ROSEMEAD SCHOOL DISTRICT HVAC REPLACEMENT AT BUILDINGS "F", "G", AND "H" SHUEY ELEMENTARY SCHOOL

8472 E WELLS ST, ROSEMEAD CA 91770

FILE NO: 19-91 A#: 03-122720

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 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. SPECIFIC NOTES & DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES & TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT. WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDUM. 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 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. THE DRAWINGS & SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE(S) OR MODIFICATION TO AN EXISTING STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. HANGES 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, 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.

PROJECT COST, IF ANY. ONE COPY OF EACH CCD IS REQUIRED FOR THE FILES OF DSA. NY 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.)

HANGES 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

WHERE NECESSARY, SHALL BE ACCOMPANIED BY SUPPLEMENTARY DRAWINGS REFERENCED IN THE TEXT OF THE CCD. ALL

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

SHOWN THEREON CCDS SHALL STATE THE REASON OF THE CHANGE & THE SCOPE OF WORK TO BE ACCOMPLISHED. &

RESPONSIBLE CHARGE OF OBSERVATION OF THE WORK OF CONSTRUCTION OF THE PROJECT & BY THE ARCHITECT OR

CCDS & SUPPLEMENTARY DRAWINGS SHALL BE STAMPED & SIGNED BY THE ARCHITECT OR ENGINEER IN GENERAL

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 ORRECTION. 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

- 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.
- . 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. . 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.
- 2. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE(S) DURING CONSTRUCTION. I'HE 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 INDEMNIEY & 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

GENERAL NOTES

- 4 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
- 5. 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
- 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
- 20. ALL DISSIMILAR METALS SHALL BE EFFECTIVELY ISOLATED FROM EACH OTHER TO PREVENT MOLECULAR BREAKDOWI 21. CONTRACTOR SHALL REVIEW THE CONSTRUCTION DOCUMENTS BEFORE PERFORMING THE WORK SHOWN ON THE CONSULTING ENGINEER'S DRAWINGS. DISCREPANCIES BETWEEN THE ARCHITECTURAL & CONSULTING ENGINEER'S AWINGS 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 NECESSARY UTILITY CONNECTIONS, TO MAKE THE EQUIPMENT FULLY OPERATIONAL

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

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

- 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
- 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 DUTIES & RESPONSIBILITIES UNDER SECTION 17309 & 81141 OF THE EDUCATION CODE AND SECTIONS 4-336 & 4342
- 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.

OF TITLE24, A PROJECT INSPECTOR SHALL, UNDER THE DIRECTION OF THE ARCHITECTAND/OR ENGINEER, BE RESPONSIBLE

PROGRAM IS SATISFACTORILY COMPLETED. THE PROJECT INSPECTOR AND ANY ASSISTANT INSPECTOR MUST BE APPROVED

FOR MONITORING THE WORK OF THE SPECIAL INSPECTORS AND TESTING LABORATORIES TO ENSURE THAT THE TESTING

- 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

3. 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

34. A "DSA CERTIFIED" INSPECTOR WITH CLASS 3 CERTIFICATION IS REQUIRED FOR THIS PROJECT. 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 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

ARE DEFINED IN SECTION 4-342, CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 424.

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

LIGHTING CONTROLS ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED LIGHTING CONTROLS

- HTTPS://WWW.ENERGY.CA.GOV/PROGRAMS-AND-TOPICS/PROGRAMS/ACCEPTANCE-TEST-TECHNICIAN-CERTIFICATION-PROVIDER-PROGRAM/ACCEPTANCE. THE ACCEPTANCE TESTING PROCEDURES MUST BE REPEATED. AND DEFICIENCIES MUST BE CORRECTED BY THE
- BUILDER OR INSTALLING CONTRACTOR UNTIL THE CONSTRUCTION/INSTALLATION OF THE SPECIFIED SYSTEMS CONFORM AND PASS THE REQUIRED ACCEPTANCE CRITERIA. PROJECT INSPECTORS WILL COLLECT THE FORMS TO CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE BEEN COMPLETED.
- 36. ALL WORK SHALL CONFORM TO 2019 TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR). THE SCOPE OF WORK - CLEARLY INDICATE THE SCOPE OF WORK ON THE COVER SHEET OR GENERAL NOTE
- 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. - INSPECTOR CLASS = ?

40. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL

- THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT. 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
- 42. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.

THE WORK. (SECTION 4-317(C), PART 1, TITLE 24, CCR)

ROOM IDENTIFICATION TAG A101 A5.01 COLUMN GRID REFERENCE SHEET NUMBER S0.02 S0.03 S1.01 S2.01 S2.02 LATH AND PLASTER WALL OR BUILDING SECTION NUMBER A2.1 GYPSUM BOARD; MOISTURE RESISTANT GYPSUM BOARD M002 M101 SHEET NUMBER PLYWOOD M601 M602 **INSULATION BATT EXTERIOR ELEVATION** A5.1 E002 E601 - SHEET NUMBER Total Sheets = 20 1A — INTERIOR ELEVATION PROPERTY LINE/ **BOUNDARY LINE**

WORK ABOVE, BELOW, OR

BEYOND; (E) WORK TO BE

REMOVED; FUTURE WORK

AS NOTED ON DWGS.

TO BREAK CONTINUITY

FINISH GRADE LINE,

ELEVATION EARTH

CONTOUR LINE ON PLAN,

SECTIONS OR ELEVATIONS

DIMENSION LINES

MATCH LINE

DIMENSION LINE

GENERAL SYMBOLS



SHEET INDEX

TITLE SHEET, INDEX TO DRAWINGS AND NOTES

SITE PLAN

NO. SHT. NO.

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

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.

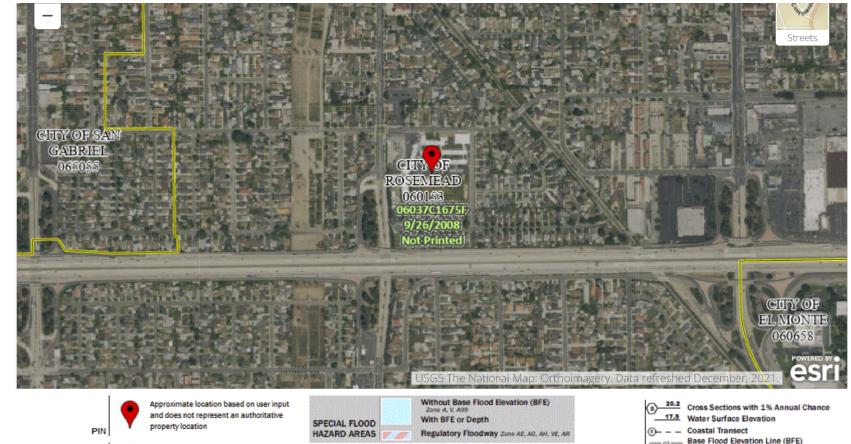
PART 9 2019 CALIFORNIA FIRE CODE, TITLE 24 C.C.R. (2009 INTERNATIONAL FIRE CODE OF THE INTERNATIONAL CODE COUNCIL)

PART 12 2019 CALIFORNIA REFERENCED STANDARDS, TITLE 24 C.C.R. TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

CODE ANALYSIS

TYPE OF CONSTRUCTION: TYPE V-B-NON SPRINKLERED ALLOWABLE AREA= 9,500 S.F. ACTUAL AREA= BUILDINGS E + F = 6,858 S.F. OK BUILDINGS G + H = 3,509 S.F. OK OCCUPANCY E-1

FLOOD MAP



Limit of Study Jurisdiction Boundary of 1% annual chanceflood with average Coastal Transect Baseline depth less than one foot or with drainage areas of less than one square mile Zone Future Conditions 1% Annual Hydrographic Feature Chance Flood Hazard Zone X GENERAL ---- Channel, Culvert, or Storm Sewer Area with Reduced Flood Risk due to STRUCTURES IIIIII Levee, Dike, or Floodwall Levee. See Notes. Zone X Area of Undetermined Flood Hazard Zone D FLOOD HAZARD Area with Flood Risk due to Levee Zone D Otherwise Protected Area OTHER AREAS Coastal Barrier Resource System Area

DIRECTORY

NAC | ARCHITECTURE 837 NORTH SPRING ST. THIRD FLOOR LOS ANGELES, CA. 90012-2323 TEL: 323.475.8075 FAX: 323.859.3110 CONTACT: GARY CHRISTOFI

gchristofi@nacarchitecture.com

STRUCTURAL:

ARCHITECT:

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 "F", "G", AND "H"

VICINITY MAP SHUEY E.S. SITE



SHUEY ELEMENTARY SCHOOL

PROJECT SITE:

STATEMENT OF GENERAL CONFORMANCE

PRINT NAME

LICENSE NUMBER

C-22214

SHEET NUMBER

DOOR NUMBER

WINDOW TYPE

CONSTRUCTION

KEYNOTE

DEMOLITION

REVISION NUMBER

INTERNATIONAL

ACCESSIBILITY

SYMBOL (I.S.A.)

KEYNOTE

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# 03-122717 FILE NO. 19-91)

THE DRAWINGS OR SHEETS LISTED ON THE COVER OR ASSOCIATED WITH 03-122720 THIS DRAWING, PAGE OF SPECIFICATIONS/CALCULATIONS

05/31/2023

EXPIRATION DATE

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

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])

HAVE BEEN PREPARED BY OTHER DESIGN PROFESSIONALS OR CONSULTANTS WHO ARE LICENSED AND/OR AUTHORIZED TO

I FIND ALL DRAWINGS OR SHE THAT: THIS DRAWING OR PAG	EETS LISTED ON THE COVER OR INDEX SHEET SE				
IS/ARE IN GENERAL CONFORMANCE WITH THE PROJECT DESIGN INTENT, AND	IS/ARE IN GENERAL CONFORMANCE WITH THE PROJECT DESIGN INTENT, AND				
HAS/HAVE BEEN COORDINATED WITH THE PROJECT PLANS AND SPECIFICATIONS. 11/17/2022	HAS/HAVE BEEN COORDINATED WITH THE PROJECT PLANS AND SPECIFICATIONS.				
SIGNATURE DATE	SIGNATURE DATE				
ARCHITECT OR ENGINEER DESIGNATED TO BE IN GENERAL RESPONSIBLE CHARGE	ARCHITECT OR ENGINEER DELEGATED RESPONSIBILITY FOR THIS PORTION OF THE WORK				
HELENA JUBANY					

PRINT NAME

LICENSE NUMBER

EXPIRATION DATE

SCHOOL DISTRIC PARK ROSEMEAD 8472 E. WELLS STREET ROSEMEAD CA 91770

NAC NO 161-21043 DRAWN | HH CHECKED GC

DATE 02-14-2023



SAND BOX

PLAY AREA

GRASS PLAYFIELD

BLDG."N" A# 43977

BLDG."O" A# 43977 A# 03-117804

A# 03-117804

(E) TOILET ROOM BLDG. D' DSA A# 107659 A# 03-117804

CLASSROOM

BLDG. "E"

A#10219

A# 03-117804

CLASSROOM BLDG. "F" DSA A# 107659

A#10219 A# 03-117804

(E) CONC. PAVING AREA

LAUN APREA

RTU S11

CLASSROOM BLDG. "G"

A#25601

CLASSROOM

AREA: 360 GROSS

CCC. LOAD: 360/20-48

CLASSROOM

AREA: 300 GROSS

OCC. LOAD: 300/20-48

CLASSROOM

AREA: 500 GROOD

OC. LOAD: \$40,20-48

CLASSROOM

AREA: 160 GROSS

OCC. LOAD: 150/20-48

CLASSROOM

AREA: 300 GROSS

OCC. LOAD: 300/20-48

CLASSROOM

APEA 360 GROSS
OCC. LOAD: \$6020-48

(E) AC PAVING AREA

DSA A# 107659 —/

A.C., PAVED AREA

EXISTING
RELOCATABLE
DSA A# 03-117804

CLASSROOM

AREA: 350 GROSS

OCC. LOAD: 350/20-48

CLASSROOM

AREA: 360 GROSS

CCC, LOAD: 360/20-48

CLASSROOM

AREA: 350 GROSS

OCC. LOAD: 350/20-48

CLASSROOM

APEA: 360 GROSS
OCC. LOAD: 360/20-45

(E) AC PAYING AREA

CLASSROOM

BLDG. "C" DSA A# 107659

A#10219

CLASSROOM =
BLDG. "A"
DSA A# 107659

A#10219 A# 03-117804

EXISTING
MULTIPURPOSE
BLDG. "B"
DSA A# 24103
A# 03-117804

(EXISTING STAND ALONE F.A. SYSTEM TO BE TIED INTO NEW F.A. SYSTEM)

A# 03-117804

(EXISTING STAND ALONE

FAMILYSTEM TO BE TIED

INTO NEW F.A. SYSTEM)

EXISTING
CHILDCARE
CENTER
BLDG. 'R'
DSA A# 03-117135
A# 03-117804

A# 03-117804

KINDERGARTEN

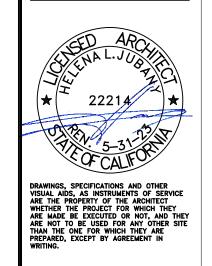
C. PAVING

SAND BOX

GRASS

SHUEY HVAC										
BUILDINGS IN SCOPE	DSA-A#	CERTIFICATION STATUS								
BLDG - F	03-107659	CERTIFIED								
BLDG - F	03-117453	CERTIFIED								
BLDG - G	03-25601	CERTIFIED								
BLDG - G	03-117453	CERTIFIED								
BLDG - H	03-117453	CERTIFIED								
BLDG - H	03-25601	CERTIFIED								

