

**FIBER OPTIC CABLE**  
THREE MULTIMODE PAIRS (SIX STRANDS) AND THREE SINGLE-MODE PAIRS (SIX STRANDS)  
BERK-TEK OM3 OF EQUAL  
CAT 6A CABLE  
BERK-TEK CAT. 6A

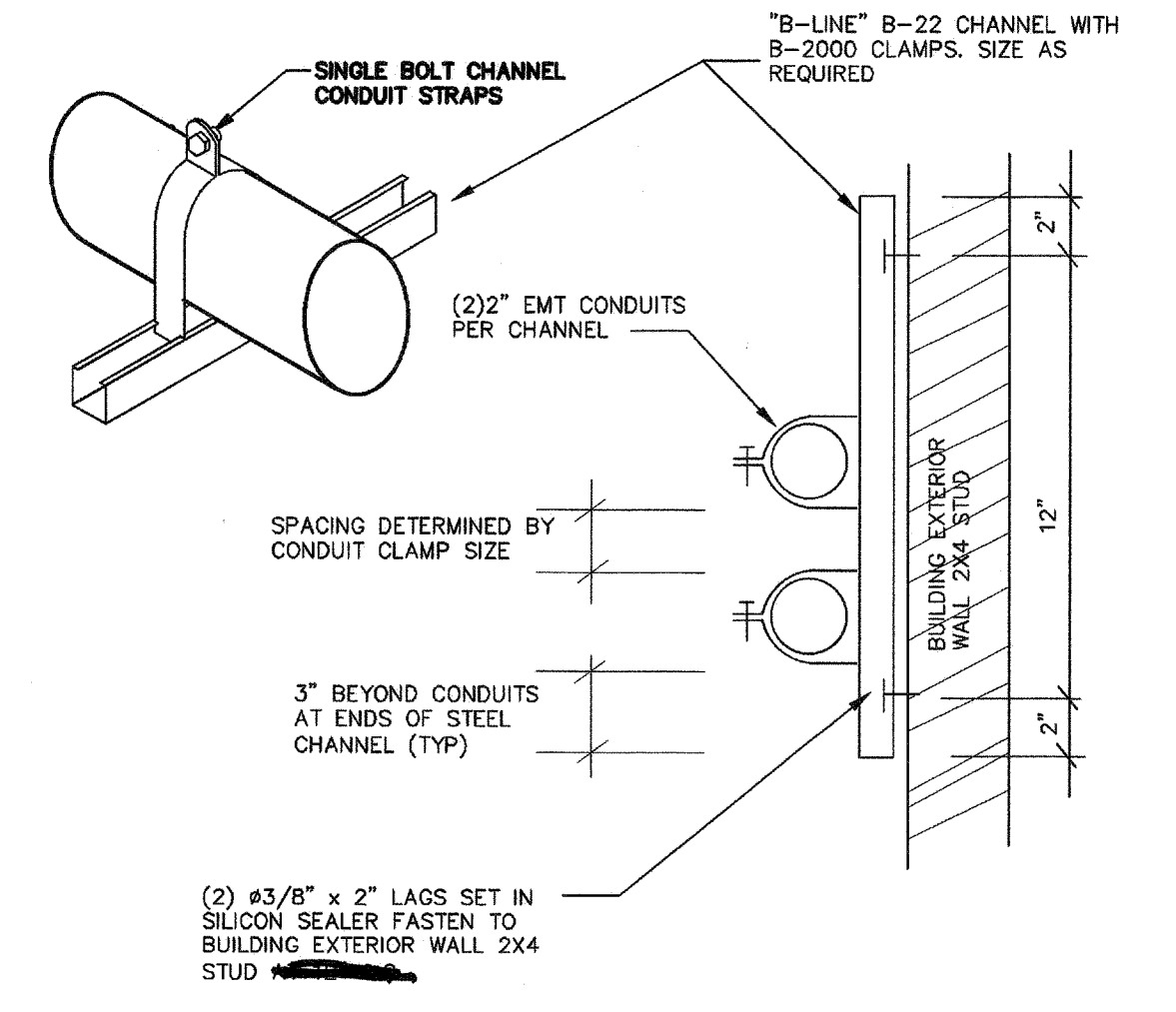
**CABLE TESTING**  
ALL FIBER OPTIC CABLE MUST BE TESTED TO SUPPORT 100BASE-FX FULL DUPLEX STANDARDS.  
ALL CAT 6A CABLE MUST BE TESTED TO SUPPORT 100BASE-TX.  
TEST RESULTS ARE TO BE PROVIDED TO OWNER I.T MANAGER FOR REVIEW AND APPROVAL.

