GENERAL REQUIREMENTS:

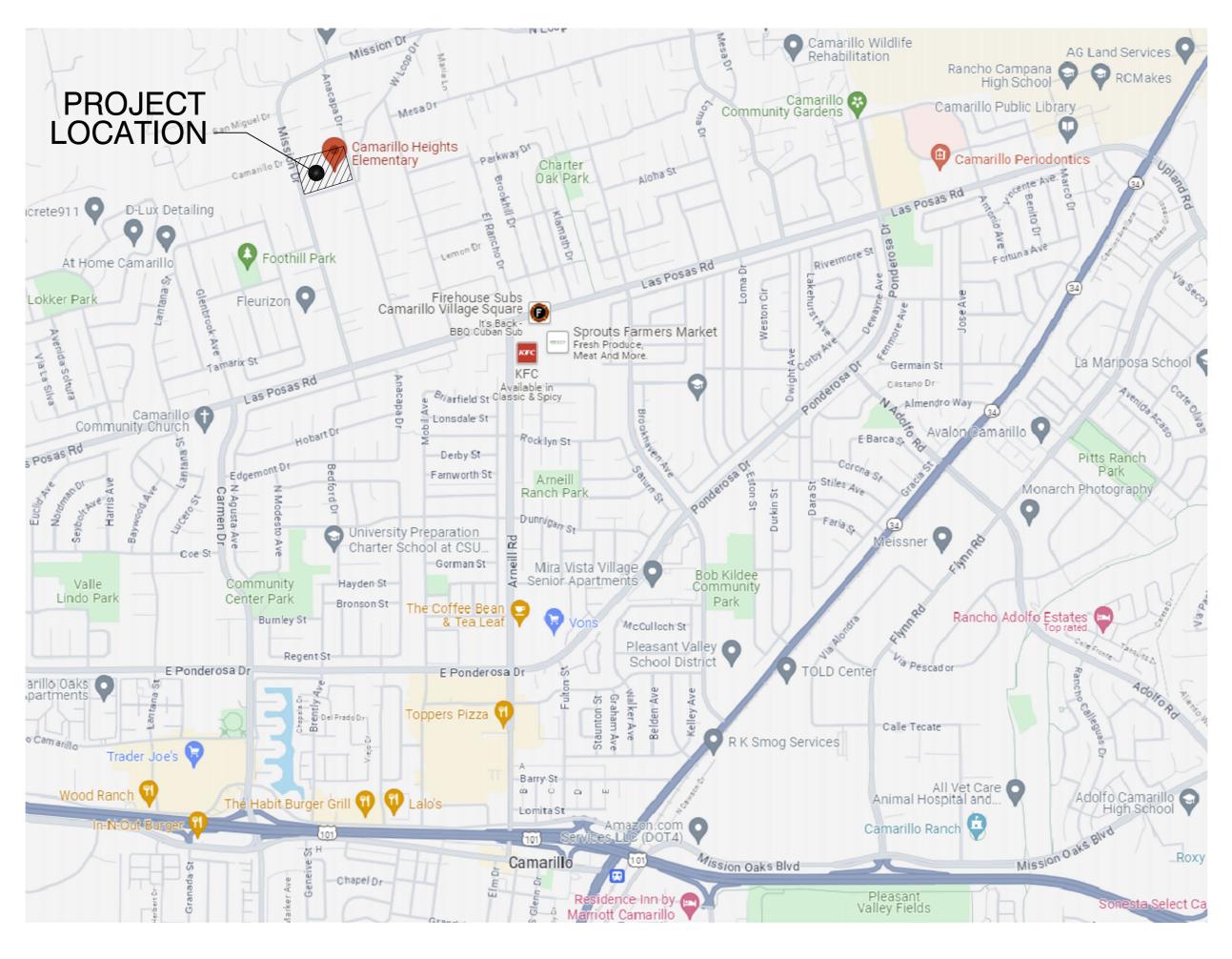
- 1. ALL WORK SHALL CONFORM TO 2022 EDITION TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).
- 2. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE
- 3. A 'DSA CERTIFIED' PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 24,
- 4. A 'DSA CERTIFIED' INSPECTOR WITH CLASS 3 CERTIFICATION IS REQUIRED FOR THIS **PROJECT**
- 5. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE SCHOOL BOARD SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THIS
- 6. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE TITLE 24. CALIFORNIA CODE OF REGULATIONS. SHOULD ANY EXISTING CONDITIONS WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHERE-IN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CALIFORNIA CODE OR REGULATIONS, A CONSTRUCTION CHANGE DOCUMENT, OR A SEPARATE SET OF PLANS AND SPECIFICATIONS. DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT BEFORE PROCEEDING WITH THE WORK.

GENERAL NOTES

- 1. ANY DIFFERENCE BETWEEN THE EXISTING CONSTRUCTION AS OBSERVED IN THE FIELD AND AS SHOWN ON THE DRAWINGS SHALL BE REPORTED TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.
- 2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARTING WORK THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES. THE CONTRACTOR IS RESPONSIBLE FOR CHECKING AND COORDINATING ALL DIMENSIONS REVIEW BUILDING LAYOUT WITH ARCHITECT BEFORE STARTING ANY FOOTING **EXCAVATION OR FOUNDATION WORK.**
- 3. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ACTUAL SITE CONDITIONS REGARDLESS OF INFORMATION SHOWN ON THE DRAWINGS. DISCREPANCIES BETWEEN CONDITIONS SHOWN OR NOT SHOWN ON DRAWINGS AND ACTUAL EXISTING VISIBLE, DISCERNABLE CONDITIONS AT THE JOB SITE, DO NOT RELIEVE THE CONTRACTOR FROM PERFORMING THE WORK OF THIS CONTRACT IN FULL CONFORMANCE WITH THE CONTRACT DOCUMENTS
- 4. IT SHALL BE THE RESPONSIBILTY OF THE GENERAL CONTRACTOR TO INSURE THAT ALL APPLICABLE SAFETY LAWS ARE STRICTLY ENFORCED AND TO MAINTAIN A SAFE
- 5. BIDDERS MUST VISIT THE BUILDING SITE AND FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS TO PROVIDE A PROJECT COMPLETE IN EVERY DETAIL AND READY FOR OCCUPANCY. DISCREPANCIES OR DELETIONS MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE THE BID DATE FOR CORRECTION.
- 6. ANY DAMAGE DONE TO THE EXISTING SITE OR FACILITIES DURING THE COURSE OF THE WORK SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE WITH NO ADDITIONAL COST TO THE DISTRICT.
- 7. BIDDERS SHALL ASSUME THAT ALL ITEMS INDICATED ON THE DRAWINGS ARE NEW CONSTRUCTION IF NOT INDICATED WITH AN (N) OR "NEW", UNLESS INDICATED AS "(E)"
- 8. ALL NEW WORK SHALL MATCH EXISTING IN KEEPING WITH GOOD CONSTRUCTION PRACTICE. IT IS THE INTENT OF THESE DOCUMENTS THAT THE PORTION OF THE SURFACE WHICH HAS BEEN INSTALLED, REPAIRED OR REPLACED, SHALL MATCH THE EXISTING ADJACENT SURFACES. AND THAT THE NEW WORK WILL NOT BE DISCERNABLE FROM THE EXISTING.
- 9. WHERE MINIMUM DIMENSIONS ARE INDICATED, EXISTING DIMENSIONS IN EXCESS OF THAT SHOWN MAY BE RETAINED UNLESS OTHERWISE NOTED.
- 10. CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF ALL OMISSIONS AND CONFLICTS BETWEEN THE ELEMENTS OF THE CONTRACT DOCUMENTS BEFORE PROCEEDING WITH THE WORK INVOLVED.
- 11. CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL, LANDSCAPE SITE FEATURES TO REMAIN. ALL DAMAGED WORK SHALL BE REPLACED WITH THE SAME MATERIALS, INCLUDING MATCHING THE EXISTING COLORS AND TEXTURES BY THE CONTRACTOR AT HIS OWN EXPENSE WITH NO ADDITIONAL
- 12. FIRE SAFETY DURING DEMOLITION AND CONSTRUCTION SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF THIS CODE AND THE APPLICABLE PROVISIONS OF
- 13. THE CALIFORNIA ENERGY CODE SECTION 10-103 REQUIRES ACCEPTANCE TESTING ON ALL NEWLY INSTALLED LIGHTING CONTROLS, MECHANICAL SYSTEMS, ENVELOPES, AND PROCESS EQUIPMENT AFTER INSTALLATION AND BEFORE PROJECT COMPLETION. AN ACCEPTANCE TEST IS A FUNCTIONAL PERFORMANCE TEST TO HELP ENSURE THAT NEWLY INSTALLED EQUIPMENT IS OPERATING AND IN COMPLIANCE WITH THE ENERGY
- 14. LIGHTING CONTROLS ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED LIGHTING CONTROLS ACCEPTANCE TEST TECHNICIAN (ATT).
- 15. MECHANICAL SYSTEM ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED MECHANICAL ATT FOR PROJECTS SUBMITTED ON OR AFTER OCTOBER 1, 2021.
- 16. ENVELOPE AND PROCESS EQUIPMENT ACCEPTANCE TESTS SHALL BE PERFORMED BY THE INSTALLING CONTRACTOR, ENGINEER/ARCHITECT OF RECORD OR THE OWNER'S
- 17. A LISTING OF CERTIFIED ATT CAN BE FOUND AT: HTTPS://WWW.ENERGY.CA.GOV/PROGRAMS-AND-TOPICS/PROGRAMS/ ACCEPTANCE-TEST-TECHNICIAN-CERTIFICATION-PROVIDER-PROGRAM/ACCEPTANCE.
- 18. THE ACCEPTANCE TESTING PROCEDURES MUST BE REPEATED, AND DEFICIENCIES MUST BE CORRECTED BY THE BUILDER OR INSTALLING CONTRACTOR UNTIL THE CONSTRUCTION/INSTALLATION OF THE SPECIFIED SYSTEMS CONFORM AND PASS THE REQUIRED ACCEPTANCE CRITERIA.
- 19. PROJECT INSPECTORS WILL COLLECT THE FORMS TO CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE BEEN COMPLETED.

PLEASANT VALLEY SCHOOL DISTRICT CAMARILLO HEIGHTS CAMPUS FIRE ALARM UPGRADES

35 CATALINA DR, CAMARILLO, CA 93010



VICINITY MAP

APPLICABLE CODES

CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING:

2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), TITLE 24 C.C.R. 2022 CALIFORNIA BUILDING CODE (CBC), TITLE 24 C.C.R. 2022 CALIFORNIA ELECTRICAL CODE (CEC), TITLE 24 C.C.R. PART 4 2022 CALIFORNIA MECHANICAL CODE (CMC), TITLE 24 C.C.R.

2022 CALIFORNIA PLUMBING CODE (CPC), TITLE 24 C.C.R. 2022 CALIFORNIA ENERGY CODE, TITLE 24 C.C.R. 2022 CALIFORNIA HISTORICAL BUILDING CODE, TITLE 24 C.C.R.

2022 CALIFORNIA FIRE CODE (CFC), TITLE 24, C.C.R

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

2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), TITLE 24, C.C.R. 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), TITLE 24, C.C.R.

STATE BUILDING CODE

(Part 1, Title 24, C.C.R.)

"The intent of these drawings and specification 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 Title 24, California Code of Regulations, a change order, or a separate set of plans and specifications, detailing and specifying the required work shall be submitted to and approved by the Division of the State Architect before

Changes to the approved drawings and specifications shall be made by an addenda or a construction change document (CCD) approved by the Division of the State Architect, as required by Section 4-338,

PROJECT TEAM

KRUGER BENSEN ZIEMER ARCHITECTS, INC. 199 FIGUEROA STREET, SUITE 100A VENTURA, CA 93001 OFFICE: (805) 963-1726 PRINCIPAL-IN-CHARGE: TODD A. JESPERSEN, AIA EMAIL ADDRESS: toddj@kbzarch.com PROJECT TEAM: JONATHAN D. LEE, AIA EMAIL ADDRESS: jonathanl@kbzarch.com

ELECTRICAL ENGINEER LUCCI & ASSOCIATES INC. 3251 CORTE MALPASO #511 CAMARILLO, CA 93010 OFFICE: (805) 389-6520 **ENGINEER: KEN LUCCI** EMAIL ADDRESS: ken@lucciland.com

OWNER

PLEASANT VALLEY SCHOOL DISTRICT 600 TEMPLE AVE, CAMARILLO, CA 93010 OFFICE: (805) 389-2100

PROJECT SCOPE

REPLACE (E) FIRE ALARM SYSTEM WITH NEW FULLY AUTOMATIC FIRE ALARM SYSTEM WITH VOICE EVACUATION

SHEET INDEX

GENERAL

1. G-001 TITLE SHEET

ARCHITECTURAL 2. A-100 SITE PLAN

3. E100 GENERAL NOTES, ABBREVIATIONS, SYMBOLS &

4. E600 FIRE ALARM SITE PLAN - NEW WORK NEW FIRE ALARM MASTER LEGEND EMERGENCY VOICE/ ALARM/DETECTION COMM

SYSTEM RISER DIAGRAM E603 EMERGENCY VOICE/ALARM COMM SYSTEM - FIRE

ALARM DETAILS 8. E604 HONEYWELL CUT SHEETS MULTI-CRITERIA CO & **SMOKE SENSOR & MONITOR MODULE**

9. E605 HONEYWELL CUT SHEETS SPEAKER STROBES & PHOTOELECTRIC SMOKE SENSOR

10. E606 HONEYWELL CUT SHEETS TEMPERATURE SENSORS &

11. E610 CLASSROOM BUILDING 100 FIRE ALARM PLAN - NEW 12. E620 CLASSROOM BUILDING 200 FIRE ALARM PLAN - NEW 13. E630 CLASSROOM BUILDING 300 FIRE ALARM PLAN - NEW CLASSROOM BUILDING 400 FIRE ALARM PLAN - NEW

15. E650 CLASSROOM BUILDING 500 FIRE ALARM PLAN - NEW CLASSROOM BUILDING 600 FIRE ALARM PLAN - NEW 17. E670 CLASSROOM BUILDING 700 FIRE ALARM PLAN - NEW 18. E680 CLASSROOM BUILDING 800 FIRE ALARM PLAN - NEW

19. E690 CLASSROOM BUILDING 900 FIRE ALARM PLAN - NEW 20. E691 CLASSROOM BUILDING 1000 KINDERGARTEN FIRE ALARM PLAN - NEW

21. E692 CLASSROOM BUILDING 1100 FIRE ALARM PLAN - NEW 22. E693 KITCHEN BUILDING 1200 FIRE ALARM PLAN - EXISTING (IN CONSTRUCTION)

23. E700 FIRE RISER DIAGRAM 24. E701 VBUS/SBUS RISER DIAGRAM

25. E720 BUILDING 200, 1100, 100 & 500 EMERGENCY VOICE/ALARM COMM SYSTEM - CALCULATIONS

26. E730 BUILDING 300 & 600 EMERGENCY VOICE/ALARM COMM SYSTEM - CALCULATIONS 27. E770 BUILDING 700 & 800 EMERGENCY VOICE/ALARM COMM

SYSTEM - CALCULATIONS BUILDING 1000 KINDER EMERGENCY VOICE/ALARM

COMM SYSTEM - CALCS 29. E793 BUILDING 1200 KITCHEN EMERGENCY VOICE/ALARM

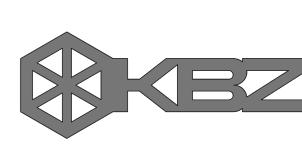
COMM SYSTEM - CALCS 30. E800 ELECTRICAL DETAILS

TOTAL: 30 SHEETS

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 03-124308 INC: REVIEWED FOR SS ☐ FLS ☑ ACS ☐

DSA STAMP & SIGNATURE

VALLEY SCHOOL ELEMENTARY CAMARILLO



KRUGER BENSEN ZIEMER ARCHITECTS, INC. 199 FIGUEROA ST, STE 100A VENTURA CA 93001 TELEPHONE (805) 963-1726 WWW.KBZARCH.COM

TODD A JESPERSEN, AIA

JONATHAN LEE PROJECT ARCHITECT

All ideas, design arrangements and plans indicated or represented by this drawing are owned by and are the property of Kruger-Bensen-Ziemer, Al. architects, and were created, evolved and developed for use on, and in connection with, the specified projects. None of such ideas, designs. rrangements or plans shall be used by or disclosed to any person, firm or corporation for any purpose whatsoever without the written permission of

ENGINEER'S

STAMP & SIGNATURE



CONSULTANT INFORMATION

5 -/-/-4 -/-/-3 -/-/-2 -/-/--/-/-XX REVISION DESCRIPTION DATE

DRAWN TJ CHECKED ti DATE 05/04/2024

JOB. NO. 24003

SHEET TITLE SHEET TITLE

SHEET

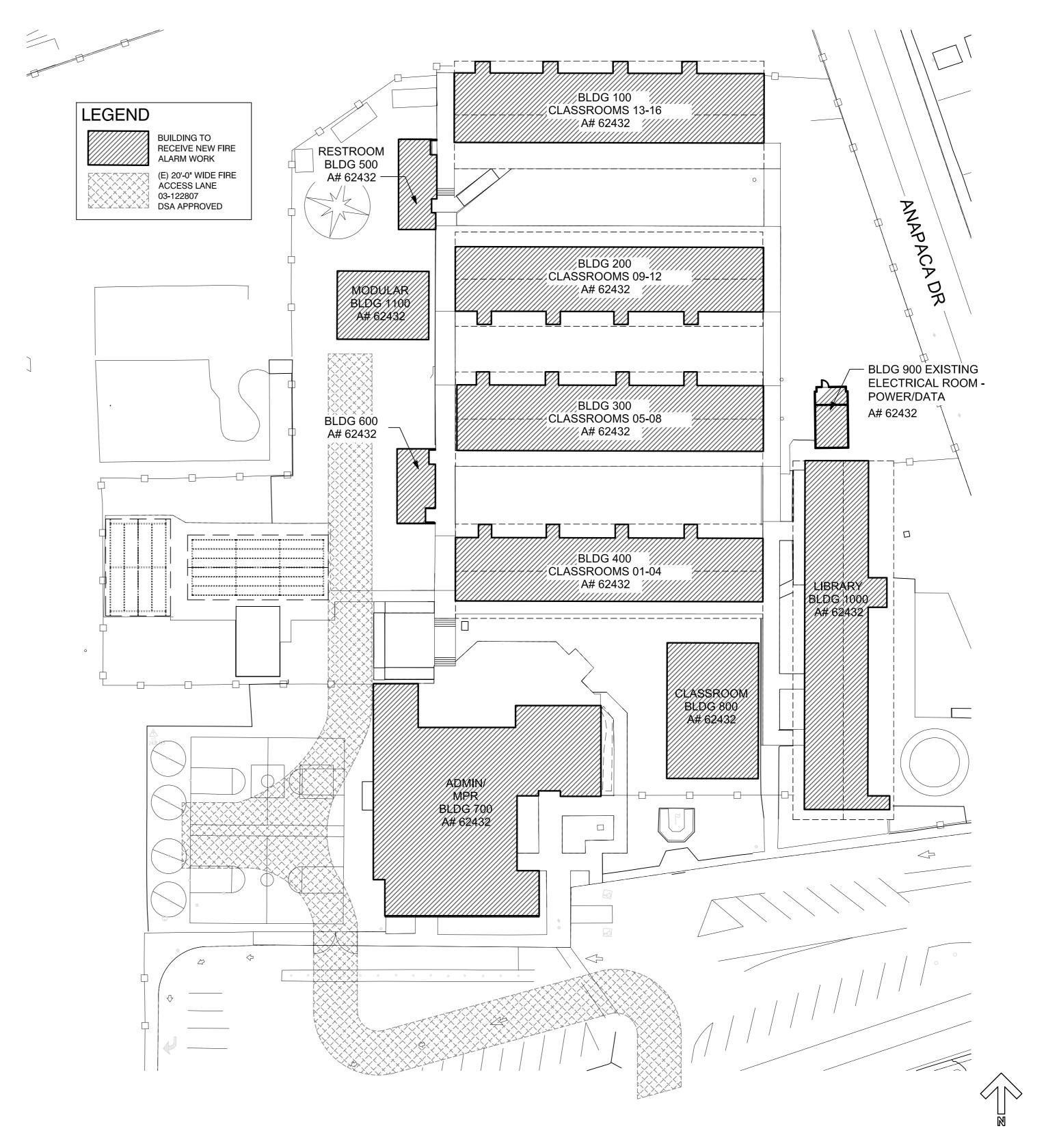
CODE ANALYSIS

		CONSTRUCTION	FIRE	ALLOWABLE	ACTUAL
BLDG. NAME	OCC. TYPE	TYPE	SPRINKLER	AREA	AREA
BUILDING 100 CLASSROOM	E	V-B	NONE	9,000 S.Q.	4,650 S.Q.
BUILDING 200 CLASSROOM	E	V-B	NONE	9,500 S.Q.	4,300 S.Q.
BUILDING 300 CLASSROOM	E	V-B	NONE	9,500 S.Q.	4,350 S.Q.
BUILDING 400 CLASSROOM	E	V-B	NONE	9,500 S.Q.	4,250 S.Q.
BUILDING 500 RESTROOM	U	V-B	NONE	5,500 S.Q.	700 S.Q.
BUILDING 600 RESTROOM	U	V-B	NONE	5,500 S.Q.	550 S.Q.
BUILDING 700 ADMIN/MPR	A-2 & B	V-B	NONE	SEE BELOW	SEE BELOW
BUILDING 800 CLASSROOM	E	V-B	NONE	9,500 S.Q.	2,600 S.Q.
BUILDING 900 ELECTRICAL	U	V-B	NONE	5,500 S.Q.	500 S.Q.
BUILDING 1000 LIBRARY	A-3	V-B	NONE	6,000 S.Q.	4,800 S.Q.
BUILDING 1100 CLASSROOM	E	V-B	NONE	9,500 S.Q.	1,300 S.Q.

BUILDING 700 (MIXED-USE OCCUPANCY)

A-2 OCCUPANCY IS 3,450 S.F. OUT OF 6,000 S.F. ALLOWED = 57.50% B OCCUPANCY IS 3,650 S.F. OUT OF 9,000 S.F. ALLOWED = 40.56%

TOTAL = 57.50 + 40.56 = 98.06 < 100 (OK)





IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT APP: 03-124308 INC: REVIEWED FOR

SS ☐ FLS ☑ ACS ☐

DSA STAMP & SIGNATURE

PLEASANT VALLEY SCHOOL DISTRICT HEIGHTS ELEMENTARY SCHOOL CAMARILLO

KRUGER BENSEN ZIEMER ARCHITECTS, INC.

TELEPHONE (805) 963-1726 WWW.KBZARCH.COM TODD A JESPERSEN, AIA Principal-in-charge

JONATHAN LEE PROJECT ARCHITECT

All ideas, design arrangements and plans indicated or represented by this drawing are owned by and are the property of Kruger-Bensen-Ziemer, AlA architects, and were created, evolved and developed for use on, and in connection with, the specified projects. None of such ideas, designs, arrangements or plans shall be used by or disclosed to any person, firm or corporation for any purpose whatsoever without the written permission of Kruger-Bensen-Ziemer.

ENGINEER'S STAMP & SIGNATURE

199 FIGUEROA ST, STE 100A VENTURA CA 93001

ARCHITECT'S STAMP & SIGNATURE

CONSULTANT INFORMATION

5 -/-/-4 -/-/--/-/-2 -/-/--/-/-DATE REVISION DESCRIPTION DRAWN TJ CHECKED tj

DATE 05/04/2024 JOB. NO. 24003

SHEET SITE PLAN TITLE

SHEET **A-100**

THE DRAWINGS AND THESE GENERAL NOTES DESCRIBE THE SCOPE OF WORK AND SYSTEMS. THE MATERIAL REQUIRED FOR THE WORK SHALL BE CONTRACTOR FURNISHED AND CONTRACTOR INSTALLED, UNLESS SPECIFICALLY NOTED OTHERWISE. THE WORK INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING PRINCIPAL SYSTEMS AND EQUIPMENT

AND PAY FOR ALL NECESSARY CONSTRUCTION PERMITS, INSPECTION FEES, AND OTHER CHARGES BY AGENCIES HAVING

PROVIDE AND INSTALL ALL MATERIALS IN CONFORMANCE WITH THE 2016 C.E.C., CALIFORNIA ADMINISTRATIVE CODE TITLE 8, AND OTHER CODES AND REGULATIONS HAVING JURISDICTION. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH THE REOUIREMENTS OF THE INSPECTING AUTHORITY AND THE MANUFACTURERS RECOMMENDATIONS.

BEFORE SUBMITTING BID, BECOME THOROUGHLY FAMILIAR WITH ACTUAL EXISTING CONDITIONS AT THE BUILDING. THE INTENT OF THE WORK IS SHOWN ON THE DRAWINGS AND DESCRIBED HEREINAFTER. BY THE ACT OF SUBMITTING A BID PROPOSAL FOR THE WORK, THE CONTRACTOR SHALL BE DEEMED TO HAVE MADE SUCH STUDY AND EXAMINATION AND TO ACCEPT ALL CONDITIONS PRESENT AT THE SITE. NO REQUEST FOR ADDITIONAL PAYMENT WILL BE CONSIDERED AS VALID, DUE TO FAILURE TO ALLOW FOR CONDITIONS WHICH MAY EXIST.

COORDINATE ALL WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL

ELECTRICAL CONNECTION REQUIRED WHETHER SHOWN ON ELECTRICAL DRAWINGS OR NOT. ELECTRICAL EQUIPMENT LOCATIONS INDICATED ARE SHOWN DIAGRAMMATICALLY, EXACT LOCATION SHALL BE VERIFIED. SCALING OFF OF DRAWINGS SHALL BE DONE AT CONTRACTORS RISK. DO NOT SCALE DEVICES, LIGHTING FIXTURES OR ANY EQUIPMENT FROM PLANS. LIGHTING FIXTURE OUANTITIES AND LENGTHS SHALL BE CONTRACTORS RESPONSIBILITY. FIXTURES ARE SHOWN FOR CIRCUITING ONLY. CONTRACTOR TO VERIFY SIZES & QUANTITIES PRIOR TO BID.

UNINTERRUPTED EXISTING ELECTRICAL POWER SHALL BE MAINTAINED TO OTHER TRADES FOR TEMPORARY POWER AREAS OF THE SITE DURING CONSTRUCTION. PROVIDE ANY TEMPORARY SERVICES AS MAY BE REQUIRED. IDENTIFY AT BID TIME, ALL WORK TO BE DONE ON PREMIUM TIME AND THE TOTAL OVERTIME MAN-HOURS REQUIRED FOR COMPLETION.

PROVIDE RECORD DRAWINGS IN ACAD TO THE OWNER WITH ALL CHANGES NOTED THEREON AT THE COMPLETION OF THE PROJECT, RECORD DRAWINGS SHALL BE SIGNED AND DATED BY CONTRACTOR PRIOR TO RELEASE OF FINAL RETENTION OF ALL

CONTRACTOR SHALL UNCONDITIONALLY GUARANTEE ALL LABOR AND MATERIALS ON ALL WORK AGAINST DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR.

SUBMIT SHOP DRAWINGS AND MATERIAL LIST FOR REVIEW PRIOR TO COMMENCING ANY WORK, ALL EQUIPMENT TO BEAR U. LABEL OR THAT OF ANOTHER ACCEPTABLE TESTING LABORATORY. SHOP DRAWINGS MUST BE STAMPED BY THE CONTRACTOR FOR CONFORMANCE PRIOR TO SUBMITTAL. SUBMIT THREE HARD COPY SETS OF SHOP DRAWINGS FOR REVIEW PRIOR TO PURCHASING ALL BREAKER MOUNTING HARDWARE, DISCONNECT SWITCHES, FUSES, CONTROLLERS, LIGHTING FIXTURES, LIGHT SWITCHES, RECEPTACLES, ETC.

CONTRACTOR'S BID SHALL BE BASED ON ALL WORK SHOWN ON THE PLANS AND AS SPECIFIED. IF CONTRACTOR PROPOSES TO SUBSTITUTE FOR EQUIPMENT SPECIFIED. HE SHALL SUBMIT HIS REQUEST FOR CONSIDERATION OF THE OWNER AND ENGINEER PRIOR TO BID IN WRITING. ALL SUBSTITUTIONS MUST BE REVIEWED BY THE ENGINEER IN WRITING. SUCH REVIEW SHALL NO RELIEVE THE CONTRACTOR COMPLYING WITH THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS, AND THE CONTRACTOR SHALL BE RESPONSIBLE AT HIS OWN EXPENSE FOR ANY CHARGES RESULTING FROM HIS PROPOSED SUBSTITUTIONS WHICH AFFECT OTHER PARTS OF HIS OWN WORK, THE OWNER, ENGINEER OF RECORD OR THE WORK OF OTHER CONTRACTORS

ALL WORK AND MATERIAL SHALL CONFORM TO THE LATEST RULES OF THE GOVERNING ELECTRICAL CODE AND INSTALLATION SHALL

ALL MATERIALS SHALL BE NEW AND LISTED FOR THE APPLICATION BY UNDERWRITERS LABORATORY (U.L.).

BE OF THE LATEST INDUSTRY STANDARDS OF WORKMANSHIP.

CONDUIT SHALL BE EMT. PVC, IMC, RIGID OR FLEXIBLE STEEL TYPE, CONDUIT SHALL BE MANUFACTURED IN ACCORDANCE WITH UL-1 A GROUND WIRE IS REQUIRED IN ALL FLEXIBLE CONDUIT AND UNDERGROUND CONDUIT. BUSHINGS SHALL BE INSTALLED ON ALL COMMUNICATION, TELEPHONE & SPEAKER CONDUITS. PROVIDE 3/16" NYLON PULL STRING IN ALL EMPTY CONDUITS. NO MC, BX OR AC90 SHALL BE PERMITTED. FLEXIBLE STEEL CONDUIT RUNS SHALL BE LIMITED TO A MAXIMUM LENGTH OF 6 FOOT, ALL CONNECTIONS SHALL BE COMPRESSION & NOT SCREW TYPE. ALL FIRE ALARM CONDUITS SHALL BE PAINTED RED.

FEEDERS AND BRANCH CIRCUITS IDENTIFICATION identify feeders with the corresponding circuit designation at the over-current device, load end, and in pull BOXES WITH E-Z CODE OR OTHER APPROVED WIRE MARKER. IDENTIFY BRANCH CIRCUITS WITH I.D. MARKERS, THE CORRESPONDING CIRCUIT DESIGNATION AT THE OVER-CURRENT DEVICE, AT ALL SPLICES, IN JUNCTION BOXES, AND IN OUTLETS. USE PLASTIC COATED SELF-STICKING MARKERS SUCH AS THOMAS & BETTS E-Z CODE FOR IDENTIFICATION OF CONDUCTORS. IDENTIFY SIGNAL & COMMUNICATION CABLES AT TERMINAL AND OUTLET UNIQUELY WITH PERMANENT LABELING.