FILE NO: 19-91 A#: 03-122720



ROSEMEAD SCHOOL DISTRICT

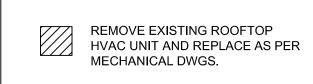
RSD - SHUEY ELEMENTARY SCHOOL

HVAC REPLACEMENT AT BUILDINGS F,G AND H

ROSEMEAD SCHOOL DISTRICT PARK ROSEMEAD

8472 E. WELLS STREET ROSEMEAD CA 91770

LEGEND



NAC NO 161-21043

DATE 02-13-2023

ROSEMEAD

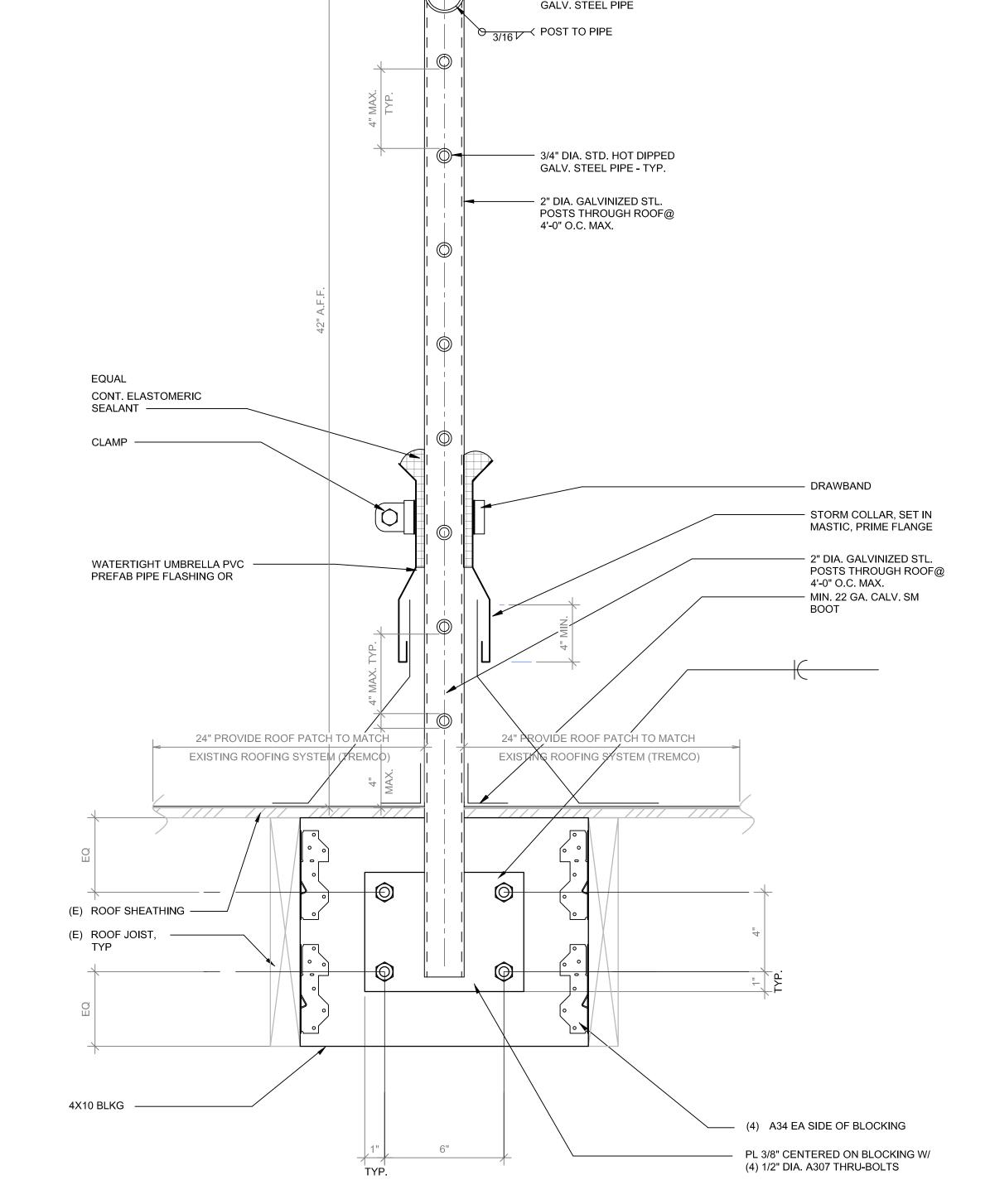
SCHOOL DISTRICT PARK ROSEMEAD 8472 E. WELLS STREET

ROSEMEAD CA 91770

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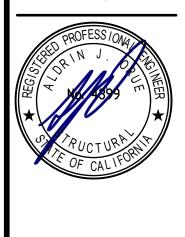
NAC NO 161-21043

CHECKED _ DATE 02-13-2023



— ALIGN RAILS TO CENTER OF

St, Suite 2100 CA 90017 18.0201 off.com



ROSEMEAD SCHOOL DISTRICT

RSD - SHUEY ELEMENTARY SCHC

HVAC REPLACEMENT AT BUILDINGS F,G ANI

ROSEMEAD
SCHOOL DISTRICT
PARK ROSEMEAD
3907 ROSEMEAD BOULEVARD

3907 ROSEMEAD BOULEVAL ROSEMEAD, CA 91770

NAC NO 161-21043

FILE

DRAWN CC

CHECKED EMB/AL

SHEET INDEX, SYMBOLS AND ABBREVIATIONS

11-17-2022

S0.01

THICKNESS

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

GRADE NO. 1
GRADE NO. 1

- 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.
- 3. ORIENTED STRAND BOARD (OSB) MAY BE SUBSTITUTED FOR PLYWOODS NOTED ABOVE, AND COMPLY WITH DOC PS2. PROVIDED IT IS RATED BY APA'S PERFORMANCE STANDARD RATING & ICC-ESR # NOTED.
- 4. ALL FLOOR & ROOF SHEATHING SHALL BE LAID FACE GRAIN PERPENDICULAR TO FRAMING AND SHALL BE APPROVED BY THE BUILDING INSPECTOR BEFORE COVERING.
- 5. ALL NAILING SHALL CONFORM TO THE APPLICABLE BUILDING CODE AND REGULATIONS. ALL NAILS SHALL BE COMMON NAILS ASTM F1667. MINIMUM NAILING REQUIREMENTS OUTLINED IN TABLE 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.
- USE OF MACHINE NAILING IS SUBJECT TO A SATISFACTORY JOBSITE DEMONSTRATION AND THE APPROVAL BY THE INSPECTOR AND STRUCTURAL ENGINEER. THE APPROVAL IS SUBJECT TO CONTINUED SATISFACTORY PERFORMANCE. MACHINE NAILING WILL NOT BE APPROVED IN 5/16" PLYWOOD. IF NAILHEADS PENETRATE THE OUTER PLY MORE THAN WOULD BE NORMAL FOR A HAND HAMMER OR IF MINIMUM ALLOWABLE EDGE DISTANCES ARE NOT MAINTAINED, THE PERFORMANCE WILL BE DEEMED UNSATISFACTORY.
- 11. ALL 5/8" DIAMETER AND LARGER BOLTS CALLED OUT ON DRAWINGS, INCLUDING ANCHOR BOLTS (AB) SHALL HAVE STEEL SQUARE PLATE WASHERS AS LISTED BELOW UNDER THE HEAD AND/OR NUT BEARING ON WOOD.

BOLT DIAMETER	1/2"	5/8"	3/4"	7/8"	1"
WASHER - THICKNESS	1/4"	5/16"	3/8"	7/16"	1/2"
WASHER - WIDTH	2 1/2"	2 3/4"	3"	3 1/2"	4"
MINIMUM EMBEDMENT	7"	8"	8"	8"	12"

FRAMING CONNECTORS: PER MANUFACTURER'S APPROVED PRODUCT EVALUATION REPORT (ICC-ESR) AND INSTALLED ACCORDINGLY. SIZE AND NUMBER OF NAILS TO BE MAXIMUM SPECIFIED BY THE MANUFACTURER UNO. THE FOLLOWING IS A LIST OF ICC-ESR NUMBERS CORRESPONDING TO SOME OF THE FRAMING CONNECTORS USED IN THE PROJECT:

DESCRIPTION	ICC-ESR
SIMPSON 'CMST'	2105
SIMPSON 'LPT4'	5313
SIMPSON 'HD'	5708
SIMPSON 'EPC, 'PC"	443
SIMPSON 'CC'	2011
SIMPSON 'PBS'	5709
SIMPSON 'LUS'	5708
SIMPSON 'A34', 'A35'	5672
SIMPSON 'HU'	5117
SIMPSON 'ITT'	2329

- 13. BOLTED HOLD DOWN ANCHORS: INSTALL PER MANUFACTURE'S APPROVED ICC PRODUCT EVALUATION REPORT. INSTALL HOLD DOWN 1/2 INCH MINIMUM ABOVE THE PLATE TO ALLOW FOR TIGHTENING POST BOLTS. USE EXTRA CARE IN BORING THE POST HOLES (1/32 TO 1/16 LARGER THAN THE BOLT DIAMETER). THE HOLD DOWN SHALL BE INSTALLED TIGHT TO THE HOLD DOWN POST WITHOUT FILLERS OR DAPPING. THE POST BOLTS SHALL NOT BE COUNTERSUNK INTO THE HOLD DOWN POST UNO. DO NOT BEND HOLD DOWN ANCHORS. (SIMPSON HD ICC-ESR# 5708).
- 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:

F 20 PSF (REDUCIBLE)

SNOW LOADS:

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

3. WIND LOADS:

WIND LOADS ARE IN ACCORDANCE WITH SECTION 1609A OF THE CODE. SEE TABLE ON THIS SHEET FOR PRESSURE AT EXTERIOR COMPONENTS AND CLADDING.

BASIC WIND SPEED, V = 101 MPH (3-SECOND GUST)

RISK CATEGORY III

WIND EXPOSURE C

WIND IMPORTANCE FACTOR, I = 1.0

DESIGN WIND PRESSURE = 39.66 PSF

4. EARTHQUAKE LOADS ON NONSTRUCTURAL COMPONENTS:

EARTHQUAKE LOADS ARE IN ACCORDANCE WITH SECTION 1613A OF THE CODE. RISK CATEGORY III Ip = 1.0 FOR ALL NONSTRUCTURAL COMPONENTS SEISMIC DESIGN CATEGORY (SDC) = D

SITE CLASS = D $S_S = 1.997g$ $S_1 = 0.721g$

 $S_{D1}^{\cdot} = 0.817g$ $S_{DS}^{\cdot} = 1.597g$

EARTHQUAKE LOADS ON NONSTRUCTURAL COMPONENTS, SHALL BE DETERMINED IN ACCORDANCE WITH THE FOLLOWING PROCEDURE: CALCULATE Fp BASED ON ASCE 7-16 EQUATION 13.3-1 USING THE VALUE OF

S_{DS} = 1.597g
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.

EARTHQUAKE LOADS ON PRIMARY STRUCTURE:

EARTHQUAKE LOADS ARE IN ACCORDANCE WITH SECTION 1613A OF THE CODE.

R = 6 1/2 (WOOD SHEARWALL)

6. FLOOD DESIGN DATA:

THE PROJECT IS NOT LOCATED WITHIN A FLOOD HAZARD AREA

STRUCTURAL OBSERVATION:

- 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.
- 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.
- 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.

CONSTRUCTION STAGES

ELEMENTS/CONNECTIONS TO BE OBSERVED

a. ROOF FRAMING

CONNECTORS / STRAPS

THE STRUCTURAL OBSERVER SHALL PREPARE A REPORT FOR EACH SIGNIFICANT STATE OF CONSTRUCTION OBSERVED. A COPY OF THE OBSERVATION REPORT SHALL BE SENT TO DSA, OWNER, CONTRACTOR, AND PROJECT INSPECTOR.

GENERAL

- 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.

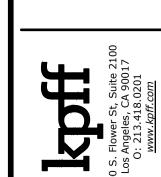
- NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK.
- 6. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING:

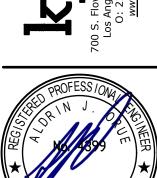
2019 CALIFORNIA BUILDING CODE, PART 2A, REFERRED TO HERE AS "THE CODE", AND ANY OTHER REGULATING AGENCIES WHICH HAVE AUTHORITY OVER WHICH ANY PORTION OF THE WORK, INCLUDING THE STATE OF CALIFORNIA DIVISION OF INDUSTRIAL SAFETY, AND THOSE CODES & STANDARDS LISTED IN THESE NOTES AND SPECIFICATIONS.

