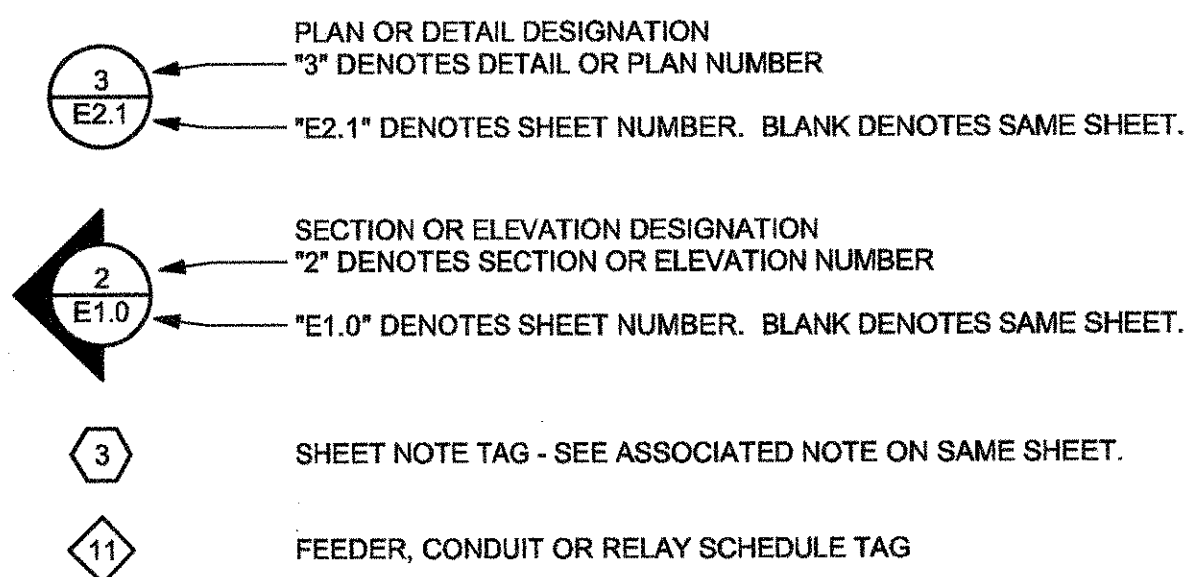
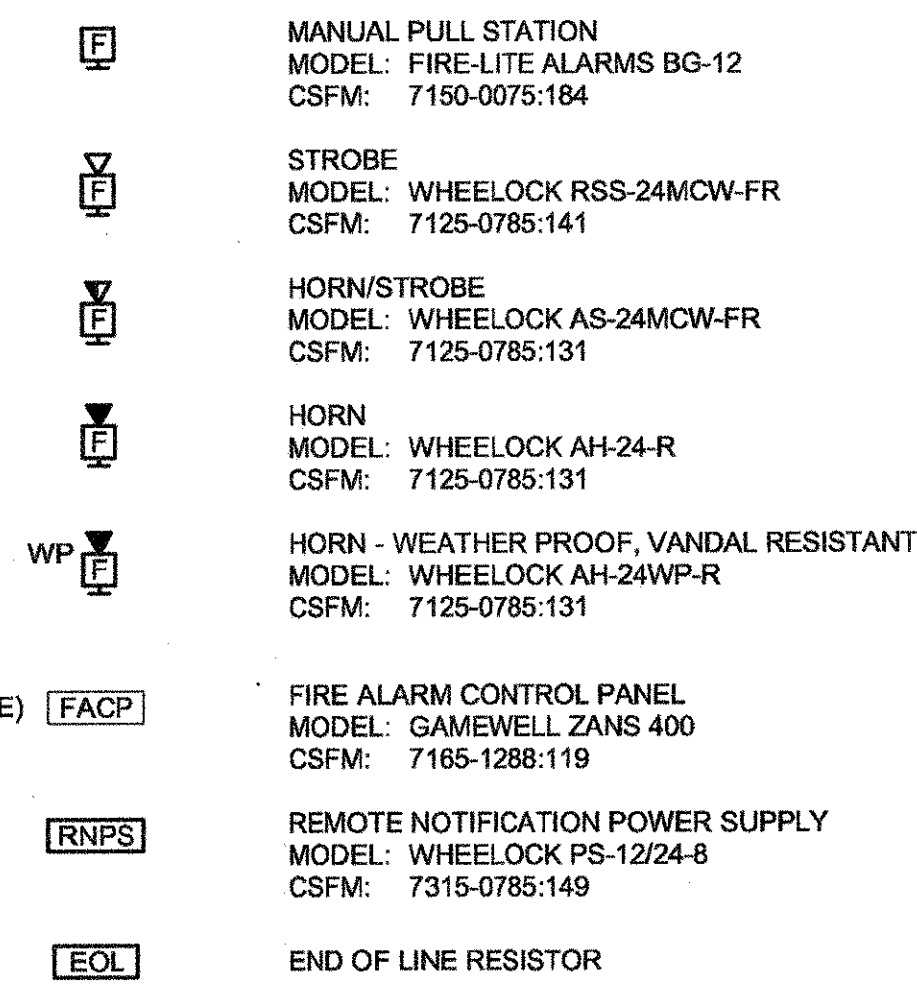


