

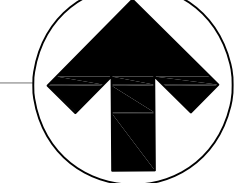
NEW DRESSING ROOMS

SALES AREA
CEILING HEIGHT
12'-0" A.F.F.

FLOOR PLAN

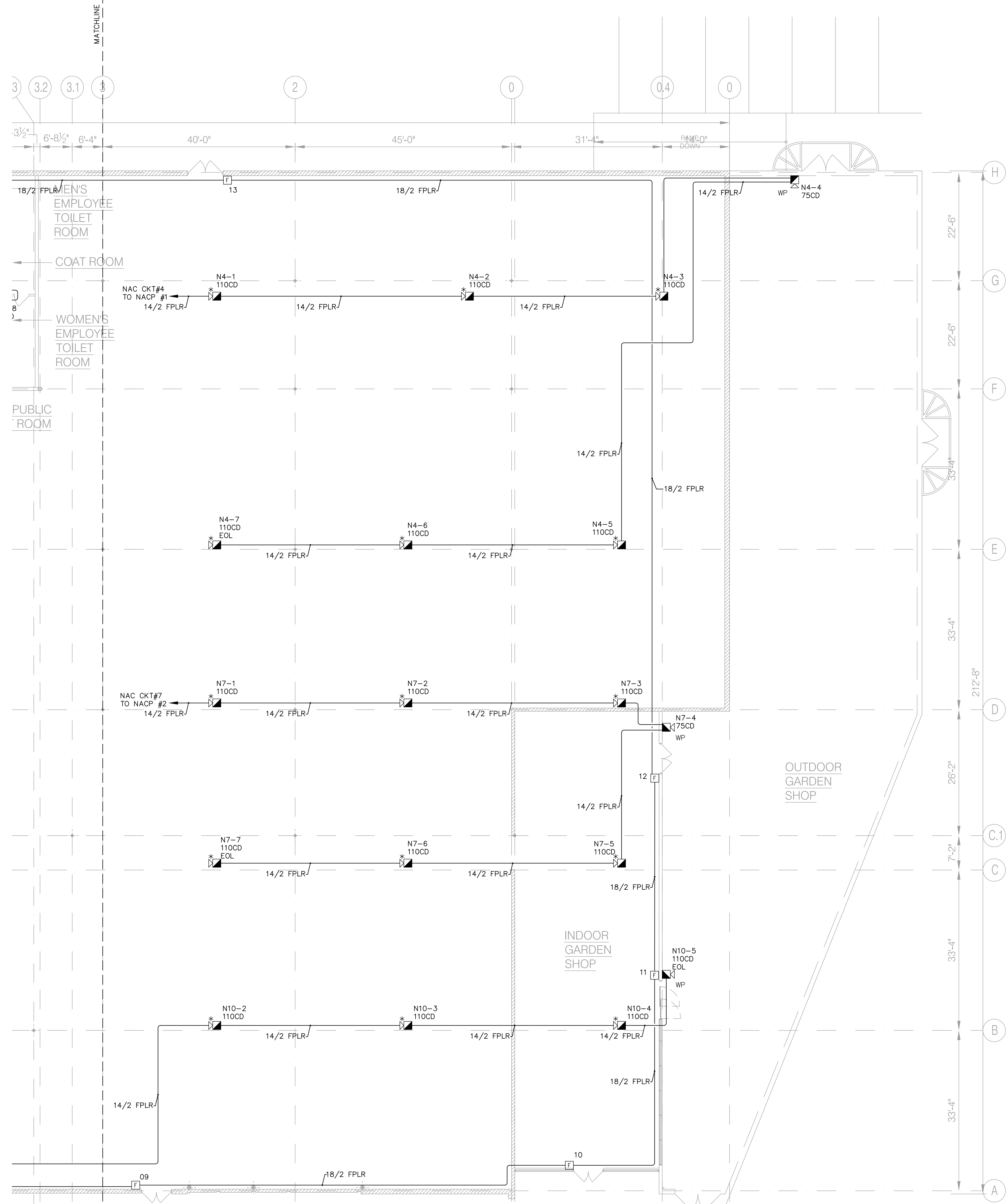
SCALE: 1/8" = 1'-0"