DELIVER ALL CONDUCTORS TO THE JOB SITE IN ORIGINAL UNBROKEN CARTON OR REEL, PROPERLY TAGGED WITH U.L. LABEL, SIZE, COPPER CONDUCTORS FOR ALL WIRING, USE CONDUCTORS WITH 90°C THHN/THWN 600 VOLTS INSULATION, UNLESS OTHERWISE NOTED, CONDUCTOR SIZE NO.1 AWG AND SMALLER WITH 90 DEGREE C INSULATION ARE TO USE THE 60 DEGREE COLUMN OF THE CODE, TABLE 310-16, TO DETERMINE AMPACITY. CONDUCTORS #1/0 AWG AND LARGER WITH 75 DEGREE AND 90 DEGREE INSULATION ARE TO USE THE 75 DEGREE COLUMN OF CODE, TABLE 310-16, TO DETERMINE AMPACITY, (110.14C) WHERE THE NUMBER OF CONDUCTORS IN A RACEWAY OR CABLE EXCEEDS THREE, THE ALLOWABLE AMPACITY OF EACH CONDUCTOR SHALL BE REDUCED PER

STRUCTURAL SUPPORT (SEE E800 FOR MOUNTING DETAILS)

ELECTRICIANS" PERFORMING WORK ON THIS PROJECT SHALL BE CURRENTLY CERTIFIED IN ACCORDANCE WITH THE STATE OF CALIFORNIA AB931 AND THE DIVISION OF APPRENTISHIP STANDARDS SECTION 3099.

NOTIFY THE OWNER IMMEDIATELY WHEREVER EXISTING EQUIPMENT IS ENCOUNTERED WHICH MUST BE RELOCATED DUE TO THE NEW CONSTRUCTION, AND WHICH IS NOT INDICATED ON THE PLANS. ALL REMOVED MATERIALS AND EQUIPMENT WHICH ARE SALVAGEABLE SHALL REMAIN THE PROPERTY OF THE OWNER, DELIVER SUCH

SALVAGED MATERIALS AND EQUIPMENT ON THE PREMISES AS DIRECTED BY OWNER, AND NEATLY PILE OR STORE THEM AND PROTECT FROM DAMAGE. REMOVE FROM PREMISES AND DISPOSE OF ALL MATERIALS CONSIDERED BY THE OWNER TO BE SCRAP.

ALL EXISTING FIRE ALARM & ELECTRICAL DEVICES, CIRCUITS CONDUCTORS, FEEDERS ETC., WHEN NOTED TO BE REMOVED, SHALL BE REMOVED TO THE LAST ACTIVE DEVICE. DEVICES NO LONGER UTILIZED BUT REMAINING AS LAST ACTIVE DEVICE SHALL BE LABELED AS

'SPARE'. COORDINATE ALL OUTAGES WITH OWNERS REPRESENTATIVE.

DISCONNECT AND MAKE SAFE ALL ELECTRICAL SYSTEMS ON SITE AND IN WALL, FLOORS, AND CEILINGS SCHEDULED FOR REMOVAL.

REMOVE, RELOCATE, AND EXTEND EXISTING INSTALLATIONS TO ACCOMMODATE NEW CONSTRUCTION.

REMOVE ABANDONED WIRING TO SOURCE OF SUPPLY AND RE-LABEL DEVICES AS SPARES.

REMOVE ABANDONED CONDUIT, INCLUDING ABANDONED CONDUIT ABOVE ACCESSIBLE CEILING FINISHES. CUT CONDUIT FLUSH WITH WALLS AND FLOOR, AND PATCH SURFACES.

REPAIR ADJACENT CONSTRUCTION AND FINISHES DAMAGED DURING DEMOLITION AND EXTENSION WORK. MAINTAIN ACCESS TO EXISTING ELECTRICAL INSTALLATIONS WHICH REMAIN ACTIVE, MODIFY INSTALLATION OR PROVIDE ACCESS PANEL AS

BEGINNING OF DEMOLITION MEANS CONTRACTOR ACCEPTS EXISTING CONDITIONS.

CAREFULLY PROTECT ALL WALLS, TRIM, FLOORS, EQUIPMENT AND MATERIALS. WHEN WORKING ON FINISHED SURFACES, LIMIT DAMAGE TO THE CONFINES AS MUCH AS POSSIBLE AND RESTORE TO THE ORIGINAL CONDITION ALL SURFACES WHICH ARE DAMAGED BECAUSE OF THE INSTALLATION OF THIS WORK

EQUIPMENT, MATERIALS AND SUPPLIES REMOVED FOR PROTECTION SHALL BE REPLACED IN ORIGINAL LOCATIONS. ANY MATERIALS DAMAGED SHALL BE REPLACED WITH NEW MATERIALS OF LIKE KIND AND QUALITY.

DO ALL DRILLING, CUTTING, CHANNELING AND PATCHING REQUIRED TO INSTALL ELECTRICAL WORK AS INDICATED OR HEREIN SPECIFIED. M ALL HOLES, CURBS, ETC., IN FLOORS, CEILINGS AND WALLS SHALL BE PATCHED, UNLESS INDICATED OTHERWISE. PAINT ALL NEW ELECTRICAL RACEWAYS, CABINETS, ENCLOSURES AND FITTINGS PENETRATING INTO FIRE RATED ENVELOPES, SPACES, ETC.

ALL CONDUIT RUNS SHALL BE CONCEALED, UNLESS SHOWN OTHERWISE. PROVIDE A PULL WIRE IN ALL EMPTY CONDUITS.

EXISTING CONDITION SHOWN IS FROM AVAILABLE RECORD DRAWINGS AND VISUAL FIELD SURVEY AND SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY ACTUAL EXISTING CONDITION AT SITE.

ALL WORK SHOWN IS NEW UNLESS SPECIALLY INDICATED AS EXISTING (X). ALL ELECTRICAL EQUIPMENT MOUNTING AND ANCHORAGE MUST CONFORM WITH LOCAL AND STATE SEISMIC CODES.

URNISH AND INSTALL COMPLETE BONDING AND GROUNDING SYSTEM AS REQUIRED BY CODES. CONTINUITY OF GROUNDING SHALL BE MAINTAINED MECHANICALLY AND ELECTRICALLY THROUGHOUT THE SYSTEM. A GREEN GROUNDING CODE SIZED CONDUCTOR SHALL BE CARRIED IN ALL CONDUITS.

GENERAL NOTES

IT IS THE INTENT OF THESE PLANS AND SPECIFICATIONS THAT A COMPLETE AND WORKABLE ELECTRICAL INSTALLATION BE PROVIDED FOR ALL THE EQUIPMENT DESCRIBED OR SHOWN AS BEING IN THIS CONTRACT. TOWARD THIS END FURNISH ALL LABOR AND TOOLS NECESSARY AND FURNISH AND INSTALL ALL APPARATUS, MATERIALS AND FOLIPMENT IN A FASHION COMPLYING WITH ALL APPLICABLE CODES, INCLUDING ITEMS REOUIRED BUT NOT NORMALLY SHOWN, SUCH AS LAMPS, COUPLINGS, HANGERS, BRACKETS, CLAMPS, BOXES, CONNECTORS AND HARDWARE. REFER ALSO TO WRITTEN SPECIFICATIONS FOR GENERAL, MECHANICAL AND

PROCURE ALL PERMITS FROM LEGALLY CONSTITUTED AUTHORITIES, ARRANGE FOR ALL INSPECTIONS AND PAY ALL COSTS FOR FEES AND TESTS IN CONNECTION THEREWITH. COMPLY WITH CODES: NOTHING IN THESE PLANS AUTHORIZES DEVIATION FROM

DETERMINE EXACT ROUTING OF CONCEALED FEEDERS AND BRANCH HOMERUNS IN COOPERATION WITH OTHER TRADES TO SIMPLIFY INSTALLATION WHEREVER POSSIBLE BUT SUBJECT TO APPROVAL OF ARCHITECT FOR VISUAL AND STRUCTURAL REASONS. DO NOT RUN ANY CONDUIT IN SLAB IF ITS OUTSIDE DIAMETER EXCEEDS 1/3 THE THICKNESS OF THE SLAB. LOCATE CONDUITS

WITHIN THE MIDDLE OF THE SLAB, WHERE CONDUITS ARE GROUPED IN PARALLEL RUNS, SPACE THEM 3" OR MORE APART. WHERE

CONDUITS CROSS EACH OTHER, THICKEN SLAB PROPORTIONATELY OVER A HORIZONTAL AREA EQUAL TO TEN TIMES THE DIAMETER

SIZE OUTLET BOXES IN CONFORMITY WITH CODE FOR NUMBER AND GAUGE OF CONDUCTORS THEREIN, EXCEPT WHERE NOTED TO BE LARGER. MINIMUM BOX SIZE SHALL BE 4" SQUARE BY 1-1/2" DEEP.

EXAMINE PLANS TO DISCERN A FIRE RATING OF ONE HOUR OR MORE, PROVIDE A ONE, TWO OR THREE HOUR FIRE-RATED ENCLOSURE

ALL ELECTRICAL WORK SHALL BE INSTALLED SO AS TO BE READILY ACCESSIBLE FOR OPERATING, SERVICING, MAINTAINING AND REPAIRING, ALL CONDUIT SHALL BE CONCEALED WHERE POSSIBLE, EXPOSED CONDUIT SHALL BE IN STRAIGHT LINES PARALLEL WITH OR AT RIGHT ANGLES TO, COLUMN LINES OR BEAMS AND SEPARATED BY AT LEAST THREE (3) INCHES FROM WATER LINES WHENEVER THEY RUN LONG SIDE OR ACROSS SUCH LINES. CONDUIT SHALL NOT BE RUN BELOW CABLE TRAYS OR LIGHT FIXTURES WITHOUT SPECIFIC APPROVAL OF THE OWNERS REPRESENTATIVE, HANGERS SHALL BE FASTENED TO STEEL, CONCRETE OR MASONRY, BUT NOT TO PIPING. HANGERS AND SUPPORT SYSTEMS ARE AN INTEGRAL PART OF THE VISUAL ENVIRONMENT. ALL HANGERS AND SUPPORTS EXPOSED TO PUBLIC VIEW MUST BE SHOWN IN DETAIL ON PLANS SUBMITTED TO ENGINEER FOR APPROVAL OF APPEARANCE. ALL HANGERS MUST BE UNIFORMLY SPACED AND NEATLY INSTALLED WITH NO EXCESS MATERIAL BEYOND WHAT IS REQUIRED FOR THE SUPPORT FUNCTION. CONTRACTOR SHALL SELECT ACCESSORIES AND HARDWARE WITH A SMOOTH, NEAT FINISHED APPEARANCE AND PAINT ALL EXPOSED CONDUIT HANGERS TO MATCH THE ADJACENT FINISHES.

CONTRACTOR SHALL EXAMINE PLANS AND VERIFY IN FIELD LOCATIONS OF ALL FIRE RATED WALLS, CEILINGS AND FLOORS. CONTRACTOR SHALL SEAL ALL ELECTRICAL SYSTEM PENETRATIONS THROUGH FIRE RATED WALLS, CEILINGS AND FLOORS WITH U.L. LISTED MATERIAL APPROVED BY THE AUTHORITY HAVING JURISDICTION.

PANEL CIRCUIT DIRECTORY SHALL COMPLY WITH CEC 408.4.

OF THE LARGEST CONDUIT. REFER ALSO TO DETAILS SHOWN.

PROVIDE 90% COMPACTION OR SAND SLURRY OVER ALL UNDERGROUND CONDUITS, USE ONLY CLEAN FILL

MARKING - UNDERGROUND SYSTEM SHALL BE LEGIBLY MARKED "UNDERGROUND SYSTEM" AT THE SOURCE OR FIRST DISCONNECTING MEANS OF THE SYSTEM. THE MARKING SHALL BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED.

THE ISSUANCE OF A PERMIT SHALL NOT PREVENT THE BUILDING OFFICIAL FROM REQUIRING THE CORRECTION OF ERRORS ON THESE PLANS OR FROM PREVENTING ANY VIOLATION OF THE CODES ADOPTED BY DSA, RELEVANT LAWS, ORDINANCES, RULES AND/OR

FOR FIRE RATED WALL/CEILING PENETRATION AND/OR MEMBRANE PENETRATION, COMPLETE NRTL CLASSIFICATION SHEETS SHALL BE PROVIDED TO THE INSPECTOR AT THE TIME OF INSPECTION

14. PROVIDE SEPARATE SUBMITTAL; OBTAIN ALL REQUIRED PERMITS, INSPECTIONS AND APPROVALS FOR ALL FIRE ALARM SYSTEM INSTALLATIONS AND/OR MODIFICATIONS FROM THE FIRE DEPARTMENT.

ALL INSTALLED MATERIALS AND EQUIPMENT SHALL BE LISTED U.L., NRTL OR LISTED AND APPROVED BY AN APPROVED TESTING

ALL NEW OVERCURRENT DEVICES INSTALLED IN EXISTING PANELS/SWITCHBOARDS SHALL MATCH THE MAKE, MODEL AND INTERRUPTING CAPACITY OF THE EXISTING OVERCURRENT DEVICES.

'. RACEWAY SEALS. CONDUITS OR RACEWAYS THROUGH WHICH MOISTURE MAY CONTACT LIVE PARTS SHALL BE SEALED OR PLUGGED AT

THE IDENTIFICATION OF EVERY CIRCUIT OF A PANEL BOARD AND SWITCHBOARD SHALL BE LEGIBLY IDENTIFIED AS TO ITS CLEAR, EVIDENT, AND SPECIFIC PURPOSE OR USE AND SHALL INCLUDE SUFFICIENT DETAIL TO ALLOW EACH CIRCUIT TO BE DISTINGUISHED FROM ALL OTHERS. 2016 C.E.C 408.4 - PROVIDE MORE DETAIL ON PANEL SCHEDULE CIRCUIT DESCRIPTIONS.

CONTRACTOR SHALL PROVIDE AND INSTALL A SILENT KNIGHT FIRE ALARM SYSTEM FOR THE PROJECT AREA TO INCLUDE:

SMOKE & CO DETECTORS IN ALL REQUIRED AREAS

HEAT DETECTORS IN ALL REQUIRED AREAS DUCT DETECTORS IN ALL REQUIRED SPACES

STROBES/SPEAKERS IN ALL REQUIRED AREAS

CONTRACTOR SHALL BE BUILDING STANDARD AND SHALL BE SELECTED FIRE ALARM SYSTEM FACTORY AUTHORIZED AND APPROVED VENDOR - NO "PARTS & SMARTS"

ALL DEVICES AND EQUIPMENT SHALL BE CALIFORNIA STATE FIRE MARSHALL APPROVED AND CURRENTLY LISTED.

CONTRACTOR SHALL WARRANTY ALL DEVICES AND SYSTEMS FOR A PERIOD OF TWO YEARS.

12. UNIQUELY LABEL ALL ADDRESSABLE DEVICES TO MATCH FIRE ALARM PROGRAMMING & AS BUILTS.

CONTRACTOR SHALL PROVIDE 6 (SIX) HARD COPY SETS OF FIRE ALARM MANUALS FOR ALL SYSTEMS AND DEVICES IN ADDITION TO 6 (SIX) HARD COPY SETS OF A SYSTEM OPERATIONAL MANUAL TAILORED FOR THE PROJECT SPACE.

CONTRACTOR SHALL PROVIDE AN INDIVIDUALLY ADDRESSABLE TOTALLY SUPERVISED SYSTEM WITH BATTERY BACK-UP FOR MONITORING OR INITIATING CIRCUITS WITH DUAL RATE BATTERY CHARGER.

CONTRACTOR SHALL PROVIDE A SATISFACTORY SYSTEM TEST IN THE PRESENCE OF THE OWNER, FIRE PREVENTION BUREAU AND

CONTRACTOR SHALL PROVIDE A CENTRAL MASTER ANNUNCIATOR PANEL IN THE ADMINISTRATION BUILDING AND A REMOTE PANEL IN MEP COMPONENT ANCHORAGE NOTE AN AREA PER OWNERS REPRESENTATIVE AND LOCAL FIRE MARSHAL. ANNUNCIATOR PANEL SHALL BE NONGRAPHIC WITH NAMEPLATE AND LED FOR EACH DEVICE ADDRESS, WITH AUDIBLE ALARM AND

CONTRACTOR SHALL PROVIDE ALL CONNECTION TO POWER PANELS, CONDUIT AND WIRE AND CONNECTIONS REQUIRED TO PROVIDE

AN OPERATIONAL FIRE ALARM SYSTEM.

ABBREVIATIONS

AMP FRAME/AMP FUSE AVAILABLE FAULT CURRENT ABOVE FINISHED FLOOR ARCHITECT AMP SWITCH

AMERICAN WIRE GAG BKBD BACKBOARD CIRCUIT BREAKE CONTINUATION CEILING CONDUIT ONLY CABLE TELEVISION COLD WATER PIPE DISCONNECT DISCONNECT SWITCH ECD ELECTRICAL CONTRACTOR EM EMERGENCY LIGHT/FEEDER

FOR ENGINEER OF RECORD

FRONT

SHALLOW FLOOR BOX GENERAL CONTRACTOR GROUND FAULT INTERRUPTER GROUND HORSEPOWER ISOLATED GROUND JUNCTION BOX KILO VOLT AMPS=1000V LIGHTING CONTACTOR LONG CONTINUOUS LOAD LOW VOLTAGE MOUNTED MAIN TELEPHONE BACKBOARD MOUNTING MEDIUM VOLTAGE METAL HALIDE MANUFACTURER NATIONAL ELECTRICAL CODE NEW NOT IN CONTRACT NIGHT LIGHT

NORMALLY OPEN

POWER OR POLE

NORMALLY CLOSED

PROVIDED BY OTHERS

REMOVED RGS RIGID GALVANIZED STEEL CONDUIT ROOM SYSTEM NEUTRAL TIME CLOCK TELEPHONE TERMINAL BOARD TELEPHONE TERMINAL CABINET TRANSFORMER TRANSIENT VOLTAGE SURGE

SUPPRESSOR UNDERGROUND UON UNLESS OTHERWISE NOTED UNSW UNSWITCHED VOLT AMPS VOLTS/VOLTAGE WATTS/WATTAGE WEATHERPROOF WITH

EXISTING

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.

TEMPORARY, MOVEABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G., HARD WIRED) TO THE BUILDING UTILITY 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.

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 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13,

SYMBOLS

DUPLEX RECEPTACLE, WALL MOUNTED @ +18"AFF, NEMA 5-20R U.O.N.

JUNCTION BOX (CEILING MTD.) SIZE PER TABLE AND NEC ARTICLE 370

THERMOSTAT - 36" TO 48" AFF, BOTTOM & TOP OF BOX RESPECTIVELY

BRANCH CIRCUIT PANELBOARD - 240/120V, 1Ø, 3W OR 3Ø, 3W, 240VAC OR 120/208VAC, 3Ø, 4W.

FLEXIBLE CONDUIT (WITH GROUND CONDUCTOR, PROVIDE LIQUID TIGHT CONDUIT IN ALL

4'X8'X3/4" TELEPHONE BACKBOARD, MARINE PLYWOOD AND PAINTED WITH FIRE RESISTANT PAINT, PER OWNERS

JUNCTION BOX (WALL MTD.) SIZE PER TABLE AND NEC ARTICLE 370

SPECIAL OUTLET, TYPE AS REQUIRED BY EQUIPMENT.

BRANCH CIRCUIT PANELBOARD - 480/277V, 3Ø, 4W

EMERGENCY CIRCUIT

EXPOSED AREAS)

ALL CONDUITS.)

CODE. (3/4" CONDUIT MINIMUM).

CKT 7 WITH DEDICATED NEUTRAL.

3/4"C-2#12 & 1#12 GND

3/4"C-3#12 & 1#12 GND

3/4"C-4#12 & 1#12 GND 3/4"C-5#12 & 1#12 GND

3/4"C-2#10 & 1#10 GND

3/4"C-3#10 & 1#10 GND 3/4"C-4#10 & 1#10 GND

3/4"C-5#10 & 1#10 GND

SEE KEY NOTE #1 AS INDICATED ON DRAWING

SWITCH WITH PILOT LIGHT @ 42"AFF

CIRCUIT SWITCH LEGS — WALL SWITCHES

100A UTILITY METER (OR AS NOTED)

AND WHITE FOR NEUTRAL, GREEN FOR GROUND.

AND WHITE FOR NEUTRAL, GREEN FOR GROUND.

SWITCH MOUNTED @ +42" AFF

MOTOR RATED SWITCH

— E—

3r 60Ar

CONDUIT RUN CONCEALED ABOVE CEILING OR IN WALLS,

LOW VOLTAGE CABLE & CONDUIT 3/4"C-1#CAT6 U.O.N.

- WHERE NO NUMBER IS INDICATED, THE CONDUCTORS ARE

#12AWG(MIN.) CONDUIT SIZE IS AS REQUIRED BY ELECTRICAL

HASH MARKS INDICATE QUANTITY OF #12 CONDUCTORS. NO HASH

MARKS INDICATE (2)#12AWG. (PROVIDE GROUND CONDUCTOR IN

INDICATES A HOMERUN TO PNL 2LA, CKTS 1-3-5 WITH SHARED NEUTRAL &

CONDUIT RUN CONCEALED BELOW FLOOR OR UNDERGROUND

(SEE E601 FOR FIRE ALARM DEVICE SYMBOLS)

1" CONDUIT MINIMUM IF UNDERGROUND (CONTRACTOR TO PROVIDE

DEDICATED NEUTRALS FOR CIRCUITS WHICH DO NOT HAVE COMMON

CIRCUIT HANDLE TIES ON BREAKERS FEEDING THE CIRCUITS)

3-WAY SWITCH, a & b INDICATES LIGHT FIXTURE TO BE SWITCHED (EACH A 3-WAY) MOUNTED @ 42" AFF

DISCONNECT SWITCH, 60AMP SWITCH, 35 AMP FUSE, 3 POLE W/ OVERCURRENT PROTECTION U.O.N.

FUSED DISCONNECT SWITCH 100AMP SWITCH RATING WITH 60 AMP FUSES, 3 POLE

CCTV-VERIFY MOUNTING LOCATION AND REQUIREMENTS WITH CLIENT/OWNER.

COLOR CODE FOR CONDUCTORS

APPLICABLE CODE: 2022 CBC

MOLDED CASE CIRCUIT BREAKER 200 AMP FRAME, 150 AMP TRIP

120/208VAC,3Ø,4W OR 120/208VAC, 1Ø, 3W: BLUE,BLACK,RED FOR PHASE CONDUCTORS

277/480VAC,3Ø,4W: ORANGE,BROWN,YELLOW FOR PHASE CONDUCTORS

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

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 HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT

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 PRE-APPROVED 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.

ELECTRICAL DISTRIBUTION SYSTEMS (E)

MP□ MD□ PP□ E⊠ OPTION 1 DETAILED ON APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS

MP□ MD□ PP□ E⊠ OPTION 2: SHALL COMPLY WITH HCAI (OSHPD) PREAPPROVAL (OPM#) #

LIST OF DRAWINGS DESCRIPTION DESCRIPTION GENERAL NOTES, ABBREVIATIONS, SYMBOLS & DRAWING LIST E100 E680 LIBRARY BUILDING 800 FIRE ALARM PLAN - NEW WORK E600 FIRE ALARM SITE PLAN - NEW WORK E690 BUILDING 900 ELECTRICAL & STORAGE - NO FIRE ALARM PLAN E601 NEW FIRE ALARM MASTER LEGEND E691 KINDERGARTEN BUILDING 1000 FIRE ALARM PLAN - NEW WORK BUILDING 1100 FIRE ALARM PLAN - NEW WORK MERGENCY VOICE/ ALARM/DETECTION COMM SYSTEM RISER DIAGRAM E692 E693 BUILDING 1200 KITCHEN FIRE ALARM PLAN - EXISTING (IN CONSTRUCTION) EMERGENCY VOICE/ALARM COMM SYSTEM - FIRE ALARM DETAILS E700 FIRE RISER DIAGRAM MODULE VBUS/SBUS RISER DIAGRAM HONEYWELL CUT SHEETS SPEAKER STROBES & PHOTOELECTRIC SMOKE BUILDING 200, 1100, 100 & 500 EMERGENCY VOICE/ALARM COMM SYSTEM CALCULATIONS HONEYWELL CUT SHEETS TEMPERATURE SENSORS & RELAY E606 BUILDING 300, 600 & 400 EMERGENCY VOICE/ALARM COMM SYSTEM -CLASSROOM BUILDING 100 FIRE ALARM PLAN - NEW WORK E620 CLASSROOM BUILDING 200 FIRE ALARM PLAN - NEW WORK F770 BUILDING 700 & 800 EMERGENCY VOICE/ALARM COMM SYSTEM - CALCULATIONS CLASSROOM BUILDING 300 FIRE ALARM PLAN - NEW WORK KINDERGARTEN BUILDING 1000 EMERGENCY VOICE/ALARM COMM SYSTEM CLASSROOM BUILDING 400 FIRE ALARM PLAN - NEW WORK CALCULATIONS RESTROOM BUILDING 500 FIRE ALARM PLAN - NEW WORK E793 BUILDING 1200 EMERGENCY VOICE/ALARM COMM SYSTEM - CALCULATIONS E800 ELECTRICAL DETAILS RESTROOM BUILDING 600 FIRE ALARM PLAN - NEW WORK MULTIPURPOSE BUILDING 700 FIRE ALARM PLAN - NEW WORK

CONTRACTOR TO REPLACE EXISTING DSA APPROVED FIRE ALARM SYSTEM WITH NEW FULLY ADDRESSABLE FIRE ALARM SYSTEM WHILE MAINTAINING EXISTING FIRE ALARM SYSTEM UNTIL REPLACEMENT IS COMPLETE & ACTIVE AND APPROVED BY DSA. CONTRACTOR TO PROVIDE DETAILED INSTALLATION PLANS TO SHOW SCHEDULE OF WORK FOR OWNERS

SCOPE OF WORK

APPROVAL AND PROPOSED SCHEDULE TO MEET PVSD TIME SCHEDULE/CONSTRAINTS.

*ኔሀይይነ ጩ አነቋቋሀይዜነ ሄತ*ቄ *በነይ* 251 CORTE MALPASO, #511

CAMARILLO, CA 93012-8094

IDENTIFICATION STAME DIV. OF THE STATE ARCHITEC

REVIEWED FOR

SS ☐ FLS ☑ ACS ☐

10/23/2024

FAX (805) 389-6519

APP: 03-124308 INC:

whatsoever without first obtaining the expressed written permission and consent of LUCCI & ASSOC. INC nor are they to be assigned to any third party without obtaining said written permission and consen

(805) 389-6520



LUCCI & ASSOCIATES, INC. reserve their commonlaw copyrigh

are not to be reproduced, changed, or copied in any form or manner

and other property rights in these plans. These plans and drawings

LIST OF APPLICABLE CODES

LIST OF APPLICABLE CODES

2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 PART 11, TITLE 24 CCR

2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR 24 CCR

2022 CALIFORNIA ELECTRICAL CODE (CEAC), PART 3, TITLE 24 CCR TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR FOR A LIST OF APPLICABLE 2022 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 CCR

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN),

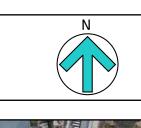
2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE

2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR APPLICABLE STANDARDS

STANDARDS, INCLUDING CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS, REFER TO CBC 2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR CHAPTER 35 AND CFC CHAPTER 80

2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE

SITE MAP

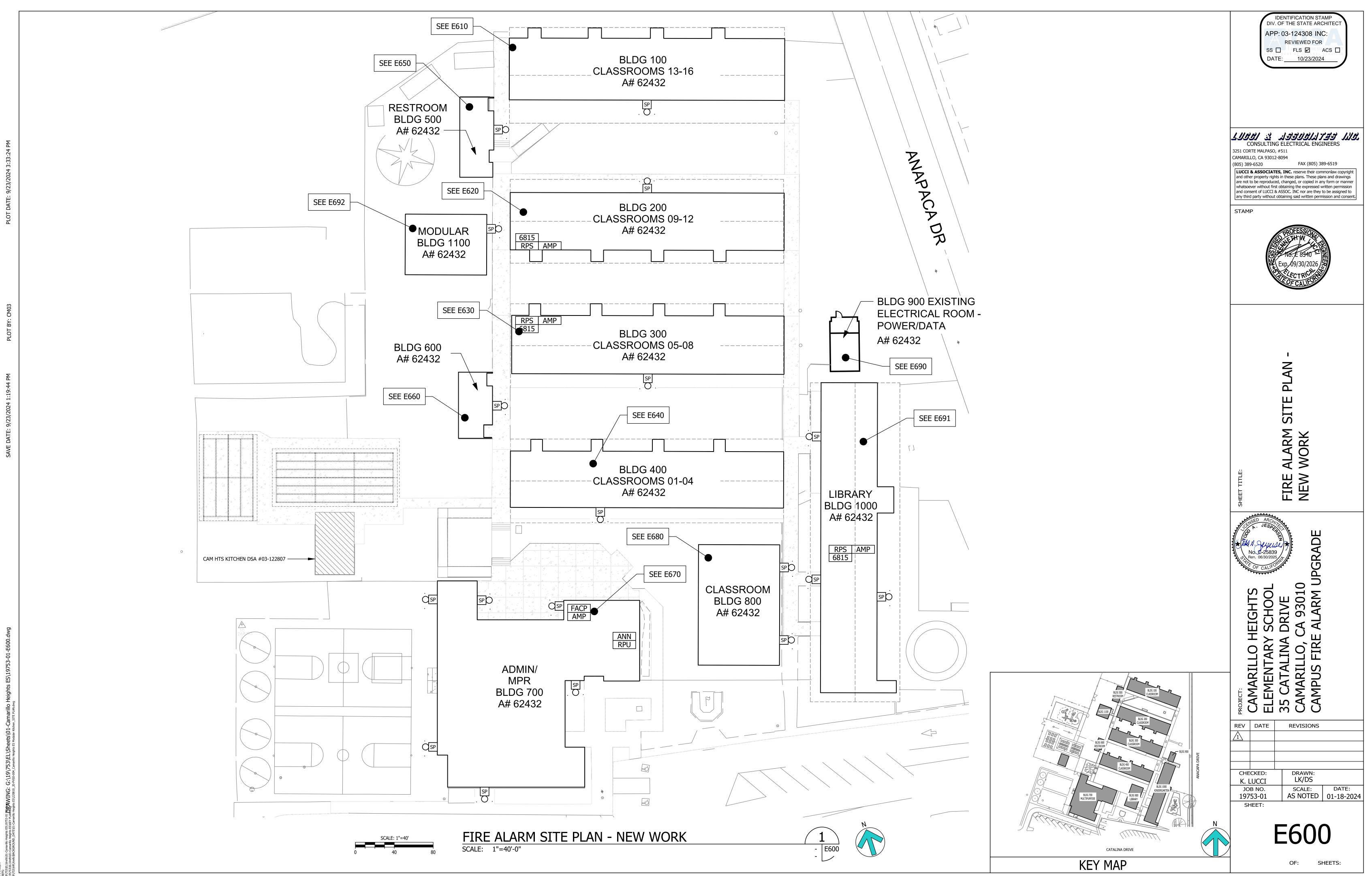


REV DATE REVISIONS LK/DS K. LUCCI JOB NO. 19753-01 AS NOTED | 01-18-2024

SHEETS:

Copyright Lucci and Associates Consulting Electrical Engineers. Deviations from this drawing will not be made without their expressed written permission. L.A.I.# 19753-01

SHEET:



EXISTING IN ADMIN

CALIFORNIA FIRE CODE NOTES:

DETECTION DEVICES.

