# ROSEMEAD SCHOOL DISTRICT HVAC REPLACEMENT AT BUILDINGS "E","F" AND "G"

AT

#### ENCINITA ELEMENTARY SCHOOL

4515 ENCINITA AVENUE ROSEMEAD CA 91770

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

#### GENERAL NOTES

ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE 2019 CALIFORNIA BUILDING CODE, PART 1 AND 2, TITLE 24
C.C.R. AND ANY OTHER REGULATING AGENCIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK, INCLUDING THE
STATE OF CALIFORNIA, DIVISION OF INDUSTRIAL SAFETY AND THOSE CODES AND STANDARDS LISTED IN THE NOTES AND
SPECIFICATIONS.

DO NOT SCALE THE CONSTRUCTION DOCUMENTS. DIMENSIONS SHALL TAKE PRECEDENCE OVER GRAPHIC SCALES SHOWN ON THE DRAWINGS. TYPICAL DETAILS & GENERAL NOTES ARE MINIMUM REQUIREMENTS TO BE USED WHEN CONDITIONS ARE

NOT SHOWN OTHERWISE. IF ADDITIONAL DIMENSIONS ARE REQUIRED, CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING, WORK WITHIN THE AREA OF DISCREPANCY OR CONFLICT SHALL NOT PROCEED UNTIL GIVEN SUCH NOTICE BY THE ARCHITECT TO RESUME CONSTRUCTION.

3. SPECIFIC NOTES & DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES & TYPICAL DETAILS. WHERE NO

EDITION AND/OR ADDENDUM

- DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT.

  4. WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST
- 5. THIS SHEET IS ONE OF A SET OF DOCUMENTS WHICH INCLUDES, BUT IS NOT LIMITED TO, DRAWINGS, SPECIFICATIONS & ADDENDA ADDRESSING ALL TRADES. FULLY COORDINATE ARCHITECTURAL, STRUCTURAL, ELECTRICAL, AND/OR MECHANICAL DRAWINGS, DETAILS & SPECIFICATIONS TO ASCERTAIN THE FULL SCOPE OF THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO FURNISH COMPLETE SET OF CONSTRUCTION DOCUMENTS TO ALL BIDDERS. ALL BIDDERS SHALL REVIEW THE FULL SET OF CONSTRUCTION DOCUMENTS PRIOR TO SUBMITTING BIDS FOR THE WORK. ANY INCONSISTENCIES OR CONFLICTING INFORMATION INCORPORATED INTO THE CONTRACT DOCUMENTS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATIONS AND/OR ADJUSTMENTS BEFORE COMMENCING WORK
- 6. WHERE APPLICABLE, REFER TO THE PROJECT SPECIFICATION MANUAL FOR INFORMATION NOT COVERED BY THESE GENERAL NOTES OR THE DRAWINGS. INFORMATION GIVEN IN ONE PORTION OF THE CONTRACT DOCUMENTS SHALL BE CONSIDERED TO BE GIVEN IN ALL CONTRACT DOCUMENTS.
- 7. THE DRAWINGS & SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE(S) OR MODIFICATION TO AN EXISTING STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION.

  GENERAL:
  CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24,
- ADDENDA:
  CHANGES OR ALTERATIONS OF THE APPROVED PLANS OR SPECIFICATIONS PRIOR TO LETTING A CONSTRUCTION CONTRACT FOR THE WORK INVOLVED SHALL BE MADE BY MEANS OF ADDENDA WHICH SHALL BE SUBMITTED TO & APPROVED BY DSA PRIOR TO DISTRIBUTION TO CONTRACTORS. ORIGINAL COPIES OF ADDENDA SHALL BE STAMPED & SIGNED BY THE ARCHITECT OR ENGINEER IN GENERAL RESPONSIBLE CHARGE OF PREPARATION OF THE PLANS & SPECIFICATIONS & BY THE ARCHITECT OR REGISTERED ENGINEER DELEGATED RESPONSIBILITY FOR THE PORTION AFFECTED BY THE ADDENDA. [SEE SECTION 4-317(h).] ONE COPY OF EACH ADDENDUM IS REQUIRED FOR THE FILES OF DSA.

CHANGES OR ALTERATIONS OF THE APPROVED PLANS OR SPECIFICATIONS AFTER A CONTRACT FOR THE WORK HAS BEEN

- LET SHALL BE MADE ONLY BY MEANS OF CCD SUBMITTED TO & APPROVED BY DSA PRIOR TO COMMENCEMENT OF THE WORK SHOWN THEREON. CCDS SHALL STATE THE REASON OF THE CHANGE & THE SCOPE OF WORK TO BE ACCOMPLISHED, &, WHERE NECESSARY, SHALL BE ACCOMPANIED BY SUPPLEMENTARY DRAWINGS REFERENCED IN THE TEXT OF THE CCD. ALL CCDS & SUPPLEMENTARY DRAWINGS SHALL BE STAMPED & SIGNED BY THE ARCHITECT OR ENGINEER IN GENERAL RESPONSIBLE CHARGE OF OBSERVATION OF THE WORK OF CONSTRUCTION OF THE PROJECT & BY THE ARCHITECT OR REGISTERED ENGINEER DELEGATED RESPONSIBILITY FOR OBSERVATION OF THE PORTION OF THE WORK OF CONSTRUCTION AFFECTED BY THE CCD, SHALL BEAR THE APPROVAL OF THE DISTRICT & SHALL INDICATE THE ASSOCIATED CHANGE IN THE PROJECT COST, IF ANY. ONE COPY OF EACH CCD IS REQUIRED FOR THE FILES OF DSA.
- ANY CHANGE, ERASURE, ALTERATION, OR MODIFICATION OF ANY PLANS OR SPECIFICATIONS BEARING THE STAMP OF DSA MAY RESULT IN VOIDANCE OF THE APPROVAL OF THE APPLICATION. HOWEVER, THE WRITTEN APPROVAL OF PLANS MAY BE EXTENDED BY DSA TO INLCUDE REVISED PLANS & SPECIFICATIONS AFTER DOCUMENTS ARE SUBMITTED FOR REVIEW & APPROVED. (SEE SECTION 4-323 FOR REVISED PLANS & SECTION 4-338 FOR ADDENDA & CHANGE ORDERS.)
- PERFORMANCE OF THE WORK:

  THE CONTRACTOR SHALL CAREFULLY STUDY THE APPROVED PLANS & SPECIFICATIONS & SHALL PLAN A SCHEDULE OF OPERATIONS WELL AHEAD OF TIME. IF AT ANY TIME IT IS DISCOVERED THAT WORK IS BEING DONE WHICH IS NOT IN ACCORDANCE WITH THE APPROVED PLANS & SPECIFICATIONS, THE CONTRACTOR SHALL CORRECT THE WORK IMMEDIATELY. ALL INCONSISTENCIES OR ITEMS WHICH APPEAR IN ERROR IN THE PLANS & SPECIFICATIONS SHALL BE PROMPTLY CALLED TO THE ATTENTION OF THE ARCHITECT OR REGISTERED ENGINEER, THROUGH THE INSPECTOR, FOR INTERPRETATION OR CORRECTION. IN NO CASE, HOWEVER, SHALL THE INSTRUCTION OF THE ARCHITECT OR REGISTERED ENGINEER BE CONSTRUED TO CAUSE WORK TO BE DONE WHICH IS NOT IN CONFORMITY WITH THE APPROVED PLANS, SPECIFICATIONS, AND CHANGE ORDERS. THE CONTRACTOR MUST NOTIFY THE PROJECT INSPECTOR, IN ADVANCE, OF THE COMMENCEMENT OF CONSTRUCTION OF EACH AND EVERY ASPECT OF THE WORK. SUBSTITUTIONS SHALL BE CONSIDERED AS A CHANGE
- 8. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS & SITE CONDITIONS BEFORE STARTING WORK. DIMENSIONS ARE NOT ADJUSTABLE WITHOUT THE REVIEW & CLARIFICATION OF THE ARCHITECT UNLESS NOTED AS (+/-) PLUS/MINUS OR (FIELD) VERIFY. THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCY BEFORE PROCEEDING WITH WORK.
- 9. ALL INFORMATION SHOWN ON THE DRAWINGS RELATIVE TO EXISTING CONDITIONS IS GIVEN AS REPRESENTING THE BEST INFORMATION CURRENTLY AVAILABLE, BUT WITHOUT GUARANTEE OF ACCURACY. THE CONTRACTOR & SUBCONTRACTOR SHALL CAREFULLY EXAMINE THE SITE, COMPARE THE CONSTRUCTION DOCUMENTS WITH THE EXISTING CONDITIONS, BE RESPONSIBLE FOR ACCURACY OF ALL DIMENSIONS & THOROUGHLY FAMILIARIZE HIMSELF/HERSELF WITH THE SCOPE OF WORK. BY THE ACT OF SUBMITTING A BID THE CONTRACTOR SHALL BE DEEMED TO HAVE MADE SUCH AN EXAMINATION, HAVE ACCEPTED THE CONDITIONS & HAVE INCLUDED ALL RELATED SITE/BUILDING(S) CONDITION COST IN HIS/HER BID.
- 10. NO PART OF THESE CONTRACT DOCUMENTS SHALL BE CONSIDERED AS REQUIRING OR PERMITTING ANY WORK CONTRARY TO THE REQUIREMENTS OF ANY CODE REGULATION OR ORDINANCE WHICH HAS JURISDICTION OVER THE WORK.
- 11. ALL SYMBOLS & ABBREVIATIONS USED ON THE DRAWINGS ARE CONSIDERED TO BE CONSTRUCTION STANDARDS ABBREVIATION OR SYMBOLS. IF THE CONTRACTOR HAS A QUESTION REGARDING THE SAME OR THEIR EXACT MEANING, THE ARCHITECT SHALL BE NOTIFIED FOR CLARIFICATION.
- 12. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE(S) DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACES, SHORES & GUYS REQUIRED TO SUPPORT ALL LOADS TO WHICH THE BUILDING STRUCTURE & COMPONENTS, ADJACENT SOILS OR STRUCTURES, UTILITIES & RIGHT-OF-WAYS MAY BE SUBJECTED DURING CONSTRUCTION.

- 13. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICE, THE CONTRACTOR SHALL ASSUME SOLE & COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS & PROPERTY ACCORDING TO THE REQUIREMENTS OF THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) & CALIFORNIA OCCUPATIONAL REGULATIONS. THIS STIPULATION SHALL BE CONSIDERED TO BE CONTINUOUS & NOT LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL INDEMNIFY & HOLD DESIGN PROFESSIONALS, INSPECTORS, ET AL., HARMLESS FROM ANY & ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THE PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE
- 14. THE DESIGN TEAM SHALL NOT HAVE CONTROL OR CHARGE OF & SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS & PROGRAMS IN CONNECTION WITH THE WORK, THE ACTS OR OMISSIONS OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN
- ACCORDANCE WITH THE CONTRACT DOCUMENTS, APPLICABLE CODES AND STANDARDS.

  15. CONTRACTOR SHALL PROVIDE CONSTRUCTION BARRICADES OR PROTECTIVE DEVICES OF SUFFICIENT HEIGHT & MAGNITUDE AS TO PREVENT ANY PERSONS OF ANY AGE FROM ACCIDENTALLY ENTERING THE WORK AREA, PROVIDE TEMPORARY
- PASSAGEWAYS AS REQUIRED. YELLOW TAPE BARRICADES SHALL NOT BE ALLOWED AT THESE SITES.

  16. DELIVERY OF MATERIALS TO THE CONSTRUCTION ZONE & REMOVAL OF WASTE FROM THE SITE SHALL BE COORDINATED WITH THE DISTRICT FOR AN ACCEPTABLE ACCESS ROUTE & SCHEDULE. USE OF THE AREA OUTSIDE THE CONSTRUCTION ZONE SHALL NOT BE ALLOWED UNDER ANY CIRCUMSTANCES WITHOUT CLEARANCE FROM THE SCHOOL DISTRICT OR THE
- OWNER'S AUTHORIZED REPRESENTATIVE.

  17. CONTRACTOR SHALL INVESTIGATE THE SITE DURING CLEARING & EARTHWORK OPERATIONS, AS MAY BE REQUIRED BY THE SCOPE OF THE WORK, FOR FILLED EXCAVATIONS OR BURIED STRUCTURES, SYSTEMS, UTILITIES OR FOUNDATIONS, ETC. IF
- ANY SUCH STRUCTURES ARE FOUND, THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY.

  18. IN DEMOLITION OF EXISTING BUILDINGS, WORK SHALL NOT BE PERFORMED IN AREA CONTAMINATED BY MATERIALS MADE OF ASBESTOS &/OR LEAD UNTIL THE ASBESTOS AND/OR LEAD MATERIALS HAVE BEEN REMOVED OR ENCAPSULATED BY THE
- CONTRACTOR. IF ASBESTOS OR LEAD IS ENCOUNTERED, NOTIFICATION SHALL BE GIVEN PER SPECIFICATIONS.

  19. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE SHOP DRAWINGS, PRODUCT LITERATURE, PRODUCT SAMPLES, ETC. ARE SUBMITTED TO THE ARCHITECT IN A TIMELY MANNER SO AS NOT TO IMPACT THE

CONSTRUCTION SCHEDULE

- ALL DISSIMILAR METALS SHALL BE EFFECTIVELY ISOLATED FROM EACH OTHER TO PREVENT MOLECULAR BREAKDOWN.
   CONTRACTOR SHALL REVIEW THE CONSTRUCTION DOCUMENTS BEFORE PERFORMING THE WORK SHOWN ON THE CONSULTING ENGINEER'S DRAWINGS. DISCREPANCIES BETWEEN THE ARCHITECTURAL & CONSULTING ENGINEER'S DRAWINGS SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION FOR CLARIFICATION & DIRECTION. CONSTRUCTION
- 22. INSTALL ALL EQUIPMENT COMPLETELY AS REQUIRED AND/OR AS RECOMMENDED BY THE MANUFACTURER, INCLUDING ALL

INSTALLED IN CONFLICT WITH THE CONSTRUCTION DOCUMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT NO

- 23. TRADE NAMES & MANUFACTURERS REFERRED TO ARE FOR QUALITY STANDARDS ONLY. SUBSTITUTION WILL BE PERMITTED AS APPROVED BY THE SCHOOL DISTRICT OR ARCHITECT OF RECORD. CONTRACTOR SHALL STIPULATE THAT ALL PROPOSED SUBSTITUTIONS ARE EQUAL IN PERFORMANCE & COMPLY WITH THE APPLICABLE CODES & REGULATIONS. SUBSTITUTIONS OF ALTERNATE MATERIALS OR SYSTEMS SHALL BE AT NO ADDITIONAL COST TO THE DISTRICT.
- 24. ELECTRICAL GROUNDING SHALL BE PERFORMED IN THE PRESENCE OF THE DSA BUILDING INSPECTOR OF THE WORK.
- 25. ALL INSPECTION & TESTING SHALL CONFORM TO THE REQUIREMENTS OF PART 1 & 2, TITLE 24, C.C.R..26. SHOP AND FIELD WELDING OPERATIONS SHALL BE PERFORMED BY A CERTIFIED WELDER. ALL WELDING SHALL SPECIALLY

INSPECTED BY AN A WS-CWI QUALIFIED INSPECTOR APPROVED BT DSA/ORS.

- 27. GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE COORDINATION OF THE VARIOUS TRADES PERFORMING
  THE WORK, CONTRACTOR SHALL SUBMIT FOR REVIEW A COMPLETE COORDINATION SCHEDULE ILLUSTRATING THE EXTENT &
  THE POSITION OF EACH SCOPE OF WORK TO AVOID CONFLICT & TO MAINTAIN REQUIRED SERVICE ACCESS & CODE REQUIRED
- 28. THE DISTRICT MUST PROVIDE FOR & REQUIRE COMPETENT, ADEQUATE. & CONTINUOUS INSPECTION BY AN INSPECTOR SATISFACTORY TO THE ARCHITECT OR REGISTERED ENGINEER IN GENERAL RESPONSIBLE CHARGE OF OBSERVATION OF THE WORK OF CONSTRUCTION, TO ANY ARCHITECT OR REGISTERED ENGINEER DELEGATED RESPONSIBILITY FOR A PORTION OF THE WORK, & TO DSA. THE COST OF THE PROJECT INSPECTION SHALL BE PAID FOR BY THE DISTRICT. AN INSPECTOR SHALL NOT HAVE ANY CURRENT EMPLOYMENT WITH ANY ENTITY THAT IS A CONTRACTING PARTY FOR THE CONSTRUCTION. AN APPROVED PROJECT INSPECTOR MAY BE REMOVED & REPLACED IF THE WORK PERFORMED IS NOT IN CONFORMANCE WITH ACCEPTED INSPECTION STANDARDS AS DETERMINED BY THE DISTRICT THE PROJECT ARCHITECT & ENGINEER WITH CONCURRENCE OF DSA. THE INSPECTOR SHALL HAVE PERSONAL KNOWLEDGE AS DEFINED IN SECTIONS 17309 & 81141 OF THE EDUCATION CODE OF ALL WORK DONE ON THE PROJECT OR ITS PARTS AS DEFINED IN SECTION 4-316 OF TITLE 24. NO WORK SHALL BE CARRIED ON EXCEPT UNDER THE INSPECTION OF A PROJECT INSPECTOR APPROVED BY DSA.THE EMPLOYMENT OF SPECIAL OR ASSISTANT INSPECTORS SHALL NOT BE CONSTRUED AS RELIEVING THE PROJECT INSPECTOR OF HIS/HER DUTTIES & RESPONSIBILITIES UNDER SECTION 17309 & 81141 OF THE EDUCATION CODE AND SECTIONS 4-336 & 4342 OF TITLE24. A PROJECT INSPECTOR SHALL, UNDER THE DIRECTION OF THE ARCHITECTAND/OR ENGINEER, BE RESPONSIBLE FOR MONITORING THE WORK OF THE SPECIAL INSPECTORS AND TESTING LABORATORIES TO ENSURE THAT THE TESTING PROGRAM IS SATISFACTORILY COMPLETED. THE PROJECT INSPECTOR AND ANY ASSISTANT INSPECTOR MUST BE APPROVED
- 29. THE INTENT OF THE DRAWINGS & SPECIFICATIONS IS TO MODIFY THE FACILITY FOR ACCESSIBILITY IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY CONDITIONS DEVELOP NOT COVERED BY THE CONSTRUCTION DOCUMENTS SUCH THAT THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CCD DETAILING & SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO & APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK-SECTION 4-417, PART 1, TITLE 24, CCR.
- 30. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CCD, OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK.
- 31. CUTTING, BORING SAWCUTTING OR DRILLING THROUGH THE EXISTING OR NEW STRUCTURAL ELEMENTS IS NOT TO BE STARTED UNTIL THE DETAILS HAVE BEEN REVIEWED & APPROVED BY THE ARCHITECT, STRUCTURAL ENGINEER & THE DSA FIELD ENGINEER IF DETAILS DO NOT SHOW OR CONFORM TO THE APPROVED DRAWINGS.
- 32. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT SHALL CONDUCT ALL THE REQUIRED TESTS

- 33. A "DSA CERTIFIED" PROJECT INSPECTOR EMPLOYED BY THE DISTRICT(OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342. CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 424, CCR).
- 34. A "DSA CERTIFIED" INSPECTOR WITH CLASS 3 CERTIFICATION IS REQUIRED FOR THIS PROJECT.
   35. THE CALIFORNIA ENERGY CODE SECTION 10-103 REQUIRES ACCEPTANCE TESTING ON ALL NEWLY INSTALLED LIGHTING CONTROLS, MECHANICAL SYSTEMS, ENVELOPES, AND PROCESS EQUIPMENT AFTER INSTALLATION AND BEFORE PROJECT
- CONTROLS, MECHANICAL SYSTEMS, ENVELOPES, AND PROCESS EQUIPMENT AFTER INSTALLATION AND BEFORE PROJECT COMPLETION. AN ACCEPTANCE TEST IS A FUNCTIONAL PERFORMANCE TEST TO HELP ENSURE THAT NEWLY INSTALLED EQUIPMENT IS OPERATING AND IN COMPLIANCE WITH THE ENERGY CODE.

