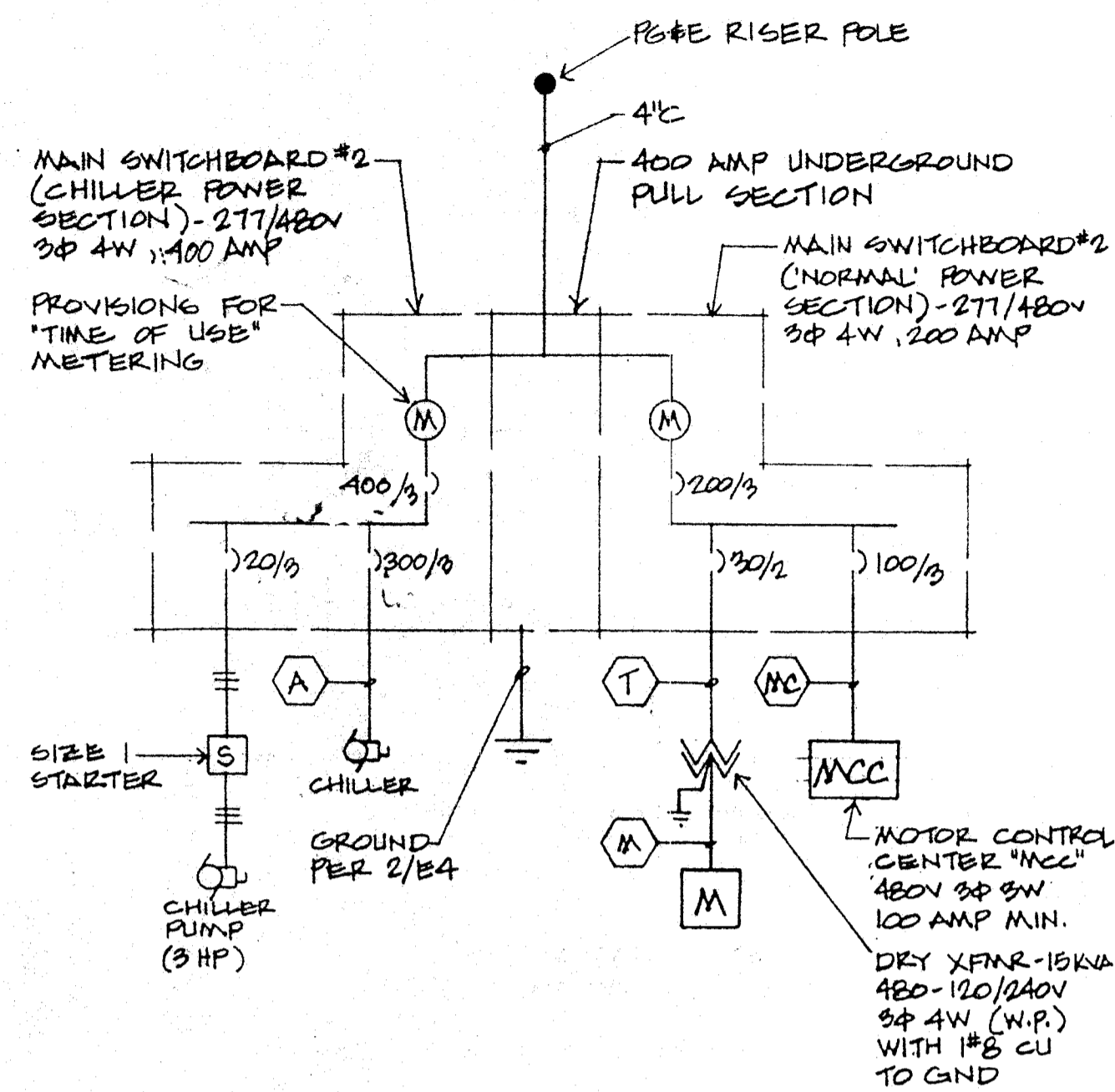
