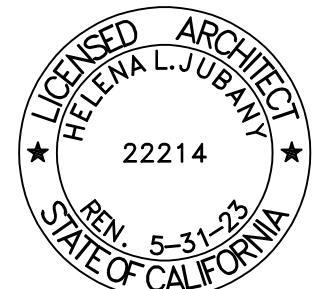


ENCINITA HVAC		
BUILDINGS IN SCOPE	DSA-A#	CERTIFICATION STATUS
BLDG - E	03-107659	CERTIFIED
	03-119066	NOT CERTIFIED
	03-6720	CERTIFIED
BLDG - F	03-107659	CERTIFIED
	03-119066	NOT CERTIFIED
	03-7747	CERTIFIED
BLDG - G	03-107659	CERTIFIED
	03-119066	NOT CERTIFIED
	03-7747	CERTIFIED

FILE NO: 19-91 A#: 03-122716



REMOVED, RELOCATED AND OTHER MEASURES AS NECESSARY TO MAINTAIN THE INTEGRITY OF THE PROJECT AND THE RESULTS OF THE ANALYSIS. THE ANALYST IS NOT RESPONSIBLE FOR ANY DAMAGE TO THE BUILDING OR ITS CONTENTS. THE ANALYST IS NOT RESPONSIBLE FOR ANY DAMAGE TO THE BUILDING OR ITS CONTENTS. THE ANALYST IS NOT RESPONSIBLE FOR ANY DAMAGE TO THE BUILDING OR ITS CONTENTS.

ROSEMEAD SCHOOL DISTRICT
RSD - ENCINITA ELEMENTARY SCHOOL
HVAC REPLACEMENT AT BUILDINGS E, F AND G



ROSEMEAD
SCHOOL DISTRICT
PARK ROSEMEAD
4515 ENCINITA AVENUE
ROSEMEAD CA 91770

JUBANY
NAC
ARCHITECTURE

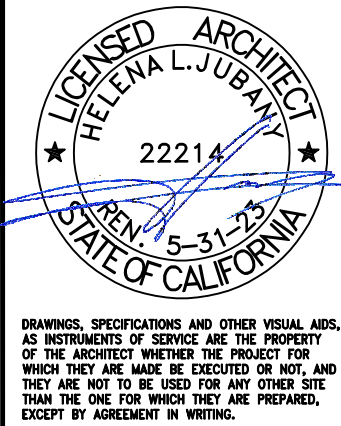
NAC NO: 161-21043
FILE: DSA SUBMITTAL
DRAWN: .
CHECKED: .
DATE: 02-14-2023

LEGEND

REMOVE EXISTING ROOFTOP HVAC UNIT AND REPLACE AS PER MECHANICAL DWGS.

SITE PLAN
SCALE: 1/32"=1'-0"

A101



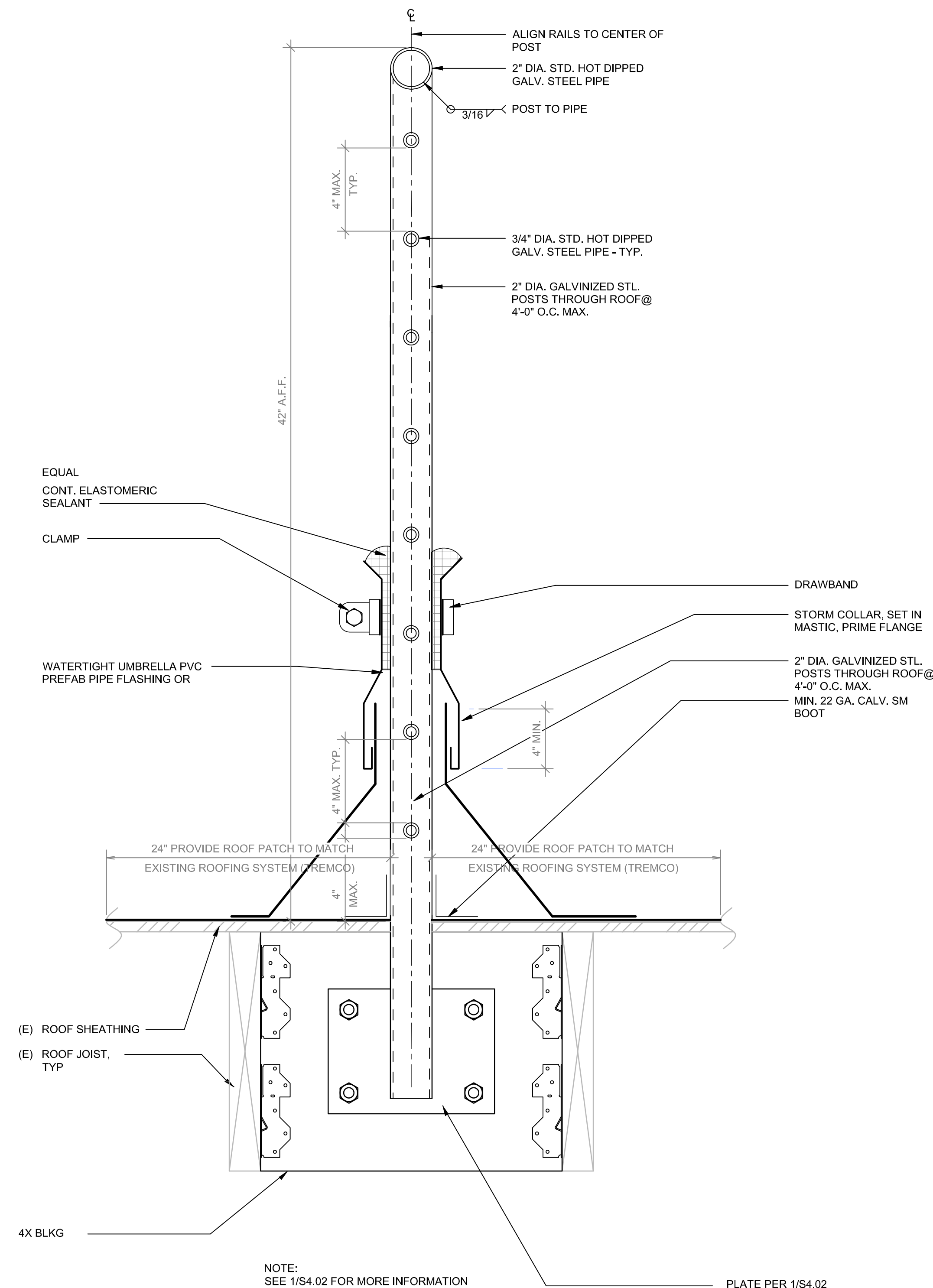
ROSEMEAD SCHOOL DISTRICT
RSD - ENCINITA ELEMENTARY SCHOOL
HVAC REPLACEMENT AT BUILDINGS E, F AND G



ROSEMEAD SCHOOL DISTRICT
PARK ROSEMEAD
4515 ENCINITA AVENUE
ROSEMEAD CA 91770

JUBANY
NAC ARCHITECTURE

NAC NO:	161-21043
FILE	DSA SUBMITTAL
DRAWN	.
CHECKED	.
DATE	02-14-2023



1 ROOF GUARDRAIL/FALL PROTECTION DETAIL
Scale: 3" = 1'-0"

ABBREVIATIONS			SYMBOLS			SHEET INDEX	
REF	REFERENCE	FDN	FOUNDATION	AB	ANCHOR BOLT	S0.01	SHEET INDEX, SYMBOLS AND ABBREVIATIONS
REINF	REINFORCE; REINFORCING	FF	FINISHED FLOOR; FAR FACE	ACI	AMERICAN CONCRETE INSTITUTE		
REQD	REQUIRED	FIN	FINISH	ADDL	ADDITIONAL		
RF	ROOF	FJ	FLOOR JOIST	ADJ	ADJACENT	S0.02	STRUCTURAL GENERAL NOTES
		FL	FLOOR LINE	AESS	ARCHITECTURAL EXPOSED STRUCTURAL STEEL	S0.03	STRUCTURAL GENERAL NOTES
SCHED	SCHEDULE	FLG	FLANGE	AGGR	AGGREGATE		
SECT	SECTION	FLR	FLOOR	AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION		
SEOR	STRUCTURAL ENGINEER OF RECORD	FN	FIELD NAIL	ALT	ALTERNATE	S1.01	OVERALL SITE / KEY PLAN
SEP	SEPERATION	FOC	FACE OF CONCRETE	ALUM	ALUMINUM		
SHT	SHEET	FOM	FACE OF MASONRY	ANCH	ANCHOR		
SHTG	SHEATHING	FOS	FACE OF STUD	ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	S2.01	BLDG E - ROOF FRAMING PLAN
SDIA	SAN DIEGO INTERNATIONAL AIRPORT	FOW	FACE OF WALL	AOR	ARCHITECT OF RECORD		
SDM	SIMILAR	FP	FULL PENETRATION; FIRE PROOFING	APA	AMERICAN PLYWOOD ASSOCIATION		
SLBB	SHORT LEGS BACK-TO-BACK	FRMG	FRAMING	APPROVD	APPROVED	S2.02	BLDG F - ROOF FRAMING PLAN
SOG	SLAB ON GRADE	FS	FULL SIZE; FAR SIDE	APPROX	APPROXIMATE		
SN	SHEAR NAIL	FT	FOOT; FEET	ARCH	ARCHITECTURAL; ARCHITECT		
SPCG	SPACING	FTG	FOOTING	ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	S2.03	BLDG G - ROOF FRAMING PLAN
SPECS	SPECIFICATIONS	GA	GAUGE	AVDGS	ADVANCED VISUAL DOCKING GUIDANCE SYSTEM		
SPCL	SPECIAL	GALV	GALVANIZED	AWPA	AMERICAN WOOD PRESERVERS ASSOCIATION	S4.01	EQUIPMENT SUPPORT DETAILS
SQ	SQUARE	GB	GRADE BEAM	AWS	AMERICAN WELDING SOCIETY		
SS	SELECT STRUCTURAL; STAINLESS STEEL	GLB	GLUED LAMINATED BEAM	ATC	AMERICAN INSTITUTE OF TIMBER CONSTRUCTION		
SSL	SHORT SLOTTED HOLES	GR	GRADE	&	AND	S4.02	EQUIPMENT SUPPORT DETAILS
STAGG	STAGGER	GRND	GROUND	@	AT		
STD	STANDARD						
STIFF	STIFFENERS						
STL	STEEL	HDR	HEADER	BHS	BAGGAGE HANDLING SYSTEM		
STRUCT	STRUCTURAL	HGR	HANGER	BLDG	BUILDING		
STRUCT I	STRUCTURAL I	H OR HORIZ	HORIZONTAL	BLK	BLOCK		
SW	SHEAR WALL	HOSP	HOSPITAL	BLKG	BLOCKING		
SYM	SYMMETRICAL	HP	HIGH POINT	BM	BEAM		
		HR	HARD ROCK	BN	BOUNDARY NAIL		
T	TOP	HS	HIGH STRENGTH	BNDRY	BOUNDARY		
TB	TIE BEAM	HSB	HORIZONTALLY SLOTTED HOLES	B.O.	BOTTOM OF		
T & B	TOP AND BOTTOM	HT	HEIGHT	BOT or B	BOTTOM		
T & G	TONGUE AND GROOVE			BRG	BRACE		
TEMP	TEMPERATURE; TEMPORARY	ID	INSIDE DIAMETER	BRG	BEARING		
THK	THICKNESS/THICK	IF	INSIDE FACE	BT	BENT		
THRU	THROUGH	I-JST	I-JOIST	BTWN	BETWEEN		
THR	THREADED	IN	INCH				
T.O.	TOP OF	INCL	INCLUDE				
TOC	TOP OF CONCRETE; TOP OF CURB	INFO	INFORMATION	CANT	CANTILEVER		
TOF	TOP OF FOOTING	INSP	INSPECTION	CAM OR C	CAMBER		
TOS	TOP OF STEEL	INT	INTERIOR	CBC	CALIFORNIA BUILDING CODE		
TOW	TOP OF WALL	IT	INFORMATION TECHNOLOGY	CC	CENTER TO CENTER		
				CG	CENTER OF GRAVITY		
T&B	TOP AND BOTTOM	JST	JOIST	CIP	CAST-IN-PLACE		
T&G	TONGUE & GROOVE	JT	JOINT	CJ	CONSTRUCTION JOINT; CONTROL JOINT		
TSG	TAPERED STEEL GIRDER			CL	CENTER LINE		
TYP	TYPICAL	K	KIPS	CLR	CLEARANCE; CLEAR		
		KSI	KIPS PER SQUARE INCH	CLSM	CONTROLLED LOW-STRENGTH MATERIAL		
UBC	UNIFORM BUILDING CODE			CMU	CONCRETE MASONRY UNIT		
UNO	UNLESS NOTED OTHERWISE			COL	COLUMN		
UT	ULTRA-SONIC TEST	LAB	LABORATORY	COMP	COMPRESSION		
VERT	VERTICAL	LABC	LOS ANGELES BUILDING CODE	CONC	CONCRETE		
VIF	VERIFY IN FIELD	LADBS	LOS ANGELES DEPARTMENT OF BUILDING AND SAFETY	CONN	CONNECTION; CONNECT		
VSH	VERTICAL SLOTTED HOLES	LAWA	LOS ANGELES WORLD AIRPORTS	CONSTR	CONSTRUCTION		
		LB(S) or #	POUND(S)	CONT	CONTINUE; CONTINUOUS		
W/	WITH	LF	LINEAL FOOT	CONTR	CONTRACTOR		
W/O	WITHOUT	LIN	LINEAL; LINEAR	CJP	COMPLETE JOINT PENETRATION WELD		
WD	WOOD	LLN	LONG LEGS BACK-TO-BACK	CTR	CENTER		
WP	WORK POINT; WATERPROOF	LLB	LONG LEGS BACK-TO-BACK	CTS&K	COUNTERSINK; COUNTERSUNK		</

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WOOD

1. ALL STRUCTURAL LUMBER SHALL BE DOUGLAS FIR, VISUALLY GRADED OR MACHINE GRADED UNDER THE LUMBER GRADING RULES OF WEST COAST LUMBER INSPECTION BUREAU (LATEST EDITION). ALL FRAMING MEMBERS SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE ON PLANS:
- | THICKNESS | GRADE |
|---------------------|-------------|
| 2" NOM. AND SMALLER | GRADE NO. 1 |
| LARGER THAN 2" NOM. | GRADE NO. 1 |
2. ALL STRUCTURAL PLYWOOD SHEATHING SHALL BE DOUGLAS FIR STANDARD GRADE RATED SHEATHING - EXPOSURE 1 CONFORMING TO THE LATEST EDITION OF DOC P51 ALL PANELS SHALL BEAR LEGIBLE DFPA STAMPS.
3. ORIENTED STRAND BOARD (OSB) MAY BE SUBSTITUTED FOR PLYWOODS NOTED ABOVE, AND COMPLY WITH DOC PS2. PROVIDED IT IS RATED BY APA'S PERFORMANCE STANDARD RATING & ICC-ESR # NOTED.
4. ALL FLOOR & ROOF SHEATHING SHALL BE LAID FACE GRAIN PERPENDICULAR TO FRAMING AND SHALL BE APPROVED BY THE BUILDING INSPECTOR BEFORE COVERING.
5. ALL NAILING SHALL CONFORM TO THE APPLICABLE BUILDING CODE AND REGULATIONS. ALL NAILS SHALL BE COMMON NAILS ASTM F1667. MINIMUM NAILING REQUIREMENTS OUTLINED IN TABLE Z304.9.1 OF THE CODE SHALL BE FOLLOWED UNLESS OTHERWISE NOTED.
6. LAG BOLTS (LAG SCREWS): PROVIDE LEAD HOLE 60%-70% OF THREADED SHANK DIAMETER AND FULL DIAMETER FOR SMOOTH SHANK PORTION. MINIMUM PENETRATION INTO MAIN MEMBER SHALL BE 8d.
7. UNLESS OTHERWISE NOTED, ALL WOOD SILL PLATE UNDER BEARING, EXTERIOR OR SHEAR WALLS IN CONTACT WITH CONCRETE OR MASONRY SHALL BE BOLTED TO CONCRETE OR MASONRY WITH 5/8"Ø BOLTS AT 4'-0" OC BEGINNING AT 9" OC MAX. FROM EACH END OF THE PLATES. BOLTS SHALL EXTEND A MINIMUM OF 8" INTO CONCRETE OR MASONRY. *HILTI 0.145"Ø DN PINS (ICC-ESR #1390) AT 16" MIN SPACING MAY BE SUBSTITUTED FOR ANCHOR BOLTS AT INTERIOR NON-SHEAR/NON-BEARING WALLS ONLY.
8. ALL BOLT HEADS AND NUTS WHICH BEAR AGAINST THE FACE OF WOOD MEMBERS SHALL BE PROVIDED WITH METAL WASHERS AS INDICATED ON PLANS OR PER WASHER PLATE SCHEDULE ON NOTE #11 AND HOLES SHALL BE DRILLED A MAXIMUM OF 1/16" OVERSIZED. INSPECTOR SHALL VERIFY THESE CONDITIONS IN THE FIELD.
9. ALL NUTS ON BOLTS SHALL BE TIGHTENED WHEN INSTALLED AND RE-TIGHTENED AT THE COMPLETION OF WORK OR BEFORE CLOSING IN. THREAD PROJECTION SHALL BE 1/16 INCH MINIMUM BEYOND THE NUT.
10. USE OF MACHINE NAILING IS SUBJECT TO A SATISFACTORY JOBSITE DEMONSTRATION AND THE APPROVAL BY THE INSPECTOR AND STRUCTURAL ENGINEER. THE APPROVAL IS SUBJECT TO CONTINUED SATISFACTORY PERFORMANCE. MACHINE NAILING WILL NOT BE APPROVED IN 5/16" PLYWOOD. IF NAILHEADS 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.
11. ALL 5/8" DIAMETER AND LARGER BOLTS CALLED OUT ON DRAWINGS, INCLUDING ANCHOR BOLTS (AB) SHALL HAVE STEEL SQUARE PLATE WASHERS AS LISTED BELOW UNDER THE HEAD AND/OR NUT BEARING ON WOOD.
- | BOLT DIAMETER | 1/2" | 5/8" | 3/4" | 7/8" | 1" |
|--------------------|--------|--------|------|--------|------|
| WASHER - THICKNESS | 1/4" | 5/16" | 3/8" | 7/16" | 1/2" |
| WASHER - WIDTH | 2 1/2" | 2 3/4" | 3" | 3 1/2" | 4" |
| MINIMUM EMBEDMENT | 7" | 8" | 8" | 8" | 12" |
12. FRAMING CONNECTORS: PER MANUFACTURER'S APPROVED PRODUCT EVALUATION REPORT (ICC-ESR) AND INSTALLED ACCORDINGLY. SIZE AND NUMBER OF NAILS TO BE MAXIMUM SPECIFIED BY THE MANUFACTURER UNO. THE FOLLOWING IS A LIST OF ICC-ESR NUMBERS CORRESPONDING TO SOME OF THE FRAMING CONNECTORS USED IN THE PROJECT:
- | DESCRIPTION | ICC-ESR # |
|----------------------|-----------|
| SIMPSON 'CMST' | 2105 |
| SIMPSON 'LPT4' | 5313 |
| SIMPSON 'HD' | 5708 |
| SIMPSON 'EPC, 'PC' | 443 |
| SIMPSON 'CC' | 2011 |
| SIMPSON 'PBS' | 5709 |
| SIMPSON 'LUS' | 5708 |
| SIMPSON 'A34', 'A35' | 5672 |
| SIMPSON 'HU' | 5117 |
| SIMPSON 'ITT' | 2329 |
13. BOLTED HOLD DOWN ANCHORS: INSTALL PER MANUFACTURE'S APPROVED ICC PRODUCT EVALUATION REPORT. INSTALL HOLD DOWN 1/2 INCH MINIMUM ABOVE THE PLATE TO ALLOW FOR TIGHTENING POST BOLTS. USE EXTRA CARE IN BORING THE POST HOLES (1/32 TO 1/16 LARGER THAN THE BOLT DIAMETER). THE HOLD DOWN SHALL BE INSTALLED TIGHT TO THE HOLD DOWN POST WITHOUT FILLERS OR DAPPING. THE POST BOLTS SHALL NOT BE COUNTERSUNK INTO THE HOLD DOWN POST UNO. DO NOT BEND HOLD DOWN ANCHORS. (SIMPSON HD ICC-ESR# 5708).
14. SUBSTITUTIONS: PROVIDE MANUFACTURER'S APPROVED PRODUCT EVALUATION REPORT AND A LIST OF ALL PROPOSED SUBSTITUTIONS TO THE ENGINEER FOR REVIEW BEFORE FABRICATION. PROPOSED SUBSTITUTIONS SHALL BE APPROVED BY DSA.
15. PRESERVATIVE TREATED WOOD: WOOD EXPOSED TO THE WEATHER; FOUNDATION PLATES ON CONCRETE SLABS, FOUNDATIONS WHICH ARE IN DIRECT CONTACT WITH EARTH SHALL BE TREATED WOOD WITH PRESERVATIVE RETENTION CONFORMING TO AWPA AS REQUIRED FOR USE. NEWLY EXPOSED SURFACES RESULTING FROM FIELD CUTTING, BORING OR HANDLING SHALL BE FIELD TREATED IN ACCORDANCE WITH AWPA M-4.
16. TOP PLATES: TWO PIECES, SAME SIZE AS STUDS, STAGGER SPLICES 4'-0" MINIMUM. CENTER SPLICES OVER STUDS.
17. FULL-DEPTH SOLID BLOCKING OR CROSS BRACING: INSTALLED AT INTERVALS NOT EXCEEDING 8 FEET FOR ALL JOISTS AND RAFTERS.
18. CUTTING AND NOTCHING: DO NOT CUT, BORE, COUNTERSINK OR NOTCH WOOD MEMBERS EXCEPT WHERE SHOWN IN THE DETAILS. HOLES THROUGH PLATES, STUDS AND DOUBLE PLATES IN WALLS SHALL NOT EXCEED 40% THE MEMBER WIDTH AND SHALL BE LOCATED IN THE CENTER OF THE MEMBER.
19. END SUPPORT: ROOF AND FLOOR JOISTS OVER 4 INCHES DEEP SHALL HAVE THEIR ENDS HELD IN POSITION WITH EITHER:
- FULL DEPTH SOLID BLOCKING;
 - NAILED BRIDGING;
 - NAILING OR BOLTING TO OTHER FRAMING MEMBERS; OR
 - APPROVED JOIST HANGERS.
20. GALVANIZING: ALL EXPOSED STEEL TIMBER HARDWARE, FASTENERS AND CONNECTORS SHALL BE GALVANIZED.

