GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

SOUTH SAN FRANCISCO UNIFIED SCHOOL DISTRICT

SKYLINE ELEMENTARY SCHOOL

HVAC REPLACEMENT

55 CHRISTEN AVE, DALY CITY, CA 94015

FILE: 41-28
APPL: 01-122566

GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF GOVERNING CODES LISTED IN "APPLICABLE CODES" AND ALL GOVERNING LOCAL CODES AND REGULATIONS.
2. THE OWNER / ARCHITECT HAVE OBTAINED APPROVAL OF THE PRIMARY AUTHORITY HAVING JURISDICTION (DSA, HCAI, CITY BUILDING PERMIT). CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL OTHER REQUIRED PERMITS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
3. UNLESS STATED OTHERWISE IN THE SPECIFICATIONS, SPECIAL INSPECTION IS REQUIRED FOR SHOP AND FIELD STRUCTURAL WELDING.
4. WHERE INCORPORATED IN THE CONSTRUCTION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN COPIES OF HCAI OR DSA PRE-APPROVALS FOR PRE-APPROVED ITEMS OR SYSTEMS INCORPORATED INTO THE CONSTRUCTION AND DISTRIBUTE TO OWNER'S REPRESENTATIVE, ARCHITECT AND INSPECTOR.
5. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO FURNISH AND AND INSTALL ALL MATERIALS AND WORK DESCRIBED, DEPICTED OR DETAILED WITHIN THESE DOCUMENTS REGARDLESS OF THE LOCATION OF THAT MATERIAL OR WORK WITHIN THE DOCUMENTS OR OMISSION (WHETHER DELIBERATE OR ACCIDENTAL) OF THAT MATERIAL OR WORK BY A SUBCONTRACTOR ON HIS/HER BID.
6. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL CONSIDER THESE DOCUMENTS IN THEIR ENTIRETY. DISCREPANCIES OR CONTRADICTIONS BETWEEN PORTIONS OF THESE DOCUMENTS MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AT LEAST 72 HOURS PRIOR TO BID OPENING FOR CLARIFICATION. OTHERWISE, THE MOST RESTRICTIVE REQUIREMENT SHALL BE IN FORCE AT NO ADDITIONAL COST TO THE OWNER.
7. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE SAFETY OF ALL PERSONS ON OR ABOUT THE CONSTRUCTION SITE, IN ACCORDANCE WITH APPLICABLE LAWS AND CODES. CONTRACTOR ESTABLISH PROCEDURES TO ASSURE ALL PERSONS ENTERING A POSSIBLY HAZARDOUS AREA, INCLUDING WORKERS, SUBCONTRACTORS, OTHER CONTRACTORS, VISTORS, AND OTHERS ARE AWARE OF APPROPRIATE / REQUIRED SAFETY PROCEDURES. COMPLY WITH LOCAL STATE, AND FEDERAL SAFETY STANDARDS, INCLUDING OSHA REQUIREMENTS AND WITH THE SAFETY PROVISIONS OF THE LATEST MANUAL OF ACCIDENT PREVENTION PUBLISHED BY THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA.
8. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING TEMPORARY FENCING AND GATES, SIGNAGE, SECURITY LIGHTING OR OTHER SECURITY AND CONTROL MEASURES NECESSARY TO PROVIDE FOR THE SAFETY OF THE PUBLIC AND FACILITY USERS UNTIL THE COMPLETION OF THE WORK.
9. THE CONTRACTOR IS RESPONSIBLE TO FOR PROTECTION OF ADJACENT PROPERTY AND SHALL REPAIR AND / OR REPLACE ALL PROPERTY DAMAGED DURING THE COURSE ON THE WORK.
10. THE CONTRACTOR SHALL LIMIT HIS / HER ACTIVITY TO THE AREA DESCRIBED WITHIN THE DOCUMENTS UNLESS OTHERWISE PERMITTED BY THE OWNER'S REPRESENTATIVE.
11. THE CONTRACTOR IS RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY ITEMS DAMAGED OR DISTURBED DURING THE COURSE OF THE WORK. INSTALLATION SHALL MATCH EXISTING IN KIND, QUALITY, AND PERFORMANCE.
12. WHERE EXISTING CONSTRUCTION AND FINISHES ARE CUT, DAMAGED, OR REMODELED, PATCH WITH MATERIALS TO MATCH IN KIND, QUALITY, PERFORMANCE CHARACTERISTICS, AND APPEARANCE.
13. ALL DIMENSIONS ARE TO FACE OF STUD, UNLESS OTHERWISE NOTED. DIMENSIONS NOTED AS "CLR" MEAN CLEAR DIMENSION TO FACE OF FINISH. VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES FOUND.
14. VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS. NOTIFY ARCHITECT OF ANY DISCREPANCIES FOUND. VERIFY DIMENSIONS OF ALL OWNER-FURNISHED ITEMS, INCLUDING FURNITURE AND EQUIPMENT, TO ENSURE PROPER COORDINATION WITH CONSTRUCTION.
15. ALL ITEMS IN THESE DRAWINGS ARE NEW UNLESS OTHERWISE NOTED.
16. ALL UTILITIES REQUIRED FOR THE CONTINUOUS OPERATION OF ALL OCCUPIED EXISTING FACILITIES SHALL BE MAINTAINED IN SERVICE AT ALL TIMES. ANY SHUT DOWNS FOR NEW CONNECTIONS MUST BE COORDINATED WITH THE OWNER'S REPRESENTATIVE TWO WEEKS PRIOR TO THE REQUESTED SHUT DOWN.
17. COORDINATION WITH OTHER CONTRACTS: IF ANY PART OF THIS CONTRACTOR'S WORK DEPENDS UPON THE WORK OF A SEPARATE CONTRACTOR, THIS CONTRACTOR SHALL INSPECT SUCH OTHER WORK AND PROMPTLY REPORT IN WRITING TO THE OWNER'S REPRESENTATIVE ANY DEFECTS IN SUCH OTHER WORK THAT RENDER IT UNSUITABLE TO RECEIVE THE WORK OF THIS CONTRACTOR. FAILURE OF THIS CONTRACTOR TO SO INSPECT AND REPORT SHALL CONSTITUTE AN ACCEPTANCE OF THE OTHER CONTRACTOR'S WORK, EXCEPT AS TO DEFECTS WHICH MAY DEVELOP IN OTHER CONTRACTOR'S WORK AFTER EXECUTION OF THIS CONTRACTOR'S WORK.
18. COORDINATION OF SCHEDULE: PORTIONS OF THIS WORK MAY BE REQUIRED TO BE COMPLETED ON SCHEDULE IN ORDER TO AVOID DELAY TO OTHER CONTRACTORS OR OWNERS OPERATIONS. CONTRACTOR SHALL STRICTLY ADHER TO ESTABLISHED COMPLETION DATES AS DESIGNATED IN THE SPECIFICATIONS AND COORDINATE WORK SCHEDULE WITH THE OWNER'S REPRESENTATIVE AND OTHER CONTRACTORS. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND LIQUIDATED DAMAGES.
19. SCHEDULE ALL WORK WITH THE OWNER'S REPRESENTATIVE, INCLUDING CONSTRUCTION ACCESS AND STORAGE, AND WORK OUTSIDE THE "EXTENT OF WORK" SET FORTH IN THESE DOCUMENTS. THE CONSTRUCTION SCHEDULE SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO THE START OF CONSTRUCTION.
20. CONSTRUCTION PROCEDURES SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO THE START OF CONSTRUCTION.
21. DEMOLITION IS NOT NECESSARILY LIMITED TO ONLY WHAT IS SHOWN ON THIS OR OTHER DRAWINGS OR AS OUTLINED IN THE SPECIFICATIONS. THE INTENT IS TO INDICATE GENERAL SCOPE OF DEMOLITION REQUIRED. CONTRACTOR SHALL INCLUDE ALL MISCELLANEOUS DEMOLITON, CUTTING AND PATCHING REQUIRED TO COMPLETE THE PROJECT IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.
22. ALL ITEMS IDENTIFIED TO BE SALVAGED SHALL BE DELIVERED IN GOOD CONDITION TO A PLACE OF STORAGE AS DIRECTED BY THE OWNER'S REPRESENTATIVE. ALL OTHER ITEMS MUST BE DISPOSED OF OFF-SITE IN A LEGAL MANNER.
23. ARCHITECT IS NOT RESPONSIBLE FOR THE DISCOVERY, PRESENCE, HANDLING, REMOVAL OR DISPOSAL OF, OR EXPOSURE OF PERSONS TO, HAZARDOUS MATERIALS OR TOXIC SUBSTANCES IN ANY FORM AT THE PROJECT SITE. TO THE EXTENT THESE DOCUMENTS RELATE TO SUCH ISSUES, ARCHITECT'S PARTICIPATION IS SOLELY ADMINISTRATIVE WITHOUT ANY RESPONSIBILITY FOR THE CONTENT OR EXECUTION OF SUCH DOCUMENTS.
24. DETAIL DRAWINGS WITH REFERENCES TO FIRE-RATED ASSEMBLIES OR CONSTRUCTION WHICH HAVE BEEN TESTED BY UNDERWRITERS LABORATORIES, THE CALIFORNIA BUILDING CODE OR ANY OTHER APPROVED TESTING AGENCY, SHALL BE CONSTRUED TO INCLUDE ALL WORK AND PROCEDURES CONTAINED IN THE REFERENCED ASSEMBLY DESCRIPTION..
25. ALL PIPE AND DUCT PENETRATIONS THROUGH FIRE RATED CONSTRUCTION SHALL BE FIRE STOPPED AND SEALED TO MAINTAIN THE REQUIRED RATING.
26. CONTRACTOR TO MAINTAIN CONTEMPORANEOUSLY RECORDED "AS-BUILT" INFORMATION OF ALL WORK, WHICH SHALL BE MARKED IN COLOR ON THE DRAWINGS AND SPECIFICATIONS. A SCANNED PDF OF THE "AS-BUILT" DRAWINGS AND SPECIFICATIONS SHALL BE TURNED OVER TO THE OWNER'S REPRESENTATIVE PRIOR TO FINAL APPLICATION FOR PAYMENT. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
27. CONTRACTOR SHALL PROVIDE TEMPORARY PROTECTION AND DUST COVERS ADJACENT TO OCCUPIED AREAS AS REQUIRED TO CONTAIN DUST AND DEBRIS WITHIN CONSTRUCTION AREA. BROOM CLEAN ALL AREAS, INLCUDING SIDEWALKS AND DRIVEWAYS EACH DAY. KEEP DIRT AND DUST TO A MINIMUM.
28. WORK SHALL BE EXECUTED IN A CAREFUL AND ORDERLY MANNER WITH THE LEAST POSSIBLE DISTURBANCE TO PUBLIC AND TO OCCUPANTS OF EXISTING BUILDING.
29. CLEAN ALL EXPOSED SURFACES AND NEW EQUIPMENT AFTER COMPLETION.

ADMINISTRATIVE NOTES

1. THE INTENT OF THE DRAWINGS AND SPECIFICATIONS IS TO ***REPLACE EXISTING FURNACES AND ROOFTOP AIR CONDITIONING UNITS*** IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS. THIS PROJECT WAS SUBMITTED AND REVIEWED BY DSA FOR EXEMPT CONCURRENCE.
2. A COPY OF PARTS 1 AND 2, TITLE 24 C.C.R. SHALL BE KEPT ON THE JOB SITE AT ALL TIMES DURING CONSTRUCTION.
3. ALL CONSTRUCTION CHANGE DOCUMENT AND ADDENDA TO BE SIGNED BY THE ARCHITECT AND THE OWNER.
4. ALL TESTS TO CONFROM TO THE REQUIREMENTS OF SECTION 4-335, PART 1, TITLE 24.
5. TESTS OF MATERIALS AND TESTING LABORATORY SHALL BE IN ACCORDANCE WITH SECTION 4-335 OF PART 1, TITLE 24 AND THE DISTRICT SHALL EMPLOY AND PAY THE LABORATORY. COSTS OF RE-TEST MAY BE BACK CHARGED TO THE CONTRACTOR.
6. NOT USED
7. THIS PROJECT REQUIRES A DSA CERTIFIED PROJECT INSPECTOR. INSPECTOR SHALL BE APPROVED BY DSA. INSPECTION SHALL BE IN ACCORDANCE WITH SECTION 4-333(B). THE DUTY OF THE INSPECTOR SHALL BE IN ACCORDANCE WITH SECTION 4-342, PART 1, TITLE 24.
8. NOT USED
9. NOT USED
10. THE ARCHITECT AND THE STRUCTURAL ENGINEER SHALL PERFORM THEIR DUTIES IN ACCORDANCE WITH SECTION 4-333(A) AND 4-341, PART 1, TITLE 24.
11. THE CONTRACTOR SHALL PERFORM HIS DUTIES IN ACCORDANCE WITH SECTION 4-343, PART 1, TITLE 24.
12. FUNCTIONAL PERFORMANCE TESTING AND BUILDING COMMISSIONING AS DEFINED BY SECTION 120.8, PART 6, TITLE 24 SHALL BE CONDUCTED BY A QUALIFIED COMMISSIONING AGENT TO DEMONSTRATE THE CORRECT INSTALLATION AND OPERATION OF EACH COMPONENT, SYSTEM AND SYSTEM-TO-SYSTEM INTERFACE IN ACCORDANCE WITH THE ACCEPTANCE TEST REQUIREMENTS FOR THE SPECIFIED SYSTEMS AS NOTED:
    - MECHANICAL SYSTEMS TESTING IN ACCORDANCE WITH SECTION 120.5, PART 6, TITLE 24
    - LIGHTING CONTROLS AND PROCESS EQUIPMENT IN ACCORDANCE WITH SECTION 130.4, PART 6, TITLE 24
    - BUILDING ENVELOPE DESIGN IN ACCORDANCE WITH SECTION 120.7, PART 6, TITLE 24
13. ALL CONSTRUCTION AND DEMOLITION SHALL BE IN ACCORDANCE WITH CHAPTER 33 OF THE CBC AND CFC, AND THE WRITTEN SITE FIRE SAFETY PLAN.

APPLICABLE CODES

ALL WORK PERFORMED UNDER THIS CONTRACT IS TO CONFORM TO THE FOLLOWING CODES AND REGULATIONS:

2025 CALIFORNIA BUILDING ADMINISTRATIVE CODE,
PART 1, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)

2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, CCR BASED ON THE 2021 INTERNATIONAL BUILDING CODE (IBC) WITH 2021 CALIFORNIA AMENDMENTS)

2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24, CCR BASED ON THE 2020 NATIONAL ELECTRICAL CODE (NEC) WITH 2020 CALIFORNIA AMENDMENTS)

2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24, CCR BASED ON THE 2021 UNIFORM MECHANICAL CODE (UMC) WITH 2021 CALIFORNIA AMENDMENTS)

2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24, CCR BASED ON THE 2021 UNIFORM PLUMBING CODE (UPC) WITH 2021 CALIFORNIA AMENDMENTS)

2022 CALIFORNIA ENERGY EFFICIENCY STANDARDS (ENERGY CODE), PART 6, TITLE 24 CCR

2022 SAFETY CODE FOR ELEVATORS AND ESCALATORS
(ASME A17.1-2019)

2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24, CCR BASED ON THE 2021 INTERNATIONAL FIRE CODE (IFC) WITH 2022 CALIFORNIA AMENDMENTS)

2022 CALIFORNIA EXISTING BUILDING CODE, PART 10, TITLE 24 CCR
(2021 IEB CODE AND 2022 CALIFORNIA AMENDMENTS)

2022 CALIFORNIA GREEN BUILDING CODE (CALGreen), PART 11, TITLE 24, CCR

2022 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 CCR

TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

NFPA 13	INSTALLATION OF SPRINKLER SYSTEMS	2022 EDITION
NFPA 14	INSTALLATION OF STANDPIPE SYSTEMS	2019 EDITION
NFPA 17	STANDARD FOR DRY CHEMICAL EXTINGUISHING SYS.	2021 EDITION
NFPA 17A	STANDARD FOR WET CHEMICAL SYS.	2021 EDITION
NFPA 20	INSTALLATION OF STATIONARY PUMPS	2019 EDITION
NFPA 24	INSTALLATION OF PRIVATE FIRE MAINS	2019 EDITION
NFPA 72	NATIONAL FIRE ALARM AND SIGNALING CODE	2022 EDITION
NFPA 80	FIRE DOORS AND OTHER OPENING PROTECTIVES	2019 EDITION
NFPA 92	STANDARD FOR SMOKE CONTROL SYSTEMS	2018 EDITION
NFPA 253	CRITICAL RADIANT FLUX OF FLOOR COVERING SYS	2019 EDITION
NFPA 2001	CLEAN AGENT FIRE EXTINGUISHING SYSTEM	2018 EDITION

REFERENCE CODE SECTIONS FOR APPLICABLE STANDARDS - 2022 CBC CHAPTER 35 AND 2022 CFC CHAPTER 45

THE ABOVE CODES AND REGULATIONS REFER TO THE LATEST EDITION OR REVISION IN FORCE ON THE DATE OF THE CONTRACT, UNLESS OTHERWISE STATED. NOTHING ON THE DRAWINGS IS TO BE CONSTRUED AS REQUIRING OR PERMITTING WORK THAT IS CONTRARY TO THE LISTED CODES AND REGULATIONS, OR OTHER LOCAL, STATE OR FEDERAL CODES OR REGULATIONS WHICH MAY BE APPLICABLE.

COMPLIANCE WITH CFC CHAPTER 33, FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION, AND CBC CHAPTER 33, SAFETY DURING CONSTRUCTION WILL BE ENFORCED.

OWNER

SOUTH SAN FRANCISCO UNIFIED SCHOOL DISTRICT
398 B STREET
SOUTH SAN FRANCISCO, CA 94080
CONTACT: WAZI CHOWDHURY
TEL. (650) 877-8707

CONSULTANTS

ARCHITECT
HIBSER YAMAUCHI ARCHITECTS, INC.
300 27TH STREET
OAKLAND, CA 94612
CONTACT: CRAIG DURAND
TEL. (510) 446-2222

STRUCTURAL
BASE DESIGN INC
582 MARKET ST, STE 1402
SAN FRANCISCO, CA 94104
CONTACT: KATY BRIGGS
TEL. (415) 466-2997

MECHANICAL
OPTIMUM ENERGY DESIGN
5277 COLLEGE AVE
OAKLAND, CA 94618
CONTACT: ANDREA KING
TEL. (510) 837-9182

ELECTRICAL
WKM
3397 MT DIABLO BLVD, STE C
LAFAYETTE, CA 94549
CONTACT: TIFFANY KANE
TEL. (925) 385-0649

INDEX OF DRAWINGS

ARCHITECTURAL
A0.01 TITLE SHEET
A0.02 SYMBOLS, LEGENDS AND ABBREVIATIONS
A1.01 SITE PLAN
A2.01 DEMOLITION PLAN - BUILDING B, C, & E
A2.02 DEMOLITION PLAN - BUILDING A & D
A2.03 FLOOR PLAN - BUILDING B, C, & E
A2.04 FLOOR PLAN - BUILDING A & D
A2.21 OVERALL ROOF PLAN - DEMO
A2.22 OVERALL ROOF PLAN - NEW
A6.03 REFLECTED CEILING PLANS - BLDG B, C, & E
A6.04 REFLECTED CEILING PLANS - BLDG A & D
A9.01 DETAILS

STRUCTURAL
S1.01 GENERAL NOTES AND ABBREVIATIONS
S2.01 ROOF FRAMING PLAN - BLDGS B, C,AND E
S2.02 ROOF FRAMING PLAN - BLDG A AND D
S8.01 NAILING SCHEDULE AND WOOD DETAILS

MECHANICAL
M0.01 MECHANICAL GENERAL NOTES AND DESIGN CRITERIA
M0.02 MECHANICAL LEGEND
M0.03 MECHANICAL SCHEDULES
M1.01 MECHANICAL BUILDINGS REFERENCE PLAN
MD2.01 BUILDINGS B, C, & E MECHANICAL DEMOLITION FLOOR PLANS
MD2.02 BUILDINGS A & D MECHANICAL DEMOLITION FLOOR PLANS
MD2.03 BUILDINGS B, C, & E MECHANICAL DEMOLITION ROOF PLAN
MD2.04 BUILDINGS A & D MECHANICAL DEMOLITION ROOF PLAN
M2.01 BUILDINGS B, C, & E MECHANICAL NEW WORK FLOOR PLANS
M2.02 BUILDINGS A & D MECHANICAL NEW WORK FLOOR PLANS
M2.03 BUILDINGS B, C, & E MECHANICAL NEW WORK ROOF PLAN
M2.04 BUILDINGS A & D MECHANICAL NEW WORK ROOF PLAN
M3.01 MECHANICAL DETAILS
M3.02 MECHANICAL DETAILS
M4.01 MECHANICAL EMS CONTROL DIAGRAM
M5.01 MECHANICAL TITLE 24 FORMS
M5.02 MECHANICAL TITLE 24 FORMS

ELECTRICAL
E0.01 ELECTRICAL SYMBOLS, NOTES AND SCHEDULES
E0.02 ELECTRICAL PANEL SCHEDULES
E0.03 ELECTRICAL PANEL SCHEDULES
E1.01 ELECTRICAL POWER PLAN
E2.01 ELECTRICAL POWER PLANS BUILDINGS B AND C
E2.02 ELECTRICAL POWER PLANS BUILDING E
E2.03 ELECTRICAL POWER PLANS BUILDINGS A AND D
E2.04 ELECTRICAL POWER PLAN - ROOF

FIRE ALARM
FA0.01 FIRE ALARM SYMBOLS, NOTES, AND SCHEDULES
FA0.02 FIRE ALARM RISER DIAGRAM
FA1.01 FIRE ALARM SITE PLAN
FA2.01 FIRE ALARM PLANS BUILDINGS B & C
FA2.02 FIRE ALARM PLANS BUILDING E
FA2.03 FIRE ALARM PLANS BUILDING A & D

TOTAL NUMBER OF SHEETS: 47

DEFERRED APPROVALS

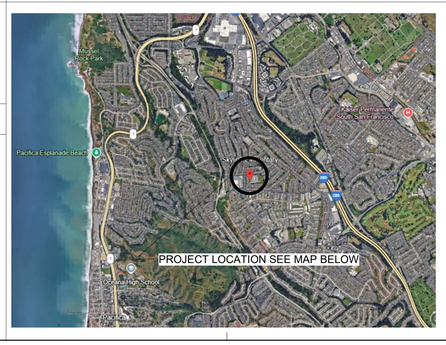
NONE

EXISTING CONDITION

1. CALIFORNIA CLIMATE ZONE 3

VICINITY MAP

NO SCALE



SCOPE OF WORK

GENERAL ALTERATIONS TO:

BUILDING A, INCLUDING:
REPLACEMENT OF EXISTING ADMIN BUILDING FURNACE AND ROOFTOP CONDENSING UNIT.

BUILDING B, INCLUDING:
REPLACEMENT OF EXISTIING CLASSROOM FURNACES AND ROOFTOP CONDENSING UNITS.

BUILDING C, INCLUDING:
REPLACEMENT OF EXISTING CLASSROOM FURNACES AND ROOFTOP CONDENSING UNITS.
REPLACEMENT OF EXISTING FURNACE CLOSET DOORS AND DOOR FRAMES WITH LARGER.

BID ALTERNATE 1: REPLACEMENT OF EXISTING DUCTWORK ABOVE THE CEILING IN CLASSROOMS

BUILDING D, INCLUDING:
REPLACEMENT OF EXISTING CLASSROOM FURNACES AND ROOFTOP CONDENSING UNITS.
REPLACEMENT OF EXISTING FURNACE CLOSET DOORS AND DOOR FRAMES WITH LARGER

BID ALTERNATE 1: REPLACEMENT OF EXISTING DUCTWORK ABOVE THE CEILING IN CLASSROOMS

BUILDING E, INCLUDING:
REPLACEMENT OF EXISTING FURNACES AND AND ROOFTOP CONDENSING UNITS.

STATEMENT OF GENERAL CONFORMANCE

APPLICATION NO.: 01-122566
FILE NO.: 41-28

THE DRAWINGS IDENTIFIED AS FOLLOWS:

☒ ALL DRAWING SHEETS INCLUDED IN THIS SET NOT BEARING MY STAMP AND SIGNATURE.
☐ DRAWING SHEETS DENOTED IN THE SHEET INDEX AS FOLLOWS:
☐ DRAWING SHEETS INCLUDED UNDER THE FOLLOWING PC APPROVAL(S)_____

HAVE BEEN PREPARED BY OTHER DESIGN PROFESSIONALS OR CONSULTANTS WHO ARE LICENSED AND AUTHORIZED TO PREPARE SUCH DRAWINGS (PLANS) IN THIS STATE. THEY HAVE BEEN EXAMINED BY ME FOR:
1) DESIGN INTENT AND APPEAR TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS AND THE PROJECT SPECIFICATIONS PREPARED BY ME, AND
2) COORDINATION WITH MY DRAWINGS (PLANS) AND SPECIFICATIONS AND ARE ACCEPTABLE FOR INCORPORATION INTO THE CONSTRUCTION OF THIS PROJECT.

PER TITLE 24, PART 1, SECTION 4-316(B): THIS STATEMENT OF GENERAL CONFORMANCE SHALL NOT BE CONSTRUED AS RELIEVING ME OF MY RIGHTS, DUTIES, AND RESPONSIBILITIES UNDER SECTIONS 17302 AND 81138 OF THE EDUCATION CODE AND SECTIONS 4-336, 4-341 AND 4-344 OF TITLE 24, PART 1.

SIGNATURE		DATE
2/19/25		
CRAIG DURAND	C-33859	03/31/27
PRINTED NAME	LICENSE NUMBER	EXPIRATION DATE

Revisions

Delta	Date	Revisions	By

This document is the property of the Owner and is not to be used without their written permission

LICENSED ARCHITECT · CRAIG S. DURAND · C-33859 · 03-31-2027 RENEWAL DATE · STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ; 510.446.2211 fax

HY Architects Project number: Project Number

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
TITLE SHEET

Client Project Number: 0000.0

Scale:
Drawn By: Author
Checked By: Checker
Issue Date: Issue Date
Revit Version: 2023

Sheet
A0.01
Sheet of

2/18/2026 2:47:09 PM C:\Users\allock\Documents\6241 SSFUSD Skyline ES HVAC_R25_Central_allock.NZLXN.rvt

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY

FEMA FLOOD MAP

National Flood Hazard Layer FIRMette

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- SPECIAL FLOOD HAZARD AREAS: Without Base Flood Elevation (BFE) *Zone A, V, A99*; With BFE or Depth *Zone AE, AO, AH, VE, AR*; Regulatory Floodway
- OTHER AREAS OF FLOOD HAZARD: 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*; Future Conditions 1% Annual Chance Flood Hazard *Zone X*; Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*; Area with Flood Risk due to Levee *Zone D*
- NO SCREEN: Area of Minimal Flood Hazard *Zone X*; Effective LOMRs
- OTHER AREAS: Area of Undetermined Flood Hazard *Zone D*
- GENERAL STRUCTURES: Channel, Culvert, or Storm Sewer; Levee, Dike, or Floodwall
- OTHER FEATURES: 20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation; Coastal Transect; Base Flood Elevation Line (BFE); Limit of Study; Jurisdiction Boundary; Coastal Transect Baseline; Profile Baseline; Hydrographic Feature
- MAP PANELS: Digital Data Available; No Digital Data Available; Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/29/2025 at 9:19 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

ABBREVIATIONS

&	AND
@	AT
℄	CENTERLINE
Ø	DIAMETER
#	POUND OR NUMBER
A/C	AIR CONDITIONING
AC	ASPHALTIC CONCRETE
ACOUS	ACOUSTICAL
ACT	ACOUSTIC CEILING TILE
ADD	ADDITIONAL
ADJ	ADJACENT
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
ALUM	ALUMINUM
ANOD	ANODIZED
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
BITUM	BITUMINOUS
BD	BOARD
BLDG	BUILDING
BLKG	BLOCKING
BOT	BOTTOM
BTWN	BETWEEN
BUR	BUILT-UP ROOFING
CAB	CABINET
CB	CATCH BASIN
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CG	CORNER GUARD
CJ	CONTROL JOINT
CLG	CEILING
CLO	CLOSET
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
COMP	COMPOSITION
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CORR	CORRIDOR
CT	CERAMIC TILE
CUST	CUSTODIAN
DBL	DOUBLE
DEMO	DEMOLITION
DEPT	DEPARTMENT
DF	DRINKING FOUNTAIN
DI	DRAIN OR DROP INLET
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DISP	DISPENSER
DIV	DIVISION
DN	DOWN
DS	DOWNSPOUT
DTL	DETAIL
DW	DISHWASHER
DWG	DRAWING
(E)	EXISTING
E	EAST
EA	EACH
EF	EXHAUST FAN
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
ENCL	ENCLOSURE
EQ	EQUAL
EQUIP	EQUIPMENT
EVA	EMERGENCY VEHICLE ACCESS
EWC	ELECTRICAL WATER COOLER
EXP	EXPANSION
EXT	EXTERIOR
FA	FIRE ALARM
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF	FINISH FLOOR
FIN	FINISH
FLR	FLOOR
FO	FACE OF
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOS	FACE OF STUD
FRP	FIBERGLASS REINFORCED PANEL
FT	FOOT OR FEET
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GB	GRAB BAR
GSM	GALVANIZED SHEET METAL
GYP	GYPSUM
HB	HOSE BIB
HC	HOLLOW CORE
HD	HEAD
HDWR	HARDWARE
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HR	HOUR
HT	HEIGHT
INFO	INFORMATION
INSUL	INSULATION
INT	INTERIOR
JAN	JANITOR
JT	JOINT
LAB	LABORATORY
LAM	LAMINATE
LAV	LAVATORY
LBS	POUNDS
LT	LIGHT
MAX	MAXIMUM
MB	MACHINE BOLT
MDF	MEDIUM DENSITY FIRE BOARD
MECH	MECHANICAL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MOD	MODULAR
MTD	MOUNTED
MTG	MOUNTING
MTL	METAL
MUL	MULLION
(N)	NEW
N/A	NOT APPLICABLE
N	NORTH
NIC	NOT IN CONTRACT
NO or #	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
O/	OVER
OC	ON CENTER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER INSTALLED
OPP	OPPOSITE
PL	PLATE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLYWD	PLYWOOD
PR	PAIR
PTD	PAPER TOWEL DISPENSER
PVC	POLYVINYL CHLORIDE
(R)	RELOCATE
(RE)	RELOCATE EXISTING
RB	RESILIENT OR RUBBER BASE
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REF	REFERENCE
REFR	REFRIGERATOR
REINF	REINFORCED
REQ	REQUIRED
RF	RESILIENT FLOORING
RM	ROOM
RO	ROUGH OPENING
RWL	RAIN WATER LEADER
S	SOUTH
SC	SOLID CORE
SCD	SEE CIVIL DRAWINGS
SCHED	SCHEDULE
SD	SOAP DISPENSER
SED	SEE ELECTRICAL DRAWINGS
SF	SQUARE FEET
SFPD	SEE FIRE PROTECTION DRAWINGS
SHT	SHEET
SIM	SIMILAR
SLD	SEE LANDSCAPE DRAWINGS
SMD	SEE MECHANICAL DRAWINGS
SMS	SHEET METAL SCREW
SND	SANITARY NAPKIN DISPENSER
SPD	SEE PLUMBING DRAWINGS
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
SSD	SEE STRUCTURAL DRAWINGS
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUSP	SUSPEND
TEL	TELEPHONE
TEMP	TEMPORARY
THK	THICK
T.O.	TOP OF
TOC	TOP OF CURB
TOP	TOP OF PARAPET
TOS	TOP OF SLAB
TOW	TOP OF WALL
TPD	TOILET PAPER DISPENSER
TV	TELEVISION
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
W	WEST
w/	WITH
W/O	WITHOUT
WC	WATER CLOSET
WD	WOOD
WH	WATER HEATER

SYMBOLS

- GRID LINE
- BUILDING ELEVATION: ELEVATION IDENTIFICATION; SHEET WHERE ELEVATION IS SHOWN
- BUILDING OR WALL SECTION: SECTION IDENTIFICATION; SHEET WHERE SECTION IS SHOWN
- DETAIL: DETAIL IDENTIFICATION; SHEET WHERE DETAIL IS SHOWN
- INTERIOR ELEVATION(S): DETAIL NO. OF ELEVATION; NO ARROWS MEAN ELEVATION NOT SHOWN; SHEET WHERE ELEVATION IS SHOWN; ELEVATION IDENTIFICATION
- WORK POINT, CONTROL POINT OR DATUM POINT
- REVISIONS: REVISION NUMBER, SEE REVISION SCHEDULE ON TITLE BLOCK; AREA OF REVISION
- ROOM IDENTIFICATION: ROOM NAME; KAISER ROOM CODE NAME; ROOM NUMBER; CEILING HEIGHT (OTHER THAN EXISTING OR 8'-0" A.F.F.)
- KEYNOTE TAG: REFER TO KEYNOTE LIST LOCATED ON PLAN SHEETS
- AREA OF NO WORK
- DOOR TAG (SEE DOOR SCHEDULE): DOOR MARK; HARDWARE GROUP
- DOOR MARK
- (E) DOOR TO REMAIN
- (E) DOOR TO BE REMOVED
- (N) DOOR & DOOR FRAME
- WALL TAG: WALL TYPE - REFER TO DRAWING SHEET A9.01
- WINDOW TAG (SEE WINDOW SCHEDULE): WINDOW MARK
- CASEWORK TYPE: REFER TO WI NORTH AMERICAN ARCHITECTURAL WOODWORK & OWNER CASEWORK STANDARDS; CASEWORK DIMENSIONS; CUSTOMIZATIONS & SPECIALTY HARDWARE

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

SAN FRANCISCO UNIFIED SCHOOL DISTRICT · SOUTH · EDUCATION FOR ALL

Revisions

Delta	Date	Revisions	By

This document is the property of the Owner and is not to be used without their written permission

LICENSED ARCHITECT · CRAIG S. DURAN · C-33859 · 03-31-2027 RENEWAL DATE · STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: Project Number

Facility

SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project

HVAC REPLACEMENT

Sheet Title

SYMBOLS, LEGENDS AND ABBREVIATIONS

Client Project Number: 0000.0

Scale: 12" = 1'-0"
Drawn By: Author
Checked By: Checker
Issue Date: Issue Date
Revit Version: 2023

Sheet

A0.02

Sheet 2 of 200

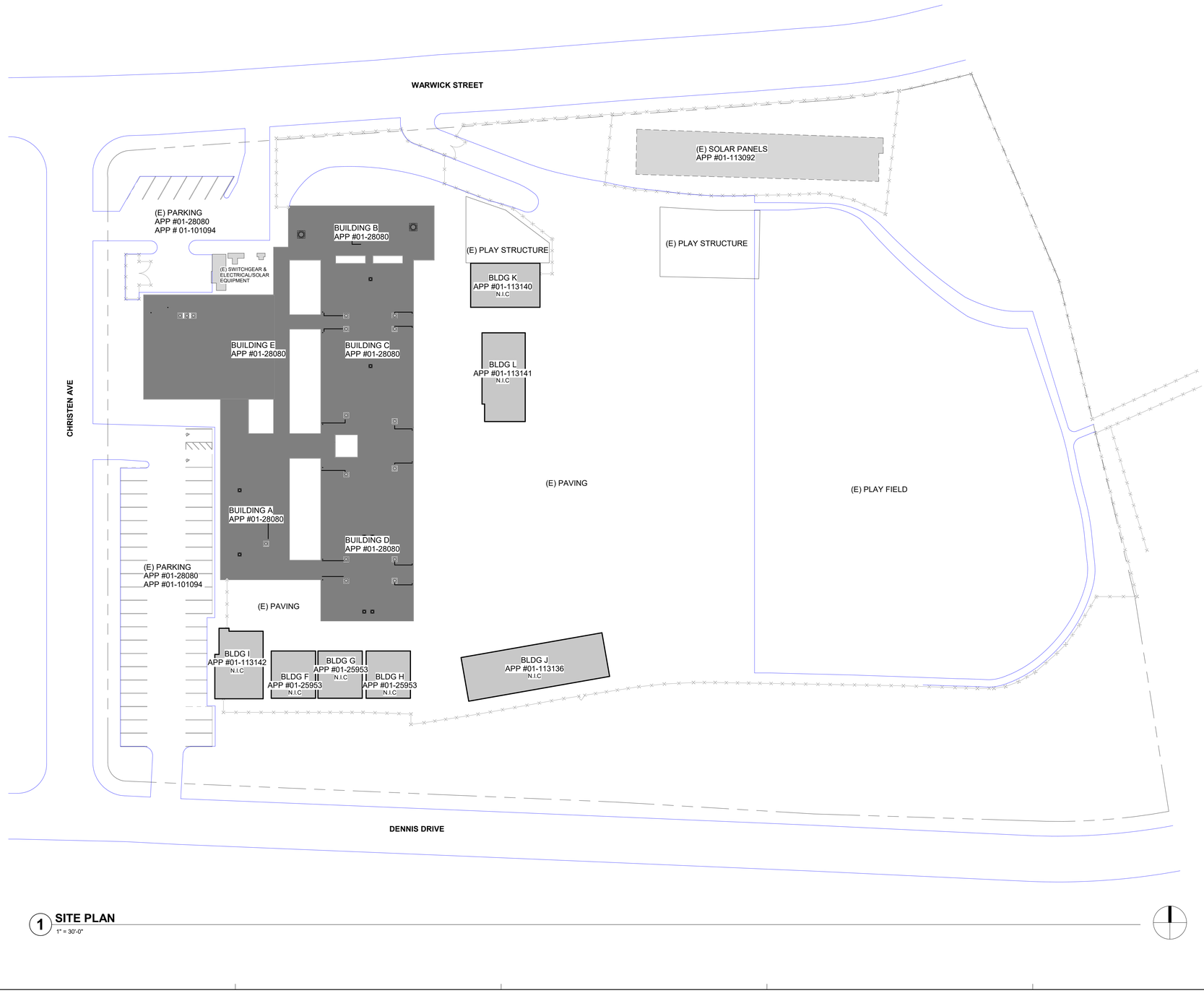
2/18/2026 2:47:10 PM C:\Users\ablock\Documents\6241 SSF\SD Skyline ES HVAC_R25_Central_ajollock2NZD.rvt

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY

DSA CERTIFICATION DATA

DSA APP. #	PROJECT NAME	APP. DATE	CLOSE DATE	DSA CLOSEOUT LETTER TYPE
01-25953	BLDG F, G, H	-	-	-
01-28080	BLDG A, B, C, D, E	9/13/1966	-	-
01-64982	SKYLINE ELEMENTARY SCHOOL	6/12/1996	3/17/1999	1 - CERTIFICATION & CLOSE OF FILE
01-100221	ALTERATIONS TO LOW VOLTAGE UPGRADE OF ALL BUILDINGS	11/12/1999	9/13/2011	1 - CERTIFICATION & CLOSE OF FILE
01-100238	ALTERATIONS TO TOILET ROOMS	6/30/1999	11/29/2011	1 - CERTIFICATION & CLOSE OF FILE
01-101094	RECONSTRUCTION/ REHABILITATION OF BLDGS A, B, C, D, E	8/16/1999	12/28/2004	1 - CERTIFICATION & CLOSE OF FILE
01-113092	CONSTRUCTION OF SITE WORK / CIVIL	5/31/2013	3/4/2014	1 - CERTIFICATION & CLOSE OF FILE
01-113136	BUILDING J	6/7/2013	5/5/2014	1 - CERTIFICATION & CLOSE OF FILE
01-113140	EXPLORATORIUM - BLDG K	6/7/2013	5/6/2014	1 - CERTIFICATION & CLOSE OF FILE
01-113141	EXPLORATORIUM - BLDG L	6/13/2013	5/6/2014	1 - CERTIFICATION & CLOSE OF FILE
01-113142	LIBRARY - BLDG I	6/14/2013	5/6/2014	1 - CERTIFICATION & CLOSE OF FILE



1 SITE PLAN
1" = 30'-0"

CODE ANALYSIS

	CONST. TYPE	OCC	AREA	SPRINKLERED
(E) BUILDING A				
(E) ADMIN BUILDING	V-B	E	2,703 SF	NO
ALLOWED BUILDING AREA = 9,500 SF > 2,703 SF				
(E) BUILDING B				
(E) CLASSROOM BUILDING	V-B	E	2,640 SF	NO
ALLOWED BUILDING AREA = 9,500 SF > 2,640 SF				
(E) BUILDING C				
(E) CLASSROOM BUILDING	V-B	E	6,615 SF	NO
ALLOWED BUILDING AREA = 9,500 SF > 6,615 SF				
(E) BUILDING D				
(E) CLASSROOM BUILDING	V-B	E	6,632 SF	NO
ALLOWED BUILDING AREA = 9,500 SF > 6,632 SF				
(E) BUILDING E				
(E) MPR	V-A	E	6,256 SF	NO
ALLOWED BUILDING AREA = 18,500 SF > 6,256 SF				
(E) BUILDING F, G, H				
(E) CLASSROOM BUILDINGS	V-B	E	2,922 SF	NO
ALLOWED BUILDING AREA = 9,500 SF > 2,922 SF				
(E) BUILDING I				
(E) LIBRARY	V-B	E	1,492 SF	NO
ALLOWED BUILDING AREA = 9,500 SF > 1,492 SF				
(E) BUILDING J				
(E) CLASSROOM BUILDING	V-B	E	2,925 SF	NO
ALLOWED BUILDING AREA = 9,500 SF > 2,925 SF				
(E) BUILDING K				
(E) KINDERGARTEN CLASSROOM BUILDING	V-B	E	1,477 SF	NO
ALLOWED BUILDING AREA = 9,500 SF > 1,477 SF				
(E) BUILDING L				
(E) EXPLORATORIUM	V-B	E	1,822 SF	NO
ALLOWED BUILDING AREA = 9,500 SF > 1,822 SF				

NOTE: BUILDING CODE INFORMATION NOT CHANGING IN THIS APPLICATION

LEGEND

- PROPERTY LINE
- ROOFTOP UNIT
- (E) BUILDING, NOT IN PROJECT SCOPE
- (E) BUILDING, IN PROJECT SCOPE
- EDGE OF CONCRETE

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

SAN FRANCISCO UNIFIED SCHOOL DISTRICT · SOUTH · EDUCATION FOR ALL

Revisions

Delta	Date	Revisions	By

This document is the property of the Owner and is not to be used without their written permission.

LICENSED ARCHITECT CRAIG S. DURANT C-33859 03-31-2027 RENEWAL DATE STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY Architects Project number: Project Number

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
SITE PLAN

Client Project Number: 0000.0

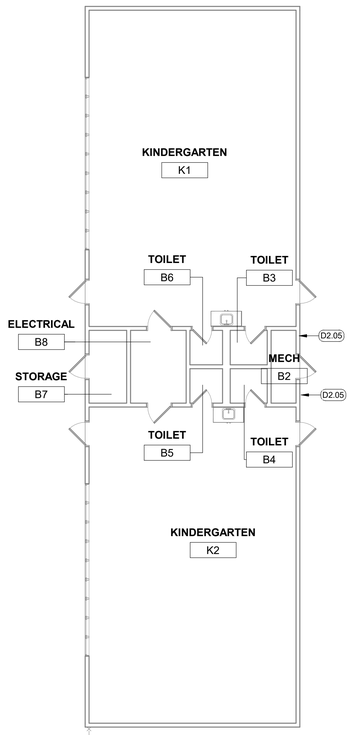
Scale: 1" = 30'-0"
Drawn By: Author
Checked By: Checker
Issue Date: Issue Date
Revit Version: 2023

Sheet
A1.01
Sheet 2 of 200

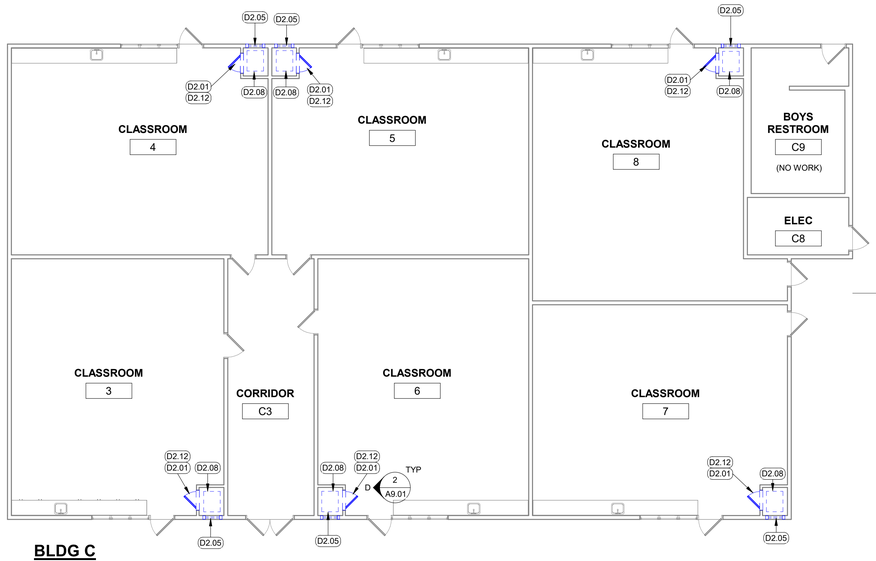
C:\Users\alollock\Documents\t0241 SSFUSD Skyline ES HVAC_R25_Central_alollockNZL.rvt
2/18/2026 2:47:10 PM

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY



BLDG B



BLDG C

MATCHLINE, SEE A2.02

BLDG E

MATCHLINE, SEE A2.02

2 DEMO FLOOR PLAN - BLDG B, C, & E

1/8" = 1'-0"

GENERAL NOTES

1. PRIOR TO START OF CONSTRUCTION CONTRACTOR TO FIELD VERIFY (E) CONDITIONS & NOTIFY ARCHITECT OF ANY DISCREPANCIES FROM THE PLANS.

2. PRIOR TO START OF CONSTRUCTION CONTRACTOR TO REMOVE & PROTECT ALL (E) EQUIPMENT & FURNITURE. RELEASE BACK TO THE FACILITY FOR FUTURE RE-USE UON OR UNLESS DIRECTED BY THE OWNER.

3. ALL DIMENSIONS SHALL BE FROM FACE OF STUD, UON. DIMENSIONS NOTED AS "CLR" REFER TO CLEAR DIMENSION FROM FACE OF FINISH.

4. WHEREVER THE TERM "ALIGN" IS SHOWN, CONTRACTOR TO ALIGN THE FACES OF WALL FINISH(ES).

5. PROTECT & MAINTAIN ALL (E) PARTITION RATINGS, UON.

6. PRESERVE & PROTECT (E) FINISHES THAT ARE TO REMAIN. WHERE DAMAGE OCCURS DURING CONSTRUCTION PATCH & REPAIR ALL WALLS, CEILING, AND FLOOR SURFACES TO MATCH (E), UON. IF FINISHES ARE DAMAGED BEYOND REPAIR & AN EXACT MATCH CANNOT BE PROCURED NOTIFY THE ARCHITECT IMMEDIATELY FOR DIRECTION ON REPLACEMENT FINISH SPECIFICATION. WALLS SHALL BE PAINTED TO THE NEAREST CORNER/ INTERSECTION & ALL OTHER FINISHES TO BE REPLACED AT THE NEAREST CORNER/ INTERSECTION FOR A SEAMLESS AESTHETIC.

7. REFER TO STRUCTURAL, MECHANICAL, AND ELECTRICAL SERIES SHEETS FOR ADDITIONAL INFORMATION. COORDINATE LOCATIONS OF WALL MOUNTED ACCESSORIES, EQUIPMENT, FURNITURE, SIGNAGE & THEIR ASSOCIATED BACKING WITH POWER/DATA, THERMOSTAT, LIGHT SWITCH & MISC. PANEL LOCATIONS PRIOR TO INSTALLATION.

DEMO NOTES

D2.01	DEMO (E) DOOR AND FRAME. SALVAGE (E) DEADBOLT AND STRIKE FOR REINSTALLATION.
D2.05	DEMO (E) LOUVERS AT EXTERIOR WALL
D2.08	DEMO (E) FURNACE, SMD
D2.12	DEMO WALL ABOVE (E) OPENING AND RELOCATE (E) HEADER +18" TO ACCOMMODATE (N) DOOR

KEYNOTES

DEMO LEGEND

Room Name / ##	ROOM TAG
	(E) FURNACE TO BE DEMOLISHED, SMD
	(E) DOOR TO REMAIN
	(E) DOOR TO BE DEMOLISHED
	(E) LOUVER TO BE DEMOLISHED

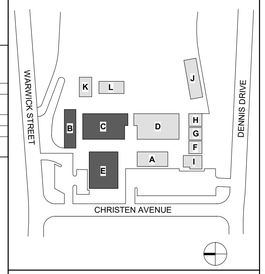
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

SAN FRANCISCO UNIFIED SCHOOL DISTRICT · SOMOS UNA · EDUCATION FOR ALL

Revisions

Delta	Date	Revisions	By

KEY PLAN



This document is the property of the Owner and is not to be used without their written permission

LICENSED ARCHITECT CRAIG S. DUBANT C-33859 03-31-2027 RENEWAL DATE STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: Project Number

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
DEMOLITION PLAN - BUILDING B, C, & E

Client Project Number: 0000.0

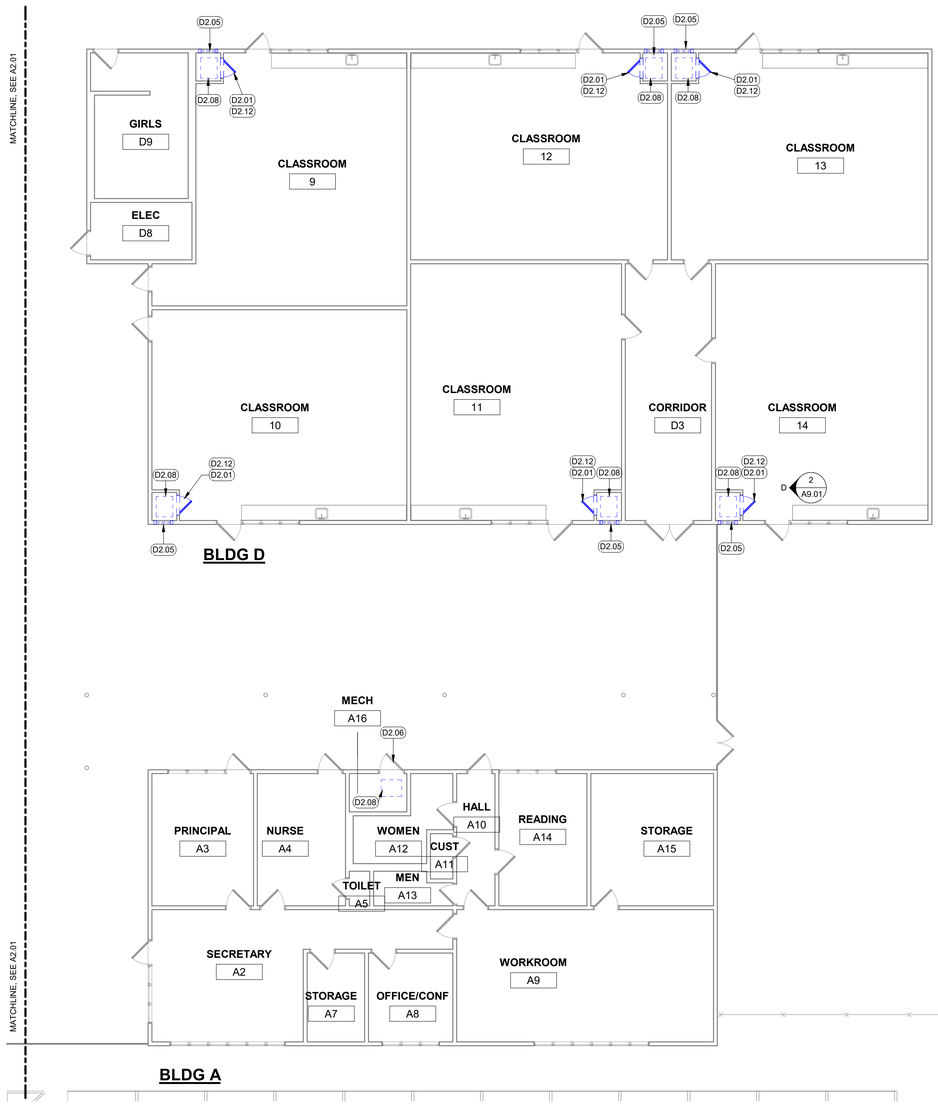
Scale: As indicated
Drawn By: Author
Checked By: Checker
Issue Date: Issue Date
Revit Version: 2023

Sheet
A2.01
Sheet 2 of 200

2/18/2026 2:47:11 PM C:\Users\abillock\Documents\6241 SSFUSD Skyline ES HVAC_R25_Central_abillockNDL.rvt

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY



1 DEMO FLOOR PLAN - BUILDING A & D

1/8" = 1'-0"

GENERAL NOTES

1. PRIOR TO START OF CONSTRUCTION CONTRACTOR TO FIELD VERIFY (E) CONDITIONS & NOTIFY ARCHITECT OF ANY DISCREPANCIES FROM THE PLANS.

2. PRIOR TO START OF CONSTRUCTION CONTRACTOR TO REMOVE & PROTECT ALL (E) EQUIPMENT & FURNITURE. RELEASE BACK TO THE FACILITY FOR FUTURE RE-USE UON OR UNLESS DIRECTED BY THE OWNER.

3. ALL DIMENSIONS SHALL BE FROM FACE OF STUD, UON. DIMENSIONS NOTED AS "CLR" REFER TO CLEAR DIMENSION FROM FACE OF FINISH.

4. WHEREVER THE TERM "ALIGN" IS SHOWN, CONTRACTOR TO ALIGN THE FACES OF WALL FINISH(ES).

5. PROTECT & MAINTAIN ALL (E) PARTITION RATINGS, UON.

6. PRESERVE & PROTECT (E) FINISHES THAT ARE TO REMAIN. WHERE DAMAGE OCCURS DURING CONSTRUCTION PATCH & REPAIR ALL WALLS, CEILING, AND FLOOR SURFACES TO MATCH (E), UON. IF FINISHES ARE DAMAGED BEYOND REPAIR & AN EXACT MATCH CANNOT BE PROCURED NOTIFY THE ARCHITECT IMMEDIATELY FOR DIRECTION ON REPLACEMENT FINISH SPECIFICATION. WALLS SHALL BE PAINTED TO THE NEAREST CORNER/ INTERSECTION & ALL OTHER FINISHES TO BE REPLACED AT THE NEAREST CORNER/ INTERSECTION FOR A SEAMLESS AESTHETIC.

7. REFER TO STRUCTURAL, MECHANICAL, AND ELECTRICAL SERIES SHEETS FOR ADDITIONAL INFORMATION. COORDINATE LOCATIONS OF WALL MOUNTED ACCESSORIES, EQUIPMENT, FURNITURE, SIGNAGE & THEIR ASSOCIATED BACKING WITH POWER/DATA, THERMOSTAT, LIGHT SWITCH & MISC. PANEL LOCATIONS PRIOR TO INSTALLATION.

DEMO NOTES

D2.01	DEMO (E) DOOR AND FRAME. SALVAGE (E) DEADBOLT AND STRIKE FOR REINSTALLATION.
D2.05	DEMO (E) LOUVERS AT EXTERIOR WALL
D2.06	DEMO (E) LOUVER IN (E) DOOR. (E) DOOR TO REMAIN
D2.08	DEMO (E) FURNACE, SMD
D2.12	DEMO WALL ABOVE (E) OPENING AND RELOCATE (E) HEADER +18" TO ACCOMMODATE (N) DOOR

KEYNOTES

DEMO LEGEND

Room Name ##	ROOM TAG
	(E) FURNACE TO BE DEMOLISHED, SMD
	(E) DOOR TO REMAIN
	(E) DOOR TO BE DEMOLISHED
	(E) LOUVER TO BE DEMOLISHED

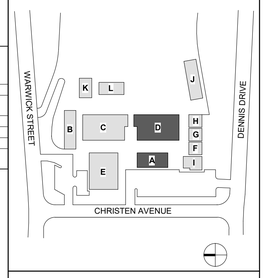
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

SAN FRANCISCO UNIFIED SCHOOL DISTRICT · SOUTHEAST · EDUCATION FOR ALL

Revisions

Delta	Date	Revisions	By

KEY PLAN



This document is the property of the Owner and is not to be used without their written permission

LICENSED ARCHITECT CRAIG S. DURANT C-33859 03-31-2027 RENEWAL DATE STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: Project Number

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
DEMOLITION PLAN - BUILDING A & D

Client Project Number: 0000.0

Scale:	As indicated
Drawn By:	Author
Checked By:	Checker
Issue Date:	Issue Date
Revit Version:	2023

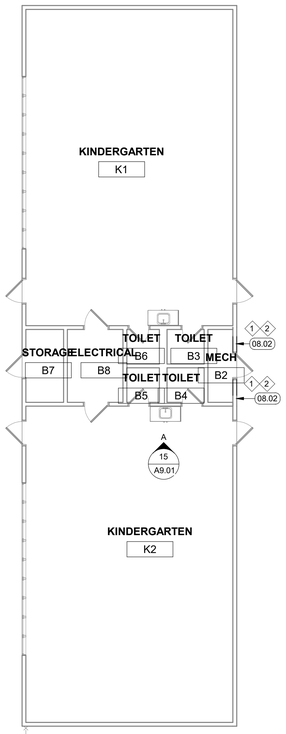
Sheet **A2.02**

Sheet 2 of 200

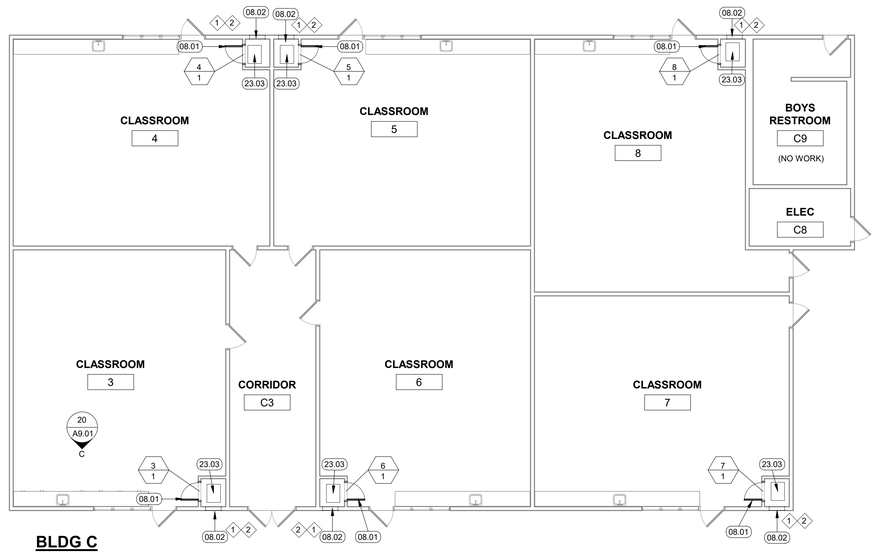
2/18/2026 2:47:12 PM C:\Users\alollock\Documents\6241 SSF\USD Skyline ES HVAC_R25_Central_alollockNZL.XN.rvt

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY



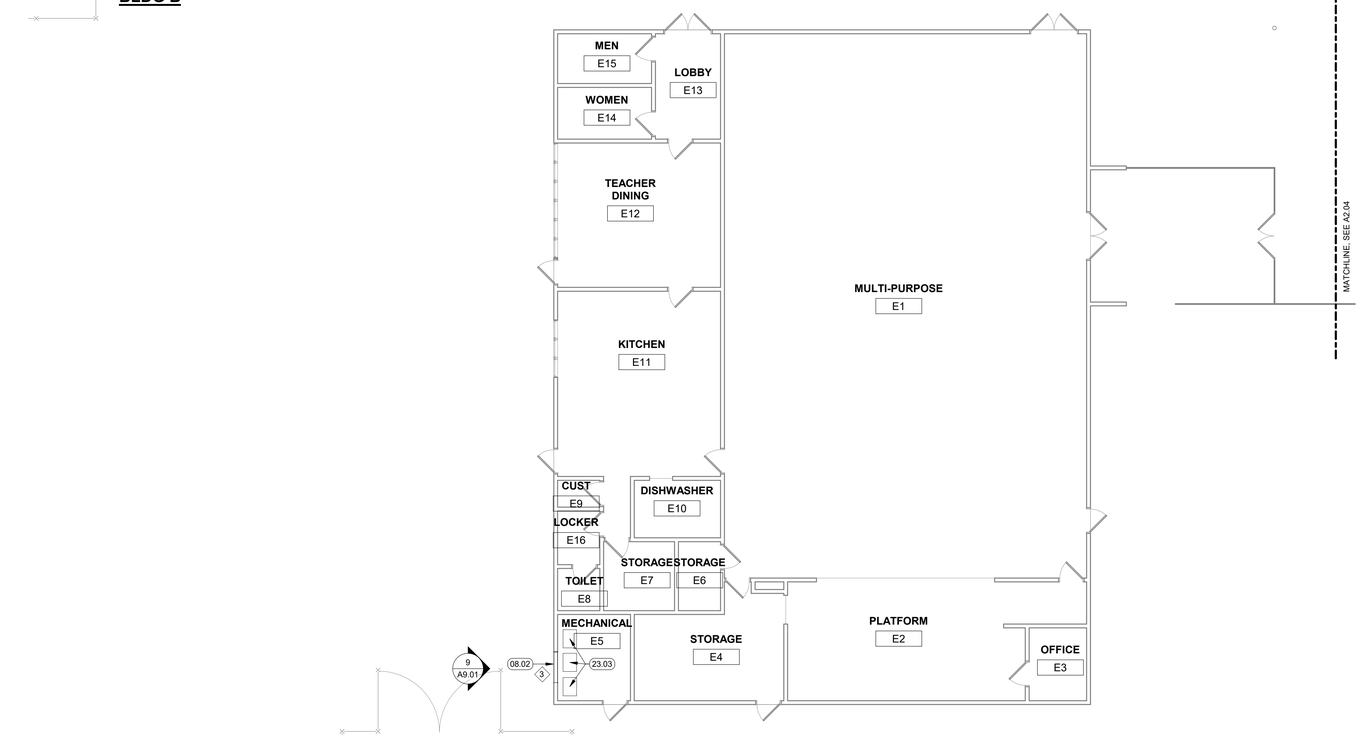
BLDG B



BLDG C

MATCHLINE, SEE A2.04

02.03



BLDG E

MATCHLINE, SEE A2.04

3 FIRST FLOOR PLAN - BUILDING B, C, & E

1/8" = 1'-0"

GENERAL NOTES

1. PRIOR TO START OF CONSTRUCTION CONTRACTOR TO FIELD VERIFY (E) CONDITIONS & NOTIFY ARCHITECT OF ANY DISCREPANCIES FROM THE PLANS.

