

FLOOR PLAN - ELECTRICAL

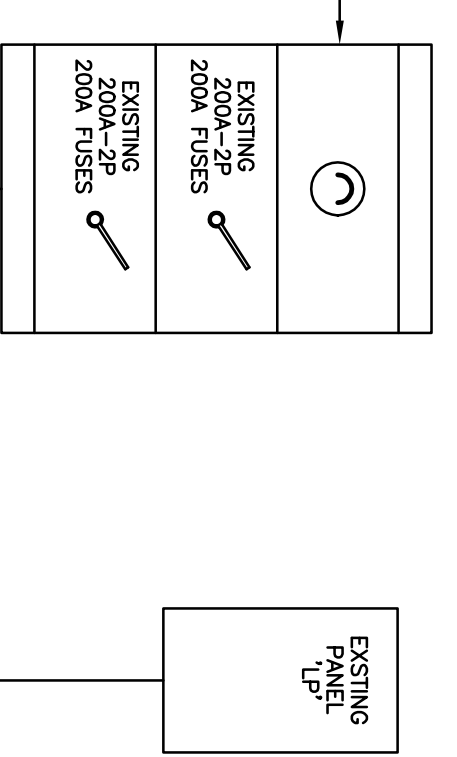
SCALE : 3/16" = 1' - 0"

KEYNOTES

- ALL EXISTING ELECTRICAL WORK TO REMAIN. EXISTING AREA NOT IN SCOPE OF PROJECT.
- MONITOR LOCAL CORRIDOR LIGHTING BRANCH CIRCUIT, 120V CONSTANT SOURCE.
- EXISTING PANEL, 200A-120/240V-1φ.
- SWITCH BANK 'A', THREE (3) SINGLE POLE TOGGLE SWITCHES AND ONE (1) 2000 WATT DIMMER, SURFACE MOUNTED IN WIREKNOCK BOX WITH WIREKNOCK 700 UP TO CEILING. PAINT WIREKNOCK TO MATCH WALLS.
- SWITCH BANK 'B', SIX (6) SINGLE POLE TOGGLE SWITCHES AND ONE (1) 1000 WATT DIMMER, SURFACE SURFACE MOUNTED IN WIREKNOCK BOX WITH WIREKNOCK 700 UP TO CEILING. PAINT WIREKNOCK TO MATCH WALLS.
- TO SINGLE POLE TOGGLE SWITCH AT SWITCH BANK 'A', "TYPICAL".
- TO SINGLE POLE TOGGLE SWITCH AT SWITCH BANK 'B', "TYPICAL".
- TO DIMMER SWITCH AT BANK 'A'.
- CEILING FAN, 120V-1φ.
- VERIFY RECEPTACLE MOUNTING HEIGHTS AT DIS WITH OWNER.
- CONNECT TO EXISTING CLOSET LIGHTING BRANCH CIRCUIT WIRING.
- EXISTING SERVICE ENTRANCE CABINET AND UTILITY METER.

PANEL RISER DIAGRAM

ALL EXISTING DISTRIBUTION EQUIPMENT TO REMAIN. NO MODIFICATIONS. SHOWN FOR REFERENCE ONLY.



LOAD SUMMARY

REMOVED LOAD:	2 x 8000VA = 16000VA
ADDED LOAD:	
RECEPTACLES:	6180VA x 125% = 7725VA
LIGHTING:	600VA x 100% = 600VA
MOTORS:	2180VA x 125% = 2725VA
	380VA x 25% = 95VA
NET REDUCED LOAD (-):	16000VA/240V = -67A
NET ADDED LOAD (+):	10575VA/240V = +44A
TOTAL REDUCED LOAD	= -23A

ELECTRICAL SYMBOLS

SYMBOL	DESCRIPTION
	FLUORESCENT LIGHTING FIXTURE WITH TYPE DESIGNATION
	FLUORESCENT STRIP LIGHTING FIXTURE WITH TYPE DESIGNATION
	RECESSED DOWNLIGHT WITH TYPE DESIGNATION
	TRACK LIGHTING FIXTURE WITH TYPE DESIGNATION
	EMERGENCY EXIT SIGN. SHADED AREA INDICATES FACE.
	SINGLE POLE TOGGLE SWITCH, 20A @ 120/277V, 48" A.F.F.
	DIMMER SWITCH, 20A @ 120/277V, 48" A.F.F.
	DUPLEX RECEPTACLE, 20A @ 125V, 18" A.F.F.
	EXISTING DUPLEX RECEPTACLE TO REMAIN
	JUNCTION BOX.
	EXISTING PANEL.
	WIRE AND CONDUIT.
	HOME-RUN TO PANEL.
	CEILING MOUNTED SPEAKER

