PANELBOARD MDP SCHEDULE

PROVIDE SERVICE ENTRANCE

VOLTAGE: 208Y/120V MAINS 800A MCB MOUNTING SURFACE REMARKS: FULLY RATED
BUS SIZE: 800 AMP TOTAL LOAD 234.6 KVA FAULT DUTY 65K MINIMUM

No.	SERVES	LTG	RCPT	MTR	A/C	HTG	MISC	BRKR TRIP	P	PH A B C	P	BRKR TRIP	MISC	HTG	A/C	MTR	RCPT	LTG	SERVES	No.
1	RTU-1 (2)				19.4			60	3		3	225	2.0	0.0	0.0	0.0	1.2	54.2	PANEL "A"	2
3																				4
5																				6
7	RTU-2 (2)				19.4			60	3		3	225	24.4	3.8	0.0	5.6	19.2	1.7	PANEL "B"	8
9																				10
11																				12
13	RTU-3 (2)				6.4			25	3		3	125	3.2	0.0	0.0	0.0	6.2	0.0	PANEL "C"	14
15																				16
17																				18
19	RTU-4 (2)				10.6			35	3		3	125	7.5	0.0	1.8	0.0	10.7	0.0	PANEL "D"	20
21																				22
23																				24
25	RTU-5(2)				10.4			30	3		3	60				11.6			TRASH COMPACTOR	26
27																				28
29																				30
31	COOLER CU-1 (2)				9.0			40	3		3	40				6.3			VRC	32
33																				34
35																				36
37	SPACE																		SPACE	38
39	SPACE																		SPACE	40
41	SPACE																		SPACE	42
43	SPACE																		SPACE	44
45	SPACE																		SPACE	46
47	SPACE																		SPACE	48
49	SPACE																		SPACE	50
	* HEATING AND A/C LOAD ARE NON CONCURRENT												37.1	3.8	77.0	23.5	37.3	55.9	CONNECTED KVA	234.6
													37.1	3.8	77.0	26.4	24.1	69.8	DEMAND KVA	234.4
																			DEMAND AMPS	651

PANELBOARD A SCHEDULE

VOLTAGE: 208Y/120V MAINS 225A MLO MOUNTING SURFACE REMARKS: REF. GENERAL NOTES 2 & 3 / THIS SHEET
BUS SIZE: 225 AMP TOTAL LOAD 57.4 KVA FAULT DUTY 65K MINIMUM

No.	SERVES	LTG	RCPT	MTR	A/C	HTG	MISC	BRKR TRIP	P	PH A B C	P	BRKR TRIP	MISC	HTG	A/C	MTR	RCPT	LTG	SERVES	No.
1	LIGHTS RETAIL	1.1						20	1		1	20						1.1	LIGHTS RETAIL	2
3	LIGHTS RETAIL	1.1						20	1		1	20						1.1	LIGHTS RETAIL	4
5	LIGHTS RETAIL	1.1						20	1		1	20						1.2	LIGHTS RETAIL	6
7	LIGHTS RETAIL	1.1						20	1		1	20						0.9	LIGHTS RETAIL	8
9	LIGHTS RETAIL	0.9						20	1		1	20						0.5	UPPER FLOOR LIGHTING	10
11	ATTIC LIGHTS/REC	0.4	1.2					20	1		1	20	0.8					0.4	EMPLOYEE/EF-1 & 2	12
13	50% LIGHTS PHARMACY	1.0						20	1		1	20						0.4	EMERGENCY LIGHT	14
15	LIGHTS PHARMACY	1.0						20	1		1	20							SPARE	16
17	LIGHTS PHOTOLAB	0.8						20	1		1	20						1.2	CANOPY SIGN (CVS)	18
19	LIGHTS (VALANCE)	1.1						20	1		1	20						1.2	CANOPY SIGN (PHARMACY	20
21	WINDOW SIGN	1.2						20	1		1	20						1.2	CANOPY SIGN (24 HRS)	22
23	WINDOW SIGN	1.2						20	1		1	20						1.2	CANOPY SIGN (CVS)	24
25	WINDOW SIGN / MONITOR	1.2					0.5	20	1		1	20						1.2	CANOPY SIGN (PHARMACY	26
27	WINDOW SIGN	1.2						20	1		1	20						1.2	CANOPY SIGN (24 HRS)	28
29	WINDOW SIGN	1.2						20	1		1	20						0.9	LIGHTS EXTERIOR CANOPY	30
31	LIGHTS (VALANCE)	1.2						20	1		1	20						1.2	LIGHTS EXTERIOR CANOPY	32
33	ATTIC WINDOW LIGHT	0.4						20	1		1	20						1.2	LIGHTS EXTERIOR CANOPY	34
35	SPARE							20	1		1	20	0.7					0.8	COOLER DOOR LIGHTS	36
37	EM SALON GONDOLA	1.2						20	1		1	20						1.2	EXTERIOR CORNICE LIGHTS	38
39	SSCU GONDOLA	1.2						20	1		1	20						1.1	EXTERIOR CORNICE LIGHTS	40
41	SSCU GONDOLA	1.2						20	1		1	20						1.1	EXTERIOR CORNICE LIGHTS	42
43	WALL PAKS	0.6						20	1		1	20						0.8	EXTERIOR CORNICE LIGHTS	44
45	BUILDING SIGN	1.2						20	1		1	20						1.8	LIGHTS EXTERIOR CANOPY	46
47	BUILDING SIGN	1.2						20	1		1	20						1.0	LIGHTED SHELVES	48
49	BUILDING SIGN	1.2						20	1		1	20						1.0	LIGHTED SHELVES	50
51	DRIVE THROUGH SIGN	1.2						20	1		1	20						0.7	MGRS OFC/ RECEIVING	52
53	DRIVE THROUGH SIGN	1.2						20	1		1	20							SPARE	54
55	DRIVE THROUGH SIGN	1.2						20	1		1	20							SPARE	56
57	SPARE							20	1		1	20							SPARE	58
59	SPARE							20	1		1	20							SPARE	60
													2.0	0.0	0.0	0.0	1.2	54.2	CONNECTED KVA	57.4
													2.0	0.0	0.0	0.0	1.2	67.7	DEMAND KVA	70.9
																			DEMAND AMPS	197