2. PRIOR TO START OF CONSTRUCTION CONTRACTOR TO REMOVE & PROTECT ALL (E) EQUIPMENT & FURNITURE. RELEASE BACK TO THE FACILITY FOR FUTURE RE-USE UON OR UNLESS DIRECTED BY THE OWNER.

3. ALL DIMENSIONS SHALL BE FROM FACE OF STUD, UON. DIMENSIONS NOTED AS "CLR" REFER TO CLEAR DIMENSION FROM FACE OF FINISH.

4. WHEREVER THE TERM "ALIGN" IS SHOWN, CONTRACTOR TO ALIGN THE FACES OF WALL FINISH(ES).

5. PROTECT & MAINTAIN ALL (E) PARTITION RATINGS, UON.

6. PRESERVE & PROTECT (E) FINISHES THAT ARE TO REMAIN. WHERE DAMAGE OCCURS DURING CONSTRUCTION PATCH & REPAIR ALL WALLS, CEILING, AND FLOOR SURFACES TO MATCH (E), UON. IF FINISHES ARE DAMAGED BEYOND REPAIR & AN EXACT MATCH CANNOT BE PROCURED NOTIFY THE ARCHITECT IMMEDIATELY FOR DIRECTION ON REPLACEMENT FINISH SPECIFICATION. WALLS SHALL BE PAINTED TO THE NEAREST CORNER/ INTERSECTION & ALL OTHER FINISHES TO BE REPLACED AT THE NEAREST CORNER/ INTERSECTION FOR A SEAMLESS AESTHETIC.

7. REFER TO STRUCTURAL, MECHANICAL, AND ELECTRICAL SERIES SHEETS FOR ADDITIONAL INFORMATION. COORDINATE LOCATIONS OF WALL MOUNTED ACCESSORIES, EQUIPMENT, FURNITURE, SIGNAGE & THEIR ASSOCIATED BACKING WITH POWER/DATA, THERMOSTAT, LIGHT SWITCH & MISC. PANEL LOCATIONS PRIOR TO INSTALLATION.

KEYNOTES

02.03	(E) HSS STEEL COLUMN
08.01	DOOR, SEE SCHEDULE, TYP.
08.02	LOUVER, SEE SCHEDULE
23.03	FURNACE, SMD

LEGEND

Room Name / ##	ROOM TAG
	FURNACE, SMD
	(E) DOOR TO REMAIN
	DOOR, SEE SCHEDULE
	LOUVER, SEE SCHEDULE
	LOUVER TAG, SEE SCHEDULE
101 / #	DOOR NUMBER / DOOR TAG, SEE SCHEDULE / HARDWARE SET

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

Revisions

Delta	Date	Revisions	By

KEY PLAN

This document is the property of the Owner and is not to be used without their written permission

LICENSED ARCHITECT CRAIG S. DUBAKE C-33859 03-31-2027 RENEWAL DATE STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: Project Number

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
FLOOR PLAN - BUILDING B, C, & E

Client Project Number: 0000.0

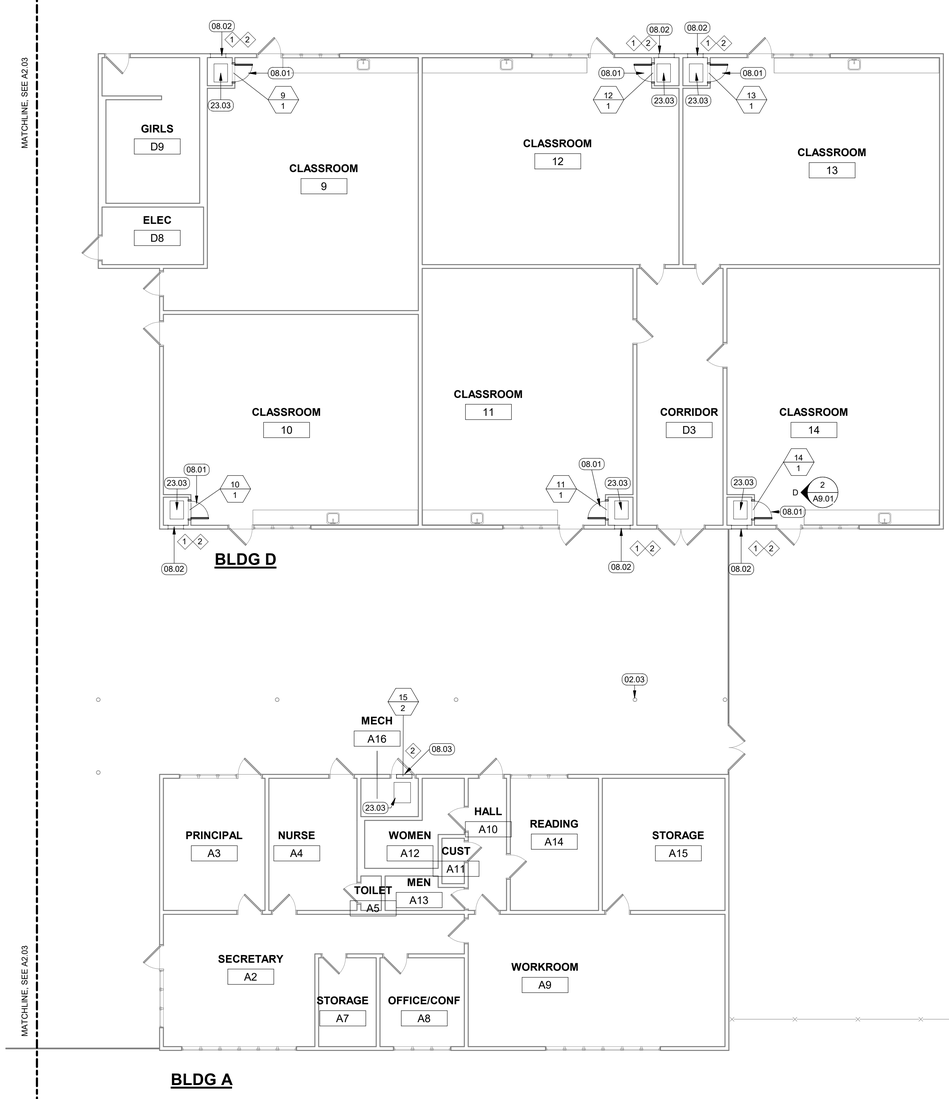
Scale: As indicated
Drawn By: Author
Checked By: Checker
Issue Date: Issue Date
Revit Version: 2023

Sheet
A2.03
Sheet 2 of 200

2/18/2026 2:47:13 PM C:\Users\aldlock\Documents\6241 SSFUSD Skyline ES HVAC_R25_Central_aldlockNDLXN.rvt

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY



1 FIRST FLOOR PLAN - BUILDING A & D
1/8" = 1'-0"

GENERAL NOTES

1. PRIOR TO START OF CONSTRUCTION CONTRACTOR TO FIELD VERIFY (E) CONDITIONS & NOTIFY ARCHITECT OF ANY DISCREPANCIES FROM THE PLANS.

2. PRIOR TO START OF CONSTRUCTION CONTRACTOR TO REMOVE & PROTECT ALL (E) EQUIPMENT & FURNITURE. RELEASE BACK TO THE FACILITY FOR FUTURE RE-USE UON OR UNLESS DIRECTED BY THE OWNER.

3. ALL DIMENSIONS SHALL BE FROM FACE OF STUD, UON. DIMENSIONS NOTED AS "CLR" REFER TO CLEAR DIMENSION FROM FACE OF FINISH.

4. WHEREVER THE TERM "ALIGN" IS SHOWN, CONTRACTOR TO ALIGN THE FACES OF WALL FINISH(ES).

5. PROTECT & MAINTAIN ALL (E) PARTITION RATINGS, UON.

6. PRESERVE & PROTECT (E) FINISHES THAT ARE TO REMAIN. WHERE DAMAGE OCCURS DURING CONSTRUCTION PATCH & REPAIR ALL WALLS, CEILING, AND FLOOR SURFACES TO MATCH (E), UON. IF FINISHES ARE DAMAGED BEYOND REPAIR & AN EXACT MATCH CANNOT BE PROCURED NOTIFY THE ARCHITECT IMMEDIATELY FOR DIRECTION ON REPLACEMENT FINISH SPECIFICATION. WALLS SHALL BE PAINTED TO THE NEAREST CORNER/ INTERSECTION & ALL OTHER FINISHES TO BE REPLACED AT THE NEAREST CORNER/ INTERSECTION FOR A SEAMLESS AESTHETIC.

7. REFER TO STRUCTURAL, MECHANICAL, AND ELECTRICAL SERIES SHEETS FOR ADDITIONAL INFORMATION. COORDINATE LOCATIONS OF WALL MOUNTED ACCESSORIES, EQUIPMENT, FURNITURE, SIGNAGE & THEIR ASSOCIATED BACKING WITH POWER/DATA, THERMOSTAT, LIGHT SWITCH & MISC. PANEL LOCATIONS PRIOR TO INSTALLATION.

KEYNOTES

02.03	(E) HSS STEEL COLUMN
08.01	DOOR, SEE SCHEDULE, TYP.
08.02	LOUVER, SEE SCHEDULE
08.03	LOUVER IN DOOR, SEE SCHEDULE
23.03	FURNACE, SMD

LEGEND

Room Name / ##	ROOM TAG
	FURNACE, SMD
	(E) DOOR TO REMAIN
	DOOR, SEE SCHEDULE
	LOUVER, SEE SCHEDULE
	LOUVER TAG, SEE SCHEDULE
101 / #	DOOR NUMBER / DOOR TAG, SEE SCHEDULE / HARDWARE SET

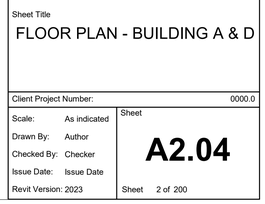
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

SAN FRANCISCO UNIFIED SCHOOL DISTRICT · SOUTHSIDE · EDUCATION FOR ALL

Revisions

Delta	Date	Revisions	By

KEY PLAN



This document is the property of the Owner and is not to be used without their written permission

LICENSED ARCHITECT CRAIG S. DUBAKE C-33859 03-31-2027 RENEWAL DATE STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: Project Number

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
FLOOR PLAN - BUILDING A & D

Client Project Number: 0000.0

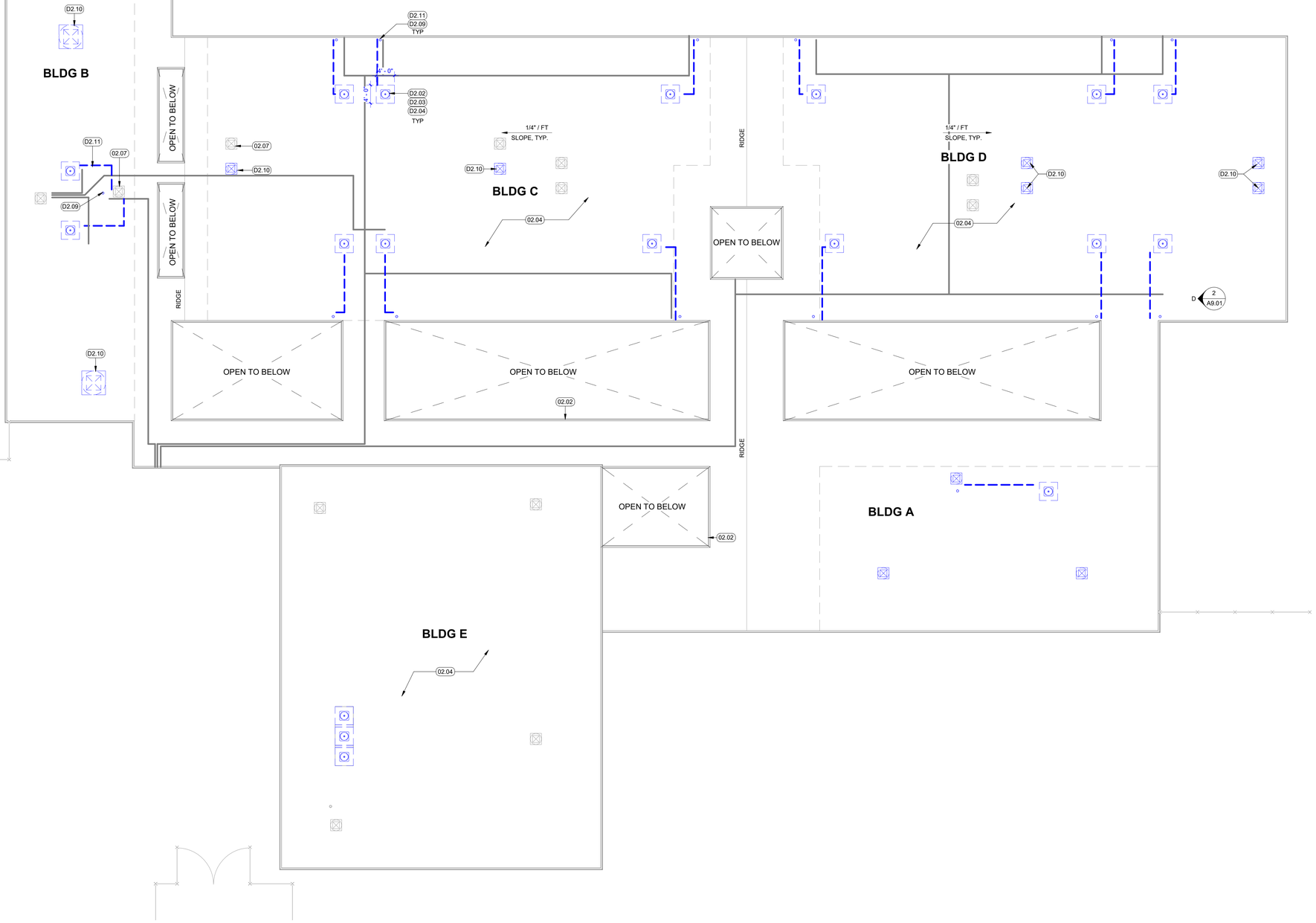
Scale:	As indicated
Drawn By:	Author
Checked By:	Checker
Issue Date:	Issue Date
Revit Version:	2023

Sheet
A2.04
Sheet 2 of 200

2/18/2026 2:47:13 PM C:\Users\aldlock\Documents\6241 SSFUSD Skyline ES HVAC_R25_Central_aldlockNDLXN.rvt

0 5' 50' GRAPHIC SCALES: 1/16" = 1'-0"
0 5' 25' 1/8" = 1'-0"
0 1' 12' 1/4" = 1'-0"
0 1' 6' 1/2" = 1'-0"
0 4' 3/4" = 1'-0"
0 1' 3' 1" = 1'-0"
0 2' 1 1/2" = 1'-0"
0 1' 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY



1 OVERALL ROOF PLAN - DEMO
1" = 10'-0"

GENERAL NOTES

1. PRIOR TO START OF CONSTRUCTION CONTRACTOR TO FIELD VERIFY (E) CONDITIONS & NOTIFY ARCHITECT OF ANY DISCREPANCIES FROM THE PLANS.

2. PRIOR TO START OF CONSTRUCTION CONTRACTOR TO REMOVE & PROTECT ALL (E) EQUIPMENT & FURNITURE. RELEASE BACK TO THE FACILITY FOR FUTURE RE-USE UON OR UNLESS DIRECTED BY THE OWNER.

3. ALL DIMENSIONS SHALL BE FROM FACE OF STUD, UON. DIMENSIONS NOTED AS "CLR" REFER TO CLEAR DIMENSION FROM FACE OF FINISH.

4. WHEREVER THE TERM "ALIGN" IS SHOWN, CONTRACTOR TO ALIGN THE FACES OF WALL FINISH(ES).

5. PROTECT & MAINTAIN ALL (E) PARTITION RATINGS, UON.

6. PRESERVE & PROTECT (E) FINISHES THAT ARE TO REMAIN. WHERE DAMAGE OCCURS DURING CONSTRUCTION PATCH & REPAIR ALL WALLS, CEILING, AND FLOOR SURFACES TO MATCH (E), UON. IF FINISHES ARE DAMAGED BEYOND REPAIR & AN EXACT MATCH CANNOT BE PROCURED NOTIFY THE ARCHITECT IMMEDIATELY FOR DIRECTION ON REPLACEMENT FINISH SPECIFICATION. WALLS SHALL BE PAINTED TO THE NEAREST CORNER/ INTERSECTION & ALL OTHER FINISHES TO BE REPLACED AT THE NEAREST CORNER/ INTERSECTION FOR A SEAMLESS AESTHETIC.

7. REFER TO STRUCTURAL, MECHANICAL, AND ELECTRICAL SERIES SHEETS FOR ADDITIONAL INFORMATION. COORDINATE LOCATIONS OF WALL MOUNTED ACCESSORIES, EQUIPMENT, FURNITURE, SIGNAGE & THEIR ASSOCIATED BACKING WITH POWER/DATA, THERMOSTAT, LIGHT SWITCH & MISC. PANEL LOCATIONS PRIOR TO INSTALLATION.

DEMO NOTES

D2.02	DEMO (E) AC UNIT, TYP.
D2.03	DEMO (E) UNISTRUT, TYP.
D2.04	DEMO (E) ROOF CURB & PORTION OF ROOFING FOR PATCH, TYP.
D2.09	DEMO (E) FURNACE FLUE, SMD
D2.10	DEMO (E) GRAVITY VENT, SMD
D2.11	DEMO (E) CONDENSATE PIPING, SMD

KEYNOTES

02.02	(E) GUTTER, TYP.
02.04	(E) BUILT-UP ROOFING
02.07	(E) GRAVITY HOOD TO REMAIN, SMD

DEMO ROOF LEGEND

(E) CASETTE CONDENSING UNIT TO BE DEMOLISHED

(E) MECHANICAL UNIT CURBS TO BE DEMOLISHED

(E) B.U.R. AREA TO BE DEMOLISHED. SUBSTRATE TO REMAIN

LINE OF (E) BUILDING FOOTPRINT BELOW

(E) ROOF CONDUIT TO REMAIN

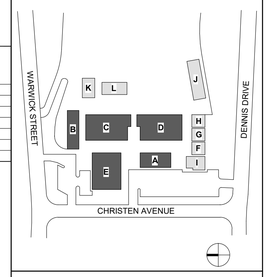
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

SAN FRANCISCO UNIFIED SCHOOL DISTRICT · SOUTHERN · EDUCATION FOR ALL

Revisions

Delta	Date	Revisions	By

KEY PLAN



This document is the property of the Owner and is not to be used without their written permission.

LICENSED ARCHITECT CRAIG S. DURAN C-33859 03-31-2027 RENEWAL DATE STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: Project Number

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
OVERALL ROOF PLAN - DEMO

Client Project Number: 0000.0

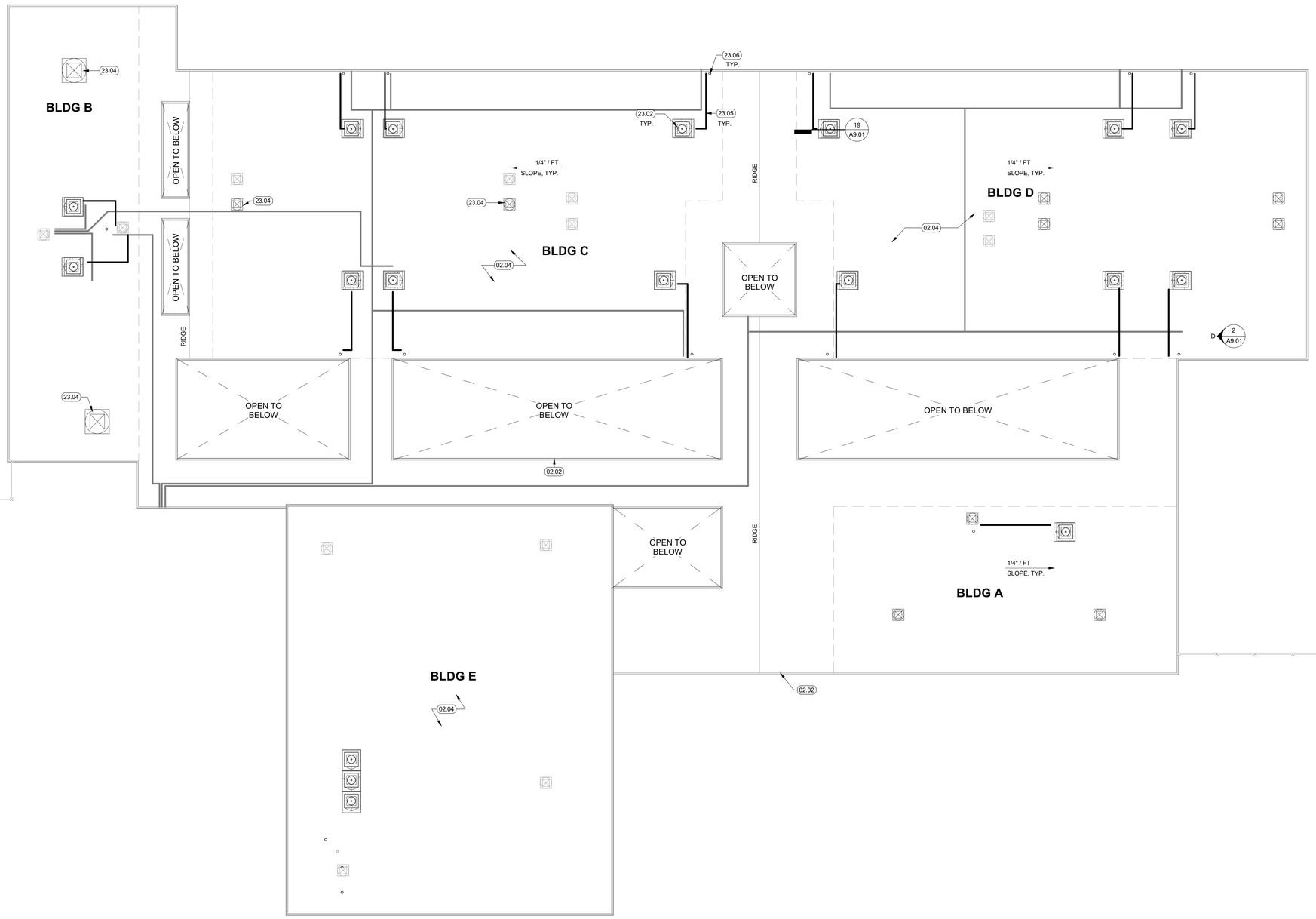
Scale: As indicated
Drawn By: Author
Checked By: Checker
Issue Date: Issue Date
Revit Version: 2023

Sheet
A2.21
Sheet 2 of 200

C:\Users\alelitock\Documents\6241 SSF USD Skyline ES HVAC_R25_Central_alelitockNZLXN.rvt
2/18/2026 2:47:13 PM

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY



1 ROOF PLAN - OVERALL
1" = 10'-0"

GENERAL NOTES

1. PRIOR TO START OF CONSTRUCTION CONTRACTOR TO FIELD VERIFY (E) CONDITIONS & NOTIFY ARCHITECT OF ANY DISCREPANCIES FROM THE PLANS.

2. PRIOR TO START OF CONSTRUCTION CONTRACTOR TO REMOVE & PROTECT ALL (E) EQUIPMENT & FURNITURE. RELEASE BACK TO THE FACILITY FOR FUTURE RE-USE UON OR UNLESS DIRECTED BY THE OWNER.

3. ALL DIMENSIONS SHALL BE FROM FACE OF STUD, UON. DIMENSIONS NOTED AS "CLR" REFER TO CLEAR DIMENSION FROM FACE OF FINISH.

4. WHEREVER THE TERM "ALIGN" IS SHOWN, CONTRACTOR TO ALIGN THE FACES OF WALL FINISH(ES).

5. PROTECT & MAINTAIN ALL (E) PARTITION RATINGS, UON.

6. PRESERVE & PROTECT (E) FINISHES THAT ARE TO REMAIN. WHERE DAMAGE OCCURS DURING CONSTRUCTION PATCH & REPAIR ALL WALLS, CEILING, AND FLOOR SURFACES TO MATCH (E), UON. IF FINISHES ARE DAMAGED BEYOND REPAIR & AN EXACT MATCH CANNOT BE PROCURED NOTIFY THE ARCHITECT IMMEDIATELY FOR DIRECTION ON REPLACEMENT FINISH SPECIFICATION. WALLS SHALL BE PAINTED TO THE NEAREST CORNER/ INTERSECTION & ALL OTHER FINISHES TO BE REPLACED AT THE NEAREST CORNER/ INTERSECTION FOR A SEAMLESS AESTHETIC.

7. REFER TO STRUCTURAL, MECHANICAL, AND ELECTRICAL SERIES SHEETS FOR ADDITIONAL INFORMATION. COORDINATE LOCATIONS OF WALL MOUNTED ACCESSORIES, EQUIPMENT, FURNITURE, SIGNAGE & THEIR ASSOCIATED BACKING WITH POWER/DATA, THERMOSTAT, LIGHT SWITCH & MISC. PANEL LOCATIONS PRIOR TO INSTALLATION.

KEYNOTES

02.02	(E) GUTTER, TYP.
02.04	(E) BUILT-UP ROOFING
23.02	SPLIT SYSTEM CONDENSING UNIT, SMD
23.04	GRAVITY HOOD, SMD
23.05	CONDENSATE LINE, SMD
23.06	(N) VENT AT (E) OPENING, SMD

ROOF LEGEND

- SPLIT SYSTEM CONDENSING UNIT, SMD
- MECHANICAL UNIT CURB, SEE DETAIL 19 / A9.01
- ROOF PATCH, SEE DETAIL 12 / A9.01
- CRICKET, SEE DETAIL 17 / A9.01
- LINE OF (E) BUILDING FOOTPRINT BELOW
- (E) ROOF CONDUIT TO REMAIN

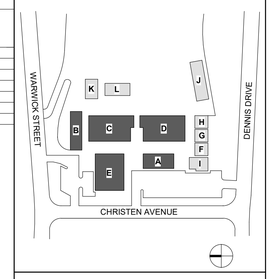
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

SOUTH SAN FRANCISCO UNIFIED SCHOOL DISTRICT · EDUCATION FOR ALL

Revisions

Delta	Date	Revisions	By

KEY PLAN



This document is the property of the Owner and is not to be used without their written permission

LICENSED ARCHITECT · CRAIG S. DURANT · C-33859 · 03-31-2027 · RENEWAL DATE · STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: Project Number

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
OVERALL ROOF PLAN - NEW

Client Project Number: 0000.0

Scale:	As indicated
Drawn By:	Author
Checked By:	Checker
Issue Date:	Issue Date
Revit Version:	2023

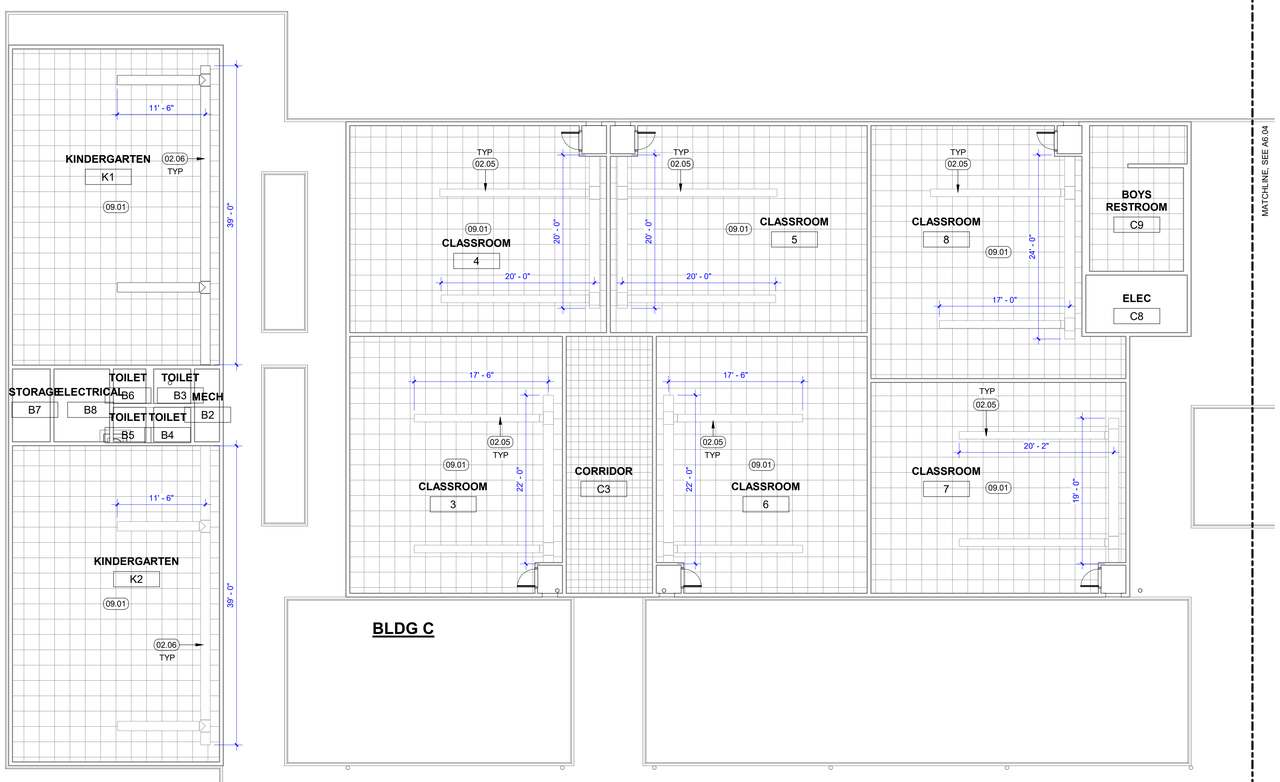
Sheet
A2.22

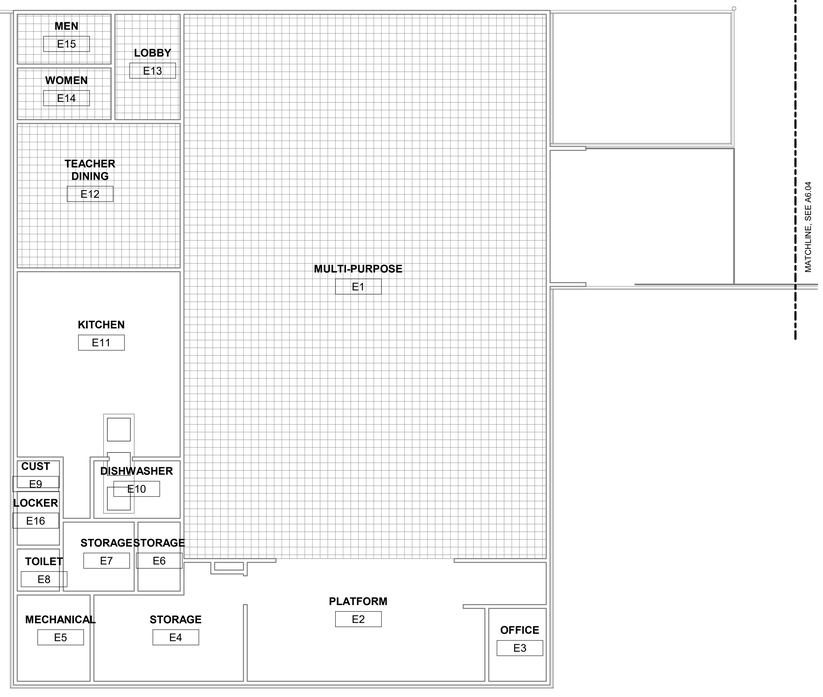
Sheet 2 of 200

C:\Users\aloilock\Documents\6241 SSFUSD Skyline ES HVAC_R25_Central_aloilockNZLXN.rvt
2/18/2026 2:47:14 PM

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY





BLDG E

1 RCP - BLDG B, C, & E
1/8" = 1'-0"

GENERAL NOTES

1. PRIOR TO START OF CONSTRUCTION CONTRACTOR TO FIELD VERIFY (E) CONDITIONS & NOTIFY ARCHITECT OF ANY DISCREPANCIES FROM THE PLANS.
2. PRIOR TO START OF CONSTRUCTION CONTRACTOR TO REMOVE & PROTECT ALL (E) EQUIPMENT & FURNITURE. RELEASE BACK TO THE FACILITY FOR FUTURE RE-USE UON OR UNLESS DIRECTED BY THE OWNER.
3. ALL DIMENSIONS SHALL BE FROM FACE OF STUD, UON. DIMENSIONS NOTED AS "CLR" REFER TO CLEAR DIMENSION FROM FACE OF FINISH.
4. WHEREVER THE TERM "ALIGN" IS SHOWN, CONTRACTOR TO ALIGN THE FACES OF WALL FINISH(ES).
5. PROTECT & MAINTAIN ALL (E) PARTITION RATINGS, UON.
6. PRESERVE & PROTECT (E) FINISHES THAT ARE TO REMAIN. WHERE DAMAGE OCCURS DURING CONSTRUCTION PATCH & REPAIR ALL WALLS, CEILING, AND FLOOR SURFACES TO MATCH (E), UON. IF FINISHES ARE DAMAGED BEYOND REPAIR & AN EXACT MATCH CANNOT BE PROCURED NOTIFY THE ARCHITECT IMMEDIATELY FOR DIRECTION ON REPLACEMENT FINISH SPECIFICATION. WALLS SHALL BE PAINTED TO THE NEAREST CORNER/ INTERSECTION & ALL OTHER FINISHES TO BE REPLACED AT THE NEAREST CORNER/ INTERSECTION FOR A SEAMLESS AESTHETIC.
7. REFER TO STRUCTURAL, MECHANICAL, AND ELECTRICAL SERIES SHEETS FOR ADDITIONAL INFORMATION. COORDINATE LOCATIONS OF WALL MOUNTED ACCESSORIES, EQUIPMENT, FURNITURE, SIGNAGE & THEIR ASSOCIATED BACKING WITH POWER/DATA, THERMOSTAT, LIGHT SWITCH & MISC. PANEL LOCATIONS PRIOR TO INSTALLATION.

KEYNOTES

02.05	CLEAN (E) DUCT TO REMAIN, TYP. SEE BID ALT.
02.06	CLEAN (E) DUCT TO REMAIN.
09.01	REMOVE & REINSTALL (E) 2'X2' CEILING TILES AS NEEDED TO COMPLETE WORK. KEEP IN GOOD CONDITION.

BID ALTERNATES

BASE BID - CLEAN ALL (E) DUCTWORK

1. BID ALTERNATE - REPLACE (E) DUCTWORK IN BUILDING C AND D. CLEAN ALL OTHER (E) DUCTWORK IN BLDG A, B, E PER BASE BID.

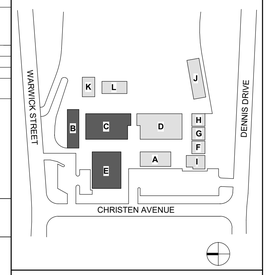
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

SAN FRANCISCO UNIFIED SCHOOL DISTRICT · SOUTHEAST · EDUCATION FOR ALL

Revisions

Delta	Date	Revisions	By

KEY PLAN



This document is the property of the Owner and is not to be used without their written permission

LICENSED ARCHITECT CRAIG S. DURAN C-33859 03-31-2027 RENEWAL DATE STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: Project Number

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
REFLECTED CEILING PLANS - BLDG B, C, & E

Client Project Number: 0000.0

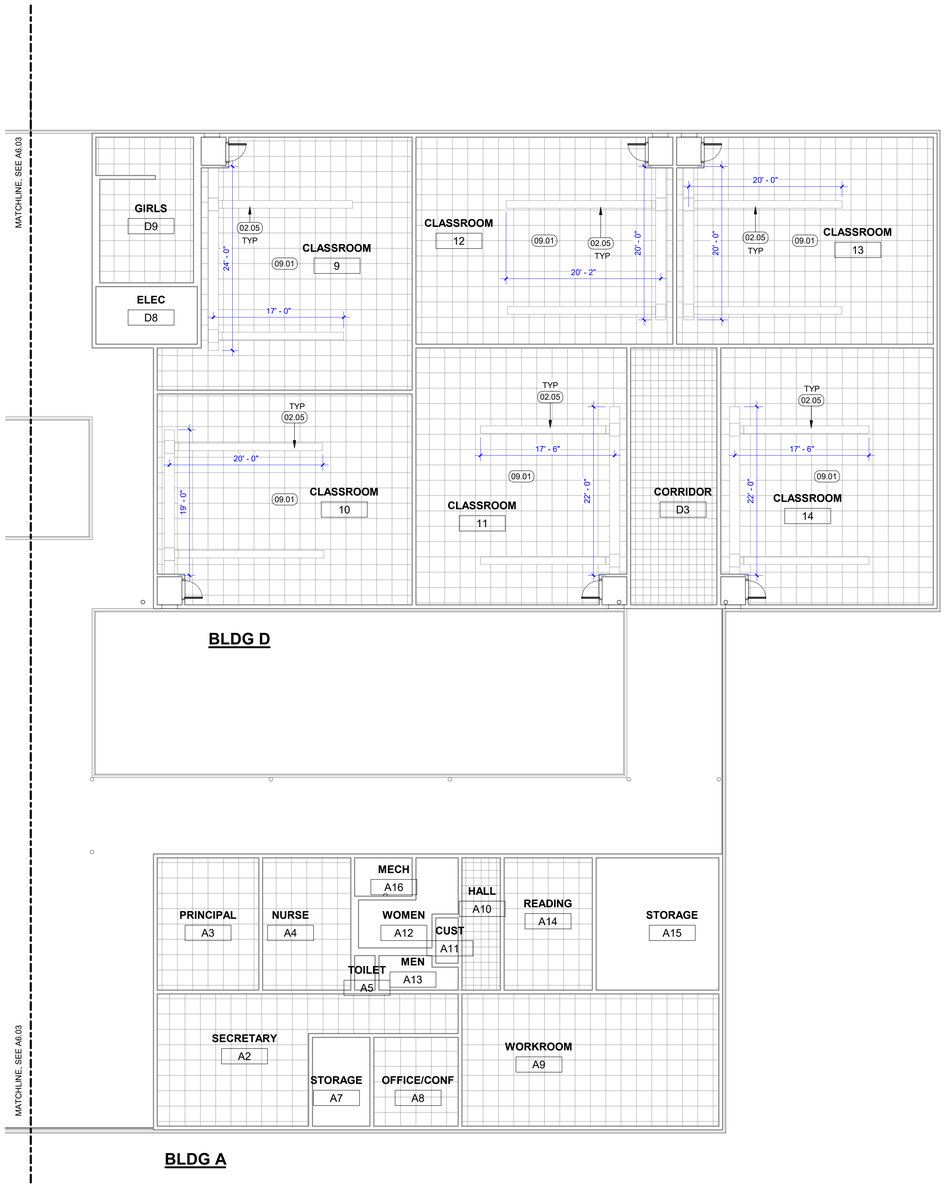
Scale: As indicated
Drawn By: Author
Checked By: Checker
Issue Date: Issue Date
Revit Version: 2023

Sheet
A6.03
Sheet 2 of 200

C:\Users\abilock\Documents\6241 SSFUSD Skyline ES HVAC_R25_Central_abilockNDLXH.rvt
2/18/2026 2:47:14 PM

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"



1 RCP - BLDG A & D
1/8" = 1'-0"

GENERAL NOTES

1. PRIOR TO START OF CONSTRUCTION CONTRACTOR TO FIELD VERIFY (E) CONDITIONS & NOTIFY ARCHITECT OF ANY DISCREPANCIES FROM THE PLANS.

2. PRIOR TO START OF CONSTRUCTION CONTRACTOR TO REMOVE & PROTECT ALL (E) EQUIPMENT & FURNITURE. RELEASE BACK TO THE FACILITY FOR FUTURE RE-USE UON OR UNLESS DIRECTED BY THE OWNER.

3. ALL DIMENSIONS SHALL BE FROM FACE OF STUD, UON. DIMENSIONS NOTED AS "CLR" REFER TO CLEAR DIMENSION FROM FACE OF FINISH.

4. WHEREVER THE TERM "ALIGN" IS SHOWN, CONTRACTOR TO ALIGN THE FACES OF WALL FINISH(ES).

5. PROTECT & MAINTAIN ALL (E) PARTITION RATINGS, UON.

6. PRESERVE & PROTECT (E) FINISHES THAT ARE TO REMAIN. WHERE DAMAGE OCCURS DURING CONSTRUCTION PATCH & REPAIR ALL WALLS, CEILING, AND FLOOR SURFACES TO MATCH (E), UON. IF FINISHES ARE DAMAGED BEYOND REPAIR & AN EXACT MATCH CANNOT BE PROCURED NOTIFY THE ARCHITECT IMMEDIATELY FOR DIRECTION ON REPLACEMENT FINISH SPECIFICATION. WALLS SHALL BE PAINTED TO THE NEAREST CORNER/ INTERSECTION & ALL OTHER FINISHES TO BE REPLACED AT THE NEAREST CORNER/ INTERSECTION FOR A SEAMLESS AESTHETIC.

7. REFER TO STRUCTURAL, MECHANICAL, AND ELECTRICAL SERIES SHEETS FOR ADDITIONAL INFORMATION. COORDINATE LOCATIONS OF WALL MOUNTED ACCESSORIES, EQUIPMENT, FURNITURE, SIGNAGE & THEIR ASSOCIATED BACKING WITH POWER/DATA, THERMOSTAT, LIGHT SWITCH & MISC. PANEL LOCATIONS PRIOR TO INSTALLATION.

KEYNOTES

02.05	CLEAN (E) DUCT TO REMAIN, TYP. SEE BID ALT.
09.01	REMOVE & REINSTALL (E) 2'X2' CEILING TILES AS NEEDED TO COMPLETE WORK. KEEP IN GOOD CONDITION.

BID ALTERNATES

BASE BID - CLEAN ALL (E) DUCTWORK

1. BID ALTERNATE - REPLACE (E) DUCTWORK IN BUILDING C AND D. CLEAN ALL OTHER (E) DUCTWORK IN BLDG A, B, E PER BASE BID.

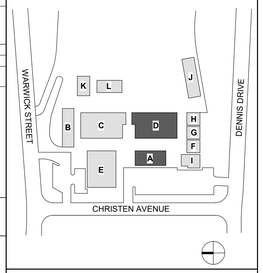
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

SOUTH SAN FRANCISCO UNIFIED SCHOOL DISTRICT · EDUCATION FOR ALL

Revisions

Delta	Date	Revisions	By

KEY PLAN



This document is the property of the Owner and is not to be used without their written permission

LICENSED ARCHITECT
CRAIG S. DURANT
C-33859
03-31-2027
RENEWAL DATE
STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: Project Number

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
REFLECTED CEILING PLANS - BLDG A & D

Client Project Number: 0000.0

Scale:	As indicated
Drawn By:	Author
Checked By:	Checker
Issue Date:	Issue Date
Revit Version:	2023

Sheet
A6.04
Sheet 2 of 200

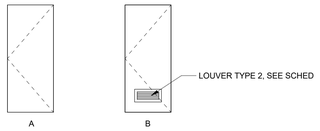
C:\Users\alolock\Documents\6241 SSFUSD Skyline ES HVAC_R25_Central_alolockNZLXN.rvt
2/18/2026 2:47:15 PM

GRAPHIC SCALES: 1/16" = 1'-0" (0 5' 50') | 1/8" = 1'-0" (0 5' 25') | 1/4" = 1'-0" (0 1' 12') | 1/2" = 1'-0" (0 1' 6') | 3/4" = 1'-0" (0 4') | 1" = 1'-0" (0 1' 3') | 1 1/2" = 1'-0" (0 2') | 3" = 1'-0" (0 1')

IF THIS SHEET IS NOT 30"x42", IT IS A REDUCED PRINT SCALE ACCORDINGLY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

LOUVER SCHEDULE				
TYPE	SIZE	LOCATION	INSECT SCREEN	Count
1	24"x18"	EXTERIOR	YES	14
2	24"x24"	EXTERIOR	YES	15
3	48"x84"	EXTERIOR	YES	1



DOOR LEGEND
1/4" = 1'-0"

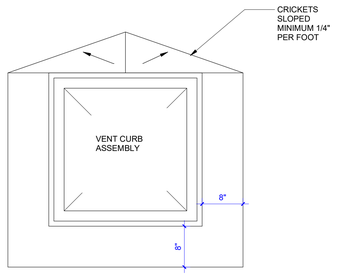
DOOR AND FRAME SCHEDULE

DOOR MARK	DOOR				FRAME					DOOR HARDWARE	REMARKS	SIGNAGE	
	NOMINAL SIZE		MATERIAL	DOOR TYPE	MATERIAL	TYPE	DETAILS					TYPE	SIGN TEXT/ROOM
	WIDTH	HEIGHT					HEAD	JAMB	SILL				
3	2' - 3 1/2"	5' - 0"	WD	A	HM	1	10/A9.01	5/A9.01	5/A9.01	1			
4	2' - 3 1/2"	5' - 0"	WD	A	HM	1	10/A9.01	5/A9.01	5/A9.01	1			
5	2' - 3 1/2"	5' - 0"	WD	A	HM	1	10/A9.01	5/A9.01	5/A9.01	1			
6	2' - 3 1/2"	5' - 0"	WD	A	HM	1	10/A9.01	5/A9.01	5/A9.01	1			
7	2' - 3 1/2"	5' - 0"	WD	A	HM	1	10/A9.01	5/A9.01	5/A9.01	1			
8	2' - 3 1/2"	5' - 0"	WD	A	HM	1	10/A9.01	5/A9.01	5/A9.01	1			
9	2' - 3 1/2"	5' - 0"	WD	A	HM	1	10/A9.01	5/A9.01	5/A9.01	1			
10	2' - 3 1/2"	5' - 0"	WD	A	HM	1	10/A9.01	5/A9.01	5/A9.01	1			
11	2' - 3 1/2"	5' - 0"	WD	A	HM	1	10/A9.01	5/A9.01	5/A9.01	1			
12	2' - 3 1/2"	5' - 0"	WD	A	HM	1	10/A9.01	5/A9.01	5/A9.01	1			
13	2' - 3 1/2"	5' - 0"	WD	A	HM	1	10/A9.01	5/A9.01	5/A9.01	1			
14	2' - 3 1/2"	5' - 0"	WD	A	HM	1	10/A9.01	5/A9.01	5/A9.01	1			
15	3' - 0"	7' - 0"	(E)	B	(E)	(E)	-	-	-	2			

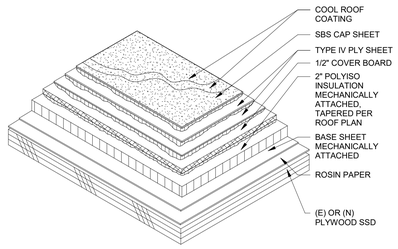
DOOR HARDWARE

GROUP 1
3 EA HINGE, 5BB1 4.5X4.5, 652, IVES
1 EA GASKETING, 188S-BK PSA, BK, ZERO
REINSTALL (E) DEADBOLT
REINSTALL (E) STRIKE PLATE

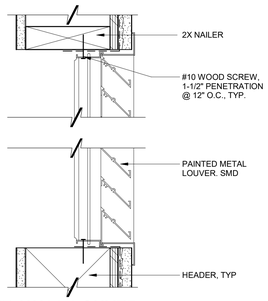
GROUP 2
HARDWARE EXISTING TO REMAIN



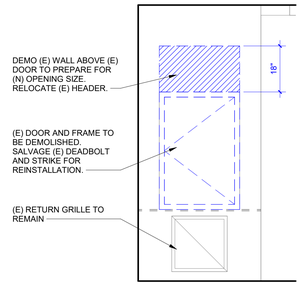
17 CRICKETS
1" = 1'-0"



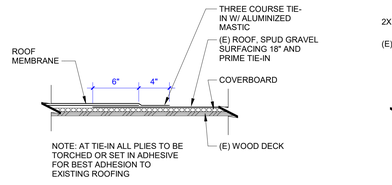
12 TYPICAL B.U.R. SECTION
3" = 1'-0"



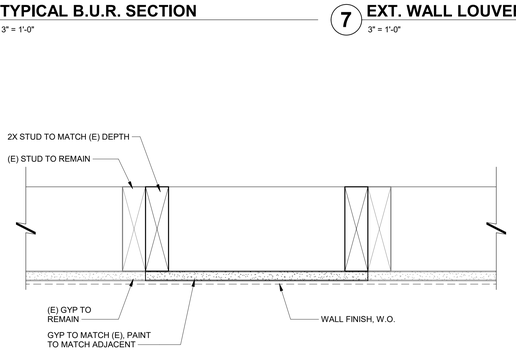
7 EXT. WALL LOUVER
3" = 1'-0"



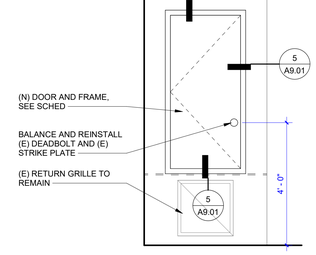
2 TYP. CLASSROOM INTERIOR DOOR DEMO
1/2" = 1'-0"



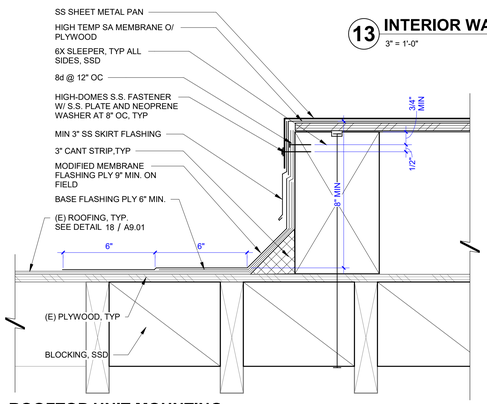
18 ASPHALT ROOF TIE-IN
1 1/2" = 1'-0"



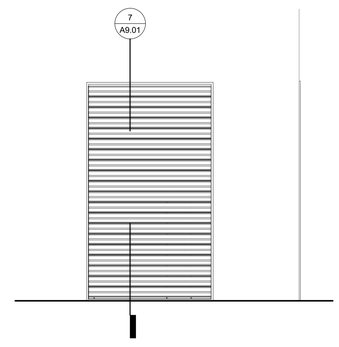
13 INTERIOR WALL SECTION
3" = 1'-0"



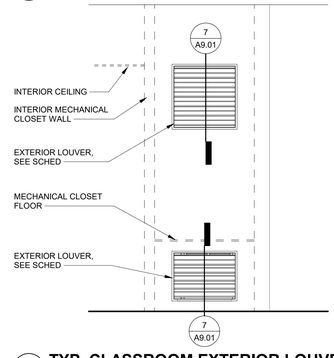
3 TYP. CLASSROOM INTERIOR DOOR
1/2" = 1'-0"



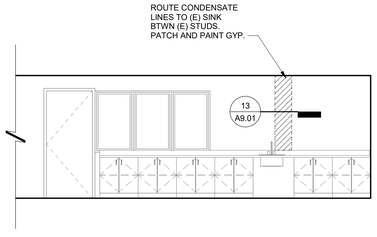
19 ROOFTOP UNIT MOUNTING
3" = 1'-0"



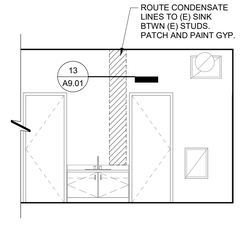
9 ELEVATION - MPR EXTERIOR WALL
1/2" = 1'-0"



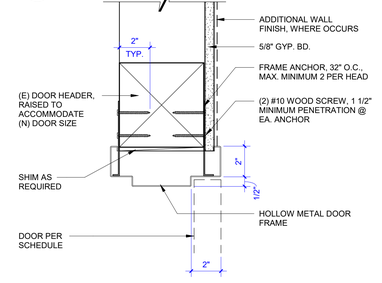
4 TYP. CLASSROOM EXTERIOR LOUVERS
1/2" = 1'-0"



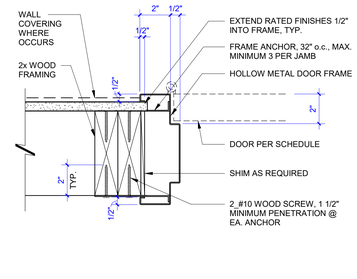
20 INTERIOR ELEVATION - TYPICAL CLASSROOM
1/4" = 1'-0"



15 INTERIOR ELEVATION - BLDG B
1/4" = 1'-0"



10 INTERIOR DOOR HEAD - WOOD
3" = 1'-0"



5 INTERIOR HM DOOR JAMB - WOOD (SILL SIMILAR)
3" = 1'-0"

Revisions

Delta	Date	Revisions	By

This document is the property of the Owner and is not to be used without their written permission

LICENSED ARCHITECT CRAIG S. DURNIN C-33859 03-31-2027 RENEWAL DATE STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY Architects Project number: Project Number

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
DETAILS

Client Project Number: 0000.0

Scale: As indicated
Drawn By: Author
Checked By: Checker
Issue Date: Issue Date
Revit Version: 2023

Sheet
A9.01
Sheet of 200

2/18/2026 2:47:16 PM C:\Users\aliolock\Documents\6241 SSFUSD Skyline ES HVAC_R25_Central_aliolockNZL.rvt

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY

I. GENERAL REQUIREMENTS

A. THE STRUCTURAL DRAWINGS AND PROJECT SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THE MEANS, METHODS, PROCEDURES AND SEQUENCE OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND ENSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.

B. DURING THE CONSTRUCTION PERIOD, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF PERSONNEL AND PROPERTY ON AND AROUND THE JOBSITE. THE CONTRACTOR SHALL PROVIDE SHORING, BRACING, GUYS, ETC. IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL STANDARDS.

C. ALL CONSTRUCTION, TESTING, AND INSPECTIONS SHALL CONFORM TO THE BUILDING CODE REFERENCED UNDER THE HEADING "BASIS OF DESIGN" BELOW.

D. STANDARDS REFERENCED IN THESE DRAWINGS SHALL BE THE LATEST EDITION, UNLESS OTHERWISE NOTED.

E. SEE DRAWINGS OTHER THAN STRUCTURAL FOR: FLOOR FINISHES; DEPRESSIONS IN FLOOR SLABS; OPENINGS IN WALLS AND FLOORS REQUIRED BY ARCHITECTURAL AND MEP FEATURES; EXTERIOR PAVING; CURBS; SLOPES; DRAINS; PADS; NON-STRUCTURAL PARTITIONS; EMBEDDED ITEMS; ETC. COORDINATE THESE ITEMS WITH THE STRUCTURAL DRAWINGS.

F. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AT THE JOB SITE BEFORE COMMENCING WORK AND SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT.

G. OMISSIONS OR DISCREPANCIES BETWEEN THE VARIOUS ELEMENTS OF THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND STRUCTURAL ENGINEER AND RESOLVED BEFORE PROCEEDING WITH THE WORK.

H. DO NOT SCALE THE DRAWINGS; USE WRITTEN DIMENSIONS ONLY. WHERE NO DIMENSIONS ARE PROVIDED OR WHERE DIMENSIONS PROVIDED CONFLICT WITH OTHER DRAWINGS, CONSULT THE ARCHITECT AND SEOR BEFORE PROCEEDING WITH THE WORK.

I. WHERE MEMBER LOCATIONS ARE NOT DIMENSIONED, MEMBERS SHALL BE LOCATED ON COLUMN LINES OR EQUALLY SPACED BETWEEN MEMBERS ON COLUMN LINES OR BETWEEN MEMBERS OTHERWISE LOCATED. CENTERLINES OF COLUMNS, WALLS, FRAMING MEMBERS, AND FOUNDATIONS COINCIDE WITH GRIDLINES, UNLESS OTHERWISE NOTED.

J. TYPICAL DETAILS ARE INTENDED TO APPLY TO APPLICABLE SITUATIONS, UNLESS OTHERWISE NOTED. TYPICAL DETAILS MAY NOT BE SPECIFICALLY LOCATED.

K. DETAILS SHALL BE APPLIED TO EVERY LIKE CONDITION WHETHER OR NOT THEY ARE REFERENCED IN EVERY INSTANCE. FOR CONDITIONS NOT SPECIFICALLY SHOWN, USE DETAILS SIMILAR TO THOSE PROVIDED.

I. THE CONTRACTOR SHALL VERIFY THAT CONSTRUCTION LOADS DO NOT EXCEED THE CAPACITY OF THE STRUCTURE AT THE TIME THE LOADS ARE PLACED.

II. EXISTING CONSTRUCTION

A. WORK SHOWN IS NEW UNLESS OTHERWISE NOTED AS EXISTING, (E).

B. EXISTING CONSTRUCTION SHOWN IN THESE DRAWINGS WAS OBTAINED FROM AS-BUILT DRAWINGS TITLED "SKYLINE ELEMENTARY SCHOOL" (DSA APPL# 28080), DATED 7/11/1966, AND PREPARED BY DELP W JOHNSON, POOLE, & STORM, ARCHITECTS AND FROM SITE INVESTIGATIONS. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, REVIEW ALL AVAILABLE EXISTING DRAWINGS AND VERIFY DIMENSIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND SEOR OF ALL DISCREPANCIES AND EXCEPTIONS BEFORE PROCEEDING WITH THE WORK.

C. THE REMOVAL, CUTTING, DRILLING, ETC. OF EXISTING WORK SHALL BE PERFORMED WITH GREAT CARE AND SMALL TOOLS IN ORDER TO MAINTAIN THE STRUCTURAL INTEGRITY OF THE BUILDING. IF EXISTING STRUCTURAL MEMBERS NOT INDICATED FOR REMOVAL INTERFERE WITH THE NEW WORK, THE SEOR SHALL BE NOTIFIED IMMEDIATELY. APPROVAL SHALL BE OBTAINED PRIOR TO REMOVAL OF THE EXISTING MEMBERS.

