

Appendix F: Electrical Schedules

Existing Panelboard 'EHVPAWG'

PANEL 'EHVPAWG'																	
277/480 VOLT 3 PHASE 4 WIRE 400A MLO SURFACE MOUNTED																	
DESCRIPTION	KVA / #			BRKR POLE	AMP	CIR-CUIT	4 WIRE			CIR-CUIT	BRKR POLE	AMP	KVA / #			DESCRIPTION	
	A#	B#	C#				A#	B#	C#				A#	B#	C#		
AHU-A1 SUPPLY FAN	7.1			3	50	1			2	3	125	19.6			ELEVATOR SE 3		
-		7.1	3			5			4				19.6	-			
-			7.1			5			6				19.6	-			
ELEVATOR SE 4A	16.2			3	125	7			8	3	60	11.2			AHU-A3 SUPPLY FAN		
-		16.2	9					10				11.2	-				
-			16.2			11			12				11.2	-			
15KVA XFMR FOR PANEL ELVPAWG	0.2			3	30	13			14	3	100	11.2			PANEL EHVPAW1		
-		0.5	15					16				11.5	-				
-			17					18				9.1	-				
METHANE MOTOR CONTROL CENTER	3.0			3	20	19			20	3	60	11.2			AHU-A4 SUPPLY FAN		
-		3.0	21					22				11.2	-				
-			23					24				11.2	-				
SPACE	-			1	-	25			26	1	-	-			SPACE		
SPACE	-			1	-	27			28	1	-	-			SPACE		
SPACE	-			1	-	29			30	1	-	-			SPACE		
			26.5	26.8	26.3							53.2	53.5	51.1			

TOTAL CONNECTED KVA: 237.4

Redesign Panelboard 'EHVPAWG1'

PANEL 'EHVPAWG1'																	
277/480 VOLT 3 PHASE 4 WIRE 400A MLO SURFACE MOUNTED																	
DESCRIPTION	KVA / #			BRKR POLE	AMP	CIR-CUIT	4 WIRE			CIR-CUIT	BRKR POLE	AMP	KVA / #			DESCRIPTION	
	A#	B#	C#				A#	B#	C#				A#	B#	C#		
AHU-A1 SUPPLY FAN	9.7			3	50	1			2	3	125	19.6			ELEVATOR SE 3		
-		9.7	3			5			4				19.6	-			
-			9.7			5			6				19.6	-			
ELEVATOR SE 4A	16.2			3	125	7			8	3	20	4.2			AHU-A3 SUPPLY FAN		
-		16.2	9					10				4.2	-				
-			16.2			11			12				4.2	-			
15KVA XFMR FOR PANEL ELVPAWG	0.2			3	30	13			14	3	100	11.2			PANEL EHVPAW1		
-		0.5	15					16				11.5	-				
-			17					18				9.1	-				
METHANE MOTOR CONTROL CENTER	3.0			3	20	19			20	3	20	4.2			AHU-A4 SUPPLY FAN		
-		3.0	21					22				4.2	-				
-			23					24				4.2	-				
AHU-A2 SUPPLY FAN	12.5			3	60	25			26	1	-	-			SPACE		
-		12.5	27					28				-	-	SPACE			
-			29					30				-	-	SPACE			
			41.6	41.9	41.4							39.2	39.5	37.1			

TOTAL CONNECTED KVA: 240.7

New Panelboard 'EHVPAWG2'

PANEL 'EHVPAWG2'																			
277/480 VOLT 3 PHASE 4 WIRE 400A MLO SURFACE MOUNTED																			
DESCRIPTION	KVA / ϕ			BRKR		CIR- CUIT	A ϕ	B ϕ	C ϕ	CIR- CUIT	BRKR		KVA / ϕ			DESCRIPTION			
	A ϕ	B ϕ	C ϕ	POLE	AMP						POLE	AMP	A ϕ	B ϕ	C ϕ				
AHU-A1 EXHAUST FAN	3.9			3	20	1				2	3	20	3.0			CHILLER/HEATER			
-		3.9					3						4			3.0			-
-			3.9					5						6				3.0	
AHU-A3 EXHAUST FAN	2.2			3	20	7				8	3	50	11.1			COOLING TOWER			
-		2.2					9						10			11.1			-
-			2.2					11						12				11.1	
AHU-A4 EXHAUST FAN	2.2			3	20	13				14	1	-				SPACE			
-		2.2					15						16			-			SPACE
-			2.2				17						18			-			SPACE
AHU-A2 EXHAUST FAN	6.1			3	30	19				20	1	-				SPACE			
-		6.1					21						22			-			SPACE
-			6.1				23						24			-			SPACE
SPACE	-			1	-	25				26	1	-	-			SPACE			
SPACE	-			1	-	27				28	1	-	-			SPACE			
SPACE	-			1	-	29				30	1	-	-			SPACE			
			14.4	14.4	14.4							14.1	14.1	14.1					

