PREACTION MATRIX OF OPERATION

ACTION / RESULT	MANUAL PULL STATION	HSSD ZONES 1 THROUGH 6			HSSD ZONE 7			DUCT DETECTOR (MAU FC-1)	WATER SERVICE SHUTDOWN FLOW	PREACTION SPRINKLER FLOW SWITCH	PREACTION TAMPER SWITCH	PREACTION LOW AIR SWITCH	BUILDING POWER FAILURE	FM-200 CONTROL PANEL ALARM
		AnalaSER ALARM LEVEL 1 (30K)	AnalaSER ALARM LEVEL 2 (60K)	AnalaSER ALARM LEVEL 3 (100K)	AnalaSER ALARM LEVEL 1 (30K)	AnalaSER ALARM LEVEL 2 (60K)	AnalaSER ALARM LEVEL 3 (100K)							
DISPLAY ADDRESS FENWALNET 2000 CONTROL PANEL	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ACTIVATE SUN-AWAY/ VISUAL DEVICES	YES	NO	NO	YES	NO	NO	YES	NO	YES	YES	NO	NO	NO	YES
SEND REMOTE TROUBLE TO BLDG. FACP	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	NO
SEND REMOTE ALARM TO BLDG. FACP	YES	NO	NO	YES	NO	NO	YES	NO	YES	YES	NO	NO	NO	YES
HSSD LEVEL 1 60 SPM HORN BLUE STROBE (IN RESPECTIVE ZONE)	NO	YES	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO
HSSD LEVEL 2 120 SPM HORN BLUE & YELLOW STROBE (IN RESPECTIVE ZONE)	NO	NO	YES	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO
HSSD LEVEL 3 ALARM,CONTINUOUS & RED STROBE (IN RESPECTIVE ZONE)	NO	NO	NO	YES	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO
SHUTDOWN AIR HANDLING (FC-1)	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO
ENERGIZE PREACTION SOLENOID	NO	NO	NO	YES	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO
SHUTDOWN COMPUTER ROOM POWER	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
SHUTDOWN LIEBERT UNITS	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

INSTALLATION DEPT. NOTES

COLOR CODING FOR CONTROL WIRING	JUNCTION BOX LOCATIONS AND / OR ELEVATIONS	DEVICE JUNCTION BOX TYPES DO NOT GANG DEVICES
FIRST ALARM SIGNALS (F/A RED (+) BLACK (-) SIGNAL LINE CIRCUIT 18/18p CLASS (+)CONNECTION ON SIGNAL BLACK (-)SPLITS ON BASE) MANUAL RELEASE SIGNIGNS 18/18p NON-POLARIZED DEVICE	GENERAL RELEASE STATIONS 4' O/C ABOVE FIN. FLOOR FIRE ALARM CONTROL PANELS ANNUNCIATOR EXTENDER PANELS AND GRAPHIC ANNUNCIATORS 5 1/2' TO 6½' OF ENCINSION	CEILING MOUNT DEV. 4/9 BOX W/ 2/0 PLAST. RING OR 4/9 BOX ALL ALLEN BRADLEY DEV.-2 GANG SIGNAL RELEASE STATIONS- 1 GANG

GENERAL NOTES

1. A DEDICATED 120 VAC CIRCUIT, MIN. 20 AMPS TO BE PROVIDED AT PREACTION CONTROL PANEL WITH LOCKOUT TO BE INSTALLED ON CIRCUIT BREAKER. (BY CALPROTECTION)
2. ALL WIRING, INITIATING DEVICES AND ANNUNCIATOR PANEL SHALL BE SUPERVISED TO THE PERIPHERAL POINT OF ANNUNCIATION (FIRE ALARM PANEL TO SUPERVISE THE ANNUNCIATOR PANEL, ALL CIRCUITS AND INITIATING DEVICES).
3. CONNECTION TO THE FIRE ALARM SYSTEM: DUPLICATE TERMINALS OR LEADLOR THEIR EQUIVALENT,SHALL BE PROVIDED ON EACH INITIATING DEVICE FOR THE EXPRESS PURPOSE OF CONNECTING INTO THE FIRE ALARM SYSTEM TO PROVIDE SUPERVISION OF THE CONNECTIONS. SUCH TERMINALS OR LEADS ARE NECESSARY TO ENSURE THAT THE WIRE RUN IS BROKEN AND THAT THE INDIVIDUAL CONNECTIONS ARE MADE TO THE INCOMING AND OUTGOING LEADS ON OTHER TERMINALS FOR SIGNALING AND POWER.
4. ALL DEVICES IN THE ALARM SYSTEM SHALL BE COMPATIBLE WITH AND INSTALLED TO MANUFACTURERS SPECIFICATIONS
5. AUDIBILITY OF ALARM AND VOICE COMMUNICATION SHALL BE NOT LESS THAN 15 db ABOVE AMBIENT SOUND THROUGHOUT AREA OF ALARM
6 – CENTRAL STATION COMPANY:
   CALPROTECTION
   6735-B SIERRA CT.
   DUBLIN, CALIFORNIA 94568-3011
   U.L. FILE-VOL. NO.: S3399-2
   APPLICANT ID NO.: 13621-003
   PHONE NO.: (925) 803-3940

