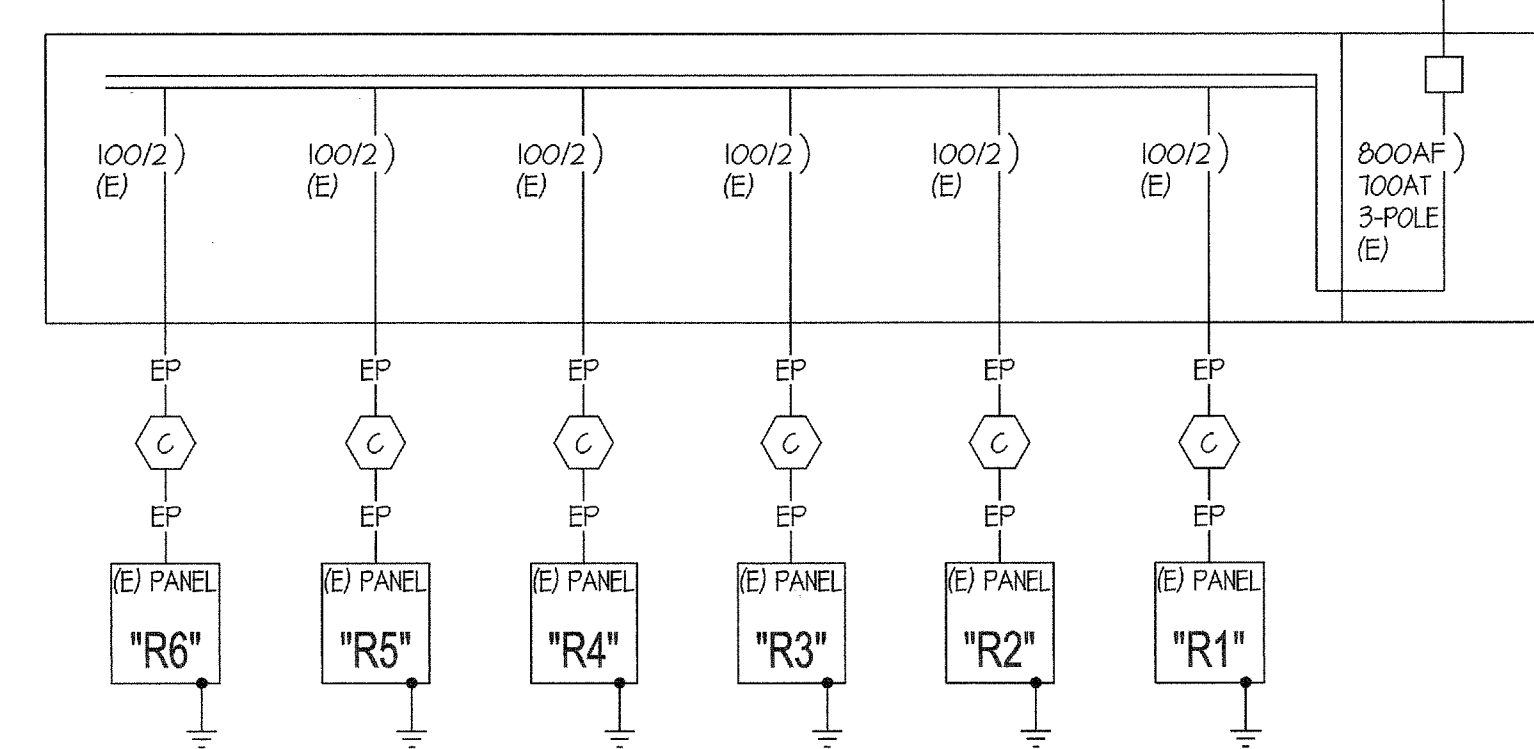
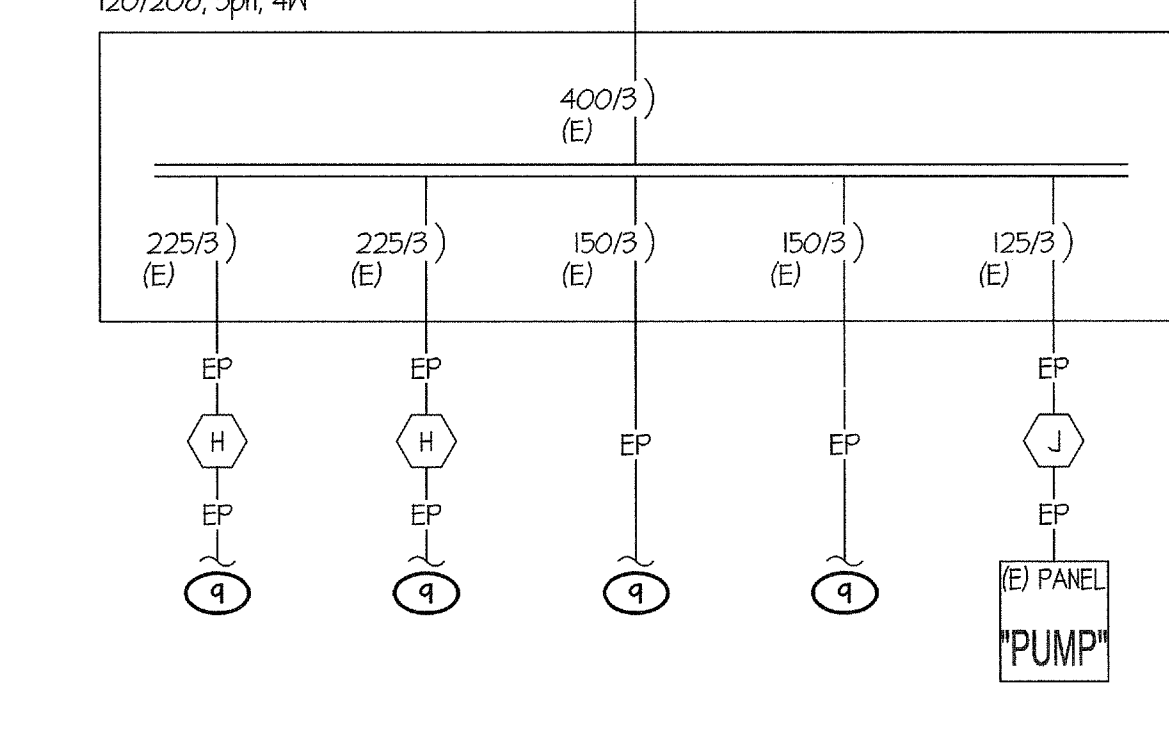