SYMBOL LIST

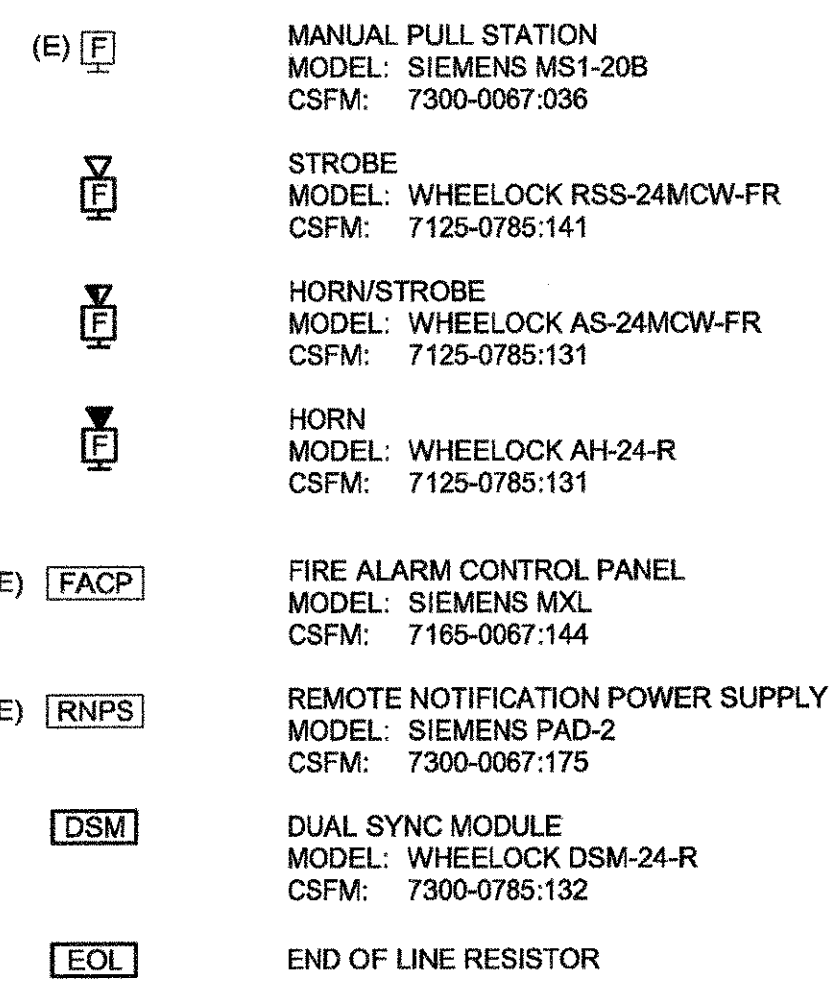
GENERAL SYMBOLS



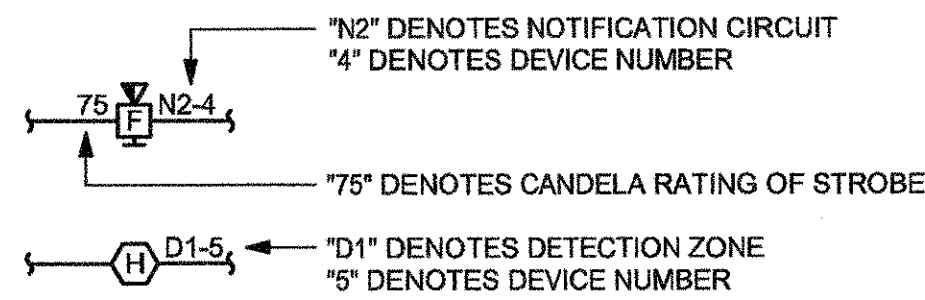
PACIFIC HEIGHTS SCHOOL - FIRE ALARM SYMBOLS