- 7. SEE ARCHITECTURAL DRAWINGS FOR THE FOLLOWING:
 - SIZE AND LOCATION OF ALL DOOR AND WINDOW OPENINGS, EXCEPT AS NOTED
 - SIZE AND LOCATION OF ALL INTERIOR AND EXTERIOR NON-BEARING PARTITIONS.
 - 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.
- 13. CONTRACTOR SHALL INVESTIGATE SITE DURING CLEARING AND EARTHWORK OPERATIONS FOR FILLED EXCAVATIONS OR BURIED STRUCTURES, SUCH AS CESSPOOLS, CISTERNS, FOUNDATIONS, ETC. IF ANY SUCH STRUCTURES ARE FOUND, STRUCTURAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
- 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#: 03-122720

11-17-202







ROSEMEAD SCHOOL DISTRICT

RSD - SHUEY ELEMENTARY SCHOOL

HVAC REPLACEMENT AT BUILDINGS F,G AND H



ROSEMEAD, CA 91770

C ARCHITECTURE

NAC NO 161-21043

FILE

DRAWN CC

CHECKED EMB/AL

DATE 11-17-2022

STRUCTURAL GENERAL NOTES

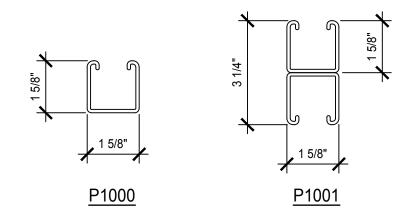
S0.02

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

7. BOLT TORQUE REQUIREMENTS:

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



STRUCTURAL TESTS AND SPECIAL INSPECTIONS

- 1. 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 THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION.
- SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 1707A OF THE CODE FOR THE FOLLOWING ITEMS:
- 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.
- 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#: 03-122720

11-17-20 01-31-20





OSEMEAD SCHOOL DISTRICT

SSD - SHUEY ELEMENTARY SCHOC

VAC REPLACEMENT AT BUILDINGS F.G AND F



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

ARCHITECTUR

161-21043

CC
ECKED EMB/AL
11-17-2022

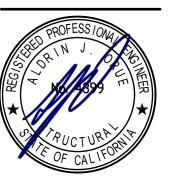
RUCTURAL GENER

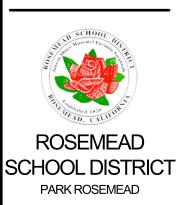
<u>SU U3</u>

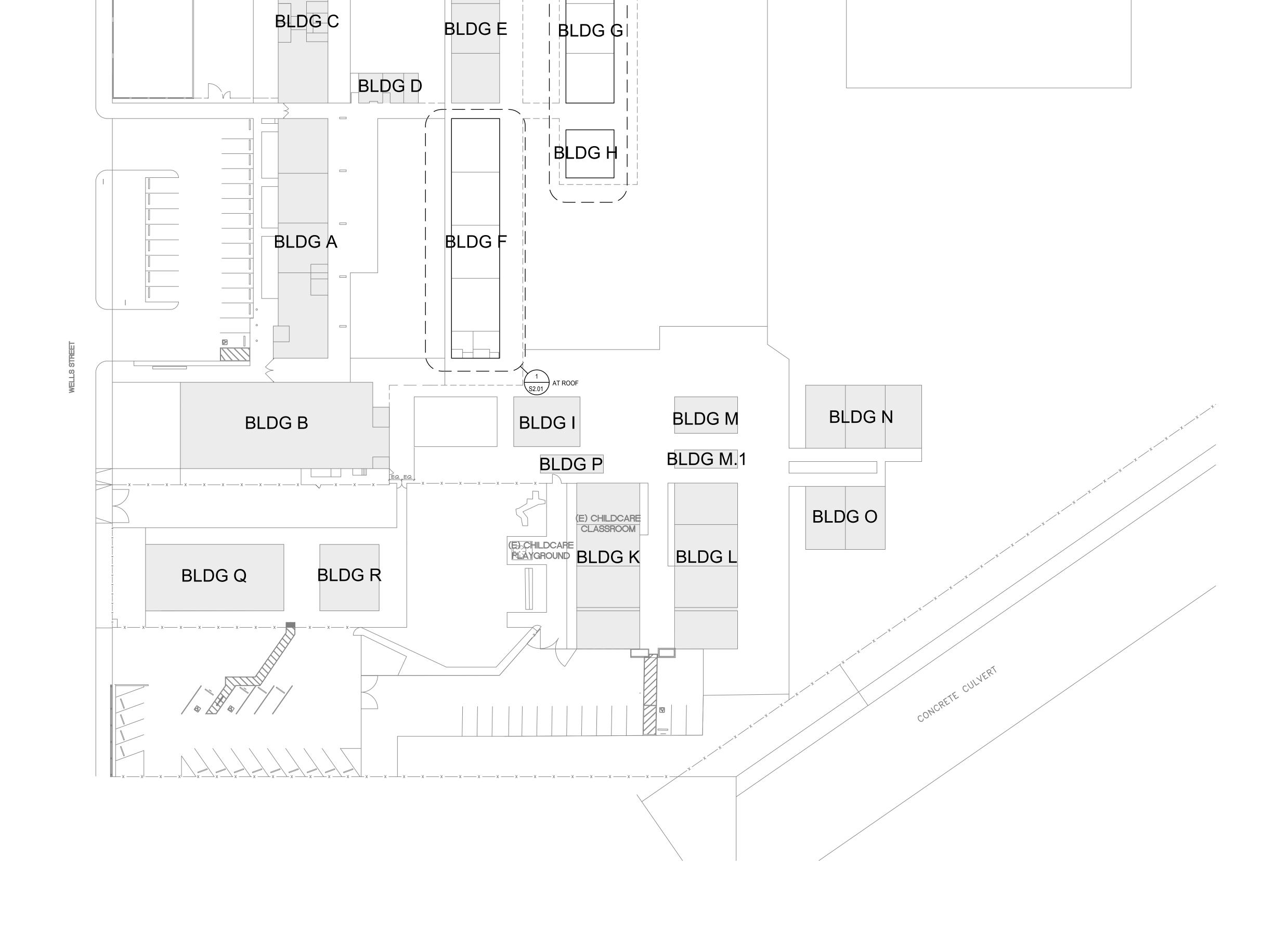
- 1. THE PURPOSE OF THIS KEY PLAN IS TO INDICATE AREAS FOR ENLARGED STRUCTURAL PLANS ONLY. NOT USED.
- 3. VERIFY ALL DIMENSIONS AND ELEVATIONS IN THE FIELD AND WITH ARCH DRAWINGS PRIOR TO
- LOCATING AND FABRICATING NEW FRAMING.
- 4. SEE SHEET S0.01 FOR SYMBOLS AND ABBREVIATIONS.
- 5. SEE S0.XX SERIES OF SHEETS FOR STRUCTURAL GENERAL NOTES.
- 6. VERIFY EXACT QUANTITIES, LOCATIONS AND DIMENSIONS OF MEP EQUIPMENT WITH MEP & ARCHITECTURAL DRAWINGS AND EQUIPMENT MFR PRIOR TO FABRICATION OF NEW SUPPORT FRAMING AND INSTALLATION OF EQUIPMENT.

FILE NO: 19-91 A#: 03-122720









(E) 2 1/2"Ø STD PIPE, TYP

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.
- 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
- 6. SEE ARCHITECTURAL DRAWINGS FOR GRID DIMENSIONS & HORIZONTAL CONTROL.
- 7. MOVE AND REPLACE (E) CROSS BRIDGING IN KIND AS REQUIRED FOR INSTALLATION OF SISTERING JOISTS.
- 8. SEE SHEET S0.01 FOR SYMBOLS AND ABBREVIATIONS.
- 9. SEE S0.XX SERIES OF SHEETS FOR STRUCTURAL GENERAL NOTES.
- 10. SEE S4.XX SERIES OF SHEETS FOR EQUIPMENT SUPPORT DETAILS.

MECHANICAL EQUIPMENT NOTES:

(E) WOOD ROOF OPENINGS AS REQ'D.

1. XXX INDICATES (N) HVAC EQUIPMENT PER MECHANICAL DRAWINGS. SEE EQUIPMENT SCHEDULE FOR SUPPORT AND/OR ANCHORAGE DETAIL.

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

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											
OPERATING MARK WEIGHT LBS.		DETAIL REFERENCE	REMARKS								
RTU-SH11	675	4/S4.01	SEE MECH FOR ADDI_INFORMATION								

Flower St, Suite 2100 Angeles, CA 90017 : 213.418.0201

FILE NO: 19-91



A#: 03-122720

SCHOOL F, G AND H

OSEMEAD SCHOOL DISTRICT

SD - SHUEY ELEMENTARY SCH

VAC REPLACEMENT AT BUILDINGS F,G AN

ROSEMEAD
SCHOOL DISTRICT
PARK ROSEMEAD

3907 ROSEMEAD BOULEVARD ROSEMEAD, CA 91770

CARCHITECTURE

NAC NO 161-21043
FILE
DRAWN CC

BUILDING F ROOF FRAMING PLAN

KEY PLAN $\stackrel{\scriptscriptstyle{\mathbb{N}}}{\oplus}$

8LOC 8 8LOC 9 8L

- 1. EXISTING CONDITIONS SHOWN ON PLANS, SECTIONS AND DETAILS ARE BASED ON LIMITED AVAILABLE SUBJECT TO REVIEW & APPROVAL BY DSA.
- AND FABRICATING NEW FRAMING.
- 3. ELEMENTS SHOWN SCREENED ARE EXISTING ELEMENTS WHICH ARE TO REMAIN, UNO. ELEMENTS SHOWN
- 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.
- 7. MOVE AND REPLACE (E) CROSS BRIDGING IN KIND AS REQUIRED FOR INSTALLATION OF SISTERING JOISTS.
- 8. SEE SHEET S0.01 FOR SYMBOLS AND ABBREVIATIONS.
- 9. SEE S0.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 & 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.

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

BLDG C

BLDG A

BLDG B

BLDG R

KEY PLAN 💍

BLDG Q

BLDG D

BLDG E

BLDG I

BLDG P

BLDG M

BLDG M.1

4. IF PIPING FROM MECH UNIT REQUIRE CORE THRU (E) ROOF OR WALL SHEATHING (2 INCH MAX

EQUIPMENT SCHEDULE

RTU UNITS OPERATING MARK WEIGHT REMARKS REFERENCE SEE MECH FOR RTU-SH13 675 ADDL INFORMATION SEE MECH FOR RTU-SH16

ADDL INFORMATION

FILE NO: 19-91 A#: 03-122720



SCHOOL DISTRICT PARK ROSEMEAD 3907 ROSEMEAD BOULEVARD

ROSEMEAD, CA 91770

NAC NO 161-21043 11-17-2022

BUILDING G & H ROOF FRAMING PLAN

PLAN NOTES:

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

2. VERIFY ALL DIMENSIONS AND ELEVATIONS IN THE FIELD AND WITH ARCH DRAWINGS PRIOR TO LOCATING

DARK ARE NEW ELEMENTS, UNO.

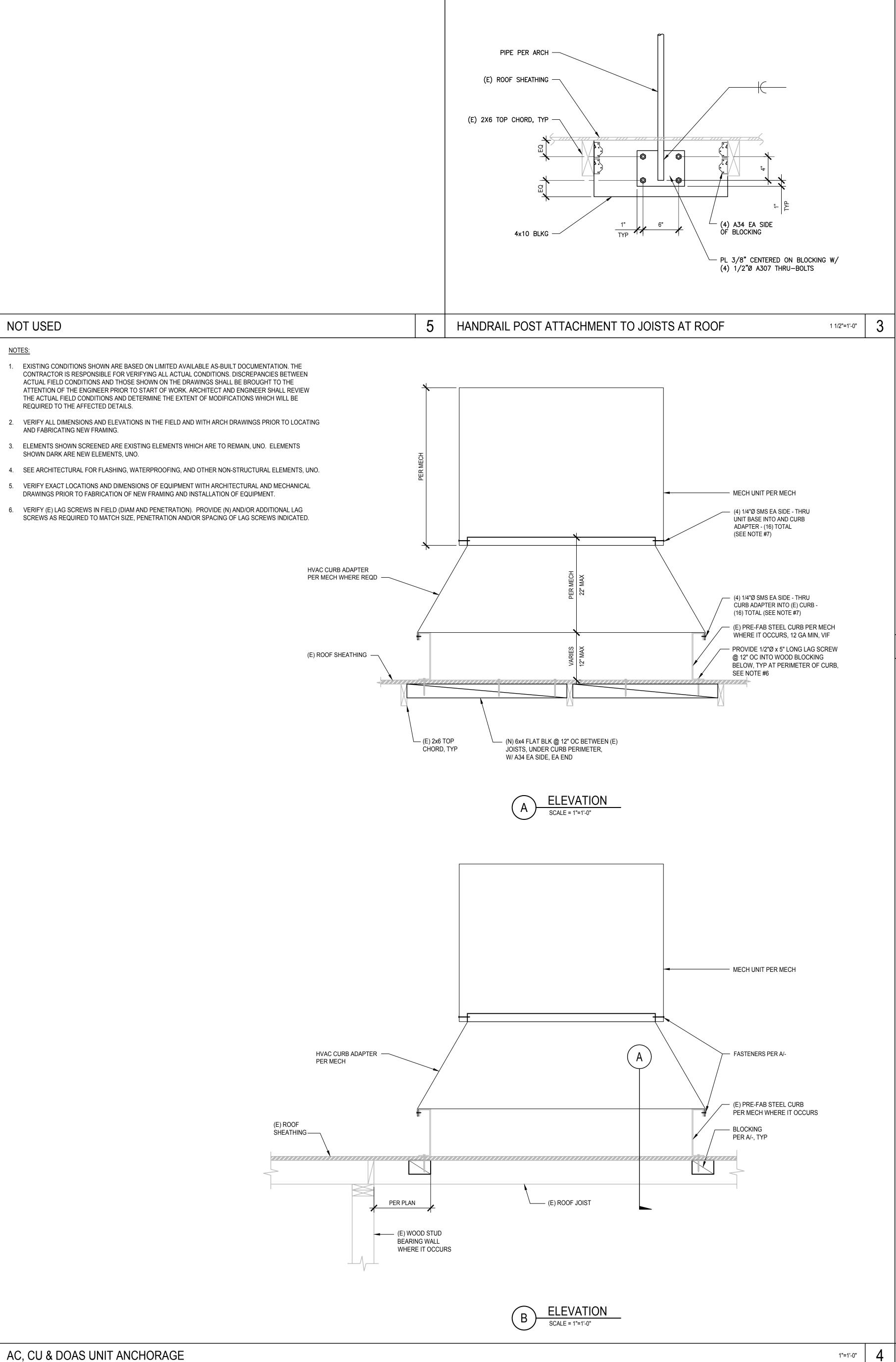
6. SEE ARCHITECTURAL DRAWINGS FOR GRID DIMENSIONS & HORIZONTAL CONTROL.

INDICATES (N) HVAC EQUIPMENT PER MECHANICAL DRAWINGS. SEE EQUIPMENT SCHEDULE FOR SUPPORT AND/OR ANCHORAGE DETAIL.

ARCHITECTURAL DRAWINGS AND EQUIPMENT MFR PRIOR TO FABRICATION OF NEW SUPPORT FRAMING

BLDG G & H - ROOF FRAMING PLAN

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



EXCEPT WHERE OTHERWISE STATED.

1. THIS NAILING SCHEDULE SHALL ONLY BE USED IF CONDITION IS NOT OTHERWISE DETAILED OR SPECIFIED ON THE CONSTRUCTION DOCUMENTS. COMMON NAILS SHALL BE USED

2. NAILS SPACED AT 6 INCHES (152mm) ON CENTER AT EDGES, 12 INCHES (305mm) AT INTERMEDIATE SUPPORTS EXCEPT 6 INCHES (152mm) AT ALL SUPPORTS WHERE SPANS ARE 48 INCHES (1219mm) OR MORE. FOR NAILING OF WOOD STRUCTURAL PANEL AND PARTICLEBOARD DIAPHRAGMS AND SHEAR WALLS, REFER TO SECTIONS OF THE CODE.

