

ELECTRICAL SPECIFICATIONS

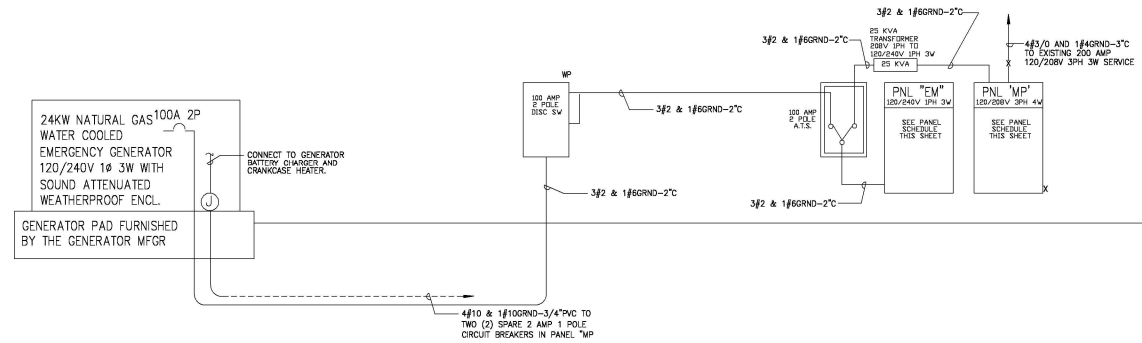
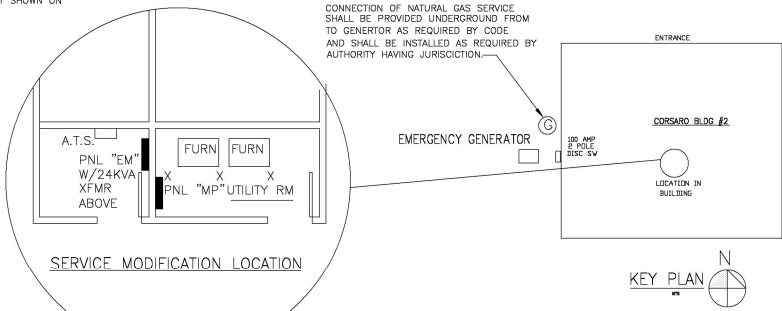
- THE ELECTRICAL CONTRACTOR SHALL ACQUANT HIMSELF WITH THE CONSTRUCTION DETAILS OF THE JOB PRIOR TO SUBMITTING HIS BID.
- THE ELECTRICAL CONTRACTOR SHALL VISIT THE JOBSITE AND FAMILIARIZE HIMSELF WITH THE ELECTRICAL SERVICE LOCATIONS.
- THE ELECTRICAL CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS PERTAINING TO THE ELECTRICAL WORK.
- ALL WORK SHALL COMPLY WITH THESE DRAWINGS AND ALL APPLICABLE CODES AND ORDINANCES. ALL WORK SHALL BE INSTALLED PER THE CURRENT NEC.
- ALL ARTICLES, MATERIALS AND EQUIPMENT SHALL BE NEW AND FREE FROM DEFECTS. ALL MATERIALS, WHERE REQUIRED, SHALL BE UL APPROVED.
- THIS CONTRACTOR SHALL TAKE PRECAUTIONS FOR THE SAFETY OF HIS EMPLOYEES ON THE JOBSITE. SHALL COMPLY WITH ALL LOCAL AND STATE BUILDING CODES; AND SHALL MAINTAIN ALL INSURANCE TO PROTECT HIMSELF, THE OWNER AND THE OTHER TRADES FOR THE DURATION OF THE JOB.
- THE WORK UNDER THIS CONTRACT SHALL BE COORDINATED WITH OTHER TRADES.
- ALL WIRING SHALL BE RUN IN "EMT" CONDUIT WITH SET SCREW FITTINGS ABOVE GRADE. "MC" CABLE MAY BE USED IN WALLS WHERE PERMITTED BY CODE.
- ALL WIRING SHALL BE THHN OR THWN #12 AWG COPPER MINIMUM; THWN IN DAMP AND WET LOCATIONS.
- PANELS SHALL BE CIRCUIT BREAKER TYPE WITH COPPER BUS AND BOLT-ON BREAKERS AIC TO SUIT SERVICE SHORT CIRCUIT CAPACITY. DIRECTORIES IN PANELS SHALL BE TYPE WRITTEN LISTING CIRCUITS AS WIRED.
- ANY NEW BREAKERS IN EXISTING PANELS SHALL BE OF THE TYPE SUITABLE FOR USE IN THAT PANEL WITH MOUNTING AND SHORT CIRCUIT CAPACITIES EQUAL TO OR GREATER THAN THE EXISTING BREAKERS. PANEL DIRECTORIES SHALL BE UPDATED TO INDICATE ANY NEW LOADS ADDED TO THE PANEL.
- ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER THE ACCEPTANCE OF THE JOB.
