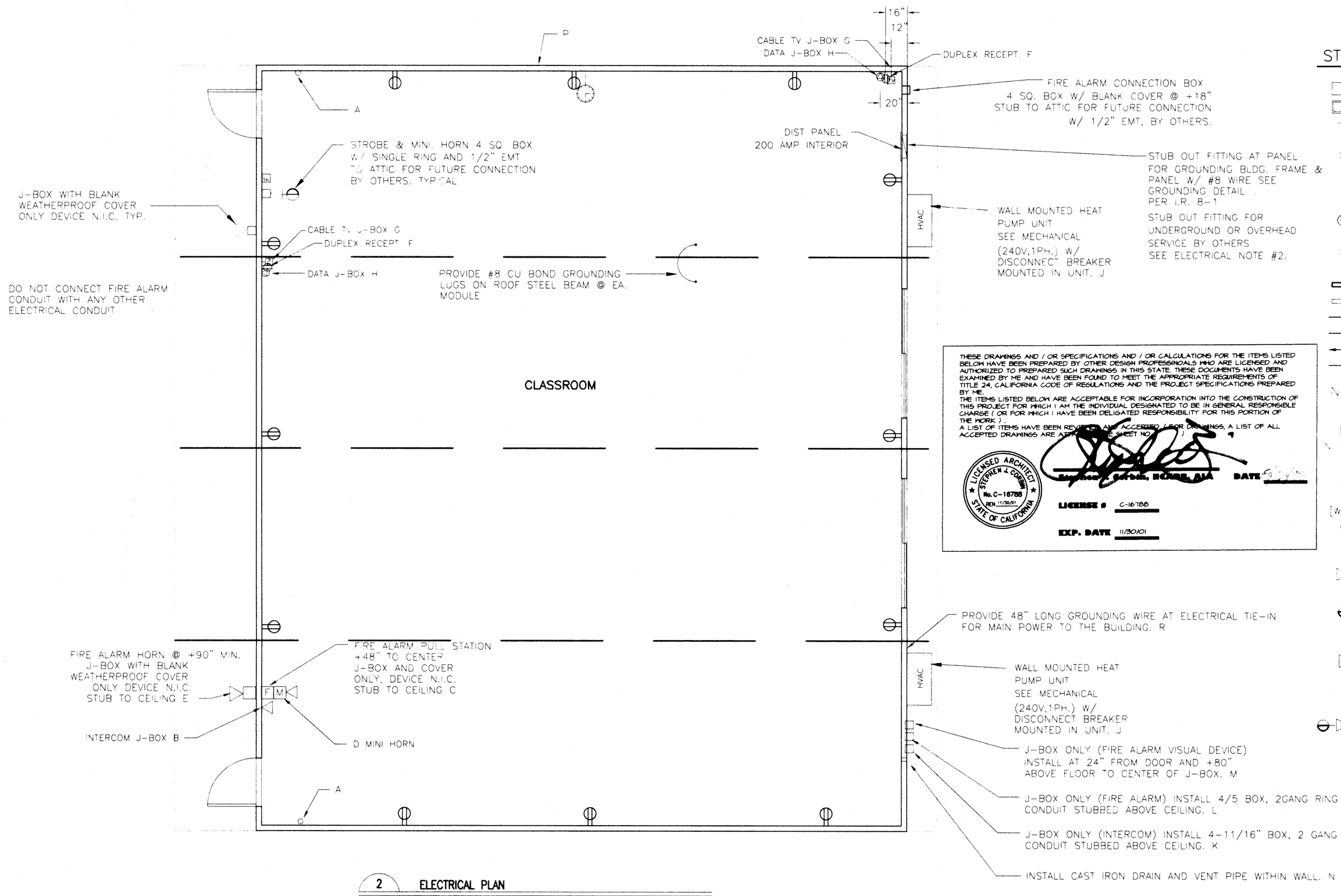

2 / E1 **ELECTRICAL PLAN**
1/4" = 1'-0"