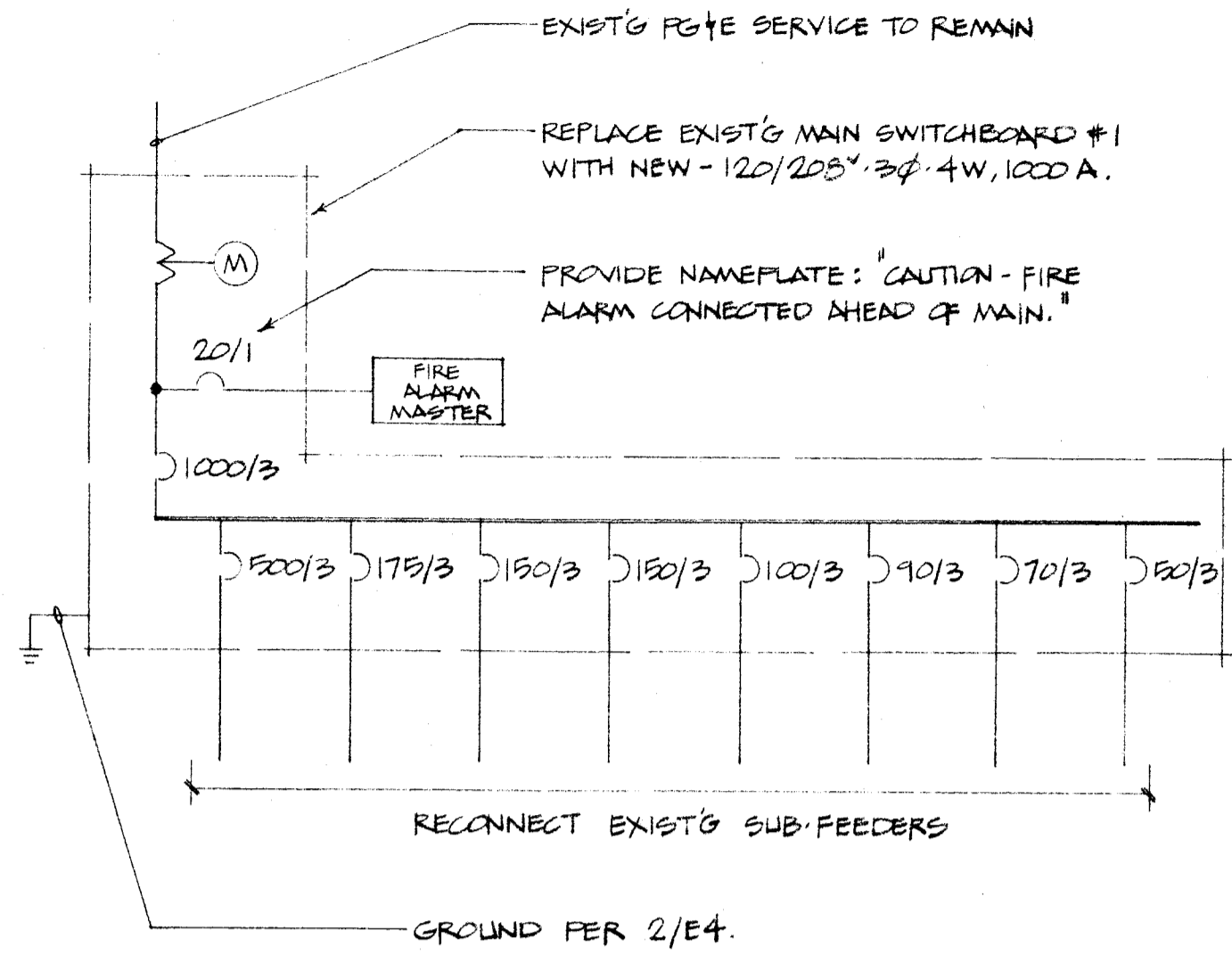