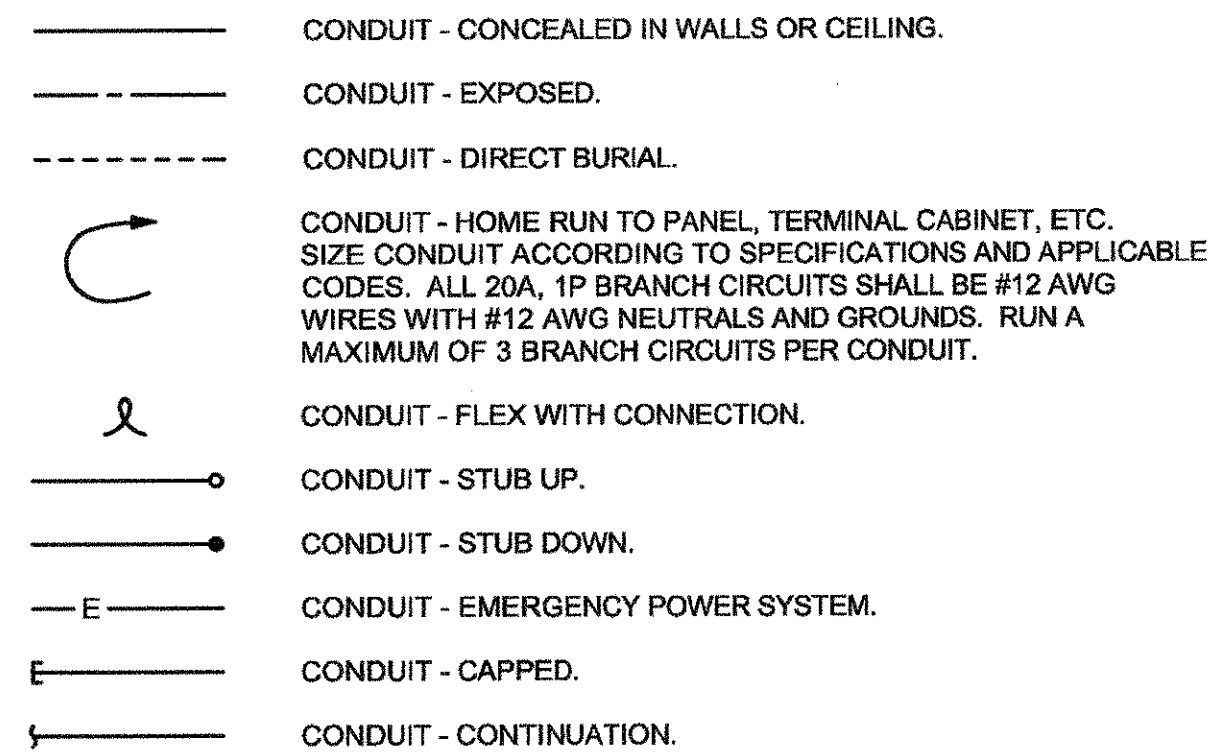
SKYLINE COLLEGE - FIRE ALARM SYMBOLS



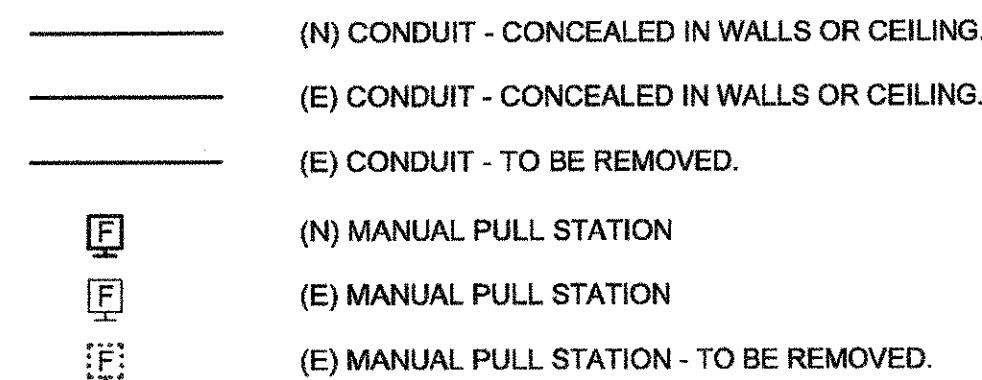
TYPICAL ZONE NOMENCLATURE



WIRING & CONDUIT RUN SYMBOLS



NEW VS. EXISTING



SEQUENCE OF OPERATION OF FIRE ALARM SYSTEM

- ACTIVATION OF ANY OF THE SYSTEM PULL STATIONS, SMOKE DETECTORS OR HEAT DETECTORS SHALL CAUSE ALL SIGNALS IN THE BUILDING TO ACTIVATE AND SOUND. ACTIVATION OF ALARM SHALL ACTIVATE AUTODIALER IN SECURITY COMPANY'S OFFICE. THE AUTODIALER SHALL SOUND ALARM IN SECURITY COMPANY'S OFFICE.
- IN ADDITION, THE ALARM LIGHT ON THE FIRE ALARM PANEL CORRESPONDING TO THE ALARM ZONE WILL ILLUMINATE.
- SHOULD AN OPEN GROUND OR SHORT OCCUR IN THE WIRING, THE SYSTEM WILL DETECT THE MALFUNCTION AND INITIATE A TROUBLE INDICATOR ALONG WITH THE SPECIFIC ZONE TROUBLE LIGHT WILL ILLUMINATE.
- ONCE THE SYSTEM IS BACK TO NORMAL, THE PANEL WILL RESOUND FOR PROPER RESETTING.
- WHERE REMOTE MONITORING IS NOT REQUIRED, THE FIRE ALARM PANEL SHALL BE BACKED UP BY STANDBY BATTERIES FOR 24 HOURS AND 5 MINUTES OF ALARM. WHERE REMOTE MONITORING IS REQUIRED, THE FIRE ALARM PANEL SHALL BE BACKED UP BY STANDBY BATTERIES FOR 60 HOURS AND 5 MINUTES OF ALARM.

OWNERSHIP OF INSTRUMENTS OF SERVICE

- ALL REPORTS, DRAWINGS, SPECIFICATIONS, COMPUTER FILES, FIELD DATA, NOTES AND OTHER DOCUMENTS AND INSTRUMENTS PREPARED BY THE CONSULTANT AS INSTRUMENTS OF SERVICE SHALL REMAIN THE PROPERTY OF THE CONSULTANT. THE CONSULTANT SHALL RETAIN ALL COMMON LAW, STATUTORY AND OTHER RESERVED RIGHTS, INCLUDING THE COPYRIGHT THERE TO.
- THE CLIENT ACKNOWLEDGES THE CONSULTANT'S CONSTRUCTION DOCUMENTS, INCLUDING ELECTRONIC FILES, AS INSTRUMENTS OF PROFESSIONAL SERVICE. NEVERTHELESS, THE FINAL CONSTRUCTION DOCUMENTS PREPARED UNDER THIS AGREEMENT SHALL BECOME THE PROPERTY OF THE CLIENT UPON COMPLETION OF THE SERVICES AND PAYMENT IN FULL OF ALL MONIES DUE TO THE CONSULTANT. THE CLIENT SHALL NOT REUSE OR MAKE ANY MODIFICATION TO THE CONSTRUCTION DOCUMENTS WITHOUT THE PRIOR WRITTEN AUTHORIZATION OF THE CONSULTANT. THE CLIENT AGREES, TO THE FULLEST EXTENT PERMITTED BY LAW, TO INDEMNIFY AND HOLD HARMLESS THE CONSULTANT, ITS OFFICERS, DIRECTORS, EMPLOYEES AND SUBCONSULTANTS (COLLECTIVELY, CONSULTANT) AGAINST ANY DAMAGES, LIABILITIES OR COSTS, INCLUDING REASONABLE ATTORNEY'S FEES AND DEFENSE COSTS, ARISING FROM OR ALLEGEDLY ARISING FROM OR IN ANY WAY CONNECTED WITH THE UNAUTHORIZED REUSE OR MODIFICATION OF THE CONSTRUCTION DOCUMENTS BY THE CLIENT OR ANY PERSON OR ENTITY THAT ACQUIRES OR OBTAINS THE CONSTRUCTION DOCUMENTS FROM OR THROUGH THE CLIENT WITHOUT THE WRITTEN AUTHORIZATION OF THE CONSULTANT.

PACIFIC HEIGHTS SCHOOL - PROJECT DESCRIPTION

- OCCUPANCY TYPE: B (COMMUNITY COLLEGE)
- SYSTEM TYPE: CLASS B, NON-ADDRESSABLE, MANUAL SYSTEM.
- METHOD OF COMMUNICATION: TELEPHONE
- SCOPE OF WORK: NEW EXTENSION OF AN EXISTING MANUAL FIRE ALARM SYSTEM AT AN EXISTING BUILDING AT AN EXISTING SCHOOL CAMPUS.
- SCHOOL OWN AND USED FOR JUNIOR COLLEGE. THEREFORE MANUAL FIRE ALARM SYSTEM COMPLIES WITH SB575.

