

UPSTREAM DEVICE - 100A											
LOAD TYPE (LABEL)	LOAD (KVA)			CIRCUIT NUMBER	WIRE SIZE	BREAKER	CODE	LOAD (KVA)			LOAD TYPE (LABEL)
	A	B	C					A	B	C	
CASHIER DESK RECEIPTS UN	0.9			12	12	15		0.7			CASHIER DESK RECEIPTS
CASHIER DESK RECEIPTS	0.7			4	12	15		0.7			CASHIER DESK RECEIPTS
CASHIER DESK RECEIPTS	0.7			6	12	15		0.4			CASH COUNTER 106107
CASHIER DESK RECEIPTS	0.7			8	12	15		0.7			CASHIER DESK RECEIPTS
CAT SCALE RECEIPTS	0.2			10	12	15		0.4			ENERGY MANAGEMENT PANEL
CTS FLUGMOLD	1.6			12	20			0.0			SPARE
CTS FLUGMOLD	1.6			14	20			0.0			SPARE
TTS FLUGMOLD	1.8			16	20			0.0			SPARE
TTS FLUGMOLD	1.8			18	20			0.0			SPARE
SPARE	0.0			20	20			0.0			SPARE
SPARE	0.0			22	20			0.0			SPACE ONLY
SPACE ONLY	0.0			24	20			0.0			SPACE ONLY
SPACE ONLY	0.0			26	20			0.0			SPACE ONLY
SPACE ONLY	0.0			28	20			0.0			SPACE ONLY
SPACE ONLY	0.0			30	20			0.0			SPACE ONLY
SPACE ONLY	0.0			32	20			0.0			SPACE ONLY
SPACE ONLY	0.0			34	20			0.0			SPACE ONLY
SPACE ONLY	0.0			36	20			0.0			SPACE ONLY
SPACE ONLY	0.0			38	20			0.0			SPACE ONLY
SPACE ONLY	0.0			40	20			0.0			SPACE ONLY
SPACE ONLY	0.0			42	20			0.0			SPACE ONLY
TOTAL CONN. LOAD	12.5 KVA							3.6 KVA			
PANEL DIVERSITY	31.4 AMPERES							3.6 KVA			

UPSTREAM DEVICE - 225A											
LOAD TYPE (LABEL)	LOAD (KVA)			CIRCUIT NUMBER	WIRE SIZE	BREAKER	CODE	LOAD (KVA)			LOAD TYPE (LABEL)
	A	B	C					A	B	C	
CONVECTION OVEN 552B	2.5			2	4	10		2.5			CONVECTION OVEN 552B
SHUNT TRIP	0.0			6	10	15		0.0			SHUNT TRIP
CONVECTION OVEN 552B	0.9			8	12	15		0.9			CONVECTION OVEN 552B
SHUNT TRIP	0.0			12	12	15		0.0			SHUNT TRIP
CIGARETTE DISPLAY CASE 82	0.4			14	10	25		0.0			DUAL COFFEE BREWER 902
DIGITAL DISPLAY 34G34F	1.8			16	10	25		0.0			DUAL COFFEE BREWER 902
BEAN-TO-CUP 9L	2.1			18	12	20		1.8			DUNKACINO MACHINE 107A
EF-1	0.5			22	8	35		2.9			DUAL THERMOFR. BREWER 122A
THERMOFRESH BREWER 122AA	2.0			24	8	35		2.0			WH-2
ICED COFFEE BREWER 200A	2.1			26	8	35		2.1			WH-2
SLATWALL 63B	0.7			32	8	45		3.3			GRAB-N-GO CASE COND. 1P
COUNTER TOP COLDWELL 10F	0.4			34	10	30		1.7			CUBE ICE MAKER COND. 4A
AC-1/CU-1	2.1			36	10	30		1.7			CUBE ICE MAKER COND. 4A
SPARE	0.0			40	10	30		0.0			SPARE
SPARE	0.0			42	10	30		0.0			SPARE
TOTAL CONN. LOAD	72.7 KVA							24.2 KVA			
PANEL DIVERSITY	156.5 AMPERES							23.8 KVA			

