Library Renovation & Addition

# ARROYO GRANDE LIBRARY

800 West Branch Street, Arroyo Grande, CA 93420

## SYMBOLS

- 1 → sheet reference note
- 34 / A9.0 — detail reference: detail number / sheet number
- 1 — door number
- A — window letter
- 1 / A1 — interior elevation: elevation number / sheet number — direction of view
- 1 / A1 — building section: section number / sheet number — direction of view
- 1:12 — roof slope: indicates roof slope and direction of slope
- N — north marker: page north/true north
- Title / Elevation — height/elevation marker
- 1 — revision marker
- international symbol of accessibility

## ABBREVIATIONS

| | | | |
|---|---|---|---|
| ac | air conditioner | in | inch |
| aff | above finish floor | info | information |
| al | aluminum | jan | janitor |
| approx | approximately | lam | laminated |
| asph | asphalt | lav | lavatory |
| avg | average | lb/# | pound |
| bldg | building | lf | linear foot |
| blk/blkg | block/blocking | max | maximum |
| bm | beam | mech | mechanical |
| bot | bottom | manu/mfr | manufacturer |
| cf | cubic foot | min | minimum |
| ci | cubic inch | misc | miscellaneous |
| cj | ceiling joist/control joint | (n) | new |
| cl | center line | ng | natural grade |
| clr | clear/clearance | no./# | number |
| clg | ceiling | nts | not to scale |
| cmu | concrete masonry unit | o/ | over |
| col | column | oc | on center |
| conc | concrete | os | occupancy sensor |
| conn | connection | oz | ounce |
| const | construction | ph | phone |
| cont | continuous | pl | plate/property line |
| ctr | center | plywd | plywood |
| cw | cold water | prefab | pre-fabricated |
| cy | cubic yard | psf | pounds per square foot |
| dbl | double | psi | pounds per square inch |
| deg | degree | ptdf | pressure treated douglas fir |
| dept | department | r | riser |
| det | detail | rd | roof drain |
| df | douglas fir | ref | refrigerator |
| dia | diameter | req | required |
| dim | dimension | rm | room |
| dn | down | row | right of way |
| ds | downspout | rwd | redwood |
| dw | dishwasher | s4s | surfaced 4 sides |
| ea | each | sc | solid core |
| elec | electrical | sd | smoke detector |
| elev | elevation/elevator | sf | square foot |
| eos | edge of slab | sht | sheet |
| eq | equal | shtg | sheathing |
| equip | equipment | sim | similar |
| exist/(e) | existing | spec | specification |
| ext | exterior | sst | stainless steel |
| fau | forced air unit | std | standard |
| fh | fire hydrant | stl | steel |
| foc | face of curb | t&g | tongue and groove |
| fof | face of finish | t | tread |
| fos | face of stud | thk | thick (ness) |
| fd | floor drain | tel | telephone |
| fdn | foundation | temp | temperature |
| fe | fire extinguisher | toc | top of curb |
| ff | finish floor | tof | top of footing |
| fg | finish grade | tow | top of wall |
| fin | finish | tos | top of slab |
| fix | fixture | tv | television |
| flr | floor | typ | typical |
| fos | face of stud | u.n.o | unless noted otherwise |
| fp | fireplace or floor plan | vct | vinyl composition tile |
| fs | finish surface | vert | vertical |
| ft | foot | v.i.f | verify in field |
| ftg | footing | w/ | with |
| g | gas | w/o | without |
| galv | galvanized | wc | water closet |
| gd | garbage disposal | wd | wood |
| gyp | gypsum | wh | water heater |
| hb | hose bibb | wic | walk in closet |
| hc | hollow core | wp | waterproof |
| hdr | header | wui | wildland urban interface |
| hw | hot water | yd | yard |

## CALIFORNIA CODE REFERENCES

1. This project shall comply w/all current applicable codes and ordinances, including but not limited to:
   2022 California Building Code, Volumes 1 & 2
   2022 California Plumbing Code
   2022 California Mechanical Code
   2022 California Electrical Code
   2022 California Energy Code
   2022 California Green Building Code
   2022 California Fire Code
   2022 California Reference Standards Code
   Grading - CBC Appendix J
   County of San Luis Obispo Building & Construction Ordinance: Title 19
   County of San Luis Obispo Land Use Ordinance: Title 22
   County Fire Code Ordinance - Title 16

## DIRECTORY

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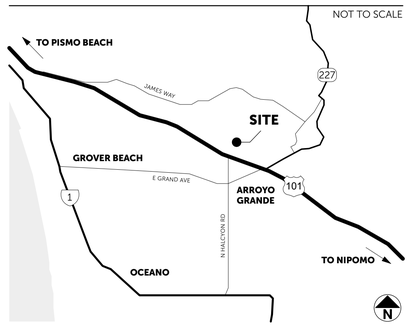
| | |
|---|---|
| Owner. | COUNTY OF SAN LUIS OBISPO<br>Department of Public Works<br>County Government Center, Room 206<br>San Luis Obispo, CA 93408 |
| Architect of Record. | REISS DESIGN STUDIO, PC.<br>Shana Reiss, President, C-32912<br>735 Tank Farm Road, Suite 150<br>San Luis Obispo, CA 93401<br>Phone: (805) 706-0645<br>Email: shana@reissdesignstudio.com |
| Civil Engineer. | WALSH ENGINEERING<br>Matthew Walsh, Lic. #79026<br>1108 Garden Street, Suite 202-204<br>San Luis Obispo, CA 93401<br>Phone: (805) 319-4948<br>Email: matt@walshengineering.net |
| Structural Engineer. | ASHLEY & VANCE ENGINEERING, INC.<br>Ian Shoebridge, PE S6293<br>1229 Carmel Street<br>San Luis Obispo, CA 93401<br>Phone: (805) 545-0010<br>Email: ian@ashleyvance.com |
| Electrical Engineer. | GRAY ELECTRICAL CONSULTING + ENGINEERING, CORP<br>Heather Gray, License E18927<br>PO Box #368 - 2529 Professional Parkway, Suite A<br>Santa Maria, CA 93455<br>Phone: (805) 361-0525<br>Email: heather@gececorp.com |
| Mechanical & Plumbing. | BMA MECHANICAL +<br>Brandon Rodgers, Lic. M33682<br>689 Tank Farm Road, Suite 240<br>San Luis Obispo, CA 93401<br>Phone: (805) 544-4269<br>Email: brandonr@bmaslo.com |
| Fire Protection Engineer. | PTRUTNER FIRE PROTECTION ENGINEERING, INC.<br>Paul Trutner, PE CA No. 1934<br>2470 Stearns Street #280<br>Simi Valley, CA 93063<br>Phone: (805) 297-3100<br>Email: paul@ptrutnerfpe.com |

## VICINITY MAP

NOT TO SCALE




## PLANNING INFORMATION

**ZONING** Public Facility
COMMUNITY/ PLANNING AREA City of Arroyo Grande

**FIRE INFORMATION**
JURISDICTION Arroyo Grande City Fire
HAZARD ZONE LRA - Local Responsibility Area

**SETBACKS/YARDS**

| | | |
|---|---|---|
| Existing to Remain | Front/Street Setback | 25'0" |
| Existing to Remain | Side Yard | 25'0" |
| Existing to Remain | Rear/Other Yard | 25'0" |

**LOT COVERAGE**

| | | |
|---|---|---|
| ALLOWED | Building Coverage | 60% |
| EXISTING TO REMAIN | Building Coverage | 10% |

**MAXIMUM HEIGHT**

| | |
|---|---|
| ALLOWED | 35'0" |
| EXISTING TO REMAIN | 28'0" |

**BUILDING AREAS**

**Existing Floor Areas** Lower Floor

| | |
|---|---|
| General Library | 8,347 S.F. |
| Restrooms/Circulation/Walls | 1,056 S.F. |
| Storage | 114 S.F. |
| Staff Area & Offices | 1,230 S.F. |
| Total Lower Floor | 10,747 S.F. |
| Upper Floor | |
| Staff Area | 1,220 S.F. |
| Total Upper Floor | 1,220 S.F. |
| **Total Conditioned Existing Building** | **11,967 S.F.** |
| Covered Porch/Entry | 1,864 S.F. |
| Upper Balcony | 1,536 S.F. |
| Total Building Area | 15,367 S.F. |

**Proposed Floor Areas** Lower Floor

| | |
|---|---|
| General Library | 8,340 S.F. |
| Restrooms/Circulation | 1,127 S.F. |
| Storage | 227 S.F. |
| Staff Area & Offices* | 1,813 S.F. |
| (N) Veterans Space* | 259 S.F. |
| Total Lower Floor | 11,766 S.F. |
| Upper Floor | |
| (N) Mechanical* | 192 S.F. |
| Staff Area | 1,220 S.F. |
| Total Upper Floor | 1,412 S.F. |
| **Total Conditioned Proposed Building** | **13,178 S.F.** |
| (E) Covered Entry | 356 S.F. |
| (E) Covered Porch/ Patio | 471 S.F. |
| (E) Upper Balcony | 1,536 S.F. |
| Total Building Area | 15,541 S.F. |
| (N) Uncovered Patio/Flatwork | 373 S.F. |

**PARKING CALCS**

Parking calculations for reference, refer to County permit PMT-CALT2023-00008 for parking calculations and information to serve the site.
REQUIRED Libraries 1/500 s.f.
14,467 / 500 = 29 spaces
Per SLO Municipal Code 22.18.050, (1) handicapped parking space is required

## REQUIRED SPECIAL INSPECTIONS

The following items shall require special inspections in accordance with CBC Chapter 17, and the Jurisdiction requirements. Confirm any additional special inspection items with Building Inspector at pre-construction meeting. Special inspectors shall be a qualified person who shall demonstrate competence to the satisfaction of the Building Official. Names and qualifications shall be submitted to the Building Department for approval prior to performing work.

1. Refer to sheet T4.1, Required Special Inspections.
2. Also refer to sheet S-1.3, Special Inspections.

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## STATEMENT OF COMPLIANCE

This Project has been designed in accordance with and meets the County adopted building code and ordinance requirements including, but not limited to, the California State Accessibility Standards and I/we will be responsible for all clarifications deemed necessary during the construction phases.

Shana Reiss, C-32912

## CONDITIONS

Fire Sprinkler permit and approved plans to be on job site.

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## PROJECT DATA

**SCOPE OF WORK**
A proposal for the renovation and addition to the Arroyo Grande Library. The project includes: the renovation of 11,967 S.F. of existing conditioned space. There will be a second floor mechanical room added of 192 S.F.. There will be an enclosure of the existing covered walkway space of 1,019 S.F. into conditioned area. The total conditioned space will be 13,178 S.F.. Patio space will include added 373 S.F. of flatwork. The renovation will include an interior layout rework as well as remodel of existing restrooms, including one new family restroom to comply with accessibility and fixture quantity requirements. The second floor will include a new mechanical room to support remodel, but otherwise there is no modification to the existing use or design, so access improvements to the existing stairs are not necessary. The entire library portion of the larger building will receive a new commercial fire sprinkler system and a 2-hour fire rated wall will separate the library portion from the remainder of the larger building (South County Regional Center). 1

The South County Regional Center is NOT part of the scope of this project. The existing covered porch will be partially infilled to create new interior area. The County of San Luis Obispo is the jurisdiction in charge of review on all items of this submittal except fire as that will be reviewed by the City of Arroyo Grande.

The jurisdictions involved have agreed that at such time that the requirements for a fire sprinkler systems outlined in Table 903.2 - Automatic Fire Sprinkler System Requirements for Existing Construction are met within the scope of a project planned at the South County Regional Center, the County of San Luis Obispo will comply accordingly.

**PROJECT ADDRESS** 800 W Branch St, Arroyo Grande, California 93420

**APN** 007-011-050

**LEGAL DESCRIPTION** CY AG PM 44/96 PTN PAR 3

**LOT SIZE** 13.11 Acres

**UTILITIES** Electricity - PG&E
Natural Gas - Southern California Gas Company
Water - Golden State Water Company
Sewer - South SLO County Sanitation District

**RELEVANT PMTs** CALT2023-00008 Site Work/ Maintenance PMT
BLD24-000388 Fire Sprinkler & Fire Alarm (City of AG) 1

## BUILDING INFORMATION

**REQUIRED**

| | | |
|---|---|---|
| FIRE SPRINKLERS | Required | YES |
| | Proposed | YES |

Refer to scope of work above for Fire Sprinkler scope clarification.

**CONST. TYPE** V-B

**OCCUPANCY GROUP** A3

| | |
|---|---|
| ALLOWABLE AREA | 6,000 SF. w/o fire sprinklers<br>24,000 SF. w/ fire sprinklers |
| MAX. HEIGHT | 40' w/o fire sprinklers<br>60'/(2) Stories w/ fire sprinklers |

## GENERAL NOTES

1. In the event archaeological resources are unearthed or discovered during any construction activities, the following standards apply:
   a. Construction activities shall cease, and the County/City of jurisdiction shall be notified, so that the extent and location of discovered materials may be recorded by a qualified archaeologist, and disposition of artifacts may be accomplished in accordance with State and Federal law.
   b. In the event archaeological resources are found to include human remains, or in any other case when human remains are discovered during construction, the County/City coroners shall be notified so proper disposition may be accomplished.
2. All materials, finishes, manufactured items, and equipment shall be installed in full accordance with the supplier's or manufacturer's written recommendations or these documents, whichever is more stringent.
3. No hazardous materials which exceed the quantities listed in CBC Tables 307.1 shall be stored and/or used within the building.
4. All notes provided referencing current and adoped local codes, including but not limited to the CBC, CMC, CPC, CRC, CEC, CEnC, Cal Green, and all applicable California Title 24 energy requirements are provided herein for convenience only. Actual codes will always take precedence. It is the responsibility of the Contractor to know, verify, or confirm all code requirements and not rely soley upon listed notes.
5. The buildings described on the following pages are required to be equipped with a fire sprinkler system. Shop drawings shall be submitted and approved by the City/County of jurisdiction Building and Fire Department prior to installation of the system. System design shall meet all requirements of State Fire Marshal, NFPA and City/County of jurisdiction regulations. Sprinkler shop drawings shall be submitted and approved prior to rough framing inspection.
6. Remodeling pre-1978 structures without using lead safe work practices is a violation of the California Health and Safety Code Section 105256. Contractors, Remodelers, and Painters are required to use 'Lead-Safe' work practices pursuant to Title 17, California Code of Regulations Section 36050. Construction debris known to contain lead based paint must be disposed of at an approved location. Contact the Architect.
7. Contractor should schedule periodic site meetings, and foremen for each trade relevant to progress or upcoming work should be included in meeting. Subcontractor to be made aware of this and it shall be outlined in their contract for services with the contractor.
8. Prior to commencement of construction, the General Contractor shall schedule a pre-construction meeting at the project site with all parties to review special inspection requirements, procedures and special inspectors that will be assigned to the project.
9. The General Contractor shall be responsible for verification of all existing conditions and shall field verify all dimensions prior to commencement of work. Any discrepancies shall be brought to the immediate attention of the Architect.
10. The General Contractor shall be responsible for implementing and monitoring the approved erosion and sedimentation control plan. Refer to Civil sheets.
11. The General Contractor shall provide and maintain portable fire extinguishers on-site during construction per California Fire Code Section 906.
12. Contractor shall review these plans thoroughly, make a detailed site visit, and shall immediately bring any inconsistency, site layout problem, or any other request for clarification to the Architect for resolution prior to the delivery of any bid. Failure to do so shall cause the Contractor to be ineligible for extras relating to such matters.
13. Contractor shall submit reproducible shop drawings to Architect for Owner's, Architect's, and Engineer's approval.
14. Contractor shall coordinate with all trades to provide complete working systems.
15. Contractor is responsible for the safety, actions and conduct of his employees and his subcontractors' employees while in the project area, adjacent areas and in the building and its vicinity.
16. The General Contractor shall compile an Operation & Maintenance Manual to be placed in the building and provided to building Owner at time of final inspection per CalGreen 4.410 or 5.410.
17. Prior to final inspection, General Contractor shall complete and sign CF-6R form. The completed form must be available to the Building Inspector at the final inspection and a copy of the CF-6R form given to the Owner.
18. Refer to Cal Green Notes and Checklist for additional Contractor Responsibility requirements.
19. Drawings of existing facilities are, in general, diagrammatic. Exact locations shall be determined by the Contractor from field measurements taken by Contractor's personnel. Actual arrangement of the work shall follow locations shown on the drawings within the constraints of existing equipment and construction. Dimensions shall govern these drawings and they are not to be scaled. Drawings and notes to drawings are correlative and have equal authority and priority. Should there be discrepancies in themselves or between them, Contractor shall base bid pricing on the most expensive combination of quality and/or quantity of the work indicated. In the event of discrepancies, the appropriate method of performing the work and/or items to be incorporated into the scope of the work shall be determined by the Architect or Engineer.
20. All dimensions to window and doors, including centerlines, are to be maintained. Upon selection of window and door brands if any discrepancies or conflicts are found, whether to accommodate structural, framing, or other, the General Contractor shall notify the Architect immediately and prior to approving any change to sub contractors or installers, so as to allow for coordination of other affected items such as lighting, fixtures, appliances, cabinetry, and finishes.

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| 100 | TOTAL SHEETS |


1
B1

## DETACHED SUPPORTING DOCUMENTS

| | |
|---|---|
| Specifications Book (RDS, V2) | Date: 10/28/2024 |
| Hydraulic Calculations (Alpha Fire, #23-00002) | Date: 06/18/2024 |
| Structural Calculations *(Ashley & Vance, #22373)* | Date: 03/29/2024 |
| Soils Report Memo (Ashley & Vance, #22373) | Date: 10/22/2024 |
| Title 24/Energy Compliance *(BMA, AG Library)* | Date: 10/25/2024 |
| BLD-1031 | Date: 10/28/2024 |
| SWCP Waiver | Date: 10/28/2024 |

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## REQUIRED SEPARATE PERMIT

1. Fire sprinkler plans and calculations - Approved under Arroyo Grande permit BLD24-000388/ 24F-6440, 24F-4677.
2. Fire alarm plans - Approved under Arroyo Grande permit BC25-001000/ 25F-0110.

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REISS DESIGN STUDIO, PC
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SAN LUIS OBISPO, CA 93401



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PROJECT:
Renovation & Addition

**Arroyo Grande Library**
APN: 007-011-050
800 W. Branch Street
Arroyo Grande, CA 93420

CLIENT:
County of San Luis Obispo
Department of Public Works
County Goverment Center, Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:
**TITLE SHEET**

CONSULTANT:
B1 Bid Set Update 07/25/2025

STAMP:
LICENSED ARCHITECT C-32912 SHANA MARIE REISS REN. 09-30-25 STATE OF CALIFORNIA

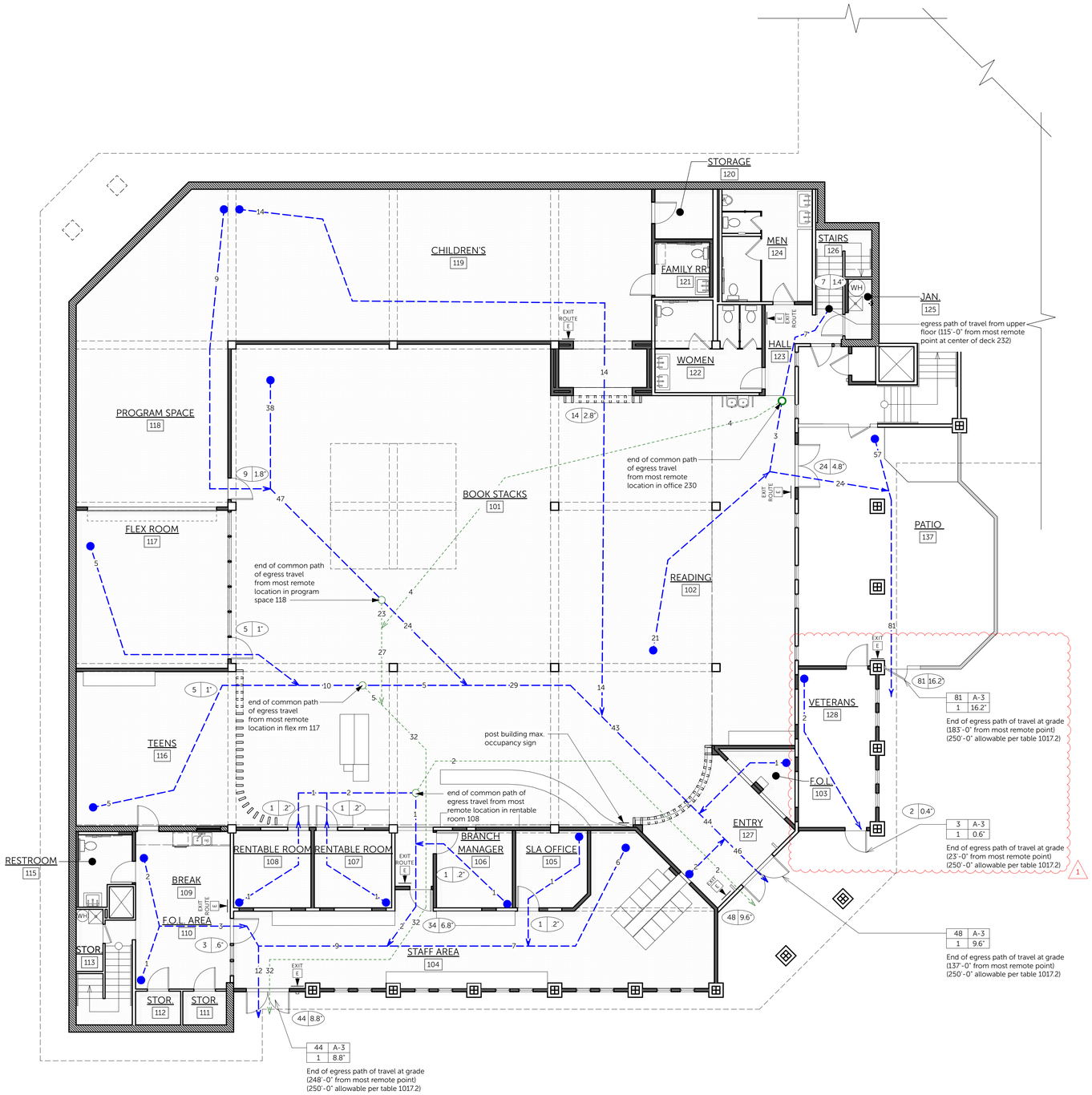
DATE:
April 4, 2024

REVISIONS:
1 Plan Check 1 County of SLO, 10/28/2024
2 Plan Check 2 County of SLO, 01/22/2025
3 Owner Revision Roof Deck, 03/10/2025
4 Engineer Update 05/27/2025
5 Engineer Update 05/30/2025

JOB NUMBER:
2308

SHEET:
T1.0


Time: 2:43:47 PM File name: 01_02_Arroyo Grande Library_CA_Title_Site.vwx Date: July 25, 2025




# 1 OCCUPANCY & EGRESS LOWER FLOOR

**Scale: 1/8" = 1'-0"**

## PROJECT OCCUPANCY & EGRESS

| ROOM NAME | ROOM # | AREA* | OCC. FACTOR (TABLE 1004.5) | OCC. LOAD | EXITS REQ'D | EXITS PROVIDED |
|---|---|---|---|---|---|---|
| **A-3 OCCUPANCY** | | | | | | |
| BOOK STACKS | 101 | 3,780 | 100 | 38 | **2** | No single room requires more than one exit per occupancy, however, travel distances do require multiple exits. Due to open nature of plan, routes are infinite. Egress is proven on drawing. |
| READING | 102 | 1,051 | 50 | 21 | **1** | |
| FOL | 103 | 52 | 100 | 1 | **1** | |
| STAFF AREA | 104 | 864 | 150 | 6 | **1** | |
| SLA OFFICE | 105 | 106 | 150 | 1 | **1** | |
| BRANCH MANAGER | 106 | 114 | 150 | 1 | **1** | |
| RENTABLE ROOM | 107 | 116 | 150 | 1 | **1** | |
| RENTABLE ROOM | 108 | 116 | 150 | 1 | **1** | |
| BREAK ROOM | 109 | 200 | 150 | 2 | **1** | |
| FOL AREA | 110 | 92 | 150 | 1 | **1** | |
| STORAGE | 111 | 29 | - | - | **1** | |
| STORAGE | 112 | 29 | - | - | **1** | |
| STORAGE | 113 | 32 | - | - | **1** | |
| STORAGE | 114 | 13 | - | - | **1** | |
| RESTROOM | 115 | 56 | - | - | **1** | |
| TEENS | 116 | 490 | 100 | 5 | **1** | |
| FLEX ROOM | 117 | 467 | 100 | 5 | **1** | |
| PROGRAM SPACE | 118 | 808 | 100 | 9 | **1** | |
| CHILDREN'S | 119 | 1,325 | 100 | 14 | **1** | |
| STORAGE | 120 | 58 | - | - | **1** | |
| FAMILY RR | 121 | 61 | - | - | **1** | |
| WOMEN'S RR | 122 | 184 | - | - | **1** | |
| HALL | 123 | 86 | - | - | **1** | |
| MEN'S RR | 124 | 198 | - | - | **1** | |
| JAN | 125 | 31 | - | - | **1** | |
| STAIRS | 126 | 67 | - | - | **1** | |
| ENTRY | 127 | 222 | 150 | 2 | **1** | |
| VETERANS | 128 | 259 | 150 | 2 | **1** | |
| PATIO | 137 | 844 | 15 | 57 | **1** | |

1 * Room areas do not include wall thicknesses.

2 ** Unoccupied mechanical rooms are not required to comply with the common path of egress travel distance measurement per CBC 1006.2.1

## OCCUPANCY & EGRESS LEGEND

GROUP A-3

## LEGEND

- PRIMARY EXIT ROUTE — INDICATES # OF OCCUPANTS ALONG ROUTE
- SECONDARY EXIT ROUTE — INDICATES # OF OCCUPANTS ALONG ROUTE
- MOST REMOTE POINT FOR EGRESS
- EXIT E OR EXIT ROUTE E — TACTILE EXIT SIGNAGE, REFER TO DOOR SCHEDULE SIGNAGE NOTES, SHEET A8.1
- END OF COMMON PATH OF EGRESS TRAVEL (75'-0" ALLOWABLE PER CBC 1006.2.1)
- END OF EGRESS PATH OF TRAVEL AT GRADE

EGRESS ANALYSIS TAG

OCCUPANT LOAD → 1 | A-3 ← OCCUPANCY GROUP
REQUIRED EXITS → 1 | 1.02" ← TOTAL OPENING WIDTH REQ'D (0.2" PER OCCUPANT)

DOOR WIDTH TAG

OCCUPANT LOAD → 1 | 0.2" ← TOTAL OPENING WIDTH REQ'D (0.2" PER OCCUPANT)


REISS DESIGN STUDIO, PC
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735 TANK FARM ROAD, SUITE 150
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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Goverment Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**OCCUPANCY & EGRESS LOWER FLOOR**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. These approved plans shall be made available when inspections are requested.
All changes must be approved.

STAMP:

LICENSED ARCHITECT C-32912 SHANA MARIE REISS REN. 09-30-25 STATE OF CALIFORNIA

DATE:

April 4, 2024

REVISIONS:

1 Plan Check 1 County of SLO, 10/28/2024

2 Plan Check 2 County of SLO, 01/22/2025

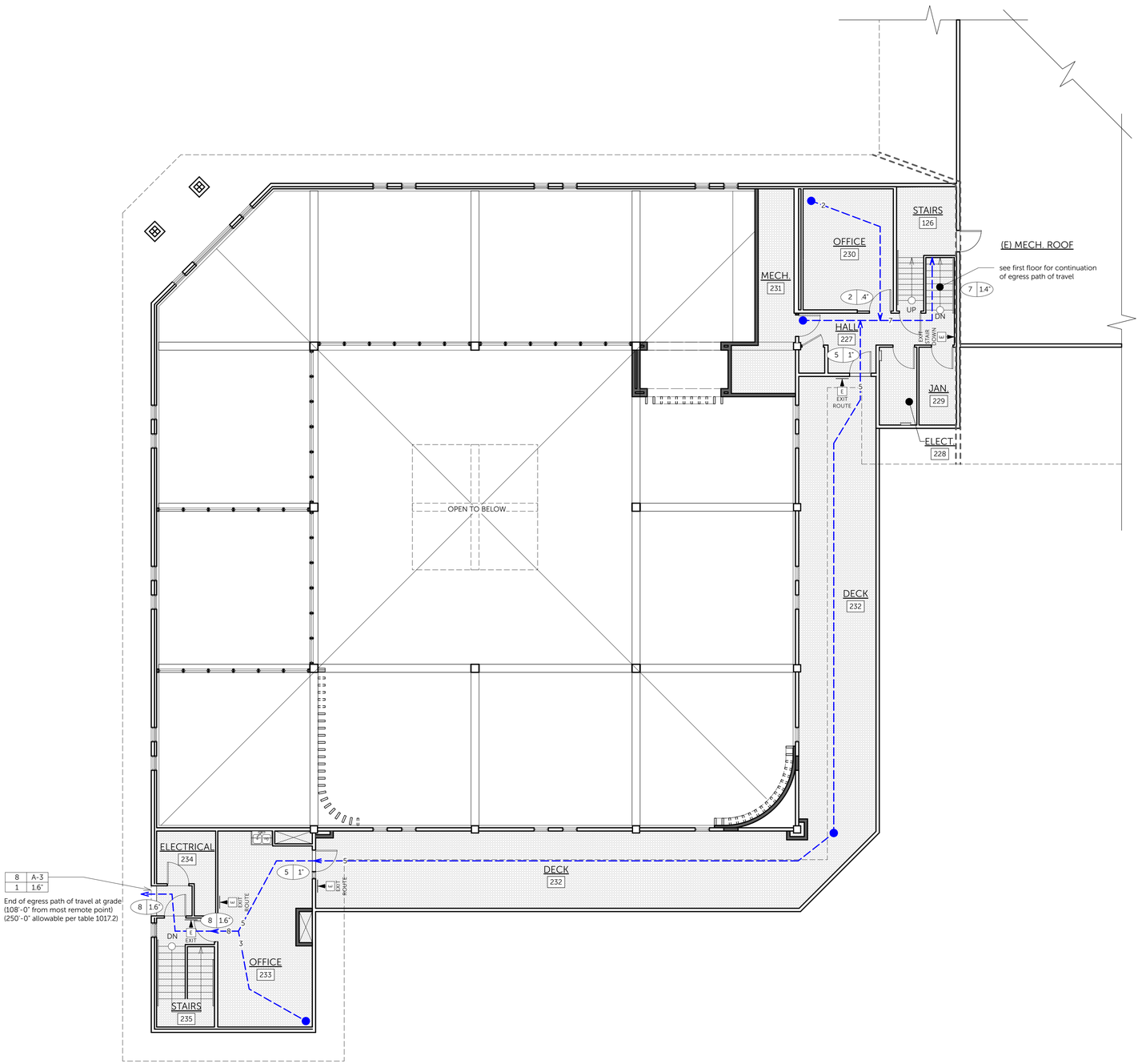
JOB NUMBER:

2308

SHEET:

T2.1


Date: January 22, 2025 Time: 2:09:34 PM File name: Arroyo Grande Library_CD Title Site.vwx




# PROJECT OCCUPANCY & EGRESS

| ROOM NAME | ROOM # | AREA* | OCC. FACTOR (TABLE 1004.5) | OCC. LOAD | EXITS REQ'D | EXITS PROVIDED |
|---|---|---|---|---|---|---|
| **A-3 OCCUPANCY** | | | | | | |
| STAIRS | 126 | | - | - | **1** | *** |
| HALL | 227 | 123 | - | - | **1** | |
| ELECTRICAL ROOM | 228 | 57 | - | - | **1** | |
| JAN | 229 | 57 | - | - | **1** | |
| OFFICE | 230 | 215 | 150 | 2 | **1** | |
| MECHANICAL ROOM | 231 | 170 | - | - | **1** | |
| DECK | 232 | 1,471 | 150 | 10 | **1** | |
| OFFICE | 233 | 338 | 150 | 3 | **1** | |
| ELECTRICAL ROOM | 234 | 74 | - | - | **1** | |
| STAIRS | 235 | 120 | - | - | | |

* Room areas do not include wall thicknesses.
** Unoccupied mechanical rooms are not required to comply with the common path of egress travel distance measurement per CBC 1006.2.1
***  **No single room requires more than one exit per occupancy, however, travel distances do require multiple exits. Due to open nature of plan, routes are infinite. Egress is proven on drawing.**

# OCCUPANCY & EGRESS LEGEND

GROUP A-3

# LEGEND

PRIMARY EXIT ROUTE
INDICATES # OF OCCUPANTS ALONG ROUTE

SECONDARY EXIT ROUTE
INDICATES # OF OCCUPANTS ALONG ROUTE

MOST REMOTE POINT FOR EGRESS

EXIT E OR EXIT ROUTE E
TACTILE EXIT SIGNAGE,
REFER TO DOOR SCHEDULE
SIGNAGE NOTES, SHEET A8.1

END OF COMMON PATH OF EGRESS TRAVEL
(75'-0" ALLOWABLE PER CBC 1006.2.1)

END OF EGRESS PATH OF TRAVEL
AT GRADE

EGRESS ANALYSIS TAG

OCCUPANT LOAD → 1 | A-3 ← OCCUPANCY GROUP
REQUIRED EXITS → 1 | 1.02" ← TOTAL OPENING WIDTH REQ'D (0.2" PER OCCUPANT)

DOOR WIDTH TAG

OCCUPANT LOAD → 1 | 0.2" ← TOTAL OPENING WIDTH REQ'D (0.2" PER OCCUPANT)

Scale: 1/8" = 1'-0"

## 2 OCCUPANCY & EGRESS UPPER FLOOR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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
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CLIENT:

County of San Luis Obispo
Department of Public Works
County Goverment Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**OCCUPANCY & EGRESS UPPER FLOOR**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. These approved plans shall be made available when inspections are requested.
All changes must be approved.

STAMP:

LICENSED ARCHITECT C-32913 SHANA MARIE REISS REN. 09-30-25 STATE OF CALIFORNIA

DATE:

April 4, 2024

REVISIONS:

JOB NUMBER:

2308

SHEET:

T2.2


Plot: January 22, 2025 Time: 2:09:35 PM File name: Arroyo Grande Library_CD Tite Site.vwx

# AIA California 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

## NONRESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2023)

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

# CHAPTER 3
# GREEN BUILDING
## SECTION 301 GENERAL

**301.1 SCOPE.** Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7.

**301.3 NONRESIDENTIAL ADDITIONS AND ALTERATIONS. [BSC-CG]** The provisions of individual sections of Chapter 5 apply to newly constructed buildings, building additions of 1,000 square feet or greater, and/or building alterations with a permit valuation of $200,000 or above (for occupancies within the authority of California Building Standards Commission). Code sections relevant to additions and alterations shall only apply to the portions of the building being added or altered within the scope of the permitted work.

A code section will be designated by a banner to indicate where the code section only applies to newly constructed buildings [N] or to additions and/or alterations [A]. When the code section applies to both, no banner will be used.

**301.3.1 Nonresidential additions and alterations that cause updates to plumbing fixtures only:**

**Note:** On and after January 1, 2014, certain commercial real property, as defined in Civil Code Section 1101.3, shall have its noncompliant plumbing fixtures replaced with appropriate water-conserving plumbing fixtures under specific circumstances. See Civil Code Section 1101.1 *et seq.* for definitions, types of commercial real property affected, effective dates, circumstances necessitating replacement of noncompliant plumbing fixtures, and duties and responsibilities for ensuring compliance.

**301.3.2 Waste Diversion.** The requirements of Section 5.408 shall be required for additions and alterations whenever a permit is required for work.

301.4 PUBLIC SCHOOLS AND COMMUNITY COLLEGES. (see GBSC)
301.5 HEALTH FACILITIES. (see GBSC)

## SECTION 302 MIXED OCCUPANCY BUILDINGS

**302.1 MIXED OCCUPANCY BUILDINGS.** In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy.

## SECTION 303 PHASED PROJECTS

**303.1 PHASED PROJECTS.** For shell buildings and others constructed for future tenant improvements, only those code measures relevant to the building components and systems considered to be new construction (or newly constructed) shall apply.

**303.1.1 Initial Tenant improvements.** The provisions of this code shall apply only to the initial tenant improvements to a project. Subsequent tenant improvements shall comply with the scoping provisions in Section 303.3 non-residential additions and alterations.

## ABBREVIATION DEFINITIONS:

| | |
|---|---|
| HCD | Department of Housing and Community Development |
| BSC | California Building Standards Commission |
| DSA-SS | Division of the State Architect, Structural Safety |
| OSHPD | Office of Statewide Health Planning and Development |
| LR | Low Rise |
| HR | High Rise |
| AA | Additions and Alterations |
| N | New |

# CHAPTER 5
# NONRESIDENTIAL MANDATORY MEASURES

# DIVISION 5.1 PLANNING AND DESIGN

## SECTION 5.101 GENERAL

**5.101.1 SCOPE**
The provisions of this chapter outline planning, design and development methods that include environmentally responsible site selection, building siting and development to protect, restore and enhance the environmental quality of the site and respect the integrity of adjacent properties.

## SECTION 5.102 DEFINITIONS

**5.102.1 DEFINITIONS**
The following terms are defined in Chapter 2 *(and are included here for reference)*

**CUTOFF LUMINAIRES.** Luminaires whose light distribution is such that the candela per 1000 lamp lumens does not numerically exceed 25 (2.5 percent) at an angle of 90 degrees above nadir, and 100 (10 percent) at a vertical angle of 80 degrees above nadir. This applies to all lateral angles around the luminaire.

**LOW-EMITTING AND FUEL EFFICIENT VEHICLES.**
Eligible vehicles are limited to the following:

1. Zero emission vehicle (ZEV), enhanced advanced technology PZEV (enhanced AT ZEV) or transitional zero emission vehicles (TZEV) regulated under CCR, Title 13, Section 1962.
2. High-efficiency vehicles, regulated by U.S. EPA, bearing a fuel economy and greenhouse gas rating od 9 oe 10 as regulated under 40 CFR Section 600 Subpart D.

**NEIGHBORHOOD ELECTRIC VEHICLE (NEV).** A motor vehicle that meets the definition of "low-speed vehicle" either in Section 385.5 of the Vehicle Code or in 49CFR571.500 (as it existed on July 1, 2000), and is certified to zero-emission vehicle standards.

**TENANT-OCCUPANTS.** Building occupants who inhabit a building during its normal hours of operation as permanent occupants, such as employees, as distinguished from customers and other transient visitors.

**VANPOOL VEHICLE.** Eligible vehicles are limited to any motor vehicle, other than a motortruck or truck tractor, designed for carrying more than 10 but not more than 15 persons including the driver, which is maintained and used primarily for the nonprofit work-related transportation of adults for the purpose of ridesharing.

**Note:** Source: Vehicle Code, Division 1, Section 668

**ZEV.** Any vehicle certified to zero-emission standards.

## SECTION 5.106 SITE DEVELOPMENT

Civil

**5.106.1 STORM WATER POLLUTION PREVENTION FOR PROJECTS THAT DISTURB LESS THAN ONE ACRE OF LAND.** Newly constructed projects and additions which disturb less than one acre of land, and are not part of a larger common plan of development or sale, shall prevent the pollution of storm water runoff from the construction activities through one or more of the following measures:

**5.106.1.1 Local ordinance**. Comply with a lawfully enacted storm water management and/or erosion control ordinance.

**5.106.1.2 Best Management Practices (BMPs).** Prevent the loss of soil through wind or water erosion by implementing an effective combination of erosion and sediment control and good housekeeping BMPs.

1. Soil loss BMPs that should be considered for implementation as appropriate for each project include, but are not limited to, the following:
   a. Scheduling construction activity during dry weather, when possible.
   b. Preservation of natural features, vegetation, soil, and buffers around surface waters.
   c. Drainage swales or lined ditches to control stormwater flow.
   d. Mulching or hydroseeding to stabilize disturbed soils.
   e. Erosion control to protect slopes.
   f. Protection of storm drain inlets (gravel bags or catch basin inserts).
   g. Perimeter sediment control (perimeter silt fence, fiber rolls).
   h. Sediment trap or sediment basin to retain sediment on site.
   i. Stabilized construction exits.
   j. Wind erosion control.
   k. Other soil loss BMPs acceptable to the enforcing agency.
2. Good housekeeping BMPs to manage construction equipment, materials, non-stormwater discharges and wastes that should be considered for implementation as appropriate for each project include, but are not limited to, the following:
   a. Dewatering activities.
   b. Material handling and waste management.
   c. Building materials stockpile management.
   d. Management of washout areas (concrete, paints, stucco, etc.).
   e. Control of vehicle/equipment fueling to contractor's staging area.
   f. Vehicle and equipment cleaning performed off site.
   g Spill prevention and control.
   h. Other housekeeping BMPs acceptable to the enforcing agency.

**5.106.2 STORMWATER POLLUTION PREVENTION FOR PROJECTS THAT DISTURB ONE OR MORE ACRES OF LAND.** Comply with all lawfully enacted stormwater discharge regulations for projects that (1) disturb one acre or more of land, or (2) disturb less than one acre of land but are part of a larger common plan of development sale.

**Note:** Projects that (1) disturb one acre or more of land, or (2) disturb less than one acre of land but are part of the larger common plan of development or sale must comply with the post-construction requirements detailed in the applicable National Pollutant Discharge Elimination System (NPDES) General permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities issued by the State Water Resources Control Board or the Lahontan Regional Water Quality Control Board (for projects in the Lake Tahoe Hydrologic Unit).

The NPDES permits require postconstruction runoff (post-project hydrology) to match the preconstruction runoff (pre-project hydrology) with the installation of postconstruction stormwater management measures. The NPDES permits emphasize runoff reduction through on-site stormwater use, interception, evapotranspiration, and infiltration through nonstructural controls, such as Low Impact Development (LID) practices, and conversation design measures. Stormwater volume that cannot be addressed using nonstructural practices is required to be captured in structural practices and be approved by the enforcing agency.

Refer to the current applicable permits on the State Water Resources Control Board website at: www.waterboards.ca.gov/constructionstormwater. Consideration to the stormwater runoff management measures should be given during the initial design process for appropriate integration into site development.

**5.106.4 BICYCLE PARKING.** For buildings within the authority of California Building Standards Commission as specified in Section 103, comply with Section 5.106.4.1. For buildings within the authority of the Division of the State Architect pursuant to Section 105, comply with Section 5.106.4.2

**5.106.4.1 Bicycle parking. [BSC-CG]** Comply with Sections 5.106.4.1.1 and 5.106.4.1.2; or meet the applicable local ordinance, whichever is stricter.

**5.106.4.1.1 Short-term bicycle parking.** If the new project or an addition or alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack.
**Exception:** Additions or alterations which add nine or less visitor vehicular parking spaces.

**5.106.4.1.2 Long-term bicycle parking.** For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5 percent of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility.

**5.106.4.1.3** For additions or alterations that add 10 or more tenant-occupant vehicular parking spaces, provide secure bicycle parking for 5 percent of the tenant vehicular parking spaces being added, with a minimum of one bicycle parking facility.

**5.106.4.1.4** For new shell buildings in phased projects provide secure bicycle parking for 5 percent of the anticipated tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility.

**5.106.4.1.5** Acceptable bicycle parking facility for Sections 5.106.4.1.2, 5.106.4.1.3, and 5.106.4.1.4 shall be convenient from the street and shall meet one of the following:

1. Covered, lockable enclosures with permanently anchored racks for bicycles;
2. Lockable bicycle rooms with permanently anchored racks; or
3. Lockable, permanently anchored bicycle lockers.

**Note:** Additional information on recommended bicycle accommodations may be obtained from Sacramento Area Bicycle Advocates.

**5.106.4.2 Bicycle parking. [DSA-SS]** For public schools and community colleges, comply with Sections 5.106.4.2.1 and 5.106.4.2.2

**5.106.4.2.1 Student bicycle parking.** Provide permanently anchored bicycle racks conveniently accessed with a minimum of four two-bike capacity racks per new building.
**5.106.4.2.2 Staff bicycle parking.** Provide permanent, secure bicycle parking conveniently accessed with a minimum of two staff bicycle parking spaces per new building. Acceptable bicycle parking facilities shall be convenient from the street or staff parking area and shall meet one of the following:

1. Covered, lockable enclosures with permanently anchored racks for bicycles;
2. Lockable bicycle rooms with permanently anchored racks; or
3. Lockable, permanently anchored bicycle lockers.

**5.106.5.3 Electric vehicle (EV) charging**. [N] Construction to provide electric vehicle infrastructure and facilitate electric vehicle charging shall comply with Section 5.106.5.3.1 and shall be provided in accordance with regulations in the California Building Code and the California Electrical Code.

Exceptions:

1. On a case-by-case basis where the local enforcing agency has determined compliance with this section is not feasible based upon one of the following conditions:
   a. Where there is no local utility power supply
   b. Where the local utility is unable to supply adequate power.
   c. Where there is evidence suitable to the local enforcement agency substantiating the local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3, may adversely impact the construction cost of the project.
2. Parking spaces accessible only by automated mechanical car parking systems are not required to comply with this code section

**5.106.5.3.1 EV capable spaces.**
**[N]** EV capable spaces shall be provided in accordance with Table 5.106.5.3.1 and the following requirements:

1. Raceways complying with the California Electrical Code and no less that 1-inch (25 mm) diameter shall be provided and shall originate at a service panel or a subpanel(s) serving the area, and shall terminate in close proximity to the proposed location of the EV capable and into a suitable listed cabinet, box,enclosure or equivalent. A common raceway may be used to serve multiple EV charging spaces.
2. A service panel or subpanel (s) shall be provided with panel space and electrical load capacity for a dedicated 208/240 volt, 40-ampere minimum branch circuit for each EV capable space, with delivery of 30-ampere minimum to an installed EVSE at each EVCS.
3. The electrical system and any on-site distribution transformers shall have sufficient capacity to supply full rated amperage at each EV capable space.
4. The service panel or subpanel circuit directory shall identify the reserved overcurrent protective devices space(s) as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE."

Note: A parking space served by electric vehicle supply equipment or designed as a future EV charging space shall count as at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements established by an enforcement agency. See vehicle Code Section 22511.2 for further details.

TABLE 5.106.5.3.1

| TOTAL NUMBER OF ACTUAL PARKING SPACES | NUMBER OF REQUIRED EV CAPABLE SPACES | NUMBER OF EVCS (EV CAPABLE SPACES PROVIDED WITH EVSE)*2 |
|---|---|---|
| 0-9 | 0 | 0 |
| 10-25 | 2 | 0 |
| 26-50 | 8 | 2 |
| 51-75 | 13 | 3 |
| 76-100 | 17 | 4 |
| 101-150 | 25 | 6 |
| 151-200 | 35 | 9 |
| 201 AND OVER | 20% of total[1] | 25% of EV capable spaces[1] |

1. Where there is insufficient electrical supply.
2. The number of required EVCS (EV capable spaces provided with EVSE) in column 3 count towards the total number of required EV capable spaces shown in column 2.

**5.106.5.3.2 Electric vehicle charging stations (EVCS)**
EV capable spaces shall be provided with EVSE to create EVCS in the number indicated in Table 5.106.5.3.1. The EVCS required by Table 5.106.5.3.1 may be provided with EVSE in any combination of Level 2 and Direct Current Fast Charging (DCFC), except that at least one Level 2 EVSE shall be provided.

One EV charger with multiple connectors capable of charging multiple EVs simultaneously shall be permitted if the electrical load capacity required by Section 5.106.5.3.1 for each EV capable space is accumulatively supplied to the EV charger.

The installation of each DCFC EVSE shall be permitted to reduce the minimum number of required EV capable spaces without EVSE by five and reduce proportionally the required electrical load capacity to the service panel or subpanel.

**5.106.5.3.3 Use of automatic load management systems (ALMS).**
ALMS shall be permitted for EVCS. When ALMS is installed, the required electrical load capacity specified in Section
5.106.5.3.1 for each EVCS may be reduced when serviced by an EVSE controlled by an ALMS. Each EVSE controlled by an ALMS shall deliver a minimum 30 amperes to an EV when charging one vehicle and shall deliver a minimum 3.3 kW while simultaneously charging multiple EVs.

**5.106.5.3.4 Accessible EVCS.**
When EVSE is installed, accessible EVSC shall be provided in accordance with the *California Building Code*, Chapter 11B, Section 11B-228.3.
**Note:** For EVCS signs, refer to Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

**5.106.5.4 Electric Vehicle (EV) charging: medium-duty and heavy-duty. [N]**
Construction shall comply with section 5.106.5.4.1 to facilitate future installation of electric vehicle supply equipment (EVSE). Construction for warehouses, grocery stores and retail stores with planned off-street loading spaces shall also comply with Section 5.106.5.4.1 for future installation of medium- and heavy-duty EVSE.
Exceptions:

1. On a case-by-case basis where the local enforcing agency has determined compliance with this section is not feasible based upon one of the following conditions:
   a. Where there is no local utility power supply.
   b. Where the local utility is unable to supply adequate power.
   c. Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3, may adversely impact the construction cost of the project.

When EVSE(s) is/are installed, it shall be in accordance with the *California Building Code*, the *California Electrical Code* and as follows:

**5.106.5.4.1 Electric vehicle charging readiness requirements for warehouse, grocery stores and retail stores with planned off-street loading spaces.**
[N] In order to avoid future demolition when adding EV charging supply and distribution equipment, spare raceways(s) or busway(s) and adequate capacity for transformers(s), service panels(s) or subpanel(s) shall be installed at the time of construction in accordance with the California Electrical Code. Construction plans and specifications shall include but are not limited to, the following:

1. The transformer, main service equipment and subpanel shall meet the minimum power requirement in Table 5.106.5.4.1 to accommodate the dedicated branch circuits for the future installation of EVSE.
2. The construction documents shall indicate on or more location(s) convenient to the planned offstreet loating space(s) reserved for medium-and heavy-duty ZEV charging cabinets and charging dispensers, and a pathway reserved for routing of conduit from the termination of the raceway(s) or busway(s) to the charging cabinet(s) and dispenser(s) as shown in Table 5.106.5.4.1
3. Raceway(s) or busway(s) originating at a main service panel or a subpanel(s) serving the area where potential future medium-and heavy-duty EVSE will be located and shall terminate in close proximity to the potential future location of the charging equipments for medium- and heavy-duty vehicles.
4. The raceway(s) or busway(s) shall be sufficient size to carry the minimum additional system load to the future location of the charging for medium- and heavy-duty ZEVs as shown in Table 5.106.5.4.1.

TABLE 5.106.5.4.1 RACEWAY CONDUIT AND PANEL POWER REQUIREMENTS FOR MEDIUM- AND HEAVY-DUTY EVSE [N]

| BUILDING TYPE | BUILDING SIZE (SQ. FT.) | NUMBER OF OFF-STREET LOADING SPACES | ADDITIONAL CAPACITY REQUIRED (KVA) FOR RACEWAY & BUSWAY AND TRANSFORMER & PANEL |
|---|---|---|---|
| Grocery | 10,000 to 90,000 | 1 or 2 | 200 |
| | | 3 or Greater | 400 |
| | Greater than 90,000 | 1 or Greater | 400 |
| Retail | 10,000 to 135,000 | 1 or 2 | 200 |
| | | 3 or Greater | 400 |
| | Greater than 135,000 | 1 or Greater | 400 |
| Warehouse | 20,000 to 256,000 | 1 or 2 | 200 |
| | | 3 or Greater | 400 |
| | Greater than 256,000 | 1 or Greater | 400 |

Elect.

**5.106.8 LIGHT POLLUTION REDUCTION. [N].** I Outdoor lighting systems shall be designed and installed to comply with the following:

1. The minimum requirements in the California Energy Code for Lighting Zones 0-4 as defined in Chapter 10, Section 10-114 of the California Administrative Code; and
2. Backlight (B) ratings as defined in IES TM-15-11 (shown in Table A-1 in Chapter 8);
3. Uplight and Glare ratings as defined in California Energy Code (shown in Tables 130.2-A and 130.2-B in Chapter 8) and
4. Allowable BUG ratings not exceeding those shown in Table 5.106.8, [N] or Comply with a local ordinance lawfully enacted pursuant to Section 101.7, whichever is more stringent.

**Exceptions: [N]**

1. Luminaires that qualify as exceptions in Sections 130.2 (b) and 140.7 of the California Energy Code.
2. Emergency lighting.
3. Building facade meeting the requirements in Table 140.7-B of the California Energy Code, Part 6.
4. Custom lighting features as allowed by the local enforcing agency, as permitted by Section 101.8 Alternate materials, designs and methods of construction.
5. Luminaires with less than 6,200 initial luminaire lumens.

TABLE 5.106.8 [N] MAXIMUM ALLOWABLE BACKLIGHT, UPLIGHT AND GLARE (BUG) RATINGS 1,2

| ALLOWABLE RATING | LIGHTING ZONE LZ0 | LIGHTING ZONE LZ1 | LIGHTING ZONE LZ2 | LIGHTING ZONE LZ3 | LIGHTING ZONE LZ4 |
|---|---|---|---|---|---|
| **MAXIMUM ALLOWABLE BACKLIGHT RATING** 3 | | | | | |
| Luminaire greater than 2 mounting heights (MH) from property line | N/A | No Limit | No Limit | No Limit | No Limit |
| Luminaire back hemisphere is 1-2 MH from property line | N/A | B2 | B3 | B4 | B4 |
| Luminaire back hemisphere is 0.5-1 MH from property line | N/A | B1 | B2 | B3 | B3 |
| Luminaire back hemisphere is less than 0.5 MH from property line | N/A | B0 | B0 | B1 | B2 |
| **MAXIMUM ALLOWABLE UPLIGHT RATING (U)** | | | | | |
| For area lighting 3 | N/A | U0 | U0 | U0 | U0 |
| For all other outdoor lighting,including decorative luminaires | N/A | U1 | U2 | U3 | UR |
| **MAXIMUM ALLOWABLE GLARE RATING 5 (G)** | | | | | |
| **MAXIMUM ALLOWABLE GLARE RATING 5 (G)** | N/A | G1 | G2 | G3 | G4 |
| **MAXIMUM ALLOWABLE GLARE RATING 5 (G)** | N/A | G0 | G1 | G1 | G2 |
| **MAXIMUM ALLOWABLE GLARE RATING 5 (G)** | N/A | G0 | G0 | G1 | G1 |
| **MAXIMUM ALLOWABLE GLARE RATING 5 (G)** | N/A | G0 | G0 | G0 | G1 |

1. IESNA Lighting Zones 0 and 5 are not applicable; refer to Lighting Zones as defined in the *California Energy Code* and Chapter 10 of the *California Administrative Code*.

2. For property lines that abut public walkways, bikeways, plazas and parking lots, the property line may be considered to be 5 feet beyond the actual property line for purpose of determining compliance with this section. For property lines that abut public roadways and public transit corridors, the property line may be considered to be the centerline of the public roadway or public transit corridor for the purpose of determining compliance with this section.

3. General lighting luminaires in areas such as outdoor parking, sales or storage lots shall meet these reduced ratings. Decorative luminaries located in these areas shall meet *U*-value limits for "all other outdoor lighting"

**5.106.8.1 Facing- Backlight**
Luminaries within 2MH of a property line shall be oriented so that the nearest property line is behind the fixture, and shall comply with the backlight rating specified in Table 5.106.8 based on the lighting zone and distance to the nearest point of that property line.
**Exception: Corners.** If two property lines (or two segments of the same property line) have equidistant point to the luminaire, then the luminaire may be oriented so that the intersection of the two lines (the corner) is directly behind the luminaire. The luminaire shall still use the distance to the nearest points(s) on the property lines to determine the required backlight rating.

**5.106.8.2 Facing-Glare.**
For luminaires covered by 5.106.8.1, if a property line also exists within or extends into the front hemisphere within 2MH of the luminaire then the luminaire shall comply with the more stringent glare rating specified in Table 5.106.8 based on the lighting zone and distance to the nearest point on the nearest property line within the front hemisphere.

**Note: [N]**
1.See also *California Building Code*, Chapter 12, Section 1205.6 for college campus lighting requirements for parking facilities and walkways.
2.Refer to Chapter 8 (Compliance Forms, Worksheets and Reference Material) for IES TM-15-11 Table A-1, *California Energy Code* Tables 130.2-A and 130.2-B.
3. Refer to the *California Building Code* for requirements for additions and alterations.

Civil

**5.106.10 GRADING AND PAVING.** Construction plans shall indicate how site grading or a drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following:

1. Swales.
2. Water collection and disposal systems.
3. French drains.
4. Water retention gardens.
5. Other water measures which keep surface water away from buildings and aid in groundwater recharge.
**Exception:** Additions and alterations not altering the drainage path.

**5.106.12 SHADE TREES [DSA-SS].** Shade Trees shall be planted to comply with Sections 5.106.12.1, 5.106.12.2, and 5.106.12.3. Percentages shown shall be measured at noon on the summer solstice. Landscape irrigation necessary to establish and maintain tree health shall comply with Section 5.304.6.

**5.106.12.1 Surface parking areas.** Shade tree plantings, minimum #10 container size or equal, shall be installed to provide shade over 50 percent of the parking area within 15 years.

**Exceptions:** Surface parking area covered by solar photovoltaic shade structures with roofing materials that comply with Table A5.106.11.2.2 in Appendix A5 shall be permitted in whole or in part in lieu of shade tree planting.

**5.106.12.2 Landscape areas.** Shade tress plantings, minimum #10 container size or equal shall be installed to provide shade of 20% of the landscape area within 15 years.

**Exceptions:** Playfields for organized sport activity are not included in the total area calculation.

**5.106.12.3. Hardscape areas.** Shade tree plantings, minimum #10 container size or equal shall be installed to provide shade over 20 percent of the hardscape area within 15 years.

**Exceptions:**
1. Walks, hardscape areas covered by solar photovoltaic shade structures or shade structures with roofing materials that comply with Table A5.106.11.2.2 in Appendix A5 shall be permitted in whole or in part in lieu of shade tree planting.
2. Designated and marked play areas of organized sport activity are not included in the total area calculation.

# DIVISION 5.2 ENERGY EFFICIENCY

## SECTION 5.201 GENERAL

**5.201.1 Scope [BSC-CG].** ***California Energy Code [DSA-SS].*** For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory building standards.

# DIVISION 5.3 WATER EFFICIENCY AND CONSERVATION

## SECTION 5.301 GENERAL

**5.301.1 Scope.** The provisions of this chapter shall establish the means of conserving water use indoors, outdoors and in wastewater conveyance.

## SECTION 5.302 DEFINITIONS

**5.302.1 Definitions.** The following terms are defined in Chapter 2 *(and are included here for reference)*

**EVAPOTRANSPIRATION ADJUSTMENT FACTOR (ETAF) [DSA-SS].** An adjustment factor when applied to reference evapotranspiration that adjusts for plant factors and irrigation efficiency, which ae two major influences on the amount of water that needs to be applied to the landscape.

**FOOTPRINT AREA [DSA-SS].** The total area of the furthest exterior wall of the structure projected to natural grade, not including exterior areas such as stairs, covered walkways, patios and decks.

**METERING FAUCET**. A self-closing faucet that dispenses a specific volume of water for each actuation cycle. The volume or cycle duration can be fixed or adjustable.

**GRAYWATER.** Pursuant to Health and Safety Code Section 17922.12, "graywater" means untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. "Graywater" includes, but is not limited to wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines and laundry tubs, but does not include waste water from kitchen sinks or dishwashers.

**MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO).** The California ordinance regulating landscape design, installation and maintenance practices that will ensure commercial, multifamily and other developer installed landscapes greater than 2500 square feet meet an irrigation water budget developed based on landscaped area and climatological parameters.

**MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO). [HCD]** The California model ordinance (California Code of Regulations, Title 23, Division 2, Chapter 2.7), regulating landscape design, installation and maintenance practices. Local agencies are required to adopt the updated MWELO, or adopt a local ordinance at least as effective as the MWELO.

**POTABLE WATER.** Water that is drinkable and meets the U.S. Environmental Protection Agency (EPA) Drinking Water Standards. See definition in the California Plumbing Code, Part 5.

**POTABLE WATER. [HCD]** Water that is satisfactory for drinking, culinary, and domestic purposes, and meets the U.S. Environmental Protection Agency (EPA) Drinking Water Standards and the requirements of the Health Authority Having Jurisdiction.

**RECYCLED WATER.** Water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur [Water Code Section 13050 (n)]. Simply put, recycled water is water treated to remove waste matter attaining a quality that is suitable to use the water again.

**SUBMETER. [HCD 1]** A secondary device beyond a meter that measures water consumption of an individual rental unit within a multiunit residential structure or mixed-use residential and commercial structure. (See Civic Code Section 1954.202 (g) and Water code Section 517 for additional details.)

**WATER BUDGET.** Is the estimated total landscape irrigation water use which shall not exceed the maximum applied water allowance calculated in accordance with the Department of Water Resources Model Efficient Landscape Ordinance (MWELO).

**DISCLAIMER:** *THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.*

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PROJECT:
Renovation & Addition

**Arroyo Grande Library**
APN: 007-011-050
800 W. Branch Street
Arroyo Grande, CA 93420

CLIENT:
County of San Luis Obispo
Department of Public Works
County Goverment Center, Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:
**CAL GREEN CHECKLIST**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. These approved plans shall be made available when inspections are requested.
All changes must be approved.

STAMP:
LICENSED ARCHITECT C-32913 SHANA MARIE REISS REN. 09-30-25 STATE OF CALIFORNIA

DATE:
April 4, 2024

REVISIONS:

JOB NUMBER:
2308

SHEET:
T3.1

Date: January 22, 2025 Time: 2:09:35 PM File name: Arroyo Grande Library_CD Title Site.vwx

# 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

## NONRESIDENTIAL MANDATORY MEASURES, SHEET 2 (January 2023)

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

### SECTION 5.303 INDOOR WATER USE

**5.303.1 METERS.** Separate submeters or metering devices shall be installed for the uses described in Sections 503.1.1 and 503.1.2.

**5.303.1.1 Buildings in excess of 50,000 square feet.** Separate submeters shall be installed as follows:

1. For each individual leased, rented or other tenant space within the building projected to consume more than 100 gal/day (380 L/day), including, but not limited to, spaces used for laundry or cleaners, restaurant or food service, medical or dental office, laboratory, or beauty salon or barber shop.
2. Where separate submeters for individual building tenants are unfeasible, for water supplied to the following subsystems:
   a. Makeup water for cooling towers where flow through is greater than 500 gpm (30 L/s).
   b. Makeup water for evaporative coolers greater than 6 gpm (0.04 L/s).
   c. Steam and hot water boilers with energy input more than 500,000 Btu/h (147 kW).

**5.303.1.2 Excess consumption.** A separate submeter or metering device shall be provided for any tenant within a new building or within an addition that is projected to consume more than 1,000 gal/day.

Plumb.

**5.303.3 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS.** Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:

Plumb.

**5.303.3.1 Water Closets.** The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-Type toilets.

**Note:** The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.

Plumb.

**5.303.3.2 Urinals.**

**5.303.3.2.1 Wall-mounted Urinals.** The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush.

**5.303.3.2.2 Floor-mounted Urinals.** The effective flush volume of floor-mounted or other urinals shall not exceed 0.5 gallons per flush.

**5.303.3.3 Showerheads. [BSC-CG]**

Plumb.

**5.303.3.3.1 Single showerhead.** Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads.

**5.303.3.3.2 Multiple showerheads serving one shower.** When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to allow only one shower outlet to be in operation at a time.
**Note:** A hand-held shower shall be considered a showerhead.

Plumb.

**5.303.3.4 Faucets and fountains.**

**5.303.3.4.1 Nonresidential Lavatory faucets.** Lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi.

**5.303.3.4.2 Kitchen faucets.** Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi.

**5.303.3.4.3 Wash fountains.** Wash fountains shall have a maximum flow rate of not more than1.8 gallons per minute/20 [rim space (inches) at 60 psi].

**5.303.3.4.4 Metering faucets.** Metering faucets shall not deliver more than 0.20 gallons per cycle.

**5.303.3.4.5 Metering faucets for wash fountains.** Metering faucets for wash fountains shall have a maximum flow rate of not more than 0.20 gallons per minute/20 [rim space (inches) at 60 psi].

**Note:** Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.

**5.303.3.4.6 Pre-rinse spray value**
When installed, shall meet the requirements in the *California Code of Regulations*, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) Table H-2, Section 1605.3 (h)(4)(A), and Section 1607 (d)(7), and shall be equipped with an integral automatic shutoff.

**FOR REFERENCE ONLY:**The following table and code section have been reprinted from the *California Code of Regulations*, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) and Section 1605.3 (h)(4)(A).

TABLE H-2

STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY VALUES MANUFACTURED ON OR AFTER JANUARY 28, 2019

| PRODUCT CLASS [spray force in ounce force (ozf)] | MAXIMUM FLOW RATE (gpm) |
|---|---|
| Product Class 1 (≤ 5.0 ozf) | 1.00 |
| Product Class 2 (> 5.0 ozf and ≤ 8.0 ozf) | 1.20 |
| Product Class 3 (> 8.0 ozf) | 1.28 |

**5.303.4 COMMERCIAL KITCHEN EQUIPMENT.**

**5.303.4.1 Food Waste Disposers.** Disposers shall either modulate the use of water to no more than 1 gpm when the disposer is not in use (not actively grinding food waste/no-load) or shall automatically shut off after no more than 10 minutes of inactivity. Disposers shall use no more than 8 gpm of water.
**Note:** This code section does not affect local jurisdiction authority to prohibit or require disposer installation.

**5.303.5 AREAS OF ADDITION OR ALTERATION.** For those occupancies within the authority of the California Building Standards Commission as specified in Section 103, the provisions of Section 5.303.3 and 5.303.4 shall apply to new fixtures in additions or areas of alteration to the building.

**5.303.6 STANDARDS FOR PLUMBING FIXTURES AND FITTINGS.** Plumbing fixtures and fittings shall be installed in accordance with the *California Plumbing Code*, and shall meet the applicable standards referenced in Table 1701.1 of the *California Plumbing Code* and in Chapter 6 of this code.

### SECTION 5.304 OUTDOOR WATER USE

**5.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS.** Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.

**Notes:**
1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the California Code of Regulations, Title 23, Chapter 2.7, Division 2.
2. MWELO and supporting documents, including a water budget calculator, are available at: https://www.water.ca.gov/.

**5.304.6 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS.** For public schools and community colleges, landscape projects as described in Sections 5.304.6.1 and 5.304.6.2 shall comply with the California Department of Water Resources Model Water Efficient Landscape Ordinance (MWELO) commencing with Section 490 of Chapter 2.7, Division 2, Title 23, *California Code of Regulations*, except that the evapotranspiration adjustment factor (ETAF) shall be 0.65 with an additional water allowance for special landscape areas (SLA) of 0.35.

**Exception**: Any project with an aggregate landscape area of 2,500 square feet or less may comply with the prescriptive measures contained in Appendix D of the MWELO.

**5.304.6.1 Newly constructed landscapes.** New construction projects with an aggregate landscape area equal to or greater than 500 square feet.

**5.304.6.2 Rehabilitated landscapes.** Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 1,200 square feet.

# DIVISION 5.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

### SECTION 5.401 GENERAL

**5.401.1 SCOPE.** The provisions of this chapter shall outline means of achieving material conservation and resource efficiency through protection of buildings from exterior moisture, construction waste diversion, employment of techniques to reduce pollution through recycling of materials, and building commissioning or testing and adjusting.

### SECTION 5.402 DEFINITIONS

**5.402.1 DEFINITIONS.** The following terms are defined in Chapter 2 *(and are included here for reference)*

**ADJUST.** To regulate fluid flow rate and air patterns at the terminal equipment, such as to reduce fan speed or adjust a damper.

**BALANCE.** To proportion flows within the distribution system, including sub-mains, branches and terminals, according to design quantities.

**BUILDING COMMISSIONING.** A systematic quality assurance process that spans the entire design and construction process, including verifying and documenting that building systems and components are planned, designed, installed, tested, operated and maintained to meet the owner's project requirements.

**ORGANIC WASTE.** Food waste, green waste, landscape and pruning wste, nonhazardous wood waste, and food soiled paper waste that is mixed in with food waste.

**TEST.** A procedure to determine quantitative performance of a system or equipment

### SECTION 5.407 WATER RESISTANCE AND MOISTURE MANAGEMENT

**5.407.1 WEATHER PROTECTION.** Provide a weather-resistant exterior wall and foundation envelope as required by California Building Code Section 1402.2 (Weather Protection), manufacturer's installation instructions or local ordinance, whichever is more stringent.

Arch.

**5.407.2 MOISTURE CONTROL.** Employ moisture control measures by the following methods.

**5.407.2.1 Sprinklers.** Design and maintain landscape irrigation systems to prevent spray on structures.

**5.407.2.2 Entries and openings**. Design exterior entries and/or openings subject to foot traffic or wind-driven rain to prevent water intrusion into buildings as follows:

**5.407.2.2.1 Exterior door protection.** Primary exterior entries shall be covered to prevent water intrusion by using nonabsorbent floor and wall finishes within at least 2 feet around and perpendicular to such openings plus at least one of the following:

1. An installed awning at least 4 feet in depth.
2. The door is protected by a roof overhang at least 4 feet in depth.
3. The door is recessed at least 4 feet.
4. Other methods which provide equivalent protection.

**5.407.2.2.2 Flashing.** Install flashings integrated with a drainage plane.

### SECTION 5.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING

Arch.

**5.408.1 CONSTRUCTION WASTE MANAGEMENT.** Recycle and/or salvage for reuse a minimum of 65% of the non-hazardous construction and demolition waste in accordance with Section 5.408.1.1, 5.408.1.2 or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent.

**5.408.1.1 Construction waste management plan.** Where a local jurisdiction does not have a construction and demolition waste management ordinance, submit a construction waste management plan that:

1. Identifies the construction and demolition waste materials to be diverted from disposal by efficient usage, recycling, reuse on the project or salvage for future use or sale.
2. Determines if construction and demolition waste materials will be sorted on-site (source-separated) or bulk mixed (single stream).
3. Identifies diversion facilities where construction and demolition waste material collected will be taken.
4. Specifies that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.

**5.408.1.2 Waste Management Company.** Utilize a waste management company that can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with this section.

**Note:** The owner or contractor shall make the determination if the construction and demolition waste material will be diverted by a waste management company.

**Exceptions to Sections 5.408.1.1 and 5.408.1.2:**

1. Excavated soil and land-clearing debris.
2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist.
3. Demolition waste meeting local ordinance or calculated in consideration of local recycling facilities and markets.

**5.408.1.3 Waste stream reduction alternative.** The combined weight of new construction disposal that does not exceed two pounds per square foot of building area may be deemed to meet the 65% minimum requirement as approved by the enforcing agency.

**5.408.1.4 Documentation.** Documentation shall be provided to the enforcing agency which demonstrates compliance with Sections 5.408.1.1, through 5.408.1.3. The waste management plan shall be updated as necessary and shall be accessible during construction for examination by the enforcing agency.

**Notes:**

1. Sample forms found in "A Guide to the California Green Building Standards Code (Nonresidential)" located www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission-Resources-List-Folder/CALGreen may be used to assist in documenting compliance with the waste management plan.
2. Mixed construction and demolition debris processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).

Arch.

**5.408.2 UNIVERSAL WASTE. [A]** Additions and alterations to a building or tenant space that meet the scoping provisions in Section 301.3 for nonresidential additions and alterations, shall require verification that Universal Waste items such as fluorescent lamps and ballast and mercury containing thermostats as well as other California prohibited Universal Waste materials are disposed of properly and are diverted from landfills. A list of prohibited Universal Waste materials shall be included in the construction documents.

**Note**: Refer to the Universal Waste Rule link at: http://www.dtsc.ca.gov/universalwaste/

**5.408.3 EXCAVATED SOIL AND LAND CLEARING DEBRIS.** 100 percent of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed.

**Exception:** Reuse, either on or off-site, of vegetation or soil contaminated by disease or pest infestation.

**Notes:**

1. If contamination by disease or pest infestation is suspected, contact the County Agricultural Commissioner and follow its direction for recycling or disposal of the material.
2. For a map of know pest and/or disease quarantine zones, consult with the California Department of Food and Agriculture. (www.cdfa.ca.gov)

### SECTION 5.410 BUILDING MAINTENANCE AND OPERATIONS

Arch.

**5.410.1 RECYCLING BY OCCUPANTS.** Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive.

**Exception**: Rural jurisdictions that meet and apply for the exemption in Public Resources Code 42649.82 (a)(2)(A) et seq. shall also be exempt from the organic waste portion of this section.

**5.410.1.1 Additions.** All additions conducted within a 12-month period under single or multiple permits, resulting in an increase of 30% or more in floor area, shall provide recycling areas on site.

**Exception**: Additions within a tenant space resulting in less than a 30% increase in the tenant space floor area.

**5.410.1.2 Sample ordinance.** Space allocation for recycling areas shall comply with Chapter 18, Part 3, Division 30 of the *Public Resources Code*. Chapter 18 is known as the California Solid Waste Reuse and Recycling Access Act of 1991 (Act).

**Note:** A sample ordinance for use by local agencies may be found in Appendix A of the document at the CalRecycle's web site.

**5.410.2 COMMISSIONING. [N] New buildings 10,000 square feet and over.** For new buildings 10,000 square feet and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements. Commissioning shall be performed in accordance with this section by trained personnel with experience on projects of comparable size and complexity. For I-occupancies that are not regulated by OSHPD or for I-occupancies and L-occupancies that are not regulated y the California Energy Code Section 100.0 Scope, all requirements in Sections 5.410.2 through 5.410.2.6 shall apply.

**Note:** For energy-related systems under the scope (Section 100) of the California Energy Code, including heating, ventilation, air conditioning (HVAC) systems and controls, indoor lighting systems and controls, as well as water heating systems and controls, refer to California Energy Code Section 120.8 for commissioning requirements

Commissioning requirements shall include:

1. Owner's or Owner representative's project requirements.
2. Basis of design.
3. Commissioning measures shown in the construction documents.
4. Commissioning plan.
5. Functional performance testing.
6. Documentation and training.
7. Commissioning report.

**Exceptions:**

1. Unconditioned warehouses of any size.
2. Areas less than 10,000 square feet used for offices or other conditioned accessory spaces within unconditioned warehouses.
3. Tenant improvements less than 10,000 square feet as described in Section 303.1.1.
4. Open parking garages of any size, or open parking garage areas, of any size, within a structure.

**Note:** For the purposes of this section, unconditioned shall mean a building, area, or room which does not provide heating and or air conditioning.

**Informational Notes:**

1. IAS AC 476 is an accreditation criteria for organizations providing training and/or certification of commissioning personnel. AC 476 is available to the Authority Having Jurisdiction as a reference for qualifications of commissioning personnel. AC 476 des not certify individuals to conduct functional performance tests or to adjust and balance systems.
2. Functional performance testing for heating, ventilation, air conditioning systems and lighting controls must be performed in compliance with the *California Energy Code*.

**5.410.2.1 Owner's or Owner Representative's Project Requirements (OPR). [N]** The expectations and requirements of the building appropriate to its phase shall be documented before the design phase of the project begins. This documentation shall include the following:
1. Environmental and sustainability goals.
2. Building sustainable goals.
3. Indoor environmental quality requirements.
4. Project program, including facility functions and hours of operation, and need for after hours operation.
5. Equipment and systems expectations.
6. Building occupant and operation and maintenance (O&M) personnel expectations.

**5.410.2.2 Basis of Design (BOD). [N]** A written explanation of how the design of the building systems meets the OPR shall be completed at the design phase of the building project. The Basis of Design document shall cover the following systems:

1. Renewable energy systems.
2. Landscape irrigation systems.
3. Water reuse system.

**5.410.2.3 Commissioning plan. [N]** Prior to permit issuance a commissioning plan shall be completed to document how the project will be commissioned. The commissioning plan shall include the following:
1. General project information.
2. Commissioning goals.
3. Systems to be commissioned. Plans to test systems and components shall include:
   a. An explanation of the original design intent.
   b. Equipment and systems to be tested, including the extent of tests.
   c. Functions to be tested.
   d. Conditions under which the test shall be performed.
   e. Measurable criteria for acceptable performance.
4. Commissioning team information.
5. Commissioning process activities, schedules and responsibilities. Plans for the completion of commissioning shall be included.

**5.410.2.4 Functional performance testing. [N]** Functional performance tests shall demonstrate the correct installation and operation of each component, system and system-to-system interface in accordance with the approved plans and specifications. Functional performance testing reports shall contain information addressing each of the building components tested, the testing methods utilized, and include any readings and adjustments made.

**5.410.2.5 Documentation and training. [N]** A Systems Manual and Systems Operations Training are required, including Occupational Safety and Health Act (OSHA) requirements in *California Code of Regulations* (CCR), Title 8, Section 5142, and other related regulations.

**5.410.2.5.1 Systems manual. [N]** Documentation of the operational aspects of the building shall be completed within the systems manual and delivered to the building owner or representative. The systems manual shall include the following:
1. Site information, including facility description, history and current requirements.
2. Site contact information.
3. Basic operations and maintenance, including general site operating procedures, basic troubleshooting, recommended maintenance requirements, site events log.
4. Major systems.
5. Site equipment inventory and maintenance notes.
6. A copy of verifications required by the enforcing agency or this code.
7. Other resources and documentation, if applicable.

**5.410.2.5.2 Systems operations training. [N]** A program for training of the appropriate maintenance staff for each equipment type and/or system shall be developed and documented in the commissioning report and shall include the following:
1. System/equipment overview (what it is, what it does and with what other systems and/or equipment it interfaces).
2. Review and demonstration of servicing/preventive maintenance.
3. Review of the information in the Systems Manual.
4. Review of the record drawings on the system/equipment.

**5.410.2.6 Commissioning report. [N]** A report of commissioning process activities undertaken through the design and construction phases of the building project shall be completed and provided to the owner or representative.

**5.410.4 TESTING AND ADJUSTING. New buildings less than 10,000 square feet.** Testing and adjusting of systems shall be required for new buildings less than 10,000 square feet or new systems to serve an addition or alteration subject to Section 303.1.

**5.410.4.2 (Reserved)**

**Note:** For energy-related systems under the scope (Section 100) of the California Energy Code, including heating, ventilation, air conditioning (HVAC) systems and controls, indoor lighting system and controls, as well as water heating systems and controls, refer to California Energy Code Section 120.8 for commissioning requirements and Sections 120.5, 120.6, 130.4, and 140.9(b)3 for additional testing requirements of specific systems.

**5.410.4.2 Systems.** Develop a written plan of procedures for testing and adjusting systems. Systems to be included for testing and adjusting shall include at a minimum, as applicable to the project:

1. Renewable energy systems.
2. Landscape irrigation systems.
3. Water reuse systems.

**5.410.4.3 Procedures.** Perform testing and adjusting procedures in accordance with manufacturer's specifications and applicable standards on each system.

**5.410.4.3.1 HVAC balancing.** In addition to testing and adjusting, before a new space-conditioning system serving a building or space is operated for normal use, the system shall be balanced in accordance with the procedures defined by the Testing Adjusting and Balancing Bureau National Standards; the National Environmental Balancing Bureau Procedural Standards; Associated Air Balance Council National Standards or as approved by the enforcing agency.

**5.410.4.4 Reporting.** After completion of testing, adjusting and balancing, provide a final report of testing signed by the individual responsible for performing these services.

**5.410.4.5 Operation and maintenance (O & M) manual.** Provide the building owner or representative with detailed operating and maintenance instructions and copies of guaranties/warranties for each system. O & M instructions shall be consistent with OSHA requirements in CCR, Title 8, Section 5142, and other related regulations.

**5.410.4.5.1 Inspections and reports.** Include a copy of all inspection verifications and reports required by the enforcing agency.

# DIVISION 5.5 ENVIRONMENTAL QUALITY

### SECTION 5.501 GENERAL

**5.501.1 SCOPE.** The provisions of this chapter shall outline means of reducing the quantity of air contaminants that are odorous, irritating, and/or harmful to the comfort and well-being of a building's installers, occupants and neighbors.

### SECTION 5.502 DEFINITIONS

**5.502.1 DEFINITIONS.** The following terms are defined in Chapter 2 *(and are included here for reference)*

**ARTERIAL HIGHWAY.** A general term denoting a highway primarily for through traffic usually on a continuous route.

**A-WEIGHTED SOUND LEVEL (dBA).** The sound pressure level in decibels as measured on a sound level meter using the internationally standardized A-weighting filter or as computed from sound spectral data to which A-weighting adjustments have been made.

**1 BTU/HOUR.** British thermal units per hour, also referred to as Btu. The amount of heat required to raise one pound of water one degree Fahrenheit per hour, a common measure of heat transfer rate. A ton of refrigeration is 12,000 Btu, the amount of heat required to melt a ton (2,000 pounds) of ice at 32º Fahrenheit.

**COMMUNITY NOISE EQUIVALENT LEVEL (CNEL).** A metric similar to the day-night average sound level (Ldn), except that a 5 decibel adjustment is added to the equivalent continuous sound exposure level for evening hours (7pm to 10pm) in addition to the 10 dB nighttime adjustment used in the Ldn.

**COMPOSITE WOOD PRODUCTS.** Composite wood products include hardwood plywood, particleboard and medium density fiberboard. "Composite wood products" does not include hardboard, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber, timber, prefabricated wood I–joists or finger–jointed lumber, all as specified in California Code of Regulations (CCR), Title 17, Section 93120.1(a).

**Note:** See CCR, Title 17, Section 93120.1.

**DAY-NIGHT AVERAGE SOUND LEVEL (Ldn).** The A-weighted equivalent continuous sound exposure level for a 24-hour period with a 10 dB adjustment added to sound levels occurring during nighttime hours (10p.m. to 7 a.m.).

**DECIBEL (db).** A measure on a logarithmic scale of the magnitude of a particular quantity (such as sound pressure, sound power, sound intensity) with respect to a reference quantity.

**ELECTRIC VEHICLE (EV).** An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, electric motorcycles, and the like, primarily powered by an electric motor that draws current from a rechargeable storage battery, fuel cell, photovoltaic array, or other source of electric current. Plug-in hybrid electric vehicles (PHEV) are considered electric vehicles. For purposes of the *California Electrical Code*, off-road, self-propoelled electric vehicles, such as industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, boats, and the like, are not included.

**ELECTRIC VEHICLE CHARGING STATION(S) (EVCS)).** One or more spaces intended for charging electric vehicles.

**ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE).** The conductors, including the ungrounded, grounded, and equipment grounding conductors and the electric vehicle connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.

**ENERGY EQUIVALENT (NOISE) LEVEL (Leq).** The level of a steady noise which would have the same energy as the fluctuating noise level integrated over the time of period of interest.

**EXPRESSWAY.** An arterial highway for through traffic which may have partial control of access, but which may or may not be divided or have grade separations at intersections.

**FREEWAY.** A divided arterial highway with full control of access and with grade separations at intersections.

**GLOBAL WARMING POTENTIAL (GWP).** The radiative forcing impact of one mass-based unit of a given greenhouse gas relative to an equivalent unit of carbon dioxide over a given period of time. Carbon dioxide is the reference compound with a GWP of one.

**GLOBAL WARMING POTENTIAL VALUE (GWP VALUE).** A 100-year GWP value published by the Intergovernmental Panel on Climate Change (IPCC) in either its Second Assessment Report (SAR) (IPCC, 1995); or its Fourth Assessment A-3 Report (AR4) (IPCC, 2007). The SAR GWP values are found in column "SAR (100-yr)" of Table 2.14.; the AR4 GWP values are found in column "100 yr" of Table 2.14.

**HIGH-GWP REFRIGERANT.** A compound used as a heat transfer fluid or gas that is: (a) a chlorofluorocarbon, a hdrochlorofluorocarbon, a hydrofluorocarbon, a perfluorocarbon, or any compound or blend of compounds, with a GWP value equal to or greater than 150, or (B) any ozone depleting substance as defined in Title 40 of the Code of Federal Regulations, Part 82, sec.82.3 (as amended March 10, 2009)**.**

**LONG RADIUS ELBOW.** Pipe fitting installed between two lengths of pipe or tubing to allow a change of direction, with a radius 1.5 times the pipe diameter.

**LOW-GWP REFRIGERANT.** A compound used as a heat transfer fluid or gas that: (A) has a GWP value less than 150, and (B) is not an ozone depleting substance as defined in Title 40 of the Code of Federal Regulations, Part 82, sec.82.3 (as amended March 10, 2009).

**MERV.** Filter minimum efficiency reporting value, based on ASHRAE 52.2–1999.

**MAXIMUM INCREMENTAL REACTIVITY (MIR).** The maximum change in weight of ozone formed by adding a compound to the "Base REactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundreths of a gram (g $O^3$/g ROC).

**PRODUCT-WEIGHTED MIR (PWMIR).** The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging).

**PSIG.** Pounds per square inch, guage.

**REACTIVE ORGANIC COMPOUND (ROC).** Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere.

**SCHRADER ACCESS VALVES.** Access fittings with a valve core installed.

**SHORT RADIUS ELBOW.** Pipe fitting installed between two lengths of pipe or tubing to allow a change of direction, with a radius 1.0 times the pipe diameter.

**SUPERMARKET.** For the purposes of Section 5.508.2, a supermarket is any retail food facility with 8,000 square feet or more conditioned area, and that utilizes either refrigerated display cases, or walk-in coolers or freezers connected to remote compressor units or condensing units.

**VOC.** A volatile organic compound broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a)

**Note:** Where specific regulations are cited from different agencies such as SCAQMD, ARB, etc., the VOC definition included in that specific regulation is the one that prevails for the specific measure in question.

### SECTION 5.503 FIREPLACES

**5.503.1 FIREPLACES.** Install only a direct-vent sealed-combustion gas or sealed wood-burning fireplace, or a sealed woodstove or pellet stove, and refer to residential requirements in the California Energy Code, Title 24, Part 6, Subchapter 7, Section 150. Woodstoves, pellet stoves and fireplaces shall comply with applicable local ordinances.

**5.503.1.1 Woodstoves.** Woodstoves and pellet stoves shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits.

### SECTION 5.504 POLLUTANT CONTROL

Mech.

**5.504.1 TEMPORARY VENTILATION.** The permanent HVAC system shall only be used during construction if necessary to condition the building or areas of addition or alteration within the required temperature range for material and equipment installation. If the HVAC system is used during construction, use return air filters with a Minimum Efficiency Reporting Value (MERV) of 8, based on ASHRAE 52.2-1999, or an average efficiency of 30% based on ASHRAE 52.1-1992 Replace all filters immediately prior to occupancy, or, if the building is occupied during alteration, at the conclusion of construction.

Mech.

**5.504.3 Covering of duct openings and protection of mechanical equipment during construction.** At the time of rough installation and during storage on the construction site until final startup of the heating, cooling and ventilation equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheetmetal or other methods acceptable to the enforcing agency to reduce the amount of dust, water and debris which may enter the system.

**DISCLAIMER:** *THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.*


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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Goverment Center, Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**CAL GREEN CHECKLIST**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT2024-00055 Date: 05/27/2025
The approval of these plans shall not permit violations of county or state laws. The County may revoke this permit or require corrections if they are in error. These approved plans shall be made available when inspections are requested. All changes must be approved.

STAMP:

LICENSED ARCHITECT C-32812 SHANA MARIE REISS REN. 09-30-25 STATE OF CALIFORNIA

DATE:

April 4, 2024

REVISIONS:

JOB NUMBER:

2308

SHEET:

T3.2


Date: January 22, 2025
Time: 2:09:37 PM
File name: Arroyo Grande Library_CD Title Site.vwx

# 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

## NONRESIDENTIAL MANDATORY MEASURES, SHEET 3 (January 2023)

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

| Y | N/A | RESPON. PARTY |
|---|---|---|
| ☒ | ☐ | Arch. / Mech. |

**5.504.4 FINISH MATERIAL POLLUTANT CONTROL.** Finish materials shall comply with Sections 5.504.4.1 through 5.504.4.6.

**5.504.4.1 Adhesives, sealants and caulks.** Adhesives, sealants, and caulks used on the project shall meet the requirements of the following standards:

1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable, or SCAQMD Rule 1168 VOC limits, as shown in Tables 5.504.4.1 and 5.504.4.2. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products as specified in subsection 2, below.

2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than one pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of *California Code of Regulations*, Title 17, commencing with Section 94507.

TABLE 5.504.4.1 - ADHESIVE VOC LIMIT[1,2]

Less Water and Less Exempt Compounds in Grams per Liter

| ARCHITECTURAL APPLICATIONS | CURRENT VOC LIMIT |
|---|---|
| INDOOR CARPET ADHESIVES | 50 |
| CARPET PAD ADHESIVES | 50 |
| OUTDOOR CARPET ADHESIVES | 150 |
| WOOD FLOORING ADHESIVES | 100 |
| RUBBER FLOOR ADHESIVES | 60 |
| SUBFLOOR ADHESIVES | 50 |
| CERAMIC TILE ADHESIVES | 65 |
| VCT & ASPHALT TILE ADHESIVES | 50 |
| DRYWALL & PANEL ADHESIVES | 50 |
| COVE BASE ADHESIVES | 50 |
| MULTIPURPOSE CONSTRUCTION ADHESIVES | 70 |
| STRUCTURAL GLAZING ADHESIVES | 100 |
| SINGLE-PLY ROOF MEMBRANE ADHESIVES | 250 |
| OTHER ADHESIVES NOT SPECIFICALLY LISTED | 50 |
| **SPECIALTY APPLICATIONS** | |
| PVC WELDING | 510 |
| CPVC WELDING | 490 |
| ABS WELDING | 325 |
| PLASTIC CEMENT WELDING | 250 |
| ADHESIVE PRIMER FOR PLASTIC | 550 |
| CONTACT ADHESIVE | 80 |
| SPECIAL PURPOSE CONTACT ADHESIVE | 250 |
| STRUCTURAL WOOD MEMBER ADHESIVE | 140 |
| TOP & TRIM ADHESIVE | 250 |
| **SUBSTRATE SPECIFIC APPLICATIONS** | |
| METAL TO METAL | 30 |
| PLASTIC FOAMS | 50 |
| POROUS MATERIAL (EXCEPT WOOD) | 50 |
| WOOD | 30 |
| FIBERGLASS | 80 |

1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.

2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168, www.arb.ca.gov/DRDB/SC/CURHTML/R1168.PDF

TABLE 5.504.4.2 - SEALANT VOC LIMIT

Less Water and Less Exempt Compounds in Grams per Liter

| SEALANTS | CURRENT VOC LIMIT |
|---|---|
| ARCHITECTURAL | 250 |
| MARINE DECK | 760 |
| NONMEMBRANE ROOF | 300 |
| ROADWAY | 250 |
| SINGLE-PLY ROOF MEMBRANE | 450 |
| OTHER | 420 |
| **SEALANT PRIMERS** | |
| ARCHITECTURAL | |
| NONPOROUS | 250 |
| POROUS | 775 |
| MODIFIED BITUMINOUS | 500 |
| MARINE DECK | 760 |
| OTHER | 750 |

NOTE: FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THESE TABLES, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.

**5.504.4.3 Paints and coatings.** Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Coatings Suggested Control Measure, as shown in Table 5.504.4.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 5.504.4.3 shall be determined by classifying the coating as a Flat, Nonflat or Nonflat-High Gloss coating, based on its gloss, as defined in Subsections 4.21, 4.36 and 4.37 of the 2007 California Air Resources Board Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat-High Gloss VOC limit in Table 5.504.4.3 shall apply.

**5.504.4.3.1 Aerosol Paints and coatings.** Aerosol paints and coatings shall meet the PWMIR Limits for ROC in Section 94522(a)(3) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(c)(2) and (d)(2) of *California Code of Regulations*, Title 17, commencing with Section 94520, and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 8 Rule 49.

| Y | N/A | RESPON. PARTY |
|---|---|---|
| | | |

TABLE 5.504.4.3 - CONT.

GRAMS OF VOC PER LITER OF COATING, LESS WATER & LESS EXEMPT COMPOUNDS

| COATING CATEGORY | CURRENT VOC LIMIT |
|---|---|
| **SPECIALTY COATINGS** | |
| ALUMINUM ROOF COATINGS | 400 |
| BASEMENT SPECIALTY COATINGS | 400 |
| BITUMINOUS ROOF COATINGS | 50 |
| BITUMINOUS ROOF PRIMERS | 350 |
| BOND BREAKERS | 350 |
| CONCRETE CURING COMPOUNDS | 350 |
| CONCRETE/MASONRY SEALERS | 100 |
| DRIVEWAY SEALERS | 50 |
| DRY FOG COATINGS | 150 |
| FAUX FINISHING COATINGS | 350 |
| FIRE RESISTIVE COATINGS | 350 |
| FLOOR COATINGS | 100 |
| FORM-RELEASE COMPOUNDS | 250 |
| GRAPHIC ARTS COATINGS (SIGN PAINTS) | 500 |
| HIGH-TEMPERATURE COATINGS | 420 |
| INDUSTRIAL MAINTENANCE COATINGS | 250 |
| LOW SOLIDS COATINGS[1] | 120 |
| MAGNESITE CEMENT COATINGS | 450 |
| MASTIC TEXTURE COATINGS | 100 |
| METALLIC PIGMENTED COATINGS | 500 |
| MULTICOLOR COATINGS | 250 |
| PRETREATMENT WASH PRIMERS | 420 |
| PRIMERS, SEALERS, & UNDERCOATERS | 100 |
| REACTIVE PENETRATING SEALERS | 350 |
| RECYCLED COATINGS | 250 |
| ROOF COATINGS | 50 |
| RUST PREVENTATIVE COATINGS | 250 |
| SHELLACS: | |
| CLEAR | 730 |
| OPAQUE | 550 |
| SPECIALTY PRIMERS, SEALERS & UNDERCOATERS | 100 |
| STAINS | 250 |
| STONE CONSOLIDANTS | 450 |
| SWIMMING POOL COATINGS | 340 |
| TRAFFIC MARKING COATINGS | 100 |
| TUB & TILE REFINISH COATINGS | 420 |
| WATERPROOFING MEMBRANES | 250 |
| WOOD COATINGS | 275 |
| WOOD PRESERVATIVES | 350 |
| ZINC-RICH PRIMERS | 340 |

1. GRAMS OF VOC PER LITER OF COATING, INCLUDING WATER & EXEMPT COMPOUNDS

2. THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS ARE LISTED IN SUBSEQUENT COLUMNS IN THE TABLE.

3. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, ARCHITECTURAL COATINGS SUGGESTED CONTROL MEASURE, FEB. 1, 2008. MORE INFORMATION IS AVAILABLE FROM THE AIR RESOURCES BOARD.

**5.504.4.3.2 Verification.** Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following:

1. Manufacturer's product specification
2. Field verification of on-site product containers

**5.504.4.4 Carpet Systems.**
All carpet installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers." Version 1.2, January 2017 (Emission testing method for California Specifications 01350).

See California Department of Public Health's website for certification programs and testing labs.
https://www.cdph.ca.gov//Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

**5.504.4.4.1 Carpet cushion.** All carpet cushion installed in the building interior shall meet the requirements of the California Department of Public Health,"Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers,"Version 1.2, January 2017 (Emission testing method for California Specifications 01350).

See California Department of Public Health's website for certification programs and testing labs.
https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

**5.504.4.4.2 Carpet adhesive.** All carpet adhesive shall meet the requirements of Table 5.504.4.1.

**5.504.4.5 Composite wood products.** Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the buildings shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure (ATCM) for Composite Wood (17 CCR 93120 et seq.). Those materials not exempted under the ATCM must meet the specified emission limits, as shown in Table 5.504.4.5.

**5.504.4.5.3 Documentation.** Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following:

1. Product certifications and specifications.
2. Chain of custody certifications.
3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.).
4. Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Australian AS/NZS 2269 or European 636 3S standards.
5. Other methods acceptable to the enforcing agency.

TABLE 5.504.4.5 - FORMALDEHYDE LIMITS[1]

MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION

| PRODUCT | CURRENT LIMIT |
|---|---|
| HARDWOOD PLYWOOD VENEER CORE | 0.05 |
| HARDWOOD PLYWOOD COMPOSITE CORE | 0.05 |
| PARTICLE BOARD | 0.09 |
| MEDIUM DENSITY FIBERBOARD | 0.11 |
| THIN MEDIUM DENSITY FIBERBOARD[2] | 0.13 |

1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIFORNIA CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93120.12.

2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16 INCHES (8 MM).

| Y | N/A | RESPON. PARTY |
|---|---|---|
| | ☒ | |

**5.504.4.6 Resilient flooring systems.** Where resilient flooring is installed, at least 80 percent of floor area receiving resilient flooring shall meet the requirements of the California Department of Public Health,"Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specifications 01350)

See California Department of Public Health's website for certification programs and testing labs.
https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

**5.504.4.6.1 Verification of compliance.** Documentation shall be provided verifying that resilient flooring materials meet the pollutant emission limits.

**5.504.4.7 Thermal insulation**
Comply with the requirements of the California Department of Public Health, "Standard Method of the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, "Version 1.2, January 1.2, January 2017 (Emission testing method for California Specification 01350).
See California Department of Public Health's website for certification programs and testing labs.
https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

**5.504.4.7.1 Verification of compliance.**
Documentation shall be provided verifying that thermal insulation materials meet the pollutant emission limits.

**5.504.4.8 Acoustical ceiling and wall panels.**
Comply with the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, " Version 1.2, January 2017 (Emission testing method for California Specification 01350).
See California Department of Public Health's website for certification programs and testing labs.

**5.504.4.8.1 Verification of compliance.** Documentation shall be provided verifying that acoustical finish materials meet the pollutant emission limits.

**5.504.5.3 Filters.** In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media for outside and return air that provides at least a Minimum Efficiency Reporting Value (MERV) of 13. MERV 13 filters shall be installed prior to occupancy, and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual.

**Exceptions:** Existing mechanical equipment.

**5.504.5.3.1 Labeling.** Installed filters shall be clearly labeled by the manufacturer indicating the MERV rating.

| | |
|---|---|
| ☐ | ☒ |

**5.504.7 ENVIRONMENTAL TOBACCO SMOKE (ETS) CONTROL.** Where outdoor areas are provided for smoking, prohibit smoking within 25 feet of building entries, outdoor air intakes and operable windows and within the building as already prohibited by other laws or regulations; or as enforced by ordinances, regulations or policies of any city, county, city and county, California Community College, campus of the California State University, or campus of the University of California, whichever are more stringent. When ordinances, regulations or policies are not in place, post signage to inform building occupants of the prohibitions.

## SECTION 5.505 INDOOR MOISTURE CONTROL

| | |
|---|---|
| ☒ | ☐ Mech. |

**5.505.1 INDOOR MOISTURE CONTROL.** Buildings shall meet or exceed the provisions of California Building Code, CCR, Title 24, Part 2, Sections 1202 (Ventilation) and Chapter 14 (Exterior Walls). For additional measures, see Section 5.407.2 of this code.

## SECTION 5.506 INDOOR AIR QUALITY

| | |
|---|---|
| ☒ | ☐ Mech. |

**5.506.1 OUTSIDE AIR DELIVERY.** For mechanically or naturally ventilated spaces in buildings, meet the minimum requirements of Section 120.1 (Requirements For Ventilation) of the *California Energy Code*, or the applicable local code, whichever is more stringent, and Division 1, Chapter 4 of CCR, Title 8.

| | |
|---|---|
| ☒ | ☐ Arch. |

**5.506.2 CARBON DIOXIDE ($CO_2$) MONITORING.** For buildings or additions equipped with demand control ventilation, $CO_2$ sensors and ventilation controls shall be specified and installed in accordance with the requirements of the California Energy Code, Section 120(c)(4).

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**5.506.3 Carbon dioxide (CO2) monitoring in classrooms.**
**(DSA-SS)** Each public K-12 school classroom, as listed in Table 120.1-A of the *California Energy Code,* shall be equipped with a carbon dioxide monitor or sensor that meets the following requirements:

1. The monitor or sensor shall be permanently affixed in a tamper-proof manner in each classroom between 3 and 6 feet (914 mm and 1829 mm) above the floor and at least 5 feet (1524 mm) away from door and operable windows.
2. When the monitor or sensor is not integral to an Energy Management Control System (EMCS), the monitor or sensor shall display the carbon dioxide readings on the device. When the sensor is integral to an EMCS, the carbon dioxide readings shall be available to and regularly monitored by facility personnel.
3. A monitor shall provide notification through a visual indicator on the monitor when the carbon dioxide levels in the classroom have exceeded 1,100ppm. A sensor integral to an EMCS shall provide notification to facility personnel through a visual and/or audible indicator when the carbon dioxide levels in the classroom have exceeded 1,100ppm.
4. The monitor or sensor shall measure carbon dioxide levels at minimum 15- minute intervals and shall maintain a record of previous carbon dioxide measurements of not less than 30 days duration.
5. The monitor or sensor used to measure carbon dioxide levels shall have the capacity to measure carbon dioxide levels with a range of 400ppm to 2000ppm or greater.
6. The monitor or sensor shall be certified by the manufacturer to be accurate within 75ppm at 1,000ppm carbon dioxide concentration and shall be certified by the manufacturer to require calibration no more frequently than once every 5 years.

## SECTION 5.507 ENVIRONMENTAL COMFORT

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**5.507.4 ACOUSTICAL CONTROL.** Employ building assemblies and components with Sound Transmission Class (STC) values determined in accordance with ASTM E 90 and ASTM E 413, or Outdoor-Indoor Sound Transmission Class (OITC) determined in accordance with ASTM E 1332, using either the prescriptive or performance method in Section 5.507.4.1 or 5.507.4.2.

**Exception:** Buildings with few or no occupants or where occupants are not likely to be affected by exterior noise, as determined by the enforcement authority, such as factories, stadiums, storage, enclosed parking structures and utility buildings.

**Exception: [DSA-SS]** For public schools and community colleges, the requirements of this section and all subsections apply only to new construction.

**5.507.4.1 Exterior noise transmission, prescriptive method.** Wall and roof-ceiling assemblies exposed to the noise source making up the building or addition envelope or altered envelope shall meet a composite STC rating of at least 50 or a composite OITC rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 in the following locations:

1. Within the 65 CNEL noise contour of an airport.

   **Exceptions:**

   1. $L_{dn}$ or CNEL for military airports shall be determined by the facility Air Installation Compatible Land Use Zone (AICUZ) plan.
   2. $L_{dn}$ or CNEL for other airports and heliports for which a land use plan has not been developed shall be determined by the local general plan noise element.

2. Within the 65 CNEL or $L_{dn}$ noise contour of a freeway or expressway, railroad, industrial source or fixed-guideway source as determined by the Noise Element of the General Plan.

**5.507.4.1.1. Noise exposure where noise contours are not readily available.** Buildings exposed to a noise level of 65 dB $L_{eq}$ - 1-hr during any hour of operation shall have building, addition or alteration exterior wall and roof-ceiling assemblies exposed to the noise source meeting a composite STC rating of at least 45 (or OITC 35), with exterior windows of a minimum STC of 40 (or OITC 30).

**5.507.4.2 Performance Method.** For buildings located as defined in Section 5.507.4.1 or 5.507.4.1.1, wall and roof-ceiling assemblies exposed to the noise source making up the building or addition envelope or altered envelope shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed an hourly equivalent noise level (Leq-1Hr) of 50 dBA in occupied areas during any hour of operation.

**5.507.4.2.1 Site Features.** Exterior features such as sound walls or earth berms may be utilized as appropriate to the building, addition or alteration project to mitigate sound migration to the interior.

**5.507.4.2.2 Documentation of Compliance.** An acoustical analysis documenting complying interior soundlevels shall be prepared by personnel approved by the architect or engineer of record.

**5.507.4.3 Interior sound transmission.** Wall and floor-ceiling assemblies separating tenant spaces and tenant spaces and public places shall have an STC of at least 40.

**Note:** Examples of assemblies and their various STC ratings may be found at the California Office of Noise Control: www.toolbase.org/PDF/CaseStudies/stc_icc_ratings.pdf.

## SECTION 5.508 OUTDOOR AIR QUALITY

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**5.508.1 Ozone depletion and greenhouse gas reductions.** Installations of HVAC, refrigeration and fire suppression equipment shall comply with Sections 5.508.1.1 and 5.508.1.2.

**5.508.1.1 Chlorofluorocarbons (CFCs).** Install HVAC, refrigeration and fire suppression equipment that do not contain CFCs.

**5.508.1.2 Halons.** Install HVAC, refrigeration and fire suppression equipment that do not contain Halons.

| Y | N/A | RESPON. PARTY |
|---|---|---|
| ☐ | ☒ | |

**5.508.2 Supermarket refrigerant leak reduction.** New commercial refrigeration systems shall comply with the provisions of this section when installed in retail food stores 8,000 square feet or more conditioned area, and that utilize either refrigerated display cases, or walk-in coolers or freezers connected to remote compressor units or condensing units. The leak reduction measures apply to refrigeration systems containing high-global-warming potential (high-GWP) refrigerants with a GWP of 150 or greater. New refrigeration systems include both new facilities and the replacement of existing refrigeration systems in existing facilities.

**Exception:** Refrigeration systems containing low-global warming potential (low-GWP) refrigerant with a GWP value less than 150 are not subject to this section. Low-GWP refrigerants are nonozone-depleting refrigerants that include ammonia, carbon dioxide ($CO_2$), and potentially other refrigerants.

**5.508.2.1 Refrigerant piping.** Piping compliant with the California Mechanical Code shall be installed to be accessible for leak protection and repairs. Piping runs using threaded pipe, copper tubing with an outside diameter (OD) less than 1/4 inch, flared tubing connections and short radius elbows shall not be used in refrigerant systems except as noted below.

**5.508.2.1.1 Threaded pipe.** Threaded connections are permitted at the compressor rack.

**5.508.2.1.2 Copper pipe.** Copper tubing with an OD less than 1/4 inch may be used in systems with a refrigerant charge of 5 pounds or less.

**5.508.2.1.2.1 Anchorage.** One-fouth-inch OD tubing shall be securely clamped to a rigid base to keep vibration levels below 8 mils.

**5.508.2.1.3 Flared tubing connections.** Double-flared tubing connections may be used for pressure controls, valve pilot lines and oil.

**Exception:** Single-flared tubing connections may be used with a multiring seal coated with industrial sealant suitable for use with refrigerants and tightened in accordance with manufacturer's recommendations.

**5.508.2.1.4 Elbows.** Short radius elbows are only permitted where space limitations prohibit use of long radius elbows.

**5.508.2.2 Valves.** Valves Valves and fittings shall comply with the *California Mechanical Code* and as follows.

**5.508.2.2.1 Pressure relief valves.** For vessels containing high-GWP refrigerant, a rupture disc shall be installed between the outlet of the vessel and the inlet of the pressure relief valve.

**5.508.2.2.1.1 Pressure detection.** A pressure gauge, pressure transducer or other device shall be installed in the space between the rupture disc and the relief valve inlet to indicate a disc rupture or discharge of the relief valve.

**5.508.2.2.2 Access valves.** Only Schrader access valves with a brass or steel body are permitted for use.

**5.508.2.2.2.1 Valve caps.** For systems with a refrigerant charge of 5 pounds or more, valve caps shall be brass or steel and not plastic.

**5.508.2.2.2.2 Seal caps.** If designed for it, the cap shall have a neoprene O-ring in place.

**5.508.2.2.2.2.1 Chain tethers.** Chain tethers to fit ovr the stem are required for valves designed to have seal caps.

**Exception:** Valves with seal caps that are not removed from the valve during stem operation.

**5.508.2.3 Refrigerated service cases.** Refrigerated service cases holding food products containing vinegar and salt shall have evaporator coils of corrosion-resistant material, such as stainless steel; or be coated to prevent corrosion from these substances.

**5.508.2.3.1 Coil coating.** Consideration shall be given to the heat transfer efficiency of coil coating to maximize energy efficiency.

**5.508.2.4 Refrigerant receivers.** Refrigerant receivers with capacities greater than 200 pounds shall be fitted with a device tha indicates the level of refrigerant in the receiver.

**5.508.2.5 Pressure testing.** The system shall be pressure tested during installation prior to evacuation and charging.

**5.508.2.5.1 Minimum pressure.** The system shall be charged with regulated dry nitrogen and appropriate tracer gas to bring system pressure up to 300 psig minimum.

**5.508.2.5.2 Leaks.** Check the system for leaks, repair any leaks, and retest for pressure using the same gauge.

**5.508.2.5.3 Allowable pressure change.** The system shall stand, unaltered, for 24 hours with no more than a +/- one pound pressure change from 300 psig, measured with the same gauge.

**5.508.2.6 Evacuation.** The system shall be evacuated after pressure testing and prior to charging.

**5.508.2.6.1 First vacuum.** Pull a system vacuum down to at least 1000 microns (+/- 50 microns), and hold for 30 minutes.

**5.508.2.6.2 Second vacuum.** Pull a second system vacuum to a minimum of 500 microns and hold for 30 minutes.

**5.508.2.6.3 Third vacuum.** Pull a third vacuum down to a minimum of 300 microns, and hold for 24 hours with a maximum drift of 100 microns over a 24-hour period.

# CHAPTER 7
# INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

## 702 QUALIFICATIONS

**702.1 INSTALLER TRAINING.** HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. Examples of acceptable HVAC training and certification programs include but are not limited to the following:

1. State certified apprenticeship programs.
2. Public utility training programs.
3. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.
4. Programs sponsored by manufacturing organizations.
5. Other programs acceptable to the enforcing agency.

**702.2 SPECIAL INSPECTION [HCD].** When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition to other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be considered by the enforcing agency when evaluating the qualifications of a special inspector:

1. Certification by a national or regional green building program or standard publisher.
2. Certification by a statewide energy consulting or verification organization, such as HERS raters, building performance contractors, and home energy auditors.
3. Successful completion of a third party apprentice training program in the appropriate trade.
4. Other programs acceptable to the enforcing agency.

**Notes:**

1. Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.
2. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in California according to the Home Energy Rating System (HERS).

**[BSC-CG]** When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition, the special inspector shall have a certification from a recognized state, national or international association, as determined by the local agency. The area of certification shall be closely related to the primary job function, as determined by the local agency.

**Note:** Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.

## 703 VERIFICATIONS

**703.1 DOCUMENTATION.** Documentation used to show compliance with this code shall include but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified applicable checklist.

**DISCLAIMER:** *THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.*

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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Goverment Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**CAL GREEN CHECKLIST**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. These approved plans shall be made available when inspections are requested.
All changes must be approved.

STAMP:

LICENSED ARCHITECT C-32912 SHANA MARIE REISS REN. 09-30-25 STATE OF CALIFORNIA

DATE:

April 4, 2024

REVISIONS:

JOB NUMBER:

2308

SHEET:

T3.3

Date: January 22, 2025 Time: 2:09:37 PM File name: Arroyo Grande Library_CD Title Site.vwx

## Statement Of Required Special Inspections

The Statement Of Required Special Inspections *imprinted on the plan sheet shall be unique to the specific project identifying only the inspections as required*.

Project Address: 800 W. BRANCH ST. ARROYO GRANDE, CA 93420  Permit No.: CALT2024-00055

Notation Used in Table:

Column headers:

- C — Indicates continuous inspection is required.
- P — Indicates periodic inspections are required. The notes and or contract documents should clarify.
- Notes — Applicable standards as referenced from the California Building Code

Box entries:

- X — Is placed in the appropriate column to denote either "C" continuous or "P" periodic inspections.
- --- — Denotes an activity that is either a one-time activity or one whose frequency is defined in some other manner.
- ☐ — Selection box of required special inspections identified with an X by design professional.

Additional detail regarding inspections and tests are provided in the project specification or notes on the drawings.

| Verification and Inspection | C | P | Notes |
|---|---|---|---|
| ☒ **1704.2.5 –** Inspect fabricator's fabrication and quality control procedures. | | | |
| ☒ **1704.2.5.1 –** Certificate of Compliance from Approved Fabricator | | | |





| ☐ Table 1705.2 – Structural Steel (AISC 360 and AISC 341) | | | |
|---|---|---|---|
| **Verification and Inspection** | **C** | **P** | **Notes** |
| ☒ 1. Fabricator and erector documents (Verify reports and certificates as listed in AISC, chapter N, paragraph N, paragraph 3.2 for compliance with construction documents.) | | | |
| ☒ 2. Material verification of structural steel. | | X | |
| ☒ 3. Verify member locations, braces, stiffeners, and application of joint details at each connection comply with construction documents. | | X | |
| ☒ 4. Structural steel welding: | | | |
| ☒ a. Inspection tasks Prior to Welding (Observe, or perform for each welded joint or member, the QA tasks listed in AISC 360, Table N5.4-1.) | | --- | |
| ☒ b. Inspection tasks During Welding (Observe, or perform for each welded joint or member, the QA tasks listed in AISC 360, Table N5.4-2.) | | --- | |
| ☒ c. Inspection tasks After Welding (Observe, or perform for each welded joint or member, the QA tasks listed in AISC 360, Table N5.4-3.) | | --- | |
| ☐ d. Nondestructive testing (NDT) of welded joints: | | | EXCEPTION: NDT of welds completed in an approved fabricator's shop. See AISC 360, N7 |





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| ☐ 1) Complete penetration groove welds 5/16" or greater in risk category III or IV. | | --- | UT on 100%, may reduce to 25% per AISC 360, N5e |
| ☐ 2) Complete penetration groove welds 5/16" or greater in risk category II. | | --- | UT on 10%, may increase to 100% per AISC 360, N5f |
| ☐ 3) Thermally cut surfaces of access holes when material t > 2". | | --- | |
| ☐ 4) Welded joints subject to fatigue when required by AISC 360, Appendix 3, Table A-3.1. | | --- | |
| ☐ 5) Fabricator's NDT reports when fabricator performs NDT. | | --- | AISC 360, N5d |
| ☐ 5. Structural steel bolting: | | | |
| ☐ a. Inspection tasks Prior to Bolting (Observe, or perform tasks for each bolted connection in accordance with QA tasks listed in AISC 360, Table N5.6-1.) | | --- | |
| ☐ b. Inspection tasks During Bolting (Observe the QA tasks listed in AISC 360, Table N5.6-2.) | | --- | |
| ☐ c. Inspection tasks After Bolting (Perform tasks for each bolted connection in accordance with QA tasks listed in AISC 360, Table N5.6-3.) | | --- | |
| ☐ 6. Inspection of steel elements of composite construction prior to concrete placement in accordance with QA tasks listed in AISC 360, Table N6.1. | | --- | |





| ☐ Table 1705.2.2 – Verification of Steel Construction Other Than Structural Steel | | | |
|---|---|---|---|
| **Verification and Inspection** | **C** | **P** | **Notes** |
| ☐ 1. Material verification of cold-formed steel deck: ☐ a. Identification markings to conform to ASTM standards specified in the approved construction documents. | | X | Applicable ASTM material standards. |
| ☐ b. Manufacturer's certified test reports. | | X | |
| ☐ 2. Inspection of welding: | | | |
| ☐ a. Cold-formed steel deck: | | | |
| ☐ 1) Floor and roof deck welds. | | X | AWS D1.3 |
| ☐ b. Reinforcing steel: | | | |
| ☐ 1) Verification of weldability of reinforcing steel other than ASTM A 706. | | X | AWS D1.4, ACI 318: Section 3.5.2 |
| ☐ 2) Reinforcing steel resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special structural walls of concrete and shear reinforcement. | X | | AWS D1.4, ACI 318: Section 3.5.2 |
| ☐ 3) Shear reinforcement. | X | | AWS D1.4, ACI 318: Section 3.5.2 |
| ☐ 4) Other reinforcing steel. | | X | AWS D1.4, ACI 318: Section 3.5.2 |





| ☐ Table 1705.3 - Concrete | | | |
|---|---|---|---|
| **Verification and Inspection** | **C** | **P** | **Notes** |
| ☐ 1. Inspection of reinforcing steel, including prestressing tendons and placement. | | X | ACI 318: 3.5 |
| ☐ 2. Inspection of reinforcing steel welding in accordance with Table 1705.2.2 Item 2b. | | | AWS D1.4, ACI 318: Section 3.5.2 |
| ☐ 3. Inspection of anchors cast in concrete where allowable loads have been increased or where strength design is used. | | X | ACI 318: 8.1.3, 21.1.8; |
| ☒ 4. Inspection of anchors post-installed in hardened concrete members. | | X | ACI 318: 3.8.6, 8.1.3, 21.1.8; CBC 1901.3 |
| ☐ 5. Verifying use of required design mix. | | X | ACI 318: Ch. 4,5.2-5.4; CBC 1903 |
| ☐ 6. At time fresh concrete is sampled to fabricate specimens for strength tests, perform slump and air content tests and determine the temperature of the concrete. | X | | ASTM C 172; ASTM C 31; ACI 318: 5.6; CBC 1903 |
| ☐ 7. Inspection of concrete and shotcrete placement for proper application techniques. | X | | ACI 318: 5.9, 5.10; CBC 1908 |
| ☐ 8. Inspection for maintenance of specified curing temperature and techniques. | | X | ACI 318: 5.11-5.13; CBC 1903 |
| ☐ 9. Inspection of prestressed concrete. | | | |
| ☐ a. Application of prestressing forces. | X | | ACI 318: 18.20 |





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| ☐ b. Grouting of bonded prestressing tendons in the seismic force-resisting system. | X | | ACI 318: 18.18 |
| ☐ 10. Erection of precast concrete members. | | X | ACI 318: Ch. 16 |
| ☐ 11. Verification of in-situ concrete strength, prior to stressing of tendons in postensioned concrete and prior to removal of shores and forms from beams and structural slabs. | | X | ACI 318: 6.2 |
| ☐ 12. Inspect formwork for shape, location, and dimensions of the concrete member being formed. | | X | ACI 318: 6.1 |

| ☐ Table 1705.4 – Level B Masonry Inspections (TMS 402/ACI 530/ASCE 5 and TMS 602/ACI 530.1/ASCE 6) | | | |
|---|---|---|---|
| **Verification and Inspection** | **C** | **P** | **Notes** |
| ☒ 1. Verify compliance with the approved submittals. | | X | TMS 602; Art.1.5 |
| ☒ 2. Verification of *f*'m and *f*'AAC prior to construction except where specifically exempted by the code. | | X | TMS 602; Art 1.4B |
| ☒ 3. Verification of slump flow and VSI as delivered to the site for self-consolidating grout. | X | | TMS 602; Art.1.5B.1.b.3 |
| ☒ 4. As masonry construction begins, the following shall be verified to ensure compliance: | | | |
| ☒ a. Proportions of site-prepared mortar. | | X | TMS 602; Art.2.6A |





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| ☒ b. Construction of mortar joints. | | X | TMS 602; Art.3.3B |
| ☒ c. Location of reinforcement, connectors, prestressing tendons, and anchorages. | | X | TMS 602; Art.3.4, 3.6A |
| ☐ d. Prestressing technique. | | X | TMS 602; Art.3.6B |
| ☐ e. Grade and size of prestressing tendons and anchorages. | | X | TMS 602; Art.2.4B, 2.4H |
| ☒ 5. During construction verify: | | | |
| ☒ a. Compliance with required inspection provisions of the construction documents and the approved submittals. | | --- | |
| ☒ b. Size and location of structural elements. | | X | TMS 602; Art.3.3F |
| ☒ c. Type, size, and location of anchors, including other details of anchorage of masonry to structural members, frames, etc. | | X | TMS 402;1.16.4.3, 1.17.1 |
| ☐ d. Welding of reinforcing bars. | X | | TMS 402; Sec. 2.1.7.7.2, 3.3.3.4(c); 8.3.3.4(b) |
| ☒ e. Protection of masonry during cold weather (temperature below 40 degrees F) or hot weather (temperature above 90 degrees F) | | X | CBC 2105; TMS 602; Art. 1.8C, 1.8D |
| ☐ f. Application and measurement of prestressing force. | | X | TMS 602; Art. 3.6B |
| ☒ 6. Prior to grouting verify the following: | | | |
| ☒ a. Grout space is clean. | | X | TMS 602; Art. 3.2B |





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| ☒ b. Specified size, grade, and type of reinforcement. | | X | TMS 602; Art.2.4, 3.4 |
| ☒ c. Placement of reinforcement and connectors and prestressing tendons and anchorages. | | X | TMS 402; Sec. 1.16; TMS 602; Art. 3.4 |
| ☒ d. Proportions of site-prepared grout and prestressing grout for bonded tendons. | | X | TMS 602; Art. 2.6B |
| ☒ e. Construction of mortar joints. | | X | TMS 602; Art. 3.3B |
| ☒ 7. Verify grout placement to ensure compliance with code and construction document provisions. | X | | TMS 602; Art. 3.5 |
| ☐ a. Observe grouting of prestressing bonded tendons. | X | | TMS 602; Art. 3.6C |
| ☒ 8. Observe preparation of required grout specimens, mortar specimens, and/or prisms. | X | | CBC 2105; TMS 602; Art. 1.4 |
| ☒ 9. Additional levels of masonry inspection are required as otherwise noted on the plans. | | --- | |

| ☐ Table 1705.5 – Required Verification and Inspection for Wood Construction | | | |
|---|---|---|---|
| **Verification and Inspection** | **C** | **P** | **Notes** |
| ☐ 1. Inspect prefabricated wood structural elements and assemblies in accordance with Section 1704.2.5. | | --- | |
| ☐ 2. Inspect site-built assemblies. | | | |
| ☐ a. Inspect high-load diaphragms: | | --- | CBC 1705.5.1 |





| | | | |
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| ☐ 1) Verify grade and thickness of structural panel sheathing. | | | |
| ☐ 2) Verify nominal size of framing members at adjoining panel edges. Verify nail or staple diameter and length, number of fastener lines, and spacing between fasteners in each line and at edge margins. | | | |
| ☐ b. Metal-plate-connected wood trusses spanning 60 feet or greater: | | --- | CBC 1705.5.2 |
| ☐ 1) Verify that the temporary installation restraint bracing and the permanent individual truss members restraint bracing are installed in accordance with the approved truss submittal package. | | | |

| ☐ Table 1705.6 – Required Verification and Inspection of Soils | | | |
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| **Verification and Inspection** | **C** | **P** | **Notes** |
| ☐ 1. Verify materials below shallow foundations are adequate to achieve the desired bearing capacity. | | X | |
| ☐ 2. Verify excavations are extended to proper depth and have reached proper material. | | X | |
| ☐ 3. Perform classification and testing of compacted fill materials. | | X | |





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| ☐ 4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill. | X | | |
| ☐ 5. Prior to placement of compacted fill, observe subgrade and verify that site has been prepared properly. | | X | |

| ☐ Table 1705.7 – Required Verification and Inspection for Driven Deep Foundation Elements | | | |
|---|---|---|---|
| **Verification and Inspection** | **C** | **P** | **Notes** |
| ☐ 1. Verify element materials, sizes and lengths comply with the requirements. | X | | |
| ☐ 2. Determine capacities of test elements and conduct additional load tests, as required. | X | | |
| ☐ 3. Observe driving operations and maintain complete and accurate records for each element. | X | | |
| ☐ 4. Verify placement locations and plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and document any damage to foundation element. | X | | |
| ☐ 5. For steel elements, perform additional inspections in accordance with CBC Section 1705.2. | | --- | |





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| ☐ 6. For concrete elements and concrete-filled elements, perform additional inspections in accordance with CBC Section 1705.3. | | --- | |
| ☐ 7. For specialty elements, perform additional inspections as determined by the registered design professional in responsible charge. | X | | |

| ☐ Table 1705.8 – Required Verification and Inspection for Cast-In-Place Deep Foundation Elements | | | |
|---|---|---|---|
| **Verification and Inspection** | **C** | **P** | **Notes** |
| ☐ 1. Observe drilling operations and maintain complete and accurate records for each element. | X | | |
| ☐ 2. Verify locations of piers and their plumbness, confirm element diameters, bell diameters (if applicable), lengths, embedment into bedrock (if applicable) and adequate end-bearing strata capacity. Record concrete or grout volumes. | X | | |
| ☐ 3. For concrete elements, perform additional inspections in accordance with CBC Section 1705.3. | | | |





| ☐ 1705.9 – Required Verification and Inspection for Helical Pile Foundation | | | |
|---|---|---|---|
| **Verification and Inspection** | **C** | **P** | **Notes** |
| ☐ 1. Record installation equipment used, pile dimensions, tip elevations, final depth, final installation torque, and other pertinent data. | X | | |

| ☐ 1705.12 – Required Verification and Inspection for Seismic Resistance | | | |
|---|---|---|---|
| **Verification and Inspection** | **C** | **P** | **Notes** |
| ☐ 1. Structural Steel Special Inspections for Seismic Resistance: | | | CBC 1705.12.1 |
| ☐ a. Inspection of structural steel in accordance with AISC 341. | | --- | AISC 341 |
| ☐ 2. Structural Wood Special Inspection for Seismic Resistance: | | | CBC 1705.12.2 |
| ☐ a. Inspection of field gluing operations of elements of the seismic-force resisting system. | X | | CBC 1705.12.2. Number 1 |
| ☒ b. Inspection of nailing, bolting, anchoring and other fastening of components within the seismic-force resisting system, including wood shear walls, panels, diaphragms, collectors, and hold-downs.* | | X | CBC1705.12.2 Number 2<br>Structural Observation is the preference due to the limitations of certifications available.<br>* Not required where fastener spacing of sheathing is more than 4" on center. |
| ☐ 3. Cold-formed Steel Light-Frame Construction Special Inspections for Seismic Resistance: | | | CBC 1705.12.3 |





| | | | |
|---|---|---|---|
| ☐ a. Inspection during welding operations of elements of the seismic-force resisting system. | | X | |
| ☐ b. Inspections for screw attachment, bolting, anchoring and other fastening of components within the seismic-force resisting system, including shear walls, diaphragms*, collectors, and hold-downs. | | X | CBC1705.12.3 Number 2<br>Structural Observation is the preference due to the limitations of certifications available.<br>* Not required where fastener spacing of sheathing is more than 4" on center. |
| ☐ 4. Designated Seismic Systems Verification: | | | |
| ☐ a. Inspect and verify that the component label, anchorage or mounting conforms to the certificate of compliance in accordance with Section 1705.12.3. | | X | |
| ☐ 5. Architectural Components Special Inspections For Seismic Resistance: | | | CBC 1705.12.5 |
| ☐ a. Inspection during the erection and fastening of exterior cladding and interior and exterior veneer. | | X | |
| ☐ b. Inspection during the erection and fastening of interior and exterior nonbearing walls. | | X | |
| ☐ c. Inspection during anchorage of access floors. | | X | |
| ☐ 6. Mechanical and Electrical Components Special Inspections for Seismic Resistance: | | | CBC 1705.12.6 |





| | | | |
|---|---|---|---|
| ☐ a. Inspection during the anchorage of electrical equipment for emergency or standby power systems. | | X | |
| ☐ b. Inspection during the anchorage of other electrical equipment. | | X | |
| ☐ c. Inspection during installation and anchorage of piping systems designed to carry hazardous materials, and their associated mechanical units. | | X | |
| ☐ d. Inspection during the installation and anchorage of HVAC ductwork that will contain hazardous materials. | | X | |
| ☐ e. Inspection during the installation and anchorage of vibration isolation systems. | | X | |
| ☐ 7. Storage Racks Special Inspections for Seismic Resistance: | | | CBC 1705.12.7 |
| ☐ a. Inspection during the anchorage of storage racks 8 feet or greater in height. | | X | |
| ☐ 8. Seismic Isolation Systems: | | | CBC 1705.12.8 |
| ☐ a. Inspection during the fabrication and installation of isolator units and energy dissipation devices used as part of the seismic isolation system. | | X | |





| ☐ 1705.12 – Testing and Qualification for Seismic Resistance | | | |
|---|---|---|---|
| **Verification and Inspection** | **C** | **P** | **Notes** |
| ☐ 1. Concrete Reinforcement Testing and Qualification for Seismic Resistance: | | | CBC 1705.12.1 |
| ☐ a. Review certified mill test reports for each shipment of reinforcement used to resist earthquake-induced flexural and axial forces in reinforced concrete special moment frames, special structural walls, and coupling beams connecting special structural walls. | | --- | |
| ☐ b. Verify reinforcement weldability of ASTM A615 reinforcement used to resist earthquake-induced flexural and axial forces in reinforced concrete special moment frames, special structural walls, and coupling beams connecting special structural walls. | | --- | |
| ☐ 2. Structural Steel Testing and Qualification for Seismic Resistance: | | | CBC 1705.12.1.2 |
| ☐ a. Test in accordance with the quality assurance requirements of AISC 341. | | --- | AISC 341 |
| ☐ 3. Seismic Certification of Nonstructural Components: | | | CBC 1705.13.2 |
| ☐ a. Review certificate of compliance for designated seismic system components. | | --- | |





| | | | |
|---|---|---|---|
| ☐ 4. Seismic Isolation Systems: | | | CBC 1705.13.4 |
| ☐ a. Test seismic isolation system in accordance with ASCE 7 Section 17.8. | | --- | ASCE 7 Section 17.8 |

| ☐ 1705.13 – Required Verification and Inspection for Sprayed Fire-Resistant Materials | | | |
|---|---|---|---|
| **Verification and Inspection** | **C** | **P** | **Notes** |
| ☐ 1. Verify surface condition preparation of structural members. | | X | |
| ☐ 2. Verify application of sprayed fire-resistant members. | | X | |
| ☐ 3. Verify average thickness of sprayed fire-resistant materials applied to structural members. | | X | |
| ☐ 4. Verify density of the sprayed fire-resistant material complies with approved fire-resistant material. | | --- | CBC 1705.14 Number 3 |
| ☐ 5. Verify the cohesive/adhesive bond strength of the cured sprayed fire-resistant material. | | --- | CBC 1705.14 Number 4 |

| ☐ 1705.15 – Required Verification and Inspection for Mastic and Intumescent Fire-Resistant Coatings | | | |
|---|---|---|---|
| **Verification and Inspection** | **C** | **P** | **Notes** |
| ☐ 1. Inspect mastic and intumescent fire-resistant coatings applied to structural elements and decks. | | X | |





| ☐ 1705.16 – Required Verification and Inspection for Exterior Insulation and Finish Systems (EIFS) | | | |
|---|---|---|---|
| **Verification and Inspection** | **C** | **P** | **Notes** |
| ☐ 1. Verify materials, details and installations are per the approved construction documents. | | X | |
| ☐ 2. Inspection of water-resistive barrier over sheathing substrate. | | X | |

| ☐ 1705.17 – Required Verification and Field Testing for Fire-Resistant Penetrations and Joints | | | |
|---|---|---|---|
| **Verification and Inspection** | **C** | **P** | **Notes** |
| ☐ 1. Inspect penetration firestop systems. | | --- | ASTM E2174 |
| ☐ 2. Inspect fire-resistant joint systems. | | --- | ASTM E2393 |

| ☐ 1705.18 – Required Verification and Field Testing for Smoke Control Systems | | | |
|---|---|---|---|
| **Verification and Inspection** | **C** | **P** | **Notes** |
| ☐ 1. Leakage testing and recording of device locations prior to concealment. | | X | |
| ☐ 2. Prior to occupancy and after sufficient completion, pressure difference testing, flow measurements, and detection and control. | | X | |





| ☐ Designer Specified Verification, Inspection or Field Testing | | | |
|---|---|---|---|
| **Verification and Inspection** | **C** | **P** | **Notes** |
| ☐ **Other –** Designer Specified: | | --- | |



****Also refer to structural sheet, S-1.3, Special Inspections.**

REISS DESIGN STUDIO, PC
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PROJECT:
Renovation & Addition

**Arroyo Grande Library**
APN: 007-011-050
800 W. Branch Street
Arroyo Grande, CA 93420

CLIENT:
County of San Luis Obispo
Department of Public Works
County Goverment Center, Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:
**REQUIRED SPECIAL INSPECTIONS**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. These approved plans shall be made available when inspections are requested.
All changes must be approved.

STAMP:
LICENSED ARCHITECT C-32912 SHANA MARIE REISS REN. 09-30-25 STATE OF CALIFORNIA

DATE:
April 4, 2024

REVISIONS:
1 Plan Check 1
County of SLO, 10/28/2024

JOB NUMBER:
2308

SHEET:
T4.1 (1)

Date: January 22, 2025 Time: 2:09:38 PM File name: Arroyo Grande Library_CD Tite Site.vwx

# SIGNS

**CBC Division 7, Section 11B-703)**

1. GENERAL- New or altered signs shall be provided in accordance with CBC Sections 11B-216 & 11B-703. Where both visual and tactile characters are required, either one sign with both visual and tactile characters, or two separate signs, one with visual, and one with tactile characters, shall be provided.
2. EXCEPTIONS - The following are not required to comply:
   • Building directories, menus, seat & row designations in assembly areas, occupancy names, building addresses, company names and logos.
3. VISUAL CHARACTERS - Visual characters shall comply with CBC Seciton 11B-703.5
   • FINISH and CONTRAST- Characters and their background shall have a non-glare finish. Characters shall contrast with their background with either light characters on a dark background or dark characters on a light background.
   • CASE- Characters shall be uppercase or lowercase or a combination of both.
   • STYLE- Characters shall be conventional in form. Characters shall not be italic, oblique, script, or highly decorative, or of other unusual form.
   • CHARACTER PROPORTIONS- Characters shall be selected from fonts where the width of the uppercase letter "O" is 60%-110% of the height of the uppercase letter "I".
   • CHARACTER HEIGHT- Minimum character height shall comply with Table 11B-703.5.5. Viewing distance shall be measured as the horizontal distance between the character and an obstruction preventing further approach towards the sign. Character height shall be based on the uppercase letter "I".
   • HEIGHT FROM FINISH FLOOR or GROUND- Visual characters shall be 40" minimum above finish floor or ground.
   • STROKE THICKNESS- Stroke thickness of the uppercase letter "I" shall be 10%-20% of height of character.
   • CHARACTER SPACING- Character spacing shall be measured between the two closest points of adjacent characters, excluding word spaces. Space between individual characters shall be 10%-35% of character height.
   • LINE SPACING- Spacing between baselines of separate lines of characters within a message shall be 135%-170% of the character height.

**TABLE 11B-703.5.5 -VISUAL CHARACTER HEIGHT**

| HEIGHT TO BASELINE OF CHARACTER | HORIZONTAL VIEWING DISTANCE | MINIMUM CHARACTER HEIGHT |
|---|---|---|
| 40"</=70" | <72" | 5/8" |
| | =/>72" | 5/8", plus 1/8" per foot of viewing distance above 72" |
| >70"</=120" | <180" | 2" |
| | =/>180" | 2", plus 1/8" per foot of viewing distance above 180" |
| >120" | <21' | 3" |
| | =/>21' | 3", plus 1/8" per foot of viewing distance above 21' |

4. RAISED CHARACTERS- Raised characters shall comply with Section 11B-703.2. Raised characters shall be duplicated in Braille
   • DEPTH- Raised characters shall be 1/32" min. above thier background
   • CASE- Characters shall be uppercase
   • STYLE- Characters shall be sans serif. Characters shall not be italic, oblique, script, highly decorative, or other unusual form.
   • CHARACTER PROPORTIONS- Characters shall be selected from fonts where the width of the uppercase letter "O" is 60% min. and 110% max. of the height of the uppercase letter "I".
   • CHARACTER HEIGHT- Character height measured vertically from the baseline of the character shall be 5/8"-2" based on the height of the uppercase letter "I".

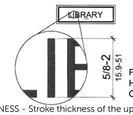



FIGURE 11B-703.2.5
HEIGHT OF RAISED CHARACTERS

   • STROKE THICKNESS - Stroke thickness of the uppercase letter "I" shall be 15% maximum of the height of character.
   • CHARACTER SPACING- Character spacing shall be measured between the two closest points of adjacent raised characters within a message, excluding word spaces. Where characters have rectangular cross sections, spacing between individual raised characters shall be 1/8" minimum and 4x the raised character stroke width maximum. Where characters have other cross sections, spacing between individual raised characters shall be 1/16" minimum and 4x the raised character stroke width maximum at the top of the cross sections. Characters shall be separated from raised borders and decorative elements 3/8" minimum.
   • LINE SPACING - Spacing between the baselines of separate lines of raised characters within a message shall be 135%-170% of the raised character height.
   • POSITION- Text shall be in horizontal format
5. BRAILLE - Braille shall be contracted (Grade 2) and shall comply with CBC Sections 11B-703.3 and 11B703.4
   •Braille dots shall have a domed or rounded shape and shall comply with Table 11B-703.3.1. The indication of an upper case letter or letters shall only be used before the first word of sentences, proper nouns and names, individual letters of the alphabet, initials, and acronyms.
   • Braille shall be positioned below the corresponding text in a horiztonal format, flush left or centered. If the text is multi-lined, Braille shall be placed below the entire text.
   • Braille shall be separated 3/8" -1/2" from any other tactile characters and 3/8" minimum from raised borders and other decorative elements.
   • Tactile characters on signs shall be located 48" minimum above the finish floor or ground surface, measured from the baseline of the lowest Braille cells and 60" maximum above the finish floor or ground surface, measured from the baseline of the highest line of raised characters.
   • Where a tactile sign is provided at the door, the sign shall be located alongside the door at the latch side. Where a tactile sign is provided at double doors with one active leaf, the sign shall be located on the inactive leaf. Where a tactile sign is provided at double doors with two active leafs, the sign shall be located to the right hand door. Where there is no wall space at the latch side of a asingl door or at the right side of double doors, signs shall be located on the nearest adjacent wall.
   • Signs containing tactile characters shall be located so that a clear floor space of 18"x18" minimum, centered on the tactile characters is provided beyond the arc of any door swing between the closed position & 45° open position.
   • Where permanent identification signage is provided for rooms and spaces they shall be located on the approach side of the door as one enters the room or space.
   • Signs that identify exits shall be located on the approach side of the door as one exits the room or space.

**TABLE 11B-703.3.1 -BRAILLE DIMENSIONS**

| MEASUREMENT RANGE | IN INCHES |
|---|---|
| **Dot base diameter** | **0.059-0.063** |
| Distance between two dots in the same cell | 0.100 |
| Distance between corresponding dots in adjacent cells | 0.300 |
| Dot height | 0.025-0.037 |
| Distance between corresponding dots from on cell directly below | 0.395-0.400 |

1. Measured center to center

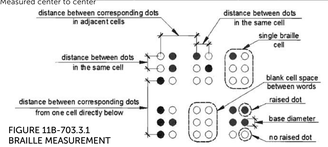



FIGURE 11B-703.3.1
BRAILLE MEASUREMENT

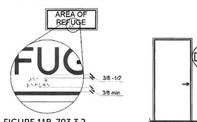



FIGURE 11B-703.3.2
POSITION OF BRAILLE

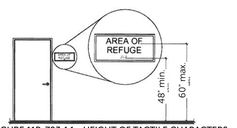



FIGURE 11B-703.4.1 - HEIGHT OF TACTILE CHARACTERS

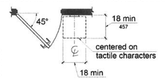
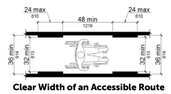


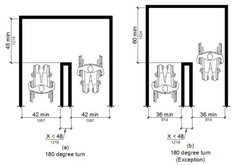

FIGURE 11B-703.4.2
LOCATION OF TACTILE SIGNS AT DOORS

## 44 SIGNS

Scale: NTS




**Clear Width of an Accessible Route**
*Figure 11B-403.5.1*



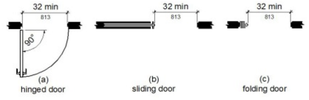

**Clear Width at Turn**
*Figure 11B-403.5.2*

**11B - 403.2 Floor or ground surface**. Floor or ground surfaces shall comply with Section 11B-302.
**11B - 403.3 Slope**. The running slope of walking surfaces shall not be steeper than 1:20. The cross slope of walking surfaces shall not be steeper than 1:48.

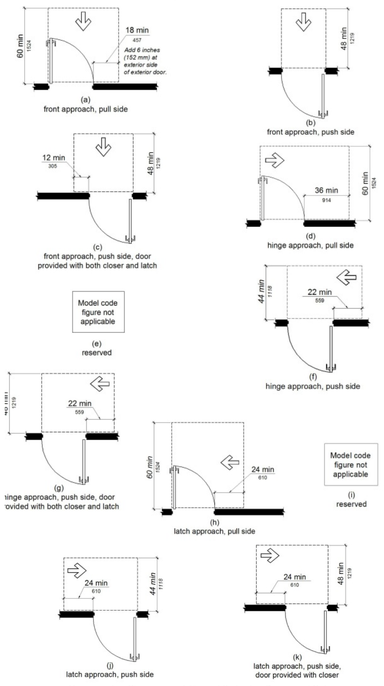
*For additional information, refer to CBC 11B-403*

## 31 ACCESSIBLE ROUTES & WALKING SURFACES

Scale: NTS




**Clear Width of Doorways**
*Figure 11B-404.2.3*




**Maneuvering Clearances at Manual Swinging Doors and Gates**
*Figure 11B-404.2.4.1*

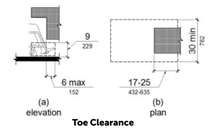
**11B-404.2.3 Clear width.** Door openings shall provide a clear width of 32 inches (813 mm) minimum. Clear openings of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees. Openings more than 24 inches (610 mm) deep shall provide a clear opening of 36 inches (914 mm) minimum. There shall be no projections into the required clear opening width lower than 34 inches (864 mm) above the finish floor or ground. Projections into the clear opening width between 34 inches (864 mm) and 80 inches (2032 mm) above the finish floor or ground shall not exceed 4 inches (102 mm).
**11B-404.2.4.4 Floor or ground surface.** Floor or ground surfaces within required maneuvering clearances shall comply with Section 11B-302. Changes in level, slopes exceeding 1:48, and detectable warnings shall not be permitted.
**11B-404.2.5. Thresholds.** Thresholds, if provided at doorways, shall be 1/2 inch (12.7 mm) high maximum. Raised thresholds and changes in level at doorways shall comply with Sections 11B-302 and 11b-303.
**11B-404.2.7. Door and Gate Hardware.** Handles, pulls, latches, locas, and other operable parts of doors and gates shall comply with Section 11B-309.4. Operable parts of such hardware shall be 34 inches minimum and 44 inches maximum above the finish floor or ground. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides.
**11B-404.2.8.1 Door closers and gate closers.** Door closers and gate closers shall be adjusted so that from an open position of 90 degrees, the time required to move the door to a position of 12 degrees from the latch is 5 seconds minimum.
**11B-404.2.9 Door and gate opening force.** The force for pushing or pulling open a door or gate shall be as follows:

1. Interior hinged doors and gates: 5 pounds (22.2N) maximum.
2. Sliding or folding doors: 5 pounds (22.2N) maximum.
3. Required fire doors: the minimum opening force allowable by the appropriate administrative authority, not to exceed 15 pounds (66.7N).
4. Exterior hinged doors: 5 pounds (22.2N) maximum.

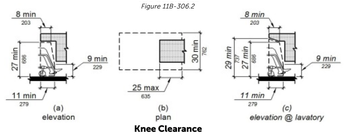
*For additional information, refer to CBC 11B-404*

## 34 DOOR CLEARANCES & REQUIREMENTS

Scale: NTS




**Toe Clearance**
*Figure 11B-306.2*



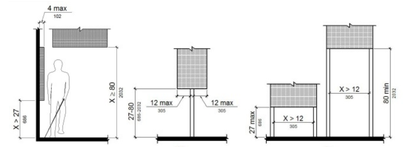

**Knee Clearance**
*Figure 11B-306.3*

**11B - 306.2.1 General**. Space under an element between the finish floor or ground and 9 inches (229 mm) above the finish floor or ground shall be considered toe clearance and comply with Section 11B-306.2
**11B - 306.3.1 General**. Space under an element between 9 inches (229 mm) and 27 inches (686 mm) above the finish floor or ground shall be considered knee clearance and shall comply with Section 11B-306.3.