- NOTES (THIS DETAIL ONLY):**
- ONE SPARE 2 1/2" TO REMAIN.
 - TO EXISTING BRINE CHILLER. NO WORK REQUIRED.
 - BOND AND GROUND PER DETAIL #4/E1, TYPICAL OF 2.
 - 1 #4 CU BETWEEN ADJACENT GROUND RODS.
 - EXISTING SPARE 1 1/2" (WITH NYLON FULL ROPE). EXTEND PER FEEDER (D).
 - THREE SPARE 1 1/2" (WITH NYLON FULL ROPE) TO REMAIN.
 - CONNECT PANEL PROVIDED WITH RELOCATABLE BUILDING, TYPICAL.
 - TO REMAIN IN USE. NO WORK REQUIRED.
 - VARIOUS FEEDERS AND CIRCUIT BREAKERS TO REMAIN. NO WORK REQUIRED.
 - EXISTING 3 #250 kcmil + 1 #4 GND (CU-XHHN-2) TO REMAIN.
 - USE EXISTING SPARE CIRCUIT BREAKER TO CONNECT NEW LOADS AS SHOWN.
 - PICK UP AND EXTEND #4 CU AT THIS GROUND ROD WITH A NEW #4 CU AS SHOWN.

(E) PANEL "D" (CUTLER-HAMMER) ②
120/208V, 3ph, 4W, 800 AMP RATED (100 AMP MAIN)
10,000, A.I.C.