NOTE:  
ALL CIRCUIT BREAKER  
A.I.C. TO EXCEED AVAILABLE,  
CONTR. TO VERIFY W/P.G. & E.



7 ONE LINE DIAGRAM  
E4 (NEW MAIN SWITCHBOARD #2)



6 ONE LINE DIAGRAM  
E4 (EXIST'G MAIN SWITCHBOARD #1)

ALL CONSTR. W.P.

METERING FACILITIES  
AS REQ'D - TYP.

MAIN PER ONE LINE  
DIAGRAM - TYP.

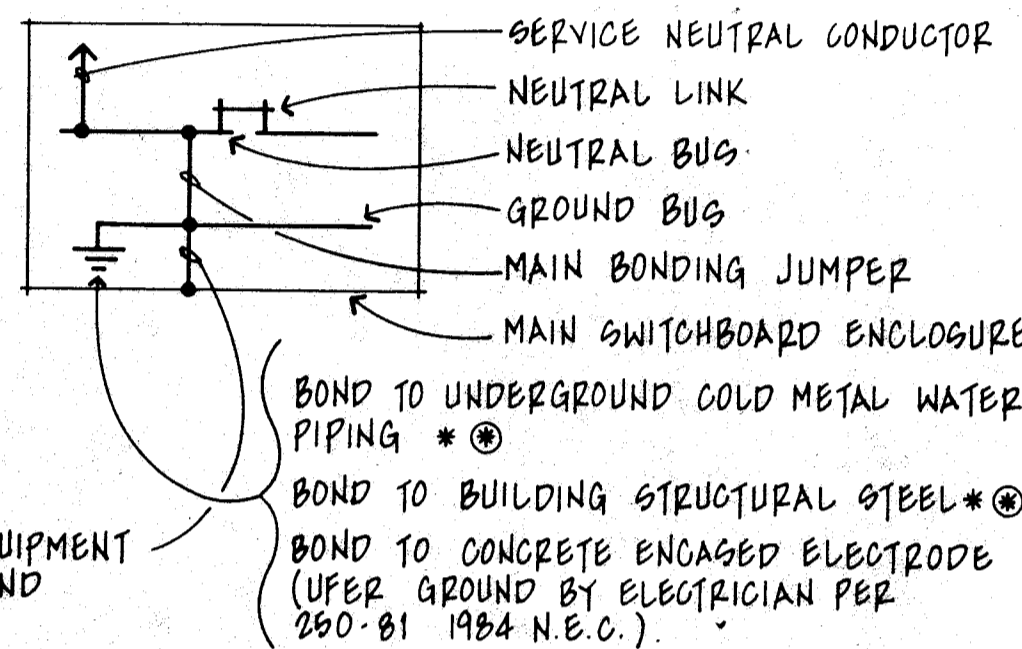
DOUBLE HAMP FOR OWNER  
AND POWER CO. - TYP.

6" CONG. PAD

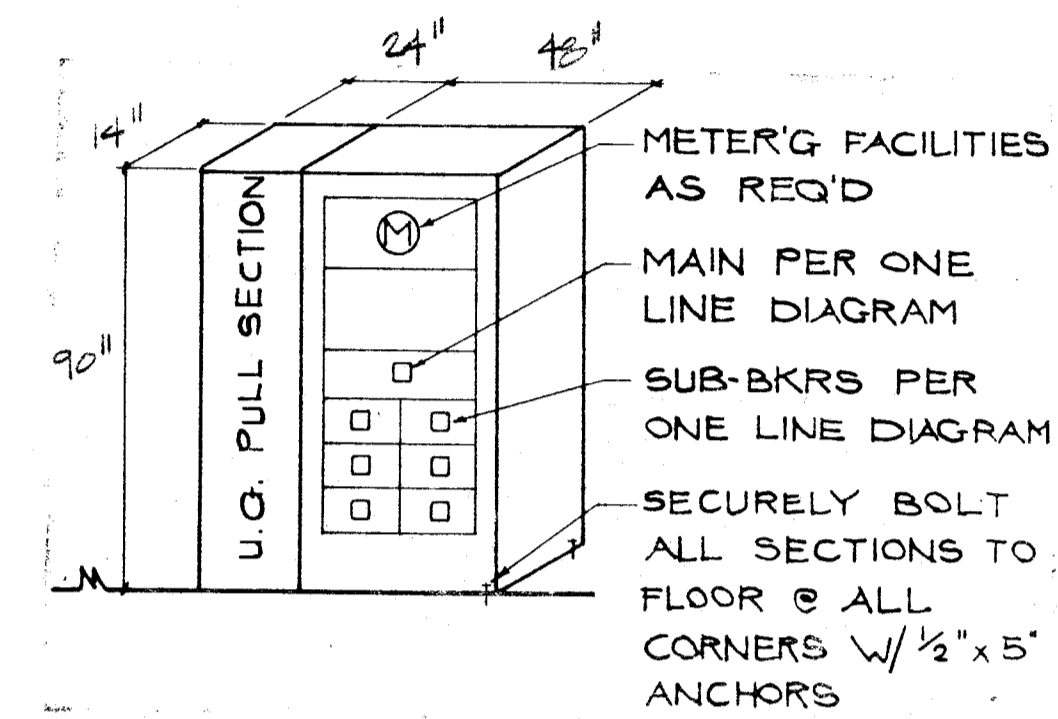
1/2" x 5" ANCHORS AT  
EACH CORNER EACH  
SECTION