D. THE CONTRACTOR SHALL SAFELY SHORE EXISTING CONSTRUCTION WHEREVER EXISTING SUPPORTS ARE REMOVED TO ALLOW INSTALLATION OF THE NEW WORK. THE EXISTING CONSTRUCTION SHALL BE CONNECTED AND/OR EMBEDDED INTO THE NEW CONSTRUCTION AS SHOWN OR SPECIFIED.

E. ALL SHORING METHODS AND SEQUENCING OF DEMOLITION SHALL BE SPECIFIED BY A LICENSED CIVIL OR STRUCTURAL ENGINEERING IN THE STATE OF CALIFORNIA TO BE RETAINED BY THE CONTRACTOR. SEE SPECIFICATIONS FOR DETAILED REQUIREMENTS.

F. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES BEFORE BEGINNING WORK. SPECIAL CARE SHALL BE TAKEN TO PROTECT UTILITIES THAT ARE TO REMAIN IN SERVICE DURING CONSTRUCTION.

G. THE CONTRACTOR SHALL PROMPTLY REPAIR DAMAGE CAUSED DURING OPERATIONS WITH SIMILAR MATERIALS AND WORKMANSHIP.

H. THE CONTRACTOR SHALL LOCATE EXISTING REINFORCING STEEL WHERE EXISTING CONCRETE IS TO BE CUT, CORED OR SAWN. LOCATION SHALL BE DONE USING A NON-DESTRUCTIVE METHOD. DO NOT DAMAGE EXISTING REINFORCING WITHOUT NOTIFYING THE ARCHITECT AND SEOR.

III. BASIS OF DESIGN

A. THE STRUCTURAL DESIGN OF THIS PROJECT IS GOVERNED BY THE 2022 CALIFORNIA BUILDING CODE (CBC) WITH SS/DSA AMENDMENTS.

B. RISK CATEGORY = III

D. LIVE LOADS:
1. ROOF = 20 PSF

E. WIND DESIGN DATA:
1. BASIC WIND SPEED = 100 mph (3 SECOND GUST)
2. EXPOSURE CATEGORY = C
3. INTERAL PRESSURE COEFFICIENT = +/-0.18
4. EXTERIOR COMPONENT AND CLANDING DESIGN WIND PRESSURE = 32.3 PSF (WALL ZONE 5), 69.1 PSF (ROOF ZONE 3).

F. SEISMIC DESIGN DATA:
1. Ie = 1.25
2. Fa = 1.2
3. Fv = N/A
4. Ss = 2.445
5. S1 = 1.025
6. SDS = 1.956
7. SD1 = N/A
8. SITE CLASS = D (DEFAULT)
9. SEISMIC DESIGN CATEGORY = E

IV. WOOD

A. ALL WOOD FRAMING SHALL CONFORM TO NATIONAL DESIGN SPECIFICATIONS (NDS) FOR WOOD CONSTRUCTION AND APA PDS, PLYWOOD DESIGN SPECIFICATION.

B. ALL WOOD FRAMING SHALL BE DOUGLAS FIR LARCH, UNLESS OTHERWISE NOTED. GRADE SHALL BE AS FOLLOWS:

1. JOISTS = NO 1
2. BEAMS = NO 1
3. WALL STUDS = NO 1
4. SILL PLATES = PRESSURE TREATED NO 1
5. BLOCKING AND MISCELLANEOUS = NO 2

C. REJECTION OF WOOD MEMBERS: THE PROVISION IN DOC PS 20 (AS REFERENCED BY CBC 2303.1.1) WHICH PERMITS FIVE PERCENT OF THE MATERIAL TO FALL BELOW GRADE SHALL NOT BE CONSTRUED TO PERMIT BELOW-GRADE MATERIAL TO BE USED AS LOAD-CARRYING MEMBERS WHICH HAVE BEEN DESIGNED FOR SPECIFIC ALLOWABLE STRESSES AND ACCEPTABLE SAFETY FACTORS. MATERIALS WHICH FALL BELOW GRADE SHALL BE REJECTED FOR LOAD-CARRYING USE. WOOD MEMBERS WHICH ARE REQUIRED TO CARRY DESIGN LOADS AND WHICH THE PROJECT ARCHITECT, SEOR OR INSPECTOR JUDGE TO BE MISGRADED SHALL BE REINSPECTED BY A QUALIFIED LUMBER GRADING INSPECTOR TO VERIFY THE PROPER GRADING OF THE MATERIAL. WOOD MEMBERS WHICH HAVE PERMISSIBLE GRADE CHARACTERISTICS OR DEFECTS IN SUCH COMBINATION AS TO AFFECT THE SERVICEABILITY OF THE MEMBER SHALL BE REJECTED BY THE PROJECT INSPECTOR WITH THE CONCURRENCE OF THE ARCHITECT OR SEOR.

D. ALL LUMBER IN CONTACT WITH CONCRETE OR CONCRETE MASONRY 0'-8" OR LESS ABOVE THE GROUND SHALL BE PRESSURE TREATED.

E. MAXIMUM MOISTURE CONTENT SHALL BE 15%AT TIME OF FRAMING FOR NEW WOOD MEMBERS ADJACENT TO EXISTING WOOD MEMBERS. ALL OTHER MEMBERS SHALL HAVE A MAXIMUM MOISTURE CONTENT OF 19% AT TIME OF FRAMING. REFER TO ARCHITECTURAL DRAWINGS, PROJECT SPECIFICATIONS AND CLADDING MANUFACTURERS' INFORMATION FOR MORE STRINGENT MOISTURE CONTENT REQUIREMENTS.

F. WOOD CONNECTORS SHALL BE AS MANUFACTURED BY SIMPSON STRONG TIE OR EQUAL PRODUCT IF APPROVED BY SEOR. SIMPSON DESIGNATIONS USED IN THESE DRAWINGS.

G. NAILS SHALL BE COMMON WIRE GAGE, UNLESS OTHERWISE NOTED AND CONFORM TO CBC TABLE 2304.10.2. USE OF MACHINE NAILING IS SUBJECT TO A SATISFACTORY JOBSITE DEMONSTRATION FOR EACH PROJECT AND THE APPROVAL OF THE PROJECT ARCHITECT, STRUCTURAL ENGINEER AND DSA.

H. LAG BOLTS AND UNFINISHED MACHINE BOLTS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD.

I. ANCHOR RODS SHALL CONFORM TO ASTM F1554 GR 36.

J. FASTENERS INSTALLED IN PRESSURE TREATED OR FIRE RETARDANT TREATED WOOD SHALL BE GALVANIZED.

K. PROVIDE LATERAL SUPPORT FOR BEAMS, JOISTS, AND RAFTERS PER CBC SECTION 2308.4.6.

VI. POST-INSTALLED ANCHORS

A. POST-INSTALLED ANCHORS INCLUDE EXPANSION ANCHORS, EPOXY ANCHORS AND REINFORCING STEEL DOWELS, SCREW ANCHORS AND POWDER-ACTUATED FASTENERS. AS DETAILED IN THE DRAWINGS.

B. DO NOT DAMAGE OR CUT EXISTING REINFORCING STEEL WHILE INSTALLING POST-INSTALLED ANCHORS. NOTIFY SEOR IF EXISTING REINFORCING STEEL INTERFERES WITH INSTALLATION OF POST-INSTALLED ANCHORS.

C. ALL MIS-DRILLED OR UNACCEPTABLE HOLES SHALL NOT BE USED AND SHALL BE GROUTED SOLID.

D. ALL POST-INSTALLED ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE ICC-ES REPORT AND MANUFACTURER'S RECOMMENDATIONS.

E. PROVIDE SPECIAL INSPECTION FOR THE INSTALLATION OF ALL POST-INSTALLED ANCHORS, UNLESS OTHERWISE NOTED.

F. FIELD TEST POST-INSTALLED ANCHORS, UNLESS OTHERWISE NOTED. FIELD TESTING SHALL BE IN COMPLIANCE WITH THE FOLLOWING:
1. 10% OF POST-INSTALLED ANCHORS USED FOR SILL PLATE BOLTING SHALL BE TESTED; 100% OF ALL OTHER POST-INSTALLED ANCHORS USED FOR STRUTURAL APPLICATIONS SHALL BE TESTED.
2. 50% OF POST-INSTALLED ANCHORS USED FOR NON-STRUCTURAL APPLICATIONS SHALL BE TESTED, INCLUDING ONE HALF OF ALL ANCHORS IN EACH GROUP.
   a. IF ANY ANCHOR FAILS TESTING, ALL ANCHORS OF THE SAME TYPE THAT ARE UNTESTED SHALL BE TESTED UNTIL 20 CONSECUTIVE ANCHORS PASS.
   b. NO TESTING REQUIRED FOR POWDER-ACTUATED FASTENERS USED TO ATTACH TRACKS OF INTERIOR, NON-STRUCTURAL PARTITION WALLS WHERE THERE ARE AT LEAST THREE FASTENERS PER PIECE OF TRACK.
3. NO TESTING REQUIRED OF REINFORCING STEEL DOWELS ACROSS COLD JOINTS IN CONCRETE SLABS ON GRADE.
4. TORQUE TESTING MAY BE USED FOR TORQUE CONTROLLED POST-INSTALLED ANCHORS; TENSION TEST ALL OTHER POST-INSTALLED ANCHORS.
5. TORQUE TESTING SHALL BE IN ACCORDANCE WITH CBC SECTION 1910A.5.5.2.
6. TENSION TESTING SHALL BE IN ACCORDANCE WITH CBC SECTION 1910A.5.5.1.
7. ALL FIELD TESTING SHALL BE DONE UNDER THE OBSERVATION OF THE PROJECT INSPECTOR.
8. TESTING SHALL OCCUR AT LEAST 24 HOURS AFTER THE ANCHOR HAS BEEN INSTALLED.

G. EXPANSION ANCHORS
1. FOR INSTALLATION IN CONCRETE, EXPANSION ANCHORS SHALL BE ONE OF THE FOLLOWING:
   a. STRONG BOLT 2 PER ICC-ES ESR-3037 AS MANUFACTURED BY SIMPSON STRONG TIE.
   b. KWIK BOLT TZ2 PER ICC-ES ESR-4266 AS MANUFACTURED BY HILTI, INC.
2. FOR INSTALLATION IN FULLY-GROUTED CONCRETE MASONRY, EXPANSION ANCHORS SHALL BE ONE OF THE FOLLOWING:
   a. KWIK BOLT KBTZ2 PER ICC-ES ESR-4561 AS MANUFACTURED BY HILTI, INC.
3. USE STAINLESS STEEL AT EXTERIOR, WEATHER-EXPOSED OR DAMP LOCATIONS; CARBON STEEL EXPANSION ANCHORS MAY BE USED AT ALL OTHER LOCATION, UNLESS OTHERWISE NOTED.
4. MINIMUM ANCHOR EMBEDMENT AND TORQUE TEST VALUES ARE AS FOLLOWS:

KWIK BOLT TZ2 IN NORMAL WEIGHT CONCRETE (f'c = 3000 PSI MIN)				
ANCHOR DIAMETER	EMBED (IN)	MINIMUM HOLE	TORQUE TEST VALUES (FT-LBS)	
(IN)		DEPTH (IN)	CARBON STEEL	STAINLESS STEEL
3/8	2 5/16	2 5/8	30	30
1/2	2 3/8	2 5/8	50	40
5/8	4 1/16	4 3/4	40	60
3/4	5 9/16	5 3/4	110	125

STRONG BOLT 2 IN NORMAL WEIGHT CONCRETE (f'c = 3000 PSI MIN)				
ANCHOR DIAMETER	EMBED (IN)	MINIMUM HOLE	TORQUE TEST VALUES (FT-LBS)	
(IN)		DEPTH (IN)	CARBON STEEL	STAINLESS STEEL
3/8	1 7/8	2	30	30
1/2	2 3/4	3	60	65
5/8	5 3/8	5 3/8	90	80
3/4	5 1/4	6	150	150

4. WHERE EXPANSION ANCHORS ARE INSTALLED IN CONTACT WITH WOOD FRAMING, PROVIDE AN OVERSIZE WASHER IN ORDER TO ACHIEVE TORQUE REQUIRED BY ICC-ES REPORT. USE 1/4"x3"x3" WASHER, MINIMUM.
5. CONTRACTOR SHALL PROVIDE ANCHORS WITH SUFFICIENT TOTAL LENGTH FOR THE SPECIFIED EMBEDMENT LENGTH, THICKNESS OF FASTENED PART, WASHER AND NUT.

I. SCREW ANCHORS
1. FOR INSTALLATION IN CONCRETE, SCREW ANCHORS SHALL BE ONE OF THE FOLLOWING:
   a. TITEN HD PER ICC-ES ESR-2713 AS MANUFACTURED BY SIMPSON STRONG TIE.
   b. KH-EZ PER ICC-ES ESR-3027 AS MANUFACTURED BY HILTI, INC.
2. RE-USE OF SCREW ANCHORS OR SCREW ANCHOR HOLTS SHALL NOT BE PERMITTED.
3. SCREW-TYPE ANCHORS TESTED WITH A CALIBRATED TORQUE WRENCH SHALL ATTAIN THE SPECIFIED TORQUE WITHIN ONE-QUARTER (1/4) TURN OF THE SCREW AFTER INITIAL SEATING OF THE SCREW HEAD.
4. MINIMUM ANCHOR EMBEDMENT AND TORQUE TEST VALUES ARE AS FOLLOWS:

TITEN HD IN NORMAL WEIGHT CONCRETE (f'c = 3000 PSI MIN)			
ANCHOR DIAMETER	EMBED (IN)	MINIMUM HOLE	TORQUE TEST
(IN)		DEPTH (IN)	VALUE (FT-LBS)
1/4	1 5/8	1 3/4	24
3/8	2 1/2	2 3/4	50
1/2	3 1/4	3 3/4	65
5/8	4	4 1/2	100
3/4	4	4 1/2	150

KH-EZ IN NORMAL WEIGHT CONCRETE (f'c = 3000 PSI MIN)			
ANCHOR DIAMETER	EMBED (IN)	MINIMUM HOLE	TORQUE TEST
(IN)		DEPTH (IN)	VALUE (FT-LBS)
1/4	1 5/8	2	18
3/8	2 1/8	2 3/8	40
1/2	2 1/4	2 5/8	45
5/8	3 1/4	3 5/8	85
3/4	4	4 3/8	95

ABBREVIATIONS

ABBREVIATION	DESCRIPTION
(E)	EXISTING
(N)	NEW
AB	ANCHOR BOLT
ADDL	ADDITIONAL
ALT	ALTERNATE
APPRX	APPROXIMATE
AR	ANCHOR ROD
ARCH	ARCHITECT OR ARCHITECTURAL
AVG	AVERAGE
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BOT	BOTTOM
BRDG	BRIDGING
BTWN	BETWEEN
CIP	CAST-IN-PLACE
CJ	CONTROL/CONSTRUCTION JOINT
CJP	COMPLETE JOINT PENETRATION
CL	CENTER LINE
CLR	CLEAR OR CLEARANCE
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION(S)
CONST	CONSTRUCTION
CONT	CONTINUOUS
CTR	CENTER
CTRD	CENTERED
CTRSK	COUNTERSINK
db	DIAMETER OF BOLT OR REBAR
DBL	DOUBLE
DEMO	DEMOLISH
DET	DETAIL
DF	DOUGLAS FIR
DIA	DIAMETER
DIAG	DIAGONAL
DIM(S)	DIMENSION(S)
DL	DEAD LOAD
DWG(S)	DRAWING(S)
DWL	DOWEL(S)
EA	EACH
ECC	ECCENTRICITY
EF	EACH FACE
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
EMBED	EMBEDMENT
EN	EDGE NAIL
ENGR	ENGINEER
EOS	EDGE OF SLAB
EQ	EQUAL
EQUIP	EQUIPMENT
ES	EACH SIDE
EW	EACH WAY
EXP	EXPANSION
EXT	EXTERIOR
FF	FINISH FLOOR
FIN	FINISH(ED)
FLR	FLOOR
FN	FIELD NAILING
FND	FOUNDATION
FO	FACE OF
FRM'G	FRAMING
FS	FAR SIDE
FTG	FOOTING
GA	GAGE, GAUGE
GALV	GALVANIZED
GB	GRADE BEAM
GEN	GENERAL
GLB	GLUE-LAMINATED BEAM
GR	GRADE
GYP	GYPSUM
HD	HOLDOWN
HDR	HEADER
HGR	HANGER
HK	HOOK
HORIZ	HORIZONTAL
HT	HEIGHT
HVAC	HEATING VENTING AND AIR CONDITIONING
ID	INSIDE DIAMETER
IF	INSIDE FACE
INFO	INFORMATION
INT	INTERIOR
JH	JOIST HANGER
JST(S)	JOIST(S)
JT	JOINT
LBS	POUNDS
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LOC	LOCATION
LONG	LONGITUDINAL
LW	LIGHTWEIGHT
LWC	LIGHTWEIGHT CONCRETE
MATL	MATERIAL
MAX	MAXIMUM
MB	UNFINISHED MACHINE BOLT
MECH	MECHANICAL
MEP	MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION
MEZZ	MEZZANINE
MFR	MANUFACTURER
MID	MIDDLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MTL	METAL
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NS	NEAR SIDE
NTS	NOT TO SCALE
NW	NORMAL WEIGHT
NWC	NORMALWEIGHT CONCRETE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OH	OPPOSITE HAND
OPNG(S)	OPENING(S)
OPP	OPPOSITE
OSB	ORIENTED STRAND BOARD
PAF	POWDER ACTUATED FASTENER
PERP	PERPENDICULAR
PL	PLATE
PLY	PLYWOOD
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSL	PARALLEL STRAND LUMBER
RAD	RADIUS
REF	REFERENCE
REINF	REINFORCE(D) (ING) OR (MENT)
REQD	REQUIRED
REV	REVISION
RWD	REDWOOD
SAD	SEE ARCHITECTURAL DRAWINGS
SCD	SEE CIVIL DRAWINGS
SCHED	SCHEDULE(D)
SECT	SECTION
SEOR	STRUCTURAL ENGINEER OF RECORD
SF	SQUARE FOOT (FEET)
SHT	SHEET
SIM	SIMILAR
SLRS	SEISMIC LOAD RESISTING SYSTEM
SMD	SEE MECHANICAL DRAWINGS
SMS	SHEET METAL SCREW(S)
SOG	SLAB ON GRADE
SP	SPACE
SPEC(S)	SPECIFICATION(S)
SQ	SQUARE
STAGG'D	STAGGERED
STD	STANDARD
STIFF	STIFFENER
STL	STEEL
STR	STRUCTURE
STRCTL	STRUCTURAL
SYMM	SYMMETRICAL
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TD	TIE DOWN
TEMP	TEMPERATURE OR TEMPORARY
THK	THICK OR THICKNESS
THRD'D	THREADED
TO	TOP OF
TRANSV	TRANSVERSE
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VERT	VERTICAL
VIF	VERIFY IN FIELD
W/	WITH
W/O	WITHOUT
WD	WOOD
WF	WIDE FLANGE
WP	WORK POINT
WT	WEIGHT
WWR	WELDED WIRE REINFORCEMENT

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

SAN FRANCISCO UNIFIED SCHOOL DISTRICT · SOUTH · EDUCATION FOR ALL

Revisions

Delta	Date	Revisions	By

Copyright © 2025 BASE Design
This document is the property of BASE Design and is not to be used without written permission

BASE DESIGN
582 MARKET ST. STE. 1402
SAN FRANCISCO, CA 94104
Office:(415) 466-2997
www.BASEdesigninc.com

This document is the property of the Owner and is not to be used without their written permission

REGISTERED PROFESSIONAL ENGINEER · KATHRYN BRIGGS · NO. 5732 · Exp. 12-31-26 · STRUCTURAL · STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number:

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
GENERAL NOTES AND ABBREVIATIONS

Client Project Number:

Scale: 1 1/2" = 1'-0"
Drawn By: SN
Checked By: KMB/JL
Issue Date: 11/24/2025
Revit Version: 2023

Sheet
S1.01
Sheet of

Z:\Shared\Projects\2024\24299 - Skyline Elementary School HVAC Upgrade\Structural Drawings\24299 - Skyline Elementary School HVAC Upgrade - R23.rvt
2/12/2026 9:28:25 AM

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

SHEET NOTES:

1. SEE GENERAL NOTES ON SHEET S1.01.
2. FOR TYPICAL WOOD FRAMING DETAILS SEE SHEET S8.01.
3. NO WALL OPENINGS ARE PERMITTED WITHOUT SEOR APPROVAL EXCEPT RE-USING EXISTING OPENINGS AND MODIFICATION TO EXISTING OPENINGS AS NOTED ON THESE PLANS AND DETAILS ON SHEET S8.01.

1 ROOF FRAMING PLAN - BLDGS B, C, AND E

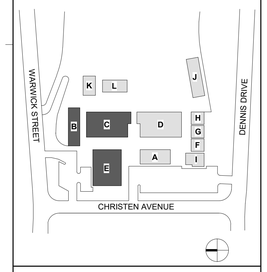
1/8" = 1'-0"

SAN FRANCISCO UNIFIED SCHOOL DISTRICT · SOUTH · EDUCATION FOR ALL

Revisions

Delta	Date	Revisions	By

KEY PLAN



Copyright © 2025 BASE Design
This document is the property of BASE Design and is not to be used without written permission

BASE DESIGN
582 MARKET ST., STE. 1402
SAN FRANCISCO, CA 94104
Office:(415) 466-2997
www.BASEdesigninc.com

This document is the property of the Owner and is not to be used without their written permission

REGISTERED PROFESSIONAL ENGINEER · KATHRYN BRUCE · NO. 5732 · Exp. 12-31-26 · STRUCTURAL · STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ; 510.446.2211 fax

HY Architects Project number:

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
ROOF FRAMING PLAN - BLDGS B, C, AND E

Client Project Number:

Scale:	1/8" = 1'-0"
Drawn By:	SN
Checked By:	KMB/JL
Issue Date:	11/24/2025
Revit Version:	2023

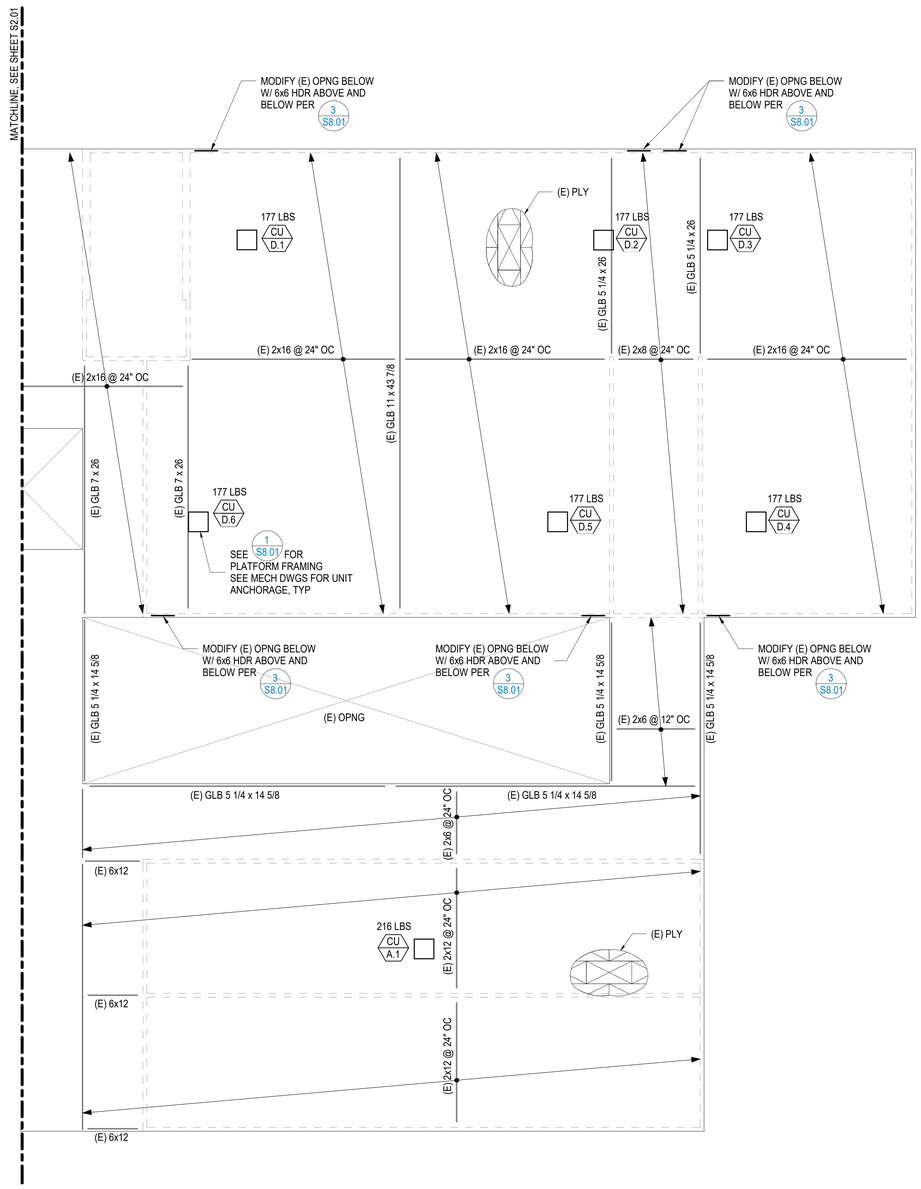
Sheet **S2.01**
Sheet of

2/12/2026 9:28:25 AM Z:\Shared\Projects\2024\24299 - Skyline Elementary School HVAC Upgrade\Structural Drawings\24299 - Skyline Elementary School HVAC Upgrade - R23.rvt

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026



1 ROOF FRAMING PLAN - BLDGS A AND D

1/8" = 1'-0"

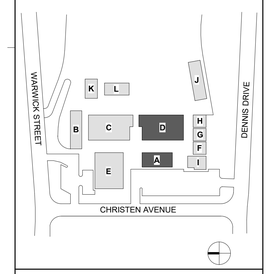
SHEET NOTES:

1. SEE GENERAL NOTES ON SHEET S1.01.
2. FOR TYPICAL WOOD FRAMING DETAILS SEE SHEET S8.01.
3. NO WALL OPENINGS ARE PERMITTED WITHOUT SEOR APPROVAL EXCEPT RE-USING EXISTING OPENINGS AND MODIFICATION TO EXISTING OPENINGS AS NOTED ON THESE PLANS AND DETAILS ON SHEET S8.01.

Revisions

Delta	Date	Revisions	By

KEY PLAN



Copyright © 2025 BASE Design
This document is the property of BASE Design and is not to be used without written permission

BASE DESIGN
582 MARKET ST. STE. 1402
SAN FRANCISCO, CA 94104
Office:(415) 466-2997
www.BASEdesigninc.com

This document is the property of the Owner, and is not to be used without their written permission

REGISTERED PROFESSIONAL ENGINEER
KATHRYN BRIGGS
NO. 5732
Exp. 12-31-26
STRUCTURAL
STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number:

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
ROOF FRAMING PLAN - BLDGS A AND D

Client Project Number:

Scale:	1/8" = 1'-0"
Drawn By:	SN
Checked By:	KMB/JL
Issue Date:	11/24/2025
Revit Version:	2023

Sheet **S2.02**
Sheet of

2/12/2026 9:28:25 AM Z:\Shared\Projects\2024\24299 - Skyline Elementary School HVAC Upgrade\Structural Drawings\24299 - Skyline Elementary School HVAC Upgrade - R23.rvt

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

FASTENING SCHEDULE

DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION
ROOF		
1. Blocking between ceiling joists, rafters or trusses to top plate or other framing below	3-8d common (2 1/2" × 0.131"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown	Each end, toenail
Blocking between rafters or truss not at the wall top plate, to rafter or truss	2-8d common (2 1/2" × 0.131") 2-3" × 0.131" nails 2-3" 14 gage staples	Each end, toenail
	2-16 d common (3 1/2" × 0.162") 3-3" × 0.131" nails 3-3" 14 gage staples	End nail
Flat blocking to truss and web filler	16d common (3 1/2" × 0.162") @ 6" o.c. 3" × 0.131" nails @ 6" o.c. 3" × 14 gage staples @ 6" o.c	Face nail
2. Ceiling joists to top plate	3-8d common (2 1/2" × 0.131"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown	Each joist, toenail
3. Ceiling joist not attached to parallel rafter, laps over partitions (no thrust)	3-16d common (3 1/2" x 0.163") 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, 7/16" crown	Face nail
4. Ceiling joist attached to parallel rafter (heel joint) (see Section 2308.7.3.1, Table 2308.7.3.1)	Per Table 2308.7.3.1	Face nail
5. Collar tie to rafter	3-10d common (3" × 0.148"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, 7/16" crown	Face nail
6. Rafter or roof truss to top plate	3-10 common (3" × 0.148"); or 3-16d box (3 1/2" × 0.135"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131 nails; or 4-3" 14 gage staples, 7/16" crown	Toenail[c]
7. Roof rafters to ridge valley or hip rafters; or roof rafter to 2-inch ridge beam	2-16d common (3 1/2" × 0.162"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3"14 gage staples, 7/16" crown; or	End nail
	3-10d common (3 1/2" × 0.148"); or 4-16d box (3 1/2" × 0.135"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, 7/16" crown	Toenail
WALL		
8. Stud to stud (not at braced wall panels)	16d common (3 1/2" × 0.162");	24" o.c. face nail
	10d box (3" × 0.128"); or 3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown	16" o.c. face nail
9. Stud to stud and abutting studs at intersecting wall corners (at braced wall panels)	16d common (3 1/2" × 0.162"); or	16" o.c. face nail
	16d box (3 1/2" × 0.135"); or	12" o.c. face nail
	3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown	12" o.c. face nail
10. Built-up header (2" to 2" header)	16d common (3 1/2" × 0.162"); or	16" o.c. each edge, face nail
	16d box (3 1/2" × 0.135")	12" o.c. each edge, face nail
11. Continuous header to stud	4-8d common (2 1/2" × 0.131"); or 4-10d box (3" × 0.128")	Toenail
12. Top plate to top plate	16d common (3 1/2" × 0.162"); or	16" o.c. face nail
	10d box (3" × 0.128"); or 3" × 0.131" nails; or 3" 14 gage staples, 7/16" crown	12" o.c. face nail
13. Top plate to top plate, at end joints	8-16d common (3 1/2" × 0.162"); or 12-10d box (3" × 0.128"); or 12-3" × 0.131" nails; or 12-3" 14 gage staples, 7/16" crown	Each side of end joint, face nail (minimum 24" lap splice length each side of end joint)
14. Bottom plate to joist, rim joist, band joist or blocking (not at braced wall panels)	16d common (3 1/2"x0.163"); or	16" o.c. face nail
	16d box (3 1/2" × 0.135"); or 3" × 0.131" nails; or 3" 14 gage staples, 7/16" crown	12" o.c. face nail
15. Bottom plate to joist, rim joist, band joist or blocking at braced wall panels	2-16d common (3 1/2 " × 0.162"); or 3-16d box (3 1/2" × 0.135"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, 7/16" crown	16" o.c. face nail
16. Stud to top or bottom plate	4-8d common (2 1/2" × 0.131"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, 7/16" crown; or	Toenail
	2-16d common (3 1/2" × 0.162"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown	End nail
17. Top plates, laps at corners and intersections	2-16d common (3 1/2" × 0.162"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown	Face nail
18. 1" brace to each stud and plate	2-8d common (2 1/2" × 0.131"); or 2-10d box (3" × 0.128"); or 2-3" × 0.131" nails; or 2-3" 14 gage staples, 7/16" crown	Face nail
19. 1" × 6" sheathing to each bearing	2-8d common (2 1/2" × 0.131"); or 2-10d box (3" × 0.128")	Face nail
20. 1" × 8" and wider sheathing to each bearing	3-8d common (2 1/2" × 0.131"); or 3-10d box (3" × 0.128")	Face nail

FASTENING SCHEDULE (CONT.)

DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION
FLOOR		
21. Joist to sill, top plate, or girder	3-8d common (2 1/2" × 0.131"); or floor 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown	Toenail
22. Rim joist, band joist, or blocking to top plate, sill or other framing below	8d common (2 1/2" × 0.131"); or floor 10d box (3" × 0.128"); or 3" × 0.131" nails; or 3" 14 gage staples, 7/16" crown	6" o.c., toenail
23. 1" × 6" subfloor or less to each joist	2-8d common (2 1/2" × 0.131"); or 2-10d box (3" × 0.128")	Face nail
24. 2" subfloor to joist or girder	2-16d common (3 1/2" × 0.162")	Face nail
25. 2" planks (plank & beam – floor & roof)	2-16d common (3 1/2" × 0.162")	Each bearing, face nail
26. Built-up girders and beams, 2" lumber layers	20d common (4" × 0.192")	32" o.c., face nail at top and bottom staggered on opposite sides
	10d box (3" × 0.128"); or 3" × 0.131" nails; or 3" 14 gage staples, 7/16" crown	24" o.c. face nail at top and bottom staggered on opposite sides
	And: 2-20d common (4" × 0.192"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown	Ends and at each splice, face nail
27. Ledger strip supporting joists or rafters	3-16d common (3 1/2" × 0.162"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, 7/16" crown	Each joist or rafter, face nail
28. Joist to band joist or rim joist	3-16d common (3 1/2" × 0.162"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, 7/16" crown	End nail
29. Bridging or blocking to joist, rafter or truss	2-8d common (2 1/2" × 0.131"); or 2-10d box (3" × 0.128"); or 2-3" × 0.131" nails; or 2-3" 14 gage staples, 7/16" crown	Each end, toenail

Wood structural panels (WSP), subfloor, roof and interior wall sheathing to framing and particleboard wall sheathing to framing

		Edges (inches)	Intermediate supports (inches)
30. 3/8" – 1/2"	6d common or deformed (2" × 0.113"); or 2 3/8" x 0.113 nails (subfloor and wall)	6	
	8d common or deformed (2 1/2" × 0.113" x 0.281" head) (roof) or RSRS-01 (2 3/8" x 0.133") nail (roof)	6	
	1 3/4" 16 gage staple, 7/16" crown (subfloor and wall)	4	
	2 3/8" × 0.113" x 0.266 head nail (roof)	3	
	1 3/4" 16 gage staple, 7/16" crown (roof)	3	
31. 19/32" – 3/4"	8d common (2 1/2" × 0.131"); or deformed (2" × 0.113") (subfloor and wall)	6	
	8d common or deformed (2 1/2" x 0.131" x 0.281" head) (roof) or RSRS-01 (2 3/8" x 0.113") nail (roof)[d]	6	
	2 3/8" × 0.113" x 0.266" head nail; or 2" 16 gage staple, 7/16" crown	4	
32. 7/8" – 1 1/4"	10d common (3" × 0.148"); or deformed (2 1/2" × 0.131" x 0.281" head)	6	
Other exterior wall sheathing			
33. 1/2" fiberboard sheathing[g]	1 1/2" galvanized roofing nail (7/16" head diameter); or 1 1/4" 16 gage staple with 7/16" or 1" crown	3	6
34. 25/32" fiberboard sheathing[g]	1 3/4" galvanized roofing nail (7/16" diameter head); or 1 1/2" 16 gage staple with 7/16" or 1" crown	3	6
Wood structural panels, combination subfloor underlayment to framing			
35. 3/4" and less	8d common (2 1/2" × 0.131"); or 6d deformed (2" × 0.113")	6	12
36. 7/8" – 1"	8d common (2 1/2" × 0.131"); or 8d deformed (2 1/2" × 0.131")	6	12
37. 1 1/8" – 1 1/4"	10d common (3" × 0.148"); or 8d deformed (2 1/2" × 0.131")	6	12
Panel siding to framing			
38. 1/2" or less	6d corrosion-resistant siding (1 7/8" × 0.106"); or 6d corrosion-resistant casing (2" × 0.099")	6	12
39. 5/8"	8d corrosion-resistant siding (2 3/8" × 0.128"); or 8d corrosion-resistant casing (2 1/2 " × 0.113")	6	12

Wood structural panels (WSP), subfloor, roof and interior wall sheathing to framing and particleboard wall sheathing to framing [a]

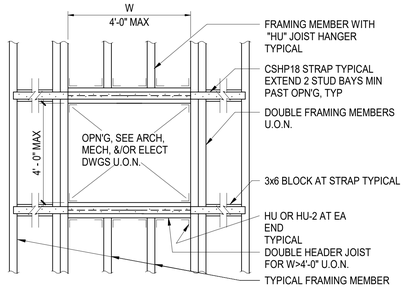
		Edges (inches)	Intermediate supports (inches)
40. 1/4 "	4d casing (1 1/2" × 0.080"); or 4d finish (1 1/2" × 0.072")	6	12
41. 3/8 "	6d casing (2" × 0.099"); or 6d finish (Panel supports at 24 inches)	6	12

For SI: 1 inch = 25.4 mm.

a. Nails spaced at 6 inches at intermediate supports where spans are 48 inches or more. Nails for wall sheathing are permitted to be common, box or casing.
b. Spacing shall be 6 inches on center on the edges and 12 inches on center at intermediate supports for nonstructural applications. Panel supports at 16 inches (20 inches if strength axis in the long direction of the panel, unless otherwise marked).
c. Where a rafter is fastened to an adjacent parallel ceiling joist in accordance with this schedule and the ceiling joist is fastened to the top plate in accordance with this schedule, the number of toenails in the rafter shall be permitted to be reduced by one nail.
d. RSRS-01 is a Roof Sheathing Ring Shank nail meeting the specifications in ASTM F1667.

12 NAILING SCHEDULE

NTS

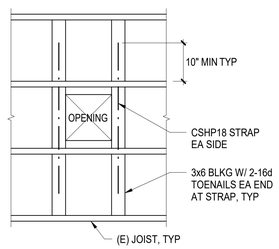


NOTE:

ADJACENT OPENINGS SHALL BE SPACED AT 6' - 0" MINIMUM.

4 OPENING IN DIAPHRAGM

NTS

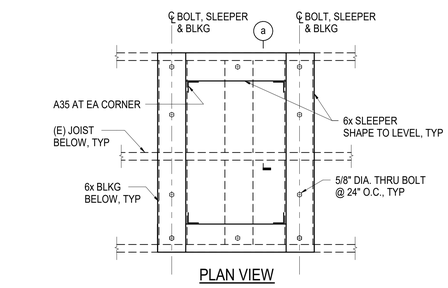


NOTE:

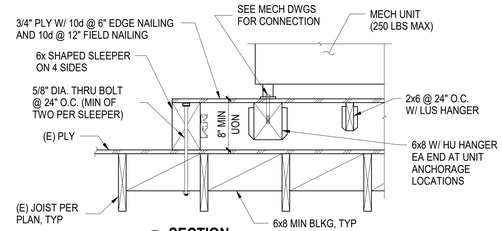
ADJACENT OPENINGS SHALL BE SPACED AT 6' - 0" MINIMUM.

5 SMALL OPENING IN DIAPHRAGM (22"x22" MAX)

NTS



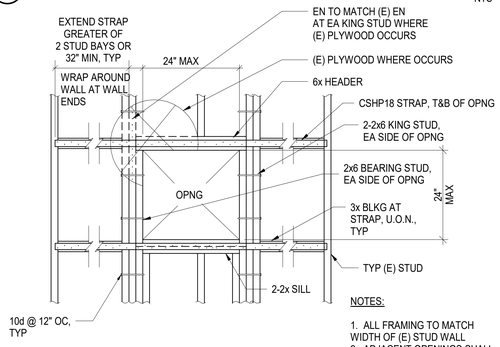
PLAN VIEW



a SECTION

1 MECH UNIT PLATFORM DETAIL

NTS

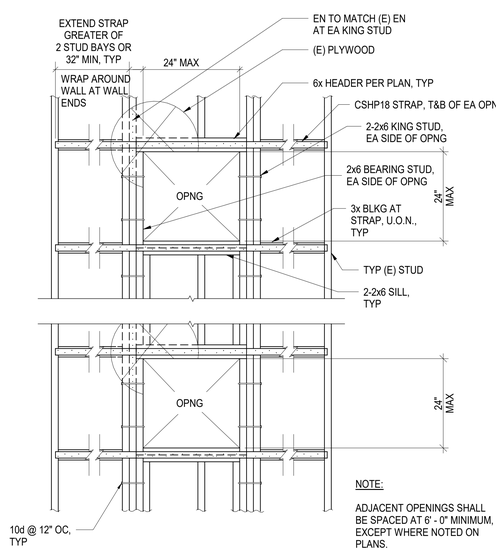


NOTES:

1. ALL FRAMING TO MATCH WIDTH OF (E) STUD WALL
2. ADJACENT OPENINGS SHALL BE SPACED AT 6' - 0" MINIMUM, EXCEPT WHERE NOTED ON PLANS.

2 SMALL OPENING IN WALL

NTS



NOTE:

ADJACENT OPENINGS SHALL BE SPACED AT 6' - 0" MINIMUM, EXCEPT WHERE NOTED ON PLANS.

3 STACKED SMALL OPENINGS IN WALL

NTS

Revisions

Delta	Date	Revisions	By

Copyright © 2025 BASE Design
This document is the property of BASE Design and is not to be used without written permission

BASE DESIGN
582 MARKET ST. STE. 1402
SAN FRANCISCO, CA 94104
Office:(415) 466-2997
www.BASEdesigninc.com

This document is the property of the Owner and is not to be used without their written permission

REGISTERED PROFESSIONAL ENGINEER KATHRYN BR. LOCK NO. 5732 Exp. 12-31-26 STRUCTURAL STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY Architects Project number:

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
NAILING SCHEDULE AND WOOD DETAILS

Client Project Number:

Scale:	As indicated
Drawn By:	SN
Checked By:	KMB/JL
Issue Date:	11/24/2025
Revit Version:	2023

Sheet **S8.01**
Sheet of

Z:\Shared\Projects\2024\24299 - Skyline Elementary School HVAC Upgrade\Structural Drawings\24299 - Skyline Elementary School HVAC Upgrade - R23.rvt
2/12/2026 9:28:25 AM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

MECHANICAL GENERAL NOTES

1. ENTIRE INSTALLATION SHALL CONFORM TO REQUIREMENTS OF 2022 CALIFORNIA MECHANICAL CODE, 2022 CALIFORNIA BUILDING CODE, AND ALL OTHER APPLICABLE CODES AND REGULATIONS, INCLUDING 2016 CALIFORNIA ENERGY CONSERVATION STANDARDS DIVISION T-24 & T-20.

2. 2022 CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE INCLUDING APPLICABLE MANDATORY MEASURES:

   a. COVERING OF DUCT OPENINGS AND PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION PER CALGREEN REQUIREMENTS.

   b. ADHESIVES, SEALANTS AND CAULKS SHALL MEET CALGREEN REQUIREMENTS.

   c. FILTERS SHALL BE A MINIMUM EFFICIENCY REPORTING VALUE (MERV) OF 13 OR AS SPECIFIED.

   d. INSTALLATIONS OF HVAC AND REFRIGERATION EQUIPMENT SHALL COMPLY WITH SECTIONS 5.508.1.1 AND 5.508.1.2.

3. COORDINATE ENTIRE INSTALLATION OF HVAC SYSTEM WITH WORK OF ALL OTHER TRADES PRIOR TO ANY FABRICATION OR INSTALLATION. PROVIDE ALL FITTINGS, OFFSETS, AND TRANSITIONS AS REQUIRED FOR A COMPLETE WORKABLE INSTALLATION. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ITEMS TO BE PROVIDED BY OTHER TRADES WHERE MENTIONED IN THE CONTRACT DOCUMENTS PRIOR TO BID - NO EXCEPTIONS.

4. CONTRACTOR SHALL NOTIFY OWNER AND ENGINEER OF CONSTRUCTION PHASING PRIOR TO START OF CONSTRUCTION, REMOVAL, AND/OR REPLACEMENT OF ANY EQUIPMENT. CONTRACTOR SHALL RECEIVE PERMISSION IN WRITING PRIOR TO START OF ANY WORK DURING ANY PHASE FOR WORK SHOWN HEREIN. IT SHALL BE THE RESPONSIBILITY OF CONTRACTOR TO CONDUCT WORK AND ARRANGE HIS WORK IN A MANNER THAT WILL CAUSE MINIMAL INTERFERENCE WITH DAILY FUNCTIONS WITHIN FACILITY. ANY EXPECTED DOWNTIME SHALL BE COORDINATED WITH THE OWNER.

5. ALL EQUIPMENT, DUCTS, PIPING, AND OTHER DEVICES AND MATERIALS INSTALLED OUTSIDE OF BUILDING OR OTHERWISE EXPOSED TO WEATHER SHALL BE COMPLETELY WEATHER-PROOFED AND PAINTED TO MATCH, COORDINATE WITH ARCHITECT PRIOR TO PAINTING.

6. THE OWNER ACKNOWLEDGES THAT DESIGN PROFESSIONAL CONSTRUCTION DOCUMENTS AND SPECIFICATIONS ARE INSTRUMENTS OF PROFESSIONAL SERVICES. NEVERTHELESS, CONSTRUCTION DOCUMENTS AND SPECIFICATIONS PREPARED UNDER THIS AGREEMENT SHALL BECOMES PROPERTY OF THE OWNER UPON COMPLETION OF THE WORK. THE OWNER AGREES TO HOLD HARMLESS AND INDEMNIFY DESIGN PROFESSIONAL AGAINST ALL DAMAGES, CLAIMS AND LOSSES, INCLUDING DEFENSE COSTS, ARISING OUT OF ANY RESCUE OF CONSTRUCTION DOCUMENTS AND SPECIFICATIONS WITHOUT WRITTEN AUTHORIZATION OF DESIGN PROFESSIONAL.

7. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH AND BE CONSIDERED TO BE PART OF A SEPARATE AND COMPLETE MECHANICAL SPECIFICATION.

8. ALL DIMENSIONS SHOWN ON THESE PLANS ARE APPROXIMATE AND MUST BE CONFIRMED ON SITE.

9. PRIOR TO OCCUPANCY, THE ENTIRE H.V.A.C. SYSTEMS SHALL BE BALANCED IN ACCORDANCE WITH ASSOCIATED AIR BALANCE COUNCIL (AABC) STANDARDS BY AN INDEPENDENT AIR BALANCE CONTRACTOR. CERTIFICATION SHALL BE PROVIDED BY CONTRACTOR FOR AIR AS APPLICABLE. SYSTEMS SHALL BE BALANCED AS INDICATED ON PLANS INCLUDING FRESH AIR VENTILATION. WHERE THERE IS A CONFLICT WITH MECHANICAL PLANS, AIR BALANCE CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO BALANCING OF SYSTEM. IF NOT, AIR BALANCE CONTRACTOR SHALL BEAR ALL COSTS INCURRED FOR WORK THAT MUST BE RE-BALANCED DUE TO CONFLICTS ON CONTRACT DOCUMENTS. CONTRACTOR SHALL PROVIDE THREE COPIES OF AIR BALANCE REPORT TO ENGINEER FOR APPROVAL.

10. FOR INACCESSIBLE AREAS CONTRACTOR SHALL PROVIDE ACCESS PANELS FOR ALL DAMPERS, EQUIPMENT, SMOKE DETECTORS, AND CONTROL DEVICES. THESE PANELS SHALL MATCH THE RATING OF THE WALL AND/OR CEILING THAT THEY ARE LOCATED IN. MINIMUM ACCESS PANEL SIZES SHALL BE AS FOLLOWS:

    a. HAND ACCESS: 12"x12"

    b. BODY ACCESS: 30"x30" MIN. WHERE A LARGER ACCESS SIZE IS REQUIRED DUE TO INSTALLATION CONSTRAINTS, THE CONTRACTOR SHALL DO SO AT NO ADDITIONAL COST AND SHALL NOTIFY THE ARCHITECT AND ENGINEER OF DEVIATIONS PRIOR TO INSTALLATION.

11. COORDINATE THE LOCATION OF ALL ROOF OPENINGS AND THE LOCATION OF ALL ROOF MOUNTED EQUIPMENT WITH THE STRUCTURAL AND ARCHITECTURAL PLANS PRIOR TO ANY INSTALLATION.

12. PLATFORMS, CURBS, AND FLASHINGS FOR MECHANICAL EQUIPMENT SHALL BE AS INDICATED ON THE STRUCTURAL AND ARCHITECTURAL PLANS, UNLESS NOTED OTHERWISE. WHERE THERE IS A CONFLICT WITH THE MECHANICAL PLANS THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND ENGINEER PRIOR TO FABRICATION AND INSTALLATION.

13. ALL EQUIPMENT, ACCESSORIES, AND RELATED PIPING SHALL BE INSTALLED IN STRICT ACCORDANCE WITH EQUIPMENT MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL FITTINGS, TRANSITIONS, DAMPERS, VALVES, AND OTHER DEVICES REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.

14. MAINTENANCE LABEL SHALL BE AFFIXED TO ALL MECHANICAL EQUIPMENT AND A MAINTENANCE MANUAL SHALL BE PROVIDED FOR THE OWNER'S USE.

15. PROVIDE 85% MIN. EFFICIENCY THROWAWAY FILTERS FOR ALL AIR CONDITIONING UNITS. SEE EQUIPMENT SCHEDULE AND SPECIFICATIONS FOR TYPE. SIZES SHALL BE AS RECOMMENDED BY THE MANUFACTURER, UNLESS OTHERWISE SPECIFIED.

16. ALL EQUIPMENT WITH MOVING PARTS SHALL BE PROVIDED WITH FLEXIBLE DUCT AND PIPE CONNECTIONS.

17. ALL EQUIPMENT SHALL BE LABELED AS TO SPACE IT SERVES. SEE PLANS AND SPECIFICATIONS FOR IDENTIFICATION STANDARDS.

18. ALL HVAC EQUIPMENT SHALL BE CERTIFIED BY CALIFORNIA ENERGY COMMISSION (CEC) TO COMPLY WITH LATEST EFFICIENCY STANDARDS.

19. ALL FRESH AIR INTAKES SHALL MEET CODE REQUIRED CLEARANCES FROM EXHAUST, FLUE, FUEL BURNING APPLIANCE, AND PLUMBING VENT OUTLETS. FOR GAS/ELECTRIC AIR CONDITIONING UNITS WHERE CODE REQUIRED CLEARANCES ARE NOT MET, A FACTORY FLUE GAS DEFLECTOR AND EXTENSION SHALL BE USED TO MINIMIZE THESE CLEARANCES. CONTRACTOR SHALL DETERMINE LOCATIONS WHERE REQUIRED PRIOR TO BID. THIS SHALL BE PROVIDED AT NO ADDITIONAL COST.

20. ALL AIR HANDLING EQUIPMENT SERVING CONDITIONED SPACES SHALL PROVIDE CONTINUOUS FRESH AIR TO SPACES IN OCCUPIED MODE.

21. CONTRACTOR SHALL VERIFY ALL CLEARANCES AND AVAILABLE SPACE FOR DUCTWORK PRIOR TO ORDERING AND/OR FABRICATING MATERIAL.

22. CONTRACTOR TO SUBMIT ALL EQUIPMENT, DUCTWORK, AIR DISTRIBUTION DEVICES, AND OTHER ACCESSORIES TO ENGINEER FOR APPROVAL PRIOR TO ANY ORDERING OF SUCH ITEMS.

23. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS WITHIN 45 DAYS OF AWARD OF CONTRACT. SEE DIV. 23 SPECIFICATIONS FOR REQUIREMENTS. IF SHOP DRAWINGS ARE NOT PROVIDED TO ENGINEER FOR APPROVAL, AND ANY CONFLICTS OCCUR BETWEEN TRADES, DURING CONSTRUCTION, & ETC. THEN CONTRACTOR SHALL BE RESPONSIBLE AND BEAR ALL COST INCURRED FOR ANY REVISIONS AT NO ADDITIONAL COST TO THE OWNER. THE OWNER AND ENGINEER SHALL BE NOTIFIED IMMEDIATELY PRIOR TO FABRICATION AND INSTALLATION OF ANY CONFLICTS BETWEEN TRADES, DURING CONSTRUCTION, & ETC.

24. PAINT EXPOSED SURFACES, WHETHER OR NOT COLORS ARE DESIGNATED IN SCHEDULES, EXCEPT WHERE A SURFACE OR MATERIAL IS SPECIFICALLY INDICATED NOT TO BE PAINTED OR IS TO REMAIN NATURAL. WHERE AN ITEM OR SURFACE IS NOT SPECIFICALLY MENTIONED, PAINT THE SAME AS SIMILAR ADJACENT MATERIALS OR SURFACES. IF COLOR OR FINISH IS NOT DESIGNATED, THE OWNER'S REPRESENTATIVE WILL SELECT FROM STANDARD COLORS OR FINISHES AVAILABLE.

    a. PAINTING INCLUDES FIELD PAINTING EXPOSED BARE AND COVERED PIPES AND DUCTS (INCLUDING COLOR CODING), HANGERS, EXPOSED STEEL AND IRON WORK, AND PRIMED METAL SURFACES OF MECHANICAL AND ELECTRICAL EQUIPMENT.

---- CONTROLS -----

25. CONTROL SCHEMATICS ARE FOR SEQUENCE ONLY. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ALL ELECTRICAL DEVICES REQUIRED.

26. ALL LINE VOLTAGE WIRING SHALL BE INSTALLED IN CONDUIT. ALL LINE VOLTAGE CONDUIT AND WIRING, INCLUDING FINAL CONNECTIONS, SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR AS INDICATED ON THE ELECTRICAL DRAWINGS OR SPECIFIED IN THE ELECTRICAL SECTION OF THE SPECIFICATIONS. ALL ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS OF ALL GOVERNING BODIES HAVING JURISDICTION THEREOF.

27. ALL LOW VOLTAGE CONDUIT AND WIRING AS APPLICABLE, INCLUDING FINAL CONNECTIONS, SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR AS INDICATED ON THE MECHANICAL DRAWINGS OR SPECIFIED IN THE MECHANICAL SECTION OF THE SPECIFICATIONS.
    A. ALL LOW VOLTAGE WIRING SHALL BE INSTALLED IN CONDUIT.
    B. ALL LOW VOLTAGE WIRING SHALL BE PLENUM - RATED.
    C. WHERE THE CONTROLS CONTRACTOR IS RETAINED BY THE OWNER, THEY SHALL BE RESPONSIBLE FOR THE FOLLOWING:
    a. FURNISH AND INSTALL ALL DEVICES, WIRING, AND TERMINATIONS REQUIRED FOR A COMPLETE AND FUNCTIONAL INSTALLATION.

    b. COORDINATE ALL WORK AND REQUIREMENTS WITH OTHER TRADES INCLUDING GENERAL, MECHANICAL, AND ELECTRICAL CONTRACTORS PRIOR TO BID.

    c. CONTRACTOR SHALL FOLLOW ALL SUBMITTAL REQUIREMENTS PER DRAWINGS AND SPECIFICATIONS.

28. ALL THERMOSTATS SHALL BE OF THE ELECTRONIC, PROGRAMMABLE, AUTOMATIC CHANGEOVER TYPE TO SEQUENCE HEATING OR COOLING. SET POINT RANGE SHALL BE 10° F. BETWEEN FULL HEATING AND COOLING. THEY SHALL HAVE CAPABILITY OF TERMINATING ALL HEATING AT A TEMPERATURE NO MORE THAN 70° F., AND COOLING AT A TEMPERATURE NOT LESS THAN 78° F. ADJUSTABLE TEMPERATURE DIFFERENTIAL SHALL BE 1½° F. CONTROL LIMITS SHALL BE FROM 55° F. TO 85° F. MOUNT AT THERMOSTAT PER DETAIL 1 ON SHEET M-201.

    NOTE:
    a. THERMOSTATS THAT ARE PART OF AN ENERGY MANAGEMENT SYSTEM SHALL FOLLOW CONTROL SPECIFICATIONS AND DRAWING REQUIREMENTS.

    b. SHOULD THE LOCATION OF THE THERMOSTAT NOT MEET ADA HEIGHT REQUIREMENTS DUE TO OBSTRUCTIONS, THEN AN ALTERNATE LOCATION SHALL BE PROPOSED OR REQUESTED BY CONTRACTOR THAT SHALL BE APPROVED BY ENGINEER AND ARCHITECT.

29. CONTROLS CONTRACTOR AND AIR BALANCE CONTRACTOR SHALL COORDINATE WORK AND PERFORM NECESSARY TASKS AS REQUIRED TO OBTAIN AIR AND WATER FLOW QUANTITIES FOR SYSTEMS SHOWN HEREIN.

30. CONTROLS SHALL BE PROVIDED TO PROVIDE THE MINIMUM RATE OF OUTDOOR AIR REQUIRED BY THE STATE ENERGY REGULATIONS.

----- AIR DISTRIBUTION -----

31. ALL DUCTWORK SHALL BE SHEET METAL CONSTRUCTED OR SPIRAL, ERECTED, AND TESTED IN ACCORDANCE WITH THE MOST RESTRICTIVE OF LOCAL REGULATIONS, PROCEDURES DETAILED IN THE ASHRAE HANDBOOK OF FUNDAMENTALS, CHAPTER 6 OF THE MECHANICAL CODE, OR THE APPLICABLE STANDARDS ADOPTED BY THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION.

32. DUCTWORK HANDLING CONDITIONED AIR SHALL BE INSULATED OR LINED AS INDICATED ON DRAWINGS. SUPPLY AND RETURN DUCT INSULATION SHALL BE MIN. 1½" THICK, ¾" LB./CUBIC FT. DENSITY AND HAVE A MIN. VALUE OF R-8 WHERE LOCATED IN ONE OR MORE OF THE FOLLOWING SPACES:

    a. OUTDOORS, OR

    b. IN A SPACE BETWEEN THE ROOF AND AN INSULATED CEILING, OR

    c. IN A SPACE DIRECTLY UNDER A ROOF WITH FIXED VENTS OR OPENINGS TO THE OUTSIDE OR UNCONDITIONED SPACES, OR

    d. IN AN UNCONDITIONED CRAWLSPACE; OR

    e. IN OTHER UNCONDITIONED SPACES

    OTHERWISE PROVIDE R-8 WHEN LOCATED IN CONDITIONED ATTIC SPACES ABOVE CEILINGS . ALL DUCTWORK EXPOSED ON ROOF SHALL BE INTERNALLY LINED WITH 1½" THICK, 1½ LB./CUBIC FT. DENSITY DUCT LINER UNLESS OTHERWISE INDICATED OR SPECIFIED. ALL DUCT SIZES ARE SHEET METAL SIZES. ALL DUCT JOINTS SHALL BE SEALED PER CHAPTER 6 MECHANICAL CODE REQUIREMENTS. PROVIDE PIPING AND DUCT INSULATION IN ACCORDANCE WITH THE LATEST STANDARDS OF THE CALIFORNIA ENERGY COMMISSION.

33. ALL INSULATION SHALL HAVE A FLAME SPREAD OF NOT MORE THAN 25 AND A SMOKE DENSITY NOT EXCEEDING 50.

34. MANUAL VOLUME DAMPER SHALL BE PROVIDED IN ALL DUCT BRANCHES TO INDIVIDUAL DIFFUSERS, GRILLES, AND REGISTERS, AS WELL AS FRESH AIR INTAKE DUCTS. DAMPERS SHALL BE LOCATED AT THE BRANCH DUCT LOCATIONS. MECHANICAL CONTRACTOR SHALL COORDINATE LOCATIONS OF DAMPERS WITH AIR BALANCE CONTRACTOR PRIOR TO BID, SO THEY ARE ACCESSIBLE PRIOR TO BID, SO THEY ARE ACCESSIBLE PRIOR TO INSTALLATION. OPPOSED BLADE DAMPERS SHALL NOT BE PERMITTED UNLESS NOTED OTHERWISE.

---- EXISTING CONDITIONS ----

35. BEFORE BIDDING ON THIS WORK, THE CONTRACTOR SHALL MAKE A CAREFUL EXAMINATION OF THE PREMISES, EXISTING EQUIPMENT AND SERVICES. HE SHALL DEFINITELY DETERMINE IN ADVANCE, THE METHODS OF INSTALLING AND CONNECTING THE NEW EQUIPMENT, DUCTWORK, AND PIPING THE MEANS TO BE PROVIDED FOR GETTING THE EQUIPMENT AND MATERIALS INTO PLACE AND SHALL MAKE HIMSELF THOROUGHLY FAMILIAR WITH ALL OF THE REQUIREMENTS OF THE PROJECT. FAILURE TO VISIT THE SITE WILL IN NO WAY RELIEVE THE SUCCESSFUL CONTRACTOR OF THE NECESSITY OF FURNISHING ANY MATERIAL OR PERFORMING ANY WORK THAT MAY BE REQUIRED TO COMPLETE THE WORK IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS. THIS ADDITIONAL SHALL BE PERFORMED WITHOUT ADDITIONAL COST TO THE OWNER.

