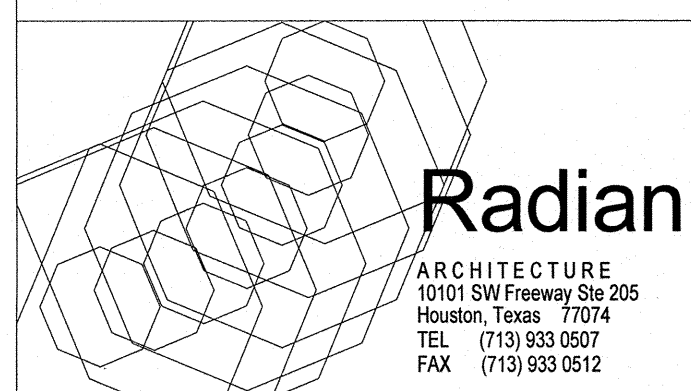
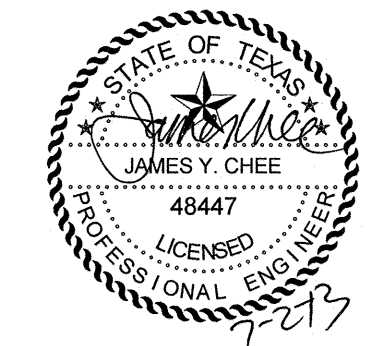


OPTIMUM CARE  
SUGAR LAND, TEXAS



Revision Schedule		
#	Date	Description

Project No.	ELECTRICAL PANEL SCHEDULES
Sheet No.	E3.06



REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL PHASING INFORMATION.

**REDDING LINDEN BARR**  
CONSULTING ENGINEERS  
801 TRAVIS, SUITE 2000  
HOUSTON, TEXAS 77002  
PH: 713.237.9800  
FAX: 713.237.9801  
TEXAS REGISTERED ENGINEERING FIRM F-3113

208Y120V 3Ph 4W Full size neutral, w/copper ground bus

**PANEL "L4A"**  
Copper Bus Rating: 225 AMP  
Main Rating (M.C.B.): 225 AMP  
1 run of #4/0, 1 #4 G, 3 1/2" C.  
Feeder Ampacity = 230A

LOAD DESCRIPTION	TYPE	LOAD KVA	LOAD AMP	WIRE/CONDUIT SIZE (Note 1)	TRIPPOLE (Note 2)	CKT #	PH	TRIPPOLE (Note 2)	WIRE/CONDUIT SIZE (Note 1)	LOAD AMP	LOAD TYPE	LOAD DESCRIPTION		
EXTERIOR REC (2)	R	0.36	3.0	2#12, 1#12G, 1/2" C	20 / 1	1	A	2	20 / 1	3.0	MIS	TV REC (2) 120A		
GF RR (2) 122A	R	0.36	3.0	2#12, 1#12G, 1/2" C	20 / 1	3	B	4	20 / 1	3.0	MIS	TV REC (1) 127A		
BEDROOM REC (4) 123A	R	0.72	6.0	2#12, 1#12G, 1/2" C	20 / 1	5	C	6	20 / 1	6.0	MIS	TV REC (2) 116A		
GF & (3) REC 123A	R	0.72	6.0	2#12, 1#12G, 1/2" C	20 / 1	7	A	8	20 / 1	6.0	MIS	TV REC (2) 128A		
BEDROOM REC (2) 127A	R	0.36	3.0	2#12, 1#12G, 1/2" C	20 / 1	9	B	10	20 / 1	6.0	MIS	GREAT ROOM TV REC (2) 117A		
BEDROOM REC (4) 116A	R	0.72	6.0	2#12, 1#12G, 1/2" C	20 / 1	11	C	12	20 / 1	4.2	0.50	MIS	PCS (2) 117A & 125A	
GF RR (2) 115A	R	0.36	3.0	2#12, 1#12G, 1/2" C	20 / 1	13	A	14	20 / 1	7.3	0.88	L	LIGHTING 124A	
BEDROOM REC (4) 128A	R	0.72	6.0	2#12, 1#12G, 1/2" C	20 / 1	15	B	16	20 / 1	10.6	1.28	L	LIGHTING 128A	
BEDROOM REC (4) 128A	R	0.72	6.0	2#12, 1#12G, 1/2" C	20 / 1	17	C	18	20 / 1	0.8	0.10	L	LIGHTING 128A	
GREAT ROOM REC (5) 117A	R	1.08	9.0	2#12, 1#12G, 1/2" C	20 / 1	19	A	20	20 / 1	9.8	1.18	L	LIGHTING 137A	
GREAT ROOM REC (5) 117A	R	0.90	7.5	2#12, 1#12G, 1/2" C	20 / 1	21	B	22	20 / 1	4.4	0.53	L	LIGHTING 117A	
GREAT ROOM REC (2) 117A	R	0.36	3.0	2#12, 1#12G, 1/2" C	20 / 1	23	C	24	20 / 1	7.5	0.90	M	FANS	
GREAT ROOM REC (2) 117A	R	0.36	3.0	2#12, 1#12G, 1/2" C	20 / 1	25	A	26	20 / 1				SPARE	
CORRIDOR REC (4) 118A	R	0.72	6.0	2#12, 1#12G, 1/2" C	20 / 1	27	B	28	20 / 1				SPARE	
CONVENIENCE REC (2) 125A	R	0.36	3.0	2#12, 1#12G, 1/2" C	20 / 1	29	C	30	20 / 1				SPARE	
GF & (3) REC 110A	R	0.36	3.0	2#12, 1#12G, 1/2" C	20 / 1	31	A	32	20 / 1				SPACE	
EXTERIOR REC (2)	R	0.36	3.0	2#12, 1#12G, 1/2" C	20 / 1	33	B	34	20 / 1				SPACE	
EXTERIOR REC (2)	R	0.36	3.0	2#12, 1#12G, 1/2" C	20 / 1	35	C	36	20 / 1				SPACE	
EXTERIOR REC (1)	R	0.18	1.5	2#12, 1#12G, 1/2" C	20 / 1	37	A	38	60 / 3	4#6, 1#10G, 1 1/4" C	0.0	0.0	MIS	SPD (Externally Mounted Surge-Protective Device)
SPACE					20 / 1	39	B	40			0.0	0.0	MIS	***
SPACE					20 / 1	41	C	42			0.0	0.0	MIS	***

