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RBV FIRE ALARM UPGRADE
RANCHO BUENA VISTA HIGH SCHOOL

SHEET INDEX
SHEET TOTAL: 41

ARCHITECTURAL

COVER SHEET & GENERAL INFO

T-001	COVER SHEET
T-002	APPLICABLE CODES AND GENERAL NOTES
T-003	ABBREVIATIONS AND TYPICAL SYMBOLS

ELECTRICAL

E-1.0	ELECTRICAL LEGEND AND NOTES
E-5.0	SITE PLAN - FIRE ALARM
E-5.1	FLOOR PLAN - FIRE ALARM
E-5.2	FLOOR PLAN - FIRE ALARM
E-5.3	FLOOR PLAN - FIRE ALARM
E-5.4	FLOOR PLAN - FIRE ALARM
E-5.5	FLOOR PLAN - FIRE ALARM
E-5.6	FLOOR PLAN - FIRE ALARM
E-5.7	FLOOR PLAN - FIRE ALARM
E-5.8	FLOOR PLAN - FIRE ALARM
E-5.9	FLOOR PLAN - FIRE ALARM
E-5.10	FLOOR PLAN - FIRE ALARM
E-5.11	FLOOR PLAN - FIRE ALARM
E-5.12	FLOOR PLAN - FIRE ALARM
E-5.13	FLOOR PLAN - FIRE ALARM
E-5.14	FLOOR PLAN - FIRE ALARM
E-5.15	FLOOR PLAN - FIRE ALARM
E-5.16	FIRE ALARM SCHEDULE AND NOTES
E-5.17	FIRE ALARM RISER DIAGRAM
E-5.18	FIRE ALARM RISER DIAGRAM
E-5.19	FIRE ALARM CALCULATIONS
E-5.20	FIRE ALARM CALCULATIONS
E-5.21	TYPICAL DETAILS
E-10.1	DEMOLITION PLAN - FIRE ALARM
E-10.2	DEMOLITION PLAN - FIRE ALARM
E-10.3	DEMOLITION PLAN - FIRE ALARM
E-10.4	DEMOLITION PLAN - FIRE ALARM
E-10.5	DEMOLITION PLAN - FIRE ALARM
E-10.6	DEMOLITION PLAN - FIRE ALARM
E-10.7	DEMOLITION PLAN - FIRE ALARM
E-10.8	DEMOLITION PLAN - FIRE ALARM
E-10.9	DEMOLITION PLAN - FIRE ALARM
E-10.10	DEMOLITION PLAN - FIRE ALARM
E-10.11	DEMOLITION PLAN - FIRE ALARM
E-10.12	DEMOLITION PLAN - FIRE ALARM
E-10.13	DEMOLITION PLAN - FIRE ALARM
E-10.14	DEMOLITION PLAN - FIRE ALARM
E-10.15	DEMOLITION PLAN - FIRE ALARM

PROJECT DIRECTORY

CLIENT:
VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE
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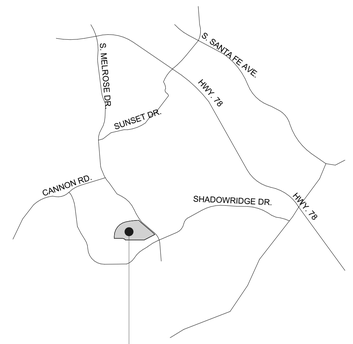
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PROJECT SCOPE
THE SCOPE OF THIS PROJECT INCLUDES A CAMPUS WIDE FIRE ALARM UPGRADE TO THE EXISTING FIRE ALARM SYSTEM.

EXISTING BUILDING CONSTRUCTION TYPE: V-A; V-B AT PERFORMING ARTS SPACE.
EXISTING AFFS: NONE, EXCEPT SPRINKLERED AT PERFORMING ARTS SPACE.

VICINITY MAP



RANCHO BUENA VISTA HIGH SCHOOL
1601 LONGHORN DR.
VISTA, CA 92081

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-122924 INC:
REVIEWED FOR
SS ☐ FLS ☑ ACS ☐
DATE: 02/29/2024

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ARCHITECT OF RECORD

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VISTA, CA 92081
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REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln

MODEL FILE:
23-018_RBV FIRE ALARM_DRAFT.pln

PLOT DATE:
2/28/2024

SHEET TITLE

COVER SHEET

T-001

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RBV FIRE ALARM UPGRADE
RANCHO BUENA VISTA HIGH SCHOOL

GENERAL CONSTRUCTION NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE CODES LISTED ON THIS SHEET. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILAR WITH ALL CODES AND ORDINANCES, CITY OR STATE AS REQUIRED FOR THE CONSTRUCTION OF THE FOLLWOING PROJECT. WHERE CONFLICTS OCCUR BETWEEN FEDERAL, STATE, AND LOCAL LAWS, CODES, ORDINANCES, AND REGULATIONS, THE MOST STRINGENT SHALL GOVERN,
2. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF BOTH THE UNIFORM BUILDING CODE AND TITLE 24, CALIFORNIA CODE OF REGULATIONS.
3. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO THE START OF WORK. THE EXISTING CONDITIONS SHALL INCLUDE, BUT NOT BE LIMITED TO: IRRIGATION, DRAINAGE, SITE MEHCANICAL, PLUMBING, AND ELECTRICAL. THE CONTRACTOR SHALL NOTIFY THE ARCHTIECT OF ANY DISCREPANCIES IN SITE CONDITIONS AND CONTRACT DOCUMENTS. FAILURE TO NOTIFY WHILE PROCEEDING WITH WORK SHALL IMPLY ACCEPTANCE OF THE SITE CONDITIONS BY THE CONTRACTOR FOR THE WORK INTENDED.
4. THE CONTRACTOR SHALL PROVIDE ADEQUATE AND SAFE BRACING TO SUPPORT THE COMPONENTS OF THE STRUCTURE UNTIL THE STRUCTURE ITSELF, FLOOR AND ROOF DIAPHRAGMS ARE COMPLETE ENOUGH TO SUPPORT ITSELF. THE SAFETY AND ERECTION OF BRACING SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THERE ARE NO DISCREPENCIES BEWTEEN THE ARCHITECTURAL DRAWINGS AND THE CONSULTING ENGINEER'S DRAWINGS WHICH WOULD CAUSE A CONFLICT IN THE INSTALLATION OF THE SYSTEMS. IF SUCH A CONFLICT DOES OCCUR, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ALERT THE ARCHITECT TO THE SITUATION PRIOR TO INSTALLATION. ANY WORK INSTALLED IN CONFLICT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REMEDY WITH NO ADDITIONAL COST TO THE OWNER.
6. THE CONTRACTOR SHALL REFER TO THE SPECIFICATIONS FOR A COMPLETE LIST OF GENERAL CONDITIONS, SPECIAL CONDITIONS, AND MATERIAL INSTALLATION METHODOLOGY.
7. TYPICAL NOTES AND DETAILS SHALL APPLY UNLESS SHOWN OTHERWISE, WHERE A CONSTRUCTION DETAIL IS NOT SHOWN OR NOTED, THE DETAIL SHALL BE THE SAME AS FOR A SIMILAR CONDITION.
8. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS, SERVICES, POINTS OF CONNECTION, AND IRRIGATION LINES IN THE CONSTRUCTION AREA PRIOR TO COMMENCEMENT OF WORK. IF PROPER VERIFICATION IS NOT DONE PRIOR TO WORK COMMENCING, AND DAMAGE IS INCURRED THE CONTRACTOR SHALL REPAIR THE DAMAGE AT NO COST TO THE OWNER.
9. ALL DRAWINGS ARE FOR ILLUSTRATION ONLY, THE CONTRACTOR AND SUBCONTRACTORS, SHALL NOT LOCATE ITEMS BY SCALING. IF ITEMS ARE MISLOCATED DUE TO SCALING, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND CORRECTLY INSTALLING THE ITEMS AT NO EXPENSE TO THE OWNER.
10. IT IS THE INTENT OF THESE DRAWINGS TO INDICATE A COMPLETE AND FINISHED PRODUCT AND / OR ABUTING EXISTING CONDITION IN A FINSHED AND PROFESSIONAL MANNER.
11. IT IS THE CONTRACTOR'S RESPONSIBILITY TO KEEP THE AREA AROUND THE WORK IN A CLEAN AND SAFE CONDITION. ALL TRASH AND DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER. AREA OF WORK SHALL BE COMPLETELY CLEANED AND READY FOR OCCUPANCY UPON COMPLETION OF WORK.
12. ALL WORK SHALL CONFORM TO TITLE 24 CA CODE OF REGULATIONS. A COPY OF TITLE 24, PARTS 1-5, SHALL BE AVAILABLE ON THE JOBSITE AT ALL TIMES.
13. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY DSA, AS REQUIRED BY SEC. 4-338, PART 1, T-24, CCR. ALL ADDENDA AND CONSTRUCTION CHANGE DOCUMENTS SHALL BE SIGNED BY THE ARCHITECT.
14. A 'DSA CERTIFIED' PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY DSA, ARCHITECT OF RECORD & STRUCTURAL ENGINEER OF RECORD (WHERE APPLICABLE), SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342 PART 1, T-24 CCR. THE INSPECTOR SHALL BE A CLASS III.
15. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE OWNER SHALL CONDUCT ALL REQUIRED TESTING AND SPECIAL INSPECTIONS FOR THE PROJECT AS IDENTIFIED ON THE DSA 103 TESTING AND INSPECTION FORM.
16. THE PROJECT SHALL CONFORM TO CURRENT ADA STANDARDS 2022 CBC CHAPTER 11 B.
17. FOOD HANDLING FACILITIES SHALL COMPLY WITH ALL LOCAL HEALTH REQUIREMENTS AND CALIFORNIA UNIFORM RETAIL FOOD FACILITIES LAWS.
18. 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 CONDITIONS SUCH AS DETERIORATION OR NONCOMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TILE 24, CALIFORNIA CODE OF REGULATIONS, A CCD, OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY THE DIVISION OF STATE ARCHITECT BEFORE PROCEEDING WITH THE WORK.
19. THE ARCHITECT AND OR ENGINEER SHALL MAKE PERIODIC SITE VISITS DURING CONSTRUCTION TO OBSERVE THE PROGRESS OF THE WORK AND VERIFY GENERAL CONFORMANCE TO THE PLANS AND SPECIFICATIONS IS BEING MET. THESE VISIT DO NOT CONSTITUTE A GUARANTEE OF THE CONTRACTOR'S WORK. A CONTRACTOR'S ERROR THAT GOES UNDETECTED DURING A PERIODIC VISIT DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR PROPERLY PERFORMING THE SCOPE OF THE PROJECT.
20. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ADJACENT STRUCTURES, PROPERTY, AND SITE FEATURES DURING CONSTRUCTION. ANY DAMAGE TO SUCH ITEMS SHALL BE PROMPTLY RESTORED TO THE SATISFACTION OF THE OWNER AND ARCHITECT.
21. CONTRACTORS AND SUBCONSTRATORS ARE REQUIRED TO SUBMIT THEIR BIDS BASED ON ALL DRAWINGS AND SPECIFICATIONS, NOT SOLELY THE SHEETS OR SECTIONS RELEVANT TO THEIR TRADE.
22. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO BE COMPLIMENTARY IN NATURE, HOWEVER IF A DISCREPANCY OCCURS BETWEEN THE TWO DOCUMENTS, THE MORE STRINGENT REQUIREMENT AND HIGHEST LEVEL OF QUALITY SHALL TAKE PRECENDENCE.
23. ALL DETAILS PROVIDED IN THE CONSTRUCTION DOCUMENTS ARE A PART OF THE CONSTRUCTION SCOPE REGARDLESS OF WHETHER THEY ARE SPECIFICALLY REFERENCED.
24. FABRICATION AND INSTALLATION OF DEFERRED SUBMITTAL ITEMS SHALL NOT BE STARTED UNTIL CONTRACTOR'S DRAWINGS, SPECIFICATIONS, AND ENGINEERING CALCULATIONS FOR THE ACTUAL SYSTEMS TO BE INSTALLED HAVE BEEN ACCEPTED AND SIGNED BY THE ARCHITECT OR STRUCTURAL ENGINEER AND APPROVED BY THE DSA. LIST DEFERRED SUBMITTAL ITEMS FOR THIS PROJECT.
25. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.

GENERAL DEMOLITION NOTES

1. DEMOLITION PLANS REFERENCE GENERAL ITEMS AND CONDITION VARIATIONS MAY OCCUR WITHIN AREA OF DEMOLITION AND SHALL BE TREATED AS SIMILAR.
2. NOT ALL LOCATIONS FOR DEMOLITION MAY BE NOTED. CONTRACTOR SHALL REVIEW THE PROJECT REQURIEMENTS AND BE FAMLIAR WITH THE EXISTING SITE CONDITIONS FOR EVALUATION OF DEMOLITION WORK NECESSARY TO COMPLETE THE NEW WORK.
3. KEY NOTES REFERENCE GENERAL ELEMENTS FOR DISPOSAL OR SALVAGE. VARIOUS ASSOCIATED ITEMS MAY OCCUR AND SHALL BE REMOVED ACCORDING TO THE NEEDS AND DESIGN INTENT OF THE NEW CONSTRUCTION.
4. THE CONTRACTOR SHALL NOT REMOVE OR ALTER ANY BUILDING ELEMENTS OR SYSTEMS NECESSARY FOR THE BUILDING'S STRUCTURAL INTERGRITY WITHOUT PRIOR AUTHORIZATION FROM THE ARCHITECT AND/OR STRUCTURAL ENGINEER OF RECORD.
5. CONTRACTOR SHALL NOT ALTER OR REMOVE ANY SHEAR WALLS OR BEARING WALLS UNLESS IDENTIFIED ON THE DRAWINGS WITH APPROPRIATE DETAILS. THE COTNRACTOR SHALL TAKE PRECAUTIONS DURING DEMOLITION AND CONSTRUCTION ACITIVITES TO NOT EFFECT THE EXISTING STRUCTURAL SYSTEM OF THE BUILDING. IF DURING THE COURSE OF THE WORK, ELEMENTS THAT ARE IDENTIFIED TO BE DEMOLISHED, BUT APPEAR STRUCTURAL IN NATURE AND NOT IDENTIFIED AS SUCH, THE CONTRACTOR SHALL NOTFIY THE ARCHITECT IMMEDIATELY. THE CONTRACTOR SHALL NOT PROCEED WITH THE DEMOLITION OF SUCH ELEMENTS WITHOUT THE DIRECTION OF THE ARCHITECT AND/OR STRUCTURAL ENGINEER OF RECORD.
6. AFTER THE DEMOLITION AND REMOVAL OF ELEMENTS, REPAIR AND RESTORE EXISTING FINISHES TO BE LEFT EXPOSED TO THEIR ORIGINAL CHARACTER. WHERE EXISTING FINISHES ARE TO BE HIDDEN WITH NEW MATERIALS, THOSE FINISHES SHALL BE RESTORED TO PROVIDE ADEQUATE SUITABILITY, STRENGTH, AND SUBSTRATE FOR NEW CONSTRUCTION AND FINISHES.
7. CONTRACTOR SHALL COMPLY WITH THE FOLLOWING SECTIONS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION:
   - 5-2 PROTECTION
   - 5-3 REMOVAL
   - 5-4 RELOCATION
   - 7-8 PROJECT SITE MAINTENANCE
   - 7-9 PROTECTION AND RESTORATION OF EXIST. IMPROVEMENTS
   - 7-10 PUBLIC CONVENIENCE AND SAFETY
8. SAFETY DURING CONSTRUCTION SHALL COMPLY WITH CHAPTER 33 C.B.C. AND CHAPTER 33 C.F.C.
9. THE CONTRACTOR SHALL DISPOSE OF DEMOLITION MATERIALS IN A LEGAL AND ACCEPTABLE MANNER.
10. CONTRACTOR SHALL MAKE AVAILABLE TO OWNER ANY MATERIALS OR EQUIPMENT LISTED FOR DEMOLITION, DISPOSAL. REMOVAL, ETC. UPON OWNERS REQUEST. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL SALVAGABLE ITEMS.
11. CONTRACTOR SHALL KEEP OPERATING EQUIPMENT OR MATERIALS INDICATED FOR REUSE, RELOCATION, OR OWNER RETENTION IN A SAFE MANNER TO PROTECT THE MATERIAL OR EQUIPMENT FROM DAMAGE.
12. THE CONTRACTOR IS RESPONSIBLE TO PERFORM ALL DEMOLITION WORK NECESSARY TO ALLOW EXECUTION OF ALL REQUIREMENTS OF THE NEW CONSTRUCTION UNDER THIS CONTRACT. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL EXISTING CONDITIONS.
13. THE RECORD DRAWINGS FOR THE FACILITIES TO BE MODERNIZED MAY BE AVAILABLE FROM THE DISTRICT FOR REFERENCE. CONTRACTOR SHALL REQUEST DRAWINGS OR OTHER OWNER SUPPLIED DOCUMENTS PRIOR TO BEGINNING DEMOLITION OR CONSTRUCTION ACTIVIITES. THE CONTRACTOR SHALL REVIEW THE RECORD DOCUMENTS TO DETERMINE ANY CONDITIONS WHERE CONFLICTS, HARDSHIPS, OR SIMILIAR ISSUES MAY ARISE. THE CONTRACTOR SHALL NOTIFY THE ARCHTIECT OF ANY CONDITIONS WHERE CONFLICTS MAY ARISE PRIOR TO DEMOLITION OR CONSTRUCTION ACTIVITIES.
14. AREA OF FLOOR SLAB OR PAVING DEMOLITION IS SHOWN AS AN APPROXIMATION ONLY TO DEFINE GENERAL SCOPE OF WORK. EXISTING CONDITIONS MAY REQUIRE A LARGER / DIFFERENTLY CONFIGURED AREA OF DEMOLITION. REMOVAL SHALL BE IN ACCORDANCE TO THE NEEDS AND DESIGN INTENT OF THE NEW CONSTRUCTION. COORDINATE DEMOLITION REQUIREMENTS WITH CIVIL, STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DESIGN AND DRAWINGS.
15. ALL FLOOR SLAB AND/OR PAVING SAWCUTS SHALL BE DONE IN A MANNER THAT CREATES A SHARP, STRAIGHT, AND SQUARE EDGE. SAW CUT EDGES EXPOSED FOR LONG DURATIONS DURING CONSTRUCTION SHALL BE PROTECTED BY THE CONTRACTOR IN ORDER TO LIMIT CHIPPING OF CONCRETE EDGE. IF CHIPPING OR OTHER DAMAGE OCCURS, CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ADDITIONAL FLOOR SLAB AND/OR PAVING TO NEXT AVAILABLE JOINT OR AS DETERMINED BY ARCHITECT AT THE CONTRACTOR'S OWN COST.
16. WHERE EQUIPMENT AND/OR FIXTURES ARE INDICATED TO BE REMOVED ALL RELATED EXPOSED PIPING, CONDUITS, AND ASSOCIATED ITEMS SHALL ALSO BE REMOVED AND/OR PROPERLY TERMINATED TO PROVIDE COMPLETE DEMOLITION.
17. WHERE EXISTING CONSTRUCTION ELEMENTS (FRAMING, FINISHES, PIPES, CONDUITS, DUCTWORK, EQUIPMENT, ETC.) INTERFERE WITH THE INTENDED NEW CONSTRUCTION OR WOULD BE EXPOSED IN OTHERWISE 'FINISHED' AREAS, THESE ITEMS SHALL ALSO BE REMOVED AND/OR RELOCATED.
18. AT DEMOLITION OF DOORS, WINDOWS, FLASHINGS, SOFFITS, ETC. WHERE PLASTER IS DISTURBED AT FINISHES TO REMAIN, REMOVE PLASTER BACK 6" MINIMUM TO EXPOSE LATH TO PERFORM PROPER PLASTER PATCH.
19. REFER TO STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ALL DEMOLITION WORK SPECIFIC TO THOSE BUILDING SYSTEMS.
20. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REQUEST ANY HAZARDOUS ABATEMENT DOCUMENTS FOR THE SCOPE OF WORK TO FULLY UNDERSTAND THE EXTENT OF REMOVAL AND DISPOSAL REQUIREMENTS FOR THOSE MATERIALS.
21. ALL ABATEMENT WORK SHALL BE COMPLETED BY THE CONTRACTOR PRIOR TO DEMOLITION WORK.

GENERAL ACCESIBILITY NOTES

1. EXIT DOORS SHALL BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE. HAND-ACTIVATED DOOR OPENING HARDWARE SHALL BE CENTERED BETWEEN 36" TO 42" ABOVE THE FLOOR (PANIC HARDWARE SHALL BE BETWEEN 36" TO 44" ABOVE FIN. FLR.). LATCHING AND LOCKING DOORS THAT ARE HAND ACTIVATED AND IN A PATH OF TRAVEL, SHALL BE OPENABLE WITH A SINGLE EFFORT BY LEVER-TYPE HARDWARE, BY EXIT DEVICE, OR PUSH-PULL ACTIVATING BARS. LOCKED EXIT DOORS SHALL OPERATE BY ABOVE IN DIRECTON OF EGRESS.
2. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 5.0 POUNDS FOR EXTERIOR AND INTERIOR DOORS, SUCH PUSH OR PULL EFFORT BEING APPLIED AT RIGHT ANGLES TO HINGED DOORS AND AT THE CENTER PLANE OF SLIDING OR FOLDING DOORS.
3. DOOR CLOSERS AND GATES CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR TO A POSITION OF 12 DEGREES FROM THE LATCH IS 5 SECONDS MINIMUM.
4. THE FLOOR OR LANDING SHALL NOT BE MORE THAN 1/2 INCH LOWER THAN THE THRESHOLD OF THE DOORWAY. CHANGE IN LEVEL BETWEEN 1/4 AND 1/2 INCH SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1 UNIT VERTICAL TO 2 UNITS HORIZONTAL.
5. ACCESSIBLE FIXTURES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH CALIFORNIA PLUMBING CODE, 2022 EDITION.
6. EXPOSED LAVATORY P-TRAP ASSEMBLIES AND WATER SUPPLY LINES SHALL BE INSTALLED WITH REMANUFACTURED VINYL COVERED P-TRAP, VALVE, AND SUPPLY INSULATED COVER.
7. THE FORCE REQUIRED TO OPERATE LAVATORY OR SINK FAUCETS SHALL BE NO GREATER THAN 5 POUNDS, SELF-CLOSING FAUCETS SHALL HAVE A MINIMUM 10 SECOND CYCLE TIME.
8. ALL ACCESSIBLE GATES WITHIN THE PATH OF TRAVEL SHALL HAVE NON-GRIP HARDWARE MOUNTED BETWEEN 34" TO 44" ABOVE FINISH PAVING. THERE SHALL BE 24" MINIMUM CLEAR SPACE PROVIDED AT THE STRIKE SIDE OF THE GATE FOR ACCESSIBLE MANEUVERING CLEARANCES.
9. ALL DIMENSIONS FOR ACCESSIBLE COMPONENTS, FEATURES, OR CLEAR FLOOR SPACE ARE TO FACE OF FINISH UNLESS OTHERWISE NOTED.
10. WHERE FLOOR DRAINS ARE PROVIDED, FINISHED SURFACE SHALL SLOPE TO DRAIN NO MORE THAN 2% IN ANY DIRECTION. FLOOR DRAINS AND FLOOR SINKS SHALL HAVE 1/2" MAXIMUM GRATE OPENINGS IN ALL DIRECTION.
11. ACCESSIBLE PATH OF TRAVEL (POT) SHALL BE A BARRIER FREE ACCESS ROUTE WITHOUT ANY ABRUPT LEVEL CHANGES EXCEEDING 1/2" BEVELED 1:2 MAX SLOPE OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4" MAX. POT SHALL BE AT LEAST 48" IN WIDTH WITH A STABLE, FIRM, AND SLIP RESISTANT SURFACE. CROSS SLOPE SHALL NOT EXCEED 2% MAX AND THE SLOPE IN THE DIRECTION OF TRAVEL SHALL NOT EXCEED 5%. POT SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM ABOVE FINISHED SURFACE AND PROTRUDING OBJECTS GREATER THAN 4" PROJECTION FROM THE WALL AND 27" ABOVE FINISHED SURFACE, BUT LESS THAN 80" ABOVE FINISHED SURFACE. REFERENCE CBC 11B-202.4.
12. OPENINGS IN GRATINGS OR STRAINERS LOCATED IN THE PEDESTRIAN CIRCULATION PATHS OR PATH OF TRAVEL SHALL NOT ALLOW PASSAGE OF A SPHERE MORE THAN 1/2" DIAMETER. ELONGATED OPENINGS SHALL BE PLACED SO THAT THE LONG DIMENSION IS PERPENDICULAR TO THE DOMINANT DIRECTION OF TRAVEL IN COMPLIANCE WITH CBC 11B-302.
13. GATES IN THE PATH OF TRAVEL SHALL COMPLY WITH EXIT DOOR REQUIREMENTS.

GENERAL FIRE NOTES

1. FIRE SAFETY AND EVACUATION PLANS SHALL BE MADE AVAILABLE IN TH WORKPLACE FOR REFERENCE AND REVIEW BY EMPLOYEES AND COPIES SHALL BE FURNISHED TO THE FIRE CODE OFFICIAL FOR REVIEW UPON REQUEST.
2. THROUGH PENETRATION FIRE STOPPING FOR ALL FIRE WALLS, FLOORS/CEILING, AND ASSEMBLIES SHALL HAVE AN 'F' OR 'T' RATING PER THE CBC AND STANDARDS. INSTALLATION OF FIRE STOPPING SHALL COMPLY WITH APPROVED METHODS.
3. ALL CONTRACTORS PERFORMING WORK ON THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS OF 2022 CFC 901.7, SPECIFICALLY 901.7.4 CHAPTER 11 AND 33 AS WELL AS NFPA 241 FIRE PREVENTION PROGRAM THROUGHOUT ALL PHASES OF CONSTRUCTION.
4. FIRE PROTECTION DURING DEMOLITION AND CONSTRUCTION SHALL BE IN ACCORDANCE TO 2022 CBC AND CFC.

LIST OF APPLICABLE CODES

2022 CALIFORNIA ADMINISTRATIVE CODE (C.A.C.), PART 1, TITLE 24, C.C.R.

2022 CALIFORNIA BUILDING CODE (C.B.C.), PART 2, TITLE 24, C.C.R.

2022 CALIFORNIA ELECTRIC CODE (C.E.C.), PART 3, TITLE 24, C.C.R.

2022 CALIFORNIA MECHANICAL CODE (C.M.C.), PART 4, TITLE 24, C.C.R.

2022 CALIFORNIA PLUMBING CODE (C.P.C.), PART 5, TITLE 24, C.C.R.

2022 CALIFORNIA ENERGY CODE, PART 6, TITLE 24, C.C.R.

2022 CALIFORNIA FIRE CODE (C.F.C.), PART 9, TITLE 24, C.C.R.

2022 CALIFORNIA EXISTING BUILDING CODE (C.E.B.C.), PART 10, TITLE 24, C.C.R.

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24, C.C.R.

2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24, C.C.R.

TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

APPLICABLE STANDARDS

FOR A LIST OF APPLICABLE STANDARDS, INCLUDING CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS, REFER TO C.B.C. CHAPER 35 AND C.F.C. CHAPTER 80.

IDENTIFICATION STAMP
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APP: 04-122924 INC:
REVIEWED FOR
SS ☐ FLS ☑ ACS ☐
DATE: 02/29/2024

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ARCHITECT OF RECORD

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ENGINEER OF RECORD

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REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE:
23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE:
2/28/2024

SHEET TITLE

APPLICABLE CODES AND GENERAL NOTES

T-002

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RBV FIRE ALARM UPGRADE
RANCHO BUENA VISTA HIGH SCHOOL

STANDARD ABBREVIATIONS

&	AND
<	ANGLE
@	AT
A	AMP
AB.	ANCHOR BOLT
ABV.	ABOVE
AC.	ASPAHLT
A/C.	AIR CONDITIONING
ACOUS.	ACOUSTICAL
AD.	AREA DRAIN
ADJ.	ADJUSTABLE
AGGR.	AGGREGATE
AFF.	ABOVE FINISH FLOOR
AL.	ALUMINUM
AP.	ACCESS PANEL
APPROX.	APPROXIMATE
ARCH.	ARCHITECTURAL
ASC.	ABOVE SUSPENDED CEILING
AS.	AUTOMATIC SPRINKLER
AUTO.	AUTOMATIC
BD	BOARD
BFG.	BELOW FINISH GRADE
BITUM.	BITUMINOUS
BLDG.	BUILDING
BLK.	BLOCK
BM.	BEAM
BRG.	BEARING
BRK.	BRICK
BOT.	BOTTOM
BTU.	BRITISH THERMAL UNIT
C.	CONDUIT
CAB.	CABINET
CB.	CATCH BASIN
CD.	CEILING DIFFUSER
CEM.	CEMENT
CER.	CERAMIC
CF.	CUBIC FEET
CFM.	CUBIC FEET PER MINUTE
CG.	CORNER GUARD
CI.	CAST IRON
CIP.	CAST IN PLACE
CKT. BKR.	CIRCUIT BREAKER
CL.	CENTERLINE
CLG.	CEILING
CLR.	CLEAR
CMU.	CONCRETE MASONRY UNIT
CNTR.	COUNTER
CO.	CLEANOUT
COTG.	CLEANOUT TO GRADE
COL.	COLUMN
CONC.	CONCRETE
CONN.	CONNECTION
CPT.	CARPET
CTR.	CENTER
CTSK.	COUNTERSINK
CW.	COLD WATER
D.	DRAIN
DBL.	DOUBLE
DEPT.	DEPARTMENT
DET.	DETAIL
DF.	DINKING FOUNTAIN
DIA.	DIAMETER
DIM.	DIMENSION
DISP.	DISPENSER
DMT.	DEMOUNTABLE
DN.	DOWN
DO.	DOOR OPENING
DR.	DRAIN
DS.	DOWNSPOUT
DWG.	DRAWING
DWR.	DRAWER
EXIST.	EXISTING
E.	EAST
EA.	EACH
EF.	EXHAUST FAN
EJ.	EXPANSION JOINT
ELEC.	ELECTRICAL
ELEV.	ELEVATOR
EMER.	EMERGENCY
ENCL.	ENCLOSURE
EP.	ELECTRICAL PANELBOARD
EQ.	EQUAL
EQUIP.	EQUIPMENT
EW.	EACH WAY
EWC.	ELECTRIC WATER COOLER
EH.	EXHAUST
EXIST.	EXISTING
EXPO.	EXPOSED
EXP.	EXPANSION
EXT.	EXTERIOR
FAS.	FASTNER
FA.	FIRE ALARM
FB.	FACE BRICK
FCO.	FLOOR CLEANOUT
FD.	FLOOR DRAIN
FDN.	FOUNDATION
FE.	FIRE EXTINGUISHER
FEC.	FIRE EXTINGUISHER CABINET
FF.	FINISH FLOOR
FG.	FINISH GRADE
FH.	FIRE HYDRANT
FHC.	FIRE HOUSE CABINET
FIN.	FINISH
FL.	FLOW LINE
FLR.	FLOOR
FLOUR.	FLOURESCENT
FOC.	FACE OF CONCRETE
FOF.	FACE OF FINISH
FOM.	FACE OF MASONRY
FOS.	FACE OF STUD
FPRF.	FIREPROOFING
FS	FINISH SURFACE
FT.	FOOT
FTG.	FOOTING
FUT.	FUTURE
GA.	GAUGE
GALV.	GALVANIZED
GB.	GRAB BAR
GC.	GENERAL CONTRACTOR
GL.	GLASS
GI.	GALVANIZED IRON
GND.	GROUND
GPDW.	GYPSUM DRYWALL
GRD.	GRADE
GV.	GATE VALVE
GYP.	GYPSUM
HB.	HOSE BIB
HC.	HOLLOW CORE
HD.	HEAD
HDR.	HEADER
HDW.	HARDWARE
HM.	HOLLOW METAL
HDWD.	HARDWARE
HNDRL.	HANDRAIL
HORIZ.	HORIZONTAL
HVAC.	HEATING, VENTILATING, AIR CONDITIONING
ID.	INSIDE DIAMETER
IE.	INVERT ELEVATION
IF.	INSIDE FACE
IN.	INCH
INC.	INCLUDE
INFO.	INFORMATION
INSUL.	INSULATION
INT.	INTERIOR
INV.	INVERT
JAN.	JANITOR
JST.	JOIST
JT.	JOINT
KIT.	KITCHEN
KP.	KICK PLATE
KVA	KILOVOLT AMPERES
KW	KILOWATT
MAS.	MASONRY
MAT'L.	MATERIAL
MAX.	MAXIMUM
MC.	MEDICINE CABINET
MECH.	MECHANICAL
MFR.	MANUFACTURER
MH.	MANHOLE
MIN.	MINIMUM
MIR.	MIRROR
MISC.	MISCELLANEOUS
MO.	MASONRY OPENING
MTD.	MOUNTED
MTL.	METAL
MUL.	MULLION
N.	NORTH
NIC.	NOT IN CONTRACT
NO.	NUMBER
NOM.	NOMINAL
NTS.	NOT TO SCALE
OA.	OUTSIDE AIR
O/A	OVERALL
OBS.	OBSCURE
OC.	ON CENTER
OD.	OUTSIDE DIAMETER
OFF.	OFFICE
OH.	OPPOSITE HAND
OPNG.	OPENING
OPP	OPPOSET
OVHD.	OVERHEAD
PAV.	PAVING
PC.	PRECAST CONCRETE
PCC.	PORTLAND CEMENT CONCRETE
PHP.	PARTIAL HEIGHT PARTITION
PLT.	PLATE
PL	PROPERTY LINE
PLAM	PLASTIC LAMINATE
PLAS.	PLASTER
PLYWD.	PLYWOOD
PLBG.	PLUMBING
POC.	POINT OF CONNECTION
PP.	POWER POLE
PRCST	PRE-CAST
PSI.	POUNDS PER SQUARE INCH
PT.	POINT
PTD.	PAPER TOWEL DISPENSER
PTN.	PARTITION
PVMT.	PAVEMENT
QT.	QUARRY TILE
R.	RISER
RAD.	RADIUS
RD.	ROOF DRAIN
REF.	REFERENCE
REFR.	REFRIGERATOR
REINF.	REINFORCED
REQ'D.	REQUIRED
REV.	REVISION
RESIL.	RESILIENT
RM.	ROOM
RO.	ROUGH OPENING
RDWD.	REDWOOD
S.	SOUTH
SC.	SOLID CORE
SCHED.	SCHEDULE
SD.	SOAP DISPENSER
SECT.	SECTION
SF.	SQUARE FOOT
SH.	SHELF
SHR.	SHOWER
SHT.	SHEET
SIM.	SIMILAR
SMH	SEWER MANHOLE
SND.	SANITARY NAPKIN DISPENSER
SOV.	SHUT OFF VALVE
SPEC.	SPECIFICATIONS
SPKR.	SPRINKLER
SQ.	SQUARE
SS.	STAINLESS STEEL
STA.	STATION
STD.	STANDARD
STL.	STEEL
ST.	STEEL
STO.	STORAGE
STRUC.	STRUCTURAL
STR.	STRUCTURAL
SUSP.	SUSPENDED
SYM.	SYMMETRICAL
T	TREAD
TB.	TOWEL BAR
T&B	TOP AND BOTTOM
TOC	TOP OF CURB
TEL.	TELEPHONE
TEM.	TEMPERED
TER.	TERAZZO
TF.	TOP OF FOOTING
T&G	TONGUE AND GROOVE
THK.	THICK
TP.	TOP OF PARAPET
TPD.	TOILET PAPER DISPENSER
TS	TOP OF STRUCTURE
TTB.	TELEPHONE TERMINAL BACKBOARD
TV.	TELEVISION
TOW.	TOP OF WALL
TYP.	TYPICAL
UG.	UNDERGROUND
UNF.	UNFINISHED
UNO	UNLESS NOTED OTHERWISE
UON	UNLESS OTHERWISE NOTED
UR	URINAL
UTIL.	UTILITY
VAR.	VARIES
VB.	VAPOR BARRIER
VCT.	VINYL COMPOSITION TILE
VERT.	VERTICAL
VEST.	VESTIBULE
VIF.	VERIFY IN FIELD
VTR.	VENT THROUGH ROOF
W	WEST
W/	WITH
WC.	WATER CLOSET
WCO.	WALL CLEAN OUT
WD.	WOOD
WDW.	WINDOW
WH.	WATER HEATER
W/O	WITHOUT
WP.	WATERPROOF
WSCT.	WAINSCOT
WT.	WEIGHT
WWF.	WELDED WIRE FABRIC
WWM.	WELDED WIRE MESH

ACOUSTIC TILE CEILING (ATC) IN SUSPENDED T-BAR CEILING GRID (2'X4')

GYPSUM BOARD CEILING (INTERIOR)
STUCCO SOFFIT (EXTERIOR)

SUSPENDED LIGHT FIXTURE IN ATC

LIGHT FIXTURE

AIR DIFFUSER (SUPPLY)

AIR DIFFUSER (RETURN)

FINISHED CEILING HEIGHT, WHERE HEIGHTS ARE NOT INDICTAED REFER TO FINISH SCHEDULE. — N'-N"

EXISTING WALL TO REMAIN

NEW WALL

EXISTING WALL TO BE DEMOLISHED

HATCH MAY VARY BASED ON RATING

RATED WALL (NEW OR EXISTING)

WINDOW (NEW OR EXISTING)

WINDOW TO BE DEMOLISHED

DOOR (NEW OR EXISTING)

DOOR TO BE DEMOLISHED

DIRECTION OF FLOW

ROOF DRAIN/OVERFLOW DRAIN

CRICKET

APPROXIMATE LOCATION OF PROTECTIVE ROOF WALKTOP

TYPICAL SYMBOLS

ROOM ELEVATION — X/1, X/2, X/3, X/4, A-X.X — 'X' INDICATES CORRESPONDING ELEVATION REFERENCE; NUMBER REFERENCES FINISH SCHEDULE ELEVATION; CORRESPONDING SHEET NUMBER OF ELEVATION

DETAIL REFERENCE — N / A-X.X — DETAIL NUMBER; CORRESPONDING SHEET NUMBER OF DETAIL

EXTERIOR ELEVATION MARKER — N / A-X.X — EXTERIOR ELEVATION NUMBER; CORRESPONDING SHEET NUMBER OF ELEVATION

SECTION MARKER — A / A-X.X — ORIENTATION OF SECTION CUT; BUILDING SECTION LETTER; CORRESPONDING SHEET NUMBER OF SECTION

DOOR IDENTIFICATION — N / D000 — CORRESPONDING ROOM NUMBER; DOOR NUMBER

WINDOW IDENTIFICATION — 000 — WINDOW NUMBER

REVISION — N — REVISION NUMBER

KEYNOTE — N / TYP. — KEYNOTE NUMBER; TYPICAL WHERE NOTED. TYPICAL ITEMS WILL NOT BE NOTED AT ALL LOCATION.

