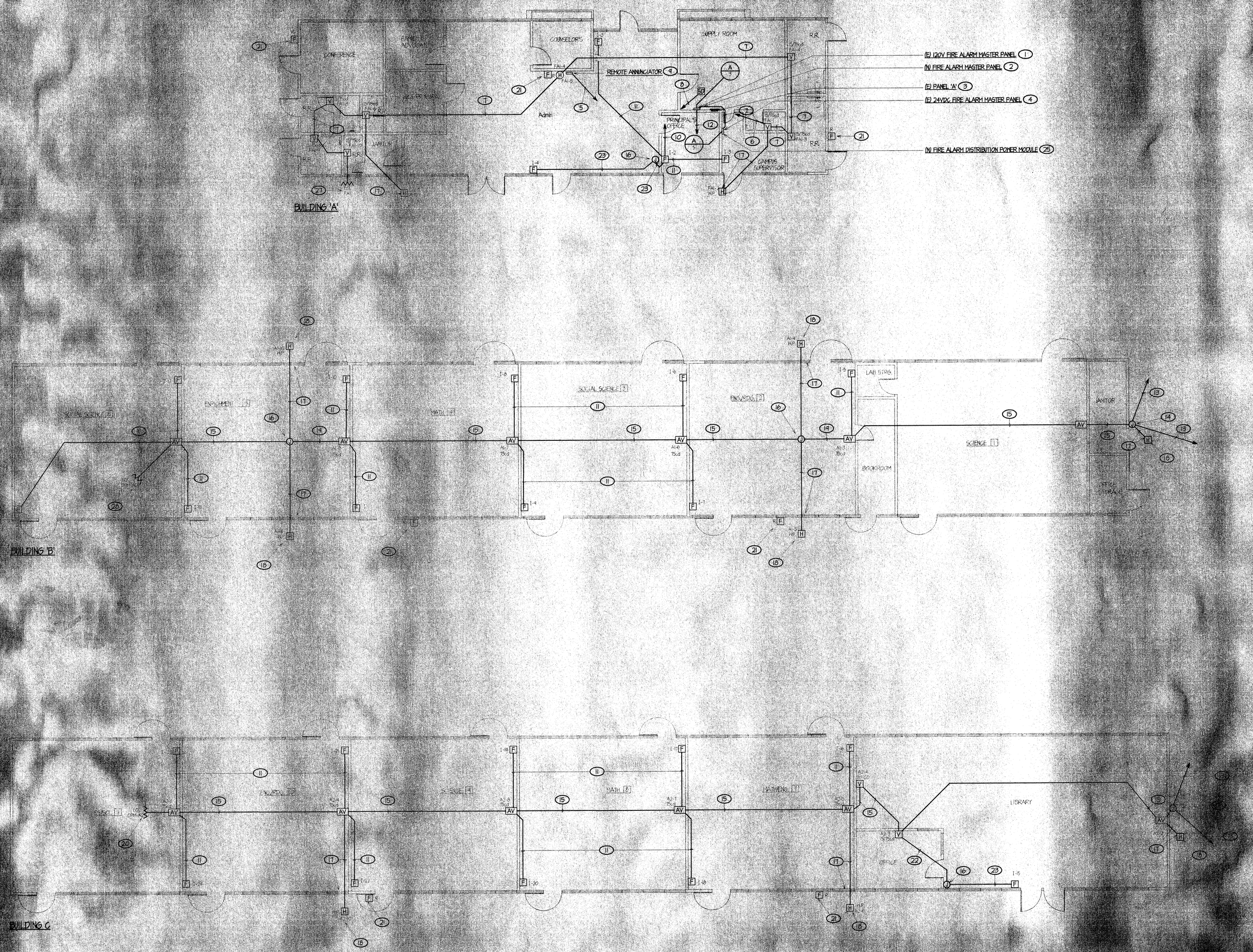


FIRE ALARM SYSTEM PLAN-BUILDING 'A', 'B', 'C' 20

## FIRE ALARM SYSTEM PLAN NOTES

1. EXISTING 120V FIRE ALARM PANEL, PREVIOUSLY UNDER DSA APPLICATION #A61541 TO BE REMOVED COMPLETE AND REPLACED WITH NEW 120V DC FIRE ALARM MASTER PANEL, ITEM 2 BELOW. DE-ENERGIZE MAIN AND BRANCH CIRCUIT BREAKERS, DISCONNECT BRANCH CIRCUIT CONDUCTORS AND PULL OUT COMPLETE. REMOVE ANY OVERHEAD BRANCH CIRCUIT CONDUIT COMPLETE. REFER TO GENERAL NOTES, SHEET E-0, AND FIRE ALARM SINGLE LINE DIAGRAM, 1/E-5 FOR COORDINATION REFERENCE.
2. PROVIDE NEW FIRE ALARM MASTER CONTROL PANEL PER SPECIFICATIONS, INSTALL PER 5/E-5 AND CONNECT PER FIRE ALARM SINGLE LINE DIAGRAM, 1/E-5.
3. EXISTING 208Y/120V, 3ø4w 4H, PANEL (E) REMAIN. CIRCUIT BREAKERS #3 AND #5 ARE DEDICATED TO EXISTING FIRE ALARM PANEL(S). REUSE 20A CIRCUIT BREAKER #3 AND CONNECT FIRE ALARM PANEL POWER PER MANUFACTURER'S WRITTEN INSTRUCTIONS AND PROVIDE DISCONNECT LOCATION LABELING PER NFPA 72, 1-5.2.5.2. REUSE 20A CIRCUIT BREAKER #5 AND CONNECT FIRE ALARM DISTRIBUTED POWER MODULE POWER PER MANUFACTURER'S WRITTEN INSTRUCTIONS AND PROVIDE DISCONNECT LOCATION LABELING PER NFPA 72, 1-5.2.5.2.
4. EXISTING 24VDC FIRE ALARM PANEL, CURRENTLY SERVING RELOCATABLE CLASSROOMS TO BE REMOVED COMPLETE AND REPLACED WITH NEW DISTRIBUTED POWER MODULE, ITEM 25 BELOW. DISCONNECT BRANCH CIRCUIT CONDUCTORS AND PULL OUT COMPLETE. REMOVE ANY EXPOSED, EMPTY CONDUIT COMPLETE. REFER TO GENERAL NOTES, SHEET E-0 AND FIRE ALARM SINGLE LINE DIAGRAM, 1/E-5 FOR COORDINATION REFERENCE.
5. RUN SURFACE METAL RACEWAY (WIREMOLD V100 SERIES OR EQUAL) WITH WIRING/CABLING PER MANUFACTURER'S RECOMMENDATION UP WALL TO CEILING. CONVERT TO 1/2"C. WITH WIRING/CABLING PER MANUFACTURER'S RECOMMENDATION IN ACCESSIBLE ATTIC SPACE AND RUN TO FIRE ALARM MASTER PANEL LOCATED IN SUPPLY ROOM, BUILDING 'A'. REFER TO 4/E-5 FOR COORDINATION/REFERENCE.