SUB BREAKERS PER ONE LINE  
DIAGRAM TYPICAL.

4 MAIN SWITCHBOARD #2  
E4



2 GROUND'G ELECTRODE SYS.  
E4 NO SCALE



3 MAIN SWITCHBOARD #1  
E4 NO SCALE

PANEL REPLACEMENT SCHEDULE

AT EACH PANEL LISTED BELOW REPLACE EXISTING BUS AND BREAKERS WITH NEW BUS AND BREAKERS (SIZE AND QUANTITY AS NOTED). PROVIDE NEW INTERIOR BREAKER COVER. PANEL ENCLOSURE AND DOOR TO REMAIN U.O.N. (EXISTING DIMENSIONS NOTED ARE APPROX. - CONTRACTOR TO VERIFY IN FIELD). RECONNECT EXISTING BRANCH CIRCUITS, PROVIDE NEW TYPED CIRCUIT DIRECTORIES, REPLACE ANY FAULTY LOCKS (MATCH EXIST'G KEY).

PANEL "A"	120/208V 3-4W, 225 AMP. PROVIDE BREAKERS: 8 - 20/1 (2 ARE SPARE), 32 - 15/1, 225/3 (MAIN). EXISTING ENCLOSURE = 43"H x 20"W.
PANEL "B"	120/208V 3-4W, 600 AMP. PROVIDE BREAKERS: 14 - 20/1 (2 ARE SPARE), 2 - 15/2, 1 - 100/3, 600/3 (MAIN). EXISTING ENCLOSURE = 57"H x 35"W.
PANEL "C"	120/208V 3-4W, 100 AMP. PROVIDE BREAKERS: 9 - 20/1 (2 ARE SPARE), 9 - 15/1, 6 - 15/2, 100/3 (MAIN). EXISTING ENCLOSURE = 40"H x 20"W.
PANEL "D"	120/208V 3-4W, 100 AMP. PROVIDE BREAKERS: 12 - 20/1 (3 FOR LIGHTS, 2 FOR MECH, 2 ARE SPARE), 3 - 15/1, 1 - 15/2, 1 - 20/3, 1 - 40/2, 100/3 (MAIN). EXISTING ENCLOSURE = 40"H x 20"W.
PANEL "E"	120/208V 3-4W, 225 AMP. PROVIDE BREAKERS: 12 - 20/1 (2 FOR LIGHTS, 2 FOR MECH, 2 ARE SPARE), 6 - 15/1, 1 - 100/3, 225/3 (MAIN). EXISTING ENCLOSURE = 46"H x 20"W.
PANEL "F"	120/208V 3-4W, 100 AMP. PROVIDE BREAKERS: 13 - 20/1 (3 FOR LIGHTS, 2 FOR MECH, 2 ARE SPARE), 3 - 15/1, 100/3 (MAIN). EXISTING ENCLOSURE = 29"H x 20"W.
PANEL "G"	120/208V 3-4W, 225 AMP. PROVIDE BREAKERS: 12 - 20/1 (2 FOR LIGHTS, 2 FOR MECH, 2 ARE SPARE), 6 - 15/1, 1 - 100/3, 225/3 (MAIN). EXISTING ENCLOSURE = 46"H x 20"W.
PANEL "H"	120/208V 3-4W, 100 AMP. PROVIDE BREAKERS: 13 - 20/1 (3 FOR LIGHTS, 2 FOR MECH, 2 ARE SPARE), 3 - 15/1, 100/3 (MAIN). EXISTING ENCLOSURE = 29"H x 20"W.
PANEL "I"	120/208V 3-4W, 225 AMP. PROVIDE BREAKERS: 13 - 20/1 (2 FOR LIGHTS, 1 FOR MECH, 2 ARE SPARE), 4 - 15/1, 1-100/3, 225/3 (MAIN). EXISTING ENCLOSURE = "H x "W.
PANEL "J"	120/208V 3-4W, 100 AMP. PROVIDE BREAKERS: 15 - 20/1 (4 FOR LIGHTS, 2 FOR MECH, 2 ARE SPARE), 3 - 15/1, 100/3 (MAIN). EXISTING ENCLOSURE = 29"H x 20"W.
PANEL "K"	120/208V 3-4W, 100 AMP. PROVIDE BREAKERS: 2-20/1 (2 ARE SPARE, TWO FOR MECH. CONTROL), 10 - 15/1, 1 - 25/1, 1 - 20/3, 1 - 30/2, 100/3 (MAIN). EXISTING ENCLOSURE = 38"H x 20"W.