ROOM NAME/NUMBER MARKER — ROOM NAME / ROOM NUMBER

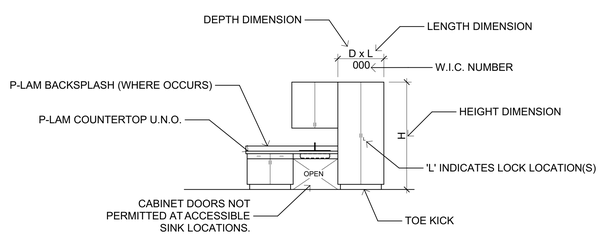
EXISTING ACCESSIBLE PATH OF TRAVEL (POT)

NEW ACCESSIBLE PATH OF TRAVEL (POT) — 0.00 — ARCHITECTURAL SPOT ELEVATION (WHERE OCCURS)

60" DIAMETER ACCESSIBLE CLEAR SPACE

30"X48" ACCESSIBLE CLEAR SPACE

TYPICAL CABINET DESIGNATION (BASE, FULL, OVERHEAD)



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1601 LONGHORN DRIVE
VISTA, CA 92081
VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 2/28/2024

SHEET TITLE

ABBREVIATIONS AND TYPICAL SYMBOLS

T-003

Z:\Shared\AlphaStudio\ASDG Projects\Active Projects\23-018 RBV Fire Alarm Upgrade\Archicad\23-018_RBV FIRE ALARM_DRAFT.pln

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ABBREVIATIONS

A	AMPERE (AMPS)
AC	ALTERNATING CURRENT
AF	AMPS-FRAME (RATING)
AIC	AMP INTERRUPTING CURRENT
AM	AMMETER
AS	AMP SWITCH (FUSED SWITCH RATING)
AT	AMPS-TRIP (RATING)
AWG	AMERICAN WIRE GAUGE
BC	BARE COPPER
BLDG	BUILDING
C	CONDUIT
CB	CIRCUIT BREAKER
CO	CONDUIT ONLY
CT	CURRENT TRANSFORMER
CU	COPPER
CFOI	CONTRACTOR FURNISHED OWNER INSTALLED
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
DPDT	DOUBLE POLE DOUBLE THROW
DPST	DOUBLE POLE SINGLE THROW
DWG	DRAWING
EX	EXISTING
FLA	FULL LOAD AMPS
FVR	FULL VOLTAGE REVERSING
FVNR	FULL VOLTAGE NON-REVERSING
GFI	GROUND FAULT INTERRUPTER
GRD/GND	GROUND
HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
HZ	HERTZ
KW	KILOWATT
LCL	LONG CONTINUOUS LOAD
LRA	LOCKED ROTOR AMPS
LTG	LIGHTING
MCC	MOTOR CONTROL CENTER
MCM (KCM)	THOUSAND CIRCULAR MILS
MECH	MECHANICAL
NC	NORMALLY CLOSED
NF	NON-FUSED
NO	NORMALLY OPEN/NUMBER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER INSTALLED
P	POLE
PH	PHASE
POC	POINT OF CONNECTION
PRS	PVC COATED RIGID STEEL (CONDUIT)
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE DUCT
SWBD	SWITCHBOARD
TYP	TYPICAL
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
V	VOLT
VA	VOLTAMPERES
VM	VOLTMETER
VL	VERIFY LOCATION
W	WIRE/WATTS
WP	WEATHERPROOF (NEMA TYPE 3R)
WT	WATERTIGHT
XP	EXPLOSION PROOF (RATED FOR AREA HAZARD)

ELECTRICAL SYMBOL LEGEND

DISTRIBUTION EQUIPMENT

- DRAW OUT TYPE EQUIPMENT
- VACUUM CIRCUIT BREAKER, RATING AS NOTED.
- AIR INTERRUPTER SWITCH AND FUSE
- AIR INTERRUPTER
- FUSE
- POWER TRANSFORMER, RATING AS NOTED
- POWER CIRCUIT BREAKER DRAWOUT
- AUTOMATIC TRANSFER SWITCH. SEE SCHEDULE
- (A) AMMETER
- (V) VOLTMETER
- CIRCUIT BREAKER
  - 200AF — 200AMP FRAME
  - 200AT — 200AMP TRIP
  - 3P — 3 POLE
  - 10,000AIC — 10,000 AMPS INTERRUPTING CURRENT
- FUSED SWITCH
  - 200AS — 200AMP SWITCH
  - 200AF — 200AMP FUSE
  - 3P — 3 POLE
- (M) UTILITY COMPANY METER

POWER

- DUPLEX RECEPTACLE, FLOOR MOUNTED
- DUPLEX RECEPTACLE, WALL MOUNTED, +18" A.F.F. (U.O.N.)
- HORZ — RECEPTACLE, WALL MOUNTED HORIZONTALLY, +18" A.F.F. (U.O.N.)
- FOURPLEX RECEPTACLE, WALL MOUNTED, +18" A.F.F. (U.O.N.)
- RECEPTACLE MOUNTED +6" ABOVE COUNTER BACKSPLASH SEE ARCHITECTURAL PLANS FOR REQUIRED MOUNTING HEIGHT PRIOR TO ROUGH-IN.
- GFI — DUPLEX GROUND FAULT INTERRUPTING RECEPTACLE +18" A.F.F. (U.O.N.)
- WP — DUPLEX RECEPTACLE IN WEATHERPROOF ENCLOSURE +18" A.F.F. (U.O.N.)
- WP/L — DUPLEX RECEPTACLE IN WEATHERPROOF "LOCKING" ENCLOSURE +18" A.F.F. (U.O.N.) (SEE TYPICAL DETAILS E3 SERIES SHEETS AND SPECIFICATIONS FOR REQUIRED TYPE).
- (J) (J-H) JUNCTION BOX, CEILING OR WALL MOUNTED
- CONDUIT AND WIRE, CONCEALED IN CEILING OR WALL
- CONDUIT AND WIRE, CONCEALED IN OR UNDER FINISHED FLOOR OR UNDER FINISHED GRADE.
- FLEXIBLE CONDUIT CONNECTION
- BRANCH CIRCUIT HOMERUN TO PANEL. SLASHES INDICATE NUMBER OF CONDUCTORS. EQUIPMENT GROUND WIRE NOT INDICATED U.O.N. #12 CONDUCTORS ARE MINIMUM, NO HASH MARKS = MIN. (2) #12
- 3/4" CONDUIT STUBBED FROM DEVICE TO ABOVE ACCESSIBLE CEILING
- #8 — BRANCH CIRCUIT HOMERUN, NUMBER INDICATES INCREASED CONDUCTOR SIZE. CONDUCTORS SHALL REMAIN AS INDICATED FOR SIZE THROUGHOUT THE ENTIRE CIRCUIT.
- PANELBOARD, SURFACE MOUNTED.
- PANELBOARD, RECESSED
- T — STEP-DOWN TRANSFORMER
- DISTRIBUTION SWITCHBOARD
- SR — SURFACE MOUNTED RACEWAY SINGLE SECTION SERIES, NON METALLIC (WHITE)
- SR 2 — SURFACE MOUNTED RACEWAY TWO SECTION SERIES, NON METALLIC (WHITE)
- SR 3 — SURFACE MOUNTED RACEWAY THREE SECTION SERIES, NON METALLIC (WHITE)

GENERAL PROJECT NOTES:

1. UNLESS WHERE OTHERWISE NOTED, ALL WORK INDICATED ON THESE DRAWINGS SHALL BE CONSIDERED NEW WORK.
2. UNLESS WHERE OTHERWISE NOTED, ALL DIMENSIONS ARE TO BE CENTERLINE OF THE DEVICE.
3. "GENERAL NOTES" SHOWN ON AN INDIVIDUAL DRAWING APPLY TO ALL WORK SHOWN ON THAT SHEET. "KEY NOTES" ONLY APPLY TO SPECIFIC ITEMS WHERE ANNOTATED AT SPECIFIC LOCATIONS. SOME KEY NOTES MAY NOT APPLY TO ANY SPECIFIC ITEMS.
4. UNLESS SPECIFICALLY SHOWN ON THESE PLANS, NO STRUCTURAL MEMBER SHALL BE CUT, NEITHER DRILLED NOR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DIVISION OF THE STATE ARCHITECT.

GENERAL DEMOLITION NOTES:

1. ALL ELECTRICAL EQUIPMENT, EXPOSED RACEWAY AND CONDUIT, OUTLET BOXES AND RINGS, AND DEVICES ARE TO BE REMOVED, EXCEPT WHERE SHOWN TO REMAIN. EXISTING WIRING, WHETHER EXPOSED, IN CONDUIT OR RACEWAY IS TO BE REMOVED TO THE GREATEST EXTENT POSSIBLE.
2. THE ELECTRICAL CONTRACTOR IS TO DIRECT THE REMOVAL OF THE ABOVE LISTED WORK.

MEP COMPONENT ANCHORAGE NOTE:

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA-APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A1.1B THROUGH 1617A1.26 AND ASCE 7-16 CHAPTERS 13, 26, AND 30:

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G., HARD WIRED) TO THE BUILDING FOR SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
B. 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.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE 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 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8 AND 2022 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.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 A PREAPPROVED INSTALLATION GUIDE (E.G., HCAI OPM FOR 2013 CBC OR LATER), 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 HANGER AND BRACE LOADS.

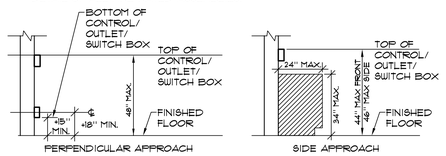
MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

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 HCAI (OSHPD) PREAPPROVAL (OPM #)_____, AS INCLUDED IN THESE DRAWINGS WITH PROJECT-SPECIFIC NOTES AND DETAILS.

FIRE RATED ASSEMBLIES NOTE:

1. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT DESCRIPTION AND DETAIL OF ALL FIRE RATED ASSEMBLIES.



NOTES:
1. MAINTAIN MINIMUM 30"X48" CLEAR FLOOR SPACE AT EACH APPROACH.
2. FORWARD OR FRONT APPROACH FOR DEVICES MOUNTED ABOVE COUNTERS ASSUMES THAT DIRECTLY BELOW THE DEVICE, THE COUNTER HAS A 30" MIN. WIDTH X 27" MIN. HIGH X 19" MIN. DEEP CLEAR OPENING. CBC SECTIONS 11B-306 AND 11B-308.

MOUNTING HEIGHT OVER OBSTRUCTION — NO SCALE — 1 / E1.0

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APP: 04-122924 INC:
REVIEWED FOR
SS ☐ FLS ☑ ACS ☐
DATE: 02/29/2024

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6152 INNOVATION WAY
CARLSBAD, 92009
760-431-2444
www.alphastudio-design.com

ARCHITECT OF RECORD

LICENSED ARCHITECT — JOSHUA T. ECKLE — No. C31020 EXP. 12/25 — STATE OF CALIFORNIA

ENGINEER OF RECORD

KEYPLAN



REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #PIn
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023
SHEET TITLE

REGISTERED PROFESSIONAL ENGINEER — MARK A. JOHNSON — No. E 14781 Exp. 6-30-2025 — ELECTRICAL — STATE OF CALIFORNIA

JOHNSON CONSULTING ENGINEERS, INC.
Power | Lighting | Multimedia
Communications | Data Networking
12875 Brookprinter Place, Suite 300
Poway, CA 92064
P 858.679.4030 | F 858.513.0559
www.jce-inc.com

#23011.01 — 11/8/2023

ELECTRICAL LEGEND AND NOTES

E-1.0

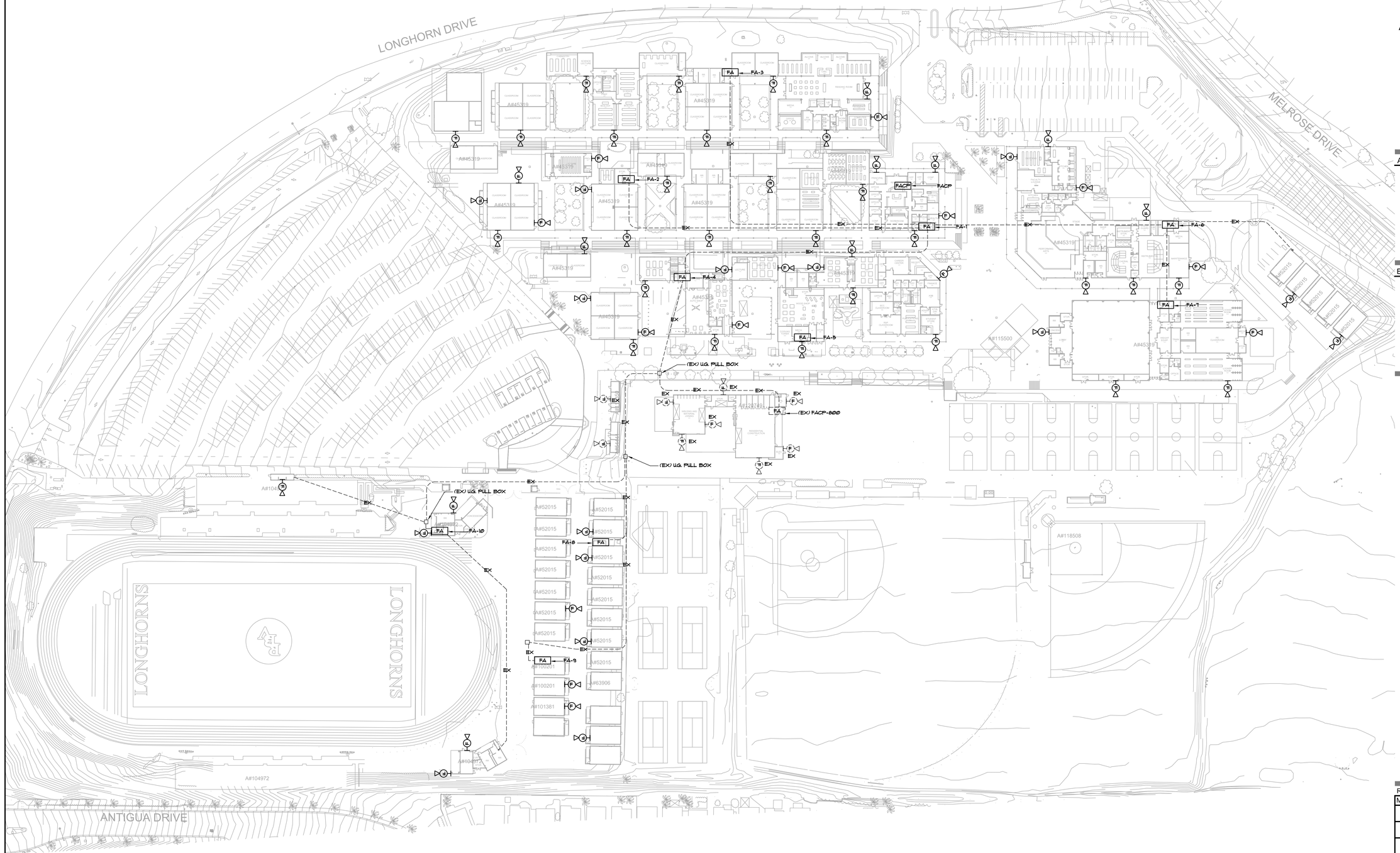
RBV FIRE ALARM UPGRADE

RANCHO BUENA VISTA HIGH SCHOOL
1601 LONGHORN DRIVE
VISTA, CA 92081

VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

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1 SITE PLAN - FIRE ALARM
SCALE: 1"=50'

NORTH

0 4 8 16

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REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE:
23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE:
7/5/2023

SHEET TITLE
SITE PLAN - FIRE ALARM

REGISTERED PROFESSIONAL ENGINEER
MARK J. RIVERA
No. E 14781
Exp. 6-30-2025
ELECTRICAL
STATE OF CALIFORNIA

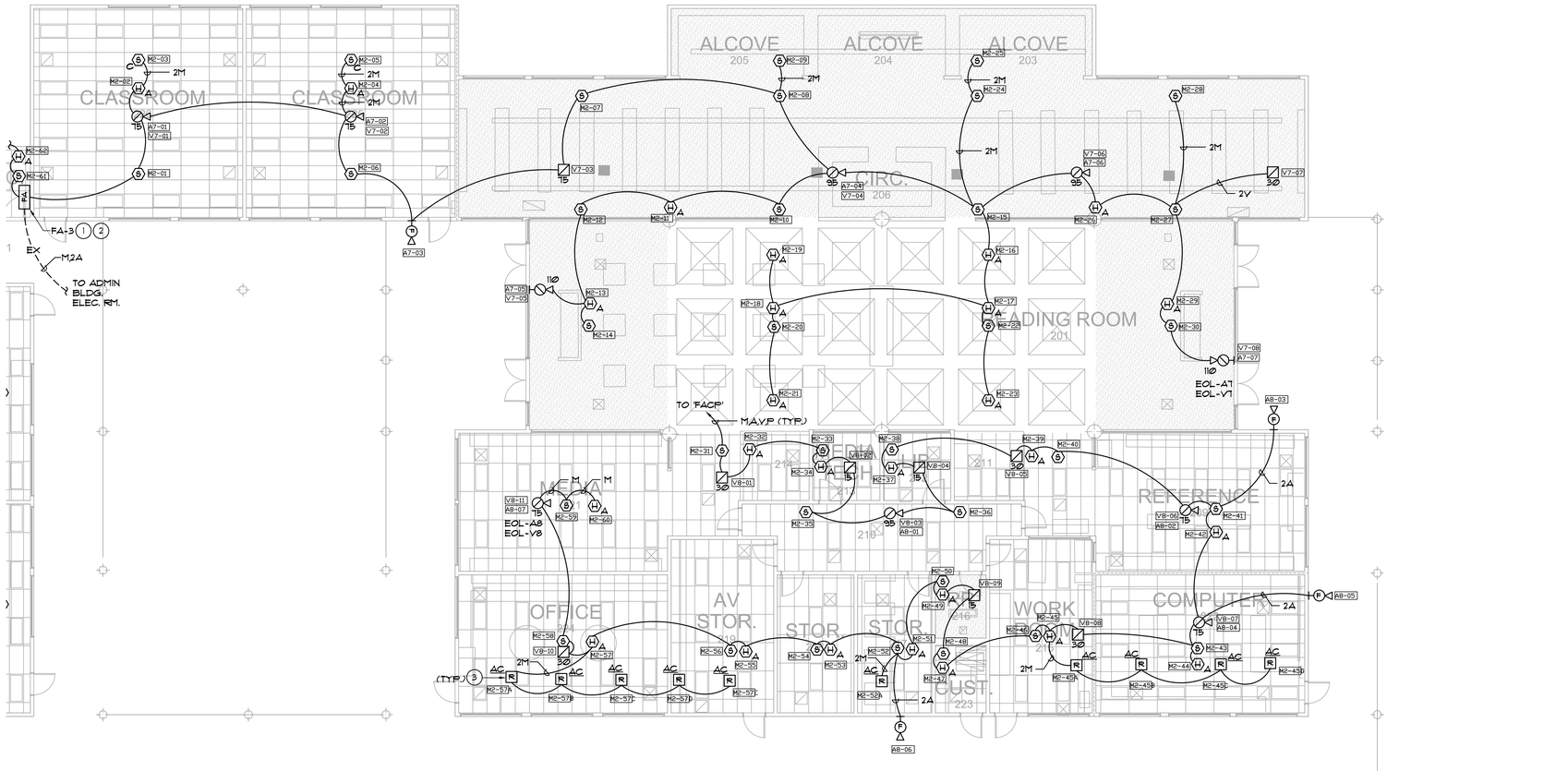
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12875 Brookprinter Place, Suite 300
Poway, CA 92064
P 858.679.4030 | F 858.513.0559
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#23011.01 2/12/2024

E-5.0

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1 FLOOR PLAN - FIRE ALARM

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

NORTH

GENERAL NOTES:

1. REFERENCE ARCHITECTURAL INTERIOR ELEVATIONS FOR EXACT LOCATION OF ALL WALL MOUNTED DEVICES.
2. REFERENCE E5 AND E8 SERIES SHEETS FOR TYPICAL CONDUIT AND BACKBOX INSTALLATION DETAILS.
3. REFERENCE RISER DIAGRAMS FOR TYPICAL CONDUIT SIZES AND INITIATION ZONE CIRCUIT IDENTIFICATIONS.
4. UNLESS OTHERWISE NOTED SOLID LINES BETWEEN DEVICES SHALL BE 1" E.M.T. ROUTED CONCEALED ABOVE CEILINGS OR IN WALLS. DASHED LINES INDICATE 1-1/2" P.V.C. UNDERGROUND CONDUIT. ALL WIRING TO BE PROVIDED PER MANUFACTURER SHOP DRAWINGS.
5. CONTRACTOR SHALL PROVIDE CEILING ACCESS PANEL AT ALL NON-LAYIN TYPE CEILINGS, WHERE HEAT DETECTOR ABOVE CEILING IS INDICATED.
6. PROVIDE WIRE PROTECTIVE GUARD OVER ALL FIRE ALARM DEVICES LOCATED IN THE FOLLOWING AREAS: GYMNASIUM, LOCKER ROOMS, SHOP AREAS, AND ANY OTHER AREA WHERE DEVICES MAY BE SUBJECT TO CONTACT.

KEY NOTES:

1. EXTEND EXISTING DEDICATED 120V CIRCUIT TO NEW PANEL.
2. PROVIDE CONNECTION TO "FACP", REFER TO SITE PLAN SHEET E5.0.
3. MAKE CONNECTION TO AIR CONDITIONING CONTROL CIRCUIT FOR AUTOMATIC SHUT OFF OF UNIT UPON SMOKE DETECTION, VL.

FIRE ALARM SYMBOL LEGENDS

- MANUAL PULL STATION MOUNTED BETWEEN 42" TO 48" A.F.F. TO HIGHEST POINT OF OPERATING HANDLE OR LEVER OF DEVICE.
- CEILING MOUNTED STROBE (15=STROBE CANDELA RATING) (V=VISUAL SIGNAL CIRCUIT IDENTIFICATION)
- CEILING MOUNTED COMBINATION SPEAKER/STROBE (15 = STROBE CANDELA RATING) (V = VISUAL SIGNAL CIRCUIT IDENTIFICATION) (A = AUDIO SIGNAL CIRCUIT IDENTIFICATION) TAP AT 1/4 WATT (U.O.N.)
- WALL MOUNTED WEATHERPROOF EXTERIOR SPEAKER MOUNTED +90" A.F.F. TO BOTTOM OF DEVICE (A = AUDIO SIGNAL CIRCUIT IDENTIFICATION)
- CEILING MOUNTED SMOKE DETECTOR
- CEILING MOUNTED SMOKE/CO DETECTOR
- CEILING MOUNTED HEAT DETECTOR
- HEAT DETECTOR MOUNTED ABOVE CEILING (SEE GENERAL NOTE #6)
- FACP — MAIN FIRE ALARM CONTROL PANEL. MOUNTING HEIGHT REQUIREMENT SPEC SECTION 28 30 01 3.6
- FA — REMOTE FIRE ALARM POWER EXTENDER
- KHS — KITCHEN HOOD FIRE SUPPRESSION SYSTEM CONTROL PANEL
- ANN — REMOTE ANNUNCIATOR
- FS — FIRE PROTECTION FLOW SWITCH WITH [M]
- TS — FIRE PROTECTION TAMPER SWITCH WITH [M]
- DSM — DUAL SYNC MODULE (SEE RISER DIAGRAM FOR LOCATION)
- R — ADDRESSABLE RELAY MODULE
- M — ADDRESSABLE MONITOR MODULE
- EOL-V — VISUAL END OF LINE RESISTOR
- EOL-A — AUDIO END OF LINE RESISTOR

FIRE ALARM NOTE:
THIS FIRE ALARM DESIGN IS A COMPLETE PLAN SUBMITTAL IN ACCORDANCE WITH CBC 305.1.2 MODERNIZATION PROJECT.

FULLY AUTOMATIC FIRE ALARM DESIGN:
THIS PROJECT IS DESIGNED TO COMPLY WITH ALL REQUIREMENTS FOR A FULLY PROTECTED AUTOMATIC FIRE ALARM SYSTEM.

IDENTIFICATION STAMP
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APP: 04-122924 INC:
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SS ☐ FLS ☑ ACS ☐
DATE: 02/29/2024

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6152 INNOVATION WAY
CARLSBAD, 92009
760-431-2444
www.alphastudio-design.com

ARCHITECT OF RECORD

LICENSED ARCHITECT
JOSHUA T. ECKLE
No. C31020
EXP. 12/25
STATE OF CALIFORNIA

ENGINEER OF RECORD

RBV FIRE ALARM UPGRADE

RANCHO BUENA VISTA HIGH SCHOOL
1601 LONGHORN DRIVE
VISTA, CA 92081

VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

KEYPLAN

REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE

FLOOR PLAN - FIRE ALARM

E-5.1

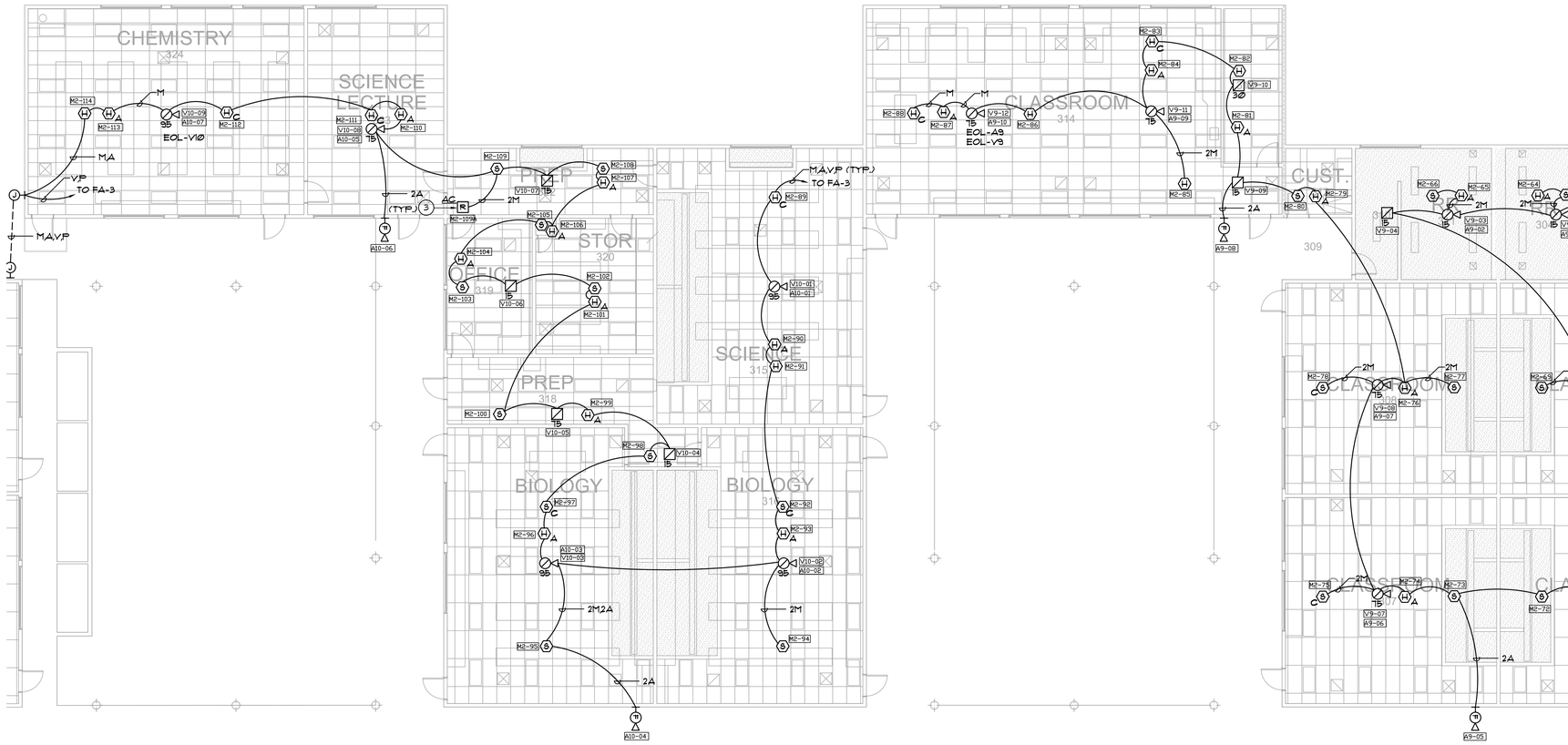
REGISTERED PROFESSIONAL ENGINEER
No. E 14781
Exp. 6-30-2025
ELECTRICAL
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1 FLOOR PLAN - FIRE ALARM

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

NORTH

0 4' 8' 16'

GENERAL NOTES:

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KEY NOTES:

1. PROVIDE DEDICATED 120 VOLT CIRCUIT TO PANEL CONNECT TO "RED LOCK ON BREAKER".
2. PROVIDE CONNECTION TO "FACP", REFER TO SITE PLAN SHEET E5.0.
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- FACP — MAIN FIRE ALARM CONTROL PANEL, MOUNTING HEIGHT REQUIREMENT SPEC SECTION 28 30 01 3.6
- FA — REMOTE FIRE ALARM POWER EXTENDER
- KHS — KITCHEN HOOD FIRE SUPPRESSION SYSTEM CONTROL PANEL
- ANN — REMOTE ANNUNCIATOR
- FS — FIRE PROTECTION FLOW SWITCH WITH [M]
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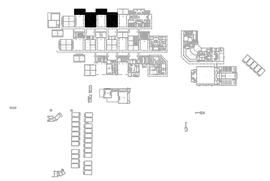
EOL-V VISUAL END OF LINE RESISTOR

EOL-A AUDIO END OF LINE RESISTOR

FIRE ALARM NOTE:
THIS FIRE ALARM DESIGN IS A COMPLETE PLAN SUBMITTAL IN ACCORDANCE WITH CBC 305.1Ø2 MODERNIZATION PROJECT.

FULLY AUTOMATIC FIRE ALARM DESIGN:
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KEYPLAN



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DATE: 02/29/2024

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ARCHITECT OF RECORD

LICENSED ARCHITECT
JOSHUA T. ECKLE
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EXP. 12/25
STATE OF CALIFORNIA

ENGINEER OF RECORD

RBV FIRE ALARM UPGRADE

RANCHO BUENA VISTA HIGH SCHOOL
1601 LONGHORN DRIVE
VISTA, CA 92081

VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln

MODEL FILE:
23-018_RBV FIRE ALARM_DRAFT.pln

PLOT DATE:
7/5/2023

SHEET TITLE

FLOOR PLAN - FIRE ALARM

E-5.2

REGISTERED PROFESSIONAL ENGINEER
MICHAEL J. GRIECO
No. E 14781
Exp. 6-30-2025
ELECTRICAL
STATE OF CALIFORNIA

2/28/2024

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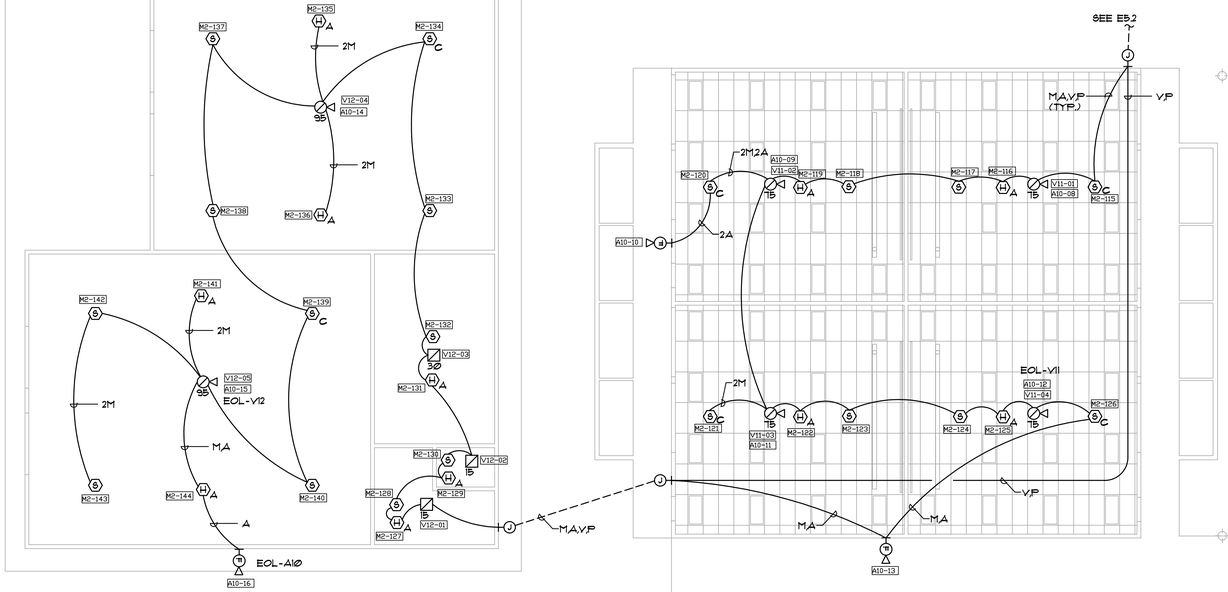
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- S — CEILING MOUNTED SMOKE DETECTOR
- SC — CEILING MOUNTED SMOKE/CO DETECTOR
- H — CEILING MOUNTED HEAT DETECTOR
- HA — HEAT DETECTOR MOUNTED ABOVE CEILING (SEE GENERAL NOTE #6.)
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- DSM — DUAL SYNC MODULE (SEE RISER DIAGRAM FOR LOCATION)
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- EOL-V — VISUAL END OF LINE RESISTOR
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FIRE ALARM NOTE:
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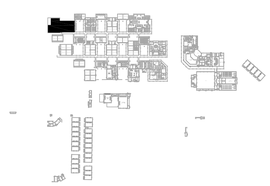
FULLY AUTOMATIC FIRE ALARM DESIGN:
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KEY PLAN



NORTH

KEYPLAN



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DATE: 02/29/2024

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www.alphastudio-design.com

ARCHITECT OF RECORD

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EXP. 12/25
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ENGINEER OF RECORD

RBV FIRE ALARM UPGRADE

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1601 LONGHORN DRIVE
VISTA, CA 92081

VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE

FLOOR PLAN - FIRE ALARM

E-5.3

REGISTERED PROFESSIONAL ENGINEER
No. E 14781
Exp. 6-30-2025
ELECTRICAL
STATE OF CALIFORNIA

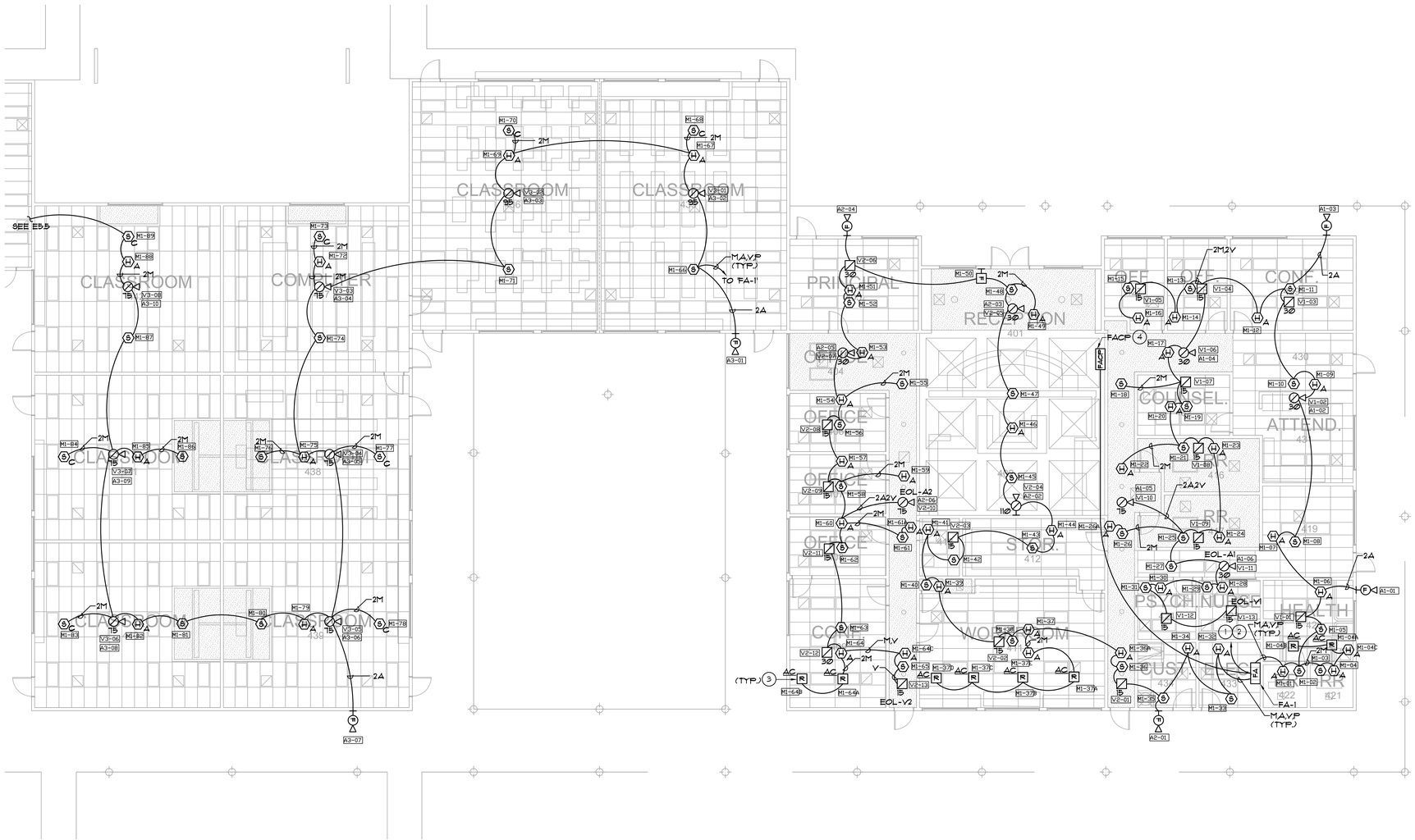
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1 FLOOR PLAN - FIRE ALARM
SCALE: 1/8" = 1'-0"

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GENERAL NOTES:

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2. REFERENCE E5 AND E8 SERIES SHEETS FOR TYPICAL CONDUIT AND BACKBOX INSTALLATION DETAILS.
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6. PROVIDE WIRE PROTECTIVE GUARD OVER ALL FIRE ALARM DEVICES LOCATED IN THE FOLLOWING AREAS: GYMNASIUM, LOCKER ROOMS, SHOP AREAS, AND ANY OTHER AREA WHERE DEVICES MAY BE SUBJECT TO CONTACT.

KEY NOTES:

1. PROVIDE DEDICATED 120 VOLT CIRCUIT TO 120/208V PANEL IN ELECTRICAL ROOM. PROVIDE "RED LOCK ON BREAKER".
2. PROVIDE CONNECTION TO "FACP", REFER TO SITE PLAN SHEET E8.0.
3. MAKE CONNECTION TO AIR CONDITIONING CONTROL CIRCUIT FOR AUTOMATIC SHUT OFF OF UNIT UPON SMOKE DETECTION, VL.
4. RECONNECT TO EXISTING DEDICATED 120V CIRCUIT.

FIRE ALARM SYMBOL LEGENDS

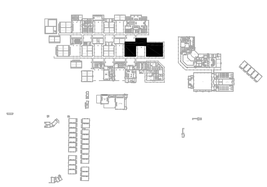
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FULLY AUTOMATIC FIRE ALARM DESIGN:
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KEY PLAN

KEYPLAN



NORTH

0 4' 8' 16'

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

IDENTIFICATION STAMP
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REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE

FLOOR PLAN - FIRE ALARM

E-5.4

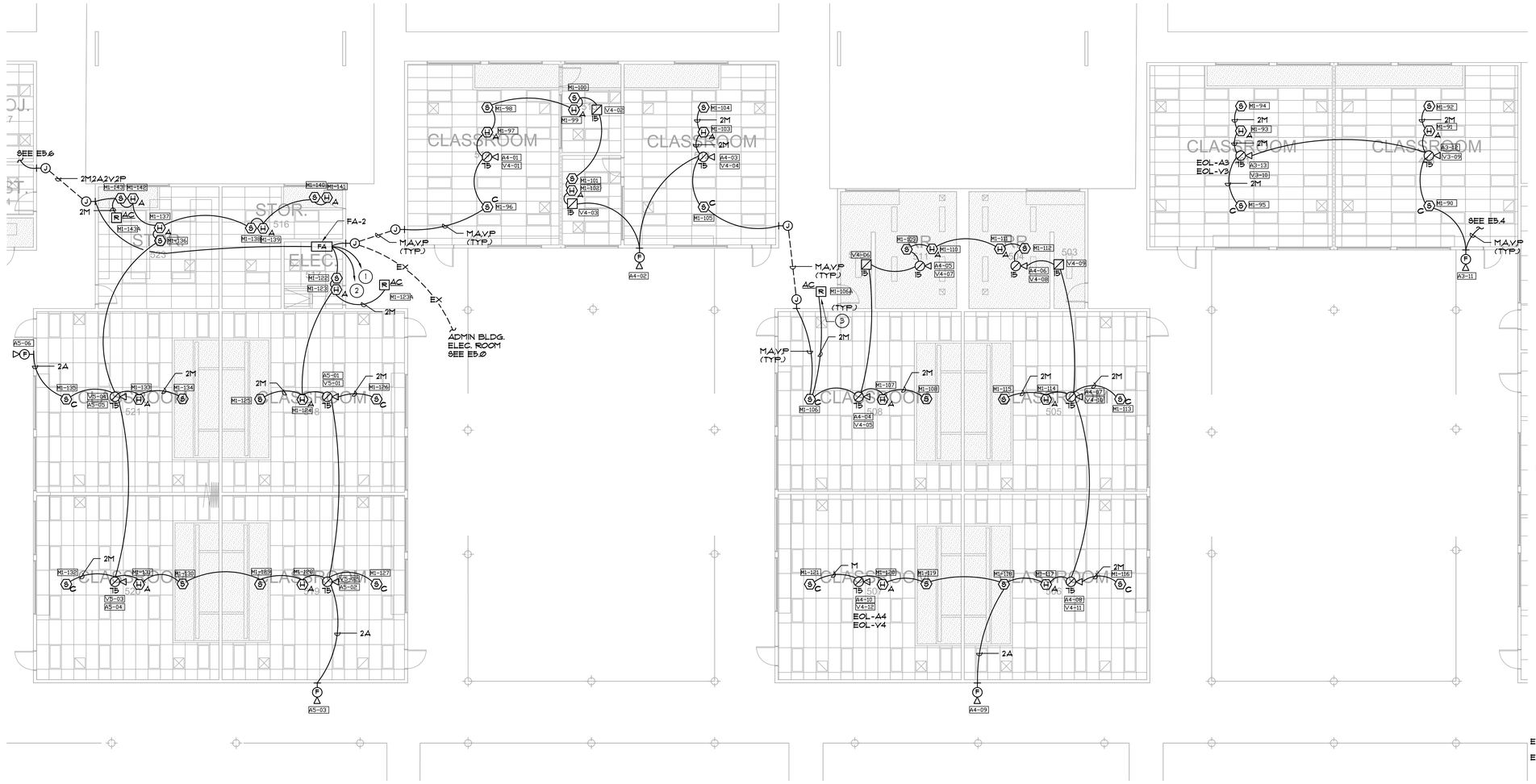
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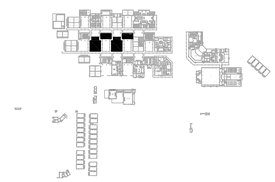
FIRE ALARM SYMBOL LEGENDS

- F — MANUAL FULL STATION MOUNTED BETWEEN 42" TO 48" A.F.F. TO HIGHEST POINT OF OPERATING HANDLE OR LEVER OF DEVICE.
- Y / TB — CEILING MOUNTED STROBE (15=STROBE CANDELA RATING) (Y=VISUAL SIGNAL CIRCUIT IDENTIFICATION)
- AV / TB — CEILING MOUNTED COMBINATION SPEAKER/STROBE (15 = STROBE CANDELA RATING) (V = VISUAL SIGNAL CIRCUIT IDENTIFICATION) (A = AUDIO SIGNAL CIRCUIT IDENTIFICATION) TAP AT 1/4 WATT (U.O.N.)
- F / A — WALL MOUNTED WEATHERPROOF EXTERIOR SPEAKER MOUNTED +90" A.F.F. TO BOTTOM OF DEVICE (A = AUDIO SIGNAL CIRCUIT IDENTIFICATION)
- S — CEILING MOUNTED SMOKE DETECTOR
- S/C — CEILING MOUNTED SMOKE/CO DETECTOR
- H — CEILING MOUNTED HEAT DETECTOR
- H/A — HEAT DETECTOR MOUNTED ABOVE CEILING (SEE GENERAL NOTE #6)
- FACP — MAIN FIRE ALARM CONTROL PANEL. MOUNTING HEIGHT REQUIREMENT SPEC SECTION 28 30 01 3.6
- FA — REMOTE FIRE ALARM POWER EXTENDER
- KHS — KITCHEN HOOD FIRE SUPPRESSION SYSTEM CONTROL PANEL
- ANN — REMOTE ANNUNCIATOR
- FS — FIRE PROTECTION FLOW SWITCH WITH [M]
- TS — FIRE PROTECTION TAMPER SWITCH WITH [M]
- DSM — DUAL SYNC MODULE (SEE RISER DIAGRAM FOR LOCATION)
- R — ADDRESSABLE RELAY MODULE
- M — ADDRESSABLE MONITOR MODULE
- EOL-V — VISUAL END OF LINE RESISTOR
- EOL-A — AUDIO END OF LINE RESISTOR

FIRE ALARM NOTE:
THIS FIRE ALARM DESIGN IS A COMPLETE PLAN SUBMITTAL IN ACCORDANCE WITH CBC 3095.102 MODERNIZATION PROJECT.