**IDF SWITCH EQUIPMENT**  
F/O CISCO WS-C29XX-24 W/ WS-C5484 6BIC (CONFIRM WITH OWNER)  
TP CISCO WS-C2950-24 (CONFIRM WITH OWNER)  
CABINETS HUBBLE RE4X OR EQUAL  
JACKS ALLEN TEL AT55-16 OR EQUAL  
FACEPLATE ALLEN TEL AT30-2-09 OR EQUAL  
PATCH PANEL ALLEN TEL ATPNL-48 OR EQUAL

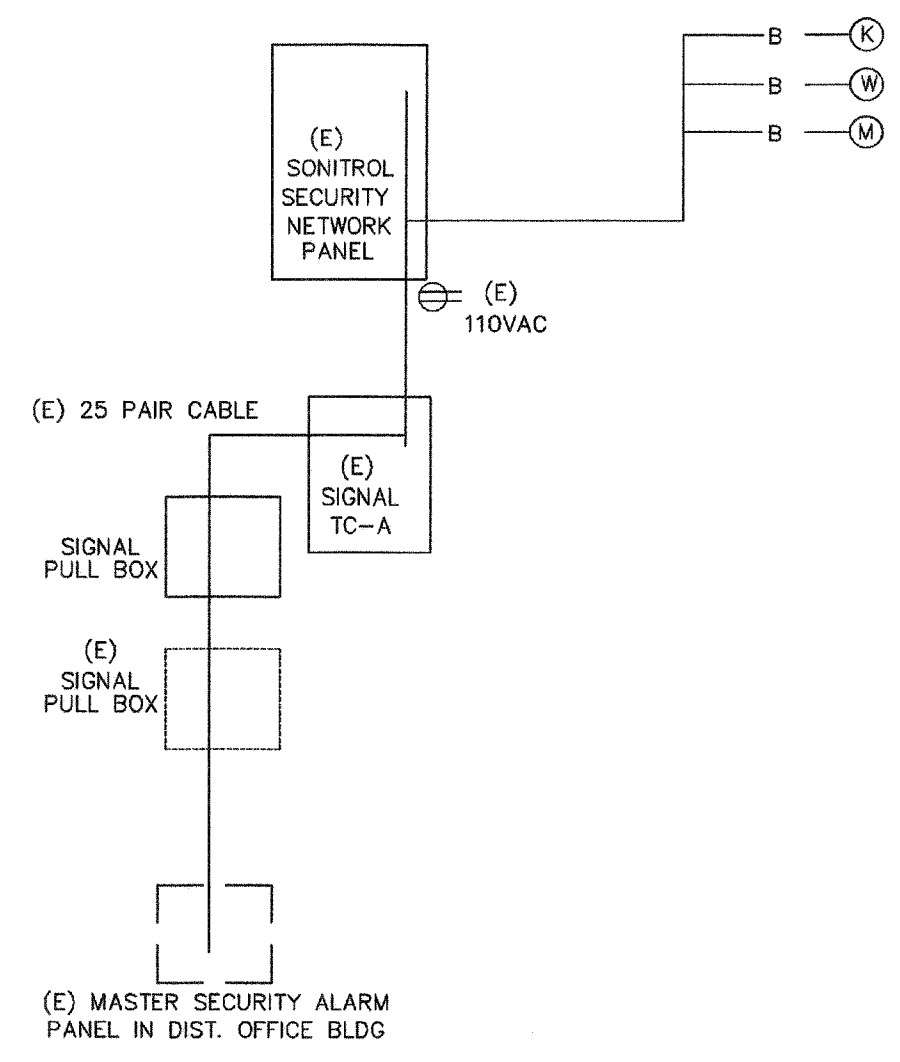
**LABELING IDENTIFICATION**  
ALL INSTALLED EQUIPMENT, CABLES, TERMINATIONS, ETC. WILL BE PERMANENTLY AND UNIQUELY MARKED. CABLES WILL BE MARKED USING A CONVENTION THAT WILL IDENTIFY ITS ORIGIN AND DESTINATION. LAN TERMINATIONS WILL SIMILARLY BE MARKED TO UNIQUELY IDENTIFY THEM WHILE PROVIDING THE SOURCE AND DESTINATION OF CABLE. IDENTIFICATIONS MUST BE SUCH THAT THEY WILL NOT RUB OFF, FALL OFF, OR EASILY BREAK AWAY.