  LIGHTING CONTROLS ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED LIGHTING CONTROLS ACCEPTANCE TEST
- PROJECTS SUBMITTED ON OR AFTER OCTOBER 1, 2021.

  ENVELOPE AND PROCESS EQUIPMENT ACCEPTANCE TESTS SHALL BE PERFORMED BY THE INSTALLING CONTRACTOR, ENGINEER/ARCHITECT OF RECORD OR THE OWNER'S AGENT.
- A LISTING OF CERTIFIED ATT CAN BE FOUND AT:
  HTTPS://WWW.ENERGY.CA.GOV/PROGRAMS-AND-TOPICS/PROGRAMS/ACCEPTANCE-TEST-TECHNICIAN-CERTIFICATIONPROVIDER-PROGRAM/ACCEPTANCE.

  THE ACCEPTANCE TESTING PROCEDURES MUST BE REPEATED, AND DEFICIENCIES MUST BE CORRECTED BY THE BUILDER OR
  INSTALLING CONTRACTOR UNTIL THE CONSTRUCTION/INSTALLATION OF THE SPECIFIED SYSTEMS CONFORM AND PASS THE

PROJECT INSPECTORS WILL COLLECT THE FORMS TO CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE BEEN

TECHNICIAN (ATT).MECHANICAL SYSTEM ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED MECHANICAL ATT FOR

COMPLETED.

36. ALL WORK SHALL CONFORM TO 2019 TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).

REQUIRED ACCEPTANCE CRITERIA.

- 37. THE SCOPE OF WORK CLEARLY INDICATE THE SCOPE OF WORK ON THE COVER SHEET OR GENERAL NOTE SHEET OF THE DRAWINGS.
   38. FABRICATION AND INSTALLATION OF DEFERRED SUBMITTAL ITEMS SHALL NOT BE STARTED UNTIL CONTRACTOR'S DRAWINGS,
- 38. FABRICATION AND INSTALLATION OF DEFERRED SUBMITTAL ITEMS SHALL NOT BE STARTED UNTIL CONTRACTOR'S DRAWINGS, SPECIFICATIONS, AND ENGINEERING CALCULATIONS FOR THE ACTUAL SYSTEMS TO BE INSTALLED HAVE BEEN ACCEPTED AND SIGNED BY THE ARCHITECT OR STRUCTURAL ENGINEER AND APPROVED BY THE DSA. LIST DEFERRED SUBMITTAL ITEMS FOR THIS PROJECT.
- 39. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGED DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR. •A "DSA CERTIFIED" PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DSA SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.
- 40. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.
- 41. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CONSTRUCTION CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK. (SECTION 4-317(C), PART 1, TITLE 24, CCR)
- 42. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.

#### GENERAL SYMBOLS

## NO. SHT. NO.

ROOM IDENTIFICATION TAG

REMOVED; FUTURE WORK

AS NOTED ON DWGS.

TO BREAK CONTINUITY

FINISH GRADE LINE,

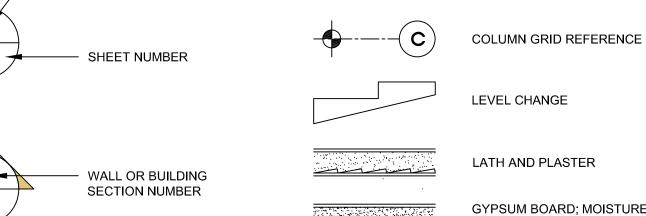
ELEVATION EARTH

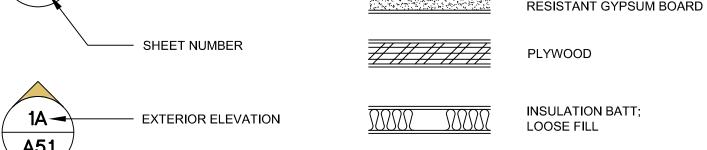
CONTOUR LINE ON PLAN,

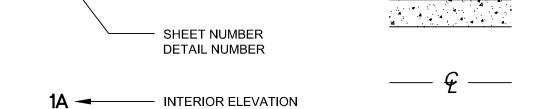
SURFACE ELEVATION

**SECTIONS OR ELEVATIONS** 

DIMENSION LINES













KEYNOTE

DEMOLITION

KEYNOTE

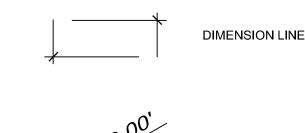
REVISION NUMBER

INTERNATIONAL

**ACCESSIBILITY** 

SYMBOL (I.S.A.)

REVISION NUMBI



### 8 M701 TITLE 24 COMPLIANCE FORMS - ENCINITA 9 E001 GENERAL NOTES, LEGENDS, ABBREVIATIONS, AND SHEET INDEX 0 E002 SCHEDULES - ENCINITA 1 E101 ELECTRICAL SITE PLAN ENCINITA

GENERAL NOTES, LEGENDS, ABBREVIATIONS, AND SHEET INDEX

SHEET INDEX

TITLE SHEET, INDEX TO DRAWINGS AND NOTES

SHEET INDEX, SYMBOLS AND ABBREVIATIONS

STRUCTURAL GENERAL NOTES

STRUCTURAL GENERAL NOTES

BUILDING E ROOF FRAMING PLAN

BUILDING F ROOF FRAMING PLAN

BUILDING G ROOF FRAMING PLAN

**EQUIPMENT SUPPORT DETAILS** 

**EQUIPMENT SUPPORT DETAILS** 

MECHANICAL SITE PLAN ENCINITA

SCHEDULES - ENCINITA

DETAILS

OVERALL SITE/ KEY PLAN

A101

A5.01

S0.02

S0.03

S1.01

S2.01

S2.02

S2.03

S4.01

S4.02

M002

M101

M601

M602

E601

Total Sheets = 22

SITE PLAN

ROOF DETAIL

APPLICABLE CODES

PARTIAL LIST OF APPLICABLE CODES AS OF JANUARY 1, 2019

PART 1 2022 BUILDING STANDARDS ADMINISTRATIVE CODE, TITLE 24 C.C.R.

PART 2 2019 CALIFORNIA BUILDING CODE, TITLE 24 C.C.R.

(2009 INTERNATIONAL BUILDING CODE OF THE INTERNATIONAL CODE COUNCIL, WITH CALIFORNIA AMENDMENTS)

PART 3 2019 CALIFORNIA ELECTRICAL CODE, TITLE 24 C.C.R.
(2008 NATIONAL ELECTRICAL CODE OF THE NATIONAL FIRE PROTECTION
ASSOCIATION, NFPA)

PART 4 2019 CALIFORNIA MECHANICAL CODE, TITLE 24 C.C.R.

(2009 UNIFORM MECHANICAL CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING & MECHANICAL OFFICIALS, IAPMO)

PART 5 2019 CALIFORNIA PLUMBING CODE, PART 5, TITLE 24 C.C.R.

(2009 UNIFORM PLUMBING CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING & MECHANICAL OFFICIALS, IAPMO)

PART 6 2019 CALIFORNIA ENERGY CODE, TITLE 24 C.C.R.

PART 6 2019 CALIFORNIA ENERGY CODE, TITLE 24 C.C.R.

PART 9 2019 CALIFORNIA FIRE CODE, TITLE 24 C.C.R.

(2009 INTERNATIONAL FIRE CODE OF THE INTERNATIONAL CODE COUNCIL)

PART 12 2019 CALIFORNIA REFERENCED STANDARDS. TITLE 24 C.C.R.

PART 12 2019 CALIFORNIA REFERENCED STANDARDS, TITLE 24 C.C.R.

TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

#### CODE ANALYSIS

TYPE OF CONSTRUCTION = TYPE V-B NON-SPRINKLERED OCCUPANCY : E-1
ALLOWABLE ARE = 9,500 S.F.

EXISTING AREA:

BLDG E + RESTROOM = 6,200 S.F. OK

BLDG F = 5,400 S.F. OK

BLDG G + RESTROOM = 8,600 S.F. OK

# ROSEMEAD SCHOOL DISTRICT PARK ROSEMEAD 4515 ENCINITA AVENUE

ROSEMEAD CA 91770

M Ш

#### FLOOD MAP

# ## CONTROL OF Streets GUTY OF TIENIPLE GUTY OF TIENIPLE GUTY OGOGES GUTY OF TIENIPLE GUTY OGOGES Approximate location based on user injust and does not represent an authoritative seaform \$1.000 to 100 t

Selected FloodMap Boundary

Digital Data Available

Effective LOMRs

MAP PANELS

No Digital Data Available

Regulatory Floodway Zone AE, AO, AH, VE, AR

0.2% Annual Chance Flood Hazard, Areas

of 1% annual chance flood with average

depth less than one foot or with drainage

areas of less than one square mile Zone >

Future Conditions 1% Annual

Area with Reduced Flood Risk due to

Chance Flood Hazard Zone 2

Levee. See Notes. Zone X

Area of Undetermined Flood Hazard Zone D FLOOD HAZARD Area with Flood Risk due to Levee Zone D

... Base Flood Elevation Line (BFE)

Limit of Study

Profile Baseline

GENERAL ---- Channel, Culvert, or Storm Sewer

Jurisdiction Boundar

Hydrographic Feature

Coastal Transect Baseline

#### DIRECTORY

ARCHITECT:

NAC | ARCHITECTURE

837 NORTH SPRING ST. THIRD FLOOR

LOS ANGELES, CA. 90012-2323

TEL: 323.475.8075

FAX: 323.859.3110

CONTACT: GARY CHRISTOFI

EMAIL: gchristofi@nacarchitecture.com

#### STRUCTURAL:

KPFF
700 S FLOWER ST #1200
LOS ANGELES, CA. 90017
TEL: 213-418-0201
CONTACT: BEN SEGURA
EMAIL: benjamin.segura@kpff.com

#### **MECHANICAL:**

P2S ENG 5000 E.SPRING ST.8TH FLOOR LONG BEACH, CA. 90815 TEL: 562-497-2999 CONTACT: ANDREW SMITH EMAIL: andrew.smith@p2sinc.com

#### ELECTRICAL:

P2S ENG
5000 E.SPRING ST.8TH FLOOR
LONG BEACH, CA. 90815
TEL: 562-497-2999
CONTACT: ALLEN SLY
EMAIL: allen.sly@p2sinc.com

#### SCOPE OF WORK

REMOVAL AND REPLACEMENT OF EXISTING ROOF TOP HVAC UNITS OVER EXISTING CURBS AT BUILDINGS "E", "F" AND "G"

#### VICINITY MAP ENCINITA E.S. SITE



**ENCINITA ELEMENTARY SCHOOL** 

#### STATEMENT OF GENERAL CONFORMANCE

FOR ARCHITECTS/ENGINEERS WHO UTILIZE PLANS, INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS, PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND/OR CONSULTANTS (APPLICATION NO. A# 03-122716 FILE NO. 19-91)

( APPLICATION NO. \_\_A# 122716 \_\_\_\_\_\_ FILE NO. \_\_19-91 \_\_\_\_\_ )

THE DRAWINGS OR SHEETS LISTED ON THE COVER OR ASSOCIATED WITH 03\_122716
THIS DRAWING, PAGE OF SPECIFICATIONS/CALCULATIONS

HAVE BEEN PREPARED BY OTHER DESIGN PROFESSIONALS OR CONSULTANTS WHO ARE LICENSED AND/OR AUTHORIZED TO PREPARE SUCH DRAWINGS IN THIS STATE. IT HAS BEEN EXAMINED BY ME FOR:

DESIGN INTENT AND APPEARS TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS AND THE PROJECT SPECIFICATIONS PREPARED BY ME, AND COORDINATION WITH MY PLANS AND SPECIFICATIONS AND IS ACCEPTABLE FOR INCORPORATION INTO THE CONSTRUCTION OF THIS PROJECT.

THE STATEMENT OF GENERAL CONFORMANCE "SHALL NOT BE CONSTRUED AS RELIEVING ME OF MY RIGHTS, DUTIES, AND RESPONSIBILITIES UNDER SECTIONS 17302 AND 81138 OF THE EDUCATION CODE AND SECTIONS 4-336, 4-341, AND 4-344" OF TITLE 24, PART 1 (TITLE 24, PART 1, SECTION 4-317 [b])

-	FIND ALL DRAWINGS OR SHEETHAT: THIS DRAWING OR PAGE	ETS LISTED ON THE COVER OR I	NDEX SHEET
IS/ARE IN GENERAL CON DESIGN INTENT, AND	NFORMANCE WITH THE PROJECT	IS/ARE IN GENERAL CON DESIGN INTENT, AND	IFORMANCE WITH THE PROJECT
HAS/HAVE BEEN COORDINATED WITH THE PROJECT PLANS AND SPECIFICATIONS.		HAS/HAVE BEEN COORD AND SPECIFICATIONS.	NATED WITH THE PROJECT PLANS
	11/10/2022		
SIGNATURE	DATE	SIGNATURE	DATE
ARCHITECT OR ENGINEER DESIGNATED TO BE IN GENERAL RESPONSIBLE CHARGE		ARCHITECT OR ENGINEER D FOR THIS PORTION OF THE V	
HELENA JUBANY			
PRINT NAME		PRINT NAME	
C-22214	05/31/2023		
LICENSE NUMBER	EXPIRATION DATE	LICENSE NUMBER	EXPIRATION DATE

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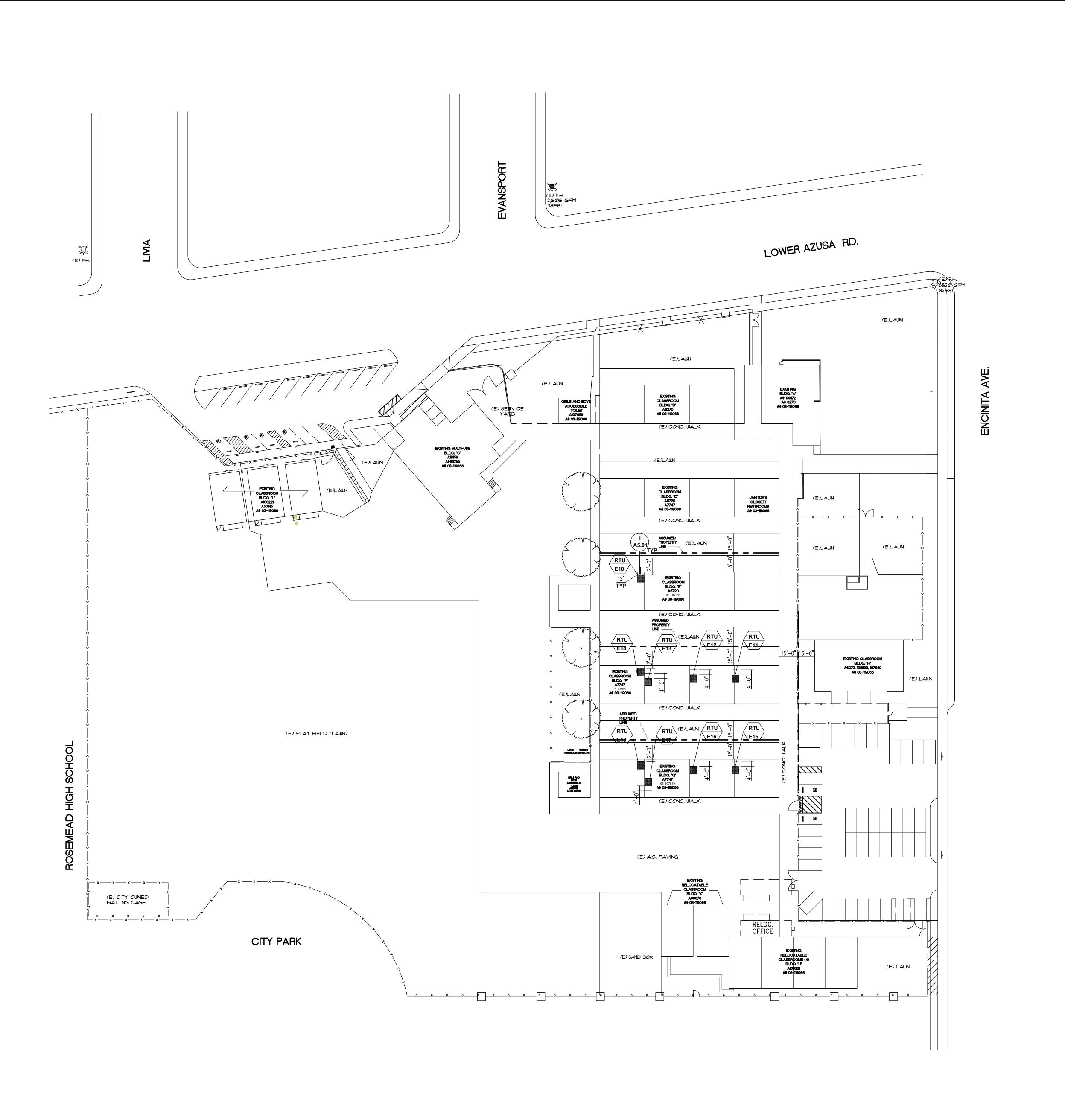
NAC NO 161-21043

FILE DSA SUBMITTAL

DRAWN HH

CHECKED 
DATE 02-14-2023

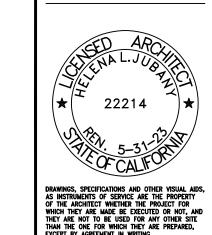
TITLE SHEET, INDEX TO DRAWINGS AND NOTES



#### **ENCINITAS HVAC**

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

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



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

4515 ENCINITA ROSEMEAD C

LEGEND

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

NAC NO 161-21043

FILE DSA SUBMITTAL

DRAWN CHECKED DATE 02-14-2023

SITE PLAN 500 A 101 SCALE: 1/32"=1'-0" 6

A#: 03-122716

FILE NO: 19-91

ROSEMEAD CA 91770

4515 ENCINITA AVENUE

NAC NO 161-21043

DATE 02-14-2023

EQUAL

CONT. ELASTOMERIC SEALANT ----

WATERTIGHT UMBRELLA PVC —— PREFAB PIPE FLASHING OR

(E) ROOF SHEATHING ——

4X BLKG

24" PROVIDE ROOF PATCH TO

 $\bigcirc$ 

NOTE: SEE 1/S4.02 FOR MORE INFORMATION

EXISTING ROOFING SYSTEM

ALIGN RAILS TO CENTER OF POST

> 3/16 ✓ POST TO PIPE

—— 2" DIA. STD. HOT DIPPED GALV. STEEL PIPE

— 3/4" DIA. STD. HOT DIPPED GALV. STEEL PIPE - TYP.