SHALL BE CONNECTED TO THE BUILDING FIRE ALARM SYSTEM.

1.1. INTERIOR CORRIDORS ARE PROTECTED BY SMOKE DETECTORS.

BE INTERCONNECTED AND SHALL OPERATE ALL NOTIFICATION APPLIANCES.

APPROVED BY THE FIRE ENFORCING AGENCY; AND

SMOKE DETECTORS SHALL BE INSTALLED ON THE CEILING ONLY.

DETECTORS OR FIRE SPRINKLERS SHALL BE USED.

SPRINKLERS OR SMOKE DETECTORS ARE NOT INSTALLED.

907.2.3 A MANUAL AND AUTOMATIC FIRE ALARM SYSTEM THAT INTIATES THE OCCUPANT NOTIFICATION SIGNAL UTILIZING AN

EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM MEETING THE REQUIREMENTS OF 907.5.2.2 AND INSTALLED IN ACCORDANCE

AUDITORIUMS, CAFETERIAS, GYMNASIUMS AND SIMILAR AREAS ARE PROTECTED BY HEAT DETECTORS OR OTHER APPROVED

SHOPS AND LABORATORIES INVOLVING DUSTS OR VAPORS ARE PROTECTED BY HEAT DETECTORS OR OTHER APPROVED

WITH SECTION 907.6 SHALL BE INSTALLED IN GROUP E OCCUPANCIES WITH AN OCCUPANT LOAD OF 50 OR MORE PERSONS OR CONTAINING MORE THAN ONE CLASSROOM OR ONE OR MORE ROOMS USED FOR GROUP E OR -4 DAY CARE PURPOSES IN ACCORDANCE WITH THIS SECTION. WHEN AUTOMATIC SPRINKLER SYSTEMS OR SMOKE DETECTORS ARE INSTALLED, SUCH SYSTEMS OR DETECTORS

1. MANUAL FIRE ALARM BOXES ARE NOT REQUIRED IN GROUP E OCCUPANCIES WHERE ALL OF THE FOLLOWING APPLY:

2. MANUAL FIRE ALARM BOXES ARE NOT REQUIRED IN GROUP E OCCUPANCIES WHERE ALL OF THE FOLLOWING APPLY:

2.1. THE BUILDING IS EQUIPPED THROUGHOUT WITH AN APPROVED AUTOMATIC SPRINKLER SYSTEM INSTALLED IN

THE EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM WILL ACTIVATE ON A SPRINKLER WATER FLOW.

907.2.3.1 SYSTEM CONNECTION. WHERE MORE THAN ONE FIRE ALARM CONTROL UNIT IS USED AT THE SCHOOL CAMPUS, THEY SHALL

. BUILDINGS THAT ARE SEPARATED A MINIMUM OF 20 FEET AND IN ACCORDANCE WITH THE CALIFORNIA BUILDING CODE; AND

2. THERE IS A METHOD OF TWO WAY COMMUNICATION BETWEEN EACH CLASSROOM AND THE SCHOOL ADMINISTRATIVE OFFICE

907.2.3.2 ASSEMBLIES LOCATED WITHIN A GROUP E OCCUPANCY. ASSEMBLY OCCUPANCIES WITH AN OCCUPANT LOAD OF LESS THAN

1,000 AND LOCATED WITHIN A GROUP E OCCUPANCY CAMPUS OR BUILDING SHALL BE PROVIDED WITH A FIRE ALARM SYSTEM AS

907.2.3.3 NOTIFICATION. THE FIRE ALARM SYSTEM NOTIFICATION SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 907.5.

907.2.3.4 ANNUNCIATION. ANNUNCIATION OF THE FIRE ALARM SYSTEM SHALL COMPLY WITH THE REQUIREMENTS OF SECTION

907.2.3.6 AUTOMATIC FIRE ALARM SYSTEM. AUTOMATIC DETECTION SHALL BE PROVIDED IN ACCORDANCE WITH THIS SECTION.

907.2.3.6.1 SMOKE DETECTORS. SMOKE DETECTORS SHALL BE INSTALLED AT THE CEILING OF EVERY ROOM AND IN 'CEILING-PLENUMS'

UTILIZED FOR ENVIRONMENTAL AIR. WHERE THE CEILING IS ATTACHED DIRECTLY TO THE UNDER SIDE OF THE ROOF STRUCTURE,

EXCEPTION: WHERE THE ENVIRONMENTAL OR AMBIENT CONDITIONS EXCEED SMOKE DETECTOR INSTALLATION GUIDELINES, HEAT

907.2.3.6.2 HEAT DETECTORS. MULTI-CRITERIA HEAT DETECTORS SHALL BE INSTALLED IN COMBUSTIBLE SPACES WHERE THE

907.2.3.5. MONITORING. SCHOOL FIRE ALARM SYSTEMS SHALL BE MONITORED IN ACCORDANCE WITH SECTION 907.6.6.3.

EXCEPTION: INTERCONNECTION OF FIRE ALARM CONTROL UNITS IS NOT REQUIRED WHEN ALL OF THE FOLLOWING ARE PROVIDED:

THE CAPABILITY TO ACTIVATE THE EVACUATION SIGNAL FROM A CENTRAL POINT IS PROVIDED

MANUAL ACTIVATION IS PROVIDED FROM A NORMALLY OCCUPIED LOCATIONS.

3. FOR PUBLIC SCHOOL STATE FUNDED CONSTRUCTION PROJECTS SEE SECTION 907.2.29

3. A METHOD OF MANUAL ACTIVATION OF EACH FIRE ALARM SYSTEM IS PROVIDED.

2.4. THE CAPABILITY TO ACTIVATE THE EVACUATION SIGNAL FROM A CENTRAL POINT IS PROVIDED.

EMERGENCY VOICE/ALARM COMMUNICATIONS SYSTEM LEGEND DESCRIPTION MODEL # BACK BOX REQUIREMENTS EXISTING FIRE ALARM CONTROL PANE SILENT KNIGHT IFP-2100 ECS SURFACE OR FLUSH MOUN FIRE ALARM TERMINAL CABINET FURNISHED BY OTHERS FIRE ALARM REMOTE POWER SUPPL SILENT KNIGHT RPS-100 SURFACE MOUNT SILENT KNIGHT 6815XL 165-0559:0505 INSTALL IN RPS-1000 FIRE ALARM SLC EXPANDER CARD SILENT KNIGHT ECS-50W FIRE ALARM VOICE AMPLIFIER - 50W SURFACE MOUNT 7165-0559:0505 SILENT KNIGHT RA-2000 SURFACE MOUNT FIRE ALARM REMOTE ANNUNCIATOR 7165-0559:050 FIRE ALARM REMOTE PAGING UNIT SURFACE MOUNT SILENT KNIGHT ECS-RPU 7300-0559:0175 SINGLE GANG BOX PULL STATION SILENT KNIGHT IDP-PUL '150-0559:015 SILENT KNIGHT IDP-HEAT-W HEAT DETECTOR 4" SQ. BOX W/ 3" ROUND RING '270-0559:051 ATTIC SPACE HI-TEMP HEAT DETECTOR W/ BASE SILENT KNIGHT IDP-HEAT-HT-W 4" SQ. BOX W/ 3" ROUND RING MULTI CRITERIA DETECTOR W/ BASE (SMOKE, HEAT, CO) SILENT KNIGHT IDP-FIRE-CO-W 4" SQ. BOX W/ 3" ROUND RING 272-0559:051 4" SQ. BOX W/ 3" ROUND RING SMOKE DETECTOR W/ BASE SILENT KNIGHT IDP-PHOTO-W 272-0559:051 SILENT KNIGHT IDP-MONITOR 4" SQ. BOX INPUT MODULE 7300-0559:015 4" SQ. BOX RELAY MODULE SILENT KNIGHT IDP-RELAY 7300-0559:015 4" SQ. DEEP BOX SYSTEM SENSOR SPSRL SPEAKER/STROBE COMBO, WALL MOUNT 7320-1653:050 4" SQ. DEEP BOX
SURFACE MOUNT WEATHERPROOF BOX SPEAKER/STROBE COMBO, CEILING MOUNT System sensor spscrl 7320-1653:050 OUTDOOR SPEAKER, WALL MOUNT SYSTEM SENSOR SPRK 7320-1653:020 MONITOR MODULAR

	WIRE	CHART						
SYMBOL	CIRCUIT DESCRIPTION	UNDERGROUND / WET SYMBOL	WIRE IN CONDUIT UNDERGROUND/WET					
SBUS 4-WIRE TOTAL	COMM CIRCUIT — POWER	2 CONDUCTOR 2/14FPL SOLID TWISTED/UNSHIELDED	enugu.	2 CONDUCTOR 2/14 FPL TWISTED WEST PENN #AQ225				
	COMM CIRCUIT - DATA	2 CONDUCTOR 2/14 FPL SOLID TWISTED/ SHIELDED	SBUSU	2 CONDUCTOR 2/14 FPL TWISTED/ SHIELDED WEST PENN#AQ295				
VBUS	AMPLIFIER COMM CIRCUIT	2 CONDUCTOR 2/16 STRANDED TWISTED / SHIELDED	VBUSU	2 CONDUCTOR 2/16 STRANDED TWISTED/ SHIELDED WEST PENN#AQ294				
D	SIGNAL LINE CIRCUIT (SLC)	2 CONDUCTOR 2/16 FPL SOLID TWISTED/UNSHIELDED	DD	2 CONDUCTOR 2/16 FPL TWISTED/ UNSHIELDED WEST PENN#AQ225				
N	NOTIFICATION APPLIANCE CIRCUIT (NAC)	2 CONDUCTOR 2/12 FPL SOLID TWISTED/UNSHIELDED OR THHN	NN	2 CONDUCTOR 2/12 FPL TWISTED/ UNSHIELDED WEST PENN#AQ227				
S	SPEAKER APPLIANCE CIRCUIT (SAC)	2 CONDUCTOR 2/14 STRANDED TWISTED SHIELDED	SS	2 CONDUCTOR 2/14 STRANDED TWISTED/ SHIELDED WEST PENN#AQ295				
Р	SOUNDER BASE POWER CIRCUIT	2 CONDUCTOR 2/16 FPL SOLID TWISTED/UNSHIELDED	PP	2 CONDUCTOR 2/16 FPL TWISTED/ UNSHIELDED WEST PENN#AQ225				

EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM

SYSTEM SHALL REMAIN ACTIVE UNTIL THE NEW FA SYSTEM IS COMMISSIONED AND OPERATIONAL.

SCOPE OF WORK:

PROVIDE A NEW FULLY ADDRESSABLE CAMPUS WIDE FIRE ALARM SYSTEM AND AFTER CERTIFICATION, REMOVE EXISTING CAMPUS

THE NEW FACP & NEW RPS(S) THAT ARE INSTALLED WILL REPLACE THE EXISTING CAMPUS FACP BUT THE EXISTING CAMPUS FA

NEW SYSTEM SHALL PROVIDE AUTOMATIC DETECTION AND VOICE EVACUATION IN ALL BUILDINGS & REMOTELY ANNUNCIATE TO A

GENERAL NOTES:

- . APPLICABLE STANDARD 2022 NFPA 72
- 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.
- 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.
- 4. A STAMPED SET OF APPROVED FIRE ALARM DESIGN DOCUMENTS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION.
- 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.
- 5. DSA, ARCHITECT/ENGINEER AND OWNER SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO THE FINAL INSPECTION AND/OR
- ALL PENETRATIONS THROUGH RATED ASSEMBLIES, REQUIRING OPENING PROTECTION SHALL BE PROVIDED WITH A PENETRATION FIRE STOP SYSTEM AS IDENTIFIED IN CBC CHAPTER 7, UL OR OTHER LAB TESTING CRITERIA. APPROVED TYPE OF MATERIALS SHALL BE IDENTIFIED WITHIN THE SPECIFICATION WITHIN THE FIRE ALARM SECTION.
- . WALL MOUNTED VISUAL NOTIFICATION DEVICES SHALL HAVE THEIR BOTTOMS MOUNTED AT 80" MINIMUM AND 96" MAXIMUM
- . WALL MOUNTED AUDIBLE NOTIFICATION DEVICES SHALL HAVE THEIR TOPS MOUNTED AT 90" MINIMUM AND 100" MAXIMUM FROM FINISHED FLOOR AND NO CLOSER THAN 6" TO A HORIZONTAL STRUCTURE.
- lo. 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 MINIMUM HEARING DISTANCE. SOUND LEVEL SHALL BE MAINTAINED FOR DURATION OF AT LEAST
- 11. AUDIBLE DEVICES SHALL BE SYNCHRONIZED TEMPORAL CODE 3 PATTERN.
- 12. THE CONTRACTOR SHALL ADJUST/INSTALL ALL DEVICES TO MAXIMIZE PERFORMANCE AND TO MINIMIZE FALSE ALARMS.
- 13. 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 CANDELA. VISUAL DEVICES WITHIN 55' FROM EACH OTHER
- 14. UNDERGROUND AND EXTERIOR CONDUITS TO HAVE WATERTIGHT FITTINGS AND WIRE TO BE APPROVAL FOR WET LOCATIONS.
- 15. 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.
- 16. 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 IN UNDERGROUND LOCATIONS. THERE MUST BE AT LEAST 6' OF LEAD WIRE FROM THE BOX TO
- L7. 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
- 18. 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
- 19. FIRE ALARM PANEL, REMOTES, AND COMPONENTS SHALL BE SECURED TO MOUNTING SURFACES PER MANUFACTURERS SPECIFICATIONS. NO SINGLE DEVICE SHALL EXCEED THE WEIGHT OF 20 LBS. WITHOUT SPECIAL MOUNTING DETAILS. 20. 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. 21. THE INSTALLING CONTRACTOR SHALL PROVIDE A RECORD OF COMPLETION PER NFPA 72, FIGURE 10.18.2.1.1.
- 22. CONTROL PANELS, REMOTE ANNUNCIATORS SHALL BE INSTALLED WITH THEIR BOTTOMS MOUNTED AT 48".
- 23. THE INSTALLING CONTRACTOR SHALL PROVIDE SYSTEM PROGRAMMING FOR SUPERVISORY MONITORING PER CBC SECTION
- 24. SUPERVISORY MONITORING SHALL BE TESTED AND VERIFIED AS SENDING CORRECT SIGNALS IN CONJUNCTION WITH FINAL
- 25. ALL CEILINGS BASED ON 10' SMOOTH CEILINGS UNLESS OTHERWISE NOTED.

CAMPUS BUILDINGS BUILDING # | SQUARE FOOTAGE **BUILDING TYPE** 3265 FT² 100 CLASSROOM 200 3265 FT² CLASSROOM 300 3265 FT² CLASSROOM 400 3265 FT² CLASSROOM 500 668 FT² RESTROOM RESTROOM 600 668 FT² 700 7845 FT² MULTI PURPOSE 800 2356 FT² LIBRARY 900 234 FT² ELECTRICAL KINDERGARTEN 3571 FT² RESTROOMS 1100 1200 639 FT² KITCHEN

NO SPRINKLED BUILDINGS EXIST ON CAMPUS

IDENTIFICATION STAME

REVIEWED FOR SS ☐ FLS ☑ ACS ☐

APP: 03-124308 INC:

ፈህይይነ ጩ አቋቋወይዜነ ፕತቋ አህይ

LUCCI & ASSOCIATES, INC. reserve their commonlaw copyright

and other property rights in these plans. These plans and drawings are not to be reproduced, changed, or copied in any form or manner whatsoever without first obtaining the expressed written permissio

and consent of LUCCI & ASSOC. INC nor are they to be assigned to

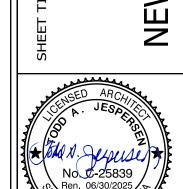
any third party without obtaining said written permission and conse

FAX (805) 389-6519

3251 CORTE MALPASO, #511

CAMARILLO, CA 93012-8094

(805) 389-6520



REVISIONS REV DATE AS NOTED | 01-18-2024 19753-01

OF: SHEETS:

Copyright Lucci and Associates Consulting Electrical Engineers. Deviations from this drawing will not be made without their expressed written permission. L.A.I.# 19753-01 PAPER SIZE 36"x24"

907.5.2.2 EMERGENCY VOICE/ALARM COMMUNICATION SYSTEMS. EMERGENCY VOICE/ALARM COMMUNICATION SYSTEMS REQUIRED BY THIS CODE SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 72. THE OPERATION OF ANY AUTOMATIC FIRE DETECTORS, SPRINKLER WATER FLOW DEVICE OR MANUAL FIRE ALARM BOX SHALL AUTOMATICALLY SOUND AN ALERT TONE FOLLOWED BY VOICE INSTRUCTIONS GIVING APPROVED INFORMATION AND DIRECTIONS FOR A GENERAL OR STAGED EVACUATION IN ACCORDANCE WITH THE BUILDING'S FIRE SAFETY AND EVACUATION PLANS REQUIRED BY SECTION 404. INDICATING CIRCUIT FAILURE 907.5.2.2.1 MANUAL OVERRIDE. A MANUAL OVERRIDE FOR EMERGENCY VOICE COMMUNICATION SHALL BE PROVIDED ON A SELECTIVE INITIATING CIRCUIT FAILURE AND ALL-CALL BASIS FOR ALL PAGING ZONES. AC / BATTERY FAILURE 907.5.2.2.2 LIVE VOICE MESSAGES. THE EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM SHALL BE ALSO HAVE THE CAPABILITY TO BROADCAST LIVE VOICE MESSAGES BY PAGING ZONES ON A SELECTIVE ALL-CALL BASIS. F.A. SYSTEM LOW BATTERY 907.5.2.2.3 ALTERNATE USES. THE EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM SHALL BE ALLOWED TO BE USED FOR OTHER SMOKE CO DETECTORS ANNOUNCEMENTS, PROVIDED THE MANUAL FIRE ALARM USE TAKES PRECEDENCE OVER ANY OTHER USE. HEAT DETECTORS ullet907.5.2.4. GROUP E SCHOOLS. ONE AUDIBLE ALARM NOTIFICATION APPLIANCE SHALL BE MOUNTED ON THE EXTERIOR OF A BUILDING CARBON MONOXIDE DETECTOR • | • | TO ALERT OCCUPANTS AT EACH PLAYGROUND AREA. ISOLATOR LINE TROUBLE 907.6.6.3 GROUP E SCHOOLS. FIRE ALARM SYSTEMS SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION IN ACCORDANCE WITH NFPA 72. THE SUPERVISING STATION SHALL BE LISTED AS EITHER UUFX EARTH GROUND FAULT (CENTRAL STATION) OR UUJS (REMOTE & PROPRIETARY) BY THE UNDERWRITERS LABORATORY INC. (UL) OR OTHER APPROVED LISTING AND TESTING LABORATORY OR SHALL COMPLY WITH THE REQUIREMENTS OF FM 3011. ELECTRICAL ROOM SMOKE

PARTIAL LIST OF APPLICABLE STANDARDS

(CALGREEN), PART 11, TITLE 24 CCR

2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 APPLICABLE STANDARDS

2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, 2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1,

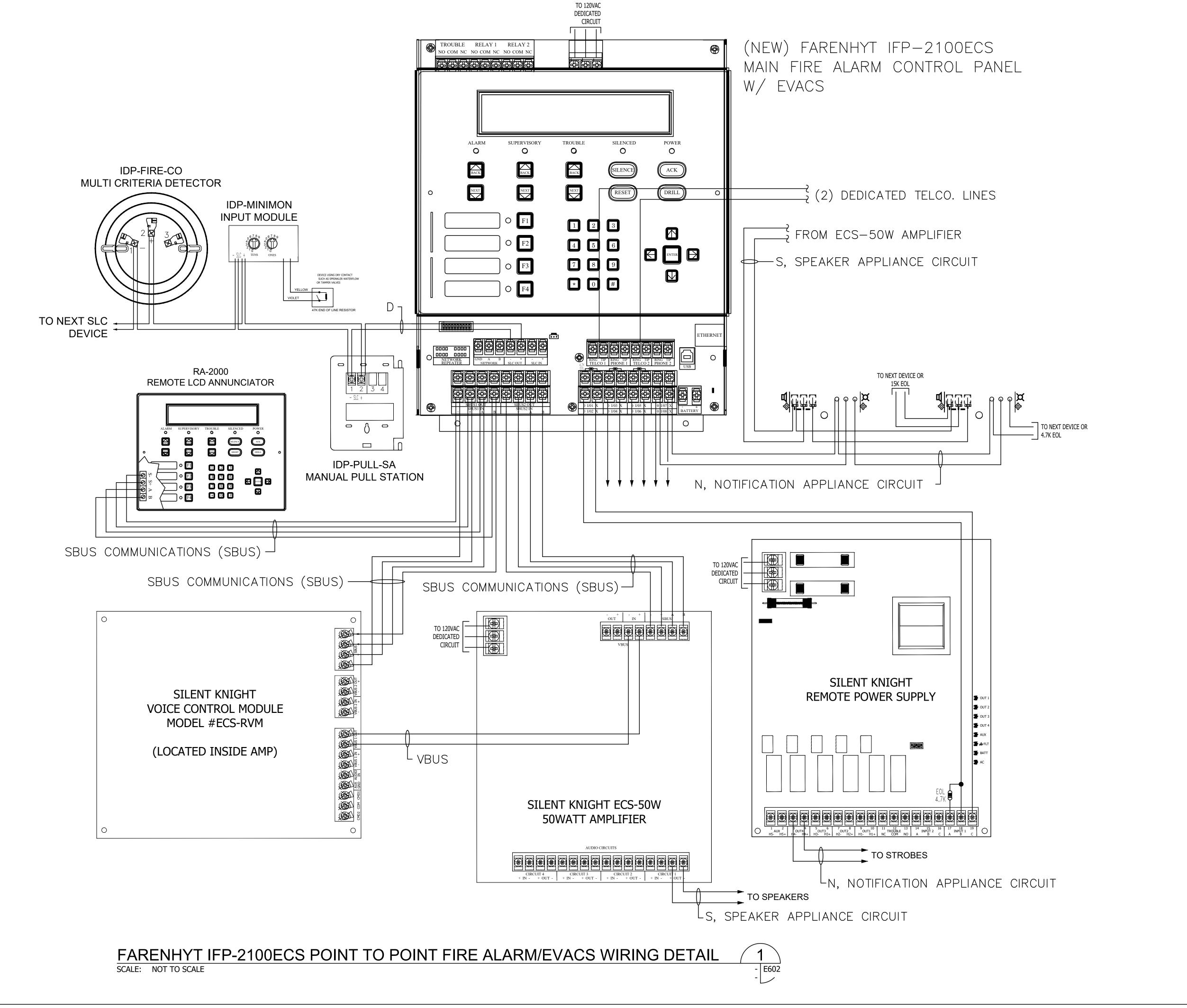
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL

FOR A LIST OF APPLICABLE STANDARDS, INCLUDING 2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS, REFER TO CBC CHAPTER 35 AND CFC CHAPTER 80.

2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24

2022 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 CCR 2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR

SEQUENCE OF OPERATION ACTION DEVICE



APP: 03-124308 INC: REVIEWED FOR SS ☐ FLS ☑ ACS ☐

ムリウク 送 メララリウル・アララ リング CONSULTING ELECTRICAL ENGINEERS

CAMARILLO, CA 93012-8094

(805) 389-6520

LUCCI & ASSOCIATES, INC. reserve their commonlaw copyrig and consent of LUCCI & ASSOC. INC nor are they to be assigned to



REVISIONS CHECKED: LK/DS K. LUCCI SCALE: DATE: AS NOTED 01-18-2024 19753-01

E602

INSTALLATION AND MAINTENANCE INSTRUCTIONS Honeywell Farenhyt™ Series

IDP-Monitor Module SPECIFICATIONS

Normal Operating Voltage Maximum Current Draw: 5.0 mA (LED on) 375μA (group poll), 350 μA (direct poll), 600 μAmps (communication, IDC shorted) Average Operating Current: **EOL Resistance:** 47K Ohms

Max. IDC wiring resistance:

Accessories:

11 Volts Maximum IDC Voltage: Maximum IDC Current Temperature Range: 32°F to 120°F (0°C to 49°C) 10% to 93% Non-condensing Humidity: $4^{1}/_{2}$ " H x 4" W x $1^{1}/_{4}$ " D (Mounts to a 4" square by $2^{1}/_{8}$ " deep box.) Dimensions:

1,500 Ohms

BEFORE INSTALLING This information is included as a quick reference installation guide. Refer to The IDP-Monitor mounts directly to 4-inch square electrical boxes (see the control panel installation manual for detailed system information. If the Figure 2). The box must have a minimum depth of 2½ inches. Surface modules will be installed in an existing operational system, inform the operator and local authority that the system will be temporarily out of service. Dis-

NOTICE: This manual should be left with the owner/user of this equipment. within the control panel enclosure. **GENERAL DESCRIPTION** The IDP-Monitor Module is intended for use in intelligent, two-wire systems, where the individual address of each module is selected using the built-in rotary switches. It provides either a Class A or Class B fault tolerant initiating

device circuit (IDC) for normally open contact fire alarm and supervisory de-

connect power to the control panel before installing the modules.

vices, or either normally open or normally closed security devices. The module has a panel controlled LED indicator.

To ensure proper operation, this module shall be connected to a compatible Honeywell Farenhyt series system control panel (list available from Honeywell).

FIGURE 1. CONTROLS AND INDICATORS

ANY NUMBER OF ULLISTED CONTACT

CLOSURE DEVICES MAY BE USED. DO NOT MIX

FIRE ALARM INTIATING, SUPERVISORY, OR

SECURITY DEVICES ON THE SAME MODULE.

INITIATING DEVICE CIRCUIT (IDC) - NFPA STYLE I

POWER LIMITED: 450µA MAX. @ 11 VDC MAX

INSTALL CONTACT CLOSURE DEVICES PER

MANUFACTURER'S INSTALLATION INSTRUCTIONS.

ANY NUMBER OF UL LISTED CONTACT

CLOSURE DEVICES MAY BE USED. DO NOT MIX

FIRE ALARM INTIATING, SUPERVISORY, OR

SECURITY DEVICES ON THE SAME MODULE.

INSTALL CONTACT CLOSURE DEVICES PER

MANUFACTURER'S INSTALLATION INSTRUCTIONS

RESISTOR

EOL RESISTOR IS

INTERNAL AT

TERMINALS 8 & 9

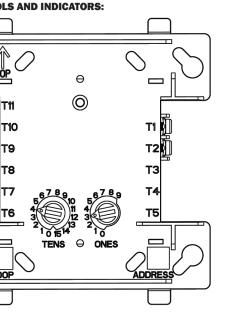


FIGURE 3. TYPICAL 2-WIRE INITIATING CIRCUIT CONFIGURATION, NFPA STYLE B OR SECURITY SYSTEMS:

DEVICE (+)

NOTE: For UL Listed security installations, the IDP-Monitor must be mounted within the control panel enclosure

FIGURE 4. TYPICAL 4-WIRE FAULT TOLERANT INITIATING CIRCUIT CONFIGURATION, NFPA STYLE D:

DEVICE (+)

MODULE

NOTE: All wiring must conform to applicable local codes, ordinances, and regulations. This module is intended for power limited wiring only. . Install module wiring in accordance with the job drawings and appropriate wiring diagrams.

NOTE: For UL Listed security installations, the IDP-Monitor must be mounted

Phone: 203-484-7161 Fax: 203-484-7118

www.Farenhyt.com

Set the address on the module per job drawings. Secure module to electrical box (supplied by installer), as shown in Figure 2.

NOTE: All references to power limited represent "Power Limited (Class 2)".

FROM PANEL OR

C0918-00

FROM PANEL OR

©2017 Honeywell. 04-21

PREVIOUS DEVICE

CONNECT MODULES TO LISTED COMPATIBLE

SIGNAL LINE CIRCUIT (SLC)

IS RECOMENDED

CONTROL PANELS ONLY

(+) PREVIOUS DEVICE

CONNECT MODULES TO LISTED COMPATIBLE

CONTROL PANELS ONLY

IGNAL LINE CIRCUIT (SLC

TWISTED PAIR

IS RECOMENDED

ALL WIRING SHOWN IS SUPERVISED AND POWER LIMITED

ALL WIRING SHOWN IS SUPERVISED AND POWER LIMITED

The detector will automatically enable the signal processing after 10 min-Testing the detector will activate the alarm relay and send a signal to 12 Clintonville Road, Northford, CT 06472-1610

the panel. Before removing the detector, notify the proper authorities that the smoke

detector system is undergoing maintenance and will be temporarily out of service. Disable the zone or system undergoing maintenance to prevent un-

1. Remove the sensor to be cleaned from the system.

5 minutes for the CO to clear and exit the detector.

2. Remove the sensor cover by pressing firmly on each of the four removal tabs that hold the cover in place. (See Figure 4.) 3. Vacuum the screen carefully without removing it. If further cleaning is

required continue with Step 4, otherwise skip to Step 7. 4. Remove the chamber cover/screen assembly by pulling it straight out.

6. Reinstall the chamber cover/screen assembly by aligning the arrows on tested to the sensitivity limits defined in UL standard 2034. the top with the two round-top posts on the sensing chamber, and gently pressing it until it fits securely.

7. Replace the cover using the LEDs to align the cover and then gently pushing it until it locks into place. NOTE: Make sure that the thermistors do not become bent under the cover.

8. Reinstall the detector.

9. Test the detector as described in TESTING. 10. Reconnect disabled circuits.

11. Notify the proper authorities that the system is back on line. **ABOUT CARBON MONOXIDE DETECTORS**

CAUTION: This carbon monoxide detector is designed for indoor use only. Do not expose to rain or moisture. Do not knock or drop the detector. The The CO cell has an expected lifetime of approximately ten years. The detector

This carbon monoxide detector is NOT: • Designed to detect any gas other than carbon monoxide

• To be seen as a substitute for the proper servicing of fuel-burning appliances or the sweeping of chimneys. • To be used on an intermittent basis, or as a portable alarm for the spill-

age of combustion products from fuel-burning appliances or chimneys. Carbon monoxide gas is a highly poisonous gas which is released when fuels are burnt. It is invisible, has no smell and is therefore impossible to detect with the human senses. Under normal conditions in a room where fuel burning appliances are well maintained and correctly ventilated, the amount of carbon monoxide released into the room by appliances should not be danger-

The detector will go into alarm if gas entry is successful. It may take up **SYMPTOMS OF CARBON MONOXIDE POISONING**

to 1 minute for the device to alarm. Once the detector is in alarm allow Carbon monoxide bonds to the hemoglobin in the blood and reduces the amount of oxygen being circulated in the body. The following symptoms are examples taken from NFPA 72 and 720. They represent approximate values for healthy adults:

)	Concentration (ppm CO)	Symptoms
	200	Mild headache after 2-3 hours of exposure
e f -	400	Headache and nausea after 1-2 hours of exposure
l	800	Headache, nausea, and dizziness after 45 minutes of exposure; collapse and unconsciousness after 2 hours of exposure

Many causes of reported carbon monoxide poisoning indicate that while victims are aware that they are not well, they become so disoriented that they are unable to save themselves by either exiting the building or calling for

5. Use a vacuum cleaner or compressed air to remove dust and debris from Also young children and pets may be the first to be affected. Per UL standard 2075, the IDP-FIRE-CO-W and IDP-FIRE-CO-IV has been

> **ALARM THRESHOLDS ARE AS FOLLOWS:** Detector response time, min. 60-240 10-50 150 ± 5 ppm

> > 4-15

I56-6603-000

2/21/2019

What to do if the carbon monoxide detector goes into alarm: Immediately move to a spot where fresh air is available, preferably out-

 400 ± 10 ppm

IMPORTANT: This detector should be tested and maintained regularly following National Fire Protection Association (NFPA) 720 requirements.

detector will not protect against the risk of carbon monoxide poisoning if is programmed to signal the approach of end of this lifetime to the control not properly wired. The detector will only indicate the presence of carbon panel. The CO cell is not a field replaceable component. The smoke sensor monoxide gas at the sensor. Carbon monoxide gas may be present in other will continue to operate using other sensing elements (photoelectric, heat and infrared) even though the CO cell is no longer operational. The CO detector will not operate once the CO cell has reached its end of life.