**DATA COMMUNICATION SYSTEM NOTES**  
1. CONTRACTOR TO PROVIDE ALL EQUIPMENT, PATCH CABLE AND ACCESSORY FOR A FULLY FUNCTIONAL SYSTEM.  
2. NEW DATA JACK WIRING CONFIGURATION MUST BE MATCHED EXISTING SYSTEM. FIELD VERIFY PRIOR TO INSTALLATION.  
3. ADMINISTRATIVE NODE TO BE RED IN COLOR WITH THE INSTRUCTIONAL NODE TO BE BLUE IN COLOR. NODE LOCATION MUST BE 12" WITHIN POWER RECEPTACLE AND FIELD VERIFY EXACT LOCATION WITH OWNER PROJECT COORDINATOR OR TECHNOLOGICAL SERVICES PERSONNEL PRIOR TO INSTALLATION.  
4. ALL EQUIPMENT DOCUMENTATION AND WARRANTY CARDS WILL BE PROVIDED TO OWNER FOR FILING WITH MANUFACTURERS UPON COMPLETION OF INSTALLATION.

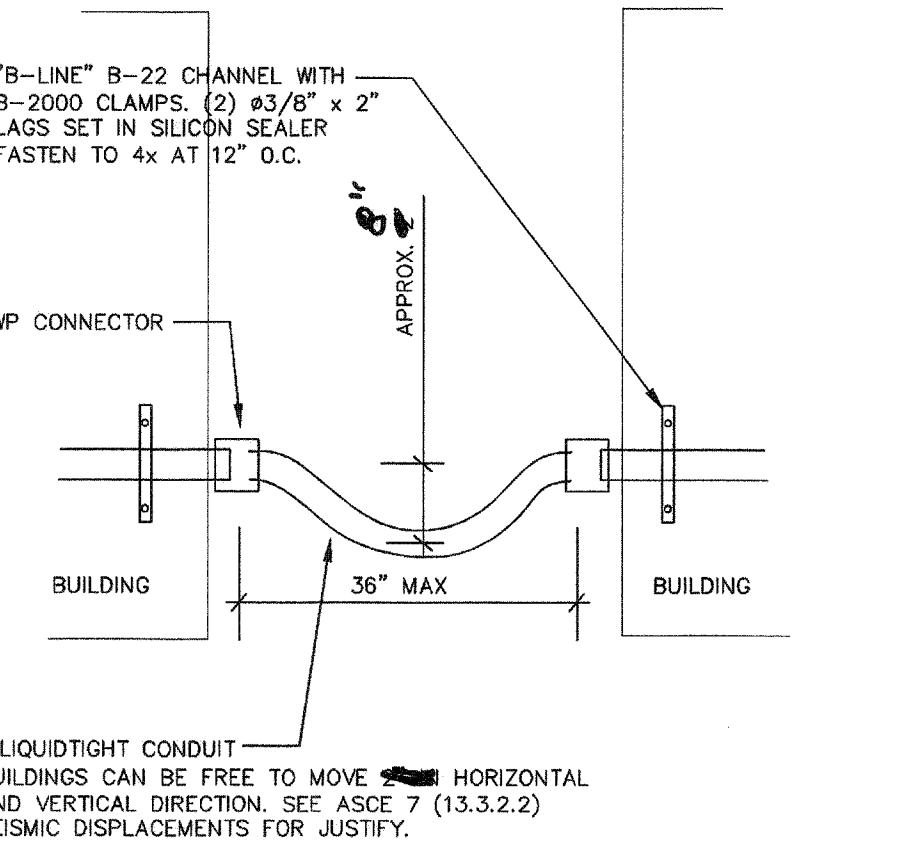
7 DATA COMMUNICATION SYSTEM RISER DIAGRAM N.T.S.