DESIGN LOADS

1. FLOOR AND ROOF LIVE LOADS:
- | ROOF | 20 PSF (REDUCIBLE) |
|------|--------------------|
|------|--------------------|
2. SNOW LOADS:
- SNOW LOADS ARE IN ACCORDANCE WITH SECTION 1608A OF THE CODE. GROUND SNOW LOAD, Pg = ZERO
3. WIND LOADS:
- WIND LOADS ARE IN ACCORDANCE WITH SECTION 1609A OF THE CODE. SEE TABLE ON THIS SHEET FOR PRESSURE AT EXTERIOR COMPONENTS AND CLADDING. BASIC WIND SPEED, V = 101 MPH (3-SECOND GUST) RISK CATEGORY III WIND EXPOSURE C WIND IMPORTANCE FACTOR, I = 1.0 DESIGN WIND PRESSURE = 39.66 PSF
4. EARTHQUAKE LOADS ON NONSTRUCTURAL COMPONENTS:
- EARTHQUAKE LOADS ARE IN ACCORDANCE WITH SECTION 1613A OF THE CODE. RISK CATEGORY III Ip = 1.0 FOR ALL NONSTRUCTURAL COMPONENTS SEISMIC DESIGN CATEGORY (SDC) = D SITE CLASS = D
- | | |
|-----------------|----------|
| S _{DS} | = 1.966g |
| S _S | = 0.712g |
| S _{D1} | = 0.807g |
| S _{DS} | = 1.573g |
- EARTHQUAKE LOADS ON NONSTRUCTURAL COMPONENTS, SHALL BE DETERMINED IN ACCORDANCE WITH THE FOLLOWING PROCEDURE: CALCULATE Fp BASED ON ASCE 7-16 EQUATION 13.3-1 USING THE VALUE OF S_{DS} = 1.573g THE MAXIMUM AND MINIMUM VALUES FOR Fp SHALL BE DETERMINED FROM ASCE 7-16 EQUATIONS 13.3-2 AND 13.3-3, RESPECTIVELY. ALL EARTHQUAKE LOADS ON NONSTRUCTURAL COMPONENTS SHALL BE BASED ON VALUES OF ap AND Rp FROM ASCE 7-16 TABLES 13.5-1 AND 13.6-1.
5. EARTHQUAKE LOADS ON PRIMARY STRUCTURE:
- EARTHQUAKE LOADS ARE IN ACCORDANCE WITH SECTION 1613A OF THE CODE.
- R = 6 1/2 (WOOD SHEARWALL)
6. FLOOD DESIGN DATA:
- THE PROJECT IS NOT LOCATED WITHIN A FLOOD HAZARD AREA.

STRUCTURAL OBSERVATION:

1. STRUCTURAL OBSERVATION SHALL BE PERFORMED BY THE STRUCTURAL ENGINEER OF RECORD OR DESIGNEE IN ACCORDANCE WITH SECTION 1710A OF THE CODE.
2. STRUCTURAL OBSERVATION IS THE VISUAL OBSERVATION OF THE ELEMENTS AND CONNECTIONS OF THE STRUCTURAL SYSTEM AT SIGNIFICANT CONSTRUCTION STAGES AND THE COMPLETED STRUCTURE FOR GENERAL CONFORMANCE TO THE APPROVED PLANS AND SPECIFICATION. STRUCTURAL OBSERVATION DOES NOT WAIVE THE RESPONSIBILITY FOR THE INSPECTIONS REQUIRED OF THE BUILDING INSPECTOR OR THE DEPUTY INSPECTOR.
3. A CIVIL OR STRUCTURAL ENGINEER OR ARCHITECT SHALL PERFORM THE STRUCTURAL OBSERVATION THE ENGINEER OR ARCHITECT SHALL BE REGISTERED OR LICENSED IN THE STATE OF CALIFORNIA. THE DEPARTMENT OF BUILDING AND SAFETY REQUIRES THE USE OF THE ENGINEER OR ARCHITECT RESPONSIBLE FOR THE STRUCTURAL DESIGN WHEN THEY ARE INDEPENDENT OF THE CONTRACTOR.
4. THE STRUCTURAL OBSERVER SHALL PROVIDE EVIDENCE OF EMPLOYMENT BY THE OWNER, A LETTER FROM THE OWNER OR A COPY OF THE AGREEMENT FOR SERVICES SHALL BE SENT TO THE BUILDING INSPECTOR BEFORE THE FIRST SITE VISIT, THE STRUCTURAL OBSERVER SHALL ALSO INFORM THE OWNER OF THE REQUIREMENTS FOR A PRECONSTRUCTION MEETING AND SHALL PRESIDE OVER THIS MEETING.
5. THE CONTRACTOR SHALL COORDINATE AND CALL FOR A PRE-CONSTRUCTION MEETING BETWEEN THE ENGINEER OR ARCHITECT RESPONSIBLE FOR THE STRUCTURAL DESIGN, STRUCTURAL OBSERVER, CONTRACTOR, AFFECTED SUBCONTRACTORS AND DEPUTY INSPECTORS. THE PURPOSE OF THE MEETING SHALL BE TO IDENTIFY THE MAJOR STRUCTURAL ELEMENTS AND CONNECTIONS THAT AFFECT THE VERTICAL AND LATERAL LOAD SYSTEMS OF THE STRUCTURE AND TO REVIEW SCHEDULING OF THE REQUIRED OBSERVATIONS. A RECORD OF THE MEETING SHALL BE INCLUDED IN THE FIRST OBSERVATION REPORT SUBMITTED TO THE BUILDING INSPECTOR.
6. THE STRUCTURAL OBSERVER SHALL PERFORM SITE VISITS AT THOSE STEPS IN THE PROGRESS OF THE WORK THAT ALLOW FOR CORRECTION OF DEFICIENCIES WITHOUT SUBSTANTIAL EFFORT OR UNCOVERING OF THE WORK INVOLVED. AT A MINIMUM, THE FOLLOWING SIGNIFICANT CONSTRUCTION STAGES REQUIRE A SITE VISIT AND AN OBSERVATION REPORT FROM THE STRUCTURAL OBSERVER.
- | CONSTRUCTION STAGES | ELEMENTS/CONNECTIONS TO BE OBSERVED |
|---------------------|-------------------------------------|
| a. ROOF FRAMING | CONNECTORS / STRAPS |
7. THE STRUCTURAL OBSERVER SHALL PREPARE A REPORT FOR EACH SIGNIFICANT STATE OF CONSTRUCTION OBSERVED. A COPY OF THE OBSERVATION REPORT SHALL BE SENT TO DSA, OWNER, CONTRACTOR, AND PROJECT INSPECTOR.

GENERAL

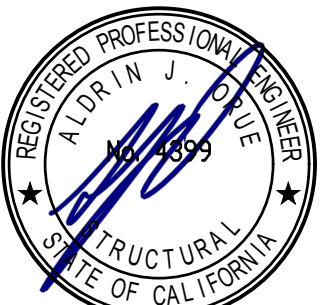
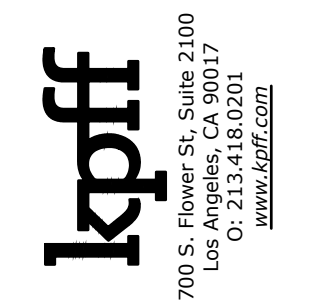
1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION. THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES.
2. ALL DRAWINGS ARE CONSIDERED TO BE A PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL DRAWINGS 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. EXISTING CONDITIONS SHOWN ARE BASED ON LIMITED AVAILABLE AS-BUILT DOCUMENTATION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL ACTUAL CONDITIONS. DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND THOSE SHOWN ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO START OF WORK. ARCHITECT AND ENGINEER SHALL REVIEW THE ACTUAL FIELD CONDITIONS AND DETERMINE THE EXTENT OF MODIFICATIONS WHICH WILL BE REQUIRED TO THE AFFECTED DETAILS. MODIFICATIONS TO THE CONTRACT DOCUMENTS MAY BE SUBJECT TO REVIEW & APPROVAL BY DSA.
4. UNLESS NOTED OTHERWISE OR SPECIFICALLY APPROVED BY THE SEOR, PRIOR TO DRILLING INTO (E) CONCRETE ELEMENTS FOR INSTALLATION OF EPOXY/EXPANSION ANCHORS/DOWELS, THE CONTRACTOR SHALL SCAN (USING NON-DESTRUCTIVE METHODS) THE (E) CONCRETE IN THE AREA OF ANCHORAGE TO LOCATE (E) REINFORCING BARS OR OTHER (E) EMBEDDED OBJECTS IN THE CONCRETE. (E) REINFORCING BARS SHALL NOT BE CUT OR DAMAGED DURING INSTALLATION OF EPOXY/EXPANSION ANCHORS/DOWELS, IF CONFLICTS OCCUR BETWEEN THE (E) REINFORCING BARS AND EPOXY/EXPANSION ANCHORS/DOWELS, A COMPOSITE LAYOUT OF THE (E) REINFORCING BARS AND EPOXY/EXPANSION ANCHORS/DOWELS SHALL BE PROVIDED TO THE STRUCTURAL ENGINEER AND ARCHITECT FOR REVIEW AND TO DETERMINE IF CONNECTION/ANCHORAGE DETAILS REQUIRE MODIFICATION. MODIFICATIONS TO THE APPROVED CONTRACT DOCUMENTS MAY BE SUBJECT TO REVIEW AND APPROVAL BY DSA.
5. 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.
6. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING:
- 2019 CALIFORNIA BUILDING CODE, PART 2A, REFERRED TO HERE AS "THE CODE", AND ANY OTHER REGULATING AGENCIES WHICH HAVE AUTHORITY OVER WHICH ANY PORTION OF THE WORK, INCLUDING THE STATE OF CALIFORNIA DIVISION OF INDUSTRIAL SAFETY, AND THOSE CODES & STANDARDS LISTED IN THESE NOTES AND SPECIFICATIONS.
7. SEE ARCHITECTURAL DRAWINGS FOR THE FOLLOWING:
- SIZE AND LOCATION OF ALL DOOR AND WINDOW OPENINGS, EXCEPT AS NOTED
 - SIZE AND LOCATION OF ALL INTERIOR AND EXTERIOR NON-BEARING PARTITIONS.
 - SIZE AND LOCATION OF ALL CONCRETE CURBS, EQUIPMENT PADS, PITS, FLOOR DRAINS, SLOPES, DEPRESSED AREAS, CHANGE IN LEVEL, CHAMFERS, GROOVES, INSERTS, ETC
 - SIZE AND LOCATION OF ALL FLOOR AND ROOF OPENINGS EXCEPT AS SHOWN.
 - FLOOR AND ROOF FINISHES.
 - DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS.
8. SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR THE FOLLOWING:
- PIPE RUNS, SLEEVES, HANGERS, TRENCHES, WALL AND SLAB OPENINGS, ETC., EXCEPT AS SHOWN OR NOTED.
 - ELECTRICAL CONDUIT RUNS, BOXES, OUTLETS IN WALLS AND SLABS.
 - CONCRETE INSERTS FOR ELECTRICAL, MECHANICAL OR PLUMBING FIXTURES.
 - SIZE AND LOCATION OF MACHINE OR EQUIPMENT BASES, ANCHOR BOLTS FOR MOTOR MOUNTS.
9. 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. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.
10. OPENINGS, POCKETS, ETC., 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. FOR ANY FURTHER RESTRICTIONS ON OPENINGS IN STRUCTURAL ELEMENTS, SEE APPLICABLE SECTIONS BELOW.
11. PIPES SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE EXCEPT WHERE SPECIFICALLY APPROVED.
12. ASTM SPECIFICATIONS ON THE DRAWINGS SHALL BE OF THE LATEST REVISION.
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, STRUCTURAL 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. PROVIDE ADEQUATE SHORING AND/OR BRACING WHERE STRUCTURE HAS NOT ATTAINED DESIGN STRENGTH.

FILE NO: 19-91

A#0: 03-122716

11-17-2022

01-31-2022



ROSEMEAD SCHOOL DISTRICT
RSD - ENCINITA ELEMENTARY SCHOOL
HVAC REPLACEMENT AT BUILDINGS E,F AND G

ROSEMEAD
SCHOOL DISTRICT
PARK ROSEMEAD
3907 ROSEMEAD BOULEVARD
ROSEMEAD, CA 91770

JUBANY
NAC
ARCHITECTURE

NAC NO: 161-21043
FILE
DRAWN: CC
CHECKED: EMB/AL
DATE: 11-17-2022

STRUCTURAL GENERAL
NOTES

S0.02

File: A:\2022\2200234 - rosemead ad - hvac rep\3 Draft\encineta elementary school\2200234_S0.03.dwg
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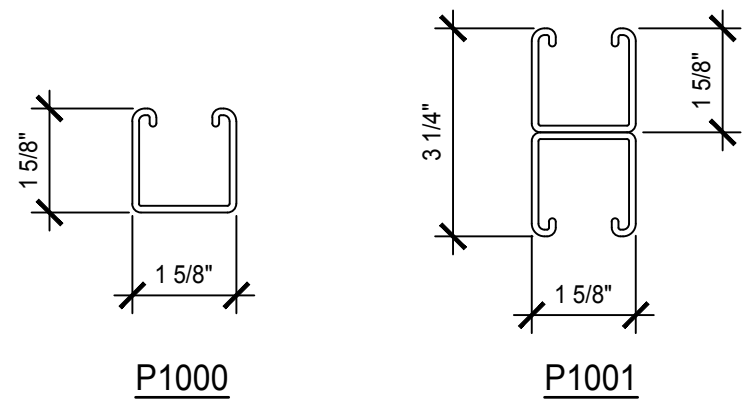
UNISTRUT METAL FRAMING

- UNISTRUT METAL FRAMING SHALL BE BY UNISTRUT CORPORATION, WAYNE, MI OR ENGINEER APPROVED EQUAL. INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND AS NOTED ON THE DRAWINGS.
- ALL CHANNEL MEMBERS SHALL BE FABRICATED FROM STRUCTURAL GRADE STEEL CONFORMING TO ONE OF THE FOLLOWING ASTM SPECIFICATIONS: A 1011 SS GR 33, A 635 GR 33.
- ALL FITTINGS SHALL BE FABRICATED FROM STEEL CONFORMING TO ONE OF THE FOLLOWING ASTM SPECIFICATIONS: A 575, A 576, A 36 OR A 635.
- ALL UNISTRUT MEMBERS AND FITTINGS SHALL BE HOT DIP GALVANIZED, UNO.
- AREAS OF UNISTRUT MEMBERS WHERE GALVANIZATION HAS BEEN REMOVED TO ALLOW FOR WELDING SHALL BE COATED WITH ZINC-RICH, GALVANIZING PAINT AFTER WELDING.
- MINIMUM UNISTRUT PROPERTIES SHALL BE AS FOLLOWS:

PARAMETER	P1000	P1001
AREA OF SECTION	0.555 IN ²	1.111 IN ²
AXIS 1-1		
MOMENT OF INERTIA (I)	0.185 IN ⁴	0.928 IN ⁴
SECTION MODULUS (S)	0.202 IN ³	0.571 IN ³
RADIUS OF GYRATION (r)	0.577 IN	0.914 IN
AXIS 2-2		
MOMENT OF INERTIA (I)	0.236 IN ⁴	0.471 IN ⁴
SECTION MODULUS (S)	0.290 IN ³	0.580 IN ³
RADIUS OF GYRATION (r)	0.651 IN	0.651 IN

- BOLT TORQUE REQUIREMENTS:

BOLT SIZE	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"
REC. TORQUE FT/LB	6	11	19	50	100	125
MAX TORQUE FT/LB	7	15	25	70	125	135



STRUCTURAL TESTS AND SPECIAL INSPECTIONS

- STRUCTURAL TESTS AND SPECIAL INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 17A OF THE CODE.
- THE SPECIAL INSPECTOR MUST BE CERTIFIED BY DIVISION OF THE STATE ARCHITECT (DSA), IN THE CATEGORY OF WORK REQUIRED TO HAVE SPECIAL INSPECTION.
- THE SPECIAL INSPECTORS AND TESTING FIRM MUST BE HIRED BY THE OWNER OR OWNER'S REPRESENTATIVE.
- SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS AND FURNISH COPIES TO THE BUILDING OFFICIAL, OWNER, AND STRUCTURAL ENGINEER OF RECORD. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS, OR WAS NOT COMPLETED IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS AND FURNISH COPIES TO THE BUILDING OFFICIAL, COMPLETED IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION.
- SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 1707A OF THE CODE FOR THE FOLLOWING ITEMS:
 - STRUCTURAL STEEL. SPECIAL INSPECTION FOR SPECIAL STEEL CONCENTRIC BRACED FRAMES AND OTHER STRUCTURAL STEEL ELEMENT THAT IS PART OF THE SEISMIC-FORCE-RESISTING SYSTEM SHALL BE IN ACCORDANCE WITH SECTION 1707A.2 OF THE CODE AND THE QUALITY ASSURANCE PLAN REQUIREMENTS OF AISC 341.
 - ARCHITECTURAL COMPONENTS. PERIODIC SPECIAL INSPECTION DURING THE ERECTION AND FASTENING OF EXTERIOR CLADDING, EXTERIOR NONBEARING WALLS, SUSPENDED THE STRUCTURE SHALL BE IN ACCORDANCE WITH SECTION 1707A.6 OF THE CODE. CEILING SYSTEMS AND THEIR ANCHORAGE, AND INTERIOR AND EXTERIOR VENEER IN
 - MECHANICAL AND ELECTRICAL COMPONENTS (SECTION 1707A.7 OF THE CODE)
 - PERIOD SPECIAL INSPECTION IS REQUIRED DURING THE ANCHORAGE OF ELECTRICAL EQUIPMENT FOR EMERGENCY OR STANDBY POWER SYSTEMS.
 - PERIOD SPECIAL INSPECTION IS REQUIRED DURING THE INSTALLATION OF ANCHORAGE OF OTHER ELECTRICAL EQUIPMENT IN THE STRUCTURE.
 - PERIOD SPECIAL INSPECTION IS REQUIRED DURING THE INSTALLATION OF VIBRATION ISOLATION SYSTEMS IN THE STRUCTURE.
- STRUCTURAL TESTING FOR SEISMIC RESISTANCE SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 1708A OF THE CODE FOR THE FOLLOWING ITEMS:
 - CONCRETE REINFORCEMENT BELOW MOMENT FRAMES SHALL COMPLY WITH SECTION 21.1.5.2 OF ACI 318-11. SPECIAL INSPECTOR SHALL VERIFY CERTIFIED MILL TEST REPORTS FOR EACH TESTING DEMONSTRATES REQUIREMENTS OF ACI 318-14 SECTION 21.1.5.2:
 - THE ACTUAL YIELD STRENGTH BASED ON MILL TESTS DOES NOT EXCEED fy BY MORE THAN 18,000 PSI.
 - THE RATIO OF THE ACTUAL TENSILE STRENGTH TO THE ACTUAL YIELD STRENGTH IS NOT LESS THAN 1.25.
 - STRUCTURAL STEEL. TESTING SHALL BE IN ACCORDANCE WITH THE QUALITY ASSURANCE PLAN REQUIREMENTS OF AISC 341.

INSPECTIONS

THE FOLLOWING ELEMENTS OF CONSTRUCTION SHALL HAVE CONTINUOUS INSPECTION BY A BUILDING INSPECTOR APPROVED BY DSA.

- EXPANSION ANCHORS.*
- ADHESIVE ANCHORS.*
- POWDER ACTIVATED FASTENERS / SHOT PINS.*

* THESE ITEMS REQUIRE SPECIAL INSPECTION.

ALL SPECIAL INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 1704A OF THE CODE AND ANY ADDITIONAL REQUIREMENTS STATED IN THESE DRAWINGS AND/OR THE PROJECT SPECIFICATIONS.

REFER TO THE STRUCTURAL TESTS AND INSPECTIONS FORM FOR ADDITIONAL INFORMATION AND ADDITIONAL TESTING AND INSPECTION REQUIREMENTS.