SPECIAL NOTE REGARDING SMOKE DETECTOR GUARDS

Smoke detectors are not to be used with detector guards unless the combination has been evaluated and found suitable for that purpose.

INSTALLATION AND MAINTENANCE INSTRUCTIONS Farenhyt® Series Black

Honeywell

IDP-FIRE-CO-W and **IDP-FIRE-CO-IV** Multi-Criteria CO and Smoke Sensor

12 Clintonville Road, Northford, CT 06472-1610 Phone: 203-484-7161 Fax: 203-484-7118 www.Farenhyt.com

SPECIFICATIONS Operating Voltage Range: 200 uA (one communication every 5 seconds with green LED blink on communication) Operating Current @ 24 VDC: 2 mA @ 24 VDC (one communication every 5 seconds with red LED solid on) Maximum Alarm Current: 4.5 mA @ 24 VDC (one communication every 5 seconds with amber LED solid on) Maximum Current: 15% to 90% Relative Humidity, Non-condensing Operating Humidity Range 32°F to 100°F (0°C to 38°C) Operating Temperature Range: 0 to 4000 ft./min. (0 to 1219.2 m/min.) Air Velocity:

2.7" (69 mm) installed in B200S series sounder base 6.875" (175 mm) installed in B200S series sounder bases Diameter: 3.4 oz. (95 g) Isolator Load Rating:

UL 2075 listed for Carbon Monoxide UL 268 listed for Open Air Protection

UL 521 listed for Heat Detectors velop a proper response plan. The installation must meet the require- event of a fire. ments of the Authority Having Jurisdiction (AHJ). Sensors offer maximum

Remove power from the communication line before installing sensors.

*Please refer to your isolator base/module manual for isolator calculation instructio

of compatible bases, refer to the Base/Sensor Cross Reference Chart at systemsensor.com. GENERAL DESCRIPTION DOES THIS SUPPORT CLIP MODE

Models IDP-FIRE-CO-W and IDP-FIRE-CO-IV are plug-in type multi-criteria carbon monoxide (CO) sensor, 135°F (57.2°C) fixed temperature heat detector and infrared (IR) sensors, as well as a carbon monoxide detector. The 5. Test the sensor(s) as described in the TESTING section of this manual. IDP-FIRE-CO-W and IDP-FIRE-CO-IV also transmit an alarm signal due to heat

FIGURE 1. WIRING DIAGRAM (135°F/57.2°C) per UL 521.

All sensors transmit an analog representation of smoke and/or carbon monoxide density over a communication line to a control panel. Rotary dial switches are provided for setting the sensor's address. (See Figure 2.)

Two LEDs on the sensor are controlled by the panel to indicate sensor status. An output is provided for connection to an optional remote LED annunciator (P/N RA100Z).

Honeywell panels offer different features sets across different models. As a result, certain features of the photoelectric sensors may be available on some control panels, but not on others. The multi-criteria CO and smoke sensors only support IDP protocol systems.

supported by the control unit are: 1. The sensor's LEDs can operate in three ways—on, off, and blinking—and they can be set to red, green, or amber. This is controlled by the panel.

The possible features available in the multi-criteria CO and smoke sensors, if

trolled independent of the LEDs. 3. Devices are point addressable up to 159 addresses. Please refer to the operation manual for the UL listed control panel for specific

operation. The photoelectric sensors require compatible addressable communications to function properly. Connect these sensors to listed-compatible control panels only.

Honeywell recommends spacing sensors in compliance with NFPA 72. In low air flow applications with smooth ceilings, space sensors 30 feet apart (9.1 m). For specific information regarding sensor spacing, placement, and special ap-

plications, refer to NFPA 72 or the System Smoke Detector Application Guide,

WIRING GUIDE This sensor must be installed in compliance with the control panel sys- All wiring must be installed in compliance with the National Electrical Code, tem installation manual. For local audible indication of a fire and/or applicable local codes, and any special requirements of the Authority Having carbon monoxide alarm, it is recommended to install the multi-criteria Jurisdiction. Proper wire gauges should be used. The installation wires should carbon monoxide (CO) and smoke sensors into a B200S series sounder be color-coded to limit wiring mistakes and ease system troubleshooting. base. If a local audible device is not used, care should be taken to de-

performance when installed in compliance with the National Fire Protec
1. Wire the sensor base (supplied separately) per the base wiring diagram. tion Association (NFPA); see NFPA 72 and NFPA 720. For a complete list

while turning it clockwise to secure it in place.

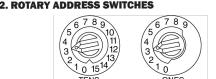
. Set the desired address on the sensor address switches. (See Figure 2.) 3. Install the sensor into the sensor base. Push the sensor into the base

smoke sensors that offer a photoelectric sensing chamber combined with a 4. After all sensors have been installed, apply power to the control panel and activate the communication line.

ANNUNCIATOF

▲CAUTION

2. The remote output may be synchronized to the LED operation or conof connections.



I56-6603-000

2/21/2019

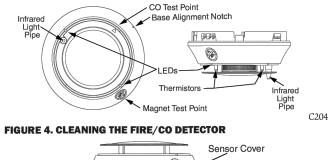
SPECIAL APPLICATION

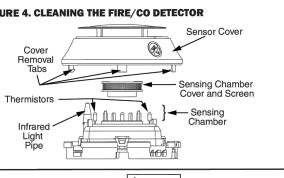
When configured at the fire alarm control panel, this detector is capable of operating in a special application mode such that it has a higher sensitivity than is normally allowed by UL 268 for areas where early warning is important. In this mode, the detector does not comply with the Cooking Nuisance Smoke Test. Detectors (Sampling ports) set to the special application mode are not suitable for use in areas where cooking appliances may be used. If cooking appliances are used within the protected space, a normal application detector or normal application mode must be used for that area.

Special application mode is not for general use and the detector may be more prone to false alarms if used in unsuitable environments. While no list is all-inclusive, some examples of unsuitable environments for special application mode are areas with airborne particulate or aerosols including sawing, drilling, and grinding operations, textile or agricultural processing, or areas with engines that are not vented to the outside. A complete list of aerosol and particulate sources is available in the Annex of NFPA 72. Suitable environments for special application mode could include early warn-

ing for hospitals, museums, assisted living and other areas that do not have airborne particulate or aerosols. Refer to the fire alarm control panel documentation for information on how to configure the detector for special application mode.

FIGURE 3. FEATURES OF THE FIRE/CO DETECTOR





Dust covers provide limited protection against airborne dust particles during shipping. Dust covers must be removed before the sensors can sense smoke. Remove sensors prior to heavy remodeling or construction.

TAMPER RESISTANCE

Models IDP-FIRE-CO-W and IDP-FIRE-CO-IV include a tamper-resistant capability that prevents removal from the base without the use of a tool. Refer to the base manual for details on making use of this capability.

Before testing, notify the proper authorities that the system is undergoing maintenance, and will temporarily be out of service. Disable the system to prevent unwanted alarms.

ing methods must satisfy the Authority Having Jurisdiction (AHJ). Sensors in operation. offer maximum performance when tested and maintained in compliance with NFPA 72. Sensitivity readings are available through the FACP. Refer to the manufacturer's published instructions for proper use.

The sensor can be tested in the following ways: A. Functional: Magnet Test (P/N M02-04-01 or M02-09-00) This sensor can be functionally tested with a test magnet. The test magnet electronically simulates smoke in the sensing chamber, testing the

sensor electronics and connections to the control panel. a. Hold the test magnet in the magnet test area as shown in Figure 3. b. The sensor should alarm the panel. Two LEDs on the sensor are controlled by the panel to indicate sensor status. Coded signals, transmitted from the panel, can cause the LEDs

to blink, latch on, or latch off. Refer to the control panel technical documentation for sensor LED status operation and expected delay to alarm. NOTE: The magnet test initiates an approximately 10 minute period when the detector's signal processing software routines are not active. B. Smoke Entry

Canned aerosol simulated smoke (canned smoke agent) may be used for smoke entry testing of the smoke detector.

The multi-criteria CO and smoke sensor uses algorithms to process signals received from multiple sensors to determine alarm conditions and reduce false alarms. Therefore, a single burst of canned smoke will not immediately place the detector into an alarm condition because the detector algorithms correctly determine a burst of canned smoke is not fire. In order to perform functional testing of the photoelectric sensor, the device must be placed into test mode. Test mode allows the detector to isolate the individual sensors for testing. The device can be placed into

test mode through either of the following methods. a. Put the device into test mode by holding a test magnet in the magnet test area as shown in Figure 3 for 6-12 seconds.

NOTE: If the magnet is held in place for too long the fire alarm test function will be triggered. (See Magnet Test, above.) Reset the panel and proceed with testing the smoke entry portion of the device.

b. Perform smoke entry testing immediately following the magnet test. The magnet test initiates an approximately 10 minute period when the detector's signal processing software routines are not active. Once in test mode, test the smoke detector using one of the tested and approved aerosol smoke products. Refer to the manufacturer's published instructions for proper use of the canned smoke agent. When used properly, the canned smoke agent will cause the smoke detector to go into alarm.

and approved aerosol smoke products include:										
ufacturer	Model									
Fire and Safety	25S, 30S (PURCHECK)									
	SMOKE CENTURION , SOLOA10, SMOKESABRE, TRUTEST, SOLO 365									
Climb	TESTIFIRE 2000									

Canned aerosol simulated smoke (canned smoke agent) formulas will vary by manufacturer. Misuse or overuse of these products may have long term adverse effects on the smoke detector. Consult the canned smoke agent manuacturer's published instructions for any further warnings or caution statements.

Direct Heat Method (Hair Dryer of 1000-1500 watts) A hair dryer of 1000-1500 watts should be used to test the thermistors.

the plastic housing. The detector will reset only after it has had sufficient time to cool. Make sure both thermistors are tested individually. Multi-Criteria Testing Testifire® by SDi provides testing of the smoke, heat and CO sensors. Consult the manufacturer's published instructions for complete usage instructions.

Direct the heat toward the thermistor, holding the heat source approxi-

mately 12 inches (30 cm) from the detector in order to avoid damaging

A sensor that fails any of these tests may need to be cleaned as described under CLEANING, and retested. When testing is complete, restore the system All sensors must be tested after installation and periodically thereafter. Test-

NOTE: Check with local codes and the AHJ to determine whether or not a functional gas test is desired for an installation.

A canned CO testing agent may be used to verify the detector's ability to sense CO. Carbon Monoxide alarm thresholds are designed around CO concentrations over time, as defined in UL standard 2034. Therefore, a single burst of CO test agent will not immediately place the detector into an alarm condition. In order to perform functional testing of the CO sensor, the device must be placed into test mode. Test mode eliminates the time and concentration requirements needed for alarm and allows the CO sensor to be tested. The device can be placed into test mode through either of the following methods.

a. Put the device into test mode by holding a test magnet in the magnet test area as shown in Figure 3 for 6-12 seconds. NOTE: If the magnet is held in place for too long the fire alarm test function will be triggered. Reset the panel and proceed with testing the CO

b. Perform functional gas entry testing immediately following the magnet test. The magnet test initiates an approximately 10 minute period when the detector's signal processing software routines are not active. Once in test mode, test the CO sensor using a tested and approved canned CO testing agent. A tested and approved canned CO testing agent is Solo detector testers model C6 CO Detector Tester available from SDi.

Complete the CO sensor testing as follows: Spray a UL approved CO agent into the top of the detector near the CO sensor opening for at least 1 second. CO sensor opening is indicated by a triangle on the sensor cover. (See Figure 3.) Use the applicator straw included with the CO agent to more efficiently direct the CO into the detection cell during testing.

I56-6603-000

2/21/2019

DIV. OF THE STATE ARCHITEC APP: 03-124308 INC: REVIEWED FOR SS ☐ FLS ☑ ACS ☐

IDENTIFICATION STAME

ક્રોઇઇઇ કે ત્રે કેઇઇઇઇડોઇકેક ડોઇઇ

3251 CORTE MALPASO, #511

CAMARILLO, CA 93012-8094 (805) 389-6520 FAX (805) 389-6519

LUCCI & ASSOCIATES, INC. reserve their commonlaw copyright and other property rights in these plans. These plans and drawings are not to be reproduced, changed, or copied in any form or manner whatsoever without first obtaining the expressed written permission and consent of LUCCI & ASSOC. INC nor are they to be assigned to any third party without obtaining said written permission and consent

STAMP



REV DATE REVISIONS CHECKED: LK/DS K. LUCCI AS NOTED | 01-18-2024 19753-01

SHEET:

OF: SHEETS:

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help. Honeywell® and Farenhyt® are registered trademarks of Honeywell International, Inc. Testifire® and SOLO® are registered trademarks of SDIO® are registered trademarks of SDIO® are registered trademarks of SDIO® and SOLO® are registered trademarks of SDIO® are registered trademarks of SDIO® and SOLO® are registered trademarks of SDIO® are registered trademarks of SDIO are registered tra

Increase the separation between the equipment and receiver.

Please refer to insert for the Limitations of Fire Alarm Systems

I56-6603-000 ©2019 Honeywell. 2/21/2019

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio with since leaving the factory. Do not install this ency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there product if there are any indications of tampering which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following should be returned to the point of purchase It is the responsibility of the system owner to

panels, wiring etc., are adequately protected to avoid tampering of the system that could result

INSTALLATION AND MAINTENANCE INSTRUCTIONS Farenhyt® Series Black

Honeywell

IDP-PHOTO-W and **IDP-PHOTO-IV**

Intelligent Photoelectric Smoke Sensors

SPECIFICATIONS

Operating Voltage Range: 200 uA (one communication every 5 seconds with green LED blink on communication) Operating Current @ 24 VDC: Maximum Alarm Current: 2 mA @ 24 VDC (one communication every 5 seconds with red LED solid on) 4.5 mA @ 24 VDC (one communication every 5 seconds with amber LED solid on) Maximum Current: 10% to 93% Relative Humidity, Non-condensing

Operating Humidity Range: Operating Temperature Range: 32°F to 122°F (0°C to 50°C) Air Velocity: 0 to 4000 ft./min. (0 to 1219.2 m/min.) 2.0" (51 mm) installed in B300-6 Base

6.2" (156 mm) installed in B300-6 Base; 4.1" (104 mm) installed in B501 Base Diameter:

WIRING GUIDE

diagram. (See Figure 2.)

turning it clockwise to secure it in place

activate the communication line.

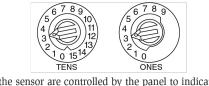
Isolator Load Rating: *Please refer to your isolator base/module manual for isolator calculation instruction

UL 268 listed for Open Air Protection. UL268A listed for Duct Applications

This sensor must be installed in compliance with the control panel system applicable local codes, and any special requirements of the Authority Having installation manual. The installation must meet the requirements of the AuJurisdiction. Proper wire gauges should be used. The installation wires should thority Having Jurisdiction (AHJ). Sensors offer maximum performance when be color-coded to limit wiring mistakes and ease system troubleshooting. Im-

installed in compliance with the National Fire Protection Association (NFPA); proper connections will prevent a system from responding properly in the see NFPA 72. **GENERAL DESCRIPTION** Models IDP-PHOTO-W and IDP-PHOTO-IV are plug-in type smoke sensors that combine a photoelectronic sensing chamber with addressable-analog commu-

The sensors transmit an analog representation of smoke density over a communication line to a control panel. Rotary dial switches are provided for setting the sensor's address. (See Figure 1.)



Remove sensors prior to heavy remodeling or construction. Two LEDs on the sensor are controlled by the panel to indicate sensor status. An output is provided for connection to an optional remote LED annunciator **FIGURE 2. WIRING DIAGRAM:**

Honeywell Farenhyt panels offer different feature sets across different models. As a result, certain features of the photoelectric sensors may be available on some control panels, but not on others. These devices support IDP protocol mode. The possible features available if supported by the control panel in-

- 1. The sensor's LEDs can operate in three ways—on, off, and blinking-and they can be set to red, green, or amber. This is controlled by the panel. 2. The remote output may be synchronized to the LED operation or controlled independent of the LEDs.
- 3. Devices are point addressable up to 159 addresses. Please refer to the operation manual for the UL listed control panel for specific operation. The photoelectric sensors require compatible addressable communications to function properly. Connect these sensors to listed-compatible control panels only.

Honeywell recommends spacing sensors in compliance with NFPA 72. In low the base manual for details on making use of this capability. air flow applications with smooth ceilings, space sensors 30 feet apart (9.1 m). For specific information regarding sensor spacing, placement, and special applications, refer to NFPA 72 or the System Smoke Detector Application Guide, available from Honeywell. Duct Applications: IDP-PHOTO-W and IDP-PHOTO-IV are listed for use in

ducts. See Duct Smoke Detectors Applications Guide HVAG53 for details on pendant mount applications. NOTE: Intelligent photoelectric smoke sensors are also listed for use inside DNR(W) duct smoke detectors.

12 Clintonville Road, Northford, CT 06472-1610 Phone: 203-484-7161 Fax: 203-484-7118

All wiring must be installed in compliance with the National Electrical Code.

Remove power from the communication line before installing sensors.

2. Set the desired address on the sensor address switches. (See Figure 1.)

. Install the sensor into the sensor base. Push the sensor into the base while

4. After all sensors have been installed, apply power to the control panel and

Oust covers provide limited protection against airborne dust particles during

CAUTION: Do not loop wire under

terminal 1 or 2. Break wire run to

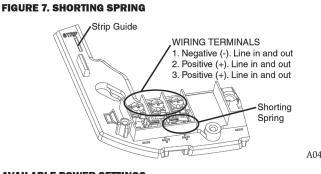
hipping. Dust covers must be removed before the sensors can sense smoke.

ntelligent photoelectric smoke sensors include a tamper-resistant capability

that prevents their removal from the base without the use of a tool. Refer to

5. Test the sensor(s) as described in the TESTING section of this manual.

. Wire the sensor base (supplied separately) as shown in the wiring



System Sensor notification appliances come with a shorting spring that is pro-

final product. (See Figure 7.) This spring will automatically disengage when

the product is installed, to enable supervision of the final system.

System Sensor offers a wide range of power settings for your life safety needs,

including ¼, ½, 1, and 2W. Sound levels data per UL 1480 can be found in Table 3. TABLE 3. SOUND LEVELS FOR EACH TRANSFORMER POWER SETTING

UL Reverberant (dBA @10 ft)	UL Anechoic (dBA @10 ft)
77	77
80	80
83	83
86	86
	(dBA @10 ft) 77 80 83

Signal levels exceeding 130% rated signal voltage can damage the speaker. Consequently, an incorrect tap connection may cause speaker damage. This means that if a 25V tap is selected when a 70.7V amplifier is being used, speaker damage may result. Therefore, be sure to select the proper taps for the

amplifier voltage/input power level combination being used. MOUNTING AND REMOVNG APPLIANCE 1. Attach mounting plate to junction box using two of the provided Philips

head screws. (See Figures 8 and 9.) 2. Connect field wiring according to terminal designations. (See Figure 5.) cover to prevent contamination of the wiring terminals on the mounting screw (sold separately).

4. To attach product to mounting plate: a. Remove the protective dust cover.

b. Hook the tabs on the top of the product housing into the grooves on mountc. Pivot the product into position to engage the terminals on the mounting plate. Make sure that the tabs on the back of the product housing fully en-

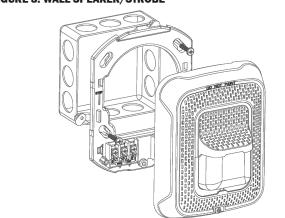
gage with the mounting plate. d. Hold product in place with one hand, and secure product by tightening the single mounting screw in the front of the product housing. Ceiling Models only: To remove product from the mounting plate, press the locking button after loosening the captive mounting screw.

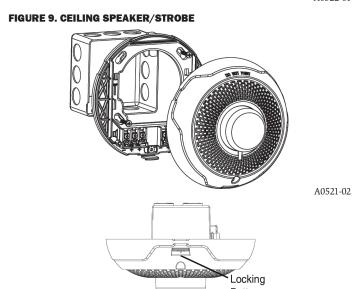
ACAUTION | The "hold in place" snaps are not intended to secure the product to the back box. The product must be secured to the back box using the screws provided.

Factory finish should not be altered: Do not paint!

ACAUTION vided between terminals 2 and 3 of the mounting plate to enable system con-

tinuity checks after the system has been wired, but prior to installation of the to flex. FIGURE 8. WALL SPEAKER/STROBE





TAMPER SCREW 3. If the product is not to be installed at this point, use the protective dust

For tamper resistance, the standard captive screw may be replaced with a Torx

> 1. To remove the captive screw, back out the screw and apply pressure to the back of the screw until it disengages from the housing. Replace with Torx screw. (See Figure 10.)



1. The surface mount back box may be secured directly to the wall or ceiling. Use of grounding bracket with ground screw is optional. (See Figures 11 and 12.) 2. The wall mount box must be mounted with the up arrow pointing up. (See NOTE: Ceiling Surface Mount Back Box SBBCR/CWL is a common back box

for ceiling horn strobes, strobes and ceiling speakers and speaker strobes. Use

156-0002-002

A0502-01

INSTALLATION AND MAINTENANCE INSTRUCTIONS

Selectable Output Speaker Strobes - Wall and Ceiling Mount

For use with the following models: Wall Speakers: SPSRL, SPSWL, SPSRL-P, SPSWL-P, SPSRL-SP, SPSWL-CLR-ALERT Ceiling Speakers: SPSCRL, SPSCWL, SPSCWL-P, SPSCWL-SP, SPSCWL-CLR-ALERT

PRODUCT SPECIFICATIONS	
Standard Operating Temperature:	32°F to 120°F (0°C to 49°C)
Humidity Range:	10 to 93% Non-condensing
Nominal Voltage (speakers):	25 Volts or 70.7 Volts
Maximum Supervisory Voltage:	50 VDC
Speaker Frequency Range:	400 – 4000 Hz
Power Settings:	1/4, 1/2, 1, 2 Watts
Input terminal wire gauge:	12 to 18 AWG
Strobe Flash Rate:	1 flash per second
Nominal Voltage (strobes):	Regulated 12VDC, regulated 24VDC or FWR
Operating Voltage Range (includes fire alarm panels with built in sync):	8 to 17.5V (12V nominal) or 16 to 33V (24V nominal)
Operating Voltage with MDL3 Sync Module:	8.5 to 17.5V (12V nominal) or 16.5 to 33V (24V nominal)

DIMENSIONS FOR PRODUCTS AND ACCE	SSORIES				MOUNTING BOX OPTIONS
WALL PRODUCTS	Length	Wi	dth	Depth	SPEAKER STROBES
Wall Speaker Strobe	6.5" (165 mm)	5.00" (1	(127 mm) 2.30" (58.4 mm)		SBBSPRL/WL (wall), SBBCRL/WL (ceil
CEILING PRODUCTS	Length	Wi	dth	Depth	ing), 4" x 4" x 21/8" or deeper (When using 12AWG, 14 AWG, or adding extra
Ceiling Speaker Strobe	6.8" (173 mm)		/A	2.87" (73mm)	wires in the box, a deeper box or exten-
WALL SURFACE MOUNT BACK BOX	Length	Wi	dth	Depth	sion ring is recommended.)
Speaker Strobe with SBBSPRL/WL Surface Mount Back Box	6.62" (168mm)	5.12" (130 mm)		2.30" (58.4 mm)	
CEILING SURFACE MOUNT BACK BOX	CEILING SURFACE MOUNT BACK BOX Diameter			Depth	
Speaker Strobe with SBBCRL/WL Surface Mount Back Box	6.92" (176 m	m)	5.37" (116mm)		
·					

using 12AWG, 14 AWG, or adding extra wires in the box, a deeper box or extension ring is recommended.)

800/736-7672, FAX: 630/377-6495

www.systemsensor.com

NOTICE: This manual shall be left with the owner/user of this equipment. **BEFORE INSTALLING**

provides detailed information on speaker notification devices, wiring and with NFPA 72, ANSI/UL 1480 and NEC 760. special applications. Copies of this manual are available from System Sensor. NFPA 72 and NEMA guidelines should be observed. System Sensor also recommends installing fire alarm speakers in compliance with NFPA 72, ANSI/ UL 1480 and NEC 760

Important: The notification appliance used must be tested and maintained following NFPA 72 requirements.

one of four input power levels. Our speaker strobes are suitable for dry and 24 volt applications. damp environments. These products are electrically backwards compatible with previous generation of System Sensor speaker strobes. With its low total harmonic distortion, the System Sensor SPL series offers high fidelity sound

Speakers Strobes are public mode notification appliances intended to alert occupants of a life safety event. The speaker is listed to ANSI/UL 1480 (public mode) and the strobe is listed to ANSI UL 1638 (public mode).

FIRE ALARM SYSTEM CONSIDERATION

Please read the System Sensor Voice Evacuation Application Guide, which System Sensor also recommends installing fire alarm speakers in compliance

The system designer must make sure that the total current drawn by the devices on the loop does not exceed the current capability of the panel supply, and that the last device on the circuit is operated within its rated voltage. The current draw information for making these calculations can be found in the tables within this manual. For convenience and accuracy, use the voltage drop calculator on the System Sensor website (www.systemsensor.com).

System Sensor series of notification appliances offer a wide range of audible When calculating the voltage for the last device, it is necessary to consider and visible devices for life safety notification. Our indoor speaker strobes the voltage drop due to the resistance of the wire. The thicker the wire, the come with 7 field selectable candela setting. The strobe portion is designed smaller the voltage drop. Note that if Class A wiring is installed, the wire to be used in 12 VDC, 24VDC, or 24V FWR (full wave rectified) systems. The length may be up to twice as long as it would be circuits that are not fault speaker is designed to be used at either 25 or 70.7 volts, and operate at any tolerant. The total number of strobes on a single NAC must not exceed 69 for

AVAILABLE CANDELA SETTINGS System Sensor offers a wide range of candela settings for your life safety

needs. In order to select your candela output, adjust the slide switch on the rear of the product to the desired candela setting on the selector switch. (See

The candela setting can also be verified by looking into the small window on the front of the unit. See Tables 1 and 2 for candela settings for wall and ceiling products. All products meet the light output profiles specified in the appropriate UL Standards. (See Figures 2-4.)

I56-0002-002

Before testing, notify the proper authorities that the system is undergoing maintenance, and will temporarily be out of service. Disable the system to prevent unwanted alarms.

All sensors must be tested after installation and periodically thereafter. Test- 8. Reinstall the detector. ing methods must satisfy the Authority Having Jurisdiction (AHJ). Sensors offer maximum performance when tested and maintained in compliance with

The sensor can be tested in the following ways:

A. Functional: Magnet Test (P/N M02-04-01 or M02-09-00) electronically simulates smoke in the sensing chamber, testing the sensor tion has been evaluated and found suitable for that purpose. electronics and connections to the control panel 1. Hold the test magnet in the magnet test area as shown in Figure 3. 2. The sensor should alarm the panel.

Two LEDs on the sensor are controlled by the panel to indicate sensor status. Coded signals, transmitted from the panel, can cause the LEDs to blink, latch on, or latch off. Refer to the control panel technical documentation for sensor LED status operation and expected delay to alarm. B. Smoke Entry

Sensitivity readings are available through the FACP. Refer to the manufacturer's published instructions for proper use. Additionally, canned aerosol simulated smoke (canned smoke agent) may be used for smoke entry testing of the smoke detector. Tested and ap-

Manufacturer	Model
HSI Fire & Safety	25S, 30S (PURCHECK)
SDi	SMOKE CENTURIAN, SOLOA4 SMOKESABRE, TRUTEST
No Climb	TESTIFIRE 2000

proper use of the canned smoke agent.

Canned aerosol simulated smoke (canned smoke agent) formulas will vary SPECIAL APPLICATION by manufacturer. Misuse or overuse of these products may have long term When configured at the fire alarm control panel, this detector is capable of opadverse effects on the smoke detector. Consult the canned smoke agent manuerating in a special application mode such that it has a higher sensitivity than facturer's published instructions for any further warnings or caution statements. is normally allowed by UL 268 for areas where early warning is important. In

When testing is complete, restore the system to normal operation and notify appliances are used within the protected space, a normal application detector the proper authorities that the system is back in operation.

Before removing the detector, notify the proper authorities that the smoke service. Disable the zone or system undergoing maintenance to prevent unwanted alarms. Remove the sensor to be cleaned from the system.

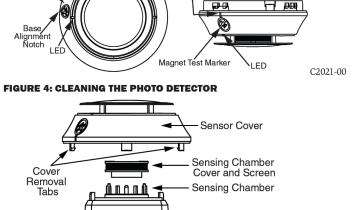
2. Remove the sensor cover by pressing firmly on each of the four removal tabs that hold the cover in place. (See Figure 4.)

3. Vacuum the screen carefully without removing it. If further cleaning is required continue with Step 4, otherwise skip to Step 7. 4. Remove the chamber cover/screen assembly by pulling it straight out.

6. Reinstall the chamber cover/screen assembly by sliding the edge over the sensing chamber. Turn until it is firmly in place.

10. Reconnect disabled circuits. 11. Notify the proper authorities that the system is back on line. **SPECIAL NOTE REGARDING SMOKE DETECTOR GUARDS**

This sensor can be functionally tested with a test magnet. The test magnet Smoke detectors are not to be used with detector guards unless the combina-



this mode, the detector does not comply with the Cooking Nuisance Smoke A sensor that fails any of these tests may need to be cleaned as described Test. Detectors (Sampling ports) set to the special application mode are not suitable for use in areas where cooking appliances may be used. If cooking or normal application mode must be used for that area. Special application mode is not for general use and the detector may be more prone to false alarms if used in unsuitable environments. While no list is all-inclusive, some examples of unsuitable environments for special applicadetector system is undergoing maintenance and will be temporarily out of tion mode are areas with airborne particulate or aerosols including sawing, drilling, and grinding operations, textile or agricultural processing, or areas with engines that are not vented to the outside. A complete list of aerosol and

particulate sources is available in the Annex of NFPA 72. Suitable environments for special application mode could include early warning for hospitals, museums, assisted living and other areas that do not have airborne particulate or aerosols. Refer to the fire alarm control panel documentation for information on how to

configure the detector for special application mode. 5. Use a vacuum cleaner or compressed air to remove dust and debris from

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference,

Before installing this product ensure that the NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits unbroken and the product has not been are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio with since leaving the factory. Do not install this quency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there product if there are any indications of tar which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following should be returned to the point of purchase.

