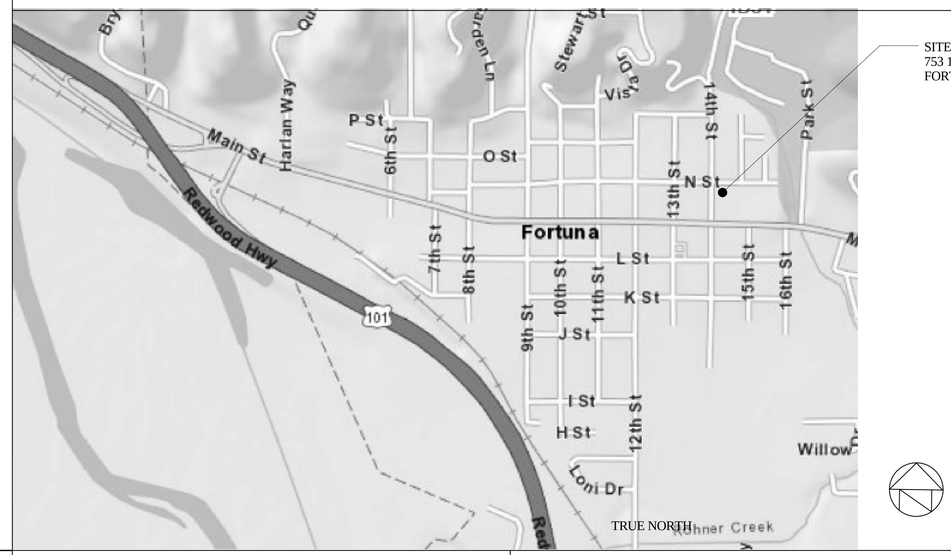
TENANT IMPROVENMENTS FOR FORTUNA LIBRARY 753 14TH AVENUE, FORTUNA CA

1. ALL WORK CONFORM TO APPLICABLE CODES, REGULATIONS, LAWS AND ORDINANCES AS REQUIRED AND BY THE CODES AND REGULATIONS LISTED IN THESE CONSTRUCTION DOCUMENTS AND MANUALS..
2. VERIFY ALL DIMENSIONS IN THE FIELD. NOTIFY THE ARCHITECT OF ANY DISCREPANCY AND OBTAIN CLARIFICATION BEFORE PROCEEDING WITH THE AFFECTED WORK. FOLLOW NUMERICAL DIMENSIONS: DO NOT SCALE, USE DATUM POINTS TO START DIMENSION STRING LAYOUT.
3. FLOOR PLAN DIMENSIONS SHOWN ARE TO FACE OF FINISH OR CENTERLINE OF COLUMNS, UNLESS OTHERWISE NOTED. SEE SYMBOLS.
4. BEFORE BEGINNING WORK AT THE SITE, WHERE POSSIBLE AND THROUGHOUT THE COURSE OF WORK, INSPECT AND VERIFY THE LOCATION AND CONDITION OF ITEMS AFFECTED BY THE WORK UNDER THIS CONTRACT AND REPORT DISCREPANCIES TO ARCHITECT BEFORE DOING THE WORK RELATED TO THAT BEING INSPECTED.
5. THE ARCHITECTURAL DRAWINGS SHOW PRINCIPAL AREAS WHERE WORK MUST BE ACCOMPLISHED UNDER THIS CONTRACT. INCIDENTAL WORK MAY ALSO BE NECESSARY IN AREAS NOT SHOWN ON THE ARCHITECTURAL DRAWINGS DUE TO CHANGES AFFECTING EXISTING MECHANICAL, ELECTRICAL PLUMBING OR OTHER SYSTEMS. SUCH INCIDENTAL WORK IS ALSO PART OF THIS CONTRACT.
6. DO NOT DRILL OR CUT EXISTING JOISTS, BEAMS, COLUMNS OR OTHER STRUCTURAL ELEMENTS UNLESS SPECIFICALLY INDICATED.
7. PREPARE, SUBMIT AND RECIEVE APPROVAL OF SLEEVE AND OPENING DRAWINGS BEFORE LOCATING SLEEVES AND OPENINGS IN FIRE-RATED CONSTRUCTION AND BEFORE CUTTING FIRE-RATED CONSTRUCTION.
8. WHERE "MATCH EXISTING" IS INDICATED: NEW CONSTRUCTION OF FINISHES AS APPROPRIATE TO THE NOTE, SHALL MATCH ADJACENT CONSTRUCTION AND FINISHES.
9. FIRE BLOCKING SHALL BE PROVIDED IN ALL CONCEALED SPACES, WALL CAVITIES INCLUDED, ACCORDING TO I.B.C. SECTION 708.2.1

VICINITY MAP



APPLICABLE CODES

PARTIAL LIST OF APPLICABLE CODES
2022 California Administrative Code (CAC). Part 1. Title 24 CCR* 2019 California Building Code (CBC), Part 2. Title 24 CCR (2021 International Building Code, Vol. 1 & 2. and 2021 California amendments
2022 California Electrical Code (CEC). Part 3. Title 24 CCR
(2021 National Electrical Code and 2021 California Amendments)
2022 California Mechanical Code (CMC), Part 4. Title 24 CCR
(2021 IAPMO Uniform Mechanical Code and 2021 California amendments)
2022 California Plumbing Code (CPC), Part 5, Title 24 CCR
(2021 IAPMO Uniform Plumbing Code and 2021 California amendments)
2022 California Energy Code (CEC). Part 6, Title 24 CCR
2022 California Fire Code (CFC), Part 9. Title 24 CCR
(2021 International Fire Code and 2021 California Amendments)
2022 California Existing Building Code (CEBC). Part 10. Title 24 CCR
(2021 International Existing Building Code and 2021 California Amendments)
2022 California Green Building Standards Code (CALGreen), Part 11, Title 24 CCR
2022 California Referenced Standards Code, Part 12. Title 24 CCR
Title 19 CCR, Public Safety, State Fire Marshal Regulations
2016 ASME A17.1/CSA B44-13 Safety Code for Elevators and Escalators

PARTIAL LIST OF APPLICABLE STANDARDS

SEE C.B.C. CHAPTER 35 FOR ALL REFERENCED STANDARDS AND APPLICABLE EDITION)

2010	ADA Standards for Accessibility	
NFPA 13	Standard for the Installation of Sprinkler Systems (CA amended) 2022 EDITION	
NFPA 14	Standard for the Installation of Standpipe and Hose Systems 2019 EDITION	
NFPA 17	Standard for Dry Chemical Extinguishing Systems 2021 EDITION	
NFPA 17A	Standard for Wet Chemical Extinguishing Systems 2021 EDITION	
NFPA 20	Standard for the Installation of Stationary Pumps for Fire Protection	2019 EDITION
NFPA 22	Standard for Water Tanks for Private Fire Protection 2022 EDITION	
NFPA 24	Standard for the Installation of Private Fire Service Mains and Their Appurtenances 2019 EDITION	
NFPA 72	National Fire Alarm and Signaling Code (CA amended); 2022 EDITION	
NFPA 80	Standard for Fire Doors and Other Opening Protectives	2019 EDITION
NFPA 2001	Standard on Clean Agent Fire Extinguishing Systems 2018 EDITION	
UL 300	Standard for Fire Testing of Fire Extinguishing Systems for Protection of Commercial Cooking Equipment 2005 (R2010) EDITION	
UL 464	Audible Signaling Devices for Fire Alarm and Signaling Systems. Including Accessories 2003 EDITION	
UL 521	Standard for Heat Detectors for Fire Protective Signaling Systems 1999 EDITION	
UL 1971	Standard for Signaling Devices for the Hearing Impaired	
ICC 300	Standard for Bleachers. Folding and Telescopic Seating. and Grandstands 2017 EDITION	

For a complete list of applicable NFPA standards see 2022 CBC (SFM) Chapter 35 and California Fire Code Chapter 80.
See California Building Code, Chapter 35, for State of California amendments to the NFPA Standards.

DIRECTORY

OWNER: HUMBOLDT COUNTY

825 5TH STREET, ROOM 112
EUREKA, CA 95501
707-476-2388
CONTACT: TRAVIS SMITH
CAO PROJECT MANAGER

ARCHITECT:

ALAMEIDA ARCHITECTURE
555 SOUTH MAIN STREET, SUITE 2
SEBASTOPOL, CALIFORNIA 95472
(707) 824-1219
www.alameida.com

PROJECT DESCRIPTION

THE PROJECT CONSIST OF INTERIOR IMPROVEMENTS TO FORTUNA LIBRARY INCLUDING INTERIOR PARTITION MODIFICATIONS TO PROVIDE TWO GENDER NEUTRAL ACCESSIBLE RESTROOMS AND REPLACE INTERIOR FINISHES.

BID ALTERNATES

BID ALTERNATE 1: LIGHTING REPLACEMENTS FOR ALL INTERIOR LIGHTING

BID ALTERNATE 2: INSTALLATION OF HEAT PUMPS & FAN COIL UNITS.

DEFERED SUBMITTALS

NONE

BUILDING STATISTICS

MAIN ADMINSTRATION / CLASSROOM BUILDING	
OCCUPANCY (CBC 302)	A-3
USE CONSTRUCTION TYPE	LIBRARY V-B
BASIC ALLOWABLE AREA (At) CBC TABLE 503	6,000
FRONT INCREASE W=[(L1XW1)+(L2XW2)] / F	NONE TAKEN
FRONT INCREASE If=[F/P-0.25] W/30	NONE TAKEN
FRONT INCREASE At X If	NONE TAKEN
SPRINKLER INCREASE At X Is	NONE TAKEN
ALOWABLE AREA Aa = [At + (At X If) + (At X Is)]	6,000
TOTAL BUILDING AREA	3,144 S.F.
ALLOWABE HEIGHT (FEET) (CBC TABLE 503)	40
ACTUAL HEIGHT (FEET)	14'-6"
ALLOWABLE STORIES	1
ACTUAL STORIES	1

DRAWING INDEX

PROJECT MANAGEMENT

ALAMEIDA ARCHITECTURE

CONSTRUCTION MANAGEMENT

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COUNTY OF HUMBOLDT

PROJECT

FORTUNA LIBRARY MODIFICATIONS

753 14TH ST.
FORTUNA, CA 95540

REGISTERED ARCHITECT
DONALD R. ALAMEIDA
C-19767
Exp. 11/30/25
STATE OF CALIFORNIA

No.	Description	Date
1	PLAN CHECK COMMENTS	4/9/25

COVER

Project number	Project Number
Date	5 15 24
Drawn by	Author
Checked by	Checker

A-0

Scale

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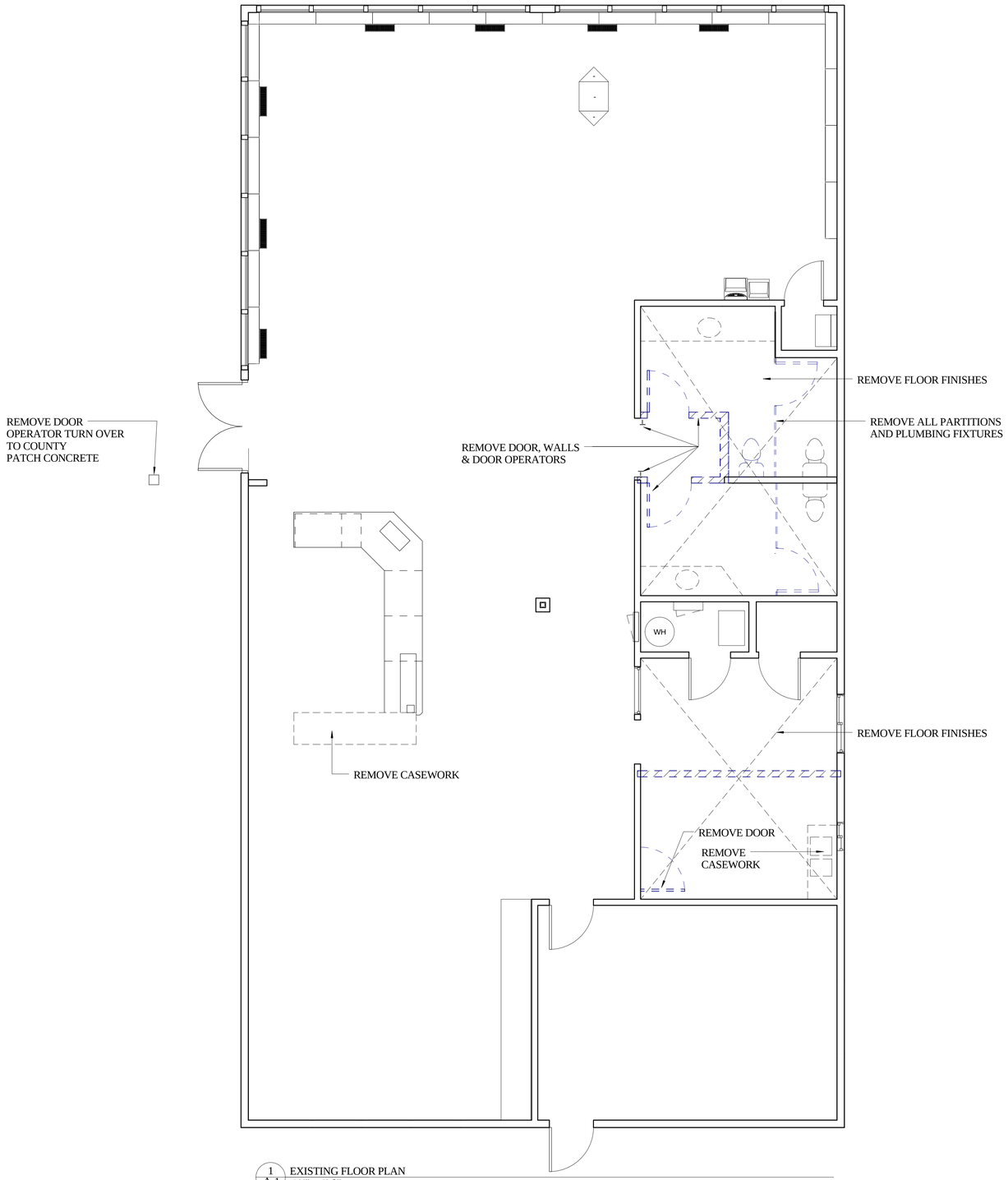

1 / A-1 EXISTING FLOOR PLAN
1/4" = 1'-0"

GENERAL DEMOLITION NOTES:

1. DEMOLITION DRAWINGS ARE SCHEMATIC, REMOVE ALL WORK AS INDICATED AND AS NECESSARY TO COMPLETE NEW CONSTRUCTION. REFER TO MECHANICAL, ELECTRICAL AND STRUCTURAL DRAWINGS FOR ADDITIONAL DEMOLITION.
2. OWNER TO REMOVE FURNITURE, STORED MATERIAL AND MOVABLE EQUIPMENT FROM BUILDING PRIOR TO DEMOLITION.
3. ALL UTILITIES INCLUDING BUT NOT LIMITED TO ELECTRICAL, GAS, SEWER, FIRE ALARM, AND DATA PRIOR TO COMMENCING WITH DEMOLITION BY OTHERS PRIOR TO DEMOLITION OF BUILDING.
4. POWER AND DATA CROSS OVER JUNCTIONS AND SPLICES TO MAINTAN CAMPUS SERVICES ELSEWHERE PERFORMED BY OTHER PRIOR TO DEMOLITION
5. CONTRACTOR TO NOTIFY UNDERGROUND SERVICES ALERT (USA) (800) 642-2444 AND OTHER APPROPRIATE ENTITIES AT LEAST 48 HOURS IN ADVANCE.. CONTRACTOR NOT TO COMMENCE WITH DEMOLITION OR EXCAVATION PRIOR TO ALL UTILIES BEING IDENTIFIED AND MARKED ON SITE.
6. PRIOR TO DEMOLITION REFER TO HAZARDOUS MATERIAL SURVEY AND ABATEMENT DOCUMENTATION PROVIDED BY THE OWNER. COORDINATE WORK WITH HAZARDOUS MATERIAL CONTRACTOR AS DIRECTED BY OWNER, SEE SPECIFICATIONS GENERAL CONDITIONS FOR FURTHER INFORMATION REGARDING DISCOVERY OF HAZARDOUS MATERIALS DURING DEMOLITION OPERATION.
7. SALVAGE FIRE ALARM DEVICES, CLOCKS, SPEAKERS, TELEPHONES AND DELIVER TO OWNER.
8. VERIFY EXISITNG CONDITIONS AND INVERT ELEVATIONS AT UNDERGROUND UTILITIES, INCLUDING BUT LIMITED TO ELECTRICAL, COMMUNICATIONS, SEWER, STORM DRAIN, PLUMBING AND IRRIGATION PRIOR TO COMMENCING WORK, CUT BACK UTILITIES TO FOUR FEET FROM OUTLINE OF NEW BUILDING, PROTECT / COVER OPENINGS WHERE EXISTING UTILITIES TO BE CONNCTED TO NEW BUILDING FROM DEMOLITION DEBRIS. CAP ALL UTILITIES THAT ARE TO BE ABANDONED.
9. PLANS PREPARED FROM ALL KNOWN INFORMATION PROVIDED BY THE OWNER AND SURVEYOR, EXISTING OR CONCEALED CONDITIONS MAY EXIST, NOTIFY ARCHITECT OF ANY DECREPANCIES OR UNDOCUMENTED UTILITIES.
10. CONTRACTOR RESPONSIBLE FOR ALL SHORING, BRACING AND SUPPORTS TO PROTECT ADJACENT AREAS FROM DISPLACEMENT OR SETTLEMENT.
11. ALL DEMOLISHED MATERIAL IS THE PROPERTY OF THE CONTRACTOR AND TO BE REMOVED IN A LEGAL MANNER. PRIOR TO DEMOLITION OWNER TO INDICATE ANY ITEMS TO BE SALVAGED AND DELIVERED BY CONTRACTOR TO THE OWNER.
12. CONTRACTOR TO COMPLY WITH ALL LOCAL, STATE AND FEDRAL ORDINANCES AND LAWS DICTATING ACCEPTABLE NOISE, ODOR , DUST AND DEBRIS MITIGATING MEASURES AND MINIMIZE IMPACT TO ADJACENT BUILDINGS, SITE AND ROADWAYS.
13. NO WORK TO COMENCE UNTIL PLANS BEAR APPROVED BY DSA STAMP.
14. WORK SHALL COMPLY WITH THE PROVISIONS OF CHAPTER 33 OF THE CBC & SFC "FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION"

PROJECT MANAGEMENT
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COUNTY
OF
HUMBOLDT

PROJECT

FORTUNA LIBRARY MODIFICATIONS

753 14TH ST.
FORTUNA, CA 95540

REGISTERED ARCHITECT
DONALD R. ALAMEIDA
C-19767
Exp. 11/30/25
STATE OF CALIFORNIA

No.	Description	Date
1	PLAN CHECK COMMENTS	4/9/25

DEMOLITION PLAN

Project number	Project Number
Date	5 15 24
Drawn by	Author
Checked by	Checker

A-1

Scale 1/4" = 1'-0"