PANELBOARD B SCHEDULE

VOLTAGE: 208Y/120V MAINS 225A MLO MOUNTING SURFACE REMARKS: REF. GENERAL NOTES 2 & 3 / THIS SHEET
BUS SIZE: 225 AMP TOTAL LOAD 54.7 KVA FAULT DUTY 65K MINIMUM

No.	SERVES	LTG	RCPT	MTR	A/C	HTG	MISC	BRKR TRIP	P	PH A B C	P	BRKR TRIP	MISC	HTG	A/C	MTR	RCPT	LTG	SERVES	No.
1	RTU REC.		0.9					20	1		1	20	0.5						SENSORMATIC UNIT	2
3	REC. RETAIL		1.6					20	1		1	20	0.4						AUTOMATIC DOORS	4
5	J-BOX PHARMACY		0.8					20	1		1	20					0.9		REC. RETAIL	6
7	HEAT TAPE (GFI)						0.5	20	1		1	20					0.7		RESTROOM REC.	8
9	REC. RETAIL / UNICRU		0.9					20	1		1	20					1.5		WALKY-STACKY / CART	10
11	J-BOX PHARMACY						0.5	20	1		1	20					1.0		J-BOX PHARMACY	12
13	SPARE		0.8					20	1		1	20					0.4		REC. ELECTRICAL AREA	14
15	J-BOX PHARMACY ISLAND		0.8					20	1		1	20					0.4		REC. ELECTRICAL AREA	16
17	REC. PHARMACY		0.5					20	1		1	20	1.2						ROLL-UP DOOR	18
19	BLOOD PRESSURE		1.2					20	1		1	20	1.2						ROLL-UP DOOR	20
21	FREEZER						2.2	20	2		1	20	1.2						ROLL-UP DOOR	22
23											1	20	0.3						EVAPORATOR COIL	24
25	FREEZER						2.2	20	2		1	20	0.3						EVAPORATOR COIL	26
27											1	20	0.3						EVAPORATOR COIL	28
29	PHARMACY REGISTER		1.2					20	1		1	20					0.5		ATM	30
31	J-BOX PHARMACY		0.8					20	1		1	20	0.2						RECEIVING BUTTON / BELL	32
33	ACCESS ALARM / IRRIG.						0.7	20	1		1	30	2.5						WH-1 (RESTROOM / Rx)	34
35	PNEUMATIC SYSTEM			2.8				30	1		1	20	0.7						WATER COOLER	36
37	SPARE							20	1		1	30				2.8			PNEUMATIC SYSTEM	38
39	MONEY ORDER SYSTEM		0.5					20	1		1	20	1.0						ICE MERCHANDISER	40
41	SEASONAL REC.		0.7					20	1		1	20	1.0						FLM	42
43	QUAD REC.		0.5					20	1		1	35		3.0					COOLER DOOR HEATER	44
45	VESTIBULE REC.		0.7					20	1		1	20					0.8		PBX INTERFACE	46
47	HAND DRYER						1.8	20	1		1	20					0.8		PBX INTERFACE	48
49	HAND DRYER						1.8	20	1		1	30					0.3		EASY AIRE 10	50
51	FACP						0.5	20	1		1	35						1.4	FACIAL GONDOLA	52
53	ANTI-SWEAT CONTROL						0.8	20	1		1	20						0.3	PILOT LIGHT	54
55	UNIT HEATER					0.8		20	1		1	20							SPARE	56
57	FIRE RISER						0.3	20	1		1	20	1.0						FLM	58
59	FIRE ALARM BELL						0.3				1	20	1.0						FLM	60
													24.4	3.8	0.0	5.6	19.2	1.7	CONNECTED KVA	54.7
													24.4	3.8	0.0	6.3	14.6	2.1	DEMAND KVA	51.2
																			DEMAND AMPS	142

