Agenda Item A.7
CONSENT CALENDAR
Meeting Date: September 16, 2025

TO: Mayor and Councilmembers

SUBMITTED BY: Matthew R. Fore, General Services Director

SUBJECT: Authorization to Advertise Construction Bid for the Replacement of Heating, Ventilation, and Air Conditioning Rooftop Units 11 and 13 at City Hall

RECOMMENDATION:

Authorize Staff to advertise a notice inviting construction bids for the Replacement of Heating, Ventilation, and Air Conditioning Rooftop Units 11 and 13 at City Hall.

BACKGROUND:

City Hall is equipped with a comprehensive heating, ventilation, and air conditioning (HVAC) system, which is comprised of multiple heating and air conditioning units. In May of 2024, Beyond Air, Inc. (Beyond Air), the City's contract HVAC maintenance vendor, noted that two units, Rooftop Units (RTUs) 11 and 13, were failing and in need of replacement.

On May 21, 2024, City Council authorized the City Manager to execute Agreement No. 2024-046 (Agreement) with RRM Design Group (RRM). The purpose of the Agreement is to assist the City to design several improvements to City Hall, including: 1) workspaces; 2) replacement of mechanical and life safety systems; and 3) Americans with Disabilities Act improvements, including installation of an elevator. As part of the Agreement, RRM further evaluated the condition of the units. In February 2025, 3C, a mechanical engineering subcontractor to RRM, verified and confirmed the findings and recommendations of Beyond Air, and thus recommended that the City replace the subject RTUs.

DISCUSSION:

RRM and its subcontractor 3C have developed plans and specifications to replace the RTUs. The plans are in final review by the City Building Division and issuance of a building permit is imminent. Staff is therefore requesting Council authorization to issue a Notice Inviting Construction Bids for the replacement of RTUs 11 and 13. The issued permit plan set is included as Attachment 1.

Staff will return to Council in the future (est. Fall of 2025) to request that Council formally approve the project plans and specifications that are part of the bid documents and to adopt findings pursuant to the California Environmental Quality Act.

GOLETA STRATEGIC PLAN:

City-Wide Initiative: 5. Strengthen Infrastructure

Strategic Goal: 5.4 Protect and maintain our City-owned facilities and critical operational assets.

FISCAL IMPACTS:

There are no fiscal impacts associated with this Council item. Once bids are received, Staff will return to Council with a request to appropriate funds from the Facility and Equipment Reserve to cover the cost of this construction work.

LEGAL REVIEW BY: Isaac Rosen, City Attorney

APPROVED BY: Robert Nisbet, City Manager

ATTACHMENT:

1. Plan Set for the Replacement of Rooftop Units 11 & 13 at City Hall

ATTACHMENT 1

Plan Set for the Replacement of Rooftop Units 11 & 13 at City Hall

GOLETA CITY HALL
HVAC UNIT REPLACEMENT

130 CREMONA DRIVE, GOLETA CA 93117

ABBREVIATIONS

A/C	AIR CONDITIONING
ABV	ABOVE
ACOUS	ACOUSTICAL
ACT	ACOUSTICAL CEILING TILE
ADA	AMERICANS WITH DISABILITIES ACT
AFCI	ARC FAULT CIRCUIT INTERRUPTER
AFF	ABOVE FINISH FLOOR
AL	ALUMINUM
ALT	ALTERNATE
ARCH	ARCHITECT(URAL)
BD	BOARD
BDRM	BEDROOM
BET	BETWEEN
BIT	BITUMINOUS
BLDG	BUILDNG
BLKG	BLOCKING
BLW	BELOW
BM	BEAM
BOT	BOTTOM
BUR	BUILT UP ROOF
CB	CATCH BASIN
CBC	CALIFORNIA BUILDING CODE
CEM	CEMENT
CFM	CUBIC FEET PER MINUTE
CIP	CAST IN PLACE
CJ	CONTROL JOINT
CL	CENTER LINE
CLG	CEILING
CLO	CLOSET
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
CPT	CARPET
CT	CERAMIC TILE
CTR	CENTER
DBL	DOUBLE
DF	DRINKING FOUNTAIN
DIA	DIAMETER, DIAPHRAGM
DIM	DIMENSION
DN	DOWN
DR	DOOR
DS	DOWN SPOUT
DTL	DETAIL
DW	DISHWASHER
DWG	DRAWING
(E)	EXISTING
E	EAST
EA	EACH
EJ	EXPANSION JOINT
EL	ELEVATION
ELEV	
ELEC	ELECTRIC
ENCL	ENCLOSURE
EQ	EQUAL
EQUIP	EQUIPMENT
EXH	EXHAUST
EXP	EXPANSION
EXT	EXTERIOR
FACP	FIRE ALARM CONTROL PANEL
FAU	FORCED AIR UNIT
FAWP	FLUID APPLIED WATERPROOFING
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE
FH	FIRE HYDRANT
FHC	FIRE HOSE CABINET
FIN	FINISH
FIXT	FIXTURE
FLR	FLOOR
FLUOR	FLOURESCENT
FND	FOUNDATION
FO	FACE OF
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOIC	FURNISHED BY OWNER INSTALLED BY CONTRACTOR
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FRP	FIBERGLASS REINFORCED PANELS
FT	FOOT OR FEET
FTG	FOOTING
GA	GAUGE, GAGE
GALV	GALVANIZED
GB	GRAB BAR
GC	GENERAL CONTRACTOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GT	GROUT
GWB	GYPSUM BOARD
GYP	GYPSUM
HB	HOSE BIBB
HC	HOLLOW CORE
HDWD	HARDWOOD
HDWR	HARDWARE
HGT	HEIGHT
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HVAC	HEATING, VENTILATION, A/C
ID	INSIDE DIAMETER
IIC	IMPACT INSULATION CLASS
IN	INCH
INCAND	INCANDESCENT
INSUL	INSULATION, INSULATED
INT	INTERIOR
JC	JANITORS CLOSET
JT	JOINT
LAM	LAMINATE
LAV	LAVATORY
LBS	POUNDS
LEED	LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN
LF	LINEAR FEET
LIN	LINEN CLOSET
LINO	LINOLEUM
LT(G)	LIGHT(ING)
LVL	LAMINATED VENEER LUMBER
LVT	LUXURY VINYL TILE
LW	LIGHTWEIGHT
MAX	MAXIMUM
MDF	MEDIUM DENSITY FIBERBOARD
MECH	MECHANICAL
MEMB	MEMBRANE
MEP	MECHANICAL, ELECTRICAL, PLUMBING
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MTD	MOUNTED
MTL	METAL
N	NORTH
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
O.P.	OVERFLOW PIPE
OC	ON CENTER
OD	OVERFLOW DRAIN
OFF	OFFICE
OH	OPPOSITE HAND
OPG	OPENING
OPP	OPPOSITE
(P)	PROPOSED
PERM	PERIMETER
PERP	PERPENDICULAR
PG	PAINT GRADE
PL	PLATE, PROPERTY LINE
PLAM	PLASTIC LAMINATE
PLBG	PLUMBING
PLYWD	PLYWOOD
PNL	PANEL
PP	POWER POLE
PR	PAIR
PRTN	PARTITION
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSL	PARALLEL STRAND LUMBER
PT	PRESSURE TREATED
PTD	PAINTED
PV	PHOTO VOLTAIC
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
QTY	QUANTITY
R	RADIUS, RISER
RB	RUBBER BASE
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REF	REFRIGERATOR
REINF	REINFORCED
REQD	REQUIRED
RH	RIGHT HAND
RM	ROOM
RO	ROUGH OPENING
RTU	ROOF TOP UNIT (MECH)
S	SOUTH
SAFB	SOUND ATTENUATION FIBER BATT
SAWP	SELF ADHEREING WATERPROOFING
SC	SCUPPER/SOLID CORE
SCHED	SCHEDULE
SEAL	SEALANT
SECT	SECTION
SF	SQUARE FOOT
SHT	SHEET
SHTHG	SHEATHING
SIM	SIMILAR
SM	SHEET METAL
SPEC	SPECIFICATION
SQ	SQUIRE
SS	SOLID SURFACE
SSTL	STAINLESS STEEL
STC	SOUND TRANSMISSION CLASS
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUSP	SUSPENDED
SV	SHEET VINYL
SYM	SYMMETRICAL
T	TREAD
T&G	TONGUE & GROOVE
TB	TACKBOARD
TEL	TELEPHONE
TEMP	TEMPERED
TER	TERRAZZO
THK	THICK
THR	THRESHOLD
TJI	TRUSS JOIST I-JOIST
TO	TOP OF
TOS	TOP OF SLAB
TOW	TOP OF WALL
TRANS	TRANSFORMER
TV	TELEVISION
TYP	TYPICAL
UFAS	UNIFORM FEDERAL ACCESSIBILITY STANDARDS
UG	UNDERGROUND
UNFIN	UNFINISHED
UNO	UNLESS NOTED OTHERWISE
UV	ULTRAVIOLET
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VIF	VERIFY IN FIELD
VTR	VENT TERMINATION PIPE
VWC	VINYL WALL COVERING
W	WEST
W/	WITH
W/D	WASHER DRYER
W/O	WITHOUT
WC	WATERCLOSET
WD	WOOD
WDW	WINDOW
WH	WATER HEATER
WI	WROUGHT IRON
WIN	WINDOW
WP	WATERPROOF(ING)
WR	WEATHER RESISTIVE
WRB	WATER RESISTIVE BARRIER
WSCT	WAINSCOT
WT	WEIGHT
WWF	WELDED WIRE FABRIC
YD	YARD

GENERAL NOTES

USE OF PLANS: THESE PLANS ARE THE PROPERTY OF RRM AND MAY NOT BE USED WITHOUT THE EXPRESS, WRITTEN CONSENT.

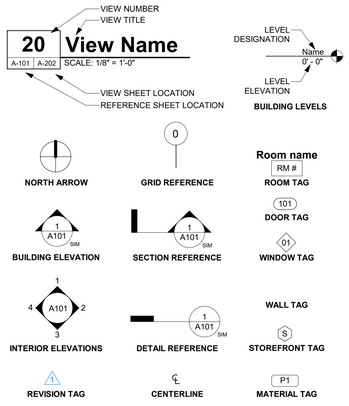
THESE NOTES APPLY TO ALL PORTIONS, PHASES AND SUBCONTRACTORS OF THIS PROJECT.

APPLICABLE CODES ARE STANDARDS:

- *2022 CALIFORNIA BUILDING CODE AND ITS APPENDICES AND STANDARDS.*
- *2022 CALIFORNIA PLUMBING CODE AND ITS APPENDICES AND STANDARDS.*
- *2022 CALIFORNIA MECHANICAL CODE AND ITS APPENDICES AND STANDARDS.*
- *2022 CALIFORNIA FIRE CODE AND ITS APPENDICES AND STANDARDS.*
- *2022 CALIFORNIA ELECTORAL CODE AND ITS APPENDICES AND STANDARDS.*
- *2022 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS.*
- *2022 CALIFORNIA GREEN BUILDING STANDARDS CODE AND ITS APPENDICES AND STANDARDS.*
- *CURRENT CITY OF GOLETA MUNICIPAL CODE.*

1. ALL WORK DESCRIBED IN THE DRAWINGS SHALL BE VERIFIED FOR DIMENSION, GRADE, EXTENT AND COMPATIBILITY WITH EXISTING SITE CONDITIONS. ANY DISCREPANCIES AND UNEXPECTED CONDITIONS THAT AFFECT OR CHANGE THE WORK DESCRIBED IN THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION IMMEDIATELY. DO NOT PROCEED WITH THE WORK IN THE AREA OF DISCREPANCIES UNTIL ALL SUCH DISCREPANCIES ARE RESOLVED. IF THE CONTRACTOR CHOOSES TO DO, HE/SHE SHALL BE PRECEDING AT HIS/HER OWN RISK.
2. DIMENSIONS SHOWN SHALL TAKE PRECEDENCE OVER DRAWING SCALE OR PROPORTION. LARGER SCALE DRAWINGS SHALL TAKE PRECEDENCE OVER SMALLER SCALE DRAWINGS. ALL DIMENSIONS ARE ROUGH AND TO THE FACE OF FRAMING.
3. CONTRACTOR IS TO BE RESPONSIBLE FOR BEING FAMILIAR WITH THESE DOCUMENTS INCLUDING ALL CONTRACT REQUIREMENTS.
4. CONTRACTOR TO REVIEW CALIFORNIA GREEN BUILDING CODE REQUIREMENTS FOR CONTRACTOR REQUIREMENTS.
5. TEMPORARY FACILITIES: CONTRACTOR SHALL PAY FOR, PROVIDE AND MAINTAIN TEMPORARY FACILITIES FOR PROJECT PROTECTION AND CONSTRUCTION, AND AS REQUIRED BY LOCAL REGULATION AND THESE DOCUMENTS. SUCH FACILITIES INCLUDE, BUT ARE NOT LIMITED TO: TOILETS, LIGHTS, HEATERS, POWER, GAS FANS, WATER, PHONES, FENCES, SIGNS, SHEDS, ETC. REMOVE FROM SITE UPON COMPLETION OF WORK. OBTAIN BUILDING OFFICIAL OR FIRE MARTIAL APPROVAL PRIOR TO USE OF ANY TEMPORARY HEATING DEVICE.
6. CONTRACTOR SHALL PROVIDE FOR PROTECTION AND SAFETY: RESPONSIBLE FOR ALL ITEMS (SIGNS, LIGHTS, FENCES, BRACING, ANCHOR-AGE, FIRE-EXTINGUISHERS, ETC.) NECESSARY FOR THE PROTECTION OF THE PUBLIC, WORKERS, MATERIALS, CONSTRUCTION AND PROPERTY PER LOCAL, STATE, AND FEDERAL REQUIREMENTS (INCLUDING EARTHQUAKES, FIRES, SPILLS, ACCIDENTS, EROSION, MUD, DUST ETC.).
7. A SEPARATE OFFICER, ACCESS EASEMENT/AGREEMENT, AND/OR RECIPROCAL ACCESS EASEMENT/AGREEMENT MAY BE REQUIRED TO ENSURE THAT THE PROPOSED PRIVATE ACCESS ROADWAY WILL REMAIN OPEN TO THROUGH TRAFFIC AND EMERGENCY VEHICLES PRIOR TO FINAL OF BUILDING PERMIT.
8. SHOP WELDS MUST BE PERFORMED BY A LICENSED FABRICATOR'S SHOP.
9. OSHA PERMITS REQUIRED FOR VERTICAL CUTS 5' OR GREATER.

SYMBOLS



PROJECT DIRECTORY

OWNER — CITY OF GOLETA
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CONTACT: PATRICK ZUROSKE
EMAIL: pzuroske@cityofgoleta.org
P:(805) 690-5128

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CONTACT: CHARLES DELLINGER
EMAIL: cadellinger@rrmdesign.com
P:(805) 543-1794

STRUCTURAL ENGINEER — RRM DESIGN GROUP
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P:(805) 543-1794

MECHANICAL ENGINEER — 3C ENGINEERING
ADDRESS: 1500 PALM STREET, SAN LUIS OBISPO, CA 93401
CONTACT: DENVER STANGER
EMAIL: dstanger@3ceng.com
P:(805) 540-3363

ELECTRICAL ENGINEER — THOMA ELECTRIC, INC.
ADDRESS: 3562 EMPLEO STREET, SUITE C, SAN LUIS OBISPO, CA 93401
CONTACT: CHRIS JOSE
EMAIL: cjose@thomaelec.com
P:(805) 543-3850

DEFFERED SUBMITTALS

1. FIRE ALARM SYSTEM

SEPARATE SUBMITTALS

1. NONE.

PROJECT INFORMATION

PROJECT SCOPE

1. REMOVAL OF TWO (2) EXISTING HVAC ROOFTOP HVAC UNITS, DEMOLITION OF SUPPORT CURBS, AND PARTIAL DEMOLITION OF DUCTWORK.
2. INSTALLATION OF TWO (2) NEW ROOFTOP HVAC UNITS AND CONSTRUCTION OF NEW SUPPORT CURBS, LIMITED ROOFING AND FLASHING, AND NEW DUCTWORK.
3. CONSTRUCTION OF NEW STRUCTURAL FRAMING AND CONNECTIONS.
4. ALL OTHER WORK INDICATED IN THE CONTRACT DOCUMENTS.

DESCRIPTION

OCCUPANCY:	B
CONSTRUCTION TYPE:	V-B
FIRE SPRINKLERED:	NO
BUILDING HEIGHT:	29' - 0"
NUMBER OF STORIES:	2
BUILDING AREA:	37,803 SF

SUPPORTING DOCUMENTS

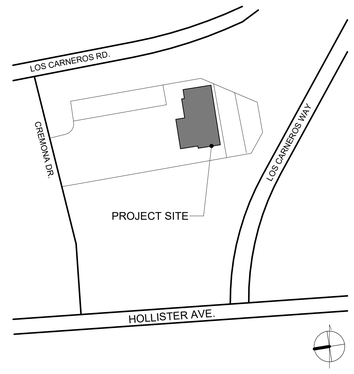
STRUCTURAL CALCULATIONS

PREPARED BY:	RRM DESIGN GROUP
DATE PREPARED:	JULY 15, 2025
JOB NUMBER:	1806-03-PS24

ENERGY COMPLIANCE

PREPARED BY:	3C ENGINEERING
DATE PREPARED:	MAY 9, 2025
JOB NUMBER:	1806-03-PS24

VICINITY MAP



SHEET INDEX

SHEET COUNT: 17

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LICENSED ARCHITECT — CHARLES N. DELLINGER — C 39623 — 09-30-25 RENEWAL DATE — STATE OF CALIFORNIA

1

CONSULTANT

AGENCY

CITY OF GOLETA

GOLETA CITY HALL - HVAC REPLACEMENT
130 CREMONA DRIVE, GOLETA CA 93117

TITLE SHEET

NO.	REVISION	DATE
1	PLAN CHECK RESPONSE 1	08/25/25

PROJECT MANAGER CD
DRAWN BY CW | **CHECKED BY** CW
DATE AUGUST 25, 2025
PROJECT NUMBER 1806-03-PS24
SHEET G-001

PLAN CHECK RESPONSE 1

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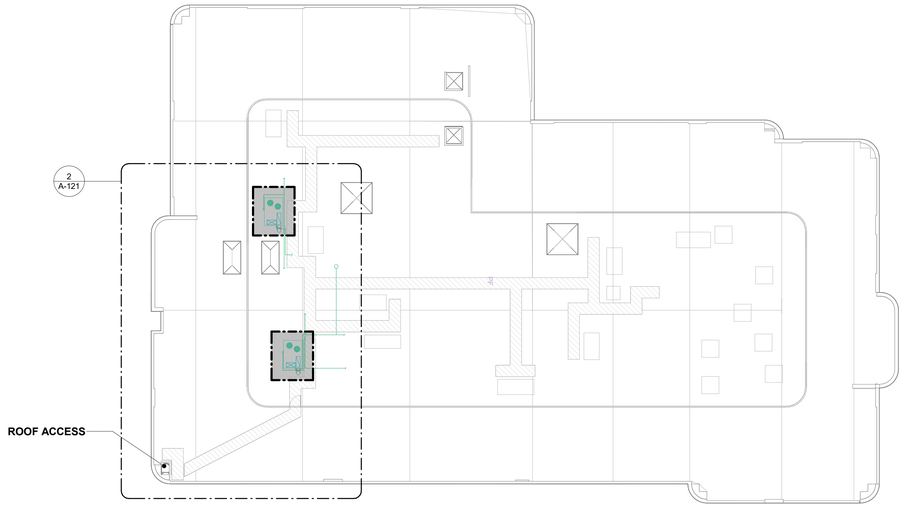
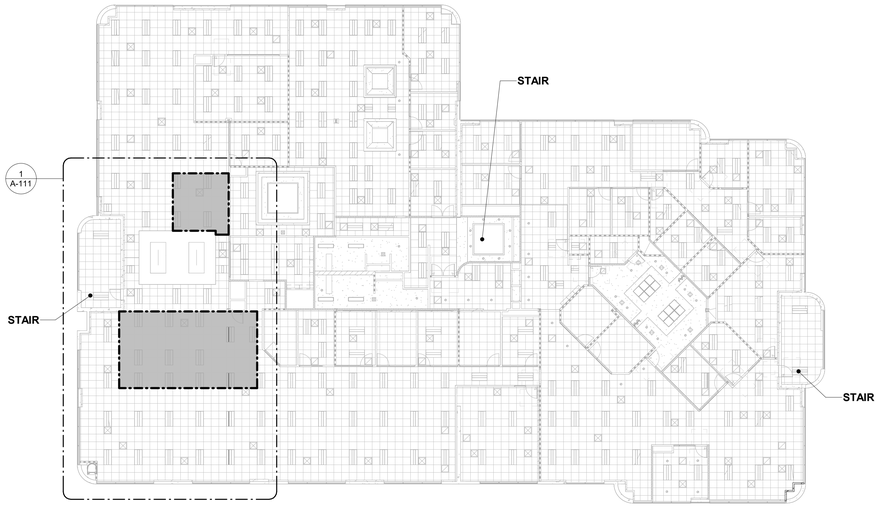


3 ROOF PLAN
A-101 SCALE: 1/16" = 1'-0"



4 SECOND FLOOR REFLECTED CEILING PLAN
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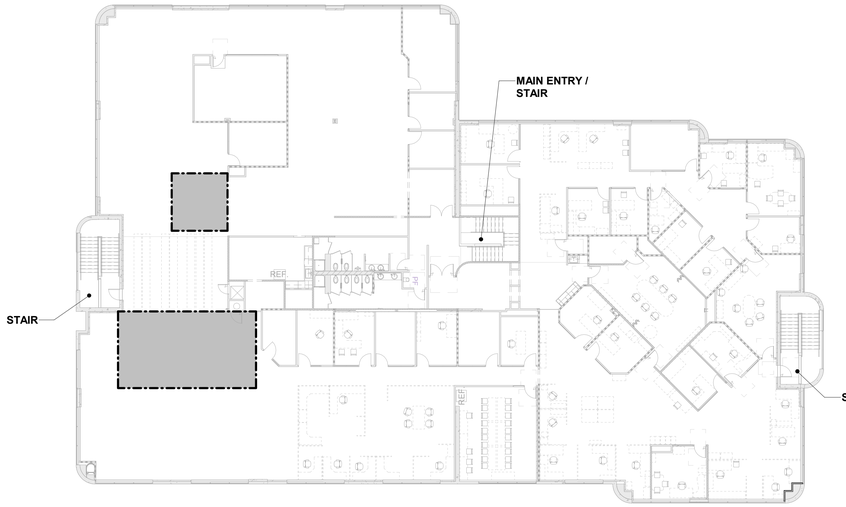

2 SECOND FLOOR PLAN
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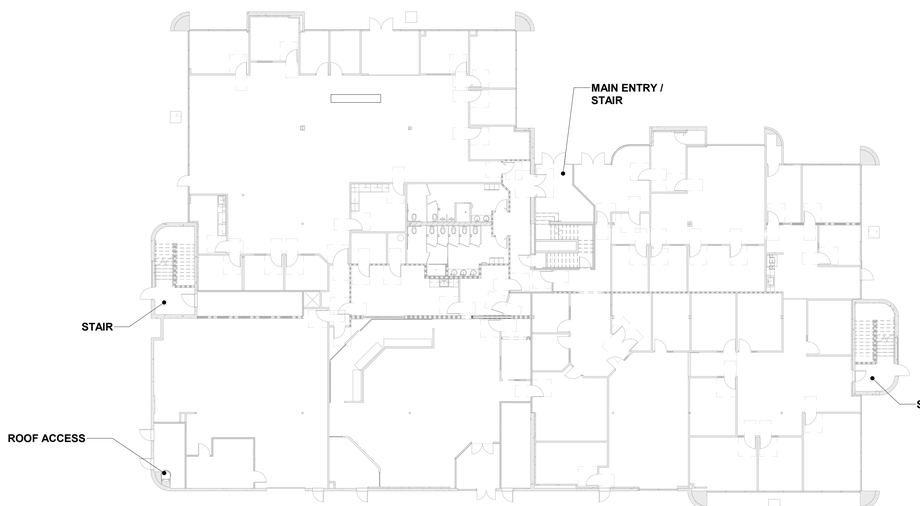

1 GROUND FLOOR PLAN (FOR REFERENCE ONLY)
A-101 SCALE: 1/16" = 1'-0"

LEGEND

AREA OF WORK, SEE STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS.

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LICENSED ARCHITECT
JOHN M. KNOX
C 39623
09-30-25
RENEWAL DATE
STATE OF CALIFORNIA
1

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CITY OF GOLETA

GOLETA CITY HALL - HVAC REPLACEMENT
130 CREMONA DRIVE, GOLETA CA 93117

OVERALL PLANS

NO.	REVISION	DATE
1	PLAN CHECK RESPONSE 1	08/25/25

PROJECT MANAGER
CD

DRAWN BY CW | **CHECKED BY** CW

DATE
AUGUST 25, 2025

PROJECT NUMBER
1806-03-PS24

SHEET
A-101

PLAN CHECK RESPONSE 1

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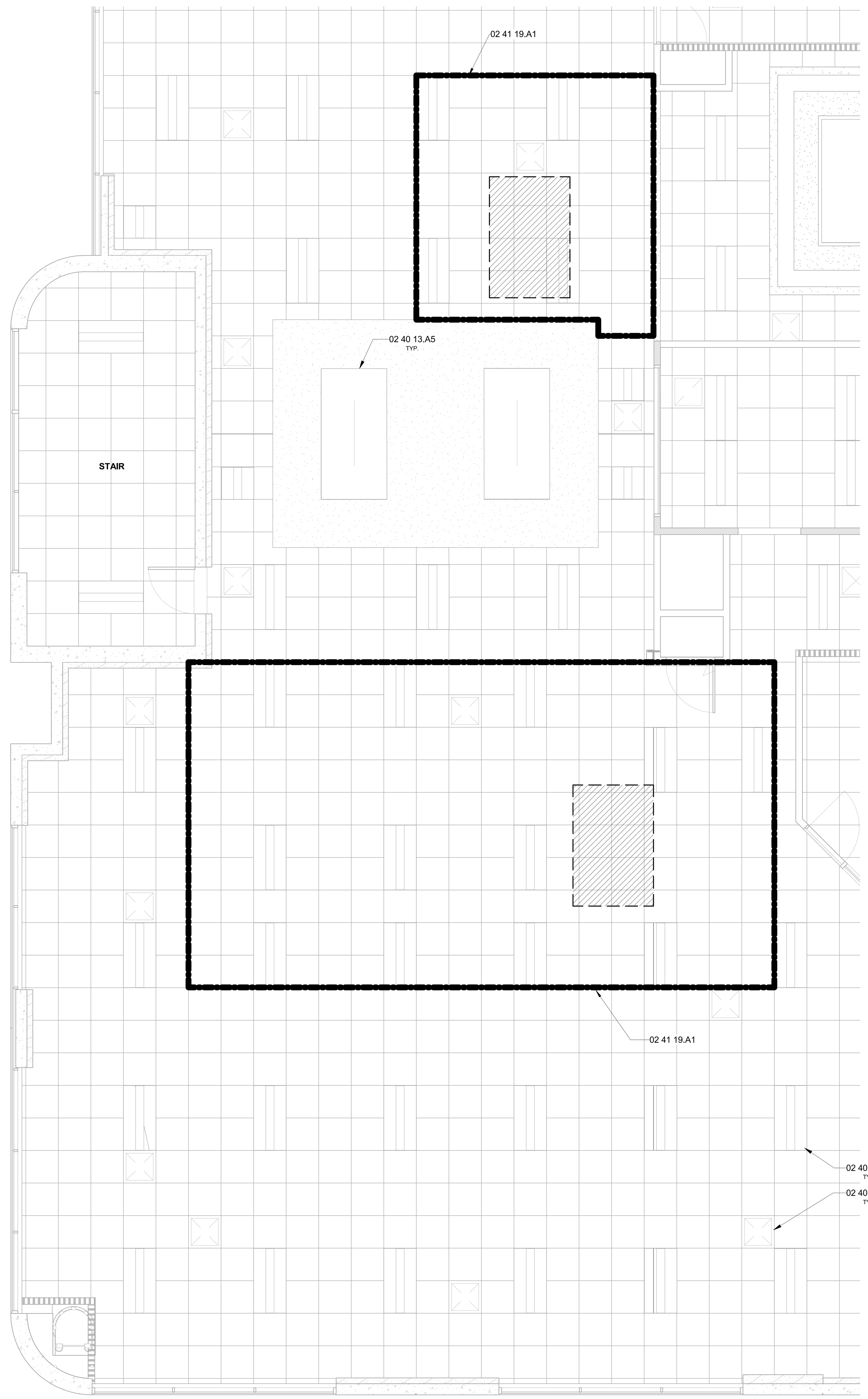

NOTE:
THE INSTALLATION OF THE NEW GLU-LAM BEAM ON THE SECOND FLOOR MAY REQUIRE SPECIAL MEANS AND METHODS DUE TO LIMITED ACCESS. CONTRACTORS SHALL ACCOUNT FOR ALL NECESSARY EQUIPMENT, LABOR, AND COORDINATION EFFORTS NECESSARY TO TRANSPORT AND INSTALL THE BEAM IN ITS FINAL LOCATION. THIS MAY INCLUDE EXPLORATION OF ALTERNATIVE ACCESS ROUTES AND/OR PARTIAL DISASSEMBLY OF EXISTING ELEMENTS. CONTRACTORS SHALL COORDINATE THIS PROCESS WITH THE CITY OF GOLETA.

