



LYDIKSEN ELEMENTARY SCHOOL REROOFING & HVAC REPLACEMENT

7700 HIGHLAND OAKS DR., PLEASANTON, CA 94588

PLEASANTON UNIFIED SCHOOL DISTRICT

GENERAL NOTES

PRE-BID SITE VISIT

CONTRACTOR SHALL VISIT THE PROJECT AREA IN ORDER TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND THE REQUIREMENTS OF THE PROJECT. THE CONTRACTOR MAY CONTACT THE ARCHITECT DURING THE BIDDING PHASE REGARDING CLARIFICATIONS AND PROJECT REQUIREMENTS.

SAFETY

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

DAMAGE TO STRUCTURE OR SYSTEMS TO REMAIN

CONTRACTOR SHALL REIMBURSE THE OWNER FOR REPAIR AND REPLACEMENT, INCLUDING ARCHITECT'S FEES, FOR ANY DAMAGE CAUSED TO STRUCTURES, LANDSCAPE, SITE WORK, OR EXISTING SYSTEMS TO REMAIN, AS THE RESULT OF CONSTRUCTION OPERATIONS.

EXISTING CONDITIONS

ALL EXISTING CONDITIONS ARE SHOWN BASED ON THE BEST INFORMATION AVAILABLE AT THE TIME, BUT WITHOUT GUARANTEE OF ACCURACY. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, AND BUILDING DATA AT THE JOB SITE. ANY DISCREPANCIES REQUIRING MODIFICATION TO THE CONSTRUCTION DOCUMENTS SHALL BE REPORTED TO THE ARCHITECT IMMEDIATELY. NO MODIFICATIONS SHALL BE MADE BY THE CONTRACTOR WITHOUT PRIOR APPROVAL FROM THE ARCHITECT.

CONTRACTOR'S EQUIPMENT

COORDINATE WITH OWNER'S REPRESENTATIVE FOR APPROVED LOCATION OF JOB SITE ACCESS, PARKING, AND LOCATION OF CONTRACTOR'S EQUIPMENT AND MATERIAL STORAGE AREA. SEE SITE PLAN FOR ADDITIONAL NOTES.

UTILITY SHUT-DOWNS AND CONNECTIONS

ALL REQUIRED UTILITY SHUT DOWNS SHALL HAVE PRIOR APPROVAL FROM THE OWNER'S REPRESENTATIVE. REQUEST SHALL BE SUBMITTED WITH ADEQUATE ADVANCE NOTICE PER PROJECT REQUIREMENTS.

ASBESTOS AND ASBESTOS PRODUCTS

THE OWNER/OPERATOR AND CONTRACTOR SHALL BE AWARE THAT BUILDINGS CONSTRUCTED PRIOR TO 1978 (OR THEREABOUT) POSSIBILITY CONTAIN ASBESTOS IN SOME EXISTING CONSTRUCTION MATERIALS, AND WILL LIKELY BE ENCOUNTERED DURING ALTERATIONS OR REMODELING.

UNDER CALIFORNIA TITLE 8, THE OWNER AND CONTRACTOR BOTH HAVE RESPONSIBILITIES TO DETERMINE THE EXISTENCE OF ASBESTOS CONTAINING MATERIALS IN AREAS TO BE ALTERED OR REMODELED PRIOR TO COMMENCEMENT OF WORK AND TO TAKE APPROPRIATE MEASURES TO PROTECT PERSONNEL. CAL-OSHA HAS JURISDICTION OVER ASBESTOS RELATED WORK. ASBESTOS RELATED WORK SHALL BE DONE IN ACCORDANCE WITH CALIFORNIA GENERAL INDUSTRIAL SAFETY ORDERS, TITLE 8, SECTION 341.6 THROUGH 341.14. ASBESTOS IN THE WORK ENVIRONMENT IS REGULATED BY TITLE 8, SECTION 5208.

THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT AND DISTRICT REGULATION 11-2-401.3 REQUIRES EVERY RENOVATION INVOLVING THE REMOVAL OF 100 SQ. FT., LN. FT., OR GREATER OF REGULATED ASBESTOS CONTAINING MATERIAL, AND FOR EVERY DEMOLITION (EVEN WHEN NO ASBESTOS IS PRESENT), A NOTIFICATION MUST BE SENT TO THE BAAQMD AT LEAST 10 WORKING DAYS PRIOR TO COMMENCEMENT OF DEMOLITION / RENOVATION.

ALL BUILDING MATERIALS MUST BE ASBESTOS FREE.

THESE DOCUMENTS DO NOT ADDRESS CONTAINMENT FOR EXISTING AREAS OF ASBESTOS WHICH MAY BE DISCOVERED DURING CONSTRUCTION. THE OWNER'S ABSENT SUBCONTRACTOR IS SOLELY RESPONSIBLE FOR THE DETECTION, REMOVAL, AND THE DISPOSAL OF ANY EXISTING ASBESTOS MATERIAL. ARCHITECTURAL AND ENGINEERING DESIGN EFFORT TO OBTAIN STATE APPROVALS, AS WELL AS THE COST OF ANY REPAIRS, FOR DAMAGE CAUSED OR REPLACEMENT OF EXISTING SYSTEMS TO REMAIN, DUE TO WORK PERFORMED BY THE ABSENT SUBCONTRACTOR. SUBCONTRACTOR, SHALL BE THE RESPONSIBILITY OF SAID SUBCONTRACTOR.

CONSTRUCTION SCHEDULING

CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION OPERATIONS WITH OWNER'S REPRESENTATIVE PRIOR TO SCHEDULING AND START OF THE WORK. CONTRACTOR SHALL PROVIDE PROTECTION TO ALL EXISTING SPACES AND SYSTEMS WHICH ARE IN USE, ADJOINING THE PROJECT, AND NOT PART OF THE PROJECT.

INTERIOR FINISHES

INTERIOR FINISHES AND ALL WALL COVERING MATERIAL SHALL CONFORM TO CCR TITLE 24, PART 2, CHAPTER 6.

PIPES, DUCTS AND CONDUIT - SUPPORT AND BRACING

PIPES, DUCTS, AND CONDUITS SHALL BE SUPPORTED AND BRACED PER THE SMACNA "GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS AND PLUMBING PIPING SYSTEMS", 09M 002-13 SEISMIC BRACING AND SUPPORT SYSTEMS.

DRILLED-IN EXPANSION ANCHORS

WHEN INSTALLING DRILLED-IN ANCHORS AND/OR POWDER DRIVEN PINS IN EXISTING NON-PRESTRESSED REINFORCED CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE EXISTING REINFORCING BARS. WHEN INSTALLING THEM INTO EXISTING PRESTRESSED CONCRETE (PRE- OR POST-TENSIONED), LOCATE THE PRESTRESSED TENDONS BY USING A NON-DESTRUCTIVE METHOD PRIOR TO INSTALLATION. EXERCISE EXTREME CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE TENDONS DURING INSTALLATION. MAINTAIN A MINIMUM CLEARANCE OF ONE INCH BETWEEN THE REINFORCEMENT AND THE DRILLED-IN ANCHOR AND/OR PIN.

TITLE 24 COMPLIANCE

THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION, OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS (2019 CBC), SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CONSTRUCTION CHANGE DOCUMENT OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK, SHALL BE SUBMITTED TO AND APPROVED BY THE DSA BEFORE PROCEEDING WITH THE WORK.

GENERAL NOTES, cont.

ABBREVIATIONS

(REFER TO CONSULTANT DRAWINGS FOR ADDITIONAL ABBREVIATIONS)

A.F.F.	ABOVE FINISHED FLOOR	LAM.	LAMINATE
A.P.	ACCESS PANEL	LAV.	LAVATORY
ACT	ADJUSTABLE TILE	M.B.	MACHINE BOLT
ADJ.	ADJUSTABLE	M.S.	MACHINE SCREW
ALUM.	ALUMINUM	M.H.	MANHOLE
AB.	ANCHOR BOLT	MFG.	MANUFACTURER
APPROX.	APPROXIMATELY	M.B.	MARKER BOARD
ARCH.	ARCHITECT	MATL.	MATERIAL
AC	ASPHALTIC CONCRETE	MAX.	MAXIMUM
B	AT	MECH.	MECHANICAL
B.M.	BENCH MARK	MTL.	METAL
BLKG.	BLOCKING	MIN.	MINIMUM
BD.	BOARD	MISC.	MISCELLANEOUS
B.W.	BOTH WAYS	MTD.	MOUNTED
BOT.	BOTTOM	(N)	NEW
BLDG.	BUILDING	NOM.	NOMINAL
B.U.R.	BUILT-UP ROOFING	N.I.C.	NOT IN CONTRACT
C.B.	CATCH BASIN	NO.	NOT TO SCALE
C.E.	CEILING	NO. or #	NUMBER
CEM.	CEMENT	OCC.	OCCUPANT(CY)
C.C. or O.C.	CENTER TO CENTER	O.C.	ON CENTER
	CERAMIC TILE	OPNG.	OPENING
CER. TILE	CLEANOUT	OPP.	OPPOSITE
C.O.T.G.	CLEANOUT TO GRADE	O.H.	OUTSIDE FACE OF STUD
C.T.G.	CLEAR	O.F.O.S.	OUTSIDE DIAMETER
CLR.	CLEAR ALL HEART	O.H.W.S.	OVERFLOW DRAIN and/or
C.A.H.R.	REDWOOD	O.D.	OUTSIDE DIAMETER
	COLD WATER	O.F.C.I.	OWNER FURNISHED and/or
C.W.	COLUMN	PR.	CONTRACTOR INSTALLED
COL.	COMMON	PART.	PARTITION
CONC.	CONCRETE	PL	PLATE
CONST.	CONSTRUCTION	P	PENNY (NAILS)
C.H.	CONSTRUCTION HEART	PLAS.	PLASTER
C.J.	CONSTRUCTION JOINT	PLYWD.	PLYWOOD
CONT.	CONTINUOUS	P.V.C.	POLY VINYL CHLORIDE
CONTR.	CONTRACTOR	P.T.	PRESSURE TREATED
CTR.	COUNTER	P.L.	PROPERTY LINE
CTSK.	COUNTER SUNK	RADIUS	RADIUS
DET.	DETAIL	R.W.L.	RAIN WATER LEADER
DIA. or Ø	DIAMETER	RWD./R.W.	REDWOOD
DIM.	DIMENSION	REINF.	REINFORCING
D.A.	DISABLED ACCESS	R.A.G.	RETURN AIR GRILLE
D.R.	DOOR	R.E.	RM ELEVATION
D.W.	DOWNSPOUT	R.F.D.	ROOF DRAIN
DWG.	DRAWING	RM.	ROOM
D.F.	DRINKING FOUNTAIN	R.O.	ROUGH OPENING
	and/or DOUBLE GLASS FIR	RND.	ROUND
EA.	EACH	R.H.M.S.	ROUND HEAD METAL SCREW
E.W.	EACH WAY	R.H.W.S.	ROUND HEAD WOOD SCREW
COL.	ELECTRIC or ELECTRICAL	SSD.	SEE STRUCTURAL DRAWINGS
ELEC.	ELEVATION	S.T.S.M.S.	SELF TAPPING SHEET
EL. or	ENCLOSURE and/or ENCLOSURE	SHEATH.	SHEETING
ELEV.	EQUAL	S.M.	SHEET METAL
ENCL.	EQUIPMENT	S.O.V.	SPLIT OFF VALVE
EQ.	EXISTING	SIM.	SIMILAR
EQUIP.	EXPANSION	S.C.	SOLID CORE
(E)	EXPANSION JOINT	SPEC.	SPECIFICATION
EXP.	EXPOSED	SQ.	SQUARE
E.J.	EXTERIOR	S.F.	SQUARE FEET
F.O.C.	FACE OF CONCRETE	STAG.	STAGGERED
F.O.M.	FACE OF MASONRY	STD.	STANDARD
F.O.S.	FACE OF STUD	STL.	STAINLESS STEEL
FIN.	FINISH	STR.	STEEL
F.F.	FINISHED FLOOR	STOR.	STORAGE
F.S.	FINISH SLAB	STRUCT.	STRUCTURAL
F.E.	FIRE EXTINGUISHER	S.A.G.	SUPPLY AIR GRILLE
F.E.C.	FIRE EXTINGUISHER CABINET	THRES.	THRESHOLD
F.H.	FIRE HYDRANT	T&O.	TONGUE & GROOVE
F.H.M.S.	FLAT HEAD METAL SCREW	T.J.	TOOLED JOINT
F.H.W.S.	FLAT HEAD WOOD SCREW	T.O.B.	TOP OF BEAM
FL. or FLR.	FLOOR	T.O.C.	TOP OF CURB or CONCRETE
F.D.	FLOOR DRAIN	T.O.S.	TOP OF STEEL or SHEATHING
FTG.	FOOTING	T.O.W.	TOP OF WALK
FND.	FOUNDATION	TYP.	TYPICAL
GALV.	GALVANIZED	U.O.N.	UNLESS OTHERWISE NOTED
G.I.	GALVANIZED IRON	U.O.S.	UNLESS OTHERWISE SHOWN
GA.	GAUGE	V.R.	VENT THROUGH ROOF
GL.	GLASS	VERT.	VERTICAL
GLU-LAM	GLUE-LAMINATED	V.G.	VERTICAL GRAIN
GRD.	GRADE	V.F.T.	VERIFY IN FIELD
GYP. BD.	GYPSUM BOARD	V.C.T.	VINYL COMPOSITION TILE
HDW.	HARDWARE	V.W.C.	VINYL WALL COVERING
HT.	HEIGHT	V.O.I.P.	VOICE OVER INTERNET PROTOCOL
H.C.	HOLLOW CORE	W.B.	WATER CLOSET
H.M.	HOLLOW METAL	W.H.	WATER HEATER
HORIZ.	HORIZONTAL	WP.	WATERPROOF
H.B.	HORSE BIBB	W.R.	WATER RESISTANT
I.D.	INSIDE DIAMETER	W.W.M.	WELDED WIRE MESH
INSUL.	INSULATION	W.D.	WINDOW DIMENSION
INT.	INTERIOR	W	WITH
INV.	INVERT	WO	WITHOUT
JT.	JOINT	WD.	WOOD
J.H.	JOIST HANGER		
K.D.	KILN DRIED		



BUILDING CODES AND STANDARDS:

2019	CALIFORNIA ADMINISTRATIVE CODE, PART 1, TITLE 24, C.C.R.
2019	CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, C.C.R.
2019	CALIFORNIA INTERNATIONAL BUILDING CODE (CBC), VOLUMES 1 AND 2, WITH 2019 CALIFORNIA AMENDMENTS.
2019	CALIFORNIA ELECTRIC CODE (CEC), PART 3, TITLE 24, C.C.R.
2019	(2018 NATIONAL ELECTRIC CODE WITH 2019 CALIFORNIA AMENDMENTS).
2019	CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24, C.C.R.
2019	(2018 UNIFORM MECHANICAL CODE WITH 2019 CALIFORNIA AMENDMENTS).
2019	CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24, C.C.R.
2019	(2018 UNIFORM PLUMBING CODE WITH 2019 CALIFORNIA AMENDMENTS).
2019	CALIFORNIA ENERGY CODE (CENC), PART 6, TITLE 24, C.C.R.
2019	CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24, C.C.R.
2019	(2018 INTERNATIONAL FIRE CODE WITH 2019 CALIFORNIA AMENDMENTS).
2019	CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24, C.C.R.
2019	CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24, C.C.R.
2019	ASME A17.1 (W/17-1) (CSA B44-08 ADDENDA) SAFETY CODE FOR ELEVATORS AND ESCALATORS
2010	ADA STANDARDS FOR ACCESSIBLE DESIGN (28 CFR PART 36 FOR TITLE II ENTITIES)

CCR TITLE-19, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.

NFPA 13	INSTALLATION OF SPRINKLER SYSTEMS (CA AMENDED)	2016 EDITION
NFPA 14	INSTALLATION OF STANDPIPE & HOSE SYSTEMS (CA AMENDED)	2016 EDITION
NFPA 17	DRY CHEMICAL EXTINGUISHING SYSTEMS	2017 EDITION
NFPA 17A	WET CHEMICAL EXTINGUISHING SYSTEM	2017 EDITION
NFPA 20	STATIONARY FIRE PUMPS TO FIRE PROTECTION	2016 EDITION
NFPA 22	WATER TANKS FOR PRIVATE FIRE PROTECTION	2013 EDITION
NFPA 24	PRIVATE FIRE SERVICE MAINS (CA AMENDED)	2016 EDITION
NFPA 25	INSPECTION, TESTING AND MAINTENANCE OF WATER BASED FIRE PROTECTION SYSTEMS	2013 CALIFORNIA EDITION
NFPA 72	NATIONAL FIRE ALARM CODE (CA AMENDED)	2016 EDITION
NFPA 80	FIRE DOORS AND OTHER OPENING PROTECTIVES	2016 EDITION
NFPA 92	STANDARD FOR SMOKE CONTROL SYSTEMS	2015 EDITION
NFPA 110	EMERGENCY AND STANDBY POWER SYSTEMS	2016 EDITION
NFPA 170	STANDARD FOR FIRE SAFETY AND EMERGENCY SYMBOLS	2018 EDITION
NFPA 253	CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEMS	2015 EDITION
NFPA 2001	CLEAN AGENT FIRE EXTINGUISHING SYSTEMS	2015 EDITION
ICC 300	STANDARDS FOR BLEACHERS, FOLDING AND TELESCOPIC SEATING, AND GRANDSTANDS	2017 EDITION
SFM 12-10-1	POWER OPERATED EXIT DOORS	
SFM 12-10-2	SINGLE POINT LATCHING OR LOCKING DEVICES	
SFM 12-10-3	EMERGENCY EXIT & PANIC HARDWARE	
UL 38	MANUAL OPERATING SIGNAL BOXES	1999/2005 EDITION
UL 288	SMOKE DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	2009 EDITION
UL 268A	SMOKE DETECTORS DUCT APPLICATIONS	1998/2003 EDITION
UL 300	FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF COMMERCIAL COOKING EQUIPMENT	2005 (R2010)
UL 305	PANIC HARDWARE	2012 EDITION
UL 464	AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, AND ACCESSORIES	2003 EDITION
UL 521	HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	1999 EDITION
UL 864	CONTROL UNITS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	2003 EDITION
UL 1971	(W/ REVISIONS THROUGH DEC. 2014) SIGNALING DEVICES FOR THE HEARING IMPAIRED	2002 EDITION
	COMPLIANCE WITH CFC CHAPTER 33, FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION AND CBC CHAPTER 33, SAFETY DURING CONSTRUCTION WILL BE ENFORCED.	

SYMBOLS LEGEND

1 A8.1	SECTION / EXTERIOR ELEVATION SECTION IDENTIFICATION SHEET WHERE SECTION IS DRAWN
4 A8.1	DETAIL DETAIL IDENTIFICATION SHEET WHERE DETAIL IS DRAWN
1 A7.1	INTERIOR ELEVATION INDICATES ELEVATION SHOWN SHEET WHERE ELEVATION IS DRAWN
CLASSROOM 102	ROOM IDENTIFICATION ROOM NAME ROOM NUMBER
3	SPECIFIC NOTE
102A	DOOR DESIGNATION
A	WINDOW DESIGNATION
1	ADDENDUM REVISION CLOUD AROUND REVISION
1	CCD REVISION CLOUD AROUND REVISION
127	FINISH NUMBER SEE SPECS AND I.E. DWGS.
A	EQUIPMENT LETTER SEE EQUIPMENT SCHEDULE
48'-0"	CEILING HEIGHT
1	WALL TYPE
1	MATCH LINE
48'-0"	ELEV. HEIGHT
1	F.O.S., U.O.N.
1	FACE OF FINISH

PROJECT SUMMARY

ROOF REPAIR/REPLACEMENT AND HVAC REPLACEMENT, MULTIPURPOSE BUILDING J.

DESIGN TEAM

ARCHITECT
SUGIMURA FINNEY ARCHITECTS
2155 SOUTH BASCOM AVENUE SUITE 200
CAMPBELL, CALIFORNIA 95008
(408) 879-0600
(408) 377-6066 FAX
ATTN: MARK FINNEY MARK@SUGIMURA.COM

MECHANICAL AND PLUMBING ENGINEER
CYPRESS ENGINEERING GROUP
2155 SOUTH BASCOM AVENUE SUITE A8
MONTEREY, CALIFORNIA 93940
(831) 218-1802

ELECTRICAL AND FIRE ALARM ENGINEER
AURUM CONSULTING ENGINEERS
1798 TECHNOLOGY DRIVE, SUITE 242
SAN JOSE, CA 95110
(408) 564-7925

DRAWING INDEX

T1 TITLE SHEET

ARCHITECTURAL
A0.2 SITE PLAN
A4.1 ROOF PLAN
A8.1 ROOF DETAILS

* MECHANICAL & PLUMBING
MP0.1 SYMBOL LEGENDS, ABBREVIATIONS, NOTES - MECHANICAL & PLUMBING
MP0.2 SCHEDULES AND DETAILS - MECHANICAL & PLUMBING
MP3.1 BUILDING J - DEMOLITION & NEW ROOF PLANS - MECHANICAL & PLUMBING
MP3.2 BUILDING J - MECHANICAL / TAB WORK
MP8.1 TITLE 24 - MECHANICAL
MP8.2 TITLE 24 - MECHANICAL

* ELECTRICAL
E0.1 SYMBOLS, ABBREVIATIONS, CODES, STANDARDS, EQUIPMENT ANCHORAGE, NOTES & SHEET INDEX
E1.1 ELECTRICAL DETAILS
E2.1 ELECTRICAL SITE PLAN
E3.1 ELECTRICAL PLANS - BUILDING J

SHEET TOTAL = 14

VICINITY MAP



PROJECT LOCATION

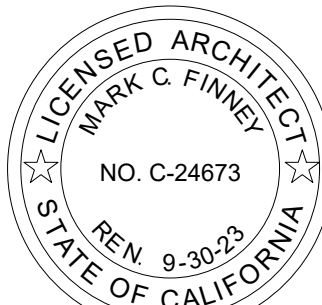
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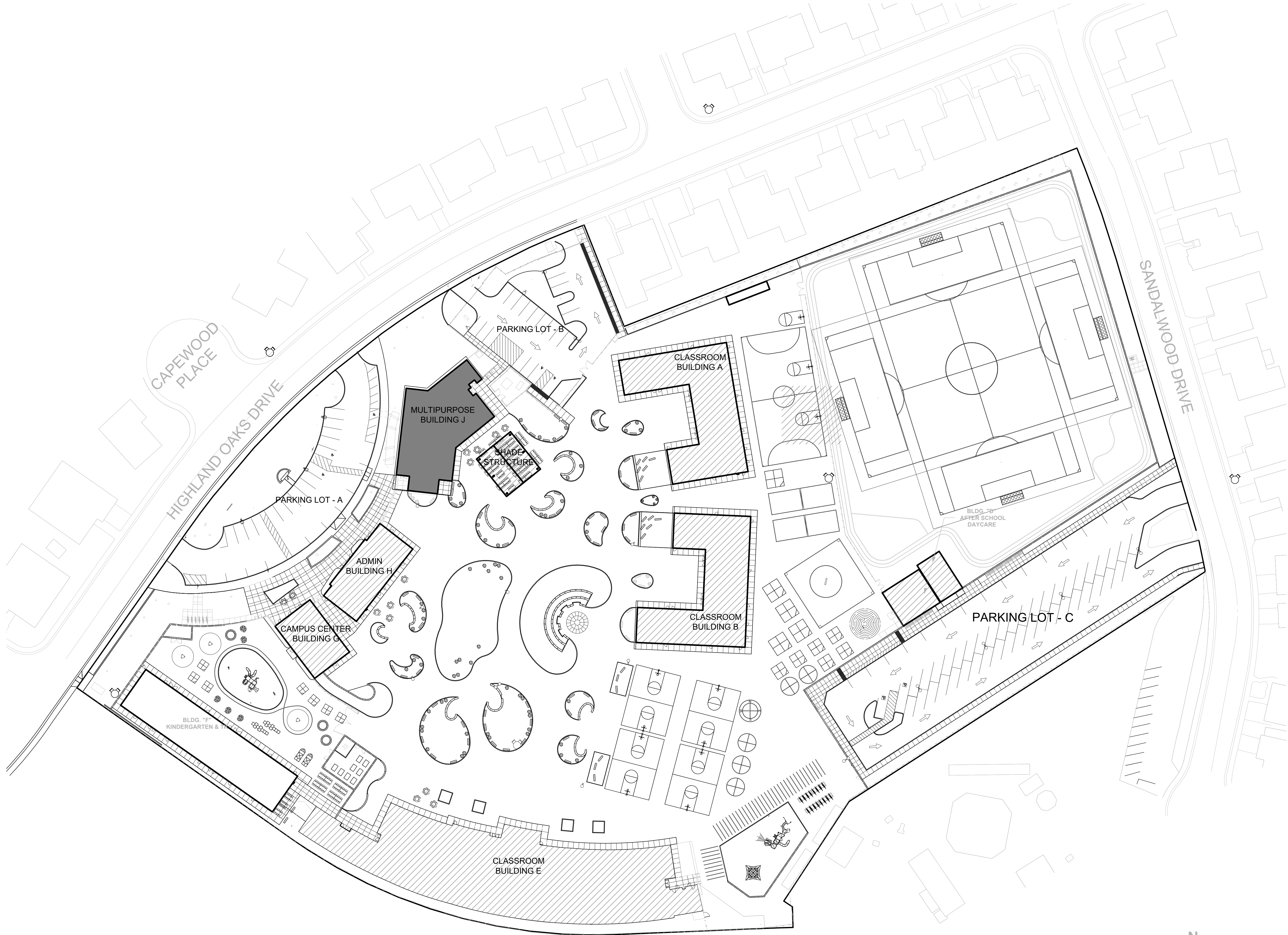
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SFA JOB NO:	DATE:
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(DSA STAMP AREA)





GENERAL NOTES

- A. REFER TO MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR EXTENT OF OTHER RELATED WORK.