TOTAL CONNECTED KVA: 85.5

Existing Switchboard S8

MALL SWITCHBOARD: S8						① 3000A, 3Ø, 4W., 277/480V. MAIN BREAKER WITH GROUND FAULT PROTECTION
BRANCH CIRCUIT		EQUIPMENT SERVED	DESIGN KVA	CONNECTED KVA	DEMAND KVA	CONDUIT AND WIRE SIZE
AMPERE	POLE					
200 (4)	3	AHU-A1	151.4	151.4	69.0	3 #3/0 & #6 GRD. IN 2" CONDUIT
250 (4)	3	AHU-A3	193.0	193.0	137.1	3 #250MCM & #4 GRD. IN 2 1/2" CONDUIT
1200 (2)	3	CATERING 13300	942.2	942.2	807.6	(4) EMPTY 3" CONDUITS
60 (5)	3	PANEL HVLHUBAG	31.1	31.1	16.1	4#6 & #8 GRD. IN 1" CONDUIT
100 (4)	3	MXTV	45.0	45.0	45.0	4 #3 & #8 GRD. IN 1 1/4" CONDUIT
60 (4)	3	PANEL HVLAWG	30.7	30.7	15.7	4 #6 & #8 GRD. IN 1" CONDUIT
350 (5)	3	PANEL HVPWAG	241.8	241.8	228.4	4 #500MCM & #3 GRD. IN 4" CONDUIT
100 (5)	3	LIFE SAFETY ATS LSAW	20.3	20.3	20.3	4 #3 & #8 GRD. IN 1 1/4" CONDUIT
400 (5)	3	MECH. EQUIP. ATS MEAW	279.9	279.9	237.4	4 #500MCM & #3 GRD. IN 4" CONDUIT
250 (4)	3	AHU-A4	193.0	193.0	137.1	3 #250MCM & #4 GRD. IN 2 1/2" CONDUIT
225 (5)	3	PANEL HVLAW1	159.4	159.4	104.4	4 #4/0 & #4 GRD. IN 2 1/2" CONDUIT
350 (5)	3	PANEL HVPWAG2	231.0	231.0	218.1	4#500MCM & #3 GRD. IN 4" CONDUIT
TOTAL			2518.8	2518.8	2036.2	

Redesign Switchboard S8

MALL SWITCHBOARD: S8						① 2500A, 3Ø, 4W., 277/480V. MAIN BREAKER WITH GROUND FAULT PROTECTION
BRANCH CIRCUIT		EQUIPMENT SERVED	DESIGN KVA	CONNECTED KVA	DEMAND KVA	CONDUIT AND WIRE SIZE
AMPERE	POLE					
-	-	-	-	-	-	-
95 (5)	3	PANEL HVPWAG2	85.5	85.5	80.7	4 #4 & #10 GRD. IN 1.5" CONDUIT
1200 (2)	3	CATERING 13300	942.2	942.2	807.6	(4) EMPTY 3" CONDUITS
60 (5)	3	PANEL HVLHUBAG	31.1	31.1	16.1	4#6 & #8 GRD. IN 1" CONDUIT
100 (4)	3	MXTV	45.0	45.0	45.0	4 #3 & #8 GRD. IN 1 1/4" CONDUIT
60 (4)	3	PANEL HVLAWG	30.7	30.7	15.7	4 #6 & #8 GRD. IN 1" CONDUIT
250 (5)	3	PANEL HVPWAG1	240.7	240.7	227.2	4 #250 MCM & #4 GRD. IN 2.5" CONDUIT
100 (5)	3	LIFE SAFETY ATS LSAW	20.3	20.3	20.3	4 #3 & #8 GRD. IN 1 1/4" CONDUIT
400 (5)	3	MECH. EQUIP. ATS MEAW	279.9	279.9	237.4	4 #500MCM & #3 GRD. IN 4" CONDUIT
250 (4)	3	AHU-A4	193.0	193.0	137.1	3 #250MCM & #4 GRD. IN 2 1/2" CONDUIT
225 (5)	3	PANEL HVLAW1	159.4	159.4	104.4	4 #4/0 & #4 GRD. IN 2 1/2" CONDUIT
350 (5)	3	PANEL HVPWAG2	231.0	231.0	218.1	4#500MCM & #3 GRD. IN 4" CONDUIT
TOTAL			2065.8	2065.8	1772.5	