THESE DRAWINGS AND / OR SPECIFICATIONS AND / OR CALCULATIONS FOR THE ITEMS LISTED BELOW HAVE BEEN PREPARED BY OTHER DESIGN PROFESSIONALS WHO ARE LICENSED AND AUTHORIZED TO PREPARED SUCH DRAWINGS IN THIS STATE. THESE DOCUMENTS HAVE BEEN EXAMINED BY ME AND HAVE BEEN FOUND TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS AND THE PROJECT SPECIFICATIONS PREPARED BY ME.
THE ITEMS LISTED BELOW ARE ACCEPTABLE FOR INCORPORATION INTO THE CONSTRUCTION OF THIS PROJECT FOR WHICH I AM THE INDIVIDUAL DESIGNATED TO BE IN GENERAL RESPONSIBLE CHARGE (OR FOR WHICH I HAVE BEEN DELEGATED RESPONSIBILITY FOR THIS PORTION OF THE WORK).
A LIST OF ITEMS HAVE BEEN REVIEWED AND ACCEPTED (FOR DRAWINGS, A LIST OF ALL ACCEPTED DRAWINGS ARE A[illegible] SHEET NO. [illegible])

LICENSED ARCHITECT STEPHEN A. CORNELL No. C-16788 EXP. 11/30/01 STATE OF CALIFORNIA

SIGNATURE: STEPHEN A. CORNELL, BOHNER, AIA DATE [illegible]
LICENSE # C-16788
EXP. DATE 11/30/01

STANDARD ELECTRICAL SYMBOLS

- FLUORESCENT LIGHTING FIXTURE - SURFACE MOUNTED.
- FLUORESCENT LIGHTING FIXTURE - RESCESSED.
- H.P.S. LIGHTING FIXTURE - WALL MOUNTED (EXTERIOR)
- INCANDESCENT LIGHTING FIXTURE - WALL MOUNTED (INTERIOR).
- DUPLEX WALL 20 AMP CONVENIENCE OUTLETS +18" TO CENTER LINE.
- SINGLE POLE LIGHT SWITHCES +48", HUBBELL PREMIUM, BRYANT HEAVY DUTY, OR LEVITON SPECIFICATIONS GRADE.
- LECTRICAL CROSSOVER J-BOXES ABOVE T-BAR CEILING #1-4"X1 ",#22 4"X2 "
- WALL CLOCK OUTLET WITH 3/4" EMT TO ABOVE CEILING +90"
- SWITCH SUBSCRIPTS - a=DEVICE CONTROLLED.
- 20 AMP DUPLEX RECEPTACLE +18" TO CENTER LINE.
- JUNCTION BOX - SIZE AND TYPE AS REQUIRED.
- PANELBOARD - SEE SCHEDULE.
- TERMINAL CABINET - SIZE AND TYPE AS NOTED
- CONDUIT CONCEALED IN CEILING OR WALL.
- CONDUIT CONCEALED BELOW FLOOR OR GRADE.
- HOMERUN TO RESPECTIVE PANEL TO TERMINAL.
- INDICATES 1#14 (GREEN) GROUND WIRE, OTHER SIZES AS INDICATED.
- BRANCH CIRCUIT WITHOUT FURTHER DESIGNATION IS A 2#14 WIRE CIRCUIT, FOR MORE THAN 2#14 WIRES AS FOLLOWS, 3#14, 4#14 ETC. FOR OTHER SIZES AS FOLLOWS, 3#10, 4#6 ETC.
- FIXTURE IDENTIFICATION - LETTER INDICATES TYPE.
- ABBREV. FOR NOT IN ELECTRICAL SECTION OF THESE PLANS AND SPEC'S.
- ABBREV. FOR EMPTY CONDUIT WITH POLY PULL CORD
- FUSED DISCONNECT SWITCH SIZE AS REQUIRED. PROVIDE FUSES AS RECOMMENDED BY EQUIPMENT SUPPLIER.
- [W.E.F.] WALL MOUNTED EXHAUST FAN N.I.E.S. CONNECT AS REQUIRED.
- 50 AMP 250 VOLT RANGE RECEPTACLE.
- [F] FIRE ALARM STATION - OUTLET ONLY, 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER +48"CENTERLINE
- FIRE ALARM HORN - OULET ONLY STUB TO CEILING - 4" SQ. BOX W/ SINGLE DEVICE RING,1/2"EMT AND W.P. COVER +90" A.F.F. STUB TO ABOVE CEILING W/ 1/2" EMT.
- FIRE ALARM VISUAL ALARM- OUTLET ONLY - 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER BOTTOM +80". A.F.F. BUT NO GREATER THAN +96" F CEILING MOUNTED PER NFPA72 TABLE 6-4.4.1(b).
- [S] SECURITY KEY PAD- OUTLET ONLY - 4" SQ. BOX W/ SINGLE DEVICE RING, 1/2" EMT STUB AND COVER +60"
- DATA OUTLET- OUTLET ONLY- 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER +16"
- FIRE ALARM MINI HORN/STROBE - OULET ONLY - 4" SQ BOX W/ SINGLE DEVICE RING AND COVER +90" MIN. STUB ABOVE CEILING W/ 1/2" EMT.