ELECTRICAL LEGEND NOTES (RISER DIAGRAM ONLY):

1. 208V/120V POWER COMPANY EXISTING MOUNTED TRANSFORMER. COORDINATE SERVICE REQUIREMENTS WITH LOCAL POWER COMPANY PRIOR TO ANY WORK.
2. POWER COMPANY METER AND CT CABINET. COORDINATE METERING REQUIREMENTS WITH LOCAL POWER COMPANY PRIOR TO ANY WORK. REFER TO E-1.2 FOR LOCATION OF ELECTRICAL SERVICE ENTRANCE EQUIPMENT.
3. PROVIDE 1-1 1/4"C WITH PULLWIRE
4. PROVIDE 3 SETS 4# 350 KCMIL – 4"C.
5. PROVIDE 1#2/0G – 1" C. TO 3/4" DIAMETER x 10'-0" LONG GROUND ROD, UNDERGROUND METAL WATER PIPE, AND BUILDING STEEL. GROUNDING WITHIN 5' OF POE OF BUILDING.
6. PROVIDE 48" W x 96" H x 3/4" D PLYWOOD BACKBOARD. ATTACH BACKBOARD TO WALL FOR SUPPORT OF TELEPHONE AND ALARM SYSTEMS INCLUDING QUADRAPLEX RECEPTACLES.
7. PROVIDE 1#6G – 3/4"C. TO BUILDING GROUND. PROVIDE 10' SLACK CABLE AT BACKBOARD.
8. PROVIDE 4#4/0 & 1#4G, 2-1/2"C.
9. PROVIDE 4#1 & 1#6G & 1#6 IG, 2"C.
10. PROVIDE 3 SETS 4# 350 KCMIL & 2/0G & 1#2/0 IG, 4"C.
11. INSTALL ENERGY MANAGEMENT SYSTEM RELAY CABINET AND BRANCH WIRING THROUGH RELAYS. PROVIDE SWITCH AT EMS PANEL TO CONTROL (OVERRIDE EMS) LIGHTING AND WATER HEATER CIRCUITS.
12. PROVIDE 800A/3P BREAKER, 42 KAIC, SUITABLE FOR USE AS SERVICE ENTRANCE, NEMA 4.
13. 2 – 4" SCHEDULE 80 PVC TELEPHONE CONDUITS, REFER TO SITE PLAN FOR FURTHER DETAILS.
14. MAKE CONNECTION OF LOW VOLTAGE ALARM WIRING WITH ENERGY MANAGEMENT RELAY CABINET. VERIFY IN FIELD WITH CVS PROJECT MANAGER.
15. 3/4" C TO FIRE ALARM CONTROL PANEL.
16. MOUNT LOW VOLTAGE WIRING CABINET ON PLYWOOD BACKBOARD.

NOTE: ALL WIRING COPPER.

PANELBOARD C SCHEDULE

VOLTAGE: 208Y/120V MAINS 125A MLO MOUNTING SURFACE REMARKS: REF. GENERAL NOTES 2 &3/ THIS SHEET
BUS SIZE: 125A AMP TOTAL LOAD 9.4 KVA FAULT DUTY 42K MINIMUM PROVIDE ADDITIONAL GROUND BUS INSULATED FROM CAN.

