

FIBER OPTIC CABLE
THREE MULTIMODE PAIRS (SIX STRANDS) AND THREE SINGLE-MODE PAIRS (SIX STRANDS)
OPTICAL CABLE COMPANY # DX 12/0650-6W3SB/1UC-6SYMC-YMD/900-0FNIR OF EQUAL
CATSE_CABLE
SEN4P424-BL-BER-PV OR EQUAL

CABLE TESTING
ALL FIBER OPTIC CABLE MUST BE TESTED TO SUPPORT 1000BASE-FX FULL DUPLEX STANDARDS.
ALL CAT 5E CABLE MUST BE TESTED TO SUPPORT 100BASE-TX.
TEST RESULTS ARE TO BE PROVIDED TO SCHOOL TECHNOLOGICAL SERVICES FOR REVIEW AND APPROVAL.

IDF SWITCH EQUIPMENT
F/O CISCO WS-C29500-24 W/ WS-C5484 GBC
TP CISCO WS-C2950-24
CABINETS SOUTH WESTERN DATA PRODUCT SWE 4000-18UBDLK OR EQUAL
JACKS ALLEN TEL AT55-16 OR EQUAL
FACEPLATE ALLEN TEL AT30-2-09 OR EQUAL
PATCH PANEL ALLEN TEL ATPNL-24 OR EQUAL

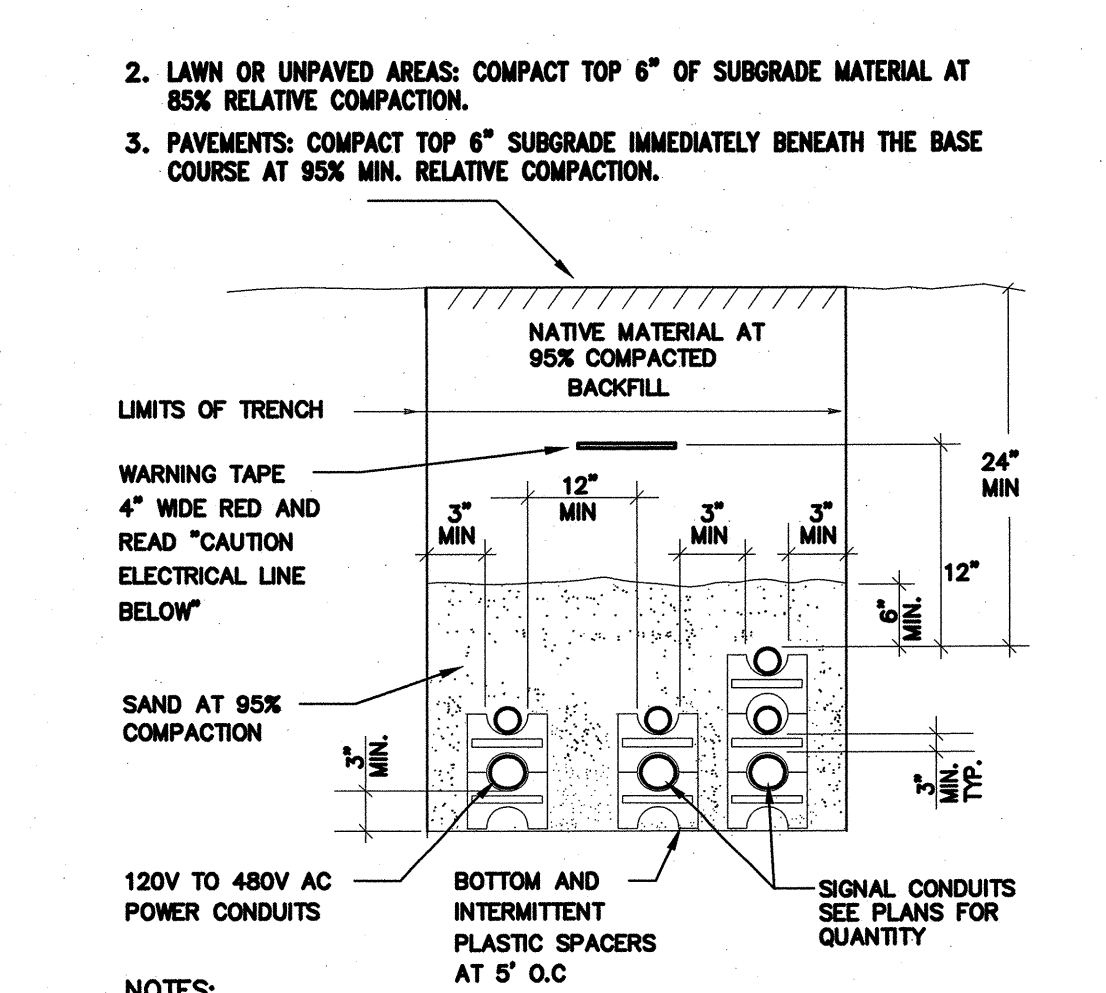
LABELING IDENTIFICATION
ALL INSTALLED EQUIPMENT, CABLES, TERMINATIONS, ETC. WILL BE PERMANENTLY AND UNIQUELY MARKED. CABLES WILL BE MARKED USING A CONVENTION THAT WILL IDENTIFY ITS ORIGIN AND DESTINATION. LAM TERMINATIONS WILL SIMILARLY BE MARKED TO UNIQUELY IDENTIFY THEM WHILE PROVIDING THE SOURCE AND 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 INFORMATION WILL BE PROVIDED TO OWNER TECHNOLOGICAL SERVICES. WARRANTY CARDS WILL BE PROVIDED TO VUSD TECHNOLOGICAL SERVICES FOR FILING WITH MANUFACTURERS UPON COMPLETION OF INSTALLATION.