NORTH



MATCHLINE

MATCHLINE

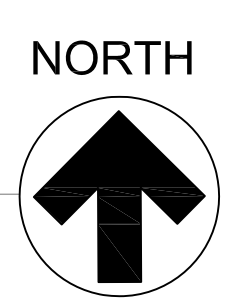


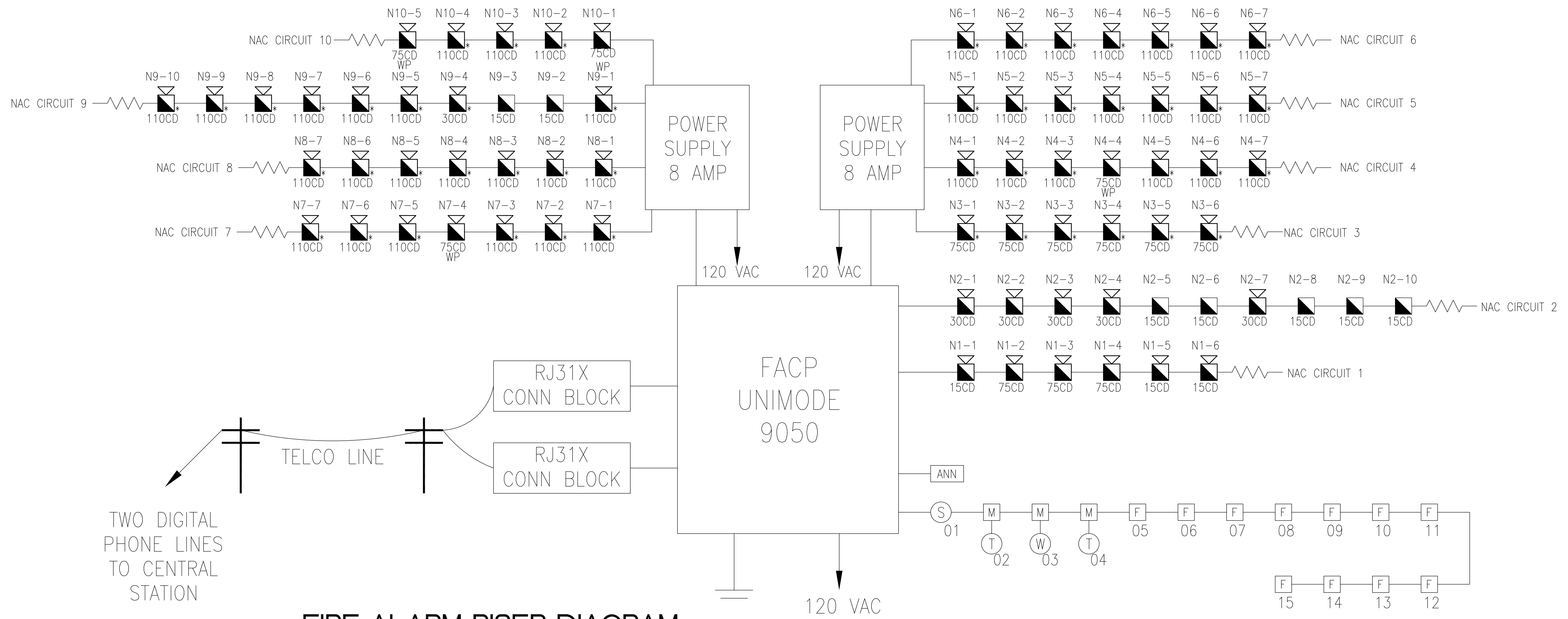
DEVICE LEGEND

- FACP FIRE ALARM CONTROL PANEL
 - NACP NAC PANEL
 - S SMOKE DETECTOR
 - F PULL STATION
 - HORN/STROBE
 - STROBE
 - T TAMPER SWITCH (BY OTHERS)
 - W WATERFLOW SWITCH (BY OTHERS)
 - ANN ANNUNCIATOR
- WP DENOTES WEATHERPROOF DEVICE
 * DENOTES CEILING MOUNT DEVICE