- Increase the separation between the equipment and receiver. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Please refer to insert for the Limitations of Fire Alarm Systems

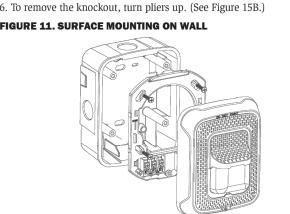
It is the responsibility of the system owner to ensure that all system components, i.e. devices, panels, wiring etc., are adequately protected to avoid tampering of the system that could result in information disclosure, spoofing, and integrity

©2019 Honeywell. 09/23/2019

the top mounting holes for ceiling speaker and speaker strobe products. (See **FIGURE 13. SURFACE MOUNT BACK BOX UP ARROW** Replace the cover using the LEDs to align the cover and then gently push-

3. Threaded knockout holes are provided for the sides of the box for conduit adapter. Knockout holes in the back of the box can be used for rear entry. 4. To remove the conduit knockout, place the blade of a flat-head screwdriver Test the detector as described in TESTING. along the outer edge and work your way around the knockout as you strike the screwdriver. (See Figure 15A.)

NOTE: Use caution not to strike the knockout near the top edge of the 5. V500 and V700 raceway knockouts are also provided. Use V500 for low **BOX: KEY HOLE PATTERN** profile applications and V700 for high profile applications. 6. To remove the knockout, turn pliers up. (See Figure 15B.)



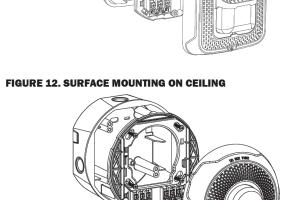
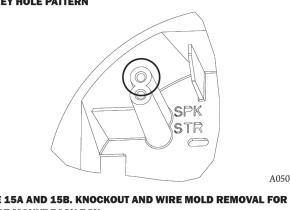
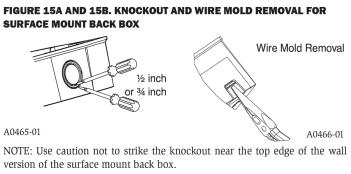


FIGURE 14. CEILING INSTALLATION WITH A SURFACE MOUNT BACK





Naways make sure that the individual speakers are tested after installation per NFPA reguages. The speaker may not be heard if it is placed on a different floor from the person in lations. The speakers may not be heard. The loudness of the speaker meets (or exceeds) hazard or if placed too far away to be heard over the ambient noise such as traffic, air current Underwriters Laboratories' standards. However, the speaker may not alert a conditioners, machinery or music appliances that may prevent alert persons from hearing sound sleeper or one who has recently used drugs or has been drinking alcoholic bever- the alarm. The speaker may not be heard by persons who are hearing impaired.

FCC STATEMENT

System Sensor speakers have been tested and found to comply with the limits for a radio frequency energy and, if not installed and used in accordance with the instruction Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed manual, may cause harmful interference to radio communications. Operation of this to provide reasonable protection against harmful interference when the equipment is equipment in a residential area is likely to cause harmful interference in which case the operated in a commercial environment. This equipment generates, uses, and can radiate user will be required to correct the interference at his own expense.

SUPPLEMENTAL INFORMATION

For the latest Warranty information, please go to: http://www.systemsensor.com/en-us/Documents/E56-4000.pdf For Limitations of Fire Alarm Systems, please go to: http://www.systemsensor.com/en-us/Documents/I56-1558.pdf Speakers only: For the latest Important Assembly Information, please go to: http://www.systemsensor.com/en-us/Documents/I56-6556.pdf



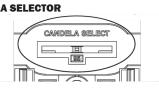




Speakers Only: Assembly Information

©2018 System Sensor. 12/10/2018

FIGURE 1. CANDELA SELECTOR



CURRENT DRAW AND AUDIBILITY RATINGS For the strobe, the current draw for each setting is listed in Tables 1 and 2.

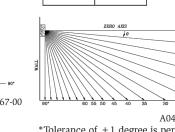
Candela	8-17.5 Volts	16-33	3 Volts	
	DC	DC	FWR	
15	88	43	60	
30	143	63	83	NOTE: Produc
75	-	107	136	candela autom
95	-	121	155	ther 12V or 2
110	-	148	179	The products
135	-	172	209	12V DC operat
185	-	222	257	other candela

NOTE: Products set at 15 and 30 candela automatically work on either 12V or 24V power supplies. The products are not listed for 12V DC operation when set to any other candela settings. **CURRENT DRAW (mA)**

either 12V or 24V power supplies. The products are not listed for 12V

to the left

candela settings. HORIZONTAL DISPERSION **DISPERSION. WALL TO FLOOR**



*Tolerance of ±1 degree is permitted.

FIGURE 4. LIGHT OUTPUT - VERTICAL DISPERSION, CEILING TO WALLS

WIRING AND MOUNTING

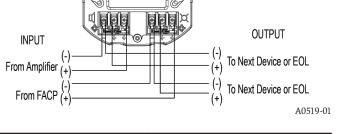
Wiring Terminals

All wiring must be installed in compliance with the National Electric Code and the local codes as well as the authority having jurisdiction. Wiring must not be of such length or wire size which would cause the notification appliance to operate outside of its published specifications. Improper connections can prevent the system from alerting occupants in the event of an emergency. Wire sizes up to 12 AWG (2.5 mm²) may be used with the mounting plate. The

mounting plate ships with the terminals set for 12 AWG wiring. Make wire connections by stripping about 3/8" of insulation from the end of the wire. Then slide the bare end of the wire under the appropriate clamping **NOTE:** Products set at 15 and 30 plate and tighten the clamping plate screw.

candela automatically work on See Figure 5 for wiring terminals and strip guide reference. 1. Connect the speaker. (See Figure 5.) DC operation when set to any other

2. There are two rotary switches on the back of the product. The first switch is used to select either 25 or 70.7 volts input and the second switch is used to select the input power of ¼, ½, 1 or 2 watts. (See Figure 6.)



NOTE: Do not loop electrical wiring un-

ler terminal screws. Wires connecti

Positive (+). Line in and out the device to the control panel must be Positive (+). Line in and out broken at the device terminal connection in order to maintain electrical su FIGURE 6. SPEAKER WATTAGE AND VOLTAGE SETTING

I56-0002-002

IDENTIFICATION STAME DIV. OF THE STATE ARCHITEC APP: 03-124308 INC: REVIEWED FOR SS ☐ FLS ☑ ACS ☐

ユリウウト ご イララリウレイアチラ レメウム

3251 CORTE MALPASO, #511 CAMARILLO, CA 93012-8094 FAX (805) 389-6519 (805) 389-6520

LUCCI & ASSOCIATES, INC. reserve their commonlaw copyright and other property rights in these plans. These plans and drawings are not to be reproduced, changed, or copied in any form or manner whatsoever without first obtaining the expressed written permission and consent of LUCCI & ASSOC. INC nor are they to be assigned to any third party without obtaining said written permission and consent

STAMP



REVISIONS REV DATE LK/DS K. LUCCI AS NOTED | 01-18-2024 19753-01 SHEET:

SHEETS:

INSTALLATION AND MAINTENANCE INSTRUCTIONS Honeywell Farenhyt™ Series 12 Clintonville Road, Northford, CT 06472-1610

Phone: 203-484-7161 Fax: 203-484-7118 **IDP-Relay SPECIFICATIONS**

6.5 mA (LED on) Maximum Current Draw: 230μA direct poll; 255μA group poll Average Operating Current: **EOL Resistance:** Not used 32°F to 120°F (0°C to 49°C) Temperature Range: Humidity: 10% to 93% Non-condensing

15 to 32 VDC

4.675" H x 4.275" W x 1.4" D (Mounts to a 4" square by 21/8" deep box.) Dimensions: SMB500 Electrical Box Accessories:

RELAY CONTACT RATINGS:

Normal Operating Voltage:

CURRENT RATING	MAXIMUM VOLTAGE	LOAD DESCRIPTION	APPLICATION
2 A	25 VAC	PF = 0.35	NON-CODED
3 A	30 VDC	RESISTIVE	NON-CODED
2 A	30 VDC	RESISTIVE	CODED
0.46 A	30 VDC	(L/R = 20MS)	NON-CODED
0.7 A	70.7 VAC	PF = 0.35	NON-CODED
0.9 A	125 VDC	RESISTIVE	NON-CODED
0.5 A	125 VAC	PF = 0.75	NON-CODED
0.3 A	125 VAC	PF = 0.35	NON-CODED

BEFORE INSTALLING

This information is included as a quick reference installation guide. Refer to the appropriate Honeywell Farenhyt series control panel installation manual for detailed system information. If the modules will be installed in an existing operational system, inform the operator and local authority that the system will be temporarily out of service. Disconnect power to the control panel before installing the modules.

NOTICE: This manual should be left with the owner/user of this equipment. **GENERAL DESCRIPTION**

The IDP-Relay is intended for use in intelligent, two-wire systems where the individual address of each module is selected using the built-in rotary switches. It allows a compatible control panel to switch discrete contacts by code command. The relay contains two isolated sets of Form-C contacts, which operate as a DPDT switch and are rated in accordance with the table in the manual. Circuit connections to the relay contacts are not supervised by the module. The module also has a panel controlled LED indicator. COMPATIBILITY REQUIREMENTS

FIGURE 2A. MODULE MOUNTING

FIGURE 3. RELAY MODULE WIRING DIAGRAM:

RELAY COMMON 2 (

NORMALLY CLOSED 2

NORMALLY OPEN 2

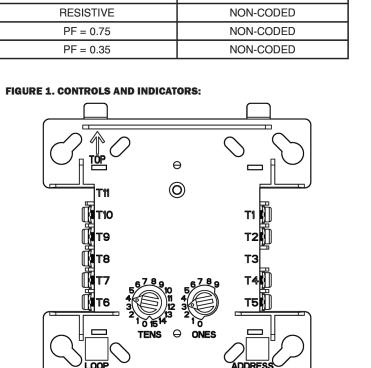
RELAY COMMON 1

DEVICE (+)

MODULE DOES NOT SUPERVISE CONTROLLED CIRCUITS

arenhyt™ is a trademark of and Honeywell® is a registered trademark of Honeywell International, In

To ensure proper operation, this module shall be connected to a compatible Honeywell Farenhyt series system control panel (list available from



The IDP-Relay mounts directly to 4-inch square electrical boxes (see Figure 2A). The box must have a minimum depth of $2^{1}/8$ inches. Surface mounted electrical boxes (SMB500) are available from Honeywell. The module can also mount to the SK-DUCT or DNR(W) housing.

NOTE: All wiring must conform to applicable local codes, ordinances, and regulations. When using control modules in nonpower limited applications, the CB500 Module Barrier must be used to meet UL requirements for the separation of power-limited and nonpower-limited terminals and wiring. The barrier must be inserted into a 4" \times 4" \times 2 $^{1}/8$ " junction box, and the control module must be placed into the barrier and attached to the junction box (Figure 2A). The power-limited wiring must be placed into the isolated quadrant of the

module barrier (Figure 2B). 1. Install module wiring in accordance with the job drawings and appropriate wiring diagrams.

2. Set the address on the module per job drawings. 3. Secure module to electrical box (supplied by installer), as shown in

Wire should be stripped to the appropriate length (recommended strip length is $^{1}/_{4}$ " to $^{3}/_{8}$ "). Exposed conductor should be secured under the clamping plate and should not protrude beyond the terminal block area. Caution: Do not loop wire under terminals. Break wire run to provide supervision of connections.

FROM PANEL OR

I56-3601-005

©2017 Honeywell. 04-21

(+) PREVIOUS DEVICE

INFORMATION ON THE NAMEPLATE LABEL.

NOTE: All references to power limited represent "Power Limited (Class 2)".

C1070-00

All relay switch contacts are shipped in the standby state (open) state, but may have transferred to the activated (closed) state during shipping. To ensure that the switch contacts are in their correct state, modules must be made to communicate with the panel before connecting circuits controlled by the module.

*NOTE: ANY FAULT IN THE POWER SUPPLY IS LIMITED TO THAT ZONE AND DOES NOT RESULT IN A FAULT IN A SEPARATE ZONE.



by Honeywell 7550 Meridian Circle Maple Grove, MN 55369-4927 763-493-6455; 800-328-0103 Fax: 763-493-6475 http://www.silentknight.com

© 2005 Silent Knight

C0151-00

156-2722-00R

Please refer to insert for the Limitations of Fire Alarm Systems

Figure 3. Views showing position of test magnet

NOTE: Before cleaning notify the proper authorities that the system is undergoing maintenance, and therefore the system

It is recommended that the sensor be removed from its mounting base for easier cleaning and that sensors be cleaned at

will temporarily be out of service. Disable the loop or system undergoing maintenance to prevent unwanted alarms.

least once a year. Use a vacuum cleaner to remove dust from the sensing chamber.

TEST MAGNET

MAINTENANCE

K200-06-00

FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

 Reorient or relocate the receiving antenna. - Increase the separation between the equipment and receiver. - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. - Consult the dealer or an experienced radio/TV technician for help.

K200-06-00 156-2722-00R



by Honeywell

Installation and Maintenance Instructions for IDP-Heat, IDP-Heat-ROR, and IDP-Heat-HT Intelligent **Plug-In Temperature Sensors**

SPECIFICATIONS

6.1 inches (155mm) WIRING GUIDE installed in IDP-6AB All wiring must be installed in compliance with the 4.1 inches (104mm) National Electrical Code, applicable local codes and the installed in B501 Authority Having Jurisdiction. Proper wire gauges should 2.0 inches (51mm) be used. The installation wires should be color coded to 4.8 ounces (137 gm) limit wiring mistakes and ease system troubleshooting. -4° F to 100°F (-20° C to 8°C); Improper connections will prevent a system from Installation Temperature: IDP-Heat and IDP-Heat-ROR responding properly in the event of a fire. -4° F to 150°F (-20° C to Remove power from the communication line before

66°C); IDP-Heat-HT installing sensors. Operating Humidity Range: 10% to 93% Relative 1. Wire the sensor base (supplied separately) per the Humidity Non-condensing wiring diagram, see Figure 1. 2. Set the desired address on the sensor address switches,

B501 flange less base 15 to 32 Volts DC Peak Voltage Range: 300 μA @ 24 VDC Standby Current: LED Current: 6.5 mA @ 24 VDC Fixed Temperature Rating: 135°F (57°C); IDP-Heat and IDP-Heat-ROR 190°F

(88°C); IDP-Heat-HT Rate-of-Rise Detection: Responds to greater than 15°F/min.; IDP-Heat-ROR

This sensor must be installed in compliance with the control panel system installation manual. The installation must meet the requirements of the Authority Having Jurisdiction (AHJ). Sensors offer maximum performance when installed in compliance with the National Fire Protection Association (NFPA); see NFPA 72. Before installing sensors, please read the system wiring

and installation manual thoroughly. This manual provides detailed information on sensor spacing, placement, zoning, and special applications. Copies of these manuals are available from Silent Knight.

IDP-6AB flanged base see Figure 2.

3. Install the sensor into the sensor base. Push the sensor into the base while turning it clockwise to secure it in place. 4. After all sensors have been installed, apply power to

the control unit and activate the communication line. 5. Test the sensor(s) as described in the TESTING section of this manual.

TAMPER RESISTANCE

GENERAL DESCRIPTION

Models IDP-Heat, IDP-Heat-ROR and IDP-Heat-HT are

intelligent sensors that utilize a state-of-the-art thermistor sensing circuit for fast response. These sensors are designed to provide open area protection with 50 foot

spacing capability. Model IDP-Heat is a fixed temperature

sensor with 135° F fixed temperature alarm. IDP-Heat-ROR is a rate-of-rise temperature sensor with 135° F

fixed temperature alarm. Model IDP-Heat-HT is a high

temperature sensor with 190° F fixed temperature alarm.

Two LEDs on each sensor light to provide a local, visible

sensor indication. Remote LED annunciator capability is

available as an optional accessory (Part No. RA400Z).

Models IDP-Heat, IDP-Heat-ROR, and IDP-Heat-HT

require compatible addressable communications to

function properly. Connect these sensors to listed-

compatible control panels only.

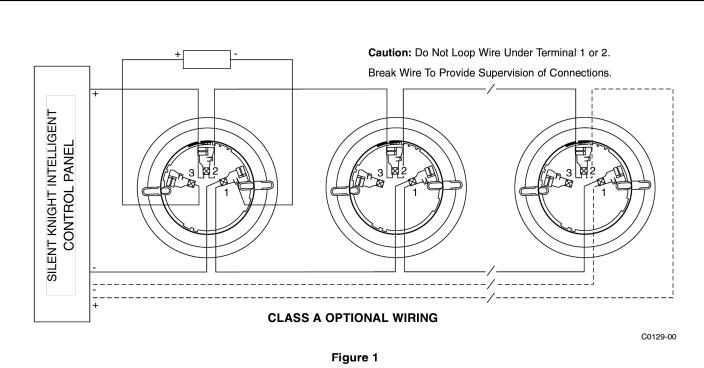
The sensor base includes a tamper proof feature which when activated prevents removal of the sensor without the use of a tool. See the installation instruction manual for the sensor base for details in using this feature.

TESTING

Before testing, notify the proper authorities that the system is undergoing maintenance, and will temporarily be out of service. Disable the system to prevent unwanted

All sensors must be tested after installation and periodically thereafter. Testing methods must satisfy the Authority Having Jurisdiction (AHJ). Sensors offer maximum performance when tested and maintained in compliance with NFPA 72.

K200-06-00 *I56-2722-00R*



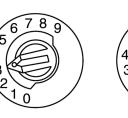
A. Test Magnet (Model No. M02-04 - optional) 1. Place the optional test magnet against the cover in the magnet test area, as shown in Figure 3, to activate the test feature (part number K200-07-00).

2. The LEDs should latch on within 10 seconds, indicating alarm and annunciating the panel. 3. Reset the detector at the system control panel.

B. Direct Heat Method (Hair dryer of 1000–1500 watts) 1. From the side of the detector, direct the heat toward the sensor. Hold the heat source about 6 inches (15 cm) away to prevent damage to the cover during

2. The LEDs on the detector should light when the temperature at the detector reaches the alarm setpoint. If the LEDs fail to light, check the power to the detector and the wiring in the detector base. 3. Reset the detector at the system control panel.

Detectors that fail these tests should be cleaned as described under MAINTENANCE and retested. If the detectors still fail these tests, they should be returned for repair.



K200-06-00 156-2722-00R

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT APP: 03-124308 INC: REVIEWED FOR SS ☐ FLS ☑ ACS ☐

ムリピピト ご コララリピレンアチラ レンピュ

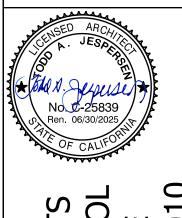
3251 CORTE MALPASO, #511 CAMARILLO, CA 93012-8094

(805) 389-6520 FAX (805) 389-6519

LUCCI & ASSOCIATES, INC. reserve their commonlaw copyright and other property rights in these plans. These plans and drawings are not to be reproduced, changed, or copied in any form or manner whatsoever without first obtaining the expressed written permission and consent of LUCCI & ASSOC. INC nor are they to be assigned to any third party without obtaining said written permission and consent

STAMP





REV DATE **REVISIONS** CHECKED: LK/DS K. LUCCI AS NOTED | 01-18-2024 19753-01 SHEET:

SHEET NOTES:

BUILDING **CLASSIFICATION:**

1. FIELD VERIFY LOCATION OF ALL DEVICES.

2. 3/4" CONDUIT MINIMUM UNLESS OTHERWISE NOTED.

3. CONTRACTOR SHALL FURNISH AND INSTALL PULL BOXES AS REQUIRED TO INSTALL CABLING PER CABLE MANUFACTURERS RECOMMENDATIONS.

4. UNIQUELY LABEL BOTH ENDS OF ALL CABLING.

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT APP: 03-124308 INC: REVIEWED FOR SS ☐ FLS ☑ ACS ☐ DATE: 10/23/2024

ムリウヴノ 送 オラオリウバイチラ ノルウ. CONSULTING ELECTRICAL ENGINEERS

3251 CORTE MALPASO, #511

CAMARILLO, CA 93012-8094 (805) 389-6520

FAX (805) 389-6519 **LUCCI & ASSOCIATES, INC.** reserve their commonlaw copyright and other property rights in these plans. These plans and drawings are not to be reproduced, changed, or copied in any form or manner whatsoever without first obtaining the expressed written permission and consent of LUCCI & ASSOC. INC nor are they to be assigned to

any third party without obtaining said written permission and consent

STAMP



BUILDING 100 PLAN - NEW WORK

REV DATE **REVISIONS** DRAWN: LK/DS CHECKED: K. LUCCI SCALE: DATE: AS NOTED 01-18-2024 19753-01

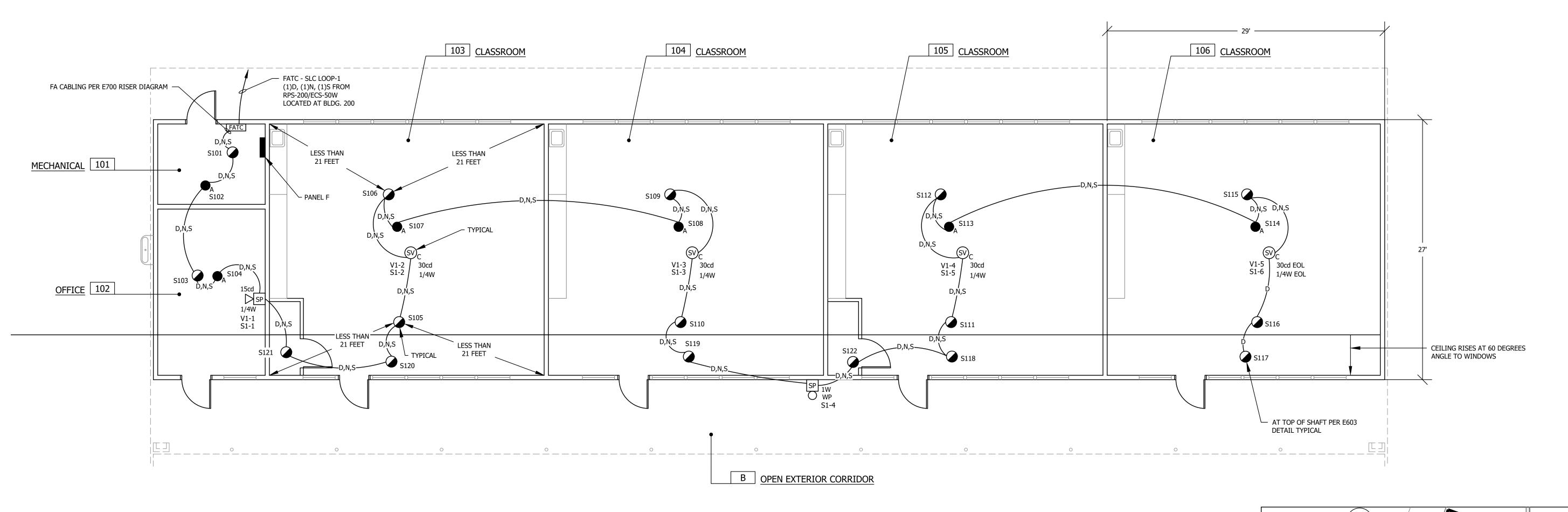
E610

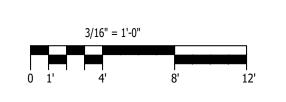
OF: SHEETS:

BUILDING DATA:

A. OCCUPANCY TYPE: E B. CONSTRUCTION TYPE: V-N C. SPRINKLERED: NOT

ONE STORY AGENCIES: A. DIVISION OF THE STATE ARCHITECT





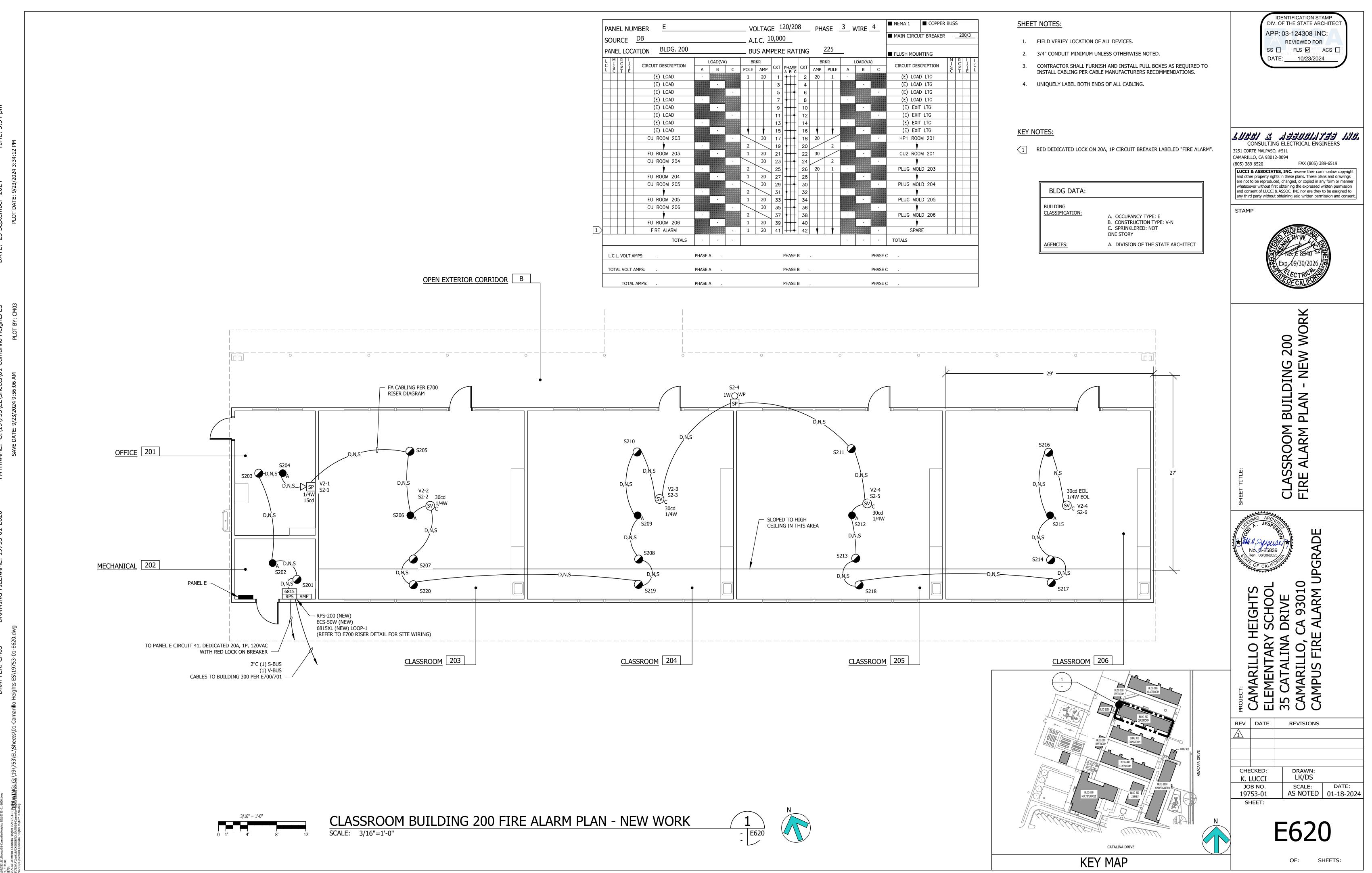
CLASSROOM BUILDING 100 FIRE ALARM PLAN - NEW WORK

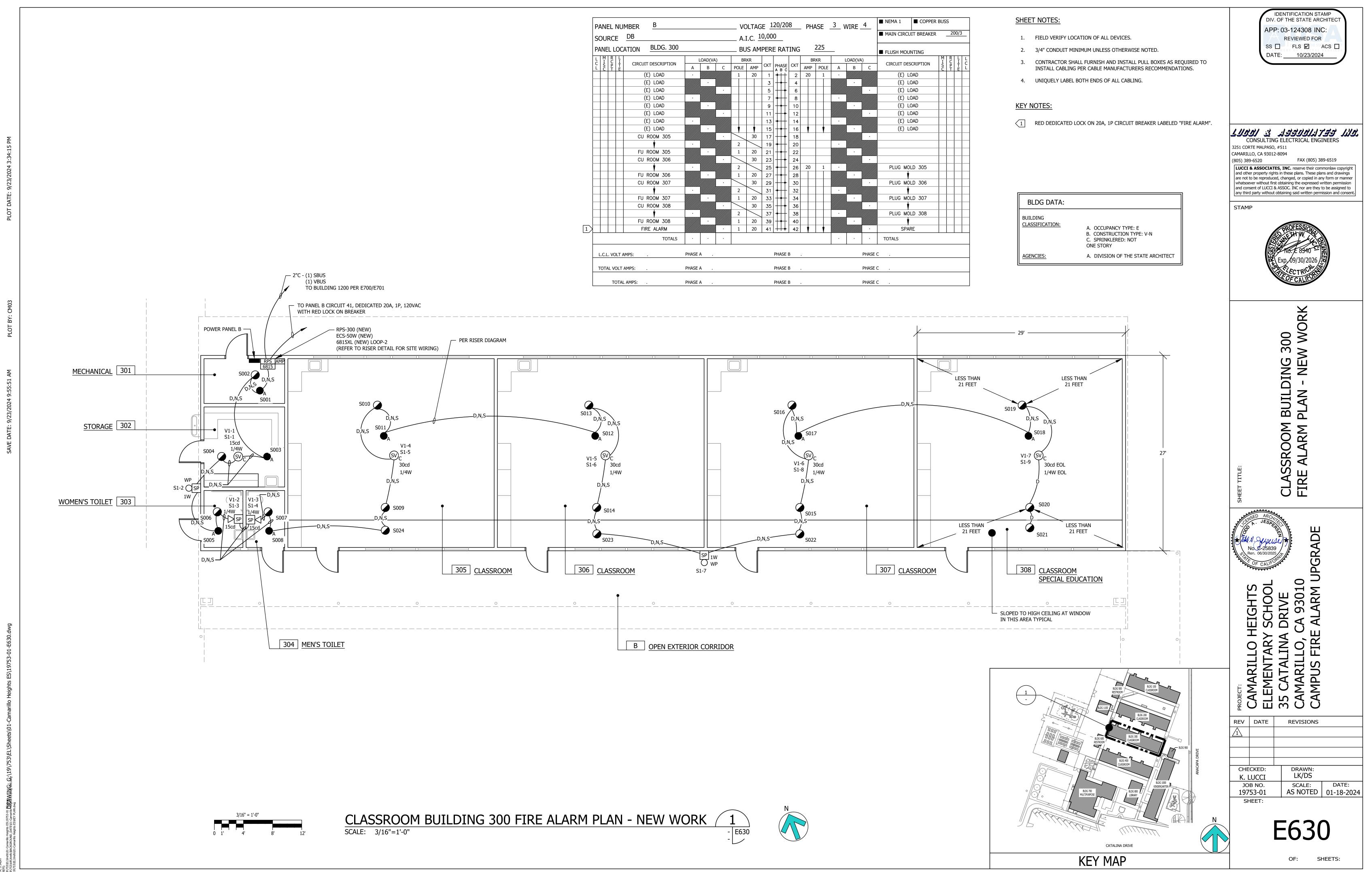
SCALE: 3/16"=1'-0"





KEY MAP





SHEET NOTES:

- 1. FIELD VERIFY LOCATION OF ALL DEVICES.
- 2. 3/4" CONDUIT MINIMUM UNLESS OTHERWISE NOTED.
- 3. CONTRACTOR SHALL FURNISH AND INSTALL PULL BOXES AS REQUIRED TO INSTALL CABLING PER CABLE MANUFACTURERS RECOMMENDATIONS.
- 4. UNIQUELY LABEL BOTH ENDS OF ALL CABLING.