- THE ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT AND POWER WIRING TO THE MECHANICAL EQUIPMENT CONTROLS CONDUITS AND WIRING IN THEM IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR UNLESS SPECIFICALLY SHOWN ON THE DRAWINGS.
- THE ENTIRE ELECTRICAL SYSTEM SHALL BE GROUNDED PER THE CURRENT NEC.
- ALL ELECTRICAL EQUIPMENT AND MATERIAL INCLUDING COMPONENTS, SHALL BE UL LABELED AND LISTED PER NEC 110-3(a)(1).
- ALL CONDUIT PENETRATIONS OF FIRE RATED FLOORS AND WALLS SHALL BE SEALED PER NEC 300-21.
- WHERE CEILING CAVITY IS A RETURN AIR PLENUM, ALL LOW VOLTAGE COMMUNICATIONS, DATA, FIRE ALARM, TELEPHONE AND OTHER MISCELLANEOUS LOW VOLTAGE WIRING, INSTALLED OPEN, SHALL BE SUITABLE FOR INSTALLATION IN AIR HANDLING PLENUMS PER NEC 300-22.
- RACEWAYS PASSING FROM THE INTERIOR TO THE EXTERIOR OF THE BUILDING SHALL BE FILLED WITH AN APPROVED MATERIAL TO PREVENT THE CIRCULATION OF WARM AIR TO A COLDER SECTION OF THE RACEWAY. NEC 300.7(A).
- GENERATOR SPECIFICATION
NATURAL GAS FUELED STANDBY GENERATOR SET RATED 120/240 VOLT SINGLE PHASE, 24KW 67.5 AMP WITH SOUND ATTENUATED WEATHER PROOF ENCLOSURE.
SYSTEM IS UL 2200 AND NFPA 110 LEVEL 1. INCLUDE ONE YEAR PARTS AND LABOR WARRANTY AND (2) OPERATIONS MANUALS. PROVIDE PAD FOR GENERATOR AS REQUIRED BY MANUFACTURER.
- AUTOMATIC TRANSFER SWITCH
SERVICE ENTRANCE MODEL KEP-DCTC-0600S-NK RATED FOR 120/240 VOLT 1 PHASE 3 WIRE 100 AMPS OVERCURRENT PROTECTIVE DEVICE, MOLDED CASE CIRCUIT BREAKERS (MCCB) PROVIDED SHALL BE 60K RATED WITH THE NORMAL CONNECTION SUPPLIED WITH AN ELECTRONIC TRIP. SWITCH TO BE MOUNTED IN A NEMA 3R ENCLOSURE WITH CONTROLLER AND LCD DISPLAY PANEL. INCLUDE STRIP HEATER WITH THERMOSTATIC CONTROL FOR CONDENSATION IN ENCLOSURE 120 VOLT, 100 WATT (EXTERNAL WIRING REQUIRED). INCLUDE ONE YEAR PARTS AND LABOR WARRANTY.

