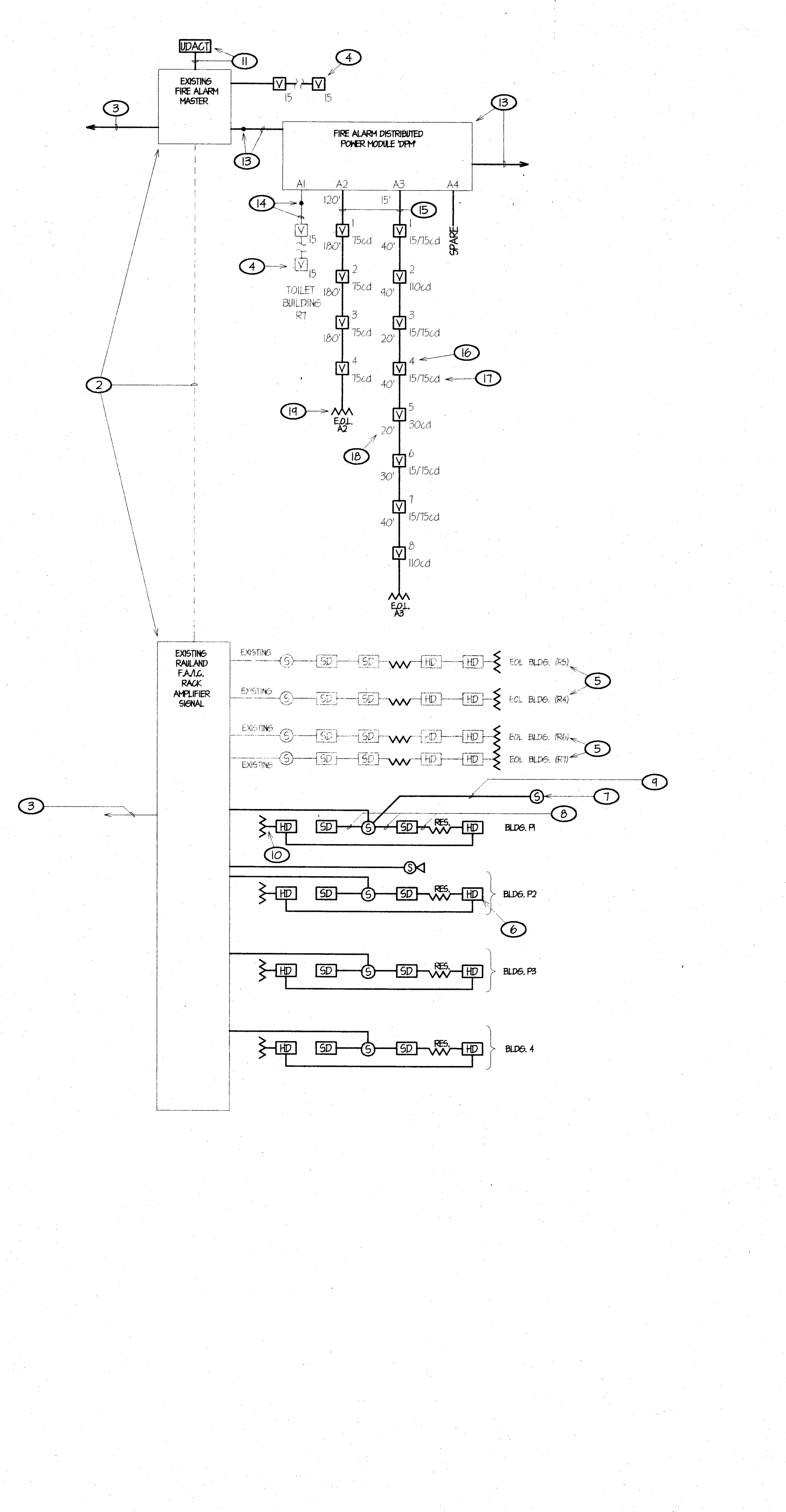

FIRE ALARM SIGNAL LINE DIAGRAM (1)