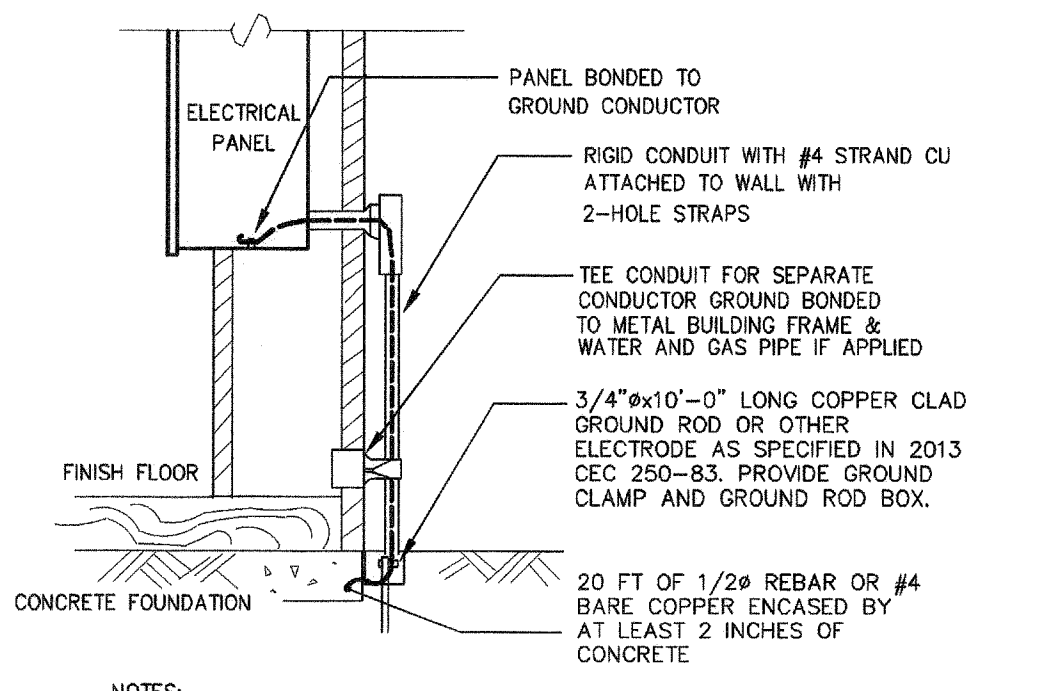
6 CONDUIT SUPPORT DETAIL - New Bid. N.T.S.