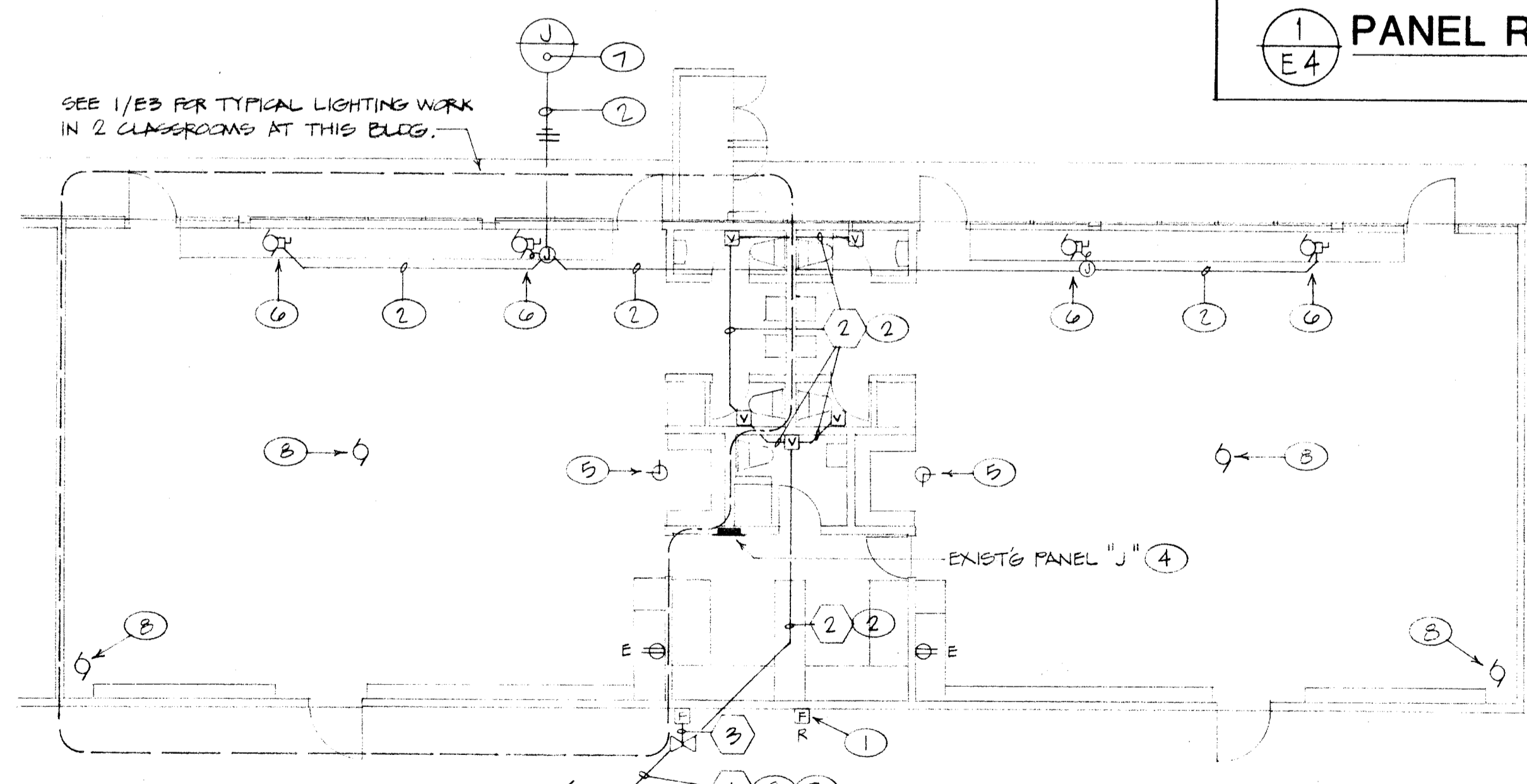
1 PANEL REPLACEMENT SCH.  
E4 NO SCALE

FEEDER SCHEDULE

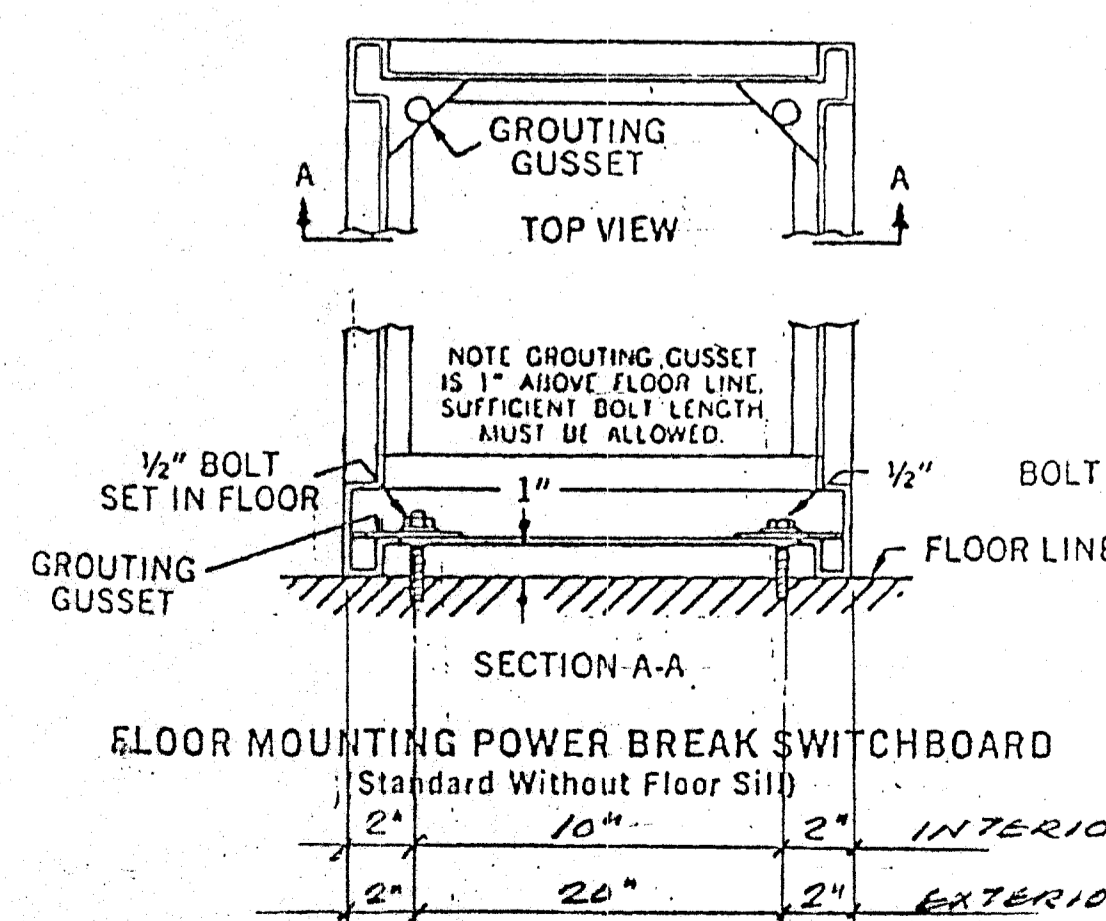
1	3/4" C. - 4 #12, 4 #14 (FIRE ALARMS)	CU THWN
2	1/2" C. - 4 #12 (FIRE ALARMS)	
3	1/2" C. - 4 #14 (FIRE ALARMS)	
4	1" C. - 4 #12, 2 #14 (FIRE ALARMS)	
5	1" C. - 4 #12, 12 #14 (FIRE ALARMS)	
A	2" C. - 3 #2/0 CU THW + 1 #4 CU GND	
M	1/4" C. - 3 #4 CU THW + 1 #10 CU GND	
T	3/4" C. - 2 #10 CU THW + 1 #10 CU GND	
MC	1/4" C. - 3 #2 CU THW + 1 #8 CU GND	