Existing Switchboard S26

MALL SWITCHBOARD: S26						① 4000A, 3Ø, 4W., 277/480V. MAIN BREAKER WITH GROUND FAULT PROTECTION
BRANCH CIRCUIT		EQUIPMENT SERVED	DESIGN KVA	CONNECTED KVA	DEMAND KVA	CONDUIT AND WIRE SIZE
AMPERE	POLE					
500 (4)	3	BROADCAST LIGHTING	287.4	287.4	287.4	(2) SETS OF 4 #250MCM & #2 GRD. IN (2) 2 1/2" C.
1200 (4)	3	EXT LED	709.0	709.0	509.7	(4) SETS OF 4 #350MCM & #3/0 GRD. IN (4) 3" C.
2500 (4)	3	INT LED	1761.8	1761.8	882.3	(7) SETS OF 4 #500MCM & #350MCM GRD. IN (7) 4" C.
200 (4)	3	PANEL HVSLAEG	93.4	93.4	75.0	4 #3/0 & #6 GRD. IN 2" CONDUIT
-	-	-	-	-	-	-
-	-	-	-	-	-	-
225 (4)	3	AHU-A2	177.5	177.5	69.0	3 #4/0 & #4 GRD. IN 2 1/2" CONDUIT
100 (4)	3	AHU-B7	72.0	72.0	32.3	3 #3 & #8 GRD. IN 1 1/4" CONDUIT
100 (4)	3	AHU-B8	72.0	72.0	32.3	3 #3 & #8 GRD. IN 1 1/4" CONDUIT
-	-	-	-	-	-	-----
-	-	-	-	-	-	-----
-	-	-	-	-	-	-----
TOTAL			3173.0	3173.0	1888.0	

Redesign Switchboard S26

MALL SWITCHBOARD: S26						① 2500A, 3Ø, 4W., 277/480V. MAIN BREAKER WITH GROUND FAULT PROTECTION
BRANCH CIRCUIT		EQUIPMENT SERVED	DESIGN KVA	CONNECTED KVA	DEMAND KVA	CONDUIT AND WIRE SIZE
AMPERE	POLE					
500 (4)	3	BROADCAST LIGHTING	287.4	287.4	287.4	(2) SETS OF 4 #250MCM & #2 GRD. IN (2) 2 1/2" C.
1200 (4)	3	EXT LED	709.0	709.0	509.7	(4) SETS OF 4 #350MCM & #3/0 GRD. IN (4) 3" C.
2500 (4)	3	INT LED	1761.8	1761.8	882.3	(7) SETS OF 4 #500MCM & #350MCM GRD. IN (7) 4" C.
200 (4)	3	PANEL HVSLAEG	93.4	93.4	75.0	4 #3/0 & #6 GRD. IN 2" CONDUIT
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
100 (4)	3	AHU-B7	72.0	72.0	32.3	3 #3 & #8 GRD. IN 1 1/4" CONDUIT
100 (4)	3	AHU-B8	72.0	72.0	32.3	3 #3 & #8 GRD. IN 1 1/4" CONDUIT
-	-	-	-	-	-	-----
-	-	-	-	-	-	-----
-	-	-	-	-	-	-----
TOTAL			2995.5	2995.5	1819	