5 SECURITY ALARM SYSTEM RISER DIAGRAM N.T.S.

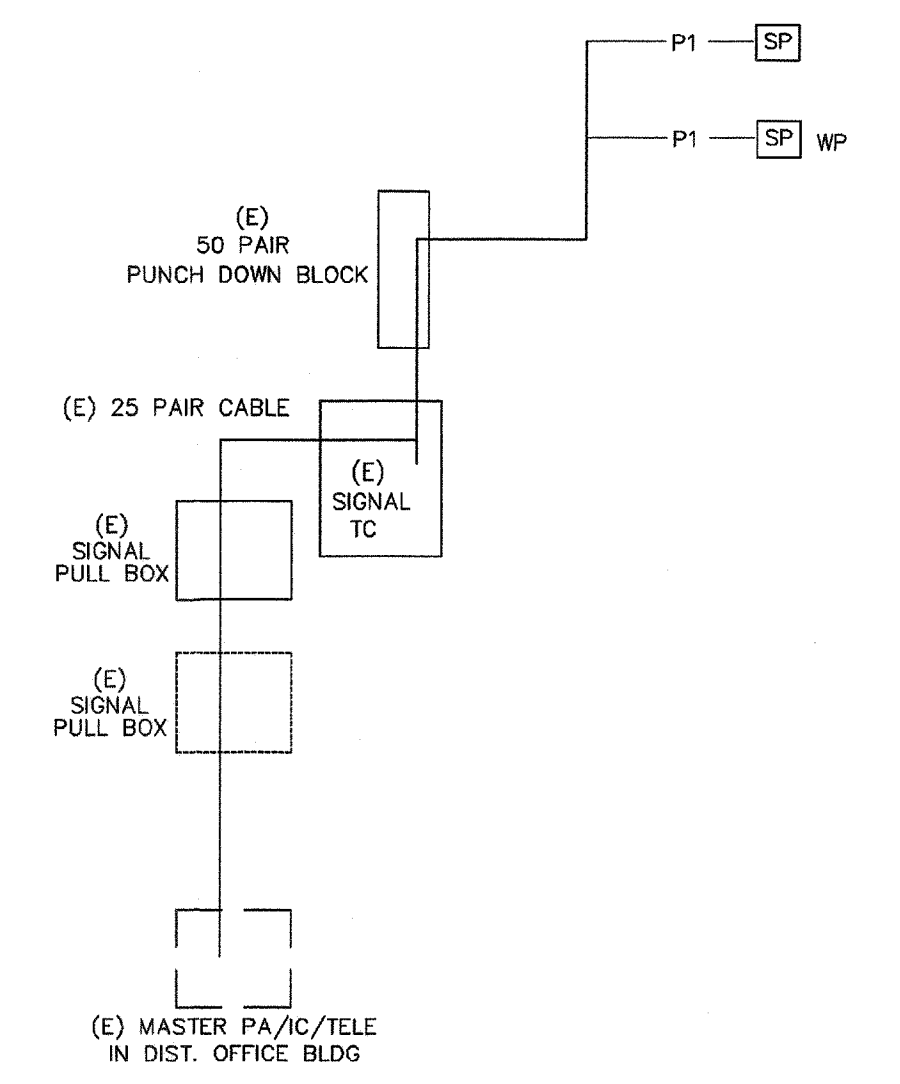


4 FLEX CONDUIT SUPPORT DETAIL N.T.S.

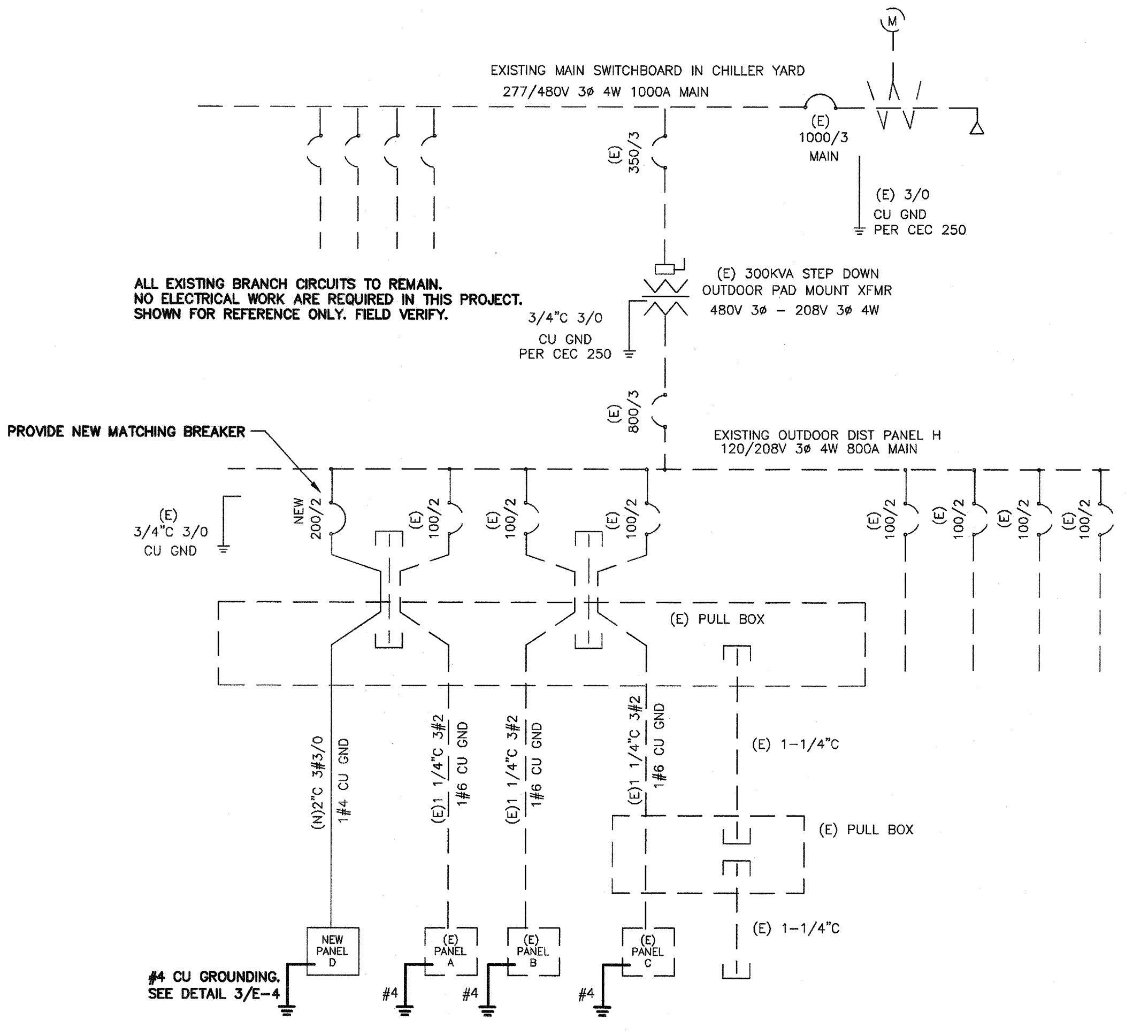


**NOTES:**  
1. SIZE OF CONDUCTORS SHALL COMPLY WITH 2016 CEC TABLE 250-66.  
2. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELECTRICAL PANEL AND TO METAL BUILDING FRAME PER 2016 CEC 250-50. IN ADDITION TO THE DETAIL SHOWN ABOVE BOND THE ELECTRICAL GROUND TO METAL WATER PIPE EMBEDDED AT LEAST 10 FT. IN SOIL IF AVAILABLE (CEC 250-50, 250-62).  
3. ALL MADE OF METAL FRAME BUILDINGS SHALL BE ELECTRICALLY BONDED TOGETHER, BOND TO HAND RAIL AND WATER PIPE IF APPLIED. (BOLTING ONLY IS NOT ACCEPTABLE BONDING).  
4. CHECK RESISTANCE TO GROUND. IF RESISTANCE EXCEED 25 OHMS, INSTALL ADDITIONAL GROUND RODS WITH CONDUCTORS AS SHOWN SEPARATED AT LEAST 6'-0" UNTIL RESISTANCE IS REDUCED TO 25 OHMS OR LESS (2016 CEC 250-84).  
5. FIELD INSPECTOR SHALL WITNESS GROUNDING TEST.

3 GROUNDING DETAIL N.T.S.



2 PA/IC/TELE SYSTEM RISER DIAGRAM N.T.S.



**NOTES:**  
1. PROVIDE NEW MATCHING BREAKERS, FEEDERS AND PANELS PER PLANS.  