No.	SERVES	LTG	RCPT	MTR	A/C	HTG	MISC	BRKR TRIP	P	PH A B C	P	BRKR TRIP	MISC	HTG	A/C	MTR	RCPT	LTG	SERVES	No.
1	PHARMACY RECEPTACLE		0.2					20	1		1	20					0.4		J-BOX PHARMACY REGISTER	2
3	POS EQUIPMENT/VSAT		0.7					20	1		1	20							SPARE	4
5	RECEPTACLES		0.4					20	1		1	20							SPARE	6
7	EMS SYSTEM (1)						0.2	20	1		1	20	0.2						TELEPHONE SYSTEM	8
9	SPARE							20	1		1	20	0.2						ALARM SYSTEM (1)	10
11	RECEPTACLES		0.7					20	1		1	20	0.4						PILL COUNTER	12
13	J-BOX PHARMACY						0.4	20	1		1	20					0.4		J-BOX PHARMACY ISLAND	14
15	J-BOX PHARMACY						0.8	20	1		1	20					0.4		J-BOX PHARMACY ISLAND	16
17	J-BOX PHARMACY		0.6					20	1		1	20							SPARE	18
19	TRASH COMPACTOR ON/OFF						1.0	20	1		1	20							SPARE	20
21	SPARE							20	1		1	20					0.7		QUAD RECEPTACLE	22
23	SPARE							20	1		1	20					0.4		RECEPTACLE	24
25	SPARE							20	1		1	20					1.0		CCTV	26
27	SPARE							20	1		1	20					0.3		RECEPTACLE	28
29	SPARE							20	1		1	20							SPARE	30
31	SPACE																		SPACE	32
33	SPACE																		SPACE	34
35	SPACE																		SPACE	36
37	SPACE																		SPACE	38
39	SPACE																		SPACE	40
41	SPACE																		SPACE	42
													3.2	0.0	0.0	0.0	6.2	0.0	CONNECTED KVA	9.4
													3.2	0.0	0.0	0.0	6.2	0.0	DEMAND KVA	9.4
																			DEMAND AMPS	26

PANELBOARD D SCHEDULE

VOLTAGE: 208Y/120V MAINS 125A MLO MOUNTING SURFACE REMARKS:REF. GENERAL NOTES 2 & 3/THIS SHEET.
BUS SIZE: 125A AMP TOTAL LOAD 20.0 KVA FAULT DUTY 42K MINIMUM PROVIDE ADDITIONAL GROUND BUS INSULATED FROM CAN.

No.	SERVES	LTG	RCPT	MTR	A/C	HTG	MISC	BRKR TRIP	P	PH A B C	P	BRKR TRIP	MISC	HTG	A/C	MTR	RCPT	LTG	SERVES	No.
1	QUAD RECEPTACLE		0.7					20	1		1	40	3.6						WH-2 (PHOTO LAB)	2
3	SILVER SPONGE		0.8					20	1		1	20					0.7		QUAD RECEPTACLE	4
5	QUAD RECEPTACLE		0.7					20	1		1	20					1.8		FRONT ENTRANCE REGIST.	6
7	QUAD RECEPTACLE		0.7					20	1		1	20					0.4		FRONT ENTRANCE REGIST.	8
9	CHECKOUT		0.7					20	1		1	20					0.9		FRONT ENTRANCE REGIST.	10
11	CHECKOUT		0.7					20	1		1	20					0.7		QUAD RECEPTACLE	12
13	QUAD RECEPTACLE		1.2					20	1		1	20					0.7		QUAD RECEPTACLE	14
15	SPARE							20	1		1	20				1.8			CU-2/AHU-1	16
17	PRINTER PROCESSOR						2.4	20	2		1	20							SPARE	18
19											1	20							SPARE	20
21	FILM PROCESSOR						1.5	20	1		1	20							SPARE	22
23	SPARE							20	1		1	20							SPARE	24
25	SPARE							20	1		1	20							SPARE	26
27	SPARE							20	1		1	20							SPARE	28
29	SPARE							20	1		1	20							SPARE	30
31	SPACE																		SPACE	32
33	SPACE																		SPACE	34
35	SPACE																		SPACE	36
37	SPACE																		SPACE	38
39	SPACE																		SPACE	40
41	SPACE																		SPACE	42
													7.5	0.0	1.8	0.0	10.7	0.0	CONNECTED KVA	20.0
													7.5	0.0	1.8	0.0	10.4	0.0	DEMAND KVA	19.7
																			DEMAND AMPS	55