SKYLINE COLLEGE - PROJECT DESCRIPTION

- OCCUPANCY TYPE: B (COMMUNITY COLLEGE)
- SYSTEM TYPE: CLASS B, ADDRESSABLE, MANUAL SYSTEM.
- METHOD OF COMMUNICATION: TELEPHONE
- SCOPE OF WORK: NEW EXTENSION OF AN EXISTING MANUAL FIRE ALARM SYSTEM AT AN EXISTING BUILDING AT AN EXISTING SCHOOL CAMPUS.
- SCHOOL OWN AND USED FOR JUNIOR COLLEGE. THEREFORE MANUAL FIRE ALARM SYSTEM COMPLIES WITH SB575.

ABBREVIATIONS

A	AMPERE	IMC	INTERMEDIATE METAL CONDUIT
ABV	ABOVE	JB	JUNCTION BOX
AF	AMPERE FRAME, AMPERE FUSE	KAC	KILOAMPERE INTERRUPTING CAPACITY
AFF	ABOVE FINISHED FLOOR	KV	KILOVOLT
AIC	AMPERE INTERRUPTING CAPACITY	KVA	KILOVOLT AMPERE
ARCH	ARCHITECTURAL	KW	KILOWATT
AS	AMPERE SWITCH	LTS	LIGHTING
AT	AMPERE TRIP	LV	LOW VOLTAGE
ATS	AUTOMATIC TRANSFER SWITCH	MAX	MAXIMUM
BKR	BREAKER	KCMIL	THOUSAND CIRCULAR MILS
BUDS	BUILDING	MDF	MAIN DISTRIBUTION FRAME
C	CONDUIT	MECH	MECHANICAL
CATV	CABLE TELEVISION	MH	MANHOLE
CB	CIRCUIT BREAKER	MIN	MINIMUM
CBC	CALIFORNIA BUILDING CODE	MTD	MOUNTED
CD	CANDELA	MTG	MOUNTING
CEC	CALIFORNIA ELECTRICAL CODE	NC	NORMALLY CLOSED
CFC	CALIFORNIA FIRE CODE	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
CKT	CIRCUIT	NIC	NOT IN CONTRACT
CL	CENTER LINE	NIEC	NOT IN ELECTRICAL CONTRACT
CLG	CEILING	NO	NUMBER, NORMALLY OPEN
CO	CONDUIT ONLY	NTS	NOT TO SCALE
COMM	COMMUNICATIONS	OC	ON CENTER
CSFM	CALIFORNIA STATE FIRE MARSHAL	P	POLE
CTR	CENTER	PA	PUBLIC ADDRESS
(D)	DEMOLISH	PB	PULL BOX
DET	DETAIL	PF	POWER FACTOR
DIM	DIMENSION	PH	PHASE
DIST	DISTRIBUTION	PNL	PANEL
DP	DISTRIBUTION PANEL	PVC	POLYVINYL CHLORIDE
DWG	DRAWING	(R)	EXISTING TO BE RELOCATED
(E)	EXISTING	REQD	REQUIRED
ELEC	ELECTRICAL	REQ(S)	REQUIREMENT(S)
EM	EMERGENCY	RM	ROOM
EMT	ELECTRICAL METALLIC TUBING	RSC	RIGID STEEL CONDUIT
EOL	END OF LINE RESISTOR	SHT	SHEET
EQUIP	EQUIPMENT	STC	SIGNAL TERMINAL CABINET
FA	FIRE ALARM	SW	SWITCH
FACP	FIRE ALARM CONTROL PANEL	SWBD	SWITCHBOARD
(F)	FUTURE	TC	TERMINAL CABINET
FIN	FINISH	TEL	TELEPHONE
FL	FLOOR	TYP	TYPICAL
G, GND	GROUND	UON	UNLESS OTHERWISE NOTED
HST	HEIGHT	V	VOLT
HP	HORSEPOWER	W	WATT, WIRE
IC	INTERCOM	WP	WEATHERPROOF
IDF	INTERMEDIATE DISTRIBUTION FRAME	XFMR	TRANSFORMER