NO SCALE

FIRE ALARM SINGLE LINE DIAGRAM NOTES

1. SINGLE LINE DIAGRAM IS A SCHEMATIC REPRESENTATION OF FIRE ALARM DISTRIBUTION AND BRANCH CIRCUITING. REFER TO PARTIAL SITE SIGNAL DISTRIBUTION PLAN, SHEET E-2 FOR SPECIFIC SITE DISTRIBUTION ROUTING AND COORDINATION/REFERENCE. FIRE ALARM ANNUNCIATION SIGNAL SOUNDS OVER CAMPUS INTERCOM SPEAKER SYSTEM THROUGHOUT. ALL SPEAKERS SHALL SOUND THE CALIFORNIA CODE GENERATED BY THE FIRE ALARM MASTER, ITEM 2 BELOW. SEPARATE, 24VDC FIRE ALARM AUDIBLE ANNUNCIATION DEVICES ARE NOT USED ON THIS CAMPUS.
2. EXISTING UNIFIED SYSTEM RACK MOUNTED PANELS AND ASSOCIATED INTERCONNECTION CABLING CURRENTLY SERVING INTERCOMMUNICATION AND FIRE ALARM SYSTEMS TO REMAIN. NO WORK REQUIRED. EXISTING FIRE ALARM MASTER PANEL IS A UNIFIED FIRE ALARM PANEL, RAULAND SECUREPLEX #FA3002, INSTALLED UNDER D.S.A. APPLICATION #03-106755, MOUNTED IN THE EXISTING INTERCOM SYSTEM RACK. REPLACE EXISTING 28.00 A.H. BATTERIES WITH NEW 40.0 A.H. BATTERIES.
3. EXISTING, DEDICATED POWER CIRCUIT AND 20/1 CIRCUIT BREAKER IN EXISTING PANEL TO REMAIN, NO WORK REQUIRED.
4. EXISTING ANNUNCIATION DEVICES SHOWN FADED TO REMAIN, TYPICAL, NO WORK REQUIRED.
5. EXISTING INITIATION DEVICES SHOWN FADED TO REMAIN, TYPICAL, NO WORK REQUIRED.
6. PROVIDE NEW SMOKE AND HEAT DETECTORS PER PLANS AND SPECIFICATIONS, TYPICAL. REFER TO INDIVIDUAL BUILDING SIGNAL PLANS, SHEET E-2 FOR EXACT DEVICE LOCATIONS, QUANTITIES AND CONDUIT ROUTING REQUIREMENTS. REFER TO FIRE ALARM SYMBOL SCHEDULE, THIS SHEET FOR COORDINATION/REFERENCE.
7. PROVIDE NEW SYSTEM SPEAKERS PER PLANS AND SPECIFICATIONS, TYPICAL. REFER TO INDIVIDUAL BUILDING SIGNAL PLANS, SHEET E-2 FOR EXACT DEVICE LOCATIONS, QUANTITIES AND CONDUIT ROUTING REQUIREMENTS. REFER TO FIRE ALARM SYMBOL SCHEDULE, THIS SHEET FOR COORDINATION/REFERENCE.
8. RUN ONE 'A' CABLE BETWEEN INITIATION DEVICES, TYPICAL, SHOWN HERE FOR CLARITY ONLY. SEE INDIVIDUAL BUILDING SIGNAL PLANS, SHEET E-2 FOR EXACT ROUTING REQUIREMENTS OF FIRE ALARM CIRCUITING AND CONDUIT, TYPICAL WHERE OCCURS. REFER TO 8/E-3 FOR TYPICAL SYSTEM WIRING REQUIREMENTS.
9. RUN ONE 'A' CABLE BETWEEN ANNUNCIATION DEVICES, TYPICAL, SHOWN HERE FOR CLARITY ONLY. SEE INDIVIDUAL BUILDING SIGNAL PLANS, SHEET E-2 FOR EXACT ROUTING REQUIREMENTS OF FIRE ALARM CIRCUITING AND CONDUIT, TYPICAL WHERE OCCURS. REFER TO 8/E-3 FOR TYPICAL SYSTEM WIRING REQUIREMENTS.
10. END OF LINE RESISTOR FOR INDICATED INITIATION CIRCUIT, TYPICAL. PROVIDE AND INSTALL AT LAST ANNUNCIATION DEVICE IN CIRCUIT PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
11. EXISTING FIRE ALARM SYSTEM AUTOMATIC DIALER COMMUNICATION/TRANSMITTER AND DEDICATED TELEPHONE CABLING/LINE TO REMAIN, NO WORK REQUIRED.
12. FIRE ALARM DISTRIBUTED POWER MODULE AND DEDICATED 120VAC, 20A CIRCUIT BREAKER PER PLANS FOR FIRE ALARM CONTROL EQUIPMENT. PROVIDE DISCONNECT LOCATION LABELING PER NFPA 72, 1-5.2.5.2.
13. RE-CONNECT EXISTING VISUAL ANNUNCIATION CIRCUIT TO NEW DISTRIBUTED POWER MODULE INPUT PER PLANS.
14. RE-CONNECT EXISTING VISUAL ANNUNCIATION CIRCUIT TO NEW DISTRIBUTED POWER MODULE ANNUNCIATION CIRCUIT WIRING PER PLANS.
15. 2 #12 CU THWN (VISUAL ANNUNCIATION) BETWEEN VISUAL DEVICES, TYPICAL. SEE INDIVIDUAL BUILDING SIGNAL PLANS, SHEET E-2 FOR EXACT ROUTING REQUIREMENTS OF FIRE ALARM CIRCUITING AND CONDUIT, TYPICAL WHERE OCCURS.
16. DENOTES DEVICE NUMBER USED IN VOLTAGE DROP CALCULATIONS, TYPICAL. REFER TO FIRE ALARM VOLTAGE DROP CALCULATIONS, SHEET EX.X AND BATTERY CALCULATIONS, SHEET EX.X FOR COORDINATION/ REFERENCE.
17. DENOTES FIRE ALARM VISUAL ANNUNCIATION DEVICE NOMINAL CANDELA RATING REQUIRED, TYPICAL.
18. DENOTES DISTANCE BETWEEN DEVICES, TYPICAL.
19. END OF LINE RESISTOR FOR INDICATED ANNUNCIATION CIRCUIT, TYPICAL. PROVIDE AND INSTALL AT LAST ANNUNCIATION DEVICE IN CIRCUIT PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