— 2" DIA. GALVINIZED STL. POSTS THROUGH ROOF@ 4'-0" O.C. MAX.

OVIDE ROOF PATCH TO MATCH

ROOFING SYSTEM (TREMCO)

DRAWBAND

STORM COLLAR, SET IN MASTIC, PRIME FLANGE

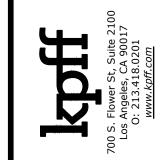
— 2" DIA. GALVINIZED STL. POSTS THROUGH ROOF@ 4'-0" O.C. MAX.

— MIN. 22 GA. CALV. SM BOOT

— PLATE PER 1/S4.02

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

11-17-202





EAD SCHOOL DISTRICT
- ENCINITA ELEMENTARY SCHOOL
REPLACEMENT AT BUILDINGS E,F AND G

ROSEMEAD
SCHOOL DISTRICT
PARK ROSEMEAD

NACHI NACHI

NAC NO 161-21043

FILE

DRAWN CC

CHECKED EMB/AL

DATE 11-17-2022

SHEET INDEX, SYMBOLS AND ABBREVIATIONS

S0.01

THICKNESS

2" NOM. AND SMALLER
LARGER THAN 2" NOM.

GRADE NO. 1
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 PS1 ALL PANELS SHALL BEAR LEGIBLE DFPA STAMPS.
- 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.
- 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 2304.9.1 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.

DOLT DIAMETED

BOLT DIAMETER	1/2"	5/8"	3/4"	//8 <sup></sup>	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:

CI.	
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.
- 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.
- 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:

OF 20 PSF (REDUCIBLE)

2. <u>SNOW LOADS:</u>

SNOW LOADS ARE IN ACCORDANCE WITH SECTION 1608A OF THE CODE. GROUND SNOW LOAD, Pg = ZERO

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

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

 $S_S = 1.966g$   $S_1 = 0.712g$  $S_{D1} = 0.807g$ 

= 1.573g

SITE CLASS = D

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<sub>DS</sub> = 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. <u>FLOOD DESIGN DATA:</u>

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.
- 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.
- 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.

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

CONSTRUCTION STAGES

ELEMENTS/CONNECTIONS TO BE OBSERVED

a. ROOF FRAMING

CONNECTORS / STRAPS

**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.
  - 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.
- 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.

- 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.
- 3. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING: 2019 CALIFORNIA BUILDING CODE, PART 2A, REFERRED TO HERE AS "THE CODE",

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.

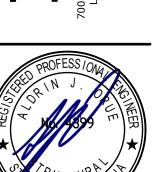
- SEE ARCHITECTURAL DRAWINGS FOR THE FOLLOWING:
- a. SIZE AND LOCATION OF ALL DOOR AND WINDOW OPENINGS, EXCEPT
- b. SIZE AND LOCATION OF ALL INTERIOR AND EXTERIOR NON-BEARING
- c. SIZE AND LOCATION OF ALL CONCRETE CURBS, EQUIPMENT PADS, PITS, FLOOR DRAINS, SLOPES, DEPRESSED AREAS, CHANGE IN LEVEL, CHAMFERS, GROOVES, INSERTS, ETC.
- d. SIZE AND LOCATION OF ALL FLOOR AND ROOF OPENINGS EXCEPT
- e. FLOOR AND ROOF FINISHES.
- f. DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS.
- 8. SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR THE FOLLOWING:
- a. PIPE RUNS, SLEEVES, HANGERS, TRENCHES, WALL AND SLAB OPENINGS, ETC., EXCEPT AS SHOWN OR NOTED.
- b. ELECTRICAL CONDUIT RUNS, BOXES, OUTLETS IN WALLS AND SLABS.
- c. CONCRETE INSERTS FOR ELECTRICAL, MECHANICAL OR PLUMBING FIXTURES.
- d. SIZE AND LOCATION OF MACHINE OR EQUIPMENT BASES, ANCHOR BOLTS FOR MOTOR MOUNTS.
- 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.
  - 2. ASTM SPECIFICATIONS ON THE DRAWINGS SHALL BE OF THE LATEST REVISION.
  - 3. 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.
  - 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#: 03-122716

11-17-202;





**J**C

ROSEMEAD SCHOOL DISTRICT

RSD - ENCINITA ELEMENTARY SCHC

HVAC REPLACEMENT AT BUILDINGS E,F AND G

ROSEMEAD
SCHOOL DISTRICT
PARK ROSEMEAD
3907 ROSEMEAD BOULEVARD

ROSEMEAD, CA 91770

ARCHITECTURE

161-21043 /N CC

11-17-2022

STRUCTURAL GENERAL

S0.02

CHECKED EMB/AL

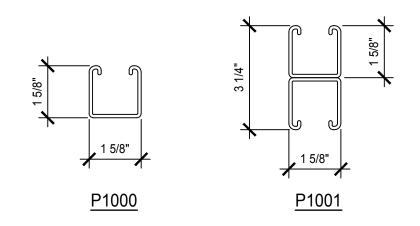
#### UNISTRUT METAL FRAMING

- 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.
- 2. 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.
- 3. ALL FITTINGS SHALL BE FABRICATED FROM STEEL CONFORMING TO ONE OF THE FOLLOWING ASTM SPECIFICATIONS:
  A 575, A 576, A 36 OR A 635.
- 4. ALL UNISTRUT MEMBERS AND FITTINGS SHALL BE HOT DIP GALVANIZED, UNO.
- 5. AREAS OF UNISTRUT MEMBERS WHERE GALVANIZATION HAS BEEN REMOVED TO ALLOW FOR WELDING SHALL BE COATED WITH ZINC-RICH, GALVANIZING PAINT AFTER WELDING.
- 6. MINIMUM UNISTRUT PROPERTIES SHALL BE AS FOLLOWS:

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

#### 7. BOLT TORQUE REQUIREMENTS:

BOLT SIZE	1/4"	5/ <sub>16</sub> "	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.
- 2. THE SPECIAL INSPECTOR MUST BE CERTIFIED BY DIVISION OF THE STATE ARCHITECT (DSA), IN THE CATEGORY OF WORK REQUIRED TO HAVE SPECIAL INSPECTION.
- 3. THE SPECIAL INSPECTORS AND TESTING FIRM MUST BE HIRED BY THE OWNER OR OWNER'S REPRESENTATIVE.
- 4. 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
- 5. SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 1707A OF THE CODE FOR THE FOLLOWING ITEMS:

THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION.

- a) 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.
- b) 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
- c) MECHANICAL AND ELECTRICAL COMPONENTS (SECTION 1707A.7 OF THE CODE)
- i. PERIOD SPECIAL INSPECTION IS REQUIRED DURING THE ANCHORAGE OF ELECTRICAL EQUIPMENT FOR EMERGENCY OR STANDBY POWER SYSTEMS.
- ii. PERIOD SPECIAL INSPECTION IS REQUIRED DURING THE INSTALLATION OF ANCHORAGE OF OTHER ELECTRICAL EQUIPMENT IN THE STRUCTURE.
- iii. PERIOD SPECIAL INSPECTION IS REQUIRED DURING THE INSTALLATION OF VIBRATION ISOLATION SYSTEMS IN THE STRUCTURE.
- 6. STRUCTURAL TESTING FOR SEISMIC RESISTANCE SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 1708A OF THE CODE FOR THE FOLLOWING ITEMS:
  - a) 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:
    - i. THE ACTUAL YIELD STRENGTH BASED ON MILL TESTS DOES NOT EXCEED fy BY MORE THAN 18,000 PSI.
  - ii. THE RATIO OF THE ACTUAL TENSILE STRENGTH TO THE ACTUAL YIELD STRENGTH IS NOT LESS THAN 1.25.
  - b) 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.

- 1. EXPANSION ANCHORS.\*
- 2. ADHESIVE ANCHORS.\*
- 3. 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

11-17-202 01-31-202





ROSEMEAD SCHOOL DISTRICT

RSD - ENCINITA ELEMENTARY SCHOOI

HVAC REPLACEMENT AT BUILDINGS E,F AND G

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

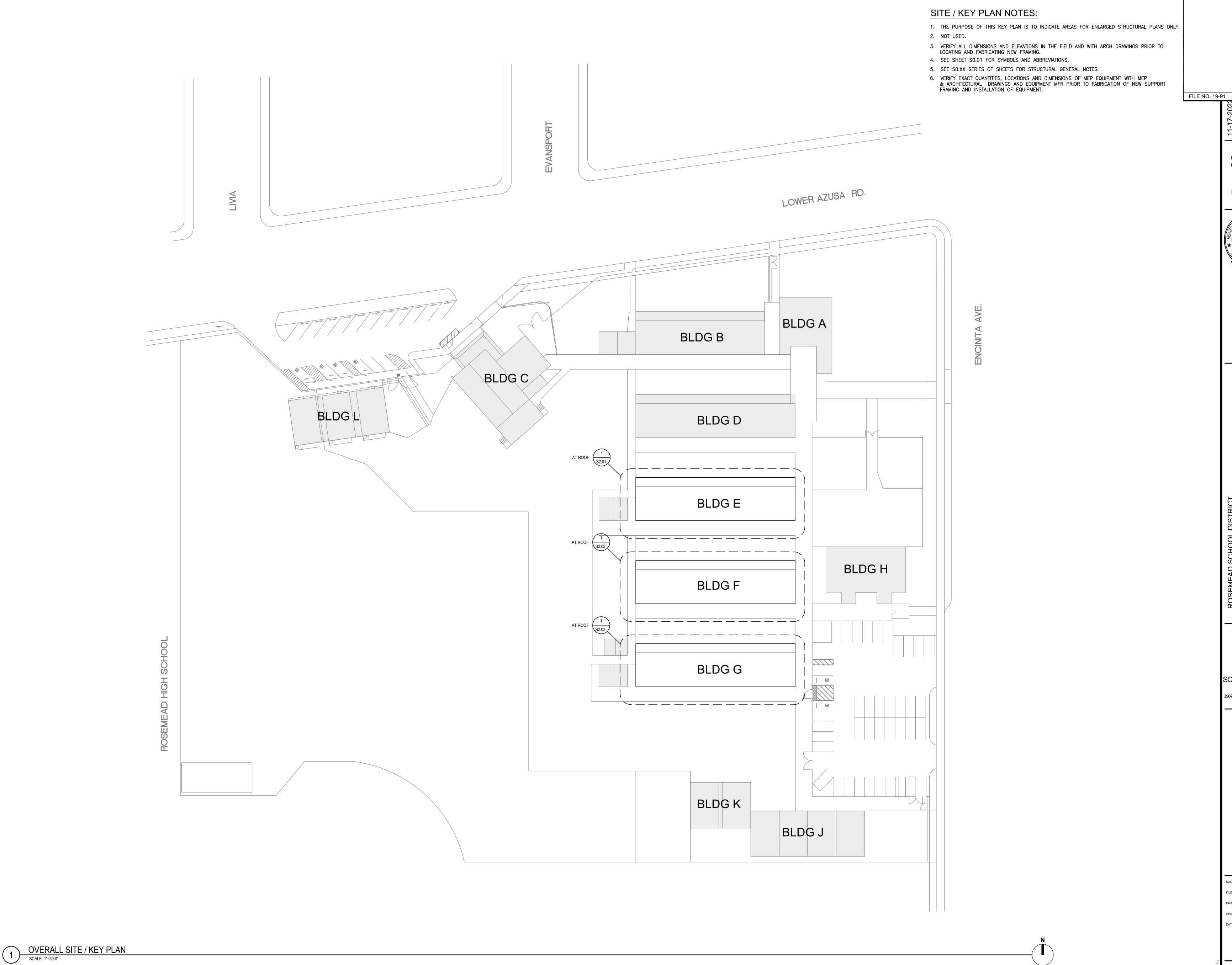
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IAC NO 161-21043

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A#: 03-122716

DISTRICT

TA ELEMENTARY SCHO

ENT AT BUILDINGS E,F AND G

RSD

ROSEMEAD
SCHOOL DISTRICT
PARK ROSEMEAD
3907 ROSEMEAD BOULEVARD
ROSEMEAD CA 91770

MACHITECTURE

NAC NO 161-21043
FILE
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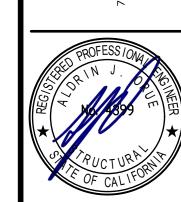
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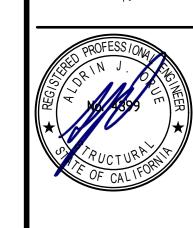
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DATE 11-17-2022

OVERALL SITE / KEY PLAN

S1 0'





NAC NO 161-21043

BUILDING E ROOF FRAMING PLAN

— (E) 1" DIAGONAL SHEATHING, TYP AT LOW ROOF — (E) 2 1/2"Ø STD PIPE (BELOW) 28'-2" (E) L 3/8x5x3 1/2, TYP (E) BRIDGING PER NOTE #7 (E) 15 I 42.9 (LOW) (E) 15 I 42.9 (LOW) (E) 15 I 42.9 (LOW) (E) 5/8" PLYWOOD SHEATHING, TYP AT COVERED WALKWAY, — (E) 6x6 WF 15.5 COL, TYP RTU UNIT PER MECH, TYP (SEE MECH EQUIP NOTES) ADD (1) 2x12 JOIST SISTERED TO ALL (E) JOISTS UNDER UNIT, (3) (E) JOISTS MINIMUM, TYP AT EA UNIT UNO —— (E) 3"Ø STD PIPE (E) 3 5/8"x6 1/2" (E) 3 5/8"x6 1/2" — (E) 1" DIAGONAL SHEATHING, TYP AT HIGH ROOF (E) 3"Ø STD PIPE — (E) 5/8" PLYWOOD SHEATHING, TYP AT COVERED WALKWAY

#### 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 DSA.
- 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.

BLDG E - ROOF FRAMING PLAN

SCALE = 1/8"=1'-0"

- 9. SEE S0.XX SERIES OF SHEETS FOR STRUCTURAL GENERAL NOTES.
- 10. SEE S4.XX SERIES OF SHEETS FOR EQUIPMENT SUPPORT DETAILS.

#### MECHANICAL EQUIPMENT NOTES:



- 2. 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.
- 3. 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.
- 4. 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

BLDG B BLDG D BLDG E

KEY PLAN 🕀

BLDG J

BLDG B

BLDG D

BLDG E

KEY PLAN 🕀

BLDG J

NAC NO 161-21043

BUILDING F ROOF FRAMING PLAN

— (E) 1" DIAGONAL SHEATHING, TYP AT LOW ROOF — (E) 2 1/2"Ø STD PIPE (BELOW) (E) L 3/8x5x3 1/2, TYP (E) BRIDGING PER NOTE #7 (E) 6x6 WF 15.5 COL, TYP (E) 15 I 42.9 (LOW) (E) 15 I 42.9 (LOW) (E) 15 I 42.9 (LOW) (E) 5/8" PLYWOOD SHEATHING, TYP AT COVERED WALKWAY, RTU UNIT PER MECH, TYP (SEE MECH EQUIP NOTES) ADD (1) 2x12 JOIST SISTERED TO ALL (E) JOISTS UNDER UNIT, (3) (E) JOISTS MINIMUM, TYP AT EA UNIT UNO ---(E) 3"Ø STD PIPE (E) 3 5/8"x6 1/2" (E) 3 5/8"x6 1/2" — (E) 1" DIAGONAL SHEATHING, TYP AT HIGH ROOF — (E) 5/8" PLYWOOD SHEATHING, TYP AT COVERED WALKWAY

#### 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 DSA.
- 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.

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

- 9. SEE S0.XX SERIES OF SHEETS FOR STRUCTURAL GENERAL NOTES. 10. SEE S4.XX SERIES OF SHEETS FOR EQUIPMENT SUPPORT DETAILS.

#### MECHANICAL EQUIPMENT NOTES:

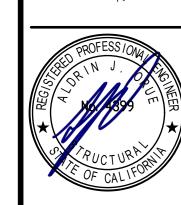


- 2. VERIFY EXACT QUANTITIES, LOCATIONS AND/OR DIMENSIONS OF MEP EQUIPMENT WITH MEP & ARCHITECTURAL DRAWINGS AND EQUIPMENT MFR PRIOR TO FABRICATION OF NEW SUPPORT FRAMING AND INSTALLATION OF EQUIPMENT.
- 3. ALL (N) DUCTS SHALL RUN THROUGH (E) ROOF AND WALL OPENINGS IN (E) WOOD STUD WALLS, TYP, UNO. NO (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.
- 4. IF PIPING FROM MECH UNIT REQUIRE CORE THRU (E) ROOF OR WALL SHEATHING (2 INCH MAX JOISTS OR STUDS.

