

4201 IVAR AVE, ROSEMEAD CA 91770

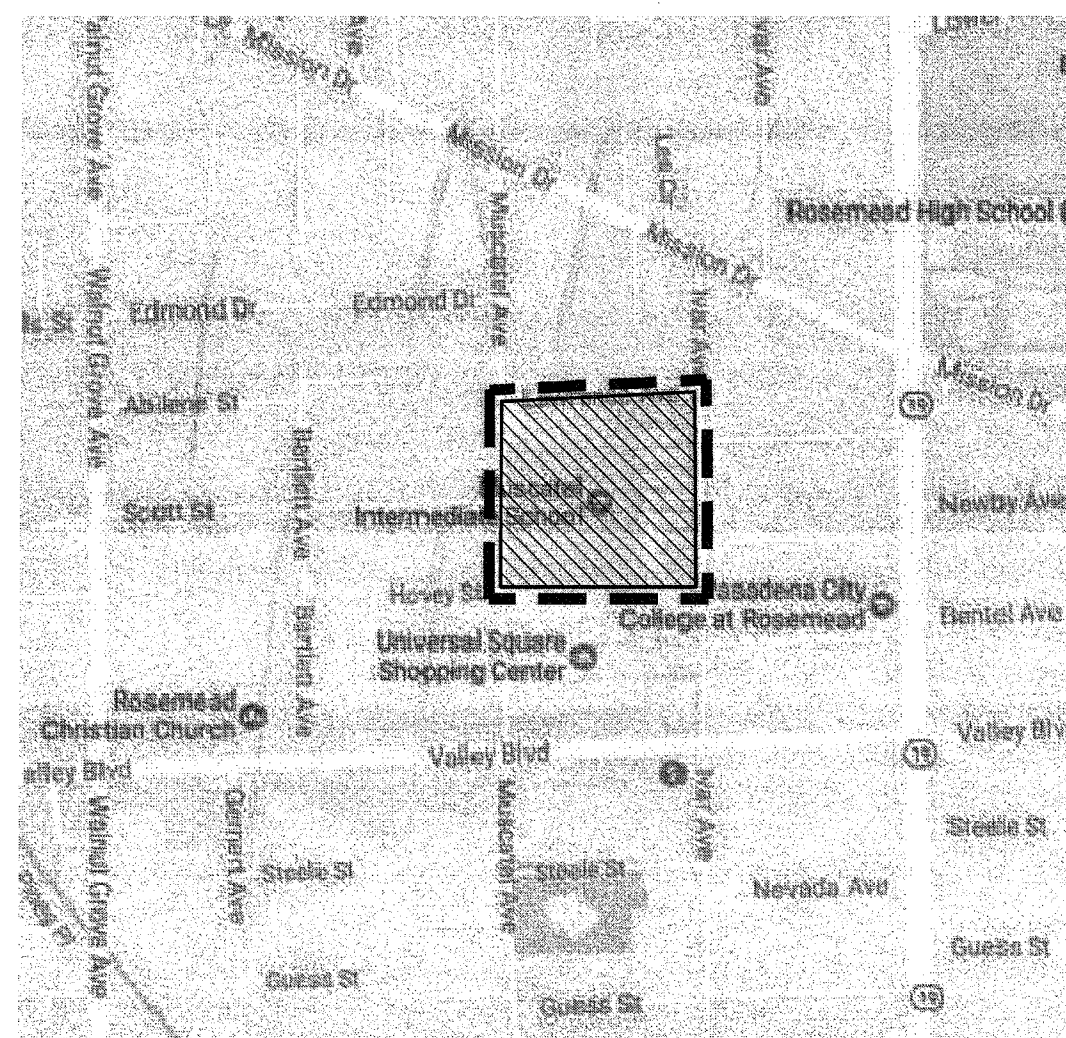
SHEET INDEX

33. A "DSA CERTIFIED" SHOP INSPECTOR EMPLOYED BY THE DISTRICT(OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN CALIFORNIA CODE OF REGULATIONS TITLE 24, CHAPTER 9, ARTICLE 6, SECTION 060000 (TITLE CDR)
34. A "DSA CERTIFIED" INSPECTOR WITH CLASS 3 CERTIFICATION IS REQUIRED FOR THIS PROJECT.
35. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS. SHOULD ANY EXISTING CONFLICTS BETWEEN THE REQUIREMENTS OF THE CALIFORNIA BUILDING STANDARDS ACT AND THE CALIFORNIA CODE OF REGULATIONS OCCUR, THE CONTRACT DOCUMENTS WHEREIN THE FINISH WORK WILL NOT COMPLY WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS SHALL PREVAIL OVER THE CALIFORNIA BUILDING STANDARDS ACT.
36. ALL PERMITS, APPLICATIONS, PLANS, SPECIFICATIONS, CONTRACTS, ADDENDUMS, CHANGE ORDERS, ETC., MUST BE DETAILED AND SIGNED BY THE REQUIRED WORK PERSONNEL. ALL SUCH DOCUMENTS SHALL BE SUBMITTED TO AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT PRIOR TO SUBMITTING THEM TO THE DISTRICT(OWNER). SEE REFERENCE SECTION 4-317 (C), CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE CDR).

	DETAIL NUMBER		ROOM IDENTIFICATION TAG
	SHEET NUMBER		COLUMN GRID REFERENCE
	WALL OR BUILDING SECTION NUMBER		LEVEL CHANGE
	SHEET NUMBER		LATH AND PLASTER
	EXTERIOR ELEVATION		GYPSUM BOARD; MOISTURE RESISTANT GYPSUM BOARD
	SHEET NUMBER DETAIL NUMBER		PLYWOOD
	INTERIOR ELEVATION		INSULATION BATT; LOOSE FILL
	SHEET NUMBER		CONCRETE
	DOOR NUMBER		CENTERLINE
	WINDOW TYPE		PROPERTY LINE/ BOUNDARY LINE
	NEW CONSTRUCTION KEYNOTE		WORK ABOVE, BELOW, OR BEYOND; (E) WORK TO BE REMOVED; FUTURE WORK AS NOTED ON DWGS.
	DEMOLITION KEYNOTE		TO BREAK CONTINUITY
	REVISION NUMBER		FINISH GRADE LINE, ELEVATION EARTH DIMENSION LINES
	INTERNATIONAL ACCESSIBILITY SYMBOL (I.S.A.)		CONTOUR LINE ON PLAN, SECTIONS OR ELEVATIONS
			MATCH LINE
			DIMENSION LINE
			SURFACE ELEVATION

ARCHITECT:
NAC | ARCHITECTURE
837 NORTH SPRING ST. THIRD FLOOR
LOS ANGELES, CA. 90012-2323
TEL: 323.475.8075
FAX: 323.859.3110
CONTACT: GARY CHRISTOFI
EMAIL: gchristofi@nacarchitecture.com

PACIFIC ENGINEERS GROUP
2740 W. MAGNOLIA BLVD. SUITE 205
BURBANK, CA. 91505
TEL: 818.748.1758
FAX: 818.763.9180
CONTACT: ABE JOSE
EMAIL: abejose@pacificeng.net

VICINITY MAP
MUSCATEL M.S. SITE

N
 PROJECT SITE:
MUSCATEL MIDDLE SCHOOL

PARTIAL LIST OF APPLICABLE CODES AS OF JANUARY 1, 2013

- PART 1 2016 BUILDING STANDARDS ADMINISTRATIVE CODE, TITLE 24 C.C.R.**
- PART 2 2016 CALIFORNIA BUILDING CODE, TITLE 24 C.C.R.**
(2009 INTERNATIONAL BUILDING CODE OF THE INTERNATIONAL CODE COUNCIL,
WITH CALIFORNIA AMENDMENTS)
- PART 3 2016 CALIFORNIA ELECTRICAL CODE, TITLE 24 C.C.R.**
(2009 NATIONAL ELECTRICAL CODE OF THE NATIONAL FIRE PROTECTION
ASSOCIATION, NFPA)
- PART 4 2016 CALIFORNIA MECHANICAL CODE, TITLE 24 C.C.R.**
(2009 UNIFORM MECHANICAL CODE OF THE INTERNATIONAL ASSOCIATION
OF PLUMBING & MECHANICAL OFFICIALS, IAPMO)
- PART 5 2016 CALIFORNIA PLUMBING CODE, PART 5, TITLE 24 C.C.R.**
(2009 UNIFORM PLUMBING CODE OF THE INTERNATIONAL ASSOCIATION OF
PLUMBING & MECHANICAL OFFICIALS, IAPMO)
- PART 6 2016 CALIFORNIA ENERGY CODE, TITLE 24 C.C.R.**
- PART 9 2016 CALIFORNIA FIRE CODE, TITLE 24 C.C.R.**
(2009 INTERNATIONAL FIRE CODE OF THE INTERNATIONAL CODE COUNCIL)
- PART 12 2016 CALIFORNIA REFERENCED STANDARDS, TITLE 24 C.C.R.**

PARTIAL LIST OF APPLICABLE STANDARDS

2013 CALIFORNIA BUILDING CODE (for SFM) REFERENCE STANDARDS CHAPTER 35

- | | | |
|-----------|---|--------------|
| NFPA 13 | AUTOMATIC SPRINKLER SYSTEMS (CALIFORNIA AMENDED) | 2013 EDITION |
| NFPA 14 | STANDPIPES SYSTEMS (CALIFORNIA AMENDED) | 2013 EDITION |
| NFPA 17 | DRY CHEMICAL EXTINGUISHING SYSTEMS | 2013 EDITION |
| NFPA 17a | WET CHEMICAL SYSTEMS | 2013 EDITION |
| NFPA 20 | STATIONARY PUMPS | 2013 EDITION |
| NFPA 24 | PRIVATE FIRE MAINS (CALIFORNIA AMENDED) | 2013 EDITION |
| NFPA 72 | NATIONAL FIRE ALARM CODE (CALIFORNIA AMENDED)
(NOTE SEE UL STANDARD 1971 FOR "VISUAL DEVICES") | 2013 EDITION |
| NFPA 253 | CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEMS | 2013 EDITION |
| NFPA 2001 | CLEAN AGENT FIRE EXTINGUISHING SYSTEMS | 2013 EDITION |

[illegible]

ROSEMEAD SCHOOL DISTRICT
MUSCATEL MIDDLE SCHOOL
NEW AUTOMATIC FIRE ALARM & VOICE EVACUATION
AT ENTIRE SITE



ROSEMEAD
SCHOOL DISTRICT
PARK ROSEMEAD
3907 ROSEMEAD BOULEVARD
ROSEMEAD, CA 91770

ARCHITECTURE

377 N. SPRING ST. | LOS ANGELES CA 90012-2323 | P: 323.475.9975 | F: 323.859.3110

NAC NO	161-17008
FILE	
DRAWN	HH
CHECKED	GC
DATE	03-21-2018

FILE: 19-91
IDENTIFICATION STAMP
ON OF THE STATE ARCHITECT
ELES BASIN REGIONAL OFFICE

APPL: A#03-118779

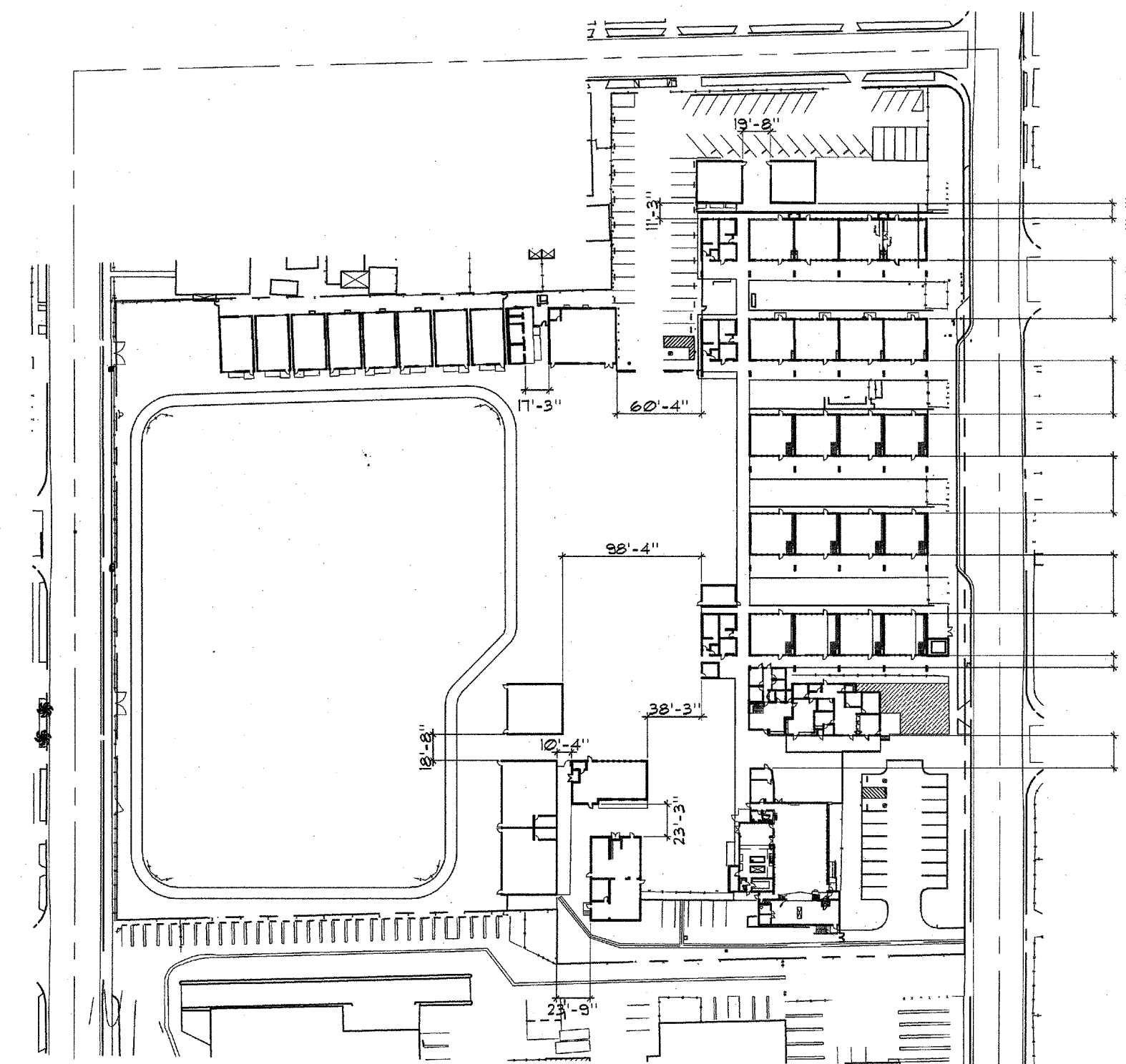
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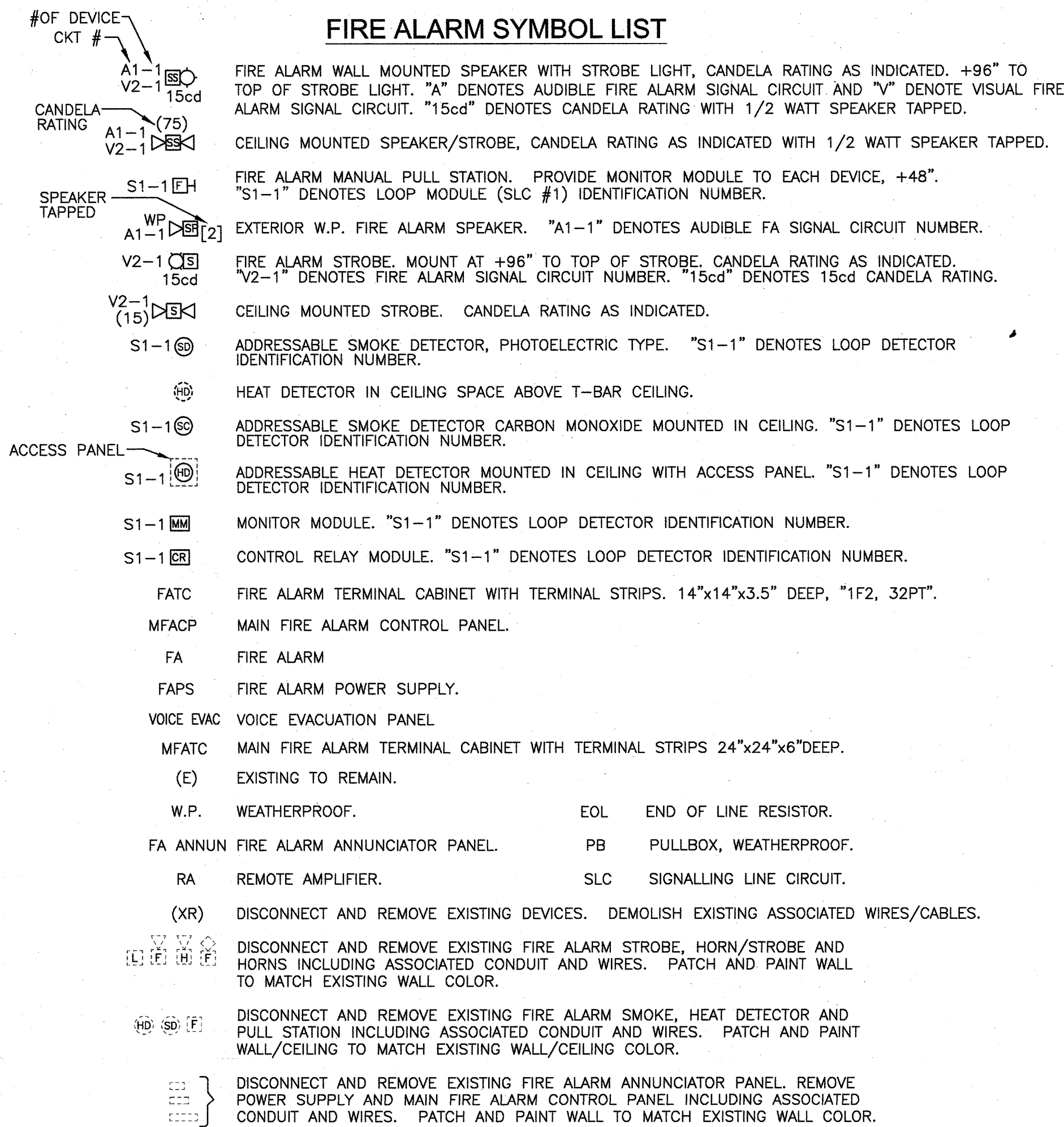
TITLE SHEET, INDEX TO DRAWINGS AND NOTES

BUILDING AREAS

BLDG. A	3,632 SF
BLDG. B	1,590 SF
BLDG. C	2,143 SF
BLDG. CR	1,440 SF
BLDG. D	5,942 SF
BLDG. E	4,860 SF
BLDG. F	3,874 SF
BLDG. G	3,839 SF
BLDG. H	4,830 SF
BLDG. I	4,830 SF
BLDG. J	980 SF
BLDG. K	961 SF
BLDG. O	960 SF
BLDG. P	984 SF

TOTAL 40,865 SF





FIRE ALARM CABLE AND WIRING

- "F" CABLE - "WEST PENN" NO. D980, 1 PAIR #18 NON-SHIELDED - FIRE ALARM ADDRESSABLE LOOP.
- "FW" CABLE - "WEST PENN" NO. AQ225, 1 PAIR #16 NON-SHIELDED - FIRE ALARM ADDRESSABLE LOOP (UNDERGROUND).
- "A" CABLE - 2#14 TWISTED PAIR, AUDIO CABLE (SPEAKER).
- "AW" CABLE - 2#14 TWISTED PAIR, AUDIO CABLE WET LOCATION (AUDIO).
- "V" CABLE - 2#12 AWG-FIRE ALARM VISUAL CIRCUIT CABLE.
- "S" CABLE - 2#14 TWISTED PAIR SYNC CABLE, WET LOCATION.
- "Z" CABLE - 2#14 TWISTED PAIR AMPLIFIER CABLE, WET LOCATION.
- "T" CABLE - CAT-5, 4 PAIR#24 TELEPHONE CABLE.

- F.A.V. 3/4", WITH ONE "F" CABLE, ONE "A" CABLE AND ONE "V" CABLE.
- F.A.V. 3/4" CONDUIT WITH ONE "F" CABLE.
- 2F 3/4" CONDUIT WITH TWO "F" CABLES.
- V 3/4" CONDUIT WITH ONE "V" CABLE.
- 2V 3/4" CONDUIT WITH TWO "V" CABLES.
- A 3/4" CONDUIT WITH ONE "A" CABLE.
- 2A 3/4" CONDUIT WITH TWO "A" CABLES.
- AW 3/4" CONDUIT WITH ONE "AW" CABLE.
- 2AW 3/4" CONDUIT WITH TWO "AW" CABLES.
- 2F,2A,2V 1-1/2" CONDUIT WITH TWO "F", TWO "A", TWO "V" CABLES.
- 2A,2V 1" CONDUIT WITH TWO "A", TWO "V" CABLES.
- F,A,V,2V 1" CONDUIT WITH ONE "F", ONE "A", TWO "V" CABLES.

SYMBOLS	COMPONENT	FIRELITE CAT. NO.	CSFM NO.
	FIRE ALARM CONTROL PANEL "MFACP"	MS-9600UDLS	7165-0075:0217
	FIRE ALARM ANNUNCIATOR	ANN-80	7120-0075:0211
	FIRE ALARM POWER SUPPLY	FCPS-24FS6	7315-0075:0206
	VOICE EVAC PANEL	EC-90/100	6911-0075:0226
	UDACT	DACT-UD2	7165-0075:0217
	PULL STATION	BG-12LX	7150-0075:0184
	REMOTE PAGE UNIT	ECC-RPU	6912-0075:0228
	REMOTE AMPLIFIER	ECC-SODA	7300-0075:0227
	CEILING MOUNTED SPEAKER/STROBE	SYSTEM SENSOR SPSRCL	7320-1653:0505
	VOICE EVAC EXTERIOR SPEAKER	SYSTEM SENSOR SPRK WITH MWBB BACKBOX	7320-1653:0201
	SPEAKER - STROBE (15cd)	SYSTEM SENSOR SPSRL	7320-1653:0505
	SPEAKER - STROBE (75cd)	SYSTEM SENSOR SPSRL	7320-1653:0505
	SPEAKER - STROBE (110cd)	SYSTEM SENSOR SPSRL	7320-1653:0505
	STROBE (15cd)	SYSTEM SENSOR SRL	7125-1653:0504
	STROBE (30cd)	SYSTEM SENSOR SRL	7125-1653:0504
	STROBE (75cd)	SYSTEM SENSOR SRL	7125-1653:0504
	SMOKE DETECTOR, PHOTOELECTRIC	SD355 W/B210LP	7272-0075:0194
	SMOKE DETECTOR, CARBON MONOXIDE	SD 355CO W/B210LF	7675-0075:0505
	MONITOR MODULE	MMF-300	7300-0075:0185
	CONTROL RELAY MODULE	CRF-300	7300-0075:0185
	HEAT DETECTOR	H365HT W/B210LP	7270-0075:0195
	LINEAR HEAT DETECTOR	NOTIFIER EPR-M	7270-0854:0101

ELECTRICAL DEMOLITION WORK

INCLUDE ALL DEMOLITION WORK AS PART OF THIS CONTRACT. EXISTING FIRE ALARM SYSTEM MUST REMAIN IN OPERATION DURING INSTALLATION OF THE NEW SYSTEM. IF EVER IT IS NECESSARY TO SHUT-OFF THE EXISTING SYSTEM DUE TO INTERCONNECTION WITH THE NEW PANELS AND DEVICES, A FIRE WATCH SHALL BE PROVIDED FOR THE DURATION OF THE SHUT DOWN AND UNTIL THE NEW SYSTEM BECOMES OPERATIONAL.

- REMOVAL OF (E) FACP @ MAIN BUILDING.
- ALL USABLE EXISTING FIRE ALARM COMPONENTS REMOVED FROM THIS PROJECT SHOULD BE RETURNED TO LOCAL MAINTENANCE AND OPERATIONS AREAS FOR SALVAGE. THE LOCAL SCHOOL DISTRICT MAINTENANCE ELECTRICAL SUPERVISOR SHOULD BE CONSULTED TO DETERMINE IF ANY COMPONENTS ARE SALVAGEABLE.
- IN WALL OR UNDERGROUND CONDUITS OF EXISTING FIRE ALARM SYSTEM SHALL BE ABANDONED IN PLACE. PROVIDE BLANK COVER/CAP. ALL ABANDONED CIRCUITS AND WIRING SHOULD BE REMOVED COMPLETELY RATHER THAN LABELED.