CALIFORNIA CODES AND STANDARDS

- 2001 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 24, CCR).
- 2001 CALIFORNIA BUILDING CODE, VOLUMES 1, 2 AND 3 (PART 2, TITLE 24, CCR) (1997 UNIFORM BUILDING CODE WITH 2001 CALIFORNIA AMENDMENTS).
- 2001 CALIFORNIA ELECTRICAL CODE (PART 3, TITLE 24, CCR) (1999 NATIONAL ELECTRICAL CODE WITH 2001 CALIFORNIA AMENDMENTS).
- 2001 CALIFORNIA MECHANICAL CODE (PART 4, TITLE 24, CCR) (2000 IAPMO UNIFORM MECHANICAL CODE WITH 2001 CALIFORNIA AMENDMENTS).
- 2001 CALIFORNIA PLUMBING CODE (PART 5, TITLE 24, CCR) (2000 IAPMO UNIFORM PLUMBING CODE WITH 2001 CALIFORNIA AMENDMENTS).
- 2001 CALIFORNIA ENERGY CODE (PART 6, TITLE 24, CCR).
- 2001 CALIFORNIA ELEVATOR SAFETY CONSTRUCTION CODE (PART 7, TITLE 24, CCR).
- 2001 CALIFORNIA FIRE CODE (PART 9, TITLE 24, CCR) (2000 UNIFORM FIRE CODE WITH CALIFORNIA AMENDMENTS).
- 2001 CALIFORNIA REFERENCED STANDARDS CODE (PART 12, TITLE 24, CCR).
- STATE FIRE MARSHAL REGULATIONS, PUBLIC SAFETY (TITLE 18, CCR).
- 1999 NFPA 13 (THE INSTALLATION OF AUTOMATIC SPRINKLER SYSTEMS WITH CALIFORNIA AMENDMENTS).
- 2000 NFPA 14 (INSTALLATION OF STANDPIPE, PRIVATE HYDRANT AND HOSE SYSTEM).
- 1995 NFPA 24 (INSTALLATION OF PRIVATE FIRE SERVICES MAINS AND THEIR APPURTENANCES).
- 1999 NFPA 72 (NATIONAL FIRE ALARM CODE WITH CALIFORNIA AMENDMENTS).