BLDG DATA:

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 03-124308 INC: REVIEWED FOR SS ☐ FLS ☑ ACS ☐



3251 CORTE MALPASO, #511

CAMARILLO, CA 93012-8094 (805) 389-6520

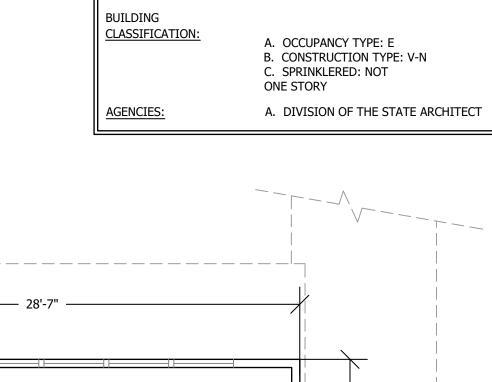
FAX (805) 389-6519 **LUCCI & ASSOCIATES, INC.** reserve their commonlaw copyright and other property rights in these plans. These plans and drawings are not to be reproduced, changed, or copied in any form or manner whatsoever without first obtaining the expressed written permission and consent of LUCCI & ASSOC. INC nor are they to be assigned to

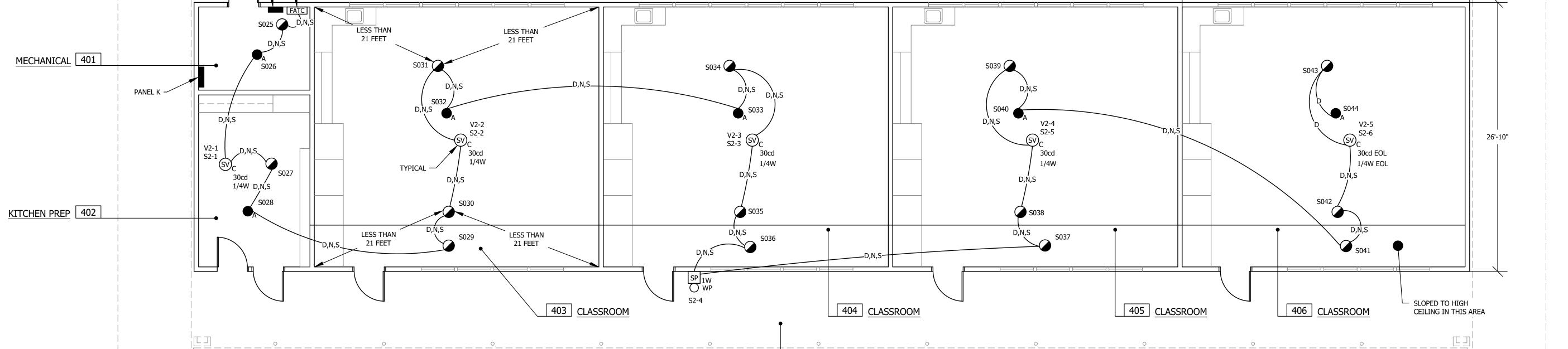
any third party without obtaining said written permission and consent

STAMP

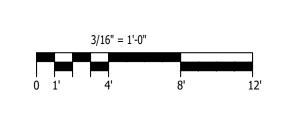
Ğ `		 ,	
REV	DATE	REVISIONS	
1			
CHE	CKED:	DRAWN:	
K. L	LUCCI	LK/DS	
JO	B NO.	SCALE:	DATE:
197	53-01	AS NOTED	01-18-20
SH	HEET:		•

E640





B OPEN EXTERIOR CORRIDOR



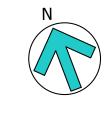
FATC - SLC LOOP-2 (1)D, (1)N, (1)S FROM RPS-300/ECS-50W LOCATED IN

POWER PANEL 'A' —

BLDG. 300 —

CLASSROOM BUILDING 400 FIRE ALARM PLAN - NEW WORK

SCALE: 3/16"=1'-0"





KEY MAP



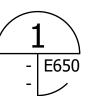
(1)D, (1)N,(1)S FROM RPS-200/ECS-50W

BOY'S 502

JANITOR 503

LOCATED IN BLDG. 200

SLC LOOP-1 -



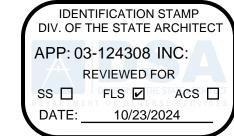
(E) BLDG 100

A OPEN EXTERIOR CORRIDOR

(E) BLDG 200



- 1. FIELD VERIFY LOCATION OF ALL DEVICES.
- 2. 3/4" CONDUIT MINIMUM UNLESS OTHERWISE NOTED.
- 3. CONTRACTOR SHALL FURNISH AND INSTALL PULL BOXES AS REQUIRED TO INSTALL CABLING PER CABLE MANUFACTURERS RECOMMENDATIONS.
- 4. UNIQUELY LABEL BOTH ENDS OF ALL CABLING.



ムリウヴノ 送 オラオリウバイチラ ノルウ. CONSULTING ELECTRICAL ENGINEERS

3251 CORTE MALPASO, #511

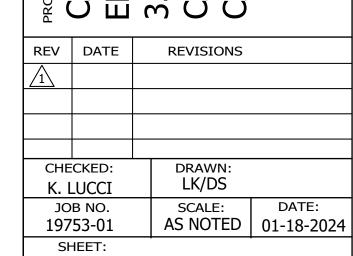
CAMARILLO, CA 93012-8094 FAX (805) 389-6519 (805) 389-6520

LUCCI & ASSOCIATES, INC. reserve their commonlaw copyright and other property rights in these plans. These plans and drawings are not to be reproduced, changed, or copied in any form or manner whatsoever without first obtaining the expressed written permission and consent of LUCCI & ASSOC. INC nor are they to be assigned to any third party without obtaining said written permission and consent

STAMP



CONTRACTOR TO PROVIDE ACCESS PANELS FOR ALL HEAT DETECTORS ABOVE CEILING



E650

OF: SHEETS:

BUILDING DATA: BUILDING CLASSIFICATION: A. OCCUPANCY TYPE: EB. CONSTRUCTION TYPE: V-NC. SPRINKLERED: NOT ONE STORY A. DIVISION OF THE STATE ARCHITECT

KEY MAP

SHEET NOTES:

- 1. FIELD VERIFY LOCATION OF ALL DEVICES.
- 2. 3/4" CONDUIT MINIMUM UNLESS OTHERWISE NOTED.
- 3. CONTRACTOR SHALL FURNISH AND INSTALL PULL BOXES AS REQUIRED TO INSTALL CABLING PER CABLE MANUFACTURERS RECOMMENDATIONS.
- 4. UNIQUELY LABEL BOTH ENDS OF ALL CABLING.

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT APP: 03-124308 INC: REVIEWED FOR SS ☐ FLS ☑ ACS ☐

ムリウヴノ 送 オララリウバイチラ ノルウ. CONSULTING ELECTRICAL ENGINEERS

3251 CORTE MALPASO, #511

CAMARILLO, CA 93012-8094 FAX (805) 389-6519 (805) 389-6520

LUCCI & ASSOCIATES, INC. reserve their commonlaw copyright and other property rights in these plans. These plans and drawings are not to be reproduced, changed, or copied in any form or manner whatsoever without first obtaining the expressed written permission and consent of LUCCI & ASSOC. INC nor are they to be assigned to any third party without obtaining said written permission and consent.

STAMP



CONTRACTOR TO PROVIDE ACCESS PANELS FOR ALL HEAT DETECTORS ABOVE CEILING

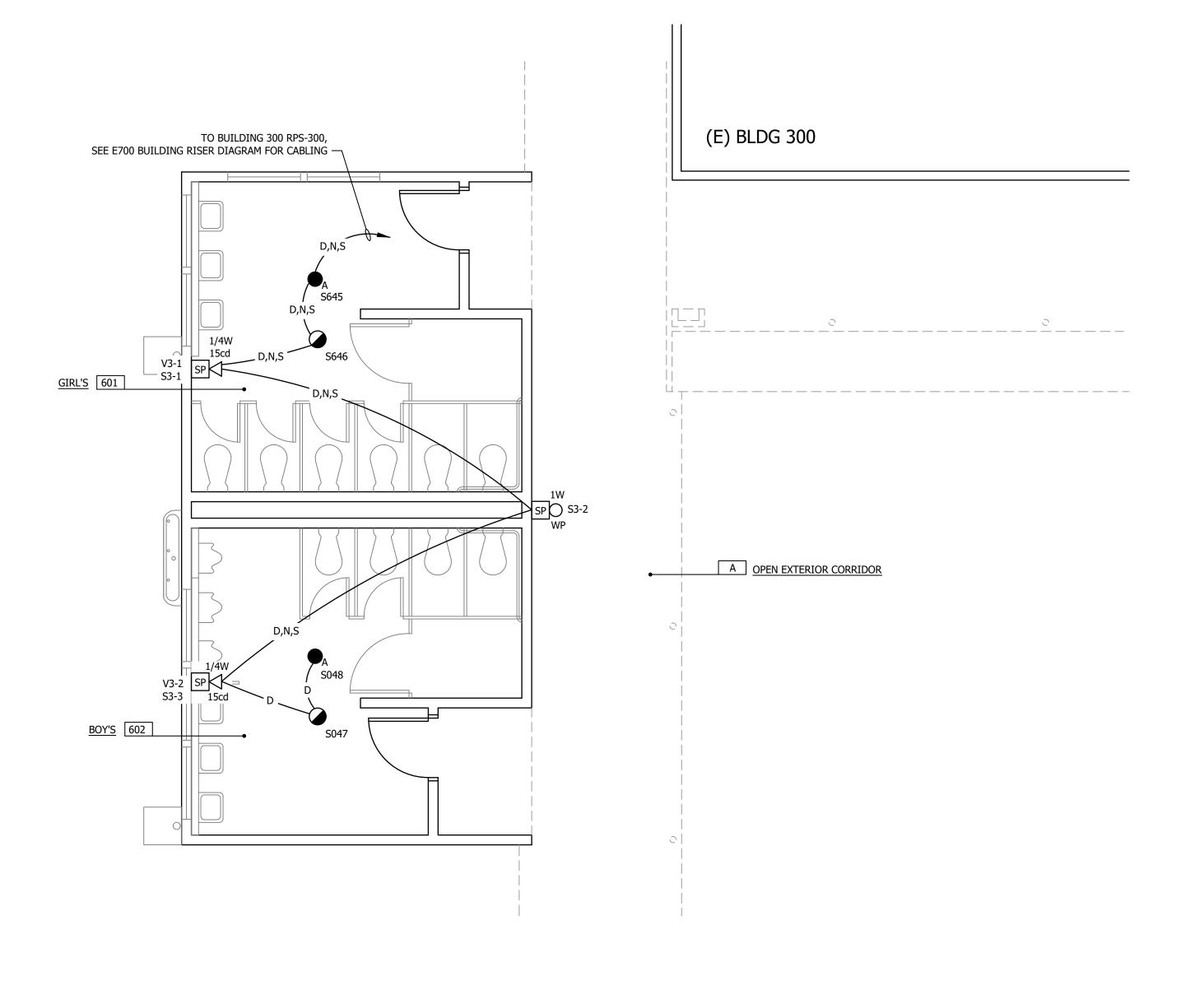
A. OCCUPANCY TYPE: EB. CONSTRUCTION TYPE: V-NC. SPRINKLERED: NOT ONE STORY

A. DIVISION OF THE STATE ARCHITECT

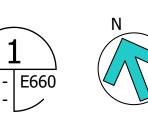
REV DATE DRAWN: LK/DS K. LUCCI SCALE: DATE: AS NOTED 01-18-2024 19753-01

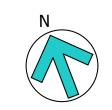
E660

OF: SHEETS:



RESTROOM BUILDING 600 FIRE ALARM PLAN - NEW WORK SCALE: 1/4"=1'-0"

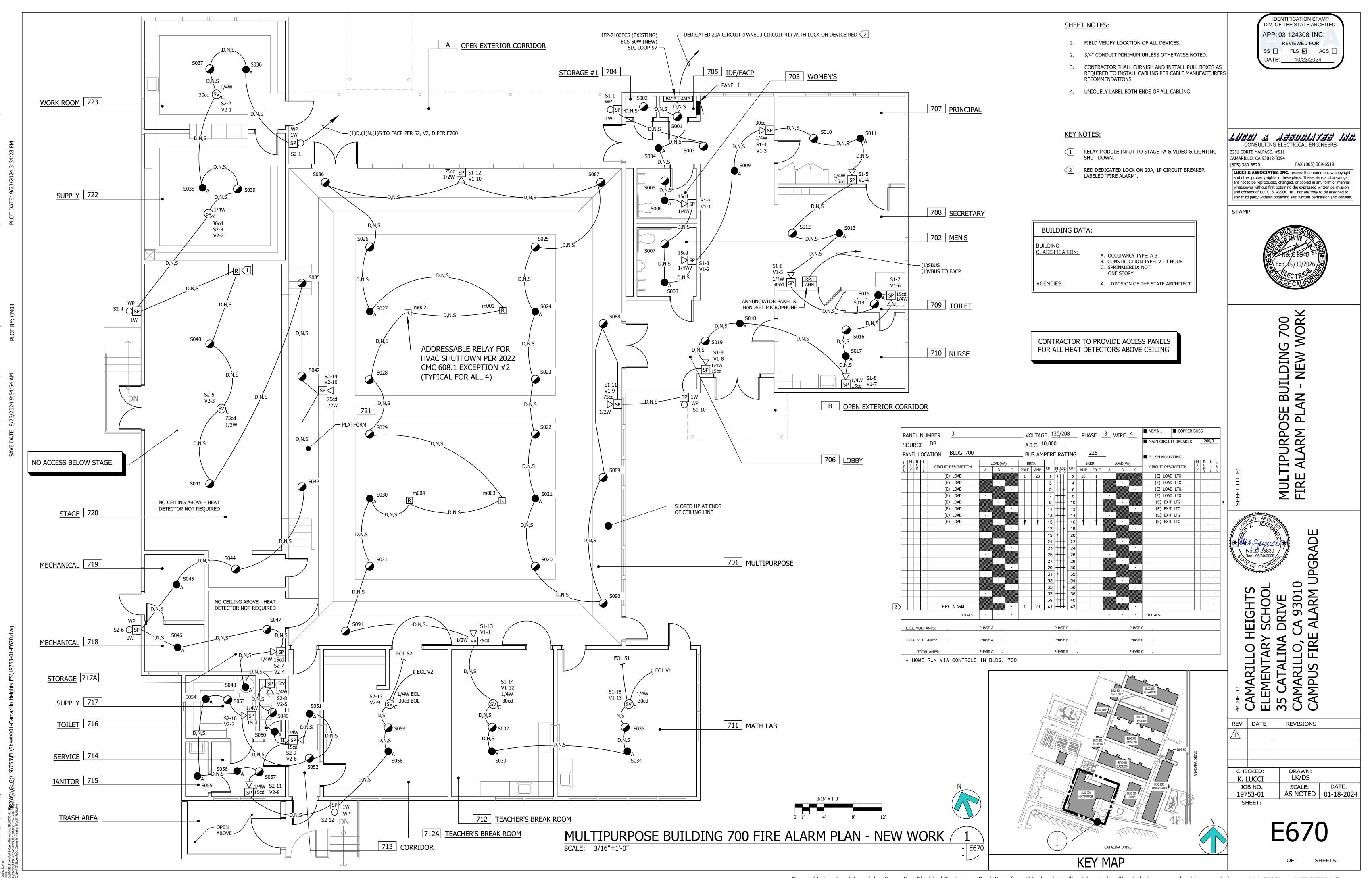






BUILDING DATA:

CLASSIFICATION:



V3-2 S3-2 (SV)



- FIELD VERIFY LOCATION OF ALL DEVICES.
- 2. 3/4" CONDUIT MINIMUM UNLESS OTHERWISE NOTED.
- 3. CONTRACTOR SHALL FURNISH AND INSTALL PULL BOXES AS REQUIRED TO INSTALL CABLING PER CABLE MANUFACTURERS RECOMMENDATIONS.
- 4. UNIQUELY LABEL BOTH ENDS OF ALL CABLING.

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 03-124308 INC: REVIEWED FOR SS ☐ FLS ☑ ACS ☐

3251 CORTE MALPASO, #511

CAMARILLO, CA 93012-8094 FAX (805) 389-6519 (805) 389-6520

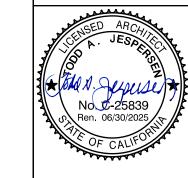
LUCCI & ASSOCIATES, INC. reserve their commonlaw copyright and other property rights in these plans. These plans and drawings are not to be reproduced, changed, or copied in any form or manner whatsoever without first obtaining the expressed written permission and consent of LUCCI & ASSOC. INC nor are they to be assigned to any third party without obtaining said written permission and consent

STAMP



BUILDING DATA:

A. OCCUPANCY TYPE: EB. CONSTRUCTION TYPE: V-NC. SPRINKLERED: NOT ONE STORY A. DIVISION OF THE STATE ARCHITECT

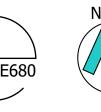


DRAWN: LK/DS SCALE: DATE: AS NOTED 01-18-2024 19753-01

E680 OF: SHEETS:

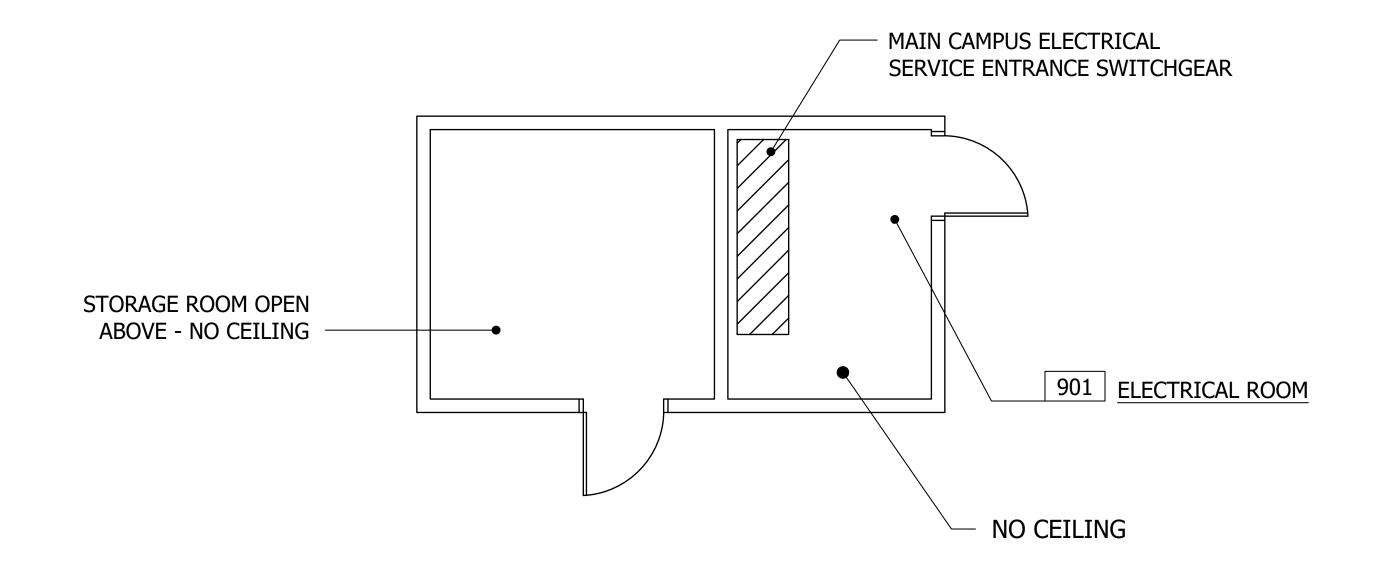


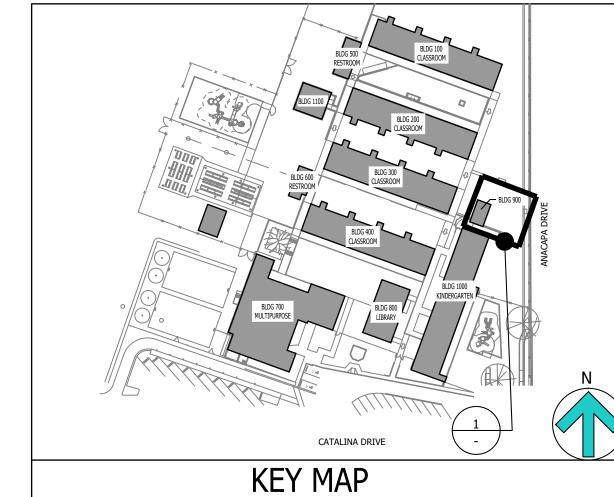
FATC (1)D,(1)N,(1)S FROM IFP-2100ECS/ECS50W LOCATED IN ADMIN BUILDING. SLC LOOP-97





KEY MAP





3251 CORTE MALPASO, #511 CAMARILLO, CA 93012-8094 FAX (805) 389-6519 (805) 389-6520 **LUCCI & ASSOCIATES, INC.** reserve their commonlaw copyright

ムリウヴト 送 コマゴリカバフラブ ルリヴェ CONSULTING ELECTRICAL ENGINEERS

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT

APP: 03-124308 INC: REVIEWED FOR SS ☐ FLS ☑ ACS ☐

and other property rights in these plans. These plans and drawings are not to be reproduced, changed, or copied in any form or manner whatsoever without first obtaining the expressed written permission and consent of LUCCI & ASSOC. INC nor are they to be assigned to any third party without obtaining said written permission and consent.

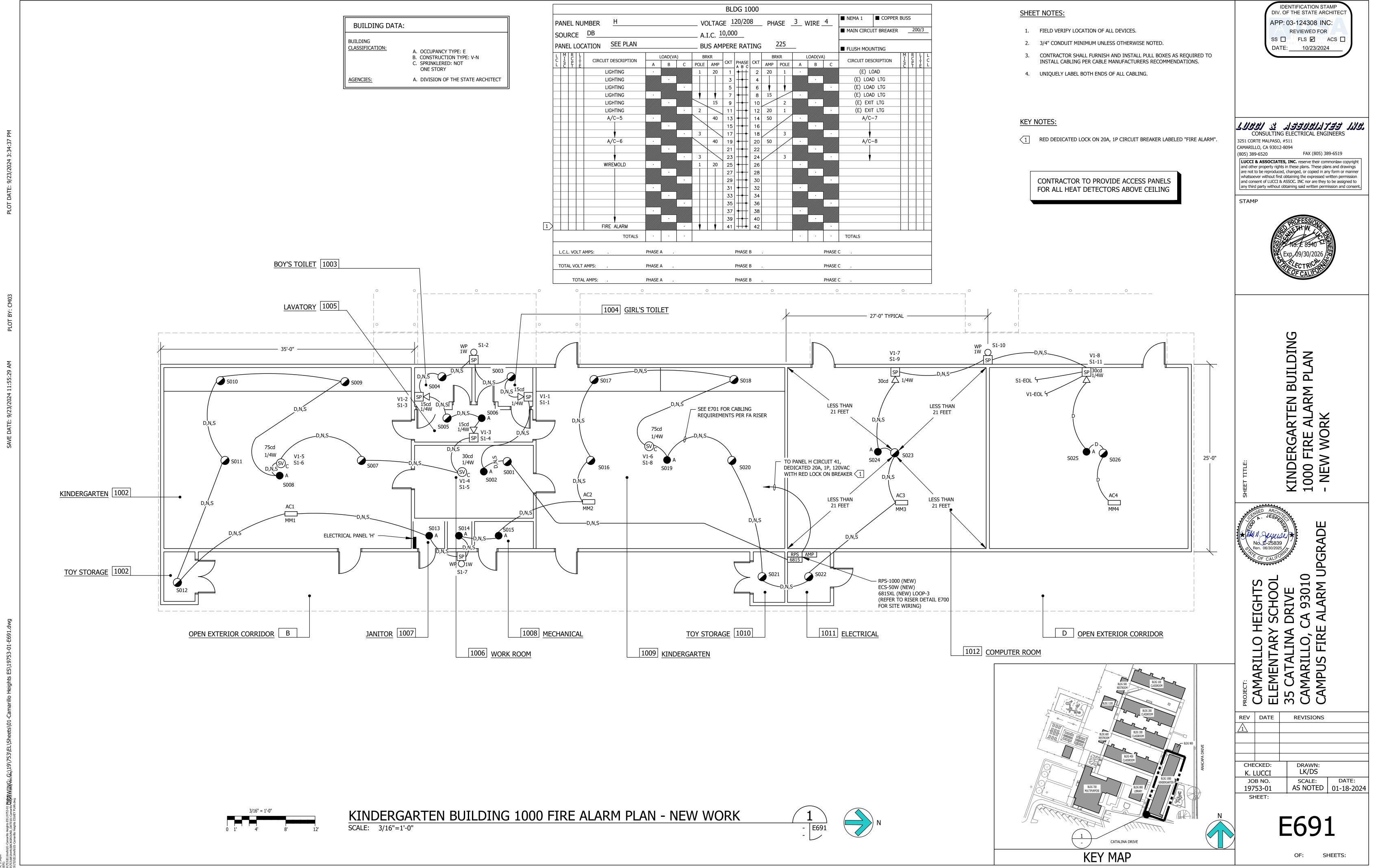
STAMP



DRAWN: LK/DS CHECKED: K. LUCCI SCALE: DATE: AS NOTED 01-18-2024 јов NO. 19753-01

E690 OF: SHEETS:

BUILDING 900 ELECTRICAL & STORAGE - NO FIRE ALARM PLAN (SCALE: 1/4"=1'-0"



1. FIELD VERIFY LOCATION OF ALL DEVICES.

SHEET NOTES:

2. 3/4" CONDUIT MINIMUM UNLESS OTHERWISE NOTED.

3. CONTRACTOR SHALL FURNISH AND INSTALL PULL BOXES AS REQUIRED TO INSTALL CABLING PER CABLE MANUFACTURERS RECOMMENDATIONS.