FULLY AUTOMATIC FIRE ALARM DESIGN:
THIS PROJECT IS DESIGNED TO COMPLY WITH ALL REQUIREMENTS FOR A FULLY PROTECTED AUTOMATIC FIRE ALARM SYSTEM.

KEY PLAN



NORTH

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-122924 INC:
REVIEWED FOR
SS ☐ FLS ☑ ACS ☐
DATE: 02/29/2024

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ARCHITECT OF RECORD

LICENSED ARCHITECT
JOSHUA T. ECKLE
No. C31020
EXP. 12/25
STATE OF CALIFORNIA

ENGINEER OF RECORD

RBV FIRE ALARM UPGRADE

RANCHO BUENA VISTA HIGH SCHOOL
1601 LONGHORN DRIVE
VISTA, CA 92081

VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE

FLOOR PLAN - FIRE ALARM

E-5.5

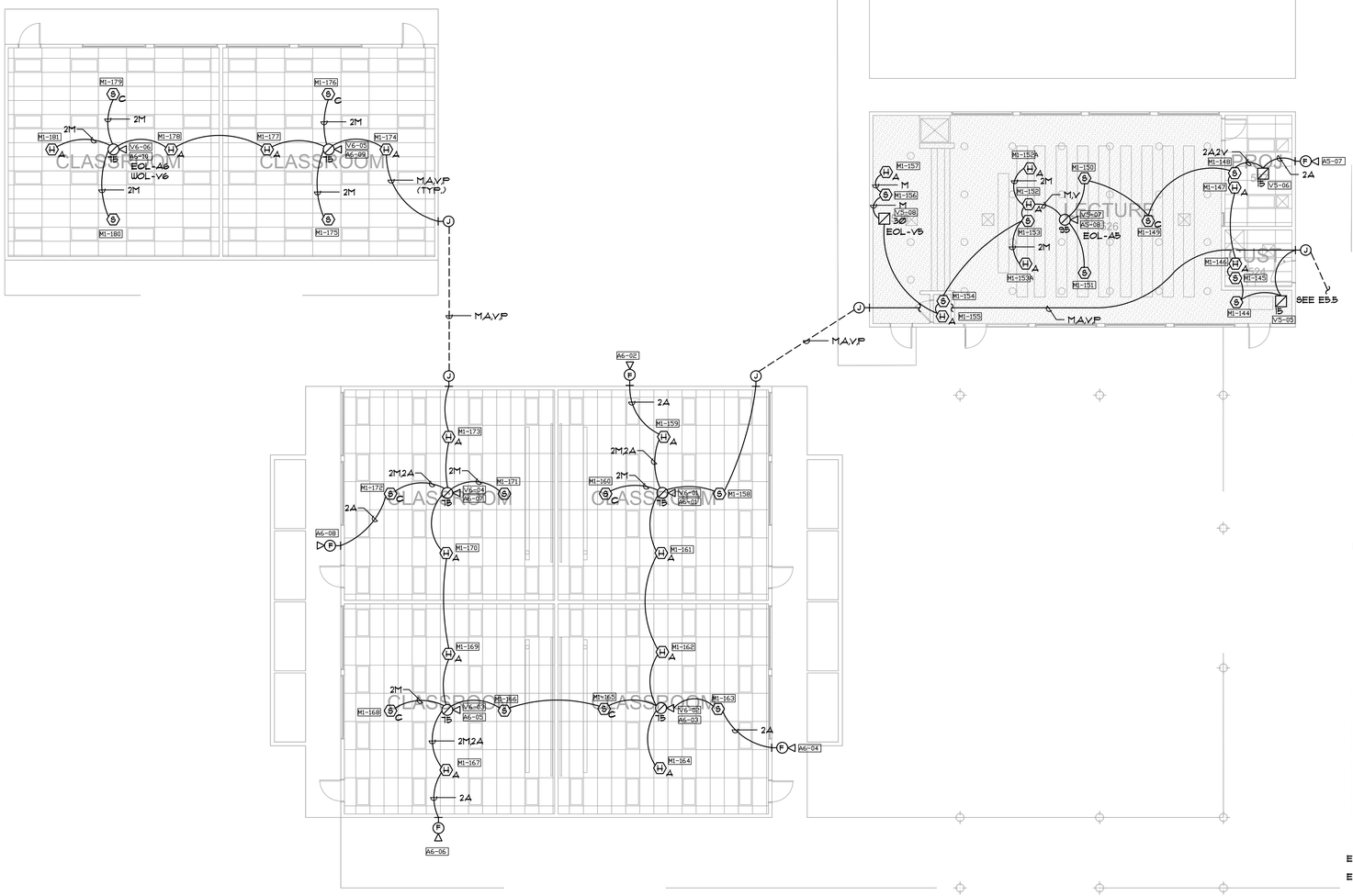
REGISTERED PROFESSIONAL ENGINEER
No. E 14781
Exp. 6-30-2025
ELECTRICAL
STATE OF CALIFORNIA

JOHNSON CONSULTING ENGINEERS, INC.
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GENERAL NOTES:

1. REFERENCE ARCHITECTURAL INTERIOR ELEVATIONS FOR EXACT LOCATION OF ALL WALL MOUNTED DEVICES.
2. REFERENCE E5 AND E8 SERIES SHEETS FOR TYPICAL CONDUIT AND BACKBOX INSTALLATION DETAILS.
3. REFERENCE RISER DIAGRAMS FOR TYPICAL CONDUIT SIZES AND INITIATION ZONE CIRCUIT IDENTIFICATIONS.
4. UNLESS OTHERWISE NOTED SOLID LINES BETWEEN DEVICES SHALL BE 1" E.M.T. ROUTED CONCEALED ABOVE CEILINGS OR IN WALLS. DASHED LINES INDICATE 1-1/2" P.V.C. UNDERGROUND CONDUIT. ALL WIRING TO BE PROVIDED PER MANUFACTURER SHOP DRAWINGS.
5. CONTRACTOR SHALL PROVIDE CEILING ACCESS PANEL AT ALL NON-LAY'N TYPE CEILINGS, WHERE HEAT DETECTOR ABOVE CEILING IS INDICATED.
6. PROVIDE WIRE PROTECTIVE GUARD OVER ALL FIRE ALARM DEVICES LOCATED IN THE FOLLOWING AREAS: GYMNASIUM, LOCKER ROOMS, SHOP AREAS, AND ANY OTHER AREA WHERE DEVICES MAY BE SUBJECT TO CONTACT.

KEY NOTES:

1. PROVIDE DEDICATED 120 VOLT CIRCUIT TO PANEL CONNECT TO "RED LOCK ON BREAKER".
2. PROVIDE CONNECTION TO "FACP", REFER TO SITE PLAN SHEET E5.0.
3. MAKE CONNECTION TO AIR CONDITIONING CONTROL CIRCUIT FOR AUTOMATIC SHUT OFF OF UNIT UPON SMOKE DETECTION, VL.
4. PROVIDE RELAY MODULE TO SHUNT SOUND SYSTEM POWER UNDER ANY ALARM.

FIRE ALARM SYMBOL LEGENDS

- F — MANUAL PULL STATION MOUNTED BETWEEN 42" TO 48" A.F.F. TO HIGHEST POINT OF OPERATING HANDLE OR LEVER OF DEVICE.
- V / 15 — CEILING MOUNTED STROBE (15=STROBE CANDELA RATING) (V=VISUAL SIGNAL CIRCUIT IDENTIFICATION)
- A,V / 15 — CEILING MOUNTED COMBINATION SPEAKER/STROBE (15 = STROBE CANDELA RATING) (V = VISUAL SIGNAL CIRCUIT IDENTIFICATION) (A = AUDIO SIGNAL CIRCUIT IDENTIFICATION) TAP AT 1/4 WATT (U.O.N.)
- F, A — WALL MOUNTED WEATHERPROOF EXTERIOR SPEAKER MOUNTED +90" A.F.F. TO BOTTOM OF DEVICE (A = AUDIO SIGNAL CIRCUIT IDENTIFICATION)
- S — CEILING MOUNTED SMOKE DETECTOR
- S, C — CEILING MOUNTED SMOKE/CO DETECTOR
- H — CEILING MOUNTED HEAT DETECTOR
- H, A — HEAT DETECTOR MOUNTED ABOVE CEILING (SEE GENERAL NOTE #6)
- FACP — MAIN FIRE ALARM CONTROL PANEL. MOUNTING HEIGHT REQUIREMENT SPEC SECTION 28 30 01 3.6
- FA — REMOTE FIRE ALARM POWER EXTENDER
- KHS — KITCHEN HOOD FIRE SUPPRESSION SYSTEM CONTROL PANEL
- ANN — REMOTE ANNUNCIATOR
- FS — FIRE PROTECTION FLOW SWITCH WITH M
- TS — FIRE PROTECTION TAMPER SWITCH WITH M
- DSM — DUAL SYNC MODULE (SEE RISER DIAGRAM FOR LOCATION)
- R — ADDRESSABLE RELAY MODULE
- M — ADDRESSABLE MONITOR MODULE

EOL-V VISUAL END OF LINE RESISTOR

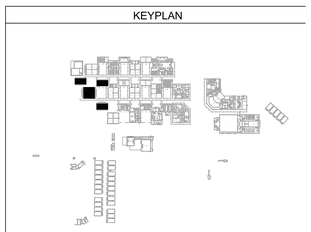
EOL-A AUDIO END OF LINE RESISTOR

FIRE ALARM NOTE:
THIS FIRE ALARM DESIGN IS A COMPLETE PLAN SUBMITTAL IN ACCORDANCE WITH CBC 3005.1.2 MODERNIZATION PROJECT.

FULLY AUTOMATIC FIRE ALARM DESIGN:
THIS PROJECT IS DESIGNED TO COMPLY WITH ALL REQUIREMENTS FOR A FULLY PROTECTED AUTOMATIC FIRE ALARM SYSTEM.

KEY PLAN

KEYPLAN



NORTH

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
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DATE: 02/29/2024

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No. E 14781
Exp. 6-30-2025
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STATE OF CALIFORNIA
2/28/2024

RBV FIRE ALARM UPGRADE

RANCHO BUENA VISTA HIGH SCHOOL
1601 LONGHORN DRIVE
VISTA, CA 92081

VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

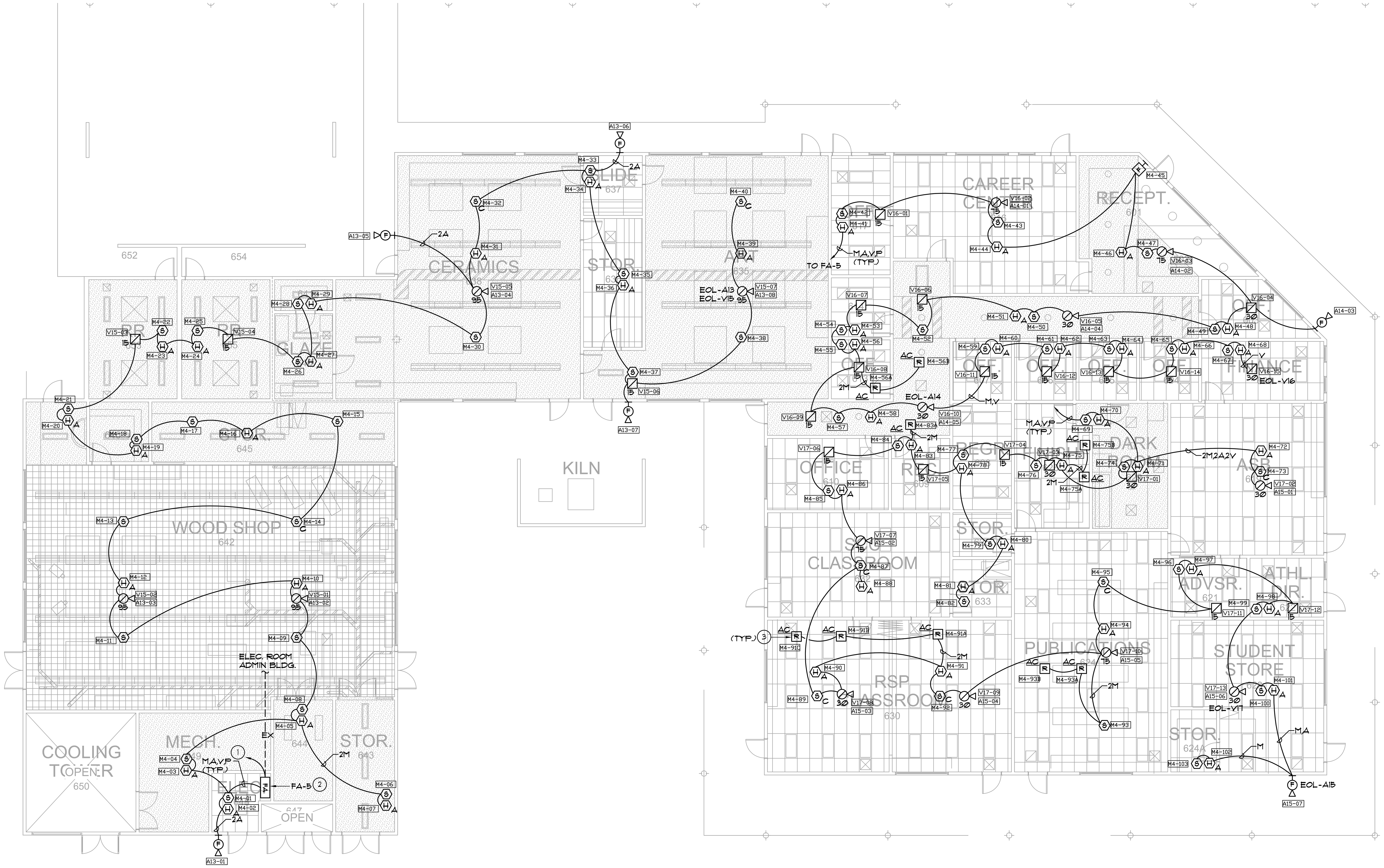
SHEET TITLE

FLOOR PLAN - FIRE ALARM

E-5.6

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NORTH

1 FLOOR PLAN - FIRE ALARM

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

GENERAL NOTES:

1. REFERENCE ARCHITECTURAL INTERIOR ELEVATIONS FOR EXACT LOCATION OF ALL WALL MOUNTED DEVICES.
2. REFERENCE E5 AND E8 SERIES SHEETS FOR TYPICAL CONDUIT AND BACKBOX INSTALLATION DETAILS.
3. REFERENCE RISER DIAGRAMS FOR TYPICAL CONDUIT SIZES AND INITIATION ZONE CIRCUIT IDENTIFICATIONS.
4. UNLESS OTHERWISE NOTED SOLID LINES BETWEEN DEVICES SHALL BE 1" E.M.T. ROUTED CONCEALED ABOVE CEILINGS OR IN WALLS. DASHED LINES INDICATE 1-1/2" P.V.C. UNDERGROUND CONDUIT. ALL WIRING TO BE PROVIDED PER MANUFACTURER SHOP DRAWINGS.
5. CONTRACTOR SHALL PROVIDE CEILING ACCESS PANEL AT ALL NON-LAYIN TYPE CEILINGS, WHERE HEAT DETECTOR ABOVE CEILING IS INDICATED.
6. PROVIDE WIRE PROTECTIVE GUARD OVER ALL FIRE ALARM DEVICES LOCATED IN THE FOLLOWING AREAS: GYMNASIUM, LOCKER ROOMS, SHOP AREAS, AND ANY OTHER AREA WHERE DEVICES MAY BE SUBJECT TO CONTACT.

KEY NOTES:

1. PROVIDE DEDICATED 120 VOLT CIRCUIT TO 120/208V PANEL IN ELECTRICAL ROOM. PROVIDE "RED LOCK ON BREAKER".
2. PROVIDE CONNECTION TO "FACP", REFER TO SITE PLAN SHEET E5.0.
3. MAKE CONNECTION TO AIR CONDITIONING CONTROL CIRCUIT FOR AUTOMATIC SHUT OFF OF UNIT UPON SMOKE DETECTION, VL.

FIRE ALARM SYMBOL LEGENDS

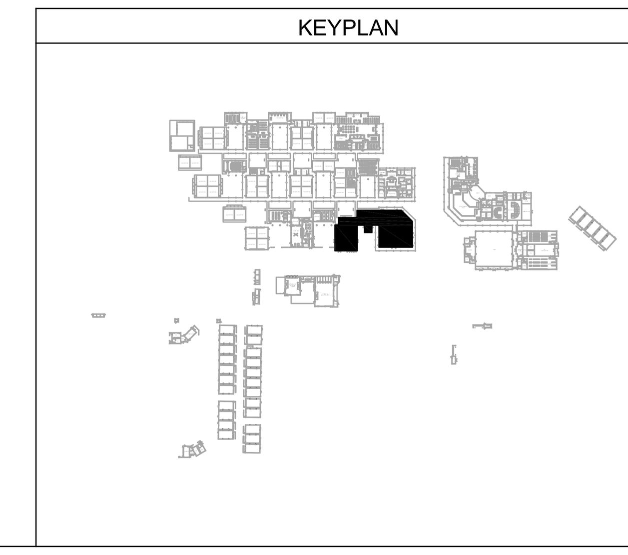
Symbol	Description
F	MANUAL PULL STATION MOUNTED BETWEEN 42" TO 48" AFF. TO HIGHEST POINT OF OPERATING HANDLE OR LEVER OF DEVICE.
V, 15	CEILING MOUNTED STROBE (15=STROBE CANDELA RATING) (V=VISUAL SIGNAL CIRCUIT IDENTIFICATION)
A,V, 15	CEILING MOUNTED COMBINATION SPEAKER/STROBE (15 = STROBE CANDELA RATING) (V = VISUAL SIGNAL CIRCUIT IDENTIFICATION) (A = AUDIO SIGNAL CIRCUIT IDENTIFICATION) TAP AT 1/4 WATT (U.O.N.)
F, A	WALL MOUNTED WEATHERPROOF EXTERIOR SPEAKER MOUNTED +90" AFF. TO BOTTOM OF DEVICE (A = AUDIO SIGNAL CIRCUIT IDENTIFICATION)
S	CEILING MOUNTED SMOKE DETECTOR
S C	CEILING MOUNTED SMOKE/CO DETECTOR
H	CEILING MOUNTED HEAT DETECTOR
H A	HEAT DETECTOR MOUNTED ABOVE CEILING (SEE GENERAL NOTE #6)
FACP	MAIN FIRE ALARM CONTROL PANEL. MOUNTING HEIGHT REQUIREMENT SPEC SECTION 28 30 01 3.6
FA	REMOTE FIRE ALARM POWER EXTENDER
KHS	KITCHEN HOOD FIRE SUPPRESSION SYSTEM CONTROL PANEL
ANN	REMOTE ANNUNCIATOR
FS	FIRE PROTECTION FLOW SWITCH WITH M
TS	FIRE PROTECTION TAMPER SWITCH WITH M
DSM	DUAL SYNC MODULE (SEE RISER DIAGRAM FOR LOCATION)
R	ADDRESSABLE RELAY MODULE
M	ADDRESSABLE MONITOR MODULE
EOL-V	VISUAL END OF LINE RESISTOR
EOL-A	AUDIO END OF LINE RESISTOR

FIRE ALARM NOTE:
THIS FIRE ALARM DESIGN IS A COMPLETE PLAN SUBMITTAL IN ACCORDANCE WITH CBC 305.10.2 MODERNIZATION PROJECT.

FULLY AUTOMATIC FIRE ALARM DESIGN:
THIS PROJECT IS DESIGNED TO COMPLY WITH ALL REQUIREMENTS FOR A FULLY PROTECTED AUTOMATIC FIRE ALARM SYSTEM.

KEY PLAN

KEYPLAN



IDENTIFICATION STAMP
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APP: 04-122924 INC:
REVIEWED FOR
SS ☐ FLS ☑ ACS ☐
DATE: 02/29/2024

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CARLSBAD, 92009
760-431-2444
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ARCHITECT OF RECORD

LICENSED ARCHITECT
JOSHUA T. ECKLE
No. C31020
EXP. 12/25
STATE OF CALIFORNIA

ENGINEER OF RECORD

RBV FIRE ALARM UPGRADE
RANCHO BUENA VISTA HIGH SCHOOL
1601 LONGHORN DRIVE
VISTA, CA 92081
VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE:
23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE:
7/5/2023
SHEET TITLE

REGISTERED PROFESSIONAL ENGINEER
MONICA GIESE-HANSEN
No. E 14781
Exp. 6-30-2025
ELECTRICAL
STATE OF CALIFORNIA

JOHNSON CONSULTING ENGINEERS, INC.
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Communications | Data Networking
12875 Brookprinter Place, Suite 300
Poway, CA 92064
P 858.679.4030 | F 858.513.0559
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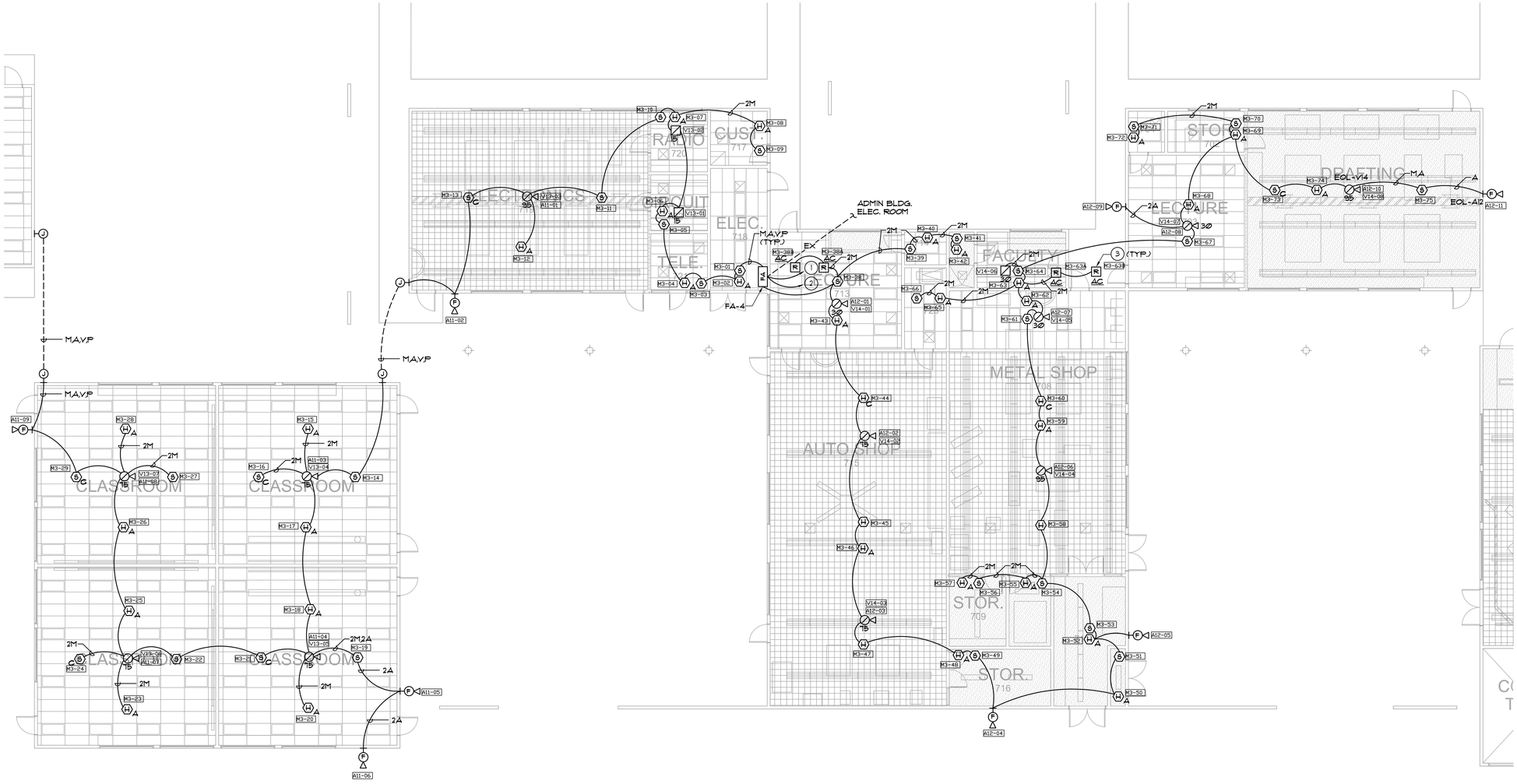
#23011.01 2/28/2024

FLOOR PLAN - FIRE ALARM

E-5.7

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GENERAL NOTES:

1. REFERENCE ARCHITECTURAL INTERIOR ELEVATIONS FOR EXACT LOCATION OF ALL WALL MOUNTED DEVICES.
2. REFERENCE E5 AND E6 SERIES SHEETS FOR TYPICAL CONDUIT AND BACKBOX INSTALLATION DETAILS.
3. REFERENCE RISER DIAGRAMS FOR TYPICAL CONDUIT SIZES AND INITIATION ZONE CIRCUIT IDENTIFICATIONS.
4. UNLESS OTHERWISE NOTED SOLID LINES BETWEEN DEVICES SHALL BE 1" E.M.T. ROUTED CONCEALED ABOVE CEILINGS OR IN WALLS. DASHED LINES INDICATE 1-1/2" P.V.C. UNDERGROUND CONDUIT. ALL WIRING TO BE PROVIDED PER MANUFACTURER SHOP DRAWINGS.
5. CONTRACTOR SHALL PROVIDE CEILING ACCESS PANEL AT ALL NON-LAYIN TYPE CEILINGS, WHERE HEAT DETECTOR ABOVE CEILING IS INDICATED.
6. PROVIDE WIRE PROTECTIVE GUARD OVER ALL FIRE ALARM DEVICES LOCATED IN THE FOLLOWING AREAS: GYMNASIUM, LOCKER ROOMS, SHOP AREAS, AND ANY OTHER AREA WHERE DEVICES MAY BE SUBJECT TO CONTACT.

KEY NOTES:

1. PROVIDE DEDICATED 120 VOLT CIRCUIT TO 120/208V PANEL IN ELECTRICAL ROOM. PROVIDE "RED LOCK ON BREAKER".
2. PROVIDE CONNECTION TO "FACP", REFER TO SITE PLAN SHEET E5.0.
3. MAKE CONNECTION TO AIR CONDITIONING CONTROL CIRCUIT FOR AUTOMATIC SHUT OFF OF UNIT UPON SMOKE DETECTION, VL.

FIRE ALARM SYMBOL LEGENDS

- MANUAL PULL STATION MOUNTED BETWEEN 42" TO 48" A.F.F. TO HIGHEST POINT OF OPERATING HANDLE OR LEVER OF DEVICE.
- CEILING MOUNTED STROBE (15=STROBE CANDELA RATING) (V=VISUAL SIGNAL CIRCUIT IDENTIFICATION)
- CEILING MOUNTED COMBINATION SPEAKER/STROBE (15 = STROBE CANDELA RATING) (V = VISUAL SIGNAL CIRCUIT IDENTIFICATION) (A = AUDIO SIGNAL CIRCUIT IDENTIFICATION) TAP AT 1/4 WATT (U.O.N.)
- WALL MOUNTED WEATHERPROOF EXTERIOR SPEAKER MOUNTED +90" A.F.F. TO BOTTOM OF DEVICE (A = AUDIO SIGNAL CIRCUIT IDENTIFICATION)
- S — CEILING MOUNTED SMOKE DETECTOR
- S C — CEILING MOUNTED SMOKE/CO DETECTOR
- H — CEILING MOUNTED HEAT DETECTOR
- H A — HEAT DETECTOR MOUNTED ABOVE CEILING (SEE GENERAL NOTE #6)
- FACP — MAIN FIRE ALARM CONTROL PANEL. MOUNTING HEIGHT REQUIREMENT SPEC SECTION 28 30 01 3.6
- FA — REMOTE FIRE ALARM POWER EXTENDER
- KHS — KITCHEN HOOD FIRE SUPPRESSION SYSTEM CONTROL PANEL
- ANN — REMOTE ANNUNCIATOR
- FS — FIRE PROTECTION FLOW SWITCH WITH [M]
- TS — FIRE PROTECTION TAMPER SWITCH WITH [M]
- DSM — DUAL SYNC MODULE (SEE RISER DIAGRAM FOR LOCATION)
- R — ADDRESSABLE RELAY MODULE
- M — ADDRESSABLE MONITOR MODULE
- EOL-V — VISUAL END OF LINE RESISTOR
- EOL-A — AUDIO END OF LINE RESISTOR

FIRE ALARM NOTE:
THIS FIRE ALARM DESIGN IS A COMPLETE PLAN SUBMITTAL IN ACCORDANCE WITH CBC 305.10.2 MODERNIZATION PROJECT.

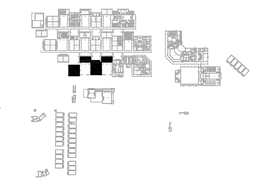
FULLY AUTOMATIC FIRE ALARM DESIGN:
THIS PROJECT IS DESIGNED TO COMPLY WITH ALL REQUIREMENTS FOR A FULLY PROTECTED AUTOMATIC FIRE ALARM SYSTEM.

NORTH

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

KEY PLAN

KEYPLAN



IDENTIFICATION STAMP
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RBV FIRE ALARM UPGRADE

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VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE

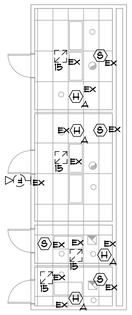
FLOOR PLAN - FIRE ALARM

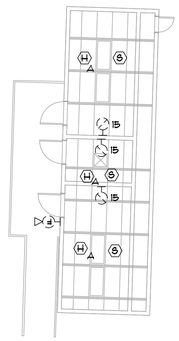
E-5.8

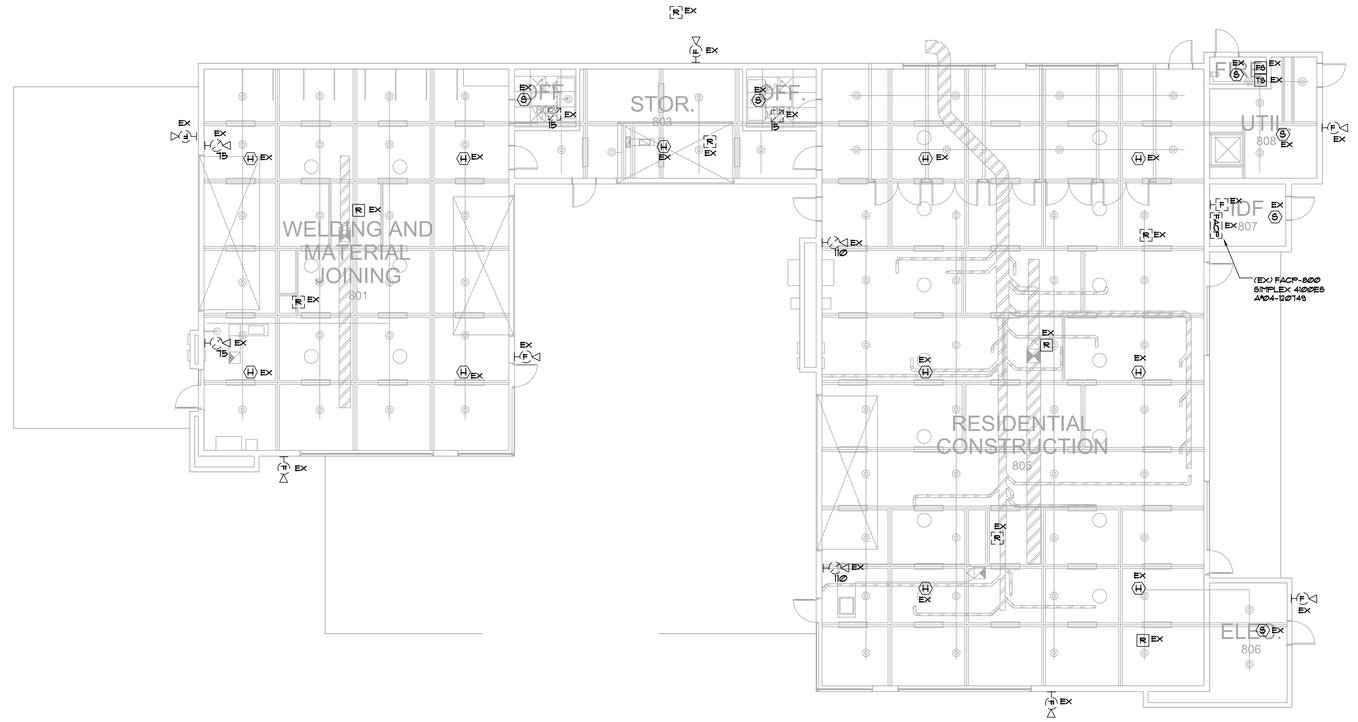
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ALL EXISTING DEVICES, FIRE ALARM PANEL CONDUIT AND WIRING IN EXISTING CTE BLDG 800 AND EXISTING RESTROOM RELOS ARE TO REMAIN. EXISTING CABLE CONNECTING EXISTING SIMPLEX 4100ES TO EXISTING CAMPUS FIRE ALARM SYSTEM SHALL BE REMOVED AND REPLACED WITH NEW CABLING. PROVIDE CROSS-TRIP FOR EXISTING SIMPLEX 4100ES AND NEW FACP NOTIFIER NF62-3030. REFER TO FIRE ALARM RISER FOR DETAILS.







GENERAL NOTES:

1. REFERENCE ARCHITECTURAL INTERIOR ELEVATIONS FOR EXACT LOCATION OF ALL WALL MOUNTED DEVICES.
2. REFERENCE E5 AND E8 SERIES SHEETS FOR TYPICAL CONDUIT AND BACKBOX INSTALLATION DETAILS.
3. REFERENCE RISER DIAGRAMS FOR TYPICAL CONDUIT SIZES AND INITIATION ZONE CIRCUIT IDENTIFICATIONS.
4. UNLESS OTHERWISE NOTED SOLID LINES BETWEEN DEVICES SHALL BE 1" E.M.T. ROUTED CONCEALED ABOVE CEILINGS OR IN WALLS. DASHED LINES INDICATE 1-1/2" P.V.C. UNDERGROUND CONDUIT. ALL WIRING TO BE PROVIDED PER MANUFACTURER SHOP DRAWINGS.
5. CONTRACTOR SHALL PROVIDE CEILING ACCESS PANEL AT ALL NON-LAY'N TYPE CEILINGS, WHERE HEAT DETECTOR ABOVE CEILING IS INDICATED.
6. PROVIDE WIRE PROTECTIVE GUARD OVER ALL FIRE ALARM DEVICES LOCATED IN THE FOLLOWING AREAS: GYMNASIUM, LOCKER ROOMS, SHOP AREAS, AND ANY OTHER AREA WHERE DEVICES MAY BE SUBJECT TO CONTACT.

KEY NOTES:

1. PROVIDE DEDICATED 120 VOLT CIRCUIT TO PANEL CONNECT TO "RED LOCK ON BREAKER".
2. PROVIDE CONNECTION TO "FACP", REFER TO SITE PLAN SHEET E5.0.
3. MAKE CONNECTION TO AIR CONDITIONING CONTROL CIRCUIT FOR AUTOMATIC SHUT OFF OF UNIT UPON SMOKE DETECTION, VL.
4. PROVIDE RELAY MODULE TO SHUNT SOUND SYSTEM POWER UNDER ANY ALARM.

FIRE ALARM SYMBOL LEGENDS

- MANUAL PULL STATION MOUNTED BETWEEN 42" TO 48" A.F.F. TO HIGHEST POINT OF OPERATING HANDLE OR LEVER OF DEVICE.
- CEILING MOUNTED STROBE (15=STROBE CANDELA RATING) (V=VISUAL SIGNAL CIRCUIT IDENTIFICATION)
- CEILING MOUNTED COMBINATION SPEAKER/STROBE (15 = STROBE CANDELA RATING) (V = VISUAL SIGNAL CIRCUIT IDENTIFICATION) (A = AUDIO SIGNAL CIRCUIT IDENTIFICATION) TAP AT 1/4 WATT (U.O.N.)
- WALL MOUNTED WEATHERPROOF EXTERIOR SPEAKER MOUNTED +90" A.F.F. TO BOTTOM OF DEVICE (A = AUDIO SIGNAL CIRCUIT IDENTIFICATION)
- CEILING MOUNTED SMOKE DETECTOR
- CEILING MOUNTED SMOKE/CO DETECTOR
- CEILING MOUNTED HEAT DETECTOR
- HEAT DETECTOR MOUNTED ABOVE CEILING (SEE GENERAL NOTE #6)
- FACP — MAIN FIRE ALARM CONTROL PANEL, MOUNTING HEIGHT REQUIREMENT SPEC SECTION 28 30 01.36
- FA — REMOTE FIRE ALARM POWER EXTENDER
- KHS — KITCHEN HOOD FIRE SUPPRESSION SYSTEM CONTROL PANEL
- ANN — REMOTE ANNUNCIATOR
- FS — FIRE PROTECTION FLOW SWITCH WITH [M]
- TS — FIRE PROTECTION TAMPER SWITCH WITH [M]
- DSM — DUAL SYNC MODULE (SEE RISER DIAGRAM FOR LOCATION)
- [R] — ADDRESSABLE RELAY MODULE
- [M] — ADDRESSABLE MONITOR MODULE
- EOL-V — VISUAL END OF LINE RESISTOR
- EOL-A — AUDIO END OF LINE RESISTOR

FIRE ALARM NOTE:
THIS FIRE ALARM DESIGN IS A COMPLETE PLAN SUBMITTAL IN ACCORDANCE WITH CBC 3Ø5.1Ø2 MODERNIZATION PROJECT.

FULLY AUTOMATIC FIRE ALARM DESIGN:
THIS PROJECT IS DESIGNED TO COMPLY WITH ALL REQUIREMENTS FOR A FULLY PROTECTED AUTOMATIC FIRE ALARM SYSTEM.