6. RUN SURFACE METAL RACEWAY (WIREMOLD V100 SERIES OR EQUAL) 2 #12 CU THHN (ANNUNCIATION) UP WALL FROM DEVICE TO CEILING. CONVERT TO 1/2"C. 4 #12 CU THHN (ANNUNCIATION) IN ACCESSIBLE ATTIC SPACE AND RUN TO FIRE ALARM MASTER PANEL LOCATED IN SUPPLY ROOM, BUILDING 'A' PER ITEM 12 BELOW. REFER TO 4/E-5 FOR COORDINATION/REFERENCE.
7. 1/2"C. 2 #12 CU THHN (ANNUNCIATION) IN ACCESSIBLE ATTIC SPACE, CONVERT TO SURFACE METAL RACEWAY (WIREMOLD V100 SERIES OR EQUAL) ABOVE CEILING IN ACCESSIBLE ATTIC SPACE AT EACH FIRE ALARM ANNUNCIATION DEVICE, THEN RUN SURFACE METAL RACEWAY 4 #12 CU THHN (ANNUNCIATION) TO FIRE ALARM ANNUNCIATION DEVICE. REFER TO 4/E-5 FOR COORDINATION/REFERENCE.
8. CEILING-MOUNT SMOKE DETECTOR WITHIN 9'-0" OF FIRE ALARM MASTER PANEL. RUN SURFACE METAL RACEWAY (WIREMOLD V100 SERIES OR EQUAL) ONE 'F' CABLE (INITIATION) ALONG CEILING TO FIRE ALARM MASTER PANEL LOCATED IN SUPPLY ROOM, BUILDING 'A'. REFER TO 4/E-5 FOR COORDINATION/REFERENCE.
9. PROVIDE FIRE ALARM REMOTE ANNUNCIATOR PER SPECIFICATIONS. REFER TO FIRE ALARM SINGLE LINE DIAGRAM, SHEET E-5 FOR COORDINATION/REFERENCE.
10. RUN SURFACE METAL RACEWAY (WIREMOLD V700 SERIES OR EQUAL) ONE 'F' CABLE (INITIATION) UP WALL TO CEILING. CONVERT TO 1/2"C. ONE 'F' CABLE (INITIATION) IN ACCESSIBLE ATTIC SPACE TO FIRE ALARM MASTER PANEL LOCATED IN SUPPLY ROOM, BUILDING 'A'. PER ITEM 12 BELOW. REFER TO 4/E-5 FOR COORDINATION/REFERENCE.
11. 1/2"C. ONE 'F' CABLE (INITIATION) IN ACCESSIBLE ATTIC SPACE, CONVERT TO SURFACE METAL RACEWAY (WIREMOLD V700 SERIES OR EQUAL) ABOVE CEILING IN ACCESSIBLE ATTIC SPACE AT EACH FIRE ALARM INITIATION DEVICE, THEN RUN SURFACE METAL RACEWAY ONE 'F' CABLE (INITIATION) TO FIRE ALARM INITIATION DEVICE. REFER TO 4/E-5 FOR COORDINATION/REFERENCE.