FIRE ALARM SYMBOL SCHEDULE

▭	EXISTING FIRE ALARM CONTROL PANEL RAULAND-BORG, INC. SECUREPLEX #FA3002 UNIFIED CONTROL PANEL (C.S.F.M. #7165-0082:103)
▭	FIRE ALARM DISTRIBUTED POWER MODULE SILENT KNIGHT #5499 (C.S.F.M. #7300-0559:123)
SM	FIRE ALARM SYNCHRONIZATION MODULE WHEELOCK #DSM-12/24-R (C.S.F.M. #7300-0785:132)
(S)	INTERIOR AUDIBLE DEVICES RAULAND-BORG, INC. #US0221 CEILING MOUNTED 8" SPEAKER ASSEMBLY, #ACC1100 BACKBOX, #ACC1001 BAFFLE AND #ACC1104 SUPPORT BRIDGE (C.S.F.M. #7150-0416:002)
S	RAULAND-BORG, INC. #US0221 WALL MOUNTED 8" SPEAKER ASSEMBLY, #ACC1100 BACKBOX AND #ACC1012 BAFFLE (C.S.F.M. #7150-0416:002)
(S) W.P.	EXTERIOR W.P. AUDIBLE DEVICE ATLAS-SOUND #APF-15TUC HORN LOUDSPEAKER ASSEMBLY MOUNTED IN #VP161-APF BAFFLE (C.S.F.M. #7320-1173:101)
V 15/75cd	INTERIOR VISUAL DEVICE WHEELOCK #RSS2415175W-FR (C.S.F.M. #7125-0785:141)
V 75cd	INTERIOR VISUAL DEVICE CANDELA RATING PER PLANS WHEELOCK #RSS24MCW-FR (C.S.F.M. #7125-0785:141)
SD	SMOKE DETECTOR MOUNTED ON CEILING HOCHIKI #SLR-24 PHOTOELECTRIC DETECTOR (C.S.F.M. #7272-0410:107) WITH NS6-220 DETECTOR BASE (C.S.F.M. #7300-0410:132)
HD	HEAT DETECTOR MOUNTED IN ATTIC HOCHIKI #AL-DFE-190 THERMAL DETECTOR (C.S.F.M. #7254-0410:119) WITH NS6-220 DETECTOR BASE (C.S.F.M. #7300-0410:132)
E.O.L.	END-OF-LINE RESISTOR