*For additional information, refer to CBC 11B-306*

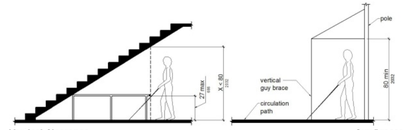
## 21 KNEE & TOE CLEARANCE

Scale: NTS




**Limits of Protruding Objects**
*Figure 11B-307.2*

**Post-Mounted Protruding Objects**
*Figure 11B-307.5*



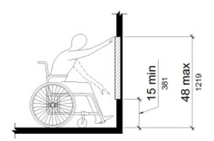

**Vertical Clearance**
*Figure 11B-307.4*

**Guy Braces**
*Figure 11B-307.4.1*

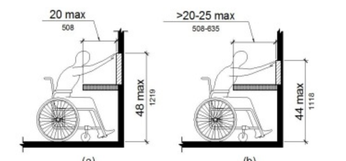
*For additional information, refer to CBC 11B-307.*

## 22 PROTRUDING OBJECTS

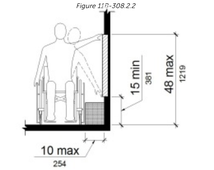
Scale: NTS



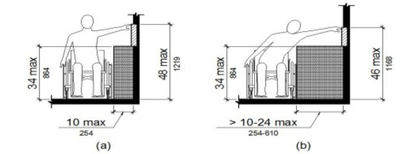

**Unobstructed Forward Reach**
*Figure 11B-308.2.1*




**Obstructed High Forward Reach**
*Figure 11B-308.2.2*




**Unobstructed Side Reach**
*Figure 11B-308.3.1*

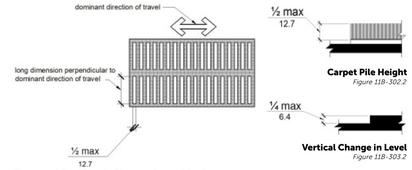



**Obstructed High Side Reach**
*Figure 11B-308.3.2*

*For additional information, refer to CBC 11B-308.*

## 24 REACH RANGES

Scale: NTS

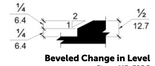



**Elongated Openings in Floor or Ground Surfaces**
*Figure 11B-302.3*

**Carpet Pile Height**
*Figure 11B-302.2*




**Vertical Change in Level**
*Figure 11B-303.2*

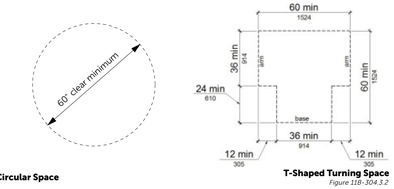



**Beveled Change in Level**
*Figure 11B-303.3*

**11B - 302.1 General**. Floor and ground surfaces shall be stable, firm, and slip resistant and shall comply with Section 11B-302
**11B - 303.4 Ramps**. Changes in level greater than 1/2 inch (12.7 mm) high shall be ramped, and shall comply with Section 11B-405 or 11B-406.

*For additional information, refer to CBC 11B-302 & 11B-303.*

## 11 FLOOR / GROUND SURFACES & VERTICAL LEVEL CHANGES




**Circular Space**

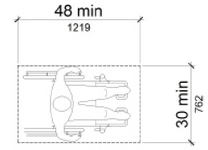
**T-Shaped Turning Space**
*Figure 11B-304.3.2*

**11B - 304.2 Floor or ground surfaces**. Floor or ground surfaces of a turning space shall comply with Section 11B-302. Changes in level, slopes exceeding 1:48, and detectable warnings shall not be permitted.
**11B - 304.3 Circular space**. The turning space shall be a space of 60 inches (1524 mm) diameter minimum. The space shall be permitted to include knee and toe clearance complying with Section 11B-306.
**11B - 304.3.2 T-Shaped space**. The turning space shall be a T-shaped space within 60 inch (1524 mm) square minimum with arms and base 36 inches (914 mm) wide minimum. Each arm of the T shall be clear of obstructions 12 inches (305 mm) minimum in each direction and the base shall be clear of obstructions 24 inches (610 mm) minimum. The space shall be permitted to include knee and toe clearance complying with Sections 11B-306 only at the end of either the base or one arm.

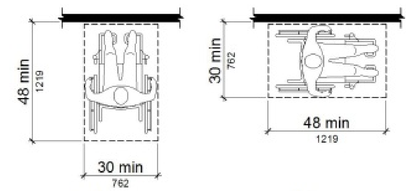
*For additional information, refer to CBC 11B-304.*

## 12 TURNING SPACE

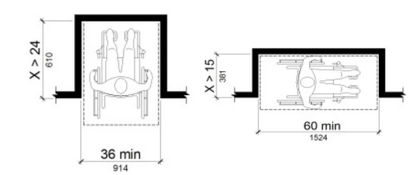
Scale: NTS




**Clear Floor or Ground Space**
*Figure 11B-305.3*




**Position of Clear Floor or Ground Space**
*Figure 11B-305.5*




**Maneuvering Clearance in an Alcove, Forward Approach**
*Figure 11B-305.7.1*

**Maneuvering Clearance in an Alcove, Parallel Approach**
*Figure 11B-305.7.2*

**11B - 305.2 Floor or ground surfaces**. Floor or ground surfaces of a clear floor or ground space shall comply with Section 11B-302. Changes in level, slopes exceeding 1:48, and detectable warnings shall not be permitted.
**11B - 305.4 Knee and toe clearance**. Unless otherwise specified,clear floor or ground space shall be permitted to include knee and toe clearance complying with Section 11B-306.

*For additional information, refer to CBC 11B-305.*

## 14 WHEELCHAIR MANEUVERING CLEARANCES

Scale: NTS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County of San Luis Obispo
Department of Public Works
County Goverment Center, Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

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April 4, 2024

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JOB NUMBER:

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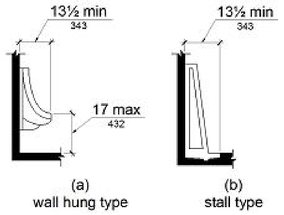
Date: January 22, 2025 Time: 2:10:20 PM File name: Arroyo Grande Library_CD Title Sht.vwx




**Height and Depth of Urinals**
*Figure 11B-605.2*

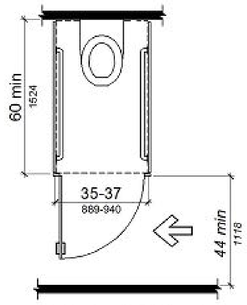
**11B - 605.3 Clear floor space.** A clear floor or ground space complying with Section 11B-305 positioned for forward approach shall be provided.

**11B - 605.4 Flush controls.** Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with Section 11B-309 except that the flush control shall be mounted at a maximum height of 44 inches (1118 mm) above the finish floor.

*For additional information, refer to CBC 11B-605.*

## 41 URINAL REQUIREMENTS

**Scale: NTS**

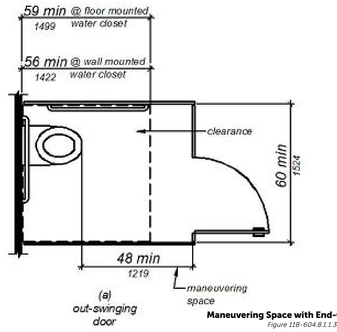



**Ambulatory Accessible Toilet Compartment**
*Figure 11B-604.8.2*

*For additional information, refer to CBC 11B-604.*

## 42 AMBULATORY ACCESSIBLE TOILET COMPART.

**Scale: NTS**

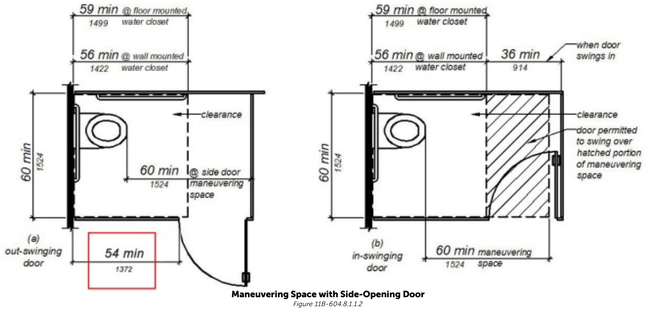



**Maneuvering Space with End-Opening Door**
*Figure 11B-604.8.1.3*

*For additional information, refer to CBC 11B-604.*

## 43 WATER CLOSET MANEUVERING SPACE W/ END OPENING DOOR

**Scale: NTS**

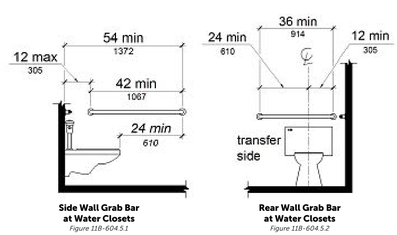



**Maneuvering Space with Side-Opening Door**
*Figure 11B-604.8.1.1.2*

*For additional information, refer to CBC 11B-604.*

## 44 WATER CLOSET MANEUVERING SPACE W/ SIDE OPENING DOOR

**Scale: NTS**




**Side Wall Grab Bar at Water Closets**
*Figure 11B-604.5.1*

**Rear Wall Grab Bar at Water Closets**
*Figure 11B-604.5.2*

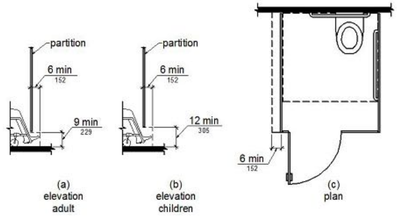
**11B - 604.5.1 Side wall.** The side wall grab bar shall be 42 inches (1067 mm) long minimum, located 12 inches (305 mm) maximum from the rear wall and extending 54 inches (1372 mm) minimum from the rear wall with the front end positioned 24 inches (610 mm) minimum in front of the water closet.

**11B - 604.5.2 Rear Wall.** The rear wall grab bar shall be 36 inches (914 mm) long minimum and extend from the centerline of the water closet 12 inches (305 mm) minimum on one side and 24 inches (610 mm) minimum on the other side.

*For additional information, refer to CBC 11B-604.*

## 31 WATER CLOSET GRAB BARS

**Scale: NTS**

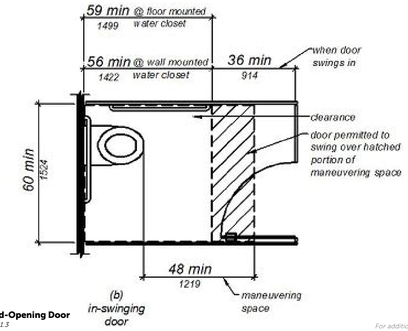



**Wheelchair Accessible Toilet Compartment Toe Clearance**
*Figure 11B-604.8.1.4*

*For additional information, refer to CBC 11B-604.*

## 32 WATER CLOSET COMPART. TOE CLEARANCE

**Scale: NTS**




**Maneuvering Space with End-Opening Door**
*Figure 11B-604.8.1.1.3*

*For additional information, refer to CBC 11B-604.*

## 43 WATER CLOSET MANEUVERING SPACE W/ END OPENING DOOR

**Scale: NTS**

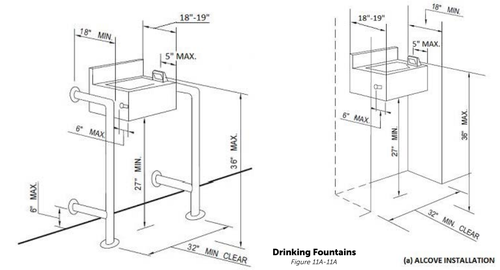



**Maneuvering Space with Side-Opening Door**
*Figure 11B-604.8.1.1.2*

*For additional information, refer to CBC 11B-604.*

## 44 WATER CLOSET MANEUVERING SPACE W/ SIDE OPENING DOOR

**Scale: NTS**




**Drinking Fountains**
*Figure 11A-11A*

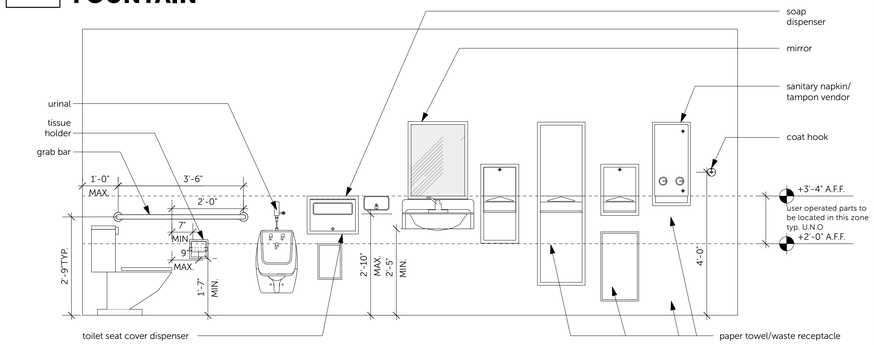
**(a) ALCOVE INSTALLATION**

**11B - 602.2 Clear floor space.** Units shall have a clear floor or ground space complying with Section 11 B-305 positioned for a forward approach and centered on the unit. Knee and toe clearance complying with Section 11 B-306 shall be provided.
**11B - 602.9 Pedestrian protection.** All drinking fountains shall either be located completely within alcoves, positioned completely between wing walls, or otherwise positioned so as not to encroach into pedestrian ways. The protected area within which a drinking fountain is located shall be 32 inches (813 mm) wide minimum and 18 inches (457 mm) deep minimum, and shall comply with Section 11B-305.7. When used, wing walls or barriers shall project horizontally at least as far as the drinking fountain and to within 6 inches (152 mm) vertically from the floor or ground surface.

*For additional information, refer to CBC 11A-11.19A.*

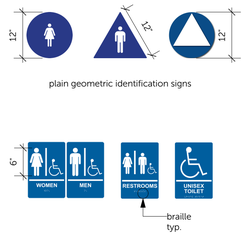
## 21 ACCESSIBLE DRINKING FOUNTAIN

**Scale: NTS**



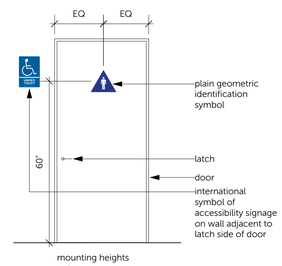

## 22 RESTROOM FIXTURES MOUNTING HEIGHTS

**Scale: NTS**




international symbol of accessibility

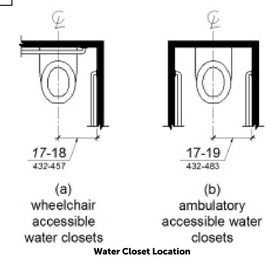
notes:
1. plain geometric identification signs shall be 1/4" thick blue acrylic plastic shape
for men
for women
for unisex
2. international symbol of accessibility sign shall have white figure and letters on a blue background. other colors may be used with building dept. approval.
3. letters and numerals shall be raised 1/32" sans-serif uppercase characters 5/8" min. to 2" max. high. proportions shall be per cc section 1127a.7.
4. mounting locations shall allow a person to approach within 3" of the signee without encountering protruding objects or standing within the swing of a door.
5. braille shall be contracted grade 2 braille.
6. attach to surface with tamper proof screws.



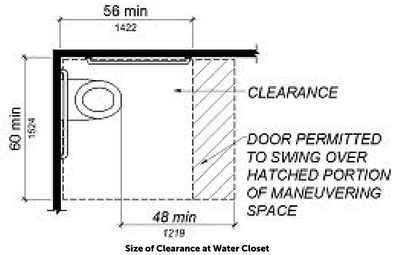

mounting heights
notes:
where there is not wall space on the latch side, signs shall be placed on the nearest adjacent wall. preferably on the right.

## 23 RESTROOM SIGNAGE

**Scale: NTS**




**Water Closet Location**
*Figure 11B-604.2*




**Size of Clearance at Water Closet**
*Figure 11B-604.3.1*

**11B - 604.3.1 Size.** Clearance around a water closet shall be 60 inches (1524 mm) minimum measured perpendicular from the side wall and 56 inches (1422 mm) minimum measured perpendicular from the rear wall. A minimum 60 inches (1524 mm) wide and 48 inches (1219 mm) deep maneuvering space shall be provided in front of the water closet.
**11B - 604.3.2 Overlap.** The required clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, dispensers, sanitary napkin disposal units, coat hooks, shelves, accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance.
**11B - 604.4 Seats.** The seat height of a water closet above the finish floor shall be 17 inches (432 mm) minimum and 19 inches (483 mm) maximum measured to the top of the seat. Seats shall not be sprung to return to a lifted position. Seats shall be 2 inches (51 mm) high maximum.

*For additional information, refer to CBC 11B-604.*

## 24 WATER CLOSET LOCATION AND CLEARANCE

**Scale: NTS**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Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Goverment Center, Room 206
San Luis Obispo, CA 93408

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CONSULTANT:

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REVIEWED FOR CODE COMPLIANCE
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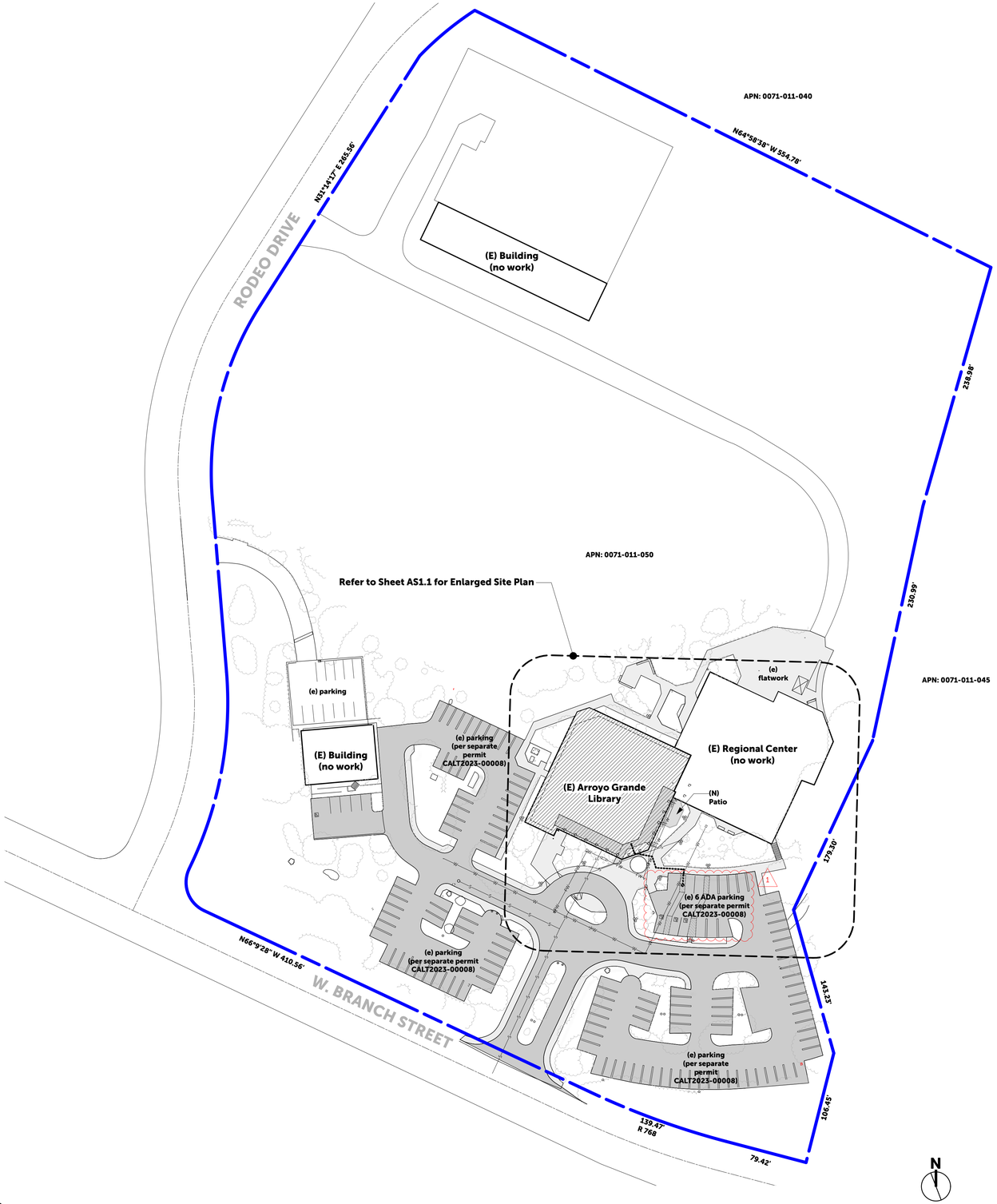


## SITE PLAN GENERAL NOTES

1. Address Identification. New and existing buildings shall have approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their backgrounds and be reflective material. Address numbers shall be Arabic numbers or alphabetic letters. Numbers shall not be spellied out. Each character shall be a minimum of 8 inches for commercial with a minimum stroke width of 1/2 inch. Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response.
2. Any portion of a fence or other structures within 5' of the building shall be constructed of non-combustible material or approved exterior fire-retardant wood or material that meets the same fire-resistive standards as the exterior walls of the building.
3. Refer to Cal Green Notes and Checklist for site related requirements.
4. Walks and sidewalks shall have a continuous common surface, not interrupted by steps or by abrupt changes in level exceeding 1/2", and shall be a minimum of 48" in width. Walk and sidewalk surface cross slopes shall note exceed 1:50 (2% slope). Walk and sidwalk surfaces shall be slip resistant.

## SITE LEGEND

- Existing Building
- Existing Building (no work)
- Existing Asphalt Parking
- Existing Concrete
- W — Water Line
- E — Electric Line
- S — Sewer Line
- GAS — Gas Line
- OH — Overhead Line
- Fire Hydrant
- Power/Utility Pole
- Pole Light
- S — Sewer Manhole

**1 OVERALL ARCHITECTURAL SITE PLAN**

**Scale: 1:660**

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**OVERALL ARCHITECTURAL SITE PLAN**

CONSULTANT:

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## SITE PLAN REFERENCE NOTES

1. (E) Building footprint
2. All (E) Landscaping to be protected in place. If work requires the removal of a portion of the landscaping and irrigation, it shall be replaced in kind.
3. (E) Asphalt parking lot and driveway, refer to permit CALT2023-00008 for parking lot upgrades (separate from this permit)
4. (E) Pavers to remain. Remove and reinstall as needed to accommodate utility line installations.
5. (E) Concrete flatwork
6. (N) Knox Box, per fire deparment jurisdiction requirements. Also see Door Schedule on A8.1 and A2.1
7. (E) Concrete site stairs
8. Accessible path of travel
9. (E) Fire hydrant, See Civil and Fire plans
10. (N) Double check detector, refer to Civil Plans
11. (N) Concrete patio/ flatwork, refer to Civil Plans
12. (E) Regional Center, no work
13. (E) Planter to remain
14. (E) PG & E Transformer
15. Extents of concrete work, see Civil plans
16. (N) 2-hour fire rated wall, refer to detail 53/A9.1

## SITE LEGEND

- Existing Building
- Existing Building (no work)
- Existing Asphalt Parking
- Existing Concrete
- W — Water Line
- E — Electric Line
- S — Sewer Line
- GAS — Gas Line
- OH — Overhead Line
- Fire Hydrant
- Power/Utility Pole
- Pole Light
- S — Sewer Manhole

N

**1 ENLARGED ARCHITECTURAL SITE PLAN**

**Scale: 1/16" = 1'-0"**


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County of SLO, 01/22/2025

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# ONSITE IMPROVEMENT PLANS

FOR

# ARROYO GRANDE LIBRARY REMODEL

## 800 W. BRANCH STREET, ARROYO GRANDE, CA

ARROYO GRANDE LIBRARY

## ABBREVIATIONS

| | | | |
|---|---|---|---|
| ± | APPROXIMATE VALUE PLUS OR MINUS | LF | LINEAL FEET |
| ( ) | EXISTING ELEVATION | MAX | MAXIMUM |
| AB | AGGREGATE BASE | MEP | MECHANICAL ELECTRICAL PLUMBING |
| AC | ASPHALT CONCRETE | MH | MANHOLE |
| BC | BEGINNING OF CURVE | MIN | MINIMUM |
| BVC | BEGINNING OF VERTICAL CURVE | (N) | NEW ITEM |
| BFE | BASE FLOOD ELEVATION | NTS | NOT TO SCALE |
| BLD | BUILDING | OH | OVERHEAD UTILITY |
| BO | BLOW-OFF ASSEMBLY | OR | OVERLAND RELEASE FOR DRAINAGE |
| BOW | BACK OF WALK | (P) | PROPOSED ITEM |
| CO | CLEANOUT | PL | PROPERTY LINE |
| ℄ | CENTERLINE | PUE | PUBLIC UTILITY EASEMENT |
| DIP | DUCTILE IRON PIPE | PVC | POLYVINYL CHLORIDE PIPE |
| DW | DOMESTIC WATER SERVICE | RCP | REINFORCED CONCRETE PIPE |
| (E) | EXISTING ITEM | ROW | RIGHT OF WAY |
| EC | END OF CURVE | R/W | RIGHT OF WAY |
| EVC | END OF VERTICAL CURVE | SD | STORM DRAIN |
| EP | EDGE OF PAVEMENT | SS | SANITARY SEWER |
| EX | EXISTING | STA | STATION |
| FF | FINISH FLOOR | STD | STANDARD |
| FG | FINISH GRADE | S/W | SIDEWALK |
| FH | FIRE HYDRANT | TC | TOP OF CURB |
| FS | FINISH SURFACE | TF | TOP OF FOOTING |
| FL | FLOW LINE | TG | TOP OF GRATE |
| FW | FIRE WATER SERVICE | TW | TOP OF WALL |
| GB | GRADE BREAK | TYP | TYPICAL |
| HP | HIGH POINT | UNO | UNLESS NOTED OTHERWISE |
| HWM | HIGH WATER MARK | VC | VERTICAL CURVE |
| INV | INVERT | VCP | VITRIFIED CLAY PIPE |
| IRR | IRRIGATION | W | WATER SERVICE |
| JT | JOINT TRENCH UTILITIES | WR | RECLAIMED WATER SERVICE |

## ANNOTATION LEGEND

- NOTE — GENERAL NOTE
- (10) — STORM DRAIN KEY NOTE/GENERAL KEY NOTE
- 10 — WATER KEY NOTE
- (10) — SANITARY SEWER KEY NOTE
- ◇10 — DRY UTILITY KEY NOTE
- ⚠10 — CAUTIONARY KEY NOTES
- 2△10 — REVISION TO PLAN OR MODIFICATION TO DETAIL
- DETAIL CALLOUT (TOP=DETAIL NO./BTTM.=SHEET NO.)
- 1 / C7.0 — SECTION CALLOUT (TOP=SECTION NO./BTTM.=SHEET NO.)
- TC 10.10 — ELEVATION GRADE CALLOUT (PROPOSED)
- (TC 10.10±) — ELEVATION GRADE CALLOUT (MATCH EXISTING)
- FF 100.10 — BUILDING FINISH FLOOR ELEVATION/PAD ELEVATION
- 2.0% — DIRECTION OF FLOW/ PERCENT SLOPE
- 18"INV.(N)10.10 — UTILITY INVERT (SIZE, DIRECTION, ELEVATION)
- 19.99' — DIMENSION

## GENERAL LEGEND

- EXISTING/PROPOSED CENTERLINE (℄)
- EXISTING PROPERTY LINE (EX. PL)
- PROPOSED PROPERTY LINE (PL)
- PROPOSED SETBACK LINE
- EXISTING/PROPOSED EASEMENT
- PROPOSED SAWCUT
- GUTTER FLOWLINE
- PROPOSED CURB AND GUTTER
- PROPOSED SLOTTED CURB
- PROPOSED RETAINING WALL. HEIGHT PER PLAN.
- PROPOSED CONCRETE PAVEMENT/HARDSCAPE
- PROPOSED ASPHALT CONCRETE PAVEMENT
- PROPOSED GRAVEL
- PROPOSED PERVIOUS PAVEMENT
- DEEPENED FOUNDATION WALL. RETAINED HEIGHT PER PLAN. SEE STRUCTURAL PLANS BY OTHERS FOR CONSTRUCTION DETAILS.
- RAISED FOUNDATION WALL. RETAINED HEIGHT PER PLAN. SEE STRUCTURAL PLANS BY OTHERS FOR CONSTRUCTION DETAILS.

## GRADING LEGEND

- GB RIDGE HINGE — GRADE BREAK
- CUT / FILL — DAYLIGHT OF GRADING LIMITS (CUT/FILL LINE)
- LIMIT OF DISTURBANCE
- SWALE
- 100 — CONTOUR MAJOR
- 99 — CONTOUR MINOR
- 2:1 — TOP OF SLOPE
- TOE OF SLOPE
- OVERLAND RELEASE PATH

## STORM DRAIN LEGEND:

- 50LF12"SD@0.5% — STORM DRAIN PIPE LENGTH, SIZE AND SLOPE (SD)
- PROPOSED SLOT/TRENCH DRAIN
- PROPOSED BIO RETENTION BASIN
- ENERGY DISSIPATOR
- HEADWALL/ENDWALL
- FLARED END SECTION
- DROP INLET
- MANHOLE
- CLEANOUT

## SANITARY SEWER LEGEND:

- 75LF6"SS@2.0% — SANITARY SEWER PIPE LENGTH, SIZE AND SLOPE (SS)
- SANITARY SEWER MANHOLE (SSMH)
- SANITARY SEWER CLEANOUT TO GRADE (SSCO)
- SANITARY SEWER BACKWATER VALVE

## WATER LEGEND:

- 6"DW — DOMESTIC WATER SERVICE AND SIZE (DW)
- 8"FW — FIRE WATER SERVICE AND SIZE (FW)
- GATE VALVE
- FIRE HYDRANT (FH)
- POST INDICATOR VALVE (PIV)
- FIRE DEPARTMENT CONNECTION (FDC)
- BACKFLOW DEVICE FOR FIRE SERVICE (RPZ OR DDC)
- BACKFLOW DEVICE FOR DOMESTIC SERVICE (RPZ)
- DOMESTIC WATER METER
- IRRIGATION METER (DESIGN BY OTHERS)
- THRUST BLOCK

## SHEET INDEX


C1.0 – COVER SHEET

C2.0 – NOTES

C3.0 – GRADING AND DRAINAGE PLAN

C4.0 – UTILITY PLAN

C5.0 – SECTIONS AND DETAILS

C5.1 – SECTIONS AND DETAILS

EC1.0 – EROSION AND SEDIMENT CONTROL PLAN

EC2.0 – EROSION AND SEDIMENT CONTROL DETAILS


## REPORTS REQUIRED

FINAL REPORTS SHALL BE REQUIRED IN ACCORDANCE WITH TITLE 19.12.150 AND 19.12.160(a). (CBC 1704.6).

1. A SOIL OR CIVIL ENGINEER TO DETERMINE GRADING PERFORMED IS IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED PLANS AND IS SUITABLE TO SUPPORT THE INTENDED STRUCTURE(S).

SITE LIMITS MAP

0 80' 160'

SCALE: 1" = 80'

VICINITY MAP

## APPLICABLE CODES

2022 CALIFORNIA ADMINISTRATIVE CODE (CAC)
PART 1, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)
2022 CALIFORNIA BUILDING CODE (CBC)
PART 2, TITLE 24, CCR
2022 CALIFORNIA PLUMBING CODE (CPC)
PART 5, TITLE 24, CCR
2022 CALIFORNIA FIRE CODE (CFC)
PART 9, TITLE 24, CCR

ALL WORK AND MATERIALS SHALL BE IN CONFORMANCE WITH THE APPLICABLE STANDARDS OF THE CODE SECTIONS REFERENCED ABOVE, AND ANY OTHER APPLICABLE STATE AND LOCAL GOVERNING AGENCY ORDINANCES, LAWS, RULES, REGULATIONS, AND PROJECT CONDITIONS OF APPROVAL.

NOTHING IN THESE DRAWINGS SHALL BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES, STANDARDS, OR PROJECT REQUIREMENTS.

## STANDARDS

THE IMPROVEMENTS SHOWN ON THESE PLANS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE STANDARD DRAWINGS AND SPECIFICATIONS LISTED BELOW. IN THE EVENT OF A DISCREPANCY BETWEEN THESE PLANS AND THE STANDARD DRAWINGS AND SPECIFICATIONS, THE GOVERNING ORDER OF PRECEDENCE SHALL BE AS FOLLOWS:

1. STATE STANDARD PLANS AND SPECIFICATIONS (CALTRANS)
2. CITY OF ARROYO GRANDE STANDARD PLANS AND SPECIFICATIONS
3. STANDARD PLANS AND SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (PWC)
4. IMPROVEMENT PLAN DRAWINGS AND SPECIFICATIONS BY WALSH ENGINEERING

## SURVEY AND MAPPING

THE TOPOGRAPHIC SURVEY AND MAPPING INFORMATION, INCLUDING BUT NOT LIMITED TO EXISTING SURFACE FEATURES, PROPERTY LINES, RIGHT-OF-WAY, CENTERLINE, EASEMENTS, AND RECORD INFORMATION, SHOWN ON THESE IMPROVEMENT PLANS WERE PROVIDED BY THE SURVEY BELOW. A COPY WAS PROVIDED TO WALSH ENGINEERING BY THE PROFESSIONAL LAND SURVEYOR OR OWNER UPON THE START OF OUR DESIGN. A COPY OF SAID SURVEY IS ON FILE WITH THE DESIGN ENGINEER. WALSH ENGINEERING ASSUMES NO RESPONSIBILITY FOR INCORRECT, INACCURATE OR INSUFFICIENT INFORMATION SUPPLIED TO US AT THE TIME OF PROJECT DESIGN OR PROJECT REVISIONS.

TITLE: "TOPOGRAPHIC MAP"
DATED: 12/26/2023

MBS LAND SURVEYS
3559 SOUTH HIGUERA STREET
SAN LUIS OBISPO, CA 93401
(805)594-1960

A TITLE REPORT WAS NOT AVAILABLE AT THE TIME OF INITIAL SURVEY, THEREFORE EASEMENTS OR OTHER FEE CONVEYANCES WHICH MAY AFFECT THE SUBJECT PROPERTY HAVE NOT BEEN SHOWN AND THE BOUNDARY LINES SHOWN DO NOT REPRESENT THE TRUE OR ACTUAL BOUNDARY LINES. DETERMINATION OF THE ACTUAL PROPERTY BOUNDARIES WILL REQUIRE A COMPLETE BOUNDARY SURVEY, THE SETTING OF PROPERTY MONUMENTS AND THE FILING OF A CORNER RECORD OR RECORD OF SURVEY IN CONFORMANCE WITH STATE LAW (LS ACT SEC. 8762). PROPERTY LINES, EASEMENTS AND BUILDING SETBACKS SHOULD BE DETERMINED FROM AN ACTUAL BOUNDARY SURVEY. FOR MODIFICATIONS TO THE STRUCTURE MAY BE NECESSARY DURING CONSTRUCTION.


SLO COUNTY PLANNING AND BUILDING
PLANS REVIEWED FOR CODE COMPLIANCE
Reviewed by: Jarrel
Date: 06/27/2025
Approval of these plans shall not permit violations of county or state laws. The County may revoke this permit or require corrections if they are in error. These approved plans shall be made available upon request.
Plans not approved.


## BASIS OF COORDINATES AND BEARINGS

THE COORDINATES AND BEARINGS AS MEASURED AND SHOWN HEREON ARE ON GRID AND ARE BASED UPON THE CALIFORNIA COORDINATE SYSTEM OF 1983, CCS83, ZONE 5 0.99996 (GROUND TO GRID) WITH THE CALIFORNIA PUBLIC RESOURCES CODE SECTIONS 8801-8819; SAID COORDINATES AND BEARINGS ARE BASED LOCALLY UPON FIELD-OBSERVED TIES TO CAL TRANS CONTROL POINT "slo101 pm-14.64",

MAPPING ANGLE AND GRID FACTOR

| STATION | NORTHING(FT) | EASTING(FT) | MAPPING ANGLE | COMBINED SCALE FACTOR | ELEV (NAVD88) |
|---|---|---|---|---|---|
| PM-14.64 | 2,243,904.966 | 5,782,286.828 | -1°29'09.34982" | 0.9999462333 | 68.566 |

MEASURED DISTANCES SHOWN HEREON OR INVERSED FROM COORDINATES SHOWN HEREON ARE IN REFERENCE TO CCS83. TO APPROXIMATE LOCAL GROUND DISTANCES DIVIDE BY THE COMBINED SCALE FACTOR PROVIDED HEREON.

| NO. | DATE | REVISIONS |
|---|---|---|
| 1 | 10/28/24 | PLAN CHECK 1 COUNTY OF SLO |
| 2 | 1/22/25 | PLAN CHECK 2 COUNTY OF SLO |
| | | |
| | | |


WALSH ENGINEERING
WALSHENGINEERING.NET (805) 319-4948
1108 GARDEN STREET, SUITE 202-204 SAN LUIS OBISPO, CA 93401


REISS DESIGN STUDIO, PC

ARROYO GRANDE LIBRARY REMODEL

800 W. BRANCH STREET, ARROYO GRANDE, CA

REGISTERED PROFESSIONAL ENGINEER — MATTHEW R. WALSH — C 79026 — CIVIL — STATE OF CALIFORNIA

| | |
|---|---|
| DESIGNED BY: | TW |
| CHECKED BY: | TW |
| APPROVED BY: | MRW |
| DATE: | 1/22/2025 |

COVER SHEET

SHEET C1.0

saved: 1/23/2025, plotted: 1/22/2025, path: s:\projects_eng\2023\0150_slo county library_w. branch st_cg\drawings\cover_notes.dwg

## GENERAL NOTES

1. ALL MATERIALS, WORKMANSHIP AND CONSTRUCTION SHALL CONFORM TO THE CITY AGENCY MOST RECENTLY ADOPTED EDITION OF THE STANDARD PLANS AND SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
2. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL CONSTRUCTION PERMITS REQUIRED BY THE CITY AGENCY (SUCH AS ENCROACHMENT, GRADING, BUILDING, DEMOLITION ETC.) PRIOR TO COMMENCEMENT OF WORK.
3. AN ENCROACHMENT PERMIT MUST BE OBTAINED FROM THE DEPARTMENT OF PUBLIC WORKS PRIOR TO BEGINNING ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY
4. CONTRACTOR SHALL SECURE A TRENCH PERMIT FROM THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY PRIOR TO EXCAVATION OF ANY TRENCH OVER FIVE FEET IN DEPTH.
5. IF ANY CONTAMINATED MATERIAL IS ENCOUNTERED DURING CONSTRUCTION, WORK MUST STOP UNTIL A WORK PLAN HAS BEEN APPROVED IN WRITING BY THE CITY FIRE DEPARTMENT AND THE STATE REGIONAL WATER QUALITY CONTROL BOARD.
6. ALL TRENCH SPOILS SHALL BE REMOVED AS THEY ARE GENERATED AND DISPOSED OF ON SITE PER THE GRADING PERMIT OR AT A SITE APPROVED BY A GRADING PERMIT FROM THE DEPARTMENT OF COMMUNITY DEVELOPMENT.
7. ALL UNDERGROUND IMPROVEMENTS INCLUDING SEWER LINES, WATER LINES, STORM DRAINS, PUBLIC UTILITY FACILITIES, AND SERVICES SHALL BE INSTALLED, TESTED, AND ACCEPTED BY THE PUBLIC WORKS DEPARTMENT PRIOR TO PAVING.
8. CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO HOLD HARMLESS, INDEMNIFY AND DEFEND THE OWNER, THE DESIGN PROFESSIONAL AND THEIR CONSULTANTS, AND THE CITY AGENCY, AND EACH OF THEIR OFFICERS, EMPLOYEES, AND AGENTS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.
9. THE LOCATIONS OF UNDERGROUND OBSTRUCTIONS SHOWN ON THE PLANS ARE APPROXIMATE ONLY AND SHOULD NOT BE TAKEN AS FINAL OR ALL INCLUSIVE. THE CONTRACTOR IS CAUTIONED THAT THE PLANS MAY NOT INCLUDE ALL EXISTING UTILITIES AND THAT THE OWNER, THE CITY AGENCY AND DESIGN PROFESSIONAL ASSUME NO RESPONSIBILITY OF OBSTRUCTIONS WHICH MAY BE ENCOUNTERED.
10. THE CONTRACTOR SHALL EXPOSE ALL EXISTING UTILITIES INCLUDING SEWERS AND STORM DRAINS PRIOR TO ANY TRENCHING TO ALLOW THE ENGINEER TO VERIFY THE GRADE AND ALIGNMENT OF THE UTILITIES, AND TO VERIFY DESIGN ASSUMPTIONS AND EXACT FIELD LOCATION. EXISTING UTILITIES MAY REQUIRE RELOCATION AND/OR PROPOSED IMPROVEMENTS MAY REQUIRE GRADE OR ALIGNMENT REVISION DUE TO FIELD CONDITIONS. THE ENGINEER WILL NOT MARK ANY GRADE STAKES UNTIL AFTER THE EXACT LOCATION OF ALL EXISTING UTILITIES HAS BEEN VERIFIED.
11. THE CONTRACTOR SHALL RECOGNIZE THAT UNDERGROUND FACILITIES NOT SHOWN AS CIVIL IMPROVEMENTS (PG&E, TELEPHONE, TV, IRRIGATION, ETC.) SHALL BE COORDINATED AND CONSTRUCTED PRIOR TO PLACEMENT OF BASE ROCK AND PAVING.
12. CONTRACTOR IS RESPONSIBLE FOR PRESERVATION AND/OR PERPETUATION OF ALL EXISTING SURVEY MONUMENTS (IRON PIPES ON LOT LINES AND CORNER, CENTERLINE WELL DISKS, ETC.), WHICH CONTROL SUBDIVISIONS, TRACTS, BOUNDARIES, STREETS, HIGHWAYS, OR OTHER RIGHT-OF-WAY, EASEMENTS, OR PROVIDE SURVEY CONTROL WHICH WILL BE DISTURBED OR REMOVED DUE TO CONTRACTOR'S WORK. CONTRACTOR SHALL PROVIDE A MINIMUM OF 10 (TEN) WORKING DAYS NOTICE TO THE ENGINEER/SURVEYOR PRIOR TO DISTURBANCE OR REMOVAL OF EXISTING MONUMENTS.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE OR DETERIORATION OCCURRING TO EXISTING PUBLIC IMPROVEMENTS AS A DIRECT RESULT OF CONSTRUCTION ACTIVITY RELATED TO CONSTRUCTION OF THE COMMON IMPROVEMENTS (GRADING, ROAD CONSTRUCTION, UTILITY INSTALLATION, ETC.). REQUIRED REPAIR MAY REQUIRE PATCHING, SEALING OR OVERLAYING AFFECTED AREAS AS APPROPRIATE TO RETURN THE ROADS TO AS GOOD A CONDITION AS THEY WERE PRIOR TO CONSTRUCTION. IF THE CONTRACTOR DOES NOT ACT PRUDENTLY IN A TIMELY MANNER, THE CITY MAY, AT ITS DISCRETION PERFORM THE CORRECTION AND CHARGE THE CONTRACTOR FOR ALL COSTS AND OVERHEAD INCURRED.
14. CONSTRUCTION SITE WASTE MANAGEMENT IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR. THE CONSTRUCTION SITE MUST BE KEPT CLEAN AND FREE FROM NON-STORM WATER MATERIAL DISCHARGES, INCLUDING BUT NOT LIMITED TO SOLID WASTE SUCH AS PACKAGING MATERIALS, WOOD, PAPER, AND PLASTIC; SCRAP OR SURPLUS BUILDING MATERIALS SUCH AS METALS, RUBBER, PLASTIC, GLASS AND MASONRY PRODUCTS; DOMESTIC WASTES SUCH AS FOOD CONTAINERS, COFFEE CUPS, PAPER BAGS, AND CIGARETTES; CONSTRUCTION AND LANDSCAPING MATERIALS; AND HAZARDOUS WASTE SUCH AS PETROLEUM PRODUCTS, WOOD PRESERVATIVES, PAINTS, MORTARS, AND SOLVENTS. ANY ACTIVITY DURING CONSTRUCTION WHICH ACTUALLY AND/OR MAY POTENTIALLY RESULT IN THE DISCHARGE OF SUCH POLLUTANTS INTO THE CITY'S STORM WATER SYSTEM IS IN VIOLATION OF CITY AGENCY STORM WATER ORDINANCE AND STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD REGULATIONS. THE SITE SHALL REMAIN NEAT AND FREE FROM ANY SUCH POLLUTANTS. THE SITE MUST HAVE AN ADEQUATE NUMBER OF WATERTIGHT CONTAINERS WITH LIDS OR COVERS THAT CAN BE PLACED OVER THE CONTAINER TO KEEP OUT RAIN OR TO PREVENT LOSS OF WASTE DUE TO WIND. THE CONTRACTOR MUST COLLECT SITE TRASH DAILY AND ARRANGE FOR REGULAR WASTE COLLECTION BEFORE CONTAINER OVERFLOWS.
15. ADA AND TITLE 24 COMPLIANCE: CONSTRUCTION CONTRACTOR MUST COMPLY WITH THE REQUIREMENTS OF THE AMERICAN WITH DISABILITIES ACT (ADA) AND TITLE 24 WHILE WORKING IN THE PUBLIC RIGHT-OF-WAY. IF CONSTRUCTION CONTRACTOR'S WORK IN THE PUBLIC RIGHT-OF-WAY WILL AFFECT PEDESTRIAN ACCESS, THE CONSTRUCTION CONTRACTOR IS REQUIRED TO PROVIDE A PROPERLY SIGNED ACCESSIBLE ROUTE OF TRAVEL. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. FAILURE TO COMPLY WITH THE ADA AND TITLE 24 CAN HAVE SERIOUS CONSEQUENCES FOR THE CONSTRUCTION CONTRACTOR. SUCH FAILURE MAY RESULT IN LAWSUITS FOR REGULATORY ACTIONS BY THE DEPARTMENT OF JUSTICE OR THE STATE ATTORNEY GENERAL.
16. IN THE EVENT THAT ANY REMAINS OF PREHISTORIC OR HISTORIC HUMAN ACTIVITIES ARE ENCOUNTERED DURING PROJECT-RELATED ACTIVITIES, WORK IN THE IMMEDIATE VICINITY OF THE FINDS SHALL HALT AND THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT SUPERINTENDENT AND THE CITY AGENCY INSPECTOR. WORK SHALL NOT RESUME UNTIL A QUALIFIED ARCHAEOLOGIST OR HISTORIC ARCHAEOLOGIST, AS APPROPRIATE, APPROVED BY THE CITY AGENCY, HAS EVALUATED THE SITUATION AND MADE RECOMMENDATIONS FOR TREATMENT OF THE RESOURCE, AND WHOSE RECOMMENDATIONS ARE CARRIED OUT. IF HUMAN BURIALS ARE ENCOUNTERED, THE CONTRACTOR MUST ALSO CONTACT THE COUNTY CORONER.

## CLEARING NOTES

1. THE CONTRACTOR SHALL REVIEW SITE PRIOR TO BIDDING. ALL VEGETATION, STRUCTURES, TREES, DELETERIOUS MATERIAL, ETC. SHALL BE REMOVED FROM THE SITE AT THE EXPENSE OF THE CONTRACTOR AND SHALL BE INCLUDED IN THE LUMP SUM CLEARING COST. ALL WORK SHALL COMPLY WITH THE GEOTECHNICAL ENGINEERING INVESTIGATION COMPLETED FOR THIS PROJECT.
2. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS FROM DAMAGE UNLESS NOTED OTHERWISE. COST OF REPLACING EXISTING IMPROVEMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEMS REQUIRING REMOVAL AND REPLACEMENT OF EXISTING IMPROVEMENTS.
3. WHENEVER PAVEMENT IS BROKEN OR CUT IN THE INSTALLATION OF THE WORK COVERED BY THESE PLANS AND SPECIFICATIONS, THE PAVEMENT SHALL BE REPLACED AFTER PROPER BACKFILLING WITH PAVEMENT MATERIALS EQUAL TO OR BETTER THAN THE MATERIALS USED IN THE ORIGINAL PAVING. THE FINISHED PAVEMENT SHALL BE SUBJECT TO THE APPROVAL OF THE CITY ENGINEER.
4. PAYMENT FOR PAVEMENT WILL BE MADE ONLY FOR AREAS SHOWN ON PLANS. REPLACEMENT OF PAVEMENT WHICH IS BROKEN OR CUT DURING THE INSTALLATION OF THE WORK COVERED BY THESE SPECIFICATIONS, AND WHICH LIES OUTSIDE OF SAID AREAS, SHALL BE INCLUDED IN THE CONTRACTOR'S UNIT PRICE FOR PAVEMENT, AND NO ADDITIONAL PAYMENT SHALL BE MADE FOR SUCH WORK.
5. ALL EXISTING WELLS SHALL BE REMOVED AND/OR ABANDONED PER THE REQUIREMENTS OF THE CITY AGENCY AND THE ENVIRONMENTAL HEALTH DEPARTMENT, AND UNDER PERMIT AND INSPECTION OF SAID AGENCIES. THIS WORK SHALL BE INCLUDED IN THE LUMP SUM CLEARING COST.

## STORMWATER POLLUTION PREVENTION

1. FOR SITES WITH 1 OR MORE ACRES OF DISTURBED SURFACE, A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE PREPARED IN ACCORDANCE WITH THE CURRENT STATE WATER RESOURCES CONTROL BOARD N.P.D.E.S. PERMIT REQUIREMENTS. CONTRACTOR SHALL SUPPLY A SWPPP COMPLETED BY A QUALIFIED SWPPP DEVELOPER (QSD). THE SWPPP SHALL BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.

## GRADING NOTES

1. NO GRADING, CLEARING OR GRUBBING SHALL BE PERFORMED PRIOR TO ISSUANCE OF A GRADING PERMIT FROM LOCAL GOVERNING AGENCIES.
2. DUST CONTROL SHALL BE PROVIDED BY CONTRACTOR DURING ALL PHASES OF CONSTRUCTION.
3. SITE GRADING SHALL BE DONE UNDER DIRECTION OF THE SOILS ENGINEER AND SHALL BE IN COMPLIANCE WITH CHAPTER 33, 18, AND APPENDIX J, MOST RECENT EDITION OF THE CALIFORNIA BUILDING CODE AND THE RECOMMENDATIONS CONTAINED IN THE SOILS REPORT.
4. EXISTING NON-COMPLYING FILLS SHALL BE REMOVED OR BROUGHT INTO COMPLIANCE WITH CHAPTER 33 AND 18, AND APPENDIX J, MOST RECENT EDITION OF THE CALIFORNIA BUILDING CODE, AND THE SATISFACTION OF THE SOILS ENGINEER.
5. ANY EXCESS AND UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE SITE TO AN AREA APPROVED BY THE CITY BUILDING DIVISION AND CITY FIRE DEPARTMENT. APPROVALS MUST BE IN WRITING PRIOR TO REMOVAL OF MATERIAL.
6. CONTRACTOR SHALL PROTECT EXISTING DRAINAGE FACILITIES FROM SEDIMENTATION DURING ALL PHASES OF CONSTRUCTION.
7. ALL HAZARDOUS MATERIAL SHALL BE REMOVED AND DISPOSED OF ACCORDING TO THE REQUIREMENTS OF THE CITY'S FIRE DEPARTMENT. THE APPLICANT IS REQUIRED TO DEMONSTRATE COMPLIANCE WITH STATE AND LOCAL CODES FOR REMOVAL OF ASBESTOS CONTAINING MATERIALS DURING DEMOLITION OF THE STRUCTURES ON THE PROJECT SITE.
8. ALL PADS SHALL BE CONSTRUCTED TO A TOLERANCE OF 0.1 FEET +/- FROM SHOWN PAD ELEVATION.
9. RECORD DRAWINGS SHALL INCLUDE ANY SUB-DRAINS REQUIRED BY THE PROJECT SOILS ENGINEER DURING CONSTRUCTION.
10. PROPOSED DEVELOPMENT MUST CONFORM TO 40 CFR (CODE OF FEDERAL REGULATIONS) PARTS 122, 123 AND 124 NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT APPLICATIONS FOR STORM WATER DISCHARGE. PROJECT MUST ALSO CONFORM WITH ANY DESIGN AND CONSTRUCTION POLICIES ADOPTED BY THE CITY TO CONFORM WITH THESE REGULATIONS.
11. BLASTING (IF REQUIRED) REQUIRES A PERMIT FROM THE CITY FIRE DEPARTMENT.
12. PRIOR TO ANY GRADING OPERATION THE GRADING CONTRACTOR AND THE PROJECT SOILS ENGINEER SHALL JOINTLY SEARCH THE SITE FOR EXISTING WELLS AND SEPTIC SYSTEMS.
13. PRIVATE DRIVEWAYS SHALL BE CONSTRUCTED UNDER THE OBSERVATION OF THE SOILS ENGINEER IN COMPLIANCE WITH THE CITY DESIGN AND CONSTRUCTION STANDARDS. PROGRESS AND FINAL REPORTS SHALL BE FURNISHED TO THE ENGINEER IN COMPLIANCE WITH C.B.C. SPECIAL INSPECTION REQUIREMENTS. ALL COSTS RELATED TO SUCH SPECIAL INSPECTIONS SHALL BE BORNE BY THE OWNER/DEVELOPER.
14. EARTHWORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY AGENCY STANDARDS AND THE SOILS REPORT FOR THE PROJECT.
15. ALL INDEPENDENT LABORATORY INSPECTION AND TESTING REQUIRED BY THE CITY SHALL BE PAID FOR BY THE CONTRACTOR.
16. SUBGRADE SHALL BE COMPACTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AND THE CITY AGENCY STANDARD SPECIFICATIONS.
17. ROUGH GRADING CONTRACTOR SHALL COORDINATE WITH DEVELOPER PRIOR TO CONSTRUCTION AS TO THE RESPONSIBILITIES OF HIS WORK.
18. THE CONTRACTOR IS TO PROVIDE COMPACTED BUILDING PADS AT THE ELEVATIONS SHOWN ON THE GRADING PLAN.
19. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT WRITTEN AUTHORIZATION FROM THE ENGINEER.
20. ALL AREAS ARE TO BE GRADED TO THE ELEVATIONS SHOWN.
21. GRADING TO COMPLY WITH CBC 1804.4. SLOPE PERVIOUS GROUND AWAY FROM FOUNDATION AT A MINIMUM SLOPE OF 5% FOR A MINIMUM DISTANCE OF 10 FEET. SLOPE IMPERVIOUS GROUND AT A MINIMUM SLOPE OF 2% FOR A MINIMUM DISTANCE OF 10 FEET. IF PHYSICAL OBSTRUCTIONS OR LOT LINES PROHIBIT 10 FEET OF HORIZONTAL DISTANCE, PROVIDE A 5% SLOPE TO AN APPROVED ALTERNATIVE METHOD OF DIVERTING DRAINAGE AWAY FROM FOUNDATIONS WITH THE USE OF SWALES SLOPED AT 2% LONGITUDINALLY ALONG FLOW LINE, OR DRAINAGE INLETS WITH STORM DRAIN PIPE DIRECTED TO DISCHARGE AWAY FROM FOUNDATIONS IN A NON-EROSIVE MANNER.

## DUST CONTROL NOTES

1. APPROPRIATE DUST CONTROL SHALL BE PROVIDED TO MINIMIZE ANY DUST NUISANCE, IN ACCORDANCE WITH THE CALTRANS STANDARD SPECIFICATIONS AND THE REQUIREMENTS OF THE CITY AGENCY.
2. SPRAY WATER ON ALL EXPOSED EARTH SURFACED DURING CLEARING, GRADING, EARTH MOVING AND OTHER SITE PREPARATION ACTIVITIES THROUGHOUT THE DAY TO MINIMIZE DUST. USE TARPAULINS OR OTHER EFFECTIVE COVERS ON ALL STOCKPILED EARTH MATERIAL AND ON ALL HAUL TRUCKS TO MINIMIZE DUST. SWEEP THE ADJACENT STREET FRONTAGES AT LEAST ONCE A DAY OR AS NEEDED TO REMOVE SILT AND OTHER DIRT WHICH IS EVIDENT FROM CONSTRUCTION ACTIVITIES. ENSURE THAT CONSTRUCTION VEHICLES ARE CLEANED PRIOR TO LEAVING THE SITE TO PREVENT DUST AND DIRT FROM BEING TRACKED OFF SITE.
3. ALL EXPOSED SURFACES SHALL BE WATERED A MINIMUM OF TWICE DAILY UNLESS DEEMED UNNECESSARY DUE TO WEATHER. WATER SHALL BE APPLIED AS PROVIDED IN THE CALTRANS STANDARD SPECIFICATIONS.
4. DUST PALLIATIVES MAY BE SUBSTITUTED FOR WATERING UPON THE APPROVAL OF THE CITY ENGINEER. DUST PALLIATIVES SHALL BE APPLIED AS PROVIDED IN SECTION 18 OF CALTRANS STANDARD SPECIFICATIONS.
5. ALL EXPOSED EARTH SURFACES SHALL BE PLANTED AT THE EARLIEST POSSIBLE TIME.
6. IF APPLICABLE, CONTRACTOR SHALL COMPLY WITH DUST CONTROL PERMIT AND PERFORMANCE REQUIREMENTS OF THE AIR POLLUTION CONTROL DISTRICT. COPIES OF THE APPROVED DUST CONTROL PLAN SHALL BE PROVIDED TO CITY ENGINEER AND MAINTAINED ON SITE.
7. CONTRACTOR TO PRACTICE DUST CONTROL MEASURES IN ACCORDANCE WITH THE CITY STANDARDS THROUGHOUT CONSTRUCTION.
8. VISIBLE DUST EMISSIONS (VDE) SHALL BE MINIMIZED TO THE EXTENT FEASIBLE WHERE SOIL IS BEING DISTURBED BY EQUIPMENT OR BY WIND.
9. DUST CONTROL MAY BE ACHIEVED BY APPLYING WATER BEFORE/DURING EARTHWORK AND ONTO UNPAVED TRAFFIC AREAS, APPLYING DUST PALLIATIVES, PHASING WORK TO LIMIT DUST, AND SETTING UP WIND FENCES TO LIMIT WIND BLOWN DUST.
10. SOIL STABILIZATION IMAY BE REQUIRED AT REGULATED CONSTRUCTION SITES AFTER NORMAL WORKING HOURS AND ON WEEKENDS AND HOLIDAYS. THIS REQUIREMENT MAY ALSO APPLY TO INACTIVE CONSTRUCTION AREAS SUCH AS PHASED PROJECTS WHERE DISTURBED LAND IS LEFT UNATTENDED. APPLYING WATER TO FORM A VISIBLE CRUST ON THE SOIL AND RESTRICTING VEHICLE ACCESS ARE OFTEN EFFECTIVE FOR SHORT-TERM STABILIZATION OF DISTURBED SURFACE AREAS. LONG-TERM METHODS INCLUDING APPLYING DUST SUPPRESSANTS AND ESTABLISHING VEGETATIVE COVER MAY ALSO BE SUITABLE.
11. CARRYOUT AND TRACKOUT OF SOIL & SEDIMENT SHALL BE MINIMIZED TO THE EXTENT FEASIBLE. TRACKOUT MATERIAL MUST BE CLEANED UP AT LEAST DAILY, AND IMMEDIATELY IF IT EXTENDS MORE THAN 50 FEET FROM THE EXIT POINT ONTO A PAVED ROAD. METHODS MAY INCLUDE USING A BLOWER, DRY SWEEPING, MECHANICAL DEVICES OR STREET SWEEPING.
12. UNPAVED ACCESS AND HAUL ROADS, AS WELL AS UNPAVED VEHICLE AND EQUIPMENT TRAFFIC AREAS AT CONSTRUCTION SITES MAY REQUIRE DUST CONTROL. SPEED LIMIT SIGNS LIMITING VEHICLE SPEED MAY BE UTILIZED AS NECESSARY.
13. LITTER SHALL BE PREVENTED. ALL CONSTRUCTION MATERIAL AND DEBRIS SHALL BE LIMITED TO MATERIAL STORAGE AREAS AND TRASH AREAS.

## EROSION AND SEDIMENT CONTROL NOTES

1. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE USED TO ENSURE THAT WATER ENTERING THE STORM DRAIN SYSTEM BELOW THE CONSTRUCTION SITE IS EQUIVALENT QUALITY AND CHARACTER AS THE WATER ABOVE THE SITE.
2. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PLACED IN FRONT OF INCOMPLETE STORM DRAIN SYSTEMS TO PREVENT DEBRIS AND SEDIMENT-LADEN WATER FROM ENTERING INTO THE PUBLIC STORM DRAIN SYSTEM. BEST MANAGEMENT PRACTICES SHALL BE USED WHEN DESIGNING AND INSTALLING SUCH DEVICES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTANT MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES AT ALL TIMES TO THE SATISFACTION OF THE ENGINEER AND CITY AGENCY. EROSION AND SEDIMENT CONTROL MEASURES AND THEIR INSTALLATION SHALL BE ACCOMPLISHED USING BEST MANAGEMENT PRACTICES.
4. IF THE STORM DRAIN SYSTEM IS NOT IN PLACE BY OCTOBER 15, ADDITIONAL MEASURES SHALL BE TAKEN SUCH AS TEMPORARY SETTLING BASINS WHICH MEET THE SATISFACTION OF THE ENGINEER AND THE CITY AGENCY. SILT AND/OR CATCH BASINS MUST BE CLEANED OUT ON A REGULAR BASIS AFTER STORMS TO MAINTAIN DESIGN CAPACITY.
5. STORM WATER RUNOFF FROM THE CONSTRUCTION SITE SHALL BE DIRECTED TOWARD AN INLET WITH A SEDIMENT OR FILTRATION INTERCEPTOR PRIOR TO ENTERING THE STORM DRAIN SYSTEM.
6. THE CONTRACTOR WILL BE RESPONSIBLE FOR CLEANING WATER THAT HAS BECOME POLLUTED DUE TO NOT TAKING NECESSARY EROSION AND SEDIMENT CONTROL ACTIONS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP OF MUD AND DEBRIS CARRIED ONTO SURROUNDING STREETS AND ROADS AS A RESULT OF CONSTRUCTION ACTIVITY ON THE SITE TO THE SATISFACTION OF THE CITY AGENCY.
8. ANY DENUDED OR DISTURBED SOILS SHALL BE PROTECTED USING BEST MANAGEMENT PRACTICES.
9. BETWEEN OCTOBER 15 AND APRIL 15, ALL PAVED AREAS WILL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE IS TO BE MAINTAINED BY THE DEVELOPER, CONTRACTOR OR OWNER SO THAT A MINIMUM OF SEDIMENT-LADEN RUNOFF LEAVES THE SITE.
10. THE CONTRACTOR IS TO INFORM ALL CONSTRUCTION SITE WORKERS ABOUT THE MAJOR PROVISIONS OF THE EROSION AND SEDIMENT CONTROL PLAN AND SEEK THEIR COOPERATION IN AVOIDING THE DISTURBANCE OF THESE CONTROL MEASURES.
11. DURING THE RAINY SEASON (TYPICALLY OCTOBER 15 TO APRIL 15) ALL SEDIMENT BARRIERS ARE TO BE INSPECTED AND REPAIRED AT THE END OF EACH WORKING DAY AND, IN ADDITION, AFTER EACH STORM. CONTRACTOR SHALL INSPECT EROSION AND SEDIMENT CONTROL MEASURES AND INLETS AFTER EACH SIGNIFICANT RAINFALL AND DAILY DURING PROLONGED STORM EVENTS. REMOVE SEDIMENTS WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE BARRIER AND REPLACE FILTER DEVICES AS NECESSARY TO ENSURE PROPER FUNCTION.
12. UNSTABILIZED AREAS WILL BE REPAIRED AS SOON AS POSSIBLE AFTER BEING DAMAGED.
13. ALL GRADED OR DISTURBED AREAS SHALL BE STABILIZED IMMEDIATELY AFTER GRADING IS COMPLETE.
14. ENTRANCE TO THE PROJECT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT INTO PUBLIC RIGHT-OF-WAY. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE OF PUBLIC RIGHTS-OF- WAY. WHEN WASHING IS REQUIRED IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED ROCK THAT DRAINS INTO A SEDIMENT TRAP.
15. ALL SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO PUBLIC RIGHTS- OF-WAY SHALL BE REMOVED IMMEDIATELY USING BEST MANAGEMENT PRACTICES.
16. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR PURPOSE SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
17. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REPAIRED OR REPLACED WHEN THEY ARE NO LONGER FUNCTIONING PER BEST MANAGEMENT PRACTICES.
18. THE CONTRACTOR SHALL HAVE EROSION AND SEDIMENT CONTROL MEASURES ON SITE ADEQUATE TO PROTECT THE ENTIRE SITE PRIOR TO THE OCTOBER 15 DATE SUCH THAT IT IS IMMEDIATELY AVAILABLE IN PREPARATION OF THE UPCOMING WINTER SEASON OR IN THE EVENT OF AN EARLY RAIN.
19. AFTER CONSTRUCTION IS COMPLETE ALL STORM DRAIN SYSTEMS ASSOCIATED WITH THIS PROJECT SHALL BE INSPECTED AND CLEARED OF ACCUMULATED SEDIMENTS AND DEBRIS.
20. GRADED AREAS TO BE SEEDED FOR EROSION CONTROL SHALL USE GRASS SEED AT THE RATE OF 75-100/LBS. PER ACRE. SEEDED AREAS SHALL BE IRRIGATED TO ENSURE COVER IS ROOTED PRIOR TO RAINY SEASON.
21. HYDROSEED SHALL BE EITHER APPLIED MECHANICALLY OR BY HYDROSEEDING. HYDROSEEDING REQUIRES THE APPLICATION OF FIBER AND STABILIZING EMULSION. MECHANICAL APPLICATION SHALL REQUIRE ROLLING, TAMPING, OR OTHERWISE WORKING THE SEED APPROXIMATELY 0.5 INCHES INTO THE TOPSOIL.
22. STABILIZATION OF EXPOSED GRADED AREAS WITH STRAW MULCH SHALL BE APPLIED AT A RATE OF 2 TONS PER ACRE.
23. THIS PLAN PROVIDES EROSION CONTROL AND SEDIMENTATION INFORMATION AND DESIGN USING THE FOLLOWING ASSUMPTIONS:
    *GROUND HAS BEEN ROUGH GRADED.
    *STORM DRAIN UTILITIES AND INLETS HAVE BEEN INSTALLED.
24. CONTRACTOR SHALL ADJUST THE SEDIMENTATION AND EROSION CONTROL METHODS AS THE PROJECT DEVELOPS. IT SHALL BE THE QUALIFIED SWPPP PRACTITIONER'S (QSP) RESPONSIBILITY TO ENSURE THAT THE INSTALLED EROSION CONTROL AND SEDIMENTATION IMPROVEMENTS ARE IN CONFORMANCE WITH THE STATE OF CALIFORNIA STORM WATER POLLUTION PREVENTION PLAN GUIDELINES AND THE CALIFORNIA BEST MANAGEMENT PRACTICES.
25. TEMPORARY SILT AND DRAINAGE CONTROL FACILITIES SHALL BE INSTALLED TO CONTROL AND CONTAIN EROSION-CAUSED SILT DEPOSITS AND TO PROVIDE FOR THE SAFE DISCHARGE OF STORM WATERS INTO EXISTING STORM WATER FACILITIES. DESIGN OF THESE FACILITIES MUST BE APPROVED BY THE CITY ENGINEER AND IN PLACE PRIOR TO THE START OF GRADING.
26. THE CONTRACTOR SHALL COMPLY WITH ALL RULES, REGULATIONS AND PROCEDURES OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) FOR CONSTRUCTION AND ACTIVITIES AS PROMULGATED BY THE CALIFORNIA STATE WATER RESOURCE CONTROL BOARD OR ANY OF ITS REGIONAL WATER QUALITY CONTROL BOARDS.
27. ALL MATERIALS NECESSARY FOR WINTERIZATION SHALL BE AVAILABLE AT THE SITE BY OCTOBER 12, AND ALL WINTERIZATION MEASURES SHALL BE INSTALLED AND COMPLETED BY OCTOBER 15.
28. WINTERIZATION SHALL BE INSTALLED ACCORDING TO THIS PLAN AND AS DIRECTED BY THE QUALIFIED SWPPP PRACTITIONER (QSP), AND SHALL BE MAINTAINED BY THE CONTRACTOR THROUGH APRIL 1.
29. FILL SLOPES: AVOID LEAVING SHINY, SMOOTH GRADED SURFACES. THE LAST GRADING OPERATION SHALL BE TO WALK A TRACK-TYPE TRACTOR UP AND DOWN THE SLOPE, CREATING CLEAT MARKS ON THE SLOPE WITH CONTOURS. THESE WILL PROVIDE SEED AND FIBER COLLECTION POINTS.
30. CUT SLOPES: AVOID LEAVING SHINY, SMOOTH GRADED SURFACES. THE LAST GRADING OPERATION SHALL LEAVE THE SLOPE IN A ROUGHENED CONDITION WITH 2 INCHES OF LOOSENED MATERIAL FOR SEEDING.
31. EACH FIBER ROLL SHALL BE SECURELY HELD WITH 1"X1"X18" STAKES (MIN).
32. IF ANY GRAVEL BAGS ARE MOVED AND/OR RELOCATED IN GAINING ACCESS TO THE SITE DURING THE WINTER MONTHS, THEY SHALL BE REPLACED IF THEY ARE NO LONGER STABLE.
33. ONCE INSTALLED, ALL WINTERIZATION MATERIALS SHOULD BE CHECKED BEFORE EACH WEEKEND AND EACH STORM.
34. THIS PLAN IS INTENDED TO BE USED FOR EROSION CONTROL ONLY. OTHER INFORMATION SHOWN HEREIN MAY NOT BE THE MOST CURRENT.
35. AFTER THE UNDERGROUND STORM DRAIN SYSTEM IS INSTALLED, THE CATCH BASINS WILL BE INSTALLED (AS SOON AS PRACTICAL) AND THE SEDIMENT CONTROL DEVICE WILL BE PLACED AROUND THOSE CATCH BASINS AS SHOWN ON THIS PLAN AND IN THE DETAIL ON THE SHEET UNTIL THE SITE IS PAVED.
36. CONTRACTOR TO PROVIDE TEMPORARY SEDIMENT CONTROL DEVICE AT CATCH BASINS AS SHOWN IN DETAIL. CONTRACTOR MAY SUBSTITUTE OTHER SEDIMENT CONTROL DEVICES (GRAVEL BAGS, SILT TRAPS, ETC.) UNDER THE DIRECTION OF THE QSP. ALL MODIFICATIONS NEED TO BE APPROVED BY QSD, AND LOGGED IN THE SWPPP AMENDMENT LOG.
37. ACCESS ROADS: AS NECESSARY, ANY SEDIMENT OR OTHER CONSTRUCTION RELATED MATERIALS DEPOSITED ON ACCESS ROADS SHALL BE REMOVED PRIOR TO ANY RAIN EVENT BY VACUUMING OR SWEEPING.
38. WIND EROSION CONTROL: STOCKPILED WASTE MATERIAL SHALL BE CONTAINED AND SECURELY PROTECTED FROM WIND EROSION AT ALL TIMES WHEN NOT IN USE.
39. CONTRACTOR SHALL PROVIDE EFFECTIVE SOIL COVER FOR INACTIVE AREAS WHERE CONSTRUCTION ACTIVITY HAS DISTURBED SOIL BUT ARE NOT SCHEDULED TO RE-DISTURB SOIL FOR AT LEAST 14 DAYS.

## UTILITY NOTES

1. ALL MATERIALS, WORKMANSHIP AND CONSTRUCTION SHALL CONFORM TO THE CITY AGENCY STANDARD PLANS AND SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
2. A SEWER RELIEF VALVE MUST BE INSTALLED AS REQUIRED BY THE BUILDING DEPARTMENT ON ALL LOTS WHERE THE FINISHED FLOOR ELEVATION IS BELOW THE RIM OF THE NEXT UPSTREAM MANHOLE OF THE PUBLIC SEWER PER THE CPC SECTION 710.0. ALL MATERIALS, WORKMANSHIP AND CONSTRUCTION SHALL CONFORM TO THE CITY AGENCY STANDARD PLANS AND SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
3. CONTRACTOR SHALL SECURE A TRENCH PERMIT FROM THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY PRIOR TO EXCAVATION OF ANY TRENCH OVER FIVE FEET IN DEPTH.
4. ALL UNDERGROUND IMPROVEMENTS INCLUDING SEWER LINES, WATER LINES, STORM DRAINS, PUBLIC UTILITY FACILITIES, AND SERVICES SHALL BE INSTALLED, TESTED, AND ACCEPTED PRIOR TO PAVING ANY STREET.
5. THE LOCATIONS OF UNDERGROUND OBSTRUCTIONS SHOWN ON THE PLANS ARE APPROXIMATE ONLY AND SHOULD NOT BE TAKEN AS FINAL OR ALL INCLUSIVE. THE CONTRACTOR IS CAUTIONED THAT THE PLANS MAY NOT INCLUDE ALL EXISTING UTILITIES AND THAT THE OWNER, THE CITY AGENCY AND ENGINEER ASSUME NO RESPONSIBILITY OF OBSTRUCTIONS WHICH MAY BE ENCOUNTERED.
6. THE CONTRACTOR SHALL EXPOSE ALL EXISTING UTILITIES INCLUDING SEWERS AND STORM DRAINS PRIOR TO ANY TRENCHING TO ALLOW THE ENGINEER TO VERIFY THE GRADE AND ALIGNMENT OF THE UTILITIES, AND TO VERIFY DESIGN ASSUMPTIONS AND EXACT FIELD LOCATION. EXISTING UTILITIES MAY REQUIRE RELOCATION AND/OR PROPOSED IMPROVEMENT MAY REQUIRE GRADE OR ALIGNMENT REVISION DUE TO FIELD CONDITIONS. THE CONTRACTOR IS CAUTIONED NOT TO ORDER PRECAST ITEMS UNTIL ALL CONFLICTS ARE RESOLVED. PRECAST ITEMS ORDERED PRIOR TO CONFLICT RESOLUTION SHALL BE DONE SOLELY AT THE CONTRACTOR'S RISK. THE ENGINEER WILL NOT MARK ANY GRADE STAKES UNTIL AFTER THE EXACT LOCATION OF ALL EXISTING UTILITIES HAS BEEN VERIFIED.
7. RECORD PLAN DRAWINGS SHALL BE PROVIDED UPON COMPLETION OF PROJECT PRIOR TO FINAL ACCEPTANCE.
8. THE USE OF CONTROLLED DENSITY BACKFILL (CDF) WITHIN ANY PUBLIC SEWER OR WATER TRENCH IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY THE DIRECTOR OF UTILITIES.
9. THERE SHALL BE NO UNMETERED CONNECTIONS TO THE CITY AGENCY WATER SYSTEM INCLUDING CONNECTIONS BYPASSING THE METER FOR TESTING ONSITE PLUMBING OR FOR OBTAINING CONSTRUCTION WATER. SUCH CONNECTIONS SHALL BE SEVERED BY THE WATER UTILITY DEPARTMENT AND WILL RESULT IN PENALTIES, INCLUDING PAYMENT OF FINES AND ESTIMATED WATER USAGE FEES.
10. ALL PIPE LENGTHS SHOWN ARE MEASURED HORIZONTALLY TO INSIDE EDGE OF MANHOLE STRUCTURES OR TO THE CENTER OF MINOR DEVICES SUCH AS INLETS OR CLEANOUTS.
11. ALL STREET TRENCHING IN PUBLIC R/W REQUIRES USE OF A.C. HOTMIX, UNDER DIRECTION OF CITY INSPECTOR AND PER CITY STANDARDS.

## WATER NOTES

1. CONTRACTOR SHALL EXPOSE EXISTING WATER LINES TO VERIFY EXISTING ELEVATION AND LOCATION PRIOR TO START OF CONSTRUCTION.
2. WATER LINE CROSSINGS SHALL MEET STATE HEALTH STANDARDS AND CITY AGENCY STANDARD SPECIFICATIONS.
3. WATER LINE CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY AGENCY STANDARD SPECIFICATIONS.
4. INSTALL TRACER WIRE FOR ALL WATER LINES. ALL WATER LINES SHALL BE INSTALLED WITH A NO. 12 GAGE TW SOLID COATED TRACER WIRE.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY MARKING THE INSTALLED LOCATION OF SERVICES PRIOR TO CURB AND GUTTER INSTALLATION.
6. ALL VALVE BOXES SHALL BE ADJUSTED TO FINISH GRADE AFTER STREET PAVING COST FOR RAISING FACILITIES TO BE INCLUDED IN UNIT PRICES FOR VALVES.
7. PRIOR TO FINAL ACCEPTANCE, ALL WATER LINES SHALL BE TESTED AND DISINFECTED IN COMPLIANCE WITH THE REQUIREMENTS OF THE CITY AGENCY IMPROVEMENT STANDARD SPECIFICATIONS.
8. ALL CONNECTIONS TO EXISTING CITY FACILITIES SHALL BE MADE IN THE PRESENCE OF THE CITY PUBLIC WORKS DEPARTMENT. HOT TAPS SHALL CONFORM TO CITY REQUIREMENTS.

## WATER MATERIALS

THE FOLLOWING PIPE MATERIALS SHALL BE USED FOR WATER MAIN CONSTRUCTION AND SHALL CONFORM TO THE LATEST EDITION OF APPROPRIATE AMERICAN WATER WORKS ASSOCIATION STANDARDS AND AMERICAN SOCIETY OF TESTING MATERIALS STANDARDS:

| MATERIAL | SPECIFICATION | DIAMETER |
|---|---|---|
| PVC PIPE | AWWA C900-CLASS 200 MIN.<br>ASTM D2241<br>ASTM D1785, NSF 61 - SCH 40 | 4"-48"<br><br>1/2"-3" |
| PVC PIPE FITTINGS | ASTM D2466, NSF 61 - SCH 40 | 1/2"-3" |
| PVC PIPE JOINTS | ASTM D2122-BELL AND SPIGOT<br>ASTM F477-ELASTOMERIC SEAL<br>ASTM D3139 | 4"-48"<br>4"-48"<br>4"-48" |
| HIGH DENSITY POLYETHYLENE PIPE | AWWA C901- DR 11<br>AWWA C906 - DR 11<br>NSF STANDARD 14<br>NSF STANDARD 61<br>ASTM D3035 | 1/2"-3"<br>4"-63"<br>ALL<br>ALL |
| HIGH DENSITY POLYETHYLENE JOINTS | ASTM D2657, HEAT FUSION JOINING OF THE SAME DR PIPE. NO SOLVENT JOINTS. | ALL |
| DUCTILE IRON PIPE | AWWA C151 | 3"-48" |
| DUCTILE IRON PIPE FITTINGS | AWWA C110-PUSH ON OR MECHANICAL | 3"-48" |

## STORM DRAIN NOTES

1. THE CONTRACTOR SHALL EXPOSE ALL EXISTING STORM DRAIN PIPES WHERE A CONNECTION IS TO BE MADE SO THAT THE ENGINEER CAN VERIFY EXISTING FLOWLINES AND LOCATIONS SUFFICIENTLY BEFORE START OF CONSTRUCTION TO ALLOW FOR A REASONABLE LENGTH OF TIME FOR REVISING PLANS, IF NECESSARY.
2. CONTRACTOR TO BE RESPONSIBLE FOR ALL TESTING OF STORM DRAIN FACILITIES IN ACCORDANCE WITH THE CITY AGENCY SPECIFICATIONS.
3. ALL MANHOLE RIMS TO BE ADJUSTED TO FINISH GRADE AFTER STREET PAVING, UNLESS OTHERWISE NOTED. COST FOR RAISING FACILITIES TO BE INCLUDED IN UNIT PRICES FOR MANHOLES.
4. STORM DRAIN SYSTEM SHALL BE KEPT FREE OF DIRT AND DEBRIS DURING ALL PHASES OF CONSTRUCTION.

## STORM DRAIN MATERIALS

THE FOLLOWING STANDARD PIPE MATERIALS SHALL BE USED FOR STORM DRAIN CONSTRUCTION AND SHALL CONFORM TO THE LATEST EDITION OF THE STATE OF CALIFORNIA, AASHTO, AND AMERICAN SOCIETY OF TESTING MATERIALS STANDARDS:

| MATERIAL | SPECIFICATION | DIAMETER |
|---|---|---|
| PVC PIPE | ASTM D3034-SDR 35 | 4"-15" |
| PVC PIPE | ASTM F679-PS 46 | 18"-36" |
| PVC PIPE DEFELECTION | ASTM D2412-5% DEFLECTION | ALL |
| PVC PIPE FITTINGS | ASTM D2855-ELASTOMERIC WATER TIGHT | ALL |
| PVC PIPE MANHOLE CONNECTIONS | ASTM C923-RUBBER WEEP RING | ALL |
| HDPE | STATE SPEC. SECTION 64 | ALL |
| HDPE TYPE S | AASHTO M-252 -DUAL WALL | 3"-10" |
| HDPE TYPE S | AASHTO M-294 -DUAL WALL | 12"-48" |
| HDPE FITTINGS | ASTM D-3212-WATER TIGHT | ALL |
| REINFORCED CONCRETE PIPE | ASTM C76 -CLASS I, II, III, IV, OR V | ALL |

## WATER - UNDERGROUND FIRE SERVICE NOTES

1. THE UNDERGROUND PIPING SHALL HAVE A MINIMUM DEPTH OF BURY OF 30 INCHES FROM TOP OF PIPE TO FINISHED GRADE (36 INCHES BELOW DRIVEWAYS). NON METALLIC PIPE SHALL HAVE A TRACER WIRE AND/OR TAPE PROVIDED. (10.4) NFPA 24.
2. INITIAL BACKFILL AND BEDDING SURROUNDING THE PIPE SHALL CONSIST OF CLEAN FILL SAND OR PEA GRAVEL TO A MINIMUM OF 6" BELOW AND 12" ABOVE THE PIPE AND CONTAIN NO ASHES, CINDERS, REFUSE, ORGANIC MATTER OR OTHER CORROSIVE MATERIALS. (10.9.1) NFPA 24 (FIRE DISTRICT POLICY) ¾" AGGREGATE IS NO LONGER APPROVED IN ACCORDANCE WITH SFM AMENDMENT TO NFPA 24 2010 SECTION 10.9.1.
3. PVC PIPE SHALL BE A MINIMUM OF C900 CLASS 200. DUCTILE IRON PIPE SHALL BE CEMENT LINED.
4. ALL PIPING, VALVES, JOINTS AND FITTINGS SHALL BE LISTED FOR FIRE PROTECTION SERVICE AND SHALL BE INSTALLED, SUPPORTED, ANCHORED, CLEANED, COATED WITH AN APPROVED MASTIC, NOT TAR, AND/OR WRAPPED WITH A CORROSION-RETARDING MATERIAL IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS APPLICABLE. (CHAPTER 10) NFPA 24.
5. INSTALLATION OF THE FDC SHALL INCLUDE DUCTILE IRON FROM THE UNDERGROUND PIPING TO A POINT ABOVE GRADE, AND THEN MAY TRANSITION TO GALVANIZED PIPE BELOW THE CHECK VALVE/FDC. (10.1.2) NFPA 24.
6. THE FDC SHALL BE AT LEAST 40 FEET, BUT NO FARTHER THAN 150 FEET, AWAY FROM THE NEAREST FIRE HYDRANT.
7. THE FIRE DEPARTMENT CONNECTION (FDC) SHALL BE OFFSET FROM THE POST INDICATOR VALVE (PIV) BY NOT LESS THAN 3 FEET. THE PIV & FDC SHALL BE LOCATED 3 FEET FROM NEARBY OBJECTS INCLUDING HIGH GROWTH OR DENSE VEGETATION, TO MAINTAIN VISIBILITY AND ACCESSIBILITY AT ALL TIMES. (5.9.5.2) NFPA 24.
8. THE FDC SHALL BE SET AT A HEIGHT OF BETWEEN 30 AND 44 INCHES ABOVE FINISHED GRADE AND THE PIV SHALL BE SET SO THAT THE TOP OF THE POST WILL BE 36" ABOVE FINISHED GRADE. BOTH SHALL BE PROPERLY SUPPORTED AND PROTECTED FROM MECHANICAL DAMAGE AND FDC PROVIDED CAPS (5.9.1.2) (6.3.4.1) NFPA 24.
9. THE FDC/PIV SHALL BE AFFIXED WITH AN APPROVED PERMANENT SIGN AS TO THE ADDRESS BEING SERVED. THE SIGN SHALL HAVE RAISED OR ENGRAVED LETTERS AT LEAST 1 INCH IN HEIGHT ON A PLATE OR FITTING. THE SIGN SHALL INDICATE THE TYPE OF SYSTEM FOR WHICH THE CONNECTION IS INTENDED. WHERE THERE IS NO SPECIFIC ADDRESS, THE AREA, BUILDING, OR PORTION THEREOF SHALL BE IDENTIFIED ON THE SIGN. (5.9.5.3) NFPA 24.
10. PROVIDE A CONCRETE FOOTING WITH RESTRAINING RODS AT THE BASE OF THE PIV. PROVIDE CHAIN AND/OR BREAK-AWAY LOCKS FOR THE PIV AND BACKFLOW PREVENTION DEVICES.
11. THE PIV SHALL BE PAINTED RED AND SHALL BE PROVIDED WITH A DURABLE WEATHERPROOF LABEL OR PLACARD INDICATION THE ADDRESS SUPPORTED BY THE SYSTEM. THE ADDRESS NUMBERS SHALL BE A MINIMUM OF 2 INCHES HIGH ON A CONTRASTING BACKGROUND.
12. PRIVATE FIRE HYDRANTS SHALL BE LOCATED AT LEAST 24 INCHES, AND NO MORE THAN 36 INCHES, FROM THE BACK EDGE OF THE CURB TO CENTERLINE OF THE HYDRANT.
13. PRIVATE HYDRANTS SHALL BE PAINTED WHITE TO INDICATE THEY ARE PART OF A PRIVATE FIRE SERVICE SYSTEM.
14. CENTER OF THE LOWEST OUTLET ON THE HYDRANT SHALL BE NOT LESS THAN 18 INCHES ABOVE FINISHED GRADE.
15. PROVIDE SINGLE CHECK VALVE (SWING OR WAFER) LOCATED IN AN APPROVED LOCATION ON THE SUPPLY SIDE OF THE PIV AND FDC WHEN PRIVATE FIRE SERVICE MAINS SERVE FIRE HYDRANTS. PROVIDE AN APPROVED VALVE BOX.
16. PIPE INSTALLED UNDER THE BUILDING OR BUILDING FOUNDATION SHALL NOT CONTAIN MECHANICAL JOINTS. PROVIDE CONTINUOUS CONNECTION FROM OUTSIDE THE BUILDING TO BOTTOM OF RISER. PROVIDE MINIMUM OF 2 INCHES ANNULAR CLEARANCE WITH SLEEVE AROUND ENTIRE PIPE PENETRATION OF FOUNDATION, FLOOR, OR PAVEMENT. (9.3.4) NFPA 13 (10.6.5.1) NFPA 24.
17. PRIOR TO THE SPRINKLER RISER HOOKUP TO ABOVE GROUND PIPING, OR ACCEPTANCE OF HYDRANT SYSTEM, THIS OFFICE SHALL WITNESS A HYDROSTATIC TEST OF NOT LESS THAN 200 PSI PRESSURE FOR 2 HOURS AND FLUSH OF THE ENTIRE UNDERGROUND SYSTEM. REQUIRED FOR THE FLUSH SHALL BE BURLAP SACKS OR EQUIVALENT (WITH DE-CHLORINATION TABLETS) TO STRAIN THE HOSE OUTLET(S). ADEQUATE DRAINAGE SHALL BE AVAILABLE TO ACCEPT A MINIMUM OF FIVE MINUTES FLOW PER 100 FEET OF PIPE AT THE REQUIRED FLUSH FLOW RATE. IT IS THE RESPONSIBILITY OF THE APPLICANT TO OBTAIN ALL NECESSARY APPROVALS PRIOR TO RELEASE OF WATER TO THE ENVIRONMENT. (10.10.2.1) (10.10.2.1.2) (10.10.2.2) NFPA 24.
18. PROVIDE UNDERGROUND ELECTRICAL CONDUIT FOR THE CONNECTION TAMPER SWITCHES TO SUPERVISE ALL THE VALVES CONTROLLING WATER SUPPLY TO SPRINKLER SYSTEMS AND/OR PRIVATE HYDRANTS. THIS INCLUDES BOTH PIVS AND BACK-FLOW PREVENTION ASSEMBLIES (6.6.2) NFPA 24 (903.4) CFC.
19. INSTALLING CONTRACTOR SHALL COMPLETE AND PROVIDE A COPY OF THE CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR PRIVATE FIRE SERVICE MAINS FORM TO THE FIRE DISTRICT AT THE CONCLUSION OF THE HYDROSTATIC TEST AND FLUSH INSPECTION. (9-2.1) NFPA 24.

## WATER - FIRE SERVICE MATERIALS

THE FOLLOWING PIPE MATERIALS SHALL BE USED FOR WATER MAIN CONSTRUCTION AND SHALL CONFORM TO THE LATEST EDITION OF APPROPRIATE AMERICAN WATER WORKS ASSOCIATION STANDARDS AND AMERICAN SOCIETY OF TESTING MATERIALS STANDARDS:

| MATERIAL | SPECIFICATION | DIAMETER |
|---|---|---|
| PVC PIPE | AWWA C900-CLASS 200 MIN.<br>ASTM D2241 | ALL |
| PVC PIPE JOINTS | ASTM D2122-BELL AND SPIGOT<br>ASTM F477-ELASTOMERIC SEAL<br>ASTM D3139 | ALL<br>ALL<br>ALL |
| DUCTILE IRON PIPE | AWWA C151 | 3"-64" |
| DUCTILE IRON PIPE FITTINGS | AWWA C110-PUSH ON OR MECHANICAL | 3"-48" |

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. These approved plans shall be made available when inspections are requested.
All changes must be approved.

ARROYO GRANDE LIBRARY

| NO. | DATE | REVISIONS |
|---|---|---|
| 1 | 10/28/24 | PLAN CHECK 1 COUNTY OF SLO |
| 2 | 1/22/25 | PLAN CHECK 2 COUNTY OF SLO |
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| | | |

WALSH ENGINEERING
WALSHENGINEERING.NET (805) 319-4948
1108 GARDEN STREET, SUITE 202-204 SAN LUIS OBISPO, CA 93401

REISS DESIGN STUDIO, PC
ARROYO GRANDE LIBRARY REMODEL
800 W. BRANCH STREET, ARROYO GRANDE, CA

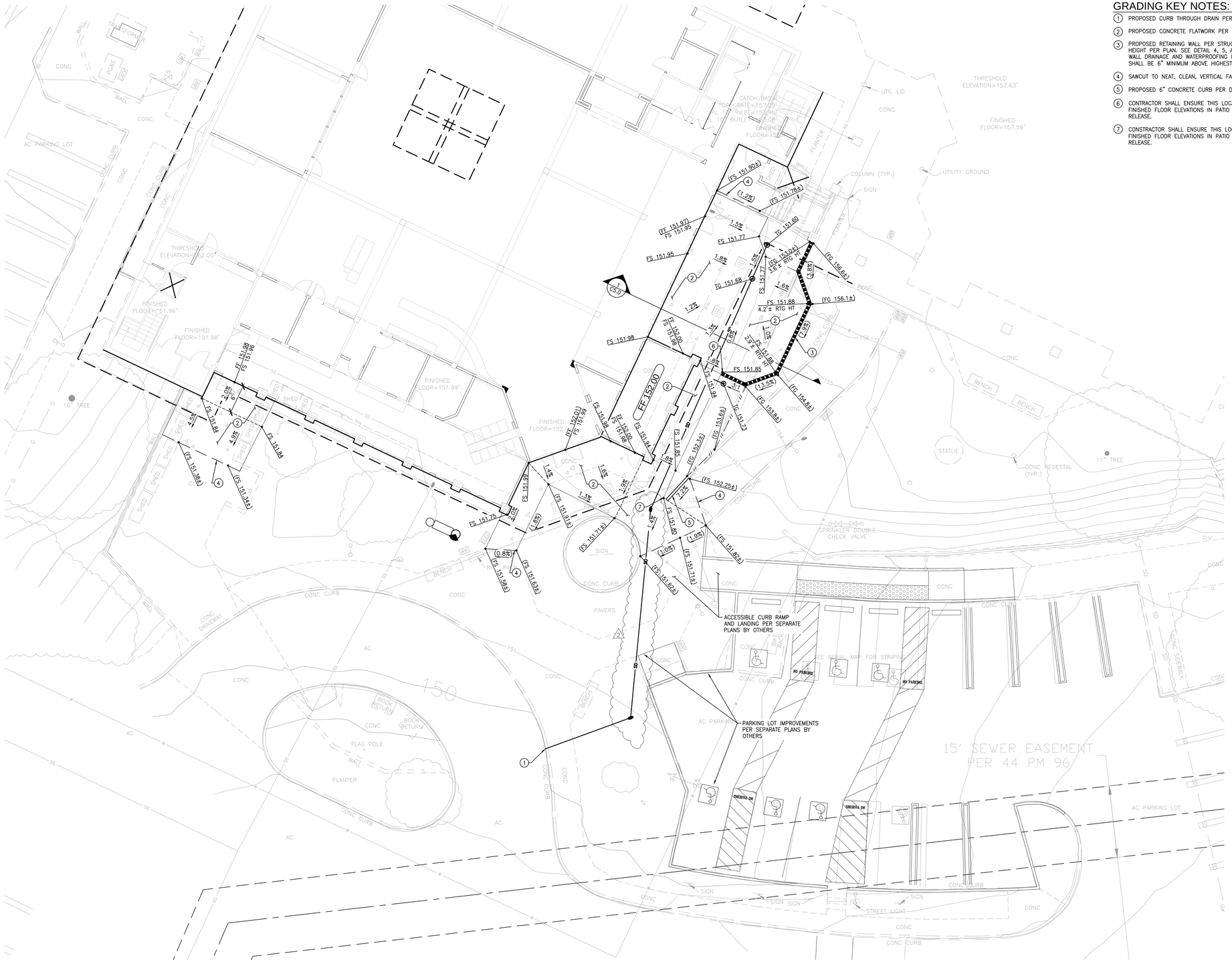
REGISTERED PROFESSIONAL ENGINEER
MATTHEW R. WALSH
C 79026
CIVIL
STATE OF CALIFORNIA

DESIGNED BY: TW
CHECKED BY: TW
APPROVED BY: MRW
DATE: 1/22/2025

NOTES

SHEET
C2.0

saved: 1/22/2025, plotted: 1/22/2025, path: s:\projects_eng\20230150_slo county library_w. branch st_ag\drawings\cover_notes.dwg




## GRADING KEY NOTES:

1. PROPOSED CURB THROUGH DRAIN PER DETAIL 3 ON SHEET C5.0.
2. PROPOSED CONCRETE FLATWORK PER DETAIL 1 ON SHEET C5.0.
3. PROPOSED RETAINING WALL PER STRUCTURAL PLANS BY OTHERS. RETAINED HEIGHT PER PLAN. SEE DETAIL 4, 5, AND 6 ON SHEET C5.0 FOR RETAINING WALL DRAINAGE AND WATERPROOFING INFORMATION. TOP OF WALL ELEVATIONS SHALL BE 6" MINIMUM ABOVE HIGHEST ADJACENT GRADE.
4. SAWCUT TO NEAT, CLEAN, VERTICAL FACE.
5. PROPOSED 6" CONCRETE CURB PER DETAIL 2 ON SHEET C5.1.
6. CONTRACTOR SHALL ENSURE THIS LOCATION IS 0.1' MINIMUM LOWER THAN FINISHED FLOOR ELEVATIONS IN PATIO AREA FOR STORMWATER OVERLAND RELEASE.
7. CONSTRACTOR SHALL ENSURE THIS LOCATION IS 2" MINIMUM LOWER THAN FINISHED FLOOR ELEVATIONS IN PATIO AREA FOR STORMWATER OVERLAND RELEASE.

## GENERAL LEGEND

- EXISTING/PROPOSED CENTERLINE (℄)
- EXISTING PROPERTY LINE (EX. ℄)
- PROPOSED PROPERTY LINE (℄)
- PROPOSED SETBACK LINE
- EXISTING/PROPOSED EASEMENT
- PROPOSED SAWCUT
- GUTTER FLOWLINE
- PROPOSED CURB AND GUTTER
- PROPOSED SLOTTED CURB
- PROPOSED RETAINING WALL. HEIGHT PER PLAN.
- PROPOSED CONCRETE PAVEMENT/HARDSCAPE
- PROPOSED ASPHALT CONCRETE PAVEMENT
- PROPOSED GRAVEL
- PROPOSED PERVIOUS PAVEMENT
- DEEPENED FOUNDATION WALL. RETAINED HEIGHT PER PLAN. SEE STRUCTURAL PLANS BY OTHERS FOR CONSTRUCTION DETAILS.
- RAISED FOUNDATION WALL. RETAINED HEIGHT PER PLAN. SEE STRUCTURAL PLANS BY OTHERS FOR CONSTRUCTION DETAILS.

## GRADING LEGEND

- GRADE BREAK (GB, RIDGE, HINGE)
- DAYLIGHT OF GRADING LIMITS (CUT/FILL LINE)
- LIMIT OF DISTURBANCE
- SWALE
- CONTOUR MAJOR (100)
- CONTOUR MINOR (99)
- TOP OF SLOPE
- TOE OF SLOPE (2:1)
- OVERLAND RELEASE PATH

## STORM DRAIN LEGEND:

- 50LF12"SD@0.5% — STORM DRAIN PIPE LENGTH, SIZE AND SLOPE (SD)
- PROPOSED SLOT/TRENCH DRAIN
- PROPOSED BIO RETENTION BASIN
- ENERGY DISSIPATOR
- HEADWALL/ENDWALL
- FLARED END SECTION
- DROP INLET
- MANHOLE (MH)
- CLEANOUT

## GRADING GENERAL NOTES:

A. SEE STORM DRAIN AND UTILITY INFORMATION ON SHEET C4.0.

B. ALL CLEARING, GRUBBING, SITE PREPARATION, OVER-EXCAVATION, EARTHWORK, ENGINEERED FILL, GEOTEXTILE MATERIAL, AND MATERIAL TESTING SHALL BE IN COMPLIANCE WITH THE GEOTECHNICAL ENGINEERING REPORT AS REQUIRED.

C. ESTIMATED EARTHWORK QUANTITIES:

| CUT | FILL | NET |
|---|---|---|
| 77 CY | 0 CY | 77 CY EXPORT |

NOTE: THE CUT AND FILL QUANTITIES SHOWN ABOVE ARE FOR PERMIT PURPOSES ONLY. THE CONTRACTOR SHALL, AFTER EXAMINING THE GRADING PLAN, SOILS REPORT AND TERRAIN, PREPARE THEIR ESTIMATE INDEPENDENTLY OF THE ENGINEER'S ESTIMATE.

D. GRADING TO COMPLY WITH CBC 1804.4. SLOPE PERVIOUS GROUND AWAY FROM FOUNDATION AT A MINIMUM SLOPE OF 5% FOR A MINIMUM DISTANCE OF 10 FEET. SLOPE IMPERVIOUS GROUND AT A MINIMUM SLOPE OF 2% FOR A MINIMUM DISTANCE, OR TO OTHER APPROVED PHYSICAL OBSTRUCTIONS OR LOT LINES PROHIBIT TO SUCH A HORIZONTAL DISTANCE, PROVIDE A 5% SLOPE TO AN APPROVED ALTERNATIVE METHOD OF DIVERTING DRAINAGE AWAY FROM FOUNDATIONS WITH THE USE OF SWALES SLOPED AT 2% LONGITUDINALLY ALONG FLOW LINE, OR DRAINAGE INLETS. STORM DRAIN PIPE DIRECTED TO DISCHARGE AWAY FROM FOUNDATIONS IN A NON-EROSIVE MANNER.

E. PER CBC SECTION 2304, IN LANDSCAPE AREAS ADJACENT TO BUILDING FOUNDATIONS, CONTRACTOR SHALL PROVIDE 8" FROM FINISH FLOOR ELEVATION DOWN TO SOIL FINISH GRADE FOR PROPER CLEARANCE BETWEEN SOIL AND BOTTOM SILL PLATES. IN HARDSCAPE AREAS, CONTRACTOR SHALL PROVIDE MINIMUM OF 2" FROM FINISH FLOOR TO DOWN TO FINISH SURFACE OF HARDSCAPE FOR PROPER CLEARANCE BETWEEN SOIL AND WOOD SIDING, UNLESS OTHER MEANS OF WATERPROOFING IS NOTED ON BUILDING PLANS/DETAILS AND APPROVED BY LOCAL AGENCY.

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
PSR - GRLT2024-00055 Date: 06/27/2025
Approval of these plans shall not permit or constitute any violation of county or state laws. The County may revoke this permit or require corrections if they are in error. These approved plans shall be made available when inspections are requested. All changes must be approved.

SCALE: 1" = 10'

NOTE: UTILITIES SHOWN WERE PLOTTED FROM OBSERVED EVIDENCE AND PLANS OBTAINED FROM UTILITY PROVIDERS. EXACT LOCATIONS AND QUANTITIES MAY VARY. THE CONTRACTOR SHALL CALL 811 FOR UTILITY LOCATING SERVICES PRIOR TO EXCAVATION AND USE EXTREME CAUTION WHEN EXPOSING UTILITIES. ANY DAMAGE TO EXISTING UTILITIES WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

Know what's below. Call 811 before you dig.

ARROYO GRANDE LIBRARY

| NO. | DATE | REVISIONS |
|---|---|---|
| 1 | 10/28/24 | PLAN CHECK 1 COUNTY OF SLO |
| 2 | 1/22/25 | PLAN CHECK 2 COUNTY OF SLO |
| 3 | | |
| 4 | | |

WALSH ENGINEERING
WALSHENGINEERING.NET (805) 319-4948
1108 GARDEN STREET, SUITE 202-204 SAN LUIS OBISPO, CA 93401

REISS DESIGN STUDIO, PC

# ARROYO GRANDE LIBRARY REMODEL

800 W. BRANCH STREET, ARROYO GRANDE, CA

REGISTERED PROFESSIONAL ENGINEER MATTHEW R. WALSH C 79026 CIVIL STATE OF CALIFORNIA

DESIGNED BY: TW
CHECKED BY: TW
APPROVED BY: MRW
DATE: 1/22/2025

GRADING AND DRAINAGE PLAN

SHEET C3.0

saved: 1/22/2025, plotted: 1/22/2025, path: s:\projects_eng\20230150_slo county library_w. branch st_ag\drawings\grading.dwg

## SANITARY SEWER KEY NOTES

(BH) (1) EXISTING SEWER LATERAL (350'±) FROM EXISTING LIBRARY CONNECTION TO EXISTING TIE IN LOCATION AT STREET TO BE INSPECTED AND REPAIRED/REPLACED AS NEEDED TO RECTIFY ANY ROOT RELATED PIPE ISSUES.

## STORM DRAIN KEY NOTES

1. 6" AREA DRAIN WITH PEDESTRIAN RATED GRATE PER DETAIL 2 ON SHEET C5.0.
2. PROPOSED STORM DRAIN CLEANOUT WITH COVER TO GRADE PER DETAIL 7 ON SHEET C5.0.
3. PROPOSED CURB THROUGH DRAIN PER DETAIL 3 ON SHEET C5.0.

## WATER KEY NOTES

1. PROPOSED 6" FIRE WATER LINE TO PROVIDE FIRE SPRINKLER SERVICE. INSTALL FIRE MAIN SWEEP PER CITY STANDARD DETAIL #6430 ON SHEET FP5. SEE SHEET FP1 FOR CONTINUATION.
2. PROPOSED ZURN 350AST-DA-6" DOUBLE DETECTOR CHECK BACKFLOW DEVICE WITH FIRE DEPARTMENT CONNECTION PER DETAIL 8 ON SHEET C5.0.
3. PROPOSED POINT OF CONNECTION TO EXISTING 10" MAIN.
4. PROPOSED THRUST BLOCK PER DETAIL 3 ON SHEET C5.1.

## CAUTIONARY KEY NOTES

1. THE EXACT UTILITY INVERT AND LOCATION IS UNKNOWN DURING PREPARATION OF THIS PLAN. THE CONTRACTOR SHALL POTHOLE AND VERIFY EXISTING UTILITY INVERT AND LOCATION PRIOR TO CONSTRUCTION AND PRIOR TO ORDERING MATERIALS. PROVIDE ENGINEER WITH POTHOLE INFORMATION 30 DAYS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS TO ALLOW ADEQUATE TIME FOR REVISIONS TO PLANS.

## GENERAL LEGEND

- EXISTING/PROPOSED CENTERLINE (℄)
- EXISTING PROPERTY LINE (EX. ℄)
- PROPOSED PROPERTY LINE (℄)
- PROPOSED SETBACK LINE
- EXISTING/PROPOSED EASEMENT
- PROPOSED SAWCUT
- GUTTER FLOWLINE
- PROPOSED CURB AND GUTTER
- PROPOSED SLOTTED CURB
- PROPOSED RETAINING WALL. HEIGHT PER PLAN.
- PROPOSED CONCRETE PAVEMENT/HARDSCAPE
- PROPOSED ASPHALT CONCRETE PAVEMENT
- PROPOSED GRAVEL
- PROPOSED PERVIOUS PAVEMENT
- DEEPENED FOUNDATION WALL. RETAINED HEIGHT PER PLAN. SEE STRUCTURAL PLANS BY OTHERS FOR CONSTRUCTION DETAILS.
- RAISED FOUNDATION WALL. RETAINED HEIGHT PER PLAN. SEE STRUCTURAL PLANS BY OTHERS FOR CONSTRUCTION DETAILS.

## STORM DRAIN LEGEND:

- —50LF12"SD@0.5%— STORM DRAIN PIPE LENGTH, SIZE AND SLOPE (SD)
- PROPOSED SLOT/TRENCH DRAIN
- PROPOSED BIO RETENTION BASIN
- ENERGY DISSIPATOR
- HEADWALL/ENDWALL
- FLARED END SECTION
- DROP INLET
- MANHOLE
- CLEANOUT

## SANITARY SEWER LEGEND:

- —75LF6"SS@2.0%— SANITARY SEWER PIPE LENGTH, SIZE AND SLOPE (SS)
- SANITARY SEWER MANHOLE (SSMH)
- SANITARY SEWER CLEANOUT TO GRADE (SSCO)
- SANITARY SEWER BACKWATER VALVE

## WATER LEGEND:

- ——6"DW—— DOMESTIC WATER SERVICE AND SIZE (DW)
- ——8"FW—— FIRE WATER SERVICE AND SIZE (FW)
- GATE VALVE
- FIRE HYDRANT (FH)
- POST INDICATOR VALVE (PIV)
- FIRE DEPARTMENT CONNECTION (FDC)
- BACKFLOW DEVICE FOR FIRE SERVICE (RPZ OR DDC)
- BACKFLOW DEVICE FOR DOMESTIC SERVICE (RPZ)
- DOMESTIC WATER METER
- IRRIGATION METER (DESIGN BY OTHERS)
- THRUST BLOCK

## UTILITY GENERAL NOTES

1. FOR PIPE MATERIALS AND ADDITIONAL NOTES, SEE SHEET C2.0.
2. FOR TRENCH SECTION, BACKFILL AND SURFACE REPLACEMENT, SEE DETAIL 1 ON SHEET C5.1.
3. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY ALL INVERTS OF EXISTING UTILITIES AT POINTS OF CONNECTION AND PROPOSED UTILITY CROSSINGS BY OBSERVATION OR POTHOLING METHODS. NOTIFY THE ENGINEER OF ANY CONFLICTS OR DISCREPANCIES IN THESE PLANS AND ACTUAL FIELD INFORMATION.

N

0 10' 20'

SCALE: 1" = 10'

811 Know what's **below.** Call 811 before you dig.

NOTE: UTILITIES SHOWN WERE PLOTTED FROM OBSERVED EVIDENCE AND PLANS OBTAINED FROM UTILITY PROVIDERS. EXACT LOCATIONS AND QUANTITIES MAY VARY. THE CONTRACTOR SHALL CALL 811 FOR UTILITY LOCATING SERVICES PRIOR TO EXCAVATION AND USE EXTREME CAUTION WHEN EXPOSING UTILITIES. ANY DAMAGE TO EXISTING UTILITIES WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

ARROYO GRANDE LIBRARY

| NO. | DATE | REVISIONS |
|---|---|---|
| 1 | 10/28/24 | PLAN CHECK 1 COUNTY OF SLO |
| 2 | 1/22/25 | PLAN CHECK 2 COUNTY OF SLO |
| BH 3 | 7/25/25 | BID SET UPDATE |
| 4 | | |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1108 GARDEN STREET, SUITE 202-204 SAN LUIS OBISPO, CA 93401


REISS DESIGN STUDIO, PC

# ARROYO GRANDE LIBRARY REMODEL

800 W. BRANCH STREET, ARROYO GRANDE, CA

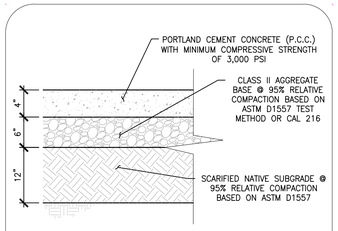
REGISTERED PROFESSIONAL ENGINEER MATTHEW R. WALSH C 79026 CIVIL STATE OF CALIFORNIA

DESIGNED BY: TW
CHECKED BY: TW
APPROVED BY: MRW
DATE: 7/25/2025

UTILITY PLAN

SHEET C4.0

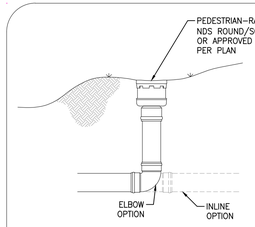

saved: 7/28/2025, plotted: 7/28/2025, path: s:\projects_eng\20230150_slo county library_w. branch st_cg\drawings\title_block.dwg




NOTES:
1. FINAL SECTIONS SHALL BE VERIFIED WITH R-VALUE TEST DURING GRADING OPERATIONS, PER SOILS REPORT.
2. PAVEMENT SECTIONS, PREPARATION OF SUBGRADE, AND EARTHWORK SHALL COMPLY WITH THE SOILS REPORT.
3. ALL CONCRETE PAVEMENT SHALL BE PROVIDED FULL DEPTH (OR ½ DEPTH OF SLAB MINIMUM) CONTROL JOINTS OR CONSTRUCTION JOINTS SPACED AT 15' O.C. MAXIMUM TO CONTROL CRACKING.

1 PEDESTRIAN CONCRETE SECTION

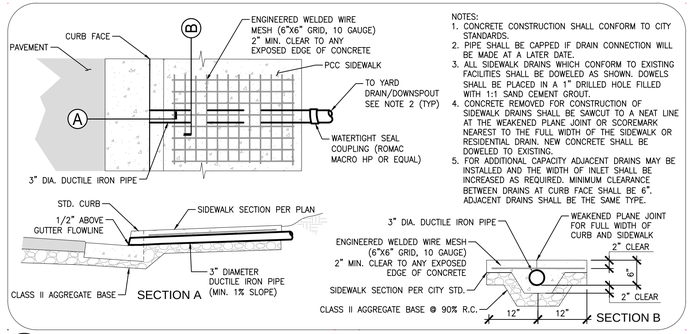
NTS




NOTES:
1. THE BACKFILL MATERIAL SHALL BE CRUSHED STONE OR OTHER GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS II MATERIAL AS DEFINED IN ASTM D2321, OR AS DETERMINED BY LOCAL STANDARDS & SITE ENGINEER. BEDDING & BACKFILL FOR SURFACE DRAINAGE INLETS SHALL BE PLACED & COMPACTED UNIFORMLY IN ACCORDANCE WITH ASTM D2321.

2 PEDESTRIAN-RATED AREA DRAIN

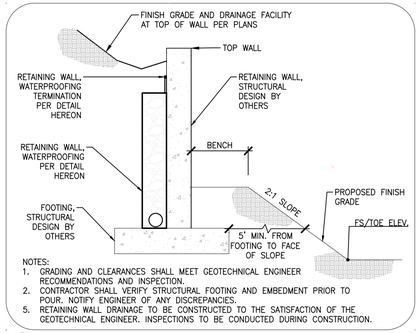
NTS




NOTES:
1. CONCRETE CONSTRUCTION SHALL CONFORM TO CITY STANDARDS.
2. PIPE SHALL BE CAPPED IF DRAIN CONNECTION WILL BE MADE AT A LATER DATE.
3. ALL SIDEWALK DRAINS WHICH CONFORM TO EXISTING FACILITIES SHALL BE DOWELED AS SHOWN. DOWELS SHALL BE PLACED IN A 1" DRILLED HOLE FILLED WITH 1:1 SAND CEMENT GROUT.
4. CONCRETE REMOVED FOR CONSTRUCTION OF SIDEWALK DRAINS SHALL BE SAWCUT TO A NEAT LINE AT THE WEAKENED PLANE JOINT OR SCOREMARK NEAREST TO THE FULL WIDTH OF THE SIDEWALK OR RESIDENTIAL DRAIN. NEW CONCRETE SHALL BE DOWELED TO EXISTING.
5. FOR ADDITIONAL CAPACITY ADJACENT DRAINS MAY BE INSTALLED AND THE WIDTH OF INLET SHALL BE INCREASED AS REQUIRED. MINIMUM CLEARANCE BETWEEN DRAINS AT CURB FACE SHALL BE 6". ADJACENT DRAINS SHALL BE THE SAME TYPE.

3 CURB THROUGH DRAIN - PIPE

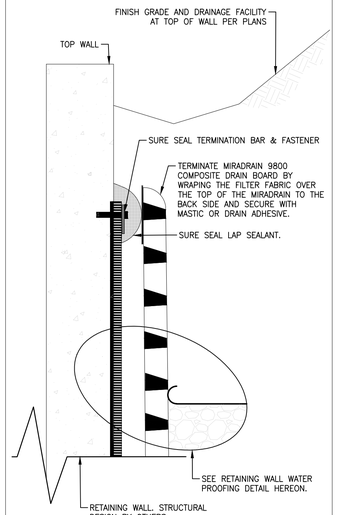
NTS




NOTES:
1. GRADING AND CLEARANCES SHALL MEET GEOTECHNICAL ENGINEER RECOMMENDATIONS AND INSPECTION.
2. CONTRACTOR SHALL VERIFY STRUCTURAL FOOTING AND EMBEDMENT PRIOR TO POUR. NOTIFY ENGINEER OF ANY DISCREPANCIES.
5. RETAINING WALL DRAINAGE TO BE CONSTRUCTED TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER. INSPECTIONS TO BE CONDUCTED DURING CONSTRUCTION.

4 RETAINING WALL GRADING

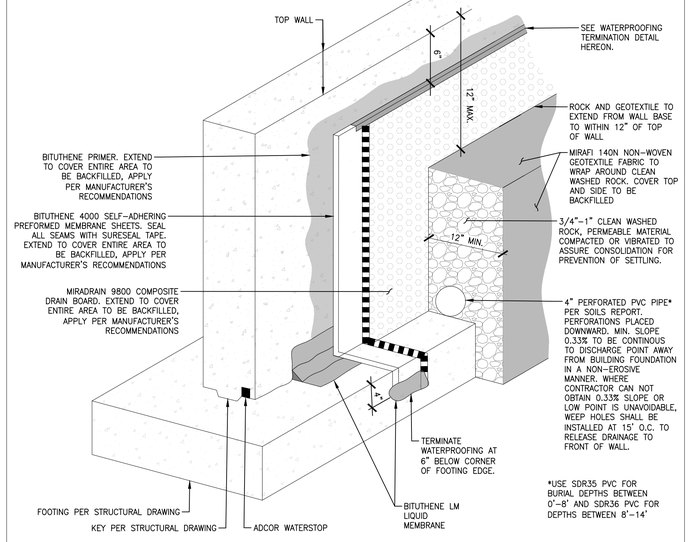
NTS




NOTES:
1. TERMINATE WATERPROOFING MEMBRANE USING CCW TERMINATION BAR FASTENED AT 6" O.C, WITHIN 1/4" OF EDGE OF MATERIAL
2. APPLY 3/4" LAYER OF BITHUENE LM LIQUID MEMBRANE OR SURE-SEAL LAP SEALANT COVERING TOP EDGE OF AND ENTIRE TERMINATION.
5. RETAINING WALL DRAINAGE TO BE CONSTRUCTED TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER. INSPECTIONS TO BE CONDUCTED DURING CONSTRUCTION.

5 WATERPROOFING TERMINATION DETAIL

NTS

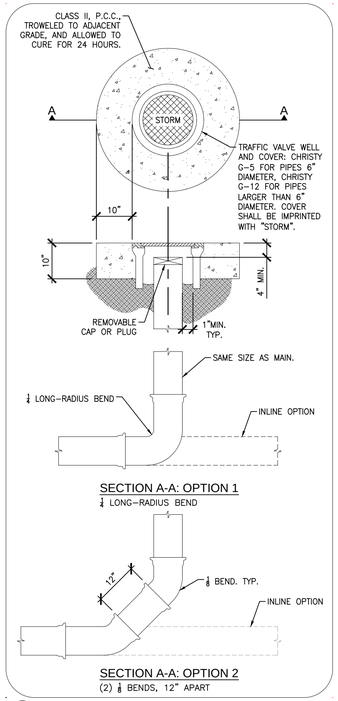



*USE SDR35 PVC FOR BURIAL DEPTHS BETWEEN 0'-8' AND SDR26 PVC FOR DEPTHS BETWEEN 8'-14'

NOTES:
1. CLEAN WASHED ROCK TO BE TOPPED WITH 12 INCHES OF COMPACTED NATIVE SOILS OF LOW PERMEABILITY PER SOILS REPORT.
2. INSTALL WATER PROOFING MATERIAL IN CONFORMANCE WITH MANUFACTURER SPECIFICATION
3. SEAL ALL SEAMS OF MEMBRANE WITH SURESEAL TAPE.
4. REFER TO GEOTECHNICAL REPORT FOR ALL WATERPROOFING RECOMMENDATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INCORPORATE GEOTECHNICAL RECOMMENDATIONS
5. RETAINING WALL DRAINAGE TO BE CONSTRUCTED TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER. INSPECTIONS TO BE CONDUCTED DURING CONSTRUCTION.

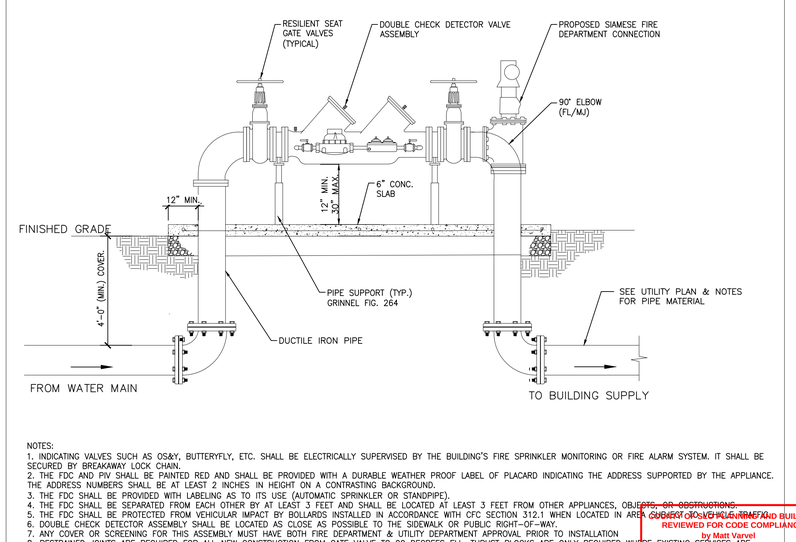
6 RETAINING WALL WATERPROOFING

NTS




7 SEWER/STORM CLEANOUT

NTS

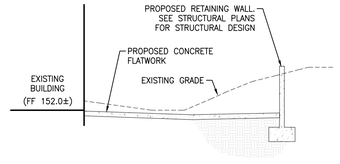



NOTES:
1. INDICATING VALVES SUCH AS OS&Y, BUTTERYFLY, ETC. SHALL BE ELECTRICALLY SUPERVISED BY THE BUILDING'S FIRE SPRINKLER MONITORING OR FIRE ALARM SYSTEM. IT SHALL BE SECURED BY BREAKAWAY LOCK CHAIN.
2. THE FDC AND PIV SHALL BE PAINTED RED AND SHALL BE PROVIDED WITH A DURABLE WEATHER PROOF LABEL OF PLACARD INDICATING THE ADDRESS SUPPORTED BY THE APPLIANCE. THE ADDRESS NUMBERS SHALL BE AT LEAST 2 INCHES IN HEIGHT ON A CONTRASTING BACKGROUND.
3. THE FDC SHALL BE PROVIDED WITH LABELING AS TO ITS USE (AUTOMATIC SPRINKLER OR STANDPIPE).
4. THE FDC SHALL BE SEPARATED FROM EACH OTHER BY AT LEAST 3 FEET AND SHALL BE LOCATED AT LEAST 3 FEET FROM OTHER APPLIANCES, OBJECTS, OR OBSTRUCTIONS.
5. THE FDC SHALL BE PROTECTED FROM VEHICULAR IMPACT BY BOLLARDS INSTALLED IN ACCORDANCE WITH CFC SECTION 312.1 WHEN LOCATED IN AREA SUBJECT TO VEHICULAR TRAFFIC.
6. DOUBLE CHECK DETECTOR ASSEMBLY SHALL BE LOCATED AS CLOSE AS POSSIBLE TO THE SIDEWALK OR PUBLIC RIGHT-OF-WAY.
7. ANY COVER OR SCREENING FOR THIS ASSEMBLY MUST HAVE BOTH FIRE DEPARTMENT & UTILITY DEPARTMENT APPROVAL PRIOR TO INSTALLATION
8. RESTRAINED JOINTS ARE REQUIRED FOR ALL NEW CONSTRUCTION FROM GATE VALVE TO 90 DEGREES ELL. THRUST BLOCKS ARE ONLY REQUIRED WHERE EXISTING CONDITIONS ARE BEING MODIFIED AND RESTRAINED JOINTS ARE NOT USED.
9. FIRE DEPARTMENT CONNECTIONS AND POST INDICATOR VALVES SHALL HAVE A MINIMUM 3 FT. CIRCUMFERENCE OF UNOBSTRUCTED CLEARANCE.

8 DOUBLE CHECK DETECTOR ASSEMBLY INSTALLATION

NTS

FIRE DEPARTMENT, UTILITY AND BUILDING REVIEWED FOR CODE COMPLIANCE by Matt Varvel
Permit No: BLD2025-0056 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws. The County may revoke this permit or require corrections if they are in error. These approved plans shall be made available when inspections are requested. All changes must be approved.




1 C3.0 NOT TO SCALE

| NO. | DATE | REVISIONS |
|---|---|---|
| 1 | 10/28/24 | PLAN CHECK 1 COUNTY OF SLO |
| 2 | 1/22/25 | PLAN CHECK 2 COUNTY OF SLO |
| | | |
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REISS DESIGN STUDIO, PC

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800 W. BRANCH STREET, ARROYO GRANDE, CA

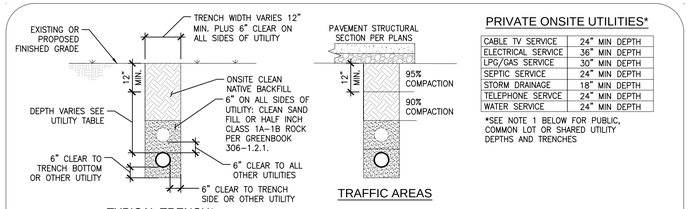
REGISTERED PROFESSIONAL ENGINEER MATTHEW R. WALSH C 79026 CIVIL STATE OF CALIFORNIA

DESIGNED BY: TW
CHECKED BY: TW
APPROVED BY: MRW
DATE: 1/22/2025

SECTIONS AND DETAILS

SHEET C5.0

saved: 1/22/2025, plotted: 1/22/2025, path: s:\projects_eng\20230150_slo county library_w branch st_og\drawings\sections_details.dwg




PRIVATE ONSITE UTILITIES*

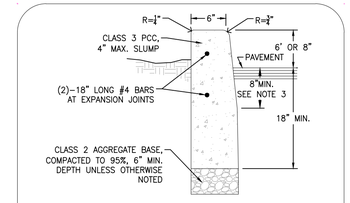
| | |
|---|---|
| CABLE TV SERVICE | 24" MIN DEPTH |
| ELECTRICAL SERVICE | 36" MIN DEPTH |
| LPG/GAS SERVICE | 30" MIN DEPTH |
| SEPTIC SERVICE | 24" MIN DEPTH |
| STORM DRAINAGE | 18" MIN DEPTH |
| TELEPHONE SERVCE | 24" MIN DEPTH |
| WATER SERVICE | 24" MIN DEPTH |

*SEE NOTE 1 BELOW FOR PUBLIC, COMMON LOT OR SHARED UTILITY DEPTHS AND TRENCHES

NOTES:
1. ALL COMMON LOT OR SHARED UTILITY TRENCHES WILL BE UNDERGROUND AND TO THE COUNTY SPECIFICATIONS, COUNTY STD U-4 AND U-4A FOR TRENCH.
2. ALL SIZING OF THE UTILITY PIPING AND CONDUITS FOR THIS PROJECT IS TO BE DETERMINED IN THE FIELD BASED ON THE CURRENT UTILITY DEMANDS, ANY SIZE INDICATED ON THE PLANS IS FOR GENERAL INFORMATION ONLY.
3. WHERE APPLICABLE PG&E SERVICE DETAILS AND SPECIFICATIONS OVERRIDE THIS TRENCH DETAIL FOR ELECTRICAL SUPPLY TO SITE, IF SO THEN SEE JOINT TRENCH CONFIGURATIONS AND OCCUPANCY GUIDE BY PG&E FOR ADDITIONAL DETAIL AND CLARIFICATION ON ELECTRICAL TRENCHING AND PLANS BY OTHERS.
4. WET UTILITIES MUST HAVE A MINIMUM OF 36" SEPARATION FROM THE ELECTRICAL SERVICE, WATER SERVICE AND SEWER SERVICE MUST BE IN SEPARATE TRENCHES.
5. SEWER OR SEPTIC SERVICE, STORM DRAINAGE AND WATER SERVICE MUST NOT BE IN THE SAME TRENCH AS THE ELECTRICAL SERVICE.
6. SAND OR ROCK TO BE PLACED AND TAMPED TO INSURE COMPLETE FILL OF HAUNCHING AREA FOR AVOIDANCE OF SETTLEMENT.

1 PRIVATE UTILITY TRENCH DETAIL

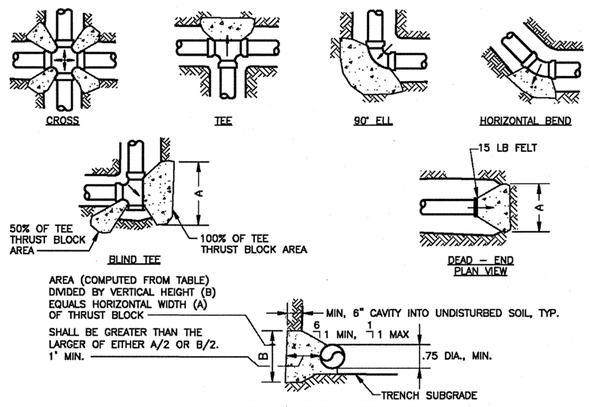
NTS




NOTES:
1. WHEN CURB IS PLACED ADJACENT TO EXISTING OR FUTURE IRRIGATED LANDSCAPE AREA, PCC SHALL EXTEND DOWN AS SHOWN FOR MOISTURE BARRIER. ANY ALTERNATE MOISTURE BARRIER SHALL BE APPROVED BY ENGINEER.
2. WHEN CURB IS NOT LOCATED AS IN NOTE 2, DEPTH MAY BE REDUCED.
3. EXPANSION JOINTS SHALL BE PLACED AT CORNERS, BC'S AND EX'S, AND AT 33 FEET MAXIMUM SPACING.

2 CURB

NTS




**THRUST BLOCK SIZING IN SQUARE FEET OF BEARING AREA**

**SITE SPECIFIC SOIL BEARING CAPACITY (BOLD)**

| PIPESIZE | BEND | THRUST # | 1000psf | 1500psf | 2000psf | 3000psf | 4000psf |
|---|---|---|---|---|---|---|---|
| | | | A | B | C | D | E |
| 4 inch | TEES | 1810 | 5.4 | 3.6 | 2.7 | 1.8 | 1.4 |
| | 90 | 2559 | 7.7 | 5.1 | 3.8 | 2.6 | 1.9 |
| | 45 | 1385 | 4.2 | 2.8 | 2.1 | 1.4 | 1.0 |
| | 22-1/2 | 706 | 2.1 | 1.4 | 1.1 | 0.7 | 0.4 |
| | | | A | B | C | D | E |
| 6 inch | TEES | 3739 | 11.2 | 7.5 | 5.6 | 3.7 | 2.8 |
| | 90 | 5288 | 15.9 | 10.6 | 7.9 | 5.3 | 4.0 |
| | 45 | 2862 | 8.6 | 5.7 | 4.3 | 2.9 | 2.1 |
| | 22-1/2 | 1459 | 4.4 | 2.9 | 2.2 | 1.5 | 1.1 |
| | | | A | B | C | D | E |
| 8 inch | TEES | 6433 | 19.3 | 12.9 | 9.6 | 6.4 | 4.8 |
| | 90 | 9097 | 27.3 | 18.2 | 13.6 | 9.1 | 6.8 |
| | 45 | 4923 | 14.8 | 9.8 | 7.4 | 4.9 | 3.7 |
| | 22-1/2 | 2510 | 7.5 | 5.0 | 3.8 | 2.5 | 1.9 |
| | | | A | B | C | D | E |
| 10 inch | TEES | 9677 | 29.0 | 19.4 | 14.5 | 9.7 | 7.3 |
| | 90 | 13685 | 41.1 | 27.4 | 20.5 | 13.7 | 10.3 |
| | 45 | 7406 | 22.2 | 14.8 | 11.1 | 7.4 | 5.6 |
| | 22-1/2 | 3776 | 11.3 | 7.6 | 5.7 | 3.8 | 2.8 |
| | | | A | B | C | D | E |
| 12 inch | TEES | 13685 | 41.1 | 27.4 | 20.5 | 13.7 | 10.3 |
| | 90 | 19353 | 58.1 | 38.7 | 29.0 | 19.4 | 14.5 |
| | 45 | 10474 | 31.4 | 20.9 | 15.7 | 10.5 | 7.9 |
| | 22-1/2 | 5340 | 16.0 | 10.7 | 8.0 | 5.3 | 4.0 |

**NOTES:**
1. **THRUST VALUES SHOWN AND SAFETY FACTOR OF 1.5 ARE PURSUANT TO THE CURRENT EDITION OF NFPA 24 STANDARD FOR UNDERGROUND FIRE MAINS.**
2. **SOIL BEARING CAPACITY IS PER SOIL TYPE AS FOLLOWS: SOFT CLAY=1000 PSF, SILT=15OO PSF, SANDY SILTS/CLAYS=2000 PSF, SAND=3000 PSF, HARD SAND=4000**
3. **BEARING CAPACITY FOR SITE SPECIFIC SOIL TYPE IS CIRCLE AT TOP OF TABLE.**

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT2024-00055 Date: 01/27/2025
The approval of these plans shall not permit violations of county or state laws.
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3 THRUST BLOCK

NTS

saved: 1/22/2025, plotted: 1/22/2025, path: s:\projects_eng\20230150_slo county library_w. branch st_cgl\drawings\sections_details.dwg

| NO. | DATE | REVISIONS |
|---|---|---|
| 1 | 10/28/24 | PLAN CHECK 1 COUNTY OF SLO |
| 2 | 1/22/25 | PLAN CHECK 2 COUNTY OF SLO |
| | | |
| | | |

WALSH ENGINEERING
WALSHENGINEERING.NET (805) 319-4948
1108 GARDEN STREET, SUITE 202-204 SAN LUIS OBISPO, CA 93401

REISS DESIGN STUDIO, PC

ARROYO GRANDE LIBRARY REMODEL

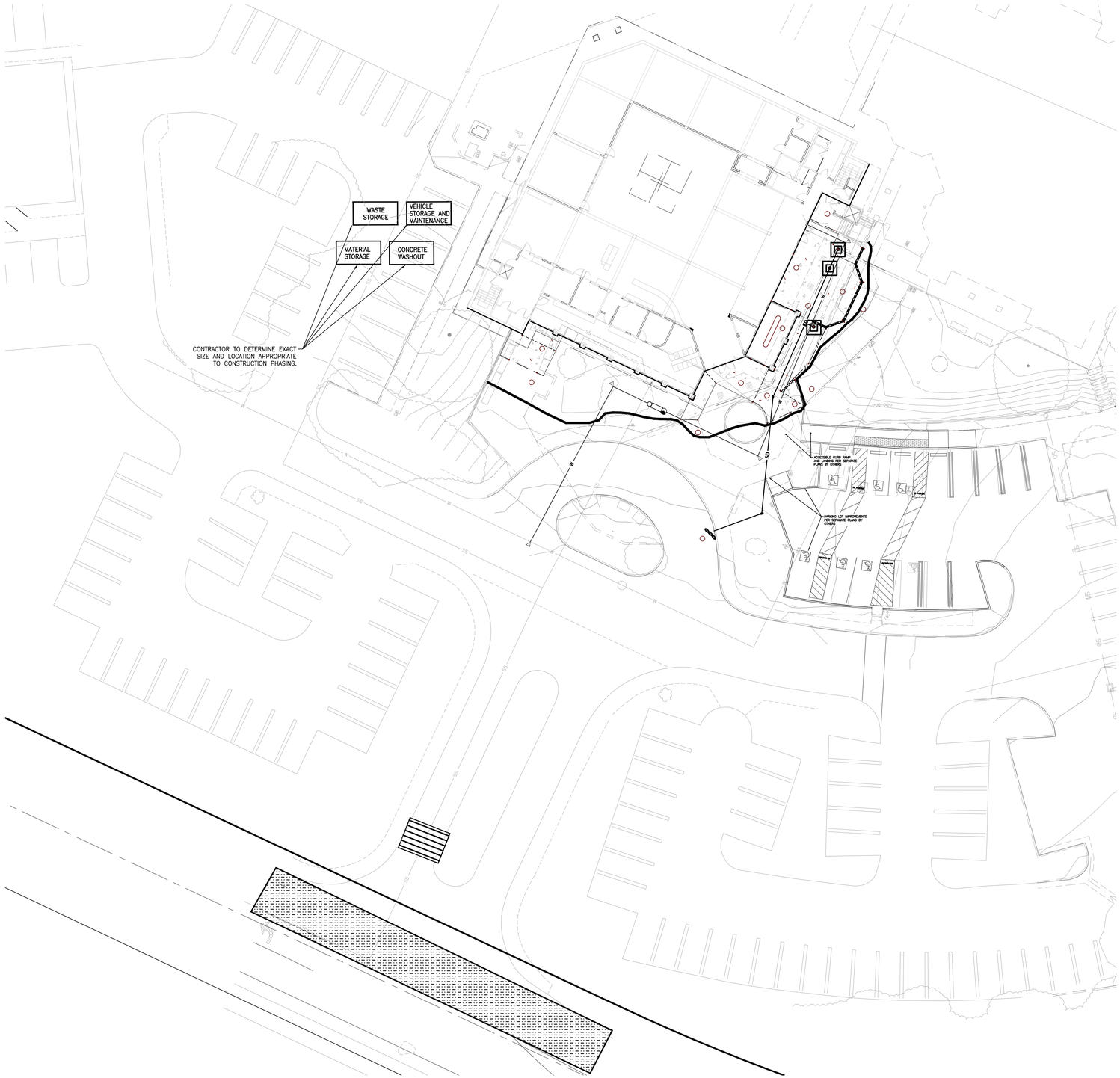
800 W. BRANCH STREET, ARROYO GRANDE, CA

REGISTERED PROFESSIONAL ENGINEER MATTHEW R. WALSH C 79026 CIVIL STATE OF CALIFORNIA

DESIGNED BY: TW
CHECKED BY: TW
APPROVED BY: MRW
DATE: 1/22/2025

SECTIONS AND DETAILS

SHEET C5.1




## EROSION CONTROL LEGEND

- SILT FENCE SEDIMENT CONTROL PER DETAIL 1 ON SHEET EC2.0.
- FIBER ROLL SEDIMENT CONTROL PER DETAIL 2 ON SHEET EC2.0.
- CONCRETE WASHOUT — CONCRETE WASHOUT BMP PER DETAIL 4 ON SHEET EC2.0.
- DROP INLET SEDIMENT CONTROL PER DETAIL 7 ON SHEET EC2.0.
- GRAVEL BAG CHECK DAM PER DETAIL 8 ON SHEET EC2.0.
- STREET SWEEPING AND VACUUMING PER CASQA FACT SHEET SE-7
- RUMBLE STRIPS PER DETAIL 6 ON SHEET EC2.0.

ARROYO GRANDE LIBRARY

COUNTY OF SLO PLANNING AND BUILDING
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0 20' 40'
SCALE: 1" = 20'

NOTE: UTILITIES SHOWN WERE PLOTTED FROM OBSERVED EVIDENCE AND PLANS OBTAINED FROM UTILITY PROVIDERS. EXACT LOCATIONS AND QUANTITIES MAY VARY. THE CONTRACTOR SHALL CALL 811 FOR UTILITY LOCATING SERVICES PRIOR TO EXCAVATION AND USE EXTREME CAUTION WHEN EXPOSING UTILITIES. ANY DAMAGE TO EXISTING UTILITIES WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

811 Know what's below. Call 811 before you dig.

| NO. | DATE | REVISIONS |
|---|---|---|
| 1 | 10/28/24 | PLAN CHECK 1 COUNTY OF SLO |
| 2 | 1/22/25 | PLAN CHECK 2 COUNTY OF SLO |
| | | |
| | | |

WALSH ENGINEERING
WALSHENGINEERING.NET (805) 319-4948
1108 GARDEN STREET, SUITE 202-204 SAN LUIS OBISPO, CA 93401

REISS DESIGN STUDIO, PC

# ARROYO GRANDE LIBRARY REMODEL

800 W. BRANCH STREET, ARROYO GRANDE, CA

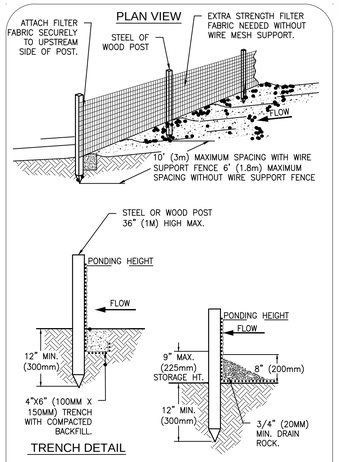
REGISTERED PROFESSIONAL ENGINEER MATTHEW R. WALSH C 79026 CIVIL STATE OF CALIFORNIA

DESIGNED BY: TW
CHECKED BY: TW
APPROVED BY: MRW
DATE: 1/22/2025

EROSION AND SEDIMENT CONTROL PLAN

SHEET
EC1.0

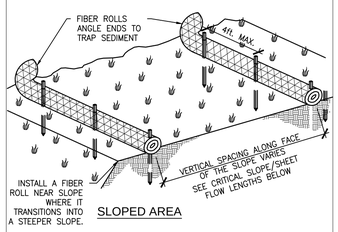
saved: 10/23/2024, plotted: 1/22/2025, path: s:\projects_eng\20230150_slo county library_w branch sl_og\drawings\xrosion.dwg

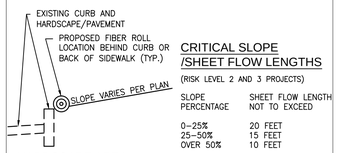



NOTES:
1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" MAXIMUM RECOMMENDED STORAGE HEIGHT.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE TO SEDIMENT TRANSPORT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

1 SILT FENCE — NTS

NOTE:
1. INSTALL FIBER ROLL ALONG A LEVEL CONTOUR.

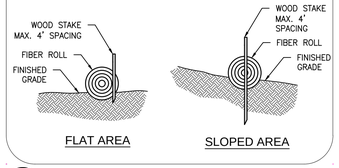


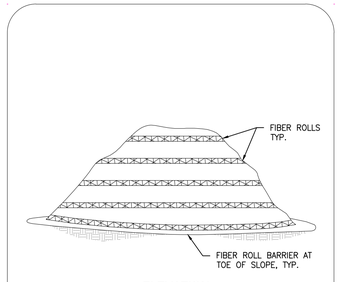

CRITICAL SLOPE /SHEET FLOW LENGTHS

(RISK LEVEL 2 AND 3 PROJECTS)

| SLOPE PERCENTAGE | SHEET FLOW LENGTH NOT TO EXCEED |
|---|---|
| 0-25% | 20 FEET |
| 25-50% | 15 FEET |
| OVER 50% | 10 FEET |

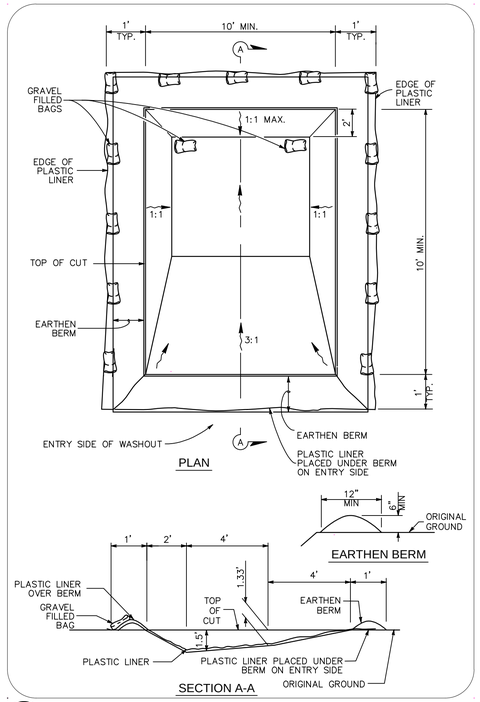



2 FIBER ROLL — NTS

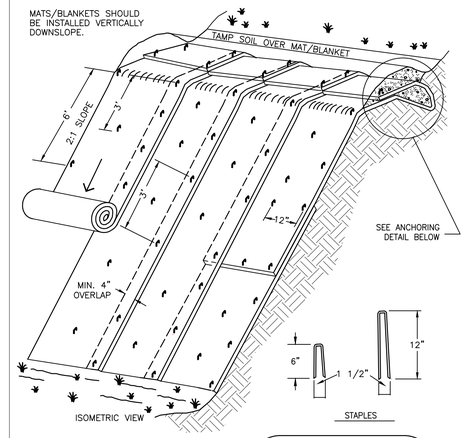



NOTES:
1. SEE FIBER ROLL DETAIL ON THIS SHEET FOR ADDITIONAL REQUIREMENTS.
2. IF EROSION OF THE STOCKPILE IS OBSERVED, ADDITIONAL MEASURES SHALL BE INITIATED INCLUDING THE OPTIONAL REINFORCED PLASTIC COVERING AND THE OPTIONAL LINED DITCH AT THE TOE OF THE SLOPE.

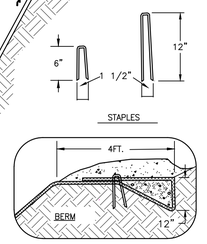
3 STOCKPILE PROTECTION — NTS



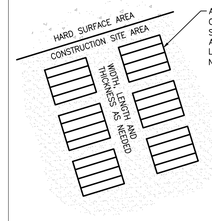

4 CONCRETE WASHOUT — NTS




NOTES:
1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS TO ENSURE MAT/BLANKET HAS GOOD SOIL CONTACT.
2. LAY BLANKETS AND STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH.
3. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
4. APPLY SEED, FERTILIZER, AND IRRIGATE UNTIL VEGETATION IS GERMINATED THROUGH MAT AND SOIL IS EFFECTIVELY STABILIZED WITH VEGETATION.
5. SEED WITH CALIFORNIA GOLDFIELDS, COASTAL TIDYTIPS, SPANISH LOTUS, BICOLOR LUPINE, SMALL FESCUE, SIXWEEKS FESCUE OR APPROVED EQUAL.