12. EXIT FIRE ALARM MASTER PANEL WITH SURFACE METAL RACEWAY (WIREMOLD 64000 SERIES OR EQUAL) WITH 8 #12 CU THHN (ANNUNCIATION), ONE 'F' CABLE (INITIATION) TO CEILING. CONVERT TO SURFACE METAL RACEWAY SERVICE ENTRANCE FITTING, THEN EXIT BUILDING VIA 2"C. TO TOP OF COVERED WALKWAY AND DISTRIBUTE AS SHOWN. REFER TO FIRE ALARM SITE ELECTRICAL PLAN, SHEET E-1 FOR COORDINATION/REFERENCE
13. REFER TO SITE FIRE ALARM SYSTEM PLAN FOR FEEDER CONTINUATION ON COVERED WALKWAY AND COORDINATION REFERENCE.
14. NEF, 6" x 6" x 4" NEMA 3R SCREW COVER ENCLOSURE FOR BUILDING FIRE ALARM BRANCH CIRCUIT EXTENSION. REFER TO SITE FIRE ALARM SYSTEM PLAN FOR COORDINATION/REFERENCE.
15. 1/2"C. 2 #12 CU THHN (ANNUNCIATION), ONE 'F' CABLE (INITIATION) IN ACCESSIBLE ATTIC SPACE, CONVERT TO SURFACE METAL RACEWAY (WIREMOLD V700 SERIES OR EQUAL) WHEN EXISTING CEILING IN ACCESSIBLE ATTIC SPACE AT EACH FIRE ALARM ANNUNCIATION DEVICE, THEN RUN SURFACE METAL RACEWAY 4 #12 CU THHN (ANNUNCIATION) TO FIRE ALARM DEVICE. REFER TO 4/E-5 FOR COORDINATION/REFERENCE.
16. 4S JUNCTION BOX MOUNTED IN ACCESSIBLE ATTIC SPACE. RUN 1/2" CONDUIT IN ACCESSIBLE ATTIC SPACE TO T-BAR CEILING, THEN CONVERT TO SURFACE METAL RACEWAY AT T-BAR CEILING AND EXTEND TO FIRE ALARM DEVICE ON INTERIOR WALL. REFER TO 4/E-5 FOR COORDINATION/REFERENCE.
17. 1/2"C. 4 #12 CU THHN (ANNUNCIATION) CONCEALED IN ATTIC AND EXTERIOR SOFFIT STRUCTURE AS REQUIRED.
18. EXTERIOR W.P. AUDIBLE DEVICE MOUNTED IN SOFFIT OF CORRIDOR.
19. 1/2"C. 2 #12 CU THHN (ANNUNCIATION), ONE 'F' CABLE (INITIATION) IN ACCESSIBLE ATTIC SPACE.
20. END OF LINE RESISTOR FOR ANNUNCIATION CIRCUIT 'DPM-A3' MOUNTED AT THIS DEVICE.