"A" CABLE - WEST PENN WIRE #AQC369

FIRE ALARM SYSTEM OPERATIONAL MATRIX

SYMBOL	DEVICE DESCRIPTION	ACTIVATE EVACUATION HORNS/ STROBES	RELEASE DOOR CLOSURE DEVICE	SHUT DOWN HVAC FANS	ANNUNCIATE AT BUILDING F.A.C.P.	ACTIVATE FIRE/ SMOKE DAMPERS	ACTIVATE FIRE RATED ROLL-UP DOORS
F	MANUAL PULL STATION	X			X		
DD	DUCT SMOKE DETECTOR	X		X	X	X	
SD	SMOKE DETECTOR	X	X		X	X	X
HD	HEAT DETECTOR	X	X		X		X
WF	WATERFLOW SWITCH	X			X		
TS	TAMPER SWITCH				SUPERVISORY		

APPLICABLE CODES AND STANDARDS

APPLICABLE CODES AS OF NOVEMBER 1, 2002:

PART 1	2001 CALIFORNIA BUILDING STANDARD ADMINISTRATIVE CODE, TITLE 24 C.C.R.
PART 2	2001 CALIFORNIA BUILDING CODE, TITLE 24 C.C.R. (1997 UNIFORM BUILDING CODE VOLUMES 1-3 OF THE INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS, WITH CALIFORNIA AMENDMENTS
PART 3	2001 CALIFORNIA ELECTRICAL CODE, TITLE 24 C.C.R. (1999 NATIONAL ELECTRICAL CODE OF THE NAITONAL FIRE PROTECTION ASSOCIATION , NFPA)
PART 4	2001 CALIFORNIA MECHANICAL CODE, TITLE 24 C.C.R. (2000 UNIFORM MECHANICAL CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHINICAL OFFICIALS, IAPMO)
PART 5	2001 CALIFORNIA PLUMBING CODE, TITLE 24 C.C.R. (2000 UNIFORM PLUMBING CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS, IAPMO)
PART 6	2001 CALIFORNIA ENERGY CODE, TITLE 24 C.C.R.
PART 7	2001 CALIFORNIA ELEVATOR SAFETY CONSTRUCTION CODE, TITLE 24 C.C.R.
PART 8	2001 CALIFORNIA HISTORICAL BUILDING CODE, TITLE 24 C.C.R.
PART 9	2001 CALIFORNIA FIRE CODE, TITLE 24 C.C.R. (2000 UNIFORM FIRE CODE OF THE WESTERN FIRE CHIEFS ASSOCIATION)
PART 10	2001 CALIFORNIA CODE FOR BUILDING CONSERVATION, TITLE 24 C.C.R. (1997 UNIFORM CODE FOR BUILDING CONSERVATION OF THE INTERNATION CONFERENCE OF BUILDING OFFICIALS, WITH AMENDMENTS)
PART 12	2001 CALIFORNIA REFERENCE STANDARDS CODE, TITLE 24 C.C.R.