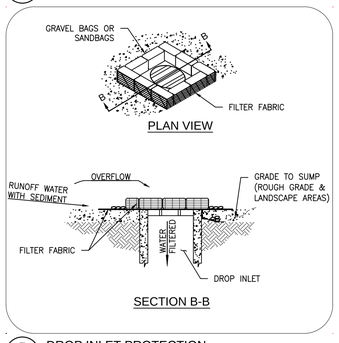



5 JUTE NETTING EROSION CONTROL MAT — NTS

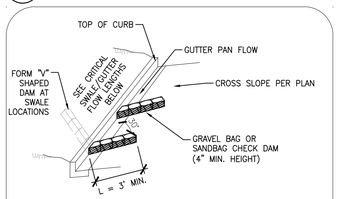



NOTES:
1. MUD, SEDIMENT AND OTHER MATERIALS SHALL NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION SITE EXIT TO PUBLIC ROADWAYS SHALL BE STABILIZED, TO PREVENT SEDIMENT OR OTHER MATERIALS FROM BEING DEPOSITED ON PUBLIC ROADWAYS. DEPOSITS ON PUBLIC ROADWAYS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS INTO THE NATURAL OR PUBLIC STORM WATER SYSTEM.
2. STABILIZED CONSTRUCTION SITE EXIT SHALL:
   - 2.a. BE LOCATED AT ANY PONT WHERE TRAFFIC ENTERS OR LEAVES A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT OF WAY, STREET, ALLEY, SIDEWALK OR PARKING AREA.
   - 2.b. INCLUDE A SERIES OF STEEL PLATES (3 OR MORE) WITH "RUMBLE STRIPS", AND/OR 4" MINIMUM AGGREGATE WITH A WIDTH (10' MIN.), LENGTH (30' MIN.) AND THICKNESS NEEDED TO ADEQUATELY PREVENT ANY TRACKING ONTO PAVED SURFACES.
   - 2.c. INCLUDE A WASH RACK WITH A SEDIMENT TRAP LARGE ENOUGH TO COLLECT ALL WASH WATER AS NECESSARY TO IMPROVE SEDIMENT COLLECTION EFFICIENCY.
3. ENSURE THAT ALL VEHICLES ACCESSING THE CONSTRUCTION SITE UTILIZE THE STABILIZED CONSTRUCTION SITE ENTRACNCE/EXIT.
4. ENSURE THAT ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS IS REMOVED IMMEDIATELY.
5. INCLUDE SWEEPING PAVED AREAS THAT RECEIVE CONSTRUCTION TRAFFIC WHENEVER SEDIMENT BECOMES VISIBLE.
6. ENSURE THAT PAVEMENT WASHING IS PREVENTED IF WASHING RESULTS IN A DISCHARGE TO THE STORM WATER SYSTEM OR A NATURAL WATERCOURSE.

6 RUMBLE STRIPS — NTS




7 DROP INLET PROTECTION — NTS




CRITICAL SLOPE /GUTTER FLOW LENGTHS

| SLOPE PERCENTAGE | GUTTER FLOW LENGTH NOT TO EXCEED |
|---|---|
| 0-2% | 250 FEET |
| 2-10% | 150 FEET |
| OVER 10% | 100 FEET |

NOTES:
1. VISUALLY INSPECT SEDIMENT BUILD-UP. REMOVE/CLEAN WHEN SEDIMENT REACHES 3" MAX.

8 CHECK DAM FOR GUTTER — NTS

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
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| NO. | DATE | REVISIONS |
|---|---|---|
| 1 | 10/28/24 | PLAN CHECK 1 COUNTY OF SLO |
| 2 | 1/22/25 | PLAN CHECK 2 COUNTY OF SLO |
| 3 | | |
| 4 | | |

WALSH ENGINEERING
WALSHENGINEERING.NET (805) 319-4948
1108 GARDEN STREET, SUITE 202-204 SAN LUIS OBISPO, CA 93401

REISS DESIGN STUDIO, PC

# ARROYO GRANDE LIBRARY REMODEL

800 W. BRANCH STREET, ARROYO GRANDE, CA

REGISTERED PROFESSIONAL ENGINEER MATTHEW R. WALSH C79026 CIVIL STATE OF CALIFORNIA

DESIGNED BY: TW
CHECKED BY: TW
APPROVED BY: MRW
DATE: 1/22/2025

EROSION AND SEDIMENT CONTROL DETAILS

SHEET
EC2.0

saved: 10/23/2024, plotted: 1/22/2025, path: s:\projects_eng\2023\150_slo county library_w. branch st_arg\drawing\11 erosion.dwg

## GENERAL SPRINKLER NOTES

1.THIS COMMERCIAL TENANT IMPROVEMENT SHALL BE DESIGNED AND INSTALLED PER NFPA 13 2022 EDITION AND LOCAL AHJ REGULATIONS.
2.ONLY NEW SPRINKLER SHALL BE EMPLOYED IN THE INSTALLATION OF THIS SPRINKLER
SYSTEM. IF ANY SPRINKLERS WERE MOVED OR RELOCATED, THEY WILL BE REPLACED WITH AN EQUIVALENT TYPE AND TEMPERATURE HEAD.
3.SPARE SPRINKLERS OF INSTALLATION TYPE SHALL BE PROVIDED IN EXISTING SYSTEM SPARE HEAD BOX.
4.ALL EXISTING PIPING SHALL BE MARKED AS DASH LINES. NEW PIPING SHALL BE INDICATED WITH SOLID LINES.
5.ALL PIPE MEASUREMENTS ARE CENTER TO CENTER.
6.ALL NEW 1" PIPE TO BE SCH 40.
7.OWNER SHALL PROVIDE AND MAINTAIN FREEZE PROTECTION OF SYSTEM.
8.ANY DEFICIENCIES WITHIN THE EXISTING SPRINKLER SYSTEM IS OUTSIDE THE SCOPE OF THIS WORK.
9.ANY CHANGES WITHOUT THE CONSENT OF INSTALLING CONTRACTOR AND SHALL NOT BE REPRODUCED WITHOUT THEIR CONSENT.

## SCOPE OF WORK

NFPA 13 2022 ED.

HAZARD CLASSIFICATION:
LIGHT HAZARD - LIBRARY, OFFICES, RESTROOMS & COMBUSTIBLE CONCEALED SPACE

HEAD SPACING:
LIGHT HAZARD 225 SF-
SMALL ROOM RULE- 9 FT OFF SINGLE WALL
ELO PENDENTS IN MAIN CEILING ARE EXTENDED COVERAGE. CALCULATED FOR 18'X18' SPACING.

HYDRAULIC CALCS: NEW HYDRAULIC CALCS PROVED FOR ALL REMOTE AREAS.

HYDRAULIC PRESSURE TEST: NA-AS PER 25.2.1.4.1
(REQUIRED WORKING STATIC PRESSURE TEST FOR 2 HOURS)

ALARM SYSTEM: NO CHANGES- MONITORED BY OTHERS

SCOPE OF WORK: THIS PROJECT CONSIST OF A TENANT IMPROVEMENT TO ARROYO GRANDE LIBRARY. CURRENTLY BUILDING IS NOT SPRINKLERED. NEW SPRINKLER SYSTEM INSTALLED FROM A NEW RISER AND OVERHEAD SPRINKLERS. ALL CONCEALED SPACE TO BE SPRINKLERED.

NO CHANGE TO ANY OTHER LOCATIONS.

## JURISDICTIONAL SUMMARY:

AHJ: CITY OF ARROYO GRANDE & AG CITY FIRE

## PROJECT INFORMATION:

| | | |
|---|---|---|
| **PROJECT ADDRESS** | 800 W Branch St, Arroyo Grande, California 93420 | |
| **APN** | 007-011-050 | |
| **LEGAL DESCRIPTION** | CY AG PM 44/96 PTN PAR 3 | |
| **LOT SIZE** | 13.11 Acres | |
| **ZONING** | Public Facility | |
| COMMUNITY/ PLANNING AREA | City of Arroyo Grande | |
| **FIRE INFORMATION** | | |
| JURISDICTION | Arroyo Grande City Fire | |
| HAZARD ZONE | LRA - Local Responsibility Area | |
| **SETBACKS/YARDS** | | |
| | Front/Street Setback | 25'0" |
| | Side Yard | 25'0" |
| | Rear/Other Yard | 25'0" |
| **LOT COVERAGE** | | |
| ALLOWED | Building Coverage | 60% |
| EXISTING TO REMAIN | Building Coverage | 10% |
| **MAXIMUM HEIGHT** | | |
| ALLOWED | 35'0" | |
| EXISTING TO REMAIN | 28'0" | *Refer to Elevations for Building Height Calculation* |

**BUILDING AREAS**

| | | |
|---|---|---|
| Existing Lower Floor | | |
| | Children's Area | 2,343 S.F. |
| | General Library | 6,899 S.F. |
| | Staff Area | 1,505 S.F. |
| | Addition Staff Area | 760 S.F. |
| **Total Lower Floor** | | 11,507 S.F. |
| | | 11,507 S.F. |
| Existing Upper Floor | | |
| | Staff Area | 2,960 S.F. |
| **Total Conditioned** | | 14,467 S.F. |
| Proposed Patio | | 1,060 S.F. |
| Existing Upper Balcony | | 1,936 S.F. |

## HYDRANT FLOW REPORT

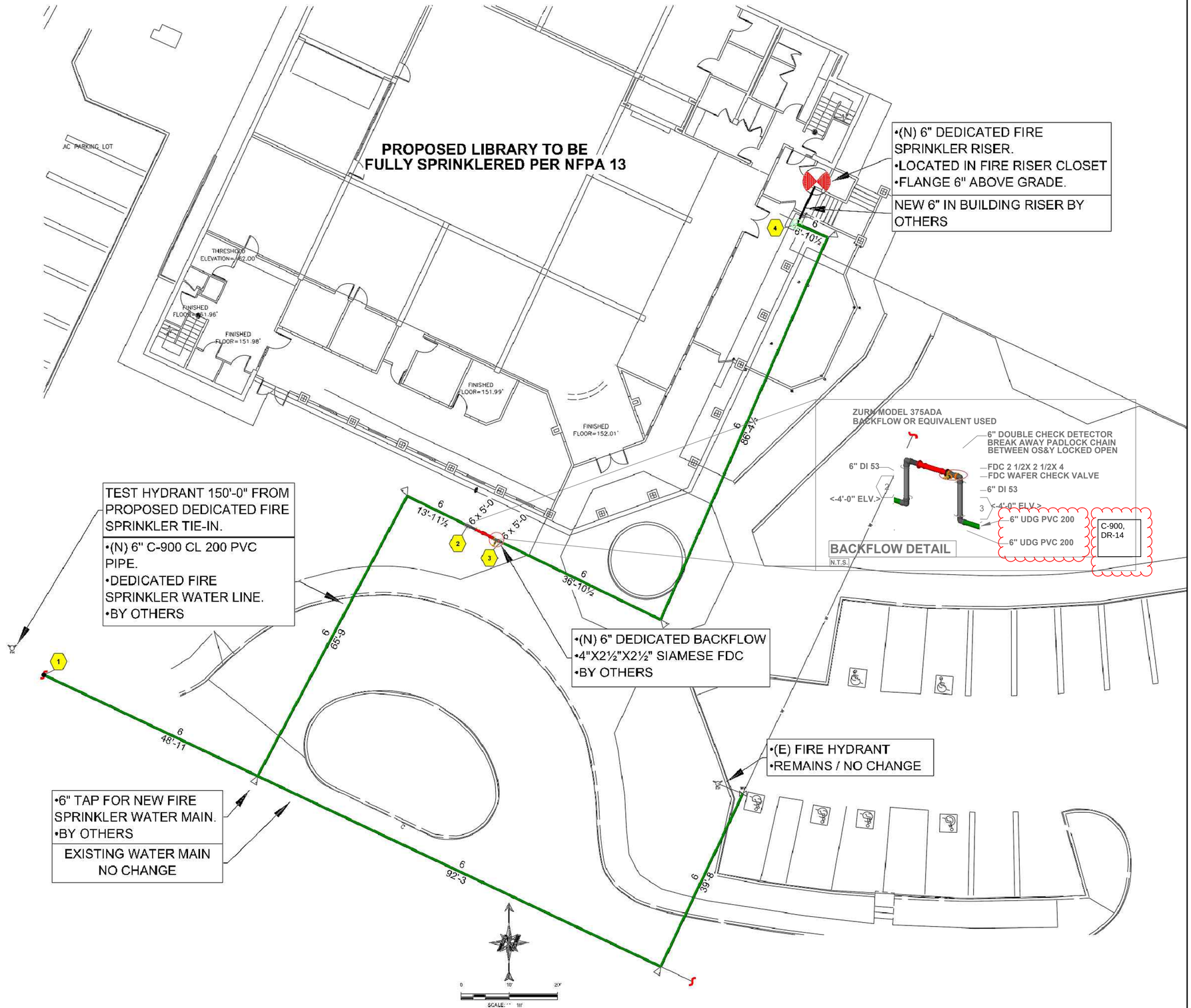
HYDRANT FLOW REPORT PROVIDED 2/9/24 BY SHANE TAYLOR UTILITES MANAGER OF ARROYO GRANDE.

STATIC 60 PSI
RESIDUAL 54PSI
PITOT 45
DIAMETER 2.5
HYDRANT FLOWING 1126 GPM
PROJECTED AVAILABLE 3135 GPM

SEE FULL REPORT SHEET FP5

## VICINITY MAP:

NOT TO SCALE




### TOTAL SPRINKLER FOR ENTIRE JOB

| SYMBOL | MANUFACTURER | SIN | MODEL | QUANTITY | K-FACTOR | TYPE | SIZE | RESPONSE | FINISH | TEMPERATURE |
|---|---|---|---|---|---|---|---|---|---|---|
| | VIKING | VK302 | MICROFAST | 57 | 5.6 | PENDENT | 1/2 | QUICK | BRASS | 155°F |
| | VIKING | VK305 | MICROFAST | 4 | 5.6 | HORIZONTAL SIDEWALL | 1/2 | QUICK | BRASS | 200°F |
| | VIKING | VK302 | MICROFAST | 8 | 5.6 | PENDENT | 1/2 | QUICK | BRASS | 200°F |
| | VIKING | VK534 | EC/QREC | 52 | 11.2 | PENDENT | 3/4 | QUICK | BRASS | 155°F |
| | VIKING | VK300 | MICROFAST | 97 | 5.6 | UPRIGHT | 1/2 | QUICK | BRASS | 200°F |
| | | | | TOTAL = 218 | | | | | | |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SAN LUIS OBISPO, CA 93401



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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:
GENERAL NOTES, FIRE SPRINKLER SITE PLAN & BUILDING DATA

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
By Matt Varvel
Project No: CAL T2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
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BMA ARCHITECTS
Work Assistance - 1 Corporate Center, 4770 Baseline Rd., Ste 240
Ashburn, VA 20147 - OFF: (804) 544-4229


STAMP:

LICENSED PROFESSIONAL ENGINEER
BRANDON ROGERS
M 38902
EXP 6/30/25
MECHANICAL
STATE OF CALIFORNIA

DATE:
**May 28, 2025**

REVISIONS:

FIRE REVIEW
REVIEWED FOR CODE COMPLIANCE
Jun 05 2025
CSG CONSULTANTS, INC.

JOB NUMBER:
2028

SHEET:
FP1

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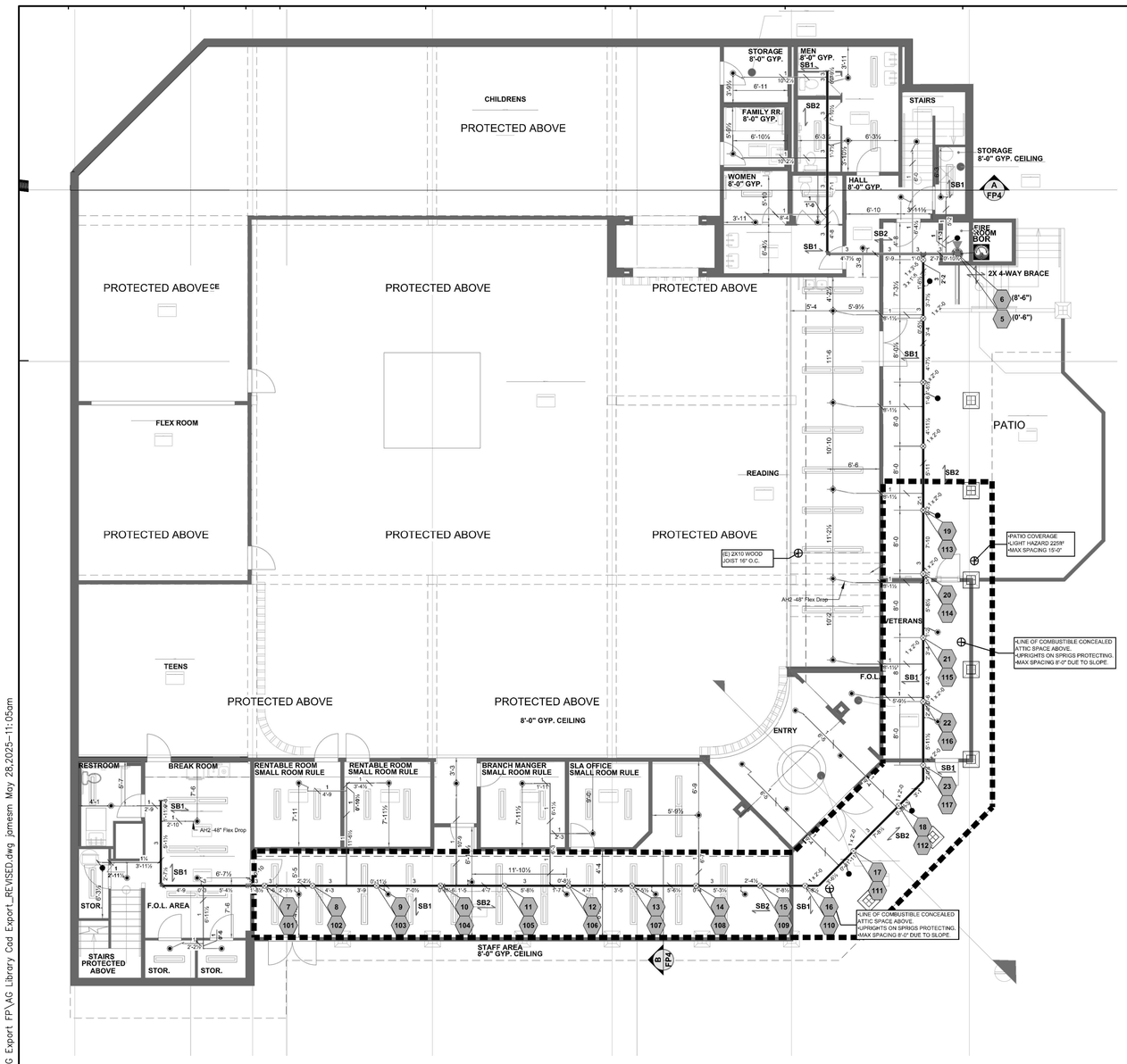
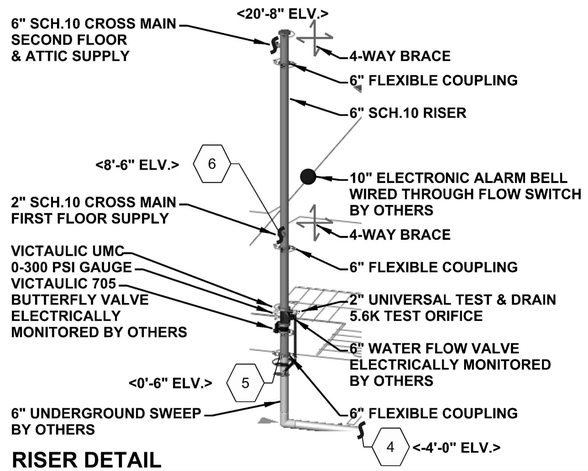



## FIRST FLOOR FIRE SPRINKLER PLAN

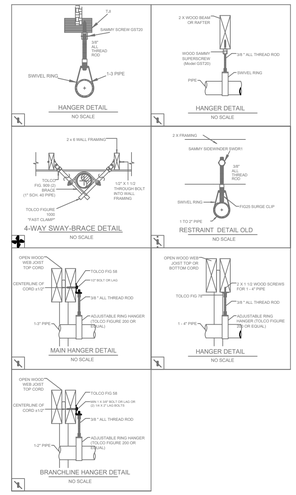
SCALE: 1/8" = 1'-0"




## RISER DETAIL

N.T.S.

| Hydraulic Information | |
|---|---|
| Remote Area 1 | |
| OCCUPANCY CLASSIFICATION | Light Hazard |
| DENSITY (gpm/ft²) | 0.10 for 1500ft² (Actual 1555ft²) |
| TOTAL HOSE STREAMS | 100.00 |
| TOTAL HEADS FLOWING | 17 |
| K-FACTOR | 5.6 |
| TOTAL WATER REQUIRED | 362.30 |
| TOTAL PRESSURE REQUIRED | 36.528 |
| BASE of RISER (gpm) | 262.30 |
| BASE of RISER (psi) | 20.991 |
| SAFETY MARGIN (psi) | +19.000 (34.2%) |




| Sprinkler Legend | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Symbol | Manufacturer | SIN | Model | Quantity | K-Factor | Type | Size | Response | Finish | Temperature | Note |
| ◉ | Viking | VK302 | Microfast | 57 | 5.6 | Pendent | 1/2 | Quick | Brass | 155°F | VIKING 155°F BRASS |
| ➤ | Viking | VK305 | Microfast | 4 | 5.6 | Horizontal Sidewall | 1/2 | Quick | Brass | 200°F | VIKING 200°F BRASS |
| ◉ | Viking | VK302 | Microfast | 8 | 5.6 | Pendent | 1/2 | Quick | Brass | 200°F | VIKING 200°F BRASS |
| ◉ | Viking | VK534 | EC/QREC | 52 | 11.2 | Pendent | 3/4 | Quick | Brass | 155°F | VIKING 155°F BRASS |
| ⊗ | Viking | VK300 | Microfast | 97 | 5.6 | Upright | 1/2 | Quick | Brass | 200°F | VIKING 200°F BRASS |
| | | | | Total = 218 | | | | | | | |

FIRE REVIEW

REVIEWED FOR CODE COMPLIANCE

Jun 05 2025

CSG CONSULTANTS, INC.

REISS
DESIGN STUDIO, PC
(805) 706-0645
WWW.REISSDESIGNSTUDIO.COM
3055 DUNCAN LANE, SUITE A
SAN LUIS OBISPO, CA 93401

All reports, drawings, specifications, computer files, field data, notes and other documents and instruments prepared by REISS DESIGN STUDIO, PC as instruments of service shall remain the property of REISS DESIGN STUDIO, PC. REISS DESIGN STUDIO, PC shall retain all common law, statutory and other reserved rights, including, without limitation, the copyrights thereto.

PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

FIRST FLOOR FIRE SPRINKLER PAN

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CAL T2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. These approved plans shall be in use on the job.
All changes must be approved.

BMA Mechanical, Inc. 1485 Farm Rd, Ste 240
(805) 544-4259
BMA 2084 23156.00

STAMP:

LICENSED PROFESSIONAL ENGINEER
GORDON ROBERT MARVEL
M 38 982
EXP 6/30/25
MECHANICAL
STATE OF CALIFORNIA

DATE:

**May 28, 2025**

REVISIONS:

JOB NUMBER:

2028

SHEET:

FP2

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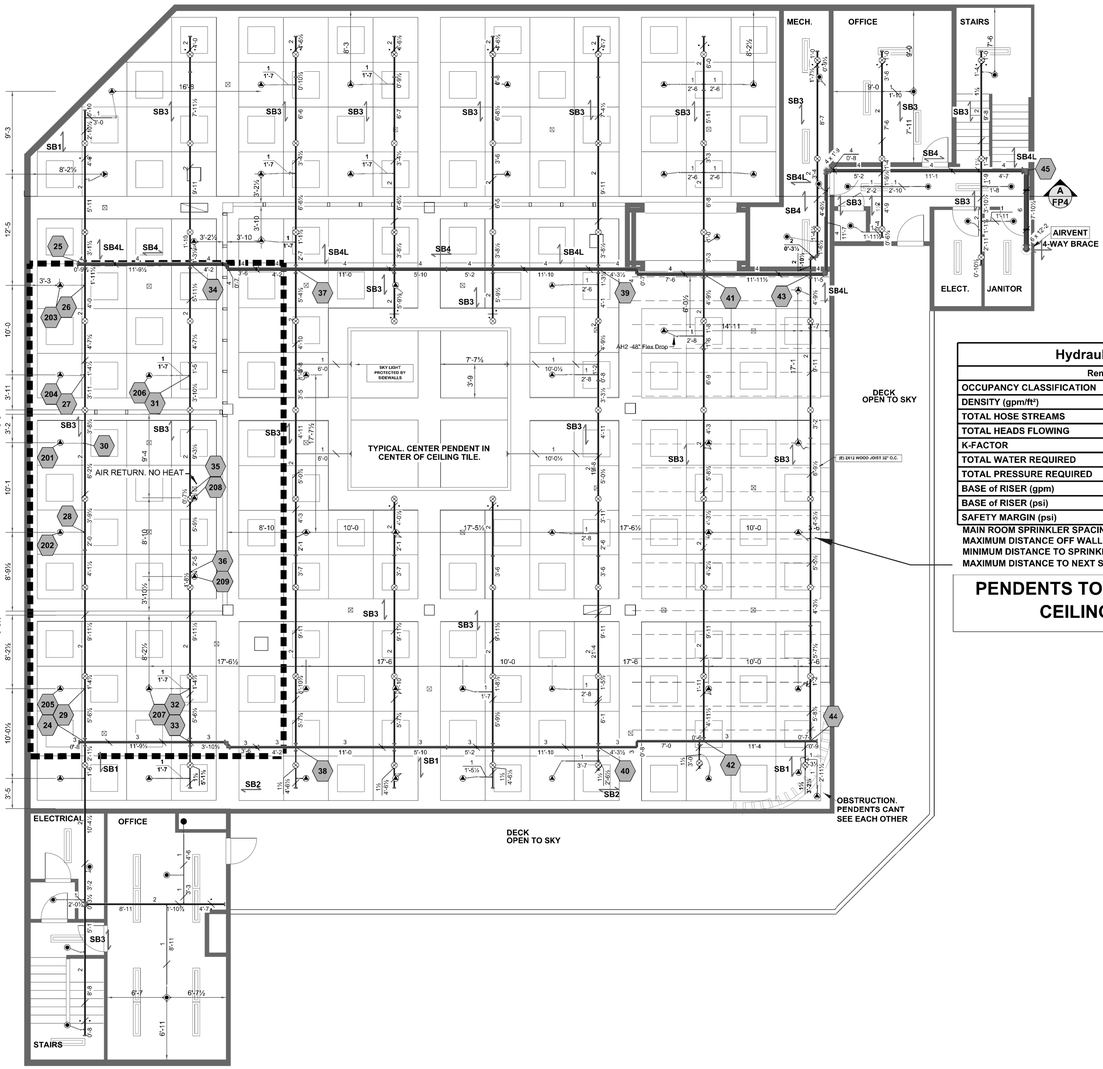
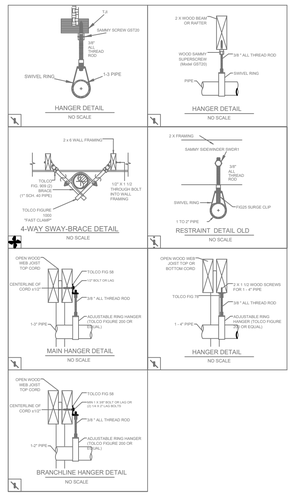



| Hydraulic Information | |
|---|---|
| Remote Area 2 | |
| OCCUPANCY CLASSIFICATION | Light Hazard |
| DENSITY (gpm/ft²) | 0.10 for 1500ft² (Actual 1561ft²) |
| TOTAL HOSE STREAMS | 100.00 |
| TOTAL HEADS FLOWING | 9 |
| K-FACTOR | 11.2 |
| TOTAL WATER REQUIRED | 425.68 |
| TOTAL PRESSURE REQUIRED | 48.832 |
| BASE of RISER (gpm) | 325.68 |
| BASE of RISER (psi) | 33.961 |
| SAFETY MARGIN (psi) | +6.184 (11.2%) |

MAIN ROOM SPRINKLER SPACING 18' X 18'
MAXIMUM DISTANCE OFF WALL 9'-0"
MINIMUM DISTANCE TO SPRINKLER 8'-0"
MAXIMUM DISTANCE TO NEXT SPRINKLER 18'-0"

**PENDENTS TO BE CENTERED IN CEILING PANELS.**




# SECOND FLOOR FIRE SPRINKLER PLAN

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

| Sprinkler Legend | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Symbol | Manufacturer | SIN | Model | Quantity | K-Factor | Type | Size | Response | Finish | Temperature | Note |
| | Viking | VK302 | Microfast | 57 | 5.6 | Pendent | 1/2 | Quick | Brass | 155°F | VIKING 155°F BRASS |
| | Viking | VK305 | Microfast | 4 | 5.6 | Horizontal Sidewall | 1/2 | Quick | Brass | 200°F | VIKING 200°F BRASS |
| | Viking | VK302 | Microfast | 8 | 5.6 | Pendent | 1/2 | Quick | Brass | 200°F | VIKING 200°F BRASS |
| | Viking | VK534 | EC/QREC | 52 | 11.2 | Pendent | 3/4 | Quick | Brass | 155°F | VIKING 155°F BRASS |
| | Viking | VK300 | Microfast | 97 | 5.6 | Upright | 1/2 | Quick | Brass | 200°F | VIKING 200°F BRASS |
| | | | | Total = 218 | | | | | | | |

FIRE REVIEW

REVIEWED FOR CODE COMPLIANCE

Jun 05 2025

CSG CONSULTANTS, INC.

REISS
DESIGN STUDIO, PC
(805) 706-0645
WWW.REISSDESIGNSTUDIO.COM
3055 DUNCAN LANE, SUITE A
SAN LUIS OBISPO, CA 93401

All reports, drawings, specifications, computer files, field data, notes and other documents and instruments prepared by REISS DESIGN STUDIO, PC as instruments of service shall remain the property of REISS DESIGN STUDIO, PC. REISS DESIGN STUDIO, PC shall retain all common law, statutory and other reserved rights, including, without limitation, the copyrights thereto.

PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

SECOND FLOOR FIRE SPRINKLER PLAN

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. These plans shall be maintained on the approved plans shall be made. Any deviations without approval may result in additional fees.

BMA 1390 Tennessee Rd, Ste 240
Morgantown, WV 26505
(304) 599-5444 x229
AV Project No: 23156.00

STAMP:

DATE:

May 28, 2025

REVISIONS:

JOB NUMBER:

2028

SHEET:

FP3

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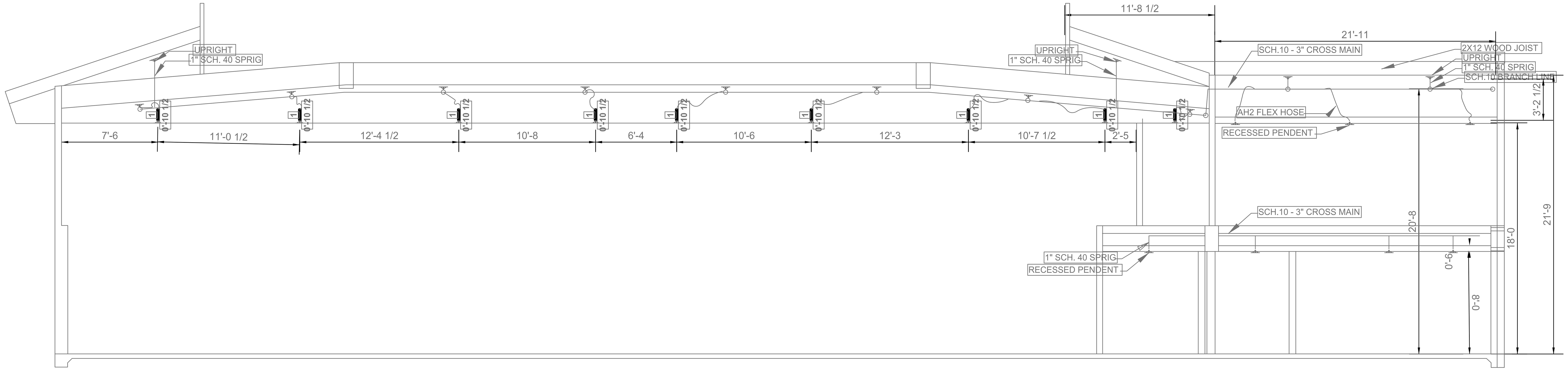
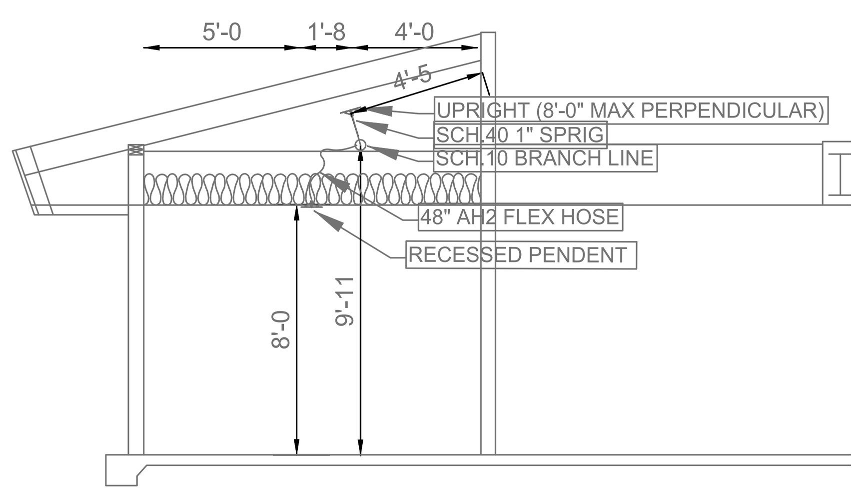



(A) **SECTIONAL**

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




(B) **SECTIONAL**

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

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**VIKING® | TECHNICAL DATA | MICROFAST® QUICK RESPONSE UPRIGHT SPRINKLER VK300 (K5.6)**

The Viking Corporation, 210 N Industrial Park Drive, Hastings MI 49058
Telephone: 269-945-9501 Technical Services: 877-384-5464 Fax: 269-818-1680 Email: techsvcs@vikingcorp.com
Visit the Viking website for the latest edition of this technical data page: www.vikinggroupinc.com

WARNING: Cancer and Reproductive Harm- www.P65Warnings.ca.gov

### 1. DESCRIPTION
The Viking Microfast® Quick Response Upright Sprinkler VK300 is a small, thermosensitive, glass-bulb spray sprinkler available in several different finishes and temperature ratings to meet design requirements. The special Polyester and Electroless Nickel PTFE (ENT) coatings can be used in decorative applications where colors are desired. In addition, these coatings have been investigated for installation in corrosive atmospheres and are listed/approved as corrosion resistant as indicated in the Approval Charts.

### 2. LISTINGS AND APPROVALS
**cULus Listed:** Category VNIV
**FM Approved:** Classes 2002 and 2020

Refer to Approval Charts and Design Criteria for listing and approval requirements that must be followed.

### 3. TECHNICAL DATA
**Specifications:**
Minimum Operating Pressure: 7 psi (0.5 bar)*
Maximum Working Pressure: 175 psi (12 bar) wwp.
Factory tested hydrostatically to 500 psi (34.5 bar)
Testing: U.S.A. Patent No. 4,831,870
Thread size: 1/2" NPT, 15 mm BSP
Nominal K-Factor: 5.6 U.S. (80.6 metric**)
Glass-bulb fluid temperature rated to -65 °F (-55 °C)
Overall Length: 2-3/16" (56 mm)
*cULus Listing, FM Approval, and NFPA 13 installs require a minimum of 7 psi (0.5 bar). The minimum operating pressure for LPCB and CE Approvals ONLY is 5 psi (0.35 bar).

**Material Standards:**
Frame Casting: Brass UNS-C84400 or QM Brass
Deflector: Brass UNS-C23000 or Phosphor Bronze UNS-C51000
Bulb: Glass, nominal 3 mm diameter
Belleville Spring Sealing Assembly: Nickel Alloy, coated on both sides with PTFE Tape
Screw: Brass UNS-C36000
Pip Cap and Insert Assembly: Copper UNS-C11000 and Stainless Steel UNS-S30400
For Polyester Coated Sprinklers: Belleville Spring-Exposed
For ENT Coated Sprinklers: Belleville Spring-Exposed, Screw and Pipcap - ENT plated

**Ordering Information:** (Also refer to the current Viking price list.)
Order Viking Microfast® Quick Response Upright Sprinkler VK300 by first adding the appropriate suffix for the sprinkler finish and then the appropriate suffix for the temperature rating to the sprinkler base part number.
Finish Suffix: Brass = A, Chrome = F, White Polyester = M-/W, Black Polyester = M-/B, and ENT = JN
Temperature Suffix (°F/°C): 135°/57° = A, 155°/68° = B, 175°/79° = D, 200°/93° = E, and 286°/141° = G
For example, sprinkler VK300 with a 1/2" NPT thread, Brass finish and a 155 °F/68 °C temperature rating = Part No. 12978AB
**Available Finishes And Temperature Ratings:** Refer to Table 1.
**Accessories:** (Also refer to the Viking website.)
**Sprinkler Wrench:** Standard Wrench: Part No. 21475M/B (available since 2017)
**Sprinkler Cabinets:**
A. Six-head capacity: Part No. 01724A (available since 1971)
B. Twelve-head capacity: Part No. 01725A (available since 1971)

### 4. INSTALLATION
Refer to appropriate NFPA Installation Standards.



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**VIKING | TECHNICAL DATA | MICROFAST® QUICK RESPONSE HORIZONTAL SIDEWALL SPRINKLER VK305 (K5.6)**

The Viking Corporation, 210 N Industrial Park Drive, Hastings MI 49058
Telephone: 269-945-9501 Technical Services: 877-384-5464 Fax: 269-818-1680 Email: techsvcs@vikingcorp.com
Visit the Viking website for the latest edition of this technical data page: www.vikinggroupinc.com

WARNING: Cancer and Reproductive Harm- www.P65Warnings.ca.gov

### 1. DESCRIPTION
The Viking Microfast® Quick Response Horizontal Sidewall Sprinkler VK305 is a small thermosensitive glass bulb spray sprinkler available with various finishes and temperature ratings to meet design requirements. The special Polyester and Electroless Nickel PTFE (ENT) coatings can be used in decorative applications where colors are desired. In addition, these coatings have been investigated for installation in corrosive atmospheres and are listed/approved as corrosion resistant as indicated in Approval Charts.

### 2. LISTINGS AND APPROVALS
cULus Listed: Category VNIV
FM Approved: Class 2020
China Approval: Approved according to China GB Standard

Refer to Approval Charts and Design Criteria for listing and approval requirements that must be followed.

### 3. TECHNICAL DATA
**Specifications:**
Minimum Operating Pressure: 7 psi (0.5 bar)
Rated to 175 psi (12 bar) water working pressure
Factory tested hydrostatically to 500 psi (34.5 bar)
Nominal K-Factor: 5.6 U.S. (80.6 metric*)
* Metric K-factor measurement shown is when pressure is measured in Bar. When pressure is measured in kPa, divide the metric K-factor shown by 10.0.
Overall Length: 2-3/4" (68 mm)

**Material Standards:**
Frame Casting: Brass UNS-C84400 or QM Brass
Deflector: Copper UNS-C19500
Bulb: Glass, nominal 3 mm diameter
Belleville Spring Sealing Assembly: Nickel Alloy, coated on both sides with PTFE Tape
Screw: Brass UNS-C36000
Pip Cap and Insert Assembly: Copper UNS-C11000 and Stainless Steel UNS-S30400
For Polyester Coated Sprinklers: Belleville Spring-Exposed
For ENT Coated Sprinklers: Belleville Spring - Exposed, Screw and Pip cap - ENT plated.

**Ordering Information:** (Also refer to the current Viking price list.)
Order Viking Microfast® Quick Response Horizontal Sidewall Sprinkler VK305 by first adding the appropriate suffix for the sprinkler finish and then the appropriate suffix for the temperature rating to the sprinkler base part number.
Finish Suffix: Brass = A, Chrome = F, White Polyester = M-/W, Black Polyester = M-/B, and ENT = JN
Temperature Suffix: 135 °F / 57 °C = A, 155 °F / 68 °C = B, 175 °F / 79 °C = D, 200 °F / 93 °C = E, and 286 °F / 141 °C = G
For example, sprinkler 12997 with a Brass finish and a 155 °F / 68 °C temperature rating = Part No. 12997AB
**Available Finishes And Temperature Ratings:** Refer to Table 1.
**Accessories:** (Also refer to the Viking website.)
**Sprinkler Wrenches:**
A. Standard Wrench: Part No. 21475M/B (available since 2017).
B. Wrench for recessed and/or wax coated sprinklers: Part No. 13655W/B** (available since 2006)
**A ½" ratchet is required (not available from Viking).



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**VIKING® | TECHNICAL DATA | MICROFAST® QUICK RESPONSE PENDENT SPRINKLER VK302 (K5.6)**

The Viking Corporation, 210 N Industrial Park Drive, Hastings MI 49058
Telephone: 269-945-9501 Technical Services: 877-384-5464 Fax: 269-818-1680 Email: techsvcs@vikingcorp.com
Visit the Viking website for the latest edition of this technical data page: www.vikinggroupinc.com

WARNING: Cancer and Reproductive Harm- www.P65Warnings.ca.gov

### 1. DESCRIPTION
The Viking Microfast® Quick Response Pendent Sprinkler VK302 is a small thermosensitive glass bulb spray sprinkler available with various finishes and temperature ratings to meet design requirements. The special Polyester and Electroless Nickel PTFE (ENT) coatings can be used in decorative applications where colors are desired. In addition, these coatings have been investigated for installation in corrosive environments and are Listed and Approved as indicated in the Approval Charts.

### 2. LISTINGS AND APPROVALS
**cULus Listed:** Category VNIV
**FM Approved:** Class Series 2000
**VdS Approved:** Certificates G414009, G414010, G4040095, and 4880045
**LPCB Approved:** Certificate 096e/06
**CE:** Standard EN 12259-1,Declaration of Performance DOP_Sprinklers_LPCB_5-2-19, DOP_VK302ENT_29-1-20 & DOP_VK302-57C_30-9-20
**China Approval**: Approved according to China GB standard
**MED Certified:** Standard EN 12259-1, EC-certificate of conformity 0832-MED-1003

Refer to Approval Chart 1 and Design Criteria cULus Listing requirements, and refer to Approval Chart 2 and Design Criteria for FM Approval requirements that must be followed.

### 3. TECHNICAL DATA
**Specifications:**
Minimum Operating Pressure: 7 psi (0.5 bar)
Rated to 175 psi (12 bar) water working pressure
Factory tested hydrostatically to 500 psi (34.5 bar)
Thread size: 1/2" NPT, 15 mm BSP
Nominal K-Factor: 5.6 U.S. (80.6 metric**)
Glass-bulb fluid temperature rated to -65 °F (-55 °C)
Overall Length: 2-1/4" (58 mm)
*cULus Listing, FM Approval, and NFPA 13 installs require a minimum of 7 psi (0.5 bar). The minimum operating pressure for LPCB and CE Approvals ONLY is 5 psi (0.35 bar).

**Material Standards:**
Frame Casting: Brass UNS-C84400 or QM Brass
Deflector: Phosphor Bronze UNS-C51000 or Copper UNS-C19500
Bulb: Glass, nominal 3 mm diameter
Belleville Spring Sealing Assembly: Nickel Alloy, coated on both sides with PTFE Tape
Screw: Brass UNS-C36000
Pip Cap and Insert Assembly: Copper UNS-C11000 and Stainless Steel UNS-S30400
For Polyester Coated Sprinklers: Belleville Spring-Exposed
For ENT Coated Sprinklers: Belleville Spring-Exposed, Screw and Pipcap - ENT plated.

**Ordering Information:** (Also refer to the current Viking price list.)
Order Quick Response Pendent Sprinklers by first adding the appropriate suffix for the sprinkler finish and then the appropriate suffix for the temperature rating to the sprinkler base part number.

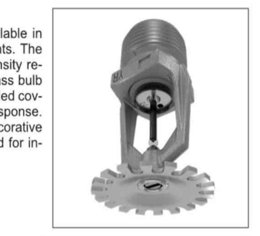


---



**VIKING® | TECHNICAL DATA | STANDARD/QUICK RESPONSE EXTENDED COVERAGE PENDENT SPRINKLER VK534 (K11.2)**

The Viking Corporation, 210 N Industrial Park Drive, Hastings MI 49058
Telephone: 269-945-9501 Technical Services: 877-384-5464 Fax: 269-818-1680 Email: techsvcs@vikingcorp.com
Visit the Viking website for the latest edition of this technical data page www.vikinggroupinc.com



WARNING: Cancer and Reproductive Harm- www.P65Warnings.ca.gov

### 1. DESCRIPTION
Viking EC/QREC Pendent Sprinkler VK534 is a thermosensitive spray sprinkler available in several different finishes and temperature ratings to meet varying design requirements. The extra-large orifice produces the flows needed to meet Light and Ordinary Hazard density requirements at lower pressures than standard orifice or large orifice sprinklers. The glass bulb operating element and special deflector characteristics meet the quick response extended coverage standards. Pendent Sprinkler VK534 is cULus Listed as standard and quick response. The special polyester and electroless nickel PTFE (ENT) coatings can be used in decorative applications where colors are desired. In addition, ENT coating has been investigated for installation in corrosive atmospheres. See Approval Charts.

### 2. LISTINGS AND APPROVALS
**cULus Listed:** Category VNIV
Refer to Approval Chart 1 and Design Criteria cULus Listing requirements.

### 3. TECHNICAL DATA
**Specifications:**
Minimum Operating Pressure: Refer to the Approval Charts.
Maximum Working Pressure: 175 PSI (12 Bar). Factory-tested hydrostatically to 500 PSI (34.5 bar).
Factory tested hydrostatically to 500 PSI (34.5 bar).
Thread size: 3/4" NPT
Nominal K-Factor: 11.2 U.S. (161.3 metric†)
† Metric K-factor measurement shown is in Bar. When pressure is measured in kPa, divide the metric K-factor shown by 10.0.
Glass-bulb fluid temperature rated to -65 °F (-55 °C)
Overall Length: 2-3/8" (61 mm)

**Material Standards:**
Sprinkler Frame: Brass UNS-C84400
Deflector: Brass UNS-C26000
Bulb: Glass, nominal 3 mm diameter
Belleville Spring Sealing Assembly: Nickel Alloy, coated on both sides with PTFE tape
Screw: Brass UNS-C36000
Pip Cap and Insert Assembly: Copper UNS-C11000 and stainless steel UNS-S30400
For Polyester-Coated Sprinklers: Belleville spring-exposed
For ENT-Coated Sprinklers: Belleville spring-exposed, screw and pipcap-ENT plated.

**Ordering Information:** (Also refer to the current Viking price list.)
Order Viking EC/QREC Pendent Sprinkler VK534 by first adding the appropriate suffix for the sprinkler finish and then the appropriate suffix for the temperature rating to the sprinkler base part number.
Finish Suffix: Brass = A, Chrome = F, White Polyester = M-/W, Black Polyester = M-/B, and ENT = JN
Temperature Suffix: 135 °F (57 °C) = A, 155 °F (68 °C) = B, 175 °F (79 °C) = D, 200 °F (93 °C) = E, and 286 °F (141 °C) = G
For example, sprinkler VK534 with a brass finish and a 155 °F (68 °C) temperature rating = Part No. 08340AB
**Available Finishes And Temperature Ratings:**
Refer to Table 1.
**Accessories:** (Also refer to the Viking website)
**Sprinkler Wrenches:**
A. Standard Wrench: Part No. 05118CW/B (available since 1981)
B. Wrench for a wax-coated and/or recessed pendent sprinkler: Part No. 11663W/B** (available since 2001)
**A ½" ratchet is required (not available from Viking).
**Sprinkler Cabinets:**
A. Six-head capacity: Part No. 01724A (available since 1971)
B. Twelve-head capacity: Part No. 01725A (available since 1971)

### 4. INSTALLATION
Refer to appropriate NFPA Installation Standards.



---



**VIKING® | TECHNICAL DATA | MICROFAST® QUICK RESPONSE UPRIGHT SPRINKLER VK300 (K5.6)**

The Viking Corporation, 210 N Industrial Park Drive, Hastings MI 49058
Telephone: 269-945-9501 Technical Services: 877-384-5464 Fax: 269-818-1680 Email: techsvcs@vikingcorp.com
Visit the Viking website for the latest edition of this technical data page: www.vikinggroupinc.com

**Approval Chart 1 (UL)**
Microfast® Quick Response Upright Sprinkler VK300
Maximum 175 PSI (12 bar) WWP

KEY: A1X — Temperature, Finish, Escutcheon (if applicable)

| Base Part Number[1] | SIN | Thread Size | | Nominal K-Factor | | Overall Length | | Listings and Approvals[3] | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NPT | BSP | U.S. | metric[2] | Inches | mm | cULus | VdS | LPCB | NYC[8] | CE |
| 12978 | VK300 | 1/2" | 15 mm | 5.6 | 80.6 | 2-3/16 | 56 | A1, B2 | -- | -- | See footnote 7. | -- |
| *NOTICE - Product Below - Limited Availability (Contact Local Viking Office)* | | | | | | | | | | | | |
| 06661B | VK300 | 1/2" | 15 mm | 5.6 | 80.6 | 2-3/16 | 56 | A1, B2 | -- | -- | See footnote 7. | -- |

**Approved Temperature Ratings**
A - 135 °F (57 °C), 155 °F (68 °C), 175 °F (79 °C), 200 °F (93 °C), and 286 °F (141°C)
B - 155 °F (68 °C), 175 °F (79 °C), 200 °F (93 °C), and 286 °F (141°C)

**Approved Finishes**
1 - Brass, Chrome, White Polyester[5,6], and Black Polyester[5,6]
2 - ENT[6]

**Footnotes**
1 Base part number is shown. For complete part number, refer to Viking's current price schedule.
2 Metric K-factor measurement shown is when pressure is measured in Bar. When pressure is measured in kPa, divide the metric K-factor shown by 10.0.
3 This table shows the listings and approvals available at the time of printing. Check with the manufacturer for any additional approvals.
4 Listed by Underwriters Laboratories Inc. for us in the U.S. and Canada
5 Other colors are available on request with the same Listings and Approvals as the standard colors.
6 cULus Listed as corrosion resistant.
7 Meets New York City requirements, effective July 1, 2008
8 Accepted for use, City of New York Board of Standards and Appeals, Calendar Number 219-76-SA and City of New York Department of Buildings, MEA 89-92-E, Vol. 16.

**DESIGN CRITERIA - UL**
(Also refer to Approval Chart 1 above.)

**cULus Listing Requirements:**
The Viking Microfast® Quick Response Upright Sprinkler VK300 is cULus Listed as indicated in Approval Chart 1 for installation in accordance with the latest edition of NFPA 13 for standard spray sprinklers.
- Designed for use in Light and Ordinary Hazard occupancies.
- The sprinkler installation rules contained in NFPA 13 for standard spray upright sprinklers must be followed.

**IMPORTANT: Always refer to Bulletin Form No. F_091699 - Care and Handling of Sprinklers. Also refer to Form No. F_080614 for general care, installation, and maintenance information. Viking sprinklers are to be installed in accordance with the latest edition of Viking technical data, the appropriate standards of NFPA, FM Global, LPCB, APSAD, VdS or other similar organizations, and also with the provisions of governmental codes, ordinances, and standards, whenever applicable.**



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**VIKING | TECHNICAL DATA | MICROFAST® QUICK RESPONSE HORIZONTAL SIDEWALL SPRINKLER VK305 (K5.6)**

The Viking Corporation, 210 N Industrial Park Drive, Hastings MI 49058
Telephone: 269-945-9501 Technical Services: 877-384-5464 Fax: 269-818-1680 Email: techsvcs@vikingcorp.com
Visit the Viking website for the latest edition of this technical data page: www.vikinggroupinc.com

**Approval Chart 1 (FM)**
Microfast® Quick Response Sidewall Sprinklers
Maximum 175 PSI WWP

KEY: A1X — Temperature, Finish, Escutcheon (if applicable)

| Sprinkler Base Part Number[1] | SIN | Thread Size | | Nominal K-Factor | | Overall Length | | FM Approvals[3,4] (Refer also to Design Criteria below.) | |
|---|---|---|---|---|---|---|---|---|---|
| | | NPT | BSPT | U.S. | metric[2] | Inches | mm | | |
| 12997 | VK305 | 1/2" | 15 mm | 5.6 | 80.6 | 2-11/16 | 68 | A1Y, B1X | |
| *NOTICE - Product Below - Limited Availability (Contact Local Viking Office)* | | | | | | | | | |
| 12121 | VK305 | 1/2" | 15 mm | 5.6 | 80.6 | 2-11/16 | 68 | A1W, B1X, C2W, D2Z | -- |

**Approved Temperature Ratings**
A - 135 °F (57 °C), 155 °F (68 °C), 175 °F (79 °C), 200 °F (93 °C), and 286 °F (141 °C)
B - 135 °F (57 °C), 155 °F (68 °C), 175 °F (79 °C), and 200 °F (93 °C)

**Approved Finishes**
1 - Brass

**Approved Escutcheons**
X - Installed with standard surface-mounted escutcheons **or** recessed with the Viking Micromatic® Model E-1, E-2, E-3, or G-1 Recessed Escutcheon
Y - Installed with standard surface-mounted escutcheons

**Footnotes**
1 Base part number shown. For complete part number, refer to Viking's current price schedule.
2 Metric K-factor measurement shown is when pressure is measured in Bar. When pressure is measured in kPa, divide the metric K-factor shown by 10.0.
3 This table shows the FM Approvals available at the time of printing. Other approvals may be in process.
4 Viking vertical sidewall sprinklers may be installed pendent or upright.
5 Approved according to China GB Standard.

**DESIGN CRITERIA - FM**
(Also refer to Approval Chart 2 above.)

**FM Approval Requirements:**
Horizontal Sidewall Sprinkler VK305 is FM Approved as a quick response **Non-Storage** sidewall sprinkler as indicated in the FM Approval Guide. For specific application and installation requirements, reference the latest applicable FM Loss Prevention Data Sheets (including Data Sheet 2-0). FM Global Loss Prevention Data Sheets contain guidelines relating to, but not limited to: minimum water supply requirements, hydraulic design, ceiling slope and obstructions, minimum and maximum allowable spacing, and deflector distance below the ceiling.

**NOTE: The FM installation guidelines may differ from cULus and/or NFPA criteria.**

**IMPORTANT: Always refer to Bulletin Form No. F_091699 - Care and Handling of Sprinklers. Also refer to Bulletin Form No. F_080614 for general care, installation, and maintenance information. Viking sprinklers are to be installed in accordance with the latest edition of Viking technical data, the appropriate standards of NFPA, FM Global, LPCB, APSAD, VdS or other similar organizations, and also with the provisions of governmental codes, ordinances, and standards, whenever applicable.**



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**VIKING® | TECHNICAL DATA | MICROFAST® QUICK RESPONSE PENDENT SPRINKLER VK302 (K5.6)**

The Viking Corporation, 210 N Industrial Park Drive, Hastings MI 49058
Telephone: 269-945-9501 Technical Services: 877-384-5464 Fax: 269-818-1680 Email: techsvcs@vikingcorp.com
Visit the Viking website for the latest edition of this technical data page: www.vikinggroupinc.com

**Approval Chart 2 (FM)**
The Viking Microfast® Quick Response Pendent Sprinkler VK302
Maximum 175 PSI (12 Bar) WWP

KEY: A1X — Temperature, Finish, Escutcheon (if applicable)

| Base Part Number[1] | SIN | Sprinkler Style | Thread Size | | Nominal K-Factor | | Overall Length | | FM Approvals[3] (Refer also to Design Criteria.) |
|---|---|---|---|---|---|---|---|---|---|
| | | | NPT | BSP | U.S. | metric[2] | Inches | mm | |
| 12979 | VK302 | Pendent | 1/2" | 15 mm | 5.6 | 80.6 | 2-1/4 | 58 | A1Z, B1Y, D2X, C2 |
| 21354[6] | VK302 | Pendent | -- | 15 mm | 5.6 | 80.6 | 2-1/4 | 58 | C3 |
| *NOTICE - Product Below - Limited Availability (Contact Local Viking Office)* | | | | | | | | | |
| 06662B | VK302 | Pendent | 1/2" | 15 mm | 5.6 | 80.6 | 2-1/4 | 58 | A1Z, B1Y, D2X, C2 |
| 18021 | VK302 | Pendent | 1/2" | 15 mm | 5.6 | 80.6 | 2-1/4 | 58 | A1Z, B1Y |

**Approved Temperature Ratings**
A - 135 °F (57 °C), 155 °F (68 °C), 175 °F (79 °C), 200 °F (93 °C), 286 °F (141 °C)
B - 135 °F (57 °C), 155 °F (68 °C), 175 °F (79 °C), and 200 °F (93 °C)
C - 155 °F (68 °C), 175 °F (79 °C), 200 °F (93 °C), 286 °F (141 °C)
D - 155 °F (68 °C), 175 °F (79 °C), 200 °F (93 °C)

**Approved Finishes**
1 - Brass, Chrome, White Polyester[4], and Black Polyester[4]
2 - ENT[5]
3 - Chrome

**Approved Escutcheons**
X - Standard surface-mounted escutcheon or the Viking Micromatic® Model E-1 Recessed Escutcheon
Y - Standard surface-mounted escutcheon or recessed with the Viking Micromatic® Model E-1 or E-2 Recessed Escutcheon
Z - Standard surface-mounted escutcheon

**Footnotes**
1 Base part number shown. For complete part number, refer to Viking's current price schedule.
2 Metric K-factor measurement shown is when pressure is measured in Bar. When pressure is measured in kPa, divide the metric K-factor shown by 10.0.
3 This table shows the FM Approvals available at the time of printing. Other approvals may be in process.
4 Other colors are available on request with the same Approvals as the standard colors.
5 FM approved as corrosion resistant.
6 Approved according to China GB Standard.

**DESIGN CRITERIA - FM**
(Also refer to Approval Chart 2 above.)

**FM Approval Requirements:**
The Viking Microfast® Quick Response Pendent Sprinkler VK302 is FM Approved as quick response **Non-storage** pendent sprinklers as indicated in the FM Approval Guide. For specific application and installation requirements, reference the latest applicable FM Loss Prevention Data Sheets (including Data Sheet 2-0). FM Global Loss Prevention Data Sheets contain guidelines relating to, but not limited to: minimum water supply requirements, hydraulic design, ceiling slope and obstructions, minimum and maximum allowable spacing, and deflector distance below the ceiling.

**NOTE: The FM installation guidelines may differ from cULus and/or NFPA criteria.**

**IMPORTANT: Always refer to Bulletin Form No. F_091699 - Care and Handling of Sprinklers. Also refer to Form No. F_080614 for general care, installation, and maintenance information. Viking sprinklers are to be installed in accordance with the latest edition of Viking technical data, the appropriate standards of NFPA, FM Global, LPCB, APSAD, VdS or other similar organizations, and also with the provisions of governmental codes, ordinances, and standards, whenever applicable.**



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**VIKING® | TECHNICAL DATA | STANDARD/QUICK RESPONSE EXTENDED COVERAGE PENDENT SPRINKLER VK534 (K11.2)**

The Viking Corporation, 210 N Industrial Park Drive, Hastings MI 49058
Telephone: 269-945-9501 Technical Services: 877-384-5464 Fax: 269-818-1680 Email: techsvcs@vikingcorp.com
Visit the Viking website for the latest edition of this technical data page www.vikinggroupinc.com

**Approval Chart 1 (UL)**
SR/QR EC Pendent Sprinkler VK534

KEY: A1X — Temperature, Finish, Escutcheon (if applicable)

| Sprinkler Base Part Number[1] | SIN | NPT Thread Size | Nominal K-Factor | | Maximum Water Working Pressure | Overall Length | |
|---|---|---|---|---|---|---|---|
| | | Inches | U.S. | metric[2] | | Inches | mm |
| 08340 | VK534 | 3/4 | 11.2 | 161.3 | 175 PSI (12 Bar) | 2-5/16 | 59 |

| Max. Sprinkler Spacing (L x W) | Maximum Area per Sprinkler[2] | Minimum Water Supply Requirements[5]: Light Hazard | Ordinary Hazard Group I | Ordinary Hazard Group II | Listings and Approvals[3] (Refer also to UL Design Criteria) |
|---|---|---|---|---|---|
| | | Flow / Pressure | Flow / Pressure | Flow / Pressure | cULus[4] |
| **Standard Response** | | | | | |
| 16 ft. x 16 ft. (4.9 m x 4.9 m) | 256 ft (23.8 m) | -- | 38 GPM @ 11.5 PSI (143.9 L/min @ .79 Bar) | 51 GPM @ 20.7 PSI (193.1 L/min @ 1.43 Bar) | C1W, D1Y, D2Z, C2W |
| 18 ft. x 18 ft. (5.5 m x 5.5 m) | 324 ft (30.1 m) | -- | 49 GPM @ 19.1 PSI (185.5 L/min @ 1.32 Bar) | 65 GPM @ 33.7 PSI (246.1 L/min @ 2.32 Bar) | C1W, D1Y, D2Z, C2W |
| 20 ft. x 20 ft. (6.1 m x 6.1 m) | 400 ft (37.2 m) | -- | 60 GPM @ 28.7 PSI (227.1 L/min @ 1.98 Bar) | 80 GPM @ 51.0 PSI (302.8 L/min @ 3.52 Bar) | C1W, D1Y, D2Z, C2W |
| **Quick Response** | | | | | |
| 12 ft. x 12 ft. (3.7 m x 3.7 m) | 144 ft (13.4 m) | -- | 30 GPM @ 7.2 PSI (113.6 L/min @ .50 Bar) | 39 GPM @ 12.1 PSI (147.7 L/min @ .84 Bar) | E1Y, E2Z |
| 14 ft. x 14 ft. (4.3 m x 4.3 m) | 196 ft (18.2 m) | -- | 30 GPM @ 7.2 PSI (113.6 L/min @ .50 Bar) | 39 GPM @ 12.1 PSI (147.7 L/min @ .84 Bar) | E1Y, E2Z |
| 16 ft. x 16 ft. (4.9 m x 4.9 m) | 256 ft (23.8 m) | 30 GPM @ 7.2 PSI (113.6 L/min @ .50 Bar) | -- | -- | B1Y, F2Z |
| 18 ft. x 18 ft. (5.5 m x 5.5 m) | 324 ft (30.1 m) | 33 GPM @ 8.7 PSI (124.9 L/min @ .60 Bar) | -- | -- | B1Y, F2Z |
| 20 ft. x 20 ft. (6.1 m x 6.1 m) | 400 ft (37.2 m) | 40 GPM @ 12.8 PSI (151.4 L/min @ .88 Bar) | -- | -- | A1Y, G2Z |

**Approved Temperature Ratings**
A - 135 °F (57 °C) and 175 °F (79 °C)
B - 135 °F (57 °C), 155 °F (68 °C), and 175 °F (79 °C)
C - 155 °F (68 °C), 175 °F (79 °C), 200 °F (93 °C), and 286 °F (141 °C)
D - 155 °F (68 °C), 175 °F (79 °C), and 200 °F (93 °C)
E - 155 °F (68 °C)
F - 155 °F (68 °C), and 175 °F (79 °C)
G - 175 °F (79 °C)

**Approved Finishes**
1 - Brass, chrome, white polyester, and black polyester
2 - ENT[6]

**Approved Escutcheons**
W - Standard surface-mounted escutcheons only
Y - Standard surface-mounted escutcheons or recessed with the Micromatic® Model E-1, E-2, or E-3 recessed escutcheon
Z - Standard surface-mounted escutcheons or the Micromatic Model E-1 recessed escutcheon.

**Footnotes**
1 Part number shown is the base part number. For complete part number, refer to current Viking price list schedule.
2 Metric K-factor measurement shown is when pressure is measured in Bar. When pressure is measured in kPa, divide the metric K-factor shown by 10.0.
3 This chart shows listings and approvals available at time of printing. Check with the manufacturer for any additional approvals.
4 cULus Listed for use in the U.S. and Canada.
5 To determine "Minimum Water Supply Requirement" for areas of coverage where length and width of actual sprinkler spacing are not equal, select the "Maximum Sprinkler Spacing" from the chart that is equal to or greater than the larger of the actual spacing (length or width) dimensions used. Example: When using 10'-6" x 13'-0" sprinkler spacing, provide the "Minimum Water Supply Requirement" listed in the chart for 14'-0" x 14'-0" spacing. For areas of coverage smaller than shown, use the "Minimum Water Supply Requirement" in the appropriate hazard group for the next larger area listed. The distance from sprinklers to walls shall not exceed one-half the "Maximum Sprinkler Spacing" listed for the "Minimum Water Supply Requirement" used.
6 cULus Listed as corrosion-resistant.



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**REISS**
DESIGN STUDIO, PC

(805) 706-0645
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3055 DUNCAN LANE, SUITE A
SAN LUIS OBISPO, CA 93401

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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

SECTIONALS & FIRE
SPRINKLER DATA SHEETS

CONSULTANT:

BMA Mechanical
689 Tank Farm Rd., Ste 240
SLO, CA 93401
OFF: (805) 544-4259
BMA JOB# 23156.00

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. These approved plans shall be made available when inspections are requested.
All changes must be approved.

STAMP:

DATE:
**May 28, 2025**

REVISIONS:

FIRE REVIEW
REVIEWED FOR CODE COMPLIANCE
Jun 05 2025
CSG CONSULTANTS, INC.

JOB NUMBER:
2028

SHEET:
FP4

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ZURN WILKINS

# Model 375ADA

## Reduced Pressure Detector Assembly

(with OS&Y gates)

**Application**

Designed for installation on water lines in fire protection systems to protect against both backsiphonage and backpressure of contaminated water into the potable water supply. The Model 375ADA shall provide protection where a potential health hazard exists. Incorporates metered by-pass to detect leaks and unauthorized water use.

**Standards Compliance**

- ASSE® Listed 1047 (2 1/2" - 8")
- CSA® Certified B64.4 (2-1/2" - 8")
- AWWA Compliant C550
- UL® Classified
- C-UL® Classified
- FM® Approved
- Approved by the Foundation for Cross Connection Control and Hydraulic Research at the University of Southern California.
- NYC MEA 104-05-M
- Meets the requirements of NSF/ANSI 61*

*(0.25% MAX. WEIGHTED AVERAGE LEAD CONTENT)

**By-Pass Backflow Assembly** 3/4" Model 975XLD

**Materials**

| | |
|---|---|
| Main valve body | Ductile Iron ASTM A 536 Grade 4 |
| Access covers | Ductile Iron ASTM A 536 Grade 4 |
| Coatings | FDA Approved fusion epoxy finish |
| Internals | Stainless steel, 300 Series NORYL™ |
| Fasteners & Springs | Stainless Steel, 300 Series |
| Elastomers | EPDM (FDA approved) Buna Nitrile (FDA approved) |
| Polymers | NORYL™ |
| Sensing line | Stainless steel, braided hose |

**Features**

Sizes: 2 1/2"*, 3"*, 4", 6", 8", 10"

| | |
|---|---|
| Maximum working water pressure | 175 PSI |
| Maximum working water temperature | 140°F |
| Hydrostatic test pressure | 350 PSI |
| End connections (Grooved for steel pipe) | AWWA C606 |
| (Flanged) | ANSI B16.1 Class 125 |

*2 1/2" & 3" sizes use 4" body & reducer coupling

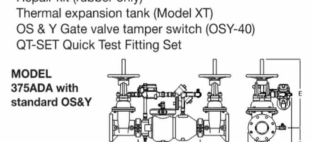
**Options**

(Suffixes can be combined)

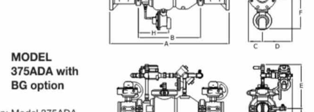
- ☐ - with OS & Y gate valves (standard)
- ☐ L - less shut-off valves (grooved body connections)
- ☐ LM - less water meter
- ☐ - with remote reading meter
- ☐ - with gallon meter (standard)
- ☐ - with cu ft/min meter
- ☐ G - with groove end gate valves
- ☐ FG - with flanged inlet gate connection and grooved outlet gate connection
- ☐ MS - with Integral Relief Valve Monitor Switch
- ☐ BG - with grooved end butterfly valves with integral supervisory switches
- ☐ BF - with flanged end butterfly valves with integral supervisory switches
- ☐ PI - with Post Indicator Gate Valve
- ☐ –509 - with AWWA C509 gate valves

**Accessories**

- ☐ Air gap (Model AG)
- ☐ Repair kit (rubber only)
- ☐ Thermal expansion tank (Model XT)
- ☐ OS & Y Gate valve tamper switch (OSY-40)
- ☐ QT-SET Quick Test Fitting Set



MODEL 375ADA with standard OS&Y



MODEL 375ADA with BG option

Attention: Model 375ADA (grooved body) and Model 375DA (flange body) have different lay lengths.

**Dimensions & Weights (do not include pkg.)**

| MODEL 375ADA SIZE | | WITHOUT GATES | | WITH OS&Y GATES (GXF) | | WITH OS&Y GATES (GXG) | | WITH BUTTERFLY VALVES (GXG) | | WITH BUTTERFLY VALVES (GXF) | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| in. | mm | lbs. | kg | lbs. | kg | lbs. | kg | lbs. | kg | lbs. | kg |
| 2 1/2 | 65 | 112 | 50.8 | 214 | 97 | 206 | 93.5 | 154 | 70 | 164 | 74 |
| 3 | 80 | 111 | 50 | 231 | 104.8 | 221 | 100.3 | 156 | 71 | 169 | 77 |
| 4 | 100 | 98 | 45 | 252 | 114 | 226 | 103 | 146 | 66 | 168 | 76 |
| 6 | 150 | 151 | 69 | 387 | 176 | 357 | 162 | 225 | 102 | 255 | 116 |
| 8 | 200 | 321 | 146 | 797 | 362 | 773 | 351 | 465 | 211 | 511 | 232 |
| 10 | 250 | 374 | 170 | 1059 | 480 | 937 | 425 | 590 | 268 | 648 | 294 |

DIMENSION (approximate)

| MODEL 375ADA SIZE | | A | | A WITH BUTTERFLY VALVES | | B LESS GATE VALVES | | C | | D | | E OS&Y OPEN | | E OS&Y CLOSED | | E WITH BUTTERFLY VALVES | | F | | H | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm |
| 2 1/2 | 65 | 35 1/8 | 892 | 32 1/8 | 816 | 20 1/8 | 511 | 4 1/2 | 114 | 9 | 229 | 16 3/8 | 416 | 13 7/8 | 352 | 8 1/4 | 210 | 11 | 279 | 9 5/8 | 247 |
| 3 | 80 | 36 1/8 | 918 | 33 | 838 | 20 1/8 | 511 | 4 1/2 | 114 | 9 | 229 | 18 7/8 | 479 | 15 5/8 | 397 | 8 1/2 | 216 | 11 | 279 | 9 5/8 | 247 |
| 4 | 100 | 38 1/4 | 972 | 33 1/4 | 845 | 19 7/8 | 505 | 4 1/2 | 114 | 9 | 229 | 22 3/4 | 578 | 18 1/4 | 464 | 9 | 229 | 11 | 279 | 9 5/8 | 247 |
| 6 | 150 | 47 1/4 | 1200 | 40 1/4 | 1022 | 25 7/8 | 657 | 5 1/2 | 140 | 10 1/2 | 267 | 30 1/8 | 765 | 23 3/4 | 603 | 10 1/4 | 260 | 12 3/8 | 314 | 13 | 330 |
| 8 | 200 | 62 | 1575 | 55 | 1397 | 38 1/2 | 978 | 10 | 254 | 12 | 305 | 37 3/4 | 959 | 29 1/4 | 743 | 12 | 305 | 15 3/8 | 391 | 17 5/16 | 440 |
| 10 | 250 | 64 5/8 | 1642 | 58 1/2 | 1485 | 38 1/2 | 978 | 10 | 254 | 12 | 305 | 45 1/4 | 1162 | 35 3/8 | 899 | 13 | 330 | 15 3/8 | 391 | 17 1/8 | 435 |

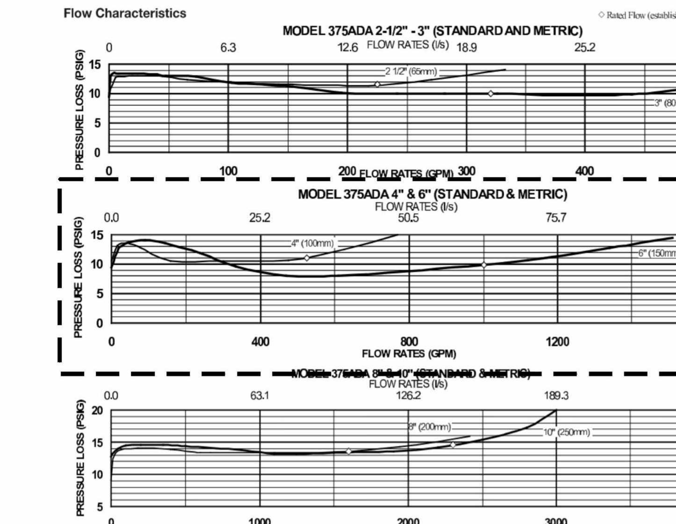
Relief Valve discharge port: 2 1/2"- 6" - 2.75 sq. in. 8" -10" - 3.69 sq. in.

Zurn Industries, LLC | Wilkins
1747 Commerce Way, Paso Robles, CA U.S.A. 93446 Ph. 855-663-9876, Fax 805-238-5766
In Canada | Zurn Industries Limited
3544 Nashua Drive, Mississauga, Ontario L4V 1L2 Ph. 905-405-8272, Fax 905-405-1292
www.zurn.com

Rev. F
Date: 8/16
Document No. BF-375ADA
Patent No. 5, 913, 331
Product No. Model 375ADA



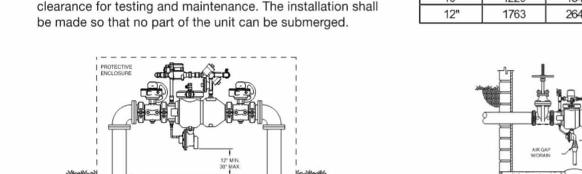
**Flow Characteristics**




**Typical Installation**

Local codes shall govern installation requirements. To be installed in accordance with the manufacturer's instructions and the latest edition of the Uniform Plumbing Code. Unless otherwise specified, the assembly shall be mounted at a minimum of 12" (305mm) and a maximum of 30" (762mm) above adequate drains with sufficient side clearance for testing and maintenance. The installation shall be made so that no part of the unit can be submerged.

| Pipe size | Capacity thru Schedule 40 Pipe (GPM) 5 ft/sec | 7.5 ft/sec | 10 ft/sec | 15 ft/sec |
|---|---|---|---|---|
| 2 1/2" | 75 | 112 | 149 | 224 |
| 3" | 115 | 173 | 230 | 346 |
| 4" | 198 | 298 | 397 | 595 |
| 6" | 450 | 675 | 900 | 1351 |
| 8" | 780 | 1169 | 1559 | 2339 |
| 10" | 1229 | 1843 | 2458 | 3687 |
| 12" | 1763 | 2644 | 3525 | 5288 |




OUTDOOR INSTALLATION (MODEL 375ADA with BG option) INDOOR INSTALLATION (MODEL 375ADA with G option)

**Specifications**

The Reduced Pressure Detector Backflow Prevention Assembly shall be certified to NSF/ANSI 61, ASSE® Listed 1047, and supplied with full port OS & Y gate valves. The main body and access cover shall be epoxy coated ductile iron (ASTM A 536 Grade 4), the seat ring and check valve shall be NORYL™, the stem shall be stainless steel (ASTM A 276) and the seat disc elastomers shall be EPDM. The checks and the relief valve shall be accessible for maintenance without removing the device from the line. The Reduced Pressure Detector Backflow Prevention Assembly shall be a ZURN WILKINS Model 375ADA.

Zurn Industries, LLC | Wilkins
1747 Commerce Way, Paso Robles, CA U.S.A. 93446 Ph. 855-663-9876, Fax 805-238-5766
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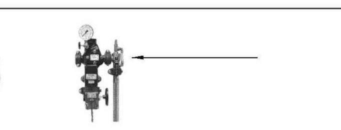
3544 Nashua Drive, Mississauga, Ontario L4V 1L2 Ph. 905-405-8272, Fax 905-405-1292
www.zurn.com



# Victaulic® Series UMC Universal Manifold Check Assembly

Victaulic 30.72



## 1.0 PRODUCT DESCRIPTION

**Available Sizes**

- 1 ¼ – 8"/DN32 – DN200

**Maximum Working Pressure**

- Up to 300 psi/2068 kPa/20.6 bar

**Application**

- Floor control assemblies may be utilized to meet the zone separation requirements of multistory applications exceeding two stories in height or whenever separate control or zoning is specified.
- Shotgun riser assemblies may be utilized in vertical orientations on individual system risers.

**Configurations**

- Optional control valve: Series 705 Butterfly Valve or Series 728 Ball Valve
- Factory assembled right-handed/left-handed (field changeable if necessary)

**Included Components**

- Integrated Check Valve
- Series UTD (Universal Test Drain) with integrated Series ARV (Adjustable Relief Valve)
- Quick Drain Hose
- Vane Type Flow Switch
- 1 ¼ – 2"/DN32 – DN50 UMC use saddle type 2" VSR flow switch
- 2 ½ – 3"/73mm – DN80 and 8"/DN200 UMC use saddle type VSR flow switch for corresponding valve size
- 4 – 6"/DN100-DN150 UMC use VSR-M flow switch with flange adapter
- 1 ¼ – 8"/DN32 – DN200 System-side pressure gauge 400 psi/2750 kPa/27.5 bar
- 1 ¼ – 3"/DN32-DN80 supply side ½" plugged port located on control valve (if using as a system riser, pressure gauge ordered separately)
- 4 – 8"/DN100 – DN200 Supply-side pressure gauge 400 psi/2750 kPa/27.5 bar

**Available End Connections**

- Victaulic Original Groove System (OGS) standard groove

## 2.0 CERTIFICATION/LISTINGS

cULus LISTED, FM APPROVED, CE, UKCA

ALWAYS REFER TO ANY NOTIFICATIONS AT THE END OF THIS DOCUMENT REGARDING PRODUCT INSTALLATION, MAINTENANCE OR SUPPORT.





## 5.0 PERFORMANCE

| Size Nominal inches DN | Actual Outside Diameter inches mm | Equivalent Length of Sch. 40 Pipe[1] with control valve feet meters | without control valve feet meters | Flow Characteristics Cv/Kv Values with control valve Full Open | Cv/Kv Values without control valve Full Open | Maximum Working Pressure psi kPa |
|---|---|---|---|---|---|---|
| 1 ¼ DN32 | 1.660 42.4 | 8.3 2.5 | 8.0 2.4 | 38.52 33 | 35.59 31 | 300 2068 |
| 1 ½ DN40 | 1.900 48.3 | 10.1 3.1 | 10.0 3.0 | 56.75 49 | 57.43 50 | 300 2068 |
| 2 DN50 | 2.375 60.3 | 21.1 6.4 | 15.8 4.8 | 71.43 62 | 83.14 72 | 300 2068 |
| 2 ½ | 2.875 73.0 | 19.6 6.0 | 15.8 4.8 | 112.43 97 | 125.84 109 | 300 2068 |
| DN65 | 3.000 76.1 | 19.6 6.0 | 15.8 4.8 | 112.43 97 | 125.84 109 | 300 2068 |
| 3 DN80 | 3.500 88.9 | 20.0 6.1 | 13.3 4.0 | 199.32 172 | 241.43 209 | 300 2068 |
| 4 DN100 | 4.500 114.3 | 17.6 5.4 | 12.9 3.9 | 425.88 368 | 499.23 432 | 300 2068 |
| | 6.500 155.1 | 40.6 12.4 | 32.0 9.8 | 834.97 722 | 932.83 807 | 300 2068 |
| 6 DN150 | 6.625 168.3 | 40.6 12.4 | 32.0 9.8 | 834.97 722 | 932.83 807 | 300 2068 |
| 8 DN200 | 8.625 219.1 | 60.8 18.5 | 45.8 13.9 | 1376.8 1191 | 1556.57 1346 | 300 2068 |

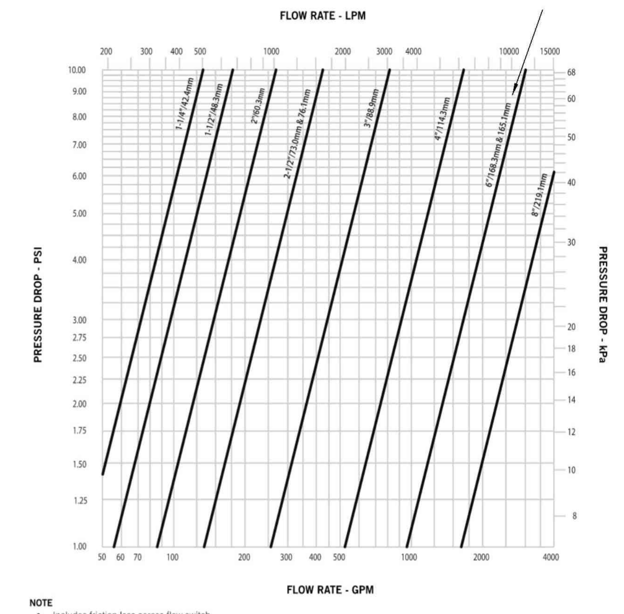
[1] Equivalent length of Sch 40 pipe calculated using the Hazen-Williams formula with a roughness coefficient of C=120





## 5.0 PERFORMANCE (CONTINUED)

**Series UMC without Control Valve**




NOTE

- Includes friction loss across flow switch



ARGCO ARGCO.com 800-854-1015

PURGENVENT™

# Model 7910MAV

WWW.PURGENVENT.COM

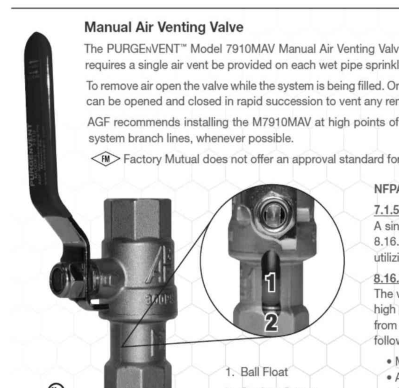
**Manual Air Venting Valve**

The PURGENVENT™ Model 7910MAV Manual Air Venting Valve is designed to exceed NFPA 13 code that requires a single air vent be provided on each wet pipe sprinkler system utilizing metallic pipe.

To remove air open the valve while the system is being filled. Once the system is in operation the M7910MAV can be opened and closed in rapid succession to vent any remaining air.

AGF recommends installing the M7910MAV at high points of the riser and at high points near the end of system branch lines, whenever possible.

FM Factory Mutual does not offer an approval standard for manual air venting valves.




1. Ball Float
2. Strainer Screen

NFPA 13 (2016)

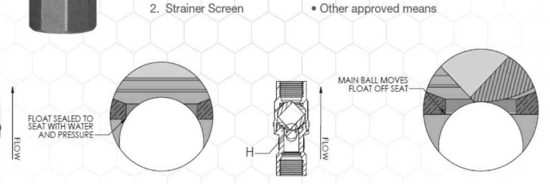
7.1.5 Air Venting

A single air vent with a connection conforming to 8.16.6 shall be provided on each wet pipe system utilizing metallic pipe.

8.16.6* Air Venting

The vent required by 7.1.5 shall be located near a high point in the system to allow air to be removed from that portion of the system by one of the following methods:

- Manual valve, minimum 1/2" (15mm) size
- Automatic air vent
- Other approved means




DETAIL F DETAIL H

phone: 800.854.1015 argco.com fax: 800-924-5922

ES-A-InBuildingRiser

## Engineering Specification

Job Name ______ Contractor ______

Job Location ______ Approval ______

Engineer ______ Contractor's P.O. No. ______

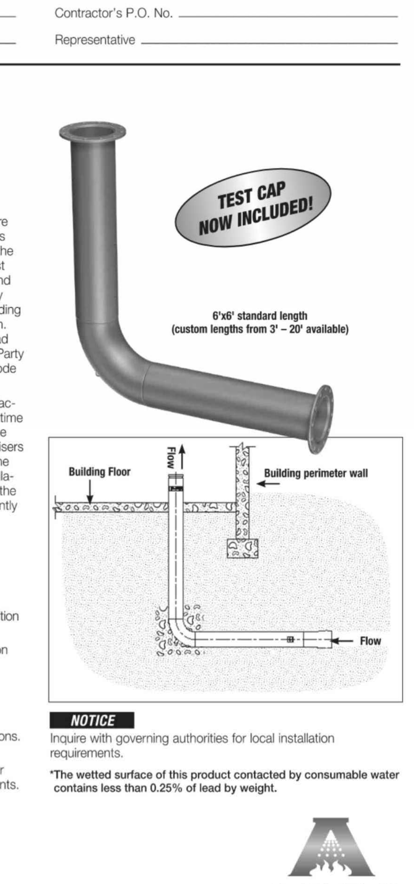
Approval ______ Representative ______

LEAD FREE*

# Series IBR

## In-Building Risers Customizable

Size: 4" – 12"




Series IBR In-Building Risers are used to connect the main fire supply to the building overhead fire system. The fitting passes under the foundation without joints and extends up through the floor. Provided with installation tabs, the unit has a CIPS (Cast Iron Pipe Size) coupler for easy connection to the underground supply (AWWA C900 PVC and Ductile Iron Pipe) and industry standard grooved-end connection (AWWA C606) on the building side for easy connection to the overhead fire sprinkler system. The IBR features Lead Free* construction to comply with Lead Free* installation requirements. Note: 12" Risers are not 3rd Party Approved, please contact your local municipality for State Code and Installation requirements.

Ames In-Building Risers are precision engineered and manufactured to provide exceptional reliability and reduce installation time and labor costs associated with field assembly. In accordance with NFPA 24, the UL Listed and FM Approved In-Building Risers replace numerous fittings, elbows, and spools, and reduce the possibility of leaks or failure in comparison to traditional installation methods and materials. Factory tested integrity ensures the highest quality installation. The use of stainless steel significantly increases the reliability and life of the riser.

**Features**

- Cost savings
- Corrosion resistant stainless steel construction, Type 304
- Ease of installation and light weight allows one person to position and handle the riser
- Minimal site preparation; joint restraint one-piece construction reduces time and labor; no missing parts, no leaks; easily identifiable for approvals
- Includes Test Cap and Coupler
- UL Listed, FM Approved, NSF Certified
- Sizes: available 4" – 12" diameter in 6'x6' standard dimensions. Custom horizontal and vertical lengths available 3'-20'.
- 12" Risers are not 3rd Party Approved, please contact your local municipality for State Code and Installation requirements.
- Designed to meet NFPA 24
- AWWA C900 Inlet/DIP
- AWWA C606 Outlet
- NSF Approved for potable water supply

NOTICE

Inquire with governing authorities for local installation requirements.

*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

Ames Fire & Waterworks product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Ames Fire & Waterworks Technical Service. Ames Fire & Waterworks reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Ames Fire & Waterworks products previously or subsequently sold.

AMES FIRE & WATERWORKS A WATTS Brand

**Specification**

In-Building Riser shall be installed as indicated on the plans. Riser shall be composed of a single extended 90 degree fitting of fabricated ASTM A312 304 stainless steel tubing, maximum working pressure 200 psi (14 bar). The fitting shall have a grooved-end connection on the outlet (building) side and a CIPS coupler on the inlet (underground) side. The grooved end shall include a coupler and cap to facilitate testing of the underground piping. The In-Building Riser shall be an Ames Fire & Waterworks Series IBR.

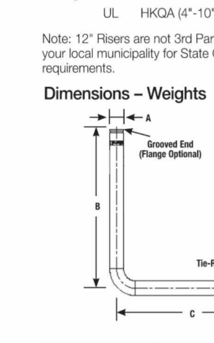
**Approvals**

Fittings FM Class 1920

UL HKQA (4"-10")

Note: 12" Risers are not 3rd Party Approved, please contact your local municipality for State Code and Installation requirements.

**Dimensions – Weights**




| SIZE | DIMENSIONS A (OD) | | B | | C | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|
| in. | in. | mm | ft | cm | ft | cm | lb | kg |
| 4 | 4½ | 114 | 6 | 183 | 6 | 183 | 71 | 32 |
| 4 | 4½ | 114 | 8'-6" | 183 | 6 | 183 | 85 | 39 |
| 4 | 4½ | 114 | 9 | 274 | 6 | 183 | 88 | 40 |
| 4 | 4½ | 114 | 5 | 152 | 7 | 213 | 71 | 32 |
| 6 | 6⅝ | 168 | 6 | 183 | 6 | 183 | 98 | 44 |
| 6 | 6⅝ | 168 | 8'-6" | 259 | 6 | 183 | 122 | 56 |
| 6 | 6⅝ | 168 | 9 | 274 | 6 | 183 | 127 | 58 |
| 6 | 6⅝ | 168 | 5 | 152 | 7 | 213 | 98 | 44 |
| 8 | 8⅝ | 219 | 6 | 183 | 6 | 183 | 129 | 59 |
| 8 | 8⅝ | 219 | 8'-6" | 259 | 6 | 183 | 163 | 74 |
| 8 | 8⅝ | 219 | 9 | 274 | 6 | 183 | 170 | 77 |
| 8 | 8⅝ | 219 | 5 | 152 | 7 | 213 | 129 | 59 |
| 10 | 10¾ | 273 | 6 | 183 | 6 | 183 | 202 | 92 |
| 10 | 10¾ | 273 | 9 | 274 | 6 | 183 | 258 | 117 |
| 10 | 10¾ | 273 | 5 | 152 | 7 | 213 | 202 | 92 |
| 12 | 12¾ | 324 | 6 | 183 | 6 | 183 | 329 | 149 |

**Each B (vertical) and C (horizontal) leg is customizable from 3' to 20' with UL Listed and FM Approved compliance. Consult with your factory representative for details.

**Standards**

NFPA — Designed to allow the contractor to conform to NFPA 24.

Where a riser is close to building foundations, underground fittings of proper design and type shall be used to avoid pipe joints being located under the foundations.

**End Connections**

**Horizontal End:** Mates with Ductile Iron Pipe and AWWA C900 Pipe (PVC Pipe with Ductile Iron Pipe equivalent outside diameters).

**Utilizes gasket conforming to UL 157 with "Lock in" gasket configuration.**

| SIZE | MATING PIPE OD | |
|---|---|---|
| in. | in. | mm |
| 4 | 4.8 | 122 |
| 6 | 6.9 | 175 |
| 8 | 9.1 | 230 |
| 10 | 11.1 | 282 |

**Vertical End**

Meets AWWA C-606 dimensions for roll grooved pipe
Meets AWWA C-207 Class D for flanges.

**Ratings**

Meets AWWA C-900 pressure class 200, DR 14 Pipe.

**Testing**

Welds are 100% leak tested at the factory.

| SIZE | DESIGN PROOF PRESSURE | |
|---|---|---|
| in. | psi | bar |
| 4 | 1000 | 70 |
| 6 | 1000 | 70 |
| 8 | 800 | 56 |
| 10 | 800 | 56 |

NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

AMES FIRE & WATERWORKS A WATTS Brand

USA: Backflow Tel: (978) 689-6066 • Fax: (978) 975-8350 • AmesFireWater.com
USA: Control Valves Tel: (713) 943-0688 • Fax: (713) 944-9445 • AmesFireWater.com
Canada: Tel: (888) 208-8927 • Fax: (905) 481-2316 • AmesFireWater.ca
Latin America: Tel: (52) 55-4122-0138 • AmesFireWater.com



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# Victaulic® VicFlex™ Sprinkler Fittings Series AH2 and AH2-CC Braided Flexible Hoses

Victaulic 10.85

Series AH2 Series AH2-CC

## 1.0 PRODUCT DESCRIPTION

**Available Sizes by Component**

**Series AH2 1"/DN25 ID Braided Hose:** 31, 36, 48, 60, 72"/790, 915, 1220, 1525, 1830 mm. Note: length includes adapter nipple and 5.75"/140 mm straight reducer.

**Series AH2-CC 1"/DN25 ID Braided Hose**: 31, 36, 48, 60, 72"/790, 915, 1220, 1525, 1830 mm.
Note: length includes captured coupling and 5.75"/140 mm straight reducer.

**Connections**

- **From Branchline**
  - ¾"/20mm BSPT female thread (VdS only)
  - 1 ¼"/32mm BSPT female thread (LPCB only)
  - 1"/25mm NPT or BSPT female Thread
  - 1"/25mm Grooved IGS (refer to Submittal 10.54 for additional IGS connections)
    - No. 116 CPVC Adapter (1"/25mm Female CPVC Socket x 1"/25mm Grooved IGS)
    - No. 142 Welded Outlet
    - Style 922 Outlet-T
    - Style 920N Mechanical-T Outlet
    - No. 65 Grooved End of Run Fitting
- **Hose Inlet**
  - 1"/25mm Grooved IGS
  - 1"/25mm NPT or BSPT male thread
  - ¾"/20mm BSPT male thread (VdS only)
  - 1 ¼"/32mm BSPT male thread (LPCB only)

ALWAYS REFER TO ANY NOTIFICATIONS AT THE END OF THIS DOCUMENT REGARDING PRODUCT INSTALLATION, MAINTENANCE OR SUPPORT.





## 5.1 PERFORMANCE – FRICTION LOSS DATA

FM Series AH2 and AH2-CC Braided Hoses
Style AB2, AB3, AB4, AB5, AB7, AB7 Adj., AB8, AB10, AB12, ABBA and ABMM *VicFlex* Brackets

| Length of Stainless Steel Flexible Hose inches mm | K-Factor Imperial S.I. | Outlet Size inches mm type | Equivalent Length of 1"/33.7 mm Sch. 40 Pipe feet meters | Maximum Number of 90° Bends at 7"/178 mm Bend Radius |
|---|---|---|---|---|
| 31 790 | 5.6 8.1 | ½ 15 Straight | 13.8 4.2 | 2 |
| | | ½ 15 90° Elbow | 23.5 7.1 | |
| 36 915 | 5.6 8.1 | ½ 15 Straight | 16.6 5.1 | 2 |
| | | ½ 15 90° Elbow | 25.6 7.8 | |
| 48 1220 | 5.6 8.1 | ½ 15 Straight | 23.4 7.1 | 3 |
| | | ½ 15 90° Elbow | 30.7 9.3 | |
| 60 1525 | 5.6 8.1 | ½ 15 Straight | 30.2 9.2 | 4 |
| | | ½ 15 90° Elbow | 35.9 10.9 | |
| 72 1830 | 5.6 8.1 | ½ 15 Straight | 37.0 11.3 | 4 |
| | | ½ 15 90° Elbow | 41.1 12.5 | |
| 31 790 | 8.0 11.5 | ¾ 20 Straight | 16.8 5.1 | 2 |
| | | ¾ 20 90° Elbow | 16.8 5.1 | |
| 36 915 | 8.0 11.5 | ¾ 20 Straight | 20 6.0 | 2 |
| | | ¾ 20 90° Elbow | 19.7 6.0 | |
| 48 1220 | 8.0 11.5 | ¾ 20 Straight | 27.8 8.4 | 3 |
| | | ¾ 20 90° Elbow | 26.6 8.1 | |

FM NOTES

- The Series AH2 hose has been tested and Approved by FM Global for use in wet, dry and preaction systems per NFPA 13, 13R, and 13D and FM data sheets 2-0, 2-5, and 2-8. FM 1637 standard for safety include, but are not limited to, pressure cycling, corrosion resistance, flow characterisitics, vibration resistance, leakage, mechanical and hydrostatic strength.
- EXAMPLE: A 48-inch hose installed with two 30° bends and two 90° bends is permitted and considered equivalent to the data in the table shown above. In this example, the total number of degrees is 240°, which is less than the allowable 270°.





## 4.1 DIMENSIONS

***VicFlex* Brackets**

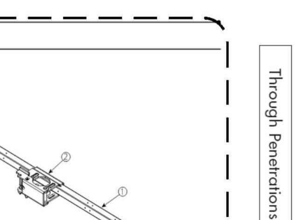
**Style AB2**

- Suspended Ceilings
- Hard-Lid Ceilings

| Item | Description |
|---|---|
| 1 | 24"/610 mm or 48"/1219 mm Square Bar |
| 2 | Patented Vertically Adjustable Center Bracket |
| 3 | End Bracket |

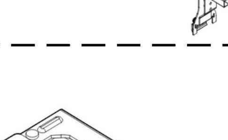
NOTE

- Both sizes FM/VdS/LPCB Approved, cULus listed



**Style AB3**

- Surface Mount Applications
- FM/LPCB Approved



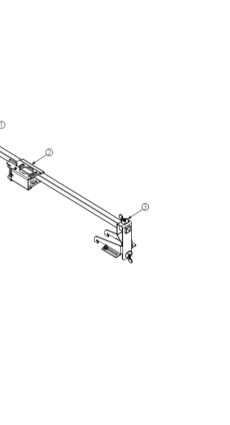
**Style AB4**

- Hard-Lid Ceilings with Hat furring channel grid system

| Item | Description |
|---|---|
| 1 | 24"/610 mm or 48"/1219 mm Square Bar |
| 2 | Patented Vertically Adjustable Center Bracket |
| 3 | End Bracket for Hat Furring Channel |

NOTE

- Both sizes FM/VdS/LPCB Approved, cULus listed.

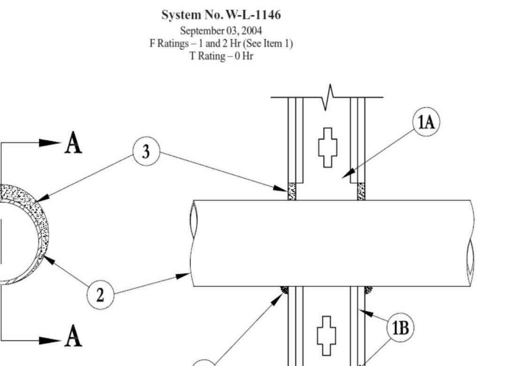




Through Penetrations | Metallic Pipes | 10000 Series | Gypsum | WL

**System No. W-L-1146**

September 03, 2004
F Ratings – 1 and 2 Hr (See Item 1)
T Rating – 0 Hr




SECTION A-A

1. **Wall Assembly** – The 1 or 2 hr fire rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
   A. **Studs** – Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 in. by 4 in. (51 mm by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC. When steel studs are used and the diam of opening exceeds the width of stud cavity, the opening shall be framed on all sides using lengths of steel stud installed between the vertical studs and screw-attached to the steel studs at each end. The framed opening in the wall shall be 4 in. to 6 in. (102 to 152 mm) wider and 4 in. to 6 in. (102 to 152 mm) higher than the diam of the penetrating item such that, when the penetrating item is centered in the opening, a 2 in. to 3 in. (51 mm to 76 mm) clearance is present between the penetrating item and the framing in all four sides.
   B. **Gypsum Board*** – The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 26 in. (660 mm) for steel stud walls. Max diam of opening is 14-1/2 in. (368 mm) for wood stud walls.

   **The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.**
2. **Through Penetrant** – One metallic pipe, conduit or tubing installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min of 0 in. (point contact) to max 2 in. (0 mm to 51 mm). Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
   A. **Steel Pipe** – Nom 24 in. (610 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. **Iron Pipe** – Nom 24 in. (610 mm) diam (or smaller) service weight (or heavier) cast iron soil pipe, nom 12 in (305 mm) diam (or smaller) or Class 50 (or heavier) ductile iron pressure pipe.
   C. **Conduit** – Nom 6 in. (152 mm) diam (or smaller) steel conduit or nom 4 in (102 mm) diam (or smaller) steel electrical metallic tubing
   D. **Copper Tubing** – Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing
   E. **Copper Pipe** – Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.
3. **Fill, Void or Cavity Materials*** – **Caulk or Sealant** – Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall. Min 1/2 in. (13 mm) diam bead of caulk applied to the penetrant/wallboard interface at the point contact location on both sides of wall.

   3M COMPANY – CP 25WB+ caulk or FB-3000 WT sealant.

*Bearing the UL Classification Mark

This material was extracted and drawn by 3M Fire Protection Products from the 2007 edition of the UL Fire Resistance Directory. cULus



2/9/24, 9:54 AM Hycalc for the Internet

FireHydrant.org

MainPage | About FireHydrant.org | Pictures of Hydrants | Hydrant Technical Info
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*BETA Version*

**Fire Hydrant Flow Calculator** City of Arroyo Grande S. County Regional Center 810 W. Branch St

© 2006, Willis Lamm

- Use the tab key to navigate.
- Tab between each box to update the calculation.
- Be sure to tab past your final entry for a correct calculation.

| | | |
|---|---|---|
| Static: | 60 | psi before flowing |
| Residual: | 54 | psi while flowing |
| Pitot: | 45 | pitot gage reading |
| Diameter: | 2.5 | size of opening tested |
| This hydrant is flowing: | 1126 | GPM from the test outlet |
| Projected available hydrant flow: | 3135 | GPM Note 1 |
| 2nd Static: | 57 | secondary psi before flowing |
| 2nd Residual: | 55 | secondary psi while flowing |
| The main can be expected to flow about: | 5441 | GPM |

Notes:

1. Projected available flows calculated at 20 psi residual, or ½ the static pressure for low pressure hydrants having static pressures of less than 40 psi.
2. This calculator is based on established Hazen-Williams formulas and is provided for convenience and estimation purposes only. The author and FireHydrant.org express no warranty for its suitability for any particular purpose.

Click for Legal Disclaimer

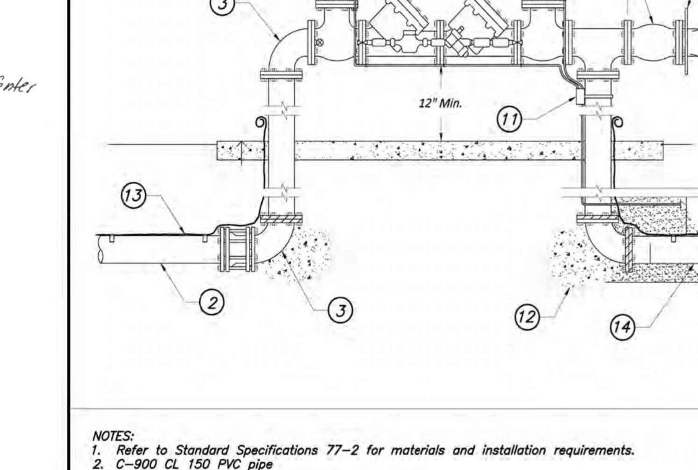
Questions? or Comments?

Unless otherwise noted, all contents of these WWW pages © FireHydrant.org
Site Design: FireHydrant.Org Volunteers - webmaster@firehydrant.org

This flow test was completed on 2/9/24, by Shane Taylor Utilities Manager



FOR REFERENCE

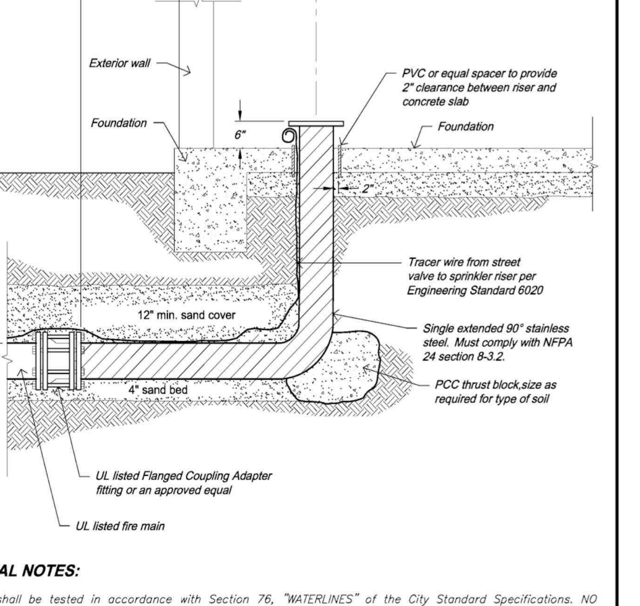



NOTES:

1. Refer to Standard Specifications 77-2 for materials and installation requirements.
2. C-900 CL 150 PVC pipe
3. 90° Ell (AWWA C-153)
4. Ductile Itron pipe (AWWA C-151/A21,51-02 CL 350)
5. Double Check Detector Check with FDC per State of California – Health and Human Services Agency, Department of Health Services (www.dhs.cahwnet.gov/ps/ddwem/publications/pubindex.htm).
6. Break-away padlock and chain between OS & Y valves locked in open position
7. Electronic alarm tamper device for monitoring each OS&Y valve.
8. FDC to face towards fire lane or street w/ metal break away caps, brass, or equal. Plastic not acceptable.
9. Sprinkler or stand pipe signage pointed towards street.
10. United brass wafer check valve No. 90 for 4" or No. 68 for 6" and greater.
11. Junction box with tamper proof screws.
12. Thrust Block per Standard Plan 740-AG.
13. No. 12, insulated THW copper wire shall run continuously over mains and services and brought up to the surface.
14. C-900 CL 200 PVC pipe

| CITY OF ARROYO GRANDE - ENGINEERING STANDARD PLAN | | 6410 |
|---|---|---|
| ISSUE DATE: MARCH 2016 | DOUBLE CHECK DETECTOR W/FDC -4" AND LARGER | SHEET 1 OF 1 |

FOR REFERENCE




**GENERAL NOTES:**

A. Fire line shall be tested in accordance with Section 76, "WATERLINES" of the City Standard Specifications. NO CONNECTION MAY BE MADE UNTIL WATER SAMPLES HAVE BEEN TESTED AND APPROVED.

B. Location of fire sprinkler riser shall be approved by the Fire Department.

C. Materials shall be UL listed for fire service.

D. Wrap bolts with 6 mil plastic sheathing prior to placement of thrust block(s).

E. All fittings and risers shall be ductile iron, internally cement lined for fire service, and wrapped with two layers of UPC listed plastic tape (minimum 40 mil) or coated with Henry's #204 plastic roof cement or an approved equal.

| CITY OF ARROYO GRANDE - ENGINEERING STANDARD PLAN | | 6430 |
|---|---|---|
| ISSUE DATE: MARCH 2016 | FIRE MAIN - BUILDING CONNECTION | SHEET 1 OF 1 |

FIRE REVIEW

REVIEWED FOR CODE COMPLIANCE

Jun 05 2025

CSG CONSULTANTS, INC.

REISS DESIGN STUDIO, PC

(805) 706-0645
WWW.REISSDESIGNSTUDIO.COM
3055 DUNCAN LANE, SUITE A
SAN LUIS OBISPO, CA 93401

All reports, drawings, specifications, computer files, field data, notes and other documents and instruments prepared by REISS DESIGN STUDIO, PC as instruments of service shall remain the property of REISS DESIGN STUDIO, PC. REISS DESIGN STUDIO, PC shall retain all common law, statutory and other reserved rights, including, without limitation, the copyrights thereto.

PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

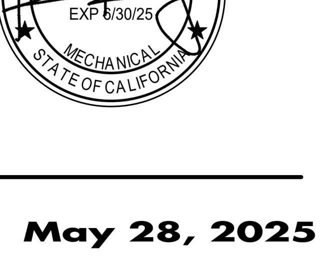
FIRE SPRINKLER PARTS, CUT SHEETS & DETAILS

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. These approved plans shall be made available when inspections are requested.
All changes must be approved.

BMA Mechanical + 699 Tank Farm Rd., Ste 240 SLO, CA 93401 OFF: (805) 544-4259 BMA JOB# 23156.00

STAMP:




DATE:

May 28, 2025

REVISIONS:

JOB NUMBER:

2028

SHEET:

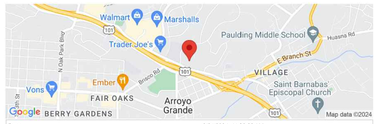
FP5

USGS web services were down for some period of time and as a result this tool wasn't operational, resulting in timeout error. USGS web services are now operational so this tool should work as expected.

# ARROYO GRANDE LIBRARY

**800 W Branch St, Arroyo Grande, CA 93420, USA**

Latitude, Longitude: 35.1245389, -120.5896933




| | |
|---|---|
| Date | 3/21/2024, 11:09:22 AM |
| Design Code Reference Document | ASCE7-16 |
| Risk Category | III |
| Site Class | D - Default (See Section 11.4.3) |

| Type | Value | Description |
|---|---|---|
| $S_S$ | 1.065 | $MCE_R$ ground motion. (for 0.2 second period) |
| $S_1$ | 0.389 | $MCE_R$ ground motion. (for 1.0s period) |
| $S_{MS}$ | 1.278 | Site-modified spectral acceleration value |
| $S_{M1}$ | null -See Section 11.4.8 | Site-modified spectral acceleration value |
| $S_{DS}$ | 0.852 | Numeric seismic design value at 0.2 second SA |
| $S_{D1}$ | null -See Section 11.4.8 | Numeric seismic design value at 1.0 second SA |

| Type | Value | Description |
|---|---|---|
| SDC | null -See Section 11.4.8 | Seismic design category |
| $F_a$ | 1.2 | Site amplification factor at 0.2 second |
| $F_v$ | null -See Section 11.4.8 | Site amplification factor at 1.0 second |
| PGA | 0.467 | $MCE_G$ peak ground acceleration |
| $F_{PGA}$ | 1.2 | Site amplification factor at PGA |
| $PGA_M$ | 0.561 | Site modified peak ground acceleration |
| $T_L$ | 8 | Long-period transition period in seconds |
| SsRT | 1.065 | Probabilistic risk-targeted ground motion. (0.2 second) |
| SsUH | 1.176 | Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration |
| SsD | 2.705 | Factored deterministic acceleration value. (0.2 second) |
| S1RT | 0.389 | Probabilistic risk-targeted ground motion. (1.0 second) |
| S1UH | 0.428 | Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration. |
| S1D | 0.923 | Factored deterministic acceleration value. (1.0 second) |
| PGAd | 1.1 | Factored deterministic acceleration value. (Peak Ground Acceleration) |
| $PGA_{UH}$ | 0.467 | Uniform-hazard (2% probability of exceedance in 50 years) Peak Ground Acceleration |
| $C_{RS}$ | 0.905 | Mapped value of the risk coefficient at short periods |
| $C_{R1}$ | 0.908 | Mapped value of the risk coefficient at a period of 1 s |
| $C_V$ | 1.313 | Vertical coefficient |

https://www.seismicmaps.org



## TOLBrace™ Seismic Bracing Calculations

V8.8.136

**Project Address:** ARROYO GRANDE LIBRARY
800 W. BRANCH ST
ARROYO GRANDE CA
Job # 23-00002

Contractor: ALPHA FIRE UNLIMITED
Address: 650 SWEENEY LANE
SAN LUIS OBISPO CA 93401
Phone: 805-541-2527
License: C-10, C-16 761360 ACO #536

Calculations based on 2022 NFPA Pamphlet #13

### Brace Information

| | |
|---|---|
| Maximum Brace Length | 3' 6" (1.067 m) |
| Diameter of Brace | 1" |
| Type of Brace | Sch.40 |
| Angle of Brace | 45° Min. |
| Least Rad. of Gyration | 0.42" (11 mm) |
| L/R Value | 100 |
| Max Horizontal Load | 4455 lbs (2021 kg) |

**Other Requirements - FM Approved Loads**

### Fastener Information

| | |
|---|---|
| Orientation to Connecting Surface | NFPA Type B |
| Fastener | |
| Type | 1/2in. x 1 1/2in. Thru Bolt |
| Diameter | 1/2in. |
| Length | 1 1/2in. |
| Maximum Load | 165 lbs (75 kg) |
| Prying Factor | N/A |

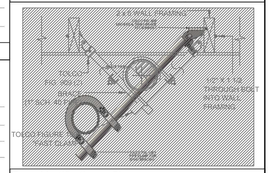
2X WOOD WALL

### TOLCO™ Brace Components

| TOLCO™ Component | Listed Load | Adjusted Load |
|---|---|---|
| Fig. 1001 Clamp | 730 lbs (331 kg) | 730 lbs (331 kg) |
| Fig.980 - 1/2" Universal Swivel | 2790 lbs (1266 kg); | 2790 lbs (1266 kg) |
| See Fastener Information | | |

*Calculation Based on CONCENTRIC Loading
*Please Note: These calculations are for TOLCO™ components only. Use of any other components voids these calculations and the listing of the assembly.

### Seismic Brace Assembly Detail




**Brace Identification on Plans** 4WAY

**Brace Type** Lateral [ ] Longitudinal [ ] 4-Way [X]

### Sprinkler System Load Calculation (Fpw = CpWp)

Cp = 0.54

| Diameter | Type | Length | Total Length | Weight Per Unit Length | Total Weight |
|---|---|---|---|---|---|
| 6" (150 mm) | Sch. 10 | 10 ft (3 m) | 10 ft (3 m) | 23.03 lb/ft (34.27 kg/m) | 230 lbs (104 kg) |

| | |
|---|---|
| Subtotal Weight | 230 lbs (104 kg) |
| Wp (incl. 15%) | 264 lbs (120 kg) |
| Total (Fpw) | 143 lbs (65 kg) |
| Maximum Fpw per 18.5.5.2 (if applicable) | N/A |

| Main Size | Type/Sch. | Spacing (ft) |
|---|---|---|
| 6" | Sch. 10 | 10 |

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## TOLBrace™ Seismic Bracing Calculations

V8.8.136

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800 W. BRANCH ST
ARROYO GRANDE CA
Job # 23-00002

Contractor: ALPHA FIRE UNLIMITED
Address: 650 SWEENEY LANE
SAN LUIS OBISPO CA 93401
Phone: 805-541-2527
License: C-10, C-16 761360 ACO #536

Calculations based on 2022 NFPA Pamphlet #13

### Brace Information

| | |
|---|---|
| Maximum Brace Length | 7' 0" (2.134 m) |
| Diameter of Brace | 1" |
| Type of Brace | Sch.40 |
| Angle of Brace | 45° Min. |
| Least Rad. of Gyration | 0.42" (11 mm) |
| L/R Value | 200 |
| Max Horizontal Load | 1310 lbs (594 kg) |

**Other Requirements - FM Approved Loads**

### Fastener Information

| | |
|---|---|
| Orientation to Connecting Surface | NFPA Type H |
| Fastener | |
| Type | 1/2in. x 1 1/2in. Thru Bolt |
| Diameter | 1/2in. |
| Length | 1 1/2in. |
| Maximum Load | 215 lbs (98 kg) |
| Prying Factor | N/A |

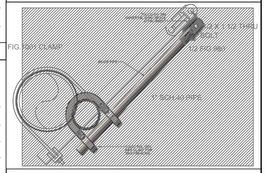
2X WOOD FRAMING MEMBER

### TOLCO™ Brace Components

| TOLCO™ Component | Listed Load | Adjusted Load |
|---|---|---|
| Fig. 1001 Clamp | 1200 lbs (544 kg) | 1200 lbs (544 kg) |
| Fig.980 - 1/2" Universal Swivel | 2790 lbs (1266 kg); | 2790 lbs (1266 kg) |
| See Fastener Information | | |

*Calculation Based on CONCENTRIC Loading
*Please Note: These calculations are for TOLCO™ components only. Use of any other components voids these calculations and the listing of the assembly.

### Seismic Brace Assembly Detail




**Brace Identification on Plans** SB1

**Brace Type** Lateral [X] Longitudinal [ ] 4-Way [ ]

### Sprinkler System Load Calculation (Fpw = CpWp)

Cp = 0.54

| Diameter | Type | Length | Total Length | Weight Per Unit Length | Total Weight |
|---|---|---|---|---|---|
| 3" (80 mm) | Sch. 10 | 40 ft (12.2 m) | 40 ft (12.2 m) | 7.94 lb/ft (11.82 kg/m) | 318 lbs (144 kg) |

| | |
|---|---|
| Subtotal Weight | 318 lbs (144 kg) |
| Wp (incl. 15%) | 366 lbs (166 kg) |
| Total (Fpw) | 197 lbs (90 kg) |
| Maximum Fpw per 18.5.5.2 (if applicable) | 454 lb (205 kg) |

| Main Size | Type/Sch. | Spacing (ft) |
|---|---|---|
| 3" | Sch. 10 | 40 |

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## TOLBrace™ Seismic Bracing Calculations

V8.8.144

**Project Address:** ARROYO GRANDE LIBRARY
800 W. BRANCH ST
ARROYO GRANDE CA
Job # 23-00002

Contractor:
Address:
Phone:
License:

Calculations based on 2022 NFPA Pamphlet #13

### Brace Information

| | |
|---|---|
| Maximum Brace Length | 7' 0" (2.134 m) |
| Diameter of Brace | 1" |
| Type of Brace | Sch.40 |
| Angle of Brace | 45° Min. |
| Least Rad. of Gyration | 0.42" (11 mm) |
| L/R Value | 200 |
| Max Horizontal Load | 1310 lbs (594 kg) |

**Other Requirements - FM Approved Loads**

### Fastener Information

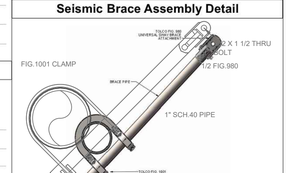
| | |
|---|---|
| Orientation to Connecting Surface | NFPA Type H |
| Fastener | |
| Type | 1/2in. x 1 1/2in. Thru Bolt |
| Diameter | 1/2in. |
| Length | 1 1/2in. |
| Maximum Load | 215 lbs (98 kg) |
| Prying Factor | N/A |

### TOLCO™ Brace Components

| TOLCO™ Component | Listed Load | Adjusted Load |
|---|---|---|
| Fig. 1001 Clamp | 1200 lbs (544 kg) | 1200 lbs (544 kg) |
| Fig.980 - 1/2" Universal Swivel | 2790 lbs (1266 kg); | 2790 lbs (1266 kg) |
| See Fastener Information | | |

*Calculation Based on CONCENTRIC Loading
*Please Note: These calculations are for TOLCO™ components only. Use of any other components voids these calculations and the listing of the assembly.

### Seismic Brace Assembly Detail




**Brace Identification on Plans** SB4L

**Brace Type** Lateral [X] Longitudinal [ ] 4-Way [ ]

### Sprinkler System Load Calculation (Fpw = CpWp)

Cp = 0.54

| Diameter | Type | Length | Total Length | Weight Per Unit Length | Total Weight |
|---|---|---|---|---|---|
| 4" (100 mm) | Sch. 10 | 20 ft (6.1 m) | 20 ft (6.1 m) | 11.78 lb/ft (17.53 kg/m) | 236 lbs (107 kg) |

| | |
|---|---|
| Subtotal Weight | 236 lbs (107 kg) |
| Wp (incl. 15%) | 271 lbs (123 kg) |
| Total (Fpw) | 147 lbs (66 kg) |
| Maximum Fpw per 18.5.5.2 (if applicable) | Contact Pipe Manufacturer |

| Main Size | Type/Sch. | Spacing (ft) |
|---|---|---|
| 4" | Sch. 10 | 20 |

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## TOLBrace™ Seismic Bracing Calculations

V8.8.136

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ARROYO GRANDE CA
Job # 23-00002

Contractor: ALPHA FIRE UNLIMITED
Address: 650 SWEENEY LANE
SAN LUIS OBISPO CA 93401
Phone: 805-541-2527
License: C-10, C-16 761360 ACO #536

Calculations based on 2022 NFPA Pamphlet #13

### Brace Information

| | |
|---|---|
| Maximum Brace Length | 7' 0" (2.134 m) |
| Diameter of Brace | 1" |
| Type of Brace | Sch.40 |
| Angle of Brace | 45° Min. |
| Least Rad. of Gyration | 0.42" (11 mm) |
| L/R Value | 100 |
| Max Horizontal Load | 4455 lbs (2021 kg) |

**Other Requirements - FM Approved Loads**

### Fastener Information

| | |
|---|---|
| Orientation to Connecting Surface | NFPA Type E |
| Fastener | |
| Type | 1/2in. x 1 1/2in. Thru Bolt |
| Diameter | 1/2in. |
| Length | 1 1/2in. |
| Maximum Load | 230 lbs (104 kg) |
| Prying Factor | N/A |

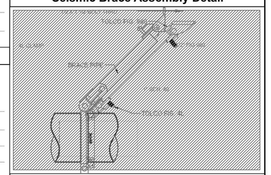
2X WOOD FRAMING MEMBER

### TOLCO™ Brace Components

| TOLCO™ Component | Listed Load | Adjusted Load |
|---|---|---|
| Fig. 4L Clamp | 650 lbs (295 kg) | 650 lbs (295 kg) |
| Fig.980 - 1/2" Universal Swivel | 2790 lbs (1266 kg); | 2790 lbs (1266 kg) |
| See Fastener Information | | |

*Calculation Based on CONCENTRIC Loading
*Please Note: These calculations are for TOLCO™ components only. Use of any other components voids these calculations and the listing of the assembly.

### Seismic Brace Assembly Detail




**Brace Identification on Plans** SB2

**Brace Type** Lateral [ ] Longitudinal [X] 4-Way [ ]

### Sprinkler System Load Calculation (Fpw = CpWp)

Cp = 0.54

| Diameter | Type | Length | Total Length | Weight Per Unit Length | Total Weight |
|---|---|---|---|---|---|
| 3" (80 mm) | Sch. 10 | 40 ft (12.2 m) | 40 ft (12.2 m) | 7.94 lb/ft (11.82 kg/m) | 318 lbs (144 kg) |

| | |
|---|---|
| Subtotal Weight | 318 lbs (144 kg) |
| Wp (incl. 15%) | 366 lbs (166 kg) |
| Total (Fpw) | 197 lbs (90 kg) |
| Maximum Fpw per 18.5.5.2 (if applicable) | N/A |

| Main Size | Type/Sch. | Spacing (ft) |
|---|---|---|
| 3" | Sch. 10 | 40 |

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## TOLBrace™ Seismic Bracing Calculations

V8.8.136

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ARROYO GRANDE CA
Job # 23-00002

Contractor: ALPHA FIRE UNLIMITED
Address: 650 SWEENEY LANE
SAN LUIS OBISPO CA 93401
Phone: 805-541-2527
License: C-10, C-16 761360 ACO #536

Calculations based on 2022 NFPA Pamphlet #13

### Brace Information

| | |
|---|---|
| Maximum Brace Length | 7' 0" (2.134 m) |
| Diameter of Brace | 1" |
| Type of Brace | Sch.40 |
| Angle of Brace | 45° Min. |
| Least Rad. of Gyration | 0.42" (11 mm) |
| L/R Value | 200 |
| Max Horizontal Load | 1310 lbs (594 kg) |

**Other Requirements - FM Approved Loads**

### Fastener Information

| | |
|---|---|
| Orientation to Connecting Surface | NFPA Type E |
| Fastener | |
| Type | 1/2in. x 1 1/2in. Thru Bolt |
| Diameter | 1/2in. |
| Length | 1 1/2in. |
| Maximum Load | 230 lbs (104 kg) |
| Prying Factor | N/A |

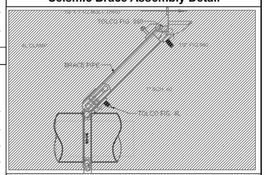
2X WOOD FRAMING MEMBER

### TOLCO™ Brace Components

| TOLCO™ Component | Listed Load | Adjusted Load |
|---|---|---|
| Fig. 4L Clamp | 1020 lbs (463 kg) | 1020 lbs (463 kg) |
| Fig.980 - 1/2" Universal Swivel | 2790 lbs (1266 kg); | 2790 lbs (1266 kg) |
| See Fastener Information | | |

*Calculation Based on CONCENTRIC Loading
*Please Note: These calculations are for TOLCO™ components only. Use of any other components voids these calculations and the listing of the assembly.

### Seismic Brace Assembly Detail




**Brace Identification on Plans** SB3

**Brace Type** Lateral [ ] Longitudinal [X] 4-Way [ ]

### Sprinkler System Load Calculation (Fpw = CpWp)

Cp = 0.54

| Diameter | Type | Length | Total Length | Weight Per Unit Length | Total Weight |
|---|---|---|---|---|---|
| 1.5" (40 mm) | Sch. 10 | 80 ft (24.4 m) | 80 ft (24.4 m) | 3.04 lb/ft (4.52 kg/m) | 243 lbs (110 kg) |

| | |
|---|---|
| Subtotal Weight | 243 lbs (110 kg) |
| Wp (incl. 15%) | 279 lbs (127 kg) |
| Total (Fpw) | 151 lbs (68 kg) |
| Maximum Fpw per 18.5.5.2 (if applicable) | N/A |

| Main Size | Type/Sch. | Spacing (ft) |
|---|---|---|
| 1.5" | Sch. 10 | 60 |

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## TOLBrace™ Seismic Bracing Calculations

V8.8.144

**Project Address:** ARROYO GRANDE LIBRARY
800 W. BRANCH ST
ARROYO GRANDE CA
Job # 23-00002

Contractor:
Address:
Phone:
License:

Calculations based on 2022 NFPA Pamphlet #13

### Brace Information

| | |
|---|---|
| Maximum Brace Length | 7' 0" (2.134 m) |
| Diameter of Brace | 1" |
| Type of Brace | Sch.40 |
| Angle of Brace | 45° Min. |
| Least Rad. of Gyration | 0.42" (11 mm) |
| L/R Value | 200 |
| Max Horizontal Load | 1310 lbs (594 kg) |

**Other Requirements - FM Approved Loads**

### Fastener Information

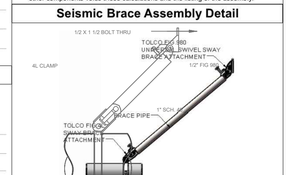
| | |
|---|---|
| Orientation to Connecting Surface | NFPA Type E |
| Fastener | |
| Type | 1/2in. x 3 1/2in. Thru Bolt |
| Diameter | 1/2in. |
| Length | 3 1/2in. |
| Maximum Load | 350 lbs (159 kg) |
| Prying Factor | N/A |

### TOLCO™ Brace Components

| TOLCO™ Component | Listed Load | Adjusted Load |
|---|---|---|
| Fig. 4L Clamp | 730 lbs (331 kg) | 730 lbs (331 kg) |
| Fig.980 - 1/2" Universal Swivel | 2790 lbs (1266 kg); | 2790 lbs (1266 kg) |
| See Fastener Information | | |

*Calculation Based on CONCENTRIC Loading
*Please Note: These calculations are for TOLCO™ components only. Use of any other components voids these calculations and the listing of the assembly.

### Seismic Brace Assembly Detail




**Brace Identification on Plans** SB4

**Brace Type** Lateral [ ] Longitudinal [X] 4-Way [ ]

### Sprinkler System Load Calculation (Fpw = CpWp)

Cp = 0.54

| Diameter | Type | Length | Total Length | Weight Per Unit Length | Total Weight |
|---|---|---|---|---|---|
| 4" (100 mm) | Sch. 10 | 40 ft (12.2 m) | 40 ft (12.2 m) | 11.78 lb/ft (17.53 kg/m) | 471 lbs (214 kg) |

| | |
|---|---|
| Subtotal Weight | 471 lbs (214 kg) |
| Wp (incl. 15%) | 542 lbs (246 kg) |
| Total (Fpw) | 292 lbs (133 kg) |
| Maximum Fpw per 18.5.5.2 (if applicable) | N/A |

| Main Size | Type/Sch. | Spacing (ft) |
|---|---|---|
| 4" | Sch. 10 | 40 |

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FIRE REVIEW

REVIEWED FOR CODE COMPLIANCE

Jun 05 2025

CSG CONSULTANTS, INC.

REISS DESIGN STUDIO, PC
(805) 706-0645
WWW.REISSDESIGNSTUDIO.COM
3055 DUNCAN LANE, SUITE A
SAN LUIS OBISPO, CA 93401

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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center, Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

SEISMIC BRACE CALCULATIONS AND BRACE DETAILS

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error.
Approved plans shall be in conformance with applicable codes.

BMA ARCHITECTURE & PLANNING
1327 Marsh St, Ste 240
SLO, CA 93401
Office (805) 544-4259
Architectural License No. C-23156

STAMP:

DATE:

**May 28, 2025**

REVISIONS:

JOB NUMBER:

2028

SHEET:

FP6

F:\Drawings\2023\23156.00_AG Library Remod\Fire\20250528_CAD Files\AG Export FP\AG Export FP\AG Library Cad Export_REVISED.dwg jamesm May 28,2025 - 11:07am

## PROJECT / BUILDING DATA

| | |
|---|---|
| **PROJECT ADDRESS:** | 800 W. Branch St., Arroyo Grande, California 93420 |
| **APN:** | 007-011-050 |
| **LEGAL DESCRIPTION:** | CY AG PM 44/96 PTN PAR 3 |
| **LOT SIZE:** | 13.11 Acres |
| **ZONING:** | Public Facility<br>COMMUNITY/PLANNING AREA: City of Arroyo Grande |
| **FIRE INFORMATION:** | JURISDICTION: Arroyo Grande City Fire<br>HAZARD ZONE: LRA - Local Responsibility Area |
| **SETBACKS/YARDS:** | FRONT/STREET SETBACK: 25'0"<br>SIDE YARD: 25'0"<br>REAR/OTHER YARD: 25'0" |
| **LOT COVERAGE:** | ALLOWED: Building Coverage: 60%<br>EXISTING TO REMAIN: Building Coverage: 10% |
| **MAXIMUM HEIGHT:** | ALLOWED: 35'0"<br>EXISTING TO REMAIN: 28'0" |
| **BUILDING AREAS:** | EXISTING LOWER FLOOR-<br>CHILDREN'S AREA: 2,343 SF<br>GENERAL LIBRARY: 6,899 SF<br>STAFF AREA: 1,505 SF<br>ADDITION STAFF AREA: 760 SF<br>TOTAL LOWER FLOOR- 11,507 SF<br>EXISTING UPPER FLOOR-<br>STAFF AREA: 2,960 SF<br>TOTAL CONDITIONED- 14,467 SF<br>PROPOSED PATIO: 1,060 SF<br>EXISTING UPPER BALCONY: 1,936 SF |

## APPLICABLE CODES AND STANDARDS

CALIFORNIA BUILDING CODE (CBC) - PART 2, TITLE 24, CCR, (Based on the 2021 International Building Code (IBC) - 2022 Edition

CALIFORNIA FIRE CODE (CFC) - PART 9, TITLE 24, CCR. Based on the 2021 International Fire Code (IFC) - 2022 Edition

CALIFORNIA ELECTRICAL CODE (CEC) - PART 3, TITLE 24, CCR. - 2022 Edition

NFPA 72, NATIONAL FIRE ALARM AND SIGNALING CODE - 2022 Edition.

## GENERAL NOTES

1. THE ENTIRE BUILDING SHALL BE PROTECTED WITH AN AUTOMATIC FIRE ALARM SYSTEM INSTALLED IN ACCORDANCE WITH WITH 2022 CFC CH. 907, 2022 NFPA 72 (WITH CALIFORNIA MODIFICATIONS PER 2022 CFC CH. 80) AND THE CITY OF ARROYO GRANDE BUILDING AND FIRE DEPARTMENTS.
2. WIRING SHALL NOT BE LOOPED THROUGH DEVICES; WIRE MUST BE CUT FOR IN AND OUT.
3. STROBES SHALL BE SYNCHRONIZED PER MANUFACTURER'S INSTRUCTIONS.
4. ALL JUNCTION BOXES SHALL BE SIZED IN ACCORDANCE WITH THE N.E.C. AND SHALL HAVE THEIR COVERS PAINTED RED WHERE APPLICABLE.
5. ALL DEVICES IN THE FIRE ALARM SYSTEM SHALL BE COMPATIBLE AND INSTALLED TO MANUFACTURER'S SPECIFICATIONS.
3. ALL EQUIPMENT SHALL BE UL LISTED / CALIFORNIA STATE FIRE MARSHALL LISTED.
4. ANY REQUIRED CONDUIT SHALL BE A MINIMUM OF 3/4" EMT.
5. ALL TESTING SHALL BE PERFORMED IN ACCORDANCE WITH 2022 NFPA 72.
   - OWNER WILL BE PROVIDED WITH A COPY OF THE RECORD OF COMPLETION.
   - AS-BUILTS WILL BE PROVIDED TO OWNER.
   - AHJ WILL RECEIVE COPY OF ALL SIGNALS RECEIVED BY CENTRAL STATION AT THE COMPLETION OF ACCEPTANCE TESTING.
   - INSTALLER TO PERMANENTLY IDENTIFY CIRCUIT BREAKER ON FACP.
6. AUDIBILITY OF ALARM SHALL NOT BE LESS THAN 15DBA ABOVE AMBIENT SOUND, BUT NOT LESS THAN 75DBA, THROUGHOUT AREA OF ALARM. INSTALLER SHALL PROVIDE A CALIBRATED DB METER FOR USE DURING THE INSPECTION.
7. ALL FAN SHUTDOWN FUNCTIONS, DAMPER CLOSURES, AND ASSOCIATED MECHANICAL SYSTEM FIRE ALARM INTERFACE SHALL BE BY THE MECHANICAL CONTRACTOR, AS APPLICABLE.
8. MANUAL PULL STATIONS SHALL BE MOUNTED SO THAT THE OPERATING MECHANISM IS 48-INCHES TO CENTERLINE FROM FINISHED FLOOR, UNLESS OTHERWISE NOTED.
9. DETECTORS SHALL NOT BE LOCATED IN THE DIRECT AIR FLOW OF, AND NOT CLOSER THAN 3-FEET FROM AN AIR SUPPLY OR RETURN REGISTER.
10. ALL EXTERIOR MOUNTED EQUIPMENT SHALL BE LISTED AS WEATHERPROOF, INCLUDING BUT NOT LIMITED TO: VISUAL, AUDIBLE, SUPERVISORY, AND INITIATING DEVICES. THEY SHALL NOTED ON THE PRINT WITH "WP" DESIGNATION FOR WEATHERPROOF. THEIR ELECTRICAL TERMINATION COUNTER-PARTS SHALL ALSO BE LISTED AS SUCH AND NOTED IN THE JOB SPECIFICATIONS.
11. ALL OUTSIDE CONTROL VALVES, FLOW SWITCHES, AND ELECTRICAL JUNCTION BOXES SHALL HAVE ELECTRICALLY SUPERVISED COVERS. ELECTRICAL JUNCTION BOXES MAY USE TAMPER PROOF SCREWS IN PLACE OF ELECTRICAL SUPERVISION. THIS PROVISION IS SPECIFICALLY DIRECTED TOWARDS EQUIPMENT USED OUTSIDE OF A BUILDING WHERE TAMPERING WITH THE FIRE ALARM SYSTEMS IS POSSIBLE.
12. ELECTRICAL POWER FOR FACP, REMOTE POWER SUPPLIES (FAPS), AND FIRE ALARM COMMUNICATOR (DACT) WILL BE PROVIDED BY A DEDICATED 20A, 120VAC CIRCUIT FROM THE ASSOCIATED HOUSE PANEL AND SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
13. ELECTRICAL POWER SERVICE SHALL BE ON A DEDICATED BRANCH CIRCUIT. THE CIRCUIT AND CONNECTORS SHALL BE MECHANICALLY PROTECTED. CIRCUIT DISCONNECTING MEANS SHALL HAVE A RED MARKING, SHALL BE ACCESSIBLE ONLY TO AUTHORIZED PERSONNEL, AND SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL". THE LOCATION OF THE CIRCUIT DISCONNECTING MEANS SHALL BE PERMANENTLY IDENTIFIED AT THE CORRESPONDING FIRE ALARM CONTROL EQUIPMENT.
14. THE FIRE ALARM SYSTEM, AS DETAILED IN THESE INSTALLATION DRAWINGS, SHALL BE INSTALLED AS INDICATED AND IN ACCORDANCE WITH THESE PROJECT DRAWINGS. NO ALTERATIONS OR MODIFICATIONS ARE ALLOWED WITHOUT THE EXPRESS WRITTEN APPROVAL OF THE OWNER OR CONSULTANT.
15. THE EQUIPMENT LIST INDICATED ON THESE DRAWINGS HAS BEEN VERIFIED BY THE ENGINEER OF RECORD THAT ALL PARTS/PART NUMBERS ARE CURRENT AND VIABLE PER THE EQUIPMENT MANUFACTURERS. THE ENGINEER OF RECORD SHALL BE NOTIFIED BEFORE ANY CHANGES OR ALTERATIONS ARE MADE TO THE SYSTEM.
16. UPON THE COMPLETION OF INSTALLATION OF THE ENTIRE SYSTEM, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF THE AUTHORITY HAVING JURISDICTION (AHJ).
17. A STAMPED SET OF APPROVED FIRE ALARM PLANS SHALL BE AT THE JOBSITE USED FOR INSTALLATION.

## SCOPE OF WORK

1. PROVIDE A NEW ADDRESSABLE FIRE ALARM MONITORING AND OCCUPANT NOTIFICATION SYSTEM THROUGHOUT THE BUILDING.
2. MANUAL FIRE ALARM BOXES - NOT REQUIRED WHEN BUILDING IS FULLY SPRINKLERED AND THE OCCUPANT NOTIFICATION DEVICES WILL ACTIVATE UPON WATERFLOW ACTIVATION.

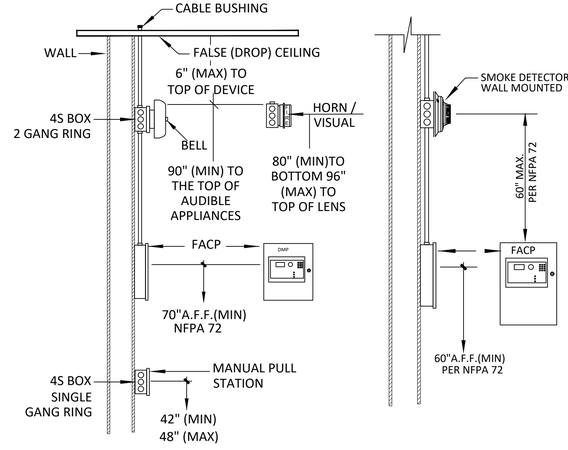
   907.2.1 Group A.
   A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group A occupancies where the occupant load due to the assembly occupancy is 300 or more, or where the Group A occupant load is more than 100 persons above or below the lowest level of exit discharge. Group A occupancies not separated from one another in accordance with Section 707.3.10 of the California Building Code shall be considered as a single occupancy for the purposes of applying this section. Portions of Group E occupancies occupied for assembly purposes with an occupant load of less than 1000 shall be provided with a fire alarm system as required for the Group E occupancy.

   Exception: Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.
3. FIRE SPRINKLER SYSTEM MONITORING - ALL WATERFLOW AND VALVE TAMPER SWITCHES ASSOCIATED WITH THE FIRE SPRINKLER SYSTEM PROVIDED WITH ADDRESSABLE MONITOR MODULES.
4. EXTERIOR 120VAC SPRINKLER BELL PROVIDED AND WIRED THRU WATERFLOW SWITCH BY ELECTRICAL CONTRACTOR.