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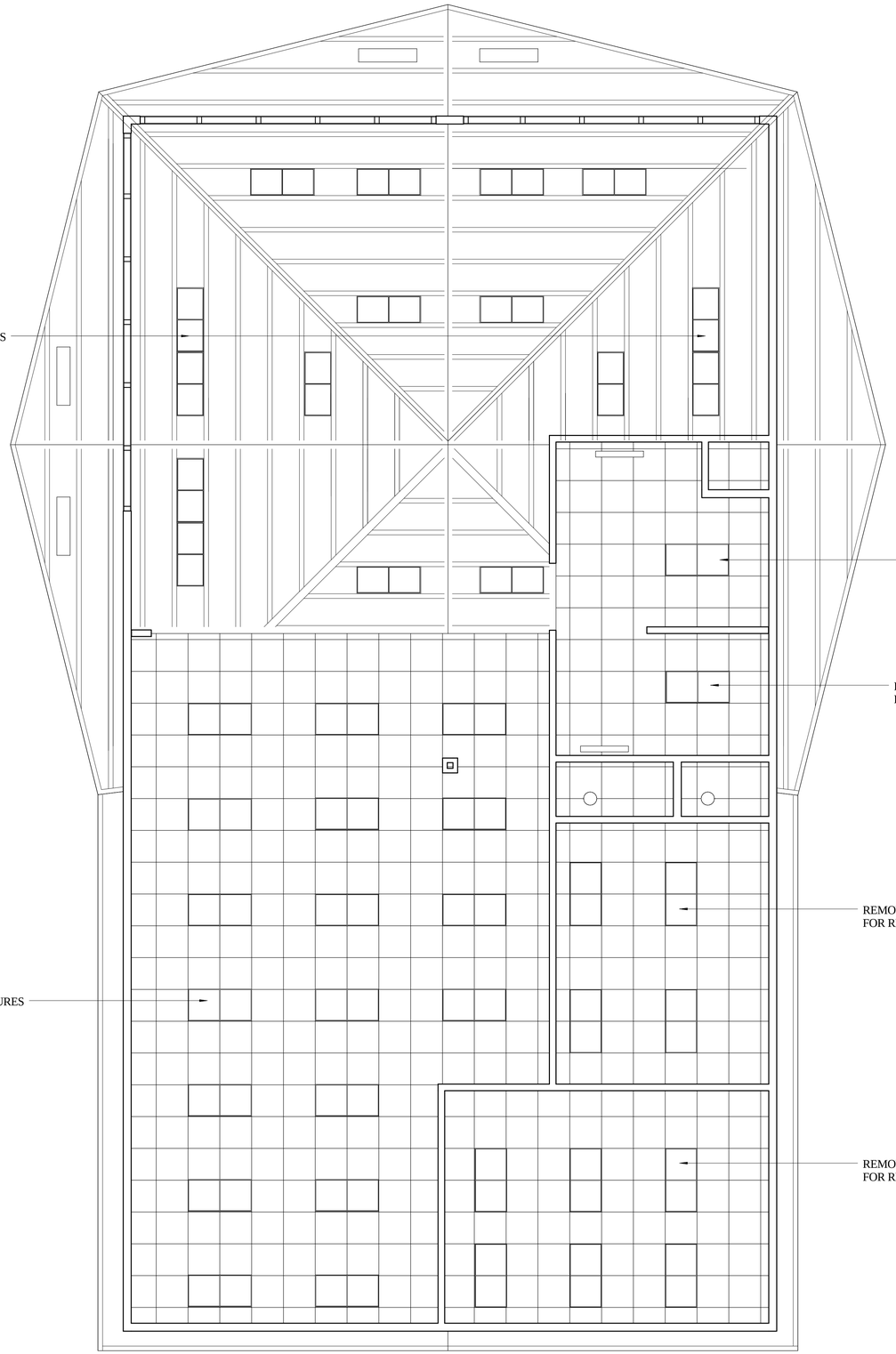

1 A-1.1 REFLECTED CEILING PLAN - DEMOLITION
1/4" = 1'-0"

PROJECT MANAGEMENT

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No.	Description	Date
1	PLAN CHECK COMMENTS	4/9/25

REFLECTED CEILING PLAN - DEMOLITION

Project number	Project Number
Date	5 15 24
Drawn by	Author
Checked by	Checker

A-1.1

Scale 1/4" = 1'-0"

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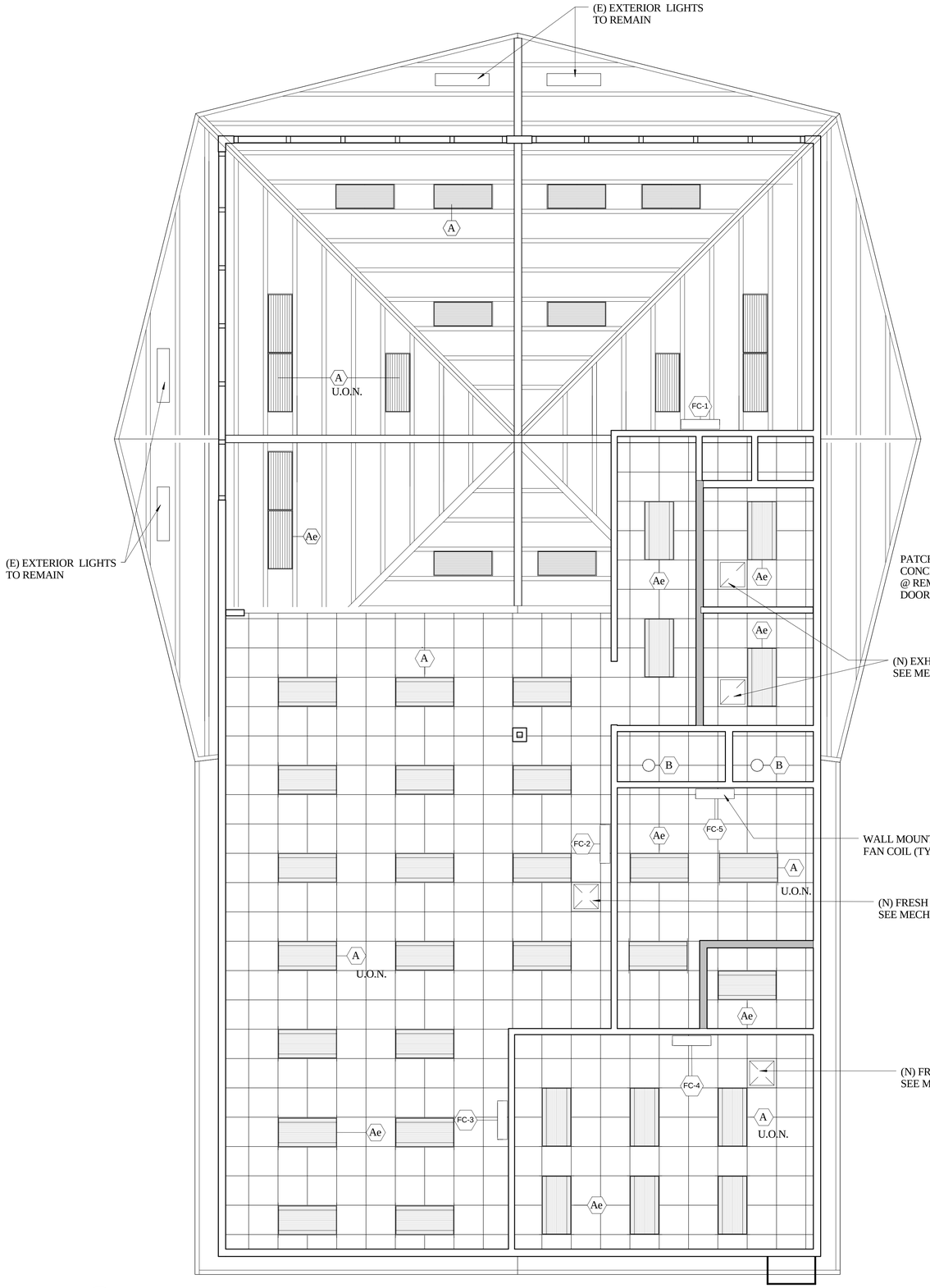
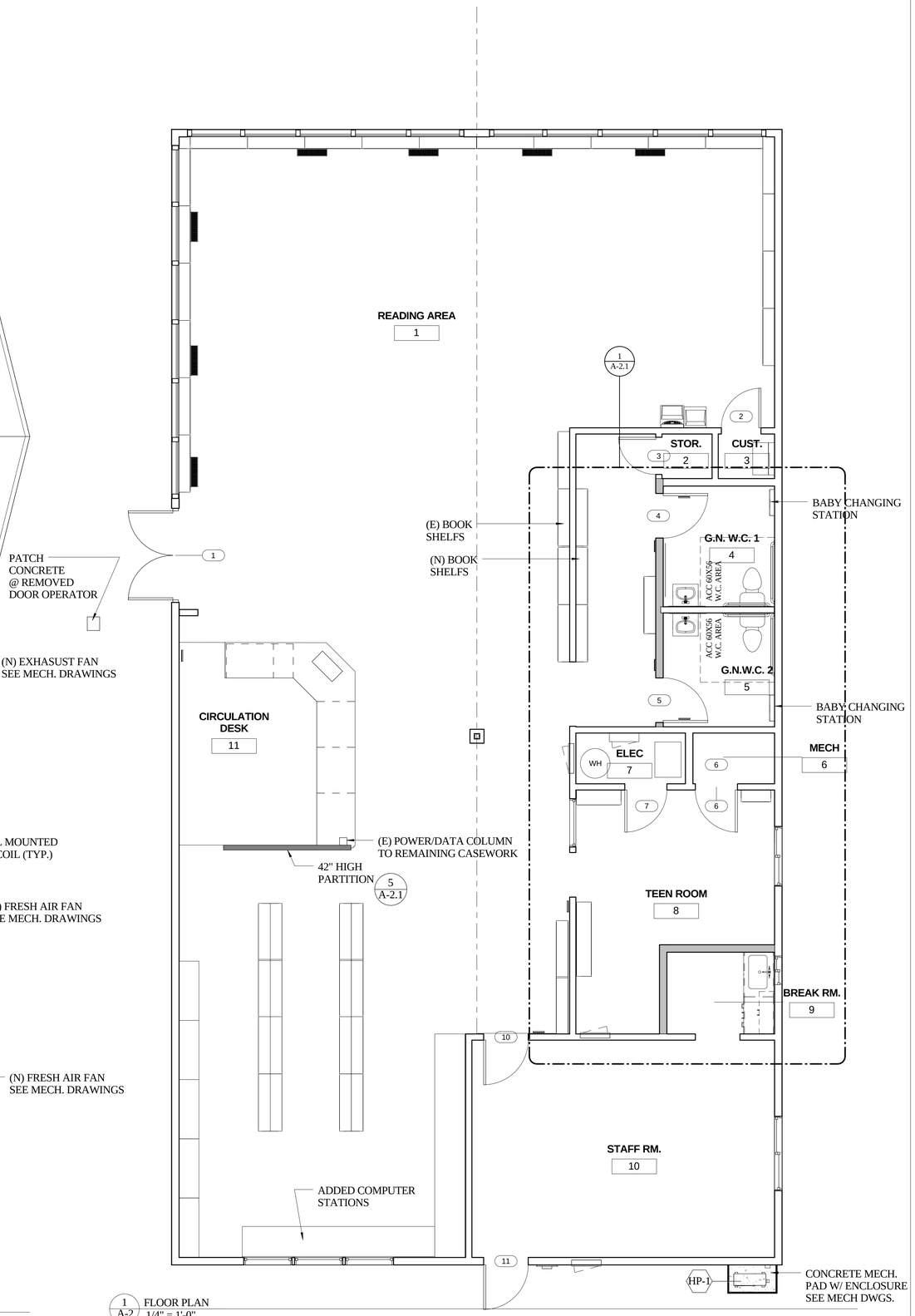


2 A-2 PROPOSED CEILING PLAN
1/4" = 1'-0"



1 A-2 FLOOR PLAN
1/4" = 1'-0"

PROJECT MANAGEMENT

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No.	Description	Date
1	PLAN CHECK COMMENTS	4/9/25

FLOOR PLAN & CEILING PLAN

Project number	Project Number
Date	5 15 24
Drawn by	DRA
Checked by	DRA

A-2

Scale 1/4" = 1'-0"

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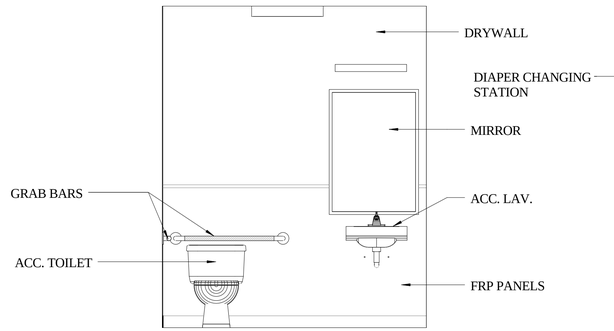
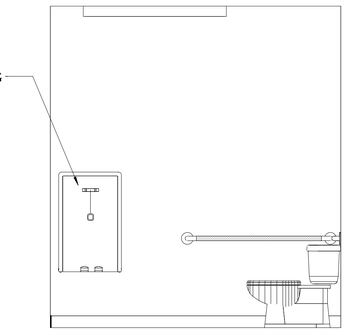
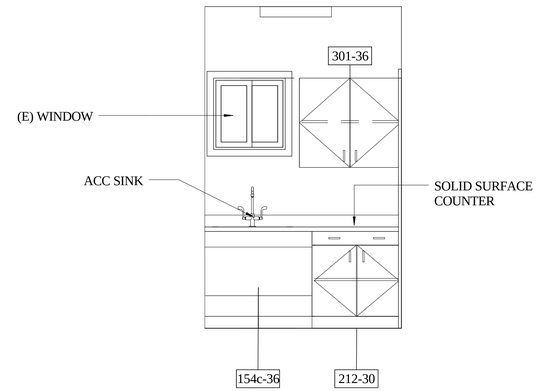


3 A-2.1 GENDER NEUTRAL W.C.-1 - SOUTH
1/2" = 1'-0"

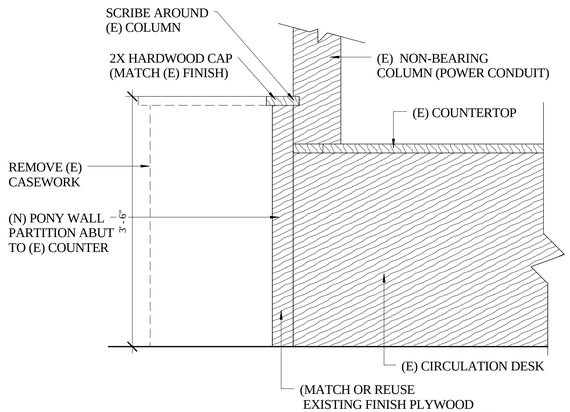
NOTE: GENDER NEUTRAL W.C.-2 SIMIALR



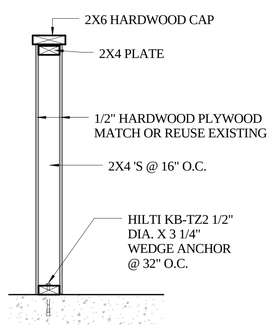
2 A-2.1 GENDER NEUTRAL W.C.-1 - EAST
1/2" = 1'-0"



4 A-2.1 BREAK ROOM - EAST
1/2" = 1'-0"

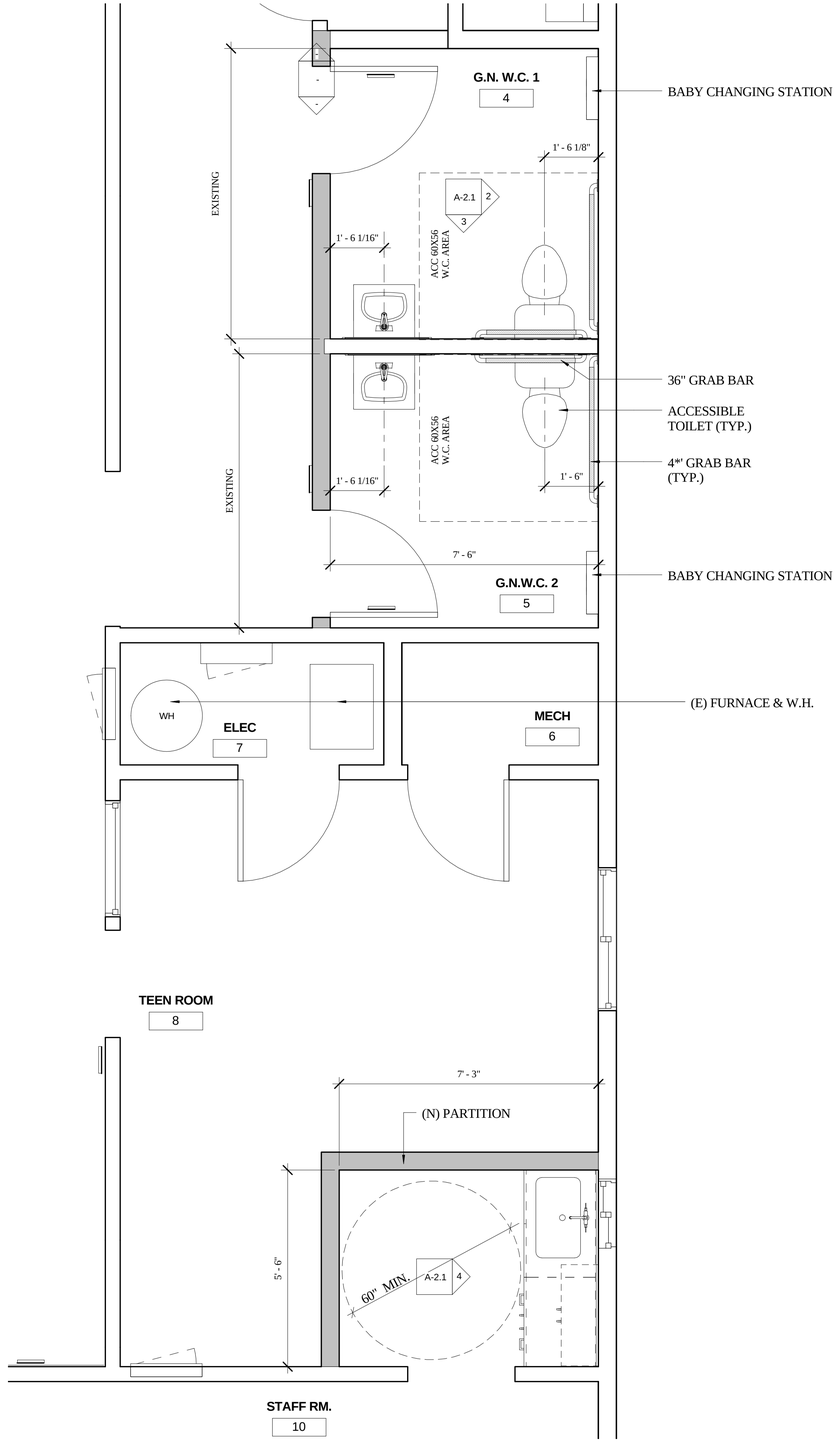


PARTIAL ELEVATION



SECTION

5 A-2.1 CIRCULATION DESK MODIFICATION
1" = 1'-0"



1 A-2.1 DETAIL FLOOR PLAN
1/2" = 1'-0"

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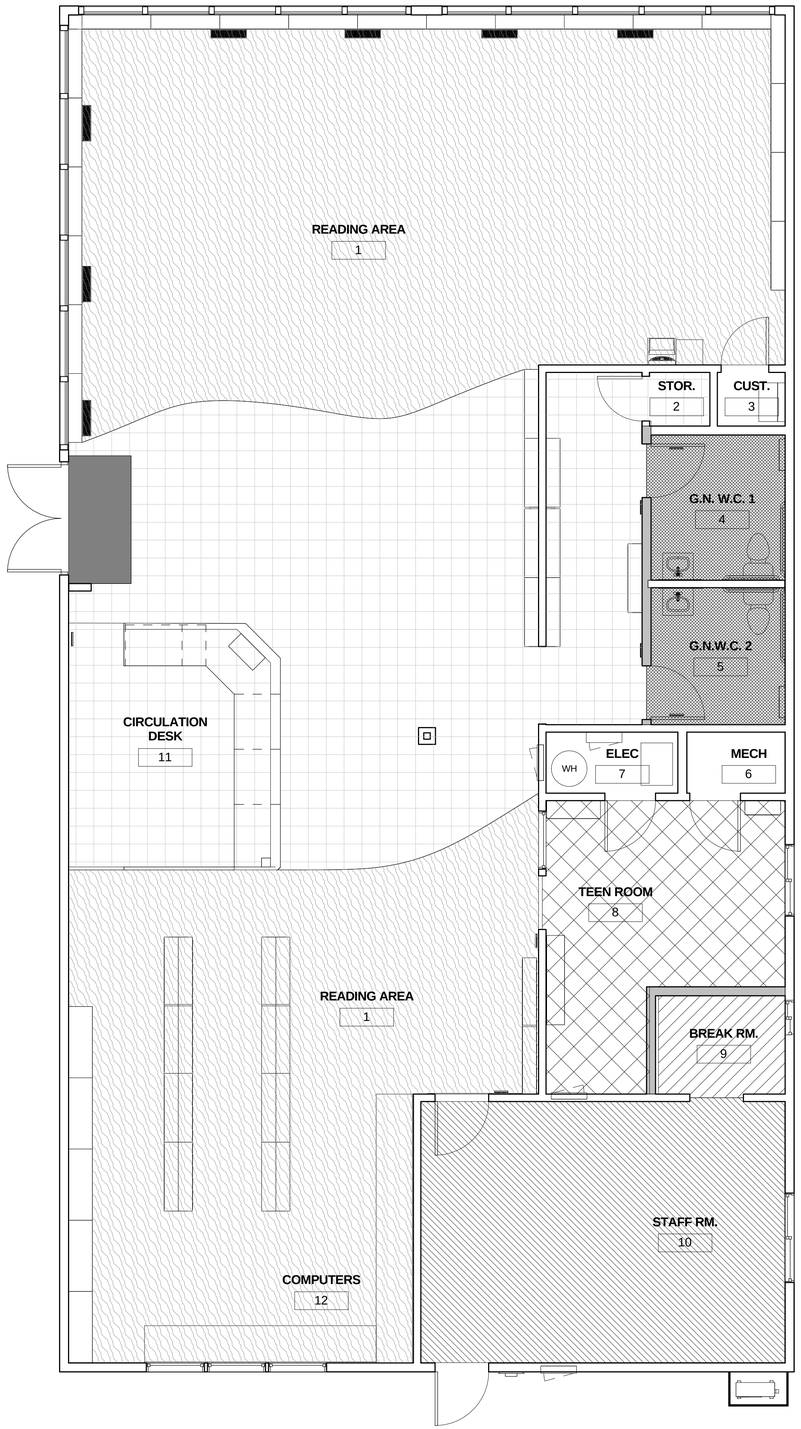
DETAIL PLANS

Project number	Project Number
Date	5 15 24
Drawn by	Author
Checked by	Checker

A-2.1

Scale: As indicated

4/11/2025 3:20:07 PM



1 A-2.2 FLOOR FINISHES PLAN
1/4" = 1'-0"

CARPET TILES:

CT-1: TARKETT HYBRID CARPET "TEXTURE MAP", " TUNDRA FLOWER", "COLLARY" OR "CREATE SPACE" CARPET TILES COLOR SELECTED BY OWNER

CT-2: TARKETT HYBRID CARPET "TEXTURE MAP", " TUNDRA FLOWER", "COLLARY" OR "CREATE SPACE" CARPET TILES COLOR SELECTED BY OWNER

WALK-OFF CARPET

WO-1: TANDUS POWERBOND ABRASIVE ACTION II WALK-OFF CARPET COLOR SELECTED BY OWNER

SHEET RESILIENT FLOOR:

SF-1: TARKETT IQ OPTIMA SHEET VINYL COLOR TO BE SELECTED BY OWNER

SF-2: TARKETT IQ OPTIMA SHEET VINYL COLOR TO BE SELECTED BY OWNER

SF-3: TARKETT L.V.T. EVENT+ WOOD COLOR TO BE SELECTED BY OWNER

EXISTING FLOORING

PROJECT MANAGEMENT

ALAMEIDA ARCHITECTURE

CONSTRUCTION MANAGEMENT

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No.	Description	Date
1	PLAN CHECK COMMENTS	4/9/25

FLOOR FINISH PLAN

Project number	Project Number
Date	5 15 24
Drawn by	Author
Checked by	Checker

A-2.2

Scale 1/4" = 1'-0"

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ASSISTIVE LISTENING SYSTEM - GENERAL NOTE PER CBC 11B-219.1 GENERAL

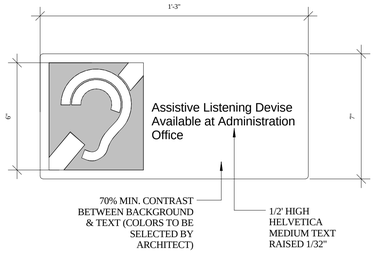
ASSISTIVE LISTENING SYSTEMS SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 11B-219 AND SHALL COMPLY WITH SECTION 11B-706.