FLOOR PLAN

SCALE: 1/8" = 1'-0"





FIRE ALARM RISER DIAGRAM

DEVICE LEGEND

- FACP FIRE ALARM CONTROL PANEL
- NACP NAC PANEL
- S SMOKE DETECTOR
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- T TAMPER SWITCH (BY OTHERS)
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WP DENOTES WEATHERPROOF DEVICE
 * DENOTES CEILING MOUNT DEVICE

	INPUT OR CONDITION				
OUTPUT OR RESULT	MANUAL PULL STATION	SMOKE DETECTOR	WET WATERFLOW SWITCH	WET TAMPER SWITCH	SYSTEM TROUBLE
FIRE ALARM CONTROL PANEL SYSTEM OPERATIONS MATRIX					
ACTIVATION OF LOCAL ALARM AT FACP	x	x	x	x	x
ACTIVATE ALL AUDIBLE & VISUAL DEVICES	x	x			
TRANSMIT ALARM SIGNAL TO CENTRAL STATION	x	x			
SHUT DOWN HVAC/FANS	x	x			
TROUBLE CONDITION AT FACP			x	x	x
TRANSMIT TROUBLE CONDITION TO CENTRAL STATION			x	x	x
SUPERVISORY CONDITION AT FACP				x	x
TRANSMIT SUPERVISORY CONDITION TO CENTRAL STATION				x	x

tyco Fire & Security		Battery Calculation Worksheet (all currents stated in mA) 4/3/2008				
PROJECT: KMART		FACP				
Device Description	Quantity of Devices	Standby mA Per Device	Alarm mA Per Device	Total Device Standby mA	Total Device Alarm mA	
System Devices						
UNIMODE 960 FIRE ALARM PANEL	1	120	200	120	200	
ADT-ANN-80 ANNUNCIATOR	1	15	40	15	40	
				0	0	
				0	0	
				0	0	
				0	0	
Total System Current				135	240	
Smoke Detectors / Auxiliary Devices						
AD355 SMOKE DETECTOR	1	0.3	40	0.3	40	
ADT-BG-12LX PULL STATION	11	0.23	40	2.53	440	
MMF-300 ADDRESSABLE MODULE	3	0.4	40	1.2	120	
				0	0	
				0	0	
				0	0	
				0	0	
Device Totals	15			4.03	600	
Notification Appliances (list all)						
P2R System Sensor Horn/Strobe 15cd	3	N/A	79	N/A	237	
P2R System Sensor Horn/Strobe 30cd	5	N/A	107	N/A	535	
P2R System Sensor Horn/Strobe 75cd	2	N/A	176	N/A	352	
P2R System Sensor Horn/Strobe 110cd	0	N/A	212	N/A	0	
P2RK System Sensor Weatherproof 75cd	0	N/A	176	N/A	0	
PC2W System Sensor Horn/Strobe Ceiling 15cd	0	N/A	79	N/A	0	
PC2W System Sensor Horn/Strobe Ceiling 30cd	0	N/A	107	N/A	0	
PC2W System Sensor Horn/Strobe Ceiling 75cd	0	N/A	176	N/A	0	
PC2W System Sensor Horn/Strobe Ceiling 110cd	0	N/A	212	N/A	0	
SR System Sensor Strobe 15cd	6	N/A	66	N/A	396	
SR System Sensor Strobe 30cd	0	N/A	94	N/A	0	
Notification Appliance Totals	16			N/A	1520	
Summary Section						
Standby Hrs. Required	24					
Alarm Sounding Minutes	5					
Total System Standby mA	139.03					
Total System Alarm mA	2360					
Total System Standby AH	3.31					
Total System Alarm AH	0.20					
Min. AH Battery	3.50					
ADD 30% FOR BATTERY DEPLETION	1.05					
Required AH Battery	4.56					
AH BATTERY PROVIDED FOR SYSTEM						
	7					