21. EXISTING DEVICE, DENOTED WITH SUBSCRIPT 'R', TO BE REMOVED FROM WALL THAT IS TO REMAIN. PULL OUT WIRING MADE IDLE BY DEVICE REMOVAL COMPLETE TO EXISTING FIRE ALARM CONTROL PANEL. PROVIDE AND INSTALL APPROPRIATE BLANK COVER PLATE TO EXISTING PULL BACK BOX THAT IS TO BE ABANDONED IN PLACE. REMOVE ANY EMPTY, EXPOSED JUNCTION BOX(ES) AND/OR CONDUIT COMPLETE. PAINT COVER PLATE TO MATCH EXISTING SURFACE. CONTRACTOR SHALL FIELD VERIFY. REFER TO FIRE ALARM INSTALLATION SEQUENCE AND SCHEDULING NOTE 5, SHEET E-0 FOR COORDINATION/REFERENCE.
22. RUN 1/2"C. ONE 'F' CABLE (INITIATION) IN ACCESSIBLE ATTIC SPACE TO JUNCTION BOX MOUNTED IN ACCESSIBLE ATTIC SPACE (ITEM 16 ABOVE).
23. CONVERT TO SURFACE METAL RACEWAY (WIREMOLD V700 SERIES OR EQUAL) ABOVE CEILING IN ACCESSIBLE ATTIC SPACE AND RUN SURFACE METAL RACEWAY ONE 'F' CABLE (INITIATION) ALONG WALL TO SURFACE MOUNTED FIRE ALARM INITIATION DEVICE. REFER TO 4/E-5 FOR COORDINATION/REFERENCE.
24. 4S JUNCTION BOX MOUNTED IN ACCESSIBLE ATTIC SPACE.
25. PROVIDE NEW DISTRIBUTED POWER MODULE. PER SPECIFICATIONS, INSTALL PER 5/E-5 AND CONNECT PER FIRE ALARM SINGLE LINE DIAGRAM, 1/E-5.
26. 3/4"C. (3) #12 CU THHN (ANNUNCIATION).
27. END OF LINE RESISTOR FOR ANNUNCIATION CIRCUIT 'FA1' MOUNTED AT THIS DEVICE.
28. END OF LINE RESISTOR FOR ANNUNCIATION CIRCUIT 'DPM-A1' MOUNTED AT THIS DEVICE.
29. PER BAKERSFIELD CITY SCHOOL DISTRICT DIRECTIONS: ALL CONDUIT RUN ON TOP OF COVERED WALKWAY AND IN ACCESSIBLE ATTIC SHALL BE OF TYPE EMT. ALL FIRE ALARM DEVICES LOCATED INSIDE OF BUILDING WALL BE SURFACE MOUNTED. ALL INTERIOR RUNS INSIDE BUILDING THAT ARE EXPOSED, ALONG WALL OR FROM DEVICE TO CEILING, SHALL UTILIZE A SURFACE METAL RACEWAY SYSTEM (WIREMOLD V700 SERIES, OR EQUAL). AND WHERE METAL RACEWAY SHALL BE CONVERTED TO EMT CONDUIT ABOVE CEILING IN ACCESSIBLE ATTIC SPACE. REFER TO 4/E-5 FOR COORDINATION/REFERENCE. NO SURFACE CONDUIT INSIDE BUILDINGS WILL BE ALLOWED.