UPSTREAM DEVICE - 225A											
LOAD TYPE (LABEL)	LOAD (KVA)			CIRCUIT NUMBER	WIRE SIZE	BREAKER	CODE	LOAD (KVA)			LOAD TYPE (LABEL)
	A	B	C					A	B	C	
MULTI-HOPPER GRINDER 1010J	1.3			2	2	12		1			MERCHANDISERS 9191A
COLD BARREL MERCH 9391	1.0			4	12	20		0.4			MERCHANDISERS 9191A
COLD BARREL MERCH 9391	1.0			6	12	20		0.4			EMPLOYEE KIOSK
POWER BASE 563	0.2			8	12	20		0.7			SLATWALL 63B
HOOD LIGHTS/CONTROLS	0.2			10	12	20		1.8			MICROWAVE 10
ZETA DRIVER	0.2			12	12	20		1.8			MICROWAVE 10
REVERSE COSMOSIS FILTER 992	0.1			14	12	20		1.0			DIGITAL DISPLAY 34F
COFFEE SATELLITE WARMER 11B	0.2			16	12	20		1.0			DIGITAL DISPLAY 34F
SINGLE-BOWL BURB DISP. 8H	0.4			18	12	20		1.8			HOTDOG ROLLER GRILL 2
POST MIX & ICE DISP. 4	1.2			20	12	20		1.8			HOTDOG ROLLER GRILL 2
POST MIX & ICE DISP. 4	1.2			22	12	20		1.1			HEATED DISPLAY CASE 5M
GRAB-N-GO CASE 1P	0.8			24	12	20		0.2			CHILI-CHEESE DISP. 12
SINGLE-BOWL BURB DISP. 8H	0.4			26	12	15		0.7			CUBE ICE MAKER 4A
COFFEE GRINDER 9E	1.3			28	12	15		0.7			CUBE ICE MAKER 4A
ICE DISPENSER 20A	1.0			30	12	15		1.0			ICE DISPENSER 20A
FROZEN BEVERAGE DISP. BE	2.1			32	12	20		0.8			LED LIGHT STRIP
FROZEN BEVERAGE DISP. BE	2.1			34	10	20		2.1			BEAN-TO-CUP 9K
FROZEN BEVERAGE DISP. BE	2.1			36	10	20		2.1			DARY DISPENSER 101CC
DELI CONVENIENCE RECEIPTS	0.5			40	12	20		0.4			DARY DISPENSER 101CC
DONUT CASE 8T	0.3			42	12	20		0.5			SINK/CONVEYER REC-1P
TOTAL CONN. LOAD	40.4 KVA							13.0 KVA			
PANEL DIVERSITY	99.6 AMPERES							14.0 KVA			

120V					
Amp Draw	12 AWG	10AWG	8AWG	6 AWG	4 AWG
15.00	49	72	115	183	292
21.30	49	77	122	194	309
31.40	49	57	91	146	232
41.50	46	73	116	185	
51.60	61	97	154		

208V, 1-ph					
Amp Draw	12 AWG	10AWG	8AWG	6 AWG	4 AWG
15.00	79	125	200	317	506
21.30	63	133	211	336	
31.40	100	158	253	402	
41.50	80	127	202	321	
51.60	105	168	268		

208V, 3-ph										
Amp Draw	12 AWG	10AWG	8AWG	6 AWG	4 AWG	2 AWG	1 AWG	#10	#8	#6
15.00	91	143	231	366	524	828	1189	1476	1862	2351
21.30	91	143	231	366	524	828	1189	1476	1862	2351
31.40	96	154	244	389	519	779	984	1241	1567	1975
41.50	92	148	233	371	487	590	745	940	1185	1399
51.60	127	194	309	492	620	853	987	1185	1399	
61.70	167	265	334	421	522	671	846	999	1199	
71.80	146	232	292	369	465	587	740	874	1049	
81.90	206	259	328	414	522	658	777	933		
91.00	185	238	295	372	470	592	699	839		
101.10	198	272	338	427	538	636	762			
111.25	187	236	296	376	474	559	671			
121.50	196	248	313	395	488	559				
131.75	212	268	336	427	538	636				
142.00	235	296	349	470						
152.25	263	370								

2 VOLTAGE DROP WIRE MATRIX
SCALE: NTS

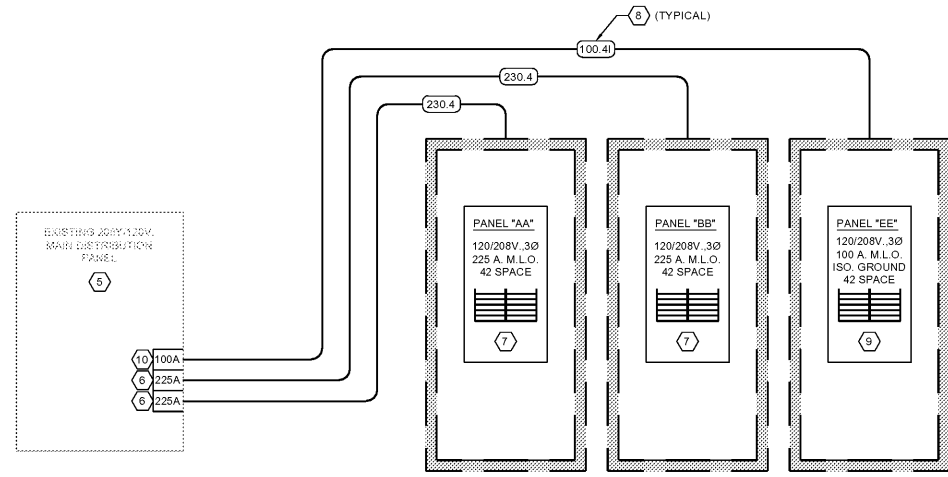
LOAD SUMMARY - RENOVATION			
HVAC	0.5 KVA	X 100%	0.5 KVA
INTERIOR LIGHTING	2.0 KVA	X 125%	2.5 KVA
EXTERIOR LIGHTING	0.0 KVA	X 125%	0.0 KVA
RECEPTACLES	15.7 KVA	FIRST 10K + 50% REMAINING	12.9 KVA
APPLIANCE	59.0 KVA	X 60%	38.4 KVA
EQUIPMENT	48.4 KVA	X 100%	48.4 KVA
MOTORS	0.0 KVA	125% LARGEST + 100% REMAINING	0.0 KVA
OTHER	0.0 KVA	X 100%	0.0 KVA
TOTAL CONNECTED LOAD KVA	125.6 KVA	LOAD DIVERSITY KVA	102.7 KVA
TOTAL CONNECTED LOAD AMPERES	348.6 AMP	LOAD DIVERSITY AMPS	285.1 AMP

