

Harold Hart, P.E.
 CONSULTING ENGINEER
 8928 W. LINDBAUGH AVE • STE. 101
 TAMPA, FLORIDA 33625
 Telephone: (813) 287-2719
 Fax: (813) 981-1555
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dunkin'
 STORE #358032
 US-11W
 BRISTOL, TN

REVISION

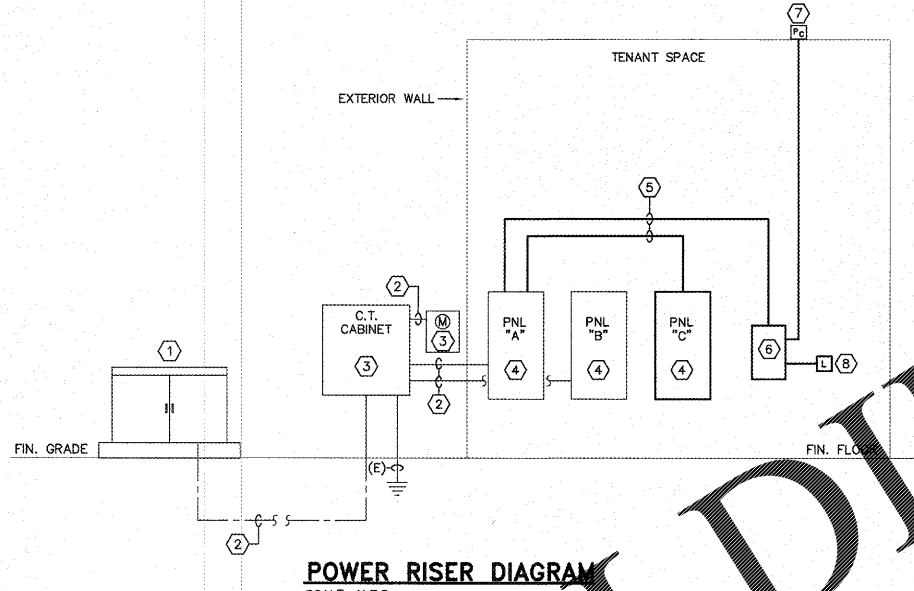
No.	DATE	DESCRIPTION

DWG DATE: 2-1-2019
 DRAWN BY: SC/AM
 PROJECT No.: 19005
 DWG TITLE:

RISER DIAGRAM & SCHEDULES

SHEET No.
E-5

- POWER RISER DIAGRAM NOTES**
- EXISTING LOCAL UTILITY POWER COMPANY POLE MOUNTED TRANSFORMER.
 - EXISTING CONDUIT AND CONDUCTORS SHALL REMAIN.
 - EXISTING C.T. CABINET AND METER SHALL REMAIN.
 - SEE PANEL SCHEDULE THIS SHEET FOR DETAILS.
 - SEE PANEL SCHEDULE 'A' ON THIS SHEET.
 - LIGHTING CONTROL RELAY PANEL.
 - PHOTOCELL INTERMATIC K4136 OR EQUAL.
 - DIGITAL SWITCH(ES) AS REQUIRED.



(E)PANEL A
 LOCATION: KITCHEN
 VOLTAGE: 208Y/120V
 TRIM: FLUSH
 MAIN: 200A MCB
 SYSTEM: 3Φ, 4W
 BUS RATING: 200A
 CONN. LOAD: 72.1 KVA
 FEED: BOTTOM
 GROUND BUS: YES