COMMON OR DEFORMED SHANK.

COMMON

DEFORM SHANK

6. CORROSION-RESISTANT SIDING OR CASING NAILS CONFORMING TO THE REQUIREMENTS OF

7. FASTENERS SPACED 3 INCHES (76mm) ON CENTER AT EXTERIOR EDGES AND 6 INCHES (152mm) ON CENTER AT INTERMEDIATE SUPPORTS.

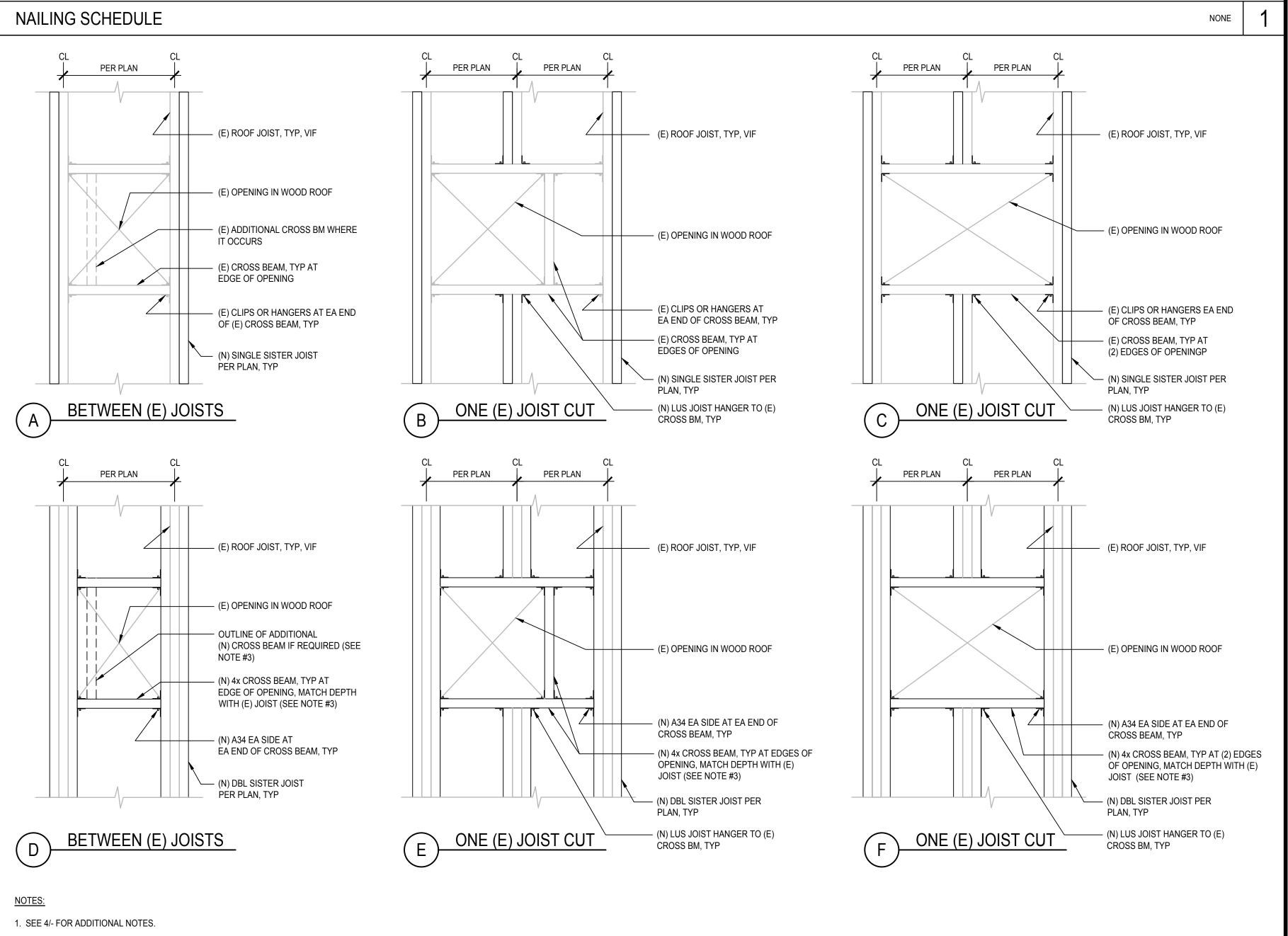
8. CORRISION-RESISTANT ROOFING NAILS WITH 7/16-INCH-DIAMETER (11mm) HEAD AND 1 1/2-INCH (38mm) LENGTH FOR 1/2" INCH (12.7mm) SHEATHING AND 1 3/4-INCH (44mm) LENGTH FOR 25/32 -INCH (20mm) SHEATHING CONFORMING TO THE REQUIREMENTS OF THE CODE.

CORROSION-RESISTANT STAPLES WITH NOMINAL 7/16-INCH (11mm) CROWN AND 1 1/8-INCH (29mm) LENGTH FOR 1/2-INCH (12.7mm) SHEATHING AND 1 1/2-INCH (38mm) LENGTH FOR 25/32 -INCH (20mm) SHEATHING CONFORMING TO THE REQUIREMENTS OF THE CODE.

10. PANEL SUPPORTS AT 16 INCHES (406mm) [20INCHES (508 mm) IF STRENGTH AXIS DIRECTION OF THE PANEL, UNLESS OTHERWISE MARKED]. CASING OR FINISH NAILS SPACED 6 INCHES (152mm) ON PANEL EDGES, 12 INCHES (305mm) AT INTERMEDIATE SUPPORTS.

11. PANEL SUPPORTY AT 24 INCHES (610mm). CASING OR FINISH NAILS SPACED 6 INCHES (152mm) ON PANEL EDGES, 12 INCHES (305mm) AT INTERMEDIATE SUPPORTS.

NAILING SCHEDULE	
CONNECTION	NAILING
1. JOIST TO SILL OR GIRDER, TOENAIL	3-8
2. BRIDGING TO JOIST, TOENAIL EACH END	2-8
3. 1" X 6" (25mm X 152mm) SUBFLOOR OR LESS TO EACH JOIST, FACE NAIL	2-8
4. WIDER THAN 1" X 6" (25mm X 152mm) SUBFLOOR TO EACH JOIST, FACE NAIL	3-8
5. 2" (51mm) SUBFLOOR TO JOIST OR GIRDER, BLIND AND FACE NAIL	2-16
6. SOLE PLATE TO JOIST OR BLOCKING, TYPICAL FACE NAIL SOLE PLATE TO JOIST OR BLOCKING, AT BRACED WALL PANELS	16d AT 16" (406mm) O 3-16d PER 16"(406 mm
7. TOP PLATE TO STUD, END NAIL	2-16
8. STUD TO SOLE PLATE	4-8d, TOENAIL OR 2-16d, END NAII
9. DOUBLE STUDS, FACE NAIL	16d AT 24" (610mm) O
10. DOUBLE TOP PLATES, TYPICAL FACE NAIL DOUBLE TOP PLATES, LAP SPLICE	16d AT 16" (406mm) O 8-16
11. BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOENAIL	3-8
12. RIM JOIST TO TOP PLATE, TOENAIL	8d AT 6" (152mm) 0
13. TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL	2-16
14. CONTINUOUS HEADER, TWO PIECES	16d AT 16" (406mm) OC ALONG EACH EDG
15. CEILING JOISTS TO PLATE, TOENAIL	3-8
16. CONTINUOUS HEADER TO STUD, TOENAIL	4-8
17. CEILING JOIST, LAPS OVER PARTITIONS, FACE NAIL	3-16
18. CEILING JOISTS TO PARELLEL RAFTERS, FACE NAIL	3-16
19. RAFTER TO PLATE, TOENAIL	3-8
20. 1" (25mm) BRACE TO EACH STUD AND PLATE, FACE NAIL	2-8
21. 1" X 8" (25mm X 203mm) SHEATHING OR LESS TO EACH BEARING, FACE NAIL	2-8
22. WIDER THAN 1" X 8" (25mm X 203mm) SHEATHING TO EACH BEARING, FACE NAIL	3-8
23. BUILT-UP CORNER STUDS	16d AT 24" (610mm) O
24. BUILT-UP GIRDER AND BEAMS 20d AT 32" (813mm) OC AT TOP	AND BOTTOM AND STAGGERED 2-20d AT ENDS AND AT EACH SPLIC
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)	6d 8d ⁴ AND 6d 8d 10d ⁴ OR 8d
COMBINATION SUBFLOOR-UNDERLAYMENT (TO FRAMING):	
3/4" (19mm) AND LESS	6d
7/8"-1" (22mm-25mm)	. 8d
1 1/8"-1 1/4" (29mm-32mm)	10d ⁴ OR 8d
27. PANEL SIDING (TO FRAMING): 2	
1/2" (12.7mm) OR LESS 5/8" (16mm)	6d 8d
28. FIBERBOARD SHEATHING: 7	
1/2" (12.7mm)	NO.11 ga
25/32" (20mm)	6d NO.16 ga NO.11 ga 8d NO.16 ga
29. INTERIOR PANELING	
1/4" (6.4mm)	4d 6d



FILE NO: 19-91

A#: 03-122720

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| Appli

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

REINSTALLING THEM W/ CONNECTOR HARDWARE AS SHOWN.

2. DETAILS A/- THRU C/- APPLY TO LOCATIONS W/ SINGLE (N) SISTERED JOIST ON ONE SIDE OF (E) JOIST.

DETAILS D/- THRU F/- APPLY TO LOCATIONS W/ DBL (N) SISTERED JOISTS. (ONE NEW JOIST ON EACH SIDE OF EXISTING JOIST.)

3. IN LIEU OF PROVIDING (N) CROSS BMS AS SHOWN, CONTRACTOR HAS THE OPTION OF CUTTING (E) CROSS BMS AS REQD AND

NOTE CALLOUT

DETAIL CALLOUT

- NUMBER ON TOP DENOTES DETAIL NUMBER

-- - NUMBER ON BOTTOM DENOTES SHEET DETAIL IS SHOWN

MECHANICAL EQUIPMENT CALLOUT, SEE MECHANICAL
PLANS FOR EXACT LOCATION AND REQUIREMENTS

SECTION CALLOUT

POINT OF CONNECTION

POINT OF DISCONNECTION

NEW LINEWORK

EXISTING LINEWORK

→ DEMOLITION LINEWORK

DIRECTION OF FLOW

DUCTWORK LEGEND

<u>SYMBOL</u>

16"x12"

SHEET METAL DUCT

HIDDEN SHEET METAL DUCT

DESCRIPTION

FILTER

16"x12" 16"x12" (1"L)

CLEAR INSIDE DIMENSION SHOWN, LINER THICKNESS IN PARENTHESIS

INTERNALLY INSULATED SHEET METAL DUCT

LOUVER

ACCESS DOOR OR ACCESS PANEL (AP) IN DUCTWORK

PIPING LEGEND

DESCRIPTION NEW PIPING (SIZE-SERVICE) ← (E) 4" CHWR — 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
BHP	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
CT	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 DIFFERENT
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
FT	FEET OR FOOT	VD	VOLUME DAMPER
GA	GAUGE	VFD	VARIABLE FREQUENCY DRIVE
GALV	GALVANIZED	VTR	VENT THRU ROOF
GC	GENERAL CONTRACTOR	W/	WITH
GPH	GALLONS PER HOUR	W/O	WITHOUT
GPM	GALLONS PER MINUTE	WB	WET BULB
HB	HOSE BIBB	WC	WATER COLUMN
HD HLWB	HEAD	WG	WATER RRESSURE DROP
HHWR	HEATING HOT WATER CHERLY	WPD	WATER PRESSURE DROP
HHWS	HEATING HOT WATER SUPPLY	WT	WEIGHT
HP	HEAT PUMP		

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

CONTROL ABBREVIATIONS

<u>ABBREVIATION</u>	DESCRIPTION	ABBREVIATION	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

001 GENERAL NOTES, LEGENDS, ABBREVIATIONS AND SHEET INDEX

M002 SCHEDULES - SHUEY

M101 MECHANICAL SITE PLAN - SHUEY

M601 DETAILS
M602 DETAILS

M701 TITLE 24 COMPLIANCE FORMS - SHUEY

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
- 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:

INSTRUCTIONS.

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.
- 2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER.

 "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
- 3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.
- THE FOLLOWING MECHANICAL 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 ☒ MD ☒ PP☒ E ☒ - OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

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

A#: 03-122720

FILE NO: 19-91

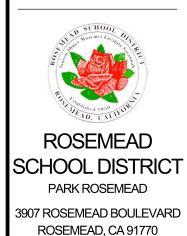
Long Beach | Los Angeles San Diego | San Jose



ROSEMEAD SCHOOL DISTRICT

RSD - SHUEY ELEMENTARY SCHOOL

HVAC REPLACEMENT AT BUILDINGS F,G AND H



NATUR ARCHITECTUR

NAC NO 161-21043
FILE

DRAWN JL

CHECKED SN

DATE 10-06-2022

GENERAL NOTES, LEGENDS, ABBREVIATIONS, AND SHEET INDEX

M001

PACKAGED AIR CONDITIONING UNITS

							SUPPLY FAN			Co	COOLING CAPACITY				TOTAL HEATING CAPACITY				ELECTRICAL								
MARK	MANUFACTURER & MODEL	LOCATION	TYPE	SERVICE	AIRFLOW	HP/(BHP)	FOD	DDM	TOTAL	SENSIBLE	TONIC	SEER	INPUT	OUTPUT	ENTERING AIR	LEAVING AIR	_J THERMAL	VOLTAGE	DLIACE	ΓLA	MCA	MOCD	OUTSIDE AIR CFM SETPOIN	OPERATING T WEIGHT LBS.	CURB WEIGHT LBS.	MAX OPERATING WEIGHT LBS.	REMARKS
					AIRFLOW CFM	пг/(впг)	ESP	RPM	TOTAL MBH	SENSIBLE MBH	TONS		MBH	MBH	°F DB	°F DB	EFFICIENCY	VOLTAGE	PHASE	FLA	MCA	MOCP				WEIGHT EBO.	
RTU-SH11	CARRIER 48GCGM05A2A5-0A0A0	SHUEY 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	70.0	98.4	81%	230	3	26.0	27.0	30.0	450	675	147	675	1 3 4 5 7 13
RTU-SH13	CARRIER 48GCGM05A2A5-0A0A0	SHUEY 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	70.0	98.4	81%	230	3	26.0	27.0	30.0	450	675	0	675	2 3 4 5 6 13 15
RTU-SH16	CARRIER 48GCGM05A2A5-0A0A0	SHUEY	GAS HEAT/ELEC	CLASSROOM 15B/16	1,600	1.0/(0.62)	0.5	1,792	49.96	37.06	4	16.1	60.0	49.0	70.0	98.4	81%	230	3	26.0	27.0	30.0	450	675	0	675	2 3 4 5 6 15

1	UNIT SHALL BE VERTICAL DISCHARGE.	

4 PROVIDE WITH 2" MERV-13 FILTERS.

2 UNIT SHALL BE HORIZONTAL DISCHARGE. 5 PROVIDE WITH 100% OSA ECONOMIZER WITH BAROMETRIC RELIEF. PROVIDE TITLE 24 COMPLIANT VENSTAR 2800 THERMOSTAT WITH ADJUSTABLE SETPOINT AND OVERRIDE 6 UNIT DISCHARGE CONFIGURATION SHALL MATCH EXISTING. NO ADAPTER CURB REQUIRED FOR MOUNTING.