1 SECOND FLOOR PARTIAL REFLECTED CEILING PLAN

A-101 | A-111 SCALE: 1/4" = 1'-0"

RCP GENERAL NOTES

1. SEE STRUCTURAL DRAWINGS FOR MORE INFORMATION.
2. SEE MECHANICAL DRAWINGS FOR MORE INFORMATION.
3. SEE ELECTRICAL DRAWINGS FOR MORE INFORMATION.

KEYNOTES

02 40 13.A2	EXISTING LIGHT FIXTURE
02 40 13.A3	EXISTING MECHANICAL REGISTER
02 40 13.A5	EXISTING SKYLIGHT
02 41 19.A1	REMOVE AND PROTECT EXISTING CEILING GRID SYSTEM AND TILES, LIGHT FIXTURES, REGISTERS AND OTHER COMPONENTS. REPAIR OR REPLACE ANY DAMAGED CEILING COMPONENTS OR FIXTURES.

LEGEND

AREA OF WORK, SEE STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS.

GENERAL LOCATION OF MECHANICAL UNIT ABOVE

EXISTING GYPSUM BOARD CEILING

EXISTING ACOUSTICAL TILE CEILING

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LICENSED ARCHITECT CAMERON M. WIRE C39623 09-30-25 RENEWAL DATE STATE OF CALIFORNIA

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CITY OF GOLETA

GOLETA CITY HALL - HVAC REPLACEMENT

130 CREMONA DRIVE, GOLETA CA 93117

SECOND FLOOR PARTIAL RCP

NO.	REVISION	DATE
1	PLAN CHECK RESPONSE 1	08/25/25

PROJECT MANAGER
CD
DRAWN BY
CW
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CW
DATE
AUGUST 25, 2025
PROJECT NUMBER
1806-03-PS24
SHEET
A-111

PLAN CHECK RESPONSE 1

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ROOF PLAN GENERAL NOTES

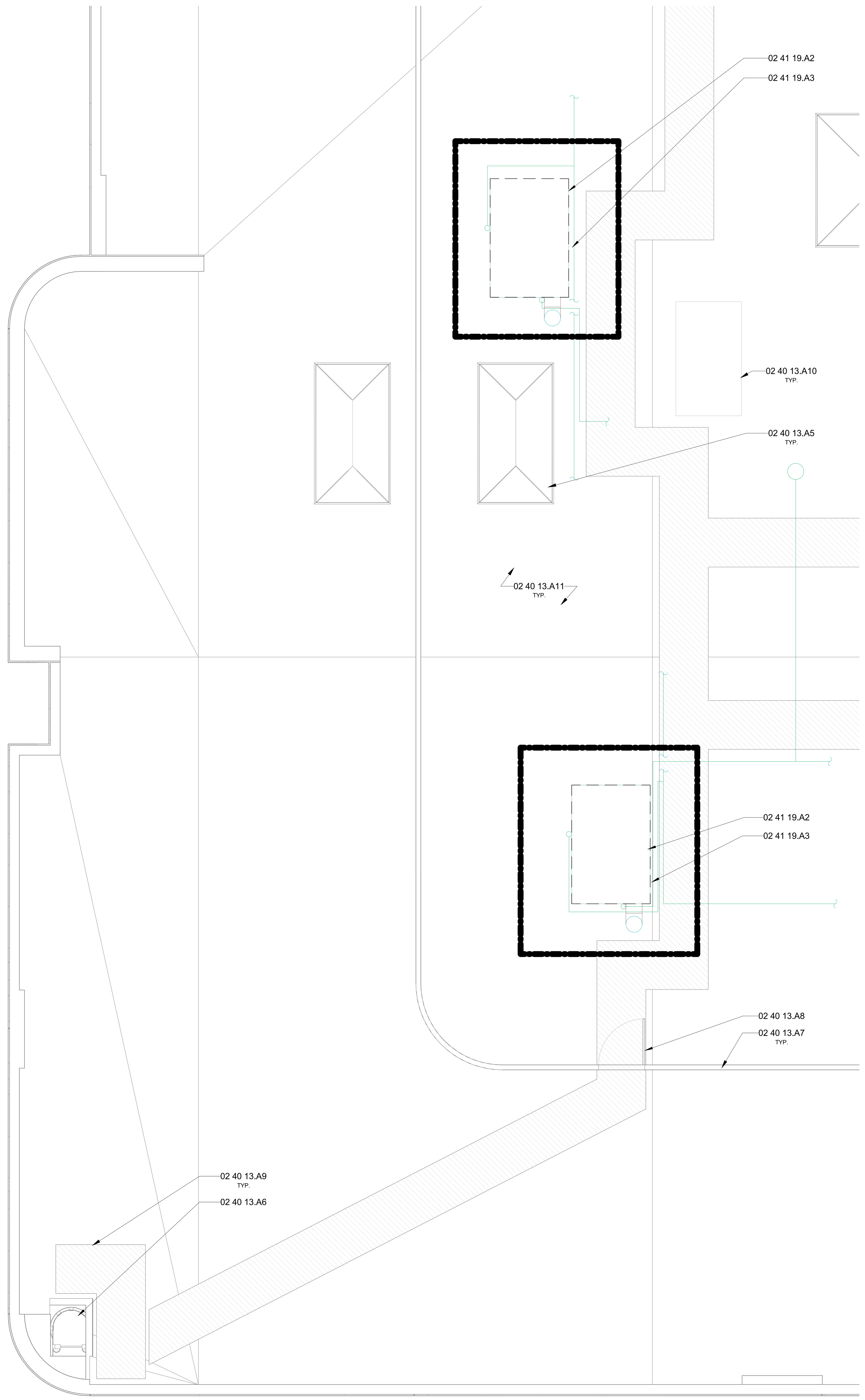
1. SEE STRUCTURAL DRAWINGS FOR MORE INFORMATION.
2. SEE MECHANICAL DRAWINGS FOR MORE INFORMATION.
3. SEE ELECTRICAL DRAWINGS FOR MORE INFORMATION.
4. ALL ROOFING MATERIALS TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
5. ROOF COVERINGS AND UNDERLAYMENT SHALL BE APPLIED IN ACCORDANCE WITH (***2022 CBC 1507.1)***, AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.
6. ALL WORK ON THE ROOF, INCLUDING PENETRATIONS FOR MECHANICAL AND/OR PLUMBING, SHALL BE PATCHED AND REPARIED WITH A MATCHING ROOF ASSEMBLY TO EXISTING. WORK SHALL ADHERE TO THE REQUIREMENTS OF THE WARRANTY OF THE EXISTING ROOF SYSTEM TO MAINTAIN THE EXISTING WARRANTY.
7. CONTRACTOR TO COORDINATE WITH EXISTING ROOF MANUFACTURER TO SCHEDULE INSPECTIONS THAT MAY BE REQUIRED TO MAINTAIN THE EXISTING ROOF WARRANTY.

KEYNOTES

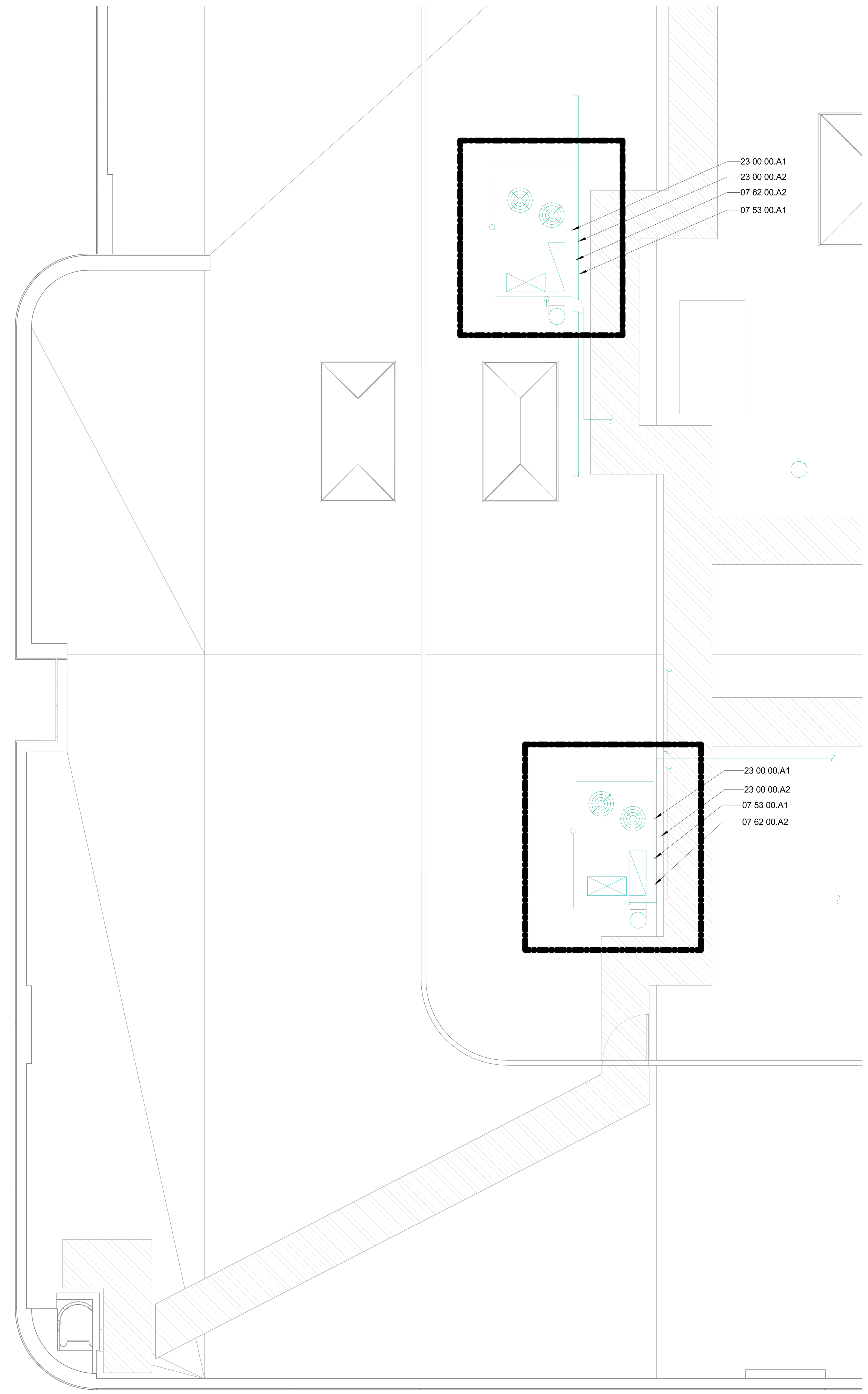
02 40 13.A5	EXISTING SKYLIGHT
02 40 13.A6	EXISTING ROOF ACCESS LADDER
02 40 13.A7	EXISTING ROOF SCREEN
02 40 13.A8	EXISTING ACCESS GATE
02 40 13.A9	EXISTING ROOF WALKING PADS
02 40 13.A10	EXISTING MECHANICAL UNIT TO REMAIN
02 40 13.A11	EXISTING MEMBRANE ROOFING
02 41 19.A2	REMOVE EXISTING MECHANICAL UNIT
02 41 19.A3	REMOVE EXISTING MECHANICAL UNIT SUPPORT CURBS
07 53 00.A1	SINGLE-PLY MEMBRANE ROOFING
07 62 00.A2	ALUMINUM FLASHING
23 00 00.A1	NEW MECHANICAL UNIT, SEE MECHANICAL DRAWINGS.
23 00 00.A2	NEW MECHANICAL UNIT SUPPORT CURBS, SEE MECHANICAL DRAWINGS.

LEGEND

AREA OF WORK, SEE STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS.



1 PARTIAL ROOF PLAN - DEMO
A-121 SCALE: 1/4" = 1'-0"



2 PARTIAL ROOF PLAN - NEW
A-101 A-121 SCALE: 1/4" = 1'-0"

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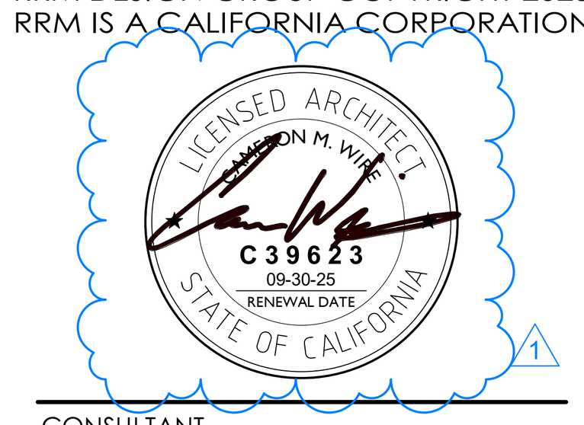

CONSULTANT

AGENCY

CITY OF GOLETA

GOLETA CITY HALL - HVAC REPLACEMENT

130 CREMONA DRIVE, GOLETA CA 93117

PARTIAL ROOF PLANS - DEMO & NEW

NO.	REVISION	DATE
1	PLAN CHECK RESPONSE 1	08/25/25

PROJECT MANAGER
CD

DRAWN BY
CW

CHECKED BY
CW

DATE
AUGUST 25, 2025

PROJECT NUMBER
1806-03-PS24

SHEET
A-121

PLAN CHECK RESPONSE 1

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SYMBOLS

Symbol	Description
S-	DETAIL REFERENCE BUBBLE WITH LEADER
	DETAIL REFERENCE BUBBLE
	FULL HEIGHT SECTION INDICATOR
	ELEVATION OF WALL OR FRAME
	NORTH ARROW
BOT OF EL = (-X'-X")	TOP/BOTTOM OF ELEVATIONS
	SLOPE
	WELDED WIRE FABRIC (WWF LAYER)
	STEPPED SURFACE; FLOOR DEPRESSION
	SLOPED SURFACE
S S	STEPPED FOOTING
BS BS	BOTTOM STEPPED FOOTING
XX-X' X	INDICATES SHEAR WALL TYPE AND LENGTH, PER SHEAR WALL SCHEDULE
	INDICATES SPAN AND DIRECTION OF PREFABRICATED ROOF TRUSS (BY OTHERS)
XX	INDICATES SPAN AND DIRECTION OF ROOF RAFTER OR FLOOR JOIST WITH WEB STIFFENER
XX	INDICATES SPAN AND DIRECTION OF ROOF RAFTER OR FLOOR JOIST
	INDICATES EXTENTS OF FRAMING OR OTHER STRUCTURAL ELEMENT
	INDICATES HEADER @ OPENING PER HEADER SCHEDULE
	EARTH LAYER
	INDICATES SAND OR GROUT
	INDICATES GRAVEL
	STEEL IN CROSS SECTION
	INDICATES BEARING WALL
	SHADED AREA INDICATES CALIFORNIA FRAMING
	SHADED AREA INDICATES FOOTPRINT OF FLOOR ABOVE
	STEEL HSS TUBE COLUMN
	STEEL HSS OR PIPE COLUMN
	WIDE FLANGE STEEL COLUMN
	WOOD POST
X	INDICATES TOP PLATE SPLICE NAILING PER SCHEDULE
1x	INDICATES SHEAR WALL STRAP / HOLDOWN TYPE PER SCHEDULE
F1	INDICATES PAD FOOTING TYPE PER SCHEDULE
C1	INDICATES FOOTING TYPE PER SCHEDULE
	ANGLE BRACE
(2L)	DOUBLE ANGLE BRACE
	DRAG STRUT CONNECTION
	FULL HEIGHT STIFFENER CONNECTION
	MOMENT CONNECTION
	MEMBER SPLICE
(+3")	TOP OF STEEL ± ELEVATION
[X]	NUMBER OF EVENLY SPACED SHEAR STUDS
[X-Y-Z]	SPECIAL STUD SPACING SEE TYPICAL STEEL DETAILS
<3/4>	BEAM CAMBER AT MID-SPAN

WALL TYPES

- INDICATES PLYWOOD SIDE FOR SHEARWALL
- INDICATES BEARING WOOD WALL BELOW
- INDICATES BEARING WOOD WALL ABOVE
- INDICATES NON-BEARING WOOD WALL BELOW
- INDICATES NON-BEARING WOOD WALL ABOVE
- INDICATES EXISTING BEARING WOOD WALL
- INDICATES EXISTING NON-BEARING WOOD WALL
- INDICATES BEARING CMU WALL BELOW
- INDICATES BEARING CMU WALL ABOVE
- INDICATES NON-BEARING CMU WALL BELOW
- INDICATES NON-BEARING CMU WALL ABOVE
- INDICATES EXISTING BEARING CMU WALL
- INDICATES EXISTING NON-BEARING CMU WALL
- INDICATES BEARING CONCRETE WALL BELOW
- INDICATES BEARING CONCRETE WALL ABOVE
- INDICATES NON-BEARING CONCRETE WALL BELOW
- INDICATES NON-BEARING CONCRETE WALL ABOVE
- INDICATES EXISTING BEARING CONCRETE WALL
- INDICATES EXISTING NON-BEARING CONCRETE WALL

SHEET INDEX

ABBREVIATIONS

A & B	ABOVE AND BELOW
AB	ANCHOR BOLT
ABV	ABOVE
ACI	AMERICAN CONCRETE INSTITUTE
ADDL	ADDITIONAL
ADJ	ADJACENT
AESS	ARCHITECTURAL EXPOSED STRUCTURAL STEEL
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ALT	ALTERNATE
ALUM	ALUMINUM
ANCH	ANCHOR
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APA	ENGINEERED WOOD ASSOCIATION (FORMERLY THE AMERICAN PLYWOOD ASSOCIATION)
APPVD	APPROVED
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL; ARCHITECT
AWPA	AMERICAN WOOD PRESERVERS ASSOCIATION
AWS	AMERICAN WELDING SOCIETY
AITC	AMERICAN INSTITUTE OF TIMBER CONSTRUCTION
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS
BEL	BELOW
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM
BN	BOUNDARY NAIL
BOT OR B	BOTTOM
BRC	BRACE
BRG	BEARING
BTWN	BETWEEN
CANT	CANTILEVER
CAM OR C	CAMBER
CC	CENTER TO CENTER
CG	CENTER OF GRAVITY
CIP	CAST-IN-PLACE
CJ	CONSTRUCTION JOINT; CONTROL JOINT
CL	CENTER LINE
CLR	CLEARANCE; CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
COMP	COMPRESSION
CONC	CONCRETE
CONN	CONNECTION; CONNECT
CONSTR	CONSTRUCTION
CONT	CONTINUE; CONTINUOUS
CONTR	CONTRACTOR
CJP	COMPLETE JOINT PENETRATION WELD
CTR	CENTER
CTSK	COUNTERSINK; COUNTERSUNK
CU FT	CUBIC FOOT
d	PENNY (NAIL OR BAR DIA)
DBL	DOUBLE
DEPT	DEPARTMENT
DET	DETAIL
DF	DOUGLAS FIR/LARCH
DIA OR Ø	DIAMETER
DIAG	DIAGONAL
DIAPH	DIAPHRAGM
DIM	DIMENSION
DN	DOWN
DO	DO OVER
DWG	DRAWING
DWL	DOWEL
EA	EACH
EF	EACH FACE
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
EMBED	EMBEDMENT
EN	EDGE NAIL
ENGR	ENGINEER
EQ	EQUAL OR EQUIVALENT
EQUIP	EQUIPMENT
ES	EACH SIDE
EW	EACH WAY
EXIST or (E)	EXISTING
EXT	EXTERIOR
FDN	FOUNDATION
FIN	FINISH
FJ	FLOOR JOIST
FLG	FLANGE
FLR	FLOOR
FN	FIELD NAIL
FOC	FACE OF CONCRETE
FOM	FACE OF MASONARY
FOS	FACE OF STUD
FOW	FACE OF WALL
FRMG	FRAMING
FT	FOOT; FEET
FTA	FLOOR TIE ABOVE
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GB	GRADE BEAM
GLB	GLUED LAMINATED BEAM
GR	GRADE
GRND	GROUND
H or HORIZ	HORIZONTAL
HDR	HEADER
HGR	HANGER
HP	HIGH POINT
HSH	HORIZONTALLY SLOTTED HOLES
HT	HEIGHT
ID	INSIDE DIAMETER
IF	INSIDE FACE
I-JST	I-JOIST
IN	INCH
INCL	INCLUDE
INFO	INFORMATION
INSP	INSPECTION
INT	INTERIOR
JST	JOIST
JT	JOINT
K	KIPS
KS	KING STUD
KP	KING POST
KSI	KIPS PER SQUARE INCH
LB(S) OR #	POUND(S)
LF	LINEAL FOOT
LIN	LINEAL; LINEAR
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LP	LOW POINT
LSH	LONG SLOTTED HOLES
LSL	LAMINATED STRAND LUMBER
LT WT	LIGHTWEIGHT
LVL	LEVEL OR LAMINATED VENEER LUMBER
MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MB	MACHINE BOLT
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM; MINUTE
MISC	MISCELLANEOUS
(N)	NEW
N	NORTH
NO or #	NUMBER
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OH	OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE
ORIG	ORIGINAL
OSB	ORIENTED STRAND BOARD
PA	POST ABOVE
PARA OR //	PARALLEL
PC	PRECAST; PIECE
PERP	PERPENDICULAR
PI	PLYWOOD INDEX
℞ OR PL.	PLATE
PL	PROPERTY LINE
PLF	PONDS PER LINEAL FOOT
PLCS	PLACES
PLY	PLYWOOD
PROP	PROPERTY
PT	PRESSURE TREATED
PW	PLATE WASHER
PJP	PARTIAL JOINT PENETRATION WELD
PREFAB	PREFABRICATED
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSL	PARALLEL STRAND LUMBER
PVMT	PAVEMENT
#	POUND; NUMBER
REF	REFERENCE
REINF	REINFORCE; REINFORCING
REQD	REQUIRED
RF	ROOF
RR	ROOF RAFTER
Ø	ROUND; DIAMETER
SCHED	SCHEDULE
SECT	SECTION
SEP	SEPARATION
SHT	SHEET
SHTG	SHEATHING
SIM	SIMILAR
SOG	SLAB ON GRADE
SN	SHEAR NAIL
SPCG	SPACING
SPECS	SPECIFICATIONS
SQ	SQUARE
SS	STAINLESS STEEL
SSL	SHORT SLOTTED HOLES
STD	STANDARD
STGR	STAGGER
STIFF	STIFFENERS
STIRR	STIRRUP
STL	STEEL
STRUCT	STRUCTURAL
SW	SHEAR WALL
SYM	SYMMETRICAL
TB	TIE BEAM
T & B	TOP AND BOTTOM
T & G	TONGUE & GROOVE
TO	TOP OF
TOC	TOP OF CURB; TOP OF CONCRETE
TOF	TOP OF FOOTING
TEMP	TEMPERATURE; TEMPORARY
THRU	THROUGH
THK	THICKNESS/THICK
THR	THREADED
TOP or T	TOP
TOS	TOP OF STEEL/TOP OF SLAB
TOW	TOP OF WALL
TS	TRIMMER STUD
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UT	ULTRA-SONIC TEST
VERT	VERTICAL
VSH	VERTICAL SLOTTED HOLES
W/	WITH
W/O	WITHOUT
WO	WHERE OCCURS
WD	WOOD
WP	WORK POINT; WATERPROOF
WWF	WELDED WIRE FABRIC

STRUCTURAL STEEL SHAPES

W	W SHAPE
C	AMERICAN STD CHANNEL SHAPE
MC	MISC CHANNEL SHAPE
L	ANGLE SHAPE
WT, ST, MT	STRUCT TEE SHAPE
PIPE	STANDARD PIPE SHAPE
PIPE-X	EXTRA STRONG PIPE SHAPE
PIPE-XX	DBL EXTRA STRONG PIPE SHAPE
HSS	HOLLOW STRUCTURAL SECTION

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GOLETA CITY HALL

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SHEET INDEX, ABBREVIATIONS & SYMBOLS

NO.	REVISION	DATE
1	PLAN CHECK RESPONSE 1	08/25/25

PLAN CHECK RESPONSE 1

PROJECT MANAGER: M. DOREMUS
DRAWN BY: C. PRESSLER
CHECKED BY: M. DOREMUS
DATE: AUGUST 25, 2025
PROJECT NUMBER: 1806-03-PS24
SHEET: S-101

N:\1800\1806-03-PS24-Goleta-City-Hall-TI\Structural\ConDocs\Sheet-Files_GoletaHall-TI\1806-03-PS24-S101.dwg, S101, Aug 25, 2025 10:51am, CPressler

SUBMITTALS

1. THE FOLLOWING SUBMITTALS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL BY THE ENGINEER:
    A. ROUGH CARPENTRY: WOOD PRODUCT DATA AND MANUFACTURER'S CERTIFICATES

2. BEFORE SUBMITTING EACH SUBMITTAL, (INCLUDES SHOP DRAWINGS, PRODUCT DATA, SAMPLES AND SIMILAR SUBMITTALS), THE CONTRACTOR SHALL HAVE:
    A. REVIEWED AND COORDINATED EACH SUBMITTAL WITH OTHER SUBMITTALS AND WITH THE REQUIREMENTS OF THE WORK AND THE CONTRACT DOCUMENTS. THIS INCLUDES THE CONTRACTOR REVIEWING AND VERIFYING THAT THE SUBMITTAL IS COORDINATED AMONG ALL CONSTRUCTION TRADES:
    B. DETERMINED AND VERIFIED ALL FIELD MEASUREMENTS, QUANTITIES, DIMENSIONS , SPECIFIED PERFORMANCE AND DESIGN CRITERIA, INSTALLATION REQUIREMENTS, MATERIALS, CATALOG NUMBERS AND SIMILAR INFORMATION
    C. DETERMINED AND VERIFIED ALL INFORMATION RELATIVE TO THE CONTRACTOR'S RESPONSIBILITIES FOR MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION, AND SAFETY PRECAUTIONS AND PROGRAMS.
    D. REVIEWED AND VERIFIED THAT THE ARCHITECT'S OR ENGINEER'S COMMENTS FROM PREVIOUS SUBMITTAL ROUNDS HAVE BEEN ADDRESSED.

3. EACH SUBMITTAL SHALL BEAR A STAMP OR SPECIFIC WRITTEN CERTIFICATION THAT THE CONTRACTOR HAS SATISFIED THEIR OBLIGATIONS UNDER THE CONTRACT DOCUMENTS WITH RESPECT TO THE CONTRACTOR'S REVIEW AND APPROVAL OF THAT SUBMITTAL.

4. THE CONTRACTOR'S OBLIGATION TO PERFORM AND COMPLETE THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS SHALL BE ABSOLUTE:
    a. REVIEW AND APPROVAL OF SHOP DRAWINGS BY THE ARCHITECT AND/OR ENGINEER DOES NOT CONSTITUTE APPROVAL OF A CHANGE REQUEST, SUBSTITUTION OR MODIFICATION TO THE CONTRACT DRAWINGS.
    b. THE ARCHITECT AND ENGINEER SHALL BE NOTIFIED OF CHANGE REQUESTS, SUBSTITUTIONS OR MODIFICATIONS TO THE CONTRACT DRAWINGS IN WRITING BEFORE AND SEPARATE FROM THE SUBMITTAL PRIOR TO SUBMISSION.

5. FABRICATION FOR ITEMS IN THESE DOCUMENTS SHALL NOT COMMENCE UNTIL THE SUBMITTAL HAS BEEN REVIEWED AND APPROVED BY THE ENGINEER.

6. THE CONTRACTOR SHALL ALLOW SUFFICIENT TIME FOR THE ENGINEER OF RECORD TO THOROUGHLY REVIEW SUBMITTAL PACKAGES (10 WORKING DAYS, MINIMUM).