KEY PLAN

NORTH

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

IDENTIFICATION STAMP
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APP: 04-122924 INC:
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SS ☐ FLS ☑ ACS ☐
DATE: 02/29/2024

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760-431-2444
www.alphastudio-design.com

ARCHITECT OF RECORD
JOSHUA T. ECKLE
No. C31020
EXP. 12/25
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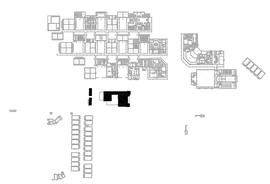
ENGINEER OF RECORD

RBV FIRE ALARM UPGRADE

RANCHO BUENA VISTA HIGH SCHOOL
1601 LONGHORN DRIVE
VISTA, CA 92081

VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

KEYPLAN



REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE

FLOOR PLAN - FIRE ALARM

E-5.9

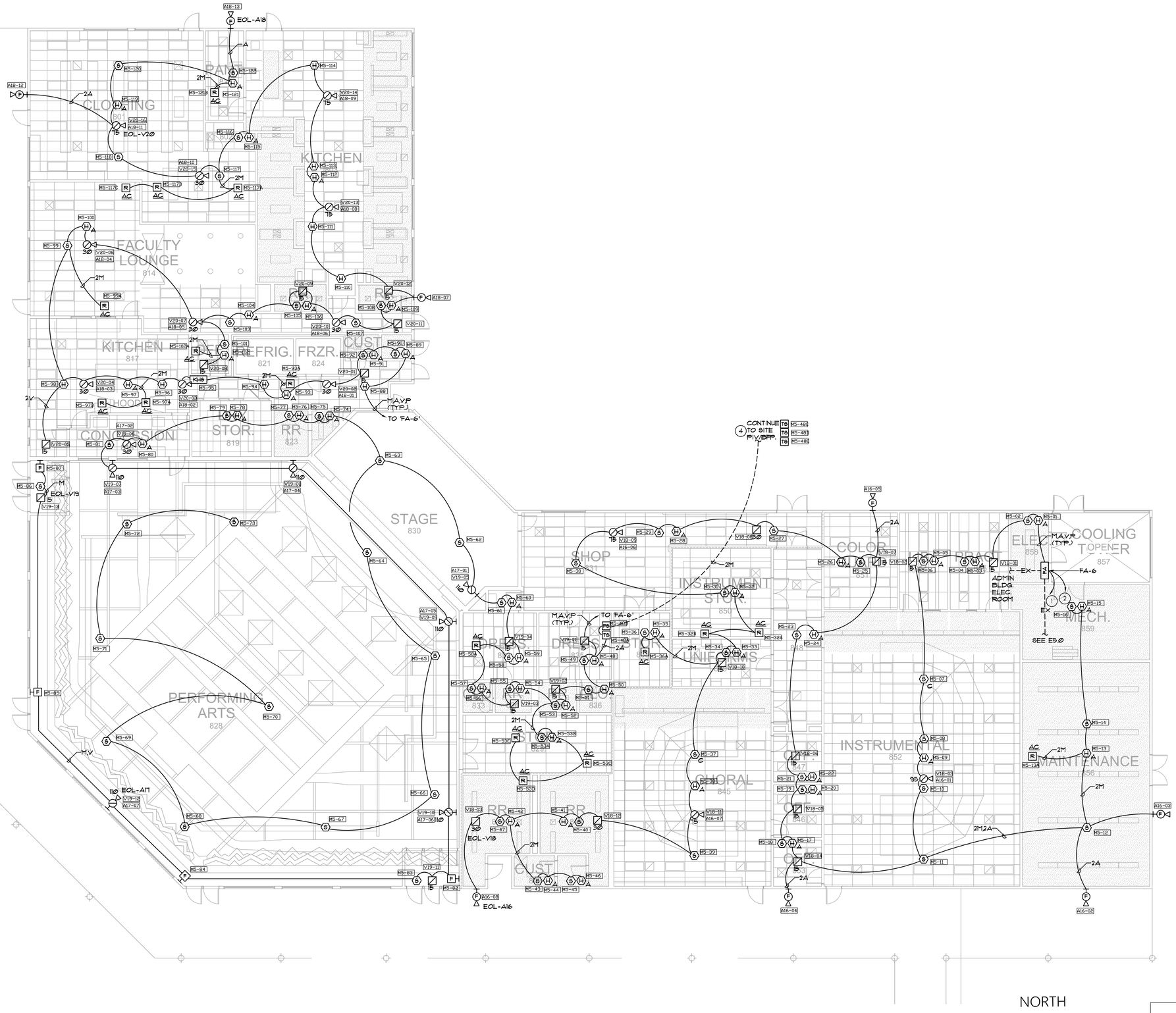
REGISTERED PROFESSIONAL ENGINEER
No. E 14781
Exp. 6-30-2025
ELECTRICAL
STATE OF CALIFORNIA

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

GENERAL NOTES:

1. REFERENCE ARCHITECTURAL INTERIOR ELEVATIONS FOR EXACT LOCATION OF ALL WALL MOUNTED DEVICES.
2. REFERENCE E5 AND E8 SERIES SHEETS FOR TYPICAL CONDUIT AND BACKBOX INSTALLATION DETAILS.
3. REFERENCE RISER DIAGRAMS FOR TYPICAL CONDUIT SIZES AND INITIATION ZONE CIRCUIT IDENTIFICATIONS.
4. UNLESS OTHERWISE NOTED SOLID LINES BETWEEN DEVICES SHALL BE 1" E.M.T. ROUTED CONCEALED ABOVE CEILINGS OR IN WALLS. DASHED LINES INDICATE 1-1/2" P.V.C. UNDERGROUND CONDUIT. ALL WIRING TO BE PROVIDED PER MANUFACTURER SHOP DRAWINGS.
5. CONTRACTOR SHALL PROVIDE CEILING ACCESS PANEL AT ALL NON-LAY'N TYPE CEILINGS, WHERE HEAT DETECTOR ABOVE CEILING IS INDICATED.
6. PROVIDE WIRE PROTECTIVE GUARD OVER ALL FIRE ALARM DEVICES LOCATED IN THE FOLLOWING AREAS: GYMNASIUM, LOCKER ROOMS, SHOP AREAS, AND ANY OTHER AREA WHERE DEVICES MAY BE SUBJECT TO CONTACT.

KEY NOTES:

1. PROVIDE DEDICATED 120 VOLT CIRCUIT TO 120/208V PANEL IN ELECTRICAL ROOM. PROVIDE 'RED LOCK ON BREAKER'.
2. PROVIDE CONNECTION TO 'FACP', REFER TO SITE PLAN SHEET E5.0.
3. MAKE CONNECTION TO AIR CONDITIONING CONTROL CIRCUIT FOR AUTOMATIC SHUT OFF OF UNIT UPON SMOKE DETECTION, VL.
4. FIELD VERIFY EXACT LOCATION PRIOR TO ROUGH IN.

FIRE ALARM SYMBOL LEGENDS

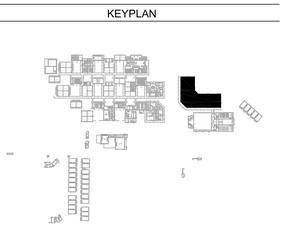
- F — MANUAL PULL STATION MOUNTED BETWEEN 42" TO 48" A.F.F. TO HIGHEST POINT OF OPERATING HANDLE OR LEVER OF DEVICE.
- Y, 15 — CEILING MOUNTED STROBE (15=STROBE CANDELA RATING) (Y=VISUAL SIGNAL CIRCUIT IDENTIFICATION)
- AV, 15 — CEILING MOUNTED COMBINATION SPEAKER/STROBE (15 = STROBE CANDELA RATING) (V = VISUAL SIGNAL CIRCUIT IDENTIFICATION) (A = AUDIO SIGNAL CIRCUIT IDENTIFICATION) TAP AT 1/4 WATT (U.O.N.)
- F, A — WALL MOUNTED WEATHERPROOF EXTERIOR SPEAKER MOUNTED +90" A.F.F. TO BOTTOM OF DEVICE (A = AUDIO SIGNAL CIRCUIT IDENTIFICATION)
- S — CEILING MOUNTED SMOKE DETECTOR
- S, C — CEILING MOUNTED SMOKE/CO DETECTOR
- H — CEILING MOUNTED HEAT DETECTOR
- H, A — HEAT DETECTOR MOUNTED ABOVE CEILING (SEE GENERAL NOTE #6)
- FACP — MAIN FIRE ALARM CONTROL PANEL. MOUNTING HEIGHT REQUIREMENT SPEC SECTION 28 30 01.26
- FA — REMOTE FIRE ALARM POWER EXTENDER
- KHS — KITCHEN HOOD FIRE SUPPRESSION SYSTEM CONTROL PANEL
- ANN — REMOTE ANNUNCIATOR
- FS — FIRE PROTECTION FLOW SWITCH WITH [M]
- TS — FIRE PROTECTION TAMPER SWITCH WITH [M]
- DSM — DUAL SYNC MODULE (SEE RISER DIAGRAM FOR LOCATION)
- R — ADDRESSABLE RELAY MODULE
- M — ADDRESSABLE MONITOR MODULE
- EOL-V — VISUAL END OF LINE RESISTOR
- EOL-A — AUDIO END OF LINE RESISTOR

FIRE ALARM NOTE:
THIS FIRE ALARM DESIGN IS A COMPLETE PLAN SUBMITTAL IN ACCORDANCE WITH CBC 305.1.2 MODERNIZATION PROJECT.

FULLY AUTOMATIC FIRE ALARM DESIGN:
THIS PROJECT IS DESIGNED TO COMPLY WITH ALL REQUIREMENTS FOR A FULLY PROTECTED AUTOMATIC FIRE ALARM SYSTEM.

KEY PLAN

KEYPLAN



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ARCHITECT OF RECORD

LICENSED ARCHITECT
JOSHUA T. ECKLE
No. C31020
EXP. 12/25
STATE OF CALIFORNIA

ENGINEER OF RECORD

RBV FIRE ALARM UPGRADE

RANCHO BUENA VISTA HIGH SCHOOL
1601 LONGHORN DRIVE
VISTA, CA 92081

VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #PIn
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE

FLOOR PLAN - FIRE ALARM

E-5.10

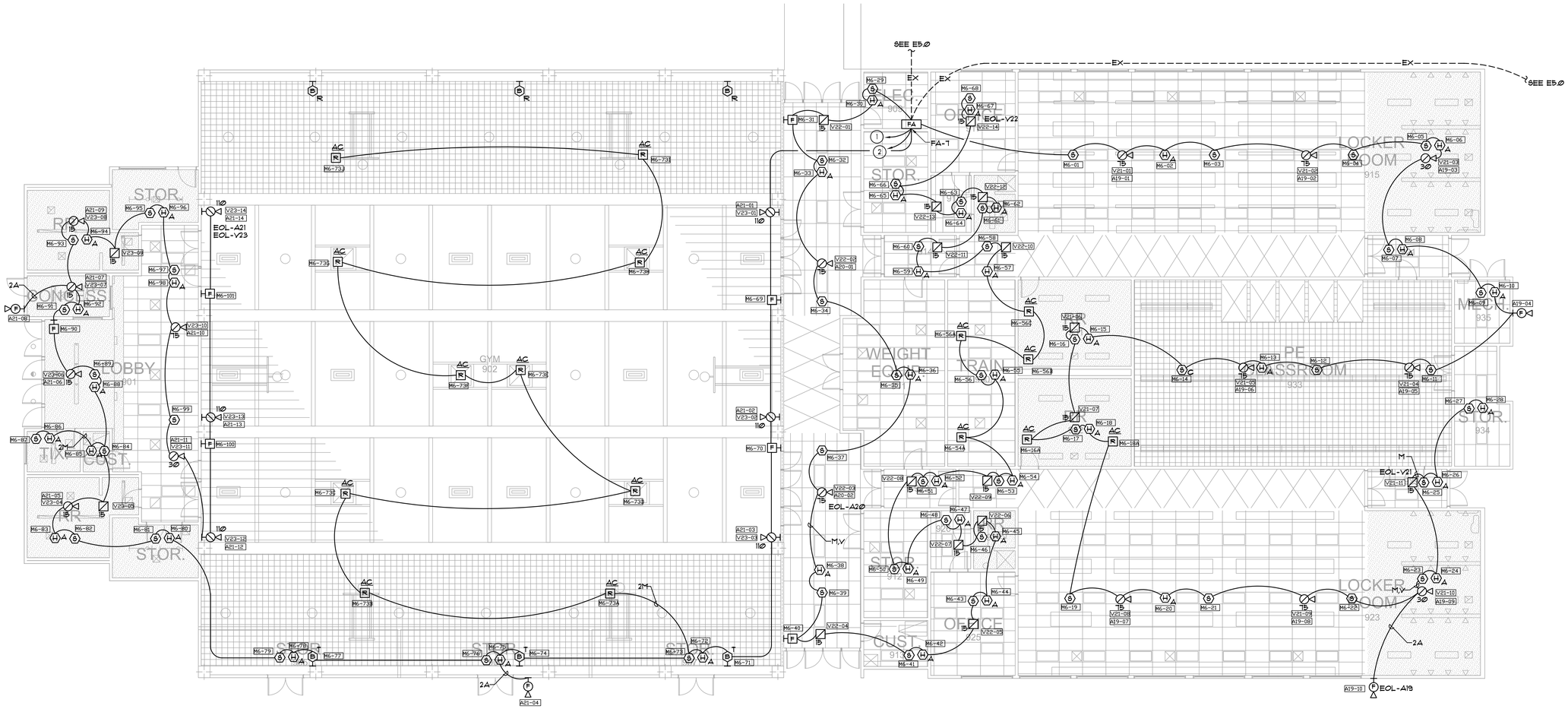
REGISTERED PROFESSIONAL ENGINEER
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FIRE ALARM NOTE:
THIS FIRE ALARM DESIGN IS A COMPLETE PLAN SUBMITTAL IN ACCORDANCE WITH CBC 305.1Ø2 MODERNIZATION PROJECT.

FULLY AUTOMATIC FIRE ALARM DESIGN:
THIS PROJECT IS DESIGNED TO COMPLY WITH ALL REQUIREMENTS FOR A FULLY PROTECTED AUTOMATIC FIRE ALARM SYSTEM.

FIRE ALARM SYMBOL LEGENDS

- (F) MANUAL FULL STATION MOUNTED BETWEEN 42" TO 48" A.F.F. TO HIGHEST POINT OF OPERATING HANDLE OR LEVER OF DEVICE.
- (V) 15 CEILING MOUNTED STROBE (15=STROBE CANDELA RATING) (V=VISUAL SIGNAL CIRCUIT IDENTIFICATION)
- (A,V) 15 CEILING MOUNTED COMBINATION SPEAKER/STROBE (15 = STROBE CANDELA RATING) (V = VISUAL SIGNAL CIRCUIT IDENTIFICATION) (A = AUDIO SIGNAL CIRCUIT IDENTIFICATION) TAP AT 1/4 WATT (U.O.N.)
- (S) A WALL MOUNTED WEATHERPROOF EXTERIOR SPEAKER MOUNTED +80" A.F.F. TO BOTTOM OF DEVICE (A = AUDIO SIGNAL CIRCUIT IDENTIFICATION)
- (S) CEILING MOUNTED SMOKE DETECTOR
- (S)C CEILING MOUNTED SMOKE/CO DETECTOR
- (H) CEILING MOUNTED HEAT DETECTOR
- (H)A HEAT DETECTOR MOUNTED ABOVE CEILING (SEE GENERAL NOTE *6)
- FACP MAIN FIRE ALARM CONTROL PANEL. MOUNTING HEIGHT REQUIREMENT SPEC SECTION 28 3Ø Ø1 3.6
- FA REMOTE FIRE ALARM POWER EXTENDER
- K-H5 KITCHEN HOOD FIRE SUPPRESSION SYSTEM CONTROL PANEL
- ANN REMOTE ANNUNCIATOR
- FS FIRE PROTECTION FLOW SWITCH WITH (M)
- TS FIRE PROTECTION TAMPER SWITCH WITH (M)
- DSM DUAL SYNC MODULE (SEE RISER DIAGRAM FOR LOCATION)
- (R) ADDRESSABLE RELAY MODULE
- (M) ADDRESSABLE MONITOR MODULE
- EOL-V VISUAL END OF LINE RESISTOR
- EOL-A AUDIO END OF LINE RESISTOR

GENERAL NOTES:

1. REFERENCE ARCHITECTURAL INTERIOR ELEVATIONS FOR EXACT LOCATION OF ALL WALL MOUNTED DEVICES.
2. REFERENCE E5 AND E8 SERIES SHEETS FOR TYPICAL CONDUIT AND BACKBOX INSTALLATION DETAILS.
3. REFERENCE RISER DIAGRAMS FOR TYPICAL CONDUIT SIZES AND INITIATION ZONE CIRCUIT IDENTIFICATIONS.
4. UNLESS OTHERWISE NOTED SOLID LINES BETWEEN DEVICES SHALL BE 1" E.M.T. ROUTED CONCEALED ABOVE CEILINGS OR IN WALLS. DASHED LINES INDICATE 1-1/2" P.V.C. UNDERGROUND CONDUIT. ALL WIRING TO BE PROVIDED PER MANUFACTURER SHOP DRAWINGS.
5. CONTRACTOR SHALL PROVIDE CEILING ACCESS PANEL AT ALL NON-LAYIN TYPE CEILINGS, WHERE HEAT DETECTOR ABOVE CEILING IS INDICATED.
6. PROVIDE WIRE PROTECTIVE GUARD OVER ALL FIRE ALARM DEVICES LOCATED IN THE FOLLOWING AREAS: GYMNASIUM, LOCKER ROOMS, SHOP AREAS, AND ANY OTHER AREA WHERE DEVICES MAY BE SUBJECT TO CONTACT.

KEY NOTES:

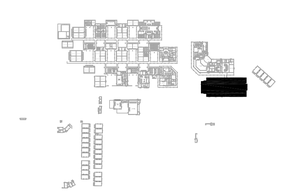
1. PROVIDE DEDICATED 12Ø VOLT CIRCUIT TO PANEL CONNECT TO "RED LOCK ON BREAKER".
2. PROVIDE CONNECTION TO "FACP", REFER TO SITE PLAN SHEET E5.Ø.
3. MAKE CONNECTION TO AIR CONDITIONING CONTROL CIRCUIT FOR AUTOMATIC SHUT OFF OF UNIT UPON SMOKE DETECTION, VL.
4. PROVIDE RELAY MODULE TO SHUNT SOUND SYSTEM POWER UNDER ANY ALARM.

NORTH

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

KEY PLAN

KEYPLAN



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ENGINEER OF RECORD

REGISTERED PROFESSIONAL ENGINEER MICHAEL J. JOHNSON No. E 14781 Exp. 6-30-2025 ELECTRICAL STATE OF CALIFORNIA

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RBV FIRE ALARM UPGRADE

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1601 LONGHORN DRIVE
VISTA, CA 92081

VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

REVISIONS

MARK	DATE	DESCRIPTION

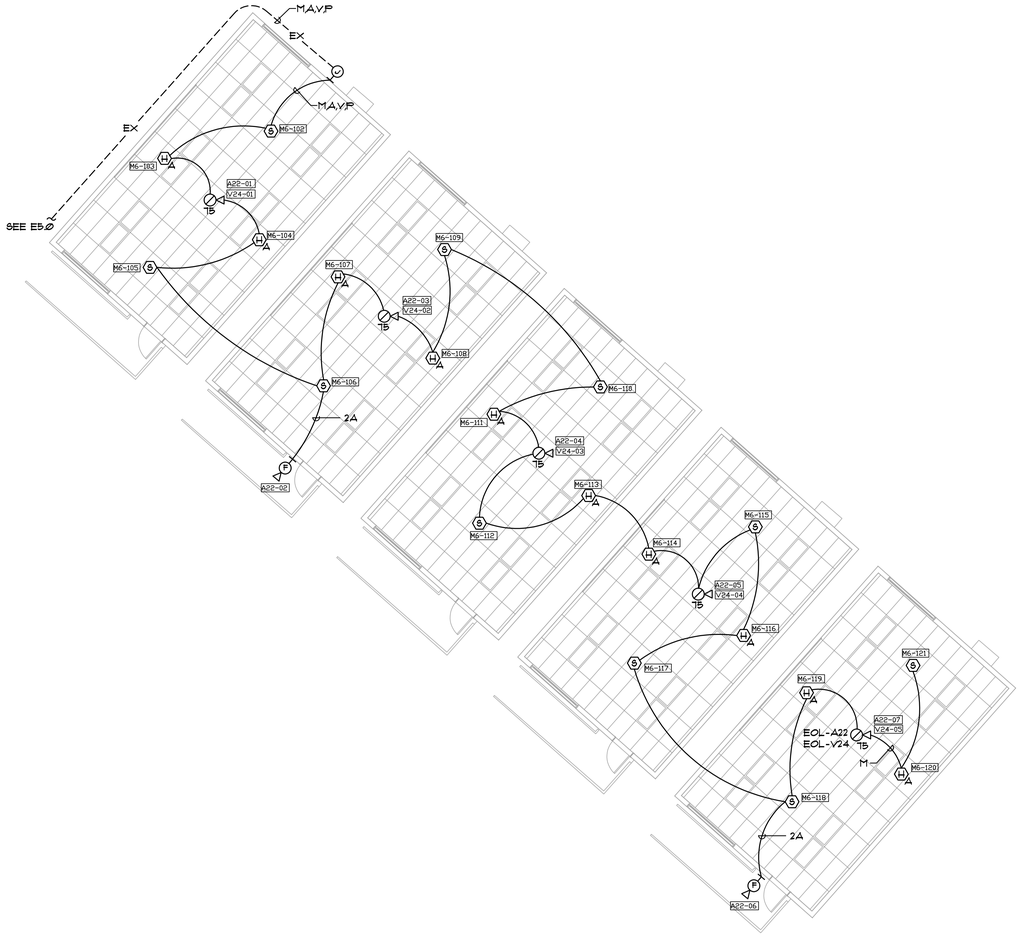
PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE
FLOOR PLAN - FIRE ALARM

E-5.11

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NORTH

0 4' 8' 16'

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

GENERAL NOTES:

1. REFERENCE ARCHITECTURAL INTERIOR ELEVATIONS FOR EXACT LOCATION OF ALL WALL MOUNTED DEVICES.
2. REFERENCE E5 AND E8 SERIES SHEETS FOR TYPICAL CONDUIT AND BACKBOX INSTALLATION DETAILS.
3. REFERENCE RISER DIAGRAMS FOR TYPICAL CONDUIT SIZES AND INITIATION ZONE CIRCUIT IDENTIFICATIONS.
4. UNLESS OTHERWISE NOTED SOLID LINES BETWEEN DEVICES SHALL BE 1" E.M.T. ROUTED CONCEALED ABOVE CEILINGS OR IN WALLS. DASHED LINES INDICATE 1-1/2" P.V.C. UNDERGROUND CONDUIT. ALL WIRING TO BE PROVIDED PER MANUFACTURER SHOP DRAWINGS.
5. CONTRACTOR SHALL PROVIDE CEILING ACCESS PANEL AT ALL NON-LAY'N TYPE CEILINGS, WHERE HEAT DETECTOR ABOVE CEILING IS INDICATED.
6. PROVIDE WIRE PROTECTIVE GUARD OVER ALL FIRE ALARM DEVICES LOCATED IN THE FOLLOWING AREAS: GYMNASIUM, LOCKER ROOMS, SHOP AREAS, AND ANY OTHER AREA WHERE DEVICES MAY BE SUBJECT TO CONTACT.

KEY NOTES:

1. PROVIDE DEDICATED 120 VOLT CIRCUIT TO PANEL CONNECT TO "RED LOCK ON BREAKER".
2. PROVIDE CONNECTION TO "FACP", REFER TO SITE PLAN SHEET E5.0.
3. MAKE CONNECTION TO AIR CONDITIONING CONTROL CIRCUIT FOR AUTOMATIC SHUT OFF OF UNIT UPON SMOKE DETECTION, VL.

FIRE ALARM SYMBOL LEGENDS

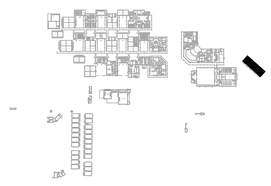
- MANUAL PULL STATION MOUNTED BETWEEN 42" TO 48" A.F.F. TO HIGHEST POINT OF OPERATING HANDLE OR LEVER OF DEVICE.
- CEILING MOUNTED STROBE (15=STROBE CANDELA RATING) (V=VISUAL SIGNAL CIRCUIT IDENTIFICATION)
- CEILING MOUNTED COMBINATION SPEAKER/STROBE (15 = STROBE CANDELA RATING) (V = VISUAL SIGNAL CIRCUIT IDENTIFICATION) (A = AUDIO SIGNAL CIRCUIT IDENTIFICATION) TAP AT 1/4 WATT (U.O.N.)
- WALL MOUNTED WEATHERPROOF EXTERIOR SPEAKER MOUNTED +90" A.F.F. TO BOTTOM OF DEVICE (A = AUDIO SIGNAL CIRCUIT IDENTIFICATION)
- CEILING MOUNTED SMOKE DETECTOR
- CEILING MOUNTED SMOKE/CO DETECTOR
- CEILING MOUNTED HEAT DETECTOR
- HEAT DETECTOR MOUNTED ABOVE CEILING (SEE GENERAL NOTE #6)
- FACP — MAIN FIRE ALARM CONTROL PANEL, MOUNTING HEIGHT REQUIREMENT SPEC SECTION 28 30 00 1 3.6
- FA — REMOTE FIRE ALARM POWER EXTENDER
- KHS — KITCHEN HOOD FIRE SUPPRESSION SYSTEM CONTROL PANEL
- ANN — REMOTE ANNUNCIATOR
- FS — FIRE PROTECTION FLOW SWITCH WITH [M]
- TS — FIRE PROTECTION TAMPER SWITCH WITH [M]
- DSM — DUAL SYNC MODULE (SEE RISER DIAGRAM FOR LOCATION)
- [R] — ADDRESSABLE RELAY MODULE
- [M] — ADDRESSABLE MONITOR MODULE
- EOL-V — VISUAL END OF LINE RESISTOR
- EOL-A — AUDIO END OF LINE RESISTOR

FIRE ALARM NOTE:
THIS FIRE ALARM DESIGN IS A COMPLETE PLAN SUBMITTAL IN ACCORDANCE WITH CBC 3015.102 MODERNIZATION PROJECT.

FULLY AUTOMATIC FIRE ALARM DESIGN:
THIS PROJECT IS DESIGNED TO COMPLY WITH ALL REQUIREMENTS FOR A FULLY PROTECTED AUTOMATIC FIRE ALARM SYSTEM.

KEY PLAN

KEYPLAN



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ARCHITECT OF RECORD

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EXP. 12/25
STATE OF CALIFORNIA

ENGINEER OF RECORD

RBV FIRE ALARM UPGRADE

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1601 LONGHORN DRIVE
VISTA, CA 92081

VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE

FLOOR PLAN - FIRE ALARM

E-5.12

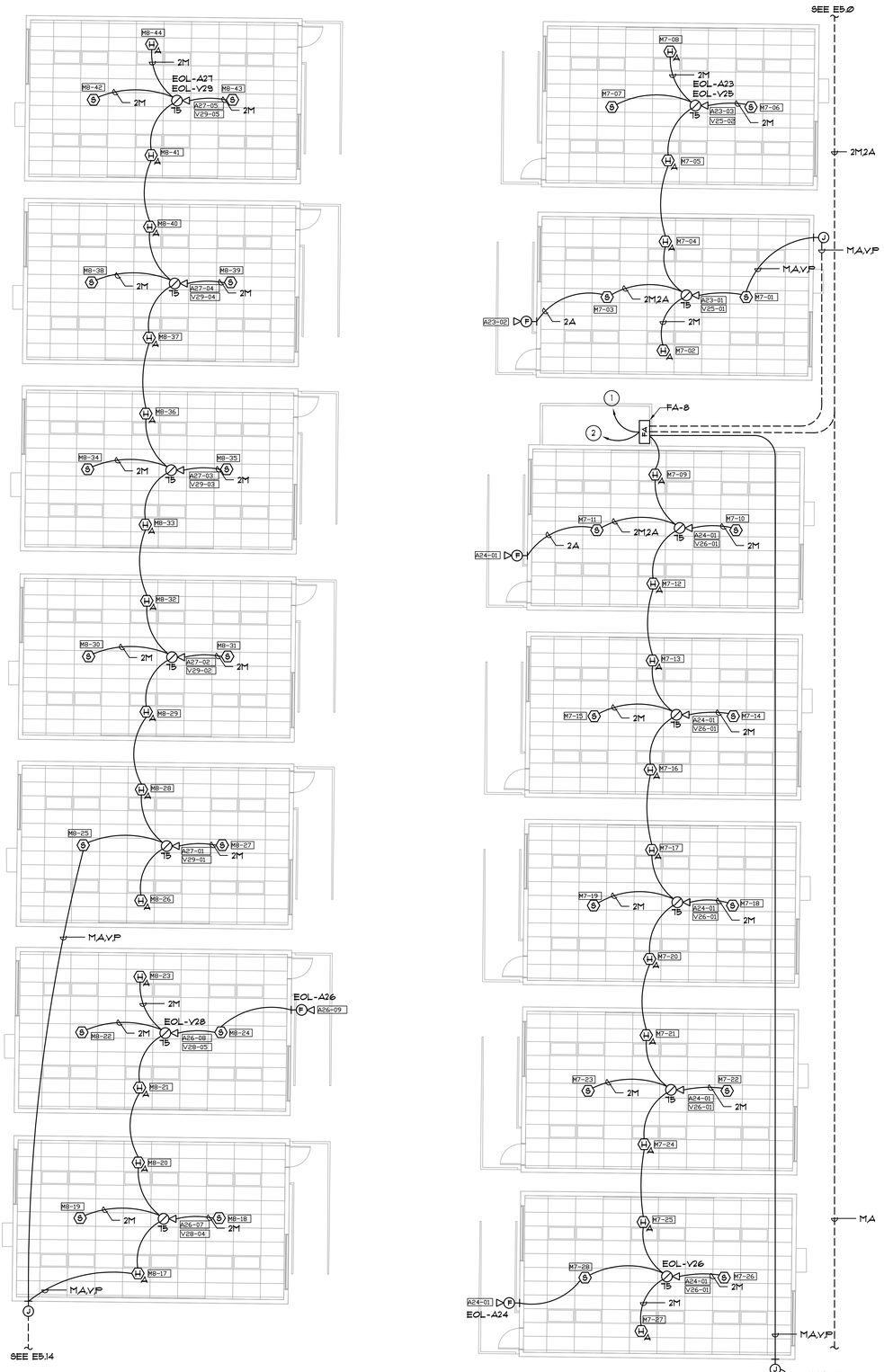
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CONSULTING ENGINEERS, INC.
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NORTH

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

GENERAL NOTES:

1. REFERENCE ARCHITECTURAL INTERIOR ELEVATIONS FOR EXACT LOCATION OF ALL WALL MOUNTED DEVICES.
2. REFERENCE E5 AND E8 SERIES SHEETS FOR TYPICAL CONDUIT AND BACKBOX INSTALLATION DETAILS.
3. REFERENCE RISER DIAGRAMS FOR TYPICAL CONDUIT SIZES AND INITIATION ZONE CIRCUIT IDENTIFICATIONS.
4. UNLESS OTHERWISE NOTED SOLID LINES BETWEEN DEVICES SHALL BE 1" E.M.T. ROUTED CONCEALED ABOVE CEILINGS OR IN WALLS. DASHED LINES INDICATE 1-1/2" P.V.C. UNDERGROUND CONDUIT. ALL WIRING TO BE PROVIDED PER MANUFACTURER SHOP DRAWINGS.
5. CONTRACTOR SHALL PROVIDE CEILING ACCESS PANEL AT ALL NON-LAY'N TYPE CEILINGS, WHERE HEAT DETECTOR ABOVE CEILING IS INDICATED.
6. PROVIDE WIRE PROTECTIVE GUARD OVER ALL FIRE ALARM DEVICES LOCATED IN THE FOLLOWING AREAS: GYMNASIUM, LOCKER ROOMS, SHOP AREAS, AND ANY OTHER AREA WHERE DEVICES MAY BE SUBJECT TO CONTACT.

KEY NOTES:

1. RECONNECT TO EXISTING DEDICATED 120V CIRCUIT.
2. PROVIDE CONNECTION TO "FACP", REFER TO SITE PLAN SHEET E5.Ø.

FIRE ALARM SYMBOL LEGENDS

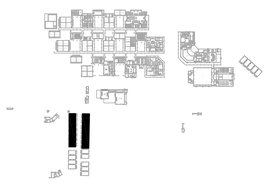
- F — MANUAL PULL STATION MOUNTED BETWEEN 42" TO 48" A.F.F. TO HIGHEST POINT OF OPERATING HANDLE OR LEVER OF DEVICE.
- V 15 — CEILING MOUNTED STROBE (15=STROBE CANDELA RATING) (V=VISUAL SIGNAL CIRCUIT IDENTIFICATION)
- A.V 15 — CEILING MOUNTED COMBINATION SPEAKER/STROBE (15 = STROBE CANDELA RATING) (V = VISUAL SIGNAL CIRCUIT IDENTIFICATION) (A = AUDIO SIGNAL CIRCUIT IDENTIFICATION) TAP AT 1/4 WATT (U.O.N.)
- P A — WALL MOUNTED WEATHERPROOF EXTERIOR SPEAKER MOUNTED +90" AFF. TO BOTTOM OF DEVICE (A = AUDIO SIGNAL CIRCUIT IDENTIFICATION)
- S — CEILING MOUNTED SMOKE DETECTOR
- S C — CEILING MOUNTED SMOKE/CO DETECTOR
- H — CEILING MOUNTED HEAT DETECTOR
- H A — HEAT DETECTOR MOUNTED ABOVE CEILING (SEE GENERAL NOTE #6)
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- FS — FIRE PROTECTION FLOW SWITCH WITH M
- TS — FIRE PROTECTION TAMPER SWITCH WITH M
- DSM — DUAL SYNC MODULE (SEE RISER DIAGRAM FOR LOCATION)
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- M — ADDRESSABLE MONITOR MODULE
- EOL-V — VISUAL END OF LINE RESISTOR
- EOL-A — AUDIO END OF LINE RESISTOR

FIRE ALARM NOTE:
THIS FIRE ALARM DESIGN IS A COMPLETE PLAN SUBMITTAL IN ACCORDANCE WITH CBC 3095.102 MODERNIZATION PROJECT.

FULLY AUTOMATIC FIRE ALARM DESIGN:
THIS PROJECT IS DESIGNED TO COMPLY WITH ALL REQUIREMENTS FOR A FULLY PROTECTED AUTOMATIC FIRE ALARM SYSTEM.

KEY PLAN

KEYPLAN



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RBV FIRE ALARM UPGRADE

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VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #PIn
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE

FLOOR PLAN - FIRE ALARM

E-5.13

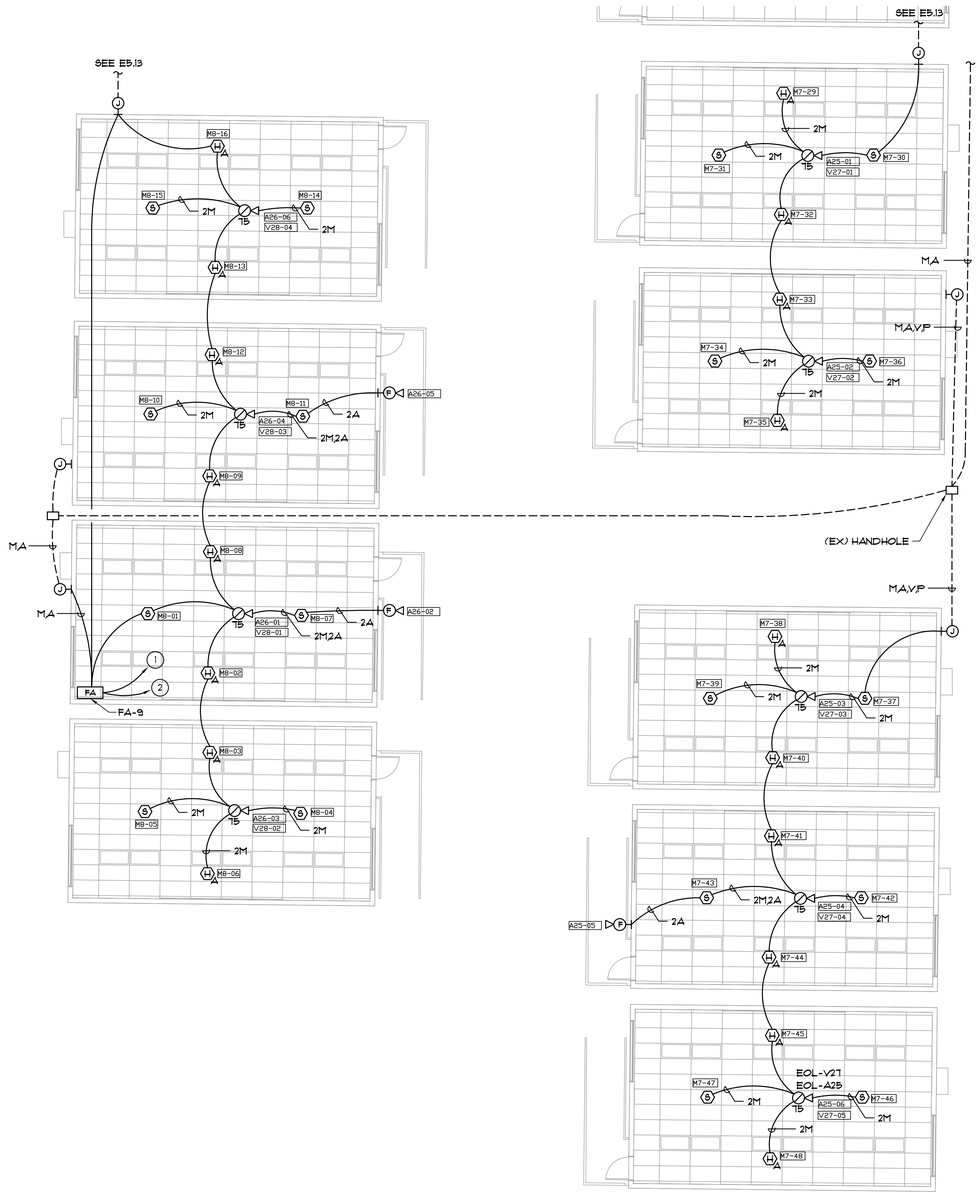
REGISTERED PROFESSIONAL ENGINEER
MARK JOHNSON
No. E 14781
Exp. 6-30-2025
ELECTRICAL
STATE OF CALIFORNIA

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#23011.01 2/28/2024

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1 FLOOR PLAN - FIRE ALARM

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

NORTH

GENERAL NOTES:

1. REFERENCE ARCHITECTURAL INTERIOR ELEVATIONS FOR EXACT LOCATION OF ALL WALL MOUNTED DEVICES.
2. REFERENCE E5 AND E8 SERIES SHEETS FOR TYPICAL CONDUIT AND BACKBOX INSTALLATION DETAILS.
3. REFERENCE RISER DIAGRAMS FOR TYPICAL CONDUIT SIZES AND INITIATION ZONE CIRCUIT IDENTIFICATIONS.
4. UNLESS OTHERWISE NOTED SOLID LINES BETWEEN DEVICES SHALL BE 1" EMT, ROUTED CONCEALED ABOVE CEILINGS OR IN WALLS. DASHED LINES INDICATE 1-1/2" P.V.C. UNDERGROUND CONDUIT. ALL WIRING TO BE PROVIDED PER MANUFACTURER SHOP DRAWINGS.
5. CONTRACTOR SHALL PROVIDE CEILING ACCESS PANEL AT ALL NON-LAYIN TYPE CEILINGS, WHERE HEAT DETECTOR ABOVE CEILING IS INDICATED.
6. PROVIDE WIRE PROTECTIVE GUARD OVER ALL FIRE ALARM DEVICES LOCATED IN THE FOLLOWING AREAS; GYMNASIUM, LOCKER ROOMS, SHOP AREAS, AND ANY OTHER AREA WHERE DEVICES MAY BE SUBJECT TO CONTACT.

KEY NOTES:

1. PROVIDE DEDICATED 120 VOLT CIRCUIT TO RELO PANEL. PROVIDE "RED LOCK ON BREAKER".
2. PROVIDE CONNECTION TO "FACP", REFER TO SITE PLAN SHEET E5.0.

FIRE ALARM SYMBOL LEGENDS

- (F) MANUAL PULL STATION MOUNTED BETWEEN 42" TO 48" A.F.F. TO HIGHEST POINT OF OPERATING HANDLE OR LEVER OF DEVICE.
- V / 15 CEILING MOUNTED STROBE (15=STROBE CANDELA RATING) (V=VISUAL SIGNAL CIRCUIT IDENTIFICATION)
- AV / 15 CEILING MOUNTED COMBINATION SPEAKER/STROBE (15 = STROBE CANDELA RATING) (V = VISUAL SIGNAL CIRCUIT IDENTIFICATION) (A = AUDIO SIGNAL CIRCUIT IDENTIFICATION) TAP AT 1/4 WATT (U.O.N.)
- (F) A WALL MOUNTED WEATHERPROOF EXTERIOR SPEAKER MOUNTED +80" A.F.F. TO BOTTOM OF DEVICE (A = AUDIO SIGNAL CIRCUIT IDENTIFICATION)
- (S) CEILING MOUNTED SMOKE DETECTOR
- (S) C CEILING MOUNTED SMOKE/CO DETECTOR
- (H) CEILING MOUNTED HEAT DETECTOR
- (H) A HEAT DETECTOR MOUNTED ABOVE CEILING (SEE GENERAL NOTE #5)
- FACP MAIN FIRE ALARM CONTROL PANEL. MOUNTING HEIGHT REQUIREMENT SPEC SECTION 28 30 01 3.6
- FA REMOTE FIRE ALARM POWER EXTENDER
- KHS KITCHEN HOOD FIRE SUPPRESSION SYSTEM CONTROL PANEL
- ANN REMOTE ANNUNCIATOR
- FS FIRE PROTECTION FLOW SWITCH WITH (M)
- TS FIRE PROTECTION TAMPER SWITCH WITH (M)
- DSM DUAL SYNC MODULE (SEE RISER DIAGRAM FOR LOCATION)
- R ADDRESSABLE RELAY MODULE
- M ADDRESSABLE MONITOR MODULE
- EOL-V VISUAL END OF LINE RESISTOR
- EOL-A AUDIO END OF LINE RESISTOR

FIRE ALARM NOTE:
THIS FIRE ALARM DESIGN IS A COMPLETE PLAN SUBMITTAL IN ACCORDANCE WITH CBC 305.1.2 MODERNIZATION PROJECT.

FULLY AUTOMATIC FIRE ALARM DESIGN:
THIS PROJECT IS DESIGNED TO COMPLY WITH ALL REQUIREMENTS FOR A FULLY PROTECTED AUTOMATIC FIRE ALARM SYSTEM.