36. CONTRACTOR SHALL VERIFY PRIOR TO CONSTRUCTION THE CONDITION OF EXISTING EQUIPMENT, DUCTWORK, ASSOCIATED CONTROLS, AND T-STATS. SHOULD ANY OF THESE ITEMS NOT BE PERFORMING SATISFACTORILY OR MALFUNCTIONING, CONTRACTOR SHALL NOTIFY TENANT AND/OR OWNER AND PROVIDE A COST TO ENSURE PROPER OPERATION PRIOR TO COMPLETION OF WORK.

37. BEFORE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS AND DIMENSIONS OF ALL EXISTING EQUIPMENT AND ELECTRICAL SERVICES IN THE AREA OF CONSTRUCTION AND NOTIFY THE ENGINEER AND ARCHITECT OF ANY DISCREPANCIES.

38. ALL CONNECTIONS AND DISCONNECTIONS TO EXISTING EQUIPMENT SHALL BE MADE IN SUCH A MANNER THAT INTERRUPTION TIME SHALL BE KEPT TO A MINIMUM. THE CONTRACTOR SHALL GIVE THE OWNER'S REPRESENTATIVE SUFFICIENT NOTICE OF SUCH INTERRUPTION AND THE ACTUAL SHUTDOWN TIME SHALL BE AT A TIME DESIGNATED BY THE OWNER'S REPRESENTATIVE.

----- PLUMBING -----

39. BEFORE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS , ELEVATIONS AND CHARACTERISTICS OF ALL UTILITIES AND PIPING, AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.

40. ALL VALVES, UNIONS, ETC. TO BE SAME SIZE AS PIPE UNLESS OTHERWISE INDICATED ON DRAWINGS.

41. CONNECTION BETWEEN INCOMPATIBLE MATERIALS ABOVE GRADE AND INSIDE BUILDING SHALL BE MADE WITH TWO (2) DIELECTRIC UNIONS SEPARATED BY A TWELVE INCH (12" SECTION OF RED BRASS PIPE.

42. ALL PLUMBING WORKS SHALL BE INSTALLED SO AS TO AVOID INTERFERENCE WITH ELECTRICAL AND MECHANICAL EQUIPMENT AND STRUCTURAL FRAMING.

43. ALL WORK AND MATERIAL SHALL BE PERFORMED AND INSTALLED IN COMPLIANCE WITH CALIFORNIA PLUMBING CODE 2022.

44. ANY ALTERATION TO A STRUCTURAL MEMBER, SUCH AS CUTTING, BORING, BRAZING , DRILLING , WELDING , ETC. SHALL HAVE PRIOR WRITTEN APPROVAL OF ARCHITECT, STRUCTURAL ENGINEER AND DSA.

MECHANICAL SHEET LIST

SHEET NUMBER	SHEET TITLE
M0.01	MECHANICAL GENERAL NOTES AND DESIGN CRITERIA
M0.02	MECHANICAL LEGEND
M0.03	MECHANICAL SCHEDULES
M1.01	MECHANICAL BUILDINGS REFERENCE PLAN
MD2.01	BUILDINGS B, C, & E MECHANICAL DEMOLITION FLOOR PLANS
MD2.02	BUILDINGS A & D MECHANICAL DEMOLITION FLOOR PLANS
MD2.03	BUILDINGS B, C, & E MECHANICAL DEMOLITION ROOF PLANS
MD2.04	BUILDINGS A & D MECHANICAL DEMOLITION ROOF PLANS
M2.01	BUILDINGS B, C, & E MECHANICAL NEW WORK FLOOR PLANS
M2.02	BUILDINGS A & D MECHANICAL NEW WORK FLOOR PLANS
M2.03	BUILDINGS B, C, & E MECHANICAL NEW WORK ROOF PLANS
M2.04	BUILDINGS A & D MECHANICAL NEW WORK ROOF PLANS
M3.01	MECHANICAL DETAILS
M3.02	MECHANICAL DETAILS
M4.01	MECHANICAL EMS CONTROL DIAGRAMS
M5.01	MECHANICAL TITLE 24 FORMS
M5.02	MECHANICAL TITLE 24 FORMS

APPLICABLE CODES AND STANDARDS

LIST OF APPLICABLE CODES
2025 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR
2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR
2022 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 CCR
2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR
2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR
2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR
TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

APPLICABLE STANDARDS
FOR A LIST OF APPLICABLE STANDARDS, INCLUDING CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS, REFER TO CBC CHAPTER 35 AND CFC CHAPTER 80.

MEP COMPONENT ANCHORAGE NOTE

APPLICABLE CODE: 2022 CBC

MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA-APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26, AND 30:

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G., HARD WIRED) TO THE BUILDING 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.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

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

A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

APPLICABLE CODE: 2022 CBC

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2022 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., HCAI OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

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

MP☒ MD☐ PP☒ E☐ OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

MP☐ MD☐ PP☐ E☐ OPTION 2: SHALL COMPLY WITH HCAI (OSHPD) PREAPPROVAL (OPM #) #_____________, AS INCLUDED IN THESE DRAWINGS WITH PROJECT-SPECIFIC NOTES AND DETAILS.

DESIGN CRITERIA

1. REPLACE EXISTING GAS FIRED FURNACES AND DX COOLING SPLIT SYSTEMS IN-KIND FOR BUILDINGS A, B, C, D, & E
2. RE-CONNECT NEW HVAC EQUIPMENT TO EXISTING CAMPUS EMS.
3. TEST, ADJUST, AND BALANCE (TAB) THE AIR DISTRIBUTION SYSTEM INCLUDING EQUIPMENT AND CONTROLS TO MAINTAIN BUILDINGS PRESSURIZATION AND TEMPERATURE CONTROL.
4. RE-CONNECT NATURAL GAS PIPING FOR GAS FIRED FURNACES.
5. PROVIDE CONDENSATE PIPING FOR NEW COOLING COILS AND DISCHARGE TO AN APPROVED DISPOSAL AREA

CARBON MONOXIDE STATEMENT

CARBON MONOXIDE DETECTION SYSTEM NOT REQUIRED PER DSA IR 9-2, EXCEPTION 2.2.1 PER THE CALIFORNIA EXISTING BUILDING CODE. THIS GROUP E PROJECT WAS CONSTRUCTED BEFORE ADOPTION OF THE 2016 CALIFORNIA BUILIDNG STANDARDS CODE.

ACCEPTANCE TESTING

1. THE CALIFORNIA ENERGY CODE SECTION 10-103 REQUIRES ACCEPTANCE TESTING ON ALL NEWLY INSTALLED MECHANICAL SYSTEMS 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 CODE.
2. MECHANICAL SYSTEM ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED MECHANICAL ATT FOR PROJECTS SUBMITTED ON OR AFTER OCTOBER 1, 2021.
3. PROCESS EQUIPMENT ACCEPTANCE TESTS SHALL BE PERFORMED BY THE INSTALLING CONTRACTOR, ENGINEER/ARCHITECT OF RECORD OR THE OWNER'S AGENT.
4. A LISTING OF CERTIFIED ATT CAN BE FOUND AT: HTTPS://WWW.ENERGY.CA.GOV/PROGRAMS-AND-TOPICS/PROGRAMS/ACCEPTA BNCE-TEST-TECHNICIAN-CERTIFICATION-PROVIDER-PROGRAM/ACCEPTANCE. 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.
5. PROJECT INSPECTORS WILL COLLECT THE FORMS TO CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE BEEN COMPLETED.

BID ALTERNATE

BASE BID: DUCT CLEANING FOR ALL BLDGS EXISTING AIR DISTRIBUTION ABOVE ACT CEILING TILING. SEE SPECIFICATION 23 00 00 HVAC FOR ADDITIONAL INFORMATION.

BID ALTERNATE #1:
-REPLACE BLDGS. C & D EXISTING AIR DISTRIBUTION WITH NEW
-ALL OTHER BLDGS EXISTING AIR DISTRIBUTION SHALL BE CLEANED PER BASE BID.

SOUTH SAN FRANCISCO UNIFIED SCHOOL DISTRICT · EDUCATION FOR ALL

# Revisions			
Delta	Date	Revisions	By

optimum energy design
Consulting Engineers
5277 College Avenue
Oakland, CA 94618
Telephone (510) 837-9182

This document is the property of the Owner and is not to be used without their written permission

REGISTERED PROFESSIONAL ENGINEER · ABBY BANERJEE · No. M29253 Exp. 6/30/27 · MECHANICAL · STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY Architects Project number: Project Number

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
MECHANICAL GENERAL NOTES AND DESIGN CRITERIA

Client Project Number: 0000.0

Scale: Not to Scale
Drawn By: CC
Checked By: AK
Issue Date:
Revit Version: 2023

Sheet
M0.01
Sheet of

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY

LEGEND

SYMBOL	ABBR.	DESCRIPTION	SYMBOL	ABBR.	DESCRIPTION	ABBR.	DESCRIPTION	SYMBOL	ABBR.	DESCRIPTION	SYMBOL	ABBR.	DESCRIPTION
	-	SUPPLY AIR RISER	MB	ME	ITEMS FURNISHED BY MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR.	DSA	DEPARTMENT OF STATE ARCHITECTS		LWC	LIGHT WEIGHT CONCRETE		SM/SMS	SHEET METAL / SHEET METAL SCREW
	-	RETURN AIR RISER				DWG	DRAWING		MFR	MANUFACTURER		SOO	SEQUENCE OF OPERATION
	-	EXHAUST AIR RISER	DS	D.S.	DOOR SWITCH	EER	ENERGY EFFICIENCY RATIO		MAX	MAXIMUM		SOV	SHUT-OFF VALVE
	SAG	SUPPLY AIR GRILLE	1	-	KEY NOTE	DSD	DUCT SMOKE DETECTOR		MBH	THOUSAND BRITTISH THERMAL UNITS		SP	STATIC PRESSURE
	RAG	RETURN AIR GRILLE	A / M-401	-	DETAIL SHEET NUMBER	EMBED	EMBEDMENT		MEP	MECHANICAL, ELECTRICAL AND PLUMBING		SQ	SQUARE
	EAG	EXHAUST AIR GRILLE	A / M-401	-	SECTION REFERENCE WITH DETAIL /SHEET NUMBER	(E)	EXISTING		MTL	METAL		SQ.FT.	SQUARE FEET
	SWR	SIDEWALL REGISTER	EQ	-	EQUIPMENT TAG	EA	EXHAUST AIR/ EACH		MCA	MINIMUM CIRCUIT AMPACITY		SS	STAINLESS STEEL
	(L)	LINED DUCTWORK		%	PERCENT	EAD	EXHAUST AIR DUCT		MECH	MECHANICAL		SSD	SEE STRUCTURAL DRAWINGS
	-	FLEXIBLE CONNECTION		&	AND	EAT	ENTERING AIR TEMPERATURE		MERV	MINIMUM EFFICIENCY REPORTING VALUE		STD	STANDARD
	FC	FLEXIBLE CONNECTION		@	AT	EOR	ENGINEER OF RECORD		MIN	MINIMUM/MINUTE		STPT	SETPOINT
	-	NEW DUCT (SEE PLAN)		(A)	AMPS	DN	DOWN		MOP	MINIMUM OVERCURRENT PROTECTION		SYM	SYMBOL
	-	EXISTING DUCT (SEE PLAN)		ABBR	ABBREVIATIONS	EMS	ENERGY MANGEMENT SYSTEM		MHP	MOTOR HORSE POWER		T-24	TITLE 24
	-	DEMO DUCT (SEE PLAN)		ABV	ABOVE	ESP	EXTERNAL STATIC PRESSURE		MTG	MOUNTING		TCP	TEMPERATURE CONTROL PANEL
	MVD	MANUAL VOLUME DAMPER		ADA	AMERICANS WITH DISABILITIES ACT	EQUIV	EQUIVALENT		MP	MIXING PLENUM		TEMP	TEMPERATURE
	BDD	BACKDRAFT DAMPER		ADDT'L	ADDITIONAL	ERU	ENERGY RECOVERY UNIT		(N)	NEW		TOP	TOP OF PIPE
SD	SFD	SMOKE / FIRE DAMPER		ADJ	ADJUSTABLE	EWT	ENTERING WATER TEMPERATURE		NFPA	NATIONAL FIRE PROTECTION ASSOCIATION		T-STAT	THERMOSTAT
F	FD	FIRE DAMPER		AHU	AIR HANDLING UNIT	EX	EXAMPLE		NOM	NOMINAL		TXV	THERMOSTATIC EXPANSION VALVE
	DL	DOOR LOUVER		AI	ANALOG INPUT	EXT	EXTERNAL/EXTERIOR		NWC	NORMAL WEIGHT CONCRETE		TYP	TYPICAL
U.C.	UC	UNDERCUT DOOR 3/4"		AO	ANALOG OUTPUT	FEI	FAN ENERGY INDEX	#	NO	NUMBER		U.L.	UNITED LABORATORIES
RS	RS	REFRIGERANT SUCTION LINE		APD	AIR PRESSURE DROP	FLA	FULL LOAD AMPERAGE		OPM	OFFICE OF STATEWIDE HEALTH PLANNING AND CERTIFICATION		V	VOLT
RL	RL	REFRIGERANT LIQUID LINE		ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS	FLR.	FLOOR		O.C.	ON CENTER		VAV	VARIABLE AIR VOLUME
CD	CD	CONDENSATE DRAIN		ATR	ALL-THREADED ROD	FPI	FINS PER INCH		OPN'G	OPENING		VD	MANUAL VOLUME DAMPER
	-	STRAINER		ATT	ACCEPTANCE TEST TECHNICIAN	FO	FIELD ORDER		OBD	OPPOSED BLADE DAMPER		VELO	VELOCITY
	-	THERMOMETER		BDD	BACKDRAFT DAMPER	FPS	FEET PER SECOND		OSHPD	DEVELOPMENT		VFD	VARIABLE FREQUENCY DRIVE
	-	SHUTOFF VALVE		BG	BELOW GROUND	FPM	FEET PER MINUTE		OSA	OUTSIDE AIR		VOL	VOLUME
	-	CHECK VALVE		BHP	BRAKE HORSE POWER	FSC	FAN SPEED CONTROL		O.D.	OUTSIDE DIAMETER		VTR	VENT THRU ROOF
	-	BALL VALVE		BLKG	BLOCKING	FT	FEET		NR	NETWORK ROUTER		W	WIDTH
	-	DIRECTION OF FLOW		BOP	BOTTOM OF PIPE	GA	GAUGE		LWT	LEAVING WATER TEMPERATURE		W/	WITH
	-	REDUCER OR INCREASER		BTUH	BRITISH THERMAL UNITS	GALV	GALVANIZED		PH	PHASE		W/O	WORK ORDER
	-	MANUAL AIR VENT		CA	CALIFORNIA	GPM	GALLONS PER MINUTE	₹	-	PLATE		WB	WET BULB
	-	TOP CONNECTION, 45° OR 90°		CAV	CONSTANT AIR VOLUME	G.C.	GENERAL CONTRACTOR		PT	POINT		W.G.	WATER GAUGE
	-	BOTTOM CONNECTION, 45° OR 90°		CBC	CALIFORNIA BUILDING CODE	HDG	HOT DIPPED GALVANIZED		PLF	POUND PER LINEAR FEET		WPD	WATER PRESSURE DROP
	-	SIDE CONNECTION		CC	CONTROL CONTRACTOR	HOA	HAND-OFF-AUTO		PSI	POUND PER SQUARE INCH		WT	WEIGHT
	-	CAPPED OUTLET		CCR	CALIFORNIA CODE OF REGULATIONS	HHW	HEATING HOT WATER		PC	PRE-CAST			
	-	RISE OR DROP IN PIPE		C.D.	CEILING DIFFUSER	HTG	HEATING		PD	PRESSURE DROP			
	-	UNION		CFM	CUBIC FEET PER MINUTE	HP	HORSE POWER		PRESS.	PRESSURE			
HHWR	HHWR	HEATING HOT-WATER RETURN		CLG	COOLING	HWR	HOT-WATER RETURN		PERFOR	PERFORATED			
HHWS	HHWS	HEATING HOT-WATER SUPPLY		CLR	CLEAR	HVAC	HEATING VENTILATION AND AIR CONDITIONING		PID	PROPORTIONAL INTEGRAL DERIVATIVE			
CHWS	CHWS	CHILLED WATER SUPPLY		CONTR	CONTRACTOR	HZ	HERTZ		PS	PRE-STRESSED			
CHWR	CHWR	CHILLED WATER RETURN		CONC	CONCRETE	HWS	HOT-WATER SUPPLY		QTY	QUANTITY			
	S.D.	SMOKE DETECTOR		COP	COEFFICIENT OF PERFORMANCE	I.D.	INSIDE DIAMETER		R	RELOCATED			
	P.O.C.	POINT OF CONNECTION		CONT.	CONTINUATION	IAPMO	INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS		RAD	RETURN AIR DUCT			
	P.O.D.	POINT OF DEMOLITION		CU	CONDENSER UNIT	IN	INCHES		REQ'D	REQUIRED			
T	T-STAT	THERMOSTAT		CV	VALVE FLOW COEFFICIENT	IMP	IMPELLER		RG	REFRIGERANT GAS			
H	H	HUMIDISTAT		D	DEPTH	INFO	INFORMATION		RL	REFRIGERANT LIQUID			
TS	TS	TEMPERATURE SENSOR		D"	DIAMETER INCHES	IN.W.G	INCHES WATER GAUGE		RND	ROUND			
OS	OS	OVERRIDE SWITCH		DB	DRY BULB	L	LENGTH		RPM	REVOLUTIONS PER MINUTE			
PD	PD	PRESSURE DIFFERENTIAL SWITCH		Dba	A-WEIGHTED DECIBEL	IN.W.C./IWC	INCH WATER COLUMN		SA	SUPPLY AIR			
S	S	SWITCH		DDC	DIRECT DIGITAL CONTROL	L X W X H	LENGTH X WIDTH X HEIGHT		SB	SOLID BLOCKING/SIMPSON BOLT			
E	E	ITEMS FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR AS SPECIFIED ON THE ELECTRICAL CONTRACT DOCUMENTS		DEFL.	DEFLECTION	"L	LINER THICKNESS IN INCHES		SHT.	SHEET			
			°	DEG	DEGREE	DO	DIGITAL OUTPUT		SCCR	SHORT CIRCUIT CURRENT RATING			
M	M	ITEMS FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR AS SPECIFIED ON THE MECHANICAL CONTRACT DOCUMENTS		DI	DIGITAL INPUT	LAT	LEAVING AIR TEMPERATURE		SCH	SCHEDULE			
				DIA	DIAMETER	LAT.	LATERAL		S	STRUCTURAL			
EM	EM	ITEMS FURNISHED BY ELECTRICAL CONTRACTOR AND INSTALLED BY MECHANICAL CONTRACTOR.		DIS	DISCHARGE	LBS	POUNDS		SDS	SELF DRILLING SCREW			
									SEER	SEASONAL ENERGY EFFICIENCY RATIO			
									SAD	SUPPLY AIR DUCT			
									SEOR	STRUCTURAL ENGINEER OF RECORD			

NOTE: NOT ALL ITEMS SHOWN ON THE LEGEND LIST MAY BE USED.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

SAN FRANCISCO UNIFIED SCHOOL DISTRICT · SOUTH · EDUCATION FOR ALL

#	Revisions		
Delta	Date	Revisions	By

optimum energy design
Consulting Engineers
5277 College Avenue
Oakland, CA 94618
Telephone (510) 837-9182

This document is the property of the Owner and is not to be used without their written permission

REGISTERED PROFESSIONAL ENGINEER · BANERJEE · No. M29233 Exp. 6/30/27 · MECHANICAL · STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: Project Number

Facility

SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project

HVAC REPLACEMENT

Sheet Title

MECHANICAL LEGEND

Client Project Number: 0000.0

Scale: Not to Scale
Drawn By: CC
Checked By: AK
Issue Date:
Revit Version: 2023

Sheet

M0.02

Sheet of

3/26/2025 3:12:50 PM M:\P - PROJECTS\2025\502-25-0001 SFUSD SKYLINE ES\02_MECH

GRAPHIC SCALES: 1/16" = 1'-0" (0 5' 50') | 1/8" = 1'-0" (0 5' 25') | 1/4" = 1'-0" (0 1' 12') | 1/2" = 1'-0" (0 1' 6') | 3/4" = 1'-0" (0 4') | 1" = 1'-0" (0 1' 3') | 1 1/2" = 1'-0" (0 2') | 3" = 1'-0" (0 1')

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

INDOOR GAS UPFLOW FURNACE SCHEDULE - BUILDINGS A, B, C, D, E

SYM	MFR & MODEL #	AREA SERVICED	HEATING CAPACITY INPUT	HEATING CAPACITY OUPUT	AFUE(%)	CFM	OSA CFM	ESP (IN WG)	ELECTRICAL V	PH	MCA	MOCP	WT (LBS)	INTERLOCK WITH	OUTDOOR UNIT	CONTROL DETAIL	ANCHORAGE DETAIL	REMARKS
F A.1	CARRIER 58US5B100M21--22	BUILDING A	100,000	97,000	95	1645	525	1.50	115	1	13.8	20	170	EC A.1	CU A.1	1 M4.01	4 M3.01	1,2,3,4,5,6,8,10,11
F B.1	CARRIER 59US5B080M21--20	BUILDING B	80,000	78,000	95	1200	425	1.20	115	1	13.8	20	161	EC B.1	CU B.1	1 M4.01	14 M3.01	1,2,3,4,6,7,8,9,10,11
F B.2	CARRIER 59US5B080M21--20	BUILDING B	80,000	78,000	95	1200	425	1.20	115	1	13.8	20	161	EC B.2	CU B.2	1 M4.01	14 M3.01	1,2,3,4,6,7,8,10,11
F C.1	CARRIER 59US5B080M21--20	BUILDING C	80,000	78,000	95	1200	350	1.00	115	1	13.8	20	161	EC C.1	CU C.1	1 M4.01	5 M3.01	1,2,3,4,5,6,8,10,11
F C.2	CARRIER 59US5B080M21--20	BUILDING C	80,000	78,000	95	1200	345	1.00	115	1	13.8	20	161	EC C.2	CU C.2	1 M4.01	5 M3.01	1,2,3,4,5,6,8,10,11
F C.3	CARRIER 59US5B080M21--20	BUILDING C	80,000	78,000	95	800	350	1.00	115	1	13.8	20	161	EC C.3	CU C.3	1 M4.01	5 M3.01	1,2,3,4,5,6,8,10,11
F C.4	CARRIER 59US5B080M21--20	BUILDING C	80,000	78,000	95	800	355	1.00	115	1	13.8	20	161	EC C.4	CU C.4	1 M4.01	5 M3.01	1,2,3,4,5,6,8,10,11
F C.5	CARRIER 59US5B080M21--20	BUILDING C	80,000	78,000	95	800	340	1.00	115	1	13.8	20	161	EC C.5	CU C.5	1 M4.01	5 M3.01	1,2,3,4,5,6,8,10,11
F C.6	CARRIER 59US5B080M21--20	BUILDING C	80,000	78,000	95	800	340	1.00	115	1	13.8	20	161	EC C.6	CU C.6	1 M4.01	5 M3.01	1,2,3,4,5,6,8,10,11
F D.1	CARRIER 59US5B080M21--20	BUILDING D	80,000	78,000	95	800	355	1.00	115	1	13.8	20	161	EC D.1	CU D.1	1 M4.01	5 M3.01	1,2,3,4,5,6,8,10,11
F D.2	CARRIER 59US5B080M21--20	BUILDING D	80,000	78,000	95	1200	340	1.00	115	1	13.8	20	161	EC D.2	CU D.2	1 M4.01	5 M3.01	1,2,3,4,5,6,8,10,11
F D.3	CARRIER 59US5B080M21--20	BUILDING D	80,000	78,000	95	1200	340	1.00	115	1	13.8	20	161	EC D.3	CU D.3	1 M4.01	5 M3.01	1,2,3,4,5,6,8,10,11
F D.4	CARRIER 59US5B080M21--20	BUILDING D	80,000	78,000	95	1200	350	1.00	115	1	13.8	20	161	EC D.4	CU D.4	1 M4.01	5 M3.01	1,2,3,4,5,6,8,10,11
F D.5	CARRIER 59US5B080M21--20	BUILDING D	80,000	78,000	95	1200	350	1.00	115	1	13.8	20	161	EC D.5	CU D.5	1 M4.01	5 M3.01	1,2,3,4,5,6,8,10,11
F D.6	CARRIER 59US5B080M21--20	BUILDING D	80,000	78,000	95	800	345	1.00	115	1	13.8	20	161	EC D.6	CU D.6	1 M4.01	5 M3.01	1,2,3,4,5,6,8,10,11
F E.1	CARRIER 58US5B100M21--22	BUILDING E	100,000	97,000	95	1720	1005	1.50	115	1	13.8	20	170	EC E.1	CU E.1	1 M4.01	4 M3.01	1,2,3,4,5,6,8,10,11
F E.2	CARRIER 58US5B100M21--22	BUILDING E	100,000	97,000	95	1720	1005	1.50	115	1	13.8	20	170	EC E.2	CU E.2	1 M4.01	4 M3.01	1,2,3,4,5,6,8,10,11
F E.3	CARRIER 59US5B080M21--20	BUILDING E	80,000	78,000	95	800	325	1.20	115	1	13.8	20	161	EC E.3	CU E.3	1 M4.01	4 M3.01	1,2,3,4,5,6,8,10,11

REMARKS:
1. PROVIDE ULTRA LOW NOX UNIT AND INSTALL NEW UPFLOW FURNACE UNIT PER MANUFACTURER INSTRUCTIONS.
2. ALL DIMENSIONS, SERVICE ACCESS LOCATIONS, AND CONNECTION LOCATIONS SHALL BE FIELD VERIFIED PRIOR TO ORDERING.
3. UNIT CAPACITIES ARE BASED ON OUTDOOR DESIGN TEMPERATURES OF 78 DEG. F DB/62 DEG F WB DURING COOLING PERIOD AND 34 DEG. F DB DURING HEATING PERIOD.
4. ELECTRO-MECHANICAL CONTROL FOR ALERTON CONTROL INTERFACE.
5. PROVIDE SOUTHWARK METAL MFG. CO FURNACE FILTER BASE (GFFB62025 OR APPROVED EQUAL) W/ 4" THICK 20"X25" MERV 13 FILTER. ASHRAE COMPLIANT @ 85% EFFICIENCY(PARTICLE SIZE 1.0-3.0 MICRONS). PROVIDE PAMLICOAIR AIR FILTER MODEL PRIME13 OR APPROVED EQUAL (@ 0.11 MAX. PD IN. WG FOR 3-TON & 0.2 PD IN. WG. FOR 5-TON). SEE FLOOR PLAN FOR FILTER ORIENTATION.
6. PROVIDE CONCENTRIC VENT KIT (3").
7. PROVIDE SOUTHWARK METAL MFG. CO FURNACE FILTER BASE (GFFB41625 OR APPROVED EQUAL) W/ 2" THICK 16"X25" MERV 13 FILTER. ASHRAE COMPLIANT @ 85% EFFICIENCY(PARTICLE SIZE 1.0-3.0 MICRONS). PROVIDE PAMLICOAIR AIR FILTER MODEL PRIME13 OR APPROVED EQUAL (@ 0.24 MAX. PD IN. WG FOR 3-TON). SEE FLOOR PLAN FOR FILTER ORIENTATION.
8. PROVIDE ULTRA LOW NOX UNIT WITH FACTORY SUPPLIED CONDENSATE NEUTRALIZER KIT.
9. PROVIDE CONDENSATE TRAP OFFSET ADAPTER KIT - UPFLOW WITH RIGHT SIDE RETURN
10. PROVIDE DEMAND CONTROL VENTILATION
11. PROVIDE COASTAL CORROSION PROTECTION. FULLY COAT EXTERIOR AND INTERIOR OF CABINET. INSTITU SPRAY COAT ES^2 BY GORILLA COATINGS OR APPROVED EQUAL.

NOTE:
1. ALL DIMENSIONS, SERVICE FURNACE ACCESS LOCATIONS, AND CONNECTION LOCATIONS SHALL BE VERIFIED PRIOR TO ORDERING/BEGINNING INSTALLATION. CONTRACTOR TO PROVIDE FILTER BOX LAYOUT WITH FURNACE IN SHOP DRAWINGS.
2. INSTALLING CONTRACTOR TO PROVIDE LIQUID & GAS LINE REFRIGERANT PIPES AS PER BELOW:
3-TON :3/8" LIQUID LINE & 7/8" GAS LINE.
5-TON :3/8" LIQUID LINE & 1-1/8" GAS LINE.

OUTDOOR CONDENSING UNIT SCHEDULE - BUILDINGS A, B, C, D, E

SYM	MFR & MODEL #	TONS	AREA SERVICED	COOLING CAPACITY	SEER	ELECTRICAL V	PH	MCA	MOCP	WEIGHT (LBS)	INDOOR UNIT	CONTROL DETAIL	ANCHORAGE DETAIL	REMARKS
CU A.1	CARRIER 26SCA560	5.0	BUILDING A	60,000	15.0	230	1	31.4	50	216	F 1.1	1 M4.01	3 M3.01	1,2,3,4,5
CU B.1	CARRIER 26SCA536	3.0	BUILDING B	36,000	15.5	230	1	17.6	30	177	F 1.2	1 M4.01	4 M3.01	1,2,3,4,5
CU B.2	CARRIER 26SCA536	3.0	BUILDING B	36,000	15.5	230	1	17.6	30	177	F 1.3	1 M4.01	3 M3.01	1,2,3,4,5
CU C.1	CARRIER 26SCA536	3.0	BUILDING C	36,000	15.5	230	1	17.6	30	177	F 1.4	1 M4.01	3 M3.01	1,2,3,4,5
CU C.2	CARRIER 26SCA536	3.0	BUILDING C	36,000	15.5	230	1	17.6	30	177	F 2.1	1 M4.01	3 M3.01	1,2,3,4,5
CU C.3	CARRIER 26SCA536	3.0	BUILDING C	36,000	15.5	230	1	17.6	30	177	F 2.2	1 M4.01	3 M3.01	1,2,3,4,5
CU C.4	CARRIER 26SCA536	3.0	BUILDING C	36,000	15.5	230	1	17.6	30	177	F 2.3	1 M4.01	3 M3.01	1,2,3,4,5
CU C.5	CARRIER 26SCA536	3.0	BUILDING C	36,000	15.5	230	1	17.6	30	177	F 3.1	1 M4.01	3 M3.01	1,2,3,4,5
CU C.6	CARRIER 26SCA536	3.0	BUILDING C	36,000	15.5	230	1	17.6	30	177	F 3.2	1 M4.01	3 M3.01	1,2,3,4,5
CU D.1	CARRIER 26SCA536	3.0	BUILDING D	36,000	15.5	230	1	17.6	30	177	F 3.3	1 M4.01	3 M3.01	1,2,3,4,5
CU D.2	CARRIER 26SCA536	3.0	BUILDING D	36,000	15.5	230	1	17.6	30	177	F 7.1	1 M4.01	3 M3.01	1,2,3,4,5
CU D.3	CARRIER 26SCA536	3.0	BUILDING D	36,000	15.5	230	1	17.6	30	177	F 7.2	1 M4.01	3 M3.01	1,2,3,4,5
CU D.4	CARRIER 26SCA536	3.0	BUILDING D	36,000	15.5	230	1	17.6	30	177	F 7.3	1 M4.01	3 M3.01	1,2,3,4,5
CU D.5	CARRIER 26SCA536	3.0	BUILDING D	36,000	15.5	230	1	17.6	30	177	F 8.1	1 M4.01	3 M3.01	1,2,3,4,5
CU D.6	CARRIER 26SCA536	3.0	BUILDING D	36,000	15.5	230	1	17.6	30	177	F 8.2	1 M4.01	3 M3.01	1,2,3,4,5
CU E.1	CARRIER 26SCA560	5.0	BUILDING E	60,000	15.0	230	1	31.4	50	216	F 8.3	1 M4.01	3 M3.01	1,2,3,4,5
CU E.2	CARRIER 26SCA560	5.0	BUILDING E	60,000	15.0	230	1	31.4	50	216	F 9.1	1 M4.01	3 M3.01	1,2,3,4,5
CU E.3	CARRIER 26SCA536	3.0	BUILDING E	36,000	15.5	230	1	17.6	30	177	F 9.2	1 M4.01	3 M3.01	1,2,3,4,5

REMARKS:
1. PROVIDE AND INSTALL NEW CONDENSING UNIT PER MANUFACTURER INSTRUCTIONS.
2. PROVIDE NEOPRENE PADS.
3. UNIT CAPACITIES ARE BASED ON OUTDOOR DESIGN TEMPERATURES OF 78 DEF. F DB/62 DEG. F WB DURING COOLING PERIOD AND 34 DEG.F DB DURING HEATING PERIOD.
4. INSULATE REFRIGERANT PIPING LINES IN ITS ENTIRETY FROM OUTDOOR UNIT TO INDOOR COOLING COIL . PROVIDE ALUMINUM WEATHER JACKETING FOR ALL OUTDOOR REFRIGERANT PIPING.
5. PROVIDE COASTAL CORROSION PROTECTION. FULLY COAT THE EXTERIOR AND INTERIOR OF CABINET INCLUDING COILS. INSTITU SPRAY COAT ES^2 BY GORILLA COATINGS OR APPROVED EQUAL.
6. TYPE R-454B REFRIGERANT.
7. INSTALL FILTER DRIERS INDOORS AND ADJACENT TO COILS.

NOTE:
1. REFRIGERANT LINE SIZES ARE 3/8" RL & 7/8" RG FOR 3-TON UNIT AND 3/8" RL & 1-1/8" FOR 5-TON UNITS. CONTRACTOR SHALL COORDINATE FINAL REFRIGERANT PIPE SIZES WITH MANUFACTURER REPRESENTATIVE BASED UPON DETERMINATION OF ACTUAL IN FIELD DEVELOPED LENGTH PRIOR TO ORDERING PRODUCT.

EVAPORATOR COIL SCHEDULE - BUILDINGS A, B, C, D, E

SYM	MFR & MODEL #	AREA SERVICED	COOLING CAP.(BTUH)	CFM	APD (IN WG)	WT (LBS)	INTERLOCK WITH	CONTROL DETAIL	ANCHORAGE DETAIL	REMARKS
EC A.1	CARRIER CAAMP6024AMA	BUILDING A	60,000	1645	0.24	92	F A.1	1 M4.01	4 M3.01	1,2,3,4,6,7
EC B.1	CARRIER CAAMP3617AMA	BUILDING B	36,000	1200	0.17	67	F B.1	1 M4.01	14 M3.01	1,2,3,4,5,6,7
EC B.2	CARRIER CAAMP3617AMA	BUILDING B	36,000	1200	0.17	67	F B.2	1 M4.01	14 M3.01	1,2,3,4,5,6,7
EC C.1	CARRIER CAAMP3617AMA	BUILDING C	36,000	1200	0.17	67	F C.1	1 M4.01	5 M3.01	1,2,3,4,5,6,7
EC C.2	CARRIER CAAMP3617AMA	BUILDING C	36,000	1200	0.17	67	F C.2	1 M4.01	5 M3.01	1,2,3,4,5,6,7
EC C.3	CARRIER CAAMP3617AMA	BUILDING C	36,000	800	0.17	67	F C.3	1 M4.01	5 M3.01	1,2,3,4,5,6,7
EC C.4	CARRIER CAAMP3617AMA	BUILDING C	36,000	800	0.17	67	F C.4	1 M4.01	5 M3.01	1,2,3,4,5,6,7
EC C.5	CARRIER CAAMP3617AMA	BUILDING C	36,000	800	0.17	67	F C.5	1 M4.01	5 M3.01	1,2,3,4,5,6,7
EC C.6	CARRIER CAAMP3617AMA	BUILDING C	36,000	800	0.17	67	F C.6	1 M4.01	5 M3.01	1,2,3,4,5,6,7
EC D.1	CARRIER CAAMP3617AMA	BUILDING D	36,000	800	0.17	67	F D.1	1 M4.01	5 M3.01	1,2,3,4,5,6,7
EC D.2	CARRIER CAAMP3617AMA	BUILDING D	36,000	1200	0.17	67	F D.2	1 M4.01	5 M3.01	1,2,3,4,5,6,7
EC D.3	CARRIER CAAMP3617AMA	BUILDING D	36,000	1200	0.17	67	F D.3	1 M4.01	5 M3.01	1,2,3,4,5,6,7
EC D.4	CARRIER CAAMP3617AMA	BUILDING D	36,000	1200	0.17	67	F D.4	1 M4.01	5 M3.01	1,2,3,4,5,6,7
EC D.5	CARRIER CAAMP3617AMA	BUILDING D	36,000	1200	0.17	67	F D.5	1 M4.01	5 M3.01	1,2,3,4,5,6,7
EC D.6	CARRIER CAAMP3617AMA	BUILDING D	36,000	800	0.17	67	F D.6	1 M4.01	5 M3.01	1,2,3,4,5,6,7
EC E.1	CARRIER CAAMP6024AMA	BUILDING E	60,000	1720	0.24	92	F E.1	1 M4.01	4 M3.01	1,2,3,4,6,7
EC E.2	CARRIER CAAMP6024AMA	BUILDING E	60,000	1720	0.24	92	F E.2	1 M4.01	4 M3.01	1,2,3,4,6,7
EC E.3	CARRIER CAAMP3617AMA	BUILDING E	36,000	800	0.17	67	F E.3	1 M4.01	4 M3.01	1,2,3,4,6,7

REMARKS:
1. PROVIDE AND INSTALL NEW EVAPORATIVE COIL UNIT PER MANUFACTURER INSTRUCTIONS.
2. ALL DIMENSIONS, SERVICE ACCESS LOCATIONS, AND CONNECTION LOCATIONS SHALL BE FIELD VERIFIED PRIOR TO ORDERING.
3. INSTALL FILTER DRIERS INDOORS ADJACENT TO COILS. PROVIDE PIPE INSULATION FOR ALL REFRIGERANT AND CONDENSATE DRAIN PIPING.
4. TYPE R454B REFRIGERANT.
5. PROVIDE CONDENSATE PUMP AND RE-CONNECT EXISTING POWER.
6. R-454B LEAK DISSIPATION SYSTEM FURNISHED BY FACTORY AND FIELD INSTALLED BY CONTRACTOR.
7. PROVIDE COASTAL CORROSION PROTECTION. FULLY COAT THE EXTERIOR AND INTERIOR OF CABINET INCLUDING COILS. INSTITU SPRAY COAT ES^2 BY GORILLA COATINGS OR APPROVED EQUAL.

PIPE MATERIAL SCHEDULE

SERVICE	LOCATION	MATERIAL: COPPER PIPE	COPPER PIPE TYPE "L"	COPPER TYPE "M"	BLACK STEEL SCH 40	POLYETHYLENE (PE) PIPE & FITTINGS	NO HUB CAST IRON	HUB AND SPIGOT CAST IRON	REMARKS
NATURAL GAS (NG)	ABOVE GROUND				●				2
CONDENSATE DRAINAGE (CD)	ABOVE GROUND			●					1,3

REMARKS:
1. PROVIDE INDOOR CONDENSATE PIPING WITH INSULATION BY "LMCOA" "LMCOLOCK". 3/4" THICKNESS CLOSED-CELL INSULATION. INSULATION SHALL HAVE A FLAME SPREAD OF NOT MORE THAN 25 AND A SMOKE DENSITY NOT EXCEEDING 50 PER 2022 CMC. ALL JOINTS SHALL BE MITERED AND SECURED WITH BLACK DUCT TAPE.
2. HPROVIDE SCHEDULE 40 BLACK STEEL CONFORMING TO ASTM A53 WITH BLACK MALLEABLE IRON THREADED FITTINGS CONFORM TO ASME B16.3 FOR PIPING 2 INCHES AND SMALLER ABOVE GROUND.
3. PROVIDE ASTM B 88, TYPE M COPPER PIPE FOR ABOVE GROUND.

AIR DISTRIBUTION SCHEDULE

SYM.	MFR. & MODEL #	NECK SIZE	CFM RANGE	MAX. NECK VELOCITY	MAX. N.C.	S.P. DROP	TYPE	DAMPER	REMARKS
- TG-1	KRUEGER EGC5	24"X24"	0-1400	400	30	.03	EGG-CRATE	NONE	FRAME 23 FOR T-BAR

LEGEND

400 / SD-1 — CFM; AIR DISTRIBUTION DEVICE

SD	SUPPLY DIFFUSER
RG	RETURN GRILLE
TG	TRANSFER GRILLE
EG	EXHAUST GRILLE

GRAVITY HOOD SCHEDULE

SYM.	MFR.& MODEL#	TYPE	CFM	PD	THROAT SIZE	FREE AREA	HOOD SIZE (W xL)	WT	REMARKS
GR A.1	GREENHECK FGR	RELIEF	975	.05	18"X18"	2.25 SQ.FT.	32"X39"	75 LBS	1, 2, 3
GR A.2	GREENHECK FGR	RELIEF	670	.05	18"X18"	2.25 SQ.FT.	32"X39"	75 LBS	1, 2, 3
GI A.3	GREENHECK FGI	INTAKE	1645	.03	24"X24"	4.0 SQ.FT.	52"X39"	90 LBS	1, 2, 3
GR B.1	GREENHECK FGR	RELIEF	1200	.05	14"X30"	2.92 SQ.FT.	28"X51"	75 LBS	2, 3, 4
GR B.2	GREENHECK FGR	RELIEF	1200	.05	14"X30"	2.92 SQ.FT.	28"X51"	75 LBS	1, 2, 3
GR C.1	GREENHECK FGR	RELIEF	1200	.05	20"X20"	2.78 SQ.FT.	34"X39"	75 LBS	1, 2, 3
GR C.2	GREENHECK FGR	RELIEF	1200	.05	20"X20"	2.78 SQ.FT.	34"X39"	75 LBS	1, 2, 3
GR D.2	GREENHECK FGR	RELIEF	1200	.05	20"X20"	2.78 SQ.FT.	34"X39"	75 LBS	1, 2, 3
GR D.3	GREENHECK FGR	RELIEF	1200	.05	20"X20"	2.78 SQ.FT.	34"X39"	75 LBS	1, 2, 3
GR D.4	GREENHECK FGR	RELIEF	1200	.05	20"X20"	2.78 SQ.FT.	34"X39"	75 LBS	1, 2, 3
GR D.5	GREENHECK FGR	RELIEF	1200	.05	20"X20"	2.78 SQ.FT.	34"X39"	75 LBS	1, 2, 3

REMARKS:
1. PROVIDE GREENHECK WD-100 COUNTERBALANCE DAMPER PER THE THROAT SIZE.
2. PROVIDE INSECT SCREEN.
3. PROVIDE 14" ROOF CURB.
4. PROVIDE MOTORIZED DAMPER PER M4.01, EMS CONTROL DIAGRAMS.

#	Revisions		
Delta	Date	Revisions	By

optimum energy design
Consulting Engineers
5277 College Avenue
Oakland, CA 94618
Telephone (510) 837-9182

This document is the property of the Owner and is not to be used without their written permission

REGISTERED PROFESSIONAL ENGINEER ROBERT BANEGAS No. M29253 Exp. 6/30/27 MECHANICAL STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY Architects Project number: Project Number

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
MECHANICAL SCHEDULES

Client Project Number: 0000.0

Scale: Not to Scale
Drawn By: CC
Checked By: AK
Issue Date:
Revit Version: 2023

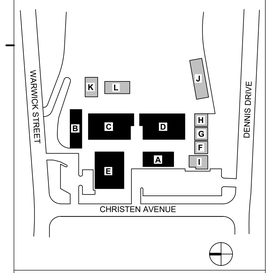
Sheet
M0.03
Sheet of

3/20/2025 3:12:50 PM M:\P - PROJECTS\2025\502-25-0001 SFUSD SKYLINE ES\02_MECH

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026



Revisions

Delta	Date	Revisions	By

optimum energy design
Consulting Engineers
5277 College Avenue
Oakland, CA 94618
Telephone (510) 837-9182

This document is the property of the Owner and is not to be used without their written permission

REGISTERED PROFESSIONAL ENGINEER
ABBY BANERJEE
No. M29253
Exp. 6/30/27
MECHANICAL
STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: Project Number

Facility

SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project

HVAC REPLACEMENT

Sheet Title

MECHANICAL BUILDINGS REFERENCE PLAN

Client Project Number: 0000.0

Scale: As Indicated
Drawn By: CC
Checked By: AK
Issue Date:
Revit Version: 2023

Sheet

M1.01

Sheet of

N REF. NORTH

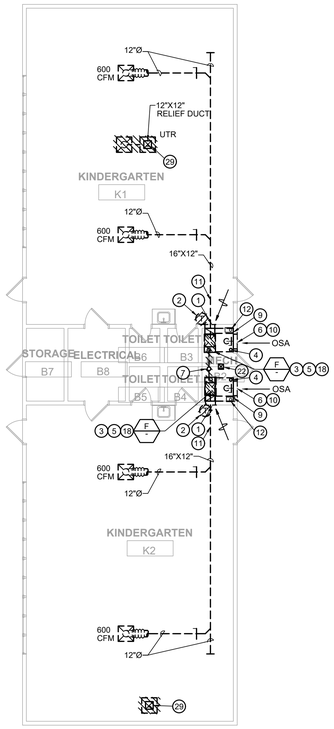
MECHANICAL BUILDINGS REFERENCE PLAN

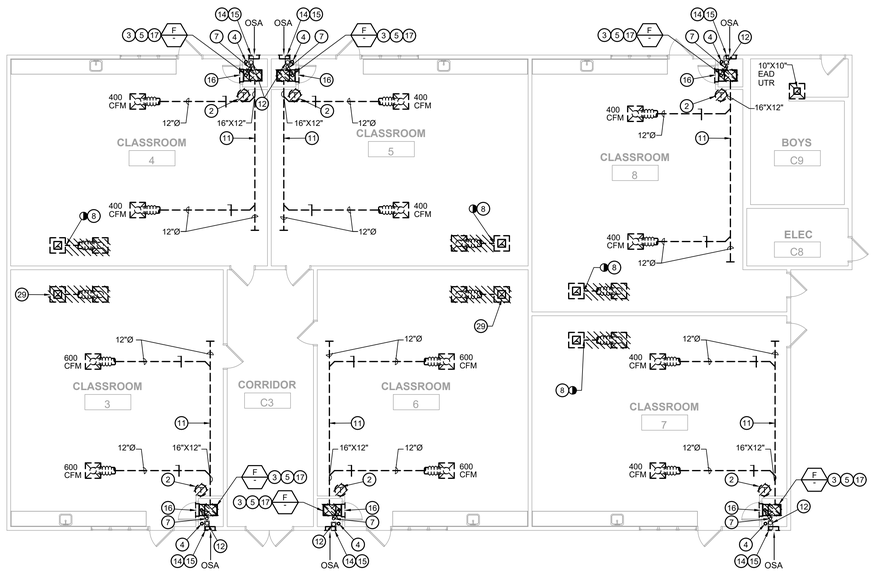
1/16" = 1'-0" | 1

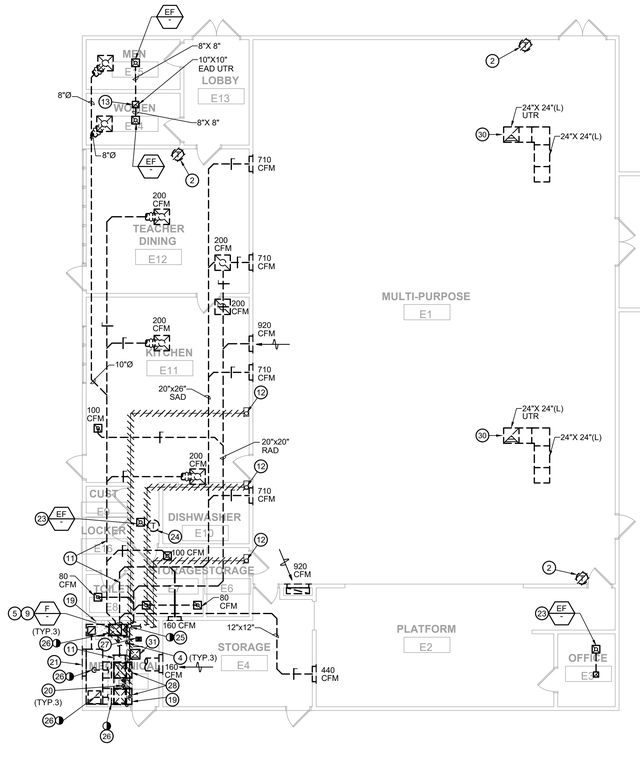
3/26/2025 3:12:50 PM M:\P - PROJECTS\2025\502-25-0001 SFUSD SKYLINE ES\02_MECH

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY







N REF. NORTH

BUILDINGS B, C, & E MECHANICAL DEMOLITION FLOOR PLANS | 1/8" = 1'-0" | 1

DEMOLITION CONSTRUCTION NOTES:

1. CONTRACTOR SHALL REUSE EXISTING OPENING(S) IN WALLS AND/OR ROOF FOR FUTURE PIPING AND ETC WHEREVER POSSIBLE. COORDINATE WITH OTHER TRADES AS NECESSARY.
2. CONTRACTOR SHALL PATCH AND REPAIR EXISTING WALLS, FLOORS, CEILINGS, AND/OR ROOF OPENING(S) AS NECESSARY FOR EXISTING HVAC EQUIPMENT, DUCTS, PIPING, & ETC. BEING REMOVED AND/OR MODIFIED. MATCH SURROUNDING MATERIAL AND MAINTAIN FIRE RATING.
3. EXISTING EXTERIOR WALL LOUVERS ARE BEING REPLACED WITH NEW BY ARCHITECTURAL. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
4. REMOVE EXISTING DDC CONTROLLERS FROM ASSOCIATED EXISTING FURNACES AND SPLIT SYSTEMS BEING REMOVED. CONTRACTOR SHALL FIELD VERIFY THEIR LOCATIONS. INSTALL UNITARY CONTROLLERS FOR NEW WORK.
5. PROVIDE SS CONSTRUCTED COUNTERBALANCE BACKDRAFT DAMPERS FOR ALL BLDGS. RELIEF AIR HOODS. FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR.
6. REPLACE EXISTING DDC CONTROLLERS WITH NEW INCLUDING ACTUATORS AND OSA/RA DAMPERS FOR ALL BUILDINGS. INSTALL SS CONSTRUCTED DAMPERS INCLUDING LINKAGES BY MECHANICAL. 24V MOTORIZED DAMPER ACTUATORS BY CONTROL CONTRACTOR.
7. NO WALL OPENINGS ARE PERMITTED WITHOUT SEOR APPROVAL EXCEPT RE-USING EXISTING OPENINGS AND MODIFICATION TO EXISTING OPENINGS AS NOTED ON THESE PLANS AND DETAILS ON STRUCTURAL DRAWING S8.01.

DEMOLITION KEY NOTES:

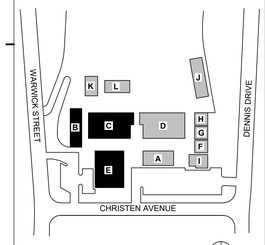
1. RETAIN EXISTING RETURN AIR GRILLE.
2. REMOVE EXISTING FURNACE THERMOSTAT.
3. REMOVE EXISTING COOLING COIL CONDENSATE PIPING IN ITS ENTIRETY INCLUDING CONDENSATE PUMP. RETAIN EXISTING POWER FOR NEW WORK.
4. DISCONNECT EXISTING NG PIPING FROM FURNACE. RETAIN EXISTING NG SUPPLY PIPING FOR NEW WORK RE-CONNECTION.
5. REMOVE EXISTING GAS FIRED FURNACE AND ASSOCIATED APPURTENANCES INCLUDING BUT NOT LIMITED TO CONTROL, SUPPORTS, AND COOLING COIL. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
6. EXISTING HIGH WALL MOUNTED OSA EXTERIOR LOUVER SHALL BE REPLACED WITH NEW BY ARCHITECTURAL. DEMOLISH EXISTING OSA DUCT FROM LOUVER TO MIXING BOX.
7. REMOVE EXISTING FLUE PIPING AND RISER UP THRU' ROOF FROM EXISTING FURNACE(S).
8. REMOVE EXISTING RELIEF AIR DUCT UP THRU' ROOF FROM ROOFTOP RELIEF AIR GRAVITY HOOD TO REMAIN.
9. DEMOLISH EXISTING AIR MIXING BOX.
10. EXISTING LOW WALL MOUNTED COMBUSTION AIR EXTERIOR LOUVER SHALL BE REPLACED WITH NEW BY ARCHITECTURAL.
11. EXISTING SUPPLY AIR DISTRIBUTION TO REMAIN. DISCONNECT DUCT FROM EXISTING FURNACE(S) TO BE REMOVED AND RECONNECT AT NEW WORK INSTALLATION.
12. DEMOLISH EXISTING SPLIT SYSTEM REFRIGERANT PIPING (RG & RL) IN ITS ENTIRETY.
13. EXISTING EXHAUST AIR DUCT UP THRU' ROOF TO ROOFTOP EXHAUST AIR FAN TO REMAIN.
14. EXISTING LOW WALL MOUNTED OSA EXTERIOR LOUVER AT AIR MIXING BOX SHALL BE REPLACED WITH NEW BY ARCHITECTURAL.
15. EXISTING HIGH WALL MOUNTED COMBUSTION AIR EXTERIOR LOUVER SHALL BE REPLACED WITH NEW BY ARCHITECTURAL. DEMOLISH EXISTING ASSOCIATED DUCTWORK.
16. RETAIN EXISTING RETURN AIR GRILLE AT AIR MIXING BOX.
17. EXISTING FURNACE CLOSET AND AIR MIXING BOX SHALL REMAIN FULLY INTACT BY CONTRACTOR. REPLACE EXISTING LINING WITH NEW AND REMOVE FILTER RACK AT TOP OF AIR MIXING BOX. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
18. EXISTING EQUIPMENT PLATFORM SHALL REMAIN FULLY INTACT BY CONTRACTOR.
19. EXISTING CONCRETE PAD TO REMAIN.
20. REMOVE EXISTING COOLING COIL CONDENSATE PIPING IN ITS ENTIRETY.
21. EXISTING EXTERIOR WALL AIR LOUVER SHALL BE REPLACED WITH NEW BY ARCHITECTURAL. DEMOLISH EXISTING OSA AIR PLENUM AND ASSOCIATED DUCTWORK FROM FURNACES .
22. EXISTING COMBUSTION AIR DUCT UP THRU' ROOF TO ROOFTOP GRAVITY HOOD TO REMAIN. ABANDON IN PLACE.
23. EXISTING EXHAUST FAN TO REMAIN.
24. EXISTING THERMOSTAT FOR EXHAUST FAN TO REMAIN.
25. EXISTING FLUE UP THRU' ROOF TO REMAIN. REMOVE EXISTING FLUE FROM EXISTING FURNACE(S) BEING REMOVED AND CUT AND CAP FLUE AT POD.
26. RETAIN EXISTING RETURN AIR DISTRIBUTION FOR RE-CONNECTION AT NEW WORK INSTALLATION.
27. EXISTING FLOOR DRAIN.
28. REMOVE AND RE-INSTALL EXISTING DUCT MOUNTED SMOKE DETECTOR AS REQUIRED.
29. DEMOLISH EXISTING RELIEF AIR DUCT UP THRU' ROOF TO EXISTING ROOFTOP RELIEF AIR GRAVITY HOOD. REMOVE ASSOCIATED CEILING GRILLE.
30. EXISTING RELIEF AIR DISTRIBUTION TO REMAIN.
31. EXISTING COMBUSTION AIR DUCT UP THRU' ROOF TO ROOFTOP GRAVITY HOOD TO REMAIN.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

SAN FRANCISCO UNIFIED SCHOOL DISTRICT · SOUTH · EDUCATION FOR ALL

Revisions			
Delta	Date	Revisions	By

KEY PLAN



optimum energy design
Consulting Engineers
5277 College Avenue
Oakland, CA 94618
Telephone (510) 837-9182

This document is the property of the Owner and is not to be used without their written permission

REGISTERED PROFESSIONAL ENGINEER · BANERJEE · No. M29233 Exp. 6/30/27 · MECHANICAL · STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: Project Number

Facility

SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project

HVAC REPLACEMENT

Sheet Title

BUILDINGS B, C, & E MECHANICAL DEMOLITION FLOOR PLANS

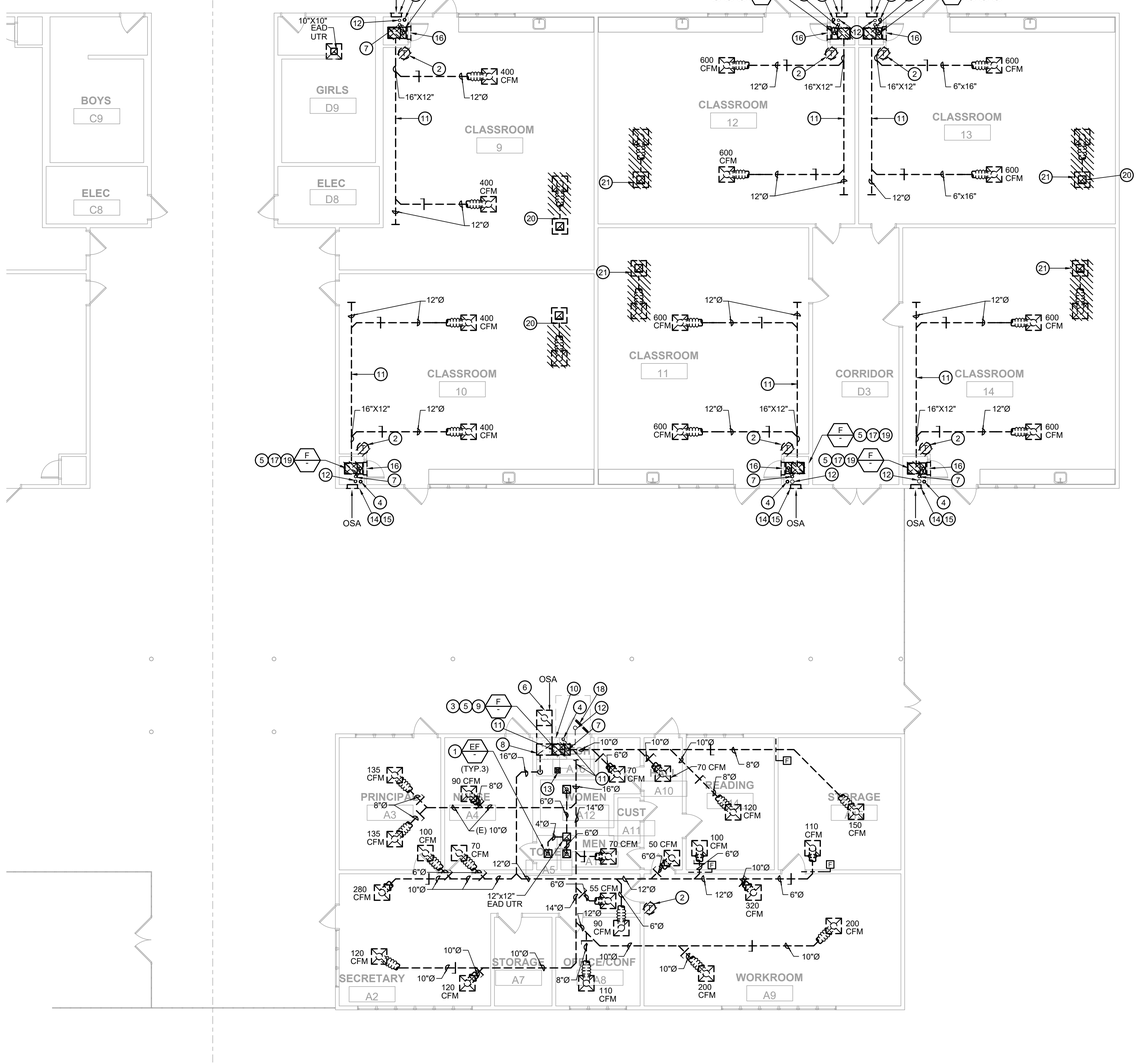
Client Project Number: 0000.0

Scale:	As Indicated	Sheet	MD2.01
Drawn By:	CC		
Checked By:	AK		
Issue Date:			
Revit Version:	2023	Sheet	of

3/26/2025 3:12:50 PM M:\P - PROJECTS\2025\502-25-0001 SFUSD SKYLINE ES\02_MECH

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY



DEMOLITION CONSTRUCTION NOTES:

1. CONTRACTOR SHALL REUSE EXISTING OPENING(S) IN WALLS AND/OR ROOF FOR FUTURE PIPING AND ETC WHEREVER POSSIBLE. COORDINATE WITH OTHER TRADES AS NECESSARY.
2. CONTRACTOR SHALL PATCH AND REPAIR EXISTING WALLS, FLOORS, CEILINGS, AND/OR ROOF OPENING(S) AS NECESSARY FOR EXISTING HVAC EQUIPMENT, DUCTS, PIPING, & ETC. BEING REMOVED AND/OR MODIFIED. MATCH SURROUNDING MATERIAL AND MAINTAIN FIRE RATING.
3. EXISTING EXTERIOR WALL LOUVERS ARE BEING REPLACED WITH NEW BY ARCHITECTURAL. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
4. REMOVE EXISTING DDC CONTROLLERS FROM ASSOCIATED EXISTING FURNACES AND SPLIT SYSTEMS BEING REMOVED. CONTRACTOR SHALL FIELD VERIFY THEIR LOCATIONS. INSTALL UNITARY CONTROLLERS FOR NEW WORK.
5. PROVIDE SS CONSTRUCTED COUNTERBALANCE BACKDRAFT DAMPERS FOR ALL BLDGS. RELIEF AIR HOODS. FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR.
6. REPLACE EXISTING DDC CONTROLLERS WITH NEW INCLUDING ACTUATORS AND OSA/RA DAMPERS FOR ALL BUILDINGS. INSTALL SS CONSTRUCTED DAMPERS INCLUDING LINKAGES BY MECHANICAL, 24V MOTORIZED DAMPER ACTUATORS BY CONTROL CONTRACTOR.
7. NO WALL OPENINGS ARE PERMITTED WITHOUT SEOR APPROVAL EXCEPT RE-USING EXISTING OPENINGS AND MODIFICATION TO EXISTING OPENINGS AS NOTED ON THESE PLANS AND DETAILS ON STRUCTURAL DRAWING S8.01.