FILE NO: 19-91

A# 03-122716

11-17-2022
01-31-2021

kpff
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ROSEMEAD SCHOOL DISTRICT
RSD - ENCINITA ELEMENTARY SCHOOL
HVAC REPLACEMENT AT BUILDINGS E,F AND G

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STRUCTURAL GENERAL
NOTES

S0.03

1. THE PURPOSE OF THIS KEY PLAN IS TO INDICATE AREAS FOR ENLARGED STRUCTURAL PLANS ONLY.
2. NOT USED.
3. VERIFY ALL DIMENSIONS AND ELEVATIONS IN THE FIELD AND WITH ARCH DRAWINGS PRIOR TO LOCATING AND FABRICATING NEW FRAMING.
4. SEE SHEET SO.01 FOR SYMBOLS AND ABBREVIATIONS.
5. SEE SO.XX SERIES OF SHEETS FOR STRUCTURAL GENERAL NOTES.
6. VERIFY EXACT QUANTITIES, LOCATIONS AND DIMENSIONS OF MEP EQUIPMENT WITH MEP ARCHITECTURAL DRAWINGS AND EQUIPMENT MFR PRIOR TO FABRICATION OF NEW SUPPORT FRAMING AND INSTALLATION OF EQUIPMENT.

11-17-2022	01-31-2023
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**ROSEMEAD
SCHOOL DISTRICT**
PARK ROSEMEAD
3907 ROSEMEAD BOULEVARD
ROSEMEAD, CA 91770

837 N. SPRING ST. | LOS ANGELES CA 90012-2523 | P: 323.476.8076 | F: 323.869.3110

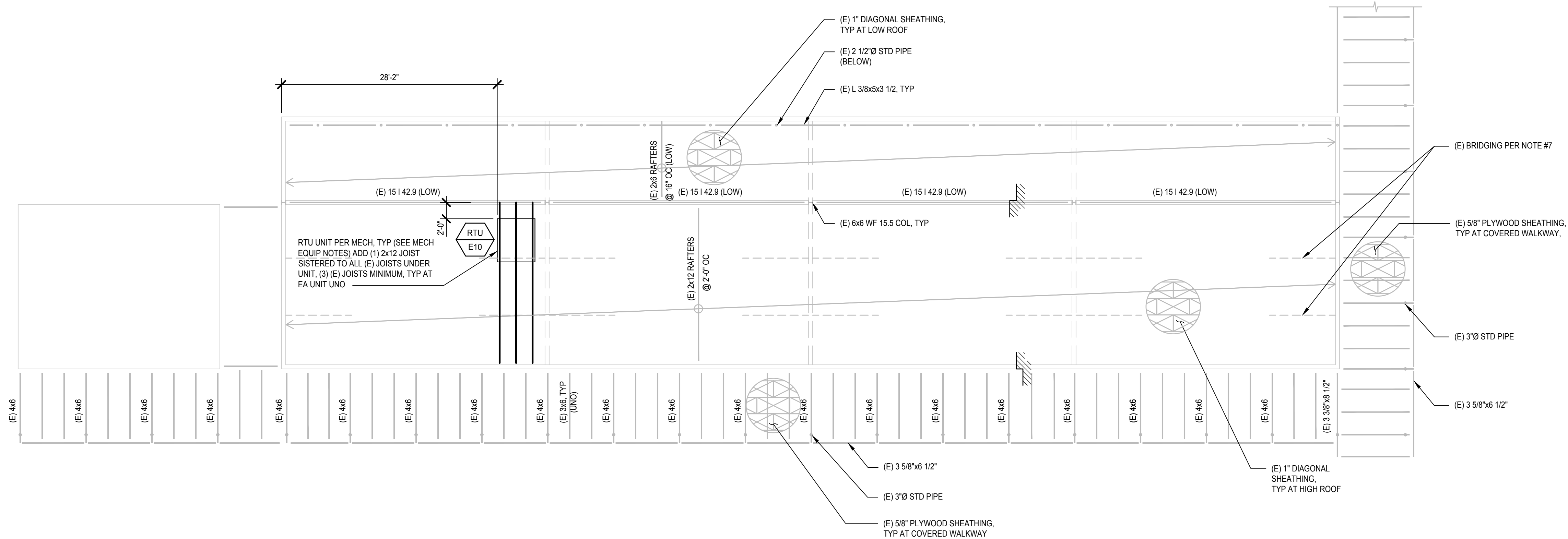
OVERALL SITE /
KEY PLAN

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A diagram of a circular loop with a north pole (N) at the top. A horizontal line extends from the left side of the loop.

1 OVERALL SITE / KEY PLAN
SCALE: 1"=30'-0"




1 BLDG E - ROOF FRAMING PLAN
SCALE = 1/8"=1'-0"

PLAN NOTES:

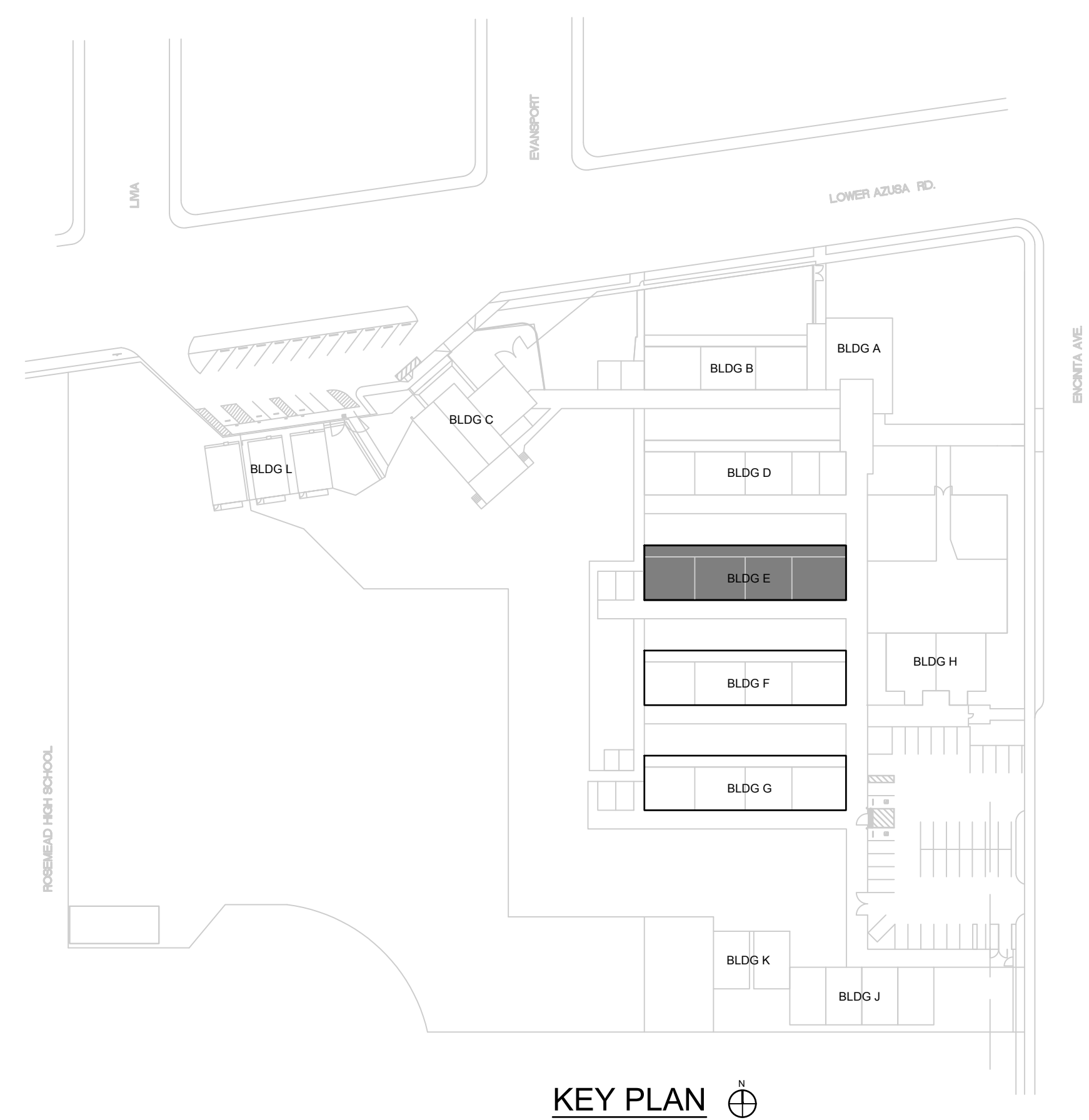
1. EXISTING CONDITIONS SHOWN ON PLANS, SECTIONS AND DETAILS ARE BASED ON LIMITED AVAILABLE AS-BUILT DOCUMENTATION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL ACTUAL CONDITIONS DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND THOSE SHOWN ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO START OF WORK. ARCHITECT AND ENGINEER SHALL REVIEW THE ACTUAL FIELD CONDITIONS AND DETERMINE THE EXTENT OF MODIFICATIONS WHICH WILL BE REQUIRED TO THE AFFECTED DETAILS. MODIFICATIONS TO THE CONTRACT DOCUMENTS MAY BE SUBJECT TO REVIEW & APPROVAL BY AIA.
2. VERIFY ALL DIMENSIONS AND ELEVATIONS IN THE FIELD AND WITH ARCH DRAWINGS PRIOR TO LOCATING AND FABRICATING NEW FRAMING.
3. ELEMENTS SHOWN SCREENED ARE EXISTING ELEMENTS WHICH ARE TO REMAIN. UNO. ELEMENTS SHOWN DARK ARE NEW ELEMENTS. UNO.
4. VERIFY ALL DIMENSIONS, ELEVATIONS, FINISH SURFACES, SLOPES, DRAINS, DEPRESSIONS, CURBS, ETC., WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION.
5. SEE ARCH FOR FINISHES, PARTITION WALLS, WATERPROOFING, ROOFING, AND OTHER NON-STRUCTURAL ELEMENTS
6. SEE ARCHITECTURAL DRAWINGS FOR GRID DIMENSIONS & HORIZONTAL CONTROL.
7. MOVE AND REPLACE (E) CROSS BRIDGING IN KIND AS REQUIRED FOR INSTALLATION OF SISTERING JOISTS
8. SEE SHEET S0.01 FOR SYMBOLS AND ABBREVIATIONS.
9. SEE S0.0X SERIES OF SHEETS FOR STRUCTURAL GENERAL NOTES.
10. SEE S4.0X SERIES OF SHEETS FOR EQUIPMENT SUPPORT DETAILS.

MECHANICAL EQUIPMENT NOTES:

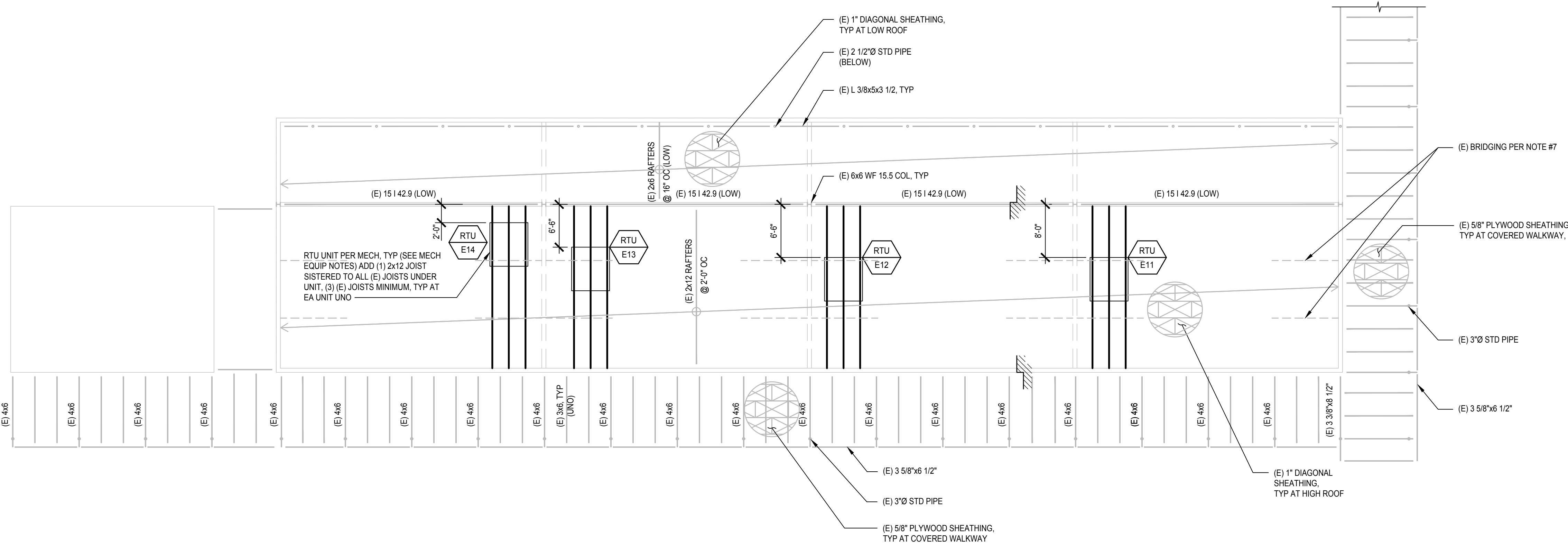
- 
 INDICATES (N) HVAC EQUIPMENT PER MECHANICAL DRAWINGS. SEE EQUIPMENT SCHEDULE FOR SUPPORT AND/OR ANCHORAGE DETAIL.
- VERIFY EXACT QUANTITIES, LOCATIONS AND/OR DIMENSIONS OF MEP EQUIPMENT WITH MEP & ARCHITECTURAL DRAWINGS AND EQUIPMENT MFR PRIOR TO FABRICATION OF NEW SUPPORT FRAMING AND INSTALLATION OF EQUIPMENT.
- ALL (N) DUCTS SHALL RUN THROUGH (E) ROOF AND WALL OPENINGS IN (E) WOOD STUD WALLS. TYPE UNO NO (N) OPENINGS SHALL BE CUT IN (E) ROOF OR WALLS. SEE DETAIL 2/54.01 (N) FRAMING AT (E) WOOD ROOF OPENINGS AS REQ'D.
- IF PIPING FROM MECH UNIT REQUIRE CORE THRU (E) ROOF OR WALL SHEATHING (2 INCH MAX DIAMETER), CORE SHALL BE LOCATED BETWEEN ADJACENT (E) JOISTS OR STUDS AND SHALL NOT CUT JOISTS OR STUDS.

EQUIPMENT SCHEDULE

RTU UNITS			
MARK	OPERATING WEIGHT LBS.	DETAIL REFERENCE	REMARKS
RTU-E10	860	4/S4.01	SEE MECH FOR ADDL INFORMATION



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1 BLDG F - ROOF FRAMING PLAN
SCALE = 1/8"=1'-0"

PLAN NOTES:

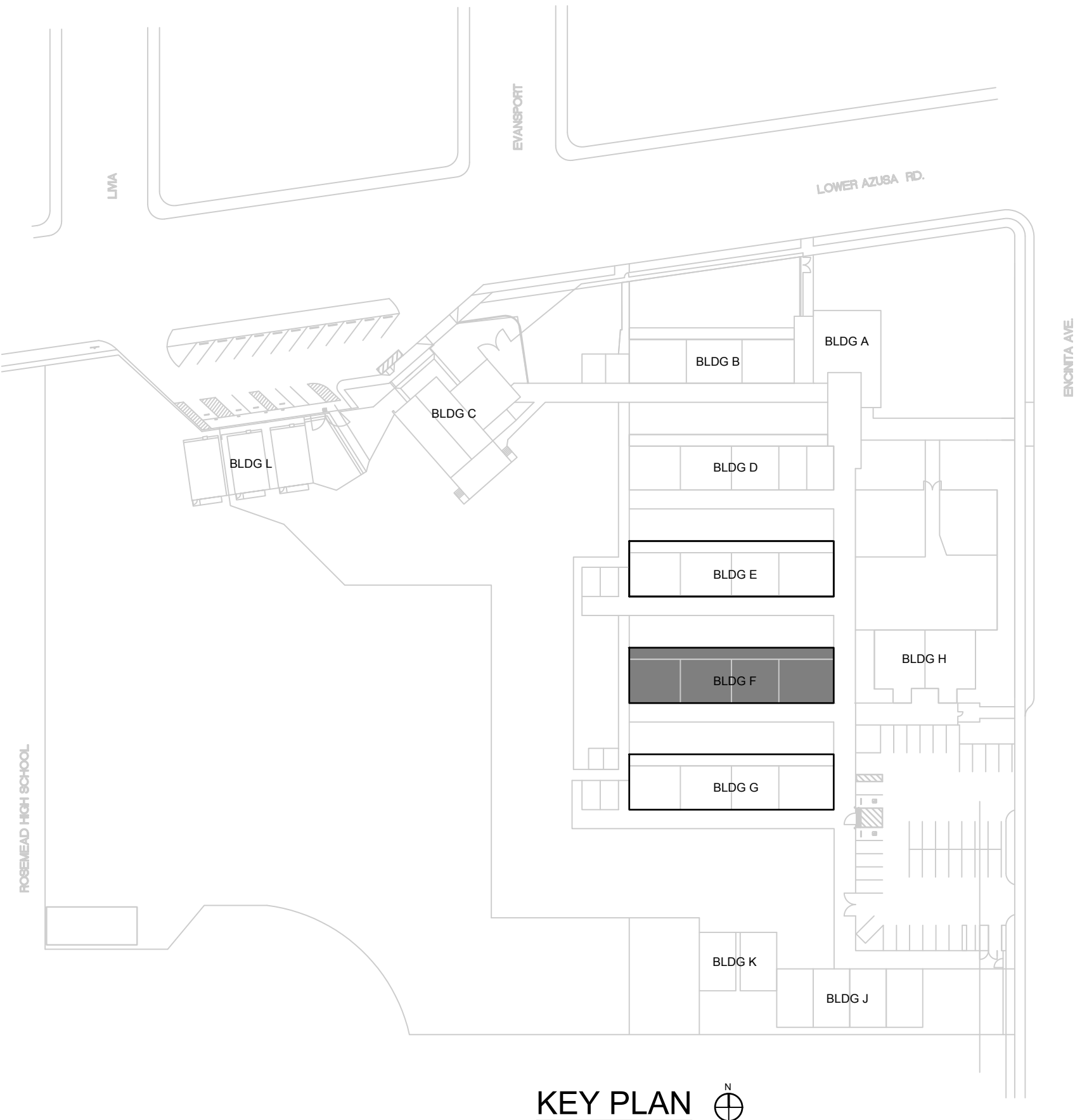
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- SEE S4.XX SERIES OF SHEETS FOR EQUIPMENT SUPPORT DETAILS.

MECHANICAL EQUIPMENT NOTES:

- XXX
XX INDICATES (N) HVAC EQUIPMENT PER MECHANICAL DRAWINGS. SEE EQUIPMENT SCHEDULE FOR SUPPORT AND/OR ANCHORAGE DETAIL.
- VERIFY EXACT QUANTITIES, LOCATIONS AND/OR DIMENSIONS OF MEP EQUIPMENT WITH MEP & ARCHITECTURAL DRAWINGS AND EQUIPMENT MFR PRIOR TO FABRICATION OF NEW SUPPORT FRAMING AND INSTALLATION OF EQUIPMENT.
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- IF PIPING FROM MECH UNIT REQUIRE CORE THRU (E) ROOF OR WALL SHEATHING (2 INCH MAX DIAMETER), CORE SHALL BE LOCATED BETWEEN ADJACENT (E) JOISTS OR STUDS AND SHALL NOT CUT JOISTS OR STUDS.