11B-219.2 REQUIRED SYSTEMS
AN ASSISTIVE LISTENING SYSTEM SHALL BE PROVIDED IN ASSEMBLY AREAS, INCLUDING CONFERENCE AND MEETING ROOMS.
EXCEPTION: THIS SECTION DOES NOT APPLY TO SYSTEMS USED EXCLUSIVELY FOR PAGING, BACKGROUND MUSIC, OR A COMBINATION OF THESE TWO USES.

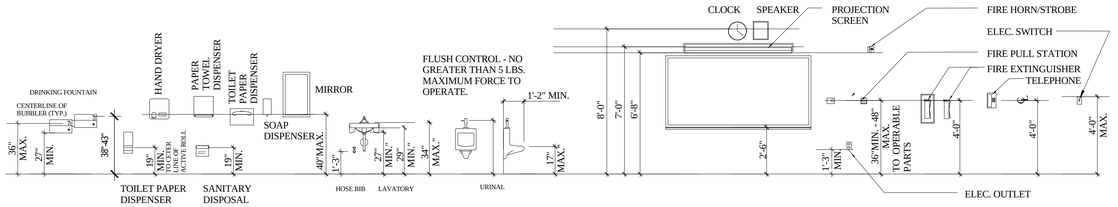
TWO PORTABLE ASSITIVE LISTENING (AL) SYSTMENS ARE STORED AT THE ADMINISTRATION OFFICES (ROOM A18). PROVIDE ASSISTIVE LISTENING AVAILABILITY SIGNS IN ALL CLAASROOMS AND ASSEMBY AREAS. SEE PROJECT SIGNAGE PLAN FOR LOCSTIONS OF NEW SIGNS.

11B-219.3 RECEIVERS
THE MINIMUM NUMBER OF RECEIVERS TO BE PROVIDED SHALL BE EQUAL TO 4 PERCENT OF THE TOTAL NUMBER OF SEATS, BUT IN NO CASE LESS THAN TWO. TWENTY-FIVE PERCENT MINIMUM OF RECEIVERS PROVIDED, BUT NO FEWER THAN TWO, SHALL BE HEARING-AID COMPATIBLE IN ACCORDANCE WITH SECTION 11B-706.3.

TOTAL NUMBER OF SEATS = MAXIMUM OF 32 STUDENTS PER CLASSROOM x 9 x 0.04 = 12 RECIEVERS TO BE AVAILABLE, MIN. OF 3 TO BE HEARING AID COMPATIBLE.



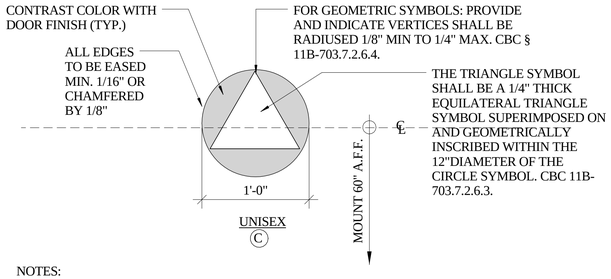
8 A-2.3 SIGN ASSISTED LISTENING
3" = 1'-0"



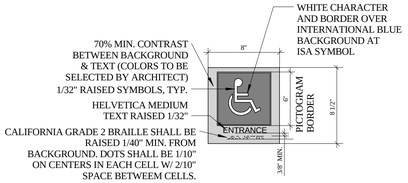
NOTE: ALL DIMENSIONS INDICATED ARE CLEAR, FINISH TO FINISH

NOTE: WALL MOUNTED ITEMS MAY NOT PROTRUDE BEYOND 4" WHEN MOUNTED OVER 27 INCHES AND UNDER 80 INCHES

1 A-2.3 ACC MOUNTING HEIGHTS
1/4" = 1'-0"

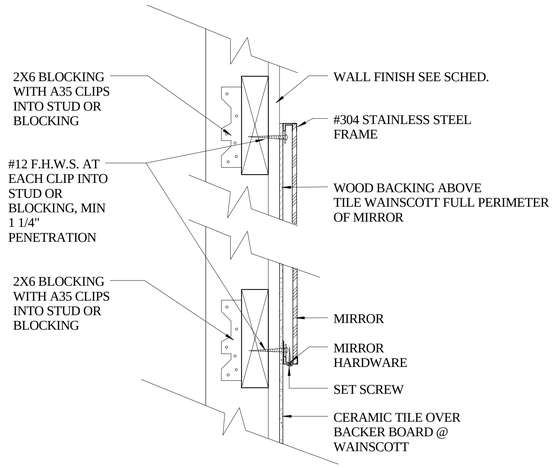


NOTES:
1. SIGNAGE TO BE 1/4" THICK.
2. ALL PICTOGRAMS SHALL BE IN CONTRASTING COLOR BACKGROUND ALL SURACES SHALL HAVE AN EGGSHELL FINISH TYP.
3. MOUNT ON DOORS W/NON STAINING ADHESIVE TYP.
4 CONFORM TO ALL APPLICABLE CODES.
5. POSITION ADDITIONAL ACCESSIBILITY SIGNAGE ON LATCH SIDE OF DOOR

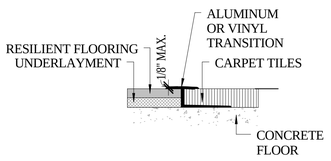


2 A-2.3 ACC ENTRANCE SIGN
1 1/2" = 1'-0"

3 A-2.3 ADA RESTROOM DOOR SIGNS
1 1/2" = 1'-0"

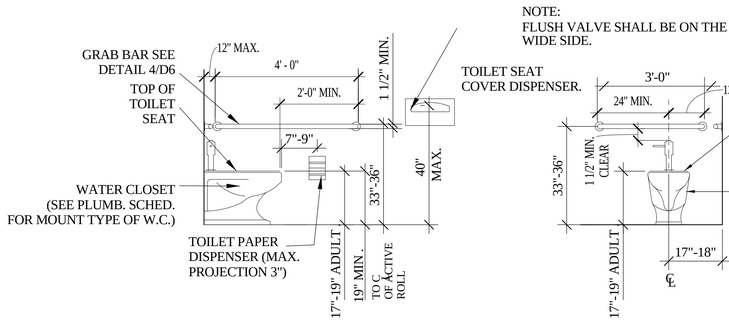


10 A-2.3 MIRROR ATTACHMENT
3" = 1'-0"



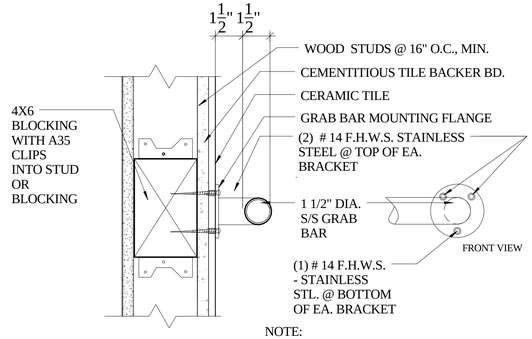
11 A-2.3 CARPET TO RESILIENT FLOOR TRANSITION
12" = 1'-0"

FLUSH CONTROL - NO GREATER THAN 5 LBS.OF FORCE TO OPERATE



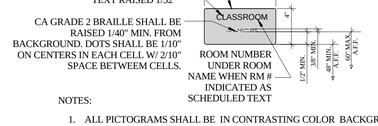
NOTE: ALL DIMENSIONS INDICATED ARE CLEAR, FINISH TO CENTER LINES OF PLUMBING FIXTURES OR ACCESSORIES DIMENSIONS AND MUST BE

6 A-2.3 ACC WATERCLOSET
1/2" = 1'-0"



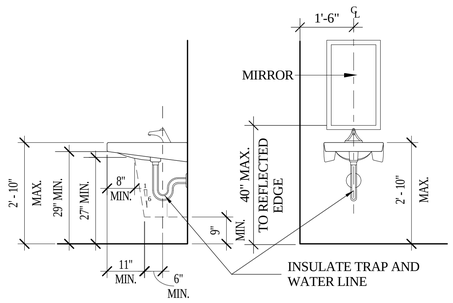
NOTE:
ALL SCREWS TO HAVE 1-1/4" MIN. EMBEDMENT. INTO BLOCKING.

9 A-2.3 GRAB BAR MOUNTING
3" = 1'-0"



NOTES:
1. ALL PICTOGRAMS SHALL BE IN CONTRASTING COLOR BACKGROUND
2. ALL SURACES SHALL HAVE AN EGGSHELL FINISH TYP. MOUNT ON WALL W/NON STAINING ADHESIVE TYP.
3. CONFORM TO ALL APPLICABLE CODES.
4. BASELINE OF LOWEST BRAILLE TO BE 48" A.F.F. MIN. AND BASE LINE OF TEX TO BE 60" A.F.F. MAX. TYPICAL AT ALL SIGNS WITH TACTILE AND BRAILE.

4 A-2.3 ADA STRIKE SIDE ROOM SIGN
1 1/2" = 1'-0"



NOTE: 1. ALL DIMENSIONS INDICATED ARE CLEAR, FINISH TO FINISH DIMENSIONS AND MUST BE STRICTLY MAINTAINED

2. SEE DETAIL 4/P-1 FOR ACCESSIBLE SINK DIMENSION

7 A-2.3 ACCESSIBLE LAVATORY HEIGHTS
1/2" = 1'-0"

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PROJECT

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No.	Description	Date
1	PLAN CHECK COMMENTS	4/9/25

ACCESSIBILITY DETAILS

Project number	Project Number
Date	5 15 24
Drawn by	Author
Checked by	Checker

A-2.3

Scale: As indicated

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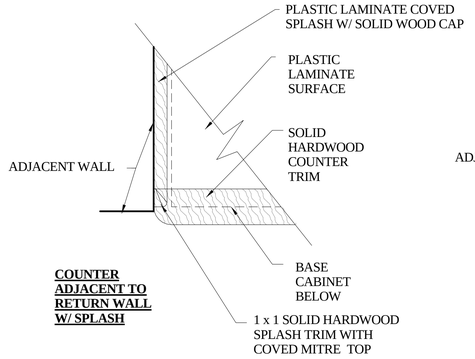
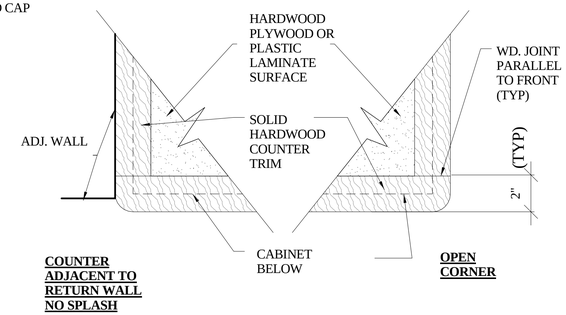
NOTE: SEE CABINET TYPE ELEVATIONS FOR HARDWOOD TYPE



COUNTER ADJACENT TO RETURN WALL W/ SPLASH

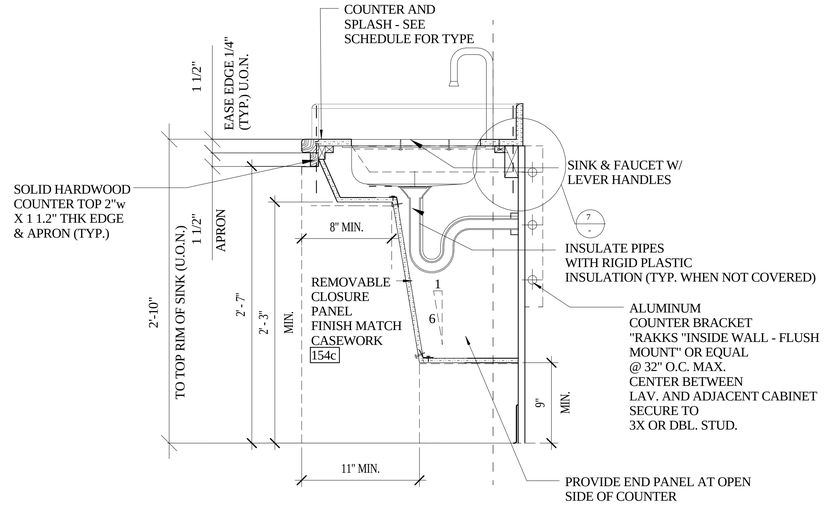


COUNTER ADJACENT TO RETURN WALL NO SPLASH

OPEN CORNER

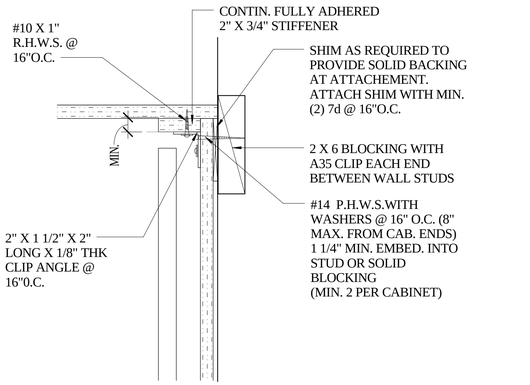
COUNTER TOPS AT SPACES OTHER THAN SCIENCE ROOMS AND TEACHERS LOUNGE. ALL COUNTER TOPS IN ROOMS A-9, A-10 AND A11 TO BE SOLID EPOXY WITH MARINE ENDGE. TEACHER LOUNGE TO BE QUARTZ SOLID SURFACE.

3 A-2.4 CABINET TOP CORNERS
3" = 1'-0"

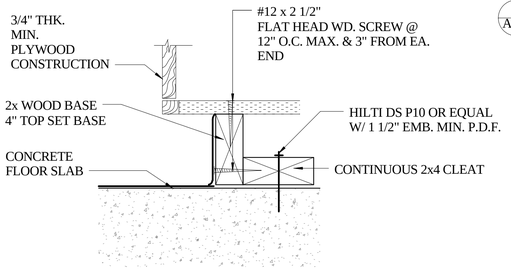


GEN. NOTE: ALL ACCESIBLE COUNTER HEIGHTS NOT TO EXCEED 2'-10". VERIFY FLOOR LEVELNESS PRIOR TO INSTALLATION

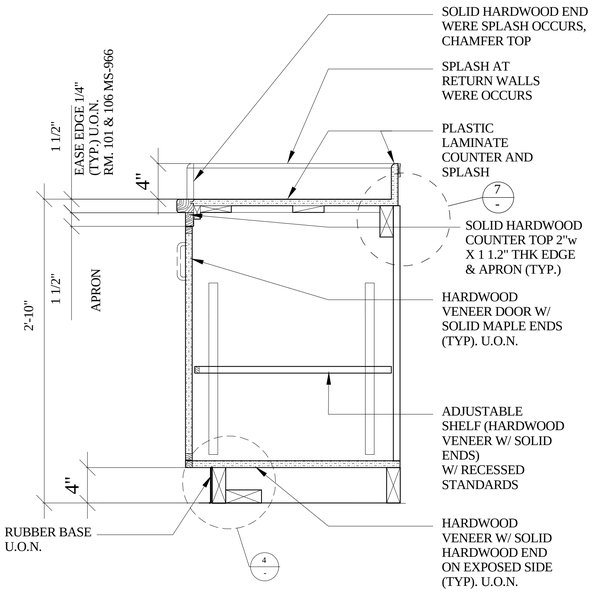
1 A-2.4 COUNTER W/ SINK - ACC DIMENSIONS
1 1/2" = 1'-0"



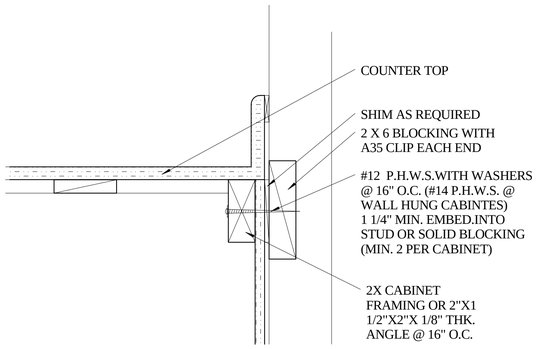
6 A-2.4 WALL CABINET ATTACHEMENT
3" = 1'-0"



4 A-2.4 BASE CABINET ATTACHEMENT
3" = 1'-0"



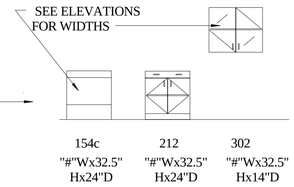
2 A-2.4 BASE CAB. SECTION
1 1/2" = 1'-0"



7 A-2.4 BASE CAB WALL ATTACH
3" = 1'-0"

REFER TO WOODWORK INSTITUTE - MILL WORK MANUAL - LATEST EDITION FOR REFERENCED CASEWORK MODEL NUMBERS

FACE FRAME MAY BE W.I. CONDITION 8a OR 8b AT ADJOINING CABINETS, PROPOSE FINISH CASEWORK WIDTHS IN SHOP DRAWINGS (TYP FOR ALL GROUPED CASEWORK)



TYPICAL FOR ALL

5 A-2.4 CASEWORK TYPES
1/4" = 1'-0"

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CASEWORK

Project number	Project Number
Date	5 15 24
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Checked by	Checker