SHOP FABRICATION

1. SHOP FABRICATION REQUIRES SPECIAL INSPECTION IN ACCORDANCE WITH CODE SECTION 1704.2.5. EXCEPTION: SHOP SPECIAL INSPECTIONS ARE NOT REQUIRED WHEN WORK IS DONE ON THE PREMISES OF FABRICATOR REGISTERED AND APPROVED TO PERFORM SUCH WORK IN ACCORDANCE WITH CODE SECTION 1704.2.5.1. THE FOLLOWING ACCREDITATIONS MEET THE REQUIREMENTS OF THIS EXCEPTION:
    B. WOOD BUILDINGS
        a. STRUCTURAL GLUED LAMINATED TIMBER

STRUCTURAL GLUED LAMINATED TIMBER

1. STRUCTURAL GLUED LAMINATED TIMBER SHALL MEET THE FOLLOWING MINIMUM STANDARDS EXCEPT WHERE OTHERWISE NOTED:

STRUCTURAL GLUED LAMINATED TIMBER PROPERTIES [C]

USE	COMBINATION SYBMOL	SPECIES OUTER/CORE	RATING [B]	APPEARANCE	REFERENCE [A]
SIMPLE SPAN	24F-V4	DF/DF	AITC OR APA-EWS	SEE NOTE D	2022 CBC 2303.1.3 (AITC/ANSI 190.1-07 OR ANSI 190.1-12 AND ASTM D3737)
CANTILEVER OR MULTI - SPAN/CONTINUOUS	24F-V8	DF/DF	AITC OR APA-EWS	SEE NOTE D	

TABLE NOTES:

A. GLUED LAMINATED MEMBERS SHALL BE MANUFACTURED AS REQUIRED IN ASTM D 3737 AND EITHER OF THE FOLLOWING STANDARDS:
    a. ANSI 117-15 (CODE REFERENCED)
    b. ANSI 190.1-22 (CURRENT STANDARD)

B. STRUCTURAL GLUED LAMINATED TIMBERS SHALL BE IDENTIFIED WITH A STAMP BEARING THE AITC QUALITY MARK OR AWA-EPS TRADEMARK. PLACE STAMPS ON SURFACES THAT WILL NOT BE EXPOSED TO VIEW IN THE COMPLETED STRUCTURE. SUBMIT CERTIFICATES OF CONFORMANCE INDICATING THAT THE GLULAM MEMBERS CONFORM TO THE REQUIREMENTS OF ANSI

C. REFER TO GENERAL WOOD NOTES FOR PRESERVATIVE TREATMENT.

D. STRUCTURAL GLUED LAMINATED MEMBERS SHALL BE OF THE FOLLOWING APPEARANCE GRADES:
    a. INDUSTRIAL: TYPICAL EXPOSURE FOR MEMBERS NOT EXPOSED TO VIEW IN THE COMPLETED WORK.
    b. ARCHITECTURAL: EXPOSURE FOR MEMBERS EXPOSED TO VIEW IN THE COMPLETED WORK.
    c. PREMIUM: EXPOSURE FOR SPECIFIC EXPOSED MEMBERS AS INDICATED ON THE DRAWINGS.

2. ADHESIVES USED IN THE GLULAM MANUFACTURING PROCESS SHALL CONFORM TO ANSI 405-18 (PREVIOUSLY AITC 405), STANDARD FOR ADHESIVES FOR USE IN STRUCTURAL GLUED LAMINATED TIMBER. ADHESIVES SHALL BE A WET-USE ADHESIVE MEETING THE REQUIREMENTS OF ASTM D5229.

3. MEMBERS SHALL HAVE A SEALER ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS AFTER FABRICATION. END SEAL EACH END OF THE MEMBER IMMEDIATELY AFTER CUTTING.

4. PROVIDE CAMBER AS INDICATED ON THE DRAWINGS.

5. TRANSPORTATION, STORAGE, AND HANDLING:
    A. REFER TO AITC 111-05, RECOMMENDED PRACTICE FOR PROTECTION OF STRUCTURAL GLUED LAMINATED TIMBER DURING TRANSIT, STORAGE AND ERECTION.
        a. LOAD WRAP OR BUNDLE WRAP INDUSTRIAL APPEARANCE GRADE MEMBERS. ARCHITECTURAL OR PREMIUM GRADE MEMBERS SHALL BE WRAPPED INDIVIDUALLY AND REMAIN UNTIL PROTECTION IS NO LONGER REQUIRED FROM WEATHER, SUNLIGHT, SOILING, AND/OR OTHER TRADES. SLIT UNDERSIDE OF WRAPPINGS TO PREVENT ACCUMULATION OF MOISTURE.
    B. STORAGE:
        a. STORE GLULAM MEMBERS ON A FLAT SURFACE AT LEAST 6" ABOVE THE GROUND. PLACE SUPPORTS CLOSE ENOUGH TOGETHER TO PREVENT NOTICEABLE DEFLECTIONS.

WOOD STRUCTURAL PANELS (SHEATHING)

1. WOOD STRUCTURAL PANELS SHALL MEET THE FOLLOWING MINIMUM STANDARDS EXCEPT WHERE OTHERWISE NOTED:

WOOD STRUCTURAL PANEL PROPERTIES

USE	PLY	BOND CLASSIFICATION [C]	SHEATHING GRADE	PERFORMANCE RATING	SPAN RATING	RATING [B]	REFERENCE [A]
ROOF	5	EXPOSURE 1	REFER TO TYPICAL DIAPHRAGM SCHEDULE			APA	2022 CBC 2303.1.5 (DOC PS 1-19 OR PS 2-18)
FLOOR	5	EXPOSURE 1				APA	
WALL [D]	5	EXPOSURE 1	REFER TO TYPICAL SHEAR WALL SCHEDULE			APA	

TABLE NOTES:

A. WOOD STRUCTURAL PANELS SHALL CONFORM TO THE REQUIREMENTS FOR THEIR TYPE IN ACCORDANCE WITH THE FOLLOWING VOLUNTARY STANDARDS BY THE ENGINEERED WOOD ASSOCIATION (APA):
    a. VOLUNTARY PRODUCT STANDARD, STRUCTURAL PLYWOOD, PS 1-09
    b. VOLUNTARY PRODUCT STANDARD, PERFORMANCE STANDARD FOR WOOD-BASED STRUCTURAL-USE PANELS, PS 2-10

B. WOOD STRUCTURAL PANELS SHALL BE IDENTIFIED BY THE APA TRADEMARK INDICATING CONFORMANCE TO THE APPLICABLE VOLUNTARY STANDARD

C. WHERE PANELS ARE EXPOSED TO REPEATED WETTING AND REDRYING, LONG-TERM EXPOSURE TO WEATHER, OR CONDTIONS OF SIMILAR SEVERITY, "EXTERIOR" APA RATED PLYWOOD SHEATHING SHALL BE USED. C-D "EXPOSURE 1" APA RATED PLYWOOD SHEATHING (CDX) SHALL NOT BE USED FOR CONDITIONS INVOLVING LONG-TERM EXPOSURE TO WEATHER.
    a. EXCEPTION: WOOD STRUCTURAL PANEL ROOF SHEATHING EXPOSED TO THE OUTDOORS ON THE UNDERSIDE IS PERMITTED TO BE "EXPOSURE 1" TYPE.
    b. WOOD STRUCTURAL PANELS TO BE USED AS SIDING SHALL COMPLY WITH ANSI/APA PRP-210.

D. ORIENTED STRAND BOARD (OSB) WITH EQUIVALENT CLASSIFICATION AND RATINGS MAY BE USED IN LIEU OF PLYWOOD FOR WOOD STRUCTURAL PANEL WALL SHEATHING.

2. TRANSPORTATION, STORAGE, AND HANDLING:
    A. TRANSPORTATION
        a. IN TRANSPORTING PANELS ON OPEN TRUCK BEDS, COVER THE BUNDLES WITH A TARP.
    B. STORAGE
        a. ALWAYS STORE THE PANELS UNDER COVER WHENEVER POSSIBLE
        b. WHEN STORING PANELS OUTSIDE STACK THEM ON A LEVEL SURFACE ON TOP OF STRINGERS OR OTHER BLOCKING, THREE STRINGERS MINIMUM.
        c. NEVER LEAVE PANELS IN CONTACT WITH THE GROUND
        d. COVER THE STACK WITH A PLASTIC TARP, ENSURING THAT THE BUNDLE IS WELL VENTILATED TO PREVENT MILDEW.
        e. IF MOISTURE ABSORPTION IS EXPECTED, CUT THE STEEL BAND TO PREVENT DAMAGE
        f. KEEP SANDED OR OTHER APPEARANCE GRADE PANELS AWAY FROM HIGH TRAFFIC AREAS
    C. HANDLING
        a. ALWAYS PROTECT ENDS AND EDGES, ESPECIALLY TONGUE AND GROOVE PRODUCTS, FROM PHYSICAL DAMAGE.
        b. ACCLIMATIZE THE PANELS FOR 24 HOURS MINIMUM BEFORE INSTALLATION BY STANDING THE PANELS ON EDGE WITH A GAP BETWEEN EACH TO ALLOW FOR AIR CIRCULATION OR PER MANUFACTURER'S RECOMMENDATIONS.

3. PLYWOOD ORIENTATION
    A. ROOF AND FLOOR SHEATHING SHALL BE LAID WITH THE GRAIN OF THE OUTER PILES PERPENDICULAR TO THE FRAMING MEMBERS, SHALL BE CONTINUOUS OVER 2 JOIST BAYS MINIMUM AND END JOINTS SHALL BE JOINED OVER FRAMING AND STAGGERED. LEAVE A 1/8" GAP BETWEEN PANELS TO ALLOW FOR PANEL EXPANSION UNLESS RECOMMENDED OTHERWISE BY THE PANEL MANUF. REFER TO SPECIFIC DETAILS IN THE DRAWINGS FOR FURTHER PARAMETERS.
    B. PLYWOOD OR OSB WALL SHEATHING MAY BE APPLIED VERTICALLY OR HORIZONTALLY. ALL END JOINTS BE JOINED OVER FRAMING AND STAGGERED.

4. BLOCKING:
    A. ROOF: ALL ROOF SHEATHING SHALL BE BLOCKED UNLESS SPECIFICALLY ALLOWED ON PLANS. WHERE PERMITTED TO BE UNBLOCKED, ALL UNBLOCKED EDGES SHALL BE TONGUE AND GROOVE.
    B. ALL FLOOR SHEATHING SHALL BE BLOCKED UNLESS SPECIFICALLY ALLOWED ON PLANS. WHERE PERMITTED TO BE UNBLOCKED, ALL UNBLOCKED EDGES SHALL BE TONGUE AND GROOVE.
    C. WALLS: ALL SHEAR WALLS SHALL BE FULLY BLOCKED AT PLYWOOD EDGES.

5. FASTENERS
    A. USE SHEATHING NAILS SAME GAUGE AS COMMON WIRE NAILS WITH LENGTHS AT LEAST EQUAL TO SHEATHING THICKNESS PLUS REQUIRED PENETRATION PER AWS SDPWS TABLE 4.2A OR 4.3A (AS REQUIRED).
    B. EQUIVALENT PNEUMATIC DRIVE NAILS MAY BE USED IF FASTENER MANUFACTURER HAS RECEIVED ICC OR IAPMO APPROVAL FOR THE INTENDED USE. FASTENERS TO BE SUBSTITUTED SHALL BE EQUIVALENT IN LATERAL AND WITHDRAWAL STRENGTH TO THE SIZE OF COMMON NAIL SPECIFIED.
    C. USE OF MACHINE NAILING IS SUBJECT TO A SATISFACTORY JOB SITE DEMONSTRATION FOR EACH PROJECT AND THE APPROVAL BY THE PROJECT ARCHITECT OR STRUCTURAL ENGINEER. THE APPROVAL IS SUBJECT TO CONTINUED SATISFACTORY PERFORMANCE. MACHINE NAILING WILL NOT BE APPROVED IN 5/16" PLYWOOD OR OSB SHEATHING. IF NAIL HEADS PENETRATE THE OUTER PLY MORE THAN WOULD BE NORMAL FOR A HAND HAMMER OR IF MINIMUM ALLOWABLE EDGE DISTANCES ARE NOT MAINTAINED, THE PERFORMANCE WILL BE DEEMED UNSATISFACTORY.
    D. TYPICAL NAILING SHALL BE 10d AT 6" O.C. AT ALL SUPPORTED EDGES AND OVER SHEAR WALLS, AND 10D AT 12" O.C. AT ALL INTERMEDIATE SUPPORTS, UNLESS OTHERWISE NOTED, SEE PLANS AND REFER TO SHEAR WALL SCHEDULE.

EXISTING UNDERGROUND UTILITIES

1. THE ARCHITECT AND ENGINEERS ARE NOT RESPONSIBLE FOR THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES WHETHER OR NOT SHOWN ON THE DRAWINGS. DRAWINGS, IF ANY, IS APPROXIMATE. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING ON THE SITE. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT AND/OR STRUCTURAL ENGINEER SHOULD ANY SUCH UNIDENTIFIED CONDITIONS BE DISCOVERED.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES WHICH MAY RESULT FROM HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ALL EXISTING UNDERGROUND UTILITIES.

3. AN UNDERGROUND SERVICE ALERT INQUIRY IDENTIFICATION NUMBER MUST BE OBTAINED AT LEAST TWO WORKING DAYS BEFORE STARTING WORK WITH THIS PERMIT.
    A. FOR PROJECTS IN SOUTHERN CALIFORNIA TELEPHONE NO. 1-800-422-4133.
    B. FOR PROJECTS IN NORTHERN CALIFORNIA TELEPHONE NO. 1-800-227-2600.

DEMOLITION

1. ALL DEMOLITION SHALL BE CARRIED ON IN SUCH A WAY AS NOT TO DAMAGE EXISTING ELEMENTS, WHICH ARE TO REMAIN IN THE FINISHED STRUCTURE.

2. ALL ELEMENTS OF THE STRUCTURE, WHICH ARE TO REMAIN, AND WHICH ARE DAMAGED DURING DEMOLITION WORK SHALL BE REPLACED AT NO ADDITIONAL COST. EXISTING ELEMENTS SHALL BE PROTECTED TO THE FULLEST EXTENT POSSIBLE, IN ORDER TO MITIGATE DAMAGE.

3. CONTRACTOR IS REPONSIBLE FOR REMOVAL AND REPLACEMENT OF ALL EXISTING ELEMENTS THAT ARE NECESSARY FOR THE INSTALLATION OF ALL NEW WORK.

4. WHERE EXISTING PARTITION WALLS ARE TO BE DEMOLISHED, CONTRACTOR SHALL VERIFY WALLS ARE NON-BEARING PRIOR TO DEMOLITION. IF WALLS ARE FOUND TO BE BEARING, CONTRACTOR SHALL NOTIFY ARCHITECT IMMEDIATELY

SAWN LUMBER

1. FRAMING LUMBER SHALL MEET THE FOLLOWING MINIMUM STANDARDS EXCEPT WHERE OTHERWISE NOTED:

SAWN LUMBER PROPERTIES

USE	SIZE	SPECIES	GRADE	REFERENCE
MUDSILLS	2x4	D.F.	STANDARD OR BETTER PRESSURE TREATED	2022 CBC 2303.1.9
	2x6 AND LARGER	D.F.	NO. 2 OR BETTER PRESSURE TREATED	
	2x	REDWOOD	FOUNDATION GRADE	
HORIZONTAL FRAMING LUMBER				
ROOF JOISTS AND RAFTERS	2x	D.F.	NO. 2	WCLIB & WWPA
FLOOR JOISTS	2x	D.F.	NO. 2	
HEADERS AND BEAMS	4x	D.F.	NO. 2	
ANY OTHER HORIZONTAL	4x4 AND SMALLER	D.F.	NO. 2	
	6x6 AND LARGER	D.F.	NO. 1	
VERTICAL FRAMING LUMBER				
TOP PLATES	2x	D.F.	NO. 2	WCLIB & WWPA
STUDS	2x4 & 3x4	D.F.	STUD	
	2x6 & 2x8	D.F.	NO. 2	
POSTS	4x4 & 4x6 POSTS	D.F.	NO. 2	
	6x6 & LARGER POSTS	D.F.	NO. 1	
ALL OTHER FRAMING LUMBER				
ALL OTHER FRAMING LUMBER, UNO	ALL SIZES	D.F.	STANDARD & BETTER	WCLIB & WWPA

2. FLOOR JOISTS SHALL BE GRADE STAMPED "S-DRY" WHICH INDICATES A MOISTURE CONTENT NOT EXCEEDING 19 PERCENT.

3. ALL SOLE PLATES AND TOP PLATES SHALL BE GRADE STAMPED "KD" WHICH INDICATES KILN DRIED WITH A MOISTURE CONTENT NOT EXCEEDING 15 PERCENT AT BUILDINGS WITH 4 OR MORE STORIES.

4. STUD WALLS SHOWN ON PLANS ARE NONBEARING PARTITIONS WALLS, BEARING WALLS OR SHEAR WALLS BELOW THE FRAMING LEVEL, UNLESS NOTED OTHERWISE. STUDS SHALL BE SIZE AND SPACING AS NOTED IN THE DRAWINGS, SEE PLANS AND ARCHITECTURAL DRAWINGS. UNLESS OTHERWISE NOTED.

5. MINIMUM FRAMING NAILING SHALL CONFORM TO CBC TABLE 2304.10.2. ALL NAILS SHALL BE COMMON WIRE NAILS. PREDRILL NAIL HOLES TO 70% OF NAIL SHANK DIAMETER WHERE NAILING TENDS TO SPILT WOOD.

6. UNLESS OTHERWISE NOTED, ALL WOOD SILL PLATES UNDER BEARING, EXTERIOR, OR SHEAR WALLS IN CONTACT WITH CONCRETE OR MASONRY SHALL BE BOLTED TO THE CONCRETE OR MASONRY WITH 5/8" Ø X 12" BOLTS W/ 0.229" X 3" X 3" PLATE WASHER (GALV) AT 4'-O" O.C. BEGINNING AT 9" O.C. MAXIMUM FROM EACH END OF THE PLATES. THE BOLTS SHALL EXTEND A MINIMUM OF 7" INTO THE CONCRETE OR MASONRY. (POWDER DRIVEN PINS AT 1/3 OF THE BOLT SPACING OR 24" O.C. MAXIMUM MAY BE SUBSTITUTED FOR THE ANCHOR BOLTS AT INTERIOR NON-SHEAR WALLS ONLY).

7. PRESERVATIVE TREATMENT:
    A. WOOD MEMBERS SHALL BE PRESERVATIVE TREATED IN ACCORDANCE WITH AITC 109-07, STANDARD FOR PRESERVATIVE TREATMENT, BASED ON THE SERVICE CONDITION PER THE USE CATEGORIES (UC#) SPECIFIED IN AWPA U1-20.
        a. UC1 - INTERIOR CONSTRUCTION, ABOVE GROUND, DRY - NO PRESERVATIVE TREATMENT REQUIRED.
        b. UC2 - INTERIOR CONSTRUCTION, ABOVE GROUND, WET - PRESERVATIVE TREATMENT REQUIRED IF THE HUMIDITY OR MOISTURE CONDENSATION IS 20% OR GREATER.
        c. UC3 - EXTERIOR CONSTRUCTION ABOVE GROUND - PRESERVATIVE TREATMENT REQUIRED.
    B. FOR ALL TREATED WOOD MEMBERS, ALL CUTS, HOLES OR INJURIES SUCH AS ABRASIONS OR HOLES FROM REMOVAL NAILS AND SPIKES WHICH MAY PENETRATE THE TREATED ZONE SHALL BE FIELD TREATED IN ACCORDANCE WITH AWPA M4-15. THE FOLLOWING FILED TREATMENTS SHALL BE USED:
        a. BORED HOLES: HOLES FOR CONNECTORS OR BOLTS MAY BE TREATED BY PUMPING COAL TAR ROOFING CEMENT MEETING ASTM D5643 INTO HOLES USING A GREASE GUN OR SIMILAR DEVICE.
        b. EXTERIOR: COPPER NAPHTHENATE.
        c. INTERIOR: INORGANIC BORON PRESERVATIVES LIMITED TO USE IN APPLICATIONS NOT IN CONTACT WITH GROUND AND CONTINUOUSLY PROTECTED FROM LIQUID WATER.
    C. ALL LUMBER IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED LUMBER WITH AWPA TREATMENT C2 USING EITHER ALKALINE QUAT (ACQ TYPE B AND D), COPPER AZOLE (CBA-A, CA-B), OR SODIUM BORATES (SBX). ANCHOR BOLTS, FASTENERS, AND METAL FRAMING CONNECTORS IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE HOT-DIPPED GALVANIZED TO A RATING OF G-185 PER ASTM A653.

8. PROVIDE 2 STUDS UNDER ALL 4 X 10 AND LARGER BEAMS OR HEADERS AT SPANS 6 FEET OR LONGER, UNLESS OTHERWISE NOTED. WHERE POSTS OR MULTIPLE STUDS UNDER BEAMS OR HEADERS ARE CALLED FOR ON DRAWINGS THOSE POSTS OR MULTIPLE STUDS SHALL BE CARRIED TO THE FOUNDATION/PODIUM LEVEL.

9. PROVIDE THE FOLLOWING BLOCKING AS A MINIMUM, UNLESS SHOWN OTHERWISE:
    2x FULL DEPTH SOLID BLOCKING BETWEEN JOISTS OVER SUPPORT.
    2x FULL DEPTH SOLID BLOCKING BETWEEN JOISTS OVER AND BELOW PARTITION WALLS.

10. DOUBLE JOISTS UNDER PARTITIONS RUNNING PARALLEL TO JOISTS, UNLESS SUPPORTED BY A WALL BELOW OR SHOWN OTHERWISE. NAIL DOUBLED JOISTS WITH 16d AT 12" O.C., STAGGERED.

11. BRIDGING SHALL BE 2 X SOLID BLOCKS, INSTALLED AS FOLLOWS:
    ROOF JOISTS MORE THAN 10" DEPTH, 8'-O" O.C. MAXIMUM, NOT MORE THAN 8'-0' FROM SUPPORT.
    FLOOR JOISTS MORE THAN 10" DEPTH, 8'-O" O.C. MAXIMUM, NOT MORE THAN 8'-0' FROM SUPPORT.

12. JOIST HANGERS AND OTHER METAL FRAMING ACCESSORIES ARE REFERRED TO ON PLANS BY PARTICULAR TYPE AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, STOCKTON, CALIFORNIA. ACCESSORIES OF OTHER MANUFACTURES WITH EQUIVALENT LOAD CARRYING CHARACTERISTICS MAY BE USED WITH APPROVAL BY SEOR.

13. FIRE STOPPING, BACKING FOR INTERIOR FINISHES, NONBEARING WALLS, AND OTHER NON-STRUCTURAL FRAMING ARE NOT NECESSARILY SHOWN ON STRUCTURAL DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS.

14. THE TOP OF NON-BEARING WALLS SHALL NOT BE IN CONTACT WITH JOISTS/TRUSSES/RAFTERS ABOVE. REFER TO THE REFERENCED DETAILS FOR REQUIRED GAP, 1/2" MINIMUM, UNLESS NOTED OTHERWISE IN DETAIL.

HARDWARE AND CONNECTORS

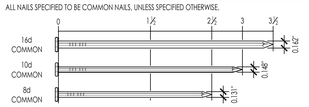
GENERAL:
USE ALL SPECIFIED FASTENERS AS SPECIFIED ON PLANS. IF NOT INDICATED ON PLANS PROVIDE FASTENERS PER MFR'S APPROVED ICC-ESR REPORT OR PRODUCT LITERATURE

HOLDOWNS:
1. DO NOT OVER TIGHTEN NUTS ON TIE-DOWN ANCHOR RODS OR BOLTS. TIGHTEN ANCHOR ROD NUTS ONE-THIRD TO ONE HALF TURN BEYOND FINGER TIGHT
2. INSTALL ALL HOLDOWNS TIGHT TO END STUDS/POST, DO NOT USE FILLER BLOCKS. FOR MISALIGNED ANCHOR BOLTS, EXTEND THE ANCHOR ROD AT A 1:6 (HORIZ/VERT) USING A COUPLER WITH EQUIVALENT ANCHOR ROD AND INSTALL THE HOLDOWN HIGHER ON END STUD / POST
3. FOR HOLDOWNS THAT BOLT TO END POSTS, INSTALL THE HEAD OF THE BOLT TO THE BRACKET SIDE, AND ON THE SIDE OPPOSITE THE BRACKET, INSTALL A WASHER BETWEEN THE NUT AND THE STUD / POSTS

TIE DOWN & COLLECTOR STRAPS:
1. TIE DOWN AND COLLECTOR STRAPS SHALL BE INSTALLED STRAIGHT AND TRUE. DO NOT FOLD, BEND, KINK OR OTHERWISE ALTER CONNECTOR STRAPS
2. INSTALL TIE DOWN STRAPS DIRECT TO POST IN LIEU OF OVER SHEATHING. STRAPS MAY BE INSTALLED ON THE UNSHEATHED SIDE OF THE END STUDS / POSTS

FASTENER INFORMATION

1. ALL NAILS SPECIFIED TO BE COMMON NAILS, UNLESS SPECIFIED OTHERWISE.



DESIGN INFORMATION

1. DEAD LOADS:

DEAD LOADS

LOCATIONS		UNIFORM (PSF)
ROOF:	BUILT UP ROOF OVER SAWN LUMBER W/ ACOUSTICAL TILE CEILING	17
FLOOR:	CARPET OVER GYPCRETE OVER TJI JOISTS	24
EXTERIOR BEARING WALLS:	10" CONCRETE WALL	106
EXTERIOR BEARING WALLS:	PLASTER/STUCCO EXTERIOR WALL	21
INTERIOR NON BEARING WALLS:	NON-BEARING PARTITION WALL	9

2. FLOOR LIVE LOADS: (2022 CBC SECTION 1603.1.1)

FLOOR LIVE LOADS

OCCUPANCY OR USE	UNIFORM (PSF)	CONC. (LBS)	REFERENCE
OFFICES	50	—	2022 CBC TABLE 1607.1

3. ROOF LIVE LOADS (2022 CBC SECTION 1603.1.2)

ROOF LIVE LOADS

OCCUPANCY OR USE	UNIFORM (PSF)	CONC. (LBS)	REFERENCE
ROOF ORDINARY FLAT, PITCHED AND CURVED ROOFS (THAT ARE NOT OCCUPIABLE)	20	—	2022 CBC TABLE 1607.1

4. ROOF SNOW LOADS (2022 CBC SECTION 1603.1.3):

SNOW DESIGN DATA

PARAMETER	VALUE	REFERENCE
GROUND SNOW LOAD	Pg = 0 PSF	ASCE 7-16 7.2

5. WIND DESIGN DATA (2022 CBC SECTION 1603.1.4) :

WIND DESIGN DATA

PARAMETER	VALUE	REFERENCE
ULTIMATE DESIGN WIND SPEED (3-SEC GUST)	V_{ULT} = 92 MPH	2022 CBC FIG. 1609.3
NOMINAL DESIGN WIND SPEED (3-SEC GUST)	V_{ASD} = 72 MPH	2022 CBC 1609.3.1
EXPOSURE CATEGORY	C	2022 CBC 1609.4.3
INTERNAL PRESSURE COEFFICIENT:	GCpi = ± 0.18	ASCE 7-16 TABLE 26.13-1

COMPONENTS & CLADDING WIND PRESSURES (PSF)

LOCATION		COMPONENT TRIBUTARY AREA (SQ FT)		
		10	100	500
ROOF	ZONE 1'	-19.4	-19.4	-16.0
	ZONE 1	-33.8	-26.6	-21.2
	ZONE 2	-44.5	-35.6	-28.4
	ZONE 3	-60.7	-41.9	-28.4
	ALL ZONES	16.0	16.0	16.0
OVERHANG	ZONE 1'	-33.8	-32.0	-21.2
	ZONE 1	-33.8	-32.0	-21.2
	ZONE 2	-44.5	-32.0	-23.0
	ZONE 3	-60.7	-39.2	-23.0
WALL	ZONE 4	-23.0	-19.9	-17.6
	ZONE 5	-28.4	-22.1	-17.6
	POSITIVE	21.2	17.6	16.0

6. EARTHQUAKE DESIGN DATA (2022 CBC SECTION 1603.1.5):

SITE AND OCCUPANCY PARAMETERS

PARAMETER	VALUE	REFERENCE
RISK CATEGORY	II	2022 CBC TABLE 1604.5
SEISMIC IMPORTANCE FACTOR	I = 1.0	ASCE 7-16 TABLE 1.5-2
MAPPED SPECTRAL RESPONSE ACCELERATIONS:	S_S = 2.322	2022 CBC 1613.2.1
	S_1 = 0.818	
SITE CLASS	D (DEFAULT)	2022 CBC 1613.2.2
SPECTRAL RESPONSE COEFFICIENTS:	S_{DS} = 1.858	2022 CBC 1613.2.4
	S_{D1} = 0.927	

7. GEOTECHNICAL INFORMATION (2022 CBC SECTION 1603.1.6):
    REFER TO FOUNDATION GENERAL NOTES

FOUNDATION

1. GEOTECHNICAL INFORMATION AND FOUNDATION DESIGN IS BASED ON THE FOLLOWING:
    A. DESIGN LATERAL SOIL LOADS ARE IN ACCORDANCE WITH 2022 CBC TABLE 1610.1
    B. ALLOWABLE FOUNDATION BEARING AND LATERAL PRESSURES ARE IN ACCORDANCE WITH 2022 CBC TABLE 1806.2
    C. VALUES LISTED SHALL BE VERIFIED BY A LICENSED GEOTECHNICAL ENGINEER

2. SPREAD OR CONTINUOUS FOOTINGS:

ELEMENT	ALLOWABLE BEARING CAPACITY (PSF) [A]	ALLOWABLE LATERAL RESISTANCE [B]	
		PASSIVE RESISTANCE (PSF/FT BELOW GRADE) [E]	COHESION (PSF)
CONT FOOTING	1,500	100	120

NOTES:
A. THE ALLOWABLE CAPACITY MAY BE INCREASED BY ONE-THIRD WHEN CONSIDERING LOADS OF SHORT DURATION SUCH AS WIND OR SEISMIC FORCES.
B. THE ALLOWABLE LATERAL RESISTANCE CAN BE TAKEN AS THE SUM OF THE FRICTIONAL RESISTANCE AND PASSIVE RESISTANCE .
C. THE UPPER 0 FOOT OF SOIL NOT PROTECTED BY PAVEMENT SHALL BE NEGLECTED WHEN CALCULATING PASSIVE RESISTANCE.
D. COMPACTED FILL SHOULD BE PREPARED AS FOLLOWS: A MIN OF 12" OF COMPACTED FILL SHALL BE PROVIDED, COMPACTED TO A MIN OF 90 PERCENT MODIFIED PROCTOR IN ACCORDANCE WITH ASTM D 1557 (2022 CBC 1804.6)
E. MAY BE DOUBLED FOR ISOLATED POLES PER 2022 CBC 1806.3.4

4. WHERE NOT SHOWN ON THE DRAWINGS, CONTRACTOR TO PROVIDE FOR DESIGN AND INSTALLATION OF ALL CRIBBING, SHEATHING AND SHORING REQUIRED AND SHALL BE SOLELY RESPONSIBLE FOR ALL EXCAVATION PROCEDURES INCLUDING LAGGING, SHORING, AND PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS, AND UTILITIES IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL SAFETY ORDINANCES.