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

MODEL AND DIMENSIONS FOR ADAPTER CURB ATTACHMENT.

8 PROVIDE WITH CA-CAR-537-CAR-005 MICROMETL CURB ADAPTER. 9 EXISTING UNIT MODEL : CARRIER 48NLT048. CONTRACTOR TO VERIFY
MODEL AND DIMENSIONS FOR ADAPTER CURB ATTACHMENT EXISTING UNIT MODEL: CARRIER 48NLT042. CONTRACTOR TO FIELD VERIFY MODEL AND DIMENSIONS FOR ADAPTED CLIPS ATTACHMENT. ADAPTER CURB ATTACHMENT.

EXISTING UNIT MODEL : CARRIER 48HJD005, 48HDJ006 OR 48HJD007. CONTRACTOR TO FIELD VERIFY MODEL AND DIMENSIONS FOR CURB ATTACHMENT.

FOR ADAPTER CURB. PROVIDE CDI 1959854-1-9999-4000 OR EQUAL ADAPTER. EXISTING UNIT MODEL: CARRIER 48HJD006. CONTRACTOR TO FIELD VERIFY MODEL AND DIMENSIONS FOR CURB ATTACHMENT.

12 EXISTING UNIT MODEL: CARRIER 48HJD006. CONTRACTOR TO FIELD VERIFY MODEL AND DIMENSIONS FOR HORIZONTAL DISCHARGE. ATTACH PER STRUCTURAL.

MODEL AND DIMENSIONS FOR ADAPTER CURB ATTACHMENT.

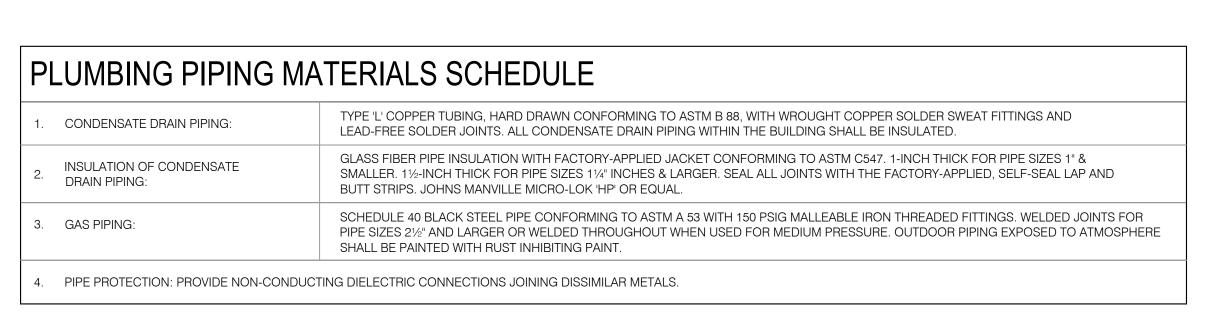
EXISTING UNIT MODEL : BARD RPM36B. CONTRACTOR TO FIELD VERIFY MODEL AND DIMENSIONS FOR ADAPTER CURB. PROVIDE CDI 1959854-1-9999-4000 OR FOLIAL ADAPTER

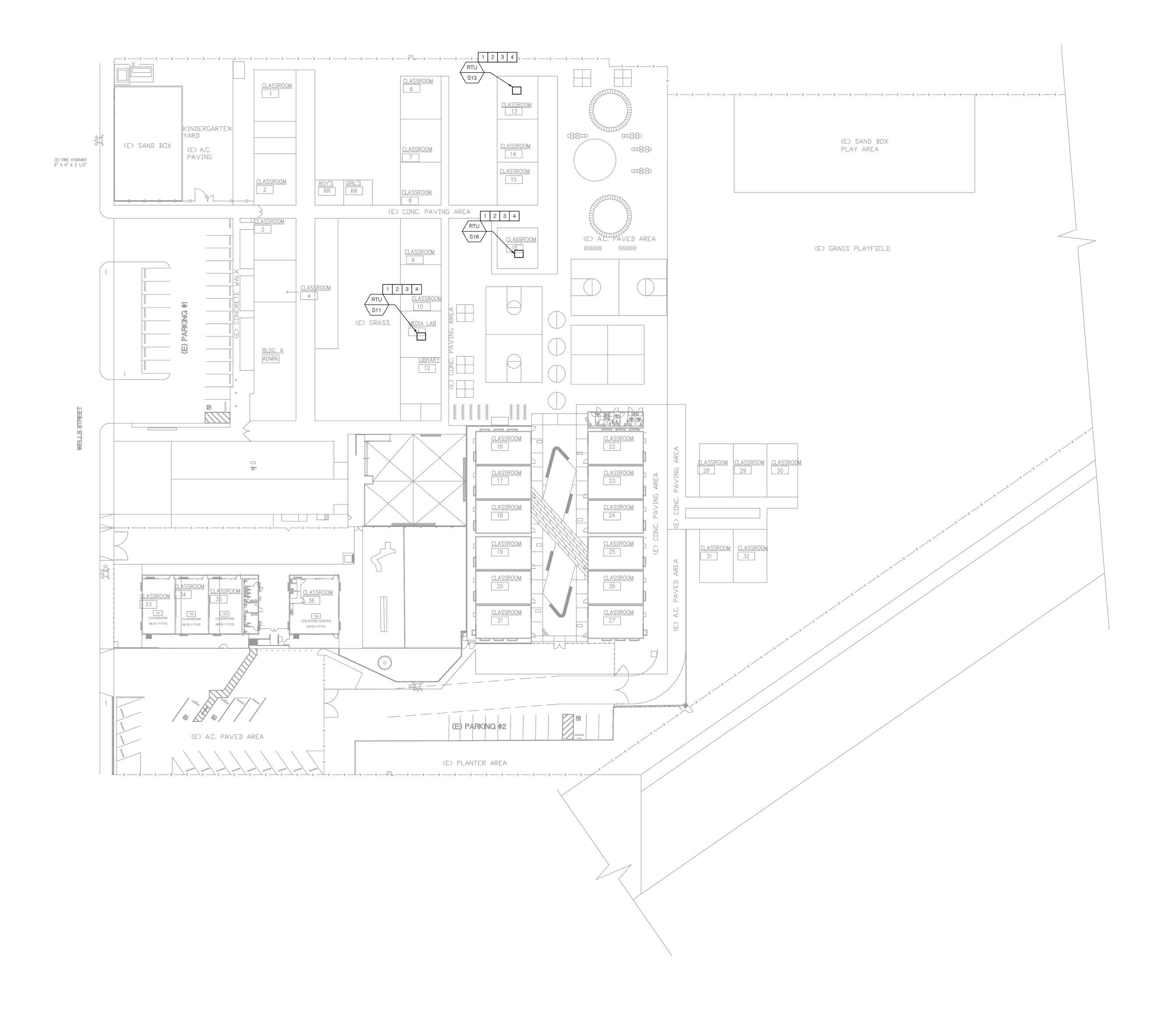
FILE NO: 19-91 A#: 03-122720



SCHOOL DISTRICT

SCHEDULES - SHUEY





GENERAL NOTES

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

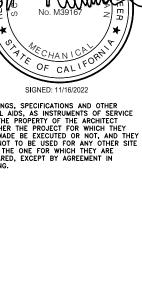
KEY NOTES

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- 1 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" 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 DETIAL 4/M601.
- PROVIDE 3/4" CD FROM A/C UNIT AND ROUTE ON ROOF. REFER TO DETAIL 6/M601.









3907 ROSEMEAD BOULEVARD ROSEMEAD, CA 91770

drawn CN CHECKED SN

MECHANICAL SITE PLAN -SHUEY

NAC NO 161-21043

DRAWN JL CHECKED SN DATE 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.

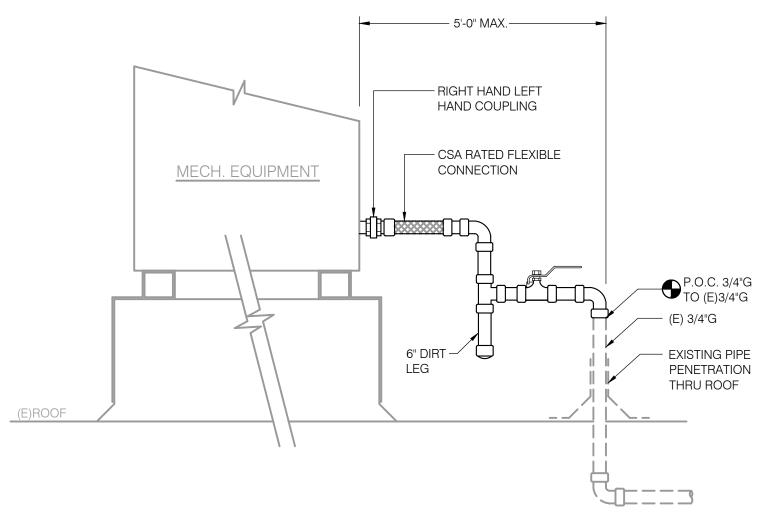
2 PIPE CLAMP - UNISTRUT P1113 OR EQUAL.

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

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

MAX. # OF PIPES/SUPPORT = 2 MAX. SIZE OF PIPE (DIA.) = 1-1/4" MAX. OPER. WEIGHT AT EA = 10 LBS MAX. SUPPORT SPACING = 6 FEET 12" MAX. (h) TO CTR. OF PIPE 12" MAX. (h) TO CTR. OF PIPE

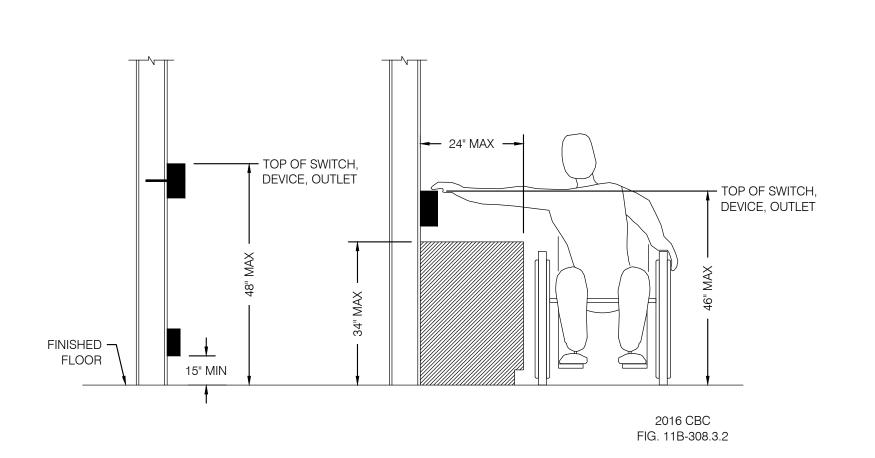
CONDENSATE DRAIN PIPE SUPPORT ON ROOF

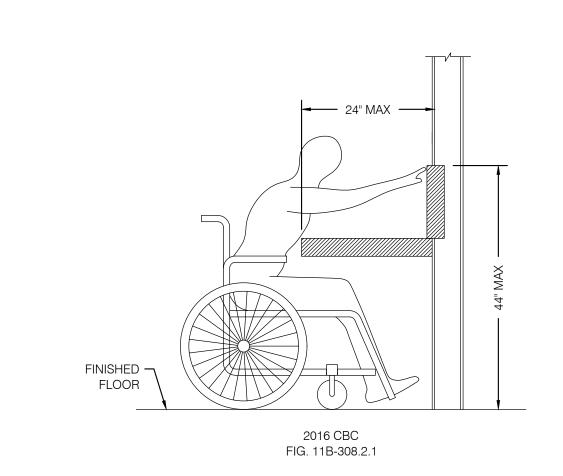


DETAIL GENERAL NOTES

A. FIELD VERIFY EXACT POINT OF CONNECTION TO EXISTING UTILITIES.

GAS CONNECTOR DETAIL

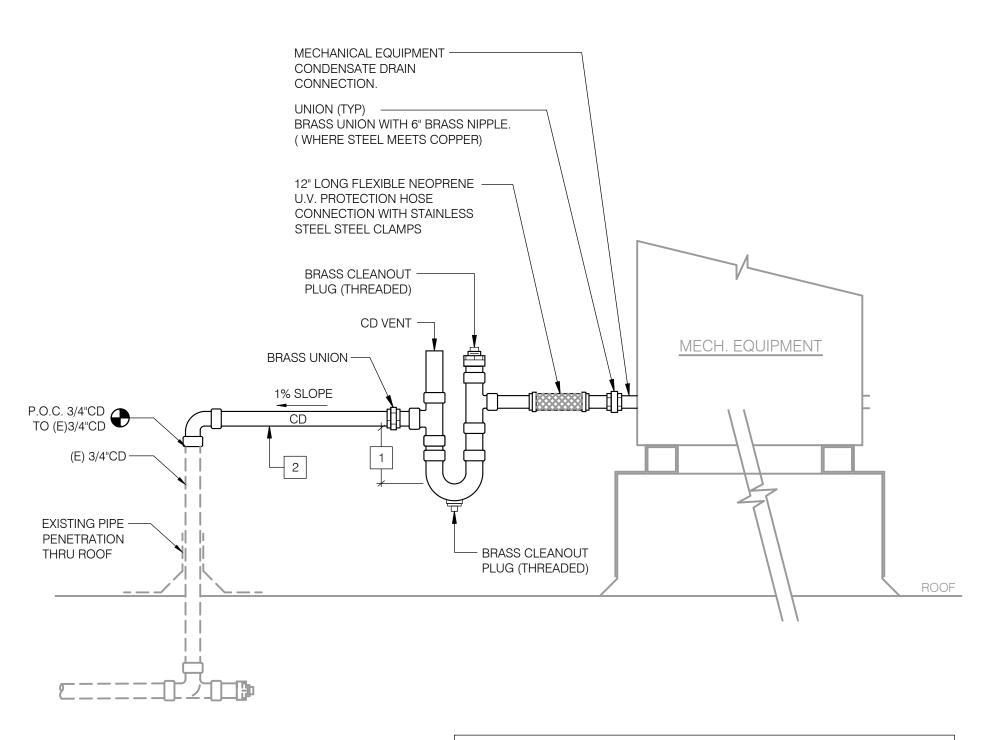


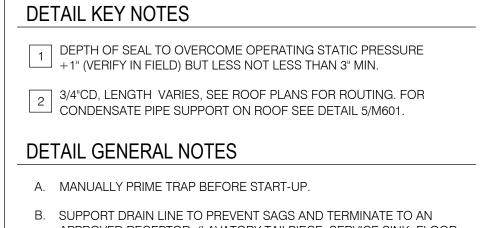


NOTES

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 SYSTEM (IE: TEMPERATURE AND HUMIDITY SENSORS).