A-2.4

Scale: As indicated

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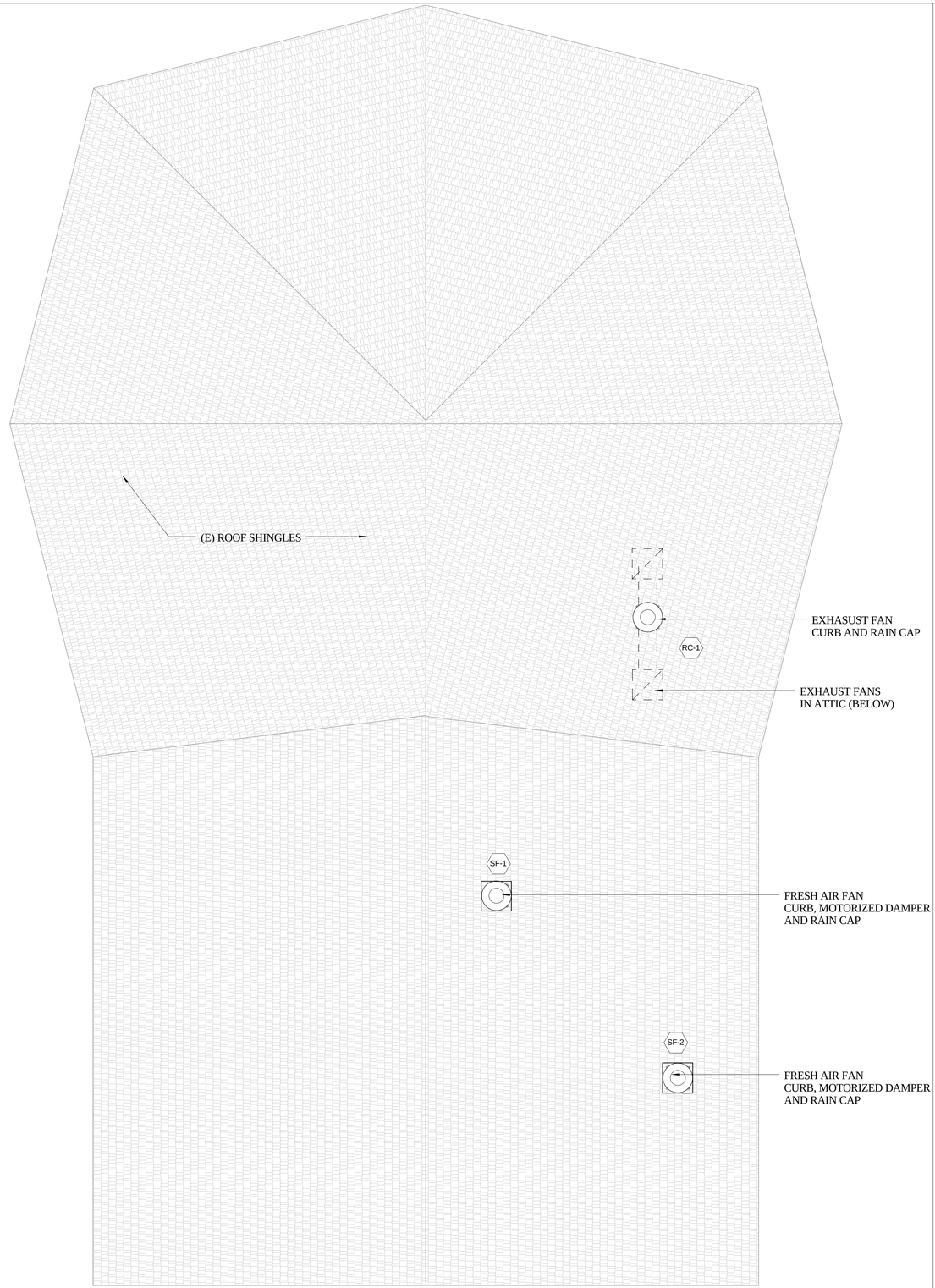

1 A-3 ROOF PLAN
1/4" = 1'-0"

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C-19767
Exp. 11/30/25
STATE OF CALIFORNIA

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ROOF PLAN

Project number	Project Number
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Checked by	Checker

A-3

Scale 1/4" = 1'-0"

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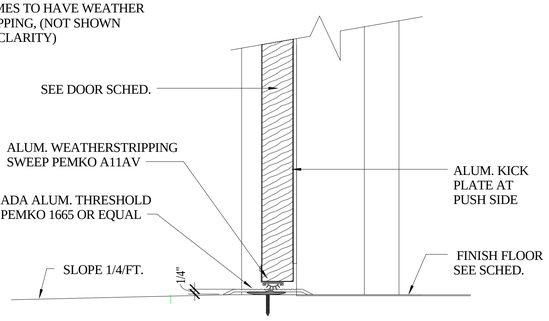
EXTERIOR **INTERIOR**

NOTE: EXTERIOR DOOR FRAMES TO HAVE WEATHER STRIPPING, (NOT SHOWN FOR CLARITY)



3 / A-5 EXTERIOR DOOR THRESHOLD
3" = 1'-0"

ROOM FINISH SCHEDULE

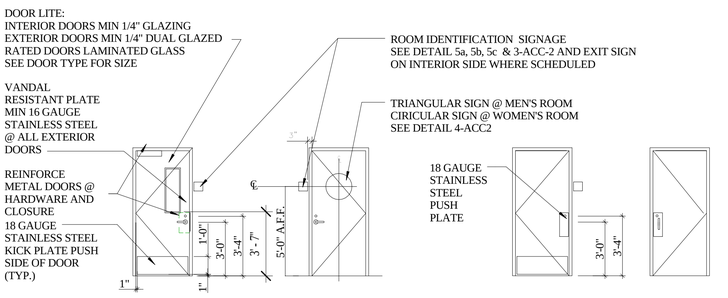
NUMBER	NAME	BASE	FLOOR	EAST WALL	SOUTH WALL	WEST WALL	NORTH WALL	WAINSCOT	WAINSCOT HT.	CEILING	CEILING HEIGHT	COMMENTS
1	READING AREA			PAINT	PAINT	PAINT	PAINT	NONE	-	PAINT	VARIES	
2	STOR.			PAINT	PAINT	PAINT	PAINT	NONE	-			
3	CUST.			PAINT	PAINT	PAINT	PAINT	NONE	-			
4	G.N. W.C. 1			G.B./PAINT	G.B./PAINT	G.B./PAINT	G.B./PAINT	FRP	48 INCHES	G.B. / PAINT	MATCH EXISTING	
5	G.N.W.C. 2			G.B./PAINT	G.B./PAINT	G.B./PAINT	G.B./PAINT	FRP	48 INCHES	G.B. / PAINT	MATCH EXISTING	
6	MECH			EXISTING	EXISTING	EXISTING	EXISTING	NONE	-	EXISTING	EXISITNG	
7	ELEC			EXISTING	EXISTING	EXISTING	EXISTING	NONE	-	EXISTING	EXISTING	
8	TEEN ROOM			PAINT	PAINT	PAINT	PAINT	NONE	-	AC TILE	MATCH EXISTING	
9	BREAK RM.			G.B./PAINT	G.B./PAINT	G.B./PAINT	G.B./PAINT	NONE	-	G.B. / PAINT	MATCH EXISTING	
10	STAFF RM.			EXISTING	EXISTING	EXISTING	EXISTING	NONE	-	EXISTING	EXISTING	
11	CIRCULATION DESK			-	-	PAINT	-	NONE				
12	COMPUTERS			PAINT	PAINT	-	-	NONE				

DOOR SCHEDULE

Mark	Type	DOOR WIDTH	LEAFS	DOOR Height	DOOR Thickness	DOOR Material	DOOR Finish	Fire Rating	Hardware	FRAME Type	FRAME Material	FRAME Finish	FRAME JAMB DTL.	FRAME HEAD DTL.	Head Height	Comments
1	C	3' - 0"	PAIR	7' - 0"	0' - 1 3/4"	FRP HYBRID	FACTORY	NA	1	EXISTING	-	-			7' - 0"	
2	A	2' - 8"	SINGLE	7' - 0"	0' - 1 3/4"	EXISTING	EXISTING	NA	EXISTING	EXISTING	-				7' - 0"	
3	A	2' - 6"	SINGLE	7' - 0"	0' - 1 3/4"	SOLID CORE WOOD	STAIN	NA	2	WELDED	STEEL	PAINTED			7' - 0"	
4	A	3' - 0"	SINGLE	7' - 0"	0' - 1 3/4"	SOLID CORE WOOD	STAIN	NA	3	WELDED	STEEL	PAINTED			7' - 0"	
5	A	3' - 0"	SINGLE	7' - 0"	0' - 1 3/4"	SOLID CORE WOOD	STAIN	NA	3	WELDED	STEEL	PAINTED			7' - 0"	
6	A	2' - 10"	SINGLE	7' - 0"	0' - 1 3/4"	EXISITING	EXISTING	NA	EXISTING	EXISTING	-	PAINTED			7' - 0"	
7	A	2' - 10"	SINGLE	7' - 0"	0' - 1 3/4"	EXISTING	EXISTING	NA	EXISTING	EXISTING	-	PAINTED			7' - 0"	
9	-	3' - 0"	SINGLE	7' - 0"	0' - 1 3/4"	NONE	NONE	NA	-	CASED	WOOD	PAINTED			7' - 0"	CASED OPENING
10	A	3' - 0"	SINGLE	7' - 0"	0' - 1 3/4"	EXISTING	EXISTING	NA	EXISTING	EXISTING	-	PAINTED			7' - 0"	
11	A	3' - 0"	SINGLE	7' - 0"	0' - 1 3/4"	EXISTING	EXISTING	NA	EXISTING	EXISTING	-	PAINTED			7' - 0"	

CASEWORK SCHEDULE

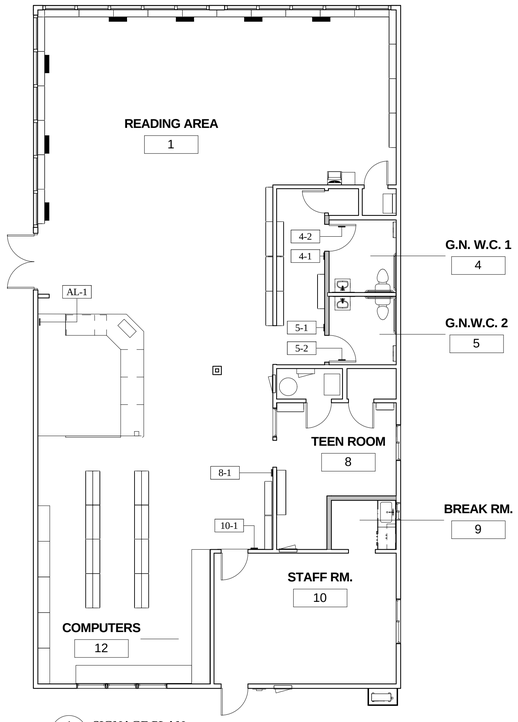
MARK	DESCRIPTION	WIDTH	HEIGHT	DEPTH	FINISH	COUNT	COMMENTS
154c-36	ADA UNDER SINK APRON	3' - 0"	2' - 8 1/2"	23' - 3"	MAPLE	1	COUNTER 24" MAX.
212-30	BASE CABINET W/ UPPER DRAWER	2' - 6"	2' - 8 1/2"	23' - 3"	MAPLE	1	COUNTER 24" MAX.
301-36	UPPER CABINET	2' - 10"	2' - 6"		MAPLE	1	



2 / A-5 DOOR TYPES
1/4" = 1'-0"

GENERAL NOTES: DOORS

1. ALL HINGED DOORS TO BE 1-3/4" U.O.N.
2. ALL DOOR SIZES GIVEN ARE FOR REFERENCE USE ONLY. 32" CLEAR MIN. OPENING FOR ALL DOORS (UNLESS SPECIFICALY NOTED OTHERWISE) CONTRACTOR MUST FIELD MEASURE EXISTING CONDITIONS FOR EXACT DIMENSIONS REQUIRED FOR NEW WORK. PROVIDE SHOP DRAWINGS TO ARCHITECT FOR APPROVAL. PROVIDE WEATHERSTRIPPING AT EXTERIOR DOORS TYPICAL.
3. ALL DOORS/FRAMES SHALL BE SHOP PRIMED AND PAINTED PER SPECIFICATIONS. ALL FRAMES TO BE WELDED.
4. CONTRACTOR SHALL PROVIDE LETTER OF CONFIRMATION FROM DOOR CLOSER MANUFACTURER ON CLOSING FORCE COMPLIANCES TO THE ADA/CALIFORNIA TITLE 24 REQUIREMENT. (5 lbf INTERIOR, 15 lbf EXTERIOR, 15 lbf ON REQUIRED FIRE DOORS IF ALLOWED BY AUTHORITY HAVING JURISDICTION.
5. OPERABLE PARTS OF HARDWARE / DOORS TO BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THE FORCE TO ACTIVATE OPERABLE PARTS TO BE MAXIMUM OF 5 LBS.
6. ALL DOOR LITES SHALL HAVE 1/4" GLAZING MIN. DUAL GLAZED. BOTTOM OF GLASS TO BE MAX. 43" A.F.F.



1 / A-5 SIGNAGE PLAN
1/8" = 1'-0"

NOTE: ALL SIGNS WILL BE PROVIDED BY THE OWNER INSTALLED BY THE CONTRACTOR

SIGN SCHEDULE

MARK	SIGN TEXT	MOUNT	DETAIL REF.	COMMENTS
4-1	GENDER NEUTRAL RESTROOM	WALL	4/A-2.3	
4-2	NO TEXT - CIRCLE/TRIANGLE	DOOR	3c/A-2.3	
5-1	GENDER NEUTRAL RESTROOM	WALL	4/A-2.3	
5-2	NO TEXT - CIRCLE/TRIANGLE	DOOR	3c/A-2.3	
8-1	TEEN ROOM	WALL	4/A-2.3	
10-1	STAFF OFFICE	WALL	4/A-2.3	
AL-1	ASSISTED LISTENING DEVICE	WALL	8/A-2.3	

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SCHEDULES

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A-5

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PANELS

BRANCH CIRCUIT PANEL

MAIN SWITCHBOARD

IDENTIFICATION TAGS

LIGHTING FIXTURE TAG: TYPE AND WATTAGE

MECHANICAL EQUIPMENT

SHEET NOTE REFERENCE NUMBER

REVISION

FEEDER TAG

DETAIL OR SECTION

DETAIL/DIAGRAM NOTE

COMMUNICATION FEEDER TAG

ABBREVIATIONS

UON	UNLESS OTHERWISE NOTED
MTC	EMPTY CONDUIT
SAD	SEE ARCHITECTURAL DRAWINGS
SMD	SEE MECHANICAL DRAWINGS
SPD	SEE PLUMBING DRAWINGS
WP	WEATHER PROOF
EC	ELECTRICAL CONTRACTOR

WIRING

NEUTRAL — BRANCH CIRCUIT HOMERUN, CROSS LINES INDICATE NUMBER OF #12 WIRES (UON), WHERE IN EXCESS OF 2. (NOT COUNTING REQUIRED EQUIPMENT GROUND IN PVC CONDUITS).

CONDUIT CONCEALED IN CEILING OR WALL, NUMBER OF CONDUCTORS SHALL BE AS REQUIRED FOR THE CIRCUIT OR CONTROL SHOWN UON.

CONDUIT CONCEALED IN OR BELOW FLOOR OR GRADE, NUMBER OF CONDUCTORS SHALL BE AS REQUIRED FOR THE CIRCUITS OR CONTROL SHOWN UON.

LV — LOW VOLTAGE 0-10 VOLT DIMMING CONTROL WIRING

D — DATA SYSTEM CONDUIT (3/4" MTC U.O.N.)

COMPUTER OUTLET W/ (2) RJ45 DATA JACKS AND (1) COMPUTER OUTLET W/ 1-RJ 45 TELEPHONE JACK +17" UON,

1 — COMPUTER OUTLET W/1 RJ45 DATA JACKS (+ 11'-0" FOR WIRELESS ACCESS POINT)

COMPUTER OUTLET W/2 RJ45 DATA JACKS (+17" UON)

CLOCK & OUTLET

S — SPEAKER & OUTLET

S — AUDIO VISUAL SPEAKER & OUTLET

SYMBOLS

NOTE:

1. LIGHTING FIXTURES ARE REFERENCED BY TAG REFER TO LIGHTING FIXTURE SCHEDULE FOR DESCRIPTION
2. EXISTING DEVICES ARE SHOWN DASHED.

SWITCHES AND DEVICES

DUPLEX CONVENIENCE RECEPTACLE: 3-POLE GRD (+15" BOTTOM OF BOX, UON)

FOURPLEX RECEPTACLE: 3-POLE GRD (+15" BOTTOM OF BOX, UON)

GROUND FAULT INTERRUPTER FOURPLEX RECEPTACLE +15" BOTTOM OF BOX, UON

GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE (+15" BOTTOM OF BOX, UON)

FOURPLEX RECEPTACLE: 3-POLE GRD W/ (3) USB PORTS , LEVITON OR EQUAL, +15" BOTTOM OF BOX, UON)

DUPLEX CONVENIENCE RECEPTACLE: 3-POLE GRD AND COMPUTER OUTLET W/ (2) RJ45 DATA JACKIN FLOOR BOX

B/B — 240V RECEPTICLE AND BUCK & BOOST TRANSFORMER 208V TO 240V

SPECIAL OUTLET AS REQUIRED BY EQUIPMENT.

MANUAL MOTOR STARTER SWITCH, HORSEPOWER RATED W/ OVRLOAD

J — JUNCTION BOX

M — MOTOR OUTLET AND FLEX CONNECTION

F — FUSED / NON-FUSED DISCONNECT SWITCH

S_2 S_3 S_k — TOGGLE SWITCH: 1-POLE, 2-POLE, 3-WAY, KEYED (+48" TO THE TOP OF BOX, UON)

WATTSTOPPER LMDC-100

D1 — 0-10 VOLT LED DIMMER AND WATTSTOPPER LMDM-101 (MOTION SENSOR (+46" AT CENTER, UON)

D2 — 0-10 VOLT LED DIMMER AND WATTSTOPPER LMDW-102 (MOTION SENSOR (+46" AT CENTER, UON)

1 D — 0-10 VOLT LED DIMMER WATTSTOPPER LMDM-101 (+46" AT CENTER, UON)

LMRC 211 — WATTSTOPPER LMRC-211 SINGLE RELAY ROOM CONTROLLER

LMRC 212 — WATTSTOPPER LMRC-212 ROOM CONTROLLER

LMRC 213 — WATTSTOPPER LMRC-213 ROOM CONTROLLER

LMLS 500 — WATTSTOPPER LMLS MULTIZONE DIMMING DIGITAL PHOTO SENSOR

T — THERMOSTAT - VENSTAR T6800

C — CAMERA LOCATION

ELECTRICAL GENERAL NOTES

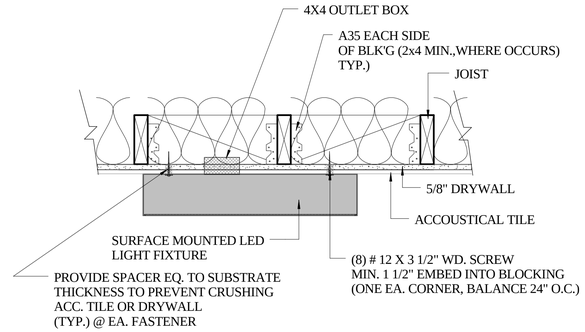
1. SEE ARCHITECTURAL DRAWINGS FOR COUNTER HEIGHTS.INSTALL ALL RECEPTACLES, DEVICES, ETC. ACCORDINGLY.
2. SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL LIGHTING FIXTURES.
3. FINISH OF ALL LIGHTING FIXTURES SHALL BE AS SELECTED BY THE ARCHITECT FROM STANDARD FINISHES.
4. SEE MECHANICAL DRAWINGS FOR EXACT LOCATION OF EQUIPMENT REQUIRING ELECTRICAL CONNECTION.
5. SEE MECHANICAL CONTROL DIAGRAM FOR CONTROL WIRING BY ELECTRICAL CONTRACTOR.
6. FIRE STOPPING SHALL BE PROVIDED WHERE PENETRATING ITEMS PASS ENTIRELY THROUGH BOTH PROTECTIVE MEMBRANES OF BEARING WALLS REQUIRED TO HAVE A FIRE-RESISTIVE RATING AND WALLS REQUIRING PROTECTED OPENINGS. FIRE STOPPING SHALL ALSO BE PROVIDED AT PENETRATIONS OF FIRE RESISTIVE FLOORS AND FLOORS WHICH ARE PART OF A CEILING-FLOOR ASSEMBLY. FIRE-STOPPING SHALL HAVE AN "F" OR "T" RATING AS DETERMINED BY TESTS CONDUCTED IN ACCORDANCE WITH UBC SECTION 714 SEE SPECIFICATIONS.
7. RELOCATE ANY EXISTING CONDUIT AND OUTLETS WHICH INTERFERE WITH NEW CONSTRUCTION. RELOCATE OUTLETS TO ACCESSIBLE LOCATIONS PER CODE.
8. MAINTAIN CIRCUIT CONTINUITY TO ALL EXISTING OUTLETS REMAINING IN USE WHETHER SHOWN OR NOT.
9. REMOVE ALL EXISTING CONDUIT, OUTLETS, FIXTURES, CONDUCTORS, ETC. NO LONGER IN USE.
10. PROVIDE EMERGENCY BATTERY PACK FOR ALL FIXTURES. WHERE SHOWN INDICATED ON DRAWINGS CONNECT BATTERY PACKS AHEAD OF SWITCH.