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

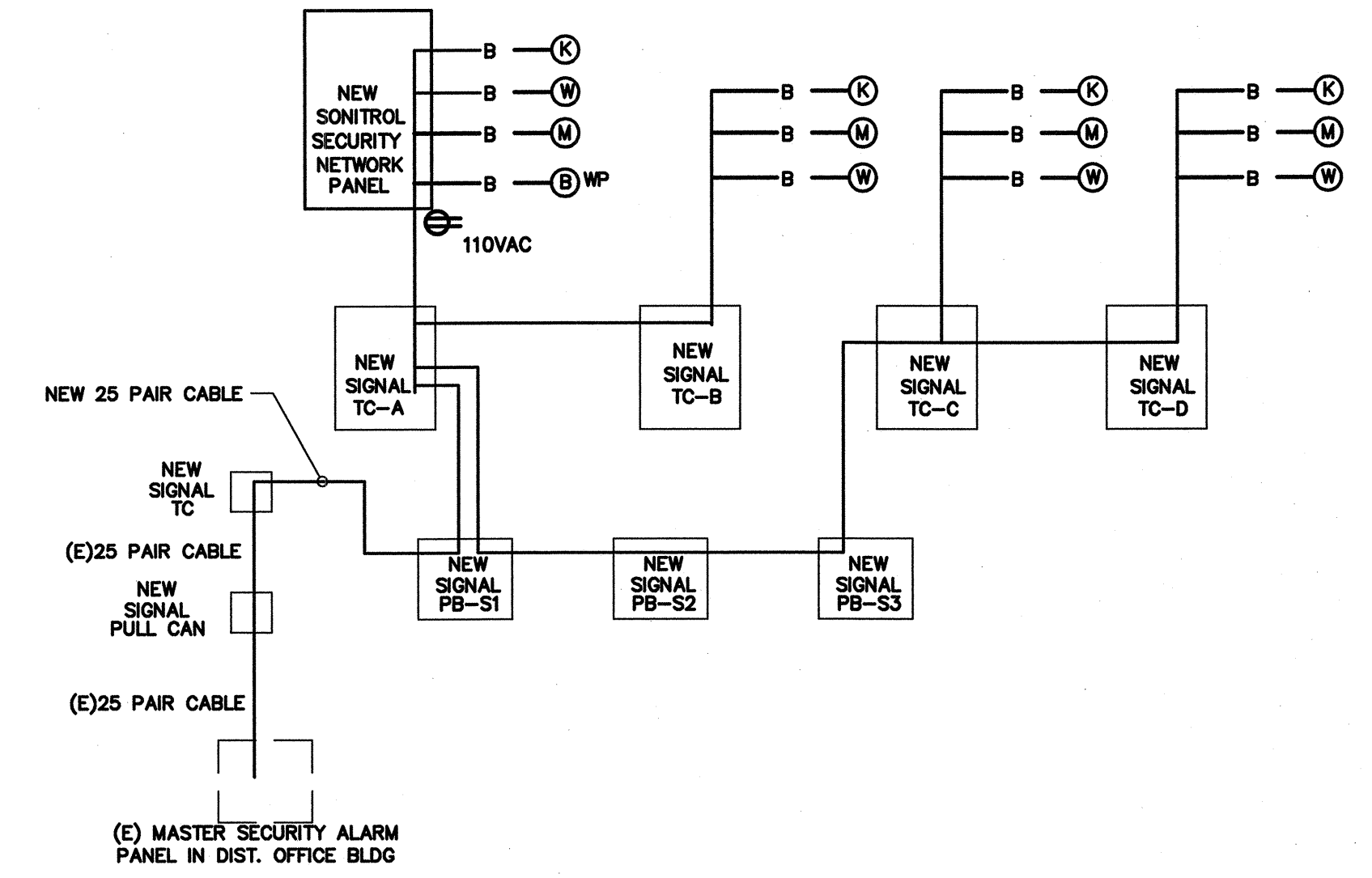
RESTORE NEW FINISHED SURFACE PER ORIGINAL CONDITION AS FOLLOWS:

- STRUCTURES, BUILDING SLABS, WALKWAYS, AND STEPS: COMPACT TOP 6" OF SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL AT 92% MAX. RELATIVE COMPACTION. COMPACT UPPER 2" OF BACKFILL IN UTILITIES TRENCHES OR OTHER EXCAVATION TO 92% MIN. RELATIVE COMPACTION.
- LAWN OR UNPAVED AREAS: COMPACT TOP 6" OF SUBGRADE MATERIAL AT 85% RELATIVE COMPACTION.
- PAVEMENTS: COMPACT TOP 6" SUBGRADE IMMEDIATELY BENEATH THE BASE COURSE AT 95% MIN. RELATIVE COMPACTION.

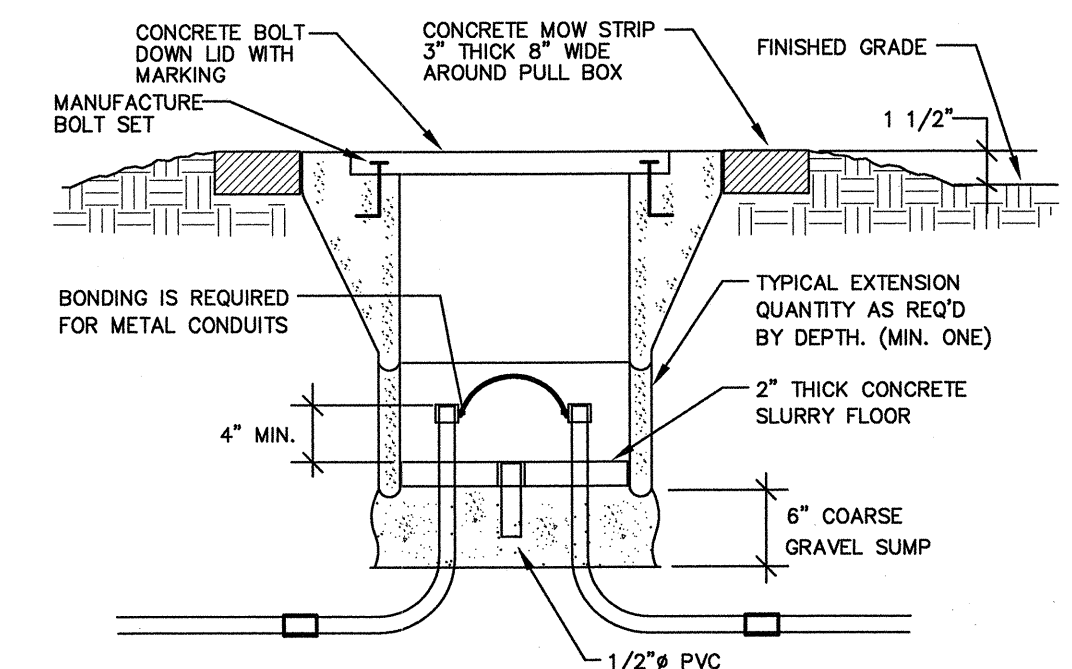


NOTES:
1. IF CONDUITS ARE INSTALLED IN A FILL AREA, THE TOP OF THE FILL MUST BE A MIN. OF 30" ABOVE THE DESIGN CONDUITS ELEVATION BEFORE THE CONDUITS IS INSTALLED.
2. ELECTRICAL CONDUITS SHALL BE MIN. 12" FROM OTHER UTILITY PIPES IN JOIN TRENCH, NO UTILITY PIPES ARE ALLOWED INSTALLED ON THE TOP OF ELECTRICAL CONDUITS.