ELECTRICAL SPECIFICATIONS

- THE TERM "PROVIDE" SHALL MEAN CONTRACTOR SHALL FURNISH, INSTALL AND CONNECT ITEMS AS REQUIRED TO OBTAIN A COMPLETE WORKING SYSTEM. FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND SERVICE NECESSARY FOR THE PROPER AND COMPLETE INSTALLATION OF ALL ELECTRICAL WORK SHOWN ON THE DRAWINGS AND AS HEREIN SPECIFIED. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, STATE AND LOCAL CODES.
- ELECTRICAL DRAWINGS ARE DIAGRAMMATIC ONLY. CONTRACTOR TO VERIFY EQUIPMENT LOCATIONS, MOUNTING HEIGHTS AND REQUIREMENTS WITH OWNER PRIOR TO ROUGH-IN.
- THIS PROJECT IS A REMODEL. THE CONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS WHICH MAY AFFECT HIS BID. NO ALLOWANCES WILL BE MADE AFTER THE BID FOR EXISTING CONDITIONS UNLESS THE CONTRACTOR'S FAILURE TO VERIFY EXISTING CONDITIONS.
- ALL WORKMANSHIP AND MATERIALS SHALL BE FULLY GUARANTEED FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE OF THE ENTIRE INSTALLATION COVERED BY THIS CONTRACT. SHOULD ANY DEFECTS OCCUR DURING THIS GUARANTEE PERIOD, THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ALL DEFECTIVE EQUIPMENT, MATERIALS AND/OR WORK AT NO EXTRA CHARGE.
- ALL EQUIPMENT SHALL BE LISTED, LABELED, OR CERTIFIED BY A NATIONALLY RECOGNIZED TESTING LABORATORY.
- MOUNTING HEIGHTS ABOVE FINISHED FLOOR (AFF) ARE TO CENTER OF DEVICE UNL.
- LIGHTING FIXTURES SHALL BE WIRED TO SWITCHES SHOWN IN EACH ROOM AND CONNECTED TO PANELBOARD WITH REQUIRED QUANTITY OF WIRES FOR PROPER OPERATION. ALL EMERGENCY LIGHTING UNITS SHALL BE WIRED TO CONSTANT SOURCE AND MONITOR LOCAL ROOM LIGHTING BRANCH CIRCUIT.
- ALL CEILING MOUNTED EXIT SIGNS, LIGHTING FIXTURES, SMOKE DETECTORS, ETC. SHALL BE SUPPORTED FROM BUILDING STRUCTURAL STEEL. PROVIDE ALL AUXILIARY MOUNTING BRACKETS AS REQUIRED. CEILING PADS SHALL NOT BE USED TO SUPPORT THESE ITEMS.
- RECEPTACLES SHALL BE CIRCUITED WITH SEPARATE GROUND WIRE. GFI RECEPTACLES SHALL BE WIRED WITH SEPARATE NEUTRAL CONDUCTOR. RECEPTACLES SHALL NOT BE INSTALLED BACK TO BACK ON COMMON WALLS. DEVICES ON OPPOSITE SIDES OF RATED WALLS OR PARTITIONS SHALL BE SEPARATED BY NOT LESS THAN 24 INCHES HORIZONTALLY.
- WIRING DEVICES SHALL BE 20A COMMERCIAL GRADE. UN LISTED, SELF-GROUNDING, GROUND LUG, SIDE/BACK WIRED, BROWN COLOR. WALL PLATES SHALL BE STAINLESS STEEL TYPE 302/304.
- WIRE AND CABLE SHALL BE RUN IN ELECTRIC METALLIC TUBING (EMT) OR METAL CLAD CABLE (TYPE MC-2). MINIMUM CONDUIT SIZE IS 3/4" INCH. MINIMUM SIZE WIRE IS #12 AWG. CONDUIT SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. CONDUIT SHALL BE LABELED FOR PHASE ROTATION AND NO MORE THAN THREE CIRCUITS SHALL BE RULLED IN SINGLE CONDUIT. EXCEPT FOR NEUTRALS FOR GFI CIRCUITS, WIRE (EXCEPT GROUND) MUST BE OF SAME SIZE AND ON OPPOSITE PHASES IF USING COMMON NEUTRAL.
- OUTLET AND DEVICE BOXES SHALL BE GALVANIZED COATED, FLAT ROLLED SHEET STEEL, AND OF PROPER SIZE AND TYPE. ALL BOXES SHALL BE FINISHED SURFACE AND SECURED FIRM IN PLACE TO BUILDING STRUCTURE TRUE AND SQUARE. ALL BOXES MUST BE SO ATTACHED THAT THEY WILL NOT "ROCK", "SHIFT" OR "MOVE" IN AND OUT WHEN DEVICES ARE USED.
- SPlicing SHALL BE DONE WITH APPROVED, INSULATED OR NON-INSULATED CONNECTORS OF APPROPRIATE TYPES AND CURRENT-CARRYING CAPACITY.
- PROVIDE FIRE STOP TO ALL CONDUITS CROSSING FIRE RATED PARTITIONS.
- BALANCE PANELBOARD PHASES TO +/- 10%. PROVIDE TYPEWRITTEN CIRCUIT DIRECTORY IDENTIFYING EACH CIRCUIT IN PANEL.
- ALL SOUND SYSTEM SPEAKERS FURNISHED BY OWNER, INSTALLED BY CONTRACTOR. SPEAKER CABLING SHALL BE PLENUM RATED CABLE.
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CIRCUITS AND SCHEDULE TO ENGINEER PRIOR TO CONNECTION OF ANY NEW BRANCH CIRCUITS. PROVIDE NEW TYPEWRITTEN CIRCUIT DIRECTORY IN PANEL AT COMPLETION OF PROJECT.