NOTE:

INSTALLATION OF ELECTRICAL SWITCHES MUST COMPLY WITH CBC SECTION 11B-308.1.1 AND ELECTRICAL RECEPTACLES MUST COMPLY WITH CBC SECTION 11B-308.1.2

LIGHTING FIXTURE SCHEDULE

TAG	SYMBOL ON PLAN	DESCRIPTION	ACCEPTABLE MANUFACTURER CATALOG NO.	NO. & TYPE OF	FIXTURE WATT	VOLT	LOCATION	NOTE
A		2 X 4 SURFACE MOUNTED LED DIRECT CEILING MOUNT	ORACLE LIGHTING OSMT-LED-4000L-DM10-MVOLT-40K-85-A-SFW	LED	32	120		
Ae		2 X 4 SURFACE MOUNTED LED DIRECT CEILING MOUNT	ORACLE LIGHTING OSMT-LED-4000L-DM10-MVOLT-40K-85-EMG-O-LED-A-SFW	LED	32	120		WITH EMERGENCY BATTERY PACK
B		SURFACE MOUNTED ROUND FIXTURE	ACURITY JUNO SLIM LINE JSF-12IN-13LM-SWW4-90CRI-120FRPC-WH-EBX	LED	14.6	120		



3 / E-0 SURFACE MOUNTED LIGHT FIXTURE
1 1/2" = 1'-0"

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FORTUNA, CA 95540

REGISTERED ARCHITECT — DONALD R. ALAMEIDA — C-19767 — Exp. 11/30/25 — STATE OF CALIFORNIA

No.	Description	Date
1	PLAN CHECK COMMENTS	4/9/25

ELECTRICAL NOTES

Project number	Project Number
Date	5 15 24
Drawn by	Author
Checked by	Checker

E-0

Scale: As indicated

4/11/2025 3:20:15 PM

PANEL: A

VOLT 120 / 240V
PHASE 1
WIRE 3W
BUSSING 100 AMP
POLES 16P

REMARKS:
EXISTING PANEL "A" MODIFIED
CONSERVATIVE ESTIMATE

MAIN BREAKER 100 AMP / 2 POLE
FEEDER SEE SINGLE LINE
CONDUIT NON-METALIC
MOUNTED FLUSH
AIC RATING 22,000

LOAD DESCRIPTION	A/FCI	GFCI	LOAD TYPE	A	B	BRKR	CKT.		CKT.	BRKR	A	B	LOAD TYPE	LOAD DESCRIPTION
LIGHTING NORTHEAST			L	0.693		20/1	1		2	20/1		0.18	R	MENS W.C.
LIGHTING SOUTHEAST			L		0.320	20/1	3		4	20/1	0.18		R	WOMENS W.C. / CUST/ D.F.
LIGHTING WEST			L	0.747		20/1	5		6	30/1		2.85	H	WATER HEATER
EXTERIOR LIGHTING			L		0.444	20/1	7		8		2.85		H	
CIRC. DESK			L	0.18		20/1	9		10	20/1		0.18	R	FURNACE/TELEPHONE
SPARE			L		0.00	20/1	11		12	20/1	0.18		R	EXTERIOR RECPT.
CT 1-2			R	0.18		20/1	13		14	20/1		0.18	R	CT 5-6
CT 3-4			R		0.18	20/1	15		16	20/1	0.18		R	AT&T
				1.8 KVA	0.944 KVA						3.39 KVA	3.39 KVA		

DEMAND LOAD SUMMARY			CONN. KVA	DEMAND FACTOR	DEMAND KVA
TYPE	M	NON-CONTINUIOUS / MISC.	0	1	0.00
TYPE	L	LIGHTING /CONTINUIOUS	2.3844	1.25	2.98
TYPE	R	RECEPTICLES (FIRST 10 KVA)	1.44	1	1.44
TYPE	R	RECEPTICLES (OVER 10 KVA)	0	0.5	0.00
TYPE	H	HVAC / MECH LOADS	5.7	1	5.70
TYPE	V	EV / CONTINUIOUS	0	1.25	0.00
		TOTALS	9.5244		10.12

PHASE A 5.19 KVA
PHASE B 4.3344 KVA

43.25 MAX AMPS / PHASE

43.3% % OF PANEL

NOTE: FAN COIL UNITS POWERED BY HEAT PUMP

PANEL: B

VOLT 120 / 240V
PHASE 1
WIRE 3W
BUSSING 100 AMP
POLES 16P

REMARKS:
EXISTING PANEL "B" MODIFED
(CONSERVATIVE ESTMATE)

MAIN BREAKER 100 AMP / 2 POLE
FEEDER SEE SINGLE LINE
CONDUIT NON-METALIC
MOUNTED FLUSH
AIC RATING 22,000

LOAD DESCRIPTION	LOAD TYPE	A	B	BRKR	CKT.		CKT.	BRKR	A	B	LOAD TYPE	LOAD DESCRIPTION
READING ROOM-NORTH	L	0.003		20/1	1		2	20/1		0.18	R	READING ROOM CENTER
READING ROOM SOUTH / EXISTING COMPUTERS	L		0.320	20/1	3		4	20/1	0.32		L	WORKROOM LIGHTS / Ee) COMPUTERS
WORK ROOM RECEPT	R	0.180		20/1	5		6	20/1		0.18	R	STAFF ROOM
TEEN RM / BREAK	L		0.213	20/1	7		8	20/1	0.18		H	FURNACE/ NEW COMPUTERS
READING ROOM RECEPT	R	0.180		20/1	9		10	20/1		0.18	R	READ'G RM RECEP SOUTH
COMPUTER 1	L		0.180	20/1	11		12	20/1	0.18		R	COMPUTER 2
EXIST & EMERGENCY	L	0.180		20/1	13		14	35/2		2.85	L	**(N) HEATPUMP # 1 (N) #10 CONDUCTORS**
TEEN ROOM LIGHTING	L		0.213	20/1	15		16		2.85		R	
		0.5427 KVA	0.927 KVA						3.53 KVA	3.39 KVA		

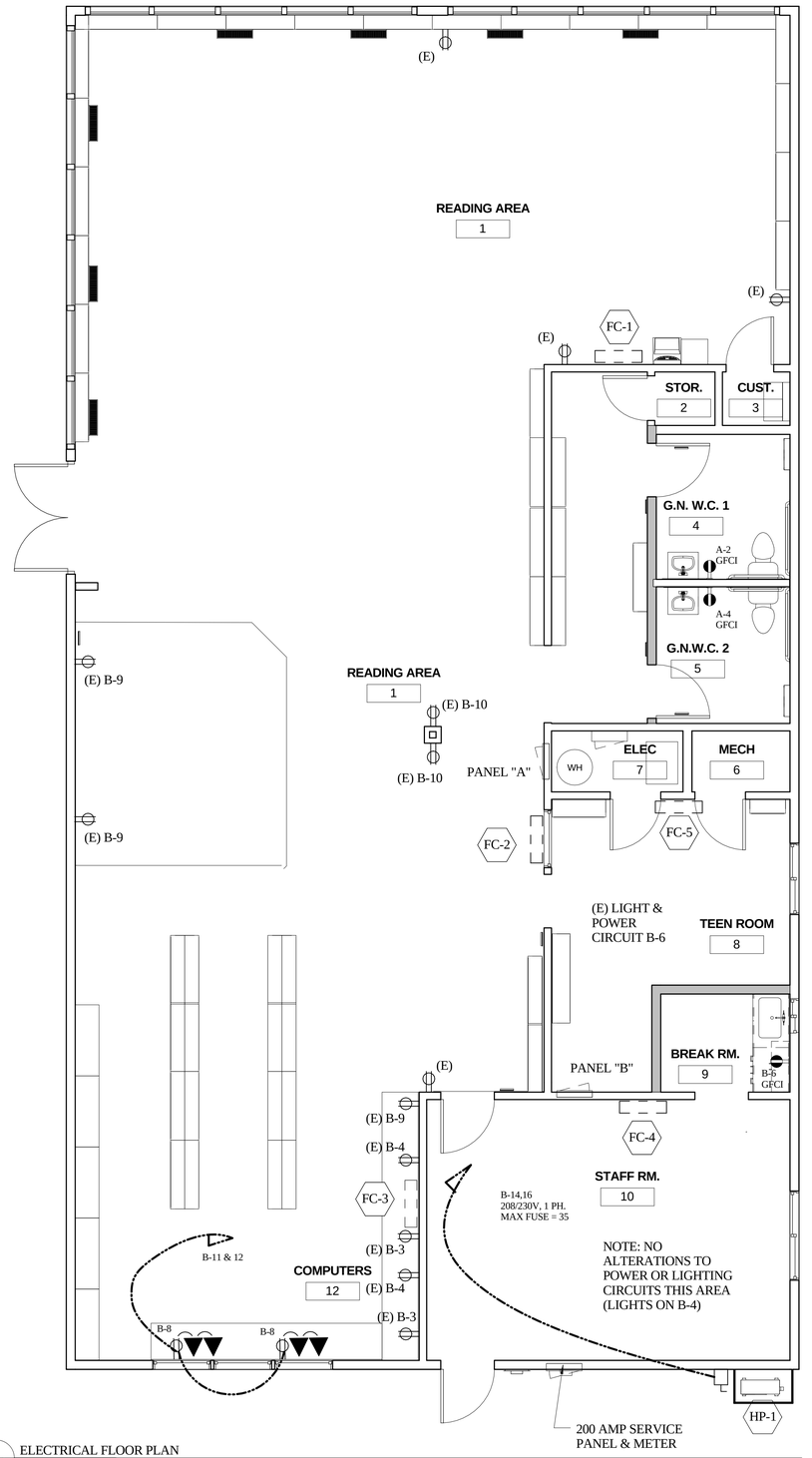
DEMAND LOAD SUMMARY			CONN. KVA	DEMAND FACTOR	DEMAND KVA
TYPE	M	NON-CONTINUIOUS / MISC.	0	1	0.00
TYPE	L	LIGHTING /CONTINUIOUS	4.2793	1.25	5.35
TYPE	R	RECEPTICLES (FIRST 10 KVA)	3.93	1	3.93
TYPE	R	RECEPTICLES (OVER 10 KVA)	0	0.5	0.00
TYPE	H	HVAC / MECH LOADS	0.18	1	0.18
TYPE	V	EV / CONTINUIOUS	0	1.25	0.00
		TOTALS	8.3893		9.46

PHASE A 4.0727 KVA
PHASE B 4.3167 KVA

35.97 MAX AMPS / PHASE

36% % OF PANEL

NOTE: FAN COIL UNITS POWERED BY HEAT PUMP



1 / E-1 ELECTRICAL FLOOR PLAN
1/4" = 1'-0"

PROJECT MANAGEMENT
ALAMEIDA ARCHITECTURE
CONSTRUCTION MANAGEMENT
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COUNTY OF HUMBOLDT

PROJECT

FORTUNA LIBRARY MODIFICATIONS

753 14TH ST.
FORTUNA, CA 95540

REGISTERED ARCHITECT DONALD R. ALAMEIDA C-19767 Exp. 11/30/25 STATE OF CALIFORNIA

No.	Description	Date
1	PLAN CHECK COMMENTS	4/9/25

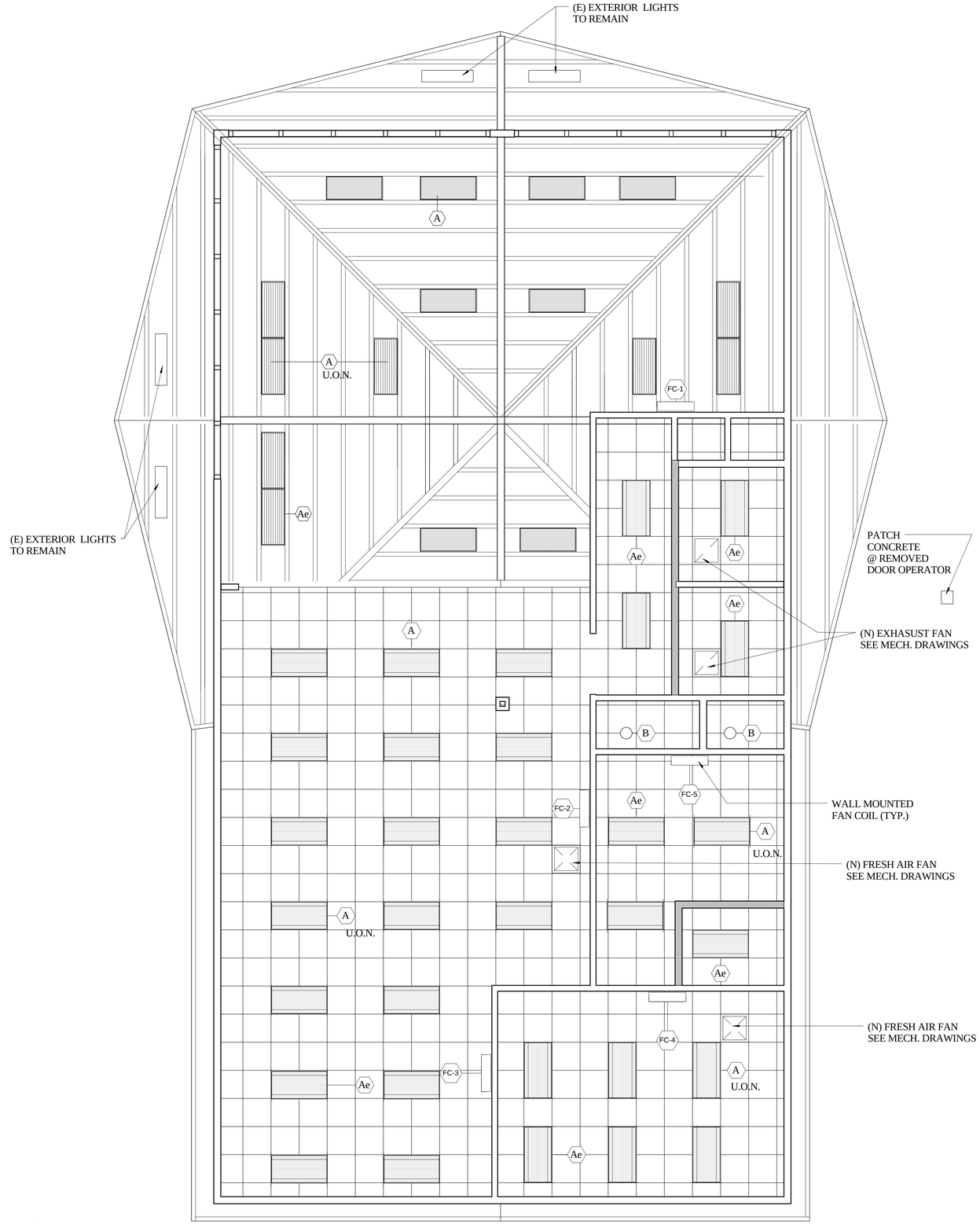
ELECTRICAL PLAN AND PANEL SCHEDULES

Project number	Project Number
Date	5 15 24
Drawn by	Author
Checked by	Checker

E-1

Scale 1/4" = 1'-0"

4/11/2025 3:20:18 PM



1 E-3 LIGHTING PLAN
1/4" = 1'-0"

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ARCHITECTURE

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FORTUNA, CA 95540

REGISTERED ARCHITECT
DONALD R. ALAMEIDA
C-19767
Exp. 11/30/25
STATE OF CALIFORNIA

No.	Description	Date
1	PLAN CHECK COMMENTS	4/9/25

LIGHTING PLAN

Project number	Project Number
Date	5 15 24
Drawn by	Author
Checked by	Checker

E-3

Scale 1/4" = 1'-0"

4/1/2025 3:20:19 PM

MECHANICAL EQUIPMENT

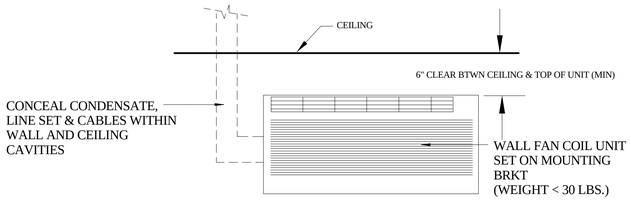
TAG	MAKE & MODEL	COOLING /HEATING		SUPPLY FAN			MIN. OSA CFM	POWER	UNIT MIN. CIRC. AMPS	MAX. FUSE	UNIT OPER. WEIGHT	WEIGHT INCLUDING ACCESORIES	HEATING (MBH)				COMMENTS
		TOTAL MBH	EER	NOM. CFM	ESP IN. WG	HP							HEAT PUMP	COP HI TEMP	GAS HEAT	AFUE %	
HP 1	DAIKIN MODEL # 5MXS48TVJU	47K	10.5	-	-	-	-	208/60/1	33.2	35	216 LBS	216 LBS	48.5	3.9	N/A	N/A	
FA 1	PEN-BARRY Z8	-	-	350	0.25	130 WATTS	338	120 - 1PH			35	35	-	-	-	-	W/ MORTORIZED DAMPER CURB MOUNTED
FA 2	PANASONIC FV-15NFLSI	-	-	100	0.04	125 WATTS	40	120 - 1PH	0.38	15 A	17.4	17.4	-	-	-	-	FRESH AIR STAFF AREA.
FC 1	DAIKIN MODEL # FTXS12LVJU	12K	-	240	-	-	-	120 - 1PH	0.14	-	22 LBS.	22 LBS.	-	-	-	-	UNIT POWERED BY HEATPUMP
FC 2	DAIKIN MODEL # FTXS12LVJU	12K	-	240	-	-	-	120 - 1PH	0.14	-	22 LBS.	22 LBS.	-	-	-	-	UNIT POWERED BY HEATPUMP
FC 3	DAIKIN MODEL # FTXS12LVJU	12K	-	240	-	-	-	120 - 1PH	0.14	-	22 LBS.	22 LBS.	-	-	-	-	UNIT POWERED BY HEATPUMP
FC 4	DAIKIN MODEL # FTXS09LVJU	9K	-	233	-	-	-	120 - 1PH	0.11	-	20 LBS.	20 LBS.	-	-	-	-	UNIT POWERED BY HEATPUMP
FC 5	DAIKIN MODEL # CTS07WJU9	7K	-	233	-	-	-	120 - 1PH	0.11	-	20 LBS.	20 LBS.	-	-	-	-	UNIT POWERED BY HEATPUMP
EF 1	BROAN L150	-	-	130	-	-	-	120 - 1PH	1.4	-	28 LBS.	28 LBS.	-	-	-	-	DUCT TO ROOF CURB WITH RAIN CAP
EF 2	BROAN L150	-	-	130	-	-	-	120 - 1PH	1.4	-	28 LBS.	28 LBS.	-	-	-	-	DUCT TO ROOF CURB WITH RAIN CAP

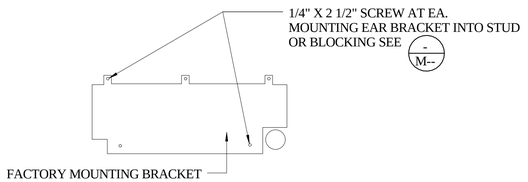
GENERAL NOTES - MECHANICAL EQUIPMENT:

1. ALL FAN COILS TO BE CONNECTED TO INDIVIDUAL WIRED / WIFI PROGRAMMABLE THERMOSTATS PER ROOM (DAIKIN ONE+THERMOSTAT).
2. ALL FAN COILS TO HAVE INLINE CONDESATE PUMPS.
3. ALL FAN COILS TO HAVE AIR PRUIFYING FILTER.
4. MOUNT EXHAUST ON SLOPED ROOF CURB UNITS.
5. FRESH AIR FANS TO HAVE MERV 13 FILTERS, POVIDE CEILING ACCESS PANEL TO CHANGE FILTERS
6. ACCESSOIES FOR EXFHASUT FAN: METAL GRILL AND WIRE TO OCCUPANCY SENSOR LIGHT SWITCH.