2. ALL NEW CONDUIT SHALL BE 75C THWN-2 COPPER IN CONDUIT. (AMPACITY FOR CONDUCTOR SELECTION MUST BE DETERMINED/DERATED BY THE ALLOWED TERMINATION RATINGS MARKED/APPROVED ON EACH DEVICES, MOTOR, APPLIANCE, XFMR O.C.P.C. PANEL, ETC. CONDUCTORS INSTALLED IN U.G OR WET LOCATIONS SHALL BE MARKER 'W'. PER 2016 CEC 110-14(C)(1)).  
3. ALL WIRING OVER 100 VOLT SHALL BE INSTALLED IN RACEWAY CONDUIT, EMT ABOVE GRADE, PVC SCH. 40 BELOW GRADE AND STEEL CONDUIT ON EXPOSE SURFACE BELOW 8' AFF. FOR PHYSICAL PROTECTION.  
4. STEEL BACK BOX SHALL BE PROVIDE FOR ALL NEW ELECTRICAL DEVICES SUCH AS SWITCH, OUTLET AND CONDUCTOR SPLICE.  
5. ELECTRICAL CONTRACTOR IS RESPONSIBLE TO VERIFY THE EXISTING SWITCHBOARD AND PANELS ARE INSTALL PER ONE LINE DIAGRAM PRIOR TO WORKING, AND REPORT TO ENGINEERS IF ANY DISCREPANCY ARE FOUND.

1 SINGLE LINE DIAGRAM N.T.S.

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DETAILS AND SYSTEM DIAGRAMS

Project Name & Address:  
**FREMONT ELEMENTARY SCHOOL  
1 RELOCATABLE CLASSROOM**  
BAKERSFIELD CITY SCHOOL DISTRICT  
607 TEXAS STREET, BAKERSFIELD, CA

Issue Date: 06/00/17  
Date: 06/30/17  
Designer: J CHONG  
DR: J CHONG  
PC: \_\_\_\_\_

Agency Approval Stamp:

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