GENERAL FIRE ALARM NOTES

- THE SYSTEM SHALL CONFORM TO CALIFORNIA CODE OF REGULATIONS (CCR) TITLES 19 & 24 AS APPLICABLE TO THIS PROJECT.
- UPON COMPLETION OF SYSTEM INSTALLATION, THE SYSTEM SHALL BE TESTED IN THE PRESENCE OF AND IN A MANNER ACCEPTABLE TO DSA/IOB. CONTRACTOR TO SUPPLY NECESSARY TESTING EQUIPMENT INCLUDING A "DECIMETER" TO CHECK ACCEPTABLE NOISE LEVELS OF AUDIBLE DEVICES. PROVIDE TEST RESULTS PER NFPA 72 TO ARCHITECT, DSA, INSPECTOR OF RECORD, OWNER AND TO THE LOCAL FIRE AUTHORITY.
- PENETRATIONS OF ALL FIRE-RATED WALLS SHALL BE PROTECTED IN ACCORDANCE WITH THE CALIFORNIA BUILDING CODE, PART 2. PROVIDE DETAILS AND DESIGN NUMBERS.
- CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDA OR A CONSTRUCTION CHANGE DOCUMENTS (CCD) APPROVED BY THE OFFICE OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR.
- A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE OFFICE OF THE STATE ARCHITECT, SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.
- AUTOMATIC VOICE EVACUATION FIRE ALARM SYSTEMS SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION AS REQUIRED BY NFPA 72 AS AMENDED BY THE ARTICLE 91. THE SUPERVISING STATION SHALL BE LISTED AS EITHER UJFX OR UJWS BY UNDERWRITERS LABORATORY OR SHALL MEET THE REQUIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011.
- LOCATION AND PLACEMENT OF FIRE ALARM DEVICES ARE NOT TO BE CONSIDERED DIAGRAMMATIC IN NATURE. ANY CHANGE IN THE LOCATION OR PLACEMENT OF BOTH DETECTION AND NOTIFICATION DEVICES MUST BE REVIEWED AND APPROVED BY DSA FLS. FINAL APPROVAL OF DEVICE PLACEMENT IS SUBJECT TO FIELD VERIFICATION OF CODE COMPLIANCE.
- ALL WIRING, INITIATING DEVICES AND ANNUNCIATOR PANEL SHALL BE SUPERVISED TO THE PRINCIPAL POINT OF ANNUNCIATION.
- ALL TERMINATIONS IN TERMINAL CABINETS SHALL BE ON TERMINAL BLOCKS.
- EXISTING FIRE ALARM SYSTEM SHALL REMAIN OPERATIONAL UNTIL THE NEW SYSTEMS ARE TESTED, APPROVED, AND ACCEPTED BY SCHOOL DISTRICT; OTHERWISE HUMAN 24 HOURS FIRE WATCH SHALL BE PROVIDED BY FIRE ALARM CONTRACTOR.
- SPEAKER INTELLIGIBILITY SHALL BE MEASURED AND PART OF ACCEPTANCE TEST.

GENERAL NOTES

- "THE FIRE ALARM SYSTEM SHALL CONFORM TO ARTICLE 760 OF THE CALIFORNIA ELECTRICAL CODE, CURRENT CALIFORNIA TITLE 24 REQUIREMENTS, CALIFORNIA FIRE CODE, NFPA 72 AND 101 STANDARDS, AMERICAN WITH DISABILITY ACT (ADA) REQUIREMENTS."
- "PANELS MUST NOT BE MOUNTED HIGHER THAN 6 FEET AND SYSTEM STATUS DISPLAYS ARE TO BE AT EYE LEVEL (+60" AFF). NO EQUIPMENT OR RACEWAY MAY BE LOCATED UNDER A CABINET CONTAINING BATTERIES."
- AT LEAST ONE TERMINATION CABINET IN EACH BUILDING FOR TERMINATION OF ALL FIRE ALARM WIRING. PROVIDE A MAIN TERMINAL CABINET IN MAIN BUILDING FOR ROUTING ALL FIRE ALARM SYSTEM WIRING FOR ENTIRE SCHOOL.
- "CONTRACTOR SHALL INSTALL AND FURNISH A COMPLETE ADDRESSABLE FIRE ALARM VOICE EVACUATION SYSTEM, INCLUDING BUT NOT LIMITED TO WIRING, CONDUITS AND DEVICES REQUIRED FOR SATISFACTORY OPERATION OF SYSTEM."
- PROVIDE 120 VAC 20A DEDICATED CIRCUIT(S) FOR EACH CIRCUIT FEEDING FIRE ALARM EQUIPMENT. CIRCUIT BREAKER AT PANEL BOARD SHALL BE EQUIPPED WITH A HANDLE LOCK-ON DEVICE AND SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL". CIRCUIT NUMBER, ELECTRICAL PANEL NAME AND LOCATION SHALL BE PERMANENTLY AND CLEARLY MARKED ON THE INSIDE SURFACE OF FIRE ALARM UNIT. ACCESS TO CIRCUIT BREAKER(S) SHALL BE RESTRICTED TO AUTHORIZED PERSONNEL ONLY. PROVIDE SURGE SUPPRESSOR AT INPUT OF FIRE ALARM UNIT.
- ALL EXPOSED CONDUITS AND BOXES WITH THE EXCEPTION OF THOSE IN UNOCCUPIED AREAS LIKE JANITOR OR UTILITY ROOMS, SHALL BE PAINTED TO MATCH THE SURFACES WHERE INSTALLED.
- THE REPRESENTATION OF PHYSICAL PLACEMENT OF EXISTING CONDUITS HAS BEEN DEVELOPED FROM THE BEST INFORMATION AVAILABLE TO THE DISTRICT AT THE TIME THE DRAWINGS WERE PREPARED. THE DISTRICT PROVIDES THIS ONLY AS A GENERAL GUIDELINE FOR THE CONVENIENCE OF BIDDERS/CONTRACTORS AND DOES NOT GUARANTEE OR WARRANT IN ANY WAY EXPRESSLY OR IMPLIEDLY, THE ACCURACY OF THESE REPRESENTATIONS. NOTHING IN THIS DISCLAIMER AFFECTS IN ANY WAY THE DUTY OF THE CONTRACTOR TO FURNISH ACCURATE "AS BUILT" DRAWINGS AFTER THE COMPLETION OF THE CONTRACT.
- IN EXISTING BUILDINGS, CONTRACTORS SHALL NOT WORK IN AREAS CONTAMINATED BY MATERIALS MADE OF ASBESTOS UNTIL THE ASBESTOS MATERIALS HAVE BEEN REMOVED OR ENCAPSULATED.
- REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND EQUIPMENT AND MATERIAL APPROVED FOR USE UNDER THIS CONTRACT.
- CONTRACTOR SHALL NOT DISMANTLE OR REMOVE EXISTING FIRE ALARM SYSTEM DEVICES UNTIL THE NEW FIRE ALARM SYSTEM IS COMPLETELY OPERATIONAL AND THE UNUSED EXISTING SYSTEM DEVICES MUST BE REMOVED TO COMPLETE THE PROJECT. ALL ABANDONED CIRCUITS AND WIRING SHOULD BE REMOVED COMPLETELY RATHER THAN LABELED.
- QUANTITY OF WIRES SHOWN IN ALL CONDUITS IS FOR GENERAL GUIDELINE. SUPPLIER OF FA SYSTEM SHALL PREPARE CONSTRUCTION DRAWINGS SHOWING ALL NECESSARY WIRES AND CABLES AND VERIFY SIZES OF ALL CONDUITS SHOWN.
- DRAWINGS DO NOT SHOW ALL THE NECESSARY J-BOXES AND PULL BOXES WHICH WILL BE REQUIRED THROUGHOUT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL THESE BOXES AS NECESSARY TO TERMINATE CONDUITS AND RACEWAYS. PAINT BOXES TO MATCH COLOR OF THE FINISHED SURFACE THAT THE BOXES ARE ATTACHED BUILDINGS.
- ALL JUNCTION BOXES AND DEVICES INDICATED ON BUILDING EXTERIORS SHALL BE WEATHERPROOF TYPE.
- FIRE ALARM WIRES SHALL BE COPPER TYPE THWN/THHN.
- WHEN ALL FIRE ALARM DEVICES ARE INSTALLED AND PROGRAMMING IS COMPLETE, THE FIRE ALARM DEVICE MAP IN THE SCHOOL MAIN OFFICE SHOULD BE UPDATED TO INDICATE TO SCHOOL PERSONNEL THE LOCATIONS OF THE NEW DEVICES.
- SPLICING OF FA SYSTEM WIRING IS NOT ALLOWED. JUNCTION BOXES SHALL NOT CONTAIN SPLICES. CONDUCTORS SHALL BE PULLED THROUGH. TERMINATIONS SHALL BE PERFORMED, ON DEVICE TERMINALS, TERMINAL BLOCKS IN CABINETS AND EQUIPMENT TERMINALS.
- LABEL DESCRIPTIONS" INDICATING DEVICE TYPE AND LOCATION THAT ARE DISPLAYED ON THE FIRE ALARM LCD DISPLAY SHOULD BE CLEAR AND EASILY UNDERSTOOD BY THE OFFICE STAFF. DESCRIPTIONS SHOULD BE BASED ON THE STAFF'S UNDERSTANDING OF THE SITE AND NOT ON INFORMATION TAKEN FROM FRONTS.
- PROVIDE 24 HOURS FIRE WATCH DURING CONSTRUCTION. SHOULD EXISTING SYSTEM NEED TO BE INTERRUPTED. INCLUDE ALL COST IN ORIGINAL BID.
- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY THE TYPE OF CEILING CONSTRUCTION AND TO PROVIDE THE PROPER TYPE OF BOX MOUNTING AND SUPPORT FOR FIRE ALARM INITIATION DEVICES.

CONSTRUCTION NOTES

- VERIFY CONDUIT STUB UP AREAS OUTSIDE ALL BUILDINGS AND STUB UP AT BEST AREAS TO AVOID EXISTING WINDOWS, DOORS, ETC.
- PERFORM THE NECESSARY DEMOLITION WORK WITH GREAT CARE AND WITH SMALL TOOLS IN ORDER NOT TO JEOPARDIZE EXISTING STRUCTURE AND EQUIPMENT TO REMAIN.
- HEAT DETECTORS INSTALLED ABOVE SUSPENDED CEILING MUST HAVE THEIR LOCATIONS CLEARLY MARKED ABOVE THE CEILING AND BE EASILY ACCESSIBLE. LABEL LETTERING SHOULD BE 1/2" HIGH, RED ON WHITE BACKGROUND AND BOLD ENOUGH TO BE EASILY SEEN BY PERSONNEL FROM THE FLOOR.
- PROVIDE ACCESS PANEL AT EACH NEW HEAT DETECTOR INSTALLED INSIDE ATTIC OR CEILING SPACE EXCEPT IN T-BAR CEILING AREAS. INCLUDE IN BID TO PROVIDE TEMPORARY ACCESS OPENING AT NON-T-BAR CEILING AREAS TO INSTALL CONDUITS AND BOXES FOR FIRE ALARM SYSTEM AND PATCH TO MATCH EXISTING FINISH AFTER INSTALLATION. VERIFY EXISTING CEILING BEFORE SUBMITTING BID. CUT WALL AND MODIFY CEILING AS REQUIRED DURING CONDUITS/BOXES INSTALLATION AND PATCH TO MATCH EXISTING.
- REPLACE DAMAGED CEILING TILES AND CEILING TILES WITH HOLES DUE TO REMOVAL OF EXISTING DEVICES, J-BOX, CONDUITS, WIREMOLD RACEWAYS & ETC.
- UNLESS SPECIFICALLY APPROVED ON THE DRAWINGS, NO STRUCTURAL MEMBER SHALL BE ALTERED BY CUTTING, BORING, BRAZING, DRILLING, NOTCHING, WELDING AND ETC. WITHOUT THE SEOR AND DSA REVIEW AND APPROVAL.
- SEAL AND CAULK AS REQUIRED AT ALL PENETRATIONS.
- WHEREVER POSSIBLE, CONCEAL NEW CONDUITS AND BOXES IN CEILING, ATTIC SPACE OR WALLS. FISH CONDUITS INSIDE OF STUD WALLS WHERE POSSIBLE. WHERE EXPOSED RACEWAYS AND BOXES HAVE TO BE USED IN FINISHED AREAS, USE "WIREMOLD" TYPE SURFACE RACEWAYS. FOR ONE SD PER CLASSROOM, RUN THE WIREMOLD FROM WALL J-BOX UP TO THE SD ONLY. FOR TWO SD PER CLASSROOM, LOCATE THE TWO SD CLOSER TO WALLS WITH A CENTER-TO-CENTER SPACE BETWEEN SD IN COMPLIANCE WITH NFPA-72 AND USE A SHORT PIECE OF WIREMOLD FROM EACH WALL J-BOX TO EACH SD. DO NOT RUN WIREMOLD ACROSS THE CEILING BUT RUN ALONG WALLS.
- WHEN RUNNING WIREMOLD RACEWAYS, RUN RACEWAYS HIGH ON WALL AT CEILING LINE OR LOW NEAR FLOOR AND SWEEP DOWN OR UP TO DEVICES. TAKE CARE TO MAKE INSTALLATION NEAT AND UNOBJECTIONABLE. DRAWINGS DO NOT SHOW NECESSARY INTERMEDIATE BOXES. INCLUDE ALL NECESSARY FITTINGS, PULL AND J-BOXES IN BID.
- IF STRUCTURAL MEMBERS NOT INDICATED TO BE REMOVED ARE INTERFERING WITH NEW CONSTRUCTION, OBTAIN WRITTEN AUTHORIZATION FROM ENGINEER BEFORE REMOVING SUCH MEMBERS. DSA APPROVAL REQUIRED.
- COORDINATE THE DEMOLITION WORK AND NEW CONSTRUCTION TO PERMIT CONTINUED OPERATION OF ALL FACILITIES NECESSARY TO BE KEPT IN OPERATION.

CODES, STANDARDS & GUIDES

List of 2016 California Code of Regulations (C.C.R.).

Applicable Codes Effective January 1, 2017:

- 2016 California Building Standards Administrative Code, (CAC), Part 1, Title 24 C.C.R.
- 2016 California Building Code, (CBC), Part 2, Title 24 C.C.R. Volumes 1 & 2.
- (Based on 2015 Edition International Building Code with 2016 California Amendments)
- 2016 California Electrical Code, (CEC), Part 3, Title 24 C.C.R.
- (Based on 2014 National Electrical Code with 2017 California Amendments)
- 2016 California Mechanical Code, (CMC), Part 4, Title 24 C.C.R.
- (Based on 2015 IAPMO Uniform Mechanical Code with 2016 California Amendments)
- 2016 California Plumbing Code, (CPC), Part 5, Title 24 C.C.R.
- (Based on 2015 IAPMO Uniform Plumbing Code with 2016 California Amendments)
- 2016 California Energy Code, Part 6, Title 24 C.C.R.
- (Based on 2015 Edition California Energy Commission Building Energy Efficiency Standards)
- 2016 California Fire Code, (CFC), Part 9, Title 24 C.C.R.
- (Based on 2015 International Fire Code with 2016 California Amendments)
- 2016 California Existing Building Code, (CEBC), Part 10, Title 24 C.C.R.
- (Based on 2015 International Existing Building Code with 2016 California Amendments)
- 2016 California Green Building Standards Code, (CGC), Part 11, Title 24 C.C.R.
- 2016 California Reference Standards, Part 12, Title 24 C.C.R.
- (Partial List - See CBC Chapter 35 and CFC Chapter 45)

Applicable Standards and Guide:

- 2016 Edition NFPA 13 Installation of Sprinkler System (California Amendments)
- 2016 Edition NFPA 14 Installation of Standpipe and Hose Systems
- 2017 Edition NFPA 17 Dry Chemical Extinguishing Systems
- 2016 Edition NFPA 17A Wet Chemical Extinguishing Systems
- 2016 Edition NFPA 20 Installation of Stationary Pumps for Fire Protection
- 2016 Edition NFPA 24 Installation of Private Fire Service Mains and Their Appurtenances
- 2016 Edition NFPA 72 National Fire Alarm Code (California Amended)
- (Note see UL Standard 1971 for "Visual Devices")
- 2015 Edition NFPA 253 Critical Radiant Flux of Floor Covering Systems
- 2012 Edition NFPA 2001 Clean Agent Fire Extinguishing Systems

Federal Codes and Standards:

Americans with Disabilities Act (ADA), Title II or Title III

Title II: Uniform Federal Accessibility Standards (UFAS) or ADA Standards for Accessible Design (Appendix A of 28 CFR, Part 36).

Title III: ADA Standards for Accessible Design (Appendix A of 28 CFR, Part 36)

MFP Component Anchorage Note

All mechanical, plumbing, and electrical components shall be anchored and installed per the details on the DSA approved construction documents. Where no detail is indicated, the following components shall be anchored or braced to meet the force and displacement requirements prescribed in the 2013 CBC, Sections 1616A.1.18 through 1616A.1.26 and ASCE 7-10 Chapter 13, 26 and 30.

- All permanent equipment and components.
- Temporary or movable equipment that is permanently attached (e.g. hard wired) to the building utility services such as electricity, gas or water.
- Movable equipment which is stationed in one place for more than 8 hours and heavier than 400 pounds are required to be anchored with temporary attachments.

The following mechanical and electrical components shall be positively attached to the structure, but the attachment need not be detailed on the plans. These components shall have flexible connections provided between the component and associated ductwork, piping, and conduit.

- Components weighing less than 400 pounds and have a center of mass located 4 feet or less above the adjacent floor or roof level that directly support the component.
- Components weighing less than 20 pounds, or in the case of distributed systems, less than 5 pounds per foot, which are suspended from a roof or floor or hung from a wall.

For those elements that do not require details on the approved drawings, the installation shall be subject to the approval of the design professional in general responsible charge or structural engineer delegated responsibility and the DSA District Structural Engineer. The project inspector will verify that all components and equipment have been anchored in accordance with above requirements.

Piping, Ductwork, and Electrical Distribution System Bracing Note

Piping, ductwork, and electrical distribution systems shall be braced to comply with the forces and displacements prescribed in ASCE 7-10 Section 13.3 as defined in ASCE 7-10 Section 13.6.3.6, 13.6.7, 13.6.8, and 2013 CBC, Sections 1616A.1.23, 1616A.1.24, 1616A.1.25 and 1616A.1.26.

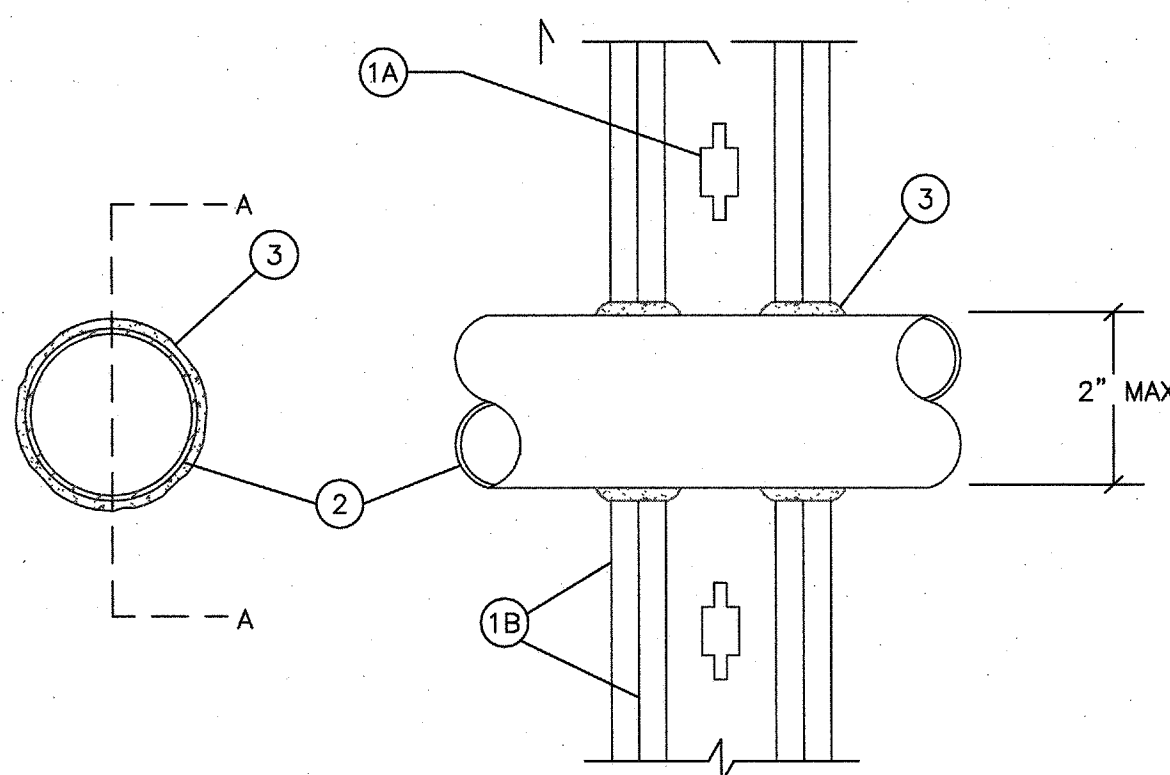
The method of showing bracing and attachments to the structure for the identified distribution system are as noted below. When bracing and attachments are based on preapproved installation guide (e.g., SMACNA or OSHPD OPM), copies of the bracing system installation guide or manual shall be available on the jobsite prior to the start of and during the hanging and bracing of the distribution systems. The Structural Engineer of Record shall verify the adequacy of the structure to support the tranger and brace loads.

Mechanical Piping (MP), Mechanical Ducts (MD), Plumbing Piping (PP), Electrical Distribution Systems (E):

MP□MD□PP□E□ - Option 1: Detailed on the approved drawings with project specific notes and details.

MP□MD□PP□E□ - Option 2: Shall comply with the applicable OSHPD Pre-Approval (OPM #)

MP□MD□PP□E□ - Option 3: Shall comply with the SMACNA Seismic Restraint Manual, OSHPD Edition (2009), including any addenda. Fasteners and other attachments not specifically identified in the SMACNA Seismic Restraint Manual, OSHPD Edition, are detailed on the approved drawings with project specific notes and details. The details shall account for the applicable Seismic Hazard Level _____ and Connection Level _____ for the project and conditions.



SECTION A-A

THROUGH - PENETRATION FIRESTOP SYSTEM

System Nos. W-1001
June 15, 2005
F Ratings - 1, 2, 3 and 4 Hr (See Items 2 and 3)
T Ratings - 0, 1, 2, 3 and 4 Hr (See Item 3)
I Ratings At Ambient - less than 1 CFM/sq ft
I Rating At 400 F - less than 1 CFM/sq ft

- Wall Assembly - The 1, 2, 3 or 4 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
 - Studs - Rigid framing may consist of either wood studs (max 2 hr fire rated assembly) or steel channel studs. Wood studs consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406mm) OC with nom 2 by 4 in. (51 by 102 mm) lumber end plates and cross braces. Steel studs to be min 3-5/8 in. (92 mm) wide by 1-3/8 in. (35 mm) deep channels spaced max 24 in. (610 mm) OC.
 - Gypsum Board - Nom 1/2 or 5/8 in. (13 or 16 mm) thick, 4 ft. (122 cm) wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 26 in. (660 mm).
- Through Penetrant - One Metallic pipe, conduit or tubing installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min of 0 in. (0 mm) (point contact) to max 2 in. (51 mm). Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
 - Steel Pipe - Nom 24 in. (610 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - Iron Pipe - Nom 24 in. (610 mm) diam (or smaller) service weight (or heavier) cast iron soil pipe, nom 12 in. (305 mm) diam (or smaller) or Class 50 (or heavier) ductile iron pressure pipe.
 - Conduit - Nom 6 in. (152 mm) diam (or smaller) steel conduit or nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing.
 - Copper Tubing - Nom 6 in. (152 mm) diam (or smaller) Type 1 (or heavier) copper tubing.
 - Copper Pipe - Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.
 - Through Penetrating Product - Flexible Weld Piping - The following types of steel flexible metal gas piping may be used:
 - Nom 2 in. (51 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly. OMGA FLEX INC.
 - Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly. TITELUX CORP. A BUNNY CO.
 - Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly. WND MFG INC.
- Fill, Void or Cavity Material - Caulk or Sealant - Min 5/8, 1-1/4, 1-7/8 and 2-1/2 in. (16, 32, 48, and 64 mm) thickness of caulk for 1, 2, 3 and 4 hr rated assemblies, respectively, applied within annulus, flush with both surfaces of wall. Min 1/4 in. (6mm) diam bead of caulk applied to gypsum board/penetrant interface at point contact location on both sides of wall. The hourly F Rating of the fire stop system is dependent upon the hourly fire rating of the wall assembly in which it is installed, as shown in the following tables. The hourly T Rating of the firestop system is dependent upon the type or size of the pipe or conduit and the hourly fire rating of the wall assembly in which it is installed, as tabulated below.