③ EXISTING DISTRIBUTION SWITCHBOARD "DS-3"
120/208, 3ph, 4W



LOAD CALCULATION (MAIN SWITCHBOARD):

EXISTING LOAD (MAIN SWBD "MS"):
MAX DEMAND (METER #100457H42) PER P.6.4.E. RECORDS 320 kVA
MAXIMUM DEMAND x 125% 400 kVA

EXISTING LOAD + NEW LOAD = 490.52 kVA
AMPS AT 480/277V, 3ph, 4W 591 AMPS
THEREFORE THE 1200 AMP SERVICE IS ADEQUATE.

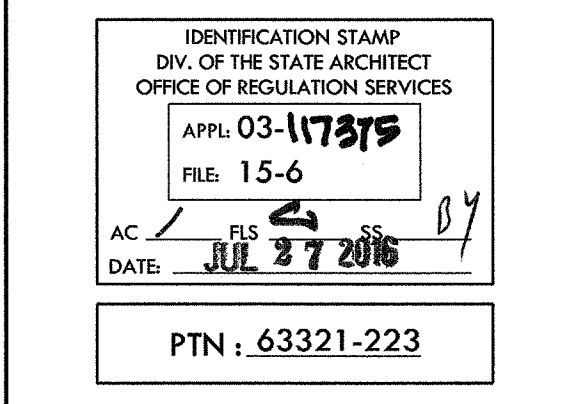
NEW LOAD AT (E) PANEL "NR":
FOUR EXISTING RELOCATABLE BLDGS. 60.44 kVA
TWO NEW RELOCATABLE BLDGS. 30.08 kVA
TOTAL 90.52 kVA
251 AMPS

THEREFORE A 400 AMP PANEL IS ADEQUATE

- FEEDER SCHEDULE:**
(ALL CONDUCTORS IN 480V OR 480/277V UNDERGROUND FEEDERS SHALL BE CU-XHHN-2. ALL OTHER CONDUCTORS, INCLUDING THE EQUIPMENT GROUNDING CONDUCTOR, SHALL BE CU-TWNN-2 FOR #8 AND LARGER AND CU-TWNN FOR #10 AND SMALLER.)
- EXISTING PG&E SECONDARY TO REMAIN.
 - 4" C - 6 #10 + 1 #4 GND. FULL OUT CONDUCTORS FROM MAIN SWITCHBOARD BACK TO EXISTING FULL BOX #2 AND COIL UP FOR RECONNECTION. FULL IN NEW 3 #300 + 6 #4/O + 1 #4 GND.
 - 1 1/2" C - 3 #2 + 1 #6 GND.
 - 2" C - 4 #400 kcmil + 1 #10 GND IN EACH.
 - 3 1/2" C - 4 #350 MCM CU.
 - 2" C - 3 #3/O AMPS CU.
 - 3 1/2" C - 4 #500 MCM CU.
 - 3" C - 3 #4/O AMPS CU.
 - 1 1/2" (NIPPLE) - 4 #1 + 1 #6 GND.
 - 2" C - 3 #2/O + 1 #4 GND (CU-XHHN-2).
 - 1 1/2" C - 3 #2 + 1 #6 GND.
 - 2" C - 3 #2/O + 1 #4 GND (CU-XHHN-2).
 - 1 1/2" C - 3 #2 + 1 #6 GND

NOTE:
ALL VOLTAGE DROP CALCULATIONS ARE DONE USING 80% OF THE AMP RATING OF THE EQUIPMENT BEING SUPPLIED.

SITE IMPROVEMENTS FOR (2) MODULAR CLASSROOMS AT:
HORACE MANN ELEMENTARY SCHOOL
2710 NILES STREET, BAKERSFIELD, CA, 93306
FOR
BAKERSFIELD CITY SCHOOL DISTRICT
BAKERSFIELD, KERN COUNTY, CALIFORNIA, 93305