FIRE ALARM SYSTEM

1. THE FIRE ALARM SYSTEM SHALL CONFORM TO THE CALIFORNIA ELECTRICAL CODE, ARTICLE 760 &CA. FIRE CODE ART. 10.
2. INSTALLATION OF THE FIRE ALARM SYSTEM SHALL NOT BE STARTED UNTIL DETAILED PLANS AND SPECIFICATIONS, INCLUDING CALIFORNIA STATE FIRE MARSHAL LISTING NUMBERS FOR EACH COMPONENT OF THE SYSTEM HAVE BEEN APPROVED BY THE DIVISION OF THE STAT ARCHITRCT.
3. UPON COMPLETION OF THE INSTALLATION OF THE FIRE ALARM SYSTEM, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF THE ENFORCING AGENCY.

GENERAL NOTES

1. GROUNDING ELECTRODE CONDUCTOR SIZED PER CEC 250-94 & 95.
2. PROVIDE BONDS TO BLDG. STEEL & PANEL (#8 CU)
3. PANEL TO LISTED FOR USE AS SERVICE EQUIPMENT

FIXTURE NOTES:

1. ALL FLUORESCENT LIGHT FIXTURES SHALL HAVE ENERGY SAVING LAMPS AND BALLASTS.
2. LUMINATES/BALLASTS SHALL BE CERTIFIED PER CALIFORNIA BUILDING CODE TITLE 24.
3. FLUORESCENT LIGHT FIXTURE TYPE "A" SHALL BE CONTROLLED TO PROVIDE TWO LEVELS OF LIGHTING. SWITCH (SA) SHALL CONTROL THE TWO OUTER LAMPS AND SWITCH (SB) SHALL CONTROL THE TWO INNER LAMPS.

ELECTRICAL

1. Electrical service drop and connections supplied by others.
2. Manufacturer to provide stub-out from back of electrical panel through the exterior wall for receiving either underground or overhead service & fitting for grounding cable.
3. Electrical panel board shall be recess mounted inside the building. Sized to accommodate all connected loads including spaces as shown. Overcurrent protective devices in the panel boards have adequate short circuit interrupting capacity. All buses including bus shall be copper or aluminum.
4. 2x4 Flourescent fixtures shall be steel frame, lens shall be hinged and locked in place by two locking devices. The lens diffusers shall be KHS, Inc. #KSH-12, Carolite, inc. #C-12 or Plaskolite, Inc. #PL21A. Minimum lens thickness shall be .125 inch.
5. Flourescent ballast shall be energy saver while maintaining full light output, class "P" equipped with thermal protectors, guaranteed against failure for (2) years and be replaced from inside the fixture.
6. Clock - 12" dia. clock on clock outlet.
   A) Clock shall be General Electric model 2912 129V 60 cycle
   B) Clock outlet shall be Bryant #2828 or equal with seperable hanging clip & app'd recept.