MOUNTING HEIGHT OVER OBSTRUCTION





APPROVED RECEPTOR. (LAVATORY TAILPIECE, SERVICE SINK, FLOOR SINK OR ROOF RECEPTOR.)

TYPICAL CONDENSATE DRAIN DETAIL

6. SS = 2.507. FA = 1.2**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.

(3) EQUALLY SPACED PER SHORT SIDE

9 EQUIPMENT BASE RAIL.

1. 60 FT TALL BUILDING MAX

4. RISK CATAGORY III AND IV

155 MPH, 3-SECOND GUST

2. EXPOSURE C

5. IP = 1.5

WIND SPEED

NOTES

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

(E)ROOF SHEATHING -

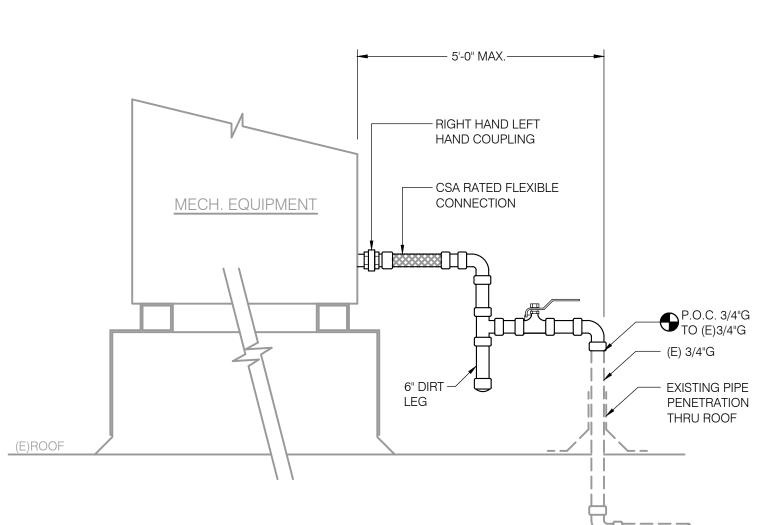
(E)ROOF FRAMING

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

5 INTERNAL DUCT TRANSITIONS

10 REFER TO STRUCTURAL PLANS FOR CALCULATIONS AND ADDITIONAL DETAILING. 6 INTERNAL INSULATION WITH GASKETING.

ROOFTOP UNIT INSTALLATION W/ CURB ADAPTER



(E)WOOD SHEATHING -

(E)WOOD FRAMING —

4 MATCH EXISTING ANCHORAGE FROM UNIT TO CURB.

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

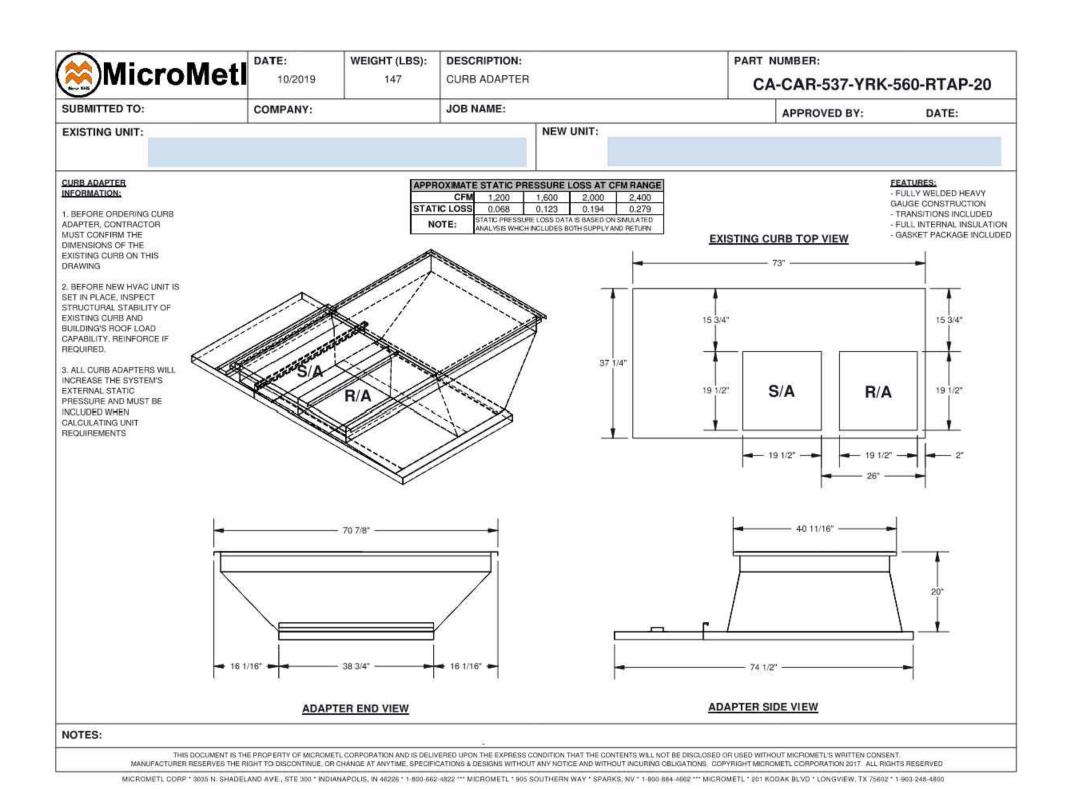
2 EXISTING RETURN DUCT. CONNECT TO UNIT RETURN CURB AT POC SHOWN.

3 EXISTING ROOF CURB AND FLASHING.

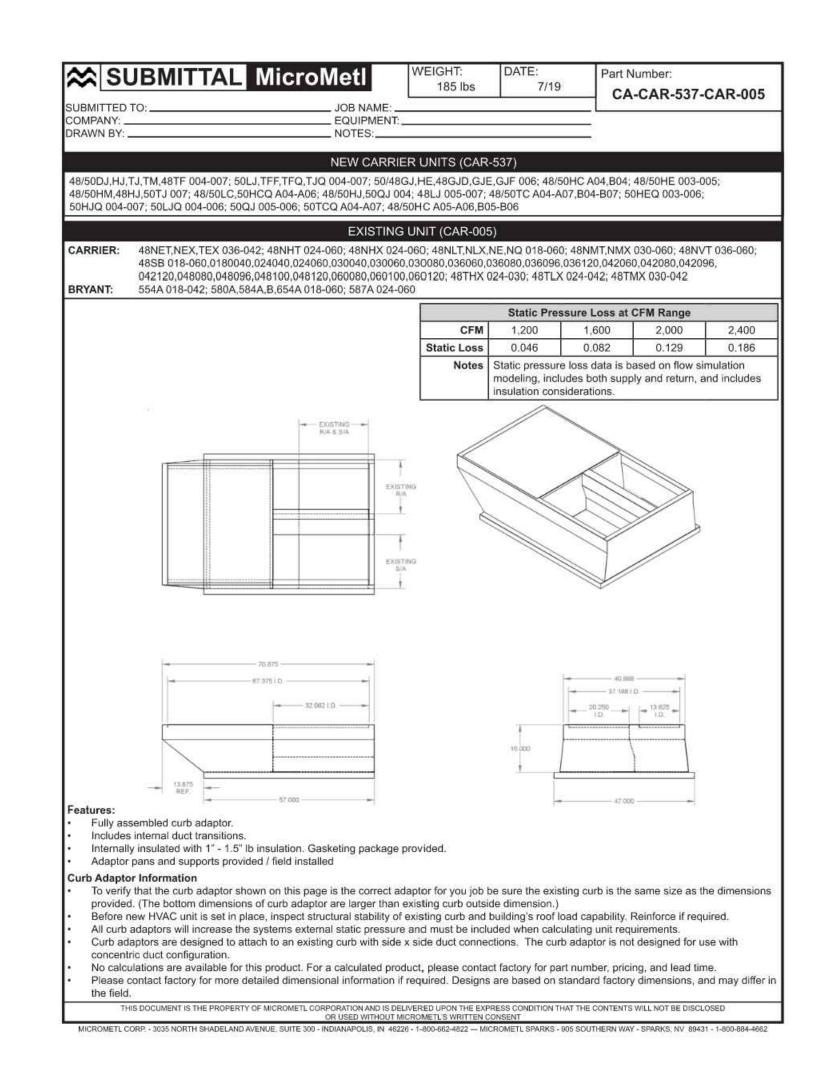
ROOFTOP UNIT INSTALLATION ON (E) CURB

\\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

A#: 03-122720

FILE NO: 19-91

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

NAC NO 161-21043 drawn JL CHECKED SN

DATE 10-06-2022 DETAILS

M602

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

Documentation Software: Energy Code Ace

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

Compliance ID: 77583

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 01 Project Location (city) 7600 04 Total Conditioned Floor Area 02 Climate Zone 05 Total Unconditioned Floor Area 03 Occupancy Types Within Project: 06 # of Stories (Habitable Above Grade) ☐ Office (B) Retail (M) ☐ Non-refrigerated Warehouse (S) ☐ Hotel/ Motel Guest Rooms (R-1) School (E) ☐ Healthcare Facility (I) ☐ High-Rise Residential (R-2/R-3) Other (Write In)

B. PROJECT SCOPE

Relocatable Class Bldg (E)

	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

STATE OF CALIFORNIA

Mechanical Systems CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE NRCC-MCH-E RSD HVAC Replacement Report Page: Project Name: (Page 4 of 8) Project Address: Date Prepared: 2022-11-16T18:16:49-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS This table is used to demonstrate compliance with prescriptive requirements found in §140.4(c), §140.4(e) and §140.4(m) for fan systems. Fan systems serving only process loads are

exempt from these requirements and do not need to be included in Table H. Designed per §140.4(e) and System Fan Type: RTU-E10-E18 Fixed Temperature Constant Volume Controls: an Power Pressure Drop Adjustment - Table 140.4-B Maximum Design Supply Airflow Fan Name o Fan Function Design Airflow through Device (CFM) Fully ducted return/ BHP RTU-E10-E18 1600 0.62 lated Adjustment (i Maximum System Fan Total System Design

Power (B)HP: ¹ FOOTNOTES: Computer room economizers must meet requirements of $\frac{6140.9(a)}{a}$ and will be documented on the NRCC-PRC-E document.

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

Total System Design Supply Airflow (CFM):

I. SYSTEM CONTROLS This table is used to demonstrate compliance with mandatory controls in §110.2 and §120.2 and prescriptive controls in §140.4(f) and (n) or requirements in §141.0(b)2E for altered

0.62

ce conditioning syster	ns.						a destruit de la compansa de la comp	
01	02	03	04	05	06	07	08	09
System Name	System Zoning	Conditioned Floor Area Being Served (ft ²)	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 ²	Setback + DR Tstat per §110.12	EMCS	NA: Single Zone	EMCS	NA: Single Zone	NA: Alteration Project

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

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

STATE OF CALIFORNIA

Registration Number:

Mechanical Systems CALIFORNIA ENERGY COMMISSION NRCC-MCH-E CERTIFICATE OF COMPLIANCE NRCC-MCH-E (Page 7 of 8 2022-11-16T18:16:49-05:00 Project Address:

P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION There are no NRCV forms required for this project.

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

Q. MANDATORY MEASURES DOCUMENTATION LOCATION This table is used to indicate where mandatory measures are documented in the plan set or construction documentation. Compliance with Mandatory Measures documented through MCH andatory Measures Note Block

Generated Date/Time:

Report Version: 2019.1.003

Schema Version: rev 20200601

STATE OF CALIFORNIA

Mechanical Systems CALIFORNIA ENERGY COMMISSION NRCC-MCH-E CERTIFICATE OF COMPLIANCE RSD HVAC Replacement Report Page: Project Name: (Page 2 of 8) 2022-11-16T18:16:49-05:0

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 Cooling Towers §110.1, §110.2, §140.4(c) §110.2(e)2 Compliance Results 5140.4 (See Table I) COMPLIES with Conditions

COMPLIES Mandatory Measures Compliance (See Table Q for Detail 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

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

Schema Version: rev 20200601

STATE OF CALIFORNIA **Mechanical Systems**

CALIFORNIA ENERGY COMMISSION NRCC-MCH-E CERTIFICATE OF COMPLIANCE RSD HVAC Replacement Report Page: Project Name: (Page 5 of 8) Project Address: 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 includes remarks made by the permit applicant to the Authority Having Jurisdiction.