4. UNIQUELY LABEL BOTH ENDS OF ALL CABLING.

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 03-124308 INC: REVIEWED FOR SS ☐ FLS ☑ ACS ☐

ムリウヴノ 送 オラオリウバイチラ ノルウ. CONSULTING ELECTRICAL ENGINEERS

3251 CORTE MALPASO, #511

CAMARILLO, CA 93012-8094 (805) 389-6520

LUCCI & ASSOCIATES, INC. reserve their commonlaw copyright and other property rights in these plans. These plans and drawings are not to be reproduced, changed, or copied in any form or manner whatsoever without first obtaining the expressed written permission and consent of LUCCI & ASSOC. INC nor are they to be assigned to any third party without obtaining said written permission and consent

FAX (805) 389-6519

STAMP



BUILDIN - NEW V

BUILDING DATA:

BUILDING CLASSIFICATION:

A. OCCUPANCY TYPE: EB. CONSTRUCTION TYPE: V-NC. SPRINKLERED: NOT ONE STORY

A. DIVISION OF THE STATE ARCHITECT



REV DATE **REVISIONS** DRAWN: LK/DS K. LUCCI SCALE: DATE: AS NOTED 01-18-2024 19753-01 SHEET:

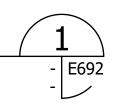
E692

OF: SHEETS:

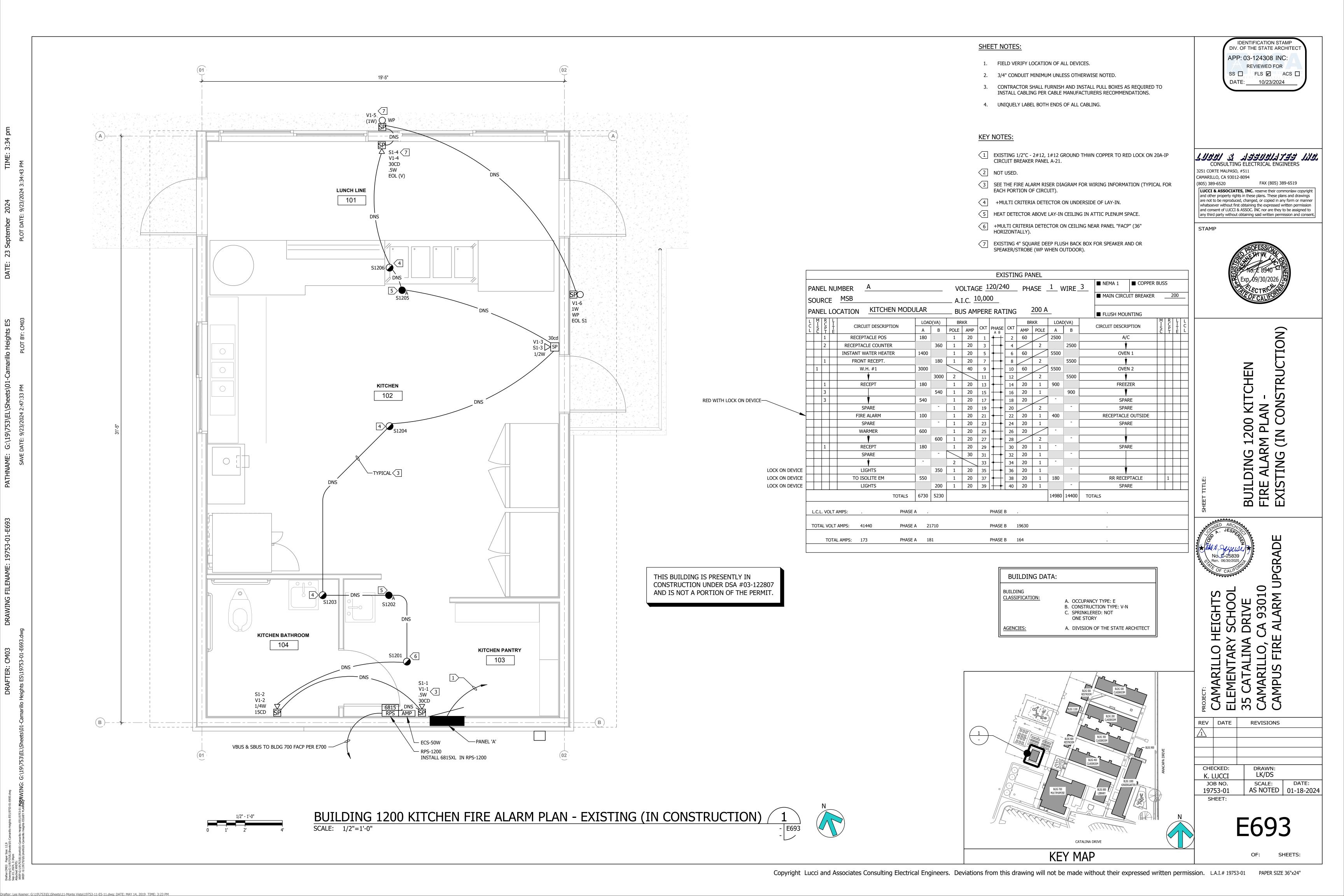
BUILDING 200 = (1)D,(1)S,(1)N, FROM RPS-200/ECS-50W LOCATED IN BLDG. 200 SLC LOOP-1

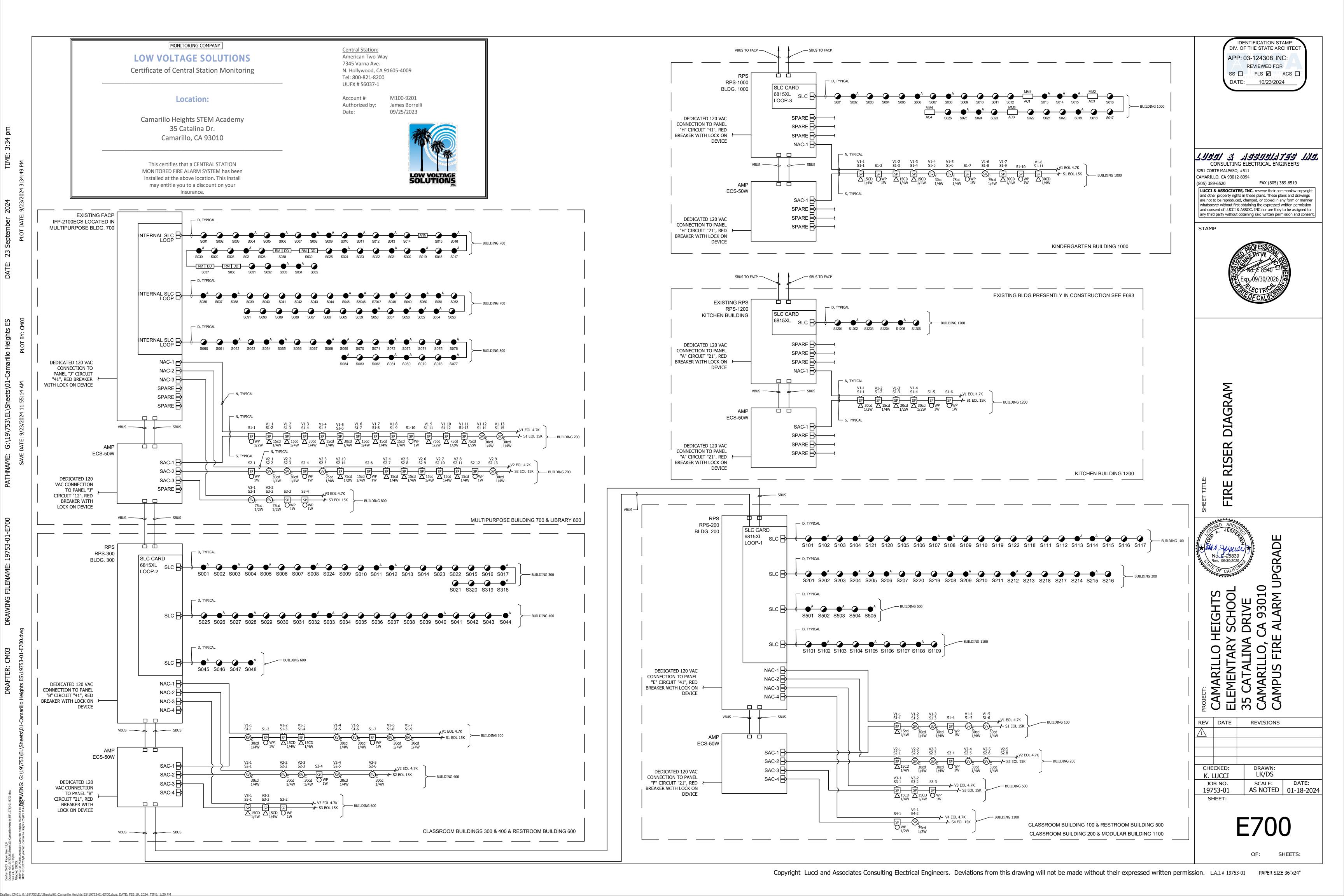
BUILDING 500 RESTROOM

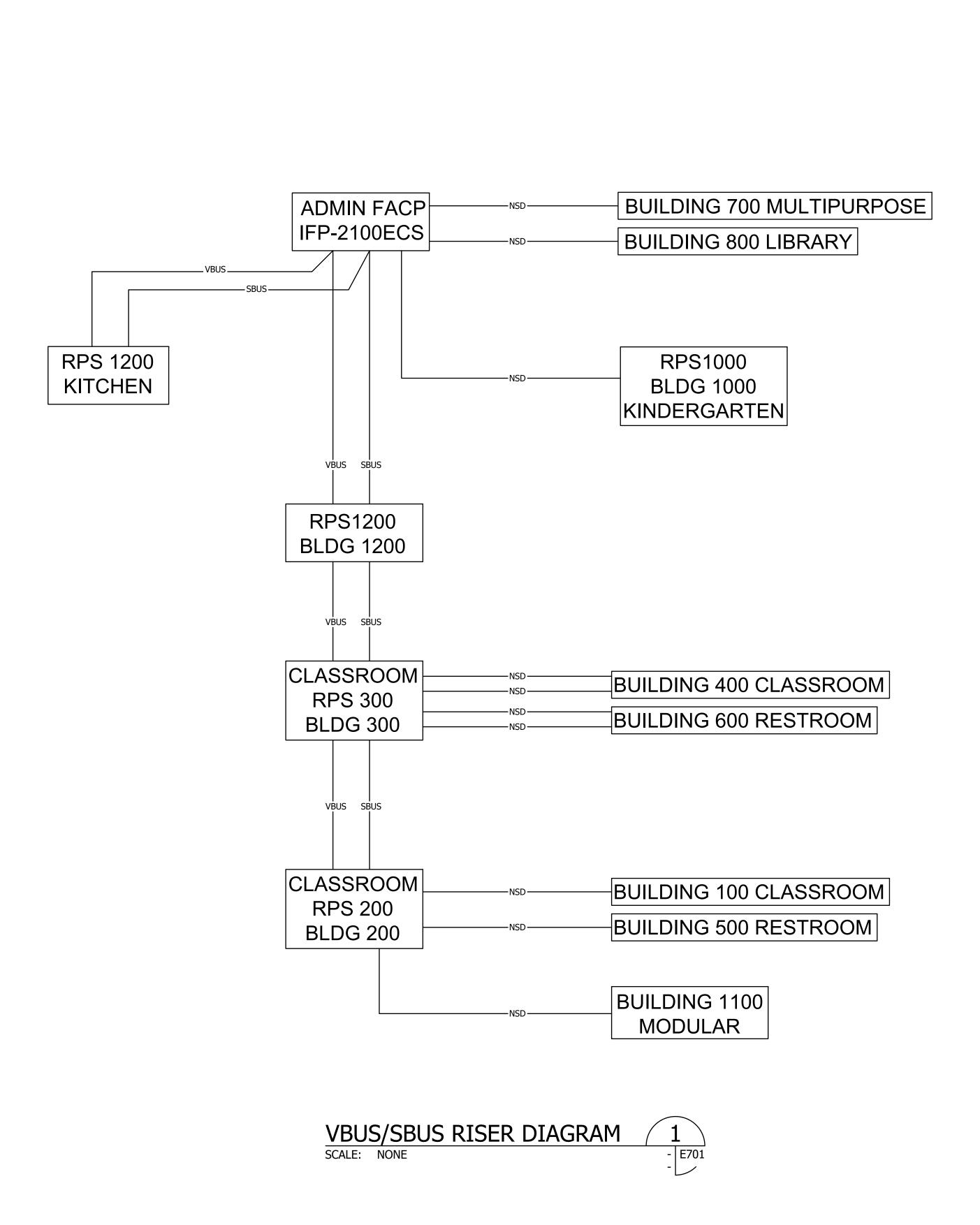
BUILDING 1100 FIRE ALARM PLAN - NEW WORK SCALE: 1/4"=1'-0" MODULAR CLASSROOM

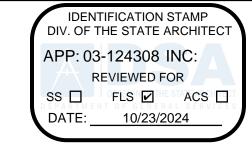


KEY MAP









ムリグゲノ 送 メラダリグルンブラヴ ルリグ、 CONSULTING ELECTRICAL ENGINEERS

3251 CORTE MALPASO, #511

CAMARILLO, CA 93012-8094

FAX (805) 389-6519 (805) 389-6520 LUCCI & ASSOCIATES, INC. reserve their commonlaw copyright and other property rights in these plans. These plans and drawings are not to be reproduced, changed, or copied in any form or manner whatsoever without first obtaining the expressed written permission and consent of LUCCI & ASSOC. INC nor are they to be assigned to

any third party without obtaining said written permission and consen

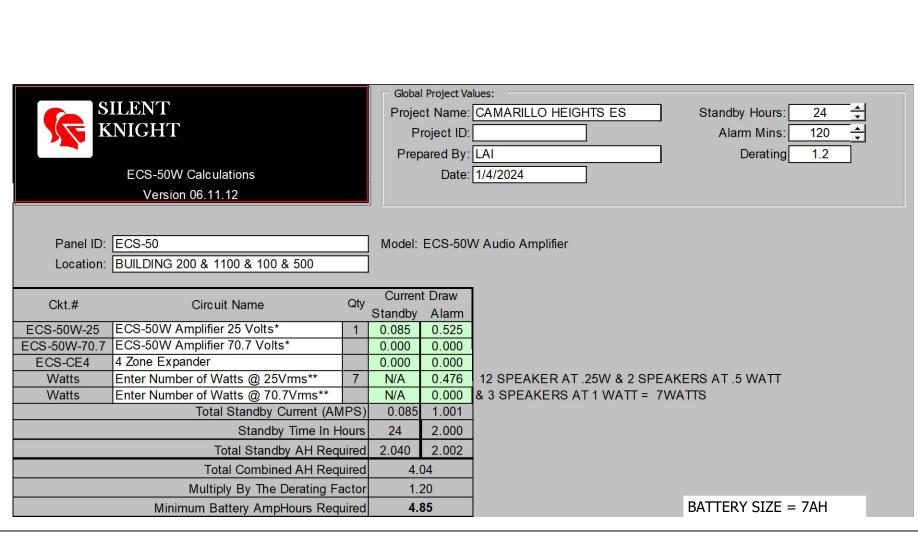


DIAGRAM



REV DATE DRAWN: LK/DS CHECKED: K. LUCCI SCALE: DATE: AS NOTED 01-18-2024 ЈОВ NO. 19753-01

E701



	VOLTAGE DROP CALCULATIONS - SPEAKER APPLIANCE CIRCUITS																											
PANE	LID	CKT#	1/4 V 0.0 QTY.			WATT 034 AMP		/ATT 068 AMP	2 WATT 0.132 QTY. AMP	0. QTY.	- 000 AMP	0.0 QTY.	000 AMP		- 000 AMP	0.0 QTY.		0.000 QTY. AMP	(I) - TOTAL - CURRENT	X	LENGTH FT.	x 21.6	CIR ÷ MILS 14awg	= VOLTS DROPPED	÷ 24	(V) x	100	% VOLTAGE DROP
		0.4	QIII.		QII.		QII.					QII.		QII.		QII.		W. A. 10 M. W. W.		П	100	24.6			Π		100	0.6
AM	IP	S1	5	0.085		0.000	1	0.068	0.000		0.000		0.000		0.000		0.000	0.000	0.153	X	120	x 21.6	÷ 2580	= 0.154	÷ 2	24 x	100	0.6
RPS-	12	S2	5	0.085		0.000	1	0.068	0.000		0.000		0.000		0.000		0.000	0.000	0.153	X	150	x 21.6	x 4110	= 0.121	÷ 2	24 x	100	0.5
RPS-	12	S3	2	0.034		0.000	1	0.068	0.000		0.000		0.000		0.000		0.000	0.000	0.102	x	250	x 21.6	x 4110	= 0.134	÷ 2	24 x	100	0.6
RPS-	12	S4		0.000	2	0.068		0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.068	X	250	x 21.6	x 4110	= 0.089	÷	24 x	100	0.4

1 x FEET x 21.6 VOLTAGE DROPPED

C.M. I = TOTAL CIRCUIT CURRENT

FEET = ONE WAY DISTANCE IN FEET MEASURED FROM SOURCE TO THE LAST DEVICE 21.6 = FORMULA CONSTANT

C.M. = CROSS SECTIONAL AREA OF CONDUCTOR IN CIRCULAR MILS. SEE CHART BELOW WIRE RESISTANCE

AWG 12 1.59 PER 1000' AWG 14 2.52 PER 1000' 4110 4.02 PER 1000' 2580 1620 6.39 PER 1000'

				l Project Va		LIEIGH	TEC] Cton	dby Hours:	. 24	
Honeywell THE POWER OF CONNECTED	Farenhyt™ Series			roject ID:	CAMARILLO	HEIGH	I ES		larm Mins:	120	
IED 2100/ECS	Calculations-IDP		Prep	pared By:	LAI 1/4/2024			Derat Voltage Dr	ing Factor:		
	n 04.16.18			Date.	1/4/2024			_	reshold %]
	RPS-200 BUILDING 200		4	RA-2000 24 VDC	Add. Fire Al	arm Pa	inel			3.0 Amps 9.0 Amps	
Location.	DOILDING 200					10	OL D				
Part.#	Description	Qty	Standby	nt Draw Alarm	Wire AV & Type		Ohms Per 1000 Ft.	Length(ft) One-Way	Actual Ohms	Volts @ EOL	%Drop
IFP-2100 IDP-Photo, Photo-T,PhotoR	IFP-2100 Smoke detector		0.000	0.000							
IDP-Fire-CO	Fire-CO detector	37	0.0111	0.0000							
IDP-Heat, Heat-HT, ROR	Heat detector		0.0000	0.0000							
IDP-Beam, Beam-T DNR	Beam detector Duct housing		0.0000	0.0000							
IDP-IDP Acclimate	IDP Acclimate		0.0000	0.0000							
IDP-Photo W	Photo W		0.0000	0.0000							
IDP-Photo-R-W	Photo-R-W		0.0000	0.0000							
IDP-Photo-T-W IDP-Heat-W	Photo-T-W Heat-W		0.0000	0.0000				\ /			
IDP-Heat-ROR-W	Heat-ROR-W		0.0000	0.0000							
IDP-Heat-HT-W	Heat-HT-W	18	0.0036	0.0810)XA			
IDP-Control	Control		0.0000	0.0000			,				
IDP-Control-6 IDP-Monitor, Minimon	Control-6 Monitor, Minimon		0.0000	0.0000							
IDP-Monitor-2	Monitor-2		0.0000	0.0000							
IDP-Monitor-10	Monitor-10		0.0000	0.0000		,					
IDP-Pull-SA, Pull-DA	Pull-SA, Pull-DA		0.0000	0.0000							
IDP-Relay	Relay Relay-6		0.0000	0.0000							
IDP-Relay-6 IDP-RelayMon-2	Relay Mon-2			0.0000							
IDP-Zone	Zone		0.0000	0.0000							
IDP-Zone-6	Zone-6		0.0000	0.0000							
IDP-Iso (Isolator Module)	Iso (Isolator Module)		0.0000	0.0000							
IDP-ISO-6 B224BI	ISO-6 Isolator Base		0.0000	0.0000							
B200S	Sounder Base		0.0000	0.0000							
B200SR	Sounder Base		0.0000	0.0000							
B200S-LF	Sounder Base LF		0.0000	0.0000				> <			
B200SR-LF	Sounder Base LF		0.0000	0.0000							
B224RB RTS151	Relay Base Magnetic Remote Test		0.0000	0.0000							
RTS151KEY	Key Activated Test		0.000	0.0000							_
RA100Z	Remote LED		0.000	0.000							
6815	SLC Expander		0.000	0.000							
RA-2000 RA-1000	LCD Remote Annunc		0.000	0.000							
RA-1000 RA-100	LCD Remote Annunc LCD Remote Annunc	•	0.000	0.000							
5824	Serial/Parallel Module		0.000	0.000						/	
5496	Power Expander		0.000	0.000							
RPS-1000	Power Expander	1	0.010	0.010							
5865-4 5865-3	LED Annunciator (4G) LED Annunciator (3G)		0.000	0.000			\				
5880	LED Driver Module		0.000	0.000					/		
5883	Relay Module		0.000	0.000							
CELL-MOD	Communicator		0.000	0.100							
SK-NIC SK-FML	Network Interface Card Fiber Module	1	0.021	0.021				\			
SK-FSL	Fiber Module	1	0.000	0.000				\ /			
WIDP-WG1	Wireless Gateway		0.000	0.000				NKA			
ECS-NVCM	Voice control		0.000	0.000							
ECS-SW24	Zone Expander		0.000	0.000					\		
ECS-RPU	Remote Paging Unit	1	0.070	0.250							
ECS-LOC	Local Operating Console	N	0.000	0.000							
ECS-LOC2100	Local Operating Console		0.000	0.000							
ECS-INT50W	50 Watt Internal Amp 25	1	0.000	0.000		/			`		
LOS-INTOUVV	volts		0.000	0.000							
ECS-INT50W	50 Watt Internal Amp 70		0.000	0.000							
ECS-50W	volts 50 Watt Amplifier	1	0.010	0.010	/						
ECS-30VV ECS-30VV	125 Watt Amplifier	,	0.000	0.000							
ECS-DUAL50W	50/100 Watt Amp	•	0.000	0.000							
ECS-50WBU	50 Watt Backup Amplifier		0.000	0.000							
NAC-1	Notification Appl Circuit	cfg.	0.000	0.295	#14 Solid	▼	2.52	210	1.06	20.09	0.90%
NAC-2	Notification Appl Circuit	cfg.	0.000	0.402	#14 Solid	Ī	2.52	180	0.91	20.04	0.40%
NAC-3	Notification Appl Circuit	cfg.	0.000	0.086	#14 Solid		2.52	220	1.11	20.30	0.00%
SPARE	Notification Appl Circuit	cfg.	0.000	0.107	#14 Solid		2.52	230	1.16	20.28	0.61%
SPARE	Notification Appl Circuit	cfg.	0.000	0.000	#14 Solid	$\overline{\mathbf{v}}$	2.52		0.00	20.40	0.00%
SPARE	Notification Appl Circuit	cfg.	0.000	0.000	#14 Solid		2.52	<u> </u>	0.00	20.40	0.00%
SPARE	Notification Appl Circuit	cfg.	0.000	0.000	#14 Solid	Ţ	2.52		0.00	20.40	0.00%
SPARE	Notification Appl Circuit	cfg.	0.000	0.000	#14 Solid		2.52		0.00	20.40	0.00%
	Total Standby Curren			1.383	Total Alarm						
	Standby Time			2.000	Alarm Time I			(120 Mins)			
	Total Standby AH	Required	3.521	2.766	Total Alarm /	AH Requ	uired				

					V	OLT	AGE	DROP	CAL	CUL	_ATI	ONS	6 - NO	OTIF	FICA	ATIO	N Al	PPLI	ANCE	EC	IRC	CUIT	S						
PANEL ID	CKT#	0.	TROBE 043	0.0	TROBE	0.3	107	110cd STROBE 0.148		-	20.00)00	0.00	00	0.0	1000	67.83	-	(I) TOTAL CURRENT	x LEI	NGTH FT.	x 21.6	÷ M		VOLTS DROPPED	÷ 24(\	√) x	100	% VOLTAGE DROP
		QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY. AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	CORREIVI					IVV B					DIOI
RPS-200	N1	1	0.043	4	0.252		0.000	0.000		0.000		0.000		0.000		0.000		0.000	0.295	x 2	210	x 21.6	÷ 41	10 =	0.326	÷ 24	ı x	100	1.4
RPS-200	N2	1	0.043	4	0.252	1	0.107	0.000		0.000		0.000		0.000		0.000		0.000	0.402	x 1	180	x 21.6	x 41	10 =	0.380	÷ 24	ı x	100	1.6
RPS-200	N3	2	0.086		0.000		0.000	0.000		0.000		0.000		0.000		0.000		0.000	0.086	x 2	220	x 21.6	x 41	10 =	0.099	÷ 24	ı x	100	0.4
RPS-200	N4		0.000		0.000	1	0.107	0.000		0.000		0.000		0.000		0.000		0.000	0.107	x 2	230	x 21.6	x 41	10 =	0.129	÷ 24	ı x	100	0.5

BATTERY SIZE = 21AH

I x FEET x 21.6 VOLTAGE DROPPED

C.M. I = TOTAL CIRCUIT CURRENT

FEET = ONE WAY DISTANCE IN FEET MEASURED FROM SOURCE TO THE LAST DEVICE

Multiply By The Derating Factor

Minimum Battery AmpHours Required

21.6 = FORMULA CONSTANT C.M. = CROSS SECTIONAL AREA OF CONDUCTOR IN CIRCULAR MILS. SEE CHART BELOW

1.59 PER 1000'

2.52 PER 1000' 4.02 PER 1000' 2580 1620 6.39 PER 1000'

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 03-124308 INC: REVIEWED FOR SS ☐ FLS ☑ ACS ☐

LUCCI & STRUCKITET WE CONSULTING ELECTRICAL ENGINEERS

3251 CORTE MALPASO, #511 CAMARILLO, CA 93012-8094

— SEE E700 FOR BUILDING 100, 200, 500 & 1100

(805) 389-6520

LUCCI & ASSOCIATES, INC. reserve their commonlaw copyright and other property rights in these plans. These plans and drawings are not to be reproduced, changed, or copied in any form or manner whatsoever without first obtaining the expressed written permission and consent of LUCCI & ASSOC. INC nor are they to be assigned to

any third party without obtaining said written permission and consent

FAX (805) 389-6519

STAMP

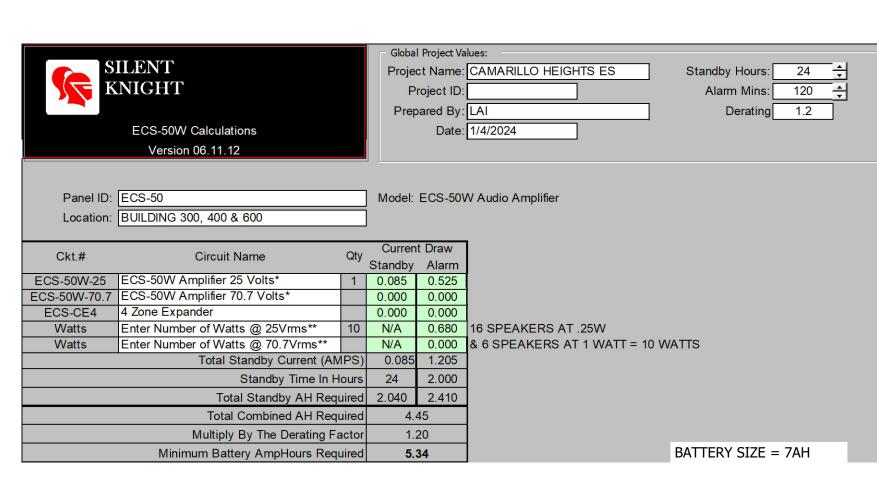


BUILDING EMERGENC COMM SYS

REV DATE

LK/DS K. LUCCI AS NOTED 01-18-2024 19753-01

REVISIONS



						VO	LTA	GE I	DRC	P C	ALC	ULA	ATIO	NS -	· SP	EAK	ER /	4PP	LIAN	ICE (CIR	RCU	ITS	3						
PANEL ID	CKT#	1/4 V		,	WATT 034		/ATT 068	2 W 0.1		0.0	00	0.0	. 000	0.0	000	0.0	-	0.0		(I) TOTAL	x LE	ENGTH FT.	x 2	1.6 ÷		= VOLTS DROPPE		24(V)	x 100	% VOLTAGE
		QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	CURRENT					14awg					DROP
AMP	S1	9	0.153		0.000	3	0.204		0.000		0.000		0.000		0.000		0.000		0.000	0.357	x	150	x 2	1.6 x	4110	= 0.281	÷	24	x 100	1.2
AMP	S2	5	0.085		0.000	2	0.136		0.000		0.000		0.000		0.000		0.000		0.000	0.221	X	180	x 2	1.6 ÷	2580	= 0.333	÷	24	x 100	1.4
AMP	S3	2	0.034		0.000	1	0.068		0.000		0.000		0.000		0.000		0.000		0.000	0.102	x	220	x 2	1.6 ×	4110	= 0.118	÷	24	x 100	0.5

I x FEET x 21.6 VOLTAGE DROPPED

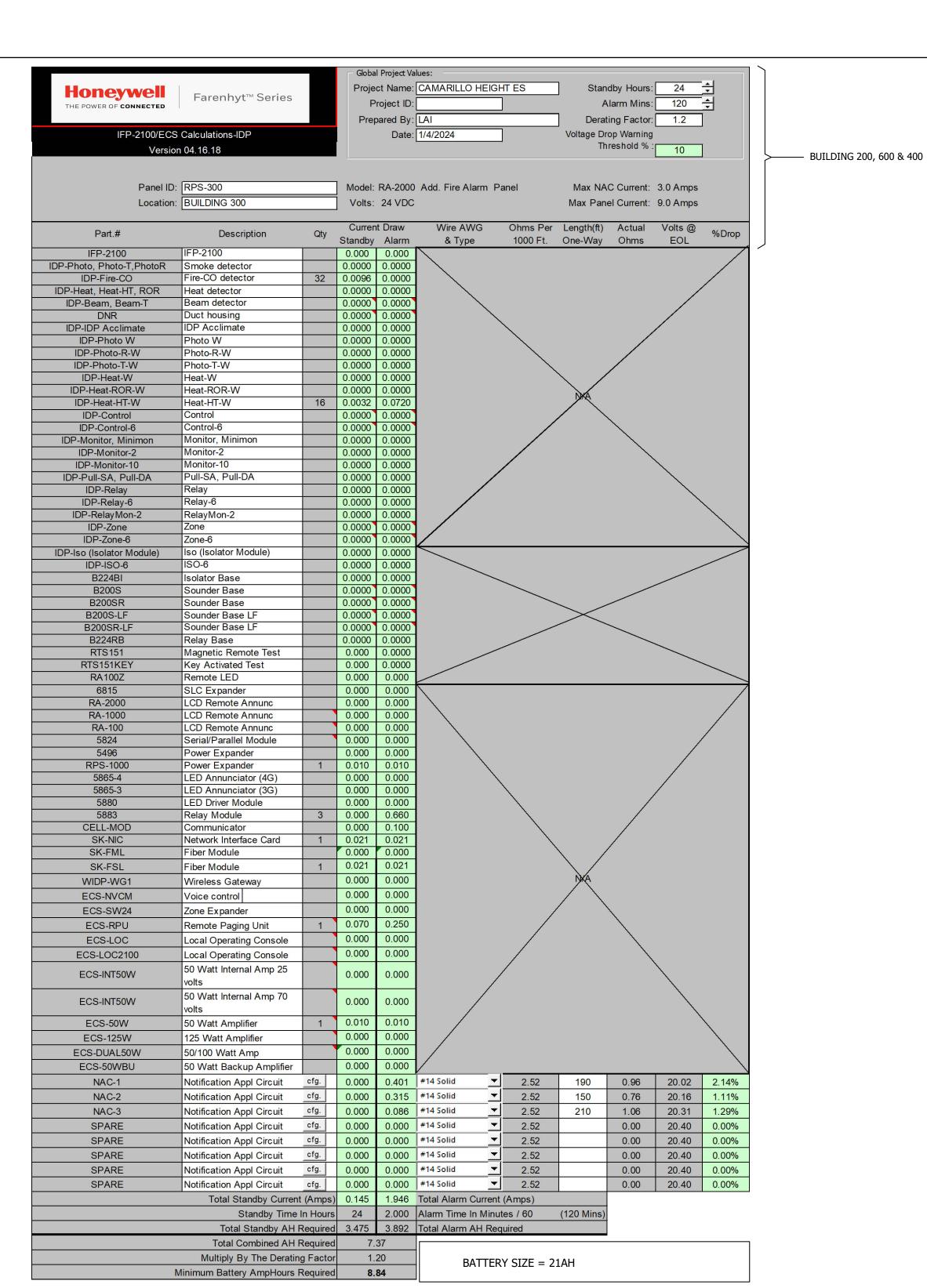
C.M. I = TOTAL CIRCUIT CURRENT

FEET = ONE WAY DISTANCE IN FEET MEASURED FROM SOURCE TO THE LAST DEVICE 21.6 = FORMULA CONSTANT

C.M. = CROSS SECTIONAL AREA OF CONDUCTOR IN CIRCULAR MILS. SEE CHART BELOW

WIRE RESISTANCE CIR. MILS **AWG 12** 1.59 PER 1000' 6530

AWG 14 2.52 PER 1000' 4110 4.02 PER 1000' 2580 **AWG 16 AWG 18** 6.39 PER 1000' 1620



					V	OLT	AGE	E DR	OP	CALCUL	ATI	ONS	6 - N	OTIF	FICA	TIO	N Al	PPLI	ANCI	E C	IRC	UIT	S						
PANEL ID	CKT#	15cd S	TROBE	30cd S	TROBE	75cd S		110cd S 0.1	_	- 0.000		-	0.0				0.0	-	(I) TOTAL		NGTH FT.	x 21.6	÷	CIR MILS	VO DRO	LTS	÷ 24(V)	x 100	% VOLTAGE
		QTY.		QTY.		QTY.	AMP	QTY.	AMP	QTY. AMP	QTY.	AMP	QTY.		QTY.	AMP		AMP	CURRENT				1	14awg	DIO				DROP
RPS-300	N1	2	0.086	5	0.315		0.000		0.000	0.000		0.000		0.000		0.000		0.000	0.401	x	190	x 21.6	÷	4110	= 0.4	.00	÷ 24	x 100	1.7
RPS-300	N2		0.000	5	0.315		0.000		0.000	0.000		0.000		0.000		0.000		0.000	0.315	x	150	x 21.6	÷	4110	= 0.2	.09	÷ 24	x 100	0.9
RPS-300	N3	2	0.086		0.000		0.000		0.000	0.000		0.000		0.000		0.000		0.000	0.086	x	210	x 21.6	x	4110	= 0.0	95 -	÷ 24	x 100	0.4

I x FEET x 21.6 VOLTAGE DROPPED

C.M. I = TOTAL CIRCUIT CURRENT

FEET = ONE WAY DISTANCE IN FEET MEASURED FROM SOURCE TO THE LAST DEVICE

21.6 = FORMULA CONSTANT

C.M. = CROSS SECTIONAL AREA OF CONDUCTOR IN CIRCULAR MILS. SEE CHART BELOW

WIRE RESISTANCE CIR. MILS 1.59 PER 1000' **AWG 12 AWG 14** 2.52 PER 1000' 2580 **AWG 16** 4.02 PER 1000' 1620 **AWG 18** 6.39 PER 1000'

DIV. OF THE STATE ARCHITEC APP: 03-124308 INC: REVIEWED FOR SS ☐ FLS ☑ ACS ☐ DATE: 10/23/2024

IDENTIFICATION STAMP

ムリピピト ご コララリピレンアチラ レリピュ

3251 CORTE MALPASO, #511

CAMARILLO, CA 93012-8094 (805) 389-6520

FAX (805) 389-6519 LUCCI & ASSOCIATES, INC. reserve their commonlaw copyright and other property rights in these plans. These plans and drawings are not to be reproduced, changed, or copied in any form or manner whatsoever without first obtaining the expressed written permission and consent of LUCCI & ASSOC. INC nor are they to be assigned to

any third party without obtaining said written permission and consent

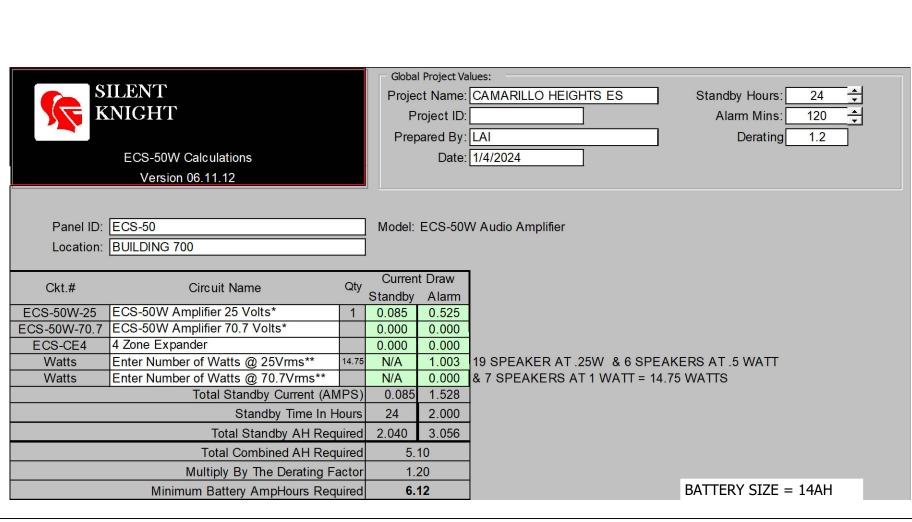
STAMP



600)ICE BUILDING EMERGENC COMM SYS

REV DATE REVISIONS

LK/DS K. LUCCI AS NOTED | 01-18-2024 19753-01 SHEET:



PANEL ID CKT # $\frac{1/4 \text{ WATT}}{0.017}$ $\frac{1/2 \text{ WATT}}{0.034}$ $\frac{1 \text{ WATT}}{0.068}$ $\frac{2 \text{ WATT}}{0.012}$ $\frac{-}{0.000}$ \frac																														
PANEL ID	CKT#	,								0.000	0					0.00	00			TOTAL	x		x 21.6	; ÷	MILS	VOLTS DROPPE	D ÷	24(V)	x 100	% VOLTAGE
		QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	CURRENT					14awg					DROP
AMP	S1	10	0.170	4	0.136	1	0.068		0.000	C	0.000		0.000		0.000		0.000		0.000	0.374	x	160	x 21.6	5 ÷	2580	0.501	÷	24	x 100	2.1
AMP	S2	9	0.153	1	0.034	4	0.272		0.000	C	0.000		0.000		0.000		0.000		0.000	0.459	x	180	x 21.6	5 x	4110	0.434	÷	24	x 100	1.8
AMP	S3		0.000	2	0.068	2	0.136		0.000	C	0.000		0.000		0.000		0.000		0.000	0.204	x	200	x 21.6	5 x	4110	0.214	÷	24	x 100	0.9

1 x FEET x 21.6 VOLTAGE DROPPED

C.M.