## SHEET INDEX


| | |
|---|---|
| FA-1.0 | TITLE SHEET / GENERAL NOTES / SEQUENCE OF OPERATIONS, AND DETAILS AND WIRING DIAGRAMS |
| FA-2.0 | FIRE ALARM SYSTEM DESIGN |
| FA-3.0 | FIRE ALARM RISER DIAGRAM / BATTERY AND VOLTAGE DROP CALCULATIONS |


## VICINITY MAP

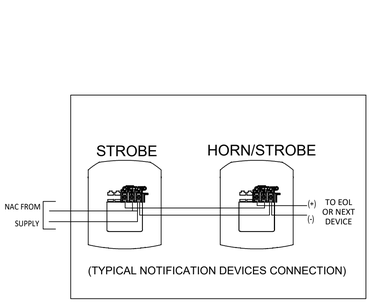



# 4 TYPICAL INSTALLATION DETAIL

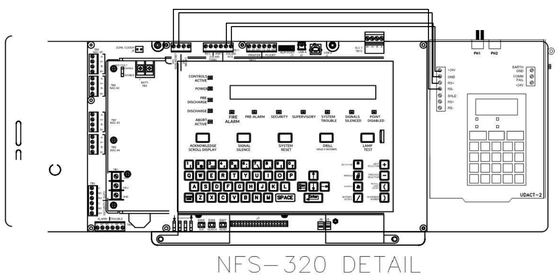
## Symbol Legend

| SYMBOL | DESCRIPTION | MANUFACTURER | PART NUMBER | MODEL | QUANTITY | CSFM |
|---|---|---|---|---|---|---|
| FACP | INTELLIGENT ADDRESSABLE FACP WITH COMMUNICATOR | NOTIFIER | NFS-320 | NFS-320 | 1 | 7165-0028:0243 |
| CELL | UNIVERSAL ALARM COMMUNICATOR | DMP | CELLCOMF-LTE-V | CELLCOMF -LTE-V | 1 | 7300-0553:0136 |
| DOC | DOCUMENT STORAGE BOX, 12 IN. X 13 IN. X 2.25 IN. W/4GB FLASH DRIVE | SPACEAGE | SSU00685 | FAD | 1 | 7300-0553:0110 |
| S | LOW PROFILE INTELLIGENT PHOTO SENSOR, WHITE | NOTIFIER | FSP-951 | FSP-951 | 1 | 7272-0028:0503 |
| VS | TAMPER SWITCH | POTTER | OSYSU-1 / PCVS-2 | OSYSU / PCVS | 2/1 | 7770-0328:0010 |
| WF | WATERFLOW SWITCH | POTTER | VSR | VSR-6 | 1 | 7770-0328:0001 |
| M | MONITOR MODULE W/FLASHSCAN, ADDRESSABLE | NOTIFIER | FMM-1 | FMM-1 | 8 | 7300-0028:0219 |
| | L-SERIES STROBE, WHITE, WALL | SYSTEM SENSOR | SWL | SWL | 5 | 7125-1653:0504 |
| | L-SERIES 2-WIRE, HORN STROBE, WHITE, WALL | SYSTEM SENSOR | P2WL | P2WL | 15 | 7135-1653:0503 |
| EOL | EOL 4.7K | NOTIFIER | EOL-4.7K | EOL-4.7K | 2 | |

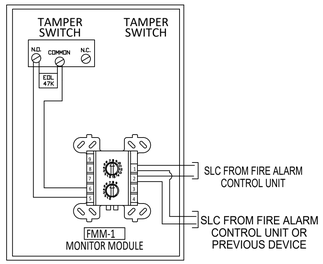
# 2 DEVICE LEGEND




# 3 TYPICAL DEVICE CONNECTION




# 8 FACP AND CELL COMMUNICATOR




# 6 TYPICAL MONITOR MODULE

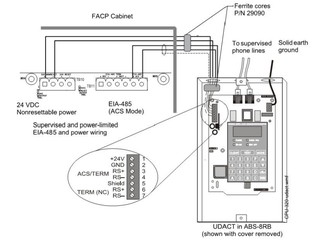
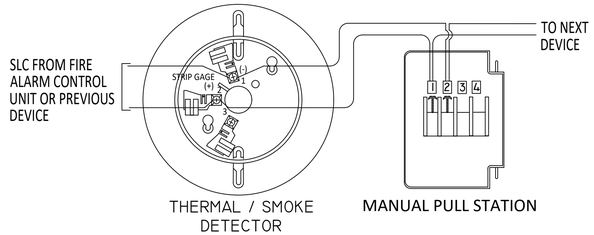



Figure 4.2 Typical Wiring Diagram for a Central Station Fire Alarm System

# 7 CENTRAL STATION WIRING DIAGRAM

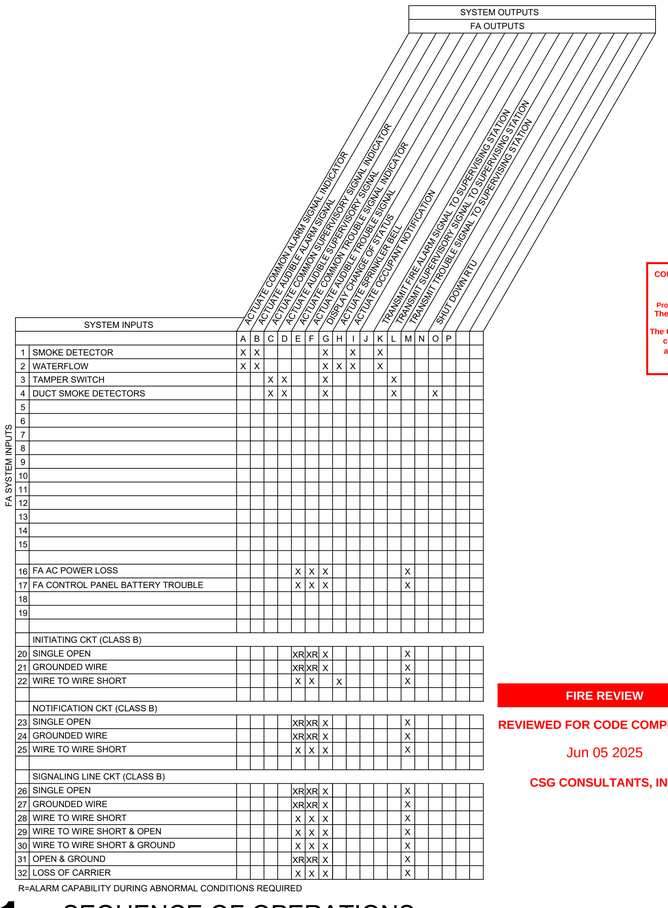



# 5 SLC CIRCUIT CONNECTIONS (TYP.)

FA SYSTEM INPUTS

| | SYSTEM INPUTS | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SMOKE DETECTOR | X | X | | | | | X | | X | | X | | | | | |
| 2 | WATERFLOW | X | X | | | | | X | X | X | | X | | | | | |
| 3 | TAMPER SWITCH | | | X | X | | | X | | | | | X | | | | |
| 4 | DUCT SMOKE DETECTORS | | | X | X | | | X | | | | | X | | X | | |
| 5 | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| 16 | FA AC POWER LOSS | | | | | X | X | X | | | | | X | | | | |
| 17 | FA CONTROL PANEL BATTERY TROUBLE | | | | | X | X | X | | | | | X | | | | |
| 18 | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | INITIATING CKT (CLASS B) | | | | | | | | | | | | | | | | |
| 20 | SINGLE OPEN | | | | | XR | XR | X | | | | | X | | | | |
| 21 | GROUNDED WIRE | | | | | XR | XR | X | | | | | X | | | | |
| 22 | WIRE TO WIRE SHORT | | | | | X | X | | X | | | | X | | | | |
| | | | | | | | | | | | | | | | | | |
| | NOTIFICATION CKT (CLASS B) | | | | | | | | | | | | | | | | |
| 23 | SINGLE OPEN | | | | | XR | XR | X | | | | | X | | | | |
| 24 | GROUNDED WIRE | | | | | XR | XR | X | | | | | X | | | | |
| 25 | WIRE TO WIRE SHORT | | | | | X | X | X | | | | | X | | | | |
| | | | | | | | | | | | | | | | | | |
| | SIGNALING LINE CKT (CLASS B) | | | | | | | | | | | | | | | | |
| 26 | SINGLE OPEN | | | | | XR | XR | X | | | | | X | | | | |
| 27 | GROUNDED WIRE | | | | | XR | XR | X | | | | | X | | | | |
| 28 | WIRE TO WIRE SHORT | | | | | X | X | X | | | | | X | | | | |
| 29 | WIRE TO WIRE SHORT & OPEN | | | | | X | X | X | | | | | X | | | | |
| 30 | WIRE TO WIRE SHORT & GROUND | | | | | X | X | X | | | | | X | | | | |
| 31 | OPEN & GROUND | | | | | XR | XR | X | | | | | X | | | | |
| 32 | LOSS OF CARRIER | | | | | X | X | X | | | | | X | | | | |

R=ALARM CAPABILITY DURING ABNORMAL CONDITIONS REQUIRED




# 1 SEQUENCE OF OPERATIONS

AUTHORITY HAVING JURISDICTION:
CITY OF ARROYO GRANDE
BUILDING AND FIRE DEPARTMENTS

| DATE: | ISSUE# | DESCRIPTION |
|---|---|---|
| 4/10/24 | - | FOR PERMIT |
| 4/30/25 | 1 | CORRECTION |
| 5/29/25 | 2 | PTFPE SUBMITTAL |

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws. The County may revoke a permit or require corrections if they are in error. These approved plans shall be made available when inspections are made. All changes must be approved.

FIRE REVIEW
REVIEWED FOR CODE COMPLIANCE
Jun 05 2025
CSG CONSULTANTS, INC.

PLOT SIZE
24" X 36"

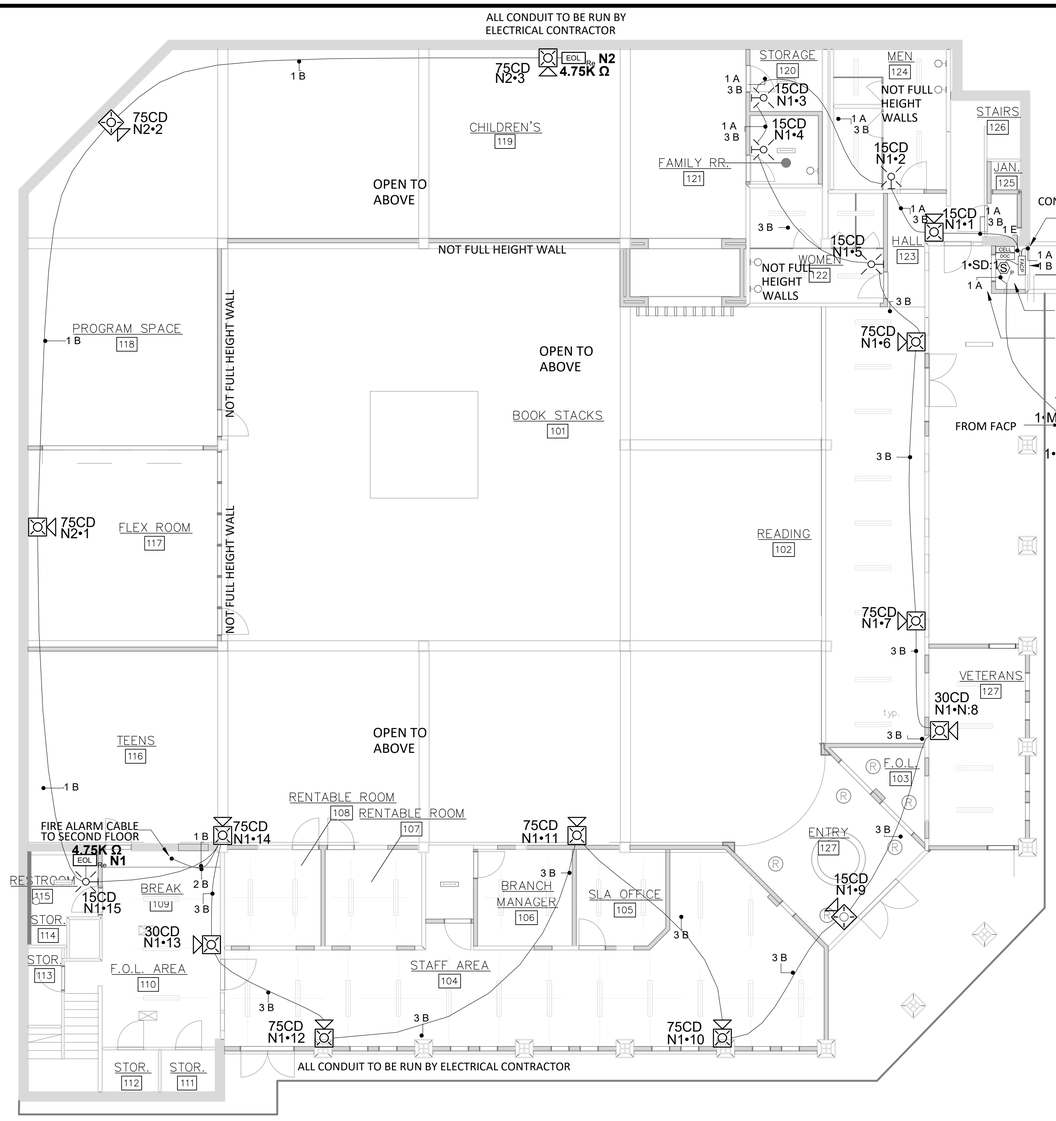
| JOB NO.:23-00002 | DRAWN BY: |
|---|---|
| 4/10/2024 | STAFF |

SHEET NO.
FA-1.0
SHEET 1 OF 3


PTrutner
FIRE PROTECTION ENGINEERING INC.
2470 STEARNS STREET #280, SIMI VALLEY, CA 93063
(805) 297-3100


LICENSED PROFESSIONAL ENGINEER
KYLE J. TRUTNER
FP 1934
EXP. 03/31/27
FIRE PROTECTION
STATE OF CALIFORNIA
5/29/2025

ARROYO GRANDE LIBRARY
800 W. BRANCH STREET
ARROYO GRANDE CA
007-011-050

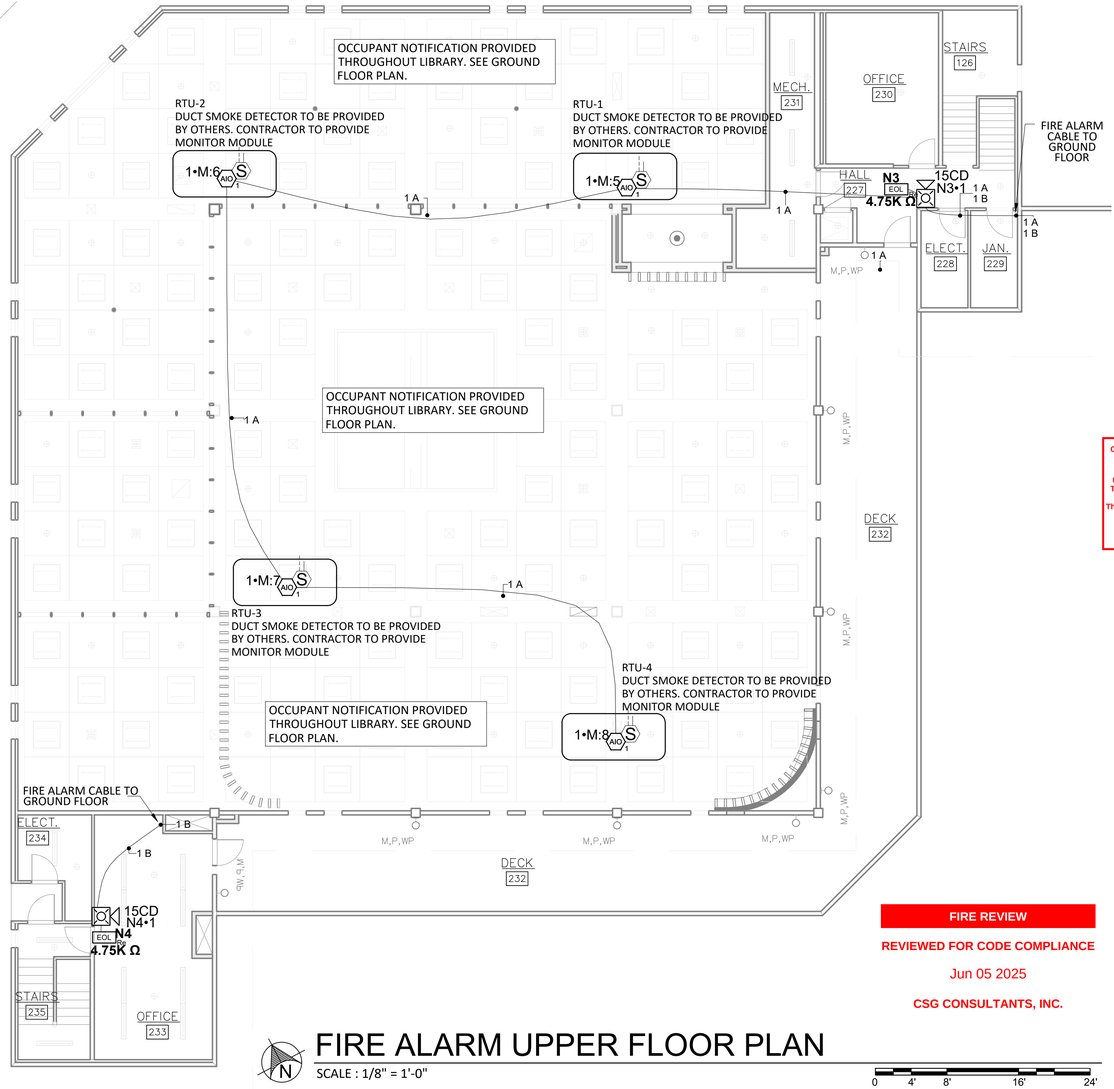



# FIRE ALARM GROUND FLOOR PLAN

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

0 4' 8' 16' 24'

| FIRE ALARM WIRE LEGEND | | CSFM Listing Number |
|---|---|---|
| A | **SIGNALING LINE CIRCUIT**<br>#16/2<br>PLENUM RATED:FPLP<br>GENESIS (HONEYWELL CABLE) 4511 | 7161-1487:0100 |
| B | **NOTIFICATION APPLIANCE CIRCUIT**<br>#16/2<br>PLENUM RATED:FPLP<br>GENESIS (HONEYWELL CABLE) 4511 | 7161-1487:0100 |
| E | **24VDC POWER CABLE**<br>#14/2<br>PLENUM RATED:FPLP<br>GENESIS (HONEYWELL CABLE) 4513 | 7161-1487:0100 |
| D | **INITIATING ALARM CAUSING**<br>#16/2<br>PLENUM RATED:FPLP<br>GENESIS (HONEYWELL CABLE) 4511 | 7161-1487:0100 |




# FIRE ALARM UPPER FLOOR PLAN

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

0 4' 8' 16' 24'

FIRE REVIEW

REVIEWED FOR CODE COMPLIANCE

Jun 05 2025

CSG CONSULTANTS, INC.

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. These approved plans shall be made available when inspections are requested.
No changes must be allowed.

PTrutner
FIRE PROTECTION ENGINEERING INC.
24703 STEARNS STREET #280 SIMI VALLEY, CA 93063
(805) 297-3100

LICENSED PROFESSIONAL ENGINEER
PAUL J. TROTTNER
FP 1934
EXP. 03/31/27
FIRE PROTECTION
STATE OF CALIFORNIA
5/29/2025

AUTHORITY HAVING JURISDICTION:
CITY OF ARROYO GRANDE
BUILDING AND FIRE DEPARTMENTS

| DATE: | ISSUE# | DESCRIPTION |
|---|---|---|
| 4/10/24 | - | FOR PERMIT |
| 4/30/25 | 1 | CORRECTION |
| 5/29/25 | 2 | PTFPE SUBMITTAL |

ARROYO GRANDE LIBRARY
800 W. BRANCH STREET
ARROYO GRANDE CA
007-011-050

PLOT SIZE
24" X 36"

| JOB NO.:23-00002 | DRAWN BY: |
|---|---|
| 4/10/2024 | STAFF |

SHEET NO.
FA-2.0
SHEET 2 OF 3

## Circuit Calculations Panel: 320 Card: 00 Circuit:SBC1

Circuit Name: SBC1
Circuit Type: Serial/ACS-BUS (485) Terminal Voltage: 20.4V:DC Amperage: -1000.0000mA
Cable: 18/2 SOL JKT FPLR 1M RL RED #18
Calculations based on Running Total Length.
Design Criteria: Ambient temperature: 167°F Max. operating voltage drop: 18%

| Device | Part No | Appliance Desc | Distance | Current | Voltage | Voltage Drop |
|---|---|---|---|---|---|---|
| | NFS-320 | Panel | | | 20.4V | |
| M:2 | UDACT-2 | UNIVERSAL DIGITAL ALARM COMMUNICATOR TRANSMITTER-2 | 0'-0 | 0.0000mA | | |

## Circuit Calculations Panel: 320 Card: 00 Circuit:1

Circuit Name: 1
Circuit Type: Signaling line/NOTIFIER SLC, ONYX FLASHSCAN Terminal Voltage: 20.4V:DC Amperage: 400.0000mA
Cable: 18/2 SOL JKT FPLR 1M RL RED #18
Calculations based on Running Total Length.
Design Criteria: Ambient temperature: 167°F Max. operating voltage drop: 18%

| Device | Part No | Appliance Desc | Distance | Current | Voltage | Voltage Drop |
|---|---|---|---|---|---|---|
| | NFS-320 | Panel | | | 20.4V | |
| SD:1 | FSP-951 | LOW PROFILE INTELLIGENT PHOTO SENSOR, WHITE | 2'-10 | 0.2000mA | 20.3999V | (0.0001V) |
| M:1 | FMM-1 | MONITOR MODULE W/FLASHSCAN, ADDRESSABLE | 14'-7 1/2 | 0.3750mA | 20.3996V | (0.0003V) |
| M:2 | FMM-1 | MONITOR MODULE W/FLASHSCAN, ADDRESSABLE | 2'-6 1/2 | 0.3750mA | 20.3996V | (0V) |
| M:3 | FMM-1 | MONITOR MODULE W/FLASHSCAN, ADDRESSABLE | 133'-11 | 0.3750mA | 20.398V | (0.0016V) |
| M:4 | FMM-1 | MONITOR MODULE W/FLASHSCAN, ADDRESSABLE | 3'-0 | 0.3750mA | 20.398V | (0V) |
| ----- | | | | | | |
| M:5 | FMM-1 | MONITOR MODULE W/FLASHSCAN, ADDRESSABLE | 38'-11 | 0.3750mA | 20.3991V | (0.0009V) |
| M:6 | FMM-1 | MONITOR MODULE W/FLASHSCAN, ADDRESSABLE | 10'-0 | 0.3750mA | 20.3989V | (0.0002V) |
| M:7 | FMM-1 | MONITOR MODULE W/FLASHSCAN, ADDRESSABLE | 10'-0 | 0.3750mA | 20.3988V | (0.0001V) |
| M:8 | FMM-1 | MONITOR MODULE W/FLASHSCAN, ADDRESSABLE | 10'-0 | 0.3750mA | 20.3988V | (0.0001V) |
| ----- | | | | | | |
| | | | 225'-9 1/2 | 3.2000mA | | |

Total Current: 3.2000mA
(Total VDrop Percent:0.01%) Total Voltage Drop : 0.002V

# SLC CIRCUIT

NO SCALE

## Circuit Calculations Panel: 320 Card: 00 Circuit:N4

Circuit Name: N4
Circuit Type: Notification Terminal Voltage: 20.4 V:DC Amperage: 1.5000 A
Cable: 16/4 SOL JKT FPLP 1M RL RED #16
Calculations based on Running Total Length.
Design Criteria: Ambient temperature: 167 °F Max. operating voltage drop: 18%

| Device | Part No | Appliance Desc | Distance | Current | Voltage | Voltage Drop |
|---|---|---|---|---|---|---|
| | NFS-320 | Panel | | | 20.4 V | |
| 1 | P2WL | L-SERIES 2-WIRE, HORN STROBE, WHITE, WALL, 15CD | 311'-3 | 54.0000 mA | 20.24 V | (0.16 V) |
| A: | EOL-4.7K | EOL 4.7K | 2'-6 | 0.0000 mA | 20.24 V | (0 V) |
| | | | 313'-9 | 54.0000 mA | | |

Total Current: 54.0000 mA
(Total VDrop Percent:0.78%) Total Voltage Drop : 0.16 V

## NAC 4

## Circuit Calculations Panel: 320 Card: 00 Circuit:AUX1

Circuit Name: AUX1
Circuit Type: Power/Non-resettable Terminal Voltage: 20.2 V:DC Amperage: 1.2500 A
Cable: 14/2 SOL JKT FPLR 1M RL RED #14
Calculations based on Running Total Length.
Design Criteria: Ambient temperature: 167 °F Max. operating voltage drop: 18%

| Device | Part No | Appliance Desc | Distance | Current | Voltage | Voltage Drop |
|---|---|---|---|---|---|---|
| | NFS-320 | Panel | | | 20.2 V | |
| M:3 | UDACT-2 | UNIVERSAL DIGITAL ALARM COMMUNICATOR TRANSMITTER-2 | 0'-0 | 75.0000 mA | 20.2 V | (0 V) |
| P:1 | CELLCOMF-LTE-V | UNIVERSAL ALARM COMMUNICATOR | 3'-4 1/2 | 0.0000 mA | 20.1986 V | (0.0014 V) |
| | | | 3'-4 1/2 | 75.0000 mA | | |

Total Current: 75.0000 mA
(Total VDrop Percent:0.01%) Total Voltage Drop : 0.0014 V

# NAC4 CIRCUIT

NO SCALE

## Battery Calculations for Panel: 320

Part No:NFS-320 - NFS-320, FACP, Intelligent Addressable Fire Alarm System

| Part No. | Qty. | Description | Standby | Total Standby | Alarm | Total Alarm |
|---|---|---|---|---|---|---|
| | | Panel Equipment | | | | |
| NFS-320_MB | 1 | NFS-320_MB, Main Board | 250.0000mA | 250.0000mA | 390.0000mA | 390.0000mA |
| 002-477-229_MB | 1 | MAINBOARD FOR 002-477-229 | 0.0000mA | 0.0000mA | 0.0000mA | 0.0000mA |
| 020-478 | 1 | RS232 COMMUNICATION INTERFACE FOR ID3000 | 45.0000mA | 45.0000mA | 45.0000mA | 45.0000mA |
| UDACT-2 | 1 | UNIVERSAL DIGITAL ALARM COMMUNICATOR TRANSMITTER-2 | 80.0000mA | 80.0000mA | 150.0000mA | 150.0000mA |
| CELLCOMF-LTE | 1 | CELLULAR COMMUNICATOR | 30.0000mA | 30.0000mA | 81.0000mA | 81.0000mA |
| | | | Total Panel Stby | 405.0000mA | Total Panel Alarm | 666.0000mA |
| | | Peripheral Devices | | | | |
| FMM-1 | 8 | MONITOR MODULE W/FLASHSCAN, ADDRESSABLE (Signaling line) | 0.3750mA | 3.0000mA | 5.1000mA | 40.8000mA |
| FSP-951 | 1 | LOW PROFILE INTELLIGENT PHOTO SENSOR, WHITE (Signaling line) | 0.2000mA | 0.2000mA | 4.5000mA | 4.5000mA |
| GTS | 3 | TAMPER SWITCH (Initiating) | 0.0000mA | 0.0000mA | 0.0000mA | 0.0000mA |
| GWF | 1 | GEN WATERFLOW (Initiating) | 0.0000mA | 0.0000mA | 0.0000mA | 0.0000mA |
| P2WL | 4 | L-SERIES 2-WIRE, HORN STROBE, WHITE, WALL (Notification) 15CD 89dB | 0.0000mA | 0.0000mA | 54.0000mA | 216.0000mA |
| SWL | 5 | L-SERIES STROBE, WHITE, WALL (Notification) 15CD | 0.0000mA | 0.0000mA | 43.0000mA | 215.0000mA |
| P2WL | 9 | L-SERIES 2-WIRE, HORN STROBE, WHITE, WALL (Notification) 75CD 88dB | 0.0000mA | 0.0000mA | 119.0000mA | 1071.0000mA |
| P2WL | 2 | L-SERIES 2-WIRE, HORN STROBE, WHITE, WALL (Notification) 30CD 89dB | 0.0000mA | 0.0000mA | 74.0000mA | 148.0000mA |
| EOL-4.7K | 4 | Notifier, EOL, 4.7K Ohms (Notification) | 0.0000mA | 0.0000mA | 0.0000mA | 0.0000mA |
| CELLCOMF-LTE | 1 | UNIVERSAL ALARM COMMUNICATOR (Power) | 0.0000mA | 0.0000mA | 0.0000mA | 0.0000mA |
| | | | | | | |
| | | | Total Peripheral Stby | 3.2000mA | Total Periph Alarm | 1695.3000mA |
| | | | | | | |
| | | | Total Standby Amps | 408.2000mA | Total Alarm Amps | 2361.3000mA |

Standby time: 24 Hrs 9.797Ah
Alarm time: 5 Min 0.197Ah
Battery requirement: 9.994Ah
Compensation Factors - Standby: 1.2 Alarm: 1.2 Requirement with compensation: 11.992Ah

**PROVIDE (2) - 12V 18AH SEALED LEAD-ACID IN SERIES**

# FAPS BATTERY CALCULATIONS

NO SCALE

## Circuit Calculations Panel: 320 Card: 00 Circuit:N1

Circuit Name: N1
Circuit Type: Notification Terminal Voltage: 20.4 V:DC Amperage: 1.5000 A
Cable: 16/4 SOL JKT FPLP 1M RL RED #16
Calculations based on Running Total Length.
Design Criteria: Ambient temperature: 167 °F Max. operating voltage drop: 18%

| Device | Part No | Appliance Desc | Distance | Current | Voltage | Voltage Drop |
|---|---|---|---|---|---|---|
| | NFS-320 | Panel | | | 20.4 V | |
| 1 | P2WL | L-SERIES 2-WIRE, HORN STROBE, WHITE, WALL, 15CD | 11'-11 | 54.0000 mA | 20.2725 V | (0.1275 V) |
| 2 | SWL | L-SERIES STROBE, WHITE, WALL, 15CD | 7'-6 | 43.0000 mA | 20.1951 V | (0.0774 V) |
| 3 | SWL | L-SERIES STROBE, WHITE, WALL, 15CD | 24'-5 1/2 | 43.0000 mA | 19.9397 V | (0.2554 V) |
| 4 | SWL | L-SERIES STROBE, WHITE, WALL, 15CD | 6'-8 | 43.0000 mA | 19.8784 V | (0.0613 V) |
| 5 | SWL | L-SERIES STROBE, WHITE, WALL, 15CD | 21'-6 | 43.0000 mA | 19.6726 V | (0.2058 V) |
| 6 | P2WL | L-SERIES 2-WIRE, HORN STROBE, WHITE, WALL, 75CD | 11'-0 | 119.0000 mA | 19.5788 V | (0.0938 V) |
| 7 | P2WL | L-SERIES 2-WIRE, HORN STROBE, WHITE, WALL, 75CD | 31'-3 | 119.0000 mA | 19.3241 V | (0.2547 V) |
| N:8 | P2WL | L-SERIES 2-WIRE, HORN STROBE, WHITE, WALL, 30CD | 13'-8 | 74.0000 mA | 19.2325 V | (0.0917 V) |
| 9 | P2WL | L-SERIES 2-WIRE, HORN STROBE, WHITE, WALL, 15CD | 23'-10 1/2 | 54.0000 mA | 19.0869 V | (0.1455 V) |
| 10 | P2WL | L-SERIES 2-WIRE, HORN STROBE, WHITE, WALL, 75CD | 21'-0 1/2 | 119.0000 mA | 18.9651 V | (0.1218 V) |
| 11 | P2WL | L-SERIES 2-WIRE, HORN STROBE, WHITE, WALL, 75CD | 30'-1 1/2 | 119.0000 mA | 18.8261 V | (0.1391 V) |
| 12 | P2WL | L-SERIES 2-WIRE, HORN STROBE, WHITE, WALL, 75CD | 42'-5 | 119.0000 mA | 18.6803 V | (0.1458 V) |
| 13 | P2WL | L-SERIES 2-WIRE, HORN STROBE, WHITE, WALL, 30CD | 18'-1 | 74.0000 mA | 18.6387 V | (0.0415 V) |
| 14 | P2WL | L-SERIES 2-WIRE, HORN STROBE, WHITE, WALL, 75CD | 12'-4 | 119.0000 mA | 18.6197 V | (0.019 V) |
| 15 | SWL | L-SERIES STROBE, WHITE, WALL, 15CD | 16'-3 1/2 | 43.0000 mA | 18.613 V | (0.0067 V) |
| A: | EOL-4.7K | EOL 4.7K | 2'-5 | 0.0000 mA | 18.613 V | (0 V) |
| | | | 294'-6 1/2 | 1185.0000 mA | | |

Total Current: 1185.0000 mA
(Total VDrop Percent:8.76%) Total Voltage Drop : 1.787 V

# NAC1 CIRCUIT

NO SCALE

## Circuit Calculations Panel: 320 Card: 00 Circuit:N2

Circuit Name: N2
Circuit Type: Notification Terminal Voltage: 20.4 V:DC Amperage: 1.5000 A
Cable: 16/4 SOL JKT FPLP 1M RL RED #16
Calculations based on Running Total Length.
Design Criteria: Ambient temperature: 167 °F Max. operating voltage drop: 18%

| Device | Part No | Appliance Desc | Distance | Current | Voltage | Voltage Drop |
|---|---|---|---|---|---|---|
| | NFS-320 | Panel | | | 20.4 V | |
| 1 | P2WL | L-SERIES 2-WIRE, HORN STROBE, WHITE, WALL, 75CD | 335'-0 | 119.0000 mA | 19.2583 V | (1.1417 V) |
| 2 | P2WL | L-SERIES 2-WIRE, HORN STROBE, WHITE, WALL, 75CD | 47'-0 | 119.0000 mA | 19.1489 V | (0.1094 V) |
| 3 | P2WL | L-SERIES 2-WIRE, HORN STROBE, WHITE, WALL, 75CD | 50'-7 | 119.0000 mA | 19.0907 V | (0.0582 V) |
| A: | EOL-4.7K | EOL 4.7K | 2'-3 1/2 | 0.0000 mA | 19.0907 V | (0 V) |
| | | | 434'-11 | 357.0000 mA | | |

Total Current: 357.0000 mA
(Total VDrop Percent:6.42%) Total Voltage Drop : 1.3093 V

# NAC2 CIRCUIT

NO SCALE

## Circuit Calculations Panel: 320 Card: 00 Circuit:N3

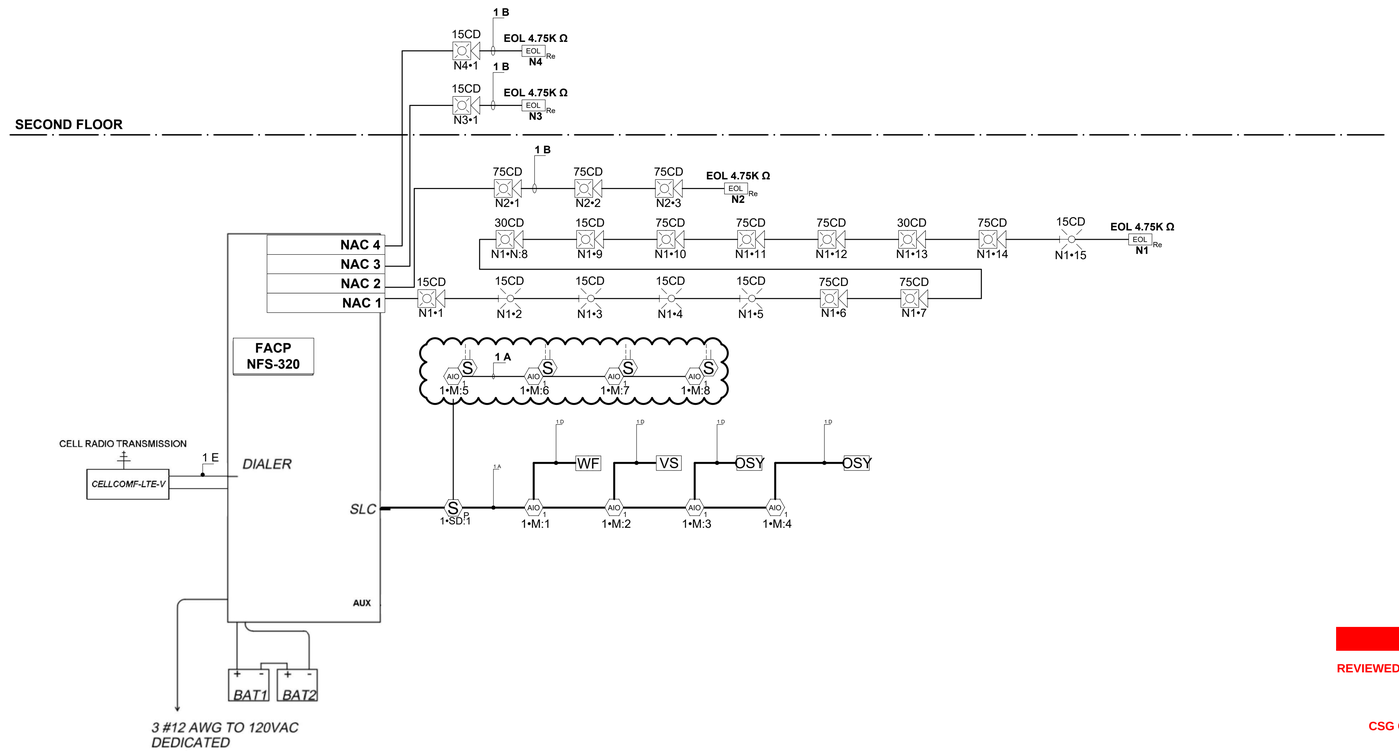
Circuit Name: N3
Circuit Type: Notification Terminal Voltage: 20.4 V:DC Amperage: 1.5000 A
Cable: 16/4 SOL JKT FPLP 1M RL RED #16
Calculations based on Running Total Length.
Design Criteria: Ambient temperature: 167 °F Max. operating voltage drop: 18%

| Device | Part No | Appliance Desc | Distance | Current | Voltage | Voltage Drop |
|---|---|---|---|---|---|---|
| | NFS-320 | Panel | | | 20.4 V | |
| 1 | P2WL | L-SERIES 2-WIRE, HORN STROBE, WHITE, WALL, 15CD | 28'-11 | 54.0000 mA | 20.3852 V | (0.0148 V) |
| A: | EOL-4.7K | EOL 4.7K | 3'-6 | 0.0000 mA | 20.3852 V | (0 V) |
| | | | 32'-5 | 54.0000 mA | | |

Total Current: 54.0000 mA
(Total VDrop Percent:0.07%) Total Voltage Drop : 0.0148 V

# NAC3 CIRCUIT

NO SCALE




# FIRE ALARM RISER DIAGRAM

NO SCALE

FIRE REVIEW

REVIEWED FOR CODE COMPLIANCE

Jun 05 2025

CSG CONSULTANTS, INC.

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. These approved plans shall be made available when inspections are requested.
All changes must be approved.


PTrutner
FIRE PROTECTION ENGINEERING INC.
(805) 297-3100
24703 STEARNS STREET #280 SIMI VALLEY, CA 93063


LICENSED PROFESSIONAL ENGINEER
PAUL J. TRUTNER
FP 1934
EXP. 03/31/25
FIRE PROTECTION
STATE OF CALIFORNIA
5/29/2025

AUTHORITY HAVING JURISDICTION:
CITY OF ARROYO GRANDE
BUILDING AND FIRE DEPARTMENTS

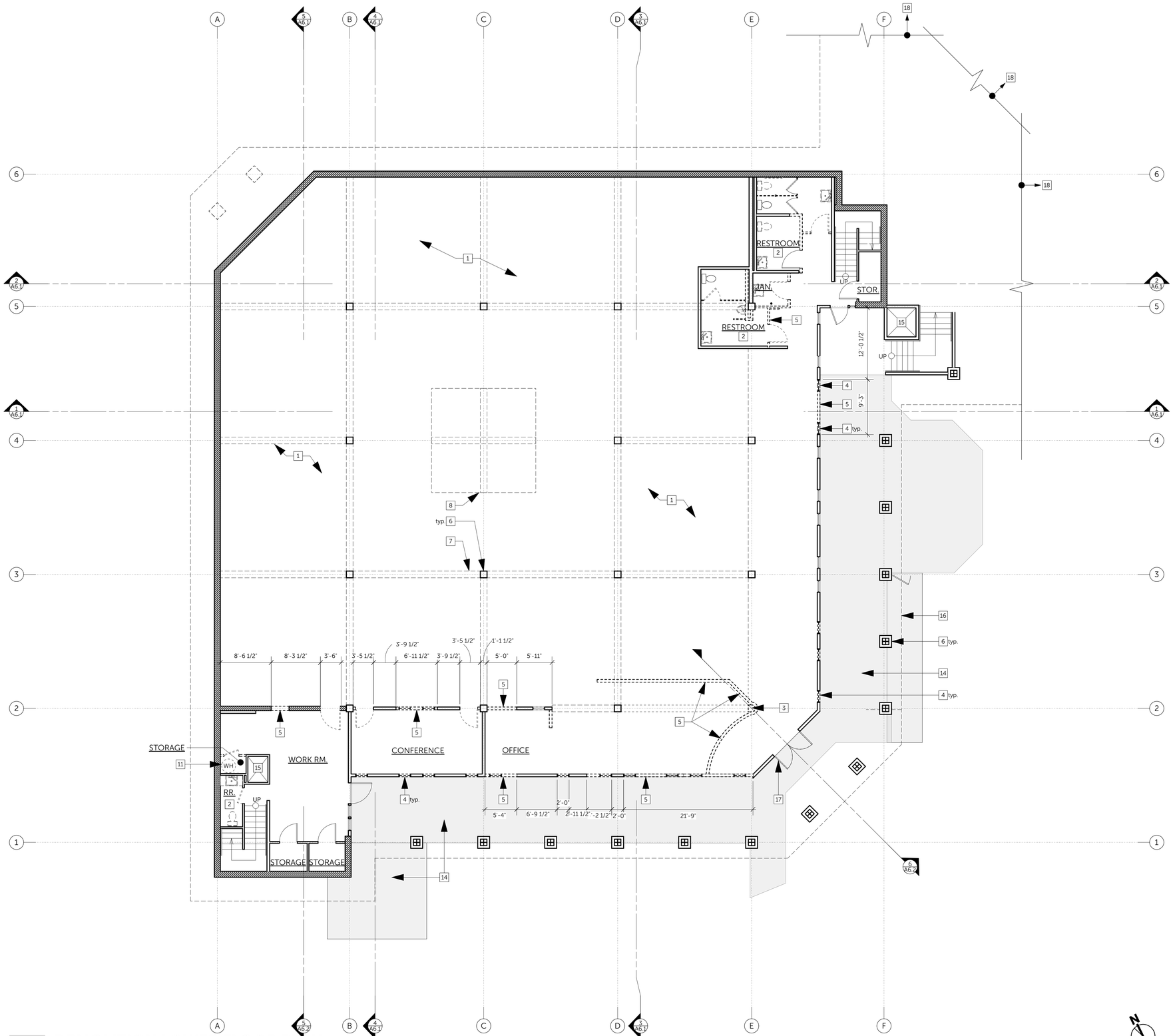
| DATE: | ISSUE# | DESCRIPTION |
|---|---|---|
| 4/10/24 | - | FOR PERMIT |
| 4/30/25 | 1 | CORRECTION |
| 5/29/25 | 2 | PTFPE SUBMITTAL |

ARROYO GRANDE LIBRARY
800 W. BRANCH STREET
ARROYO GRANDE CA
007-011-050

PLOT SIZE
24" X 36"

| JOB NO.:23-00002 | DRAWN BY: |
|---|---|
| 4/10/2024 | STAFF |

SHEET NO.
FA-3.0
SHEET 3 OF 3




# 1 DEMOLITION LOWER FLOOR PLAN

Scale: 1/8" = 1'-0"

## DEMO PLAN GENERAL NOTES

1. Prior to construction/demolition, notify Architect immediately of any discrepancies found between the plans and the as-built condition. Verify all items to be demolished with Owner prior to commencing demolition/removal.
2. All foundations, concrete slabs, and buildings structures shall be removed to the satisfaction of the building official.
3. General Contractor shall be responsible for all demolition as required for completion of the project. All items to be reused or returned to Owner shall be maintained in good condition. All items to be removed shall either be (1) retained by the Owner at his discretion, (2) removed and recycled off-site, or (3) delivered to an appropriate dumpsite. All materials shall be disposed of in accordance with local agency requirements.
4. Construction/demolition noise shall comply with jurisdiction Municipal Code and be limited to the hours specified in the noise regulations. Confirm hours of work with Owner.
5. The General Contractor shall maintain and leave the project area in a clean, safe and orderly condition. Trash and debris shall be removed from site and premises daily. Contractor shall be responsible for seeing that each subcontractor cleans up and removes, daily, any and all debris generated by construction operations, making ready for all subsequent subcontractors. Safeguards during construction and demolition shall be in accordance with CFC. Combustible construction debris shall not be permitted to accumulate within the building and shall be removed daily.
6. General Contractor shall: Exercise reasonable precaution in the protection of all existing finishes to remain and/or all existing substrates to receive new finish; Schedule and coordinate all trades to eliminate damage to all floor materials once installed; Provide protective coverings for all floor, partition and ceiling finishes to remain in the project area and for all finishes which may be subject to traffic or construction activity in adjacent areas; Provide protective covering for all windows and other glass to remain; Provide impact protection for all interior finishes; Provide minimum 1/8" thick tempered hardboard or plywood gangway to protect all flooring materials from breakage, cracking, scratching or other damage from dollies, hand trucks or rolling bins or tool carts used to transport materials to and from project area; Extend protection from building entry(ies) to project area. The Contractor shall protect interior surface of glazing at all times from breakage and scratching of interior window coatings. Any hollows or damaged areas of concrete floor shall be repaired prior to commencement of new construction. The Contractor shall remove from demolished walls or portions of walls all power circuits and switch legs back to first junction box in ceiling space. Remove any millwork or wall-mounted plumbing fixtures from walls indicated to be demolished and not otherwise shown. The Contractor shall maintain a truck or other vehicle for removal of waste materials daily from site. Waste materials shall be transported to such vehicle by covered rubber-tired carts. Any lighting fixtures removed from the space and not disposed of shall be salvaged as directed by the Owner's representative. The contractor shall take care not to unreasonably cause damage to the lighting fixtures.
7. During demolition operations, all material removed shall be wetted sufficiently or otherwise handled to control the dust incidental to removal. Dust control measures shall be in effect continuously during demolition as to limit the amount of airborn debris and dust. Provide protection around areas where new work and/or demolition is to be performed in order to prevent dust and dirt from entering active portions of the building. Dust control shall be maintained to the satisfaction of the Jurisdiction. Material and construction debris to be hauled off site shall be sufficiently covered or tarped as to not allow any material to leave the vehicle while on any public right-of-way, all adjacent streets, and alleys. All public ways and places shall be kept free and clear of all rubbish, refuse and loose materials resulting from the moving, demolition or demolition removal operations, except as allowed by temporary encroachment permits approved by the Public Works Director. All material shall be recycled or disposed of in means approved by jurisdiction.
8. Pedestrians shall be protected from construction/demolition as stated in CBC Section 3306.
9. Upon completion of the removal of a building or structure the ground shall be left in a smooth condition, free of demolition debris. Holes in the ground shall be filled to existing grade. All foundations, concrete slabs, and buildings structures shall be removed to the satisfaction of the building official.
10. General Contractor shall patch, repair, or replace all work damaged by new construction. The General Contractor shall patch wall and floor to conform to material, texture and surface alignment with the adjoining surface.

## DEMO PLAN REFERENCE NOTES

1. Book stacks to removed, salvaged, and replaced by Owner (B1)
2. Restroom to be modified. Fixtures to be removed.
3. Column to be removed, refer to Structural plans and Floor Plans
4. Window to be removed, salvaged, and reused at new window openings. Refer to A2.1, A2.2 for proposed locations of new window openings.
5. Portion of wall to be removed, refer to wall legend (B1)
6. (E) Structural column to remain
7. (E) Beam to remain, refer to Structural Plans
8. (E) Skylight to be replaced
9. (E) Space/ room to remain
10. (E) Roof below to remain
11. (E) Water heater to be removed, retained, and reinstalled. Refer to Plumbing Plans.
12. Demo (E) floor finishes throughout building
13. (E) Sink to remain
14. (E) Slab to be removed and replaced, see civil and structural plans
15. (E) Mechanical chase
16. (E) Roof above to remain
17. Door to be removed and replaced
18. Roof connection to remain (not in scope)
19. (E) Roof access to remain

## WALL LEGEND

- (E) 2x Wall to be demolished
- (E) 2x Wall to remain
- (E) CMU Wall to remain
- (N) 2x6 Wall @ 16" o.c.
- (N) CMU Wall infill
- FE — Fire extinguisher and cabinet. Mount at +48" at centerline of valve handle. At doors maintain strike side clearances


REISS
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(805) 706-0645
WWW.REISSDESIGNSTUDIO.COM
3055 DUNCAN LANE, SUITE A
SAN LUIS OBISPO, CA 93401



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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050

800 W. Branch Street
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Goverment Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**DEMOLITION LOWER FLOOR PLAN**

CONSULTANT:

STAMP:

LICENSED ARCHITECT C-32912 SHANA MARIE REISS REN. 09-30-25 STATE OF CALIFORNIA

DATE:

July 2, 2024

REVISIONS:

B1 Bid Set Update 07/25/2025

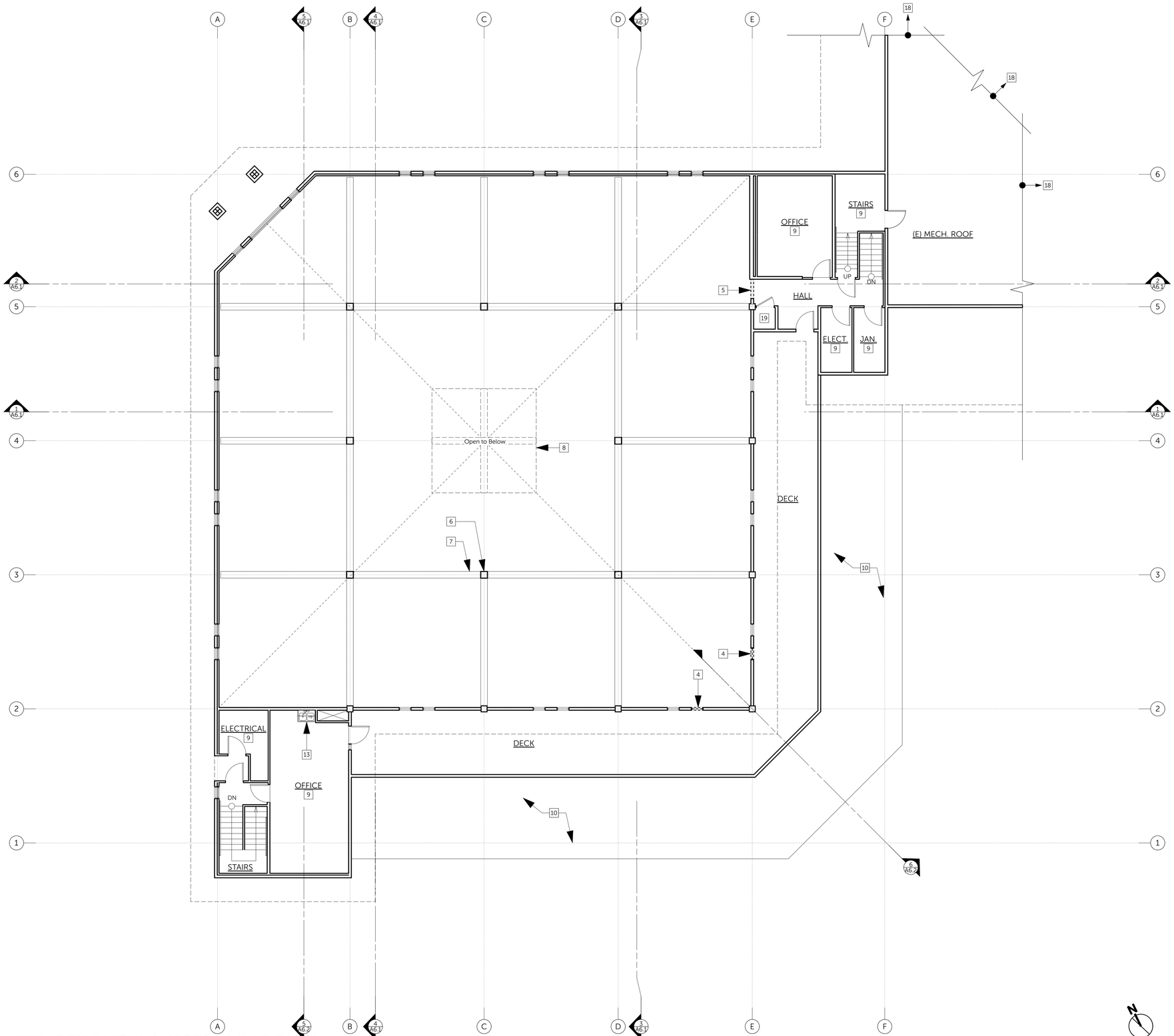
JOB NUMBER:

2308

SHEET:

A1.1


Date: July 25, 2025 Time: 10:32:10 AM File name: 03_Arroyo Grande Library_CA_Plans.vwx




# 1 DEMOLITION UPPER FLOOR PLAN

Scale: 1/8" = 1'-0"

## DEMO PLAN GENERAL NOTES

1. Prior to construction/demolition, notify Architect immediately of any discrepancies found between the plans and the as-built condition. Verify all items to be demolished with Owner prior to commencing demolition/removal.
2. All foundations, concrete slabs, and buildings structures shall be removed to the satisfaction of the building official.
3. General Contractor shall be responsible for all demolition as required for completion of the project. All items to be reused or returned to Owner shall be maintained in good condition. All items to be removed shall either be (1) retained by the Owner at his discretion, (2) removed and recycled off-site, or (3) delivered to an appropriate dumpsite. All materials shall be disposed of in accordance with local agency requirements.
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6. General Contractor shall: Exercise reasonable precaution in the protection of all existing finishes to remain and/or all existing substrates to receive new finish; Schedule and coordinate all trades to eliminate damage to all floor materials once installed; Provide protective coverings for all floor, partition and ceiling finishes to remain in the project area and for all finishes which may be subject to traffic or construction activity in adjacent areas; Provide protective covering for all windows and other glass to remain; Provide impact protection for all interior finishes; Provide minimum 1/8" thick tempered hardboard or plywood gangway to protect all flooring materials from breakage, cracking, scratching or other damage from dollies, hand trucks or rolling bins or tool carts used to transport materials to and from project area; Extend protection from building entry(ies) to project area. The Contractor shall protect interior surface of glazing at all times from breakage and scratching of interior window coatings. Any hollows or damaged areas of concrete floor shall be repaired prior to commencement of new construction. The Contractor shall remove from demolished walls or portions of walls all power circuits and switch legs back to first junction box in ceiling space. Remove any millwork or wall-mounted plumbing fixtures from walls indicated to be demolished and not otherwise shown. The Contractor shall maintain a truck or other vehicle for removal of waste materials daily from site. Waste materials shall be transported to such vehicle by covered rubber-tired carts. Any lighting fixtures removed from the space and not disposed of shall be salvaged as directed by the Owner's representative. The contractor shall take care not to unreasonably cause damage to the lighting fixtures.
7. During demolition operations, all material removed shall be wetted sufficiently or otherwise handled to control the dust incidental to removal. Dust control measures shall be in effect continuously during demolition as to limit the amount of airborn debris and dust. Provide protection around areas where new work and/or demolition is to be performed in order to prevent dust and dirt from entering active portions of the building. Dust control shall be maintained to the satisfaction of the Jurisdiction. Material and construction debris to be hauled off site shall be sufficiently covered or tarped as to not allow any material to leave the vehicle while on any public right-of-way, all adjacent streets, and alleys. All public ways and places shall be kept free and clear of all rubbish, refuse and loose materials resulting from the moving, demolition or demolition removal operations, except as allowed by temporary encroachment permits approved by the Public Works Director. All material shall be recycled or disposed of in means approved by jurisdiction.
8. Pedestrians shall be protected from construction/demolition as stated in CBC Section 3306.
9. Upon completion of the removal of a building or structure the ground shall be left in a smooth condition, free of demolition debris. Holes in the ground shall be filled to existing grade. All foundations, concrete slabs, and buildings structures shall be removed to the satisfaction of the building official.
10. General Contractor shall patch, repair, or replace all work damaged by new construction. The General Contractor shall patch wall and floor to conform to material, texture and surface alignment with the adjoining surface.

## DEMO PLAN REFERENCE NOTES

1. Book stacks to removed, salvaged, and replaced by Owner
2. Restroom to be modified. Fixtures to be removed.
3. Column to be removed, refer to Structural plans and Floor Plans
4. Window to be removed, salvaged, and reused at new window openings. Refer to A2.1, A2.2 for proposed locations of new window openings.
5. Portion of wall to be removed, refer to wall legend
6. (E) Structural column to remain
7. (E) Beam to remain, refer to Structural Plans
8. (E) Skylight to be replaced
9. (E) Space/ room to remain
10. (E) Roof below to remain
11. (E) Water heater to be removed, retained, and reinstalled. Refer to Plumbing Plans.
12. Demo (E) floor finishes throughout building
13. (E) Sink to remain
14. (E) Slab to be removed and replaced, see civil and structural plans
15. (E) Mechanical chase
16. (E) Roof above to remain
17. Door to be removed and replaced
18. Roof connection to remain (not in scope)
19. (E) Roof access to remain

## WALL LEGEND

- (E) 2x Wall to be demolished
- (E) 2x Wall to remain
- (E) CMU Wall to remain
- (N) 2x6 Wall @ 16" o.c.
- (N) CMU Wall infill
- FE — Fire extinguisher and cabinet. Mount at +48" at centerline of valve handle. At doors maintain strike side clearances

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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

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800 W. Branch Street
Arroyo Grande, CA 93420

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County of San Luis Obispo
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Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**DEMOLITION UPPER FLOOR PLAN**

CONSULTANT:

STAMP:

LICENSED ARCHITECT C-32913 SHANA MARIE REISS REN. 09-30-25 STATE OF CALIFORNIA

DATE:

July 2, 2024

REVISIONS:

B1 Bid Set Update 07/25/2025

JOB NUMBER:

2308

SHEET:

A1.2

Date: July 25, 2025 Time: 10:32:30 AM File name: 03_Arroyo Grande Library_CA_Plans.vwx

# 1 PROPOSED LOWER FLOOR PLAN

Scale: 1/8" = 1'-0"

## FLOOR PLAN GENERAL NOTES

1. Do not scale drawings.
2. All dimensions shall be field verified prior to commencement of work. If any variation, discrepancy or omission is found, the Contractor or Sub-contractor shall notify the Architect in writing and obtain written resolution from Architect prior to proceeding with any work.
3. All new walls shall be 2x6 framing with insulation or per Title 24, U.N.O. Refer to Wall Legend. Infill walls to match (e) wall thickness.
4. STAIRWAYS
   Existing stairwells to remain untouched. No significant work proposed upstairs. Due to no public access upstairs, and offices upstairs matching offices downstairs, the stairwell will remain as it is currently with no modifications.
5. BOOK STACKS
   Library book stacks available for public use shall be 54 inches maximum above the finish floor. Book stacks available for public use may be higher than 54 inches maximum above the finish floor when an attendant is available to assist persons with disabilities. Book stacks restricted to employee use are not required to comply with these requirements. CBC 11B-225.2.3

## FLOOR PLAN REFERENCE NOTES

1. (N) Base Cabinet and Countertop with 6" min. splash
2. (N) Sink, refer to Plumbing Plans and knee clerance detail 21/ADA1.1
3. (N) AMH supplied and installed by owner
4. (N) +34" Book Drop, refer to detail 44/A9.4
5. (N) +34" Counter height Cabinetry, see Electrical Plans for outlet charging locations
6. (N) IDF below, refer to Electrical Plans
7. (N) Bench seating and desk, see Electrical Plans for outlet locations, and detail 22/A9.4.
8. (N) +34" Help Desk, refer to 54/A9.3
9. (N) +42" Laptop Bar, refer to Electrical Plans
10. (N) Drinking Fountain, refer to Plumbing Plans and detail 21/ADA1.2
11. (E) Sink to remain
12. (N) Structural column, refer to Structural Plans
13. (N) Built in wall cubby, refer to detail 24/A9.4.
14. (N) Computer Station - refer to Electrical and Structural Plans. Equipment and furniture by Owner.
15. (N) Copy Station. Provide power/ data. Equipment & furniture by Owner.
16. (N) Printing Station. Provide power/ data. Equipment & furniture by Owner.
17. (N) 36" wide gate, refer to Door Schedule on A8.1 and provide alarm
18. Proposed location for electronic catalogs - refer to Electrical and Structural Plans
19. (E) Structural beam
20. Book Stacks, +40" @ 3 shelves, and +66" @ 5 shelves, refer to wall legend. To be OFCI (Owner Furnished, Owner Installed)
21. (E) Deck, refer to A4.5, reference note #12.
22. Electrical Panel, see Electrical Plans
23. Line indicates floor above
24. Line indicates floor below
25. Soffit above, refer to RCP
26. (N) Skylight above
27. (E) Water Heater, to be reinstalled. Refer to Demo and Plumbing Plans.
28. (N) Fire Riser room
29. (N) Bench and TV area
30. (N) Mechanical Chase
31. (N) Decorative Slat wall, refer to sheet 24/A9.2, 54/A9.2, 24/A9.3
32. (E) Mechanical Chase
33. (E) Structural column
34. (N) Storefront System, refer to A8.1
35. Area of re-poured concrete slab, see Civil Plans.
36. (N) Planter
37. (N) Undercounter Fridge
38. (N) Fence, refer to Civil Plans
39. (E) Parapet to remain
40. Line indicates roof above
41. Line indicates roof below
42. (N) Accent TV wall area
43. Roof connection to remain (not in scope)
44. (N) Water heater, refer to Plumbing Plans
45. (E) Planter to remain, refer to Civil Plans
46. (N) RFID book alarm, supplied and installed by Owner
47. Recessed carpet tiling at entry, see Interior Finish Schedule on sheet A8.1. Carpeted area to be 6-ft wide by 10-ft deep.
48. (N) Self-checkout location. Provide power/data, equipment by Owner.
49. (N) Floor/ Mop sink per Plumbing Plans
50. F.O.L. is acronym for Friends of Library
51. (E) 2-hr fire rated wall to remain.
    (N) 2-hr fire rated wall to be constructed as a continuation of existing fire rated wall. See detail 53/A9.1 for wall assembly. Noted by heavy dashed lines at grid line F, between gridlines 4-6.
52. CMU wall infill, refer to Structural Plans. Gypsum board finish over furring channel along both sides of the wall.
53. (N) Knox Box, per fire deparment jurisdiction requirements. Also see Door Schedule on A8.1

## WALL LEGEND

- (E) 2x Wall to be demolished
- (E) 2x Wall to remain
- (E) CMU Wall to remain
- (N) 2x6 Wall @ 16" o.c.
- (N) CMU Wall infill
- FE — Fire extinguisher and cabinet. Mount at +48" at centerline of valve handle. At doors maintain strike side clearances
- Book stacks , + 66" tall @ 5 shelves
- Book stacks , + 40" tall @ 3 shelves


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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Goverment Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**PROPOSED LOWER FLOOR PLAN**

CONSULTANT:

STAMP:

LICENSED ARCHITECT C-32912 SHANA MARIE REISS REN. 09-30-25 STATE OF CALIFORNIA

DATE:

July 2, 2024

REVISIONS:

1 Plan Check 1 County of SLO, 10/28/2024
2 Plan Check 2 County of SLO, 01/22/2025
B1 Bid Set Update 07/25/2025

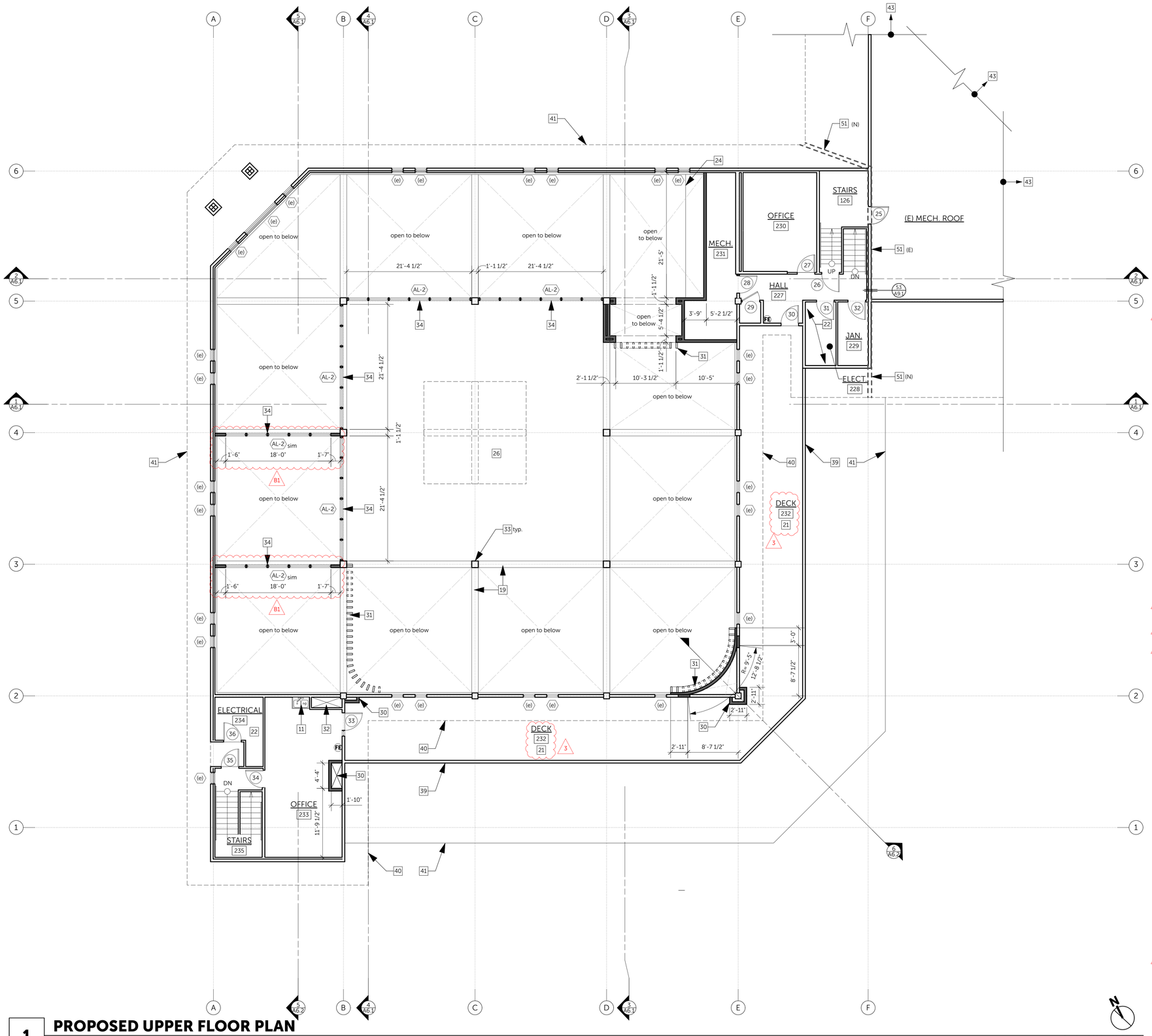
JOB NUMBER:

2308

SHEET:

A2.1

Date: July 25, 2025 Time: 3:38:33 PM File name: 03_Arroyo Grande Library_CA_Plans.vwx




# 1 PROPOSED UPPER FLOOR PLAN

Scale: 1/8" = 1'-0"

## FLOOR PLAN GENERAL NOTES

1. Do not scale drawings.
2. All dimensions shall be field verified prior to commencement of work. If any variation, discrepancy or omission is found, the Contractor or Sub-contractor shall notify the Architect in writing and obtain written resolution from Architect prior to proceeding with any work.
3. All new walls shall be 2x6 framing with insulation or per Title 24, U.N.O. Refer to Wall Legend. Infill walls to match (e) wall thickness.
4. STAIRWAYS
   Existing stairwells to remain untouched. No significant work proposed upstairs. Due to no public access upstairs, and offices upstairs matching offices downstairs, the stairwell will remain as it is currently with no modifications.
5. BOOK STACKS
   Library book stacks available for public use shall be 54 inches maximum above the finish floor. Book stacks available for public use may be higher than 54 inches maximum above the finish floor when an attendant is available to assist persons with disabilities. Book stacks restricted to employee use are not required to comply with these requirements. CBC 11B-225.2.3.

## FLOOR PLAN REFERENCE NOTES

1. (N) Base Cabinet and Countertop with 6" min. splash
2. (N) Sink, refer to Plumbing Plans and knee clearance detail 21/ADA1.1
3. (N) AMH supplied and installed by owner
4. (N) +34" Book Drop, refer to detail 44/A9.4
5. (N) +34" Counter height Cabinetry, see Electrical Plans for outlet charging locations
6. (N) IDF below, refer to Electrical Plans
7. (N) Bench seating and desk, see Electrical Plans for outlet locations, and detail 22/A9.4.
8. (N) +34" Help Desk, refer to 54/A9.3
9. (N) +42" Laptop Bar, refer to Electrical Plans
10. (N) Drinking Fountain, refer to Plumbing Plans and detail 21/ADA1.2
11. (E) Sink to remain
12. (N) Structural column, refer to Structural Plans
13. (N) Built in wall cubby, refer to detail 24/A9.4.
14. (N) Computer Station - refer to Electrical and Structural Plans. Equipment and furniture by Owner.
15. (N) Copy Station. Provide power/ data. Equipment & furniture by Owner.
16. (N) Printing Station. Provide power/ data. Equipment & furniture by Owner.
17. (N) 36" wide gate, refer to Door Schedule on A8.1 and provide alarm
18. Proposed location for electronic catalogs - refer to Electrical and Structural Plans
19. (E) Structural beam
20. Book Stacks, +40" @ 3 shelves, and +66" @ 5 shelves, refer to wall legend. To be OFCI (Owner Furnished, Owner Installed).
21. (E) Deck, refer to A4.5, reference note #12.
22. Electrical Panel, see Electrical Plans
23. Line indicates floor above
24. Line indicates floor below
25. Soffit above, refer to RCP
26. (N) Skylight above
27. (E) Water Heater, to be reinstalled. Refer to Demo and Plumbing Plans.
28. (N) Fire Riser room
29. (N) Bench and TV area
30. (N) Mechanical Chase
31. (N) Decorative Slat wall, refer to sheet 24/A9.2, 54/A9.2, 24/A9.3
32. (E) Mechanical Chase
33. (E) Structural column
34. (N) Storefront System, refer to A8.1
35. Area of re-poured concrete slab, see Civil Plans.
36. (N) Planter
37. (N) Undercounter Fridge
38. (N) Fence, refer to Civil Plans
39. (E) Parapet to remain
40. Line indicates roof above
41. Line indicates roof below
42. (N) Accent TV wall area
43. Roof connection to remain (not in scope)
44. (N) Water heater, refer to Plumbing Plans
45. (E) Planter to remain, refer to Civil Plans
46. (N) RFID book alarm, supplied and installed by Owner
47. Recessed carpet tiling at entry, see Interior Finish Schedule on sheet A8.1. Carpeted area to be 6-ft wide by 10-ft deep.
48. (N) Self-checkout location. Provide power/data, equipment by Owner.
49. (N) Floor/ Mop sink per Plumbing Plans
50. F.O.L. is acronoym for Friends of Library
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    (N) 2-hr fire rated wall to be constructed as a continuation of existing fire rated wall. See detail 53/A9.1 for wall assembly. Noted by heavy dashed lines at grid line F, between gridlines 4-6.
52. CMU wall infill, refer to Structural Plans. Gypsum board finish over furring channel along both sides of the wall.
53. (N) Knox Box, per fire deparment jurisdiction requirements. Also see Door Schedule on A8.1 and AS1.1.

## WALL LEGEND

- (E) 2x Wall to be demolished
- (E) 2x Wall to remain
- (E) CMU Wall to remain
- (N) 2x6 Wall @ 16" o.c.
- (N) CMU Wall infill
- FE — Fire extinguisher and cabinet. Mount at +48" at centerline of valve handle. At doors maintain strike side clearances


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PROJECT:

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Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**PROPOSED UPPER FLOOR PLAN**

CONSULTANT:

STAMP:

LICENSED ARCHITECT C-32912 SHANA MARIE REISS RENEW. 09-30-25 STATE OF CALIFORNIA

DATE:

July 2, 2024

REVISIONS:

1 Plan Check 1 County of SLO, 10/28/2024
2 Plan Check 2 County of SLO, 01/22/2025
3 Owner Revision Roof Deck, 03/10/2025
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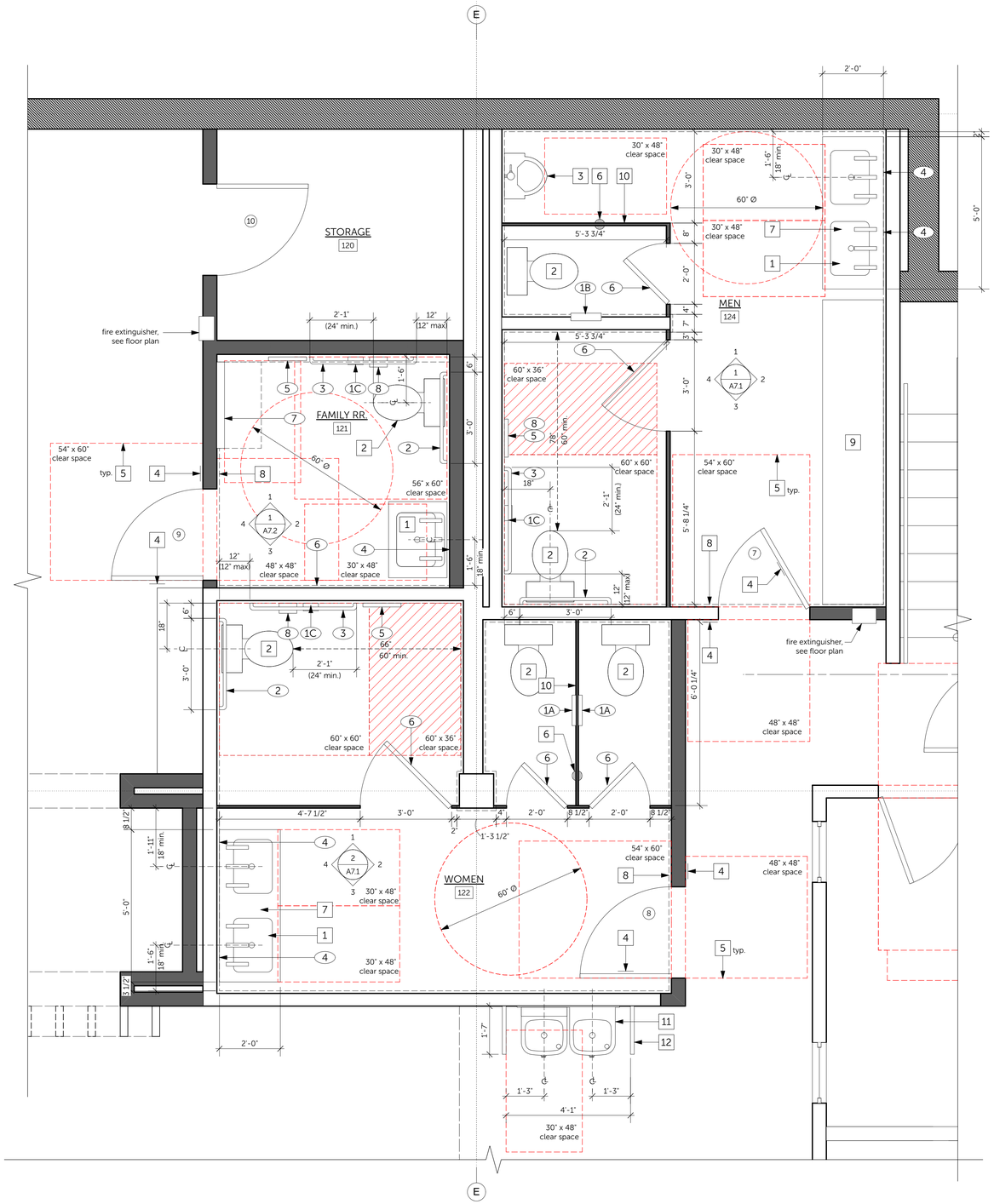
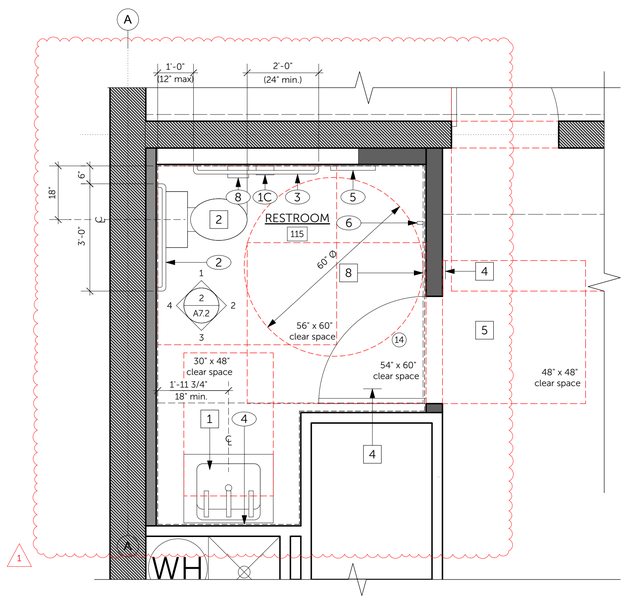



## 1 ENLARGED FLOOR PLAN - RESTROOMS 121, 122 AND 124

Scale: 1/2" = 1'-0"




## 2 ENLARGED FLOOR PLAN - RESTROOM 115

Scale: 1/2" = 1'-0"

# R.R. ACCESSORY SCHEDULE

| MARK | DESCRIPTION | MODEL |
|---|---|---|
| 1A | PARTITION MOUNTED SEAT COVER/TOILET PAPER DISPENSER, BOBRICK | B-3579 |
| 1B | RECESSED SEAT COVER/TOILET PAPER DISPENSER, BOBRICK | B-34745 |
| 1C | SURFACE-MOUNTED TOILET PAPER DISPENSER, BOBRICK | B-2888 |
| 2 | STRAIGHT GRAB BAR, 36", BOBRICK (refer to 22/ADA1.2) | B-680636 |
| 3 | STRAIGHT GRAB BAR, 42", BOBRICK (refer to 22/ADA1.2) | B-680642 |
| 4 | CHANNEL-FRAME MIRROR, BOBRICK | B-165 2436 |
| 5 | SURFACE-MOUNTED TOILET SEAT COVER, BOBRICK (DO NOT MOUNT ABOVE GRAB BAR) | B-221 |
| 6 | HOOKS, BOBRICK (+48") | B-6717 |
| 7 | BABY CHANGING TABLE, SURFACE MOUNTED, BOBRICK | KB310-SSWM |
| 8 | SURFACE-MOUNTED SANITARY NAPKIN RECEPTACLE, BOBRICK | B-254 |

**NOTES**

RESTROOM ACCESSORIES MADE BY THE SAME MANUFACTURER MUST BE KEYED TO ONE KEY.

REFER TO ACCESSIBILITY NOTES, STANDARD DETAILS REFER TO 1/ADA1.3, AND INTERIOR ELEVATIONS FOR MOUNTING HEIGHT REQUIREMENTS.

ALL DIMENSIONS SHALL BE TO FINISH SURFACE U.N.O.

# ENLARGED PLAN REFERENCE NOTES

1. Accessible lavatory sink, Refer to Plumbing Plans. Refer to 22/ADA1.2 for mounting height requirements.
2. Accessible water closet, Refer to Plumbing Plans and Accessibility Notes, refer ADA1.2.
3. Urinal, Refer to Plumbing Plans and Accessibility Notes 41/ADA1.2, and 22/ADA1.2 for mounting height requirements.
4. Provide accessible signage for toilet facilities, refer to sheet ADA1.2.
5. Provide level door landing and strike side clearances per Accessibility Notes and Standard Details, see ADA sheets.
6. Floor drain, refer to Plumbing Plans.
7. +34" solid surface countertop
8. Dashed line 1" off of wall indicates line of wall finish.
9. Full height storage built-in, refer to detail 54/A9.4.
10. Toilet partitions, Scranton Products - Hiny Hiders or approved equal. color: Paisley.
11. (N) Drinking fountains/ Bottle Filling, 1 standard and 1 accessible, refer to Plumbing Plans.
12. Drinking fountain grab bars/cane detections, refer to drinking fountain notes on 21/ADA1.2 and detail 54/A9.1 for detailed information.

# PLUMBING FIXTURES

**A-3 OCCUPANCY** *(see A2.1 for applicable room names/ numbers)*

| ROOM NAME*** | AREA* | OCC. FACTOR (CPC TABLE 4-1) | OCC. LOAD (AREA / FACTOR) | MEN (50%) OF OCC. LOAD | WOMEN (50%) OF OCC. LOAD | FIXTURE RATIO UTILIZATION PERCENTAGE | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | WATER CLOSET | | URINAL** | DRINKING FOUNTAIN | LAVATORY | |
| | | | | | | MEN | WOMEN | | | MEN | WOMEN |
| | | | | | | 1:100 | 3:100 | 1:100 | 1:250 | 1:200 | 1:100 |
| Lower Floor | | | | | | | | | | | |
| - General Library | 8,340 | 50 | 166.80 | 83.40 | 83.40 | 83.4% | 83.4% | 83.4% | 66.7% | 41.7% | 83.4% |
| - Storage | 227 | 150 | 1.51 | 0.76 | 0.76 | 0.8% | 0.8% | 0.8% | 0.6% | 0.4% | 0.8% |
| - Staff Area & Offices | 1,813 | 150 | 12.09 | 6.04 | 6.04 | 6.0% | 6.0% | 6.0% | 4.8% | 3.0% | 6.0% |
| - (N) Veterans Space | 259 | 150 | 1.73 | 0.86 | 0.86 | 0.9% | 0.9% | 0.9% | 0.7% | 0.4% | 0.9% |
| - (E) Patio | 844 | 150 | 5.63 | 2.81 | 2.81 | 2.8% | 2.8% | 2.8% | 2.3% | 1.4% | 2.8% |
| Upper Floor | | | | | | | | | | | |
| - Staff Area | 1,220 | 150 | 8.13 | 4.07 | 4.07 | 4.1% | 4.1% | 4.1% | 3.3% | 2.0% | 4.1% |
| | TOTAL | | **195.9** | **97.9** | **97.9** | **97.9%** | **97.9%** | **97.9%** | **78.4%** | **49.0%** | **97.9%** |

**REQUIRED FIXTURES IDENTIFIED IN BOLD/GRAY FILL**

| FIXTURES PER PERSON | | MEN | WOMEN |
|---|---|---|---|
| Excerpt from CPC Table 422.1 (referenced below) for applicable occupancy and total occupant load per gender. | WATER CLOSET | 1: 1 < 97.9 < 100 | 3: 51 < 97.9 < 100 |
| | URINAL | 1: 1 < 97.9 < 100 | |
| | LAVATORY | 1: 1 < 97.9 < 200 | 1: 1 < 97.9 < 150 |
| | | FIXTURES PER PERSON (GENERAL) | |
| | DRINKING FOUNTAIN | 1: 1 < 195.9 < 250 | |
| | SERVICE SINK | 1: 1 service sink | |

*Use high value for division in fixture ratio utilization calculations above.*

**PROPOSED FIXTURES IDENTIFIED IN BOLD/GRAY FILL**

| FIXTURES PER PERSON | | MEN (RR 124) | WOMEN RR (122) | ALL GENDER | |
|---|---|---|---|---|---|
| Excerpt from CPC Table 422.1 (referenced below) for applicable occupancy and total occupant load per gender. | WATER CLOSET | 2 | 3 | 2 | *SERVED BY SINGLE OCCUPANT RESTROOMS 115 & 121* |
| | URINAL | 1 | | | |
| | LAVATORY | 2 | 2 | 2 | |
| | | FIXTURES PER PERSON (GENERAL) | | | |
| | DRINKING FOUNTAIN | 1 | | | |
| | SERVICE SINK | 1 | | | |

* ***Room areas do not include wall thicknesses. Refer to Plumbing Area Plan on this sheet.***

** ***The total number of required water closets for females shall not be less than the total number of required water closets and urinals for males. [BSC] This requirement shall not apply when single occupancy toilet facilities are provided for each sex in an A or E occupancy with an occupant load less than 50. The required urinal shall be permitted to be omitted.***

*** **Accessory areas such as, but not limited to, hallways/corridors, stairways, ramps, toilet rooms, mechanical rooms, closets and fixed equipment, may be excluded.**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800 W. Branch Street
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County Goverment Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**ENLARGED RESTROOM PLANS**

CONSULTANT:

STAMP:

LICENSED ARCHITECT C-32912 SHANA MARIE REISS REN. 09-30-25 STATE OF CALIFORNIA

DATE:

July 2, 2024

REVISIONS:

1 Plan Check 1 County of SLO, 10/28/2024

2 Plan Check 2 County of SLO, 01/22/2025

JOB NUMBER:

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Date: July 25, 2025 Time: 10:32:32 AM File name: 03_Arroyo Grande Library_CA_Plans.vwx

# 1 LOWER FLOOR REFLECTED CEILING PLAN

Scale: 1/8" = 1'-0"

## RCP GENERAL NOTES

1. Refer to Interior Finish Notes for additional ceiling finish requirements
2. Refer to Lighting Plans for Lighting General Notes and Legend
3. Refer to Building Sections and Structural Plans for description of exposed structural members.
4. All fixtures identified as centered or aligned shall be installed as indicated. Any obstacles that prevent installation at designated locations, such as framing, structural, or otherwise shall be brought to the attention of the Architect.

## RCP REFERENCE NOTES

1. Light Fixture, refer to Electrical Drawings
2. Painted gypsum board ceiling
3. (E) Structural beam
4. Return air per Mechanical Plans
5. Supply air per Mechanical Plans
6. Existing lighting to remain, refer to Electrical Drawings
7. Backing and hook for hanging mobile kinetic bird/butterfly display. Mobile to be supplied by Owner.
8. (N) Soffit or beam, refer to Structural drawings
9. (E) Exterior wall sconce to be replaced in place, refer to Electrical drawings
10. Provide backing and support for future abstract tree installation. Abstract trees to be provided by Owner.
11. (N) Skylight above
12. (N) Decorative slat wall, refer to sheet 24/A9.2, 54/A9.2, 24/A9.3
13. Center light fixture in room/ space
14. Equally space lighting fixture in space
15. Open to above, refer to A4.2
16. Edge of roof above
17. Edge of roof below
18. (E) Stucco finish to be removed and replaced with painted gypsum board ceiling
19. (E) Supply and Return air vent to be demolished, refer to Mechanical drawings
20. Roof connection to remain (not in scope)
21. Edge of ceiling
22. (E) Stucco to remain
23. (E) Soffit vent to remain
24. (N) Structural beam, refer to structural drawings. Wrap in gypsum board to match ceiling.
25. (N) Sectional overhead roll up door, refer to specifications
26. (E) T-bar ceiling w/ acoustic tile to remain. Existing acoustical ceiling tiles are to be re-used and are in limited supply. Take extra care to protect tiles. If quantity of tiles is not sufficient for complete re-installation, coordinate with Architect to determine replacement options.

B1 B1 1

## RCP LEGEND

- Surface Wall Mounted Light, refer to Electrical drawings
- Pendant Light, refer to Electrical drawings
- (R) Recessed Ceiling Mounted Light, refer to Electrical drawings
- Light Fixture, refer to Electrical drawings
- Light Fixture, refer to Electrical drawings
- Light Fixture, refer to Electrical drawings
- Exhaust Fan, refer to Mechanical drawings
- Supply Air, refer to Mechanical drawings
- Return Air, refer to Mechanical drawings
- Sprinkler head, refer to Fire Protection drawings pendents in coffered ceiling to be centered in ceiling panels
- Emergency Egress Light Fixture, refer to Electrical drawings
- 1 EM Emergency Egress Lighting, refer to Electrical drawings

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**LOWER FLOOR REFLECTED CEILING PLAN**

CONSULTANT:

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LICENSED ARCHITECT C-32912 SHANA MARIE REISS REN. 09-30-25 STATE OF CALIFORNIA

DATE:

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REVISIONS:

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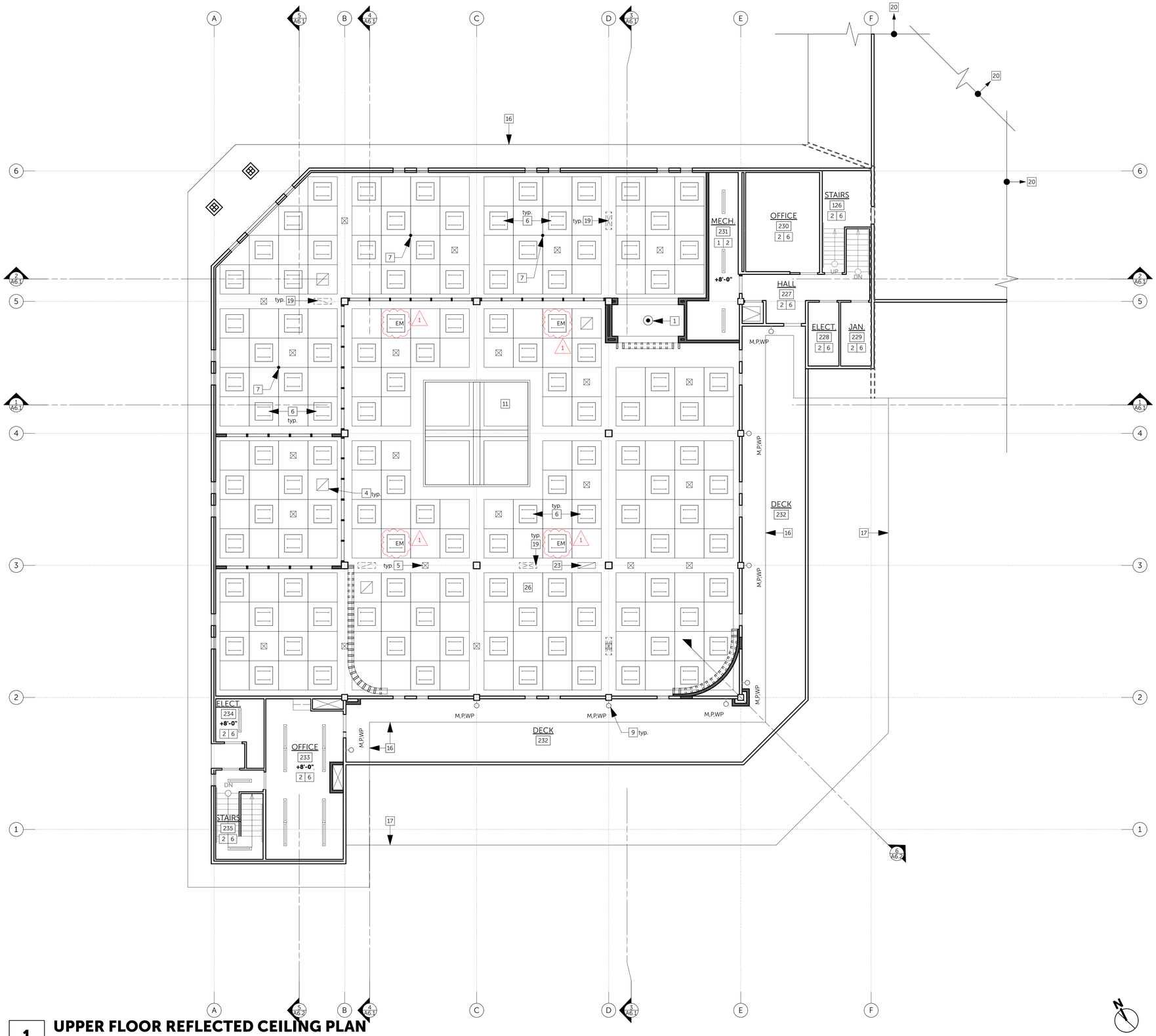


# 1 UPPER FLOOR REFLECTED CEILING PLAN

Scale: 1/8" = 1'-0"

## RCP GENERAL NOTES

1. Refer to Interior Finish Notes for additional ceiling finish requirements
2. Refer to Lighting Plans for Lighting General Notes and Legend
3. Refer to Building Sections and Structural Plans for description of exposed structural members.
4. All fixtures identified as centered or aligned shall be installed as indicated. Any obstacles that prevent installation at designated locations, such as framing, structural, or otherwise shall be brought to the attention of the Architect.

## RCP REFERENCE NOTES

1. Light Fixture, refer to Electrical Drawings
2. Painted gypsum board ceiling
3. (E) Structural beam
4. Return air per Mechanical Plans
5. Supply air per Mechanical Plans
6. Existing lighting to remain, refer to Electrical Drawings
7. Backing and hook for hanging mobile kinetic bird/butterfly display. Mobile to be supplied by Owner.
8. (N) Soffit or beam, refer to Structural drawings
9. (E) Exterior wall sconce to be replaced in place, refer to Electrical drawings
10. Provide backing and support for future abstract tree installation. Abstract trees to be provided by Owner.
11. (N) Skylight above
12. (N) Decorative slat wall, refer to sheet 24/A9.2, 54/A9.2, 24/A9.3
13. Center light fixture in room/ space
14. Equally space lighting fixture in space
15. Open to above, refer to A4.2
16. Edge of roof above
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18. (E) Stucco finish to be removed and replaced with painted gypsum board ceiling
19. (E) Supply and Return air vent to be demolished, refer to Mechanical drawings
20. Roof connection to remain (not in scope)
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22. (E) Stucco to remain
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24. (N) Structural beam, refer to structural drawings. Wrap in gypsum board to match ceiling.
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B1 B1 1

## RCP LEGEND

- Surface Wall Mounted Light, refer to Electrical drawings
- Pendant Light, refer to Electrical drawings
- R — Recessed Ceiling Mounted Light, refer to Electrical drawings
- Light Fixture, refer to Electrical drawings
- Light Fixture, refer to Electrical drawings
- Light Fixture, refer to Electrical drawings
- Exhaust Fan, refer to Mechanical drawings
- Supply Air, refer to Mechanical drawings
- Return Air, refer to Mechanical drawings
- Sprinkler head, refer to Fire Protection drawings
  pendents in coffered ceiling to be centered in ceiling panels
- Emergency Egress Light Fixture, refer to Electrical drawings
- 1 EM — Emergency Egress Lighting, refer to Electrical drawings

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**UPPER FLOOR REFLECTED CEILING PLAN**

CONSULTANT:

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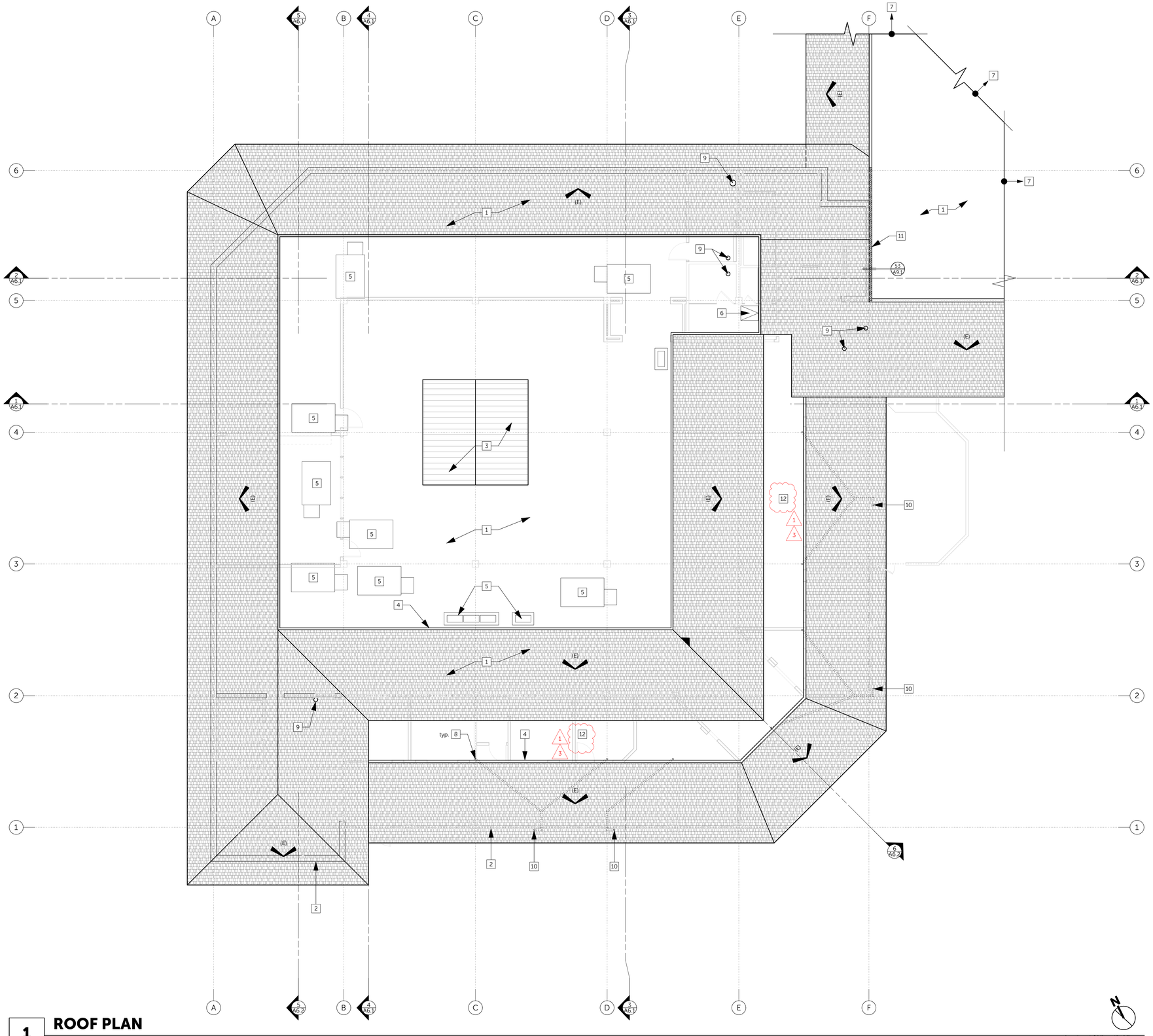
A4.2

Date: July 25, 2025 Time: 10:23:33 AM File name: 03_Arroyo Grande Library_CA_Plans.vwx




1 **ROOF PLAN**

Scale: 1/8" = 1'-0"

## ROOF GENERAL NOTES

1. Existing roofing to remain. Patch/ repair in kind per manufacturer recommendation.

## ROOF PLAN REFERENCE NOTES

1. (E) Roofing Material to remain
2. Building footprint below
3. (N) Skylight. Pinnacle 350/600 series or approved equal. Refer to Specifications.
4. (E) Parapet to remain
5. (N) Mechanical equipment, refer to Mechanical Drawings
6. (E) Roof access to remain
7. Roof connection to remain (not in scope)
8. (E) Deck drains
9. (N) Roof jack, refer to Mechanical drawings
10. Intercept existing roof drains and route to new exterior wall/location, terminate at bottom of wall to splash block/hardscape.
11. (N) Two hour fire rated wall, refer to detail 53/A9.1
12. At balcony on second floor, existing roof deck membrane shall be stripped to subsurface and replaced with Dex-O-Tex: Dex-Flex, or approved equal. Color: 304 Sandpiper Beige Knockdown Finish, or approved equal. Topping finish surface or applied top coat to be slip and moisture resistant. Installation and flashing per Manufacturer's instructions. Replace damaged substructure and ceiling joists as necessary with like for like. Existing slope to remain. Contractor to assume 5% joist replacement & 10% sheathing replacement at Owner's direction.

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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Goverment Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**ROOF PLAN**

CONSULTANT:

STAMP:

LICENSED ARCHITECT
C- 32912
SHANA MARIE REISS
REN. 09-30-25
STATE OF CALIFORNIA

DATE:

July 2, 2024

REVISIONS:

2 Plan Check 2
County of SLO, 01/22/2025

3 Owner Revision
Roof Deck, 03/10/2025

B1 Bid Set Update
07/25/2025

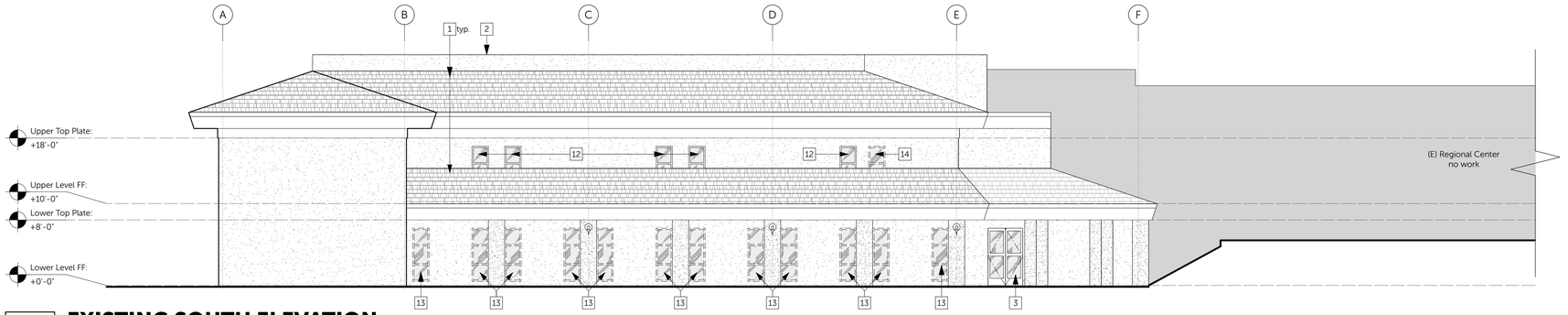
JOB NUMBER:

2308

SHEET:

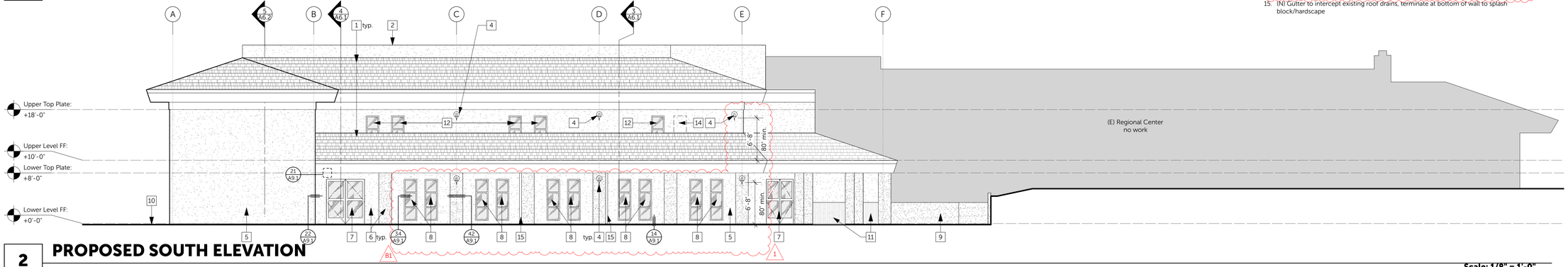
A4.5

Date: July 25, 2025 Time: 10:32:34 AM File name: 03_Arroyo Grande Library_CA_Plans.vwx



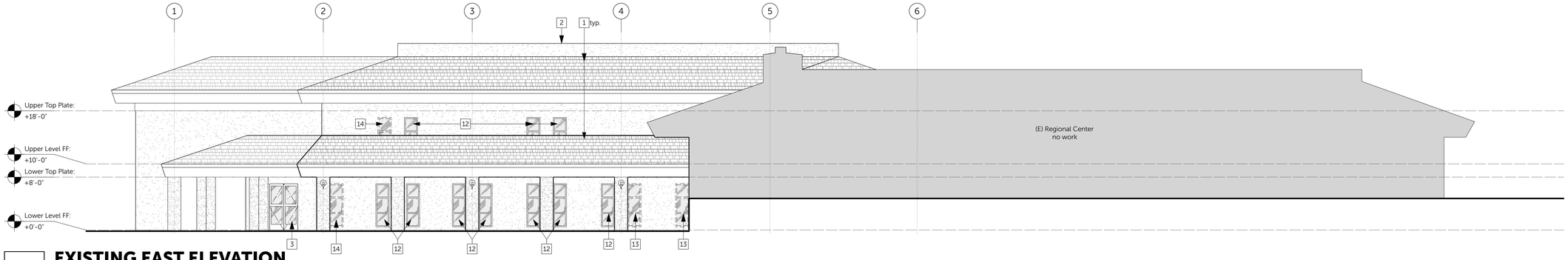

## 1 EXISTING SOUTH ELEVATION

**Scale: 1/8" = 1'-0"**



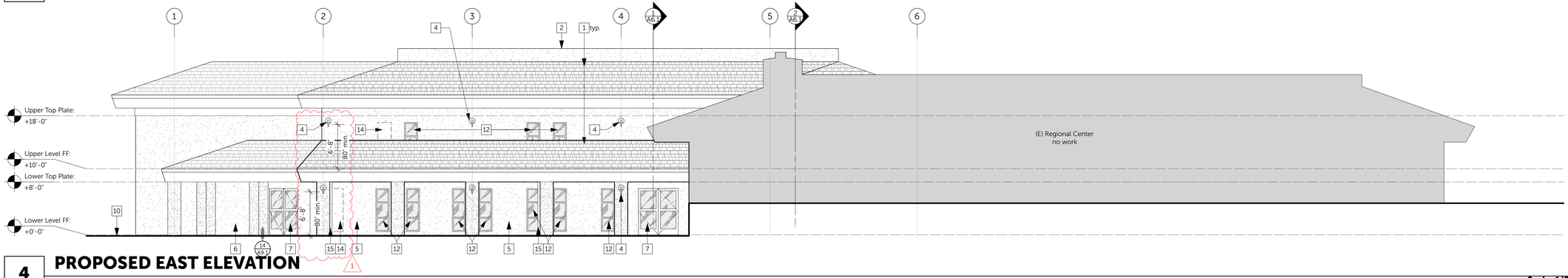

## 2 PROPOSED SOUTH ELEVATION

**Scale: 1/8" = 1'-0"**




## 3 EXISTING EAST ELEVATION

**Scale: 1/8" = 1'-0"**




## 4 PROPOSED EAST ELEVATION

**Scale: 1/8" = 1'-0"**

## EXTERIOR ELEVATION GENERAL NOTES

1. Exterior finishes and colors shall be verified with the Owner prior to application, whether specified on the plans or not.
2. Verify expansion joints required for large surface stucco face prior to providing bid.
3. Provide flashing and counterflashing per CBC 1503.2 at chimneys, parapets, balconies, landings, exterior stairways, roof to wall intersections, and any other vertical to horizontal intersections to maintain a weather and watertight envelope. Paint all galvanized metal material to match adjacent material.

## ELEVATION REFERENCE NOTES

1. (E) Roof material to remain
2. (E) Roof parapet to remain
3. (E) Door to be removed and replaced
4. (E) Exterior Light. Refer to Electrical Plans.
5. (E) Exterior Stucco Finish to remain
6. (N) Exterior Stucco Finish to match existing
7. (N) Door. Refer to Floor Plan and Door Schedule for size and type. Refer to Door General Notes for additional information and requirements
8. (N) Window. Refer to Floor Plan and Window Schedule for size and type. Refer to Window General Notes for additional information.
9. (N) +42" Stucco Garden Wall
10. Finish grade.
11. (N) 42" tall x 36" wide gate. Refer to Door Schedule on A8.1 and provide alarm. Gate to be within +42" tall fence - refer to detail 52/A9.4.
12. (E) Window to remain
13. (E) Window to be removed, salvaged, and reused at new window openings. Refer to A2.1, A2.2 for proposed locations of new window openings.
14. (E) Window to be removed, patch opening. Removed windows to be salvaged, and reused at new window openings. Refer to A2.1, A2.2 for proposed locations of new window openings.
15. (N) Gutter to intercept existing roof drains, terminate at bottom or wall to splash block/hardscape

B1

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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Goverment Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**EXTERIOR ELEVATIONS**

CONSULTANT:

STAMP:

LICENSED ARCHITECT
C-32912
SHANA MARIE REISS
REN. 09-30-25
STATE OF CALIFORNIA

DATE:

April 4, 2024

REVISIONS:

1 Plan Check 1
County of SLO, 10/28/2024

B1 Bid Set Update
07/25/2025

JOB NUMBER:

2308

SHEET:

A5.1

Date: July 25, 2025
Time: 8:47:47 AM
File name: 04_Arroyo Grande Library_CA_Elevations Sections.vwx

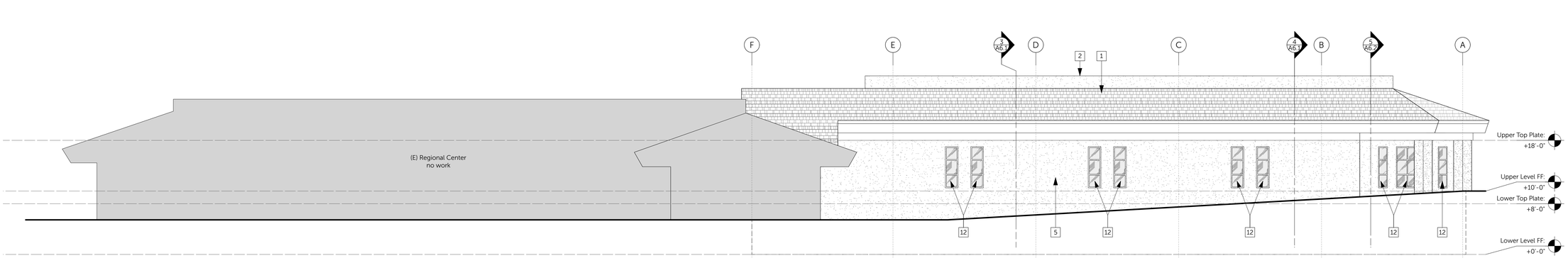
## EXTERIOR ELEVATION GENERAL NOTES

1. Exterior finishes and colors shall be verified with the Owner prior to application, whether specified on the plans or not.
2. Verify expansion joints required for large surface stucco face prior to providing bid.
3. Provide flashing and counterflashing per CBC 1503.2 at chimneys, parapets, balconies, landings, exterior stairways, roof to wall intersections, and any other vertical to horizontal intersections to maintain a weather and watertight envelope. Paint all galvanized metal material to match adjacent material.

## ELEVATION REFERENCE NOTES

1. (E) Roof material to remain
2. (E) Roof parapet to remain
3. (E) Door to be removed and replaced
4. (E) Exterior Light. Refer to Electrical Plans.
5. (E) Exterior Stucco Finish to remain
6. (N) Exterior Stucco Finish to match existing
7. (N) Door. Refer to Floor Plan and Door Schedule for size and type. Refer to Door General Notes for additional information and requirements
8. (N) Window. Refer to Floor Plan and Window Schedule for size and type. Refer to Window General Notes for additional information.
9. (N) +42" Stucco Garden Wall
10. Finish grade.
11. (N) 42" tall x 36" wide gate. Refer to Door Schedule on A8.1 and provide alarm. Gate to be within +42" tall fence - refer to detail 52/A9.4.
12. (E) Window to remain
13. (E) Window to be removed, salvaged, and reused at new window openings. Refer to A2.1, A2.2 for proposed locations of new window openings.
14. (E) Window to be removed, patch opening. Removed windows to be salvaged, and reused at new window openings. Refer to A2.1, A2.2 for proposed locations of new window openings.
15. (N) Gutter to intercept existing roof drains, terminate at bottom of wall to splash block/hardscape

B1




## 1 EXISTING & PROPOSED NORTH ELEVATION (NO CHANGE)

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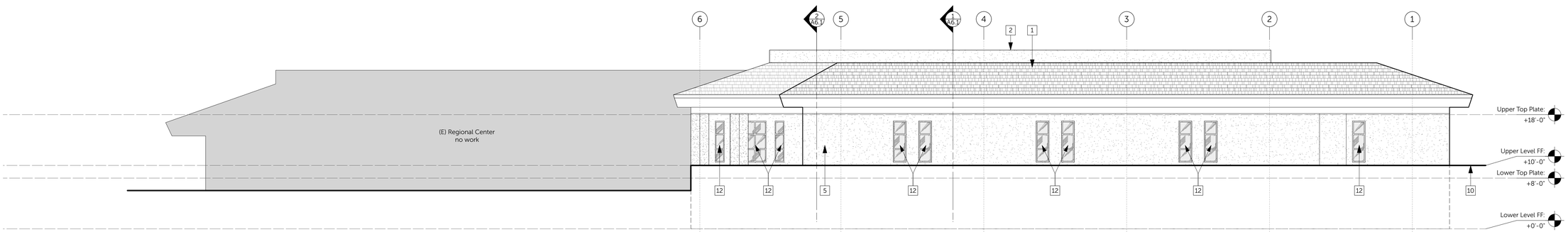


## 2 EXISTING & PROPOSED WEST ELEVATION (NO CHANGE)

**Scale: 1/8" = 1'-0"**


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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Goverment Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**EXTERIOR ELEVATIONS**

CONSULTANT:

STAMP:

LICENSED ARCHITECT
C-32913
SHANA MARIE REISS
REN. 09-30-25
STATE OF CALIFORNIA

DATE:

April 4, 2024

REVISIONS:

B1 Bid Set Update 07/25/2025

JOB NUMBER:

2308

SHEET:

A5.2


Date: July 25, 2025
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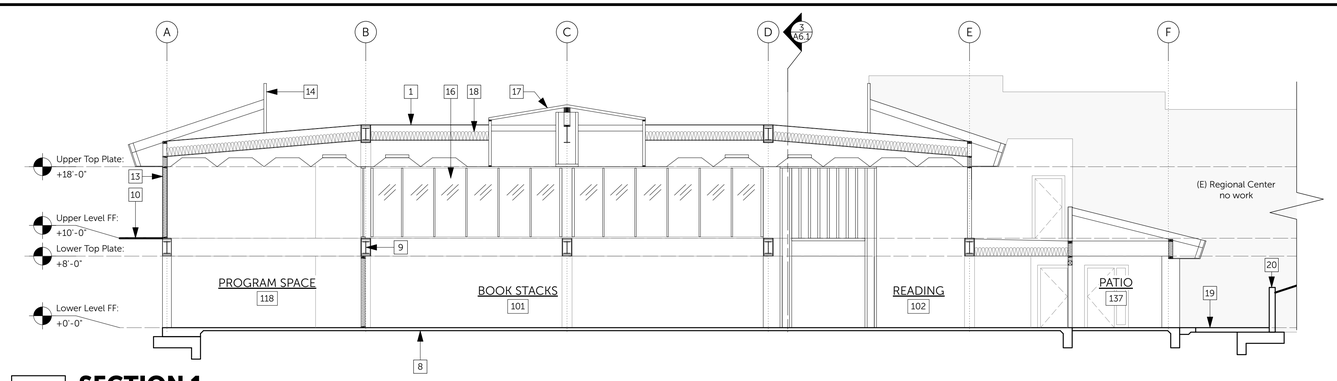


1 **SECTION 1**

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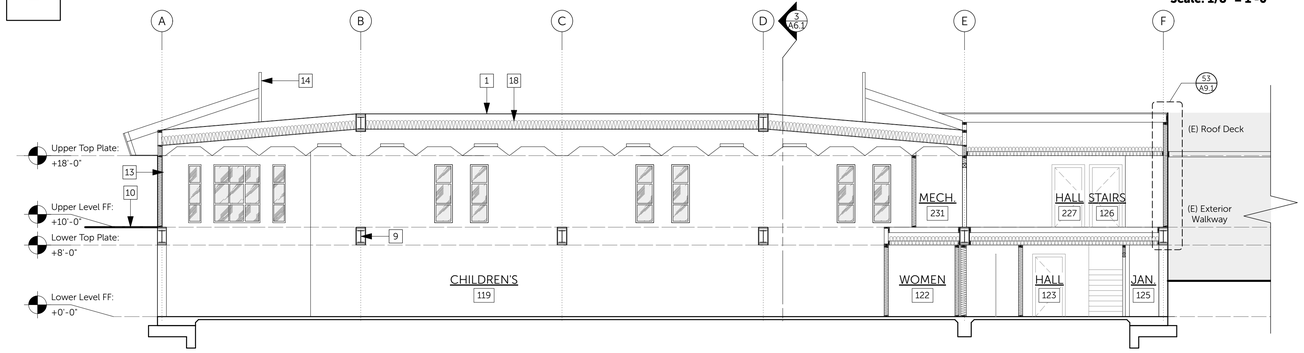


2 **SECTION 2**

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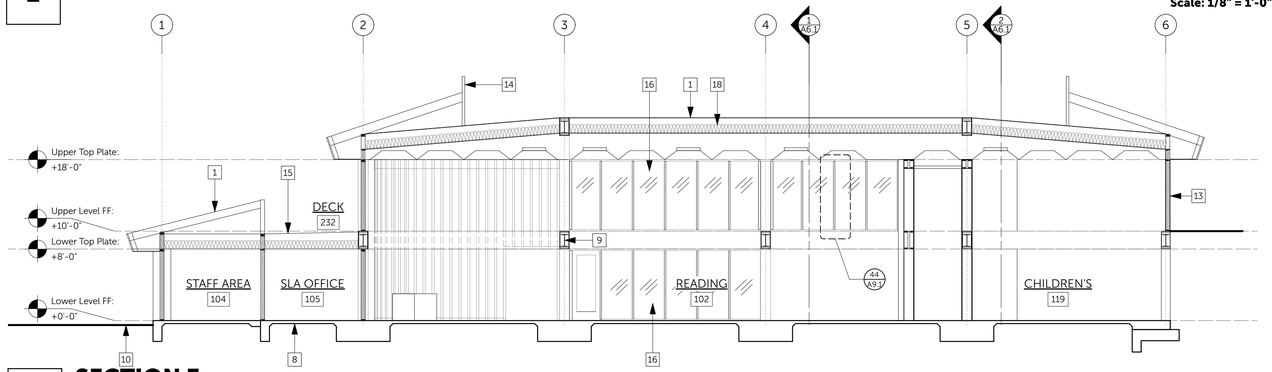
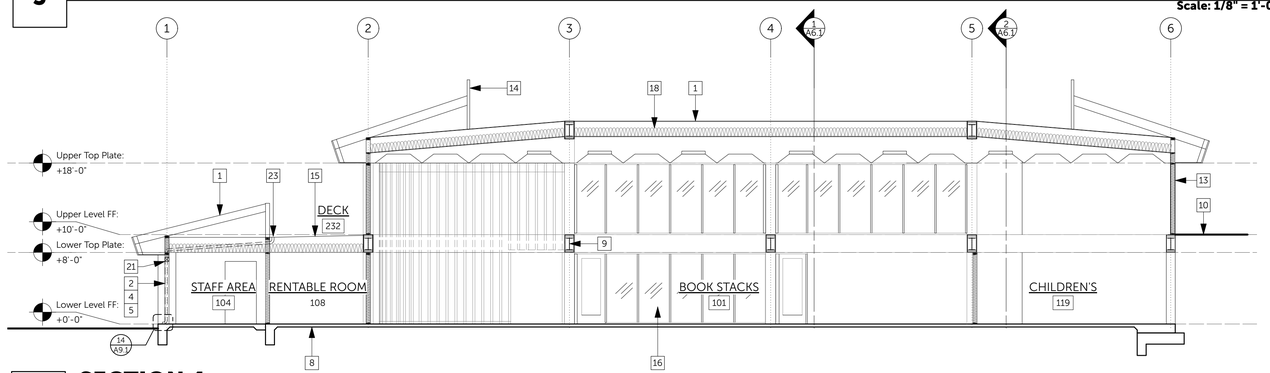



3 **SECTION 3**

Scale: 1/8" = 1'-0"




4 **SECTION 4**

Scale: 1/8" = 1'-0"

## BUILDING SECTION REFERENCE NOTES

1. Existing (E) Roofing to remain, all drainage to remain
2. Exterior finish per Exterior Elevations
3. 2x4 vertical wall framing per Floor Plan(s) and Structural Plan(s)
4. 2x6 vertical wall framing per Floor Plan(s) and Structural Plan(s)
5. R-19 insulation min. or Refer to Title 24 Report/Mandatory Measures
6. R-30 insulation min. or Refer to Title 24 Report/Mandatory Measures
7. (E) Sheathing over floor framing
8. (E) Slab on grade.
9. (E) Beam/Header to remain
10. Finish grade.
11. (E) Stairs
12. Soffit
13. (E) Wall to remain. Patch and refinish as necessary.
14. (E) Parapet. Refer to Roof Plan and referenced detail(s).
15. (E) Deck
16. (N) Storefront beyond
17. (N) Skylight
18. (E) Insulation to remain
19. (N) Planter
20. (N) Retaining Wall 5' tall
21. (N) Beam/Header per Structural Plans
22. (N) Slab on grade. Refer to Foundation Plan General Notes & Title 24 for waterproofing.
23. Existing drain to remain where occurs, terminate at bottom of wall to splash block/hardscape
24. (N) Floor joists per Structural Plans

## BUILDING SECTION GENERAL NOTES

1. Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19% moisture content. Refer to Cal Green 5.505 (non-residential), for moisture content verification methods. Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Wet-applied insulation products shall follow the manufacturers' drying recommendations prior to enclosure. Exterior sheathing shall be dry before applying exterior cover.
2. Concrete slab foundations required to have a vapor retarder by Cal Green Code and CBC, California Code of Regulations, Title 24, Part 2, Chapter 19. Concrete slabs shall be installed with a capillary break per Cal Green Code 4.505.2.1.
3. Water absorption rate for slab edge insulation material alone without facing is no greater than 0.3%, water vapor permeance rate is no greater than 2.0 perm/inch and shall be protected from physical damage and UV light deterioration.
4. New roofing, gutters, flashings and moisture sealants between new work and existing construction shall be installed such that exterior moisture will not penetrate the building envelope.
5. Exterior plaster shall be in compliance with ASTM C 926 and ASTM C 1063 & CRC R703.6.
   • Lath and lath attachments shall be of corrosion resistant materials. Expanded metal or woven lath shall be attached with 1-1/2" long, 11 gauge nails having a 7/16" head, or 7/8" long, 16 gauge staples, spaced at no more than 6", or as otherwise approved.
   • Plastering with Portland cement plaster shall be not less than three coats when applied over metal lath or wire lath and shall be not less than two coats when applied over masonry, concrete, pressure-preservative treated wood, decay-resistant wood or gypsum backing.
   • On wood-frame construction with an on-grade floor slab system, exterior plaster shall be applied to cover, but not extend below, lath, paper and screed.
   • A minimum 0.019" (no. 26 galvanized sheet gauge), corrosion-resistant weep screed or plastic weep screed, with a minimum vertical attachment flange of 3 1/2" shall be provided at or below the foundation plate line on exterior stud walls in accordance with ASTM C 926. The weep screed shall be placed a minimum of 4" above the earth or 2" above paved areas and shall be a type that will allow trapped water to drain to the exterior of the building. The weather-resistant barrier shall lap the attachment flange. The exterior lath shall cover and terminate on the attachment flange of the weep screed.
   • Water-resistive barriers shall be installed and, where applied over wood-based sheathing, shall include a water-resistive vapor-permeable barrier with a performance at least equivalent to two layers of Grade D paper. Where the water-resistive barrier that is applied over wood-based sheathing has a water resistance equal to or greater than that of 60 minute Grade D paper and is separated from the stucco by an intervening, substantially nonwater-absorbing layer or designed drainage space.
6. Lap roofing, gutters, flashings, moisture barriers and sealants to direct exterior moisture away from the building envelope.
7. One layer of No. 15 asphalt felt, free from holes and breaks, complying with ASTM D 226 for Type I felt or other approved water-resistive barrier, shall be applied over studs or sheathing of all exterior walls. Such felt or material shall be applied horizontally, with the upper layer lapped over the lower layer not less than 2". Where the joints occur, felt shall be lapped not less than 6". The felt or approved material shall be continuous to the top of the walls and terminated at penetrations and building appendages in a manner to prevent the accumulation of water within the wall assembly. Omission of the water-resistive barrier is permitted under paperbacked stucco lath when the paper backing is an approved water-resistive barrier.
8. Penetration of fire-resistant walls, floor ceilings and roof ceilings shall be protected as required in CBC Section 712.
9. Refer to Exterior Elevations and Structural Plans for framing sizing, plate/header heights and schedules.
10. Refer to Floor Plan General Notes and Title 24 report for insulation ratings, requirements and additional information.
11. Unless specified otherwise, all wall coverings shall be securely fastened in accordance with CBC 1404.4 or with other approved aluminum, stainless steel, zinc-coated or other approved corrosion-resistive fasteners.
12. Weep screeds shall be a minimum of 26 gauge galvanized sheet, corrosion-resistant, with a minimum vertical attachment flange of 3 1/2". Weep screeds shall be provided at or below the foundation plate line on all exterior walls. The screed shall be placed a min. of 4" above the earth or 2" above paved areas and shall be a type that will allow trapped water to drain to the exterior of the building. The weather-resistive barrier shall lap the attachment flange, and the exterior lath shall cover and terminate on the attachment flange of the screed.

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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Goverment Center, Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**SECTIONS**

CONSULTANT:

STAMP:

LICENSED ARCHITECT C-32913 SHANA MARIE REISS REN. 09-30-25 STATE OF CALIFORNIA

DATE:

April 4, 2024

REVISIONS:

B1 Bid Set Update 07/25/2025

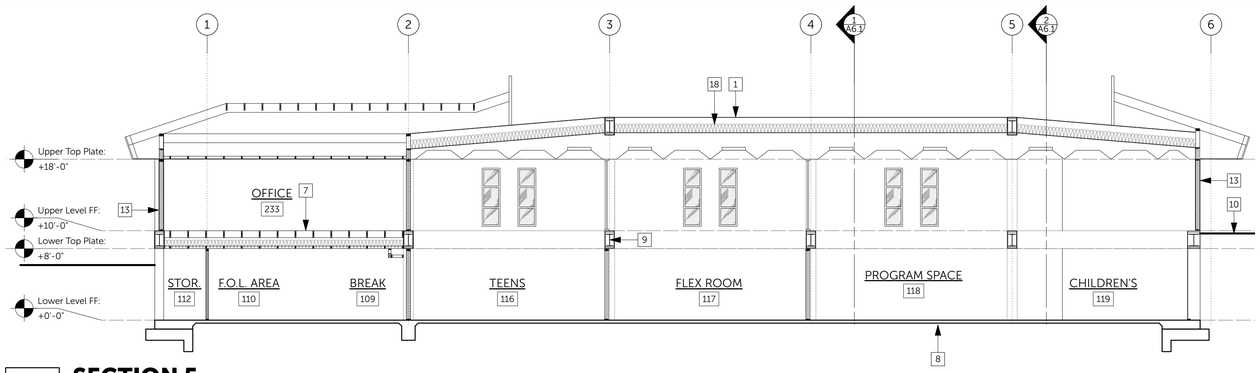
JOB NUMBER:

2308

SHEET:

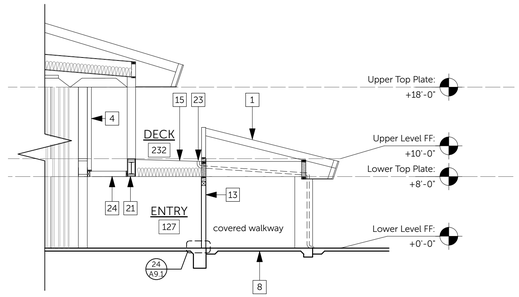
A6.1

Date: July 25, 2025 Time: 8:47:49 AM File name: 04_Arroyo Grande Library_CA_Elevations Sections.vwx




## 5 SECTION 5

**Scale: 1/8" = 1'-0"**




## 6 SECTION 6

**Scale: 1/8" = 1'-0"**

## BUILDING SECTION REFERENCE NOTES

1. Existing (E) Roofing to remain, all drainage to remain
2. Exterior finish per Exterior Elevations
3. 2x4 vertical wall framing per Floor Plan(s) and Structural Plan(s)
4. 2x6 vertical wall framing per Floor Plan(s) and Structural Plan(s)
5. R-19 insulation min. or Refer to Title 24 Report/Mandatory Measures
6. R-30 insulation min. or Refer to Title 24 Report/Mandatory Measures
7. (E) Sheathing over floor framing
8. (E) Slab on grade.
9. (E) Beam/Header to remain
10. Finish grade.
11. (E) Stairs
12. Soffit
13. (E) Wall to remain. Patch and refinish as necessary.
14. (E) Parapet. Refer to Roof Plan and referenced detail(s).
15. (E) Deck
16. (N) Storefront beyond
17. (N) Skylight
18. (E) Insulation to remain
19. (N) Planter
20. (N) Retaining Wall 5' tall
21. (N) Beam/Header per Structural Plans
22. (N) Slab on grade. Refer to Foundation Plan General Notes & Title 24 for waterproofing.
23. Existing drain to remain where occurs, terminate at bottom of wall to splash block/hardscape
24. (N) Floor joists per Structural Plans

B1

## BUILDING SECTION GENERAL NOTES

1. Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19% moisture content. Refer to Cal Green 5.505 (non-residential), for moisture content verification methods. Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Wet-applied insulation products shall follow the manufacturers' drying recommendations prior to enclosure. Exterior sheathing shall be dry before applying exterior cover.
2. Concrete slab foundations required to have a vapor retarder by Cal Green Code and CBC, California Code of Regulations, Title 24, Part 2, Chapter 19. Concrete slabs shall be installed with a capillary break per Cal Green Code 4.505.2.1.
3. Water absorption rate for slab edge insulation material alone without facing is no greater than 0.3%, water vapor permeance rate is no greater than 2.0 perm/inch and shall be protected from physical damage and UV light deterioration.
4. New roofing, gutters, flashings and moisture sealants between new work and existing construction shall be installed such that exterior moisture will not penetrate the building envelope.
5. Exterior plaster shall be in compliance with ASTM C 926 and ASTM C 1063 & CRC R703.6.
   • Lath and lath attachments shall be of corrosion resistant materials. Expanded metal or woven lath shall be attached with 1-1/2" long, 11 gauge nails having a 7/16" head, or 7/8" long, 16 gauge staples, spaced at no more than 6", or as otherwise approved.
   • Plastering with Portland cement plaster shall be not less than three coats when applied over metal lath or wire lath and shall be not less than two coats when applied over masonry, concrete, pressure-preservative treated wood, decay-resistant wood or gypsum backing.
   • On wood-frame construction with an on-grade floor slab system, exterior plaster shall be applied to cover, but not extend below, lath, paper and screed.
   • A minimum 0.019" (no. 26 galvanized sheet gauge), corrosion-resistant weep screed or plastic weep screed, with a minimum vertical attachment flange of 3 1/2" shall be provided at or below the foundation plate line on exterior stud walls in accordance with ASTM C 926. The weep screed shall be placed a minimum of 4" above the earth or 2" above paved areas and shall be a type that will allow trapped water to drain to the exterior of the building. The weather-resistant barrier shall lap the attachment flange. The exterior lath shall cover and terminate on the attachment flange of the weep screed.
   • Water-resistive barriers shall be installed and, where applied over wood-based sheathing, shall include a water-resistive vapor-permeable barrier with a performance at least equivalent to two layers of Grade D paper. Where the water-resistive barrier that is applied over wood-based sheathing has a water resistance equal to or greater than that of 60 minute Grade D paper and is separated from the stucco by an intervening, substantially nonwater-absorbing layer or designed drainage space.
6. Lap roofing, gutters, flashings, moisture barriers and sealants to direct exterior moisture away from the building envelope.
7. One layer of No. 15 asphalt felt, free from holes and breaks, complying with ASTM D 226 for Type I felt or other approved water-resistive barrier, shall be applied over studs or sheathing of all exterior walls. Such felt or material shall be applied horizontally, with the upper layer lapped over the lower layer not less than 2". Where the joints occur, felt shall be lapped not less than 6". The felt or approved material shall be continuous to the top of the walls and terminated at penetrations and building appendages in a manner to prevent the accumulation of water within the wall assembly. Omission of the water-resistive barrier is permitted under paperbacked stucco lath when the paper backing is an approved water-resistive barrier.
8. Penetration of fire-resistant walls, floor ceilings and roof ceilings shall be protected as required in CBC Section 712.
9. Refer to Exterior Elevations and Structural Plans for framing sizing, plate/header heights and schedules.
10. Refer to Floor Plan General Notes and Title 24 report for insulation ratings, requirements and additional information.
11. Unless specified otherwise, all wall coverings shall be securely fastened in accordance with CBC 1404.4 or with other approved aluminum, stainless steel, zinc-coated or other approved corrosion-resistive fasteners.
12. Weep screeds shall be a minimum of 26 gauge galvanized sheet, corrosion-resistant, with a minimum vertical attachment flange of 3 1/2". Weep screeds shall be provided at or below the foundation plate line on all exterior walls. The screed shall be placed a min. of 4" above the earth or 2" above paved areas and shall be a type that will allow trapped water to drain to the exterior of the building. The weather-resistive barrier shall lap the attachment flange, and the exterior lath shall cover and terminate on the attachment flange of the screed.

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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Goverment Center, Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**SECTIONS**

CONSULTANT:

STAMP:

LICENSED ARCHITECT
C-32912
SHANA MARIE REISS
REN. 09-30-25
STATE OF CALIFORNIA

DATE:

April 4, 2024

REVISIONS:

B1 Bid Set Update 07/25/2025

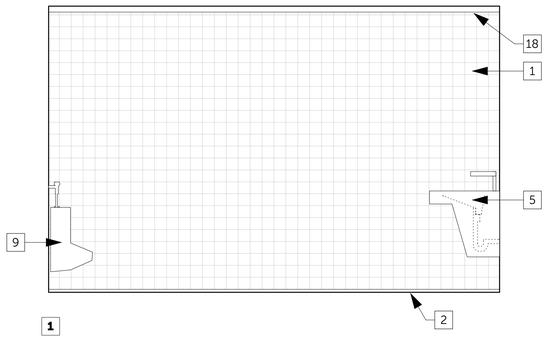
JOB NUMBER:

2308

SHEET:

A6.2

Date: July 25, 2025 Time: 8:47:50 AM File name: 04_Arroyo Grande Library_CA_Elevations Sections.vwx

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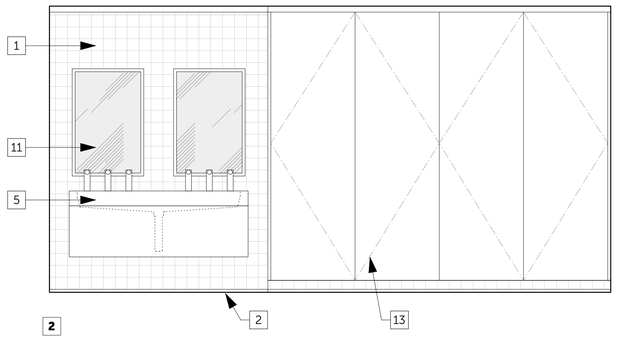


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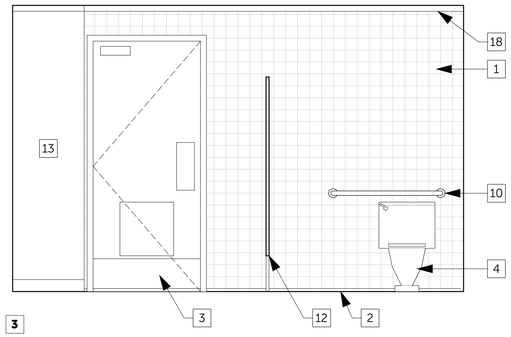


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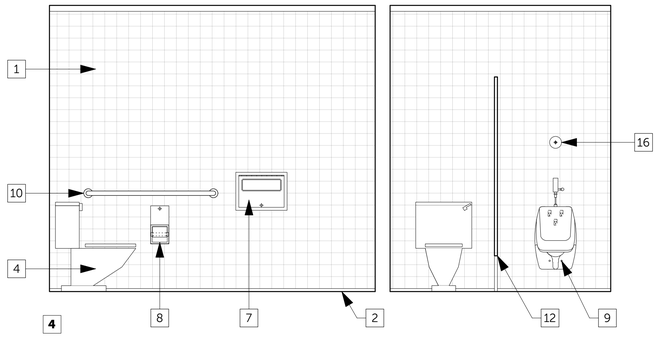
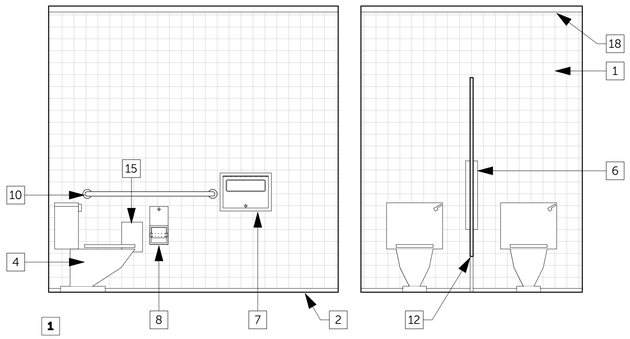



4

## 1 MENS RESTROOM - 124

**Scale: 1/2" = 1'-0"**

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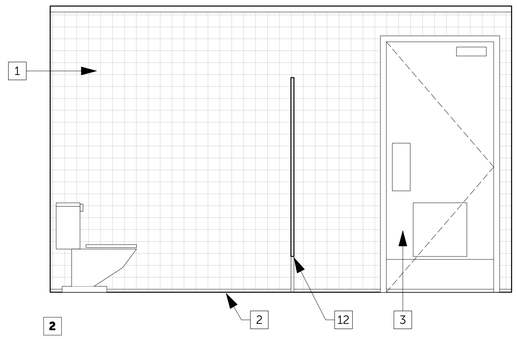


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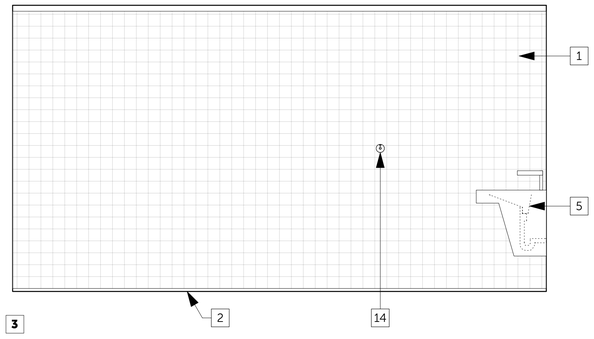


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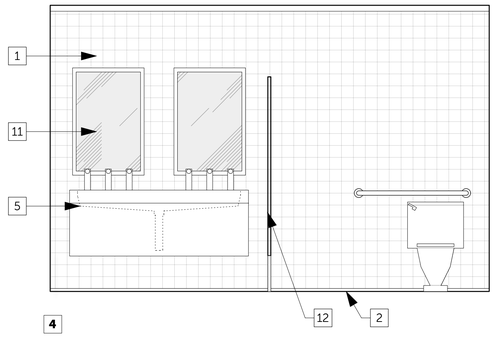


4

## 2 WOMENS RESTROOM - 122

**Scale: 1/2" = 1'-0"**

## INTERIOR ELEVATION REFERENCE NOTES

1. Wall tile, refer to Interior Finish Schedule on sheet A8.1.
2. Cove, refer to Interior Finish Schedule on sheet A8.1.
3. Door, refer to Door Schedule on sheet A8.1
4. Accessible water closet. Refer to Plumbing Plans and Accessibility Notes on sheet ADA1.2.
5. Accessible lavatory sink. Refer to 22/ADA1.2 for mounting height requirements.
6. Partition mounted seat cover/ toilet paper dispenser. Refer to Restroom Accessory schedule, refer to A3.1.
7. Surface mounted seat cover dispenser. Refer to Restroom Accessory Schedule. Refer to A3.1 and 22/ADA1.2 for mounting height requirements.
8. Surface mounted toilet paper dispenser. Refer to Restroom Accessory Schedule. Refer to A3.1 and 22/ADA1.2 for mounting height requirements.
9. Urinal. Refer to Plumbing Plans, Accessibility Notes, 41/ADA1.2, and 22/ADA1.2 for mounting height requirements.
10. Grab bar. Refer to Restroom Accessory Schedule on sheet A3.1 and 22/ADA1.2 for mounting height requirements.
11. Mirror, refer to Restroom Accessory Schedule on sheet A3.1 and 22/ADA1.2 for mounting height requirements.
12. Toilet partitions, Scranton Products - Hiny Hiders or approved equal. color: Paisley
13. Full height storage built-in, refer to detail 33/A9.4.
14. Surface mounted hook, Refer to restroom accessory schedule, refer to A3.1 and 22/ADA1.2 for mounting height requirements.
15. Surface mounted sanitary napkin receptacle. Refer to Restroom Accessory Schedule on sheet A3.1 and 22/ADA1.2 for mounting height requirements.
16. Cleanout above fixture connection, stainless cover plate, refer to Plumbing plans
17. Baby changing table, surface mounted. Refer to Restroom Accessory Schedule on sheet A3.1 and 22/ADA1.2 for mounting height requirements.
18. 2" crown molding


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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050

800 W. Branch Street
Arroyo Grande, CA 93420

CLIENT:

SHEET CONTENTS:

**INTERIOR ELEVATIONS**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. These approved plans shall be made available when inspections are requested.
All changes must be approved.

STAMP:

LICENSED ARCHITECT
C-32912
SHANA MARIE REISS
REN. 09-30-25
STATE OF CALIFORNIA

DATE:

April 4, 2024

REVISIONS:

JOB NUMBER:

SHEET:

A7.1

Date: January 15, 2025 Time: 2:45:51 PM File name: Arroyo Grande Library_CD Elevations Sections.vwx

## INTERIOR ELEVATION REFERENCE NOTES

1. Wall tile, refer to Interior Finish Schedule on sheet A8.1.
2. Cove, refer to Interior Finish Schedule on sheet A8.1.
3. Door, refer to Door Schedule on sheet A8.1
4. Accessible water closet. Refer to Plumbing Plans and Accessibility Notes on sheet ADA1.2.
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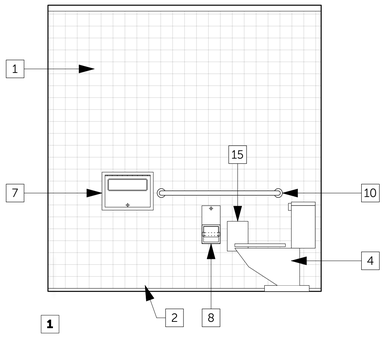
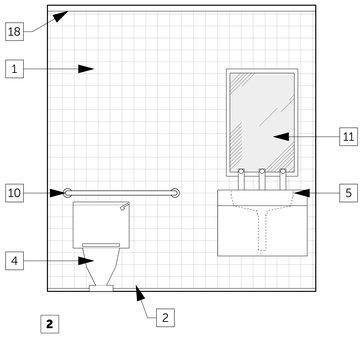
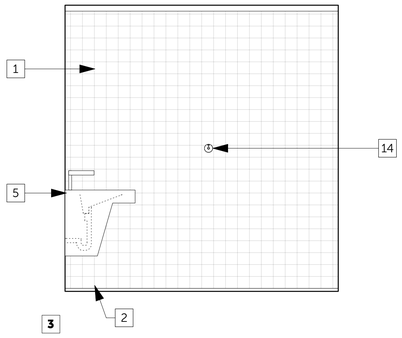
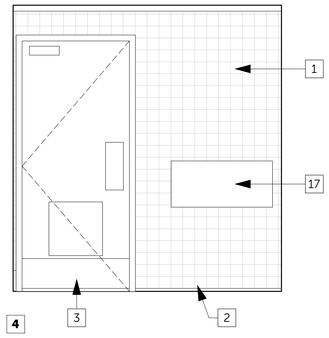
14. Surface mounted hook, Refer to restroom accessory schedule, refer to A3.1 and 22/ADA1.2 for mounting height requirements.
15. Surface mounted sanitary napkin receptacle. Refer to Restroom Accessory Schedule on sheet A3.1 and 22/ADA1.2 for mounting height requirements.
16. Cleanout above fixture connection, stainless cover plate, refer to Plumbing plans
17. Baby changing table, surface mounted. Refer to Restroom Accessory Schedule on sheet A3.1 and 22/ADA1.2 for mounting height requirements.
18. 2" crown molding



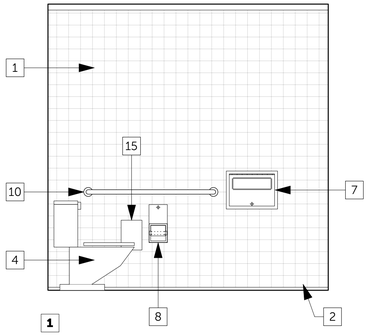



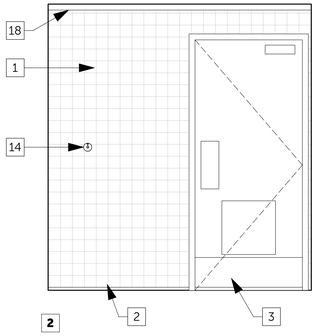



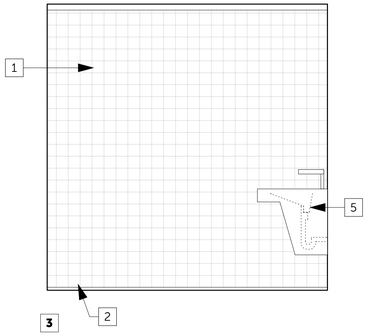



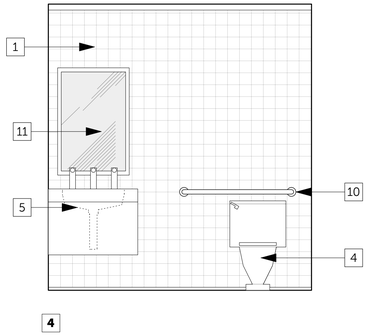

## 1 FAMILY RESTROOM - 121

**Scale: 1/2" = 1'-0"**




## 2 RESTROOM - 115

**Scale: 1/2" = 1'-0"**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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050

800 W. Branch Street
Arroyo Grande, CA 93420

CLIENT:

SHEET CONTENTS:

**INTERIOR ELEVATIONS**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. These approved plans shall be made available when inspections are requested.
All changes must be approved.