KEY PLAN

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-122924 INC:
REVIEWED FOR
SS ☐ FLS ☑ ACS ☐
DATE: 02/29/2024

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6152 INNOVATION WAY
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ARCHITECT OF RECORD

LICENSED ARCHITECT
JOSHUA T. ECKLE
No. C31020
EXP. 12/25
STATE OF CALIFORNIA

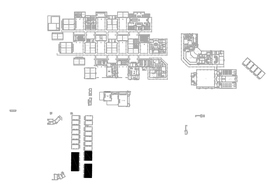
ENGINEER OF RECORD

RBV FIRE ALARM UPGRADE

RANCHO BUENA VISTA HIGH SCHOOL
1601 LONGHORN DRIVE
VISTA, CA 92081

VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

KEYPLAN



REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE

FLOOR PLAN - FIRE ALARM

E-5.14

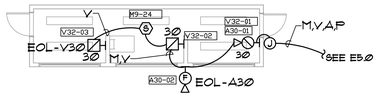
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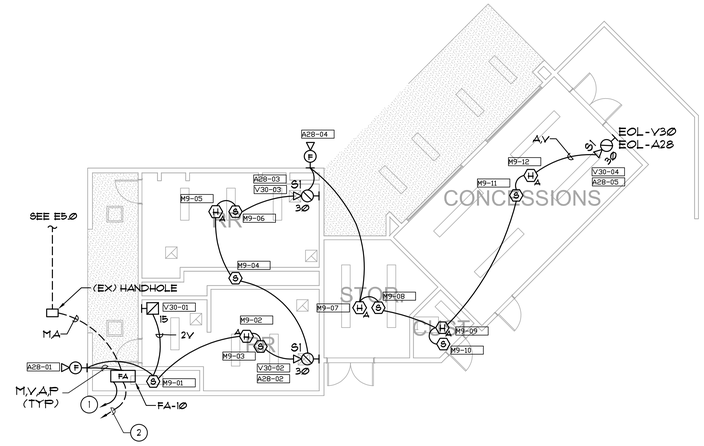
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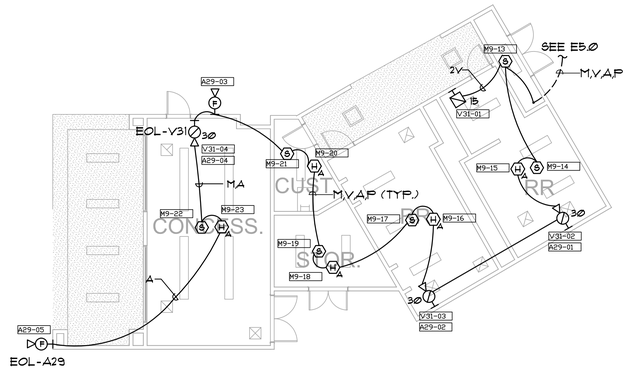
#23011.01 2/28/2024

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NORTH

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

0 4 8 16

GENERAL NOTES:

1. REFERENCE ARCHITECTURAL INTERIOR ELEVATIONS FOR EXACT LOCATION OF ALL WALL MOUNTED DEVICES.
2. REFERENCE E5 AND E8 SERIES SHEETS FOR TYPICAL CONDUIT AND BACKBOX INSTALLATION DETAILS.
3. REFERENCE RISER DIAGRAMS FOR TYPICAL CONDUIT SIZES AND INITIATION ZONE CIRCUIT IDENTIFICATIONS.
4. UNLESS OTHERWISE NOTED SOLID LINES BETWEEN DEVICES SHALL BE 1" E.M.T. ROUTED CONCEALED ABOVE CEILINGS OR IN WALLS. DASHED LINES INDICATE 1-1/2" P.V.C. UNDERGROUND CONDUIT. ALL WIRING TO BE PROVIDED PER MANUFACTURER SHOP DRAWINGS.
5. CONTRACTOR SHALL PROVIDE CEILING ACCESS PANEL AT ALL NON-LAY'N TYPE CEILINGS, WHERE HEAT DETECTOR ABOVE CEILING IS INDICATED.
6. PROVIDE WIRE PROTECTIVE GUARD OVER ALL FIRE ALARM DEVICES LOCATED IN THE FOLLOWING AREAS: GYMNASIUM, LOCKER ROOMS, SHOP AREAS, AND ANY OTHER AREA WHERE DEVICES MAY BE SUBJECT TO CONTACT.

KEY NOTES:

1. RECONNECT TO EXISTING DEDICATED 120V CIRCUIT.
2. PROVIDE CONNECTION TO "FACP", REFER TO SITE PLAN SHEET E5.0.

FIRE ALARM SYMBOL LEGENDS

- (F) MANUAL PULL STATION MOUNTED BETWEEN 42" TO 48" A.F.F. TO HIGHEST POINT OF OPERATING HANDLE OR LEVER OF DEVICE.
- Y / 15 CEILING MOUNTED STROBE (15=STROBE CANDELA RATING) (Y=VISUAL SIGNAL CIRCUIT IDENTIFICATION)
- A,V / 15 CEILING MOUNTED COMBINATION SPEAKER/STROBE (15 = STROBE CANDELA RATING) (V = VISUAL SIGNAL CIRCUIT IDENTIFICATION) (A = AUDIO SIGNAL CIRCUIT IDENTIFICATION) TAP AT 1/4 WATT (U.O.N.)
- (F) / A WALL MOUNTED WEATHERPROOF EXTERIOR SPEAKER MOUNTED +90" A.F.F. TO BOTTOM OF DEVICE (A = AUDIO SIGNAL CIRCUIT IDENTIFICATION)
- (S) CEILING MOUNTED SMOKE DETECTOR
- (S)C CEILING MOUNTED SMOKE/CO DETECTOR
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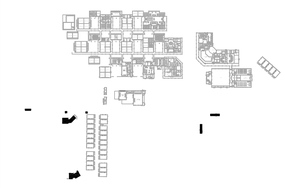
EOL-V VISUAL END OF LINE RESISTOR
EOL-A AUDIO END OF LINE RESISTOR

FIRE ALARM NOTE:
THIS FIRE ALARM DESIGN IS A COMPLETE PLAN SUBMITTAL IN ACCORDANCE WITH CBC 3051.102 MODERNIZATION PROJECT.

FULLY AUTOMATIC FIRE ALARM DESIGN:
THIS PROJECT IS DESIGNED TO COMPLY WITH ALL REQUIREMENTS FOR A FULLY PROTECTED AUTOMATIC FIRE ALARM SYSTEM.

KEY PLAN

KEYPLAN



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VISTA UNIFIED SCHOOL DISTRICT
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REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE

FLOOR PLAN - FIRE ALARM

E-5.15

REGISTERED PROFESSIONAL ENGINEER
MICHAEL J. RIVERA
No. E 14781
Exp. 6-30-2025
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2/28/2024

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NOTIFIER MODEL NFS2 3030

SYM	MODEL NO.	DESCRIPTION	C.S.F.M. LISTING	MFG.
FACP	NFS2-3030	FIRE ALARM CONTROL PANEL/VOICE EVAC	7165-0028:0224	NOTIFIER
FA	HFP-PS10	FIRE ALARM POWER SUPPLY PANEL	7315-1637:0505	NOTIFIER
DSM	DSM-12/24	SYNC MODULE	7300-0785:0132	WHEELOCK
ANN	LCD-80	REMOTE ANNUNCIATOR	7120-0028:0156	NOTIFIER
H	NBG-12LX	MANUAL PULL STATION	7150-0028:0199	NOTIFIER
H	FST-951	INTELLIGENT HEAT DETECTOR	7270-0028:0502	NOTIFIER
	B300-6	SENSOR BASE	7300-1653:0109	NOTIFIER
S,H	FCO-951	INTELLIGENT SMOKE/HEAT/ CO DETECTOR	7272-0028:0510	NOTIFIER
	B200S	SOUNDER BASE	7300-1653:0213	NOTIFIER
S	FSP-951	INTELLIGENT SMOKE DETECTOR	7272-0028:0503	NOTIFIER
	B300-6	SENSOR BASE	7300-1653:0109	NOTIFIER
H	FST-951	INTELLIGENT HEAT DETECTOR (ATTIC)	7270-0028:0502	NOTIFIER
	B300-6	SENSOR BASE	7300-1653:0109	NOTIFIER
H	SPRK	EXTERIOR SPEAKER W/WP BACKBOX	7320-1653:0201	SYS SENSOR
	SCWL	STROBE (15/30/75/110) cd (CEIL MNT)	7125-1653:0504	NOTIFIER
	SPSCWL	SPEAKER/STROBE - CEILING	7320-1653:0505	NOTIFIER
	SPSWL	SPEAKER/STROBE - WALL	7320-1653:0505	SYS SENSOR
M	FMM-1	ADDRESSABLE MONITOR MODULE	7300-0028:0219	NOTIFIER
R	FRM-1	ADDRESSABLE RELAY MODULE	7300-0028:0219	NOTIFIER
R1	RIC-1	120 VOLT RELAY MODULE	7300-1004:0101	SAE INC
	TYPE FPL	SIGNAL LINE CIRCUIT CONDUCTORS ('M')	7161-0859:0101	WEST PENN
	TYPE THHN	AUDIO VISUAL AND POWER CONDUCTORS (AV,P)	N/A	SOUTHWIRE

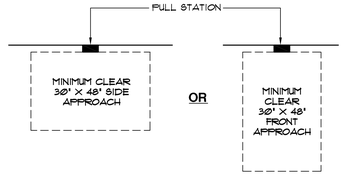
APPLICABLE STANDARDS AND CODES

SEE SHEET T-002

WIRING SCHEDULE

DES	CONDUCTOR TYPE	WIRE COLOR	CIRCUIT TYPE
M	(1) 1 PR #14 TWSTED SHIELDED	RED/BLACK/SHIELD	SIGNAL LINE CIRCUIT
A	(2) #12 THHN (UON ON CALCS)	BLUE/WHITE	NOTIFICATION APP. CIRCUIT (NAC)
V	(2) #12 THHN (UON ON CALCS)	GREEN/BLUE	NOTIFICATION APP. CIRCUIT (NAC)
P	(2) #12 THHN	RED/BLACK	POWER

CLEAR SPACE REQUIREMENTS AT FIRE ALARM PULL STATIONS·



ANNUNCIATOR ZONE SCHEDULE

	ROOM SMOKE OR HEAT DETECTORS	ABOVE CEILING HEAT DETECTORS	MANUAL PULL STATIONS	DUCT DETECTORS	SPRINKLER SYSTEM	TROUBLE INDICATION
BLDG. A	YES	YES	NO	NO	N/A	YES
BLDG. B	YES	YES	NO	YES	N/A	YES
BLDG. C	YES	YES	NO	NO	N/A	YES
BLDG. D	YES	YES	NO	NO	N/A	YES
BLDG. E	YES	YES	NO	NO	N/A	YES
BLDG. F	YES	YES	NO	NO	N/A	YES
BLDG. G	YES	YES	NO	NO	N/A	YES
BLDG. H	YES	YES	NO	NO	N/A	YES
BLDG. I	YES	YES	NO	NO	N/A	YES
BLDG. J	YES	YES	NO	NO	N/A	YES
BLDG. JJ	YES	YES	NO	NO	N/A	YES
BLDG. K THRU T	YES	YES	NO	NO	N/A	YES

NOTES:

1. ALL SMOKE DETECTORS, HEAT DETECTORS ABOVE CEILING DETECTORS, DUCT DETECTORS MANUAL PULL STATIONS, FLOW SWITCHES, TAMPER SWITCHES SHALL BE INDIVIDUALLY ADDRESSABLE.
2. PROVIDE (1) ANNUNCIATOR WHICH WILL PROVIDE LED LIGHT INDICATORS TO IDENTIFY THE ABOVE ZONE SCHEDULE (IN ADDITION TO ANNUNCIATOR NOTED IN NOTE # 3).
3. PROVIDE (1) 32 CHARACTER BACK-LIGHTED ALPHA-NUMERIC DISPLAY ANNUNCIATOR WITH KEYPAD FOR OPERATOR CONTROL, PROGRAMMING AND TESTING.

MAXIMUM NUMBER OF CONDUCTORS IN TRADE SIZES OF CONDUIT OR TUBING MINIMUM CONDUIT SIZE FOR THIS PROJECT IS 1"

CONDUIT TRADE SIZE (INCHES)		1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	5
TYPE LETTERS	CONDUCTOR SIZE AWG, kcmil											
THWN	14 12	13 10	24 18	39 29	69 51	94 70	154 114	164				
THHN	10 8	6 3	11 5	18 9	32 16	44 22	73 36	104 51	160 79	106	136	

TRADE SIZE	INTERNAL DIAMETER INCHES	AREA——SQUARE INCHES								
		100% INCHES	PERCENT REDUCTION PER NUMBER OF 18AWG TWISTED SHIELD PAIRS							
			OVER 2 COND. 40%	1	2	3	4	5	6	7	8
1/2	.622	.30	.12	38%	66%	99%	X	X	X	X	X
3/4	.824	.53	.21	19%	38%	57%	76%	95%	X	X	X
1	1.049	.86	.34	12%	24%	36%	48%	60%	72%	84%	96%
1 1/4	1.380	1.50	.60	7%	14%	21%	28%	35%	42%	49%	56%
1 1/2	1.610	2.04	.82	5%	10%	15%	20%	25%	30%	35%	40%
2	2.067	3.36	1.34	3%	6%	9%	12%	15%	18%	21%	24%

FIRE ALARM SEQUENCE OF OPERATION

DEVICE / ACTION	MANUAL PULL STATION	AREA/DUCT SMOKE/HEAT DETECTOR	AC POWER FAILURE	SPRINKLER ACTIVATION TAMPER SW.	SPRINKLER ACTIVATION FLOW SW.
SOUND ALARM THROUGHOUT BLDG.	YES	YES	NO	N/A	YES
ACTIVATE RELAY FOR MONITORING	YES	YES	YES	N/A	YES
ANNUNCIATE AT PANEL AND ANNUNCIATOR	YES	YES	YES	N/A	YES
SOUND TROUBLE BUZZER	ON WIRING FAULT	ON WIRING FAULT	YES	N/A	ON WIRING FAULT
SOUND SPRINKLER BELL	NO	NO	NO	N/A	YES
REPORT TO MONITORING STATION	YES	YES	YES	YES	YES
INITIATE SHUTDOUN OF HVAC UNITS	YES	YES	NO	N/A	YES

FIRE ALARM MONITORING NOTE·

1. AUTOMATIC FIRE ALARM SYSTEMS SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION AS REQUIRED BY NFPA 72 AS AMENDED BY CFC SECTION 907. THE SUPERVISING STATION SHALL BE LISTED AS EITHER UUFX OR UUJS BY UNDERWRITERS LABORATORY OR SHALL MEET THE REQUIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011. SUPERVISION OF SYSTEM AND LEASED TELEPHONE LINES SHALL BE ARRANGED BY OWNER.

FIRE ALARM GENERAL REQUIREMENTS·

1. THE COMPLETE INSTALLATION SHALL BE REVIEWED AND APPROVED BY THE ABOVE LOCAL MANUFACTURERS REPRESENTATIVE. SEE SPECIFICATIONS (28 30 01), FOR ADDITIONAL CONTRACTOR QUALIFICATIONS AND REQUIREMENTS.
2. WIRING TYPES AND QUANITITES SHOWN ARE FOR INFORMATION ONLY. THE CONTRACTOR SHALL PROVIDE ALL WIRING AS REQUIRED TO MAKE A FULLY OPERATIONAL SYSTEM. SHOP DRAWINGS AND OR AS-BUILT DOCUMENTS SHALL INDICATE ALL WIRING PROVIDED.
3. THE AUDIBILITY OF FIRE ALARM WARNING DEVICES SHALL BE AUDIBLE THROUGH THE OCCUPANCY WITH A MINIMAL SOUND LEVEL 15 db's OVER THE AMBIENT NOISE LEVEL. ADD ADDITIONAL DEVICES AS REQUIRED.
4. UPON COMPLETION OF THE INSTALLATION OF THE FIRE ALARM SYSTEM, A REACCEPTANCE TEST OF THE ENTIRE SYSTEM SHALL BE PERFORMED IN THE PRESENCE OF THE ENFORCING AGENCY AND IN ACCORDANCE WITH SPECIFICATIONS (28 30 01). THE CONTRACTOR SHALL FURNISH db METERS AND ALL OTHER EQUIPMENT TO PERFORM THESE TESTS.
5. ALL OPERATING HARDWARE AT INITIATING DEVICES SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST, AND THE FORCE REQUIRED TO OPERATE SHALL BE LESS THAN 5 POUNDS.
6. INSTALLATION OF THE SYSTEMS SHALL NOT BE STARTED UNTIL DETAILED DESIGN DOCUMENTS AND SPECIFICATION, INCLUDING STATE FIRE MARSHAL LISTING NUMBERS FOR EACH COMPONENT OF THE SYSTEM HAS BEEN APPROVED BY DSA.
7. UPON COMPLETION OF THE INSTALLATION OF THE SYSTEMS, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF A DSA PROJECT INSPECTOR.
8. A STAMPED SET OF APPROVED FIRE ALARM DESIGN DOCUMENTS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION.
9. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE CODE OR RECOGNIZED STANDARDS SHALL BE BROUGHT TO THE ATTENTION OF DSA AND THE ARCHITECT/ENGINEER OF THE PROJECT.
10. DSA, ARCHITECT/ENGINEER AND OWNER SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO THE FINAL INSPECTION AND /OR TESTING.
11. WALL MOUNTED VISUAL NOTIFICATION DEVICES SHALL HAVE THEIR BOTTOMS MOUNTED AT 80" MINIMUM AND 96" MAXIMUM FROM FINISHED FLOOR.
12. WALL MOUNTED AUDIBLE NOTIFICATION DEVICES SHALL HAVE THEIR TOPS MOUNTED AT 90" MINIMUM AND 100" MAXIMUM FROM FINISHED FLOOR AND NO CLOSER THEN 6" TO A HORIZONTAL STRUCTURE.
13. AUDIBLE DEVICES TO BE AT LEAST 15 DBA ABOVE THE AVERAGE AMBIENT SOUND LEVEL BUT NOT LESS THAN 75 DBA AT 10 FEET OR MORE THAN 110 DBA AT THE MINIM HEARING DISTANCE . SOUND LEVEL SHALL BE MAINTAIND FOR DURATION OF AT LEAST 60 SECTIONS 5 DBA MUST BE MAINTAINED.
14. AUDIBLE DEVICES SHALL BE SYNCHRONIZED TEMPORAL CODE 3 PATTERN.
15. THE CONTRACTOR SHALL ADJUST/INSTALL ALL DEVICES TO MAXIMIZE PERFORMANCE AND TO MINIMIZE FALSE ALARMS.
16. VISUAL DEVICES SHOULD NOT EXCEED 2 FLASHES PER SECOND AND SHOULD NOT BE SLOWER THAN 1 FLASH EVERY SECOND. THE DEVICE SHALL HAVE A PULSING LIGHT SOURCE NOT LESS THAN 15 CANDELLA VISUAL DEVICES WITHIN 55' FROM EACH OTHER SHALL BE SYNCHRONIZED.
17. UNDERGROUND AND EXTERIOR CONDUITS TO HAVE WATERTIGHT FITTINGS AND WIRE TO BE APPROVAL FOR WET LOCATIONS.
18. ALL FIRE ALARM WIRING SHALL BE FLP OR FPLP (FIRE POWER LIMITED OR FIRE POWER LIMITED PLENUM) AS REQUIRED FOR APPLICATION. WIRING IN CONDUIT ABOVE GROUND MAY BE THHN OR THWN.
19. PER CEC STANDARDS, ALL WIRING IS TO BE PULLED THROUGH EACH JUNCTION BOX AND CONNECTED DIRECTLY TO EACH FIRE DEVICE. DO NOT SPLICE THE WIRE. THERE MUST BE AT LEAST 6" OF LEAD WIRE FROM THE BOX TO THE DEVICE. ALL BOXES TO BE SIZED PER CEC.
20. SMOKE DETECTORS SHALL NOT BE ANY CLOSER THAN 1' FROM FIRE SPRINKLERS OR 3' FROM ANY SUPPLY DIFFUSER. IN AREA OF CONSTRUCTION OR POSSIBLE DAMAGE/CONTAMINATION ON NEWLY INSTALLED FIRE ALARM DEVICES SHALL BE COVERED UNTIL THAT AREA IS READY TO BE TURNED OVER TO THE OWNER
21. ALL FIRE ALARM CIRCUITS SHALL BE IN CONDUIT, SURFACE RACEWAY OR OPEN RUN ABOVE CEILINGS, UNDER FLOORS AND IN WALLS IN A NEAT AND PROTECTED MANOR AS INDICATED ON DESIGN DOCUMENTS. EXPOSED CIRCUITS ARE ONLY PERMITTED WHEN NOTED AS EXPOSED ON DESIGN DOCUMETS.
22. FIRE ALARM PANEL, REMOTES, AND COMPONENETS SHALL BE SECURED TO MOUNTING SURFACES PER MANUFACTURERS SPECIFICATIONS. NO SINGLE DEVICE SHALL EXCEED THE WEIGHT OF 20 LBS. WITHOUT SPECIAL MOUNTING DETAILS.
23. A DEDICATED BRANCH CIRCUIT SHALL BE PROVIDED FOR FIRE ALARM EQUIPMENT. THIS CIRCUIT SHALL BE ENERGIZED FROM THE COMMON USE AREA PANEL AND SHALL HAVE NO OTHER OUTLETS. THE BREAKER SHALL HAVE A RED LOCKING DEVICE TO BLOCK THE HANDLE IN THE "ON" POSITION. THE CIRCUIT BREAKER SHALL BE LABELED "FIRE ALARM CIRCUIT CONTROL". CIRCUIT ID TO BE LABELED AT FIRE PANEL/EXTENDERS.
24. THE INSTALLING CONTRACTOR SHALL PROVIDE A RECORD OF COMPLETION PER NFPA 72,
25. CONTROL PANELS, REMOTE ANNUNCIATORS SHALL BE INSTALLED WITH THEIR BOTTOMS MOUNTED AT 48".
26. THE INSTALLING CONTRACTOR SHALL PROVIDE SYSTEM PROGRAMMING FOR SUPERVISORY MONITORING PER CBC CHAPTER 9.
27. SUPERVISORY MONITORING SHALL BE TESTED AND VERIFIED AS SENDING CORRECT SIGNALS IN CONJUNCTION WITH FINAL ACCEPTANCE TEST.
28. OWNER SHALL BE RESPONSIBLE FOR ESTABLISHING A FIRE SYSTEM MONITORING CONTRACT OR PROVISIONS.
29. PROVIDE FIRE ALARM DOCUMENTATION CABINET AT MAIN FIRE ALARM PANEL.
30. THE INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE PLACEMENT OF ALL FIRE ALARM DETECTION DEVICES SHALL PROVIDE THE MINIMUM CLEARANCE DISTANCE FROM ALL EXISTING HVAC SUPPLY REGISTERS / RETURN AIR GRILLES AS REQUIRED BY THE FIRE ALARM MANUFACTURER TO ELIMINATE ACCUMULATION OF DUST AND FALSE ALARM INITIATION OF THE DEVICES.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-122924 INC:
REVIEWED FOR
SS ☐ FLS ☑ ACS ☐
DATE: 02/29/2024

ALPHASTUDIO DESIGN GROUP

6152 INNOVATION WAY
CARLSBAD, 92009
760-431-2444
www.alphastudio-design.com

ARCHITECT OF RECORD

LICENSED ARCHITECT
JOSHUA T. ECKLE
No. C31020
EXP. 12/25
STATE OF CALIFORNIA

ENGINEER OF RECORD

KEYPLAN



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Communications | Data Networking
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Poway, CA 92064
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REGISTERED PROFESSIONAL ENGINEER
No. E 14781
Exp. 6-30-2025
ELECTRICAL
STATE OF CALIFORNIA

*23011.01 2/28/2024

RBV FIRE ALARM UPGRADE

RANCHO BUENA VISTA HIGH SCHOOL
1601 LONGHORN DRIVE
VISTA, CA 92081
VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #PIn
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE

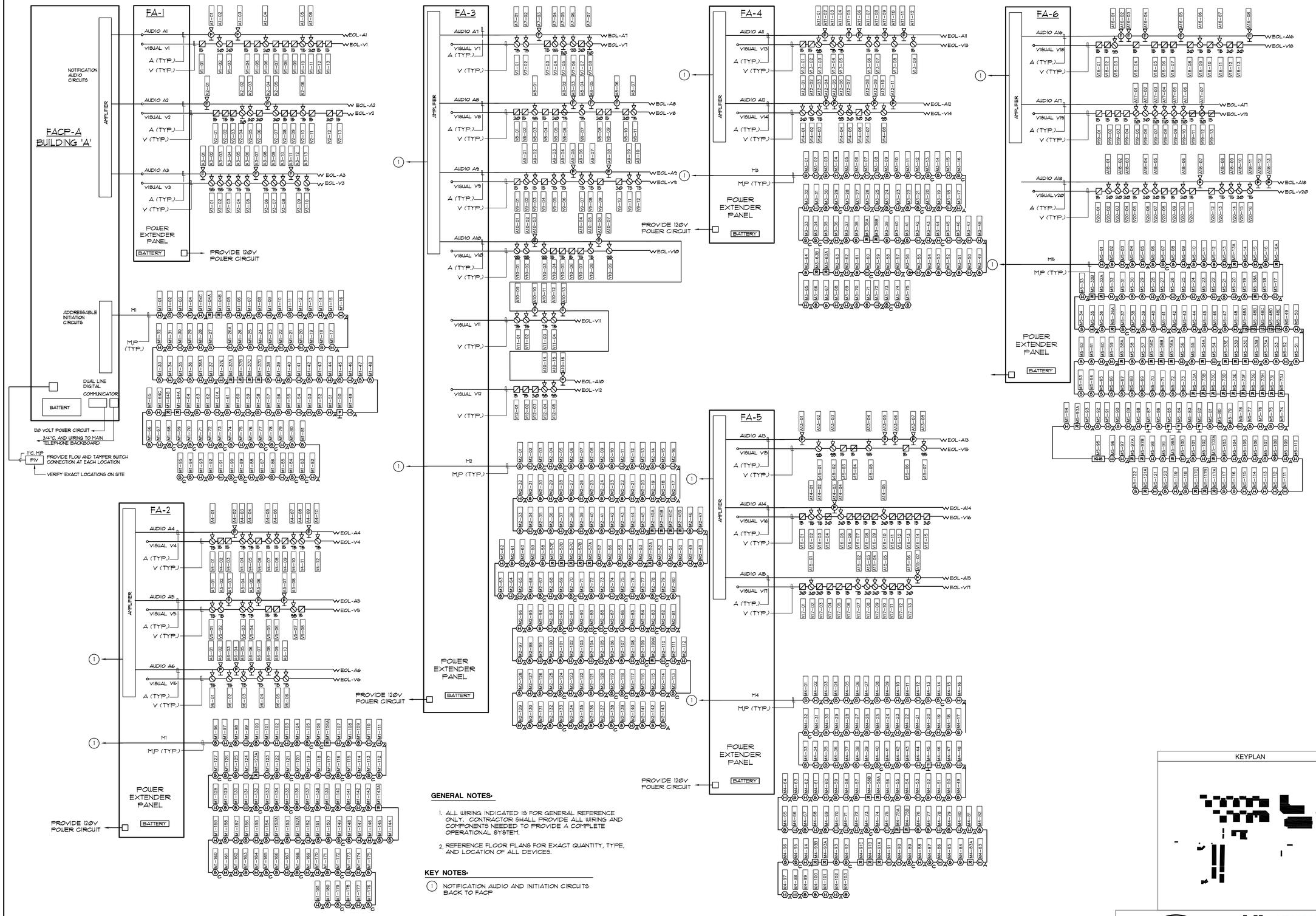
FIRE ALARM SCHEDULE AND NOTES

E-5.16

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GENERAL NOTES:

1. ALL WIRING INDICATED IS FOR GENERAL REFERENCE ONLY. CONTRACTOR SHALL PROVIDE ALL WIRING AND COMPONENTS NEEDED TO PROVIDE A COMPLETE OPERATIONAL SYSTEM.
2. REFERENCE FLOOR PLANS FOR EXACT QUANTITY, TYPE, AND LOCATION OF ALL DEVICES.

KEY NOTES:

1. NOTIFICATION AUDIO AND INITIATION CIRCUITS BACK TO FACP

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RBV FIRE ALARM UPGRADE

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1601 LONGHORN DRIVE
VISTA, CA 92081

VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

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MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

REGISTERED PROFESSIONAL ENGINEER
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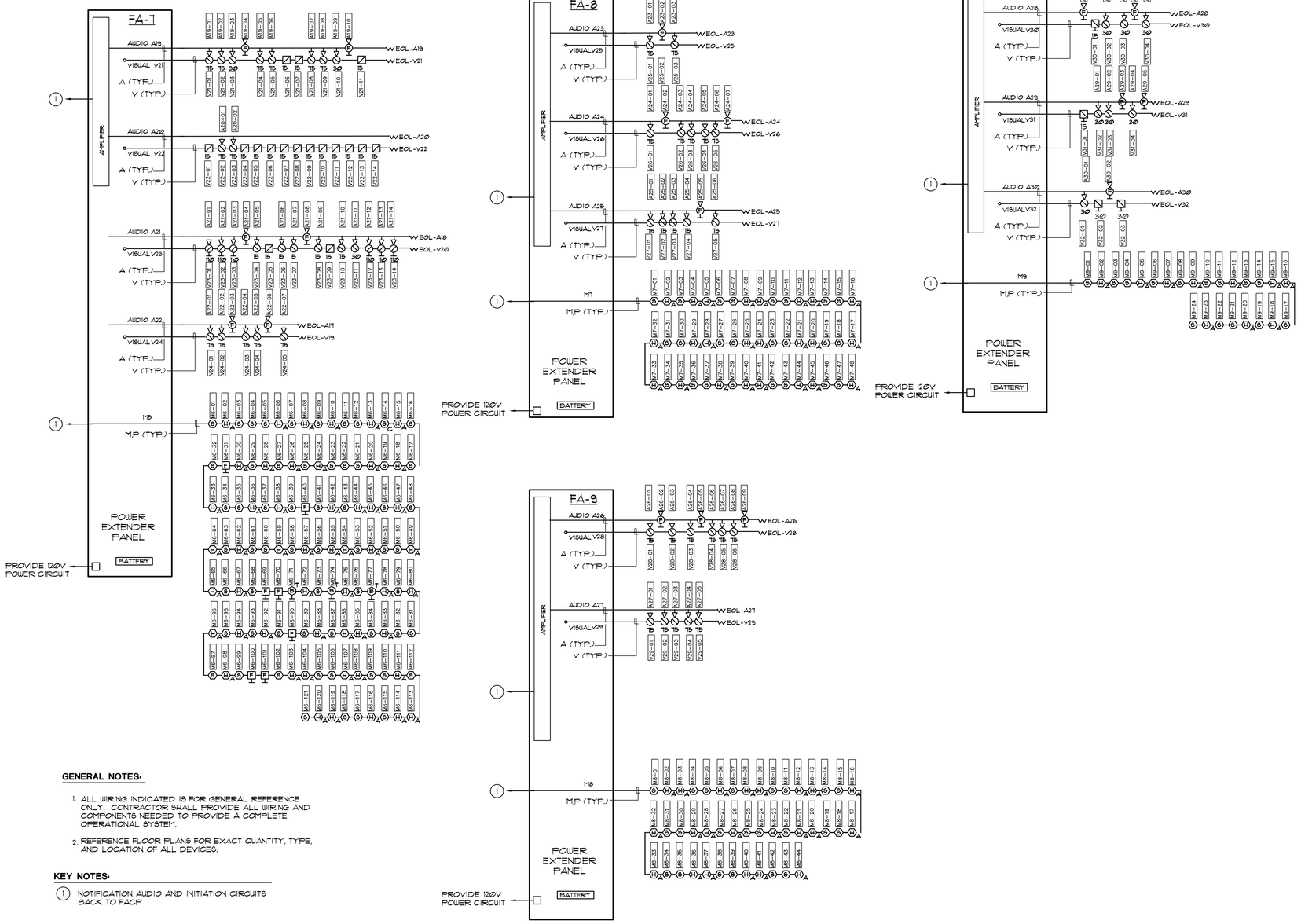
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SHEET TITLE

FIRE ALARM RISER DIAGRAM

E-5.17

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2. REFERENCE FLOOR PLANS FOR EXACT QUANTITY, TYPE, AND LOCATION OF ALL DEVICES.

KEY NOTES:

(1) NOTIFICATION AUDIO AND INITIATION CIRCUITS BACK TO FACP

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RBV FIRE ALARM UPGRADE

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1601 LONGHORN DRIVE
VISTA, CA 92081

VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

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REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #PIn
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE

FIRE ALARM RISER DIAGRAM

E-5.18

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No. E 14781
Exp. 6-30-2025
ELECTRICAL
STATE OF CALIFORNIA

2/12/2024

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Fire Alarm Control Panel
FACP FCI E3 Battery Calculations
Building 'A' (FACP)

Type of Device Or Equipment	Standby Amperage Qty	Current	Total	Alarm Amperage Quantity	Current	Total
Control Panel Devices :						
Master Control Assembly	1	0.0810	0.0810	1	0.1500	0.1500
Communication Module	1	0.0460	0.0460	1	0.0460	0.0460
Voice Gateway	1	0.1500	0.1500	1	0.1500	0.1500
Additional SLC Modules	9	0.2000	1.8000	9	0.2500	2.2500
Signal Line Circuit Devices:						
Smoke Detector	395	0.0003	0.1304	395	0.0065	2.5675
Smoke Detector Base	395	0.0005	0.1975	395	0.0055	2.1725
Heat Detector	393	0.0002	0.0786	393	0.0055	2.5545
Heat Detector Base	393	0.0005	0.1965	393	0.0055	2.1615
Relay Module	69	0.0003	0.0207	69	0.0003	0.0207
Monitor Module	30	0.0004	0.0120	30	0.0070	0.2100
Remote Annunciator	0	0.0300	0.0000	0	0.0650	0.0000
Beam Detector (REC. & TRANS)	3	0.0040	0.0120	3	0.0150	0.0450
Pull Station	13	0.0003	0.0039	13	0.0000	0.0000
Pull Station	0	0.0003	0.0000	0	0.0000	0.0000
Smoke Detector/CO	13	0.0002	0.0026	13	0.0020	0.0260
Exteior Speaker @ 2 watt tap	0	0.009	0.0000	0	0.02857	0.000
NAC Panel	0	0.075	0.000	0	0.205	0.000
15cd Wall Speaker/Strobe				0	0.030	0.000
30cd Wall Speaker/Strobe				0	0.040	0.000
75cd Wall Speaker/Strobe				0	0.115	0.000
110cd Wall Speaker/Strobe				0	0.200	0.000
15cd (Ceiling) Speaker/Strobe				0	0.041	0.000
30cd (Ceiling) Speaker/Strobe				0	0.063	0.000
75cd (Ceiling) Speaker/Strobe				0	0.111	0.000
95cd (Ceiling) Speaker/Strobe				0	0.134	0.000
15cd Wall Strobe				0	0.057	0.000
30cd Wall Strobe				0	0.085	0.000
75cd Wall Strobe				0	0.135	0.000
110cd Wall Strobe				0	0.182	0.000
135cd Wall Strobe				0	0.205	0.000
185cd Wall Strobe				0	0.253	0.000
15cd (Ceiling) Strobe				0	0.058	0.000
30cd (Ceiling) Strobe				0	0.155	0.000
75cd (Ceiling) Strobe				0	0.258	0.000
95cd (Ceiling) Strobe				0	0.258	0.000
	Total Standby Amperage		**2.731**		**Total Alarm Amperage**	**12.354**

Standby Time Required

24 Hours x Total Standby Amperage = 24 x 2.731 = 65.548 Amp Hours

Alarm Time Required

.25 (15 Min.) x Total Alarm Amperage = 0.25 x 12.354 = 3.088 Amp Hours

Total Required = **68.636** Amp Hours
x125% = 85.795031250
Provide Battery & Minimum Battery Amp Hour Required = **120** Amp Hours

Building (FA-1)
Remote Extender Panel
Supplementary Notification Appliance Circuit Battery Calculations

Type of Device Or Equipment	Standby Amperage Qty	Current	Total	Alarm Amperage Quantity	Current	Total
Exteior Speaker @ 2 watt tap	1	0.000	0.000	7	0.02857	0.200
NAC Panel	1	0.075	0.075	1	0.206	0.206
15cd Wall Speaker/Strobe				0	0.030	0.000
30cd Wall Speaker/Strobe				0	0.040	0.000
75cd Wall Speaker/Strobe				0	0.115	0.000
110cd Wall Speaker/Strobe				1	0.200	0.200
				0	0.000	0.000
				0	0.000	0.000
15cd (Ceiling) Speaker/Strobe				0	0.041	0.000
30cd (Ceiling) Speaker/Strobe				5	0.063	0.315
75cd (Ceiling) Speaker/Strobe				15	0.111	1.110
95cd (Ceiling) Speaker/Strobe				2	0.134	0.268
				0	0.000	0.000
				0	0.000	0.000
				0	0.000	0.000
15cd Wall Strobe				0	0.057	0.000
30cd Wall Strobe				0	0.085	0.000
75cd Wall Strobe				0	0.135	0.000
110cd Wall Strobe				0	0.182	0.000
135cd Wall Strobe				0	0.205	0.000
185cd Wall Strobe				0	0.253	0.000
15cd (Ceiling) Strobe				14	0.040	0.560
30cd (Ceiling) Strobe				3	0.058	0.174
75cd (Ceiling) Strobe				1	0.155	0.155
95cd (Ceiling) Strobe				0	0.258	0.000
				0	0.000	0.000
				0	0.00000	0.000
				0	0.00000	0.000
	Total Standby Amperage		**0.075**		**Total Alarm Amperage**	**3.188**

Standby Time Required

24 Hours x Total Standby Amperage = 24 x 0.075 = 1.800 Amp Hours

Alarm Time Required

.25(1 5 Min.) x Total Alarm Amperage = .25 x 3.188 = 0.797 Amp Hours

Total Required = **2.597** Amp Hours
x125% = 3.246246875
Provide Battery & Minimum Battery Amp Hour Required = **12** Amp Hours

Building (FA-2)
Remote Extender Panel
Supplementary Notification Appliance Circuit Battery Calculations

Type of Device Or Equipment	Standby Amperage Qty	Current	Total	Alarm Amperage Quantity	Current	Total
Exteior Speaker @ 2 watt tap	9	0.000	0.000	9	0.02857	0.257
NAC Panel	1	0.075	0.075	1	0.206	0.206
15cd Wall Speaker/Strobe	0			0	0.030	0.000
30cd Wall Speaker/Strobe	0			0	0.040	0.000
75cd Wall Speaker/Strobe	0			0	0.115	0.000
110cd Wall Speaker/Strobe	0			0	0.200	0.000
	0			0	0.000	0.000
	0			0	0.000	0.000
15cd (Ceiling) Speaker/Strobe	2			2	0.041	0.082
30cd (Ceiling) Speaker/Strobe	0			0	0.063	0.000
75cd (Ceiling) Speaker/Strobe	9			9	0.111	1.776
95cd (Ceiling) Speaker/Strobe	7			7	0.134	1.205
	0			0	0.000	0.000
	0			0	0.000	0.000
	0			0	0.000	0.000
15cd Wall Strobe	0			0	0.057	0.000
30cd Wall Strobe	0			0	0.085	0.000
75cd Wall Strobe	0			0	0.135	0.000
110cd Wall Strobe	0			0	0.182	0.000
135cd Wall Strobe	0			0	0.205	0.000
185cd Wall Strobe	0			0	0.253	0.000
15cd (Ceiling) Strobe	9			9	0.040	0.360
30cd (Ceiling) Strobe	7			7	0.058	0.406
75cd (Ceiling) Strobe	4			4	0.155	0.620
95cd (Ceiling) Strobe	0			0	0.258	0.000
0	0			0	0.000	0.000
0	0			0	0.00000	0.000
0	0			0	0.00000	0.000
	Total Standby Amperage		**0.075**		**Total Alarm Amperage**	**5.370**

Standby Time Required

24 Hours x Total Standby Amperage = 24 x 0.075 = 1.800 Amp Hours

Alarm Time Required

.25 (15 Min.) x Total Alarm Amperage = .25 x 5.370 = 1.343 Amp Hours

Total Required = **3.143** Amp Hours
x125% = 3.928209375
Minimum Battery Amp Hour Required = **12** Amp Hours

Building (FA-3)
Remote Extender Panel
Supplementary Notification Appliance Circuit Battery Calculations

Type of Device Or Equipment	Standby Amperage Qty	Current	Total	Alarm Amperage Quantity	Current	Total
Exteior Speaker @ 2 watt tap	11			11	0.02857	0.314
NAC Panel	1	0.075	0.075	1	0.206	0.206
15cd Wall Speaker/Strobe	0			0	0.030	0.000
30cd Wall Speaker/Strobe	0			0	0.040	0.000
75cd Wall Speaker/Strobe	0			0	0.115	0.000
110cd Wall Speaker/Strobe	2			2	0.200	0.400
	0			0	0.000	0.000
	0			0	0.000	0.000
15cd (Ceiling) Speaker/Strobe	2			2	0.041	0.082
30cd (Ceiling) Speaker/Strobe	0			0	0.063	0.000
75cd (Ceiling) Speaker/Strobe	16			16	0.111	1.776
95cd (Ceiling) Speaker/Strobe	9			9	0.134	1.205
	0			0	0.000	0.000
	0			0	0.000	0.000
	0			0	0.000	0.000
15cd Wall Strobe	0			0	0.057	0.000
30cd Wall Strobe	0			0	0.085	0.000
75cd Wall Strobe	0			0	0.135	0.000
110cd Wall Strobe	0			0	0.182	0.000
135cd Wall Strobe	0			0	0.205	0.000
185cd Wall Strobe	0			0	0.253	0.000
15cd (Ceiling) Strobe	9			9	0.040	0.360
30cd (Ceiling) Strobe	7			7	0.058	0.406
75cd (Ceiling) Strobe	4			4	0.155	0.620
95cd (Ceiling) Strobe	0			0	0.258	0.000
0	0			0	0.000	0.000
0	0			0	0.00000	0.000
0	0			0	0.00000	0.000
	Total Standby Amperage		**0.075**		**Total Alarm Amperage**	**5.370**

Standby Time Required

24 Hours x Total Standby Amperage = 24 x 0.075 = 1.800 Amp Hours

Alarm Time Required

.25 (15 Min.) x Total Alarm Amperage = .25x 5.370 = 1.343 Amp Hours

Total Required = **3.143** Amp Hours
x125% = 3.928209375
Minimum Battery Amp Hour Required = **12** Amp Hours

Building (FA-4)
Remote Extender Panel
Supplementary Notification Appliance Circuit Battery Calculations