GENERAL NOTES

- THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO BIDDING AND ALLOW FOR ALL FIELD CONDITIONS. OBTAIN CONTRACT DOCUMENTS FOR ALL OTHER TRADES AND BE RESPONSIBLE FOR ALL ELECTRICAL WORK NOTED AND CALLED OUT ON THE CONTRACT DOCUMENTS. COORDINATE ELECTRICAL WORK WITH ALL OTHER TRADES ON PROJECT. COORDINATE ALL CONDUIT RUNS, ELECTRICAL EQUIPMENT AND PANEL LOCATIONS WITH ALL OTHER WORK TO AVOID CONFLICTS.
- COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS. MATERIALS AND EQUIPMENT SHALL BE U.L. AND CALIFORNIA STATE FIRE MARSHAL (CSFM) LISTED AND LABELED FOR THE APPLICATION.
- BEFORE BEGINNING CONSTRUCTION, PROVIDE TO THE ARCHITECT A CONSTRUCTION SCHEDULE OF ELECTRICAL WORK. THE CONSTRUCTION SCHEDULE SHALL IDENTIFY ALL SIGNIFICANT MILESTONES WITH COMPLETION DATES.
- OBTAIN AND PAY FOR ALL PERMITS, LICENSES AND INSPECTION FEES REQUIRED BY THIS CONTRACT WORK, UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF PERSONS AND PROPERTY AND SHALL PROVIDE INSURANCE COVERAGE AS NECESSARY FOR LIABILITY, PERSONAL, PROPERTY DAMAGE, TO FULLY PROTECT THE OWNER, ARCHITECT AND ENGINEER FROM ANY AND ALL CLAIMS RESULTING FROM THIS WORK.
- MAINTAIN RECORD DRAWINGS AT THE PROJECT SITE INDICATING ALL MODIFICATIONS TO ELECTRICAL SYSTEMS. AT THE CONCLUSION OF THE PROJECT, PROVIDE ACCURATE "AS-BUILT" DRAWINGS ACCEPTABLE TO THE ARCHITECT.
- ALL MATERIALS PROVIDED FOR THE PROJECT SHALL BE NEW, UNLESS OTHERWISE NOTED. PROVIDE ALL INCIDENTAL MATERIALS REQUIRED FOR A COMPLETE INSTALLATION.
- PROVIDE ALL REQUIRED "CUTTING, PATCHING, BACK FILL AND REPAIRS" NECESSARY TO RESTORE DAMAGED SURFACES TO EQUAL OR BETTER THAN ORIGINAL CONDITIONS EXISTING AT START OF WORK.
- IN FINISHED INTERIOR AREAS, RUN ALL CONDUITS CONCEALED, UNLESS OTHERWISE NOTED. PAINT ALL EXPOSED CONDUITS AND ELECTRICAL EQUIPMENT. REFER TO ARCHITECT'S PAINTING SECTION FOR REQUIREMENTS.
- ALL ELECTRICAL EQUIPMENT INSTALLED OUTDOORS SHALL BE WEATHERPROOF. EXTERIOR CONDUIT RUNS INTO BUILDINGS SHALL BE INSTALLED WITH FLASHING, CAULKED AND SEALED. CONDUITS FOR EXTERIOR ELECTRICAL DEVICES SHALL BE RUN INSIDE BUILDING, UNLESS OTHERWISE NOTED. UNDERGROUND AND EXTERIOR CONDUIT SHALL HAVE WATERTIGHT FITTINGS.
- ALL CONDUITS SHALL BE A MINIMUM 3/4" UNLESS OTHERWISE NOTED. POWER BRANCH CIRCUITS SHALL HAVE A MINIMUM TWO (2) #12 AWG AND ONE (1) #12 AWG GROUND TYPE THW/THHN. ALL POWER AND FIRE ALARM WIRING SHALL BE RUN IN CONDUIT. THE USE OF ROMEX (NMC) OR BX (AC) CABLE IS NOT PERMITTED. PROVIDE ALL WIRES AND WIRE SIZES REQUIRED BY LATEST CODES.
- CONDUITS SHALL NOT BE USED AS A GROUND PATH. ALL CONDUITS SHALL CONTAIN A GROUNDING CONDUCTOR, SIZED PER NEC/CEC REQUIREMENTS.
- PROVIDE A PULL CORD IN EVERY EMPTY CONDUIT FOR USE IN FUTURE CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE LOCATING ALL EXISTING UNDERGROUND SYSTEMS IN THE AREA OF UNDER GROUND WORK. REPAIR ALL DAMAGED SYSTEMS TO OWNERS SATISFACTION. MAINTAIN EXTREME CARE DURING TRENCHING AS EXISTING SYSTEMS ARE KNOWN TO EXIST IN THE AREA. THE DRAWINGS AND SPECIFICATIONS ARE FOR THE ASSISTANCE AND GUIDANCE OF THE CONTRACTOR. EXACT LOCATIONS, DISTANCES AND ELEVATIONS WILL BE GOVERNED BY ACTUAL CONDITIONS. COORDINATE THE CONTRACT DOCUMENTS AND FIELD CONDITIONS TO DETERMINE EXACT ROUTING AND FINAL TERMINATIONS FOR ALL WORK.