5. CONTRACTOR TO PROVIDE FOR DE-WATERING OF EXCAVATIONS FROM SURFACE WATER, GROUND WATER AND/OR SEEPAGE.

6. EXCAVATION FOR FOOTINGS SHALL BE APPROVED BY THE INSPECTOR OR GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE AND REINFORCING.

7. ALL EXCAVATIONS SHALL BE PROPERLY BACKFILLED. DO NOT PLACE BACKFILL BEHIND RETAINING WALLS BEFORE CONCRETE OR GROUT HAS ATTAINED FULL DESIGN STRENGTH. CONTRACTOR SHALL PROVIDE FOR DESIGN, PERMITS AND INSTALLATION OF SUCH BRACING.

8. EXCAVATIONS SHALL BE CUT SQUARE AND SMOOTH, WITH LEVEL BOTTOMS.

9. FOOTING BACKFILL AND UTILITY TRENCH BACKFILL WITHIN BUILDING AREA SHALL BE MECHANICALLY COMPACTED IN LAYERS IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION REPORT AND APPROVED BY THE GEOTECHNICAL ENGINEER. FLOODING WILL NOT BE PERMITTED. ALL FILLS USED TO SUPPORT FOUNDATIONS SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER REPRESENTATIVE PER SECTION 1705.6 OF THE CODE.

10. ALL ABANDONED FOOTINGS, UTILITIES, ETC. SHALL BE REMOVED. NEW FOOTINGS MUST EXTEND INTO UNDISTURBED SOILS.

11. PIPES WITHIN THE ZONE OF INFLUENCE OF BUILDING OR SITE ELEMENT FOUNDATIONS SHALL BE ENCASED IN LEAN CONCRETE AT THE DIRECTION OF THE GEOTECHNICAL ENGINEER OF RECORD.

EXISTING CONDITIONS

1. ALL INFORMATION SHOWN ON THE PLANS RELATIVE TO EXISTING CONDITIONS IS GIVEN AS THE BEST PRESENT KNOWLEDGE FROM PLANS SUPPLIED BY THE OWNER, BUT WITHOUT GUARANTEE OF ACCURACY.

2. WHERE ACTUAL CONDITIONS ARE NOT IN ACCORDANCE WITH THE INFORMATION PRESENTED, THE ARCHITECT AND/OR STRUCTURAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY. NO MODIFICATIONS OF THE PLANS FOR NEW CONSTRUCTION SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT.

GENERAL

1. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING CODES AND STANDARDS:
    A. 2022 CALIFORNIA BUILDING CODE, PART 2, VOLUME 2 OF 2, AND TITLE 24 C.C.R. 2022 EDITION AND LATEST REVISIONS (INCLUDING SUPPLEMENTS AND ERRATA) HEREIN REFERRED TO AS "THE CODE".
    B. ANY OTHER REGULATING AGENCIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK, INCLUDING THE STATE OF CALIFORNIA DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (CAL/OSHA).
    C. CODES & STANDARDS REFERENCED IN THE CODE OR LISTED IN THESE NOTES AND SPECIFICATIONS.

2. ALL DRAWINGS ARE CONSIDERED TO BE A PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES THAT OCCUR SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO START OF CONSTRUCTION SO THAT A CLARIFICATION CAN BE ISSUED. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS OR ANY CODE REQUIREMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT THEIR OWN EXPENSE AND AT NO EXPENSE TO THE OWNER OR ARCHITECT.

3. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK.

4. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION. THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES. IN NO INSTANCE SHALL DIMENSIONS BE SCALED FROM THE DRAWINGS.

5. SEE ARCHITECTURAL DRAWINGS FOR THE FOLLOWING:
    A. SIZE AND LOCATION OF ALL DOOR AND WINDOW OPENINGS, EXCEPT AS NOTED
    B. SIZE AND LOCATION OF ALL INTERIOR AND EXTERIOR NON-BEARING PARTITIONS UNLESS NOTED AND/OR DETAILED ON THE STRUCTURAL DRAWINGS
    C. SIZE AND LOCATION OF ALL CONCRETE CURBS, EQUIPMENT PADS, PITS, FLOOR DRAINS, SLOPES, DEPRESSED AREAS, CHANGE IN LEVEL, CHAMFERS, GROOVES, INSERTS, ETC
    D. SIZE AND LOCATION OF ALL FLOOR AND ROOF OPENINGS EXCEPT AS SHOWN
    E. FLOOR AND ROOF FINISHES
    F. MISCELLANEOUS DRAINAGE AND WATERPROOFING
    G. ALL FIREPROOFING REQUIREMENTS INCLUDING FIREPROOFING OF STRUCTURAL STEEL
    H. DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS

6. SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR THE FOLLOWING:
    A. PIPE RUNS, SLEEVES, HANGERS, TRENCHES, WALL AND SLAB OPENINGS, ETC., EXCEPT AS SHOWN OR NOTED.
    B. ELECTRICAL CONDUIT RUNS, BOXES, OUTLETS IN WALLS AND SLABS.
    C. CONCRETE INSERTS FOR ELECTRICAL, MECHANICAL OR PLUMBING FIXTURES.
    D. SIZE AND LOCATION OF MACHINE OR EQUIPMENT BASES, ANCHOR BOLTS FOR MOTOR MOUNTS.

7. SEE CIVIL DRAWINGS FOR THE FOLLOWING:
    A. HEIGHT AND/OR ELEVATION OF:
        a. FINISHED SURFACE
        b. TOP OF WALL
        c. TOP OF GRADE
        d. FINISHED GRADE
        e. SLOPE
    B. SITE CONCRETE WALKWAYS, CURBS & PAVING

8. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT ETC. THE CONTRACTOR IS RESPONSIBLE FOR PROVISION OF TEMPORARY SHORING AND OTHER CONSTRUCTION AIDS, INCLUDING ALL ENGINEERING OF SUCH SYSTEMS, FOR TEMPORARY SUPPORT OF NEW AND/OR EXISTING STRUCTURAL ELEMENTS AS REQUIRED FOR ERECTION AND OTHER CONTRACTOR'S MEANS AND METHODS OF CONSTRUCTION (UNO). OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS OR CONCERN CONSTRUCTION MEANS AND METHODS OR CONSTRUCTION SAFETY.

9. BACKFILL SHALL NOT BE PLACED BEHIND EXTERIOR AND INTERIOR RETAINING WALLS UNTIL THE CONCRETE / CMU HAS ACHIEVED FULL DESIGN STRENGTH. FOR BRACED WALLS SUPPORTED BY STRUCTURAL DIAPHRAGMS. BACKFILL SHALL NOT BE PLACED BEHIND THE WALL UNTIL THE DIAPHRAGM HAS BEEN INSTALLED , AND FOR CONCRETE DIAPHRAGMS, HAS ACHIEVED FULL DESIGN STRENGTH.

10. THE CONTRACT STRUCTURAL DRAWINGS SHOW THE BUILDING IN ITS FINAL INTENDED POSITION. CONTRACTOR SHALL MAKE PROVISIONS IN THE LAYOUT OF THE BUILDING TO TAKE INTO ACCOUNTS SHRINKAGE, CREEP, SHORTENING, ETC..

11. OPENINGS, POCKETS, ETC., LARGER THAN 6" SHALL NOT BE PLACED IN CONCRETE SLABS, DECKS, WALLS, UNLESS SPECIALLY DETAILED ON THE STRUCTURAL DRAWINGS. NOTIFY THE STRUCTURAL ENGINEER WHEN DRAWINGS BY OTHERS SHOW OPENINGS, POCKETS, ETC., LARGER THAN 6" NOT SHOWN ON THE STRUCTURAL DRAWINGS, BUT WHICH ARE LOCATED IN STRUCTURAL MEMBERS.

12. ASTM SPECIFICATIONS ON THE DRAWINGS SHALL BE THE VERSION REFERENCED IN CHAPTER 35 OF THE CODE OR AS REFERENCED IN THE APPLICABLE DESIGN STANDARD.

13. CONTRACTOR SHALL INVESTIGATE SITE DURING CLEARING AND EARTHWORK OPERATIONS FOR FILLED EXCAVATIONS OR BURIED STRUCTURES, SUCH AS CESSPOOLS, CISTERNS, FOUNDATIONS, ETC. IF ANY SUCH STRUCTURES ARE FOUND, THE STRUCTURAL ENGINEER AND GEOTECHNICAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY.

14. CONSTRUCTION MATERIAL SHALL BE SPREAD OUT IF PLACED ON FRAMED ROOF OR FLOOR. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT. THE CONTRACTOR TO DESIGN AND PROVIDE ADEQUATE SHORING AND/OR BRACING WHERE STRUCTURE HAS NOT ATTAINED DESIGN STRENGTH.

15. CONTRACTOR SHALL COORDINATE SHORING WITH DRAWINGS OF RECORD TO INSURE PROVISIONS FOR POCKETS, BLOCKOUTS, OFFSETS, STEPPED FOOTINGS AND ANY OTHER ITEMS AFFECTED BY THE SHORING. SHORING IS NOT THE RESPONSIBILITY OF THE SEOR. CONTRACTOR TO SUBMIT ANY SHORING DESIGN AND DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.

16. AN UNDERGROUND SERVICE ALERT INQUIRY IDENTIFICATION NUMBER MUST BE OBTAINED AT LEAST TWO WORKING DAYS BEFORE STARTING WORK WITH THIS PERMIT.
    A. FOR PROJECTS IN SOUTHERN CALIFORNIA TELEPHONE NO. 1-800-422-4133.
    B. FOR PROJECTS IN NORTHERN CALIFORNIA TELEPHONE NO. 1-800-227-2600.

17. EDGE OF SLAB DIMENSIONS TO BE COORDINATED AND VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO FABRICATION.

18. THE CONTRACTOR SHALL ALLOW SUFFICIENT TIME FOR THE ENGINEER OF RECORD TO THOROUGHLY REVIEW SUBMITTAL PACKAGES (10 WORKING DAYS, MINIMUM) AND REQUESTS FOR INFORMATION (7 WORKING DAYS MINIMUM).

DIMENSIONS

1. DIMENSIONS SHALL BE DEFINED TO INCLUDE BOTH HORIZONTAL DIMENSIONS AND VERTICAL DIMENSIONS (ELEVATIONS).
2. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE. DRAWINGS SHALL NOT BE SCALED.
3. SEE ARCHITECTURAL DRAWINGS FOR DIMENSION NOT NOTED ON STRUCTURAL DRAWINGS.
4. SEE ARCHITECTURAL AND/OR CIVIL DRAWINGS FOR FINISH FLOOR ELEVATIONS.
5. SEE ARCHITECTURAL DRAWINGS FOR ALL TOP OF SHEATHING AND/OR ROOF ELEVATIONS.
6. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION. THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES OR INCONSISTENCIES.

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MICHAEL DOREMUS
S 5685
Michael

CONSULTANT

AGENCY

GOLETA CITY HALL
130 CREMONA DRIVE, GOLETA CA 93117

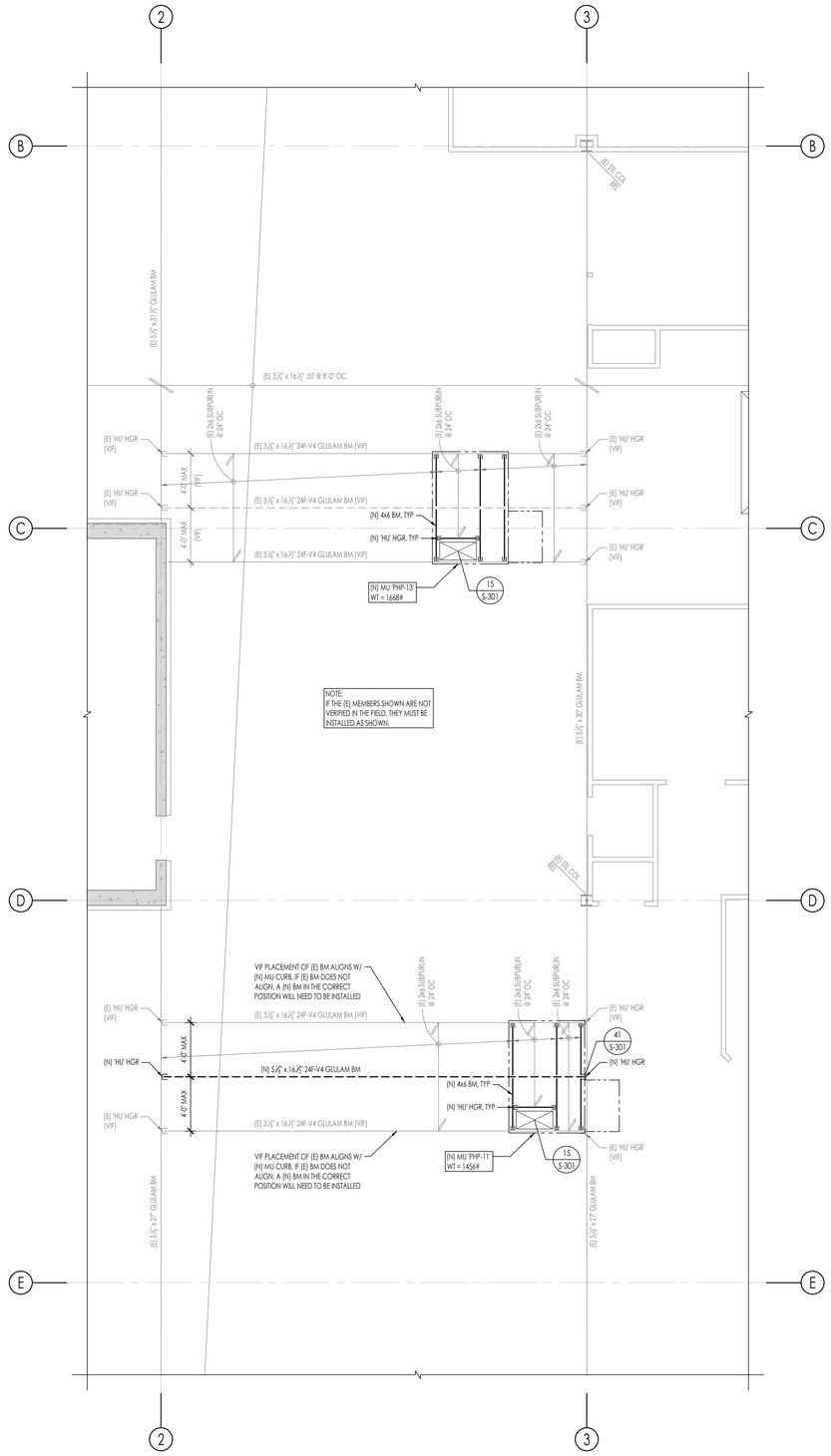
GENERAL NOTES

NO.	REVISION	DATE
1	PLAN CHECK RESPONSE 1	08/25/25

PLAN CHECK RESPONSE 1

PROJECT MANAGER
M. DOREMUS
DRAWN BY **C. PRESSLER**
CHECKED BY **M. DOREMUS**
DATE
AUGUST 25, 2025
PROJECT NUMBER
1806-03-PS24
SHEET
S-102

N:\1800\1806-03-PS24-Goleta-City-Hall-TI\Structural\ConDocs\Sheet-Files_GoletaHall-TI\1806-03-PS24_S102.dwg, S102, Aug 25, 2025 10:51am, CPressler



1 PARTIAL ROOF FRAMING PLAN - OPTION A
SCALE: 1/4" = 1'-0"

NORTH

ROOF FRAMING NOTES

1. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS AND ELEVATIONS INCLUDING, BUT NOT LIMITED TO THE FOLLOWING, ALL DIMENSIONS TO BE VERIFIED PRIOR TO CONSTRUCTION:
   - A. GRID DIMENSIONS AND HORIZONTAL CONTROL
   - B. ALL DIMENSIONS, ELEVATIONS, FINISH SURFACE, SLOPES, DRAINS, SLAB DEPRESSIONS, ETC
   - C. LOCATION AND EXTENT OF EXTERIOR WALL ASSEMBLIES AND OPENINGS
   - D. ALL NON STRUCTURAL WALLS
2. REFER TO THE FOLLOWING SHEETS FOR TYPICAL DETAILS:

DESCRIPTION	SHEET (S)
SYMBOLS AND ABBREVIATIONS	S-101
STRUCTURAL GENERAL NOTES	S-102
TESTING AND INSPECTION	S-102
ROOF FRAMING DETAILS	S-301

3. SEE ARCHITECTURAL DRAWINGS FOR ALL TOP OF SHEATHING AND TOP OF WALL ELEVATIONS.
4. SEE ARCHITECTURAL, PLUMBING, MECHANICAL AND ELECTRICAL DRAWINGS FOR SIZE AND LOCATION OF PIPES, DUCTS AND OTHER ROOF PENETRATIONS. FOR ROOF PENETRATIONS NOT SHOWN ON ROOF FRAMING PLAN, SEE DETAIL 1S/S-301 FOR TYPICAL OPENINGS, UNO.
5. SEE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF ALL DOOR AND WINDOW OPENINGS IN BEARING AND NON-BEARING WALLS.
6. ALL LINES AND/OR MEMBERS INDICATED AS 'STRUT' SHALL RECEIVE (2) ROWS OF BOUNDARY NAILING (BN), STGR.
7. 'MU' INDICATES MECHANICAL UNIT. MAXIMUM ALLOWABLE WEIGHT IS SHOWN, INCLUDING CURB & COMBINATION ECONOMIZER & POWER EXHAUST. SEE MECHANICAL & ARCHITECTURAL DRAWINGS FOR EXACT LOCATION & WEIGHT OF EQUIPMENT. ATTACH MECH UNITS TO STRUCTURE PER DETAIL 3/1/S-301. SEE DETAIL 1S/S-301 FOR OPENINGS IN ROOF FRAMING.
8. EXISTING FRAMING (INCLUDING, BUT NOT LIMITED TO, GLULAM GRADE STAMP, DIMENSIONS OF FRAMING AND LOCATION OF FRAMING) SHALL BE CONFIRMED PRIOR TO STARTING WORK WITH THIS PERMIT.

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REGISTERED PROFESSIONAL ENGINEER — MICHAEL DORE — No. S 6685 — STRUCTURAL — STATE OF CALIFORNIA

CONSULTANT

AGENCY

GOLETA CITY HALL
130 CREMONA DRIVE, GOLETA CA 93117

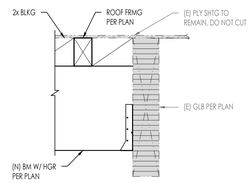
ROOF FRAMING PLAN

NO.	REVISION	DATE
1	PLAN CHECK RESPONSE 1	08/25/25

PROJECT MANAGER: M. DOREMUS
DRAWN BY: C. PRESSLER
CHECKED BY: M. DOREMUS
DATE: AUGUST 25, 2025
PROJECT NUMBER: 1806-03-PS24
SHEET: S-201

PLAN CHECK RESPONSE 1

N:\1800\1806-03-PS24-Goleta-City-Hall\Structural\ConDocs\Sheet-Files_GoletaHall.TI\1806-03-PS24 - Plans.dwg, S201, Aug 25, 2025 10:51am, CPressler



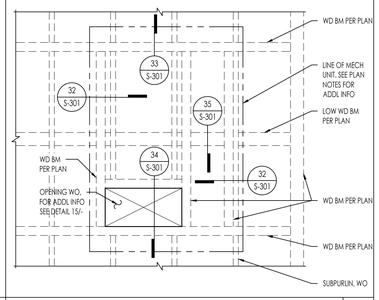
61

DROPPED BEAM CONNECTION

1806-03-PP24 - S-301 - 41

1" = 1'-0"

51



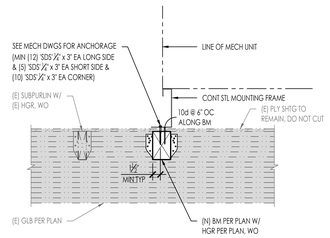
41

ROOF FRAMING @ MECH UNIT

1806-03-PP24 - S-301 - 31

1/2" = 1'-0"

31



62

52

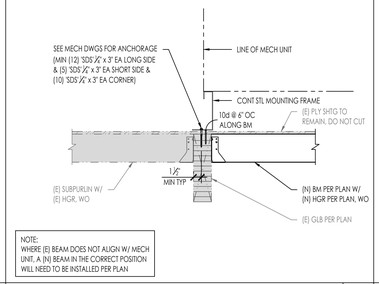
42

PERP TO ROOF BEAM

1806-03-PP24 - S-301 - 32

1" = 1'-0"

32



NOTE:
WHERE (E) BEAM DOES NOT ALIGN W/ MECH UNIT, A (N) BEAM IN THE CORRECT POSITION WILL NEED TO BE INSTALLED PER PLAN

63

53

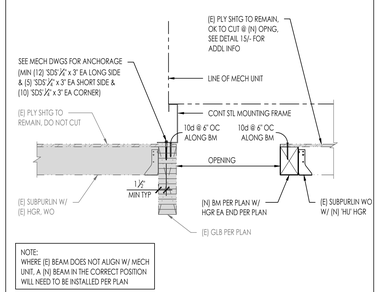
43

EQUIPMENT SUPPORT PARALLEL TO ROOF BEAM

1806-03-PP24 - S-301 - 33

1" = 1'-0"

33



NOTE:
WHERE (E) BEAM DOES NOT ALIGN W/ MECH UNIT, A (N) BEAM IN THE CORRECT POSITION WILL NEED TO BE INSTALLED PER PLAN

64

54

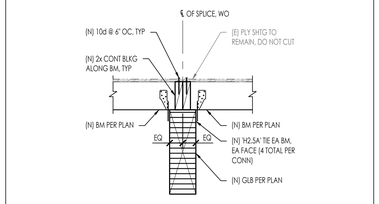
44

EQUIPMENT SUPPORT PARALLEL TO ROOF BEAM

1806-03-PP24 - S-301 - 34

1" = 1'-0"

34



65

55

45

ROOF BEAM TO LOW BEAM CONN

1806-03-PP24 - S-301 - 35

1" = 1'-0"

35

FASTENING SCHEDULE PER 2022 CBC 2304.10.1		
CONNECTION	FASTENING	LOCATION
1. BLOCKING BETWEEN CEILING JOISTS, RAFTERS OR TRUSSES TO TOP PLATE OR OTHER FRAMING BELOW	3-8d COMMON	EACH END, TOENAIL
2. BLOCKING BETWEEN RAFTERS OR TRUSS NOT AT THE WALL TO TOP PLATE, TO RAFTER OR TRUSS	2-8d COMMON	EACH END, TOENAIL
	2-16d COMMON	END NAIL
3. FLAT BLOCKING TO TRUSS AND WEB FILLER	16d COMMON @ 6" OC	FACE NAIL
4. CEILING JOIST TO TOP PLATE	3-8d COMMON	EACH JOIST, TOENAIL
5. CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER; LAPS OVER PARTITIONS	3-16d COMMON	FACE NAIL
6. CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT)	3-16d COMMON	FACE NAIL
7. COLLAR TIE TO RAFTER	3-10d COMMON	FACE NAIL
8. RAFTER OR ROOF TRUSS TO PLATE	3-10d COMMON	TOENAIL[b]
9. ROOF RAFTER TO RIDGE VALLEY OR HIP RAFTER; OR ROOF RAFTER TO 2-INCH RIDGE BEAM	2-16d COMMON	END NAIL
	3-10d COMMON	TOENAIL
10. STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS	16d COMMON	16" OC FACE NAIL
11. BUILT-UP HEADER (2" TO 2" HEADER)	16d COMMON	16" OC EACH EDGE, FACE NAIL
12. CONTINUOUS HEADER TO STUD	4-10d COMMON	TOENAIL
13. TOP PLATE TO TOP PLATE	16d COMMON	16" OC FACE NAIL
14. TOP PLATE TO TOP PLATE, AT END JOINTS	8-16d COMMON	EACH SIDE OF END JOINT, FACE NAIL (MINIMUM 24" LAP SPLICE LENGTH EACH SIDE OF END JOINT)
15. BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING	2-16d COMMON	16" OC FACE NAIL
16. STUD TO TOP OR BOTTOM PLATE	4-8d COMMON	TOENAIL
	2-16d COMMON	END NAIL
17. TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	2-16d COMMON	FACE NAIL
18. JOIST TO SILL, TOP PLATE, OR GIRDER	3-8d COMMON	TOENAIL
20. RIM JOIST, BAND JOIST, OR BLOCKING TO TOP PLATE, SILL OR OTHER FRAMING BELOW	8d COMMON	6" OC, TOENAIL
21. 1"x6" SUBFLOOR OR LESS TO EACH JOIST	2-8d COMMON	FACE NAIL
22. 2" SUBFLOOR TO JOIST OR GIRDER	2-16d COMMON	FACE NAIL
23. BUILT-UP GIRDER AND BEAMS, 2" LUMBER LAYERS	20d COMMON (4" x 0.192")	32" OC FACE NAIL AT TOP AND BOTTOM STAGGERED ON APPOSITE SIDE
24. LEDGER STRIP SUPPORTING JOIST OR RAFTERS	3-16d COMMON	EACH JOIST OR RAFTER, FACE NAIL
26. JOIST TO BAND JOIST OR RIM JOIST	3-16d COMMON	END NAIL
27. BRIDGING OR BLOCKING TO JOIST, RAFTER OR TRUSS	2-8d COMMON	EACH END, TOENAIL

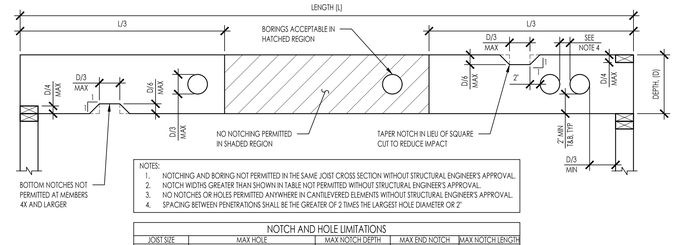
NOTES:
a. THIS NAILING SCHEDULE SHALL ONLY BE USED IF CONDITION IS NOT OTHERWISE DETAILED OR SPECIFIED ON THE CONSTRUCTION DOCUMENTS. COMMON NAILS SHALL BE USED EXCEPT WHERE OTHERWISE STATED
b. WHERE A RAFTER IS FASTENED TO AN ADJACENT PARALLEL CEILING JOIST IN ACCORDANCE WITH THIS SCHEDULE AND THE CEILING JOIST IS FASTENED TO THE TOP PLATE IN ACCORDANCE WITH THIS SCHEDULE, THE NUMBER OF TOENAILS IN THE RAFTER SHALL BE PERMITTED TO BE REDUCED BY ONE NAIL

NAILING SCHEDULE

1806-03-PS24 - S301 - 12

NTS

12



NOTES:
1. NOTCHING AND BORING NOT PERMITTED IN THE SAME JOIST CROSS SECTION WITHOUT STRUCTURAL ENGINEER'S APPROVAL.
2. NOTCH WIDTHS GREATER THAN SHOWN IN TABLE NOT PERMITTED WITHOUT STRUCTURAL ENGINEER'S APPROVAL.
3. NO NOTCHES OR HOLES PERMITTED ANYWHERE IN CANTILEVERED ELEMENTS WITHOUT STRUCTURAL ENGINEER'S APPROVAL.
4. SPACING BETWEEN PENETRATIONS SHALL BE THE GREATER OF 2 TIMES THE LARGEST HOLE DIAMETER OR 2"