(DSA STAMP AREA)

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING

2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-878-6600
FAX: 408-377-6555

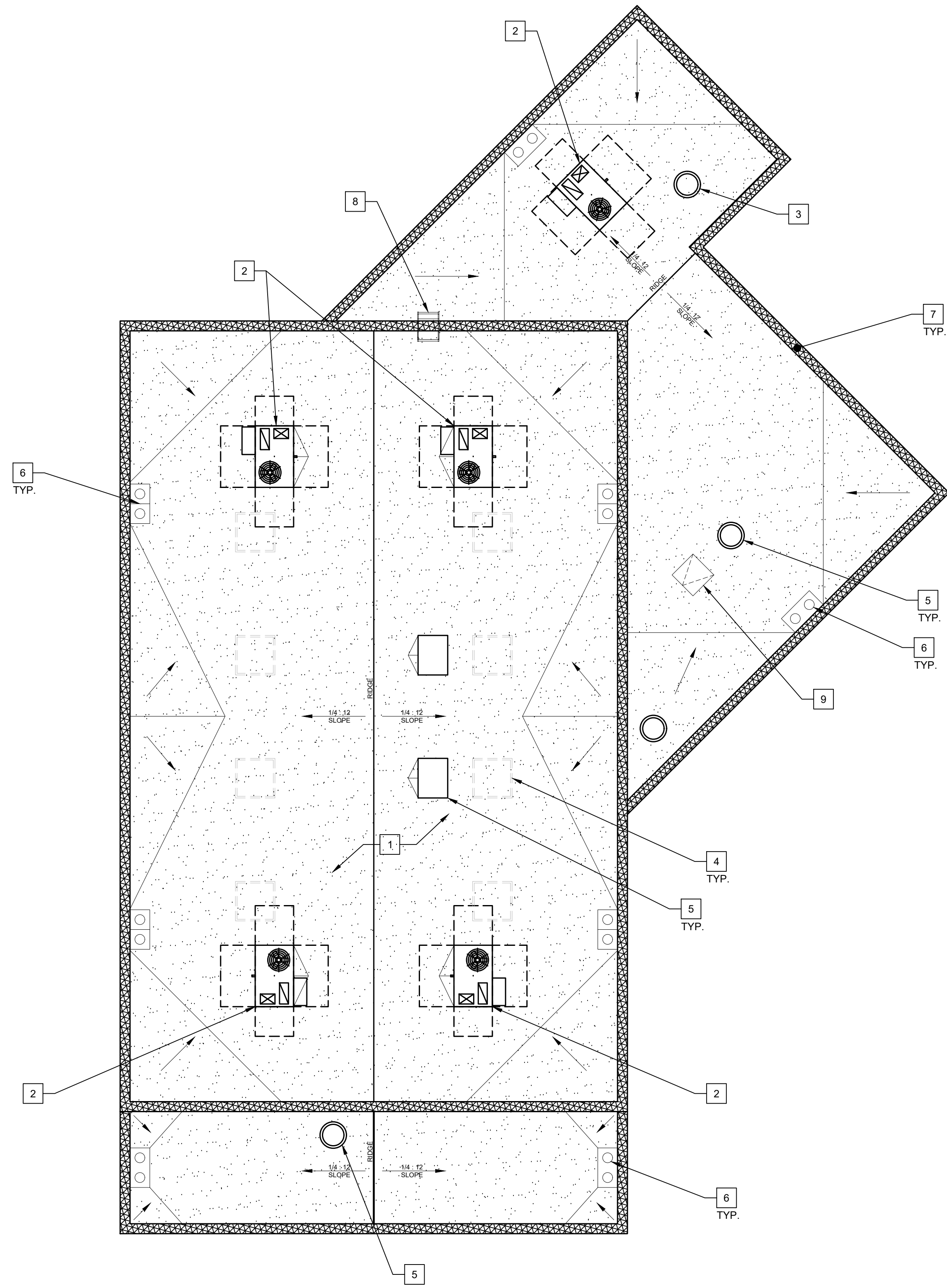
LICENSED ARCHITECT
MARK C. FINNEY
NO. C-24673
EXPIRATION 9-30-23
STATE OF CALIFORNIA

SITE PLAN

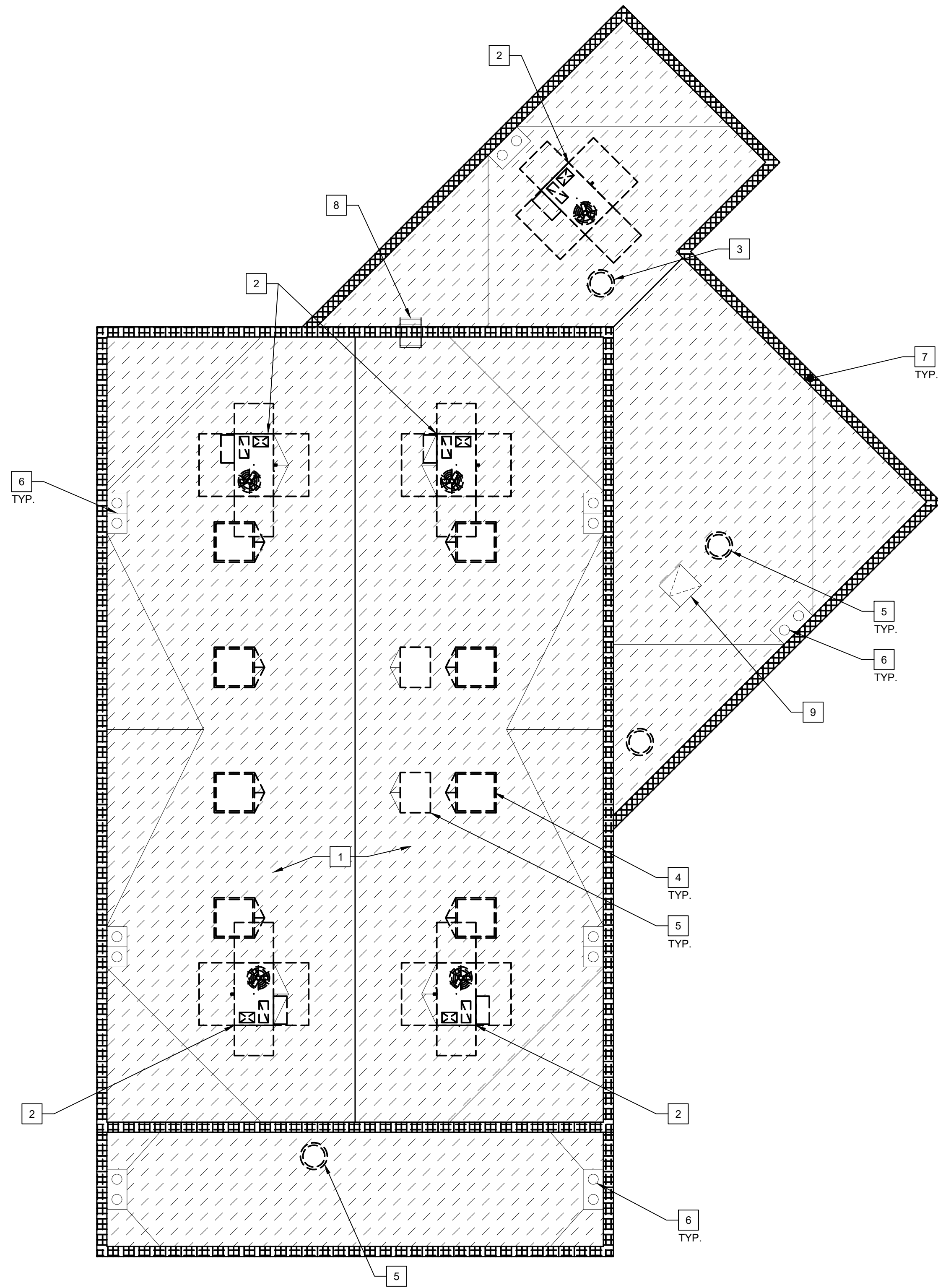
REROOFING AND HVAC REPLACEMENT
LYDIKSEN ELEMENTARY SCHOOL
7700 HIGHLAND OAKS DR., PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

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DRAWN BY:	KNJ
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SFA JOB NO:	20085
DATE:	11/16/2021



1 NEW ROOF PLAN
1/8" = 1'-0"
0 2' 4' 8' 16' 24'



1 DEMOLITION ROOF PLAN
1/8" = 1'-0"
0 2' 4' 8' 16' 24'

GENERAL NOTES

- A. NOT ALL ROOF APPURTENANCES ARE SHOWN ON DRAWINGS. CONTRACTOR TO FIELD VERIFY QUANTITIES AND LOCATIONS OF ALL DEVICES AND EQUIPMENT. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL SCOPE OF WORK.
- B. CONTRACTOR TO REMOVE AND REINSTALL MECHANICAL UNITS, DUCTWORK AND ALL OTHER ROOF TOP APPURTENANCES AS REQUIRED FOR INSTALLATION OF ROOFING. CONTRACTOR TO REINSTALL AND RECONNECT ALL DEVICES AND RETURN THEM TO WORKING ORDER. CONTRACTOR TO NOTIFY DISTRICT AND ARCHITECT OF ANY DEVICES NOT FUNCTIONING PRIOR TO REMOVAL.
- C. COORDINATE SLEEPER LOCATIONS WITH MECHANICAL, PLUMBING, AND/OR ELECTRICAL AS REQUIRED. SEE DETAIL 4/A9.1.

DEMOLITION ROOF PLAN NOTES

1. REMOVE (E) ROOFING TO EXPOSE SHEATHING, INCLUDING SIDE OF PARAPET WALL. PREPARE FOR NEW ROOFING SYSTEM, SEE SPECS.
2. REMOVE (E) AC UNITS. PREPARE AREA FOR NEW HVAC UNITS, SEE MECHANICAL DRAWINGS.
3. (E) EXHAUST FAN AND CURB TO BE REMOVED AND RE-INSTALLED IN NEW LOCATION, SEE NEW ROOF PLAN AND MECHANICAL DRAWINGS.
4. REMOVE (E) SKYLIGHT CAPS AND CURBS. PREPARE FOR ROOF INFILL AND NEW ROOFING SYSTEM.
5. REMOVE (E) EXHAUST FANS AND RELIEF HOODS, PREPARE FOR NEW FANS AND HOODS, SEE MECHANICAL DRAWINGS.
6. REMOVE (E) ROOF DRAINS AND OVERFLOW, PREPARE FOR NEW DRAINS.
7. REMOVE (E) PARAPET FLASHING AND COPING.
8. EXISTING ROOF LADDER TO REMAIN.
9. EXISTING ROOF ACCESS HATCH TO REMAIN.

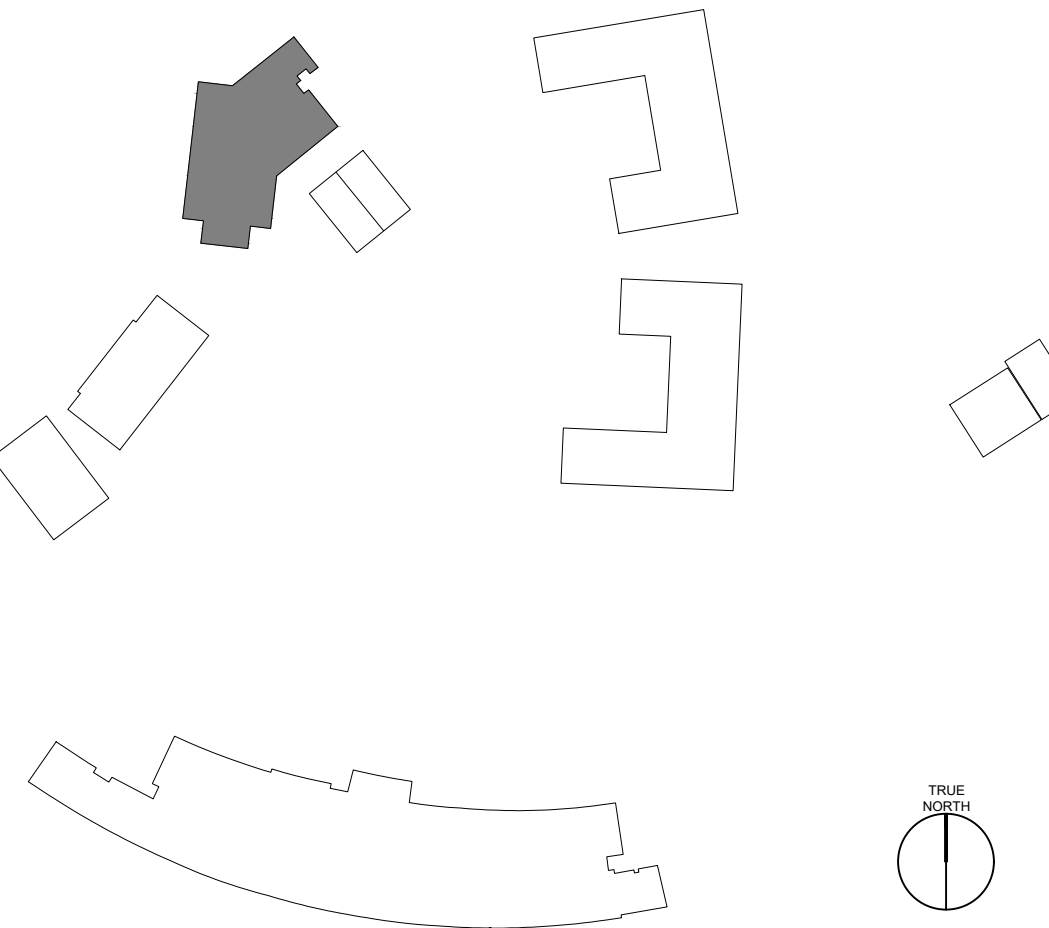
NEW ROOF PLAN NOTES

1. (N) ROOFING SYSTEM, INCLUDING INSIDE OF PARAPET WALL, SEE SPECS.
2. (N) AC UNITS, SEE DETAIL 1/A9.1 & MECHANICAL DRAWINGS.
3. (N) EXHAUST FAN AND IN/CURB INSTALLED IN NEW LOCATION, SEE DETAIL 8/A9.1 AND MECHANICAL DRAWINGS.
4. FRAME AND INFILL SKYLIGHT OPENING AND APPLY NEW ROOFING SYSTEM OVER PATCH, SEE DETAIL 9/A9.1.
5. (N) EXHAUST FANS AND RELIEF HOODS, SEE DETAILS 8/A9.1 MECHANICAL DRAWINGS.
6. (N) ROOF DRAINS AND OVERFLOW, SEE DETAIL 3/A9.1 ADN PLUMBING DRAWINGS.
7. (N) PARAPET FLASHING AND COPING, SEE DETAIL 2/A9.1.
8. EXISTING ROOF LADDER TO REMAIN.
9. EXISTING ROOF ACCESS HATCH TO REMAIN, SEE DETAIL 5/A9.1 FOR FLASHING DETAIL.

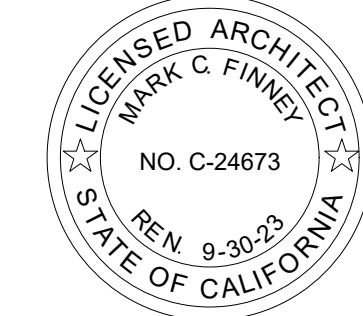
GRAPHIC KEY

- EXISTING TO BE DEMOLISHED
- EXISTING ROOFING TO BE REMOVED
- NEW BUILT-UP ROOFING

BUILDING KEY



(DSA STAMP AREA)



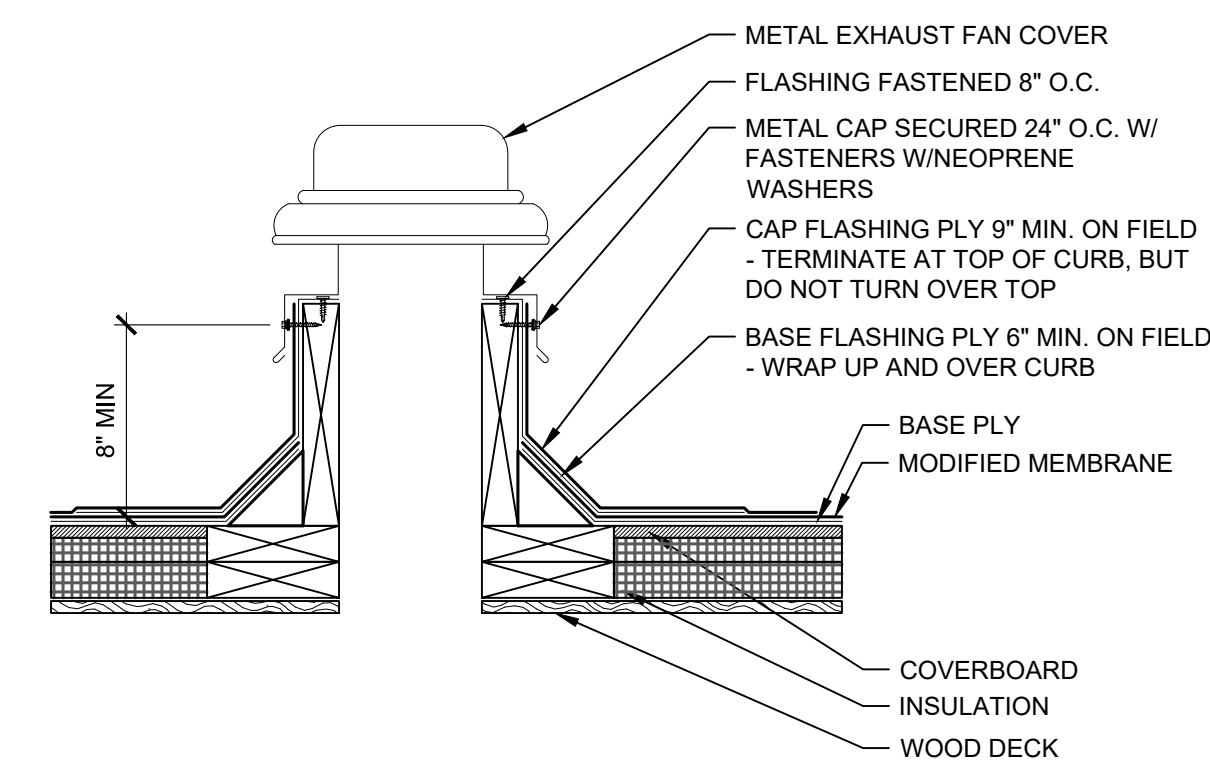
ROOF PLANS

REROOFING AND HVAC REPLACEMENT
LYDIKSEN ELEMENTARY SCHOOL
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PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS		
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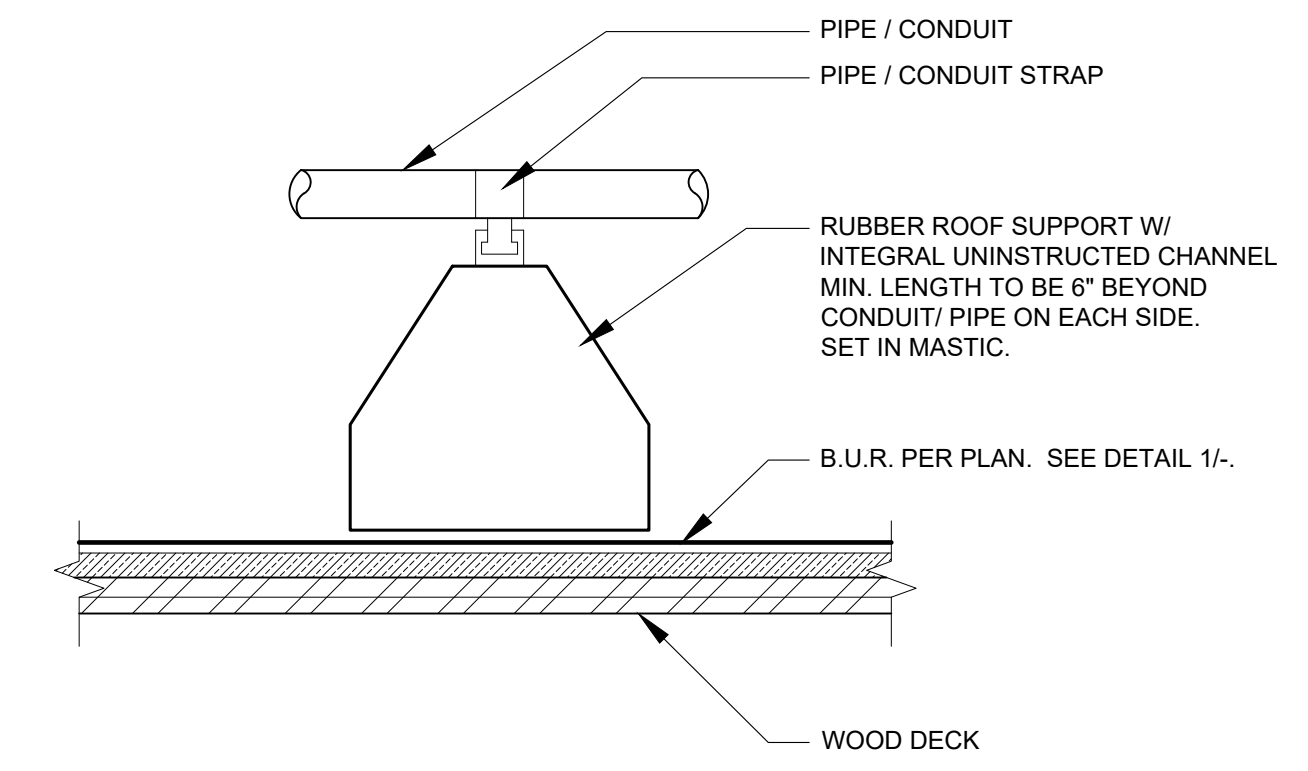
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20085	11/16/2021

A4.1

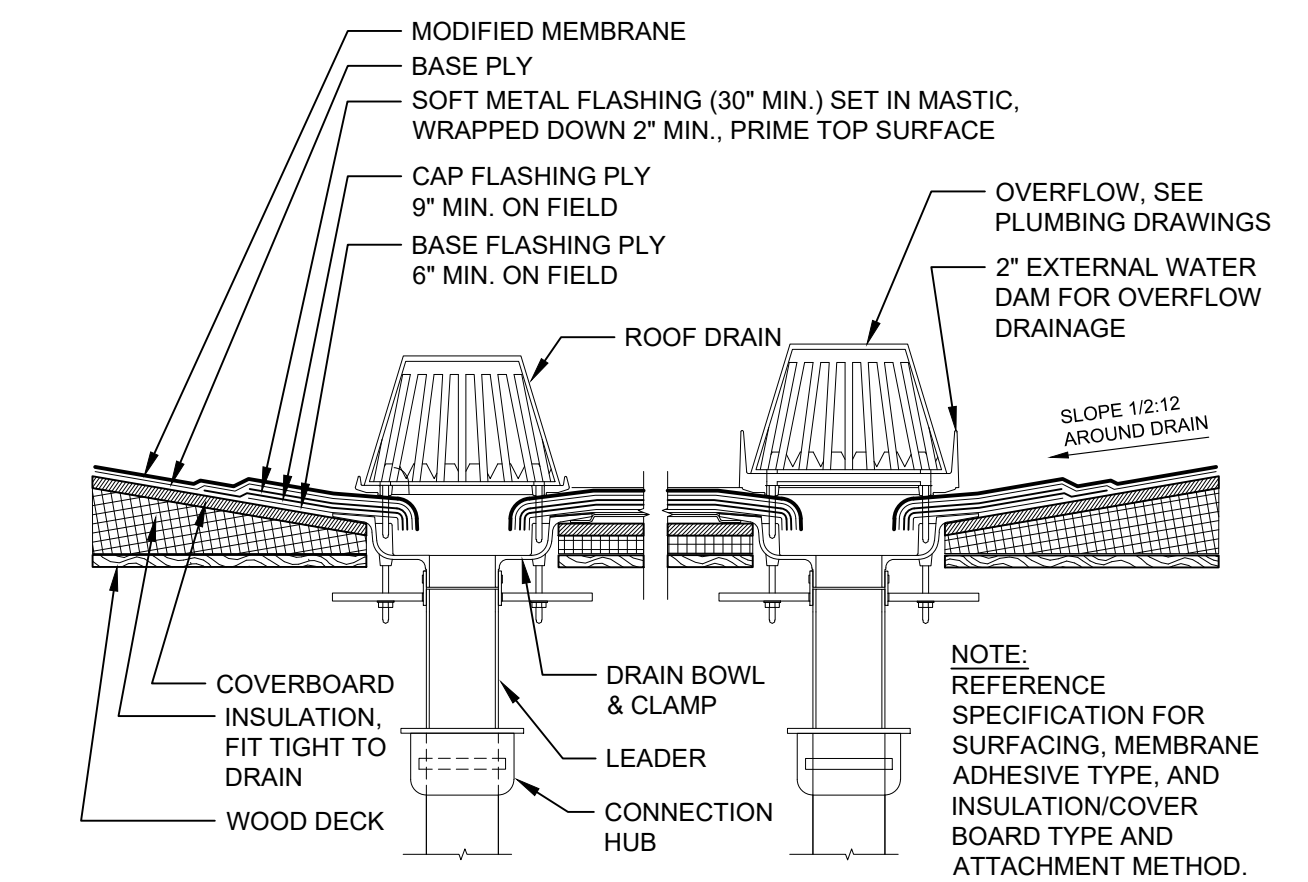


NOTE:
REFERENCE SPECIFICATION FOR SURFACING, MEMBRANE ADHESIVE TYPE, AND
INSULATION/COVER BOARD TYPE AND ATTACHMENT METHOD.