Type of Device Or Equipment	Standby Amperage Qty	Current	Total	Alarm Amperage Quantity	Current	Total
Exteior Speaker @ 2 watt tap	9			9	0.02857	0.257
NAC Panel	1	0.075	0.075	1	0.206	0.206
15cd Wall Speaker/Strobe	0			0	0.030	0.000
30cd Wall Speaker/Strobe	0			0	0.040	0.000
75cd Wall Speaker/Strobe	0			0	0.115	0.000
110cd Wall Speaker/Strobe	0			0	0.200	0.000
	0			0	0.000	0.000
	0			0	0.000	0.000
15cd (Ceiling) Speaker/Strobe	4			4	0.041	0.164
30cd (Ceiling) Speaker/Strobe	3			3	0.063	0.189
75cd (Ceiling) Speaker/Strobe	4			4	0.111	0.444
95cd (Ceiling) Speaker/Strobe	3			3	0.134	0.402
	0			0	0.000	0.000
	0			0	0.000	0.000
	0			0	0.000	0.000
15cd Wall Strobe	0			0	0.057	0.000
30cd Wall Strobe	0			0	0.085	0.000
75cd Wall Strobe	0			0	0.135	0.000
110cd Wall Strobe	0			0	0.182	0.000
135cd Wall Strobe	0			0	0.205	0.000
185cd Wall Strobe	0			0	0.253	0.000
15cd (Ceiling) Strobe	2			2	0.040	0.080
30cd (Ceiling) Strobe	1			1	0.058	0.058
75cd (Ceiling) Strobe	0			0	0.155	0.000
95cd (Ceiling) Strobe	0			0	0.258	0.000
0	0			0	0.000	0.000
0	0			0	0.00000	0.000
0	0			0	0.00000	0.000
	Total Standby Amperage		**0.075**		**Total Alarm Amperage**	**1.800**

Standby Time Required

24 Hours x Total Standby Amperage = 24 x 0.075 = 1.800 Amp Hours

Alarm Time Required

.25 (15 Min.) x Total Alarm Amperage = .25x 1.800 = 0.450 Amp Hours

Total Required = **2.250** Amp Hours
x125% = 2.700039
Minimum Battery Amp Hour Required = **12** Amp Hours

(FA-5)
Remote Extender Panel
Supplementary Notification Appliance Circuit Battery Calculations

Type of Device Or Equipment	Standby Amperage Qty	Current	Total	Alarm Amperage Quantity	Current	Total
Exteior Speaker @ 2 watt tap	6			6	0.02857	0.171
NAC Panel	1	0.000	0.000	1	0.206	0.206
15cd Wall Speaker/Strobe	0			0	0.030	0.000
30cd Wall Speaker/Strobe	0			0	0.040	0.000
75cd Wall Speaker/Strobe	0			0	0.115	0.000
110cd Wall Speaker/Strobe	0			0	0.200	0.000
	0			0	0.000	0.000
	0			0	0.000	0.000
15cd (Ceiling) Speaker/Strobe	0			0	0.041	0.000
30cd (Ceiling) Speaker/Strobe	6			6	0.063	0.378
75cd (Ceiling) Speaker/Strobe	4			4	0.111	0.444
95cd (Ceiling) Speaker/Strobe	4			4	0.134	0.536
	0			0	0.000	0.000
	0			0	0.000	0.000
	0			0	0.000	0.000
15cd Wall Strobe	0			0	0.057	0.000
30cd Wall Strobe	0			0	0.085	0.000
75cd Wall Strobe	0			0	0.135	0.000
110cd Wall Strobe	0			0	0.182	0.000
135cd Wall Strobe	0			0	0.205	0.000
185cd Wall Strobe	0			0	0.253	0.000
15cd (Ceiling) Strobe	17			17	0.040	0.680
30cd (Ceiling) Strobe	4			4	0.058	0.232
75cd (Ceiling) Strobe	0			0	0.155	0.000
95cd (Ceiling) Strobe	0			0	0.258	0.000
0	0			0	0.000	0.000
0	0			0	0.00000	0.000
0	0			0	0.00000	0.000
	Total Standby Amperage		**0.000**		**Total Alarm Amperage**	**2.647**

Standby Time Required

24 Hours x Total Standby Amperage = 24 x 0.000 = 0.000 Amp Hours

Alarm Time Required

.25 (15 Min.) x Total Alarm Amperage = .25 x 2.647 = 0.662 Amp Hours

Total Required = **0.662** Amp Hours
x125% = 0.82731875
Minimum Battery Amp Hour Required = **12** Amp Hours

Building (FA-6)
Remote Extender Panel
Supplementary Notification Appliance Circuit Battery Calculations

Type of Device Or Equipment	Standby Amperage Qty	Current	Total	Alarm Amperage Quantity	Current	Total
Exteior Speaker @ 2 watt tap	8			8	0.02857	0.229
NAC Panel	1	0.000	0.000	1	0.206	0.206
15cd Wall Speaker/Strobe	0			0	0.030	0.000
30cd Wall Speaker/Strobe	0			0	0.040	0.000
75cd Wall Speaker/Strobe	0			0	0.115	0.000
110cd Wall Speaker/Strobe	5			5	0.200	1.000
	0			0	0.000	0.000
	0			0	0.000	0.000
15cd (Ceiling) Speaker/Strobe	0			0	0.041	0.000
30cd (Ceiling) Speaker/Strobe	8			8	0.063	0.504
75cd (Ceiling) Speaker/Strobe	5			5	0.111	0.555
95cd (Ceiling) Speaker/Strobe	1			1	0.134	0.134
	0			0	0.000	0.000
	0			0	0.000	0.000
	0			0	0.000	0.000
15cd Wall Strobe	0			0	0.057	0.000
30cd Wall Strobe	0			0	0.085	0.000
75cd Wall Strobe	0			0	0.135	0.000
110cd Wall Strobe	0			0	0.182	0.000
135cd Wall Strobe	0			0	0.205	0.000
185cd Wall Strobe	0			0	0.253	0.000
15cd (Ceiling) Strobe	19			19	0.040	0.760
30cd (Ceiling) Strobe	3			3	0.058	0.174
75cd (Ceiling) Strobe	0			0	0.155	0.000
95cd (Ceiling) Strobe	0			0	0.258	0.000
0	0			0	0.000	0.000
0	0			0	0.00000	0.000
0	0			0	0.00000	0.000
	Total Standby Amperage		**0.000**		**Total Alarm Amperage**	**3.562**

Standby Time Required

24 Hours x Total Standby Amperage = 24 x 0.000 = 0.000 Amp Hours

Alarm Time Required

.25 (15 Min.) x Total Alarm Amperage = .25 x 3.562 = 0.890 Amp Hours

Total Required = **0.890** Amp Hours
x125% = 1.1129875
Minimum Battery Amp Hour Required = **12** Amp Hours

Building (FA-7)
Remote Extender Panel
Supplementary Notification Appliance Circuit Battery Calculations

Type of Device Or Equipment	Standby Amperage Qty	Current	Total	Alarm Amperage Quantity	Current	Total
Exteior Speaker @ 2 watt tap	6			6	0.02857	0.171
NAC Panel	1	0.000	0.000	0	0.206	0.000
15cd Wall Speaker/Strobe	0			0	0.030	0.000
30cd Wall Speaker/Strobe	0			0	0.040	0.000
75cd Wall Speaker/Strobe	0			0	0.115	0.000
110cd Wall Speaker/Strobe	6			6	0.200	1.200
	0			0	0.000	0.000
	0			0	0.000	0.000
15cd (Ceiling) Speaker/Strobe	4			4	0.041	0.164
30cd (Ceiling) Speaker/Strobe	3			3	0.063	0.189
75cd (Ceiling) Speaker/Strobe	13			13	0.111	1.443
95cd (Ceiling) Speaker/Strobe	0			0	0.134	0.000
	0			0	0.000	0.000
	0			0	0.000	0.000
	0			0	0.000	0.000
15cd Wall Strobe	0			0	0.057	0.000
30cd Wall Strobe	0			0	0.085	0.000
75cd Wall Strobe	0			0	0.135	0.000
110cd Wall Strobe	0			0	0.182	0.000
135cd Wall Strobe	0			0	0.205	0.000
185cd Wall Strobe	0			0	0.253	0.000
15cd (Ceiling) Strobe	17			17	0.040	0.680
30cd (Ceiling) Strobe	4			4	0.058	0.232
75cd (Ceiling) Strobe	0			0	0.155	0.000
95cd (Ceiling) Strobe	0			0	0.258	0.000
0	0			0	0.000	0.000
0	0			0	0.00000	0.000
0	0			0	0.00000	0.000
	Total Standby Amperage		**0.000**		**Total Alarm Amperage**	**4.053**

Standby Time Required

24 Hours x Total Standby Amperage = 24 x 0.000 = 0.000 Amp Hours

Alarm Time Required

.25 (15 Min.) x Total Alarm Amperage = .25 x 4.053 = 1.013 Amp Hours

Total Required = **1.013** Amp Hours
x125% = 1.266669375
Minimum Battery Amp Hour Required = **12** Amp Hours

Building (FA-8)
Remote Extender Panel
Supplementary Notification Appliance Circuit Battery Calculations

Type of Device Or Equipment	Standby Amperage Qty	Current	Total	Alarm Amperage Quantity	Current	Total
Exteior Speaker @ 2 watt tap	1	0.000	0.000	4	0.02857	0.114
NAC Panel	1	0.075	0.075	1	0.206	0.206
15cd Wall Speaker/Strobe				0	0.030	0.000
30cd Wall Speaker/Strobe				0	0.040	0.000
75cd Wall Speaker/Strobe				0	0.115	0.000
110cd Wall Speaker/Strobe				12	0.111	1.332
				0	0.134	0.000
				0	0.000	0.000
				0	0.000	0.000
				0	0.000	0.000
15cd (Ceiling) Speaker/Strobe				0	0.041	0.000
30cd (Ceiling) Speaker/Strobe				0	0.063	0.000
75cd (Ceiling) Speaker/Strobe				12	0.111	1.332
95cd (Ceiling) Speaker/Strobe				0	0.134	0.000
				0	0.000	0.000
				0	0.000	0.000
				0	0.000	0.000
15cd Wall Strobe				0	0.057	0.000
30cd Wall Strobe				0	0.085	0.000
75cd Wall Strobe				0	0.135	0.000
110cd Wall Strobe				0	0.182	0.000
135cd Wall Strobe				0	0.205	0.000
185cd Wall Strobe				0	0.253	0.000
15cd (Ceiling) Strobe				0	0.040	0.000
30cd (Ceiling) Strobe				1	0.058	0.058
75cd (Ceiling) Strobe				0	0.155	0.000
95cd (Ceiling) Strobe				0	0.258	0.000
				0	0.000	0.000
				0	0.00000	0.000
				0	0.00000	0.000
	Total Standby Amperage		**0.075**		**Total Alarm Amperage**	**1.710**

Standby Time Required

24 Hours x Total Standby Amperage = 24 x 0.075 = 1.800 Amp Hours

Alarm Time Required

.25(1 5 Min.) x Total Alarm Amperage = .25 x 1.710 = 0.428 Amp Hours

Total Required = **2.228** Amp Hours
x125% = 2.7844625
Provide Battery & Minimum Battery Amp Hour Required = **12** Amp Hours

Building (FA-9)
Remote Extender Panel
Supplementary Notification Appliance Circuit Battery Calculations

Type of Device Or Equipment	Standby Amperage Qty	Current	Total	Alarm Amperage Quantity	Current	Total
Exteior Speaker @ 2 watt tap	3	0.000	0.000	3	0.02857	0.086
NAC Panel	1	0.075	0.075	1	0.206	0.206
15cd Wall Speaker/Strobe	0			0	0.030	0.000
30cd Wall Speaker/Strobe	0			0	0.040	0.000
75cd Wall Speaker/Strobe	0			0	0.115	0.000
110cd Wall Speaker/Strobe	0			0	0.200	0.000
	0			0	0.000	0.000
	0			0	0.000	0.000
15cd (Ceiling) Speaker/Strobe	0			0	0.041	0.000
30cd (Ceiling) Speaker/Strobe	0			0	0.063	0.000
75cd (Ceiling) Speaker/Strobe	11			11	0.111	1.221
95cd (Ceiling) Speaker/Strobe	0			0	0.134	0.000
	0			0	0.000	0.000
	0			0	0.000	0.000
	0			0	0.000	0.000
15cd Wall Strobe	0			0	0.057	0.000
30cd Wall Strobe	0			0	0.085	0.000
75cd Wall Strobe	0			0	0.135	0.000
110cd Wall Strobe	0			0	0.182	0.000
135cd Wall Strobe	0			0	0.205	0.000
185cd Wall Strobe	0			0	0.253	0.000
15cd (Ceiling) Strobe	0			0	0.040	0.000
30cd (Ceiling) Strobe	0			0	0.058	0.000
75cd (Ceiling) Strobe	0			0	0.155	0.000
95cd (Ceiling) Strobe	0			0	0.258	0.000
	0			0	0.000	0.000
	0			0	0.00000	0.000
	0			0	0.00000	0.000
	Total Standby Amperage		**0.075**		**Total Alarm Amperage**	**1.513**

Standby Time Required

24 Hours x Total Standby Amperage = 24 x 0.075 = 1.800 Amp Hours

Alarm Time Required

.25 (15 Min.) x Total Alarm Amperage = .25x 1.513 = 0.378 Amp Hours

Total Required = **2.178** Amp Hours
x125% = 2.722721875
Provide Battery & Minimum Battery Amp Hour Required = **12** Amp Hours

Building (FA-10)
Remote Extender Panel
Supplementary Notification Appliance Circuit Battery Calculations

Type of Device Or Equipment	Standby Amperage Qty	Current	Total	Alarm Amperage Quantity	Current	Total
Exteior Speaker @ 2 watt tap	5			5	0.02857	0.143
NAC Panel	1	0.075	0.075	1	0.206	0.206
15cd Wall Speaker/Strobe	0			0	0.030	0.000
30cd Wall Speaker/Strobe	0			0	0.040	0.000
75cd Wall Speaker/Strobe	0			0	0.115	0.000
110cd Wall Speaker/Strobe	0			0	0.200	0.000
	0			0	0.000	0.000
	0			0	0.000	0.000
15cd (Ceiling) Speaker/Strobe	0			0	0.041	0.000
30cd (Ceiling) Speaker/Strobe	7			7	0.063	0.441
75cd (Ceiling) Speaker/Strobe	0			0	0.111	0.000
95cd (Ceiling) Speaker/Strobe	0			0	0.134	0.000
	0			0	0.000	0.000
	0			0	0.000	0.000
	0			0	0.000	0.000
15cd Wall Strobe	2			2	0.057	0.114
30cd Wall Strobe	2			2	0.085	0.170
75cd Wall Strobe	0			0	0.135	0.000
110cd Wall Strobe	0			0	0.182	0.000
135cd Wall Strobe	0			0	0.205	0.000
185cd Wall Strobe	0			0	0.253	0.000
15cd (Ceiling) Strobe	0			0	0.040	0.000
30cd (Ceiling) Strobe	0			0	0.058	0.000
75cd (Ceiling) Strobe	0			0	0.155	0.000
95cd (Ceiling) Strobe	0			0	0.258	0.000
	0			0	0.000	0.000
	0			0	0.00000	0.000
	0			0	0.00000	0.000
	Total Standby Amperage		**0.075**		**Total Alarm Amperage**	**1.074**

Standby Time Required

24 Hours x Total Standby Amperage = 24 x 0.075 = 1.800 Amp Hours

Alarm Time Required

.25 (15 Min.) x Total Alarm Amperage = .25x 1.074 = 0.268 Amp Hours

Total Required = **2.068** Amp Hours
x125% = 2.585578125
Minimum Battery Amp Hour Required = **12** Amp Hours

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-122924 INC:
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SS ☐ FLS ☑ ACS ☐
DATE: 02/29/2024

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www.alphastudio-design.com

ARCHITECT OF RECORD

LICENSED ARCHITECT
JOSHUA T. ECKLE
No. C31020
EXP. 12/25
STATE OF CALIFORNIA

ENGINEER OF RECORD

RBV FIRE ALARM UPGRADE

RANCHO BUENA VISTA HIGH SCHOOL
1601 LONGHORN DRIVE
VISTA, CA 92081

VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023
SHEET TITLE

FIRE ALARM CALCULATIONS

E-5.19

REGISTERED PROFESSIONAL ENGINEER
MICHAEL ANTHONY JOHNSON
No. E 14781
Exp. 6-30-2025
ELECTRICAL
STATE OF CALIFORNIA

JOHNSON CONSULTING ENGINEERS, INC.
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2/28/2024

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Fire Alarm Voltage Drop Calculations

Calculation Formula:

Total Current x Feet x 21.6 / Circular Mills (Voltage Drop)

Circular Mils Using #10 wire =10380
Circular Mils Using #12 wire = 6530
Circular Mils Using #14 wire = 4110
Circular Mils Using #18 wire = 1620

Voltage Drop / 24 Volts x 100 Percent = Percentage Voltage Drop

Building (FA-1)

Device Type	Circuit: V1/A1			Circuit: V2/A2			Circuit: V3/A3			Circuit: 0		
	Devices x Current		Total Current	Devices x Current		Total Current	Devices x Current		Total Current	Devices x Current		Total Current
Exteior Speaker @ 2 watt tap	2	0.02857	0.057	2	0.02857	0.057	3	0.02857	0.086	0	0.02857	0.000
NAC Panel	1	0.206	0.206	0	0.206	0.000	0	0.206	0.000	0	0.206	0.000
15cd Wall Speaker/Strobe	0	0.030	0.000	0	0.030	0.000	0	0.030	0.000	0	0.030	0.000
30cd Wall Speaker/Strobe	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000
75cd Wall Speaker/Strobe	0	0.115	0.000	0	0.115	0.000	0	0.115	0.000	0	0.115	0.000
110cd Wall Speaker/Strobe	0	0.200	0.000	1	0.200	0.200	0	0.200	0.000	0	0.200	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
15cd (Ceiling) Speaker/Strobe	0	0.041	0.000	0	0.041	0.000	0	0.041	0.000	0	0.041	0.000
30cd (Ceiling) Speaker/Strobe	3	0.063	0.189	2	0.063	0.126	0	0.063	0.000	0	0.063	0.000
75cd (Ceiling) Speaker/Strobe	1	0.111	0.111	1	0.111	0.111	8	0.111	0.888	0	0.111	0.000
95cd (Ceiling) Speaker/Strobe	0	0.134	0.000	0	0.134	0.000	2	0.134	0.268	0	0.134	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
15cd Wall Strobe	0	0.057	0.000	0	0.057	0.000	0	0.057	0.000	0	0.057	0.000
30cd Wall Strobe	0	0.085	0.000	0	0.085	0.000	0	0.085	0.000	0	0.085	0.000
75cd Wall Strobe	0	0.135	0.000	0	0.135	0.000	0	0.135	0.000	0	0.135	0.000
110cd Wall Strobe	0	0.182	0.000	0	0.182	0.000	0	0.182	0.000	0	0.182	0.000
135cd Wall Strobe	0	0.205	0.000	0	0.205	0.000	0	0.205	0.000	0	0.205	0.000
185cd Wall Strobe	0	0.253	0.000	0	0.253	0.000	0	0.253	0.000	0	0.253	0.000
15cd (Ceiling) Strobe	8	0.040	0.320	6	0.040	0.240	0	0.040	0.000	0	0.040	0.000
30cd (Ceiling) Strobe	1	0.058	0.058	2	0.058	0.116	0	0.058	0.000	1	0.058	0.058
75cd (Ceiling) Strobe	0	0.155	0.000	1	0.155	0.155	0	0.155	0.000	1	0.155	0.155
95cd (Ceiling) Strobe	0	0.258	0.000	0	0.258	0.000	0	0.258	0.000	0	0.258	0.000
0	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
0	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000
0	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000
		Total	0.941		Total	1.005		Total	1.242		Total	0.213
Circuit Length:	320			460			300			0		
Circular mils:	6530			6530			6530			6530		
Volts dropped:	1.00			1.53			1.23			0.00		
Percent voltage drop:	**4.15%**			**6.37%**			**5.13%**			**0.00%**		

Building (FA-2)

Device Type	Circuit: V4/A4			Circuit: V5/A5			Circuit: V6/A6			Circuit: 0		
	Devices x Current		Total Current	Devices x Current		Total Current	Devices x Current		Total Current	Devices x Current		Total Current
Exteior Speaker @ 2 watt tap	2	0.02857	0.057	3	0.02857	0.086	4	0.02857	0.114	0	0.02857	0.000
NAC Panel	1	0.206	0.206	0	0.206	0.000	0	0.206	0.000	0	0.206	0.000
15cd Wall Speaker/Strobe	0	0.030	0.000	0	0.030	0.000	0	0.030	0.000	0	0.030	0.000
30cd Wall Speaker/Strobe	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000
75cd Wall Speaker/Strobe	0	0.115	0.000	0	0.115	0.000	0	0.115	0.000	0	0.115	0.000
110cd Wall Speaker/Strobe	0	0.200	0.000	0	0.200	0.000	0	0.200	0.000	0	0.200	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
15cd (Ceiling) Speaker/Strobe	2	0.041	0.082	0	0.041	0.000	0	0.041	0.000	0	0.041	0.000
30cd (Ceiling) Speaker/Strobe	0	0.063	0.000	0	0.063	0.000	0	0.063	0.000	0	0.063	0.000
75cd (Ceiling) Speaker/Strobe	6	0.111	0.666	4	0.111	0.444	6	0.111	0.666	0	0.111	0.000
95cd (Ceiling) Speaker/Strobe	0	0.134	0.000	1	0.134	0.134	0	0.134	0.000	0	0.134	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
15cd Wall Strobe	0	0.057	0.000	0	0.057	0.000	0	0.057	0.000	0	0.057	0.000
30cd Wall Strobe	0	0.085	0.000	0	0.085	0.000	0	0.085	0.000	0	0.085	0.000
75cd Wall Strobe	0	0.135	0.000	0	0.135	0.000	0	0.135	0.000	0	0.135	0.000
110cd Wall Strobe	0	0.182	0.000	0	0.182	0.000	0	0.182	0.000	0	0.182	0.000
135cd Wall Strobe	0	0.205	0.000	0	0.205	0.000	0	0.205	0.000	0	0.205	0.000
185cd Wall Strobe	0	0.253	0.000	0	0.253	0.000	0	0.253	0.000	0	0.253	0.000
15cd (Ceiling) Strobe	4	0.040	0.160	3	0.040	0.120	0	0.040	0.000	2	0.040	0.080
30cd (Ceiling) Strobe	0	0.058	0.000	0	0.058	0.000	0	0.058	0.000	1	0.058	0.058
75cd (Ceiling) Strobe	0	0.155	0.000	0	0.155	0.000	0	0.155	0.000	0	0.155	0.000
95cd (Ceiling) Strobe	0	0.258	0.000	0	0.258	0.000	0	0.258	0.000	0	0.258	0.000
0	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
0	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000
0	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000
		Total	1.171		Total	0.784		Total	0.780		Total	0.138
Circuit Length:	530			530			530			0		
Circular mils:	6530			6530			6530			6530		
Volts dropped:	2.05			1.37			1.37			0.00		
Percent voltage drop:	**8.55%**			**5.72%**			**5.70%**			**0.00%**		

Building (FA-3)

Device Type	Circuit: V7/A7			Circuit: V8/A8			Circuit: V9/A9			Circuit: V10/A10		
	Devices x Current		Total Current	Devices x Current		Total Current	Devices x Current		Total Current	Devices x Current		Total Current
Exteior Speaker @ 2 watt tap	1	0.02857	0.029	3	0.02857	0.086	2	0.02857	0.057	2	0.02857	0.057
NAC Panel	1	0.206	0.206	0	0.206	0.000	0	0.206	0.000	0	0.206	0.000
15cd Wall Speaker/Strobe	0	0.030	0.000	0	0.030	0.000	0	0.030	0.000	0	0.030	0.000
30cd Wall Speaker/Strobe	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000
75cd Wall Speaker/Strobe	0	0.115	0.000	0	0.115	0.000	0	0.115	0.000	0	0.115	0.000
110cd Wall Speaker/Strobe	2	0.200	0.400	0	0.200	0.000	0	0.200	0.000	0	0.200	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
15cd (Ceiling) Speaker/Strobe	0	0.041	0.000	0	0.041	0.000	2	0.041	0.082	0	0.041	0.000
30cd (Ceiling) Speaker/Strobe	0	0.063	0.000	0	0.063	0.000	0	0.063	0.000	0	0.063	0.000
75cd (Ceiling) Speaker/Strobe	2	0.111	0.222	3	0.111	0.333	6	0.111	0.666	1	0.111	0.111
95cd (Ceiling) Speaker/Strobe	2	0.134	0.268	1	0.134	0.134	0	0.134	0.000	4	0.134	0.536
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
15cd Wall Strobe	0	0.057	0.000	0	0.057	0.000	0	0.057	0.000	0	0.057	0.000
30cd Wall Strobe	0	0.085	0.000	0	0.085	0.000	0	0.085	0.000	0	0.085	0.000
75cd Wall Strobe	0	0.135	0.000	0	0.135	0.000	0	0.135	0.000	0	0.135	0.000
110cd Wall Strobe	0	0.182	0.000	0	0.182	0.000	0	0.182	0.000	0	0.182	0.000
135cd Wall Strobe	0	0.205	0.000	0	0.205	0.000	0	0.205	0.000	0	0.205	0.000
185cd Wall Strobe	0	0.253	0.000	0	0.253	0.000	0	0.253	0.000	0	0.253	0.000
15cd (Ceiling) Strobe	0	0.040	0.000	3	0.040	0.120	3	0.040	0.120	2	0.040	0.080
30cd (Ceiling) Strobe	1	0.058	0.058	4	0.058	0.232	1	0.058	0.058	0	0.058	0.000
75cd (Ceiling) Strobe	1	0.155	0.155	0	0.155	0.000	0	0.155	0.000	2	0.155	0.310
95cd (Ceiling) Strobe	0	0.258	0.000	0	0.258	0.000	0	0.258	0.000	0	0.258	0.000
0	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
0	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000
0	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000
		Total	1.338		Total	0.905		Total	0.983		Total	1.094
Circuit Length:	370			350			400			350		
Circular mils:	6530			6530			4110			4110		
Volts dropped:	1.64			1.05			2.07			2.01		
Percent voltage drop:	**6.82%**			**4.36%**			**8.61%**			**8.39%**		

BUILDING (FA-3)

Device Type	Circuit: V11/A10			Circuit: V12/A10			Circuit: 0			Circuit: 0		
	Devices x Current		Total Current	Devices x Current		Total Current	Devices x Current		Total Current	Devices x Current		Total Current
Exteior Speaker @ 2 watt tap	2	0.02857	0.057	1	0.02857	0.029	0	0.02857	0.000	0	0.02857	0.000
NAC Panel	0	0.206	0.000	0	0.206	0.000	0	0.206	0.000	0	0.206	0.000
15cd Wall Speaker/Strobe	0	0.030	0.000	0	0.030	0.000	0	0.030	0.000	0	0.030	0.000
30cd Wall Speaker/Strobe	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000
75cd Wall Speaker/Strobe	0	0.115	0.000	0	0.115	0.000	0	0.115	0.000	0	0.115	0.000
110cd Wall Speaker/Strobe	0	0.200	0.000	0	0.200	0.000	0	0.200	0.000	0	0.200	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
15cd (Ceiling) Speaker/Strobe	0	0.041	0.000	0	0.041	0.000	0	0.041	0.000	0	0.041	0.000
30cd (Ceiling) Speaker/Strobe	0	0.063	0.000	0	0.063	0.000	0	0.063	0.000	0	0.063	0.000
75cd (Ceiling) Speaker/Strobe	4	0.111	0.444	0	0.111	0.000	0	0.111	0.000	0	0.111	0.000
95cd (Ceiling) Speaker/Strobe	0	0.134	0.000	2	0.134	0.268	0	0.134	0.000	0	0.134	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
15cd Wall Strobe	0	0.057	0.000	0	0.057	0.000	0	0.057	0.000	0	0.057	0.000
30cd Wall Strobe	0	0.085	0.000	0	0.085	0.000	0	0.085	0.000	0	0.085	0.000
75cd Wall Strobe	0	0.135	0.000	0	0.135	0.000	0	0.135	0.000	0	0.135	0.000
110cd Wall Strobe	0	0.182	0.000	0	0.182	0.000	0	0.182	0.000	0	0.182	0.000
135cd Wall Strobe	0	0.205	0.000	0	0.205	0.000	0	0.205	0.000	0	0.205	0.000
185cd Wall Strobe	0	0.253	0.000	0	0.253	0.000	0	0.253	0.000	0	0.253	0.000
15cd (Ceiling) Strobe	0	0.040	0.000	1	0.040	0.040	0	0.040	0.000	0	0.040	0.000
30cd (Ceiling) Strobe	0	0.058	0.000	1	0.058	0.058	0	0.058	0.000	0	0.058	0.000
75cd (Ceiling) Strobe	0	0.155	0.000	1	0.155	0.155	0	0.155	0.000	0	0.155	0.000
95cd (Ceiling) Strobe	0	0.258	0.000	0	0.258	0.000	0	0.258	0.000	0	0.258	0.000
0	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
0	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000
0	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000
		Total	0.501		Total	0.550		Total	0.000		Total	0.000
Circuit Length:	350			375			0			0		
Circular mils:	6530			6530			4110			4110		
Volts dropped:	0.58			0.68			0.00			0.00		
Percent voltage drop:	**2.42%**			**2.84%**			**0.00%**			**0.00%**		

Building (FA-4)

Device Type	Circuit: V13/A11			Circuit: V14/A12			Circuit: 0			Circuit: 0		
	Devices x Current		Total Current	Devices x Current		Total Current	Devices x Current		Total Current	Devices x Current		Total Current
Exteior Speaker @ 2 watt tap	5	0.02857	0.143	4	0.02857	0.114	0	0.02857	0.000	0	0.02857	0.000
NAC Panel	1	0.206	0.206	0	0.206	0.000	0	0.206	0.000	0	0.206	0.000
15cd Wall Speaker/Strobe	0	0.030	0.000	0	0.030	0.000	0	0.030	0.000	0	0.030	0.000
30cd Wall Speaker/Strobe	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000
75cd Wall Speaker/Strobe	0	0.115	0.000	0	0.115	0.000	0	0.115	0.000	0	0.115	0.000
110cd Wall Speaker/Strobe	0	0.200	0.000	0	0.200	0.000	0	0.200	0.000	0	0.200	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
15cd (Ceiling) Speaker/Strobe	4	0.041	0.164	0	0.041	0.000	0	0.041	0.000	0	0.041	0.000
30cd (Ceiling) Speaker/Strobe	0	0.063	0.000	3	0.063	0.189	0	0.063	0.000	0	0.063	0.000
75cd (Ceiling) Speaker/Strobe	2	0.111	0.222	2	0.111	0.222	0	0.111	0.000	0	0.111	0.000
95cd (Ceiling) Speaker/Strobe	1	0.134	0.134	2	0.134	0.268	0	0.134	0.000	0	0.134	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
15cd Wall Strobe	0	0.057	0.000	0	0.057	0.000	0	0.057	0.000	0	0.057	0.000
30cd Wall Strobe	0	0.085	0.000	0	0.085	0.000	0	0.085	0.000	0	0.085	0.000
75cd Wall Strobe	0	0.135	0.000	0	0.135	0.000	0	0.135	0.000	0	0.135	0.000
110cd Wall Strobe	0	0.182	0.000	0	0.182	0.000	0	0.182	0.000	0	0.182	0.000
135cd Wall Strobe	0	0.205	0.000	0	0.205	0.000	0	0.205	0.000	0	0.205	0.000
185cd Wall Strobe	0	0.253	0.000	0	0.253	0.000	0	0.253	0.000	0	0.253	0.000
15cd (Ceiling) Strobe	2	0.040	0.080	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000
30cd (Ceiling) Strobe	0	0.058	0.000	1	0.058	0.058	0	0.058	0.000	0	0.058	0.000
75cd (Ceiling) Strobe	0	0.155	0.000	0	0.155	0.000	0	0.155	0.000	0	0.155	0.000
95cd (Ceiling) Strobe	0	0.258	0.000	0	0.258	0.000	0	0.258	0.000	0	0.258	0.000
0	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
0	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000
0	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000
		Total	0.949		Total	0.851		Total	0.000		Total	0.000
Circuit Length:	350			350			0			0		
Circular mils:	6530			6530			6530			4110		
Volts dropped:	1.10			0.99			0.00			0.00		
Percent voltage drop:	**4.58%**			**4.11%**			**0.00%**			**0.00%**		

(FA-5)

Device Type	Circuit: V15/A13			Circuit: V16/A14			Circuit: V17/A15			Circuit: 0		
	Devices x Current		Total Current	Devices x Current		Total Current	Devices x Current		Total Current	Devices x Current		Total Current
Exteior Speaker @ 2 watt tap	4	0.02857	0.114	1	0.02857	0.029	1	0.02857	0.029	0	0.02857	0.000
NAC Panel	1	0.206	0.206	0	0.206	0.000	0	0.206	0.000	0	0.206	0.000
15cd Wall Speaker/Strobe	0	0.030	0.000	0	0.030	0.000	0	0.030	0.000	0	0.030	0.000
30cd Wall Speaker/Strobe	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000
75cd Wall Speaker/Strobe	0	0.115	0.000	0	0.115	0.000	0	0.115	0.000	0	0.115	0.000
110cd Wall Speaker/Strobe	0	0.200	0.000	0	0.200	0.000	0	0.200	0.000	0	0.200	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
15cd (Ceiling) Speaker/Strobe	0	0.041	0.000	0	0.041	0.000	0	0.041	0.000	0	0.041	0.000
30cd (Ceiling) Speaker/Strobe	0	0.063	0.000	2	0.063	0.126	4	0.063	0.252	0	0.063	0.000
75cd (Ceiling) Speaker/Strobe	0	0.111	0.000	2	0.111	0.222	2	0.111	0.222	0	0.111	0.000
95cd (Ceiling) Speaker/Strobe	4	0.134	0.536	0	0.134	0.000	0	0.134	0.000	0	0.134	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
15cd Wall Strobe	0	0.057	0.000	0	0.057	0.000	0	0.057	0.000	0	0.057	0.000
30cd Wall Strobe	0	0.085	0.000	0	0.085	0.000	0	0.085	0.000	0	0.085	0.000
75cd Wall Strobe	0	0.135	0.000	0	0.135	0.000	0	0.135	0.000	0	0.135	0.000
110cd Wall Strobe	0	0.182	0.000	0	0.182	0.000	0	0.182	0.000	0	0.182	0.000
135cd Wall Strobe	0	0.205	0.000	0	0.205	0.000	0	0.205	0.000	0	0.205	0.000
185cd Wall Strobe	0	0.253	0.000	0	0.253	0.000	0	0.253	0.000	0	0.253	0.000
15cd (Ceiling) Strobe	3	0.040	0.120	9	0.040	0.360	5	0.040	0.200	0	0.040	0.000
30cd (Ceiling) Strobe	0	0.058	0.000	2	0.058	0.116	2	0.058	0.116	0	0.058	0.000
75cd (Ceiling) Strobe	0	0.155	0.000	0	0.155	0.000	0	0.155	0.000	0	0.155	0.000
95cd (Ceiling) Strobe	0	0.258	0.000	0	0.258	0.000	0	0.258	0.000	0	0.258	0.000
0	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
0	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000
0	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000
		Total	0.976		Total	0.853		Total	0.819		Total	0.000
Circuit Length:	350			350			350			0		
Circular mils:	6530			6530			6530			4110		
Volts dropped:	1.13			0.99			0.95			0.00		
Percent voltage drop:	**4.71%**			**4.11%**			**3.95%**			**0.00%**		

Building (FA-6)

Device Type	Circuit: V18/A16			Circuit: V19/A17			Circuit: V20/A18			Circuit: 0		
	Devices x Current		Total Current	Devices x Current		Total Current	Devices x Current		Total Current	Devices x Current		Total Current
Exteior Speaker @ 2 watt tap	5	0.029	0.143	0	0.029	0.000	3	0.029	0.086	0	0.029	0.000
NAC Panel	1	0.206	0.206	0	0.206	0.000	0	0.206	0.000	0	0.206	0.000
15cd Wall Speaker/Strobe	0	0.030	0.000	0	0.030	0.000	0	0.030	0.000	0	0.030	0.000
30cd Wall Speaker/Strobe	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000
75cd Wall Speaker/Strobe	0	0.115	0.000	0	0.115	0.000	0	0.115	0.000	0	0.115	0.000
110cd Wall Speaker/Strobe	0	0.200	0.000	5	0.200	1.000	0	0.200	0.000	0	0.200	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
15cd (Ceiling) Speaker/Strobe	0	0.041	0.000	0	0.041	0.000	0	0.041	0.000	0	0.041	0.000
30cd (Ceiling) Speaker/Strobe	0	0.063	0.000	1	0.063	0.063	7	0.063	0.441	0	0.063	0.000
75cd (Ceiling) Speaker/Strobe	2	0.111	0.222	0	0.111	0.000	3	0.111	0.333	0	0.111	0.000
95cd (Ceiling) Speaker/Strobe	1	0.134	0.134	0	0.134	0.000	0	0.134	0.000	0	0.134	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
15cd Wall Strobe	0	0.057	0.000	0	0.057	0.000	0	0.057	0.000	0	0.057	0.000
30cd Wall Strobe	0	0.085	0.000	0	0.085	0.000	0	0.085	0.000	0	0.085	0.000
75cd Wall Strobe	0	0.135	0.000	0	0.135	0.000	0	0.135	0.000	0	0.135	0.000
110cd Wall Strobe	0	0.182	0.000	0	0.182	0.000	0	0.182	0.000	0	0.182	0.000
135cd Wall Strobe	0	0.205	0.000	0	0.205	0.000	0	0.205	0.000	0	0.205	0.000
185cd Wall Strobe	0	0.253	0.000	0	0.253	0.000	0	0.253	0.000	0	0.253	0.000
15cd (Ceiling) Strobe	7	0.040	0.280	6	0.040	0.240	6	0.040	0.240	0	0.040	0.000
30cd (Ceiling) Strobe	3	0.058	0.174	0	0.058	0.000	0	0.058	0.000	0	0.058	0.000
75cd (Ceiling) Strobe	0	0.155	0.000	0	0.155	0.000	0	0.155	0.000	0	0.155	0.000
95cd (Ceiling) Strobe	0	0.258	0.000	0	0.258	0.000	0	0.258	0.000	0	0.258	0.000
0	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
0	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
0	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
		Total	1.159		Total	1.303		Total	1.100		Total	0.000
Circuit Length:	350			350			350			0		
Circular mils:	6530			6530			6530			6530		
Volts dropped:	1.34			1.51			1.27			0.00		
Percent voltage drop:	**5.59%**			**6.29%**			**5.30%**			**0.00%**		

Building (FA-7)

Device Type	Circuit: V21/A19			Circuit: V22/A20			Circuit: V23/A21			Circuit: V24/A22		
	Devices x Current		Total Current	Devices x Current		Total Current	Devices x Current		Total Current	Devices x Current		Total Current
Exteior Speaker @ 2 watt tap	2	0.029	0.057	0	0.029	0.000	2	0.029	0.057	2	0.029	0.057
NAC Panel	1	0.206	0.206	0	0.206	0.000	0	0.206	0.000	0	0.206	0.000
15cd Wall Speaker/Strobe	0	0.030	0.000	0	0.030	0.000	0	0.030	0.000	0	0.030	0.000
30cd Wall Speaker/Strobe	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000
75cd Wall Speaker/Strobe	0	0.115	0.000	0	0.115	0.000	0	0.115	0.000	0	0.115	0.000
110cd Wall Speaker/Strobe	0	0.200	0.000	0	0.200	0.000	6	0.200	1.200	0	0.200	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
15cd (Ceiling) Speaker/Strobe	0	0.041	0.000	0	0.041	0.000	4	0.041	0.164	0	0.041	0.000
30cd (Ceiling) Speaker/Strobe	2	0.063	0.126	0	0.063	0.000	1	0.063	0.063	0	0.063	0.000
75cd (Ceiling) Speaker/Strobe	5	0.111	0.555	2	0.111	0.222	1	0.111	0.111	5	0.111	0.555
95cd (Ceiling) Speaker/Strobe	0	0.134	0.000	0	0.134	0.000	0	0.134	0.000	0	0.134	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
15cd Wall Strobe	0	0.057	0.000	0	0.057	0.000	0	0.057	0.000	0	0.057	0.000
30cd Wall Strobe	0	0.085	0.000	0	0.085	0.000	0	0.085	0.000	0	0.085	0.000
75cd Wall Strobe	0	0.135	0.000	0	0.135	0.000	0	0.135	0.000	0	0.135	0.000
110cd Wall Strobe	0	0.182	0.000	0	0.182	0.000	0	0.182	0.000	0	0.182	0.000
135cd Wall Strobe	0	0.205	0.000	0	0.205	0.000	0	0.205	0.000	0	0.205	0.000
185cd Wall Strobe	0	0.253	0.000	0	0.253	0.000	0	0.253	0.000	0	0.253	0.000
15cd (Ceiling) Strobe	3	0.040	0.120	12	0.040	0.480	2	0.040	0.080	0	0.040	0.000
30cd (Ceiling) Strobe	0	0.058	0.000	0	0.058	0.000	0	0.058	0.000	0	0.058	0.000
75cd (Ceiling) Strobe	0	0.155	0.000	0	0.155	0.000	0	0.155	0.000	0	0.155	0.000
95cd (Ceiling) Strobe	0	0.258	0.000	0	0.258	0.000	0	0.258	0.000	0	0.258	0.000
0	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
0	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
0	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
		Total	1.064		Total	0.702		Total	1.675		Total	0.612
Circuit Length:	350			350			350			350		
Circular mils:	6530			6530			6530			6530		
Volts dropped:	1.23			0.81			1.94			0.71		
Percent voltage drop:	**5.13%**			**3.39%**			**8.08%**			**2.95%**		

Building (FA-8)