#### **EQUIPMENT SCHEDULE**

RTU UNITS			
MARK	OPERATING WEIGHT LBS.	DETAIL REFERENCE	REMARKS
RTU-E11	860	4/\$4.01	SEE MECH FOR ADDL INFORMATION
RTU-E12	860	4/S4.01	SEE MECH FOR ADDL INFORMATION
RTU-E13	860	4/S4.01	SEE MECH FOR ADDL INFORMATION
RTU-E14	860	4/S4.01	SEE MECH FOR ADDL INFORMATION

DIAMETER), CORE SHALL BE LOCATED BETWEEN ADJACENT (E) JOISTS OR STUDS AND SHALL NOT CUT



BLDG B

BLDG D

BLDG E

KEY PLAN 🕀

BLDG J

NAC NO 161-21043

BUILDING G ROOF FRAMING PLAN

— (E) 1" DIAGONAL SHEATHING, TYP AT LOW ROOF — (E) 2 1/2"Ø STD PIPE (BELOW) (E) L 3/8x5x3 1/2, TYP (E) BRIDGING PER NOTE #7 (E) 6x6 WF 15.5 COL, TYP (E) 15 I 42.9 (LOW) (E) 15 I 42.9 (LOW) (E) 15 I 42.9 (LOW) (E) 5/8" PLYWOOD SHEATHING, TYP AT COVERED WALKWAY, RTU UNIT PER MECH, TYP (SEE MECH E18 EQUIP NOTES) ADD (1) 2x12 JOIST SISTERED TO ALL (E) JOISTS UNDER UNIT, (3) (E) JOISTS MINIMUM, TYP AT EA UNIT UNO — (E) 3"Ø STD PIPE (E) 3 5/8"x6 1/2" (E) 3 5/8"x6 1/2" — (E) 1" DIAGONAL SHEATHING, TYP AT HIGH ROOF (E) 3"Ø STD PIPE — (E) 5/8" PLYWOOD SHEATHING, TYP AT COVERED WALKWAY

#### 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 DSA.
- 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.

BLDG G - ROOF FRAMING PLAN

SCALE = 1/8"=1'-0"

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

9. SEE S0.XX SERIES OF SHEETS FOR STRUCTURAL GENERAL NOTES.

#### MECHANICAL EQUIPMENT NOTES:

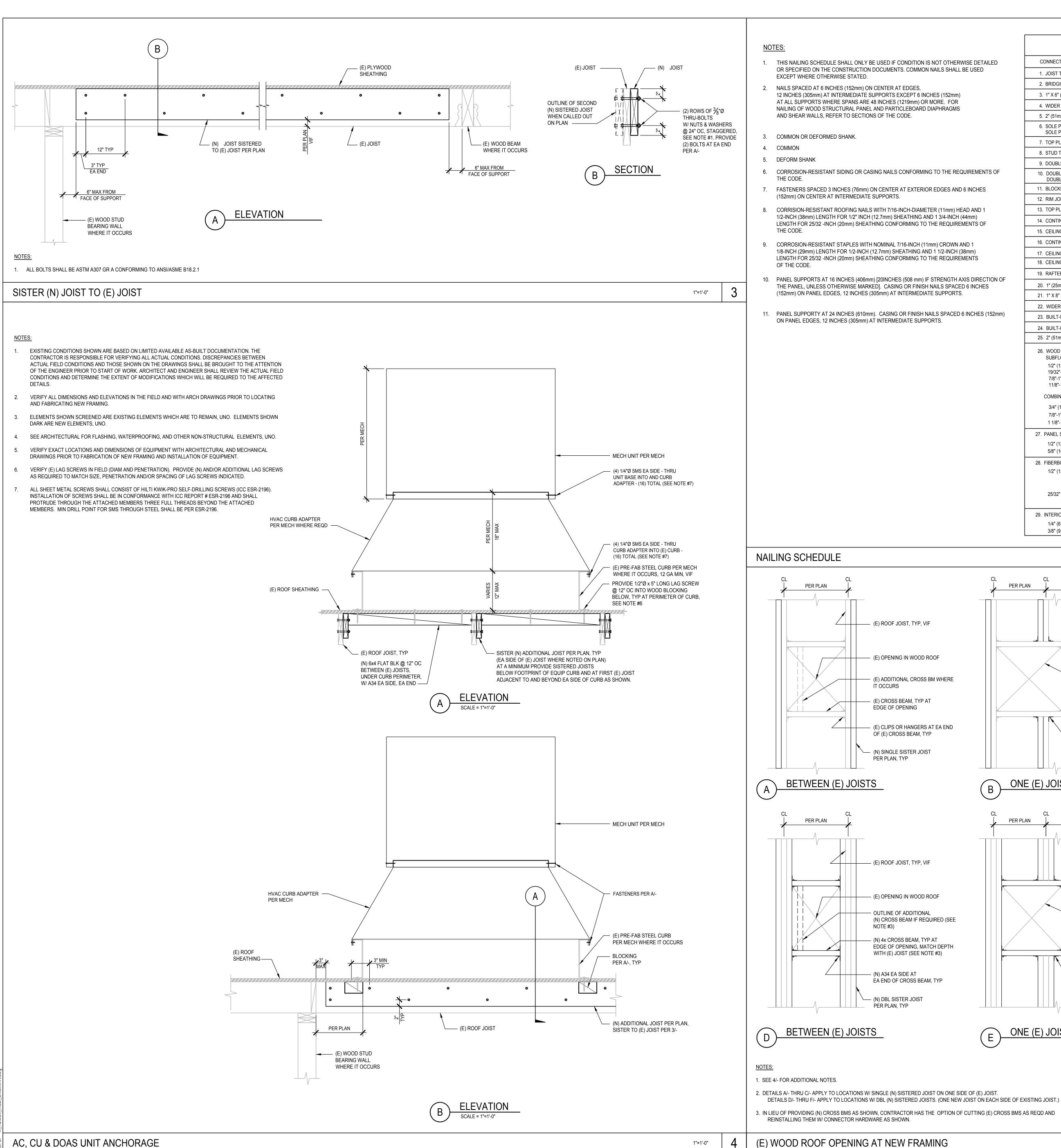


- 2. VERIFY EXACT QUANTITIES, LOCATIONS AND/OR DIMENSIONS OF MEP EQUIPMENT WITH MEP & ARCHITECTURAL DRAWINGS AND EQUIPMENT MFR PRIOR TO FABRICATION OF NEW SUPPORT FRAMING AND INSTALLATION OF EQUIPMENT.
- 3. ALL (N) DUCTS SHALL RUN THROUGH (E) ROOF AND WALL OPENINGS IN (E) WOOD STUD WALLS, TYP, UNO. NO (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.
- 4. IF PIPING FROM MECH UNIT REQUIRE CORE THRU (E) ROOF OR WALL SHEATHING (2 INCH MAX JOISTS OR STUDS.

#### **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/\$4.01	SEE MECH FOR ADDL INFORMATION	
RTU-E17	860	4/\$4.01	SEE MECH FOR ADDL INFORMATION	
RTU-E18	860	4/S4.01	SEE MECH FOR ADDL INFORMATION	

DIAMETER), CORE SHALL BE LOCATED BETWEEN ADJACENT (E) JOISTS OR STUDS AND SHALL NOT CUT



NAILING SCHEDULE 1. THIS NAILING SCHEDULE SHALL ONLY BE USED IF CONDITION IS NOT OTHERWISE DETAILED CONNECTION NAILING<sup>1</sup> OR SPECIFIED ON THE CONSTRUCTION DOCUMENTS. COMMON NAILS SHALL BE USED 3-8d 1. JOIST TO SILL OR GIRDER, TOENAIL EXCEPT WHERE OTHERWISE STATED. 2-8d 2. BRIDGING TO JOIST, TOENAIL EACH END 2. NAILS SPACED AT 6 INCHES (152mm) ON CENTER AT EDGES, 2-8d 12 INCHES (305mm) AT INTERMEDIATE SUPPORTS EXCEPT 6 INCHES (152mm) 3. 1" X 6" (25mm X 152mm) SUBFLOOR OR LESS TO EACH JOIST, FACE NAIL AT ALL SUPPORTS WHERE SPANS ARE 48 INCHES (1219mm) OR MORE. FOR 3-8d 4. WIDER THAN 1" X 6" (25mm X 152mm) SUBFLOOR TO EACH JOIST, FACE NAIL NAILING OF WOOD STRUCTURAL PANEL AND PARTICLEBOARD DIAPHRAGMS 2-16d AND SHEAR WALLS, REFER TO SECTIONS OF THE CODE. 5. 2" (51mm) SUBFLOOR TO JOIST OR GIRDER, BLIND AND FACE NAIL 6. SOLE PLATE TO JOIST OR BLOCKING, TYPICAL FACE NAIL 16d AT 16" (406mm) OC 3-16d PER 16"(406 mm) SOLE PLATE TO JOIST OR BLOCKING, AT BRACED WALL PANELS COMMON OR DEFORMED SHANK. 7. TOP PLATE TO STUD, END NAIL 2-16d 8. STUD TO SOLE PLATE 4-8d, TOENAIL OR 2-16d, END NAIL DEFORM SHANK 9. DOUBLE STUDS, FACE NAIL 16d AT 24" (610mm) OC 6. CORROSION-RESISTANT SIDING OR CASING NAILS CONFORMING TO THE REQUIREMENTS OF 10. DOUBLE TOP PLATES, TYPICAL FACE NAIL 16d AT 16" (406mm) OC DOUBLE TOP PLATES, LAP SPLICE 7. FASTENERS SPACED 3 INCHES (76mm) ON CENTER AT EXTERIOR EDGES AND 6 INCHES 11. BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOENAIL 3-8d (152mm) ON CENTER AT INTERMEDIATE SUPPORTS. 8d AT 6" (152mm) 0C 12. RIM JOIST TO TOP PLATE, TOENAIL 8. CORRISION-RESISTANT ROOFING NAILS WITH 7/16-INCH-DIAMETER (11mm) HEAD AND 1 13. TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL 2-16d 1/2-INCH (38mm) LENGTH FOR 1/2" INCH (12.7mm) SHEATHING AND 1 3/4-INCH (44mm) 14. CONTINUOUS HEADER, TWO PIECES 16d AT 16" (406mm) OC ALONG EACH EDGE LENGTH FOR 25/32 -INCH (20mm) SHEATHING CONFORMING TO THE REQUIREMENTS OF 15. CEILING JOISTS TO PLATE, TOENAIL 16. CONTINUOUS HEADER TO STUD, TOENAIL 4-8d 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) 17. CEILING JOIST, LAPS OVER PARTITIONS, FACE NAIL 3-16d LENGTH FOR 25/32 -INCH (20mm) SHEATHING CONFORMING TO THE REQUIREMENTS 18. CEILING JOISTS TO PARELLEL RAFTERS, FACE NAIL 3-16d OF THE CODE. 19. RAFTER TO PLATE, TOENAIL 3-8d PANEL SUPPORTS AT 16 INCHES (406mm) [20INCHES (508 mm) IF STRENGTH AXIS DIRECTION OF 20. 1" (25mm) BRACE TO EACH STUD AND PLATE, FACE NAIL THE PANEL, UNLESS OTHERWISE MARKED]. CASING OR FINISH NAILS SPACED 6 INCHES (152mm) ON PANEL EDGES, 12 INCHES (305mm) AT INTERMEDIATE SUPPORTS. 21. 1" X 8" (25mm X 203mm) SHEATHING OR LESS TO EACH BEARING, FACE NAIL 2-8d 22. WIDER THAN 1" X 8" (25mm X 203mm) SHEATHING TO EACH BEARING, FACE NAIL 3-8d 11. PANEL SUPPORTY AT 24 INCHES (610mm). CASING OR FINISH NAILS SPACED 6 INCHES (152mm) 16d AT 24" (610mm) OC 23. BUILT-UP CORNER STUDS ON PANEL EDGES, 12 INCHES (305mm) AT INTERMEDIATE SUPPORTS. 20d AT 32" (813mm) OC AT TOP AND BOTTOM AND STAGGERED 2-20d AT ENDS AND AT EACH SPLICE 24. BUILT-UP GIRDER AND BEAMS 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 19/32"-3/4" (15mm-19mm) 7/8"-1" (22mm-25mm) 11/8"-11/4" (29mm-32mm) COMBINATION SUBFLOOR-UNDERLAYMENT (TO FRAMING): 3/4" (19mm) AND LESS 7/8"-1" (22mm-25mm) 10d<sup>4</sup> OR 8d<sup>5</sup> 1 1/8"-1 1/4" (29mm-32mm) 27. PANEL SIDING (TO FRAMING):

1/2" (12.7mm) OR LESS

28. FIBERBOARD SHEATHING:

5/8" (16mm)

25/32" (20mm)

29. INTERIOR PANELING

1/4" (6.4mm)

3/8" (9.5mm)

NAILING SCHEDULE NONE PER PLAN PER PLAN PER PLAN PER PLAN PER PLAN — (E) ROOF JOIST, TYP, VIF (E) ROOF JOIST, TYP, VIF (E) ROOF JOIST, TYP, VIF — (E) OPENING IN WOOD ROOF - (E) ADDITIONAL CROSS BM WHERE — (E) OPENING IN WOOD ROOF — (E) OPENING IN WOOD ROOF IT OCCURS - (E) CROSS BEAM, TYP AT EDGE OF OPENING (E) CLIPS OR HANGERS AT (E) CLIPS OR HANGERS EA END (E) CLIPS OR HANGERS AT EA END EA END OF CROSS BEAM, TYP OF CROSS BEAM, TYP OF (E) CROSS BEAM, TYP - (E) CROSS BEAM, TYP AT - (E) CROSS BEAM, TYP AT EDGES OF OPENING (2) EDGES OF OPENINGP (N) SINGLE SISTER JOIST PER PLAN, TYP (N) SINGLE SISTER JOIST PER (N) SINGLE SISTER JOIST PER BETWEEN (E) JOISTS ONE (E) JOIST CUT (N) LUS JOIST HANGER TO (E) (N) LUS JOIST HANGER TO (E) CROSS BM, TYP PER PLAN PER PLAN PER PLAN PER PLAN PER PLAN — (E) ROOF JOIST, TYP, VIF - (E) ROOF JOIST, TYP, VIF - (E) ROOF JOIST, TYP, VIF —— (E) OPENING IN WOOD ROOF OUTLINE OF ADDITIONAL (N) CROSS BEAM IF REQUIRED (SEE (E) OPENING IN WOOD ROOF — (E) OPENING IN WOOD ROOF NOTE #3) - (N) 4x CROSS BEAM, TYP AT EDGE OF OPENING, MATCH DEPTH WITH (E) JOIST (SEE NOTE #3) (N) A34 EA SIDE AT EA END OF - (N) A34 EA SIDE AT EA END OF CROSS BEAM, TYP (N) A34 EA SIDE AT EA END OF CROSS BEAM, TYP - (N) 4x CROSS BEAM, TYP AT EDGES OF - (N) 4x CROSS BEAM, TYP AT (2) EDGES OPENING, MATCH DEPTH WITH (E) OF OPENING, MATCH DEPTH WITH (E) JOIST (SEE NOTE #3) JOIST (SEE NOTE #3) — (N) DBL SISTER JOIST PER PLAN, TYP - (N) DBL SISTER JOIST PER (N) DBL SISTER JOIST PER PLAN, TYP PLAN, TYP (N) LUS JOIST HANGER TO (E) BETWEEN (E) JOISTS - (N) LUS JOIST HANGER TO (E) ONE (E) JOIST CUT ONE (E) JOIST CUT CROSS BM, TYP CROSS BM, TYP 1. SEE 4/- FOR ADDITIONAL NOTES.

NO.11 ga<sup>8</sup>

NO.16 ga

NO.11 ga

NO.16 ga<sup>9</sup>

FILE NO: 19-91

A#: 03-122716

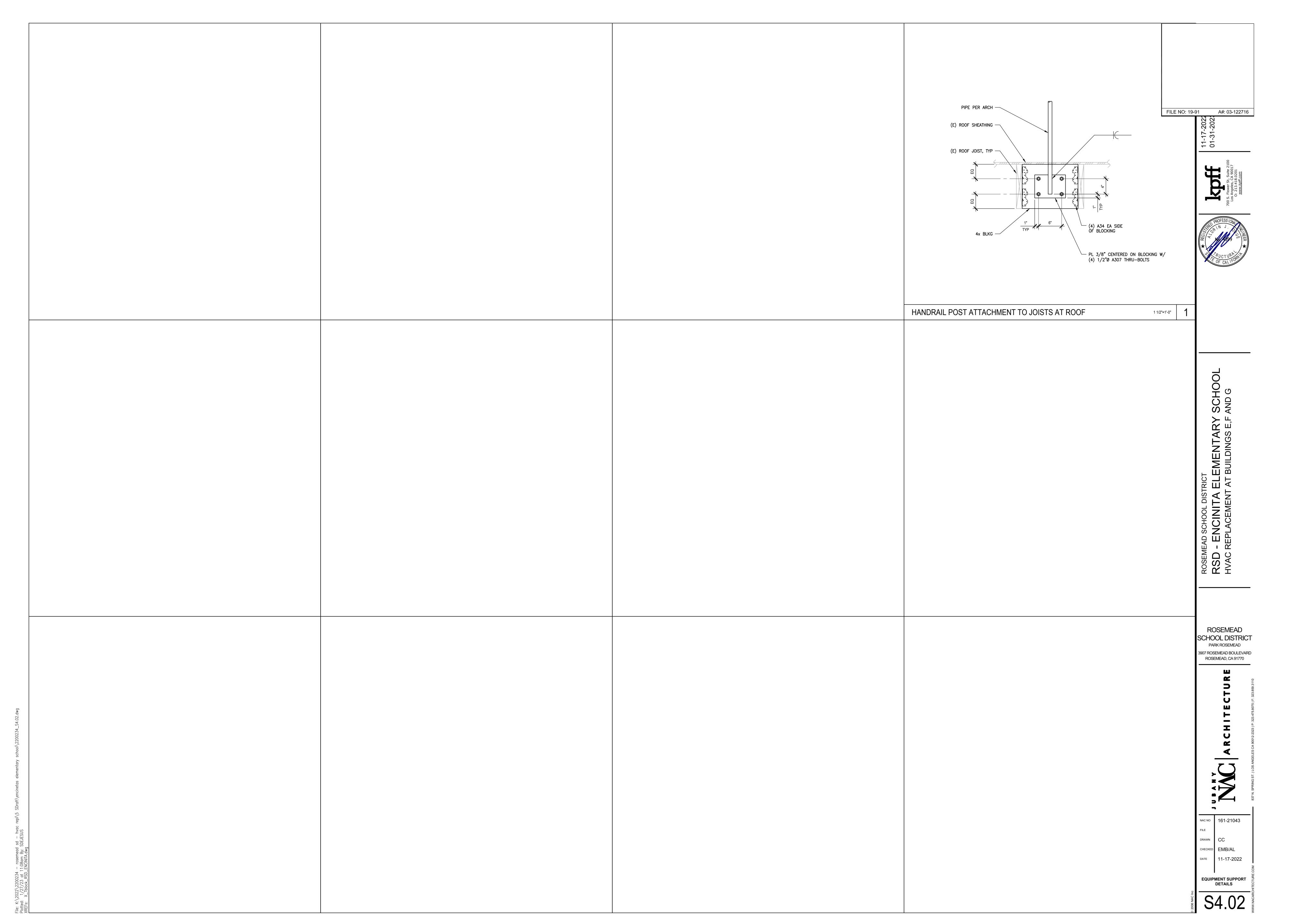
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ROSEMEAD SCHOOL DISTRICT PARK ROSEMEAD 3907 ROSEMEAD BOULEVARD ROSEMEAD, CA 91770

NAC NO 161-21043 11-17-2022

**EQUIPMENT SUPPORT** DETAILS

(E) WOOD ROOF OPENING AT NEW FRAMING



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

EXISTING LINEWORK

POINT OF CONNECTION

POINT OF DISCONNECTION

NEW 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 PARENTHESIS

FILTER

LOUVER

ACCESS DOOR OR ACCESS PANEL (AP) IN DUCTWORK

#### PIPING LEGEND

DESCRIPTION NEW PIPING (SIZE-SERVICE)  $\longleftarrow$ (E) 4" CHWR  $\longrightarrow$ EXISTING PIPING (SIZE-SERVICE) ELBOW FACING AWAY FROM VIEWER ELBOW FACING TOWARD VIEWER TEE FACING AWAY FROM VIEWER TEE FACING TOWARD VIEWER 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