- CONDUIT AND WIRING ARE SHOWN ON THESE PLANS DIAGRAMMATICALLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD TO SUIT SITE CONDITIONS.
- SEISMIC ANCHORAGE OF ALL ELECTRICAL EQUIPMENT SHALL BE PROVIDED IN ACCORDANCE WITH TITLE 24, CBC SECTION 1632A.
- PLANS SHALL BE APPROVED BY THE "DIVISION OF THE STATE ARCHITECT" (DSA) PRIOR TO BEGINNING WORK. SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW PRIOR TO PURCHASE.
- SUFFICIENT ACCESS AND WORKING SPACE SHALL BE PROVIDED AND MAINTAINED ABOUT ALL ELECTRIC EQUIPMENT TO PERMIT READY AND SAFE OPERATION AND MAINTENANCE OF SUCH EQUIPMENT PER CEC ARTICLE 110-16.
- ALL FIRE ALARM DEVICES SHALL BE CALIFORNIA STATE FIRE MARSHAL (CSFM) LISTED.
- FIRE ALARM WIRING SHALL BE LISTED FOR USE AS REQUIRED BY TITLE 24/CEC, ARTICLE 760. MINIMUM WIRE SHALL BE TWO (2) #14 AWG FOR INITIATING CIRCUITS AND TWO (2) #14 AWG FOR INDICATING CIRCUITS.
- FIRE ALARM WIRE USED IN WET LOCATIONS SHALL BE OF AN APPROVED TYPE IN ACCORDANCE WITH 3-310-8, 24/CEC (1.e. THHW OR EQUAL).
- PENETRATIONS OF FIRE RATED WALLS SHALL BE PROTECTED IN ACCORDANCE WITH CALIFORNIA BUILDING CODE, CHAPTER 7, TITLE 24. PROVIDE DETAILS OF FIRE-STOP SYSTEMS FOR ALL PIPE/CABLE/CONDUIT PASSING THROUGH FIRE RATED WALLS/FLOORS REQUIRING PROTECTED OPENINGS.
- VISUAL FIRE ALARM DEVICES SHALL HAVE A PULSING LIGHT SOURCE NOT LESS THAN 15 CANDELAS. LOCATE PER 1999 NFPA 72.
- ALL FIRE ALARM DEVICE CONNECTIONS TO THE LIGHT AND POWER SERVICE SHALL BE ON A DEDICATED BRANCH CIRCUIT(S). THE CIRCUIT(S) AND CONNECTIONS SHALL BE MECHANICALLY PROTECTED. CIRCUIT DISCONNECTING MEANS SHALL HAVE A RED MARKING, SHALL BE ACCESSIBLE ONLY TO AUTHORIZED PERSONNEL, AND SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL." THE LOCATION OF THE CIRCUIT DISCONNECTING MEANS SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL UNIT. (1999 NFPA 72 SECTION 1-5.2.2)
- PROVIDE TEMPORAL-THREE DISTINCTIVE FIRE ALARM SOUND. (CFC SECTION 1007.3.3.2, NFPA 72 SECTION 3-7.2)
- AUDIBLE FIRE ALARM SOUND LEVEL SHALL BE AT LEAST 15 dBA ABOVE THE AVERAGE AMBIENT SOUND LEVEL IN ALL OCCUPIABLE AREAS. (NFPA 72 SECTION 6-3.1.2) (I.E. CLASSROOM AVERAGE AMBIENT ROOM NOISE IS 45 dBA PLUS 15 dBA EQUALS 60 dBA MINIMUM ALARM TONE REQUIRED)
- STROBES SHALL FLASH AT A RATE OF NOT EXCEEDING TWO FLASHES PER SECOND NOR BE LESS THAN ONE FLASH EVERY SECOND. (1999 NFPA 72 SECTION 4-4.2)
- AUDIBLE SIGNALS INTENDED FOR OPERATION IN THE PUBLIC MODE SHOULD HAVE A SOUND LEVEL OF NOT LESS THAN 75 dBA AT 10 FEET OR MORE THAN 110 dBA AT THE MINIMUM HEARING DISTANCE FROM THE AUDIBLE APPLIANCE. (CBC SECTION 3501.1)
- FINAL FIRE ALARM TEST SHALL BE MADE WITH THE DSA INSPECTOR OF RECORD (IOR). LOCAL FIRE AUTHORITY SHALL BE NOTIFIED OF DATE AND TIME OF FINAL FIRE ALARM TESTING AND SHALL ASSIST/WITNESS SUCH TESTING AT THEIR DISCRETION.
- FIRE ALARM CONTRACTOR SHALL PROVIDE A "RECORD OF COMPLETION" TO THE INSPECTOR OF RECORD (IOR)/DSA AFTER COMPLETION OF OPERATIONAL ACCEPTANCE TESTS. (1999 NFPA 72 SECTION 1-6.2.1 AND FIGURE 1-6.2.1)
- THE SUPERVISORY STATION SHALL BE LISTED AS EITHER UJFX OR UJUS BY UNDERWRITERS LABORATORIES OR SHALL MEET THE REQUIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011.