PANEL "MP" EXIST'D		120/208V-3PH-4W		SURFACE MTS		
CKT	LOAD	KW	KVA	LOAD	CKT	
1	OFFICE RECEPT	10	10	0.6 LG AND EMERG	2	
2	DFC AREA RECEPT	10	10	1.0 LG BATH/RECH BN	4	
3	N. WING RECEPTS	10	10	1.0 LG AND EMERG	6	
7	KITCHEN GFJ	15	15	1.0 OFFICE LG	8	
9	S. DFC RECEPT	08	08	0.6 LIGHTING	10	
11	DATA RM RECEPT	06	06	1.0 FURNACE	12	
13	S.W. DFC RECEPTS	10	10	1.0 FURNACE	14	
15	MICROWAVE	10	10	---	SPACE	16
17	REFRIGERATOR	10	10	2.0 A/C COND	18	
19	HOT WATER HTR	15	15	2.0 A/C COND	20	
21	EXT GFI RECEPT	10	10	---	SPACE	22
23	EXT GFI RECEPT	10	10	2.0 A/C COND	24	
25	CUBICLE BACK	10	10	2.0 A/C COND	26	
27	CUBICLE BACK	10	10	---	SPACE	28
29	CUBICLE FRONT	10	10	---	SPACE	30
31	CUBICLE BACK	10	10	---	SPACE	32
33	FIRE ALARM PANEL	10	10	---	SPACE	34
35	SPACE	---	---	---	SPACE	36
37	SPACE	---	---	---	SPACE	38
39	SPACE	---	---	0.6 PANEL "EM"	40	
41	SPACE	---	---	3.2 PANEL "EM"	42	

PANEL "EM"		120/208V-3PH-3W		SURFACE MTS		
CKT	LOAD	KW	KVA	LOAD	CKT	
1	DFC AREA RECEPTS	10	10	0.6 LG AND EMERG	2	
3	S. DFC RECEPT	08	08	1.0 LG AND EMERG	4	
5	DATA RM RECEPT	02	02	0.6 LIGHTING	6	
7	REFRIGERATOR	10	10	1.0 FURNACE	8	
9	FIRE ALARM PNL	10	10	1.0 FURNACE	10	
11	SPACE	---	---	---	SPACE	12
13	SPACE	---	---	---	SPACE	14
15	SPACE	---	---	---	SPACE	16
17	SPACE	---	---	---	SPACE	18
19	SPACE	---	---	---	SPACE	20
21	SPACE	---	---	---	SPACE	22
23	SPACE	---	---	---	SPACE	24

