

PANEL 'PD'																	
VOLTAGE: 277/480 VOLT 3 PHASE 4 W BUS RATING: 400A CU FEEDER: REFER TO SINGLE LINE DIAGRAM						MAIN: 4003 BREAKER STYLE: BOLT ON MTG STYLE: SURFACE NEMA3R											
CT #	VA LOAD PER PHASE			LOAD DESCRIPTION	LOAD TYPE			CB	VA LOAD PER PHASE			CT #					
	A	B	C		LT	RC	HT		MO	MS	A		B	C			
1	9945			HP-1			1	50	a				2				
3		9945		SPACE			1	-	b				4				
5			9945	SPACE			1	3	c				6				
7	9945			HP-1			1	50	a				8				
9		9945		SPACE			1	-	b				10				
11			9945	SPACE			1	3	c				12				
13	9945			HP-1			1	50	a				14				
15		9945		SPACE			1	-	b				16				
17			9945	SPACE			1	3	c				18				
19	9945			HP-1			1	50	a				20				
21		9945		SPACE			1	-	b				22				
23			9945	SPACE			1	3	c				24				
25	9945			HP-1			1	50	a				26				
27		9945		SPACE			1	-	b				28				
29			9945	SPACE			1	3	c				30				
31				SPACE									32				
33				SPACE									34				
35				SPACE									36				
37	55310			PANEL PC				250	a				38				
39		55310		SPACE				-	b				40				
41			49725	SPACE				3	c				42				
SUB TOTAL									0			0					
LOAD SUMMARY BY TYPE									CONNECTED			DEMAND FACTOR			DEMAND		
									LIGHTING: 0			125%			0		
									RECEPTACLES: 0			100%			0		
									HEATING: 0			100%			0		
									HVAC AND MOTORS: 149175			100%			149175		
									MISCELLANEOUS: 0			100%			0		
									TOTAL VA			106035			106035		
									CONNECTED AMPS			379			379		

PANEL 'PB'																	
VOLTAGE: 277/480 VOLT 3 PHASE 4 W BUS RATING: 400A CU FEEDER: REFER TO SINGLE LINE DIAGRAM						MAIN: 3003 BREAKER STYLE: BOLT ON MTG STYLE: SURFACE NEMA3R											
CT #	VA LOAD PER PHASE			LOAD DESCRIPTION	LOAD TYPE			CB	VA LOAD PER PHASE			CT #					
	A	B	C		LT	RC	HT		MO	MS	A		B	C			
1	9945			HP-1			1	50	a				2				
3		9945		SPACE			1	-	b				4				
5			9945	SPACE			1	3	c				6				
7	9945			HP-1			1	50	a				8				
9		9945		SPACE			1	-	b				10				
11			9945	SPACE			1	3	c				12				
13	9945			HP-1			1	50	a				14				
15		9945		SPACE			1	-	b				16				
17			9945	SPACE			1	3	c				18				
19	9945			HP-1			1	50	a				20				
21		9945		SPACE			1	-	b				22				
23			9945	SPACE			1	3	c				24				
25	9945			HP-1			1	50	a				26				
27		9945		SPACE			1	-	b				28				
29			9945	SPACE			1	3	c				30				
31	9945			HP-1			1	50	a				32				
33		9945		SPACE			1	-	b				34				
35			9945	SPACE			1	3	c				36				
37	19114			PANEL PE				90	a				38				
39		19114		SPACE				-	b				40				
41			19114	SPACE				3	c				42				
SUB TOTAL									0			0					
LOAD SUMMARY BY TYPE									CONNECTED			DEMAND FACTOR			DEMAND		
									LIGHTING: 0			125%			0		
									RECEPTACLES: 0			100%			0		
									HEATING: 0			100%			0		
									HVAC AND MOTORS: 179010			100%			179010		
									MISCELLANEOUS: 0			100%			0		
									TOTAL VA			78784			78784		
									CONNECTED AMPS			284			284		

PANEL 'PE'																	
VOLTAGE: 277/480 VOLT 3 PHASE 4 W BUS RATING: 100A CU FEEDER: REFER TO SINGLE LINE DIAGRAM						MAIN: 903 BREAKER STYLE: BOLT ON MTG STYLE: SURFACE NEMA3R											
CT #	VA LOAD PER PHASE			LOAD DESCRIPTION	LOAD TYPE			CB	VA LOAD PER PHASE			CT #					
	A	B	C		LT	RC	HT		MO	MS	A		B	C			
1	9557			HP-3			1	50	a				2				
3		9557		SPACE			1	-	b				4				
5			9557	SPACE			1	3	c				6				
7	9557			HP-3			1	50	a				8				
9		9557		SPACE			1	-	b				10				
11			9557	SPACE			1	3	c				12				
13				SPACE									14				
15				SPACE									16				
17				SPACE									18				
19				SPACE									20				
21				SPACE									22				
23				SPACE									24				
25				SPACE									26				
27				SPACE									28				
29				SPACE									30				
31				SPACE									32				
33				SPACE									34				
35				SPACE									36				
37				SPACE									38				
39				SPACE									40				
41				SPACE									42				
SUB TOTAL									0			0					
LOAD SUMMARY BY TYPE									CONNECTED			DEMAND FACTOR			DEMAND		
									LIGHTING: 0			125%			0		
									RECEPTACLES: 0			100%			0		
									HEATING: 0			100%			0		
									HVAC AND MOTORS: 57342			100%			57342		
									MISCELLANEOUS: 0			100%			0		
									TOTAL VA			19114			19114		
									CONNECTED AMPS			69			69		