EQUIPMENT SCHEDULE

RTU UNITS			
MARK	OPERATING WEIGHT LBS.	DETAIL REFERENCE	REMARKS
RTU-E11	860	4/54.01	SEE MECH FOR ADDL INFORMATION
RTU-E12	860	4/54.01	SEE MECH FOR ADDL INFORMATION
RTU-E13	860	4/54.01	SEE MECH FOR ADDL INFORMATION
RTU-E14	860	4/54.01	SEE MECH FOR ADDL INFORMATION



KEY PLAN

FILE NO: 19-91 A#: 03-122716

11-17-2022
01-31-2022

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BUILDING F
ROOF FRAMING PLAN

S2.02

11-17-2022
01-31-2022

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ROSEMEAD SCHOOL DISTRICT
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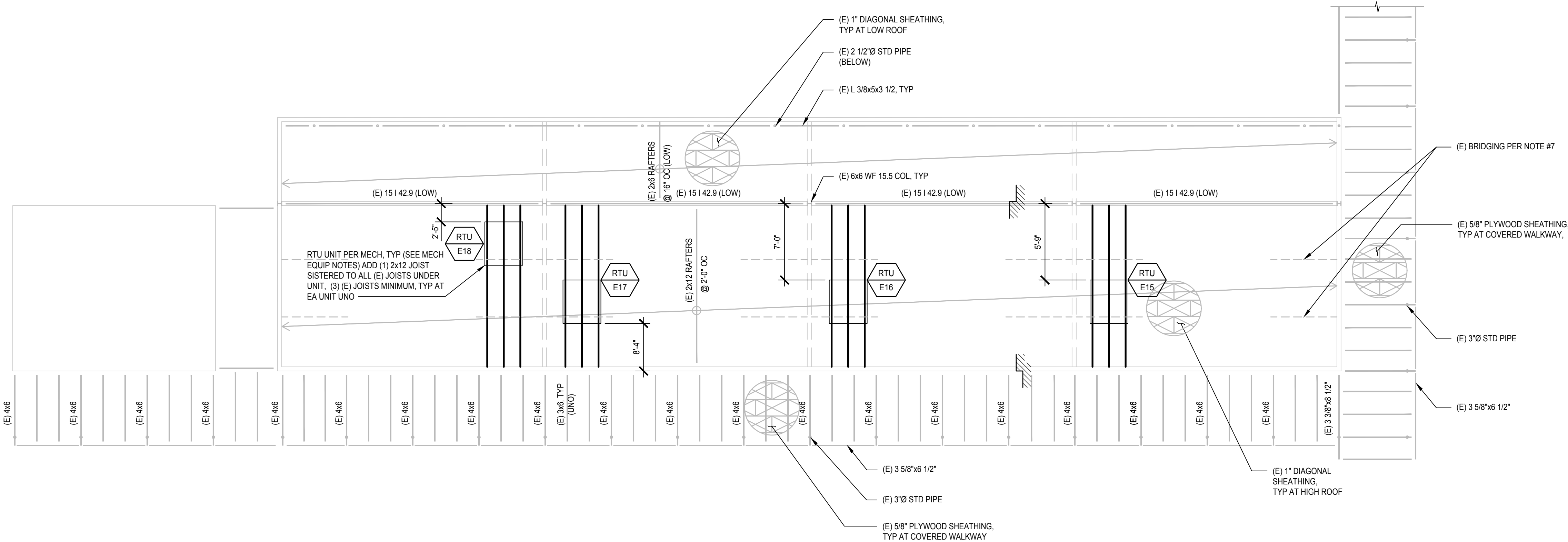
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FILE:
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DATE: 11-17-2022

BUILDING G
ROOF FRAMING PLAN

S2.03



1 BLDG G - ROOF FRAMING PLAN
SCALE = 1/8"=1'-0"

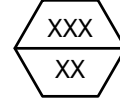
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- SEE ARCHITECTURAL DRAWINGS FOR GRID DIMENSIONS & HORIZONTAL CONTROL.
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- SEE SHEET S0.01 FOR SYMBOLS AND ABBREVIATIONS.
- SEE S0.XX SERIES OF SHEETS FOR STRUCTURAL GENERAL NOTES.
- SEE S4.XX SERIES OF SHEETS FOR EQUIPMENT SUPPORT DETAILS.

EQUIPMENT SCHEDULE

RTU UNITS			
MARK	OPERATING WEIGHT LBS.	DETAIL REFERENCE	REMARKS
RTU-E15	860	4/S4.01	SEE MECH FOR ADDL INFORMATION
RTU-E16	860	4/S4.01	SEE MECH FOR ADDL INFORMATION
RTU-E17	860	4/S4.01	SEE MECH FOR ADDL INFORMATION
RTU-E18	860	4/S4.01	SEE MECH FOR ADDL INFORMATION

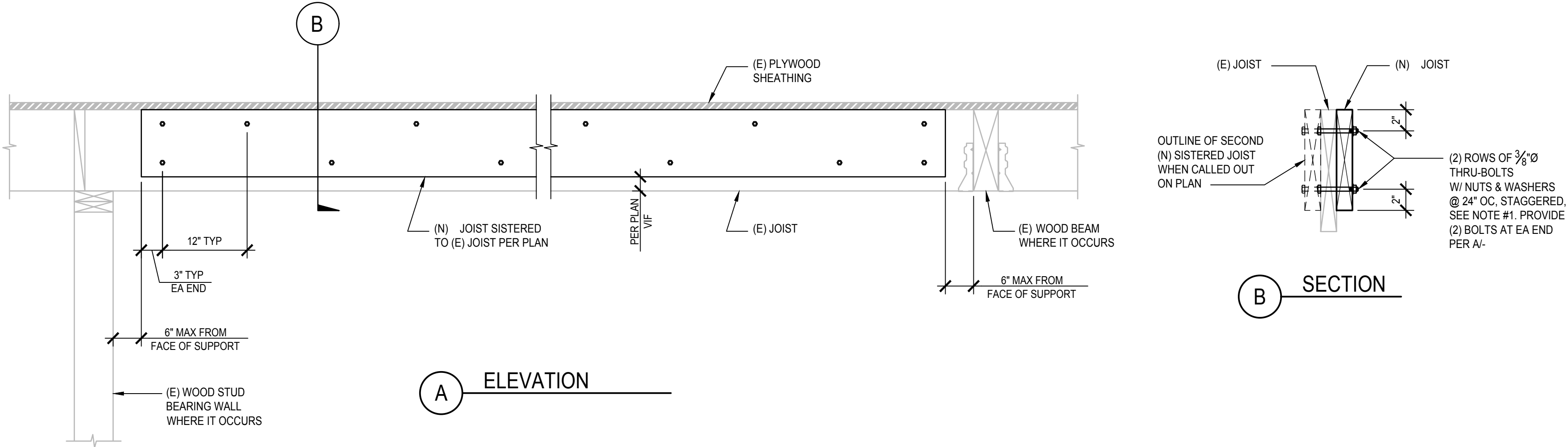
MECHANICAL EQUIPMENT NOTES:

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- VERIFY EXACT QUANTITIES, LOCATIONS AND/OR DIMENSIONS OF MEP EQUIPMENT WITH MEP & ARCHITECTURAL DRAWINGS AND EQUIPMENT MFR PRIOR TO FABRICATION OF NEW SUPPORT FRAMING AND INSTALLATION OF EQUIPMENT.
- ALL (N) DUCTS SHALL RUN THROUGH (E) ROOF AND WALL OPENINGS IN (E) WOOD STUD WALLS, TYP. UNO. NO (N) OPENINGS SHALL BE CUT IN (E) ROOF OR WALLS. SEE DETAIL 2/S4.01 FOR (N) FRAMING AT (E) WOOD ROOF OPENINGS AS REQ'D.
- IF PIPING FROM MECH UNIT REQUIRE CORE THRU (E) ROOF OR WALL SHEATHING (2 INCH MAX DIAMETER), CORE SHALL BE LOCATED BETWEEN ADJACENT (E) JOISTS OR STUDS AND SHALL NOT CUT JOISTS OR STUDS.



KEY PLAN

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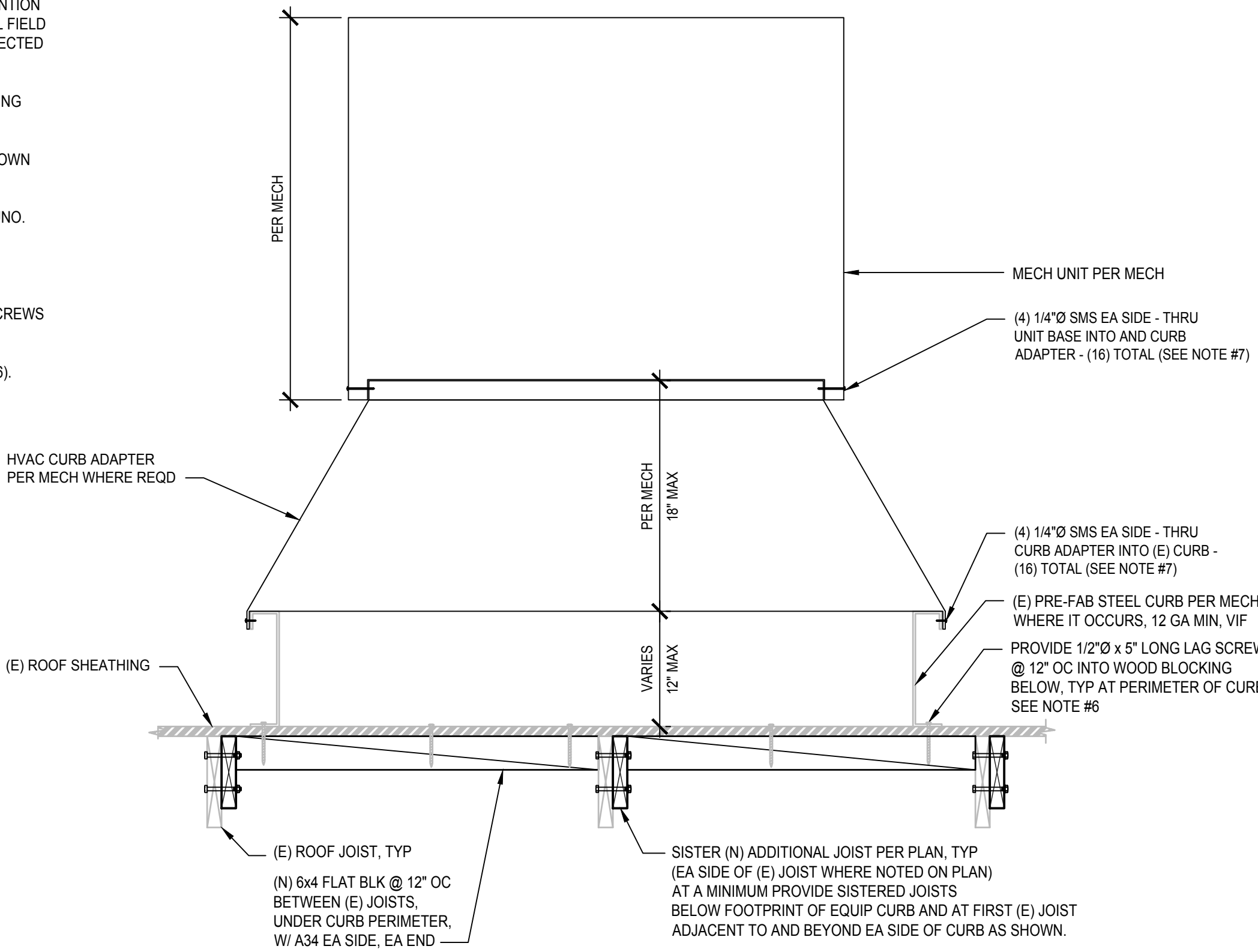


- NOTES:**
- ALL BOLTS SHALL BE ASTM A307 GR A CONFORMING TO ANSIA/ASME B18.2.1

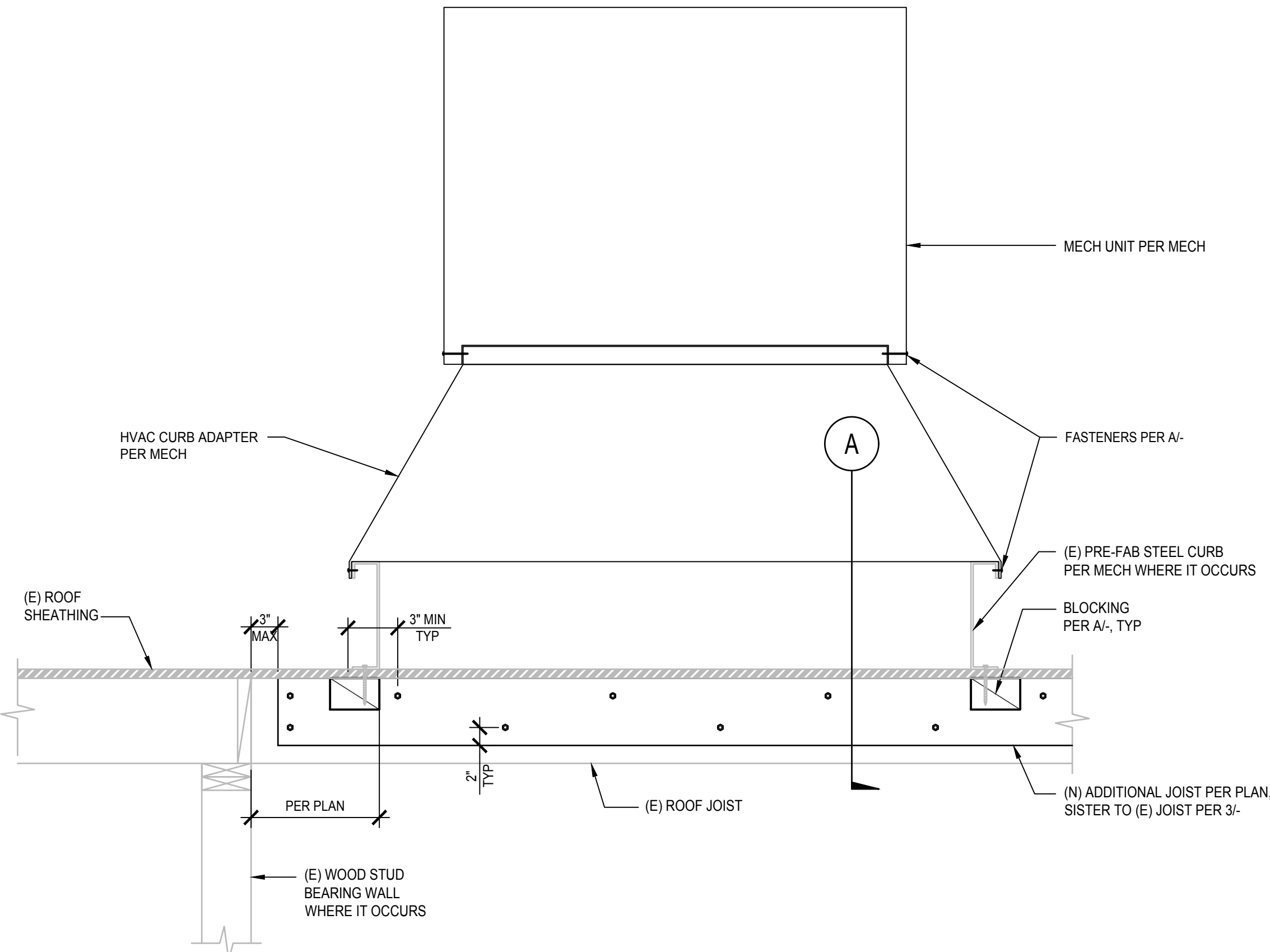
SISTER (N) JOIST TO (E) JOIST

1"=1'-0" 3

- NOTES:**
- EXISTING CONDITIONS SHOWN ARE BASED ON LIMITED AVAILABLE AS-BUILT DOCUMENTATION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL ACTUAL CONDITIONS. DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND THOSE SHOWN ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO START OF WORK. ARCHITECT AND ENGINEER SHALL REVIEW THE ACTUAL FIELD CONDITIONS AND DETERMINE THE EXTENT OF MODIFICATIONS WHICH WILL BE REQUIRED TO THE AFFECTED DETAILS.
 - VERIFY ALL DIMENSIONS AND ELEVATIONS IN THE FIELD AND WITH ARCH DRAWINGS PRIOR TO LOCATING AND FABRICATING NEW FRAMING.
 - ELEMENTS SHOWN SCREENED ARE EXISTING ELEMENTS WHICH ARE TO REMAIN. UNO. ELEMENTS SHOWN DARK ARE NEW ELEMENTS, UNO.
 - SEE ARCHITECTURAL FOR FLASHING, WATERPROOFING, AND OTHER NON-STRUCTURAL ELEMENTS, UNO.
 - VERIFY EXACT LOCATIONS AND DIMENSIONS OF EQUIPMENT WITH ARCHITECTURAL AND MECHANICAL DRAWINGS PRIOR TO FABRICATION OF NEW FRAMING AND INSTALLATION OF EQUIPMENT.
 - VERIFY (E) LAG SCREWS IN FIELD (DIAM AND PENETRATION). PROVIDE (N) AND/OR ADDITIONAL LAG SCREWS AS REQUIRED TO MATCH SIZE, PENETRATION AND/OR SPACING OF LAG SCREWS INDICATED.
 - ALL SHEET METAL SCREWS SHALL CONSIST OF HILTI KWIK-PRO SELF-DRILLING SCREWS (ICC ESR-2196). INSTALLATION OF SCREWS SHALL BE IN CONFORMANCE WITH ICC REPORT # ESR-2196 AND SHALL PROTRUDE THROUGH THE ATTACHED MEMBERS THREE FULL THREADS BEYOND THE ATTACHED MEMBERS. MIN DRILL POINT FOR SMS THROUGH STEEL SHALL BE PER ESR-2196.



ELEVATION
SCALE = 1"=1'-0"



ELEVATION
SCALE = 1"=1'-0"

AC, CU & DOAS UNIT ANCHORAGE

1"=1'-0" 4

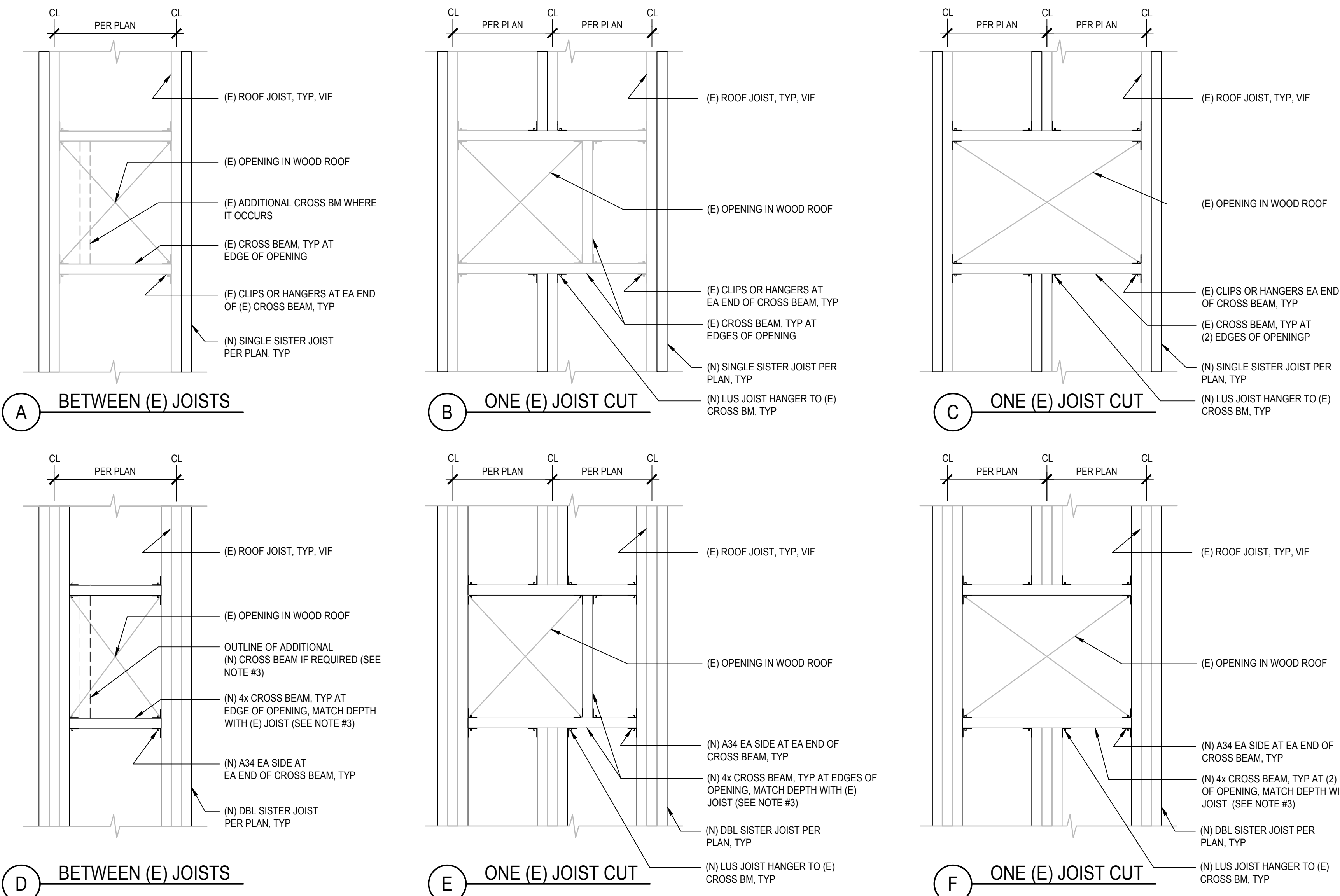
NOTES:

- 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.
- NAILS SPACED AT 6 INCHES (152mm) ON CENTER AT EDGES, 12 INCHES (305mm) AT INTERMEDIATE SUPPORTS EXCEPT 6 INCHES (152mm) AT ALL SUPPORTS WHERE SPANS ARE 48 INCHES (1219mm) OR MORE. FOR NAILING OF WOOD STRUCTURAL PANEL AND PARTICLEBOARD DIAPHRAGMS AND SHEAR WALLS, REFER TO SECTIONS OF THE CODE.
- COMMON OR DEFORMED SHANK.
- COMMON
- DEFORM SHANK
- CORROSION-RESISTANT SIDING OR CASING NAILS CONFORMING TO THE REQUIREMENTS OF THE CODE.
- FASTENERS SPACED 3 INCHES (76mm) ON CENTER AT EXTERIOR EDGES AND 6 INCHES (152mm) ON CENTER AT INTERMEDIATE SUPPORTS.
- CORROSION-RESISTANT ROOFING NAILS WITH 7/16-INCH-DIAMETER (11mm) HEAD AND 1 1/2-INCH (38mm) LENGTH FOR 1/2" INCH (12.7mm) SHEATHING AND 1 3/4-INCH (44mm) LENGTH FOR 25/32 -INCH (20mm) SHEATHING CONFORMING TO THE REQUIREMENTS OF THE CODE.
- CORROSION-RESISTANT STAPLES WITH NOMINAL 7/16-INCH (11mm) CROWN AND 1 1/8-INCH (29mm) LENGTH FOR 1/2-INCH (12.7mm) SHEATHING AND 1 1/2-INCH (38mm) LENGTH FOR 25/32 -INCH (20mm) SHEATHING CONFORMING TO THE REQUIREMENTS OF THE CODE.
- PANEL SUPPORTS AT 16 INCHES (406mm) [20INCHES (508 mm)] IF STRENGTH AXIS DIRECTION OF THE PANEL, UNLESS OTHERWISE MARKED). CASING OR FINISH NAILS SPACED 6 INCHES (152mm) ON PANEL EDGES, 12 INCHES (305mm) AT INTERMEDIATE SUPPORTS.
- PANEL SUPPORTY AT 24 INCHES (610mm). CASING OR FINISH NAILS SPACED 6 INCHES (152mm) ON PANEL EDGES, 12 INCHES (305mm) AT INTERMEDIATE SUPPORTS.