DEMOLITION KEY NOTES:

1. EXISTING EXHAUST FAN TO REMAIN.
2. REMOVE EXISTING FURNACE THERMOSTAT.
3. REMOVE EXISTING COOLING COIL CONDENSATE PIPING IN ITS ENTIRETY.
4. DISCONNECT EXISTING NG PIPING FROM FURNACE. RETAIN EXISTING NG SUPPLY PIPING FOR NEW WORK RE-CONNECTION.
5. REMOVE EXISTING GAS FIRED FURNACE AND ASSOCIATED APPURTENANCES INCLUDING BUT NOT LIMITED TO CONTROL, SUPPORTS, AND COOLING COIL. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
6. REMOVE EXISTING OSA DUCT WITHIN WALKWAY CEILING SPACE UP THRU' ROOF TO ROOFTOP GRAVITY HOOD. DEMOLISH EXISTING OSA DUCT FROM FURNACE.
7. REMOVE EXISTING FLUE PIPING AND RISER UP THRU' ROOF FROM EXISTING FURNACE.
8. REMOVE EXISTING RETURN AIR PLENUM UP TO OSA DUCT.
9. DEMOLISH EXISTING AIR MIXING BOX.
10. EXISTING CONCRETE PAD TO REMAIN.
11. EXISTING SUPPLY/RETURN AIR DISTRIBUTION TO REMAIN. DISCONNECT DUCTS FROM EXISTING FURNACE TO BE REMOVED AND RECONNECT AT NEW WORK INSTALLATION.
12. DEMOLISH EXISTING SPLIT SYSTEM REFRIGERANT PIPING (RG & RL) IN ITS ENTIRETY.
13. EXISTING FLOOR SINK TO REMAIN.
14. EXISTING LOW WALL MOUNTED OSA EXTERIOR LOUVER AT AIR MIXING BOX SHALL BE REPLACED WITH NEW BY ARCHITECTURAL.
15. EXISTING HIGH WALL MOUNTED COMBUSTION AIR EXTERIOR LOUVER SHALL BE REPLACED WITH NEW BY ARCHITECTURAL. DEMOLISH EXISTING ASSOCIATED DUCTWORK.
16. RETAIN EXISTING RETURN AIR GRILLE AT AIR MIXING BOX.
17. EXISTING FURNACE CLOSET AND AIR MIXING BOX SHALL REMAIN FULLY INTACT BY CONTRACTOR. REPLACE EXISTING LINING WITH NEW AND REMOVE FILTER RACK AT TOP OF AIR MIXING BOX. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
18. EXISTING HIGH AND LOW DOOR LOUVERS SHALL BE REPLACED WITH NEW BY ARCHITECTURAL. SEE ARCHITECTURAL DRAWINGS FOR ADDTIONAL INFORMATION..
19. REMOVE EXISTING COOLING COIL CONDENSATE PIPING IN ITS ENTIRETY INCLUDING CONDENSATE PUMP. RETAIN EXISTING POWER FOR NEW WORK.
20. DEMOLISH EXISTING RELIEF AIR DUCT UP THRU' ROOF TO EXISTING ROOFTOP RELIEF AIR GRAVITY HOOD. REMOVE ASSOCIATED CEILING GRILLE.
21. REMOVE EXISTING RELIEF AIR DUCT UP THRU' ROOF FROM ROOFTOP RELIEF AIR GRAVITY HOOD TO REMAIN.

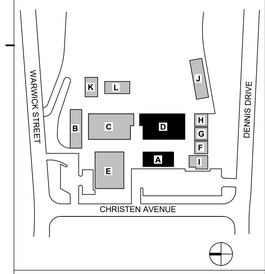
N REF. NORTH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

SAN FRANCISCO UNIFIED SCHOOL DISTRICT · SOUTH · EDUCATION FOR ALL

#	Revisions		
Delta	Date	Revisions	By

KEY PLAN



optimum energy design
Consulting Engineers
5277 College Avenue
Oakland, CA 94618
Telephone (510) 837-9182

This document is the property of the Owner and is not to be used without their written permission

REGISTERED PROFESSIONAL ENGINEER BANERJEE No. M29203 Exp. 6/30/27 MECHANICAL STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: Project Number

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
BUILDINGS A & D MECHANICAL DEMOLITION FLOOR PLANS

Client Project Number: 0000.0

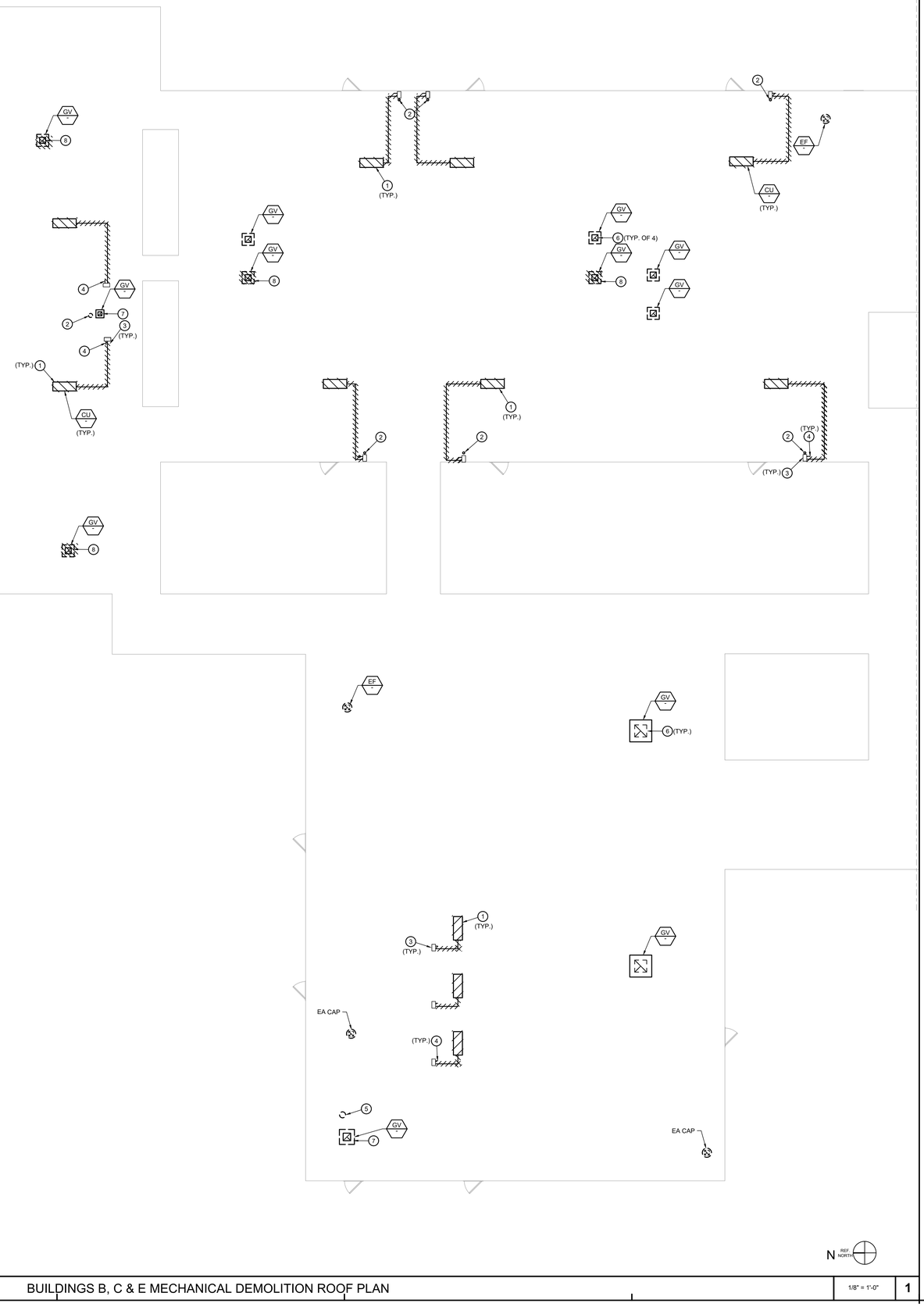
Scale: As Indicated
Drawn By: CC
Checked By: AK
Issue Date:
Revit Version: 2023

Sheet
MD2.02
Sheet of

3/26/2025 3:12:50 PM M:\P - PROJECTS\2025\502-25-0001 SFUSD SKYLINE ES\02_MECH

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY



DEMOLITION GENERAL NOTES:

1. CONTRACTOR SHALL REUSE EXISTING OPENING(S) IN WALLS AND/OR ROOF FOR FUTURE PIPING AND ETC WHEREVER POSSIBLE. COORDINATE WITH OTHER TRADES AS NECESSARY.
2. CONTRACTOR SHALL PATCH AND REPAIR EXISTING WALLS, FLOORS, CEILINGS, AND/OR ROOF OPENING(S) AS NECESSARY FOR EXISTING HVAC EQUIPMENT, DUCTS, PIPING, & ETC. BEING REMOVED AND/OR MODIFIED. MATCH SURROUNDING MATERIAL AND MAINTAIN FIRE RATING.
3. REMOVE EXISTING DDC CONTROLLERS FROM ASSOCIATED EXISTING FURNACES AND SPLIT SYSTEMS BEING REMOVED. CONTRACTOR SHALL FIELD VERIFY THEIR LOCATIONS. INSTALL UNITARY CONTROLLERS FOR NEW WORK.
4. PROVIDE SS CONSTRUCTED COUNTERBALANCE BACKDRAFT DAMPERS FOR ALL BLDGS. RELIEF AIR HOODS. FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR.
5. REPLACE EXISTING DDC CONTROLLERS WITH NEW INCLUDING ACTUATORS AND OSA/RA DAMPERS FOR ALL BUILDINGS. INSTALL SS CONSTRUCTED DAMPERS INCLUDING LINKAGES BY MECHANICAL. 24V MOTORIZED DAMPER ACTUATORS BY CONTROL CONTRACTOR.
6. NO WALL OPENINGS ARE PERMITTED WITHOUT SEOR APPROVAL EXCEPT RE-USING EXISTING OPENINGS AND MODIFICATION TO EXISTING OPENINGS AS NOTED ON THESE PLANS AND DETAILS ON STRUCTURAL DRAWING S8.01.

DEMOLITION KEYNOTES:

1. DEMOLISH EXISTING ROOFTOP SPLIT SYSTEM CONDENSING UNIT AND ASSOCIATED APPURTENANCES INCLUDING BUT NOT LIMITED TO SUPPORTS AND REFRIGERANT PIPING. SEE ELECTRICAL DRAWINGS FOR POWER INFORMATION.
2. EXISTING FLUE FROM FURNACE TO BE REMOVED IN ITS ENTIRETY.
3. RETAIN EXISTING GOOSENECK FOR PIPING DOWN THRU' ROOF FOR NEW WORK INSTALLATION.
4. DEMOLISH EXISTING CONDENSATE PIPING.
5. RETAIN EXISTING FLUE.
6. EXISTING RELIEF AIR GRAVITY HOOD TO REMAIN.
7. EXISTING COMBUSTION AIR GRAVITY HOOD TO REMAIN.
8. DEMOLISH EXISTING RELIEF AIR GRAVITY HOOD.

N REF NORTH

BUILDINGS B, C & E MECHANICAL DEMOLITION ROOF PLAN | 1/8" = 1'-0" | 1

3/26/2025 3:12:59 PM M:\P - PROJECTS\2025\502-25-000\1 SFUSD SKYLINE ES\02_MECH

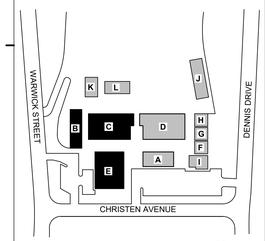
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

SAN FRANCISCO UNIFIED SCHOOL DISTRICT · SOUTH · EDUCATION FOR ALL

Revisions

Delta	Date	Revisions	By

KEY PLAN



optimum energy design
Consulting Engineers
5277 College Avenue
Oakland, CA 94618
Telephone (510) 837-9182

This document is the property of the Owner and is not to be used without their written permission

REGISTERED PROFESSIONAL ENGINEER · ROBERT BARBERIS · No. M29253 Exp. 6/30/27 · MECHANICAL · STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: Project Number

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
BUILDINGS B, C & E MECHANICAL DEMOLITION ROOF PLAN

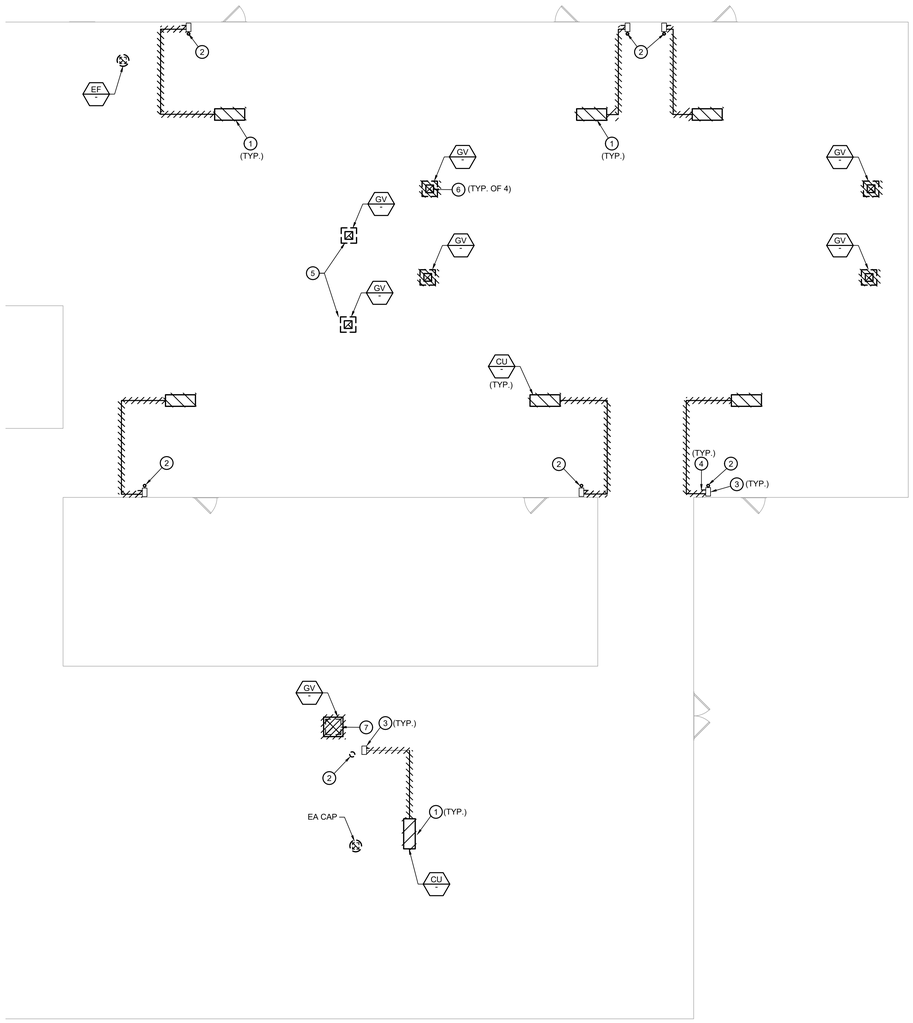
Client Project Number: 0000.0

Scale: As Indicated
Drawn By: CC
Checked By: AK
Issue Date:
Revit Version: 2023

Sheet
MD2.03
Sheet of

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY



DEMOLITION GENERAL NOTES:

1. CONTRACTOR SHALL REUSE EXISTING OPENING(S) IN WALLS AND/OR ROOF FOR FUTURE PIPING AND ETC WHEREVER POSSIBLE. COORDINATE WITH OTHER TRADES AS NECESSARY.
2. CONTRACTOR SHALL PATCH AND REPAIR EXISTING WALLS, FLOORS, CEILINGS, AND/OR ROOF OPENING(S) AS NECESSARY FOR EXISTING HVAC EQUIPMENT, DUCTS, PIPING, & ETC. BEING REMOVED AND/OR MODIFIED. MATCH SURROUNDING MATERIAL AND MAINTAIN FIRE RATING.
3. REMOVE EXISTING DDC CONTROLLERS FROM ASSOCIATED EXISTING FURNACES AND SPLIT SYSTEMS BEING REMOVED. CONTRACTOR SHALL FIELD VERIFY THEIR LOCATIONS. INSTALL UNITARY CONTROLLERS FOR NEW WORK.
4. PROVIDE SS CONSTRUCTED COUNTERBALANCE BACKDRAFT DAMPERS FOR ALL BLDGS. RELIEF AIR HOODS. FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR.
5. REPLACE EXISTING DDC CONTROLLERS WITH NEW INCLUDING ACTUATORS AND OSA/RA DAMPERS FOR ALL BUILDINGS. INSTALL SS CONSTRUCTED DAMPERS INCLUDING LINKAGES BY MECHANICAL. 24V MOTORIZED DAMPER ACTUATORS BY CONTROL CONTRACTOR.
6. NO WALL OPENINGS ARE PERMITTED WITHOUT SEOR APPROVAL EXCEPT RE-USING EXISTING OPENINGS AND MODIFICATION TO EXISTING OPENINGS AS NOTED ON THESE PLANS AND DETAILS ON STRUCTURAL DRAWING S8.01.

DEMOLITION KEYNOTES:

1. DEMOLISH EXISTING ROOFTOP SPLIT SYSTEM CONDENSING UNIT AND ASSOCIATED APPURTENCES INCLUDING BUT NOT LIMITED TO SUPPORTS AND REFRIGERANT PIPING. SEE ELECTRICAL DRAWINGS FOR POWER INFORMATION.
2. EXISTING FLUE FROM FURNACE TO BE REMOVED IN ITS ENTIRETY.
3. RETAIN EXISTING GOOSENECK FOR PIPING DOWN THRU' ROOF FOR NEW WORK INSTALLATION.
4. DEMOLISH EXISTING CONDENSATE PIPING.
5. EXISTING RELIEF AIR GRAVITY HOOD TO REMAIN.
6. DEMOLISH EXISTING RELIEF AIR GRAVITY HOOD.
7. DEMOLISH EXISTING OUTSIDE AIR INTAKE GRAVITY HOOD.

N REF. NORTH

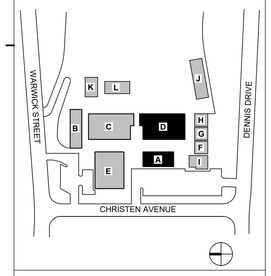
BUILDINGS A & D MECHANICAL DEMOLITION ROOF PLAN | 1/8" = 1'-0" | 1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

SAN FRANCISCO UNIFIED SCHOOL DISTRICT · SOUTH EDUCATION FOR ALL

Revisions			
Delta	Date	Revisions	By

KEY PLAN



optimum energy design
Consulting Engineers
5277 College Avenue
Oakland, CA 94618
Telephone (510) 837-9182

This document is the property of the Owner and is not to be used without their written permission

REGISTERED PROFESSIONAL ENGINEER ROBERT BANEVICH No. M29253 Exp. 8/30/27 MECHANICAL STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY Architects Project number: Project Number

Facility

SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project

HVAC REPLACEMENT

Sheet Title

BUILDINGS A & D MECHANICAL DEMOLITION ROOF PLAN

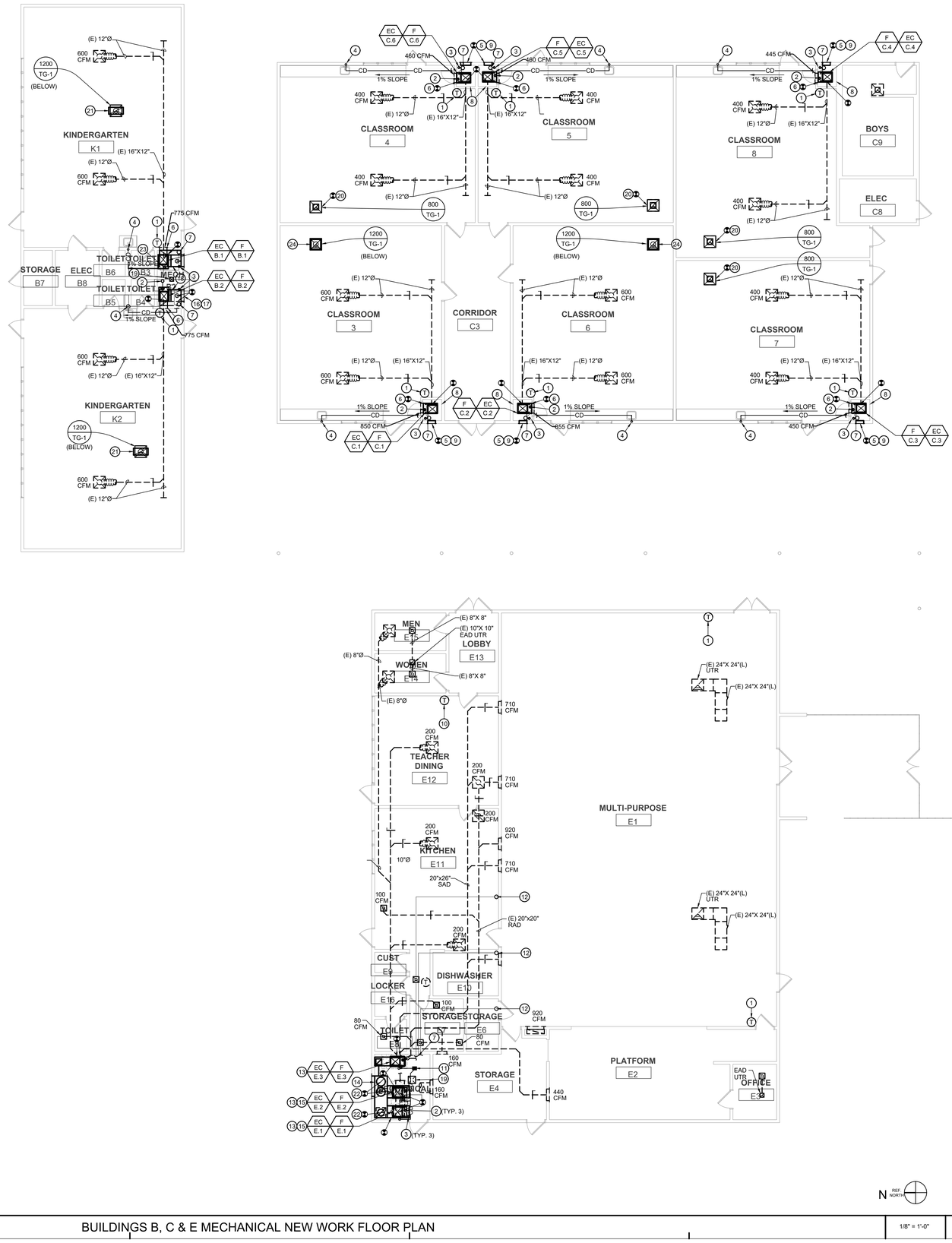
Client Project Number: 0000.0

Scale:	As Indicated	Sheet	MD2.04
Drawn By:	CC		
Checked By:	AK		
Issue Date:			
Revit Version:	2023	Sheet	of

3/26/2025 3:12:50 PM M:\P - PROJECTS\2025\502-25-0001 SFUSD SKYLINE ES\02_MECH

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY



N REF NORTH

CONSTRUCTION GENERAL NOTES:

1. MAINTAIN MANUFACTURER'S MINIMUM CLEARANCES ON ALL MECHANICAL EQUIPMENT.
2. CONTRACTOR SHALL INSTALL PIPING SUCH THAT EQUIPMENT AND ALL APPURTENANCES ARE EASILY SERVICEABLE.
3. CONTRACTOR SHALL REUSE EXISTING OPENING(S) IN WALLS AND/OR ROOF FOR FUTURE PIPING AND ETC, WHEREVER POSSIBLE. COORDINATE WITH OTHER TRADES AS NECESSARY.
4. CONTRACTOR SHALL PATCH AND REPAIR EXISTING WALLS, FLOORS, CEILINGS, AND/OR ROOF OPENING(S) AS NECESSARY FOR EXISTING HVAC EQUIPMENT, DUCTS, PIPING, & ETC. BEING REMOVED. MATCH SURROUNDING MATERIAL AND MAINTAIN FIRE RATING.
5. CONTRACTOR SHALL INSULATE ALL REFRIGERANT PIPING LINES AND PROVIDE ALUMINUM WEATHER JACKETING FOR ALL OUTDOOR REFRIGERANT PIPING.
6. CONTRACTOR SHALL COORDINATE VENT, AND REFRIGERANT PIPE SIZES WITH MANUFACTURER REPRESENTATIVE(S) BASED UPON DETERMINATION OF ACTUAL IN FIELD DEVELOPED LENGTH PRIOR TO ORDERING PRODUCT.
7. PROVIDE SS CONSTRUCTED GRAVITY TYPE BACKDRAFT DAMPERS FOR OSA LOUVERS/GRAVITY AIR INTAKE HOODS AT BLDGS. A, B, AND E.
8. REPLACE EXISTING DDC CONTROLLERS WITH NEW INCLUDING ACTUATORS AND OSA/RA DAMPERS FOR ALL BUILDINGS. INSTALL SS CONSTRUCTED DAMPERS INCLUDING LINKAGES. DAMPER BY AND ACTUATOR BY CONTROLS CONTRACTOR.
8. NO WALL OPENINGS ARE PERMITTED WITHOUT SEOR APPROVAL EXCEPT RE-USING EXISTING OPENINGS AND MODIFICATION TO EXISTING OPENINGS AS NOTED ON THESE PLANS AND DETAILS ON STRUCTURAL DRAWING S8.01.

CONSTRUCTION KEY NOTES:

1. NEW ELECTRONIC THERMOSTAT WITH CO2 SENSOR FOR FURNACE. MOUNT AT 48" A.F.F.
2. CONNECT NEW 2.5" VENT AND COMBUSTION AIR INTAKE TO UNIT WITH 3" CONCENTRIC VENT UP THRU' ROOF. RE-USE EXISTING ROOF OPENING AND MODIFY AS NECESSARY.
3. CONNECT NEW NG PIPING FROM FURNACE TO EXISTING NG SUPPLY PIPING.
4. NEW 3/4" CD PIPING DOWN INSIDE WALL TO SINK TAILPIECE FROM CONDENSING FURNACE AND COOLING COIL. PROVIDE P-TRAP AT UNIT.
5. ROUTE NEW OSA DUCT TO NEW LOW WALL MOUNTED OSA EXTERIOR WALL LOUVER W/ INSECT SCREEN AT AIR MIXING BOX. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
6. EXISTING RETURN AIR GRILLE TO REMAIN.
7. CONNECT NEW REFRIGERANT PIPING (RG & RL) FROM ROOFTOP CONDENSING UNIT TO COOLING COIL.
8. EXISTING FURNACE CLOSET AND AIR MIXING BOX TO REMAIN. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
9. ROUTE NEW OSA DUCT TO NEW HIGH WALL OSA EXTERIOR WALL LOUVER W/ INSECT SCREEN. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
10. NEW ELECTRONIC THERMOSTAT FOR FURNACE. MOUNT AT 48" A.F.F.
11. NEW 3/4" CD PIPING DOWN TO FLOOR DRAIN WITH 1" AIR GAP.
12. NEW REFRIGERANT PIPING UP THRU' ROOF TO ROOFTOP CONDENSING UNIT. RE-USE EXISTING ROOF OPENING AND MODIFY AS NECESSARY.
13. INSTALL NEW AIR MIXING BOX WITH LINING AND FILTER RACK MOUNTED ON TOP. NEW AIR MIXING BOX FOOTPRINT SIZE SHALL MATCH EXISTING.
14. PROVIDE A MIN. 26" DEEP PLENUM OVER NEW OSA EXERIOR WALL LOUVER W/ INSECT SCREEN. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
15. RE-INSTALL EXISTING DUCT MOUNTED SMOKE DETECTOR(S).
16. ROUTE NEW OSA DUCT W/VD TO NEW LOW WALL MOUNTED OSA EXTERIOR WALL LOUVER W/ INSECT SCREEN. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
17. ROUTE NEW OSA DUCT W/VD TO NEW HIGH WALL MOUNTED OSA EXTERIOR WALL LOUVER W/ INSECT SCREEN AT AIR MIXING BOX. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
18. INSTALL NEW AIR MIXING BOX WITH LINING AND FILTER RACK MOUNTED ON SIDE OF FURNACE. NEW AIR MIXING BOX FOOTPRINT SIZE SHALL MATCH EXISTING.
19. EXISTING COMBUSTION AIR DUCT UP THRU' ROOF TO ROOFTOP GRAVITY HOOD TO REMAIN. ABANDON IN PLACE.
20. PROVIDE NEW 18"X18" UP THRU ROOF. RECONNECT NEW RELIEF AIR DUCT TO EXISTING DUCT DOWN THRU ROOF.
21. PROVIDE NEW 14"X30" RELIEF AIR DUCT UP THRU' ROOF TO GRAVITY RELIEF HOOD.
22. RECONNECT EXISTING RETURN DUCT WORK TO NEW PLENUM.
23. CONNECT NEW 2.5" VENT AND COMBUSTION AIR INTAKE TO UNIT WITH 3" CONCENTRIC VENT UP THRU' ROOF.
24. PROVIDE NEW 20"X20" RELIEF AIR DUCT UP THRU' ROOF TO GRAVITY RELIEF HOOD.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

SAN FRANCISCO UNIFIED SCHOOL DISTRICT · SOUTH EDUCATION FOR ALL

Revisions			
Delta	Date	Revisions	By

KEY PLAN

optimum energy design
Consulting Engineers
5277 College Avenue
Oakland, CA 94618
Telephone (510) 837-9182

This document is the property of the Owner and is not to be used without their written permission

REGISTERED PROFESSIONAL ENGINEER BRENT BREWER No. M29253 Exp. 6/30/27 MECHANICAL STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: Project Number

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
BUILDINGS B, C, & E MECHANICAL NEW WORK FLOOR PLANS

Client Project Number: 0000.0

Scale: As Indicated
Drawn By: CC
Checked By: AK
Issue Date:
Revit Version: 2023

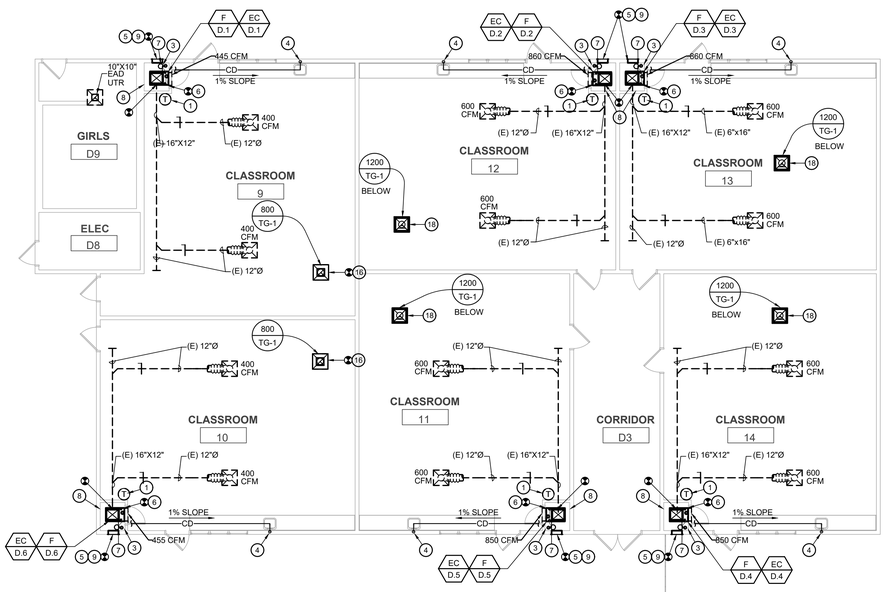
Sheet
M2.01
Sheet of

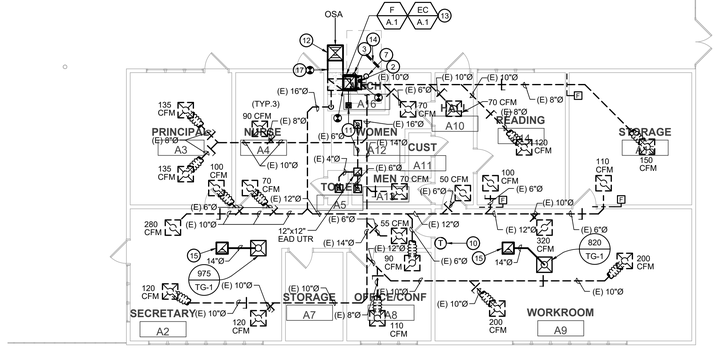
BUILDINGS B, C & E MECHANICAL NEW WORK FLOOR PLAN | 1/8" = 1'-0" | 1

3/26/2025 3:12:50 PM M:\P - PROJECTS\2025\02-25-0001 SFUSD SKYLINE ES\02_MECH

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY





CONSTRUCTION GENERAL NOTES:

1. MAINTAIN MANUFACTURER'S MINIMUM CLEARANCES ON ALL MECHANICAL EQUIPMENT.
2. CONTRACTOR SHALL INSTALL PIPING SUCH THAT EQUIPMENT AND ALL APPURTENANCES ARE EASILY SERVICEABLE.
3. CONTRACTOR SHALL REUSE EXISTING OPENING(S) IN WALLS AND/OR ROOF FOR FUTURE PIPING AND ETC, WHEREVER POSSIBLE. COORDINATE WITH OTHER TRADES AS NECESSARY.
4. CONTRACTOR SHALL PATCH AND REPAIR EXISTING WALLS, FLOORS, CEILINGS, AND/OR ROOF OPENING(S) AS NECESSARY FOR EXISTING HVAC EQUIPMENT, DUCTS, PIPING, & ETC. BEING REMOVED. MATCH SURROUNDING MATERIAL AND MAINTAIN FIRE RATING.
5. CONTRACTOR SHALL INSULATE ALL REFRIGERANT PIPING LINES AND PROVIDE ALUMINUM WEATHER JACKETING FOR ALL OUTDOOR REFRIGERANT PIPING.
6. CONTRACTOR SHALL COORDINATE VENT, AND REFRIGERANT PIPE SIZES WITH MANUFACTURER REPRESENTATIVE(S) BASED UPON DETERMINATION OF ACTUAL IN FIELD DEVELOPED LENGTH PRIOR TO ORDERING PRODUCT.
7. PROVIDE SS CONSTRUCTED GRAVITY TYPE BACKDRAFT DAMPERS FOR OSA LOUVERS/GRAVITY AIR INTAKE HOODS AT BLDGS. A, B, AND E.
8. REPLACE EXISTING DDC CONTROLLERS WITH NEW INCLUDING ACTUATORS AND OSA/RA DAMPERS FOR ALL BUILDINGS. INSTALL SS CONSTRUCTED DAMPERS INCLUDING LINKAGES. DAMPER BY AND ACTUATOR BY CONTROLS CONTRACTOR.
8. NO WALL OPENINGS ARE PERMITTED WITHOUT SEOR APPROVAL EXCEPT RE-USING EXISTING OPENINGS AND MODIFICATION TO EXISTING OPENINGS AS NOTED ON THESE PLANS AND DETAILS ON STRUCTURAL DRAWING S8.01.

CONSTRUCTION KEY NOTES:

1. NEW ELECTRONIC THERMOSTAT WITH CO2 SENSOR FOR FURNACE. MOUNT AT 48" A.F.F.
2. CONNECT NEW 2.5" VENT AND COMBUSTION AIR INTAKE TO UNIT 3" CONCENTRIC VENT UP THRU' ROOF. RE-USE EXISTING ROOF OPENING AND MODIFY AS NECESSARY.
3. CONNECT NEW NG PIPING FROM FURNACE TO EXISTING NG SUPPLY PIPING.
4. NEW 3/4" CD PIPING DOWN INSIDE WALL TO SINK TAILPIECE FROM CONDENSING FURNACE AND COOLING COIL. PROVIDE P-TRAP AT UNIT.
5. ROUTE NEW OSA DUCT TO NEW LOW WALL MOUNTED OSA EXTERIOR WALL LOUVER W/ INSECT SCREEN AT AIR MIXING BOX. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
6. EXISTING RETURN AIR GRILLE TO REMAIN.
7. CONNECT NEW REFRIGERANT PIPING (RG & RL) FROM ROOFTOP CONDENSING UNIT TO COOLING COIL.
8. EXISTING FURNACE CLOSET AND AIR MIXING BOX TO REMAIN. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
9. ROUTE NEW OSA DUCT TO NEW HIGH WALL MOUNTED OSA AIR EXTERIOR WALL LOUVER. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
10. NEW ELECTRONIC THERMOSTAT FOR FURNACE. MOUNT AT 48" A.F.F.
11. NEW 3/4" CD PIPING DOWN TO FLOOR DRAIN WITH 1" AIR GAP.
12. NEW 24"X24" OSA DUCT WITHIN WALKWAY CEILING SPACE UP THRU' ROOF TO ROOFTOP GRAVITY HOOD.
13. INSTALL NEW AIR MIXING BOX WITH LINING AND FILTER RACK MOUNTED ON TOP. NEW AIR MIXING BOX FOOTPRINT SIZE SHALL MATCH EXISTING.
14. NEW DOOR LOUVERS BY ARCHITECUTRAL. SEE ARCHITECUTRLA DRAWINGS FOR ADDITIONAL INFORMATION.
15. PROVIDE NEW 18" X 18" RELIEF AIR DUCT UP THRU' ROOF TO GRAVITY RELIEF HOOD.
16. PROVIDE NEW 18"X18" UP THRU ROOF. RECONNECT NEW RELIEF AIR DUCT TO EXISTING DUCT DOWN THRU ROOF.
17. CONNECT NEW 24"X24" OSA DUCT TO EXISTING OSA/RETURN AIR PLENUM. CONTRACTOR TO PROVIDE TRANSITIONS AS NECESSARY TO MAKE CONNECTIONS.
18. PROVIDE NEW 20"x20" RELIEF AIR DUCT UP THRU' ROOF TO GRAVITY RELIEF HOOD.

N REF. NORTH

BUILDINGS A & D MECHANICAL NEW WORK FLOOR PLAN | 1/8" = 1'-0" | 1

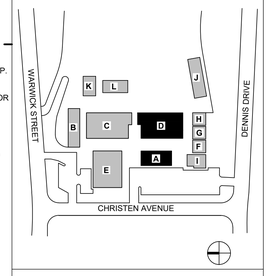
3/28/2025 3:12:50 PM M:\P - PROJECTS\2025\502-25-0001 SFUSD SKYLINE ES\02_MECH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

SAN FRANCISCO UNIFIED SCHOOL DISTRICT · SOUTH EAST · EDUCATION FOR ALL

Revisions			
Delta	Date	Revisions	By

KEY PLAN



optimum energy design
Consulting Engineers
5277 College Avenue
Oakland, CA 94618
Telephone (510) 837-9182

This document is the property of the Owner and is not to be used without their written permission

REGISTERED PROFESSIONAL ENGINEER ROBERT BARSTOW No. M29253 Exp. 6/30/27 MECHANICAL STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY Architects Project number: Project Number

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
BUILDINGS A & D MECHANICAL NEW WORK FLOOR PLANS

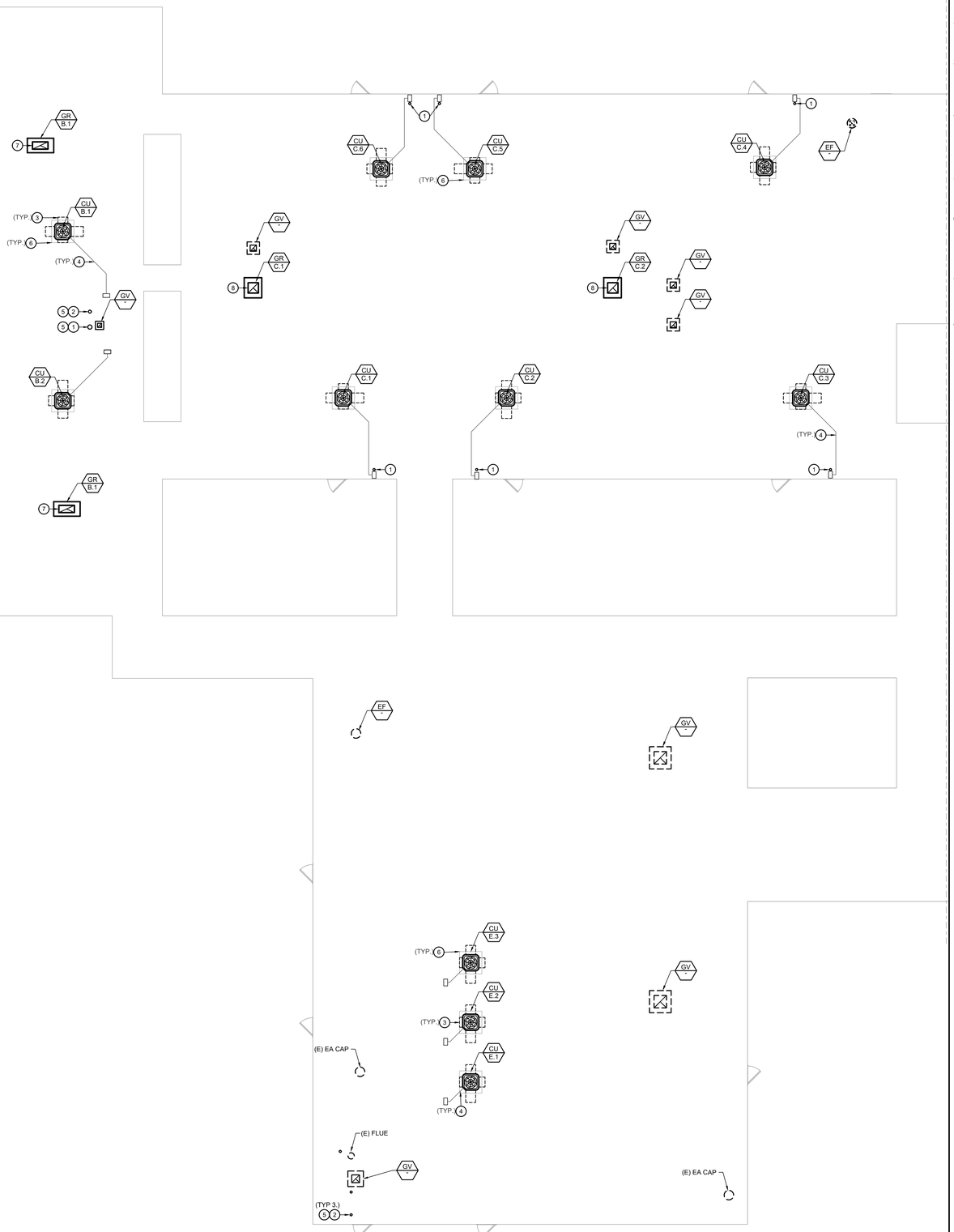
Client Project Number: 0000.0

Scale: As Indicated
Drawn By: CC
Checked By: AK
Issue Date:
Revit Version: 2023

Sheet
M2.02
Sheet of

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY



N REF NORTH

BUILDINGS B, C & E MECHANICAL NEW WORK ROOF PLAN | 1/8" = 1'-0" | 1

3/26/2025 3:12:50 PM M:\P - PROJECTS\2025\502-25-0001 SFUSD SKYLINE ES\02_MECH

CONSTRUCTION GENERAL NOTES:

1. MAINTAIN MANUFACTURER'S MINIMUM CLEARANCES ON ALL MECHANICAL EQUIPMENT.
2. CONTRACTOR SHALL INSTALL PIPING SUCH THAT EQUIPMENT AND ALL APPURTENANCES ARE EASILY SERVICEABLE.
3. CONTRACTOR SHALL REUSE EXISTING OPENING(S) IN WALLS AND/OR ROOF FOR FUTURE PIPING AND ETC, WHEREVER POSSIBLE. COORDINATE WITH OTHER TRADES AS NECESSARY.
4. CONTRACTOR SHALL PATCH AND REPAIR EXISTING WALLS, FLOORS, CEILINGS, AND/OR ROOF OPENING(S) AS NECESSARY FOR EXISTING HVAC EQUIPMENT, DUCTS, PIPING, & ETC. BEING REMOVED. MATCH SURROUNDING MATERIAL AND MAINTAIN FIRE RATING.
5. CONTRACTOR SHALL INSULATE ALL REFRIGERANT PIPING LINES AND PROVIDE ALUMINUM WEATHER JACKETING FOR ALL OUTDOOR REFRIGERANT PIPING.
6. CONTRACTOR SHALL COORDINATE VENT, AND REFRIGERANT PIPE SIZES WITH MANUFACTURER REPRESENTATIVE(S) BASED UPON DETERMINATION OF ACTUAL IN FIELD DEVELOPED LENGTH PRIOR TO ORDERING PRODUCT.
7. ALL NEW GRAVITY HOODS DUCT DOWN THRU' ROOF SHALL FIT WITHIN EXISTING FRAMING. NO FRAMING SHALL BE CUT FOR NEW WORK INSTALLATION.
8. NO WALL OPENINGS ARE PERMITTED WITHOUT SEOR APPROVAL EXCEPT RE-USING EXISTING OPENINGS AND MODIFICATION TO EXISTING OPENINGS AS NOTED ON THESE PLANS AND DETAILS ON STRUCTURAL DRAWING S8.01.

CONSTRUCTION KEY NOTES:

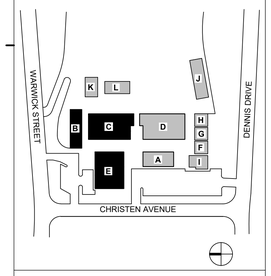
1. NEW 3" CONCENTRIC VENT THRU' ROOF. RE-USE EXISTING ROOF OPENING AND MODIFY AS NECESSARY.
2. NEW 3" CONCENTRIC VENT THRU' ROOF.
3. OUTLINE OF NEW EQUIPMENT MINIMUM CLEARANCES.
4. NEW REFRIGERANT PIPING (RG & RL) DOWN THRU' ROOF WITHIN EXISTING ROOFTOP GOOSENECK. CONCEAL EXISTING GOOSENECK OPENING WITH SHEET METAL COVER AND WEATHERPROOF PIPE PENETRATIONS.
5. EXTEND NEW VENT OUTLET MIN. 3 FEET ABOVE ANY AIR INTAKES.
6. NEW MIN. 8" HIGH EQUIPMENT PLATFORM. EXTEND MIN 6" AROUND PERIMETER OF UNIT.
7. 14"x30" RELIEF DUCT DOWN THRU' ROOF. RE-USE EXISTING ROOF OPENING. MODIFY AS NECESSARY.
8. 20"x20" RELIEF DUCT DOWN THRU' ROOF. RE-USE EXISTING ROOF OPENING. MODIFY AS NECESSARY.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

SAN FRANCISCO UNIFIED SCHOOL DISTRICT · SOUTH EAST · EDUCATION FOR ALL

Revisions			
Delta	Date	Revisions	By

KEY PLAN



optimum energy design
Consulting Engineers
5277 College Avenue
Oakland, CA 94618
Telephone (510) 837-9182

This document is the property of the Owner and is not to be used without their written permission

REGISTERED PROFESSIONAL ENGINEER · ABBY BARDUSE · No. M29253 Exp. 6/30/27 · MECHANICAL · STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY Architects Project number: Project Number

Facility

SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project

HVAC REPLACEMENT

Sheet Title

BUILDINGS B, C & E MECHANICAL NEW WORK ROOF PLAN

Client Project Number: 0000.0

Scale: As Indicated
Drawn By: CC
Checked By: AK
Issue Date:
Revit Version: 2023

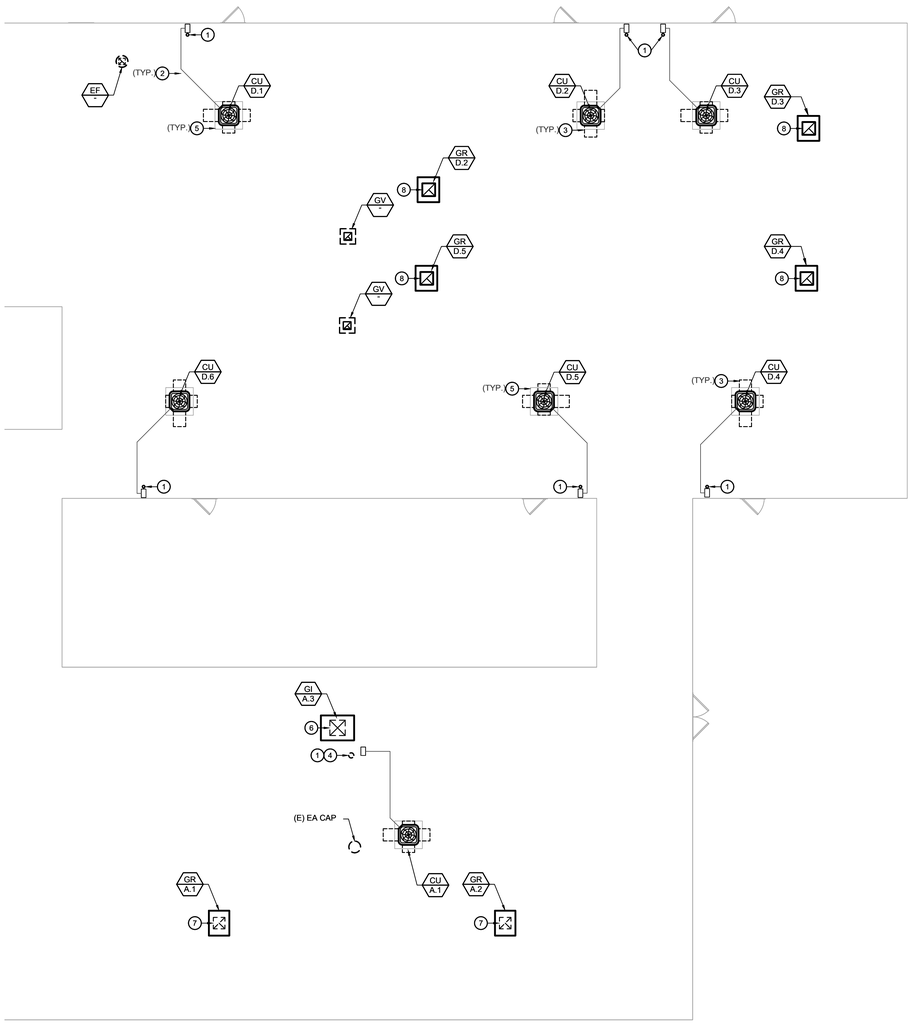
Sheet

M2.03

Sheet of

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY

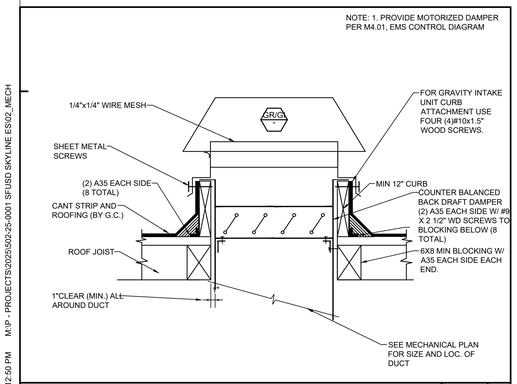


CONSTRUCTION GENERAL NOTES:

1. MAINTAIN MANUFACTURER'S MINIMUM CLEARANCES ON ALL MECHANICAL EQUIPMENT.
2. CONTRACTOR SHALL INSTALL PIPING SUCH THAT EQUIPMENT AND ALL APPURTENANCES ARE EASILY SERVICEABLE.
3. CONTRACTOR SHALL REUSE EXISTING OPENING(S) IN WALLS AND/OR ROOF FOR FUTURE PIPING AND ETC, WHEREVER POSSIBLE. COORDINATE WITH OTHER TRADES AS NECESSARY.
4. CONTRACTOR SHALL PATCH AND REPAIR EXISTING WALLS, FLOORS, CEILINGS, AND/OR ROOF OPENING(S) AS NECESSARY FOR EXISTING HVAC EQUIPMENT, DUCTS, PIPING, & ETC. BEING REMOVED. MATCH SURROUNDING MATERIAL AND MAINTAIN FIRE RATING.
5. CONTRACTOR SHALL INSULATE ALL REFRIGERANT PIPING LINES AND PROVIDE ALUMINUM WEATHER JACKETING FOR ALL OUTDOOR REFRIGERANT PIPING.
6. CONTRACTOR SHALL COORDINATE VENT, AND REFRIGERANT PIPE SIZES WITH MANUFACTURER REPRESENTATIVE(S) BASED UPON DETERMINATION OF ACTUAL IN FIELD DEVELOPED LENGTH PRIOR TO ORDERING PRODUCT
7. ALL NEW GRAVITY HOODS DUCT DOWN THRU' ROOF SHALL FIT WITHIN EXISTING FRAMING. NO FRAMING SHALL BE CUT FOR NEW WORK INSTALLATION.
8. NO WALL OPENINGS ARE PERMITTED WITHOUT SEOR APPROVAL EXCEPT RE-USING EXISTING OPENINGS AND MODIFICATION TO EXISTING OPENINGS AS NOTED ON THESE PLANS AND DETAILS ON STRUCTURAL DRAWING S8.01.

CONSTRUCTION KEY NOTES:

1. NEW 3" CONCENTRIC VENT THRU' ROOF. RE-USE EXISTING ROOF OPENING AND MODIFY AS NECESSARY.
2. NEW REFRIGERANT PIPING (RG & RL) DOWN THRU' ROOF WITHIN EXISTING ROOFTOP GOOSENECK. CONCEAL EXISTING GOOSENECK OPENING WITH SHEET METAL COVER AND WEATHERPROOF PIPE PENETRATIONS.
3. OUTLINE OF NEW EQUIPMENT MINIMUM CLEARANCES.
4. EXTEND VENT OUTLET MIN. 3 FEET ABOVE AIR INTAKE.
5. NEW MIN. 8" HIGH EQUIPMENT PLATFORM. EXTEND MIN 6" AROUND PERIMETER OF UNIT.
6. 24"x24" OSA DUCT DOWN THRU' ROOF. RE-USE EXISTING ROOF OPENING. MODIFY AS NECESSARY.
7. 18"x18" RELIEF DUCT DOWN THRU' ROOF.
8. 20"x20" RELIEF DUCT DOWN THRU' ROOF. RE-USE EXISTING ROOF OPENING. MODIFY AS NECESSARY.



GRAVITY OUTSIDE-AIR INTAKE / RELIEF DETAIL | SCALE NONE | 1

N REF NORTH

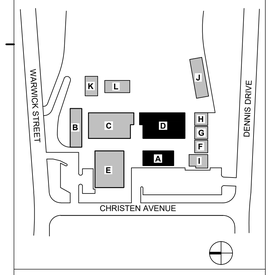
BUILDINGS A & D MECHANICAL NEW WORK ROOF PLAN | 1/8" = 1'-0" | 1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

SAN FRANCISCO UNIFIED SCHOOL DISTRICT · SOUTH SEAS · EDUCATION FOR ALL

Revisions			
Delta	Date	Revisions	By

KEY PLAN



optimum energy design
Consulting Engineers
5277 College Avenue
Oakland, CA 94618
Telephone (510) 837-9182

This document is the property of the Owner and is not to be used without their written permission

REGISTERED PROFESSIONAL ENGINEER · ANDREW KEET BANKEMPER · No. M29253 Exp. 6/30/27 · MECHANICAL · STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: Project Number

Facility

SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project

HVAC REPLACEMENT

Sheet Title

BUILDINGS A & D MECHANICAL NEW WORK ROOF PLAN

Client Project Number: 0000.0

Scale:	As Indicated
Drawn By:	CC
Checked By:	AK
Issue Date:	
Revit Version:	2023

Sheet **M2.04**

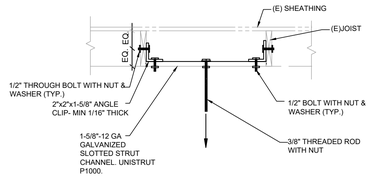
Sheet of

3/26/2025 3:12:50 PM M:\P - PROJECTS\2025\502-25-0001 SFUSD SKYLINE ES\02_MECH

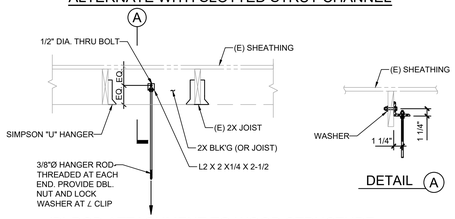
GRAPHIC SCALES: 0 5' 50' (1/16" = 1'-0") | 0 5' 25' (1/8" = 1'-0") | 0 1' 12' (1/4" = 1'-0") | 0 1' 6' (1/2" = 1'-0") | 0 4' (3/4" = 1'-0") | 0 1' 3' (1" = 1'-0") | 0 2' (1 1/2" = 1'-0") | 0 1' (3" = 1'-0")

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY

PIPE SUPPORT BRACING / SPACING SCHEDULE		
TYPE OF PIPE	SIZE	MAX.SPACING
COPPER	3/4" AND SMALLER	5 FT.
	1" TO 1-1/4"	6 FT.