## FIRE ALARM APPROVAL

THE FIRE ALARM SYSTEM DESIGN IS A COMPLETE PLAN SUBMITTAL PER DSA-ORS POLICY. THE CONTRACTOR SHALL INSTALL THE MANUAL, ADDRESSABLE FIRE PROTECTION SYSTEM AS SHOWN AND SPECIFIED. IF ANY SUBSTITUTION OF FIRE ALARM EQUIPMENT IS TO BE REQUESTED, SUCH REQUEST SHALL BE MADE A MINIMUM OF TEN BUSINESS DAYS PRIOR TO PROJECT BID DATE. THE SUBMITTAL SHALL INCLUDE ALL MANUFACTURER'S CATALOG EQUIPMENT SPECIFICATION SHEETS, SHEETS LISTING SHEETS FOR INDIVIDUAL COMPONENTS COMPRISING THE SUBSTITUTED FIRE ALARM SYSTEM, BATTERY LOAD CALCULATIONS AND VOLTAGE DROP CALCULATIONS FOR EACH INITIATING CIRCUIT. SHOULD THE SUBSTITUTED SYSTEM BE APPROVED AND INSTALLED, THE CONTRACTOR SHALL PROVIDE ONE SET OF REPRODUCIBLE CAD GENERATED, DSA-ORS APPROVED AND STAMPED 'AS-CONSTRUCTED' DRAWINGS TO THE ENGINEER UPON COMPLETION OF THE SYSTEM INSTALLATION.

WE ENGINEERING
CONSULTING ELECTRICAL ENGINEERS

DSA CERTIFICATION STAMP
OFFICE OF THE STATE ARCHITECT
DIVISION OF REGULATION SERVICES
APPROVED
APPL. NO. 61541
INC. 0
DATE 2/17/02
SHEET 6 OF 12

Project

BAKERSFIELD CITY SCHOOL DISTRICT

# WASHINGTON JUNIOR HIGH SCHOOL

FIRE ALARM SYSTEM REPLACEMENT

Bakersfield, California

CAD IDENTIFICATION CLAUSE

THE CO... DRAWING RULES PREPARED FOR DSA PROJECT ELECTRICAL ENGINEERS WITH CADD DRAWING FOR THE ENGINEER OF RECORD. THE CADD DRAWING DRAWING IS PROVIDED FOR ANY PROJECT REVISIONS MADE BY ANY UNAUTHORIZED PERSON OR FOR LOSS OR DAMAGE RESULTING FROM ANY REVISIONS MADE BY PERSONS OTHER THAN THE ENGINEER OF RECORD. ADDITIONS SHALL BE MADE AT THE DISCRETION OF THE ENGINEER OF RECORD. ADDITIONS SHALL BE CONSIDERED THE ELECTRICAL RESPONSIBILITY OF THE RESIDENT ENGINEER.

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| DRAWN BY | NAVILLO |
| CHECKED BY | RTB |
| APPROVED BY | PMI |
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SHEET TITLE:
FIRE ALARM SYSTEM PLAN-BUILDINGS 'A', 'B', 'C'

SHEET
E-2
OF 6 SHEETS