CKT	LOAD SERVED	COND	PHASE	NEUT	Ø	BKR/DMD	L1	L2	L3	DMD	PHASE	NEUT	Ø	LOAD SERVED	CKT
1	LTC. FRONT LINE/BACK LINE	1/2"	#12	#12	#12	20/A	L	L	L	20/A	3/4"	#10	#10	HEIGHT LIMIT BARS	2
3	LTC. EXTERIOR	1/2"	#12	#12	#12	20/A	L	L	L	20/A	1/2"	#12	#12	DONUT DISPLAY	4
5	LTC. DINING AREA/EF-3	1/2"	#12	#12	#12	20/A	L	L	L	20/A	1/2"	#12	#12	HVAC CONTROL PANEL	6
7	REC. DINING	1/2"	#12	#12	#12	20/A	R	L	L	20/A	3/4"	#10	#10	LTC. DIRECTIONAL SIGNAGE	8
9	REC. RESTROOM Q1	1/2"	#12	#12	#12	20/A	R	L	L	20/A	3/4"	#10	#10	DRIVE THRU SPEAKER POST	10
11	LTC. KITCHEN/RESTROOMS	1/2"	#12	#12	#12	20/A	L	L	L	20/A	3/4"	#10	#10	LTC. D/T MENU BOARDS/SPEAKER POST	12
13	BEVERAGE COOLER	1/2"	#12	#12	#12	20/A	K	R	L	20/A	1/2"	#12	#12	REC. DINING	14
15	FREEZER EVAPORATOR	1/2"	#12	#12	#12	20/A	K	R	L	20/A	1/2"	#12	#12	REF. UNIT	16
17	UNDERCOUNTER DISHWASHER [256]	3/4"	#8	#8	#10	40/2	K	M	L	20/A	1/2"	#12	#12	EF-2	18
19	UNDERCOUNTER REFRIGERATOR [120F]	1/2"	#12	#12	#12	20/A	K	L	L	20/A	1/2"	#12	#12	LIGHTING CONTROL RELAY PANEL	20
21	TWIN COFFEE BREWER [124A]	3/4"	#8	#8	#10	40/2	K	L	L	20/2	3/4"	#8	#8	BUILDING SIGNAGE	22
23	SINGLE COFFEE BREWER [124E]	1/2"	#12	#12	#12	20/A	K	L	L	20/1	3/4"	#8	#8	LTC. SITE	24
25	UNDERCOUNTER REFRIGERATOR [120V]	1/2"	#12	#12	#12	20/A	K	L	L	20/1	1/2"	#12	#12	SPARE	26
27	OHF	1/2"	#12	#12	#12	20/A	K	L	L	30/2	1/2"	#10	#10	TAYLOR MAGNA BLENDER [116]	30
29	HAND DRYER	1/2"	#12	#12	#12	20/A	N	K	K	30/2	1/2"	#10	#10	CONVEYOR TOASTER [244]	32
31	HAND DRYER	1/2"	#12	#12	#12	20/A	N	K	K	30/2	1/2"	#10	#10	PANEL 'C'	38
33	COOLER EVAPORATOR	1/2"	#12	#12	#12	20/A	N	K	K	30/2	1/2"	#10	#10		40
35	MENU BOARD	1/2"	#12	#12	#12	20/A	N	K	K	30/2	1/2"	#10	#10		42

LOADS (IN VA) CONNECTED DEMAND MINIMUM LOADS CONNECTED DEMAND MINIMUM REMAINING CONTINUOUS LOADS 500 1 500

LIGHTING 10880 1.25 13725 NON-SEASONAL MOTORS 2292 1.0 2292 REMAINING NON-CONTINUOUS LOADS 2180 2180

RECEPTS TO 10 KVA 2880 1.0 2880 LARGEST MOTOR 0 0.25 0 DEMAND LOADS 0 0

RECEPTS REMAINING 0 0.5 0 WATER HEATING 200 1.0 200 MIN. CONNECTED LOAD 21.1 KVA 92.3 AMPS

SPACE HEATING 0 0.0 0 KITCHEN EQUIP. 53088 0.65 34517 MIN. FEEDER/PANEL CAP. 21.4 KVA 89.4 AMPS

AIR CONDITIONING 0 1.0 0 OVERALL DEMAND FACTOR 0.89

(E)PANEL B
 LOCATION: KITCHEN
 VOLTAGE: 208Y/120V
 TRIM: FLUSH
 MAIN: 200A MCB
 SYSTEM: 3Φ, 4W
 BUS RATING: 200A
 CONN. LOAD: 76.6 KVA
 FEED: BOTTOM
 GROUND BUS: YES

CKT	LOAD SERVED	COND	PHASE	NEUT	Ø	BKR/DMD	L1	L2	L3	DMD	PHASE	NEUT	Ø	LOAD SERVED	CKT
1		3/4"	#8	-	#10	30/3	A	A	A	25/3	1/4"	#8	-		2
3															4
5															6
7															8
9															10
11															12
13															14
15															16
17															18
19															20
21															22
23															24
25															26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42

LOADS (IN VA) CONNECTED DEMAND MINIMUM LOADS CONNECTED DEMAND MINIMUM REMAINING CONTINUOUS LOADS 0 1.25 0

LIGHTING 0 1.25 0 NON-SEASONAL MOTORS 0 1.0 0 REMAINING NON-CONTINUOUS LOADS 0 1.0 0

RECEPTS TO 10 KVA 10000 1.0 10000 LARGEST MOTOR 0 0.25 0 DEMAND LOADS 0 1.0 0

RECEPTS REMAINING 1825 0.5 913 WATER HEATING 0 1.0 0 TOTAL CONNECTED LOAD 76.6 KVA 324 AMPS

SPACE HEATING 0 0.0 0 KITCHEN EQUIP. 39844 0.65 25964 MIN. FEEDER/PANEL CAP. 61.7 KVA 171.3 AMPS

AIR CONDITIONING 0 1.0 0 OVERALL DEMAND FACTOR 0.81

PANEL C
 LOCATION: KITCHEN
 VOLTAGE: 208Y/120V
 TRIM: FLUSH
 MAIN: 125A MLO
 SYSTEM: 3Φ, 4W
 BUS RATING: 125A
 CONN. LOAD: 30.9 KVA
 FEED: BOTTOM
 GROUND BUS: YES