#### **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
ВНР	BRAKE HORSEPOWER	MAX	MAXIMUM
BLDG	BUILDING	MBH	THOUSAND BTU PER HOUR
BOB	BOTTOM OF BEAM	MC	MECHANICAL CONTRACTOR
BOP	BOTTOM OF PIPE	MCA	MINIMUM CIRCUIT AMPS
BTU	BRITISH THERMAL UNIT	MH	MANHOLE
CFM	CUBIC FEET PER MINUTE	MIN	MINIMUM
CHWR	CHILLED WATER RETURN	MOCP	MAXIMUM OVERLOAD CIRCUIT PROTECT
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
СТ	COOLING TOWER	OBD	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 DIFFERENTI
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
EL	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
	FEET OR FOOT	VD	VOLUME DAMPER
FT			
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
НВ	HOSE BIBB	WC	WATER COLUMN
HD	HEAD	WG	WATER GAUGE
HHWR	HEATING HOT WATER RETURN	WPD	WATER PRESSURE DROP
	HEATING HOT WATER RETORN HEATING HOT WATER SUPPLY	WFD	WEIGHT
HHMMC		v V I	11 17 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
HHWS 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	<u>ABBREVIATION</u>	DESCRIPTION
A	ALARM	PS	PRESSURE SWITCH
AFMS	AIRFLOW MONITORING STATION	PT	PRESSURE TRANSMITTER
Al	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
HOA	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

TITLE 24 COMPLIANCE FORMS - ENCINITA

#### GENERAL NOTES

- 1. 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).
- 2. 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.
- 3. WHERE USED, THE TERM "PROVIDE" SHALL MEAN "FURNISH AND INSTALL".
- 4. IN THE EVENT OF A CONFLICT OR INCONSISTENCY BETWEEN ITEMS INDICATED ON DRAWINGS AND SPECIFICATIONS WITH CODE REQUIREMENTS, THE MORE STRINGENT STANDARD SHALL PREVAIL.
- 5. 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.
- 6. 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.
- 7. 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.
- 8. THIS CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES PRIOR TO FABRICATION, PURCHASE AND/OR INSTALLATION OF ALL WORK.
- 9. EXISTING MATERIALS THAT ARE REMOVED SHALL NOT BE REUSED IN NEW SYSTEMS, EXCEPT WHERE INDICATED AS BEING RELOCATED.
- 10. ALL EQUIPMENT SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 11. THIS CONTRACTOR SHALL NOT BORE, NOTCH, CUT, OR PENETRATE INTO A STRUCTURAL MEMBER WITHOUT WRITTEN APPROVAL FROM A DESIGNATED STRUCTURAL ENGINEER AND THE OWNER.
- 12. ALL PIPE ELBOWS SHALL BE LONG RADIUS UNLESS OTHERWISE SPECIFICALLY NOTED ON THE DRAWINGS.
- 13. 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.
- 14. 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.
- 15. 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.
- 16. MEP COMPONENT ANCHORAGE NOTE:

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:

#### 1. 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.
- 3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

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

- A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
- B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.
- THE ANCHORAGE OF ALL MECHANICAL COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.
- 17. 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 PREAPPROVED INSTALLATION GUIDE (E.G., OSHPD OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

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

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

MP MD PP E - OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM #) #\_\_\_\_\_

FILE NO: 19-91

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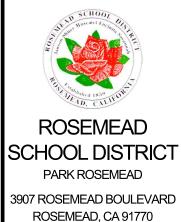
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SEMEAD SCHOOL DISTRICT

SD - ENCINITA ELEMENTARY SCHOO

AC REPLACEMENT AT BUILDINGS E,F AND G



ARCHITECTURE

NAC NO 161-21043

DRAWN JL

CHECKED SN

DATE 10-06-2022

GENERAL NOTES,
LEGENDS,
ABBREVIATIONS, AND

M001

						SUPPL	Y FAN			COOLING CAPACIT	Υ			ТО	TAL HEATING CAP	ACITY				ELECTRICAL							
MARK	MANUFACTURER & MODEL	LOCATION	TYPE	SERVICE	AIRFLOW	HP/(BHP)	ESP	RPM	TOTAL	SENSIBLE	TONS	SEER	INPUT	OUTPUT	ENTERING AIR	LEAVING AIR	THERMAL	VOLTAGE	PHASE	FLA	MCA	MOCP	OUTSIDE AIR CFM SETPOINT	OPERATING WEIGHT LBS.	CURB WEIGH LBS.	MAX OPERATING WEIGHT LBS.	REMARKS
					CFM	1117(01117)	LSF	Krivi	MBH	MBH	10113		MBH	MBH	°F D6	°F D6	EFFICIENCY	VOLTAGE	FTIASL	TLA	WCA	WOCF				WEIGHT EBG.	
RTU-E10	CARRIER 48GCGM05A2A5-0A0A0	ENCINITA BLDG E 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	1 3 4 5 8 10
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	1 3 4 5 8 10
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	1 3 4 5 8 10
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	1 3 4 5 8 10
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	1 3 4 5 8 10
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	1 3 4 5 8 10
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	1 3 4 5 8 10
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	1 3 4 5 8 10
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	1 3 4 5 8 10
1 UNIT SHA	_ BE VERTICAL DISCHARGE.			4 F	PROVIDE WITH 2" ME	ERV-13 FILTERS.					7 PROVI	DE WITH CA-CAR	-537-YRK-560-RT	AP-20 MICROME	TL CURB ADAPTEI	R. 10	EXISTING UNIT M	ODEL : CARRIER 4 URB ATTACHMEN	48NLT042. CONTI JT.	RACTOR TO FIELD	VERIFY MODEL	AND DIMENSIO	NS FOR 13	EXISTING UNIT N	MODEL : YORK [ ID DIMENSIONS	D1EG048. CONTRA S FOR ADAPTER CU	CTOR TO FIELD VERIFY RB ATTACHMENT.
2 UNIT SHA	_ BE HORIZONTAL DISCHARGE	E.		5 P	PROVIDE WITH 100%	6 OSA ECONOMIZ	ER WITH BARON	METRIC RELIEF.			8 PROVI	DE WITH CA-CAR	-537-CAR-005 MI	CROMETL CURB	ADAPTER.	11	EXISTING UNIT M		48HJD005, 48HD.	J006 OR 48HJD00 <sup>-</sup>	7. CONTRACTOR	TO FIELD VERIF	-Y 14	EXISTING UNIT N	MODEL : BARD F	RPM36B. CONTRAC	TOR TO FIELD VERIFY MODEL AND DIMENSIONS
3 PROVIDE CAPABILI	ITLE 24 COMPLIANT VENSTAR 7. REPLACE IN PLACE OF EXIS	2800 THERMOSTAT WI STING THERMOSTAT.	ITH ADJUSTABLE SETPOII	NT AND OVERRIDE 6 N	INIT DISCHARGE CO MOUNTING.	Onfiguration S	HALL MATCH EX	KISTING. NO ADAF	PTER CURB REQ	UIRED FOR			: CARRIER 48NLT ENSIONS FOR AD			12	EXISTING UNIT M	ODEL : CARRIER 4			O VERIFY MODEL	AND DIMENSIC	ONS FOR 15	PROVIDE UNIT C	N EXISTING 81"	JVIDE CDI 1959854- "X79" ROOF PLATF( I. ATTACH PER STR	1-9999-4000 OR EQUAL ADAPTER. DRM. PROVIDE JCTURAL.

PLUMBING PIPING MATERIALS SCHEDULE

4. PIPE PROTECTION: PROVIDE NON-CONDUCTING DIELECTRIC CONNECTIONS JOINING DISSIMILAR METALS.

. CONDENSATE DRAIN PIPING:

DRAIN PIPING:

B. GAS PIPING:

INSULATION OF CONDENSATE

TYPE 'L' COPPER TUBING, HARD DRAWN CONFORMING TO ASTM B 88, WITH WROUGHT COPPER SOLDER SWEAT FITTINGS AND

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 1¼" INCHES & LARGER. SEAL ALL JOINTS WITH THE FACTORY-APPLIED, SELF-SEAL LAP AND

SCHEDULE 40 BLACK STEEL PIPE CONFORMING TO ASTM A 53 WITH 150 PSIG MALLEABLE IRON THREADED FITTINGS. WELDED JOINTS FOR

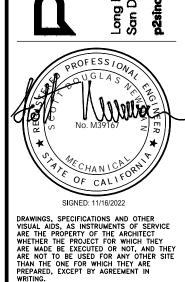
PIPE SIZES 2½" AND LARGER OR WELDED THROUGHOUT WHEN USED FOR MEDIUM PRESSURE. OUTDOOR PIPING EXPOSED TO ATMOSPHERE

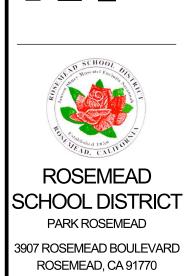
LEAD-FREE SOLDER JOINTS. ALL CONDENSATE DRAIN PIPING WITHIN THE BUILDING SHALL BE INSULATED.

BUTT STRIPS. JOHNS MANVILLE MICRO-LOK 'HP' OR EQUAL.

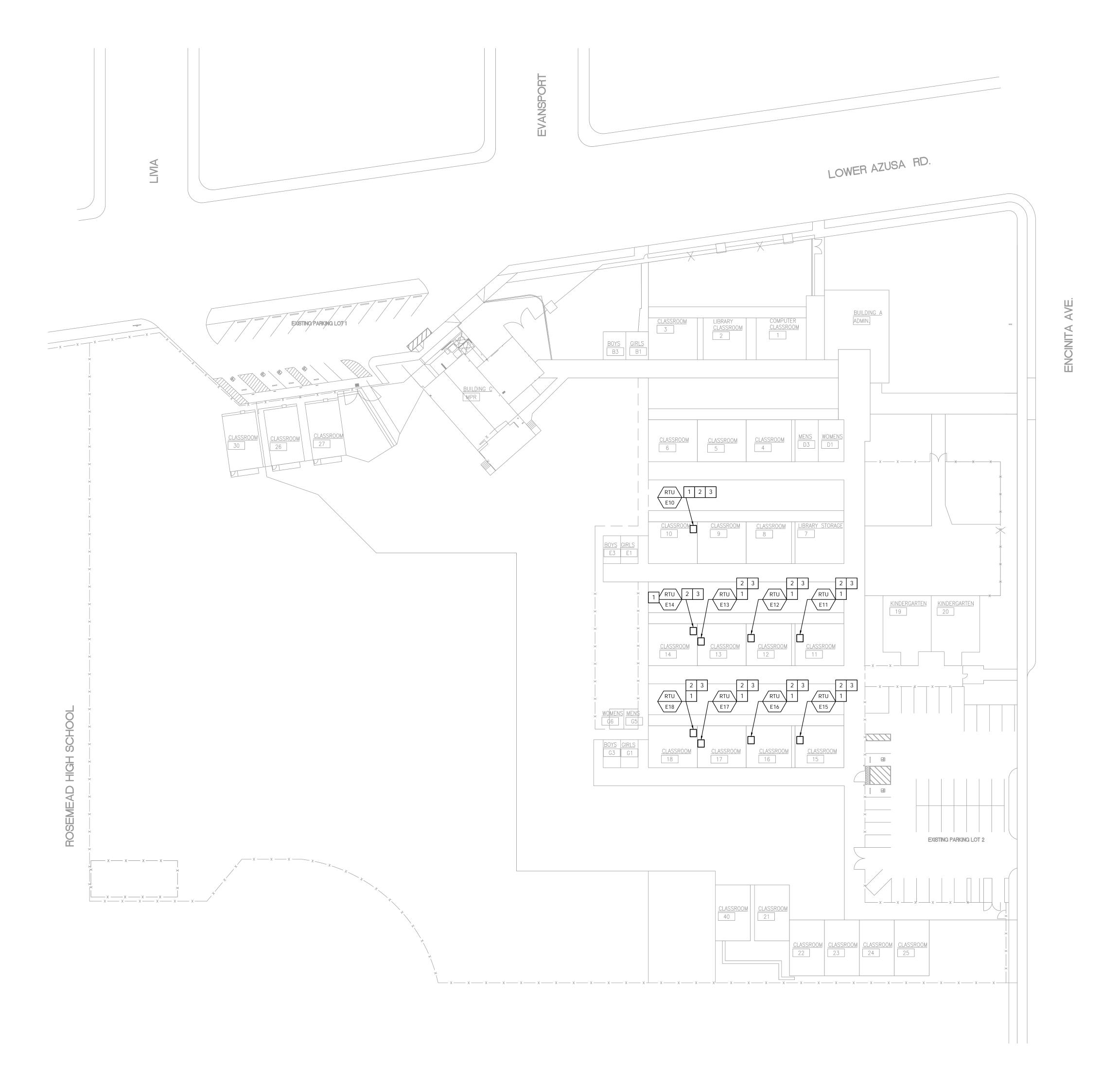
SHALL BE PAINTED WITH RUST INHIBITING PAINT.

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





SCHEDULES - ENCINITA



**GENERAL NOTES** 

1. 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** 

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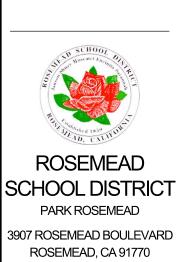
REPLACE EXISTING ROOFTOP UNIT WITH NEW EQUIPMENT IN SAME LOCATION ON ROOF PER DETAIL 1/M601. NEW UNIT TO MOUNT TO EXISTING CURB WITH CURB ADAPTER. PROVIDE 3/4" CD FROM A/C UNIT AND INTERCEPT (E) 3/4" CD AT ROOF. FIELD VERIFY LOCATION OF (E) CD PIPE AND EXTEND AS REQUIRED. REFER TO DETAIL 5/M601.

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.





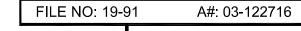


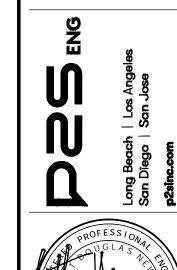


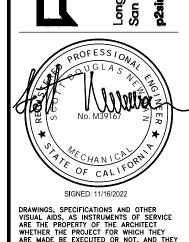
drawn **JL** CHECKED SN











1. 60 FT TALL BUILDING MAX

4. RISK CATAGORY III AND IV

155 MPH, 3-SECOND GUST

2. EXPOSURE C

5. IP = 1.56. SS = 2.50

7. FA = 1.2

MAX 20" VERIFY

14 GA MICROHOLD CLIPS. ATTACH TO CURB W/ #10 X 1" 7 TEKS SCREW. MIN. (5) EQUALLY SPACED PER LONG SIDE,

8 14 GA MICROHOLD CLIPS. ATTACH TO UNIT W/ #12 X 1-1/2" TEKS SCREW.

REFER TO STRUCTURAL PLANS FOR CALCULATIONS AND ADDITIONAL DETAILING.

(3) EQUALLY SPACED PER SHORT SIDE

9 EQUIPMENT BASE RAIL.

WIND SPEED

NAC NO 161-21043 drawn JL CHECKED SN 10-06-2022

DETAILS

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

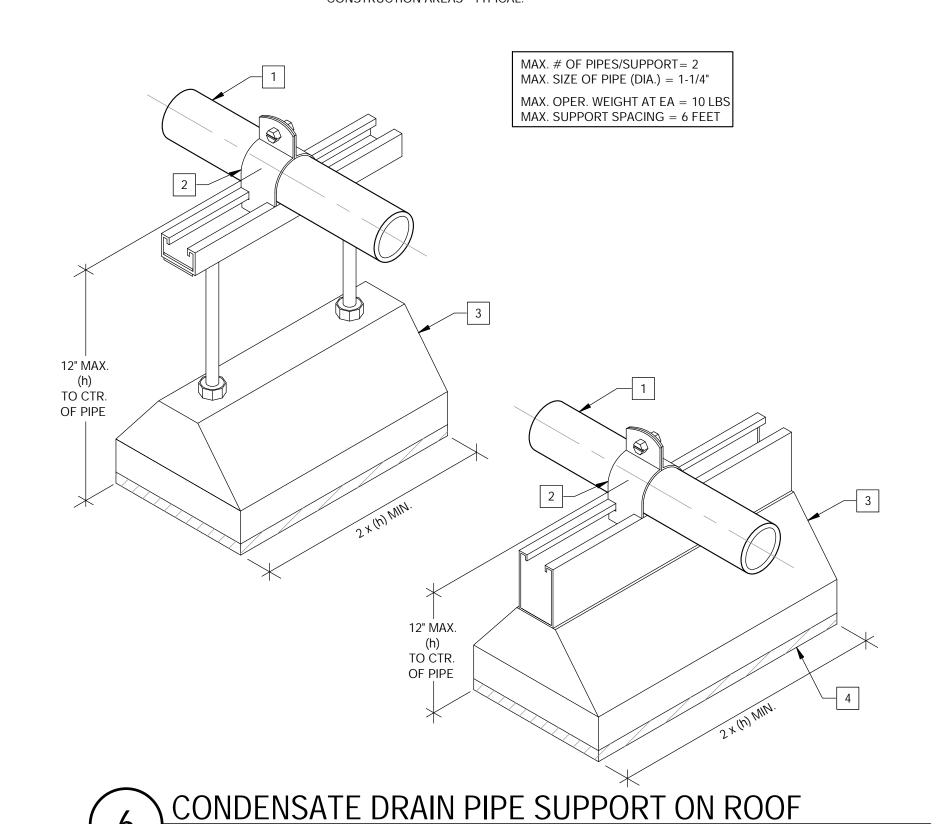
C. REFER TO STRUCTURAL DRAWINGS AND ARCHITECTURAL DRAWINGS FOR MAX ROOF SLOPE.

DETAIL NOTES PIPE AT ROOF - REFER TO SPECIFICATIONS FOR PIPE MATERIAL.

2 PIPE CLAMP - UNISTRUT P1113 OR EQUAL.

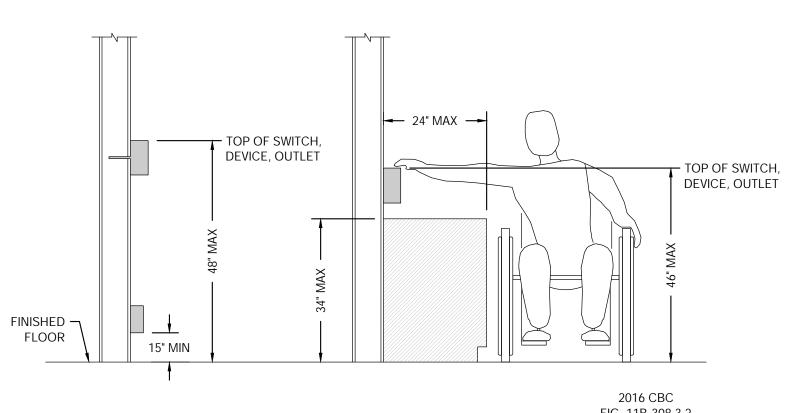
B-LINE C-PORT SERIES PIPE SUPPORT SYSTEM OR EQUAL.

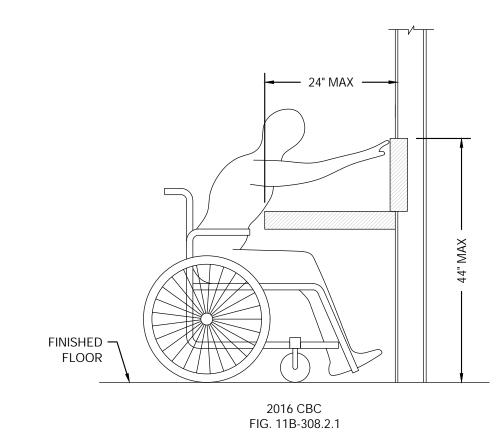
4 SET ON MASTIC OR RUBBER PADDING AT PVC ROOF CONSTRUCTION AREAS - TYPICAL.