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. 01 Check the box if the project is showing ventilation calculations on the plans, or attaching the calculations instead of completing this table. 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. 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(1) for duct leakage testing. Duct Leakage Sealing Existing Supply and Return The 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 ft² of conditioned floor area. No The <u>combined</u> 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 Registration Number: Generated Date/Time: 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 CERTIFICATE OF COMPLIANCE Project Name: RSD HVAC Replacement Report Page: (Page 8 of 8) 2022-11-16T18:16:49-05:00 Project Address:

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete. cumentation Author Name Andrew Smith CEA/ HERS Certification Identification (if applicable):

In an unconditioned crawl space

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

4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.

I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable

inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

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

Generated Date/Time: Report Version: 2019.1.003 Schema Version: rev 20200601 Documentation Software: Energy Code Ace

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

Compliance ID: 77583

STATE OF CALIFORNIA

F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE (Page 3 of 8) Project Name: RSD HVAC Replacement Report Page: Project Address: 2022-11-16T18:16:49-05:00

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), <u>§140.4(b)</u> and <u>§140.4(k)</u> or <u>§141.0(b)2</u> 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) Cooling Output^{2,3} Load Calculations³ Heating Output^{2,3} Equipment Category per | Equipment Type per Tables 110.2 / Tit Name or Item Tables 110.2 (kBtu/h) (kBtu/h) Per Design (kBtu/h) (kBtu/h) Rated Heating RTU-E10-E18 Sm. Commercial AC Air-cooled unitary AC/HP Pkg (3Ph)

¹FOOTNOTES: 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.

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

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

Dry System Equipment	Efficiency (other than Package	Terminal Air Conditi	oners (PTAC) and I	Package Terminal	Heat Pumps (PTHF	r))			
01	02	03	04	05	06	07	08	09	
			Heati	ng Mode	Cooling Mode				
Name or Item Tag	Size Category (Btu/h)	Rating Condition (°F)	Efficiency Unit	Minimum Efficiency Required per Tables 110.2 / Title 20	Design Efficiency	Efficiency Unit	Minimum Efficiency Required per Tables 110.2 / Title 20	Design Efficiency	
RTU-E10-E18	<65,000		HSPF	8	81	SEER	14	16.1	

G. PUMPS This section does not apply to this project.

Generated Date/Time: Documentation Software: Energy Code Ace Registration Number:

Compliance ID: 77583 CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance Report Version: 2019.1.003 Schema Version: rev 20200601 Report Generated: 2022-11-16 15:16:53

STATE OF CALIFORNIA Mechanical Systems

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

CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE roject Name: RSD HVAC Replacement Report Page: (Page 6 of 8) 2022-11-16T18:16:49-05:00

L. DISTRIBUTION (DUCTWORK and PIPING) ☐ In other unconditioned spaces The scope of the project includes extending an existing duct system, which is constructed, insulated or sealed with asbestos. The scope of the project includes an existing duct system that is documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in the Reference Nonresidential Appendix NA2. 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

elections 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/

O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

NRCI-MCH-01-E - Must be submitted for all buildings

elections 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 Verified NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A RTU-E10-E18 Supply Fan VFD Acceptance (if applicable) since testing activities overlap. NRCA-MCH-05-A - Air Economizer Controls RTU-E10-E18 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: Documentation Software: Energy Code Ace Registration Number: 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

Space Conditioning Mandatory Measures:

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.

110.8(a) INSULATION CERTIFICATION 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."

110.8(b) UREA FORMALDEHYDE INSULATION 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.

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

110.8(d) DUCTS 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.

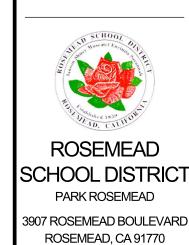
NATURALLY VENTILATED SPACES SHALL BE DESIGNED IN ACCORDANCE WITH 120.1(c)2A THROUGH 120.1(c)2C AND INCLUDE A MECHANICAL VENTILATION SYSTEMS DESIGNED IN ACCORDANCE WITH 120.1(c)3.

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.

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).

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

FILE NO: 19-91 A#: 03-122720



NAC NO 161-21043 10-06-2022

TITLE 24 COMPLIANCE FORMS - SHUEY

② 20A, 125V QUAD RECEPTACLE FIRE RATED TYPE

FIXTURE FED FROM GENERATOR/ INVERTER/ BATTERY BACKUP

INDICATES LIGHTING CONTROL ZONE.

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

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

ABBREVIATIONS

<u>ABBREVIATION</u>	DESCRIPTION	<u>ABBREVIATION</u>	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	ASSUME	LGST	LARGEST
A.C. AF	ASPHALT CONCRETE AMPERE FUSE RATING	LIS LOC.	LOAD INTERRUPTER SWITCH LOCATION
AFC	AVAILABLE FAULT CURRENT	LOTO	LOCK-OUT & TAG-OUT
AFF AFG	ABOVE FINISHED FLOOR ABOVE FINISH GRADE	LSI LTG	LONG TERM, SHORT TERM, INSTANTANEOUS LIGHTING
AIC	AMPERE INTERRUPTING CAPACITY	LV	LOW VOLTAGE
AL	ALUMINUM	M	METER
APPROX. ARCH.	APPROXIMATE ARCHITECT; ARCHITECTURAL	MAX MCA	MAXIMUM MAXIMUM CIRCUIT AMPACITY
AS	AMPERE SWITCH RATING	MCC	MOTOR CONTROL CENTER
ASCC	AVAILABLE SHORT CIRCUIT CURRENT	MCP	MOTOR CIRCUIT PROTECTOR
ATC ATO	AIR TERMINAL CHAMBER AUTOMATIC THROW-OVER (SWITCH)	MFGR, MFR MH	MANUFACTURER MANHOLE
ATS	AUTOMATIC TRANSFER SWITCH	MI.	MECHANICAL INTERLOCK
AUTO AUX	AUTOMATIC AUXILIARY	MRCT MIN	MULTI-RATIO CURRENT TRANSFORMER MINIMUM
AWG	AMERICAN WIRE GAUGE	MOCP	MAXIMUM OVERCURRENT PROTECTION
BAT	BATTERY	MTD	MOUNTED
BEL BKBD	BELOW BACKBOARD	MTG MTR	MOUNTING MOTOR
BKR	BREAKER	MTTB	MAIN TELEPHONE TERMINAL BOARD
BLDG	BUILDING	MV	MEDIUM VOLTAGE
3.S. C	BARE STRANDED CONDUIT	N NAC	NORTH NOTIFICATION APPLIANCE CIRCUIT
) CB	CIRCUIT BREAKER	NC NC	NOTIFICATION APPLIANCE CIRCUIT NORMALLY CLOSED
CC	CONSTANT CURRENT	NEC	NATIONAL ELECTRICAL CODE
CEC CF	CALIFORNIA ELECTRICAL CODE CUBIC FEET	NF NIC	NON-FUSED NOT IN CONTRACT
CKT	CIRCUIT	NL	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	OCPD	OUTSIDE DIAMETER
COL	COLUMN	OE	OVERHEAD ELECTRICAL
CP CPT	COMMUNICATION PROCESSOR CONTROL POWER TRANSFORMER	OFC OH	OIL FUSED CUTOUT OVERHEAD
CR	CONTROL RELAY	OL	OIL LEVER SWITCH
SFD	COMBINATION SMOKE FIRE DAMPER	Р	POLE
CT CW	CURRENT TRANSFORMER COLD WATER	PAC PB	PROGRAMMABLE AUTOMATION CONTROLLI PULL BOX
CU	COPPER	PC	PHOTOCELL
DIAG	DIAGRAM	PCB	POLYCHLORINATED BIPHENYL
NST. OL	DISTANCE DAMP LOCATION LISTING	PDS PF	PRESSURE DIFFERENTIAL SWITCH POWER FACTOR
DM	DIGITAL METER	PH OR Ø	PHASE
MMC	DIGITAL METER MODULE	PILC	PAPER INSULATED, LEAD COVER
)P)IST.	DISTRIBUTION PANEL DISTANCE	PIV PL	POST INDICATING VALVE PLATE
OWG	DRAWING	PLC	PROGRAMMABLE LOGIC CONTROLLER
)WP	DEPARTMENT OF WATER & POWER	PNL	PANEL
EA ECM	EACH ELECTRONIC CIRCUIT MONITOR	POC PREF.	POINT OF CONNECTION PREFERRED
LEC.	ELECTRONIC CIRCUIT MONITOR ELECTRICAL	PREF. PRI.	PRIMARY
M	EMERGENCY	PVC	POLY-VINYL CHLORIDE
MH MT	ELECTRICAL MANHOLE ELECTRICAL METALLIC TUBING	PWR REC/RECEPT	POWER RECEPTACLE
ivi i iPO	EMERGENCY POWER OFF	REQ'D	REQUIRED
:PR	ETHYLENE PROPYLENE RUBBER	RGS	RIGID GALVANIZED STEEL
QUIP :R	EQUIPMENT EXISTING TO BE REMOVED	RMC RPBP	RIGID METAL CONDUIT REDUCED PRESSURE BACK FLOW PREVENT
.r :RR	EXISTING TO BE REMOVED EXISTING TO BE RELOCATED AND -	RM	ROOM
	RECONNECTED	RTAC	REAL TIME AUTOMATION CONTROLLER
XIST/(E) XP	EXISTING EXPLOSION PROOF	SCCR	SHORT CIRCUIT CURRENT RATING
AP A	EXPLOSION PROOF FIRE ALARM	SCE SF	SOUTHERN CALIFORNIA EDISON SQUARE FEET
FE	FINISHED FLOOR ELEVATION	SHT	SHEET
IN. IP.	FINISH FIELD INTERFACE PANEL	SIG. SP	SIGNAL SPARE
IP. IXT	FIXTURE	SPECS	SPECIFICATIONS
LA	FULL LOAD AMPS	ST	STREET
LR LUOR	FLOOR FLUORESCENT	STD STP	STANDARD SHIELDED TWISTED PAIR
LUOR T	FEET	SW	SWITCH
ACP	FIRE ALARM CONTROL PANEL	SWBD	SWITCHBOARD
ATC MC	FIRE ALARM TERMINAL CABINET FLEXIBLE METAL CONDUIT	SWGR SWST	SWITCHGEAR SWITCHING STATION
O O	FIBER OBTIC	TB	TERMINAL BLOCK
TG	FOOTING	TEL./TELE	TELEPHONE
SEN SFI	GENERATOR GROUND FAULT INTERRUPTER	TMH T.O.D.	TELEPHONE MANHOLE TOP OF DUCTBANK
SFR	GROUND FAULT RELAY	T.O.M.	TOP OF MANHOLE
G G	GREEN GROUND	TPS	TWISTED SHIELDED PAIR
GND IOA	GROUND HAND-OFF-AUTOMATIC	TRANSF,XFMR TS	TRANSFORMER TAMPER SWITCH
IP	HORSEPOWER	TYP	TYPICAL
łΤ	HEIGHT	UG	UNDERGROUND
ITR IZ	HEATER HERT7	UON V	UNLESS OTHERWISE NOTED
IZ CON	HERTZ INTEGRATED COMMUNICATIONS OPTICAL -	V VA	VOLTS VOLT-AMPERES
	NETWORK	VB	VIBRATION SWITCH
= = =	INVERT ELEVATION	VFD W	VARIABLE FREQUENCY DRIVE
ED MC	INTELLIGENT ELECTRONIC DEVICES INTERMEDIATE METAL CONDUIT	W W/	WATTS WITH
SC	SHORT CIRCUIT CURRENT	W/O	WITHOUT
NCAND	INCADESCENT	WCR	WITHSTAND CLOSE-ON RATING
, JB, J-BOX	JUNCTION BOX THOUSAND CIRCULAR MILS	WP Z	WEATHERPROOF IMPEDANCE
KCMIL	I DOUGANIO CARCANI AR MINIS		

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
- A. ALL PERMANENT EQUIPMENT AND COMPONENTS.

13, 26, AND 30.

- 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#) #:

SHEET INDEX

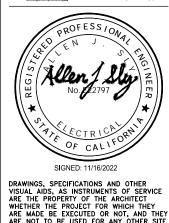
E001 GENERAL NOTES, LEGENDS, ABBREVIATIONS, AND SHEET INDEX

E002 SCHEDULES - SHUEY

ELECTRICAL SITE PLAN - SHUEY

DETAILS

FILE NO: 19-91 A#: 03-122720





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

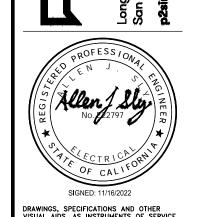
1. WHERE EXISTING CIRCUIT BREAKERS AND FEEDERS ARE BEING RE-USED, CONTRACTOR SHALL VERIFY THE EXISTING CIRCUIT FOR THAT HVAC UNIT IS SERVING THE RESPECTIVE BUILDING PER THE SCHEDULE. MODIFY UNIT NAMES IN THE PANEL DIRECTORY AS REQUIRED TO MATCH THE RESPECTIVE UNIT THAT IS SERVED.

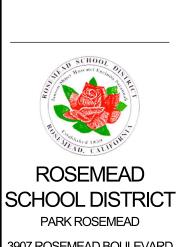
2. REFER TO MECHANICAL SCHEDULES FOR ADDITIONAL EQUIPMENT INFORMATION. 3. HVAC EQUIPMENT WHOSE EXISTING CIRCUIT BREAKER MATCHES THE MOCP OF THE NEW UNIT SHALL BE PROVIDED WITH A NON-FUSED DISCONNECT. IF THE EXISTING CIRCUIT BREAKER EXCEEDS THE MOCP, A

FUSED DISCONNECT SHALL BE PROVIDED.