1 EXAMPLE PANELBOARD SCHEDULES
SCALE: NTS

CONDUIT AND CONDUCTOR SCHEDULE

FEEDER	DESCRIPTION
100.4I	(4)#3, (1)#8 G., (1)#8 I.G., IN 1-1/2" C.
230.4	(4)#40, (1)#4 G., IN 2-1/2" C.

CONDUIT AND CONDUCTOR SCHEDULE NOTES:
I - ISOLATED GROUND
V - SIZED FOR VOLTAGE DROP
S - SEPARATELY DERIVED SYSTEM
U - UTILITY FEEDER



3 PARTIAL RISER DIAGRAM
SCALE: NTS

CODE NOTES:

- LC- CONTROL WITH LIGHTING CONTACTORS SEE DETAIL 2 ON SHEET E8.
- GF- PROVIDE GFCI BREAKER.
- L- PROVIDE LOCK-ON DEVICE.
- S- PROVIDE SHUNT TRIP BREAKER.
- SWN- SWITCHED NEUTRAL/COMMON TRIP TYPE CIRCUIT BREAKER. ALSO, PROVIDE CIRCUIT BREAKER HANDLE PADLOCK ATTACHMENT.
- P- CIRCUIT BREAKER PADLOCK ATTACHMENT FOR LOCKING BREAKER IN THE "OFF" POSITION.
- HL- PROVIDE HANDLE CLAMP FOR LOCKING CIRCUIT BREAKER IN THE "ON" POSITION.
- HA- PROVIDE HACR TYPE BREAKER.
- IG- ISOLATED GROUND CIRCUIT.

KEYED NOTES

- CONNECT BRANCH CIRCUITS TO EXISTING SPARE CIRCUIT BREAKERS (INCLUDING BREAKERS MADE SPARE BY DEMOLITION), OR PROVIDE AND CONNECT TO NEW CIRCUIT BREAKERS IN EXISTING SPACES.
- IF THERE ARE NOT ENOUGH EXISTING SPARE CIRCUIT BREAKERS AND/OR BREAKER SPACES, THEN PROVIDE NEW PANELBOARD(S) AND FEEDER(S). COORDINATE PANELBOARD LOCATION(S) WITH OWNER.
- VERIFY THAT PANELBOARDS, FEEDERS AND FEEDER BREAKERS ARE NOT OVER-LOADED BY CONNECTION OF NEW LOADS.
- ANY NEW PANELBOARDS OR CIRCUIT BREAKERS SHALL MATCH THE AIC RATINGS OF THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM.
- EXISTING ELECTRICAL DISTRIBUTION SYSTEM TO REMAIN IN SERVICE.
- IF NEW PANELBOARD IS REQUIRED, PROVIDE NEW 225A, 3-POLE BREAKER TO FEED NEW PANELBOARD.
- IF NEW PANELBOARD IS REQUIRED, PROVIDE NEW 208Y/120V, 3Ø, 225A, M.L.O. PANEL. LABEL AS REQUIRED.
- CONDUCTOR SIZING BASED ON USE OF COPPER CONDUCTORS HAVING AN INSULATION RATING OF 75°C.
- IF NEW PANELBOARD IS REQUIRED, PROVIDE NEW 208Y/120V, 3Ø, 100A M.L.O. PANEL WITH ISOLATED GROUNDING BAR. LABEL AS REQUIRED.
- IF NEW PANELBOARD IS REQUIRED, PROVIDE NEW 100A, 3-POLE BREAKER TO FEED NEW PANELBOARD.

TRAVEL CENTER
PANELBOARD SCHEDULES
PILOT TRAVEL CENTER
15845 WHYTE HARDEE BLVD
HARDEEVILLE, SC 29927

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