CKT	LOAD SERVED	COND	PHASE	NEUT	Ø	BKR/DMD	L1	L2	L3	DMD	PHASE	NEUT	Ø	LOAD SERVED	CKT
1	BOOSTER PUMP	1/2"	#12	#12	#12	20/A	M	L	L	20/A	1/2"	#12	#12	REC. SHOW WINDOW	2
3	HOT WINTER BEVERAGE DISP. [108A]	1/2"	#12	#12	#12	20/A	K	K	K	20/A	1/2"	#12	#12	UNDERCOUNTER REFRIGERATOR [120F]	4
5															6
7	DRIVE THRU TIMER	1/2"	#12	#12	#12	20/A	R	L	L	20/A	1/2"	#12	#12	COFFEE GRINDER [101Q]	8
9	SPACE ONLY	-	-	-	-	-	-	-	-	-	-	-	-	BEVERAGE COOLER	10
11	SPACE ONLY	-	-	-	-	-	-	-	-	-	-	-	-	UNDERCOUNTER REFRIGERATOR [120F]	12
13	FREEZER CONDENSER	1/2"	#12	#12	#12	15/3	K	K	K	20/2	1/2"	#12	#12	ICE MACHINE [423]	14
15															16
17															18
19	D/T WINDOW	1/2"	#12	#12	#12	20/A	R	L	L	20/A	1/2"	#12	#12	ICED COFFEE BREWER [200A]	20
21	WATER CHILLER [26]	1/2"	#12	#12	#12	20/A	K	K	K	20/A	1/2"	#12	#12	BACK BAR STORAGE [257]	22
23	HANDS-FREE FAUCETS	1/2"	#12	#12	#12	20/A	R	L	L	20/A	1/2"	#12	#12	COOLER CONDENSER	24
25	LTS/HTR - COOLER/FREEZER	1/2"	#12	#12	#12	20/A	K	K	K						26
27	SPACE ONLY	-	-	-	-	-	-	-	-	-	-	-	-	ESPRESSO MACHINE [96]	28
29	SPACE ONLY	-	-	-	-	-	-	-	-	-	-	-	-		30

LOADS (IN VA) CONNECTED DEMAND MINIMUM LOADS CONNECTED DEMAND MINIMUM REMAINING CONTINUOUS LOADS 0 1.25 0

LIGHTING 1080 1.25 1350 NON-SEASONAL MOTORS 900 1.0 900 REMAINING NON-CONTINUOUS LOADS 0 1.0 0

RECEPTS TO 10 KVA 900 1.0 900 LARGEST MOTOR 0 0.25 0 DEMAND LOADS 0 1.0 0

RECEPTS REMAINING 0 0.5 0 WATER HEATING 0 1.0 0 TOTAL CONNECTED LOAD 30.9 KVA 85.9 AMPS

SPACE HEATING 0 0.0 0 KITCHEN EQUIP. 28048 0.65 18231 MIN. FEEDER/PANEL CAP. 21.4 KVA 89.4 AMPS

AIR CONDITIONING 0 1.0 0 OVERALL DEMAND FACTOR 0.89

- PANEL SCHEDULE GENERAL NOTES:
- WHEN A GFCI CIRCUIT BREAKER IS UTILIZED WITHIN CIRCUITS THAT ARE GROUPED TOGETHER IN A SINGLE HOMERUN, A SEPARATE NEUTRAL CONDUCTOR SHALL BE RUN FOR EACH PHASE CIRCUIT.
 - WHEN CIRCUITS ON PLANS SHOW GROUPED WITHIN A SINGLE HOMERUN, THE CIRCUIT BREAKERS THAT FEED THOSE CIRCUITS SHALL BE PROVIDED WITH ONE OF THE FOLLOWING: EITHER NEW 10.4; A SEPARATE NEUTRAL FOR EACH CIRCUIT; A SINGLE HANGER TILE OR SIMILAR; OR DISCONNECT THE GROUPED CIRCUITS; OR A 2-POLE OR 4-POLE CIRCUIT BREAKER AS REQUIRED. THIS DOES NOT APPLY TO DEDICATED 2-POLE AND 4-POLE CIRCUITS.

LOAD SUMMARY

1. LIGHTING	11.0 KVA @ 1.25 D.F. =	13.7 KVA
2. RECEPTS	14.7 KVA, FIRST 10,000 @ 100%, REMAINING @ 50% =	12.4 KVA
3. A/C	24.8 KVA @ 1.00 D.F. =	24.8 KVA
4. KITCHEN	93.0 KVA @ 0.65 D.F. =	60.5 KVA
5. WATER HEATER	0.2 KVA @ 1.00 D.F. =	0.2 KVA
6. MISC. CONTINUOUS	0.5 KVA @ 1.25 D.F. =	0.6 KVA
7. MISC. NON-CONTINUOUS	4.5 KVA @ 1.00 D.F. =	4.5 KVA
TOTAL DEMAND LOAD @ 208/120V, 3Φ, 4W:		116.7 KVA 324 AMPS

Original Plans