ALTERNATE WITH SLOTTED STRUT CHANNEL

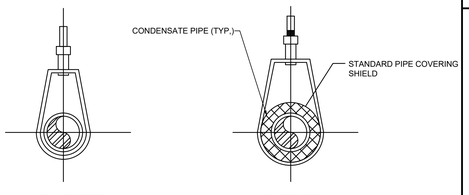


(B) ROD ATTACHMENT TO WOOD STRUCTURE

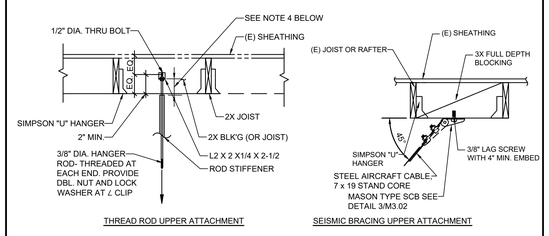
SCHEDULE FOR SINGLE PIPE HANGERS 3/4" THRU 1-1/8"		
PIPE SIZE	ROD SIZE	MAXIMUM LOAD (LBS PER FOOT)
3/4" THRU 1-1/8"	3/8"	2

NOTES:

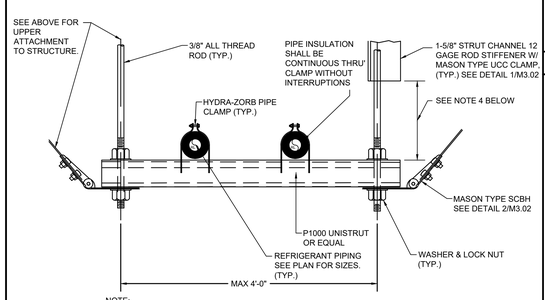
1. SUPPORT PIPE HANGERS FROM STRUCTURAL BEAM ONLY.
2. STRUCTURAL STEEL PENETRATIONS SHALL BE FIRST REVIEWED AND APPROVED BY THE STRUCTURAL ENGINEER. (IF APPLICABLE)
3. HANGER AND ROD SHALL BE DIPPED IN ZINC CHROMATE PRIMER PRIOR TO INSTALLATION.
4. SCHEDULED DATA MAY ALSO BE USED FOR TRAPEZE HANGER SELECTION WITH EACH ROD NOT TO EXCEED THE LOADS SHOWN IN THE MAXIMUM LOAD COLUMN.
5. FOR THE MAXIMUM HANGING ALLOWED IN THE STRUCTURE REFER TO STRUCTURAL DETAILS.
6. BRACING FOR INDIVIDUALLY SUPPORTED PIPING SYSTEM MAY BE OMMITTED WHEN ALL OF THE FOLLOWING CONDITIONS ARE MET:
   -VERTICAL SUPPORT IS PROVIDED BY ROD HANGERS.
   -NOMINAL PIPE SIZE DOES NOT EXCEED 2" FOR IP = 1.0 AMD SEISMIC DESIGN CATEGORY C
   -PROVISIONS ARE MADE TO AVOID IMPACT WITH OTHER STRUCTURAL AND NON-STRUCTURAL COMPONENTS OR TO PROTECT THE PIPING IN THE EVENT OF SUCH IMPACT. THE SEPARATION DISTANCE BETWEEN THE UNBRACED COMPONENT AND OTHER COMPONENTS SHALL BE A MINIMUM OF 18 INCHES.



TYPICAL PIPE HANGER DETAIL — SCALE NONE — 15

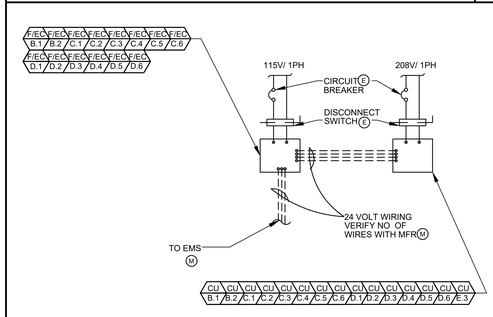


THREAD ROD UPPER ATTACHMENT — SEISMIC BRACING UPPER ATTACHMENT

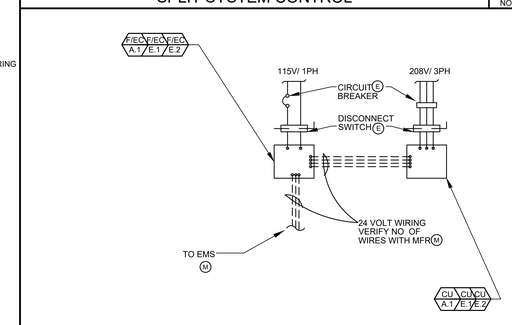


NOTE:
1. IF 'L' EXCEEDS 50 TIMES THE DIAMETER OF THE ROD, THEN A VERTICAL STIFFENER IS REQUIRED.
2. PIPE HANGER SUPPORT SHALL BE 6'-0" MAX O.C. AND EACH CHANGE OF DIRECTION.
3. PROVIDE TRANSVERSE SEISMIC BRACING AT 20 FEET MAX AND EVERY CHANGE OF DIRECTION. PROVIDE LONGITUDINAL SEISMIC BRACING AT 40 FEET OC MAX, MINIMUM OF 2 REQUIRED.
4. SEE ROD STIFFENER DETAIL ON 4/M3.02 FOR ADDITIONAL INFORMATION.
5. 4.1 LBS/FT FOR UP TO MAX. 6 PIPES PER HANGER.

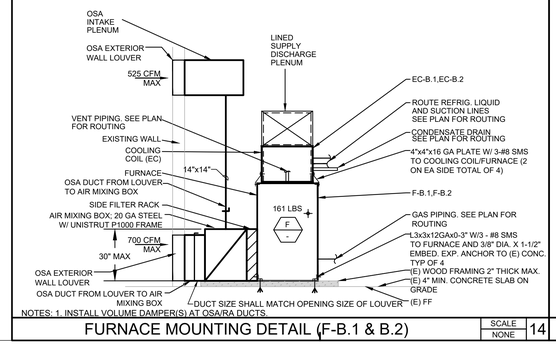
PIPE HANGER SUPPORT DETAIL — SCALE NONE — 13



SPLIT SYSTEM CONTROL — SCALE NONE — 12

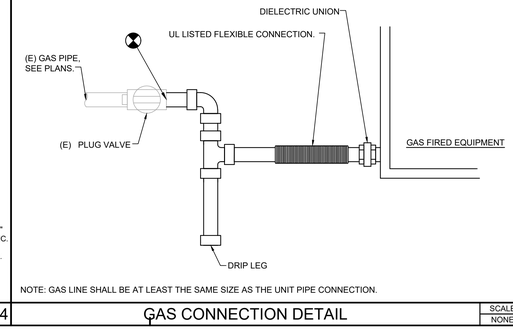


SPLIT SYSTEM CONTROL — SCALE NONE — 11



NOTES: 1. INSTALL VOLUME DAMPER(S) AT OSA/RA DUCTS.

FURNACE MOUNTING DETAIL (F-B.1 & B.2) — SCALE NONE — 14

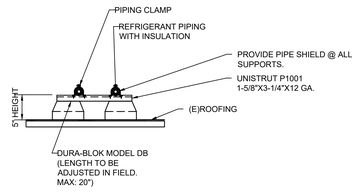


NOTE: GAS LINE SHALL BE AT LEAST THE SAME SIZE AS THE UNIT PIPE CONNECTION.

GAS CONNECTION DETAIL — SCALE NONE — 10

MAX LOAD WEIGHT = 2 LBS/FT.

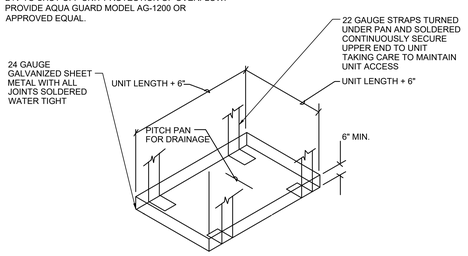
NOTE: SUPPORTS 6' FEET APART O.C.



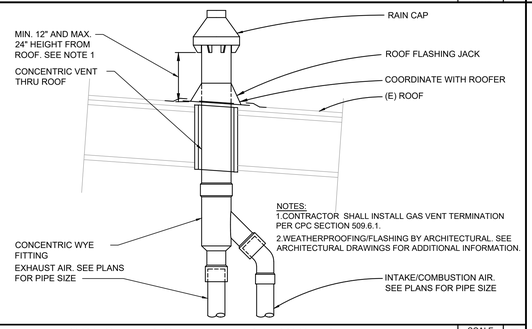
FLAT ROOF (SLOPE 1" OR LESS IN 12")

REFRIGERANT PIPE SUPPORT ON ROOF — SCALE NONE — 9

NOTE:
PROVIDE SECONDARY DRAIN PAN W/FLOAT SWITCH, 24V TO SHUT OFF UNIT PROTECTION OF OVERFLOW. PROVIDE AQUA GUARD MODEL AG-1200 OR APPROVED EQUAL.

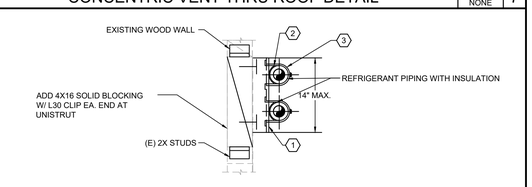


SECONDARY DRAIN PAN DETAIL — SCALE NONE — 8



NOTES:
1.CONTRACTOR SHALL INSTALL GAS VENT TERMINATION PER CPC SECTION 509.6.1.
2.WEATHERPROOFING/FLASHING BY ARCHITECTURAL. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

CONCENTRIC VENT THRU ROOF DETAIL — SCALE NONE — 7

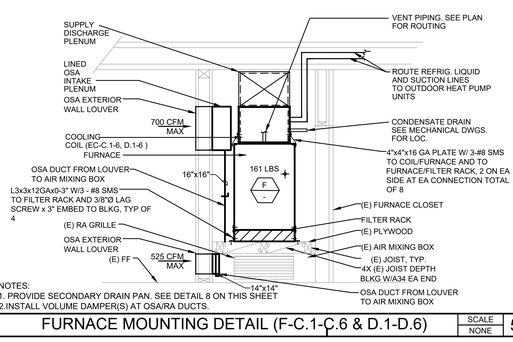


SECTION VIEW

MATERIAL LIST
(UNISTRUT OR EQUAL PRODUCT)
1. P1000 CHANNEL AT 6'-0" MAX SPACING. W/ 2-3/8"Ø X 4 LAG SCREWS AT 10" O.C. TO 4X16 SOLID BLOCKING
2. 18 GA ALUMINUM SHEET ROLLED TO CONFORM TO PIPE INSULATION O.D.
3. P2024-1120 GALV. PIPE CLAMP FOR UP TO 4" INSULATED PIPE. P1109-P1118 FOR UP TO 2.5" BARE PIPE.

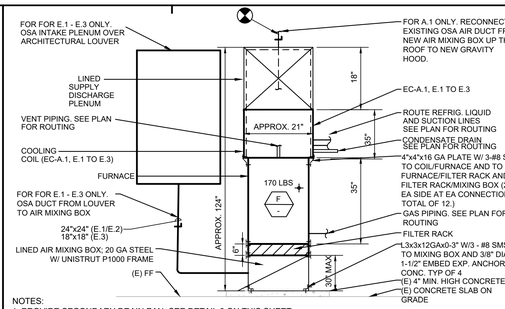
NOTES:
1. SIMILAR DETAIL FOR SINGLE PIPE WITHOUT INSULATION
2. PROVIDE INSULATION FOR REFRIGERANT PIPING ONLY.

WALL MOUNTED PIPING SUPPORT DETAIL — SCALE NONE — 6



NOTES:
1. PROVIDE SECONDARY DRAIN PAN. SEE DETAIL 8 ON THIS SHEET
2.INSTALL VOLUME DAMPER(S) AT OSA/RA DUCTS.

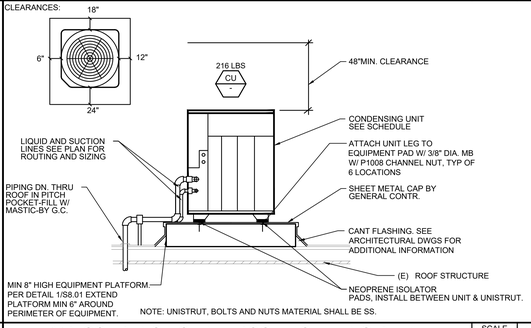
FURNACE MOUNTING DETAIL (F-C.1-C.6 & D.1-D.6) — SCALE NONE — 5



NOTES:
1. PROVIDE SECONDARY DRAIN PAN. SEE DETAIL 8 ON THIS SHEET
2.INSTALL VOLUME DAMPER(S) AT OSA/RA DUCTS.

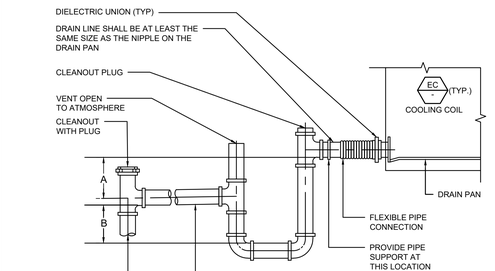
FURNACE MOUNTING DETAIL (F-A.1, E.1 TO E.3) — SCALE NONE — 4

CLEARANCES:



NOTE: UNISTRUT, BOLTS AND NUTS MATERIAL SHALL BE SS.

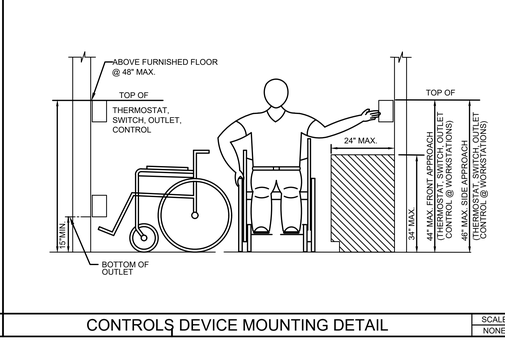
TYP. CONDENSING UNIT ROOF MOUNTING DETAIL — SCALE NONE — 3



AIR HANDLING UNIT/FAN COIL UNIT	
A	B
SEE NOTE 1	SEE NOTE 2
BLOW THROUGH COIL	
A	B
SEE NOTE 3	SEE NOTE 4

NOTES:
1. STATIC PRESSURE OF AIR CONDITIONING UNIT PLUS 1".
2. A/2 MINIMUM.
3. STATIC PRESSURE OF AIR CONDITIONING UNIT PLUS 1/2".
4. 1/2" MINIMUM.
5. INSULATE CONDENSATE PIPING (LOCATED INDOORS)
6. DO NOT INSTALL TRAPS ON FCU(S) WITH INTEGRAL CONDENSATE PUMPS.

CONDENSATE TRAP DETAIL — SCALE NONE — 2



CONTROLS DEVICE MOUNTING DETAIL — SCALE NONE — 1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

SAN FRANCISCO UNIFIED SCHOOL DISTRICT · SOUTH EDUCATION FOR ALL

#	Revisions		
Delta	Date	Revisions	By

optimum energy design
Consulting Engineers
5277 College Avenue
Oakland, CA 94618
Telephone (510) 837-9182

This document is the property of the Owner and is not to be used without their written permission

REGISTERED PROFESSIONAL ENGINEER · ABEY BARNES · No. M29293 Exp. 6/30/27 · MECHANICAL · STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: Project Number

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
MECHANICAL DETAILS

Client Project Number: 0000.0

Scale: Not to Scale
Drawn By: CC
Checked By: AK
Issue Date:
Revit Version: 2023

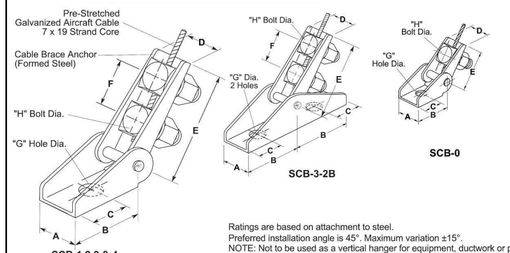
Sheet
M3.01
Sheet of

3/26/2025 3:12:50 PM M:\P - PROJECTS\2025\502-25-0001 SFUSD SKYLINE ES\02_MECH

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026



Ratings are based on attachment to steel.
Preferred installation angle is 45°. Maximum variation ±15°.
NOTE: Not to be used as a vertical hanger for equipment, ductwork or piping. To be used as a seismic restraint only.

TYPE SCB DIMENSION (in **mm**)

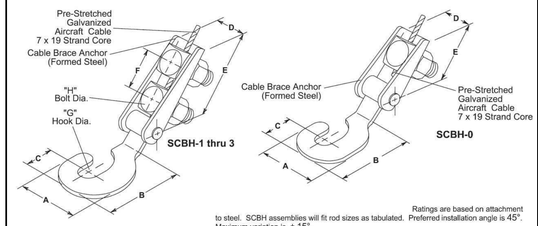
Size	A		B		C		D		E		F		G		H	
SCB-0	1 5/16	**33**	1 1/2	**38**	3/4	**19**	15/16	**24**	1 3/4	**44**	-	**-**	7/16	**11**	1/2	**13**
SCB-1	1 3/8	**35**	2	**51**	1	**25**	15/16	**24**	3 3/8	**86**	1 1/2	**38**	9/16	**14**	1/2	**13**
SCB-2	1 5/8	**41**	2 3/4	**70**	1 3/8	**35**	1 3/16	**30**	4 3/8	**111**	1 3/4	**44**	11/16	**17**	5/8	**16**
SCB-3	2	**51**	3 1/2	**89**	1 3/4	**44**	1 7/16	**37**	4 3/4	**121**	2	**51**	13/16	**21**	3/4	**19**
SCB-3-2B	2	**51**	4 3/4	**121**	1	**25**	1 7/16	**37**	4 3/4	**121**	2	**51**	13/16	**21**	3/4	**19**
SCB-4	3 1/8	**79**	5	**127**	2 1/2	**64**	1 15/16	**49**	5 3/4	**146**	2 1/4	**57**	1 5/16	**33**	1	**25**

TYPE SCB ASSEMBLY RATINGS
AS CONTROLLED BY CABLE BREAKING STRENGTH

Size	Cable Diameter in	mm	Max. Ratings lbs	kN	kg	Torque on Bolts ft-lbs	N-m	kg-m
SCB-0	1/16*	**1.6**	235	**1.0**	**106**	30	**41**	**4.2**
SCB-0	3/32*	**2.4**	460	**2.1**	**208**	30	**41**	**4.2**
SCB-0	3/32	**2.4**	500	**2.2**	**227**	30	**41**	**4.2**
SCB-1	1/8	**3**	975	**4.3**	**442**	25	**34**	**3.5**
SCB-2	3/16	**5**	2050	**9.1**	**930**	45	**61**	**6.2**
SCB-3 & -3-2B	1/4	**6**	3150	**14.0**	**1429**	55	**75**	**7.6**
SCB-4	3/8	**10**	6875	**30.5**	**3119**	200	**271**	**27.6**

* 7 x 7 STRAND CORE

SCB SEISMIC CABLE BRACE — SCALE NONE — 3



Ratings are based on attachment to steel. SCBH assemblies will fit rod sizes as tabulated. Preferred installation angle is 45°. Maximum variation is ± 15°.

TYPE SCBH DIMENSIONS (inches **mm**)

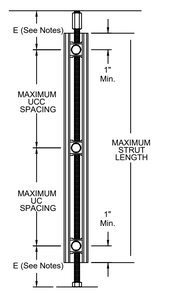
Size	For use with Rod Sizes	A		B		C		D		E		F		G		H	
SCBH-0	3/8	**10**	1 3/8	**35**	2 1/16	**52**	1 1/16	**17**	15/16	**24**	1 3/4	**44**	---	**--**	3/8	**10**	1/2	**13**
SCBH-1	1/2, 5/8	**13, 16**	1 7/8	**48**	2 3/8	**60**	1	**25**	1	**25**	3 3/8	**86**	1 1/2	**38**	5/8	**16**	1/2	**13**
SCBH-2	3/4, 7/8	**19, 22**	2 7/8	**73**	3 3/4	**95**	1 3/8	**35**	1 3/16	**30**	4 3/8	**111**	1 3/4	**44**	7/8	**22**	5/8	**16**
SCBH-3	1, 1 1/8	**25, 29**	3 1/2	**89**	4 3/4	**121**	1 3/4	**44**	1 7/16	**37**	4 3/4	**121**	2	**51**	1 1/8	**29**	3/4	**19**

TYPE SCBH ASSEMBLY RATINGS
AS CONTROLLED BY CABLE BREAKING STRENGTH

Size	Cable Diameter in	mm	Max. Ratings lbs	kN	kg	Torque on Bolts ft-lbs	N-m	kg-m
SCBH-0	1/16*	**1.6**	235	**1.0**	**107**	30	**41**	**4.2**
SCBH-0	3/32*	**2.4**	460	**2.1**	**209**	30	**41**	**4.2**
SCBH-0	3/32	**2.4**	500	**2.2**	**227**	30	**41**	**4.2**
SCBH-1	1/8	**3**	975	**4.3**	**442**	25	**34**	**3.5**
SCBH-2	3/16	**5**	2050	**9.1**	**930**	45	**61**	**6.2**
SCBH-3	1/4	**6**	3150	**14.0**	**1429**	55	**75**	**7.6**

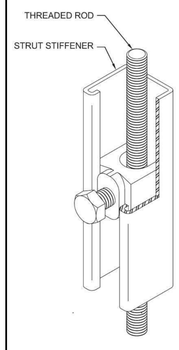
* 7 x 7 STRAND CORE

SCBH SEISMIC BRACE — SCALE NONE — 2



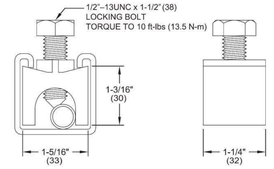
NOTE 1:
E = 3" MAXIMUM FOR 1/4" TO 1/2" RODS, AND E = 6" MAXIMUM FOR 5/8" TO 1-1/4" DIAMETER RODS. A MINIMUM OF (2) UCC SEISMIC ROD CLAMPS PER STIFFENER ANGLE ARE REQUIRED.

ROD STIFFENER FOR THE UCC — SCALE NONE — 4



TYPE UCC WITH STEEL STRUT ASSEMBLY RATINGS

Rod Size in (mm)	Maximum Compressive Force lbs (kN)	Strut Stiffener Minimum Size in (mm)	Strut Stiffener Max Length in (mm)	Maximum UCC Spacing in (mm)
3/8 (10)	425 (1.9)	1 5/8 x 1 5/8 x 12 Gage (41 x 41 x 2.5)	96 (2438)	22 (559)
1/2 (13)	1275 (5.6) 1200 (5.3)	1 5/8 x 1 5/8 x 12 Gage (41 x 41 x 2.5) 1 5/8 x 1 5/8 x 12 Gage (41 x 41 x 2.5)	96 (2438) 120 (3048)	31 (787) 31 (787)
5/8 (16)	1475 (6.5) 1325 (5.9)	1 5/8 x 1 5/8 x 12 Gage (41 x 41 x 2.5) 1 5/8 x 1 5/8 x 12 Gage (41 x 41 x 2.5)	96 (2438) 120 (3048)	39 (991) 39 (991)
3/4 (19)	2500 (11.1)	1 5/8 x 1 5/8 x 12 Gage (41 x 41 x 2.5)	144 (3658)	48 (1212)



UCC CLAMP — SCALE NONE — 1

#	Revisions		
Delta	Date	Revisions	By

optimum energy design
Consulting Engineers
5277 College Avenue
Oakland, CA 94618
Telephone (510) 837-9182

This document is the property of the Owner and is not to be used without their written permission

REGISTERED PROFESSIONAL ENGINEER — No. M29353 Exp. 6/30/27 — MECHANICAL — STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: Project Number

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
MECHANICAL DETAILS

Client Project Number: 0000.0

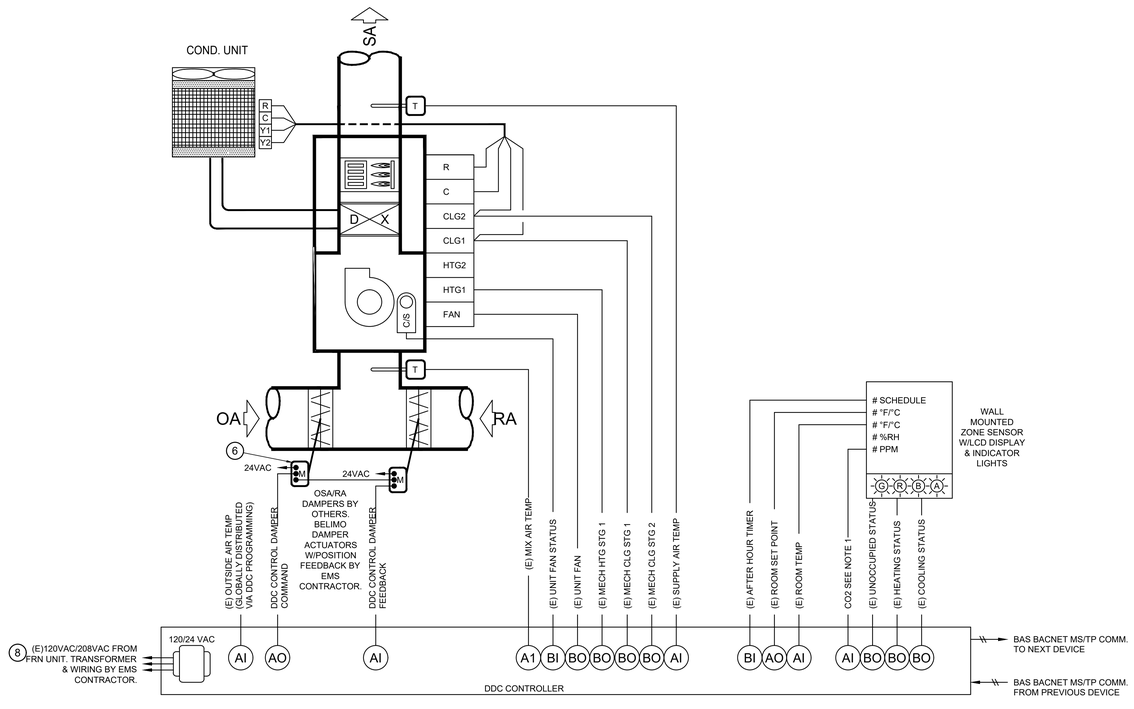
Scale: Not to Scale
Drawn By: CC
Checked By: AK
Issue Date:
Revit Version: 2023

Sheet
M3.02
Sheet of

3/26/2025 3:12:50 PM M:\P - PROJECTS\2025\502-25-0001 SFUSD SKYLINE ES\02_MECH

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY



NOTES:

1. PROVIDE DEMAND CONTROL VENTILATION ONLY WITH INTEGRAL CO2 SENSOR FOR BLDGS. B, C, D NEW HVAC EQUIPMENT INCLUDING BLDG. E, F/EC/CU-E.1 & E.2.
2. EXISTING SMOKE DETECTOR FOR F/EC/CU-E.1 & E.2 SHALL BE RE-USED. REMOVE AND RE-STALL EXISTING DUCT MOUNTED SMOKE DETECTOR AS REQUIRED.
3. REMOVE EXISTING DDC CONTROLLERS FROM ASSOCIATED EXISTING FURNACES AND SPLIT SYSTEMS BEING REMOVED. CONTRACTOR SHALL FIELD VERIFY THEIR LOCATIONS. INSTALL UNITARY CONTROLLERS FOR NEW WORK.
4. BLDG. E THERMOSTAT FOR F/EC/CU-E.1 IS SLAVE TO F/EC/CU-E.2.
5. PROVIDE SS CONSTRUCTED COUNTERBALANCE BACKDRAFT DAMPERS FOR ALL BLDGS. RELIEF AIR HOODS. FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR.
6. REPLACE EXISTING DDC CONTROLLERS WITH NEW INCLUDING ACTUATORS AND OSA/RA DAMPERS FOR ALL BUILDINGS. INSTALL SS CONSTRUCTED DAMPERS INCLUDING LINKAGES BY MECHANICAL. 24V MOTORIZED DAMPER ACTUATORS BY CONTROL CONTRACTOR.
7. DISCONNECT AND SAFE-OFF EXISTING CONTROL WIRING. RE-CONNECT AT NEW WORK INSTALLATION.
8. RETAIN EXISTING POWER AND RECONNECT AT NEW WORK INSTALLATION.
9. PROVIDE 100% ENTHALPY TYPE ECONOMIZER. THE OSA DAMPER SHALL CLOSE, IF OSA ENTHALPY IS GREATER THAN RETURN AIR.

FURNACE/CONDENSING UNIT SPLIT SYSTEM WITH ECONOMIZER, DEMAND CONTROL VENTILATION & ZONE OCCUPANCY MONITORING

1. SYSTEM OVERVIEW
   a. EACH FRN/CU UNIT WILL BE DIRECTLY CONTROLLED BY A DEDICATED EMS (ENERGY MANAGEMENT SYSTEM) UNITARY CONTROLLER.
   b. EMS UNITARY CONTROLLER WILL BE CONNECTED TO A WALL MOUNTED ELECTRONIC ZONE TEMPERATURE SENSOR.
   c. ELECTRONIC ZONE TEMPERATURE SENSOR SHALL HAVE A TOUCH SCREEN LCD INTERFACE WHICH INCLUDES: 1) DIGITAL PUSHBUTTONS FOR WARMER/COOLER SETPOINT CONTROL; 2) VISUAL DISPLAY OF ROOM TEMPERATURE, ROOM CO2 (SEE NOTE 1) AND AMBIENT OSA TEMPERATURE; AND 3) DIGITAL PUSHBUTTON AFTER-HOURS OVERRIDE TIMER CONTROL, WITH USER ADJUSTABLE DURATION. THE AFTER-HOURS OVERRIDE DURATION SHALL HAVE THE ABILITY TO BE LIMITED FROM THE FRONT-END.
2. UNIT FAN OPERATION
   a. WHEN THE ZONE IS IN OCCUPIED MODE OR IN AFTER HOURS MODE, THE FAN SHALL RUN CONTINUOUSLY, UNLESS VACANT MODE HAS BEEN TRIGGERED.
   b. DURING THE UNOCCUPIED MODE AS DETERMINED BY EMS TIME SCHEDULE, THE UNIT FAN CYCLES WITH DEMAND AND THE TEMPERATURE IS CONTROLLED BY THE UNOCCUPIED SPACE TEMPERATURE HEATING AND COOLING SETPOINTS.
3. MINIMUM OUTDOOR AIR VENTILATION
   a. DURING OCCUPIED MODE OR AFTERHOURS MODE, THE ECONOMIZER DAMPER SHALL BE COMMANDED BY THE EMS UNITARY CONTROLLER TO MAINTAIN A POSITION WHICH SATISFIES THE MINIMUM OUTDOOR AIR VENTILATION REQUIREMENTS FOR THE ZONE. DAMPER POSITION(S) DETERMINED BY AIR BALANCING CONTRACTOR.
5. DEMAND CONTROL VENTILATION, SEE NOTE 1
   a. EMS UNITARY CONTROLLER WILL BE CONNECTED TO A WALL MOUNTED CO2 SENSOR TO MONITOR ZONE CO2 CONCENTRATION.
   b. DURING OCCUPIED MODE OR AFTERHOURS MODE, THE EMS UNITARY CONTROLLER SHALL RESET THE OUTSIDE AIR DAMPER MINIMUM POSITION TO MAINTAIN THE CO2 CONCENTRATION BELOW 1,000 PPM.
6. VACANT MODE CONTROL
   a. WHEN THE ZONE HAS BEEN SCHEDULED FOR OCCUPANCY FOR AT LEAST ONE HOUR AND THE OCCUPANCY SENSOR HAS CONFIRMED THAT ZONE HAS BEEN VACANT FOR 5 MINUTES (ADJUSTABLE: MAXIMUM 30 MINUTES), ZONE SHALL BE PLACED INTO VACANT MODE.
   b. RESET COOLING AND HEATING SETPOINTS UP AND DOWN BY 2°F (ADJUSTABLE) OR MORE.
   c. VENTILATION AIR IN A VACANT ZONE SHALL BE REDUCED TO ZERO WHEN PERMITTED TO DO SO ACCORDING TO 2022 CALIFORNIA TITLE 24 TABLE 120.1A (ALL OCCUPANCY CATEGORIES WITH NOTE "F" DESIGNATION). THE UNIT FAN SHALL BE SHUT OFF AND THE ECONOMIZER SHALL BE CLOSED TO THE OUTSIDE AIR. FOR ALL OTHER ZONES, THE ECONOMIZER SHALL BE SET TO MINIMUM OUTDOOR AIR POSITION AND THE UNIT FAN SHALL OPERATE TO PROVIDE MINIMUM VENTILATION DURING VACANT MODE.
   d. UPON DETECTION OF OCCUPANCY, VACANT MODE SHALL BE CLEARED.
7. ZONE PRE-OCCUPANCY PURGE
   a. THE EMS SHALL SCHEDULE THE ZONE TO BE IN OCCUPIED MODE ONE HOUR PRIOR TO THE ACTUAL TIME OF ANTICIPATED OCCUPANCY.
8. HEATING OPERATION
   a. THE CONTROLLER COMPARES THE HEATING SETPOINT WITH THE SPACE TEMPERATURE AND DETERMINES A NEED-HEATING CONTROL SIGNAL TO STAGE A GAS REGULATING VALVE ON THE UNIT.
   b. ECONOMIZER TO BE COMMANDED TO MIN CFM SETPOINT AND MECHANICAL COOLING TO BE LOCKED OUT DURING HEATING MODE.
9. COOLING OPERATION
   a. THE CONTROLLER COMPARES THE COOLING SETPOINT WITH THE SPACE TEMPERATURE AND DETERMINES A NEED-COOLING SIGNAL.
   b. THE FIRST STAGE OF COOLING WILL ENABLE THE ECONOMIZER TO PROVIDE FREE COOLING FOR AS LONG AS POSSIBLE.
   c. THE SECOND STAGE OF COOLING WILL ENABLE THE COMPRESSOR(S) TO MAINTAIN THE ROOM SET POINT.
   d. MECHANICAL HEATING TO BE LOCKED OUT DURING COOLING MODE.
10. FAULT DETECTION DIAGNOSTICS
    a. THE EMS DDC CONTROLLER SHALL MONITOR THE FOLLOWING ECONOMIZER ACTUATOR FAULT DETECTION DIAGNOSTIC CONDITIONS AND BROADCAST RESULTS VIA EMS NETWORK:
       - TEMPERATURE SENSOR FAILURE/FAULT
       - ECONOMIZER NOT ECONOMIZING WHEN ENABLED
       - ECONOMIZER ECONOMIZING WHEN DISABLED
       - ECONOMIZER DAMPER MODULATION FAILURE
       - EXCESS OUTDOOR AIR
11. MONITORING - THE FOLLOWING CONDITIONS SHALL BE MONITORED AND DISPLAYED AT EXISTING EMS OPERATOR WORKSTATION/GRAPHICAL USER INTERFACE:
    a. SUPPLY AIR TEMPERATURE.
    b. ROOM TEMPERATURE.
    c. ROOM CO2 CONCENTRATION.
    d. CURRENT MODE (HEATING/COOLING/FAN).
    e. SUPPLY AIR TEMPERATURE ATTAINED LAST TIME UNIT WAS IN HEATING.
    f. SUPPLY AIR TEMPERATURE ATTAINED LAST TIME UNIT WAS IN COOLING.
    g. CURRENT COMMAND STATUS OF FAN, ECONOMIZER, COMPRESSOR AND GAS VALVE.
    h. RUN TIME METERS ON FAN, COMPRESSOR, AND HEAT.
    i. FAN STATUS THRU CURRENT SWITCH.
    j. ECONOMIZER ACTUATOR FEEDBACK STATUS.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

SAN FRANCISCO UNIFIED SCHOOL DISTRICT · EDUCATION FOR ALL

#	Revisions		
Delta	Date	Revisions	By

optimum energy design
Consulting Engineers
5277 College Avenue
Oakland, CA 94618
Telephone (510) 837-9182

This document is the property of the Owner and is not to be used without their written permission

REGISTERED PROFESSIONAL ENGINEER · BANNERJEE · No. M25233 Exp. 6/30/27 · MECHANICAL · STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: Project Number

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
MECHANICAL EMS CONTROL DIAGRAM

Client Project Number: 0000.0

Scale: Not to Scale
Drawn By: CC
Checked By: AK
Issue Date:
Revit Version: 2023

Sheet
M4.01
Sheet of

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 1 of 17)**

Project Name: Skyline Elementary School | **Date Prepared:** 2025-09-10

A. General Information

1	Project Name	Skyline Elementary School			
2	Run Title	Title 24 Analysis			
3	Project Location	55 CHRISTEN AVE,			
4	City	DALY CITY	5	Standards Version	Compliance 2022
6	Zip code	94015	7	Compliance Software (version)	EnergyPro 9.4
8	Climate Zone	3	9	Building Orientation (deg)	270
10	Building Type(s)	• Nonresidential	11	Weather File	SAN-FRANCISCO-INTL_STYP20.epw
12	Project Scope	• Existing alteration	13	Number of Dwelling Units	0
14	Total Conditioned Floor Area in Scope (ft²)	18349	15	Total # of hotel/motel rooms	0
16	Total Unconditioned Floor Area (ft²)	0	17	Fuel Type	Natural gas
18	Nonresidential Conditioned Floor Area	18349	19	Total # of Stories (Habitable Above Grade)	1
20	Residential Conditioned Floor Area	0			

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 2 of 17)**

B. PROJECT SUMMARY

Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within the permit application.

Building Components Complying via Performance					Building Components Complying Prescriptively	
Envelope (See Table G)	Nonres	Not Included	Solar Thermal Water Heating (See Table I3)	☐ Performance	The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).	
	MultiFam	Not Included		☒ Not Included		
Mechanical (See Table H)	Nonres	Performance	Covered Process: Commercial Kitchens (see Table J)	☐ Performance	Indoor Lighting (Unconditioned) 140.6 & 170.2(e)	NRCC-LTI-E is required
	MultiFam	Not Included		☒ Not Included	Outdoor Lighting 140.7 & 170.2(e)	NRCC-LTO-E is required
Domestic Hot Water (See Table I)	Nonres	Not Included	Covered Process: Laboratory Exhaust (see Table J)	☐ Performance	Sign Lighting 140.8 & 170.2(e)	NRCC-LTS-E is required
	MultiFam	Not Included		☒ Not Included	**Building Components Complying with Mandatory Measures**	
Lighting (Indoor Conditioned, see Table K)	Nonres	Not Included	Photovoltaics (see Table F)	☐ Performance	Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)	
	MultiFam	Not Included		☒ Not Included	Electrical Power Distribution 110.11	NRCC-ELC-E is required
			Battery (see Table F)	☐ Performance	Commissioning 120.8	NRCC-CXR-E is required
				☒ Not Included	Solar and Battery 110.10	NRCC-SAB-E is required

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 3 of 17)**

C1. COMPLIANCE SUMMARY

COMPLIES[1]

	Time Dependent Valuaton (TDV)		Source Energy Use
	Efficiency[1] (kBtu/ft² - yr)	**Total[2] (kBtu/ft² - yr)**	**Total[2] (kBtu/ft² - yr)**
Standard Design	216.76	n/a	n/a
Proposed Design	183.53	n/a	n/a
Compliance Margins	**33.23**	**n/a**	**n/a**
	Pass	**n/a**	**n/a**

[1] Efficiency measures include improvements like a better building envelope and more efficient equipment
[2] Compliance Totals include efficiency, photovoltaics and batteries
[3] New Construction, Complete Addition Scope: Building complies when all efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded
Existing, Addition and Alteration Scope: Building complies when efficiency compliance margin is greater than or equal to zero and unmet load hour limits are not exceeded

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 4 of 17)**

C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft² - yr)

COMPLIES[2]

Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Space Heating	18.73	7.63	11.1
Space Cooling	30.06	19	11.06
Indoor Fans	109.76	98.69	11.07
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	24.29	24.29	0
Indoor Lighting	33.92	33.92	0
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**216.76**	**183.53**	**33.23 (15.3%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**216.76**	**183.53**	**33.23 (15.3%)**

[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 5 of 17)**

C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Receptacle	65.88	65.88	---
Process	1.24	1.24	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**283.88**	**250.65**	**33.23 (11.7%)**

[1] Notes: This table is not used for Energy Code Compliance.

C6. 'ABOVE CODE' QUALIFICATIONS

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 6 of 17)**

C7. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	---	---	---	124.3	50.2	74.1
Space Cooling	13.1	6	7.1	---	---	---
Indoor Fans	69.9	63.2	6.7	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	---	---	---	---	---
Domestic Hot Water	18.4	18.4	0	---	---	---
Indoor Lighting	23.6	23.6	0	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**125**	**111.2**	**13.8**	**124.3**	**50.2**	**74.1**
Photovoltaics	---	---	---	---	---	---
Batteries	---	---	---	---	---	---
ENERGY USE SUBTOTAL	**125**	**111.2**	**13.8**	**124.3**	**50.2**	**74.1**
Receptacle	48.4	48.4	0	---	---	---
Process	0.8	0.8	0	---	---	---
Other Ltg	---	---	---	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	**174.2**	**160.4**	**13.8**	**124.3**	**50.2**	**74.1**

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 7 of 17)**

C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft² / yr)	Proposed Design (kBtu/ft² / yr)	Margin (kBtu/ft² / yr)	Margin Percentage
GROSS EUI[1]	39.17	32.56	6.61	16.88
NET EUI[1]	39.17	32.56	6.61	16.88

[1] Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.

D1. EXCEPTIONAL CONDITIONS

• The building does not include service water heating. Verify that service water heating is not required and is not included in the design.

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
			Heating				Cooling				
Equipment Name	Equipment Type	Qty	Total Heating Output (kBtu/h)	Supp Heat Output (kBtu/h)	Efficiency Unit	Efficiency	Total Cooling Output (kBtu/h)	Efficiency Unit	Efficiency	Economizer Type (if present)	Status[1]
CU/EC/F-A.1	Single Zone Air Conditioner (SZAC) Air System	1	80	0	AFUE	0	60	EER SEER	12.2 15	Differential DB	N
CU/EC/F-B.1	Single Zone Air Conditioner (SZAC) Air System	1	50	0	AFUE	0	34.56	EER SEER	12.2 15.5	Differential DB	N
CU/EC/F-B.2	Single Zone Air Conditioner (SZAC) Air System	1	50	0	AFUE	0	34.56	EER SEER	12.2 15.5	Differential DB	N

[1] Status: N - New, A - Altered, E - Existing

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 8 of 17)**

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
			Heating				Cooling				
Equipment Name	Equipment Type	Qty	Total Heating Output (kBtu/h)	Supp Heat Output (kBtu/h)	Efficiency Unit	Efficiency	Total Cooling Output (kBtu/h)	Efficiency Unit	Efficiency	Economizer Type (if present)	Status[1]
CU/EC/F-C.1	Single Zone Air Conditioner (SZAC) Air System	1	50	0	AFUE	0	34.56	EER SEER	12.2 15.5	Differential DB	N
CU/EC/F-C.2	Single Zone Air Conditioner (SZAC) Air System	1	50	0	AFUE	0	34.56	EER SEER	12.2 15.5	Differential DB	N
CU/EC/F-C.3	Single Zone Air Conditioner (SZAC) Air System	1	50	0	AFUE	0	34.56	EER SEER	12.2 15.5	Differential DB	N
CU/EC/F-C.4	Single Zone Air Conditioner (SZAC) Air System	1	50	0	AFUE	0	34.56	EER SEER	12.2 15.5	Differential DB	N
CU/EC/F-C.5	Single Zone Air Conditioner (SZAC) Air System	1	50	0	AFUE	0	34.56	EER SEER	12.2 15.5	Differential DB	N
CU/EC/F-C.6	Single Zone Air Conditioner (SZAC) Air System	1	50	0	AFUE	0	34.56	EER SEER	12.2 15.5	Differential DB	N
CU/EC/F-D.1	Single Zone Air Conditioner (SZAC) Air System	1	50	0	AFUE	0	34.56	EER SEER	12.2 15.5	Differential DB	N
CU/EC/F-D.2	Single Zone Air Conditioner (SZAC) Air System	1	50	0	AFUE	0	34.56	EER SEER	12.2 15.5	Differential DB	N

[1] Status: N - New, A - Altered, E - Existing

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 9 of 17)**

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
			Heating				Cooling				
Equipment Name	Equipment Type	Qty	Total Heating Output (kBtu/h)	Supp Heat Output (kBtu/h)	Efficiency Unit	Efficiency	Total Cooling Output (kBtu/h)	Efficiency Unit	Efficiency	Economizer Type (if present)	Status[1]
CU/EC/F-D.3	Single Zone Air Conditioner (SZAC) Air System	1	50	0	AFUE	0	34.56	EER SEER	12.2 15.5	Differential DB	N
CU/EC/F-D.4	Single Zone Air Conditioner (SZAC) Air System	1	50	0	AFUE	0	34.56	EER SEER	12.2 15.5	Differential DB	N
CU/EC/F-D.5	Single Zone Air Conditioner (SZAC) Air System	1	50	0	AFUE	0	34.56	EER SEER	12.2 15.5	Differential DB	N
CU/EC/F-D.6	Single Zone Air Conditioner (SZAC) Air System	1	50	0	AFUE	0	34.56	EER SEER	12.2 15.5	Differential DB	N
CU/EC/F-E.1 & EC/F-E.2	Single Zone Air Conditioner (SZAC) Air System	2	80	0	AFUE	0	60	EER SEER	12.2 15	Differential DB	N
CU/EC/F-E.3	Single Zone Air Conditioner (SZAC) Air System	1	50	0	AFUE	0	34.56	EER SEER	12.2 15.5	Differential DB	N

[1] Status: N - New, A - Altered, E - Existing

#	Revisions		
Delta	Date	Revisions	By

optimum energy design
Consulting Engineers
5277 College Avenue
Oakland, CA 94618
Telephone (510) 837-9182

This document is the property of the Owner and is not to be used without their written permission

REGISTERED PROFESSIONAL ENGINEER — No. M29253 Exp. 6/30/27 — MECHANICAL — STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ; 510.446.2211 fax

HY Architects Project number: Project Number

Facility

SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project

HVAC REPLACEMENT

Sheet Title

MECHANICAL TITLE 24 FORMS

Client Project Number: 0000.0

Scale: Not to Scale
Drawn By: CC
Checked By: AK
Issue Date:
Revit Version: 2023

Sheet

M5.01

Sheet of

3/26/2025 3:12:50 PM M:\P - PROJECTS\2025\02-25-0001 SFUSD SKYLINE ES\02_MECH

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13
Name or Item Tag	Qty	Design OA CFM	Supply Fan				Return / Relief Fan					Status[1]
			CFM	Power	Power Units	Control	Fan Type	CFM	Power	Power Units	Control	
CU/EC/F-A.1	1	597.1	1,720	1	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
CU/EC/F-B.1	1	194.94	1,200	0.85	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
CU/EC/F-B.2	1	194.94	1,200	0.85	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
CU/EC/F-C.1	1	339.72	1,200	0.85	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
CU/EC/F-C.2	1	338.58	1,200	0.85	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
CU/EC/F-C.3	1	339.72	800	0.85	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
CU/EC/F-C.4	1	339.72	800	0.85	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
CU/EC/F-C.5	1	338.58	800	0.85	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
CU/EC/F-C.6	1	339.72	800	0.85	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
CU/EC/F-D.1	1	349.22	800	0.85	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
CU/EC/F-D.2	1	335.54	1,200	0.85	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
CU/EC/F-D.3	1	340.86	1,200	0.85	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
CU/EC/F-D.4	1	341.62	1,200	0.85	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
CU/EC/F-D.5	1	334.4	1,200	0.85	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
CU/EC/F-D.6	1	335.54	800	0.85	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
CU/EC/F-E.1 & EC/F-E.2	2	956	1,720	1	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
CU/EC/F-E.3	1	282.95	800	0.85	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N

[1] *Status: N - New, A - Altered, E - Existing*

H5. GENERAL EXHAUST FAN SUMMARY

01	02	03	04	05	06	07	08
System ID	Zone Name	Qty	CFM	Power	Power Units	Continuous Operation?	Status[1]
Kitchen E11120-EF	17-Kitchen E11	1	375	0.25	BHP	No	E

[1] *Status: N - New, A - Altered, E - Existing*

H8. SYSTEM SPECIAL FEATURES

01	02	03	04
System Name	Equipment Type	Interlocks per 140.4(n)[1]	Other Special Features and Controls
CU/EC/F-A.1	Single Zone Air Conditioner (SZAC) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Differential DB
CU/EC/F-B.1	Single Zone Air Conditioner (SZAC) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Differential DB
CU/EC/F-B.2	Single Zone Air Conditioner (SZAC) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Differential DB
CU/EC/F-C.1	Single Zone Air Conditioner (SZAC) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Differential DB
CU/EC/F-C.2	Single Zone Air Conditioner (SZAC) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Differential DB
CU/EC/F-C.3	Single Zone Air Conditioner (SZAC) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Differential DB
CU/EC/F-C.4	Single Zone Air Conditioner (SZAC) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Differential DB
CU/EC/F-C.5	Single Zone Air Conditioner (SZAC) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Differential DB

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.

[1] *Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*

H8. SYSTEM SPECIAL FEATURES

01	02	03	04
System Name	Equipment Type	Interlocks per 140.4(n)[1]	Other Special Features and Controls
CU/EC/F-C.6	Single Zone Air Conditioner (SZAC) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Differential DB
CU/EC/F-D.1	Single Zone Air Conditioner (SZAC) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Differential DB
CU/EC/F-D.2	Single Zone Air Conditioner (SZAC) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Differential DB
CU/EC/F-D.3	Single Zone Air Conditioner (SZAC) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Differential DB
CU/EC/F-D.4	Single Zone Air Conditioner (SZAC) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Differential DB
CU/EC/F-D.5	Single Zone Air Conditioner (SZAC) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Differential DB
CU/EC/F-D.6	Single Zone Air Conditioner (SZAC) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Differential DB
CU/EC/F-E.1 & EC/F-E.2	Single Zone Air Conditioner (SZAC) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Differential DB
CU/EC/F-E.3	Single Zone Air Conditioner (SZAC) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Differential DB

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.

[1] *Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01	02	03	04	05	06	07
Zone Name	Mechanical Ventilation				Conditioned Area (sf)	DCV or Occupant Sensor Controls, or Both
	Ventilation Function	# of People	Supply OA CFM	Exhaust CFM		
1-Principal A3	Office - Office space Education - Multiuse assembly General - Corridors Office - Reception areas General - Conference/meeting General - Break rooms	47.5	597.1	0	1855	DCV
2-Kindergarden K1	Education - Classrooms (ages 5-8)	12.82	194.94	0	513	DCV
3-Kindergarden K2	Education - Classrooms (ages 5-8)	12.82	194.94	0	513	DCV
4-Classroom 8	Education - Classrooms (ages 5-8)	22.35	339.72	0	894	DCV
5-Classroom 6	Education - Classrooms (ages 5-8)	22.27	338.58	0	891	DCV
6-Classroom 7	Education - Classrooms (ages 5-8)	22.35	339.72	0	894	DCV
7-Classroom 8	Education - Classrooms (ages 5-8)	22.35	339.72	0	894	DCV
8-Classroom 5	Education - Classrooms (ages 5-8)	22.27	338.58	0	891	DCV
9-Classroom 4	Education - Classrooms (ages 5-8)	22.35	339.72	0	894	DCV
10-Classroom 9	Education - Classrooms (ages 5-8)	22.98	349.22	0	919	DCV
11-Classroom 12	Education - Classrooms (ages 5-8)	22.07	335.54	0	883	DCV

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01	02	03	04	05	06	07
Zone Name	Mechanical Ventilation				Conditioned Area (sf)	DCV or Occupant Sensor Controls, or Both
	Ventilation Function	# of People	Supply OA CFM	Exhaust CFM		
12-Classroom 13	Education - Classrooms (ages 5-8)	22.43	340.86	0	897	DCV
13-Classroom 14	Education - Classrooms (ages 5-8)	22.48	341.62	0	899	DCV
14-Classroom 11	Education - Classrooms (ages 5-8)	22	334.4	0	880	DCV
15-Classroom 10	Education - Classrooms (ages 5-8)	22.07	335.54	0	883	DCV
16-Multi-Use Room E1	Education - Multiuse assembly	127.47	1912	0	3824	DCV
17-Kitchen E11	Food Service - Kitchen (cooking) Food Service - Cafeteria/fast-food dining	26.56	282.95	375	925	DCV

H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12
System ID	System Type	Qty	Rated Capacity (kBtuh)		Airflow (cfm)			Fan			VSD
			Heating	Cooling	Design	Min.	Min. Ratio	Power	Power Units	Cycles	
1-Principal A3-Trm	Uncontrolled	1	N/A	N/A	1,720	N/A	0	N/A	N/A	N/A	☐
2-Kindergarden K1-Trm	Uncontrolled	1	N/A	N/A	1,200	N/A	0	N/A	N/A	N/A	☐
3-Kindergarden K2-Trm	Uncontrolled	1	N/A	N/A	1,200	N/A	0	N/A	N/A	N/A	☐
4-Classroom 8-Trm	Uncontrolled	1	N/A	N/A	1,200	N/A	0	N/A	N/A	N/A	☐
5-Classroom 6-Trm	Uncontrolled	1	N/A	N/A	1,200	N/A	0	N/A	N/A	N/A	☐
6-Classroom 7-Trm	Uncontrolled	1	N/A	N/A	800	N/A	0	N/A	N/A	N/A	☐
7-Classroom 8-Trm	Uncontrolled	1	N/A	N/A	800	N/A	0	N/A	N/A	N/A	☐

H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12
System ID	System Type	Qty	Rated Capacity (kBtuh)		Airflow (cfm)			Fan			VSD
			Heating	Cooling	Design	Min.	Min. Ratio	Power	Power Units	Cycles	
8-Classroom 5-Trm	Uncontrolled	1	N/A	N/A	800	N/A	0	N/A	N/A	N/A	☐
9-Classroom 4-Trm	Uncontrolled	1	N/A	N/A	800	N/A	0	N/A	N/A	N/A	☐
10-Classroom 9-Trm	Uncontrolled	1	N/A	N/A	800	N/A	0	N/A	N/A	N/A	☐
11-Classroom 12-Trm	Uncontrolled	1	N/A	N/A	1,200	N/A	0	N/A	N/A	N/A	☐
12-Classroom 13-Trm	Uncontrolled	1	N/A	N/A	1,200	N/A	0	N/A	N/A	N/A	☐
13-Classroom 14-Trm	Uncontrolled	1	N/A	N/A	1,200	N/A	0	N/A	N/A	N/A	☐
14-Classroom 11-Trm	Uncontrolled	1	N/A	N/A	1,200	N/A	0	N/A	N/A	N/A	☐
15-Classroom 10-Trm	Uncontrolled	1	N/A	N/A	800	N/A	0	N/A	N/A	N/A	☐
16-Multi-Use Room E1-Trm	Uncontrolled	2	N/A	N/A	3,440	N/A	0	N/A	N/A	N/A	☐
17-Kitchen E11-Trm	Uncontrolled	1	N/A	N/A	800	N/A	0	N/A	N/A	N/A	☐

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Mechanical	NRCI-MCH-E - For all buildings with Mechanical Systems

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component	Form/Title & System Name(s)
Mechanical	NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
	CU/EC/F-A.1, CU/EC/F-B.1, CU/EC/F-B.2, CU/EC/F-C.1, CU/EC/F-C.2, CU/EC/F-C.3, CU/EC/F-C.4, CU/EC/F-C.5, CU/EC/F-C.6, CU/EC/F-D.1, CU/EC/F-D.2, CU/EC/F-D.3, CU/EC/F-D.4, CU/EC/F-D.5, CU/EC/F-D.6, CU/EC/F-E.1 & EC/F-E.2 and CU/EC/F-E.3.

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component	Form/Title & System Name(s)
Mechanical	NRCA-MCH-03-A - Constant Volume Single Zone HVAC
	CU/EC/F-A.1, CU/EC/F-B.1, CU/EC/F-B.2, CU/EC/F-C.1, CU/EC/F-C.2, CU/EC/F-C.3, CU/EC/F-C.4, CU/EC/F-C.5, CU/EC/F-C.6, CU/EC/F-D.1, CU/EC/F-D.2, CU/EC/F-D.3, CU/EC/F-D.4, CU/EC/F-D.5, CU/EC/F-D.6, CU/EC/F-E.1 & EC/F-E.2 and CU/EC/F-E.3.
Mechanical	NRCA-MCH-05-A - Air Economizer Controls
	CU/EC/F-A.1, CU/EC/F-B.1, CU/EC/F-B.2, CU/EC/F-C.1, CU/EC/F-C.2, CU/EC/F-C.3, CU/EC/F-C.4, CU/EC/F-C.5, CU/EC/F-C.6, CU/EC/F-D.1, CU/EC/F-D.2, CU/EC/F-D.3, CU/EC/F-D.4, CU/EC/F-D.5, CU/EC/F-D.6, CU/EC/F-E.1 & EC/F-E.2 and CU/EC/F-E.3.
Mechanical	NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints.
	CU/EC/F-A.1, CU/EC/F-B.1, CU/EC/F-B.2, CU/EC/F-C.1, CU/EC/F-C.2, CU/EC/F-C.3, CU/EC/F-C.4, CU/EC/F-C.5, CU/EC/F-C.6, CU/EC/F-D.1, CU/EC/F-D.2, CU/EC/F-D.3, CU/EC/F-D.4, CU/EC/F-D.5, CU/EC/F-D.6, CU/EC/F-E.1 & EC/F-E.2 and CU/EC/F-E.3.
Mechanical	NRCA-MCH-12-A FDD for Packaged Direct Expansion Units
	CU/EC/F-A.1, CU/EC/F-B.1, CU/EC/F-B.2, CU/EC/F-C.1, CU/EC/F-C.2, CU/EC/F-C.3, CU/EC/F-C.4, CU/EC/F-C.5, CU/EC/F-C.6, CU/EC/F-D.1, CU/EC/F-D.2, CU/EC/F-D.3, CU/EC/F-D.4, CU/EC/F-D.5, CU/EC/F-D.6, CU/EC/F-E.1 & EC/F-E.2 and CU/EC/F-E.3.