6 CONDUIT TRENCH DETAIL N.T.S.

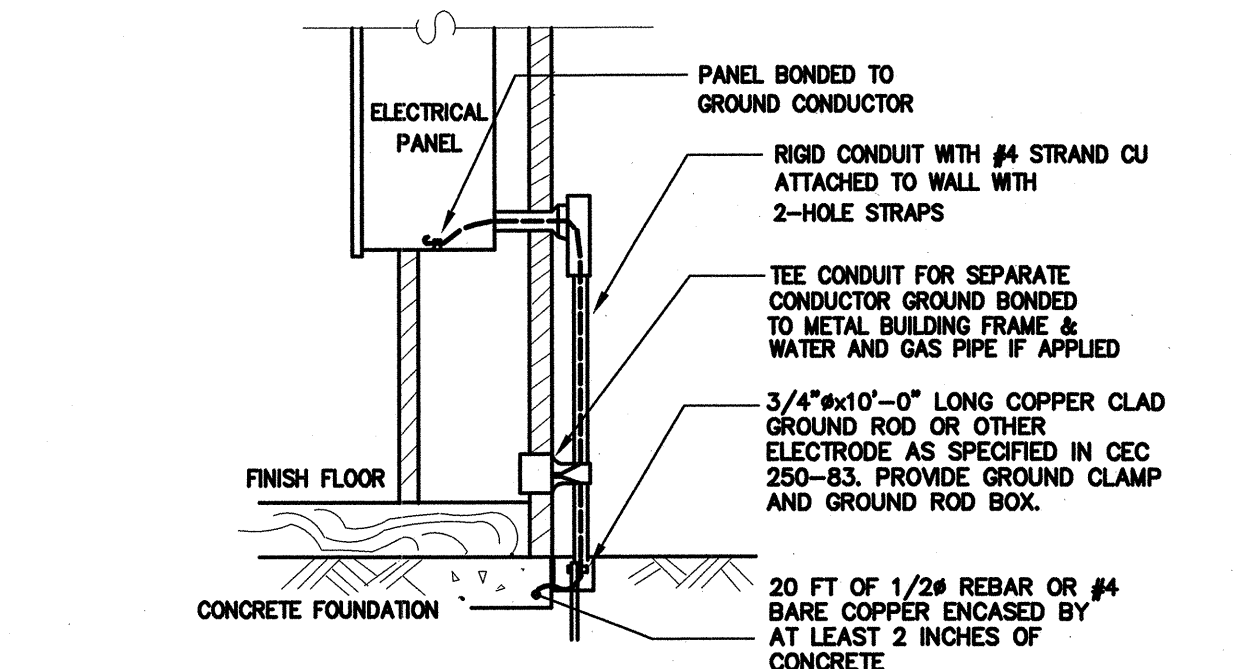


5 SECURITY ALARM SYSTEM RISER DIAGRAM N.T.S.



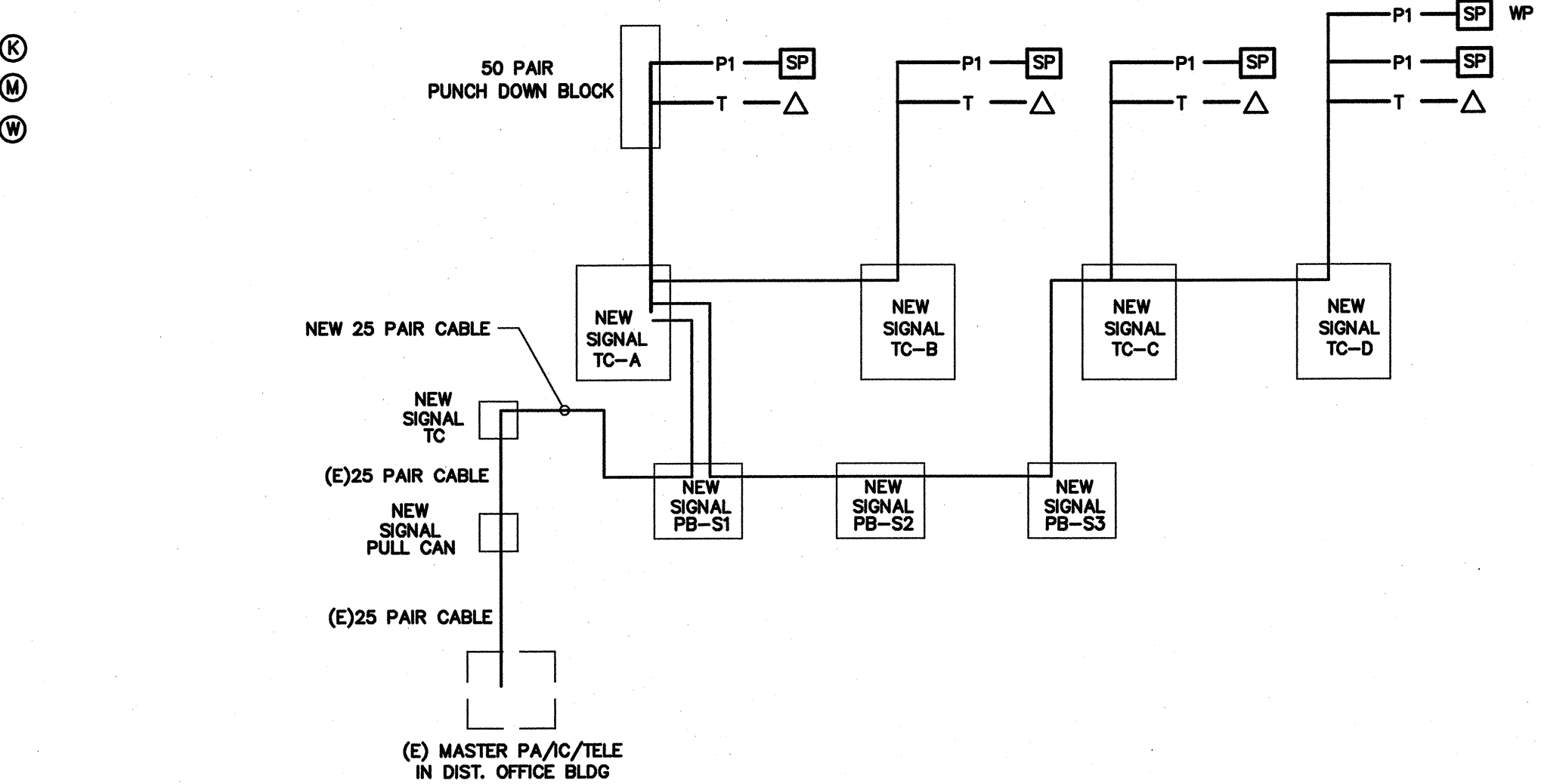
NOTES:
WHERE PULL BOX IS LOCATED WITHIN 30" OF A FOUNDATION OR SIDE WALK, PULL BOX SHALL BE SET FLUSH WITH THE ADJACENT SURFACE, MOW STRIP CONCRETE SHALL BE POURED FLUSH WITH FOUNDATION OR SIDE WALK.