— 5'-0" MAX.—— - RIGHT HAND LEFT HAND COUPLING CSA RATED FLEXIBLE CONNECTION MECH. EQUIPMENT - EXISTING PIPE PENETRATION THRU ROOF (E)ROOF DETAIL GENERAL NOTES

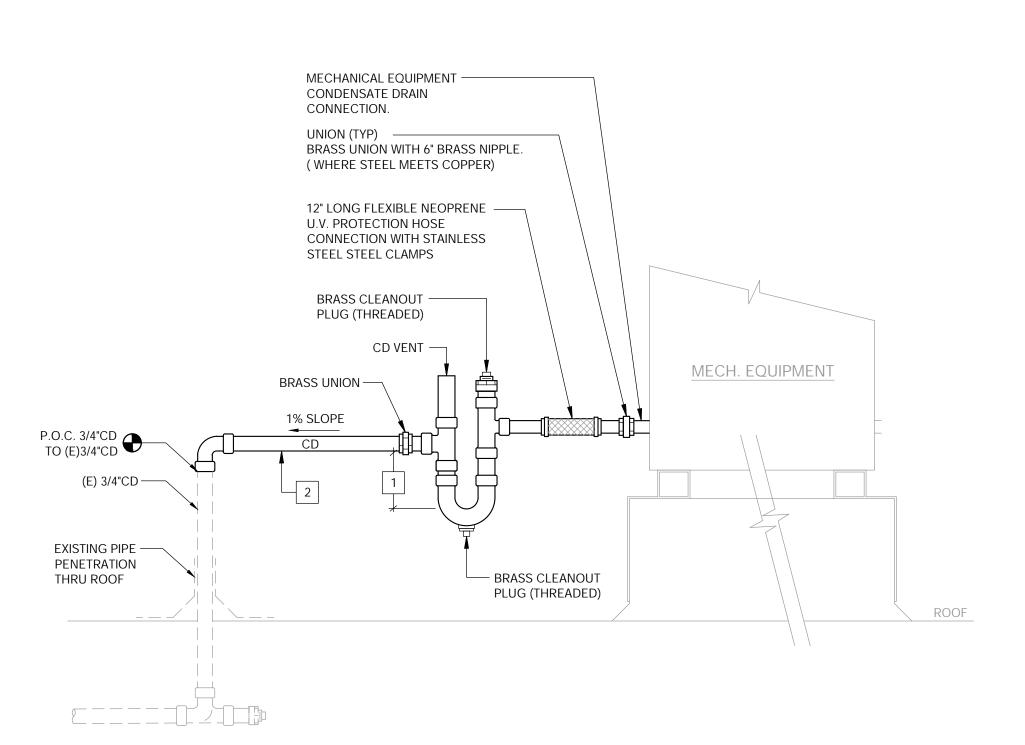
GAS CONNECTOR DETAIL

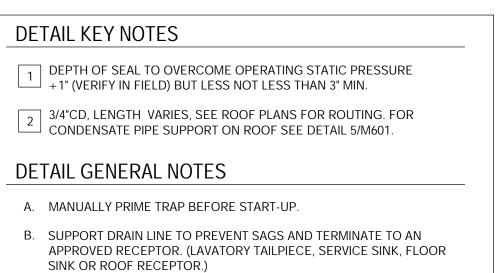




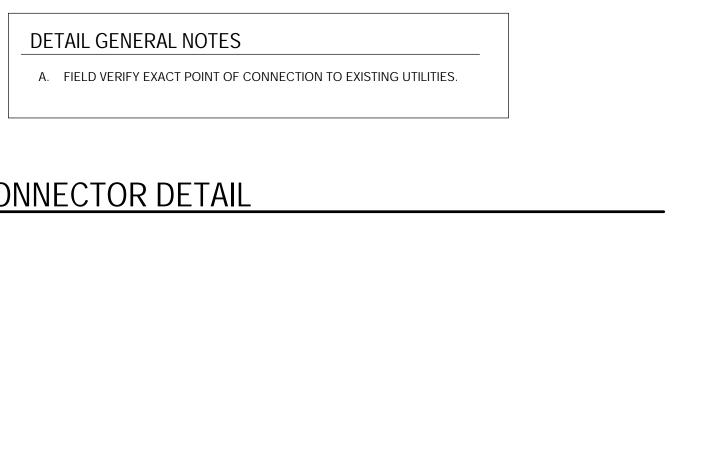
THIS DETAIL APPLIES TO MOUNTING OF ANY MECHANICAL AND ELECTRICAL DEVICE WHICH CONTAINS AN OPERABLE PART THAT IS ADJUSTABLE BY THE OCCUPANT. THIS DOES NOT APPLY TO SENSORS OR CONTROLS THAT ARE ONLY ADJUSTABLE THROUGH THE BUILDING AUTOMATION

MOUNTING HEIGHT OVER OBSTRUCTION





TYPICAL CONDENSATE DRAIN DETAIL



(E)WOOD SHEATHING -

(E)WOOD FRAMING -

EXISTING SUPPLY DUCT. CONNECT TO UNIT SUPPLY IN CURB AT POC SHOWN.

2 EXISTING RETURN DUCT. CONNECT TO UNIT RETURN CURB AT POC SHOWN.

4 MATCH EXISTING ANCHORAGE FROM UNIT TO CURB.

ROOFTOP UNIT INSTALLATION ON (E) CURB

3 EXISTING ROOF CURB AND FLASHING.

(E)ROOF SHEATHING -

EXISTING SUPPLY DUCT. CONNECT TO ADAPTER CURB AT POC SHOWN.

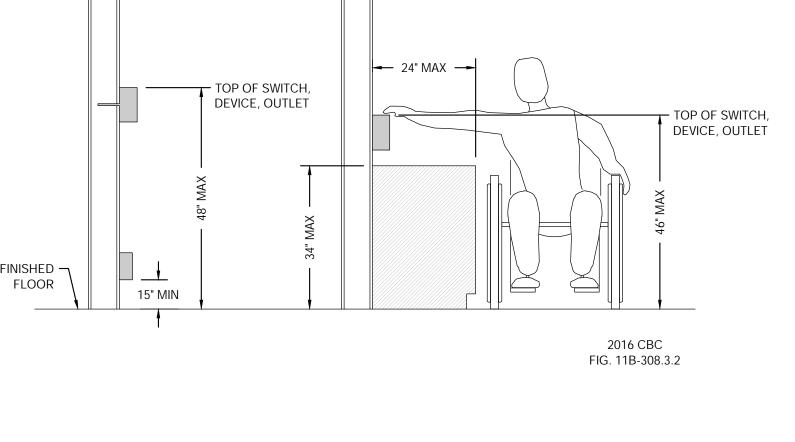
2 EXISTING RETURN DUCT. CONNECT TO ADAPTER CURB AT POC SHOWN.

14 GA FULLY ASSEMBLED, ADAPTOR CURB. MOUNT TO EXISTING CURB PER STRUCTURAL DRAWINGS. REFER TO MECHANICAL SCHEDULE AND DETAIL FOR ACCESSORY.

3 EXISTING ROOF CURB AND FLASHING.

6 INTERNAL INSULATION WITH GASKETING.

5 INTERNAL DUCT TRANSITIONS

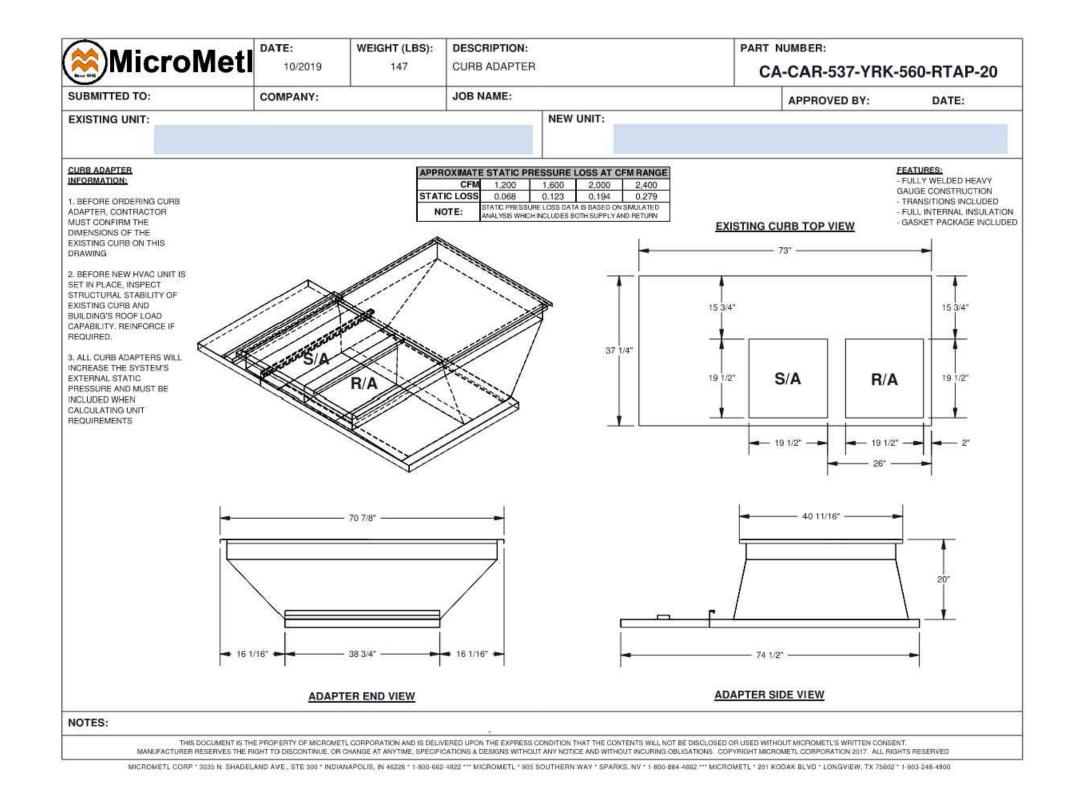


# SYSTEM (IE: TEMPERATURE AND HUMIDITY SENSORS).

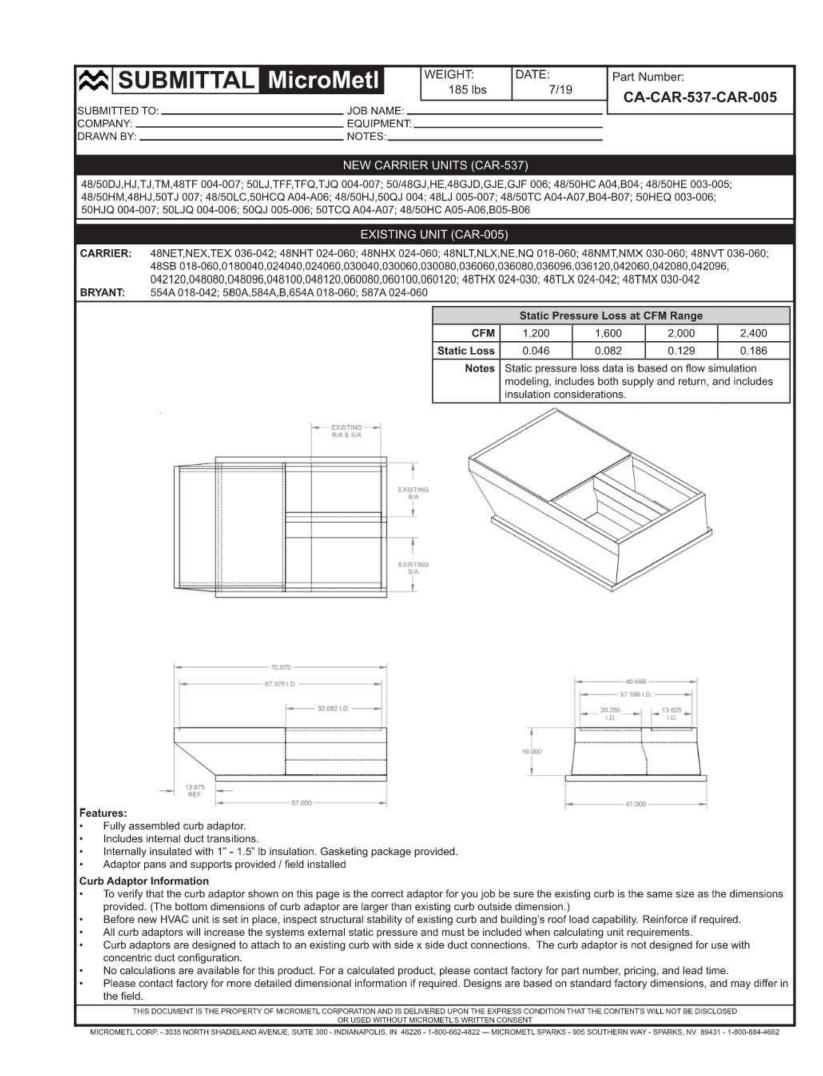


\\crystal.cdicurbs.com\eng\files\CURBS\_CURB\_ADAPTERS\1-XXXX-XXXX\_CURB\_ADAPTERS\1-9999-2022\1959854-1-9999-4000

4 CURB ADAPTER: CDI 1959854-1-999-4000



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



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

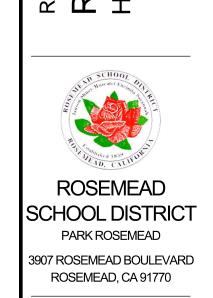
NOT USED

NO SCALE



FILE NO: 19-91

A#: 03-122716



NAC NO 161-21043 drawn **JL** CHECKED SN DATE 10-06-2022

**DETAILS** M602



path outlined in §140.4, or §141.0(b)2 for alterations. RSD HVAC Replacement Report Page: 2022-11-16T18:16:49-05:00 Project Address:

A. GENERAL INFORMATION Project Location (city) 04 Total Conditioned Floor Area 7600 2 Climate Zone 5 Total Unconditioned Floor Area 3 Occupancy Types Within Project: 06 # of Stories (Habitable Above Grade) Office (B) Non-refrigerated Warehouse (S) Hotel/ Motel Guest Rooms (R-1) Healthcare Facility (I)

Other (Write In)

Relocatable Class Bldg (E)

B. PROJECT SCOPE

☐ High-Rise Residential (R-2/R-3)

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

Registration Number: Generated Date/Time: Documentation Software: Energy Code Ace CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance Report Version: 2019.1.003 Compliance ID: 77583 Schema Version: rev 20200601 Report Generated: 2022-11-16 15:16:53

STATE OF CALIFORNIA

**Mechanical Systems** CALIFORNIA ENERGY COMMISSION NRCC-MCH-E CERTIFICATE OF COMPLIANCE NRCC-MCH-E Date Prepared: Project Address: 2022-11-16T18:16:49-05:00

I. FAN SYSTEMS & AIR ECONOMIZERS

			ed to	escriptive requirements for be included in Table H. Fixed Temperature	Econom	izer		d per <u>§140.4(e)</u> and (m)	systems. Fan systems servin  System Fan Type:	g only process loads are  Constant Volume
01	02	1 1	03	04	1		05	06	07	08
	2520								Fan Power Pressure Drop /	Adjustment - Table 140.4-B
Fan Name or Item Tag	Fan Function	on (	Qty	Maximum Design Suppl (CFM)	y Airtiow	HP	Unit <sup>2</sup>	Design HP	Device	Design Airflow through Device (CFM)
DTU 540 540				1500				9.53	Fully ducted return/ exhaust	1600
RTU-E10-E18	Supply		1	1600		E	BHP	0.62	Calculated Adjustment (in	

Total System Design

0.62

H<sub>2</sub>O)

Maximum System Fan

CALIFORNIA ENERGY COMMISSION

Documentation Software: Energy Code Ace

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

Compliance ID: 77583

Power (B)HP:

FOOTNOTES: Computer room economizers must meet requirements of  $\frac{5140.9(a)}{a}$  and will be documented on the NRCC-PRC-E document.

<sup>2</sup> The unit used for HP must be consistent for all fans within a system.

Total System Design Supply Airflow (CFM):

I. SYSTEM CONTROLS								
This table is used to demo space conditioning systen		nce with mand	atory controls in §110.2 and	<u>§120.2</u> and p	rescriptive con	trols in <u>§140.4(f)</u> and (n) or	requirements i	n <u>§141.0(b)2E</u> for altered
01	02	03	04	05	06	07	08	09
System Name	System Zoning	Conditioned Floor Area Being Served (ft²)	Thermostats	Shut-Off Controls §120.2(e)	Isolation Zone Controls §120.2(g)	Demand Response §110.12 and §120.2(b)	Supply Air Temp. Reset §140.4(f)	Window Interlocks per <u>§140.4(n)</u>
RTU-E10-E18	Single zone	<= 25,000 ft <sup>2</sup>	Setback + DR Tstat per §110.12	EMCS	NA: Single Zone	EMCS	NA: Single Zone	NA: Alteration Project

<sup>1</sup>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.

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STATE OF CALIFORNIA **Mechanical Systems** NRCC-MCH-E

Nandatory Measures Note Block

Registration Number:

Q. MANDATORY MEASURES DOCUMENTATION LOCATION

Compliance with Mandatory Measures documented through MCH

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

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

CERTIFICATE OF COMPLIANCE			NRCC-MCH-E
Project Name:	RSD HVAC Replacement	Report Page:	(Page 7 of 8)
Project Address:		Date Prepared:	2022-11-16T18:16:49-05:00
P. DECLARATION OF REQUIRED CERTIF	FICATES OF VERIFICATION		
There are no NRCV forms required for this	project.		
<u></u>	<u> </u>	<u> </u>	

Generated Date/Time:

Report Version: 2019.1.003

Schema Version: rev 20200601

**Mechanical Systems** CALIFORNIA ENERGY COMMISSION NRCC-MCH-E CERTIFICATE OF COMPLIANCE Project Name: RSD HVAC Replacement Report Page: Project Address: 2022-11-16T18:16:49-05:00

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. Summary §110.1, §110.2, §140.4(k) §140.4(c), §110.2(e)2 Compliance Results §110.2, §120.2, §140.4(d) 5140.4 (See Table F) (See Table I) (See Table G) (See Table H) (See Table J) (See Table K) (See Table M) I (See Table L) I COMPLIES with Mandatory Measures Compliance (See Table Q for Details

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 J 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.