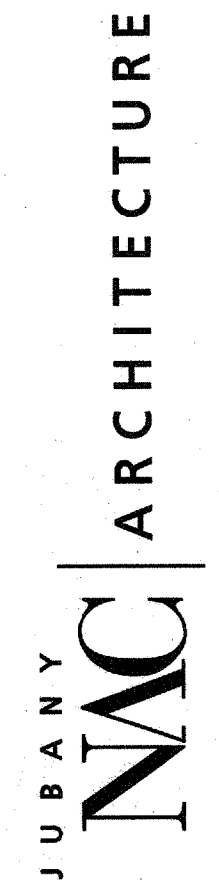
Max Pipe or Conduit Diam in. (mm)	F Rating Hr	T Rating Hr
1 (25)	1 or 2	0; 1 or 2
1 (25)	3 or 4	3 or 4
4 (102)	1 or 2	0
6 (152)	3 or 4	0
12 (305)	1 or 2	0

- + When copper pipe is used, T Rating is 0 hr.
3M COMPANY - CP 229B+ caulk or FB-3000 WF sealant.
Bearing the UL Classification Marking

ROSEMEAD SCHOOL DISTRICT
MUSCATEL MIDDLE SCHOOL
FIRE ALARM UPGRADE AT ENTIRE SITE



ROSEMEAD
SCHOOL DISTRICT
PARK ROSEMEAD
3307 ROSEMEAD BOULEVARD
ROSEMEAD, CA 91770



NAC NO 161-17008
FILE HY
DRAWN AJ
CHECKED
DATE 03-21-2018

FILE: 19-91
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
LOS ANGELES BASIN REGIONAL OFFICE

APPL: A#03-118779

AC FLS SS
DATE: 09062018

SYMBOL LIST AND NOTES

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FA001

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PACIFIC ENGINEERS GROUP
Consulting Electrical Engineers
2740 W. Magnolia Boulevard, Suite 205
Burbank, CA 91505
(818) 748-1758
FAX (818) 763-9180 Y17-013

FIRE ALARM SIGNAL CIRCUIT SCHEDULE															
BLDG.	CKT. NO.	WALL QUAN. STROBE 15 cd 0.043	WALL QUAN. STROBE 30 cd 0.063	WALL QUAN. STROBE 75 cd 0.107	WALL QUAN. STROBE 110cd 0.148	CEIL. QUAN. STROBE 15cd 0.041	CEIL. QUAN. STROBE 30cd 0.063	CEIL. QUAN. STROBE 75cd 0.111	CEIL. QUAN. STROBE 110cd 0.158	TOTAL AMPS	WIRE SIZE	DISTANCE (IN FEET)	TO MFACP	TO POWER EXTENDER	PERCENT VOLTAGE DROP
A	V1	6				1	3	2		0.71	#12	275		FAPS-A	2.69
E	V2	1	2					4		0.61	#12	300		FAPS-A	2.53
F	V3							4		0.44	#12	375		FAPS-A	2.29
G	V4							4		0.44	#12	575		FAPS-A	3.52
H	V5	1	2					4		0.61	#12	180		FAPS-H	1.52
I	V6	1	2					6		0.84	#12	368		FAPS-H	4.24
O	V7	2	2					2		0.43	#12	180		FAPS-O	1.08
O	V8							8		0.89	#12	525		FAPS-O	6.43
D	V9	4	3	4						0.79	#12	400		FAPS-D	4.35
B	V10				1		2	1		0.39	#12	285		FAPS-B	1.51
B	V11								3	0.47	#12	225		FAPS-B	1.47

I = TOTAL CURRENT FLOW IN ALARM CONDITION
L = LENGTH OF CIRCUIT FROM SUPPLY TO LAST DEVICE (IN FEET)
21.6 = RESISTIVITY OF COPPER CONDUCTOR PER CIRCULAR MILL
C.M. = CROSS SECTIONAL AREA OF CONDUCTOR IN CIRCULAR MILLS
VOLTAGE DROP = $\frac{I \times L \times 21.6}{C.M.}$

BATTERY SIZING CALCULATION

ECC-50/100 Voice Control Panel

Quantity	Device Type	Model Number	Standby Current	Total Standby Current	Alarm Current	Total Alarm Current
1	ECC-50/25		0.06500	0.06500	2.00000	2.00000
24	Speaker 25V	Speaker - 1/2 Watt Tap	0.00000	0.00000	0.02000	0.48000
20	Speaker 25V	Speaker - 2 Watt Tap	0.00000	0.00000	0.08000	1.60000
2	Speaker 25V	Speaker - 1/4 Watt Tap	0.00000	0.00000	0.01000	0.02000
3	Speaker 25V	Speaker - 1 Watt Tap	0.00000	0.00000	0.01000	0.12000
			Standby Load		Alarm Load	
			0.065 Amps		4.340 Amps	
			Standby Time: 24 Hours		Alarm Time: 15 Minutes	
			Total Standby Load: 1.56 Amp*Hours		Total Alarm Load: 1.09 Amp*Hours	
			Batteries Provided: (2) BAT-12180		Available Battery: 14.40 A.H.	
			Battery Size: 18.00 A.H.		Load (ALM + STBY): 2.65 A.H.	
			De-Rated Size(80%): 14.40 A.H.		Spare Capacity: 11.75 A.H.	

BATTERY SIZING CALCULATION

REMOTE AMPLIFIER - AMP-H

ECC 50DA

Quantity	Device Type	Model Number	Standby Current	Total Standby Current	Alarm Current	Total Alarm Current
1	50DA/25		0.06500	0.06500	2.00000	2.00000
20	Speaker 25V	Speaker - 1/2 Watt Tap	0.00000	0.00000	0.02000	0.40000
10	Speaker 25V	Speaker - 2 Watt Tap	0.00000	0.00000	0.08000	0.80000
4	Speaker 25V	Speaker - 1/4 Watt Tap	0.00000	0.00000	0.01000	0.04000
			Standby Load		Alarm Load	
			0.065 Amps		3.240 Amps	
			Standby Time: 24 Hours		Alarm Time: 15 Minutes	
			Total Standby Load: 1.56 Amp*Hours		Total Alarm Load: 0.81 Amp*Hours	
			Batteries Provided: (2) BAT-12180		Available Battery: 14.40 A.H.	
			Battery Size: 18.00 A.H.		Load (ALM + STBY): 2.37 A.H.	
			De-Rated Size(80%): 14.40 A.H.		Spare Capacity: 12.03 A.H.	

BATTERY CALCULATIONS PANEL MFACP "FIRELITE MS-9600 UDLs"

QTY.	DESCRIPTION	STANDBY		ALARM	
		DEVICE	AMPS	DEVICE	AMPS
1	MS-9600 UDLs CPU	0.29000	0.29000	0.53000	0.53000
6	ADDR. INPUT MOD	0.00055	0.00330	0.00055	0.00330
1	MIN-INPUT MODULE	0.00055	0.00055	0.00055	0.00055
25	ADDR. RELAY MODULE	0.00055	0.01375	0.00055	0.01375
8	ADDR. MANUAL PULL STATION	0.00055	0.00440	0.00055	0.00440
112	ADDR. HEAT DETECTOR	0.00055	0.06160	0.00055	0.06160
111	ADDR. PHOTO SMOKE DET	0.00055	0.06105	0.00055	0.06105
40	ADDR. PHOTO SMOKE AND CARBON MONOXIDE DET	0.00055	0.02200	0.00055	0.02200
1	SLC EXPANDER (SLC-2LS)	0.05500	0.05500	0.05500	0.05500
1	REMOTE MICROPHONE ECC-RM	0.02000	0.02000	0.02500	0.02500
1	LED ANNUNCIATOR (ANN-80)	0.03500	0.03500	0.14500	0.14500
1	UDACT-UD2	0.03500	0.03500	0.20000	0.20000
1	VOICE CONTROL MODULE	0.07000	0.07000	0.10000	0.10000
1	50 WATT AMPLIFIER ECC-50	0.01000	0.01000	0.10000	0.10000
TOTAL			0.6817		1.3217
		STANDBY		ALARM	
		24 HOURS	16.3596	15 MIN.	0.3304
		TOTAL	16.69 A.H.		
		BATTERY WITH 10% DERATING INCLUDED:		18.36 A.H.	
		BATTERY:		25 A.H.	
		SPARE:		6.64 A.H.	

VOICE EVACUATION FIRE ALARM SEQUENCE OF OPERATION

DEVICE / ACTION	MANUAL PULL STATION	AREA SMOKE DETECTORS	SMOKE DETECTOR CARBON MONOXIDE	AREA HEAT DETECTORS	POWER FAILURE	KITCHEN FIRE SUPPRESSION	NOTES
ANNUNCIATE ALARM AT FACP AND REMOTE ANNUNCIATOR	X	X	X	X			
ANNUNCIATE SUPERVISORY CONDITION AT FACP AND REMOTE ANNUNCIATOR	X	X	X	X	X	X	
ANNUNCIATE TROUBLE AT FACP AND REMOTE ANNUNCIATOR	X	X	X	X	X	X	[1]
ACTIVATE AUDIBLE/VISUAL SIGNAL THROUGHOUT SCHOOL (ALARM)	X	X	X	X		X	
CONTACT CENTRAL STATION (UDACT)	X	X	X	X	X	X	
SHUT DOWN AIR HANDLING EQUIPMENT		X	X	X			[2]
SHUT-OFF AUTONOMOUS PA	X	X	X	X		X	

[1] INDICATE TROUBLE ON WIRING FAULT OR DEVICE AS REQUIRED.

[2] SHUT DOWN ONLY AIR HANDLER EQUIPMENT IN THE BUILDING OR AREA WHERE ALARM CONDITION OCCURS.

VOICE EVACUATION CONTROL PANEL SPEAKER CIRCUIT LOAD CALCULATION

SPEAKER CIRCUIT DESCRIPTION			PANEL CIRCUIT NUMBER	WIRE GAUGE (18, 16, 14, 12)	CIRCUIT VOLTAGE (25 OR 70 VRMS)	APPLIANCES QUANTITIES / TAP VALUES				TOTAL CIRCUIT LOAD (WATTS)	ESTIMATED CIRCUIT LENGTH (FEET)	ACTUAL WIRE/LOSS (dB)	MAXIMUM ALLOWABLE CKT. LENGTH (FEET)	TOTAL CIRCUIT RESISTANCE (OHMS)
AMPLIFIER# A	AMPLIFIER LOCATION	CIRCUIT LOCATION				SPEAKER TAPPED AT	SPEAKER TAPPED AT	SPEAKER TAPPED AT	SPEAKER TAPPED AT					
ECC - 50/100	BUILDING A UTILITY RM 112	BUILDING A & E	A1	14 AWG	25 Vrms	2	10	0	5	15.50 Watts	450 ft.	-0.49 dB	3,214 ft.	2.3 Ohms
ECC - 50/100	BUILDING A UTILITY RM 112	BUILDING F & G	A2	14 AWG	25 Vrms	0	8	0	4	12.00 Watts	280 ft.	-0.24 dB	4,151 ft.	1.5 Ohms
ECC - 50/100	BUILDING A UTILITY RM 112	BUILDING D	A3	14 AWG	25 Vrms	0	2	2	3	9.00 Watts	550 ft.	-0.35 dB	5,535 ft.	2.9 Ohms
ECC - 50/100	BUILDING A UTILITY RM 112	BUILDING B, C, CR, Q, P	A4	14 AWG	25 Vrms	0	4	1	8	19.00 Watts	650 ft.	-0.85 dB	2,622 ft.	3.4 Ohms

REMOTE AMPLIFIER SPEAKER CIRCUIT LOAD CALCULATION

SPEAKER CIRCUIT DESCRIPTION			PANEL CIRCUIT NUMBER	WIRE GAUGE (18, 16, 14, 12)	CIRCUIT VOLTAGE (25 OR 70 VRMS)	APPLIANCES QUANTITIES / TAP VALUES				TOTAL CIRCUIT LOAD (WATTS)	ESTIMATED CIRCUIT LENGTH (FEET)	ACTUAL WIRE/LOSS (dB)	MAXIMUM ALLOWABLE CKT. LENGTH (FEET)	TOTAL CIRCUIT RESISTANCE (OHMS)
AMPLIFIER# H	AMPLIFIER LOCATION	CIRCUIT LOCATION				SPEAKER TAPPED AT	SPEAKER TAPPED AT	SPEAKER TAPPED AT	SPEAKER TAPPED AT					
ECC - 50DA	BUILDING H CLASSROOM 22	BUILDING H	A5	14 AWG	25 Vrms	2	4	0	3	8.50 Watts	475 ft.	-0.29 dB	5,860 ft.	2.5 Ohms
ECC - 50DA	BUILDING H CLASSROOM 22	BUILDING I	A6	14 AWG	25 Vrms	2	6	0	3	9.50 Watts	600 ft.	-0.40 dB	5,243 ft.	3.1 Ohms
ECC - 50DA	BUILDING H CLASSROOM 22	BLDG. O, TOILET, CRS	A7	14 AWG	25 Vrms	0	10	0	4	13.00 Watts	800 ft.	-0.72 dB	3,832 ft.	4.2 Ohms
ECC - 50DA	BUILDING H CLASSROOM 22	SPARE		14 AWG	25 Vrms	0	0	0	0	0.00 Watts	0 ft.	0.00 dB	0 ft.	0.0 Ohms

BUILDING "A"

BATTERY CALCULATIONS - POWER EXTENDER FAPS-A					
EQUIPMENT MODEL	QUANTITY	SUPERVISORY CURRENT, A		ALARM CURRENT, A	
		UNIT	TOTAL	UNIT	TOTAL
POWER SUPPLY 24FS6	1	0.04	0.04	0.16	0.16
75cd ALARM STROBE LIGHT 24 VDC	0	0	0	0	0
75cd ALARM STROBE LIGHT 24 VDC (CEILING)	14	0	0	0.111	1.554
30cd ALARM STROBE LIGHT 24 VDC (CEILING/WALL)	5	0	0	0.063	0.315
15cd ALARM STROBE LIGHT 24 VDC (CEILING)	1	0	0	0.041	0.041
15cd ALARM STROBE LIGHT 24 VDC (WALL)	7	0	0	0.043	0.301
STANDBY AH		SUB TOTAL		SUB TOTAL	
ALARM AH		HOURS		HOURS	
TOTAL		AH STANDBY		AH ALARM	
11 AH BATTERY PACK PROVIDED					
(0.25 = 15 min)					

BUILDING "B"

BATTERY CALCULATIONS - POWER EXTENDER FAPS-B					
EQUIPMENT MODEL	QUANTITY	SUPERVISORY CURRENT, A		ALARM CURRENT, A	
		UNIT	TOTAL	UNIT	TOTAL
POWER SUPPLY 24FS6	1	0.04	0.04	0.16	0.16
110cd ALARM STROBE LIGHT 24 VDC (WALL)	1	0	0	0.148	0.148
115cd ALARM STROBE LIGHT 24 VDC (CEILING)	3	0	0	0.158	0.474
75cd ALARM STROBE LIGHT 24 VDC (CEILING)	1	0	0	0.111	0.111
30cd ALARM STROBE LIGHT 24 VDC (CEILING)	2	0	0	0.063	0.126
15cd ALARM STROBE LIGHT 24 VDC	0	0	0	0	0
STANDBY AH		SUB TOTAL		SUB TOTAL	
ALARM AH		HOURS		HOURS	
TOTAL		AH STANDBY		AH ALARM	
0.96		0.04		1.019	
0.25		24.00		0.25	
1.21		0.96		0.25475	
7 AH BATTERY PACK PROVIDED (0.25 = 15 min)					

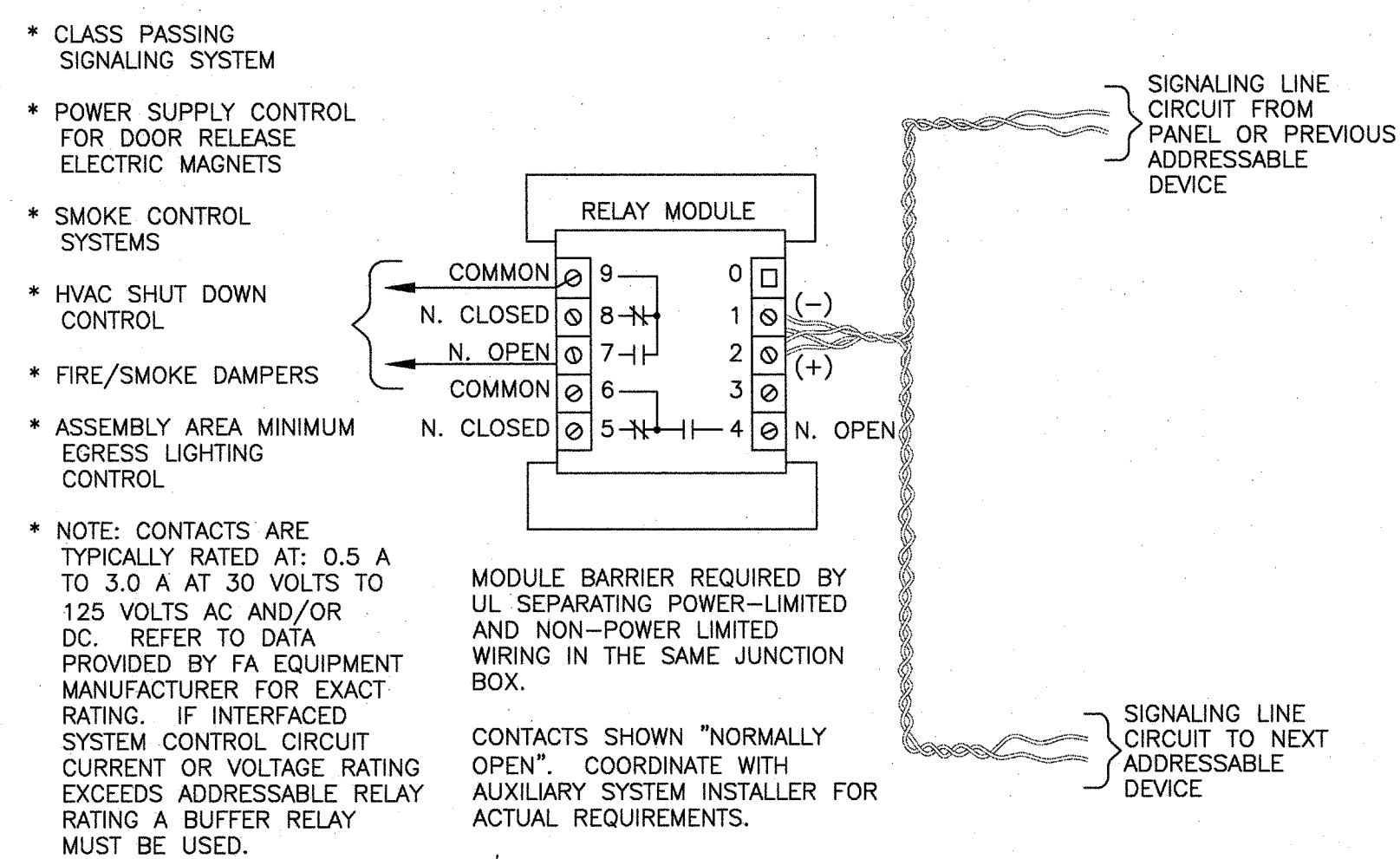
BUILDING "H"

BATTERY CALCULATIONS - POWER EXTENDER FAPS-H					
EQUIPMENT MODEL	QUANTITY	SUPERVISORY CURRENT, A		ALARM CURRENT, A	
		UNIT	TOTAL	UNIT	TOTAL
POWER SUPPLY 24FS6	1	0.04	0.04	0.16	0.16
110cd ALARM STROBE LIGHT 24 VDC	0	0	0	0	0
75cd ALARM STROBE LIGHT 24 VDC (CEILING)	10	0	0	0.111	1.11
30cd ALARM STROBE LIGHT 24 VDC (WALL)	4	0	0	0.063	0.252
15cd ALARM STROBE LIGHT 24 VDC (WALL)	2	0	0	0.043	0.086
STANDBY AH	0.96	SUB TOTAL		0.04	SUB TOTAL
ALARM AH	0.40	HOURS		24.00	HOURS
TOTAL	1.36	AH STANDBY		0.96	AH ALARM
7 AH BATTERY PACK PROVIDED		(0.25 = 15 min)			

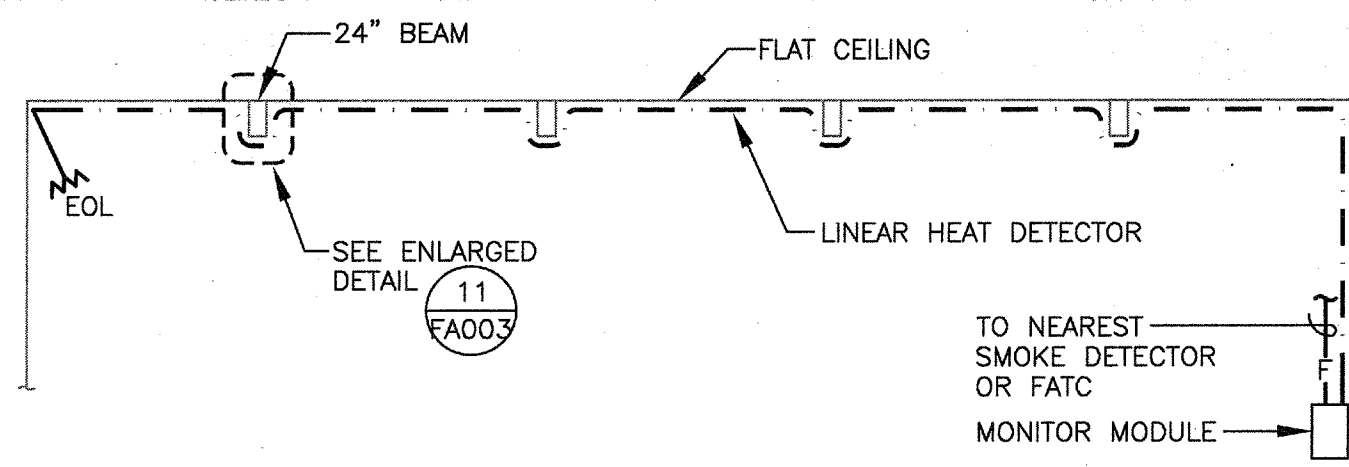
BUILDING "D"

BATTERY CALCULATIONS - POWER EXTENDER FAPS-D					
EQUIPMENT MODEL	QUANTITY	SUPERVISORY CURRENT, A		ALARM CURRENT, A	
		UNIT	TOTAL	UNIT	TOTAL
POWER SUPPLY 24FS6	1	0.04	0.04	0.16	0.16
110cod ALARM STROBE LIGHT 24 VDC	0	0	0	0	0
75cod ALARM STROBE LIGHT 24 VDC (WALL)	4	0	0	0.107	0.428
30cod ALARM STROBE LIGHT 24 VDC (WALL)	3	0	0	0.063	0.189
15cod ALARM STROBE LIGHT 24 VDC (WALL)	4	0	0	0.043	0.172
STANDBY AH	0.96	SUB TOTAL		0.04	0.549
ALARM AH	0.24	HOURS		24.00	0.25
TOTAL	1.20	AH STANDBY		0.96	0.23725
7 AH BATTERY PACK PROVIDED				(0.25 = 15 min)	