PANEL "L4A" LOAD ANALYSIS

LOAD DESCRIPTION	TYPE	DEMAND FACTOR	LOAD (KW)		NEC CALCULATION REFERENCE
			CONNECTED	CALCULATED	
LIGHTING	L	1.25	4.0	4.9	125% of connected loads
RECEPTACLES	R	—	10.1	10.0	NEC2011 Art. 220.44, First 100VA @100%, Remainder @50%
MISC. NON-CONTINUOUS LOADS	MIS	1	3.7	3.7	
TOTAL LOAD (KVA)			17.8 KVA	18.7 KVA	
TOTAL LOAD (AMP AVG)			49.3 AMP	52.0 AMP	Cut's Amps: PNA=118A, PNB=122A, PNC=102A, Neut=23A

208Y120V 3Ph 4W Full size neutral, w/copper ground bus

**PANEL "L4M"**  
Copper Bus Rating: 225 AMP  
Main Rating (M.C.B.): 225 AMP  
1 run of #4/0, 1 #4 G, 3 1/2" C.  
Feeder Ampacity = 230A

LOAD DESCRIPTION	TYPE	LOAD KVA	LOAD AMP	WIRE/CONDUIT SIZE (Note 1)	TRIPPOLE (Note 2)	CKT #	PH	TRIPPOLE (Note 2)	WIRE/CONDUIT SIZE (Note 1)	LOAD AMP	LOAD TYPE	LOAD DESCRIPTION		
CU-12	C	2.4	23.5	2#8, 1#10G, 3/4" C	40 / 2	1	A	2	2#12, 1#12G, 1/2" C	10.0	1.20	MIS	AQUARIUM	
**21.5 FLA-Disc30A2P240VWVFNDR	C	2.4	23.5	2#8, 1#10G, 3/4" C	40 / 2	3	B	4	2#12, 1#12G, 1/2" C	10.0	1.20	MIS	WASHER	
CU-13	C	2.4	23.5	2#8, 1#10G, 3/4" C	40 / 2	5	C	6	3#10, 1#10G, 1/2" C	20.0	2.1	MIS	DRYER	
**21.5 FLA-Disc30A2P240VWVFNDR	C	2.4	23.5	2#8, 1#10G, 3/4" C	40 / 2	7	A	8		20.0	2.1	MIS	**30A-125/250V-3P-4W-G,NEMA 14-30R	
CU-14	C	2.7	26.2	2#8, 1#10G, 3/4" C	40 / 2	9	B	10	2#12, 1#12G, 1/2" C	10.0	1.20	MT	FOUNTAIN	
**21.2 FLA-Disc30A2P240VWVFNDR	C	2.7	26.2	2#8, 1#10G, 3/4" C	40 / 2	11	C	12	2#12, 1#12G, 1/2" C	10.0	1.20	MT	FOUNTAIN	
CU-15	C	1.7	16.8	2#10, 1#10G, 1/2" C	25 / 2	13	A	14	2#12, 1#12G, 1/2" C	4.5	0.53	MT	EXHAUST FANS EF-16,17,18,19,20,21	
**18.8 FLA-Disc30A2P240VWVFNDR	C	1.7	16.8	2#10, 1#10G, 1/2" C	25 / 2	15	B	16	2#12, 1#12G, 1/2" C	3.0	0.36	R	EXTERIOR RECS (2)	
SPACE					25 / 2	17	C	18	2#12, 1#12G, 1/2" C	3.0	0.36	R	EQPT RECS (2)	
SPACE					25 / 2	19	A	20	2#12, 1#12G, 1/2" C	4.2	0.50	MT	BAS	
FCU-12.34HP Disc30A2P240VWV1	MT	1.7	13.8	2#12, 1#12G, 3/4" C	20 / 1	21	B	22	2#12, 1#12G, 1/2" C	2.1	0.25	MT	DAMPERS	