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STATE OF CALIFORNIA **Mechanical Systems** 

CALIFORNIA ENERGY COMMISSION NRCC-MCH-E CERTIFICATE OF COMPLIANCE Project Address: Date Prepared: 2022-11-16T18:16:49-05:00

I. 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(e)3B for all nonresidential, high-rise residential and hotel/motel occupancies. For alterations, only ventialtion systems being altered within the scope of the permit application need to be documented in this table. In lieu of this table, the required outdoor ventilation rates and airflows may be shown on the plans or the calculations can be presented in a spreadsheet. Check this box if the project included Nonresidential or Hotel/Motel spaces

Check this box if the project included new or altered high-rise residential dwelling units. O3 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) This table is used to show compliance with mandatory pipe insulation requirements found in §120.3 and prescriptive requirements found in §140.4(I) for duct leakage testing.

he answers to the questions below apply to the following duct systems: Duct leakage testing triggered for these systems? No The scope of the project includes only duct systems serving healthcare facilities Yes Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system. Yes The space conditioning system serves less than 5,000 ft<sup>2</sup> of conditioned floor area. No The combined surface area of the ducts in the following locations is more than 25% of the total surface area of the entire duct system: 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)1B or if the roof has fixed vents or openings to the outside/ unconditioned spaces

Documentation Software: Energy Code Ace Generated Date/Time: Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance Report Version: 2019.1.003 Compliance ID: 77583

Schema Version: rev 20200601

umentation Author Signature:

CEA/ HERS Certification Identification (if applicable):

STATE OF CALIFORNIA Mechanical Systems

Andrew Smith

CALIFORNIA ENERGY COMMISSION NRCC-MCH-E CERTIFICATE OF COMPLIANCE RSD HVAC Replacement Report Page: Project Address: 2022-11-16T18:16:49-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is accurate and complete. Documentation Author Name

RESPONSIBLE PERSON'S DECLARATION STATEMENT certify the following under penalty of perjury, under the laws of the State of California:

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) 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.

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. 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.

Generated Date/Time: Documentation Software: Energy Code Ace Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance Report Version: 2019.1.003 Compliance ID: 77583

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STATE OF CALIFORNIA

Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E Project Address: 2022-11-16T18:16:49-05:00

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(b) and §140.4(k) or §141.0(b)2 for alterations. Dry System Equipment Sizing (includes air conditioners, condensers, heat pumps, VRF, furnaces and unit heaters)

04 05 06 07 08 09 10 11 Equipment Sizing per Mechanical Schedule (kBtu/h) Heating Output<sup>2,3</sup> Cooling Output<sup>2,3</sup> Load Calculations<sup>3,4</sup> Smallest Size Name or Item | Equipment Category per | Equipment Type per Tables 110.2 / Tables 110.2 Heating Per Design (kBtu/h) Load (kBtu/h) (kBtu/h) Output (kBtu/h) (kBtu/h) (kBtu/h) (kBtu/h) Load RTU-E10-E18 | Sm. Commercial AC | Air-cooled unitary AC/HP Pkg (3Ph) | 49000 49000

<sup>1</sup>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 excepted.

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

<sup>3</sup> If equipment is heating only, leave cooling output and load blank. If equipment is cooling only, leave heating output and load blank. <sup>4</sup> Authority Having Jurisdiction may ask for load calculations used for compliance per <u>§140.4(b)</u>

Dry System Equipment Efficiency (other than Package Terminal Air Conditioners (PTAC) and Package Terminal Heat Pumps (PTHP)) 07 08 Heating Mode Cooling Mode Minimum Name or Item Size Category (Btu/h) Condition Efficiency Unit Required per Design Efficiency | Efficiency Unit Required per Tables 110.2 / Tables 110.2 / Title 20 Title 20 RTU-E10-E18 <65,000 14

Schema Version: rev 20200601

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G. PUMPS

This section does not apply to this project. Registration Number: Documentation Software: Energy Code Ace Generated Date/Time: Compliance ID: 77583 CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance Report Version: 2019.1.003

STATE OF CALIFORNIA

Mechanical Systems CALIFORNIA ENERGY COMMISSION NRCC-MCH-E CERTIFICATE OF COMPLIANCE (Page 6 of 8) Project Address: 2022-11-16T18:16:49-05:00

L. DISTRIBUTION (DUCTWORK and PIPING)

			in other unconditioned spaces
15	No	The scope of the	project includes extending an existing duct system, which is constructed, insulated or sealed with asbestos.
16	No		project includes an existing duct system that is documented to have been previously sealed as confirmed through field verification sting in accordance with procedures in the Reference Nonresidential Appendix NA2.
17		Duct system shall	be sealed in acordance with the California Mechanical Code

M. COOLING TOWERS

This section does not apply to this project.

N. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at

https://www.energy.ca.gov/title24/2019standards/2019\_compliance\_documents/Nonresidential\_Documents/NRCI/

NRCI-MCH-01-E - Must be submitted for all buildings O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019\_compliance\_documents/Nonresidential\_Documents/NRCA/

Systems/Spaces To Be Field Form/Title NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A RTU-E10-E18 Supply Fan VFD Acceptance (if applicable) since testing activities overlap. NRCA-MCH-05-A - Air Economizer Controls NRCA-MCH-13-A Automatic FDD for Air Handling Units and Zone Terminal Units Acceptance RTU-E10-E18 NRCA-MCH-18-A Energy Management Control Systems RTU-E10-E18

Generated Date/Time: Registration Number: Documentation Software: Energy Code Ace CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance Compliance ID: 77583 Report Version: 2019.1.003 Report Generated: 2022-11-16 15:16:53 Schema Version: rev 20200601

Space Conditioning Mandatory Measures:

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110.2 CERTIFICATION BY MANUFACTURERS ANY SPACE CONDITIONING EQUIPMENT LISTED IN §110.2 SHALL ONLY BE INSTALLED IF CERTIFIED TO THE ENERGY COMMISSION TO MEET ALL APPLICABLE §110.2

110.5 PILOT LIGHTS PROHIBITED FOR NATURAL GAS EQUIPMENT

PILOT LIGHTS ARE PROHIBITED ON NATURAL GAS FAN-TYPE CENTRAL FURNACES, POOL HEATERS, SPA HEATERS, AND FIREPLACES.

INSTALLED INSULATION SHALL BE CERTIFIED BY THE DEPARTMENT OF CONSUMER AFFAIRS PER TITLE 24, PART 12, CHAPTERS 12-13, ARTICLE 3 "STANDARDS FOR

INSULATING MATERIAL."

UREA FORMALDEHYDE INSULATION SHALL NOT BE INSTALLED UNLESS IN EXTERIOR SIDE WALLS WITH A FOUR-MIL-THICK PLASTIC POLYETHYLENE VAPOR RETARDER OR EQUIVALENT PLASTIC SHEATHING VAPOR RETARDER INSTALLED BETWEEN THE UREA FORMALDEHYDE FOAM INSULATION AND THE INTERIOR SPACE.

ALL INSULATING MATERIALS SHALL BE INSTALLED IN COMPLIANCE WITH THE FLAME SPREAD RATING AND SMOKE DENSITY REQUIREMENTS OF THE CALIFORNIA BUILDING CODE.

IF INSULATION IS INSTALLED ON AN EXISTING SPACE-CONDITIONING DUCT, IT SHALL COMPLY WITH SECTION 604.0 OF THE CMC.

120.1(a) GENERAL VENTILATION AND INDOOR AIR QUALITY REQUIREMENTS

ALL OCCUPIABLE SPACES IN HIGH-RISE RESIDENTIAL, HOTEL/MOTEL, AND NONRESIDENTIAL BUILDINGS OTHER THAN HEALTHCARE SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF \$120.1(a) THROUGH (g). THE REQUIRED OUTDOOR AIR VENTILATION RATE AND AIR-DISTRIBUTION SYSTEM DESIGN SHALL BE CLEARLY IDENTIFIED ON THE PLANS.

120.1(c)2 NATURAL VENTILATION NATURALLY VENTILATED SPACES SHALL BE DESIGNED IN ACCORDANCE WITH 120.1(c)2A THROUGH 120.1(c)2C AND INCLUDE A MECHANICAL VENTILATION SYSTEMS

DESIGNED IN ACCORDANCE WITH 120.1(c)3. 120.1(c)3 MECHANICAL VENTILATION

OCCUPIABLE SPACES SHALL BE VENTILATED WITH A MECHANICAL VENTILATION SYSTEM CAPABLE OF PROVIDING AN OUTDOOR AIRFLOW RATE (Vz) TO THE ZONE NO LESS THAN THE LARGER OF (Vz) DESCRIBED IN 120.1(c)3A OR 120.1(c)3B.

THE LESSER OF THE MINIMUM RATE OF OUTDOOR AIR REQUIRED BY SECTION 120.1(c) OR THREE COMPLETE AIR CHANGES SHALL BE SUPPLIED TO THE ENTIRE

120.1(d) TIMES OF OCCUPANCY MINIMUM OUTDOOR AIR RATE SHALL BE MET AT TIMES WHEN THE SPACE IS USUALLY OCCUPIED IN ACCORDANCE WITH 120.1(c).

FILE NO: 19-91



A#: 03-122716

SCHOOL DISTRICT PARK ROSEMEAD 3907 ROSEMEAD BOULEVARD ROSEMEAD, CA 91770

NAC NO 161-21043

10-06-2022 TITLE 24 COMPLIANCE

FORMS - ENCINITA

BUILDING DURING THE 1-HOUR PERIOD IMMEDIATELY BEFORE THE BUILDING IS NORMALLY OCCUPIED.

RECESSED POKE-THROUGH

EMERGENCY LINEAR LIGHT FIXTURE, DIMENSIONS PER PLANS - LIGHT

© © ▼ 20A, 125V DUPLEX RECEPTACLE FIRE RATED TYPE

RECESSED POKE-THROUGH - POWER/TEL/DATA

RECESSED FLOOR BOX - POWER/TEL/DATA

② 20A, 125V QUAD RECEPTACLE FIRE RATED TYPE

LINEAR LIGHT FIXTURE, DIMENSIONS PER PLANS - UPPER CASE LETTER

INDICATES LIGHT FIXTURE CALLOUT. LOWER CASE LETTER INDICATES

FIXTURE FED FROM GENERATOR/ INVERTER/ BATTERY BACKUP

LINEAR PENDANT LIGHT FIXTURE, DIMENSIONS PER PLANS - UPPER

TRACK LIGHTING - UPPER CASE LETTER INDICATES LIGHT FIXTURE CALLOUT. LOWER CASE LETTER INDICATES LIGHTING CONTROL ZONE.

LED STRIP LIGHT FIXTURE - UPPER CASE LETTER INDICATES LIGHT FIXTURE CALLOUT. LOWER CASE LETTER INDICATES LIGHTING CONTROL

CASE LETTER INDICATES LIGHT FIXTURE CALLOUT. LOWER CASE LETTER

UNDERCABINET / COVE FIXTURE - UPPER CASE LETTER INDICATES LIGHT FIXTURE CALLOUT. LOWER CASE LETTER INDICATES LIGHTING CONTROL

LIGHTING CONTROL ZONE.

INDICATES LIGHTING CONTROL ZONE.

 $\mathbf{X}\mathbf{\nabla}\mathbf{\nabla}$ 

#### **ARRDEVIATIONS**

<u>ABBRE</u>	VIATIONS		
ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
1/C	SINGLE CONDUCTOR	KVA	KILOVOLT-AMPERES
& @	AND AT	KW LF	KILOWATT LINEAR FEET
A OR AMP	AMPERES	LFMC	LIQUIDTIGHT FLEXIBLE METAL CONDUIT
ABV A.C.	ABOVE ASPHALT CONCRETE	LGST LIS	LARGEST LOAD INTERRUPTER SWITCH
AF	AMPERE FUSE RATING	LOC.	LOCATION
AFC AFF	AVAILABLE FAULT CURRENT ABOVE FINISHED FLOOR	LOTO LSI	LOCK-OUT & TAG-OUT LONG TERM, SHORT TERM, INSTANTANEOUS
AFG	ABOVE FINISH GRADE	LTG	LIGHTING
AIC AL	AMPERE INTERRUPTING CAPACITY ALUMINUM	LV M	LOW VOLTAGE METER
APPROX.	APPROXIMATE	MAX	MAXIMUM
ARCH. AS	ARCHITECT; ARCHITECTURAL AMPERE SWITCH RATING	MCA MCC	MAXIMUM CIRCUIT AMPACITY MOTOR CONTROL CENTER
ASCC ATC	AVAILABLE SHORT CIRCUIT CURRENT AIR TERMINAL CHAMBER	MCP MFGR, MFR	MOTOR CIRCUIT PROTECTOR MANUFACTURER
ATO	AUTOMATIC THROW-OVER (SWITCH)	MH	MANHOLE
ATS AUTO	AUTOMATIC TRANSFER SWITCH AUTOMATIC	MI. MRCT	MECHANICAL INTERLOCK MULTI-RATIO CURRENT TRANSFORMER
AUX	AUXILIARY	MIN	MINIMUM
AWG BAT	AMERICAN WIRE GAUGE BATTERY	MOCP MTD	MAXIMUM OVERCURRENT PROTECTION MOUNTED
BEL	BELOW	MTG	MOUNTING
BKBD BKR	BACKBOARD BREAKER	MTR MTTB	MOTOR MAIN TELEPHONE TERMINAL BOARD
BLDG B.S.	BUILDING BARE STRANDED	MV N	MEDIUM VOLTAGE NORTH
С	CONDUIT	NAC	NOTIFICATION APPLIANCE CIRCUIT
CB CC	CIRCUIT BREAKER CONSTANT CURRENT	NC NEC	NORMALLY CLOSED NATIONAL ELECTRICAL CODE
CEC	CALIFORNIA ELECTRICAL CODE	NF	NON-FUSED
CF CKT	CUBIC FEET CIRCUIT	NIC NL	NOT IN CONTRACT NIGHT LIGHT- 24HRS ON
CL	CENTER LINE	NO.	NUMBER
CLG CMU	CEILING CONCRETE MASONRY UNIT	OC OCPD	ON CENTER OVERCURRENT PROTECTIVE DEVICE
C.O.	CONDUIT ONLY WITH PULL WIRE	OD	OUTSIDE DIAMETER
COL CP	COLUMN COMMUNICATION PROCESSOR	OE OFC	OVERHEAD ELECTRICAL OIL FUSED CUTOUT
CPT CR	CONTROL POWER TRANSFORMER CONTROL RELAY	OH OL	OVERHEAD OIL LEVER SWITCH
CSFD	CONTROL RELAY COMBINATION SMOKE FIRE DAMPER	P	POLE
CT CW	CURRENT TRANSFORMER COLD WATER	PAC PB	PROGRAMMABLE AUTOMATION CONTROLLER PULL BOX
CU	COPPER	PC	PHOTOCELL
DIAG DIST.	DIAGRAM DISTANCE	PCB PDS	POLYCHLORINATED BIPHENYL PRESSURE DIFFERENTIAL SWITCH
DL	DAMP LOCATION LISTING	PF	POWER FACTOR
DM DMM	DIGITAL METER DIGITAL METER MODULE	PH OR Ø PILC	PHASE PAPER INSULATED, LEAD COVER
DP DIST.	DISTRIBUTION PANEL	PIV PL	POST INDICATING VALVE PLATE
DWG	DISTANCE DRAWING	PLC	PROGRAMMABLE LOGIC CONTROLLER
DWP EA	DEPARTMENT OF WATER & POWER EACH	PNL POC	PANEL POINT OF CONNECTION
ECM	ELECTRONIC CIRCUIT MONITOR	PREF.	PREFERRED
ELEC. EM	ELECTRICAL EMERGENCY	PRI. PVC	PRIMARY POLY-VINYL CHLORIDE
EMH	ELECTRICAL MANHOLE	PWR	POWER
EMT EPO	ELECTRICAL METALLIC TUBING EMERGENCY POWER OFF	REC/RECEPT REQ'D	RECEPTACLE REQUIRED
EPR EQUIP	ETHYLENE PROPYLENE RUBBER EQUIPMENT	RGS RMC	RIGID GALVANIZED STEEL RIGID METAL CONDUIT
ER	EXISTING TO BE REMOVED	RPBP	REDUCED PRESSURE BACK FLOW PREVENTER
ERR	EXISTING TO BE RELOCATED AND - RECONNECTED	RM RTAC	ROOM REAL TIME AUTOMATION CONTROLLER
EXIST/(E)	EXISTING	SCCR	SHORT CIRCUIT CURRENT RATING
EXP FA	EXPLOSION PROOF FIRE ALARM	SCE SF	SOUTHERN CALIFORNIA EDISON SQUARE FEET
FFE FIN.	FINISHED FLOOR ELEVATION FINISH	SHT SIG.	SHEET SIGNAL
FIP.	FIELD INTERFACE PANEL	SP	SPARE
FIXT FLA	FIXTURE FULL LOAD AMPS	SPECS ST	SPECIFICATIONS STREET
FLR	FLOOR	STD	STANDARD
FLUOR FT	FLUORESCENT FEET	STP SW	SHIELDED TWISTED PAIR SWITCH
FACP	FIRE ALARM CONTROL PANEL	SWBD	SWITCHBOARD
FATC FMC	FIRE ALARM TERMINAL CABINET FLEXIBLE METAL CONDUIT	SWGR SWST	SWITCHGEAR SWITCHING STATION
FO FTG	FIBER OBTIC FOOTING	TB TEL./TELE	TERMINAL BLOCK TELEPHONE
GEN	GENERATOR	TMH	TELEPHONE MANHOLE
GFI GFR	GROUND FAULT INTERRUPTER GROUND FAULT RELAY	T.O.D. T.O.M.	TOP OF DUCTBANK TOP OF MANHOLE
GG	GREEN GROUND	TPS	TWISTED SHIELDED PAIR
GND HOA	GROUND HAND-OFF-AUTOMATIC	TRANSF,XFMR TS	TRANSFORMER TAMPER SWITCH
HP	HORSEPOWER	TYP	TYPICAL
HT HTR	HEIGHT HEATER	UG UON	UNDERGROUND UNLESS OTHERWISE NOTED
HZ ICON	HERTZ INTEGRATED COMMUNICATIONS OPTICAL -	V VA	VOLTS VOLT-AMPERES
	NETWORK	VB	VIBRATION SWITCH
IE IED	INVERT ELEVATION INTELLIGENT ELECTRONIC DEVICES	VFD W	VARIABLE FREQUENCY DRIVE WATTS
IMC	INTERMEDIATE METAL CONDUIT	W/	WITH
ISC INCAND	SHORT CIRCUIT CURRENT INCADESCENT	W/O WCR	WITHOUT WITHSTAND CLOSE-ON RATING
J, JB, J-BOX	JUNCTION BOX	WP	WEATHERPROOF
KCMIL KV	THOUSAND CIRCULAR MILS KILOVOLT	Z	IMPEDANCE

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.

#### GENERAL NOTES

- 1. ALL WORK SHALL COMPLY WITH THE LATEST EDITION OF THE CALIFORNIA ELECTRICAL CODE AND ALL OTHER APPLICABLE FEDERAL AND STATE. WHERE THE CONSTRUCTION DOCUMENTS INDICATE MORE RESTRICTIVE REQUIREMENTS, THE CONSTRUCTION DOCUMENTS SHALL GOVERN BUT THE CONSTRUCTION DOCUMENTS SHALL NOT BE INTERPRETED AS AUTHORITY TO VIOLATE ANY CODE OR REGULATION.
- 2. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL BEAR THE UNDERWRITERS' LABEL (UL) AND SHALL BE INSTALLED IN THE MANNER FOR WHICH THEY ARE DESIGNED AND APPROVED.
- 3. THE CONTRACTOR SHALL NOT BORE, NOTCH OR IN ANY WAY CUT INTO ANY STRUCTURAL MEMBER WITHOUT WRITTEN APPROVAL FROM THE ARCHITECT OR STRUCTURAL ENGINEER.
- 4. MECHANICAL, ELECTRICAL AND PLUMBING EQUIPMENT ANCHORAGE NOTES:

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE 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.