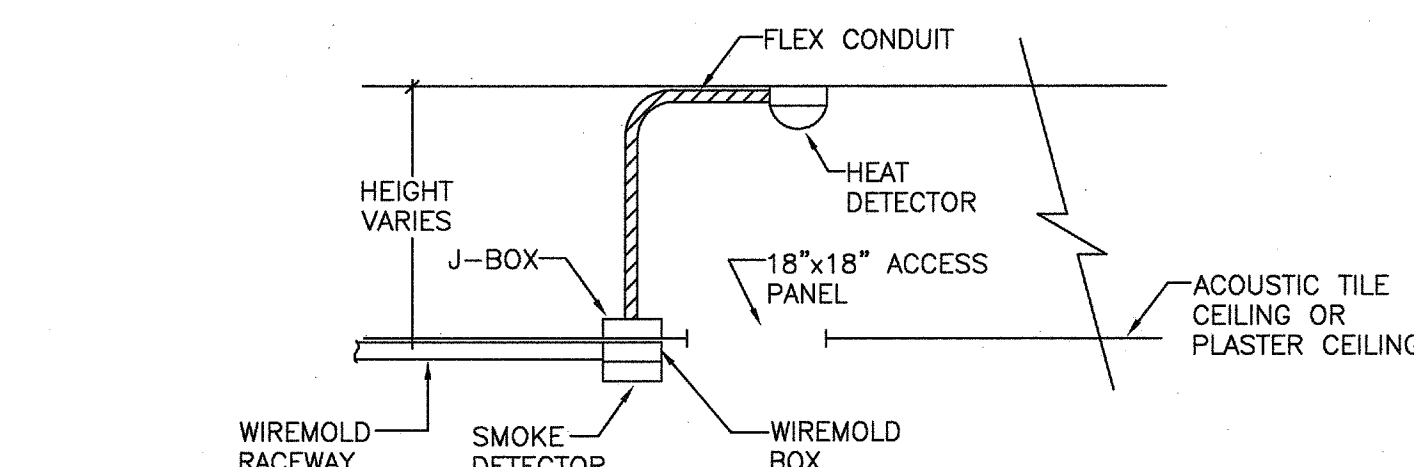
AUXILIARY SYSTEM CONTROL
INTERFACE FOR THE
FOLLOWING SYSTEMS:
* PUBLIC ADDRESS FOR
AUDIO MUTE
* CLASS PASSING
SIGNALING SYSTEM
* POWER SUPPLY CONTROL
FOR DOOR RELEASE
ELECTRIC MAGNETS
* SMOKE CONTROL
SYSTEMS
* HVAC SHUT DOWN
CONTROL
* FIRE/SMOKE DAMPERS
* ASSEMBLY AREA MINIMUM
EGRESS LIGHTING
CONTROL



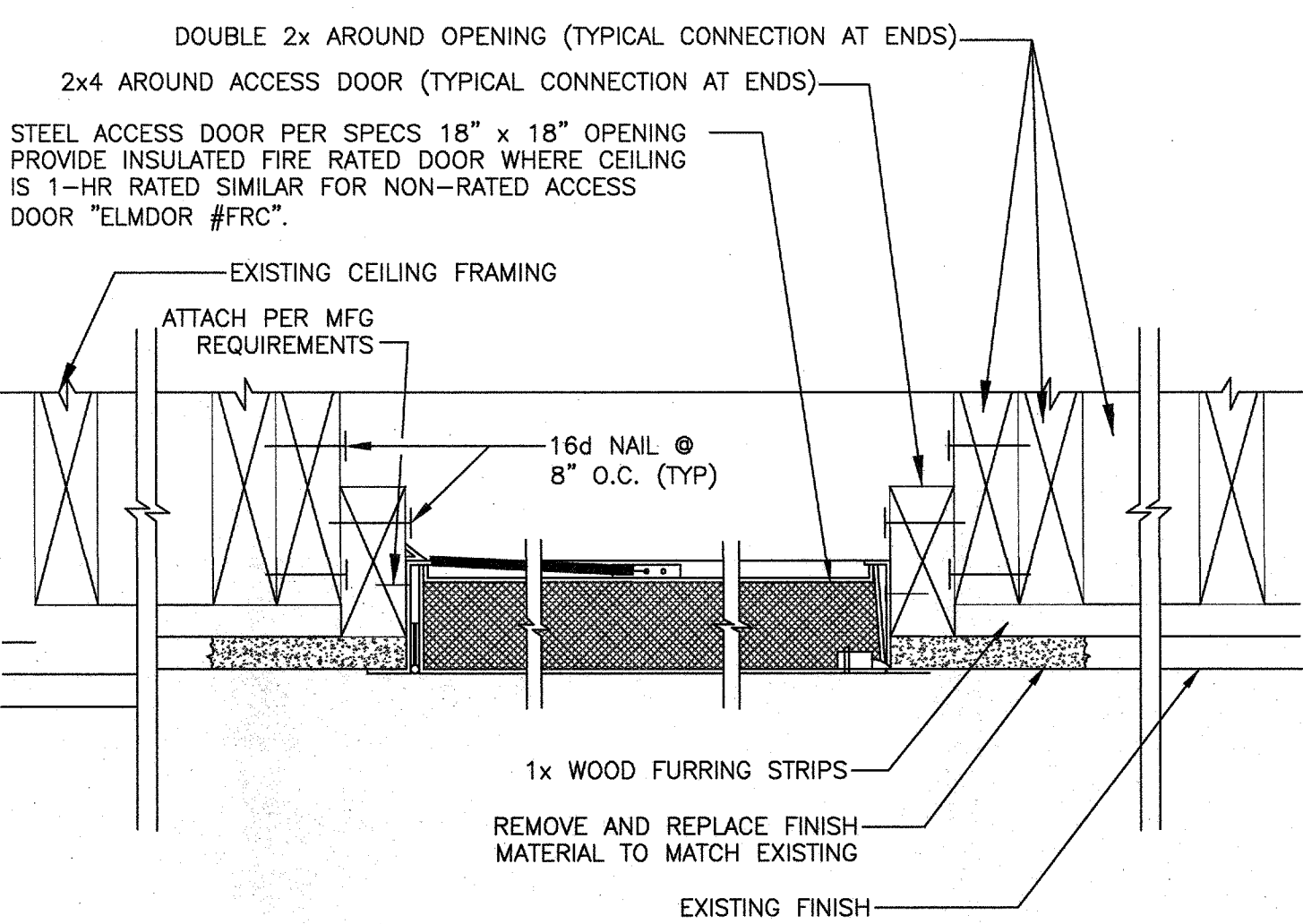
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FA003
N.T.S.
AUXILIARY SYSTEM CONTROL INTERFACE



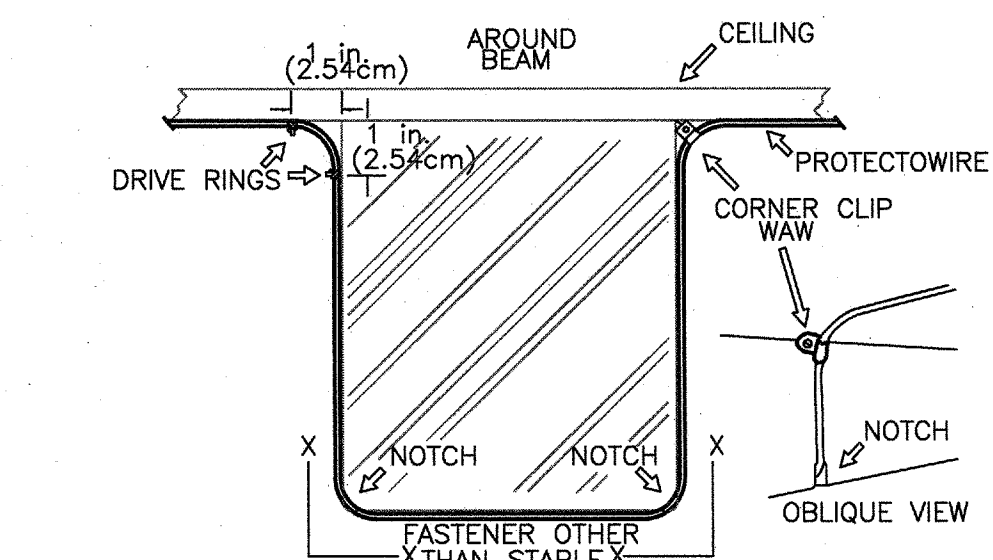
14
FA003
SCALE: 1/8" = 1'-0"
NOTE: INSTALL PER MANUFACTURER'S RECOMMENDATION.
LINEAR HEAT DETECTOR DETAIL



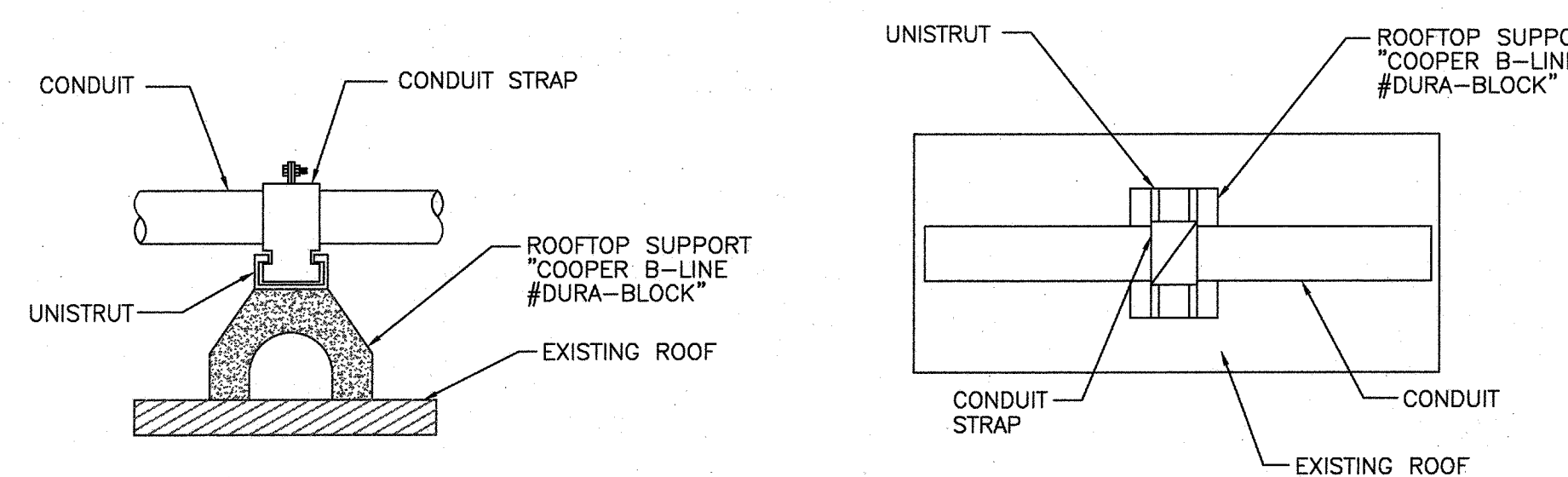
13
FA003
N.T.S.
(APPLICABLE TO ALL SHEETS)
TYPICAL SMOKE DETECTOR & HEAT DETECTOR MOUNTING DETAIL AT ACCESS PANEL



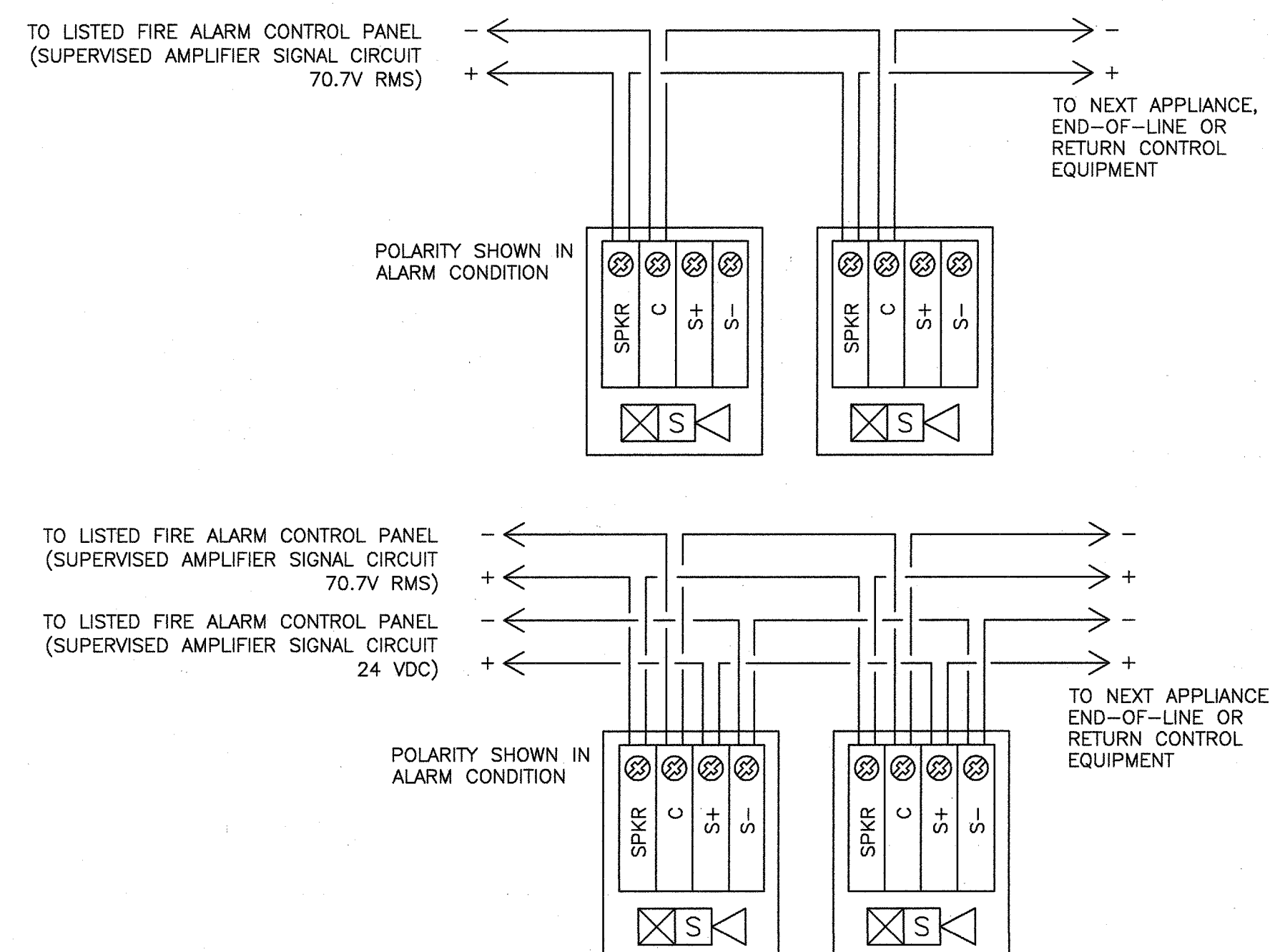
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N.T.S.
CEILING ACCESS DOOR



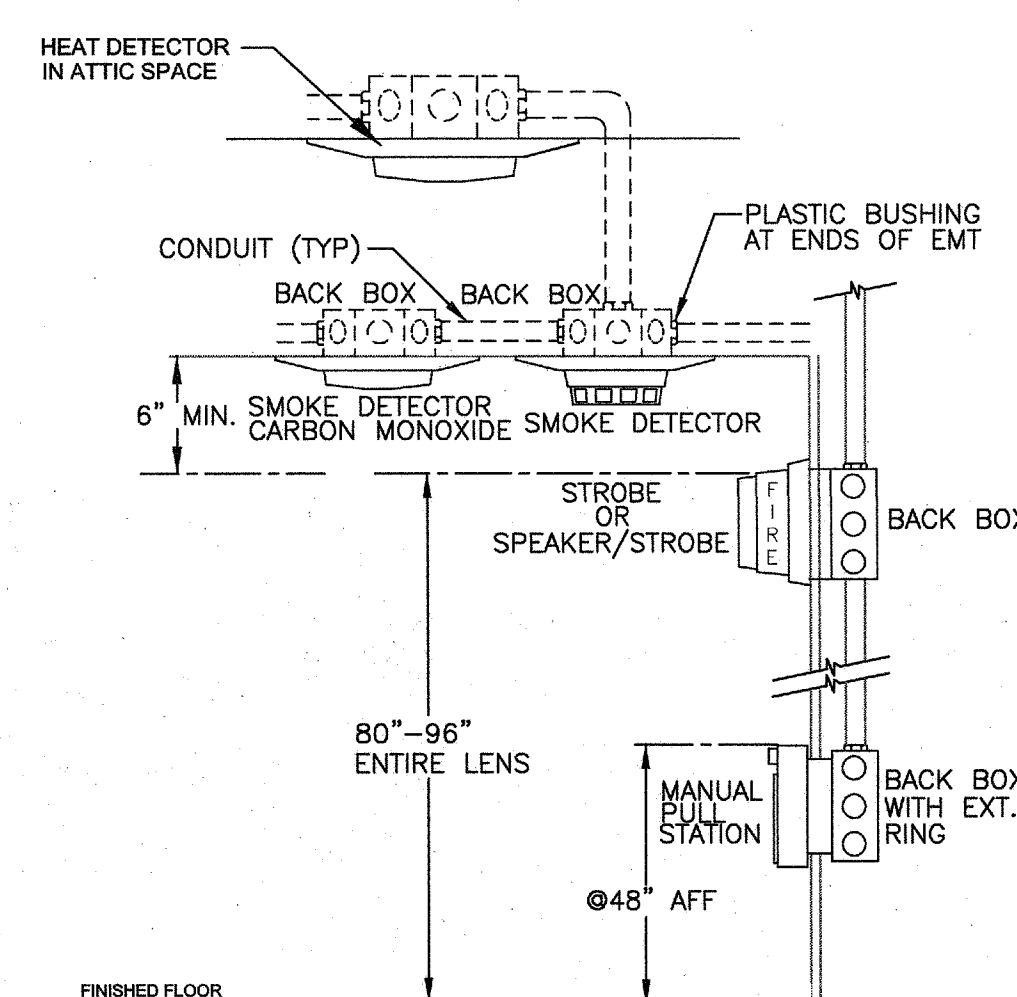
11
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N.T.S.
ENLARGED BEAM DETAIL



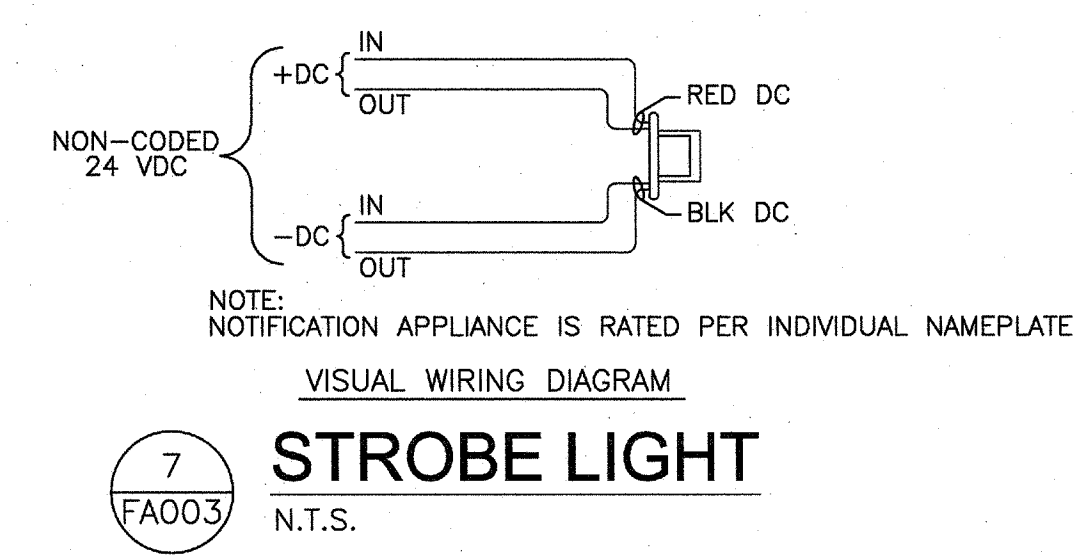
10
FA003
N.T.S.
CONDUIT SUPPORT ON ROOF



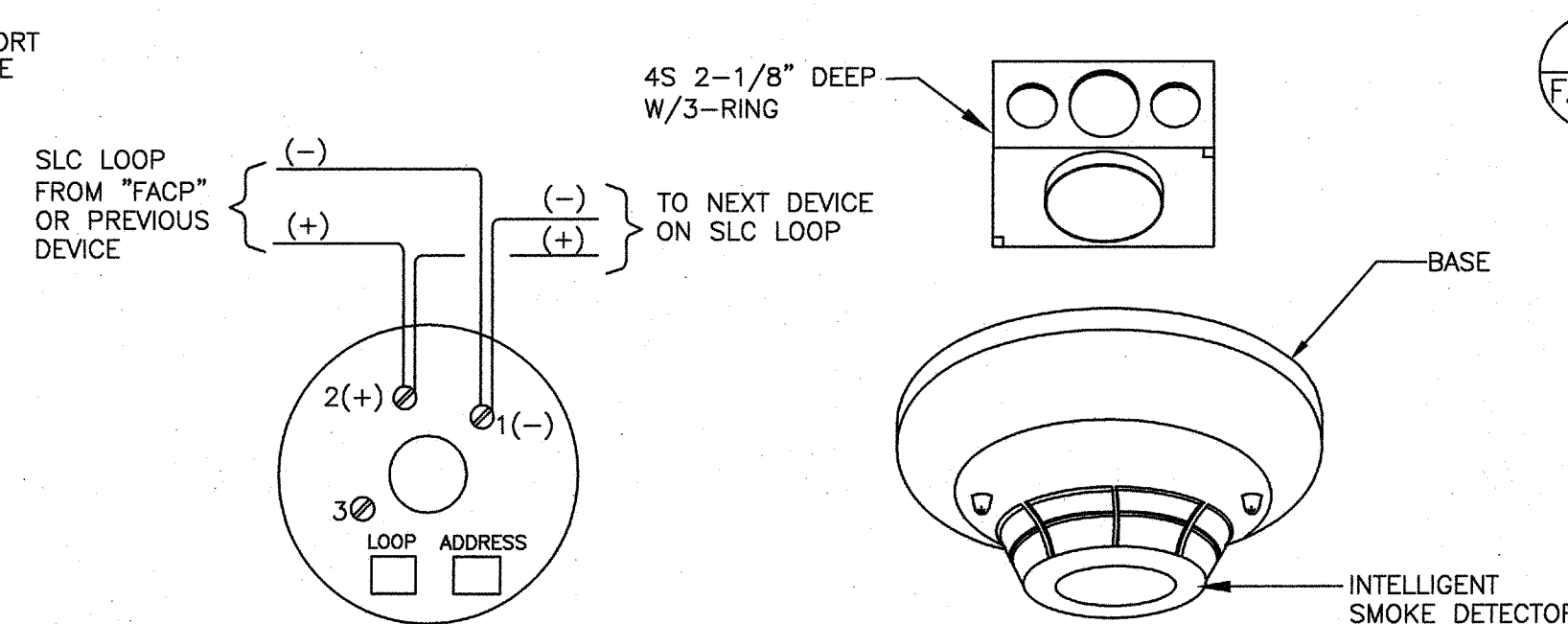
9
FA003
N.T.S.
TYPICAL SPEAKER, SPEAKER/SSTROBE WIRING DIAGRAM