4 PULL BOX AT OPEN YARD DETAIL N.T.S.

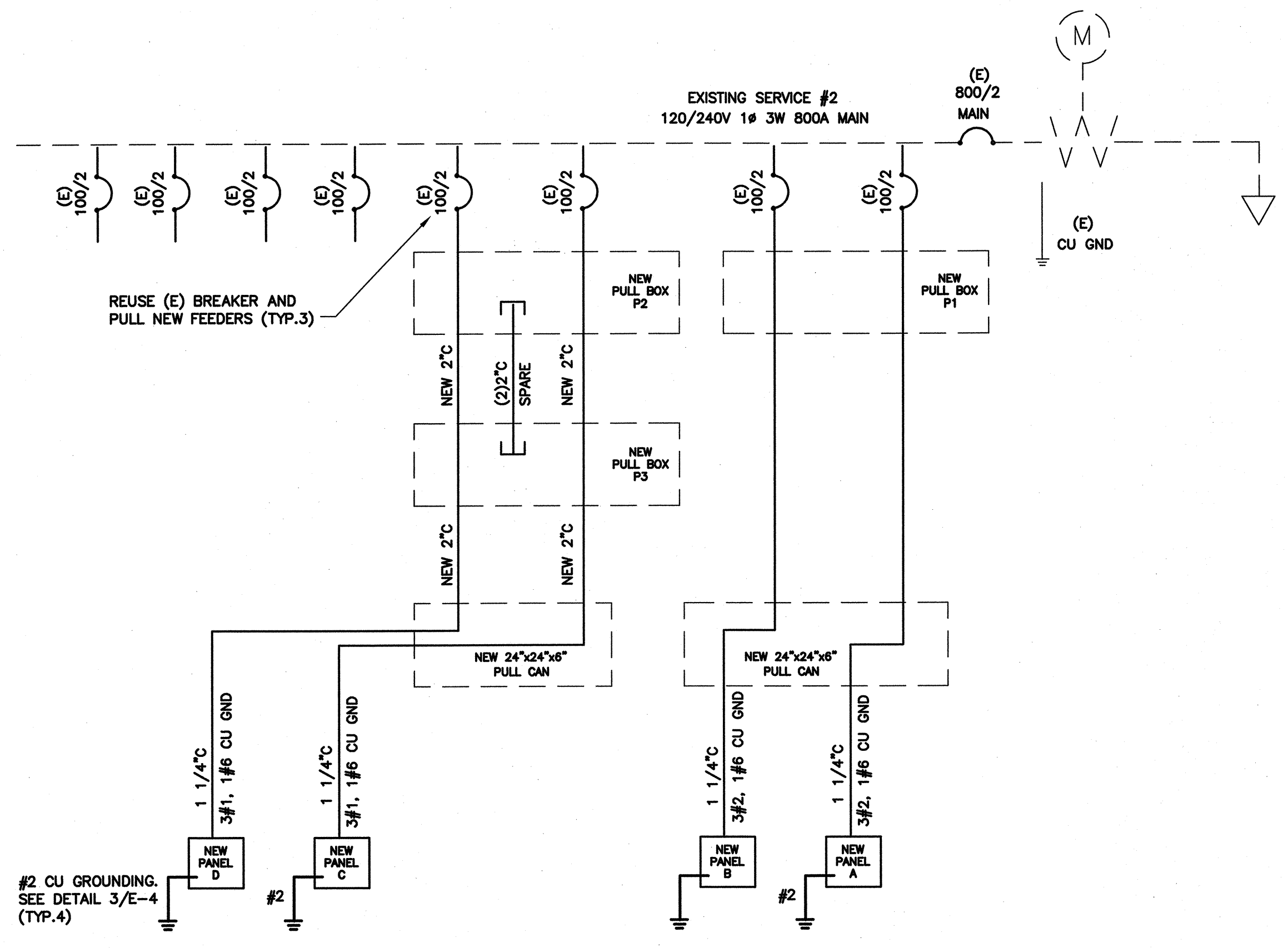


NOTES:
1. SIZE OF CONDUCTORS SHALL COMPLY WITH CEC TABLE 250-66.
2. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELECTRICAL PANEL AND TO METAL BUILDING FRAME PER CEC 250-50. IN ADDITION TO THE DETAIL SHOWN ABOVE BOND THE ELECTRICAL GROUND TO METAL WATER PIPE EMBEDDED AT LEAST 10 FT. IN SOIL IF AVAILABLE (CEC 250-50, 250-82).
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 (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 CONDUCTOR 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 2010 CEC 110-14(C)(1)).
3. ALL WIRING OVER 100 VOLT SHALL BE INSTALLED IN RACEWAY CONDUIT, EMT ABOVE GRADE, PVC SCH. 40 BELOW GRAD AND STEEL CONDUIT ON EXPOSE SURFACE BELOW 8' AFF. FOR PHYSICAL PROTECTION.
4. MC CABLE WITH SEPARATE GROUND CONDUCTOR CAN BE USED IN CEILING AND CONCEAL IN WALL.
5. STEEL BACK BOX SHALL BE PROVIDE FOR ALL NEW ELECTRICAL DEVICES SUCH AS SWITCH, OUTLET AND CONDUCTOR SPLICE.
6. ELECTRICAL CONTRACTOR IS RESPONSIBLE TO VERIFY THE EXISTING SWITCHBOARD AND PANELS ARE INSTALLED 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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Revision:	Rev. Date:

DETAILS AND SYSTEM DIAGRAMS

PIONEER ELEMENTARY
4 RELOCATABLE CLASSROOMS
BAKERSFIELD CITY SCHOOL DISTRICT
4404 PIONEER DR., BAKERSFIELD, CA

Issue Date: 00/00/13
Date: 06/02/13
Designer: J CHONG
DR: J CHONG
PC: C.M

FILE # 15-6
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
03-115335
AC: JLS
DATE: JUN 08 2014
TRACKING # 63321-131

Stamp(s):

Job No.: 5082
Sheet No.: E-4
Release:

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7/7/2013 3:51:20 PM