GENERAL NOTES:

1. ALL EQUIPMENT SHALL BE SECURED TO BLDG STRUCTURAL MEMBERS AND INSTALLED IN ACCORDANCE WITH ALL APPLICABLE CODES AND MEP COMPONENT ANCHORAGE NOTES AND DSA IR'S.
2. DRAWINGS ARE DIAGRAMMATIC AND TO BE USED FOR BIDDING ONLY. FIELD VERIFY STRUCTURE, INSTALL AND FABRICATE BASED ON FIELD CONDITIONS
3. FOLLOW MANUFACTURERS DRAWINGS AND INSTALLATION INSTRUCTIONS.
4. PROVIDE REQUIRED ELECTRICAL AND SERVICE CLEARANCES AROUND ALL UNITS.
5. ANY CHANGES IN MECHANICAL, ELECTRICAL OR STRUCTURAL WORK ASSOCIATED WITH A SUBSTITUTION ARE THE RESPONSIBILITY OF THE CONTRACTOR MAKING THE CHANGE.
6. PROVIDE CLEAN-OUTS AT HORIZONTAL BRANCH LINE PIPING OVER 5 FT LONG, AT ALL SINKS, URINALS AND WHEREVER REQUIRED BY CODE.
7. PROVIDE FLEXIBLE CONNECTIONS BETWEEN PIPING AND VIBRATING MACHINERY.
8. PENETRATIONS OF PIPES, CONDUITS, ETC., IN WALLS REQUIRING PROTECTED OPENINGS SHALL BE FIRE STOPPED. FIRE STOP MATERIAL SHALL BE A TESTED ASSEMBLY APPROVED BY ARCHITECT AND DSA.
9. PROVIDE FLEXIBLE CONNECTIONS WHERE ANY BUILDING SEISMIC JOINT OCCUR AND AT UTILITY ENTRANCES OF THE BUILDING.





MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING, AND ELECTRICAL 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 2021 CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTER 13, 26 AND 30.

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. “PERMANANTLY ATTACHED” SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTICALES HAVING A FLEXIBLE CABLE.
3. TEMPORARY MOVABLE OR MOVABLE 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 ARE REQUIRED TO BE ANCHORED IN A MANOR APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT THE ATTACHMENT NEED NOT BE DETAILED ON THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTONS MUST ALLOW MOVEMENT IN BOTH TRNASVERSE AND LONGITUDAL DIRECTIONS

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

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

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

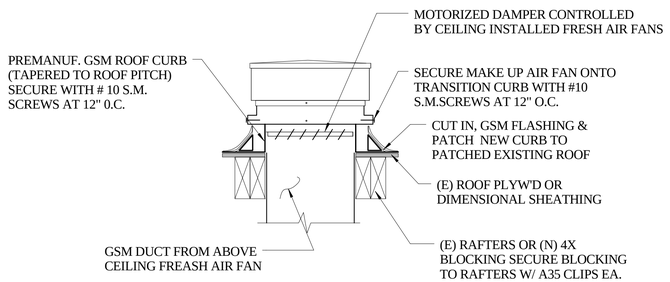
PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTION 13.6.5.6, 13.6.7, 13.6.8, AND 2019 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.

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.

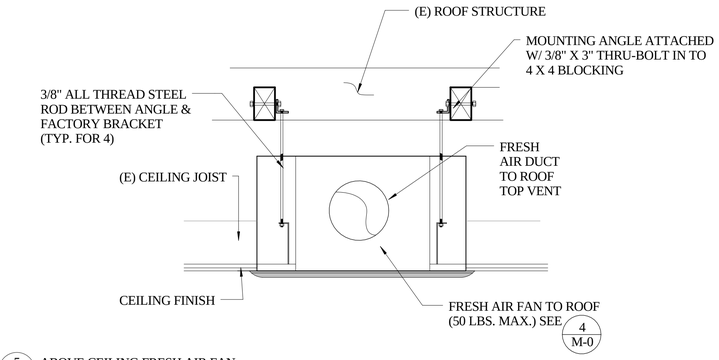
MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS E):

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

MP X MD X PP X E - X - **OPTION 2**: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM # 0052 BLINE/TOLCO.

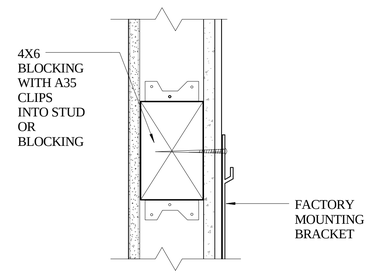


4 M-0 FRESH AIR ROOF TOP DAMPER
N.T.S.

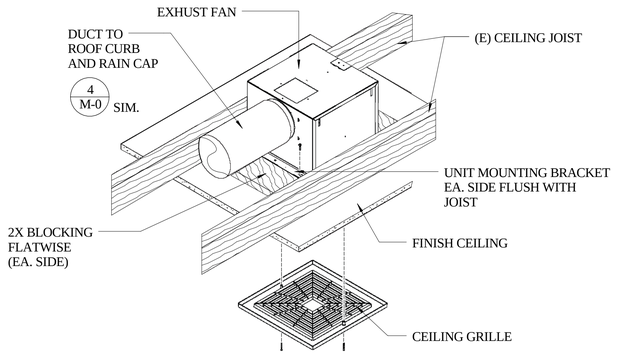


5 M-0 ABOVE CEILING FRESH AIR FAN
1" = 1'-0"

1 M-0 DUCTLESS SPLIT INDOOR UNIT
12" = 1'-0"



3 M-0 BLOCKING DETAIL - FAN COIL
3" = 1'-0"



6 M-0 EXHUAST FAN DETAIL
N.T.S.

PROJECT MANAGEMENT

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MECHANICAL NOTES AND DETAILS

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M-0

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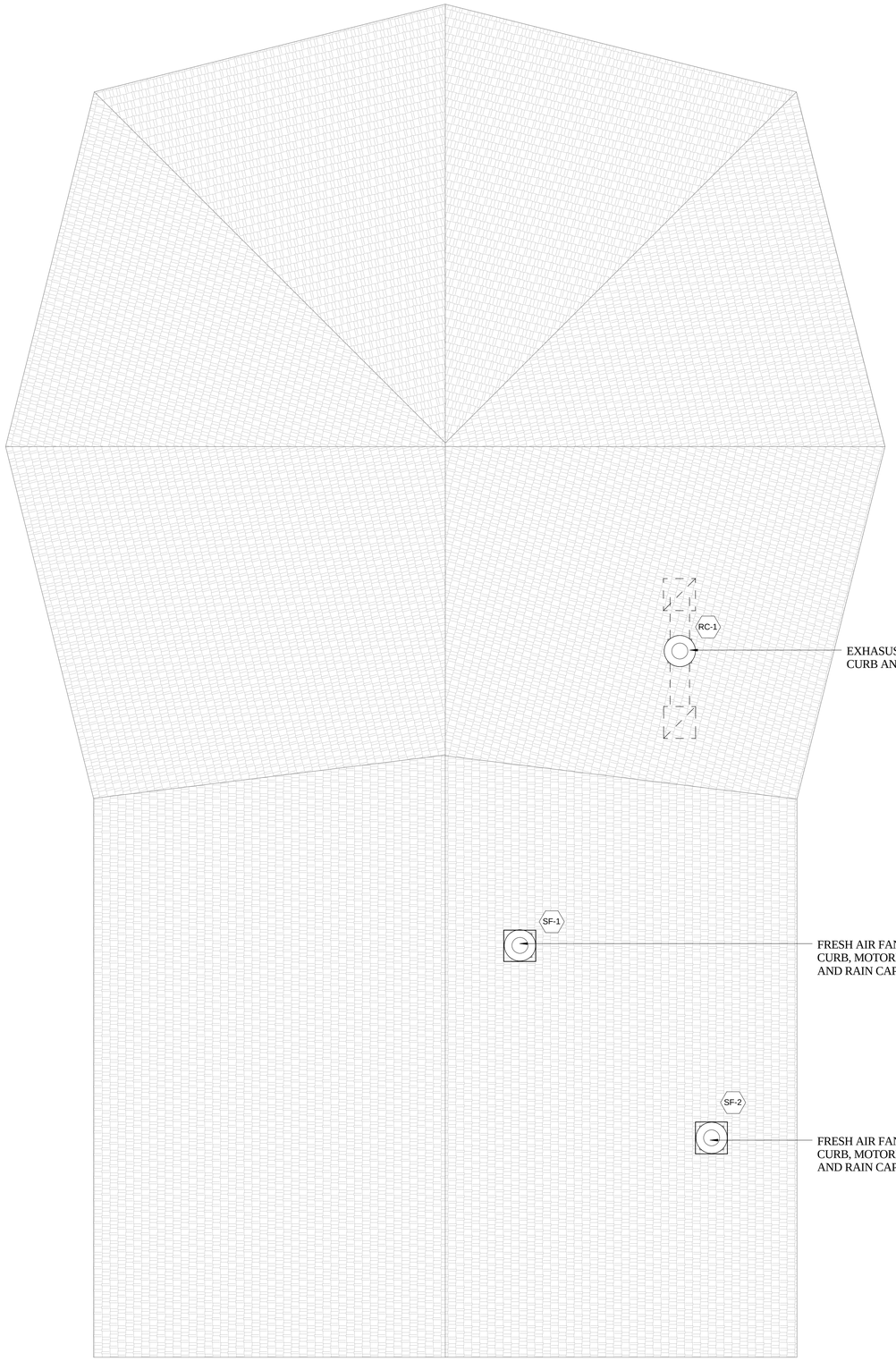
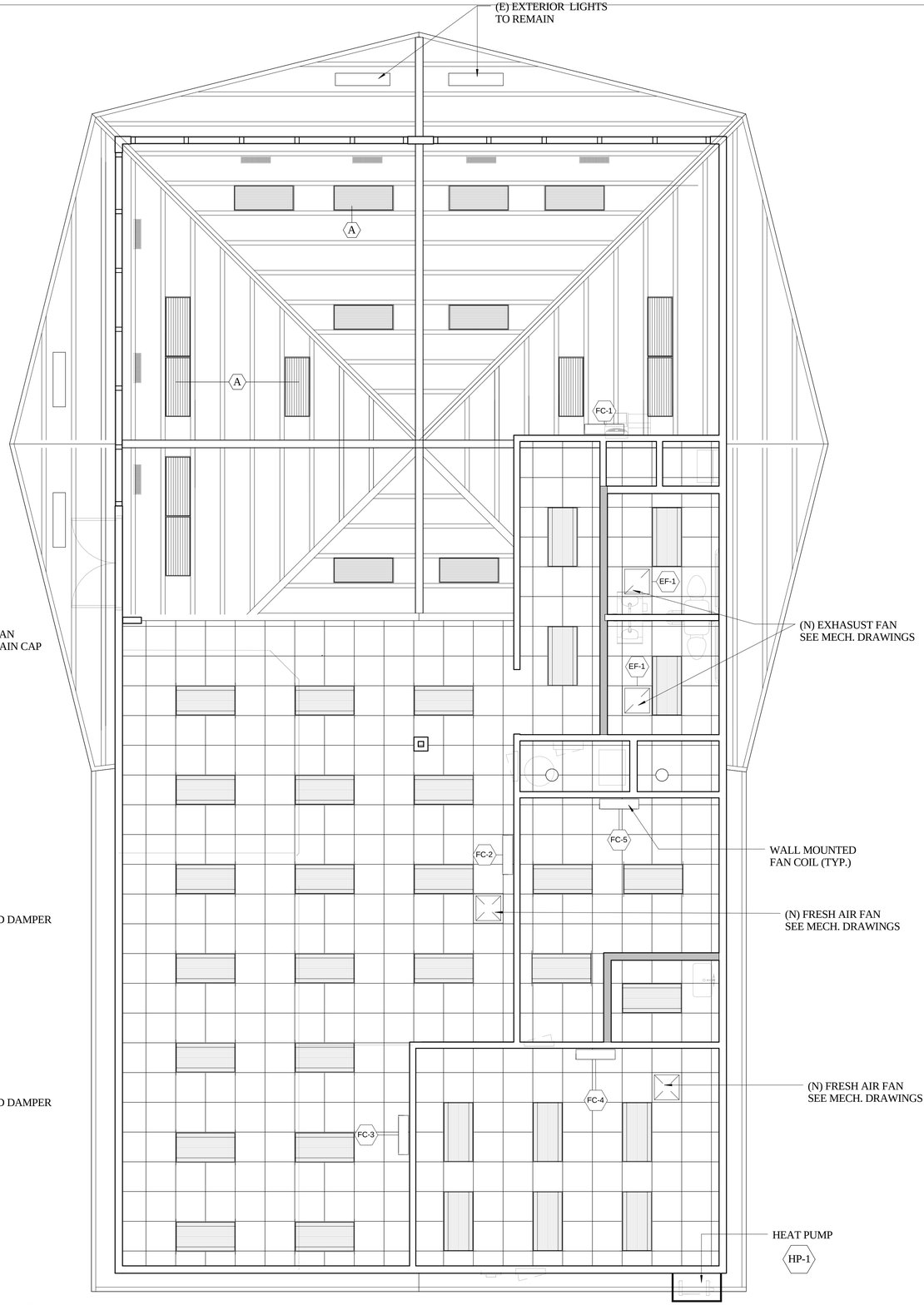


2 M-1 MECH. ROOF PLAN
1/4" = 1'-0"



1 M-1 MECHANICAL PLAN
1/4" = 1'-0"

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ARCHITECTURE

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Exp. 11/30/25
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No.	Description	Date
1	PLAN CHECK COMMENTS	4/9/25

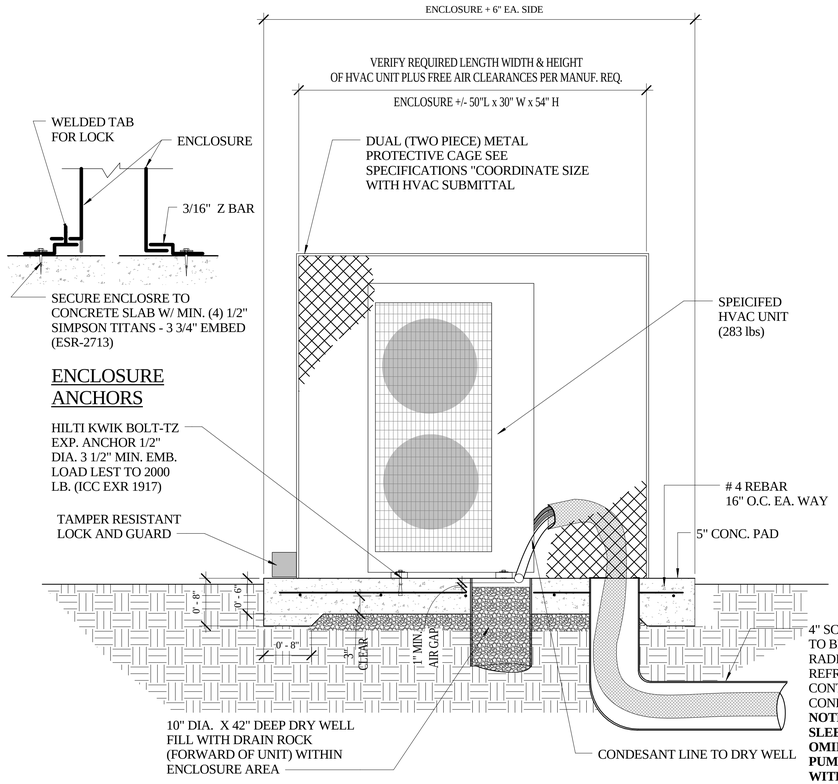
MECHANCIAL AND MECH. ROOF PLAN

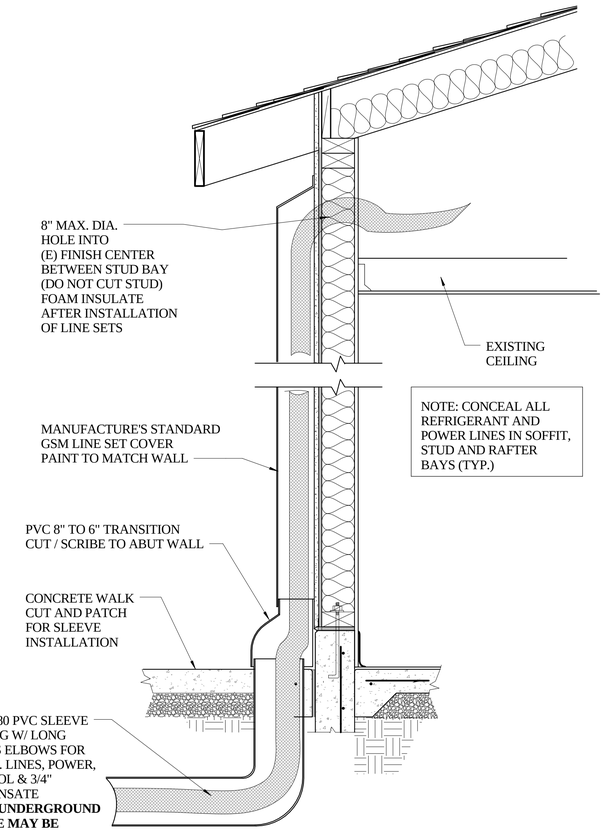
Project number	Project Number
Date	5 15 24
Drawn by	Author
Checked by	Checker

M-1

Scale 1/4" = 1'-0"

4/11/2025 3:20:23 PM





1 M-2 HVAC SPLIT SYSTEM
1" = 1'-0"

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No.	Description	Date
1	PLAN CHECK COMMENTS	4/9/25

HEAT PUMP
DETAILS

Project number	Project Number
Date	5 15 24
Drawn by	Author
Checked by	Checker

M-2

Scale 1" = 1'-0"

4/11/2025 3:20:24 PM

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
This document is used to demonstrate compliance with requirements in 110.9, 110.12(c), 130.0, 130.1, 140.6 and 141.0(b)2 for indoor lighting scopes using the prescriptive path for nonresidential and hotel/motel occupancies. It is also used to document compliance with requirements in 160.5, 170.2(e) and 180.2(b)4 for indoor lighting scopes using the prescriptive path for multifamily occupancies. Multifamily includes dormitory and senior living facilities.	
Project Name: Foruna Library Renovation	**Report Page:** (Page 1 of 8)
Project Address: 753 14th Street	**Date Prepared:** 711/12/24 2024-11-11T16:30:06-05:00

A. GENERAL INFORMATION

01	Project Location (city)	Fortuna	04	Total Conditioned Floor Area (ft²)	3,144
02	Climate Zone	1	05	Total Unconditioned Floor Area (ft²)	0
03	Occupancy Types Within Project (select all that apply):		06	# of Stories (Habitable Above Grade)	1

• Library

B. PROJECT SCOPE

This table includes any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.6 / 170.2(e) or 141.0(b)2 / 180.2(b)4 for alterations.

Scope of Work	Conditioned Spaces		Unconditioned Spaces	
01	02	03	04	05
My Project Consists of (check all that apply):	Calculation Method	Area (ft²)	Calculation Method	Area (ft²)
☐ New Lighting System	N/A	0	N/A	0
☐ New Lighting System - Parking Garage	N/A	0	N/A	0
☒ Altered Lighting System	Complete Building Method	3144	N/A	0
Total Area of Work (ft²)	3144			

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
Project Name: Foruna Library Renovation	**Report Page:** (Page 2 of 8)
753 14th Street	**Date Prepared:** 711/12/24 2024-11-11T16:30:06-05:00

C. COMPLIANCE RESULTS

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

Lighting in conditioned and unconditioned spaces must not be combined for compliance per 140.6(b)1 / 170.2(e)	Allowed Lighting Power per 140.6(b) / 170.2(e) (Watts)						Adjusted Lighting Power per 140.6(a) / 170.2(e) (Watts)				Compliance Results
	01	02	03	04	05		06	07		08	09
	Complete Building 140.6(c)1	Area Category 140.6(c)2 / 170.2(e)4	Area Category Additional 140.6(c)2G / 170.2(e)4Av (+)	Tailored 140.6(c)3 / 170.2(e)4B (+)	**Total Allowed** (Watts)		Total Designed (Watts)	Adjustments PAF Lighting Control Credits 140.6(a)2 / 170.2(e)1B (-)		**Total Adjusted** (Watts) *Includes Adjustments	**05 must be >= 08 140.6 / 170.2(e)**
	(See Table I)	(See Table I)	(See Table J)	(See Table K)			(See Table F)	(See Table P)			
Conditioned	2,200.8				= 2,200.8	≥	1,565.2		=	1565.2	COMPLIES
Unconditioned					=	≥			=		
Controls Compliance (See Table H for Details)											COMPLIES
Rated Power Reduction Compliance (See Table Q for Details)											

D. EXCEPTIONAL CONDITIONS

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

E. ADDITIONAL REMARKS

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

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Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
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F. INDOOR LIGHTING FIXTURE SCHEDULE

This table includes all planned permanent and portable lighting other than dwelling unit/ hotel/ motel room lighting. Multifamily dwelling unit and hotel/motel room lighting is documented in Table T. If using Table T to document lighting in multifamily common use areas providing shared provisions for living, eating, cooking or sanitation, those luminaires are not included here.