Device Type	Circuit: V25/A23			Circuit: V26/A24			Circuit: V27/A25			Circuit: 0		
	Devices x Current		Total Current	Devices x Current		Total Current	Devices x Current		Total Current	Devices x Current		Total Current
Exteior Speaker @ 2 watt tap	1	0.02857	0.029	2	0.02857	0.057	1	0.02857	0.029	0	0.02857	0.000
NAC Panel	1	0.206	0.206	0	0.206	0.000	0	0.206	0.000	0	0.206	0.000
15cd Wall Speaker/Strobe	0	0.030	0.000	0	0.030	0.000	0	0.030	0.000	0	0.030	0.000
30cd Wall Speaker/Strobe	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000
75cd Wall Speaker/Strobe	0	0.115	0.000	0	0.115	0.000	0	0.115	0.000	0	0.115	0.000
110cd Wall Speaker/Strobe	0	0.200	0.000	0	0.200	0.000	0	0.200	0.000	0	0.200	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
15cd (Ceiling) Speaker/Strobe	0	0.041	0.000	0	0.041	0.000	0	0.041	0.000	0	0.041	0.000
30cd (Ceiling) Speaker/Strobe	0	0.063	0.000	0	0.063	0.000	0	0.063	0.000	0	0.063	0.000
75cd (Ceiling) Speaker/Strobe	2	0.111	0.222	5	0.111	0.555	5	0.111	0.555	0	0.111	0.000
95cd (Ceiling) Speaker/Strobe	0	0.134	0.000	0	0.134	0.000	0	0.134	0.000	0	0.134	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
15cd Wall Strobe	0	0.057	0.000	0	0.057	0.000	0	0.057	0.000	0	0.057	0.000
30cd Wall Strobe	0	0.085	0.000	0	0.085	0.000	0	0.085	0.000	0	0.085	0.000
75cd Wall Strobe	0	0.135	0.000	0	0.135	0.000	0	0.135	0.000	0	0.135	0.000
110cd Wall Strobe	0	0.182	0.000	0	0.182	0.000	0	0.182	0.000	0	0.182	0.000
135cd Wall Strobe	0	0.205	0.000	0	0.205	0.000	0	0.205	0.000	0	0.205	0.000
185cd Wall Strobe	0	0.253	0.000	0	0.253	0.000	0	0.253	0.000	0	0.253	0.000
15cd (Ceiling) Strobe	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000
30cd (Ceiling) Strobe	1	0.058	0.058	0	0.058	0.000	0	0.058	0.000	1	0.058	0.058
75cd (Ceiling) Strobe	0	0.155	0.000	0	0.155	0.000	0	0.155	0.000	1	0.155	0.155
95cd (Ceiling) Strobe	0	0.258	0.000	0	0.258	0.000	0	0.258	0.000	0	0.258	0.000
0	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
0	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000
0	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000
		Total	0.515		Total	0.612		Total	0.584		Total	0.213
Circuit Length:	320			350			300			0		
Circular mils:	6530			6530			6530			6530		
Volts dropped:	0.54			0.71			0.58			0.00		
Percent voltage drop:	**2.27%**			**2.95%**			**2.41%**			**0.00%**		

Building (FA-9)

Device Type	Circuit: V28/A26			Circuit: V29/A27			Circuit: 0			Circuit: 0		
	Devices x Current		Total Current	Devices x Current		Total Current	Devices x Current		Total Current	Devices x Current		Total Current
Exteior Speaker @ 2 watt tap	3	0.02857	0.086	0	0.02857	0.000	0	0.02857	0.000	0	0.02857	0.000
NAC Panel	1	0.206	0.206	0	0.206	0.000	0	0.206	0.000	0	0.206	0.000
15cd Wall Speaker/Strobe	0	0.030	0.000	0	0.030	0.000	0	0.030	0.000	0	0.030	0.000
30cd Wall Speaker/Strobe	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000
75cd Wall Speaker/Strobe	0	0.115	0.000	0	0.115	0.000	0	0.115	0.000	0	0.115	0.000
110cd Wall Speaker/Strobe	0	0.200	0.000	0	0.200	0.000	0	0.200	0.000	0	0.200	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
15cd (Ceiling) Speaker/Strobe	0	0.041	0.000	0	0.041	0.000	0	0.041	0.000	0	0.041	0.000
30cd (Ceiling) Speaker/Strobe	0	0.063	0.000	0	0.063	0.000	0	0.063	0.000	0	0.063	0.000
75cd (Ceiling) Speaker/Strobe	6	0.111	0.666	5	0.111	0.555	0	0.111	0.000	0	0.111	0.000
95cd (Ceiling) Speaker/Strobe	0	0.134	0.000	0	0.134	0.000	0	0.134	0.000	0	0.134	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
15cd Wall Strobe	0	0.057	0.000	0	0.057	0.000	0	0.057	0.000	0	0.057	0.000
30cd Wall Strobe	0	0.085	0.000	0	0.085	0.000	0	0.085	0.000	0	0.085	0.000
75cd Wall Strobe	0	0.135	0.000	0	0.135	0.000	0	0.135	0.000	0	0.135	0.000
110cd Wall Strobe	0	0.182	0.000	0	0.182	0.000	0	0.182	0.000	0	0.182	0.000
135cd Wall Strobe	0	0.205	0.000	0	0.205	0.000	0	0.205	0.000	0	0.205	0.000
185cd Wall Strobe	0	0.253	0.000	0	0.253	0.000	0	0.253	0.000	0	0.253	0.000
15cd (Ceiling) Strobe	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000	2	0.040	0.080
30cd (Ceiling) Strobe	0	0.058	0.000	0	0.058	0.000	0	0.058	0.000	1	0.058	0.058
75cd (Ceiling) Strobe	0	0.155	0.000	0	0.155	0.000	0	0.155	0.000	0	0.155	0.000
95cd (Ceiling) Strobe	0	0.258	0.000	0	0.258	0.000	0	0.258	0.000	0	0.258	0.000
0	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
0	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000
0	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000
		Total	0.958		Total	0.555		Total	0.000		Total	0.138
Circuit Length:	350			530			0			0		
Circular mils:	6530			6530			6530			6530		
Volts dropped:	1.11			0.97			0.00			0.00		
Percent voltage drop:	**4.62%**			**4.05%**			**0.00%**			**0.00%**		

Building (FA-10)

Device Type	Circuit: V30/A28			Circuit: V31/A29			Circuit: V32/A30			Circuit: 0		
	Devices x Current		Total Current	Devices x Current		Total Current	Devices x Current		Total Current	Devices x Current		Total Current
Exteior Speaker @ 2 watt tap	2	0.02857	0.057	2	0.02857	0.057	1	0.02857	0.029	0	0.02857	0.000
NAC Panel	1	0.206	0.206	0	0.206	0.000	0	0.206	0.000	0	0.206	0.000
15cd Wall Speaker/Strobe	0	0.030	0.000	0	0.030	0.000	0	0.030	0.000	0	0.030	0.000
30cd Wall Speaker/Strobe	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000
75cd Wall Speaker/Strobe	0	0.115	0.000	0	0.115	0.000	0	0.115	0.000	0	0.115	0.000
110cd Wall Speaker/Strobe	0	0.200	0.000	0	0.200	0.000	0	0.200	0.000	0	0.200	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
15cd (Ceiling) Speaker/Strobe	0	0.041	0.000	0	0.041	0.000	0	0.041	0.000	0	0.041	0.000
30cd (Ceiling) Speaker/Strobe	3	0.063	0.189	3	0.063	0.189	1	0.063	0.063	0	0.063	0.000
75cd (Ceiling) Speaker/Strobe	0	0.111	0.000	0	0.111	0.000	0	0.111	0.000	0	0.111	0.000
95cd (Ceiling) Speaker/Strobe	0	0.134	0.000	0	0.134	0.000	0	0.134	0.000	0	0.134	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
15cd Wall Strobe	1	0.057	0.057	1	0.057	0.057	0	0.057	0.000	0	0.057	0.000
30cd Wall Strobe	0	0.085	0.000	0	0.085	0.000	2	0.085	0.170	0	0.085	0.000
75cd Wall Strobe	0	0.135	0.000	0	0.135	0.000	0	0.135	0.000	0	0.135	0.000
110cd Wall Strobe	0	0.182	0.000	0	0.182	0.000	0	0.182	0.000	0	0.182	0.000
135cd Wall Strobe	0	0.205	0.000	0	0.205	0.000	0	0.205	0.000	0	0.205	0.000
185cd Wall Strobe	0	0.253	0.000	0	0.253	0.000	0	0.253	0.000	0	0.253	0.000
15cd (Ceiling) Strobe	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000	0	0.040	0.000
30cd (Ceiling) Strobe	0	0.058	0.000	0	0.058	0.000	0	0.058	0.000	0	0.058	0.000
75cd (Ceiling) Strobe	0	0.155	0.000	0	0.155	0.000	0	0.155	0.000	0	0.155	0.000
95cd (Ceiling) Strobe	0	0.258	0.000	0	0.258	0.000	0	0.258	0.000	0	0.258	0.000
0	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000	0	0.000	0.000
0	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000
0	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000	0	0.00000	0.000
		Total	0.509		Total	0.303		Total	0.262		Total	0.000
Circuit Length:	200			800			600			0		
Circular mils:	6530			6530			4110			4110		
Volts dropped:	0.34			0.80			0.82			0.00		
Percent voltage drop:	**1.40%**			**3.34%**			**3.44%**			**0.00%**		

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RBV FIRE ALARM UPGRADE

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1601 LONGHORN DRIVE
VISTA, CA 92081

VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE:
23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE:
7/5/2023

REGISTERED PROFESSIONAL ENGINEER
MONICA GRIESE-HANSEN
No. E 14781
Exp. 6-30-2025
ELECTRICAL
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#23011.01   12/19/2023

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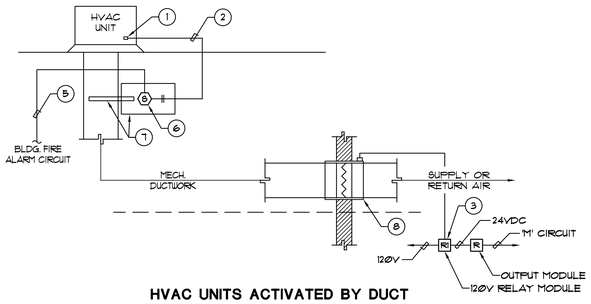
SHEET TITLE

FIRE ALARM CALCULATIONS

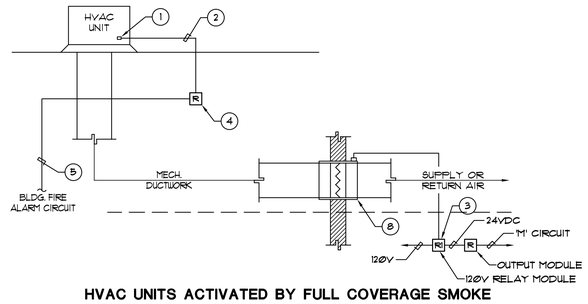
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HVAC UNITS ACTIVATED BY DUCT DETECTOR DAMPER CONTROL DIAGRAM



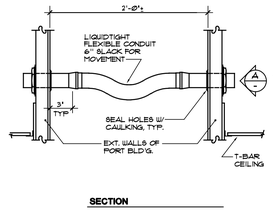
HVAC UNITS ACTIVATED BY FULL COVERAGE SMOKE DETECTION SYSTEM DAMPER CONTROL DIAGRAM

KEY NOTES:

1. ALL A/C UNITS SHALL SHUT DOWN, WHETHER IN HEATING OR COOLING MODE, UPON ACTIVATION OF ANY FIRE ALARM DEVICE IN THE BUILDING INCLUDING SMOKE/HEAT DETECTORS, MANUAL STATIONS, DUCT DETECTORS, AREA DETECTORS, CONTROLLING SMOKE DAMPERS, SPRINKLER ACTIVATION. 45 SECONDS AFTER THE A/C UNITS HAVE BEEN SHUT DOWN, ALL SMOKE DAMPERS SHALL CLOSE.
2. 1/2" CONDUIT PROVIDED BY (ELECTRICAL) WITH CONTROL WIRING PROVIDED BY (FIRE ALARM). FINAL CONNECTIONS TO A/C UNIT BY (MECHANICAL) AND ALL CONNECTIONS AT FIRE ALARM DEVICES BY (FIRE ALARM) CONTRACTOR.
3. FIRE ALARM CONTROL MODULE MOUNTED AT FACP OR FA PANELS, BOXES AND INTERCONNECTING CONDUITS BY (ELECTRICAL) CONTRACTOR. WIRING BY (FIRE ALARM) CONTRACTOR.
4. FIRE ALARM CONTROL MODULE MOUNTED TO J-BOX ADJACENT TO A/C UNIT, BOXES AND INTERCONNECTING CONDUITS BY (ELECTRICAL) CONTRACTOR. WIRING BY (FIRE ALARM) CONTRACTOR.
5. 1/2" CONDUIT PROVIDED BY (ELECTRICAL) WITH CONTROL WIRING PROVIDED BY (FIRE ALARM) CONTRACTOR.
6. SMOKE DETECTOR WITH 24V AUXILIARY CONTROL CONTACT INSTALL IN DUCT DETECTOR HOUSING BY (FIRE ALARM) CONTRACTOR.
7. DUCT DETECTOR HOUSING AND SAMPLING TUBES FURNISHED BY (FIRE ALARM) CONTRACTOR AND INSTALLED BY (MECHANICAL) CONTRACTOR SAMPLING TUBES SHALL BE SIZED TO MATCH THE DUCT SIZE AND CFM RATING.
8. SMOKE/FIRE DAMPER BY (MECHANICAL).

DAMPER/HVAC UNIT FIRE ALARM CONTROL DIAGRAM

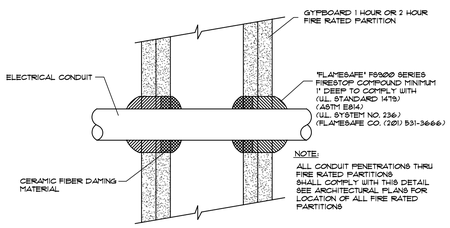
NO SCALE — 1 / E5.21



SECTION **ELEV. A**

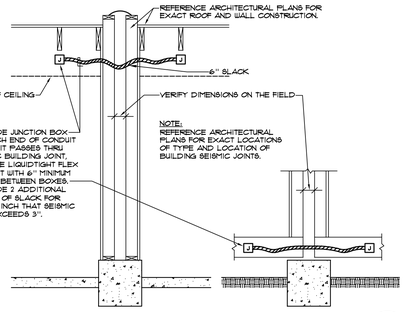
CONDUIT CONNECTIONS AT BUILDING SEPARATIONS

NO SCALE — 2 / E5.21



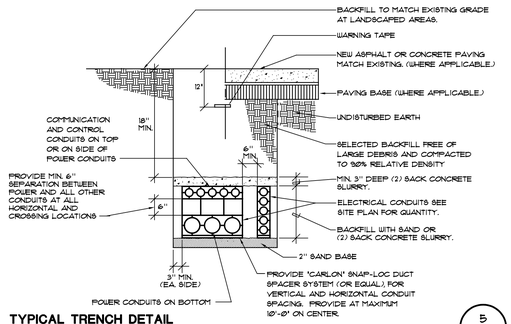
CONDUIT PENETRATION THRU FIRE RATED PARTITIONS

NO SCALE — 3 / E5.21



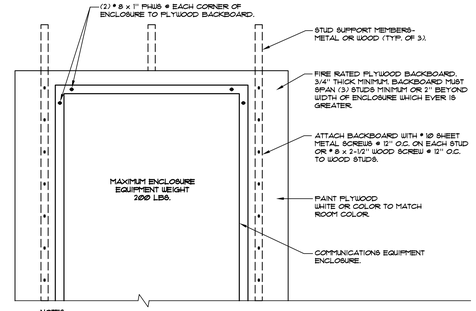
SEISMIC JOINT CONDUIT INSTALLATION DETAIL

NO SCALE — 4 / E5.21



TYPICAL TRENCH DETAIL

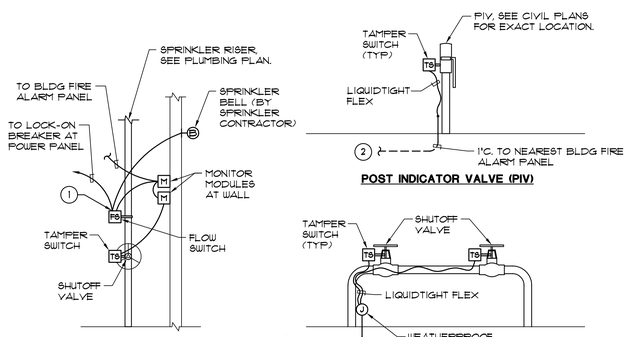
NO SCALE — 5 / E5.21



NOTES:
1. REFERENCE EQUIPMENT RACK DETAILS FOR REQUIRED BACKBOARD HEIGHT.
2. REFERENCE FLOOR PLANS FOR BACKBOARD WIDTH REQUIRED FOR COVERING LARGER WALL AREAS THAN FOR ISOLATED EQUIPMENT INSTALLATIONS.

TYPICAL BACKBOARD DETAIL

NO SCALE — 6 / E5.21



BUILDING SPRINKLER RISER

KEY NOTES:

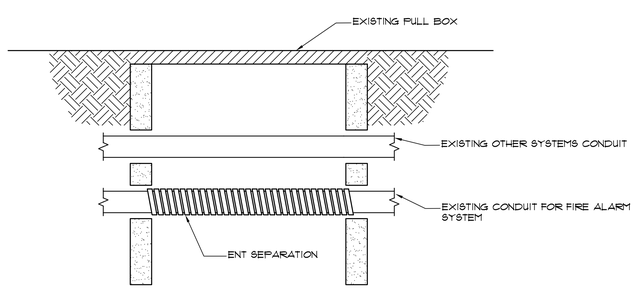
1. TAMPER SWITCH AUXILIARY CONTACTS TO ACTIVATE SPRINKLER BELL.
2. PROVIDE CONNECTION TO MONITOR MODULE LOCATED IN FIRE RISER ROOM OR ABOVE NEAREST ACCESSIBLE CEILING IN NEAREST BUILDING.

POST INDICATOR VALVE (PIV)

BACKFLOW PREVENTION ASSEMBLY

TYPICAL FIRE SPRINKLER SYSTEM CONNECTION DETAILS

NO SCALE — 7 / E5.21



TYPICAL SEPARATION ON EXISTING PULLBOXES SHARING FIRE ALARM CONDUITS WITH OTHER SYSTEMS DETAIL

NO SCALE — 8 / E5.21

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VISTA, CA 92081

VISTA UNIFIED SCHOOL DISTRICT
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KEYPLAN

REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023
SHEET TITLE

TYPICAL DETAILS

E-5.21

REGISTERED PROFESSIONAL ENGINEER
No. E 14781
Exp. 6-30-2025
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STATE OF CALIFORNIA

12/19/2023

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1 DEMOLITION PLAN - FIRE ALARM

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

NORTH

DEMOLITION GENERAL NOTES:

1. ALL ITEMS SHOWN ON THIS DRAWING ARE EXISTING TO BE REMOVED UNLESS OTHERWISE NOTED. SEE REQUIREMENTS BELOW FOR SCOPE OF WORK. ALL OTHER ELECTRICAL ITEMS IN THIS BUILDING ARE EXISTING TO REMAIN. MAINTAIN POWER CIRCUIT CONTINUITY UNTIL NEW SOURCE IS ENERGIZED AND READY FOR TRANSFER. REFER TO POWER AND LIGHTING PLANS.
2. ALL ELECTRICAL DEMOLITION WORK SHALL BE DIRECTED BY THE ELECTRICAL CONTRACTOR AND COMPLY WITH CFC CH 33.

GENERAL DEMOLITION REQUIREMENTS

1. WIRING DEVICES
   WHERE EXISTING DEVICES ARE TO BE REMOVED, THE CONTRACTOR SHALL DISPOSE OF ALL WIRING AS REQUIRED.
2. FIRE ALARM
   WHERE EXISTING FIRE ALARM PANELS AND ASSOCIATED SMOKE, HEAT, DUCT DETECTORS, PULL STATIONS AND STROBE OR HORN UNITS ARE TO BE REMOVED, THE CONTRACTOR SHALL DISPOSED OF ALL DEVICES AND EQUIPMENT AS REQUIRED.
3. ALL BOXES, EXPOSED CONDUIT, WIRE, AND OTHER ITEMS ASSOCIATED WITH FIRE ALARM SYSTEM TO BE REMOVED, SHALL BE DISCONNECTED, REMOVED AND DISPOSED OF BY THE CONTRACTOR AS REQUIRED, UNLESS SPECIFICALLY NOTED OTHERWISE. CUT AND CAP CONCEALED CONDUITS, PATCH, SEAL AND REPAIR SURFACE TO MATCH ADJACENT AREA WHERE BOXES ARE REMOVED.

FIRE ALARM SYMBOLS LEGEND TO BE REMOVED

SR
F
C
- MANUAL PULL STATION
- C = CONDUIT (TYP.)
- SR = SURFACE RACEWAY (TYP.)
- WALL MOUNTED FLASHING LIGHT STROBE
- WALL MOUNTED FLASHING LIGHT HORN/STROBE
- WALL MOUNTED WEATHERPROOF EXTERIOR HORN
- CEILING MOUNTED FLASHING LIGHT HORN/STROBE
- CEILING MOUNTED SMOKE DETECTOR
- CEILING MOUNTED HEAT DETECTOR
- HEAT DETECTOR MOUNTED ABOVE CEILING
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- FS — FLOW SWITCH WITH M
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- DSM — DUAL SYNC MODULE (SEE RISER DIAGRAM FOR LOCATION)
- R — ADDRESSABLE RELAY MODULE
- M — ADDRESSABLE MONITOR MODULE

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APP: 04-122924 INC:
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SS ☐ FLS ☑ ACS ☐
DATE: 02/29/2024

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www.alphastudio-design.com

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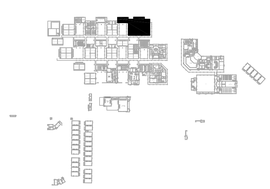
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RBV FIRE ALARM UPGRADE

RANCHO BUENA VISTA HIGH SCHOOL
1601 LONGHORN DRIVE
VISTA, CA 92081

VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

KEYPLAN



REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln

MODEL FILE:
23-018_RBV FIRE ALARM_DRAFT.pln

PLOT DATE:
7/5/2023

SHEET TITLE

DEMOLITION PLAN - FIRE ALARM

E-10.1

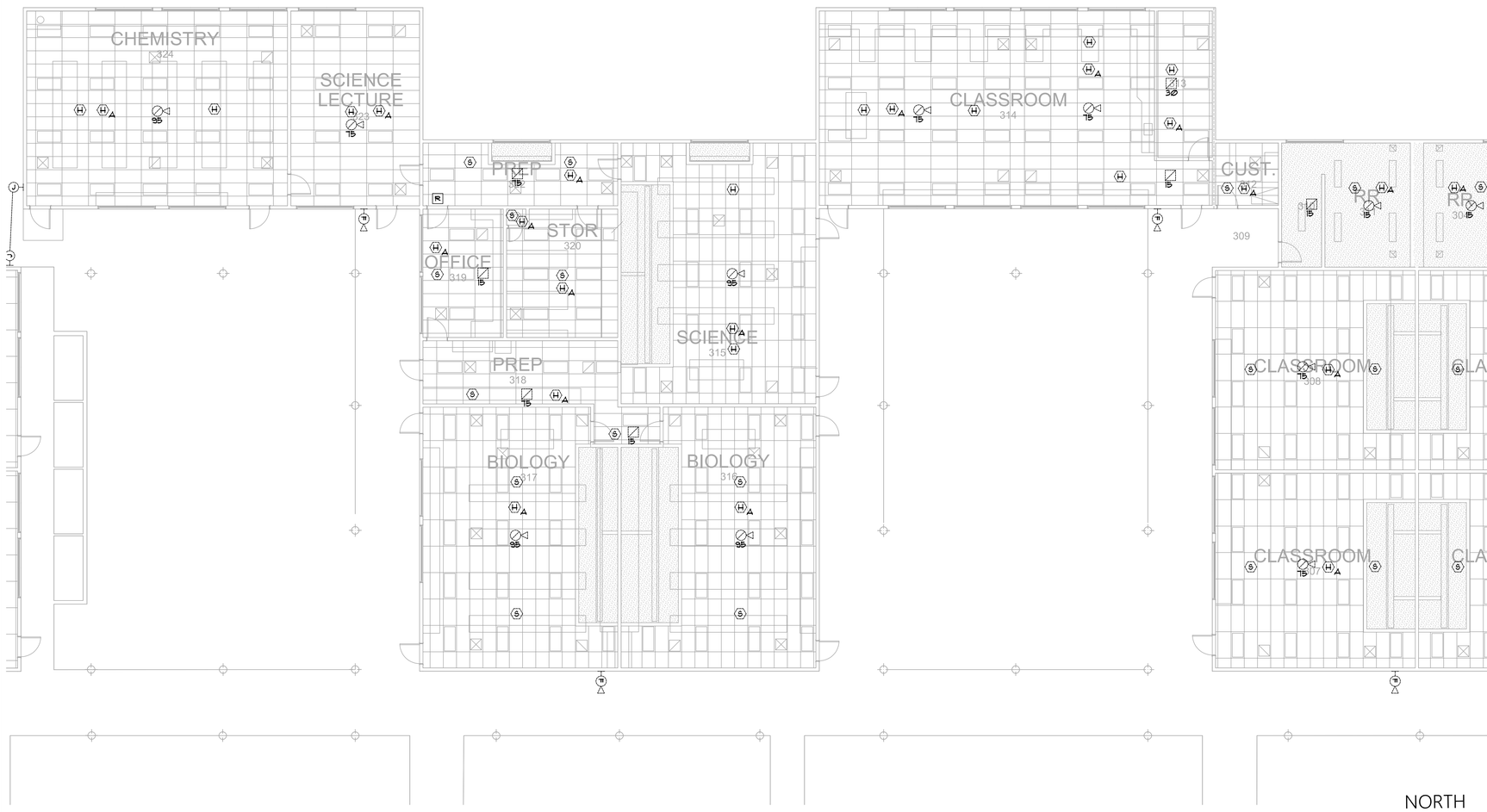
REGISTERED PROFESSIONAL ENGINEER
No. E 14781
Exp. 6-30-2025
ELECTRICAL
STATE OF CALIFORNIA

2/28/2024

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1 DEMOLITION PLAN - FIRE ALARM

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

DEMOLITION GENERAL NOTES:

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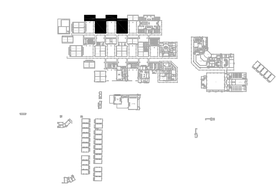
ENGINEER OF RECORD

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VISTA, CA 92081

VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

KEYPLAN



REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE

DEMOLITION PLAN - FIRE ALARM

E-10.2

REGISTERED PROFESSIONAL ENGINEER
MICHAEL S. RIVERA
No. E 14781
Exp. 6-30-2025
ELECTRICAL
STATE OF CALIFORNIA

2/28/2024

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DEMOLITION GENERAL NOTES:

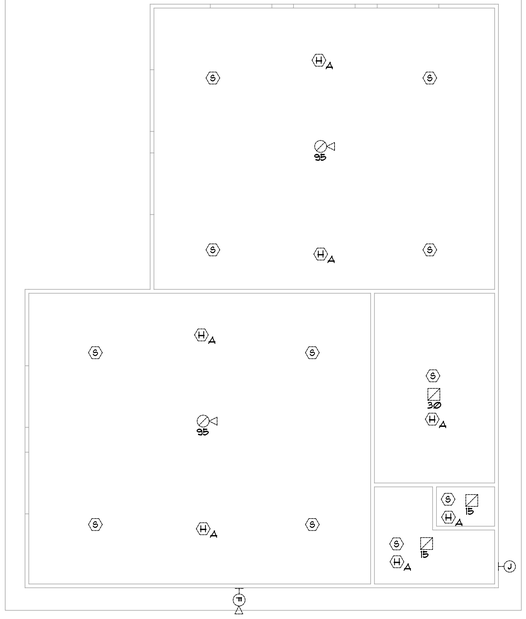
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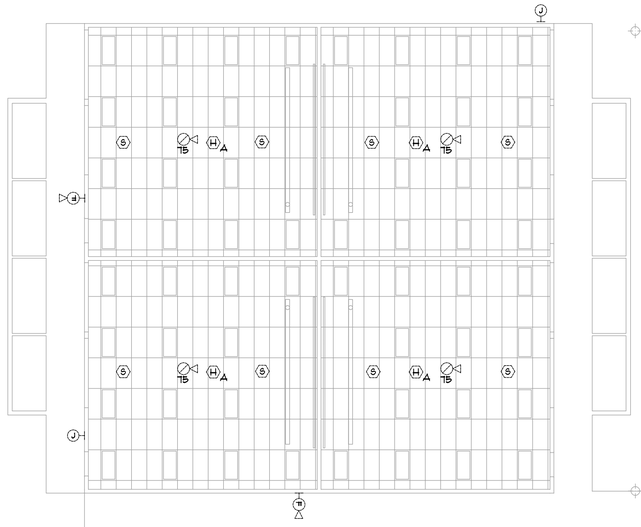
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NORTH

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

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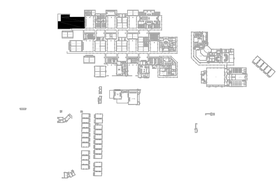
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LICENSED ARCHITECT
JOSHUA T. ECKLE
No. C31020
EXP. 12/25
STATE OF CALIFORNIA

ENGINEER OF RECORD

KEYPLAN



REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE

DEMOLITION PLAN - FIRE ALARM

E-10.3

REGISTERED PROFESSIONAL ENGINEER
No. E 14781
Exp. 6-30-2025
ELECTRICAL
STATE OF CALIFORNIA

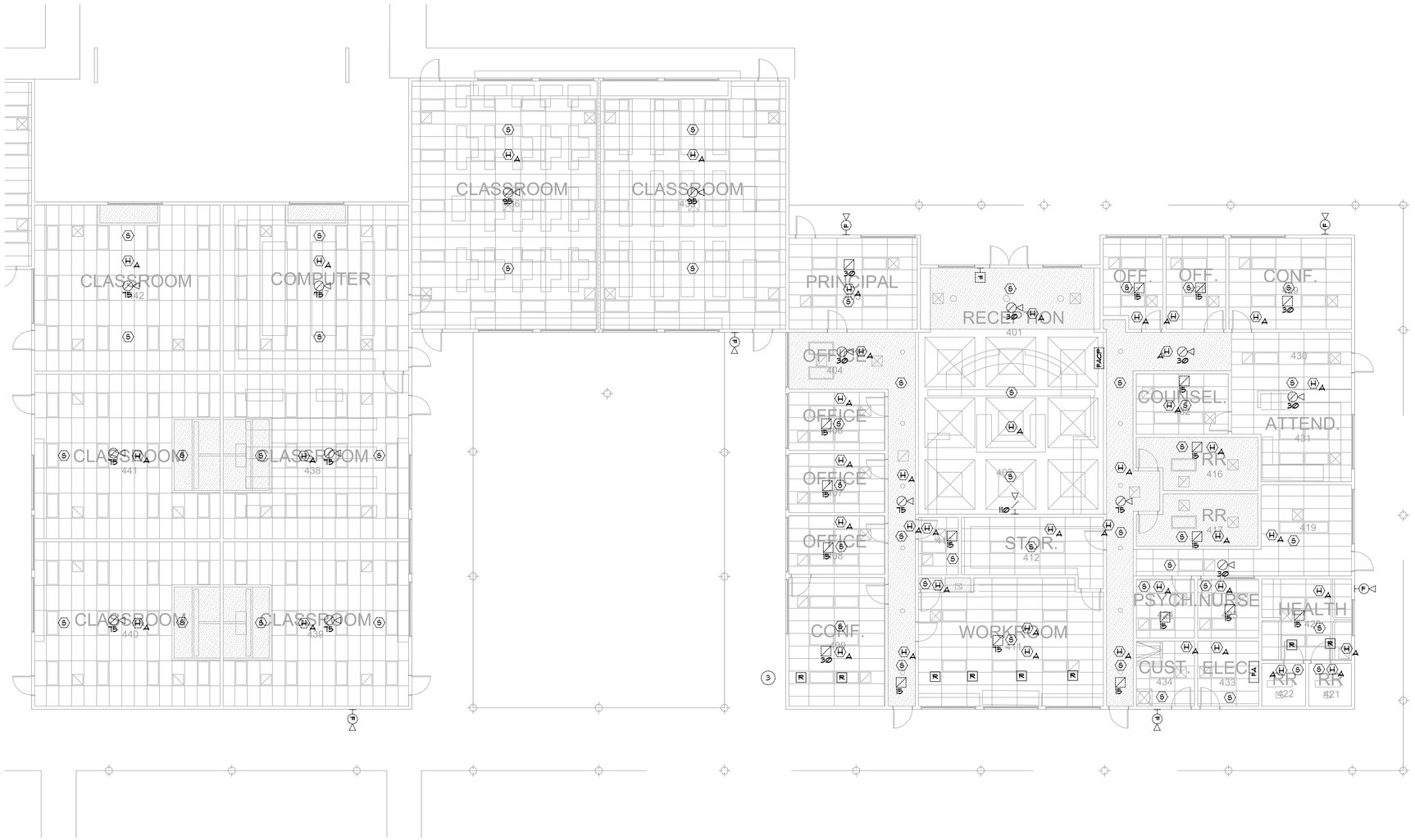
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1 DEMOLITION PLAN - FIRE ALARM
SCALE: 1/8" = 1'-0"

NORTH

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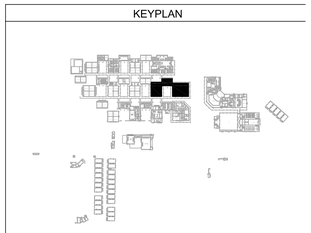
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RBV FIRE ALARM UPGRADE

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VISTA UNIFIED SCHOOL DISTRICT
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KEYPLAN



REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE

DEMOLITION PLAN - FIRE ALARM

REGISTERED PROFESSIONAL ENGINEER
MICHAEL JAMES GUERRERO
No. E 14781
Exp. 6-30-2025
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STATE OF CALIFORNIA

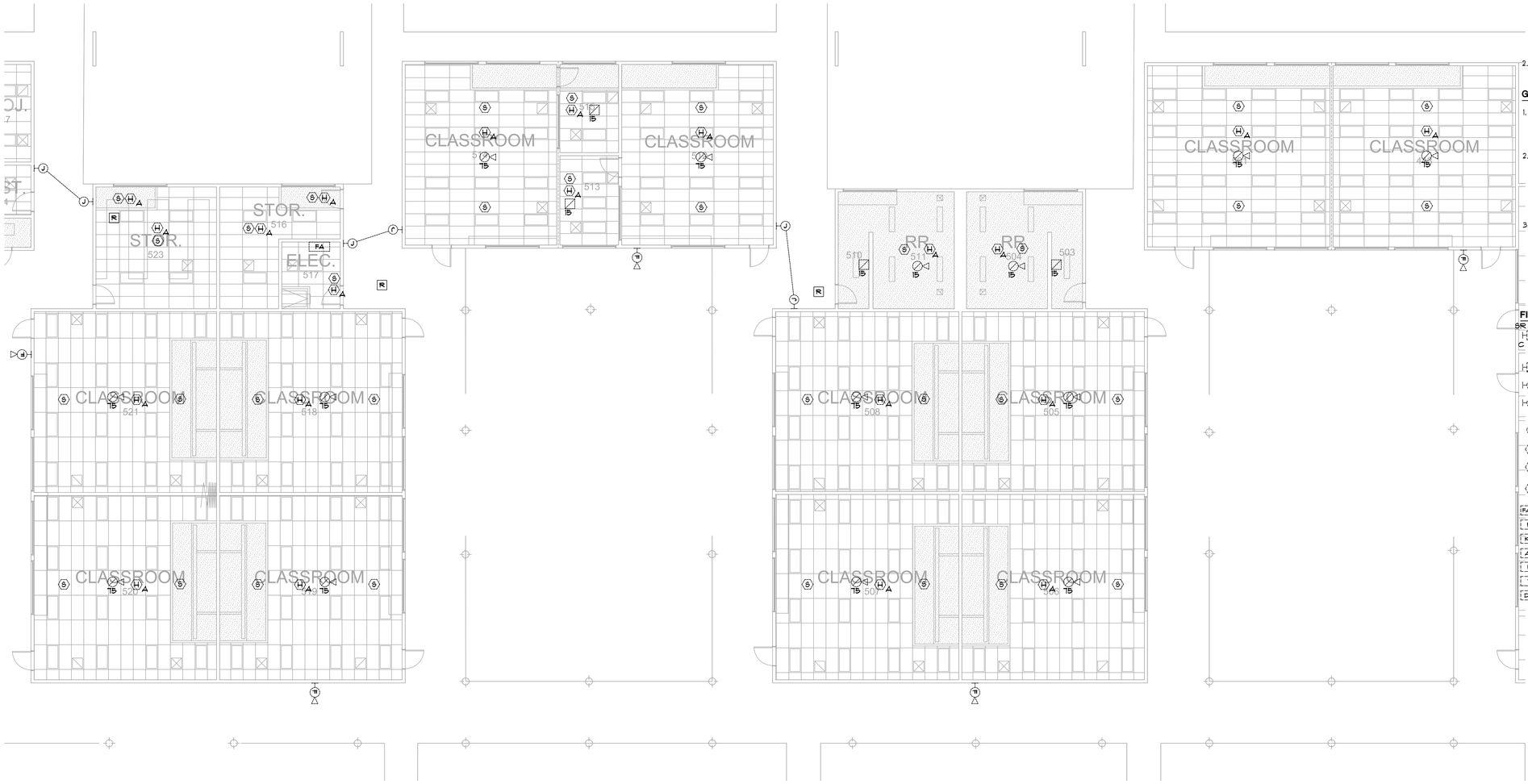
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E-10.4

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NORTH

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

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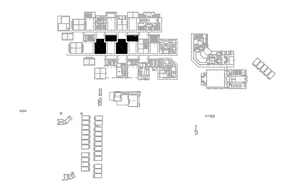
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ENGINEER OF RECORD

RBV FIRE ALARM UPGRADE

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VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

KEYPLAN



REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE

DEMOLITION PLAN - FIRE ALARM

E-10.5

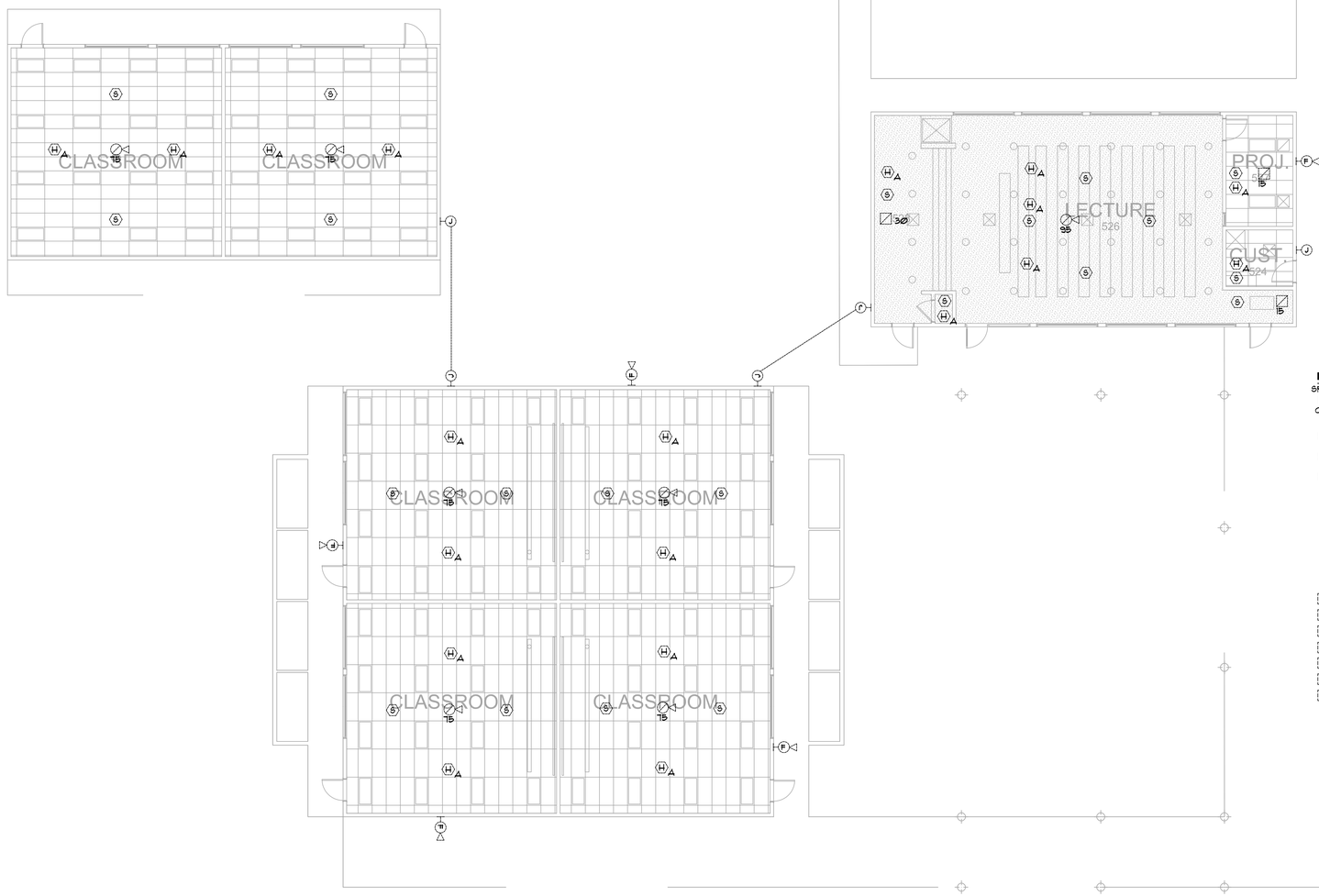
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NORTH