1601 NEW STINE ROAD, SUITE 280
BAKERSFIELD, CA 93309
PH: (661) 397-4377
FAX: (661) 397-4378
WWW.SCARCHITECT.COM

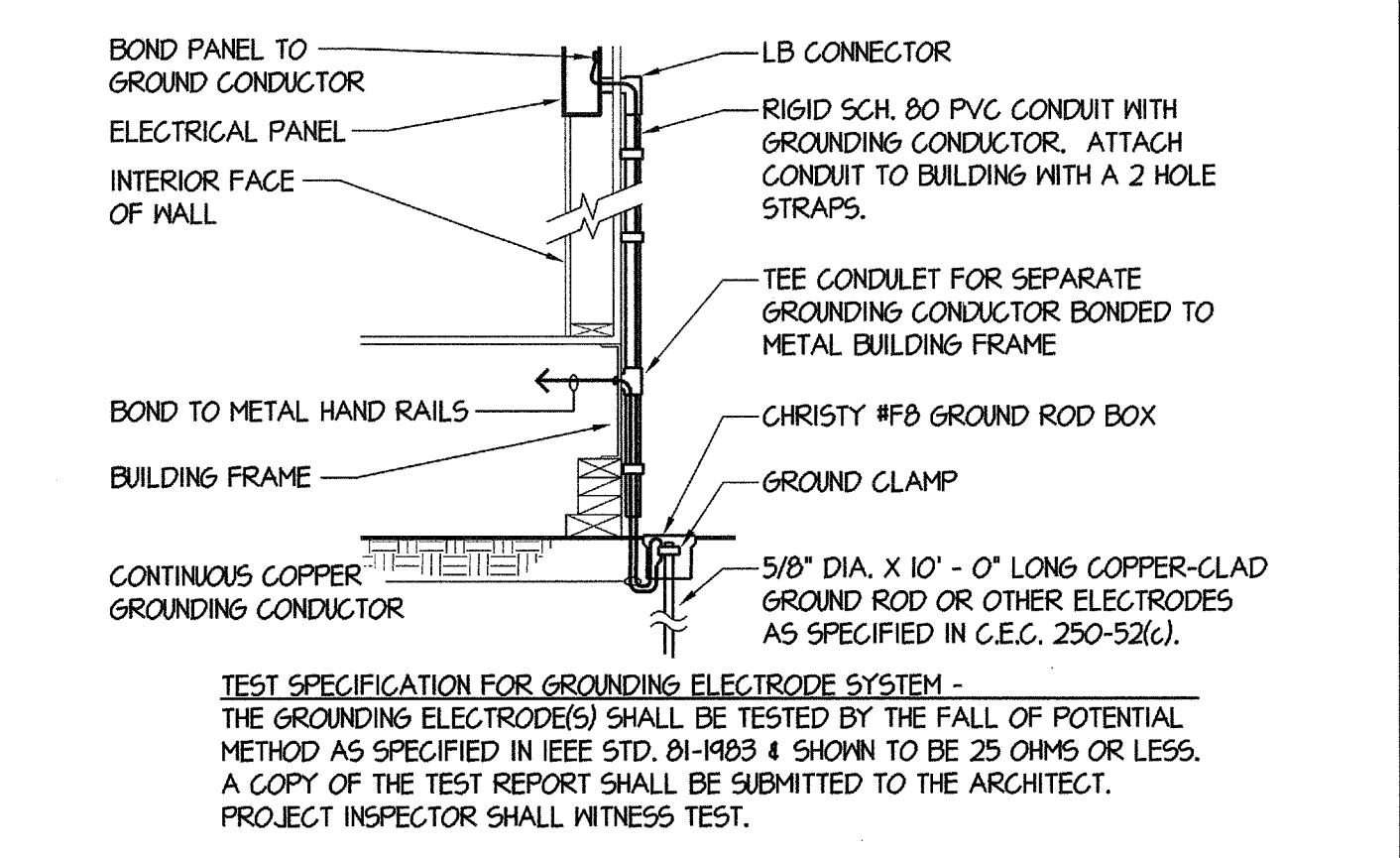
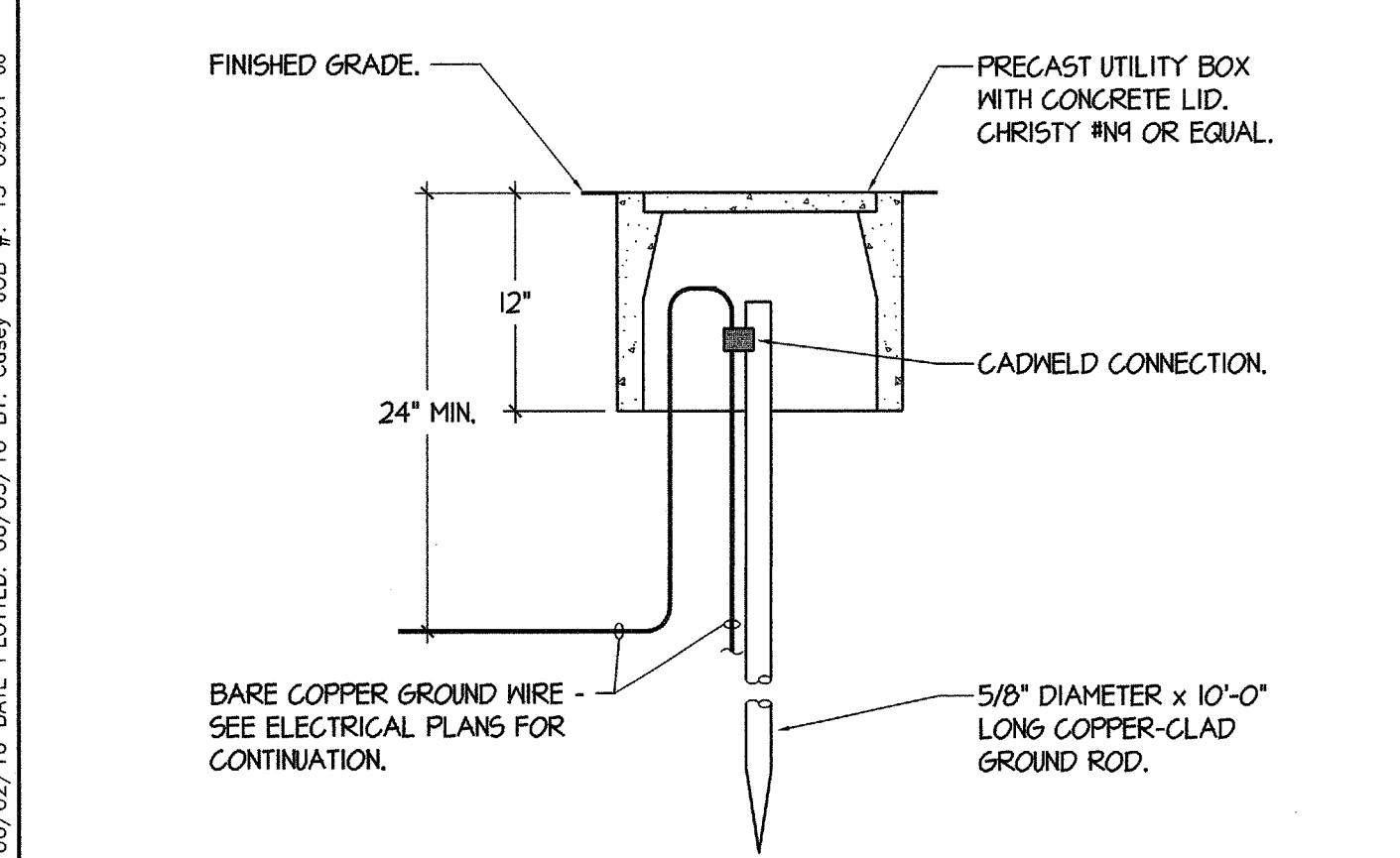