Designed Wattage: Conditioned Spaces

01	02	03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description	Modular (Track) Fixture	Small Aperture & Color Change[1]	Watts per luminaire[2]	How is Wattage determined	Total Number of Luminaires	Excluded per 140.6(a)3 / 170.2(e)2C	Design Watts	Field Inspector	
									Pass	Fail
A OR AE	SURFACE MOUNTED 2X4 LED	No	NA	32	Mfr. Spec	48	No	1,536	☐	☐
B	SURFACE MOUNTED ROUND LED	No	NA	14.6	Mfr. Spec	2	No	29.2	☐	☐
Total Designed Watts: CONDITIONED SPACES								1,565.2		

[1]*FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per 140.6(a)4B / 170.2(e)2D is adjusted to be 75% /80% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05.*

[2]*Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b). Wattage used must be the maximum rated for the luminaire, not the lamp.*

G. MODULAR LIGHTING SYSTEMS

This section does not apply to this project.

H. INDOOR LIGHTING CONTROLS (Not including PAFs)

This table includes lighting controls for conditioned and unconditioned spaces.

Building Level Controls

01	02	03	
		Field Inspector	
		Pass	Fail
Mandatory Demand Response 110.12(c)	Shut-off controls 130.1(c) / 160.5(b)4C		
NA < 4,000W subject to multilevel	See Area/Space Level Controls	☐	☐

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H. INDOOR LIGHTING CONTROLS (Not including PAFs)

Area Level Controls

04	05	06	07	08	09	10	11	12	
Area Description	Complete Building or Area Category Primary Function Area	Manual Area Controls 130.1(a) / 160.5(b)4A	Multi-Level Controls 130.1(b) / 160.5(b)4B	Shut-Off Controls 130.1(c) // 160.5(b)4C	Primary/Sky lit Daylighting 130.1(d) / 160.5(b)4D	Secondary Daylighting 130.1(d) / 160.5(b)4D	Interlocked Systems 140.6(a)1/ 170.2(e)2A	Field Inspector	
								Pass	Fail
LIBRARY WHOLE BUILDING	Library	Auth. Personnel	NA: <= 80 % LP (alt only)	Occupancy Sensor	NA: <= 80 % LP (alt only)	NA: <= 80 % LP (alt only)	No	☐	☐
							13		
							Plan Sheet Showing Daylit Zones:		

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS

Each area complying using the Complete Building or Area Category Methods per 140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per 140.6(c) or adjustments per 140.6(a) are being used .

Conditioned Spaces

01	02	03	04	05	06	
Area Description	Complete Building or Area Category Primary Function Area	Allowed Density (W/ft²)	Area (ft²)	Allowed Wattage (Watts)	Additional Allowance / Adjustment	
					Area Category	PAF
LIBRARY WHOLE BUILDING	Library	0.7	3,144	2,200.8	No	No
		TOTALS:	3,144	2,200.8	See Tables J, or P for detail	

J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM

This section does not apply to this project.

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K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE

This section does not apply to this project.

L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY

This section does not apply to this project.

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING

This section does not apply to this project.

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECIAL EFFECTS

This section does not apply to this project.

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE

This section does not apply to this project.

P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))

This section does not apply to this project.

Q. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTERATIONS

This section does not apply to this project.

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R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS

Indoor lighting alteration spaces complying prescriptively with 141.0(b)2I(ii) / 180.2(b)4BiVb are included in this table to document the power reduction. If the Percent of Indoor Lighting Power Allowance exceeds 80%, the compliance status in Table C for Controls will say "DOES NOT COMPLY"

01	02	03	04	05	06	07	08	09
Area Description	Complete Building or Area Category Primary Function Area	CALCULATED ALLOWANCE (Watts)			Luminaire Name or Item Tag	Watts per Luminaire	# of Luminaires	Total Design Watts
		Area (ft²)	Allowed Density (W/ft²)	Allowance (Watts)				
LIBRARY WHOLE BUILDING	Library	3,144	0.7	2,200.8	A OR AE	32	48	1,536
					B	14.6	2	29.2
		Total Allowance (Watts) for all Areas:		2200.8	**Total Design Watts for all Areas:**			1565.2
					Percent of Indoor Lighting Power Allowance:			0.71

S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)

This section does not apply to this project.

T. DWELLING UNIT LIGHTING

This section does not apply to this project.

U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selections have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

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

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V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in this document. If any selections have been changed by the permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and any with "-A" in the form name must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: http://www.energy.ca.gov/title24/attcp/providers.html

Form/Title	Systems/Spaces To Be Field Verified
NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	LIBRARY WHOLE BUILDING

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DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name:	DONALD ALAMEIDA	Documentation Author Signature:	Donald R. Alameida
Company:	Alameida Architecture	Signature Date:	711/12/24
Address:	555 S.Main Street Suite 2	CEA/ HERS Certification Identification (if applicable):	
City/State/Zip:	Sebastopol CA 95472	Phone:	707 582-1219

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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

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

Responsible Designer Name:	Donald Alameida	Responsible Designer Signature:	Donald R. Alameida
Company:	Alameida Architecture	Date Signed:	711/12/24
Address:	555 S.Main Street Suite 2	License:	C19767
City/State/Zip:	Sebastopol CA 95472	Phone:	707 582-1219

Indoor Lighting Mandatory Measures:

110.9 LIGHTING CONTROLS AND COMPONENTS
ALL LIGHTING CONTROL DEVICES AND SYSTEMS, AND ALL LIGHT SOURCES SHALL MEET THE APPLICABLE REQUIREMENTS OF 110.9.

NOTE: THE EXCEPTED SPACES DO NOT COUNT TOWARDS THE 10,000 FT2 THRESHOLD.

130.0 GENERAL LUMINAIRE REQUIREMENTS
ALL LUMINAIRES SHALL BE FACTORY-LABELLED PER 130.0(c).
ENERGY MANAGEMENT CONTROL SYSTEMS (EMCS) SHALL MEET REQUIREMENTS OF 130.0(e).

130.1(a) MANUAL AREA CONTROLS
EACH ROOM OR AREA WITH FLOOR-TO-CEILING WALLS IN THIS BUILDING SHALL HAVE LIGHTING CONTROLS THAT ALLOW LIGHTING TO BE MANUALLY TURNED ON AND OFF MANUAL CONTROLS SHALL:

1. BE READILY ACCESSIBLE
2. BE LOCATED IN THE SAME ENCLOSED AREA WITH THE LIGHTING IT CONTROLS.
3. PROVIDE SEPARATE CONTROL OF GENERAL, FLOOR, WALL, WINDOW CASE DISPLAY, ORNAMENTAL AND SPECIAL EFFECTS LIGHTING SO EACH TYPE CAN BE TURNED ON AND OFF SEPARATELY WITHOUT AFFECTING OTHER LIGHTING OR EQUIPMENT.

130.1(c): SHUTOFF CONTROLS
ALL INSTALLED INDOOR LIGHTING SHALL BE EQUIPPED WITH CONTROLS TO AUTOMATICALLY REDUCE LIGHTING POWER WHEN SPACE IS TYPICALLY UNOCCUPIED.

130.1(c)1: CONTROL REQUIREMENTS
ALL INSTALLED INDOOR LIGHTING SHALL HAVE ALL OF THE FOLLOWING:
A. CONTROL(S) CAPABLE OF AUTOMATICALLY SHUTTING OFF ALL LIGHTING IN THE SPACE WHEN TYPICALLY UNOCCUPIED (OCCUPANT SENSING CONTROL, AUTOMATIC TIME-SWITCH CONTROL, OR OTHER)
B. SEPARATE CONTROLS FOR LIGHTING ON EACH FLOOR (OTHER THAN STAIRWELLS)

C. SEPARATE CONTROLS FOR A SPACE ENCLOSED BY CEILING HEIGHT PARTITIONS NOT EXCEEDING 5,000 FT2

130.1(c)6 PARTIAL OR FULL-OFF OCCUPANT SENSORS
PROVIDE PARTIAL OR FULL-OFF OCCUPANT SENSORS, IN ADDITION TO SHUTOFF CONTROLS PER 130.1(c)1 AND 130.1(c)2, IN THE FOLLOWING SPACES:

- AISLE WAYS AND OPEN AREAS IN WAREHOUSES
- LIBRARY BOOK STACK AISLES
- CORRIDORS AND STAIRWELLS
- OFFICES GREATER THAN 250 SQ. FT.

Indoor Lighting Mandatory Measures:

130.1(f) CONTROL INTERACTIONS
EACH LIGHTING CONTROL INSTALLED TO MEET 130.1 REQUIREMENTS SHALL INCORPORATE THE FUNCTIONS OF OTHER LIGHTING CONTROLS REQUIRED BY THIS SECTION.

1. FOR GENERAL LIGHTING, MANUAL AREA CONTROL SHALL PERMIT THE LEVEL OF LIGHT PROVIDED WHILE LIGHTING IS ON TO BE SET OR ADJUSTED BY CONTROLS SPECIFIED IN 130.1(b), (c), (d) and (e).
2. MANUAL AREA CONTROL SHALL PERMIT SHUTOFF CONTROL TO TURN THE LIGHTING DOWN OR OFF.
3. MULTILEVEL CONTROL SHALL PERMIT THE AUTOMATIC DAYLIGHTING CONTROL TO ADJUST ELECTRIC LIGHTING IN RESPONSE TO DAYLIGHT.
4. MULTILEVEL CONTROL SHALL PERMIT THE DEMAND RESPONSIVE (DR) CONTROL TO ADJUST LIGHTING DURING A DR EVENT THEN RETURN IT TO THE LEVEL SET BY THE CONTROL AFTER THE EVENT.
5. SHUTOFF CONTROL SHALL PERMIT THE MANUAL AREA CONTROL TO TURN THE LIGHTING ON.
6. AUTOMATIC DAYLIGHTING CONTROL SHALL PERMIT MULTILEVEL LIGHTING CONTROL TO ADJUST THE LIGHTING LEVEL.
7. FOR LIGHTING CONTROLLED BY MULTILEVEL LIGHTING CONTROLS AND OCCUPANT SENSING CONTROLS THAT PROVIDE AUTOMATIC-ON FUNCTION, CONTROLS SHALL PROVIDE A PARTIAL-ON FUNCTION THAT IS CAPABLE OF AUTOMATICALLY ACTIVATING BETWEEN 50-70% OF CONTROLLED LIGHTING POWER.
8. RESERVED
9. FOR SPACE CONDITIONING SYSTEM ZONES SERVING ONLY SPACES THAT ARE REQUIRED TO HAVE OCCUPANT SENSING CONTROLS SHALL BE CONTROLLED BY OCCUPANCY SENSING CONTROLS.

PROJECT MANAGEMENT
ALAMEIDA ARCHITECTURE
CONSTRUCTION MANAGEMENT
555 S. MAIN STREET, SUITE 2
SEBASTOPOL, CA 95472
(707) 824-1219
WWW.ALAMEIDA.COM

COUNTY OF HUMBOLDT

PROJECT

FORTUNA LIBRARY MODIFICATIONS

753 14TH ST.
FORTUNA, CA 95540

REGISTERED ARCHITECT
DONALD R. ALAMEIDA
C-19767
Exp. 11/30/25
STATE OF CALIFORNIA

No.	Description	Date
1	PLAN CHECK COMMENTS	4/9/25

INDOOR LIGHTING COMPLIANCE FORMS

Project number	Project Number
Date	5 15 24
Drawn by	Author
Checked by	Checker

T24-1

Scale

4/11/2025 3:20:41 PM

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

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

A. GENERAL INFORMATION

01	Project Location (city)	Fortuna	04	Total Conditioned Floor Area	3144
02	Climate Zone	1	05	Total Unconditioned Floor Area	0
03	Occupancy Types Within Project:		06	# of Stories (Habitable Above Grade)	1

● Library

B. PROJECT SCOPE

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

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

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C. COMPLIANCE RESULTS

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

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

D. EXCEPTIONAL CONDITIONS

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

Transfer air is being used in at least one zone to meet minimum ventilation requirements. See Table J for details. Transfer air must be designed per §120.1(e) for air classification and recirculation limitations and be documented within construction documents.

E. ADDITIONAL REMARKS

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

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F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

Space Conditioning System Information

01 System Name	02 Quantity	03 System Serving	04 System Status	05 Space Type	06 Utilizing Recovered Heat
M-0 MECHANICAL NOTES AND DETAILS	1	Multi-zone			☐

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

01	02	03	04	05	06	07	08	09	10	11
Name or Item Tag	Equipment Category per Tables 110.2, 140.4(a)2 and 170.2(c)3aii	Equipment Type per Tables 110.2 and Title 20	Smallest Size Available[1] 140.4(a) and 170.2(c)1	Equipment Sizing per Mechanical Schedule (kBtu/h) 140.4(a&b), 170.2(c)1 & 170.2(c)2						
				Heating Output[2,3]			Cooling Output[2,3]		Load Calculations[3,4]	
				Per Design (kBtu/h)	Rated (kBtu/h)	Supp. Heating Output (kBtu/h)	Sensible Per Design (kBtu/h)	Rated (kBtu/h)	Total Heating Load (kBtu/h)	Total Sensible Cooling Load (kBtu/h)
M-0 MECHANICAL NOTES AND DETAILS	Variable Refrigerant Flow	VRF heat pump, air cooled	Yes	48.5	48.5	0	47	47	83	22

[1] *FOOTNOTES: Equipment shall be the smallest size, within the available options of the desired equipment line, necessary to meet the design heating and cooling loads of the building per 140.4(a) and 170.2(c)1. Healthcare facilities are excepted.*
[2] *It is common practice to show rated output capacity on the equipment schedule. Sensible cooling output comes from specification sheet tables.*
[3] *If equipment is heating only, leave cooling output and load blank. If equipment is cooling only, leave heating output and load blank.*
[4] *Authority Having Jurisdiction may ask for load calculations used for compliance per 140.4(b) and 170.2(c).*

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F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

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

01	02	03	04	05	06	07	08	09
Name or Item Tag	Size Category (Btu/h)	Heating Mode				Cooling Mode		
		Rating Condition (°F)	Efficiency Unit	Minimum Efficiency Required per Tables 110.2 / Title 20	Design Efficiency	Efficiency Unit	Minimum Efficiency Required per Tables 110.2 / Title 20	Design Efficiency
M-0 MECHANICAL NOTES AND DETAILS	<65,000	47 °Fdb/ 43 °Fwb OSA	HSPF	7.7	11.1	SEER	13	20.2

G. PUMPS

This section does not apply to this project.

H. FAN SYSTEMS & AIR ECONOMIZERS

This section does not apply to this project.

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I. SYSTEM CONTROLS

This table is used to demonstrate compliance with mandatory controls in 110.2 and 120.2 and prescriptive controls in 140.4(f) and (n), 170.2(c)4D 170.2(c)4L or requirements in 141.0(b)2E 180.2(b)2 for altered space conditioning systems.

01	02	03	04	05	06	07	08	09	10
System Name	System Zoning	Conditioned Floor Area Being Served (ft²)	Thermostats 110.2(b) & (c)[1], 120.2(a) 160.3(a)2A or 141.0(b)2E & 180.2(b)2	Shut-Off Controls 120.2(e) & 160.3(a)2D	Isolation Zone Controls 120.2(g) & 160.3(a)2F	Demand Response 110.12 120.2(b) & 160.3(a)2B	Supply Air Temp. Reset 140.4(f) & 170.2(c)4D	Window Interlocks per 140.4(n) & 170.2(c)4D	Direct Digital Control (DDC) per 120.2
Multizone Heat Pump	Multi-zone	<= 25,000 ft²	Setback	Auto Timer Switch	Auto Timer Switch	NA: PTAC, PTHP, Rm AC, HP	NA: Alteration	NA: Alteration Project	NA: Alteration in which no DDC is existing

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

J. VENTILATION AND INDOOR AIR QUALITY

This table is used to demonstrate compliance with mandatory ventilation requirements in 120.1 120.2(e)3B 140.4(p) and 140.4(q) for all nonresidential and hotel/motel and d:\24refnolink/\160.2, 160.3(a)3D, 170.2(a)4N, 170.2(a)4O for high-rise residential occupancies. For alterations, only ventilation systems being altered within the scope of the permit application need to be documented in this table. In lieu of this table, the required outdoor ventilation rates and airflows may be shown on the plans or the calculations can be presented in a spreadsheet.

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

Nonresidential and Hotel/ Motel Multifamily Common Use Ventilation Systems

04	05			06			07
System Name	FRESH AIR FAN 1	System Design OA CFM Airflow[1]	350	System Design Transfer Air CFM	338		Air Filtration per 120.1(c) 141.0(b)2 and 160.2(c)21[2]
							Provided
08	09	10	11	12	13	14	15	16

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J. VENTILATION AND INDOOR AIR QUALITY

Space Name or Item Tag	Mechanical Ventilation Required per 120.1(c)3[1] & 160.2(c)3				Exh. Vent per 120.1(c)4 & 160.2(c)4		DCV or Sensor Controls per 120.1(d)3, 120.1(d)5, and 120.1(e)3[6] 160.2(c)5D 160.2(c)5E 160.2(c)5D	
	Occupancy Type[4]	Conditioned Floor Area (ft²)	# of Shower heads/ toilets	# of people[5]	Required Min OA CFM	Required Min CFM	Provided per Design CFM	
GENERAL LIBRARY AREA	Library - reading room/ stacks	2419		22	330			DCV: Provided per §120.1(d)4
								Occ Sensor: NA: Alteration
17	Total System Required Min OA CFM				330	18	Ventilation for this System Complies?	Yes

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

K. TERMINAL BOX CONTROLS

This section does not apply to this project.

L. DISTRIBUTION (DUCTWORK and PIPING)

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

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

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-MCH-E
Project Name: Foruna Library Renovation		Report Page:	(Page 7 of 9)
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L. DISTRIBUTION (DUCTWORK and PIPING)

Duct Leakage Testing

The answers to the questions below apply to the following duct systems:	FRESH AIR FAN 1		
		NR/ Common Use: Duct leakage testing shall not exceed 6% per NA7.5.3 required for these systems?	No
		Dwelling Units: Total duct leakage of duct system shall not exceed 12% or duct system to outside shall not exceed 6% per RA3.1.4 required for systems?	---
		Duct leakage testing per CMC Section 603.9.2 required for these systems?	Yes

11	No	The scope of the project includes only duct systems serving healthcare facilities
12	Yes	Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system.
13	Yes	The space conditioning system serves less than 5,000 ft² of conditioned floor area.
14	No	The combined surface area of the ducts is more than 25% of the total surface area of the entire duct system:
15	No	The scope of the project includes extending an existing duct system, which is constructed, insulated or sealed with asbestos.
16	No	The scope of the project includes an existing duct system that is documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in the Reference Nonresidential Appendix NA2.
17	Yes	All Ductwork and plenums with pressure class ratings shall be constructed to Seal Class A
18	No	All ductwork is an extension of an existing duct system
19	No	Ductwork serving individual dwelling unit
20		< 25 ft of new or replacement space conditioning ducts installed
21	R-0.0	Duct Insulation R-value
22	No	Ductwork Existing To Remain
23	No	Duct System Connected To Altered Space Conditioning System

M. COOLING TOWERS

This section does not apply to this project.

STATE OF CALIFORNIA
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N. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency-4

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

O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency-4

Form/Title	Systems/Spaces To Be Field Verified
NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap.	FRESH AIR FAN 1
NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to 120.1(c)3) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO_2) concentration setpoints.	GENERAL LIBRARY AREA

P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

There are no NRCV forms required for this project.

Q. MANDATORY MEASURES DOCUMENTATION LOCATION

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

01	02	
Compliance with Mandatory Measures documented through MCH Mandatory Measures Note Block	Yes	Plan sheet or construction document location: M-0

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-MCH-E
Project Name: Foruna Library Renovation		Report Page:	(Page 9 of 9)
Project Address: 753 14th Street		Date Prepared: 711/12/24	2024-11-11T17:24:08-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name:	DONALD ALAMEIDA	Documentation Author Signature:	
Company:	Alameida Architecture	Signature Date:	711/12/24
Address:	555 S. Main Street Suite 2	CEA/ HERS Certification Identification (if applicable):	
City/State/Zip:	Sebastopol CA 95472	Phone:	707 582-1219

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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

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

Responsible Designer Name:	DONALD ALAMEIDA	Responsible Designer Signature:	
Company:	Alameida Architecture	Date Signed:	711/12/24
Address:	555 S. Main Street Suite 2	License:	C19767
City/State/Zip:	Sebastopol CA 95472	Phone:	707 582-1219

PROJECT MANAGEMENT
ALAMEIDA ARCHITECTURE
CONSTRUCTION MANAGEMENT
555 S. MAIN STREET, SUITE 2
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COUNTY OF HUMBOLDT

PROJECT

FORTUNA LIBRARY MODIFICATIONS

753 14TH ST.
FORTUNA, CA 95540

REGISTERED ARCHITECT
DONALD M. ALAMEIDA
C-19767
Exp. 11/30/25
STATE OF CALIFORNIA

No.	Description	Date
1	PLAN CHECK COMMENTS	4/9/25

TITLE 24 HVAC FORMS

Project number	Project Number
Date	5 15 24
Drawn by	Author
Checked by	Checker

T24-2

Scale

4/11/2025 3:21:00 PM

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 REQUIREMENTS.