PROJECT DATA

LOCATION OF WORK: FIRST FLOOR

NUMBER OF STORIES: 4 FLOORS + BASEMENT & ROOF

SPRINKLERED: YES

SCOPE OF WORK CHANGE ORDER 01 + 02

1 – ADD ANALASER ZONE #6 AND ZONE #7 AND REVISED ZONE 5 PER HYT DRAWINGS FA2.01B AND FA2.01D ALTERNATE #2. ADD AnalaSER WARNING LIGHTS.

SCOPE OF WORK

1 – FURNISH AND INSTALL A NEW PREACTION DETECTION AND CONTROL SYSTEM TO THE LAWRENCE BERKELEY NATIONAL LABORATORY COMPUTING CENTER IN THE FIRST FLOOR.

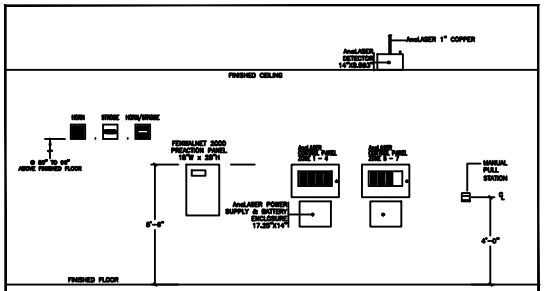
2. SPRINKLER PREACTION CONTROL WIRING:
   PREACTION SOLENOID BY CALPROTECTION
   PREACTION PRESSURE SW. BY CALPROTECTION
   PREACTION TAMPER SW. BY CALPROTECTION
   PREACTION LOW AIR SW. BY CALPROTECTION
   SPRINKLER PREACTION MECH. BY GRINNEL FIRE PROTECTION
   120V AIR COMPRESSOR BY OTHERS.

3. FUNCTIONAL TEST TO BE PERFORMED.

PROJECT SITE

G:\DWG\2000\AL-00224\MAP.gif

VICINITY MAP N. T. S.