STAMP:

LICENSED ARCHITECT
C-32912
SHANA MARIE REISS
REN. 09-30-25
STATE OF CALIFORNIA

DATE:

April 4, 2024

REVISIONS:

JOB NUMBER:

SHEET:

A7.2

Date: January 15, 2025 Time: 2:45:52 PM File name: Arroyo Grande Library_CD Elevations Sections.vwx

# INTERIOR FINISH SCHEDULE

| ROOM # | ROOM NAME | FLOOR | CEILING | WALLS | BASE | COMMENT |
|---|---|---|---|---|---|---|
| BUILDING NAME | | | | | | |
| 101 | BOOK STACKS | RSF | TB | 58GB | RB | - |
| 102 | READING | RSF | TB | 58GB | RB | |
| 103 | FOL | RSF | 58GB | 58GB | RB | |
| 104 | STAFF AREA | RSF | 58GB | 58GB | RB | |
| 105 | SLA OFFICE | RSF | 58GB | 58GB | RB | |
| 106 | BRANCH MANAGER | RSF | 58GB | 58GB | RB | |
| 107 | RENTABLE ROOM | RSF | 58GB | 58GB | RB | |
| 108 | RENTABLE ROOM | RSF | 58GB | 58GB | RB | |
| 109 | BREAK ROOM | RSF | 58GB | 58GB | RB | |
| 110 | FOL AREA | RSF | 58GB | 58GB | RB | |
| 111 | STORAGE | E | E | E | E | |
| 112 | STORAGE | E | E | E | E | |
| 113 | STORAGE | E | E | E | E | |
| 114 | STORAGE | E | E | E | E | |
| 115 | RESTROOM | T | 58GB | CWT | SH | |
| 116 | TEEN | RSF | TB | 58GB | RB | |
| 117 | FLEX ROOM | RSF | TB | 58GB | RB | |
| 118 | PROGRAM SPACE | RSF | TB | 58GB | RB | |
| 119 | CHILDREN'S | RSF | TB | 58GB | RB | 1 |
| 120 | STORAGE | RSF | 58GB | 58GB | RB | |
| 121 | FAMILY RR | T | 58GB | CWT | SH | |
| 122 | WOMEN'S RR | T | 58GB | CWT | SH | |
| 123 | HALL | RSF | 58GB | 58GB | RB | |
| 124 | MEN'S RR | T | 58GB | CWT | RB | |
| 125 | JANITOR | E | E | E | E | |
| 126 | STAIRS | E | E | E | E | |
| 127 | ENTRY | TC/RSF | 58GB | 58GB | RB | FLUSH CARPET TILES |
| BUILDING NAME | | | | | | |
| 227 | HALL | E | E | E | E | - |
| 228 | ELECT. ROOM | E | E | E | E | |
| 229 | JANITOR | E | E | E | E | |
| 230 | OFFICE | E | E | E | E | |
| 232 | MECH. ROOM | RSF | 58GB | 58GB | RB | |
| 233 | OFFICE | E | E | E | E | |
| 234 | ELECT. ROOM | E | E | E | E | |
| 235 | STAIRS | E | E | E | E | |

B1

## INTERIOR MATERIAL LEGEND (for approved equal), refer also to Specifications

B1

**FLOOR**

RSF RESILIENT SHEET FLOORING — Mannington, No Reservations Xpress, Steadfast,NR108

TC TILE CARPETING — Tandus Centiva/Tarkett, Powerbond 24"x24" tiles, Grid Overlay II, Color Hyland #44029; Use Schluter Reno-U, Brushed Antique Bronze Anodized

T TILE FLOORING — Daltile, 1x1 Mosaic Keystones, Desert Gray Speckle (1) D200

E EXISTING TO REMAIN

**BASE**

RB 6" RUBBER COVED WALL BASE

SH SCHLUTER

**WALLS**

58GB 5/8" GYPSUM WALLBOARD

CWT CERAMIC WALL TILE — Daltile, 4x4 Semi-Gloss, Arctic White 0190 (1)

E EXISTING TO REMAIN

**CEILING**

58GB 5/8" GYPSUM WALLBOARD

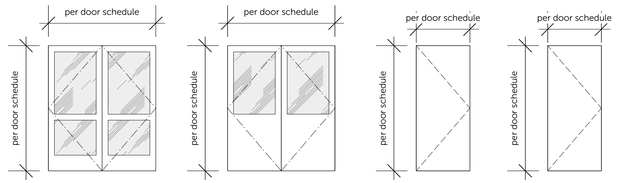
TB Existing T-BAR

**NOTES**

1. (4) wall paint colors anticipated, including paint for abstract mountain scene on walls.
2. Refer to provided specifications for products/ materials
3. Refer to A8.2 for interior paint diagram.

B1

# DOOR TYPES refer also to specifications

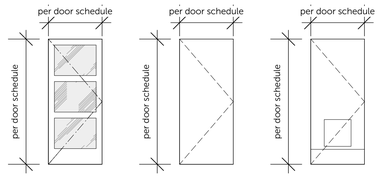



**A. Exterior Double Swing Door - Glass**
Hollow metal door, Tempered glazing

**B. Exterior Double Swing Door - Half Glass**
Hollow metal door, Tempered glazing

**C1. Exterior Single Door**
Hollow metal door, paint

**C2. Exterior Single Door**
2hr. fire rated, refer to specfications

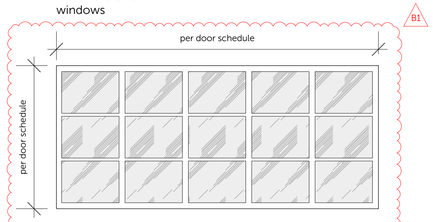



**D. Interior Single Door**
Solid Core with Tempered glazing, Paint, Mullion/muntins to match storefront windows

**E. Interior Single Door**
Solid Core, Paint

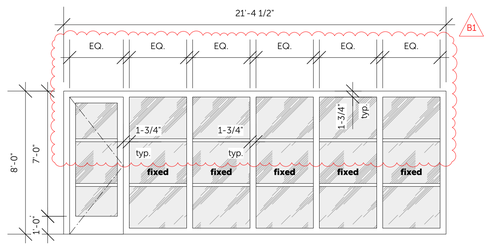
**F. Interior Single Door w/ louvers**
Solid Core, Paint

B1



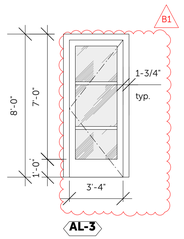

**H. Interior Overhead Sectional Door**
Tempered glazing, lock out control

# STOREFRONT TYPES refer also to specifications




B1

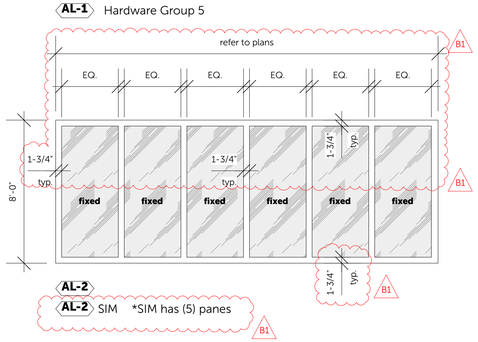
**AL-1** Hardware Group 5




B1

**AL-3**

Hardware Group 5
match the door to door of AL-1




B1

**AL-2**

**AL-2** SIM *SIM has (5) panes

B1

# DOOR SCHEDULE

| Mark | Type | Width | Height | Thickness | Seals (Y/N) | Sign | O.H.Group | Notes |
|---|---|---|---|---|---|---|---|---|
| 1 | B | 6'0" | 7'0" | 1 3/4 | Y | | 1 | Tempered, threshold refer 24/A9.1; provide knox box on adjacent wall, glazing tint to match reused adjacent windows |
| 2 | A | 6'0" | 7'0" | 1 3/4 | Y | ADA | 2 | Tempered, threshold refer 24/A9.1; provide international symbol of accessibility sticker on door, glazing tint to match reused adjacent windows |
| 3 | A | 6'0" | 7'0" | 1 3/4 | Y | | 2 | Tempered, threshold refer 24/A9.1, glazing tint to match reused adjacent windows |
| 4 | C1 | 3'0" | 7'0" | 1 3/4 | N | FIRE RISER | 3 | provide knox box on door |
| 5 | - | 3'0" | 7'0" | 1 3/4 | Y | | - | existing to remain |
| 6 | - | 3'0" | 7'0" | 1 3/4 | N | | - | existing to remain |
| 7 | F | 3'0" | 7'0" | 1 3/4 | N | MENS | 4 | |
| 8 | F | 3'0" | 7'0" | 1 3/4 | N | WOMENS | 4 | |
| 9 | F | 3'0" | 7'0" | 1 3/4 | N | UNISEX | 7 | |
| 10 | E | 3'0" | 7'0" | 1 3/4 | N | | 3 | |
| 12 | H | 18'0" | 8'0" | 1 3/4 | N | | - | Tempered, overhead sectional door |
| 13 | E | 3'0" | 7'0" | 1 3/4 | N | | 6 | |
| 14 | F | 3'0" | 7'0" | 1 3/4 | N | UNISEX | 7 | |
| 15 | - | 2'8" | 7'0" | 1 3/4 | N | | - | existing to remain |
| 17 | - | 3'0" | 7'0" | 1 3/4 | N | | - | existing to remain |
| 18 | - | 3'0" | 7'0" | 1 3/4 | N | | - | existing to remain |
| 19 | D | 3'6" | 7'0" | 1 3/4 | N | | 5 | |
| 20 | D | 3'0" | 7'0" | 1 3/4 | N | | 5 | |
| 21 | D | 3'0" | 7'0" | 1 3/4 | N | | 5 | |
| 22 | D | 3'0" | 7'0" | 1 3/4 | N | EMERGENCY EXIT ONLY | 9 | Provide panic hardware |
| 23 | D | 3'0" | 7'0" | 1 3/4 | N | | 6 | |
| 24 | D | 3'0" | 7'0" | 1 3/4 | N | | 6 | |
| 25 | C2 | 3'0" | 7'0" | 1 3/4 | Y | | 8 | 2 hours fire rated |
| 26 | - | 3'0" | 7'0" | 1 3/4 | N | | - | existing to remain |
| 27 | - | 3'0" | 7'0" | 1 3/4 | N | | - | existing to remain |
| 28 | E | 3'0" | 7'0" | 1 3/4 | N | | 6 | |
| 29 | - | 3'0" | 7'0" | 1 3/4 | N | | - | existing to remain |
| 30 | - | 3'0" | 7'0" | 1 3/4 | Y | | - | existing to remain |
| 31 | - | 3'0" | 7'0" | 1 3/4 | N | | - | existing to remain |
| 32 | - | 3'0" | 7'0" | 1 3/4 | N | | - | existing to remain |
| 33 | - | 3'0" | 7'0" | 1 3/4 | Y | | - | existing to remain |
| 34 | - | 3'0" | 7'0" | 1 3/4 | N | | - | existing to remain |
| 35 | - | 3'0" | 7'0" | 1 3/4 | Y | | - | existing to remain |
| 36 | - | 3'0" | 7'0" | 1 3/4 | Y | | - | existing to remain |
| 37 | C1 | 3'0" | 6'8" | 1 3/4 | Y | | 3 | Threshold refer 24/A9.1, glazing tint to match reused adjacent windows |
| 38 | | 3'0" | 3'6" | 1 3/4 | N | EMERGENCY EXIT ONLY - ALARM WILL SOUND | | gate within fence, provide panic hardware, dummy pull trim and alarm package |
| 39 | C1 | 3'0" | 6'8" | 1 3/4 | Y | | 3 | Threshold refer 24/A9.1, glazing tint to match reused adjacent windows |
| 40 | | 3'0" | 3'6" | 1 3/4 | N | EMERGENCY EXIT ONLY - ALARM WILL SOUND | | gate within fence, provide panic hardware, dummy pull trim and alarm package |

B1

1

B1

B1

1

* Door #11 is not used

# DOOR GENERAL NOTES refer also to specifications

1. All Doors shall be in compliance with CEnC Section 110.6.
2. Rough openings for door installation shall be verified with shop drawings prior to construction.

**Door Hardware Groups**

For all groups, refer to specification section 08 71 00.

**Group 1**
- Key System
- Door Closer
- Panic Hardware - night latch 990 (must coordinate with County lock set requirements)
- Hinges and Butts
- Threshold
- Kick Plates
- Weatherstripping

**Group 2**
- Door Closer
- Panic Hardware - Dummy Trim 990
- Hinges and Butts
- Threshold
- Kick Plates
- Weatherstripping

**Group 3**
- Key System
- Lock Set
- Hinges and Butts

**Group 4**
- Door Closer
- Hinges and Butts
- Threshold
- Door Pull
- Louvers
- Kick Plates
- Push Plates
- Stops

**Group 5**
- Door Closer
- Hinges and Butts per storefront manufacturer
- Door Pull
- Kick Plates
- Push Plates

**Group 6**
- Key System
- Lock Set
- Door Closer
- Hinges and Butts
- Kick Plates

**Group 7**
- Key System
- Lock Set - Thumbturn
- Door Closer
- Hinges and Butts
- Threshold
- Door Pull
- Louvers
- Kick Plates
- Push Plates

**Group 8**
- Key System
- Lock Set
- Door Closer
- Hinges and Butts
- Threshold
- Kick Plates
- Push Plates
- Weatherstripping

B1

**Group 9**
- Door Closer
- Hinges and Butts
- Panic Hardware 996L-BE Lever, Blank escutcheon
- Kick Plates
- Push Plates

# WINDOW SCHEDULE

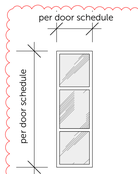
| Mark | Type | Width | Height | Head/Jamb Detail | Sill Detail | Comments |
|---|---|---|---|---|---|---|
| A | 1 | 2'0" | 6'6" | 34/A9.1 | 34/A9.1 | reuse salvaged window |
| B | 1 | 2'0" | 6'6" | 34/A9.1 | 34/A9.1 | reuse salvaged window |
| C | 1 | 2'0" | 6'6" | 34/A9.1 | 34/A9.1 | reuse salvaged window |
| D | 1 | 2'0" | 6'6" | 34/A9.1 | 34/A9.1 | reuse salvaged window |
| E | 1 | 2'0" | 6'6" | 34/A9.1 | 34/A9.1 | reuse salvaged window |
| F | 1 | 2'0" | 6'6" | 34/A9.1 | 34/A9.1 | reuse salvaged window |
| G | 1 | 2'0" | 6'6" | 34/A9.1 | 34/A9.1 | reuse salvaged window |
| H | 1 | 2'0" | 6'6" | 34/A9.1 | 34/A9.1 | reuse salvaged window |
| J | 1 | 2'0" | 6'6" | 34/A9.1 | 34/A9.1 | reuse salvaged window |
| K | 1 | 2'0" | 6'6" | 34/A9.1 | 34/A9.1 | reuse salvaged window |
| L | 1 | 2'0" | 6'6" | 34/A9.1 | 34/A9.1 | reuse salvaged window |
| M | 1 | 2'0" | 6'6" | 34/A9.1 | 34/A9.1 | reuse salvaged window |
| N | 1 | 2'0" | 6'6" | 34/A9.1 | 34/A9.1 | reuse salvaged window |
| P | 1 | 2'0" | 6'6" | 34/A9.1 | 34/A9.1 | reuse salvaged window |

B1

# WINDOW GENERAL NOTES

1. All windows shall be in compliance with CEnC Section 110.6.
2. All windows shall be aluminum storefront, slider operable with lock from interior
   Manufactured by: refer to spec book
   Color: provide color samples for selection to match existing
3. Rough openings for window installation shall be verified with shop drawings prior to construction. Coordinate top of window heights with top of door heights for continuous finish.
4. Provide screens at all operable windows.
5. All windows shall be clear dual-glazed, UNO, have a label listing the certified U-Factor, certified Solar Heat Gain Coefficient (SHGC), and infiltration that meets the requirements of CEnC Section 110.6. Refer to Title 24 requirements for additional glazing requirements.
6. Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors shall have a maximum U-factor of 0.58; or weighted averate U-factor of all fenestration shall not exceed 0.58.
7. All exterior windows and windows between conditioned and unconditioned spaces shall limit air leakage, be weatherstripped, and all joints and penetrations caulked and sealed.
8. Exterior windows shall be constructed of multipane glazing with a minimum of one tempered pane meeting the requirements of CBC Section 2406 safety glazing, or be constructed of glass block units, or have a fire-resistance rating of not less than 20 minutes when tested in accordance with NFPA 257, or be tested to meet the performance requirements of SFM 12-7A-2.
9. All window and door header/sill heights are taken from the finish floor elevations. At recessed openings, coordinate header height such that the tops of windows and doors are the same elevation, taking into account any additional 2x framing required per detail and/or different manufacturer's installation recommendations.
10. Unit skylights shall be tested and labeled as complying with AAMA/WDMA/CSA 101/I.S.2/A440. The label shall state the name of the manufacturer, the approved labeling agency, the product designation and the performance grade rating as specified in AAMA/WDMA/CSA 101/I.S.2/A440. Skylights and sloped glazing shall comply with CRC Section R308.6.

# WINDOW TYPES




**1. Fixed/Awning**
Reuse salvaged windows

B1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County Goverment Center, Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**DOOR, WINDOW, & FINISH SCHEDULES**

CONSULTANT:

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DATE:

July 2, 2024

REVISIONS:

1 Plan Check 1 County of SLO, 10/28/2024

B1 Bid Set Update 07/25/2025

JOB NUMBER:

2308

SHEET:

A8.1


Date: July 25, 2025 Time: 10:32:36 AM File name: 03_Arroyo Grande Library_CA_Plans.vwx

# INTERIOR PAINT LEGEND

| | | | | |
|---|---|---|---|---|
| - | P1 | Alabaster, SW7008 | Semi-Gloss | All walls, u.n.o., and all columns & beams |
| | P2 | Mural | Semi-Gloss | Gradient (P3, P4, & P5) |
| | P3 | Parisian Patina, SW9041 | Semi-Gloss | Darkest Accent Color |
| | P4 | Kind Green, SW6457 | Semi-Gloss | Mid-Level Accent Color |
| | P5 | Slow Green, SW6456 | Semi-Gloss | Lightest Accent Color |

All upper level to be painted Alabster, SW7008
All LVL slats to be painted Alabster, SW7008

**1 INTERIOR PAINT DIAGRAM**

**Scale: 1/8" = 1'-0"**


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**INTERIOR PAINT DIAGRAM**

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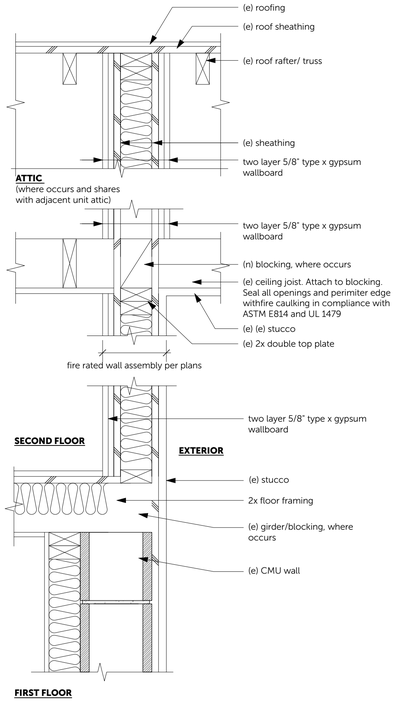
A8.2 B1


Date: July 25, 2025 Time: 10:32:38 AM File name: 03_Arroyo Grande Library_CA_Plans.vwx

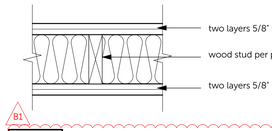



**UL U301**

**gypsum wallboard, wood studs**

| | |
|---|---|
| gypsum panels: | (2) layers 5/8" sheetrock gypsom panel |
| wood studs: | 2"x6" wood studs, 16" o.c. |
| insulation: | 5-1/2" fiberglass insulation |
| gypsum panels: | (2) layers 5/8" sheetrock gypsom panel |

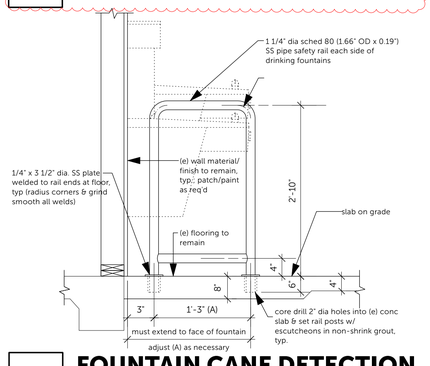
thickness: 8"




B1

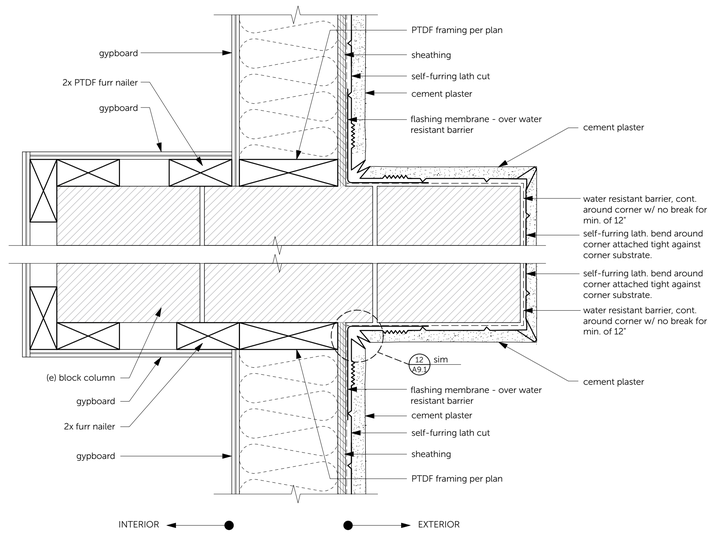
## 53 TWO HOUR FIRE RATED WALL

1 1/2" = 1'-0"



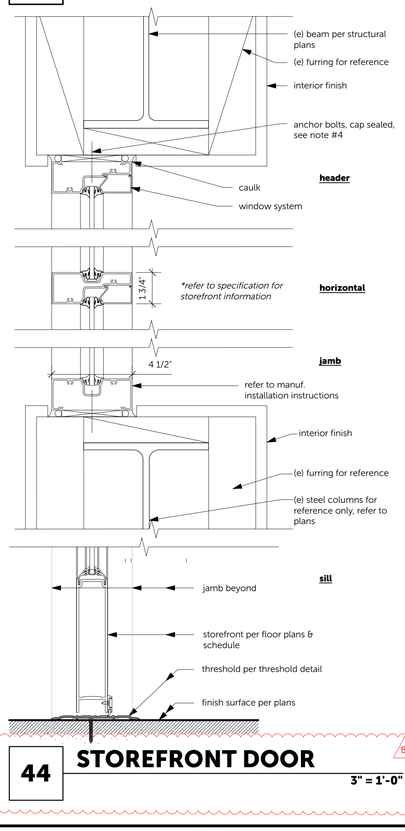

## 54 FOUNTAIN CANE DETECTION

NOT TO SCALE




## 42 NEW FURRING/FINISH AT (E) COLUMNS

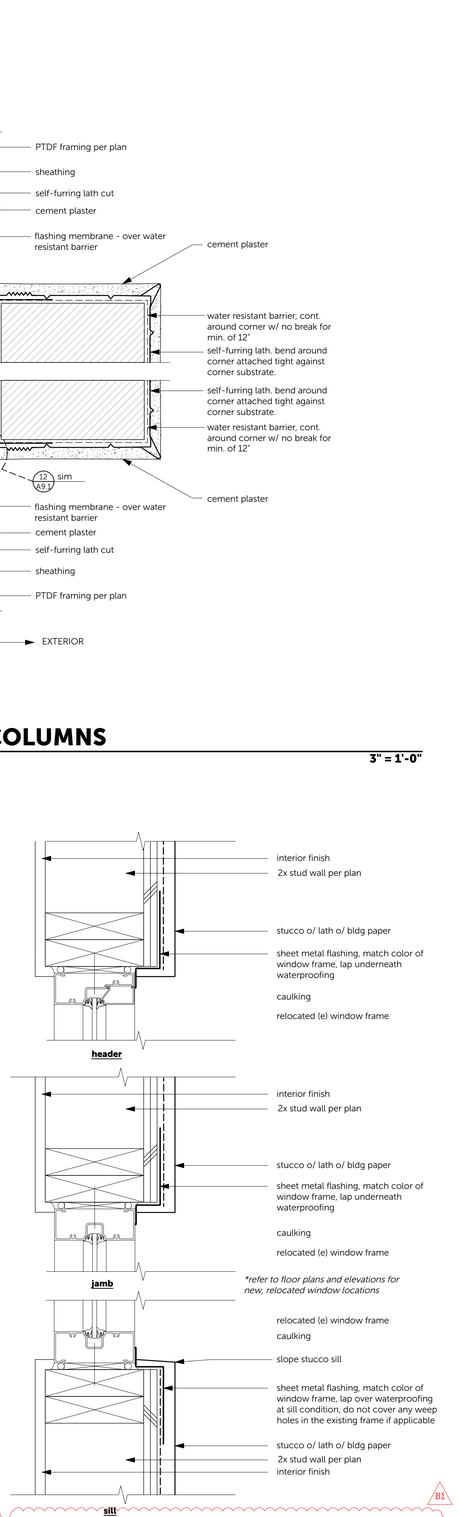
3" = 1'-0"




B1

## 44 STOREFRONT DOOR

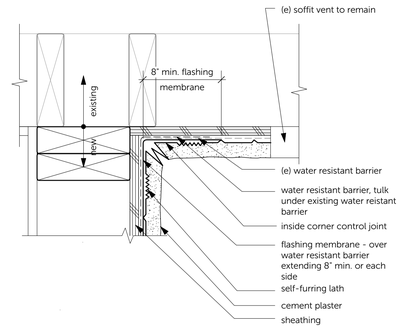
3" = 1'-0"




B1

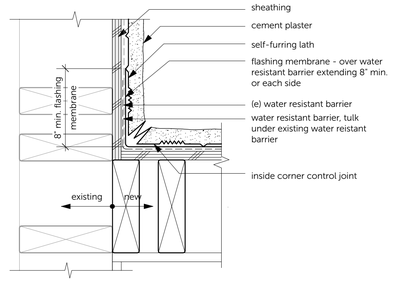
## 34 FLUSH WINDOW @ STUCCO

3" = 1'-0"




## 21 NEW INSIDE CORNER CTRL JOINT @ (E) CEILING

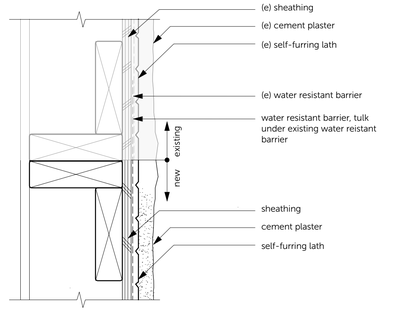
3" = 1'-0"




**note:** an inside corner control joint is not a standard recommendation when framing and substrate construction that stucco assembly is attached to are the same side.

## 22 NEW INSIDE CORNER CTRL JOINT @ (E) WALL

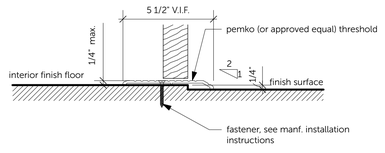
3" = 1'-0"




## 23 NEW WALL TO (E) WALL STUD

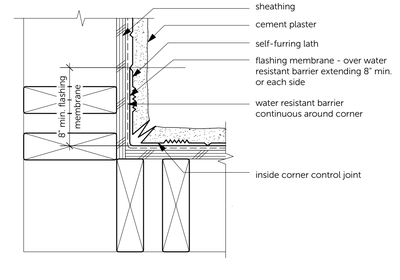
3" = 1'-0"

* verify change in finished surface when selecting appropriate threshold




## 24 1/4" OFFSET THRESHOLD*

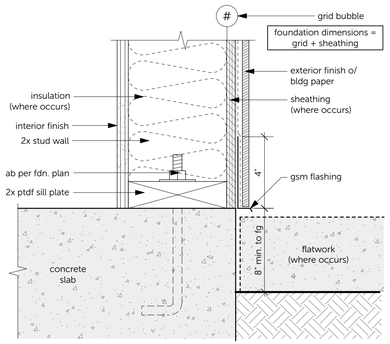
3" = 1'-0"




**note:** an inside corner control joint is not a standard recommendation when framing and substrate construction that stuco assembly is attached to are the same side.

## 12 INSIDE CORNER CONTROL JOINT

3" = 1'-0"




## 14 BASE OF WALL

3" = 1'-0"

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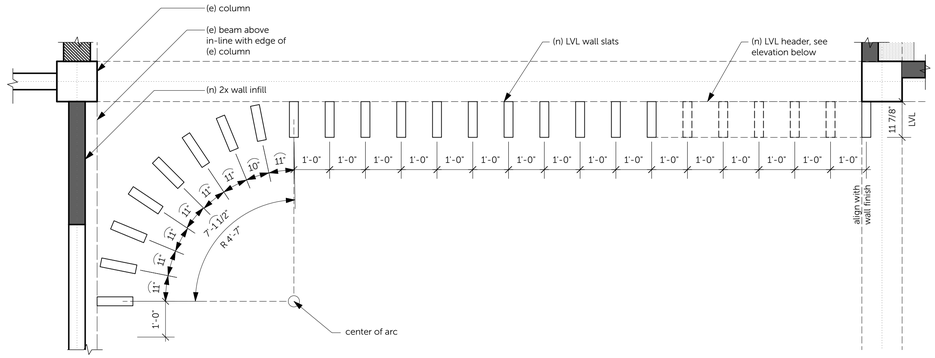
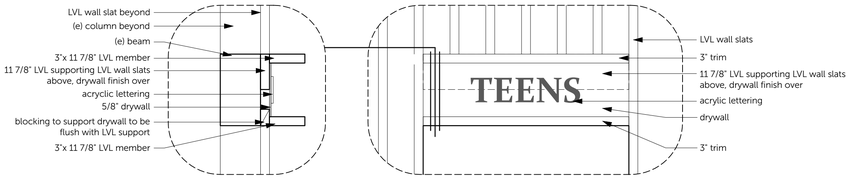
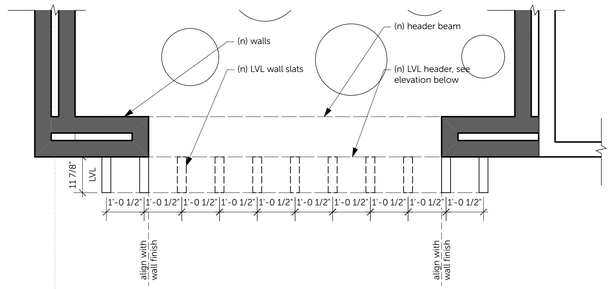



**FLOOR PLAN**

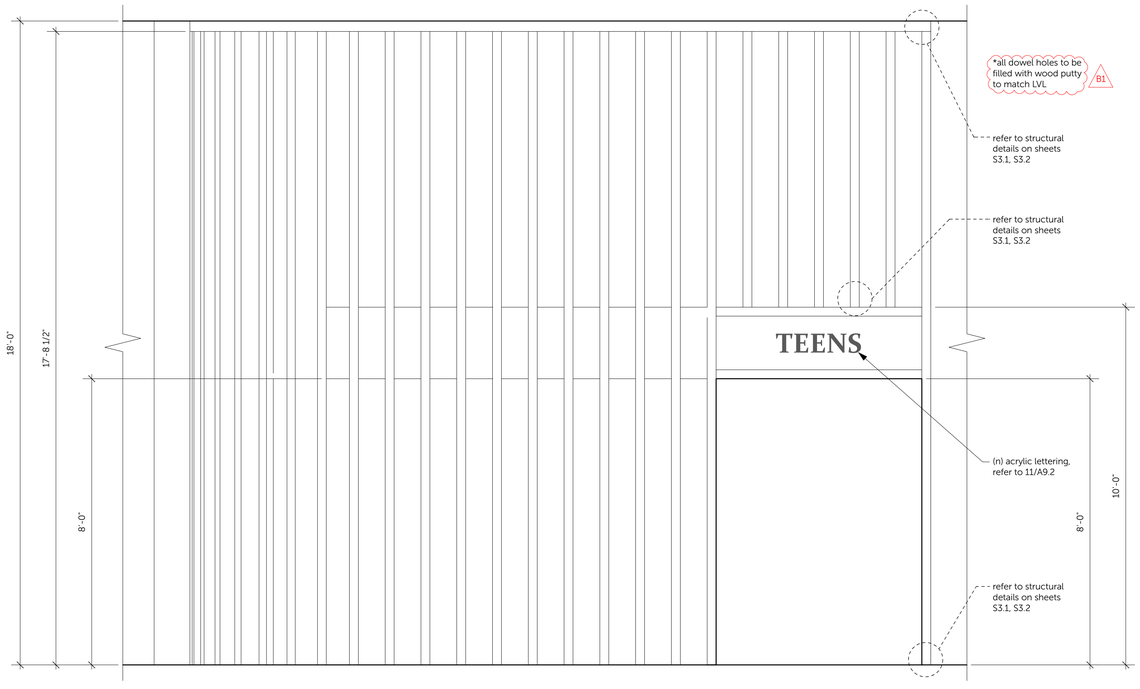



## ACRYLIC LETTERING ROOM NAMES

1/2" = 1'-0"



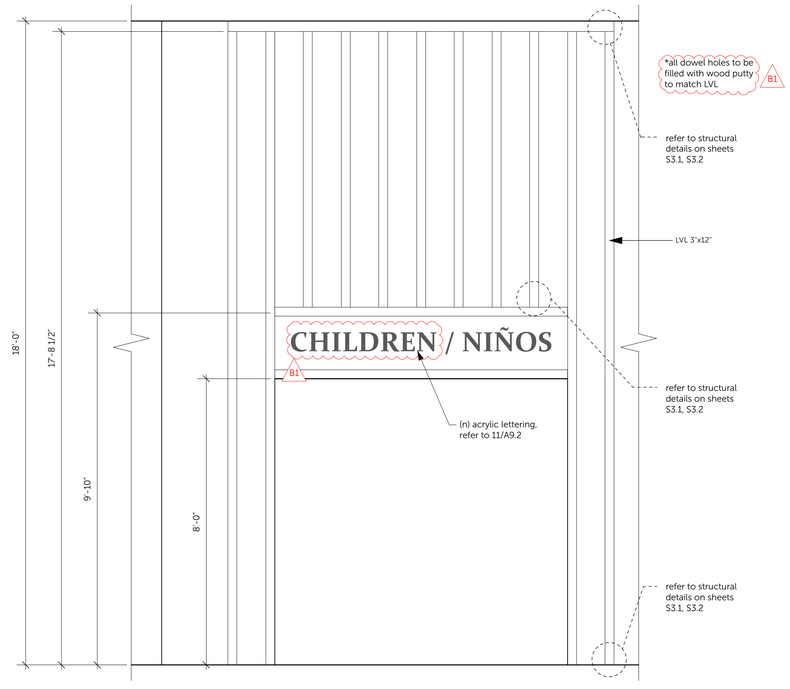

**FLOOR PLAN**




**ELEVATION**

## SLAT WALL @ TEENS

1/2" = 1'-0"




**ELEVATION**

## SLAT WALL @ CHILDREN'S

1/2" = 1'-0"

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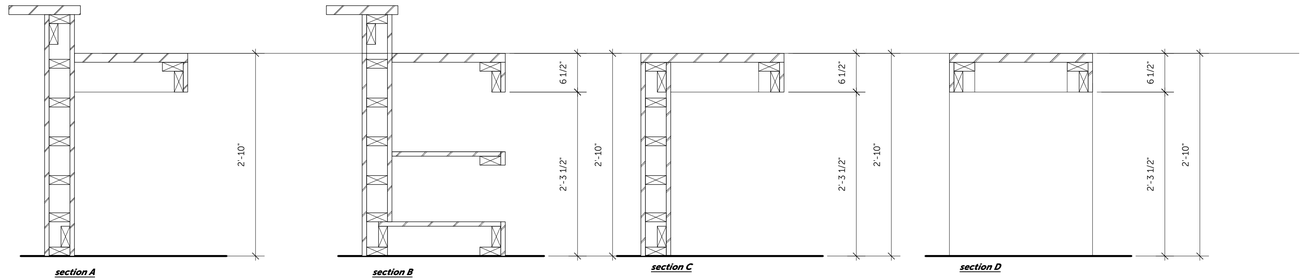
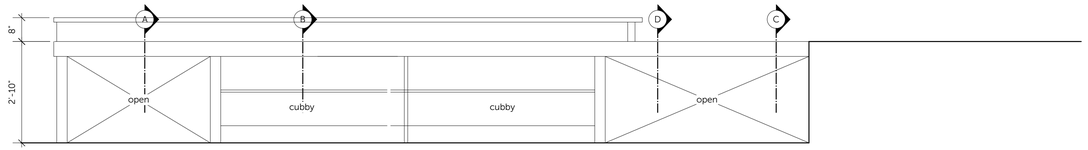
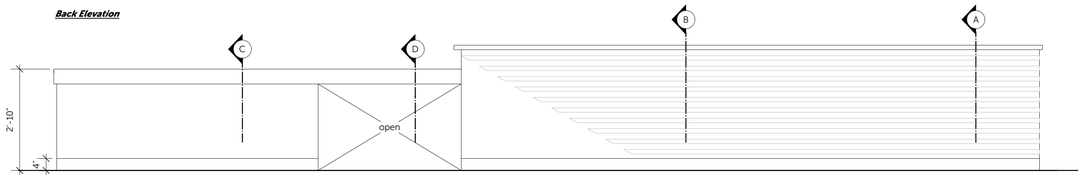
Date: July 25, 2025 Time: 10:44:43 AM File name: 05_Arroyo Grande Library_CD Details.vwx

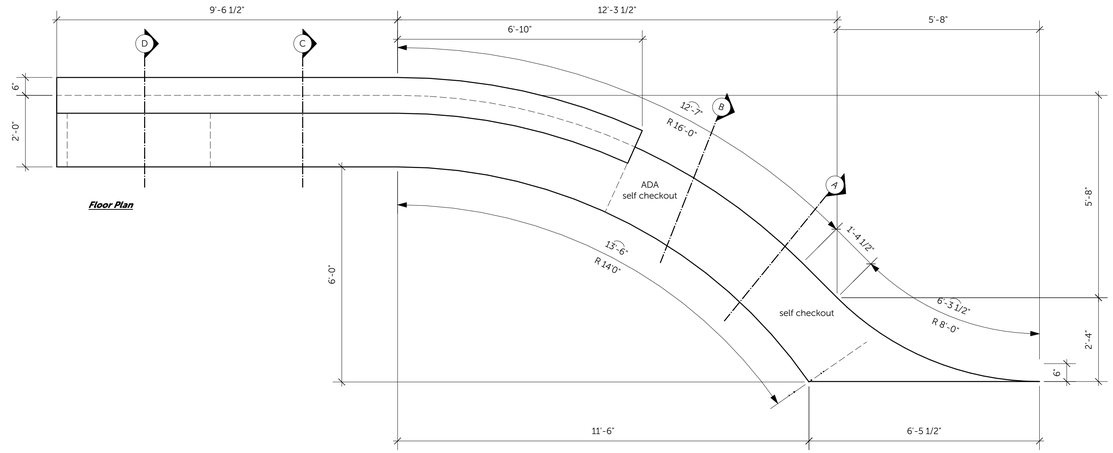



***Back Elevation***



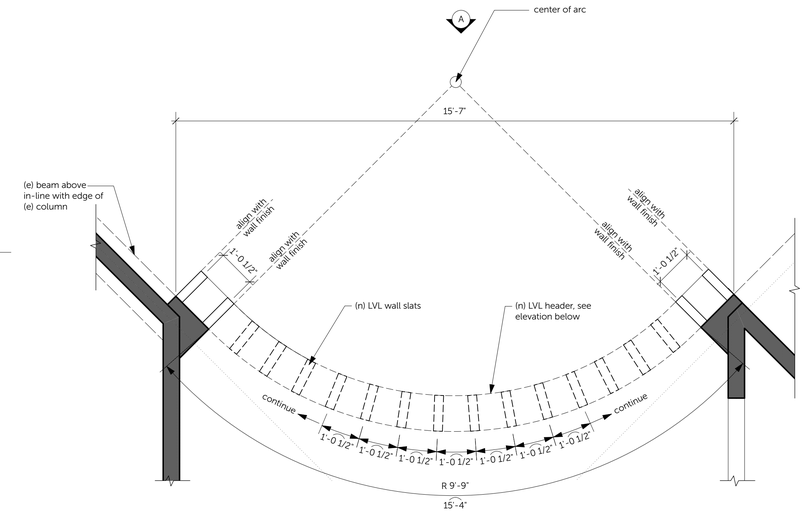

***Front Elevation***



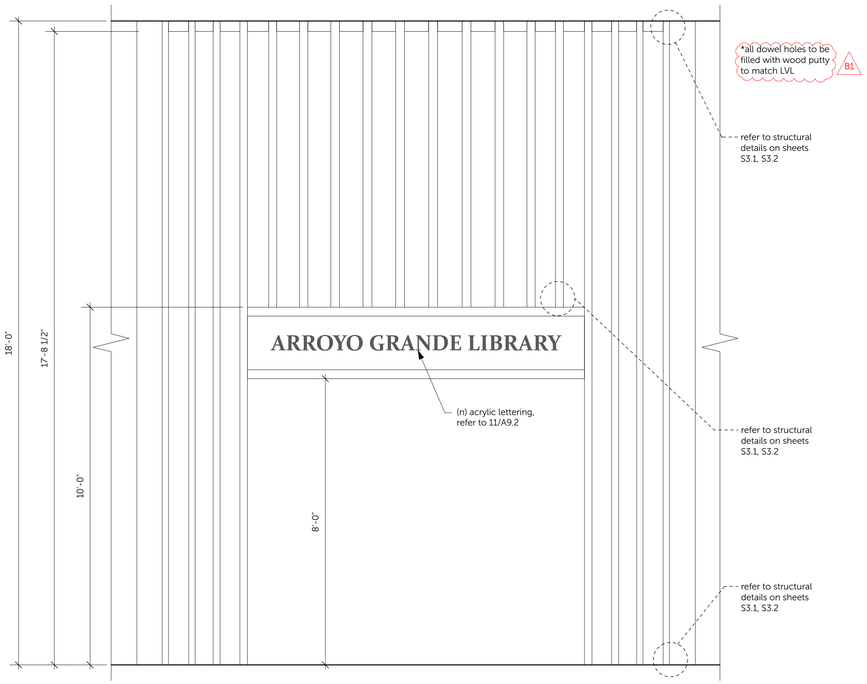

***Floor Plan***

## 54 HELP DESK

1/2" = 1'-0"




**FLOOR PLAN**




**ELEVATION A**

## 24 SLAT WALL @ ENTRY

1/2" = 1'-0"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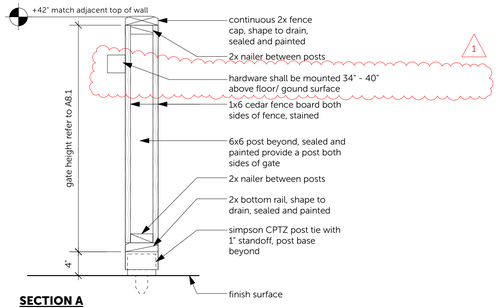
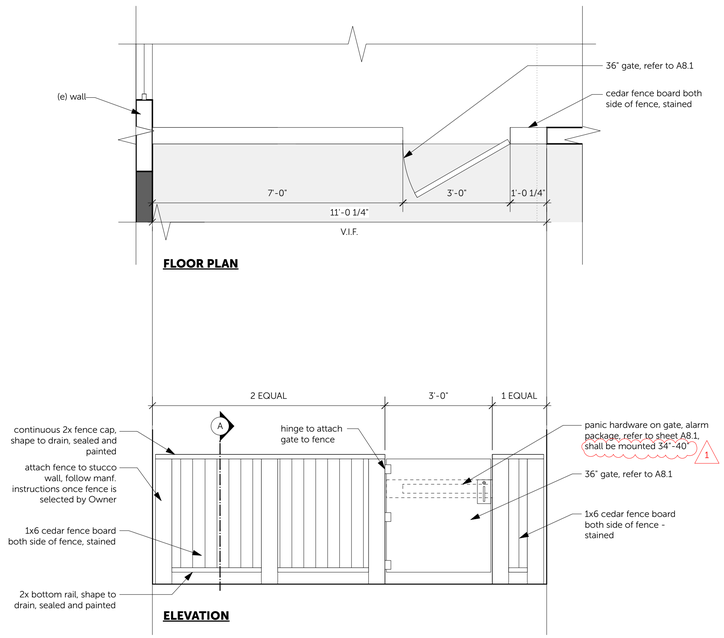
A9.3


File name: 05- Arroyo Grande Library - CD Details.vwx




**SECTION A**

scale 1"= 1'-0"




**FLOOR PLAN**

**ELEVATION**

## 52 GATE

1/2" = 1'-0"



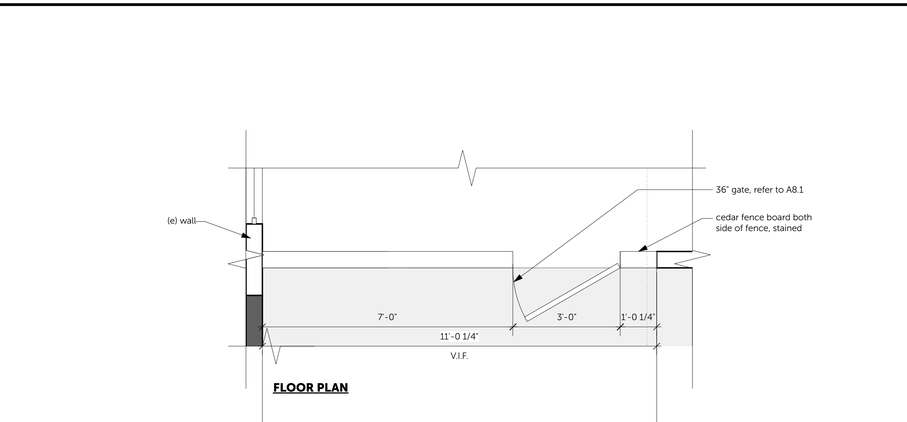

**FLOOR PLAN**




**ELEVATION**

## 54 FULL HEIGHT STORAGE AT MEN RESTROOM

1/2" = 1'-0"




*CNC file for cutout design to be coordinated with the Architect during construction. To be painted P3, P4, or P5. Refer to A8.2 for paint color specifics.

## 43 TREE DETAIL

1/2" = 1'-0"

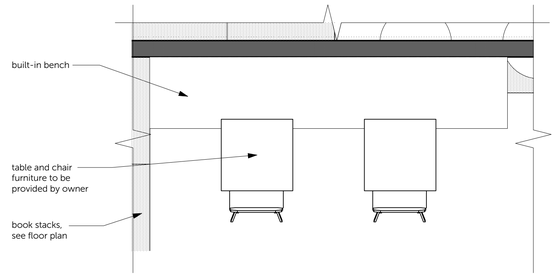



**Interior book drop.**

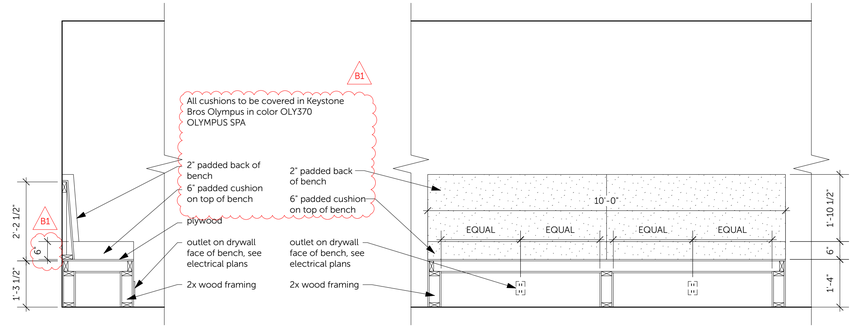
**Interior and exterior rough cut out for book drop.**

## 44 BOOK DROP

1/2" = 1'-0"




**FLOOR PLAN**

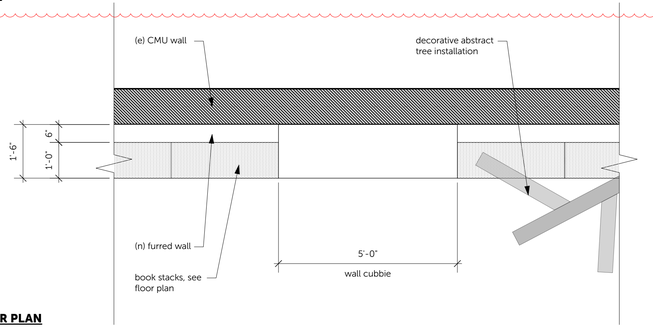



**SECTION**

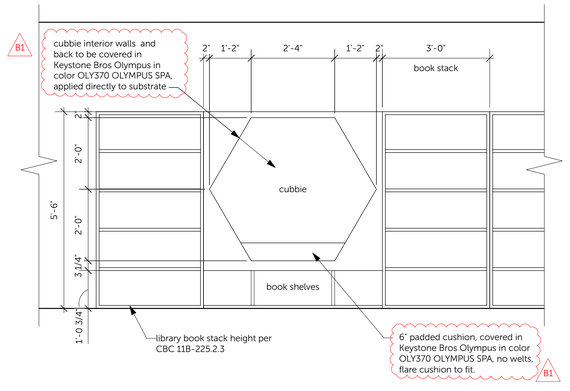
**ELEVATION**

## B1 22 BENCH SEATING AT TEEN AREA

1/2" = 1'-0"




**FLOOR PLAN**




**ELEVATIONS**

## 24 CUBBIES IN CHILDREN'S AREA

1/2" = 1'-0"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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050

800 W. Branch Street
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Goverment Center, Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**ARCHITECTURAL DETAILS**

CONSULTANT:

STAMP:

LICENSED ARCHITECT C-32912 SHANA MARIE REISS REN. 09-30-25 STATE OF CALIFORNIA

DATE:

April 4, 2024

REVISIONS:

1 Plan Check 1 County of SLO, 10/28/2024

B1 Bid Set Update 07/25/2025

JOB NUMBER:

SHEET:

A9.4

File name: 05_Arroyo Grande Library_CD Details.vwx Date: July 25, 2025 Time: 10:44:44 AM

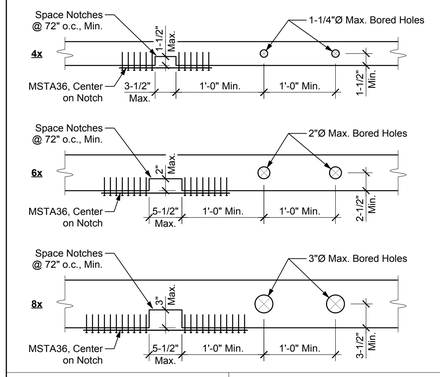
# Arroyo Grande Library

## 800 W Branch St.
## Arroyo Grande, CA 93420

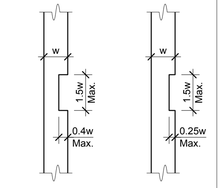
## STANDARD DETAILS

### 9 TYPICAL NOTCHING & BORING

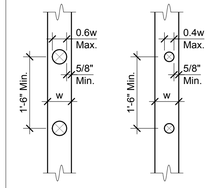
**PENETRATIONS IN TOP PLATES & SILL PLATES**




**NOTCHING LIMITS FOR WOOD STUDS**

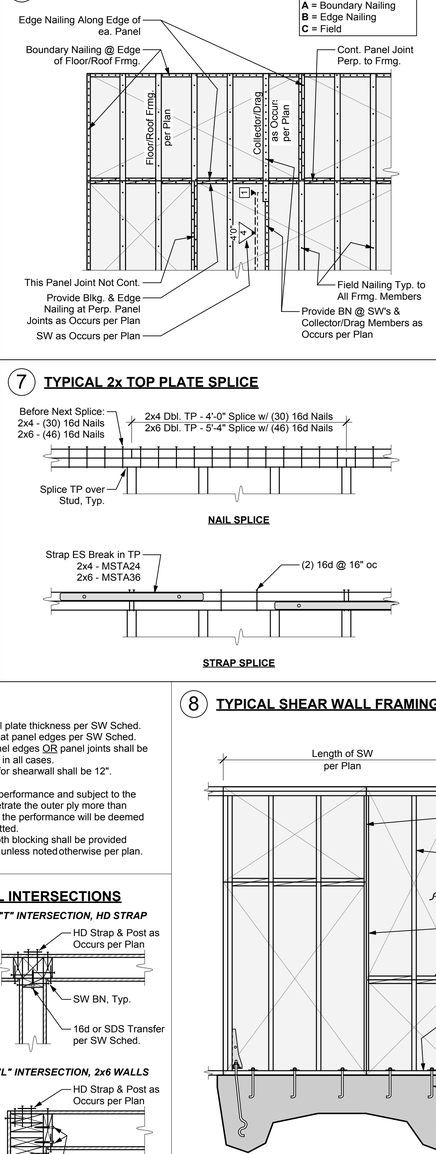



**BORING LIMITS FOR WOOD STUDS**

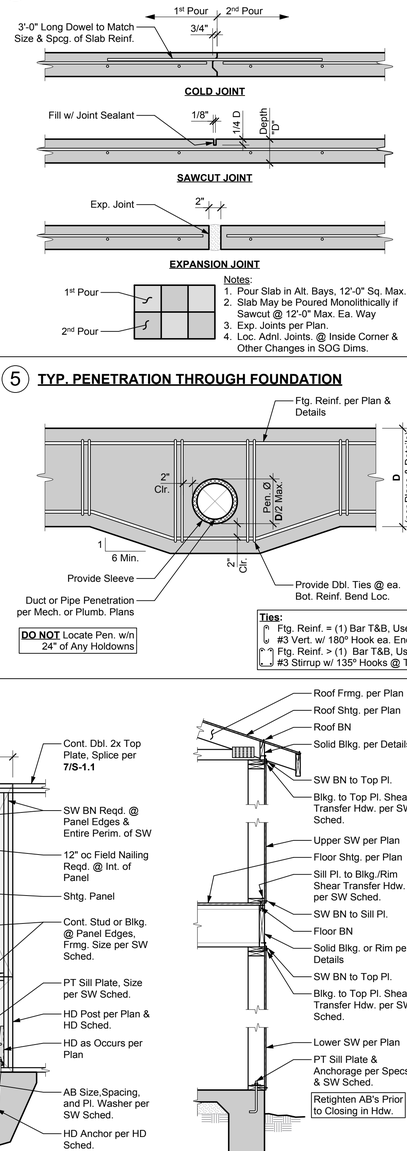



### 6 TYPICAL FLOOR / ROOF NAILING

Nailing per Plan w/ Spcg. Denoted as **@ A", B", C"**
**A** = Boundary Nailing
**B** = Edge Nailing
**C** = Field

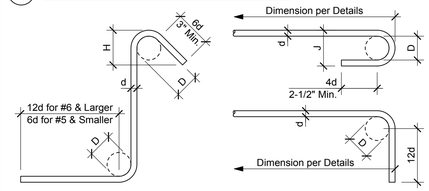



### 4 TYPICAL CONCRETE SLAB JOINTS




Notes:
1. Pour Slab in Alt. Bays, 12'-0" Sq. Max.
2. Slab May be Poured Monolithically if Sawcut @ 12'-0" Max. Ea. Way
3. Exp. Joints per Plan.
4. Loc. Adnl. Joints. @ Inside Corner & Other Changes in SOG Dims.

### 1 TYPICAL REINFORCING BAR BENDS




**STANDARD TIES & STIRRUPS**

| Bar Size | D | H (Approx.) |
|---|---|---|
| #3 | 1-1/2" | 3" |
| #4 | 2" | 3" |
| #5 | 2-1/2" | 3-3/4" |
| #6 | 4-1/2" | 4-1/2" |
| #7 | 5-1/4" | 5-1/4" |
| #8 | 6" | 6" |

**STANDARD END HOOKS**

| Bar Size | D | J |
|---|---|---|
| #3 | 2-1/4" | 3" |
| #4 | 3" | 4" |
| #5 | 3-3/4" | 5" |
| #6 | 4-1/2" | 6" |
| #7 | 5-1/4" | 7" |
| #8 | 6" | 8" |

Note:
All Bar Bend Diameters & End Lengths Must Conform to the CRSI Manual of Standard Practice

### 7 TYPICAL 2x TOP PLATE SPLICE



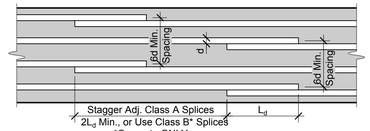

### 5 TYP. PENETRATION THROUGH FOUNDATION




**Ties:**
- Ftg. Reinf. = (1) Bar T&B, Use #3 Vert. w/ 180° Hook ea. End
- Ftg. Reinf. > (1) Bar T&B, Use #3 Stirrup w/ 135° Hooks @ Top

**DO NOT** Locate Pen. w/n 24" of Any Holdowns

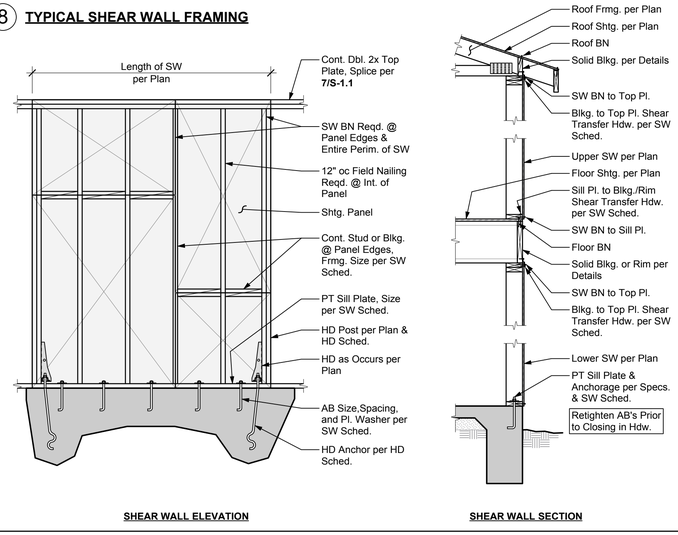
### 2 STD. DEVELOPMENT LENGTHS & LAP SPLICES



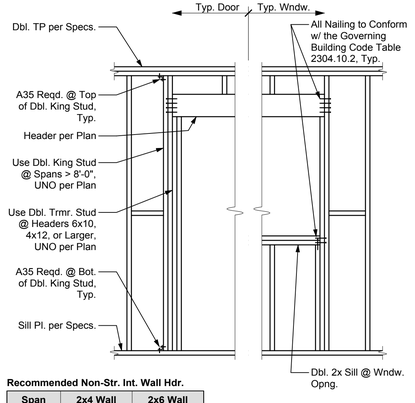

| Bar Size | CONCRETE f'c = 2500 psi Length of Lap Lap & Class A | Class B | Hook Embed Ldh |
|---|---|---|---|
| #3 | 15" | 19" | 7" |
| #4 | 19" | 25" | 10" |
| #5 | 24" | 31" | 14" |
| #6 | 29" | 37" | 18" |
| #7 | 41" | 54" | 22" |
| #8 | 47" | 61" | 27" |

| Bar Size | MASONRY f'm = 1500 psi Length of Lap, Ld | Hook Embed Ldh |
|---|---|---|
| #3 | 12" | 5" |
| #4 | 20" | 7" |
| #5 | 31" | 8" |
| #6 | 59" | 10" |
| #7 | 80" | 11" |
| #8 | 121" | 13" |

### 8 TYPICAL SHEAR WALL FRAMING




### 3 TYPICAL WOOD FRAMED OPENING



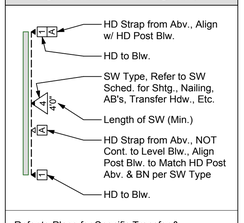

**Recommended Non-Str. Int. Wall Hdr.**

| Span | 2x4 Wall | 2x6 Wall |
|---|---|---|
| < 4'-0" | Dbl. 2x4 Flat | Dbl. 2x6 Flat |
| < 6'-0" | 4x4 | 4x6 Flat |
| < 8'-0" | 4x6 | 6x6 |
| > 8'-0" | Span in Feet Equals Beam Depth in Inches | |

### TYPICAL SHEAR WALL FRAMING NOTES:

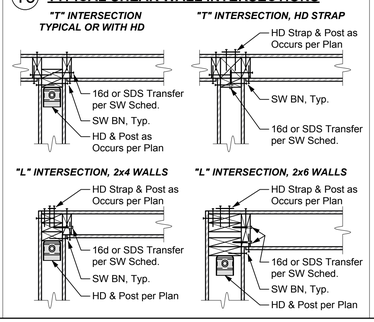
1. Single sided shear walls may be placed on EITHER side of the framed wall.
2. Sill plates on masonry or concrete to be pressure treated per Timber / Lumber specifications. Sill plate thickness per SW Sched.
3. Wall studs and blkg. are required at all adjoining panel edges. Thickness of wall studs and blkg. at panel edges per SW Sched.
4. Where plywood is applied on both faces of a wall, edge nails shall be staggered on adjacent panel edges OR panel joints shall be offset to fall on different framing members. Plywood joint and sill plate nailing shall be staggered in all cases.
5. Plywood panels shall butt along centerlines of framing members. Minimum plywood dimension for shearwall shall be 12".
6. Nails shall be located at least 3/8" from all panel edges.
7. The use of pneumatic nail guns for shear wall nailing is subject to continued satisfactory jobsite performance and subject to the review and approval by the Engineer of Record and/or Building Inspector. If the nail heads penetrate the outer ply more than would be normal for a hand held hammer, or if the minimum edge distances are not maintained, the performance will be deemed as unsatisfactory and the continued use of pneumatic nail for shear wall nailing will not be permitted.
8. At all bearing walls (both exterior and interior walls) not noted as shear walls, continuous full depth blocking shall be provided between joists and rafters with LTP4 or A35 to top plates @ 32" oc at floors and 48" oc at roofs, unless noted otherwise per plan.
9. Refer to material specifications for additional framing requirements.

### SHEAR WALL LEGEND




Refer to Plans for Specific Transfer & Connection Detail at each Shear Wall Location

### 10 TYPICAL SHEAR WALL INTERSECTIONS




## ABBREVIATIONS

| | | | |
|---|---|---|---|
| AB | Anchor Bolt | Mas. | Masonry |
| A&B | Above and Below | Max. | Maximum |
| Abv. | Above | MB | Machine Bolt |
| Adn. | Addition (al) | MF | Moment Frame |
| Adj. | Adjacent,Adjustable | Mfr. | Manufacture(r) |
| Alt. | Alternate (ive) | Min. | Minimum, Minute |
| Appd. | Approved | Mod. | Modif(y), (cation) |
| Arch. | Architect(ural) | Mtl. | Metal |
| Avg. | Average | (N) | New |
| Bdry. | Boundary | N/A | Not Applicable |
| Bldg. | Building | Nat. | Natural |
| Blk(g). | Block (ing) | NTS | Not to Scale |
| Bm. | Beam | o/ | Over |
| BN | Boundary Nailing | oc | On Center |
| B-O | Bottom of | OD | Outside Diameter |
| BO | By Others | Opng. | Opening |
| Bot. | Bottom | Opp. | Opposite |
| Brg. | Bearing | Opt. | Optional |
| Btwn. | Between | Para. | Parallel |
| BW | Both Ways | PCF | Lbs per Cubic Ft. |
| Cant. | Cantilever(ed) | Pen. | Penetrate, (tion) |
| CIP | Cast in Place | Perf. | Perforated |
| CJ | Ceiling Joist | Perim. | Perimeter |
| CJP | Complete Joint Penetration | Perp. | Perpendicular |
| | | Pl | Panel Index |
| CL | Center Line | PJP | Partial Joint Pen. |
| Clg. | Ceiling | PL | Plate |
| CMU | Conc. Masonry Unit | PLF | Lbs per Linear Ft. |
| Col. | Column | Ply. | Plywood |
| Com. | Common | Prep. | Prepare, (ation) |
| Comp. | Component | Press. | Pressure |
| Conc. | Concrete | Proj. | Project |
| Conn. | Connection | Prop. | Property |
| Const. | Construction | PSF | Lbs per Square Ft. |
| Cont. | Continue (ous) | PSI | Lbs per Square In. |
| Ctr. | Center | PT | Pressure-Treated |
| d | Penny | PV | Photovoltaic (Solar Panels) |
| Dbl. | Double | | |
| Defl. | Deflection | R | Radius |
| Deg. | Degree | Rec(s). | Recommendation(s) |
| Demo. | Demolish(tion) | Rect. | Rectangular |
| Dep. | Depress(ed) | Ref. | Reference |
| DF | Douglas Fir | Reinf. | Reinforce(d), (ment),(ing) |
| Dia. | Diameter | | |
| Diaph. | Diaphragm | Req(d). | Require(d) |
| Dif. | Different | Reqs. | Requirements |
| Dim. | Dimension | Ret. | Retain(ing) |
| Dist. | Distance | RJ | Roof Joist |
| DJ | Deck Joist | RR | Roof Rafter |
| DL | Dead Load | RW | Redwood |
| Dwg. | Drawing | SAD | See Arch Dwg's |
| (E) | Existing | Sched. | Schedule |
| Ea. | Each | Sgl. | Single |
| EF | Each Face | Shtg. | Sheathing |
| EFP | Equivalent Fluid Pressure | Sim. | Similar |
| | | SIP | Str. Insulated Panel |
| Elev. | Elevator, Elevation | SM | Sheet Metal |
| Embed. | Embed(ed), (ment) | SMS | Sheet Metal Screw |
| Engr. | Engineer | SOG | Slab on Grade |
| EOR | Engineer of Record | Spec. | Specif(ied),(cations) |
| Eq. | Equal, Equivalent | Sq. | Square |
| ES | Each Side | SS | Structural Steel |
| EW | Each Way | Std. | Standard |
| Exp. | Expand, Expansion | Stgr. | Stagger(ed) |
| Ext. | Exterior | Stl. | Steel |
| Fdn. | Foundation | Struc. | Structure, (al) |
| FF | Finished Floor | SW | Shear Wall |
| FJ | Floor Joist | Sym. | Symmet(ry), (rical) |
| Flr(g). | Floor (ing) | T&B | Top and Bottom |
| FOC | Face of Concrete | T&G | Tongue and Groove |
| FOM | Face of Masonry | Temp. | Temporary |
| FOS | Face of Studs | Thk. | Thick(ness) |
| FOW | Face of Wall | Thru | Through |
| Frmg. | Framing | TN | Toe-Nail |
| Ft. | Foot, Feet | TP | Top Plate |
| Ftg. | Footing | T-O | Top of |
| Ga. | Gage, Gauge | TOB | Top of Beam |
| Galv. | Galvanized | TOC | Top of Concrete |
| GB | Grade Beam | TOG | Top of Grade |
| GC | General Contractor | TOM | Top of Masonry |
| GLB | Glulam Beam | TOS | Top of Steel |
| Gyp. | Gypsum | TOW | Top of Wall |
| HD | Holdown | TRU | To Remain Unchanged |
| Hdr. | Header | | |
| Hdw. | Hardware | Trmr. | Trimmer Stud |
| Hgr. | Hanger | Typ. | Typical |
| Hor(iz). | Horizontal | UNO | Unless Noted Otherwise |
| Ht. | Height | | |
| ID | Inside Diameter | Vert. | Vertical |
| In. | Inch(es) | VIF | Verify in Field |
| Insp. | Inspect(ion) | VWA | Verify with Arch |
| Int. | Interior | w/ | With |
| Inv. | Invert, Inverted | w/n | Within |
| Jst. | Joist | w/o | Without |
| K | Kips (1,000 pounds) | WS | Wood Screw |
| KLF | Kips per Linear Ft. | Wndw. | Window |
| King | King Stud | Wt. | Weight |
| KP | King Post | WWF | Welded Wire Fabric |
| KSF | Kips per Square Ft. | Yd. | Yard |
| KSI | Kips per Square In. | | |
| Lb(s). | Pound(s) | @ | At |
| LL | Live Load | ° | Degrees |
| Loc. | Location | Ø | Diameter |
| LW | Light Weight | > | Greater Than |
| | | < | Less Than |
| | | # | Number, Pound(s) |
| | | / | Per |
| | | % | Percent(age) |
| | | ± | Plus or Minus |

## PROJECT INFORMATION

**OWNER:**
County of San Luis Obispo
Department of Public Works
County Government Center, Room 206
San Luis Obispo, CA 93408

**ARCHITECT:**
Reiss Design Studio, PC
3055 Duncan Lane, Suite A
San Luis Obispo, CA 93401
(805) 706-0645

## DESIGN PARAMETERS

**GENERAL PARAMETERS**

| | |
|---|---|
| Building Code | 2022 CBC * |
| Roof Loads | |
| Dead Loads** (DL) | 29 psf |
| **Includes 3 psf PV Loads | |
| Live Loads (LL) | 20 psf |
| Floor Loads - Typ. | |
| Dead Loads (DL) | 15 psf |
| Live Loads (LL) | 40 psf |
| Floor Loads - Deck | |
| Dead Loads (DL) | 11 psf |
| Live Loads (LL) | 60 psf |

**SOILS VALUES** (Table 1806.2)

| | |
|---|---|
| Bearing Pressure | 1500 psf |
| Active EFP | 45 pcf |
| Lateral Passive EFP | 130 pcf |
| Exposure | B |
| Importance Factor, $I_w$ | 1.00 |

**WIND DESIGN BASIS**

| | |
|---|---|
| Ultimate Wind Speed, $V_{ULT}$ | 95 mph |
| Nominal Wind Speed, $V_{ASD}$ | 74 mph |
| Risk Category | II |

**SEISMIC DESIGN BASIS**

| | |
|---|---|
| Seismic Design Category | D |
| Site Class | D |
| Seismic Factors | |
| $S_{DS}$ / $S_1$ | 1.065 / 0.389 |
| $S_{DS}$ / $S_{D1}$ | 0.852/ 0.496 |
| Risk Category | II |
| Importance Factor, $I_e$ | 1.00 |
| Resisting System: | Wood Shear Walls |
| Response Mod. Coefficient, R | 6.5 |
| Design Base Shear | V = 0.131W |
| Analysis Procedure: | Eqv. Lateral Force (ASCE 7-16, T. 12.6-1) |

* The 2022 California Building Code (CBC), based on the 2021 International Building Code (IBC), is the governing code in the State of California.

All As Built Information Take from Archived Plans by Architect Stuhr Dodson Foster Mcclave with Approval Dated 12/6/78

## SHEET INDEX


| | |
|---|---|
| S-1.1 | Structural Title Sheet |
| S-1.2 | Structural Specifications |
| S-1.3 | Special Inspections |
| S-2.1 | Foundation Plan |
| S-2.2 | Floor Framing Plan |
| S-2.3 | Roof Framing Plan |
| S-3.1 | Structural Details |
| S-3.2 | Structural Details |
| S-3.3 | Structural Details |



Ashley&Vance ENGINEERING, INC.
1229 Carmel Street
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Engineer of Record:

REGISTERED PROFESSIONAL ENGINEER IAN J. SHOEBRIDGE S 6293 STRUCTURAL STATE OF CALIFORNIA

Arroyo Grande Library
800 W Branch St.
Arroyo Grande, CA 93420

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT-0000055 Date: 10/7/2025
The approval of these plans shall not permit violations of any law or state law.
The County may require this permit or require corrections if there are in error. These approved plans must be made available when inspections are requested.
All changes must be approved.

Revision:

| | | |
|---|---|---|
| 1 | Plan Check | 18 Oct. 2024 |

Proj. Engr.: Emma W. Phone Ext.: 224
Proj. Mngr.: Ian S.
Date: 29 Mar. 2024 Scale: 1/8"=1'-0"
A&V Job No.: 22373

STRUCTURAL TITLE SHEET

S-1.1

DO NOT SCALE THESE DRAWINGS. Refer to Architectural plans for all dimensions.

Oct 23, 2024
11:07:22 AM

## STRUCTURAL STEEL

1. All structural steel and connections shall be fabricated and erected in accordance with AISC specifications, Seismic Provisions Supplements No. 1 and 2, and Code of Standard Practice as amended to date.
2. Steel fabrication shop drawings shall be submitted for review by the Architect and Engineer prior to fabrication.
3. Special Inspection: Continuous special inspection of structural welding is required by an inspector pre-qualified by the Building Department. The following exceptions are permitted for welds not in Special Moment-Resisting Frames:
   (a) Welding performed in an approved fabricator's shop in accordance with latest edition of the Governing Building Code, Section 1704.2.
   (b) The inspector need not be continuously present during welding of the following items, provided the materials, welding procedures, and welders qualifications are verified prior to the start of work; Periodic inspections are made of work in progress; and visual inspection of all completed welds is made prior to shipment:
      i. Single-pass fillet welds not exceeding 5/16"
      ii. Floor and roof steel deck welding
      iii. Welded studs (for nailers, diaphragms or composite deck systems)
      iv. Welded light gauge cold-formed framing members (studs, joists, etc.)
      v. Welding of stairs and railing systems
4. Testing Procedures: All complete joint penetration welds (aka full penetration, FP, or CJP) groove or butt welded joints and splices in Special Moment-Resisting Frames shall be tested 100 percent in accordance with AISC Seismic Part I, Section 16 by either ultrasonic testing ("UT") or radiography (x-ray). The following exceptions are permitted:
   (a) Ultrasonic or radiographic testing is not required for all complete joint penetration welds on material less than 5/16" thick; continuous visual inspection is required.
   (b) At the discretion of the Building Official, the ultrasonic or radiographic testing rate for an individual welder may be reduced to 25% provided the reject rate is no more than 5% for all welds tested for that individual welder.
   (c) At the discretion of the Building Official, the ultrasonic or radiographic testing may be performed in the shop of an approved fabricator by a qualified inspector of their employ.
   (d) It is the responsibility of the Contractor to verify all the testing requirements of the local Building Department as the requirements vary with each governing agency. The testing procedures outlined above apply only to those complete joint penetration welds specified in Special Moment-Resisting Frames only; Ordinary Moment-Resisting Frames are exempt.
5. Materials:
   (a) Wideflange (W) sections shall conform to ASTM A992.
   (b) Hollow Steel Sections (HSS) shall conform to ASTM A500 Gr. B.
   (c) Pipe sections shall be welded seamless pipe conforming to ASTM A53 Gr. B.
      i. STD indicates Standard Wall
      ii. EXT indicates Extra Strong
      iii. DBL indicates Double Extra Strong
   (d) All other material (plate, bars, etc.) shall conform to ASTM A36, UNO specifically.
   (e) All plate material specified in steel moment frame connections shall conform to ASTM A572 Gr. 50.
6. Bolts:
   (a) All bolts shall be ASTM A307 Gr. A, UNO specifically on the structural plans.
   (b) High strength bolts complying with ASTMF1325 Grades A325 and A490, when specified, shall require special inspection in accordance with the Governing Building Code, Section 1705.2.6.
   (c) Threaded rod, where specified, shall conform with ASTM A307 unless specifically noted otherwise on the structural plans.
   (d) Bolt holes shall be drilled 1/32" to 1/16" larger than the specified bolt diameter.
7. Welding:
   (a) All welding shall be performed using SMAW, GMAW or FCAW processes.
   (b) All welded connections to be in accordance with the latest edition of the AWS D1.1.
   (c) All welding shall be performed by certified welders.
   (d) All welding shall be performed with E70XX electrodes with a minimum CVN toughness of 20 ft-lb at -20ºF.
   (e) Weld lengths specified on the plans are the net effective length required. Where fillet weld symbol is given without indication of size, use the minimum size welds as specified in section 1.17.2 of the AISC Manual of Steel Construction 15th Ed.
   (f) No field welding shall be permitted, UNO specifically on the plans or details.
8. No holes other than those specifically detailed shall be allowed through structural steel members. Burning or torching of holes is not permitted under any circumstances.
9. All structural steel shall be painted one shop coat and touched-up in the field with red lead (or approved zinc chromate primer) as necessary.
10. Any steel member interfacing with wood framing shall have 1/2" diameter studs welded at 24" oc for attachment of wood nailers. Thru-bolting of nailers shall not be permitted unless specifically noted on the plans or details.
11. Provide hot dip galvanizing or 3" min. concrete cover around all structural steel below grade.
12. The filler metal for all welding shall have a notch toughness of net less than 20 ft-lbs at 0 degrees F, as measured by a standard Charpy V-Notch test, ASTM E-23, in accordance with the applicable filler metal specification referenced in AWE D1.1 and Seismic Supplement AWS D1.8.

## ROD AND REBAR EPOXY INSTALLATION

1. Special inspection is required, unless specifically noted otherwise. Special inspection services shall conform to the Governing Building Code, Chapter 17 and shall be provided by an ICC certified inspector or Building Department approved engineer. The Building Department reserves the right to waive or require special inspections. Nothing in these plans waives the Building Department's right to require special inspection at any point and on any material.
2. Epoxy for anchoring bolts, rods, and reinforcing bars shall be as follows:
   (a) Concrete: Hilti HIT RE 500 v3 (ICC ESR-3814), Hilti HY 200 (ICC ESR-3187), or Simpson SET-3G (ICC ESR-4057).
   (b) Full Grouted Masonry: Hilti HY 200 (ICC ESR-3187), or Hilti HY 270 (ICC 2682), or Simpson SET-3G (ICC ESR-4057).
   (c) Hollow Cell Masonry Units and Unreinforced Masonry: Hilti HY 270 (ICC 2682), or Simpson ET-HP (ICC ESR 3372).
3. Anchors shall be installed in accordance with the manufacturer's printed installation instructions by qualified personnel trained to install epoxy anchors.
4. Holes for post-installed anchors shall be drilled with a carbide tipped concrete/masonry drill bit using an electro-pneumatic hammer drill bit set in "rotation and hammer" mode. Hole diameter shall be 1/8" larger than the anchor diameter specified, unless noted otherwise. For installation in brick or hollow cell masonry units with a screen tube, the hole diameter shall be 1/4" larger than the anchor diameter, unless noted otherwise.
5. DO NOT drill through existing reinforcing. A small diameter test hole shall be drilled at the installation location. If existing reinforcing is encountered, the installation location shall be relocated to avoid conflict and the abandoned hole shall be filled with non-shrink grout or drypack. For holes drilled into columns and beams, remove the rebar cover in order to positively identify the rebar location such that the holes avoid the rebar. Other non-destructive means may be used to identify the positions and depth of reinforcing.
6. Holes shall be cleaned of dust and debris by blowing with 90 psi oil-free compressed air, brushing with a wire brush two times, and blowing with compressed air again to achieve a relatively dust-free wall surface.
7. The base material shall be a minimum of 28 days old, within a temperature range of 50ºF - 100ºF, and dry at the time of epoxy installation. The base material shall have a minimum strength as follows:
   (a) Concrete: 2,500 psi
   (b) Full Grouted Masonry: 2,000 psi
8. Fill each hole 1/2 - 2/3 full with epoxy, starting from the bottom of the hole to prevent air pockets. Withdraw the nozzle as the hole fills up with epoxy. Insert clean, oil-free anchor, turning slowly until the anchor contacts the bottom of the hole. DO NOT disturb anchor until fully cured. Cure time shall be per the manufacturer's installation instructions.

## GENERAL NOTES

1. The following notes, details, schedules & specifications shall apply to all phases of this project unless specifically noted otherwise. Notes and details on the structural plans shall take precedence over general notes and typical details. Where no details are given, construction shall be as shown for similar work.
2. All drawings are considered to be part of the contract documents. The Contractor shall be responsible for the review and coordination of all drawings and specifications prior to the start of construction. Any discrepancies shall be brought to the attention of the Engineer prior to the start of construction so that a clarification can be issued. Any work performed in conflict with the contract documents or any applicable code requirements shall be corrected by the Contractor at no expense to the Owner or Engineer.
3. All information on existing conditions shown on the structural plans are based on best present knowledge available, but without guarantee of accuracy. The Contractor shall be responsible for the verifications of all dimension and conditions at the site. Any discrepancies between actual site conditions and information shown on the drawings or in the specifications shall be brought to the attention of the EOR prior to the start of construction.
4. Refer to the Architectural plans for the following:
   (a) Dimensions
   (b) Size and location of all interior and exterior wall locations.
   (c) Size and location of all floor, roof and wall openings
   (d) Size and location of all drains, slopes, depressions, steps, etc.
   (e) Specification of all finishes & waterproofing
   (f) All other non-structural elements
5. Refer to the mechanical, electrical and plumbing plans for the following:
   (a) Size and location of all equipment
   (b) Pipe runs, sleeves, hangers and trenches
   (c) All other mechanical, electrical or plumbing related elements
6. **DO NOT** scale structural plans. Contractor shall use all written dimensions on Architectural plans.
7. Construction materials shall be uniformly spread out if placed on floor or roof so as to not overload the framing. Load shall not exceed the design live load per square foot. It is the Contractor's responsibility to provide adequate shoring and/or bracing as required.
8. Specifications and detailing of all waterproofing and drainage items, while sometimes shown on the structural plans for general information purposes only, are solely the design responsibility of others.
9. The Engineer will not be responsible for and will not have control or charge of construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the construction delineated by these plans. It should be understood that the Contractor or his/her agent(s) shall supervise and direct all work and shall be solely and completely responsible for all construction means, methods, techniques, sequences, procedures and conditions on the job site, including safety of all persons and property during the entire period of construction. Periodic observations by the Engineer, his staff or representatives are not intended to include verification of dimensions or review the adequacy of the Contractor's safety measures on or near the construction site.
10. Modifications of the plans, notes, details and specifications shall not be permitted without prior approval from the Engineer.
11. All workmanship shall conform to the best practice prevailing in the various trades performing the work. The Contractor shall be responsible for coordinating the work of all trades.
12. It is the Contractor's responsibility to ensure that only approved structural plans are used during the course of construction. The use of unapproved documents shall be at the contractor's own risk. Corrections of all work based on such documents shall be performed at the Contractor's expense.
13. These plans and specifications represent the structural design only. No information nor warranty is provided for the work of any other Consultant (Architect, Mechanical, Electrical, etc.). This includes, but is not limited to, waterproofing, drainage, ventilation, accessibility, or dimensions.

## MASONRY

1. Special inspection is required, unless specifically noted otherwise. Special inspection services shall conform to the Governing Building Code, Chapter 17 and shall be provided by an ICC certified inspector or Building Department approved engineer. The Building Department reserves the right to waive or require special inspections. Nothing in these plans waives the Building Department's right to require special inspection at any point and on any material.
2. Concrete Masonry Units:
   (a) shall have a minimum compressive strength of 2000 psi.
   (b) shall conform to ASTM C90, Grade N, Type I, medium-weight aggregate
   (c) shall conform to the TMS 402/602-16, Table SC-3
3. Mortar:
   (a) shall have a minimum compressive strength of 2000 psi.
   (b) shall be Type M or Type S
   (c) shall be proportioned in conformance with TMS 402/602-16, Table SC-1
   (d) shall be prepared with potable water that is free from deleterious amounts of acids, salts, alkali and organic materials.
4. Grout:
   (a) shall have a minimum 28 day compressive strength of 2000 psi.
   (b) shall be proportioned in conformance with TMS 402/602-16, section 2.2
   (c) shall be prepared with potable water that is free from deleterious amounts of acids, salts, alkali and organic materials.
   (d) shall have a slump between 8" & 11" for walls less than 12'-8" and greater than 12'-8" shall have a slump between 10" & 11" inches.
5. Admixtures:
   (a) shall be submitted to Engineer for review and approval prior to use.
6. Construction:
   (a) Masonry units shall be laid in a running bond pattern. Stack bond or mechanical anchorage shall not be used unless specifically detailed on the plans.
   (b) All masonry units shall be free of excessive dirt and dust.
   (c) All cells shall be filled solidly with grout. Grout shall be a workable mix suitable for pumping without segregation and shall be thoroughly mixed. Grout shall be placed by pumping and shall be placed before initial set or hardening occurs. Grout shall be consolidated by mechanical vibration during placing and reconsolidated after excess moisture has been absorbed but before workability has been lost. The grouting of any wall section shall be completed in one day with no interruptions greater than one hour.
   (d) Maximum grout height and use of clean-outs shall conform to TMS 402/602-16, section 3.5C. When required, clean-outs shall be provided by openings in the face shells in the bottom course of each cell to be grouted. The clean-outs shall be sealed after inspection and before grouting.
   (e) When grouting is stopped for more than one hour, horizontal construction joints shall be formed by stopping the grout pour approx 1-1/2" abv/below a bed joint.
7. Reinforcement:
   (a) Refer to Reinforcement section for material specifications.
   (b) All openings exceeding 24" shall have a minimum of (2) #5 bars directly above, below, and on both sides. Bars shall extend a min of 24" past edge of opening.
   (c) At the end of all walls, provide a min of (2) #5 bars vert. from foundation to TOW.
   (d) At the TOW, provide a min of (2) #4 bars horiz. along entire length of wall, UNO.
   (e) Walls shall have a minimum of #4 bars @ 24" oc horizontally and vertically, UNO.
   (f) All wall corners, intersections, ends and jambs shall have (2) #5 bars vertically unless specifically noted otherwise on the plans.
   (g) All jamb reinforcement shall dowel into foundations below with lap bars of the same diameter.
   (h) The minimum lap splice length for all reinforcing steel shall be as noted in the typical details on sheet S-1.1. All lap splices to be staggered.
   (i) All reinforcement shall be in place and secured prior to placement of grout. Reinforcement shall be placed in accordance with TMS 402/602-16, section 3.4.
   (j) Reinforcement to have grout coverage of at least one bar diameter from inside face of shell. The clear distance from the outside face of masonry to the reinforcement shall not be less than 2" when unit is exposed to soil.
8. Unless specifically noted otherwise on the architectural or structural plans, vertical control joints shall be provided in all concrete masonry walls and spaced at a maximum distance of 32 feet oc Control joints shall extend the full height of the wall. Control joints are not required when the wall length does not exceed 1.5 times the wall height.
9. Waterproofing shall be provided for all walls exposed to earth. Refer to architectural plans and specifications for waterproofing requirements.
10. Concrete masonry retaining walls shall not be backfilled until grout has set a minimum of 14 days. Refer to structural plans for slab and/or framing installation sequencing.
11. The Contractor is responsible for the design, installation, maintenance and removal of all bracing and shoring that may be required during the course of construction.

## CONCRETE

1. All concrete shall have:
   (a) an ultimate compressive strength (f'c) of 3,000 psi at 28 days (UNO).
   (b) a maximum slump of 5" at point of placement.
   (c) a W/C ratio of 0.55 or less for all slabs, walls, and columns, and 0.60 or less for all foundations.
   (d) a normal dry-weight density (UNO).
2. Special inspection is NOT required as the foundations have been *designed* with f'c = 2,500 psi in accordance with the Governing Building Code, section 1705.3, exceptions 1, 2.1, and 2.3, unless explicitly specified herein, on the structural plans, or by the Building Department. At a minimum, special inspection is always required on:
   (a) structural slabs, flat plates
   (b) walls, columns, beams
   (c) piles, caissons
   (d) welding of reinforcement, installation of mechanical bar splice devices, epoxy application
   When required or specified, special inspection services shall conform to the Governing Building Code, Chapter 17 and shall be provided by an ICC certified inspector or Building Department approved engineer. The Building Department reserves the right to waive or require special inspections. Nothing in these plans waives the Building Department's right to require special inspection at any point and on any material.
3. Testing of materials used in concrete construction must be performed as noted on structural plans or at the request of the Building Department to determine if materials are quality specified. Tests of materials and of concrete shall be made by an approved agency and at the expense of the contractor; such tests shall be made in accordance with the standards listed in the Governing Building Code, Table 1705.3. When testing of concrete is required, four (4) test cylinders shall be taken from each 150 yards, or fraction thereof, poured in any one day. One (1) cylinder shall be tested at seven (7) days; two (2) at 28 days; one (1) shall be held in reserve. Where 4x8 cylinders are used, (5) test cylinders shall be taken, with (3) cylinders tested at 28 days. If Contractor elects to have additional tests performed for "early-break" results, additional test cylinders must be taken. At no time shall the Contractor instruct the testing agency to perform tests on a schedule different than above without the prior authorization of the Engineer. Contractor is responsible for complying with applicable testing requirements of theBuilding Department. Copies of all test reports shall be provided to Engineer and Building Department for review in a timely manner.
4. The Contractor shall remove and replace any concrete which fails to attain specified 28 day compressive strength if so directed by the Engineer. Any defects in the hardened concrete shall be repaired to the satisfaction of the Engineer and/or Architect or the hardened concrete shall be replaced at the Contractor's expense.
5. All concrete work shall conform with the Governing Building Code, Chapter 19.
6. All cement shall be Portland Cement Type I or II and shall conform to ASTM C150.
7. All aggregates shall conform to ASTM C33. Maximum aggregate sizes:
   (a) Footings: 1-1/2"
   (b) All other work: 3/4"
8. Where not specifically detailed, the minimum concrete cover on reinforcing steel shall be:
   (a) Permanently exposed to earth or weather
      i. Cast against earth: 3"
      ii. Cast against forms: 2"
   (b) Not exposed to earth or weather
      i. Slabs, walls, joists: 3/4"
      ii. Beams, girders, columns: 1-1/2"
9. The minimum lap splice length for all reinforcing steel shall be as noted in the typical details on sheet S-1.1. All lap splices to be staggered.
10. All reinforcing steel, anchor bolts, dowels, inserts, and any other hardware to be cast in concrete shall be well secured in position prior to foundation inspection. All hardware to be installed in accordance with respective manufacturer's specifications. Refer to architectural and structural plans for locations of embedded items.
11. Locations of all construction joints, other than specified on the structural plans, shall be approved by the Architect and Engineer prior to forming. Construction joints shall be thoroughly air and water cleaned and heavily roughened so as to expose coarse aggregates. All surfaces to receive fresh concrete shall be maintained continuously wet at least three (3) hours in advance of concrete placement. Unless specifically detailed or otherwise noted, construction and control joints shall be provided in all concrete slabs-on-grade. Joints shall be located such that the area does not exceed 400 sq. feet.
12. The Architect, Engineer and appropriate inspectors shall be notified in a timely manner for a reinforcement inspection prior to the placement of any concrete.
13. The Contractor shall obtain approval from the Architect and the Engineer prior to placing sleeves, pipes, ducts, chases, coring and opening on or through structural concrete beams, walls, floors, and roof slabs unless specifically detailed or noted on the plans. All piles or conduits passing through concrete members shall be sleeved with standard steel pipe sections.
14. The Contractor is responsible for design, installation, maintenance and removal of all formwork. Forms shall be properly constructed, sufficiently tight to prevent leakage, sufficiently strong, and braced to maintain their shape and alignment until no longer needed for concrete support. Joints in formwork shall be tightly fitted and blocked, and shall produce a finished concrete surface that is true and free from blemishes. Forms for exposed concrete shall be pre-approved by the Architect to ensure conformance with design intent.
15. Remove formwork in accordance with the following schedule:
   (a) Forms at slab edge: 1 day
   (b) Side forms at footings: 2 days
   (c) All other vertical surfaces: 7 days
   (d) Beams, columns, girders: 15 days
   (e) Elevated slabs: 28 days
   Engineer reserves the right to modify removal schedule above based on field observations, concrete conditions, and/or concrete test results.
16. Retaining walls shall not be backfilled until concrete has set a minimum of 14 days. Refer to structural plans for slab and/or framing installation sequencing.
17. All concrete (except slabs-on-grade 6" or less) shall be mechanically vibrated as it is placed. Vibrator to be operated by experienced personnel. The vibrator shall be used to consolidate the concrete. The vibrator shall not be used to convey concrete, nor shall it be placed on reinforcing and/or forms.
18. Concrete shall be maintained in a moist condition for a min. of five (5) days after placement.
19. Concrete shall not be permitted to free fall more than six (6) feet. For heights greater than six (6) feet, use tremie, pump or other method consistent with applicable standards.
20. When specified ultimate compressive strength is greater than 2500 psi, Contractor shall submit mix designs to Architect and Engineer for approval seven (7) days prior to placement. Mix designs shall be prepared by an approved testing laboratory. Sufficient data must be provided for all admixtures.
21. Refer to Architectural plans for locations of all dimensions, slab depressions, slopes, drains, curbs, and control joints.

## FOUNDATIONS

1. Refer to Structural Design Parameters section on sheet S-1.1 for all soil design values used in calculations.
2. Soils values per Table 1806.2 of the latest edition of the Governing Building Code.
3. Unexpected Soil Conditions: At the discretion of the engineer of record, or the local building department, a soils report may be required in the event that substandard material is discovered on site. If this occurs, contact Engineer of Record for further guidance.
4. All compaction, fill, backfilling and site preparation shall be performed in accordance with project soils report or the Governing Building Code Chapter 18 & Appendix J. All such work shall be performed under the supervision of the building official.
5. Excavate to required depths and dimensions (as indicated in the drawings), cut square and smooth with firm level bottoms. Care shall be taken not to over-excavate foundation at lower elevation and prevent disturbance of soils around high elevation.
6. Foundations shall be poured in neat excavations.
7. Excavate all foundations to required depths into compacted fill or natural soil (as per plans and details) and as verified by the building official.
8. All foundations shall be inspected and approved by the appropriate building official prior to forming and placement of reinforcing or concrete.
9. Foundations shall not be poured until all required reinforcing steel, framing hardware, sleeves, inserts, conduits, pipes, etc. and formwork is properly placed and inspected by the appropriate building official/inspector(s).
10. It is the responsibility of the contractor in charge of framing to properly position all holdown bolts, anchor bolts, column bases, and all other cast-in-place hardware. Refer to typical details. All hardware to be secured prior to foundation inspections.
11. The sides and bottoms of dry excavations must be moistened to optimum moisture content or just above, just prior to placing concrete. Conversely, de-water footings as required to remove standing water and to maintain optimum working conditions.
12. The Contractor shall be solely responsible for all excavation procedures including lagging, shoring, and the protection of adjacent property, structures, streets, and utilities in accordance with all federal, state and local safety ordinances. The Contractor shall provide for the design and installation of all cribbing, bracing and shoring required.

## ROUGH CARPENTRY

1. Refer to latest edition of the Governing Building Code, Table 2304.10.2. for all minimum nailing requirements.
2. Refer to individual sections for applicable material specifications.
3. Fabricate, size, install, connect, fasten, bore, notch, and cut wood and plywood with joints true, tight, and well-nailed, screwed or bolted as required, all members to have solid bearing without being shimmed, unless noted otherwise. Set horizontal members subject to bending with the crown up. Install framing plumb, square, true and cut for full bearing. Splices are not permitted between bearings. Use full lengths unless otherwise specified.
4. Metal framing angles, anchor, clips, straps, ties, holdowns, etc. shall be mfg by Simpson Strong-Tie Co. No substitutions shall be permitted without prior approval of the Engineer.
5. All walls are to have continuous double 2x top plates spliced as followings unless specifically noted otherwise on the plans and details.
6. Wall Studs:
   (a) Unless specifically noted on the plan and details, use the following guidelines for wall framing:
      i. Use 2x4 studs at 16" oc for walls less than 9'-0" tall.
      ii. Walls 9'-0" to 16'-0" tall shall be constructed of 2x6 studs at 16" oc
      iii. Request specifically engineered wall details for walls greater than 16'-0" tall.
7. Blocking:
   (a) Provide min. one row of nominal 2" thick blocking of same width as stud, fitted snugly and spiked into studs at mid-height of partitions or walls over 8' high.
   (b) All foundation cripple walls (or "pony walls") less than 14" in height shall be solid blocking.
   (c) Rim blocking/rim board to be 1-1/4" minimum width x full depth at bearing walls, UNO per plans and details. Refer to shearwall section for additional rim/blocking requirements.
8. Notching:
   (a) Is not permitted of any structural member without prior approval
   (b) In exterior and bearing walls, notches shall not exceed 25% of the stud depth.
   (c) Non-bearing partition walls, notches shall not exceed 40% of the stud depth.
   (d) Successive notches in the same member shall be spaced a min of 18" apart.
9. Boring:
   (a) Is not permitted of any structural member without prior approval
   (b) In exterior and bearing walls, holes shall not exceed 40% of the stud depth.
   (c) Non-bearing partition walls, may be drilled not greater than 60% of stud depth.
   (d) Successive holes in the same member shall be spaced a minimum of 18" apart.
10. Bearing:
   (a) Provide a min. of 1-1/2" of bearing for all 2x joists and hdrs 4x10 / 6x8 & smaller.
   (b) Provide a min. of 3" of bearing for all beams and hdrs 4x12 / 6x10 & larger, UNO on plans.
   (c) Members bearing on prefabricated hangers are to have full bearing and nailing per manufacturer's specifications.
11. Posts:
   (a) Posts inside walls shall bear on sill plates and shall be continuous between top and bottom plates, unless specifically noted otherwise.
   (b) Provide posts under all beams, girders or double joists equal to the width of the supported member.
   (c) Posts on upper levels are to be stacked on posts of equal size at levels below, unless a larger post is specified on the plans.
   (d) Vertically oriented blocking ("squash blocking") shall be used to fully transfer the post area through floors to foundation. Vertical blocking shall be equal to floor thickness plus 1/16".
   (e) Headers framing into continuous posts without trimmer studs shall be supported in Simpson HUC hangers unless noted otherwise on the plans.
   (f) Posts when isolated, shall be seated in Simpson post or column bases, unless noted otherwise on the plans
12. Roof Framing:
   (a) Provide wood joists, as specified, laid with the crown up and spaced as indicated.
   (b) Provide a minimum of 1-1/2" end bearing unless otherwise shown.
   (c) Provide full depth solid 2x blkg or cross-bridging between the joists at 8' oc max.
   (d) Provide all cricket framing required to achieve positive drainage per Arch.
   (e) Install plywood panels with the face grain across the framing and close joints and nail at each support. Fully nail with common nails per the plans.
   (f) Plywood panels shall not be less than 4' x 8' except at boundaries and changes in framing direction, where the minimum panel dimension shall be no less than 24", unless all edges of undersized panels are supported by and fastened to framing members or blocking.
   (g) Provide Simpson "PSCL" clips at all plywood joints perpendicular to framing. Provide clips midway between framing members at the unsupported edges of plywood when members are spaced at 24" oc or greater. If clips are not used, provide solid blocking for joints perpendicular to framing.
13. Floor Framing:
   (a) Provide wood joists, as specified, laid with the crown up and spaced as indicated.
   (b) Provide a minimum of 1-1/2" end bearing unless otherwise shown.
   (c) Provide full depth solid 2x blkg or cross-bridging between the joists at 8' oc max. For floors framed with I joists, refer to the mfg's spec's for blkg requirements.
   (d) Provide full depth solid 2x blocking between the joists under all walls and partitions where the wall or partition is perpendicular to the floor framing (including floors framed with I joists)
   (e) Install plywood sheathing with the face grain across supports, end supports staggered, and the edges of sheets centered over supports. If T&G plywood is used, blocking need not be provided at all plywood edges (UNO per plan). If T&G plywood is not used, blocking shall be provided at all plywood edges. Glue plywood to joists and fully nail with common nails per the plans.
   (f) Plywood panels shall not be less than 4' x 8' except at boundaries and changes in framing direction, where the minimum panel dimension shall be no less than 24", unless all edges of undersized panels are supported by and fastened to framing members or blocking.
14. Shear Walls:
   (a) Refer to plans for all shearwall locations, length type and nailing.
   (b) Refer to Shearwall Schedule on title sheet for additional information.
   (c) Shear wall lengths specified on plans are minimum required.
   (d) Shear walls to be nailed with common nails. All nails to have minimum 3/8" edge distance to panel or framing member.
   (e) Where 3x framing is required per the shear wall schedule, stagger edge nailing.
   (f) Oriented Strand Board (OSB) may be used in lieu of plywood.
   (g) Typical Rim Board/Blocking at Shearwalls shall be 1-3/4" Min. LSL (refer to Engineered Lumber Section for Material Specifications). Refer to Shearwall Schedule per Plan for Min. Rim/Blkg Width Requirements per Transfer Fasteners.

## TIMBER / LUMBER

1. All structural lumber shall be Douglas Fir-Larch, S4S and shall conform to the Governing Building Code, section 2303.1.1.
2. The minimum lumber grade of each member shall be as follows (unless specifically noted otherwise on plans and details) :
   (a) 2x studs, blocking, plates:Stud
   (b) 2x joists #2 or better
   (c) 4x4, 4x6, or 6x6 beams or posts #2 or better
   (d) 4x8, 6x8, or larger beams or posts #1 or better
   It is recommended (but not required) that all exposed members be Select Structural or better and free of heart center due to visual characteristics.
3. All lumber in contact with concrete or masonry shall be pressure treated Douglas Fir. Whenever it is necessary to cut, notch, bore or splice pressure treated material, all newly cut surfaces shall be thoroughly painted with the same preservative.
4. Maximum moisture content for all structural members shall not exceed 19%.
5. All plywood sheathing shall be CDX grade (or better) Douglas Fir with exterior glue. All sheathing shall conform to the Governing Building Code and grade-marked by the American Plywood Association (APA). Panel index to be 40/20 for floors and 24/0 for roofs unless specifically noted otherwise on the plans and details.

## REINFORCEMENT

1. Reinforcing steel shall be deformed, clean, free of rust, grease or any other material likely to impair concrete bond.
2. All bars shall conform to ASTM A615, Grade 60 minimum (UNO on structural plans). All weld wire fabric (WWF) shall conform to ASTM A185.
3. Reinforcing steel that is to be welded shall conform to ASTM A706. All welding of reinforcement shall be subject to special inspection.
4. Contractor shall take necessary steps (standard ties, anchorage devices, etc.) to secure all reinforcing steel in their true position and prevent displacement during concrete placement.
5. Fabrication, placement and installation of reinforcing steel shall conform to:
   (a) Concrete Reinforcing Steel Institute (CRSI) Manual of Standard Practice
   (b) the Governing Building Code.
6. Shop drawings for fabrication of reinforcing steel shall be approved by the Contractor and submitted to the Architect and Engineer for review and approval prior to fabrication. Shop drawings are not required for slabs-on-grade or foundations unless specifically noted on the structural plans.
7. Heating of reinforcing steel to aid in bending and shaping of bars is not permitted. All bends in reinforcing steel are to be made cold. All bend radii shall conform to CRSI Manual of Standard Practice.
8. Refer to Concrete and Masonry notes for specific minimum splice length and splice staggering requirements. Lap welded wire fabric (WWF) reinforcement two (2) modules minimum (UNO). All splices are to be staggered.

## ENGINEERED LUMBER

1. Glu-laminated Beams (GLB):
   (a) shall have the following properties:

| Use | EWS Combination Symbol | Species / Grade | Flexural Stress, Fb (psi) | Modulus of Elasticity, E (ksi) | Horiz. Shear Stress, Fv (psi) | Compression Fc para. (psi) | Compression Fc perp. (psi) |
|---|---|---|---|---|---|---|---|
| Simple Span Bm. | 24F-V4 | DF | +2,400/-1,850 | 1,800 | 265 | 1,650 | 650 |
| Continuous or Cantilever Bm. | 24F-V8 | DF | +/- 2,400 | 1,800 | 265 | 1,650 | 650 |
| Columns | 2 | DF / L2 | +/- 1,800 | 1,300 | 265 | 1,600 | 560 |

   (b) shall not be notched, cut or drilled without prior approval from the Engineer
   (c) shall have exterior glue and weather-treatment prior to installation
   (d) shall be fabricated by an approved manufacturer & in accordance with ANSI A 190.1
   (e) shall have factory standard camber of 3,500-5,000 ft on beams UNO per Plan
2. Laminated Veneer Lumber (LVL) :
   (a) shall be 1-3/4" minimum thickness with the following minimum properties:
      i. E = 2000 ksi
      ii. Fb = 2600 psi
      iii. Fv = 285 psi
      iv. Fc (parallel) = 2500 psi
      v. Fc (perp.) = 750 psi
      vi. Ft (parallel) = 1500 psi
      vii. Specific Gravity = 0.50
   (b) shall be fabricated by an approved manufacturer
   (c) shall bear a minimum of 3-1/2" on specified supports. Provide full depth solid blocking at all bearing points
   (d) shall be nailed in accordance with mfg's specifications. Unless otherwise approved, nailing into the top edge shall not be spaced any closer than:
      i. 16d @ 6" oc, 10d @ 4" oc, and 8d @ 3" oc
      ii. When nailing must be reduced, stagger rows a minimum of 1/2" apart while maintaining proper edge distances.
   (e) shall be, when comprised of multiple members, connected with 16d nail, 1/2" bolts or 1/4" lag screws in accordance with manufacturer's specifications.
   (f) shall not be cut, notched or drilled without specific written approval of the EOR.
3. Laminated Strand Lumber (LSL) :
   (a) shall be 1-1/4" minimum thickness with the following minimum properties:
      i. E = 1550 ksi
      ii. Fb = 2325 psi
      iii. Fv = 310 psi
      iv. Fc (parallel) = 2500 psi
      v. Fc (perp.) = 800 psi
      vi. Ft (parallel) = 1070 psi
      vii. Specific Gravity = 0.50
   (b) shall be fabricated by an approved manufacturer
   (c) shall bear a minimum of 3-1/2" on specified supports. Provide full depth solid blocking at all bearing points
   (d) shall be nailed in accordance with mfg's specifications. Unless otherwise approved, nailing into the top edge shall not be spaced any closer than:
      i. 16d @ 6" oc, 10d @ 4" oc, and 8d @ 3" oc
      ii. When nailing must be reduced, stagger rows a minimum of 1/2" apart while maintaining proper edge distances.
   (e) shall be, when comprised of multiple members, connected with 16d nail, 1/2" bolts or 1/4" lag screws in accordance with manufacturer's specifications.
   (f) shall not be cut, notched or drilled without specific written approval of the EOR.
4. Parallel Strand Lumber (PSL) :
   (a) shall be 2-1/2" minimum thickness with the following minimum properties:
      i. E = 2200 ksi
      ii. Fb = 2900 psi
      iii. Fv = 290 psi
      iv. Fc (parallel) = 2900 psi
      v. Fc (perp.) = 750 psi
      vi. Ft (parallel) = 2025 psi
      vii. Specific Gravity = 0.50
   (b) shall be fabricated by an approved manufacturer
   (c) shall bear a minimum of 3-1/2" on specified supports. Provide full depth solid blocking at all bearing points
   (d) shall be nailed in accordance with manufacturer's specifications. Unless otherwise approved, nailing shall not be spaced any closer than:
      i. Narrow face: 16d @ 6" oc, 10d @ 4" oc, and 8d @ 3" oc
      ii. Wide Face: 16d @ 8" oc, and 10d & 8d @ 6" oc
      iii. When nailing must be reduced, stagger rows a minimum of 1/2" apart while maintaining proper edge distances
   (e) shall not be cut, notched or drilled without specific written approval of the EOR.
5. Plywood I Joists:
   (a) type and manufacturer shall be clearly noted on the plans. Substitutions shall not be permitted without prior approval of the Engineer.
   (b) shall be installed in accordance with applicable code approvals and mfg's spec's.
   (c) shall bear a minimum of 1-3/4" at all end supports, and 3-1/2" at intermediate supports. Provide full depth solid blocking at all bearing points.
   (d) shall be installed with intermediate blocking or bridging as specified by the Mfr. Only omit intermediate blocking when specifically allowed by the Mfr.
   (e) shall not be cut, notched or drilled without specific written approval of the EOR.

## FASTENERS

1. Nails:
   (a) shall be with "common" nails unless noted otherwise.
   (b) shall not be driven closer than 1/2 their length nor closer than 1/4 of their length to the edge or end of a member, except for sheathing.
   (c) shall be installed in pre-drilled lead holes if necessary to avoid splitting.
   (d) shall be hot-dipped zinc-coated galvanized steel, stainless steel, silicon bronze, or copper when in contact with preservative-treated wood.
      i. When used in exterior applications, nails shall have coating types and weights in accordance with the treated wood or bolt manufacturer's Recs. A Min. of ASTM A653, type G185 zinc-coated galvanized steel (or equiv.) shall be used.
      ii. When used in an interior, dry environment in SBX/DOT or zinc borate preservative-treated wood, plain carbon nails shall be permitted.
   (e) All nailing shall conform to the Governing Building Code, Table 2304.10.2.
2. Lag screws:
   (a) shall be installed into pre-drilled lead holes. Lubricant (or soap) shall be used to facilitate installation and prevent damage to the screws.
   (b) shall be hot-dipped zinc-coated galvanized steel or stainless steel when in contact with preservative-treated wood.
      i. When used in exterior applications, bolts shall have coating types and weights in accordance with the treated wood or bolt manufacturer's rec's. A minimum of ASTM A653, type G185 zinc-coated galvanized steel (or equal) shall be used.
      ii. When used in dry interior environments in SBX/DOT or zinc borate preservative-treated wood, plain carbon screws, nuts, and washers shall be permitted.
3. Bolts:
   (a) shall conform to ASTM A307, UNO specifically on plans and details.
   (b) shall be installed in pre-drilled holes a max of 1/16" larger than the specified bolt dia.
   (c) when installed against wood surfaces, shall have standard washers under the heads and nuts.
   (d) shall be hot-dipped zinc-coated galvanized steel or stainless steel when in contact with preservative-treated wood.
      i. When used in exterior applications, bolts shall have coating types and weights in accordance with the treated wood or bolt manufacturer's rec's. A minimum of ASTM A653, type G185 zinc-coated galvanized steel (or equal) shall be used.
      ii. When used in dry interior environments in SBX/DOT or zinc borate preservative-treated wood, plain carbon screws, nuts, and washers shall be permitted.
4. Anchor Bolts:
   (a) shall be installed at all exterior walls and all interior shear and/or bearing walls.
   (b) shall be 5/8" diameter with 3x3x0.229" steel plate washers at shearwalls.
   (c) shall be 5/8" diameter with 2x2x3/16" steel plate washers at non-shearwalls.
   (d) shall have 7" minimum embedment. (Contractor to coordinate length of bolts with sill plate thicknesses).
   (e) shall conform to ASTM F1554, Grade 36.
   (f) shall be hot-dipped zinc-coated galvanized steel or stainless steel when in contact with preservative-treated wood.
      i. When used in exterior applications, bolts shall have coating types and weights in accordance with the treated wood or bolt manufacturer's rec's. A minimum of ASTM A653, type G185 zinc-coated galvanized steel (or equal) shall be used.
      ii. When used in dry interior environments in SBX/DOT or zinc borate preservative-treated wood, plain carbon screws, nuts, and washers shall be permitted.
   (g) shall not be spaced greater than 72" oc Refer to shearwall schedule for specific anchor bolt spacing requirements.
   (h) shall be placed a maximum of 12" from wall corners, wall ends, and sill plate splices (but not less than 7 dia.) , and a min. of two bolts per piece of sill plate is required.
   (i) shall be secured in place prior to foundation inspection.
5. Powder Actuated Shot Pins:
   (a) shall be installed at all interior non-bearing, non-shearwalls.
   (b) shall be 0.145x3" with 1.5" diameter steel washers.
   (c) shall not be spaced greater than 32" o.c.


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Engineer of Record:

REGISTERED PROFESSIONAL ENGINEER IAN J. SHOEBRIDGE S 6293 STRUCTURAL STATE OF CALIFORNIA

Arroyo Grande Library
800 W Branch St.
Arroyo Grande, CA 93420


COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. These approved plans shall be made available when inspections are requested.
All changes must be approved.


Revision:

| Rev. | Description | Date |
|---|---|---|
| 1 | Plan Check | 18 Oct. 2024 |
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Proj. Engr.: Emma W. Phone Ext.: 224
Proj. Mngr.: Ian S.
Date: 29 Mar. 2024 Scale: 1/8"=1'-0"
A&V Job No.: 22373

STRUCTURAL SPECIFICATIONS

S-1.2

DO NOT SCALE THESE DRAWINGS. Refer to Architectural plans for all dimensions.

Oct 23, 2024 11:07:23 AM

## STATEMENT OF SPECIAL INSPECTIONS

1. This Statement of Special Inspection is submitted in fulfillment of the requirements of the Governing Building Code, section 1704 and 1705.
2. Special Inspections and Testings will be preformed in accordance with the approved plans and specifications, this statement and the Governing Building Code, Section 1704 , 1705 , 1707 , and 1708.
3. The schedule of Special Inspections summarizes the Special Inspections and tests required. Special Inspectors will refer to the approved plans and specifications for detailed special inspection requirements. Any additional tests and inspections required by the approved plans and specifications will also be performed.
4. Interim reports will be submitted to the Building Official and the Registered Design Professional in Responsible Charge in accordance with the Governing Building Code Section 1704.2.4.
5. A Final Report of Special Inspections documenting required Special Inspections, testing and correction of any discrepancies noted in the inspections shall be submitted prior to issuance of a Certificate of Use and Occupancy (Section 1704.2.4). The Final Report will document:
   (a) Required special inspections.
   (b) Correction of discrepancies noted in inspections.
6. The Owner recognizes his or her obligation to ensure that the construction complies with the approved permit documents and to implement this program of special inspections. In partial fulfillment of these obligations, the Owner will retain and directly pay for the Special Inspections as required in the Governing Building Code, Section 1704.2.
7. 1704.4 Contractor responsibility. Each contractor responsible for the construction of a main wind- or seismic force-resisting system, designated seismic system or a wind- or seismic force-resisting component listed in the statement of special inspections shall submit a written statement of responsibility to the building official and the owner or the owner's authorized agent prior to the commencement of work on the system or component. The contractor's statement of responsibility shall contain acknowledgement of awareness of the special requirements contained in the statement of special inspection.

## SCHEDULE OF TESTING AGENCIES & SPECIAL INSPECTORS

The following are the testing agencies and special inspectors that will be retained to conduct tests and inspection on this project.

| Responsibility | Firm | Address, Telephone, Email |
|---|---|---|
| 1. Special Inspection (Except for Geotechnical) | | |
| 2. Materials Testing | | |
| 3. Geotechnical Inspection | | |
| * | | |

* Additional inspections may be required at the discretion of the Building Official.

## Structural Observation Program

The Owner shall employ the Engineer or Architect registered/licensed in the State of California who is responsible for the structural design to perform structural observation

**Project:** Arroyo Grande Library
**Location:** 800 W Branch St.
Arroyo Grande, CA 93420

**Name:** Ian J Shoebridge, S.E., S6293
Principal Engineer
Engineer of Record Responsible for Structural Design

**Designated Name:** Mika Daniel, P.E., C90958

The Engineer or Architect responsible for Structual Observation, the Contractor, and appropriate Subcontractors shall hold a pre-construction meeting to review the details of the structural system to be observed.

Contractor shall contact Engineer to request each observation a minimum of 48 hours in advance.

| Observation: | Notes: |
|---|---|
| Concrete Footings | Widths and configurations of footing trenches; location of rebar prior to concrete pour |
| Wood Shear Walls & Lateral Connections | Nailing and transfers prior to cover |
| * | |
| * | |
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*Additional observations may be required at the discretion of the Building Official.

At the conclusion of the work included in the permit, the structural observer shall submit a written statement to the Building Official, verifying that the site visits have been made and identify any reported deficiencies that, to the best of the structural observer's knowledge, have not been resolved.

## SCHEDULE OF SPECIAL INSPECTIONS

Column Header Notation Used in Table:
- C Indicates continuous inspection is required.
- P Indicates periodic inspections are required. The notes and/or contract documents should clarify.

Box Entry Notation Used in Table:
- X Is placed in the appropriate column to denote either "C" continuous or "P" periodic inspections.
- -- Denotes a one-time activitiy or one whose frequency is defined in some other manner.

Additional details regarding inspections are provided in the project specifications or notes on the drawings.

| Verification & Inspection | C | P | Notes |
|---|---|---|---|
| **1704.2.5** - Inspect fabricator's fabrication and quality control procedures. | -- | -- | |
| | | | |
| **1705.2** - Steel | | | |
| 1. Material verification of high-strength bolts, nuts, and washers | | X | |
| a. Identification markings to conform to ASTM standards specified in the approved construction documents | | X | |
| b. Manufacturer's certificate of compliance required | | X | |
| 2. Inspection of high-strength bolting: | | | |
| a. Bearing-type connections | | X | |
| b. Slip-critical connections | X | | |
| 3. Material verification of structural steel: | | | |
| a. Identification markings to conform to ASTM standards specified in the approved construction documents | -- | -- | |
| b. Manufacturer's mill test reports | -- | -- | |
| 4. Material verification of weld filler materials: | | | |
| a. Identification markings to conform to AWS designation listed in the WPS | -- | -- | |
| b. Manufacturer's certificate of compliance required | -- | -- | |
| 5. Inspection of Welding:<br>a. Structural Steel | | | |
| 1) Complete and partial penetration groove welds | X | | |
| 4) Single-pass fillet welds < 5/16" | | X | |
| 6. Inspection of steel frame joint details for compliance with approved construction documents (bracing & stiffening, member locations, application of joint details at each connection, etc.) | | X | |

| Verification & Inspection | C | P | Notes |
|---|---|---|---|
| **1705.4** - Masonry - Level 2 Quality Assurance | | | |
| 1. As masonry construction begins, verify that the following are in compliance: | | | |
| a. Proportions of site-prepared mortar | | X | |
| c. Grade, type and size of reinforcement, connectors, anchor bolts, and prestressing tendons and anchorages | | X | |
| e. Sample panel construction | | X | |
| 2. Prior to grouting, verify that the following are in compliance: | | | |
| a. Grout space is clean | | X | |
| c. Placement of reinforcement, connectors, and anchor bolts | | X | |
| 3. Verify compliance of the following during construction: | | | |
| a. Materials and procedures with the approved submittals | | X | |
| b. Placement of masonry units and mortar joint construction | | X | |
| c. Size and location of structural members | | X | |
| d. Type, size, and location of anchors, including other details of anchorage of masonry to structural members, frames, or other construction | | X | |
| f. Preparation, construction, and protection of masonry during cold weather (temperature below 40°F) or hot weather (temperature above 90°F) | | X | |
| 4. Observe preparation of grout specimens, mortar specimens, and/or prisms. | | X | |
| | | | |
| **1705.13.2** - Seismic Resistance - Structural Wood | | | |
| | | | |
| 2. Inspect nailing, bolting, anchoring, and other fastening of elements of the main seismic force-resisting system, including wood shear walls, wood diaphragms, collectors (drag struts), braces, shear panels, and hold-downs | | X | Inspection of shear walls and diaphragms with fasteners spaced greater than 4" oc is not required |
| | | | |
| **1705.3** - Concrete | | | |
| 4. Inspect anchors post-installed in hardened concrete | | | |
| a. Adhesive anchors[1] installed in horizontally or upwardly inclinded orientations to resist sustained tension | X | | |
| b. Mechanical anchors[2] and adhesive anchors[1] not defined in 4.a | | X | |

FOOTNOTES:
1. Prior to epoxy placement, it must be verified that the hole is clean, dry, and free of loose debris
2. Periodic inspection shall take place such that the installation of a minimum of two (2) anchors per each shear wall are observed


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Engineer of Record:

REGISTERED PROFESSIONAL ENGINEER IAN J. SHOEBRIDGE S 6293 STRUCTURAL STATE OF CALIFORNIA

# Arroyo Grande Library

800 W Branch St.
Arroyo Grande, CA 93420

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT2025-00055 Date: 5/27/2025
The approval of these plans shall not permit violations of any city or state law.
The County may revoke this permit or require corrections if they are in error. These approved plans shall be made available when inspections are requested.
All changes must be approved.

Revision:

| | | |
|---|---|---|
| 1 | Plan Check | 18 Oct. 2024 |
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Proj. Engr.: Emma W. Phone Ext.: 224
Proj. Mngr.: Ian S.
Date: 29 Mar. 2024 Scale: 1/8"=1'-0"
A&V Job No.: 22373

# SPECIAL INSPECTIONS

# S-1.3

DO NOT SCALE THESE DRAWINGS. Refer to Architectural plans for all dimensions.

Oct 23, 2024
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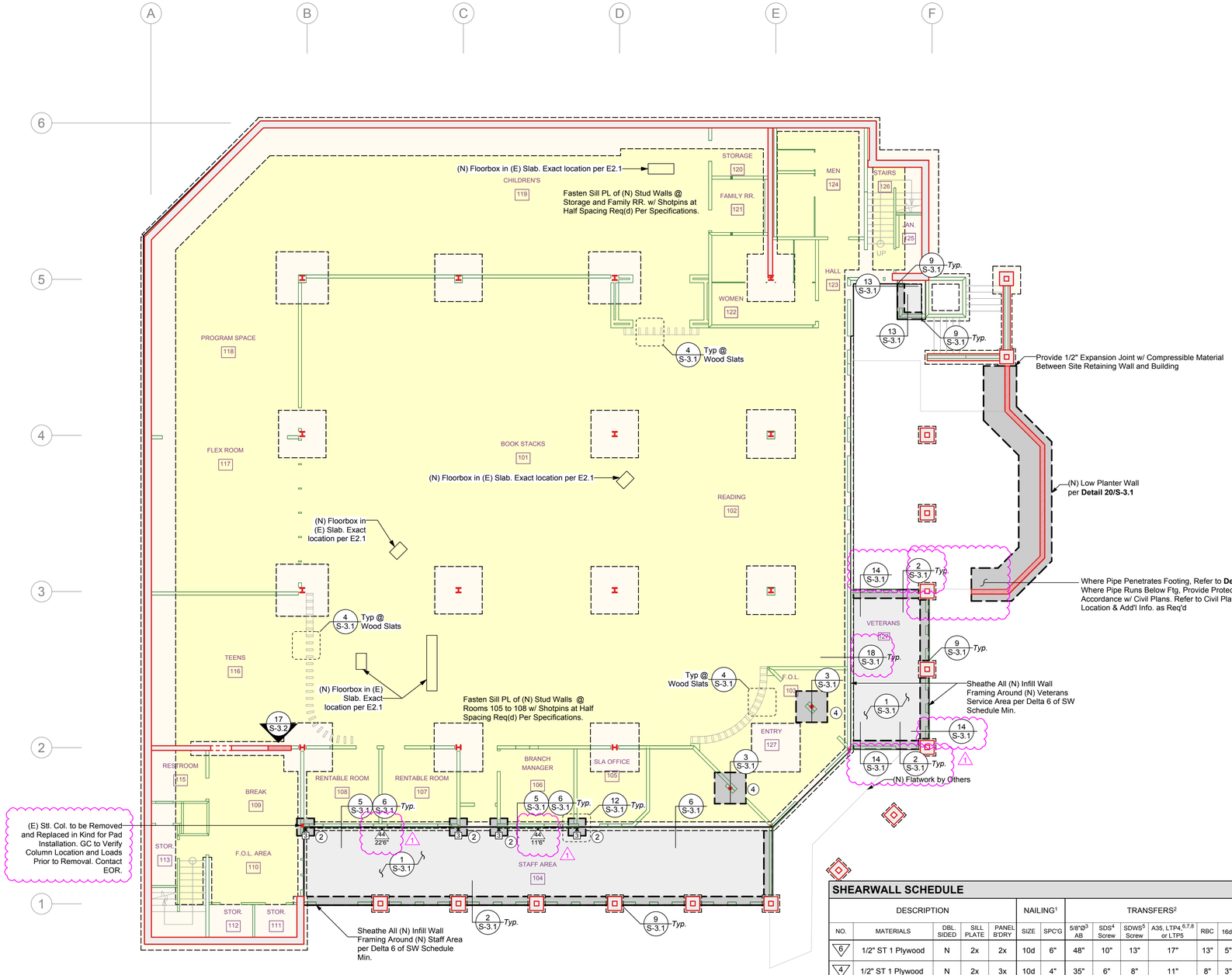


## HOLDOWN SCHEDULE

| TYPE | HOLDOWN[1,2] | MIN. POST | ANCHOR / EMBEDMENT | DETAILS |
|---|---|---|---|---|
| 3 | HDU11 | 6x6 or 4x8 | SB1x30 / 24" Min. | 12/S-3.1 |

FOOTNOTES:
1. Shared holdowns to be installed per detail **10/S-1.1**, *Typical Shearwall Intersections*, (UNO)
2. All holdowns shown shall be continued down to the foundation with the same size holdowns and post, (UNO)

**NOTES:**
1. For Conduits in (E) Slab, See **Detail 10/S-3.1**
2. For Floor Boxes in (E) Slab, See **Detail 17/S-3.1**

## EXISTING BUILDING NOTES

All As Built Information Taken From Archived Plans By Architect Stuhr Dodson Foster Mcclave With Approval Dated 12/6/78

## PAD FOOTING SCHEDULE

Pad Footings Where Occur per Plan per **Detail 4/S-3.1** with 24" Min. Embedment Below Pad Subgrade or Lowest Adj. Grade

| Plan Callout | Plan Dim. | Thickness | Reinf. |
|---|---|---|---|
| 2 | 2'-6" x 2'-6" | Per HD Anchor Reqs. | (3) #4 @ 12" oc EW, Top & Bot. |
| 4 | 4'-6" x 4'-6" | 15" | (4) #4 @ 16" oc EW, Top & Bot. |

## SHEARWALL SCHEDULE

| NO. | MATERIALS | DBL SIDED | SILL PLATE | PANEL B'DRY | NAILING[1] SIZE | NAILING[1] SPC'G | TRANSFERS[2] 5/8"Ø[3] AB | SDS[4] Screw | SDWS[5] Screw | A35, LTP4,[6,7,8] or LTP5 | RBC | 16d[9] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 1/2" ST 1 Plywood | N | 2x | 2x | 10d | 6" | 48" | 10" | 13" | 17" | 13" | 5" |
| 4 | 1/2" ST 1 Plywood | N | 2x | 3x | 10d | 4" | 35" | 6" | 8" | 11" | 8" | 3" |
| 3 | 1/2" ST 1 Plywood | N | 2x | 3x | 10d | 3" | 26" | 5"[10] | 6"[10] | 8" | 6" | - |
| 2 | 1/2" ST 1 Plywood | N | 2x | 3x | 10d | 2" | 20" | 4"[10] | 4"[10] | 6" | 5" | - |
| 44 | 1/2" ST 1 Plywood | Y | 3x | 3x | 10d | 4" | 22" | 3"[10] | 4"[10] | 5" | - | - |
| 33 | 1/2" ST 1 Plywood | Y | 3x | 3x | 10d | 3" | 18" | 3"[10,11] | 3"[10,11] | 5" | - | - |

FOOTNOTES:
1. All nails to be COMMONS. **DO NOT** use box type nails. All "field" nailing to be 12"oc, UNO. Penetration shall be 1-1/2" Min. in framing.
2. All transfers to be installed into min. 1-1/2" thick members, UNO. Where clips are spaced less than 6" oc, stagger clips on each side of wall.
3. All shear walls to have 5/8" anchor bolts, embeded 7" into concrete foundations, with 3"x3"x0.229" thick plate washers, minimum. Washers may be slotted (slot length not to exceed 1-3/4") w/ standard cut washer placed between nut and plate washer. Washers shall extend within 1/2" of the edge of the bottom plate on the sheathed side. At walls sheathed on 2 sides, plate washers shall be alternated to each side of plate. [Governing Bulding Code, Section 2308.3.1] [AF&PA SDPWS 4.3.6.4.3]
4. Simpson SDS 1/4"x5" Screws through 2x sill, or SDS 1/4"x8" Screws through 3x sill or double plates. Install into minimum 1-3/4" thick members (rim and/or blocking). [ICC ESR 2236]
5. Simpson SDWS 0.22"x5" Screws through 2x sill, or SDWS 0.22"x8" Screws through 3x sill or double plates. Install into minimum 1-3/4" thick members (rim and/or blocking). [ICC ES AC233]
6. See details for permitted transfer clip types and locations.
7. Orient LTP4 and LTP5 clips such that the long dimension is horizontal.
8. Where LTP4 clips are installed over shear wall sheathing, fasten with full length 8d common nails.
9. 16d common nails through the sill plate to rim member or blocking.
10. Install screws into 3-1/2" wide continuous member, staggered 1-1/2" apart.
11. Install screws into Glulams or solid sawn member. LSL, LVL, or PSL members are NOT acceptable, UNO.

## GENERAL FOUNDATION NOTES

Foundations per Governing Building Code, Table 1806.2
At the request of the client (or client's agent), Ashley & Vance Engineering has designed the foundations in conformance with Table 1806.2. If the building official determines that expansive soils are present, or other geologic issues of concern, then they may require that special provisions be made to the foundation design to safeguard against damage due to the expansiveness or due to other geologic issues. If this becomes the situation, all foundation construction must be halted and the client, at their own expense, shall: (a) obtain a soils report prepared by a Soils Engineer licensed in the state of the project; (b) commission Ashley & Vance Engineering to revise the foundation plans and details, and framing plans if necessary, to reflect the recommendations of the soils report; (c) submit the revised plans to the Building Department for approval.

See General Notes & Specifications for additional requirements and material specifications.

All dimensions per Architectural plans

Contractor to VERIFY all dimensions w/ Architectural plans PRIOR to commencement of construction.

**Contractor shall verify all existing conditions prior to construction & contact Engineer and Architect regarding any discrepancies.**

(N) Foundation
15" Wide x 24" Embedment w/ (2) #4 T&B Min. (4) Total

(N) 4" Slab-on-Grade w/ #3 @ 24" o.c., Min.

(E) Foundation to Remain

(E) Slab-on-Grade to Remain

(E) Pad Foundation to Remain

(N) Pad Foundation per Plans and Schedule

(N) CMU Wall

(E) CMU Wall to Remain

(N) Wood Slat Wall

3 1/2" x 11 7/8" LVL

Denotes Step in Slab-on-Grade Step Ht. & Extent per Arch.

Wood Framed Wall Above (See S-2.2)


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Engineer of Record:

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Arroyo Grande Library
800 W Branch St.
Arroyo Grande, CA 93420

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT2024_00055 Date: 10/7/2025
The approval of these plans shall not permit violations of county or state laws.
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All changes must be approved.

| Revision: | | |
|---|---|---|
| 1 | Plan Check | 18 Oct. 2024 |
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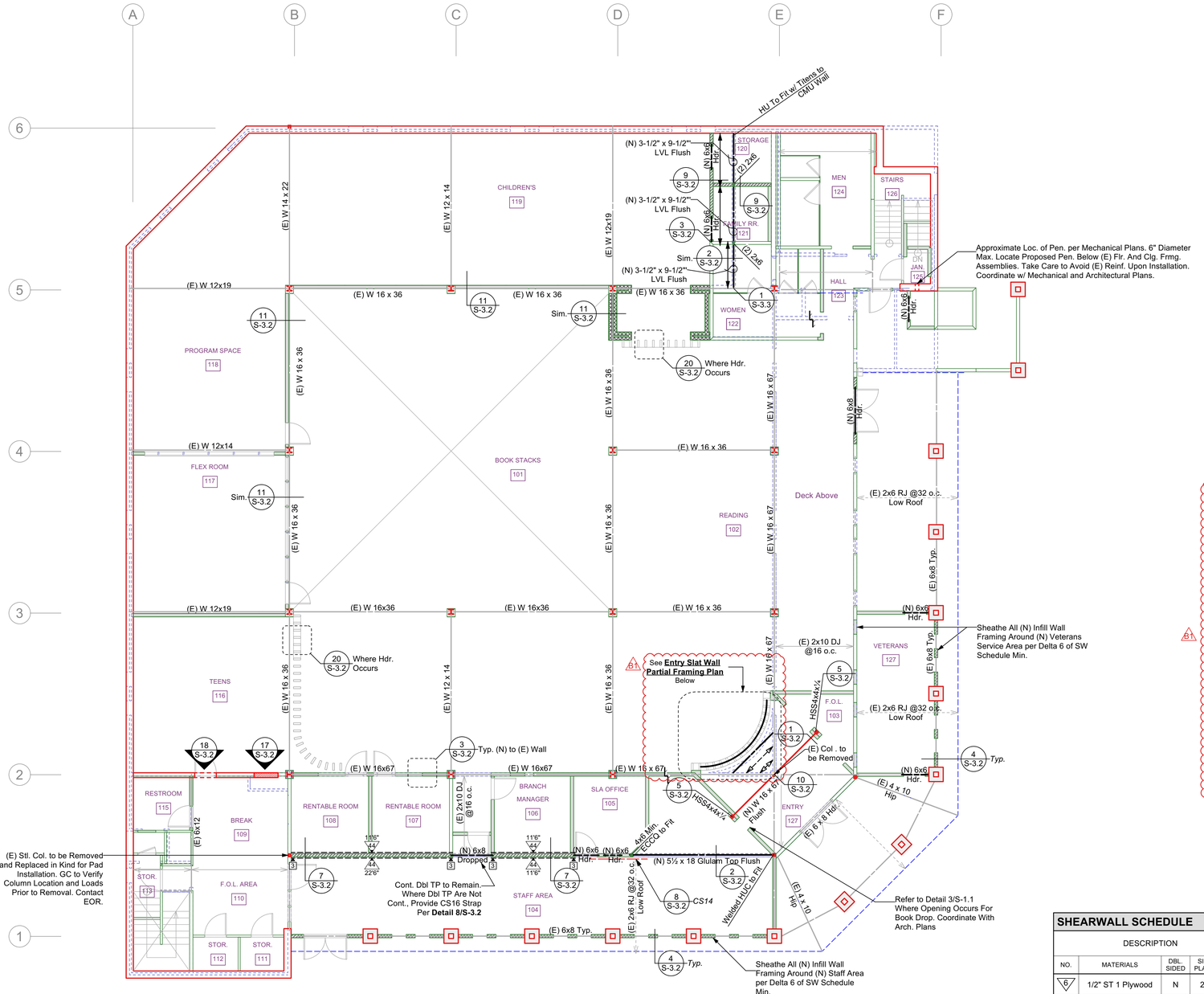
Proj. Engr.: Emma W. Phone Ext.: 224
Proj. Mngr.: Ian S.
Date: 29 Mar. 2024 Scale: 1/8"=1'-0"
A&V Job No.: 22373

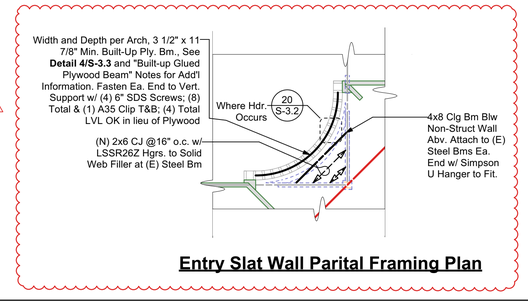
# FOUNDATION PLAN

# S-2.1

DO NOT SCALE THESE DRAWINGS. Refer to Architectural plans for all dimensions

Oct 23, 2024
11:07:29 AM




## Entry Slat Wall Parital Framing Plan

## EXISTING BUILDING NOTES

All As Built Information Taken From Archived Plans By Architect Stuhr Dodson Foster Mcclave With Approval Dated 12/6/78

## BUILT-UP GLUED PLYWOOD BEAM NOTES

Fabrication of built-up glued plywood stringers shall conform to *Plywood Design Spcification, Supplement 5-12: Design and Fabrication of All-Plywood Beams, Part 2*

Beams are to be formed from 3/8" thick plies of APA Rated Sheathing Exterior grade, to form the minimum thickness and depth as specified per plan.

Beam dimensions specified per plan are nominal dimensions. Beams may be surfaced a maximum of 1/16" each face, and a maximum of 3/16" top and bottom

Glue used between plies of sheathing shall be exterior rated glue, conforming to ASTM D2559

Adhesive is to be applied by roller, notched trowel, or spray equipment as to ensure complete adhesive coverage. The adhesive may be applied to one or both surfaces to be mated.

Unless specifically noted otherwise by the adhesive manufacturer, and adhesive spread rate is to be approximately 1.7 gallons per 100 square feet of glued area.

It is the responsibility of the fabricator to produce an adhesive bond which meets or exceeds applicable specifications.

Staples shall be installed with their crowns parallel to the plywood face-grain direction.

Staples shall be 7/16 Crown x 1 3/8" Long, 16 Ga Staple @ 6"o.c, Ea. Way, UNO.

Butt joints shall be staggered a minimum of 24" from any adjacent butt joint, and 12" from any butt joint within two plies.

## HOLDOWN SCHEDULE

| TYPE | HOLDOWN [1,2] | MIN. POST | ANCHOR / EMBEDMENT | DETAILS |
|---|---|---|---|---|
| 3 | HDU11 | 6x6 or 4x8 | SB1x30 / 24" Min. | 12/S-3.1 |

FOOTNOTES:
1. Shared holdowns to be installed per detail **10/S-1.1**, *Typical Shearwall Intersections,* (UNO)
2. All holdowns shown shall be continued down to the foundation with the same size holdowns and post, (UNO)

## SHEARWALL SCHEDULE

| NO. | MATERIALS | DBL SIDED | SILL PLATE | PANEL B'DRY | NAILING[1] SIZE | NAILING[1] SPC'G | TRANSFERS[2] 5/8"Ø[3] AB | SDS[4] Screw | SDWS[5] Screw | A35, LTP4,[6,7,8] or LTP5 | RBC | 16sd[9] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 1/2" ST 1 Plywood | N | 2x | 2x | 10d | 6" | 48" | 10" | 13" | 17" | 13" | 5" |
| 4 | 1/2" ST 1 Plywood | N | 2x | 3x | 10d | 4" | 35" | 6" | 8" | 11" | 8" | 3" |
| 3 | 1/2" ST 1 Plywood | N | 2x | 3x | 10d | 3" | 26" | 5"[10] | 6"[10] | 8" | 6" | - |
| 2 | 1/2" ST 1 Plywood | N | 2x | 3x | 10d | 2" | 20" | 4"[10] | 4"[10] | 6" | 5" | - |
| 44 | 1/2" ST 1 Plywood | Y | 3x | 3x | 10d | 4" | 22" | 3"[10] | 4"[10] | 5" | - | - |
| 33 | 1/2" ST 1 Plywood | Y | 3x | 3x | 10d | 3" | 18" | 3"[10,11] | 3"[10,11] | 5" | - | - |

FOOTNOTES:
1. All nails to be COMMONS. **DO NOT** use box type nails. All "field" nailing to be 12"oc, UNO. Penetration shall be 1-1/2" Min. in framing.
2. All transfers to be installed into min. 1-1/2" thick members, UNO. Where clips are spaced less than 6" oc, stagger clips on each side of wall.
3. All shear walls to have 5/8" anchor bolts, embeded 7" into concrete foundations, with 3"x3"x0.229" thick plate washers, minimum. Washers may be slotted (slot length not to exceed 1-3/4") w/ standard cut washer placed between nut and plate washer. Washers shall extend within 1/2" of the edge of the bottom plate on the sheathed side. At walls sheathed on 2 sides, plate washers shall be alternated to each side of plate. [Governing Building Code; Section 2308.3.1] [AF&PA SDPWS 4.3.6.4.3]
4. Simpson SDS 1/4"x5" Screws through 2x sill, or SDS 1/4"x8" Screws through 3x sill or double plates. Install into minimum 1-3/4" thick members (rim and/or blocking). [ICC ESR 2236]
5. Simpson SDWS 0.22"x5" Screws through 2x sill, or SDWS 0.22"x8" Screws through 3x sill or double plates. Install into minimum 1-3/4" thick members (rim and/or blocking). [ICC ES AC233]
6. See details for permitted transfer clip types and locations.
7. Orient LTP4 and LTP5 clips such that the long dimension is horizontal.
8. Where LTP4 clips are installed over shear wall sheathing, fasten with full length 8d common nails.
9. 16d common nails through the sill plate to rim member or blocking.
10. Install screws into 3-1/2" wide continuous member, staggered 1-1/2" apart.
11. Install screws into Glulams or solid sawn member. LSL, LVL, or PSL members are NOT acceptable, UNO.

## WALL SCHEDULE

Stud wall locations per Architecturals.

(E) Wood-Framed Wall to Remain

(N) Struc. Wood-Framed Wall
Wall Thickness per Arch.
Min. 2x6 D.F. Stud @ 16" o.c.

(N) Non-Struc. Wood-Framed Wall
Wall Thickness per Arch.
Min. 2x4 D.F. Stud @ 16" o.c.

(N) Non-Struc. Wood-Framed Wall
Wall Thickness per Arch.
Min. 2x6 D.F. #2 @ 16" o.c.

(N) Wood Slat Wall
3 1/2" x 11 7/8" LVL

(N) CMU Wall

(E) CMU Wall to Remain

All Walls to have Continuous Double Top Plates, All Splices to be per Detail **7/S-1.1**

Walls above
(shown for clarity)

## GENERAL FRAMING NOTES

(N) Beams (per Call-out)

(N) Steel Beams (per Call-out)

(E) Beams (to Remain)

All Lumber 4x6, 6x6 and Smaller to be DF #2 UNO
All Lumber 4x8, 6x8 and Larger to be DF #1 UNO

All Beams to Bear on Plates w/ Indicated Post or Doubler Below UNO

All Hangers Shall be Installed w/ Max. Nailing per Mfr. & Sized for Full Width & Depth of Supported Members, UNO

Floor sheathing to be 3/4" plywood or OSB, T & G, PI 40/20, glued and nailed w/ 10d commons at 6", 6", 12"

Provide wall length continuous full depth solid blocking (where floor joists perpendicular) or double floor joist (where joists parallel) for all walls above.

(N) 9 -1/2" TJI 110 @ 16" o.c. w/ MIU Hgrs (UNO)

(E) Roof Framing (to Remain)

(E) Deck Framing (to Remain)

Denotes Step in Framing. Step Ht. & Extent per Arch.

Waterproofing, flashing, & finish details per Architecturals.

See General Notes & Specifications for additional requirements and material specifications.

All dimensions per Architectural plans

Contractor to VERIFY all dimensions w/ Architectural plans PRIOR to commencement of construction.

**Contractor shall verify all existing conditions prior to construction & contact Engineer and Architect regarding any discrepancies.**


Ashley&Vance ENGINEERING, INC.
1229 Carmel Street
San Luis Obispo, CA 93401
(805) 545-0010
www.ashleyvance.com
CIVIL • STRUCTURAL



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Engineer of Record:

REGISTERED PROFESSIONAL ENGINEER TAN J. SHOEBERT S 6293 STRUCTURAL STATE OF CALIFORNIA

# Arroyo Grande Library

800 W Branch St.
Arroyo Grande, CA 93420

Revision:

| | | |
|---|---|---|
| 1 | Plan Check | 18 Oct. 2024 |
| B1 | Bid Set Update | 25 Jul. 2025 |
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Proj. Engr.: Emma W. Phone Ext.: 224
Proj. Mngr.: Ian S.
Date: 29 Mar. 2024 Scale: 1/8"=1'-0"
A&V Job No.: 22373

# FLOOR FRAMING PLAN

# S-2.2

DO NOT SCALE THESE DRAWINGS. Refer to Architectural plans for all dimensions.