FCU-13.34HP Disc30A2P240VWV1	MT	1.7	13.8	2#12, 1#12G, 3/4" C	20 / 1	23	C	24	2#12, 1#12G, 1/2" C	3.6	0.43	L	MED/L LIGHTING	
FCU-14.34HP Disc30A2P240VWV1	MT	1.7	13.8	2#12, 1#12G, 3/4" C	20 / 1	25	A	26	2#12, 1#12G, 1/2" C	2.1	0.25	MT	RECIRC PUMP RCP-1	
FCU-15.34HP Disc30A2P240VWV1	MT	1.7	13.8	2#12, 1#12G, 3/4" C	20 / 1	27	B	28	2#12, 1#12G, 1/2" C	2.1	0.25	MIS	FIRE ALARM PANEL	
SPACE					20 / 1	29	C	30	20 / 1					
SPACE					20 / 1	31	A	32	20 / 1					
SPACE					20 / 1	33	B	34	20 / 1					
SPACE					20 / 1	35	C	36	20 / 1					
SPACE					20 / 1	37	A	38	60 / 3	4#6, 1#10G, 1 1/4" C	0.0	0.0	MIS	SPD (Externally Mounted Surge-Protective Device)
SPACE					20 / 1	39	B	40		0.0	0.0	MIS	***	
SPACE					20 / 1	41	C	42		0.0	0.0	MIS	***	

PANEL "L4M" LOAD ANALYSIS

LOAD DESCRIPTION	TYPE	DEMAND FACTOR	LOAD (KW)		NEC CALCULATION REFERENCE
			CONNECTED	CALCULATED	
LIGHTING	L	1.25	0.4	0.5	125% of connected loads
RECEPTACLES	R	1	0.7	0.7	
COOLING LOADS	C	1	18.7	18.7	Cooling loads larger than heating
HEATING LOADS (non-coincident w/cooling)	H	—	—	—	
MOTOR	MT	1	10.8	10.6	
MISC. NON-CONTINUOUS LOADS	MIS	1	6.8	6.8	
25% LARGEST MOTOR (1.7 KVA)	—	0.25	—	0.4	
TOTAL LOAD (KVA)			37.2 KVA	37.8 KVA	
TOTAL LOAD (AMP AVG)			103.4 AMP	104.8 AMP	Cut's Amps: PNA=118A, PNB=122A, PNC=102A, Neut=23A

208Y120V 3Ph 4W Full size neutral, w/copper ground bus

**PANEL "GAR"**  
Copper Bus Rating: 100 AMP  
Main Rating (M.C.B.): 100 AMP  
1 run of #4/0, 1 #4 G, 3" C.  
Feeder Ampacity = 175A

LOAD DESCRIPTION	TYPE	LOAD KVA	LOAD AMP	WIRE/CONDUIT SIZE (Note 1)	TRIPPOLE (Note 2)	CKT #	PH	TRIPPOLE (Note 2)	WIRE/CONDUIT SIZE (Note 1)	LOAD AMP	LOAD TYPE	LOAD DESCRIPTION
LIGHTING	L	0.49	4.1	2#12, 1#12G, 1/2" C	20 / 1	1	A	2	2#12, 1#12G, 1/2" C	16.5	1.7	COMPRESSOR CU-21
RECS	R	0.36	3.0	2#12, 1#12G, 1/2" C	20 / 1	3	B	4		16.5	1.7	**16.5 FLA-Disc30A2P240VWVFNDR
RECS	R	0.36	3.0	2#12, 1#12G, 1/2" C	20 / 1	5	C	6				
SPACE					20 / 1	7	A	8				
SPACE					20 / 1	9	B	10				
SPACE					20 / 1	11	C	12				

