

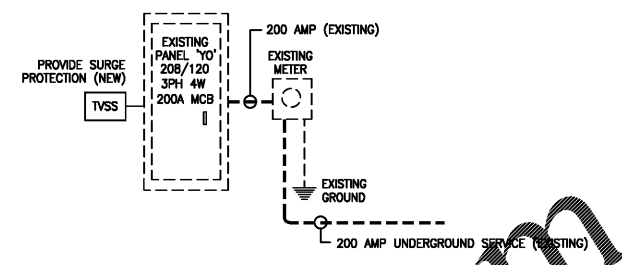
### PANEL "YO" (EXISTING)

Mfg & Type "General Electric"  
Service 208/120 Y 3PH 4W 60 Hz  
Cabinet Recessed  
AIC Rating Existing  
Mains 200 Amp MCB  
Breakers Bolt-on type  
Copper Bus & Neutral and Gnd Kit

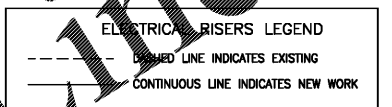
Panel Summary  
Lights 2,214  
Receptacles 5,760  
HVAC 14,870  
Motors 0  
Fans 400  
W Htrs/Pumps 0  
Kitchen 3,900  
Other 1,500

DESCRIPTION	WIRE SIZE	CONDUIT SIZE	AMPS-A	AMPS-B	AMPS-C	VOLT-AMPS	TRIP	POLES	CKT #	DESCRIPTION	WIRE SIZE	CONDUIT SIZE	AMPS-A	AMPS-B	AMPS-C	VOLT-AMPS	TRIP	POLES	CKT #
LTS-EXTERIOR	L 12	3/4"	0.0			96	20	1P	1	R RECEPT-LOCKER RM 104, EXTER	3/4"	12	6.0			720	6.0	3/4"	12
LTS & CEL FANS-MEETING 103	L 12	3/4"	7.5			900	20	1P	3	R RECEPT-RMS 105,106,107	3/4"	12	7.5			900	7.5	3/4"	12
LTS & FANS-RMS 101,102,108,109	L 12	3/4"	9.2			1102	20	1P	5	R RECEPT-OFFICE 108, EXTERIOR	3/4"	12	9.0			1080	9.0	3/4"	12
LTS-LOCKER RM AREA 104-107	L 12	3/4"	4.3			516	20	1P	7	K KITCH 101-REFRIGERATOR	3/4"	12	7.5			900	7.5	3/4"	12
SPARE	0	0	0.0				20	1P	9	K KITCH 101-MORCHVAVE	3/4"	12	12.5			1500	12.5	3/4"	12
SPARE	0	0	0.0				20	1P	11	K KITCH 101-COFFEE	3/4"	12	12.5			1500	12.5	3/4"	12
SPARE	0	0	0.0				20	1P	13	R RECEPT-OFFICE 102, EXTERIOR	3/4"	12	9.0			900	7.5	3/4"	12
SPARE	0	0	0.0				20	1P	15	R RECEPT-OFFICE 102, MEET 103	3/4"	12	7.5			900	7.5	3/4"	12
SPARE	0	0	0.0				20	1P	17	R RECEPT-MEET RM 103, EXTERIOR	3/4"	12	10.5			1260	10.5	3/4"	12
SPARE	0	0	0.0				20	1P	19	O HEATER-BACKFLOW PREVENTER	1"	6	12.5			1500	12.5	1"	6
AH&1	H 12	3/4"	11.9			1430	20	1P	21	SPARE	0	0	0.0			0	0	0	0
SPARE	0	0	0.0				20	1P	23	SPARE	0	0	0.0			0	0	0	0
SPARE	0	0	0.0				20	1P	25	SPARE	0	0	0.0			0	0	0	0
HP-1	H 4	1"	37.3			4480	60	3P	27	TVSS	0	0	0.0			0	0	0	0
HP-1	H 4	1"	37.3			4480	60	3P	27	TVSS	0	0	0.0			0	0	0	0
HP-1	H 4	1"	37.3			4480	60	3P	27	TVSS	0	0	0.0			0	0	0	0
SPACE	0	0	0.0				0	1P	31	SPACE	0	0	0.0			0	0	0	0
SPACE	0	0	0.0				0	1P	33	SPACE	0	0	0.0			0	0	0	0
SPACE	0	0	0.0				0	1P	35	SPACE	0	0	0.0			0	0	0	0
SPACE	0	0	0.0				0	1P	37	SPACE	0	0	0.0			0	0	0	0
SPACE	0	0	0.0				0	1P	39	SPACE	0	0	0.0			0	0	0	0
SPACE	0	0	0.0				0	1P	41	SPACE	0	0	0.0			0	0	0	0
TOTAL																			
A Phase Amps Total						75.9				A Phase V-A Total						9112			
B Phase Amps Total						84.3				B Phase V-A Total						10110			
C Phase Amps Total						78.5				C Phase V-A Total						9422			
Total Volt-Amps						28644													

PROVIDE A NEW 3-POLE 60A BREAKER FOR CIRCUITS 25,27,29 AND A NEW 3-POLE 30A BREAKER FOR CIRCUITS 26,28,30 MATCH PANEL "YO" AIC RATING