Jul 25, 2025
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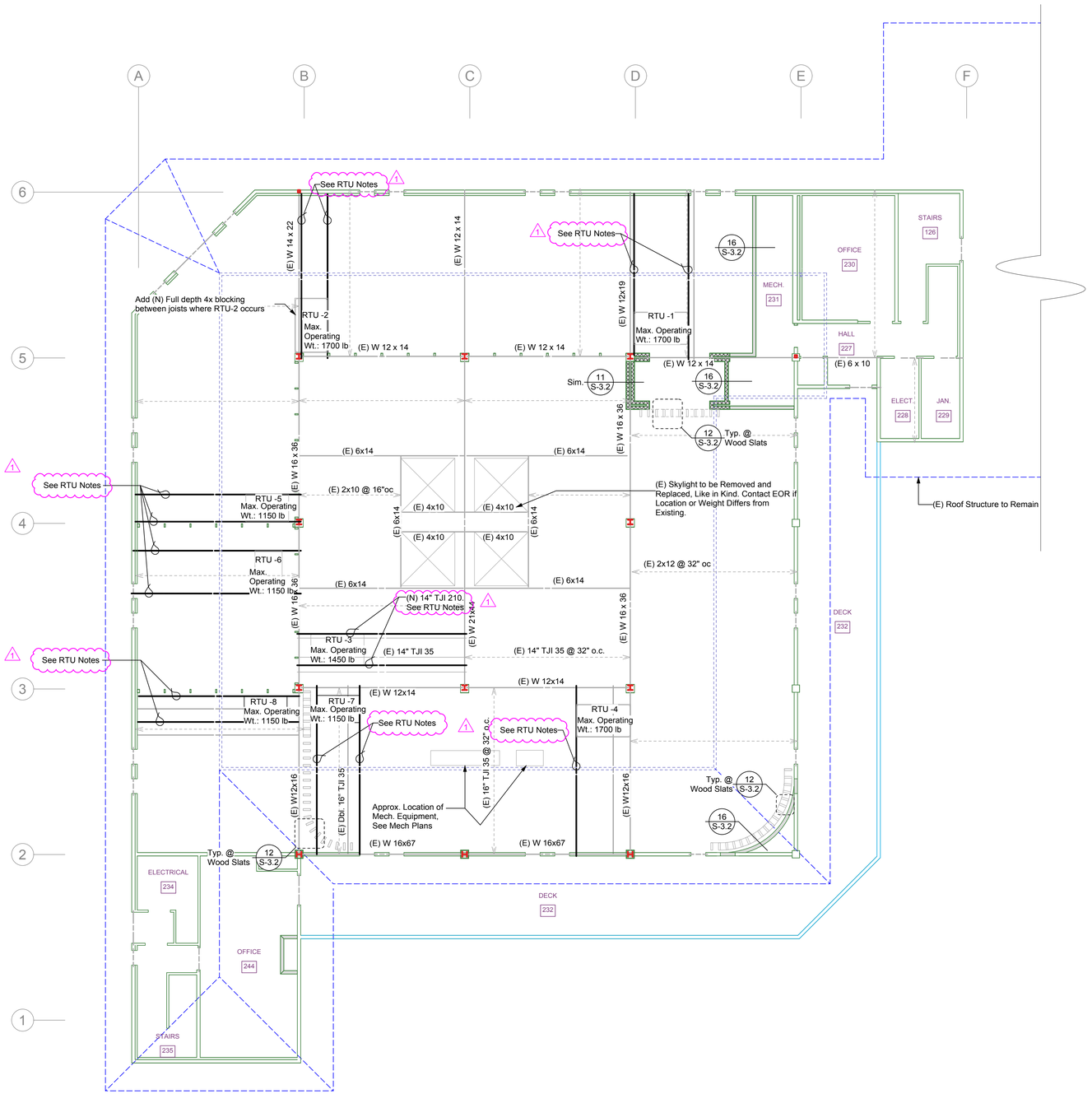


**RTU NOTES:**

1. Provide (N) 16" TJI 210 Dbl. Joist Where Unit Anchorage Locations Occur (UNO per Plan). OK to omit (N) Dbl Joists where (E) Dbl TJI 35's occur in field.
**Member Size Dependent on RTU Locations and Orientations. Contact EOR Where discrepancies occur.**

2. Attach (N) Dbl Joists to (E) Steel Beams w/ Simpson MIU Hangers per **Detail 1/S-3.2**.

3. Where Removal of (E) Joists is Req(d), See **Detail 19/S-3.2.**

4. For Mechanical Curb Attachment See **Detail 6/S-3.3**.

**NOTES:**

1. Repair or Replace (E) Damaged/ Decaying Rafter Tails As Req(d) w/ Like-In-Kind Replacement.
2. Fall Protection System Around Roof Hatch by Others. Install per Manufacturer's Specs.

## EXISTING BUILDING NOTES

All As Built Information Taken From Archived Plans By Architect Stuhr Dodson Foster Mcclave With Approval Dated 12/6/78

## WALL SCHEDULE

Stud wall locations per Architecturals.

(E) Wood-Framed Wall to Remain

(N) Non-Struc. Wood-Framed Wall

Wall Thickness per Arch.
Min. 2x4 D.F. Stud @ 16" o.c.

(N) Non-Struc. Wood-Framed Wall

Wall Thickness per Arch.
Min. 2x6 D.F. #2 @ 16" o.c.

(N) Wood Slat Wall

3 1/2" x 11 7/8" LVL

All Walls to have Continuous Double Top Plates, All Splices to be per Detail **7/S-1.1**

Walls above

(shown for clarity)

Walls Below

(shown for clarity)

## GENERAL FRAMING NOTES

(N) Beams

(E) Beams (to Remain)

All Lumber 4x6, 6x6 and Smaller to be DF #2 UNO
All Lumber 4x8, 6x8 and Larger to be DF #1 UNO

All Beams to Bear on Plates w/ Indicated Post or Doubler Below UNO

All Hangers Shall be Installed w/ Max. Nailing per Mfr. & Sized for Full Width & Depth of Supported Members, UNO

Where Required for Repair or Replacement, Roof Sheathing Thickness to Match Existing, 5/8" Min., T & G, PI 40/20, glued and nailed w/ 10d commons at 6", 6", 12"

Provide wall length continuous full depth solid blocking (where floor joists perpendicular) or double floor joist (where joists parallel) for all walls above.

(E) Roof Framing (to Remain)

Denotes Step in Framing.
Step Ht. & Extent per Arch.

Waterproofing, flashing, & finish details per Architecturals.

See General Notes & Specifications for additional requirements and material specifications.

All dimensions per Architectural plans

Contractor to VERIFY all dimensions w/ Architectural plans PRIOR to commencement of construction.

**Contractor shall verify all existing conditions prior to construction & contact Engineer and Architect regarding any discrepancies.**


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Engineer of Record:

REGISTERED PROFESSIONAL ENGINEER TAN J. SHOEBRIDGE S 6293 STRUCTURAL STATE OF CALIFORNIA

# Arroyo Grande Library

1800 W Branch St.
Arroyo Grande, CA 93420

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALTR-00055 Date: 12/27/2025
The approval of these plans shall not permit violations of any city or state laws.
The County may revoke this permit or require corrections if there are error. These approved plans shall be made available when inspections are requested.
All changes must be approved.

Revision:

| | | |
|---|---|---|
| 1 | Plan Check | 18 Oct. 2024 |
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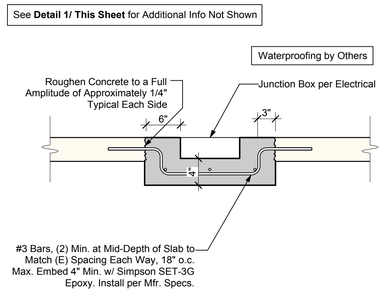
Proj. Engr.: Emma W. Phone Ext.: 224
Proj. Mngr.: Ian S.
Date: 29 Mar. 2024 Scale: 1/8"=1'-0"
A&V Job No.: 22373

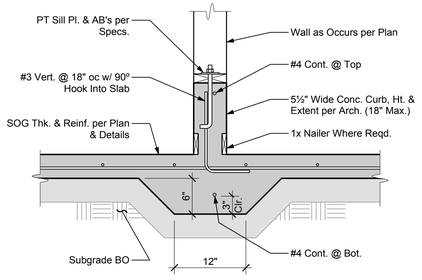
ROOF FRAMING PLAN

S-2.3

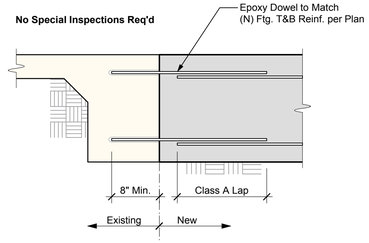
DO NOT SCALE THESE DRAWINGS. Refer to Architectural plans for all dimensions.



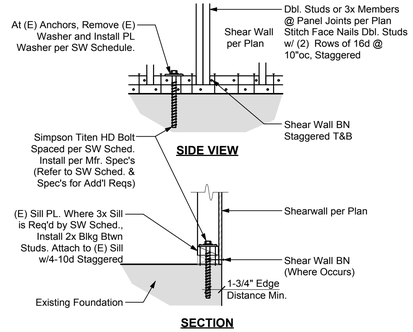

17 SLAB REPAIR @ ELECTRICAL BOXES



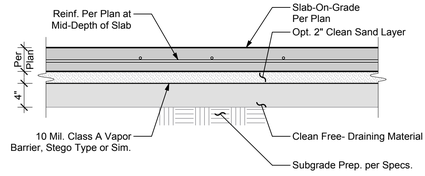

13 SHOVEL FOUNDATION




9 NEW FDN. TO EXISTING FDN.

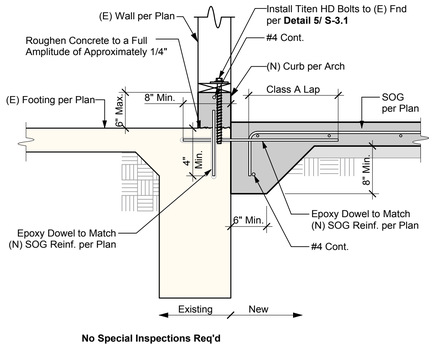



5 SHEAR TO EXISTING SILL PLATE



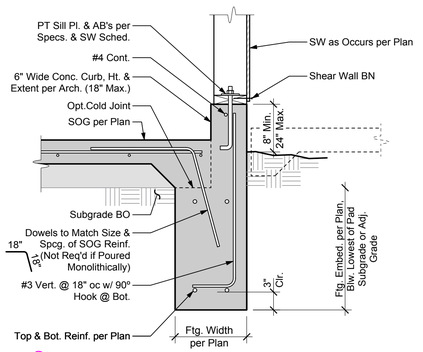

Soil Below Sand & Class "B" or "C" Moisture Barrier Shall be Premoistened to a Min. Depth of 18" & 100% of Optimum Moisture Content

1 TYP. SLAB ON GRADE

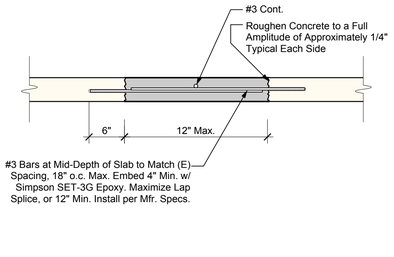



**No Special Inspections Req'd**

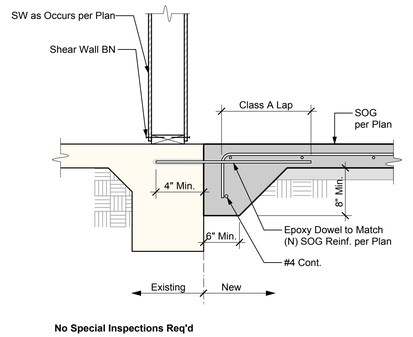
18 NEW SLAB AND CURB TO EXISTING FDN.




14 CURB AT EXTERIOR FOUNDATION

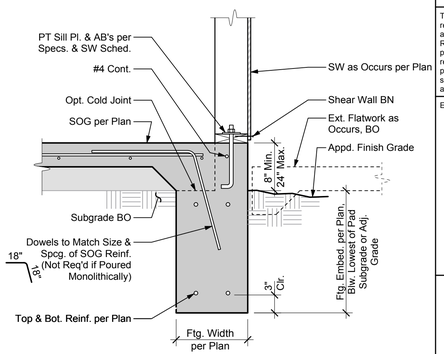



10 SLAB REPAIR

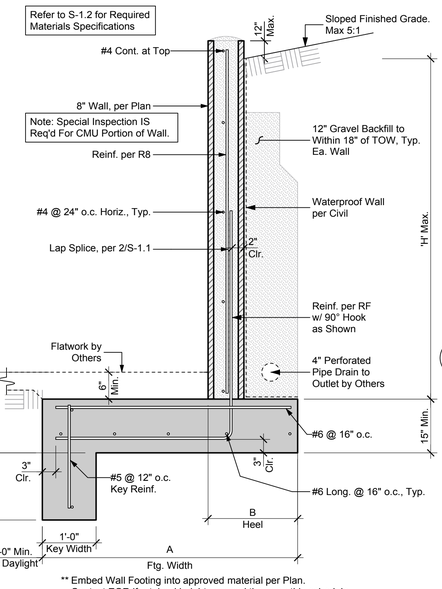



**No Special Inspections Req'd**

6 NEW SLAB TO EXISTING FOUNDATION




2 TYPICAL EXTERIOR FOUNDATION




** Embed Wall Footing into approved material per Plan. Contact EOR if retained heights exceed those on this schedule.

| H | A | B | C | RF | R8 |
|---|---|---|---|---|---|
| 4'-0" | 4'-3" | 1'-8" | 12" | #6 @ 16" | #4 @ 16" |
| 5'-4" | 4'-9" | 1'-8" | 24" | #6 @ 16" | #4 @ 16" |

20 RETAINING WALL W/ FLATWORK

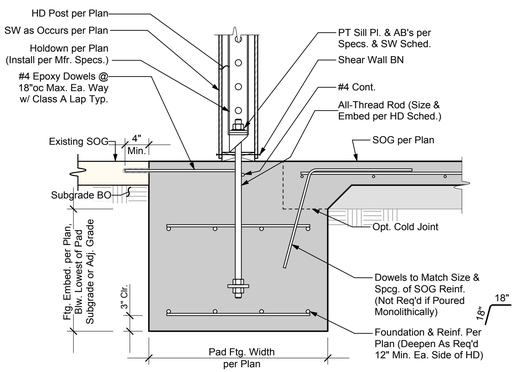
15 NOT USED

16 NOT USED

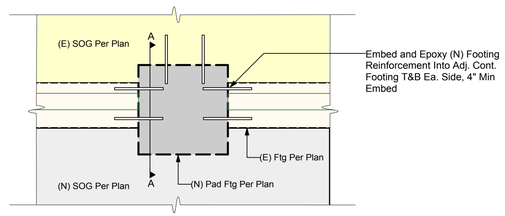
**Anchor Rod Schedule**

| Holdown | *Anchor Rod: |
|---|---|
| HDU11 | SB1x30 |

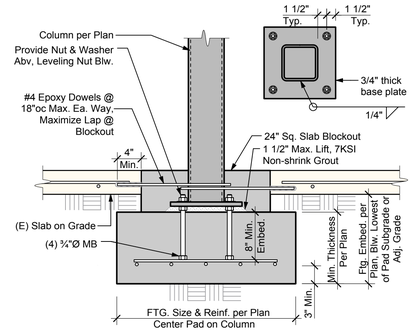
*Refer to Manufacturer's Catalog Where Slab/ Foundation Construction is to be Two-Pour. Anchors Rods Below are For Monolithic Pour.



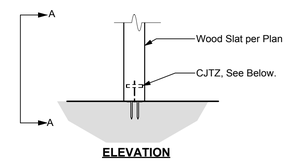

Section A-A

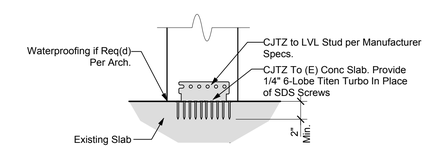



12 FOUNDATION @ SW HOLDOWNS




3 STEEL COLUMN TO PAD




4 (N) WOOD SLATS TO (E) SLAB

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(805) 545-0010
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Engineer of Record:

REGISTERED PROFESSIONAL ENGINEER IAN J. SHOEBRIDGE S 6293 STRUCTURAL STATE OF CALIFORNIA

Arroyo Grande Library
800 W Branch St.
Arroyo Grande, CA 93420

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALTR-20055 Date: 12/2025
The approval of these plans shall not permit violations of any city or state law.
The County may revoke this permit or require corrections if there are in error. These approved plans must be made available when inspections are requested.
All changes must be approved.

| Revision: | | |
|---|---|---|
| 1 | Plan Check | 18 Oct. 2024 |
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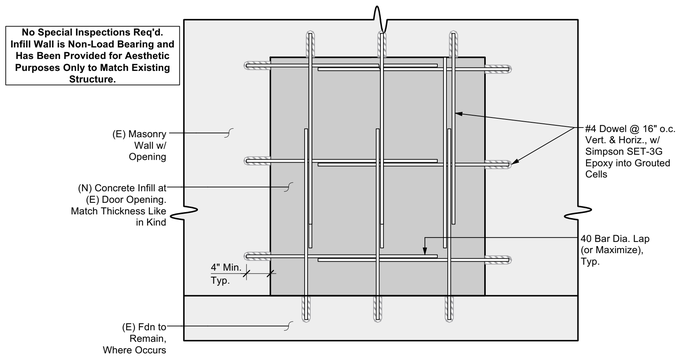
Proj. Engr.: Emma W. Phone Ext.: 224
Proj. Mngr.: Ian S.
Date: 29 Mar. 2024 Scale: 1/8"=1'-0"
A&V Job No.: 22373

STRUCTURAL DETAILS

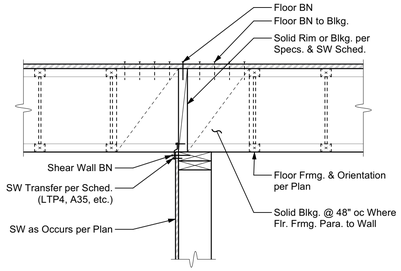
S-3.1

DO NOT SCALE THESE DRAWINGS. Refer to Architectural plans for all dimensions.

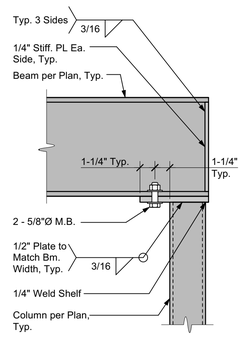
Oct 23, 2024
1:07:37 AM



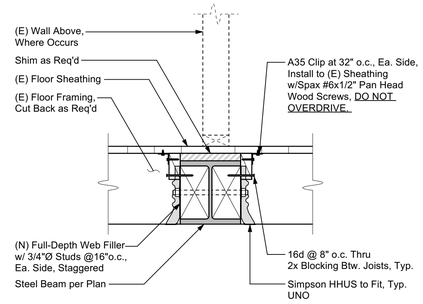

17 (N) CONCRETE INFILL AT (E) DOOR




9 SHEAR TRANSFER: FLOOR AT WALL BLW.

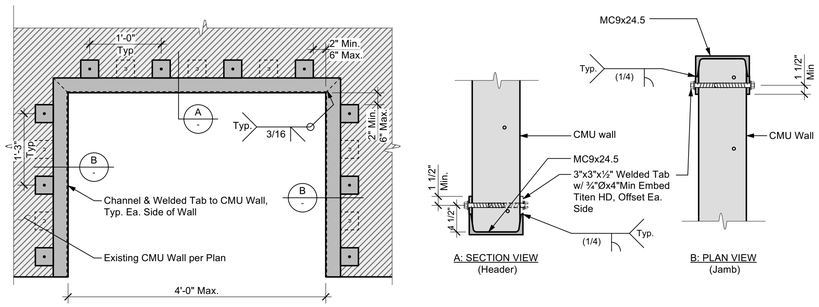



5 STEEL BEAM TO COLUMN

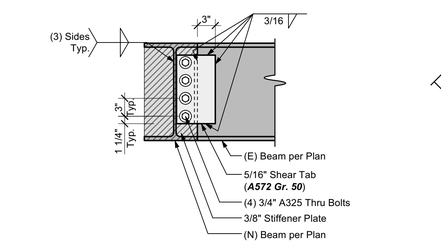



1 EXISTING FRAMING TO STEEL BEAM

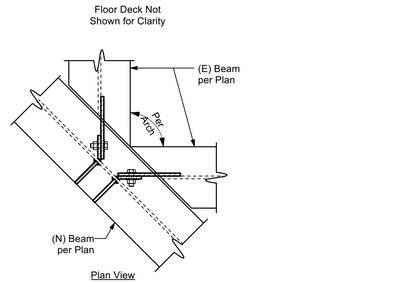
**NOTE: All Fasteners into Grouted Cells**

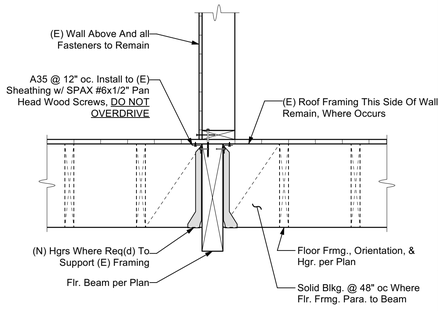



18 OPENING IN CMU WALL

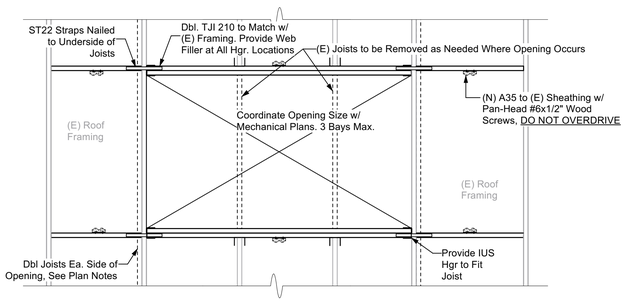



10 SKEWED FLOOR BEAM CONNECTION

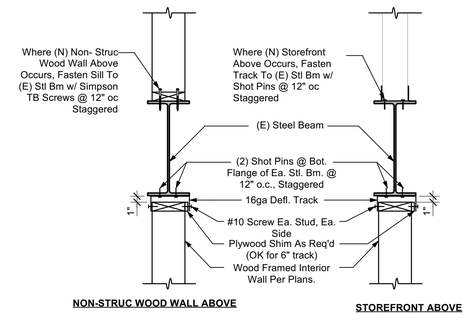


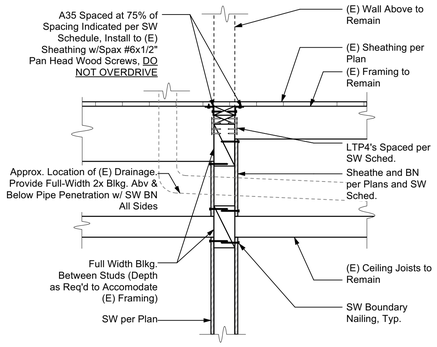

2 SHEAR TRANSFER: FLUSH BEAM AT WALL



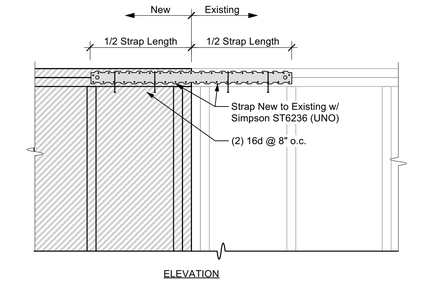

19 ROOF FRAMING FOR RTUS



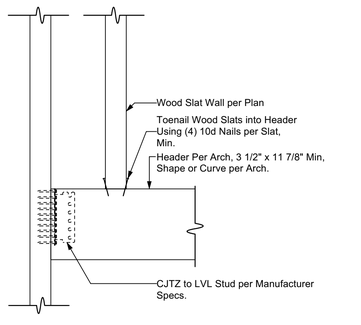

11 TYP. INT. WALL TO (E) STL. BM.



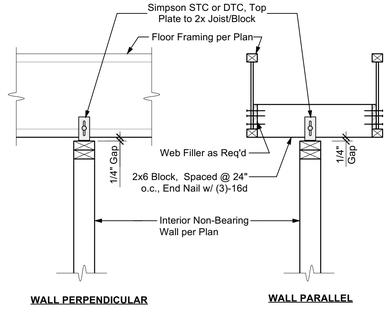

7 SHEAR WALL AT EXISTING ROOF



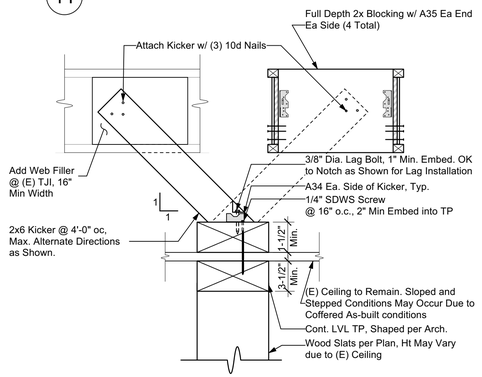

3 NEW WALL TO EXISTING WALL



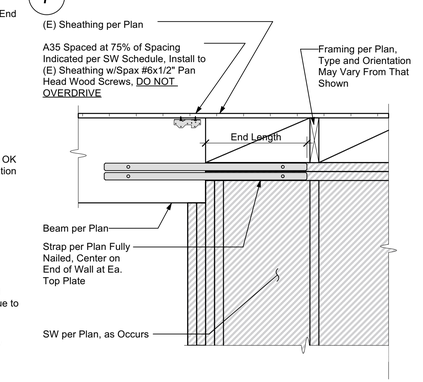

20 WOOD SLAT WALL AT HEADER



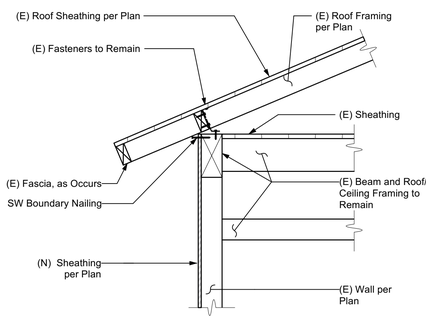

16 TYP. INTERIOR WALL TO FRAMING




12 TOP OF WALL BRACING




8 DRAG STRAP TO WALL




4 SHEAR TRANSFER AT EXISTING ROOF

Ashley&Vance ENGINEERING, INC.
1229 Carmel Street
San Luis Obispo, CA 93401
(805) 545-0010
www.ashleyvance.com
CIVIL • STRUCTURAL

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Engineer of Record:

REGISTERED PROFESSIONAL ENGINEER IAN J. SHOEBRIDGE S 6293 STRUCTURAL STATE OF CALIFORNIA

# Arroyo Grande Library

800 W Branch St.
Arroyo Grande, CA 93420

Revision:

| | | |
|---|---|---|
| 1 | Plan Check | 18 Oct. 2024 |
| B1 | Bid Set Update | 25 Jul. 2025 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Proj. Engr.: Emma W. Phone Ext.: 224
Proj. Mngr.: Ian S.
Date: 29 Mar. 2024 Scale: 1:12
A&V Job No.: 22373

## STRUCTURAL DETAILS

# S-3.2

DO NOT SCALE THESE DRAWINGS. Refer to Architectural plans for all dimensions.

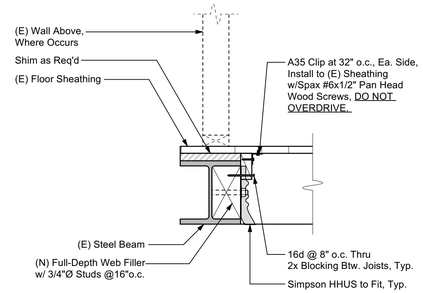
17 NOT USED

13 NOT USED

9 NOT USED

5 NOT USED

1 NEW FRAMING TO (E) STEEL BEAM

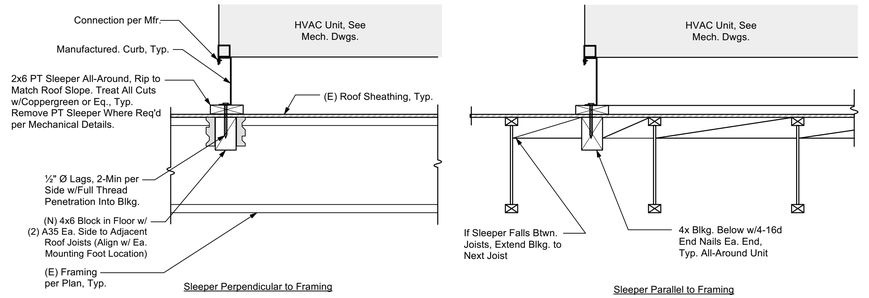



18 NOT USED

14 NOT USED

10 NOT USED

6 HVAC UNIT AT EXISTING ROOF



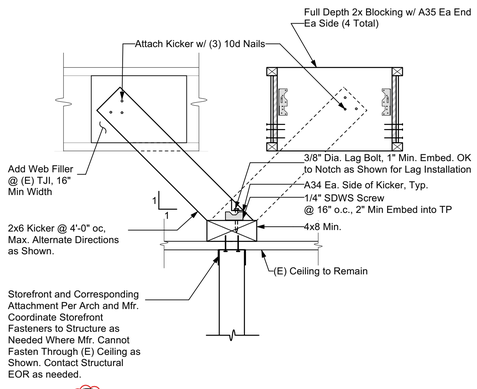

19 NOT USED

15 NOT USED

11 NOT USED

7 NOT USED

3 TOP OF STOREFRONT BRACING



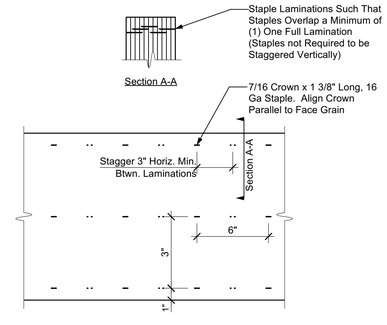

20 NOT USED

16 NOT USED

12 NOT USED

8 NOT USED

4 STAPLE SPCG FOR BUILT-UP PLYWOOD BM





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REGISTERED PROFESSIONAL ENGINEER TAN J. SHOEBRIDGE S 6293 STRUCTURAL STATE OF CALIFORNIA

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| | | |
| | | |

Proj. Engr.: Emma W. Phone Ext.: 224

Proj. Mngr.: Ian S.

Date: 29 Mar. 2024 Scale: NTS

A&V Job No.: 22373

## STRUCTURAL DETAILS

# S-3.3

DO NOT SCALE THESE DRAWINGS. Refer to Architectural plans for all dimensions.

Jul 29, 2025
2:01:05 AM

# NONRESIDENTIAL/MULTIFAMILY T24 ENVELOPE MANDATORY MEASURES

(All Section Numbers Are From 2022 Building Energy Efficiency Standards Title 24, Part 6.)

Mandatory measures in Sections 110.6–110.8, 120.7 and 160.1 apply to all multifamily nonresidential buildings, whether the designer chooses the prescriptive or performance approach to compliance. Mandatory measures by code section are as follows:

1. 110.6 REQUIREMENTS FOR FENESTRATION PRODUCTS AND EXTERIOR DOORS. All fenestration products and exterior doors shall meet the applicable requirements of section 110.6.
2. 110.7 REQUIREMENTS TO LIMIT AIR LEAKAGE. All joints, penetrations and other openings in the building envelope that are potential sources of air leakage shall be caulked, gasketed, weather–stripped or otherwise sealed to limit infiltration and exfiltration.
3. 110.8 REQUIREMENTS FOR INSULATION, ROOFING PRODUCTS AND RADIANT BARRIERS. All Insulation, Roofing Products and Radiant Barriers shall meet the requirements listed in Sections 110.8
4. 120.7 INSULATION REQUIREMENTS. Nonresidential, high–rise residential, and hotel–motel buildings shall comply with the applicable requirements in sections 120.7(a) through 120.7(c). The opaque portions of walls that separate conditioned spaces from unconditioned or ambient air shall meet the insulation requirements listed in Section 120.7(b)7.
5. 160.1 REQUIREMENTS FOR MULTIFAMILY BUILDING ENVELOPES. All multifamily nonresidential buildings are required to comply with the applicable envelope requirements in sections 160.1(a) through (f).



**G5. OPAQUE SURFACE ASSEMBLY SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | | 07 | 08 | 09 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Surface Name | Construction Type | Area (ft²) | Framing Type | Cavity R-Value | Continuous R-Value Interior | Continuous R-Value Exterior | Units | Value | Description of Assembly Layers | Status[1] |
| (A) R-13 Wall7 | Interior Wall | 14,911 | Wood | 13 | N/A | N/A | U-factor | 0.0905 | Gypsum Board - 5/8 in.<br>Composite-1<br>Gypsum Board - 5/8 in. | A |
| (E) Slab On Grade10 | Underground Floor | 7,687.17 | N/A | 0 | N/A | N/A | F-factor | 0.73 | Slab Type =Unheated slab on grade<br>Insulation Orientation =None<br>Insulation R-Value =none | E |
| R-19 Roof Rafter12 | Roof | 10,969.1 | Wood | 19 | N/A | N/A | U-factor | 0.0476 | Built-up roofing - 3/8 in.<br>Vapor permeable felt - 1/8 in.<br>Plywood - 1/2 in.<br>Air - Cavity - Wall Roof Ceiling - 4 in. or more<br>Composite-2<br>Gypsum Board - 1/2 in. | E |
| R-11 Wall16 | Exterior Wall | 7,757.95 | Wood | 11 | N/A | N/A | U-factor | 0.1098 | Stucco - 7/8 in.<br>Vapor permeable felt - 1/8 in.<br>Composite-3<br>Gypsum Board - 1/2 in. | E |
| R-19 Floor No Crawlspace56 | Exterior Floor | 176.33 | Wood | 19 | N/A | N/A | U-factor | 0.0494 | Composite-4<br>Plywood - 1/2 in.<br>Carpet - 3/4 in. | E |
| R-19 Floor No Crawlspace561 | Interior Floor | 1,340.25 | Wood | 19 | N/A | N/A | U-factor | 0.0482 | Composite-4<br>Plywood - 1/2 in.<br>Carpet - 3/4 in. | E |
| UG_Slab On Grade78 | Underground Floor | 3,815.94 | N/A | 0 | N/A | N/A | F-factor | 0.73 | Slab Type =Unheated slab on grade<br>Insulation Orientation =None<br>Insulation R-Value =none | E |

[1] *Status: N - New, A - Altered, E - Existing*





**C7. ENERGY USE SUMMARY**

| Energy Component | Standard Design Site (MWh) | Proposed Design Site (MWh) | Margin (MWh) | Standard Design Site (MBtu) | Proposed Design Site (MBtu) | Margin (MBtu) |
|---|---|---|---|---|---|---|
| Space Heating | --- | 3.2 | --- | 76 | 68.4 | 7.6 |
| Space Cooling | 14.6 | 8.2 | 6.4 | --- | --- | --- |
| Indoor Fans | 33.8 | 34.3 | -0.5 | --- | --- | --- |
| Heat Rejection | --- | --- | --- | --- | --- | --- |
| Pumps & Misc. | --- | --- | --- | --- | --- | --- |
| Domestic Hot Water | 4.4 | 4.4 | 0 | 1 | 1 | 0 |
| Indoor Lighting | 25.4 | 25.4 | 0 | --- | --- | --- |
| Flexibility | --- | --- | --- | --- | --- | --- |
| **EFFICIENCY TOTAL** | **78.2** | **75.5** | **2.7** | **77** | **69.4** | **7.6** |
| Photovoltaics | --- | --- | --- | --- | --- | --- |
| Batteries | --- | --- | --- | --- | --- | --- |
| **ENERGY USE SUBTOTAL** | **78.2** | **75.5** | **2.7** | **77** | **69.4** | **7.6** |
| Receptacle | 57.7 | 57.7 | 0 | --- | --- | --- |
| Process | --- | --- | --- | --- | --- | --- |
| Other Ltg | 0.3 | 0.3 | 0 | --- | --- | --- |
| Process Motors | --- | --- | --- | --- | --- | --- |
| **ENERGY USE TOTAL** | **136.2** | **133.5** | **2.7** | **77** | **69.4** | **7.6** |





**C1. COMPLIANCE SUMMARY**

| | COMPLIES[3] | | |
|---|---|---|---|
| | Time Dependent Valuaton (TDV) | | Source Energy Use |
| | Efficiency[1] (kBtu/ft² - yr) | Total[2] (kBtu/ft² - yr) | Total[2] (kBtu/ft² - yr) |
| Standard Design | 173.22 | n/a | n/a |
| Proposed Design | 169.09 | n/a | n/a |
| **Compliance Margins** | **4.13** | **n/a** | **n/a** |
| | **Pass** | **n/a** | **n/a** |

[1] *Efficiency measures include improvements like a better building envelope and more efficient equipment*
[2] *Compliance Totals include efficiency, photovoltaics and batteries*
[3] *New Construction, Complete Addition Scope: Building complies when all efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded*
*Existing, Addition and Alteration Scope: Building complies when efficiency compliance margin is greater than or equal to zero and unmet load hour limits are not exceeded*





**G4. NONRESIDENTIAL AIR BARRIER**

| 01 | 02 |
|---|---|
| Building Story Name | Air Barrier |
| Com-Floor 1 | No air barrier |
| Com-Floor 2 | No air barrier |
| Com-Volume | No air barrier |





**C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]**

| Non-Regulated Energy Component | Standard Design (TDV) | Proposed Design (TDV) | Compliance Margin (TDV)[1] |
|---|---|---|---|
| Receptacle | 104.83 | 104.83 | --- |
| Process | --- | --- | --- |
| Other Ltg | 0.5 | 0.5 | --- |
| Process Motors | --- | --- | --- |
| **TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)** | **278.55** | **274.42** | **4.13 (1.5%)** |

[1] *Notes: This table is not used for Energy Code Compliance.*

**C6. 'ABOVE CODE' QUALIFICATIONS**

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2





**B. PROJECT SUMMARY**

*Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within the permit application.*

| Building Components Complying via Performance | | | | | | Building Components Complying Prescriptively | |
|---|---|---|---|---|---|---|---|
| Envelope (See Table G) | Nonres | Performance | Solar Thermal Water Heating (See Table I3) | ☐ | Performance | The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E). | |
| | MultiFam | Not Included | | ☒ | Not Included | | |
| Mechanical (See Table H) | Nonres | Performance | Covered Process: Commercial Kitchens (see Table J) | ☐ | Performance | Indoor Lighting (Unconditioned) 140.6 & 170.2(e) | NRCC-LTI-E is required |
| | MultiFam | Not Included | | ☒ | Not Included | Outdoor Lighting 140.7 & 170.2(e) | NRCC-LTO-E is required |
| Domestic Hot Water (See Table I) | Nonres | Not Included | Covered Process: Laboratory Exhaust (see Table J) | ☐ | Performance | Sign Lighting 140.8 & 170.2(e) | NRCC-LTS-E is required |
| | MultiFam | Not Included | | ☒ | Not Included | **Building Components Complying with Mandatory Measures** | |
| Lighting (Indoor Conditioned, see Table K) | Nonres | Performance | Photovoltaics (see Table F) | ☐ | Performance | Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.) | |
| | MultiFam | Not Included | | ☒ | Not Included | Electrical Power Distribution 110.11 | NRCC-ELC-E is required |
| | | | Battery (see Table F) | ☐ | Performance | Commissioning 120.8 | NRCC-CXR-E is required |
| | | | | ☒ | Not Included | Solar and Battery 110.10 | NRCC-SAB-E is required |





**C8. ENERGY USE INTENSITY (EUI)**

| | Standard Design (kBtu/ft² / yr) | Proposed Design (kBtu/ft² / yr) | Margin (kBtu/ft² / yr) | Margin Percentage |
|---|---|---|---|---|
| GROSS EUI[1] | 40.8 | 39.53 | 1.27 | 3.11 |
| NET EUI[1] | 40.8 | 39.53 | 1.27 | 3.11 |

[1] *Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.*

**D1. EXCEPTIONAL CONDITIONS**

• The project uses the Simplified Geometry Performance Modeling Approach which is not capable of modeling daylighting controls and assumes the prescriptive Secondary Daylit Control requirements are met. PRESCRIPTIVE COMPLIANCE documentation (form NRCC-LTI-02-E) for the requirements of section 140.6(d) Automatic Daylighting Controls in Secondary Daylit Zones is required.
• The building does not include service water heating. Verify that service water heating is not required and is not included in the design.

**G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| Opaque Surfaces & Orientation | Total Gross Surface Area (ft²) | Total Fenestration Area (ft²) | Window to Wall Ratio (%) |
| North-Facing[1] | 2631.01 | 104 | 3.95 |
| East-Facing[2] | 2642.42 | 269.5 | 10.2 |
| South-Facing[3] | 2756.45 | 235.5 | 8.54 |
| West-Facing[4] | 1136.43 | 91 | 8.01 |
| **Total** | **9166.31** | **700** | **7.64** |
| Roof | 11912.6 | 160 | 1.34 |

*Notes*
[1] *North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),*
[2] *East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),*
[3] *South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),*
[4] *West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),*





**C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft² - yr)**

| Energy Component | COMPLIES[2] Standard Design (TDV) | Proposed Design (TDV) | Compliance Margin (TDV)[1] |
|---|---|---|---|
| Space Heating | 16.25 | 22.53 | -6.28 |
| Space Cooling | 26.55 | 15.27 | 11.28 |
| Indoor Fans | 73.92 | 74.79 | -0.87 |
| Heat Rejection | 0 | 0 | 0 |
| Pumps & Misc. | 0 | 0 | 0 |
| Domestic Hot Water | 8.5 | 8.5 | 0 |
| Indoor Lighting | 48 | 48 | 0 |
| Flexibility | --- | --- | --- |
| **EFFICIENCY COMPLIANCE TOTAL** | **173.22** | **169.09** | **4.13 (2.4%)** |
| Photovoltaics | --- | --- | --- |
| Batteries | --- | --- | --- |
| **TOTAL COMPLIANCE** | **173.22** | **169.09** | **4.13 (2.4%)** |

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*





**Project Name:** Arroyo Grande Library Remodel — **Date Prepared:** 2024-10-25

**A. General Information**

| | | | | |
|---|---|---|---|---|
| 1 | Project Name | Arroyo Grande Library Remodel | | |
| 2 | Run Title | Title 24 Analysis | | |
| 3 | Project Location | 800 W Branch St | | |
| 4 | City | Arroyo Grande | 5 Standards Version | Compliance 2022 |
| 6 | Zip code | 93420 | 7 Compliance Software (version) | EnergyPro 9.2 |
| 8 | Climate Zone | 5 | 9 Building Orientation (deg) | 156 |
| 10 | Building Type(s) | • Nonresidential | 11 Weather File | SAN-LUIS-OBISPO_STYP20.epw |
| 12 | Project Scope | • Existing addition and alteration | 13 Number of Dwelling Units | 0 |
| 14 | Total Conditioned Floor Area in Scope (ft²) | 12986.7 | 15 Total # of hotel/motel rooms | 0 |
| 16 | Total Unconditioned Floor Area (ft²) | 291.5 | 17 Fuel Type | Natural gas |
| 18 | Nonresidential Conditioned Floor Area | 12986.7 | 19 Total # of Stories (Habitable Above Grade) | 2 |
| 20 | Residential Conditioned Floor Area | 0 | | |




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SAN LUIS OBISPO, CA 93401



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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center, Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

ENERGY COMPLIANCE

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
By Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. 570 Trade Rd, Ste 240
Approved plans must be on site at all times. SLO, CA 93401
BMA Mechanical (805) 544-4259
All changes must be approved. BMA JOB# 23156.00

STAMP:

DATE:

**June 18, 2024**

REVISIONS:

1 Plan Check 1 County of SLO, 10/28/24
2 Plan Check 2 County of SLO, 12/11/24

JOB NUMBER:

2028

SHEET:

En1.0

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**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 18 of 23)

**H8. SYSTEM SPECIAL FEATURES**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| System Name | Equipment Type | Interlocks per 140.4(n)[1] | Other Special Features and Controls |
| RTU-5 | Single Zone Air Conditioner (SZAC) Air System | N/A | Differential Enthalpy |
| RTU-6 | Single Zone Air Conditioner (SZAC) Air System | N/A | Differential Enthalpy |
| RTU-7 | Single Zone Air Conditioner (SZAC) Air System | N/A | Differential Enthalpy |
| RTU-8 | Single Zone Air Conditioner (SZAC) Air System | N/A | Differential Enthalpy |

*Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.*

[1] *Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*

**H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 |
|---|---|---|---|---|---|---|
| Zone Name | Mechanical Ventilation | | | | Conditioned Area (sf) | DCV or Occupant Sensor Controls, or Both |
| | Ventilation Function | # of People | Supply OA CFM | Exhaust CFM | | |
| 1-RTU-1 | Assembly - Libraries (reading rooms and stack areas) | 13.3 | 399.02 | 450 | 2660.14 | N/A |
| 3-RTU-2 | Assembly - Libraries (reading rooms and stack areas) | 24.67 | 370.1 | 70 | 2467.35 | N/A |
| 4-RTU-3 | Assembly - Libraries (reading rooms and stack areas) | 8.88 | 266.5 | 0 | 1776.66 | N/A |
| 5-RTU-4 | Assembly - Libraries (reading rooms and stack areas) | 12.35 | 370.4 | 0 | 2469.37 | N/A |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 17 of 23)

**H5. GENERAL EXHAUST FAN SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 |
|---|---|---|---|---|---|---|---|
| System ID | Zone Name | Qty | CFM | Power | Power Units | Continuous Operation? | Status[1] |
| RTU-11-EF | 1-RTU-1 | 1 | 450 | 0.11 | BHP | No | E |
| RTU-2131-EF | 3-RTU-2 | 1 | 70 | 0.02 | BHP | No | E |
| RTU-7261-EF | 8-RTU-7 | 1 | 70 | 0.02 | BHP | No | E |
| DS-1311-EF | 10-DS-1 | 1 | 100 | 0.02 | BHP | No | N |
| DS-2317-EF | 11-DS-2 | 1 | 100 | 0.02 | BHP | No | N |
| DS-3323-EF | 12-DS-3 | 1 | 225 | 0.14 | BHP | No | N |
| DS-4330-EF | 13-DS-4 | 1 | 225 | 0.14 | BHP | No | N |
| DS-5336-EF | 14-DS-5 | 2 | 100 | 0.02 | BHP | No | E |

[1] *Status: N - New, A - Altered, E - Existing*

**H8. SYSTEM SPECIAL FEATURES**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| System Name | Equipment Type | Interlocks per 140.4(n)[1] | Other Special Features and Controls |
| RTU-1 | Single Zone Air Conditioner (SZAC) Air System | N/A | Differential Enthalpy |
| RTU-2 | Single Zone Air Conditioner (SZAC) Air System | N/A | Differential Enthalpy |
| RTU-3 | Single Zone Air Conditioner (SZAC) Air System | N/A | Differential Enthalpy |
| RTU-4 | Single Zone Air Conditioner (SZAC) Air System | N/A | Differential Enthalpy |

*Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.*

[1] *Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 16 of 23)

**H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Name or Item Tag | Qty | Design OA CFM | Supply Fan | | | | Return / Relief Fan | | | | | Status[1] |
| | | | CFM | Power | Power Units | Control | Fan Type | CFM | Power | Power Units | Control | |
| RTU-1 | 1 | 399.02 | 2,400 | 0.93 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| RTU-2 | 1 | 370.1 | 2,400 | 0.93 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| RTU-3 | 1 | 266.5 | 2,000 | 0.88 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| RTU-4 | 1 | 370.4 | 2,400 | 0.93 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| RTU-5 | 1 | 76.7 | 1,200 | 0.68 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| RTU-6 | 1 | 140.1 | 1,200 | 0.68 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| RTU-7 | 1 | 96.91 | 1,200 | 0.68 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| RTU-8 | 1 | 79.13 | 1,050 | 0.64 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| DS-1 | 1 | 0 | 375 | 0.03 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| DS-2 | 1 | 0 | 375 | 0.03 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| DS-3 | 1 | 0 | 375 | 0.03 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| DS-4 | 1 | 0 | 375 | 0.03 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| DS-5 | 1 | 0 | 375 | 0.03 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| DS-6 | 1 | 38.4 | 375 | 0.03 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |

[1] *Status: N - New, A - Altered, E - Existing*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 15 of 23)

**H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Equipment Name | Equipment Type | Qty | Heating | | | | Cooling | | | Economizer Type (if present) | Status[1] |
| | | | Total Heating Output (kBtu/h) | Supp Heat Output (kBtu/h) | Efficiency Unit | Efficiency | Total Cooling Output (kBtu/h) | Efficiency Unit | Efficiency | | |
| DS-6 | Single Zone Heat Pump | 1 | 19.79 | 0 | COP HSPF2 | 4.1 9.52 | 17.28 | EER2 SEER2 | 12.2 18.81 | N/A | N |

[1] *Status: N - New, A - Altered, E - Existing*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 14 of 23)

**H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Equipment Name | Equipment Type | Qty | Heating | | | | Cooling | | | Economizer Type (if present) | Status[1] |
| | | | Total Heating Output (kBtu/h) | Supp Heat Output (kBtu/h) | Efficiency Unit | Efficiency | Total Cooling Output (kBtu/h) | Efficiency Unit | Efficiency | | |
| RTU-4 | Single Zone Air Conditioner (SZAC) Air System | 1 | 97 | 0 | AFUE | 81 | 71.05 | EER | 11.8 | Differential Enthalpy | N |
| RTU-5 | Single Zone Air Conditioner (SZAC) Air System | 1 | 49 | 0 | AFUE | 81 | 33.6 | EER2 SEER2 | 12.2 14 | Differential Enthalpy | N |
| RTU-6 | Single Zone Air Conditioner (SZAC) Air System | 1 | 49 | 0 | AFUE | 81 | 33.6 | EER2 SEER2 | 12.2 14 | Differential Enthalpy | N |
| RTU-7 | Single Zone Air Conditioner (SZAC) Air System | 1 | 49 | 0 | AFUE | 81 | 33.6 | EER2 SEER2 | 12.2 14 | Differential Enthalpy | N |
| RTU-8 | Single Zone Air Conditioner (SZAC) Air System | 1 | 49 | 0 | AFUE | 81 | 33.6 | EER2 SEER2 | 12.2 14 | Differential Enthalpy | N |
| DS-1 | MiniSplit HP | 1 | 14.58 | 0 | COP HSPF2 | 4.3 10.2 | 11.52 | EER2 SEER2 | 12.2 21.3 | N/A | N |
| DS-2 | MiniSplit HP | 1 | 14.58 | 0 | COP HSPF2 | 4.3 10.2 | 11.52 | EER2 SEER2 | 12.2 21.3 | N/A | N |
| DS-3 | MiniSplit HP | 1 | 14.58 | 0 | COP HSPF2 | 4.3 10.2 | 11.52 | EER2 SEER2 | 12.2 21.3 | N/A | N |
| DS-4 | MiniSplit HP | 1 | 14.58 | 0 | COP HSPF2 | 4.3 10.2 | 11.52 | EER2 SEER2 | 12.2 21.3 | N/A | N |
| DS-5 | MiniSplit HP | 1 | 14.58 | 0 | COP HSPF2 | 4.3 10.2 | 11.52 | EER2 SEER2 | 12.2 21.3 | N/A | N |

[1] *Status: N - New, A - Altered, E - Existing*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 13 of 23)

**G8. OVERHANG DETAILS**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 |
|---|---|---|---|---|---|---|
| Fenestration Tag/ ID | Azimuth | Depth (ft) | Height from Top of Sill to Overhang (ft) | Right Extent (ft) | Left Extent (ft) | Flap Height |
| SF Door23 | 315 | 12 | 8 | 12 | 12 | N/A |
| 178 | 314 | 12 | 7.5 | 12 | 12 | N/A |
| 179 | 314 | 12 | 7.5 | 12 | 12 | N/A |
| 180 | 314 | 12 | 7.5 | 12 | 12 | N/A |
| 181 | 314 | 12 | 7.5 | 12 | 12 | N/A |
| 189 | 0 | 12 | 8 | 12 | 12 | N/A |
| 195 | 314 | 12 | 7.5 | 12 | 12 | N/A |
| 196 | 314 | 12 | 7.5 | 12 | 12 | N/A |

**H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Equipment Name | Equipment Type | Qty | Heating | | | | Cooling | | | Economizer Type (if present) | Status[1] |
| | | | Total Heating Output (kBtu/h) | Supp Heat Output (kBtu/h) | Efficiency Unit | Efficiency | Total Cooling Output (kBtu/h) | Efficiency Unit | Efficiency | | |
| RTU-1 | Single Zone Air Conditioner (SZAC) Air System | 1 | 97 | 0 | AFUE | 81 | 71.05 | EER | 11.8 | Differential Enthalpy | N |
| RTU-2 | Single Zone Air Conditioner (SZAC) Air System | 1 | 97 | 0 | AFUE | 81 | 71.05 | EER | 11.8 | Differential Enthalpy | N |
| RTU-3 | Single Zone Air Conditioner (SZAC) Air System | 1 | 65 | 0 | AFUE | 81 | 54.73 | EER2 SEER2 | 12.2 14 | Differential Enthalpy | N |

[1] *Status: N - New, A - Altered, E - Existing*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 12 of 23)

B1

**G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 |
|---|---|---|---|---|---|---|---|---|
| Fenestration Assembly Name | Fenestration Type/ Product Type / Frame Type | Certification Method[1] | Assembly Method | Area (ft²) | Overall U-factor | Overall SHGC | Overall VT | Status[2] |
| Default Skylight | Skylight<br>Fixed window<br>Non-metal | Default 110.6 | Manufactured | 200 | 0.84 | 0.67 | 1 | E |
| SF Door (ALT) | Vertical fenestration<br>Curtain wall<br>N/A | NFRC | Manufactured | 42 | 0.58 | 0.41 | 0.46 | A |
| Default Double Non Metal Tinted | Vertical fenestration<br>Fixed window<br>Non-metal | Default 110.6 | Site built | 442 | 0.55 | 0.55 | 0.77 | E |
| Default Double Non Metal Tinted Door | Vertical fenestration<br>Curtain wall<br>Non-metal | Default 110.6 | Site built | 42 | 0.55 | 0.55 | 0.88 | E |
| Prescriptive Fixed Window | Vertical fenestration<br>Fixed window<br>N/A | NFRC | Manufactured | 80 | 0.36 | 0.25 | 0.46 | A |
| SF Door (NEW) | Vertical fenestration<br>Curtain wall<br>N/A | NFRC | Manufactured | 42 | 0.41 | 0.26 | 0.46 | A |
| (N) Prescriptive Fixed Window | Vertical fenestration<br>Fixed window<br>N/A | NFRC | Manufactured | 52 | 0.36 | 0.25 | 0.46 | N |

[1] *Notes: Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.*

[2] *Status: N - New, A - Altered, E - Existing*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 11 of 23)

**G5. OPAQUE SURFACE ASSEMBLY SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | | 07 | 08 | 09 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Surface Name | Construction Type | Area (ft²) | Framing Type | Cavity R-Value | Continuous R-Value | | Units | Value | Description of Assembly Layers | Status[1] |
| | | | | | Interior | Exterior | | | | |
| R-21 Wall355 | Exterior Wall | 641.34 | Wood | 21 | N/A | N/A | U-factor | 0.0691 | Stucco - 7/8 in.<br>Vapor permeable felt - 1/8 in.<br>Composite-9<br>Gypsum Board - 1/2 in. | N |
| R-30 Roof No Attic359 | Roof | 256.03 | Wood | 30 | N/A | N/A | U-factor | 0.034 | AsphaltShingles0_25In<br>Vapor permeable felt - 1/8 in.<br>Plywood - 1/2 in.<br>Air - Cavity - Wall Roof Ceiling - 4 in. or more<br>Composite-10<br>Gypsum Board - 1/2 in. | N |

[1] *Status: N - New, A - Altered, E - Existing*

**G6A. OPAQUE DOOR SUMMARY (NONRESIDENTIAL)**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| Assembly Name | Area (ft²) | Overall U-factor | Status[1] |
| (E) Metal Door36 | 124.26 | 0.7 | E |
| Metal Door365 | 42 | 0.7 | N |

[1] *Status: N - New, A - Altered, E - Existing*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 10 of 23)

**G5. OPAQUE SURFACE ASSEMBLY SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | | 07 | 08 | 09 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Surface Name | Construction Type | Area (ft²) | Framing Type | Cavity R-Value | Continuous R-Value | | Units | Value | Description of Assembly Layers | Status[1] |
| | | | | | Interior | Exterior | | | | |
| 12 Concrete Wall80 | Underground Wall | 1,430 | N/A | 0 | N/A | N/A | C-factor | 1.12 | Concrete - 140 lb/ft3 - 12 in. | E |
| Demising R-19 Floor164 | Ceiling | 149.35 | Wood | 19 | N/A | N/A | U-factor | 0.0484 | AsphaltShingles0_25In<br>Vapor permeable felt - 1/8 in.<br>Plywood - 1/2 in.<br>Air - Ceiling - 3/4 in.<br>Composite-5<br>Gypsum Board - 1/2 in. | E |
| (A) R-21 Wall238 | Exterior Wall | 1,155 | Wood | 21 | N/A | N/A | U-factor | 0.0691 | Stucco - 7/8 in.<br>Vapor permeable felt - 1/8 in.<br>Composite-6<br>Gypsum Board - 1/2 in. | A |
| (A) R-30 Roof No Attic257 | Roof | 959.28 | Wood | 30 | N/A | N/A | U-factor | 0.034 | AsphaltShingles0_25In<br>Vapor permeable felt - 1/8 in.<br>Plywood - 1/2 in.<br>Air - Cavity - Wall Roof Ceiling - 4 in. or more<br>Composite-7<br>Gypsum Board - 1/2 in. | A |
| R-13 Wall351 | Interior Wall | 210 | Wood | 13 | N/A | N/A | U-factor | 0.0905 | Gypsum Board - 5/8 in.<br>Composite-8<br>Gypsum Board - 5/8 in. | N |
| Slab On Grade353 | Underground Floor | 256 | N/A | 0 | N/A | N/A | F-factor | 0.73 | Slab Type =Unheated slab on grade<br>Insulation Orientation =None<br>Insulation R-Value =none | N |

[1] *Status: N - New, A - Altered, E - Existing*



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PROJECT:

Renovation & Addition

# Arroyo Grande Library

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center, Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

ENERGY COMPLIANCE

CONSULTANT:

BMA Mechanical +
689 Tank Farm Rd., Ste 240
SLO, CA 93401
OFF: (805) 544-4269
BMA JOB# 23156.00

STAMP:

LICENSED PROFESSIONAL ENGINEER
BRANDON RODGERS
M 39882
EXP 6/30/27
MECHANICAL
STATE OF CALIFORNIA

DATE:

**June 18, 2024**

REVISIONS:

1 Plan Check 1
County of SLO, 10/28/24
2 Plan Check 2
County of SLO, 12/11/24
B1 Bid Set
Update, 07/16/25

JOB NUMBER:

2028

SHEET:

En1.1

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**K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL**

See NRCC-LTI-E for mandatory controls

**L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION**

Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

| Building Component | Form/Title |
|---|---|
| Envelope | NRCI-ENV-01-E - Must be submitted for all buildings |
| Envelope | NRCI-ENV-E - Envelope (for all buildings) |
| Mechanical | NRCI-MCH-01-E - Must be submitted for all buildings |
| Mechanical | NRCI-MCH-E - For all buildings with Mechanical Systems |
| Indoor Lighting | NRCI-LTI-E - Indoor Lighting (for all buildings) |

**M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE**

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

| Building Component | Form/Title |
|---|---|
| Envelope | NRCA-ENV-02-F - NRFC label verification for fenestration |
| Mechanical | 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 |
| Mechanical | NRCA-MCH-03-A - Constant Volume Single Zone HVAC |
| Mechanical | NRCA-MCH-05-A - Air Economizer Controls |
| Mechanical | NRCA-MCH-12-A FDD for Packaged Direct Expansion Units |

**N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION**

Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

There are no Certificates of Verification applicable to this project



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
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| Nonresidential Performance Compliance Method | (Page 20 of 22) |

**H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| System ID | System Type | Qty | Rated Capacity (kBtuh) | | Airflow (cfm) | | | Fan | | | VSD |
| | | | Heating | Cooling | Design | Min. | Min. Ratio | Power | Power Units | Cycles | |
| 9-RTU-8-Trm | Uncontrolled | 1 | N/A | N/A | 1,050 | N/A | 0 | N/A | N/A | N/A | ☐ |
| DS-1 | MiniSplit HP | 1 | 14.58 | 11.52 | 375 | N/A | N/A | 0.03 | BHP | Continuous | ☐ |
| DS-2 | MiniSplit HP | 1 | 14.58 | 11.52 | 375 | N/A | N/A | 0.03 | BHP | Continuous | ☐ |
| DS-3 | MiniSplit HP | 1 | 14.58 | 11.52 | 375 | N/A | N/A | 0.03 | BHP | Continuous | ☐ |
| DS-4 | MiniSplit HP | 1 | 14.58 | 11.52 | 375 | N/A | N/A | 0.03 | BHP | Continuous | ☐ |
| DS-5 | MiniSplit HP | 1 | 14.58 | 11.52 | 375 | N/A | N/A | 0.03 | BHP | Continuous | ☐ |
| DS-6 | Single Zone Heat Pump | 1 | 19.79 | 17.28 | 375 | N/A | N/A | 0.03 | BHP | Continuous | ☐ |

**K1. INDOOR CONDITIONED LIGHTING GENERAL INFO**

| 01 | 02 | 03 | 04 | 05 | 06 |
|---|---|---|---|---|---|
| Occupancy Type[1] | Conditioned Floor Area[2] (ft²) | Installed Lighting Power (Watts) | Lighting Control Credits (Watts) | Additional (Custom) Allowance | |
| | | | | Area Category Footnotes (Watts) | Area Category Footnotes (Watts) |
| Library - Stacks | 2660.14 | 2660.14 | 0 | 0 | 0 |
| Lounge | 256 | 140.8 | 0 | 0 | 0 |
| Office ( 250 square feet) | 934 | 560.4 | 0 | 0 | 0 |
| Office ( 250 square feet) | 492.6 | 320.19 | 0 | 0 | 0 |
| **Building Totals:** | **4342.74** | **3681.53** | **0** | **0** | **0** |

[1] *See Table 140.6-C*
[2] *See NRCC-LTI-E for unconditioned spaces*
[3] *Lighting information for existing spaces modeled is not included in this table*



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
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| Nonresidential Performance Compliance Method | (Page 22 of 22) |

**Documentation Author's Declaration Statement**

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

| | |
|---|---|
| Documentation Author Name: Dustin Lane | Documentation Author Signature: |
| Company: BMA Mechanical+ | Signature Date: 10/25/24 |
| Address: 689 Tank Farm Rd. STE 240 | CEA/HERS Certification Identification (if applicable): |
| City/State/Zip: San Luis Obispo, CA 93401 | Phone: 805-544-4269 |

**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 understand that a registered 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, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

| | | |
|---|---|---|
| Responsible Designer Name: Brandon Rodgers | Responsible Designer Signature: | |
| Company: BMA Mechanical+ | | |
| Address: 689 Tank Farm Rd. STE 240 | Date Signed: 10/25/2024 | |
| City/State/Zip: San Luis Obispo CA 93401 | License #: M33682 | |
| Phone: 805-544-4269 | Title: Engineer | Scope: Mechanical |



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| Nonresidential Performance Compliance Method | (Page 19 of 22) |

**H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 |
|---|---|---|---|---|---|---|
| Zone Name | Mechanical Ventilation | | | | Conditioned Area (sf) | DCV or Occupant Sensor Controls, or Both |
| | Ventilation Function | # of People | Supply OA CFM | Exhaust CFM | | |
| 6-RTU-5 | Assembly - Libraries (reading rooms and stack areas) | 2.56 | 76.7 | 0 | 511.31 | N/A |
| 7-RTU-6 | Office - Office space | 4.67 | 140.1 | 0 | 934 | N/A |
| 8-RTU-7 | Office - Office space | 3.23 | 96.91 | 70 | 646.08 | N/A |
| 9-RTU-8 | Office - Office space | 2.64 | 79.13 | 0 | 527.51 | N/A |
| 10-DS-1 | Office - Office space | 0.63 | 18.97 | 100 | 126.5 | N/A |
| 11-DS-2 | Office - Office space | 0.63 | 18.97 | 100 | 126.5 | N/A |
| 12-DS-3 | Office - Office space | 0.62 | 18.63 | 225 | 124.2 | N/A |
| 13-DS-4 | Office - Office space | 0.58 | 17.31 | 225 | 115.4 | N/A |
| 14-DS-5 | Office - Office space | 1.23 | 36.85 | 200 | 245.7 | N/A |
| 15-DS-6 | Misc - All others | 8.53 | 38.4 | 0 | 256 | N/A |

**H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| System ID | System Type | Qty | Rated Capacity (kBtuh) | | Airflow (cfm) | | | Fan | | | VSD |
| | | | Heating | Cooling | Design | Min. | Min. Ratio | Power | Power Units | Cycles | |
| 1-RTU-1-Trm | Uncontrolled | 1 | N/A | N/A | 2,400 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 3-RTU-2-Trm | Uncontrolled | 1 | N/A | N/A | 2,400 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 4-RTU-3-Trm | Uncontrolled | 1 | N/A | N/A | 2,000 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 5-RTU-4-Trm | Uncontrolled | 1 | N/A | N/A | 2,400 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 6-RTU-5-Trm | Uncontrolled | 1 | N/A | N/A | 1,200 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 7-RTU-6-Trm | Uncontrolled | 1 | N/A | N/A | 1,200 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 8-RTU-7-Trm | Uncontrolled | 1 | N/A | N/A | 1,200 | N/A | 0 | N/A | N/A | N/A | ☐ |



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PROJECT:

Renovation & Addition

# Arroyo Grande Library

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

ENERGY COMPLIANCE

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CAL T20224-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error or not in compliance with approved plans as well as in violation of any applicable codes.
Work Area Exclusive of Garage Shall Not Exceed 23156.00 Sq. Ft.
An Energy Model Shall Be Approved

BMA Mechanical+ 689 Tank Farm Rd, Ste 240 San Luis Obispo, CA 93401 OFC: (805) 544-4269

STAMP:

LICENSED PROFESSIONAL ENGINEER
BRANDON RODGERS
M 33682
EXP 9/30/25
MECHANICAL
STATE OF CALIFORNIA

DATE:

**June 18, 2024**

REVISIONS:

1 Plan Check 1 County of SLO, 10/28/24
2 Plan Check 2 County of SLO, 12/11/24

JOB NUMBER:

2028

SHEET:

En1.2

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STATE OF CALIFORNIA
**Domestic Water Heating System**
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | NRCC-PLB-E |
|---|---|---|
| **Project Name:** Arroyo Grande Library Remodel | **Report Page:** | (Page 6 of 6) |
| **Project Address:** 800 W Branch St | **Date Prepared:** | 2/6/2024 |

**DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**

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

| Documentation Author Name: | Documentation Author Signature: |
|---|---|
| Dustin Lane | |
| Company: BMA Mechanical+ | Signature Date: 2024-02-06 |
| Address: 689 Tank Farm Rd. STE 240 | CEA/ HERS Certification Identification (if applicable): |
| City/State/Zip: San Luis Obispo CA 93401 | Phone: 805-544-4269 |

**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: Brandon Rodgers | Responsible Designer Signature: |
|---|---|
| Company: BMA Mechanical+ | Date Signed: 2024-02-06 |
| Address: 689 Tank Farm Rd. STE 240 | License: M33682 |
| City/State/Zip: San Luis Obispo CA 93401 | Phone: 805-544-4269 |



STATE OF CALIFORNIA
**Domestic Water Heating System**
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | NRCC-PLB-E |
|---|---|---|
| **Project Name:** Arroyo Grande Library Remodel | **Report Page:** | (Page 3 of 6) |
| | **Date Prepared:** | 2/6/2024 |

**G. DOMESTIC HOT WATER DISTRIBUTION SYSTEM**

*This table is used to demonstrate compliance for nonresidential occupancies with distribution requirements in 120.3 and 140.5. For multifamily and hotel/motel occupancies, compliance is demonstrated with requirements 110.3(c), 160.4, 170.2(d).*

**Mandatory Pipe Insulation All Occupancies**

| | | |
|---|---|---|
| 13 | ☐ | For systems serving dwelling units, pipe insulation must meet the minimum insulation requirements in Table 160.4-A (see blow) except:<br>• Piping that penetrates framing members shall not be required to have pipe insulation for the distance of the framing penetration. Piping that penetrates metal framing shall use grommets, plugs, wrapping or other insulating material to assure that no contact is made with the metal framing. Insulation shall abut securely against all framing members<br>• Piping installed in interior or exterior walls shall not be required to have pipe insulation if all of the requirements are met for compliance with Quality Insulation Installation (QII) as specified in the Reference Residential Appendix RA3.5.<br>• Piping surrounded with a minimum of 1 inch of wall insulation, 2 inches of crawlspace insulation, or 4 inches of attic insulation, shall not be required to have pipe insulation. |
| 14 | ☒ | For systems serving nonresidential spaces, pipe insulation for the following applications is specified to comply with Table 120.3-A (see below) per 120.3:<br>• Recirculating system piping, including supply and return piping of the water heater<br>• The first 8 ft of hot and cold outlet piping, including between storage tank and heat trap, for a nonrecirculating storage system<br>• Pipes that are externally heated |
| 15 | ☐ | 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 per 120.3(b) / 160.4(f). Pipe insulation buried below grade must be installed in a water proof and non-crushable casing or sleeve. |

**TABLE 120.3-A / 160.4-A PIPE INSULATION THICKNESS**

| Fluid Temperature Range ( °F) | Conductivity Range (Btu-in per hour per ft² per °F) | Insulation Mean Rating Temp ( °F) | Nominal Pipe Diameter (in) | | | |
|---|---|---|---|---|---|---|
| | | | < 1 | 1 to < 1.5 | 1.5 to < 4 | 1.5 to < 4 Multifamily & Hotel/Motel |
| | | | Minimum Insulation Required | | | |
| 105-140 | 0.22 - 0.28 | 100 | 1.0 in or R-7.7 | 1.5 in or R-12.5 | 1.5 in or R-11 | 2.0 in or R-16 |



STATE OF CALIFORNIA
**Domestic Water Heating System**
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | NRCC-PLB-E |
|---|---|---|
| **Project Name:** Arroyo Grande Library Remodel | **Report Page:** | (Page 5 of 6) |
| | **Date Prepared:** | 2/6/2024 |

**I. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION**

*Selections have been made based on information provided in this document. If any selection 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-PLB-E - Must be submitted for all buildings |

**J. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE**

*There are no forms required for this project.*

**K. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION**

*There are no forms required for this project.*



STATE OF CALIFORNIA
**Domestic Water Heating System**
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | NRCC-PLB-E |
|---|---|---|
| **Project Name:** Arroyo Grande Library Remodel | **Report Page:** | (Page 2 of 6) |
| | **Date Prepared:** | 2/6/2024 |

**E. ADDITIONAL REMARKS**

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

**F. DOMESTIC HOT WATER EQUIPMENT**

*This table is used to demonstrate compliance with mandatory-equipment requirements in 110.1 and 110.3. Compliance with prescriptive requirements in 140.5(c) / 170.2(d) must also be demonstrated and with 141.0 / 180.1/ 180.2 for addition and alteration scopes.*

**Equipment Schedule: Water Heating Efficiency and Standby Loss**

| 03 | 04 | | | 05 | 06 | | | |
|---|---|---|---|---|---|---|---|---|
| System Name | Bradford White LE110U3-1 | Exception to 140.5(c)/ 170.2(d)3 | | ☐ | Gas Service Water Heating System >= 1MMBtu/h[1] | Capacity-weighted Average Efficiency % | | |

| 07 | 08 | 09 | 10 | | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|
| Name or Item Tag | Equipment Type | Volume (gal) | Rated Input Capacity (Btu/h) | Max GPM/ First Hour Rating (FHR) | Rated Efficiency | Minimum Efficiency Required | Efficiency Unit | Designed Standby Loss | Maximum Standby Loss |
| Bradford White LE110U3-1 | Consumer Rated Electric Storage | 10 | 5,120 | FHR >=75 | 0.97 | 0.93 | UEF | | |

*[1]FOOTNOTE: In systems >= 1MMBtu/h with multiple units, gas water heaters with input capacity > 100,000 Btu/h may meet 90% Et requirements via an input capacity-weighted average.*

**Water Heating Equipment All Occupancies**

| | Yes | No | Not Applicable | Requirement |
|---|---|---|---|---|
| 18 | ☐ | ☐ | ☒ | Unfired storage tank insulation shall have Internal + External >=R-16 OR External >=R-3.5. Label required per 110.3(c)3 |
| 19 | ☐ | ☐ | ☒ | New state buildings 60% of energy for service water heating from site solar energy or recovered energy per 110.3(c)5 |
| 20 | ☐ | ☐ | ☒ | Isolation valves for instantaneous water heater with input rating >6.8 kBTUH or 2 kW has been specified per 110.3(c)6 |
| 21 | ☐ | ☐ | ☒ | School buildings < 25,000 ft² and < 4 stories must install a heat pump water heating system per 140.5(a)1. Water heating systems serving an individual bathroom space may be an instantaneous electric water heater. |



STATE OF CALIFORNIA
**Domestic Water Heating System**
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| CERTIFICATE OF COMPLIANCE | | NRCC-PLB-E |
|---|---|---|
| **Project Name:** Arroyo Grande Library Remodel | **Report Page:** | (Page 4 of 6) |
| | **Date Prepared:** | 2/6/2024 |

**H. DOMESTIC HOT WATER CONTROLS**

*This table is used to demonstrate compliance with control requirements in 110.3 for all occupancies. For multifamily residential and hotel/motel occupancies, compliance is also demonstrated with requirements in 160.4(e) / 170.2(d).*

| | Yes | No | Not Applicable | Requirement |
|---|---|---|---|---|
| 01 | ☒ | ☐ | ☐ | Construction documents require manufacturer certification that service water-heating systems are equipped with automatic temperature controls capable of adjusting temperature settings per 110.3(a). |
| 02 | ☐ | ☐ | ☒ | Systems with capacity > 167,000 BTUH equipped with outlet temperature controls per 110.3(c)1 unless covered by California Plumbing Code 613.0. |
| 03 | ☐ | ☐ | ☒ | Controls for circulating pumps or electrical heat trace systems are capable of automatically turning off the system per §110.3(c)2 unless systems serves healthcare facility. |
| 04 | ☐ | ☐ | ☒ | For recirculation systems serving multiple dwelling units, design includes automatic pump controls per 170.2(d) or 180.1(b)3 for additions. |
| 05 | ☐ | ☐ | ☒ | For recirculation systems serving individual dwelling units, design includes manual on/off controls as specified in Reference Appendix RA4.4.9 per 170.2(d). |
| 06 | ☐ | ☐ | ☒ | Combustion air positive shut-off shall be provided per 160.4(3).on all newly installed commercial boilers as follows:<br>• Boilers with input capacity >= 2.5 MMBtu/h, in which the boiler is designed to operate with a nonpositive vent static pressure<br>• Boilers where one stack serves two or more boilers with a total combined input capacity per stack of 2.5 MMBtu/h. |
| 07 | ☐ | ☐ | ☒ | Boiler combustion air fans with motor >= 10 hp shall meet one of the following<br>• The fan motor shall be driven by a variable speed drive OR<br>• The fan motor shall include controls that limit the fan motor demand to <=30% of the total design wattage at 50% of the design air volume. |
| 08 | ☐ | ☐ | ☒ | Newly installed boilers with an input capacity (d gte/) 5MMBtu/h and a steady state full-load combustion efficiency < 90% shall maintain excess (stack-gas) oxygen concentrations <= 5% by volume on a dry basis over firing rates of 20-100%. Combustion air volume shall be controlled with respect to firing rate or flue gas oxygen concentration. Use of a common gas and combustion air control linkage or jack shaft is prohibited. |



STATE OF CALIFORNIA
**Domestic Water Heating System**
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | NRCC-PLB-E |
|---|---|---|
| **Project Name:** Arroyo Grande Library Remodel | **Report Page:** | (Page 1 of 6) |
| **Project Address:** 800 W Branch St | **Date Prepared:** | 2/6/2024 |

**A. GENERAL INFORMATION**

| | | | | | |
|---|---|---|---|---|---|
| 01 | Project Location (city) | Arroyo Grande | 02 | Climate Zone | 5 |
| 03 | Occupancy Types Within Project (select all that apply): | | | | |

• Library • Office • All Other Occupancies

**B. PROJECT SCOPE**

*This table includes domestic water heating systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive paths outlined in 140./ 170.2(d) and 141.0(a)/ 180.1, or 141.0(b)2N / 180.2 for additions or alterations. Solar water heating systems are documented on the NRCC-SAB compliance document. Combined hydronic water heating systems are documented on the NRCC-MCH compliance document.*

| 01 | 02 | 03 |
|---|---|---|
| My project consists of (check all that apply): | System Type[2,3] | System Components |
| ☐ New system (DHW system being installed for the first time) | | ☐ Equipment ☐ Distribution ☐ Controls |
| ☒ System Alteration (equipment, distribution or controls) | Individual System (serving nonresidential spaces) | ☒ Equipment ☒ Distribution ☒ Controls |

*[2]FOOTNOTES: Point of use water heaters, or other non-central systems used to serve nonresidential spaces, are considered individual systems.*
*[2] Dwelling units refers to hotel/motel guest rooms and units in a multifamily residential occupancy.*
*[3] DHW systems serving 2 or more dwelling units are considered "Central Systems" for multifamily occupancies*

**C. COMPLIANCE RESULTS**

*Table C will indicate if the project data input into the compliance document is compliant with water heating requirements. 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 |
|---|---|---|---|
| Domestic Hot Water Equipment | Distribution Systems | Controls | **Compliance Results** |
| Table F | Table G | Table H | |
| Yes | Yes | Yes | COMPLIES |

**D. EXCEPTIONAL CONDITIONS**

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




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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

**APN: 007-011-050**
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

ENERGY COMPLIANCE

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
By Matt Varvel
Project No: CAL T2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error.
Approved plans shall be in conformance with approved documentation.
All changes must be approved.


BMA Mechanical+ 689 Tank Farm Rd., Ste 240
SLO, CA 93401 • OFF: (805) 544-4269
www.bmamechanical.com • STATE LIC# 23156.00


STAMP:

BRANDON RODGERS
LICENSED PROFESSIONAL ENGINEER
M 33682
EXP 6/30/25
MECHANICAL
STATE OF CALIFORNIA

DATE:

**June 18, 2024**

REVISIONS:

1 Plan Check 1
County of SLO, 10/28/24
2 Plan Check 2
County of SLO, 12/11/24

JOB NUMBER:

2028

SHEET:

En1.3

# HVAC LEGEND

| SYMBOL | ABBREVIATION | DESCRIPTION |
|---|---|---|
| | | CEILING SUPPLY |
| | | CEILING RETURN |
| | | CEILING EXHAUST |
| | | SIDEWALL DIFFUSER, REGISTER, GRILLE OR LOUVER |
| | | DUCT (RECTANGULAR) |
| | | DUCT (ROUND) |
| | 24x12L | LINED DUCTWORK |
| | | TURNING VANE |
| | | FLEXIBLE DUCT |
| | FC | FLEXIBLE CONNECTION |
| | VD | MANUAL AIR VOLUME DAMPER |
| OAI 500 | | OUTSIDE AIR INTAKE MIN. CFM |
| T AC-1 | | ROOM THERMOSTAT – SUBSCRIPT INDICATES UNIT CONTROLLED |
| S | S | ON/OFF SWITCH |
| TS | TS | TEMPERATURE SENSOR |
| Ø | DIA | DIAMETER |
| | CEF | CEILING EXHAUST FAN |
| | POC/POD | POINT OF CONNECTION OR DISCONNECTION |
| | | DUCTWORK/EQUIPMENT TO BE REMOVED |
| | | EXISTING DUCTWORK/EQUIPMENT |
| DL 1FT² | DL | DOOR LOUVER – SUBSCRIPT INDICATES REQUIRED FREE AREA |
| | | ACCESS CLEARANCE AREA – 30" OR AS REQUIRED BY THE EQUIPMENT MANUFACTURER, WHICH EVER IS GREATER |
| | | REFRIGERANT LINES |

# HVAC ABBREVIATIONS

| | | | |
|---|---|---|---|
| AC | AIR CONDITION(–ING,–ED) | HP | HORSEPOWER |
| ABV | ABOVE | HZ | HERTZ |
| AFF | ABOVE FINISHED FLOOR | IDU | INDOOR UNIT |
| AFUE | ANNUAL FUEL UTILIZATION EFFICIENCY | IMP | IMPELLER |
| AHJ | AUTHORITY HAVING JURISDICTION | IWC | INCHES OF WATER COLUMN |
| ALUM | ALUMINUM | KW | KILOWATT INPUT |
| AMB | AMBIENT | LBS | POUNDS |
| ARCH | ARCHITECTURAL | LWT | LEAVING WATER TEMPERATURE |
| ARI | AMERICAN REFRIGERATION INSTITUTE | MBH | BTU PER HOUR (THOUSAND) |
| BD | BOARD | MCA | MINIMUM CIRCUIT AMPS |
| BDD | BACKDRAFT DAMPER | MFGR | MANUFACTURE OR MANUFACTURER |
| BLW | BELOW | MU/MUA | MAKE UP AIR |
| BHP | BRAKE HORSE POWER | (N) | NEW |
| BLDG | BUILDING | NOM | NOMINAL |
| BTUH | BRITISH THERMAL UNIT / HOUR | NTS | NOT TO SCALE |
| CA | COMBUSTION AIR | OA | OUTSIDE AIR |
| CAP | CAPACITY | OAI | OUTSIDE AIR INTAKE |
| CD | CONDENSATE DRAIN | OBD | OPPOSED BLADE DAMPER |
| CFD | CEILING FIRE DAMPER | ODU | OUTDOOR UNIT |
| CFM | CUBIC FEET PER MINUTE | OPT | OPERATING |
| CONN | CONNECTION | OSHPD | OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT |
| CONT | CONTINUATION | | |
| CSE | CALIFORNIA SEASONAL EFFICIENCY | PD | PRESSURE DROP |
| DB | DRY BULB TEMPERATURE | PSI | POUNDS PER SQUARE INCH |
| DET | DETAIL | RA | RETURN AIR |
| DN | DOWN | REFRIG | REFRIGERANT |
| DSA | DEPARTMENT OF THE STATE ARCHITECT | RM | ROOM |
| (E) | EXISTING | RND | ROUND |
| EA | EXHAUST AIR | SA | SUPPLY AIR |
| EDB | ENTERING DRY BULB TEMPERATURE | SEER | SEASONAL ENERGY EFFICIENCY |
| EER | ENERGY EFFICIENCY RATIO | SFD | SMOKE FIRE DAMPER |
| EFF | EFFICIENCY | SHT | SHEET |
| ELEC | ELECTRICAL | SM | SHEET METAL |
| ESP | EXTERNAL STATIC PRESSURE | SOV | SHUT OFF VALVE |
| EWB | ENTERING WET BULB | SP | STATIC PRESSURE |
| EWT | ENTERING WATER TEMPERATURE | SQ | SQUARE |
| EVAP | EVAPORATOR | SS | STAINLESS STEEL |
| FA | FACE AREA | SSE | STEADY STATE EFFICIENCY |
| FC | FLEXIBLE CONNECTION | SST | SATURATED SUCTION TEMPERATURE |
| FD | FIRE DAMPER | TYP | TYPICAL |
| FLA | FULL LOAD AMP | TXV | THERMAL EXPANSION VALVE |
| FPM | FEET PER MINUTE | UON | UNLESS OTHERWISE NOTED |
| FSC | FAN SPEED CONTROL | UTR | UP TO ROOF OR UP THROUGH ROOF |
| GA | GAGE OR GAUGE | VD | VOLUME DAMPER |
| GALV | GALVANIZED | WB | WET BULB TEMPERATURE |
| GPM | GALLONS PER MINUTE | WC | WATER COLUMN |
| GYP | GYPSUM | WG | WATER GAUGE |
| HD | HEAD | WT | WEIGHT |

# CAL GREEN CODE NONRESIDENTIAL MANDATORY MEASURES

DIVISION 5.4–MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

5.410.4 TESTING AND ADJUSTING. Testing and adjusting of systems shall be required for new buildings less than 10,000 square feet or new systems to serve an addition or alteration subject to 2022 CALGreen 303.1.

5.410.4.2 SYSTEMS. Develop a written plan of procedures for testing and adjusting systems. Systems to be included for testing and adjusting shall include at a minimum, as applicable to the project:

1. Renewable energy systems.
2. Landscape irrigation systems.
3. Water reuse systems.

5.410.4.3 PROCEDURES. Perform testing and adjusting procedures in accordance with manufacturer's specifications and applicable standards on each system.

At a minimum the Mechanical Contractor shall obtain the latest start–up check list(s) from the equipment manufacturer and perform all tests and checks applicable. After completion of the start–up check list the Mechanical contractor shall make adjustments to put the equipment in peak working order. Mechanical Contractor shall document all work performed. Close out documentation provided to the General Contractor shall include all completed check list(s) and documentation for any work performed. The General Contractor shall submit the check list(s) and work documentation to Engineer of Record.

5.410.4.3.1 HVAC BALANCING. In addition to testing and adjusting, before a new space–conditioning system serving a building or space is operated for normal use, balance the system in accordance with the procedures defined by the Testing Adjusting and Balancing Bureau National Standards; the National Environmental Balancing Bureau Procedural Standards; Associated Air Balance Council National Standards or as approved by the building enforcing agency.

See Specification section 15600 for HVAC balancing requirements.

5.410.4.4 REPORTING. After completion of testing, adjusting and balancing, provide a final report of testing signed by the individual responsible for performing these services.

5.410.4.5 OPERATION AND MAINTENANCE (O&M) MANUAL. Provide the building owner or representative with detailed operating and maintenance instructions and copies of guaranties/warranties for each system. O&M instructions shall be consistent with OSHA requirements in CCR, Title 8, Section 5142, and other related regulations.

5.410.4.5.1 INSPECTIONS AND REPORTS. Include a copy of all inspection verifications and reports required by the enforcing agency.

DIVISION 5.5–ENVIRONMENTAL QUALITY

SECTION 5.504 POLLUTANT CONTROL

5.504.1 TEMPORARY VENTILATION. The permanent HVAC system shall only be used during construction if necessary to condition the building within the required temperature range for material and equipment installation. If the HVAC system is used during construction, use return air filters with a Minimum Efficiency Reporting Value (MERV) of 8, based on ASHRAE 52.2–1999, or an average efficiency of 30% based on ASHRAE 52.1–1992. Replace all filters immediately prior to occupancy, or, if the building is occupied during alteration, at the conclusion of construction.

5.504.3 COVERING OF DUCT OPENINGS AND PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION. At the time of rough installation and during storage on the construction site until final startup of the heating, cooling and ventilating equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheet metal or other methods acceptable to the enforcing agency to reduce the amount of dust, water and debris which may enter the system.

5.504.4.1 ADHESIVES, SEALANTS AND CAULKS. Adhesives, sealants, and caulks used on the project shall meet the requirements of the following standards:

1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable, or SCAQMD Rule 1168 VOC limits, as shown in Tables 5.504.4.1 and 5.504.4.2. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products as specified in subsection 2, below.
2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than one pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of California Code of Regulations, Title 17, commencing with Section 94507.

ADHESIVE VOC LIMIT
Less Water and Less Exempt Compounds in Grams Per Liter

| SPECIALTY APPLICATIONS | CURRENT VOC LIMIT |
|---|---|
| PVC welding | 510 |
| CPVC welding | 490 |
| ABS welding | 325 |
| Plastic cement welding | 250 |
| Adhesive primer for plastic | 550 |
| Contact adhesive | 80 |
| Special purpose contact adhesive | 250 |

1. If an adhesive is used to bond dissimilar substrates together the adhesive with the highest VOC content shall be allowed.
2. For additional information regarding methods to measure the VOC content specified in this table, see South Coast Air Quality Management District Rule 1168, http://www.arb.ca.gov/DRDB/SC/CURHTML/R1168.PDF.

5.504.5.3 FILTERS. In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media for outside and return air that provides at least a Minimum Efficiency Reporting Value (MERV) of 13. MERV 13 filters shall be installed prior to occupancy, and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual.

Exceptions:

1. Existing mechanical equipment.

5.504.5.3.1 LABELING. Installed filters shall be clearly labeled by the manufacturer indicating the MERV rating.

SECTION 5.505 INDOOR MOISTURE CONTROL

5.505.1 INDOOR MOISTURE CONTROL. Buildings shall meet or exceed the provisions of California Building Code, CCR, Title 24, Part 2, Sections 1202 (Ventilation) and Chapter 14 (Exterior Walls). For additional measures, see Section 5.407.2 of this code.

SECTION 5.506 INDOOR AIR QUALITY

5.506.1 OUTSIDE AIR DELIVERY. For mechanically or naturally ventilated spaces in buildings, meet the minimum requirements of Section 120.1 (Requirements For Ventilation) of the California Energy Code, or the applicable local code, whichever is more stringent, and Division 1, Chapter 4 of CCR, Title 8.

5.506.2 CARBON DIOXIDE (CO2) MONITORING. For buildings or additions equipped with demand control ventilation, CO2 sensors and ventilation controls shall be specified and installed in accordance with the requirements of the 2022 California Energy Code, Section 120.1(c)(4).

SECTION 5.508 OUTDOOR AIR QUALITY

5.508.1 OZONE DEPLETION AND GREENHOUSE GAS REDUCTIONS. Installations of HVAC, refrigeration and fire suppression equipment shall comply with Sections 5.508.1.1 and 5.508.1.2.

5.508.1.1 CHLOROFLUOROCARBONS (CFCs). Install HVAC, refrigeration and fire suppression equipment that do not contain CFCs.

5.508.1.2 HALONS. Install HVAC, refrigeration and fire suppression equipment that do not contain Halons.

# MECHANICAL GENERAL NOTES

1. All work shown herein shall comply with the requirements of the following codes:
   - 2022 California Administrative Code (CAC): Part 1, Title 24, California Code of Regulations (CCR)
   - 2022 California Building Code (CBC): Part 2, Title 24 CCR
   - 2022 California Electrical Code (CEC): Part 3, Title 24 CCR
   - 2022 California Mechanical Code (CMC): Part 4, Title 24 CCR
   - 2022 California Plumbing Code (CPC): Part 5, Title 24 CCR
   - 2022 California Energy Code (CEnC): Part 6, Title 24 CCR
   - 2022 California Fire Code (CFC): Part 9, Title 24 CCR
   - 2022 California Green Building Standards Code (CALGreen): Part 11, Title 24 CCR
2. Furnish all labor, materials, transportation, and perform all required operations to provide complete and operable mechanical system, in accordance with the full intent and meaning of the drawings and specifications.
3. All locations of ductwork and equipment are shown diagrammatically. Adhere to locations as closely as possible, vary runs or shape of ductwork as required to meet structural and other interferences as required by the Architect.
4. Duct dimensions shown are internal. Increase outer duct dimension as required to account for the thickness of internal lining where applicable.
5. All duct shall be fabricated and installed per Chapter 6, 2022 CMC.
6. All equipment shall be installed with sufficient access to controls, filters, electric motors, etc. Access clearance shall be 30" or as required by the equipment manufacturer, which ever is greater. Contractors shall provide access panels where required. Where vertical space allows, install ductwork that is in close proximity to mechanical, electrical or any other item that requires access high in the space for ease of access.
7. The Mechanical Contractor shall coordinate all items related to mechanical systems with the work of other trades before proceeding with procuring or fabrication of equipment, ductwork, piping etc. Items to be coordinated shall include but are not limited to the following:
   - Grilles, registers and diffusers shall be coordinated with the reflected ceiling plan.
   - Ductwork locations and potential interferences with structural members, framing, fire sprinkler lines, plumbing waste lines, cable trays and conduit.
   - Openings required in walls, floors or ceilings shall be coordinated with the general contractor and/or framing contractor prior to the start of construction to avoid rework. Any rework required shall be at no additional cost to the owner.
   - Prior to bidding the project the mechanical contractor shall coordinate with the electrical contractor to determine who will be responsible for procuring and installing motor starters, conduit for low voltage controls and line voltage control devices, such as single pole switches.
   - Access to volume dampers for balancing. Access to all equipment, as well as platform and curb locations.
   - Construction of platforms and shaped runners or other means to mount curbs level. All platforms and curbs shall be level unless otherwise noted or detailed on the mechanical plans.
8. Materials exposed within any space being used as an air plenum shall be non combustible or shall have a flame spread index not greater than 25 and a smoke developed index not greater than 50, when tested as a composite product in accordance with one of the following test methods: NFPA 255, method of test of surface burning characteristics of building materials, ASTM E84, surface burning characteristics of building materials, or UL 723, test for surface burning characteristics of building materials.
9. Controls or switches intended to be used by the occupant of a room or area to control heating, cooling or ventilation equipment shall be mounted at the heights given by section 11B–308.1.1 of the 2022 CBC. Notify the architect immediately if the mounting heights required by the 2022 CBC cannot be obtained at the location where the control device is shown on the mechanical floor plans.
10. Acceptance Testing Requirements: For applicable mechanical acceptance tests see the CEnC plan sheets. All forms, regulations, and requirements are available online at www.energy.ca.gov/title24.

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| MC1.1 | MECHANICAL CONTROLS |


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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**MECHANICAL NOTES, LEGEND, AND ABBREVIATIONS**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project File: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. All work shall be in accordance with approved plans.

BMA mechanical 565 Pacific Oaks Place, Ste 240 Goleta, CA 93117 (805) 964-4269 BMA 2084 23156.00

STAMP:

LICENSED PROFESSIONAL ENGINEER
BRANDON ROGERS
M 38 982
EXP 6/30/25
MECHANICAL
STATE OF CALIFORNIA

DATE:

**June 18, 2024**

REVISIONS:

1 Plan Check 1 County of SLO, 10/28/24
2 Plan Check 2 County of SLO, 12/11/24

JOB NUMBER:

2028

SHEET:

M0.0

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# SELF-CONTAINED GAS HEATING/ELECTRIC COOLING UNIT SCHEDULE

| MARK | MAKE | MODEL | NOM. CAP. (TONS) | REFRIGERANT | ELECTRICAL DATA | | | | ARI PERFORMANCE | | EVAPORATOR FAN DATA | | | | | | FURNACE SECTION | | | MERV 8 FILTER | | | ROOF CURB | OPER. WT LBS W/CURB | REMARKS (SEE BELOW) | AREA SERVED | MOUNTING DETAIL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | POWER V–ϕ–Hz | FLA | MCA | FUSE SIZE | NET COOLING BTUH | SEER2 (EER) | SZ VAV CFM MIN. | CFM | ESP | BHP | FAN SPEED | STATIC/ DRIVE | INPUT (BTUH) | OUTPUT (BTUH) | THERM. EFF. | MFGR MODEL | #–SIZE | P.D. IN. W.G. | | | | | |
| RTU–1 | YORK | ZJ078 | 6.5 | R–410A | 208–3–60 | 30.9 | 33.7 | 40.0 | 74,000 | – (11.8) | 1,800 | 2,300 | 0.5 | 0.93 | 777 | STD/ BELT | 120,000 | 97,000 | 81 | MR–13 | 4–24x20 | 0.05 | NOTE 2 | 1700 | NOTES 1,2,5–7, 9,10,C1 | MAIN LIBRARY | 2/M1.2 |
| RTU–2 | YORK | ZJ078 | 6.5 | R–410A | 208–3–60 | 30.9 | 33.7 | 40.0 | 74,000 | – (11.8) | 1,800 | 2,300 | 0.5 | 0.93 | 777 | STD/ BELT | 120,000 | 97,000 | 81 | MR–13 | 4–24x20 | 0.05 | NOTE 2 | 1700 | NOTES 1,2,5–7, 9,10,C1 | CHILDREN'S AREA | 2/M1.2 |
| RTU–3 | YORK | ZJ061 | 5.0 | R–410A | 208–3–60 | 20.9 | 24 | 35.0 | 57,000 | 14.0 (12.2) | N/A | 1,800 | 0.7 | 0.88 | 944 | STD/ BELT | 80,000 | 65,000 | 81 | MR–13 | 4–24x16 | 0.05 | NOTE 2 | 1450 | NOTES 1,2,5–9, C1 | MAIN LIBRARY | 2/M1.2 |
| RTU–4 | YORK | ZJ078 | 6.5 | R–410A | 208–3–60 | 30.9 | 33.7 | 40.0 | 74,000 | – (11.8) | 1,800 | 2,300 | 0.5 | 0.93 | 777 | STD/ BELT | 120,000 | 97,000 | 81 | MR–13 | 4–24x20 | 0.05 | NOTE 2 | 1700 | NOTES 1,2,5–7, 9,10,C1 | MAIN LIBRARY | 2/M1.2 |
| RTU–5 | YORK | ZJ037 | 3.0 | R–410A | 208–3–60 | 16.0 | 18.4 | 25.0 | 35,000 | 14.0 (12.2) | N/A | 1,200 | 1.0 | 0.68 | 915 | STD/ BELT | 60,000 | 49,000 | 81 | MR–13 | 4–24x16 | 0.05 | NOTE 3 | 1150 | NOTES 1,3,5,6, 7–9,C1 | FLEX RM | 1/M1.2 |
| RTU–6 | YORK | ZJ037 | 3.0 | R–410A | 208–3–60 | 16.0 | 18.4 | 25.0 | 35,000 | 14.0 (12.2) | N/A | 1,200 | 1.0 | 0.68 | 915 | STD/ BELT | 60,000 | 49,000 | 81 | MR–13 | 4–24x16 | 0.05 | NOTE 3 | 1150 | NOTES 1,3,4, 6–9,C1 | STAFF AREA | 1/M1.2 |
| RTU–7 | YORK | ZJ037 | 3.0 | R–410A | 208–3–60 | 16.0 | 18.4 | 25.0 | 35,000 | 14.0 (12.2) | N/A | 1,200 | 1.0 | 0.68 | 915 | STD/ BELT | 60,000 | 49,000 | 81 | MR–13 | 4–24x16 | 0.05 | NOTE 3 | 1150 | NOTES 1,3,4, 6,8–9,C1 | BREAK/ FOL AREA | 1/M1.2 |
| RTU–8 | YORK | ZJ037 | 3.0 | R–410A | 208–3–60 | 16.0 | 18.4 | 25.0 | 35,000 | 14.0 (12.2) | N/A | 1,050 | 1.0 | 0.64 | 893 | STD/ BELT | 60,000 | 49,000 | 81 | MR–13 | 4–24x16 | 0.05 | NOTE 3 | 1150 | NOTES 1,3,4, 6,8–9,C1 | 2ND FLR OFFICE | 1/M1.2 |

Notes:
1. Provide with two stage natural gas furnace with stainless steel heat exchanger.
2. Provide with Provent 11" base height structurally calc'd vibration isolation curb model number CBISCPRD371521 Weight=387 lbs. Refer to detail 24/M1.3.
3. Provide with Provent 11" tall structurally calc'd welded curb model number CBWCPRD371511. Weight=141 lbs. Refer to detail 26/M1.3.
4. Provide with factory low leak economizer, horizontal orientation. Field install economizer. Do not install barometric relief hood on RA duct. Refer to floor plan for alternate relief air path.
5. Provide with factory low leak economizer (for vertical downshot orientation) with barometric relief.
6. Provide with standard hinged access doors for service/filters.
7. Unit to have automatic shut down per CMC 609, refer to detail 30/M1.3.
8. Provide with factory flue extension part 1FE0412. Mechanical contractor to field install flue extension.
9. Provide corrosion resistant AllDura coatings on condenser coil, evaporator coil, and unit cabinet. Interior and exterior of unit cabinet to be primed prior to application of coating. All coatings to comply with ASTM B117 (10,000+ hours coil / 5,500+ hours cabinet). All coatings to include 5 year warranty.
10. Provide with factory standard single zone VAV control with VFD.

C1. Provide with factory Smart Equipment Controller including discharge air, return air and outdoor air temperature sensors. Provide Pelican TC1 programmable thermostat, set up so that supply fan runs continuously during occupied hours. Total control to provide actuator for factory economizer damper and Pelican economizer controls. Refer to MC sheets for Pelican system.

# DUCTLESS SPLIT SYSTEM HEAT PUMP SCHEDULE

| MARK | MAKE | MOUNTING TYPE | COOLING CAPACITY BTUH | HEATING CAPACITY BTUH | SEER2 | HSPF2 | REFRIGERANT | CONDENSATE CONNECTION SIZE | INDOOR UNIT | | | | | | | OUTDOOR UNIT | | | | | REMARKS | AREA SERVED | INDOOR UNIT MOUNTING DETAIL | OUTDOOR UNIT MOUNTING DETAIL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | MODEL | POWER | MCA | MOCP | CFM | FAN WATTS | WEIGHT | MODEL | POWER | MCA | FUSE | WEIGHT | | | | |
| DS–1 | MITSUBISHI | WALL MOUNT | 12,000 | 14,000 | 21.3 | 10.2 | R–410A | 5/8" | PKA–A12LA | 208–1–60 | 1.0 | NOTE 1 | 375 | 30 | 30 | PUZ–A12NKA7 | 208–1–60 | 11.0 | 15.0 | 100 | NOTES 1–3,C1 | RENTABLE RM RM 8 | 16/M1.2 | 3/M1.2 |
| DS–2 | MITSUBISHI | WALL MOUNT | 12,000 | 14,000 | 21.3 | 10.2 | R–410A | 5/8" | PKA–A12LA | 208–1–60 | 1.0 | NOTE 1 | 375 | 30 | 30 | PUZ–A12NKA7 | 208–1–60 | 11.0 | 15.0 | 100 | NOTES 1–3,C1 | RENTABLE RM RM 7 | 16/M1.2 | 3/M1.2 |
| DS–3 | MITSUBISHI | WALL MOUNT | 12,000 | 14,000 | 21.3 | 10.2 | R–410A | 5/8" | PKA–A12LA | 208–1–60 | 1.0 | NOTE 1 | 375 | 30 | 30 | PUZ–A12NKA7 | 208–1–60 | 11.0 | 15.0 | 100 | NOTES 1–3,C1 | BRANCH MGR RM 6 | 16/M1.2 | 3/M1.2 |
| DS–4 | MITSUBISHI | WALL MOUNT | 12,000 | 14,000 | 21.3 | 10.2 | R–410A | 5/8" | PKA–A12LA | 208–1–60 | 1.0 | NOTE 1 | 375 | 30 | 30 | PUZ–A12NKA7 | 208–1–60 | 11.0 | 15.0 | 100 | NOTES 1–3,C1 | SLA OFFICE RM 5 | 16/M1.2 | 3/M1.2 |
| DS–5 | MITSUBISHI | WALL MOUNT | 12,000 | 14,000 | 21.3 | 10.2 | R–410A | 5/8" | PKA–A12LA | 208–1–60 | 1.0 | NOTE 1 | 375 | 30 | 30 | PUZ–A12NKA7 | 208–1–60 | 11.0 | 15.0 | 100 | NOTES 1–3,C1 | OFFICE RM 30 | 16/M1.2 | 3/M1.2 |
| DS–6 | MITSUBISHI | WALL MOUNT | 18,000 | 19,000 | 18.81 | 9.52 | R–410A | 5/8" | PKA–A18LA | 208–1–60 | 1.0 | NOTE 1 | 375 | 30 | 30 | PUZ–A18NKA7 | 208–1–60 | 11.0 | 15.0 | 100 | NOTES 1–3,C1 | VETERANS SERVICES | 16/M1.2 | 3/M1.2 |

Notes:
1. Indoor unit is powered off of the outdoor unit. Electrical to provide required disconnects, conduit, and wiring between units.
2. Size refrigerant piping per the manufacturer's recommendations for total developed line length.
3 Provide with MaxiBlue Advanced Blue Diamond Mini condensate pump with reservor and sensor. Pump to be internally mounted in the unit by mechanical and wired to the unit terminal block. Install per the pump manufacturers installation instructions.

C1. Provide fan coil unit with factory thermostat interface part PAC–US444CN–1 and transformer VPL24–210 for interface to 3rd party thermostat. Provide Pelican Thermostat model TC1. Mechanical contractor to provide low voltage wiring to Pelican Thermostat. Electrical contractor to provide line voltage wiring between transformer VPL24–210 and fan coil terminal block to power Pelican thermostat.

# EXHAUST FAN SCHEDULE

| MARK | MAKE | MODEL | TYPE | FAN | | | | | MOTOR | | | | ACCESSORIES | | | | | WEIGHT (LBS.) | REMARKS (SEE BELOW) | AREA SERVED | MOUNTING DETAIL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | CFM | SP | RPM | SONES (dB) | DRIVE | WATT (HP) | POWER V–ϕ–Hz | SPEED CONTROL | ENCLOSURE | BIRD GUARD | BACKDRAFT DAMPER | ROOF CURB | ROOF JACK | WALL CAP | | | | |
| EF–1 | GREENHECK | SP–A125 | CEILING EXHAUST | 100 | 0.2 | 1000 | 0.3 | DIRECT | 16 | 120–1–60 | YES | ODP | YES | YES | NO | YES | NO | 20 | NOTES 1–3,C1 | RR RM 15 | 4/M1.2 |
| EF–2 | GREENHECK | SP–A125 | CEILING EXHAUST | 100 | 0.2 | 1000 | 0.3 | DIRECT | 16 | 120–1–60 | YES | ODP | YES | YES | NO | YES | NO | 20 | NOTES 1–3,C1 | FAMILY RR RM 21 | 4/M1.2 |
| EF–3 | GREENHECK | SP–A410 | CEILING EXHAUST | 225 | 0.2 | 735 | 0.3 | DIRECT | 121 | 120–1–60 | YES | ODP | YES | YES | NO | YES | NO | 35 | NOTES 1–3,C1 | WOMEN'S RR RM 22 | 4/M1.2 |
| EF–4 | GREENHECK | SP–A410 | CEILING EXHAUST | 225 | 0.2 | 735 | 0.3 | DIRECT | 121 | 120–1–60 | YES | ODP | YES | YES | NO | YES | NO | 35 | NOTES 1–3,C1 | MEN'S RR RM 24 | 4/M1.2 |
| EF–5 | GREENHECK | SP–A125 | CEILING EXHAUST | 100 | 0.2 | 1000 | 0.3 | DIRECT | 16 | 120–1–60 | YES | ODP | YES | YES | NO | YES | NO | 20 | NOTES 1–3,C2 | JANITOR RM 29 | 4/M1.2 |
| EF–6 | GREENHECK | SP–A125 | CEILING EXHAUST | 100 | 0.2 | 1000 | 0.3 | DIRECT | 16 | 120–1–60 | YES | ODP | YES | YES | NO | YES | NO | 20 | NOTES 1–3,C2 | JANITOR RM 25 | 5/M1.2 |
| EF–7 | SOLER PALAU | TD–200 | MIXED FLOW EXHAUST | 350 | 0.2 | 2022 | – | DIRECT | 184 | 120–1–60 | YES | ODP | YES | YES | NO | YES | NO | 15 | NOTES 2,C2 | STAFF AREA | – |

Notes:
1. Fan to be Listed UL/cUL 507 – Electric Fan.
2. Disconnect to be plug–in type.
3. Provide with aluminum grille.

C1. Interlock fan with the lighting circuit. Interlock by electrical.
C2. Fan to be controlled by wall mounted On/Off switch, provided and installed by electrical.

# SUPPLY FAN SCHEDULE

| MARK | MAKE | MODEL | TYPE | FAN | | | | | MOTOR | | | | ACCESSORIES | | | | | WEIGHT (LBS.) | REMARKS (SEE BELOW) | AREA SERVED | MOUNTING DETAIL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | CFM | SP | RPM | SONES (dB) | DRIVE | WATT (HP) | POWER V–ϕ–Hz | SPEED CONTROL | ENCLOSURE | BIRD GUARD | BACKDRAFT DAMPER | ROOF CURB | ROOF JACK | WALL CAP | | | | |
| SF–1 | BROAN | FIN–180B–HW | INLINE | 50 | 0.4 | – | 0.65 | DIRECT | 10 | 120–1–60 | YES | YES | NO | YES | NO | NO | NO | 15 | NOTES 1–3,C1 | VETERANS SERV | 32/M1.3 |

Notes:
1. Disconnect to be plug–in type.
2. Provide with MERV 13 filter.
3. Provide with optional decorative paintable finishing trim for discreet flush to ceiling installation. Provide with factory installation bracket and hardware for installation between ceiling joists.

C1. Fan to be set to run during occupied hours schedule. Refer to MC sheets for control of this supply fan.


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3055 DUNCAN LANE, SUITE A
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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

MECHANICAL SCHEDULES

CONSULTANT:


BMA engineering
805 544-4259


COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CBLD2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error.
Approved plans shall be maintained at the job site.
All changes must be approved.

STAMP:

DATE:

**June 18, 2024**

REVISIONS:

1 Plan Check 1
County of SLO, 10/28/24
2 Plan Check 2
County of SLO, 12/11/24

JOB NUMBER:

2028

SHEET:

M1.0


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## RELIEF HOOD SCHEDULE

| MARK | MAKE | MODEL | TYPE | THROAT DIMENSIONS | THROAT AREA (ft2) | CFM | SP | VELOCITY | ACCESSORIES | | | WEIGHT (LBS) | REMARKS | MOUNTING DETAIL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | BIRD GUARD | BACKDRAFT DAMPER | ROOF CURB | | | |
| RH-1 | GREENHECK | FGR-16x18 | RELIEF | 16x18 | 2.0 | 1,200 | 0.05 | 600 | YES | NOTE 2 | YES | 80 | NOTES 1,2 | 6/M1.2 |
| RH-2 | GREENHECK | FGR-16x18 | RELIEF | 16x18 | 2.0 | 1,200 | 0.05 | 600 | YES | NOTE 2 | YES | 80 | NOTES 1,2 | 6/M1.2 |
| RH-3 | GREENHECK | FGR-28x28 | RELIEF | 28x28 | 5.44 | 2,500 | 0.05 | 459 | YES | NOTE 2 | YES | 120 | NOTES 1,2 | 6/M1.2 |
| RH-4 | GREENHECK | FGR-28x28 | RELIEF | 28x28 | 5.44 | 2,500 | 0.05 | 459 | YES | NOTE 2 | YES | 120 | NOTES 1,2 | 6/M1.2 |

Notes: 1. Provide with roof curb compatible with roof slope and type.
2. Provide with horizontal gravity backdraft damper. Balance damper to open at positive 0.03 in.wc.

## GRILLE, REGISTER & DIFFUSER SCHEDULE

FD = FIRE DAMPER
FSD = FIRE/SMOKE DAMPER
OAI = OUTSIDE AIR INTAKE
X"ø = INLET SIZE (IF APPLICABLE)

FD S1 400 / 12x12
400 — CFM
12x12 — NECK SIZE (length x width or length x height)
S1 — MARK: S = SUPPLY; R = RETURN, E = EXHAUST; T = TRANSFER; L = Llouver

**CEILING MOUNTED SUPPLY AIR DIFFUSER DEFLECTION LEGEND**

1-WAY | 2-WAY CORNER | 2-WAY OPPOSITE | 3-WAY | 4-WAY

| MARK | MAKE | MODEL | CONSTRUCTION | FINISH | BORDER | OBD | REMARKS (SEE BELOW) |
|---|---|---|---|---|---|---|---|
| **SUPPLY** | | | | | | | |
| S1 | TITUS | TDC | STEEL | WHITE | 1 | – | – |
| S2 | TITUS | 300RL | STEEL | WHITE | 1 | – | – |
| **RETURN** | | | | | | | |
| R1 | TITUS | 50F | ALUMINUM | WHITE | 1 | – | – |
| **EXHAUST** | | | | | | | |
| E1 | TITUS | 50F | ALUMINUM | WHITE | 1 | – | – |
| E2 | TITUS | 350RL | STEEL | WHITE | 1 | – | – |
| **LOUVER** | | | | | | | |
| L1 | GREENHECK | ESJ-401 | ALUMINUM | HYPRO POLY | 1-1/2" FLANGE | – | – |

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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
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Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

MECHANICAL SCHEDULES

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
By Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. The approved plans shall be maintained on the job site and available for inspection.
Any deviations must be approved

BMA
3427 Brandon Rd, Ste 240
Virginia Beach, VA 23456-30
OFC (805) 544-4259

STAMP:

CHRISTOPHER BRANDON ROSSER
No. M 38982
EXP 6/30/25
MECHANICAL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

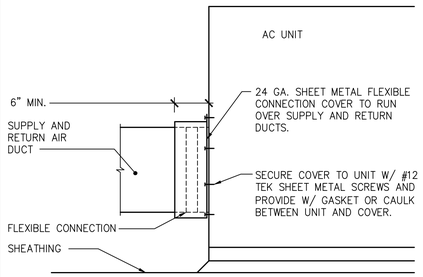
DATE:
**June 18, 2024**

REVISIONS:
1 Plan Check 1
County of SLO, 10/28/24
2 Plan Check 2
County of SLO, 12/11/24

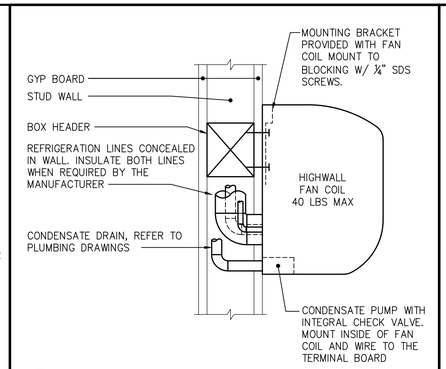
JOB NUMBER:
2028

SHEET:
M1.1

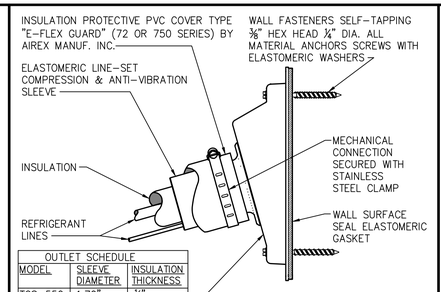
F:\Drawings\2023\23156.00_AG Library Remod\mech\23156.00_M1.0_M1.1_M1.2_M1.3_SCHEDULES & DETAILS.dwg jamesm Dec 11,2024-11:08am




## 20 FLEXIBLE CONNECTION COVER
NTS



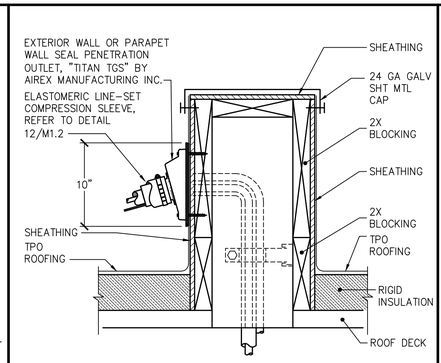

## 16 HIGH WALL FAN COIL MOUNTING
NTS



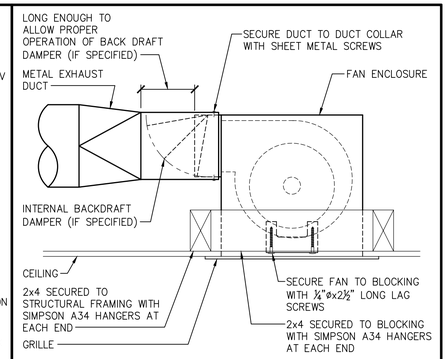

| OUTLET SCHEDULE | | |
|---|---|---|
| MODEL | SLEEVE DIAMETER | INSULATION THICKNESS |
| TGS-550 | 1.70" | ½" |
| TGS-575 | 2.38" | ¾" |
| TGS-510 | 3.19" | 1" |

MODEL NUMBERS LISTED ARE AIREX TGS SERIES

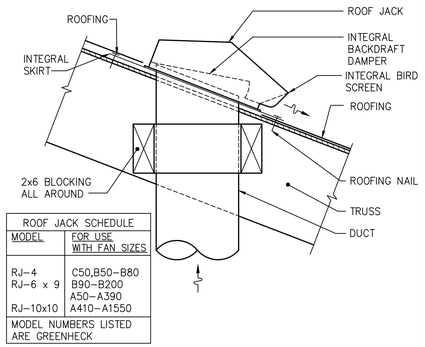
## 12 REFRIGERANT PIPE PENETRATION FOR MASONRY, STUCCO & FLAT APPLICATIONS
NTS




## 8 REFRIGERATION PIPES THRU PARAPET WALL AND ROOF
NTS

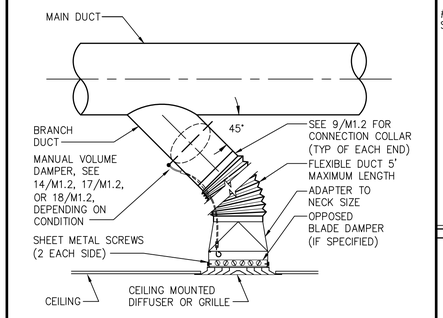



## 4 CEILING EXHAUST FAN
NTS

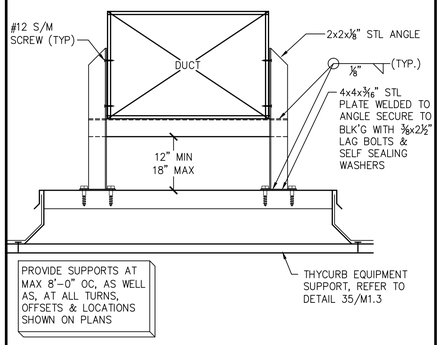



| ROOF JACK SCHEDULE | |
|---|---|
| MODEL | FOR USE WITH FAN SIZES |
| RJ-4<br>RJ-6 x 9<br>RJ-10x10 | C50,B50-B80<br>B90-B200<br>A50-A390<br>A410-A1550 |
| MODEL NUMBERS LISTED ARE GREENHECK | |

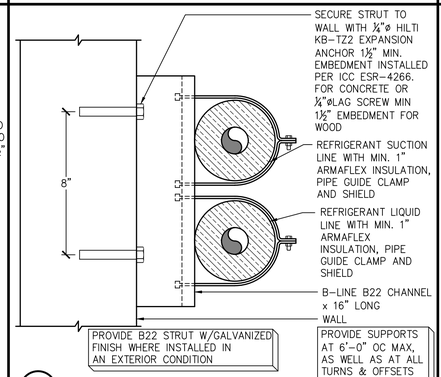
## 19 ROOF JACK
NTS



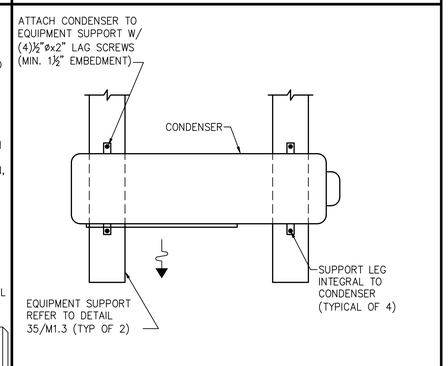

## 15 TYPICAL DROP
NTS



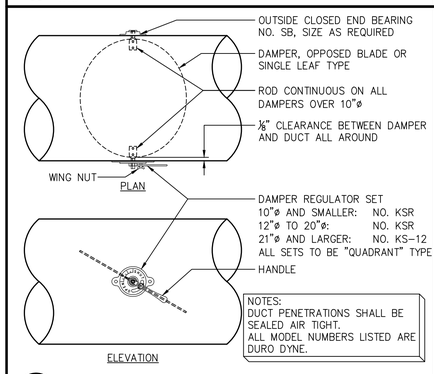

## 11 ROOF DUCT SUPPORT
NTS



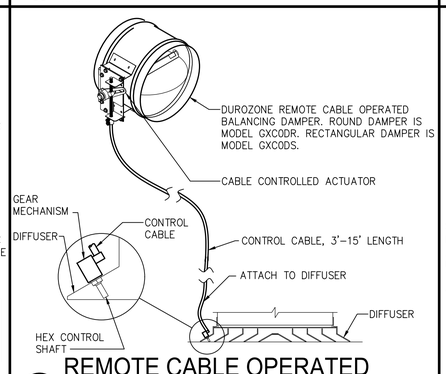

## 7 PIPE SUPPORT - WALL
NTS




## 3 CONDENSER ANCHORAGE
NTS




## 18 ROUND VOLUME DAMPER
NTS




## REMOTE CABLE OPERATED 14 VOLUME DAMPER
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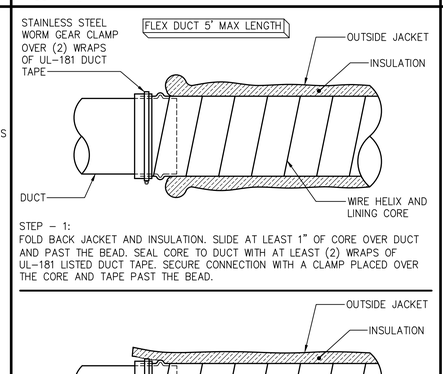
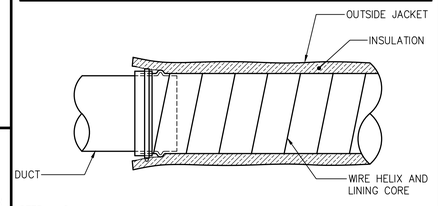
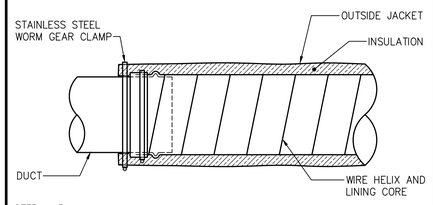



STEP – 1:
FOLD BACK JACKET AND INSULATION. SLIDE AT LEAST 1" OF CORE OVER DUCT AND PAST THE BEAD. SEAL CORE TO DUCT WITH AT LEAST (2) WRAPS OF UL-181 LISTED DUCT TAPE. SECURE CONNECTION WITH A CLAMP PLACED OVER THE CORE AND TAPE PAST THE BEAD.

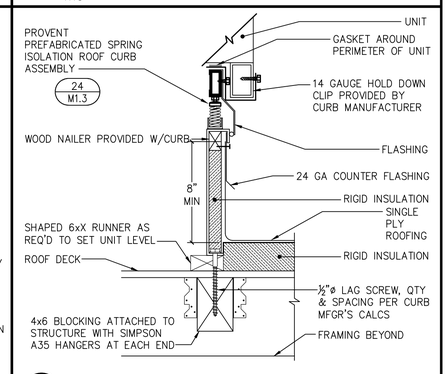



STEP – 2:
PULL THE INSULATION AND JACKET OVER THE TOP OF THE CORE AND THE CLAMP. TUCK THE OUTSIDE JACKET UNDER THE INSULATION.

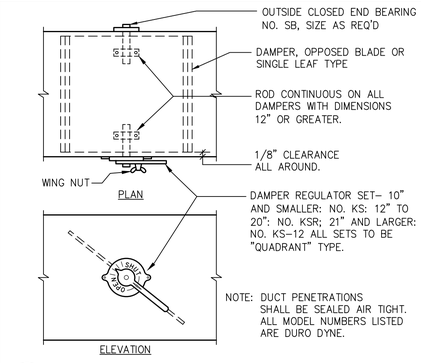



STEP – 3:
INSTALL A CLAMP AROUND THE ENTIRE FLEXIBLE DUCT ASSEMBLY

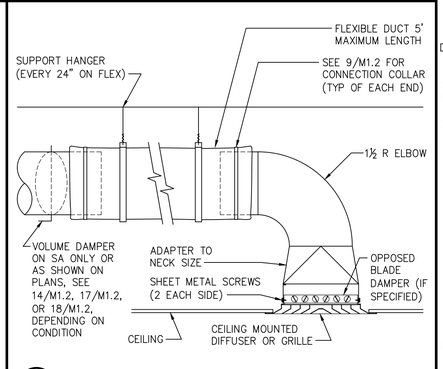
## 9 FLEXIBLE DUCT CONNECTION
NTS



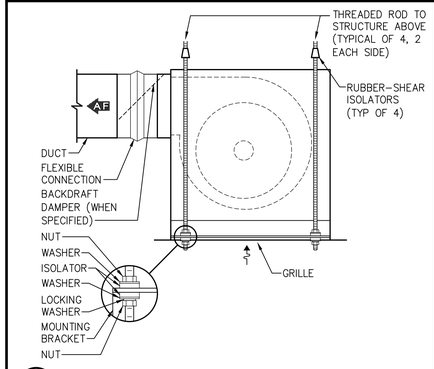

## 2 ISOLATION CURB
NTS



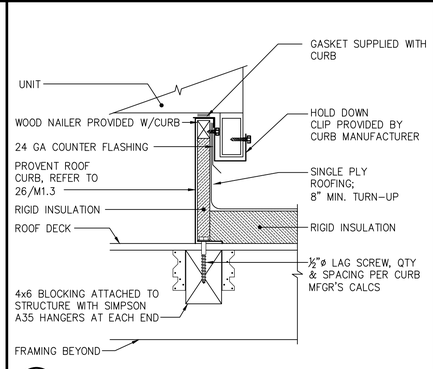

## 17 RECTANGULAR VOL. DAMPER
NTS




## 13 DIFFUSER CONNECTION
NTS




## 5 SUSPENDED CEILING FAN
NTS




## 1 A.C. UNIT MOUNTING
NTS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PROJECT:

Renovation & Addition

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800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

MECHANICAL DETAILS

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
By Matt Varvel
Project No: CAL T2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws. The County may revoke this permit or require corrections if they are in error. 976 Osos Valley Rd, Ste 240 Approved plans must be on site at all times. Los Osos, CA 93402 (805) 544-4259
BMA Mechanical Inc. BMA JOB# 23156.00
All revised sheets must be approved

STAMP:

DATE:

**June 18, 2024**

REVISIONS:

1 Plan Check 1 County of SLO, 10/28/24
2 Plan Check 2 County of SLO, 12/11/24

JOB NUMBER:

2028

SHEET:

M1.2

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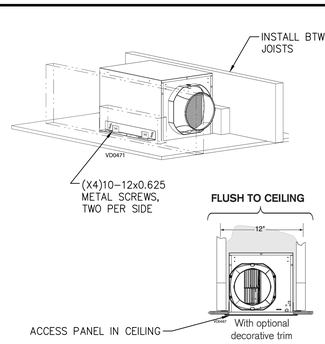


32 INLINE SUPPLY FAN
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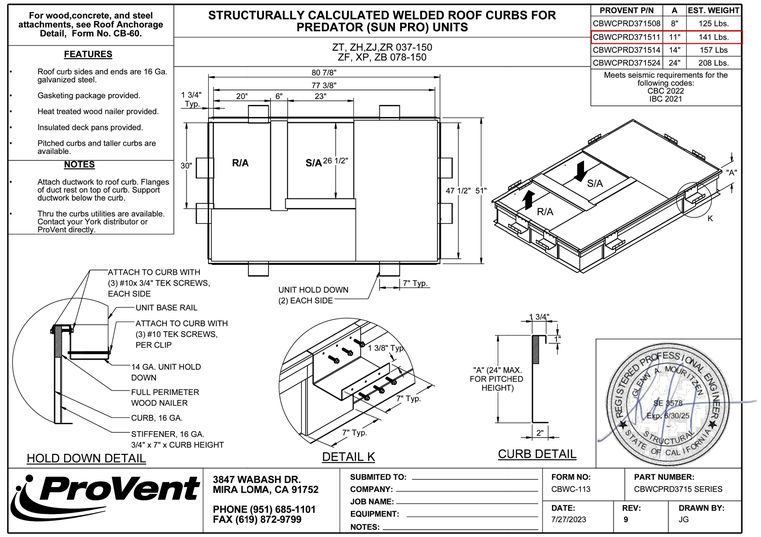
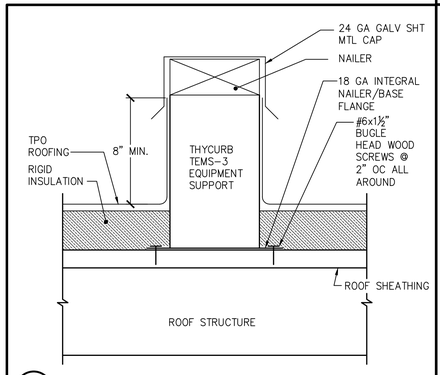
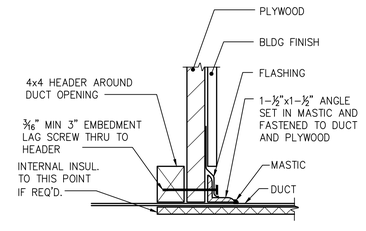



26 RTU-5,RTU-6,RTU-7,RTU-8 ROOF CURB
NTS




35 EQUIPMENT SUPPORT (TPO)
NTS

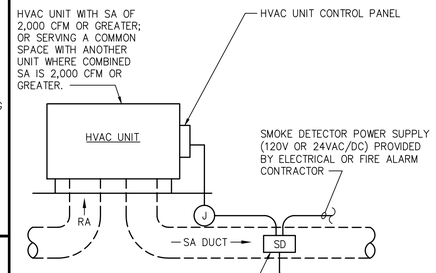



NOTE: DETAIL TYPICAL ALL AROUND DUCT EXCEPT NO FLASHING ON BOTTOM OF DUCT

34 DUCT THRU WALL
NTS

HVAC UNITS WITH SHUT DOWN TERMINALS:
CONDUIT AND LOW VOLTAGE CONTROL WIRING FROM AUX CONTACTS AT SMOKE DETECTOR TO CONTROL PANEL FOR HVAC UNIT SHUT DOWN PROVIDED BY MECHANICAL CONTRACTOR OR

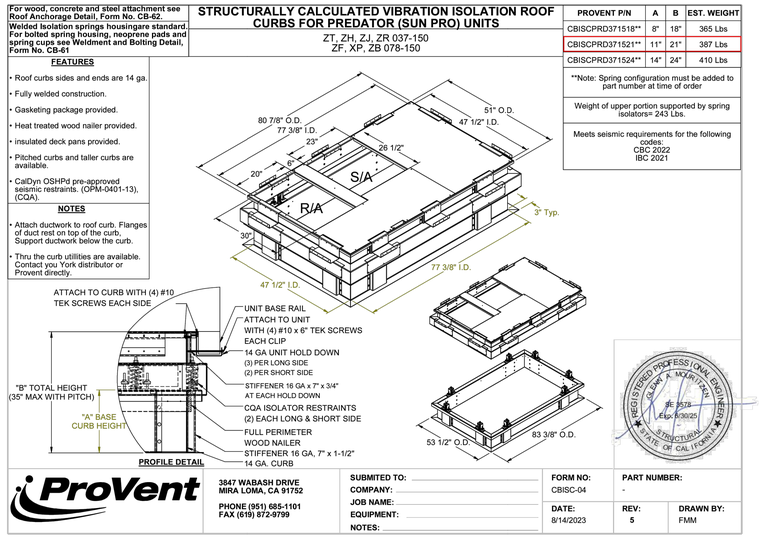
HVAC UNITS W/O SHUT DOWN TERMINALS:
CONDUIT AND LOW VOLTAGE CONTROL WIRING FROM AUX CONTACTS AT SMOKE DETECTOR TO CONTACTS AT SHUNT TRIP BREAKER TO INTERRUPT POWER TO UNIT PROVIDED BY MECHANICAL CONTRACTOR. SHUNT TRIP BREAKER AND ALL LINE VOLTAGE COMPONENTS BY ELECTRICAL CONTRACTOR.




DUCT MOUNTED SMOKE DETECTOR MODEL D4120 FOR INDOOR INSTALLS OR MODEL D4120W FOR OUTDOOR (UL LISTED #S911,FM APPROVED #3033744, CSFM LISTED #3242-1653:0207 AND MSFM APPROVED #2202) PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR. UNIT MUST BE INSTALLED AT A LOCATION ALONG DUCTWORK THAT MEETS THE MANUFACTURER'S OPTIMUM PERFORMANCE CRITERIA AND THAT IS ACCESSIBLE FOR MAINTENANCE/TESTING UPON COMPLETION OF CONSTRUCTION

FIRE ALARM SYSTEM CONDUIT, WIRE CONNECTIONS TO SMOKE DETECTORS, AND DAISY CHAIN WIRING BACK TO FIRE ALARM CONTROL PANEL BY ELECTRICAL OR FIRE ALARM CONTRACTOR.

30 DUCT MOUNTED SMOKE DETECTOR WIRING DIAGRAM
NTS




24 RTU-1,RTU-2,RTU-3,RTU-4 ROOF CURB
NTS

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BMA Mechanical, Inc. 1730 Farm Rd, Ste 240
CSLB 644001 San Luis Obispo, CA 93401
Phone: (805) 544-4259
Who knows how it should be done. BMA ID# 23156.00

STAMP:

REGISTERED PROFESSIONAL ENGINEER
JAMESON ROSSMAN
M 35 982
EXP. 6/30/25
MECHANICAL
STATE OF CALIFORNIA

DATE:

**June 18, 2024**

REVISIONS:

1 Plan Check 1 County of SLO, 10/28/24
2 Plan Check 2 County of SLO, 12/11/24

JOB NUMBER:

2028

SHEET:

M1.3

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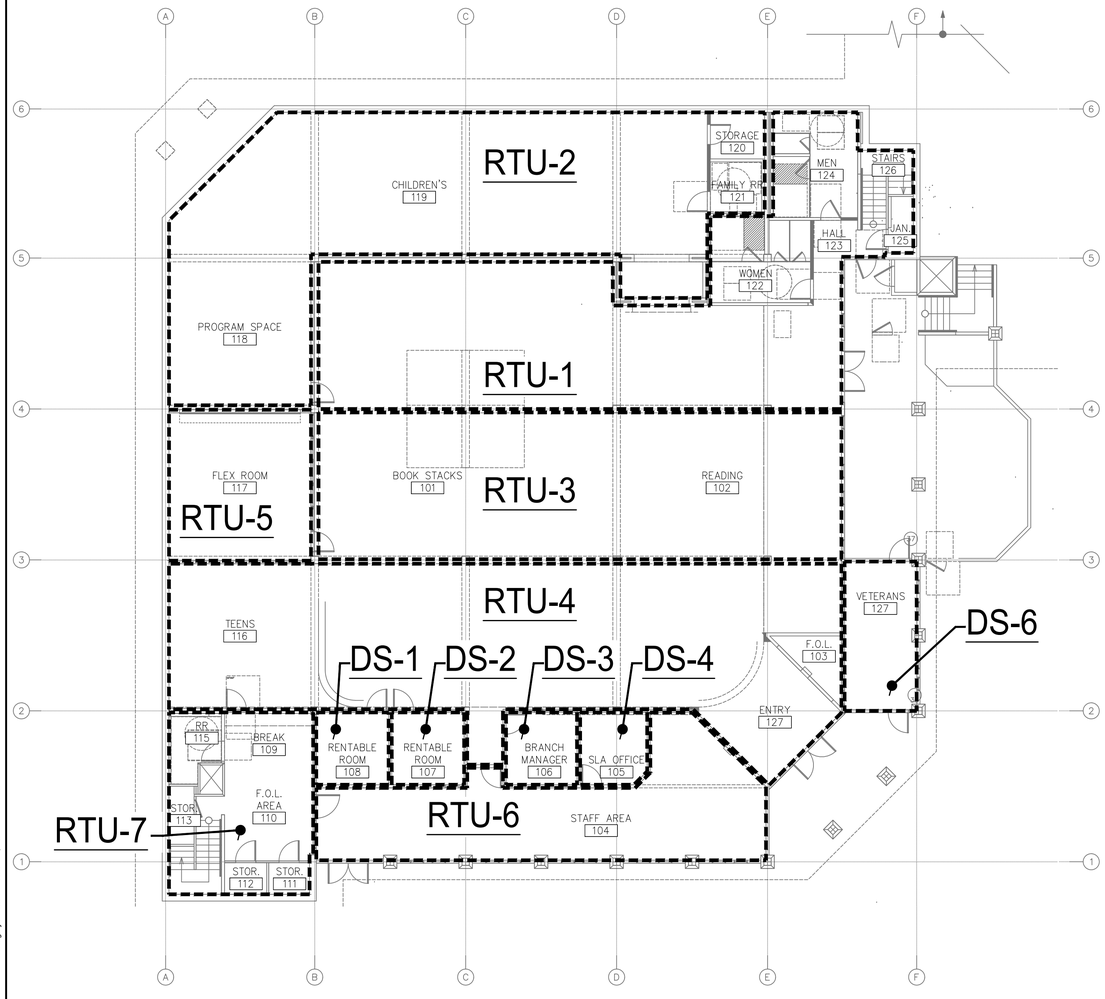
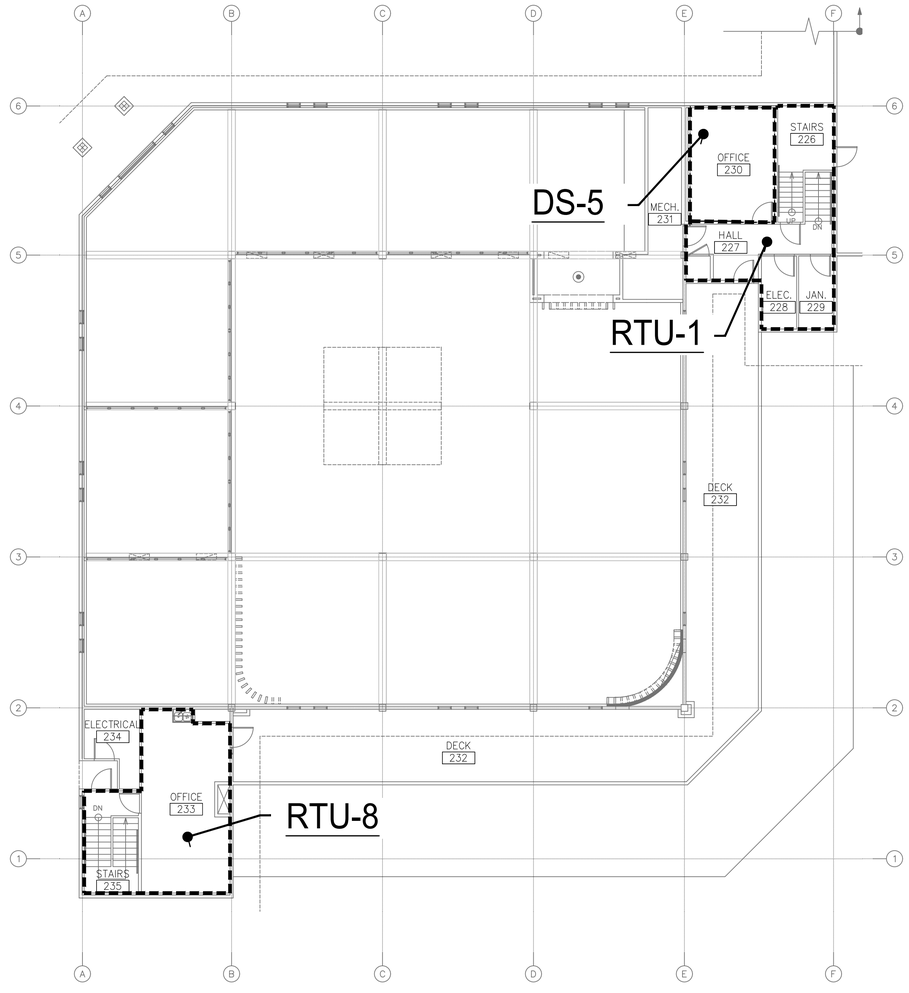



1 MECHANICAL ZONE PLAN - LOWER FLOOR

SCALE: 3/32" = 1'-0"




2 MECHANICAL ZONE PLAN - UPPER FLOOR

SCALE: 3/32" = 1'-0"

F:\Drawings\2023\23156.00_AG Library Remod\mech\23156.00_M2.0_ZONE PLAN.dwg jamesm Dec. 11,2024–11:11am

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SHEET CONTENTS:

**MECHANICAL ZONE PLANS**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
By Matt Varvel
Project No: CAL T2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error.
Approved plans shall be made available on the jobsite.
Any deviations are subject to SLO Code 23156.30
An Energized Plan must be approved

BMA 1360 Osos St, Ste 240
SLO, CA 93401
OFF: (805) 544-4259

STAMP:

DATE:

**June 18, 2024**

REVISIONS:

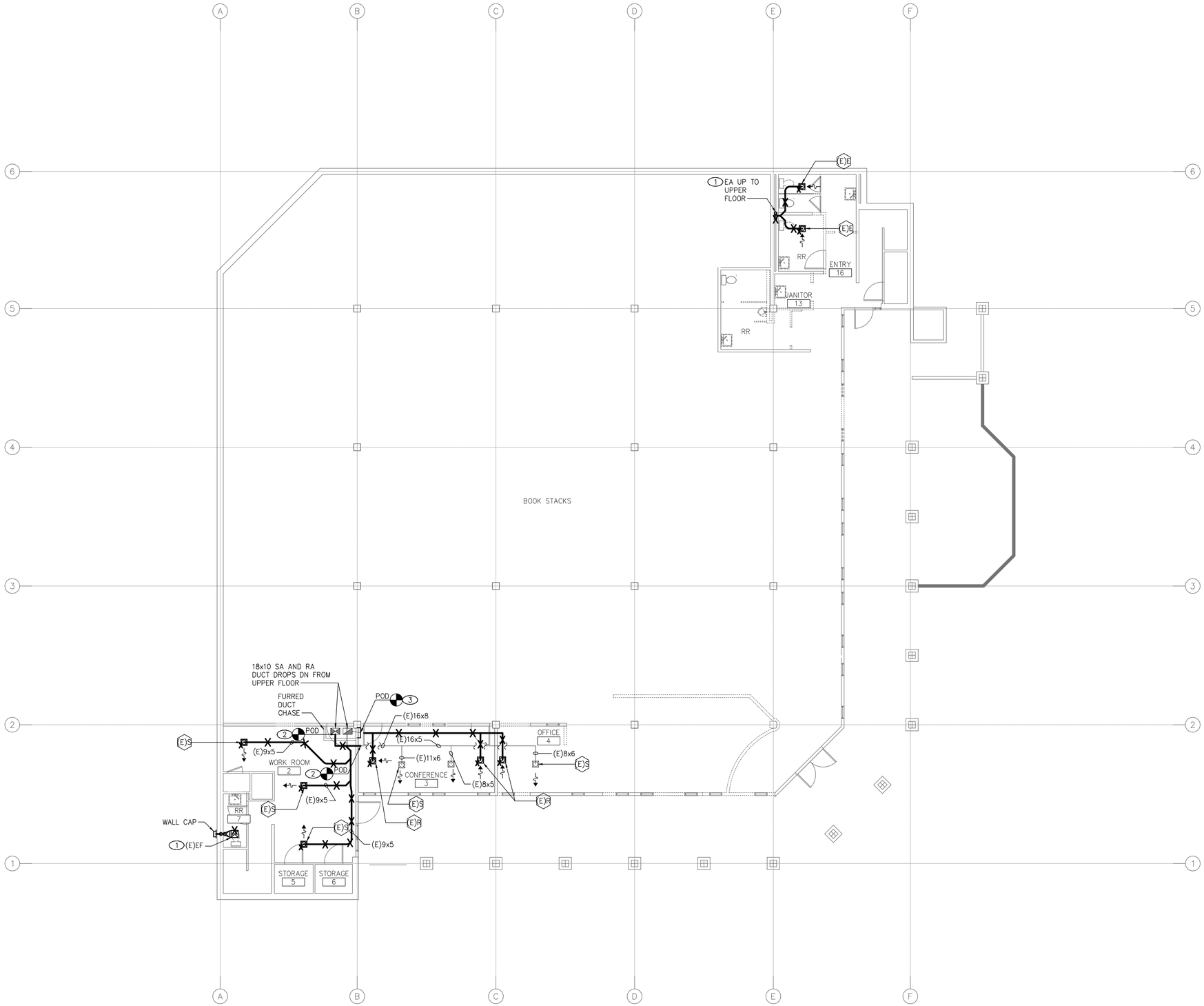
1 Plan Check 1
County of SLO, 10/28/24
2 Plan Check 2
County of SLO, 12/11/24

JOB NUMBER:

2028

SHEET:

M2.0




# MECHANICAL DEMO PLAN - LOWER FLOOR

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

## GENERAL NOTES

1. This demolition plan was prepared for the convenience of the contractor. The Engineer does not represent that all items which may require demolition have been shown. It shall be the responsibility of the contractor to carefully examine the site and the contract documents and to perform all demolition and reconstruction which may be required for the proper execution and completion of the work. Dispose of all equipment per the owner's direction while complying with all local codes and ordinances.
2. Contractor to field verify sizes of existing duct.
3. See enlarged partial mechanical proposed floor plans M4.1 and M4.2 for all reference notes and revisions.

## DEMOLITION NOTES

(1) Demolish and remove existing exhaust fan, ductwork, grilles and all associated appurtenances. Contractor to repair existing ceiling per architectural requirements.

(2) Demolish and remove existing supply air ductwork and associated grilles to point of disconnect (POD) shown. Prepare duct for new connection.

(3) Demolish and remove existing return air ductwork and associated grilles to point of disconnect (POD) shown. Cap duct to an air tight condition.

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3055 DUNCAN LANE, SUITE A
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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

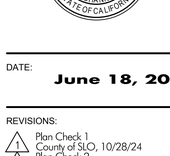
**MECHANICAL DEMO PLAN - LOWER FLOOR**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
By Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. The approved plans shall be in use on the job site at all times and shall not be altered without authorization. Other jurisdictions have other requirements.