N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

There are no Certificates of Verification applicable to this project

Documentation Author's Declaration Statement

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Cole Condon	Documentation Author Signature: CC
Company:	Signature Date: 2025-09-10
Address: 5200 E la Palma Ave	CEA/HERS Certification Identification (if applicable):
City/State/Zip: Anaheim, CA 92807	Phone: (714) 693-2277

Responsible Person's Declaration statement

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I understand that a registered copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

Responsible Designer Name: Cole Condon	Responsible Designer Signature: CC	
Company: Optimum Energy Design		
Address: 5277 College Avenue	Date Signed: 2025-09-10	
City/State/Zip: Oakland, CA 94618	License #:	
Phone: (510) 837-9182	Title:	Scope:
Responsible Designer Name: Abby Banerjee	Responsible Designer Signature:	
Company: Optimum Energy Design		
Address: 5277 College Avenue	Date Signed: 2025-09-10	
City/State/Zip: Oakland, CA 94618	License #: M29253	
Phone: (510) 837-9182	Title:	Scope:

#	Revisions		
Delta	Date	Revisions	By

optimum energy design
Consulting Engineers
5277 College Avenue
Oakland, CA 94618
Telephone (510) 837-9182

This document is the property of the Owner and is not to be used without their written permission

REGISTERED PROFESSIONAL ENGINEER ABBY BANERJEE No. M29253 Exp. 6/30/27 MECHANICAL STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: Project Number

Facility

SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project

HVAC REPLACEMENT

Sheet Title

MECHANICAL TITLE 24 FORMS

Client Project Number: 0000.0

Scale: Not to Scale
Drawn By: CC
Checked By: AK
Issue Date:
Revit Version: 2023

Sheet

M5.02

Sheet of

M:\P - PROJECTS\2025\502-25-0001 SFUSD SKYLINE ES\02_MECH
3/26/2025 3:12:50 PM

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT; SCALE ACCORDINGLY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

GENERAL ELECTRICAL NOTES

1. ELECTRICAL CONTRACTOR IS TO PROVIDE LABOR, MATERIALS, TRANSPORTATION, EQUIPMENT, RELATED HAND TOOLS, SPECIAL AND OCCASIONAL SERVICES TO CONSTRUCT AND INSTALL THE COMPLETE ELECTRICAL SYSTEM AS SPECIFIED AND SHOWN ON THE PLANS.
2. MOUNTING HEIGHTS SHALL BE A MAXIMUM +48" TO TOP OF BOX OR MINIMUM 15" TO BOTTOM OF BOX PER CBC 1142A. ALL MOUNTING HEIGHTS SHALL BE AS SHOWN ON SYMBOL LIST UNLESS OTHERWISE NOTED ON DRAWINGS.
3. BONDING JUMPERS SHALL BE INSTALLED TO INSURE CONTINUITY WHERE CONDUIT CONNECTIONS AT CONCENTRIC KNOCKOUTS ARE TO SERVE AS A GROUND.
4. PROVIDE GREEN THWN COPPER GROUND WIRE FROM PANELBOARD GROUND BUS TO ALL BRANCH CIRCUITS.
5. THE ELECTRICIAN SHALL CHECK THE TIGHTNESS OF ALL PANELBOARD BUSES AND CIRCUIT BREAKER LUGS. COMPLETELY VACUUM AND CLEAN INTERIOR OF EQUIPMENT PRIOR TO TURN OVER TO THE OWNER.
6. ALL NEW AND EXISTING PANELBOARDS AND SWITCHBOARDS SHALL BE PROVIDED WITH NEW TYPEWRITTEN DIRECTORIES TO IDENTIFY THE LOCATION OF EACH LOAD SERVED.
7. ALL EQUIPMENT SHALL BE U.L. LISTED AND INSTALLED AS PER LISTING OR LABELING (I.E. MAX. FUSE SIZES MEAN FUSE PROTECTION REQUIRED).
8. CONTRACTOR TO COORDINATE ALL NEW WORK WITH ALL OTHER TRADES FOR A SMOOTH FLOW OF INSTALLATION WORK.
9. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES TO ALL WALLS, FLOORS AND CEILINGS INCURRED DURING ELECTRICAL CONSTRUCTION. IF DAMAGE OCCURS DURING ELECTRICAL CONSTRUCTION, THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR TO PATCH, PAINT AND REPAIR TO MATCH EXISTING CONDITIONS.
10. COORDINATE EQUIPMENT LOCATIONS AND ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT REQUIRING ELECTRICAL HOOK-UP WITH CONTRACTOR RESPONSIBLE FOR PROVIDING EQUIPMENT AND EQUIPMENT MANUFACTURER DATA SHEETS.
11. ALL CORRIDOR AND EXTERIOR WALL PENETRATIONS FOR PIPES, CONDUITS, ETC., IN WALLS REQUIRING PROTECTED OPENINGS SHALL BE FIRE STOPPED. FIRE STOP MATERIAL SHALL BE A TESTED ASSEMBLY APPROVED BY THE CALIFORNIA STATE FIRE MARSHAL.
12. ELECTRICAL CONTRACTOR SHALL REVIEW MECHANICAL AND PLUMBING CONTRACT DRAWINGS AND VERIFY ALL MECHANICAL EQUIPMENT LOCATIONS, MOTOR SIZES AND CONTROL WIRING REQUIREMENTS WITH MECHANICAL CONTRACTOR AND MECHANICAL EQUIPMENT SUPPLIERS AND MANUFACTURERS PRIOR TO INSTALLATION OF ELECTRICAL CONNECTIONS.
13. ALL CONTROL DEVICES TO BE USED BY THE OCCUPANT OF THE ROOM OR AREA SHALL BE INSTALLED AT A MINIMUM OF 36" C/L, TO A MAXIMUM OF 48" TO TOP OF BOX FROM THE FINISHED FLOOR.
14. ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND ALTHOUGH THE SIZE AND LOCATIONS OF EQUIPMENT IS SHOWN TO SCALE WHEREVER POSSIBLE, CONTRACTOR SHALL MAKE USE OF MANUFACTURER'S OR OWNER'S DATA AVAILABLE AND/OR VERIFY DATA IN THE FIELD FOR PROVIDING AND INSTALLING CORRECT CABLE LENGTHS.
15. ALL EQUIPMENT MUST BE LISTED, LABELED, OR CERTIFIED BY A NATIONAL RECOGNIZED TESTING LABORATORY (NRTL).
16. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH ALL TRADES TO KEEP ELECTRICAL ROOMS EXCLUSIVELY DEDICATED TO PANELBOARDS, SIGNAL AND OTHER ELECTRICAL EQUIPMENT. NO PLUMBING, PIPING OR MECHANICAL DUCTS SHALL RUN OVER ELECTRICAL PANEL OR OTHER ELECTRICAL EQUIPMENT PER C.E.C. 110-26(f).
17. ALL SWITCHES AND RECEPTACLES SHALL BE PROVIDED WITH 'BROTHER' LABELING SYSTEM TO IDENTIFY THE PANEL AND CIRCUIT NUMBER OF EACH OUTLET. COLOR TO BE 3/8" HIGH BLACK ON TRANSPARENT TAPE.
18. ALL CABINETS, DISCONNECT SWITCHES, PULLBOXES, AND TERMINAL BOXES SHALL BE PROVIDED WITH LABELING SYSTEM TO IDENTIFY THE PANEL AND ITS USE. SEE SPECIFICATIONS FOR REQUIREMENTS.
19. MAINTAIN "AS-BUILT" RECORDS AT ALL TIMES, SHOWING EXACT LOCATION OF ALL UNDERGROUND AND/OR CONCEALED CONDUITS AND SERVICES INSTALLED UNDER THIS CONTRACT, INCLUDING CIRCUIT IDENTIFICATION WHERE APPLICABLE. PROVIDE OWNER WITH "AS-BUILT" DOCUMENTS AS INDICATED IN THE PROJECT MANUAL.
20. DRAWINGS INDICATE THE LOCATION OF DEVICES, FIXTURES AND EQUIPMENT AND THE CIRCUIT NUMBER AND PANEL DESIGNATION WHICH SUPPLIES THEM. THE CONTRACTOR SHALL VERIFY WITH ARCHITECT/VENDORS AND COORDINATE ALL LOCATIONS PRIOR TO INSTALLATION. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETELY CONNECTING ALL ELECTRICAL DEVICES TO CIRCUITS INDICATED ON THE DRAWINGS.
21. ALL EQUIPMENT GROUNDING SHALL CONFORM TO ARTICLE 250 OF THE NATIONAL ELECTRIC CODE, LATEST EDITION.
22. ALL EXTERIOR CONDUIT ABOVE GRADE INCLUDING ALL ROOF MOUNTED CONDUIT, SHALL BE RIGID GALVANIZED STEEL, U.O.N. COAT ALL EXPOSED THREADS WITH GALVANIZING PAINT.
23. ALL CONDUIT SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
24. ALL UNDERGROUND CONDUIT RUNS SHALL BE SEALED TO PREVENT GAS/MOISTURE ENTERING THE PIPE PER ARTICLE 230-8, 300.5 AND 300.5OE.
25. PROVIDE EXPANSION FITTINGS AND/OR CONDUIT FLEX TO CONDUITS PASSING THROUGH STRUCTURAL EXPANSION JOINT SYSTEM. VERIFY/COORDINATE WITH ARCHITECT FOR LOCATION.
26. ALL RACEWAY PASSING THROUGH EXPANSION JOINT AREA SHALL BE PROVIDED WITH EXPANSION JOINT FITTINGS AND/OR FLEX CONDUIT AS REQUIRED.
27. ALL EXTERIOR MOUNTED GFI RECEPTACLE OUTLETS TO BE PROVIDED WITH LOCKABLE COVERS, TAYMAC MX3200.
28. ALL EQUIPMENT/COMPONENTS/DEVICES INSTALLED OUTDOOR SHALL BE U.L. LISTED FOR WET LOCATION.
29. THE CONTRACTOR SHALL VERIFY WITH THE ARCHITECTURAL DRAWINGS ALL LOCATIONS AND DIMENSIONS OF DEVICES/EQUIPMENT PRIOR TO ROUGH-IN.
30. ALL DIVISION 23 EQUIPMENT LOW VOLTAGE CONTROL WIRING SHALL BE PROVIDED AND INSTALLED BY DIVISION 23 U.O.N. PROVIDE CONDUIT WHERE REQUIRED BY DIV 23.
31. ALL CONDUIT STUB OUTS AND CONDUITS TERMINATING TO A J-BOX, CABINET, AND THE LIKE SHALL BE PROVIDED WITH INSULATED THROAT. BOX OR CABINET COVER SHALL BE LABELED AS TO USE.

MEP COMPONENT ANCHORAGE NOTE

APPLICABLE CODE: 2022 CBC PER IR 16-13

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 CHAPTER 13, 26 AND 30.

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

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

A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
B. COMPONENTS WEIGHING LESS THAN 20 POUNDS OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

MEP DISTRIBUTION SYSTEM BRACING NOTE FOR PIPING, DUCTWORK AND ELECTRICAL CONDUIT

APPLICABLE CODE: 2022 CBC PER IR 16-13

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7 SECTION 13.3 AS DEFINED IN ASCE 7 SECTIONS 13.6.5, 13.6.6, 13.6.7, AND 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. THE MEP DESIGN PROFESSIONAL ENGINEER RESPONSIBLE FOR CONTENT ON THESE SHEETS HAS VERIFIED THAT THE DESIGN METHODS IDENTIFIED BELKOW ARE IN ACCORDANCE WITH DSA 1R 16-13.

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

MP☐ MD☐ PP ☐ E ☒ OPTION 1: PROJECT SPECIFIC DESIGN

MP☐ MD☐ PP ☐ E ☐ OPTION 2: DESIGN BASED ON OSHPD OPM, WITHIN PROJECT SUBMITTAL.

MP☐ MD☐ PP ☐ E ☐ OPTION 2: DESIGN BASED ON OSHPD OPM, DEFERRED SUBMITTAL.

ELECTRICAL SYMBOL LIST

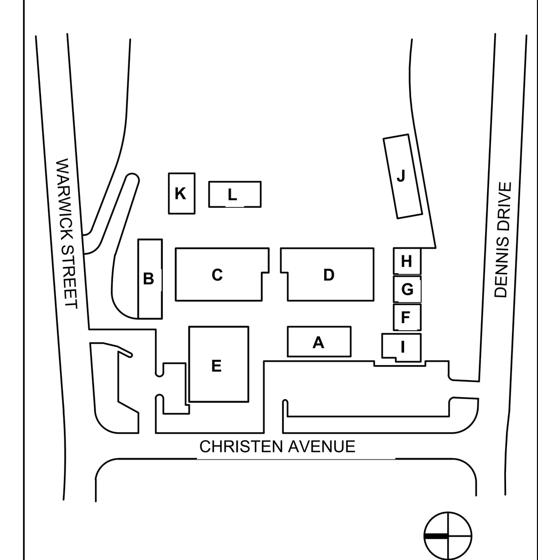
NOTE: DASHED SYMBOLS ON PLANS DENOTE EXISTING DEVICES

- 20A, 125V, 3W GROUNDING TYPE DUPLEX RECEPTACLE, +18" U.O.N.
- 20A, 125V DUPLEX GFI RECEPTACLE, +18" U.O.N.
- Ⓙ JUNCTION BOX, CEILING OR WALL MOUNTED - SIZED PER CODE
- DISCONNECT SWITCH - FUSED AS REQUIRED, WEATHERPROOF FOR OUTDOORS, SIZED PER MANUFACTURER'S REQUIREMENTS
- MOTOR CONNECTION
- S^T THERMAL OVERLOAD SWITCH
- SM MANUAL MOTOR STARTING SWITCH, HORSE POWER RATED WITH OVERLOADS
- EXISTING CONDUIT
- BRANCH CIRCUIT CONDUIT CONCEALED IN WALL OR CEILING
- BRANCH CIRCUIT CONDUIT CONCEALED UNDER FLOOR OR UNDERGROUND
- HOMERUN TO PANELBOARD OR OTHER TERMINATION POINT
- STUB CONDUIT TO ACCESSIBLE SPACE
- CONDUIT UP
- CONDUIT DOWN
- ANY BRANCH CIRCUIT CONDUIT SHALL BE MINIMUM 3/4"C - 2#12, 1#12 GREEN GROUND UNLESS OTHERWISE NOTED. FOR A GREATER NUMBER OF #12 WIRES: (―⫲― = 3/4"C - 3#12, 1#12G) ETC. FOR WIRE SIZES OTHER THAN #12: (―⫲― #8 = 3#8, 1#12G), (GROUND SIZED PER CEC, IN CODE SIZE CONDUIT) ETC.

(E)	EXISTING
(N)	NEW
CU	COPPER
GFI	GROUND FAULT INTERRUPTER
GFP	GROUND FAULT PROTECTION
MT	EMPTY CONDUIT WITH PULL CORD
PB	PULL BOX
SAD	SEE ARCHITECTURAL DRAWINGS
STC	SIGNAL TERMINAL CABINET
WP	WEATHERPROOF
UG	UNDERGROUND
U.O.N.	UNLESS OTHERWISE NOTED
VIF	VERIFY IN FIELD
◇1	NUMBERED ELECTRICAL NOTE
AC/1	MECHANICAL TAG - LETTER DENOTES TYPE, NUMBER DENOTES EQUIPMENT NUMBER

Delta	Date	Revisions	By

KEY PLAN



WKM
Electrical Consultants Incorporated
3397 Mt. Diablo Blvd., Suite C
Lafayette, CA 94549
Tel: 925.385.0649
25-004

This document is the property of the Owner and is not to be used without their written permission.

REGISTERED PROFESSIONAL ENGINEER JOSE L. WE No. E 17369 Exp. 9-30-26 ELECTRICAL STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY ARCHITECTS JOB NUMBER XXXX

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
ELECTRICAL SYMBOLS, NOTES AND SCHEDULES

Client Project Number: XXXX

Scale: AS NOTED
Drawn By: DAM
Checked By: TLK
Issue Date: 09/15/25
Revit Version: 2023

Sheet
E0.01

2/12/2026 6:16 AM c:\users\damor\wkm consulting dropbox\cad\2025\25-004 skyline es hvac\25004 e0.01

GRAPHIC SCALES: 1/16" = 1'-0" (0, 5', 50') | 1/8" = 1'-0" (0, 5', 25') | 1/4" = 1'-0" (0, 1', 12') | 1/2" = 1'-0" (0, 1', 6') | 3/4" = 1'-0" (0, 4') | 1" = 1'-0" (0, 1', 3') | 1 1/2" = 1'-0" (0, 2') | 3" = 1'-0" (0, 1')

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT; SCALE ACCORDINGLY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

EXISTING PANEL NA — NURSE A4

DESCRIPTION	LTG.	REC.	RES.	MOT.	CB	CKT	SN	CKT	CB	LTG.	REC.	RES.	MOT.	DESCRIPTION
EXH FAN - WOMENS TOILET					20/1	1	*	2	20/1			1.70		FURNACE (1)
EXH FAN - MENS TOILET					20/1	3	*	4	20/1					EXIT LIGHTS
SPARE					20/1	5	*	6	20/1					SPARE
TEACHERS LOUNGE RECEPT					20/1	7	*	8	20/1					HVAC GLOBAL CONTROLLER
TEACHERS LOUNGE CEILING JBOX					20/1	9	*	10	20/1					SPARE
SPARE					20/1	11	*	12	20/1					SPARE
SPARE					20/1	13	*	14	20/1					SPARE
SPARE					20/1	15	*	16	20/1					SPARE
SPARE					20/1	17	*	18	20/1					SPARE
SPARE					20/1	19	*	20	20/1					SPARE
SPARE					20/1	21	*	22	20/1					SPARE
SPARE					20/1	23	*	24	20/1					SPARE
SPARE					20/1	25	*	26	20/1					SPARE
SPARE					20/1	27	*	28	20/1					SPARE
SPARE					20/1	29	*	30	20/3					SPARE
(2) CU-A1				6.40	50/2	31	*	32						
						33	*	34						
SPACE						35	*	36	20/1					SPARE
ROOF RECEPT					20/1	37	*	38	100/3					(E) PANEL 'A'
SPARE					20/1	39	*	40						
SPARE					15/1	41	*	42						
TOTAL				6.40								1.70		

VOLTS: 120/208V,3ø,4W — MTG: SURFACE
BUS: 225 AMP — TYPE: A-SERIES — CONNECTED KVA: 8.10
MAIN: 225 AMP MB — KAIC: (E) 10 — CONNECTED AMPS: 22.50

EXISTING PANEL NE — KITCHEN

DESCRIPTION	LTG.	REC.	RES.	MOT.	CB	CKT	SN	CKT	CB	LTG.	REC.	RES.	MOT.	DESCRIPTION
EXHAUST FAN - TOILETS					20/1	1	*	2	20/1					WHEELCHAIR LIFT
SPARE					20/1	3	*	4	20/1			1.70		FURNACE - ESL
SPARE					20/1	5	*	6	20/1			1.70		FURNACE - MP ROOM
EXHAUST FAN - OFFICE					20/1	7	*	8	20/1					SPARE
ROLL IN REFRIGERATOR					20/1	9	*	10	20/1					SPARE
ROLL IN REFRIGERATOR					20/1	11	*	12	20/1					SPARE
SPARE					20/1	13	*	14	20/1					SPARE
SPARE					20/1	15	*	16	20/1					SPARE
SPARE					20/1	17	*	18	20/1					SPARE
SPARE					20/1	19	*	20	20/1					SPARE
SPARE					20/1	21	*	22	30/2				3.90	CU-E3 (1)
SPARE					20/1	23	*	24						
SPARE					20/1	25	*	26	50/2				6.40	CU-E2 (2)
SPARE					20/1	27	*	28						
SPARE					20/1	29	*	30						SPACE
(1) FURNACE - MP ROOM			1.70		20/1	31	*	32	50/2				6.40	CU-E1 (2)
EXT. LIGHT					20/1	33	*	34						
SPARE					15/3	35	*	36						SPACE
						37	*	38	20/1					SPARE
						39	*	40						SPACE
SPACE						41	*	42						SPACE
TOTAL			1.70									3.40	16.70	

VOLTS: 120/208V,3ø,4W — MTG: RECESSED
BUS: 400 AMP — TYPE: GE A-SERIES — CONNECTED KVA: 21.80
MAIN: 400 AMP MB — KAIC: (E) — CONNECTED AMPS: 60.56

SHEET NOTES

1. CONNECT NEW UNIT TO EXISTING CIRCUIT.
2. REPLACE EXISTING 3 POLE BREAKER WITH NEW 50A/2P AND LEAVE 1 SPACE.

EXISTING PANEL NB — STORAGE B8

DESCRIPTION	LTG.	REC.	RES.	MOT.	CB	CKT	SN	CKT	CB	LTG.	REC.	RES.	MOT.	DESCRIPTION
RCPT - COMP RM 1					20/1	1	*	2	20/1					RCPT - COMP RM 2
RCPT - COMP RM 1					20/1	3	*	4	20/1					RCPT - COMP RM 2
RCPT - PRINTER RM 1					20/1	5	*	6	20/1					RCPT - PRINTER RM 2
RCPT - TEACHR STA RM 1					20/1	7	*	8	20/1					RCPT - TEACHR STA RM 2
EXIT LIGHTS - BLDG B					20/1	9	*	10	20/1					IDF
SPARE					20/1	11	*	12	20/1					SPARE
SPARE					20/1	13	*	14	20/1					SPARE
SPARE					20/1	15	*	16	20/1					SPARE
SPARE					20/1	17	*	18	20/1					SPARE
(1) CU-B1				3.90	30/2	19	*	20	20/1					SPARE
						21	*	22	20/1					SPARE
CU-B2				3.90	30/2	23	*	24	20/1					SPARE
						25	*	26	20/1					SPARE
CU-C1				3.90	30/2	27	*	28	20/1					SPARE
						29	*	30	20/1					SPARE
CU-C2				3.90	30/2	31	*	32	20/1					SPARE
						33	*	34	20/1					SPARE
CU-C6				3.90	30/2	35	*	36	20/1					SPARE
						37	*	38	100/3					(E) PANEL 'C'
CU-C5				3.90	30/2	39	*	40						
						41	*	42						
TOTAL				23.40										

VOLTS: 120/208V,3ø,4W — MTG: SURFACE
BUS: 225 AMP — TYPE: A-SERIES — CONNECTED KVA: 23.40
MAIN: 225 AMP MB — KAIC: (E) 10 — CONNECTED AMPS: 65.00

EXISTING PANEL NC — CUSTODIAN C8

DESCRIPTION	LTG.	REC.	RES.	MOT.	CB	CKT	SN	CKT	CB	LTG.	REC.	RES.	MOT.	DESCRIPTION
RCPT - COMP RM 8					20/1	1	*	2	20/1					RCPT - COMP RM 7
RCPT - COMP RM 8					20/1	3	*	4	20/1					RCPT - COMP RM 7
RCPT - PRINTER RM 8					20/1	5	*	6	20/1					RCPT - PRINTER RM 7
RCPT - TEACHR STA RM 8					20/1	7	*	8	20/1					RCPT - TEACHR STA RM 7
RCPT - COMP RM 5					20/1	9	*	10	20/1					RCPT - COMP RM 6
RCPT - COMP RM 5					20/1	11	*	12	20/1					RCPT - COMP RM 6
RCPT - PRINTER RM 5					20/1	13	*	14	20/1					RCPT - PRINTER RM 6
RCPT - TEACHR STA RM 5					20/1	15	*	16	20/1					RCPT - TEACHR STA RM 6
RCPT - COMP RM 4					20/1	17	*	18	20/1					RCPT - COMP RM 3
RCPT - COMP RM 4					20/1	19	*	20	20/1					RCPT - COMP RM 3
RCPT - PRINTER RM 4					20/1	21	*	22	20/1					RCPT - PRINTER RM 3
RCPT - TEACHR STA RM 4					20/1	23	*	24	20/1					RCPT - TEACHR STA RM 3
(1) FURNACE - RM 6			1.70		20/1	25	*	26	30/2				3.90	CU-D6 (1)
FURNACE - RM 3			1.70		20/1	27	*	28						
FURNACE - RM 8			1.70		20/1	29	*	30	30/2				3.90	CU-D1 (1)
FURNACE - RM 5			1.70		20/1	31	*	32						
FURNACE - RM 4			1.70		20/1	33	*	34	20/1					IDF
FURNACE - RM 7			1.70		20/1	35	*	36	20/1					SPARE
EXIT LIGHTS					20/1	37	*	38	20/1					RECEPTACLE ROOF
(E) PANEL D (225 AMP)						39	*	40	20/1					SPARE
(E) PANEL D (225 AMP)						41	*	42						(E) PANEL D (225 AMP)
TOTAL			10.20										7.80	

VOLTS: 120/208V,3ø,4W — MTG: SURFACE
BUS: 400 AMP — TYPE: A-SERIES — CONNECTED KVA: 18.00
MAIN: 400 AMP MB — KAIC: (E) 10 — CONNECTED AMPS: 50.00

EXISTING PANEL ND — STORAGE D8

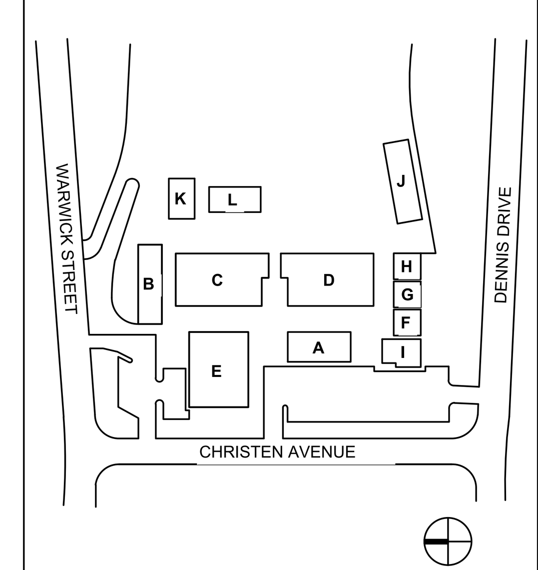
DESCRIPTION	LTG.	REC.	RES.	MOT.	CB	CKT	SN	CKT	CB	LTG.	REC.	RES.	MOT.	DESCRIPTION
RCPT - COMP RM 9					20/1	1	*	2	20/1					RCPT - COMP RM 10
RCPT - COMP RM 9					20/1	3	*	4	20/1					RCPT - COMP RM 10
RCPT - PRINTER RM 9					20/1	5	*	6	20/1					RCPT - PRINTER RM 10
RCPT - TEACHR STA RM 9					20/1	7	*	8	20/1					RCPT - TEACHR STA RM 10
RCPT - COMP RM 12					20/1	9	*	10	20/1					RCPT - COMP RM 11
RCPT - COMP RM 12					20/1	11	*	12	20/1					RCPT - COMP RM 11
RCPT - PRINTER RM 12					20/1	13	*	14	20/1					RCPT - PRINTER RM 11
RCPT - TEACHR STA RM 12					20/1	15	*	16	20/1					RCPT - TEACHR STA RM 11
RCPT - COMP RM 13					20/1	17	*	18	20/1					RCPT - COMP RM 14
RCPT - COMP RM 13					20/1	19	*	20	20/1					RCPT - COMP RM 14
RCPT - PRINTER RM 13					20/1	21	*	22	20/1					RCPT - PRINTER RM 14
RCPT - TEACHR STA RM 13					20/1	23	*	24	20/1					RCPT - TEACHR STA RM 14
(1) FURNACE - RM 9			1.70		20/1	25	*	26	30/2				3.90	CU-D4 (1)
FURNACE - RM 12			1.70		20/1	27	*	28						
FURNACE - RM 13			1.70		20/1	29	*	30	30/2				3.90	CU-D3 (1)
FURNACE - RM 10			1.70		20/1	31	*	32						
FURNACE - RM 11			1.70		20/1	33	*	34	20/1					IDF
FURNACE - RM 4			1.70		20/1	35	*	36	20/1					SPARE
EXIT SIGN					20/1	37	*	38	20/1					SPARE
(E) PANEL E						39	*	40	20/1					SPARE
(E) PANEL E						41	*	42						(E) PANEL E
TOTAL			10.20										7.80	

VOLTS: 120/208V,3ø,4W — MTG: SURFACE
BUS: 400 AMP — TYPE: A-SERIES — CONNECTED KVA: 18.00
MAIN: 400 AMP MB — KAIC: (E) 10 — CONNECTED AMPS: 50.00

Revisions

Delta	Date	Revisions	By

KEY PLAN



WKM
Electrical Consultants Incorporated
3397 Mt. Diablo Blvd., Suite C
Lafayette, CA 94549
Tel: 925.385.0649
25-004

This document is the property of the Owner and is not to be used without their written permission.

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY ARCHITECTS JOB NUMBER XXXX

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
ELECTRICAL PANEL SCHEDULES

Client Project Number: XXXX

Scale: AS NOTED
Drawn By: DAM
Checked By: TLK
Issue Date: 09/15/25
Revit Version: 2023

Sheet
E0.02

2/12/2026 6:16 AM c:\users\damor\wkm consulting dropbox\cad\2025\25-004 skyline es hvac\25004 e0.02

GRAPHIC SCALES: 1/16" = 1'-0" (0, 5', 50') · 1/8" = 1'-0" (0, 5', 25') · 1/4" = 1'-0" (0, 1', 12') · 1/2" = 1'-0" (0, 1', 6') · 3/4" = 1'-0" (0, 4') · 1" = 1'-0" (0, 1', 3') · 1 1/2" = 1'-0" (0, 2') · 3" = 1'-0" (0, 1')

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT; SCALE ACCORDINGLY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

EXISTING PANEL B-1 - SECTION 1

KITCHEN

DESCRIPTION	LOAD (KVA) LTG.	REC.	RES.	MOT.	CB	CKT	SN	CKT	CB	LOAD (KVA) LTG.	REC.	RES.	MOT.	DESCRIPTION
LIGHTS - MULTI-USE ROOM					20/1	1	*	2	20/1					LIGHTS - MULTI-USE ROOM
LIGHTS - MULTI-USE ROOM					20/1	3	*	4	20/1					LIGHTS - MULTI-USE ROOM
LIGHTS - MULTI-USE ROOM					20/1	5	*	6	20/1					LIGHTS - MULTI-USE ROOM
LIGHTS - KITCHEN					20/1	7	*	8	20/1					LIGHTS - TEACHERS DINING & HOOD
LIGHTS - DISHWASHING, JANITOR, BATH					20/1	9	*	10	20/1					LIGHTS - LOBBY, CUSTODIAN, BATHROOM
LIGHTS - MECH, LARGE STORAGE					20/1	11	*	12	20/1					LIGHTS - STAGE, OFFICE
LIGHTS - OUTSIDE FLOOD - RELAY 'C'					20/1	13	*	14	20/1					LIGHTS - OUTSIDE FLOOD - RELAY 'C'
LIGHTS - OUTSIDE FLOOD - RELAY 'D'					20/1	15	*	16	20/1					LIGHTS - EXIT, EMERGENCY BATTERY, CUST
LIGHTS - OUTSIDE RECESS					20/1	17	*	18	20/1					
RELAY CIRCUIT FOR MULTI-USE LIGHT					20/1	19	*	20	20/1					PLUGS - OFFICE, STAGE, LARGE STORAGE
PLUGS - MULTI-USE WALL & FLOOR					20/1	21	*	22	20/1					PLUG - P.A. CONTROL PANEL
PLUGS - MULTI-USE ROOM					20/1	23	*	24	20/1					PLUGS - MULTI-USE ROOM BY STAGE
PLUGS - MULTI-USE, OUTSIDE CORR					20/1	25	*	26	20/1					PLUGS - KITCHEN
PLUGS - DISHWASHING, STORAGE, PANEL					20/1	27	*	28	20/1					PLUGS - KITCHEN
PLUGS - JANITOR, DRESSING, BATH, MECH					20/1	29	*	30	20/1					PLUGS - KITCHEN - CONVEN OVENS
PLUG - KITCHEN COOLER					20/1	31	*	32	20/1					
PLUGS - KITCHEN COUNTER, OUTSIDE					20/1	33	*	34	20/1					PLUGS - TEACHERS DINING
FAN - ROOF FAN E-5 - MECH PANEL					20/1	35	*	36	20/1					PLUGS - MEN & WOMEN BATH, CUST
FAN - ROOF FAN E-4 - MECH PANEL					20/1	37	*	38	20/1					PLUG - LOBBY
FAN - ROOF FAN E-7 - DISHWASHING					20/1	39	*	40	20/1					FAN - ROOF FAN E-8, MECH PANEL
WATER HEATER CIRCULATING PUMP					20/1	41	*	42	20/1				1.70	FURNACE - S-2, MECH ROOM
TOTAL													1.70	

VOLTS: 120/208V,3ø,4W MTG: RECESSED
BUS: 225 AMP TYPE: ITE NLAB SECTION 1 KVA: 1.70
MAIN: 225 AMP KAIC: (E) CONNECTED AMPS: 4.72

EXISTING PANEL E

DESCRIPTION	LOAD (KVA) LTG.	REC.	RES.	MOT.	CB	CKT	SN	CKT	CB	LOAD (KVA) LTG.	REC.	RES.	MOT.	DESCRIPTION
LIGHTS - CLASSROOM C12					20/1	1	*	2	20/1					LIGHTS - CLASSROOM C11
LIGHTS - CLASSROOM C13					20/1	3	*	4	20/1					LIGHTS - INSIDE HALLWAY
LIGHTS - BATHROOM, STORAGE					20/1	5	*	6	20/1					LIGHTS - CLASSROOM C14
LIGHTS - CLASSROOM C7					20/1	7	*	8	20/1					LIGHTS - INSIDE PATIO
LIGHTS - CLASSROOM C6					20/1	9	*	10	20/1					SPARE
SPARE					20/1	11	*	12	20/1					SPARE
PLUGS - CLASSROOM C7/C9					20/1	13	*	14	20/1					PLUGS - CLASSROOM C16
PLUGS - OUTSIDE, CLASSROOM C12					20/1	15	*	16	20/1					PLUGS - CLASSROOM C11, OUTSIDE
PLUGS - CLASSROOM C13					20/1	17	*	18	20/1					PLUGS - CLASSROOM C14, HALL
PLUGS - BATHROOM, STOR					20/1	19	*	20	20/1					SPARE
(1) CU-D2				3.90	30/2	21	*	22	20/1					SPARE
						23	*	24	20/1					SPARE
(1) CU-D3				3.90	30/2	25	*	26	40/2					KILN
						27	*	28						
					30/2	29	*	30	20/1					SPARE
						31	*	32	20/1					SPARE
SPARE					20/1	33	*	34	20/1					SPARE
SPACE						35	*	36	20/1					SPARE
TOTAL				7.80										

VOLTS: 120/208V,3ø,4W MTG: RECESSED
BUS: 225 AMP TYPE: ITE NLAB CONNECTED KVA: 7.80
MAIN: 225 AMP MB KAIC: (E) CONNECTED AMPS: 21.67

SHEET NOTES

1. CONNECT NEW UNIT TO EXISTING CIRCUIT.

EXISTING PANEL B-2 - SECTION 2

KITCHEN

DESCRIPTION	LOAD (KVA) LTG.	REC.	RES.	MOT.	CB	CKT	SN	CKT	CB	LOAD (KVA) LTG.	REC.	RES.	MOT.	DESCRIPTION
FURNACE CONTROLS					20/1	43	*	44	20/1					MECH CONTROL PANEL - COIL CIRCUIT
FLOW ALARM					20/1	45	*	46	20/1					FURNACE CONTROLS
PLUG - KITCHEN FLOOR					20/1	47	*	48	20/1					
PLUG - KITCHEN FLOOR					20/1	49	*	50	20/1					
PLUG - KITCHEN FLOOR					20/1	51	*	52	20/1					PLUG - 220 VOLT KITCHEN FLOOR
					20/1	53	*	54	20/1					PLUG - 220 VOLT KITCHEN FLOOR
FAN - E-6, KITCHEN HOOD					20/3	55	*	56	20/3					DISHWASHER MOTOR
							*							
							*							
DISHWASHER - HEATING ELEMENT					20/3	57	*	58	20/3					GARBAGE DISPOSAL - KITCHEN
							*							
							*							
GARAGE DISPOSAL - KITCHEN					20/3	59	*	60	20/3					FURNACE - S-1, MECH ROOM
							*							
							*							
					20/3	61	*	62						SPACE
							*							SPACE
							*							SPACE
SPACE						63	*	64						SPACE
SPACE						65	*	66						SPACE
SPACE						67	*	68						SPACE
TOTAL														

VOLTS: 120/208V,3ø,4W MTG: SURFACE
BUS: 400 AMP TYPE: NQOD SECTION 1 KVA: 1.70 TOTAL KVA: 1.70
MAIN: 300 AMP MB KAIC: 10 SECTION 2 KVA: CONNECTED AMPS: 4.72

EXISTING PANEL C

STORAGE B8

DESCRIPTION	LOAD (KVA) LTG.	REC.	RES.	MOT.	CB	CKT	SN	CKT	CB	LOAD (KVA) LTG.	REC.	RES.	MOT.	DESCRIPTION
CLASSROOM 2 LIGHTS OUTER					20/1	1	*	2	20/1					
					20/1	3	*	4	20/1					
CLASSROOM 2 LIGHTS CENTER					20/1	5	*	6	20/1					ROOF FLOODS RELAY B
					20/1	7	*	8	20/1					
					20/1	9	*	10	20/1					BRACKET LITES RELAY A
					20/1	11	*	12	20/1					
					20/1	13	*	14	20/1					
					20/1	15	*	16	20/1					
(1) FURNACE CLASSROOM 1				1.70	20/1	17	*	18	20/1					ROOF FAN
(1) FURNACE CLASSROOM 2				1.70	20/1	19	*	20	20/1					HEAT CONTROL
					20/1	21	*	22	20/1					
					20/1	23	*	24	20/1					
SPACE						25	*	26						SPACE
SPACE						27	*	28						SPACE
SPACE						29	*	30						SPACE
TOTAL				3.40										

VOLTS: 120/208V,3ø,4W MTG: RECESSED
BUS: 100 AMPS TYPE: ITE NLAB CONNECTED KVA: 3.40
MAIN: 100 AMPS KAIC: (E) CONNECTED AMPS: 9.44

EXISTING PANEL D

STORAGE D8

DESCRIPTION	LOAD (KVA) LTG.	REC.	RES.	MOT.	CB	CKT	SN	CKT	CB	LOAD (KVA) LTG.	REC.	RES.	MOT.	DESCRIPTION
LIGHTS - CLASSROOM C15					20/1	1	*	2	20/1					LIGHTS - CLASSROOM C14
LIGHTS - CLASSROOM C16					20/1	3	*	4	20/1					LIGHTS - INSIDE HALLWAY
LIGHTS - BATHROOM, STORAGE					20/1	5	*	6	20/1					LIGHTS - CLASSROOM C17
LIGHTS - CLASSROOM C12					20/1	7	*	8	20/1					LIGHTS - OUTSIDE BRACKET - RELAY 'A'
LIGHTS - CLASSROOM C13					20/1	9	*	10	20/1					LIGHTS - OUTSIDE FLOOD - RELAY 'B'
SPARE					20/1	11	*	12	20/1					SPARE
PLUGS - CLASSROOM C12					20/1	13	*	14	20/1					PLUGS - CLASSROOM C13
PLUGS - CLASSROOM C15, OUTSIDE					20/1	15	*	16	20/1					PLUGS - CLASSROOM C14, OUTSIDE
PLUGS - CLASSROOM C16					20/1	17	*	18	20/1					PLUGS - CLASSROOM C17, OUTSIDE
PLUGS - BATHROOM, STOR, OUTSIDE					20/1	19	*	20	20/1					FURNACE - F3-CLASSROOM C16-MECH PL
ROOF PLUG					20/1	21	*	22	20/1					FURNACE - F4-CLASSROOM C15-MECH PL
FURNACE - F6-CLASSROOM C7-MECH PL					20/1	23	*	24	20/1					FURNACE - F7-CLASSROOM C4-MECH PL
FURNACE - F9-CLASSROOM C2-MECH PL					20/1	25	*	26	20/1					FURNACE - F8-CLASSROOM C3-MECH PL
FURNACE - F10-CLASSROOM C5-MECH PL					20/1	27	*	28	20/1					FURNACE - F11-CLASSROOM C6-MECH PL
FURNACE - F12-CLASSROOM C13-MECH PL					20/1	29	*	30	20/1					FURNACE - F13-CLASSROOM C14-MECH PL
FAN - ROOF FAN E-1 MECH PANEL, BOYS					20/1	31	*	32	20/1					FURNACE - F14-CLASSROOM C17-MECH PL
FAN - ROOF FAN E-2 MECH PANEL, GIRLS					20/1	33	*	34	20/1					FLUSH VALVE OPERATOR
MECH CONTROL PANEL COIL					20/1	35	*	36	30/2				3.90	CU-C4 (1)
(E) CIRCUIT					30/2	37	*	38						
						39	*	40	30/2				3.90	CU-C3 (1)
SPARE					20/1	41	*	42						
TOTAL													7.80	

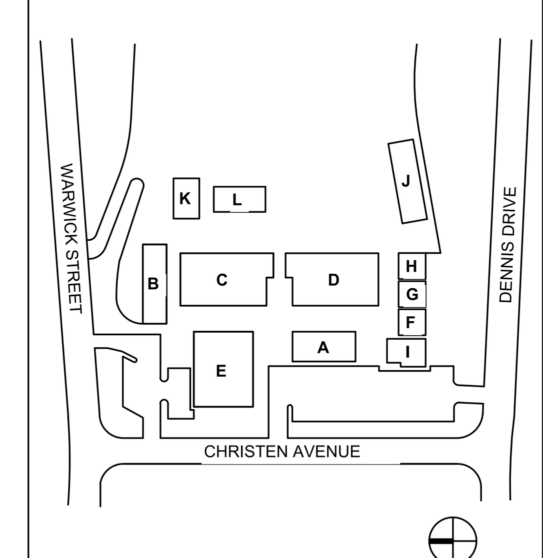
VOLTS: 120/208V,3ø,4W MTG: SURFACE
BUS: 100 AMP TYPE: ITE NLAB CONNECTED KVA: 7.80
MAIN: 100 AMP MB KAIC: (E) CONNECTED AMPS: 21.67

2/12/2026 6:16 AM c:\users\damor\wkm consulting dropbox\cad\2025\25-004 skyline es hvac\25004 e0.03

Revisions

Delta	Date	Revisions	By

KEY PLAN



WKM
Electrical Consultants Incorporated
3397 Mt. Diablo Blvd., Suite C
Lafayette, CA 94549
Tel: 925.385.0649
25-004

This document is the property of the Owner and is not to be used without their written permission.

REGISTERED PROFESSIONAL ENGINEER JOSE L. WE... No. E 17369 Exp. 9-30-26 ELECTRICAL STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY ARCHITECTS JOB NUMBER XXXX

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
ELECTRICAL PANEL SCHEDULES

Client Project Number: XXXX

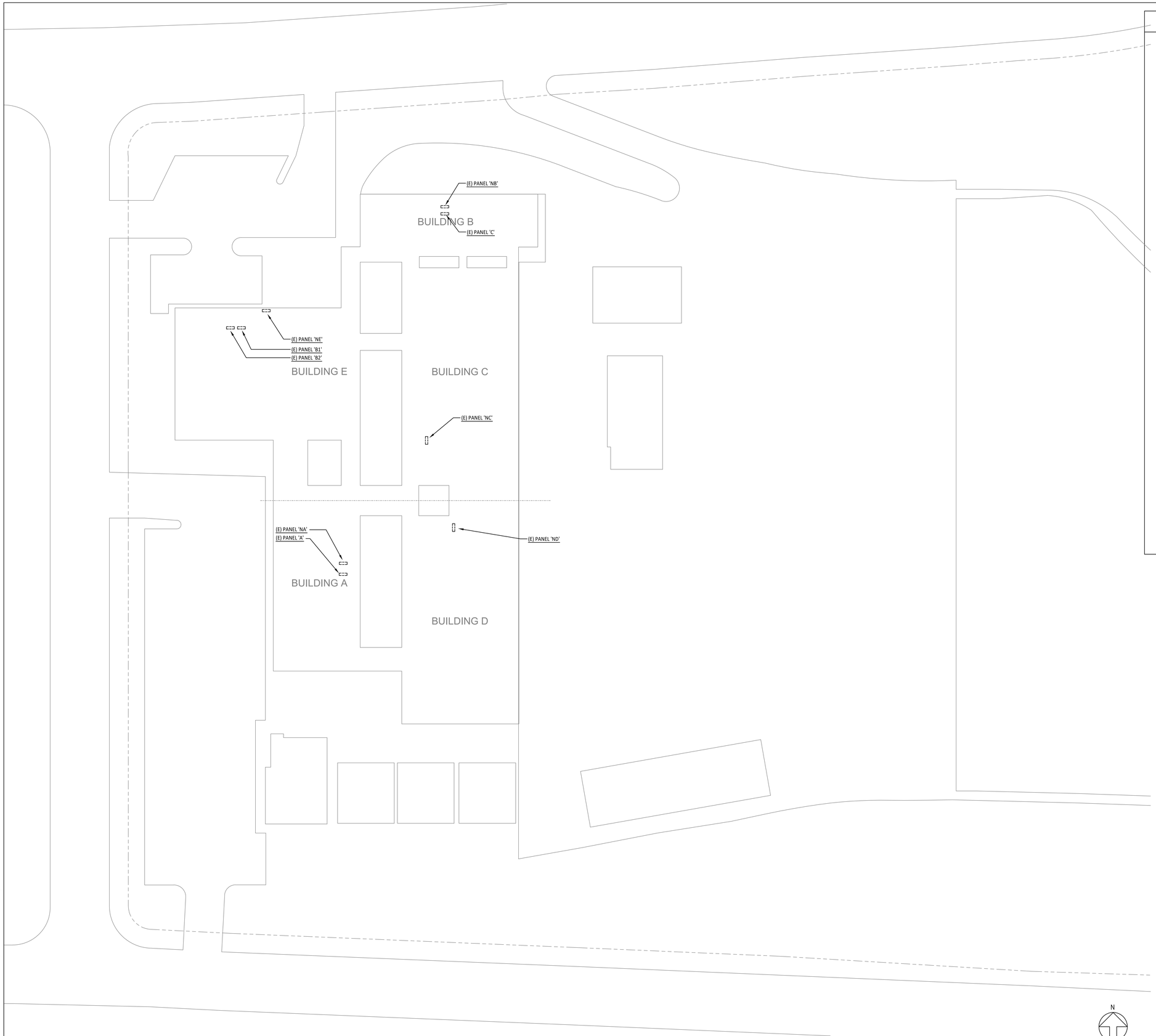
Scale: AS NOTED
Drawn By: DAM
Checked By: TLK
Issue Date: 09/15/25
Revit Version: 2023

Sheet
E0.03

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT; SCALE ACCORDINGLY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026



SHEET NOTES

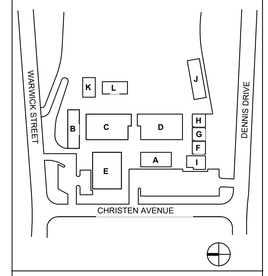
1 X

ELECTRICAL POWER SITE PLAN | 1" = 20'-0" | 1

Revisions

Delta	Date	Revisions	By

KEY PLAN



WKM
Electrical Consultants Incorporated
3397 Mt. Diablo Blvd., Suite C
Lafayette, CA 94549
Tel: 925.385.0649
25-004

This document is the property of the Owner and is not to be used without their written permission.

REGISTERED PROFESSIONAL ENGINEER
No. E 17369
Exp. 9-30-26
ELECTRICAL
STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY ARCHITECTS JOB NUMBER XXXX

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
ELECTRICAL POWER SITE PLAN

Client Project Number: XXXX

Scale:	AS NOTED
Drawn By:	DAM
Checked By:	TLK
Issue Date:	09/15/25
Revit Version:	2023

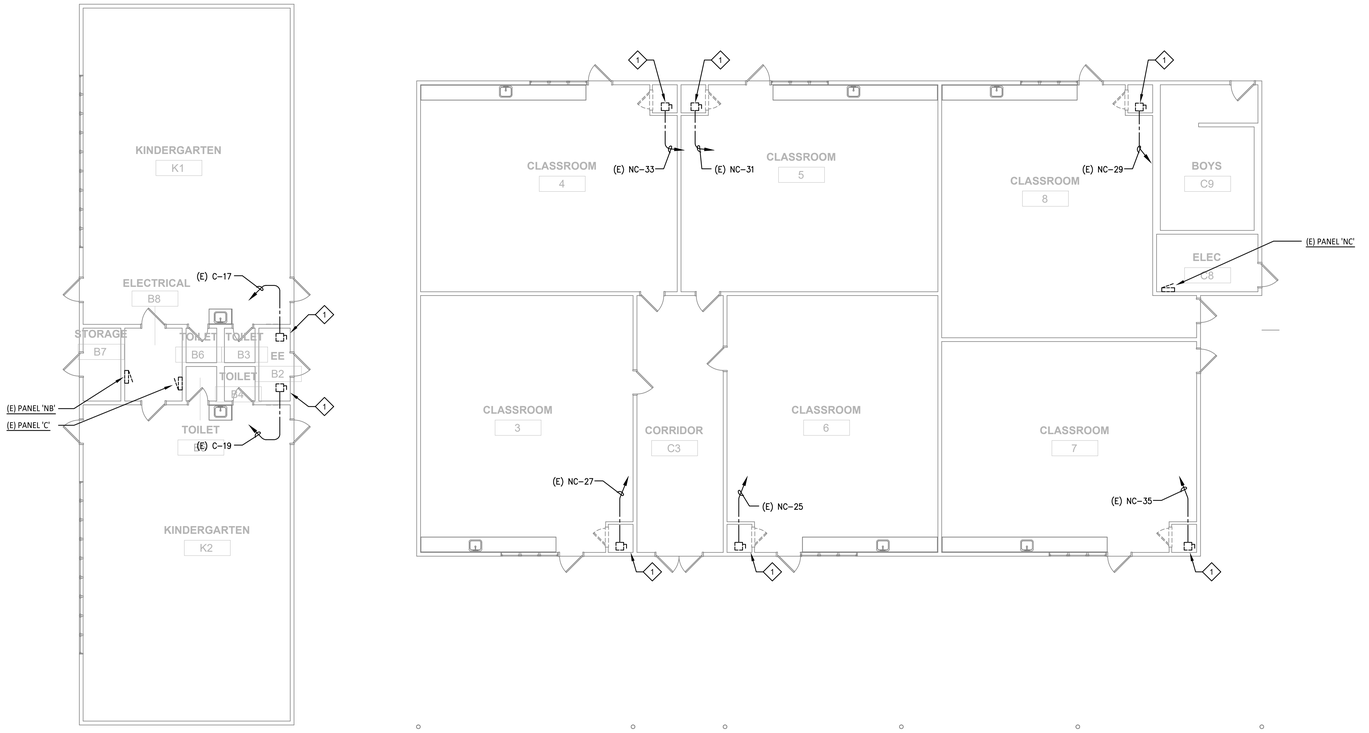
Sheet
E1.01

2/12/2026 6:16 AM c:\users\damor\wkm consulting dropbox\cad\2025\25-004 skyline es hvac\25004 e1.01

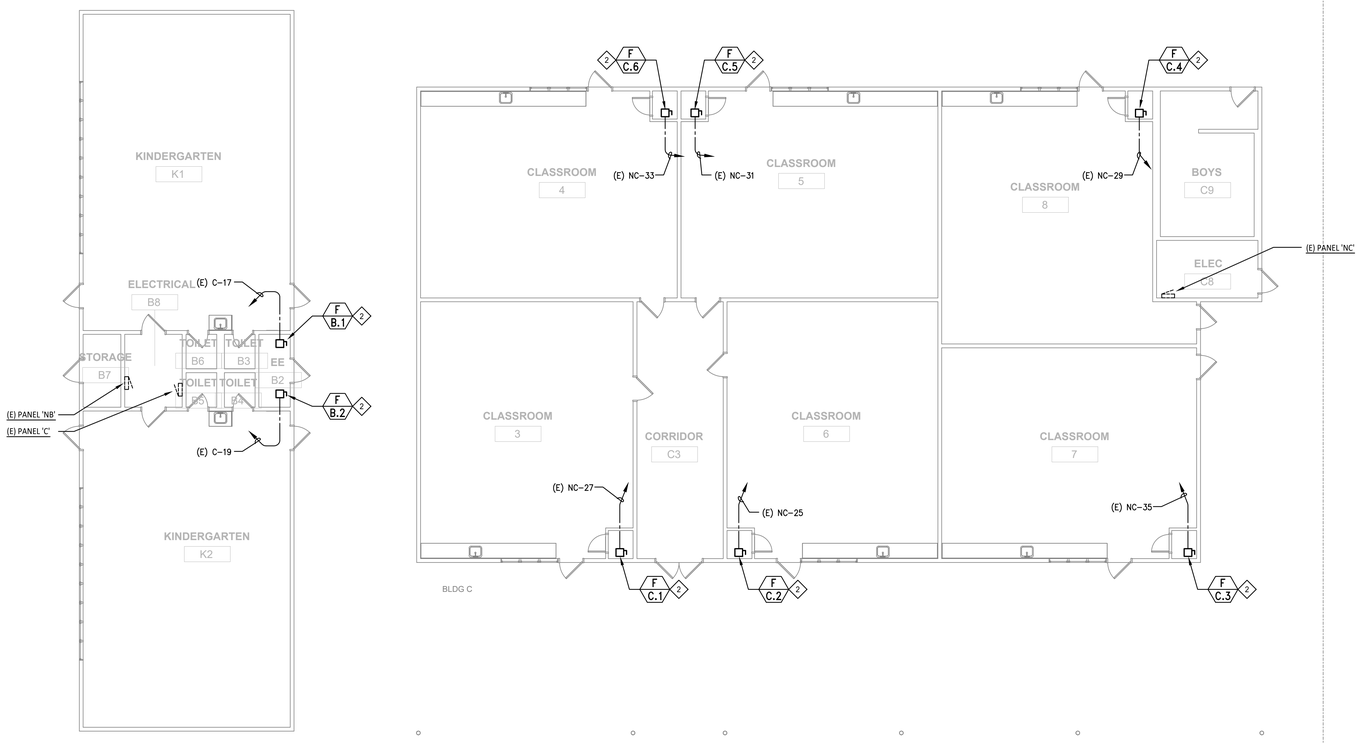
GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT; SCALE ACCORDINGLY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026



ELECTRICAL DEMOLITION POWER PLAN - BUILDINGS B & C | 1/8" = 1'-0" | 1



ELECTRICAL POWER PLAN - BUILDINGS B & C | 1/8" = 1'-0" | 2

GENERAL NOTES

1. COORDINATE ALL CONNECTION REQUIREMENTS TO UNITS WITH MECHANICAL.
2. EXISTING POWER TO EMS CONTROLLERS ARE TO REMAIN. RECONNECT TO NEW CONTROLLERS. COORDINATE LOCATIONS IN THE FIELD WITH MECHANICAL.

SHEET NOTES

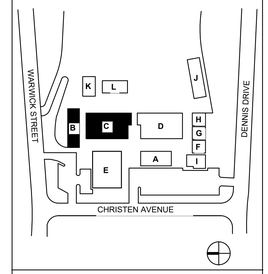
1. EXISTING DISCONNECT TO BE REPLACED WITH NEW FOR CONNECTION TO NEW UNIT. EXISTING CONDENSATE PUMP TO BE REPLACED AND RECONNECTED TO SAME CIRCUIT.
2. RECONNECT EXISTING CONDUIT AND CONDUCTORS TO NEW FURNACE UNIT AND CONDENSATE PUMP. INTERCEPT AND EXTEND AS REQUIRED.

SOUTH SAN FRANCISCO UNIFIED SCHOOL DISTRICT · EDUCATION FOR ALL

Revisions

Delta	Date	Revisions	By

KEY PLAN



WKM
Electrical Consultants Incorporated
3397 Mt. Diablo Blvd., Suite C
Lafayette, CA 94549
Tel: 925.385.0649
25-004

This document is the property of the Owner and is not to be used without their written permission.

REGISTERED PROFESSIONAL ENGINEER · No. E 17369 · Exp. 9-30-26 · ELECTRICAL · STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY ARCHITECTS JOB NUMBER XXXX

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
ELECTRICAL POWER PLANS
BUILDINGS B AND C

Client Project Number: XXXX

Scale:	AS NOTED
Drawn By:	DAM
Checked By:	TLK
Issue Date:	09/15/25
Revit Version:	2023

Sheet
E2.01

2/12/2026 6:16 AM c:\users\damor\wkm consulting dropbox\cad\2025\25-004 skyline es hvac\25004 e2.01

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT; SCALE ACCORDINGLY

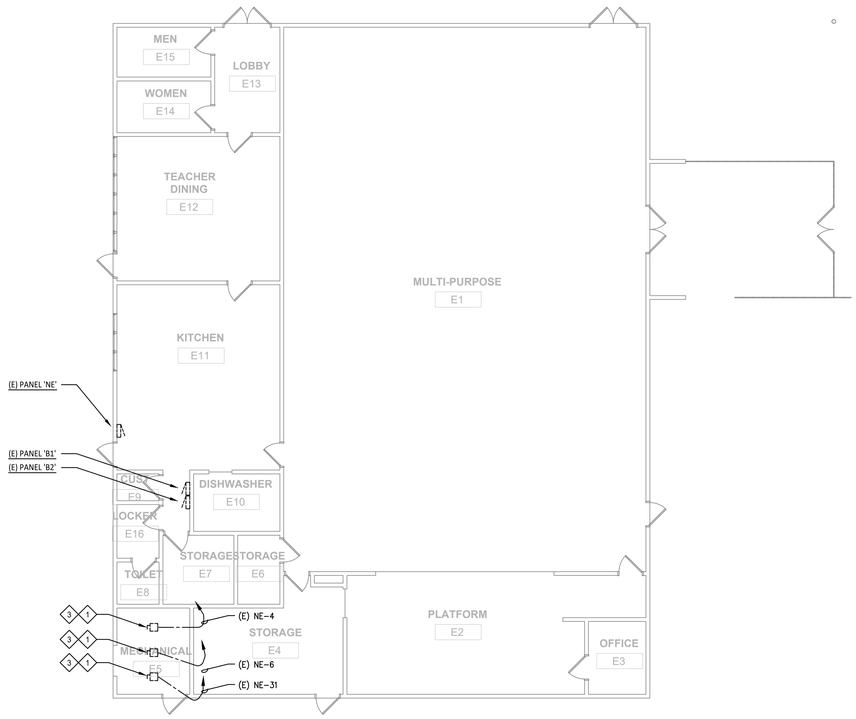
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

GENERAL NOTES

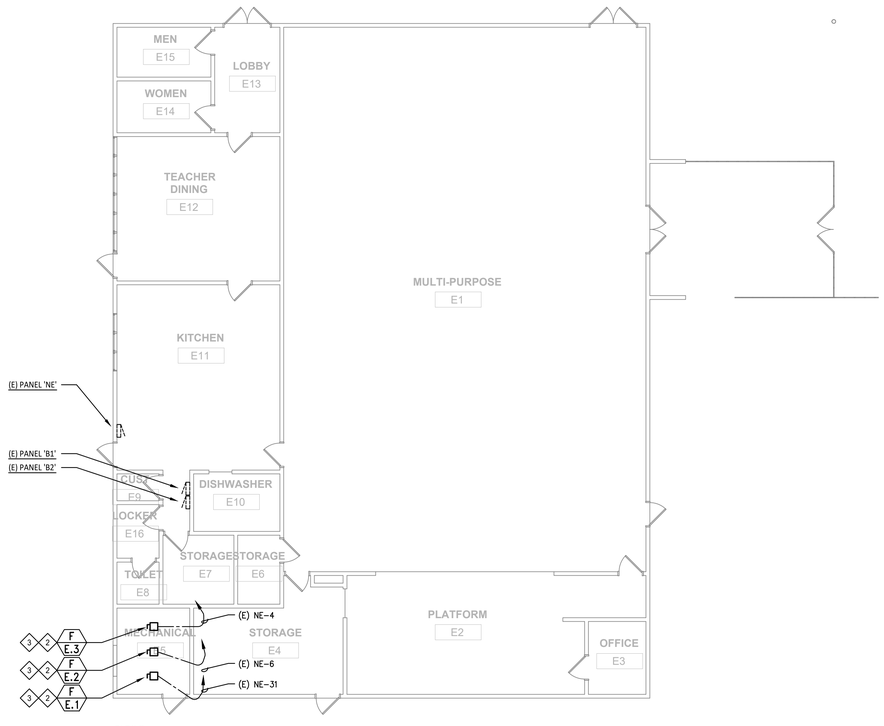
1. COORDINATE ALL CONNECTION REQUIREMENTS TO UNITS WITH MECHANICAL.
2. EXISTING POWER TO EMS CONTROLLERS ARE TO REMAIN. RECONNECT TO NEW CONTROLLERS. COORDINATE LOCATIONS IN THE FIELD WITH MECHANICAL.

SHEET NOTES

1. EXISTING DISCONNECT TO BE REPLACED WITH NEW FOR CONNECTION TO NEW UNIT.
2. RECONNECT EXISTING CONDUIT AND CONDUCTORS TO NEW FURNACE UNIT AND NEW CONDENSATE PUMP. INTERCEPT AND EXTEND AS REQUIRED AND PROVIDE NEW CONNECTION TO NEW PUMP.
3. EXISTING UNIT DUCT DETECTOR TO BE DISCONNECTED AND RECONNECTED AS REQUIRED BY NEW WORK. COORDINATE WITH MECHANICAL CONTRACTOR.



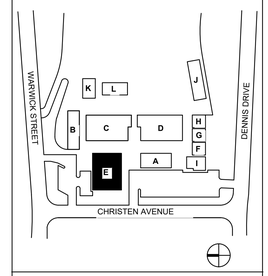
ELECTRICAL DEMOLITION POWER PLAN - BUILDING E | 1/8" = 1'-0" | 1



ELECTRICAL POWER PLAN - BUILDING E | 1/8" = 1'-0" | 2

Revisions			
Delta	Date	Revisions	By

KEY PLAN



WKM
Electrical Consultants Incorporated
3397 Mt. Diablo Blvd., Suite C
Lafayette, CA 94549
Tel: 925.385.0649
25-004

This document is the property of the Owner and is not to be used without their written permission.