NO.	DESCRIPTION	LOAD	PHASE	WIRE	CONDUIT	REMARKS
1	EXISTING O.C.T.	1120	A	#12	1"	EXISTING O.C.T.
2	EXISTING O.C.T.	1120	B	#12	1"	EXISTING O.C.T.
3	EXISTING O.C.T.	1120	C	#12	1"	EXISTING O.C.T.
4	EXISTING O.C.T.	1120	A	#12	1"	EXISTING O.C.T.
5	EXISTING O.C.T.	1120	B	#12	1"	EXISTING O.C.T.
6	EXISTING O.C.T.	1120	C	#12	1"	EXISTING O.C.T.
7	EXISTING O.C.T.	1120	A	#12	1"	EXISTING O.C.T.
8	EXISTING O.C.T.	1120	B	#12	1"	EXISTING O.C.T.
9	EXISTING O.C.T.	1120	C	#12	1"	EXISTING O.C.T.
10	EXISTING O.C.T.	1120	A	#12	1"	EXISTING O.C.T.
11	EXISTING O.C.T.	1120	B	#12	1"	EXISTING O.C.T.
12	EXISTING O.C.T.	1120	C	#12	1"	EXISTING O.C.T.
13	EXISTING O.C.T.	1120	A	#12	1"	EXISTING O.C.T.
14	EXISTING O.C.T.	1120	B	#12	1"	EXISTING O.C.T.
15	EXISTING O.C.T.	1120	C	#12	1"	EXISTING O.C.T.
16	EXISTING O.C.T.	1120	A	#12	1"	EXISTING O.C.T.
17	EXISTING O.C.T.	1120	B	#12	1"	EXISTING O.C.T.
18	EXISTING O.C.T.	1120	C	#12	1"	EXISTING O.C.T.
19	EXISTING O.C.T.	1120	A	#12	1"	EXISTING O.C.T.
20	EXISTING O.C.T.	1120	B	#12	1"	EXISTING O.C.T.
21	EXISTING O.C.T.	1120	C	#12	1"	EXISTING O.C.T.
22	EXISTING O.C.T.	1120	A	#12	1"	EXISTING O.C.T.
23	EXISTING O.C.T.	1120	B	#12	1"	EXISTING O.C.T.
24	EXISTING O.C.T.	1120	C	#12	1"	EXISTING O.C.T.
25	EXISTING O.C.T.	1120	A	#12	1"	EXISTING O.C.T.
26	EXISTING O.C.T.	1120	B	#12	1"	EXISTING O.C.T.
27	EXISTING O.C.T.	1120	C	#12	1"	EXISTING O.C.T.
28	EXISTING O.C.T.	1120	A	#12	1"	EXISTING O.C.T.
29	EXISTING O.C.T.	1120	B	#12	1"	EXISTING O.C.T.
30	EXISTING O.C.T.	1120	C	#12	1"	EXISTING O.C.T.
31	EXISTING O.C.T.	1120	A	#12	1"	EXISTING O.C.T.
32	EXISTING O.C.T.	1120	B	#12	1"	EXISTING O.C.T.
33	EXISTING O.C.T.	1120	C	#12	1"	EXISTING O.C.T.
34	EXISTING O.C.T.	1120	A	#12	1"	EXISTING O.C.T.
35	EXISTING O.C.T.	1120	B	#12	1"	EXISTING O.C.T.
36	EXISTING O.C.T.	1120	C	#12	1"	EXISTING O.C.T.
37	EXISTING O.C.T.	1120	A	#12	1"	EXISTING O.C.T.
38	EXISTING O.C.T.	1120	B	#12	1"	EXISTING O.C.T.
39	EXISTING O.C.T.	1120	C	#12	1"	EXISTING O.C.T.
40	EXISTING O.C.T.	1120	A	#12	1"	EXISTING O.C.T.

- REMOVE TWO (2) EXISTING 50A-2P BRANCH CB AND PROVIDE FOUR (4) NEW 20A-1P BRANCH CB. TYPE TO MATCH EXISTING.
- FIELD VERIFY EXISTING SPARE BRANCH CIRCUITS IN PANEL PRIOR TO START OF PROJECT.



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PROMPT PAYMENT NOTIFICATION
THIS CONTRACT ALLOWS THE
OWNER TO MAKE PAYMENT
WITHIN THIRTY (30) DAYS AFTER
CERTIFICATION AND APPROVAL
OF BILLINGS AND ESTIMATES.

DRAWING NO. E1
FLOOR PLAN - ELECTRICAL
DATE: 8-24-06
MADE BY: MMV
CHECKED: [Signature]
CONTRACT NO.: 06020

REVISIONS	DATE
1	CITY COMMENTS 8-28-06