BMA mechanical
565 Tank Farm Rd, Ste 240
San Luis Obispo, CA 93401
Office (805) 544-4259
BMA Job# 23156.00

STAMP:




DATE:

**June 18, 2024**

REVISIONS:

1 Plan Check 1
County of SLO, 10/28/24
2 Plan Check 2
County of SLO, 12/11/24

JOB NUMBER:

2028

SHEET:

M3.0

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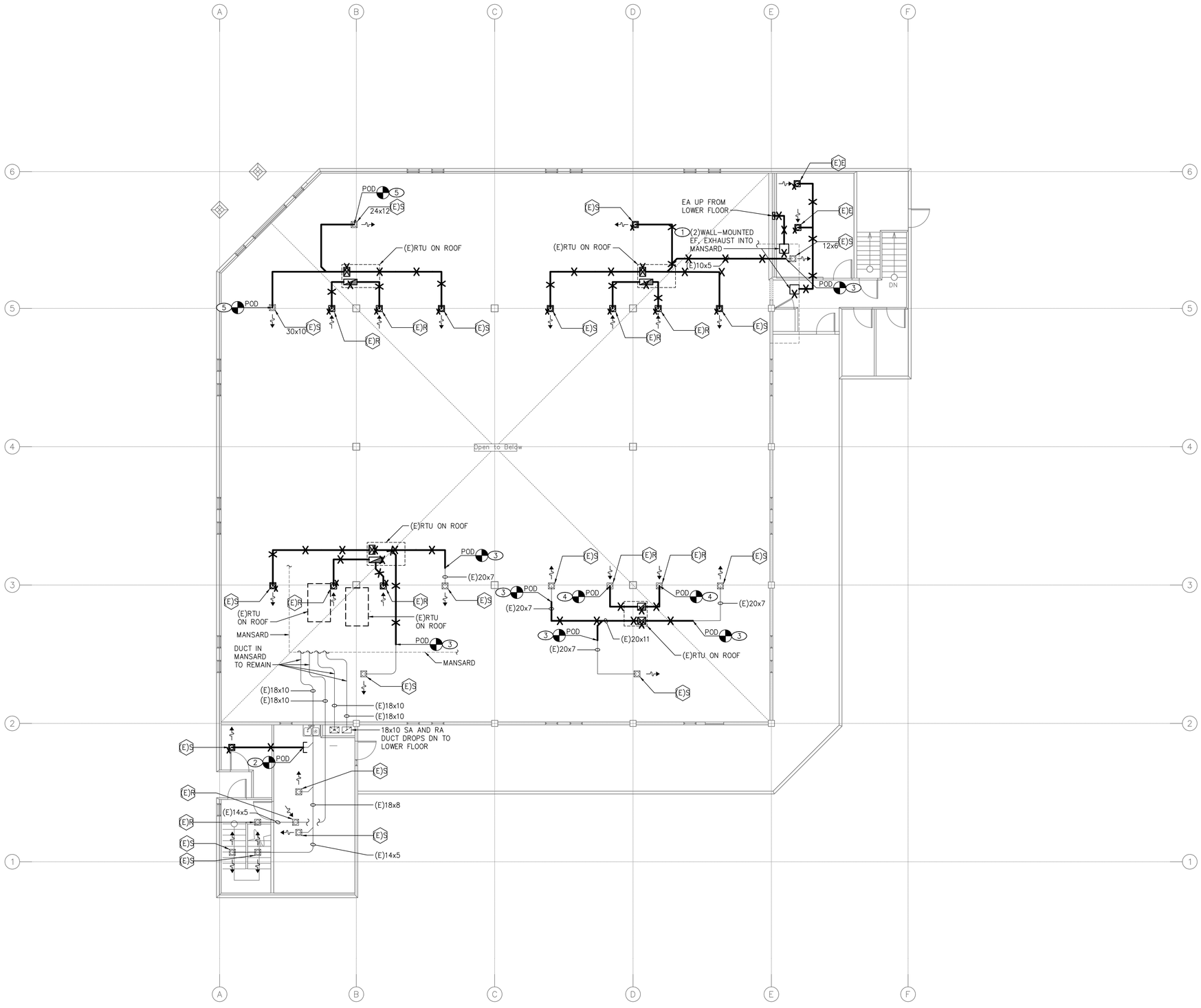


# MECHANICAL DEMO PLAN - UPPER FLOOR

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

## GENERAL NOTES

1. This demolition plan was prepared for the convenience of the contractor. The Engineer does not represent that all items which may require demolition have been shown. It shall be the responsibility of the contractor to carefully examine the site and the contract documents and to perform all demolition and reconstruction which may be required for the proper execution and completion of the work. Dispose of all equipment per the owner's direction while complying with all local codes and ordinances.
2. Contractor to field verify sizes of existing duct.
3. See enlarged partial mechanical proposed floor plans M5.1 and M5.2 for all reference notes and revisions.

## DEMOLITION NOTES

(1) Demolish and remove existing exhaust fan, ductwork, grilles and all associated appurtenances. Contractor to repair existing ceiling per architectural requirements.

(2) Demolish and remove existing supply air ductwork and grille to point of disconnect (POD) shown. Cap duct to an air tight condition.

(3) Demolish and remove existing rooftop package unit supply air ductwork and associated appurtenances to point of disconnect (POD) shown. Prepare duct for new connection.

(4) Demolish and remove existing rooftop package unit return air ductwork from back of grille at point of disconnect (POD) shown. Prepare grille for new connection.

(5) Demolish and remove existing rooftop package unit supply air ductwork from back of grille at point of disconnect (POD) shown. Prepare grille for new connection.

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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**MECHANICAL DEMO PLAN - UPPER FLOOR**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: BAL-T2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. The approved plans shall be maintained on the job at all times. All changes must be approved.

BMA Mechanical, Inc. 661 Tank Farm Rd, Ste 240
San Luis Obispo, CA 93401 Office (805) 544-4259
CSLB License Number: BMA 1089 23156.00

STAMP:

DATE:

**June 18, 2024**

REVISIONS:

1 Plan Check 1
County of SLO, 10/28/24
2 Plan Check 2
County of SLO, 12/11/24

JOB NUMBER:

2028

SHEET:

M3.1

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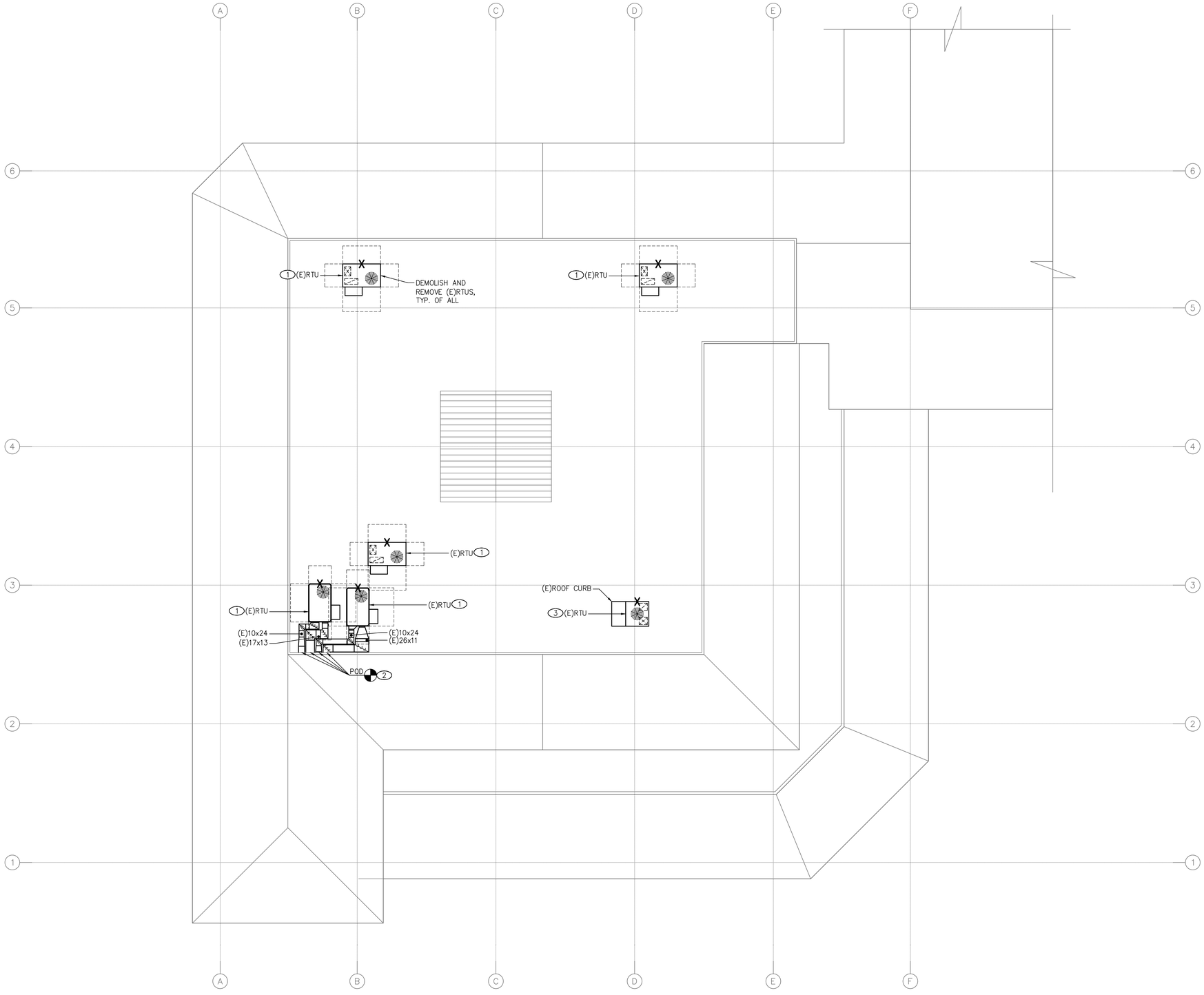


# MECHANICAL DEMO PLAN - ROOF

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

## GENERAL NOTES

1. This demolition plan was prepared for the convenience of the contractor. The Engineer does not represent that all items which may require demolition have been shown. It shall be the responsibility of the contractor to carefully examine the site and the contract documents and to perform all demolition and reconstruction which may be required for the proper execution and completion of the work. Dispose of all equipment per the owner's direction while complying with all local codes and ordinances.

## DEMOLITION NOTES

(1) Demolish and remove existing package unit, curb and all associated appurtenances. Contractor to modify existing roof openings for new package unit. Refer to sheet M6.0 for proposed roof plan.

(2) Disconnect and remove existing SA/RA ductwork and all associated appurtenances from point of disconnect (POD) shown at mansard wall. Prepare ductwork within mansard for new connection.

(3) Remove existing package unit, curb and all associated appurtenances. Contractor to modify existing roof openings for new package unit. Refer to sheet M6.0 for proposed roof plan. Contractor to return unit and curb to County.

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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**MECHANICAL DEMO PLAN - ROOF**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
By Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. The approved plans shall be on site.
All inspections are required and shall be applied for.

BMA
3427 Miguelito Court, San Luis Obispo, CA 93401
OFF: (805) 544-4259
AR Lic. No. C-23156

STAMP:

DATE:

**June 18, 2024**

REVISIONS:

1 Plan Check 1
County of SLO, 10/28/24
2 Plan Check 2
County of SLO, 12/11/24

JOB NUMBER:

2028

SHEET:

M3.2

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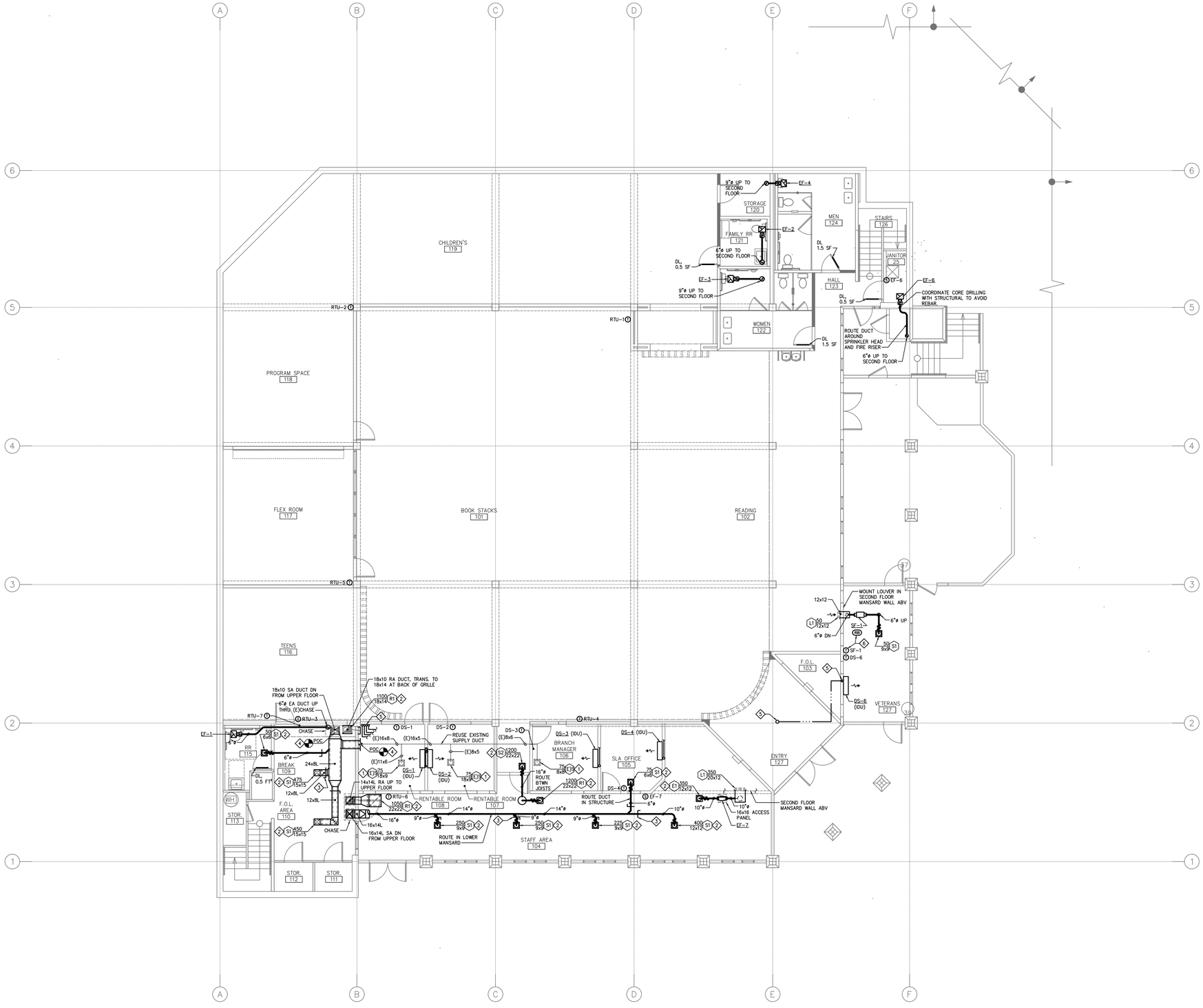


# MECHANICAL OVERALL LOWER FLOOR PLAN

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

## GENERAL NOTES

1. Refer to partial enlarged mechanical lower floor plans on M4.1 and M4.2 for all reference notes and revisions.


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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
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CLIENT:

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County Government Center,
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San Luis Obispo, CA 93408

SHEET CONTENTS:

**MECHANICAL OVERALL LOWER FLOOR PLAN**

CONSULTANT:

BMA

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
By Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. The approved plans shall be on site at all times.
All [illegible] must be approved

STAMP:

REGISTERED PROFESSIONAL ENGINEER
BRANDON ROGERS
M 38 982
EXP 8/30/25
MECHANICAL
STATE OF CALIFORNIA

DATE:

**June 18, 2024**

REVISIONS:

1 Plan Check 1
County of SLO, 10/28/24
2 Plan Check 2
County of SLO, 12/11/24

JOB NUMBER:

2028

SHEET:

M4.0

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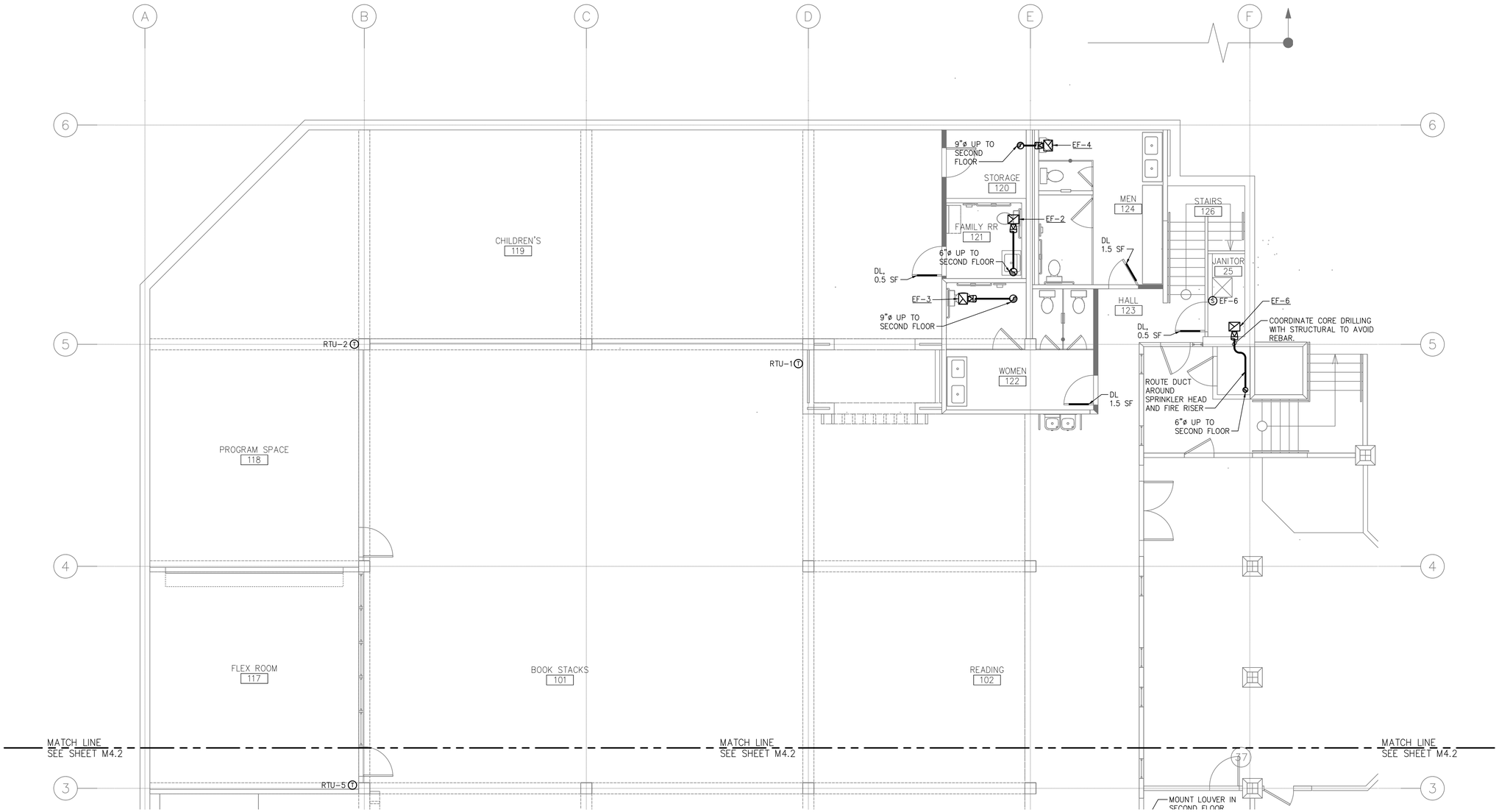


# MECHANICAL ENLARGED LOWER FLOOR PLAN - NORTH

SCALE: 3/16" = 1'-0"

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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

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800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**MECHANICAL ENLARGED LOWER FLOOR PLAN - NORTH**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CAL T2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error.
Approved plans shall be in use on the job.
All changes must be approved.

BMA Mechanical, Inc.
565 Tank Farm Rd, Ste 240
San Luis Obispo, CA 93401
Office (805) 544-4259
CA State License No. BMA 1098 23156.00

STAMP:

REGISTERED PROFESSIONAL ENGINEER
BRANDON ROTH
M 38 982
EXP 6/30/25
MECHANICAL
STATE OF CALIFORNIA

DATE:

**June 18, 2024**

REVISIONS:

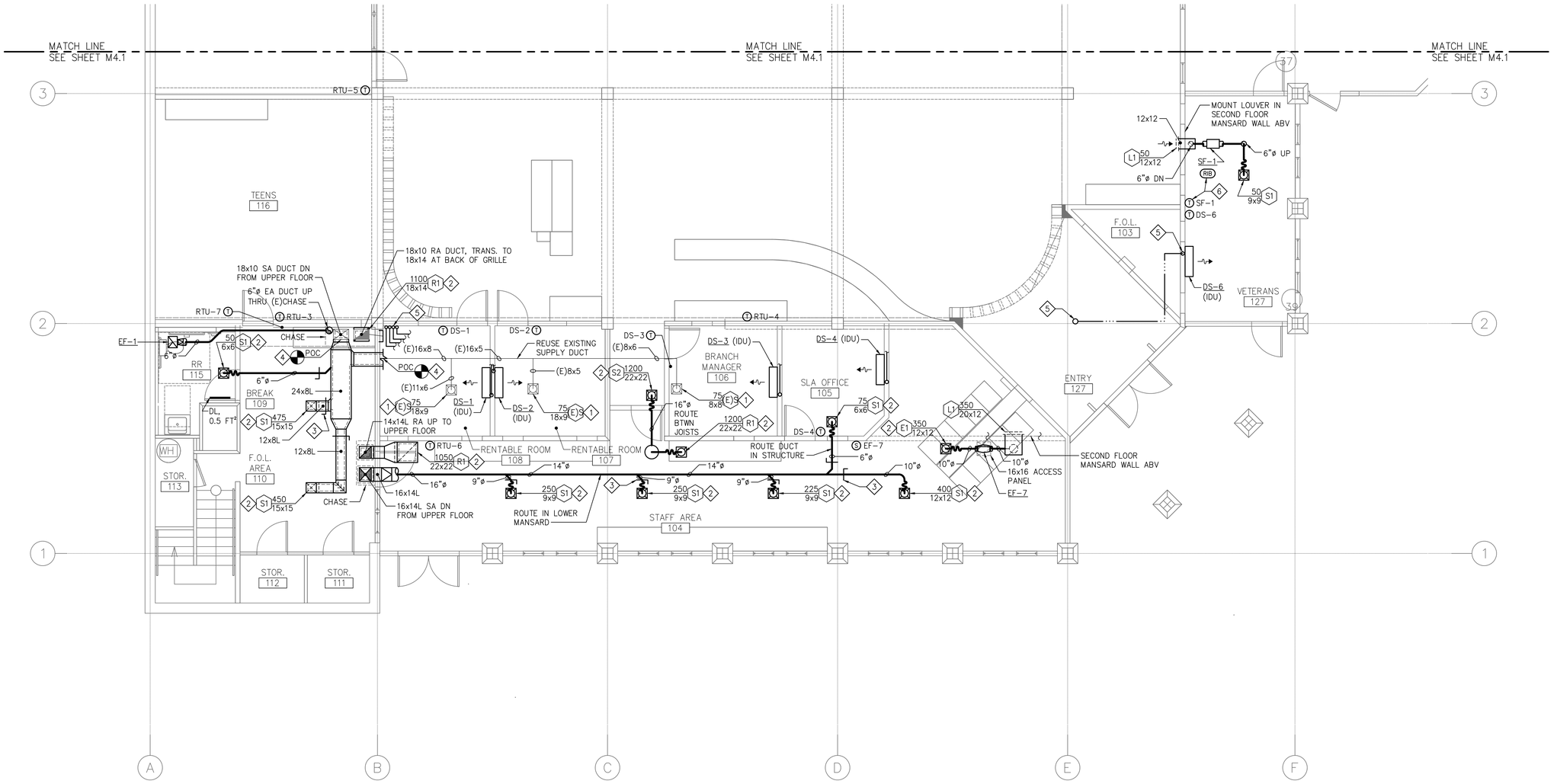
1 Plan Check 1
County of SLO, 10/28/24
2 Plan Check 2
County of SLO, 12/11/24

JOB NUMBER:

2028

SHEET:

M4.1




# MECHANICAL ENLARGED LOWER FLOOR PLAN - SOUTH

SCALE: 3/16" = 1'-0"

## REFERENCE NOTES

1. Re-balance existing grille to value shown, typical. Provide balancing damper if needed. Refer to detail 17/M1.2 or 18/M1.2, depending on condition. Provide remote cable operated dampers above a hard lid, refer to detail 14/M1.2.
2. Provide new grille at this location. Refer to details 13/M1.2 or 15/M1.2 for grille connection, depending on condition.
3. Typical volume damper. Refer to detail 17/M1.2 or 18/M1.2, depending on condition. Provide remote cable operated dampers above a hard lid, refer to detail 14/M1.2.
4. Connect new duct to existing duct or new duct to back of existing grille at Point of Connection (POC) shown.
5. Route refrigerant lineset shortest distance between IDU and ODU, refer to detail 7/M1.2 for support.
6. Electrical to provide 120 volt power to 24 volt xfrmr to power thermostat and relay in a box (RIB) for control of supply fan SF-1, refer to MC sheets. Supply fan to run during occupied hours.

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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:
**MECHANICAL ENLARGED LOWER FLOOR PLAN - SOUTH**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. The approved plans shall be maintained on the job at all times. A copy of these plans must be approved AV Drawings must be approved

BMA
805 544-4259
CA 93401
23156.00

STAMP:

DATE:
**June 18, 2024**

REVISIONS:
1 Plan Check 1
County of SLO, 10/28/24
2 Plan Check 2
County of SLO, 12/11/24

JOB NUMBER:
2028

SHEET:
M4.2

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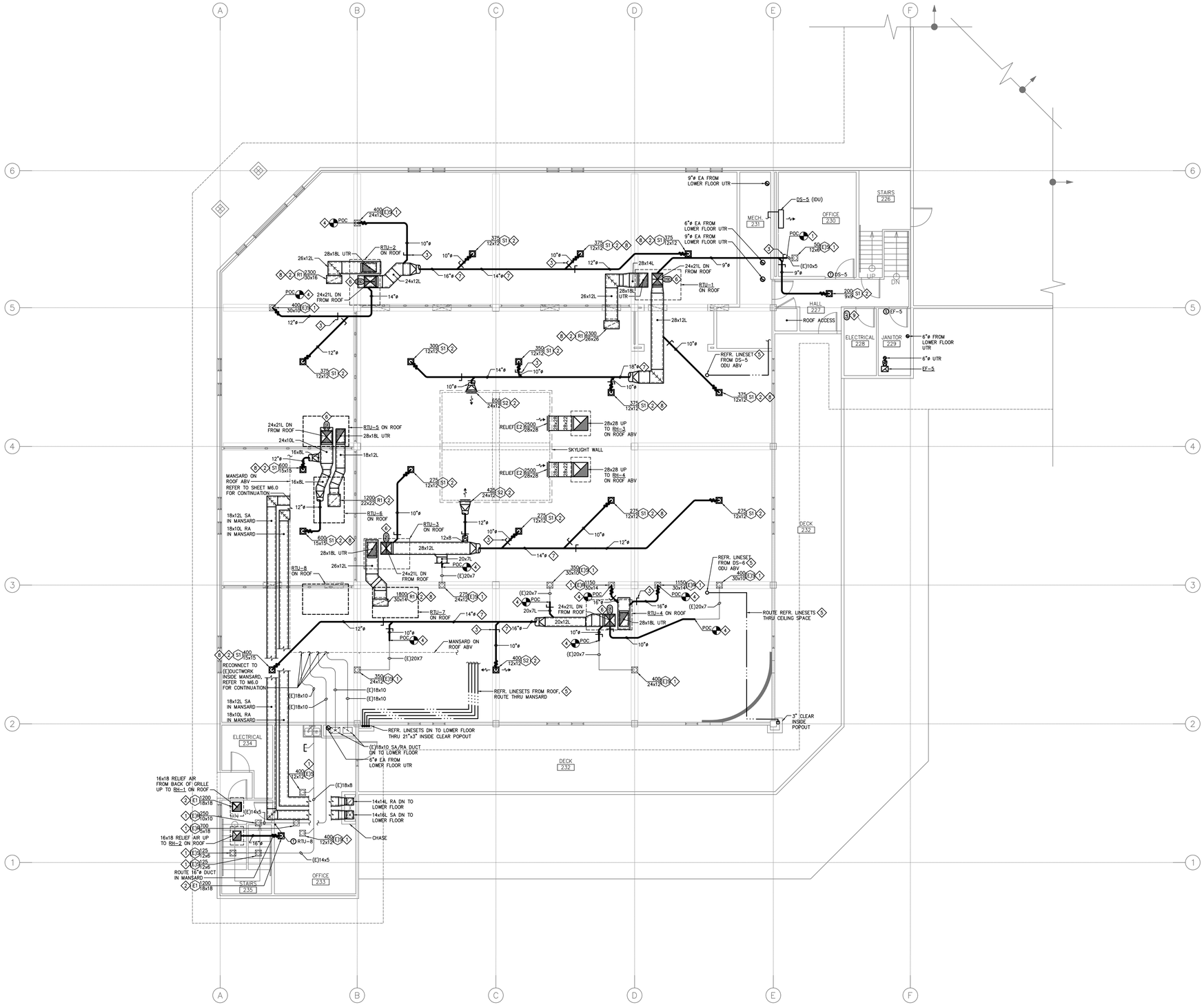


# MECHANICAL OVERALL UPPER FLOOR PLAN

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

## GENERAL NOTES

1. Refer to partial enlarged mechanical upper floor plans on M5.1 and M5.2 for all reference notes and revisions.


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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
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CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center, Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**MECHANICAL OVERALL UPPER FLOOR PLAN**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. These plans and approved plans shall be maintained on site.
Any changes must be approved.


BMA ARCHITECTS
1323 Chorro St. San Luis Obispo, CA 93405
(805) 544-4299
AV Project No: 23156.00


STAMP:

DATE:

**June 18, 2024**

REVISIONS:

1 Plan Check 1
County of SLO, 10/28/24
2 Plan Check 2
County of SLO, 12/11/24

JOB NUMBER:

2028

SHEET:

M5.0


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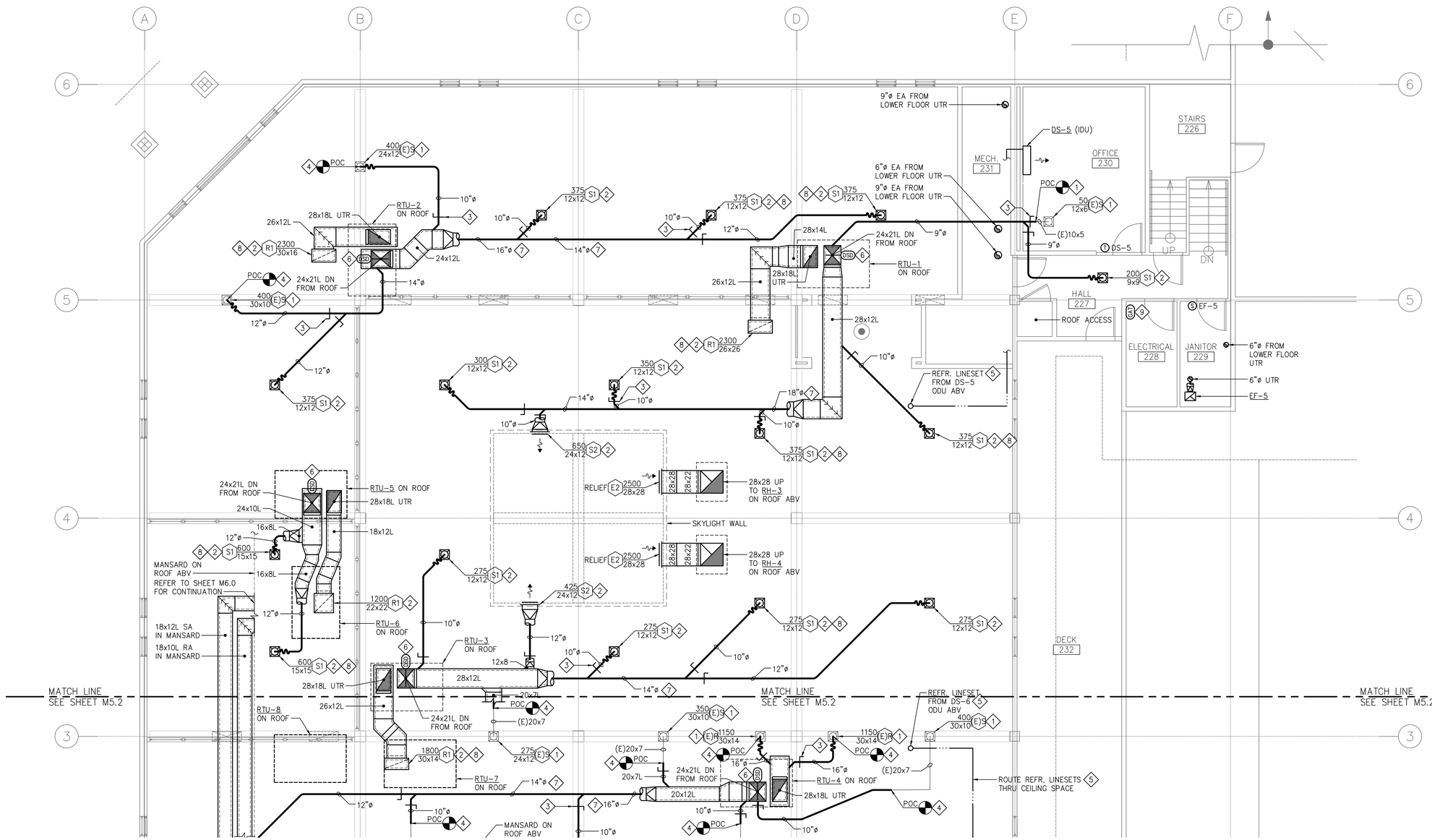


# MECHANICAL ENLARGED UPPER FLOOR PLAN - NORTH

SCALE: 3/16" = 1'-0"

## REFERENCE NOTES

1. Re-balance existing grille to value shown, typical. Provide balancing damper if needed. Refer to detail 17/M1.2 or 18/M1.2, depending on condition. Provide remote cable operated dampers above a hard lid, refer to detail 14/M1.2.
2. Provide new grille at this location. Refer to details 13/M1.2 or 15/M1.2 for grille connection, depending on condition.
3. Typical volume damper. Refer to detail 17/M1.2 or 18/M1.2, depending on condition. Provide remote cable operated dampers above a hard lid, refer to detail 14/M1.2.
4. Connect new duct to existing duct or new duct to back of existing grille at Point of Connection (POC) shown.
5. Route refrigerant lineset shortest distance between IDU and ODU, refer to detail 7/M1.2 for support.
6. Duct Smoke Detector (DSD), refer to detail 30/M1.3.
7. Route duct in ceiling space between "honeycomb" ceiling panels.
8. Grille and sprinkler head occur in same grid square. Contractor to locate grille to side of sprinkler head in same grid square.
9. Mount Pelican Gateway on wall in electrical Rm. Refer to MC sheets for requirements. Electrical to provide 120 volt power outlet for this device. Device is provided with adapter that plugs into wall.


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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center, Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:
**MECHANICAL ENLARGED UPPER FLOOR PLAN - NORTH**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CBLT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if any are in error. These plans approved plans shall be maintained on the job site. Any changes must be approved.


BMA ARCHITECTS
1331 Garden Hwy, Ste 240
Sacramento, CA 95833
(916) 544-4269
AA Design Firm License #: C-23156


STAMP:

DATE:
**June 18, 2024**

REVISIONS:
1 Plan Check 1 County of SLO, 10/28/24
2 Plan Check 2 County of SLO, 12/11/24

JOB NUMBER:
2028

SHEET:
M5.1

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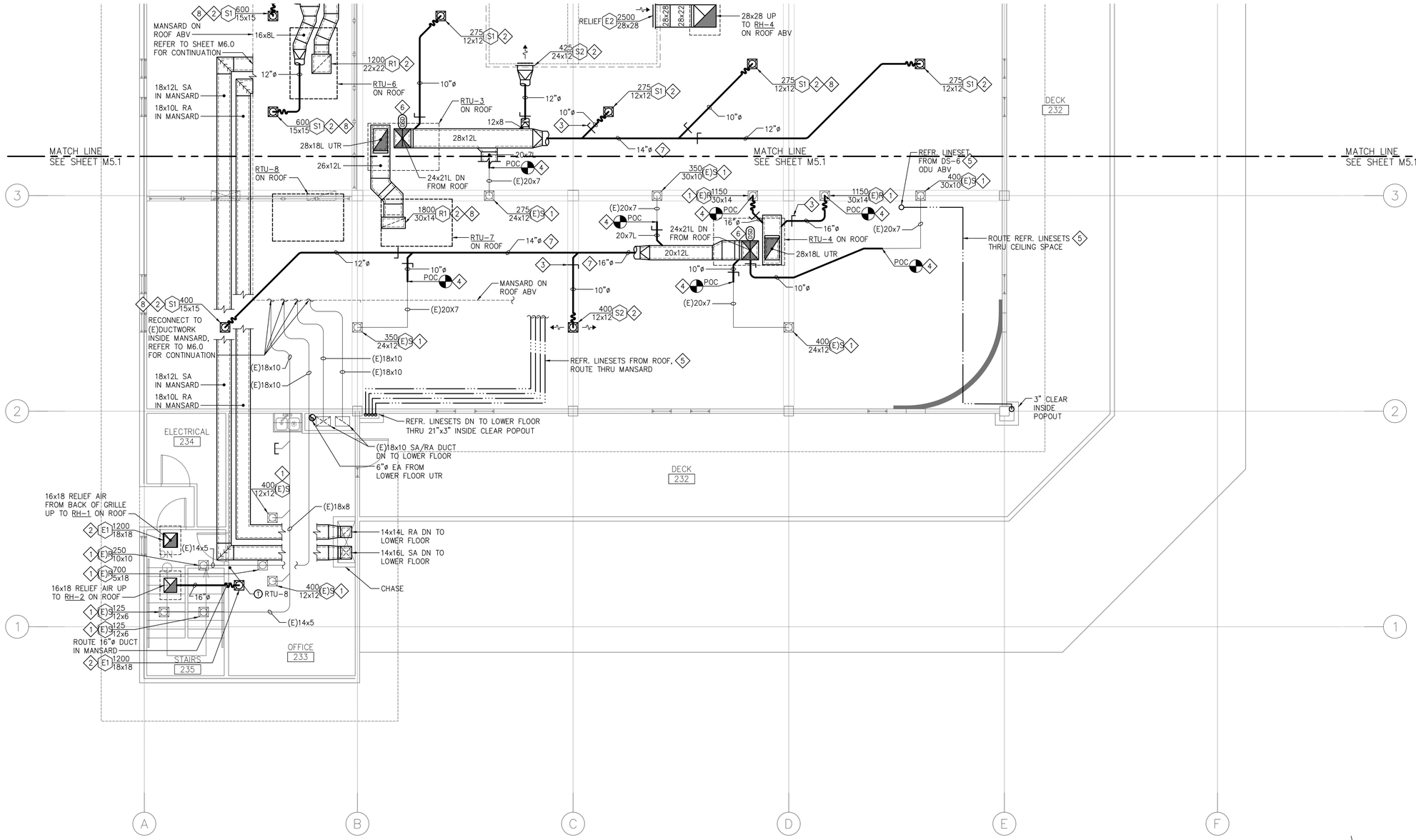


# MECHANICAL ENLARGED UPPER FLOOR PLAN - SOUTH

SCALE: 3/16" = 1'-0"

## REFERENCE NOTES

1. Re-balance existing grille to value shown, typical. Provide balancing damper if needed. Refer to detail 17/M1.2 or 18/M1.2, depending on condition. Provide remote cable operated dampers above a hard lid, refer to detail 14/M1.2.
2. Provide new grille at this location. Refer to details 13/M1.2 or 15/M1.2 for grille connection, depending on condition.
3. Typical volume damper. Refer to detail 17/M1.2 or 18/M1.2, depending on condition. Provide remote cable operated dampers above a hard lid, refer to detail 14/M1.2.
4. Connect new duct to existing duct or new duct to back of existing grille at Point of Connection (POC) shown.
5. Route refrigerant lineset shortest distance between IDU and ODU, refer to detail 7/M1.2 for support.
6. Duct Smoke Detector (DSD), refer to detail 30/M1.3.
7. Route duct in ceiling space between "honeycomb" ceiling panels.
8. Grille and sprinkler head occur in same grid square. Contractor to locate grille to side of sprinkler head in same grid square.

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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:
**MECHANICAL ENLARGED UPPER FLOOR PLAN - SOUTH**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CBLT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error or violate laws.
Approved plans shall be maintained at the job site.
All changes must be approved.

BMA engineering
3665 Thom Rd, Ste 240
SLO, CA 93401
OFF: (805) 544-4259
FAX: (805) 23156.00

STAMP:

DATE:
**June 18, 2024**

REVISIONS:
1 Plan Check 1 County of SLO, 10/28/24
2 Plan Check 2 County of SLO, 12/11/24

JOB NUMBER:
2028

SHEET:
M5.2

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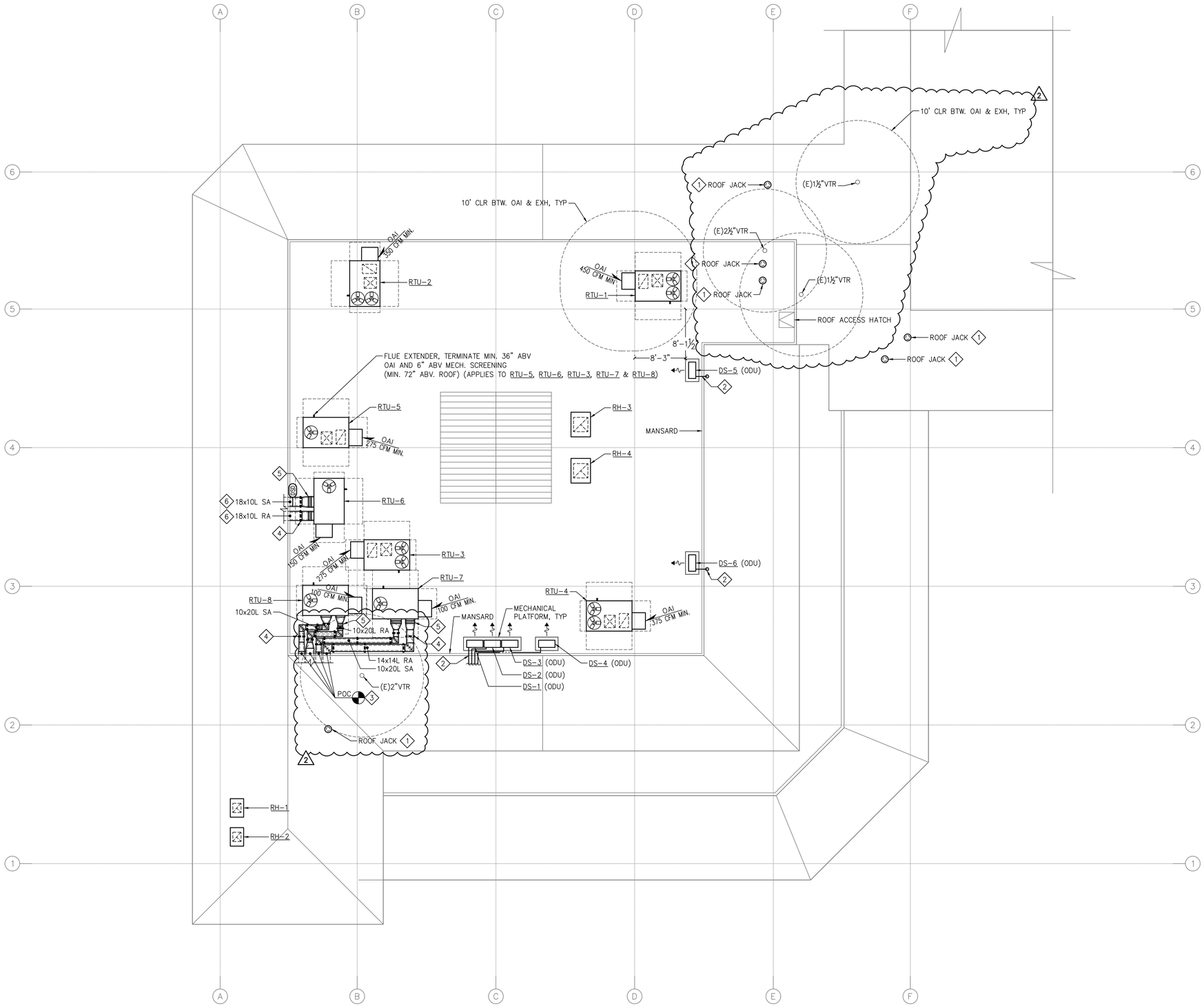


# MECHANICAL ROOF PLAN

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

## GENERAL NOTES

1. Plumbing vent terminations must be a minimum of 3 feet above or a minimum of 10 feet away from outside air intake openings. Extend vent or offset pipe on roof as required to maintain minimum clearance from OAI. Refer to plumbing plans for more information.

## REFERENCE NOTES

1. Roof jack. Refer to detail 19/M1.2.
2. Refrigerant piping thru roof parapet, refer to detail 8/M1.2 for exterior wall penetrations.
3. Connect (N)Duct to (E)duct in mansard at Point of Connection (POC) shown. See sheet M5.0 for continued ductwork. Refer to detail 34/M1.3 for duct penetration thru wall.
4. Roof duct support, typical. Refer to detail 11/M1.2.
5. Provide flexible connection cover, typical. Refer to detail 20/M1.2.
6. Duct penetration thru wall, refer to detail 34/M1.3.


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**Arroyo Grande Library**

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Arroyo Grande, CA 93420

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Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**MECHANICAL ROOF PLAN**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CBLT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if any are in conflict.
Approved plans shall be maintained on the job.
Any changes must be approved.

BMA Civil 1360 Tiburon Blvd, Ste 240 San Luis Obispo, CA 93401 (805) 544-4259 www.bmacivil.com

STAMP:

DATE:

**June 18, 2024**

REVISIONS:

1 Plan Check 1
County of SLO, 10/28/24
2 Plan Check 2
County of SLO, 12/11/24

JOB NUMBER:

2028

SHEET:

M6.0


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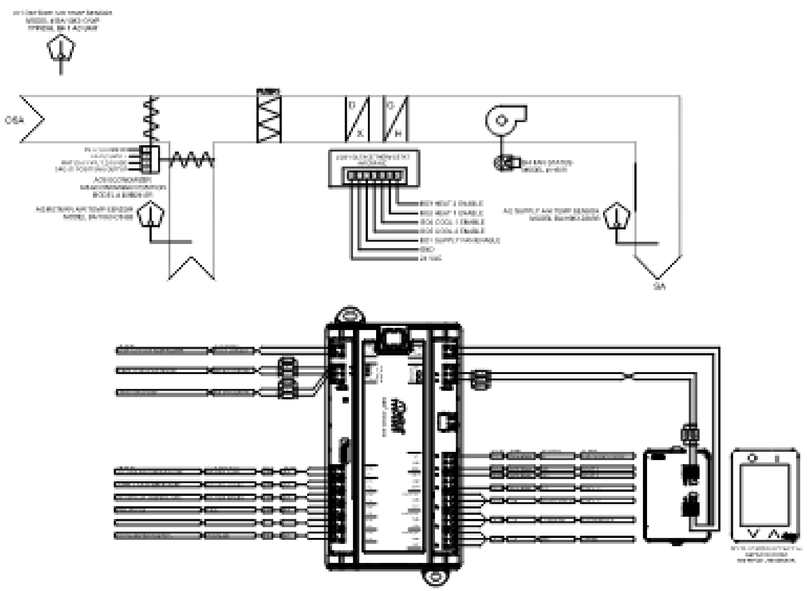
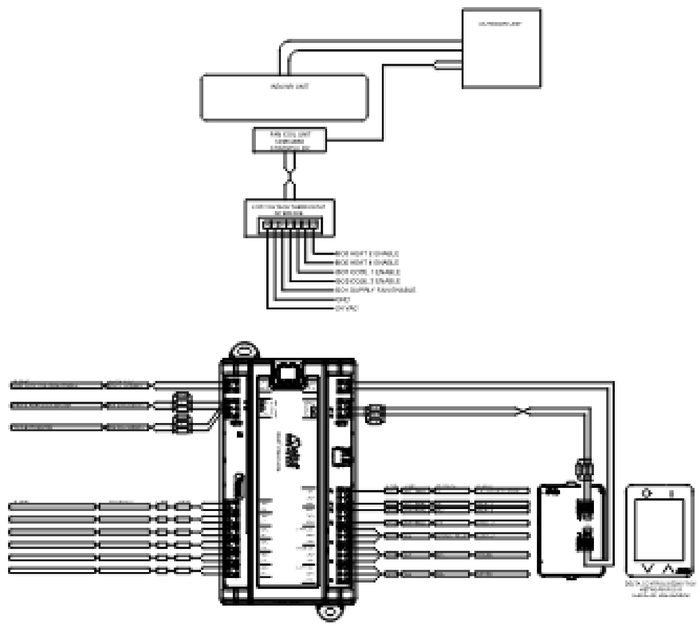


ROOF TOP UNIT CONTROL DETAIL

TYPICAL OF #: RTU-1, RTU-2, RTU-3, RTU-4, RTU-5, RTU-6, RTU-7, RTU-8

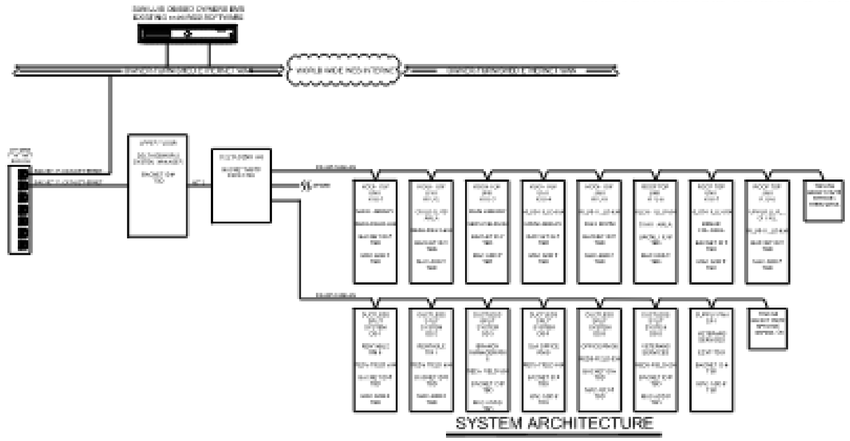


DUCTLESS SPLIT SYSTEM CONTROL DETAIL

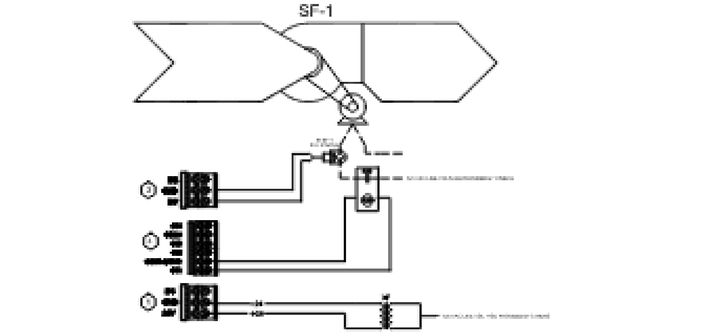
TYPICAL OF #: DS-1, DS-2, DS-3, DS-4, DS-5, DS-6

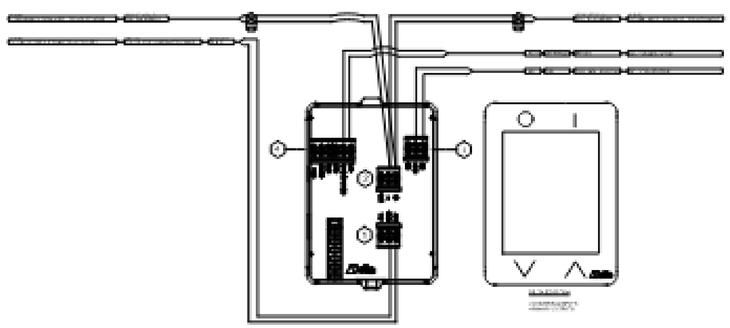
TO INTERCONNECT TO DELTA CONTROLS SYSTEM
CONTACT TJ KAY (916) 344-1711

NOTES:
LINE VOLTAGE AND CONDUIT BY DIVISION 16.



SYSTEM ARCHITECTURE





SUPPLY FAN CONTROL DETAIL

SF-1


ENVIRONMENTAL SYSTEMS INC - SACRAMENTO CONTROLS DIVISION
4219 SOUTH MARKET CT., SUITTH H, SACRAMENTO, CA 95834
PH (916) 344-1711 FAX (916) 344-2168
CSL LIC# 422419


PROJECT NAME:
COUNTY OF SAN LUIS OBISPO
ARROYO GRANDE LIBRARY

800 W. BRANCH STREET
ARROYO GRANDE, CA 93420

SHEET TITLE:
DELTA CONTROLS DESIGN DRAWINGS

CONTROLS CONTRACTOR:
ENVIRONMENTAL SYSTEMS INC
4219 S. MARKET CT. SUITE H
SACRAMENTO, CA 95834

| REVISIONS: | | |
|---|---|---|
| By | Date | No. |
| | | |
| | | |
| | | |
| | | |

JOB # N/A

DATE: APRIL 8, 2025

DRAWN BY: LC

SHEET NAME: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CLIENT:

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Department of Public Works
County Government Center,
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San Luis Obispo, CA 93408

SHEET CONTENTS:

**MECHANICAL CONTROLS**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
By Matt Varvel
Project No: CBC2025-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
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Approved plans shall be in possession of the owner or authorized agent while work is in progress.
Any changes must be approved.

BMA 2nd Submittal 1565 The Alameda Rd. Ste 240
San Luis Obispo, CA 93401
805.544.4259
AV Project # 23156.00

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DATE:

**June 18, 2024**

REVISIONS:

1 Plan Check 1
County of SLO, 10/28/24
2 Plan Check 2
County of SLO, 12/11/24

JOB NUMBER:
2028

SHEET:
MC1.0


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# PLUMBING LEGEND

| SYMBOL | ABBREV. | DESCRIPTION |
|---|---|---|
| | | BALL VALVE |
| | TPV | TRAP PRIMER VALVE |
| | PRV | PRESSURE REDUCING OR REGULATOR VALVE |
| | T&P | TEMPERATURE PRESSURE RELIEF VALVE |
| | PV | PLUG VALVE (PLAN VIEW) |
| | | VALVE IN RISER |
| | HB | HOSE BIBB |
| | COTG | CLEANOUT TO GRADE |
| WCO | WCO | WALL CLEANOUT |
| | | UNION |
| | | PIPE UP |
| | | PIPE DOWN |
| | | PIPE CONNECTION |
| | | CAPPED/PLUGGED PIPE |
| FD | | FLOOR DRAIN |
| | POC/POD | POINT OF CONNECTION OR DISCONNECTION |
| | S/W | SOIL OR WASTE BELOW GRADE |
| | S/W | SOIL OR WASTE ABOVE GRADE |
| CD | CD | CONDENSATE DRAIN |
| G | G | GAS (NATURAL 11" W.C.) |
| | V | SANITARY VENT |
| | CW | COLD WATER |
| | HW | HOT WATER |
| | HWR | HOT WATER RETURN |
| TP | TP | TRAP PRIMER LINE |

# PLUMBING ABBREVIATIONS

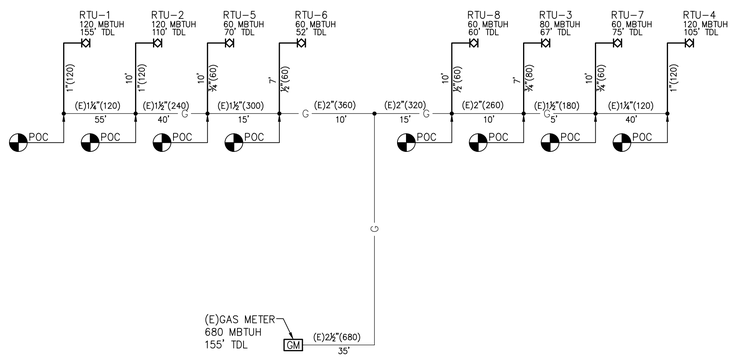
| | | | |
|---|---|---|---|
| ABV | ABOVE | IE | INVERT ELEVATION |
| ADA | AMERICAN DISABILITIES ACT | KW | KILOWATTS |
| AFF | ABOVE FINISHED FLOOR | LAV | LAVATORY |
| AG | ABOVE GRADE | LBS | POUNDS |
| AMP | AMPERAGE | MAX | MAXIMUM |
| ARCH | ARCHITECT | MBTUH | BTU PER HOUR (THOUSANDS) |
| BEL | BELOW | MECH | MECHANICAL |
| BFP | BACKFLOW PREVENTOR | MFR | MANUFACTURE OR MANUFACTURER |
| BLDG | BUILDING | MIN | MINIMUM |
| CFH | CUBIC FOOT PER HOUR | (N) | NEW |
| CI | CAST IRON | NPS | NOMINAL PIPE SIZE |
| ℄ | CENTER LINE | NTS | NOT TO SCALE |
| CONN | CONNECTION | PH | PHASE |
| CONT | CONTINUE(D) | PP | POLYPROPYLENE |
| CP | CHROME PLATED | PSI | POUNDS PER SQUARE INCH |
| CPVC | CHLORINATED POLYVINYL CHLORIDE | RM | ROOM |
| CY | CYCLES | RPM | REVOLUTIONS PER MINUTE |
| DFU | DRAINAGE FIXTURE UNITS | RWL | RAIN WATER LEADER |
| DN | DOWN | RWO | RAIN WATER OVERFLOW |
| (E) | EXISTING | SOV | SHUT-OFF VALVE |
| ELEC | ELECTRICAL | TW | TEMPERED WATER |
| EQPT | EQUIPMENT | TYP | TYPICAL |
| FLR | FLOOR | UON | UNLESS OTHERWISE NOTED |
| FR | FROM | V | VENT |
| FT | FLUSH TANK | VAC | VACUUM |
| FV | FLUSH VALVE | VTR | VENT THRU ROOF |
| GA | GAGE OR GAUGE | W | WASTE |
| GALV | GALVANIZED | W/ | WITH |
| GPC | GALLONS PER CYCLE | W/O | WITHOUT |
| GPF | GALLONS PER FLUSH | WC | WATER CLOSET |
| GPM | GALLONS PER MINUTE | WSFU | WATER SUPPLY FIXTURE UNIT |
| HP | HORSEPOWER | WT | WEIGHT |

# WATER HEATER SCHEDULE

| MARK | MAKE | MODEL | STORAGE CAPACITY (GALLONS) | DIMENSIONS | FULL WEIGHT (POUNDS) | INLET/ OUTLET (INCHES) | POWER | | | KW (WATTS) | MBTUH | EFF | FLUE SIZE (INCHES) | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | VOLTS | PH | CY | | | | | |
| WH-1 | BRADFORD-WHITE | LE110U3-1 | 10 | 17-1/2"x16"ø | 131 | 3/4" | 120 | 1 | 60 | 1.5 | – | – | – | |

# PLUMBING FIXTURE SCHEDULE

| MARK | DESCRIPTION | MIN. BRANCH SIZE (") | | | | MAKE AND MODEL | FITTINGS | REMARKS |
|---|---|---|---|---|---|---|---|---|
| | | W | V | CW | HW | | | |
| DF-1 | ADA DRINKING FOUNTAIN<br>WALL MOUNTED<br>DUAL HEIGHT | 2 | 1-1/2 | 1/2 | – | ELKAY #EZSTL8WSLK, DRINKING FOUNTAIN<br>36"x19"<br>STAINLESS STEEL FINISH | STOPS AND SUPPLIES | INSTALL PER ADA REQUIREMENTS<br>ELEC. 120V, 5.0 FLA, 370 WATTS |
| FD-1 | FLOOR DRAIN<br>W/ SQUARE STRAINER<br>& TRAP PRIMER | 2 | 1-1/2 | 1/2 | – | J.R. SMITH #2005Y02-B05NB-P050-U,<br>5"x5", CAST IRON W/ BRONZE<br>STRAINER | PRECISION PLUMBING PRODUCTS<br>"PRIME-PRO" TRAP PRIMER | |
| FS-1 | FLOOR SINK<br>W/HALF GRATE<br>& TRAP PRIMER | 2 | 1-1/2 | – | – | ZURN #Z1910-2NH-3,<br>8"x8"x6"<br>ENAMELED CAST IRON | ZURN #Z1022-XL LEAD FREE SANI-GUARD<br>AUTOMATIC TRAP PRIMER | |
| L-1 | ADA LAVATORY<br>WALL MOUNT<br>0.50 GPM, 0.16 GPC<br>SENSOR | 2 | 1-1/2 | 1/2 | 1/2 | SLOAN AER-DEC #AD-81000 RUSH STREET<br>30"x34"x23-1/2"<br>W/GRID STRAINER | SLOAN FAUCET, #ETF-420-BOX-TEE-CP-0.5GPM-MLM-FCT<br>SLOAN HAND DRYER #EHD-420-CP-HEPA<br>SLOAN SOAP DISPENSER #ESD-420-CP | INSTALL PER ADA REQUIREMENTS<br>ELEC. 110/120V<br>24VAC BOX TRANSFORMER<br>FINISHES TO BE COORDINATED WITH OWNER |
| L-2 | ADA LAVATORY<br>WALL MOUNT<br>0.50 GPM, 0.16 GPC<br>SENSOR | 2 | 1-1/2 | 1/2 | 1/2 | SLOAN AER-DEC #AD-82000 RUSH STREET<br>60"x34"x23-1/2"<br>W/GRID STRAINER | SLOAN FAUCET, #ETF-420-BOX-TEE-CP-0.5GPM-MLM-FCT<br>SLOAN HAND DRYER #EHD-420-CP-HEPA<br>SLOAN SOAP DISPENSER #ESD-420-CP | INSTALL PER ADA REQUIREMENTS<br>ELEC. 110/120V<br>24VAC BOX TRANSFORMER<br>FINISHES TO BE COORDINATED WITH OWNER |
| MS-1 | MOP SINK<br>FLOOR MOUNTED<br>W/ VACUUM BREAKER | 3 | 2 | 3/4 | 3/4 | KOHLER "WHITBY" #K-6710,<br>28"x28"x13",<br>ENAMELED CAST IRON | ELKAY #LKB940C,<br>STRAINER #K-9146, RIM GUARD #K-8940<br>HOSE, MOP HANGER, SS WALL GUARDS | |
| S-1 | ADA DOUBLE BOWL SINK<br>COUNTER TOP<br>1.5 GPM, LAMINAR | 2 | 1-1/2 | 3/4 | 3/4 | ELKAY #LRADQ332165,<br>33"X21"x6-1/2"<br>18 GA. STAINLESS | CHICAGO FAUCET #895-317GN2AE36ABCP<br>(2) STRAINER #LK35, STOPS, SUPPLIES<br>& C.P. BRASS "P" TRAP | INSTALL PER ADA REQUIREMENTS<br>WRIST BLADE FAUCET HANDLES |
| U-1 | ADA URINAL<br>WALL MOUNTED<br>0.125 GPF<br>BATTERY OPERATED SENSOR | 2 | 1-1/2 | 1-1/4 | – | KOHLER "BARDON" #K-4991-ET<br>18"x14⅛"x26⅞"<br>VITREOUS CHINA, WHITE | SENSOR FLUSH VALVE:<br>SLOAN #8186-0.125 | INSTALL PER ADA REQUIREMENTS<br>PROVIDE CLEANOUT ABOVE FIXTURE CONNECTION |
| WC-1 | ADA WATER CLOSET<br>FLOOR MOUNTED<br>ELONGATED, 1.28 GPF | 3 | 2 | 3/4 | – | KOHLER "KINGSTON" #K-25077,<br>29-3/4"x18-3/4"x16-1/2" RIM,<br>VITREOUS CHINA, WHITE | STOP, SUPPLY, & KOHLER SEAT K-4670-C | INSTALL PER ADA REQUIREMENTS<br>(LEFT HAND FLUSH) |
| WC-2 | ADA WATER CLOSET<br>FLOOR MOUNTED<br>ELONGATED, 1.28 GPF<br>BATTERY OPERATED SENSOR | 3 | 2 | 1-1/4 | – | AMR. STD. "MADERA" #3043001.020<br>28¾"x 14"x 16½"RIM<br>VITREOUS CHINA, WHITE | SENSOR FLUSH VALVE:<br>SLOAN OPTIMA #8111-1.28<br>AMR. STD. SEAT "EverClean" #5901.110T | SEE ADA REQUIREMENTS THIS SHEET.<br>LOCATE HANDLE ON WIDE SIDE OF FIXTURE |
| WC-3 | WATER CLOSET<br>FLOOR MOUNTED<br>ELONGATED, 1.28 GPF<br>BATTERY OPERATED SENSOR | 3 | 2 | 1-1/4 | – | AMR. STD. "MADERA" #3451.001,<br>28¾"x14"x15"RIM<br>VITREOUS CHINA, WHITE | SENSOR FLUSH VALVE:<br>SLOAN OPTIMA #8111-1.28<br>AMR. STD. SEAT "EverClean" #5901.110T | |




A GAS PIPING RISER DIAGRAM

NTS

PIPING SIZED PER 2022 CPC TABLE 1215.2(1)

# PLUMBING GENERAL NOTES

1. All work shown herein shall comply with the requirements of the following codes:
   - 2022 California Administrative Code (CAC): Part 1, Title 24, California Code of Regulations (CCR)
   - 2022 California Building Code (CBC): Part 2, Title 24 CCR
   - 2022 California Electrical Code (CEC): Part 3, Title 24 CCR
   - 2022 California Mechanical Code (CMC): Part 4, Title 24 CCR
   - 2022 California Plumbing Code (CPC): Part 5, Title 24 CCR
   - 2022 California Energy Code (CEnC): Part 6, Title 24 CCR
   - 2022 California Fire Code (CFC): Part 9, Title 24 CCR
   - 2022 California Green Building Standards Code (CALGreen): Part 11, Title 24 CCR
2. Contractors are referred to the specifications of the project for more detailed and additional requirements..
3. Furnish all labor, materials, transportation, and perform all required operations to provide a complete and operable system, in accordance with the full intent and meaning of the Drawings, Specifications, and per standard trade practices.
4. The installation of piping and equipment shall be made in such a manner to clear beams and obstructions. Do not cut into or reduce the size of plates or any load carrying members without approval of the Architect. Check drawings and work of others to prevent interference.
5. All plumbing fixtures, fittings and piping shall be "lead-free" per California AB1953 and meet the requirements of ANSI/NSF 61, Section 9.
6. All locations of piping and equipment are shown diagrammatically. Adhere to locations as closely as possible. Vary runs or arrangement of piping as required to meet structural and other interferences or as required by Architect.
7. Pipe sizes shown on drawings shall be installed as shown. Branch line sizes to fixtures when not indicated shall be per minimum branch line size as indicated on fixture schedule. Equipment and appliance supply piping shall be as indicated on drawings. Contractor shall verify size of equipment or appliance connection and provide reducing fittings to suit.
8. Materials exposed within any space being used as an air plenum shall be non combustible or shall have a flame spread index not greater than 25 and a smoke developed index not greater than 50, when tested as a composite product in accordance with one of the following test methods: NFPA 255, method of test of surface burning characteristics of building materials, ASTM E84, surface burning characteristics of building materials, or UL 723, test for surface burning characteristics of building materials.
9. No product will be accepted on the job site without prior approval by the Architect. The Contractor shall submit catalog sheets of all plumbing equipment.
10. All piping materials are to be stored and capped in a clean dry location. All piping installed shall be capped at the end of each work day to prevent dust, dirt or foreign material entering the pipe from the time of rough-in installation until the final connection of the piping to fixtures or equipment.
11. Rough-in and/or install plumbing fixtures at heights indicated on plans, or as directed by Architect. If a conflict in fixture location is noted on the drawings, the architectural drawings shall take precedence.
12. Provide combustion air to all gas fired equipment per CPC.

# SERVICE WATER HEATING STANDARDS AND CODE MEASURES

Service Water Heating Systems

1. Service water heating systems and equipment may be installed only if the manufacturer has certified that the system or equipment complies with all the requirements of section 110.3 of the CEnC.
2. Service water-heating systems shall be equipped with automatic temperature controls capable of adjustment from the lowest to the highest acceptable temperature settings for the intended use as listed in Table 3, Chapter 50 of the ASHRAE Handbook, HVAC Applications Volume.
3. Systems that have a total capacity greater than 167,000 Btu/hr., outlets that require higher than service water temperatures as listed in the ASHRAE Handbook, Applications Volume, shall have separate remote heaters, heat exchangers, or boosters to supply the outlet with higher temperature.
4. All hot water piping shall be insulated in accordance with CEnC section 120.3. (See: Table 120.3-A, For Ref)
5. Unfired service water heater storage tanks and backup tanks for solar water heating systems shall have either: external insulation with an installed R- value of at least R-3.5; internal and external insulation with a combined R- value of at least R-16; or sufficient insulation so that the heat loss of the tank surface based on an 80°F water-air temperature difference shall be less than 6.5 Btu/hr/sf. Residential water system piping and insulation for piping tanks and cooling systems to meet the requirement of CEnC section 150.0 (j).
6. If a circulating hot water system is installed, it shall have a control capable of automatically turning off the circulating pump(s) when hot water is not required.
7. Lavatories in restrooms of public facilities shall be equipped with controls to limit the outlet temperature to 110°F.

# PLUMBING SHEET INDEX


| | |
|---|---|
| P0.0 | PLUMBING NOTES, SCHEDULE, LEGEND & ABBREVIATIONS |
| P0.1 | PLUMBING DETAILS |
| P1.0 | PLUMBING OVERALL LOWER FLOOR PLAN – DEMO |
| P1.1 | PLUMBING OVERALL UPPER FLOOR PLAN – DEMO |
| P2.0 | PLUMBING OVERALL LOWER FLOOR PLAN |
| P2.1 | PLUMBING ENLARGED FLOOR PLANS |
| P3.0 | PLUMBING OVERALL UPPER FLOOR PLAN |
| P4.0 | PLUMBING ROOF PLAN |


# PROJECT TEAM LIST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| MANAGING PRINCIPAL | Brandon Rodgers | (805) 548-1443 | brandonr@bmaslo.com |
| PROJECT MANAGER | Rick Sawyer | (805) 548-1447 | ricks@bmaslo.com |
| MECHANICAL DESIGNER | Robyn Reed | (805) 548-1451 | robynr@bmaslo.com |
| PLUMBING DESIGNER | James Moreland | (805) 423-6340 | jamesm@bmaslo.com |
| ENERGY ANALYST | Dustin Lane | (805) 548-1452 | dustinl@bmaslo.com |



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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

PLUMBING NOTES, SCHEDULE, LEGEND, AND ABBREVIATIONS

CONSULTANT:


BMA ARCHITECTURE
1360 Osos Street, Ste 240
San Luis Obispo, CA 93401
805.544.4269
CA Corp. ID# 23156.00


COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CBLT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if any are in violation of any code.
Approved plans shall be maintained at the job site.
Any changes must be approved.

STAMP:

DATE:

**June 18, 2024**

REVISIONS:

1 Plan Check 1
County of SLO, 10/28/24
2 Plan Check 2
County of SLO, 12/11/24

JOB NUMBER:

2028

SHEET:

P0.0


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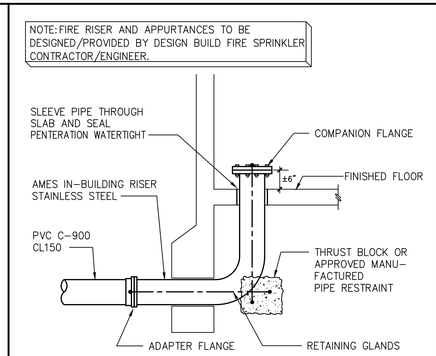


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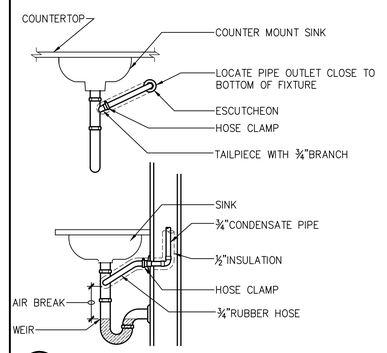


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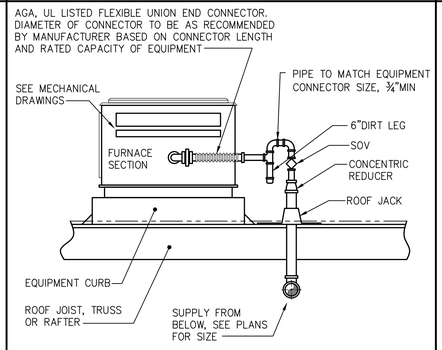


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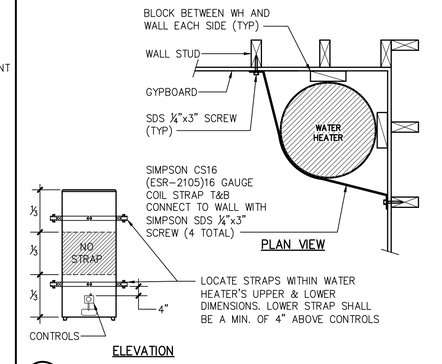
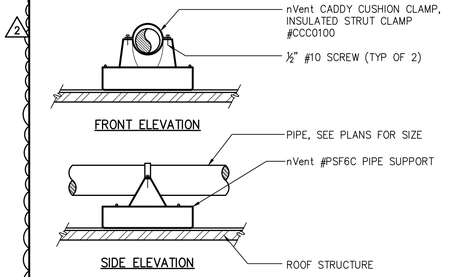
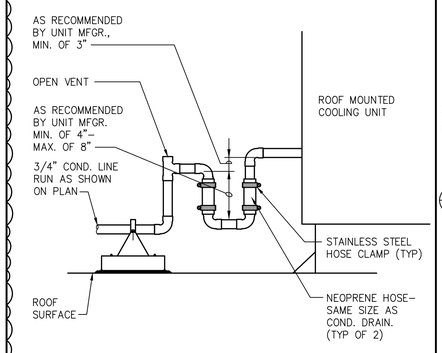



3 WATER HEATER RESTRAINT

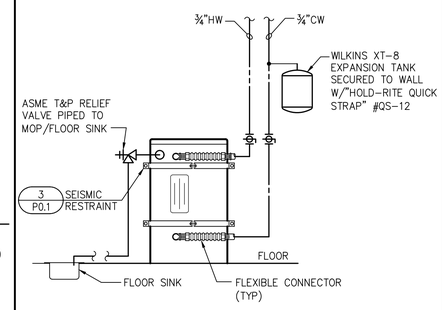



- SPACE SUPPORTS PER SPECIFICATIONS OR PER UPC IF SPECIFICATIONS ARE NOT AVAILABLE
- LISTING AND INSTALLATION INSTRUCTIONS FOR ALL PRODUCTS SHALL BE COMPATIBLE WITH THE ROOFING MATERIALS INSTALLED AND PROVIDED FOR REVIEW AND APPROVAL DURING THE SUBMITTAL PROCESS

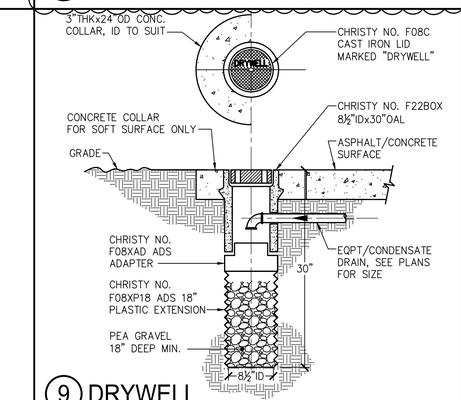
10 CONDENSATE PIPE SUPPORT



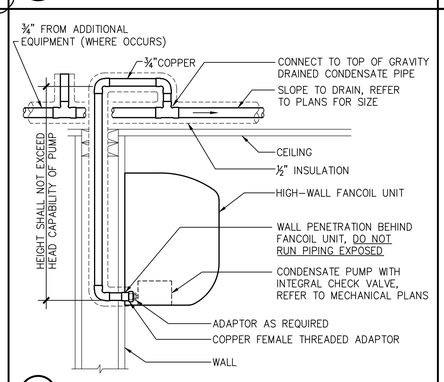

6 UNIT CONDENSATE DRAIN



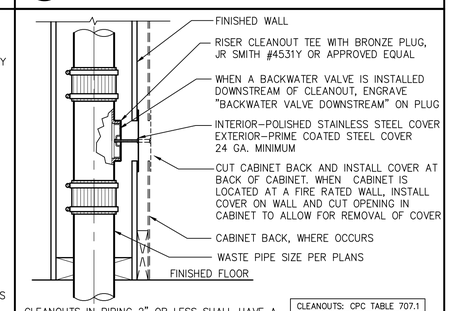

2 ELECTRIC WATER HEATER




9 DRYWELL




5 FANCOIL CONDENSATE DRAIN




CLEANOUTS IN PIPING 2" OR LESS SHALL HAVE A CLEARANCE OF NOT LESS THAN 12" IN FRONT OF THE CLEANOUT. CLEANOUTS IN PIPING LARGER THAN 2" INCHES SHALL HAVE A CLEARANCE OF NOT LESS THAN 18".

| CLEANOUTS: CPC TABLE 707.1 | |
|---|---|
| PIPE SIZE | CLEANOUT SIZE |
| 1½"-2" | 1½" |
| 2½"-3" | 2½" |
| 4"& LARGER | 3½" |

1 WALL CLEANOUT
NTS

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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

PLUMBING DETAILS

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CAL T2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if any errors are found in these approved plans. It will be unlawful to make any changes from the approved plans without permission from the County.
All changes must be approved in writing.

BMA ARCHITECTURE
Wind Engineering
1360 Vachon Rd, Ste 240
Santa Maria, CA 93455
Phone: (805) 544-4259
www.bmaarchitecture.com

STAMP:

LICENSED PROFESSIONAL ENGINEER
BRANDON RODGERS
M 36682
EXP 8/30/25
MECHANICAL
STATE OF CALIFORNIA

DATE:

**June 18, 2024**

REVISIONS:

1 Plan Check 1 County of SLO, 10/28/24
2 Plan Check 2 County of SLO, 12/11/24

JOB NUMBER:

2028

SHEET:

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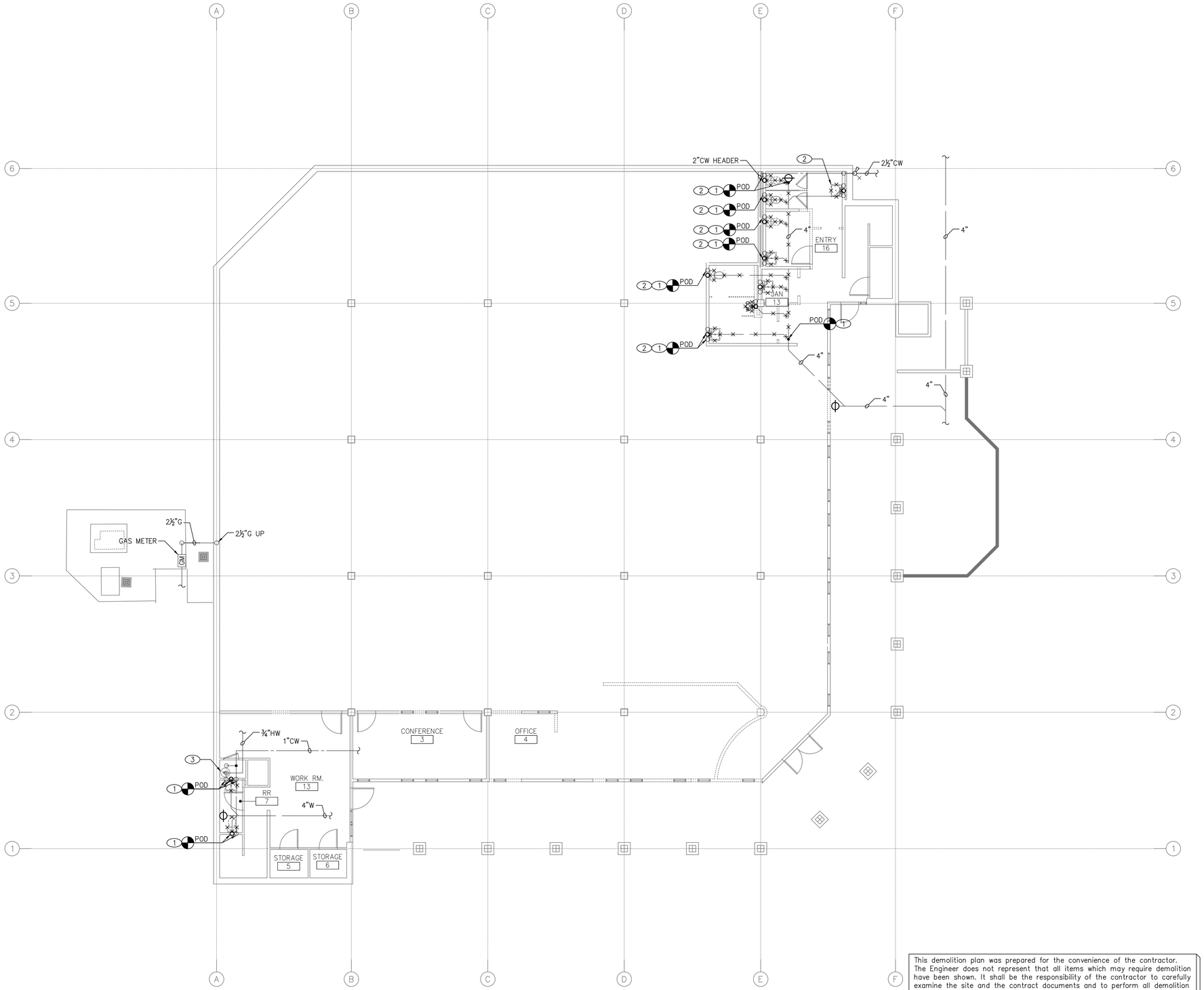


1 PLUMBING OVERALL LOWER FLOOR PLAN - DEMO

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

This demolition plan was prepared for the convenience of the contractor. The Engineer does not represent that all items which may require demolition have been shown. It shall be the responsibility of the contractor to carefully examine the site and the contract documents and to perform all demolition and reconstruction which may be required for the proper execution and completion of the work. Dispose of all equipment per the owner's direction while complying with all local codes and ordinances.

NOTE: ALL PIPING SHOWN ON THIS DEMOLITION PLAN IS EXISTING.

## GENERAL NOTES

1. See plumbing fixture schedule for pipe branch size to individual fixtures.

## DEMOLITION NOTES

(1) Field verify exact location of piping prior to construction.

(2) Remove existing fixture and all associated piping. Cap waste line below floor and vent above ceiling. Cap water pipe at active main.

(3) Remove and retain water heater for reinstallation.

SPECIAL NOTE:
UPON REMOVAL OF FIXTURES, VIDEO-SCOPE WASTE LINE AND INCLUDE A DETAILED REPORT DESCRIBING THE FOLLOWING CONDITIONS;
1. EXACT ROUTING, DEPTH, AND MATERIAL TYPE.
2. CONDITION OF INTERNAL PIPE.
3. VERIFICATION AND LOCATIONS OF ALL POINTS OF CONNECTIONS AND LATERALS.

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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

PLUMBING OVERALL LOWER FLOOR PLAN - DEMO

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CAL T2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. The approved plans shall be in use on the jobsite.
All changes must be approved.

BMA mechanical, inc. 565 Tank Farm Rd, Ste 240
San Luis Obispo, CA 93401
Office (805) 544-4259
BMA 2024 23156.00

STAMP:

DATE:

**June 18, 2024**

REVISIONS:

1 Plan Check 1
County of SLO, 10/28/24
2 Plan Check 2
County of SLO, 12/11/24

JOB NUMBER:

2028

SHEET:

P1.0

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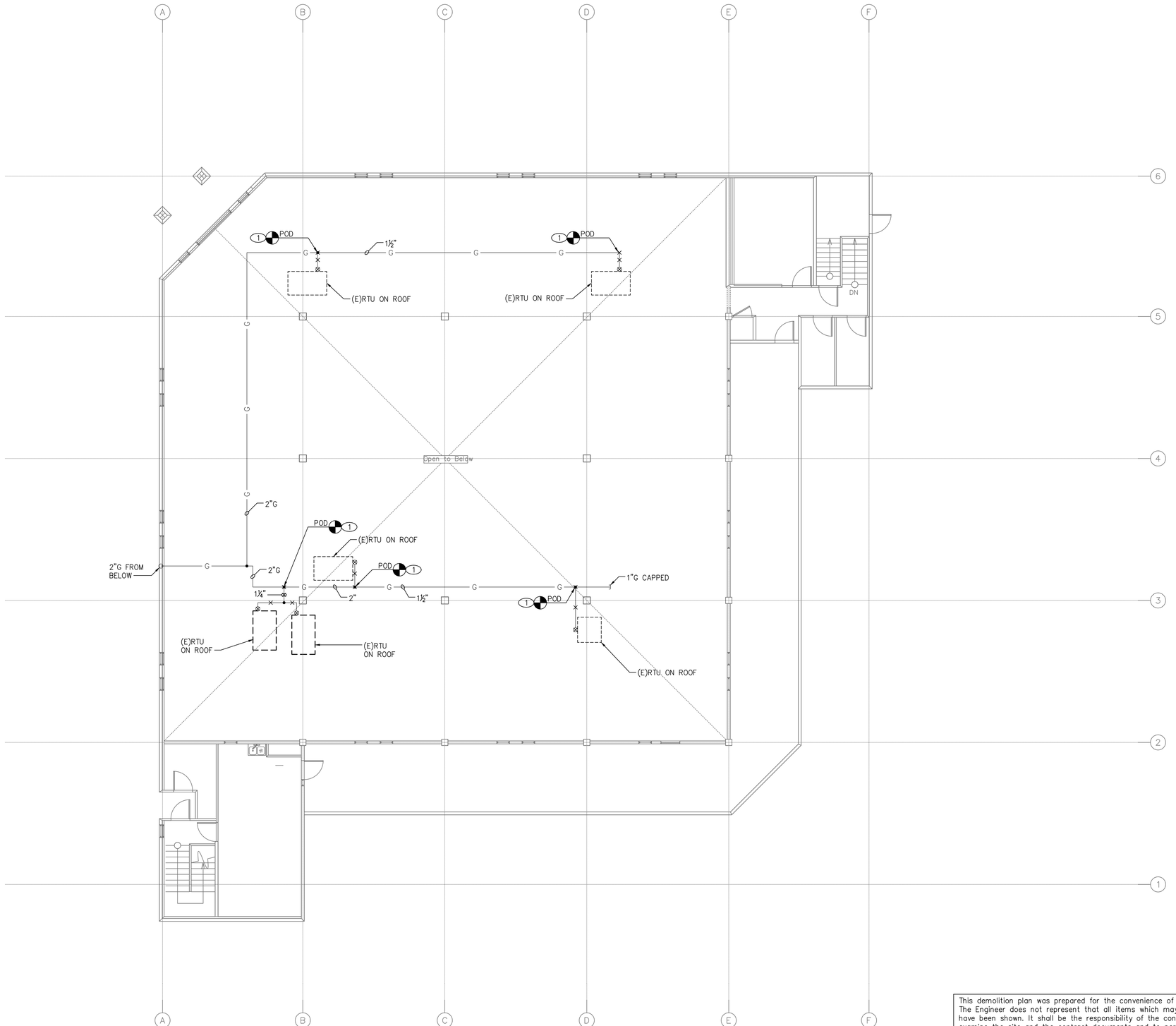


1 PLUMBING OVERALL UPPER FLOOR PLAN - DEMO
SCALE: 1/8" = 1'-0"

## GENERAL NOTES

1. See plumbing fixture schedule for pipe branch size to individual fixtures.

## DEMOLITION NOTES

(1) Field verify exact location of piping prior to construction.

(2) Remove existing fixture and all associated piping. Cap waste line below floor and vent above ceiling. Cap water pipe at active main.

SPECIAL NOTE:
UPON REMOVAL OF FIXTURES, VIDEO-SCOPE WASTE LINE AND INCLUDE A DETAILED REPORT DESCRIBING THE FOLLOWING CONDITIONS;
1. EXACT ROUTING, DEPTH, AND MATERIAL TYPE.
2. CONDITION OF INTERNAL PIPE.
3. VERIFICATION AND LOCATIONS OF ALL POINTS OF CONNECTIONS AND LATERALS.

This demolition plan was prepared for the convenience of the contractor. The Engineer does not represent that all items which may require demolition have been shown. It shall be the responsibility of the contractor to carefully examine the site and the contract documents and to perform all demolition and reconstruction which may be required for the proper execution and completion of the work. Dispose of all equipment per the owner's direction while complying with all local codes and ordinances.

NOTE: ALL PIPING SHOWN ON THIS DEMOLITION PLAN IS EXISTING.

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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

PLUMBING OVERALL UPPER FLOOR PLAN - DEMO

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if any errors are found in these approved plans. It will be the responsibility of the applicant to make any corrections necessary to comply with all applicable codes.
All changes must be approved.

BMA Structural Engineers, 1360 Osos Street, Ste 240, SLO, CA 93401, (805) 544-4259

STAMP:

LICENSED PROFESSIONAL ENGINEER
BRANDON RODGERS
M 36882
EXP 8/30/25
MECHANICAL
STATE OF CALIFORNIA

DATE:

**June 18, 2024**

REVISIONS:

1 Plan Check 1
County of SLO, 10/28/24
2 Plan Check 2
County of SLO, 12/11/24

JOB NUMBER:

2028

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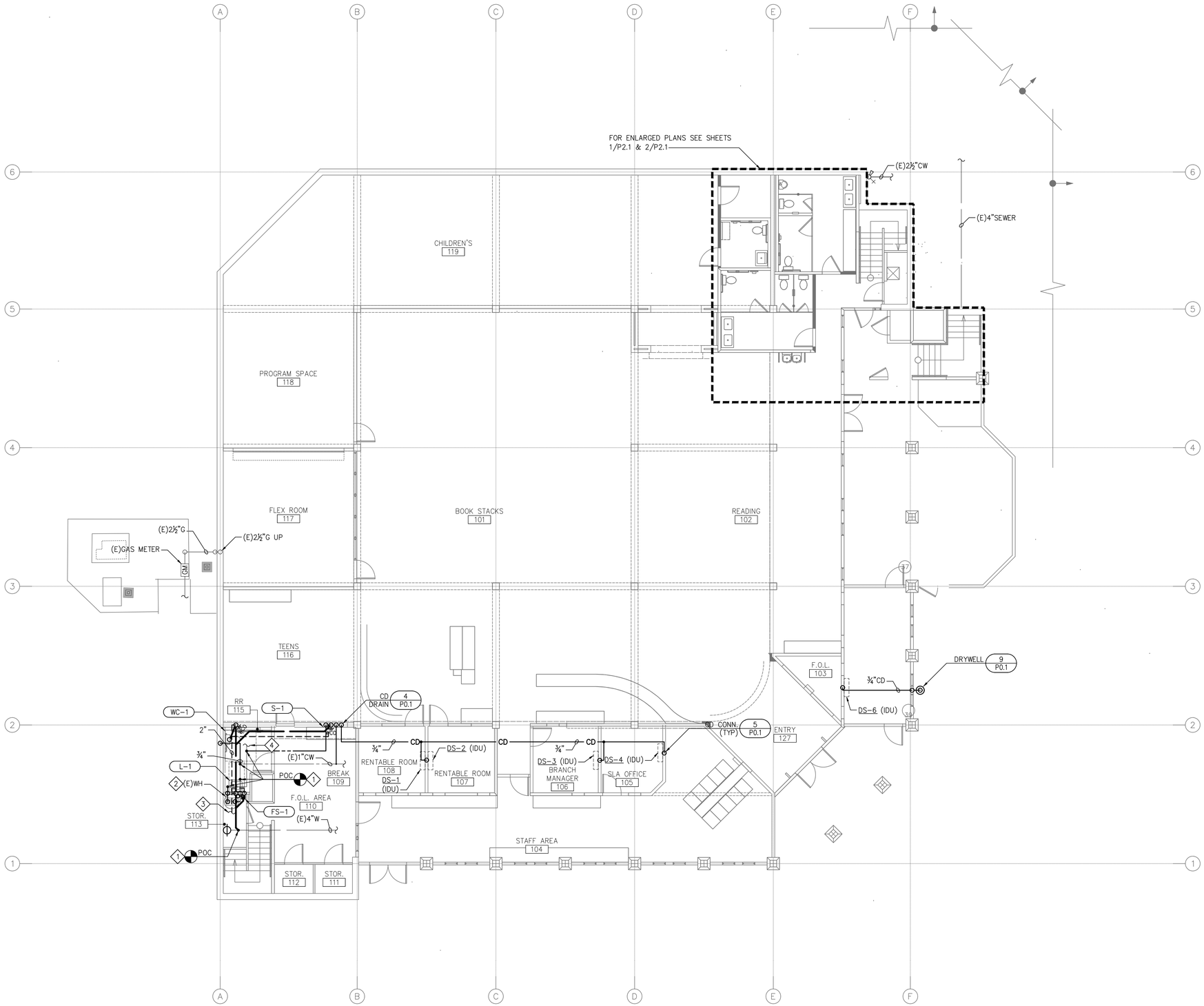


# 1 PLUMBING OVERALL LOWER FLOOR PLAN

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

## GENERAL NOTES

1. See plumbing fixture schedule for pipe branch size to individual fixtures.

## REFERENCE NOTES

1. Field verify exact location prior to construction.
2. Reconfigure existing water heater as required. Route T&P to floor sink.
3. Locate and connect to existing 2"V.
4. Reconfigure existing hot water line as necessary to support upper floor fixtures.


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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

PLUMBING OVERALL
LOWER FLOOR PLAN

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CALT20024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. Approved plans shall be in use at the jobsite.
Work inspection required - 24 hour notice.
All changes must be approved.

BMA ARCHITECTS 1775 Monterey Rd, Ste 240 San Luis Obispo, CA 93401 (805) 544-4229 BMA Project No. 23156.00

STAMP:

REGISTERED PROFESSIONAL ENGINEER
BRANDON RODGERS
M 38882
EXP 8/30/25
MECHANICAL
STATE OF CALIFORNIA

DATE:

**June 18, 2024**

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1 Plan Check 1
County of SLO, 10/28/24
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County of SLO, 12/11/24

JOB NUMBER:

2028

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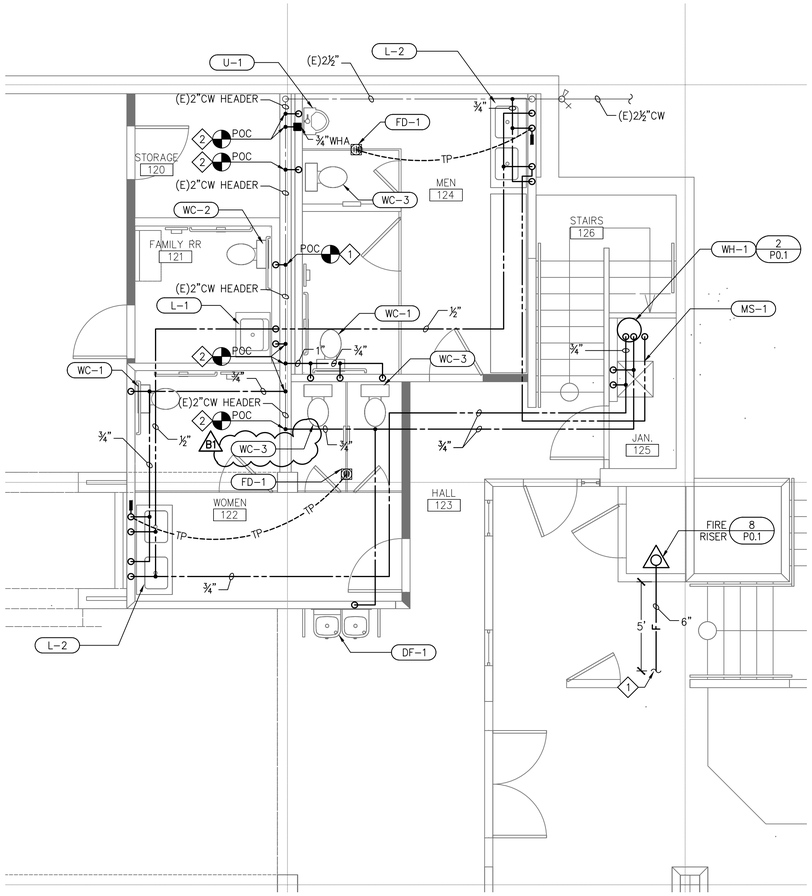
## GENERAL NOTES

1. See plumbing fixture schedule for pipe branch size to individual fixtures.

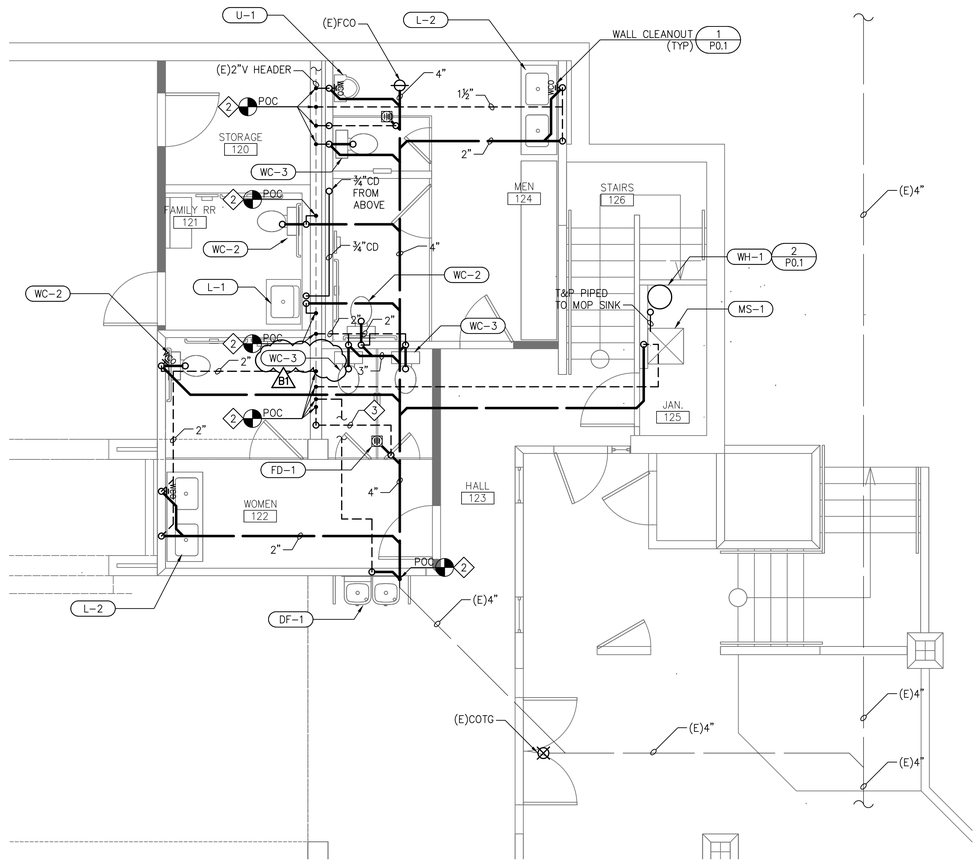
## REFERENCE NOTES

1. For continuation see civil utility plan.
2. Field verify exact location prior to construction.
3. 1½"V below grade.




## 2 PLUMBING ENLARGED FLOOR PLAN - HOT & COLD WATER

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




## 1 PLUMBING ENLARGED FLOOR PLAN - DWV

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

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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
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CLIENT:

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San Luis Obispo, CA 93408

SHEET CONTENTS:

PLUMBING ENLARGED FLOOR PLANS

CONSULTANT:


BMA Mechanical +
689 Tank Farm Rd., Ste 240
SLO, CA 93401
OFF.: (805) 544-4269
BMA JOB# 23156.00


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DATE:

June 18, 2024

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1 Plan Check 1
County of SLO, 10/28/24
2 Plan Check 2
County of SLO, 12/11/24
B1 Bid Set Update, 7/25/24

JOB NUMBER:

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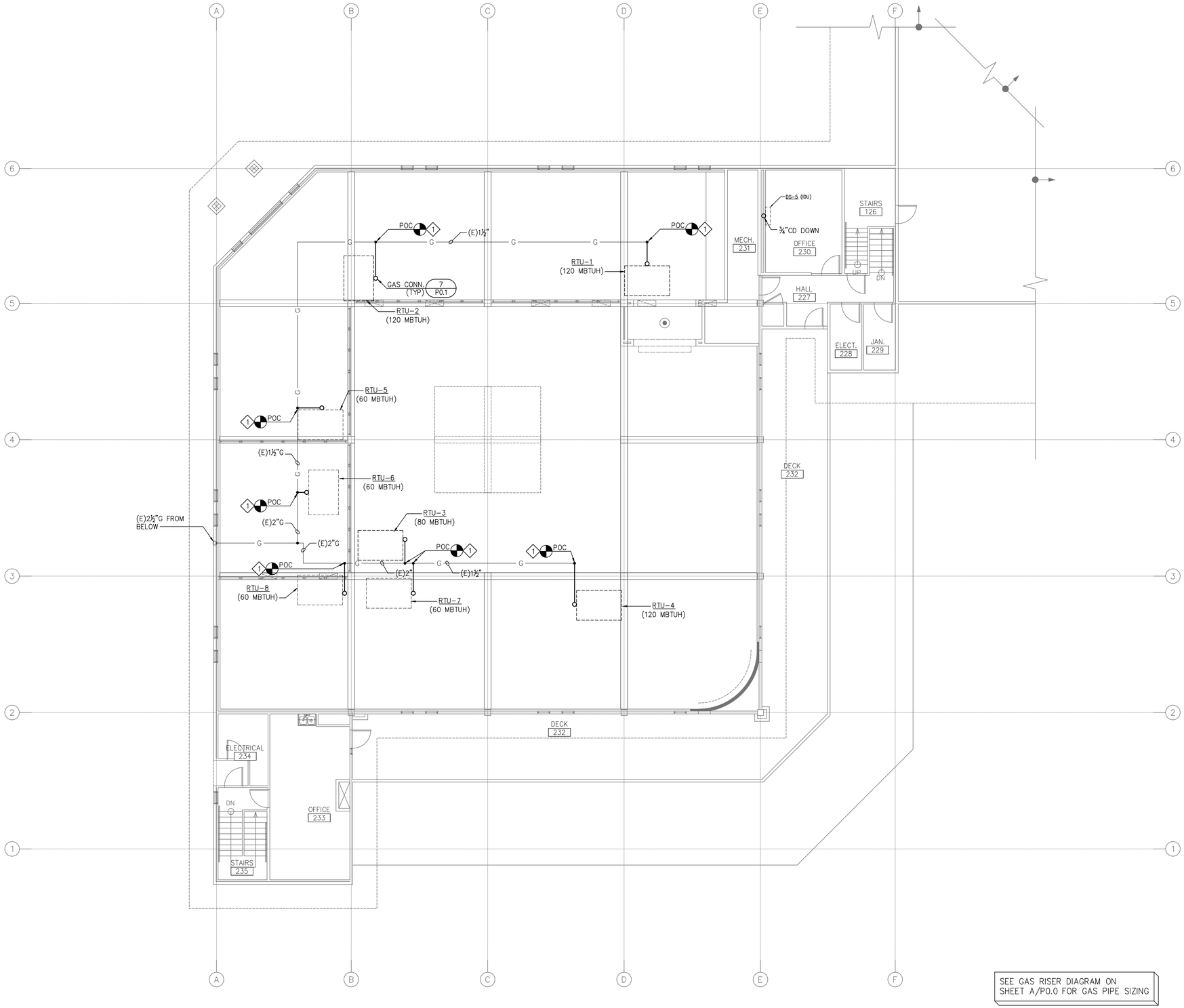
P2.1




# 1 PLUMBING OVERALL UPPER FLOOR PLAN

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

## REFERENCE NOTES

1. Field verify exact location prior to construction.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SAN LUIS OBISPO, CA 93401



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PROJECT:

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Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

PLUMBING OVERALL
UPPER FLOOR PLAN

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
By Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
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Approved plans shall be in use on the job site.
All inspections must be approved


BMA
3765 Broad St, Ste 240
San Luis Obispo, CA 93401
Office: (805) 544-4259
Mobile: (805) 235-1030


STAMP:

DATE:

**June 18, 2024**

REVISIONS:

1. Plan Check 1
County of SLO, 10/28/24
2. Plan Check 2
County of SLO, 12/11/24

JOB NUMBER:

2028

SHEET:

P3.0


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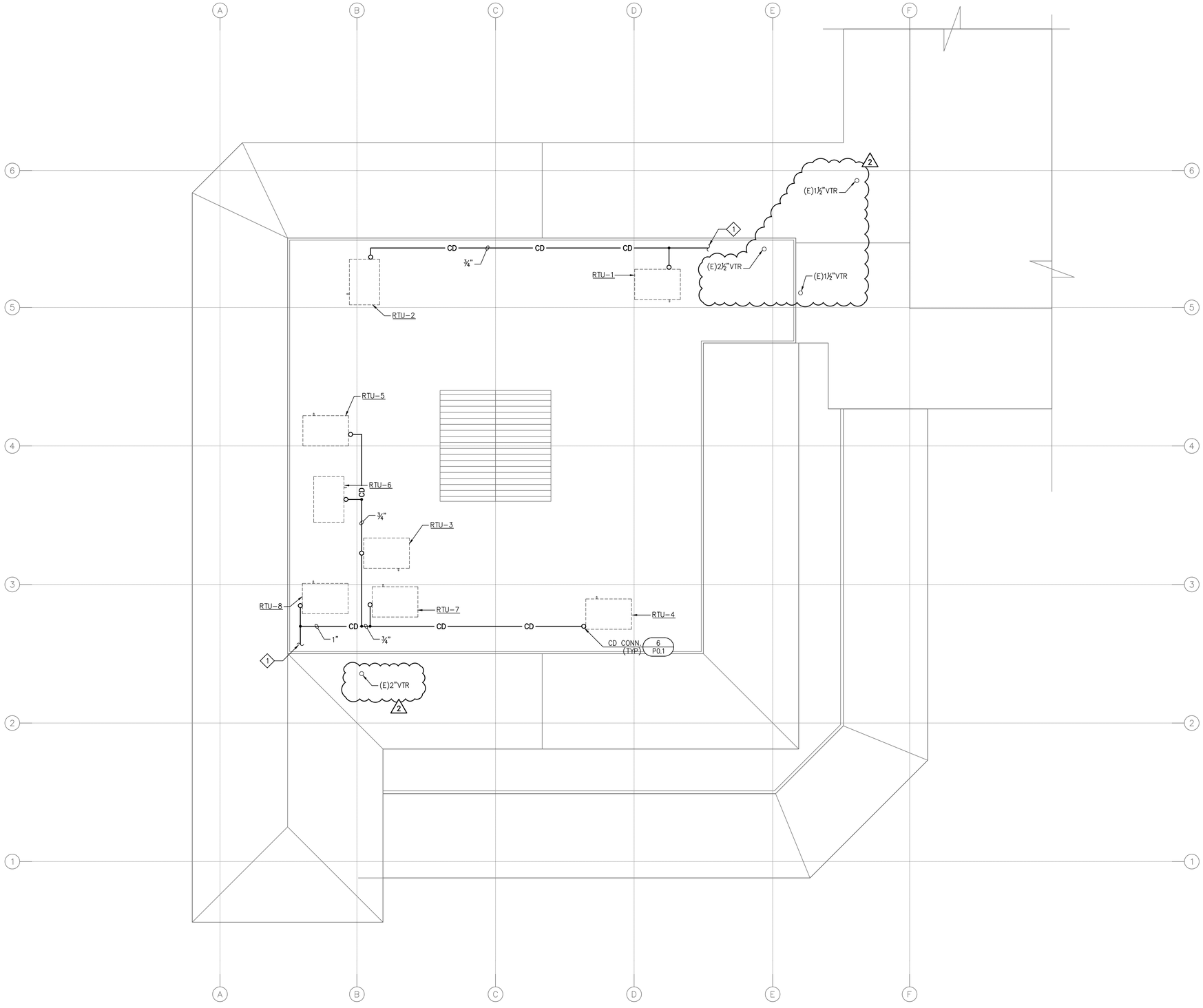


# PLUMBING ROOF PLAN

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

## REFERENCE NOTES

1. Route condensate line to existing roof drain or condensate receiver.


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SAN LUIS OBISPO, CA 93401



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PROJECT:

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**PLUMBING ROOF PLAN**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
By Matt Varvel
Project No: CALT2024-00055 Date: 06/27/2025
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require corrections if they are in error. The plans shall be approved unless it shall be unlawful.


BMA ARCHITECTURE
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MECHANICAL
STATE OF CALIFORNIA

DATE:

**June 18, 2024**

REVISIONS:

1 Plan Check 1
County of SLO, 10/28/24
2 Plan Check 2
County of SLO, 12/11/24

JOB NUMBER:

2028

SHEET:

P4.0


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# ELECTRICAL PLAN CONVENTIONS

DETAIL CALL-OUT/REFERENCE
- # / SHEET — DETAIL NO. / PLAN REFERENCE NO.

REFERENCE NOTE CALL-OUT
- # — NUMBERED SHEET NOTE
- A — LUMINAIRE DESIGNATION
- ○ 1a,b — BRANCH CIRCUIT, SWITCHLEG(S)

FEEDER DESIGNATION
- F# — FEEDER DESIGNATION NO. REFERS TO FEEDER SCHEDULE INCLUDED ON THE SINGLE LINE DIAGRAM. SCHEDULE NOTES FEEDER SPECIFICATION, CONDUIT SPECIFICATION, AND ROUTING.
- 1 — BRANCH CIRCUIT DESIGNATION

EQUIPMENT DESIGNATION
- M# — EQUIPMENT DESIGNATION: "M" - MECHANICAL
- P# — "P" - PLUMBING
- FS# — "FS" - FOOD SERVICE

LUMINAIRE DISTRIBUTION
- LIGHT DISTRIBUTION INDICATED BY ARROWS

# ELECTRICAL ABBREVIATIONS

| | | | | | |
|---|---|---|---|---|---|
| - A - | | GC | GENERAL CONTRACTOR | OPR | OWNER PROJECT REQUIREMENTS |
| A | AMPERE | GFCI | GROUND FAULT CIRCUIT INTERRUPTER | O&M | OPERATION & MAINTENANCE |
| ABV | ABOVE | GFI | GROUND FAULT CIRCUIT INTERRUPTER | OSA | OFFICE OF THE STATE ARCHITECT |
| AC | ALTERNATING CURRENT | GND | GROUND | OSHPD | OFFICE of STATEWIDE HEALTH |
| ADJ | ADJACENT | GRS | GALVANIZED RIGID STEEL | | PLANNING & DEVELOPMENT |
| AFS | FUSED SWITCH AMPERAGE RATING | GWS | GANG WITH SWITCH | OVLD | OVERLOAD |
| AFF | ABOVE FINISH FLOOR | - H - | | - P - | |
| AFG | ABOVE FINISH GRADE | H | HEIGHT | P | POLE |
| AHJ | AUTHORITY HAVING JURISDICTION | HID | HIGH INTENSITY DISCHARGE | PA | PUBLIC ADDRESS |
| AIC | AMPERES INTERRUPTING CAPACITY | HO | HIGH OUTPUT | PB | PULLBOX |
| AL | ALUMINUM | HOA | HAND-OFF-AUTO | PC | PHOTOCELL |
| APCD | AIR POLLUTION CONTROL DISTRICT | HP | HORSEPOWER | PC | PLUMBING CONTRACTOR |
| ATS | AUTOMATIC TRANSFER SWITCH | HPF | HIGH POWER FACTOR | PH | PHASE |
| AV | AUDIBLE/AUDIO VISUAL | HPS | HIGH PRESSURE SODIUM | PNL | PANEL |
| AWG | AMERICAN WIRE GAGE | - I - | | POC | POINT OF CONNECTION |
| - B - | | ID | IDENTIFICATION | PV | PHOTOVOLTAIC |
| BFG | BELOW FINISH GRADE | IG | ISOLATED GROUND | - R - | |
| BLDG | BUILDING | IBC | INTERNATIONAL BUILDING CODE | (R) | RELOCATE(D) |
| BOD | BASIS OF DESIGN | - J - | | RECEPT | RECEPTACLE |
| - C - | | J-BOX | JUNCTION BOX | REQ'D | REQUIRED |
| C | CONDUIT | - K - | | RLA | RUNNING/RATED LOAD AMPS |
| CA | CALIFORNIA | K | KILO | RM | ROOM |
| CATV | CABLE TELEVISION | KVA | KILOVOLTAMPS | RMC | RIGID METAL CONDUIT |
| CB | CIRCUIT BREAKER | KW | KILOWATT | RMV | REMOVE |
| CBC | CA BUILDING CODE | - L - | | RPLC | REPLACE |
| CEC | CA ELECTRICAL CODE | LC | LIGHTING CONTROL | RS | RAPID START |
| CF | COMPACT FLUORESCENT | LRA | LOCKED ROTOR AMPS | - S - | |
| CFC | CA FIRE CODE | LS | LIFE SAFETY BRANCH | SC | SIGNAL CABINET |
| CLG | CEILING | LT | LIGHT | SCC | SHORT CKT CURRENT |
| CL | CENTER LINE | LTG | LIGHTING | SFM | STATE FIRE MARSHAL |
| CKT | CIRCUIT | LV | LOW VOLTAGE | SHT | SHEET |
| CNTR | CONTRACTOR | - M - | | SL | SWITCH LEG |
| C.O. | CONDUIT ONLY (W/PULLROPE) | MC | MECHANICAL CONTRACTOR | SPEC | SPECIFICATION |
| CR | CRITICAL BRANCH | MCA | MINIMUM CIRCUIT AMPS | SPST | SINGLE POLE SINGLE THROW |
| CSFM | CALIFORNIA SFM | MCB | MAIN CIRCUIT BREAKER | SQ | SQUARE |
| CT | CURRENT TRANSFORMER | MECH | MECHANICAL | SURF | SURFACE SERVICE |
| CU | COPPER | MFR | MANUFACTURER | SVC | SERVICE |
| - D - | | MFS | MAIN FUSIBLE SWITCH | SW | SWITCH |
| (D) | DEMOLITION / DEMOLISH | MH | METAL HALIDE | - T - | |
| D | DEPTH | MLO | MAIN LUGS ONLY | T | TAMPER PROOF |
| DSA | DEPARTMENT OF THE STATE ARCHITECT | MOCP | MAXIMUM OCP | TBR | TO BE REMOVED |
| DC | DIRECT CURRENT | MPOE | MAIN POINT OF ENTRY | TC | TIME CLOCK |
| DIA | DIAMETER | MSB | MAIN SWITCHBOARD | TEL | TELEPHONE |
| DPST | DOUBLE POLE SINGLE THROW | MT | MOUNT | TS | TIME SWITCH |
| - E - | | MT HT | MOUNTING HEIGHT | TSP | TWISTED SHIELDED PAIR |
| (E) | EXISTING | MTS | MANUAL TRANSFER SWITCH | TTB | TELEPHONE TERMINAL BOARD |
| (EXN) | EXISTING IN NEW LOCATION | MTTB | MAIN TELEPHONE TERMINAL BOARD | TTC | TELEPHONE TERMINAL CABINET |
| (EXR) | EXISTING TO BE RELOCATED | MTTC | MAIN TELEPHONE TERMINAL CABINET | TX | TRANSFORMER |
| EC | ELECTRICAL CONTRACTOR | - N - | | TYP | TYPICAL |
| ELEC | ELECTRICAL | (N) | NEW | - U - | |
| EM | EMERGENCY | N | NEUTRAL CONDUCTOR | UC | UNDERCABINET OR UNDERCOUNTER |
| EMT | ELECTRIC METALLIC TUBING | N3R | NEMA 3R | UG | UNDERGROUND |
| EOL | END OF LINE RESISTOR | NATL | NATIONAL | UGPS | UNDERGROUND PULL SECTION |
| EOR | ENGINEER OF RECORD | NC | NORMALLY CLOSED | UL | UNDERWRITERS LABORATORIES |
| - F - | | NEC | NATIONAL ELECTRICAL CODE | UON | UNLESS OTHERWISE NOTED |
| (F) | FUTURE | NEMA | NATL ELEC MANUFACTURER'S ASSOC | USA | UG SVC ALERT |
| FACP | FIRE ALARM CONTROL PANEL | NIC | NOT IN CONTRACT | - V - | |
| FAT | FIRE ALARM TERMINAL | NL | NIGHT LIGHT | V | VOLT |
| FBO | FURNISHED BY OTHERS | NO | NORMALLY OPEN, NUMBER | VA | VOLT AMPERES |
| FLA | FULL LOAD AMPS | NPF | NORMAL POWER FACTOR | VAC | VOLT ALTERNATING CURRENT |
| FLR | FLOOR | NTS | NOT TO SCALE | VOLT | VOLTAGE |
| FLUOR | FLUORESCENT | - O - | | VR | VANDAL-RESISTANT |
| FF | FUSES FOR | OAH | OVERALL HEIGHT | - W - | |
| FS | FUSIBLE SWITCH | OC | ON CENTER | W | WIDTH, WIRE OR WATT |
| FVNR | FULL VOLTAGE NON-REVERSING | OCP | OVERCURRENT PROTECTION | WIU | WHILE-IN-USE |
| - G - | | OD | OUTSIDE DIAMETER | WP | WEATHERPROOF |
| G | GROUNDING CONDUCTOR | OH | OVERHEAD | - X - | |
| | | | | XFMR | TRANSFORMER |

# ELECTRICAL SYMBOLS

LIGHTING
- CEILING MOUNT LUMINAIRE
- WALL MOUNT LUMINAIRE
- PENDANT MOUNT LUMINAIRE
- RECESSED DOWNLIGHT
- RECESSED WALL WASH DOWNLIGHT
- RECESSED TROFFER
- RECESSED PROCEDURE LIGHT
- RECESSED STEP LIGHT
- STRIP LIGHT
- LUMINAIRE WITH EMERGENCY BATTERY PACK OR EMERGENCY BRANCH CIRCUIT CONNECTION
- TRACK LIGHT
- DIRECTIONAL FLOOD LIGHT
- EMERGENCY LUMINAIRE
- AREA LIGHT (EXTERIOR)
- BOLLARD (EXTERIOR)
- UP LIGHT (FLUSH IN GRADE)
- DIRECTIONAL GROUND MOUNTED LIGHT
- EXIT SIGN (CHEVRON DIRECTIONS NOTED)
- EXIT SIGN (WALL MOUNTED)

RACEWAYS & CONDUCTORS
- UNDERGROUND CONDUIT
- CONDUIT (CONCEALED IN STRUCTURE)
- OVERHEAD CONDUCTORS (NOT IN CONDUIT)
- WIREMOLD RACEWAY
- HOMERUN CONDUIT. CROSS MARKS DENOTE NUMBER OF CONDUCTORS - EXAMPLE: 3-HOT AND 1-NEUTRAL GROUND CONDUCTOR NOT SHOWN.
- CONDUIT TURNS UP (TOWARDS VIEWER)
- CONDUIT TURNS DOWN (AWAY FROM VIEWER)
- CONDUIT STUB (NO MARKER)
- CONDUIT STUB (WITH MARKER)
- CONDUIT SEAL
- CONDUIT CONTINUATION

SWITCHES
- SPST
- DPDT
- 3-WAY
- 4-WAY
- STAND ALONE DIMMER
- TIMER SWITCH
- PILOT LIGHT
- KEY OPERATED
- DEVICE MOUNTED ABOVE COUNTER SPLASH
- OCCUPANCY SENSOR
- PHOTOSENSOR/PHOTOCELL
- POWER PACK
- LOW VOLTAGE SWITCHBANK

FIRE ALARM
- FIRE ALARM CONTROL PANEL
- ANNUNCIATER PANEL
- HORN
- VISUAL
- AUDIBLE-VISUAL
- FLOW SWITCH
- TAMPER SWITCH
- PULL STATION
- BELL
- SMOKE DETECTOR W/ BASE
- DUCT MOUNTED SMOKE DETECTOR W/ BASE
- HEAT DETECTOR
- END OF LINE RESISTOR
- FIRE SMOKE DAMPER

POWER & COMMUNICATION
- SINGLE RECEPTACLE
- DUPLEX RECEPTACLE
- TAMPER PROOF DUPLEX RECEPTACLE
- HALF-SWITCHED DUPLEX RECEPTACLE
- FULLY-SWITCHED RECEPTACLE
- DOUBLE DUPLEX RECEPTACLE
- SPECIAL PURPOSE RECEPTACLE - THREE PHASE
- SPECIAL PURPOSE RECEPTACLE - SINGLE PHASE
- DEVICE MOUNTED FLUSH IN FLOOR
- DEVICE MOUNTED AT PEDESTAL
- DEVICE MOUNTED ABOVE COUNTER SPLASH
- JUNCTION BOX
- TELEPHONE DEVICE
- COMMUNICATIONS DEVICE (DATA/TEL)
- TELEVISION OUTLET
- DISCONNECT SWITCH (FUSED/UN-FUSED)
- COMBINATION MOTOR STARTER/DISCONNECT
- CORD DROP RECEPTACLE
- MOTOR
- CIRCUIT BREAKER
- FUSIBLE SWITCH
- FUSE
- GROUND
- PHASE
- FLUSH MOUNT PANEL
- SURFACE MOUNT PANEL
- SURFACE PANEL WITH WORKING CLEARANCE NOTED
- DRY TYPE TRANSFORMER (RATING NOTED)
- THREE PHASE DELTA CONNECTION, NEUTRAL GROUNDED
- THREE PHASE WYE CONNECTION
- RELAY
- UTILITY METER
- UTILITY METER WITH CTS

# ADA MOUNTING HEIGHTS

| DEVICE | MOUNTING HEIGHT | NOTES |
|---|---|---|
| PROTRUDING OBJECT (WALL MOUNTED) | LEADING EDGE BETWEEN 27" AND 80" AFF. | OBJECT SHALL NOT PROTRUDE MORE THAN 4" INTO THE CIRCULATION PATH. |
| RECEPTACLE, COMMUNICATION, TELEPHONE, CATV, ETC. | +15" AFF TO THE BOTTOM OF THE OUTLET BOX. | APPLICABLE TO RECEPTACLES (30 AMPS AND LESS), CONTROLS, AND SWITCHES INTENDED TO BE USED BY THE OCCUPANT OF THE ROOM PER CBC 11B-308.1.1 (SWITCHES) AND 11B-308.1.2 (RECEPTACLES). OUTLET(S) SHALL BE INSTALLED NO LESS THAN +15" MEASURED FROM THE BOTTOM OF THE OUTLET BOX TO THE LEVEL OF THE FINISHED FLOOR OR WORKING PLATFORM. |
| LUMINAIRE SWITCHES | +48" AFF TO THE TOP OF THE OUTLET BOX. | |
| DEVICES ABOVE A 20"-25" DEEP COUNTER/OBSTRUCTION | +46" (MAX.) TO THE TOP OF THE OUTLET BOX (SIDE APPROACH). +44" (MAX.) TO THE TOP OF THE OUTLET BOX (FORWARD APPROACH). | COORDINATE WITH ARCHITECTURAL PLANS. OBSTRUCTIONS SHALL NOT EXTEND MORE THAN 25" FROM THE WALL BENEATH THE RECEPTACLE/DEVICE. |
| FIRE ALARM PULL STATIONS | BETWEEN +42" - 48" MAX TO THE TOP OF THE ACTIVATING HANDLE. | |
| OUTLET BOX FOR THERMOSTAT (BY OTHERS). | BETWEEN +42" - 48" MAX TO THE TOP OF THE OUTLET BOX. | VERIFY WITH MECHANICAL PRIOR TO ROUGH IN. |

NOTES
1) DEVICES SHALL MOUNT PER MATRIX ABOVE UNLESS OTHERWISE NOTED PER PLANS.
2) PRIOR TO ROUGH-IN, THE ELECTRICAL CONTRACTOR SHALL VERIFY MOUNTING HEIGHTS FOR DEVICES AND EQUIPMENT CONNECTION LOCATIONS WITH THE ARCHITECT OR OWNER. WHERE DEVICES ARE LOCATED ABOVE COUNTERS AND SHELVING, SPECIAL ATTENTION SHALL BE TO ENSURE OUTLETS AND COVER PLATES DO NOT CONFLICT WITH EDGES OF COUNTER SPLASH, SHELVING TRIM, WAINSCOTING, ETC. CONSULT ARCHITECTURAL DETAILS AND INTERIOR ELEVATIONS, AS THEY SHALL GOVERN WHERE THERE IS CONFLICT WITH ELECTRICAL PLANS.
3) EXCEPTIONS: APPLIANCES (I.E. KITCHEN RANGES, DISHWASHERS, ETC.) WHICH DO NOT HAVE CONTROLS LOCATED ON APPLIANCE.

# GENERAL POWER & COMMUNICATION PLAN NOTES

GENERAL
1. DEVICE AND EQUIPMENT FINAL LOCATION SHALL BE FIELD VERIFIED WITH ALL TRADES DURING ROUGH-IN. OBTAIN ACCEPTANCE OF EXACT LOCATIONS WITH ARCHITECT/OWNER REPRESENTATIVES TO AVOID CONFLICT WITH FURNITURE, CASEWORK, ETC.

RECEPTACLES
2. RECEPTACLES INSTALLED IN EXTERIOR LOCATIONS SHALL BE PROVIDED WITH A WEATHERPROOF WHILE-IN-USE COVER (LOCKING AS REQUIRED PER PLANS).

WIRING
3. SEPARATE NEUTRAL CONDUCTORS SHALL BE INSTALLED FOR EACH BRANCH CIRCUIT AS INDICATED PER CONSTRUCTION DOCUMENTS.

4. FEEDERS AND BRANCH CIRCUITS SHALL CARRY A GROUNDING CONDUCTOR, SHALL BE INSTALLED IN EACH CONDUIT/RACEWAY AND SHALL BE BONDED TO THE METALLIC COMPONENTS OF THE RACEWAY SYSTEM. GROUNDING CONDUCTORS SHALL BE SIZED PER THE CONSTRUCTION DOCUMENTS OR CEC REQUIREMENTS, WHICHEVER IS GREATER. MAINTAIN THE UNIFORMITY AND CONTINUITY OF THE GROUNDING SYSTEM IN CONDUIT AND RACEWAYS. GROUND CONDUCTORS SHALL BE SIZED AS INDICATED IN CEC TABLE 250.122, UNLESS OTHERWISE NOTED ON THE DRAWINGS. IT SHALL BE PERMITTED TO UTILIZE A SINGLE GROUND CONDUCTOR WHEN BRANCH CIRCUITS ARE COMBINED IN A SINGLE HOMERUN. GROUND CONDUCTOR SHALL BE SIZED FOR THE LARGEST OVERCURRENT DEVICE.

OVERCURRENT PROTECTION
5. THERMAL OVERLOAD PROTECTION SHALL BE PROVIDED FOR ALL MOTORS WHERE REQUIRED PER CEC 430. OVERLOAD PROTECTION MAY BE PROVIDED INTEGRAL TO EQUIPMENT.

6. WHERE INDICATED ON THE CONSTRUCTION DOCUMENTS, FUSIBLE DISCONNECT SWITCHES SHALL BE PROVIDED WITH DUAL ELEMENT TIME DELAY FUSES. FUSES SHALL BE SIZED AS NOTED PER THE CONSTRUCTION DOCUMENTS AND/OR PER MANUFACTURER REQUIREMENTS. VERIFY FUSE SPECIFICATION WITH EQUIPMENT NAMEPLATE INFORMATION DURING SUBMITTAL REVIEW, PRIOR TO PROCUREMENT.

MARKING AND CLEARANCE
7. ELECTRICAL EQUIPMENT SHALL BE PROVIDED WITH FIELD OR FACTORY MARKING INDICATING THE POTENTIAL ARC FLASH HAZARDS AS REQUIRED IN CEC 110.16 AND 110.21.

8. WORKING SPACE AT ELECTRICAL EQUIPMENT SHALL BE MAINTAINED AS REQUIRED PER CEC 110.

COMMUNICATION
9. PROVIDE EACH COMMUNICATION DEVICE LOCATION WITH A 4" SQUARE, RECESSED JUNCTION BOX, WITH 1-GANG RING AND (1)1-1/4" CONDUIT STUB TO ACCESSIBLE CEILING SPACE ABOVE, UNLESS OTHERWISE NOTED.

10. ELECTRICAL AND COMMUNICATION OUTLETS SHOWN IN THE SAME LOCATION SHALL BE MOUNTED ON OPPOSITE SIDES OF THE SAME STUD. COORDINATE BETWEEN ELECTRICAL AND COMMUNICATIONS PLANS.

11. REFER TO THE COUNTY OF SLO STANDARD FOR DATA AND VOICE CABLING AND/OR SPECIFICATIONS. HOMERUN ALL COMMUNICATION CABLING TO ELECTRICAL ROOM (RM 228) (B1)

# GENERAL LIGHTING PLAN NOTES

1. LINE VOLTAGE POWERED EXIT SIGNS, EMERGENCY LUMINAIRES, AND EMERGENCY BATTERY PACKS SHALL BE PROVIDED WITH A CONSTANTLY ENERGIZED BRANCH CIRCUIT CONNECTION FOR CHARGING. EXIT SIGNAGE AND EMERGENCY LIGHTING SHALL BE INSTALLED WITH WIRING METHODS COMPLIANT WITH CEC ARTICLE 700.12(F). IN NO INSTANCE SHALL AN EXIT SIGN HAVE A "FEED THROUGH" BRANCH CIRCUIT CONNECTION.

2. EGRESS ILLUMINATION SHALL MEET OR EXCEED CODE REQUIREMENTS. EMERGENCY LIGHTING SHALL BE PROVIDED ALONG THE INTERIOR PATH OF EGRESS TO THE EXTERIOR EXIT DISCHARGE AND/OR AREA OF REFUGE AS REQUIRED PER THE CBC.

3. BRANCH CIRCUIT CONDUCTORS SHALL BE A MINIMUM OF #12 THWN, UNLESS OTHERWISE NOTED OR REQUIRED BY THE CEC.

4. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LUMINAIRE LOCATION PRIOR TO INSTALLATION.

5. LUMINAIRE CONTROL SWITCHES SHALL BE INSTALLED ON THE STRIKE SIDE OF THE DOOR UNLESS OTHERWISE NOTED PER THE PLANS. REFER TO ARCHITECTURAL PLANS.

6. THE CONTRACTOR SHALL BE RESPONSIBLE TO COMPLETE CEC T-24 INSTALLATION CERTIFICATION AND LIGHTING ACCEPTANCE DOCUMENTATION. FORMS CAN BE DOWNLOADED ON-LINE AT : https://energycodeace.com/NonresidentialForms/2022

# GENERAL ROOF PLAN NOTES

1. RECEPTACLES INSTALLED AT ROOF LEVEL SHALL BE PROVIDED WITH A WEATHERPROOF WHILE-IN-USE COVER (LOCKING AS REQUIRED PER PLANS).

2. FINAL CONNECTIONS (WITHIN TWO FEET) FOR EACH MECHANICAL/PLUMBING EQUIPMENT SHALL BE MADE WITH LIQUID TIGHT, FLEXIBLE CONDUIT. A GROUNDING CONDUCTOR SHALL BE INSTALLED, MINIMUM SIZE PER CEC REQUIREMENTS.

3. ALL EQUIPMENT SHOWN AT ROOF LEVEL SHALL BE LISTED FOR EXTERIOR USE (I.E. NEMA 3R RATING).

4. VERIFY LOCATION OF ROOF-MOUNT DISCONNECT SWITCHES AND CONDUIT ENTRY LOCATIONS FOR EQUIPMENT IN ROOF WITH MECHANICAL CONTRACTOR AND APPROVED EQUIPMENT SUBMITTALS PRIOR TO ROUGH-IN.

5. CONDUIT SHALL NOT BE INSTALLED AND ROUTED ALONG TOP OF ROOF UNLESS SPECIFICALLY INDICATED PER PLANS. CONDUIT SERVING ROOF MOUNT EQUIPMENT SHALL ROUTE IN THE ACCESSIBLE CEILING SPACE BELOW ROOF. CONDUIT PENETRATIONS AT ROOF SHALL BE APPROVED BY THE ROOFING CONTRACTOR. ROOF PENETRATIONS SHALL BE PROPERLY SEALED AND SHALL NOT COMPROMISE ROOF INTEGRITY.

# GENERAL DEMOLITION NOTES

WHERE DEVICES ARE LOCATED AT WALLS SCHEDULED FOR REMOVAL, DISCONNECT AND REMOVE AS REQUIRED. DISCONNECT AND REMOVE EXISTING BRANCH CIRCUIT CONDUCTORS AS REQUIRED TO MAINTAIN SAFE INSTALLATION. IT SHALL BE ACCEPTABLE TO TERMINATE AND CAP CONDUCTORS IN A JUNCTION BOX LOCATED WITHIN AN ACCESSIBLE AREA OR REMOVE WIRING TO NEAREST DEVICE. FIELD COORDINATE. REFER TO DIVISION 26 SPECIFICATION 26 05 01 (SELECTIVE ELECTRICAL DEMOLITION).

# CODE COMPLIANCE

THE WORK IDENTIFIED IN THESE PLANS AND SPECIFICATIONS SHALL CONFORM TO AND BE INSTALLED IN COMPLIANCE WITH APPLICABLE CODES, STANDARDS, AND ORDINANCES ENFORCED BY THE LOCAL AUTHORITY HAVING JURISDICTION AT TIME OF PERMITTING. UNLESS OTHERWISE NOTED, CODES, STANDARDS, AND ORDINANCES SHALL BE THE LATEST EDITION WITH CALIFORNIA AND LOCAL JURISDICTION AMENDMENTS AS APPLICABLE. WORK IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS SHALL NOT BE INTERPRETED TO CONFLICT WITH ANY STATE LAW, CODE OF REGULATION, LOCAL ORDINANCE, ETC.
- CALIFORNIA CODE OF REGULATIONS TITLE 24
- 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
- 2022 CALIFORNIA ELECTRICAL CODE
- 2022 CALIFORNIA FIRE CODE
- 2022 CALIFORNIA BUILDING CODE
- CALIFORNIA ACCESSIBILITY CODE

# GENERAL NOTES

WORK PERFORMED
1. FURNISH LABOR, MATERIALS, EQUIPMENT, COMPONENTS, TOOLS, TRANSPORTATION TO/FROM THE WORK SITE, AND NECESSARY SERVICES ETC. AS REQUIRED TO SUPPORT AND IMPLEMENT THE ELECTRICAL WORK SHOWN ON THE CONSTRUCTION DOCUMENTS.

2. "PROVIDE" AS USED ON THE CONSTRUCTION DOCUMENTS, IS DEFINED AS "FURNISH AND INSTALL".

3. PERMITS SHALL BE OBTAINED FOR ELECTRICAL WORK. ARRANGE INSPECTIONS WITH THE AHJ AND OBTAIN ACCEPTANCE. CONSULT WITH THE ELECTRICAL INSPECTOR PRIOR TO BEGINNING WORK.

4. ELECTRICAL WORK SHALL BE PERFORMED BY A CALIFORNIA STATE LICENSED ELECTRICIAN.

5. INSTALL EQUIPMENT AT LOCATIONS INDICATED ON THE DRAWINGS AS CLOSELY AS FIELD CONDITIONS PERMIT. OBTAIN ACCEPTANCE OF EQUIPMENT DIMENSIONS PRIOR TO INSTALLATION THROUGH SUBMITTAL REVIEW. CALIFORNIA ELECTRICAL CODE (CEC) MINIMUM WORKING CLEARANCES SHALL BE MAINTAINED.

6. ELECTRICAL DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT REFLECT MINOR VARIATIONS IN EQUIPMENT ALIGNMENT/INSTALLATION THAT MAY BE NECESSARY. REVIEW EXISTING FIELD CONDITIONS AND MAKE PROPER ADJUSTMENTS AS REQUIRED TO AVOID CONFLICT WITH OTHER TRADES OR PORTIONS OF WORK, SATISFY THE DESIGN REQUIREMENTS, AND MEET CODE MINIMUMS. OBTAIN ACCEPTANCE OF ADJUSTMENTS FROM THE ARCHITECT/ENGINEER.

7. DRAWINGS DO NOT SHOW THE EXTENT OF J-BOXES AND PULL BOXES THAT ARE REQUIRED TO IMPLEMENT THE ELECTRICAL WORK. PROVIDE THE QUANTITY OF J-BOXES AND PULL BOXED AS REQUIRED TO IMPLEMENT ELECTRICAL WORK, COMPLY WITH CODE, AND MEET AHJ REQUIREMENTS.

8. NOTIFY THE ARCHITECT/ENGINEER OF DISCREPANCIES WITHIN THE DRAWINGS, THIS SPECIFICATION, AND/OR ACTUAL FIELD CONDITIONS.

9. COORDINATE ELECTRICAL WORK WITH THE WORK OF OTHER TRADES.

10. RACEWAYS WITHIN THE BUILDING SHALL BE CONCEALED, WITH THE EXCEPTION OF EXPOSED STRUCTURE AND WHERE SPECIFICALLY ALLOWED BY THE ARCHITECT/OWNER. WHERE APPROVED, EXPOSED CONDUIT SHALL BE RUN SQUARE AND PLUMB WITH BUILDING LINES AND SHALL BE PROPERLY SUPPORTED PER CODE.

11. EXPOSED CONDUIT BELOW 7' AFF, AND WHERE SUBJECT TO PHYSICAL DAMAGE, SHALL BE INSTALLED IN GRS CONDUIT.

12. WHERE CONDUIT ONLY IS SHOWN ON THE DRAWINGS AND/OR INSTALLED FOR FUTURE PROVISIONS, 1" AND LARGER, INSTALL A NYLON PULL CORD/ROPE.

13. FLUSH MOUNTED PANELBOARDS/LOAD CENTERS SHALL HAVE A MINIMUM OF (1) 3/4" C.O. INSTALLED FROM THE PANEL TO AN ACCESSIBLE CEILING AREA, FOR EVERY FOUR BRANCH CIRCUIT SPARES AND/OR SPACES.

BIDDING
1. PRIOR TO BIDDING, CONSULT PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. IF PROJECT SPECIFICATIONS HAVE NOT BEEN PROVIDED, REQUEST THEM FROM THE ARCHITECT AND/OR ENGINEER OF RECORD.

2. PRIOR TO THE SUBMISSION OF BID REVIEW EXISTING FIELD CONDITIONS AND MAKE PROPER ADJUSTMENTS AS OUTLINED IN THE PROJECT SPECIFICATIONS.

3. OBTAIN ENGINEERING PRE-APPROVAL FOR ALTERNATE PRODUCT AS OUTLINED IN THE PROJECT SPECIFICATIONS.

FINAL ACCEPTANCE
1. COMPLETE ACCEPTANCE TESTING AS REQUIRED PER THE PROJECT SPECIFICATIONS. SUBMIT APPROPRIATE DOCUMENTATION TO THE OWNER, ARCHITECT, AND AHJ.

2. TEST THE ELECTRICAL SYSTEM AND COMPONENTS TO ENSURE PROPER PERFORMANCE. MAKE CORRECTIONS WHERE REQUIRED. DEMONSTRATE SYSTEM PERFORMANCE TO THE OWNER AND OBTAIN ACCEPTANCE.

3. PROVIDE RECORD DRAWINGS PER THE PROJECT SPECIFICATIONS TO THE OWNER.

4. PROVIDE O&M MANUALS PER THE PROJECT SPECIFICATIONS TO THE OWNER.

MATERIAL
1. FURNISHED MATERIAL AND EQUIPMENT SHALL BE NEW UNLESS SPECIFICALLY NOTED OTHERWISE IN THE CONSTRUCTION DOCUMENTS.

2. FURNISHED MATERIAL, EQUIPMENT, AND FIRE STOP THROUGH PENETRATIONS SHALL BE LISTED BY UL OR AN EQUIVALENT NATIONALLY RECOGNIZED LISTING AGENCY. PRODUCT LISTINGS SHALL BE PROVIDED TO THE EOR AT TIME OF SUBMITTAL REVIEW.

3. FURNISHED MATERIAL AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE TO THE MANUFACTURER REQUIREMENTS, SUBJECT TO REVIEW, INSPECTION, AND APPROVAL BY THE AHJ.

PENETRATIONS
1. CONDUIT PENETRATIONS THROUGH FIRE RATED ASSEMBLIES SHALL MAINTAIN RATINGS AS SPECIFIED IN CBC CHAPTER 7 AND COMPLY WITH LOCAL AHJ REQUIREMENTS. PROVIDE MEANS TO MAINTAIN INTEGRITY OF THE FIRE RATED ASSEMBLY BY PROVIDING THE FOLLOWING A. PHYSICAL ENCLOSURE AROUND EQUIPMENT (INCLUDING LUMINAIRES, PANELS, OUTLETS, ETC.) AS APPLICABLE. PENETRATIONS SHALL BE INSTALLED PER APPROVED MANUFACTURER THROUGH-PENETRATION FIRESTOP SYSTEM DETAILS. ELECTRICAL OUTLET BOXES INSTALLED FLUSH IN FIRE RATED ASSEMBLIES SHALL NOT EXCEED 16 SQ. IN., OR MORE THAN 100 SQ. IN. FOR ANY 100SQ. FT. OF WALL.

2. THE PROJECT STRUCTURAL ENGINEER AND ARCHITECT SHALL APPROVE PENETRATION OF STRUCTURAL MEMBERS (INCLUDING BUT NOT LIMITED TO: BEAMS, COLUMNS, FOOTINGS, ETC.), PERFORM WORK IN ACCORDANCE TO STRUCTURAL DETAILS INCLUDED IN THE CONSTRUCTION DOCUMENTS.

EQUIPMENT ANCHORAGE
1. ELECTRICAL EQUIPMENT SHALL BE ANCHORED OR BRACED TO MEET THE HORIZONTAL AND VERTICAL FORCES IDENTIFIED IN THE 2022 CBC AND A.S.C.E. 7-16.

2. WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON THE DRAWINGS THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER AND AHJ.

3. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURES ABILITY TO SUPPORT HANGER AND/OR BRACE LOADS DUE TO ELECTRICAL EQUIPMENT.

MECHANICAL & PLUMBING SYSTEMS
1. PROVIDE LIQUID TIGHT FLEXIBLE CONDUIT BRANCH CIRCUIT CONNECTIONS, BETWEEN EXTERIOR MECHANICAL UNIT MOUNTED DISCONNECT SWITCH AND ROOF JACK, FOR POWER AND CONTROL CIRCUITS.

2. CONDUIT SYSTEM FOR MECHANICAL CONTROLS SHALL BE THE RESPONSIBILITY OF THE MECHANICAL/MECHANICAL CONTROL CONTRACTOR. CONDUIT SHALL BE INSTALLED IN ACCORDANCE TO DIVISION 26 SPECIFICATIONS.

3. PROVIDE A 4" SQUARE JUNCTION BOX WITH 1-GANG RING AND 1/2" CONDUIT TO ACCESSIBLE CEILING SPACE ABOVE AT EACH THERMOSTAT LOCATION OR TO THE ASSOCIATED MECHANICAL UNIT AS REQUIRED.

4. PROVIDE POWER WIRING CONNECTIONS TO EXHAUST FANS. EXHAUST FANS SHALL BE PROVIDED & INSTALLED BY THE MECHANICAL CONTRACTOR.