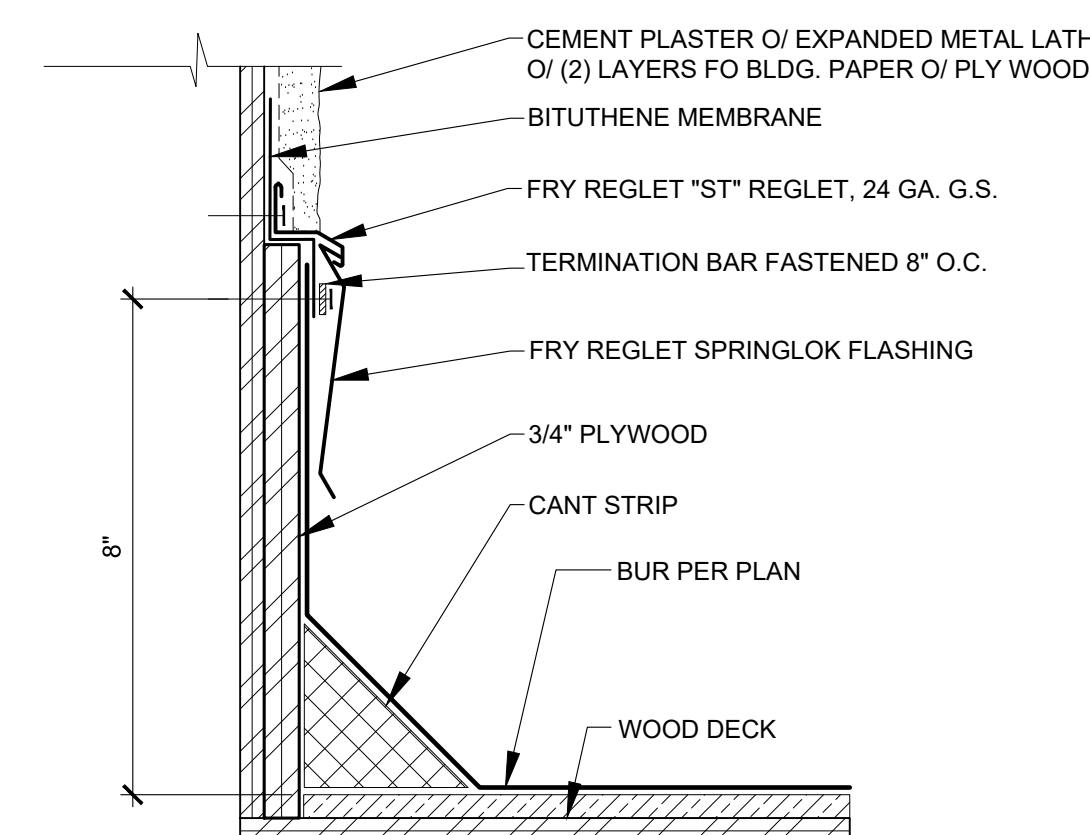
8 FLASHING DETAIL
@ EXHAUST FAN 1-1/2"=1'-0"



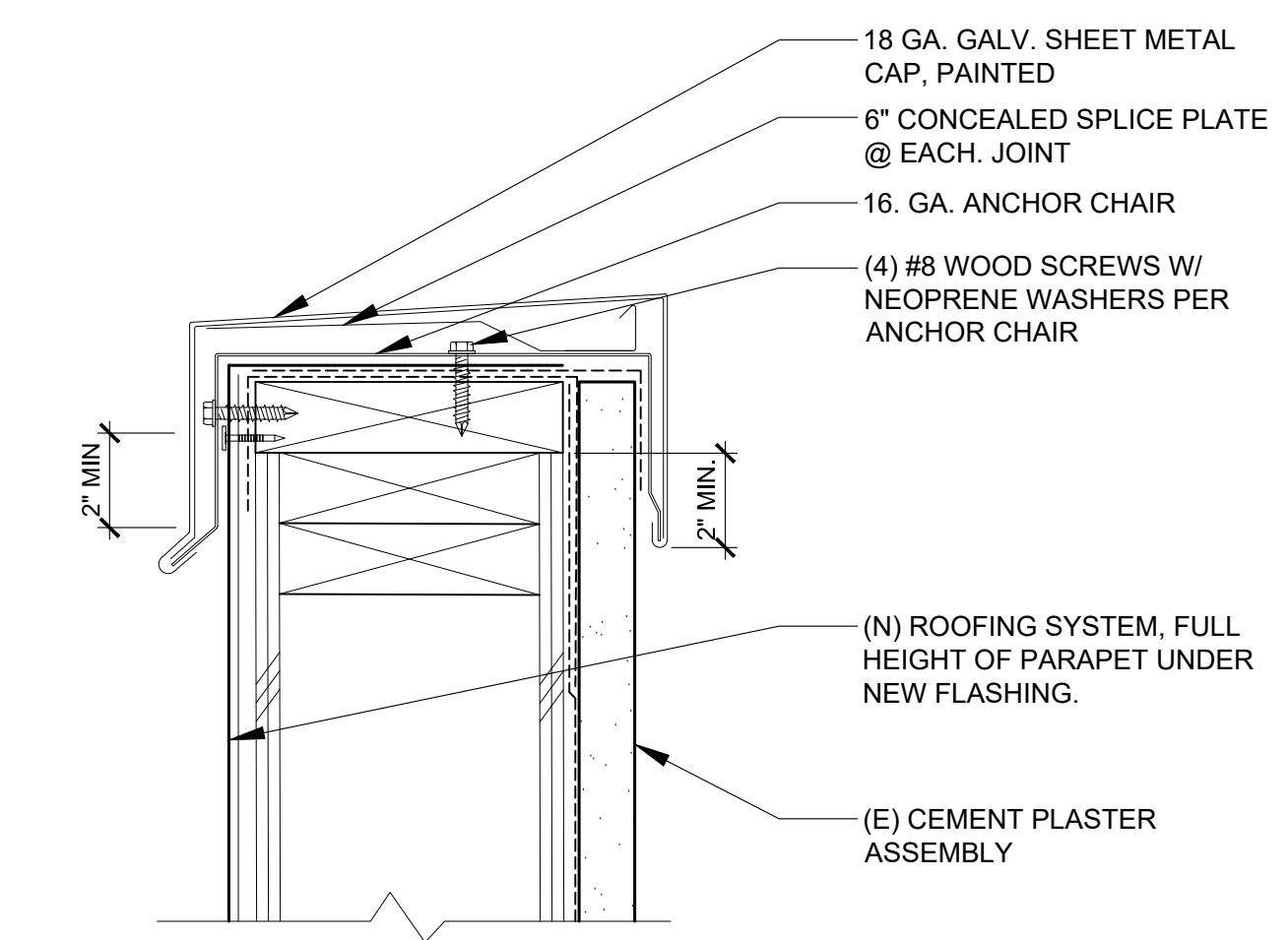
4 FLOATING SLEEPER 3"=1'-0"



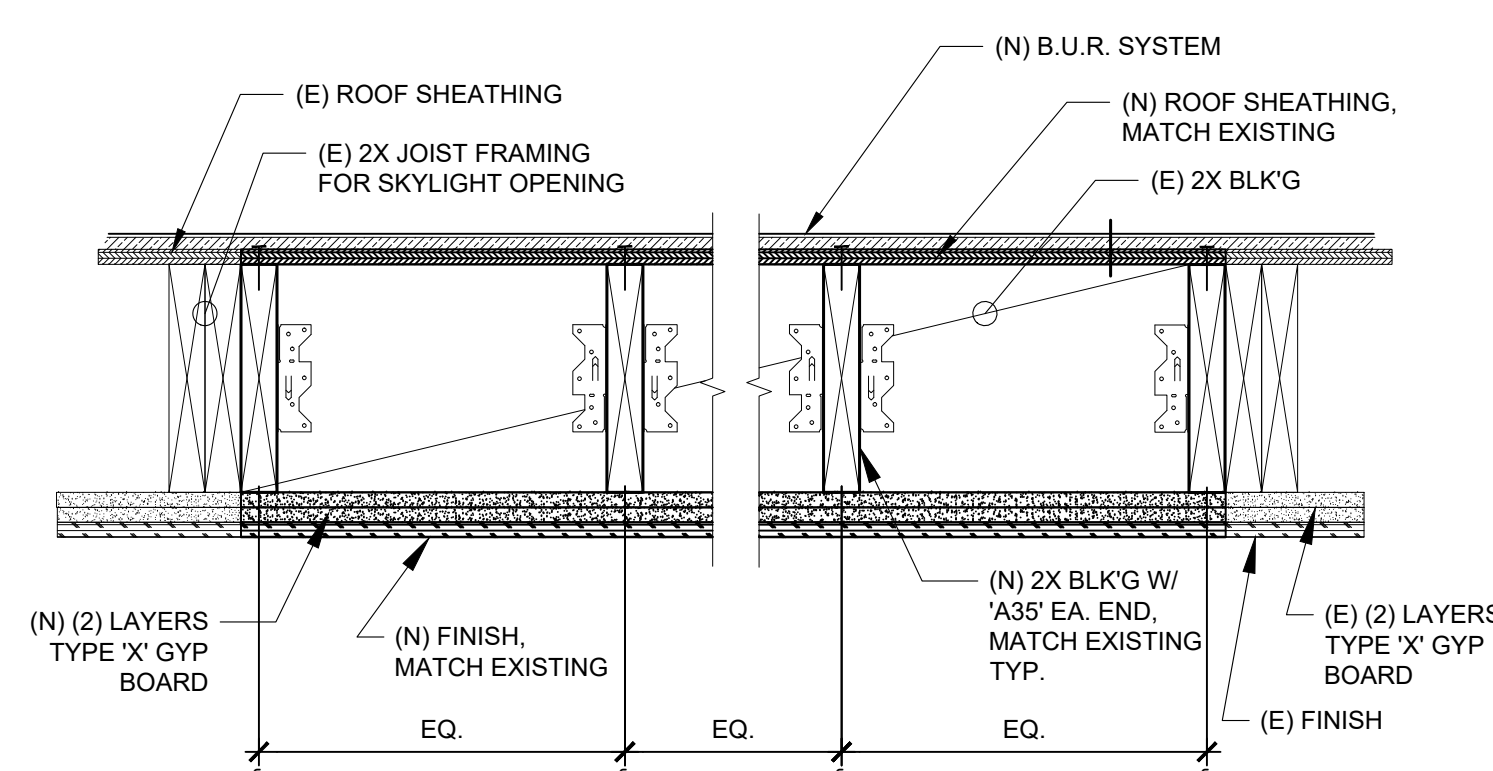
3 ROOF DRAIN AND OVERFLOW



6 CEMENT PLASTER TO BUR
@ LOW TO TALL ROOF 3"=1'-0"

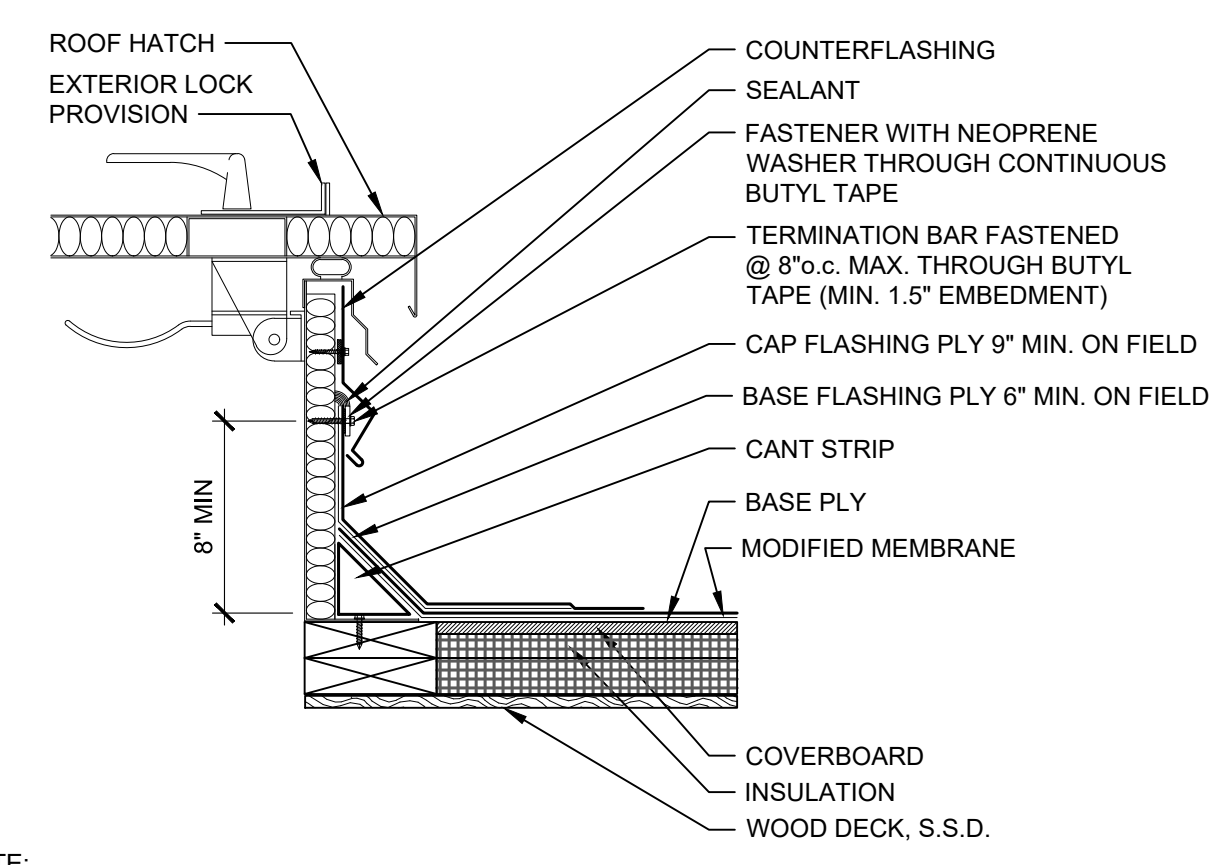


2 COPING CAP
@ CEMENT PLASTER ASSEMBLY 3"=1'-0"



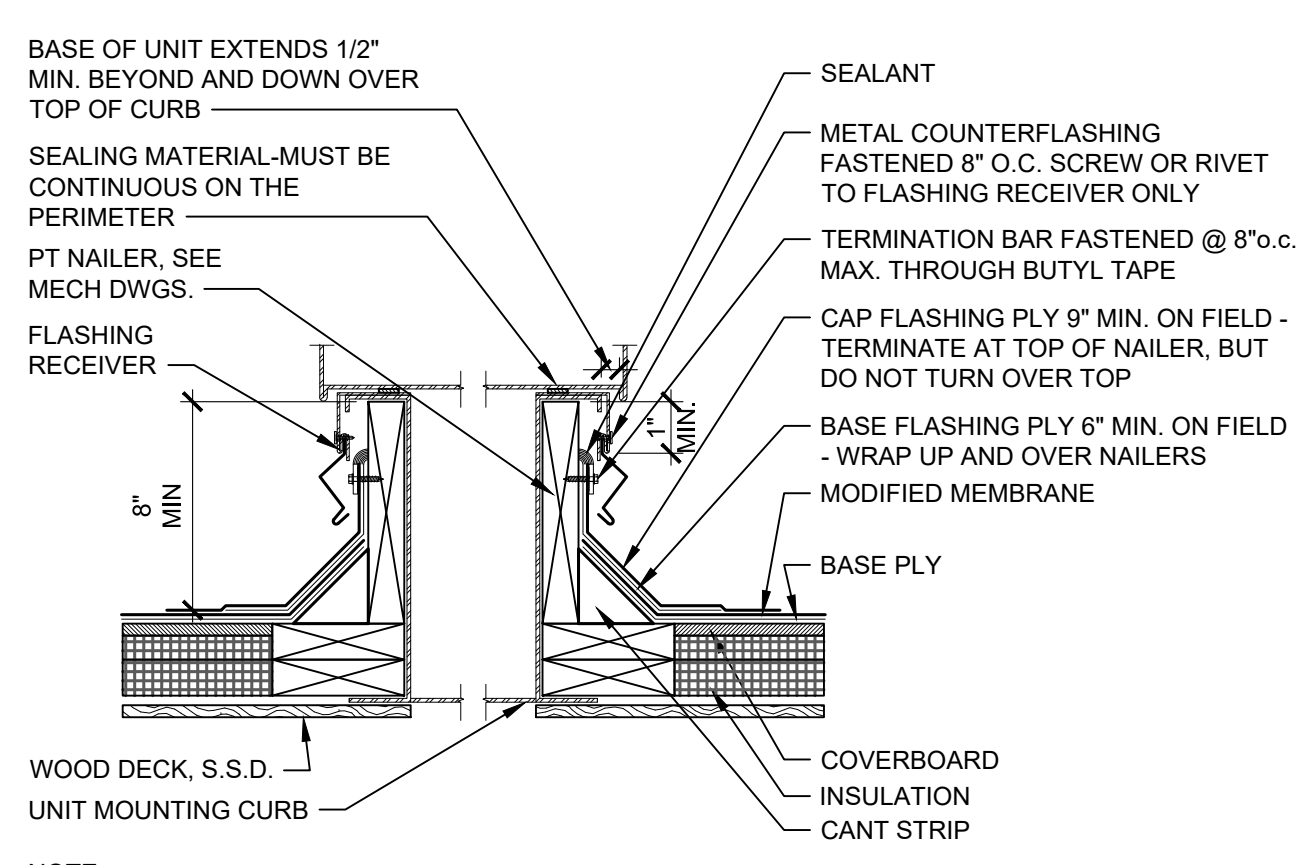
NOTE: PAINT ALL NEW SURFACES

9 SKYLIGHT- INFILL & ROOF PATCH
1 1/2"=1'-0"



NOTE:
REFERENCE SPECIFICATION FOR SURFACING, MEMBRANE ADHESIVE TYPE, AND
INSULATION/COVER BOARD TYPE AND ATTACHMENT METHOD.

5 FLASHING DETAIL
@ ROOF HATCH 1-1/2"=1'-0"

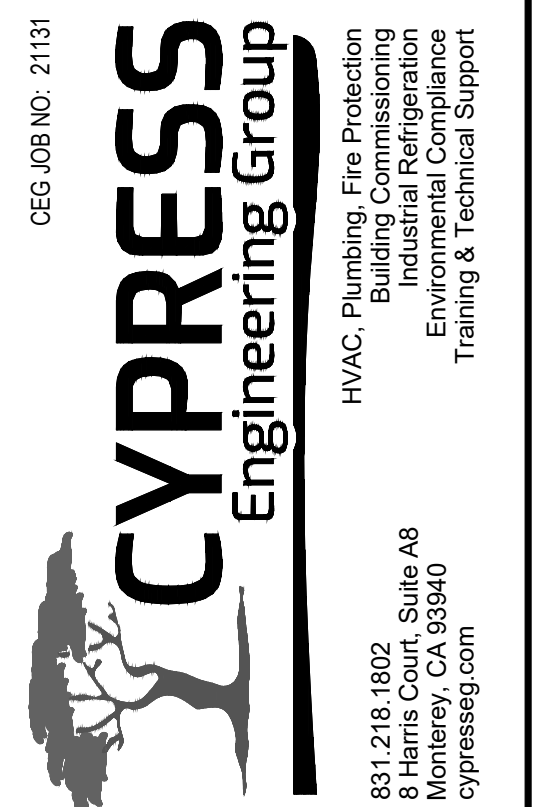


NOTE:
REFERENCE SPECIFICATION FOR SURFACING, MEMBRANE ADHESIVE TYPE, AND
INSULATION/COVER BOARD TYPE AND ATTACHMENT METHOD