PANEL 'PC'																	
VOLTAGE: 277/480 VOLT 3 PHASE 4 W BUS RATING: 300A CU FEEDER: REFER TO SINGLE LINE DIAGRAM						MAIN: 2503 BREAKER STYLE: BOLT ON MTG STYLE: SURFACE NEMA3R											
CT #	VA LOAD PER PHASE			LOAD DESCRIPTION	LOAD TYPE			CB	VA LOAD PER PHASE			CT #					
	A	B	C		LT	RC	HT		MO	MS	A		B	C			
1	9945			HP-1			1	50	a				2				
3		9945		SPACE			1	-	b				4				
5			9945	SPACE			1	3	c				6				
7	9945			HP-1			1	50	a				8				
9		9945		SPACE			1	-	b				10				
11			9945	SPACE			1	3	c				12				
13	9945			HP-1			1	50	a				14				
15		9945		SPACE			1	-	b				16				
17			9945	SPACE			1	3	c				18				
19	9945			HP-1			1	50	a				20				
21		9945		SPACE			1	-	b				22				
23			9945	SPACE			1	3	c				24				
25	9945			HP-1			1	50	a				26				
27		9945		SPACE			1	-	b				28				
29			9945	SPACE			1	3	c				30				
31	5585			HP-2 XF			1	40	a				32				
33		5585		SPACE			1	2	b				34				
35				SPACE									36				
37				SPACE									38				
39				SPACE									40				
41				SPACE									42				
SUB TOTAL									0			0					
LOAD SUMMARY BY TYPE									CONNECTED			DEMAND FACTOR			DEMAND		
									LIGHTING: 0			125%			0		
									RECEPTACLES: 0			100%			0		
									HEATING: 0			100%			0		
									HVAC AND MOTORS: 160345			100%			160345		
									MISCELLANEOUS: 0			100%			0		
									TOTAL VA			55310			55310		
									CONNECTED AMPS			200			200		

Fixture Schedule						
Luminaire						
Name	Type Description	Lamp Type	Watts per fixture	Manufacturer	Model Number	Mounting
A	2 X 4 LED	LED	35	ABL - LITHONIA	2BLT4 48LHE ADPT E21 LP840 N100	T-BAR
Ae	2 X 4 LED	LED	35	ABL - LITHONIA	2BLT4 48LHE ADPT E21 E10WA.CP LP840 N100	T-BAR EMERGENCY BATTERY BACK UP
B	1 X 4 STRIP	LED	25	ABL - LITHONIA	CLX L48 4800 LM HEF RDL SPD MVOLT E21 40K 80 CRITHCLX N100	SURFACE
X	EXIT	LED	1	ABL - LITHONIA	LHQM LED R HO RO	WALL
X1	REMOTE HEAD	LED	1	ABL - LITHONIA	ELA SD QWP L0309	WALL

PANEL 'AA'																	
VOLTAGE: 120/208 VOLT 3 PHASE 4 W BUS RATING: 100A CU FEEDER: REFER TO SINGLE LINE DIAGRAM						MAIN: MLO BREAKER STYLE: BOLT ON MTG STYLE: FLUSH											
CT #	VA LOAD PER PHASE			LOAD DESCRIPTION	LOAD TYPE			CB	VA LOAD PER PHASE			CT #					
	A	B	C		LT	RC	HT		MO	MS	A		B	C			
1				EXISTING LOAD			20	a				2					
3				EXISTING LOAD			20	b				4					
5				EXISTING LOAD			20	c				6					
7				EXISTING LOAD			20	a				8					
9				EXISTING LOAD			20	b				10					
11				EXISTING LOAD			20	c				12					
13				EXISTING LOAD			20	a				14					
15				EXISTING LOAD			20	b				16					
17				EXISTING LOAD			20	c				18					
19	1200			FACP A EXP B *			20	a				20					
		1200		EXP C VOICE EVAC*			20	a				20					
SUB TOTAL									0			0					
LOAD SUMMARY BY TYPE									CONNECTED			DEMAND FACTOR			DEMAND		
									LIGHTING: 0			125%			0		
									RECEPTACLES: 0			100%			0		
									HEATING: 0			100%			0		
									HVAC AND MOTORS: 0			100%			0		
									MISCELLANEOUS: 0			100%			0		
									TOTAL VA			1200			1200		
									CONNECTED AMPS			10			10		

VOLTAGE DROP CALCULATIONS											
VD (3 PHASE) = (1.73 * K * I * D) / CM											
VD	K	I	D	Wire Size	CM	VD	%@480	%@208			
PANEL PD	1.73	12	320	200	1328640	600 Kcmil	600000	2.2	0.5	1.1	
PANEL PC	1.73	12	160	80	265728	3/0	167800	1.6	0.3	0.8	
PANEL PB	1.73	12	240	330	1644192	350 Kcmil	350000	4.7	1.0	2.3	
PANEL PE	1.										