I = TOTAL CIRCUIT CURRENT

FEET = ONE WAY DISTANCE IN FEET MEASURED FROM SOURCE TO THE LAST DEVICE

21.6 = FORMULA CONSTANT

C.M. = CROSS SECTIONAL AREA OF CONDUCTOR IN CIRCULAR MILS. SEE CHART BELOW

WIRE RESISTANCE 1.59 PER 1000' **AWG 12** 2.52 PER 1000' 4110 **AWG 14 AWG 16** 4.02 PER 1000' 2580 1620 6.39 PER 1000'

	Farenhyt™ Series		Proje P	Il Project Va ct Name: Project ID:	CAMARILLO HEIG	HT ES	•	dby Hours: larm Mins:		÷
THE POWER OF CONNECTED IFP-2100/ECS	-			roject ID:			А	larm Mins:	120	_
			_							*
			Pre	oared By:	LAI		Derati	ng Factor:	1.2]
Version	Calculations-IDP			Date:	1/4/2024		Voltage Dro			_
	n 04.16.18						ı nı	reshold %:	10	
	RPS-700				Add. Fire Alarm F	Panel			3.0 Amps	
Location:	BUILDING 700		Volts:	24 VDC			Max Pane	el Current:	9.0 Amps	
Part.#	Description	Qty		nt Draw	Wire AWG	Ohms Per	Length(ft)	Actual	Volts @	%Dr
IFP-2100	IFP-2100	1	Standby 0.230	Alarm 0.415	& Type	1000 Ft.	One-Way	Ohms	EOL	
DP-Photo, Photo-T,PhotoR	Smoke detector		0.0000	0.0000						
IDP-Fire-CO	Fire-CO detector	52	0.0156	0.0000						
IDP-Heat, Heat-HT, ROR IDP-Beam, Beam-T	Heat detector Beam detector		0.0000	0.0000						
DNR	Duct housing		0.0000	0.0000						
IDP-IDP Acclimate	IDP Acclimate		0.0000	0.0000						
IDP-Photo W IDP-Photo-R-W	Photo W Photo-R-W		0.0000	0.0000						
IDP-Photo-T-W	Photo-T-W		0.0000	0.0000						
IDP-Heat-W	Heat-W		0.0000	0.0000		Ì	\ /			
IDP-Heat-ROR-W IDP-Heat-HT-W	Heat-ROR-W Heat-HT-W	36	0.0000	0.0000)×A			
IDP-Control	Control	30	0.0072	0.0000						
IDP-Control-6	Control-6		0.0000	0.0000						
IDP-Monitor, Minimon	Monitor, Minimon Monitor-2	4	0.0015	0.0015						
IDP-Monitor-2 IDP-Monitor-10	Monitor-2		0.0000	0.0000						
IDP-Pull-SA, Pull-DA	Pull-SA, Pull-DA		0.0000	0.0000	/					
IDP-Relay	Relay			0.0000						
IDP-Relay-6 IDP-RelayMon-2	Relay-6 RelayMon-2		0.0000	0.0000						
IDP-Zone	Zone		0.0000	0.0000						
IDP-Zone-6	Zone-6		0.0000	0.0000						
IDP-Iso (Isolator Module) IDP-ISO-6	Iso (Isolator Module)		0.0000	0.0000						
B224BI	Isolator Base		0.0000	0.0000						
B200S	Sounder Base		0.0000	0.0000						
B200SR	Sounder Base		0.0000	0.0000						
B200S-LF B200SR-LF	Sounder Base LF Sounder Base LF		0.0000	0.0000			/			
B224RB	Relay Base		0.0000	0.0000						
RTS151	Magnetic Remote Test		0.000	0.0000						
RTS151KEY RA100Z	Key Activated Test Remote LED		0.000	0.0000						
6815	SLC Expander		0.000	0.000						
RA-2000	LCD Remote Annunc	1	0.020	0.025						,
RA-1000 RA-100	LCD Remote Annunc LCD Remote Annunc	1	0.020	0.025						
5824	Serial/Parallel Module	•	0.000	0.000						
5496	Power Expander		0.000	0.000						
RPS-1000	Power Expander	1	0.000	0.000						
5865-4 5865-3	LED Annunciator (4G) LED Annunciator (3G)	1	0.035	0.145						
5880	LED Driver Module		0.000	0.000						
5883	Relay Module	4	0.000	0.880						
CELL-MOD SK-NIC	Communicator Network Interface Card	1	0.000	0.100						
SK-FML	Fiber Module	,	0.000	0.000			\ /			
SK-FSL	Fiber Module	1	0.021	0.021						
WIDP-WG1	Wireless Gateway		0.000	0.000)XA			
ECS-NVCM	Voice control		0.000	0.000						
ECS-SW24	Zone Expander		0.000	0.000		/				
ECS-RPU	Remote Paging Unit	1	0.070	0.250						
ECS-LOC ECS-LOC2100	Local Operating Console Local Operating Console		0.000	0.000						
	50 Watt Internal Amp 25	•								
ECS-INT50W	volts		0.000	0.000	/					
ECS-INT50W	50 Watt Internal Amp 70		0.000	0.000						
	volts									\
ECS-50W ECS-125W	50 Watt Amplifier	1	0.010	0.010						
ECS-125VV ECS-DUAL50W	125 Watt Amplifier 50/100 Watt Amp		0.000	0.000						/
ECS-50WBU	50 Watt Backup Amplifier		0.000	0.000						
NAC-1	Notification Appl Circuit	cfg.	0.000	0.830	#14 Solid ▼	2.52	210	1.06	19.52	2.14
NAC-2	Notification Appl Circuit	cfg.	0.000	0.511	#14 Solid ▼		240	1.21	19.78	1.11
NAC-3	Notification Appl Circuit	cfg.	0.000	0.214	#14 Solid ▼		260	1.31	20.12	1.29
SPARE	Notification Appl Circuit	cfg.	0.000	0.000	#14 Solid ▼	2.52		0.00	20.40	0.00
SPARE	Notification Appl Circuit	cfg.	0.000	0.000	#14 Solid <u>▼</u>	1		0.00	20.40	0.00
SPARE	Notification Appl Circuit	cfg.	0.000	0.000	#14 Solid			0.00	20.40	0.00
SPARE	Notification Appl Circuit	cfg.	0.000	0.000	#14 Solid			0.00	20.40	0.00
	Notification Appl Circuit	cfg.	0.000	0.000	#14 Solid ▼	2.52		0.00	20.40	0.00
SPARE		(Amna)	0.454	3 611	Total Alarm Curren	t (Amps)				
SPARE	Total Standby Current Standby Time		0.451	3.611 2.000	Total Alarm Curren	· · · ·	(120 Mins)			

					V	OLT	AGE	E DR	OP	CAL	CUL	_ATI	ONS	6 - N	OTI	FICA	ATIO	N Al	PPLI	ANCI	E C	IRC	CUITS	ì					
PANEL ID	CKT#		TROBE	30cd S	TROBE		TROBE	110cd S		0.0		0.0	-	0.0	-	0.0	-	0.0		(I) TOTAL	x LE	NGTH FT.	x 21.6 ÷	CIR - MILS	= VOLTS	; D ÷	24(V) x	100	% VOLTAGE
		QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	CURRENT		*		14awg					DROP
FACP	N1	6	0.258	4	0.252	3	0.321		0.000		0.000		0.000		0.000		0.000		0.000	0.831	x	210	x 21.6 ÷	4110	= 0.917	÷	24 x	100	3.8
FACP	N2	5	0.215	3	0.189	2	0.214		0.000		0.000		0.000		0.000		0.000		0.000	0.618	x	240	x 21.6 x	4110	= 0.779	÷	24 x	100	3.2
FACP	N3		0.000		0.000	2	0.214		0.000		0.000		0.000		0.000		0.000		0.000	0.214	х	260	x 21.6 x	4110	= 0.292	÷	24 x	100	1.2

BATTERY SIZE = 28AH

I x FEET x 21.6 VOLTAGE DROPPED C.M.

I = TOTAL CIRCUIT CURRENT

FEET = ONE WAY DISTANCE IN FEET MEASURED FROM SOURCE TO THE LAST DEVICE

Multiply By The Derating Factor

Minimum Battery AmpHours Required

21.6 = FORMULA CONSTANT

C.M. = CROSS SECTIONAL AREA OF CONDUCTOR IN CIRCULAR MILS. SEE CHART BELOW WIRE RESISTANCE

AWG 12 1.59 PER 1000' 6530 **AWG 14** 2.52 PER 1000' 4110 2580 4.02 PER 1000' 1620 **AWG 18** 6.39 PER 1000'

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 03-124308 INC: REVIEWED FOR SS ☐ FLS ☑ ACS ☐

LUCCI & STRUCKITET WE CONSULTING ELECTRICAL ENGINEERS

3251 CORTE MALPASO, #511 CAMARILLO, CA 93012-8094

(805) 389-6520

LUCCI & ASSOCIATES, INC. reserve their commonlaw copyright and other property rights in these plans. These plans and drawings are not to be reproduced, changed, or copied in any form or manner whatsoever without first obtaining the expressed written permission and consent of LUCCI & ASSOC. INC nor are they to be assigned to any third party without obtaining said written permission and consent.

FAX (805) 389-6519

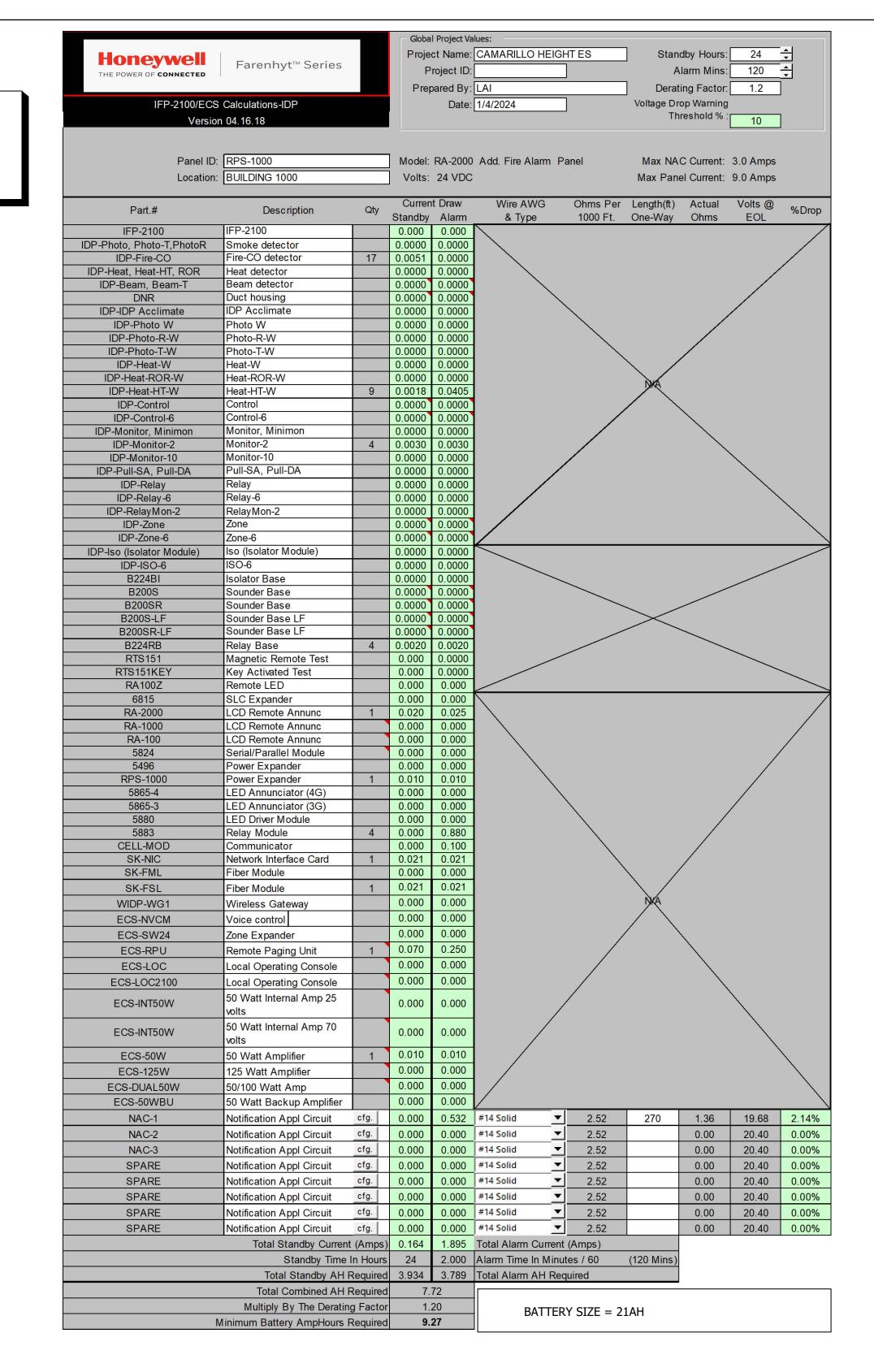
STAMP



BUILDIN EMERGEI COMM S

REV DATE REVISIONS

ł	1			
1				
_				
	CHE	CKED:	DRAWN:	
	K. I	LUCCI	LK/DS	_
	JO	B NO.	SCALE:	DATE:
	197	53-01	AS NOTED	01-18-2024
	SH	HEET:		



						VO	LTA	GE	DRC	P C	ALC	ULA	ATIO	NS -	- SP	EAK	ER A	4PP	LIAN	NCE (CIRCU	ITS				
PANEL ID	CKT#	1/4 V	17	1/2 V 0.0	34	1 W)68	0.1			000	0.0		0.0			- 000		000	(I) TOTAL CURRENT	LENGTH FT.	x 21.6 ÷	CIR - MILS 14awg	= VOLTS DROPPED	÷ 24(V) x 100	% VOLTAGE DROP
AMP	S1	QTY.	AMP 0.136	QTY.	AMP 0.000	QTY.	AMP 0.204	QTY.	0.000	QTY.	0.000	QTY.	AMP 0.000	QTY.	AMP 0.000	QTY.	0.000	QTY.	AMP 0.000		x 150	x 21.6 +		= 0.427	÷ 24 × 100	1.8

SILENT KNIGHT

Panel ID: ECS-50

Ckt.#

Location: BUILDING 1000

ECS-CE4 4 Zone Expander

ECS-50W-25 | ECS-50W Amplifier 25 Volts*

ECS-50W-70.7 ECS-50W Amplifier 70.7 Volts*

Version 06.11.12

Circuit Name

Enter Number of Watts @ 70.7Vrms**

I x FEET x 21.6 VOLTAGE DROPPED

I = TOTAL CIRCUIT CURRENT

FEET = ONE WAY DISTANCE IN FEET MEASURED FROM SOURCE TO THE LAST DEVICE

21.6 = FORMULA CONSTANT

C.M. = CROSS SECTIONAL AREA OF CONDUCTOR IN CIRCULAR MILS. SEE CHART BELOW

AWG 12 1.59 PER 1000' 6530 4110 **AWG 14** 2.52 PER 1000'

6.39 PER 1000'

LTS PPED	÷	24(V)	X	100	% VOLTAGE DROP	PAI
127	÷	24	X	100	1.8	RPS

Standby Hours: 24

BATTERY SIZE = 7AH

Alarm Mins: 120

Project Name: CAMARILLO HEIGHTS ES

0.000 & 3 SPEAKERS AT 1 WATT = 5 WATTS

Date: 1/4/2024

Model: ECS-50W Audio Amplifier

2.000

N/A

Total Standby Current (AMPS) 0.085

Total Standby AH Required 2.040

Total Combined AH Required Multiply By The Derating Factor

Minimum Battery AmpHours Required

Standby Time In Hours 24

I x FEET x 21.6

C.M.

FEET = ONE WAY DISTANCE IN FEET MEASURED FROM SOURCE TO THE LAST DEVICE

21.6 = FORMULA CONSTANT

C.M. = CROSS SECTIONAL AREA OF CONDUCTOR IN CIRCULAR MILS. SEE CHART BELOW

1.59 PER 1000' 2.52 PER 1000' 4.02 PER 1000'

					V	OLT	AGE	E DF	ROP	CAL	CUL	_ATI	ONS	6 - N	OTIF	FICA	ATIO	N A	PPL	ANCI	E CIR	CUIT	ΓS					
PANEL ID	CKT#	15cd S	TROBE		STROBE 063		STROBE 107	110cd 5	TROBE		-	0.0	-	- 0.0	100	0.0	-	0	000	(I) TOTAL	LENGTH × FT.	x 21.	с 6 ÷ м	CIR 11LS =	VOLTS ÷	24(V) x	100	% VOLTAGE
		QTY.	N 0050	QTY.	AMP	75.0	AMP	QTY.	in the control	QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	20000000	QTY.	AMP	CURRENT			14	awg	DROTTED			DROP
RPS-1000	N1	3	0.129	3	0.189	2	0.214		0.000		0.000		0.000		0.000		0.000		0.000	0.532	x 270	x 21.	6 ÷ 41	110 =	0.755 ÷	24 x	100	3.1

VOLTAGE DROPPED

I = TOTAL CIRCUIT CURRENT

WIRE RESISTANCE

4110 2580 1620

6.39 PER 1000'

LK/DS AS NOTED 01-18-2024

REVISIONS

REV DATE

K. LUCCI

19753-01

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC

REVIEWED FOR

SS ☐ FLS ☑ ACS ☐

APP: 03-124308 INC:

DATE: 10/23/2024

ムリピピト ぶ ふききりどんこてきき しょりん

LUCCI & ASSOCIATES, INC. reserve their commonlaw copyright

and other property rights in these plans. These plans and drawings are not to be reproduced, changed, or copied in any form or manner

whatsoever without first obtaining the expressed written permission

and consent of LUCCI & ASSOC. INC nor are they to be assigned to

any third party without obtaining said written permission and consent

LCULATIONS

1000

BUILDII

KINDER(EMERGE COMM S

FAX (805) 389-6519

3251 CORTE MALPASO, #511

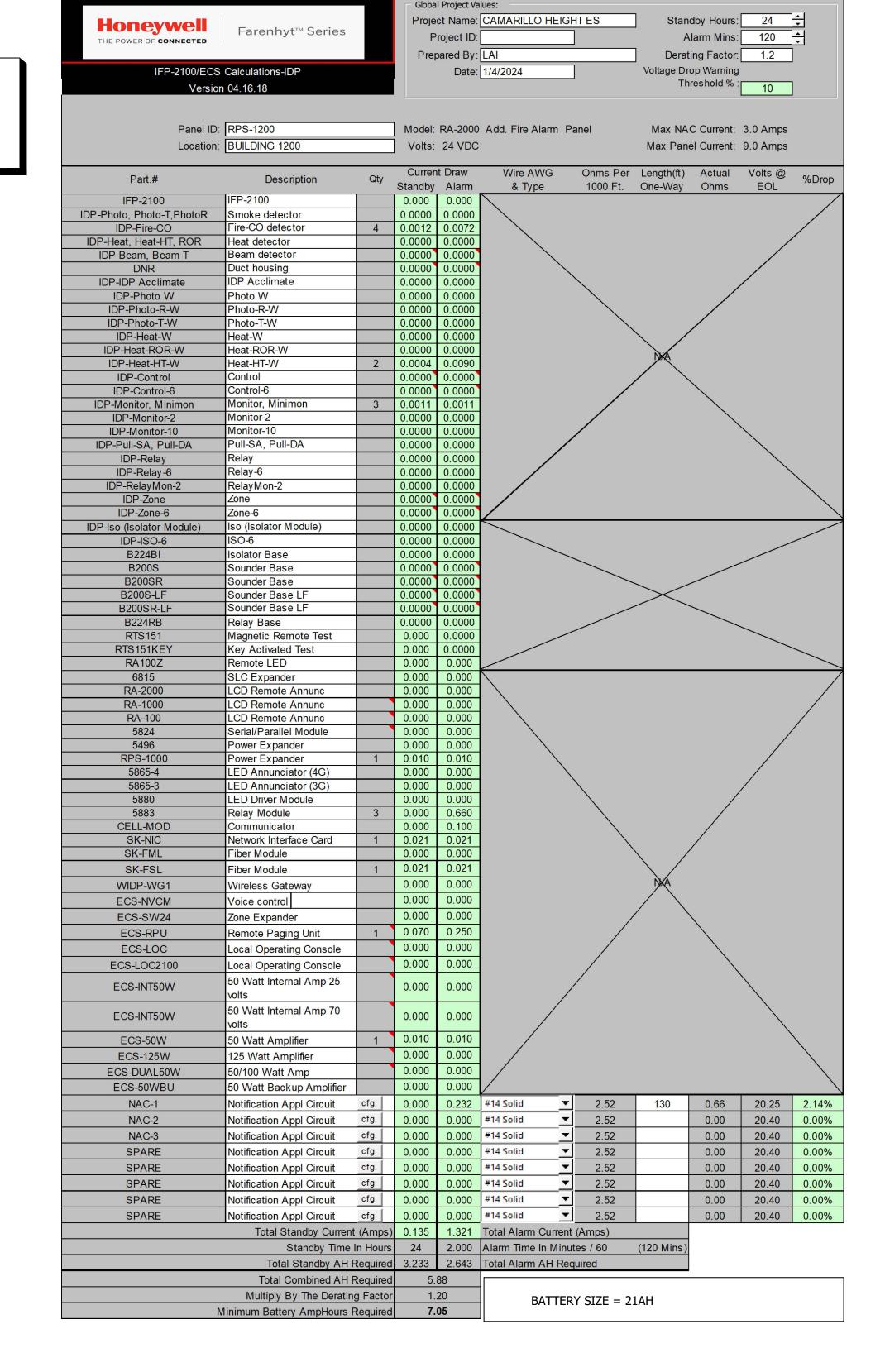
CAMARILLO, CA 93012-8094

(805) 389-6520

STAMP

Standby Hours: 24

Alarm Mins: 120



Version 06.11.12 Panel ID: ECS-50 Model: ECS-50W Audio Amplifier Location: BUILDING 1200 Ckt.# Circuit Name ECS-50W-25 ECS-50W Amplifier 25 Volts* ECS-50W-70.7 ECS-50W Amplifier 70.7 Volts* ECS-CE4 4 Zone Expander 0.255 1 SPEAKER AT .25W & 3 SPEAKERS AT .5 WATT 0.000 & 2 SPEAKERS AT 1 WATT = 3.75 WATTS Enter Number of Watts @ 70.7Vrms** N/A Total Standby Current (AMPS) 0.085 2.000 Standby Time In Hours 24 Total Standby AH Required 2.040 1.560 Total Combined AH Required 3.60 Multiply By The Derating Factor BATTERY SIZE = 7AH Minimum Battery AmpHours Required

Project Name: CAMARILLO HEIGHTS ES

Date: 1/4/2024

						VO	LTA	GE I	DRC	PC	ALC	ULA	ATIO	NS -	- SP	EAK	ER /	APF	PLIA	NCE (CIR	CUIT	S					
PANEL ID	CKT#	0.0	WATT 017	1/2 V 0.0	34	0.0	1. 10. 101	2 W 0.1	32	0.0		0.0			-	0.0			-	(I) TOTAL CURRENT	X	IGTH ×	21.6	CIR HILS	= VOLTS DROPPED	÷ 24(V)	x 100	% VOLTAGE DROP
		QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	CORREIG				14046				Ditoi
AMP	S1	1	0.017	3	0.102	2	0.136		0.000		0.000		0.000		0.000		0.000		0.000	0.255	x 1	20 x	21.6	÷ 2580	= 0.256	÷ 24	x 100	1.1

SILENT KNIGHT

I x FEET x 21.6 VOLTAGE DROPPED

C.M.

I = TOTAL CIRCUIT CURRENT

FEET = ONE WAY DISTANCE IN FEET MEASURED FROM SOURCE TO THE LAST DEVICE

21.6 = FORMULA CONSTANT

C.M. = CROSS SECTIONAL AREA OF CONDUCTOR IN CIRCULAR MILS. SEE CHART BELOW

AWG 12 1.59 PER 1000' 6530 4110 **AWG 14** 2.52 PER 1000' 6.39 PER 1000' 1620

					V	OLT	ΓAGE	E DF	OP	CAL	.CUL	_ATI	ONS	6 - N	OTII	FICA	ATIO	N A	PPLI	IANCE	E CIF	CUIT	S					
PANEL ID	CKT#	15cd STROBE 30cd STROBE			75cd STROBE		110cd STROBE 0.148		- 0.000		- 0.000		-		0.000		-		(I) TOTAL	LENGTH	н х 21.6	CIR ÷ MILS	VOLTS	÷ 24(V) x	100	% VOLTAGE	ŀ	
		0.0 QTY.	AMP	0.0 QTY.	AMP	QTY.	107 AMP	QTY.	AMP	QTY.	AMP	QTY.	AMP	0.0 QTY.	AMP	QTY.	AMP	0.0 QTY.	AMP	CURRENT	FI.		14awg	DROPPED	10 00		DROP	ı
RPS-1200	N1	1	0.043	3	0.189		0.000		0.000		0.000		0.000		0.000		0.000		0.000	0.232	x 130	x 21.6	÷ 4110	= 0.159	÷ 24 x	100	0.7	ľ

I x FEET x 21.6 VOLTAGE DROPPED

C.M.

I = TOTA

FEET =

1620

21.6 = FC.M. =

AWG 12 1.59 PER 1000' 6530 4110 **AWG 14** 2.52 PER 1000' 4.02 PER 1000' 2580 **AWG 16**

6.39 PER 1000'

TAL CIRCUIT CURRENT	
ONE WAY DISTANCE IN FEET	MEASURED FROM SOURCE TO THE LAST DEVICE
FORMULA CONSTANT	
= CROSS SECTIONAL AREA OF	CONDUCTOR IN CIRCULAR MILS. SEE CHART BELOW
SIZE WIRE RESISTANCE	CIR. MILS

LK/DS AS NOTED 01-18-2024

OF: SHEETS:

REVISIONS

REV DATE

K. LUCCI

19753-01

SHEET:

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC

REVIEWED FOR

SS ☐ FLS ☑ ACS ☐

APP: 03-124308 INC:

DATE: 10/23/2024

ムリピピト ぶ ふききりどんこてきき しょりん

LUCCI & ASSOCIATES, INC. reserve their commonlaw copyright

and other property rights in these plans. These plans and drawings are not to be reproduced, changed, or copied in any form or manner

whatsoever without first obtaining the expressed written permission

and consent of LUCCI & ASSOC. INC nor are they to be assigned to

any third party without obtaining said written permission and consent

BUILDING EMERGEN COMM SY

FAX (805) 389-6519

3251 CORTE MALPASO, #511

CAMARILLO, CA 93012-8094

(805) 389-6520

STAMP

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT APP: 03-124308 INC: REVIEWED FOR SS ☐ FLS ☑ ACS ☐

CONSULTING ELECTRICAL ENGINEERS

FAX (805) 389-6519

3251 CORTE MALPASO, #511 CAMARILLO, CA 93012-8094

(805) 389-6520

LUCCI & ASSOCIATES, INC. reserve their commonlaw copyright and other property rights in these plans. These plans and drawings are not to be reproduced, changed, or copied in any form or manner whatsoever without first obtaining the expressed written permission and consent of LUCCI & ASSOC. INC nor are they to be assigned to any third party without obtaining said written permission and consent.

STAMP





REVISIONS

REV DATE CHECKED: LK/DS K. LUCCI SCALE: DATE: AS NOTED 01-18-2024 19753-01