NAILING SCHEDULE	
CONNECTION	NAILING ¹
1. JOIST TO SILL OR GIRDER, TOENAIL	3-8d
2. BRIDGING TO JOIST, TOENAIL, EACH END	2-8d
3. 1" X 6" (25mm X 152mm) SUBFLOOR OR LESS TO EACH JOIST, FACE NAIL	2-8d
4. WIDER THAN 1" X 6" (25mm X 152mm) SUBFLOOR TO EACH JOIST, FACE NAIL	3-8d
5. 2" (51mm) SUBFLOOR TO JOIST OR GIRDER, BLIND AND FACE NAIL	2-16d
6. SOLE PLATE TO JOIST OR BLOCKING, TYPICAL, FACE NAIL SOLE PLATE TO JOIST OR BLOCKING, AT BRACED WALL PANELS	16d AT 16" (406mm) OC 3-16d PER 16" (406 mm)
7. TOP PLATE TO STUD, END NAIL	2-16d
8. STUD TO SOLE PLATE	4-8d, TOENAIL OR 2-16d, END NAIL
9. DOUBLE STUDS, FACE NAIL	16d AT 24" (610mm) OC
10. DOUBLE TOP PLATES, TYPICAL, FACE NAIL DOUBLE TOP PLATES, LAP SPLICE	16d AT 16" (406mm) OC 8-16d
11. BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOENAIL	3-8d
12. RIM JOIST TO TOP PLATE, TOENAIL	8d AT 6" (152mm) OC
13. TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL	2-16d
14. CONTINUOUS HEADER, TWO PIECES	16d AT 16" (406mm) OC ALONG EACH EDGE
15. CEILING JOISTS TO PLATE, TOENAIL	3-8d
16. CONTINUOUS HEADER TO STUD, TOENAIL	4-8d
17. CEILING JOIST, LAPS OVER PARTITIONS, FACE NAIL	3-16d
18. CEILING JOISTS TO PARELLEL RAFTERS, FACE NAIL	3-16d
19. RAFTER TO PLATE, TOENAIL	3-8d
20. 1" (25mm) BRACE TO EACH STUD AND PLATE, FACE NAIL	2-8d
21. 1" X 6" (25mm X 203mm) SHEATHING OR LESS TO EACH BEARING, FACE NAIL	2-8d
22. WIDER THAN 1" X 6" (25mm X 203mm) SHEATHING TO EACH BEARING, FACE NAIL	3-8d
23. BUILT-UP CORNER STUDS	16d AT 24" (610mm) OC
24. BUILT-UP GIRDER AND BEAMS	20d AT 32" (813mm) OC AT TOP AND BOTTOM AND STAGGERED 2-20d AT ENDS AND AT EACH SPLICE
25. 2" (51mm) PLANKS	2-16d AT EACH BEARING
26. WOOD STRUCTURAL PANELS AND PARTICLEBOARD: SUBFLOOR AND WALL SHEATHING (TO FRAMING): 1/2" (12.7mm) AND LESS 16x22-3/4" (15mm-19mm) 7/8"-1" (22mm-25mm) 11/8"-1 1/4" (29mm-32mm) COMBINATION SUBFLOOR-UNDERLAYMENT (TO FRAMING): 3/4" (19mm) AND LESS 7/8"-1" (22mm-25mm) 1 1/8"-1 1/4" (29mm-32mm)	2 8d ⁴ AND 6d ⁵ 8d ³ 10d ⁴ OR 8d ⁵ 6d ⁵ 8d ⁵ 10d ⁴ OR 8d ⁵
27. PANEL SIDING (TO FRAMING): 1/2" (12.7mm) OR LESS 5/8" (16mm)	2 6d ⁶ 8d ⁶
28. FIBERBOARD SHEATHING: 1/2" (12.7mm) 25/32" (20mm)	7 NO 11 9d ⁸ NO 16 9d ⁸ NO 11 9d ⁸ NO 16 9d ⁸
29. INTERIOR PANELING 1/4" (6.4mm) 3/8" (9.5mm)	4d ¹⁰ 6d ¹¹

NAILING SCHEDULE

NONE 1



NOTES:

- SEE 4/- FOR ADDITIONAL NOTES.
- DETAILS A/- THRU C/- APPLY TO LOCATIONS W/ SINGLE (N) SISTERED JOIST ON ONE SIDE OF (E) JOIST. DETAILS D/- THRU F/- APPLY TO LOCATIONS W/ DBL (N) SISTERED JOISTS. (ONE NEW JOIST ON EACH SIDE OF EXISTING JOIST.)
- IN LIEU OF PROVIDING (N) CROSS BMS AS SHOWN, CONTRACTOR HAS THE OPTION OF CUTTING (E) CROSS BMS AS RECD AND REINSTALLING THEM W/ CONNECTOR HARDWARE AS SHOWN.

(E) WOOD ROOF OPENING AT NEW FRAMING

1"=1'-0" 2

FILE NO: 19-91 A/E: 03-122716

11-17-2022
01-31-2022

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ROSEMEAD SCHOOL DISTRICT
RSD - ENCINITA ELEMENTARY SCHOOL
HVAC REPLACEMENT AT BUILDINGS E,F AND G

ROSEMEAD
SCHOOL DISTRICT
PARK ROSEMEAD
3907 ROSEMEAD BOULEVARD
ROSEMEAD, CA 91770

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807 N. SPRING ST. | LOS ANGELES CA 90012-2625 | P: 323.476.6095 | F: 323.885.5110
www.nacarchitecture.com

NAC NO: 161-21043
FILED: CC
DRAWN: EMB/AL
CHECKED: 11-17-2022
DATE:

EQUIPMENT SUPPORT
DETAILS

S4.01

Period	2022-11-17	2022-01-31
2022-11-17	11-17-2022	01-31-2023



ROSEMEAD SCHOOL DISTRICT
RSD - ENCINITA ELEMENTARY SCHOOL
HVAC REPLACEMENT AT BUILDINGS E, F AND G

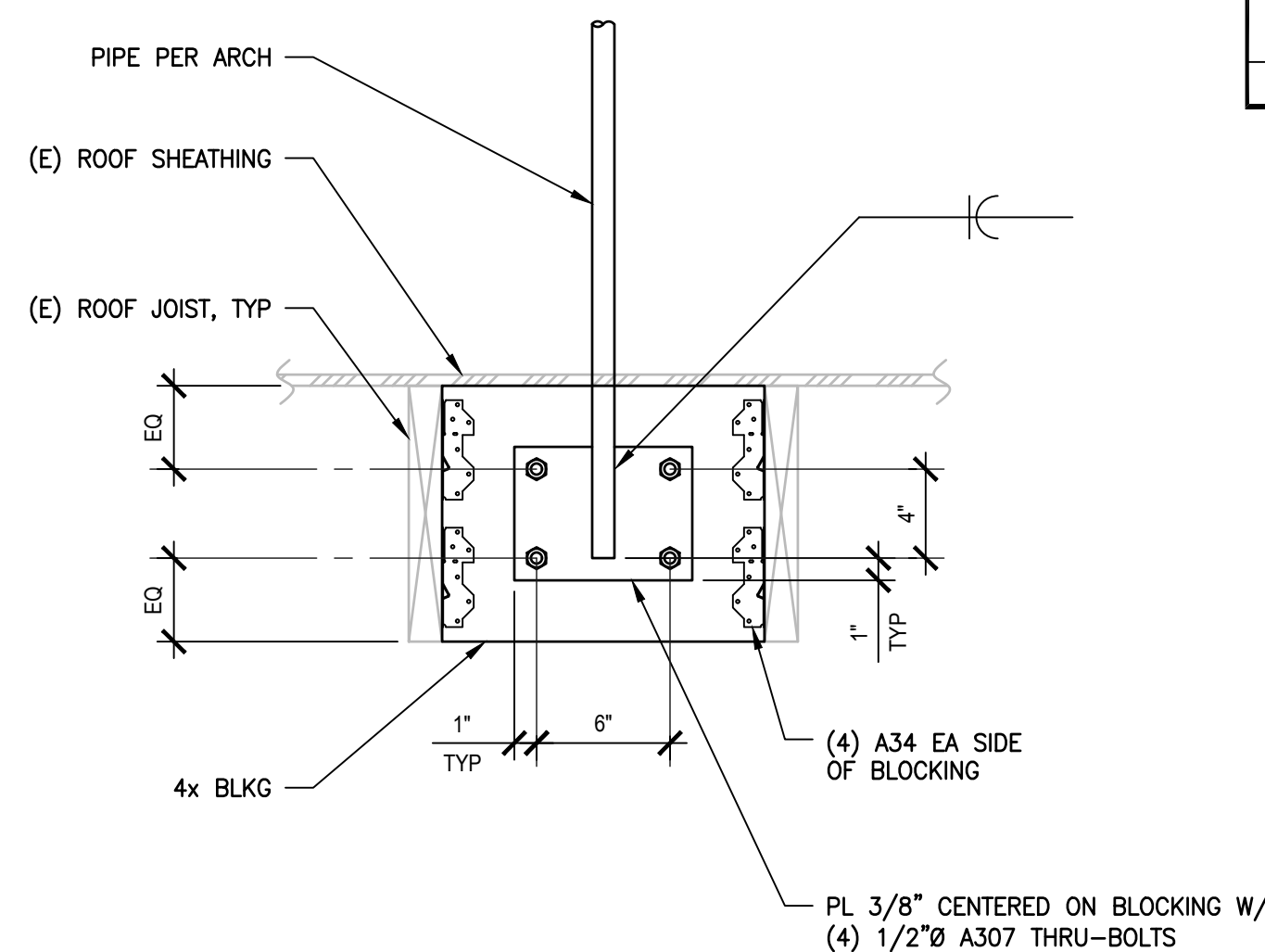
ROSEMEAD
SCHOOL DISTRICT
PARK ROSEMEAD
3907 ROSEMEAD BOULEVARD
ROSEMEAD, CA 91770

UBANY | **NAC** **ARCHITECTURE**

NAC NO	161-21043
FILE	
DRAWN	CC
CHECKED	EMB/AL
DATE	11-17-2022

EQUIPMENT SUPPORT DETAILS

S4.02



HANDRAIL POST ATTACHMENT TO JOISTS AT ROOF

 $1\frac{1}{2}''=1'-0$

1

GENERAL LEGEND

SYMBOL	DESCRIPTION
	NOTE CALLOUT
	DETAIL CALLOUT - NUMBER ON TOP DENOTES DETAIL NUMBER - NUMBER ON BOTTOM DENOTES SHEET DETAIL IS SHOWN
	MECHANICAL EQUIPMENT CALLOUT; SEE MECHANICAL PLANS FOR EXACT LOCATION AND REQUIREMENTS
	SECTION CALLOUT
	POINT OF CONNECTION
	POINT OF DISCONNECTION
	NEW LINework
	EXISTING LINework
	DEMOLITION LINework
	DIRECTION OF FLOW

DUCTWORK LEGEND

SYMBOL	DESCRIPTION
	SHEET METAL DUCT
	HIDDEN SHEET METAL DUCT
	INTERNALLY INSULATED SHEET METAL DUCT CLEAR INSIDE DIMENSION SHOWN, LINER THICKNESS IN PARENTHESES
	FILTER
	LOUVER
	ACCESS DOOR OR ACCESS PANEL (AP) IN DUCTWORK

PIPING LEGEND

SYMBOL	DESCRIPTION
	NEW PIPING (SIZE-SERVICE)
	EXISTING PIPING (SIZE-SERVICE)
	ELBOW FACING AWAY FROM VIEWER
	ELBOW FACING TOWARD VIEWER
	TEE FACING AWAY FROM VIEWER
	TEE FACING TOWARD VIEWER
	PIPE CAP
	TRANSITION, ASYMMETRIC
	TRANSITION, SYMMETRIC
	EXPANSION JOINT (COMPENSATOR)
	PIPE GUIDE
	PIPE ANCHOR
	UNION, SCREWED
	DRAIN, FUNNEL
	PUMP
	BALL VALVE
	CONDENSATE DRAIN
	ELBOW DOWN
	PIPE TEE UP & DOWN OR ELBOW UP
	PIPE TEE DOWN
	PIPE TEE UP

ABBREVIATIONS

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
AAV	AUTOMATIC AIR VENT	HP	HORSEPOWER
AFF	ABOVE FINISHED FLOOR	HT	HEIGHT
AHU	AIR HANDLING UNIT	HZ	HERTZ
AL	ALUMINUM	ID	INSIDE DIAMETER
AP	ACCESS PANEL	IN	INCHES
APD	AIRSIDE PRESSURE DROP	KW	KILOWATTS
BD	BLOWDOWN	LAT	LEAVING AIR TEMPERATURE
BDD	BACK DRAFT DAMPER	LBS	POUNDS
BFC	BELOW FINISHED CEILING	LF	LINEAR FEET
BFP	BACK FLOW PREVENTER	LWT	LEAVING WATER TEMPERATURE
BHP	BRAKE HORSEPOWER	MAX	MAXIMUM
BLOG	BUILDING	MBH	THOUSAND BTU PER HOUR
BOB	BOTTOM OF BEAM	MCA	MECHANICAL CONTRACTOR
BOP	BOTTOM OF PIPE	MCM	MINIMUM CIRCUIT AMPS
BTU	BRITISH THERMAL UNIT	MH	MANHOLE
CFM	CUBIC FEET PER MINUTE	MIN	MINIMUM
CHWR	CHILLED WATER RETURN	MOCIP	MAXIMUM OVERLOAD CIRCUIT PROTECTION
CHWS	CHILLED WATER SUPPLY	NFA	NET FREE AREA
CI	CAST IRON	NIC	NOT IN CONTRACT
CL	CENTER LINE	NPSHR	NET POSITIVE SUCTION HEAD REQUIRED
CP	CONDENSATE PUMP	OAT	OUTSIDE AIR TEMPERATURE
CT	COOLING TOWER	ODB	OPPOSED BLADE DAMPER
CU	CONDENSING UNIT	OC	ON CENTER
CV	CONSTANT VOLUME BOX	OD	OUTSIDE DIAMETER
CWR	CONDENSER WATER RETURN	OA	OUTSIDE AIR
CWS	CONDENSER WATER SUPPLY	PD	PRESSURE DROP
CWFR	CONDENSER WATER FILTER RETURN	PERF	PERFORATED
CWFS	CONDENSER WATER FILTER SUPPLY	PH	PHASE
DB	DRY BULB	POD	POINT OF DISCONNECT
DEG	DEGREES	PR	PRESSURE RELIEF
DIA	DIAMETER	PRV	PRESSURE REDUCING VALVE
DL	DOOR LOUVER	PSID	POUNDS PER SQUARE INCH DIFFERENTIAL
DN	DOWN	PSIG	POUNDS PER SQUARE INCH GAUGE
DX	DIRECT EXPANSION	PVC	POLYVINYL CHLORIDE
(E)	EXISTING	RA	RETURN AIR
EA	EACH	RF	RETURN FAN
EAT	ENTERING AIR TEMPERATURE	RLA	RATED LOAD AMPS
EC	ELECTRICAL CONTRACTOR	RPM	REVOLUTIONS PER MINUTE
EFF	EFFICIENCY	SA	SUPPLY AIR
ELEVATION	ELEVATION	SF	SUPPLY FAN
ESP	EXTERNAL STATIC PRESSURE	SPEC	SPECIFICATION
EWT	ENTERING WATER TEMPERATURE	SS	STAINLESS STEEL
'F	DEGREES FAHRENHEIT	STD	STANDARD
FD	FIRE DAMPER	TAD	TRANSFER AIR DUCT
FG	FILTER GRILLE	TDH	TOTAL DYNAMIC HEAD
FLA	FULL LOAD AMPS	TEFC	TOTALLY ENCLOSED FAN COOLED
FLR	FLOOR	TSP	TOTAL STATIC PRESSURE
FOB	FLAT ON BOTTOM	TYP	TYPICAL
FOT	FLAT ON TOP	UC	UNDERCUT
FPI	FINS PER INCH	TYP	TYPICAL
FPM	FEET PER MINUTE	V	VOLTS
FSD	FIRE SMOKE DAMPER	VAV	VARIABLE AIR VOLUME
FT	FEET OR FOOT	VD	VOLUME DAMPER
GA	GAUGE	VFD	VARIABLE FREQUENCY DRIVE
GALV	GALVANIZED	VTR	VENT THRU ROOF
GC	GENERAL CONTRACTOR	W	WITH
GPH	GALLONS PER HOUR	W/O	WITHOUT
GPM	GALLONS PER MINUTE	WB	WET BULB
HB	HOSE BIBB	WC	WATER COLUMN
HD	HEAD	WG	WATER GAUGE
HHWR	HEATING HOT WATER RETURN	WPD	WATER PRESSURE DROP
HHWS	HEATING HOT WATER SUPPLY	WT	WEIGHT
HP	HEAT PUMP		

IN THE EVENT ABBREVIATIONS NOT MENTIONED HEREIN ARE USED, REFERENCE WILL BE MADE TO ANSI Y1.1, MILITARY STANDARD ABBREVIATIONS, AND OTHER STANDARD INDUSTRY CONVENTIONS.

CONTROL ABBREVIATIONS

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
A	ALARM	PS	PRESSURE SWITCH
AFMS	AIRFLOW MONITORING STATION	PT	PRESSURE TRANSMITTER
AI	ANALOG INPUT	RH	RELATIVE HUMIDITY
AO	ANALOG OUTPUT	S	STATUS
CS	CURRENT SWITCH	SC	SPEED CONTROL
DI	DIGITAL INPUT	SI	SPEED INDICATOR
DO	DIGITAL OUTPUT	SP	SETPOINT
DP	DIFFERENTIAL PRESSURE	SS	START/STOP
FS	FLOW SWITCH	T	TEMPERATURE
FM	FLOW METER	TI	TEMPERATURE INDICATOR
HQA	HANDS-OFF-AUTO	VA	DAMPER/VALVE ACTUATOR
KW	KILOWATTS	VP	VELOCITY PRESSURE
LA	LEVEL ALARM	VSH	VIBRATION SWITCH
MOD	MOTOR OPERATED DAMPER	ZC	CLOSED END SWITCH
NC	NORMALLY CLOSED	ZI	POSITION INDICATOR
NO	NORMALLY OPEN	ZO	OPEN END SWITCH

IN THE EVENT ABBREVIATIONS NOT MENTIONED HEREIN ARE USED, REFERENCE WILL BE MADE TO ANSI Y1.1, MILITARY STANDARD ABBREVIATIONS, AND OTHER STANDARD INDUSTRY CONVENTIONS.