110.2(a) SPACE CONDITIONING EQUIPMENT EFFICIENCY
EQUIPMENT SHALL MEET APPLICABLE EFFICIENCY REQUIREMENTS IN TABLE 110.2-A THROUGH TABLE 110.2-N.

110.2(c) SETBACK THERMOSTATS
ALL HEATING OR COOLING SYSTEMS NOT CONTROLLED BY A CENTRAL ENERGY MANAGEMENT CONTROL SYSTEM (EMCS) SHALL HAVE A SETBACK THERMOSTAT WITH CLOCK MECHANISM THAT ALLOWS THE BUILDING OCCUPANT TO PROGRAM THE TEMPERATURE SETPOINTS FOR AT LEAST FOUR PERIODS WITHIN 24 HOURS.

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 HOTEL/MOTEL AND NONRESIDENTIAL BUILDINGS OTHER THAN HEALTHCARE SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF §120.1(a) THROUGH (g). THE REQUIRED OUTDOOR AIR VENTILATION RATE AND AIR-DISTRIBUTION SYSTEM DESIGN SHALL BE CLEARLY IDENTIFIED ON THE PLANS.

120.1(c)1 NONRESIDENTIAL AND HOTEL/MOTEL BUILDINGS ALL OCCUPIABLE SPACES SHALL MEET THE FOLLOWING 120.1(c)1 AIR FILTRATION REQUIREMENTS, AND EITHER 120.1(c)2 NATURAL VENTILATION, OR 120.1(c)3 MECHANICAL VENTILATION:
A. THE FOLLOWING SYSTEM TYPES SHALL BE PROVIDED WITH AIR FILTERS TO CLEAN OUTSIDE AND RETURN AIR PRIOR TO INTRODUCTION INTO OCCUPIED SPACES:
i. NEWLY INSTALLED MECHANICAL SPACE CONDITIONING SYSTEMS THAT USE FORCED AIR DUCTS <10 FT LONG TO SUPPLY AIR TO AN OCCUPIABLE SPACE.
ii. MECHANICAL SUPPLY-ONLY VENTILATION SYSTEMS THAT PROVIDE OUTSIDE AIR TO AN OCCUPIABLE SPACE.
iii. THE SUPPLY SIDE OF MECHANICAL BALANCED VENTILATION SYSTEMS, INCLUDING HEAT RECOVERY VENTILATION SYSTEMS AND ENERGY RECOVERY VENTILATION SYSTEMS THAT PROVIDE OUTSIDE AIR TO AN OCCUPIABLE SPACE.
B. AIR FILTERS SHALL HAVE EFFICIENCY >= MERV 13 WHEN TESTED PER ASHRAE STANDARD 52.2 OR A PARTICLE SIZE EFFICIENCY RATING PER 120.1(c)1B.
C. SYSTEM AIR FILTERS SHALL BE EITHER
i. NOMINAL 2 INCH MINIMUM DEPTH, OR
ii NOMINAL 1 INCH MINIMUM DEPTH, IF SIZED PER EQUATION 120.1-A BASED ON A MAXIMUM FACE VELOCITY OF 150 FT/MIN

Space Conditioning Mandatory Measures:

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

120.1(c)3 MECHANICAL VENTILATION
OCCUPIABLE SPACES SHALL BE VENTILATED WITH A MECHANICAL VENTILATION SYSTEM CAPABLE OF PROVIDING AN OUTDOOR AIRFLOW RATE (V_{ot}) TO THE ZONE NO LESS THAN EQUATION 120.1-F.

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).

120.1(d)2 PRE-OCCUPANCY
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.

120.1(d)3 REQUIRED DEMAND CONTROL VENTILATION
DCV CONTROLS ARE REQUIRED FOR A SPACE WITH A DESIGN OCCUPANCY DENSITY >= 25 PEOPLE/1,000 FT2 IF THE SYSTEM SERVING THE SPACE HAS ONE OR MORE OF THE FOLLOWING
- AN AIR ECONOMIZER
- MODULATING OUTSIDE AIR CONTROL
- DESIGN OUTDOOR AIRFLOW RATE > 3,000 CFM

120.1(d)4 DEMAND CONTROL VENTILATION DEVICES
A. FOR EACH SYSTEM WITH DCV, AT LEAST ONE CO_2 SENSOR PER 10,000 FT2 SHALL BE INSTALLED IN EACH ROOM MEETING 120.1(d)3 CRITERIA. WHEN A ZONE OR A SPACE IS SERVED BY MORE THAN ONE SENSOR, A SIGNAL FROM ANY SENSOR SHALL TRIGGER AN INCREASE IN VENTILATION.

B. CO_2 SENSORS SHALL BE BETWEEN 3 AND 6 FT ABOVE THE FLOOR.

C. DCV CONTROLS SHALL MAINTAIN CO_2 CONCENTRATIONS <= 600 PPM PLUS THE OA CO_2 CONCENTRATION IN ALL ROOMS WITH CO_2 SENSORS.

D. OUTDOOR AIR CO_2 CONCENTRATION SHALL BE ASSUMED TO BE 400 PPM IF NO DIRECT MEASUREMENT, OR SHALL BE DYNAMICALLY MEASURED USING A CO_2 SENSOR LOCATED WITHIN 4 FT OF THE OUTDOOR AIR INTAKE.

E. FOR SYSTEMS OPERATING DURING OCCUPANCY, CONTROLS SHALL MAINTAIN OA VENTILATION RATES NO LESS THAN:
THE RATE LISTED IN TABLE 120.1-A TIMES THE CONDITIONED FLOOR AREA FOR SPACES WITH CO_2 SENSORS, PLUS THE RATE REQUIRED BY 120.1(c)3 FOR OTHER SPACES SERVED BY THE SYSTEM,
OR THE EXHAUST AIR RATE, WHICH EVER IS GREATER.

F. CO_2 SENSORS SHALL BE CERTIFIED BY THE MANUFACTURER TO MEET THE ACCURACY, CALIBRATION AND RESET REQUIREMENTS OF 120.1(d)4F.

G. THE CO_2 SENSOR READING FOR EACH ZONE SHALL BE DISPLAYED CONTINUOUSLY AND SHALL BE RECORDED ON SYSTEMS WITH DDC TO THE ZONE LEVEL.

120.1(f) DESIGN AND CONTROL REQUIREMENTS FOR QUANTITIES OF OUTDOOR AIR

120.1(f)1 ALL MECHANICAL VENTILATION AND SPACE-CONDITIONING SYSTEMS SHALL BE DESIGNED WITH AND HAVE INSTALLED DUCTWORK, DAMPERS, AND CONTROLS TO ALLOW OA RATES TO BE OPERATED AT NO LESS THAN THE LARGER OF: 120.1(c)3 MINIMUMS OR THE RATE REQUIRED FOR MAKE-UP OF EXHAUST SYSTEMS FOR AN EXEMPT OR COVERED PROCESS, CONTROL OF ODORS, OR CONTAMINANT REMOVAL IN A SPACE.

Space Conditioning Mandatory Measures:

120.1(g) AIR CLASSIFICATION AND RECIRCULATION LIMITATIONS
AIR CLASSIFICATION AND RECIRCULATION LIMITATIONS OF AIR SHALL BE BASED ON TABLE 120.1-A OR TABLE 120.1-C, AND IN ACCORDANCE WITH 120.1(g)1 THROUGH 4.

120.2(a) THERMOSTAT CONTROLS
HEATING AND COOLING SUPPLY TO EACH SPACE-CONDITIONING ZONE OR DWELLING UNIT SHALL BE CONTROLLED BY AN INDIVIDUAL THERMOSTATIC CONTROL THAT RESPONDS TO TEMPERATURE IN THE ZONE AND MEETS 120.2(b) REQUIREMENTS.

120.2(b) ZONAL THERMOSTAT CONTROLS

120.2(b)1 BEING SET TO 55 °F OR LOWER, WHEN CONTROLLING HEATING
120.2(b)2 BEING SET UP TO 85 °F OR HIGHER, WHEN CONTROLLING COOLING
120.2(b)3 PROVIDING A TEMPERATURE RANGE, OR DEAD BAND OF AT LEAST 5 °F WITHIN WHICH HEATING AND COOLING TO THE ZONE IS SHUT OFF OR REDUCED TO A MINIMUM.

120.2(e)1 AUTOMATIC SHUT-OFF FOR SPACE-CONDITIONING SYSTEMS
EACH SPACE-CONDITIONING SYSTEM SHALL BE INSTALLED WITH ONE OF THE FOLLOWING CONTROLS CAPABLE OF AUTOMATICALLY SHUTTING OFF THE SYSTEM DURING PERIODS OF NONUSE:
- AUTOMATIC TIME SWITCH CONTROL PER 110.9, WITH ACCESSIBLE MANUAL OVERRIDE ALLOWING SYSTEM OPERATION FOR UP TO 4 HOURS, OR
- AN OCCUPANCY SENSOR, OR
- A 4-HOUR TIMER THAT CAN BE MANUALLY OPERATED.

120.2(e)2 AUTOMATIC RESTART FOR SPACE-CONDITIONING SYSTEMS
EACH SPACE-CONDITIONING SYSTEM SHALL BE INSTALLED WITH CONTROLS THAT SHALL AUTOMATICALLY RESTART AND TEMPORARILY OPERATE THE SYSTEM AS REQUIRED TO MAINTAIN:
- 120.2(e)2A A SETBACK HEATING THERMOSTAT SETPOINT IF THE SYSTEM PROVIDES MECHANICAL HEATING, AND
- 120.2(e)2B A SETUP COOLING THERMOSTAT SETPOINT IF THE SYSTEM PROVIDES MECHANICAL COOLING.

120.2(f) DAMPERS FOR AIR SUPPLY AND EXHAUST EQUIPMENT
OUTDOOR AIR SUPPLY AND EXHAUST EQUIPMENT SHALL BE INSTALLED WITH DAMPERS THAT AUTOMATICALLY CLOSE UPON FAN SHUTDOWN.

120.2(g) ISOLATION AREA DEVICES
EACH SPACE-CONDITIONING SYSTEM SERVING MULTIPLE ZONES WITH A COMBINED CONDITIONED FLOOR AREA OF MORE THAN 25,000 FT2 SHALL BE DESIGNED, INSTALLED AND CONTROLLED TO SERVE ISOLATION AREAS.
- EACH ZONE, OR COMBINATION OF ZONES <25,000 FT2, SHALL BE A SEPARATE ISOLATION AREA.
- EACH ISOLATION AREA SHALL BE PROVIDED WITH ISOLATION DEVICES, SUCH AS VALVES OR DAMPERS THAT ALLOW THE SUPPLY OF HEATING OR COOLING TO BE REDUCED OR SHUT-OFF INDEPENDENTLY OF OTHER ISOLATION AREAS.
- EACH ISOLATION AREA SHALL BE CONTROLLED BY A DEVICE MEETING THE REQUIREMENTS OF 120.2(e)1.

Space Conditioning Mandatory Measures:

120.2(j) DIRECT DIGITAL CONTROLS (DDC)
DDC TO THE ZONE SHALL BE PROVIDED AS SPECIFIED BY TABLE 120.2-A. THE DDC SYSTEM SHALL MEET CONTROL LOGIC REQUIREMENTS OF 120.1(D), 110.12(a) AND 110.12(b) AND BE CAPABLE OF ALL OF THE FOLLOWING:
1. MONITORING ZONE AND SYSTEM DEMAND FOR FAN PRESSURE, PUMP PRESSURE, HEATING AND COOLING
2. TRANSFERRING ZONE AND SYSTEM DEMAND INFORMATION FROM ZONES TO AIR DISTRIBUTION SYSTEM CONTROLLERS AND FROM AIR DISTRIBUTION SYSTEMS TO HEATING AND COOLING PLANT CONTROLLERS
3. AUTOMATICALLY DETECTING THE ZONES AND SYSTEMS THAT MAY BE EXCESSIVELY DRIVING THE RESET LOGIC AND GENERATE AN ALARM OR OTHER INDICATION TO THE SYSTEM OPERATOR
4. READILY ALLOW OPERATOR REMOVAL OF ZONE(S) FROM THE RESET ALGORITHM
5. FOR NEW BUILDINGS, TRENDING AND GRAPHICALLY DISPLAYING INPUT AND OUTPUT POINTS
6. RESETTING HEATING AND COOLING SETPOINTS IN ALL NON-CRITICAL ZONES UPON RECEIPT OF A SIGNAL FROM A CENTRALIZED CONTACT OR SOFTWARE POINT AS DESCRIBED IN 110.12(b).

120.2(k) OPTIMUM START/STOP CONTROLS
SPACE-CONDITIONING SYSTEMS WITH DDC TO THE ZONE SHALL HAVE OPTIMUM START/STOP CONTROLS. CONTROL ALGORITHM SHALL, AS A MINIMUM, BE A FUNCTION OF THE DIFFERENCE BETWEEN SPACE TEMPERATURE AND OCCUPIED SETPOINT, OUTDOOR AIR TEMP, AND AMOUNT OF TIME PRIOR TO SCHEDULED OCCUPANCY.

MASS RADIANT FLOOR SLAB SYSTEMS SHALL INCORPORATE FLOOR TEMPERATURE ONTO THE OPTIMUM START ALGORITHM.

120.4 AIR DISTRIBUTION SYSTEM DUCTS AND PLENUMS
PORTIONS OF SUPPLY- AND RETURN-AIR DUCTS CONVEYING HEATED OR COOLED AIR LOCATED IN ONE OR MORE OF THE FOLLOWING SPACES SHALL BE INSULATED TO A MINIMUM INSTALLED LEVEL OF R-8:
- OUTDOORS
- IN A SPACE BETWEEN THE ROOF AND AN INSULATING CEILING
- IN A SPACE DIRECTLY UNDER A ROOF WITH FIXED VENTS OR OPENINGS TO THE OUTSIDE OR UNCONDITIONED SPACES
- UNCONDITIONED SPACES, SUCH AS UNCONDITIONED CRAWLSPACE

PORTIONS OF SUPPLY-AIR DUCTS THAT ARE NOT IN ONE OF THESE SPACES, INCLUDING DUCTS BURIED IN CONCRETE SLAB, SHALL BE INSULATED TO A MINIMUM INSTALLED LEVEL OF R-4.2 (OR ANY HIGHER LEVEL REQUIRED BY CMC 605.0), OR BE ENCLOSED IN DIRECTLY CONDITIONED SPACE.

Space Conditioning Mandatory Measures:

120.4(b) DUCT AND PLENUM MATERIALS
120.4(b) FACTORY-FABRICATED DUCT SYSTEMS MUST:
- COMPLY WITH UL 181 FOR DUCTS AND CLOSURE SYSTEMS AND BE LABELED AS COMPLYING WITH UL 181
- ALL PRESSURE SENSITIVE TAPES, HEAT ACTIVATED TAPES, AND MASTICS USED IN MANUFACTURE OF RIGID FIBERGLASS DUCTS SHALL COMPLY WITH UL 181 AND UL 181A
- ALL PRESSURE SENSITIVE TAPES, AND MASTICS USED IN MANUFACTURE OF FLEXIBLE DUCTS SHALL COMPLY WITH UL 181 AND L 181B
- JOINTS AND SEAMS SHALL NOT BE SEALED WITH CLOTH BACK RUBBER ADHESIVE DUCT TAPES UNLESS COMBINED WITH MASTICS AND DRAWBANDS.

FIELD-FABRICATED DUCT SYSTEMS:
- FACTORY-MADE RIGID FIBERGLASS AND FLEXIBLE DUCTS FOR FIELD-FABRICATED DUCT SYSTEMS SHALL COMPLY WITH UL 181. ALL CLOSURE SYSTEMS, INCLUDING PRESSURE SENSITIVE TAPES, MASTICS, AND AEROSOL SEALANTS, SHALL MEET THE APPLICABLE REQUIREMENTS OF UL 181, UL 181A AND UL 181B.
- MASTIC SEALANTS SHALL:
  - COMPLY WITH APPLICABLE REQUIREMENTS OF UL 181, UL 181A, AND UL 181B AND BE NONTOXIC AND WATER RESISTANT.
  - PASS ASTM C731 AND D2202, IF USED IN BUILDING INTERIOR,
  - PASS ASTM C731, C732, AND D2202, IF USED ON EXTERIOR.
  - SEALANTS AND MESHES SHALL BE RATED FOR EXTERIOR USE.
- PRESSURE SENSITIVE TAPES SHALL COMPLY WITH APPLICABLE REQUIREMENTS IN UL 181, UL 181A, AND UL 181B.
- JOINTS AND SEAMS SHALL NOT BE SEALED WITH CLOTH BACK RUBBER ADHESIVE DUCT TAPES UNLESS COMBINED WITH MASTICS AND DRAWBANDS.
- DRAWBANDS USED WITH FLEXIBLE DUCTS SHALL:
  - BE EITHER STAINLESS STEEL WORM-DRIVE HOSE CLAMPS OR UV-RESISTANT NYLON DUCT TIES
  - HAVE A MINIMUM TENSILE STRENGTH RATING OF 150 LBS.
  - BE TIGHTENED AS RECOMMENDED BY THE MANUFACTURER
- AEROSOL SEALANT CLOSURES SHALL:
  - MEET REQUIREMENTS OF UL 723 AND BE APPLIED ACCORDING TO MANUFACTURER SPECIFICATIONS
  - TAPES OR MASTICS USED IN COMBINATION WITH AEROSOL SEALING SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF UL 181, UL 181A, AND UL 181B, ASTM C731, C732 AND D2202.

120.4(c)
ALL DUCT INSULATION PRODUCT R-VALUES SHALL BE BASED ON INSULATION ONLY AND TESTED IN ACCORDANCE WITH ASTM C518 OR ASTM C177 AND CERTIFIED PER §110.8.

120.4(d)
INSTALLED THICKNESS OF DUCT INSULATION USED TO DETERMINE ITS R-VALUE SHALL BE DETERMINED AS FOLLOWS:
- DUCT BOARD, LINER, AND FACTORY-MADE RIGIDS: USE NOMINAL INSULATION THICKNESS
- DUCT WRAP: USE 75% (25% COMPRESSION) OF NOMINAL THICKNESS
- FACTORY-MADE FLEXIBLE AIR DUCTS: DIVIDE THE DIFFERENCE BETWEEN THE ACTUAL OUTSIDE DIAMETER AND NOMINAL INSIDE DIAMETER BY TWO.

120.4(e)
INSULATED FLEXIBLE DUCT PRODUCTS INSTALLED TO MEET THIS REQUIREMENT MUST INCLUDE LABELS (MAX INTERVALS OF 3 FT) SHOWING THERMAL RESISTANCE PERFORMANCE R-VALUE FOR THE DUCT INSULATION ITSELF BASED ON TESTS IN 120.4(c). AND INSTALLED THICKNESS DETERMINED BY 120.4(d)3.

Space Conditioning Mandatory Measures:

120.4(f) PROTECTION OF INSULATION
INSULATION SHALL BE PROTECTED FROM DAMAGE BY SUNLIGHT, MOISTURE, EQUIPMENT MAINTENANCE AND WIND. CELLULAR FOAM INSULATION SHALL BE PROTECTED, OR BE PAINTED WITH A WATER RETARDANT COATING THAT PROVIDES SHIELDING FROM SOLAR RADIATION.

PROJECT MANAGEMENT

ALAMEIDA ARCHITECTURE

CONSTRUCTION MANAGEMENT

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COUNTY OF HUMBOLDT

PROJECT

FORTUNA LIBRARY MODIFICATIONS

753 14TH ST.
FORTUNA, CA 95540

REGISTERED ARCHITECT
DONALD R. ALAMEIDA
C-19767
Exp. 11/30/25
STATE OF CALIFORNIA

No.	Description	Date
1	PLAN CHECK COMMENTS	4/9/25

T-24 HVAC MANDATORY MEASURES

Project number	Project Number
Date	5 15 24
Drawn by	Author
Checked by	Checker

T24-3

Scale

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