FIRE ALARM
Junction boxes - Galvanized sheet metal, square or rectangular with blank covers. Locate one box at rear of building near main electrical panel at +18- above finish floor for future connection.
Covers - Install gasketed, metal, waterproof, finish covers at exterior locations.

If testing results determine fire alarm audibility does not meet 15db over ambient noise levels, additional fire alarm signaling devices may be required by the enforcing anency

The H.V.A.C. unit feeder circuit - panel circuit breaker, feeder wire, unit disconnect and fuses (where used) - is to be coordinated with the name plate data at the time ofmanufacture. H.V.A.C. units having KVA ratings larger than that indicated on this panel schedule will not be allowed to be installed on this building. If 60 degrees C. wire is to be used in this installation, calculations demonstrating ampacity be provided on the drawing.

NOTES:
A. FIRE EXTINGUISHER- INSTALL 30" FROM END WAL AT +48" FROM FLOOR.
B. J-BOX ONLY (INTERCOM) - 3/4" CONDUIT STUBBED ABOVE CEILING. INSTALL 30" FROM DOOR AT +48" FROM FLOOR.
C. FIRE ALARM PULL STATION - INSTALL 42" FROM DOOR AT +48" FROM FLOOR.
D. MINI HORN - INSTALL AT +80" FROM FLOOR.
E. EXTERIOR FIRE HORN - INSTALL AT +90" FROM FLOOR.
F. DUPLEX OUTLET AT 18" BELOW CEILING. 12" FROM WALL.
G. J-BOX ONLY (CABLE TV) - 18" BELOW CEILING AND 20 " FROM WALL - 3/4" CONDUIT.
H. J-BOX ONLY (DATA OUTLET) - 16" FROM WALL AND +24' ABOVE FLOOR.
J. INSTALL STANDARD HVAC UNIT WITHOUT T-STAT. BCSD WILL PROVIDE T-STAT FROM UNIT TO JUNCTION BOX IN CLASSROOM.
K. J-BOX ONLY (INTERCOM) - INSTALL 4-11/16" BOX, 2 GANG RING WITH 3/4" CONDUIT STUBBED ABOVE CEILING.
L. J-BOX ONLY (FIRE ALARM) - INSTALL 4/5 BOX, 2 GANG RING WITH 3/4" CONDUIT STUBBED ABOVE CEILING.
M. J-BOX ONLY (FIRE ALARM VISUAL DIVICE) - INSTALL AT 24" FROM DOOR AND +80" ABOVE FLOOR TO CENTER OF J-BOX.
N. INSTALL CAST IRON DRAIN AND VENT PIPE WITHIN WALL - SEE ATTACHED DETAIL.

P. PROVIDE EXPANDED METAL SKIRTING VENTS.

R. PROVIDE 48" LONG GROUNDING WIRE AT ELECTRICAL TIE-IN FOR MAIN POWER TO BUILDING.

FILE NO. 15-6
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APPL. 03-104224
AC [illegible] FLS. [illegible] SS
DATE

48 X 40 PC
RELOCATABLE
CLASSROOMS

American Modular Systems

CUSTOMER:
BAKERSFIELD CITY SCHOOL DISTRICT
NOBLE LIBRARY BUILDING

ELECTRICAL PLAN & NOTES

DATE: 06-12-00
SCALE: NONE
DRAWN BY: R.S.
CHECKED BY:
SERIAL NO.

REVISIONS					
NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION

PROJECT No.

SHEET No. E 2