SHEET INDEX

SHEET	DESCRIPTION
M001	GENERAL NOTES, LEGENDS, ABBREVIATIONS AND SHEET INDEX
M002	SCHEDULES - ENCINITA
M101	MECHANICAL SITE PLAN - ENCINITA
M601	DETAILS
M602	DETAILS
M701	TITLE 24 COMPLIANCE FORMS - ENCINITA

GENERAL NOTES

- ALL WORK SHALL COMPLY WITH THE 2019 EDITIONS OF THE CALIFORNIA BUILDING, MECHANICAL, PLUMBING, AND OTHER APPLICABLE FEDERAL, STATE, OR LOCAL CODES AS ADOPTED AND ENFORCED BY THE LOCAL JURISDICTION. IN CASE THE PLANS SHOW MORE STRINGENT REQUIREMENTS, THE PLANS SHALL GOVERN THE DESIGN. YET NOTHING ON THE DESIGN DOCUMENTS SHALL BE INTERPRETED AS AUTHORITY TO VIOLATE CODE(S) OR REGULATION(S).
- SUBMISSION OF BID IN CONNECTION WITH THIS WORK SHALL IMPLY THAT THE BIDDER HAS EXAMINED THE JOB SITE UNDER WHICH THE CONTRACTOR WILL BE OBLIGATED TO OPERATE UNDER THIS CONTRACT. NO EXTRA CHARGE WILL BE ALLOWED FOR FAILURE OF ANY BIDDER TO EXAMINE THE SITE PRIOR TO BID.
- WHERE USED, THE TERM "PROVIDE" SHALL MEAN "FURNISH AND INSTALL".
- IN THE EVENT OF A CONFLICT OR INCONSISTENCY BETWEEN ITEMS INDICATED ON DRAWINGS AND SPECIFICATIONS WITH CODE REQUIREMENTS, THE MORE STRINGENT STANDARD SHALL PREVAIL.
- CARE SHALL BE EXERCISED TO MINIMIZE ANY INCONVENIENCE OR DISTURBANCE TO OTHER AREAS OF THE BUILDING WHICH ARE TO REMAIN IN OPERATION. ISOLATE WORK AREAS TO KEEP DUST AND DIRT WITHIN THE CONSTRUCTION AREA.
- NO PIPING, EQUIPMENT, ETC. SHALL BE REMOVED, DISCONNECTED OR SHUT DOWN WITHOUT PRIOR REVIEW WITH THE OWNER TO CONFIRM THAT AREAS TO REMAIN IN OPERATION WILL NOT BE AFFECTED. IF ANY AREAS NOT WITHIN THE SCOPE OF WORK ARE AFFECTED BY ANY SHUTDOWN, REMOVAL OR DISCONNECTION, SUFFICIENT ADVANCE NOTICE MUST BE GIVEN TO THE OWNER INDICATING WHICH AREAS WILL BE AFFECTED, WHEN THE PROPOSED SHUTDOWN WILL OCCUR, AND FOR HOW LONG A PERIOD OF TIME.
- THE ARRANGEMENT OF EQUIPMENT AND PIPING SHOWN ON THE DRAWINGS IS BASED UPON INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF DESIGN AND IS NOT INTENDED TO SHOW EXACT DIMENSIONS. THIS CONTRACTOR SHALL VERIFY ALL DIMENSIONS AT THE SITE MAKING FIELD MEASUREMENTS AND SHOP DRAWINGS NECESSARY FOR FABRICATION OR ERECTION OF HVAC SYSTEMS. MAKE ALLOWANCE FOR BEAMS, PIPES AND OTHER OBSTRUCTIONS IN BUILDING CONSTRUCTION. CHECK DRAWINGS SHOWING WORK OF OTHER TRADES AND CONSULT WITH THE OWNER'S REPRESENTATIVE IN THE EVENT OF POTENTIAL INTERFERENCE. SHOP DRAWINGS SHALL BE MINIMUM 1/4"=1'-0" SCALE, INDICATING FITTINGS, SIZES, WELDS AND CONFIGURATIONS AND SUBMITTED TO ENGINEER FOR REVIEW.
- THIS CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES PRIOR TO FABRICATION, PURCHASE AND/OR INSTALLATION OF ALL WORK.
- EXISTING MATERIALS THAT ARE REMOVED SHALL NOT BE REUSED IN NEW SYSTEMS, EXCEPT WHERE INDICATED AS BEING RELOCATED.
- ALL EQUIPMENT SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
- THIS CONTRACTOR SHALL NOT BORE, NOTCH, CUT, OR PENETRATE INTO A STRUCTURAL MEMBER WITHOUT WRITTEN APPROVAL FROM A DESIGNATED STRUCTURAL ENGINEER AND THE OWNER.
- ALL PIPE ELBOWS SHALL BE LONG RADIUS UNLESS OTHERWISE SPECIFICALLY NOTED ON THE DRAWINGS.
- INSTALL MANUAL VOLUME DAMPERS WITHIN DUCT BRANCHES TO BALANCE AIRFLOW CFM. ON INSULATED DUCTS, MOUNT DAMPER REGULATOR ON 2" STAND-OFF BRACKET TO CLEAR INSULATION.
- ALL MATERIAL EXPOSED WITHIN RA PLENUMS SHALL BE NON-COMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX NOT GREATER THAN 25 AND SMOKE DEVELOPED INDEX NOT GREATER THAN 50. COMPLY WITH CMC-602.2.
- COORDINATE ACCESS TO EQUIPMENT WITH WORK OF OTHER TRADES. PROVIDE DUCT ACCESS DOORS AND CEILING ACCESS DOORS TO ALLOW ACCESS FOR FILTER CHANGEOUT, CONTROLS ACCESS AND ACCESS TO SERVICE/REMOVE COMPONENTS INCLUDING, BUT NOT LIMITED TO, FANS, PULLEYS, SHEAVES, BELTS, ETC.
- MEP COMPONENT ANCHORAGE NOTE:
 - ALL PERMANENT EQUIPMENT AND COMPONENTS.
 - TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER.
"PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
 - TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

ALL MECHANICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA-APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2019 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26, AND 30:

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

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

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

THE ANCHORAGE OF ALL MECHANICAL COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

- PIPING AND DUCTWORK DISTRIBUTION SYSTEM BRACING NOTE:

PIPING AND DUCTWORK DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8, AND 2019 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.

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

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

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

MP MD PP E - OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPO PRE-APPROVAL (OPM #) # _____

FILE NO: 19-91

Air: 03-122716

DESIGN

PROFESSIONAL SEAL

STATE OF CALIFORNIA

MECHANICAL

NO. 110022

DATE: 11/10/2022

DESIGNER'S SIGNATURE

DESIGNER'S NAME

DESIGNER'S TITLE

DESIGNER'S FIRM

DESIGNER'S SIGNATURE

DESIGNER'S NAME

DESIGNER'S TITLE

DESIGNER'S FIRM

ROSEMEAD SCHOOL DISTRICT

RSD - ENCINITA ELEMENTARY SCHOOL

HVAC REPLACEMENT AT BUILDINGS E,F AND G

SEAL OF THE CITY OF ENCINITA

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JUBANY

NAC

ARCHITECTURE

NAC NO

161-21043

FILE

JL

DRAWN

SN

CHECKED

SN

DATE

10-06-2022

GENERAL NOTES, LEGENDS, ABBREVIATIONS, AND SHEET INDEX

PACKAGED AIR CONDITIONING UNITS																											
MARK	MANUFACTURER & MODEL	LOCATION	TYPE	SERVICE	SUPPLY FAN				COOLING CAPACITY			SEER	TOTAL HEATING CAPACITY					ELECTRICAL					OUTSIDE AIR CFM SETPOINT	OPERATING WEIGHT LBS.	CURB WEIGHT LBS.	MAX OPERATING WEIGHT LBS.	REMARKS
					AIRFLOW CFM	HP/(BHP)	ESP	RPM	TOTAL MBH	SENSIBLE MBH	TONS		INPUT MBH	OUTPUT MBH	ENTERING AIR °F D6	LEAVING AIR °F D6	THERMAL EFFICIENCY	VOLTAGE	PHASE	FLA	MCA	MOCP					
RTU-E10	CARRIER 48GCGM05A2A5-0A0A0	ENCINITA BLDG F ROOF	GAS HEAT/ELEC COOL	CLASSROOM 10	1,600	1.0/(0.62)	0.5	1,792	49.96	37.06	4	16.1	60.0	49.0	70	98.4	81%	230	3	26.0	27.0	30.0	450	675	185	675	1345810
RTU-E11	CARRIER 48GCGM05A2A5-0A0A0	ENCINITA BLDG F ROOF	GAS HEAT/ELEC COOL	CLASSROOM 11	1,600	1.0/(0.62)	0.5	1,792	49.96	37.06	4	16.1	60.0	49.0	70	98.4	81%	230	3	26.0	27.0	30.0	450	675	185	675	1345810
RTU-E12	CARRIER 48GCGM05A2A5-0A0A0	ENCINITA BLDG F ROOF	GAS HEAT/ELEC COOL	CLASSROOM 12	1,600	1.0/(0.62)	0.5	1,792	49.96	37.06	4	16.1	60.0	49.0	70	98.4	81%	230	3	26.0	27.0	30.0	450	675	185	675	1345810
RTU-E13	CARRIER 48GCGM05A2A5-0A0A0	ENCINITA BLDG F ROOF	GAS HEAT/ELEC COOL	CLASSROOM 13	1,600	1.0/(0.62)	0.5	1,792	49.96	37.06	4	16.1	60.0	49.0	70	98.4	81%	230	3	26.0	27.0	30.0	450	675	185	675	1345810
RTU-E14	CARRIER 48GCGM05A2A5-0A0A0	ENCINITA BLDG F ROOF	GAS HEAT/ELEC COOL	CLASSROOM 14	1,600	1.0/(0.62)	0.5	1,792	49.96	37.06	4	16.1	60.0	49.0	70	98.4	81%	230	3	26.0	27.0	30.0	450	675	185	675	1345810
RTU-E15	CARRIER 48GCGM05A2A5-0A0A0	ENCINITA BLDG G ROOF	GAS HEAT/ELEC COOL	CLASSROOM 15	1,600	1.0/(0.62)	0.5	1,792	49.96	37.06	4	16.1	60.0	49.0	70	98.4	81%	230	3	26.0	27.0	30.0	450	675	185	675	1345810
RTU-E16	CARRIER 48GCGM05A2A5-0A0A0	ENCINITA BLDG G ROOF	GAS HEAT/ELEC COOL	CLASSROOM 16	1,600	1.0/(0.62)	0.5	1,792	49.96	37.06	4	16.1	60.0	49.0	70	98.4	81%	230	3	26.0	27.0	30.0	450	675	185	675	1345810
RTU-E17	CARRIER 48GCGM05A2A5-0A0A0	ENCINITA BLDG G ROOF	GAS HEAT/ELEC COOL	CLASSROOM 17	1,600	1.0/(0.62)	0.5	1,792	49.96	37.06	4	16.1	60.0	49.0	70	98.4	81%	230	3	26.0	27.0	30.0	450	675	185	675	1345810
RTU-E18	CARRIER 48GCGM05A2A5-0A0A0	ENCINITA BLDG G ROOF	GAS HEAT/ELEC COOL	CLASSROOM 18	1,600	1.0/(0.62)	0.5	1,792	49.96	37.06	4	16.1	60.0	49.0	70	98.4	81%	230	3	26.0	27.0	30.0	450	675	185	675	1345810

- 1

UNIT SHALL BE VERTICAL DISCHARGE.
- 2

UNIT SHALL BE HORIZONTAL DISCHARGE.
- 3

PROVIDE TITLE 24 COMPLIANT VENSTAR 2800 THERMOSTAT WITH ADJUSTABLE SETPOINT AND OVERRIDE CAPABILITY. REPLACE IN PLACE OF EXISTING THERMOSTAT.

4

PROVIDE WITH 2" MERV-13 FILTERS.

5

PROVIDE WITH 100% OSA ECONOMIZER WITH BAROMETRIC RELIEF.

6

UNIT DISCHARGE CONFIGURATION SHALL MATCH EXISTING. NO ADAPTER CURB REQUIRED FOR MOUNTING.

7

PROVIDE WITH CA-CAR-537-YRK-560-RTAP-20 MICROMETL CURB ADAPTER.

8

PROVIDE WITH CA-CAR-537-CAR-005 MICROMETL CURB ADAPTER.

9

EXISTING UNIT MODEL : CARRIER 48NLT048. CONTRACTOR TO VERIFY MODEL AND DIMENSIONS FOR ADAPTER CURB ATTACHMENT.

10

EXISTING UNIT MODEL : CARRIER 48NLT042. CONTRACTOR TO FIELD VERIFY MODEL AND DIMENSIONS FOR ADAPTER CURB ATTACHMENT.

11

EXISTING UNIT MODEL : CARRIER 48HJD005, 48HJD006 OR 48HJD007. CONTRACTOR TO FIELD VERIFY MODEL AND DIMENSIONS FOR CURB ATTACHMENT.

12

EXISTING UNIT MODEL : CARRIER 48HJD006. CONTRACTOR TO FIELD VERIFY MODEL AND DIMENSIONS FOR CURB ATTACHMENT.

13

EXISTING UNIT MODEL : YORK D1EG048. CONTRACTOR TO FIELD VERIFY MODEL AND DIMENSIONS FOR ADAPTER CURB ATTACHMENT.

14

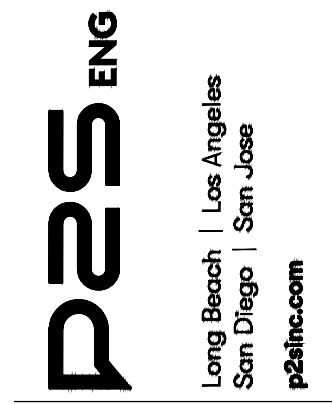
EXISTING UNIT MODEL : BARD RPM368. CONTRACTOR TO FIELD VERIFY MODEL AND DIMENSIONS FOR ADAPTER CURB. PROVIDE CDI 1959854-1-9999-4000 OR EQUAL ADAPTER.

15

PROVIDE UNIT ON EXISTING 81'X79' ROOF PLATFORM. PROVIDE HORIZONTAL DISCHARGE. ATTACH PER STRUCTURAL.

PLUMBING PIPING MATERIALS SCHEDULE

1. CONDENSATE DRAIN PIPING:	TYPE 1" COPPER TUBING, HARD DRAWN CONFORMING TO ASTM B 88, WITH WROUGHT COPPER SOLDER SWEAT FITTINGS AND LEAD-FREE SOLDER JOINTS. ALL CONDENSATE DRAIN PIPING WITHIN THE BUILDING SHALL BE INSULATED.
2. INSULATION OF CONDENSATE DRAIN PIPING:	GLASS FIBER PIPE INSULATION WITH FACTORY APPLIED JACKET CONFORMING TO ASTM C547, 1 INCH THICK FOR PIPE SIZES 1" & SMALLER, 1½-INCH THICK FOR PIPE SIZES 1½" INCHES & LARGER. SEAL ALL JOINTS WITH THE FACTORY-APPLIED, SELF-SEAL LAP AND BUTT STRIPS, JOHNS MANVILLE MICRO-LOK "HP" OR EQUAL.
3. GAS PIPING:	SCHEDULE 40 BLACK STEEL PIPE CONFORMING TO ASTM A 53 WITH 150 PSIG MALLEABLE IRON THREADED FITTINGS. WELDED JOINTS FOR PIPE SIZES 2½" AND LARGER OR WELDED THROUGHOUT WHEN USED FOR MEDIUM PRESSURE. OUTDOOR PIPING EXPOSED TO ATMOSPHERE SHALL BE PAINTED WITH RUST INHIBITING PAINT.
4. PIPE PROTECTION: PROVIDE NON-CONDUCTING DIELECTRIC CONNECTIONS JOINING DISSIMILAR METALS.	



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ROSEMEAD SCHOOL DISTRICT
RSD - ENCINITA ELEMENTARY SCHOOL
HVAC REPLACEMENT AT BUILDINGS E,F AND G



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NAC NO	161-21043
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DRAWN	JL
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SCHEDULES - ENCINITA

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GENERAL NOTES

- WHERE EXISTING EQUIPMENT IS NOTED TO BE REPLACED, CONTRACTOR SHALL DEMOLISH EXISTING UNIT AND UTILITIES AS REQUIRED FOR NEW INSTALLATION. DISCONNECT GAS PIPING, UNIT DISCONNECT AND CONTROL WIRING AT UNIT LOCATION AND RECONNECT TO NEW UNIT. WALL AND ROOF OPENING SHALL BE COVERED UNTIL NEW WATERPROOFING IS COMPLETE.
- CONDENSATE AND GAS PIPING TO BE PAINTED TO MATCH THE EXTERIOR COLOR OF ROOF.

KEY NOTES

- REPLACE EXISTING ROOFTOP UNIT WITH NEW EQUIPMENT IN SAME LOCATION ON ROOF PER DETAIL 1/M601. NEW UNIT TO MOUNT TO EXISTING CURB WITH CURB ADAPTER.
- PROVIDE 3/4" CD FROM A/C UNIT AND INTERCEPT (E) 3/4" CD AT ROOF. FIELD VERIFY LOCATION OF (E) CD PIPE AND EXTEND AS REQUIRED. REFER TO DETAIL 5/M601.
- PROVIDE 3/4" GAS TO A/C UNIT AND INTERCEPT (E) 3/4" GAS AT ROOF. FIELD VERIFY LOCATION OF (E) GAS PIPE AND EXTEND AS REQUIRED. REFER TO DETAIL 4/M601.

FILE NO: 19-91

A/E: 03-122716

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ROSEMEAD SCHOOL DISTRICT
RSD - ENCINITA ELEMENTARY SCHOOL
HVAC REPLACEMENT AT BUILDINGS E, F AND G



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SCHOOL DISTRICT
PARK ROSEMEAD
3907 ROSEMEAD BOULEVARD
ROSEMEAD, CA 911770

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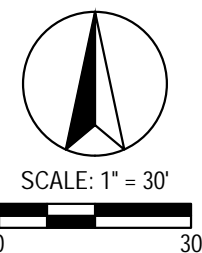
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MECHANICAL SITE PLAN -
ENCINITA

M101

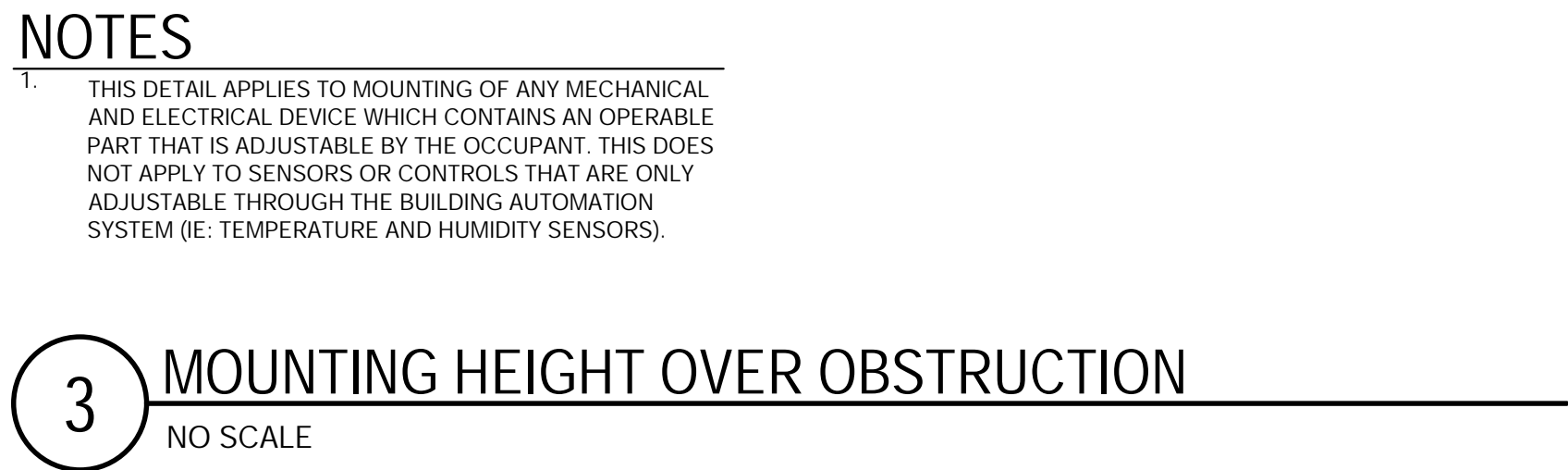
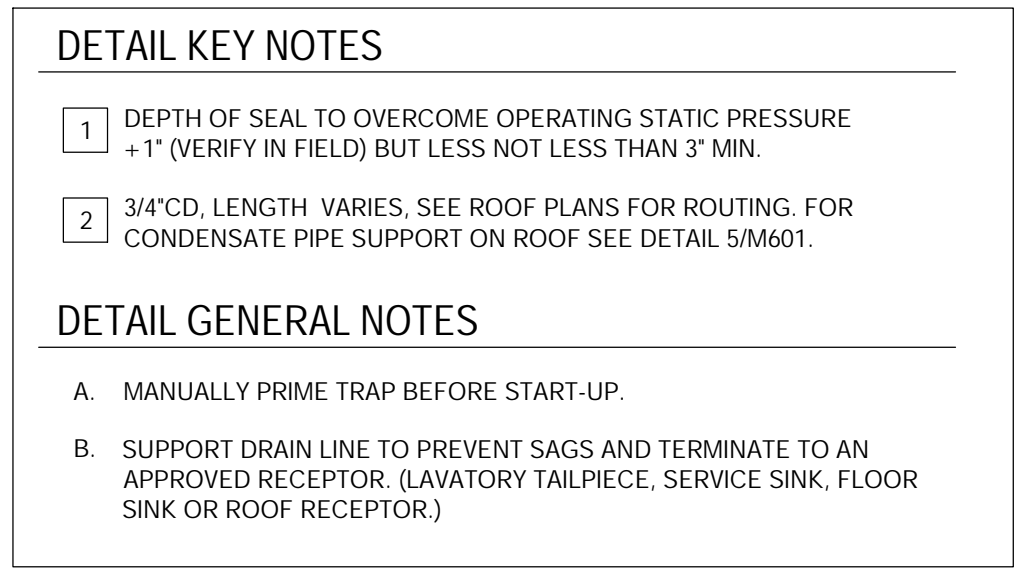
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- A. REFER TO SPECIFICATION FOR PIPE SUPPORT SPACING.
- B. CONDENSATE DRAIN PIPING SHALL SLOPE AT MINIMUM 1%.
- C. REFER TO STRUCTURAL DRAWINGS AND ARCHITECTURAL DRAWINGS FOR MAX ROOF SLOPE.

- 1 PIPE AT ROOF - REFER TO SPECIFICATIONS FOR PIPE MATERIAL.
- 2 PIPE CLAMP - UNISTRUT P1113 OR EQUAL.
- 3 B-LINE C-PORT SERIES PIPE SUPPORT SYSTEM OR EQUAL.
- 4 SET ON MASTIC OR RUBBER PADDING AT PVC ROOF CONSTRUCTION AREAS - TYPICAL.