PARTIAL LIST OF APPLICABLE STANDARDS:

NFPA 13	AUTOMATIC SPRINKLER SYSTEMS	1999 EDITION
NEPA 14	STANDPIPE SYSTEMS	2000 EDITION
NFPA 17	DRY CHEMICAL EXTINGUISHING SYSTEMS	1998 EDITION
NFPA 17A	WET CHEMICAL SYSTEMS	1994 EDITION
NFPA 20	STATIONARY PUMPS	1999 EDITION
NFPA 24	PRIVATE FIRE MAINS	1995 EDITION
NFPA 72	NATIONAL FIRE ALARM CODE (CALIFORNIA AMMENDED) (NOTE: SEE UL STANDARDS 1971 FOR "VISUAL DEVICES")	1999 EDITION
NFPA 253	CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEMS	2000 EDITION
NFPA2001	CLEAN AGENT FIRE EXTINGUISHING SYSTEMS	2000 EDITION

REFERENCE CODE SECTION FOR NFPA STANDARDS - CBS (SFM) 3504.1

COMPLETE AUTOMATIC FIRE ALARM SYSTEM SUBMITTAL

THE FIRE ALARM SYSTEM DESIGN IS A COMPLETE PLAN SUBMITTAL PER DSA-ORS POLICY. THE CONTRACTOR SHALL INSTALL THE FIRE PROTECTION SYSTEM AS SHOWN AND AS HEREIN 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 CONTRACTOR SUBMITTAL SHALL INCLUDE ALL MANUFACTURER'S CATALOG EQUIPMENT SPECIFICATION SHEETS, THE CSFM LISTING SHEETS FOR INDIVIDUAL COMPONENTS COMPRISING THE SUBSTITUTED FIRE ALARM SYSTEM, FOR EACH SIGNALLING 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.

FIRE ALARM SYSTEM INSTALLATION NOTES

ALL DRAWINGS ARE DIAGRAMMATIC ONLY, AND SHALL NOT BE USED IN DETERMINING ACTUAL CONDUIT ROUTING. THE CONTRACTOR SHALL VERIFY ALL CONDUIT ROUTING CONDITIONS AT THE PROJECT SITE AS CONSTRUCTION PROGRESSES.

ALL FIRE ALARM DATA COMMUNICATIONS AND INITIATING CIRCUITS SHALL BE INSTALLED UTILIZING SOLID COPPER CONDUCTORS WITH OUTER COVERING COLORS PER THE SPECIFICATIONS AND AS SHOWN ON THE DRAWINGS. ALL SMOKE DAMPER AND REMOTE TROUBLE INDICATOR CIRCUITS SHALL BE YELLOW. ALL CIRCUITS SHALL BE INDIVIDUALLY LABELLED, BOTH AT THE DEVICE END AND AT THE SIGNAL TERMINAL CABINET AND/OR FIRE ALARM MASTER PANEL TERMINATION POINT.

ALL FIRE ALARM CIRCUITS SHALL CONTINUOUS FROM DEVICE TO DEVICE. SPLICES ARE NOT ALLOWED UNLESS IN COVERED JUNCTION BOXES ON APPROVED TERMINAL BLOCKS. 'T' TAPPING IS ALLOWED ONLY UNDER THESE CONDITIONS.

FIRE ALARM SYSTEM LEVEL OF AUDIBILITY

BE SO LOCATED AND UNOBSTRUCTED AS TO CAUSE A LEVEL OF AUDIBILITY OF NOT LESS THAN 15 DB ABOVE AMBIENT NOISE LEVELS MEASURED FOUR FEET ABOVE THE FLOOR INSIDE BUILDING.

ADDITIONALLY, DEVICES SHALL BE RATED TO DELIVER NOT LESS THAN 75 dba AT 10'-0" NOR MORE THAN 120 dba MAXIMUM.

AMBIENT NOISE LEVELS SHALL BE CONSTRUED TO MEAN THAT WHICH CAN NORMALLY BE EXPECTED TO EXIST WHEN THE FACILITY, BUILDING, ROOM OR AREA IS FUNCTIONING UNDER NORMAL OPERATIVE OR WORKING CONDITIONS.

FIRE ALARM SYSTEM SHALL SOUND WITH THE TEMPORAL PATTERN ADOPTED BY THE STATE OF CALIFORNIA.

SEISMIC ANCHORAGE REQUIREMENTS

ALL ELECTRICAL EQUIPMENT AND CONDUIT SYSTEMS ANCHORAGE SHALL COMPLY WITH CALIFORNIA BUILDING CODE SECTION 1632A AND WITH TABLE 16A-O.

WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON THE DRAWINGS, THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE FIELD ENGINEER FOR THE DIVISION OF THE STATE ARCHITECT, OFFICE OF REGULATION SERVICES AND THE ELECTRICAL ENGINEER.

FIRE ALARM BATTERY CALCULATIONS

EQUIPMENT DESCRIPTION		QUANTITY		SUPERVISORY CURRENT (AMPERES)		ALARM CURRENT (AMPERES)	
		EXISTING	NEW	EACH	SUB-TOTAL	EACH	SUB-TOTAL
MASTER PANEL		1		0.6	0.6	0.7	0.7
FA3120		2		0.03	0.06	0.03	0.06
AMPLIFIER		1		0.185	0.185	11.0	11.0
DISTRIBUTED POWER MODULE		1	1	0.075	0.150	0.175	0.350
SMOKE DETECTORS		17	8	0.00045	0.0113	0.00072	0.018
AUDIBLE/VISUALS	15/75 cd	15		0.000	0.000	0.08	1.2
AUDIBLE/VISUALS	15 cd	4		0.000	0.000	0.051	0.204

SUB-TOTAL AMPERES	1.006 AMPS	13.532 AMPS
	x 24 HOURS	x 0.084 HOURS
SUB-TOTAL AMPERE-HOURS	24.144 A.H.	1.137 A.H.

TOTAL REQUIRED AMPERE-HOURS FOR:	25.281 A.H.
BATTERY NON-LINEAR DISCHARGE CHARACTERISTIC FACTOR	x 1.2
TOTAL MINIMUM AMPERE HOURS REQUIRED	30.337 A.H.
PROVIDED BATTERY CAPACITY	40.00 A.H.

FIRE ALARM BATTERY CALCULATIONS - 'DPM'

EQUIPMENT DESCRIPTION		QUANTITY		SUPERVISORY CURRENT (AMPERES)		ALARM CURRENT (AMPERES)	
		EXISTING	NEW	EACH	SUB-TOTAL	EACH	SUB-TOTAL
DISTRIBUTED POWER MODULE		0	1	0.075	0.075	0.175	0.175
SYNCHRONIZATION MODULE		0	1	0.030	0.030	0.070	0.070
VISUALS	15/75 cd	0	5	0.000	0.000	0.060	0.300
VISUALS	30 cd	0	1	0.000	0.000	0.063	0.063
VISUALS	75 cd	0	4	0.000	0.000	0.121	0.484
VISUALS	110 cd	0	2	0.000	0.000	0.141	0.282

SUB-TOTAL AMPERES	0.105 AMPS	1.374 AMPS
	x 24 HOURS	x 0.084 HOURS
SUB-TOTAL AMPERE-HOURS	2.520 A.H.	0.115 A.H.

TOTAL REQUIRED AMPERE-HOURS FOR:	2.635 A.H.
BATTERY NON-LINEAR DISCHARGE CHARACTERISTIC FACTOR	x 1.2
TOTAL MINIMUM AMPERE HOURS REQUIRED	3.162 A.H.
PROVIDE BATTERY CAPACITY	7.000 A.H.

FIRE ALARM VOLTAGE DROP CALCULATIONS

DEVICE NUMBER	AWG SIZE	CIRC. MILS	OHMS RES. PER/FT.	WIRE LENGTH	DEVICE AMPERES	TOTAL AMPERES	DEVICE % VD	TOTAL % VD
1	#12	6530	0.00164	120'	0.121	0.48	0.93	0.93
2	#12	6530	0.00164	180'	0.121	0.36	1.05	1.98
3	#12	6530	0.00164	180'	0.121	0.24	0.70	2.68
4	#12	6530	0.00164	180'	0.121	0.12	0.35	3.03