A. ALL PERMANENT EQUIPMENT AND COMPONENTS.

- B. 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 110/220V RECEPTACLES HAVING A FLEXIBLE CABLE.
- C. TEMPORARY, MOVABLE, OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS.

A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORTS THE

B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG

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

5. PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTES:

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

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

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

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

MP[] MD[] PP[] E[] OPTION 2: SHALL COMPLY WITH HCAI PREAPPROVAL (OPM#) #:

GENERAL NOTES, LEGENDS, ABBREVIATIONS, AND SHEET INDEX

ELECTRICAL SITE PLAN - ENCINITA

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



ROSEMEAD SCHOOL DISTRICT PARK ROSEMEAD

3907 ROSEMEAD BOULEVARD

ROSEMEAD, CA 91770

NAC NO 161-21043 DRAWN | MT CHECKED AS DATE 10-06-2022

GENERAL NOTES, LEGENDS, ABBREVIATIONS, AND

SHEET INDEX

SHEET INDEX

E001

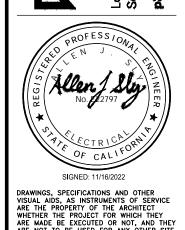
E002 SCHEDULES - ENCINITA

**DETAILS** 

1. 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.

2. REFER TO MECHANICAL SCHEDULES FOR ADDITIONAL EQUIPMENT INFORMATION. 3. 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#: 03-122716



SCHOOL DISTRICT

3907 ROSEMEAD BOULEVARD ROSEMEAD, CA 91770

SCHEDULES - ENCINITA

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
TU-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
TU-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
TU-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
TU-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
TU-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
TU-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

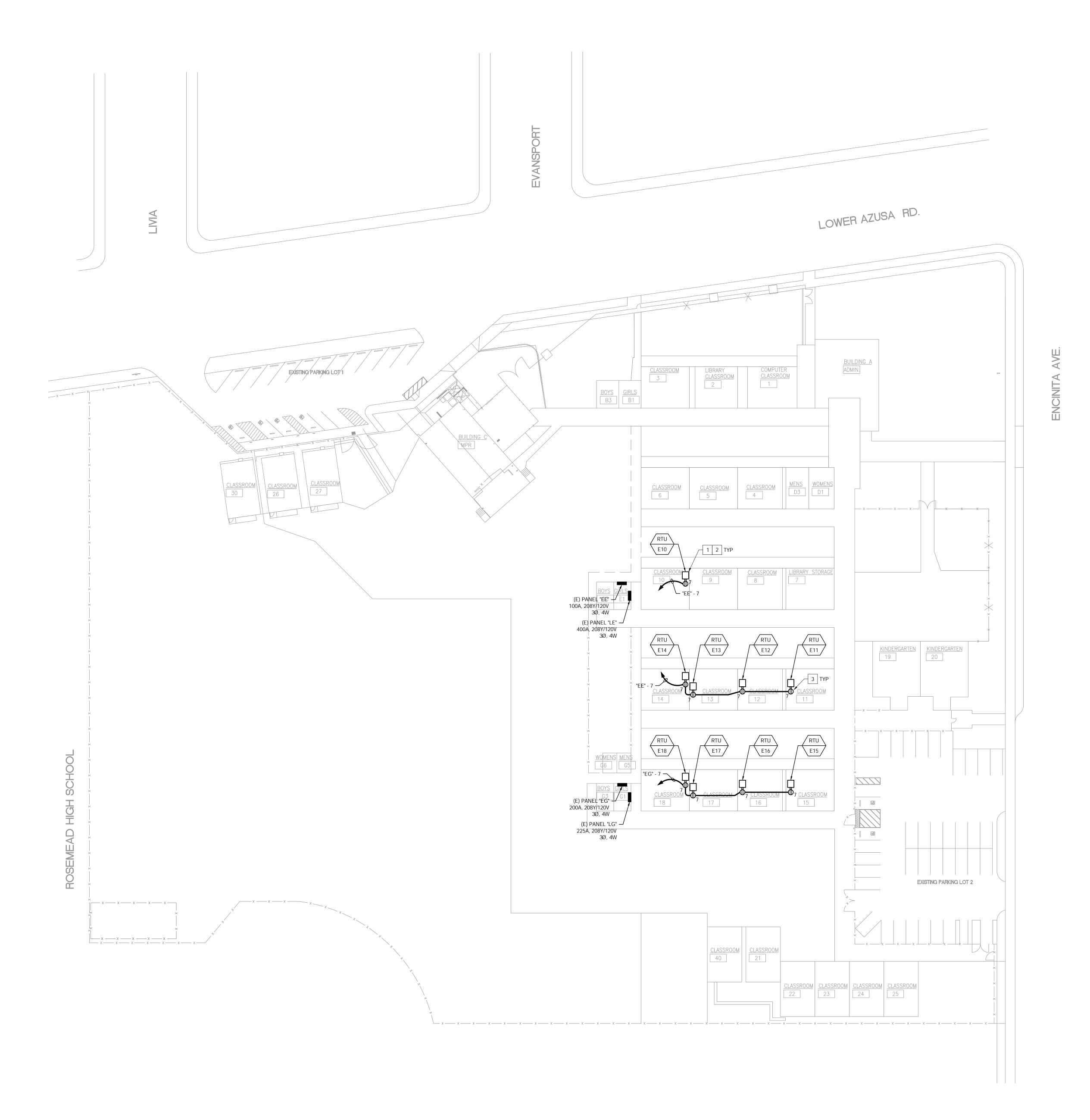
1 PROVIDE FUSED DISCONNECT FOR UNIT IN NEMA-3R ENCLOSURE. FUSE SIZED PER MOCP. UNIT SHALL BE SERVED BY EXISTING CIRCUIT. EXTEND EXISTING FEEDER AS REQUIRED FOR NEW CONNECTION TO DISCONNECT AND UNIT.

(E) PANEL:	П	EE"																	
LOCATION		NG E			VOI					120V	, 3Ø, 4\	N			FEI		ROM:		
FLOOR							US AN									RA	TING:	10,000 AIC	
MOUNTING	SURFA	CE			M	AIN E	BREAK	KER:	100A										
	SEE	* OUTLETS	2 1/0	DLT-AM	IDC	1	BKR/		BKR/	1	VIC	DLT-AM	DC	OLI	TLETS	*	SEE		
LOADS	NOTE	LTG RECM		B	С	CKT	POLE				A	B			REC MI		NOTE	ı	LOADS
(E) LOAD	11012		360			1		*	20/3	2	360			2101					(E) TVSS
(E) LOAD				360		3	20/1			4		360							_
(E) LOAD					360	5	20/1			6			360						-
ROOFTOP 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									SPACE
(E) LOAD				360		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
									NOTE	Ες.									
TOTAL ØA =	3 780	VOLT-AMPS	31.5	AMPS							ES LON	IG CON	TINUOI	IS LOA	ND.				
		VOLT-AMPS		AMPS												IN	EXISTI	NG SPACE	
	,	VOLT-AMPS		AMPS								H EXIS							
	*																		
TOTAL PANEL =	11,340	VA @ 208V,	3Ø <b>31</b>	<b>AMPS</b>															

LOCATION FLOOI MOUNTING	R: FIRST		,				В	iE/PH/ US AN BREAK	MPS:	200A	120V,	3Ø, 4V	V			FI	ROM : .TING: 1	0,000 AIC
LOADS	SEE NOTE		UTLETS RECMISC	V	DLT-AM B	PS C	CKT	BKR/ POLE		BKR/	CKT	V(	DLT-AM B		OU LTG F	TLETS	SEE NOTE	LOADS
(E) LOAD	INOIL	LIC	TILOWIOC	360	U	- O	1	1	*		2	360	В	Ü	LIGI	1LOIV	INOTE	(E) ·
(E) LOAD					360	1-1-1-1-1-1-1-1-1	3	20/1			4		360					
(E) LOAD						360	5	20/1			6			360				
(E) LOAD				360			7	20/1		20/1	8	360						(E) L
(E) LOAD					360	1	9	20/1		20/1			360					(E) L
(E) LOAD						360	11	20/1	*	20/1	12			360				(E) L
(E) LOAD				360			13	20/1	*	20/1	14	360						(E) L
(E) LOAD					360		15	20/1	_ * _		16							SF
(E) LOAD						360	17	20/1	*	20/1	18			360				(E) L
ROOFTOP RECEPTACLES	1			720			19	20/1	*	20/1	20	360						(E) L
SPACE							21		_ * _	20/1	22		360					(E) L
SPACE							23		*		24							SF
SPACE							25		*		26							SI
SPACE							27		_ * _		28							SF
SPACE							29		*		30							SF
RTU-E11	1			3,122			31	30/3	*	30/3	32	3,122					1	RTU-
					3,122		33		_ * _		34		3,122					
						3,122	35		*		36			3,122				
RTU-E13	1			3,122			37	30/3	*	30/3	38	3,122					1	RTU-
					3,122		39		_ * _		40		3,122					
						3,122	41		*		42			3,122				
TOTAL ØE	3 = 14,648	VOLT-	NOTES:  VOLT-AMPS 131.1 AMPS **"L" DENOTES LONG CONTINUOUS LOAD  VOLT-AMPS 122.1 AMPS 1. PROVIDE NEW CIRCUIT BREAKER IN EXISTING  TO MATCH EXISTING.														G SPACE	

(E) PANE	ION : BUILD		E"			VOI	TAC	E/DU	ACE .	000V/	1.00\/	, 3Ø, 4V	Λ/			FED F	DOM :	
	OOR : FIRST	ING	IL			VOL		US AI			1200	, 3D, 4V	V					: : 10,000 AIC
	ING : SURFA	\CE				M		3REAI								117	vill <b>v</b> a.	10,000 AIC
	SEE	*	OUTLETS		OLT-AM			BKR/	1	BKR/			OLT-AM				* SEE	· I
LOADS	NOTE		LTG RECMISC	Α	В	С	1			POLE		Α	В	С	LTG	RECMISC	NOTE	
E) RTU-E7		ļ		3,122			1	40/3	*	40/3	2	3,122						(E) RTU-E8
					3,122		3		_ * _		4		3,122					
						3,122	5		*		6			3,122				
E) RTU-E9				3,122	1		7	40/3	*	40/3	8	3,122					1	RTU-E10
	***************************************				3,122		9		_ * _		10		3,122					
-						3,122	11		*		12			3,122				
IVAC RECEPT							13	20/1	*	40/3	14							(E) LOAD
E) LOAD							15	20/1	_ * _		16							
E) LOAD		T					17	20/1	*		18							
E) LOAD							19	40/3	*	40/3	20				·			(E) LOAD
-		1					21		_ * _		22							
_		1					23		*		24			100000000000000000000000000000000000000				
E) LOAD		1					25	40/3	*	20/1	26	353 3353 3533						(E) LOAD
-		1					27		_ * _	20/1	28							(E) LOAD
-		1					29		*	20/1	30							(E) LOAD
E) LOAD							31	20/1	*	40/2	32							(E) HAND DRYER
E) LOAD		1					\$ <u></u>	20/1	<u></u>		34							(2) 1, 1, 1, 2 3, 1, 1, 1
E) LOAD		-					<del></del>	20/1	<del></del>		36				<b></b>			(E) LOAD
E) PANEL "EE"		+		3,780	1		ş	100/3	·	ş								(E) LOAD
		1		0,700	3,600		39		<del> </del>	20/1								(E) LOAD
		+-			0,000	3,960	ļ		*	20/1								(E) LOAD
						0,900	41			20/1	42			<u> </u>	<u> </u>			(L) LOAD
										NOTE	S:							
TOTAL	$\emptyset A = 16,268$	3 VC	OLT-AMPS	135.6	6 AMPS				*					INUOUS				
	ØB = 16,088			134.1	1 AMPS					1.	REL	JSE EX	ISTING	CIRCL	JIT E	BREAKER	TO SE	RVE UNIT.
TOTAL	ØC = 16,448	3 VC	OLT-AMPS	137.	1 AMPS													
The second was the first two																		
TOTAL PAI	VEL = 48,804	V/	4 @ 208V, 3Ø	135	5 AMPS													

FLC	ON : BUILDI		à				В	US AN	IPS:	225A	120V,	, 3Ø, 4V	V		FED F RA	ROM : TING: 10	),000 AIC
MOUNT	NG: SURFA	CE				M	AIN	BREAK	KER:	225A							
	SEE	*	OUTLETS		OLT-AM			BKR/		BKR/			OLT-AN			* SEE	
LOADS	NOTE	L	TG RECMISO	<u> </u>	В	С	1	POLE		1 1		Α	В	С	LTG REC MISC	NOTE	LOADS
RTU-E18	1			3,122			1					3,122				1	RTU-E1
					3,122	***************************************	3		_ * _		4		3,122				-
						3,122	·		*		6			3,122			
RTU-E16	1			3,122			7	40/3	*	40/3	8	3,122				1	RTU-E1
					3,122		9		- * -		10		3,122				-
						3,122	11		*		12			3,122			-
(E) LOAD	***************************************						13	100/3	*	20/1	14	360	E				(E) LOA
	***************************************						15		_ * _	30/2	16		1,000				
							17		*		18			1,000			
SPACE							19		*	20/1	20						(E) LOA
SPACE							21		_ * _	20/1	22						(E) LOA
SPACE							23		*	20/1			<u>.</u>				(E) LOA
SPACE							25		*	20/1			E Company				(E) LOA
SPACE							27		_ * _	20/1			1				(E) LOA
SPACE							29		*	20/1							(E) LOA
SPACE							31		*	20/1							(E) LOA
SPACE							33		_ * _	20/1							(E) LOA
SPACE	***************************************						35		*	20/1	36		<u>.</u> 2000-00-00-00-00-00-00-00-00-00-00-00-00				(E) LOA
(E) PANEL "LG1"				7.500				100/3		100/3		15,728					(E) PANEL "E(
				7,000	8,500		39		_ * _		40	10,720	14.648	)			(L) I / IIILL L
					8,000	4.500	-		*		42		14,040	14,648		-	
TOTAL	ØA = 36,076 ØB = 36,636 ØC = 32,636	VOL	T-AMPS	305.3	AMPS AMPS AMPS						NOTE			TINUOUS G CIRCU	S LOAD JIT BREAKER T	O SERVE	≣ UNIT.



**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 CEBC 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.

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

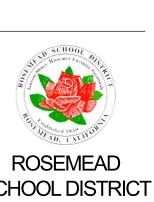
DISCONNECT EXISTING HVAC UNIT AND DISCONNECT SWITCH.

PROVIDE CONNECTION TO NEW HVAC UNIT. PROVIDE NEW DISCONNECT SWITCH. REFER TO PANEL SCHEDULES AND EQUIPMENT CONNECTION SCHEDULES FOR MORE INFORMATION.

PROVIDE 120V/20A WEATHERPROOF GFCI DUPLEX RECEPTACLE AT UNIT.





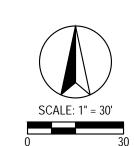


SCHOOL DISTRICT 3907 ROSEMEAD BOULEVARD ROSEMEAD, CA 91770

NAC NO 161-21043

CHECKED AS DATE 10-06-2022

ELECTRICAL SITE PLAN -ENCINITA



3 CONDUIT WALL SUPPORT
NO SCALE

B. CONDENSATE DRAIN PIPING SHALL SLOPE AT MINIMUM 1%.

A. REFER TO SPECIFICATION FOR PIPE SUPPORT SPACING.

**DETAIL NOTES** 

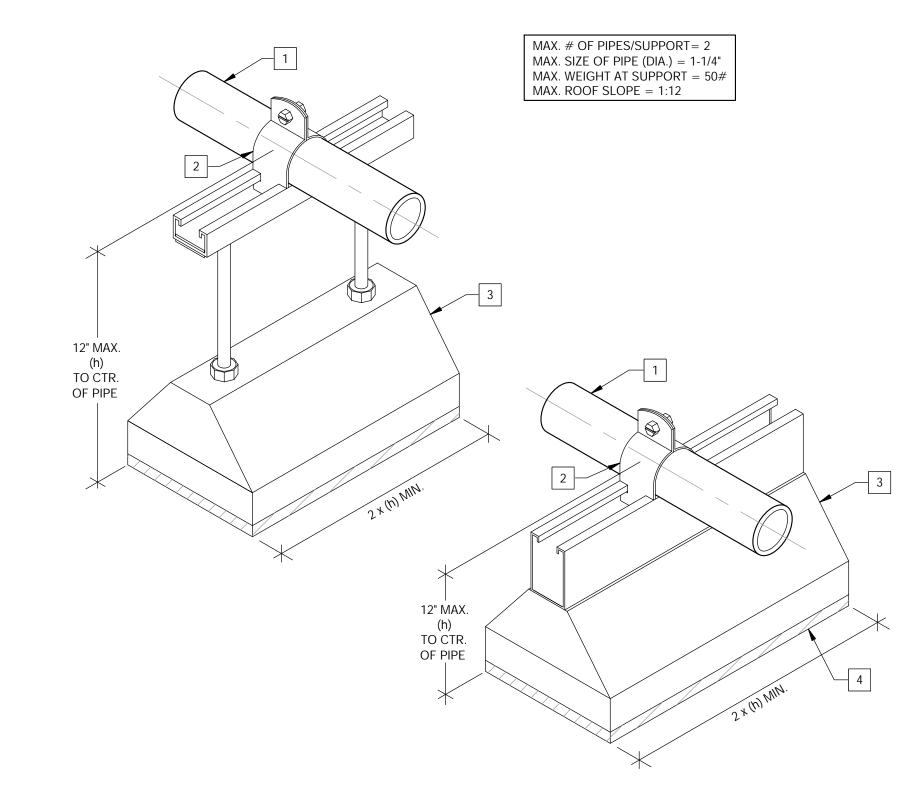
**GENERAL NOTE** 

1 PIPE AT ROOF - REFER TO SPECIFICATIONS FOR PIPE MATERIAL.

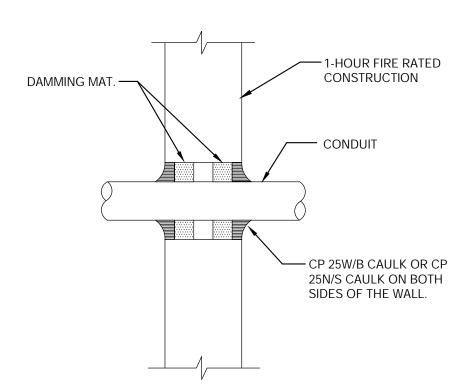
2 PIPE CLAMP - UNISTRUT P1113

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



- 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 GAULK.
- 4 USE CP 25S(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
- 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.)

1" 1" THICK

2" 2-3" THICK

1 CONDUIT PENETRATION
NO SCALE

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





SCHOOL DISTRICT PARK ROSEMEAD 3907 ROSEMEAD BOULEVARD ROSEMEAD, CA 91770

NAC NO 161-21043 CHECKED AS

DATE 10-06-2022 **DETAILS** 

E601