Options: INSULATED PANELS (WHERE REQUIRED) 1" 1-1/2LB DUCT INSULATION (R VALUE 3.85) GASKET PROVIDED WITH CURB

REVISIONS: 1 INITIAL DRAWING

Attn: Approval: RTU TAG(S):

EXISTING CURB dimensions: 43 1/2", 18 1/4", 23 3/4", 39 3/4", 42", 45 3/4", 47 1/4", 40 9/16", 25"

CDI WILL REVIEW THIS ADAPTER TO ENSURE THAT IT IS STRUCTURALLY SOUND & HAS PROPER AIRFLOW & MAY MAKE CHANGES AS NEEDED

Material: 18 ga. G-90 Galv Steel Existing Curb Oversized by: 1.5 Inches Operational Height(Raise unit by):22 Inches

1959854-1-999-4000

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SUBMITTAL MicroMetl

WEIGHT: 185 lbs DATE: 7/19 Part Number: CA-CAR-537-CAR-005

NEW CARRIER UNITS (CAR-537)

EXISTING UNIT (CAR-005)

Static Pressure Loss at CFM Range

CFM	1,200	1,600	2,000	2,400
Static Loss	0.048	0.062	0.129	0.188

Notes: Static pressure loss data is based on flow simulation modeling, includes both supply and return, and includes insulation considerations.

Features: Fully assembled curb adaptor, Includes internal duct transitions, Internally insulated with 1" - 1.5" insulation, Gasketing package provided, Adaptor pans and supports provided, field installed

Curb Adaptor Information: To verify that the curb adaptor shown on this page is the correct adaptor for your job be sure the existing curb is the same size as the dimensions provided. (The bottom dimensions of curb adaptor are larger than existing curb outside dimension.) Before new HVAC unit is set in place, inspect structural stability of existing curb and building's roof load capability. Reinforce if required. All curb adaptors will increase the systems external static pressure and must be included when calculating unit requirements. Curb adaptors are designed to attach to an existing curb with side x side duct connections. The curb adaptor is not designed for use with concentric duct configuration. No calculations are available for this product. For a calculated product, please contact factory for part number, pricing, and lead time. Please contact factory for more detailed dimensional information if required. Designs are based on standard factory dimensions, and may differ in the field.

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4 CURB ADAPTER: CDI 1959854-1-999-4000 NO SCALE

2 CURB ADAPTER: CA-CAR-537-CAR-005 NO SCALE

MicroMetl

DATE: 10/2019 WEIGHT (LBS): 147 DESCRIPTION: CURB ADAPTER PART NUMBER: CA-CAR-537-YRK-560-RTAP-20

EXISTING UNIT: NEW UNIT: APPROVED BY: DATE:

APPROXIMATE STATIC PRESSURE LOSS AT CFM RANGE

CFM	1,200	1,600	2,000	2,400
STATIC LOSS	0.060	0.103	0.194	0.279

NOTE: ANALYSIS INCLUDES BOTH SUPPLY AND RETURN

EXISTING CURB TOP VIEW

ADAPTER END VIEW

ADAPTER SIDE VIEW

NOTES: 1. BEFORE ORDERING CURB ADAPTER, CONTRACTOR MUST CONFIRM THE DIMENSIONS OF THE EXISTING CURB ON THIS DRAWING. 2. BEFORE NEW HVAC UNIT IS SET IN PLACE, INSPECT STRUCTURAL STABILITY OF EXISTING CURB AND BUILDING'S ROOF LOAD CAPABILITY. REINFORCE IF REQUIRED. 3. ALL CURB ADAPTERS WILL INCREASE THE SYSTEMS EXTERNAL STATIC PRESSURE AND MUST BE INCLUDED WHEN CALCULATING UNIT REQUIREMENTS.

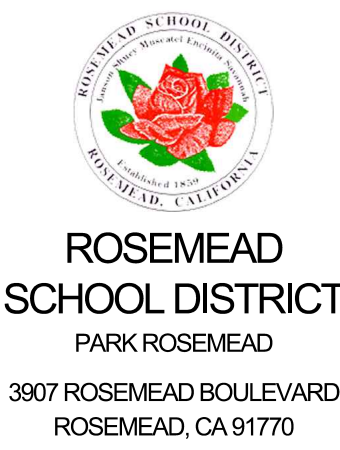
5 NOT USED NO SCALE

3 CURB ADAPTER: CA-CAR-537-YRK-560-RTAP-20 NO SCALE

1 NOT USED NO SCALE



ROSEMEAD SCHOOL DISTRICT
RSD - ENCINITA ELEMENTARY SCHOOL
HVAC REPLACEMENT AT BUILDINGS E,F AND G



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DETAILS

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STATE OF CALIFORNIA

Mechanical Systems

CERTIFICATE OF COMPLIANCE

Project Name: RSD HVAC Replacement

Report Page: (Page 1 of 8)

Project Address: 2022-11-16T18:16:49-05:00

Date Prepared:

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

Generated Date/Time: Report Version: 2019.1.003

Documentation Software: Energy Code Ace

Compliance ID: 77583

Report Generated: 2022-11-16 15:16:53

A. GENERAL INFORMATION			
01 Project Location (City)	Rosemead	04 Total Conditioned Floor Area	7600
02 Climate Zone	9	05 Total Unconditioned Floor Area	0
03 Occupancy Types Within Project:		06 # of Stories (Habitable Above Grade)	1
<input type="checkbox"/> Office (B)	<input type="checkbox"/> Retail (M)	<input type="checkbox"/> Non-refrigerated Warehouse (S)	
<input type="checkbox"/> Hotel/ Motel Guest Rooms (R-1)	<input type="checkbox"/> School (E)	<input type="checkbox"/> Healthcare Facility (I)	
<input type="checkbox"/> High-Rise Residential (R-2/R-3)	<input type="checkbox"/> Relocatable Class Bldg (E)	<input type="checkbox"/> Other (Write In)	

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 or §141.0(b)(2) for alterations.		
01	02	03
Air System(s)	Wet System Components	Dry System Components
<input checked="" type="checkbox"/> Heating Air System	<input type="checkbox"/> Water Economizer	<input checked="" type="checkbox"/> Air Economizer
<input checked="" type="checkbox"/> Cooling Air System	<input type="checkbox"/> Pumps	<input type="checkbox"/> Electric Resistance Heat
Mechanical Controls	<input type="checkbox"/> System Piping	<input checked="" type="checkbox"/> Fan Systems
<input checked="" type="checkbox"/> Mechanical Controls (existing to remain, altered or new)	<input type="checkbox"/> Cooling Towers	<input checked="" type="checkbox"/> Ductwork (existing to remain, altered or new)
	<input type="checkbox"/> Chillers	<input checked="" type="checkbox"/> Ventilation
	<input type="checkbox"/> Boilers	<input type="checkbox"/> Zonal Systems/ Terminal Boxes

STATE OF CALIFORNIA

Mechanical Systems

CERTIFICATE OF COMPLIANCE

Project Name: RSD HVAC Replacement

Report Page: (Page 4 of 8)

Project Address: 2022-11-16T18:16:49-05:00

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H. FAN SYSTEMS & AIR ECONOMIZERS							
This table is used to demonstrate compliance with prescriptive requirements found in §140.4(c), §140.4(e) and §140.4(m) 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:	RTU-E10-E18	Economizer: ¹	Fixed Temperature	Economizer Controls:	Designed per §140.4(e) and (m)	System Fan Type:	Constant Volume
01	02	03	04	05	06	07	08
Fan Name or Item Tag	Fan Function	Qty	Maximum Design Supply Airflow (CFM)	HP Unit ²	Design HP	Fan Power Pressure Drop Adjustment - Table 140.4-B	
						Device	Design Airflow through Device (CFM)
RTU-E10-E18	Supply	1	1600	BHP	0.62	Fully ducted return/ exhaust	1600
						Calculated Adjustment (in H ₂ O)	
Total System Design Supply Airflow (CFM):			1600	Total System Design (BHP):	0.62	Maximum System Fan Power (BHP):	

¹ FOOTNOTES: Computer room economizers must meet requirements of §140.9(a) and will be documented on the NRCC-PRC-E document.

² The unit used for HP must be consistent for all fans within a system.

I. SYSTEM CONTROLS								
This table is used to demonstrate compliance with mandatory controls in §110.2 and §120.2, and prescriptive controls in §141.0(a), (n) and §141.0(b)(2)(c) 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)(i) or §141.0(b)(2)(c)	Shut-Off Controls §120.2(c)	Isolation Zone Controls §120.2(a)	Demand Response §110.12 and §120.2(b)	Supply Air Temp. Reset §140.4(f)	Window Interlocks per §140.4(n)
RTU-E10-E18	Single zone	<= 25,000 ft ²	Setback + DR Tstat per §110.12	EMCS	NA: Single Zone	EMCS	NA: Single Zone	NA: Alteration Project

¹ FOOTNOTES: Gravity gas wall heaters, gravity floor heaters, gravity room heaters, non-central electric heaters, fireplaces or decorative gas appliances, wood stoves are not required to have setback thermostats.

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

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Compliance ID: 77583

Report Generated: 2022-11-16 15:16:53

STATE OF CALIFORNIA

Mechanical Systems

CERTIFICATE OF COMPLIANCE

Project Name: RSD HVAC Replacement

Report Page: (Page 7 of 8)

Project Address: 2022-11-16T18:16:49-05:00

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P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

There are no NRCC 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
	M001

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Compliance ID: 77583

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STATE OF CALIFORNIA

Mechanical Systems

CERTIFICATE OF COMPLIANCE

Project Name: RSD HVAC Replacement

Report Page: (Page 2 of 8)

Project Address: 2022-11-16T18:16:49-05:00

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Compliance ID: 77583

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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	AND	Pumps §140.4(k)	AND	Fans/ Economizers §140.4(c), §140.4(e)	AND	System Controls §110.2, §120.2, §140.4(f)	AND	Ventilation §120.1	AND	Terminal Box Controls §140.4(d)	AND	Distribution §120.3, §140.4(l)	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	Yes	AND	Yes	AND		COMPLIES with Exceptional Conditions
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.

The permit applicant has indicated on Table I that ventilation calculations have been attached or included elsewhere on the plans.

E. ADDITIONAL REMARKS

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

STATE OF CALIFORNIA

Mechanical Systems

CERTIFICATE OF COMPLIANCE

Project Name: RSD HVAC Replacement

Report Page: (Page 4 of 8)

Project Address: 2022-11-16T18:16:49-05:00

Date Prepared:

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Compliance ID: 77583

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L. SYSTEM CONTROLS

*Notes: Controls with a * require a note in the space below explaining how compliance is achieved. EX: system 1: SA Temp Reset: Exempt because zones compliant with §140.4(d) ; EXCEPTION 1 to §140.4(f)

J. VENTILATION AND INDOOR AIR QUALITY	
This table is used to demonstrate compliance with mandatory ventilation requirements in §120.1 and §120.2(c)(3) for all nonresidential, high-rise residential and hotel/motel occupancies. For alterations, only ventilation systems being altered within the scope of the permit application need to be documented in this table. In lieu of this table, the required outdoor ventilation rates and airflow may be shown on the plans or the calculations can be presented in a spreadsheet.	
01	<input checked="" type="checkbox"/> Check the box if the project is showing ventilation calculations on the plans, or attaching the calculations instead of completing this table.
02	<input type="checkbox"/> Check this box if the project included Nonresidential or Hotel/Motel spaces
	<input type="checkbox"/> Check this box if the project included new or altered high-rise residential dwelling units.
03	<input type="checkbox"/> 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).

K. TERMINAL BOX CONTROLS

This section does not apply to this project.

L. DISTRIBUTION (DUCTWORK AND PIPING)			
*Notes: Controls with a * require a note in the space below explaining how compliance is achieved. EX: system 1: SA Temp Reset: Exempt because zones compliant with §140.4(d) ; EXCEPTION 1 to §140.4(f)			
This table is used to show compliance with mandatory pipe insulation requirements found in §120.3 and prescriptive requirements found in §140.4(f) for duct leakage testing.			
Duct Leakage Sealing			
The answers to the questions below apply to the following duct systems:			
Existing Supply and Return Ducting	Duct leakage testing triggered for these systems?	No	
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 in the following locations is more than 25% of the total surface area of the entire duct system:	
	<input type="checkbox"/>	Outdoors	
	<input type="checkbox"/>	In a space directly under a roof that has a U-factor greater than the u-factor of the ceiling, or if the roof does not meet the requirements of §140.3(a)(18) or if the roof has fixed vents or openings to the outside/ unconditioned spaces	
	<input type="checkbox"/>	In an unconditioned crawl space	

STATE OF CALIFORNIA

Mechanical Systems

CERTIFICATE OF COMPLIANCE

Project Name: RSD HVAC Replacement

Report Page: (Page 8 of 8)

Project Address: 2022-11-16T18:16:49-05:00

Date Prepared:

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

Generated Date/Time: Report Version: 2019.1.003

Documentation Software: Energy Code Ace

Compliance ID: 77583

Report Generated: 2022-11-16 15:16:53

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Andrew Smith

Signature Date: _____

Address: _____

City/State/Zip: _____

Responsible Designer Signature: _____

Signature Date: _____

Address: _____

City/State/Zip: _____

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.

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

Generated Date/Time: Report Version: 2019.1.003

Documentation Software: Energy Code Ace

Compliance ID: 77583

Report Generated: 2022-11-16 15:16:53

STATE OF CALIFORNIA

Mechanical Systems

CERTIFICATE OF COMPLIANCE

Project Name: RSD HVAC Replacement

Report Page: (Page 3 of 8)

Project Address: 2022-11-16T18:16:49-05:00

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F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)										
This table is used to demonstrate compliance for mechanical equipment with mandatory requirements found in §110.1 and §110.2(a), and prescriptive requirements found in §140.4(a), §140.4(h) and §140.4(i), or §141.0(b)(2) for alterations.										
Dry System Equipment Sizing (includes air conditioners, condensers, heat pumps, VRF, furnaces and unit heaters)										
01	02	03	04	05	06	07	08	09	10	11
				Equipment Sizing per Mechanical Schedule (kBtu/h)						
				§140.4 (a&b)						
				Heating Output ^{1,2,3}			Cooling Output ^{1,2,3}		Load Calculations ^{1,4}	
				Per Design (kBtu/h)			Rated (kBtu/h)		Total Sensible Cooling Load (kBtu/h)	
				Supp. Heating Output (kBtu/h)			Sensible Per Design (kBtu/h)		Rated (kBtu/h)	
				Smallest Size Available ¹ §140.4(a)			49000		49000	
				RTU-E10-E18			Sm. Commercial AC		Air-cooled unitary AC/HP Pkg (3PH)	
				Yes			0		37060	
							49960		49000	
									49960	

¹ FOOTNOTES: Equipment shall be the smallest size, within the available options of the desired equipment line, necessary to meet the design heating and cooling loads of the building per §140.4(a). Healthcare facilities are exempted.

² It is common practice to show rated output capacity on the equipment schedule. Sensible cooling output comes from specification sheet tables.

³ If equipment is heating only, leave cooling output and load blank. If equipment is cooling only, leave heating output and load blank.

⁴ Authority Having Jurisdiction may ask for load calculations used for compliance per §140.4(b).

Dry System Equipment Efficiency (other than Package Terminal Air Conditioners (PTAC) and Package Terminal Heat Pumps (PTHP))								
01	02	03	04	05	06	07	08	09
Name or Item Tag	Size Category (Btu/h)	Heating Mode				Cooling Mode		
		Rating Condition (°F)	Efficiency Unit	Minimum Efficiency Required per Tables 110.2 / Table 20	Design Efficiency	Efficiency Unit	Minimum Efficiency Required per Tables 110.2 / Table 20	Design Efficiency
RTU-E10-E18	<65,000		HSPF		81	SEER	14	16.1

GENERAL NOTES

- WHERE EXISTING CIRCUIT BREAKERS AND FEEDERS ARE BEING RE-USED, CONTRACTOR SHALL VERIFY THE EXISTING CIRCUIT FOR THAT HVAC UNIT IS SERVING THE RESPECTIVE BUILDING PER THE SCHEDULE. MODIFY UNIT NAMES IN THE PANEL DIRECTORY AS REQUIRED TO MATCH THE RESPECTIVE UNIT THAT IS SERVED.
- REFER TO MECHANICAL SCHEDULES FOR ADDITIONAL EQUIPMENT INFORMATION.
- HVAC EQUIPMENT WHOSE EXISTING CIRCUIT BREAKER MATCHES THE MOCP OF THE NEW UNIT SHALL BE PROVIDED WITH A NON-FUSED DISCONNECT. IF THE EXISTING CIRCUIT BREAKER EXCEEDS THE MOCP, A FUSED DISCONNECT SHALL BE PROVIDED.

FILE NO: 19-91

A/E: 03-122716

MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

MARK	DESCRIPTION	LOCATION	VOLTAGE	PHASE	MCA	DISCONNECT	MOCP	FEEDER	PANEL	CIRCUIT	REMARKS
RTU-E10	PACKAGED A/C UNIT	BLDG E ROOF	208	3	27.0	30A/240VAC/3P	30	3/4"C - 3#8 & 1#10 G	"LE"	8, 10, 12	1 2
RTU-E11	PACKAGED A/C UNIT	BLDG F ROOF	208	3	27.0	30A/240VAC/3P	30	3/4"C - 3#10 & 1#10 G	"EG"	31, 33, 35	1
RTU-E12	PACKAGED A/C UNIT	BLDG F ROOF	208	3	27.0	30A/240VAC/3P	30	3/4"C - 3#10 & 1#10 G	"EG"	32, 34, 36	1
RTU-E13	PACKAGED A/C UNIT	BLDG F ROOF	208	3	27.0	30A/240VAC/3P	30	3/4"C - 3#10 & 1#10 G	"EG"	37, 39, 41	1
RTU-E14	PACKAGED A/C UNIT	BLDG F ROOF	208	3	27.0	30A/240VAC/3P	30	3/4"C - 3#10 & 1#10 G	"EG"	38, 40, 42	1
RTU-E15	PACKAGED A/C UNIT	BLDG G ROOF	208	3	27.0	30A/240VAC/3P	30	3/4"C - 3#8 & 1#10 G	"LG"	8, 10, 12	1 2
RTU-E16	PACKAGED A/C UNIT	BLDG G ROOF	208	3	27.0	30A/240VAC/3P	30	3/4"C - 3#8 & 1#10 G	"LG"	7, 9, 11	1 2
RTU-E17	PACKAGED A/C UNIT	BLDG G ROOF	208	3	27.0	30A/240VAC/3P	30	3/4"C - 3#8 & 1#10 G	"LG"	2, 4, 6	1 2
RTU-E18	PACKAGED A/C UNIT	BLDG G ROOF	208	3	27.0	30A/240VAC/3P	30	3/4"C - 3#8 & 1#10 G	"LG"	1, 3, 5	1 2

1 PROVIDE FUSED DISCONNECT FOR UNIT IN NEMA 3R ENCLOSURE. FUSE SIZED PER MOCP.

2 UNIT SHALL BE SERVED BY EXISTING CIRCUIT. EXTEND EXISTING FEEDER AS REQUIRED FOR NEW CONNECTION TO DISCONNECT AND UNIT.