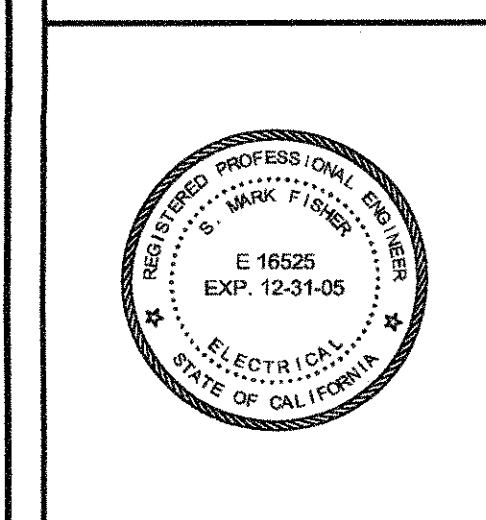
General Note
See Attached Supplemental Instructions
H's 1, 2 & 3 for Fire Alarm
Reasons

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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APP. NO. _____
AC. FILE NO. _____
DATE _____

FILE NO. _____
State Architect
215 City St., Suite 201
Oakland, CA 94612



GENERAL INFORMATION
SKYLINE COLLEGE SWING SPACE
PERMIT PACKAGE #3
SKYLINE COLLEGE
3300 COLLEGE DRIVE
SAN BRUNO, CA. 94066

REVISIONS

NO.	ITEM	DATE
Δ	CONSTRUCTION ISSUE	8/10/04
3	As-Built	3/10/05

CLIENT APPROVAL:

DRAWN BY: RCS
CHECKED BY: SMF
JOB NO: 2163.002
DATE: 5 FEB. 2004

F0.0
OF 8# SHEETS

DSA SUBMITTAL - 02.13.04