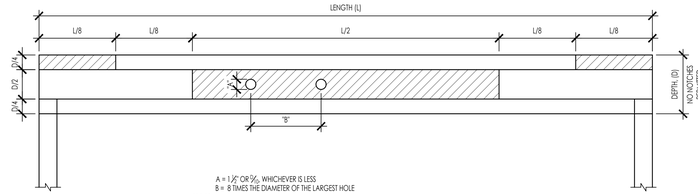
NOTCH AND HOLE LIMITATIONS				
JOIST SIZE	MAX HOLE	MAX NOTCH DEPTH	MAX END NOTCH	MAX NOTCH LENGTH
2X4	NONE	NONE	NONE	NONE
2X6	1½"	⅝"	1½"	1½"
2X8	2½"	1¼"	1½"	2½"
2X10	3"	1½"	2½"	3"
2X12	3½"	1⅞"	2½"	3½"

SAWN LUMBER AND RAFTER JOIST NOTCHING AND BORING LIMITATIONS

1806-03-PS24 - S301 - 13

NTS

13



NOTES:
1. THE MAXIMUM NUMBER OF HOLES SHALL NOT EXCEED 1 FOR EVERY 5 FEET OF BEAM LENGTH.
2. PENETRATIONS MAY NOT BE DRILLED THROUGH CANTILEVERS.
3. SQUARE PENETRATIONS MAY NOT BE CUT INTO BEAM

GLB PENETRATIONS

1806-03-PS24 - S301

NTS

14

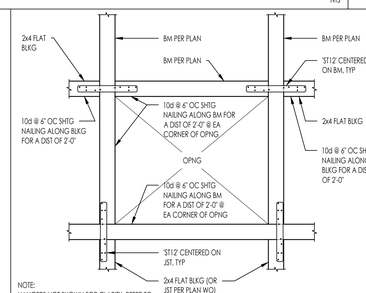
25

OPENING AT FRAMING

1806-03-PS24 - S301 - 15

NTS

15



NOTE:
HANGERS NOT SHOWN FOR CLARITY, REFER TO FRAMING PLAN FOR HANGERS.
SHTG NAILING REFERS TO NAILING INSTALLED OVER (E) ROOF SHEATHING

PLAN CHECK RESPONSE 1

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rrmdesign.com | (805) 543-1794

REGISTERED PROFESSIONAL ENGINEER — MICHAEL DORE DOREMUS — No. S 6685 — STRUCTURAL — STATE OF CALIFORNIA

CONSULTANT

AGENCY

GOLETA CITY HALL
130 CREMONA DRIVE, GOLETA CA 93117

ROOF FRAMING DETAILS

NO.	REVISION	DATE
1	PLAN CHECK RESPONSE 1	08/25/25

PROJECT MANAGER: M. DOREMUS
DRAWN BY: C. PRESSLER
CHECKED BY: M. DOREMUS
DATE: AUGUST 25, 2025
PROJECT NUMBER: 1806-03-PS24
SHEET: S-301

MECHANICAL LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
Ø	DIA	DIAMETER
ϕ		ELECTRICAL PHASE
		ROUND DUCT TURNING DOWN, ROUND DUCT TURNING UP
		ACCESS CLEARANCE
	POC OR POD	POINT OF CONNECTION, POINT OF DISCONNECTION
		ITEMS RELATED TO THE MECHANICAL SYSTEMS THAT ARE TO BE REMOVED
——— CD ———		CONDENSATE LINE
——— G ———		GAS LINE

MECHANICAL ABBREVIATIONS

AC	AIR CONDITION, AIR CONDITIONING, AIR CONDITIONED	HP	HORSE POWER
ABV	ABOVE	HVI	HOME VENTILATING INSTITUTE
AFF	ABOVE FINISHED FLOOR	HZ	HERTZ
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY	IDU	INDOOR UNIT
AHJ	AUTHORITY HAVING JURISDICTION	IWC	INCHES OF WATER COLUMN
AHU	AIR HANDLING UNIT	KW	KILOWATT
ALUM	ALUMINUM	LBS	POUNDS
AMCA	AIR MOVEMENT AND CONTROL ASSOCIATION	LWT	LEAVING WATER TEMPERATURE
AMB	AMBIENT	MBH	1000 BRITISH THERMAL UNITS PER HOUR
AP	ACCESS PANEL	MCA	MINIMUM CIRCUIT AMPS
ARCH	ARCHITECT, ARCHITECTURAL	MFGR	MANUFACTURE OR MANUFACTURER
AHRI	AIR CONDITIONING, HEATING, AND REFRIGERATION INSTITUTE	MIN	MINIMUM
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR CONDITIONING ENGINEERS	MUA	MAKE-UP AIR
BDD	BACK DRAFT DAMPER	(N)	NEW
BOD	BASIS OF DESIGN	NL	NOT LISTED
BEL	BELOW	NOM	NOMINAL
BHP	BRAKE HORSE POWER	NTS	NOT TO SCALE
BLDG	BUILDING	OA	OUTSIDE AIR
BTUH	BRITISH THERMAL UNIT PER HOUR	OAI	OUTSIDE AIR INTAKE
CA	COMBUSTION AIR	OBD	OPPOSED BLADE DAMPER
CD	CONDENSATE DRAIN	ODU	OUTDOOR UNIT
CFD	CEILING FIRE DAMPER	OSHPD	OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
CFM	CUBIC FEET PER MINUTE	PD	PRESSURE DROP
CONT	CONTINUATION	PSI	POUNDS PER SQUARE INCH
CSD	CEILING SMOKE DAMPER	RA	RETURN AIR
DB	DRY BULB TEMPERATURE	REF	REFRIGERANT, REFRIGERATION
DN	DOWN	RM	ROOM
DSA	DIVISION OF THE STATE ARCHITECT	RPM	REVOLUTIONS PER MINUTE
DTR	DOWN THROUGH ROOF	SA	SUPPLY AIR
(E)	EXISTING	SEER	SEASONAL ENERGY EFFICIENCY RATION
EA	EXHAUST AIR	SHT	SHEET
EC	EVAPORATIVE COOLER	SMACNA	SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION
EDB	ENTERING DRY BULB TEMPERATURE	SOV	SHUT OFF VALVE
EER	ENERGY EFFICIENCY RATIO	SP	STATIC PRESSURE
EFF	EFFICIENCY	SS	STAINLESS STEEL
ELEC	ELECTRICAL	SSE	STEADY STATE EFFICIENCY
ESP	EXTERNAL STATIC PRESSURE	SST	SATURATED SUCTION TEMPERATURE
EWB	ENTERING WET BULB	TEMP	TEMPORARY, TEMPERATURE
EWT	ENTERING WATER TEMPERATURE	TSP	TOTAL STATIC PRESSURE
FA	FROM ABOVE	TYP	TYPICAL
FC	FLEXIBLE CONNECTION	TXV	THERMAL EXPANSION VALVE
FD	FIRE DAMPER	UON	UNLESS OTHERWISE NOTED
FLA	FULL LOAD AMPS	UTR	UP TO OR UP THROUGH ROOF
FPM	FEET PER MINUTE	VD	VOLUME DAMPER
FSC	FAN SPEED CONTROLLER	VEX	VEHICLE EXHAUST SYSTEM
FSD	FIRE/SMOKE DAMPER	VRF	VARIABLE REFRIGERANT VOLUME
GA	GAGE, GAUGE	WB	WET BULB TEMPERATURE
GALV	GALVANIZED	WC	WATER COLUMN
GPM	GALLONS PER MINUTE	WG	WATER GAUGE
GYP	GYPSUM	WT	WEIGHT EXPRESSED IN POUNDS
HD	HEAD		

CAL GREEN CODE NONRESIDENTIAL MANDATORY MEASURES

5.410.4.5 OPERATION AND MAINTENANCE (O&M) MANUAL. PROVIDE THE BUILDING OWNER OR REPRESENTATIVE WITH DETAILED OPERATING AND MAINTENANCE INSTRUCTIONS AND COPIES OF GUARANTIES/WARRANTIES FOR EACH SYSTEM. O&M INSTRUCTIONS SHALL BE CONSISTENT WITH OSHA REQUIREMENTS IN CCR, TITLE 8, SECTION 5142, AND OTHER RELATED REGULATIONS.

5.410.4.5.1 INSPECTIONS AND REPORTS. INCLUDE A COPY OF ALL INSPECTION VERIFICATIONS AND REPORTS REQUIRED BY THE ENFORCING AGENCY.

5.504.3 COVERING OF DUCT OPENINGS AND PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION. AT THE TIME OF ROUGH INSTALLATION AND DURING STORAGE ON THE CONSTRUCTION SITE UNTIL FINAL STARTUP OF THE HEATING, COOLING AND VENTILATING EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, SHEET METAL OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY TO REDUCE THE AMOUNT OF DUST, WATER AND DEBRIS WHICH MAY ENTER THE SYSTEM.

5.504.4.1 ADHESIVES, SEALANTS AND CAULKS. ADHESIVES, SEALANTS, AND CAULKS USED ON THE PROJECT SHALL MEET THE REQUIREMENTS OF THE FOLLOWING STANDARDS:
1. ADHESIVES, ADHESIVE BONDING PRIMERS, ADHESIVE PRIMERS, SEALANTS, SEALANT PRIMERS AND CAULKS SHALL COMPLY WITH LOCAL OR REGIONAL AIR POLLUTION CONTROL OR AIR QUALITY MANAGEMENT DISTRICT RULES WHERE APPLICABLE, OR SCAQMD RULE 1168 VOC LIMITS, AS SHOWN IN TABLES 5.504.4.1 AND 5.504.4.2. SUCH PRODUCTS ALSO SHALL COMPLY WITH THE RULE 1168 PROHIBITION ON THE USE OF CERTAIN TOXIC COMPOUNDS (CHLOROFORM, ETHYLENE DICHLORIDE, METHYLENE CHLORIDE, PERCHLOROETHYLENE AND TRICHLOROETHYLENE), EXCEPT FOR AEROSOL PRODUCTS AS SPECIFIED IN SUBSECTION 2, BELOW.
2. AEROSOL ADHESIVES, AND SMALLER UNIT SIZES OF ADHESIVES, AND SEALANT OR CAULKING COMPOUNDS (IN UNITS OF PRODUCT, LESS PACKAGING, WHICH DO NOT WEIGH MORE THAN ONE POUND AND DO NOT CONSIST OF MORE THAN 16 FLUID OUNCES) SHALL COMPLY WITH STATEWIDE VOC STANDARDS AND OTHER REQUIREMENTS, INCLUDING PROHIBITIONS ON USE OF CERTAIN TOXIC COMPOUNDS, OF CALIFORNIA CODE OF REGULATIONS, TITLE 17, COMMENCING WITH SECTION 94507.

TABLE 5.504.4.1 ADHESIVE VOC LIMIT
LESS WATER AND LESS EXEMPT COMPOUNDS IN GRAMS PER LITER

SPECIALTY APPLICATIONS	CURRENT VOC LIMIT
PVC WELDING	510
CPVC WELDING	490
ABS WELDING	325
SPECIAL PURPOSE CONTACT ADHESIVE	250

1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.
2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168, HTTP://WWW.ARB.CA.GOV/DRDB/SC/CURHTML/R1168.PDF.

5.504.5.3 FILTERS. IN MECHANICALLY VENTILATED BUILDINGS, PROVIDE REGULARLY OCCUPIED AREAS OF THE BUILDING WITH AIR FILTRATION MEDIA FOR OUTSIDE AND RETURN AIR THAT PROVIDES AT LEAST A MINIMUM EFFICIENCY REPORTING VALUE (MERV) OF 13. MERV 13 FILTERS SHALL BE INSTALLED PRIOR TO OCCUPANCY, AND RECOMMENDATIONS FOR MAINTENANCE WITH FILTERS OF THE SAME VALUE SHALL BE INCLUDED IN THE OPERATION AND MAINTENANCE MANUAL. FILTERS SHALL BE CLEARLY LABELED BY THE MANUFACTURER INDICATING THE MERV RATING.

EXCEPTIONS:
1. EXISTING MECHANICAL EQUIPMENT.

SECTION 5.506 INDOOR AIR QUALITY

5.506.1 OUTSIDE AIR DELIVERY. FOR MECHANICALLY OR NATURALLY VENTILATED SPACES IN BUILDINGS, MEET THE MINIMUM REQUIREMENTS OF SECTION 120.1 (REQUIREMENTS FOR VENTILATION) OF THE 2022 CALIFORNIA ENERGY CODE, OR THE APPLICABLE LOCAL CODE, WHICHEVER IS MORE STRINGENT, AND DIVISION 1, CHAPTER 4 OF CCR, TITLE 8.

SECTION 5.508 OUTDOOR AIR QUALITY

5.508.1 OZONE DEPLETION AND GREENHOUSE GAS REDUCTIONS. INSTALLATIONS OF HVAC, REFRIGERATION AND FIRE SUPPRESSION EQUIPMENT SHALL COMPLY WITH SECTIONS 5.508.1.1 AND 5.508.1.2.

5.508.1.1 CHLOROFLUOROCARBONS (CFCS). INSTALL HVAC, REFRIGERATION AND FIRE SUPPRESSION EQUIPMENT THAT DO NOT CONTAIN CFCS.

5.508.1.2 HALONS. INSTALL HVAC, REFRIGERATION AND FIRE SUPPRESSION EQUIPMENT THAT DO NOT CONTAIN HALONS.

SECTION 702.1 INSTALLER TRAINING

HVAC SYSTEM INSTALLERS SHALL BE TRAINED AND CERTIFIED IN THE PROPER INSTALLATION OF HVAC SYSTEMS INCLUDING DUCTS AND EQUIPMENT BY A NATIONALLY OR REGIONALLY RECOGNIZED TRAINING OR CERTIFICATION PROGRAM. UNCERTIFIED PERSONS MAY PERFORM HVAC INSTALLATIONS WHEN UNDER THE DIRECT SUPERVISION AND RESPONSIBILITY OF A PERSON TRAINED AND CERTIFIED TO INSTALL HVAC SYSTEMS OR CONTRACTOR LICENSED TO INSTALL HVAC SYSTEMS. EXAMPLES OF ACCEPTABLE HVAC TRAINING AND CERTIFICATION PROGRAMS INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:
1. STATE CERTIFIED APPRENTICESHIP PROGRAMS.
2. PUBLIC UTILITY TRAINING PROGRAMS.
3. TRAINING PROGRAMS SPONSORED BY TRADE, LABOR OR STATE-WIDE ENERGY CONSULTING OR VERIFICATION ORGANIZATIONS.
4. PROGRAMS SPONSORED BY MANUFACTURING ORGANIZATIONS.
5. OTHER PROGRAMS ACCEPTABLE TO THE ENFORCING AGENCY

MECHANICAL TITLE 24 NOTES

1 HVAC EQUIPMENT AND APPLIANCES SHALL MEET THE LATEST REQUIREMENTS OF THE CA ENERGY EFFICIENCY STANDARDS.

2 HVAC SYSTEMS SHALL MEET THE LATEST CONTROL REQUIREMENTS OF THE CA ENERGY EFFICIENCY STANDARDS.

3 ALL WORK SHALL BE IN ACCORDANCE WITH CITY AND COUNTY CODES, CALIFORNIA ENERGY CONSERVATION STANDARDS, TITLE - 24, AND ALL OTHER APPLICABLE CODES.

MECHANICAL GENERAL NOTES

1 COMPLY WITH THE REQUIREMENTS OF THE FOLLOWING CODES:

2022 CALIFORNIA ADMINISTRATIVE CODE (CAC): PART 1, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)
2022 CALIFORNIA BUILDING CODE (CBC): PART 2, TITLE 24 CCR
2022 CALIFORNIA ELECTRICAL CODE (CEC): PART 3, TITLE 24 CCR
2022 CALIFORNIA MECHANICAL CODE (CMC): PART 4, TITLE 24 CCR
2022 CALIFORNIA PLUMBING CODE (CPC): PART 5, TITLE 24 CCR
2022 CALIFORNIA ENERGY CODE (CENC): PART 6, TITLE 24 CCR
2022 CALIFORNIA FIRE CODE (CFC): PART 9, TITLE 24 CCR
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CAL GREEN): PART 11, TITLE 24 CCR

REPORT DEFICIENCIES WITHIN THIRTY (30) DAYS UPON AUTHORIZATION TO PROCEED.

2 THESE DRAWINGS ARE A GENERAL GRAPHIC PRESENTATION OF THE WORK. DUCTWORK, PIPING, AND EQUIPMENT, AS SHOWN, ARE SCHEMATIC. FABRICATE AND INSTALL BASED ON ACTUAL FIELD MEASUREMENT. COORDINATE WITH OTHER TRADES. ADHERE TO LOCATIONS AS CLOSELY AS POSSIBLE, VARY RUNS OR SHAPE OF DUCTWORK AS REQUIRED TO MEET STRUCTURAL AND OTHER INTERFERENCES AS REQUIRED BY THE ARCHITECT. MAINTAIN AN UP TO DATE SET OF AS-BUILT DRAWINGS AT THE JOB SITE.

3 THE MECHANICAL CONTRACTOR SHALL COORDINATE ALL ITEMS RELATED TO MECHANICAL SYSTEMS WITH THE WORK OF OTHER TRADES BEFORE PROCEEDING WITH PROCURING OR FABRICATION OF EQUIPMENT, DUCTWORK, PIPING ETC. ITEMS TO BE COORDINATED SHALL INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:

CONSTRUCTION OF PLATFORMS AND SHAPED RUNNERS OR OTHER MEANS TO MOUNT CURBS LEVEL. ALL PLATFORMS AND CURBS SHALL BE LEVEL UNLESS OTHERWISE NOTED OR DETAILED ON THE MECHANICAL PLANS.

4 REVIEW ALL DRAWINGS AND SPECIFICATIONS INCLUDING ARCHITECTURAL, STRUCTURAL, CIVIL, MECHANICAL, PLUMBING, AND ELECTRICAL. ANY QUESTIONS SHALL BE BROUGHT UP, IN WRITING, TO THE ATTENTION OF THE ENGINEER BEFORE THE START OF CONSTRUCTION.

5 ALL EQUIPMENT SHALL BE INSTALLED WITH SUFFICIENT ACCESS TO CONTROLS, FILTERS, ELECTRIC MOTORS, ETC. ACCESS CLEARANCE SHALL BE 30" OR AS REQUIRED BY THE EQUIPMENT MANUFACTURER, WHICH EVER IS GREATER. CONTRACTORS SHALL PROVIDE ACCESS PANELS WHERE REQUIRED. WHERE VERTICAL SPACE ALLOWS, INSTALL DUCTWORK THAT IS IN CLOSE PROXIMITY TO MECHANICAL, ELECTRICAL OR ANY OTHER ITEM THAT REQUIRES ACCESS HIGH IN THE SPACE FOR EASE OF ACCESS.

6 HANDLE, STORE AND INSTALL EQUIPMENT PER MANUFACTURER'S INSTRUCTIONS.

7 BRACE AND SUPPORT PIPES, CONDUIT, AND DUCTWORK IN ACCORDANCE TO SMACNA GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL AND PLUMBING PIPING SYSTEM.

8 ALL DUCT DIMENSIONS, AS SHOWN ON MECHANICAL DRAWINGS ARE CLEAR INSIDE DIMENSIONS. INCREASE OUTER DUCT DIMENSION AS REQUIRED TO ACCOUNT FOR THE THICKNESS OF INTERNAL LINING WHERE APPLICABLE.

9 ALL SQUARE ELBOWS IN SUPPLY DUCTWORK SHALL HAVE TURNING VANES. PROVIDE MANUAL VOLUME DAMPER AT EACH BRANCH DUCT TAKE-OFF SERVING EACH AIR TERMINAL DEVICE. PROVIDE BALANCING DAMPERS FOR EACH MAIN DUCT TAKE-OFF IN ACCORDANCE TO SMACNA IN ORDER TO ASSURE A COMPLETELY BALANCED SYSTEM.

10 CONTROLS AND SWITCHES INTENDED TO BE USED BY THE OCCUPANT OF A ROOM OR AREA TO CONTROL COOLING, HEATING AND VENTILATING EQUIPMENT SHALL BE MOUNTED AT THE HEIGHTS GIVEN BY SECTION 11B-308.1 OF THE 2022 CBC. NOTIFY THE ARCHITECT IMMEDIATELY IF THE MOUNTING HEIGHTS REQUIRED BY THE 2022 CBC CANNOT BE OBTAINED AT THE LOCATION WHERE THE CONTROL DEVICE IS SHOWN ON THE MECHANICAL FLOOR PLANS.

11 DUCT SMOKE DETECTORS WHEN NOT PROVIDED PRE-INSTALLED BY THE EQUIPMENT MANUFACTURER SHALL BE INSTALLED IN THE SUPPLY AIR DUCT OF AIR-MOVING SYSTEMS SUPPLYING AIR IN EXCESS OF 2000 CFM. DETECTORS SHALL BE LOCATED BETWEEN THE SUPPLY AIR DUCT CONNECTION AT THE EQUIPMENT AND THE FIRST BRANCH DUCT OR DIFFUSER. WHERE FIRE-DETECTION OR ALARM SYSTEMS ARE PROVIDED FOR THE BUILDING, ALL SMOKE DETECTORS SHALL BE SUPERVISED BY SUCH SYSTEMS IN AN APPROVED MANNER, AND INSTALLED IN ACCORDANCE WITH NFPA 72 AND THE CALIFORNIA BUILDING AND FIRE CODES.

12 ALL EQUIPMENT SHALL BE LABELED AS TO THE SPACE THEY ARE SERVING.

13 MATERIALS EXPOSED WITHIN ANY SPACE BEING USED AS AN AIR PLENUM SHALL BE NON COMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX NOT GREATER THAN 25 AND A SMOKE DEVELOPED INDEX NOT GREATER THAN 50, WHEN TESTED AS A COMPOSITE PRODUCT IN ACCORDANCE WITH ONE OF THE FOLLOWING TEST METHODS: NFPA 255, METHOD OF TEST OF SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS, ASTM E84, SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS, OR UL 723, TEST FOR SURFACE BURNING CHARACTERISTIC OF BUILDING MATERIALS.

14 ANY MECHANICAL EQUIPMENT THAT PROVIDES POWER TO A ENERGIZED ACCESSORY MUST BE PROVIDED WITH A NAMEPLATE THAT REFLECTS THE ELECTRICAL CHARACTERISTICS OF THE COMPLETE SYSTEM AS INSTALLED WITH THE ENERGIZED ACCESSORY. NO EXCEPTIONS.

15 EQUIPMENT WITH REFRIGERANT ACCESS PORTS LOCATED OUTDOORS IN AN AREA THAT IS NOT SECURED BY WALLS OR FENCING REQUIRING KEY ACCESS SHALL BE PROTECTED FROM WITH LOCKING-TYPE TAMPER RESISTANT CAPS.

PROJECT TEAM LIST

TITLE	NAME	DESK NUMBER	EMAIL ADDRESS
PRINCIPAL IN CHARGE	BRIAN STARRETT	805.540.5358	BSTARRETT@3CENG.COM
PROJECT MANAGER	DENVER STANGER	805.540.5388	DSTANGER@3CENG.COM
MECHANICAL DESIGNER	DENVER STANGER	805.540.5388	DSTANGER@3CENG.COM

SHEET INDEX

SHEET NUMBER	SHEET TITLE
M-000	GENERAL
M-001	SCHEDULES & DETAILS
M-121	PARTIAL ROOF PLANS

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REGISTERED PROFESSIONAL ENGINEER
BRIAN P. STARRETT
M 34068
EXP. 6/30/26
MECHANICAL
STATE OF CALIFORNIA

CONSULTANT

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805. 540. 3363 WWW.3CENG.COM
1500 PALM ST. SAN LUIS OBISPO, CA 93401

AGENCY

GOLETA CITY HALL - HVAC REPLACEMENT
130 CREMONA DR, GOLETA CA 93117
GENERAL

NO.	REVISION	DATE
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PLAN CHECK RESPONSE 1

PROJECT MANAGER: DS
DRAWN BY: KH
CHECKED BY: BS
DATE: AUGUST 25, 2025
PROJECT NUMBER: 1806-03-PS24
SHEET: M-000

EXISTING GAS HEATING ELECTRIC COOLING PACKAGED UNIT SCHEDULE (FOR REFERENCE ONLY)

TAG	MAKE	MODEL	NOM CAPACITY TONS	DUCT CONFIGURATION	REFRIGERANT	COOLING STAGES	CONDENSATE CONNECTION SIZE	ELECTRICAL DATA			AHRI RATINGS		EVAPORATOR FAN DATA							FURNACE SECTION				MERV 13 FILTER QUANTITY AND SIZE	WEIGHT W/ ACCESSORIES LBS	WEIGHT W/ ACCESSORIES & CURB LBS
								POWER V/ϕ/HZ	MCA	FUSE SIZE	BTUH	EER [EER2]	DRIVE	CFM HIGH	CFM LOW	ESP	WATTS [HP]	BHP	FAN SPEED	HEATING STAGES	INPUT BTUH	OUTPUT BTUH	THERMAL EFFICIENCY [AFUE]			
(E)AC 11	CARRIER	48HJD008	7.5	VERTICAL	R-410A	2	3/4"	460/3/60	19.2	25	90,000	11.00	BELT	3,000	NA	1.4	2,615	2.90	NA	2	90,000	72,900	[82]	(4)16x20x2	870	NA
(E)AC 13	CARRIER	48HJD012	10.0	VERTICAL	R-410A	2	3/4"	460/3/60	24.9	30	120,000	11.00	BELT	4,000	NA	2.0	3,375	4.20	NA	2	120,000	98,400	[82]	(4)20x20x2	1,035	NA

GENERAL NOTES APPLICABLE TO ALL UNITS:
A. EQUIPMENT IS EXISTING AND IS TO BE REMOVED AND REPLACED. DATA GIVEN FOR REFERENCE ONLY.

PACKAGED HEAT PUMP UNIT SCHEDULE

TAG	MAKE	MODEL	NOM CAPACITY TONS	DUCT CONFIGURATION	REFRIGERANT	ELECTRICAL DATA			AHRI PERFORMANCE								AUXILIARY ELECTRIC HEAT		CONDENSATE CONNECTION SIZE	EVAPORATOR FAN DATA							MERV 13 FILTER QUANTITY AND SIZE	VENTILATION AIR BALANCE REQUIREMENTS CFM		WEIGHT W/ ACCESSORIES LBS	WEIGHT W/ ACCESSORIES & CURB LBS	REMARKS SEE BELOW	INSTALLATION DETAIL
									COOLING				HEATING																				
						POWER V/ϕ/HZ	MCA	FUSE SIZE	BTUH	SEER [SEER2]	EER [EER2]	IEER	BTUH AT 47°F	BTUH AT 17°F	COP AT 47°F	HSPF [HSPF2]	KW	BTUH		DRIVE	MIN CFM	MAX CFM	ESP	BHP	FAN SPEED	CONTROL		MINIMUM OAI	DCV MAX OAI				
PHP 11	CARRIER	50FEQM08	7.5	VERTICAL	R-454B	460/3/60	42	45	90,000	NA	11.20	15.0	84,000	45,000	3.4	NA	13.8	47,087	3/4"	DIRECT	1,980	3,000	1.0	1.5	1,609	2-STAGE	(4)20x20x2	650	NA	1,020	1,470	1,2,C1,C4	1/M001
PHP 13	CARRIER	50FEQM12	10.0	VERTICAL	R-454B	460/3/60	52	60	118,000	NA	11.00	15.0	112,000	64,000	3.4	NA	13.8	47,087	3/4"	DIRECT	2,640	4,000	0.90	2.34	1,882	2-STAGE	(4)20x20x2	550	NA	1,235	1,680	1,3,C1,C4	1/M001

GENERAL NOTES APPLICABLE TO ALL UNITS:
A. DISCONNECT PROVIDED BY ELECTRICAL CONTRACTOR.
B. PACKAGED HEAT PUMP UNITS THAT PROVIDE POWER FROM THE UNIT TO ANY ENERGIZED ACCESSORY SHALL BE PROVIDED WITH A FACTORY NAMEPLATE THAT REFLECTS THE ELECTRICAL CHARACTERISTICS OF THE COMPLETE SYSTEM. NO EXCEPTIONS.
C. PROVIDE WITH MICROMETL CRBV-SRT34HA-11 STRUCTURALLY CALCULATED SPRING ISOLATION CURB. 11" BASE HEIGHT.
D. PROVIDE WITH CSFM LISTED, FACTORY INSTALLED SMOKE DETECTOR LOCATED IN THE SUPPLY AIR COMPARTMENT. DETECTOR SHALL BE WIRED TO SHUTDOWN THE UNIT IMMEDIATELY UPON SMOKE DETECTION.
E. PROVIDE WITH SINGLE POINT POWER KIT.