PANEL "GAR" LOAD ANALYSIS

LOAD DESCRIPTION	TYPE	DEMAND FACTOR	LOAD (KW)		NEC CALCULATION REFERENCE
			CONNECTED	CALCULATED	
LIGHTING	L	1.25	0.6	0.8	125% of connected loads
RECEPTACLES	R	1	0.7	0.7	
TOTAL LOAD (KVA)			4.6 KVA	4.8 KVA	
TOTAL LOAD (AMP AVG)			12.9 AMP	13.2 AMP	Cut's Amps: PNA=23A, PNB=23A, PNC=23A, Neut=1A

208Y120V 3Ph 4W Full size neutral, w/copper ground bus Eqpt is Service Entrance Rated

**OPTIMUM CARE, HOUSTON TX**  
DIST. PANELBOARD - "DP2"

Copper Bus Rating: 800 Amp  
Main Rating (MCB w/Ground Fault Protection): 800 Amp  
3 runs of #4/0 KCMIL, 1 #3/0 G, 4" conduit  
Feeder Ampacity = 1140A  
(All wires shall have THHN/THWN insulation unless noted otherwise)

CKT.	LOAD DESCRIPTIONS	Load Type	CONN. KVA	CONN. AMP	Cont. Load	O.C. AMP	BKR AMP	POLES	Phase	PHASE WIRES, NEUTRAL & GRD CONDUIT SIZE	FEEDER AMPACITY
1	SPD (Externally Mounted Surge-Protective Device)	MIS	—	—	—	—	—	3P	A B C	1 run 4#6, 1#6, 1 1/2" C	100 Amp
2	Dist PH "DPEZ"	—	77.4	214.7	—	—	400	3P	A B C	1 run 4#600 KCMIL, 1 #3 G, 4" conduit	400 Amp
3	Panel "L4A"	—	18.7	52.0	—	—	225	3P	A B C	1 run 4#40, 1 #4 G, 3 1/2" C.	230 Amp
4	Panel "L4M"	—	37.9	104.8	—	—	225	3P	A B C	1 run 4#40, 1 #4 G, 3 1/2" C.	230 Amp
5	SPARE	—	—	—	Y	—	225	3P	A B C		
6	SPARE	—	—	—	Y	—	225	3P	A B C		
7	SPARE	—	—	—	Y	—	225	3P	A B C		
8	SPARE	—	—	—	Y	—	225	3P	A B C		
9	SPARE	—	—	—	Y	—	100	3P	A B C		
10	SPARE	—	—	—	Y	—	100	3P	A B C		
11	SPARE	—	—	—	Y	—	100	3P	A B C		
12	SPARE	—	—	—	Y	—	100	3P	A B C		

DIST. PANELBOARD - "DP2" LOAD ANALYSIS

LOAD DESCRIPTION	Load Type	DEMAND FACTOR	LOAD (KW)		NEC CALCULATION REFERENCE
			CONNECTED	CALCULATED	
LIGHTING	L	1.25	8.9	11.2	125% of connected loads
RECEPTACLES	R	—	22.0	16.0	NEC2011 Art. 220.44
COOLING LOADS	C	1	44.6	44.6	Cooling loads larger than heating
HEATING LOADS (non-coincident w/cooling)	H	—	—	—	
MOTOR	MT	1	24.7	24.7	
MISC. NON-CONTINUOUS LOADS	MIS	1	25.1	25.1	
KITCHEN LOADS	K	0.65	9.1	5.9	NEC2011 Art. 220.56
OUTSIDE LIGHTING	OL	1.25	0.5	0.6	
NON-COINCIDENT LOADS	NC	—	—	—	
TOTAL LOAD (KVA)			134.9 KVA	128.1 KVA	
TOTAL LOAD (AMP AVG)			374.4 AMP	355.5 AMP	PNA=414A, PNB=378A, PNC=345A, Neut=58A

File Name: M:\Radian Architecture\12523.00 Optimum Care - Sugar Land\Elec\12523.00 REVIT ELECTRICAL.rvt  
User: Author  
Date/Time: 7/2/2013 3:22:05 PM