1 FLASHING DETAIL
@ AC UNIT 1-1/2"=1'-0"

		<div><div><div><div>& °F</div><div>AND DEGREES FAHRENHEIT</div></div><div><div>AAV</div><div>AUTOMATIC AIR VENT</div></div><div><div>AC</div><div>AIR CONDITIONER</div></div><div><div>AD</div><div>ACCESS DOOR</div></div><div><div>ADF</div><div>ABOVE FINISH FLOOR</div></div><div><div>AEUE</div><div>ANNUAL FUEL UTILIZATION EFFICIENCY</div></div><div><div>AL</div><div>ACOUSTICALLY LINED</div></div><div><div>AMP</div><div>AMPERE</div></div><div><div>AP</div><div>ACCESS PANEL</div></div><div><div>APPROX</div><div>APPROXIMATE</div></div><div><div>ARCH</div><div>ARCHITECT/ARCHITECTURAL</div></div><div><div>BDD</div><div>BACK DRAFT DAMPER</div></div><div><div>BFP</div><div>BACK FLOW PREVENTER</div></div><div><div>BHP</div><div>BRAKE HORSEPOWER</div></div><div><div>BLDG</div><div>BUILDING</div></div><div><div>BOD</div><div>BOTTOM OF DUCT</div></div><div><div>BOP</div><div>BOTTOM OF PIPE</div></div><div><div>BTU</div><div>BRITISH THERMAL UNIT</div></div><div><div>BTUH</div><div>BRITISH THERMAL UNITS PER HOUR</div></div><div><div>BTWN</div><div>BETWEEN</div></div><div><div>CA</div><div>COMBUSTION AIR</div></div><div><div>CPH</div><div>CUBIC FEET PER HOUR</div></div><div><div>CFM</div><div>CUBIC FEET PER MINUTE</div></div><div><div>CHWR</div><div>CHILLED WATER RETURN</div></div><div><div>CHWS</div><div>CHILLED WATER SUPPLY</div></div><div><div>CIRC</div><div>CIRCULATING</div></div><div><div>CL</div><div>CENTERLINE</div></div><div><div>CLG</div><div>COOLING CEILING</div></div><div><div>CLR</div><div>CLEAR</div></div><div><div>CONC</div><div>CONCRETE</div></div><div><div>CONN</div><div>CONNECTION</div></div><div><div>CONT</div><div>CONTINUED, CONTINUATION</div></div><div><div>COOL</div><div>COOLING</div></div><div><div>COP</div><div>COEFFICIENT OF PERFORMANCE</div></div><div><div>DB</div><div>DRY BULB</div></div><div><div>DF</div><div>DRINKING FOUNTAIN</div></div><div><div>D/L</div><div>DOOR LOUVER</div></div><div><div>DN</div><div>DOWN</div></div><div><div>DP</div><div>DIFFERENTIAL PRESSURE</div></div><div><div>DWGS</div><div>DRAWINGS</div></div><div><div>(E)</div><div>EXISTING</div></div><div><div>EA</div><div>EXHAUST AIR</div></div><div><div>EAD</div><div>EXHAUST AIR DAMPER</div></div><div><div>EAT</div><div>ENTERING AIR TEMPERATURE</div></div><div><div>EDB</div><div>ENTERING DRY BULB</div></div><div><div>EER</div><div>ENERGY EFFICIENCY RATIO</div></div><div><div>EFF</div><div>EFFICIENCY</div></div><div><div>ELEC</div><div>ELECTRICAL</div></div><div><div>ELEV</div><div>ELEVATION</div></div><div><div>ENT</div><div>ENTERING</div></div></div><div><div><div>EQ</div><div>EQUAL</div></div><div><div>EQUIP</div><div>EQUIPMENT</div></div><div><div>ESP</div><div>EXTERNAL STATIC PRESSURE</div></div><div><div>EW</div><div>ENTERING WATER</div></div><div><div>EWB</div><div>ENTERING WET BULB</div></div><div><div>EWV</div><div>ENTERING WATER TEMPERATURE</div></div><div><div>EXT</div><div>EXTERIOR</div></div><div><div>FD</div><div>FLOOR DRAIN</div></div><div><div>FFE</div><div>FINISHED FLOOR ELEVATION</div></div><div><div>FLA</div><div>FULL LOAD AMPS</div></div><div><div>FLEX</div><div>FLEXIBLE</div></div><div><div>FS</div><div>FEET PER MINUTE</div></div><div><div>FS</div><div>FLOOR SINK</div></div><div><div>FT</div><div>FEET</div></div><div><div>FT HD</div><div>FEET HEAD</div></div><div><div>FTR</div><div>FLUE THRU ROOF</div></div><div><div>GA</div><div>GAUGE</div></div><div><div>GAL</div><div>GALLON</div></div><div><div>GPM</div><div>GALLONS PER MINUTE</div></div><div><div>HP</div><div>HORSEPOWER</div></div><div><div>HR</div><div>HOUR</div></div><div><div>HTG</div><div>HEATING</div></div><div><div>HZ</div><div>HERTZ</div></div><div><div>IE</div><div>INVERT ELEVATION</div></div><div><div>IN</div><div>INCH</div></div><div><div>INV</div><div>INVERT</div></div><div><div>ISO</div><div>ISO</div></div><div><div>KWH</div><div>KILOWATT HOUR</div></div><div><div>LAT</div><div>LEAVING AIR TEMPERATURE</div></div><div><div>LBS</div><div>POUNDS</div></div><div><div>LVR</div><div>LOUVER</div></div><div><div>LWT</div><div>LEAVING WATER TEMPERATURE</div></div><div><div>LWB</div><div>LEAVING WET BULB</div></div><div><div>MAD, MD</div><div>MANUAL AIR DAMPER</div></div><div><div>MAV</div><div>MANUAL AIR VENT</div></div><div><div>MAX</div><div>MAXIMUM</div></div><div><div>MBH</div><div>1000 BTU PER HOUR</div></div><div><div>MCA</div><div>MINIMUM CIRCUIT AMPS</div></div><div><div>MCP</div><div>MECHANICAL CONTROL PANEL</div></div><div><div>MECH</div><div>MECHANICAL</div></div><div><div>MFR</div><div>MANUFACTURER</div></div><div><div>MIN</div><div>MINIMUM</div></div><div><div>MOCP</div><div>MAXIMUM OVERCURRENT PROTECTION</div></div><div><div>(N)</div><div>NEW</div></div><div><div>NC</div><div>NORMALLY CLOSED</div></div><div><div>NC</div><div>NOT IN CONTRACT</div></div><div><div>NO</div><div>NORMALLY OPEN</div></div><div><div>NTS</div><div>NOT TO SCALE</div></div><div><div>OA</div><div>OUTSIDE AIR</div></div><div><div>OAD</div><div>OUTSIDE AIR DAMPER</div></div><div><div>OC</div><div>ON CENTER</div></div></div><div><div><div>OD</div><div>OUTSIDE DIAMETER</div></div><div><div>PD</div><div>PRESSURE DROP</div></div><div><div>PH</div><div>PHASE</div></div><div><div>PLF</div><div>POUNDS PER LINEAR FOOT</div></div><div><div>POC</div><div>POINT OF CONNECTION</div></div><div><div>PRV</div><div>PRESSURE REDUCING VALVE</div></div><div><div>PSI (G)</div><div>POUNDS PER SQUARE INCH (GAUGE)</div></div><div><div>(ABSOLUTE)</div><div></div></div><div><div>PIT</div><div>PRESSURE/TEMPERATURE</div></div><div><div>QTY</div><div>QUANTITY</div></div><div><div>RA</div><div>RETURN AIR</div></div><div><div>RAD</div><div>RETURN AIR DAMPER</div></div><div><div>RH</div><div>RELATIVE HUMIDITY</div></div><div><div>RL</div><div>REFRIGERANT LIQUID</div></div><div><div>RM</div><div>ROOM</div></div><div><div>RPM</div><div>REVOLUTIONS PER MINUTE</div></div><div><div>RS</div><div>REFRIGERANT SUCTON</div></div><div><div>SA</div><div>SUPPLY AIR</div></div><div><div>SC</div><div>SENSIBLE COOLING</div></div><div><div>SEER</div><div>SEASONAL ENERGY EFFICIENCY RATIO</div></div><div><div>SD</div><div>SMOKE DAMPER</div></div><div><div>SM</div><div>SHEET METAL</div></div><div><div>SOV</div><div>SHUT-OFF VALVE</div></div><div><div>SP</div><div>STATIC PRESSURE</div></div><div><div>SPEC</div><div>SPECIFICATION</div></div><div><div>SQ</div><div>SQUARE</div></div><div><div>SQFT, FT²</div><div>SQUARE FEET</div></div><div><div>SQIN, IN²</div><div>SQUARE INCHES</div></div><div><div>STRUCT</div><div>STRUCTURAL</div></div><div><div>T</div><div>THERMOSTAT, "X" INDICATES DEVICE CONTROLLED, 48° AFF (TO TOP OF STAT)</div></div><div><div>TDH</div><div>TOTAL DYNAMIC HEAD</div></div><div><div>TEMP</div><div>TEMPERATURE</div></div><div><div>THRU</div><div>THROUGH</div></div><div><div>TSP</div><div>TOTAL STATIC PRESSURE</div></div><div><div>TV</div><div>TURNING VANES</div></div><div><div>TYP</div><div>TYPICAL</div></div><div><div>UL</div><div>UNDERWRITERS LABORATORIES</div></div><div><div>UCN</div><div>UNLESS OTHERWISE NOTED</div></div><div><div>V</div><div>VOLT</div></div><div><div>VFD</div><div>VARIABLE FREQUENCY DRIVE</div></div><div><div>VTR</div><div>VENT THROUGH ROOF</div></div><div><div>W</div><div>WATTS</div></div><div><div>W</div><div>WITH</div></div><div><div>WB</div><div>WET BULB</div></div><div><div>WC</div><div>WATER COLUMN</div></div><div><div>WH</div><div>WATER HEATER</div></div><div><div>WT</div><div>WEIGHT</div></div></div></div> <div><div>2019 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24, C.C.R.</div><div>2019 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, C.C.R.</div><div>2019 CALIFORNIA ELECTRICAL CODE, PART 3, TITLE 24, C.C.R.</div><div>2019 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24, C.C.R.</div><div>2019 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24, C.C.R.</div><div>2019 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24, C.C.R.</div><div>2019 CALIFORNIA FIRE CODE (FC), PART 9, TITLE 24, C.C.R.</div><div>2019 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24, C.C.R.</div><div>2019 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24, C.C.R.</div><div>TITLE 19, C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.</div></div> <div><div>ALL SECTION NUMBERS BELOW REFER TO GROUP 1, CHAPTER 4, PART 1, TITLE 24, C.C.R.</div><div>1. ADDENDUM, CONSTRUCTION CHANGES PER SECTION 4-338.</div><div>2. INSPECTOR APPROVED BY DSA, INSPECTOR AND CONTINUOUS INSPECTION OF WORK PER SECTION 4-333(b) AND 4-342.</div><div>3. TESTS AND TESTING LABORATORY PER SECTION 4-335.</div><div>4. SPECIAL INSPECTION PER SECTION 4-336(d).</div><div>5. CONTRACTOR SHALL SUBMIT VERIFIED REPORTS PER SECTION 4-336 AND 4-343(c).</div><div>6. ADMINISTRATION OF CONSTRUCTION PER PART 1, TITLE 24, C.C.R. - DUTIES OF ARCHITECT, STRUCTURAL ENGINEER OR PROFESSIONAL ENGINEER PER SECTION 4-333(a) AND 4-341.</div><div>7. GOVERNING CODES: TITLE 24.</div><div>8. A COPY OF PARTS 1, 2, 3, 4, AND 5 OF TITLE 24 SHALL BE KEPT AVAILABLE IN THE FIELD DURING CONSTRUCTION.</div><div>9. DSA SHALL BE NOTIFIED OF START OF CONSTRUCTION PER SECTION 4-331.</div><div>10. SUPERVISION BY THE DIVISION OF THE STATE ARCHITECT PER SECTION 4-334.</div></div>		
	DSA GENERAL NOTES	<div><div><div><div>SINGLE LINE SYMBOL</div><div>DOUBLE LINE SYMBOL</div><div>DESCRIPTION</div></div><div><div><div><div><div><div>LONG SWEEP 90° ELBOW - RECTANGULAR, ROUND OR OVAL</div><div></div></div></div><div><div><div>45° ELBOW - RECTANGULAR, ROUND OR OVAL</div><div></div></div></div><div><div><div>30° ELBOW - RECTANGULAR, ROUND OR OVAL</div><div></div></div></div><div><div><div>90° ELBOW - RECTANGULAR DUCT WITH TURNING VANES</div><div></div></div></div><div><div><div>45° LATERAL - ROUND TO ROUND OR OVAL TO OVAL</div><div></div></div></div><div><div><div>90° TAKEOFF WITH 45° TAPER - RECTANGULAR TO RECTANGULAR (FOR BRANCH TAKEOFF LONGER THAN 50'-0", USE 15)</div><div></div></div></div><div><div><div>90° TAKEOFF WITH 45° ELONGATED TEE - ROUND TO ROUND</div><div></div></div></div><div><div><div>Y BRANCH - ROUND OR OVAL DUCT</div><div></div></div></div><div><div><div>90° RADIUS SPLIT - RECTANGULAR DUCT, PROVIDE SPLITTER DAMPER, XY PROPORTIONAL SPLIT</div><div></div></div></div><div><div><div>90° RECTANGULAR SPLIT - RECTANGULAR DUCT, PROVIDE SPLITTER DAMPER, XY PROPORTIONAL SPLIT</div><div></div></div></div><div><div><div>TRANSITION - RECTANGULAR TO ROUND OR RECTANGULAR TO OVAL</div><div></div></div></div><div><div><div>FLEXIBLE DUCT - ROUND</div><div></div></div></div><div><div><div>FLEXIBLE DUCT - RECTANGULAR</div><div></div></div></div></div><div><div><div>SECTION AT SUPPLY AIR OR MAKE-UP AIR DUCT UP</div><div></div></div></div><div><div><div>SECTION AT RETURN AIR OR COMBUSTION AIR DUCT UP</div><div></div></div></div><div><div><div>SECTION AT EXHAUST AIR OR RELIEF AIR DUCT UP</div><div></div></div></div><div><div><div>SUPPLY AIR DUCT DOWN</div><div></div></div></div><div><div><div>RETURN AIR DUCT DOWN</div><div></div></div></div><div><div><div>EXHAUST AIR DUCT DOWN</div><div></div></div></div><div><div><div>ROUND DUCT UP - SUPPLY, RETURN OR EXHAUST</div><div></div></div></div><div><div><div>ROUND DUCT DOWN - SUPPLY, RETURN OR EXHAUST</div><div></div></div></div><div><div><div>CEILING DIFFUSER - ONE, TWO, THREE AND FOUR WAY THROW</div><div></div></div></div><div><div><div>CEILING - RETURN AND EXHAUST REGISTERS</div><div></div></div></div><div><div><div>SIDEWALL - SUPPLY DIFFUSER, RETURN AND EXHAUST REGISTERS</div><div></div></div></div><div><div><div>MANUAL BALANCE DAMPER WITH DUCT ACCESS DOOR</div><div></div></div></div><div><div><div>MOTORIZED BALANCE DAMPER WITH DUCT ACCESS DOOR</div><div></div></div></div><div><div><div>FIRE DAMPER WITH DUCT ACCESS DOOR</div><div></div></div></div><div><div><div>FIRE/SMOKE DAMPER WITH DUCT ACCESS DOOR</div><div></div></div></div><div><div><div>ACOUSTICALLY LINED DUCT. DIMENSIONS ARE INSIDE</div><div></div></div></div><div><div><div>REGISTER NECK SIZE AND TAG DESIGN CFM</div><div></div></div></div><div><div><div>PANEL AT T-BAR CEILING</div><div></div></div></div></div></div></div></div>	<div><div>1. CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMISSION OF FINAL BID TO VERIFY ALL EXISTING SITE CONDITIONS WHICH MAY AFFECT THE COMPLETION OF THE INSTALLATION. ALL METHODS AND REQUIREMENTS FOR INSTALLATION SHALL BE DETERMINED PRIOR TO BID DATE. CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF RECORD OF ANY REQUIRED MODIFICATIONS WHICH ARE NOT REFERENCED ON THESE PLANS PRIOR TO SUBMITTING BID. SUBMITTAL OF THE CONTRACTOR'S BID DEMONSTRATES THE CONTRACTOR'S AWARENESS OF ALL SITE CONDITIONS AND REQUIRED WORK TO BE PERFORMED.</div><div>2. CONTRACTOR SHALL INCLUDE AND PROVIDE IN BID ALL LABOR AND MATERIALS NECESSARY FOR A COMPLETE AND OPERATIONAL INSTALLATION OF ALL SYSTEMS.</div><div>3. THE DRAWINGS INCLUDED IN THIS SET ARE DIAGRAMMATIC. THEY ARE REPRESENTATIVE OF THE ENGINEER OF RECORD'S DESIGN INTENT FOR ALL EQUIPMENT AND RELATED PIPING ETC. INDIVIDUAL POWER NEEDS, CONTROLS AND OTHER CONNECTIONS SHALL BE COORDINATED AND COMPLETED/ PROVIDED FOR COMPLETE SYSTEM OPERATION BY CONTRACTOR.</div><div>4. EQUIPMENT LOCATIONS AND PIPE ROUTING ARE NOT PRECISE AND SHALL BE COORDINATED, VERIFIED, AND DETERMINED IN THE FIELD. CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND ROUTE PIPING IN LOCATIONS WHICH MEET CODE REQUIREMENTS AND DO NOT INTERFERE WITH ANY BUILDING STRUCTURES, UTILITIES, OR OTHER TRADE EQUIPMENT.</div><div>5. (E) DUCTWORK AND ITEMS TO BE REMOVED ARE SHOWN HATCHED. SEE LEGEND. COORDINATE CLOSELY WITH (N) DUCTWORK AND P.O.C.'S SHOWN. ALL OTHER (E) DUCTWORK, ETC. TO REMAIN.</div><div>6. ALL EQUIPMENT, EQUIPMENT CONNECTIONS, PIPING, MOUNTING LOCATIONS ETC. ARE TO BE VERIFIED WITH OWNERS' REPRESENTATIVE AND EQUIPMENT SUPPLIER PRIOR TO BEGINNING OF THE ROUGH-IN.</div><div>7. ALL WORK SHALL BE PERFORMED TO STATE, LOCAL, NATIONAL AND DISTRICT STANDARDS AND CODES. COORDINATE SPECIFIC REQUIREMENTS WITH DISTRICT STANDARDS AND AUTHORITY HAVING JURISDICTION.</div><div>8. ALL EQUIPMENT SHALL BE NEW AND CLEARLY LABELED AND IDENTIFIED. LABELS SHALL NOT BE COVERED BY OTHER CONSTRUCTION ELEMENTS.</div><div>9. UNLESS OTHERWISE NOTED IN CONTRACT DOCUMENTS, CONTRACTOR SHALL GUARANTEE ALL EQUIPMENT AND WORK FOR A PERIOD OF ONE YEAR.</div><div>6. UNLESS OTHERWISE NOTED OR REFERENCED ON THE DRAWINGS, EVERYTHING IS NEW.</div><div>7. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED SAW CUTTING, CORE DRILLING, PATCHING, REFINISHING, ETC. AS REQUIRED FOR INSTALLATION OF SYSTEMS. ANY PENETRATIONS OR OPENINGS MADE IN WALLS OR STRUCTURES SHALL BE PATCHED AND/OR SEALED AS REQUIRED TO MAINTAIN THE INTEGRITY OF THE WALL OR STRUCTURE.</div><div>8. CONTRACTOR IS RESPONSIBLE FOR COMPLETING ALL FINAL CONNECTIONS TO OWNER FURNISHED EQUIPMENT AND SHALL INCLUDE THE PRICE OF INSTALLING ALL CONNECTIONS AS REQUIRED IN THEIR BIDS.</div><div>9. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR THE APPROVAL OF THE ENGINEER OF RECORD. ALL APPROVALS BY THE ENGINEER OF RECORD MUST BE SECURED PRIOR TO COMPLETION OF ANY PURCHASE ORDERS OR ROUGH-IN WORK.</div><div>10. THESE DRAWINGS AND ASSOCIATED SPECIFICATIONS ARE TO BE CONSIDERED CONTRACT DOCUMENTS FOR AGENCY REVIEW/ APPROVAL AND CONTRACTOR BIDDING PURPOSES.</div><div>11. AT THE COMPLETION OF THE PROJECT THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A COMPLETE SET OF AS-BUILT DRAWINGS.</div><div>12. ANY AND ALL WORK THAT REQUIRES AN INTERRUPTION TO BUILDING SERVICE(S) (ELECTRICAL/ HVAC/ PLUMBING ETC.) MUST BE COORDINATED WITH THE DISTRICT A MINIMUM OF 48 HOURS IN ADVANCE. ANY SERVICE DOWNTIME SHALL NOT OCCUR DURING SCHOOL OPERATION HOURS.</div><div>13. IN INSTANCES WHERE A CONFLICT BETWEEN THE DRAWINGS AND THE SPECIFICATIONS AND INSTALLATION MANUALS FOR THE PROJECT EXISTS, THE CONTRACTOR SHALL ADHERE TO THE MORE STRINGENT REQUIREMENT.</div><div>14. ANY EXISTING BUILDING STRUCTURES OR SURFACES DAMAGED BY DEMOLITION OR DURING INSTALLATION ACTIVITIES SHALL BE REPAIRED, PATCHED, AND/OR REFINISHED TO THE SATISFACTION OF THE OWNER.</div><div>15. FURNISH AND INSTALL MANUAL AIR DAMPERS AT ALL DUCT BRANCH TAKEOFFS TO A SINGLE SUPPLY DIFFUSER.</div><div>16. FOR ALL VOLUME DAMPERS LOCATED ABOVE CEILINGS, PROVIDE 12" LONG 1/2" WIDE FLUORESCENT ORANGE TAPE TO MARK DAMPER LOCATIONS.</div><div>17. ALL DUCTWORK, CONDUITS, BOXES, SURFACE MOUNTED RACEWAYS, SUPPORT DEVICES, AND ASSOCIATED FITTINGS SHALL BE MOUNTED IN CONCEALED LOCATIONS ABOVE CEILINGS, DUCTS, TRUSSES, BEAMS, ETC. WHERE WORK HAS TO BE INSTALLED IN EXPOSED LOCATIONS, IT SHALL BE PAINTED TO MATCH THE ADJACENT SURFACES OR PER ARCHITECT'S DIRECTION.</div><div>18. CONTRACTOR SHALL PREPARE AND SUBMIT THE CALIFORNIA ENERGY COMMISSION TITLE 24 CERTIFICATE OF ACCEPTANCE FORMS RELATED TO INSTALLED EQUIPMENT AND SYSTEMS.</div><div>19. SAFETY: IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.</div><div>20. CONTRACTOR'S EQUIPMENT: COORDINATE WITH OWNER'S REPRESENTATIVE FOR APPROVED LOCATION OF JOB SITE ACCESS, PARKING, AND LOCATION OF CONTRACTOR'S EQUIPMENT AND MATERIAL STORAGE AREA. COORDINATE WITH OWNER FOR LOCATION AND PROCEDURES.</div><div>21. ALL BUILDING MATERIALS MUST BE ASBESTOS FREE.</div><div>22. CONSTRUCTION SCHEDULING: CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION OPERATIONS WITH OWNERS' REPRESENTATIVE PRIOR TO SCHEDULING AND START OF THE WORK. CONTRACTOR SHALL PROVIDE PROTECTION TO ALL EXISTING SPACES AND SYSTEMS WHICH ARE IN USE, ADJOINING THE PROJECT, AND NOT PART OF THE PROJECT.</div><div>23. TITLE 24 COMPLIANCE: THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK IS TO BE IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS (2019 CBC). SHOULD ANY CONDITIONS BE DISCOVERED NOT COVERED BY THE CONTRACT DOCUMENTS WHERE IN THE FINISHED WORK DOES NOT COMPLY WITH 2019 CBC, A CONSTRUCTION CHANGE DOCUMENT OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK, SHALL BE SUBMITTED TO AND APPROVED BY THE DSA BEFORE PROCEEDING WITH THE WORK.</div></div>	
	MEP COMPONENT ANCHORAGE NOTE	<div><div>ALL MECHANICAL, PLUMBING AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON DSA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2019 CBC, SECTIONS 1617A.1.16 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTER 13, 26 AND 30.</div><div>1. ALL PERMANENT EQUIPMENT AND COMPONENTS.</div><div>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.</div><div>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.</div><div>THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCED 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.</div><div>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.</div><div>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.</div><div>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.</div></div>	<div><div><div><div><div><div>90° TAKEOFF WITH 45° ELONGATED TEE - ROUND TO ROUND</div><div></div></div></div><div><div><div>Y BRANCH - ROUND OR OVAL DUCT</div><div></div></div></div><div><div><div>90° RADIUS SPLIT - RECTANGULAR DUCT, PROVIDE SPLITTER DAMPER, XY PROPORTIONAL SPLIT</div><div></div></div></div><div><div><div>90° RECTANGULAR SPLIT - RECTANGULAR DUCT, PROVIDE SPLITTER DAMPER, XY PROPORTIONAL SPLIT</div><div></div></div></div><div><div><div>TRANSITION - RECTANGULAR TO ROUND OR RECTANGULAR TO OVAL</div><div></div></div></div><div><div><div>FLEXIBLE DUCT - ROUND</div><div></div></div></div><div><div><div>FLEXIBLE DUCT - RECTANGULAR</div><div></div></div></div></div><div><div><div>MANUAL BALANCE DAMPER WITH DUCT ACCESS DOOR</div><div></div></div></div><div><div><div>MOTORIZED BALANCE DAMPER WITH DUCT ACCESS DOOR</div><div></div></div></div><div><div><div>FIRE DAMPER WITH DUCT ACCESS DOOR</div><div></div></div></div><div><div><div>FIRE/SMOKE DAMPER WITH DUCT ACCESS DOOR</div><div></div></div></div><div><div><div>ACOUSTICALLY LINED DUCT. DIMENSIONS ARE INSIDE</div><div></div></div></div><div><div><div>REGISTER NECK SIZE AND TAG DESIGN CFM</div><div></div></div></div><div><div><div>PANEL AT T-BAR CEILING</div><div></div></div></div></div></div>	
	PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE	<div><div><div><div>SYMBOL</div><div>ABBRV.</div><div>IDENTIFICATION</div></div><div><div><div><div>E</div><div>CONT</div></div><div><div>UNION</div><div>LINE BREAK</div></div><div><div>CKV</div><div>CHECK VALVE</div></div><div><div>T&PRV</div><div>TEMP. & PRESS. RELIEF VALVE</div></div><div><div>OR</div><div>VALVE</div></div><div><div>CONCENTRIC & ECCENTRIC REDUCERS</div><div></div></div><div><div>AD, AP</div><div>ACCESS DOOR, ACCESS PANEL</div></div><div><div>MAV</div><div>MANUAL AIR VENT</div></div><div><div>T</div><div>THERMOSTAT MOUNTED @ 48° AFF. MAX.</div></div><div><div>CO2</div><div>CARBON DIOXIDE (CO2) SENSOR</div></div></div><div><div><div>P.O.C.</div><div>POINT OF CONNECTION</div></div><div><div>REMOVE EXISTING</div><div></div></div><div><div>TEE DOWN</div><div></div></div><div><div>90 DOWN</div><div></div></div><div><div>EQUIPMENT DESIGNATION</div><div></div></div><div><div>TAG NUMBER</div><div></div></div><div><div>SECTION 1 / SHEET M2.1</div><div></div></div></div></div></div></div>	<div><div>MP0.1 SYMBOL LEGENDS, ABBREVIATIONS, NOTES - MECHANICAL & PLUMBING</div><div>MP0.2 SCHEDULES & DETAILS - MECHANICAL & PLUMBING</div><div>MP0.1 BUILDING J - DEMOLITION & NEW ROOF PLANS - MECHANICAL & PLUMBING</div><div>MP0.1 BUILDING J - MECHANICAL / TAB WORK</div><div>MP0.1 TITLE 24 - MECHANICAL</div><div>MP0.2 TITLE 24 - MECHANICAL</div></div>	
	PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE	<div><div>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 SECTION 13.6.5, 13.6.6, 13.6.7, 13.6.8, AND 2019 CBC, SECTIONS 1617A.1.24, 1617A.1.25, AND 1617A.1.26.</div><div>THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PRE-APPROVED INSTALLATION GUIDE (E.G., OSHPD OPM FOR 2013 BC 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 HANGING AND BRACE LOADS.</div><div>MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):</div><div>MP <input type="checkbox"/> MD <input type="checkbox"/> PP <input type="checkbox"/> E <input type="checkbox"/> - OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.</div><div>MP <input checked="" type="checkbox"/> MD <input checked="" type="checkbox"/> PP <input type="checkbox"/> E <input type="checkbox"/> - OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM #) #0295-13, "UNISTRUT" OR #0052-13, "B-LINE/TOLCO"</div></div>	<div><div><div><div>SYMBOL</div><div>ABBRV.</div><div>IDENTIFICATION</div></div><div><div><div><div>E</div><div>CONT</div></div><div><div>UNION</div><div>LINE BREAK</div></div><div><div>CKV</div><div>CHECK VALVE</div></div><div><div>T&PRV</div><div>TEMP. & PRESS. RELIEF VALVE</div></div><div><div>OR</div><div>VALVE</div></div><div><div>CONCENTRIC & ECCENTRIC REDUCERS</div><div></div></div><div><div>AD, AP</div><div>ACCESS DOOR, ACCESS PANEL</div></div><div><div>MAV</div><div>MANUAL AIR VENT</div></div><div><div>T</div><div>THERMOSTAT MOUNTED @ 48° AFF. MAX.</div></div><div><div>CO2</div><div>CARBON DIOXIDE (CO2) SENSOR</div></div></div><div><div><div>P.O.C.</div><div>POINT OF CONNECTION</div></div><div><div>REMOVE EXISTING</div><div></div></div><div><div>TEE DOWN</div><div></div></div><div><div>90 DOWN</div><div></div></div><div><div>EQUIPMENT DESIGNATION</div><div></div></div><div><div>TAG NUMBER</div><div></div></div><div><div>SECTION 1 / SHEET M2.1</div><div></div></div></div></div></div></div>	<div><div>MP0.1 SYMBOL LEGENDS, ABBREVIATIONS, NOTES - MECHANICAL & PLUMBING</div><div>MP0.2 SCHEDULES & DETAILS - MECHANICAL & PLUMBING</div><div>MP0.1 BUILDING J - DEMOLITION & NEW ROOF PLANS - MECHANICAL & PLUMBING</div><div>MP0.1 BUILDING J - MECHANICAL / TAB WORK</div><div>MP0.1 TITLE 24 - MECHANICAL</div><div>MP0.2 TITLE 24 - MECHANICAL</div></div>
				<div><div>REVISIONS</div><div>NO. ITEM DATE</div></div> <div><div>DRAWN BY:</div><div>CAD</div></div> <div><div>CHECKED BY:</div><div>CS</div></div> <div><div>SFA JOB NO:</div><div>20085</div></div> <div><div>DATE:</div><div>11/05/2021</div></div> <div><div>MP0.1</div></div>

(DSA STAMP AREA)



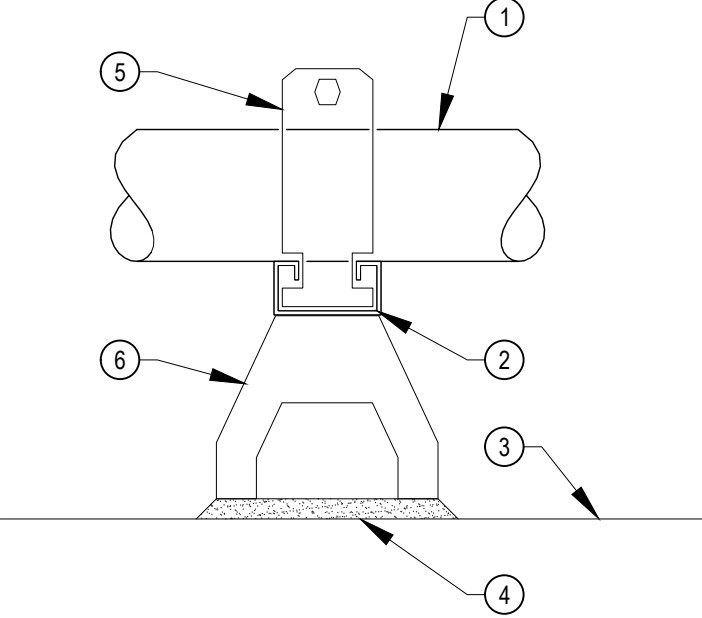
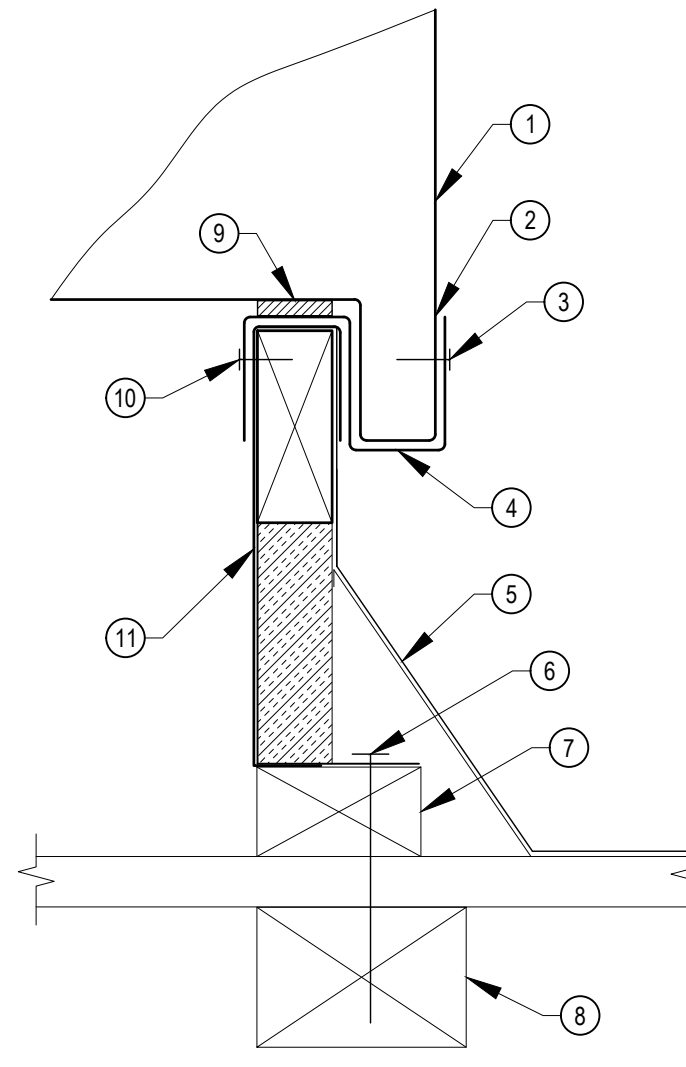
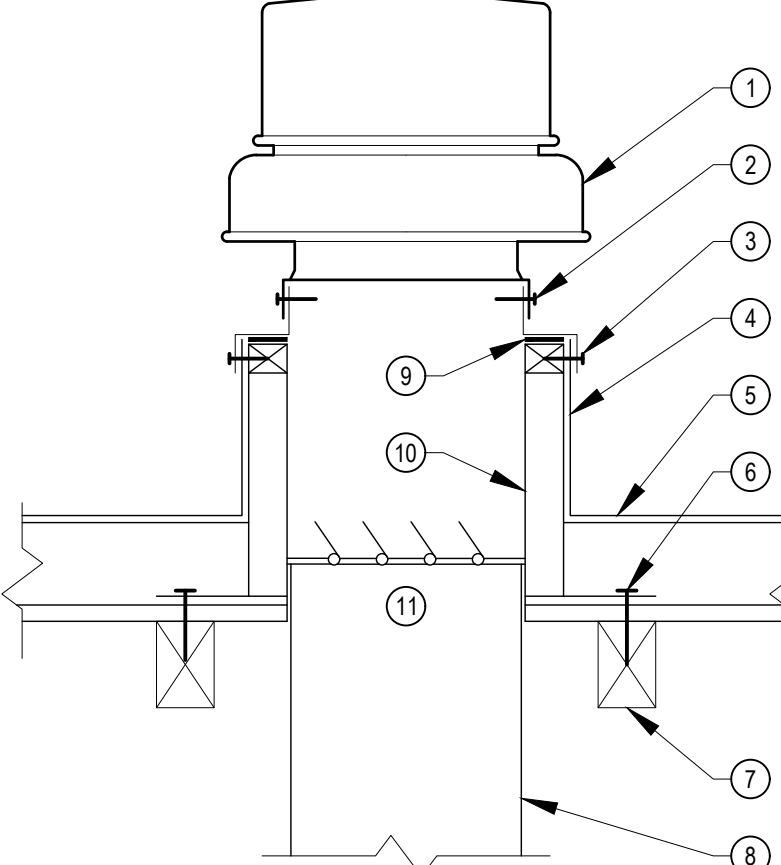
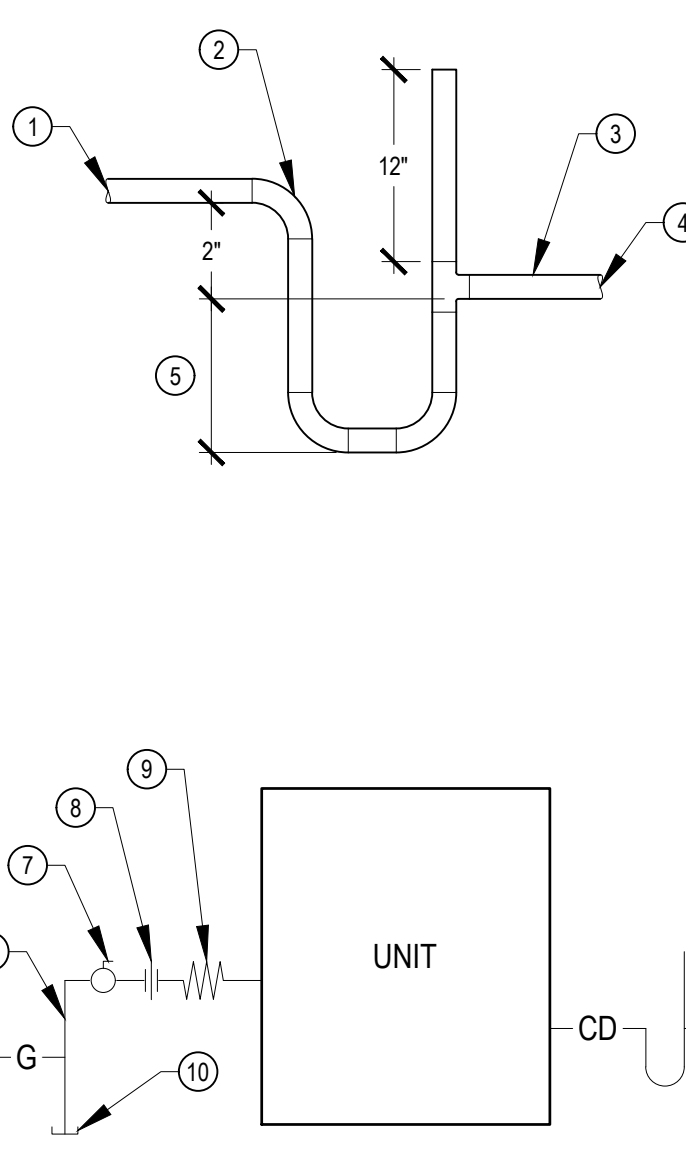
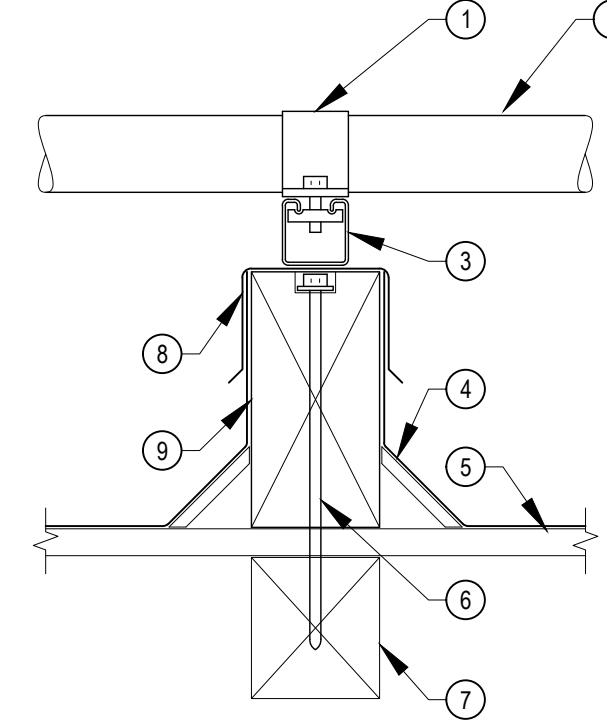
SYMBOL LEGENDS, ABBREVIATIONS, NOTES - MECHANICAL & PLUMBING

