

Panel 5A												
Service: 120/208 Volt, 3 Phase, 4 Wire			Mounting: Freestanding			Bus: 800		Mains: 800A3P			AIC: 10K	
Panel Type: NEMA 4X, SS			Poles: 42			Phase		Comments:				
Code	Description	Load	Bkr	P	Circuit	P	Bkr	Load	Description	Code		
X8	PEDESTALS	62400	*250	3	1 A 2 3	1	*250	104000	PEDESTALS	X14		
	A1,A2,A3	/	/	/	3 B 4	/	/	/	B1,B2,B3,B4,B5			
	2 RECEPTACLES / PED	/	/	/	5 C 6	/	/	/	2 RECEPTACLES / PED			
X14	PEDESTALS	83200	*250	3	7 A 8 3	7	*250	104000	PEDESTALS	X14		
	A4,A5,A6,A7	/	/	/	9 B 10	/	/	/	B6,B7,B8,B9,B10			
	2 RECEPTACLES / PED	/	/	/	11 C 12	/	/	/	2 RECEPTACLES / PED			
X4	FUEL DOCK	29000	*100	3	13 A 14 3	13	*250	104000	PEDESTALS	X14		
		/	/	/	15 B 16	/	/	/	B11,B12,B13,B14,B15			
		/	/	/	17 C 18	/	/	/	2 RECEPTACLES / PED			
	E STOP 1,2	0	20	1	19 A 20 3	19	*250	104000	PEDESTALS	X14		
	E STOP 3,4	0	20	1	21 B 22	/	/	/	B16,B17,B18,B19,B20			
	E STOP 5	0	20	1	23 C 24	/	/	/	2 RECEPTACLES / PED			
	E STOP 6,7,8	0	20	1	25 A 26 1	20	100	100	RECEPTACLE	R		
	E STOP 9,10,11	0	20	1	27 B 28 1	20	180	180	SECURITY CAMERA	R		
	E STOP 12,13	0	20	1	29 C 30 1	20	100	100	POLE LIGHTS	L		
	E STOP 14	0	20	1	31 A 32	-	-	-	SPACE			
	SPACE	-	-	-	33 B 34	-	-	-	SPACE			
	SPACE	-	-	-	35 C 36	-	-	-	SPACE			
	SPACE	-	-	-	37 A 38	-	-	-	SPACE			
	SPACE	-	-	-	39 B 40	-	-	-	SPACE			
	SPACE	-	-	-	41 C 42	-	-	-	SPACE			

Code	Description	Conn.	DF	Load Summary
L	Lighting	0.10	125%	Balance
R	Recept up to 10 kVA	0.28	100%	Phase A 196.97 KVA 33%
	Recept over 10 kVA	0.00	50%	Phase B 197.05 KVA 33%
M	Motor	0.00	100%	Phase C 196.97 KVA 33%
	Largest Motor	0.00	125%	
X4	Receptacles Loads 1 - 4	29.00	100%	Connected 590.98 KVA
X8	Receptacles Loads 5 - 8	62.40	90%	
X14	Receptacles Loads 9 - 14	499.20	80%	
	Connected Total	590.98	KVA	
	Connected Load	1641.61	Amps	
	* 100 mA GFCI TRIP			

**PANEL DEMAND:**  
 NEC TABLE 555.12 ALLOWS A DEMAND FACTOR OF 40% TO BE APPLIED TO 54 RECEPTACLES.  
 PEDESTAL RECEPTACLES: 54 X 10,400 VA X 0.40 = 224,640 VA  
 MISCELLANEOUS LOADS: 1,380 VA  
 FUEL DOCK LOAD: 29,000 VA  
 TOTAL DEMAND LOAD: 255,020 VA  
 255,020 VA @ 208 V, 3 PHASE = 708 AMPS

PANEL 5B												
Service: 120/208 Volt, 3 Phase, 4 Wire			Mounting: Surface			Bus: 800		Mains: 800A3P			AIC: 10K	
Panel Type: NEAM 4X, SS			Poles: 42			Phase		Comments:				
Code	Description	Load	Bkr	P	Circuit	P	Bkr	Load	Description	Code		
X8	PEDESTALS	10400	*250	3	1 A 2 3	1	*250	104000	PEDESTALS	X14		
	C1,C2,X1,X2,X3	/	/	/	3 B 4	/	/	/	C3,C4,C5,C6,C7			
	2 RECEPTACLES / PED	/	/	/	5 C 6	/	/	/	2 RECEPTACLES / PED			
X14	PEDESTALS	104000	*250	3	7 A 8 3	7	*250	104000	PEDESTALS	X14		
	C8,C9,C10,C11,C12	/	/	/	9 B 10	/	/	/	D1,D2,D3,D4,D5			
	2 RECEPTACLES / PED	/	/	/	11 C 12	/	/	/	2 RECEPTACLES / PED			
X14	PEDESTALS	104000	*250	3	13 A 14 1	13	*250	104000	PEDESTALS	X14		
	D6,D7,D8,D9,D10	/	/	/	15 B 16	-	-	-	SPACE			
	2 RECEPTACLES / PED	/	/	/	17 C 18	-	-	-	SPACE			
	E STOP 15,16,17,18	0	20	1	19 A 20	-	-	-	SPACE			
	E STOP 19,20,21,22	0	20	1	21 B 22	-	-	-	SPACE			
	E STOP 23,24	0	20	1	23 C 24	-	-	-	SPACE			
	E STOP 25,26,27	0	20	1	25 A 26	-	-	-	SPACE			
	E STOP 28,29	0	20	1	27 B 28	-	-	-	SPACE			
	SPACE	-	-	-	29 C 30	-	-	-	SPACE			
	SPACE	-	-	-	31 A 32	-	-	-	SPACE			
	SPACE	-	-	-	33 B 34	-	-	-	SPACE			
	SPACE	-	-	-	35 C 36	-	-	-	SPACE			
	SPACE	-	-	-	37 A 38	-	-	-	SPACE			
	SPACE	-	-	-	39 B 40	-	-	-	SPACE			
	SPACE	-	-	-	41 C 42	-	-	-	SPACE			

