

**PANELBOARD NOTES**

- (1) TERMINATE GROUND ON ISOLATED GROUND BUS
- (2) INSTALL LOCKING DEVICE FURNISHED WITH PANELBOARD (LOCK-OFF FOR MAINTENANCE)
- (3) INSTALL LOCKING DEVICE FURNISHED WITH PANELBOARD (LOCK-ON FOR CRITICAL LOAD)
- (4) GFI BREAKER FOR PERSONNEL PROTECTION (5 mA)
- (5) GFI BREAKER FOR EQUIPMENT PROTECTION (30 mA)
- (6) CONDUCTOR SIZE HAS BEEN INCREASED FOR VOLTAGE DROP. SIZE EQUIPMENT GROUNDING CONDUCTOR PROPORTIONALLY PER NEC
- (7) REFER TO ONE-LINE DIAGRAM FOR AVAILABLE FAULT CURRENT FOR INTERRUPTING RATING
- (8) REFER TO ONE-LINE DIAGRAM FOR WIRE SIZES
- (9) FACTORY WIRE TO BE USED
- (10) REFER TO SITE LIGHTING PLAN FOR WIRE SIZES
- (11) THRU CONTACTOR
- (12) FACTORY PROVIDED WITH RED LABEL FOR FIRE ALARM CIRCUIT
- (13) 4-POLAR TAP BREAKER WITH EMERGENCY NIGHT LIGHTING TO UNSWITCHED TERMINATION
- (14) DESIGNATE "PART" BREAKER



ISSUE BLOCK

11/30/17	OTB
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CHECKED BY: SAG  
 DRAWN BY: GAR  
 FILE NAME: E4.4  
 PHOTO CYCLE: 04/28/17  
 DOCUMENT DATE: 09/13/17

**BID SET NOT FOR CONSTRUCTION**

**BUSWAY SCHEDULES**

SHEET: **E4.4**

**BL1A TRACK BUSWAY** 208Y/120 V, 3PH, 4W  
 100 A, RATED BUSWAY  
 10,000 AIC  
 CASE GROUND

LENGTH: 100'  
 POWER FEED: CENTER  
 SERVES: ELECTRONICS TV WALL  
 LOCATION: ELECTRONICS DEPARTMENT  
 BUSWAY SYSTEM FURNISHED BY THE OWNER FOR INSTALLATION BY THE CONTRACTOR

DESCRIPTION	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	DESCRIPTION	
1 72M TV WALL	12	20 A	1	0.96	0.00				1	20 A	SPARE
3 72M TV WALL	12	20 A	1		0.96	0.96			1	20 A	72M TV WALL
5 SPARE	--	20 A	1			0.00		0.96	1	20 A	72M TV WALL
7 SPARE	--	20 A	1	0.00	0.96				1	20 A	72M TV WALL
9 SPARE	--	20 A	1		0.00	0.96			1	20 A	72M TV WALL
11 SPARE	--	20 A	1			0.00		0.00	1	20 A	SPARE
13 72M TV WALL	12	20 A	1	0.96	0.96				1	20 A	72M TV WALL
15 SPARE	--	20 A	1		0.00	0.96			1	20 A	72M TV WALL
17 72M TV WALL	12	20 A	1			0.96		0.00	1	20 A	SPARE
19 08A AQUARIUM WALL	12	20 A	1	1.44	0.18				1	20 A	DATA SYSTEM RACK
21 SPARE	--	20 A	1		0.00	0.90			1	20 A	SPARE
23 08A AQUARIUM WALL	12	20 A	1			0.24		0.00	1	20 A	SPARE
TOTAL CONNECTED				5.46	3.84	2.16					
TOTAL LOAD				47.65	34.15	18.00					
PER NEC ARTICLE 220 FEEDER LOAD				11.46	KVA	8.15					AMPS

**BL2A TRACK BUSWAY** 208Y/120 V, 3PH, 4W  
 100 A, RATED BUSWAY  
 10,000 AIC  
 CASE GROUND

LENGTH: 190'  
 POWER FEED: CENTER  
 SERVES: FRONT CHECKOUTS  
 LOCATION: FRONT CHECKOUTS  
 BUSWAY SYSTEM FURNISHED BY THE OWNER FOR INSTALLATION BY THE CONTRACTOR