NOTES (THIS SHEET ONLY)

- REMOVE EXISTING FIRE ALARM DEVICE. BLANK OFF BOX, FULL OUT IDLE WIRE. (NOTE: EXISTING WIRING RUNS IN SAME CONDUIT AS CLOCK WIRING. VERIFY ROUTE AT SITE.) REMOVE ANY EXPOSED EMPTY CONDUIT, RE-RUN EXIST'G CONDUCTORS REMAINING AS REQ'D.
- VERIFY CONDUIT ROUTE AT SITE. CONCEAL IN ATTIC/WALLS WHERE POSSIBLE. WHERE NOT POSSIBLE TO CONCEAL INSIDE BUILDING USE SURFACE RACEWAY (WIREMOLD #700. PAINT TO MATCH ADJACENT SURFACE).
- TO NEW FIRE ALARM MASTER.
- REPLACE INTERIOR BUS AND BREAKERS WITH NEW PER 1/E4.
- RELOCATE EXISTING CLOCK TO CLEAR NEW CEILING. PROVIDE CONDUIT, WIRE AND BOX AS REQUIRED (MATCH EXISTING). BLANK OFF EXISTING BOX. CONTRACTOR MAY FLUSH IN DEVICE OR SURFACE MOUNT, WITH CONCEALED CONDUIT TO EXISTING BOX AT CONTRACTOR'S OPTION.
- CONNECT UNIT VENTILATOR - SEE MECH. DRAWINGS.
- CONNECT TO TWO NEW 20/1 BREAKERS IN EXIST'G PANEL - SEE 1/E4.
- DISCONNECT EXIST'G MECH. EQUIP. BEING REMOVED (SEE MECH. PLANS). RE-ROUTE AND RECONNECT ANY FEED THRU CIRCUITS. PULL OUT ANY IDLE WIRE, REMOVE ANY EXPOSED EMPTY CONDUIT.



2 ELECTRICAL PLAN - BLDG. "B2"  
E4 NO SCALE



3 ELECTRICAL SWITCH CENTER/EQUIP. COUN.  
E4 SWITCHBOARD #1 & #2

date 6/23/89  
revisions

MUNSEY SCHOOL MODERNIZATION  
BAKERSFIELD CITY SCHOOL DISTRICT  
BAKERSFIELD, CALIFORNIA

APPROVED  
Department of General Services  
City of Bakersfield, California  
FEB 7 1990  
Structural Safety Section

Kenrick  
Design  
Group  
architects • planners

job number 8712

sheet number E-4

CORNELIUS ENGINEERING, INC.  
Consulting Electrical Engineer  
918 W. Main St. - Ph. 733-2671  
Visalia, California 93291  
Gerald Cornelius Calif. no. 7198

2115 19th Street, Bakersfield, CA 93301 (805) 322-1863