tyco Fire & Security		Battery Calculation Worksheet (all currents stated in mA) 4/3/2008				
PROJECT: KMART		NACP #1				
Device Description	Quantity of Devices	Standby mA Per Device	Alarm mA Per Device	Total Device Standby mA	Total Device Alarm mA	
System Devices						
FCPS-24FS8 Power Supply 8 Amp	1	65	145	65	145	
				0	0	
				0	0	
				0	0	
				0	0	
Total System Current				65	145	
Smoke Detectors / Auxiliary Devices						
				0	0	
				0	0	
				0	0	
				0	0	
				0	0	
				0	0	
Device Totals	0	0	0	0	0	
Notification Appliances (list all)						
P2R System Sensor Horn/Strobe 15cd		N/A	79	N/A	0	
P2R System Sensor Horn/Strobe 30cd		N/A	107	N/A	0	
P2R System Sensor Horn/Strobe 75cd	6	N/A	176	N/A	1056	
P2R System Sensor Horn/Strobe 110cd		N/A	212	N/A	0	
P2RK System Sensor Weatherproof 75cd		N/A	176	N/A	0	
PC2W System Sensor Horn/Strobe Ceiling 15cd		N/A	79	N/A	0	
PC2W System Sensor Horn/Strobe Ceiling 30cd		N/A	107	N/A	0	
PC2W System Sensor Horn/Strobe Ceiling 75cd		N/A	176	N/A	0	
PC2W System Sensor Horn/Strobe Ceiling 110cd		N/A	212	N/A	3816	
SR System Sensor Strobe 15cd	18	N/A	66	N/A	0	
SR System Sensor Strobe 30cd		N/A	94	N/A	0	
Notification Appliance Totals	24			N/A	4872	
Summary Section						
Standby Hrs. Required	24					
Alarm Sounding Minutes	5					
Total System Standby mA	65					
Total System Alarm mA	5017					
Total System Standby AH	1.56					
Total System Alarm AH	0.42					
Min. AH Battery	1.98					
ADD 30% FOR BATTERY DEPLETION	0.59					
Required AH Battery	2.57					
AH BATTERY PROVIDED FOR SYSTEM						
	7					

tyco Fire & Security		Battery Calculation Worksheet (all currents stated in mA) 4/3/2008				
PROJECT: KMART		NACP #2				
Device Description	Quantity of Devices	Standby mA Per Device	Alarm mA Per Device	Total Device Standby mA	Total Device Alarm mA	
System Devices						
FCPS-24FS8 Power Supply 8 Amp	1	65	145	65	145	
				0	0	
				0	0	
				0	0	
				0	0	
Total System Current				65	145	
Smoke Detectors / Auxiliary Devices						
				0	0	
				0	0	
				0	0	
				0	0	
				0	0	
				0	0	
Device Totals	0	0	0	0	0	
Notification Appliances (list all)						
P2R System Sensor Horn/Strobe 15cd		N/A	79	N/A	0	
P2R System Sensor Horn/Strobe 30cd		N/A	107	N/A	0	
P2R System Sensor Horn/Strobe 75cd		N/A	176	N/A	0	
P2R System Sensor Horn/Strobe 110cd		N/A	212	N/A	0	
P2RK System Sensor Weatherproof 75cd	3	N/A	176	N/A	528	
PC2W System Sensor Horn/Strobe Ceiling 15cd		N/A	79	N/A	0	
PC2W System Sensor Horn/Strobe Ceiling 30cd	1	N/A	107	N/A	107	
PC2W System Sensor Horn/Strobe Ceiling 75cd		N/A	176	N/A	0	
PC2W System Sensor Horn/Strobe Ceiling 110cd	22	N/A	212	N/A	4664	
SR System Sensor Strobe 15cd	2	N/A	66	N/A	132	
SR System Sensor Strobe 30cd		N/A	94	N/A	0	
Notification Appliance Totals	28			N/A	5431	
Summary Section						
Standby Hrs. Required	24					
Alarm Sounding Minutes	5					
Total System Standby mA	65					
Total System Alarm mA	5578					
Total System Standby AH	1.56					
Total System Alarm AH	0.46					
Min. AH Battery	2.02					
ADD 30% FOR BATTERY DEPLETION	0.61					
Required AH Battery	2.63					
AH BATTERY PROVIDED FOR SYSTEM						
	7					