ELECTRICAL SYMBOL LEGEND

- SYMBOL DESCRIPTION**
- INDICATES CONDUIT RUN CONCEALED IN WALL OR ABOVE CEILING IN FINISHED AREAS AND EXPOSED IN UNFINISHED. HATCHMARKS DENOTE NUMBER OF WIRES. "SP" DENOTES DIRECT BURIAL TYPE CABLE.
 - DENOTES CONDUIT RUN BELOW GROUND OR IN FLOOR SLAB.
 - 120V, 20A DUPLEX RECEPTACLE. HUBBELL CATALOG #5362 OR EQUAL WITH COVERPLATE AS SELECTED IN FIELD.
 - "GFI" DENOTES GROUND FAULT PROTECTED TYPE.
 - "WP" DENOTES WEATHERPROOF.
 - "MC" DENOTES MOUNTED ABOVE COUNTER OR SINK.
 - "BC" DENOTES MOUNTED BELOW COUNTER OR SINK.
 - 8.0KVC OR 36.7 AMPS
 - ALL CIRCUIT BREAKERS 20A/1P UNLESS OTHERWISE NOTED
 - DENOTE CIRCUIT RECONNECTED FROM PANEL "MP"
 - SAME AS ABOVE EXCEPT DOUBLE DUPLEX.
 - SPECIAL OUTLET TO MATCH EQUIPMENT CONNECTION.
 - FLUSH PLASTIC FLOOR BOX - HUBBELL CATALOG #8911 OR EQUAL WITH HUBBELL CATALOG #5362 DUPLEX RECEPTACLE AND FLANGE AND DUPLEX TAP COVER UNDER CONFERENCE TABLES OR GRANNES AND FOR CORO CONNECTIONS UNDER WORK STATIONS OR PARTITIONS.
 - TELEPHONE/DATA/COMMUNICATION OUTLET WITH 3/4" CONDUIT ROUGH-IN TO CEILING SPACE ABOVE WITH PULLWIRE AND BUSHED.
 - SAFETY DISCONNECT SWITCH - HEAVY DUTY - HIGH-POWER RATED - SIZE AND FINISH AS NOTED.
 - NON-REVERSING MAGNETIC MOTOR STARTER WITH (3) OVERLOADS, 120 VOLT CONTROL TRANSFORMER WITH FUSES SECONDARY, AND H-O-A SWITCH IN COVER OF A NEMA 1 ENCLOSURE.
 - SINGLE PHASE MANUAL MOTOR STARTER WITH OVERLOADS 30" 3/4" CLASS 2510 TYPE FD - SUBSCRIPT TELEPHONES FLUSH MOUNTED WITH STAINLESS STEEL COVERPLATE AND PILOT LIGHT, TYPE F31P.
 - JUNCTION BOX - SIZE AS REQUIRED.
 - 20A, 120/277V SINGLE POLE TOGGLE SWITCH, HUBBELL CATALOG #1221 OR EQUAL.
 - 3-WAY HUBBELL CATALOG #1223 OR EQUAL.
 - INDUCTION MOTOR. "EF" DENOTES EXHAUST FAN.
 - BRANCH CIRCUIT PANELBOARD WITH 10,000 AIC BOLT-ON BUS BREAKERS AND COPPER BUS. SEE PANEL SCHEDULES FOR BREAKER SIZES AND QUANTITIES. ALL CIRCUIT BREAKERS ARE 20 AMP 1 POLE UNLESS OTHERWISE NOTED.



- NOTES**
- SUBSCRIPTS TO SYMBOLS DENOTE AS FOLLOWS:
"X" - EXISTING TO REMAIN-RECONNECT AS INDICATED.
"XR" - EXISTING TO BE REMOVED INCLUDING CONDUIT AND WIRE BACK TO SOURCE.
"XRR" - EXISTING TO BE REMOVED, REFINISHED AND REINSTALLED AS SHOWN.
 - CIRCUITING ON DRAWINGS INDICATES INDIVIDUAL HOMERUNS FOR EACH CIRCUIT. IF CIRCUITS ARE COMBINED IN ONE CONDUIT USING SHARED NEUTRALS THE BREAKERS FEEDING THESE CIRCUITS SHALL BE MULTIPOLE.
 - CIRCUITING ON DRAWINGS INDICATES INDIVIDUAL HOMERUNS FOR EACH CIRCUIT. IF CIRCUITS ARE COMBINED IN ONE CONDUIT USING SHARED NEUTRALS THE BREAKERS FEEDING THESE CIRCUITS SHALL BE MULTIPOLE.

ONE-LINE RISER DIAGRAM

	CORSAO BLDG #2	
	28025 CLEMENS ROAD WESTLAKE, OHIO 44245	
	SCALE: 1/4"=1'-0"	APPROVED BY: _____
	DATE: 2-09-26	REVISION: _____
ELECTRICAL PLANS AND DETAILS		
CHARLES A. LEWIS & ASSOCIATES, INC. 13700 STATE ROAD 5312 11 NORTH ROYALTON, OHIO 44133		TELEPHONE NO. (440)862-8200
DRAWING NUMBER		E-1