EQUIPMENT ELEVATION DETAIL
SCALED 1/2" = 1'-0"
= SEE LOCATIONS ON FLOOR PLAN

REV #	LIN. SYM.	NEW QTY.	LIN. QTY.	EX. QTY	RELOCATE QTY	RE-USE QTY	RE-STOCK QTY	MANUFACT. PART NO.	CAE-ETA PART NO.	ITEM DESCRIPTION	ITEM LISTING #
0											
0	——	0	0	1	0	0	0	74-300009-002	MODBB-PS	FENWALNET POWER SUPPLY MODULE FOR MAIN CABINET	7148-1078141
0	——	0	0	1	0	0	0	74-100017-001	EMCOS-BATT	FENWALNET 2000 BATTERY ENCLOSURE	7148-1078141
0	BOX	0	0	1	0	0	0	MA040		SPACE AGE MODEL MA040 AUDIBLE SIGNAL	7138-0803/001
0	LIGHT	0	0	4	0	0	0	SBLM3001		SPACE AGE VX3 BLUMOAN STROBE, RED PLATE W/ RED LENS	7300-0803/002
0	LIGHT	0	0	4	0	0	0	SBLM3001		SPACE AGE VX3 BLUMOAN STROBE, YELLOW PLATE W/ YELLOW LENS	7300-0803/002
0	LIGHT	0	0	4	0	0	0	SBLM3001		SPACE AGE VX3 BLUMOAN STROBE, BLUE PLATE W/ BLUE LENS	7300-0803/002
0	——	0	0	1	0	0	0	P08-1	RELAY-PANEL	AIR PRODUCTS & CONTROLS 8X11-VOLTAGE RELAY MODULE	7300-1084/101
0	■	0	0	1	0	0	0	86-100000-031	SM200-201	FENWAL AnaLASER 200B DETECTOR ASSEMBLY, BLACK/GREY,FV	7208-1078/108
0	■	0	-1	1	0	0	0	86-100000-008	PANEL-005	FENWAL NBB 1-ZONE COMPLETE CONTROL UNIT, IN SINGLE ZONE ENCLOSURE	7208-1078/108
0	■	0	-1	1	0	0	0	86-100000-004	PANEL-004	FENWAL NBB4 4-ZONE COMPLETE CONTROL UNIT, IN 4&4X3 ZONE ENCLOSURE	7208-1078/108
0	——	0	0	1	0	0	0	04-138600-004		1/4" SAMPLING TUBE	————
0	■	0	0	1	0	0	0	70-400001-153	ECOSP-00000	FENWALNET MODEL EC-300 INTELLIGENT DUCT SMOKE DETECTOR W/ PHOTO. DET.	7040-1078/114
0	■	0	-2	2	0	0	0	86-300000-008	PULM1-200	FENWAL ADDRESSABLE MANUAL PULL STATION, "LINK"	7116-0078/103
0	■	0	2	1	0	0	0	70-400004-001	MOD01-AO	FENWALNET ADDRESSABLE OUTPUT DEVICE	7300-1078/144
0	■	0	4	13	0	0	0	70-400006-001	MOD01-4RO	FENWALNET ADDRESSABLE RELAY DEVICE (5A)	7300-1078/144
0	——	0	0	2	0	0	0	RE-12180	BATC-12180	POWERSONIC INTERNAL, 12V, 18.0 AMPHOURS	————
0	——	0	0	1	0	0	0	04-138600-004		CO2 TO CONVERTER CHAM.	————
0	——	0	0	1	0	0	0	86-100000-002		RE-232/485 CONVERTER CARD, FOUR ZONE	7300-1078/118
0	——	0	0	1	-1	0	0	86-100000-001		RE-232/485 CONVERTER CARD, ONE ZONE	7300-1078/118
0	——	0	0	1	0	0	0	86-100000-001	MODBB-IM	FENWALNET RS-3000 INTELLIGENT INTERFACE MODULE, PANEL MOUNT	7300-1078/118
0	——	0	0	1	4	0	0	74-300000-001	MODBB-SAM	FENWALNET SIGNAL ASSIMILE MODULE	7148-1078/141
0	——	0	0	1	0	0	0	74-300001-001	MODBB-ARM	FENWALNET ARMOT RELAYING MODULE	7148-1078/141
0	——	0	0	1	0	0	0	74-300007-001	MODBB-ID	FENWALNET INPUT/OUTPUT MOTHERBOARD	7148-1078/141
0	——	0	0	1	0	0	0	74-300000-001	PANEL-2000	FENWALNET 2000 CONTROL PANEL	7148-1078/141

BILL OF MATERIALS

G:\Eng\AutoCAD\Support Files\GREY.ttf

2000 MRA SHR AVENUE
LONG BEACH, CA. 90815
T 562 494 3007
F 562 495 0444

TYPE OF WORK
PREACTION AND DETECTION AND CONTROL SYSTEM

OWNER
SANCO ELECTRIC
1400 MONROEE DRIVE
SANTA CLARA, CALIFORNIA 95050-2842

NO.	ISSUE DATE	DESCRIPTION	BY
1	4-24-2000	FOR REVIEW	RCA
2	4-28-2000	FOR SUBMITTAL	RCA
3	5-5-2000	REV. FOR PLAN CHECK CORRECTIONS	RCA
4	5-22-2000	REV. FOR CHANGE ORDER #1 & #2	RCA
5	6-22-2000	REV. FOR PLAN CHECK CORR. #2	RCA
6	10-19-00	AS BUILT	MM
7	12-19-00	REV. PREACTION MATRIX	AA

AS BUILT BY
ELECTRICAL ISSUE DATE BY
MECHANICAL ISSUE DATE BY
CHECK-OUT VERIFICATION ISSUE DATE BY

PROJECT NAME
LAWRENCE BERKELEY
NATIONAL LABORATORY
COMPUTING CENTER
415 20th STREET
OAKLAND, CALIFORNIA 94612

SHEET DESCRIPTION
TITLE SHEET

PROFESSIONAL STAMPS

PROJECT NUMBER AL-00224
FILE NAME AL-0224412.DWG
APPROVED BY SV
CHECKED BY MMR
DRAWN BY RCA
SCALE AS NOTED
DRAWING NUMBER
6111P

SHEET NUMBER
FP 1.0

FILE: 00012432
4N943E050

PROJ. NO. FH0113