DESCRIPTION	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	DESCRIPTION	
1 FRONT CASH WRAPS	12	20 A	1	1.03	1.32				1	20 A	12 FRONT CASH WRAPS
3 FRONT CASH WRAPS	12	20 A	1		1.32	1.32			1	20 A	12 FRONT CASH WRAPS
5 FRONT CASH WRAPS	12	20 A	1			1.32		1.03	1	20 A	12 FRONT CASH WRAPS
7 FRONT CASH WRAPS	12	20 A	1	1.32	0.50				1	20 A	12 SELF CHECKOUTS
9 FRONT CASH WRAPS	12	20 A	1			1.32		0.91	1	20 A	12 SELF CHECKOUTS
11 FRONT CASH WRAPS	12	20 A	1			1.32		0.91	1	20 A	12 PAY STATION
13 PAY STATION	12	20 A	1	0.48	0.50				1	20 A	12 SELF CHECKOUTS
15 SPARE	--	20 A	1		0.00	0.00			1	20 A	SPARE
17 SPARE	--	20 A	1			0.00		0.96	1	20 A	12 SELF CHECKOUTS
19 SPARE	--	20 A	1		0.00	0.18			1	20 A	12 PRICE VERIFIER
21 SELF CHECKOUTS / COOLERS (6)	10	20 A	1		1.28	0.00			1	20 A	SPARE
23 SELF CHECKOUTS (6)	10	20 A	1			0.88		0.00	1	20 A	SPARE
25 SELF CHECKOUTS / COOLERS (6)	10	20 A	1	1.29	0.00				1	20 A	SPARE
27 SELF CHECKOUTS (6)	10	20 A	1		0.98	0.00			1	20 A	SPARE
29 SPARE	--	20 A	1			0.00		0.41	1	20 A	12 34Y/34B FITTING ROOMS / MGH
31 SELF CHECKOUTS / COOLER	12	20 A	1	0.89	0.00				1	20 A	SPARE
33 SELF CHECKOUTS	12	20 A	1		0.90	0.00			1	20 A	SPARE
35 SPARE	--	20 A	1			0.00		1.28	1	20 A	12 32A JEWELRY C/W
37 PAY STATION	12	20 A	1	0.61	0.89				1	20 A	12 SELF CHECKOUTS / COOLER
39 SPARE	--	20 A	1		0.00	0.96			1	20 A	12 SELF CHECKOUTS
41 COLUMN RECEPTACLES	12	20 A	1			0.38		0.00	1	20 A	SPARE
TOTAL CONNECTED				9.00	9.98	8.24					
TOTAL CONNECTED				75.95	76.85	68.70					AMPS
TOTAL LOAD				26.32	KVA	73.07					AMPS
PER NEC ARTICLE 220 FEEDER LOAD				29.32	KVA	73.07					AMPS

**BL1B TRACK BUSWAY** 208Y/120 V, 3PH, 4W  
 100 A, RATED BUSWAY  
 10,000 AIC  
 CASE GROUND

LENGTH: 100'  
 POWER FEED: CENTER  
 SERVES: ELECTRONICS POWER DROPS  
 LOCATION: ELECTRONICS DEPARTMENT  
 BUSWAY SYSTEM FURNISHED BY THE OWNER FOR INSTALLATION BY THE CONTRACTOR

DESCRIPTION	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	DESCRIPTION	
1 72G ELECTRONICS	12	20 A	1	0.71	0.00				1	20 A	SPARE
3 72G ELECTRONICS	12	20 A	1		1.06	0.36			1	20 A	444 FABRIC CUTTING / P.V.
5 72G ELECTRONICS	12	20 A	1			1.44		0.36	1	20 A	WIRELESS KIOSK
7 87B CONNECTION CENTER	12	20 A	1	0.36	0.36				1	20 A	72A CASH WRAP
9 72A / 87B CONNECTION	12	20 A	1		0.48	1.44			1	20 A	72G ELECTRONICS
11 PHOTO KIOSK	12	20 A	1			0.36		1.08	1	20 A	72G ELECTRONICS
13 72G ELECTRONICS	12	20 A	1			1.44		1.08	1	20 A	72G ELECTRONICS
15 72G ELECTRONICS	12	20 A	1			1.44		1.08	1	20 A	72G ELECTRONICS
17 72G ELECTRONICS	12	20 A	1			0.36		0.00	1	20 A	SPARE
19 SPARE	--	20 A	1	0.00	1.08				1	20 A	72G ELECTRONICS
21 SPARE	--	20 A	1		0.00	0.00			1	20 A	72G ELECTRONICS
23 09B COOL FOOD COOLER (6)	12	20 A	1			1.96		0.90	1	20 A	SPARE
25 SPARE	--	20 A	1	0.00	1.22				1	20 A	10 RTU'S 25 RECEPT (6)
27 SPARE	--	20 A	1		0.18	0.00			1	20 A	SPARE
29 COLUMN RECEPTACLES	12	20 A	1			0.72		1.22	1	20 A	9 RTU'S 23,24,27, 44UJ RCPTS (8)
TOTAL CONNECTED				6.26	6.96	6.60					KVA
TOTAL LOAD				62.42	50.50	55.22					AMPS
PER NEC ARTICLE 220 FEEDER LOAD				18.92	KVA	52.51					AMPS

**BL2B TRACK BUSWAY** 208Y/120 V, 3PH, 4W  
 100 A, RATED BUSWAY  
 10,000 AIC  
 CASE GROUND

LENGTH: 45'  
 POWER FEED: END  
 SERVES: SALES FLOOR POWER DROPS  
 LOCATION: SEASONAL  
 BUSWAY SYSTEM FURNISHED BY THE OWNER FOR INSTALLATION BY THE CONTRACTOR