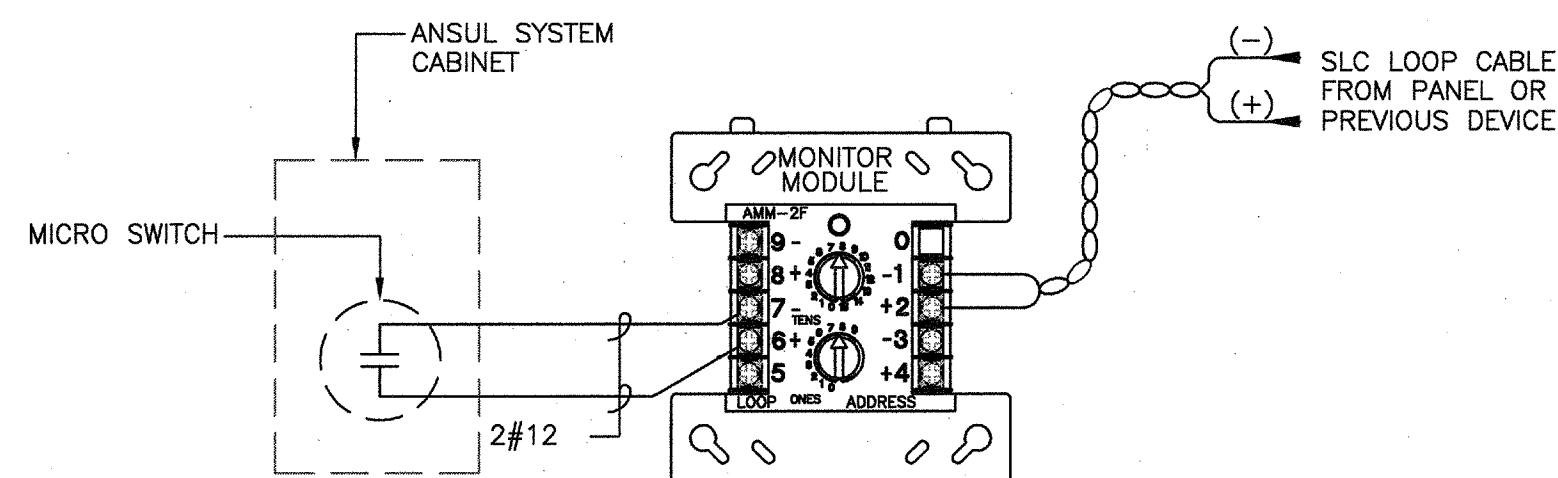
8
FA003
N.T.S.
PULL STATION, SPEAKER & STROBE HEIGHT REQUIREMENTS



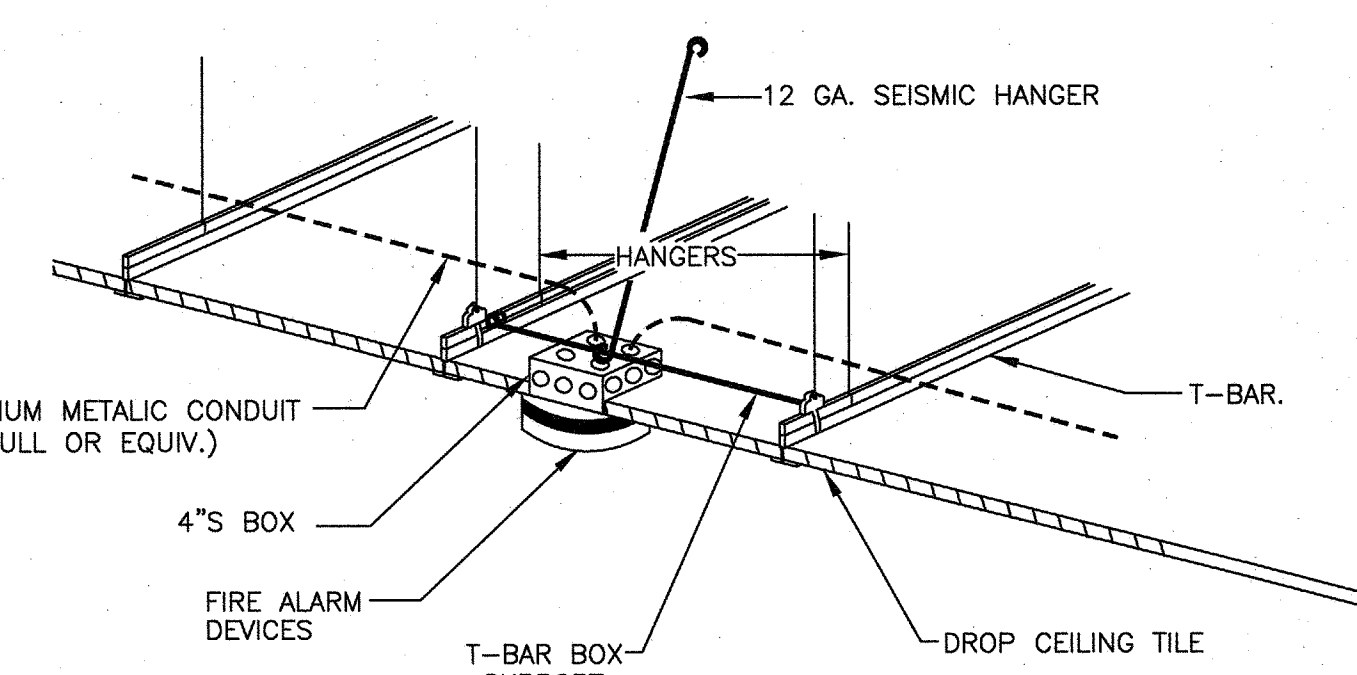
7
FA003
N.T.S.
STROBE LIGHT



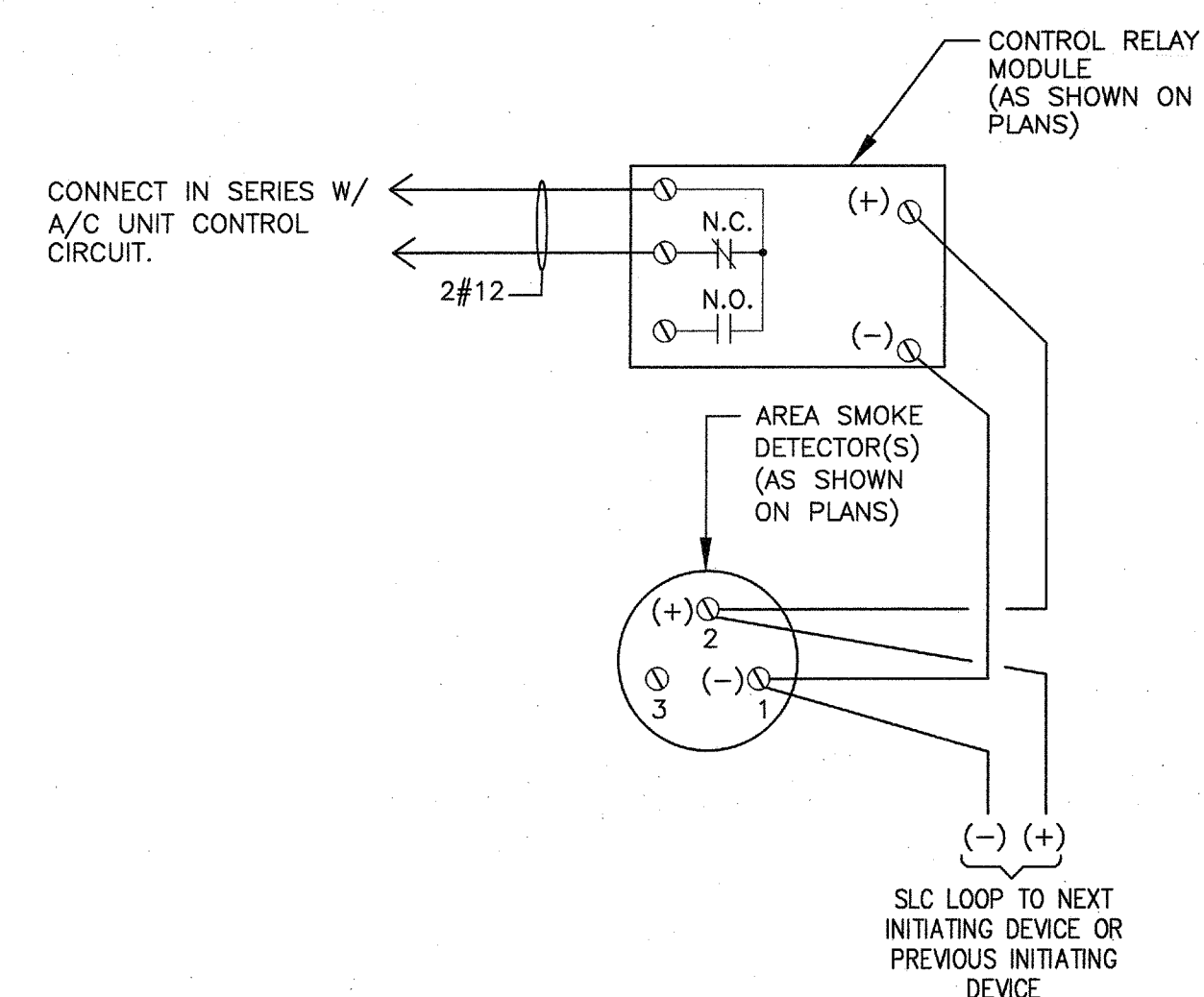
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FA003
N.T.S.
SMOKE AND HEAT DETECTOR



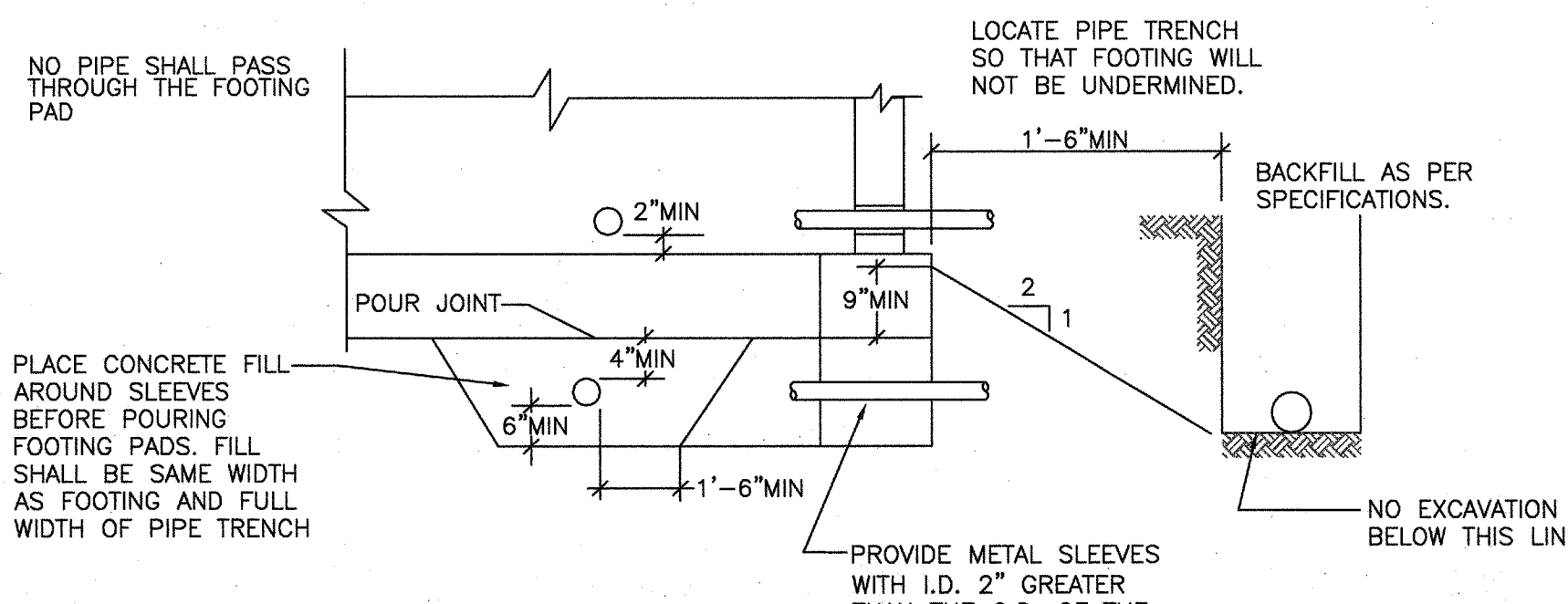
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FA003
N.T.S.
ANSUL FIRE SUPPRESSION WIRING DIAGRAM



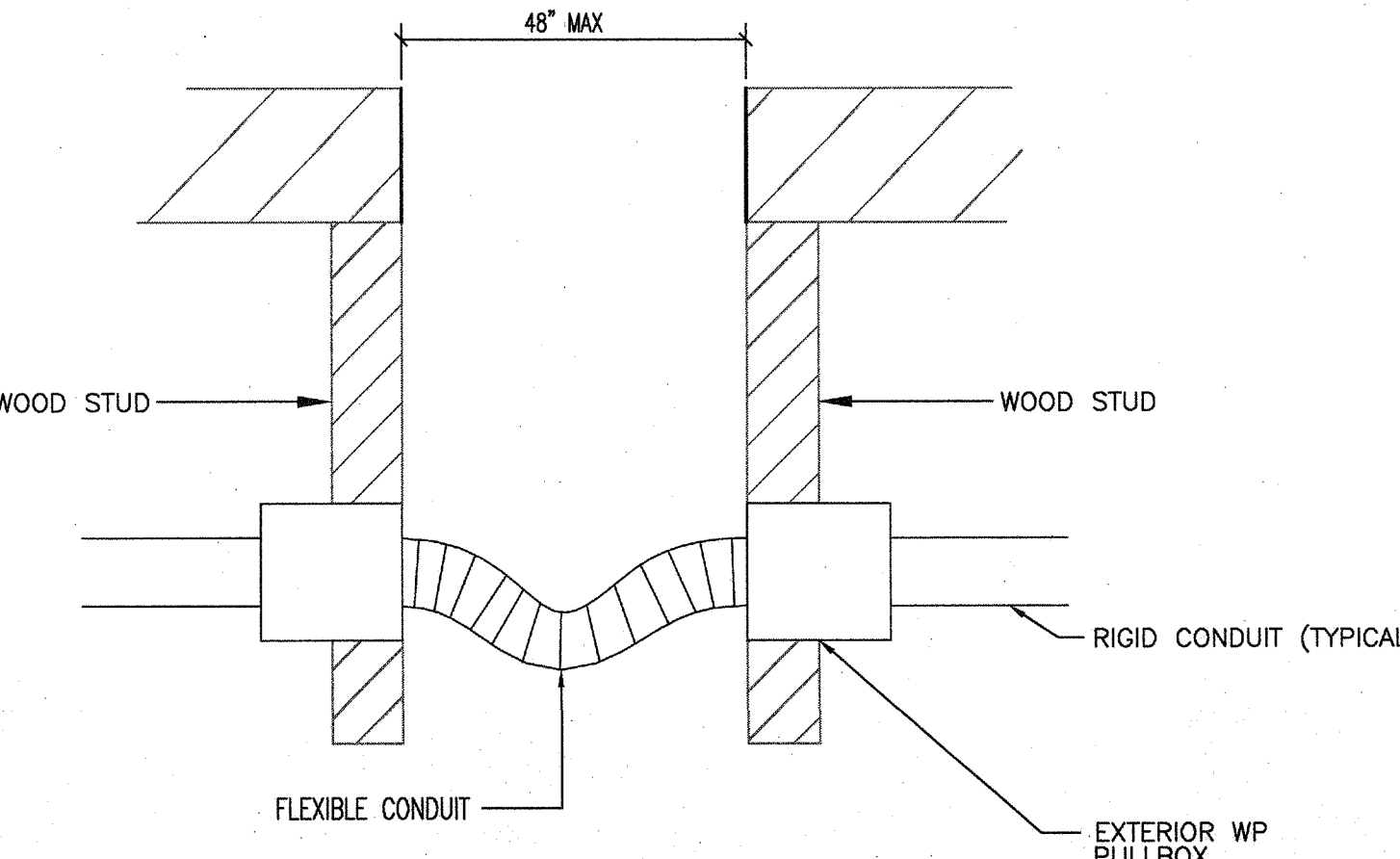
3
FA003
N.T.S.
TYPICAL (SMOKE/HEAT DETECTOR, SPEAKER-STROBE) CEILING MOUNT INSTALLATION DETAIL



2
FA003
N.T.S.
TYPICAL A/C UNIT SHUT DOWN CONTROLS



4
FA003
N.T.S.
TYPICAL PIPE TRENCH OR DUCT BANK AND FOOTING DETAIL



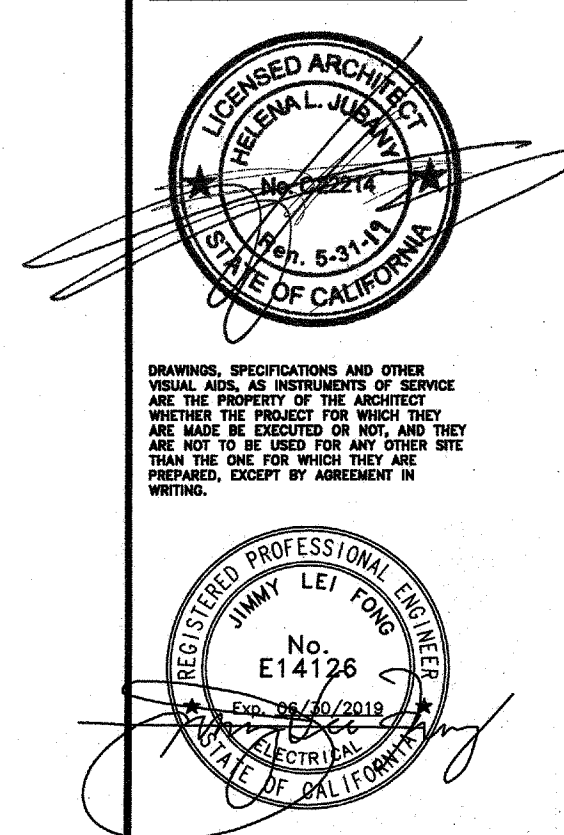
1
FA003
N.T.S.
CONDUIT RUN BETWEEN SEISMIC JOINT OR DIFFERENT STRUCTURE

FILE: 19-91
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
LOS ANGELES BASIN REGIONAL OFFICE

APPL: A#03-118779

AC: FLS RS SS
DATE: 09062018

PACIFIC ENGINEERS GROUP
Consulting Electrical Engineers
2740 Burbank, CA 91505-3051
(818) 748-1758
FAX (818) 763-9180 Y17-013



ROSEMEAD SCHOOL DISTRICT
MUSCATEL MIDDLE SCHOOL
FIRE ALARM UPGRADE AT ENTIRE SITE
4201 IVAR AVE. ROSEMEAD, CA 91770



ROSEMEAD SCHOOL DISTRICT
PARK ROSEMEAD
3307 ROSEMEAD BOULEVARD
ROSEMEAD, CA 91770

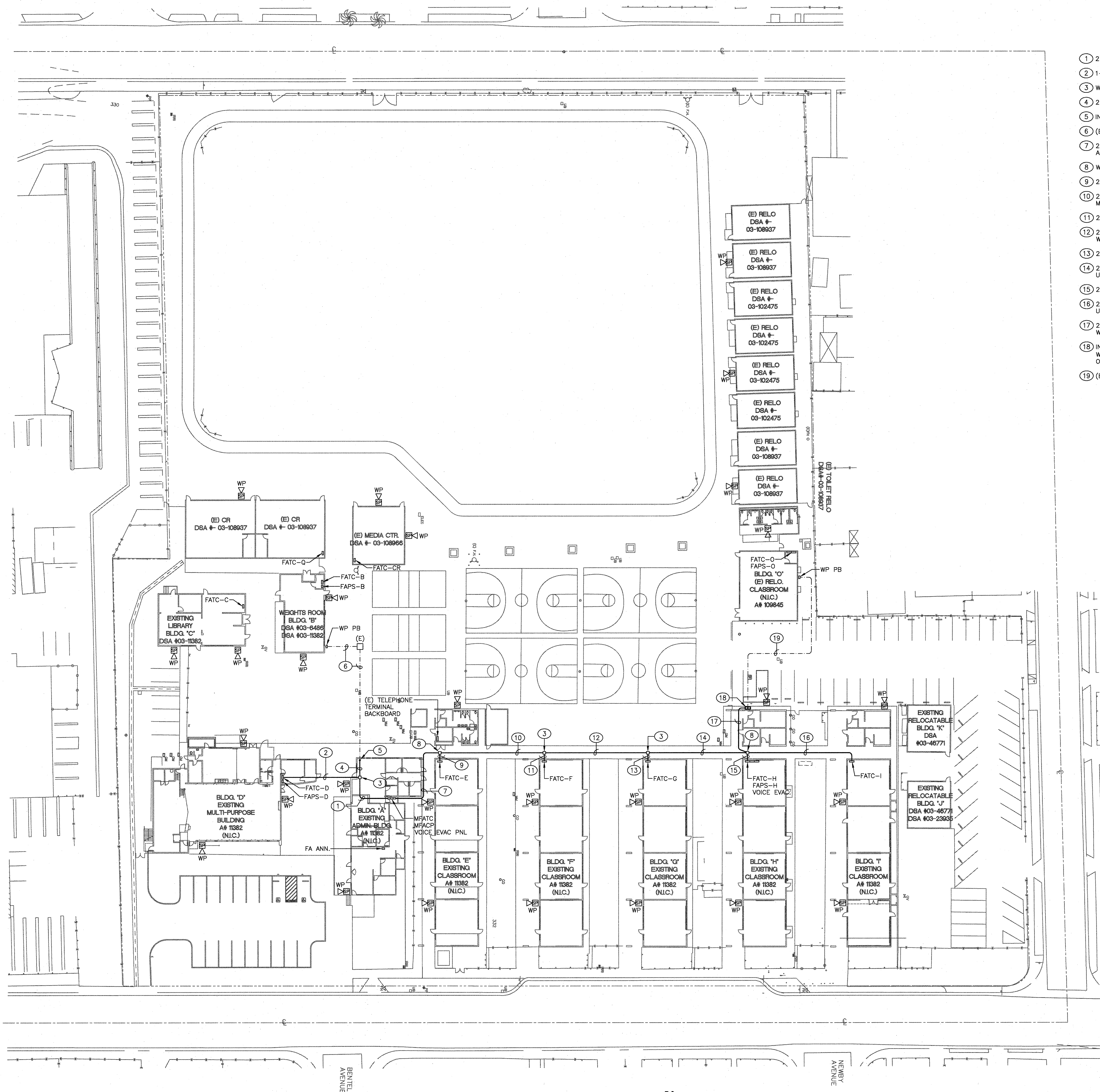
JUBANY NAC ARCHITECTURE
837 N. SPRING ST., LOS ANGELES CA 90012-2023 (P: 323.435.8075 F: 323.693.3110)

NAC NO: 161-17008
FILE:
DRAWN: HY
CHECKED: AJ
DATE: 03-21-2018

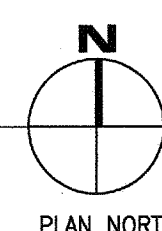
FA003

DETAILS

100

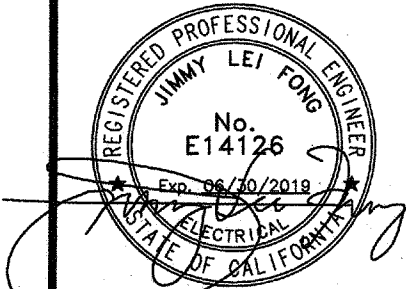
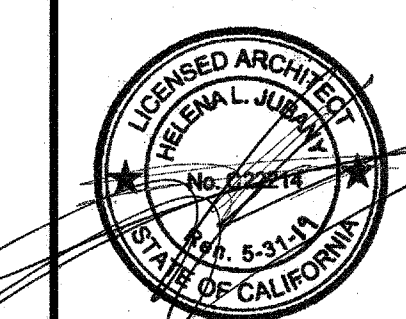


ELECTRICAL SITE PLAN
SCALE: 1"=30'-0"



- KEYED NOTES**
- ① 2" C, (1) F, (1) A, (1) AW, (2) S (FA).
 - ② 1-1/2" C, (1) F, (1) FW, (1) A, (2) S (FA).
 - ③ WP PULLBOX 12"x12"x6" DEEP MOUNT ON ROOF.
 - ④ 2" C, (1) FW, (1) AW, (2) S (FA).
 - ⑤ INTERCEPT (E) 2" C STUB-UP ON ROOF.
 - ⑥ (E) 2" C, PULL-IN (N) (1) FW, (1) AW, (2) S (FA).
 - ⑦ 2" C, (2) F, (2) A, (3) V, (1) Z, (1) S (FA). RUN EXPOSED ALONG WALL WITH UNISTRUT CHANNEL SUPPORT.
 - ⑧ WP PULLBOX 12"x12"x6" DEEP CEILING MOUNT.
 - ⑨ 2" C, (2) F, (1) A, (1) V (FA).
 - ⑩ 2" C, (2) F, (1) A, (2) V, (1) Z, (1) S (FA). CEILING/ROOF MOUNT WITH UNISTRUT CHANNEL SUPPORT.
 - ⑪ 2" C, (2) F, (2) A, (1) V (FA).
 - ⑫ 2" C, (2) F, (1) A, (1) V, (1) Z, (1) S (FA). MOUNT ON ROOF WITH UNISTRUT CHANNEL SUPPORT.
 - ⑬ 2" C, (1) F, (1) A, (1) V (FA).
 - ⑭ 2" C, (1) F, (1) Z, (1) S (FA). ROOF/CEILING MOUNT WITH UNISTRUT CHANNEL SUPPORT.
 - ⑮ 2" C, (2) F, (1) FW, (1) A, (1) AW, (1) V, (2) S (FA).
 - ⑯ 2" C, (2) F, (1) A, (1) V (FA). ROOF/CEILING MOUNT WITH UNISTRUT CHANNEL SUPPORT.
 - ⑰ 2" C, (1) FW, (1) AW, (1) S (FA). RUN EXPOSED ALONG WALL WITH UNISTRUT CHANNEL SUPPORT.
 - ⑱ INTERCEPT (E) 2" C, STUB-UP TO NEW WALL MOUNT WEATHERPROOF 12"x12"x6" DEEP PULLBOX, MOUNT HIGH ON WALL.
 - ⑲ (E) 2" C, PULL-IN (N) (1) FW, (1) AW, (1) S (FA).