KMART					
Panel Circuit	Device	Current	# of Devices	Current	Current
N1	P2R System Sensor Horn/Strobe 15cd	0.079	X	3	= 0.237
	P2R System Sensor Horn/Strobe 30cd	0.107	X		= 0
	P2R System Sensor Horn/Strobe 75cd	0.176	X	2	= 0.352
	P2R System Sensor Horn/Strobe 110cd	0.212	X		= 0
	P2RK System Sensor Weatherproof 75cd	0.176	X		= 0
	PC2W System Sensor Horn/Strobe Ceiling 15cd	0.079	X		= 0
	PC2W System Sensor Horn/Strobe Ceiling 30cd	0.107	X		= 0
	PC2W System Sensor Horn/Strobe Ceiling 75cd	0.176	X		= 0
	PC2W System Sensor Horn/Strobe Ceiling 110cd	0.212	X		= 0
	SR System Sensor Strobe 15cd	0.066	X		= 0
SR System Sensor Strobe 30cd	0.094	X		= 0	
				Total Current	0.589
N2	P2R System Sensor Horn/Strobe 15cd	0.079	X		= 0
	P2R System Sensor Horn/Strobe 30cd	0.107	X	5	= 0.535
	P2R System Sensor Horn/Strobe 75cd	0.176	X		= 0
	P2R System Sensor Horn/Strobe 110cd	0.212	X		= 0
	P2RK System Sensor Weatherproof 75cd	0.176	X		= 0
	PC2W System Sensor Horn/Strobe Ceiling 15cd	0.079	X		= 0
	PC2W System Sensor Horn/Strobe Ceiling 30cd	0.107	X		= 0
	PC2W System Sensor Horn/Strobe Ceiling 75cd	0.176	X		= 0
	PC2W System Sensor Horn/Strobe Ceiling 110cd	0.212	X	5	= 1.06
	SR System Sensor Strobe 15cd	0.066	X		= 0
SR System Sensor Strobe 30cd	0.094	X		= 0	
				Total Current	1.595

Ohms Per Foot	X Total Wire Length	Current	VDC	EOL Voltage
3.19	1000	235	X	0.589 = 0.442
				23.558

12ga, 2 cond	=	1.59 Ω
14 ga, 2 cond	=	3.19 Ω

Ohms Per Foot	X Total Wire Length	Current	VDC	EOL Voltage
3.19	1000	261	X	1.595 = 1.328
				22.672