REROOFING AND HVAC REPLACEMENT
LYDIKEN ELEMENTARY SCHOOL
7700 HIGHLAND OAKS DR., PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS	NO.	ITEM	DATE

DRAWN BY:	CAD
CHECKED BY:	CS
SFA JOB NO:	DATE:
20085	11/05/2021

MP0.1

		<div><div></div><div><p>DETAIL NOTES:</p><ol style="list-style-type: none">FOR PIPE SIZES AND TYPES, SEE PLANS.PROVIDE GAP BETWEEN INTEGRAL STRUT CHANNEL AND HARDWARE USED TO SECURE PIPE TO ALLOW FOR MOVEMENT OF SYSTEM.ROOF DECK.SET SUPPORT IN MASTIC COMPATIBLE WITH ROOF SURFACE.PROVIDE STANDARD STRUT CLAMPS.B-LINE DURA-BLOCK WITH INTEGRAL CHANNEL AND PIPE BRACKETS, WIDTH AS REQUIRED FOR NUMBER OF PIPES.<p>NOTES:</p><ol style="list-style-type: none">REFER TO SPECIFICATIONS FOR SPACING BETWEEN SUPPORT BLOCKS. ADDITIONALLY PROVIDE BLOCK WITHIN 2'-0" OF ANY CHANGE OF DIRECTION.</div></div>			<div><div></div><div><p>DETAIL NOTES:</p><ol style="list-style-type: none">UNIT. FOR LOCATION, SEE PLANS.UNIT BASE RAIL.SECURE HOLD DOWN TO UNIT BASE RAIL WITH (4) #10 x 1/2" TEK SCREWS.MICROMET. UNIT HOLD DOWNS, TYPICAL OF 2 PER SIDE.FOR FLASHING, SEE ARCHITECT'S DRAWINGS.5/8" LAG BOLT. MINIMUM 3" EMBEDMENT INTO BLOCKING BELOW.PRESSURE TREATED DOUGLAS FIR LEVELING RAIL.4x8 BLOCKING, ATTACH TO (E) STRUCTURE.SEALING GASKET.SECURE HOLD DOWN TO UNIT CURB WITH (4) #10 x 1/2" TEK SCREWS, TYP.ROOF CURB WITH WOOD NAILER.</div></div>		
3	PIPE SUPPORT ON ROOF	N.T.S.	1	ROOFTOP AIR CONDITIONER MOUNTING ON NEW CURB	N.T.S.		
		<div><div></div><div><p>DETAIL NOTES:</p><ol style="list-style-type: none">ROOF EXHAUST FAN. SEE PLANS FOR LOCATIONS.CURB ADAPTER OR REDUCER AS NECESSARY. ATTACH EXHAUST FAN TO CURB ADAPTER/REDUCER WITH #1/2 SELF TAPPING SCREWS AT 12" ON CENTER, MINIMUM 2 PER SIDE.SECURE TO ROOF CURB WITH #1/2 SELF TAPPING SCREWS AT 12" ON CENTER, MINIMUM 2 PER SIDE.FOR ROOFING AND FLASHING, SEE ARCHITECT'S DRAWINGS.ROOF DECK.3/8" BOLT THRU CURB AND ROOF WITH 3" MINIMUM EMBEDMENT INTO BLOCKING.4x BLOCKING, ATTACH TO (E) ROOF FRAMING.DUCT.SEALING GASKET.ROOF CURB WITH WOOD NAILER.BACKDRAFT DAMPER.<p>NOTE:</p><p>ROOF HOOD MOUNTING SIMILAR.</p></div></div>			<div><div></div><div><p>DETAIL NOTES:</p><ol style="list-style-type: none">CONNECT CD TO UNIT PER MANUFACTURER'S INSTALLATION REQUIREMENTS.LONG RADIUS ELBOW, TYP.PITCH MINIMUM 1/8" PER FOOT.ROUTE TO POC. SEE PLANS.UNIT TOTAL INCHES STATIC PRESSURE ±2".NATURAL GAS PIPE.GAS SHUTOFF VALVE TYP AT EACH UNIT.UNION.FLEXIBLE CONNECTOR.DIRT LEG.<p>NOTES:</p><ol style="list-style-type: none">CD PIPE SIZE SHALL NOT BE SMALLER THAN UNIT DRAIN CONNECTION SIZE.FOR PIPE SIZES AND LOCATIONS, SEE PLANS.</div></div>		
4	ROOF MOUNTED FAN	N.T.S.	2	GAS AND CONDENSATE DRAIN CONNECTION TO EQUIPMENT	N.T.S.		
		<div><div></div><div><p>DETAIL NOTES:</p><ol style="list-style-type: none">COOPER B-LINE B2400 PIPE STRAP.FOR PIPE SIZES AND TYPES, SEE PLANS.COPPER B-LINE B22 CHANNEL. ATTACH TO SLEEPER WITH #12x1-1/12" LAG SCREW, ONE AT EACH END OF CHANNEL.FOR FLASHING, SEE ARCHITECT'S DRAWINGS.ROOF DECK.3/8" LAG SCREW INTO BLOCKING BELOW. MINIMUM 2" EMBEDMENT TYP OF 2. COUNTERSUNK HEAD AT SLEEPER.4X BLOCKING, ATTACH TO ROOF STRUCTURE.20 GAUGE SHEET METAL COVER, ATTACH TO SLEEPER WITH #10 SMS.4X PRESSURE TREATED DOUGLAS FIR SLEEPER, RIP TO LEVEL. LENGTH AS REQUIRED FOR PIPES.<p>NOTES:</p><ol style="list-style-type: none">PROVIDE SUPPORT ANCHORS AT BEGINNING AND END OF PIPE RUNS AND WITHIN 2'-0" OF CHANGE OF DIRECTION.</div></div>					
5	GAS PIPE ANCHOR ON ROOF	N.T.S.					

PACKAGED ROOFTOP AIR CONDITIONING UNITS SCHEDULE BLD-MPR																			
TAG	MANUFACTURER	MODEL NO.	COOLING MBH		GAS HEATING MBH		AIRFLOW CFM	ESP IN. W.G.	OUTSIDE AIR CFM	FAN RPM	MOTOR BHP	EER	AFUE %	ELECTRICAL			WEIGHT LBS	MOUNTING DETAIL	NOTES
			TOTAL	SENSIBLE	INPUT	OUTPUT								V / PH	MCA	MOCP			
AC-1	CARRIER	48FCDM07	72.42	55.62	67	54	2400	1.0	-	2591	1.86	11	81	460 / 3	17	20	670	1/MP0.2	1, 2, 3, 4, 5, 6, 7
AC-2	CARRIER	48FCDM07	72.42	55.62	67	54	2400	1.0	-	2591	1.86	11	81	460 / 3	17	20	670	1/MP0.2	1, 2, 3, 4, 5, 6, 7
AC-3	CARRIER	48FCDM07	72.42	55.62	67	54	2400	1.0	-	2591	1.86	11	81	460 / 3	17	20	670	1/MP0.2	1, 2, 3, 4, 5, 6, 7
AC-4	CARRIER	48FCDM07	72.42	55.62	67	54	2400	1.0	-	2591	1.86	11	81	460 / 3	17	20	670	1/MP0.2	1, 2, 3, 4, 5, 6, 7
AC-5	CARRIER	48GCCDM04	35.14	25.59	67 50	54 40	1200	1.0	-	2028	0.61	12.5	81	460 / 3	12	15	562	1/MP0.2	1, 2, 3, 4, 5, 6, 7

- WEIGHT INCLUDES ALL OPTIONS AND ACCESSORIES.
 - PROVIDE WITH TEMP ULTRA LOW LEAK ECONOMIZER WITH BAROMETRIC RELIEF.
 - PROVIDE WITH LOUVERED HAIL GUARDS, UNPOWERED CONVENIENCE OUTLET, AND HINGED ACCESS PANELS.
 - PROVIDE WITH 2" MERV 13 FILTERS.
 - PROVIDE PELICAN WIRELESS PEARL ECONOMIZER CONTROLLER. CONTROLLER TO BE FIELD INSTALLED. COORDINATE WITH MANUFACTURER.
- VERTICAL DISCHARGE CONFIGURATION.
 - PROVIDE WITH MANUFACTURER'S ROOF CURB.

ROOF EXHAUST FANS SCHEDULE													
TAG	MANUFACTURER	MODEL NO.	AIRFLOW CFM	ESP IN. W.G.	FAN RPM	SOUND POWER SONES	MOTOR		WEIGHT LBS	MOUNTING DETAIL	NOTES		
							HP	V / PH					
EF-1	GREENHECK	G-140-VG	1050	0.5	942	6.6	1/2	115 / 1	76	4/MP0.2	1, 2, 5		
EF-2	GREENHECK	G-120-VG	875	0.5	1077	7.2	1/4	115 / 1	64	4/MP0.2	1, 2, 5		
EF-3	GREENHECK	G-130-VG	950	0.5	1030	7.4	1/4	115 / 1	65	4/MP0.2	1, 2, 4		
EF-4	GREENHECK	G-100-VG	665	0.5	1215	5.5	1/4	115 / 1	58	4/MP0.2	1, 2, 3		

- PROVIDE WITH ROOF CURB TO MATCH EXISTING OPENING. PROVIDE CURB CAP ADAPTER OR REDUCER AS REQUIRED.
 - PROVIDE WITH BACK DRAFT DAMPER AND BIRD SCREEN
- INTERCONNECT EXHAUST FAN WITH (E) THERMOSTAT.
 - CONTROL WITH (E) WALL MOUNTED ON-OFF SWITCH.
 - INTERCONNECT EXHAUST FAN WITH LIGHTS.

ROOF HOOD SCHEDULE											
TAG	MANUFACTURER	MODEL NO.	TYPE	HOOD SIZE (IN)			THROAT SIZE (IN)		WEIGHT LBS	MOUNTING DETAIL	NOTES
				W	L	H	W	L			
GH-1	GREENHECK	FGH-24 X 36	RELIEF	43	60	19	24	36	142	4/MP0.2	1, 2, 3
GH-2	GREENHECK	FGH-24 X 36	RELIEF	43	60	19	24	36	142	4/MP0.2	1, 2, 3

- WEIGHT INCLUDES ACCESSORIES.
- PROVIDE WITH INSECT SCREEN.
- PROVIDE GREENHECK GPH ROOF CURB.

- (E) SITE PELICAN WIRELESS GATEWAY SHALL BE USED. CONTRACTOR SHALL PROVIDE ADDITIONAL REPEATERS IF NEEDED FOR CONNECTIVITY.
- (E) PELICAN WIRELESS THERMOSTATS SHALL BE RE-USED AND WIRED TO NEW UNITS.
- CONTRACTOR SHALL PROVIDE PELICAN WIRELESS SUPPLY AIR TEMPERATURE SENSOR AT ALL UNITS.
- ROOFTOP PACKAGED UNITS:**
- EACH UNIT SHALL BE CONTROLLED BY PELICAN WIRELESS THERMOSTAT. COORDINATE WITH DISTRICT REPRESENTATIVE FOR NETWORK SETTINGS, OCCUPANCY SCHEDULES, SETPOINTS, SETBACK, ETC.
 - PELICAN WIRELESS THERMOSTAT SHALL BE CONNECTED TO NEW WIRELESS GATEWAY ON CAMPUS. COORDINATE WITH DISTRICT REPRESENTATIVE FOR IP ADDRESS AND NETWORK SETTINGS.
 - UNIT SHALL OPERATE UNDER ITS OWN INTERNAL SEQUENCE TO PROVIDE HEATING OR COOLING BASED ON ROOM SETPOINT.
 - PELICAN WIRELESS PEARL ECONOMIZER CONTROLLER SHALL MODULATE OUTSIDE AIR DAMPER TO PROVIDE FREE COOLING WHEN OUTSIDE AIR IS BELOW 75°F (HIGH TEMPERATURE LIMIT) AND OUTSIDE AIR TEMP IS 2°F BELOW ROOM TEMPERATURE (MINIMUM TEMPERATURE DIFFERENTIAL).
 - PELICAN WIRELESS PEARL ECONOMIZER CONTROLLER SHALL MODULATE OUTSIDE AIR DAMPER OPEN IF ROOM CO2 LEVEL RISES ABOVE 1000 PPM.
 - UNIT SHALL OPERATE CONTINUOUSLY DURING SCHEDULED OCCUPIED HOURS.
 - MOTORIZED OUTSIDE AIR DAMPER SHALL OPEN TO MINIMUM POSITION WHEN UNIT IS OPERATING. BALANCE CONTRACTOR SHALL DETERMINE DAMPER SETPOINT.
 - WHEN UNIT IS OFF, OUTSIDE AIR DAMPER SHALL BE CLOSED.

- EXHAUST FANS:**
- EACH FAN SHALL BE CONTROLLED BY ROOM LIGHTS/OCCUPANCY SENSOR.
 - (E) FAN CONTROLS SHALL BE RECONNECTED TO NEW FANS.

PELICAN CONTROLS AND SEQUENCE OF OPERATION

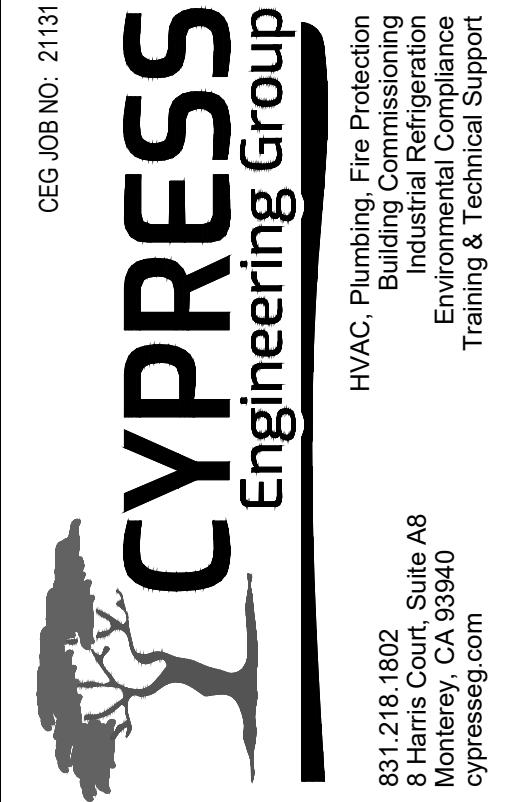
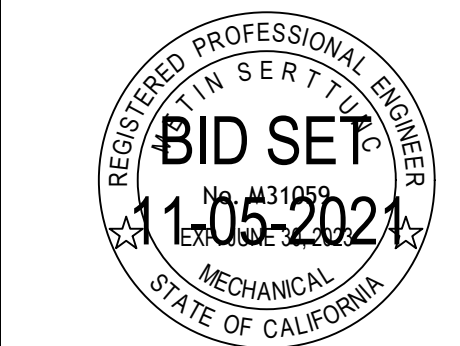
SCHEDULES & DETAILS - MECHANICAL & PLUMBING

REVISIONS NO.	ITEM	DATE
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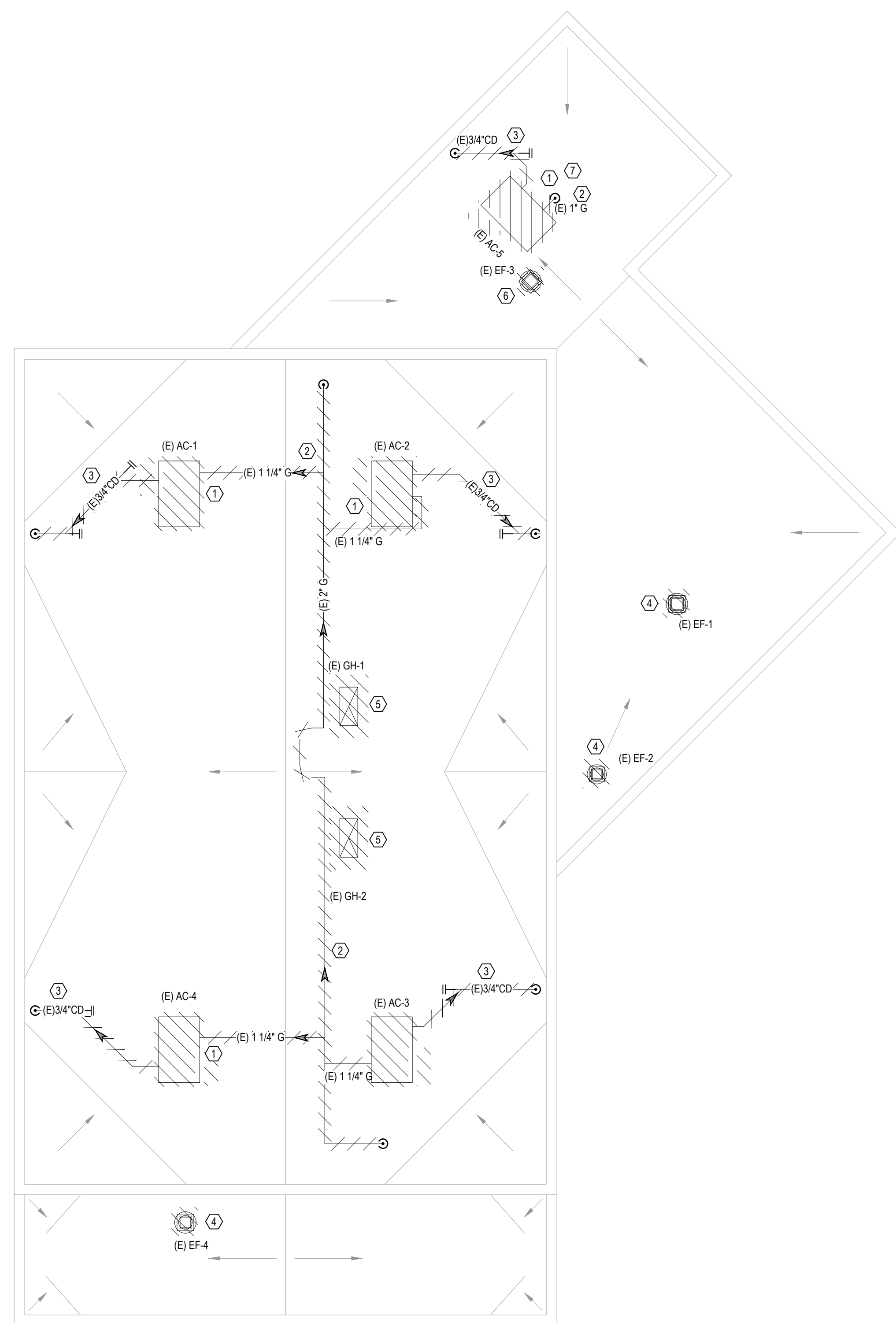
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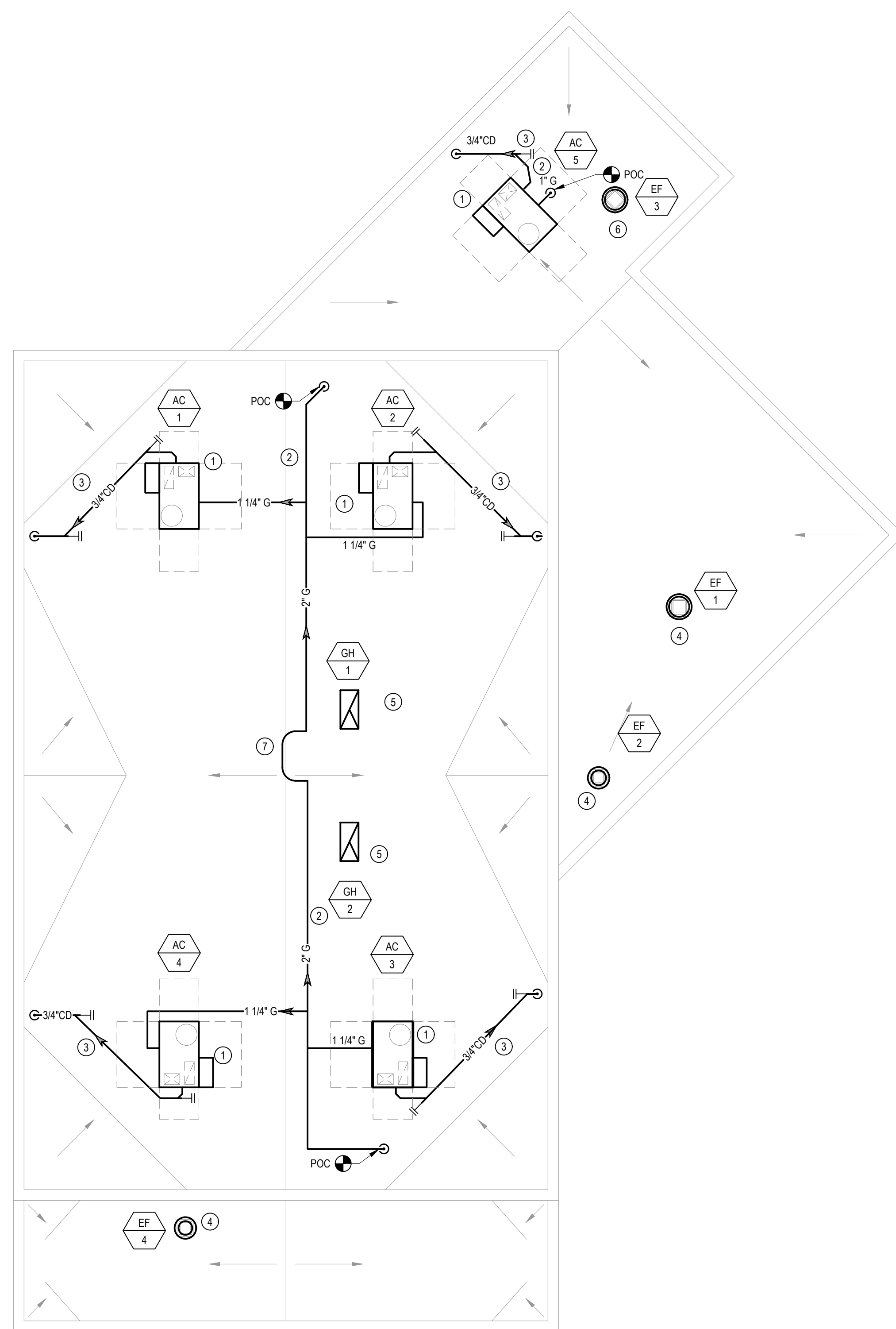
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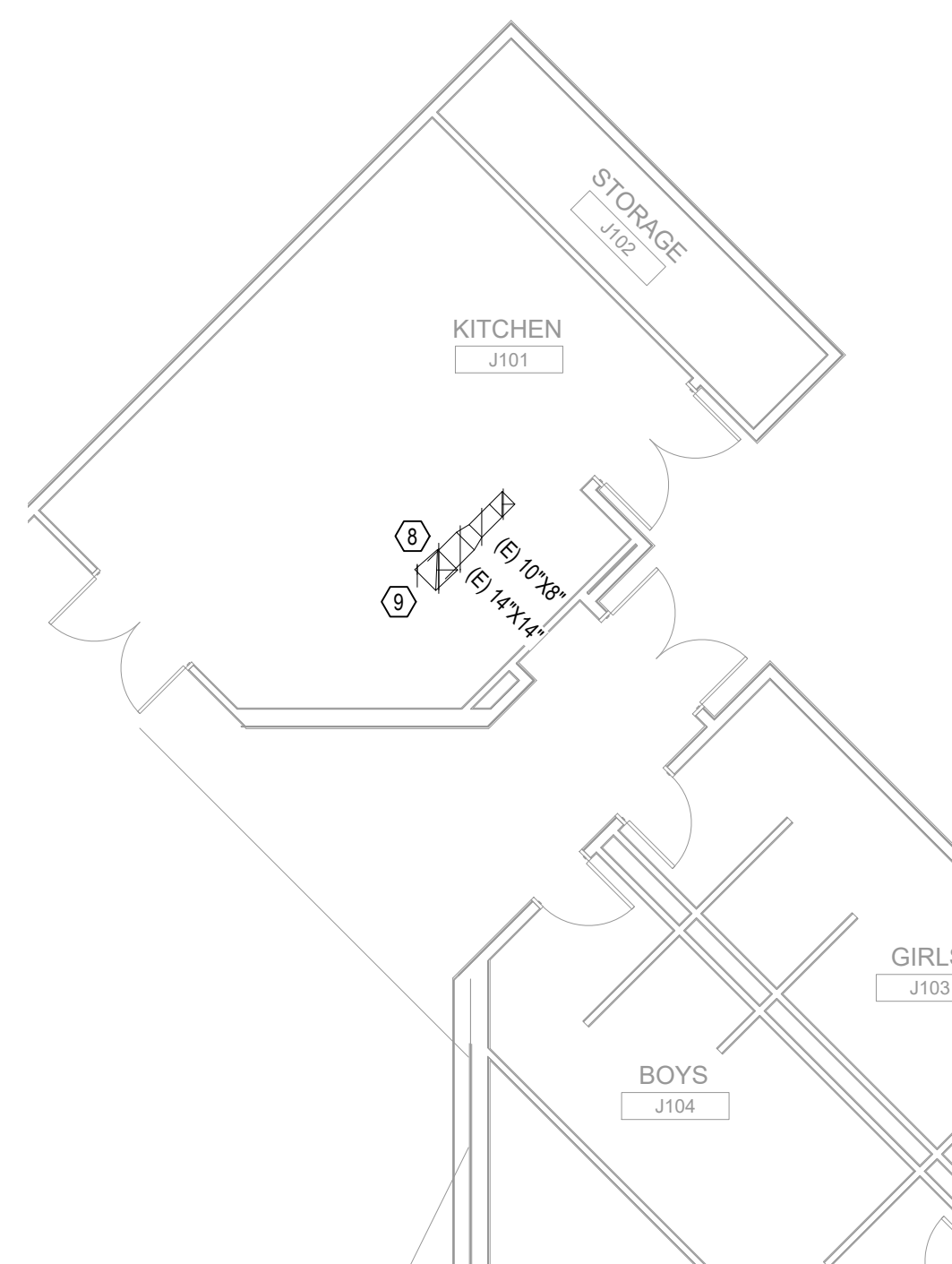
REROOFING AND HVAC REPLACEMENT
LYDIKSEN ELEMENTARY SCHOOL
7700 HIGHLAND OAKS DR., PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT



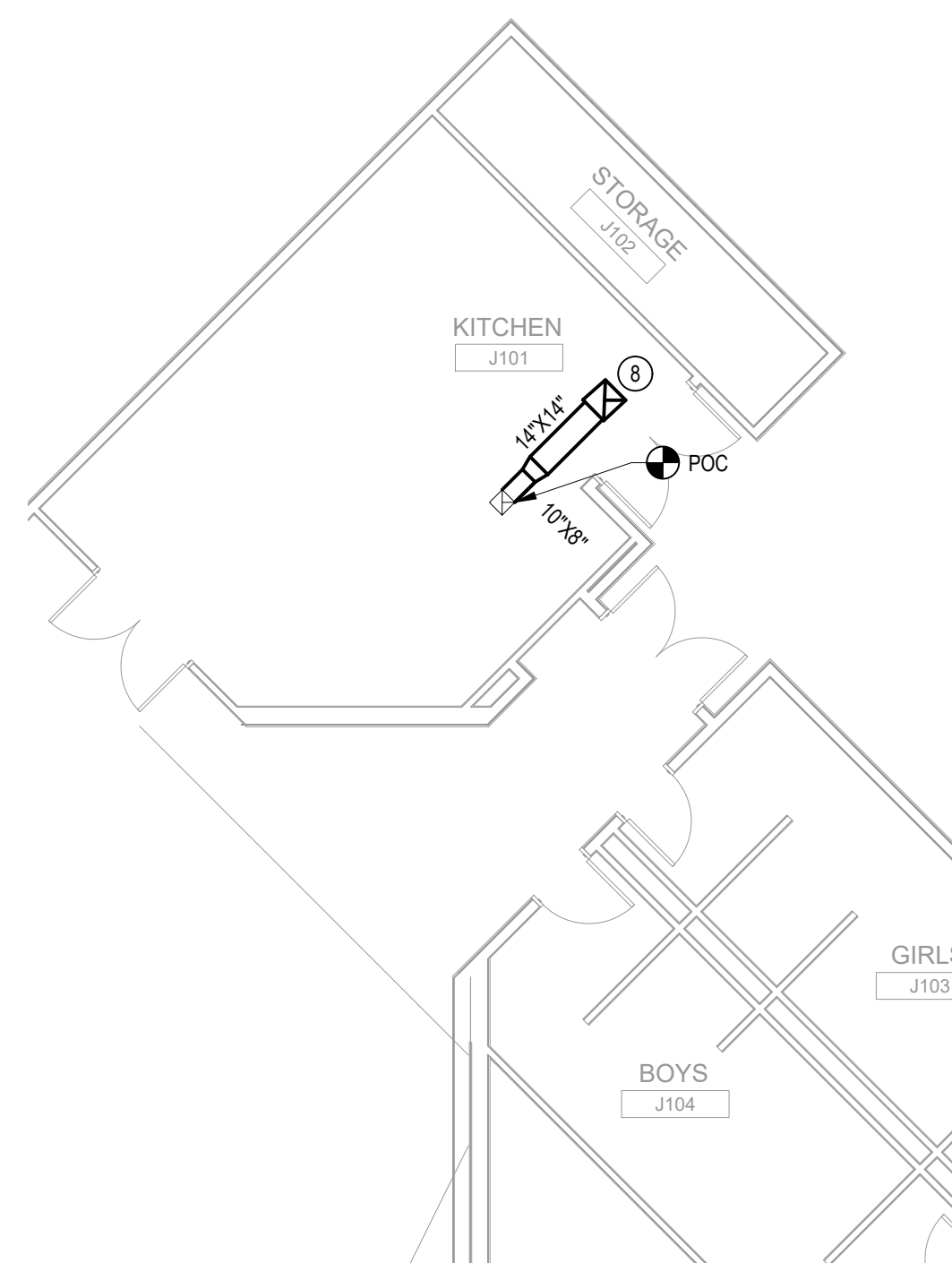
BUILDING J - DEMO ROOF PLAN



BUILDING J - NEW ROOF PLAN
SCALE: 1/8" = 1'-0"



3 BUILDING J - PARTIAL DEMO FLOOR PLAN
MP3.1 SCALE: 1/8" = 1'-0"



3 BUILDING J - PARTIAL NEW FLOOR PLAN
MP3.1 SCALE: 1/8" = 1'-0"

BUILDING KEY

- NEW SHEET NOTES

1. INSTALL NEW AC UNIT ON NEW ROOF CURB. ENSURE CORRECT UNIT ORIENTATION AND CONNECT TO (E) SUPPLY AND RETURN DUCTWORK.
2. INSTALL NEW GAS PIPING FROM POC TO UNIT ON RISER CONNECTION NEW GAS PIPE TO EACH NEW AC UNIT. INSTALL NEW GAS PIPING WITH SHUTOFF VALVE, DIRT LEG, AND FLEX CONNECTION AT NEW AC UNIT. CONNECT GAS PIPING TO AC UNIT PER DETAIL 2MP.2.2. FOR PIPE SUPPORT SEE DETAIL 3MP.2.2.
3. INSTALL NEW CP DIPPING WITH T-PIPR TO NEW AC UNIT. ROUTE TO NEAREST ROOF DRAIN AND SPILL WITH T AIR GAP. CONNECT CP PIPING TO AC UNIT PER DETAIL 2MP.2.2. FOR PIPE SUPPORT SEE DETAIL 3MP.2.2.
4. INSTALL NEW ROOF EXHAUST FAN ON NEW ROOF CURB. CONNECT TO (E) DUCT WORK.
5. INSTALL NEW RELIEF HOOD ON NEW ROOF CURB. CONNECT TO (E) DUCT WORK.
6. INSTALL NEW EXHAUST FAN ON NEW ROOF CURB PROVIDE NEW ROOF OPENING. EXTEND NEW DUCT WORK FROM EXISTING DUCTWORK AT BELOW FLOOR. MAINTAIN MINIMUM 10 FT FROM ANY OUTSIDE AIR INTAKE OPENING.
7. INSTALL METRAFLEX GAS PIPE LOOP.
8. RUN EXHAUST DUCT UP TO RELOCATED FAN ON THE ROOF.

-  DEMOLITION SHEET NOTES

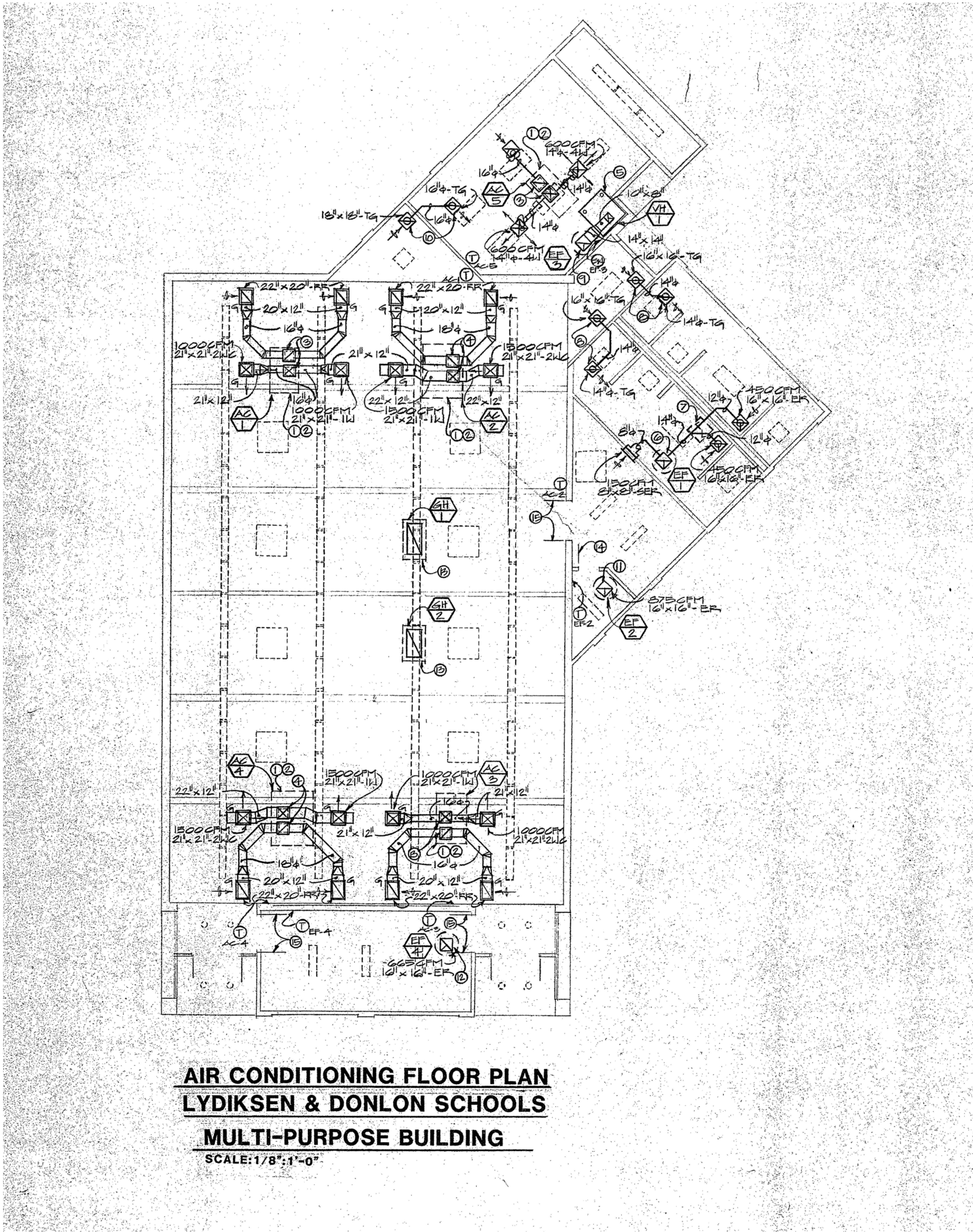
1. REMOVE (E) AC UNIT. REMOVE (E) ROOF CURB. PRESERVE ROOF OPENING FOR NEW AC UNIT.
2. REMOVE (E) GAS PIPING ON ROOF. PROTECT ROOF OPENING FOR NEW GAS PIPING CONNECTION TO NEW AC UNIT.
3. REMOVE (E) CD PIPING ON ROOF.
4. REMOVE (E) ROOF EXHAUST FAN. REMOVE (E) ROOF CURB. PRESERVE ROOF OPENING FOR NEW ROOF EXHAUST FAN UNIT.
5. REMOVE (E) RELIEF HOOD AND (E) ROOF CURB. PRESERVE ROOF OPENING FOR NEW ROOF HOOD.
6. REMOVE (E) ROOF EXHAUST FAN AND (E) ROOF CURB. PATCH (E) ROOF OPENING PER ARCHITECT'S DIRECTIONS.
7. REMOVE (E) GAS PIPING ON ROOF UP TO POC AT UNION ON RISER. PROTECT ROOF OPENING FOR NEW GAS PIPING CONNECTION TO NEW AC UNIT.
8. PATCH (E) PENETRATION PER ARCHITECT'S DRAWINGS.
9. REMOVE EXHAUST DUCT UP TO THE EXHAUST FAN LOCATED ON THE ROOF.

- ## GENERAL NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING AND NEW BUILDING STRUCTURES, SERVICES AND OWNER'S PROPERTY DURING THE ENTIRE PERIOD OF CONSTRUCTION.
2. COORDINATE THE LOCATIONS OF ROOF/WALL OPENINGS, PENETRATIONS, DUCTWORK AND ALL MECHANICAL EQUIPMENT WITH RESPECT TO BUILDING STRUCTURE AND OTHER BUILDINGS SERVICES TO AVOID CONFLICT.
3. CONTRACTOR SHALL CONNECT (E) PELICAN THERMOSTATS TO NEW UNITS AND PELICAN ECONOMIZER CONTROLLER.
4. CONTRACTOR TO VERIFY ALL EXISTING CURB DIMENSIONS BEFORE SUBMITTAL PROCESS / ORDERING EQUIPMENT AND PROVIDE CURB ADAPTERS AS REQUIRED.
5. ALL PLUMBING VENTS TO STAY IN PLACE. EXTEND VENTS ABOVE NEW ROOF LEVEL WHERE REQUIRED.
6. PLANS ARE DRAWN FROM AVAILABLE RECORD DRAWINGS AND LIMITED FIELD VERIFICATION. CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS AND MAKE ADJUSTMENTS PRIOR TO ORDERING/FABRICATION.
7. ANCHOR GAS PIPE ON ROOF PER SAMP.2.
8. CHECK THE UNITS FOR HEATING, COOLING, ECONOMIZER, AND CONTINUOUS FAN OPERATION. COORDINATE WITH SCHOOL DISTRICT TO PROGRAM THERMOSTATS FOR OCCUPIED SCHEDULE HOURS.

[illegible]

MP3.1



AIR CONDITIONING FLOOR PLAN
LYDIKSEN & DONLON SCHOOLS
MULTI-PURPOSE BUILDING
SCALE: 1/8"=1'-0"

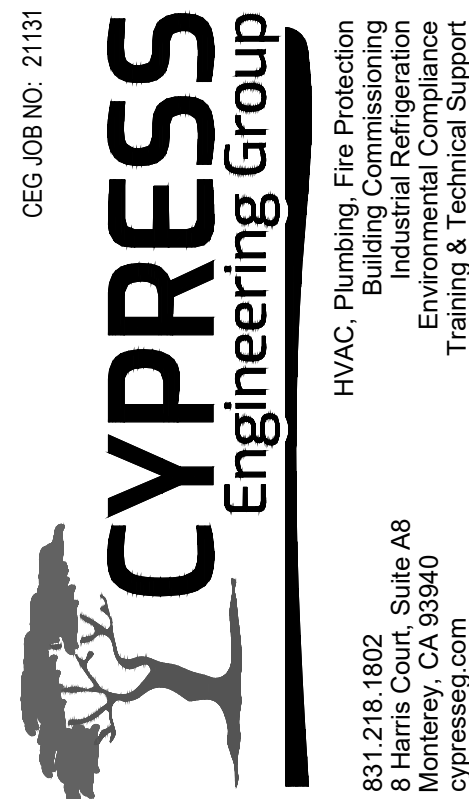
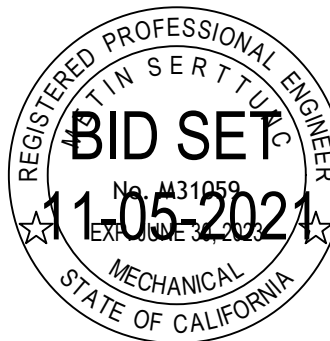
1
MP7.1 **BUILDING J - MECHANICAL / TAB WORK**
SCALE: 1/8" = 1'-0"

GENERAL NOTES

- EXISTING FLOOR PLANS FROM RECORD DRAWINGS SHOWN FOR REFERENCE ONLY.
- ADJUST AND BALANCE AIR FLOW TO CFMS SHOWN ON AIR BALANCE SCHEDULE FOR EACH BUILDING.

AIR BALANCE SCHEDULE - MPR BLDG			
UNIT NUMBER	LOCATION SERVED	SUPPLY CFM	RETURN CFM
AC-1	MPR BLDG	2400	#
AC-2	MPR BLDG	2400	#
AC-3	MPR BLDG	2400	#
AC-4	MPR BLDG	2400	#
AC-5	MPR BLDG	1200	#

(DSA STAMP AREA)



BLDG MPR-
MECHANICAL / TAB WORK

REROOFING AND HVAC REPLACEMENT
LYDIKSEN ELEMENTARY SCHOOL
7700 HIGHLAND OAKS DR., PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS
NO. ITEM DATE

DRAWN BY: CAD
CHECKED BY: CS
SFA JOB NO: 20085 DATE: 11/05/2021

MP7.1

STATE OF CALIFORNIA
Mechanical Systems
 NRCC-MCH-E (Created 09/2020) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: Roofing and HVAC Replacement Lydiksen Elementary School Report Page: Page 7 of 11
 Project Address: 7700 Highland Oaks Dr Pleasanton, CA 94588 Date Prepared: 2021-11-03

O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE
 Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCC/.

YES	NO	Form/Title	Systems To Be Field Verified	Field Inspector	
				Pass	Fail
<input checked="" type="radio"/>	<input type="radio"/>	NRCA-MCH-02-A Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap.		<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="radio"/>	<input type="radio"/>	NRCA-MCH-03-A Constant Volume Single Zone HVAC. NOTE: This form does not automatically move to "Yes". If Constant Volume Single Zone HVAC Systems are included in the scope, permit applicant should move this form to "Yes".		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-04-A Air Distribution Duct Leakage		<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="radio"/>	<input type="radio"/>	NRCA-MCH-05-A Air Economizer Controls		<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="radio"/>	<input type="radio"/>	NRCA-MCH-06-A Demand Control Ventilation Systems Acceptance must be submitted for all systems required to employ demand controlled ventilation (refer to §120.1(c)(3) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints.		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-07-A Supply Fan Variable Flow Controls		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-08-A Valve Leakage Test		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-09-A Supply Water Temperature Reset Controls		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-10-A Hydronic System Variable Flow Controls		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-11-A Automatic Demand Shed Controls		<input type="checkbox"/>	<input type="checkbox"/>

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2020

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CERTIFICATE OF COMPLIANCE
 Project Name: Roofing and HVAC Replacement Lydiksen Elementary School Report Page: Page 8 of 11
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<input checked="" type="radio"/>	<input type="radio"/>	NRCA-MCH-12-A FDD for Packaged Direct Expansion Units		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-13-A Automatic FDD for Air Handling Units and Zone Terminal Units Acceptance		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-14-A Distributed Energy Storage DX AC Systems Acceptance. NOTE: This form does not automatically move to "Yes". If Distributed Energy Storage DX AC Systems are included in the scope, permit applicant should move this form to "Yes".		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-15-A Thermal Energy Storage (TES) System Acceptance. NOTE: This form does not automatically move to "Yes". If Chilled Water Storage, Ice-on-Coil Internal Melt, Ice-on-Coil External Melt, Ice Harvester, Brine, Ice Slurry, Eutectic Salt, Clathrate Hydrate Slurry (CHS), Cryogenic or Encapsulated (Ice Ball) Systems are included in the scope, permit applicant should move this form to "Yes".		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-16-A Supply Air Temperature Reset Controls		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-17-A Condenser Water Temperature Reset Controls		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-18 Energy Management Control Systems		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-19 Occupancy Sensor Controls		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-20 Multi-Family Ventilation		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-21 Multi-Family Envelope Leakage		<input type="checkbox"/>	<input type="checkbox"/>

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2020

STATE OF CALIFORNIA
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CERTIFICATE OF COMPLIANCE
 Project Name: Roofing and HVAC Replacement Lydiksen Elementary School Report Page: Page 9 of 11
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P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION
 Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be completed by a HERS Rater and provided to the building inspector during construction. The final documents must be created by a HERS Providers registry, but drafts can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCC/.

YES	NO	Form/Title	Systems To Be Field Verified	Field Inspector	
				Pass	Fail
<input type="radio"/>	<input checked="" type="radio"/>	NRV-MCH-04-H Duct Leakage Test. NOTE: Must be completed by a HERS Rater		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRV-MCH-24 Enclosure Air Leakage Worksheet. NOTE: Must be completed by a HERS Rater		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRV-MCH-27 High-rise Residential. NOTE: Must be completed by a HERS Rater		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRV-MCH-32 Local Mechanical Exhaust. NOTE: Must be completed by a HERS Rater		<input type="checkbox"/>	<input type="checkbox"/>

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2020

STATE OF CALIFORNIA
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CERTIFICATE OF COMPLIANCE
 Project Name: Roofing and HVAC Replacement Lydiksen Elementary School Report Page: Page 4 of 11
 Project Address: 7700 Highland Oaks Dr Pleasanton, CA 94588 Date Prepared: 2021-11-03

I. SYSTEM CONTROLS
 Table Instructions: Complete the following Table to demonstrate compliance with mandatory controls in §110.2 and §120.2 and prescriptive controls in §140.4(i) and (j) or requirements in §141.0(b)(2) for altered space conditioning systems.

01	02	03	04	05	06	07	08	09
System Name	System Zoning	Conditioned Floor Area Being Served (ft²)	Thermostats §110.2(b) & (c)¹ §120.2(a) or §141.0(b)(2)	Shut-Off Controls §120.2(e)	Isolation Zone Controls §120.7(a)	Demand Response §110.12 and §120.2(b)	Supply Air Temp. Reset §140.4(f)	Window Interlocks per §140.4(n)
AC	single zone	≤ 25,000 ft²	Setback + DR Tstat per §110.12	NA: 7 day per §120.2(e)¹	NA: Single Zone	DR Tstat per §110.12	NA: Single Zone	NA: Alteration project

¹ FOOTNOTES: Gravity gas wall heaters, gravity floor heaters, gravity room heaters, non-central electric heaters, fireplaces or decorative gas appliances, wood stoves are not required to have setback thermostats.
 * NOTES: Controls with a * require a note in the space below explaining how compliance is achieved.
 EX- System 1: SA Temp Reset: Exempt because zones compliant with §140.4(d); EXCEPTION 1 to §140.4(i)

J. VENTILATION AND INDOOR AIR QUALITY
 Table Instructions: Complete the following Table to demonstrate compliance with mandatory ventilation requirements in §120.1 and §120.2(c)(3) for all nonresidential, high-rise residential and hotel/motel occupancies. For alterations, only ventilation systems being altered within the scope of the permit application need to be documented in this table. In lieu of this table, the required outdoor ventilation rates and airflow may be shown on the plans or the calculations can be presented in a spreadsheet.

01	02	03
<input checked="" type="checkbox"/>	Check the box if the project is showing ventilation calculations on the plans, or attaching the calculations instead of completing this table.	
<input type="checkbox"/>	Check this box if the project includes Nonresidential or Hotel/Motel spaces	
<input type="checkbox"/>	Check this box if the project includes new or altered high-rise residential dwelling units	
<input type="checkbox"/>	Check the box if the project is using natural ventilation in any spaces to meet required ventilation rates per §120.1(c)(2).	

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2020

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CERTIFICATE OF COMPLIANCE
 Project Name: Roofing and HVAC Replacement Lydiksen Elementary School Report Page: Page 5 of 11
 Project Address: 7700 Highland Oaks Dr Pleasanton, CA 94588 Date Prepared: 2021-11-03

¹ FOOTNOTES: System CFM should include both mechanical and natural ventilation for the zone/system.
 ² Air filtration requirements apply to the following three system types per §120.1(c)(1): space conditioning systems utilizing ducts to supply air to occupiable space; supply-only ventilation systems providing outside air to occupiable space; supply side of balanced ventilation systems including heat recovery and energy recovery ventilation systems providing outside air to occupiable space.
 ³ Uniform Mechanical Code may have more stringent ventilation requirements; the most stringent code requirement takes precedence.
 ⁴ See Standards Tables 120.1-A and 120.1-B
 ⁵ For lecture halls with fixed seating, the expected number of occupants shall be determined in accordance with the California Building Code.
 ⁶ §120.2(a)(2) requires systems serving rooms that are required by §130.1(c) to have lighting occupancy sensing controls to also have occupancy sensing zone controls for ventilation. Examples of spaces which require lighting occupancy sensors include offices 250ft² or smaller, multipurpose rooms less than 1,000ft², classrooms, conference rooms, restrooms, aisles and open areas in warehouses, library book stack aisles, corridors, stairwells, parking garages, and loading and unloading zones, unless exempt by §130.1(c).

K. TERMINAL BOX CONTROLS
 This Section Does Not Apply

L. DISTRIBUTION (DUCTWORK AND PIPING)
 Table Instructions: Complete the following tables to show compliance with mandatory pipe insulation requirements found in §120.3 and prescriptive requirements found in §140.4(i) for duct leakage testing.

Duct Leakage Sealing

11	12	13	14
No	The scope of the project includes only duct systems serving healthcare facilities.		
Yes	Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system.		
Yes	The space conditioning system serves less than 5,000 ft² of conditioned floor area.		
No	The combined surface area of the ducts in the following locations is more than 25% of the total surface area of the entire duct system:		
	<input type="checkbox"/> Outdoors		
	<input type="checkbox"/> In a space directly under a roof that has a U-factor greater than the U-factor of the ceiling, or if the roof does not meet the requirements of §140.3(a)(1) or if the roof has fixed vents or openings to the outside/unconditioned spaces		
	<input type="checkbox"/> In an unconditioned crawlspace		
	<input type="checkbox"/> In other unconditioned spaces		
Yes	The scope of the project includes extending an existing duct system, which is constructed, insulated or sealed with asbestos.		
No	The scope of the project includes an existing duct system that is documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in the Reference Nonresidential Appendix NA2.		

Table Continued

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2020

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 Project Name: Roofing and HVAC Replacement Lydiksen Elementary School Report Page: Page 6 of 11
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Table Continued

17	Duct system shall be sealed in accordance with the California Mechanical Code.

M. COOLING TOWERS
 This Section Does Not Apply

N. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION
 Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCC/.

YES	NO	Form/Title	Systems To Be Field Verified	Field Inspector	
				Pass	Fail
<input checked="" type="radio"/>		NRCC-MCH-01-E - Must be submitted for all buildings.		<input type="checkbox"/>	<input type="checkbox"/>

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2020

STATE OF CALIFORNIA
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CERTIFICATE OF COMPLIANCE
 Project Name: Roofing and HVAC Replacement Lydiksen Elementary School Report Page: Page 1 of 11
 Project Address: 7700 Highland Oaks Dr Pleasanton, CA 94588 Date Prepared: 2021-11-03

A. GENERAL INFORMATION
 01 Project Location (city) Pleasanton
 02 Climate Zone 12
 04 Total Conditioned Floor Area
 05 Total Unconditioned Floor Area
 06 # of Stories (Habitable Above Grade)
 Occupancy Types Within Project:
☐ Office (B) ☐ Retail (M)
☐ Hotel/ Motel Guest Rooms (R-1) ☒ School (E)
☐ High Rise Residential (R-2/R-3) ☐ Relocatable Class Bldg (E)
☐ Other (Write In):
 FOOTNOTES: Climate zone can be determined on the California Energy Commission's website at http://www.energy.ca.gov/maps/renewable/building_climate_zones.html

B. PROJECT SCOPE
 Table Instructions: Include any mechanical systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.6 or §141.0(b)(2) for alterations.

My project consists of (check all that apply)		
01	02	03
Air System(s)	Wet System Components	Dry System Components
<input checked="" type="checkbox"/> Heating Air System	<input type="checkbox"/> Water Economizer	<input checked="" type="checkbox"/> Air Economizer
<input checked="" type="checkbox"/> Cooling Air System	<input type="checkbox"/> Pumps	<input type="checkbox"/> Electric Resistance Heat
Mechanical Controls	<input type="checkbox"/> Hydronic System Piping	<input type="checkbox"/> Fan Systems
<input checked="" type="checkbox"/> Mechanical Controls (existing to remain, altered or new)	<input checked="" type="checkbox"/> Cooling Towers	<input checked="" type="checkbox"/> Ductwork (existing to remain, altered or new)
	<input type="checkbox"/> Chillers	<input type="checkbox"/> Ventilation
	<input type="checkbox"/> Boilers	<input type="checkbox"/> Zonal Systems/ Terminal Boxes

C. COMPLIANCE RESULTS
 Table Instructions: If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.

01	02	03	04	05	06	07	08	09
System Summary §110.1, §110.2, §140.4	Pumps §140.4(n)	Fans/ Economizers §140.4(a), §140.4(e)	System Controls §110.2, §120.2, §140.4(f)	Ventilation §120.1	Terminal Box Controls §140.4(d)	Distribution §120.3, §140.4(i)	Cooling Towers §110.2(e)(2)	Compliance Results
Yes AND	AND	Yes AND	Yes AND	Yes AND	Yes AND	Yes AND	Yes AND	COMPLIES
Mandatory Measures Compliance (See Table Q for Details)								COMPLIES

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2020

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CERTIFICATE OF COMPLIANCE
 Project Name: Roofing and HVAC Replacement Lydiksen Elementary School Report Page: Page 2 of 11
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D. EXCEPTIONAL CONDITIONS
 This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

Table H indicates a Fan Power System Index that exceeds the maximum allowed per §140.4(c). Please revise to demonstrate compliance. Selections made in Table D have been changed by the permit applicant. See Table E. Additional Remarks for permit applicant's explanation.