CONTROL NOTES:
C1. PROVIDE WITH HONEYWELL MODEL TC500A NETWORKABLE PROGRAMMABLE THERMOSTAT. INSTALL THERMOSTAT AT THE LOCATION OF THE (E)THERMOSTAT BUT AT 48" AFF AS REQUIRED TO MEET ACCESSIBILITY REQUIRMENTS. EXTEND CONTROL WIRING AS NEEDED. UTILIZE THE ELECTRICAL BOX THE EXISTING THERMOSTAT IS MOUNTED ON AS A JUNCTION BOX TO SPLICE THE WIRING. PROVIDE COVER PLATE OVER EXISTING BOX. COLOR OF COVER PLATE TO MATCH ADJACENT EXISTING COVER PLATES.

COMBINATION ECONOMIZER AND POWER EXHAUST SCHEDULE

TAG	MATCHING UNIT TAG	MAKE	MODEL	ELECTRICAL DATA					FAN DATA				WEIGHT LBS	REMARKS SEE BELOW	INSTALLATION DETAIL
				POWER V/ϕ/HZ	FLA	MCA	MOCP	POWERED BY ASSOCIATED UNIT	CFM	ESP	TYPE	MODULATING			
PE 11	PHP 11	MICROMETL	PEBD-SRT34CB-D2DH	460/3/60	4.6	5.8	10	NO	3,000	0.5	BACKWARD INCLINED	YES	195	C1,C2,C3	NA
PE 13	PHP 13	MICROMETL	PEBD-SRT34CB-D2DH	460/3/60	5.2	6.5	10	NO	4,000	0.5	BACKWARD INCLINED	YES	225	C1,C2,C3	NA

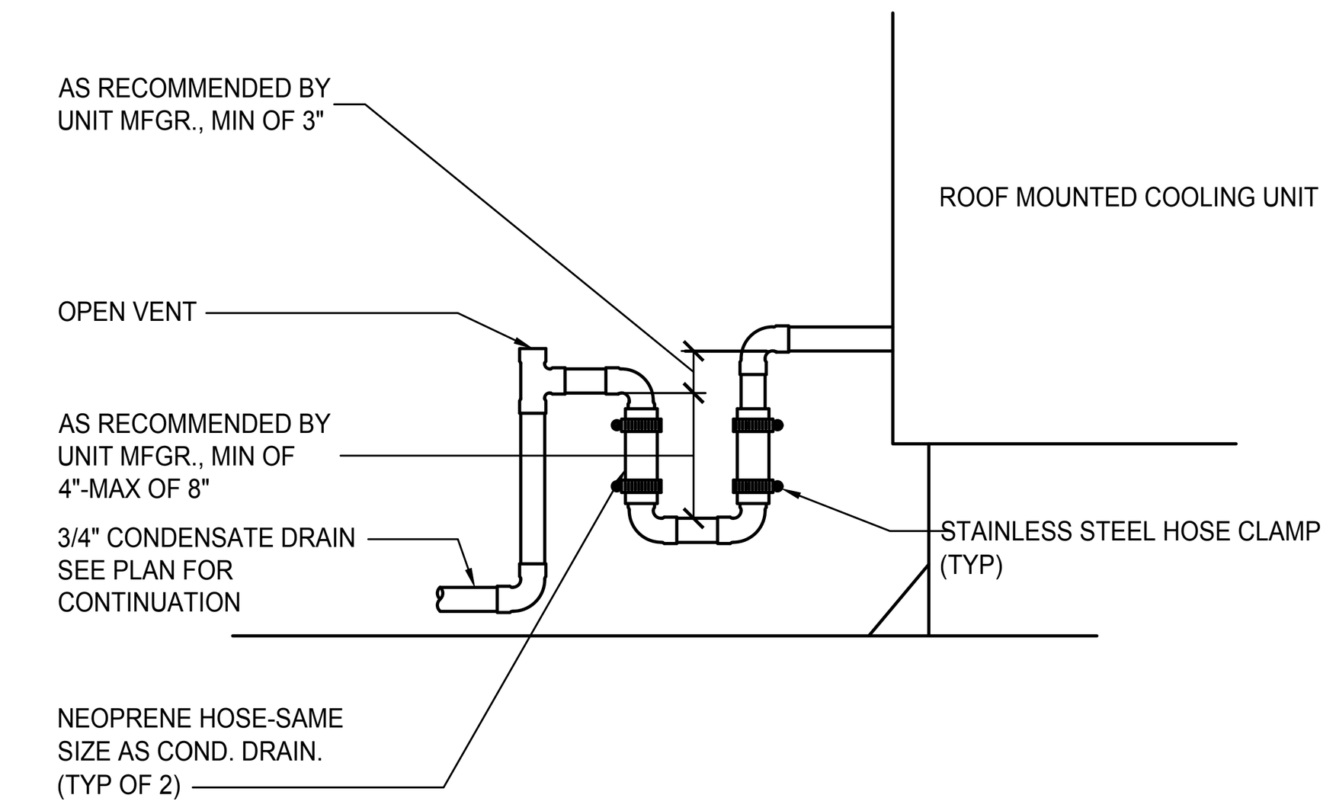
GENERAL NOTES APPLICABLE TO ALL UNITS:
A. UNIT IS PROVIDED WITH A INTEGRAL 20 AMP DISCONNECT.
B. ECONOMIZER SHALL MEET TITLE 24 MANDATORY REQUIREMENTS FOR DAMPER LEAKAGE, FAULT DETECTION AND DIAGNOSTIC CONTROLS.

CONTROL NOTES:
C1. ECONOMIZER SHALL BE DRY BULB CONTROLLED.
C2. ECONOMIZER SHALL BE PROVIDED WITH HONEYWELL JADE CONTROLLER AND BELIMO NON COMMUNICATING ACTUATORS.
C3. POWER EXHAUST SHALL MODULATE TO MAINTAIN 0.05" WC IN THE SPACE SERVED BY THE MATCHING UNIT.

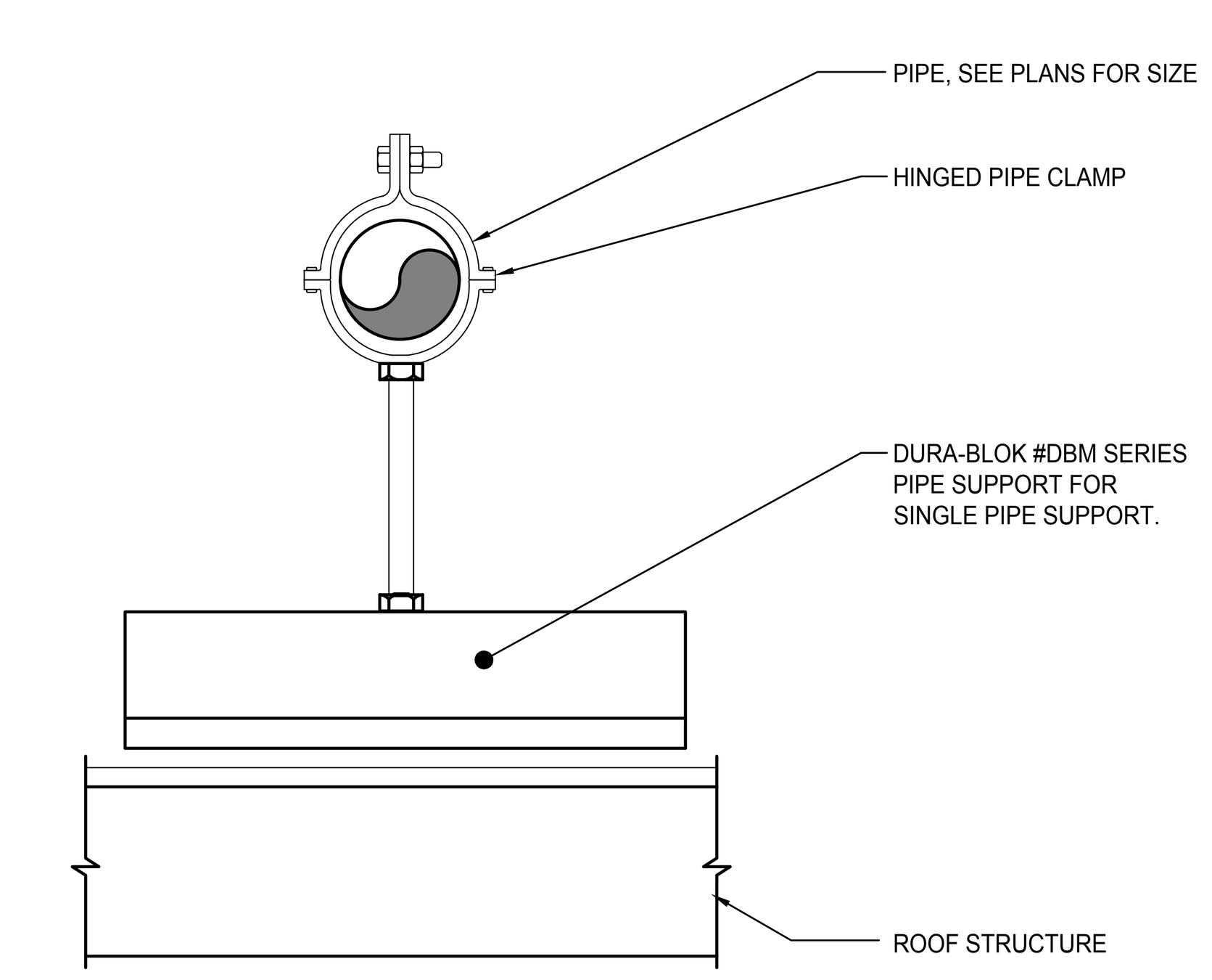
1 SECOND FLOOR PLAN
SCALE: 1/16" = 1'-0"

2 FIRST FLOOR PLAN
SCALE: 1/16" = 1'-0"

ALL CONDENSATE PIPING SHALL BE TYPE L COPPER

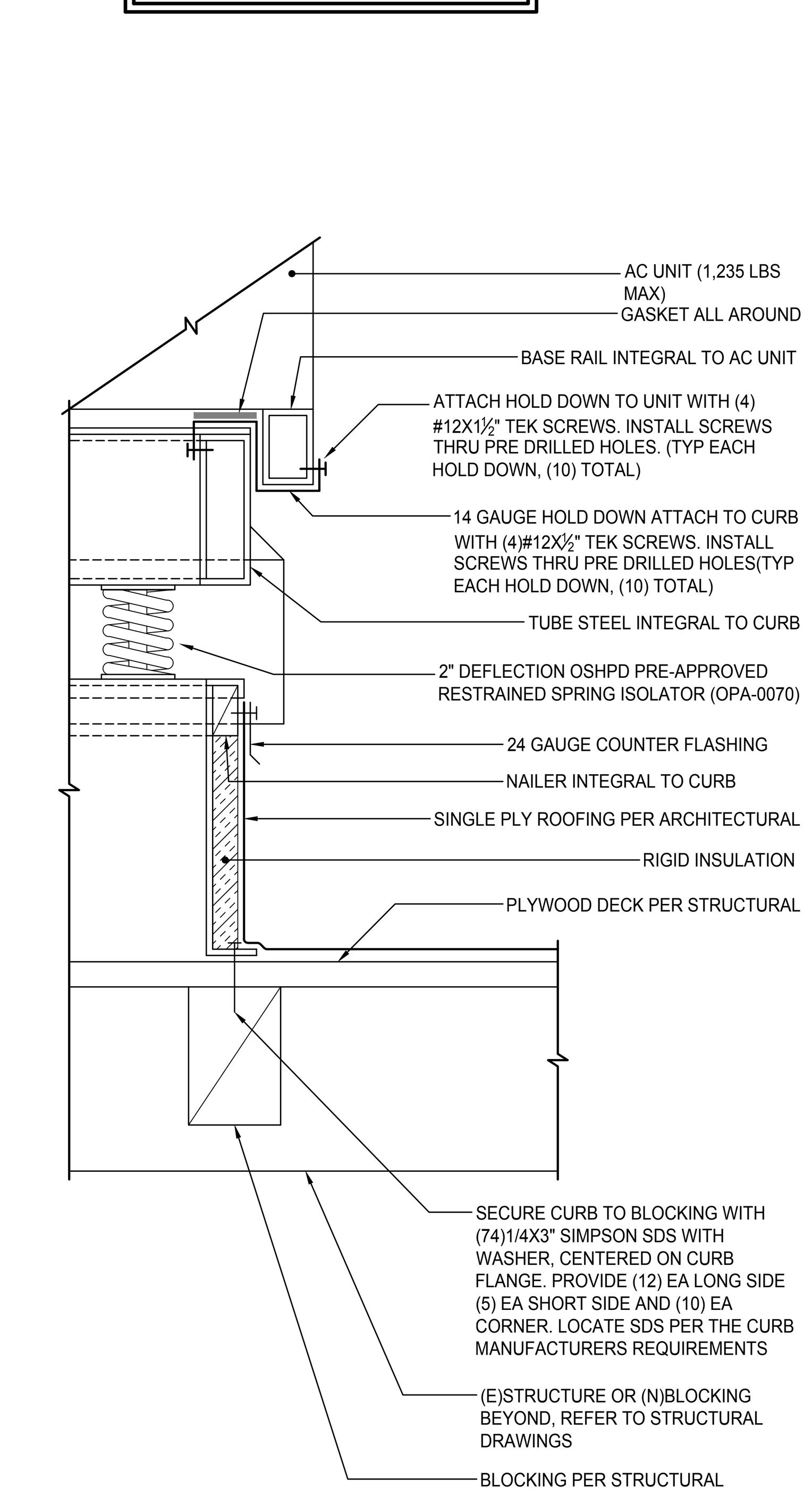


2 UNIT CONDENSATE DRAIN
NTS



3 SINGLE PIPE SUPPORT - ROOF
NTS

LOCATE HOLD DOWN CLIPS PER THE CURB MANUFACTURERS REQUIREMENTS



REFER TO ARCHITECTURAL FOR ROOFING AND FLASHING REQUIREMENTS

1 PHPs-11,13 SPRING ISOLATION CURB
NTS

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REGISTERED PROFESSIONAL ENGINEER BRIAN P. STARRETT M 34068 EXP. 6/30/26 MECHANICAL STATE OF CALIFORNIA

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AGENCY

GOLETA CITY HALL - HVAC REPLACEMENT
130 CREMONA DR, GOLETA CA 93117

SCHEDULES & DETAILS

NO.	REVISION	DATE
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△		

PLAN CHECK RESPONSE 1

PROJECT MANAGER
DS
DRAWN BY
KH
CHECKED BY
BS
DATE
AUGUST 25, 2025
PROJECT NUMBER
1806-03-PS24
SHEET
M-001

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START UP AND BALANCING

AFTER COMPLETION OF THE INSTALLATION OF THE NEW PACKAGED HEAT PUMPS AND COMBINATION ECONOMIZER AND MODULATING POWER EXHAUST THE CONTRACTOR SHALL STARTUP THE EQUIPMENT FOLLOWING THE MANUFACTURERS STARTUP PROCEDURES AND CHECKLIST. PROVIDE COMPLETED START UP CHECKLIST TO THE OWNER.

OVERALL SYSTEM AIRFLOW SHALL BE BALANCED TO ENSURE THE EQUIPMENT IS OPERATING AT THE SPECIFIED SUPPLY, RETURN AND OUTSIDE AIRFLOW VALUES. REFER TO THE PACKAGED HEAT PUMP SCHEDULE FOR THE SUPPLY AND VENTILATION AIRFLOW RATES.

DEMOLITION KEY NOTES

APPLICABLE TO THIS SHEET ONLY

1	AC UNIT TO BE REMOVED. DISCONNECT FROM POWER, CONTROL WIRING, GAS AND CONDENSATE. REMOVE UNIT AND ROOF CURB. CONTROL WIRING TO REMAIN.
2	GAS PIPING TO BE REMOVED. CAP PIPE AT POD. REMOVE PIPE AND ALL ASSOCIATED SUPPORTS TO POD.
3	CONDENSATE PIPING TO BE REMOVED. REMOVE PIPE AND ALL ASSOCIATED SUPPORTS TO POD.
4	CONDENSATE PIPING TO REMAIN. SUPPORTS SHALL BE REMOVED AND REPLACED.

DEMOLITION GENERAL NOTES

APPLICABLE TO THIS SHEET ONLY

1	ALL EXISTING ITEMS SHOWN HAVE BEEN COLLECTED FROM THE BEST AVAILABLE SOURCES. THE ENGINEER DOES NOT REPRESENT THE ACCURACY OF THESE ITEMS. THE CONTRACTOR SHALL CAREFULLY EXAMINE THE SITE AND THE CONTRACT DOCUMENTS AND PERFORM ALL WORK WHICH MAY BE REQUIRED FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK.

DEMOLITION PLAN STATEMENT

THIS DEMOLITION PLAN WAS PREPARED FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER DOES NOT REPRESENT THAT ALL ITEMS WHICH MAY REQUIRE DEMOLITION HAVE BEEN SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CAREFULLY EXAMINE THE SITE AND THE CONTRACT DOCUMENTS AND TO PERFORM ALL DEMOLITION AND RECONSTRUCTION WHICH MAY BE REQUIRED FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK. DISPOSE REMOVED ITEMS PER THE CITY OF GOLETA MUNICIPAL CODE IN CHAPTER 8.10, ARTICLE IV, MANDATORY RECYCLING OF CONSTRUCTION DEBRIS.

ALL EXISTING ITEMS SHOWN ON THE PLANS HAS BEEN COLLECTED FROM THE BEST AVAILABLE RESOURCES. ACCURACY AND LOCATION OF EXISTING ITEMS MAY NOT BE ACCURATE.

KEY NOTES

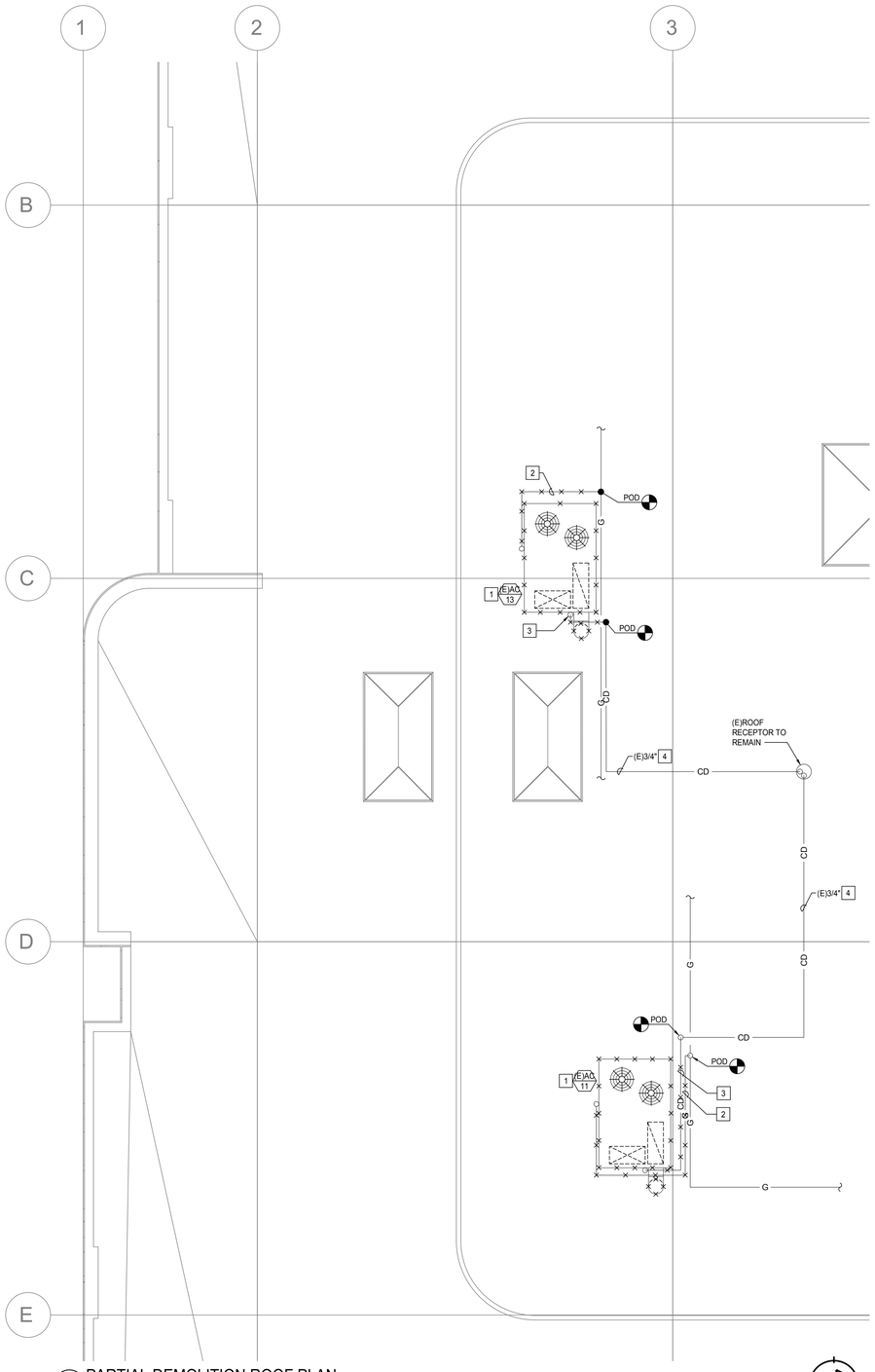
APPLICABLE TO THIS SHEET ONLY

1	3/4" CD TO PHP. REFER TO DETAIL 2/M-001 FOR CONNECTION TO UNIT. REFER TO DETAIL 3/M-001 FOR SUPPORT.
2	(E)3/4" CD. PROVIDE NEW SUPPORTS. REFER TO DETAIL 3/M001.
3	PROVIDE NEW DROP/RISER FROM THE PHP TO BELOW THE ROOF DECK. RECONFIGURE DUCTWORK BELOW ROOF AS REQUIRED TO CONNECT TO THE NEW DROP/RISER. CONTRACTOR SHALL VERIFY EXTENT OF THE RECONFIGURATION OF THE DUCTWORK BELOW THE ROOF DECK PRIOR TO BIDDING THE PROJECT. CONTRACTOR SHALL SUBMITT A SKETCH INDICATING HOW THEY INTEND TO RECONFIGURE THE DUCTWORK WITH THEIR BID.

HVAC GENERAL NOTES

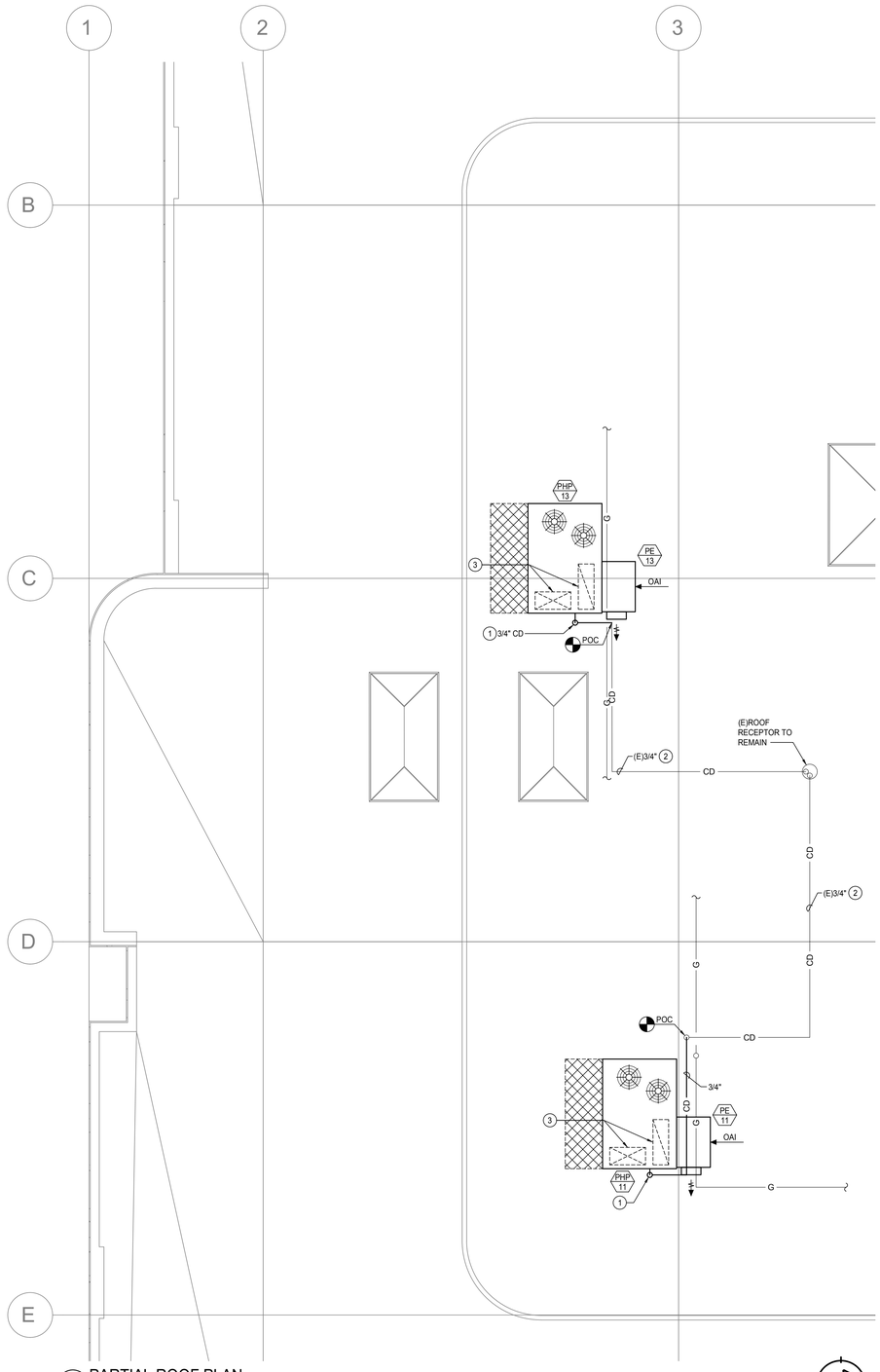
APPLICABLE TO THIS SHEET ONLY

1	ALL EXISTING ITEMS SHOWN ON THE PLANS HAS BEEN COLLECTED FROM THE BEST AVAILABLE RESOURCES. ACCURACY AND LOCATION OF EXISTING ITEMS MAY NOT BE ACCURATE.



2 PARTIAL DEMOLITION ROOF PLAN

SCALE: 1/4" = 1'-0"



1 PARTIAL ROOF PLAN

SCALE: 1/4" = 1'-0"

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PLAN CHECK RESPONSE 1

GOLETA CITY HALL - HVAC REPLACEMENT
130 CREMONA DR, GOLETA CA 93117

PARTIAL ROOF PLANS

NO.	REVISION	DATE
1		
2		
3		
4		
5		
6		

PROJECT MANAGER: DS
DRAWN BY: KH | CHECKED BY: BS
DATE: AUGUST 25, 2025
PROJECT NUMBER: 1806-03-PS24
SHEET: M-121

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STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			**NRCC-MCH-E**
Project Name:	Goleta City Hall	**Report Page:**	**(Page 12 of 12)**
Project Address:	130 Cremona Dr # B	**Date Prepared:**	5/9/2025

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Jorge Bravo	Documentation Author Signature:
Company: 3C Engineering, Inc.	Signature Date: 25-05-09
Address: 1500 Palm St.	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: San Luis Obispo CA 93405	Phone: 805-540-3363

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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

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

Responsible Designer Name: Brian Starrett	Responsible Designer Signature:
Company: 3C Engineering, Inc.	Date Signed: 2025-05-09
Address: 1500 Palm St.	License: M34068
City/State/Zip: San Luis Obispo CA 93401	Phone: 805-540-3363

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			**NRCC-MCH-E**
Project Name:	Goleta City Hall	**Report Page:**	**(Page 8 of 12)**
		Date Prepared:	5/9/2025

J. VENTILATION AND INDOOR AIR QUALITY

[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)1A: 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(e)3 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 250ft^2 or smaller, multipurpose rooms less than 1,000 ft^2, classrooms, conference rooms, restrooms, aisles and open areas in warehouses, library book stack aisles, corridors, stairwells, parking garages, and loading and unloading zones, unless excepted by 130.1(c).

K. TERMINAL BOX CONTROLS

This section does not apply to this project.

L. DISTRIBUTION (DUCTWORK and PIPING)

This table is used to show compliance with mandatory pipe insulation requirements found in 120.3 and mandatory requirements found in 120.4(g) for duct sealing.

01	☐	Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather shall be installed with a cover suitable for outdoor service. Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space shall have a Class I or Class II vapor retarder. All penetrations and joints of which shall be sealed.