DESCRIPTION	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	DESCRIPTION	
1 18C SEASONAL	12	20 A	1	0.36	0.00				1	20 A	SPARE
3 SPARE	--	20 A	1		0.00	1.00			1	20 A	12 46E RAIL CORNICE
5 SPARE	--	20 A	1			0.00		2.00	1	20 A	12 46E RAIL CORNICE
7 46E RAIL CORNICE	12	20 A	1	1.00	0.00				1	20 A	SPARE
9 46E RAIL CORNICE	12	20 A	1		1.00	1.00			1	20 A	12 46E RAIL CORNICE
11 SPARE	--	20 A	1			0.00		1.00	1	20 A	12 46E RAIL CORNICE
13 SPARE	--	20 A	1	0.00	0.38				1	20 A	12 PRICE VERIFIERS
15 46E RAIL CORNICE	12	20 A	1		1.00	1.00			1	20 A	12 46E RAIL CORNICE
17 46E RAIL CORNICE	12	20 A	1			1.00		1.00	1	20 A	12 46E RAIL CORNICE
19 18C SEASONAL (6)	10	20 A	1	0.72	1.22				1	20 A	12 RTU'S 18-19 RECEPTS
21 SPARE	--	20 A	1		0.00	0.00			1	20 A	SPARE
23 SPARE	--	20 A	1			0.00		0.00	1	20 A	SPARE
TOTAL CONNECTED				3.66	3.30	3.20					KVA
TOTAL CONNECTED				30.50	43.38	43.38					AMPS
TOTAL LOAD				13.66	KVA	37.92					AMPS
PER NEC ARTICLE 220 FEEDER LOAD				13.66	KVA	37.92					AMPS

**BL1C TRACK BUSWAY** 208Y/120 V, 3PH, 4W  
 100 A, RATED BUSWAY  
 10,000 AIC  
 CASE GROUND

LENGTH: 150'  
 POWER FEED: END  
 SERVES: SALES FLOOR POWER DROPS  
 LOCATION: SEASONAL  
 BUSWAY SYSTEM FURNISHED BY THE OWNER FOR INSTALLATION BY THE CONTRACTOR

DESCRIPTION	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	DESCRIPTION	
1 06A SPORTING C/W (6)	10	20 A	1	1.08	0.00				1	20 A	SPARE
3 06A SPORTING C/W / MGH (6)	10	20 A	1		1.68	0.00			1	20 A	SPARE
5 06A / 06B SPORTING C/W	12	20 A	1			0.16		0.10	1	20 A	12 09C BATT
7 12A COLOR CHIP BOARD (6)	10	20 A	1	1.02	0.00				1	20 A	SPARE
9 12B PAINT MIXING BOOTH (6)	8	20 A	1		1.58	0.00			1	20 A	SPARE
11 12B PAINT MIXING BOOTH	12	20 A	1			0.67		1.56	1	20 A	10 09D BATT FREEZER (6)
13 12B PAINT MIXING BOOTH	12	20 A	1	0.72	0.18				1	20 A	12 07B TOYS
15 SPARE	--	20 A	1		0.80	0.00			1	20 A	SPARE
17 SPARE	--	20 A	1			0.00		1.44	1	20 A	8 07A TOYS GONDOLA (6)
19 RTU'S 25, 35 RECEPTS	12	20 A	1	1.22	0.72				1	20 A	12 11A SEASONAL
21 SPARE	--	20 A	1		0.00	0.72			1	20 A	12 11A SEASONAL
23 SPARE	--	20 A	1			0.00		0.00	1	20 A	SPARE
25 SPARE	--	20 A	1	0.00	0.00				1	20 A	SPARE
27 11A SEASONAL	12	20 A	1		0.72	0.00			1	20 A	SPARE
29 11A SEASONAL	12	20 A	1			0.72		1.22	1	20 A	10 /AHJUS, RTU 22 RECEPTS (6)
TOTAL CONNECTED				5.54	5.46	5.67					KVA
TOTAL CONNECTED				46.24	45.70	48.97					AMPS
TOTAL LOAD				18.89	KVA	46.89					AMPS
PER NEC ARTICLE 220 FEEDER LOAD				18.89	KVA	46.89					AMPS

**BL2U TRACK BUSWAY** 120/240 V, 1PH, 3W  
 40 A, RATED BUSWAY  
 5,000 AIC  
 CASE GROUND  
 ISOLATED GROUND

LENGTH: 190'  
 POWER FEED: CENTER  
 SERVES: FRONT CHECKOUTS  
 LOCATION: FRONT CHECKOUTS  
 BUSWAY SYSTEM FURNISHED BY THE OWNER FOR INSTALLATION BY THE CONTRACTOR

DESCRIPTION	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	DESCRIPTION	
1 SPARE	--	--	--	0.00	0.51				1	20 A	12 FRONT CASH WRAPS
3 PAY STATION	12	20 A	1		0.33	0.00			1	20 A	SPARE
5 SPARE	--	--	--	0.00	0.51				1	20 A	12 FRONT CASH WRAPS
7 FRONT CASH WRAPS											