Rose Sing and Associates, Inc.
Electrical Consultants
131 S. Dunworth - (559) 733-2671
Visalia, California 93292-6705

ONE LINE DIAGRAM AND PANEL SCHEDULE

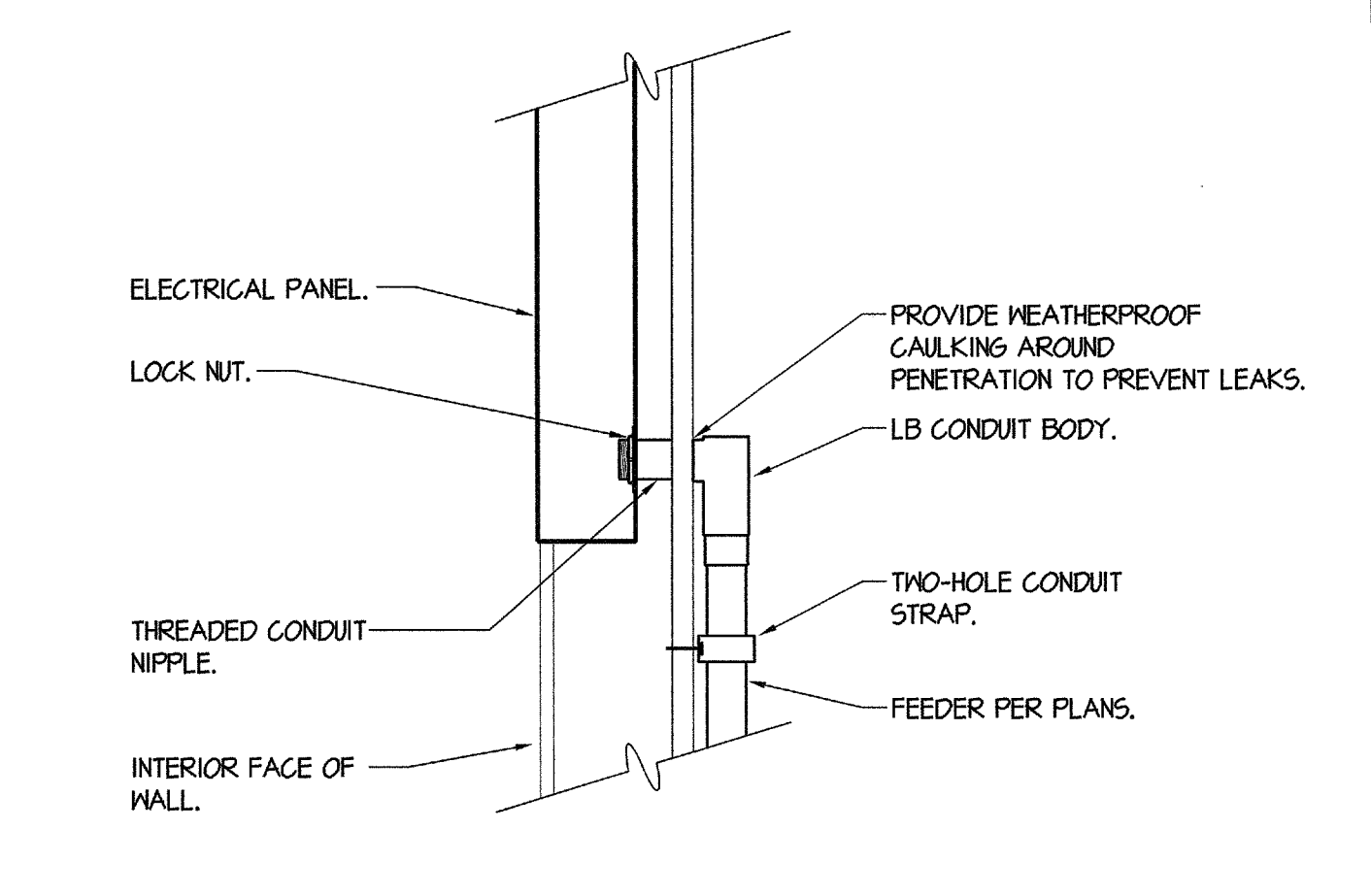
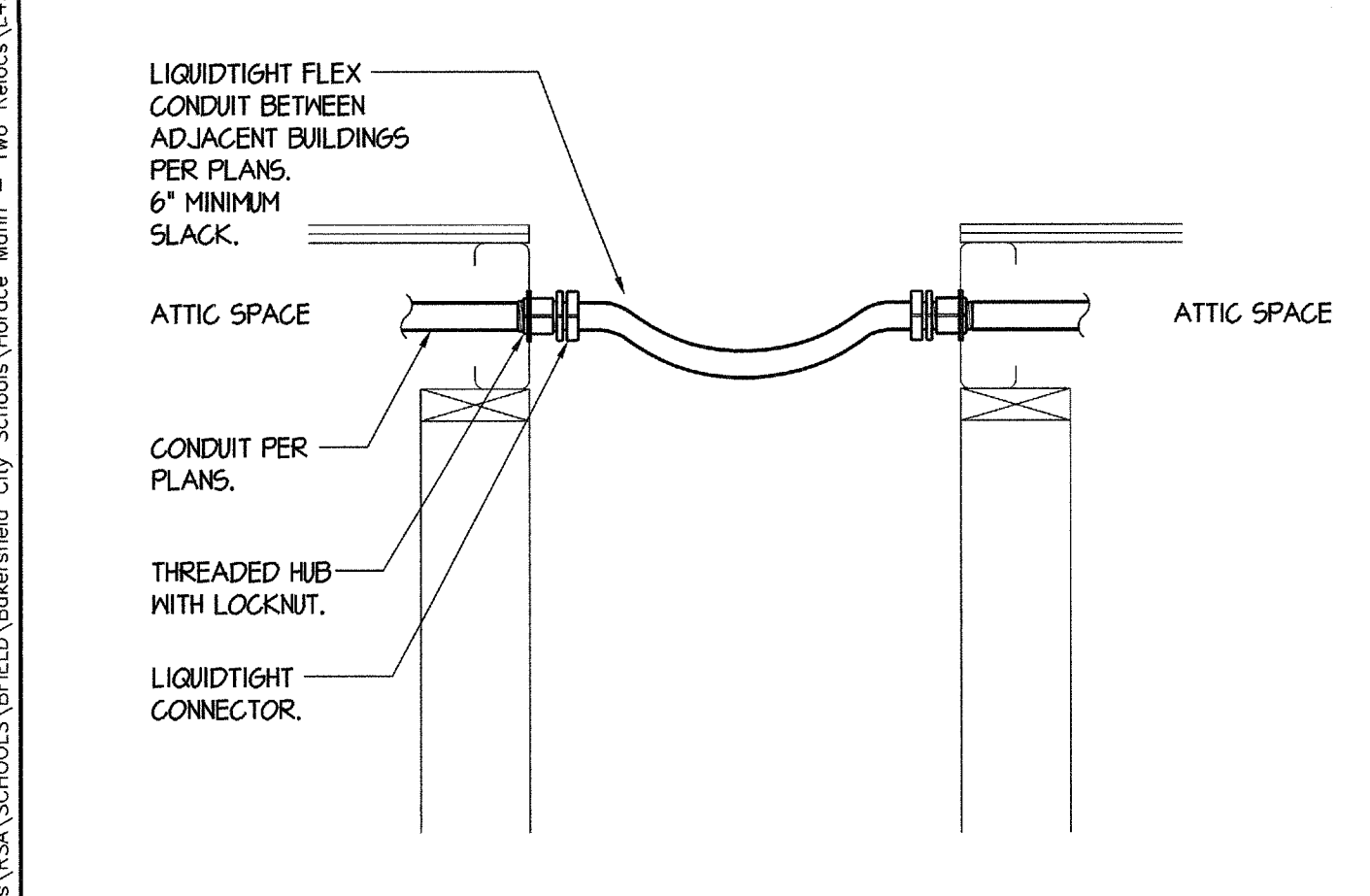
JOB NO. 1225
DRAWN: TW
CHECKED: DS
DATE: 05-25-16
4.1 OF SHEETS

① ONE LINE DIAGRAM



② GROUND ROD DETAIL

④ GROUNDING ELECTRODE SYSTEM



③ CONDUIT CONNECTION BETWEEN ADJACENT BUILDINGS

⑤ CONDUIT PENETRATION AT ELECTRICAL PANEL

Z:\Working\Jobs\RESA\SCHOOLS\BFIELD\Bakersfield City Schools\Voice Norm - Two Relocatable Buildings\Bakersfield City Schools\Voice Norm - Two Relocatable Buildings.dwg DATE PLOTTED: 06/02/16 BY: Casey, Job #: 15-09601-JJ