PACIFIC ENGINEERS GROUP
Consulting Electrical Engineers
2740 W. Magnolia Boulevard, Suite 205
Burbank, CA 91506
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FAX (818) 763-9180 Y17-013



ROSEMEAD SCHOOL DISTRICT
MUSCATEL MIDDLE SCHOOL
FIRE ALARM UPGRADE AT ENTIRE SITE
4201 IVAR AVE. ROSEMEAD, CA 91770

ROSEMEAD SCHOOL DISTRICT
PARK ROSEMEAD
3307 ROSEMEAD BOULEVARD
ROSEMEAD, CA 91770

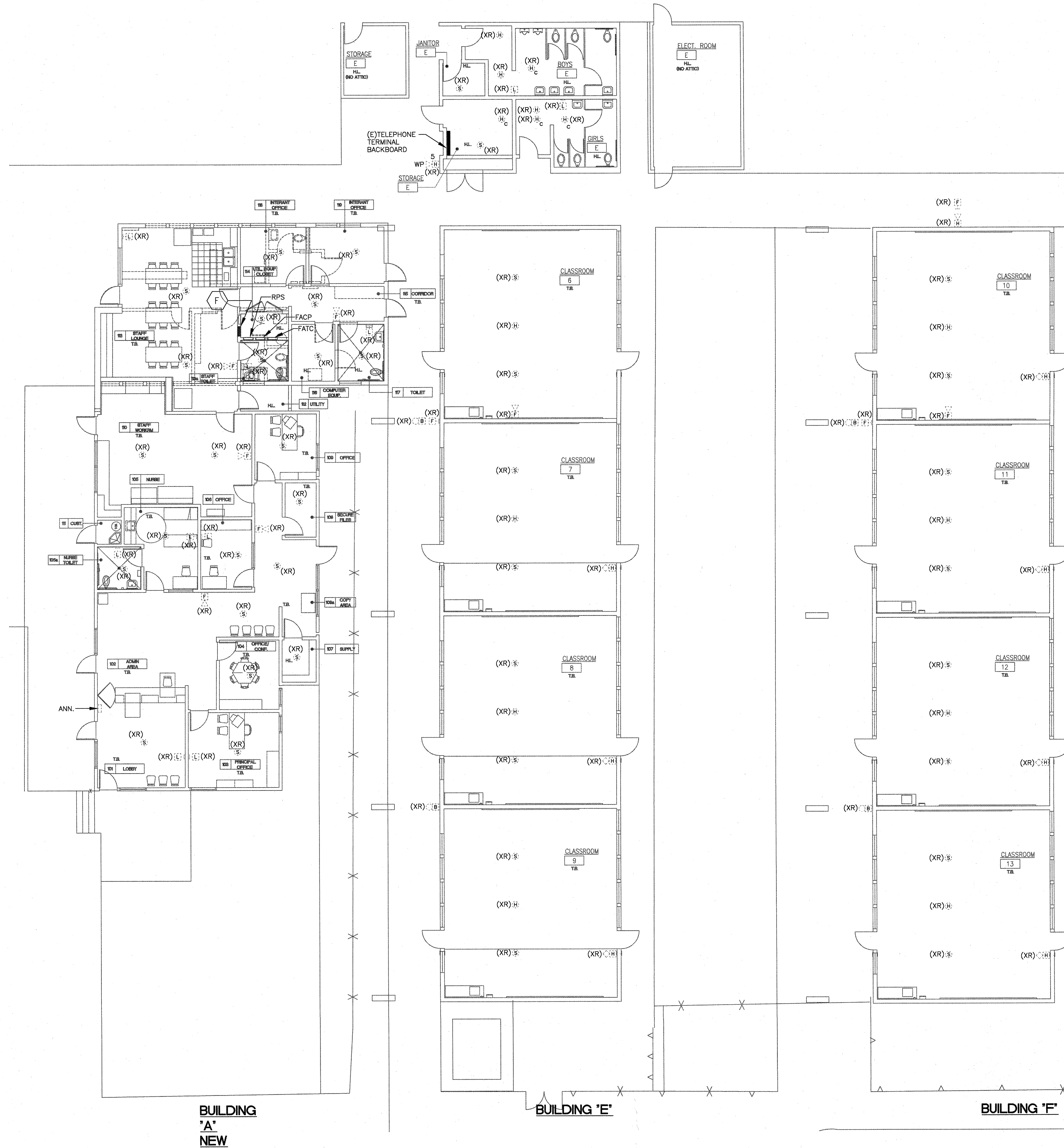
JUBANY NAC ARCHITECTURE
837 N. SPRING ST., 1105 ANGELES CA 90012-2033 (P) 323.478.8076 (F) 323.893.1110
WWW.NACARCHITECTURE.COM

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CHECKED AJ
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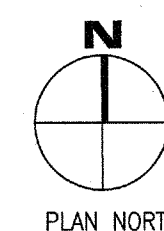
FILE: 19-91
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
LOS ANGELES BASIN REGIONAL OFFICE

APPL: A#03-118779

AC FLS SS
DATE: 09062018



FIRE ALARM DEMOLITION PLAN
SCALE: 1/8"=1'-0"

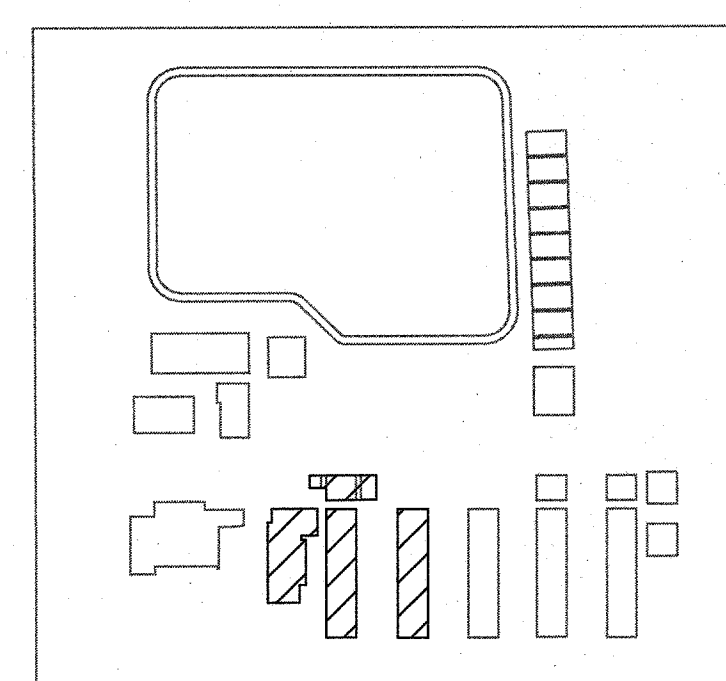


ELECTRICAL DEMOLITION WORK

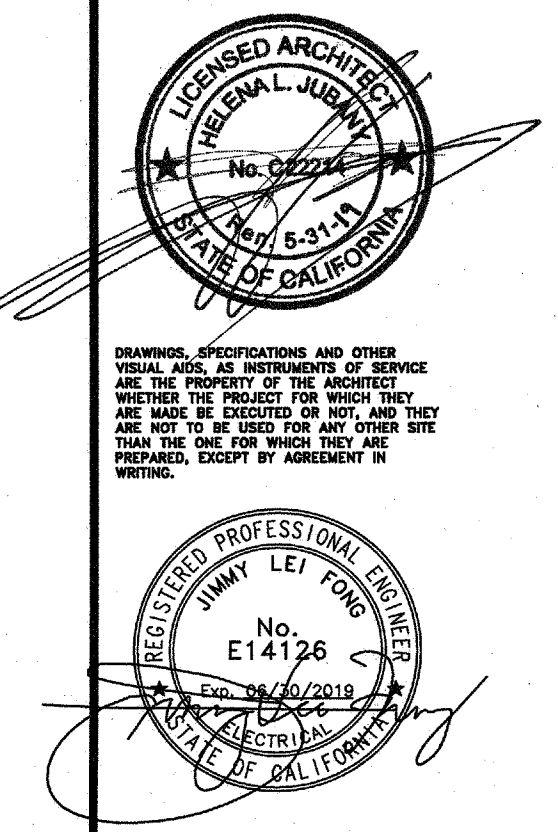
- INCLUDE ALL DEMOLITION WORK AS PART OF THIS CONTRACT. EXISTING FIRE ALARM SYSTEM MUST REMAIN IN OPERATION DURING INSTALLATION OF THE NEW SYSTEM.
- REMOVAL OF ALL EXISTING FIRE ALARM DEVICES AND ASSOCIATED WIRES AS INDICATED IN THE DRAWINGS.
 - ALL USABLE EXISTING FIRE ALARM COMPONENTS REMOVED FROM THIS PROJECT SHOULD BE RETURNED TO LOCAL MAINTENANCE AND OPERATIONS AREAS FOR SALVAGE. THE LOCAL DISTRICT SUPERVISOR SHOULD BE CONSULTED TO DETERMINE IF ANY COMPONENTS ARE SALVAGEABLE.
 - REMOVAL OF EXPOSED CONDUITS BETWEEN BUILDINGS AND WITHIN BLDGS.
 - ALL EXISTING DEVICES/OUTLETS NOT USED SHALL BE REMOVED AND BOXES BLANKED OFF.
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LEGEND

- (XR) EXISTING FIRE ALARM DEVICE TO BE DEMOLISHED INCLUDING ASSOCIATED WIRES/CABLES. PATCH AND REPAIR ALL AFFECTED CEILING TO MATCH EXISTING. PROVIDE BLANK COVER PLATES FOR ALL J-BOXES. PAINT TO MATCH CEILING SPACE.
- (S) EXISTING FIRE ALARM SMOKE DETECTOR.
- (H) EXISTING FIRE ALARM HEAT DETECTOR (IN ATTIC).
- (B) EXISTING FIRE ALARM MINI HORN.
- (E) EXISTING FIRE ALARM EXTERIOR HORN.
- (L) EXISTING FIRE ALARM STROBE.
- (CH) EXISTING FIRE ALARM HEAT DETECTOR (ON CEILING).



FILE: 19-91
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
LOS ANGELES BASIN REGIONAL OFFICE
APPL: A#03-118779
AC: FLS SS: SS
DATE: 09-06-2018

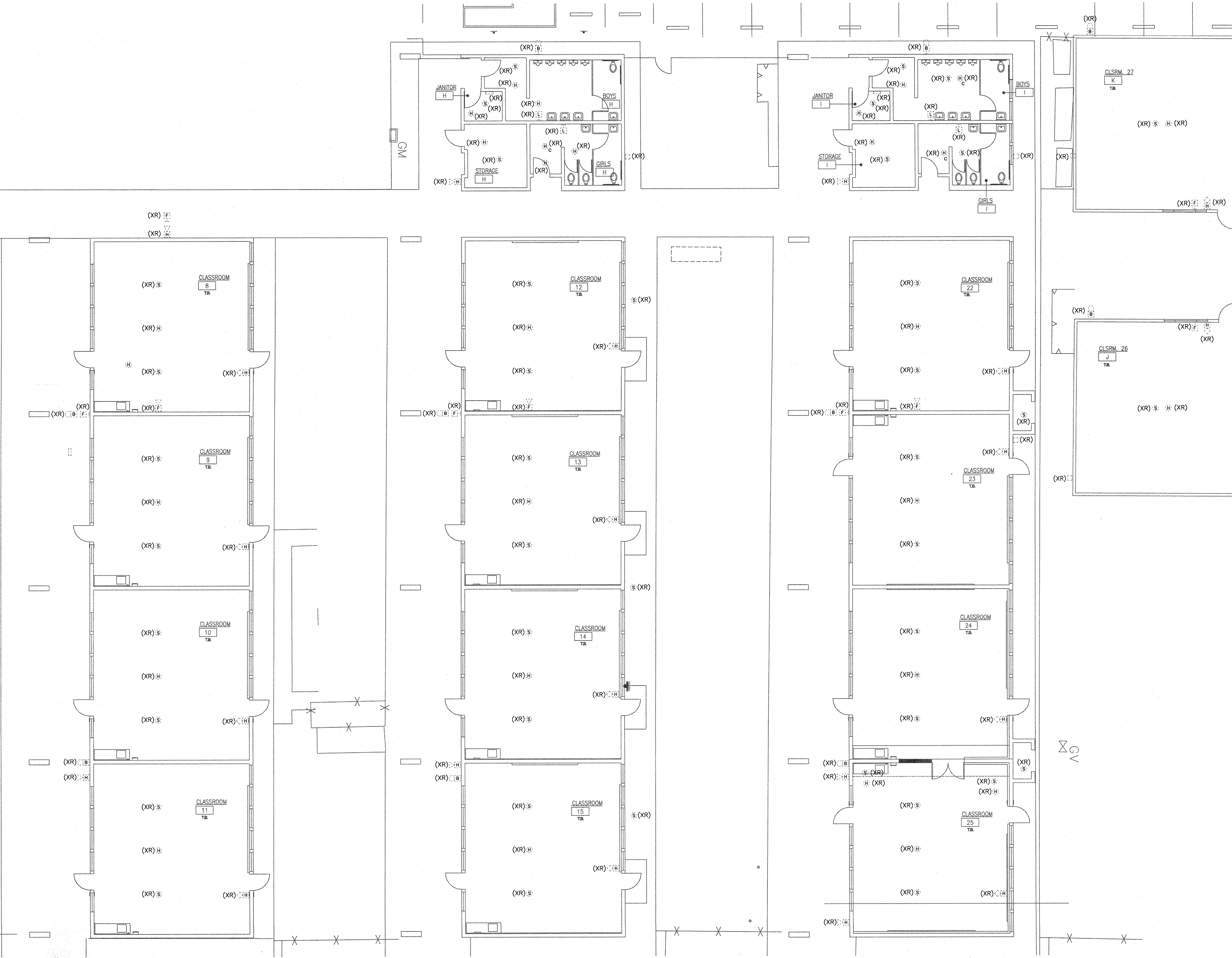


ROSEMEAD SCHOOL DISTRICT
MUSCATEL MIDDLE SCHOOL
FIRE ALARM UPGRADE AT ENTIRE SITE
4201 IVAR AVE. ROSEMEAD, CA 91770

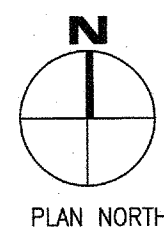
ROSEMEAD SCHOOL DISTRICT
PARK ROSEMEAD
3007 ROSEMEAD BOULEVARD
ROSEMEAD, CA 91770

JUBANY NAC ARCHITECTURE
837 N. SPRING ST. LOS ANGELES CA 90012-3233 (P: 323.435.8676) (F: 323.699.3110)

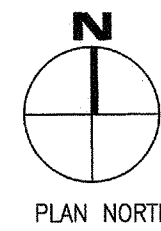
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FILE:
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DATE: 03-21-2018



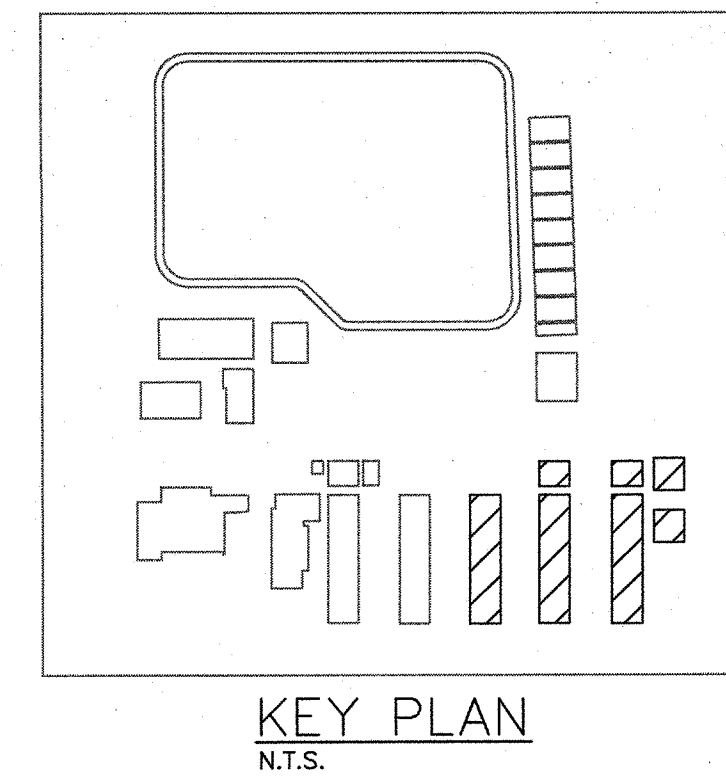
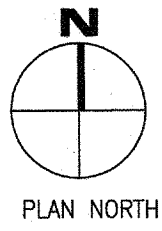
BUILDING "G" FIRE ALARM DEMOLITION PLAN
SCALE: 1/8"=1'-0"



BUILDING "H" FIRE ALARM DEMOLITION PLAN
SCALE: 1/8"=1'-0"



BUILDING "I" FIRE ALARM DEMOLITION PLAN
SCALE: 1/8"=1'-0"



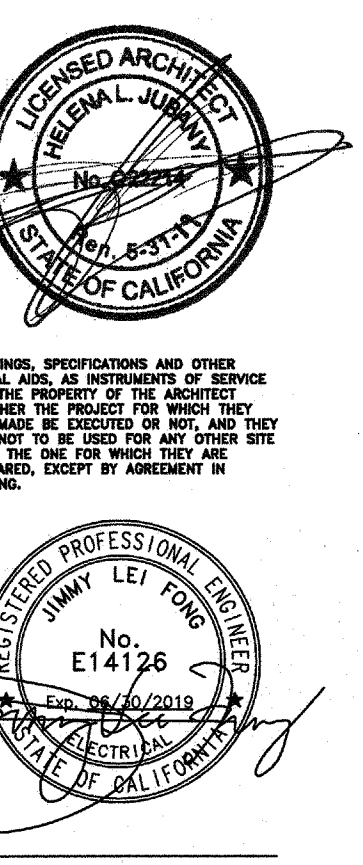
ELECTRICAL DEMOLITION WORK

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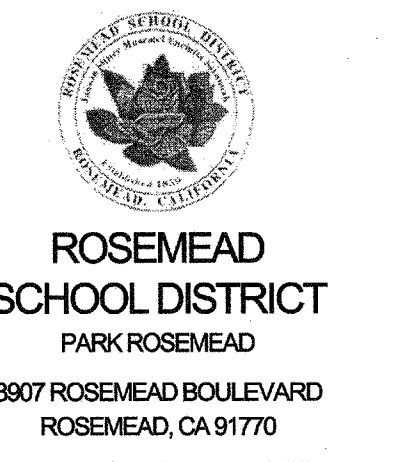
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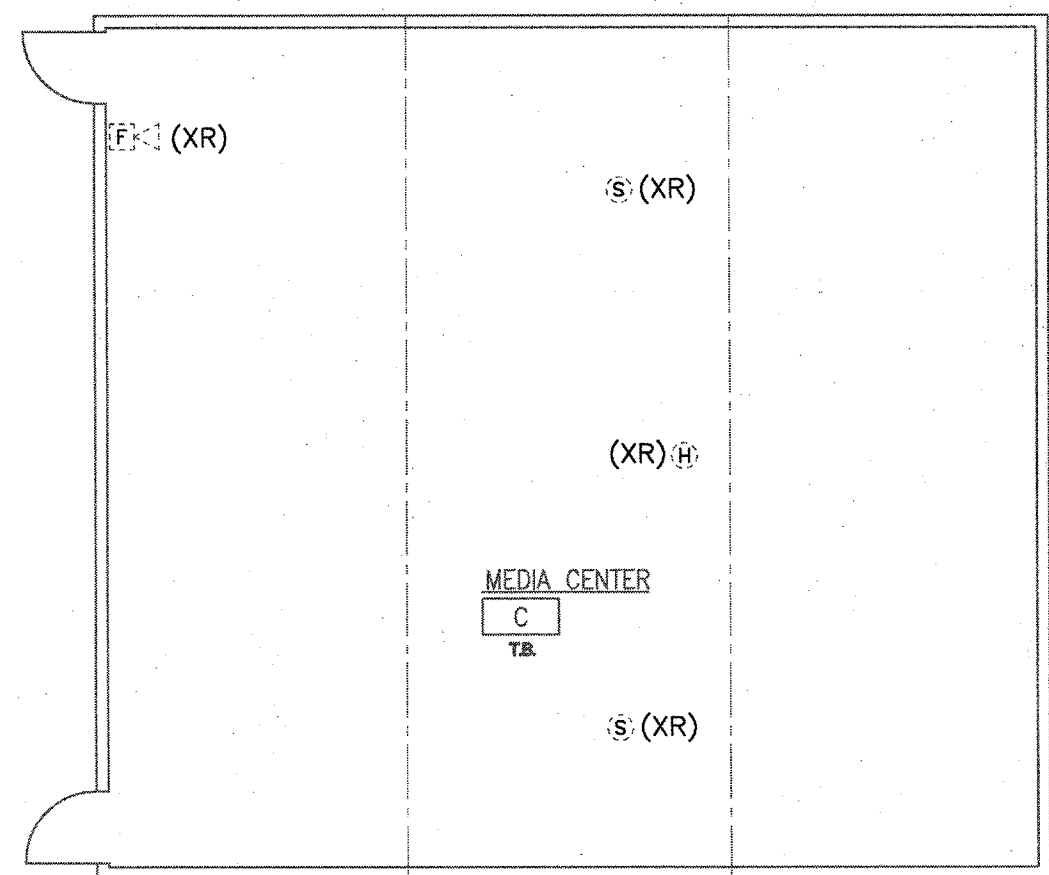
ROSEMEAD SCHOOL DISTRICT
MUSCATEL MIDDLE SCHOOL
FIRE ALARM UPGRADE AT ENTIRE SITE
4201 IVAR AVE. ROSEMEAD, CA 91770