Duct Leakage Testing

The answers to the questions below apply to the following duct systems:	AC-11	**NR/ Common Use:** Duct leakage testing shall not exceed 6% per NA7.5.3 required for these systems?	No

---

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			**NRCC-MCH-E**
Project Name:	Goleta City Hall	**Report Page:**	**(Page 9 of 12)**
		Date Prepared:	5/9/2025

L. DISTRIBUTION (DUCTWORK and PIPING)

	Dwelling Units: Total duct leakage of duct system shall not exceed 12% or duct system to outside shall not exceed 6% per RA3.1.4 required for systems?	No
	Duct leakage testing per CMC Section 603.10.1 required for these systems?	Yes

11	No	The scope of the project includes only duct systems serving healthcare facilities
12	Yes	Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system.
13	Yes	The space conditioning system serves less than 5,000 ft^2 of conditioned floor area.
14	No	The combined surface area of the ducts is more than 25% of the total surface area of the entire duct system:
15		The scope of the project includes extending an existing duct system, which is constructed, insulated or sealed with asbestos.
16	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.
17		All Ductwork and plenums with pressure class ratings shall be constructed to Seal Class A
18		All ductwork is an extension of an existing duct system
19		Ductwork serving individual dwelling unit
20		< 25 ft of new or replacement space conditioning ducts installed
21	R-6	Duct Insulation R-value
22		
23		

The answers to the questions below apply to the following duct systems:	AC-13	**NR/ Common Use:** Duct leakage testing shall not exceed 6% per NA7.5.3 required for these systems?	No

---

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			**NRCC-MCH-E**
Project Name:	Goleta City Hall	**Report Page:**	**(Page 10 of 12)**
		Date Prepared:	5/9/2025

L. DISTRIBUTION (DUCTWORK and PIPING)

	Dwelling Units: Total duct leakage of duct system shall not exceed 12% or duct system to outside shall not exceed 6% per RA3.1.4 required for systems?	No
	Duct leakage testing per CMC Section 603.10.1 required for these systems?	Yes

11	No	The scope of the project includes only duct systems serving healthcare facilities
12	Yes	Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system.
13	Yes	The space conditioning system serves less than 5,000 ft^2 of conditioned floor area.
14	No	The combined surface area of the ducts is more than 25% of the total surface area of the entire duct system:
15		The scope of the project includes extending an existing duct system, which is constructed, insulated or sealed with asbestos.
16	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.
17		All Ductwork and plenums with pressure class ratings shall be constructed to Seal Class A
18		All ductwork is an extension of an existing duct system
19		Ductwork serving individual dwelling unit
20		< 25 ft of new or replacement space conditioning ducts installed
21	R-6	Duct Insulation R-value
22		
23		

M. COOLING TOWERS

This section does not apply to this project.

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			**NRCC-MCH-E**
Project Name:	Goleta City Hall	**Report Page:**	**(Page 11 of 12)**
		Date Prepared:	5/9/2025

N. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

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/NRCI/

Form/Title
NRCI-MCH-01-E - Must be submitted for all buildings

O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

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/NRCA/

Form/Title	Systems/Spaces To Be Field Verified
NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap.	Carrier 50FEQM08; Carrier 50FEQM12;
NRCA-MCH-05-A - Air Economizer Controls	Carrier 50FEQM08; Carrier 50FEQM12;
NRCA-MCH-12-A FDD for Packaged Direct Expansion Units	Carrier 50FEQM08; Carrier 50FEQM12;

P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

There are no NRCV forms required for this project.

Q. MANDATORY MEASURES DOCUMENTATION LOCATION

This table is used to indicate where mandatory measures are documented in the plan set or construction documentation.

01		02
Compliance with Mandatory Measures documented through MCH Mandatory Measures Note Block	Yes	Plan sheet or construction document location
		M-Sheets

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			**NRCC-MCH-E**
Project Name:	Goleta City Hall	**Report Page:**	**(Page 4 of 12)**
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G. PUMPS

This section does not apply to this project.

H. FAN SYSTEMS & AIR ECONOMIZERS

This table is used to demonstrate compliance with prescriptive requirements found in 140.4(c), 140.4(e), 140.4(m), 170.2(c)3, and 170.2(c)4A for fan systems. Fan systems serving only process loads are exempt from these requirements and do not need to be included in Table H.

System Name	AC-11	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	3,000	Site Elevation	40	Economizer	Fixed Temperature
01	02	03	04			05		06	07	08	09			10	11
									Allowance		Design				
Fan Name or Item Tag	Fan Type	Qty	Component			Airflow through Component (%)		Water Gauge (w.g)	Component Allowance	Fan Allowance (watt/cfm)[3]	Design Electrical Input Power Method			Motor Nameplate Horsepower	Design Electrical Input Power (kW)
SF	Supply	1	Base Allowance for system serving spaces <=6 floors away			100			696		Manufacturer provided				1.29
			MERV 13-16 Filter upstream of thermal conditioning equipment			100			417						
			Hydronic/DX cooling coil or heat pump coil			100			417						
			Economizer Return Damper			100			138						
Supply Fan Base Allowance (kW)			Exhuast/Return/Relief/Transfer Fan Base Allowance(kW)						Fan System Allowance (kW)[3]		1.67		Fan System Electrical Output (kW)		1.29

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H. FAN SYSTEMS & AIR ECONOMIZERS

System Name	AC-13	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	4,000	Site Elevation	40	Economizer	Fixed Temperature
01	02	03	04			05		06	07	08	09			10	11
									Allowance		Design				
Fan Name or Item Tag	Fan Type	Qty	Component			Airflow through Component (%)		Water Gauge (w.g)	Component Allowance	Fan Allowance (watt/cfm)[3]	Design Electrical Input Power Method			Motor Nameplate Horsepower	Design Electrical Input Power (kW)
SF	Supply	1	Base Allowance for system serving spaces <=6 floors away			100			928		Manufacturer provided				1.95
			MERV 13-16 Filter upstream of thermal conditioning equipment			100			556						
			Hydronic/DX cooling coil or heat pump coil			100			556						
			Economizer Return Damper			100			184						
Supply Fan Base Allowance (kW)			Exhuast/Return/Relief/Transfer Fan Base Allowance(kW)						Fan System Allowance (kW)[3]		2.22		Fan System Electrical Output (kW)		1.95

[1] FOOTNOTES: Fans serving spaces with design background noise goals below NC35

[2] Low-turndown single-zone VAV fan system must be capable of and configured to reduce airflow to 50 percent of design airflow and use no more than 30 percent of the design wattage at that airflow. No more than 10 percent of the design load served by the equipment shall have fixed loads.

[3] Fan system allowance includes fan system base allowance.

[4] Filter pressure loss can only be counted once per fan system.

[5] Complex Fan System means a fan system that combines a single cabinet fan system with other supply fans, exhaust fans, or both.

[6] Computer room economizers must meet requirements of 140.9(a) and will be documented on the NRCC-PRC-E document..

Fan Energy Index (FEI)

01	02	03

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Fan Energy Index (FEI)

Name or Item Tag	FEI Exception	FEI
AC-11	Altered Fan System	
AC-13	Altered Fan System	

I. SYSTEM CONTROLS

This table is used to demonstrate compliance with mandatory controls in 110.2 and 120.2 and prescriptive controls in 140.4(f) and (n), 170.2(c)4D 170.2(c)4L or requirements in 141.0(b)2E 180.2(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 (ft^2)	Thermostats 110.2(b) & (c)[1], 120.2(a) 160.3(a)2A or 141.0(b)2E & 180.2(b)2	Shut-Off Controls 120.2(e) & 160.3(a)2D	Isolation Zone Controls 120.2(g) & 160.3(a)2F	Demand Response 110.12 120.2(b) & 160.3(a)2B	Supply Air Temp. Reset 140.4(f) & 170.2(c)4D	Window Interlocks per 140.4(n) & 170.2(c)4D
AC-11	Single zone	<= 25,000 ft^2	Setback	Auto Timer Switch	NA: Serves < 25k ft^2	DR Tstat per 110.12	NA: Alteration	NA: Alteration Project
AC-13	Single zone	<= 25,000 ft^2	Setback	Auto Timer Switch	NA: Serves < 25k ft^2	DR Tstat per 110.12	NA: Alteration	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.

J. VENTILATION AND INDOOR AIR QUALITY

This table is used to demonstrate compliance with mandatory ventilation requirements in 120.1 120.2(e)3B 140.4(p) and 140.4(q) for all nonresidential and hotel/motel and d:t24refnolink/]160.2, 160.3(a)3D, 170.2(a)4N, 170.2(a)4O for high-rise residential 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 airflows may be shown on the plans or the calculations can be presented in a spreadsheet.

01	☐	Check the box if the project is showing ventilation calculations on the plans, or attaching the calculations instead of completing this table.
02	☒	Check this box if the project included Nonresidential, Hotel/Motel Spaces or Multifamily Common Use Spaces
	☐	
03	☐	Check the box if the project is using natural ventilation in any nonresidential or hotel/motel spaces to meet required ventilation rates per 120.1(c)2.

Nonresidential and Hotel/ Motel Multifamily Common Use Ventilation Systems

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J. VENTILATION AND INDOOR AIR QUALITY

04		05			06			07	
System Name	AC-11	System Design OA CFM Airflow[1]		624	System Design Transfer Air CFM		0	Air Filtration per 120.1(c) 141.0(b)2 and 160.2(c)21[2]	
								Provided	
08	09	10	11	12	13	14	15	16	
Space Name or Item Tag	Mechanical Ventilation Required per 120.1(c)3[3] & 160.2(c)3					Exh. Vent per 120.1(c)4 & 160.2(c)4		DCV or Sensor Controls per 120.1(d)3, 120.1(d)5, and 120.1(e)3[6] 160.2(c)5D 160.2(c)5E 160.2(c)5D	
	Occupancy Type[4]	Conditioned Floor Area (ft^2)	# of Shower heads/ toilets	# of people[5]	Required Min OA CFM	Required Min CFM	Provided per Design CFM		
Office Area	Office space	4157			623.6	0	0	DCV	NA: Not required per §120.1(d)3
								Occ Sensor	NA: Not required space type
17	Total System Required Min OA CFM				624	18	Ventilation for this System Complies?		Yes
04		05			06			07	
System Name	AC-13	System Design OA CFM Airflow[1]		489	System Design Transfer Air CFM		0	Air Filtration per 120.1(c) 141.0(b)2 and 160.2(c)21[2]	
								Provided	
08	09	10	11	12	13	14	15	16	
Space Name or Item Tag	Mechanical Ventilation Required per 120.1(c)3[3] & 160.2(c)3					Exh. Vent per 120.1(c)4 & 160.2(c)4		DCV or Sensor Controls per 120.1(d)3, 120.1(d)5, and 120.1(e)3[6] 160.2(c)5D 160.2(c)5E 160.2(c)5D	
	Occupancy Type[4]	Conditioned Floor Area (ft^2)	# of Shower heads/ toilets	# of people[5]	Required Min OA CFM	Required Min CFM	Provided per Design CFM		
Office Area	Office space	3262			489.3	0	0	DCV	NA: Not required per §120.1(d)3
								Occ Sensor	NA: Not required space type
17	Total System Required Min OA CFM				489	18	Ventilation for this System Complies?		Yes

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PROJECT TEAM LIST

TITLE	NAME	DESK NUMBER	EMAIL ADDRESS
PRINCIPAL IN CHARGE	BRIAN STARRETT	805.540.5358	BSTARRETT@3CENG.COM
PROJECT MANAGER	DENVER STANGER	805.540.5388	DSTANGER@3CENG.COM
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ENERGY COMPLIANCE	JORGE BRAVO	805.540.3363 EXT 313	JBRAVO@3CENG.COM

SHEET INDEX

SHEET NUMBER	SHEET TITLE
M-000	GENERAL
M-001	SCHEDULES & DETAILS
M-121	PARTIAL ROOF PLANS
EC-000	ENERGY COMPLIANCE DOCUMENTATION

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			**NRCC-MCH-E**

This document is used to demonstrate compliance for mechanical systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.4, or 141.0(b)2 for alterations.

Project Name:	Goleta City Hall	**Report Page:**	**(Page 1 of 12)**
Project Address:	130 Cremona Dr # B	**Date Prepared:**	5/9/2025

A. GENERAL INFORMATION

01	Project Location (city)	Goleta	04	Total Conditioned Floor Area	7419
02	Climate Zone	6	05	Total Unconditioned Floor Area	0
03	Occupancy Types Within Project:		06	# of Stories (Habitable Above Grade)	2

- Office

B. PROJECT SCOPE

This table Includes mechanical systems or components that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.4, 170.2(b) or 141.0(b)2 and 180.2(b)2 for alterations.

01	02	03
Air System(s)	Wet System Components	Dry System Components
☒ Heating Air System	☐ Water Economizer	☒ Air Economizer
☒ Cooling Air System	☐ Pumps	☐ Electric Resistance Heat
Mechanical Controls	☐ System Piping	☒ Fan Systems
☒ Mechanical Controls (existing to remain, altered or new)	☐ Cooling Towers	☒ Ductwork (existing to remain, altered or new)
	☐ Chillers	☒ Ventilation
	☐ Boilers	☐ Zonal Systems/ Terminal Boxes

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C. COMPLIANCE RESULTS

Table C will indicate if the project data input into the compliance document is compliant with mechanical requirements. This table is not editable by the user. If this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D., or the table indicated as not compliant for guidance.

01		02		03		04		05		06		07		08	09
System Summary 110.1, 110.2, 140.4, 170.2(c)	AND	Pumps 140.4(k), 170.2(c)4I	AND	Fans/ Economizers 140.4(c), 140.4(e), 170.2(c)	AND	System Controls 110.2, 120.2, 140.4(f), 170.2(c)	AND	Ventilation 120.1, 160.2	AND	Terminal Box Controls 140.4(d), 170.2(c)4B	AND	Distribution 120.3, 140.4(l), 160.2, 160.3	AND	Cooling Towers 110.2(e)2	Compliance Results
(See Table F)		(See Table G)		(See Table H)		(See Table I)		(See Table J)		(See Table K)		(See Table L)		(See Table M)	
Yes	AND		AND	Yes	AND	Yes	AND	Yes	AND		AND	Yes	AND		COMPLIES
Mandatory Measures Compliance (See Table Q for Details)										COMPLIES					

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

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

F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

Space Conditioning System Information

01	02	03	04	05	06
System Name	Quantity	System Serving	System Status	Space Type	Utilizing Recovered Heat
AC-11	1	Single zone	New/ Addition		☐
AC-13	1	Single zone	New/ Addition		☐

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CERTIFICATE OF COMPLIANCE			**NRCC-MCH-E**
Project Name:	Goleta City Hall	**Report Page:**	**(Page 3 of 12)**
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F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

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

01	02	03	04	05	06	07	08	09	10	11
Name or Item Tag	Equipment Category per Tables 110.2, 140.4(a)2 and 170.2(c)3aii	Equipment Type per Tables 110.2 and Title 20	Smallest Size Available[1] 140.4(a) and 170.2(c)1	Equipment Sizing per Mechanical Schedule (kBtu/h) 140.4(a&b), 170.2(c)1 & 170.2(c)2						
				Heating Output[2,3]			Cooling Output[2,3]		Load Calculations[3,4]	
				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-11	Unitary Heat Pumps	Air-cooled, pkg (3 phase)	Yes	109.84	84	47.09	72.82	64.96	40.1	69.08
AC-13	Unitary Heat Pumps	Air-cooled, pkg (3 phase)	Yes	130.76	112	47.09	96.23	85.85	87.23	92.82

[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) and 170.2(c)1. Healthcare facilities are excepted.

[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) and 170.2(c).

Dry System Equipment Efficiency (other than Package Terminal Air Conditioners (PTAC) and Package Terminal Heat Pumps (PTHP), DX-DOAS and Dual Fuel Heat Pumps)

01	02	03	04	05	06	07	08	09
Name or Item Tag	Size Category (Btu/h)	Heating Mode				Cooling Mode		
		Rating Condition (°F)	Efficiency Unit	Minimum Efficiency Required per Tables 110.2 / Title 20	Design Efficiency	Efficiency Unit	Minimum Efficiency Required per Tables 110.2 / Title 20	Design Efficiency
AC-11	>=65,000 and <135,000		COP	3.4	3.4	EER IEER	11 14.1	12 15
AC-13	>=65,000 and <135,000		COP	3.4	3.4	EER IEER	11 14.1	11 15

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1500 PALM ST. SAN LUIS OBISPO, CA 93401

AGENCY

GOLETA CITY HALL - HVAC REPLACEMENT
130 CREMONA DR, GOLETA CA 93117
ENERGY COMPLIANCE DOCUMENTATION

NO.	REVISION	DATE
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PLAN CHECK RESPONSE 1

PROJECT MANAGER DS	
DRAWN BY KH	**CHECKED BY** BS
DATE AUGUST 25, 2025	
PROJECT NUMBER 1806-03-PS24	
SHEET EC-000	

S:\ENG Projects\Goleta City Hall AC-11&13 Replacement\Engineering\Goleta City Hall AC-11&13 Replacement T24.dwg Mdadoura778E Aug 22,2025-2:27pm

GENERAL NOTES

1. CODE COMPLIANCE: ALL WORK SHALL CONFORM TO AND BE PERFORMED IN ACCORDANCE WITH CODES, STANDARDS, AND ORDINANCES AS SET FORTH BY THE AUTHORITIES HAVING JURISDICTION AND THEIR LATEST ADOPTED EDITIONS (IN EFFECT AT TIME OF BUILDING PERMIT APPLICATION) OF THE FOLLOWING PUBLICATIONS:

A. CALIFORNIA CODE OF REGULATIONS TITLE 24; INCLUDES 2019 CALIFORNIA ELECTRICAL CODE, 2019 CALIFORNIA FIRE CODE, 2019 CALIFORNIA BUILDING CODE, ETC. WITH LOCAL AMENDMENTS AS APPLICABLE.

B. AMERICANS WITH DISABILITIES ACT (ADA).

2. SAFETY: THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL EQUIPMENT IN A SAFE AND RESPONSIBLE MANNER. KEEP DEAD FRONT EQUIPMENT IN PLACE WHILE EQUIPMENT IS ENERGIZED. CONDUCT ALL CONSTRUCTION OPERATIONS IN A SAFE MANNER FOR EMPLOYEES AS WELL AS OTHER WORKPERSONS OR ANYONE VISITING THE JOB SITE. PROVIDE BARRIERS, FLAGS, TAPE, ETC. AS REQUIRED FOR SAFETY. THE CONTRACTOR SHALL HOLD ALL PARTIES HARMLESS OF NEGLIGENT SAFETY PRACTICES, WHICH MAY CAUSE INJURY TO OTHERS ON OR NEAR THE JOB SITE.

3. FIRE RATED ASSEMBLIES SHALL MAINTAIN RATINGS AS SPECIFIED IN THE CALIFORNIA BUILDING CODE CHAPTER 7. CONTRACTOR SHALL PROVIDE AND INSTALL PHYSICAL ENCLOSURE AROUND FIXTURES, PANELS, ETC. AS REQUIRED. ALL ASSEMBLIES TO BE PENETRATED SHALL BE INSTALLED WITH APPLICABLE THROUGH-PENETRATION FIRESTOP SYSTEM AS DETERMINED BY UL CLASSIFICATION. BEFORE CONSTRUCTION, VERIFY AND COMPLY WITH REQUIREMENTS OF LOCAL AUTHORITY HAVING JURISDICTION.

4. MOUNTING HEIGHTS SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED:

+15" AFF: RECEPTACLES, TELEPHONE, TV & DATA OUTLETS. (MEASURED BOTTOM OF OUTLET BOX)
+46" AFF: OUTLET ABOVE COUNTER (MEASURED TOP OF OUTLET BOX)
+48" AFF: LIGHT SWITCHES. (MEASURED TOP OF OUTLET BOX)
+48" AFF: FIRE ALARM MANUAL PULL STATIONS, T-STATS. (MEASURED TOP OF OUTLET BOX)
THE LOWER OF +80" AFF TO BOTTOM OF LENS, OR 6" BELOW CEILING: FIRE ALARM VISUALS.

ELECTRICAL SWITCHES: CONTROLS AND SWITCHES INTENDED TO BE USED BY THE OCCUPANT OF THE ROOM OR AREA TO CONTROL LIGHT AND RECEPTACLE OUTLETS, APPLIANCES OR COOLING, HEATING AND VENTILATING EQUIPMENT, SHALL BE LOCATED NO MORE THAN 48 INCHES MEASURED FROM THE TOP OF THE OUTLET BOX NOR LESS THAN 15 INCHES MEASURED FROM THE BOTTOM OF THE OUTLET BOX TO THE LEVEL OF THE FINISH FLOOR OR WORKING PLATFORM. [CBC 11B-308.1.1]

ELECTRICAL RECEPTACLE OUTLETS: ELECTRICAL RECEPTACLE OUTLETS ON BRANCH CIRCUITS OF 30 AMPERES OR LESS AND COMMUNICATION SYSTEM RECEPTACLES SHALL BE LOCATED NO MORE THAN 48 INCHES MEASURED FROM THE TOP OF THE RECEPTACLE OUTLET BOX OR RECEPTACLE HOUSING NOR LESS THAN 15 INCHES MEASURED FROM THE BOTTOM OF THE RECEPTACLE OUTLET BOX OR RECEPTACLE HOUSING TO THE LEVEL OF THE FINISH FLOOR OR WORKING PLATFORM [CBC 11B-308.1.2]

BEFORE ROUGH-IN, VERIFY ALL MOUNTING HEIGHTS AND EXACT LOCATIONS FOR ALL EQUIPMENT ELECTRICAL CONNECTIONS, STUB-UPS, RECEPTACLES, OUTLETS, ETC. WITH ARCHITECT OR OWNER. PLACE DEVICES LOCATED ABOVE COUNTERS, SHELVING, ETC. AND IN BATHROOMS SO AS NOT TO CONFLICT WITH EDGES OF WAINSCOTING, COUNTER SPLASH, SHELVING, ETC. ARCHITECTURAL SHEETS SHALL GOVERN.

4. LABEL PANELS, CABINETS, BACKBOARDS, MAIN DEVICES, SAFETY SWITCHES, CONTACTORS AND OTHER SPECIFICALLY DESIGNATED EQUIPMENT SHOWN ON PLANS. USE ENGRAVED LAMINATED PLASTIC NAMEPLATES ATTACHED BY SCREWS OR RIVETS. FOR FEEDERS, NEATLY AND INDELIBLY LABEL CONDUIT DESTINATIONS ON BOTH VISIBLE ENDS OF CONDUIT RUNS WHERE CONDUITS TERMINATE AT DESIGNATED ENCLOSURES, STRUCTURES OR EQUIPMENT (INCLUDING PULL AND SPLICE BOXES).

5. EQUIPMENT ANCHORAGE NOTE
ALL MECHANICAL AND ELECTRICAL EQUIPMENT SHALL BE ANCHORED OR BRACED TO MEET THE HORIZONTAL AND VERTICAL FORCES PRESCRIBED IN THE 2019 CBC, SECTIONS 1613A AND 1616A AND ASCE 7-10 SECTIONS 13.3, 13.4 & 13.6.

THE ATTACHMENT OF THE FOLLOWING ITEMS SHALL BE DESIGNED TO RESIST THE FORCES PRESCRIBED ABOVE, BUT NEED NOT BE DETAILED ON THE PLANS PER 2019 CBC SECTION 1616A.1.18:

A. FURNITURE(EXCEPT STORAGE CABINETS AS NOTED IN 2019 CBC TABLE 13.5-1)
B. TEMPORARY OR MOVABLE EQUIPMENT WITH EXCEPTIONS NOTED IN 2019 CBC SECTION 1616A.1.18 ITEM 2.
C. ARCHITECTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS IN SEISMIC DESIGN CATEGORIES D, E, OR F THAT MEET ALL OF THE CRITERIA LISTED IN 2019 SECTION 1616A.1.18 ITEM 3.
D. EQUIPMENT WEIGHING LESS THAN 20 POUNDS SUPPORTED BY VIBRATION ISOLATORS.
E. EQUIPMENT WEIGHING LESS THAN 20 POUNDS SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL

FOR THOSE ELEMENTS THAT DO NOT REQUIRE DETAILS ON THE APPROVED DRAWINGS, THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE MECHANICAL/ELECTRICAL ENGINEER.

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO RESIST THE FORCES PRESCRIBED IN ASCE 7-10 SECTION 13.3 AS DEFINED IN ASCE 7-10 SECTION 13.6.8, 13.6.7, AND 13.6.5.5, ITEM 6, RESPECTIVELY.

THE BRACING AND ATTACHMENTS TO THE STRUCTURE SHALL COMPLY WITH ONE OF THE OSHPD PRE-APPROVALS WITH AN OPA#, SUCH AS MASON INDUSTRIES (OPA 349), OR ISAT (OPA 485) AS MODIFIED TO SATISFY ANCHORAGE REQUIREMENTS OF ACI 318, APPENDIX D.

COPIES OF THE MANUAL SHALL BE ON THE JOBSITE PRIOR TO STARTING HANGING AND BRACING OF THE PIPE, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS.

THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICAL SYSTEMS

1. MECHANICAL UNIT CONDUITS: TO PREVENT DAMAGE DUE TO VIBRATION, BOTH POWER AND CONTROL WIRING CONDUITS FEEDING EXTERIOR MECHANICAL UNITS SHALL BE PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR WITH LIQUID TIGHT FLEXIBLE TYPE AT FINAL CONNECTION TO UNIT AND BETWEEN ROOF JACK AND DISCONNECT SWITCH WHERE DISCONNECT IS MOUNTED ON UNIT.

2. POWER EXHAUST FANS SHALL BE PROVIDED & INSTALLED BY MECHANICAL CONTRACTOR WITH LINE VOLTAGE WIRING CONNECTIONS MADE BY ELECTRICAL CONTRACTOR.

3. MECHANICAL EQUIPMENT CONTROLS: MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LOW VOLTAGE WIRE AND CONNECTIONS (BELOW 120 VOLT) TO AND FROM ALL MECHANICAL CONTROL DEVICES. ALL LOW VOLTAGE CONTROL WIRE SHALL BE IN CONDUIT, UNLESS OTHERWISE NOTED.

4. PULLROPES: ANY RACEWAY WITHOUT CABLE OR WIRE SHALL BE INSTALLED WITH MINIMUM 200 POUND TEST PULL LINE AND LARGER IF REQUIRED BY SERVING UTILITY COMPANY. ANY NEW OR EXISTING COMMUNICATION OR SIGNAL RACEWAY ROUTED BETWEEN BUILDINGS, SIGNAL CABINETS, AND/OR SIGNAL CLOSETS WITH FUTURE CAPACITY SHALL BE INSTALLED WITH MINIMUM 200 POUND TEST PULL LINE AS WELL AS THE CALLED FOR CABLE.

EXISTING BUILDINGS

1. ASBESTOS: IF DURING THE COURSE OF WORK THE CONTRACTOR OBSERVES THE EXISTENCE OF ASBESTOS, OR ASBESTOS-BEARING MATERIALS, THE CONTRACTOR SHALL IMMEDIATELY TERMINATE FURTHER WORK ON THE PROJECT AND NOTIFY THE OWNER OF THE CONDITION. THE OWNER WILL, AFTER CONSULTATION WITH THE OWNER'S REPRESENTATIVE, DETERMINE A FURTHER COURSE OF ACTION.

2. ANY DEMOLITION WORK SHOWN WAS PREPARED FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER DOES NOT REPRESENT THAT ALL ITEMS WHICH MAY REQUIRE DEMOLITION HAVE BEEN SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CAREFULLY EXAMINE THE SITE AND THE CONTRACT DOCUMENTS AND TO PERFORM ALL DEMOLITION AND RECONSTRUCTION WHICH MAY BE REQUIRED FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK.

3. EXISTING CONDITIONS: INFORMATION SHOWN FOR EXISTING CONDITIONS WAS PRIMARILY GAINED FROM "AS BUILT" DRAWINGS AND/OR LIMITED FIELD INVESTIGATION. BEFORE BID, VISIT SITE TO VERIFY EXISTING CONDITIONS AND MAKE ALLOWANCE FOR VARIATIONS FROM THAT SHOWN.

4 EXISTING CONDUCTORS: INTERCEPT, EXTEND, REROUTE, REPULL CONDUCTORS, SPLICE AND OTHERWISE MODIFY EXISTING CONDUCTORS OF ALL SYSTEMS AS REQUIRED TO MAINTAIN AND/OR ESTABLISH PROPER FUNCTION AND SATISFY DESIGN INTENT. REMOVE ABANDONED CONDUCTORS.

5. EXISTING COMMUNICATIONS, DATA AND CATV AND OTHER LOW VOLTAGE TYPE SYSTEM OUTLET LOCATIONS SHOWN ON THE PLAN TO BE RELOCATED SHALL BE PERFORMED BY THE ELECTRICAL CONTRACTOR. MODIFY EXISTING SYSTEM AS REQUIRED FOR FULL FUNCTION (SAME AS EXISTING) IN NEW LOCATION.

6. WHERE EXISTING BUILDING CONSTRUCTION, MECHANICAL UNITS AND OTHER EQUIPMENT IS SHOWN TO BE REMOVED, DISCONNECT AND REMOVE ALL ASSOCIATED ELECTRICAL INSTALLATION.