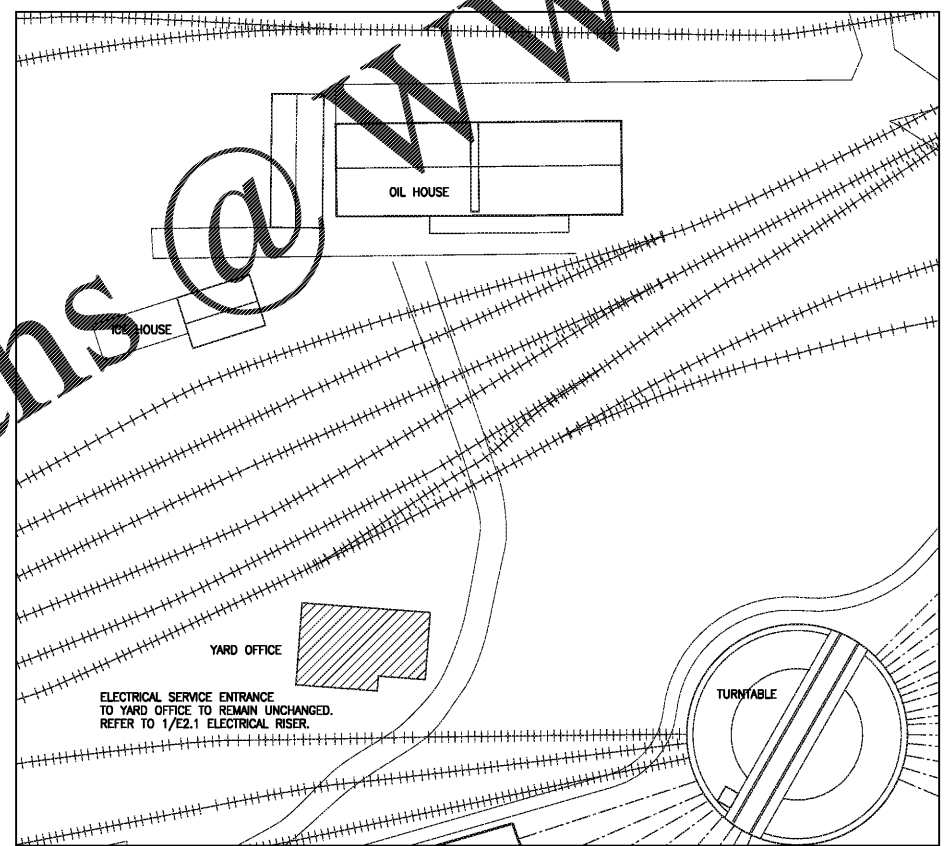


**1 ELECTRICAL RISER**  
E2.1 SCALE: NONE

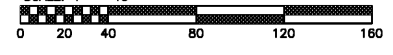


GENERAL CONSTRUCTION NOTE:  
1) SERVICE EQUIPMENT IN OTHER THAN DWELLING UNITS MUST BE LEGIBLY MARKED IN THE FIELD WITH THE AVAILABLE FAULT CURRENT. THE FIELD MARKING(S) MUST INCLUDE THE CALCULATION DATE AND BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT.

**2 PANEL SCHEDULE**  
E2.1 SCALE: NONE



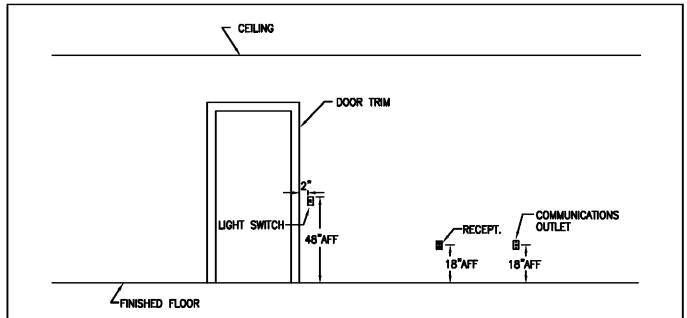
**4 PARTIAL SITE PLAN**  
E2.1 SCALE: 1" = 40'-0"



### LOAD SUMMARY - YARD OFFICE

LOAD	DEMAND VOLT-AMPS	FACTOR	VOLT-AMPS
LIGHTS	2,214	1.25	2,768
RECEPTACLES	5,760		5,760
HVAC	14,870	1	14,870
EXHAUST FANS	400	1	400
KITCHEN EQUIPMDNT	3,900	1	3,900
MISCELLANEOUS OTHER	1,500	1	1,500
TOTAL			29,198
FUTURE CAPACITY		1.73 X 208 =	81 AMPS
SERVICE - 208/120 VOLTS 3 PHASE 4W			119 AMPS
			200 AMPS

**3 LOAD SUMMARY**  
E2.1 SCALE: NONE



**5 TYPICAL SWITCH & RECEPTACLE MOUNTING DETAIL**  
E2.1 SCALE: NONE

### BRANCH CIRCUIT CONDUCTORS

FOR CIRCUITS WITH BRANCH CIRCUIT PROTECTION RATED IN AMPERES OR LESS, CONDUCTORS SHALL BE SIZED AS FOLLOWS:

VOLTS	DISTANCE	HOT RUL	REMAINDER OF CIRCUIT
120/208	0 - 60'-0"	#12	#12
	60'-0" - 100'-0"	#10	#12
	100'-0" - 200'-0"	#8	#10

**6 VOLTAGE DROP TABLE**  
E2.1 SCALE: NONE

**ELECTRICAL RISERS**

SITE PLAN  
ELECTRICAL DETAILS

2186 East Holly Grove Road  
P.O. Box 1266  
Lexington, N.C. 27293  
Design Engineering, Inc. 336/224-0100  
336/224-0099 (fax)

**HISTORIC SPENCER SHOPS YARD OFFICE**