(E) PANEL: "EE"		VOLTAGE/PHASE: 208Y/120V, 3Ø, 4W BUS AMPS: 100A MAIN BREAKER: 100A										FED FROM: _____ RATING: 10,000 AIC	
LOADS	SEE NOTE	* OUTLETS LTG/RECMISC	VOLT-AMPS A B C			BKRV/ CKT POLE/A B C POLE/CKT	VOLT-AMPS A B C			OUTLETS LTG/RECMISC	* SEE NOTE	LOADS	
(E) LOAD			360			1 20/1 *- - 20/3 2 360						(E) TVSS	
(E) LOAD				360		3 20/1 *- - 4 360						--	
(E) LOAD					360	5 20/1 *- - 6 360						--	
ROOF TOP RECEPTACLES	1		900			7 20/1 *- - 20/1 8 360						(E) LOAD	
SPACE						9 *- - 20/1 10 360						(E) LOAD	
(E) LOAD					360	11 20/1 *- - 20/1 12 360						(E) LOAD	
(E) LOAD			360			13 20/1 *- - 14 360						SPACE	
(E) LOAD						15 20/1 *- - 20/1 16 360						(E) LOAD	
(E) LOAD				360		17 20/1 *- - 20/1 18 360						(E) LOAD	
SPACE						19 *- - 20/1 20 360						(E) LOAD	
(E) LOAD					360	21 20/1 *- - 20/1 22 360						(E) LOAD	
(E) LOAD				360		23 20/1 *- - 20/1 24 360						(E) LOAD	
MAIN						25 100/3 *- - 20/1 26 360						(E) LOAD	
--						27 - *- - 20/1 28 360						(E) LOAD	
--						29 - *- - 20/1 30 360						(E) LOAD	
SPACE						31 *- - 20/1 32 360						(E) LOAD	
SPACE						33 *- - 20/1 34 360						(E) LOAD	
SPACE						35 *- - 20/1 36 360						(E) LOAD	
SPACE						37 *- - 20/1 38 360						(E) LOAD	
SPACE						39 *- - 20/1 40 360						(E) LOAD	
SPACE						41 *- - 20/1 42 360						(E) LOAD	
NOTES: * 'L' DENOTES LONG CONTINUOUS LOAD 1. PROVIDE NEW CIRCUIT BREAKER IN EXISTING SPACE TO MATCH EXISTING.													
TOTAL ØA = 3,780 VOLT-AMPS TOTAL ØB = 3,600 VOLT-AMPS TOTAL ØC = 3,960 VOLT-AMPS			31.5 AMPS 30 AMPS 33 AMPS										
TOTAL PANEL = 11,340 VA @ 208V, 3Ø 31 AMPS													

(E) PANEL: "EG"		VOLTAGE/PHASE: 208Y/120V, 3Ø, 4W BUS AMPS: 200A MAIN BREAKER: 200A										FED FROM: RATING: 10,000 A/C			
LOCATION : BUILDING G FLOOR : FIRST MOUNTING : SURFACE															
LOADS		SEE NOTE	* LTG/RECMISC	VOLT-AMPS A B C			BKRV CKT POLE/A B C POLE/CKT	VOLT-AMPS A B C			OUTLETS LTG/RECMISC	* SEE NOTE	LOADS		
(E) LOAD				360			1 20/1 *- - 20/3 2 360						(E) TVSS		
(E) LOAD					360		3 20/1 *- - 4 360						--		
(E) LOAD					360		5 20/1 *- - 6 360						--		
(E) LOAD				360			7 20/1 *- - 20/1 8 360						(E) LOAD		
(E) LOAD					360		9 20/1 *- - 20/1 10 360						(E) LOAD		
(E) LOAD					360		11 20/1 *- - 20/1 12 360						(E) LOAD		
(E) LOAD				360			13 20/1 *- - 20/1 14 360						(E) LOAD		
(E) LOAD					360		15 20/1 *- - 16 360						SPACE		
(E) LOAD					360		17 20/1 *- - 20/1 18 360						(E) LOAD		
ROOF TOP RECEPTACLES		1		720			19 20/1 *- - 20/1 20 360						(E) LOAD		
SPACE							21 *- - 20/1 22 360						(E) LOAD		
SPACE							23 *- - 24 360						SPACE		
SPACE							25 *- - 26 360						SPACE		
SPACE							27 *- - 28 360						SPACE		
SPACE							29 *- - 30 360						SPACE		
RTU-E11		1		3,122			31 3Ø/3 *- - 3Ø/3 32 3,122				1		RTU-E12		
--				3,122			33 -- *- - 34 3,122						--		
--				3,122			35 -- *- - 36 3,122						--		
RTU-E13		1		3,122			37 3Ø/3 *- - 3Ø/3 38 3,122				1		RTU-E13		
--				3,122			39 -- *- - 40 3,122						--		
--				3,122			41 -- *- - 42 3,122						--		
NOTES: * 'L' DENOTES LONG CONTINUOUS LOAD 1. PROVIDE NEW CIRCUIT BREAKER IN EXISTING SPACE TO MATCH EXISTING.															
TOTAL ØA = 15,728 VOLT-AMPS TOTAL ØB = 14,648 VOLT-AMPS TOTAL ØC = 14,648 VOLT-AMPS		131.1 AMPS 122.1 AMPS 122.1 AMPS													
TOTAL PANEL = 45,024 VA @ 208V, 3Ø		125 AMPS													

(E) PANEL: "LE"		VOLTAGE/PHASE: 208Y/120V, 3Ø, 4W BUS AMPS: 400A MAIN BREAKER: 400A										FED FROM: RATING: 10,000 A/C									
LOCATION : BUILDING E FLOOR : FIRST MOUNTING : SURFACE																					
LOADS	SEE NOTE	* LTG/RECMISC	OUTLETS	VOLT-AMPS			BKRV CKT	A	B	C	BKRV POLE/CKT	VOLT-AMPS			A	B	C	OUTLETS LTG/RECMISC	* SEE NOTE	LOADS	
(E) RTU-E7				3,122			1	40/3	**		40/3	2	3,122							(E) RTU-E8	
--							3	--	**		4						3,122			--	
--							5	--	**		6						3,122			--	
(E) RTU-E9				3,122			7	40/3	**		40/3	8	3,122						1	RTU-E10	
--							9	--	**		--	10					3,122			--	
--							11	--	**		--	12								--	
HVAC RECEPT							13	20/1	**		40/3	14								(E) LOAD	
(E) LOAD							15	20/1	**		--	16								--	
(E) LOAD							17	20/1	**		--	18								--	
(E) LOAD							19	40/3	**		40/3	20								(E) LOAD	
--							21	--	**		--	22								--	
--							23	--	**		--	24								--	
(E) LOAD							25	40/3	**		20/1	26								(E) LOAD	
--							27	--	**		20/1	28								--	
--							29	--	**		20/1	30								(E) LOAD	
(E) LOAD							31	20/1	**		40/3	32								(E) LOAD	
(E) LOAD							33	20/1	**		--	34								(E) HAND DRYER	
(E) LOAD							35	20/1	**		20/1	36								(E) LOAD	
(E) PANEL "EE"				3,780			37	100/3	**		20/1	38								(E) LOAD	
--						3,600	39	--	**		20/1	40								(E) LOAD	
--							3,960	41	--	**	20/1	42								(E) LOAD	
NOTES: * "L" DENOTES LONG CONTINUOUS LOAD 1. REUSE EXISTING CIRCUIT BREAKER TO SERVE UNIT.																					
TOTAL ØA = 16,268 VOLT-AMPS				135.6 AMPS																	
TOTAL ØB = 16,088 VOLT-AMPS				134.1 AMPS																	
TOTAL ØC = 16,448 VOLT-AMPS				137.1 AMPS																	
TOTAL PANEL = 48,804 VA @ 208V, 3Ø 135 AMPS																					

(E) PANEL: "LG"		VOLTAGE/PHASE: 208Y/120V, 3Ø, 4W BUS AMPS: 225A MAIN BREAKER: 225A										FED FROM: RATING: 10,000 A/C			
LOCATION: BUILDING G FLOOR: FIRST SURFACE: SURFACE															
LOADS	SEE NOTE	* OUTLETS LTG/RECMISC	VOLT-AMPS			BKRV POLE/A B C POLE/CKT	BKRV POLE/A B C POLE/CKT	VOLT-AMPS			OUTLETS LTG/RECMISC	* SEE NOTE	LOADS		
RTU-E18	1		3,122			1 4Ø/3 *- - 4Ø/3 2 3,122						1	RTU-E17		
--				3,122		3 -- *- - 4			3,122				--		
--					3,122	5 -- *- - 6				3,122			--		
RTU-E16	1		3,122			7 4Ø/3 *- - 4Ø/3 8 3,122						1	RTU-E15		
--				3,122		9 -- *- - 10			3,122				--		
--					3,122	11 -- *- - 12				3,122			--		
(E) LOAD					13 100/3 *- - 20/1 14 360								(E) LOAD		
--						15 -- *- - 3Ø/2 16 1,000				1,000			--		
--						17 -- *- - 18				1,000			--		
SPACE						19 *- - 20/1 20							(E) LOAD		
SPACE						21 *- - 20/1 22							(E) LOAD		
SPACE						23 *- - 20/1 24							(E) LOAD		
SPACE						25 *- - 20/1 26							(E) LOAD		
SPACE						27 *- - 20/1 28							(E) LOAD		
SPACE						29 *- - 20/1 30							(E) LOAD		
SPACE						31 *- - 20/1 32							(E) LOAD		
SPACE						33 *- - 20/1 34							(E) LOAD		
SPACE						35 *- - 20/1 36							(E) LOAD		
(E) PANEL "LG1"			7,500			37 100/3 *- - 100/3 38 15,728							(E) PANEL "EG"		
--				8,500		39 -- *- - 40			14,648				--		
--					4,500	41 -- *- - 42				14,648			--		
NOTES:															
* 1 "L" NOTES LONG CONTINUOUS LOAD															
1. REUSE EXISTING CIRCUIT BREAKER TO SERVE UNIT.															
TOTAL ØA = 36,076 VOLT-AMPS 300.6 AMPS															
TOTAL ØB = 36,636 VOLT-AMPS 305.3 AMPS															
TOTAL ØC = 32,636 VOLT-AMPS 272 AMPS															
TOTAL PANEL = ### VA @ 208V, 3Ø 292 AMPS															



GENERAL NOTES

1. REFER TO MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULES AND PANEL SCHEDULES FOR ADDITIONAL CIRCUIT INFORMATION.
2. REFER TO MECHANICAL SCHEDULES FOR ADDITIONAL EQUIPMENT INFORMATION.
3. REFER TO SHEET E601 FOR INSTALLATION DETAILS. CONDUIT SHALL BE ROUTED ON CANOPIES AND ROOFS TO SERVE UNITS AS REQUIRED.
4. CARBON MONOXIDE DETECTION SYSTEM IS NOT REQUIRED UNDER CECB 503.15.1 EXCEPTIONS 1 AND 2. SCOPE INCLUDES REPLACEMENT OF EXISTING FUEL BURNING UNITS ALREADY PRESENT AND THE GROUP E BUILDING WAS CONSTRUCTED BEFORE THE ADOPTION OF THE 2016 CALIFORNIA BUILDING STANDARDS CODE.

NOTES

1. DISCONNECT EXISTING HVAC UNIT AND DISCONNECT SWITCH.
2. PROVIDE CONNECTION TO NEW HVAC UNIT. PROVIDE NEW DISCONNECT SWITCH. REFER TO PANEL SCHEDULES AND EQUIPMENT CONNECTION SCHEDULES FOR MORE INFORMATION.
3. PROVIDE 120V/20A WEATHERPROOF GFCI DUPLEX RECEPTACLE AT UNIT.

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RSD - ENCINITA ELEMENTARY SCHOOL
HVAC REPLACEMENT AT BUILDINGS E, F AND G



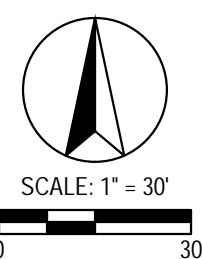
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SCHOOL DISTRICT
PARK ROSEMEAD
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ROSEMEAD, CA 91770

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DATE 10-06-2022

ELECTRICAL SITE PLAN - ENCINITA

E101



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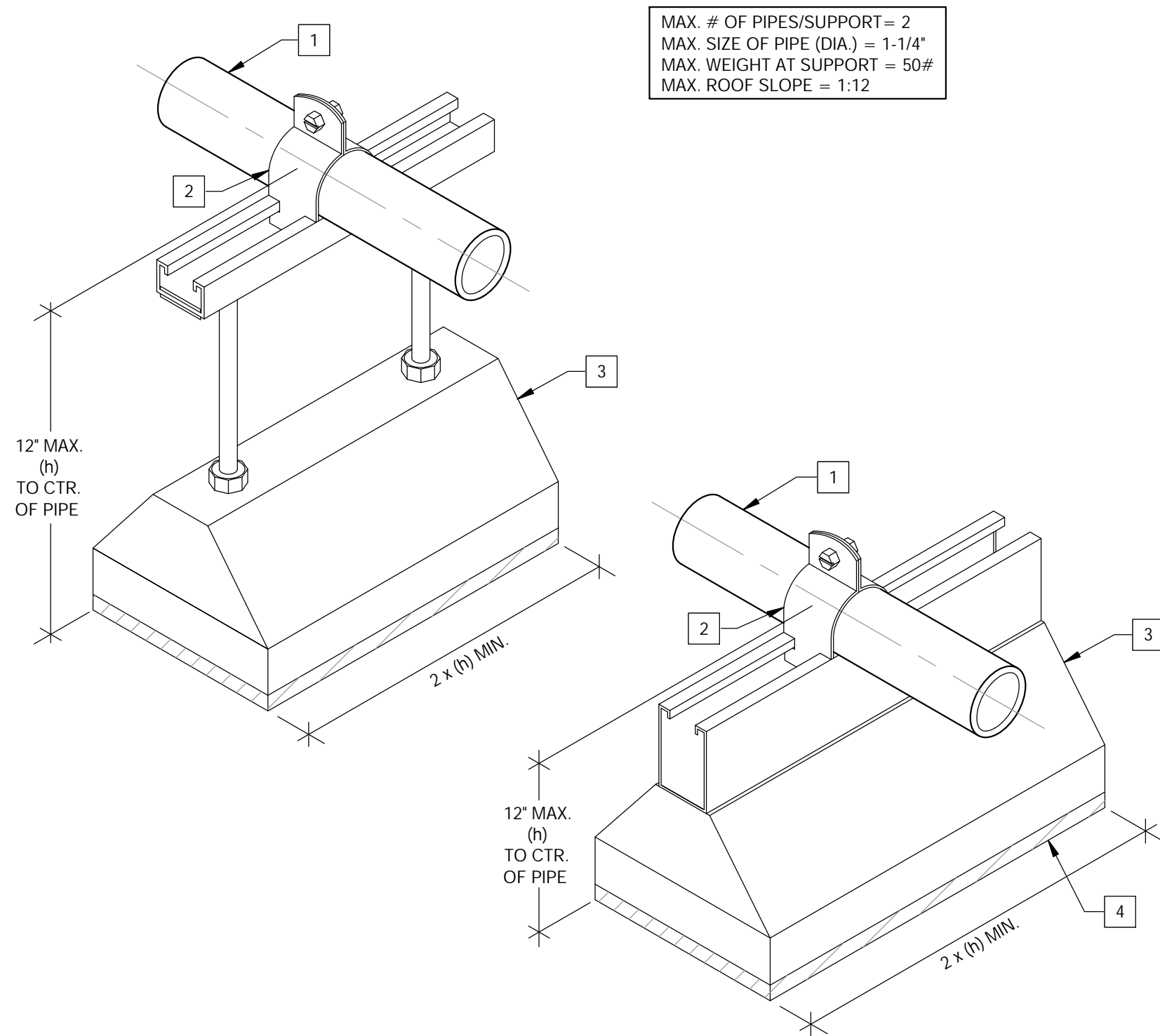


GENERAL NOTE

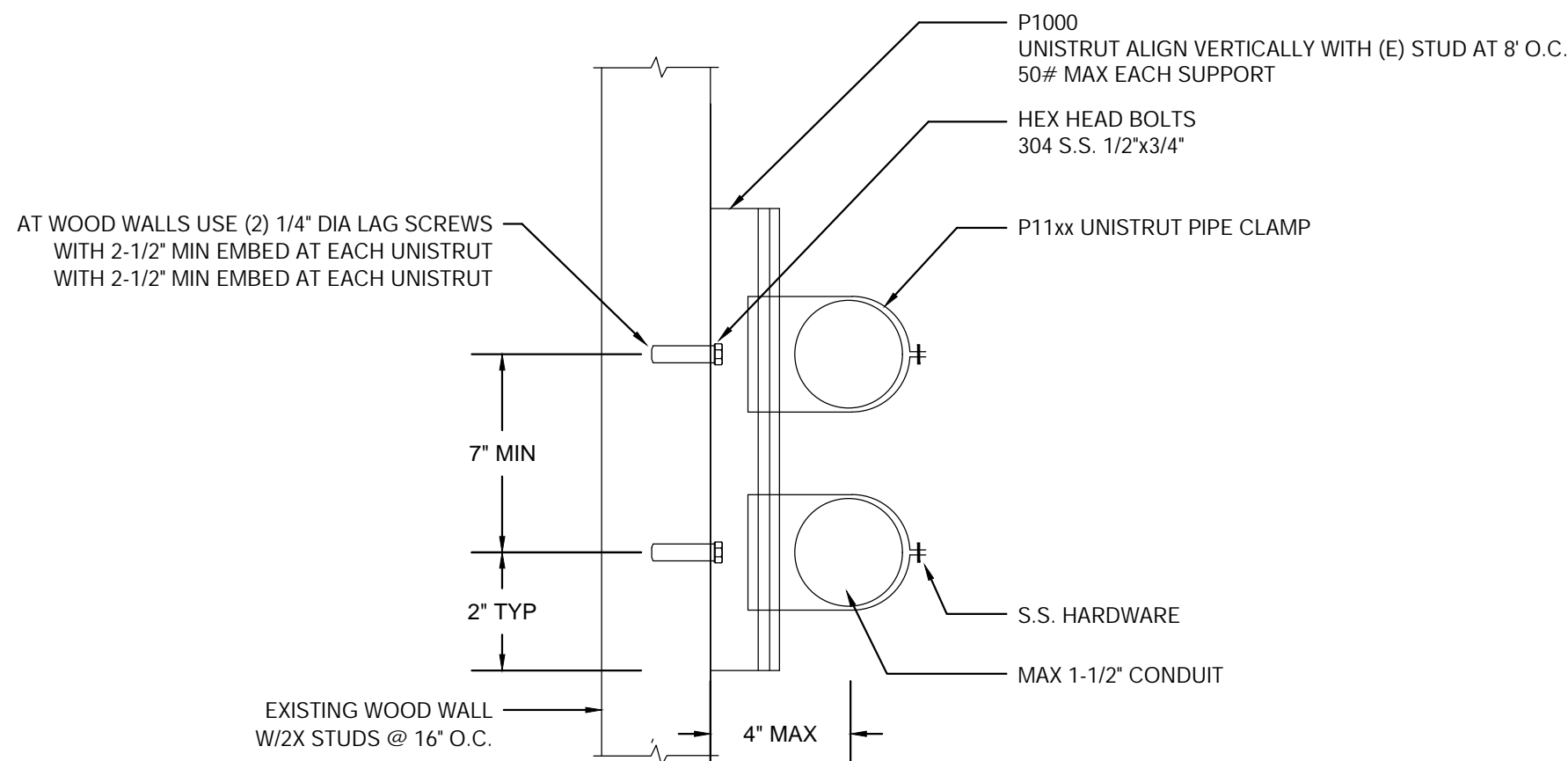
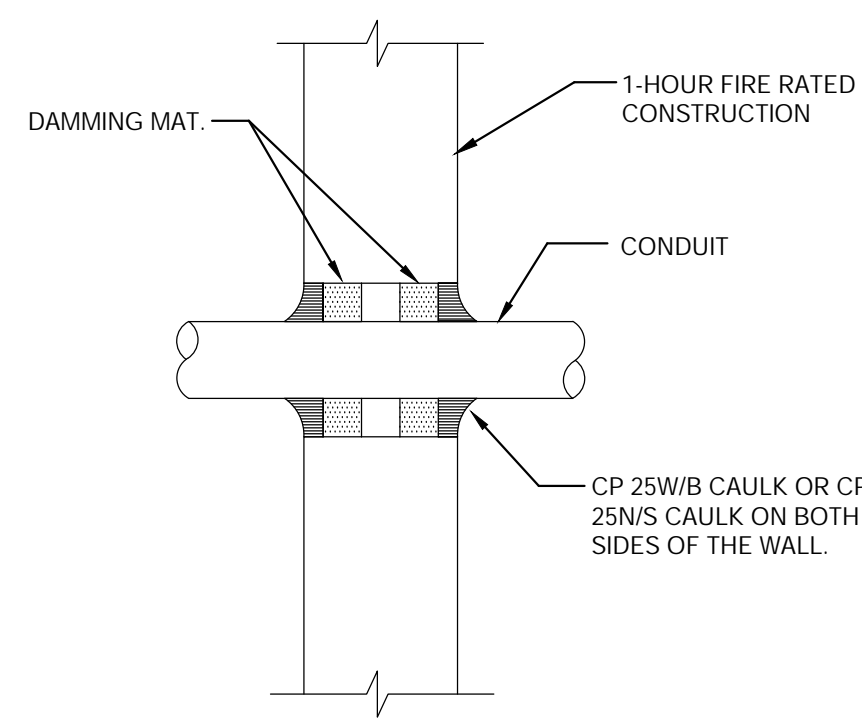
- A. REFER TO SPECIFICATION FOR PIPE SUPPORT SPACING.
B. CONDENSATE DRAIN PIPING SHALL SLOPE AT MINIMUM 1%.

DETAIL NOTES

- 1 PIPE AT ROOF - REFER TO SPECIFICATIONS FOR PIPE MATERIAL.
2 PIPE CLAMP - UNISTRUT P1113
3 B-LINE C-PORT SERIES PIPE SUPPORT SYSTEM OR EQUAL.
4 SET ON MASTIC OR RUBBER PADDING AT PVC ROOF CONSTRUCTION AREAS - TYPICAL.



2 CONDUIT ROOF SUPPORT
NO SCALE



NOTES

1. THIS IS UL STD #49 FOR CONCRETE WALLS OR UL SYSTEM #147 FOR 1HR. GYPSUM BOARD WALL.
2. THE MAXIMUM ANNULAR SPACE TO BE FILLED IS 2". THE MINIMUM ANNULAR SPACE IS 3/4".
3. FOR SOLID CONCRETE WALLS, THE CP 25 CAULK MAY BE CENTERED IN THE WALL WITH DAMMING MATERIAL ON BOTH SIDES OF THE CAULK.
4. USE CP 25(SELF SEVELING) CAULK ON HORIZONTAL SURFACES WHEN SEALING OPENING FROM ABOVE THE PENETRATION. USE CP25N (NO SAG) CAULK ON VERTICAL SURFACES AND ON HORIZONTAL SURFACES WHEN SEALING OPENINGS FROM BELOW. USE CP 25WB CAULK ON EITHER APPLICATION.
5. SHRINKAGE OF CP 25 CAULKS IS ACCEPTABLE AFTER INITIAL WET DEPTH INSTALLATION.
6. THE DEPTH OF THE CP 25 CAULKS DEPENDS ON THE INSULATION THICKNESS.

CAULK DEPTH (MIN.)	INSULATION
1"	1" THICK
2"	2-3" THICK

3 CONDUIT WALL SUPPORT
NO SCALE

1 CONDUIT PENETRATION
NO SCALE



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