Code	Description	Conn.	DF	Load Summary
L	Lighting	0.00	125%	Balance
R	Recept up to 10 kVA	0.00	100%	Phase A 142.13 KVA 33%
	Recept over 10 kVA	0.00	50%	Phase B 142.13 KVA 33%
M	Motor	0.00	100%	Phase C 142.13 KVA 33%
	Largest Motor	0.00	125%	
X4	Receptacles Loads 1 - 4	0.00	100%	Connected 426.40 KVA
X8	Receptacles Loads 5 - 8	10.40	90%	
X14	Receptacles Loads 9 - 14	416.00	80%	
	Connected Total	426.40	KVA	
	Connected Load	1184.44	Amps	
	* 100 mA GFCI TRIP			

**PANEL DEMAND:**  
 NEC TABLE 555.12 ALLOWS A DEMAND FACTOR OF 50% TO BE APPLIED TO 50 RECEPTACLES.  
 PEDESTAL RECEPTACLES: 50 X 10,400 VA X 0.50 = 260,000 VA  
 260,000 VA @ 208 V, 3 PHASE = 721 AMPS

PANEL 3												
Service: 120/208 Volt, 3 Phase, 4 Wire			Mounting: Surface			Bus: 400		Mains: 400A3P			AIC: 10K	
Panel Type: NEMA 4X, SS			Poles: 30			Phase		Comments:				
Code	Description	Load	Bkr	P	Circuit	P	Bkr	Load	Description	Code		
X8	PEDESTALS 1,2	83200	*250	3	1 A 2 3	1	*250	83200	PEDESTALS 4,5	X8		
	4 RECEPTACLES / PED	/	/	/	3 B 4	/	/	/	4 RECEPTACLES / PED			
		/	/	/	5 C 6	/	/	/				
X4	PEDESTAL 3	20800	*100	3	7 A 8 1	20	1200	1200	RECEPTACLE / LIGHT	R		
	2 RECEPTACLES / PED	/	/	/	9 B 10 1	20	1200	1200	SECURITY CAMERA	R		
		/	/	/	11 C 12 1	20	-	-	SPACE			
	E STOP 30	0	20	1	13 A 14 1	20	-	-	SPACE			
	E STOP 31	0	20	1	15 B 16	-	-	-	SPACE			
	E STOP 32	0	20	1	17 C 18	-	-	-	SPACE			
	SPACE	-	-	-	19 A 20	-	-	-	SPACE			
	SPACE	-	-	-	21 B 22	-	-	-	SPACE			
	SPACE	-	-	-	23 C 24	-	-	-	SPACE			
	SPACE	-	-	-	25 A 26	-	-	-	SPACE			
	SPACE	-	-	-	27 B 28	-	-	-	SPACE			
	SPACE	-	-	-	29 C 30	-	-	-	SPACE			
		-	-	-	31 A 32	-	-	-				
		-	-	-	33 B 34	-	-	-				
		-	-	-	35 C 36	-	-	-				
		-	-	-	37 A 38	-	-	-				
		-	-	-	39 B 40	-	-	-				
		-	-	-	41 C 42	-	-	-				


Code	Description	Conn.	DF	Load Summary
L	Lighting	0.00	125%	Balance
R	Recept up to 10 kVA	2.40	100%	Phase A 63.60 KVA 34%
	Recept over 10 kVA	0.00	50%	Phase B 63.60 KVA 34%
M	Motor	0.00	100%	Phase C 62.40 KVA 33%
	Largest Motor	0.00	125%	
X4	Receptacles Loads 1 - 4	20.80	100%	Connected 189.60 KVA
X8	Receptacles Loads 5 - 8	166.40	90%	
X14	Receptacles Loads 9 - 14	0.00	80%	
	Connected Total	189.60	KVA	
	Connected Load	526.67	Amps	
	* 100 mA GFCI TRIP			

**PANEL DEMAND:**  
 NEC TABLE 555.12 ALLOWS A DEMAND FACTOR OF 70% TO BE APPLIED TO 18 RECEPTACLES.  
 PEDESTAL RECEPTACLES: 18 X 10,400 VA X 0.70 = 131,040 VA  
 MISCELLANEOUS LOADS: 1,380 VA  
 TOTAL DEMAND LOAD: 132,420 VA  
 132,420 VA @ 208 V, 3 PHASE = 368 AMPS

NOTE: DEMAND CALCULATIONS REFLECT EVENTUAL CHANGES TO 50 AMP RECEPTACLES.

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ELEC. REF. FILE:										DRAWN BY MF										<input type="checkbox"/> CONCEPT <input type="checkbox"/> FOR REVIEW <input checked="" type="checkbox"/> FOR BID <input type="checkbox"/> FOR MANUFACTURE <input type="checkbox"/> FOR CONSTRUCTION <input type="checkbox"/> FOR RECORD									
PLOT SCALE:										ENGR BY NF																			
NO. DATE										CHECKED BY NF										TITLE PORT OF NEWPORT NEWPORT, OR DOCK 5 & 3 RENOVATION PANEL SCHEDULES									
REVISION DESCRIPTION										DRAWN BY										SCALE NO SCALE									
DRAWN BY										ENGR BY										DRAWING No. PON-E10-912									
ENGR BY										CHECKED BY										SHEET 1 OF 1									
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