7. CLOSELY COORDINATE OUTAGE AND FACILITY DISRUPTION TIME WITH ARCHITECT AND OWNER. MINIMUM 72-HOUR NOTICE IS REQUIRED BEFORE ANY CIRCUIT SHUTDOWN OR DISRUPTION OF FACILITY PERSONNEL FUNCTIONING.

ELECTRICAL ROOF PLAN

1. PROVIDE SEALTITE POWER & CONTROL CONNECTIONS TO ALL AC UNITS.

2. ALL EQUIPMENT SHOWN ABOVE ROOF IS NEMA 3R.

3. VERIFY EXACT EQUIPMENT LOCATIONS AND POINTS OF CONNECTION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.

4. FUSE DISCONNECT SWITCHES PER EQUIPMENT NAMEPLATE RATING.

5. ALL ROOF PENETRATIONS SHALL BE MADE WITH ROOF JACKS, SEAL ALL PENETRATIONS WITH MASTIC.

FIRE ALARM SYSTEM

A. EXISTING FIRE ALARM IS A SILENT NIGHT. FIRE ALARM WILL BE A DEFERRED SUBMITTAL AFTER BUILDING PERMIT IS ISSUED. APPROVAL AND DEVICES SHOWN ON PLANS ARE FOR REFERENCE ONLY. SUBMIT FULL DESIGN-BUILD SHOP DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR AND PERMIT APPLICATION TO THE COUNTY BUREAU OF FIRE PREVENTION FOR REVIEW AND APPROVAL OF FIRE ALARM SYSTEM. INCLUDE THE PLAN CHECK NUMBER ON YOUR SUBMITTAL AND ALL CORRESPONDENCE. INSTALLATION OF THE FIRE ALARM SYSTEM SHALL NOT BEGIN UNTIL THE LOCAL FIRE AUTHORITY HAS APPROVED THE SHOP DRAWINGS

LEGEND

NOTE: INTERPRET IN CONTEXT

LIGHT FIXTURES

- CEILING SURFACEMOUNT
- WALL SURFACEMOUNT
- PENDANT MOUNT
- RECESSED DOWNLIGHT
- RECESSED WALLWASH
- RECESSED FLUOR.
- SURFACE FLUOR.
- FLUOR. STRIP UON
- TRACK LIGHT
- DIRECTIONAL FLOOD
- EMERGENCY FIXTURE
- POLE LIGHT
- POLE LIGHT- DECORATIVE
- TANDEM-WIRED LAMPS
- BOLLARD
- EXIT LIGHT- WALL
- EXIT LIGHT- CEILING (ARROW INDICATES DIRECTION)
- LETTER ADJACENT INDICATES FIXTURE TYPE

POWER/COMM.

- SINGLE RECEPT.
- DUPLEX RECEPT.
- GROUND FAULT CIRCUIT INTERRUPT
- MOUNTED ABOVE COUNTER
- DUPLEX- HALF SWITCHED
- DOUBLE DUPLEX, HALF SWITCHED
- DOUBLE DUPLEX
- SPECIAL CONFIGURATION
- DUPLEX- FLOOR OUTLET
- JUNCTION BOX
- TELEPHONE OUTLET
- DATA OUTLET
- PHONE/DATA COMBO OUTLET
- MOUNTED ABOVE COUNTER
- SAFETY DISCONNECT
- TV TELEVISION OUTLET
- IDF INTERMEDIATE DISTRIBUTION FRAME
- MDF MAIN DISTRIBUTION FRAME
- AP ACCESS POINT

MISCELLANEOUS

- MOTOR
- T THERMOSTAT
- CIRCUIT BREAKER
- FUSIBLE SWITCH
- Ø PHASE
- GROUND

CONDUIT/WIRE

- NEW
- UNDERGROUND
- NEW POWER HOMERUN (3 HOTS & NEUT SHOWN)
- ISOLATED GROUND
- EXISTING TO REMAIN
- (E) POWER HOMERUN
- CONDUIT STUB (W/MARKER)
- VERTICAL CONDUIT RUN
- CONDUIT SEAL
- FLEXIBLE CONNECTION
- LOW VOLTAGE
- SURFACEMOUNT RACEWAY

SWITCHES

- $ SPST
- $2 DPST
- $3 3-WAY
- $4 4-WAY
- $D DIMMER
- $T TIMER SWITCH
- $T WITHERMAL OVERLOAD
- $P WIPILOT LIGHT
- $K KEY OPERATED
- $3 DUAL LEVEL SWITCHING
- $a SWITCHLEG DESIGNATION
- OS OCCUPANCY SENSOR

FIRE ALARM

- FIRE ALARM CONTROL PANEL
- RPS REMOTE POWER SUPPLY
- H HORN- AUDIBLE DEVICE
- V VISUAL- VISUAL DEVICE
- AV AUDIBLE/VISUAL
- SV SPEAKER/VISUAL
- F FLOW SWITCH
- T TAMPER SWITCH
- P MANUAL PULL STATION
- SD SMOKE DETECTOR
- DD DUCT SMOKE DETECTOR
- COD SMOKE/CO DETECTOR
- H HEAT DETECTOR
- B BELL
- EOL END OF LINE RESISTOR

ABBREVIATIONS

A	AMPERE
AF	AMP FUSE RATING
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISH GRADE
AIC	AMPERES INTERRUPT CAPACITY
AS	AMP SWITCH RATING
BFG	BELOW FINISH GRADE
CB	CIRCUIT BREAKER
CEC	CA. ELECTRICAL CODE
CKT	CIRCUIT
C	CONDUIT
C.O.	CONDUIT ONLY
(E)	EXISTING
EC	ELECTRICAL CONTRACTOR
EF-#	EXHAUST FAN
(EXN)	(E) IN (N) LOCATION
(EXR)	(E) TO BE (R)
(F)	FUTURE
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
G	GROUNDING CONDUCTOR
GC	GENERAL CONTRACTOR
GFI	GROUND FAULT CKT INTERRUPTER
GND	GROUND
GRS	GALVANIZED RIGID STEEL
GWS	GANGED WITH SWITCH
IG	ISOLATED GROUND
LTG	LIGHTING
MC	MECHANICAL CONTRACTOR
MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUGS ONLY
MSB	MAIN SWITCHBOARD
MTTB	MAIN TELEPHONE TERMINAL BOARD
(N)	NEW
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
P	POLE
PV	PHOTOVOLTAIC
(R)	RELOCATE(D)
(TBR)	TO BE REMOVED
TYP	TYPICAL
UC	UNDERCABINET
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
V	VOLT
VA	VOLT AMPERES
W	WATT, WIRE
WP	WEATHERPROOF (NEMA 3R)

CONVENTIONS

- X — NUMBERED SHEET NOTES: REFERS TO NOTES ON SAME SHEET AS REFERENCED
- 1 / - — DETAIL REFERENCE: -DETAIL DESIGNATION -SHEET NUMBER REFERENCE
- (AC-X) — EXISTING UNIT TAG
- UNIT # — HVAC EQUIPMENT NEW TAG PER MECHANICAL PLANS

SHEET LIST

SHEET	NAME
E-001	ELECTRICAL GENERAL NOTES, LEGEND, AND ABBREVIATION
E-011	ELECTRICAL SINGLE LINE DIAGRAM
E-101	ELECTRICAL ROOF PLAN
E-201	ELECTRICAL FIRST FLOOR PLAN
E-202	ELECTRICAL SECOND FLOOR PLAN

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AGENCY

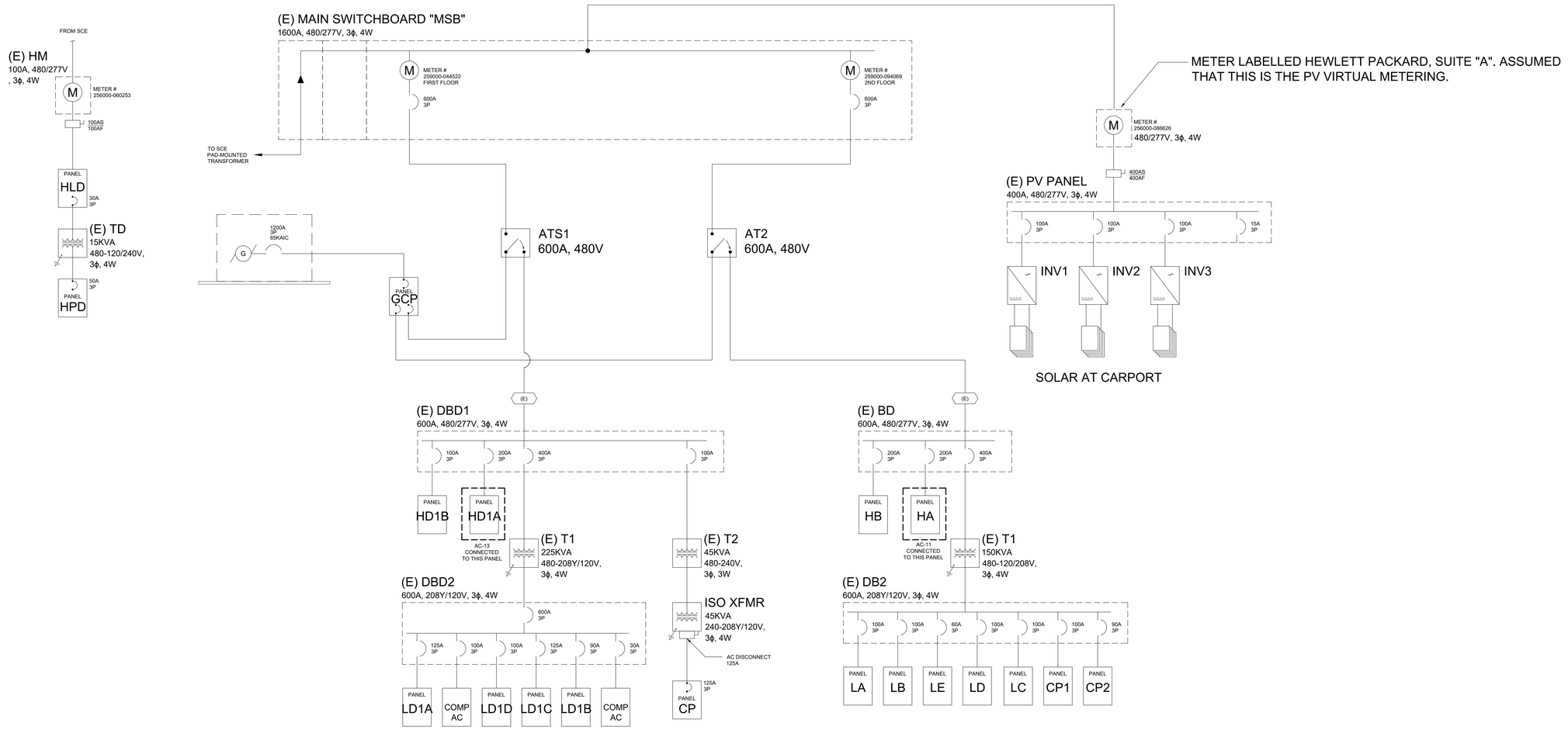
PLAN CHECK RE-SUBMITTAL

GOLETA CITY HALL - HVAC REPLACEMENT
130 CREMONA DRIVE, GOLETA CA 93117

GENERAL NOTES, LEGND, AND ABBREVIATIONS

NO.	REVISION	DATE
1		
2		
3		
4		
5		
6		

PROJECT MANAGER: CJ
DRAWN BY: TR/CJ
CHECKED BY: CJ/JT
DATE: AUGUST 25, 2025
PROJECT NUMBER: 1806-03-PS24
SHEET: E-001



1 SINGLELINE DIAGRAM

E-011 ############

1

(E) PANEL HA

BUS RATING: 225A 277/480V, 3PH, 4W
MAIN: 200A MAIN LUG
SPACES: 42 FULL SIZE BOLT-ON CB SPACES
AIC RATING: 42 KAIC PANEL

SURFACE MOUNT, NEMA 1
LOCATION: ELECTRICAL ROOM
WITH EQUIPMENT GND BUS
FEED FROM PANEL "BD"

CONNECTED VA

CKT %VD	DIST (FT)	NOTES	LOAD TYPE	CKT	DESCRIPTION	TRIP	POLES	COND SIZE	PHASE A	PHASE B	PHASE C	COND SIZE	POLES	TRIP	DESCRIPTION	CKT	LOAD TYPE	NOTES	DIST (FT)	CKT %VD
			L	1	OFFICE LIGHTING	20	1	E	500			E	1	20	OFFICE LIGHTING	2	L			
			L	3	OFFICE LIGHTING	20	1	E		500		E	1	20	OFFICE LIGHTING	4	L			
			L	5	OFFICE LIGHTING	20	1	E			500	E	1	20	OFFICE LIGHTING	6	L			
			L	7	OFFICE LIGHTING	20	1	E	500			E	1	20	EMERGENCY LIGHTING	8	L			
			L	9	OFFICE LIGHTING	20	1	E		500		E	1	20	EXIT SIGTS	10	L			
			L	11	OFFICE LIGHTING	20	1	E			500	E	3	20	SHIPPLING LIGHTS	12				
			L	13	OFFICE LIGHTING	20	1	E	500				3	20	SPARE	14				
			L	15	OFFICE LIGHTING	20	1	E		500					"	16				
				17	SPARE	20	1								"	18				
			M	19	AC - 01 (11 MCA)	20	3	E	2918 12627			8	3	50	PHP-11 (AC - 11)	20	M			
				21	"			E		2918 12627		8			"	22				
				23	"			E			2918 12627	8			"	24				
			M	25	AC - 03 (12.3 MCA)	20	3	E	3263 5227			E	3	30	AC - 10 (19.7 MCA)	26	M			
				27	"			E		3263 5227		E			"	28				
				29	"			E			3263 5227	E			"	30				
			M	31	AC - 15 (14.7 MCA)	20	3	E	3900 3900			E	3	30	AC - 17 (14.7 MCA)	32	M			
				33	"			E		3900		E			"	34				
				35	"			E			3900 3900	E			"	36				
			M	37	AC - 9 (20 MCA)	30	3	E	5307						SPACE	38				
				39	"			E		5307					SPACE	40				
				41	"			E			5307				SPACE	42				
									CON:	39642	39642	39142								
									25%:	625	625	375								
									SUB:	0	0	0								
									TOT:	40267	40267	39517								
									AMPS	145	145	143								

LOAD (VA)	LOAD TYPE LEGEND	
0	R	RECEPTACLE
6500	L	LIGHTING (125% OF CONNECTED LOAD CEC 215.2)
37142	M	MECHANICAL
0	K	KITCHEN APPLIANCE
0	N	NON-CONTINUOUS MISC.
0	C	CONTINUOUS MISC. (125% OF CONNECTED LOAD CEC 215.2)

(E) PANEL HD1A

BUS RATING: 225A 277/480V, 3PH, 4W
MAIN: 200A MAIN LUG ONLY
SPACES: 42 FULL SIZE BOLT-ON CB SPACES
AIC RATING: 42 KAIC PANEL

SURFACE MOUNT, NEMA 1
LOCATION: ELECTRICAL ROOM
WITH EQUIPMENT GND BUS
FED FROM PANEL "DBD1"

CONNECTED VA

CKT %VD	DIST (FT)	NOTES	LOAD TYPE	CKT	DESCRIPTION	TRIP	POLES	COND SIZE	PHASE A	PHASE B	PHASE C	COND SIZE	POLES	TRIP	DESCRIPTION	CKT	LOAD TYPE	NOTES	DIST (FT)	CKT %VD
			L	1	LIGHTS RM. 123	20	1	E	500 500			E	1	20	EMERGENCY LIGHTS	2	L			
			L	3	LIGHTS RM. 122	20	1	E		500 500		E	1	20	EXIT LIGHTS	4	L			
			L	5	LIGHTS RM. 117	20	1	E			500 500	E	1	20	SPARE	6	L			
			L	7	LIGHTS RM. 101	20	1	E	500 500			E	1	20	SPACE	8				
			L	9	LIGHTS RM. 101	20	1	E		500 500		E	1	20	SPARE	10	L			
			L	11	LIGHTS OFFICES	20	1	E			500	E	1	20	SPARE	12	R			
			N	13	WATER HEATEER	20	3	E	500 5307			E	3	30	AC - 7 (20 MCA)	14	M			
				15	"			E		500 5307		E			"	16				
				17	"			E			500 5307	E			"	18				
			M	19	PHP-12 (AC - 13) & PE13	60	3	6	15518 3184			E	3	20	AC - 5 (12 MCA)	20	M			
				21	"			6		15518 3184		E			"	22				
				23	"			6			15518 3184	E			"	24				
			M	25	AC-14 (15.2 MCA)	20	3	E	4033 3715			E	3	20	AC - 12 (14 MCA)	26	M			
				27	"			E		4033 3715		E			"	28				
				29	"			E			4033 3715	E			"	30				
			M	31	CU 2A (12.2A MCA)	20	3	E	3237			E	3	20	CU 1A	32	M			
				33	"			E		3237		E			"	34				
				35	"			E			3237	E			"	36				
			M	37	CU 3A (12.2A MCA)	20	3	E	3237						SPACE	38				
				39	"			E		3237					SPACE	40				
				41	"			E			3237				SPACE	42				
									CON:	40731	40731	40231								
									25%:	375	500	375								
									SUB:	0	0	0								
									TOT:	41106	41231	40606								
									AMPS	148	149	147								

LOAD (VA)	LOAD TYPE LEGEND	
0	R	RECEPTACLE
5000	L	LIGHTING (125% OF CONNECTED LOAD CEC 215.2)
38231	M	MECHANICAL
0	K	KITCHEN APPLIANCE
500	N	NON-CONTINUOUS MISC.
0	C	CONTINUOUS MISC. (125% OF CONNECTED LOAD CEC 215.2)

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THOMA: 24-8129.05

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AGENCY

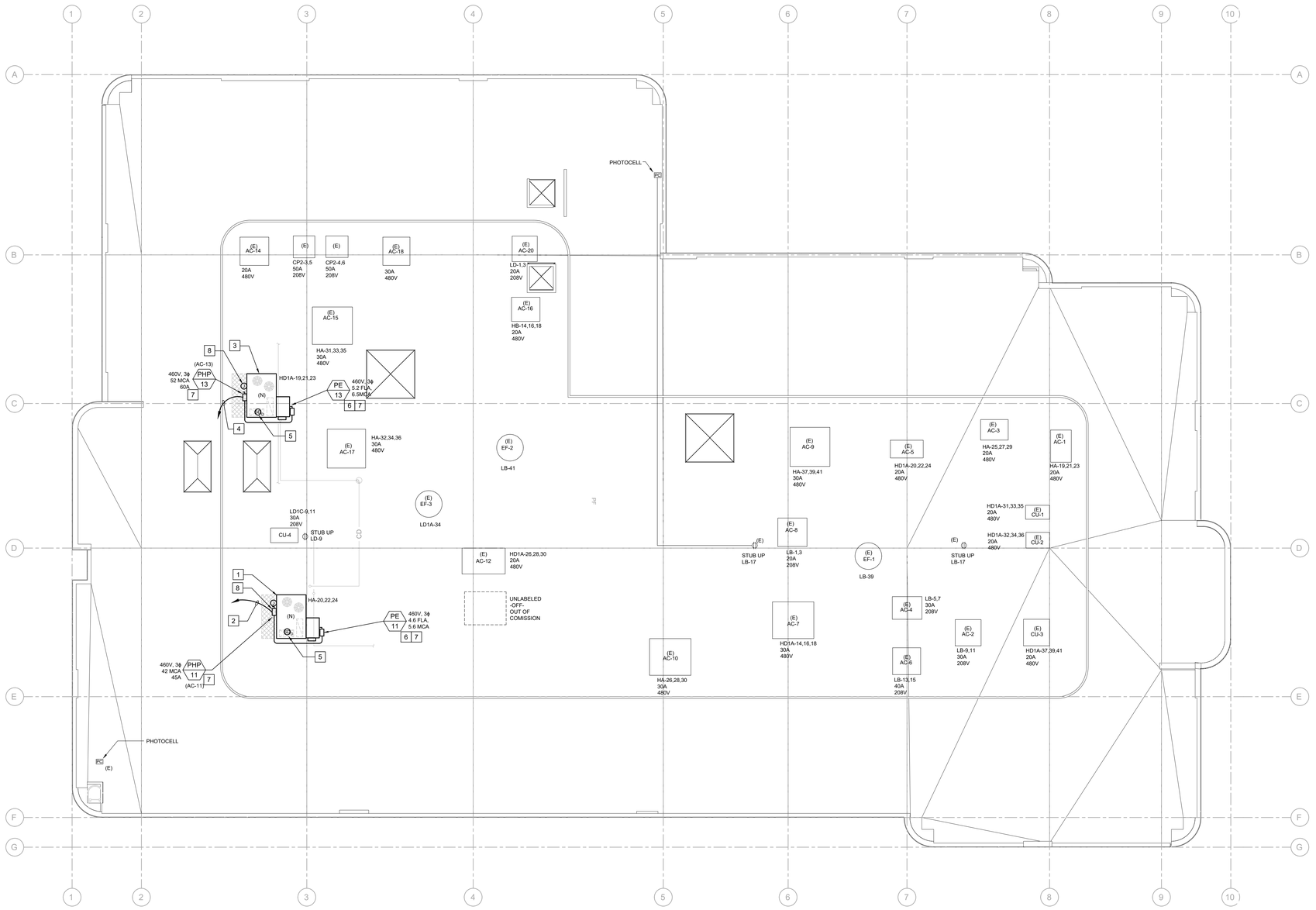
PLAN CHECK RE-SUBMITTAL

GOLETA CITY HALL - HVAC REPLACEMENT
130 CREMONA DRIVE, GOLETA CA 93117

SINGLE LINE DIAGRAM

NO.	REVISION	DATE
1	PLANCHECK RESPONSE 1	8/15/2025

PROJECT MANAGER: CJ
DRAWN BY: TR/CJ
CHECKED BY: CJ/JT
DATE: AUGUST 25, 2025
PROJECT NUMBER: 1806-03-PS24
SHEET: E-011



REFERENCE NOTES

1. AC-11 – EXISTING CONDITIONS AND UPGRADE:

   *AC-11 IS CURRENTLY CONNECTED TO PANEL HA ON THE SECOND FLOOR VIA AN EXISTING 3/4" HOMERUN CONDUIT SHARED WITH ANOTHER 3-PHASE CIRCUIT.

   *EXISTING WIRING CONSISTS OF (6)#10 CONDUCTORS + #10 CU GROUND.

   *THE CONDUIT RUNS TO AN EXISTING J-BOX ABOVE THE CEILING, THEN SPLITS INTO A DEDICATED CONDUIT RUNNING UP THROUGH THE ROOF.

   *A 3/4" CONDUIT PENETRATES THE ROOF AND TERMINATES IN AN LB FITTING WITH SEAL-TIGHT CONDUIT CONNECTED TO THE DISCONNECT.

   *REPLACE THE EXISTING 480V, 30A, 3P, NEMA 3R DISCONNECT WITH A NEW 480V, 60A, 3P, NEMA 3R DISCONNECT.

   *FIELD-LOCATE AND RE-USE THE EXISTING ROOF PENETRATION.

2. AC-11 – ELECTRICAL UPGRADE:

   *REMOVE THE EXISTING (3)#10 CONDUCTORS FROM AC-11.

   *INSTALL A NEW HOMERUN TO PANEL HA USING 3/4" CONDUIT WITH (3)#8 AND (1)#10 CU GROUND.

   *REPLACE THE EXISTING 30A, 3-POLE BREAKER IN PANEL HA WITH A NEW 480V, 50A, 3-POLE BREAKER, MATCHING THE PANEL RATING AND VOLTAGE REQUIREMENTS.

3. AC-13 – EXISTING CONDITIONS:

   *AC-13 IS CONNECTED TO PANEL HD1A ON THE FIRST FLOOR VIA A DEDICATED 3/4" CONDUIT CONTAINING (3)#8 AND (1)#10 CU GROUND.

   *THE CONDUIT PENETRATES THE ROOF INTO AN LB FITTING.

   *FIELD-LOCATE AND RE-USE THE EXISTING ROOF PENETRATION.

   *REPLACE THE EXISTING 480V, 40A, 3P, NEMA 3R DISCONNECT WITH A NEW 480V, 60A, 3P, NEMA 3R DISCONNECT.

4. AC-13 – CONDUIT AND CONDUCTOR UPGRADE:

   *THE EXISTING 3/4" CONDUIT IS UNDERSIZED FOR THE NEW CONDUCTOR REQUIREMENTS.

   *ABANDON AND REMOVE THE EXISTING 3/4" CONDUIT AND DISCONNECT THE CONDUCTORS.

   *PROVIDE A NEW 1" CONDUIT HOMERUN WITH (3)#6 AND (1)#8 CU GROUND.

   *RE-USE ONE OF THE EXISTING #8 CONDUCTORS AS THE GROUND, WHERE CODE-COMPLIANT.

   *PROVIDE A NEW ROOF PENETRATION AS REQUIRED FOR CONDUIT ROUTING.

   *REPLACE THE EXISTING 40A, 3-POLE BREAKER IN PANEL HD1A WITH A NEW 480V, 60A, 3-POLE BREAKER, MATCHING THE PANEL RATING AND VOLTAGE REQUIREMENTS.

5. PROVIDE FIRE ALARM CONNECTION TO NEW SMOKE DUCT DETECTOR PER MECHANICAL PLANS. CONNECT TO EXISTING FIRE ALARM SYSTEM.

6. NEW POWER EXHAUST HAS AN INTEGRAL DISCONNECT. PROVIDE SEPARATE CONNECTION FOR NEW AC UNIT.

7. PROPOSED DISCONNECT SHOWN IS FOR REFERENCE ONLY. COORDINATE WITH UNIT EQUIPMENT FOR EXACT LOCAITON PRIOR TO ROUGH-IN.

8. PROVIDE WP JUNCTION BOX AND 3/4"CONDUIT WITH PULL STRING DOWN TO SECOND FLOOR ACCESSIBLE CEILING SPACE FOR FUTURE BUILDING ENERGY MANAGEMENT SYSTEM CONTROL WIRING.

1 ELECTRICAL ROOF PLAN
E-101 1/8" = 1'-0"

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THOMA: 24-8129.05

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AGENCY

PLAN CHECK RE-SUBMITTAL

GOLETA CITY HALL - HVAC REPLACEMENT
130 CREMONA DRIVE, GOLETA CA 93117

ELECTRICAL ROOF PLAN

NO.	REVISION	DATE
1		
2		
3		
4		
5		
6		

PROJECT MANAGER: CJ
DRAWN BY: TR/CJ
CHECKED BY: CJ/JT
DATE: AUGUST 25, 2025
PROJECT NUMBER: 1806-03-PS24
SHEET: E-101

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1 ELECTRICAL FIRST FLOOR PLAN

E-201 1/8" = 1'-0"

□ REFERENCE NOTES

1. PANEL HD1A CIRCUIT 19/21/23 FEED EXISTING ROOF MOUNTED AC-13. REPLACE THE EXISTING 40A, 3-POLE BREAKER WITH NEW 480V, 60A, 3-POLE BREAKER, MATCHING THE PANEL RATING AND VOLTAGE REQUIRMENTS. EXISTING PANEL AND BREAKER IS SQUARE D COMPANY.

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AGENCY

GOLETA CITY HALL - HVAC REPLACEMENT

130 CREMONA DRIVE, GOLETA CA 93117

ELECTRICAL FIRST FLOOR PLAN

NO.	REVISION	DATE
1		
2		
3		
4		
5		
6		

PROJECT MANAGER: CJ
DRAWN BY: TR/CJ
CHECKED BY: CJ/JT
DATE: AUGUST 25, 2025
PROJECT NUMBER: 1806-03-PS24
SHEET: E-201

PLAN CHECK RE-SUBMITTAL

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1 ELECTRICAL SECOND FLOOR PLAN
E-202 1/8" = 1'-0"

REFERENCE NOTES

1. EXISTING PANEL HA CIRCUIT 20/22/24 FEED EXISTING ROOF MOUNTED AC-11. REPLACE THE EXISTING 30A, 3-POLE BREAKER WITH NEW 480V, 50A, 3-POLE BREAKER, MATCHING THE PANEL RATING AND VOLTAGE REQUIRMENTS. EXISTING PANEL AND BREAKER IS SQUARE D COMPANY.

2. EXISITING FIRE ALARM SYSTEM. PROVIDE FIRE ALARM CONNECTION TO NEW SMOKE DUCT DETECTORS PER MECHANICAL PLANS.

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AGENCY

PLAN CHECK RE-SUBMITTAL

GOLETA CITY HALL - HVAC REPLACEMENT
130 CREMONA DRIVE, GOLETA CA 93117

ELECTRICAL SECOND FLOOR PLAN

NO.	REVISION	DATE
1		
2		
3		
4		
5		
6		

PROJECT MANAGER: CJ
DRAWN BY: TR/CJ
CHECKED BY: CJ/JT
DATE: AUGUST 25, 2025
PROJECT NUMBER: 1806-03-PS24
SHEET: E-202