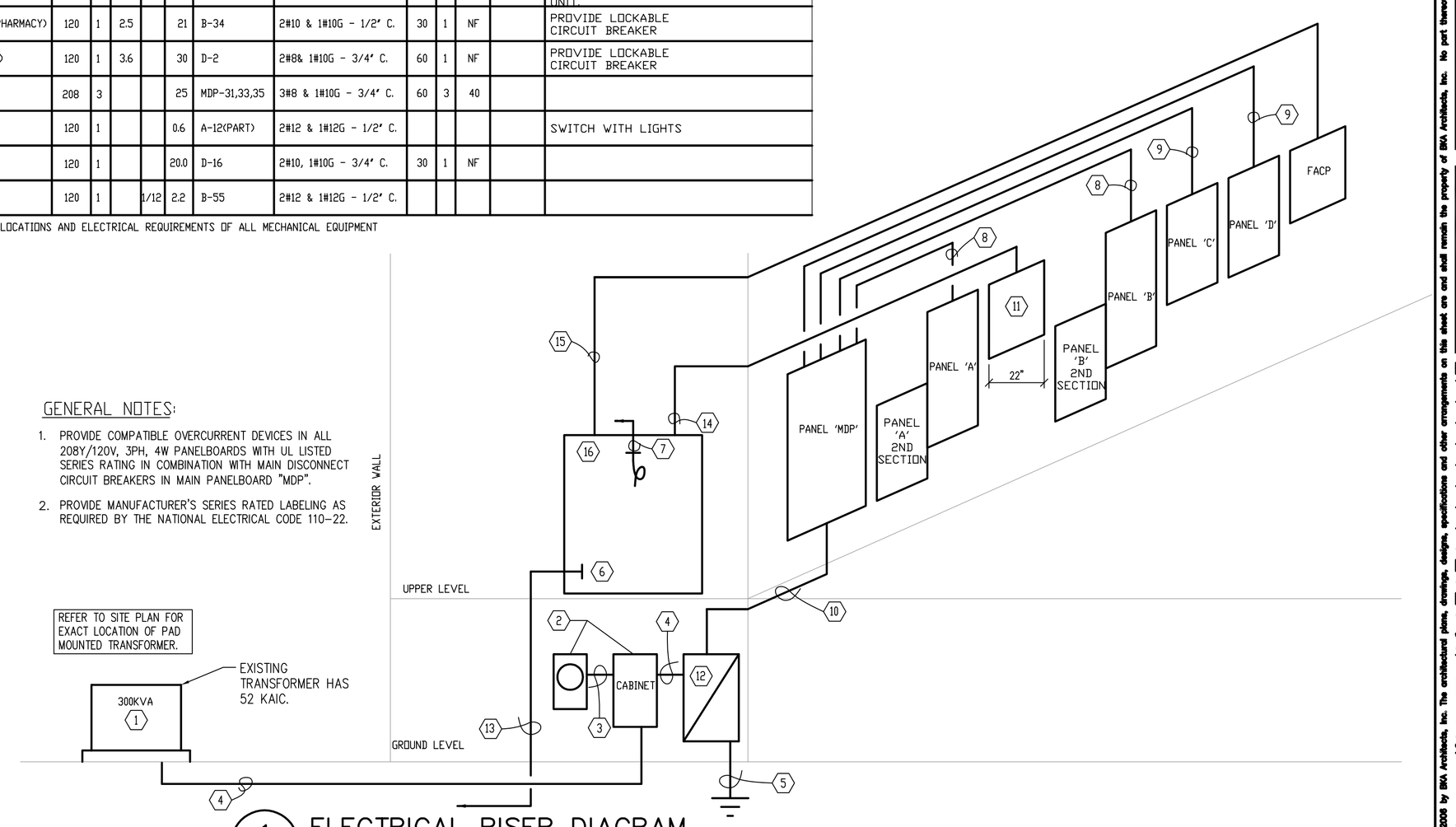
MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