E. ADDITIONAL REMARKS
 This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)
 Table Instructions: Complete the following equipment schedules to show compliance with mandatory requirements found in §110.1 and §110.2(a) and prescriptive requirements found in §140.4(a), §140.4(b) and §140.4(c) or §141.0(b)(2) for alterations.

Dry System Equipment Sizing (includes air conditioners, condensers, heat pumps, VRF, furnaces and unit heaters)

01	02	03	04	05	06	07	08	09	10	11
Name or Item Tag	Equipment Category per Tables 110.2	Equipment Type per Tables 110.2 & Title 20	Smallest Size Available¹ §140.4(a)	Equipment Sizing per Mechanical Schedule (kBtu/h) §140.4(a)(b)		Cooling Output²³		Load Calculations³⁴		
				Per Design (kBtu/h)	Rated (kBtu/h)	Supp. Heating Output (kBtu/h)	Sensible Per Design (kBtu/h)	Rated (kBtu/h)	Total Heating Load (kBtu/h)	Total Sensible Cooling Load (kBtu/h)
AC	Unitary AC/ Condensers	AC, air cooled, package (3 phase)	Yes	54	67		46	60		

¹ FOOTNOTES: Equipment shall be the smallest size, within the available options of the desired equipment line, necessary to meet the design heating and cooling loads of the building per §140.4(a). Healthcare facilities are exempted.
 ² It is common practice to show rated output capacity on the equipment schedule. Sensible cooling output comes from specification sheet tables.
 ³ If equipment is heating only, leave cooling output and load blank. If equipment is cooling only, leave heating output and load blank.
 ⁴ Authority Having Jurisdiction may ask for load calculations used for compliance per §140.4(b).
 Table Continued

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2020

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CERTIFICATE OF COMPLIANCE
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Dry System Equipment Efficiency (other than Package Terminal Air Conditioners (PTAC) and Package Terminal Heat Pumps (PTHP))

01	02	03	04	05	06	07	08	09
Name or Item Tag	Size Category (Btu/h)	Rating Condition (°F)	Efficiency Unit	Heating Mode	Design Efficiency	Efficiency Unit	Cooling Mode	Design Efficiency
AC	<65,000				0.8	SEER		16

G. PUMPS
 This Section Does Not Apply

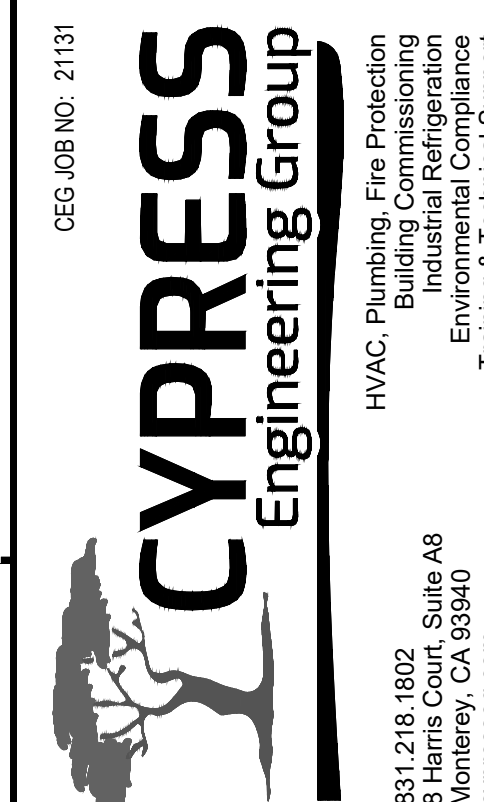
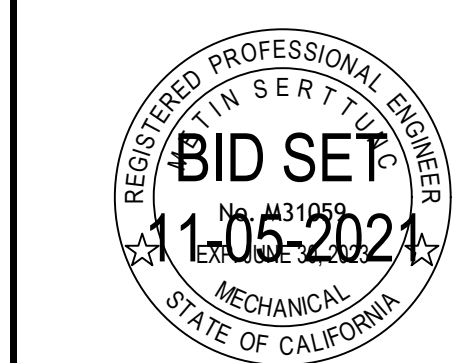
H. FAN SYSTEMS & AIR ECONOMIZERS
 Table Instructions: Complete the following Table for fan systems to demonstrate compliance with prescriptive requirements found in §140.4(c), §140.4(e) and §140.4(m). First document the system details, then add fans within that system to document compliance with fan power requirements. Fan systems serving only process loads are exempt from these requirements and do not need to be included in Table H.

System Name:	AC	Economizer¹	Differential Temperature	Economizer Controls:	Designed per §140.4(e) and (m)	System Fan Type:	Constant Volume
01	02	03	04	05	06	07	08
Fan Name or Item Tag	Fan Function	Qty	Maximum Design Supply Airflow (CFM)	HP Unit²	Design HP	Fan Power Pressure Drop Adjustment - Table 140.4-B	Design Airflow through Device (CFM)
AC	Supply	1	1,800	BHP	1.05	None used Calculated Adjustment (in H ₂ O)	
Total System Design Supply Airflow (CFM):		1,800	Total System Design (BHP):		1.05	Maximum System Fan Power (BHP):	

¹ FOOTNOTE: Computer room economizers must meet requirements of §140.9(a) and will be documented on the NRCC-PRC-E document.
 ² The unit used for HP must be consistent for all fans within a system.

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2020

(DSA STAMP AREA)



TITLE 24 FORMS - MECHANICAL


REVISIONS NO. ITEM DATE

DRAWN BY: CAD
CHECKED BY: CS
SFA JOB NO: DATE:
20085 11/05/2021

MP8.1



CEG JOB NO: 21131



CYPRESS
Engineering Group

CEG JOB NO: 21131

831.218.1802
8 Harris Court, Suite A8
Monterey, CA 93940
cypressreg.com

TITLE 24 FORMS - PLUMBING









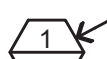
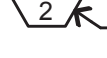




























































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77700 HIGHLAND OAKS DR., PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

[illegible]

MP8.2

GENERAL CONSTRUCTION NOTES	
1.	CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS. MATERIALS AND EQUIPMENT SHALL BE U.L. LISTED AND LABELED FOR THE APPLICATION.
2.	THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES AND INSPECTION FEES REQUIRED BY THIS CONTRACT WORK.
3.	CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO BIDDING AND ALLOW FOR ALL FIELD CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ELECTRICAL WORK NOTED AND CALLED OUT ON ALL CONTRACT DOCUMENTS. THE CONTRACTOR SHALL OBTAIN INFORMATION AND BE FAMILIAR WITH ALL OTHER TRADES WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION BETWEEN OTHER TRADES ON PROJECT.
4.	CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF PERSONS AND PROPERTY AND SHALL PROVIDE INSURANCE COVERAGE AS NECESSARY FOR LIABILITY AND PERSONAL PROPERTY DAMAGE, TO FULLY PROTECT THE OWNER, ARCHITECT AND ENGINEER FROM ANY AND ALL CLAIMS RESULTING FROM THIS WORK.
5.	CONTRACTOR SHALL MAINTAIN RECORD DRAWINGS AT THE PROJECT SITE INDICATING ALL MODIFICATIONS TO ELECTRICAL SYSTEMS. THE CONTRACTOR SHALL AT THE CONCLUSION OF THE PROJECT PROVIDE ACCURATE "AS-BUILT" DRAWINGS ACCEPTABLE TO THE ARCHITECT.
6.	ALL MATERIALS PROVIDED TO THE PROJECT SHALL BE NEW. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AND INSTALL ALL INCIDENTAL MATERIALS REQUIRED FOR A COMPLETE INSTALLATION.
7.	CONTRACTOR SHALL PROVIDE TO THE ARCHITECT A CONSTRUCTION SCHEDULE OF ELECTRICAL WORK. THE CONSTRUCTION SCHEDULE SHALL IDENTIFY ALL SIGNIFICANT MILESTONES WITH COMPLETION DATES.
8.	CONTRACTOR SHALL PROVIDE ALL REQUIRED "CUTTING, PATCHING, EXCAVATION, BACKFILL AND REPAIRS" NECESSARY TO RESTORE DAMAGED SURFACES TO EQUAL OR BETTER THAN ORIGINAL CONDITIONS EXISTING AT START OF WORK.
9.	CONTRACTOR SHALL BE RESPONSIBLE FOR PAINTING ALL EXPOSED CONDUITS AND ELECTRICAL EQUIPMENT. REFER TO ARCHITECTS PAINTING SECTION FOR REQUIREMENTS.
10.	ALL ELECTRICAL EQUIPMENT INSTALLED OUTDOORS SHALL BE WEATHERPROOF. EXTERIOR CONDUITS RUN INTO BUILDINGS SHALL BE INSTALLED WITH FLASHING, CAULKED AND SEALED. CONDUITS FOR EXTERIOR ELECTRICAL DEVICES SHALL BE RUN INSIDE BUILDING UNLESS OTHERWISE NOTED ON DRAWINGS.
11.	ALL CONDUITS UNLESS OTHERWISE NOTED ON DRAWINGS SHALL HAVE AS A MINIMUM: TWO (2) #12s WITH ONE (1) #12 GROUND. "TICK" MARKS SHOWN ON CIRCUITRY ARE FOR ROUGH ESTIMATING ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WIRES AND WIRE SIZES REQUIRED BY LATEST CODE.
12.	ALL BRANCH CIRCUITS SHALL HAVE INDIVIDUAL NEUTRALS. SHARED NEUTRALS ON MULTIWIRE CIRCUITS IS NOT ALLOWED.
13.	COORDINATE ALL CONDUIT RUNS, ELECTRICAL EQUIPMENT AND PANELS WITH ALL OTHER WORK TO AVOID CONFLICTS.
14.	CONTRACTOR SHALL PROVIDE IN EVERY NEW EMPTY CONDUIT A DRAW STRING FOR USE IN FUTURE CONSTRUCTION.
15.	ALL CONDUIT SHALL BE CONCEALED WHERE POSSIBLE. CUT AND PATCH EXISTING WALLS WHERE NECESSARY. WHERE IT IS NECESSARY TO CUT OR BORE EXISTING STRUCTURAL WALLS FOR NEW ELECTRICAL WORK OBTAIN PERMISSION FROM THE ARCHITECT PRIOR TO STARTING WORK. REUSE EXISTING CONDUIT WHERE POSSIBLE.
16.	WHERE IT IS NOT POSSIBLE TO REUSE EXISTING CONDUIT OR RUN NEW CONCEALED CONDUIT USE NON-METALLIC SURFACE RACEWAY AND BOXES. ROUTING OF ALL NON-METALLIC RACEWAYS SHALL BE APPROVED BY THE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN.
17.	CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE TO EXISTING UNDERGROUND SYSTEMS (GAS, WATER, TELEPHONE, ELECTRICAL, SEWER, ETC.). THE CONTRACTOR SHALL REPAIR & PAY ALL EXPENSES FOR DAMAGE TO EXISTING UNDERGROUND SYSTEMS AS A RESULT OF NEW WORK. REPAIR TO DAMAGED UNDERGROUND SYSTEMS SHALL BE TO THE OWNERS SATISFACTION WITHOUT EXTRA EXPENSE TO THE OWNER.
18.	WHERE NON-METALLIC SHEATHED CONDUCTORS ARE FOUND, THE CONTRACTOR SHALL REMOVE TO FULLEST EXTENT PER THE GENERAL DEMOLITION NOTES AND REPLACE WITH CONDUIT. METAL CLAD CABLE WILL BE PERMITTED ON A CASE-BY-CASE BASIS ONLY BY WRITTEN APPROVAL FROM THE ARCHITECT.
19.	ALL INSTALLATION OF EXPOSED SURFACE MOUNTED RACEWAY IN PUBLIC AREAS SHALL BE REVIEWED BY ARCHITECT BEFORE ROUGH-IN. CONTRACTOR IS TO DETERMINE THE ACCESSIBILITY OF ATTIC, FURRED SPACE, HOLLOW WALLS, ETC. IN EACH AREA AND REVIEW WITH ARCHITECT. IF SYSTEM CAN BE ROUTED CONCEALED EITHER BY FISHING OR ACCESSIBILITY, CONTRACTOR IS TO DO SO. IF INACCESSIBILITY IS DETERMINED, CONTRACTOR SHALL INSTALL SURFACE MOUNTED RACEWAY IN THE MOST AESTHETICALLY PLEASING MEANS AS DETERMINED BY THE ARCHITECT. NO ALLOWANCE FOR ADDITIONAL COMPENSATION DUE TO ROUTING AS DIRECTED BY THE ARCHITECT WILL BE MADE.

GENERAL DEMOLITION NOTES	
A.	CONTRACTOR SHALL FIELD VERIFY EXTENT OF ELECTRICAL DEMOLITION AND QUANTITIES OF ELECTRICAL TO BE REMOVED AS DICTATED BY THE REQUIREMENTS OF THE PROJECT.
B.	REMOVAL SHALL INCLUDE WIRING, RACEWAY, BOXES, SWITCHES, LIGHT FIXTURES, ETC. AS INDICATED ON THE PLANS AND AS REQUIRED BY THESE DEMOLITION NOTES.
C.	RACEWAYS ASSOCIATED WITH ELECTRICAL BEING DEMOLISHED WHICH ARE CONCEALED IN EXISTING REMAINING WALLS MAY BE ABANDONED IN PLACE. REMOVE WIRING FROM CONDUIT.
D.	RACEWAYS ASSOCIATED WITH ELECTRICAL BEING DEMOLISHED WHICH ARE EXPOSED SHALL BE REMOVED.
E.	WHERE REMOVAL OF EQUIPMENT OR WIRING IS INDICATED, IT SHALL INCLUDE ALL ASSOCIATED WIRING BACK TO LAST ACTIVE REMAINING OUTLET, DEVICE, FIXTURE OR PANEL.
F.	ELECTRICAL CONTRACTOR SHALL INSURE THAT ALL REMAINING ACTIVE CIRCUITS, DEVICES, OUTLETS, LIGHT FIXTURES, ETC. HAVE NOT BEEN DISCONNECTED OR MADE INOPERATIVE DURING DEMOLITION. ELECTRICAL CONTRACTOR SHALL RESTORE ALL INTERRUPTED OR DISCONNECTED CIRCUITS TO OPERATION.
G.	ELECTRICAL CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL REMOVED ELECTRICAL EQUIPMENT AND MATERIAL.
H.	NO REMOVED EQUIPMENT OR MATERIAL SHALL BE REUSED AS PART OF NEW WORK, U.O.N.
I.	EXISTING REMAINING CONCEALED RACEWAYS MAY BE REUSED FOR NEW WORK PROVIDED THEY MEET ALL REQUIREMENTS OF THE SPECIFICATION FOR NEW WORK.
J.	EXISTING FLUSH OUTLETS MAY BE REUSED FOR NEW WORK PROVIDED THEY MEET ALL REQUIREMENTS OF THE SPECIFICATION FOR NEW WORK. MEET THE REQUIREMENTS OF THE CURRENT C.E.C. FOR VOLUME AND COINCIDE WITH LOCATION SHOWN FOR THE NEW WORK.
K.	FLUSH OUTLET BOXES IN EXISTING WALLS TO REMAIN MAY BE ABANDONED IN PLACE. REMOVE DEVICES AND WIRING, PLUG OPENING AND PROVIDE AND INSTALL A BLANK DEVICE PLATE.
L.	EXISTING WIRING SHOWN HAS BEEN TAKEN FROM OLD PLANS AND IS ASSUMED TO BE CORRECT. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY ACTUAL CONDITIONS AND MAKE ADJUSTMENTS TO SUIT ACTUAL CONDITIONS AND TO MEET THE INTENT OF THE CONTRACT DOCUMENTS.
M.	WHERE TELEPHONE, COMPUTER DATA, FIBER OPTICS, FIRE ALARM OR OTHER COMMUNICATIONS OUTLETS OR WIRING IS TO BE DEMOLISHED IT SHALL BE REMOVED BACK TO THE NEXT TERMINAL POINT. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH OWNER OR HIS REPRESENTATIVE TO HAVE EQUIPMENT AND WIRING DESIGNATED FOR REMOVAL OR PRESERVATION PRIOR TO REMOVAL OF OUTLET BOXES, CONDUIT OR WIRING BY ELECTRICAL CONTRACTOR.
N.	COORDINATE WITH OWNER PRIOR TO START OF DEMOLITION TO MINIMIZE POWER INTERRUPTIONS. WORK MAY HAVE TO OCCUR DURING NON-REGULAR BUSINESS HOURS. COORDINATE IN WRITING WITH OWNER ONE WEEK PRIOR TO PLANNED POWER INTERRUPTIONS.

ELECTRICAL SYMBOLS & ABBREVIATIONS									
SYMBOLS & ABBREVIATIONS SHOWN ARE FOR GENERAL USE. DISREGARD THOSE WHICH DO NOT APPEAR ON THE PLANS.									
	SECURITY DOOR CONTACTS		PANELBOARD - FLUSH MOUNTED		DETAIL NOTE REFERENCE SYMBOL. SEE ASSOCIATED NOTE ON SAME DETAIL.		DETAIL NUMBER		DETAIL OR SECTION REFERENCE SHEET NUMBER
	SECURITY MOTION DETECTOR		EQUIPMENT PANEL - FLUSH MOUNTED		FEEDER DESIGNATION. SEE ASSOCIATED NOTE ON SAME DETAIL.		INDICATES QUANTITY OF TELEPHONE OUTLETS		INDICATES QUANTITY OF DATA OUTLETS
	CCTV CAMERA		PANELBOARD - SURFACE MOUNTED	ABBREVIATIONS					
	SECURITY SYSTEM KEYPAD		EQUIPMENT PANEL - SURFACE MOUNTED	A	AMPERE	GFCI	GROUND FAULT	NTS	NOT TO SCALE
	DOOR BELL PUSHBUTTON		METER W/ CURRENT TRANSFORMER	AFF	ABOVE FINISHED FLOOR	GFI	INTERRUPTING FLOOR	OA	OVERALL HEIGHT
	DOOR CHIME WITH LED		JUNCTION BOX - CEILING OR WALL MOUNTED, SIZE PER CODE, TAPE AND TAG WIRES	ALUM	ALUMINUM	GRS	GROUND	OC	ON CENTER
	RECEPTACLE - DUPLEX *		MOTOR CONNECTION	ARCH	ARCHITECT	HT	GALVANIZED RIGID	OH	OVERHEAD
	DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER - FIELD VERIFY HEIGHT		NON-FUSED DISCONNECT SWITCH	AWG	AMERICAN WIRE	IDF	INTERMEDIATE	PA	PUBLIC ADDRESS
	GFCI CONVENIENCE RECEPTACLE - DUPLEX *		FUSED DISCONNECT SWITCH; FUSED WITH DUAL-ELEMENT FUSES SIZED PER EQUIPMENT MFGRS NAMEPLATE DATA	BKR	BREAKER	INCAND	INCANDESCENT	PB	PULL BOX
	GFCI CONVENIENCE DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER - FIELD VERIFY HEIGHT		COMBINATION STARTER/FUSED DISCONNECT SWITCH; FUSED DISCONNECT SWITCH ELEMENT FUSES SIZED PER EQUIPMENT MFGRS NAMEPLATE DATA	C	CONDUIT	JB	JUNCTION BOX	PF	POWER FACTOR
	RECEPTACLE DOUBLE DUPLEX *		MAGNETIC STARTER - NEMA SIZE INDICATED NEMA 3R ENCLOSURE UNLESS OTHERWISE SPECIFIED	CATV	CABLE TV	KV	KILOVOLT	PH	PHASE
	HALF SWITCHED DUPLEX RECEPTACLE *		CIRCUIT BREAKER	CB	CIRCUIT BREAKER	KVA	KILOVOLT AMPERES	PIR	PASSIVE INFRARED
	SINGLE RECEPTACLE *		GROUND ROD WITH GROUNDWELL BOX	CCTV	CLOSED CIRCUIT TV	KW	KILOWATT	PNL	PANEL
	DUPLEX RECEPTACLE - CEILING MOUNTED		GROUND ELECTRODE	CKT	CIRCUIT	LCP	LIGHTING CONTROL	PV	PHOTOVOLTAIC
	LETTER INDICATES DUPLEX HALF CONTROLLED RECEPTACLE *		NORMALLY OPEN CONTACT	CL	CENTER LINE	LTG	LIGHTING	PVC	POLYVINYL
	LETTER INDICATES DUPLEX FULLY CONTROLLED RECEPTACLE *		NORMALLY CLOSED CONTACT	CLG	CEILING	LTV	LOW VOLTAGE	PWR	POWER
	FLOOR MOUNTED DUPLEX RECEPTACLE		TRANSFORMER - SEE SINGLE LINE FOR SIZE	C.O.	CONDUIT ONLY	KCM	THOUSAND	(RP)	RELOCATE
	FLOOR MOUNTED BOX		PULLBOX	CTR	CENTER	CIR	CIRCUIT MILS	RECPTS	RECEPTACLES
	POWER OUTLET - SEE PLANS FOR NEMA TYPE *		FLEX CONDUIT WITH CONNECTION	D	DIMMER	MCA	MINIMUM	REQMTS	REQUIREMENT(S)
	POWER POLE		CONDUIT - UP	DIM	DIMENSION	MDF	MAIN DISTRIBUTION FRAME	SHT	SHEET
	WALL TELEPHONE OUTLET **		CONDUIT - DOWN	DIST	DISTRIBUTION	MECH	MECHANICAL	SLD	SINGLE LINE DIAGRAM
	VOICE/DATA WALL OUTLET *		SURFACE METAL OR NON-METALLIC RACEWAY	(E)	EXISTING	MLO	MAIN LUGS ONLY	STC	SYSTEMS TERMINATION
	VOICE/DATA OUTLET MOUNTED ABOVE COUNTER - FIELD VERIFY HEIGHT		CONDUIT - EXISTING	EC	ELECTRICAL CONTRACTOR	MPC	MAXIMUM OVER CURRENT PROTECTION	SW	SWITCH
	SURFACE MOUNTED VOICE/DATA WALL OUTLET *		CONDUIT - CONCEALED IN WALLS OR CEILING	(EL)	EVENING LIGHT	MTD	MAIN POINT OF ENTRANCE	SWBD	SWITCHBOARD
	SURFACE MOUNTED VOICE/DATA OUTLET MOUNTED ABOVE COUNTER - FIELD VERIFY HEIGHT		CONDUIT - BELOW SLAB OR UNDERGROUND; 3/4" MIN.	EM	EMERGENCY	MTG	MOUNTING	TTB	TELEPHONE TERMINAL
	WIRELESS ACCESS POINT (WAP) - CEILING MOUNTED		CAPPED OR STUB-OUT CONDUIT	EMT	ELECTRICAL	MCCP	MAXIMUM OVER CURRENT PROTECTION	US	UNDERGROUND
	WIRELESS ACCESS POINT (WAP) - WALL MOUNTED - FIELD VERIFY HEIGHT		CONDUIT CONTINUATION	EQUIP	EQUIPMENT	N	NEW	VD	VOLTAGE DROP
	VOICE/DATA OUTLET - FLOOR MOUNTED		CONDUIT - HOME RUN TO PANEL, TERMINAL CABINET, ETC. AS INDICATED	EV	ELECTRICAL VEHICLE	NIC	NOT IN CONTRACT	W	WATT
	TV OUTLET *		RUNS MARKED WITH CROSSHATCHES INDICATE NUMBER OF #12 AWG WIRES WHEN MORE THAN TWO. SIZE CONDUIT ACCORDING TO SPECIFICATIONS AND APPLICABLE CODE.	FA	FIRE ALARM	NIEC	NOT IN ELECTRICAL CONTRACT	W/	WITH
	VOICE/DATA OUTLET - CEILING MOUNTED		CROSS HATCHES WITH NUMBER ADJACENT INDICATES WIRE SIZE OTHER THAN #12 AWG.	FACP	FIRE ALARM CONTROL PANEL	(NL)	NIGHT LIGHT	WP	WEATHERPROOF
	INTERIOR SPEAKERS CEILING MOUNTED		SHEET NOTE REFERENCE SYMBOL; SEE ASSOCIATED NOTE ON SAME SHEET	FC	FOOT CANDLE	NO	NUMBER	XFMR	TRANSFORMER
	INTERIOR SPEAKERS WALL MOUNTED		SCHEDULE SYMBOL; SEE ASSOCIATED NOTE ON SAME SHEET	FIN	FINISH	NOM	NOMINAL		
	CLOCK +8-0 AFF U.O.N. VERIFY BEFORE INSTALLATION			FL	FLOOR				
				FLA	FULL LOAD AMPS				
				FLUOR	FLUORESCENT				
				F	FUTURE				
				GC	GENERAL CONTRACTOR				

*+15' A.F.F. TO BOTTOM OF BOX, U.O.N.
**+48' A.F.F. TO TOP OF BOX, U.O.N.

[#] NUMBER IN BRACKETS DENOTES NUMBER
OF CABLE DROPS WHEN MORE THAN 2

EQUIPMENT ANCHORAGE	
<u>MEIP COMPONENT ANCHORAGE NOTES:</u>	
ALL MECHANICAL, PLUMBING AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. WHERE NO DETAIL IS INDICATED, THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2019 CBC, SECTION 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTER 13, 26 & 30:	
1. ALL PERMANENT EQUIPMENT AND COMPONENTS.	
2. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (e.g. HARD WIRE) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER, "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 120 / 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 BE DETAILED IN THE PLANS. 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 OF 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.	
<u>PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE</u>	
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 SECTION 13.6.5, 13.6.6, 13.6.7, 13.6.8 AND 2019 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 PRE-APPROVED INSTALLATION GUIDE (e.g. OSHPD 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 THE APPLICABLE OSHPD PRE-APPROVED (OPM #) # _____.	

APPLICABLE CODES & STANDARDS	
<u>CODES:</u>	
1. 2019 CALIFORNIA ADMINISTRATIVE CODE (C.C.R.), TITLE 24, PART 1.	
2. 2019 CALIFORNIA BUILDING CODE (CBC) C.C.R., TITLE 24, VOL. 1 & 2 BASED ON THE 2018 INTERNATIONAL BUILDING CODE (IBC) WITH CALIFORNIA AMENDMENTS.	
3. 2019 CALIFORNIA ELECTRICAL CODE (CEC) C.C.R., TITLE 24, PART 3 BASED ON THE 2017 NATIONAL ELECTRICAL CODE (NEC) WITH CALIFORNIA AMENDMENTS.	
4. 2019 CALIFORNIA MECHANICAL CODE (CMC) C.C.R., TITLE 24, PART 4 BASED ON THE 2018 UNIFORM MECHANICAL CODE (UMC) WITH CALIFORNIA AMENDMENTS.	
5. 2019 CALIFORNIA PLUMBING CODE (CPC) C.C.R., TITLE 24, PART 5 BASED ON THE 2018 UNIFORM PLUMBING CODE (UPC) WITH CALIFORNIA AMENDMENTS.	
6. 2019 CALIFORNIA ENERGY CODE C.C.R., TITLE 24, PART 6.	
7. 2019 CALIFORNIA FIRE CODE (FC) C.C.R., TITLE 24, PART 9 BASED ON THE 2018 INTERNATIONAL FIRE CODE (IFC) WITH CALIFORNIA AMENDMENTS.	
8. 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE C.C.R., TITLE 24, PART 11.	
9. 2019 CALIFORNIA REFERENCED STANDARDS CODE C.C.R., TITLE 24, PART 12.	
10. TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.	
11. NATIONAL FIRE ALARM CODE (NFPA 72) 2016.	
<u>STANDARDS:</u>	
1. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)	
2. ELECTRONICS INDUSTRIES ASSOCIATION (EIA)	
3. INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE)	
4. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)	
5. NATIONAL ELECTRICAL TESTING ASSOCIATION (NETA)	
6. UNDERWRITER LABORATORIES (UL)	
7. CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ACT STANDARDS (CAL/OSHA)	

SHEET INDEX	
E0.1	SYMBOLS, ABBREVIATIONS, CODES, STANDARDS, EQUIPMENT ANCHORAGE, NOTES & SHEET INDEX.
E1.1	ELECTRICAL DETAILS.
E2.1	ELECTRICAL SITE PLAN.
E3.1	ELECTRICAL PLANS - BUILDING J.