REGISTERED PROFESSIONAL ENGINEER
No. E 17369
Exp. 9-30-26
ELECTRICAL
STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY ARCHITECTS JOB NUMBER XXXX

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
ELECTRICAL POWER PLANS
BUILDING E

Client Project Number: XXXX

Scale:	AS NOTED	Sheet
Drawn By:	DAM	E2.02
Checked By:	TLK	
Issue Date:	09/15/25	
Revit Version:	2023	

2/12/2026 6:16 AM c:\users\damor\wkm consulting dropbox\cad\2025\25-004 skyline es hvac\25004 e2.02

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT; SCALE ACCORDINGLY

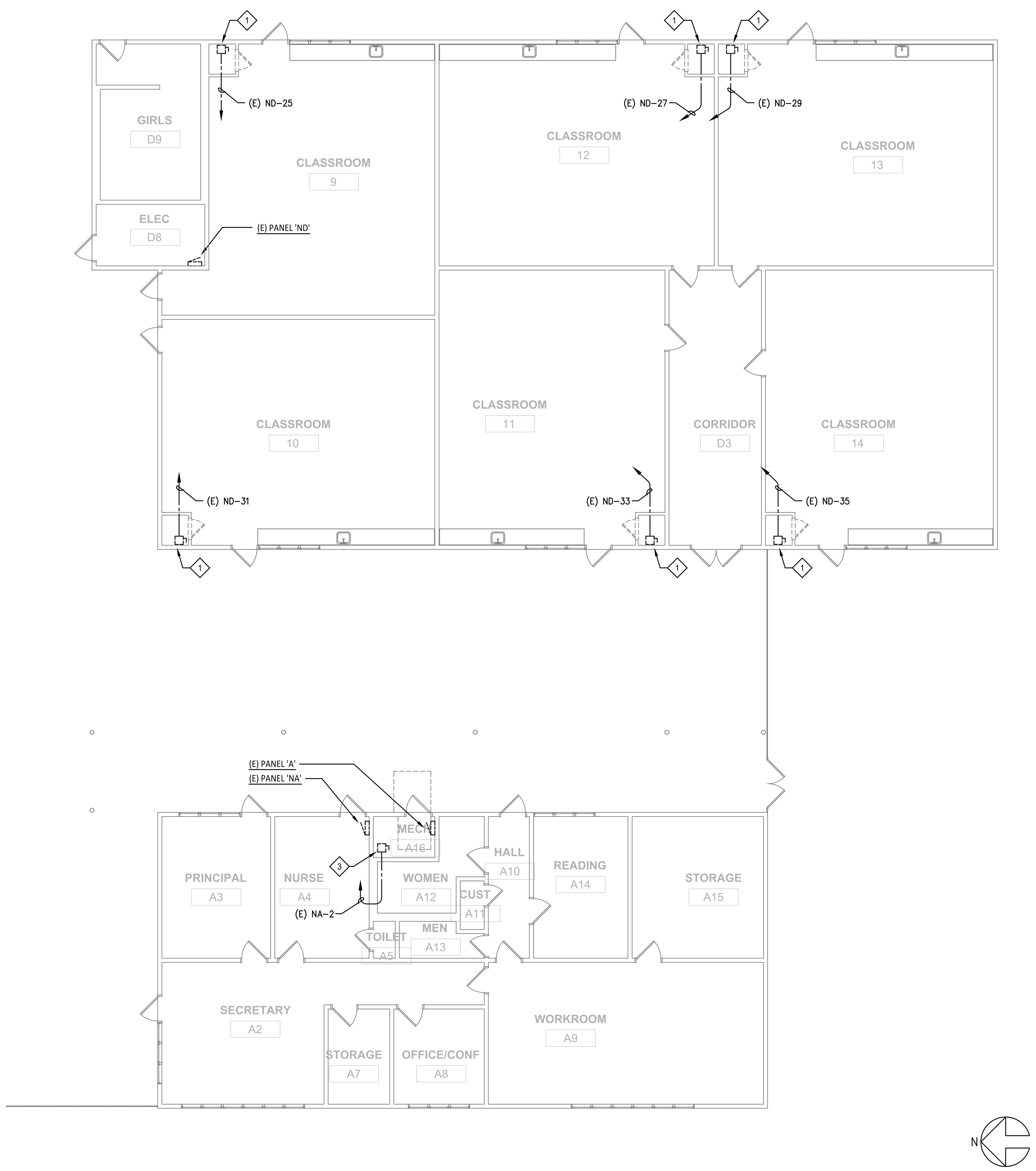
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

GENERAL NOTES

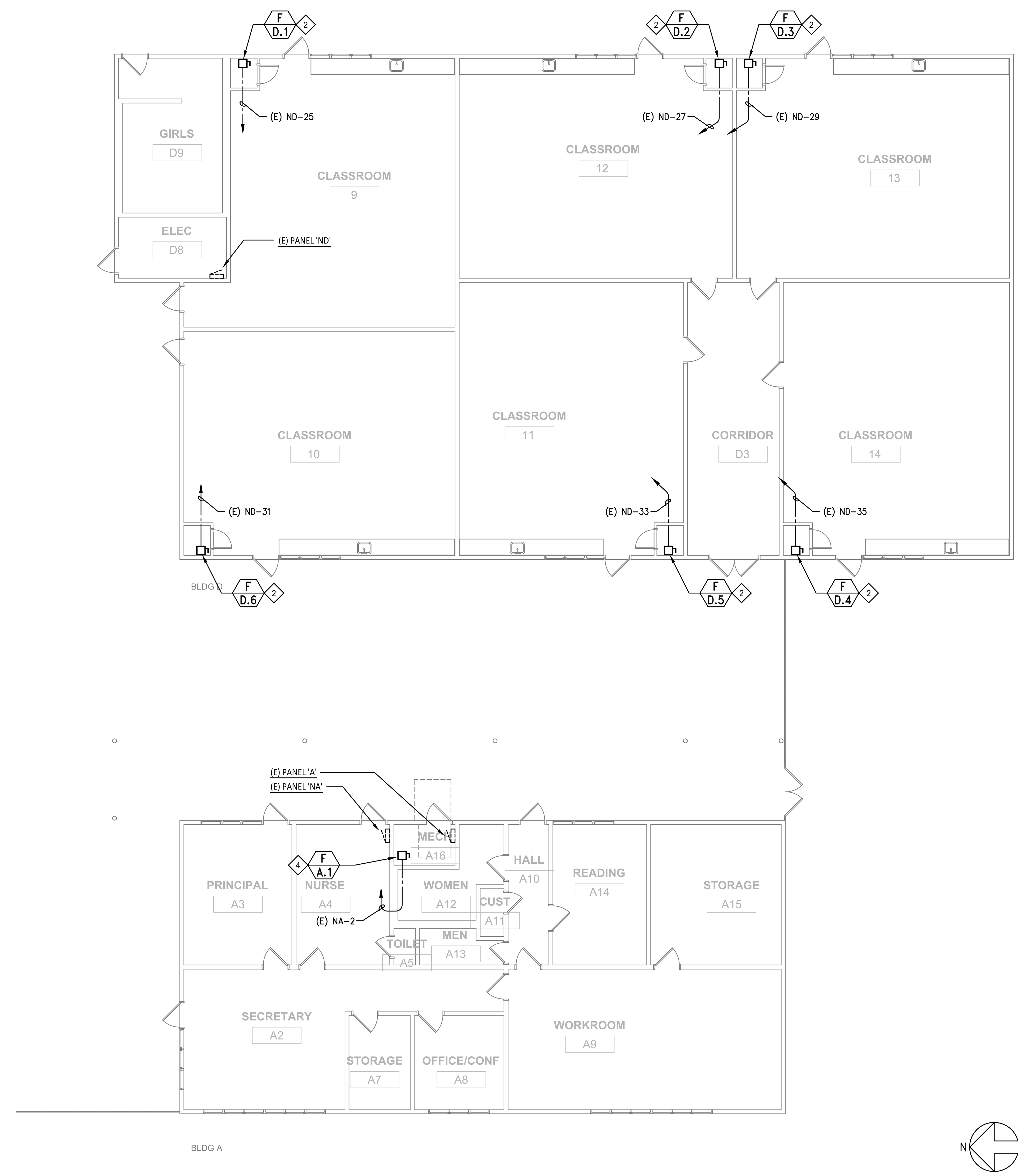
1. COORDINATE ALL CONNECTION REQUIREMENTS TO UNITS WITH MECHANICAL.
2. EXISTING POWER TO EMS CONTROLLERS ARE TO REMAIN. RECONNECT TO NEW CONTROLLERS. COORDINATE LOCATIONS IN THE FIELD WITH MECHANICAL.

SHEET NOTES

1. EXISTING DISCONNECT TO BE REPLACED WITH NEW FOR CONNECTION TO NEW UNIT. EXISTING CONDENSATE PUMP TO BE REPLACED AND RECONNECTED TO SAME CIRCUIT.
2. RECONNECT EXISTING CONDUIT AND CONDUCTORS TO NEW FURNACE UNIT AND CONDENSATE PUMP. INTERCEPT AND EXTEND AS REQUIRED.
3. EXISTING DISCONNECT TO BE REPLACED WITH NEW FOR CONNECTION TO NEW UNIT.
4. RECONNECT EXISTING CONDUIT AND CONDUCTORS TO NEW FURNACE UNIT AND NEW CONDENSATE PUMP. INTERCEPT AND EXTEND AS REQUIRED AND PROVIDE NEW CONNECTION TO NEW PUMP.

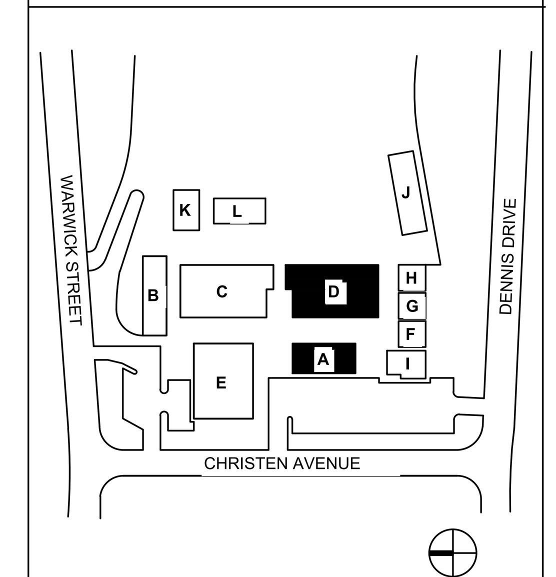


ELECTRICAL DEMOLITION POWER PLAN - BUILDINGS A & D | 1/8" = 1'-0" | 1



ELECTRICAL POWER PLAN - BUILDINGS A & D | 1/8" = 1'-0" | 2

KEY PLAN



Delta	Date	Revisions	By

WKM
Electrical Consultants Incorporated
3397 Mt. Diablo Blvd., Suite C
Lafayette, CA 94549
Tel: 925.385.0649
25-004

This document is the property of the Owner and is not to be used without their written permission.

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY ARCHITECTS JOB NUMBER XXXX

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
ELECTRICAL POWER PLANS
BUILDINGS A AND D

Client Project Number: XXXX

Scale:	AS NOTED
Drawn By:	DAM
Checked By:	TLK
Issue Date:	09/15/25
Revit Version:	2023

Sheet
E2.03

2/12/2026 6:16 AM c:\users\damor\wkm consulting dropbox\cad\2025\25-004 skyline es hvac\25004 e2.03

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT; SCALE ACCORDINGLY

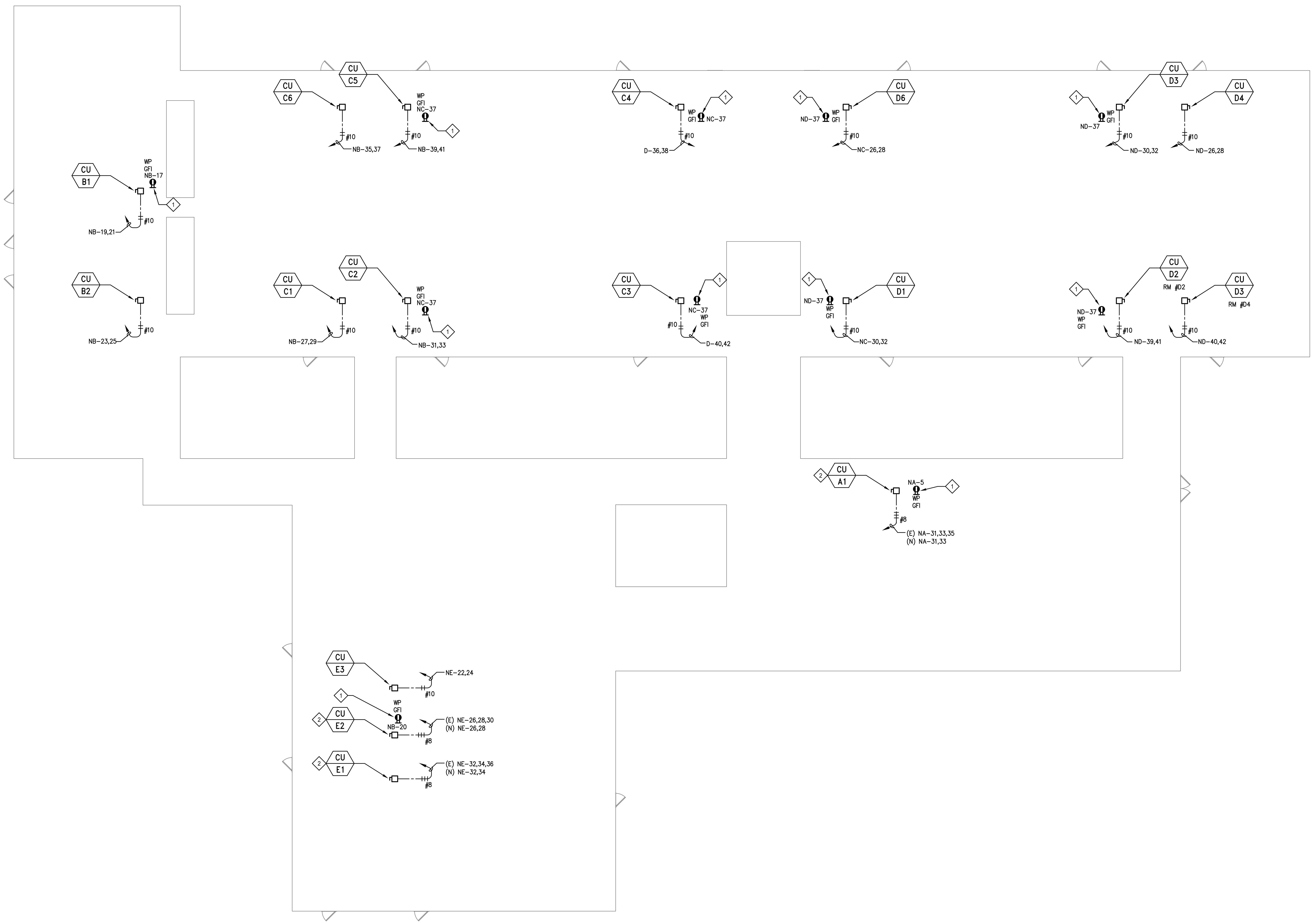
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

GENERAL NOTES

1. ALL DISCONNECTS SHOWN ARE TO BE REPLACED WITH NEW. EXTEND EXISTING CIRCUITS AND CONDUCTORS AS REQUIRED AND CONNECT TO EXISTING CIRCUIT.
2. EXISTING POWER TO EMS CONTROLLERS ARE TO REMAIN. RECONNECT TO NEW CONTROLLERS. COORDINATE LOCATIONS IN THE FIELD WITH MECHANICAL.

SHEET NOTES

1. REPLACE EXISTING RECEPTACLE WITH NEW WEATHERPROOF GFI RECEPTACLE AND RECONNECT TO EXISTING CIRCUIT.
2. SEE PANEL SCHEDULE FOR REVISED CIRCUITS.

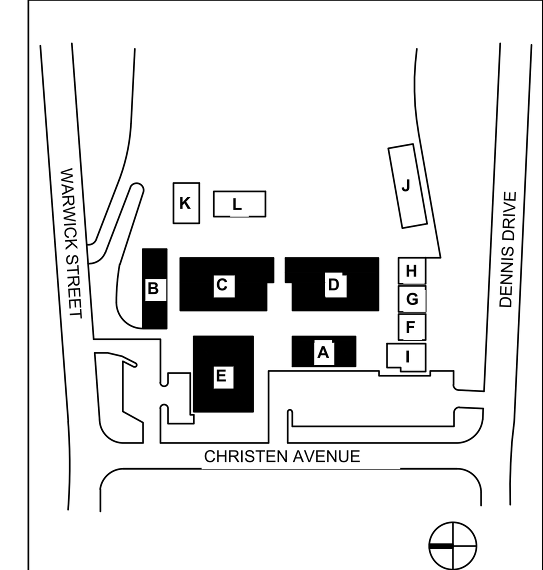


ELECTRICAL POWER PLAN - ROOF | 1" = 10'-0" | 1

Revisions

Delta	Date	Revisions	By

KEY PLAN



WKM
Electrical Consultants Incorporated
3397 Mt. Diablo Blvd., Suite C
Lafayette, CA 94549
Tel: 925.385.0649
25-004

This document is the property of the Owner and is not to be used without their written permission.

REGISTERED PROFESSIONAL ENGINEER JOSE L. WE No. E 17369 Exp. 9-30-26 ELECTRICAL STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY ARCHITECTS JOB NUMBER XXXX

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
ELECTRICAL POWER PLAN - ROOF

Client Project Number: XXXX

Scale:	AS NOTED	Sheet
Drawn By:	DAM	E2.04
Checked By:	TLK	
Issue Date:	09/15/25	
Revit Version:	2023	

2/12/2026 6:16 AM c:\users\damo\rwkm consulting dropbox\cad\2025\25-004 skyline es hvac\25004 e2.04

0 5' 50' GRAPHIC SCALES: 1/16" = 1'-0"
0 5' 25' 1/8" = 1'-0"
0 1' 12' 1/4" = 1'-0"
0 1' 6' 1/2" = 1'-0"
0 4' 3/4" = 1'-0"
0 1' 3' 1" = 1'-0"
0 2' 1 1/2" = 1'-0"
0 1' 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT; SCALE ACCORDINGLY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

BILL OF MATERIALS

SYM.	QTY.	DESCRIPTION	MODEL #	MANUFACTURER	CSFM LISTING #
FACP	1	(N) FACP	DESIGO FC 2025	Siemens	7165-0067:0264
RPS	3	(E) REMOTE POWER SUPPLY	PAD 2	Siemens	7300-0067:0175
HD	13	(N) 175 DEGREE HEAT DETECTOR WITH DB SERIES BASE	FDT421	Siemens	7270-0067:0262 7300-0067:0134

IF NUMBER OF DEVICES VARIES BETWEEN BILL OF MATERIALS AND PLANS THE NUMBER OF DEVICES ON PLANS SHALL BE USED FOR PRICING. CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES.

FIRE ALARM WIRE SCHEDULE

TYPE	MANUFACTURER	MODEL NO.	DESCRIPTION	SYSTEM	OVERALL CABLE DIAMETER	MAX CABLES 1" CONDUIT 40% FILL	MAX CABLES 1 1/4" CONDUIT 40% FILL
A	WEST PENN	990	1 PR #16 AWG SOLID, UNSHIELDED, TYPE FPLR	SLC LOOP - INTERIOR	0.168	15	27
	WEST PENN	AQC225	1 PR #16 AWG SOLID, UNSHIELDED AQUASEAL	SLC LOOP - EXTERIOR	0.242	7	13
B	WEST PENN	998S	1 PR #12 AWG STRANDED, UNSHIELDED, TYPE FPLR	STROBE NOTIFICATION	0.244	7	12

NOTE: CONDUIT FILL IS FOR REFERENCE. CONTRACTOR IS RESPONSILBE FOR VERIFING ANY COMBINATONS OF VARIOUS CABLES.

FIRE ALARM OPERATION MATRIX

INPUT \ OUTPUT	ANNUNCIATE ALARM CONDITION AT FACP	ANNUNCIATE TROUBLE CONDITION AT FACP	ANNUNCIATE ALARM CONDITION AT ANNUNCIATOR	ANNUNCIATE TROUBLE CONDITION AT ANNUNCIATOR	ACTIVATE SPEAKER/STROBE AND SPEAKER/STROBE UNITS THROUGHOUT CAMPUS	SHUTDOWN ASSOCIATED AHU AND FIRE SMOKE DAMPERS	ACTIVATE ALARM SIGNAL FOR CENTRAL STATION (SIGNAL VIA DRY CONTACTS)	ACTIVATE TROUBLE SIGNAL FOR CENTRAL STATION (SIGNAL VIA DRY CONTACTS)
MANUAL STATION	X		X		X		X	
HEAT/SMOKE DETECTORS	X		X		X	X	X	
SYSTEM TROUBLE		X		X				X
SYSTEM POWER FAILURE		X		X				X
DUCT DETECTORS		X		X		X	X	

FIRE ALARM CONTROL PANEL BATTERY CALCULATIONS

PANEL MODULES

QTY	DESCRIPTION	STANDBY EACH	STANDBY TOTAL	ALARM EACH	ALARM TOTAL
1	MAIN POWER SUPPLY	0.150000	0.150000	0.050000	0.050000
2	DEVICE LOOP CARD	0.100000	0.200000	0.100000	0.200000
1	ZONE INDICATING CARD	0.089000	0.089000	0.089000	0.089000
1	LED MODULE	0.014000	0.014000	0.014000	0.014000
1	NETWORK RING CARD	0.500000	0.500000	0.500000	0.500000
	PANEL STANDBY CURRENT		0.953000		
	PANEL ALARM CURRENT				0.853000

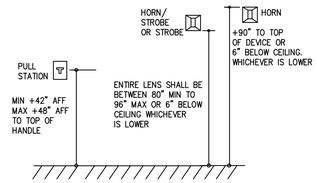
FIELD DEVICES

QTY	DESCRIPTION	STANDBY EACH	STANDBY TOTAL	ALARM EACH	ALARM TOTAL
38	(E) HORN	0.000000	0.000000	0.038000	1.444000
22	(E) HORN	0.000000	0.000000	0.032000	0.704000
	DEVICE STANDBY CURRENT		0.000000		
	DEVICE ALARM CURRENT				2.148000

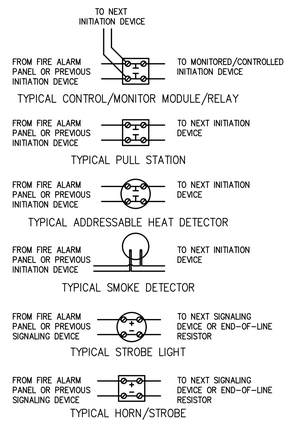
TOTAL SYSTEM CURRENT

DESCRIPTION	STANDBY	ALARM
CONTROL PANEL	0.953000	0.853000
FIELD DEVICES	0.000000	2.148000
TOTAL STANDBY CURRENT	0.953000	
X 24 HOUR STANDBY	22.872000	
TOTAL ALARM CURRENT		3.001000
15 MINUTES OF ALARM (X .25)		0.750250
TOTAL BATTERY REQUIREMENT		23.622250
TOTAL BAT. WITH 25% SAFETY MARGIN		29.5278
BATTERY SUPPLIED		* (2) 31 AH

* THE DEVICE LOOP CARDS INCLUDE CURRENT DRAW FOR MAXIMUM NUMBER OF INITIATION DEVICES. THEREFORE ADDITIONAL DEVICES ADDED IN THIS PROJECT DO NOT CHANGE THE EXISTING BATTERY REQUIREMENT.



FIRE ALARM DEVICE ELEVATIONS | NTS | 1



FIRE ALARM DEVICE DETAIL | NTS | 2

FIRE ALARM SYMBOL LIST

NOTE: DASHED SYMBOLS ON PLANS DENOTE EXISTING DEVICES

FACP	FIRE ALARM CONTROL PANEL (FACP)
RPS	FIRE ALARM REMOTE POWER SUPPLY (RPS)
F	FIRE ALARM MANUAL PULL STATION, +48" TO TOP OF HANDLE
SD	FIRE ALARM SMOKE DETECTOR
HD	175° FIXED HEAT DETECTOR
—— - ——	EXISTING RACEWAY
————	NEW RACEWAY
- - - - - -	CABLE SUSPENDED ON HOOKS
(E)	EXISTING
(N)	NEW
(RL)	RELOCATED
AMP	AMPLIFIER PANEL
ANN	ANNUNCIATOR
CL	CENTERLINE
CR	CLASSROOM
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
MT	EMPTY CONDUIT WITH PULL CORD
PB	PULL BOX
PIV	POST INDICATOR VALVE
RPS	REMOTE POWER SUPPLY
STC	SIGNAL TERMINAL CABINET

SCOPE OF WORK

1. REPLACE EXISTING MXL COMPONENTS AT FACP WITH NEW DESIGO COMPONENTS TO ALLOW FOR ADDITION OF NEW HEAT DETECTORS IN FURNACE CLOSETS.
2. INSTALL NEW FIRE ALARM DEVICES AND WIRING AS SHOWN ON PLANS AND CONNECT TO EXISTING MANUAL FIRE ALARM SYSTEM.

TYPE OF SYSTEM

- THIS IS AN EXISTING MANUAL ADDRESSABLE SYSTEM
- CLASS 'B' DETECTION
- CLASS 'B' INITIATION
- SYSTEM IS A PROTECTED PREMISIS AND REQUIRES 24 HOUR STANDBY.
- BUILDINGS ARE TYPE 'E' OCCUPANCY.
- SYSTEM DESIGNER: TIFFANY L. KANE, WKM INCORPORATED

APPLICABLE CODES

PARTIAL LIST OF APPLICABLE CODES AS OF JANUARY 1, 2020:
2025 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR (2021 INTERNATIONAL BUILDING CODE, VOL. 1 & 2, AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR (2020 NATIONAL ELECTRICAL CODE AND 2022 CALIFORNIA AMENDMENTS) 2019 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR (2021 IAPMO UNIFORM MECHANICAL CODE AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR (2021 IAPMO UNIFORM PLUMBING CODE AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 CCR
2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR (2021 INTERNATIONAL FIRE CODE AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR (2021 INTERNATIONAL EXISTING BUILDING CODE AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR
2022CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR
TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS
2019 ASME A17.1/CSA B44-13 SAFETY CODE FOR ELEVATORS AND ESCALATORS (PER 2022 CBC PART 2 CH 35) NOTE: CAL/OSHA ELEVATOR UNIT ENFORCES CCR TITLE 8 AND USES THE 2004 ASME A17.1 BY ADOPTION

PARTIAL LIST OF APPLICABLE STANDARDS:

NFPA 72 - NATIONAL FIRE ALARM AND SIGNALING CODE (CA AMENDED) - 2022 EDITION
NFPA 80 - STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES - 2022 EDITION
UL 464 - AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, INCLUDING ACCESSORIES - 2003 EDITION
UL 521 - STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS - 1999 EDITION

FOR A COMPLETE LIST OF APPLICABLE NFPA STANDARDS REFER TO 2022 CBC (SFM) CHAPTER 35 AND CALIFORNIA FIRE CODE CHAPTER 80.

SEE CALIFORNIA BUILDING CODE CHAPTER 35 FOR STATE OF CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS AND AN OVERALL LISTING OF REFERENCED STANDARDS.

FIRE ALARM SYSTEM NOTES

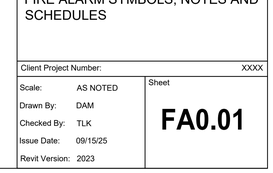
1. FINAL FIRE ALARM TEST SHALL BE MADE WITH THE DSA PROJECT INSPECTOR (PI). LOCAL FIRE AUTHORITY SHALL BE NOTIFIED OF DATE 48 HOURS IN ADVANCE AND TIME OF FINAL FIRE ALARM TESTING AND SHALL ASSIST/WITNESS SUCH TESTING WHEN ABLE.
2. UNDERGROUND AND EXTERIOR CONDUITS WILL HAVE WATER-TIGHT FITTINGS. (CEC 110-11 AND 300-6)
3. FIRE ALARM DEVICE MOUNTING HEIGHTS:
   - PULL STATION: 48" TO TOP OF HANDLE ABOVE FINISHED FLOOR. (CEC 380-8c)
   - SPEAKER INTERIOR: MINIMUM 90" TO TOP OF DEVICE ABOVE FINISHED FLOOR, NOT LESS THAN 6" FROM CEILING. (2022 NFPA72-18.4.8.1)
   - WALL MOUNTED STROBE OR SPEAKER/STROBE: MINIMUM 80" TO BOTTOM OF STROBE LENS AND NOT GREATER THAN 96" TO TOP OF STROBE LENS, ABOVE FINISHED FLOOR, NOT LESS THAN 6" FROM CEILING. (2022 NFPA72-18.5.4.1)
4. TO ENSURE THAT AUDIBLE PUBLIC MODE SIGNALS ARE CLEARLY HEARD, UNLESS OTHERWISE PERMITTED BY 2022 NFPA72-18.4.3.2 THROUGH 18.4.3.5, THEY SHALL HAVE A SOUND LEVEL AT LEAST 15db ABOVE THE AVERAGE AMBIENT SOUND LEVEL OR 5db ABOVE THE MAXIMUM SOUND LEVEL HAVING A DURATION OF AT LEAST 60 SECONDS, WHICHEVER IS GREATER, MEASURED 5 ft (1.5 m) ABOVE THE FLOOR IN THE AREA REQUIRED TO BE SERVED BY THE SYSTEM USING THE A-WEIGHTED SCALE (dBA). (2022 NFPA72-18.4.3.1)
5. AUDIBLE DEVICES SHALL SOUND THE CALIFORNIA UNIFORM FIRE ALARM SIGNAL IN TEMPORAL MODE.
6. VISUAL DEVICES SHALL NOT EXCEED 2 FLASHES PER SECOND AND SHALL NOT BE SLOWER THAN 1 FLASH EVERY SECOND. (2022 NFPA72-18.5.2.1)
7. FIRE ALARM CONTRACTOR SHALL PROVIDE A "RECORD OF COMPLETION" TO THE PROJECT INSPECTOR (PI) / DSA AFTER COMPLETION OF OPERATIONAL ACCEPTANCE TESTS. (2022 NFPA 72-14.6.2.4 AND FIGURE 14.6.2.4)
8. ALL CIRCUITS SHALL BE SUPERVISED AGAINST OPENS, SHORTS AND GROUNDS.
9. INSTALLATION OF DEVICES SHALL BE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
10. MARK ALL WIRES IN ACCORDANCE WITH 760-10.
11. ALL OUTSIDE FIRE ALARM DEVICES SHALL BE CSFM LISTED AS WEATHERPROOF TYPE.
12. EXISTING CAMPUS FIRE ALARM SYSTEM SHALL NOT BE DISCONNECTED OR TAKEN OUT OF SERVICE WITHOUT WRITTEN PERMISSION FROM SCHOOL DISTRICT. 48 HOUR NOTICE SHALL PROVIDED TO LOCAL FIRE AUTHORITY PRIOR TO FIRE ALARM SYSTEM SHUTDOWN.
13. ALL FIRE ALARM WIRING SHALL BE CONTINUOUS WITHOUT SPLICES AND TERMINATED IN TERMINAL BLOCKS OF THE DEVICE OR FIRE ALARM APPROVED TERMINAL BLOCKS IN TERMINAL CABINETS OR JUNCTION BOXES.
14. ALL FIRE ALARM WIRING INSTALLED IN UNDERGROUND CONDUIT OR OTHER WET LOCATIONS SHALL BE UL LISTED FOR WET LOCATIONS.
15. ALL WIRING TO BE RUN IN FIRE ALARM DEDICATED CONDUIT. ALL NEW FA WIRING SHALL BE INSTALLED IN CONDUIT MINIMUM SIZE 1" U.O.N. USE EXISTING FIRE ALARM CONDUITS WHERE PRACTICAL TO INSTALL A NEW FA WIRING. FIELD VERIFY EXACT EXISTING CONDUIT ROUTING.
16. ALL SHIELDS TO BE CONTINUOUS, DRY AND FREE FROM ALL GROUNDS AND SHORTS.
17. ELECTRICAL/FIRE ALARM CONTRACTOR SHALL VERIFY EXISTING AVAILABLE ADDRESSES ON EXISTING SYSTEM AND CORRECT ON AS-BUILT DRAWINGS FOR SUBMITTAL TO SCHOOL DISTRICT AT END OF PROJECT.
18. THIS CAMPUS HAS AN EXISTING UL LISTED CENTRAL MONITORING STATION: SUPERVISING STATION: AUTOMATIC FIRE ALARM SYSTEMS SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION AS REQUIRED BY NFPA 72, AS AMENDED BY CFC CHAPTER 80. THE SUPERVISION STATION SHALL BE LISTED AS EITHER UUFX OR UUJS BY UNDERWRITERS LABORATORY OR SHALL MEET THE REQUIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011.
19. THE DOCUMENTATION CABINET SHALL BE PROMINENTLY LABELED SYSTEM RECORD DOCUMENTS PER NFPA 72, 7.7.2.4.
20. AFTER APPROVAL, SUBSTITUTIONS OF FIRE ALARM MANUFACTURERS SHALL REQUIRE A CHANGE ORDER WITH MANUFACTURER CUT SHEETS AND APPLICABLE CSFM LISTINGS.
21. NFPA 72 (2022) SEC. 18.4.10 VOICE INTELLIGIBILITY. WITHIN THE ACOUSTICALLY DISTINGUISHABLE SPACES (ADS) WHERE VOICE INTELLIGIBILITY IS REQUIRED, VOICE COMMUNICATION SYSTEMS SHALL REPORDUCE PRERECORDED, SYNTHESIZED, OR LIVE MESSAGES WITH VOICE INTELLIGIBILITY.
22. NFPA 72 (2022) SEC. 24.3.2.1 ALL USERS OF SYSTEMS THAT HAVE MICROPHONES FOR LIVE VOICE ANNOUNCEMENTS SHALL BE PROVIDED WITH POSTED INSTRUCTIONS FOR USING THE MICROPHONE.
23. NFPA 72 (2022) SEC. 7.7.2.1 WITH EVERY NEW SYSTEM A DOCUMENTAION CABINET SHALL BE INSTALLED AT THE SYSTEM CONTROL UNIT OR AT ANOTHER APPROVED LOCATION AT THE PROTECTED PREMISES.
24. NFPA 72 (2022) SEC. 7.7.2.2 ALL RECORD DOCUMENTATION SHALL BE STORED IN THE DOCUMENTATION CABINET.
25. NFPA 72 (2022) SEC. 7.7.2.4 THE DOCUMENTATION CABINET SHALL BE PROMINENTLY LABELED "SYSTEM RECORD DOCUMENTS".
26. ALL BATTERIES SHALL BE MARKED WITH YEAR AND MONTH OF MANUFACTURER.

SAN FRANCISCO UNIFIED SCHOOL DISTRICT · EDUCATION FOR ALL

Revisions

Delta	Date	Revisions	By

KEY PLAN



WRM
Electrical Consultants Incorporated
3397 Mt. Diablo Blvd., Suite C
Lafayette, CA 94549
Tel: 925.385.0649
25-004

This document is the property of the Owner and is not to be used without their written permission.

REGISTERED PROFESSIONAL ENGINEER · TIFFANY L. KANE · No. E 17248 · Exp. 9-30-26 · ELECTRICAL · STATE OF CALIFORNIA

HY HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY ARCHITECTS JOB NUMBER XXXX

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
FIRE ALARM SYMBOLS, NOTES AND SCHEDULES

Client Project Number: XXXX

Scale:	AS NOTED
Drawn By:	DAM
Checked By:	TLK
Issue Date:	09/15/25
Revit Version:	2023

Sheet
FA0.01

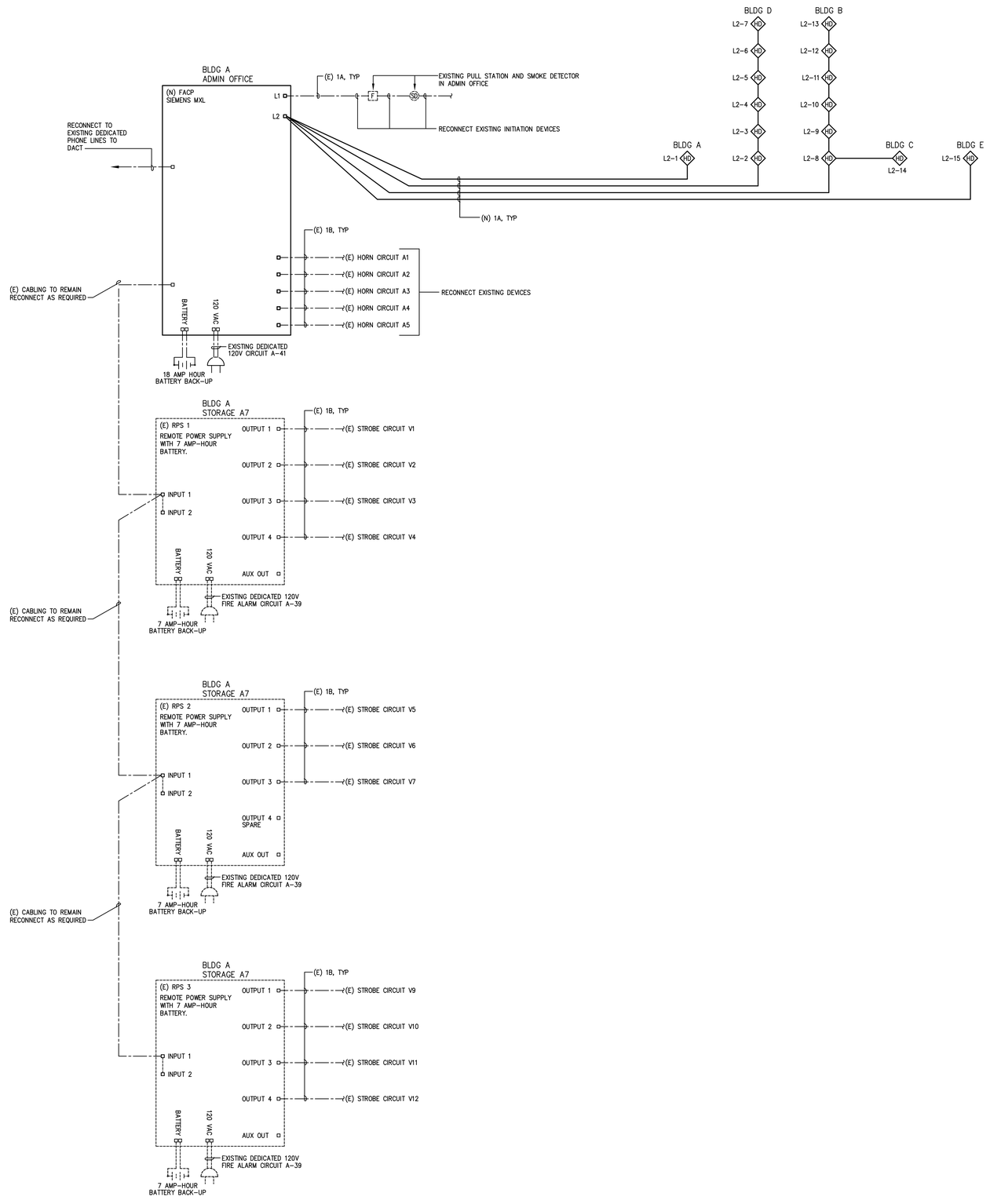
2/12/26 6:17 AM C:\users\damor\wkm consulting dropbox\cad\2025\25-004 skyline es hvac\25004 fa0.01

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT; SCALE ACCORDINGLY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

EXISTING SYSTEM APPROVED DSA APPL #01-100221



PARTIAL FIRE ALARM RISER DIAGRAM | NTS | 1

SAN FRANCISCO UNIFIED SCHOOL DISTRICT · SOUTH EAST · EDUCATION FOR ALL

Revisions			
Delta	Date	Revisions	By

KEY PLAN

WRM
Electrical Consultants Incorporated
3397 Mt. Diablo Blvd., Suite C
Lafayette, CA 94549
Tel: 925.385.0649
25-004

This document is the property of the Owner and is not to be used without their written permission.

REGISTERED PROFESSIONAL ENGINEER — Thomas L. Kosmicki — No. E 17369 — Exp. 9-30-26 — ELECTRICAL — STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY ARCHITECTS JOB NUMBER XXXX

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
FIRE ALARM RISER DIAGRAM

Client Project Number: XXXX

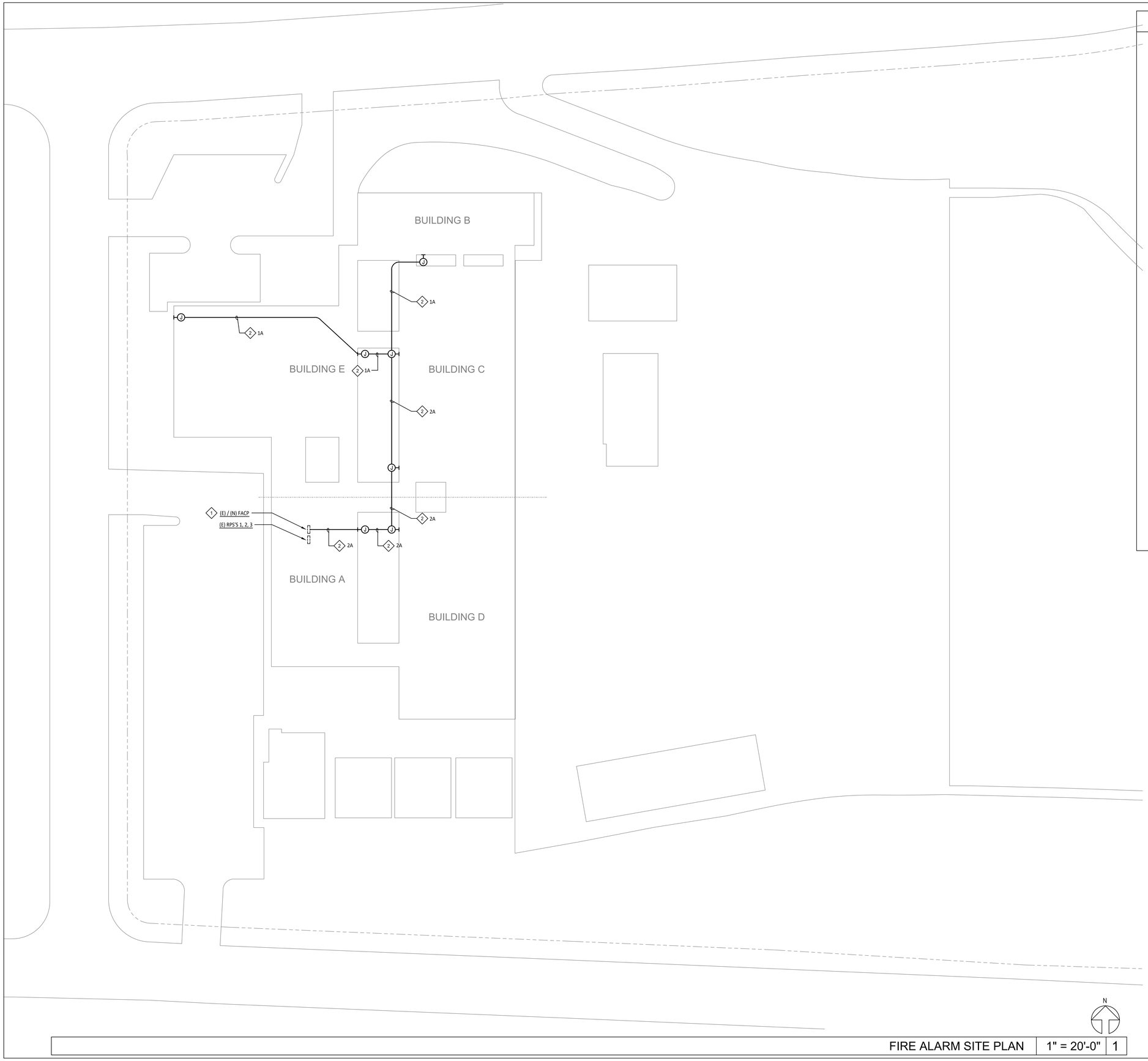
Scale:	AS NOTED
Drawn By:	DAM
Checked By:	TLK
Issue Date:	09/15/25
Revit Version:	2023

Sheet
FA0.02

2/12/2026 6:17 AM c:\users\damor\wrm consulting dropbox\cad\2025\25-004 skyline es hvac\25004 fa0.02

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT; SCALE ACCORDINGLY



SHEET NOTES

1. EXISTING FACP TO BE UPGRADED. SEE RISER DIAGRAM AND SHEET FA2.03.
2. NEW 1" WALL OR CEILING MOUNTED CONDUIT WITH TYPE 'A' CABLES SHOWN.

FIRE ALARM SITE PLAN | 1" = 20'-0" | 1

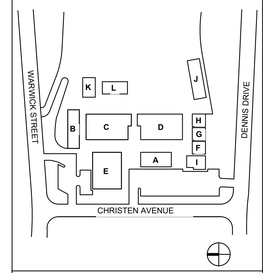
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

SAN FRANCISCO UNIFIED SCHOOL DISTRICT · SOUTH EDUCATION FOR ALL

Revisions

Delta	Date	Revisions	By

KEY PLAN



WRM
Electrical Consultants Incorporated
3397 Mt. Diablo Blvd., Suite C
Lafayette, CA 94549
Tel: 925.385.0649
25-004

This document is the property of the Owner and is not to be used without their written permission.

REGISTERED PROFESSIONAL ENGINEER · ELECTRICAL · STATE OF CALIFORNIA
No. E 17368
Exp. 9-30-26

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY ARCHITECTS JOB NUMBER XXXX

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
FIRE ALARM SITE PLAN

Client Project Number: XXXX

Scale:	AS NOTED
Drawn By:	DAM
Checked By:	TLK
Issue Date:	09/15/25
Revit Version:	2023

Sheet
FA1.01

2/12/2026 6:17 AM c:\users\damor\wkm consulting dropbox\cad\2025\25-004 skyline es hvac\25004 fa1.01

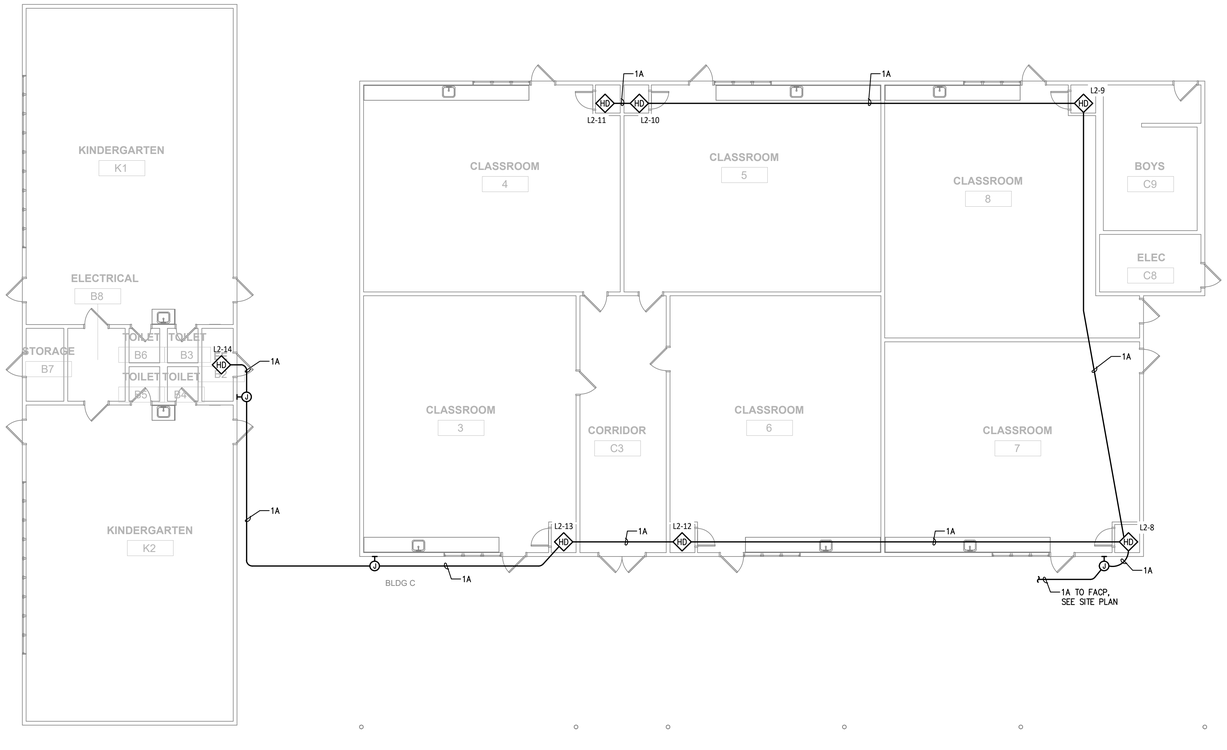
GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT; SCALE ACCORDINGLY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

GENERAL NOTES

1. EXISTING FIRE ALARM NOTIFICATION DEVICES AND PULL STATIONS ARE NOT SHOWN. ALL EXISTING DEVICES SHALL REMAIN AND TO BE RECONNECTED TO NEW SYSTEM.
2. ALL NEW WIRING TO BE RUN IN MINIMUM 3/4" CONDUIT.



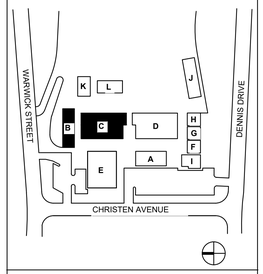
N

FIRE ALARM PLAN - BUILDINGS B & C | 1/8" = 1'-0" | 1

Revisions

Delta	Date	Revisions	By

KEY PLAN



WKM
Electrical Consultants Incorporated
3397 Mt. Diablo Blvd., Suite C
Lafayette, CA 94549
Tel: 925.385.0649
25-004

This document is the property of the Owner and is not to be used without their written permission.

REGISTERED PROFESSIONAL ENGINEER
No. E 17369
Exp. 9-30-26
ELECTRICAL
STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY ARCHITECTS JOB NUMBER XXXX

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
FIRE ALARM PLANS
BUILDINGS B AND C

Client Project Number: XXXX

Scale:	AS NOTED
Drawn By:	DAM
Checked By:	TLK
Issue Date:	09/15/25
Revit Version:	2023

Sheet
FA2.01

2/12/2026 6:17 AM c:\users\damor\wkm consulting dropbox\cad\2025\25-004 skyline es hvac\25004 fa2.01

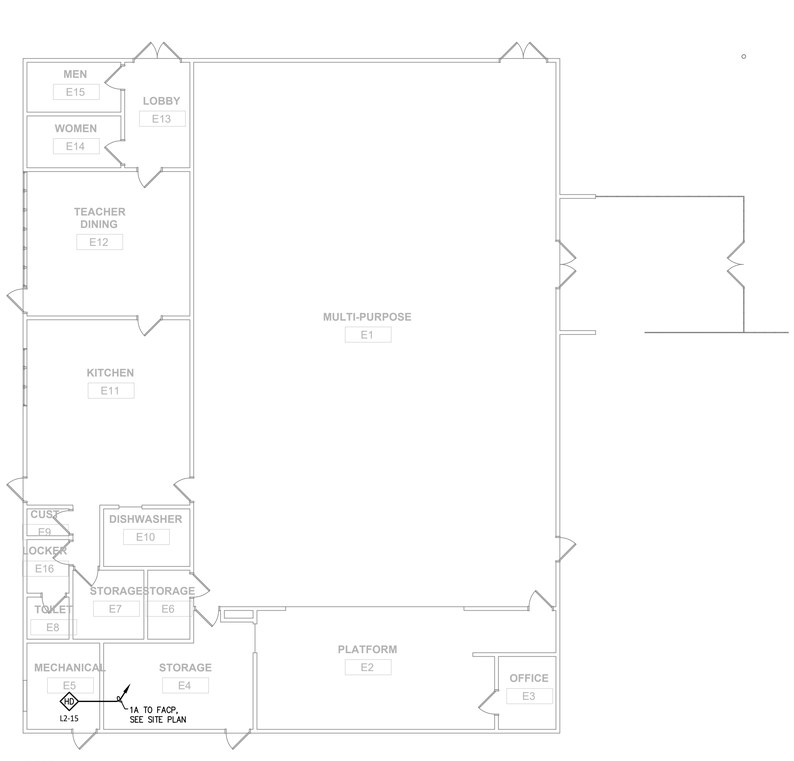
GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT; SCALE ACCORDINGLY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

GENERAL NOTES

1. EXISTING FIRE ALARM NOTIFICATION DEVICES AND PULL STATIONS ARE NOT SHOWN. ALL EXISTING DEVICES SHALL REMAIN AND TO BE RECONNECTED TO NEW SYSTEM.
2. ALL NEW WIRING TO BE RUN IN MINIMUM 3/4" CONDUIT.



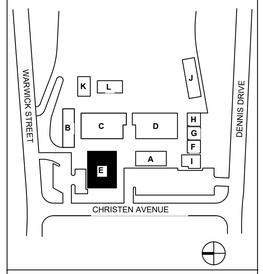
N

FIRE ALARM PLAN - BUILDING E | 1/8" = 1'-0" | 1

Revisions

Delta	Date	Revisions	By

KEY PLAN



WKM
Electrical Consultants Incorporated
3397 Mt. Diablo Blvd., Suite C
Lafayette, CA 94549
Tel: 925.385.0649
25-004

This document is the property of the Owner and is not to be used without their written permission.

REGISTERED PROFESSIONAL ENGINEER
No. E 17369
Exp. 9-30-26
ELECTRICAL
STATE OF CALIFORNIA

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY ARCHITECTS JOB NUMBER XXXX

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
FIRE ALARM PLANS
BUILDING E

Client Project Number: XXXX

Scale:	AS NOTED
Drawn By:	DAM
Checked By:	TLK
Issue Date:	09/15/25
Revit Version:	2023

Sheet
FA2.02

2/12/2026 6:17 AM c:\users\damor\wkm consulting dropbox\cad\2025\25-004 skyline es hvac\25004 fa2.02

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT; SCALE ACCORDINGLY

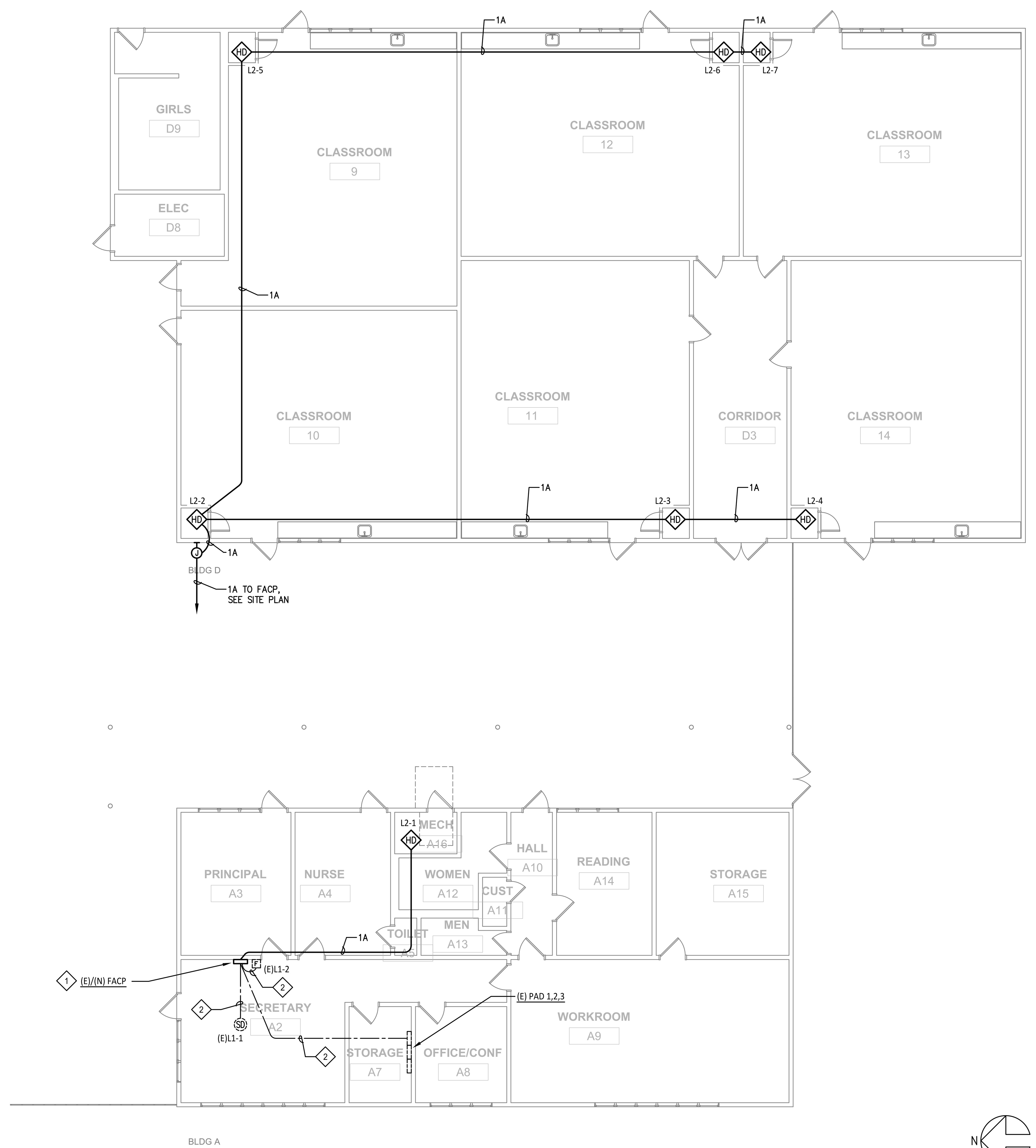
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-122566 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 3/10/2026

GENERAL NOTES

1. EXISTING FIRE ALARM NOTIFICATION DEVICES AND PULL STATIONS ARE NOT SHOWN. ALL EXISTING DEVICES SHALL REMAIN AND TO BE RECONNECTED TO NEW SYSTEM.
2. ALL NEW WIRING TO BE RUN IN MINIMUM 3/4" CONDUIT.

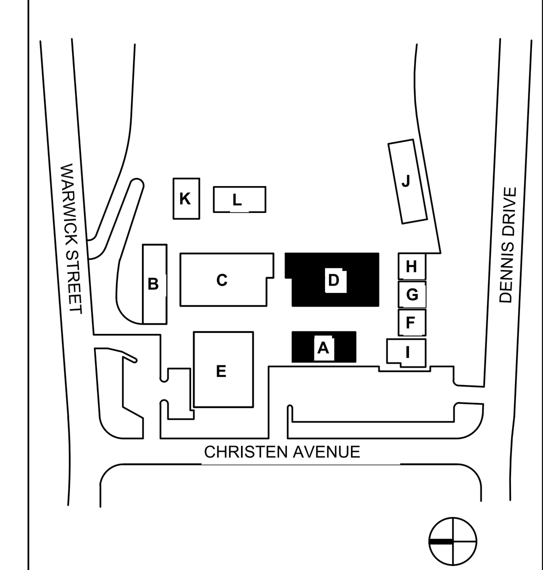
SHEET NOTES

1. EXISTING FACP CAN NOT SUPPORT NEW REQUIRED HEAT DETECTORS IN FURNACE CLOSETS. EXISTING INTERIOR COMPONENTS TO BE REPLACED WITH NEW TO UPGRADE TO SIEMENS DESIGO FACP TO ALLOW FOR NEW ADDITIONS.
2. RECONNECT EXISTING WIRING AS REQUIRED.



FIRE ALARM PLAN - BUILDINGS A & D | 1/8" = 1'-0" | 1

KEY PLAN



Revisions

Delta	Date	Revisions	By

WKM
Electrical Consultants Incorporated
3397 Mt. Diablo Blvd., Suite C
Lafayette, CA 94549
Tel: 925.385.0649
25-004

This document is the property of the Owner and is not to be used without their written permission.

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY ARCHITECTS JOB NUMBER XXXX

Facility
SKYLINE ELEMENTARY SCHOOL
55 CHRISTEN AVE, DALY CITY, CA 94015

Project
HVAC REPLACEMENT

Sheet Title
FIRE ALARM PLANS
BUILDINGS A AND D

Client Project Number: XXXX

Scale: AS NOTED
Drawn By: DAM
Checked By: TLK
Issue Date: 09/15/25
Revit Version: 2023

Sheet
FA2.03

2/12/2026 6:17 AM c:\users\damon\wkm consulting dropbox\cad\2025\25-004 skyline es hvac\25004 fa2.03