ITEM NO.	DESCRIPTION	EQUIPMENT CHARACTERISTICS VOLTS	PH	KW	HP	MCA	CIRCUIT	FEEDER	DISCONNECT SWITCH SIZE	PL	FUSE	FEATURES	REMARKS
1	RTU-1 (RETAIL AREA)	208	3			53.9	MDP-1,3,5	3#4, 1#6G - 1 1/4" C.		3			DISCONNECT SWITCH SCHEDULED WITH UNIT
2	RTU-2 (RETAIL AREA)	208	3			53.9	MDP-7,9,11	3#4, 1#6G - 1 1/4" C.		3			DISCONNECT SWITCH SCHEDULED WITH UNIT
3	RTU-3 (PHARMACY)	208	3			17.9	MDP-13,15,17	3#10, 1#10G - 1" C.		3			DISCONNECT SWITCH SCHEDULED WITH UNIT
4	RTU-4 (UPPER FLOOR & RECEIVING)	208	3			29.5	MDP-19,21,23	3#8, 1#10G - 1" C.		3			DISCONNECT SWITCH SCHEDULED WITH UNIT
5	RTU-5 (ENTRANCE AREA)	208	3			29.1	MDP-25,27,29	3#8, 1#10G - 1" C.		3			DISCONNECT SWITCH SCHEDULED WITH UNIT
6	WH-1 (TOILETS/PHARMACY)	120	1	2.5		21	B-34	2#10 & 1#10G - 1/2" C.	30	1	NF		PROVIDE LOCKABLE CIRCUIT BREAKER
7	WH-2 (PHOTOLAB)	120	1	3.6		30	D-2	2#8& 1#10G - 3/4" C.	60	1	NF		PROVIDE LOCKABLE CIRCUIT BREAKER
8	CU-1	208	3			25	MDP-31,33,35	3#8 & 1#10G - 3/4" C.	60	3	40		
9	EF-1 & EF-2	120	1			0.6	A-12(PART)	2#12 & 1#12G - 1/2" C.					SWITCH WITH LIGHTS
10	CU-2/AHU1	120	1			20.0	D-16	2#10, 1#10G - 3/4" C.	30	1	NF		
11	UH-1	120	1		1/12	2.2	B-55	2#12 & 1#12G - 1/2" C.					

NOTE: COORDINATE EXACT LOCATIONS AND ELECTRICAL REQUIREMENTS OF ALL MECHANICAL EQUIPMENT

GENERAL NOTES:

1. PROVIDE COMPATIBLE OVERCURRENT DEVICES IN ALL 208Y/120V, 3PH, 4W PANELBOARDS WITH UL LISTED SERIES RATING IN COMBINATION WITH MAIN DISCONNECT CIRCUIT BREAKERS IN MAIN PANELBOARD "MDP".
2. PROVIDE MANUFACTURER'S SERIES RATED LABELING AS REQUIRED BY THE NATIONAL ELECTRICAL CODE 110-22.



1 ELECTRICAL RISER DIAGRAM
E-2.2 SCALE: NOT TO SCALE

TENANT ELECTRICAL RESPONSIBILITIES

1. INSTALL AND LOAD ALL REGISTERS.
2. INSTALL AND CHECK MANAGER'S EQUIPMENT.
3. MOUNT SPENCER POS LOOP PANEL IN MANAGER'S
4. IDENTIFY AND TERMINATE ALL POS WIRE.
5. INSTALL AND TEST TIME CLOCK.
6. CONNECT AND TERMINATE MODEM AND/OR VSAT LINES.
7. BUILD MANAGER'S COMPUTER CABINET.
8. DRILL HOLES IN MANAGER'S COUNTER AS NEEDED.
9. TIE UP ALL LOOSE WIRES.
10. INSTALL AND TEST PHARMACY COMPUTER EQUIPMENT.
11. CUT HOLE IN LASER PRINTER CABINET.
12. TEST AND CONNECT COMMUNICATIONS LINES TO MODEMS.
13. TERMINATE AND/ OR CONNECT SATELLITE LINES.
14. MOUNT ALL TYPE 1 FACE PLATES AND LOOP ATTACHMENT BOXES UNDER THE PHARMACY AND FRONT CHECKOUTS.
15. INSTALL ALL PHONE BRACKETS.

ELECTRIC LOAD SUMMARY

TOTAL CONNECTED LOAD:	651.1 AMPS
TOTAL N.E.C.LOAD	650.6 AMPS
MAIN SERVICE SWITCH	800 AMP
MAIN SERVICE CONDUCTORS	3 SETS 4#350KCMIL
MAIN SERVICE CONDUITS	3-4" CONDUITS

ELECTRICAL LEGEND NOTES (PANEL BOARD SCHEDULES ONLY):

(1) PROVIDE LOCK-ON DEVICE FOR CIRCUIT BREAKER.

(2) PROVIDE H.A.C.R. TYPE CIRCUIT BREAKER.

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REVISIONS:

DRAWING BY: HYZ
DATE: 8/31/09
JOB NUMBER: 209017
TITLE: ELECTRICAL SCHEDULES & RISER DIAGRAM
SHEET NUMBER: E-2.2

COMMENTS:
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