(DSA STAMP AREA)

SUGIMURA FINNEY ARCHITECTS

SFA

2105 SOUTH BASCOM AVE. SUITE 200 CAMPBELL, CA 95008 PHONE: 408.285.1500 FAX: 408.274.0000

LICENSED ARCHITECT

MARK C. FINNEY

NO. C-24673

9-30-20

STATE OF CALIFORNIA

REGISTERED PROFESSIONAL

ARCHITECT

BID SET

ELECTRICAL

STATE OF CALIFORNIA

AURUM CONSULTING ENGINEERS

MONTEREY BAY, INC.

Project No. 21-419-00

60 Garden Court • Suite 210 • Monterey, CA 93940 T.831.646.3330 • F.831.646.3336 • www.aecomb.com

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SYMBOLS, ABBREVIATIONS, CODES, STANDARDS, EQUIPMENT ANCHORAGE, NOTES & SHEET INDEX

REROOFING AND HVAC REPLACEMENT
LYDIKSEN ELEMENTARY SCHOOL
7700 HIGHLAND OAKS DR., PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS

NO. 1

ITEM

DATE

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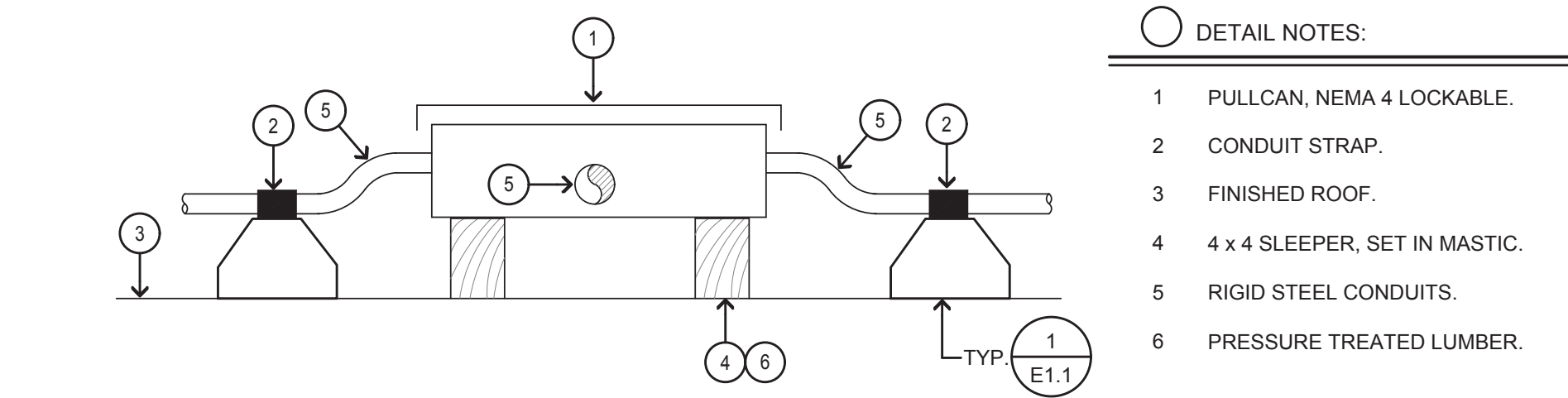
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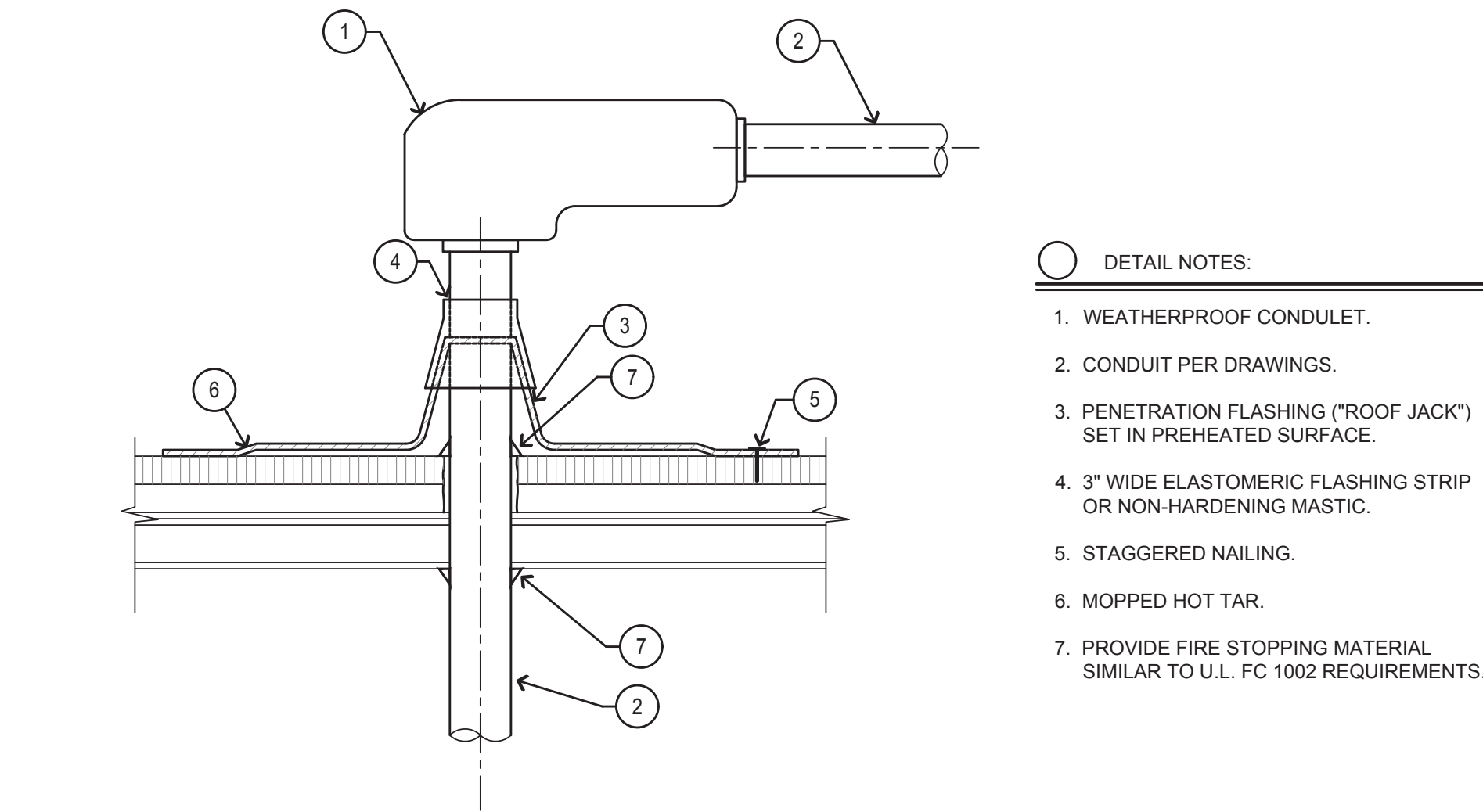
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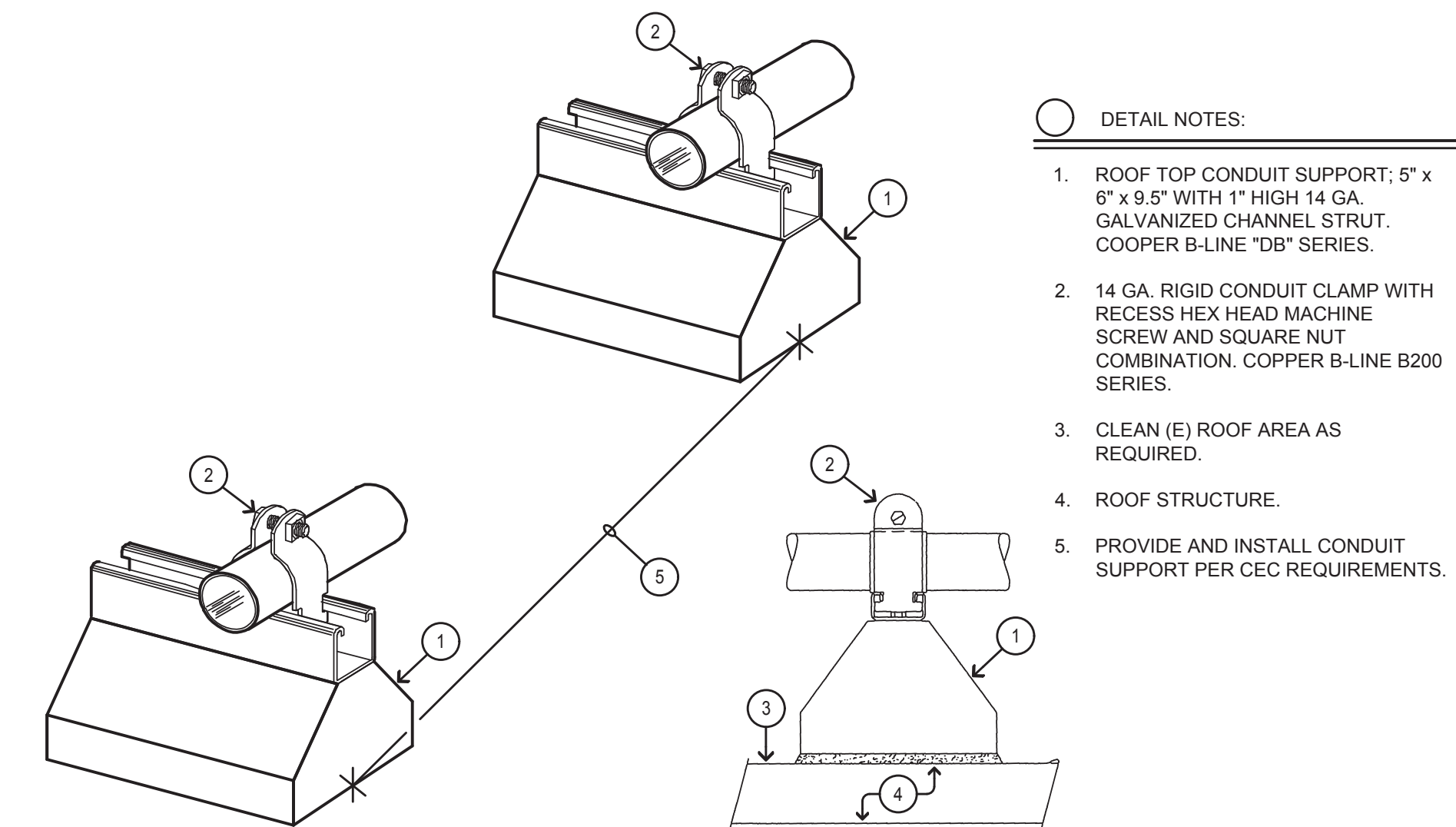
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3 PULLCAN AT ROOF DETAIL
NO SCALE



2 CONDUIT PENETRATION
NO SCALE



1 ROOF MOUNTED CONDUIT SUPPORT DETAIL
NO SCALE

(DSA STAMP AREA)

SUGIMURA
FINNEY
ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408.277.6500
FAX: 408.277.6505

LICENSED ARCHITECT
MARK C. FINNEY
NO. C-24873
9-30-23
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL
MARK C. FINNEY
NO. 5745
ELECTRICAL
STATE OF CALIFORNIA

ACE AURUM CONSULTING
ENGINEERS
MONTEREY BAY, INC.
Project No. 21-419-00
60 Garden Court • Suite 210 • Monterey, CA 93940
T.831.646.3330 • F.831.646.3336 • www.aacemb.com

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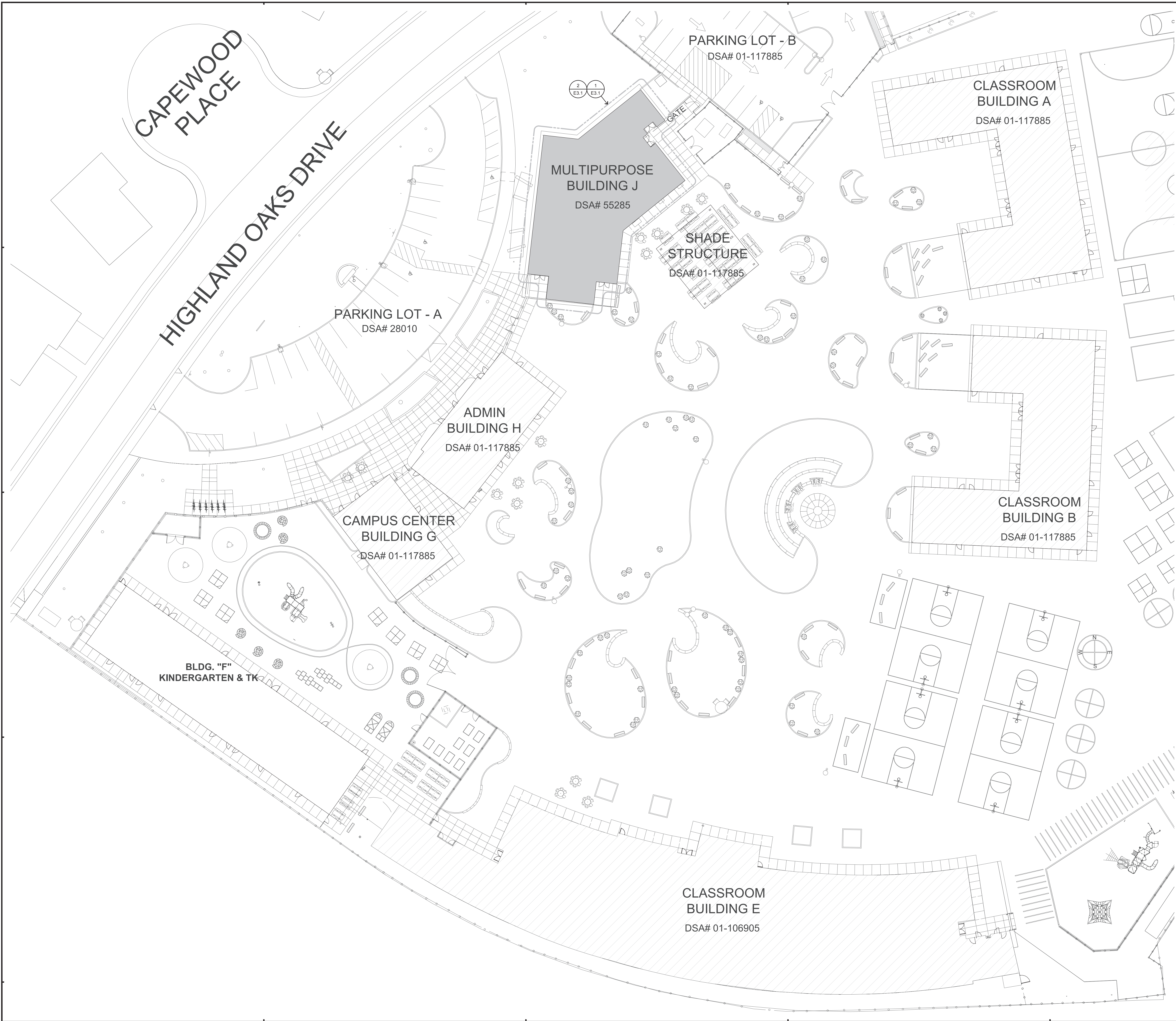
ELECTRICAL DETAILS

**REROOFING AND HVAC REPLACEMENT
LYDIKSEN ELEMENTARY SCHOOL
7700 HIGHLAND OAKS DR., PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT**

REVISIONS		
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E1.1



2151 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408.277.6000
FAX: 408.277.6005

ARCHITECTUREINTERIORSPLANNING

SUGIMURA
FINNEY
ARCHITECTS

SFA

REGISTERED ARCHITECT
MARK C. FINNEY
NO. C-24873
EXPIRATION DATE: 9-30-23
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL
ELECTRICAL
BID SET
STATE OF CALIFORNIA

AURUM CONSULTING
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ELECTRICAL SITE PLAN

REEROOFING AND HVAC REPLACEMENT
LYDIKSEN ELEMENTARY SCHOOL
7700 HIGHLAND OAKS DR., PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

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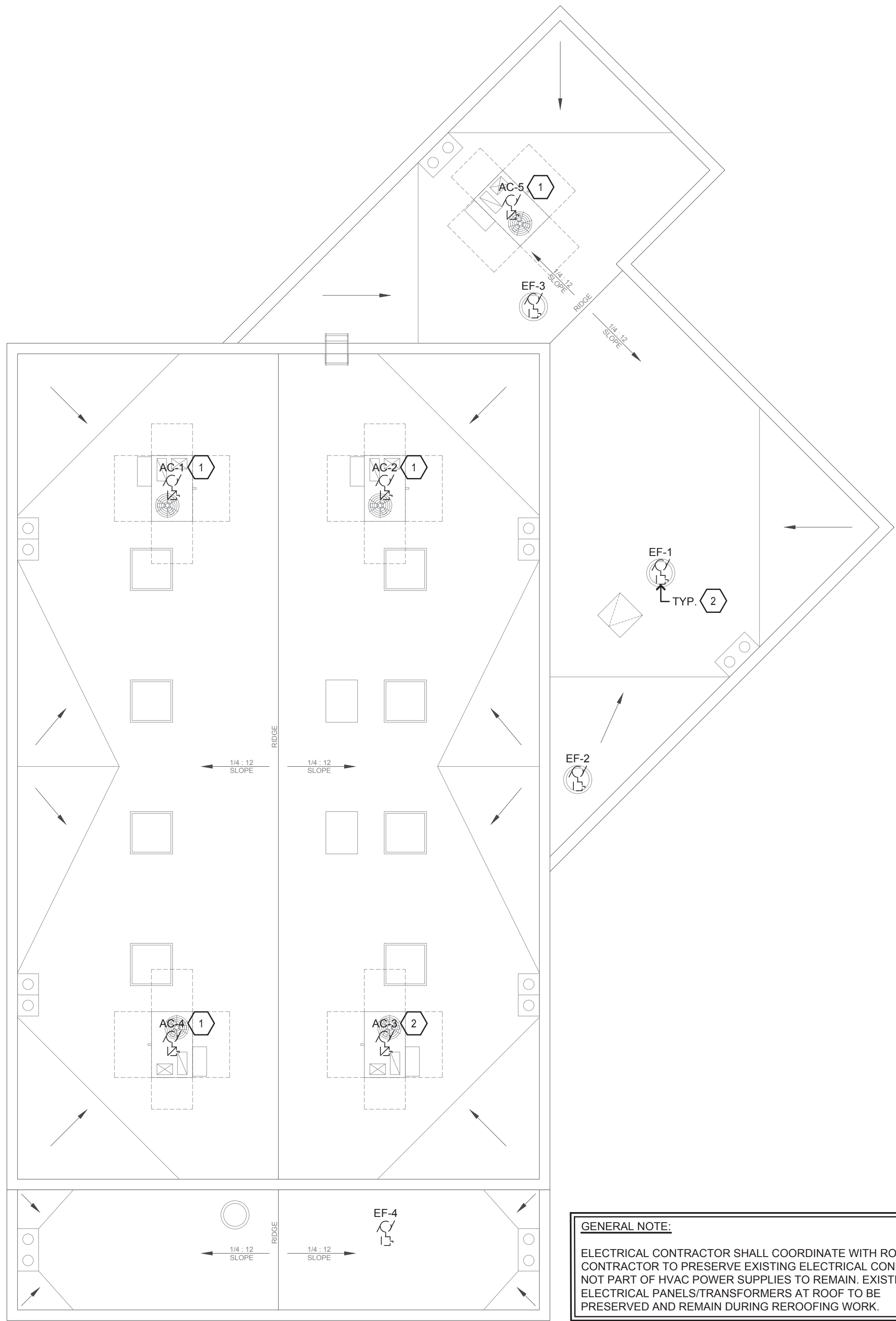
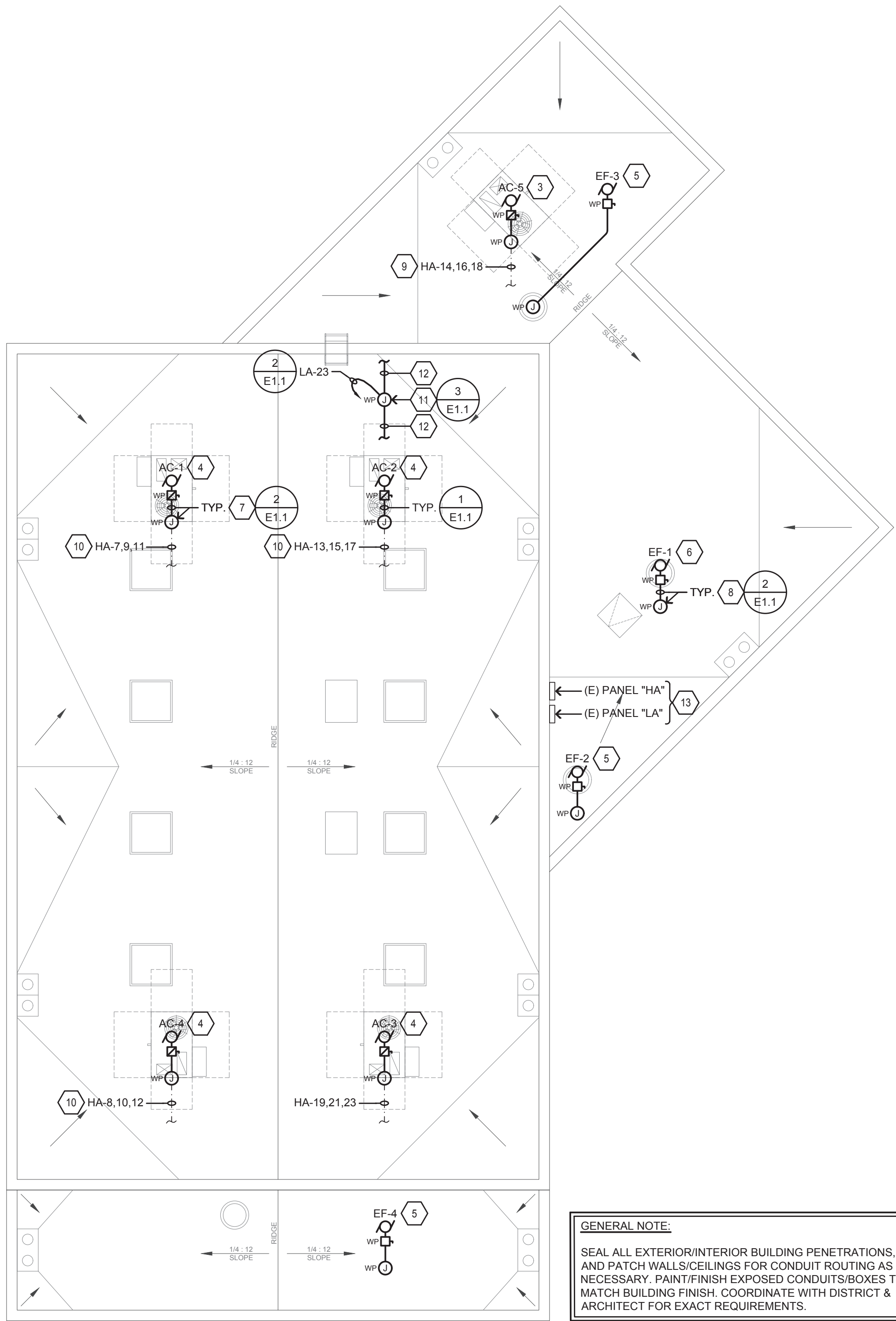
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BRANCH CIRCUIT CONDUCTOR SIZING TABLE		
CIRCUIT AMPACITY/VOLTAGE	CIRCUIT LENGTH	REQUIREMENT
20/120	56'-00"	3/4" C., 2 #10 & 1 #10 GND.
20/120	91'-140"	3/4" C., 2 #8 & 1 #10 GND.
20/277	131'-205"	3/4" C., 2 #10 & 1 #10 GND.
20/277	206'-330"	3/4" C., 2 #8 & 1 #10 GND.
NOTE: CONTRACTOR SHALL SIZE BRANCH CIRCUIT CONDUCTORS PER THE TABLE ABOVE AS DETERMINED BY THE CIRCUIT CONDUCTOR LENGTH, U.O.N. CONTRACTOR SHALL SPLICE TO #12 AWG WITHIN TERMINATION BOX FOR DEVICE CONNECTION IF NECESSARY.		

SHEET NOTES

- DEMOLISH EXISTING MECHANICAL UNIT AND ASSOCIATED BREAKER AT PANEL PER GENERAL DEMOLITION NOTES ON SHEET E0.1. CONTRACTOR SHALL CUT BACK FEEDER CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE AND PRESERVE FOR CONNECTION OF NEW MECHANICAL UNIT UNDER NEW WORK; SEE 2/E3.1 FOR NEW WORK.
- DEMOLISH EXISTING MECHANICAL UNIT PER GENERAL DEMOLITION NOTES ON SHEET E0.1. CONTRACTOR SHALL CUT BACK FEEDER CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE AND PRESERVE FOR CONNECTION OF NEW MECHANICAL UNIT UNDER NEW WORK; SEE 2/E3.1 FOR NEW WORK.
- AIR CONDITIONING UNIT; 12 MCA, 480V, 3Ø.
- AIR CONDITIONING UNIT; 17 MCA, 480V, 3Ø.
- EXHAUST FAN; 1/4 HP, 120V, 1Ø. CONNECT VIA EXISTING LIGHTING CONTROLS.
- EXHAUST FAN; 1/2 HP, 120V, 1Ø. CONNECT VIA EXISTING LIGHTING CONTROLS.
- CONTRACTOR SHALL INTERCEPT EXISTING FEEDER CONDUIT PRESERVED DURING DEMOLITION WORK WITH JUNCTION BOX AT ACCESSIBLE CEILING SPACE AND SPLICE AND EXTEND WITH 3/4" C., 3 #10 & 1 #10 GND. TO NEW AIR CONDITIONING UNIT.
- CONTRACTOR SHALL INTERCEPT EXISTING FEEDER CONDUIT PRESERVED DURING DEMOLITION WORK WITH JUNCTION BOX AT ACCESSIBLE CEILING SPACE AND SPLICE AND EXTEND WITH 3/4" C., 2 #10 & 1 #10 GND. TO NEW ROOF EXHAUST FAN.
- PROVIDE AND INSTALL 15 AMP, 3-POLE BREAKER WITH ASSOCIATED MOUNTING HARDWARE AT EXISTING PANEL. NEW BREAKER SHALL MATCH EXISTING IN RATING AND TYPE.
- PROVIDE AND INSTALL 20 AMP, 3-POLE BREAKER WITH ASSOCIATED MOUNTING HARDWARE AT EXISTING PANEL. NEW BREAKER SHALL MATCH EXISTING IN RATING AND TYPE.
- CONTRACTOR SHALL PROVIDE AND INSTALL 8" SQ. X 4" DEEP NEMA 3R PULLCAN. CONTRACTOR SHALL INSTALL MINIMUM OF (2) AS NECESSARY TO NOT EXCEED 270 DEGREES OF CONDUIT BENDS.
- CONNECT ALL CONVENIENCE RECEPTACLES FURNISHED WITH NEW AIR CONDITIONING UNITS; (10) RECEPTACLES MAX. PER 120V CIRCUIT.
- LOCATED IN ELECTRICAL ROOM BELOW.



2 ELECTRICAL ROOF PLAN - BUILDING J
SCALE: 1/8"=1'-0"

1 ELECTRICAL DEMOLITION PLAN - BUILDING J
SCALE: 1/8"=1'-0"

ELECTRICAL PLANS - BUILDING J

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