NACP#1					
Panel Circuit	Device	Current	# of Devices	Current	Current
N3	P2R System Sensor Horn/Strobe 15cd	0.079	X		= 0
	P2R System Sensor Horn/Strobe 30cd	0.107	X		= 0
	P2R System Sensor Horn/Strobe 75cd	0.176	X		= 0
	P2R System Sensor Horn/Strobe 110cd	0.212	X		= 0
	P2RK System Sensor Weatherproof 75cd	0.176	X		= 0
	PC2W System Sensor Horn/Strobe Ceiling 15cd	0.079	X		= 0
	PC2W System Sensor Horn/Strobe Ceiling 30cd	0.107	X		= 0
	PC2W System Sensor Horn/Strobe Ceiling 75cd	0.176	X	6	= 1.056
	PC2W System Sensor Horn/Strobe Ceiling 110cd	0.212	X		= 0
	SR System Sensor Strobe 15cd	0.066	X		= 0
SR System Sensor Strobe 30cd	0.094	X		= 0	
				Total Current	1.056
N4	P2R System Sensor Horn/Strobe 15cd	0.079	X		= 0
	P2R System Sensor Horn/Strobe 30cd	0.107	X		= 0
	P2R System Sensor Horn/Strobe 75cd	0.176	X		= 0
	P2R System Sensor Horn/Strobe 110cd	0.212	X		= 0
	P2RK System Sensor Weatherproof 75cd	0.176	X	1	= 0.176
	PC2W System Sensor Horn/Strobe Ceiling 15cd	0.079	X		= 0
	PC2W System Sensor Horn/Strobe Ceiling 30cd	0.107	X		= 0
	PC2W System Sensor Horn/Strobe Ceiling 75cd	0.176	X		= 0
	PC2W System Sensor Horn/Strobe Ceiling 110cd	0.212	X	6	= 1.272
	SR System Sensor Strobe 15cd	0.066	X		= 0
SR System Sensor Strobe 30cd	0.094	X	6	= 0.564	
				Total Current	2.012

Ohms Per Foot	X Total Wire Length	Current	VDC	EOL Voltage
3.19	1000	251	X	1.056 = 0.846
				23.154

Ohms Per Foot	X Total Wire Length	Current	VDC	EOL Voltage
3.19	1000	540	X	2.012 = 3.466
				20.534

NACP#2					
Panel Circuit	Device	Current	# of Devices	Current	Current
N5	P2R System Sensor Horn/Strobe 15cd	0.079	X		= 0
	P2R System Sensor Horn/Strobe 30cd	0.107	X		= 0
	P2R System Sensor Horn/Strobe 75cd	0.176	X		= 0
	P2R System Sensor Horn/Strobe 110cd	0.212	X		= 0
	P2RK System Sensor Weatherproof 75cd	0.176	X		= 0
	PC2W System Sensor Horn/Strobe Ceiling 15cd	0.079	X		= 0
	PC2W System Sensor Horn/Strobe Ceiling 30cd	0.107	X		= 0
	PC2W System Sensor Horn/Strobe Ceiling 75cd	0.176	X		= 0
	PC2W System Sensor Horn/Strobe Ceiling 110cd	0.212	X	6	= 1.272
	SR System Sensor Strobe 15cd	0.066	X		= 0
SR System Sensor Strobe 30cd	0.094	X		= 0	
				Total Current	1.272
N6	P2R System Sensor Horn/Strobe 15cd	0.079	X		= 0
	P2R System Sensor Horn/Strobe 30cd	0.107	X		= 0
	P2R System Sensor Horn/Strobe 75cd	0.176	X		= 0
	P2R System Sensor Horn/Strobe 110cd	0.212	X		= 0
	P2RK System Sensor Weatherproof 75cd	0.176	X	2	= 0.352
	PC2W System Sensor Horn/Strobe Ceiling 15cd	0.079	X		= 0
	PC2W System Sensor Horn/Strobe Ceiling 30cd	0.107	X		= 0
	PC2W System Sensor Horn/Strobe Ceiling 75cd	0.176	X		= 0
	PC2W System Sensor Horn/Strobe Ceiling 110cd	0.212	X	3	= 0.636
	SR System Sensor Strobe 15cd	0.066	X		= 0
SR System Sensor Strobe 30cd	0.094	X		= 0	
				Total Current	0.988

Ohms Per Foot	X Total Wire Length	Current	VDC	EOL Voltage
3.19	1000	389	X	1.272 = 1.578
				22.422

Ohms Per Foot	X Total Wire Length	Current	VDC	EOL Voltage
3.19	1000	420	X	1.272 = 1.704
				22.296

Panel Circuit	Device	Current	# of Devices	Current	Current
N7	P2R System Sensor Horn/Strobe 15cd	0.079			