ANNUNCIATION CIRCUIT 'A2' — TOTAL PERCENTAGE DROP IN CIRCUIT: 3.03%

BASED UPON A 24 VDC CIRCUIT OPERATING AT 75 DEGREES FARENHEIT

FIRE ALARM VOLTAGE DROP CALCULATIONS

DEVICE NUMBER	AWG SIZE	CIRC. MILS	OHMS RES. PER/FT.	WIRE LENGTH	DEVICE AMPERES	TOTAL AMPERES	DEVICE % VD	TOTAL % VD
1	#12	6530	0.00164	15'	0.060	0.64	0.16	0.16
2	#12	6530	0.00164	40'	0.140	0.58	0.38	0.54
3	#12	6530	0.00164	90'	0.060	0.44	0.64	1.18
4	#12	6530	0.00164	20'	0.060	0.38	0.12	1.30
5	#12	6530	0.00164	40'	0.063	0.32	0.21	1.51
6	#12	6530	0.00164	20'	0.060	0.26	0.08	1.59
7	#12	6530	0.00164	30'	0.060	0.20	0.10	1.69
8	#12	6530	0.00164	40'	0.14	0.14	0.09	1.78

ANNUNCIATION CIRCUIT 'A3' — TOTAL PERCENTAGE DROP IN CIRCUIT: 1.78%

BASED UPON A 24 VDC CIRCUIT OPERATING AT 75 DEGREES FARENHEIT

FIRE ALARM SYSTEM REQUIREMENTS

THE FIRE ALARM SYSTEM SHALL CONFORM TO CALIFORNIA BUILDING CODE, SECTION 305.9; CALIFORNIA ELECTRICAL CODE, ARTICLE 760 AND CALIFORNIA FIRE CODE, ARTICLE 10.

INSTALLATION OF THE FIRE ALARM SYSTEM SHALL NOT COMMENCE UNTIL DETAILED PLANS AND SPECIFICATIONS, INCLUDING CALIFORNIA STATE FIRE MARSHAL LISTINGS FOR EACH COMPONENT OF THE SYSTEM HAVE BEEN APPROVED BY THE DIVISION OF THE STATE ARCHITECT - OFFICE OF REGULATION SERVICES.

UPON COMPLETION OF THE INSTALLATION OF THE FIRE PROTECTIVE SIGNALLING EQUIPMENT, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF THE ENFORCING FIRE AGENCY, NFPA 72. 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 AGENCY PER CALIFORNIA FIRE CODE.

A CERTIFICATE OF COMPLETION SHALL BE PROVIDED TO THE OWNER PER NFPA 72, CHAPTER 1 AND THE CALIFORNIA FIRE CODE.

REGISTERED PROFESSIONAL ENGINEER — VINCENT W. WATERS — No. E 14975 — Exp. 6/30/07 — ELECTRICAL — STATE OF CALIFORNIA

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#2004-82

ORDIZ MELBY ARCHITECTS, INC.

5500 MING AVENUE SUITE 280
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TELEPHONE (661) 832-5258
FACSIMILE (661) 832-4291

LICENSED ARCHITECT — WILLIAM JOHN MELBY — No. C-16835 — DEC. 31 2006 RENEWAL DATE — STATE OF CALIFORNIA

DANNY E. ORDIZ, A.I.A
ARCHITECT C-14,728

WILLIAM J. MELBY, A.I.A.
ARCHITECT C-16,835

IDENTIFICATION STAMP
DIV OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APPL 03-108679
FILE # 15-6
AC Sm FLS CO SS [illegible]
DATE JUL 26 2005

PTN:63321-50

SITE IMPROVEMENTS PORTABLE CLASSROOMS AT CHIPMAN JUNIOR HIGH SCHOOL

BAKERSFIELD CITY SCHOOL DISTRICT

EISSLER STREET
BAKERSFIELD, CALIFORNIA
93306

MARK	DATE	DESCRIPTION
SD		D.S.A. APPROVAL
CD		
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JOB NUMBER: 2004771
CAD DRAWING FILE: 2004-82-E-4.DWG
DRAWN BY: CMH/DAJ
CHECKED BY: VWW

CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH THE WORK. REPORT DESCREPANCIES TO THE ARCHITECT.

SHEET TITLE

FIRE ALARM SINGLE LINE DIAGRAM, DETAIL CALCULATIONS

SHEET IDENTIFICATION NUMBER

E-4

SHEET OF

X:\J2005\2004-82\2004-82\2004-82-E-4 DAJ\AMSSE 07/22/05