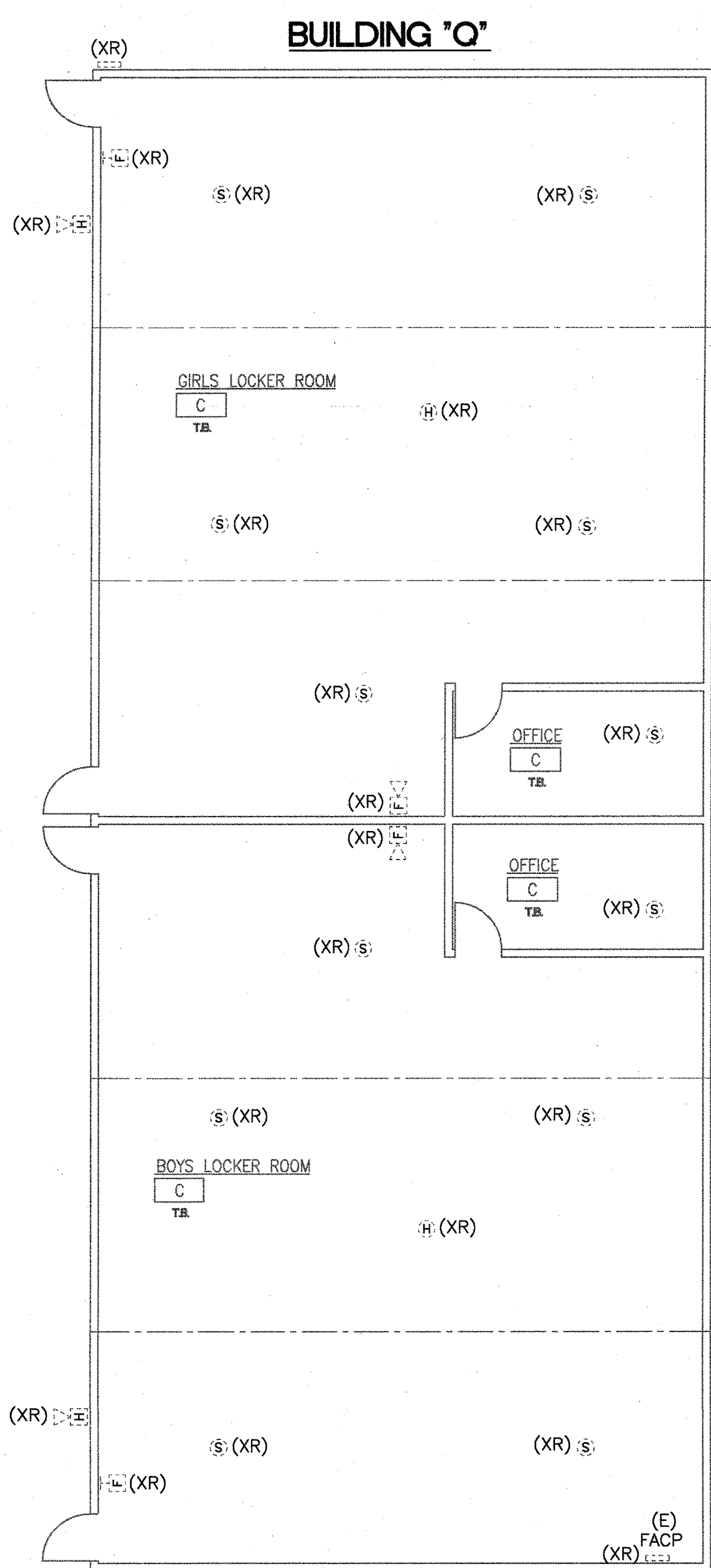
ROSEMEAD SCHOOL DISTRICT
PARK ROSEMEAD
3807 ROSEMEAD BOULEVARD
ROSEMEAD, CA 91770

JUBANY NAC ARCHITECTURE
807 N. SPRING ST., LOS ANGELES, CA 90012-3333 (P: 323.455.6076) (F: 323.669.3110)

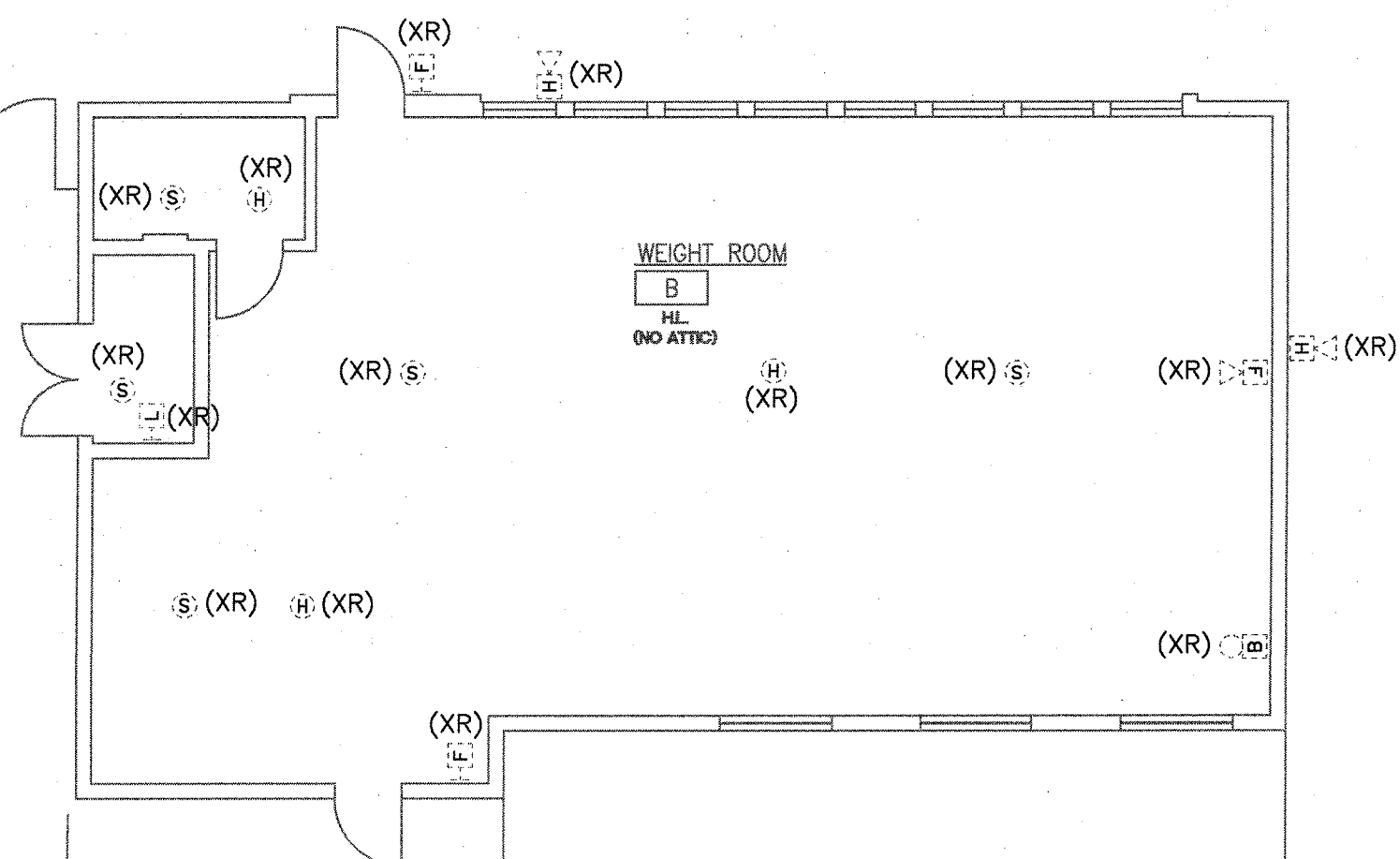
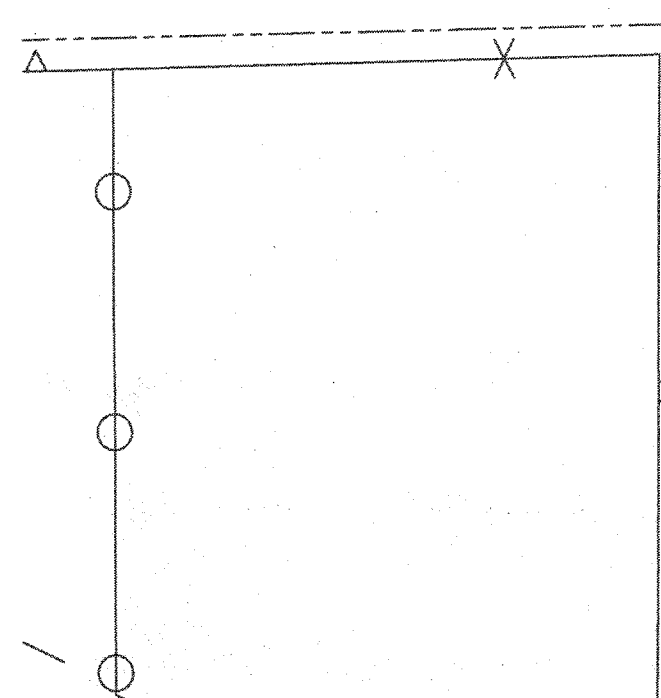
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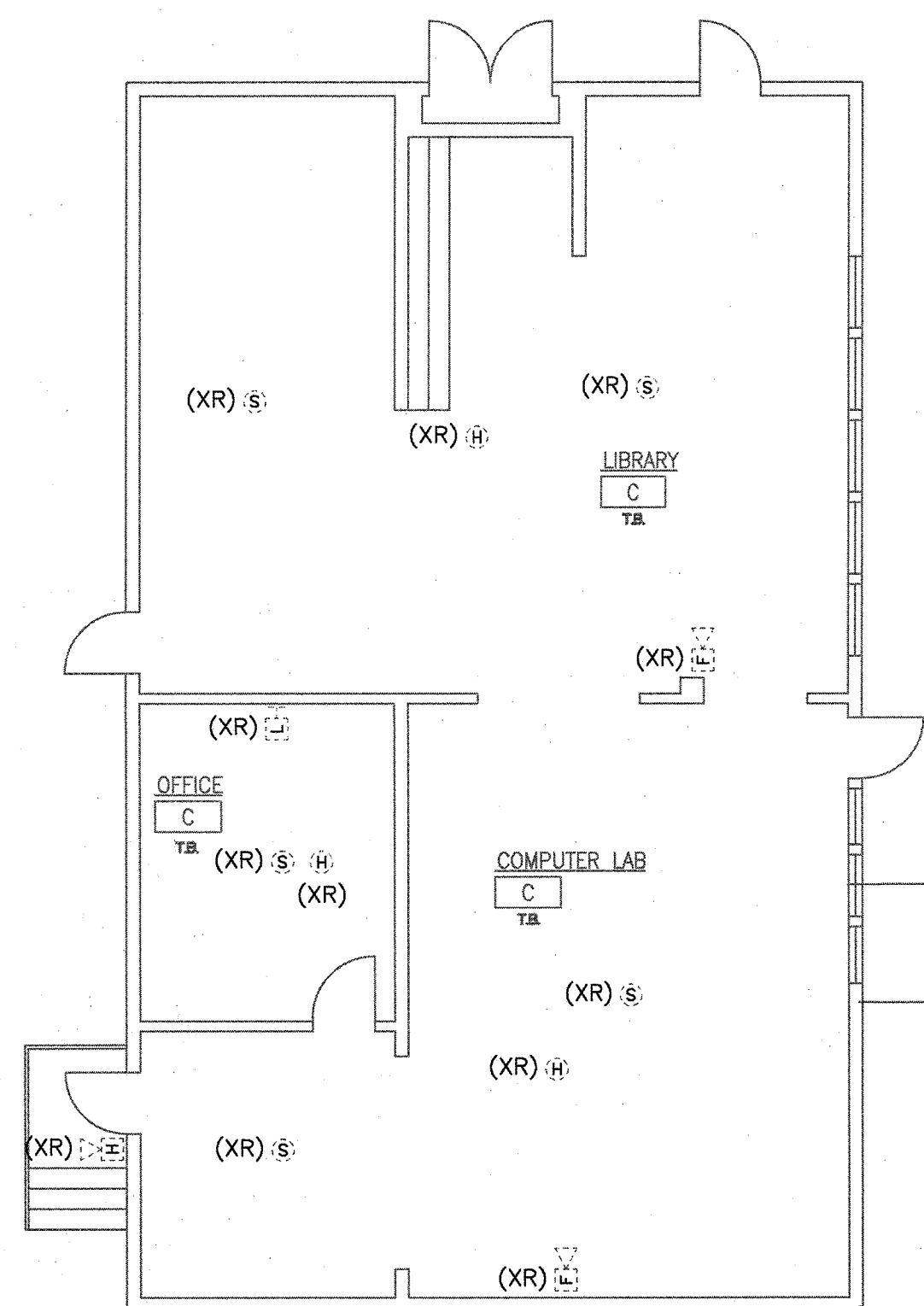
BUILDING "CR"



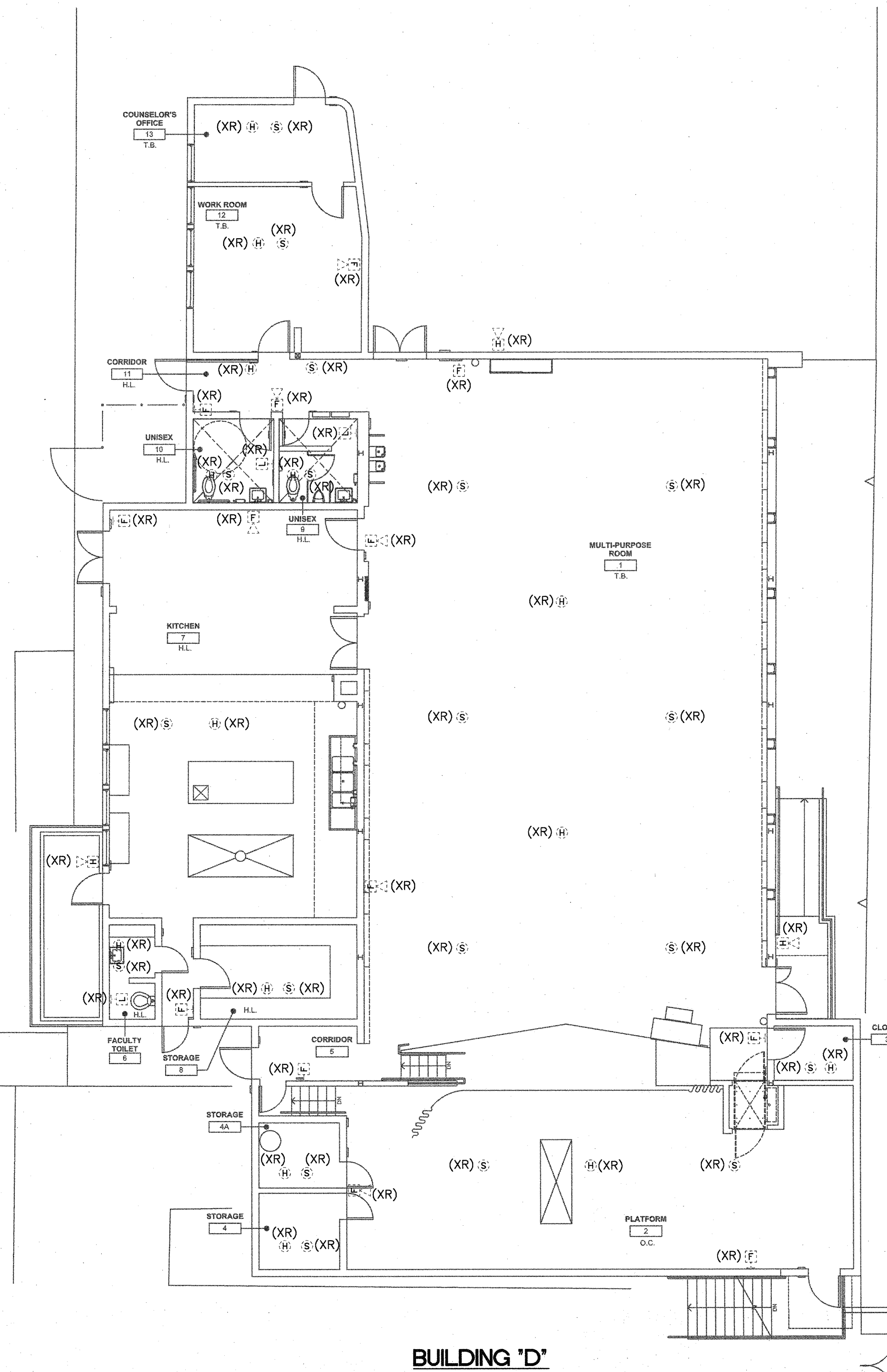
BUILDING "P"



BUILDING "B"



BUILDING "C"



BUILDING "D"

FIRE ALARM DEMOLITION PLAN

SCALE: 1/8"=1'-0"



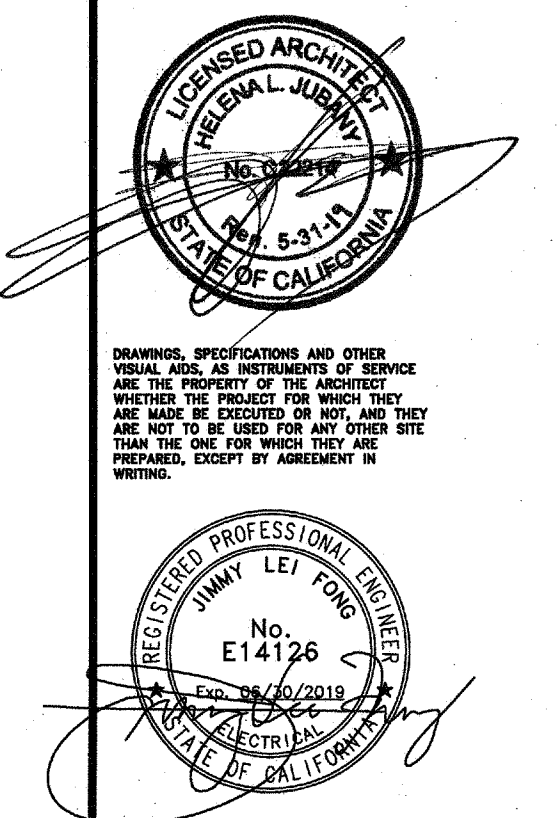
ELECTRICAL DEMOLITION WORK

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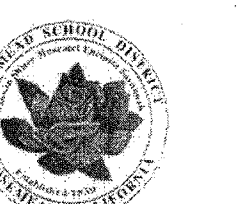
LEGEND

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ROSEMEAD SCHOOL DISTRICT
MUSCATEL MIDDLE SCHOOL
FIRE ALARM UPGRADE AT ENTIRE SITE

4201 IVAR AVE. ROSEMEAD, CA 91770



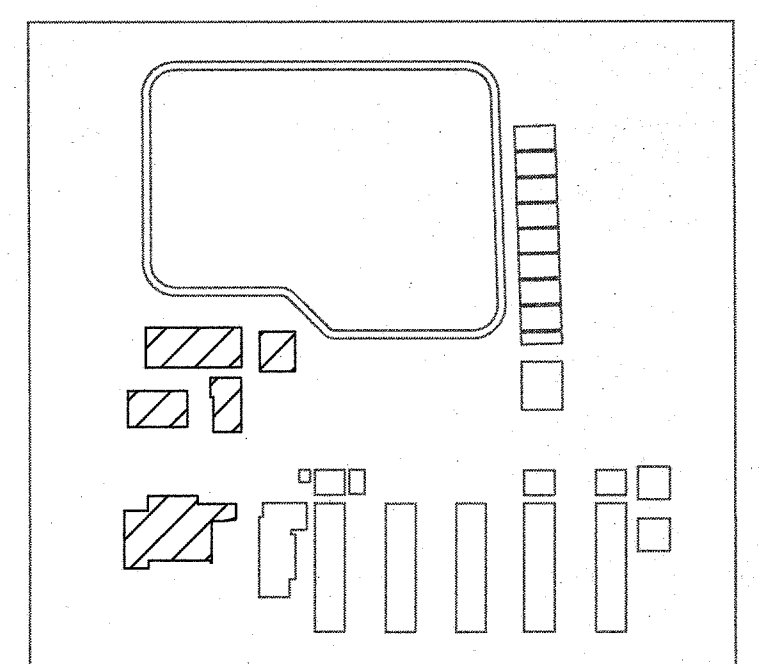
ROSEMEAD
SCHOOL DISTRICT
PARK ROSEMEAD
3907 ROSEMEAD BOULEVARD
ROSEMEAD, CA 91770

JUBANY
NAC ARCHITECTURE

NAC NO 161-17008
FILE
DRAWN HY
CHECKED AJ
DATE 03-21-2018

FA-303

FILE: 19-91
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
LOS ANGELES BASIN REGIONAL OFFICE
APPL: A#03-118779
AC FLS SS
DATE: 09/06/2018



KEY PLAN
N.T.S.

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(H) EXISTING FIRE ALARM HEAT DETECTOR (IN ATTIC).

(MH) EXISTING FIRE ALARM MINI HORN.

(EH) EXISTING FIRE ALARM EXTERIOR HORN.

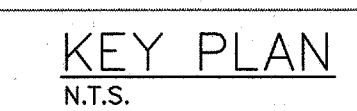
(LS) EXISTING FIRE ALARM STROBE.

(CH) EXISTING FIRE ALARM HEAT DETECTOR (ON CEILING).