FILE NO: 19-91 A#: 03-122720

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SCHEDULES - SHUEY

MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE LOCATION VOLTAGE PHASE MCA FUSE CIRCUIT MARK DESCRIPTION DISCONNECT FEEDER PANEL REMARKS PACKAGED A/C UNIT BLDG F ROOF 2, 4, 6 RTU-SH11 208 25.8 3/4"C - 3#10 & 1#10 G 30A/240VAC/3P 3/4"C - 3#10 & 1#10 G EXISTING 27, 29, 31 1 3 RTU-SH13 PACKAGED A/C UNIT BLDG G ROOF 208 25.8 30A/240VAC/3P PACKAGED A/C UNIT BLDG H ROOF 1, 3, 5 25.8 208 3/4"C - 3#10 & 1#10 G EXISTING 30A/240VAC/3P

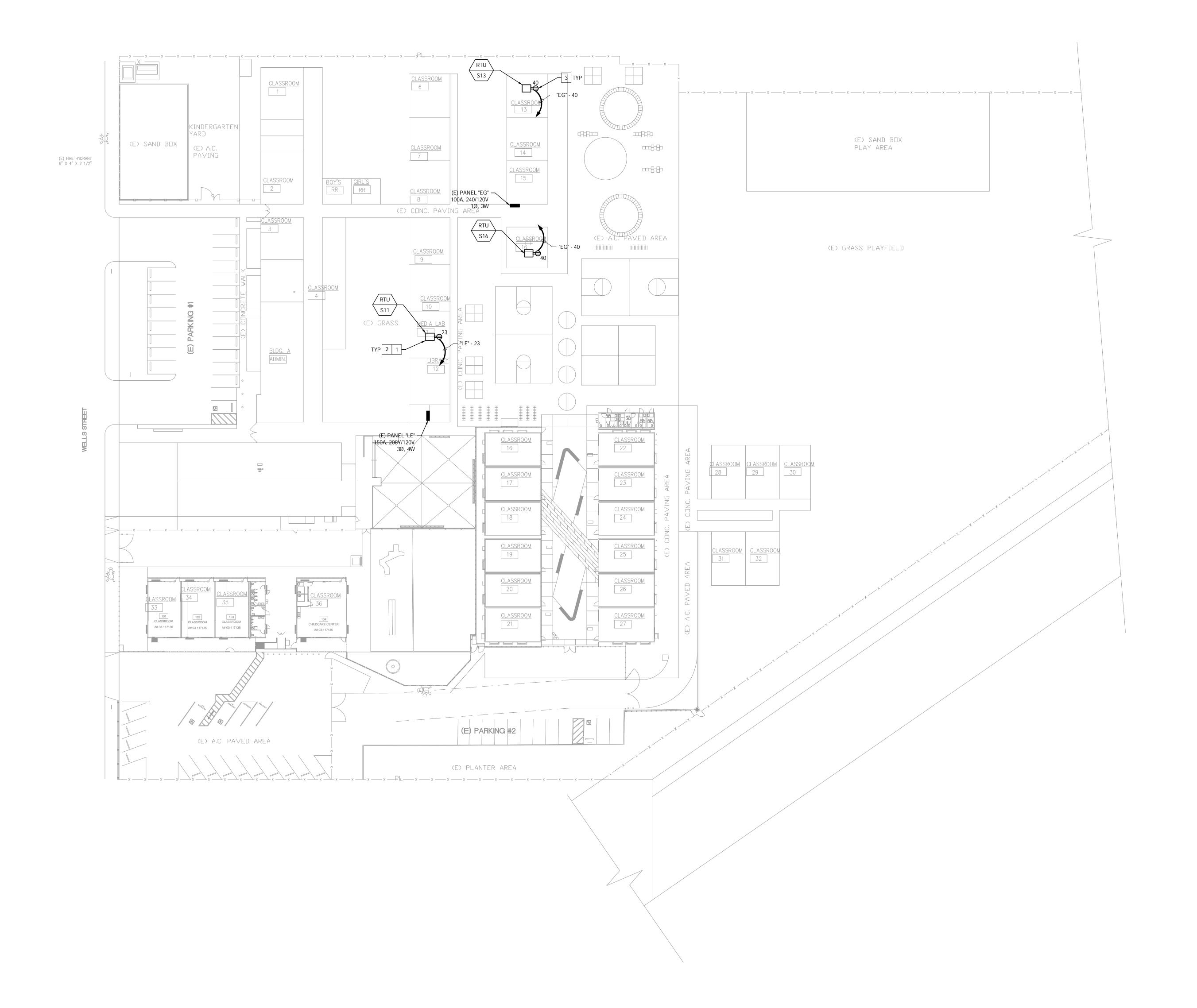
1 PROVIDE FUSED DISCONNECT FOR UNIT IN NEMA-3R ENCLOSURE. FUSED SIZED PER MOCP.

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

CONTRACTOR SHALL VERIFY EXISTING SOURCE OF POWER AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES BEFORE PERFORMING ANY WORK.

LOCATIO	N : PORTA	BLI	E BUILE	DING 25		VOL	TAG	E/PH/	ASE :	240/1	20V,	1Ø, 3W	/		F	ED F	ROM :		
FLOO	FLOOR: FIRST							BUS AMPS: 100A									TING:	10,000 AIC	
MOUNTIN	G: SURFA	CE				M	AIN E	BREAK	KER :	100A									
	SEE	*		LETS	VC	DLT-AN		BKR/		BKR/	1	V	OLT-AN				OLL		
LOADS	NOTE		LTG RI	ECMISC	Α	В	: 1			POLE		Α	В	LTG	REC	MISC	NOTE	LOADS	
(E) LOAD					360		1	20/1	* -	20/2	ļ	500						((E) TVS
(E) LOAD						360	3	20/1	- *		4		500						
(E) LOAD					360		5		* -	20/1	6	360							E) LOAI
(E) LOAD						360	7	20/1	_ *	20/1	8		360					(E	E) LOAI
(E) LOAD					360		9	20/1	* -	20/1	10	360						(E	E) LOAI
(E) LOAD			***************************************			360	11	20/1	_ *	20/1	12		360					(E	E) LOAI
(E) LOAD					360		13	20/1	* -	20/1	14	360						(1	E) LOAI
(E) LOAD						360	15	20/1	- *	20/1	16		360					(E	E) LOAI
(E) LOAD					360		17	20/1	* _	20/1	18	360						(E	E) LOAI
(E) LOAD						360	19	20/1	_ *	20/1	20		360					(1	E) LOAI
(E) LOAD					360		21	20/1	* -	20/1	22	360						(E	E) LOAI
(E) LOAD						360	23	20/1	- *	20/1	24		360					(E	E) LOAI
(E) LOAD					360		25	20/1	* _	20/1	26	360						· · · · · · · · · · · · · · · · · · ·	E) LOAI
(E) LOAD						360	27	20/1	_ *	20/1	28		360						E) LOAI
(E) LOAD					360		29	20/1	* _	20/1	30	360							E) LOAI
(E) LOAD						360	31	20/1	_ *	20/1	32		360	†					E) LOAI
(E) LOAD					360		33	20/1	* -	20/1	34	360							E) LOAI
(E) LOAD						360	35	}	_ *	20/1	36		360						E) LOAI
(E) LOAD					360		37	20/1	* _	20/1	38	360							E) LOAI
ROOF RECEPTACLES	1	-				360	·.}	ļ	_ *		40								SPAC
SPACE							41		* _		42								SPAC
TOTAL Ø	A = 7,340 B = 6,980					AMPS AMPS		J	*	NOTI "L" DE 1.	ES: NOTE PRO	VIDE		JIT BI	REAK	KER TO		CH EXISTING ERVE LOAD.	
TOTAL PANEI	_ = 14,320	VA	@ 24	0V, 1Ø	60	AMPS	8												

(E) PANEL:		LE"																
LOCATION:		VOLTAGE/PHASE: 208Y/120V, 3Ø, 4W FED FROM:																
FLOOR:				BUS AMPS: 225A												RA	TING: 10,00	00 AIC
MOUNTING :	SURFA	CE			MA	AIN E	BREAK	KER :	150A									
	SEE			OLT-AM	IPS	4	BKR/		BKR/		V	DLT-AM	PS		JTLET		SEE	
LOADS	NOTE	LT(G RECMISC A	В	С	CKT	POLE				Α	В	С	LTG	REC	MISC	NOTE	LOADS
E) RTU-SH9			3,098	3		1	35/3		30/3	2	3,098						1	RTU-SH11
-				3,098		3		_ * _		4		3,098						
_					3,098	5		*		6			3,098					
E) RTU-SH10			3,098	3		7	35/3	*	35/3	8	3,098							(E) RTU-SH12
-				3,098		9		- * -		10		3,098						
-			And a second		3,098	11		*		12		**************************************	3,098					
E) LOAD						13	20/1	*	20/1	14								(E) LOAD
E) LOAD						15	20/1	_ * _	20/1	16								SPARE
E) FIRE ALARM						17	20/1	*	20/1	18								SPARE
E) LOAD						19	20/1	*	20/1	20	ladiala ladiala la distributa							SPARE
E) LOAD						21	20/1	_ * _	Ì	22		***						SPARE
ROOFTOP RECEPTACLES	1				180	23	20/1	*		24		Ì						SPARE
E) PANEL "LE-1"						25	60/3	*	100/3	26								(E) PANEL "EF"
-						27		_ * _		28								
-						29		*		30								
					3	ž	***************************************		NOTI								<u> </u>	
TOTAL ØA =				3 AMPS				*				G CONT				MATO	LI EVICTINA	NAMILIEACTUDED AND
$TOTAL \varnothing B =$				3 AMPS					•			CIRCUI FO SER			101	WATC	H EXISTING	G MANUFACTURER AND
TOTAL ØC =		V/ []]	AIVIES 104	B AMPS						HAI	IIIGO	O SEH	VE LU	AD.				



GENERAL NOTES

- 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.

 CARBON MONOXIDE DETECTION SYSTEM IS NOT
- 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#: 03-122720

NOT

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.

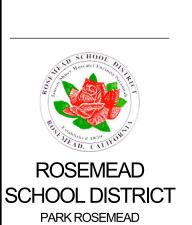
PROVIDE 120V/20A WEATHERPROOF GFCI DUPLEX RECEPTACLE AT UNIT.





400L ND H

RSD - SHUEY ELEMENTARY SCH HVAC REPLACEMENT AT BUILDINGS F,G AN



3907 ROSEMEAD BOULEVARD ROSEMEAD, CA 91770

ARCHITECTURE

○ 161-21043

DRAWN MT
CHECKED AS
DATE 10-06-202

ELECTRICAL SITE PLAN -SHUEY

E101

SCALE: 1" = 30'

3 CONDUIT WALL SUPPORT
NO SCALE

GENERAL NOTE

A. REFER TO SPECIFICATION FOR PIPE SUPPORT SPACING.

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

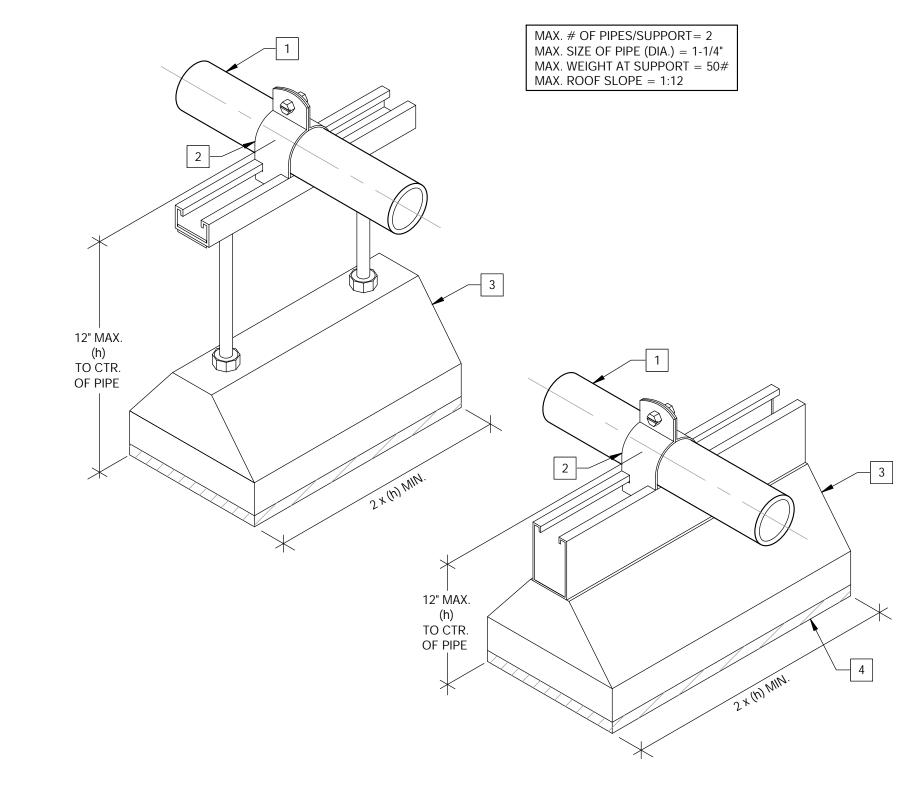
DETAIL NOTES

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

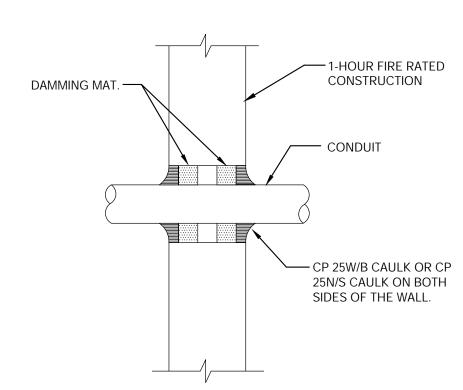
2 PIPE CLAMP - UNISTRUT P1113

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

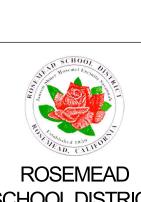
2" 2-3" THICK

1 CONDUIT PENETRATION
NO SCALE

FILE NO: 19-91

A#: 03-122720





SCHOOL DISTRICT PARK ROSEMEAD 3907 ROSEMEAD BOULEVARD ROSEMEAD, CA 91770

NAC NO 161-21043

CHECKED AS DATE 10-06-2022

E601

DETAILS