0 4 8 16

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

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No. C31020
EXP. 12/25
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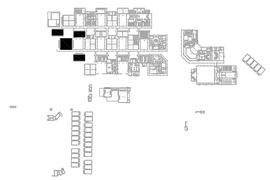
ENGINEER OF RECORD

RBV FIRE ALARM UPGRADE

RANCHO BUENA VISTA HIGH SCHOOL
1601 LONGHORN DRIVE
VISTA, CA 92081

VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

KEYPLAN



REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE

DEMOLITION PLAN - FIRE ALARM

E-10.6

REGISTERED PROFESSIONAL ENGINEER
No. E 14781
Exp. 6-30-2025
ELECTRICAL
STATE OF CALIFORNIA

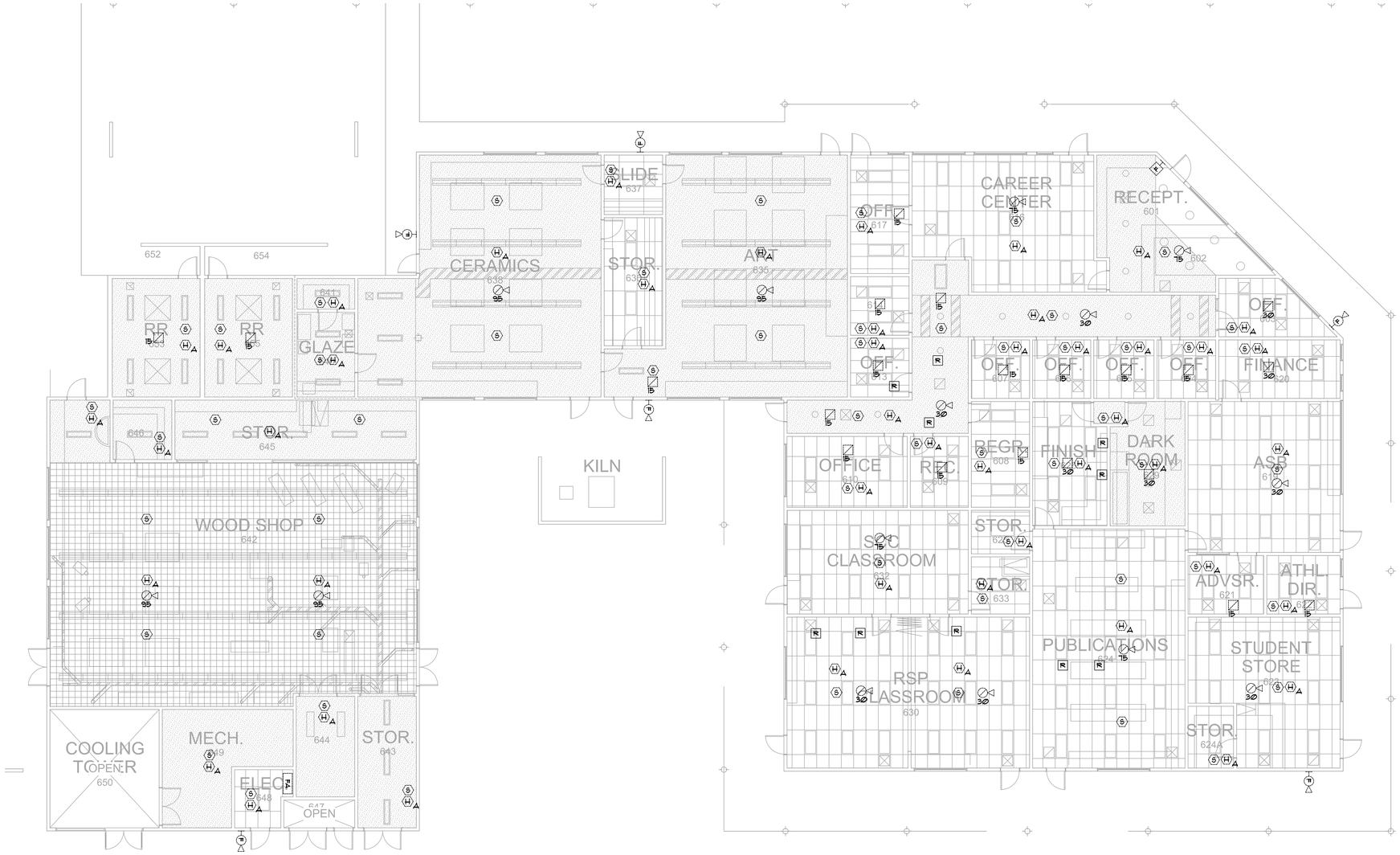
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DEMOLITION GENERAL NOTES·

1. ALL ITEMS SHOWN ON THIS DRAWING ARE EXISTING TO BE REMOVED UNLESS OTHERWISE NOTED. SEE REQUIREMENTS BELOW FOR SCOPE OF WORK. ALL OTHER ELECTRICAL ITEMS IN THIS BUILDING ARE EXISTING TO REMAIN. MAINTAIN POWER CIRCUIT CONTINUITY UNTIL NEW SOURCE IS ENERGIZED AND READY FOR TRANSFER. REFER TO POWER AND LIGHTING PLANS.
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FIRE ALARM SYMBOLS LEGEND TO BE REMOVED

- SR / C — MANUAL PULL STATION (C = CONDUIT (TYP), SR = SURFACE RACEWAY (TYP))
- WALL MOUNTED FLASHING LIGHT STROBE
- WALL MOUNTED FLASHING LIGHT HORN/STROBE
- WP — WALL MOUNTED WEATHERPROOF EXTERIOR HORN
- CEILING MOUNTED FLASHING LIGHT HORN/STROBE
- S — CEILING MOUNTED SMOKE DETECTOR
- H — CEILING MOUNTED HEAT DETECTOR
- H/A — HEAT DETECTOR MOUNTED ABOVE CEILING
- FACP — MAIN FIRE ALARM CONTROL PANEL
- FA — REMOTE FIRE ALARM POWER EXTENDER
- KHS — KITCHEN HOOD FIRE SUPPRESSION SYSTEM CONTROL PANEL
- ANN — REMOTE ANNUNCIATOR
- PS — FLOW SWITCH WITH M
- TS — TAMPER SWITCH WITH M
- DSM — DUAL SYNC MODULE (SEE RISER DIAGRAM FOR LOCATION)
- R — ADDRESSABLE RELAY MODULE
- M — ADDRESSABLE MONITOR MODULE

NORTH

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

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DATE: 02/29/2024

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ARCHITECT OF RECORD

LICENSED ARCHITECT
JOSHUA T. ECKLE
No. C31020
EXP. 12/25
STATE OF CALIFORNIA

ENGINEER OF RECORD

RBV FIRE ALARM UPGRADE

RANCHO BUENA VISTA HIGH SCHOOL
1601 LONGHORN DRIVE
VISTA, CA 92081
VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

KEYPLAN

REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE

DEMOLITION PLAN - FIRE ALARM

E-10.7

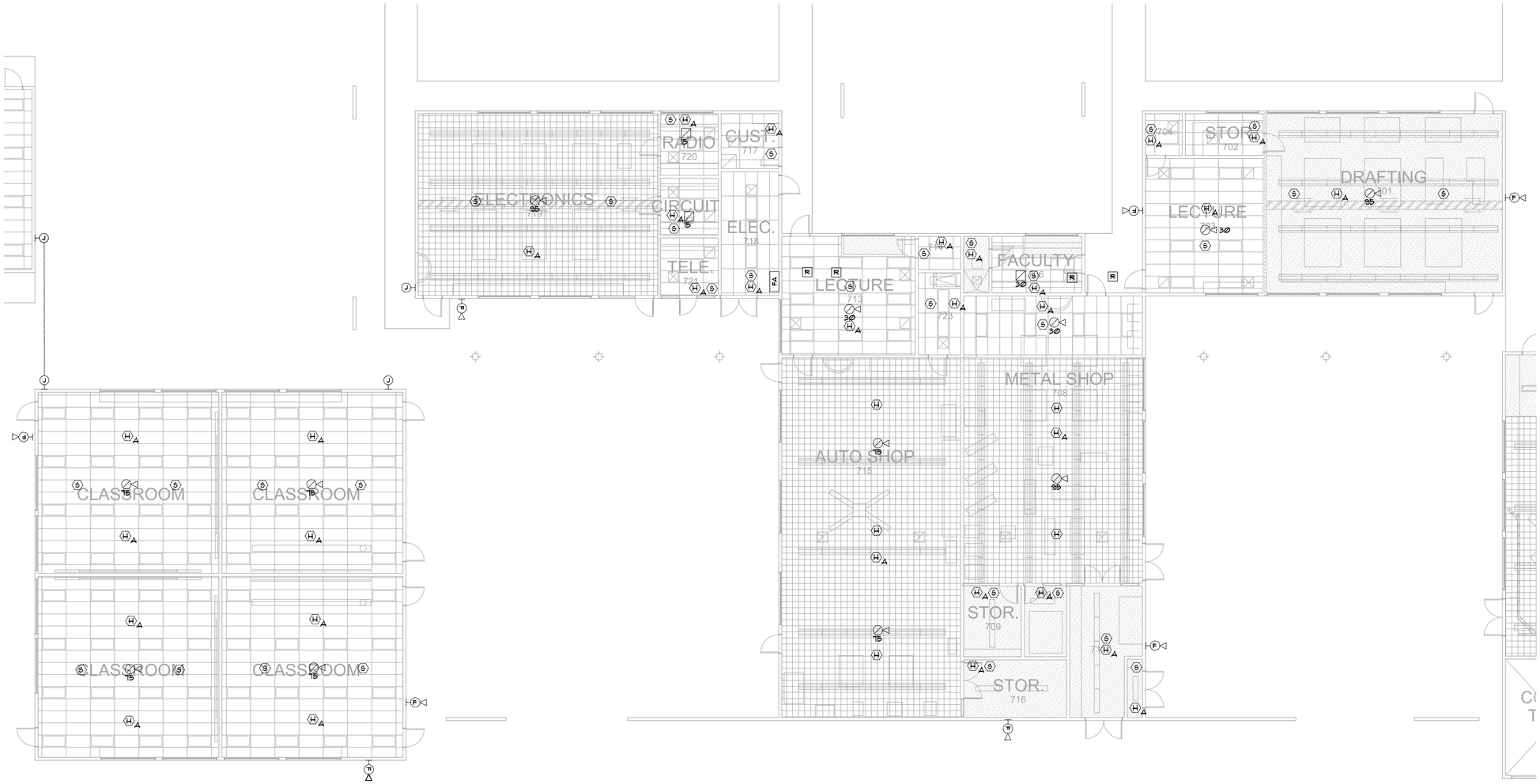
REGISTERED PROFESSIONAL ENGINEER
No. E 14781
Exp. 6-30-2025
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- DSM — DUAL SYNC MODULE (SEE RISER DIAGRAM FOR LOCATION)
- IR — ADDRESSABLE RELAY MODULE
- IM — ADDRESSABLE MONITOR MODULE

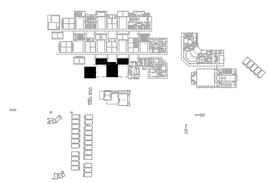
NORTH

0 4 8 16

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

KEY PLAN

KEYPLAN



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ARCHITECT OF RECORD

LICENSED ARCHITECT
JOSHUA T. ECKLE
No. C31020
EXP. 12/25
STATE OF CALIFORNIA

ENGINEER OF RECORD

REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE

DEMOLITION PLAN - FIRE ALARM

E-10.8

RBV FIRE ALARM UPGRADE

RANCHO BUENA VISTA HIGH SCHOOL
1601 LONGHORN DRIVE
VISTA, CA 92081

VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

REGISTERED PROFESSIONAL ENGINEER
No. E 14781
Exp. 6-30-2025
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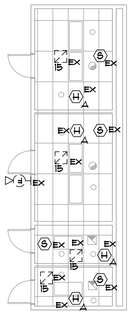
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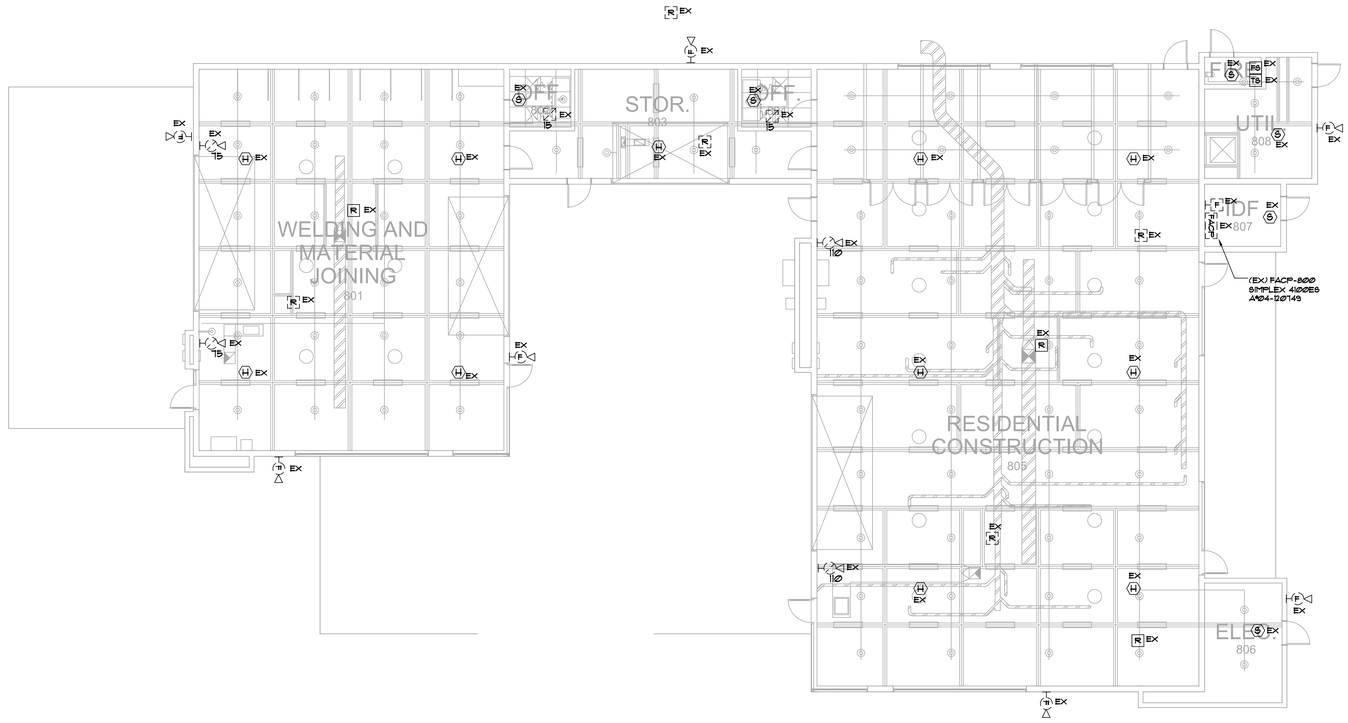
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ALL EXISTING DEVICES, FIRE ALARM PANEL CONDUIT AND WIRING IN EXISTING CTE BLDG 800 AND EXISTING RESTROOM RELOS ARE TO REMAIN. EXISTING CABLE CONNECTING EXISTING SIMPLEX 4100ES TO EXISTING CAMPUS FIRE ALARM SYSTEM SHALL BE REMOVED AND REPLACED WITH NEW CABLING. PROVIDE CRO99-TRIP FOR EXISTING SIMPLEX 4100ES AND NEW FACP NOTIFIER NFS2-3030. REFER TO FIRE ALARM RISER FOR DETAILS.





NORTH

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

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RBV FIRE ALARM UPGRADE

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VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

KEYPLAN

REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE

DEMOLITION PLAN - FIRE ALARM

E-10.9

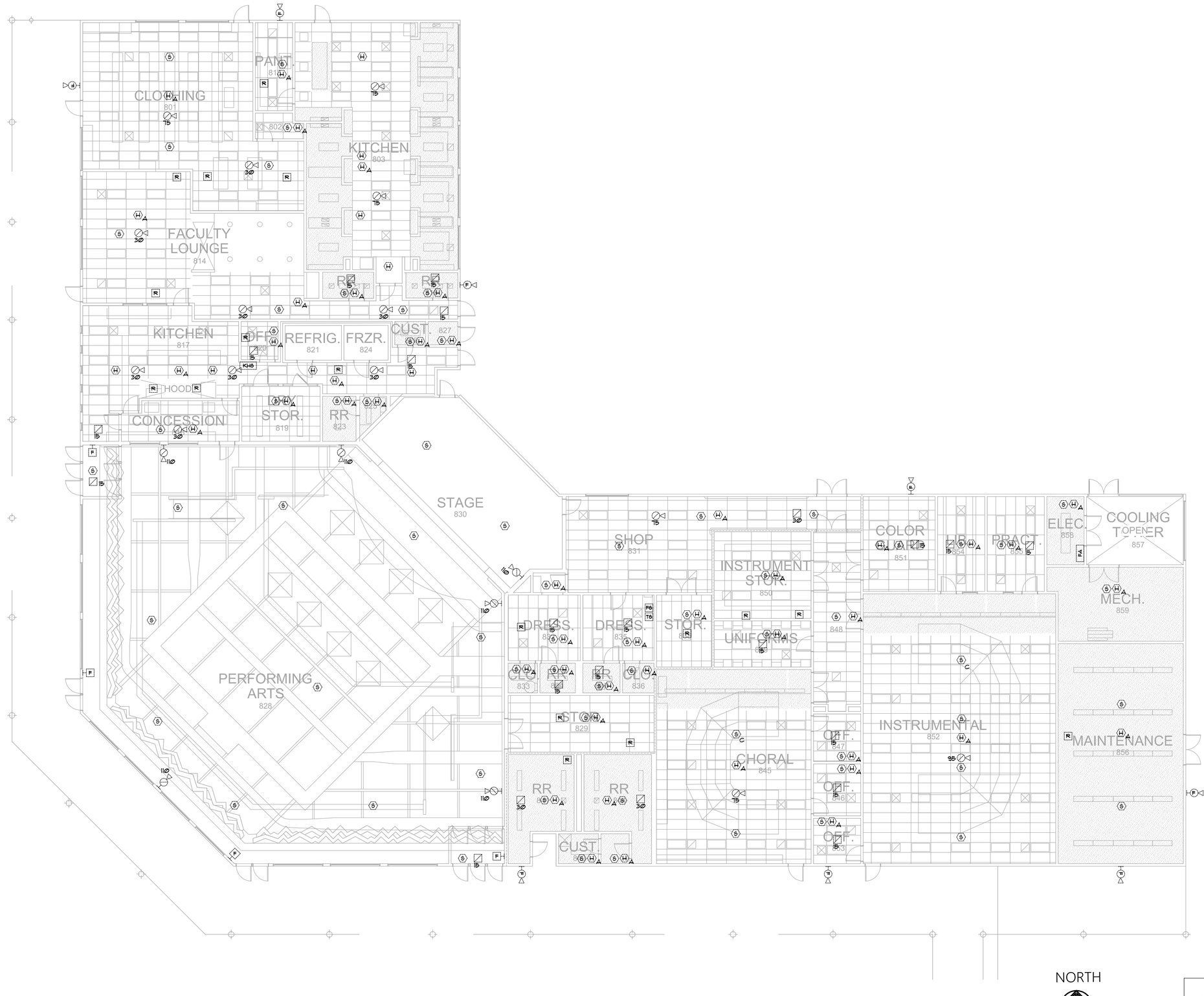
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MICHAEL S. RIVERA
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NORTH

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

DEMOLITION GENERAL NOTES:

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ARCHITECT OF RECORD

LICENSED ARCHITECT
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STATE OF CALIFORNIA

ENGINEER OF RECORD

RBV FIRE ALARM UPGRADE

RANCHO BUENA VISTA HIGH SCHOOL
1601 LONGHORN DRIVE
VISTA, CA 92081

VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

KEYPLAN

REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE
DEMOLITION PLAN - FIRE ALARM

REGISTERED PROFESSIONAL ENGINEER
No. E 14781
Exp. 6-30-2025
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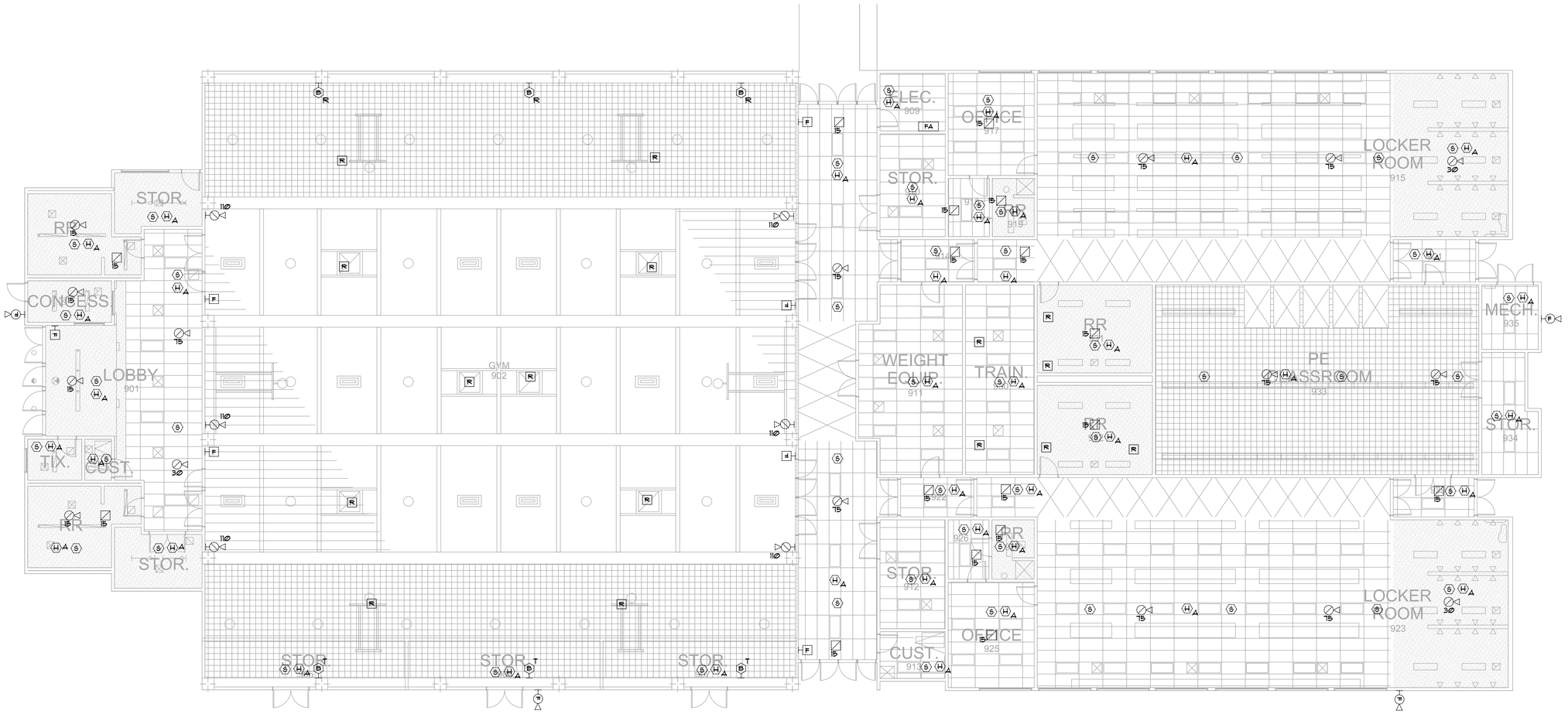
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E-10.10

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FIRE ALARM SYMBOLS LEGEND TO BE REMOVED

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NORTH

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

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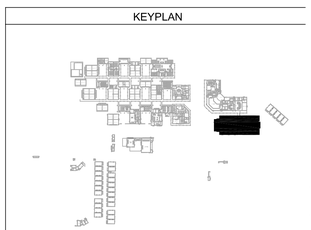
ENGINEER OF RECORD

RBV FIRE ALARM UPGRADE

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KEYPLAN



REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE

DEMOLITION PLAN - FIRE ALARM

E-10.11

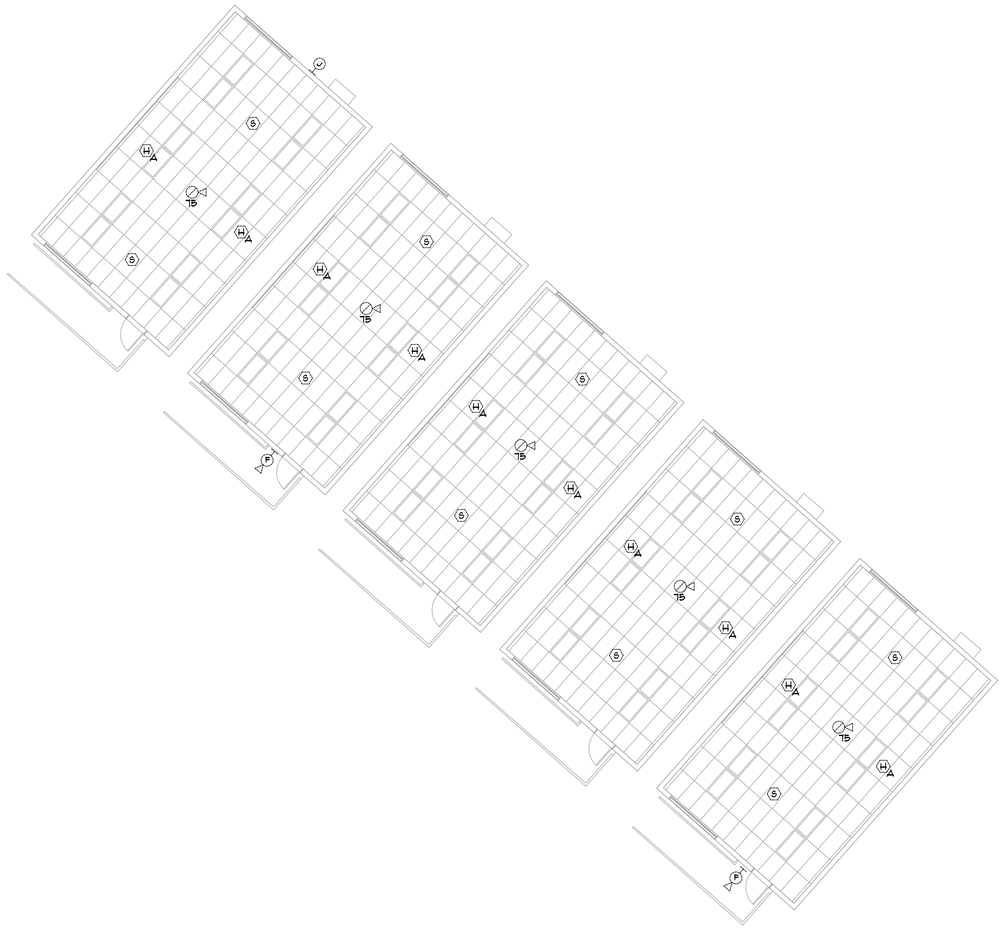
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1 DEMOLITION PLAN - FIRE ALARM
SCALE: 1/8" = 1'-0"

NORTH

0 4' 8' 16'

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- FA — REMOTE FIRE ALARM POWER EXTENDER
- KHS — KITCHEN HOOD FIRE SUPPRESSION SYSTEM CONTROL PANEL
- ANN — REMOTE ANNUNCIATOR
- FS — FLOW SWITCH WITH [M]
- TS — TAMPER SWITCH WITH [M]
- DSM — DUAL SYNC MODULE (SEE RISER DIAGRAM FOR LOCATION)
- R — ADDRESSABLE RELAY MODULE
- M — ADDRESSABLE MONITOR MODULE

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DATE: 02/29/2024

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LICENSED ARCHITECT
JOSHUA T. ECKLE
No. C31020
EXP. 12/25
STATE OF CALIFORNIA

ENGINEER OF RECORD

RBV FIRE ALARM UPGRADE

RANCHO BUENA VISTA HIGH SCHOOL
1601 LONGHORN DRIVE
VISTA, CA 92081

VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

KEYPLAN

REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE

DEMOLITION PLAN - FIRE ALARM

REGISTERED PROFESSIONAL ENGINEER
No. E 14781
Exp. 6-30-2025
ELECTRICAL
STATE OF CALIFORNIA

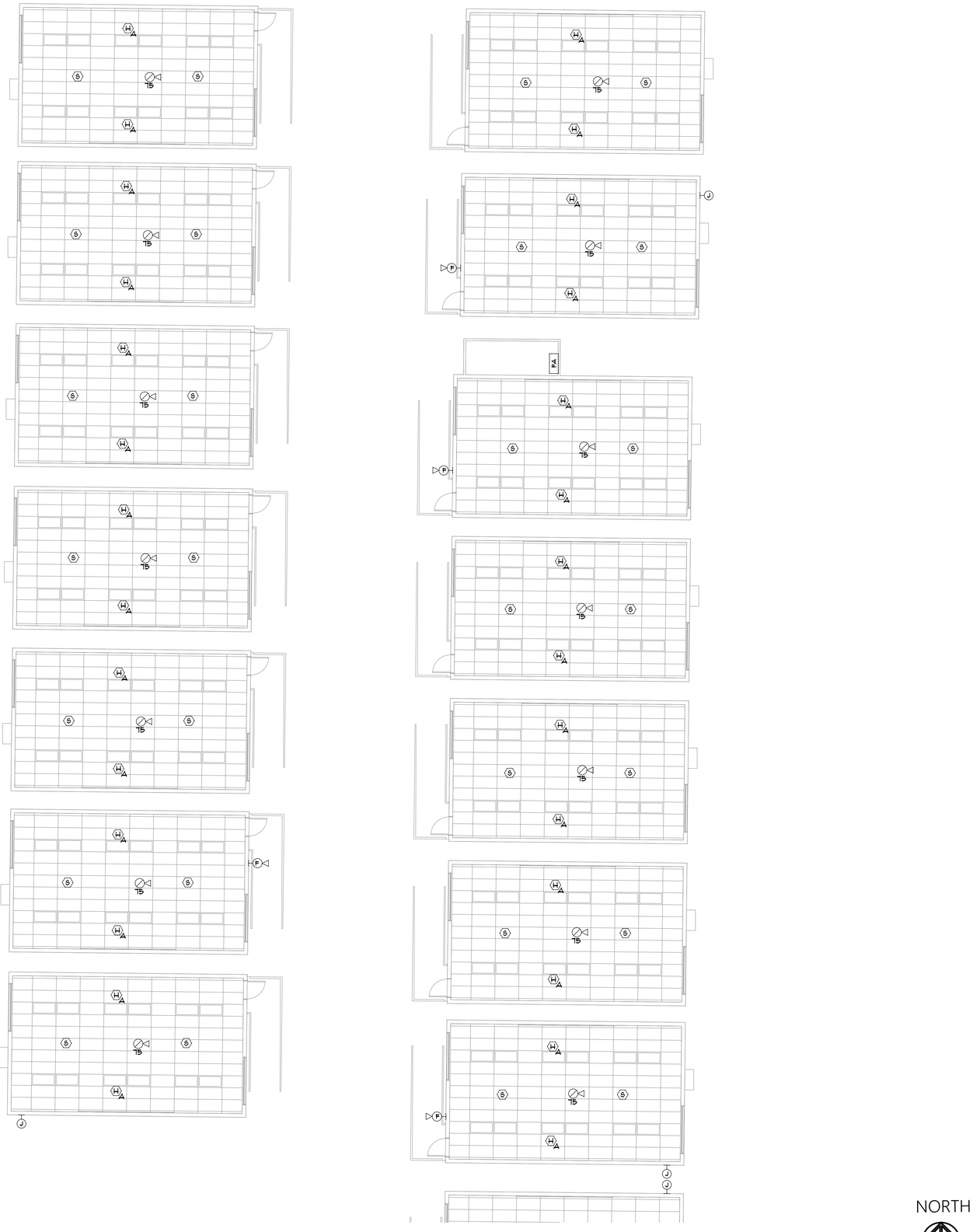
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1 DEMOLITION PLAN - FIRE ALARM
SCALE: 1/8" = 1'-0"

NORTH

DEMOLITION GENERAL NOTES:

1. ALL ITEMS SHOWN ON THIS DRAWING ARE EXISTING TO BE REMOVED UNLESS OTHERWISE NOTED. SEE REQUIREMENTS BELOW FOR SCOPE OF WORK. ALL OTHER ELECTRICAL ITEMS IN THIS BUILDING ARE EXISTING TO REMAIN. MAINTAIN POWER CIRCUIT CONTINUITY UNTIL NEW SOURCE IS ENERGIZED AND READY FOR TRANSFER. REFER TO POWER AND LIGHTING PLANS.
2. ALL ELECTRICAL DEMOLITION WORK SHALL BE DIRECTED BY THE ELECTRICAL CONTRACTOR AND COMPLY WITH CFC CH 33.

GENERAL DEMOLITION REQUIREMENTS

1. WIRING DEVICES
   WHERE EXISTING DEVICES ARE TO BE REMOVED, THE CONTRACTOR SHALL DISPOSE OF ALL WIRING AS REQUIRED.
2. FIRE ALARM
   WHERE EXISTING FIRE ALARM PANELS AND ASSOCIATED SMOKE, HEAT, DUCT DETECTORS, PULL STATIONS AND STROBE OR HORN UNITS ARE TO BE REMOVED, THE CONTRACTOR SHALL DISPOSED OF ALL DEVICES AND EQUIPMENT AS REQUIRED.
3. ALL BOXES, EXPOSED CONDUIT, WIRE, AND OTHER ITEMS ASSOCIATED WITH FIRE ALARM SYSTEM TO BE REMOVED, SHALL BE DISCONNECTED, REMOVED AND DISPOSED OF BY THE CONTRACTOR AS REQUIRED, UNLESS SPECIFICALLY NOTED OTHERWISE. CUT AND CAP CONCEALED CONDUITS. PATCH, SEAL AND REPAIR SURFACE TO MATCH ADJACENT AREA WHERE BOXES ARE REMOVED.

FIRE ALARM SYMBOLS LEGEND TO BE REMOVED

SR
C
- MANUAL PULL STATION
  C = CONDUIT (TYP)
  SR = SURFACE RACEWAY (TYP)
- WALL MOUNTED FLASHING LIGHT STROBE
- WALL MOUNTED FLASHING LIGHT HORN/STROBE
- WALL MOUNTED WEATHERPROOF EXTERIOR HORN
- CEILING MOUNTED FLASHING LIGHT HORN/STROBE
- CEILING MOUNTED SMOKE DETECTOR
- CEILING MOUNTED HEAT DETECTOR
- HEAT DETECTOR MOUNTED ABOVE CEILING
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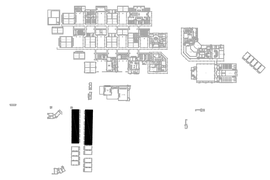
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ENGINEER OF RECORD

KEYPLAN



RBV FIRE ALARM UPGRADE

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1601 LONGHORN DRIVE
VISTA, CA 92081

VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023
SHEET TITLE

DEMOLITION PLAN - FIRE ALARM

E-10.13

REGISTERED PROFESSIONAL ENGINEER
MICHAEL S. RIVERA
No. E 14781
Exp. 6-30-2025
ELECTRICAL
STATE OF CALIFORNIA

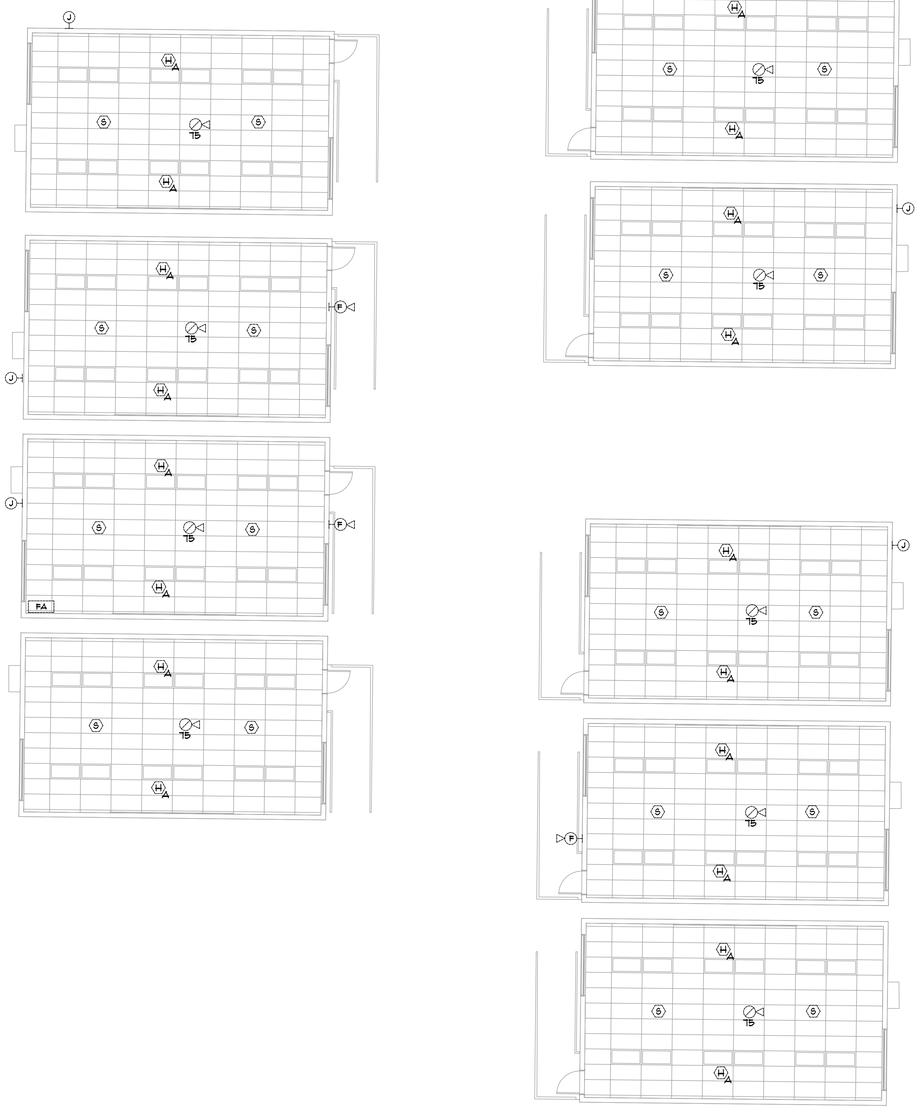
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1 DEMOLITION PLAN - FIRE ALARM

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

NORTH

0 4 8 16

DEMOLITION GENERAL NOTES:

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FIRE ALARM SYMBOLS LEGEND TO BE REMOVED

- SR / F / C — MANUAL PULL STATION (C = CONDUIT (TYP.), SR = SURFACE RACEWAY (TYP.))
- WALL MOUNTED FLASHING LIGHT STROBE
- WALL MOUNTED FLASHING LIGHT HORN/STROBE
- F — WALL MOUNTED WEATHERPROOF EXTERIOR HORN
- CEILING MOUNTED FLASHING LIGHT HORN/STROBE
- S — CEILING MOUNTED SMOKE DETECTOR
- H — CEILING MOUNTED HEAT DETECTOR
- H/A — HEAT DETECTOR MOUNTED ABOVE CEILING
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RBV FIRE ALARM UPGRADE

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VISTA UNIFIED SCHOOL DISTRICT
1234 ARCADIA AVENUE VISTA CA 92084

KEYPLAN



REVISIONS

MARK	DATE	DESCRIPTION

PROJECT NO: #Pln
MODEL FILE: 23-018_RBV FIRE ALARM_DRAFT.pln
PLOT DATE: 7/5/2023

SHEET TITLE

DEMOLITION PLAN - FIRE ALARM

E-10.14

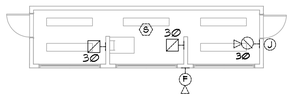
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No. E 14781
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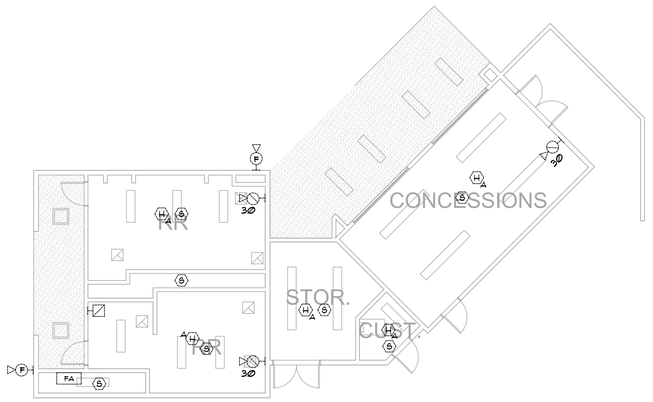
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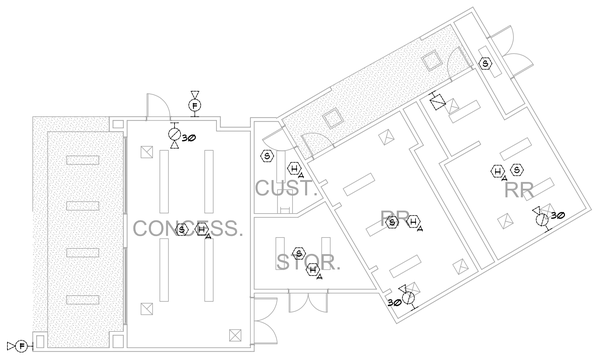
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FIRE ALARM SYMBOLS LEGEND TO BE REMOVED

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

NORTH

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KEYPLAN

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PROJECT NO: #Pln
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