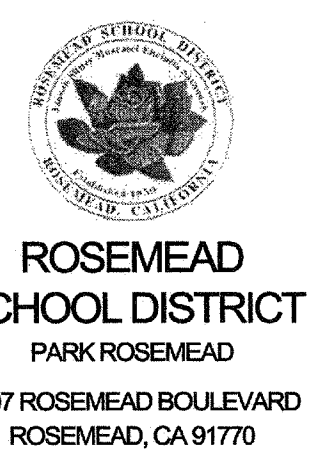


FIRE ALARM DEMOLITION PLAN  PLAN NORTH

SCALE: 1/8"=1'-0"



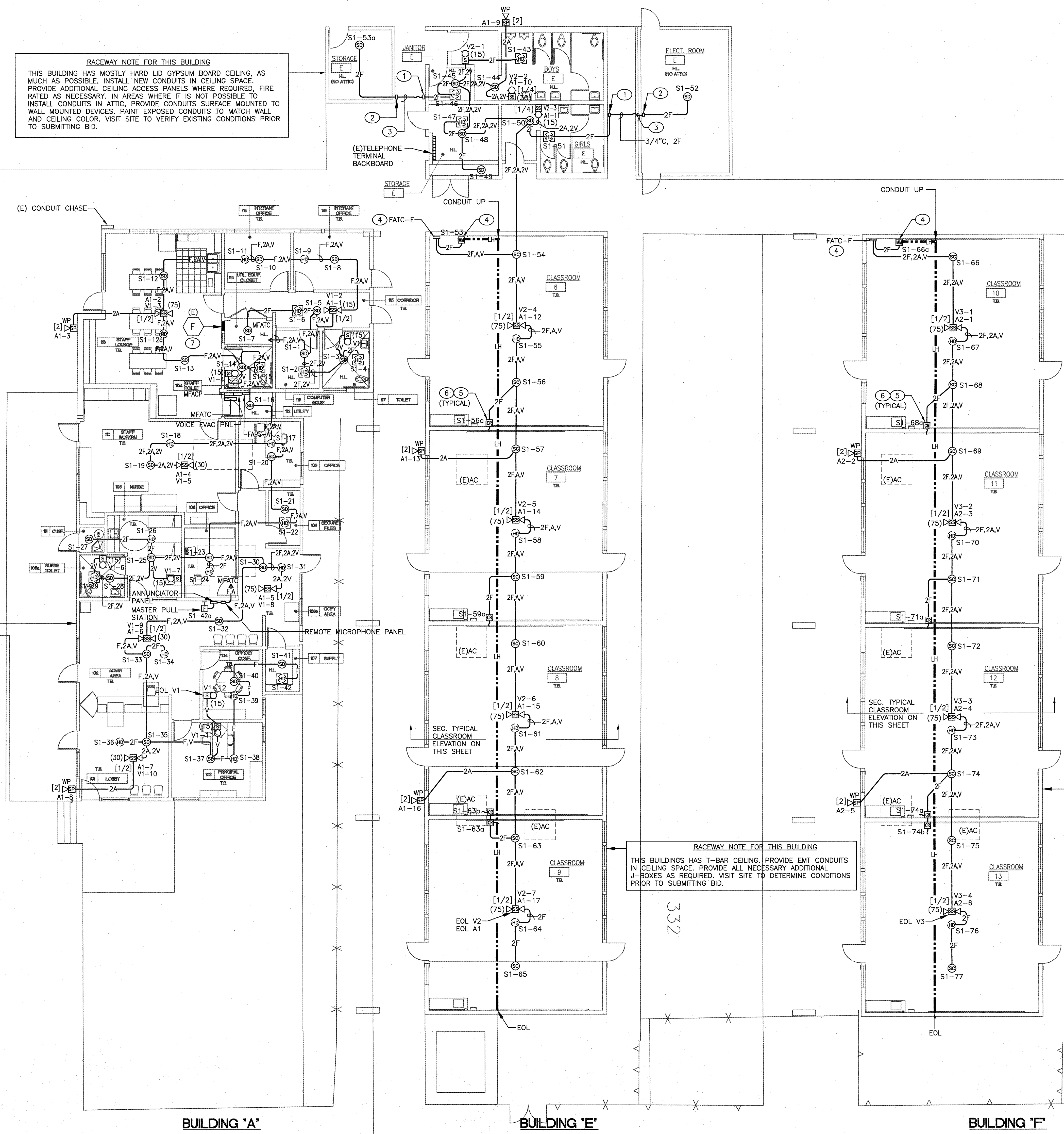
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DATE: 09062018



FA-304

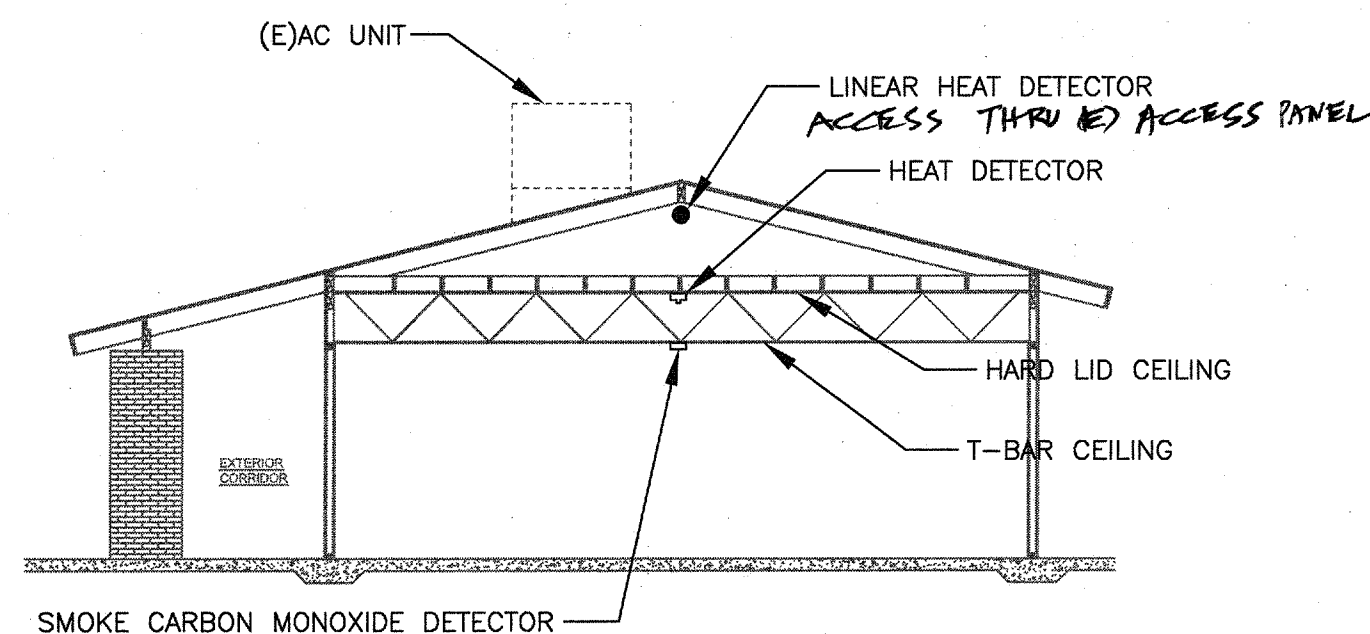
RACEWAY NOTE FOR THIS BUILDING
THIS BUILDING HAS MOSTLY HARD LID GYPSUM BOARD CEILING, AS MUCH AS POSSIBLE, INSTALL NEW CONDUITS IN CEILING SPACE. PROVIDE ADDITIONAL CEILING ACCESS PANELS WHERE REQUIRED. FIRE RATED AS NECESSARY. IN AREAS WHERE IT IS NOT POSSIBLE TO INSTALL CONDUITS IN ATTIC, PROVIDE CONDUITS SURFACE MOUNTED TO WALL MOUNTED DEVICES. PAINT EXPOSED CONDUITS TO MATCH WALL AND CEILING COLOR. VISIT SITE TO VERIFY EXISTING CONDITIONS PRIOR TO SUBMITTING BID.

RACEWAY NOTE FOR THIS BUILDING
THIS BUILDING HAS T-BAR CEILING. PROVIDE EMT CONDUITS IN CEILING SPACE. PROVIDE ALL NECESSARY ADDITIONAL J-BOXES AS REQUIRED. VISIT SITE TO DETERMINE CONDITIONS PRIOR TO SUBMITTING BID.



- KEYED NOTES**
- 1 WP 6"x6"x4"D PULLBOX MOUNT HIGH ON EXTERIOR WALL.
 - 2 6"x6"x4"D PULLBOX.
 - 3 PROVIDE 1" FLEX CONDUIT.
 - 4 MOUNT HIGH ON WALL.
 - 5 4S BOX WITH CONTROL RELAY MODULE. MOUNT ABOVE T-BAR CEILING AND MARK DEVICE ADDRESS ON CEILING.
 - 6 3/4"C, 2#12. CONNECT IN SERIES TO AC UNIT CONTROL CIRCUIT ON ROOF FOR AUTOMATIC SHUT-OFF. SEE WIRING DETAIL ON SHEET FA-003.
 - 7 PROVIDE (3)20A CIRCUIT BREAKER TO SPACE CIRCUIT 5, 7, AND 9 WITH LOCK-ON DEVICE, RED MARKING AND IDENTIFY "FIRE ALARM" IN BOLD LETTERS PER NFPA 72, CHAP. 10.6.5.2. NEW CIRCUIT BREAKERS SHALL MATCH EXISTING AND A.I.C. RATING.

CEILING TYPE:
T.B. - T-BAR CEILING
H.L. - HARD LID CEILING

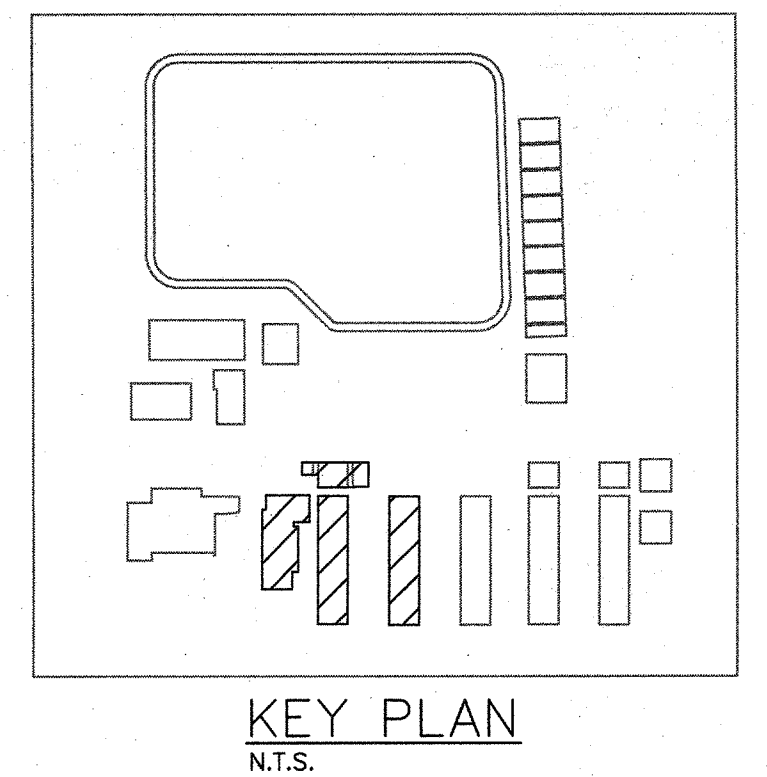


TYPICAL CLASSROOM ELEVATION SECTION
SCALE: NTS

RACEWAY NOTE FOR THIS BUILDING
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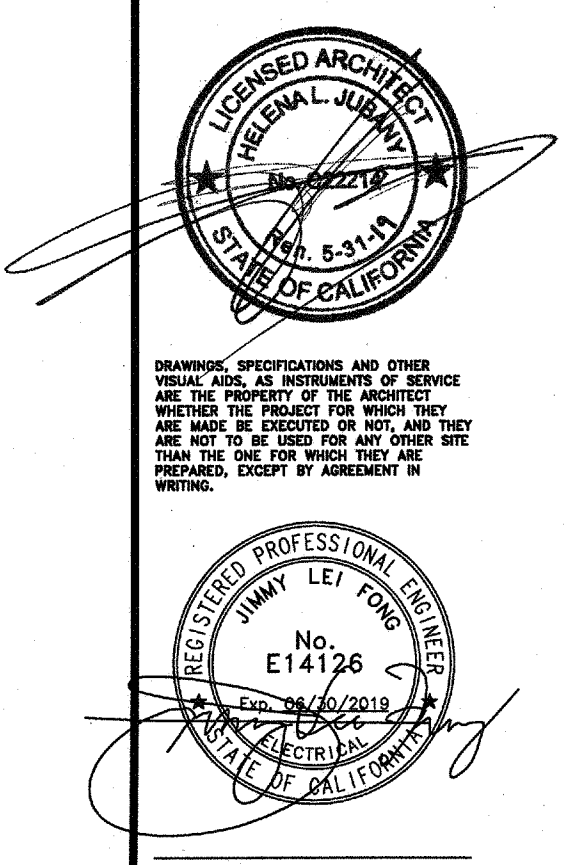
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FIRE ALARM PLAN
SCALE: 1/8"=1'-0"
PLAN NORTH



KEY PLAN
N.T.S.

PACIFIC ENGINEERS GROUP
Consulting Electrical Engineers
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Tel: (818) 748-1758
Fax: (818) 763-9180

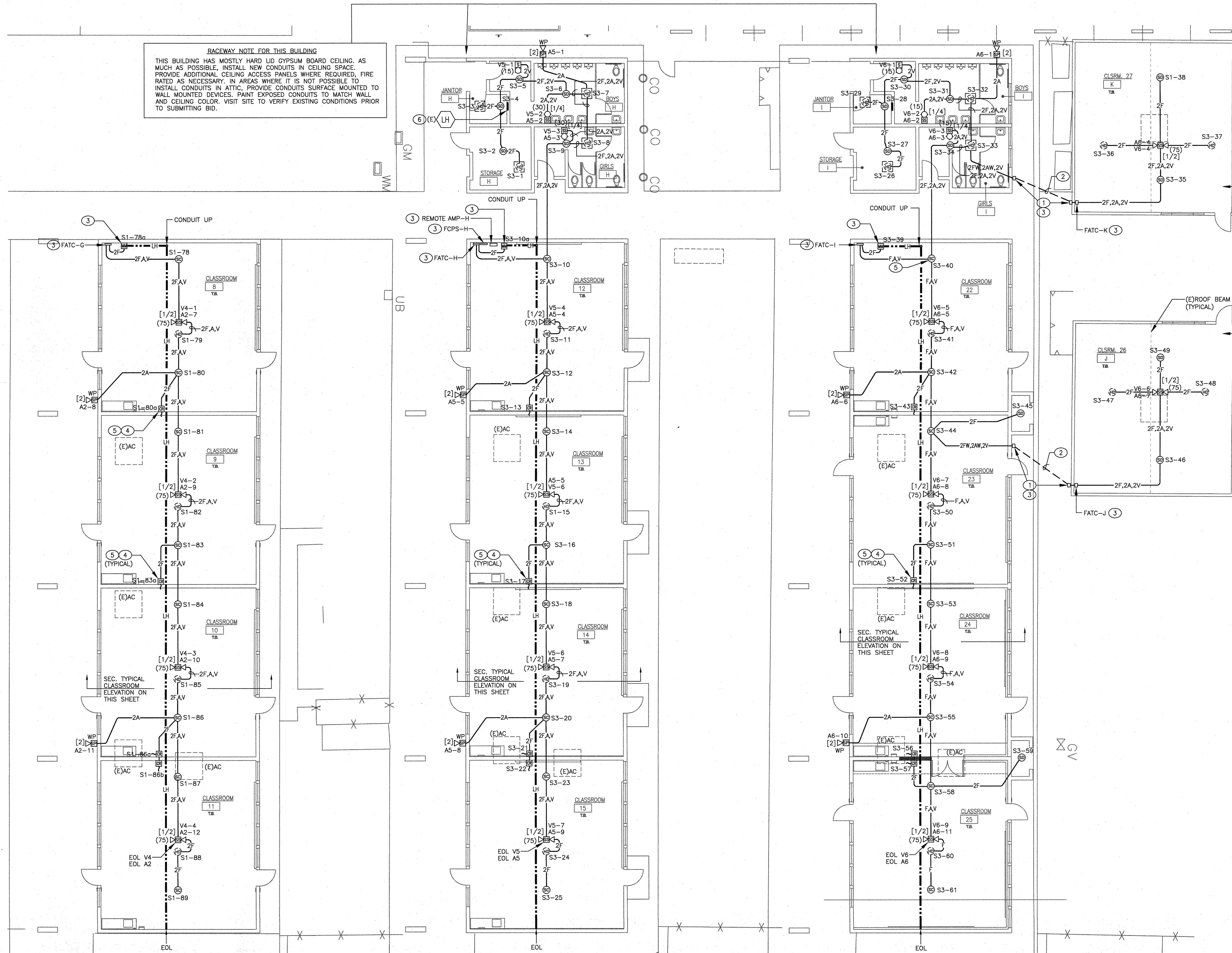


ROSEMEAD SCHOOL DISTRICT
MUSCATEL MIDDLE SCHOOL
FIRE ALARM UPGRADE AT ENTIRE SITE
4201 IVAR AVE. ROSEMEAD, CA 91770

ROSEMEAD SCHOOL DISTRICT
PARK ROSEMEAD
3007 ROSEMEAD BOULEVARD
ROSEMEAD, CA 91770

JUBANY NAC ARCHITECTURE
837 N. SPRING ST., LOS ANGELES, CA 90012-2033 (P. 213.478.8076) (F. 323.893.3110)

NAC NO. 161-17008
FILE
DRAWN HY
CHECKED AJ
DATE 03-21-2018



BUILDING 'G' FIRE ALARM PLAN
SCALE: 1/8"=1'-0"

RACEWAY NOTE FOR THIS BUILDING
THIS BUILDING HAS T-BAR CEILING. PROVIDE EMT CONDUITS IN CEILING SPACE. PROVIDE ALL NECESSARY ADDITIONAL J-BOXES AS REQUIRED. VISIT SITE TO DETERMINE CONDITIONS PRIOR TO SUBMITTING BID.

BUILDING 'H' FIRE ALARM PLAN
SCALE: 1/8"=1'-0"

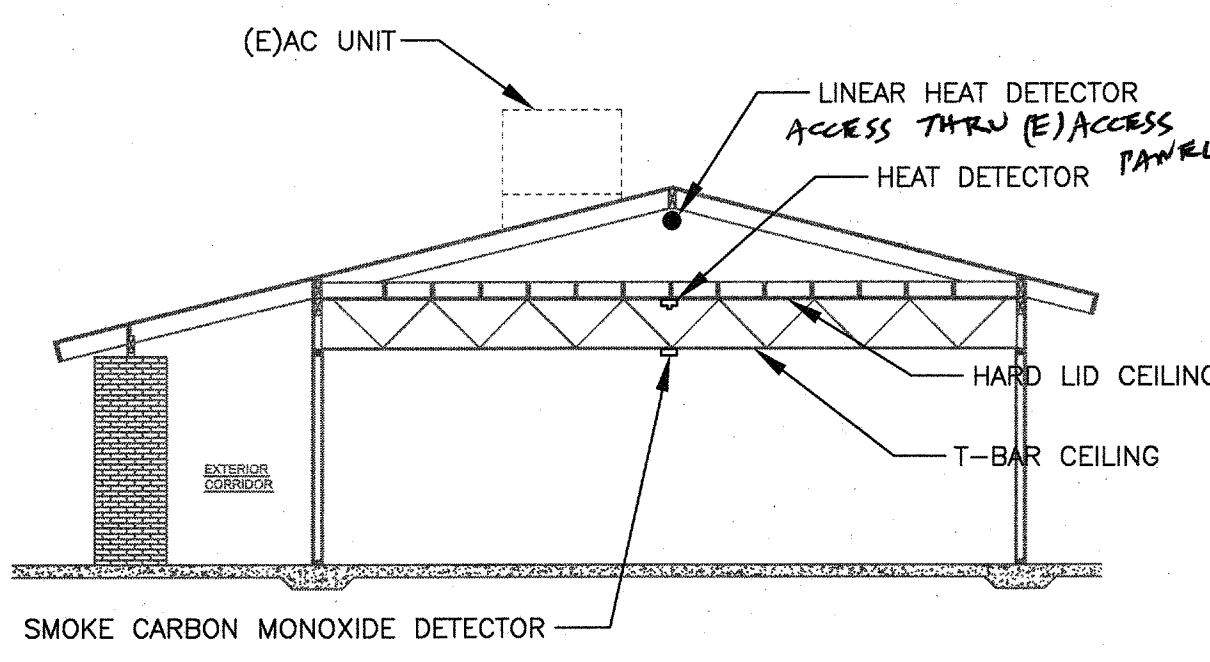
RACEWAY NOTE FOR THIS BUILDING
THIS BUILDING HAS T-BAR CEILING. PROVIDE EMT CONDUITS IN CEILING SPACE. PROVIDE ALL NECESSARY ADDITIONAL J-BOXES AS REQUIRED. VISIT SITE TO DETERMINE CONDITIONS PRIOR TO SUBMITTING BID.

BUILDING 'I' FIRE ALARM PLAN
SCALE: 1/8"=1'-0"

RACEWAY NOTE FOR THIS BUILDING
THIS BUILDING HAS T-BAR CEILING. PROVIDE EMT CONDUITS IN CEILING SPACE. PROVIDE ALL NECESSARY ADDITIONAL J-BOXES AS REQUIRED. VISIT SITE TO DETERMINE CONDITIONS PRIOR TO SUBMITTING BID.

- KEYED NOTES**
- WP 8"x8"x6" D PULLBOX, MOUNT HIGH ON WALL EXTEND 1" TO ATTIC SPACE.
 - 1-1/2" C, 2FW, 2AW, 2V.
 - MOUNT HIGH ON WALL.
 - AS WITH CONTROL RELAY MODULE MOUNT ABOVE T-BAR CEILING AND MARK "DEVICE ADDRESS ON CEILING".
 - 3/4" C, 2F12, CONNECT IN SERIES TO AC UNIT CONTROL CIRCUIT ON ROOF FOR AUTOMATIC SHUT-OFF. SEE WIRES DETAIL ON SHEET FA003.
 - DISCONNECT, REMOVE AND REPLACE SPARE CIRCUIT BREAKER #17&42 WITH 20 AMP, 1 POLE BREAKER. NEW CIRCUIT BREAKERS SHALL BE WITH LOCK-ON DEVICE, RED MARKING AND IDENTIFY "FIRE ALARM" IN BOLD LETTERS PER NFPA 72, CHAP. 10.6.5.2. NEW CIRCUIT BREAKER SHALL MATCH EXISTING AND A.I.C. RATING.

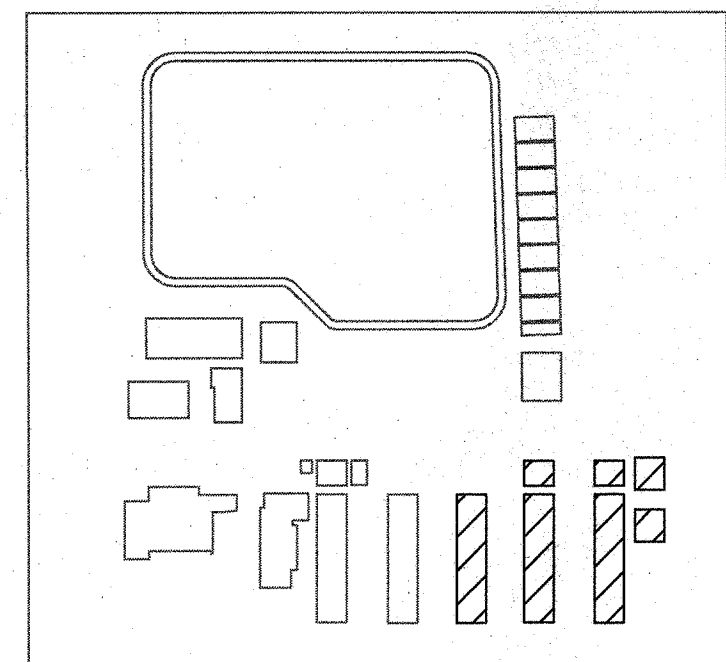
RACEWAY NOTE FOR THIS BUILDING
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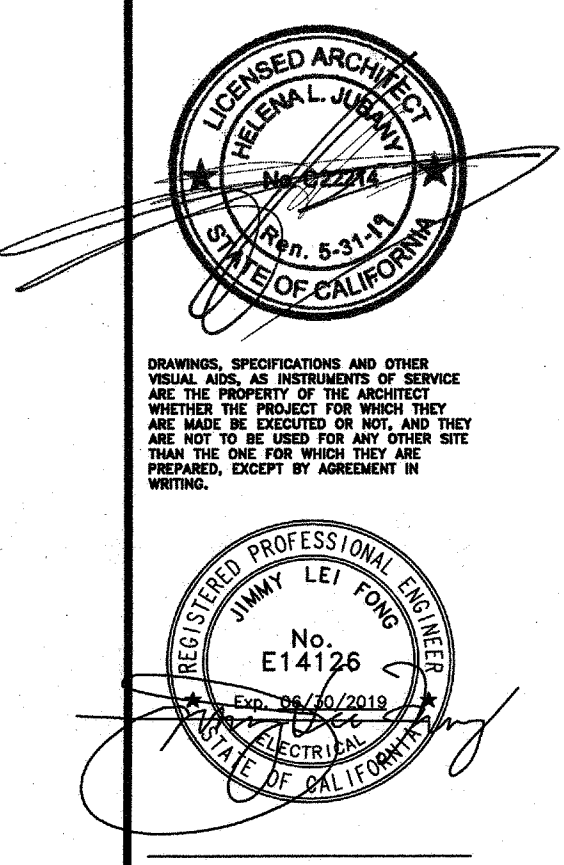
TYPICAL CLASSROOM ELEVATION SECTION
SCALE: NTS

CEILING TYPE:
T.B. - T-BAR CEILING
H.L. - HARD LID CEILING

FILE: 19-91
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
LOS ANGELES BASIN REGIONAL OFFICE
APPL: AR03-118779
AC: *[Signature]* SS
DATE: 09.06.2018



KEY PLAN
N.T.S.



ROSEMEAD SCHOOL DISTRICT
MUSCATEL MIDDLE SCHOOL
FIRE ALARM UPGRADE AT ENTIRE SITE
4201 IVAR AVE. ROSEMEAD, CA 91770

ROSEMEAD
SCHOOL DISTRICT
PARK ROSEMEAD
3307 ROSEMEAD BOULEVARD
ROSEMEAD, CA 91770

JUBANY
NAC ARCHITECTURE
827 N. SPRING ST. LOS ANGELES CA 90012-2323 (P) 213.425.6071 (F) 323.693.3110
WWW.NACARCHITECTURE.COM

NAC NO: 161-17008
FILE:
DRAWN: HY
CHECKED: AJ
DATE: 03-21-2018

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 WRITING.

UBANY
NAC

ARCHITECTURE

FA-404

CEILING TYPE:
T.B. - T-BAR CEILING.



RACEWAY NOTE FOR THIS BUILDINGS

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KEY PLAN
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2005 NAC 1-2