5. PROVIDE POWER AND FIRE ALARM WIRING TO DUCT MOUNTED SMOKE DETECTORS. DUCT MOUNTED SMOKE DETECTORS PROVIDED & INSTALLED BY THE MECHANICAL CONTRACTOR.


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(805) 706-0645
www.reissdesignstudio.com
3055 Duncan Lane, Suite A
San Luis Obispo, CA 93401



All reports, drawings, specifications, computer files, field data, notes and other documents and instruments prepared by REISS DESIGN STUDIO, PC as instruments of service shall remain the property of REISS DESIGN STUDIO, PC. REISS DESIGN STUDIO, PC shall retain all common law, statutory and other reserved rights, including, without limitation, the copyrights thereto.


PROJECT:

**Arroyo Grande Library**

**APN: 007-011-050**
**800 W. Branch Street,**
**Arroyo Grande, CA 93420**

CLIENT:
DRAWINGS, SPECIFICATIONS, AND OTHER DOCUMENTS, INCLUDING THOSE IN ELECTRONIC FORM, PREPARED BY GRAY ELECTRICAL CONSULTING + ENGINEERING, CORP. ARE THE INSTRUMENTS OF SERVICE FOR USE SOLELY WITH RESPECT TO THIS PROJECT UNLESS OTHERWISE AUTHORIZED IN WRITING. GRAY ELECTRICAL CONSULTING + ENGINEERING, CORP. SHALL BE DEEMED THE AUTHOR AND OWNER OF THE INSTRUMENTS OF SERVICE AND SHALL RETAIN ALL COMMON LAW, STATUTORY AND OTHER RESERVED RIGHTS, INCLUDING COPYRIGHTS.

SHEET CONTENTS:

**GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS**

CONSULTANT:


GECE
GRAY ELECTRICAL CONSULTING + ENGINEERING, CORP
2529 PROFESSIONAL PKWY SUITE A - P.O. BOX #368 SANTA MARIA, CA 93455
P. 805-361-0525
E.INFO@GECECORP.COM
WWW.GECECORP.COM


STAMP:

REGISTERED PROFESSIONAL ENGINEER HEATHER ANN GRAY NO.E18927 ELECTRICAL STATE OF CALIFORNIA

EXPIRES: 12.31.2025
GECE #2309

DATE: 6/28/2024

REVISIONS:
1. **Plan Check 1 County of SLO, 10/28/24**
2. **Plan Check 2 County of SLO, 12/11/24**
B1. **Bid Set Update Dated, 07/25/2025**

JOB NUMBER:

SHEET:

**E0.1**

STATE OF CALIFORNIA
## Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | NRCC-ELC-E |
|---|---|---|
| **Project Name:** Arroyo Grande Library | **Report Page:** | **(Page 4 of 4)** |
| **Project Address:** 800 W Branch St | **Date Prepared:** | 4/8/2024 |

**DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**

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

| Documentation Author Name: | Documentation Author Signature: |
|---|---|
| Heather Gray | |
| Company: Gray Electrical Consulting + Engineering, Corp | Signature Date: 2024-04-08 |
| Address: P.O. Box 368 | CEA/ HERS Certification Identification (if applicable): |
| City/State/Zip: Santa Maria CA 93456 | Phone: (805)361-0525 |

**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: | Responsible Designer Signature: |
|---|---|
| Heather Gray | |
| Company: Gray Electrical Consulting + Engineering, Corp | Date Signed: 2024-04-08 |
| Address: P.O. Box 368 | License: E18927 |
| City/State/Zip: Santa Maria CA 93456 | Phone: (805)361-0525 |



STATE OF CALIFORNIA
## Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | NRCC-ELC-E |
|---|---|---|
| *This document is used to demonstrate compliance with mandatory requirements in 130.5, for electrical systems in newly constructed nonresidential and hotel/motel occupancies and 160.6 and 160.9 for electrical systems in newly constructed multifamily occupancies. Additions and alterations to electrical service systems in nonresidential and hotel/motel occupancies will also use this document to demonstrate compliance per 141.0(a) or 141.0(b)2P for alterations. For multifamily addition or alterations compliance will be documented per 180.1(a) or 180.2 (b)4Bvii* | | |
| **Project Name:** Arroyo Grande Library | **Report Page:** | **(Page 1 of 4)** |
| **Project Address:** 800 W Branch St | **Date Prepared:** | 4/8/2024 |

**A. GENERAL INFORMATION**

| | | | | | |
|---|---|---|---|---|---|
| 01 | Project Location (city) | Arroyo Grande | 02 | Climate Zone | 5 |
| | | | 03 | Occupancy Types Within Project: | All Other OccupanciesOfficeSupport Areas |

**B. PROJECT SCOPE**

*This table includes electrical systems that are within the scope of the permit application.*

| 01 | 02 | 03 | 04 | 05 | 06 | 07 |
|---|---|---|---|---|---|---|
| Electrical Service Designation/ Description | Scope of Work[1] | Rating[2] (kVA) | Utility Provided Metering System Exception to 130.5(a)/ 160.6(a)[3] | System subject to CA Elec Code Article 517 Exception to 130.5(a)and (b) | Demand Response Controls | Provides power to dwelling units/common living areas only in multifamily occupancy |
| (E)"MS" | Add/Alt to feeders and branch circuits only | 288 | ☐ | ☐ | Where required, demand response controls must be specified which are capable of receiving and automatically responding to at least one standards based messaging protocol which enables demand response after receiving a demand response signal. Sections 120.2/ 160.3, 130.1/ 160.5, and 130.3/ 160.5, and mechanical, indoor lighting, and sign lighting Certificate of Compliance documents will indicate when demand response controls are required. | ☐ |

*[1] FOOTNOTES: Adding only new feeders and branch circuits triggers Voltage Drop 130.5(c)/160.6(c), no other requirements from 130.5/160.6 are required.*
*[2] If common use areas in a multifamily are submetered, rating is for submeter size serving common use areas.*
*[3] Applicable if the utility company is providing a metering system that indicates instantaneous kW demand and kWh for a utility-defined period.*



STATE OF CALIFORNIA
## Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | NRCC-ELC-E |
|---|---|---|
| **Project Name:** Arroyo Grande Library | **Report Page:** | **(Page 2 of 4)** |
| | **Date Prepared:** | 4/8/2024 |

**C. COMPLIANCE RESULTS**

*Results in this table are automatically calculated from data input and calculations in Tables F through J. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see applicable Table referenced below.*

| 01 | | 02 | | 03 | | 04 | 05 | 06 |
|---|---|---|---|---|---|---|---|---|
| Service Electrical Metering 130.5(a)/ 160.6(a) (See Table F) | AND | Separation for Monitoring 130.5(b)/ 160.6(b) (See Table G) | AND | Voltage Drop 130.5(c)/ 160.6(c) (See Table H) | AND | Controlled Receptacles 130.5(d)/ 160.6(d) (See Table I) | Electric Ready 160.9 (See Table J) | **Compliance Results** |
| Yes | AND | Yes | AND | Yes | AND | Yes | | COMPLIES |

**D. EXCEPTIONAL CONDITIONS**

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

**E. ADDITIONAL REMARKS**

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

**F. SERVICE ELECTRICAL METERING**

*This section does not apply to this project.*

**G. SEPARATION OF ELECTRICAL CIRCUITS FOR ENERGY MONITORING**

*This section does not apply to this project.*

**H. VOLTAGE DROP**

*This table includes entirely new or complete replacement electrical power distribution systems, or alterations that add, modify or replace both feeders and branch circuits to demonstrate compliance with 130.5(c)/ 160.6(c). For alterations, only the altered circuits must demonstrate compliance per 141.0(b)2Pii/ 180.2(b)4Bviic.*

| 01 | 02 | 03 | 04 | 05 | |
|---|---|---|---|---|---|
| | | | | Field Inspector | |
| Electrical Service Designation/Description | Combined Voltage Drop on Installed Feeder/Branch Circuit Conductors Compliance Method | Location of Voltage Drop Calculations[1] | Sheet Number for Voltage Drop Calculations in Construction Documents | Pass | Fail |



STATE OF CALIFORNIA
## Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | NRCC-ELC-E |
|---|---|---|
| **Project Name:** Arroyo Grande Library | **Report Page:** | **(Page 3 of 4)** |
| | **Date Prepared:** | 4/8/2024 |

**H. VOLTAGE DROP**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| (E)"MS" | ☒ | Voltage drop less than 5% | ☐ | Permitted by CA Elec Code (Exception to 130.5(c))* | In construction documents | E1.2-E1.3 | ☐ | ☐ |

** NOTES: If "Permitted by CA Elec Code "* is selected under Compliance Method above, please indicate where the exception applies in the space provided below.*

*[1] FOOTNOTES: Voltage drop calculations may be attached to the permit application outside the construction documents if allowed by the Authority Having Jurisdiction. Select "attached" if applicable. If calculations will be the responsibility of the installing contractor, select "Contractor Responsible".*

**I. CIRCUIT CONTROLS FOR 120-VOLT RECEPTACLES AND CONTROLLED RECEPTACLES**

*This section does not apply to this project.*

**J. ELECTRIC READY BUILDINGS**

*This section does not apply to this project.*

**K. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION**

*Selections have been made based on information provided in this document. If any selection 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-ELC-E - Must be submitted for all buildings |




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www.reissdesignstudio.com
3055 Duncan Lane, Suite A
San Luis Obispo, CA 93401



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PROJECT:

**Arroyo Grande Library**

**APN: 007-011-050**
**800 W. Branch Street,**
**Arroyo Grande, CA 93420**

CLIENT:


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SHEET CONTENTS:

**TITLE 24 COMPLIANCE DOCUMENTATION**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Project No: CAL-T2024-00055 Date: 06/27/2024
This approval of these plans shall not permit the construction of any work that does not comply with the California Building Code. The County may revoke this permit or require approved plans shall be made available for inspection. All changes must be approved.


GRAY ELECTRICAL CONSULTING + ENGINEERING, CORP
2529 PROFESSIONAL PARKWAY, SANTA MARIA, CA 93455
SUITE A · P.O. BOX 368 · (805) 361-0525 · GRAYELECCORP.COM
SANTA MARIA, CA 93455 · WWW.GRAYELECCORP.COM


STAMP:

REGISTERED PROFESSIONAL ENGINEER
HEATHER ANN GRAY
NO.E18927
ELECTRICAL
STATE OF CALIFORNIA

EXPIRES: 12.31.2024
GECE #2309

DATE: 6/28/2024

REVISIONS:

1 **Plan Check 1**
**County of SLO, 10/28/24**

2 **Plan Check 2**
**County of SLO, 12/11/24**

JOB NUMBER:

SHEET:

**E0.2**

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

*This section does not apply to this project.*

**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 |

**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. | Office; Office; Break Room; Rentable Room; Restroom; Corridor; Reading; Storage; |





**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 | |
| Mandatory Demand Response 110.12(c) | Shut-off controls 130.1(c) / 160.5(b)4C | Pass | Fail |
| NA: <= 80 % LP (alt only) | See Area/Space Level Controls | ☐ | ☐ |

**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/Skylit 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 |
| Office | Office ( <=250 square feet) | Readily Accessible | Dimmer | Occupancy Sensor | NA: Overhang | NA: Overhang | No | ☐ | ☐ |
| Office | Office ( >250 square feet) | Readily Accessible | Dimmer | Occupancy Sensor | NA: Overhang | NA: General Ltg < 120W | No | ☐ | ☐ |
| Break Room | Lounge | Readily Accessible | Dimmer | Occupancy Sensor | NA: General Ltg < 120W | NA: General Ltg < 120W | No | ☐ | ☐ |
| Rentable Room | Lounge | Readily Accessible | Dimmer | Occupancy Sensor | NA: General Ltg < 120W | NA: General Ltg < 120W | No | ☐ | ☐ |
| Restroom | Restroom | Readily Accessible | NA: Restrooms | Occupancy Sensor | NA: General Ltg < 120W | NA: General Ltg < 120W | No | ☐ | ☐ |
| Corridor | Corridor | Auth. Personnel | NA: General Ltg <= 0.5W/SF | Occupancy Sensor | NA: General Ltg < 120W | NA: General Ltg < 120W | No | ☐ | ☐ |
| Reading | Lounge | Auth. Personnel | NA: <= 80 % LP (alt only) | Occupancy Sensor | NA: Overhang | NA: Overhang | No | ☐ | ☐ |
| Storage | All Other Space Types | Readily Accessible | NA: Enclosed area <100SF | Occupancy Sensor | NA: General Ltg < 120W | NA: General Ltg < 120W | No | ☐ | ☐ |





*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.*

**A. GENERAL INFORMATION**

| | | | | |
|---|---|---|---|---|
| 01 | Project Location (city) | Arroyo Grande | 04 | Total Conditioned Floor Area (ft²) | 2,966 |
| 02 | Climate Zone | 5 | 05 | Total Unconditioned Floor Area (ft²) | 119 |
| 03 | Occupancy Types Within Project (select all that apply): | | 06 | # of Stories (Habitable Above Grade) | 1 |

● Office ● Support Areas ● All Other Occupancies

**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 | | | | |
| ☐ New Lighting System - Parking Garage | | | | |
| ☒ Altered Lighting System | Area Category Method | 2966 | Area Category Method | 119 |
| **Total Area of Work (ft²)** | 2966 | | 119 | |





**DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**

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

| | |
|---|---|
| Documentation Author Name: | Documentation Author Signature: |
| Company: Gray Electrical Consulting + Engineering, Corp | Signature Date: 2024-06-28 |
| Address: | CEA/ HERS Certification Identification (if applicable): |
| City/State/Zip: | Phone: |

**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: Heather Gray | Responsible Designer Signature: |
| Company: Gray Electrical Consulting + Engineering, Corp | Date Signed: 2024-06-28 |
| Address: P.O. Box 368 | License: E18927 |
| City/State/Zip: Santa Maria CA 93456 | Phone: (805)361-0525 |





**H. INDOOR LIGHTING CONTROLS (Not including PAFs)**

| | |
|---|---|
| | 13 |
| | Plan Sheet Showing Daylit Zones: |
| | E3.1 |

**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 |
| Restrooms | Restroom | 0.65 | 578 | 375.7 | No | No |
| Corridor | Corridor | 0.4 | 48 | 19.2 | No | No |
| Office < 250 sqft | Office ( <=250 square feet) | 0.65 | 241 | 156.6 | No | No |
| Office > 250 sqft | Office ( >250 square feet) | 0.6 | 1,193 | 715.8 | No | No |
| Lounge Break | Lounge | 0.55 | 562 | 309.1 | No | No |
| Lobby | Main Entry Lobby | 0.7 | 323 | 226.1 | No | No |
| Electrical, Mechanical, Telephone Rooms | Electrical Mechancial Telephone Room | 0.4 | 21 | 8.4 | No | No |
| | | **TOTALS:** | 2,966 | 1,810.9 | See Tables J, or P for detail | |

**Unconditioned 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 |
| Storage | All Other Space Types | 0.4 | 119 | 47.6 | No | No |
| | | **TOTALS:** | 119 | 47.6 | See Tables J, or P for detail | |





**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** | | 1,810.9 | 0 | | = | 1,811 | ≥ 1,750 | 0 | = | 1750 | | | COMPLIES |
| **Unconditioned** | | 47.6 | 0 | | = | 48 | ≥ 40 | 0 | = | 40 | | | COMPLIES |
| **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.*





**J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM**

*This section does not apply to this project.*

**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.*





**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 |
| C1 | C1_42W LED | No | NA | 42 | Mfr. Spec | 36 | No | 1,512 | ☐ | ☐ |
| C2 | C2_20W LED | No | NA | 20 | Mfr. Spec | 3 | No | 60 | ☐ | ☐ |
| C3 | C3_61W LED | No | NA | 61 | Mfr. Spec | 1 | No | 61 | ☐ | ☐ |
| C4 | C4_13W LED | No | NA | 13 | Mfr. Spec | 9 | No | 117 | ☐ | ☐ |
| | | | | | | | **Total Designed Watts: CONDITIONED SPACES** | 1,750 | | |

**Designed Wattage: Unconditioned 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 |
| C2 | C2_20W LED | No | NA | 20 | Mfr. Spec | 2 | No | 40 | ☐ | ☐ |
| | | | | | | | **Total Designed Watts: UNCONDITIONED SPACES** | 40 | | |

*[1]FOOTNOTE: Design Watts for small aperture and color changing luminaires which quoilfy 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.*



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San Luis Obispo, CA 93401

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**APN: 007-011-050**
**800 W. Branch Street,**
**Arroyo Grande, CA 93420**

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SHEET CONTENTS:

**TITLE 24 COMPLIANCE DOCUMENTATION**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Permit No. BLD2024-00055 Date: 06/28/2024
The approval of these plans shall not permit the violation of county or state laws. The County may revoke this permit or require approved plans shall be made available upon inspection. APPROVED

GRAY ELECTRICAL CONSULTING + ENGINEERING, CORP
2529 PROFESSIONAL PARKWAY, UNIT A
SUITE A - ADDRESS CHANGE EFFECTIVE 6/1/2024
SANTA MARIA, CA 93455 | WWW.GECECORP.COM

STAMP:

EXPIRES: 12.31.2024
GECE #2309

DATE: 6/28/2024

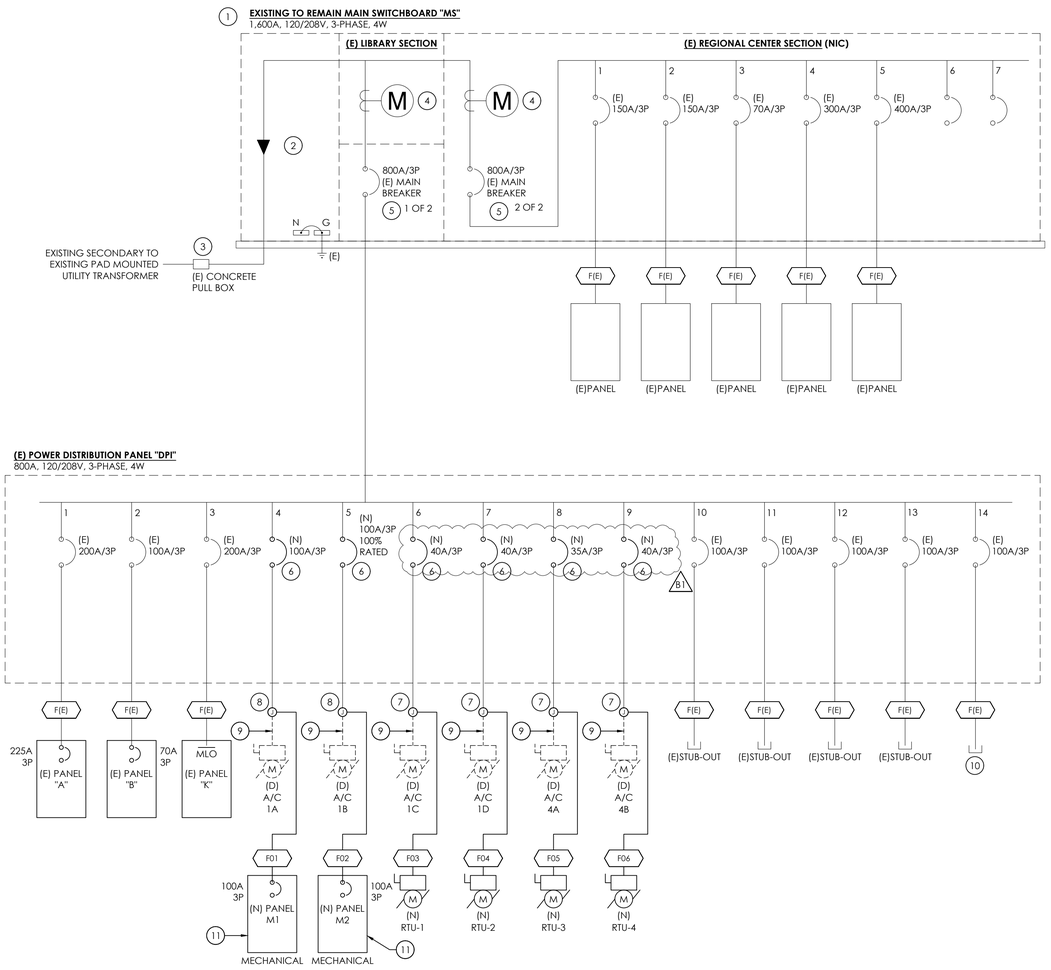
REVISIONS:

1. **Plan Check 1 County of SLO, 10/28/24**
2. **Plan Check 2 County of SLO, 12/11/24**

JOB NUMBER:

SHEET:

**E0.3**




# SINGLE LINE DIAGRAM

NOTE: ELECTRIC DISTRIBUTION EQUIPMENT SHOWN IS EXISTING SCHEDULED TO REMAIN UNLESS OTHERWISE NOTED.

SCALE:NTS

## REFERENCE NOTES

1. EXISTING FACILITY MAIN ELECTRIC SERVICE AND DISTRIBUTION SWITCHGEAR RATING AS INDICATED.
2. EXISTING UTILITY APPROVED UNDERGROUND PULL SECTION AND POINT OF DELIVERY.
3. EXISTING UTILITY SECONDARY SERVICE CONDUIT TO TRANSFORMER.
4. EXISTING UTILITY APPROVED COMMERCIAL METER SOCKET (REMOTE).
5. MAIN OVER CURRENT PROTECTION, RATING AMPACITY AS INDICATED.
6. REPLACE EXISTING CIRCUIT BREAKER WITH NEW CIRCUIT BREAKER. RATING AS INDICATED.
7. FIELD LOCATE, INTERCEPT AND EXTEND CONDUIT FROM EXISTING RTU TO NEW RTU LOCATION.
8. FIELD LOCATE, INTERCEPT AND EXTEND CONDUIT FROM EXISTING RTU TO NEW PANEL LOCATION.
9. FIELD LOCATE, DISCONNECT AND DEMOLISH EXISTING BRANCH CIRCUIT IN CONDUIT FROM TO DEMOLISHED RTU.
10. PROVIDE (1) 2" C.O. FUTURE SOLAR PROVISION TO ROOF. CAP BOTH ENDS. INSTALL C.O. UP THROUGH MECHANICAL RM 231 TO ROOF WELL. COORDINATE EXACT LOCATION ON SITE. (B1)
11. PANELBOARDS SHALL BE EATON OR SQURE D PER COUNTY STANDARDS.

## SINGLE LINE DIAGRAM GENERAL NOTES

- FAULT CURRENT CALCULATION NOTE
  THE ELECTRICAL DISTRIBUTION SHALL BE PROVIDED WITH A FAULT RATING CAPABLE TO WITHSTAND THE VALUE INDICATED ON THE SINGLE LINE DIAGRAM AND / OR REFLECTED IN THE FEEDER SCHEDULE PREPARED FOR THIS PROJECT. THE FORMULAS USED IN THIS CALCULATION ARE AS FOLLOWS;

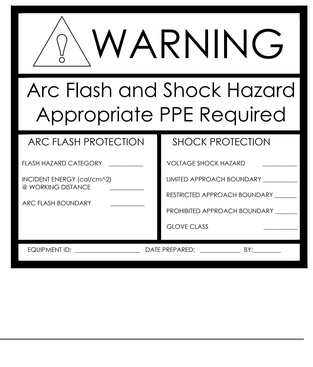
  C FACTOR = 1/Z PER LF
  F FACTOR = [1.73 x L x I ] / [PC x C x E]
  M FACTOR = 1 / [ 1 + F FACTOR]
  SHORT CIRCUIT AMPS AT FAULT = 1 x M

  DEFINITIONS

  Z PER LF = CONDUCTOR IMPEDANCE PER LINEAR FOOT
  L = CONDUCTOR LENGTH IN LINEAR FEET
  I = FAULT CURRENT RATING AVAILABLE AT THE SOURCE
  PC = QUANTITY OF PARALLEL CONDUCTORS PER PHASE
  C = C FACTOR (SEE EQUATION)
  E = LINE VOLTAGE
- CONDUCTORS SHALL BE THHN/THWN COPPER UNLESS OTHERWISE NOTED. AMPACITY SIZES NOTED ON THE CONSTRUCTION DOCUMENTS ARE BASED ON 75 DEG.
- TERMINALS FOR SWITCHES, CIRCUIT BREAKERS AND OTHER EQUIPMENT, AS SPECIFIED, SHALL BE LISTED AND IDENTIFIED FOR USE WITH 75 DEG. CONDUCTORS.
- FINAL TERMINATIONS OF CONDUCTORS TO ELECTRICAL EQUIPMENT AND DEVICES SHALL BE TORQUE-WRENCH TIGHTENED TO THE MANUFACTURER RECOMMENDED SPECIFICATION.
- SYSTEM SHALL BE FULLY RATED FOR THE AVALIABLE FAULT CURRENT AS IDENTIFIED IN FIELD OR AS PER UTILITY COMPANY.

**ARROYO GRANDE LIBRARY SERVICE DEMAND LOAD SUMMARY (E)"MS" METER #1008823341**

| | |
|---|---|
| MAX KW FROM PG&E DEMAND DATA (6/7/2022-6/7/2023) | 53.20 KW |
| MAX KW AT 125% (NEC 220.87) | 66.50 KW |
| MAX KVA (0.8PF) | 83.13 KVA |
| (E)DPI ADDITIONAL LOAD | 102.04 KVA |
| (E)A ADDITIONAL LOAD | 12.80 KVA |
| (E)B ADDITIONAL LOAD | 8.01 KVA |
| (E)K ADDITIONAL LOAD | 2.56 KVA |
| TOTAL DEMAND LOAD | 209 KVA |
| | 579 A @ 120/208V, 3-PHASE |
| | 28% SPARE CAPACITY |




1 ARC FLASH SIGNAGE
NOT TO SCALE

**ARROYO GRANDE LIBRARY -- FEEDER SCHEDULE**

| FEEDER NO. | LOAD DESIGNATION | AMPACITY | CONDUIT SIZE | | FEEDER SPECIFICATION | | | | | | ESTIMATED CONDUCTOR LENGTH (LF) (SEE NOTE #1) | CALCULATED VOLTAGE DROP | | AMPS INTERRUPTING CAPACITY (AIC) (SEE NOTES #1, 2) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | # | SPECIFICATION | # | SPECIFICATION | + | # | GND. SPECIFICATION | Ea. | | CALCULATED PER FEEDER | TOTAL FROM SOURCE | |
| F(E) | EXISTING | - | - | - | EXISTING TO REMAIN | | | | | | - | - | - | - |
| F01 | "M1" | 110A | 1 | 2"C. | 4 | #1 AWG THWN CU. | + | 1 | #8 AWG THWN CU. GND. | - | 160 | 1.25 | 1.25 | 4,381 |
| F02 | "M2" | 110A | 1 | 2"C. | 4 | #1 AWG THWN CU. | + | 1 | #8 AWG THWN CU. GND. | - | 160 | 1.62 | 1.62 | 4,381 |
| F03 | "RTU-1" | 55A | 1 | 1"C. | 3 | #6 AWG THWN CU. | + | 1 | #10 AWG THWN CU. GND. | - | 65 | 0.89 | 0.89 | 3,866 |
| F04 | "RTU-2" | 55A | 1 | 1"C. | 3 | #6 AWG THWN CU. | + | 1 | #10 AWG THWN CU. GND. | - | 115 | 1.58 | 1.58 | 2,243 |
| F05 | "RTU-3" | 55A | 1 | 1"C. | 3 | #6 AWG THWN CU. | + | 1 | #10 AWG THWN CU. GND. | - | 110 | 1.17 | 1.17 | 2,342 |
| F06 | "RTU-4" | 55A | 1 | 1"C. | 3 | #6 AWG THWN CU. | + | 1 | #10 AWG THWN CU. GND. | - | 85 | 1.16 | 1.16 | 2,999 |

NOTES:

1. CONDUCTOR LENGTH HAS BEEN PROVIDED AS THE BASIS OF DESIGN FOR BOTH VOLTAGE DROP AND AIC CALCULATION. CONDUCTOR LENGTH NOTED SHALL NOT BE USED FOR BIDDING OR PROCUREMENT PURPOSES. SHOULD THE ACTUAL CONDUCTOR LENGTH DIFFER FROM WHAT HAS BEEN SPECIFIED, THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD FOR REVIEW AND RE-CALCULATION AS MAY BE NECESSARY.
2. ELECTRICAL DISTRIBUTION EQUIPMENT SHALL BE RATED TO WITHSTAND A MIN. OF THE CALCULATED SHORT CIRCUIT CURRENT. THE VALUE NOTED AS BEEN INCLUDED FOR REFERENCE ONLY AND SHALL BE VERIFIED PER THE OVERCURRENT PROTECTIVE DEVICE COORDINATION STUDY.

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SHEET CONTENTS:

**SINGLE LINE DIAGRAM**

CONSULTANT:

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P. 805-361-0525
E.INFO@GECECORP.COM
WWW.GECECORP.COM

STAMP:

REGISTERED PROFESSIONAL ENGINEER
HEATHER ANN GRAY
NO.E18927
ELECTRICAL
STATE OF CALIFORNIA
EXPIRES: 12.31.2025
GECE #2309

DATE: 6/28/2024

REVISIONS:

1 **Plan Check 1 County of SLO, 10/28/24**
2 **Plan Check 2 County of SLO, 12/11/24**
B1 **Bid Set Update Dated, 07/25/2025**

JOB NUMBER:

SHEET:

**E1.1**

## EXISTING PANEL "DPI"

TYPE: DISTRIBUTION PANELBOARD — FIELD VERIFY AIC PANEL & BRANCH CIRCUITS — LOCATION: UPPER FLOOR TELE 28/JAN 29
BUS: 800A — NEMA: 1
120/208V, 3-PHASE, 4W — MOUNTING: SURFACE
MAIN LUGS ONLY — PROVIDE WITH EQUIPMENT GROUND BUS — FEED FROM: (E)"MSB"

| NOTES | CIRCUIT | DESCRIPTION | BREAKER | WIRE | LF | VD(%) | PF | TYPE | PHASE A | PHASE B | PHASE C | TYPE | PF | VD(%) | LF | WIRE | BREAKER | DESCRIPTION | CIRCUIT | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (E)PANEL "A" | | - | - | - | - | - | 8181 | | | - | - | - | - | - | | (E)PANEL "B" | | |
| | 1 | " | (E) 200A/3P | - | - | - | - | - | 6285 | 13194 | | - | - | - | - | - | (E) 100A/3P | " | 2 | |
| | | " | | - | - | - | - | - | | 5329 | 16425 | - | - | - | - | - | | " | | |
| | | | | | | | | | | | 5650 | | | | | | | | | |
| | | (E)PANEL "K" | | - | - | - | - | - | 17398.75 | | | - | - | - | - | - | | (N) PANEL "M1" | | |
| | 3 | " | (E) 200A/3P | - | - | - | - | - | 9977 | 14635 | | - | - | - | - | - | 100A/3P | " | 4 | 2.6 |
| | | " | | - | - | - | - | - | | 9237 | 16275 | - | - | - | - | - | | " | | |
| | | | | | | | | | | | 8080 | | | | | | | | | |
| | | (N) PANEL "M2" | | - | - | - | - | - | 11530 | | | - | - | - | - | - | | RTU-1 | | |
| 2.6 | 5 | " | (N) 100A/3P | - | - | - | - | - | 3711 | 11532 | | - | - | - | - | - | (N) 40A/3P | " | 6 | 2.6 |
| | | " | | - | - | - | - | - | | 3711 | 9644 | - | - | - | - | - | | " | | |
| | | | | | | | | | | | 3711 | | | | | | | | | |
| | | RTU-2 | | - | - | - | - | - | 3711 | | | - | - | - | - | - | | RTU-3 | | |
| 2.6 | 7 | " | (N) 40A/3P | - | - | - | - | - | 2880 | 3711 | | - | - | - | - | - | (N) 35A/3P | " | 8 | 2.6 |
| | | " | | - | - | - | - | - | | 2880 | 3711 | - | - | - | - | - | | " | | |
| | | | | | | | | | | | 2880 | | | | | | | | | |
| | | RTU-4 | | - | - | - | - | - | 3711 | | | - | - | - | - | - | | SPARE | | |
| 2.6 | 9 | " | (N) 40A/3P | - | - | - | - | - | | 3711 | | - | - | - | - | - | (E) 100A/3P | " | 10 | |
| | | " | | - | - | - | - | - | | | 3711 | - | - | - | - | - | | " | | |
| | | SPARE | | - | - | - | - | - | | | | - | - | - | - | - | | SPARE | | |
| | 11 | " | (E) 100A/3P | - | - | - | - | - | | | | - | - | - | - | - | (E) 100A/3P | " | 12 | |
| | | " | | - | - | - | - | - | | | | - | - | - | - | - | | " | | |
| | | SPARE | | - | - | - | - | - | | | | - | - | - | - | - | | (F) SOLAR | | |
| | 13 | " | (E) 100A/3P | - | - | - | - | - | | | | - | - | - | - | - | (E) 100A/3P | " | 14 | |
| | | " | | - | - | - | - | - | | | | - | - | - | - | - | | " | | |
| | | | | | | | | SUBTOTAL (VA) | 67384.75 | 67940 | 70087 | | | | | | | | | |
| | | | | | | | | CONTINUOUS | 0 | 0 | 0 | | | | | | | | | |
| | | | | | | | | AMPS @ 120 | 562 | 566 | 584 | | | | | | | | | |

**205.41 KVA**
**571 AMPS @ 120/208V, 3 PHASE**

## PANEL SCHEDULE NOTES

TYPICAL FOR SHEETS E1.2 AND E1.3

PANEL SCHEDULE LOAD TYPE INDEX:
"C" = CONTINUOUS LOAD. OPERABLE FOR 3 HOURS OR MORE. LOAD CALCULATED AT 125% OF TOTAL CONNECTED LOAD.
"K" = KITCHEN APPLIANCE LOAD. SUBJECT TO 75% DEMAND FACTOR PER NEC 220.53 IF GREATER THAN/EQUAL TO FOUR APPLIANCES.
"M"= MECHANICAL LOAD. NO DEMAND FACTOR APPLIED.
"R" = RECEPTACLE LOAD.
"G"= GENERAL LOAD.

GENERAL NOTES:
- VOLTAGE DROP CALCULATIONS HAVE BEEN PREPARED IN ACCORDANCE TO 2016 CALIFORNIA ENERGY CODE STANDARDS (TITLE 24, ELECTRICAL POWER DISTRIBUTION). CONDUCTOR LENGTH INDICATED SHALL NOT BE USED FOR BIDDING AND PROCUREMENT PURPOSES. FIELD COORDINATE CONDUCTOR LENGTH REQUIRED AND NOTIFY ENGINEER OF RECORD OF ANY DISCREPANCIES.
- FOR CIRCUITS WITH MULTIPLE LOADS (I.E. RECEPTACLES, LIGHTING) THE CIRCUIT ESTIMATED LENGTH IS DETERMINED BY THE FURTHEST DEVICE LOCATION.
- WHERE BRANCH CIRCUITS HAVE NOT BEEN LOADED TO THE MAXIMUM ALLOWABLE CIRCUIT CAPACITY, VOLTAGE DROP CALCULATIONS HAVE BEEN PREPARED BASED ON CONNECTED LOAD INDICATED, UNLESS OTHERWISE NOTED.
- PANEL SCHEDULES CREATED BASED ON AS BUILT DOCUMENTATION AND FIELD OBSERVATION. CONTRACTOR TO CONFIRM ALL BRANCH CIRCUITS NOTED FOR REVISION PRIOR TO INSTALLATION AND REMOVAL.

VOLTAGE DROP CALCULATION:

VOLTAGE DROP (%) = (2 x OHMS PER 1000 LF x CONDUCTOR LENGTH x AMPS) / (1000 x QTY OF WIRES PER PHASE)

SCHEDULE SPECIFIC NOTES:

1. VERIFY LOAD, CIRCUIT BREAKER, AND CONDUCTOR SIZE WITH EQUIPMENT MANUFACTURER SPECIFICATIONS.
2. REFER TO SINGLE LINE DIAGRAM FOR CIRCUIT BREAKER AND CONDUCTOR SIZE.
3. EXISTING BRANCH CIRCUIT SCHEDULED TO REMAIN. CONNECTED LOAD REFLECTED AS PER AS-BUILD DOCUMENTATION (STUHR, DODSON, FOSTER, McCLAVE ARCHITECTS, PLANS DATED 12-6-78)
4. PROVIDE GFCI TYPE CIRCUIT BREAKER. CONNECTED LOAD REFLECTED AS PER AS-BUILD DOCUMENTATION (STUHR, DODSON, FOSTER, McCLAVE ARCHITECTS, PLANS DATED 12-6-78).
5. DISCONNECT AND DEMOLISH EXISTING CIRCUIT. PROVIDE NEW CIRCUIT TO LOAD AS SHOWN. REUSE EXISTING CIRCUIT BREAKER. VERIFY RATING OF EXISTING CIRCUIT BREAKER MATCHES WHAT IS SHOWN ON PANEL SCHEDULE.
6. DISCONNECT AND DEMOLISH EXISTING CIRCUIT AND CIRCUIT BREAKER. PROVIDE NEW CIRCUIT TO LOAD AS SHOWN. PROVIDE NEW CIRCUIT BREAKER WITH RATING AS SHOWN ON PANEL SCHEDULE.
7. PROVIDE NEW CIRCUIT TO LOAD AS SHOWN. REPLACE EXISTING 'SPARE' CIRCUIT BREAKER WITH NEW CIRCUIT BREAKER WITH RATING AS SHOWN ON PANEL SCHEDULE.
8. PROVIDE NEW CIRCUIT TO LOAD AS SHOWN. REUSE EXISTING 'SPARE' CIRCUIT BREAKER. VERIFY RATING OF EXISTING CIRCUIT BREAKER MATCHES WHAT IS SHOWN ON PANEL SCHEDULE.
9. PROVIDE NEW CIRCUIT TO LOAD AS SHOWN. PROVIDE NEW CIRCUIT BREAKER IN PANEL 'SPACE' AS SHOWN.
10. PROVIDE RED COLORED, LOCKING CIRCUIT BREAKER.

## EXISTING PANEL "A"

TYPE: PANELBOARD — (FIELD VERIFY) AIC PANEL & BRANCH CIRCUITS — LOCATION: UPPER FLOOR TELE 28/JAN 29
BUS: 225A — 42 FULL SIZE [BOLT ON] [PLUG IN] — NEMA: 1
120/208V, 3-PHASE, 4W — CIRCUIT BREAKER SPACES — MOUNTING: SURFACE
225A 3P MAIN CIRCUIT BREAKER — PROVIDE WITH EQUIPMENT GROUND BUS — FEED FROM: (E)"DPI"

| NOTES | CIRCUIT | DESCRIPTION | BREAKER | WIRE | LF | VD(%) | PF | TYPE | PHASE A | PHASE B | PHASE C | TYPE | PF | VD(%) | LF | WIRE | BREAKER | DESCRIPTION | CIRCUIT | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 1 | R-RENTABLE ROOM 108 | 20/1 | 12 | 50 | 1.24 | 0.6 | R | 900 | | | R | 0.6 | 0.13 | 25 | 12 | 20/1 | R-RESTROOM | 2 | 5 |
| | | | | | | | | | 196 | | | | | | | | | | | |
| 5 | 3 | R-RENTABLE ROOM 107 | 20/1 | 12 | 60 | 1.49 | 0.6 | R | | 900 | | R | 0.6 | 0.59 | 40 | 12 | 20/1 | R-BREAK ROOM | 4 | 5 |
| | | | | | | | | | | 540 | | | | | | | | | | |
| 5 | 5 | R-BRANCH MANAGER | 20/1 | 12 | 90 | 2.23 | 0.6 | R | | | 900 | R | - | - | - | - | 20/1 | (E) CONVENIENCE RECEPTS | 6 | 3 |
| | | | | | | | | | | | 1000 | | | | | | | | | |
| 5 | 7 | R-BRANCH MANAGER SW | 20/1 | 12 | 90 | 1.34 | 0.6 | R | 540 | | | R | - | - | - | - | 20/1 | (E) CONVENIENCE RECEPTS | 8 | 3 |
| | | | | | | | | | 1000 | | | | | | | | | | | |
| 3 | 9 | (E) LIGHTS | 20/1 | - | - | - | - | C | | 1000 | | C | - | - | - | - | 20/1 | (E) STAFF ENTRY LIGHTS | 10 | 3 |
| | | | | | | | | | | 1000 | | | | | | | | | | |
| 3 | 11 | (E) ROOF LIGHTS | 20/1 | - | - | - | - | C | | | 1200 | C | - | - | - | - | 20/1 | (E) EXTERIOR WALKWAYLTS | 12 | 3 |
| | | | | | | | | | | | 1500 | | | | | | | | | |
| 3 | 13 | (E) ROOF RECEPTACLES | 20/1 | - | - | - | - | R | 1000 | | | R | 0.6 | 1.78 | 90 | 12 | 20/1 | R-SLA OFFICE | 14 | 6 |
| | | | | | | | | | 720 | | | | | | | | | | | |
| 6 | 15 | R-BRANCH MANAGER | 20/1 | 12 | 90 | 1.34 | 0.6 | R | | 540 | | R | 0.6 | 1.34 | 90 | 12 | **20/1** | R-SLA OFFICE SW | 16 | 6 |
| | | | | | | | | | | 540 | | | | | | | | | | |
| 6 | 17 | R-TEENS | **20/1** | 12 | 50 | 0.74 | 0.6 | R | | | 540 | R | 0.6 | 0.32 | 65 | 12 | 20/1 | FLOOR BOX | 18 | 5 |
| | | | | | | | | | | | 180 | | | | | | | | | |
| 5 | 19 | R-FLEX ROOM | 20/1 | 12 | 75 | 1.11 | 0.6 | R | 540 | | | R | 0.6 | 0.50 | 50 | 12 | 20/1 | FLOOR BOX | 20 | 5 |
| | | | | | | | | | 360 | | | | | | | | | | | |
| 5 | 21 | R-PROGRAM SPACE | 20/1 | 12 | 95 | 1.41 | 0.6 | R | | 540 | | R | 0.6 | 0.59 | 60 | 12 | 20/1 | FLOOR BOX | 22 | 5 |
| | | | | | | | | | | 360 | | | | | | | | | | |
| 3 | 23 | (E) ELEC WATER HEATER | 20/1 | - | - | - | - | G | | | 1500 | G | - | - | - | - | 20/1 | (E) IRRIGATION CONTROLLER | 24 | 3 |
| | | | | | | | | | | | 1000 | | | | | | | | | |
| 7 | 25 | R-STAFF AREA | 20/1 | 12 | 60 | 0.89 | 0.6 | R | 540 | | | R | 0.6 | 0.59 | 60 | 12 | 20/1 | FLOOR BOX | 26 | 8 |
| | | | | | | | | | 360 | | | | | | | | | | | |
| 7 | 27 | R-STAFF AREA | **20/1** | 12 | 75 | 1.11 | 0.6 | R | | 544 | | G | - | - | - | - | 20/1 | (E) TIME CLOCK | 28 | 3 |
| | | | | | | | | | | 500 | | | | | | | | | | |
| 7 | 29 | R-STAFF AREA SW | **20/1** | 12 | 75 | 1.49 | 0.6 | R | | | 720 | R | 0.6 | 0.59 | 60 | 12 | 20/1 | FLOOR BOX | 30 | 8 |
| | | | | | | | | | | | 360 | | | | | | | | | |
| 3 | 31 | (E) LIGHTING (OFFICES) | 20/1 | - | - | - | - | C | 500 | | | R | 0.6 | 0.50 | 100 | 12 | 20/1 | FLOOR BOX | 32 | 8 |
| | | | | | | | | | 180 | | | | | | | | | | | |
| 3 | 33 | (E) KITCHEN PLUGS | 20/1 | - | - | - | - | K | | 500 | | K | - | - | - | - | 50/2 | (E) KITCHEN UNIT | 34 | 3 |
| | | | | | | | | | | 4650 | | | | | | | | | | |
| 3 | 35 | (E) KITCHEN PLUGS | 20/1 | - | - | - | - | K | | | 500 | K | - | - | - | - | | " | 36 | 3 |
| | | | | | | | | | | | 4650 | | | | | | | | | |
| 3 | 37 | (E) KITCHEN PLUGS | 20/1 | - | - | - | - | K | 500 | | | R | 0.6 | 1.49 | 75 | 12 | 20/1 | R-STAFF AREA | 38 | 9 |
| | | | | | | | | | 720 | | | | | | | | | | | |
| 8 | 39 | R-EXTERIOR | 20/1 | 12 | 55 | 0.54 | 0.6 | R | | 360 | | R | 0.6 | 1.68 | 85 | 12 | 20/1 | R-STAFF AREA | 40 | 9 |
| | | | | | | | | | | 720 | | | | | | | | | | |
| 3 | 41 | (E) GARBAGE DISPOSAL | 20/1 | - | - | - | - | G | | | 1500 | M | 0.8 | 0.55 | 100 | 12 | 20/1 | EF-1 &EF-7 | 42 | 9 |
| | | | | | | | | | | | 200 | | | | | | | | | |
| | | | | | | | | SUBTOTAL (VA) | 8056 | 12694 | 15750 | | | | | | | | | |
| | | | | | | | | CONTINUOUS | 125 | 500 | 675 | | | | | | | | | |
| | | | | | | | | AMPS @ 120 | 68 | 110 | 137 | | | | | | | | | |

**37.80 KVA**
**105 AMPS @ 120/208V, 3 PHASE**

## EXISTING PANEL "B"

TYPE: PANELBOARD — FIELD VERIFY AIC PANEL & BRANCH CIRCUITS — LOCATION: LOWER FLOOR TO BE RELOCATED
BUS: 100A — 24 FULL SIZE [BOLT ON] [PLUG IN] — NEMA: 1
120/208V, 3-PHASE, 4W — CIRCUIT BREAKER SPACES — MOUNTING: FLUSH
70A 3P MAIN CIRCUIT BREAKER — PROVIDE WITH EQUIPMENT GROUND BUS — FEED FROM: (E)"DPI"

| NOTES | CIRCUIT | DESCRIPTION | BREAKER | WIRE | LF | VD(%) | PF | TYPE | PHASE A | PHASE B | PHASE C | TYPE | PF | VD(%) | LF | WIRE | BREAKER | DESCRIPTION | CIRCUIT | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 1 | R-STORAGE/RR | 20/1 | 12 | 40 | 0.99 | 0.6 | R | 900 | | | R | - | - | - | - | 20/1 | CONVENIENCE RECEPTS | 2 | 3 |
| | | | | | | | | | 1000 | | | | | | | | | | | |
| 5 | 3 | EF-2/3/4/6 | 20/1 | 12 | 50 | 0.38 | 0.6 | R | | 274 | | R | - | - | - | - | 20/1 | CONVENIENCE RECEPTS | 4 | 3 |
| | | | | | | | | | | 1000 | | | | | | | | | | |
| 8 | 5 | R-READING AND DF-1 | 20/1 | 12 | 30 | 0.30 | 0.6 | R | | | 360 | R | 0.6 | 2.48 | 100 | 12 | 20/1 | R-CHECKOUT | 6 | 5 |
| | | | | | | | | | | | 900 | | | | | | | | | |
| 3 | 7 | CONVENIENCE RECEPTS | 20/1 | - | - | - | - | R | 1000 | | | R | - | - | - | - | 20/1 | CONVENIENCE RECEPTS | 8 | 3 |
| | | | | | | | | | 1000 | | | | | | | | | | | |
| 8 | 9 | R-READING | 20/1 | 12 | 40 | 0.79 | 0.6 | R | | 720 | | R | - | - | - | - | 20/1 | CHECKOUT COUNTER REC. | 10 | 3 |
| | | | | | | | | | | 1000 | | | | | | | | | | |
| 3 | 11 | CHECKOUT COUNTER REC. | 20/1 | - | - | - | - | R | | | 1000 | R | - | - | - | - | 20/1 | CHECKOUT COUNTER REC. | 12 | 3 |
| | | | | | | | | | | | 1000 | | | | | | | | | |
| 3 | 13 | LIGHTS | 20/1 | - | - | - | - | C | 500 | | | G | - | - | - | - | 20/1 | P.T. BACKBOARD | 14 | 3 |
| | | | | | | | | | 500 | | | | | | | | | | | |
| 5 | 15 | R-READING | 20/1 | 12 | 45 | 0.89 | 0.6 | R | | 720 | | C | - | - | - | - | 20/1 | EXIT LIGHTS | 16 | 3 |
| | | | | | | | | | | 500 | | | | | | | | | | |
| 3 | 17 | CTV T.C. | 20/1 | - | - | - | - | G | | | 500 | R | 0.6 | 1.68 | 85 | 12 | 20/1 | R-CHECKOUT | 18 | 8 |
| | | | | | | | | | | | 720 | | | | | | | | | |
| 8 | 19 | R-CHILDREN'S | 20/1 | 12 | 40 | 0.79 | 0.6 | R | 720 | | | R | 0.6 | 1.41 | 95 | 12 | 20/1 | R-STAFF | 20 | 8 |
| | | | | | | | | | 540 | | | | | | | | | | | |
| 8 | 21 | R-READING | 20/1 | 12 | 75 | 1.11 | 0.6 | R | | 540 | | R | 0.6 | 1.30 | 105 | 12 | 20/1 | R-STAFF SW | 22 | 8 |
| | | | | | | | | | | 450 | | | | | | | | | | |
| 8 | 23 | R-CHECKOUT | 20/1 | 12 | 95 | 1.41 | 0.6 | R | | | 540 | R | 0.6 | 1.82 | 105 | 12 | 20/1 | R-STAFF | 24 | 8 |
| | | | | | | | | | | | 630 | | | | | | | | | |
| | | | | | | | | SUBTOTAL (VA) | 6160 | 5204 | 5650 | | | | | | | | | |
| | | | | | | | | CONTINUOUS | 125 | 125 | 0 | | | | | | | | | |
| | | | | | | | | AMPS @ 120 | 52 | 44 | 47 | | | | | | | | | |

**17.26 KVA**
**48 AMPS @ 120/208V, 3 PHASE**


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**APN: 007-011-050**
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**Arroyo Grande, CA 93420**


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SHEET CONTENTS:

**ELECTRICAL SCHEDULES**

CONSULTANT:


GECE
GRAY ELECTRICAL CONSULTING + ENGINEERING, CORP
2529 PROFESSIONAL PKWY | P. 805-361-0525
SUITE A - P.O. BOX #368 | E.INFO@GECECORP.COM
SANTA MARIA, CA 93455 | WWW.GECECORP.COM


STAMP:

REGISTERED PROFESSIONAL ENGINEER — HEATHER ANN GRAY — NO.E18927 — ELECTRICAL — STATE OF CALIFORNIA

EXPIRES: 12.31.2025
GECE #2309

DATE: 6/28/2024

REVISIONS:

1 **Plan Check 1**
**County of SLO, 10/28/24**

2 **Plan Check 2**
**County of SLO, 12/11/24**

B1 **Bid Set Update**
**Dated, 07/25/2025**

JOB NUMBER:

SHEET:

**E1.2**

## (N) PANEL "M2"

TYPE: PANELBOARD — 10K AIC PANEL & BRANCH CIRCUITS — LOCATION: UPPER FLOOR MECH 231
BUS: 100A — 30 FULL SIZE [BOLT ON] [PLUG IN] — NEMA: 1
120/208V, 3-PHASE, 4W — CIRCUIT BREAKER SPACES — MOUNTING: SURFACE
100A MAIN CIRCUIT BREAKER, 100% RATED — PROVIDE WITH EQUIPMENT GROUND BUS — FEED FROM: DPI

| NOTES | CIRCUIT | DESCRIPTION | BREAKER | WIRE | LF | VD(%) | PF | TYPE | PHASE A | PHASE B | PHASE C | TYPE | PF | VD(%) | LF | WIRE | BREAKER | DESCRIPTION | CIRCUIT | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | DS-1 | 20/2 | 10 | 120 | 1.72 | 0.8 | M | 1248<br>960 | | | M | 0.8 | 1.06 | 40 | 12 | 20/1 | FAUCET | 2 | 1 |
| 1 | 3 | " | | 10 | 120 | 1.72 | 0.8 | M | | 1248<br>480 | | M | 0.8 | 0.66 | 25 | 12 | 20/1 | FAUCET | 4 | 1 |
| 1 | 5 | DS-2 | 20/2 | 10 | 120 | 1.72 | 0.8 | M | | | 1248<br>960 | M | 0.8 | 0.66 | 25 | 12 | 20/1 | FAUCET | 6 | 1 |
| 1 | 7 | " | | 10 | 120 | 1.72 | 0.8 | M | 1248<br>480 | | | M | 0.8 | 2.15 | 130 | 10 | 20/1 | FAUCET | 8 | 1 |
| 1 | 9 | DS-3 | 20/2 | 10 | 120 | 1.72 | 0.8 | M | | 1248<br>1920 | | M | 0.8 | 2.11 | 40 | 12 | 20/1<br>GFCI | HAND DRYER | 10 | 1 |
| 1 | 11 | " | | 10 | 120 | 1.72 | 0.8 | M | | | 1248<br>1920 | M | 0.8 | 2.11 | 40 | 12 | 20/1<br>GFCI | HAND DRYER | 12 | 1 |
| 1 | 13 | DS-4 | 20/2 | 10 | 120 | 1.72 | 0.8 | M | 1248<br>1920 | | | M | 0.8 | 1.32 | 25 | 12 | 20/1<br>GFCI | HAND DRYER | 14 | 1 |
| 1 | 15 | " | | 10 | 120 | 1.72 | 0.8 | M | | 1248<br>1920 | | M | 0.8 | 1.32 | 25 | 12 | 20/1<br>GFCI | HAND DRYER | 16 | 1 |
| 1 | 17 | DS-5 | 20/2 | 12 | 20 | 0.46 | 0.8 | M | | | 1248<br>1920 | M | 0.8 | 1.32 | 25 | 12 | 20/1<br>GFCI | HAND DRYER | 18 | 1 |
| 1 | 19 | " | | 12 | 20 | 0.46 | 0.8 | M | 1248<br>1920 | | | M | 0.8 | 2.7 | 130 | 8 | 20/1<br>GFCI | HAND DRYER | 20 | 1 |
| 1 | 21 | WH-1 | 20/1 | 10 | 45 | 1.16 | 0.8 | M | | 1500<br>720 | | R | 0.6 | 1.98 | 100 | 12 | 20/1 | VETERANS | 22 | |
| 1 | 23 | CP-1 | 20/1 | 12 | 45 | 0.03 | 0.8 | M | | | 20<br>1080 | R | 0.6 | 2.97 | 100 | 12 | 20/1 | VETERANS SW | 24 | |
| 1 | 25 | DS-6 | 20/2 | 12 | 60 | 1.37 | 0.8 | M | 1248<br>10 | | | M | 0.8 | 0.25 | 90 | 12 | 20/1 | SF-1 | 26 | 1 |
| 1 | 27 | " | | 12 | 60 | 1.37 | 0.8 | M | | 1248 | | - | - | - | - | - | 20/1 | SPARE | 28 | |
| | 29 | SPARE | 20/1 | - | - | - | - | - | | | | - | - | - | - | - | 20/1 | SPARE | 30 | |
| | | | | | | | | SUBTOTAL (VA) | 11530 | 11532 | 9644 | | | | | | | | | |
| | | | | | | | | CONTINUOUS | 0 | 0 | 0 | | | | | | | | | |
| | | | | | | | | AMPS @ 120 | 96 | 96 | 80 | | | | | | | | | |

**32.71 KVA**
**91 AMPS @ 120/208V, 3 PHASE**

## (N) PANEL "M1"

TYPE: PANELBOARD — 10K AIC PANEL & BRANCH CIRCUITS — LOCATION: UPPER FLOOR MECH 231
BUS: 100A — 30 FULL SIZE [BOLT ON] [PLUG IN] — NEMA: 1
120/208V, 3-PHASE, 4W — CIRCUIT BREAKER SPACES — MOUNTING: SURFACE
100A MAIN CIRCUIT BREAKER — PROVIDE WITH EQUIPMENT GROUND BUS — FEED FROM: (E)DPI

| NOTES | CIRCUIT | DESCRIPTION | BREAKER | WIRE | LF | VD(%) | PF | TYPE | PHASE A | PHASE B | PHASE C | TYPE | PF | VD(%) | LF | WIRE | BREAKER | DESCRIPTION | CIRCUIT | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | RTU-5 | 25/3 | 8 | 150 | 1.55 | 0.8 | M | 1921<br>1373 | | | G | 0.85 | 1.28 | 130 | 8 | 20/2 | AUTO GATE MOTOR | 2 | 1 |
| 1 | 3 | " | | 8 | 150 | 1.55 | 0.8 | M | | 1921<br>1373 | | G | 0.85 | 1.28 | 130 | 8 | | " | 4 | 1 |
| 1 | 5 | " | | 8 | 150 | 1.55 | 0.8 | M | | | 1921<br>196 | M | 0.8 | 0.30 | 55 | 12 | 20/1 | EF-5, MECH RM RECEPT | 6 | 1 |
| 1 | 7 | RTU-6 | 25/3 | 8 | 150 | 1.55 | 0.8 | M | 1921<br>720 | | | R | 0.6 | 1.98 | 160 | 10 | 20/1 | R - ROOF | 8 | |
| 1 | 9 | " | | 8 | 150 | 1.55 | 0.8 | M | | 1921<br>180 | | R | 0.6 | 0.12 | 25 | 12 | 20/1 | GATEWAY RECEPTACLE | 10 | |
| 1 | 11 | " | | 8 | 150 | 1.55 | 0.8 | M | | | 1921<br>200 | G | 0.85 | 0.28 | 50 | 12 | 20/1 | FACP | 12 | 10 |
| 1 | 13 | RTU-7 | 25/3 | 8 | 150 | 1.55 | 0.8 | M | 1921<br>200 | | | G | 0.85 | 0.28 | 50 | 12 | 20/1 | FA BELL | 14 | 10 |
| 1 | 15 | " | | 8 | 150 | 1.55 | 0.8 | M | | 1921 | | | | | | | | SPACE | 16 | 1 |
| 1 | 17 | " | | 8 | 150 | 1.55 | 0.8 | M | | | 1921 | | | | | | | SPACE | 18 | |
| 1 | 19 | RTU-8 | 25/3 | 8 | 150 | 1.55 | 0.8 | M | 1921 | | | | | | | | | SPACE | 20 | |
| 1 | 21 | " | | 8 | 150 | 1.55 | 0.8 | M | | 1921 | | | | | | | | SPACE | 22 | |
| 1 | 23 | " | | 8 | 150 | 1.55 | 0.8 | M | | | 1921 | | | | | | | SPACE | 24 | |
| | 25 | SPARE | 20/1 | - | - | - | - | - | | | | | | | | | | SPACE | 26 | |
| | 27 | SPARE | 20/1 | - | - | - | - | - | | | | | | | | | | SPACE | 28 | |
| | 29 | SPARE | 20/1 | - | - | - | - | - | | | | | | | | | | SPACE | 30 | |
| | | | | | | | | SUBTOTAL (VA) | 9977 | 9237 | 8080 | | | | | | | | | |
| | | | | | | | | CONTINUOUS | 0 | 0 | 0 | | | | | | | | | |
| | | | | | | | | AMPS @ 120 | 83 | 77 | 67 | | | | | | | | | |

**27.29 KVA**
**76 AMPS @ 120/208V, 3 PHASE**

## EXISTING PANEL "K"

TYPE: PANELBOARD — FIELD VERIFY AIC PANEL & BRANCH CIRCUITS — LOCATION: UPPER FLOOR TELE 28 OR JAN 29
BUS: 225A — 42 FULL SIZE [BOLTON] [PLUG IN] — NEMA:
120/208V, 3-PHASE, 4W — CIRCUIT BREAKER SPACES — MOUNTING: SURFACE
MAIN LUGS ONLY — PROVIDE WITH EQUIPMENT GROUND BUS — FEED FROM: (E)DPI

| NOTES | CIRCUIT | DESCRIPTION | BREAKER | WIRE | LF | VD(%) | PF | TYPE | PHASE A | PHASE B | PHASE C | TYPE | PF | VD(%) | LF | WIRE | BREAKER | DESCRIPTION | CIRCUIT | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 1 | LIGHTING RM#1 (READING) | 20/1 | - | - | - | - | C | 600<br>600 | | | C | - | - | - | - | 20/1 | LIGHTING RM#1 (READING) | 2 | 3 |
| 3 | 3 | LIGHTING RM#1 (READING) | 20/1 | - | - | - | - | C | | 400<br>400 | | C | - | - | - | - | 20/1 | LIGHTING RM#1 (READING) | 4 | 3 |
| 3 | 5 | LIGHTING RM#1 (READING) | 20/1 | - | - | - | - | C | | | 1600<br>1400 | C | - | - | - | - | 20/1 | LIGHTING RM#1 (READING) | 6 | 3 |
| 3 | 7 | LIGHTING RM#1 (READING) | 20/1 | - | - | - | - | C | 600<br>600 | | | C | - | - | - | - | 20/1 | LIGHTING RM#1 (READING) | 8 | 3 |
| 3 | 9 | LIGHTING RM#1 (READING) | 20/1 | - | - | - | - | C | | 400<br>400 | | C | - | - | - | - | 20/1 | LIGHTING RM#1 (READING) | 10 | 3 |
| 3 | 11 | LIGHTING RM#1 (READING) | 20/1 | - | - | - | - | C | | | 1400<br>1600 | C | - | - | - | - | 20/1 | LIGHTING RM#1 (READING) | 12 | 3 |
| 3 | 13 | LIGHTING RM#1 (READING) | 20/1 | - | - | - | - | C | 600<br>600 | | | C | - | - | - | - | 20/1 | LIGHTING RM#1 (READING) | 14 | 3 |
| 3 | 15 | LIGHTING RM#1 (READING) | 20/1 | - | - | - | - | C | | 800<br>200 | | C | - | - | - | - | 20/1 | LIGHTING RM#1 (READING) | 16 | 3 |
| 3 | 17 | EMERGENCY LIGHTS | 20/1 | - | - | - | - | C | | | 1400<br>1600 | C | - | - | - | - | 20/1 | LIGHTING RM#1 (READING) | 18 | 3 |
| 3 | 19 | LTG - BAT- (DOWNSTAIRS) | 20/1 | - | - | - | - | C | 600<br>600 | | | C | - | - | - | - | 20/1 | LIGHTING LOWER FLOOR | 20 | 3 |
| 3 | 21 | LIGHTING LOWER FLOOR | 20/1 | - | - | - | - | C | | 200<br>900 | | C | - | - | - | - | 20/1 | LIGHTING LOWER FLOOR | 22 | 3 |
| 3 | 23 | LIGHTING LOWER FLOOR | 20/1 | - | - | - | - | C | | | 1200<br>200 | C | - | - | - | - | 20/1 | TIME CLOCK TRANSFORMER | 24 | 3 |
| | 25 | SPARE | 20/1 | - | - | - | - | - | 500<br>500 | | | C | - | - | - | - | 20/1 | ROUTER CIRCUIT | 26 | 3 |
| | 27 | SPARE | 20/1 | - | - | - | - | - | | 500<br>500 | | C | - | - | - | - | 20/1 | ` | 28 | 3 |
| 3 | 29 | AREA LIGHTING | 20/2 | - | - | - | - | C | | | 460<br>670 | C | - | - | - | - | 20/2 | AREA LIGHTING | 30 | 3 |
| 3 | 31 | ` | | - | - | - | - | C | 460<br>670 | | | C | - | - | - | - | | ` | 32 | 3 |
| 3 | 33 | AREA LIGHTING | 20/2 | - | - | - | - | C | | 670<br>670 | | C | - | - | - | - | 20/2 | AREA LIGHTING | 34 | 3 |
| 3 | 35 | ` | | - | - | - | - | C | | | 670<br>670 | C | - | - | - | - | | ` | 36 | 3 |
| 3 | 37 | AREA LIGHTING | 20/2 | - | - | - | - | C | 670<br>123 | | | - | - | - | - | - | 20/1 | VETERANS | 38 | |
| 3 | 39 | ` | | - | - | - | - | C | | 670<br>500 | | - | - | - | - | - | 20/1 | SPARE | 40 | |
| | 41 | SPARE | 20/1 | - | - | - | - | - | | | 1500<br>1500 | - | - | - | - | - | 20/1 | SPARE | 42 | |
| | | | | | | | | SUBTOTAL (VA) | 15823 | 16213 | 15870 | | | | | | | | | |
| | | | | | | | | CONTINUOUS | 3525 | 3303 | 3218 | | | | | | | | | |
| | | | | | | | | AMPS @ 120 | 16 | 165 | 159 | | | | | | | | | |

**57.95 KVA**
**161 AMPS @ 120/208V, 3 PHASE**


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SHEET CONTENTS:

**ELECTRICAL SCHEDULES**

CONSULTANT:


COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Permit No. C-PMT-13855 Date: 06/28/2024
The approval of these plans shall not permit violations of county or state laws.
The County may revoke this permit or require approved plans shall be made available
Submitted Electronically
Approved Electronically



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SANTA MARIA, CA 93455
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WWW.GECECORP.COM


STAMP:

DATE: 6/28/2024

REVISIONS:
1 **Plan Check 1 County of SLO, 10/28/24**
2 **Plan Check 2 County of SLO, 12/11/24**

JOB NUMBER:

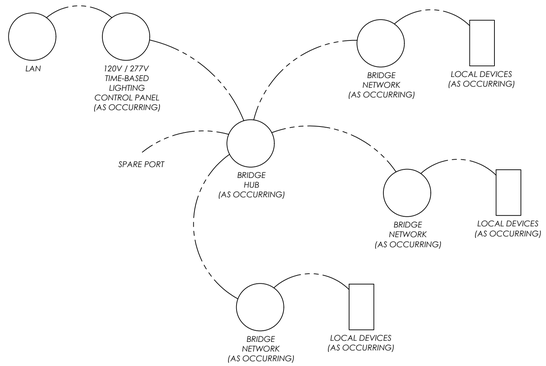
SHEET:

**E1.3**

# FLOOR/WALL BOX SCHEDULE

| | SYMBOL | MANUFACTURER | SPECIFICATION | DESCRIPTION | AC VOLTAGE | MOUNTING |
|---|---|---|---|---|---|---|
| F1 | | LEGRAND | WIREMOLD OMNI BOX 880CS1-1 | SINGLE (1) GANG FLOORBOX, FLUSH IN FLOOR. PROVIDE WITH DEVICE AS INDICATED. | 120V | FLUSH IN FLOOR |
| F2 | | LEGRAND | WIREMOLD OMNI BOX 880CS2-1 | TWO (2) GANG FLOORBOX, FLUSH IN FLOOR. PROVIDE WITH DEVICES AS INDICATED. | 120V | FLUSH IN FLOOR |
| F3 | | LEGRAND | WIREMOLD OMNI BOX 880CS3-1 | THREE (3) GANG FLOORBOX, FLUSH IN FLOOR. PROVIDE WITH DEVICES AS INDICATED. | 120V | FLUSH IN FLOOR |
| F4 | | LEGRAND | WIREMOLD OMNI BOX 880CS2-1 | TWO (2) GANG FLOORBOX, FLUSH IN FLOOR. PROVIDE WITH DEVICES AS INDICATED. | 120V | FLUSH IN FLOOR |

NOTE: FLOORBOXES SHALL BE PROVIDED WITH APPROPRIATE TRIM AS PER FLOORING APPLICATION (IE. LUXURY VINYL PLANK). FINISH SELECTION SHALL BE PER ARCHITECTURAL REQUIREMENTS.




GENERAL NOTES:

1. THIS DETAIL HAS BEEN PREPARED ON A SCHEMATIC LEVEL AND DOES NOT FULLY IDENTIFY ALL INSTALLATION CRITERIA AS REQUIRED BY THE MANUFACTURER. PRIOR TO PROCUREMENT INSTALLATION THE CONTRACTOR SHALL FURNISH A COMPLETE MANUFACTURER ENGINEERING DRAWING, INCLUDING SYSTEM SCHEMATIC AND SPECIFICATIONS, CAPABLE OF ACHIEVING THE DESIGN INTENT AS REPRESENTED ON THE DRAWINGS FOR ENGINEER APPROVAL. MANUFACTURER DRAWINGS SHALL INCLUDE, HOWEVER, SHALL NOT BE LIMITED TO:
   - A. SCALED FLOOR PLANS INDICATING DEVICE LOCATION AND SYSTEM INTERCONNECTION (SEE NOTE #2).
   - B. CONFIRMATION OF CONTROL DEVICE SPECIFICATIONS, QUANTITIES, AND LOCATION PER PLANS TO MAXIMIZE AND CONFIRM DEVICE COVERAGE. EEOR WILL REVIEW DOCUMENTATION TO ENSURE COMPLIANCE WITH LOCAL AND STATE CODES.
   - C. WIRING DETAILS.
   - D. SINGLE LINE DIAGRAM, INCLUDING BRIDGE PORT CONNECTION POINTS, LAN SYSTEM CONNECTION, WIRELESS NETWORK, ETC.
   - E. INSTALLATION INSTRUCTIONS.
   - F. BILL OF MATERIALS.
2. THE LIGHTING CONTROL SYSTEM BASIS OF DESIGN HAS BEEN DEVELOPED PURSUANT TO AN ACUITY BRANDS nLIGHT SYSTEM.
   - A. RELAY CONTROLLED LOADS SHALL BE CONNECTED VIA A LIGHTING CONTROL PANEL WITH T-24 APPROVED AUTOMATIC MEANS FOR LIGHTING CONTROL VIA ASTRONOMICAL TIME CLOCK AND PHOTOCELL.
   - B. LIGHTING CONTROL DEVICES SHALL BE INTERCONNECTED VIA CAT-5E WIRING SYSTEM AS PER MANUFACTURER REQUIREMENTS. INTERCONNECTION SHALL BE "DAISY-CHAIN" WITH OVERALL CABLE LENGTH NOT EXCEEDING 1,000-FEET FROM INITIAL TO LAST DEVICE.
   - C. LUMINIARES SHALL BE nLIGHT ENABLED.
   - D. ENSURE DEVICES ARE LABELED IN THE FIELD, CORRESPONDING TO FACTORY SCHEMATIC DIAGRAMS.
   - E. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONTROL TERMINATIONS. SPLICING WITHIN THE CONTROL SYSTEM IS NOT PERMITTED.
   - F. POWER AND CONTROL WIRING ARE NOT PERMITTED TO SHARE THE SAME CONDUIT OR RACEWAY.
   - G. MAINTAIN A MINIMUM OF 12" SEPARATION BETWEEN LINE VOLTAGE AND LOW VOLTAGE SYSTEM WIRING. KEEP LOW VOLTAGE SYSTEM WIRING AWAY FROM EMF DEVICES (I.E. TRANSFORMERS).
   - H. EMERGENCY AND NORMAL POWER DEVICES SHALL SWITCH TOGETHER.
   - I. EMERGENCY DEVICES SHALL ENABLE LUMINIARES TO POWER AT 100% UPON LOSS OF NORMAL POWER.
3. THE LIGHTING CONTROL SYSTEM SHALL PROVIDE APPROPRIATE SEPARATION BETWEEN NORMAL AND EMERGENCY POWERED LOADS. NORMAL AND EMERGENCY POWERED LOADS SHALL BE KEPT ENTIRELY INDEPENDENT AS OUTLINED IN CEC ARTICLE 700.
4. THE INSTALLED SYSTEM SHALL BE CAPABLE OF RECEIVING A (FUTURE) DEMAND RESPONSE SIGNAL FROM THE UTILITY COMPANY AS REQUIRED PER CALIFORNIA TITLE 24.
5. REFER TO SYSTEM DIVISION 26 PERFORMANCE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

## 1 LIGHTING CONTROL CONCEPTUAL SCHEMATIC

NOT TO SCALE

# NEW LUMINAIRE SCHEDULE - INTERIOR

| TYPE | MANUFACTURER | SPECIFICATION | LAMP | AC VOLTAGE | SYSTEM WATTAGE | MOUNTING | NOTES |
|---|---|---|---|---|---|---|---|
| C1 | LITHONIA OR ENGINEER APPROVED EQUAL | TRUM 4ft ALO6-5000L FMP 8SWW2-40K ZT MVOLT | LED (4000K) | 120V | 42W | SURFACE (CEILING) | 4' LONG LOW PROFILE LED WRAPAROUND LUMINAIRE. 80+CRI, 5,000 LUMENS, DAMP LOCATION LISTED. PROVIDE EMERGENCY BATTERY BACKUP (10W RATED) FOR ALL LUMINAIRES LABELED (EM). ACUITY IOTA MODEL ILBCP10 HESDA. FIELD INSTALLED. |
| C2 | LITHONIA OR ENGINEER APPROVED EQUAL | FMLWL 24 840 ZT MVOLT | LED (4000K) | 120V | 20W | SURFACE (CEILING) | 2' LONG LOW PROFILE LED WRAPAROUND LUMINAIRE. 85+CRI, 1,200 LUMENS, DAMP LOCATION LISTED |
| C3 | MARK ARCHITECTURAL LIGHTING OR ENGINEER APPROVED EQUAL | MGLS 48IN 80CRI 40K 5500LM MIN1 FLL MVOLT FLT ZT | LED (4000K) | 120V | 61W | SURFACE (CEILING) | 48" DIA. LED SURFACE MOUNTED LUMINAIRE, 80+CRI, 5,516 LUMENS. FINISH PER OWNERSHIP / OWNER. |
| C4 | JUNO LIGHTING OR ENGINEER APPROVED EQUAL | JSF 10LM 40K 90CRI MVOLT ZT WH | LED (4000K) | 120V | 13W | SURFACE (CEILING) | 7" LED SURFACE MOUNTED DOWNLIGHT, 90 CRI, 1000 LUMENS, WET LOCATION LISTED |
| C5A | EUREKA LIGHTING OR ENGINEERING APPROVED EQUAL | QS10 4232-23 LED 30 80 120V DV C ** RC1 WHE XXX XX WH | LED (3000K) | 120V | 9.8W | PENDANT | SMALL QUADRANT PENDANT, 23.62" H X 7.87" W, 9.8W, 916 LUMENS, FELT FINISH AND CUTOUT PATTERN PER OWNERSHIP. |
| C5B | EUREKA LIGHTING OR ENGINEERING APPROVED EQUAL | QS10 4232-35 LED 30 80 120V DV C ** RC1 WHE XXX XX WH | LED (3000K) | 120V | 9.8W | PENDANT | MEDIUM QUADRANT PENDANT, 35.43" H X 11.81" W, 9.8W, 970 LUMENS, FELT FINISH AND CUTOUT PATTERN PER OWNERSHIP. |
| C5C | EUREKA LIGHTING OR ENGINEERING APPROVED EQUAL | QS10 4232-47 LED 30 80 120V DV C ** RC1 WHE XXX XX WH | LED (3000K) | 120V | 14.1W | PENDANT | LARGE QUADRANT PENDANT, 47.24" H X 16" W, 14.1W, 1366 LUMENS, FELT FINISH AND CUTOUT PATTERN PER OWNERSHIP. |
| X1 | LITHONIA OR ENGINEER APPROVED EQUAL | LHQM LED R M6 | LED | 120V | 4W | SURFACE | COMBINATION EXIT SIGN/EMERGENCY LIGHTING WITH INTEGRAL BATTERY BACK-UP (90 MINUTE MIN.) AND SELF DIAGNOSTICS. PROVIDE WITH CHEVRON AND SINGLE OR DUAL FACE INDICATIONS AS PER PLANS. FINISH PER OWNERSHIP / OWNER. |

# LUMINAIRE SCHEDULE GENERAL NOTES

- LUMINAIRES SHALL BE RATED BY UL FOR BRANCH CIRCUIT THROUGH-WIRING. IF LUMINAIRES ARE NOT RATED FOR THRU WIRING, THE CONTRACTOR SHALL MAKE APPROPRIATE ACCOMMODATIONS WHEN WIRING.
- VERIFY CEILING TYPES/FINISHES FOR ALL RECESSED FIXTURES PRIOR TO FORWARDING SUBMITTALS.

# CONTROL DEVICE LEGEND

| TYPE | MANUFACTURER | SPECIFICATION | TECHNOLOGY | AC VOLTAGE | MOUNTING | OPERATIONAL SETTINGS |
|---|---|---|---|---|---|---|
| $ | CONTRACTOR SELECT | LINE VOLTAGE SWITCH | - | 120V | WALL | LINE VOLTAGE |
| $OS | SENSOR SWITCH OR ENGINEER APPROVED EQUAL | WSX PDT | DUAL TECHNOLOGY | 120V | SURFACE | LINE VOLTAGE WITH OCCUPANCY SENSOR. PROVIDE WITH 2P WHERE REQUIRED TO CONTROL MECHANICAL EXHAUST FAN. |
| $D2 | SENSOR SWITCH OR ENGINEER APPROVED EQUAL | sPODMRD | - | 120V | WALL | LINE VOLTAGE DIMMER SWITCH WITH 0-10V DIMMING CAPABILITIES. COLOR TO BE SELECTED BY OWNER / ARCHITECT. |
| $D | SENSOR SWITCH OR ENGINEER APPROVED EQUAL | sPODM D | - | LV | WALL | LOW VOLTAGE DIMMER SWITCH WITH 0-10V DIMMING CAPABILITIES. COLOR TO BE SELECTED BY OWNER / ARCHITECT. |
| $LV | nLIGHT CONTROLS OR ENGINEER APPROVED EQUAL | nPOD | - | LV | RECESSED | nLIGHT nPOD LOW-VOLTAGE SWITCH. REFER TO PLANS AND SWITCHBANK ELEVATIONS FOR ADDITIONAL INFORMATION |
| PPN | nLIGHT CONTROLS OR ENGINEER APPROVED EQUAL | nPP16D | DUAL TECHNOLOGY | LV | SURFACE | POWER PACK WITH 0-10V DIMMING CAPABILITIES. |
| PPL | nLIGHT CONTROLS OR ENGINEER APPROVED EQUAL | nPP20L | - | LV | SURFACE | PLUG LOAD CONTROL POWER PACK. LOAD PLUG SHALL SWITCH UP TO 20A LOADS. |
| OS1 | nLIGHT CONTROLS OR ENGINEER APPROVED EQUAL | nCM PDT 9(RJB) | DUAL TECHNOLOGY | LV | SURFACE | LOW VOLTAGE OCCUPANCY SENSOR FOR SMALL MOTION DETECTION. |
| OS2 | nLIGHT CONTROLS OR ENGINEER APPROVED EQUAL | nCM PDT 9(RJB) ADCX | DUAL TECHNOLOGY | LV | SURFACE | LOW VOLTAGE OCCUPANCY SENSOR FOR SMALL MOTION DETECTION. PROVIDE WITH PHOTOCELL FOR DAYLIGHT ZONES. |
| OS3 | SENSOR SWITCH OR ENGINEER APPROVED EQUAL | CMR PDT 10 | DUAL TECHNOLOGY | 120V | SURFACE | LINE VOLTAGE OCCUPANCY SENSOR WITH PIR & MICROPHONICS TECHNOLOGY. CONTROL AUTO "ON"; AUTO "OFF" TIME DELAY: 3 MIN; GRACE PERIOD: 15 SEC. |

# LIGHTING CONTROL SCHEDULE GENERAL NOTES

- ILLUMINATION LEVELS DURING HOURS OF DARKNESS SHALL BE ADJUSTED TO 20% OR MORE BELOW DAYTIME ILLUMINATION LEVELS.
- SENSOR AND DIMMING SETTINGS SHALL BE CALIBRATED AND FINALIZED PURSUANT TO FINAL INSTALLATION OF ALL LUMINAIRES, COMPLETION OF FINAL FINISHES AND FURNITURE INSTALLATION IS COMPLETE.
- TO ENSURE EVEN LIGHTING LEVELS AND ENERGY SAVINGS, LUMINAIRES WITHIN DAYLIGHT ZONES THAT INCLUDE MORE THAN ONE ROW OF FIXTURES SHALL BE PROGRAMMED SUCH THAT FIXTURES CLOSER TO WINDOWS RECEIVE LOWER LIGHT COMMANDS THAN FIXTURES FARTHER FROM WINDOWS.
- PHOTOSENSORS SHALL NOT BE INSTALLED IN DIRECT SUNLIGHT OR DIRECT ILLUMINATION PATH OF LUMINAIRES.
- LUMINAIRES WITHIN PRIMARY OR SECONDARY DAYLIGHT ZONES SHALL REDUCE LUMEN OUTPUT BY A MINIMUM OF 65% WHEN DETECTED DAYLIGHTING MEETS OR EXCEEDS 150% OF DESIGN ILLUMINATION LEVELS.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PROJECT:

**Arroyo Grande Library**

**APN: 007-011-050**
**800 W. Branch Street,**
**Arroyo Grande, CA 93420**

CLIENT:


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SHEET CONTENTS:

**LIGHTING SCHEDULES**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Varvel
Reviewed - Date: 06/28/2024
The approval of these plans shall not permit the construction in violation of any state, local or federal law. The County may revoke this permit or require approved plans shall be made available for inspection without fee upon request.


GRAY ELECTRICAL CONSULTING + ENGINEERING, CORP
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SANTA MARIA, CA 93455 | WWW.GECECORP.COM


STAMP:

REGISTERED PROFESSIONAL ENGINEER
HEATHER ANN GRAY
NO.E18927
ELECTRICAL
STATE OF CALIFORNIA

EXPIRES: 12.31.2024
GECE #2309

DATE: 6/28/2024

REVISIONS:

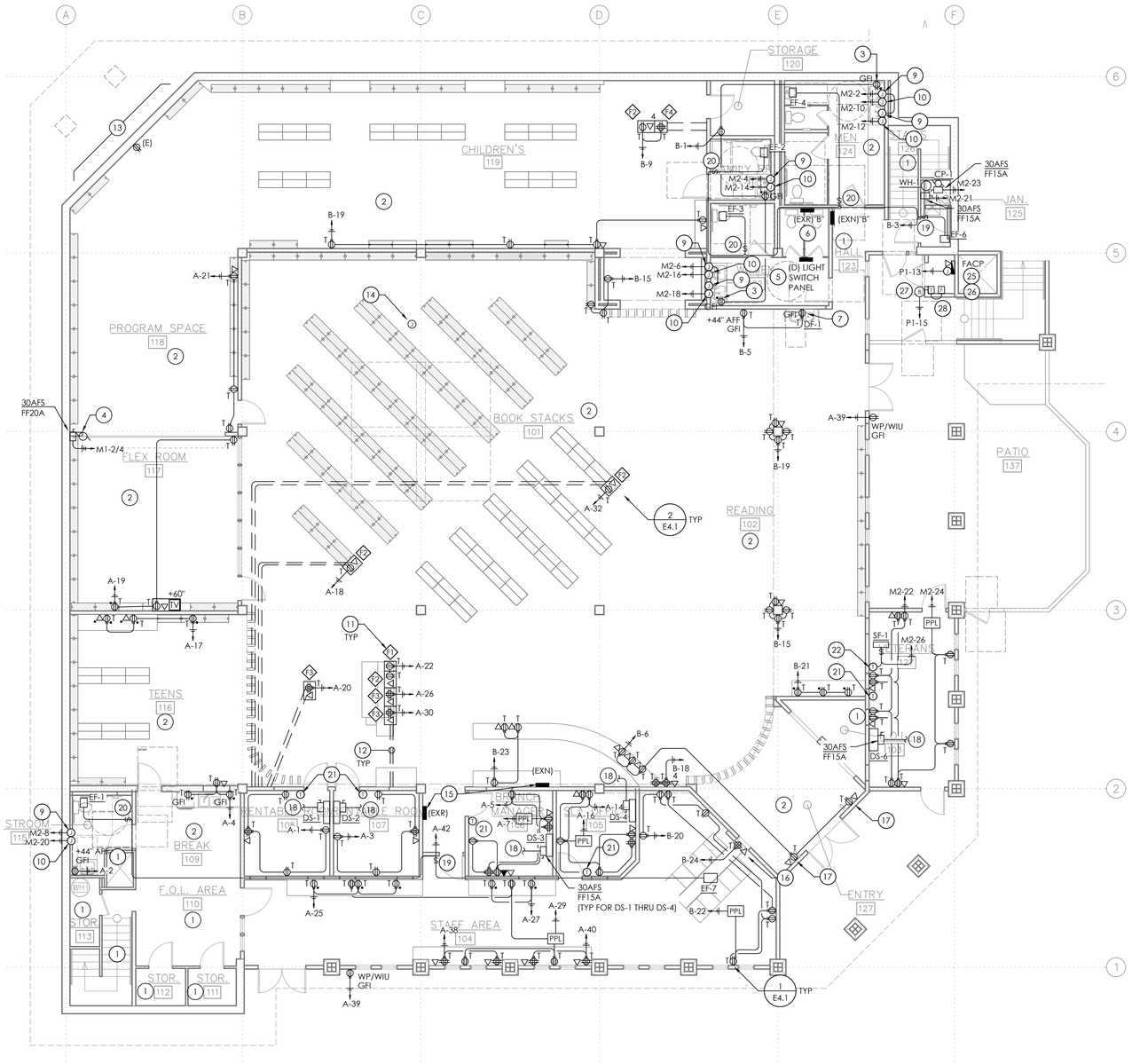
1 **Plan Check 1**
**County of SLO, 10/28/24**

2 **Plan Check 2**
**County of SLO, 12/11/24**

JOB NUMBER:

SHEET:

**E1.4**




# LOWER FLOOR POWER PLAN

SCALE: 1/8" = 1'0"

## REFERENCE NOTES

(#) GENERAL NOTE: REFERENCE NOTES ARE TYPICAL FOR SHEETS E2.1-E2.3. ALL REFERENCE NOTES MAY NOT OCCUR ON THIS SHEET.

1. EXISTING POWER DEVICES TO REMAIN.
2. EXISTING POWER DEVICES TO REMAIN. PROVIDE NEW DEVICES AS INDICATED ON PLANS.
3. EXISTING GFI RECEPTACLE AT +44"AFF. CONTRACTOR TO FIELD LOCATE AND CONFIRM. IF RECEPTACLE IS NOT EXISTING, PROVIDE NEW.
4. AUTOMATIC GATE MOTOR. CONFIRM POWER REQUIREMENTS WITH MANUFACTURER PRIOR TO PRODUCT PROCUREMENT. BASIS OF DESIGN: 208V, 1-PHASE, 2HP
5. DISCONNECT AND DEMOLISH EXISTING LIGHT SWITCH PANEL.
6. RELOCATE EXISTING PANEL "B" TO NEW LOCATION IN HALL AS SHOWN. INTERCEPT AND SPLICE EXISTING CIRCUITS AND EXTEND TO NEW LOCATION.
7. ELECTRICAL CONNECTION TO DRINKING FOUNTAIN.
8. INSTALL CONVENIENCE RECEPTACLE WITHIN 25-FEET OF MECHANICAL EQUIPMENT AT FOR SERVICING. FIELD COORDINATE FINAL LOCATION.
9. ELECTRICAL CONNECTION TO FAUCET. REFER TO MECHANICAL.
10. DEDICATED ELECTRICAL CONNECTION TO HAND DRYER. REFER TO MECHANICAL.
11. NEW FLOOR BOX INSTALLED IN EXISTING FLOOR SLAB. SAWCUT, PATCH, AND REPAIR AS PER ARCHITECT AND STRUCTURAL DIRECTION. SEE FLOOR BOX LEGEND SHEET E1.4. TYPICAL.
12. FLOOR BOX SHALL HAVE POWER AND COMMUNICATION RACEWAYS AS FOLLOWS. SAWCUT AND PATCH FLOOR SLAB AS PER ARCHITECT AND STRUCTURAL DIRECTION.
    - 12.1. EXTEND NEW 1" C. FROM FLOOR BOX TO NEAREST WALL FOR VERTICAL TRANSITION INTO ACCESSIBLE CEILING SPACE AND HOMERUN TO ELECTRICAL PANEL AS NOTED (POWER).
    - 12.2. EXTEND NEW 1"C. FROM FLOOR BOX TO NEAREST WALL FOR VERTICAL TRANSITION INTO ACCESSIBLE CEILING SPACE (COMMUNICATIONS). (B1)
13. FIELD LOCATE, DISCONNECT AND REMOVE ALL RECEPTACLES ON THIS WALL WITH THE EXCEPTION OF ONE, AS SHOWN. MAINTAIN EXISTING BRANCH CIRCUIT CONNECTION TO DEVICE SCHEDULED TO REMAIN.
14. DISCONNECT EXISTING COMMUNICATION CABLING AT FLOOR BOX. ABANDON CABLING AND FLOOR BOX IN PLACE.
15. IDF (INTERMEDIATE DISTRIBUTION FRAME) AREA TO BE RELOCATED IN CABINET. FIELD INTERCEPT AND EXTEND ALL LOW VOLTAGE CABLING TO NEW LOCATION.
16. BOOK SORTING EQUIPMENT. CONFIRM FINAL POWER REQUIREMENTS WITH MANUFACTURER SUBMITTAL.
17. ANTI THEFT DEVICES OWNER PROVIDED.
18. INDOOR UNIT IS FED FROM OUTDOOR UNIT. COMPLY WITH MANUFACTURER'S INSTALLATION REQUIREMENTS.
19. EXHAUST FAN CONTROLLED VIA WALL MOUNTED ON/OFF SWITCH.
20. INTERLOCK EXHAUST FAN WITH LIGHTING CIRCUIT.
21. PROVIDE LINE VOLTAGE WIRING BETWEEN FAN COIL TERMINAL BLOCK AND THERMOSTAT. COMPLY WITH MANUFACTURER'S INSTALLATION REQUIREMENTS. REFER TO MECHANICAL PLANS FOR MORE INFORMATION.
22. PROVIDE 120V POWER TO PROGRAMMABLE SUPPLY FAN. COMPLY WITH MANUFACTURER'S INSTALLATION REQUIREMENTS. REFER TO MECHANICAL PLANS FOR MORE INFORMATION.
23. PROVIDE CONVENIENCE RECEPTACLE WITHIN 25-FEET OF MECHANICAL EQUIPMENT.
24. PROVIDE RECEPTACLE FOR MECHANICAL CONTROLS PELICAN GATEWAY DEVICE. COORDINATE LOCATION WITH MECHANICAL CONTRACTOR.
25. BUILDING FIRE ALARM CONTROL PANEL "FACP". PROVIDE FIRE ALARM CONTROL PANEL. PROVIDE DEDICATED 120A BRANCH CIRCUIT CONNECTION. REFER TO FIRE ALARM PLANS.
26. PROVIDE 3/4" C.O. RACEWAY TO FIRE ALARM CONTROL PANEL "FACP". FIRE ALARM SIGNAL WIRING, BY OTHERS.
27. FIRE ALARM SYSTEM BELL. PROVIDE DEDICATED 120V BRANCH CIRCUIT, LOCKED-HOT. LOCATE AS PER FIRE SPRINKLER CONTRACTOR.
28. TAMPER AND FLOW SWITCH AT FIRE RISER. LOCATE AS PER FIRE SPRINKLER CONTRACTOR. WIRE BELL THROUGH FLOW SWITCH.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SHEET CONTENTS:

**LOWER FLOOR POWER PLAN**

CONSULTANT:


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SUITE A - P.O. BOX #368
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STAMP:

REGISTERED PROFESSIONAL ENGINEER
HEATHER ANN GRAY
NO. E18927
ELECTRICAL
STATE OF CALIFORNIA
EXPIRES: 12.31.2025
GECE #2309

DATE: 6/28/2024

REVISIONS:

1 **Plan Check 1**
**County of SLO, 10/28/24**

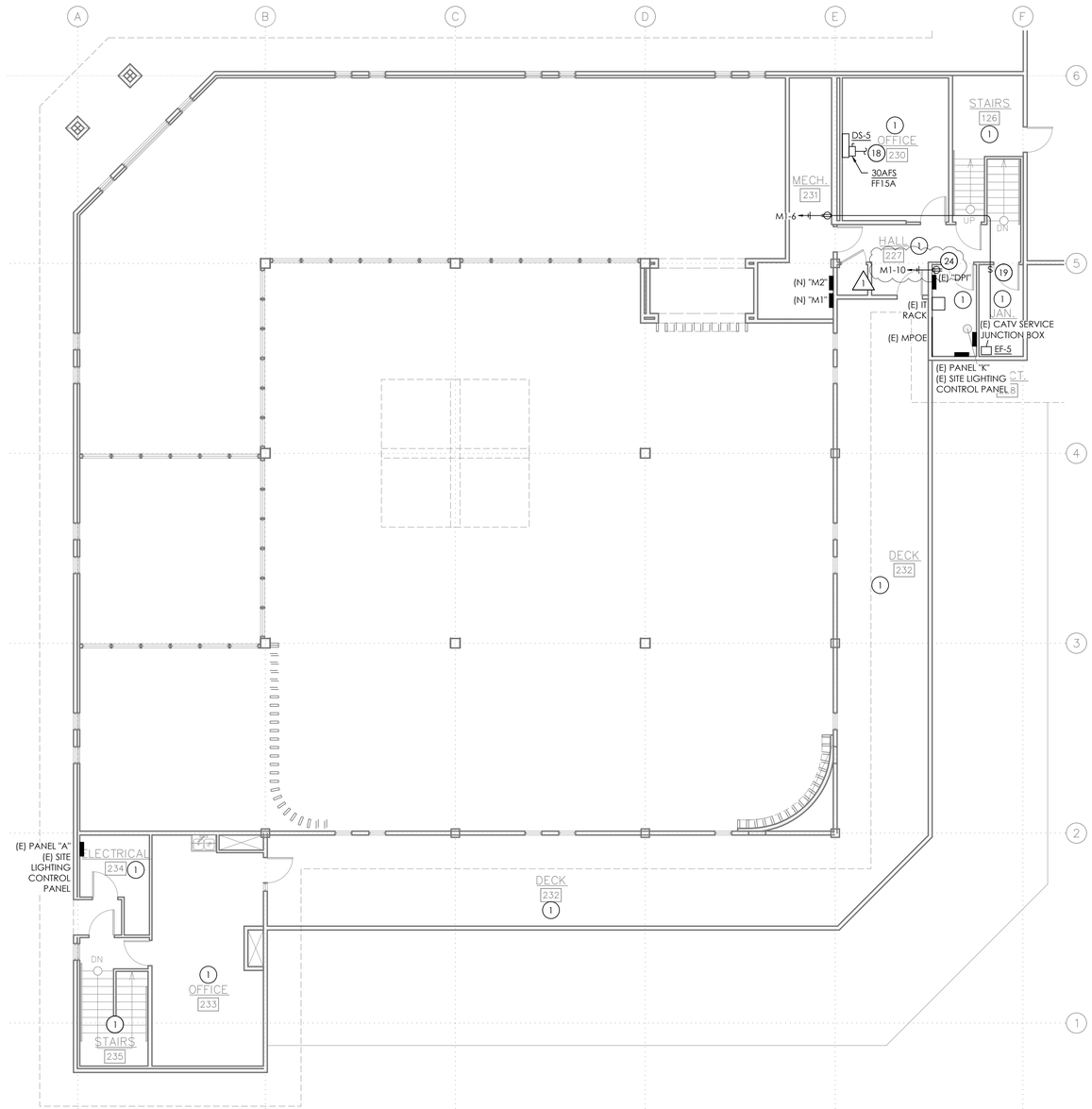
2 **Plan Check 2**
**County of SLO, 12/11/24**

B1 **Bid Set Update**
**Dated, 07/25/2025**

JOB NUMBER:

SHEET:

**E2.1**




# UPPER FLOOR POWER PLAN

SCALE: 1/8" = 1'0"

## REFERENCE NOTES

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20. INTERLOCK EXHAUST FAN WITH LIGHTING CIRCUIT.
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SHEET CONTENTS:

**UPPER FLOOR POWER PLAN**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Vanvel
Permit No. BLD-0000-00155 Date: 06/28/2024
The approval of these plans shall not permit the violations of county or state laws.
The County may revoke this permit or require approved plans shall be made available
Inspection Contact Info: (805) 781-5600

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SUITE A - | E: MATT@GRAYELECTRICALCORP.COM
SANTA MARIA, CA 93455 | WWW.GECECORP.COM

STAMP:

REGISTERED PROFESSIONAL ENGINEER
MATTHEW ANTHONY GRAY
NO. E18927
ELECTRICAL
STATE OF CALIFORNIA

EXPIRES: 12.31.2024
GECE #2309

DATE: 6/28/2024

REVISIONS:

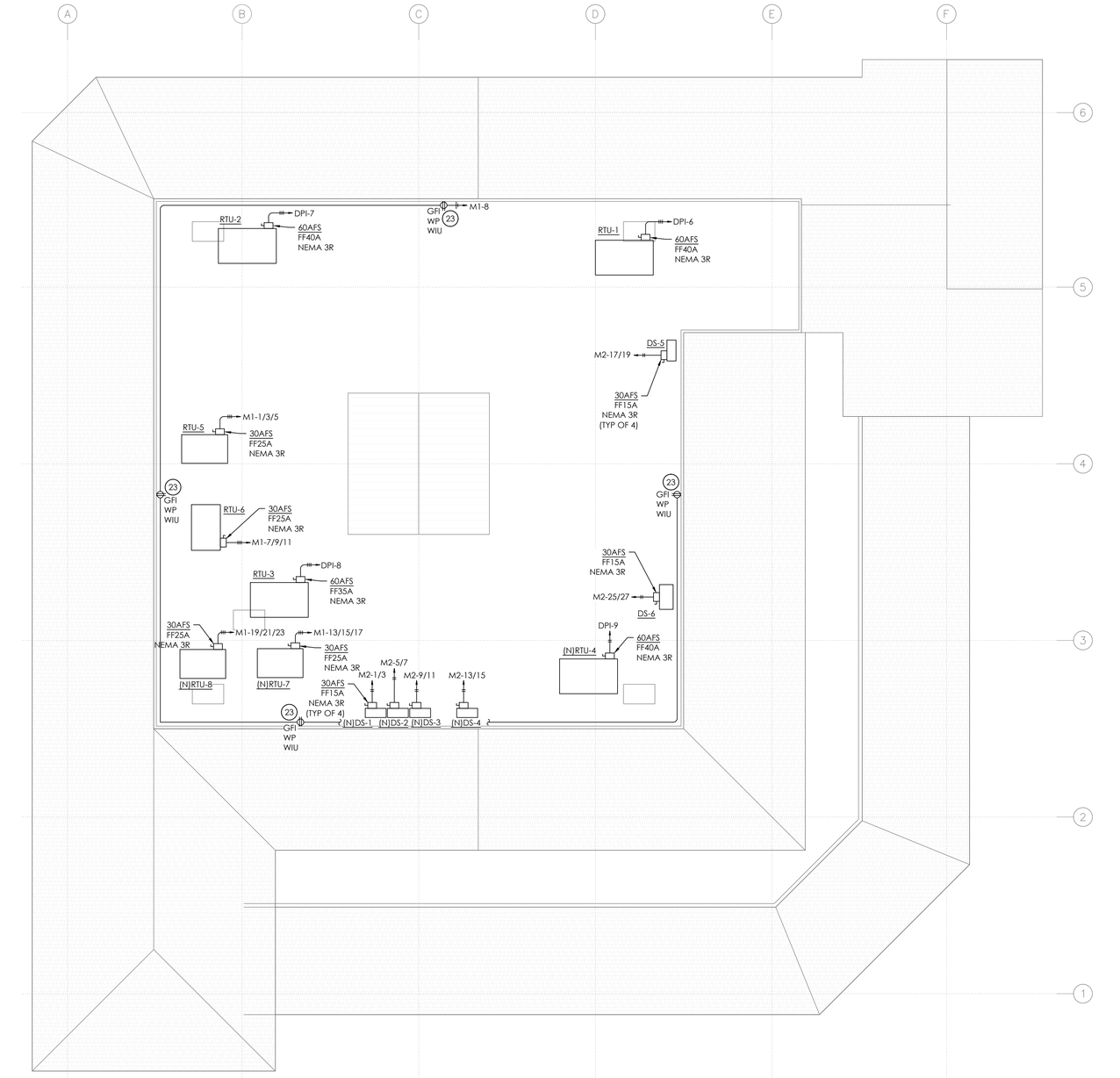
1 **Plan Check 1**
**County of SLO, 10/28/24**

2 **Plan Check 2**
**County of SLO, 12/11/24**

JOB NUMBER:

SHEET:

**E2.2**




# ROOF POWER PLAN

SCALE: 1/8" = 1'0"

## REFERENCE NOTES

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6. RELOCATE EXISTING PANEL "B" TO NEW LOCATION IN HALL AS SHOWN. INTERCEPT AND SPLICE EXISTING CIRCUITS AND EXTEND TO NEW LOCATION.
7. ELECTRICAL CONNECTION TO DRINKING FOUNTAIN.
8. INSTALL CONVENIENCE RECEPTACLE WITHIN 25-FEET OF MECHANICAL EQUIPMENT AT FOR SERVICING. FIELD COORDINATE FINAL LOCATION.
9. ELECTRICAL CONNECTION TO FAUCET. REFER TO MECHANICAL.
10. DEDICATED ELECTRICAL CONNECTION TO HAND DRYER. REFER TO MECHANICAL.
11. NEW FLOOR BOX INSTALLED IN EXISTING FLOOR SLAB. SAWCUT, PATCH, AND REPAIR AS PER ARCHITECT AND STRUCTURAL DIRECTION. SEE FLOOR BOX LEGEND SHEET E1.4, TYPICAL.
12. FLOOR BOX SHALL HAVE POWER AND COMMUNICATION RACEWAYS AS FOLLOWS. SAWCUT AND PATCH FLOOR SLAB AS PER ARCHITECT AND STRUCTURAL DIRECTION.
    - 12.1. EXTEND NEW 1" C. FROM FLOOR BOX TO NEAREST WALL FOR VERTICAL TRANSITION INTO ACCESSIBLE CEILING SPACE AND HOMERUN TO ELECTRICAL PANEL AS NOTED (POWER).
    - 12.2. EXTEND NEW 1"C. FROM FLOOR BOX TO NEAREST WALL FOR VERTICAL TRANSITION INTO ACCESSIBLE CEILING SPACE AND HOMERUN TO ELECTRICAL PANEL AS NOTED (POWER).
13. FIELD LOCATE, DISCONNECT AND REMOVE ALL RECEPTACLES ON THIS WALL WITH THE EXCEPTION OF ONE, AS SHOWN. MAINTAIN EXISTING BRANCH CIRCUIT CONNECTION TO DEVICE SCHEDULED TO REMAIN.
14. DISCONNECT EXISTING COMMUNICATION CABLING AT FLOOR BOX, ABANDON CABLING AND FLOOR BOX IN PLACE.
15. IDF (INTERMEDIATE DISTRIBUTION FRAME) AREA TO BE RELOCATED IN CABINET. FIELD INTERCEPT AND EXTEND ALL LOW VOLTAGE CABLING TO NEW LOCATION.
16. BOOK SORTING EQUIPMENT. CONFIRM FINAL POWER REQUIREMENTS WITH MANUFACTURER SUBMITTAL.
17. ANTI THEFT DEVICES OWNER PROVIDED.
18. INDOOR UNIT IS FED FROM OUTDOOR UNIT. COMPLY WITH MANUFACTURER'S INSTALLATION REQUIREMENTS.
19. EXHAUST FAN CONTROLLED VIA WALL MOUNTED ON/OFF SWITCH.
20. INTERLOCK EXHAUST FAN WITH LIGHTING CIRCUIT.
21. PROVIDE LINE VOLTAGE WIRING BETWEEN FAN COIL TERMINAL BLOCK AND THERMOSTAT. COMPLY WITH MANUFACTURER'S INSTALLATION REQUIREMENTS. REFER TO MECHANICAL PLANS FOR MORE INFORMATION.
22. PROVIDE 120V POWER TO PROGRAMMABLE SUPPLY FAN. COMPLY WITH MANUFACTURER'S INSTALLATION REQUIREMENTS. REFER TO MECHANICAL PLANS FOR MORE INFORMATION.
23. PROVIDE CONVENIENCE RECEPTACLE WITHIN 25-FEET OF MECHANICAL EQUIPMENT.
24. PROVIDE RECEPTACLE FOR MECHANICAL CONTROLS PELICAN GATEWAY DEVICE. COORDINATE LOCATION WITH MECHANICAL CONTRACTOR.
25. BUILDING FIRE ALARM CONTROL PANEL "FACP". PROVIDE FIRE ALARM CONTROL PANEL. PROVIDE DEDICATED 120A BRANCH CIRCUIT CONNECTION. REFER TO FIRE ALARM PLANS.
26. PROVIDE 3/4" C.O. RACEWAY TO FIRE ALARM CONTROL PANEL "FACP". FIRE ALARM SIGNAL WIRING, BY OTHERS.
27. FIRE ALARM SYSTEM BELL. PROVIDE DEDICATED 120V BRANCH CIRCUIT, LOCKED-HOT. LOCATE AS PER FIRE SPRINKLER CONTRACTOR.
28. TAMPER AND FLOW SWITCH AT FIRE RISER. LOCATE AS PER FIRE SPRINKLER CONTRACTOR. WIRE BELL THROUGH FLOW SWITCH.


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PROJECT:

**Arroyo Grande Library**

**APN: 007-011-050**
**800 W. Branch Street,**
**Arroyo Grande, CA 93420**

CLIENT:


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SHEET CONTENTS:

**ROOF POWER PLAN**

CONSULTANT:


GRAY ELECTRICAL CONSULTING + ENGINEERING, CORP
2529 PROFESSIONAL PARKWAY, SUITE A - SANTA MARIA, CA 93455
SANTA MARIA, CA 93455 | WWW.GECLECORP.COM



COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Vavuris
Permit No: CAL T2024-00055 Date: 06/07/2024
The approval of these plans shall not permit the construction of any work in violation of the County may revoke this permit or require approved plans shall be made available
Any deviation must be approved


STAMP:

EXPIRES: 12.31.2024
GECE #2309

DATE: 6/28/2024

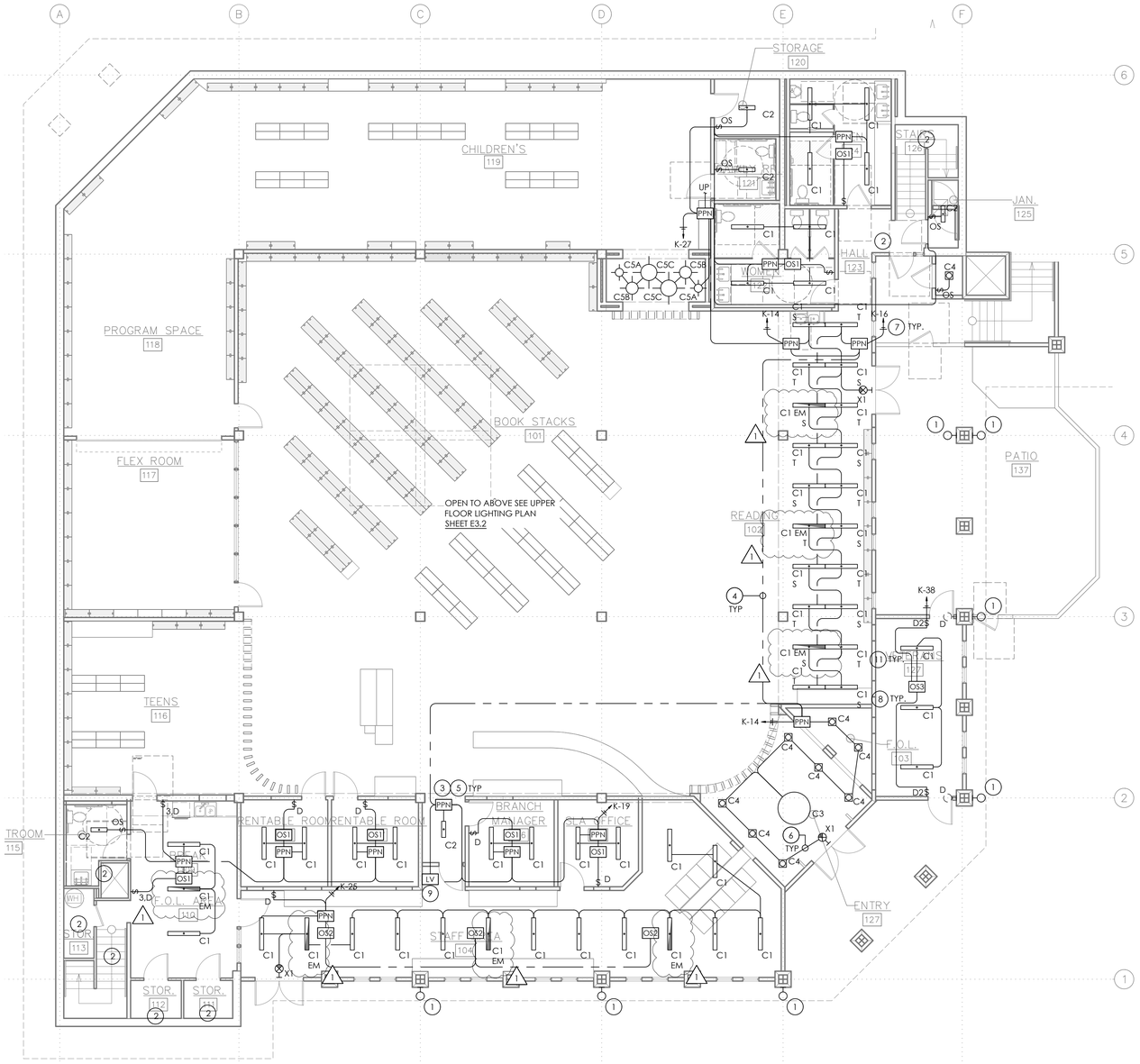
REVISIONS:

1. **Plan Check 1**
   **County of SLO, 10/28/24**
2. **Plan Check 2**
   **County of SLO, 12/11/24**

JOB NUMBER:

SHEET:

**E2.3**




# LOWER FLOOR LIGHTING PLAN

SCALE: 1/8" = 1'0"

## REFERENCE NOTES

(#) GENERAL NOTE: REFERENCE NOTES ARE TYPICAL FOR SHEETS E3.1-E3.2. ALL REFERENCE NOTES MAY NOT OCCUR ON THIS SHEET.

1. EXISTING EXTERIOR WALL SCONCE TO BE REPLACED IN PLACE. PROVIDE ANP LIGHTING WG012-1-FR-M010LD-D-W-30K-XX-WM1211-73 OR ENGINEERING APPROVED EQUAL. ALTERATION DOES NOT INCREASE CONNECTED LIGHTING LOAD, EXCEPTION 1 TO CEC SECTION 141.0(b)2Lii APPLIES.
2. EXISTING LIGHTING DEVICES TO REMAIN.
3. LOW VOLTAGE LIGHTING CONTROL SYSTEM GROUPING AS PER LIGHTING SCHEDULES. COORDINATE WITH ENGINEER APPROVED MANUFACTURER SUBMITTAL. TYPICAL. LOW VOLTAGE CAT5E EXTENSION TO WALL POD TO CONTROL.
4. INTERCONNECT LOW VOLTAGE OCCUPANCY SENSORS WITH CAT5E LIGHTING CONTROL WIRING TO POWER PACK AS PER MANUFACTURER REQUIREMENTS. TYPICAL.
5. INSTALL POWER PACKS IN A ACCESSIBLE LOCATION.
6. EXTEND UN-SWITCHED BRANCH CIRCUIT CONNECTION TO EXIT SIGNAGE. TYPICAL.
7. INTERCEPT EXISTING BRANCH CIRCUIT AT SWITCH PANEL TO BE DEMOLISHED. EXTEND TO NEW POWER PACK LOCATION. CIRCUITING AND LOAD TO BE REMAIN, LIGHTING CONTROLS REVISION ONLY.
8. EXISTING SWITCHING TAGS TO REMAIN.
9. NEW WALL POD CONTROL TOUCH SCREEN DIGITAL TIME CLOCK, ACUITY BRANDS nDTC WH OR ENGINEERING APPROVED EQUAL.
10. LUMINAIRES IN LIBRARY TO REMAIN ONLY LIGHTING CONTROLS ADDED. EXCEPTION 5 TO SECTION 141.0(b)2I APPLIES.
11. ONE FOR ONE LUMINAIRE ALTERATION IN READING AREA OF LESS THAN 50 LUMINAIRES LIGHTING CONTROLS ADDED. EXCEPTION 5 AND 6 TO CEC SECTION 141.0(b)2I APPLIES. ENSURE LIGHTING CONTROLS DIM LUMINAIRES TO 50% AT ALL TIMES.
12. EXISTING LUMINAIRE INSTALLED WITH EMERGENCY POWER PACK.

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PROJECT:

**Arroyo Grande Library**

**APN: 007-011-050**
**800 W. Branch Street,**
**Arroyo Grande, CA 93420**

CLIENT:

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SHEET CONTENTS:

**LOWER FLOOR LIGHTING PLAN**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Vawter
Project No: CAL2024-00055 Date: 06/27/2024
This approval of these plans shall not permit the construction of any work or material in violation of any code or ordinance. The County may revoke this permit or require corrections to any work in violation. At the jobsite, approved plans shall be made available when requested by inspection personnel.

GRAY ELECTRICAL CONSULTING + ENGINEERING, CORP
2529 PROFESSIONAL PARKWAY
SUITE A - ADDRESS CHANGE EFFECTIVE 12/1/2024
SANTA MARIA, CA 93455
ADMIN@GRAYELECTRICALCORP.COM
WWW.GECECORP.COM

STAMP:

REGISTERED PROFESSIONAL ENGINEER
ANTHONY GRAY
NO.E18927
ELECTRICAL
STATE OF CALIFORNIA

EXPIRES: 12.31.2024
GECE #2309

DATE: 6/28/2024

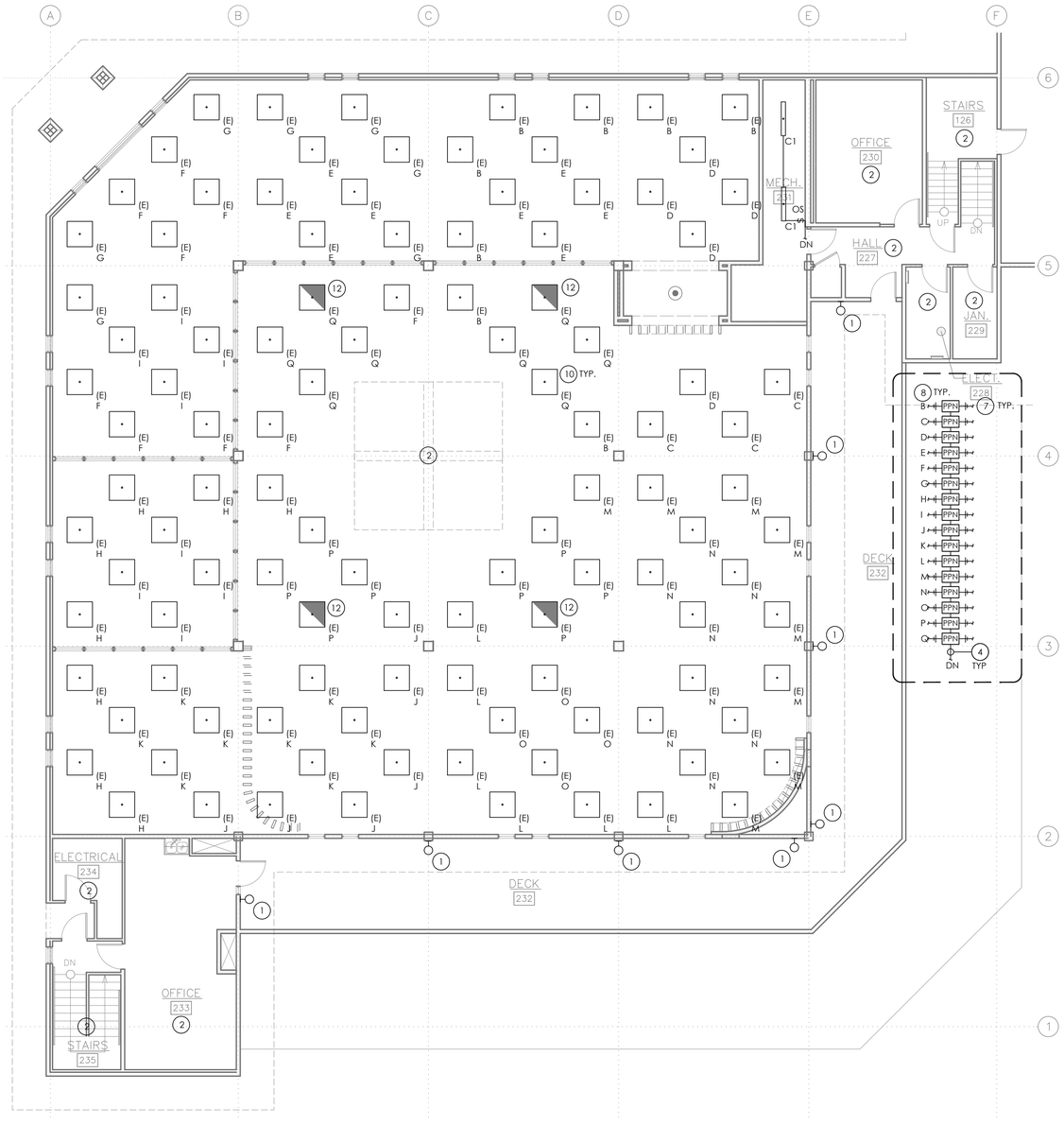
REVISIONS:

1. **Plan Check 1**
   **County of SLO, 10/28/24**
2. **Plan Check 2**
   **County of SLO, 12/11/24**

JOB NUMBER:

SHEET:

**E3.1**




# UPPER FLOOR LIGHTING PLAN

SCALE: 1/8" = 1'0"

## REFERENCE NOTES

(#) GENERAL NOTE: REFERENCE NOTES ARE TYPICAL FOR SHEETS E3.1-E3.2. ALL REFERENCE NOTES MAY NOT OCCUR ON THIS SHEET.

1. EXISTING EXTERIOR WALL SCONCE TO BE REPLACED IN PLACE. PROVIDE ANP LIGHTING WG012-1-FR-M010LD-D-W-30K-XX-WM1211-73 OR ENGINEERING APPROVED EQUAL. ALTERATION DOES NOT INCREASE CONNECTED LIGHTING LOAD, EXCEPTION 1 TO CEC SECTION 141.0(b)2Lii APPLIES.
2. EXISTING LIGHTING DEVICES TO REMAIN.
3. LOW VOLTAGE LIGHTING CONTROL SYSTEM GROUPING AS PER LIGHTING SCHEDULES. COORDINATE WITH ENGINEER APPROVED MANUFACTURER SUBMITTAL. TYPICAL. LOW VOLTAGE CAT5E EXTENSION TO WALL POD TO CONTROL.
4. INTERCONNECT LOW VOLTAGE OCCUPANCY SENSORS WITH CAT5E LIGHTING CONTROL WIRING TO POWER PACK AS PER MANUFACTURER REQUIREMENTS. TYPICAL.
5. INSTALL POWER PACKS IN A ACCESSIBLE LOCATION.
6. EXTEND UN-SWITCHED BRANCH CIRCUIT CONNECTION TO EXIT SIGNAGE. TYPICAL.
7. INTERCEPT EXISTING BRANCH CIRCUIT AT SWITCH PANEL TO BE DEMOLISHED. EXTEND TO NEW POWER PACK LOCATION. CIRCUITING AND LOAD TO BE REMAIN. LIGHTING CONTROLS REVISION ONLY. NOTE: DIMMING CAPABILITIES NOT REQUIRED. EXISTING LIGHTING TO BE CONNECTED TO THE NEW LIGHTING SYSTEM FOR SWITCHING CAPABILITY. (B1)
8. EXISTING SWITCHING TAGS TO REMAIN.
9. NEW WALL POD CONTROL TOUCH SCREEN DIGITAL TIME CLOCK, ACUITY BRANDS nDTC WH OR ENGINEERING APPROVED EQUAL.
10. LUMINAIRES IN LIBRARY TO REMAIN ONLY LIGHTING CONTROLS ADDED. EXCEPTION 5 TO SECTION 141.0(b)2I APPLIES.
11. ONE FOR ONE LUMINAIRE ALTERATION IN READING AREA OF LESS THAN 50 LUMINAIRES LIGHTING CONTROLS ADDED. EXCEPTION 5 AND 6 TO CEC SECTION 141.0(b)2I APPLIES. ENSURE LIGHTING CONTROLS DIM LUMINAIRES TO 50% AT ALL TIMES.
12. EXISTING LUMINAIRE INSTALLED WITH EMERGENCY POWER PACK.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PROJECT:

**Arroyo Grande Library**

**APN: 007-011-050**
**800 W. Branch Street,**
**Arroyo Grande, CA 93420**

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SHEET CONTENTS:

**UPPER FLOOR LIGHTING PLAN**

CONSULTANT:


GECE
GRAY ELECTRICAL CONSULTING + ENGINEERING, CORP
2529 PROFESSIONAL PKWY
SUITE A - P.O. BOX #368
SANTA MARIA, CA 93455
P. 805-361-0525
E.INFO@GECECORP.COM
WWW.GECECORP.COM


STAMP:

REGISTERED PROFESSIONAL ENGINEER
HEATHER ANN GRAY
NO.E18927
ELECTRICAL
STATE OF CALIFORNIA
EXPIRES: 12.31.2025
GECE #2309

DATE: 6/28/2024

REVISIONS:

1 **Plan Check 1**
**County of SLO, 10/28/24**

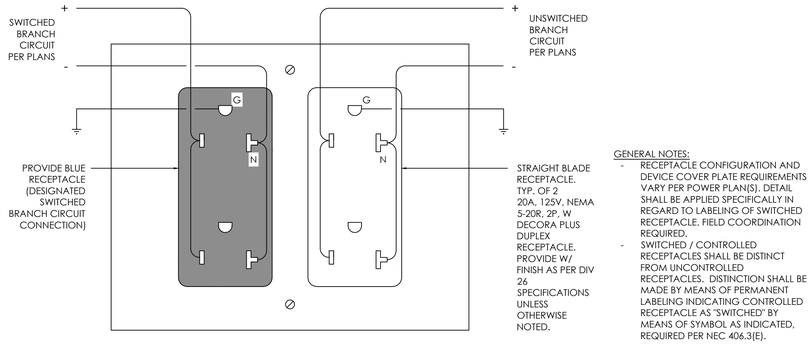
2 **Plan Check 2**
**County of SLO, 12/11/24**

B1 **Bid Set Update**
**Dated, 07/25/2025**

JOB NUMBER:

SHEET:

**E3.2**

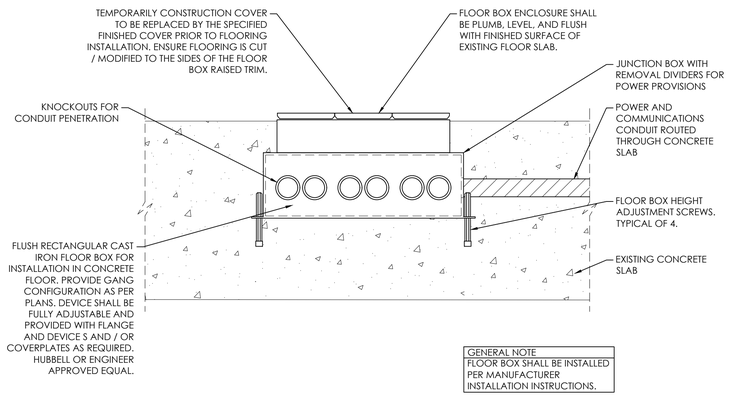



GENERAL NOTES:

- RECEPTACLE CONFIGURATION AND DEVICE COVER PLATE REQUIREMENTS VARY PER POWER PLAN(S). DETAIL SHALL BE APPLIED SPECIFICALLY IN REGARD TO LABELING OF SWITCHED RECEPTACLE. FIELD COORDINATION REQUIRED.
- SWITCHED / CONTROLLED RECEPTACLES SHALL BE DISTINCT FROM UNCONTROLLED RECEPTACLES. DISTINCTION SHALL BE MADE BY MEANS OF PERMANENT LABELING INDICATING CONTROLLED RECEPTACLE AS "SWITCHED" BY MEANS OF SYMBOL AS INDICATED, REQUIRED PER NEC 406.3(E).

## 1 DUPLEX RECEPTACLE - SWITCHED AND UNSWITCHED

SCALE: NOT TO SCALE




GENERAL NOTE
FLOOR BOX SHALL BE INSTALLED PER MANUFACTURER INSTALLATION INSTRUCTIONS.

## 2 FLOOR BOX AT CONCRETE SLAB

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SHEET CONTENTS:

**ELECTRICAL DETAILS**

CONSULTANT:

COUNTY OF SLO PLANNING AND BUILDING
REVIEWED FOR CODE COMPLIANCE
by Matt Vavrek
Permit No: CAL T2024-00055 Date: 06/07/2024
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STAMP:

EXPIRES: 12.31.2024
GECE #2309

DATE: 6/28/2024

REVISIONS:

1 **Plan Check 1**
**County of SLO, 10/28/24**

2 **Plan Check 2**
**County of SLO, 12/11/24**

JOB NUMBER:

SHEET:

**E4.1**

# ALTERNATE 5 - CEILING PLANS

Library Renovation & Addition

# ARROYO GRANDE LIBRARY

800 West Branch Street, Arroyo Grande, CA 93420

## SYMBOLS

- 1 — sheet reference note
- 34 / A9.0 — detail reference: detail number / sheet number
- 1 — door number
- A — window letter
- 1 / A1 — interior elevation: elevation number / sheet number — direction of view
- 1 / A1 — building section: section number / sheet number — direction of view
- 1:12 — roof slope: indicates roof slope and direction of slope
- N — north marker: page north/true north
- Title / Elevation — height/elevation marker
- 1 — revision marker
- international symbol of accessibility

## ABBREVIATIONS

| | | | |
|---|---|---|---|
| ac | air conditioner | in | inch |
| aff | above finish floor | info | information |
| al | aluminum | jan | janitor |
| approx | approximately | lam | laminated |
| asph | asphalt | lav | lavatory |
| avg | average | lb/# | pound |
| bldg | building | lf | linear foot |
| blk/blkg | block/blocking | max | maximum |
| bm | beam | mech | mechanical |
| bot | bottom | manu/mfr | manufacturer |
| cf | cubic foot | min | minimum |
| ci | cubic inch | misc | miscellaneous |
| cj | ceiling joist/control joint | (n) | new |
| cl | center line | ng | natural grade |
| clr | clear/clearance | no./# | number |
| clg | ceiling | nts | not to scale |
| cmu | concrete masonry unit | o/ | over |
| col | column | oc | on center |
| conc | concrete | os | occupancy sensor |
| conn | connection | oz | ounce |
| const | construction | ph | phone |
| cont | continuous | pl | plate/property line |
| ctr | center | plywd | plywood |
| cw | cold water | prefab | pre-fabricated |
| cy | cubic yard | psf | pounds per square foot |
| dbl | double | psi | pounds per square inch |
| deg | degree | ptdf | pressure treated douglas fir |
| dept | department | r | riser |
| det | detail | rd | roof drain |
| df | douglas fir | ref | refrigerator |
| dia | diameter | req | required |
| dim | dimension | rm | room |
| dn | down | row | right of way |
| ds | downspout | rwd | redwood |
| dw | dishwasher | s4s | surfaced 4 sides |
| ea | each | sc | solid core |
| elec | electrical | sd | smoke detector |
| elev | elevation/elevator | sf | square foot |
| eos | edge of slab | sht | sheet |
| eq | equal | shtg | sheathing |
| equip | equipment | sim | similar |
| exist/(e) | existing | spec | specification |
| ext | exterior | sst | stainless steel |
| fau | forced air unit | std | standard |
| fh | fire hydrant | stl | steel |
| foc | face of curb | tbg | tongue and groove |
| fof | face of finish | t | tread |
| fos | face of stud | thk | thick (ness) |
| fd | floor drain | tel | telephone |
| fdn | foundation | temp | temperature |
| fe | fire extinguisher | toc | top of curb |
| ff | finish floor | tof | top of footing |
| fg | finish grade | tow | top of wall |
| fin | finish | tos | top of slab |
| fix | fixture | tv | television |
| flr | floor | typ | typical |
| fos | face of stud | u.n.o | unless noted otherwise |
| fp | fireplace or floor plan | vct | vinyl composition tile |
| fs | finish surface | vert | vertical |
| ft | foot | v.i.f | verify in field |
| ftg | footing | w/ | with |
| g | gas | w/o | without |
| galv | galvanized | wc | water closet |
| gd | garbage disposal | wd | wood |
| gyp | gypsum | wh | water heater |
| hb | hose bibb | wic | walk in closet |
| hc | hollow core | wp | waterproof |
| hdr | header | wui | wildland urban interface |
| hw | hot water | yd | yard |

## CALIFORNIA CODE REFERENCES

1. This project shall comply w/all current applicable codes and ordinances, including but not limited to:
   2022 California Building Code, Volumes 1 & 2
   2022 California Plumbing Code
   2022 California Mechanical Code
   2022 California Electrical Code
   2022 California Energy Code
   2022 California Green Building Code
   2022 California Fire Code
   2022 California Reference Standards Code
   Grading - CBC Appendix J
   County of San Luis Obispo Building & Construction Ordinance: Title 19
   County of San Luis Obispo Land Use Ordinance: Title 22
   County Fire Code Ordinance - Title 16

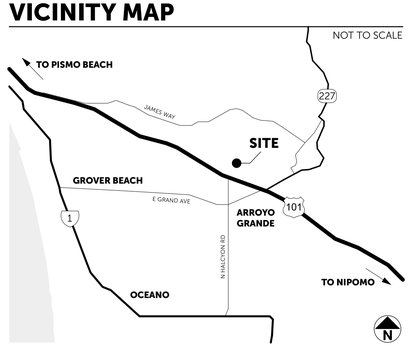
## DIRECTORY

5

| | |
|---|---|
| Owner. | COUNTY OF SAN LUIS OBISPO<br>Department of Public Works<br>County Government Center, Room 206<br>San Luis Obispo, CA 93408 |
| Architect of Record. | REISS DESIGN STUDIO, PC.<br>Shana Reiss, President, C-32912<br>735 Tank Farm Road, Suite 150<br>San Luis Obispo, CA 93401<br>Phone: (805) 706-0645<br>Email: shana@reissdesignstudio.com |
| Civil Engineer. | WALSH ENGINEERING<br>Matthew Walsh, Lic. #79026<br>1108 Garden Street, Suite 202-204<br>San Luis Obispo, CA 93401<br>Phone: (805) 319-4948<br>Email: matt@walshengineering.net |
| Structural Engineer. | ASHLEY & VANCE ENGINEERING, INC.<br>Ian Shoebridge, PE S6293<br>1229 Carmel Street<br>San Luis Obispo, CA 93401<br>Phone: (805) 545-0010<br>Email: ian@ashleyvance.com |
| Electrical Engineer. | GRAY ELECTRICAL CONSULTING + ENGINEERING, CORP<br>Heather Gray, License E18927<br>PO Box #368 - 2529 Professional Parkway, Suite A<br>Santa Maria, CA 93455<br>Phone: (805) 361-0525<br>Email: heather@gececorp.com |
| Mechanical & Plumbing. | BMA MECHANICAL +<br>Brandon Rodgers, Lic. M33682<br>689 Tank Farm Road, Suite 240<br>San Luis Obispo, CA 93401<br>Phone: (805) 544-4269<br>Email: brandonr@bmaslo.com |
| Fire Protection Engineer. | PTRUTNER FIRE PROTECTION ENGINEERING, INC.<br>Paul Trutner, PE CA No. 1934<br>2470 Stearns Street #280<br>Simi Valley, CA 93063<br>Phone: (805) 297-3100<br>Email: paul@ptrutnerfpe.com |

## VICINITY MAP

NOT TO SCALE




## PLANNING INFORMATION

**ZONING** Public Facility
COMMUNITY/ PLANNING AREA City of Arroyo Grande

**FIRE INFORMATION**
JURISDICTION Arroyo Grande City Fire
HAZARD ZONE LRA - Local Responsibility Area

**SETBACKS/YARDS**

| | | |
|---|---|---|
| Existing to Remain | Front/Street Setback | 25'0" |
| Existing to Remain | Side Yard | 25'0" |
| Existing to Remain | Rear/Other Yard | 25'0" |

**LOT COVERAGE**

| | | |
|---|---|---|
| ALLOWED | Building Coverage | 60% |
| EXISTING TO REMAIN | Building Coverage | 10% |

**MAXIMUM HEIGHT**
ALLOWED 35'0"
EXISTING TO REMAIN 28'0"

**BUILDING AREAS**

**Existing Floor Areas** Lower Floor

| | |
|---|---|
| General Library | 8,347 S.F. |
| Restrooms/Circulation/Walls | 1,056 S.F. |
| Storage | 114 S.F. |
| Staff Area & Offices | 1,230 S.F. |
| Total Lower Floor | 10,747 S.F. |
| Upper Floor | |
| Staff Area | 1,220 S.F. |
| Total Upper Floor | 1,220 S.F. |
| **Total Conditioned Existing Building** | **11,967 S.F.** |
| Covered Porch/Entry | 1,864 S.F. |
| Upper Balcony | 1,536 S.F. |
| Total Building Area | 15,367 S.F. |

**Proposed Floor Areas** Lower Floor

| | |
|---|---|
| General Library | 8,340 S.F. |
| Restrooms/Circulation | 1,127 S.F. |
| Storage | 227 S.F. |
| Staff Area & Offices* | 1,813 S.F. |
| (N) Veterans Space* | 259 S.F. |
| Total Lower Floor | 11,766 S.F. |
| Upper Floor | |
| (N) Mechanical* | 192 S.F. |
| Staff Area | 1,220 S.F. |
| Total Upper Floor | 1,412 S.F. |
| **Total Conditioned Proposed Building** | **13,178 S.F.** |
| (E) Covered Entry | 356 S.F. |
| (E) Covered Porch/ Patio | 471 S.F. |
| (E) Upper Balcony | 1,536 S.F. |
| Total Building Area | 15,541 S.F. |
| (N) Uncovered Patio/Flatwork | 373 S.F. |

**PARKING CALCS**

Parking calculations for reference, refer to County permit PMT-CALT2023-00008 for parking calculations and information to serve the site.
REQUIRED Libraries 1/500 s.f.
14,467 / 500 = 29 spaces
Per SLO Municipal Code 22.18.050, (1) handicapped parking space is required

## REQUIRED SPECIAL INSPECTIONS

The following items shall require special inspections in accordance with CBC Chapter 17, and the Jurisdiction requirements. Confirm any additional special inspection items with Building Inspector at pre-construction meeting. Special inspectors shall be a qualified person who shall demonstrate competence to the satisfaction of the Building Official. Names and qualifications shall be submitted to the Building Department for approval prior to performing work.

1. Refer to sheet T4.1, Required Special Inspections.
2. Also refer to sheet S-1.3, Special Inspections.

1

## STATEMENT OF COMPLIANCE

This Project has been designed in accordance with and meets the County adopted building code and ordinance requirements including, but not limited to, the California State Accessibility Standards and I/we will be responsible for all clarifications deemed necessary during the construction phases.

Shana Reiss, C-32912

## CONDITIONS

Fire Sprinkler permit and approved plans to be on job site.

1

## PROJECT DATA

**SCOPE OF WORK**
A proposal for the renovation and addition to the Arroyo Grande Library. The project includes: the renovation of 11,967 S.F. of existing conditioned space. There will be a second floor mechanical room added of 192 S.F.. There will be an enclosure of the existing covered walkway space of 1,019 S.F. into conditioned area. The total conditioned space will be 13,178 S.F.. Patio space will include added 373 S.F. of flatwork. The renovation will include an interior layout rework as well as remodel of existing restrooms, including one new family restroom to comply with accessibility and fixture quantity requirements. The second floor will include a new mechanical room to support remodel, but otherwise there is no modification to the existing use or design, so access improvements to the existing stairs are not necessary. The entire library portion of the larger building will receive a new commercial fire sprinkler system and a 2-hour fire rated wall will separate the library portion from the remainder of the larger building (South County Regional Center).

1

The South County Regional Center is NOT part of the scope of this project. The existing covered porch will be partially infilled to create new interior area. The County of San Luis Obispo is the jurisdiction in charge of review on all items of this submittal except fire as that will be reviewed by the City of Arroyo Grande.

The jurisdictions involved have agreed that at such time that the requirements for a fire sprinkler systems outlined in Table 903.2 - Automatic Fire Sprinkler System Requirements for Existing Construction are met within the scope of a project planned at the South County Regional Center, the County of San Luis Obispo will comply accordingly.

**PROJECT ADDRESS** 800 W Branch St, Arroyo Grande, California 93420

**APN** 007-011-050

**LEGAL DESCRIPTION** CY AG PM 44/96 PTN PAR 3

**LOT SIZE** 13.11 Acres

**UTILITIES** Electricity - PG&E
Natural Gas - Southern California Gas Company
Water - Golden State Water Company
Sewer - South SLO County Sanitation District

**RELEVANT PMTs** CALT2023-00008 Site Work/ Maintenance PMT
BLD24-000388 Fire Sprinkler & Fire Alarm (City of AG)

1

## BUILDING INFORMATION

**REQUIRED**

| | | |
|---|---|---|
| FIRE SPRINKLERS | Required | YES |
| | Proposed | YES |

Refer to scope of work above for Fire Sprinkler scope clarification.

**CONST. TYPE** V-B

**OCCUPANCY GROUP** A3

| | |
|---|---|
| ALLOWABLE AREA | 6,000 SF. w/o fire sprinklers<br>24,000 SF. w/ fire sprinklers |
| MAX. HEIGHT | 40' w/o fire sprinklers<br>60'/(2) Stories w/ fire sprinklers |

## GENERAL NOTES

1. In the event archaeological resources are unearthed or discovered during any construction activities, the following standards apply:
   a. Construction activities shall cease, and the County/City of jurisdiction shall be notified, so that the extent and location of discovered materials may be recorded by a qualified archaeologist, and disposition of artifacts may be accomplished in accordance with State and Federal law.
   b. In the event archaeological resources are found to include human remains, or in any other case when human remains are discovered during construction, the County/City coroners shall be notified so proper disposition may be accomplished.
2. All materials, finishes, manufactured items, and equipment shall be installed in full accordance with the supplier's or manufacturer's written recommendations or these documents, whichever is more stringent.
3. No hazardous materials which exceed the quantities listed in CBC Tables 307.1 shall be stored and/or used within the building.
4. All notes provided referencing current and adoped local codes, including but not limited to the CBC, CMC, CPC, CRC, CEC, CEnC, Cal Green, and all applicable California Title 24 energy requirements are provided herein for convenience only. Actual codes will always take precedence. It is the responsibility of the Contractor to know, verify, or confirm all code requirements and not rely soley upon listed notes.
5. The buildings described on the following pages are required to be equipped with a fire sprinkler system. Shop drawings shall be submitted and approved by the City/County of jurisdiction Building and Fire Department prior to installation of the system. System design shall meet all requirements of State Fire Marshal, NFPA and City/County of jurisdiction regulations. Sprinkler shop drawings shall be submitted and approved prior to rough framing inspection.
6. Remodeling pre-1978 structures without using lead safe work practices is a violation of the California Health and Safety Code Section 105256. Contractors, Remodelers, and Painters are required to use 'Lead-Safe' work practices pursuant to Title 17, California Code of Regulations Section 36050. Construction debris known to contain lead based paint must be disposed of at an approved location. Contact the Architect.
7. Contractor should schedule periodic site meetings, and foremen for each trade relevant to progress or upcoming work should be included in meeting. Subcontractor to be made aware of this and it shall be outlined in their contract for services with the contractor.
8. Prior to commencement of construction, the General Contractor shall schedule a pre-construction meeting at the project site with all parties to review special inspection requirements, procedures and special inspectors that will be assigned to the project.
9. The General Contractor shall be responsible for verification of all existing conditions and shall field verify all dimensions prior to commencement of work. Any discrepancies shall be brought to the immediate attention of the Architect.
10. The General Contractor shall be responsible for implementing and monitoring the approved erosion and sedimentation control plan. Refer to Civil sheets.
11. The General Contractor shall provide and maintain portable fire extinguishers on-site during construction, per California Fire Code Section 906.
12. Contractor shall review these plans thoroughly, make a detailed site visit, and shall immediately bring any inconsistency, site layout problem, or any other request for clarification to the Architect for resolution prior to the delivery of any bid. Failure to do so shall cause the Contractor to be ineligible for extras relating to such matters.
13. Contractor shall submit reproducible shop drawings to Architect for Owner's, Architect's, and Engineer's approval.
14. Contractor shall coordinate with all trades to provide complete working systems.
15. Contractor is responsible for the safety, actions and conduct of his employees and his subcontractors' employees while in the project area, adjacent areas and in the building and its vicinity.
16. The General Contractor shall compile an Operation & Maintenance Manual to be placed in the building and provided to building Owner at time of final inspection per CalGreen 4.410 or 5.410.
17. Prior to final inspection, General Contractor shall complete and sign CF-6R form. The completed form must be available to the Building Inspector at the final inspection and a copy of the CF-6R form given to the Owner.
18. Refer to Cal Green Notes and Checklist for additional Contractor Responsibility requirements.
19. Drawings of existing facilities are, in general, diagrammatic. Exact locations shall be determined by the Contractor from field measurements taken by Contractor's personnel. Actual arrangement of the work shall follow locations shown on the drawings within the constraints of existing equipment and construction. Dimensions shall govern these drawings and they are not to be scaled. Drawings and notes to drawings are correlative and have equal authority and priority. Should there be discrepancies in themselves or between them, Contractor shall base bid pricing on the most expensive combination of quality and/or quantity of the work indicated. In the event of discrepancies, the appropriate method of performing the work and/or items to be incorporated into the scope of the work shall be determined by the Architect or Engineer.
20. All dimensions to window and doors, including centerlines, are to be maintained. Upon selection of window and door brands if any discrepancies or conflicts are found, whether to accommodate structural, framing, or other, the General Contractor shall notify the Architect immediately and prior to approving any change to sub contractors or installers, so as to allow for coordination of other affected items such as lighting, fixtures, appliances, cabinetry, and finishes.

## SHEET INDEX


| | | |
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| T2.2 | OCCUPANCY & EGRESS UPPER FLOOR | |
| T3.1 | CAL GREEN CHECKLIST | |
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| ADA1.2 | ACCESSIBILITY NOTES & STANDARD DETAILS | |
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| C1.0 | COVER SHEET | |
| C2.0 | NOTES | |
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| 1 B1 103 | TOTAL SHEETS | |


## DETACHED SUPPORTING DOCUMENTS

| | |
|---|---|
| Specifications Book (RDS, V2) | Date: 10/28/2024 |
| Hydraulic Calculations (Alpha Fire, #23-00002) | Date: 06/18/2024 |
| Structural Calculations *(Ashley & Vance,#22373)* | Date: 03/29/2024 |
| Soils Report Memo (Ashley & Vance, #22373) | Date: 10/22/2024 |
| Title 24/Energy Compliance *(BMA, AG Library)* | Date: 10/25/2024 |
| BLD-1031 | Date: 10/28/2024 |
| SWCP Waiver | Date: 10/28/2024 |

1

## REQUIRED SEPARATE PERMIT

1. Fire sprinkler plans and calculations - Approved under Arroyo Grande permit BLD24-000388/ 24F-6440, 24F-4677.
2. Fire alarm plans - Approved under Arroyo Grande permit BC25-001000/ 25F-0110.

2


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PROJECT:
Renovation & Addition

**Arroyo Grande Library**
APN: 007-011-050
800 W. Branch Street
Arroyo Grande, CA 93420

CLIENT:
County of San Luis Obispo
Department of Public Works
County Goverment Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:
**TITLE SHEET**

CONSULTANT:
B1 Bid Set Update 07/25/2025
TB T-Bar Replacement Alternate County of SLO, 08/28/25

STAMP:
LICENSED ARCHITECT C-32912 SHANA MARIE REISS REN. 09-30-25 STATE OF CALIFORNIA

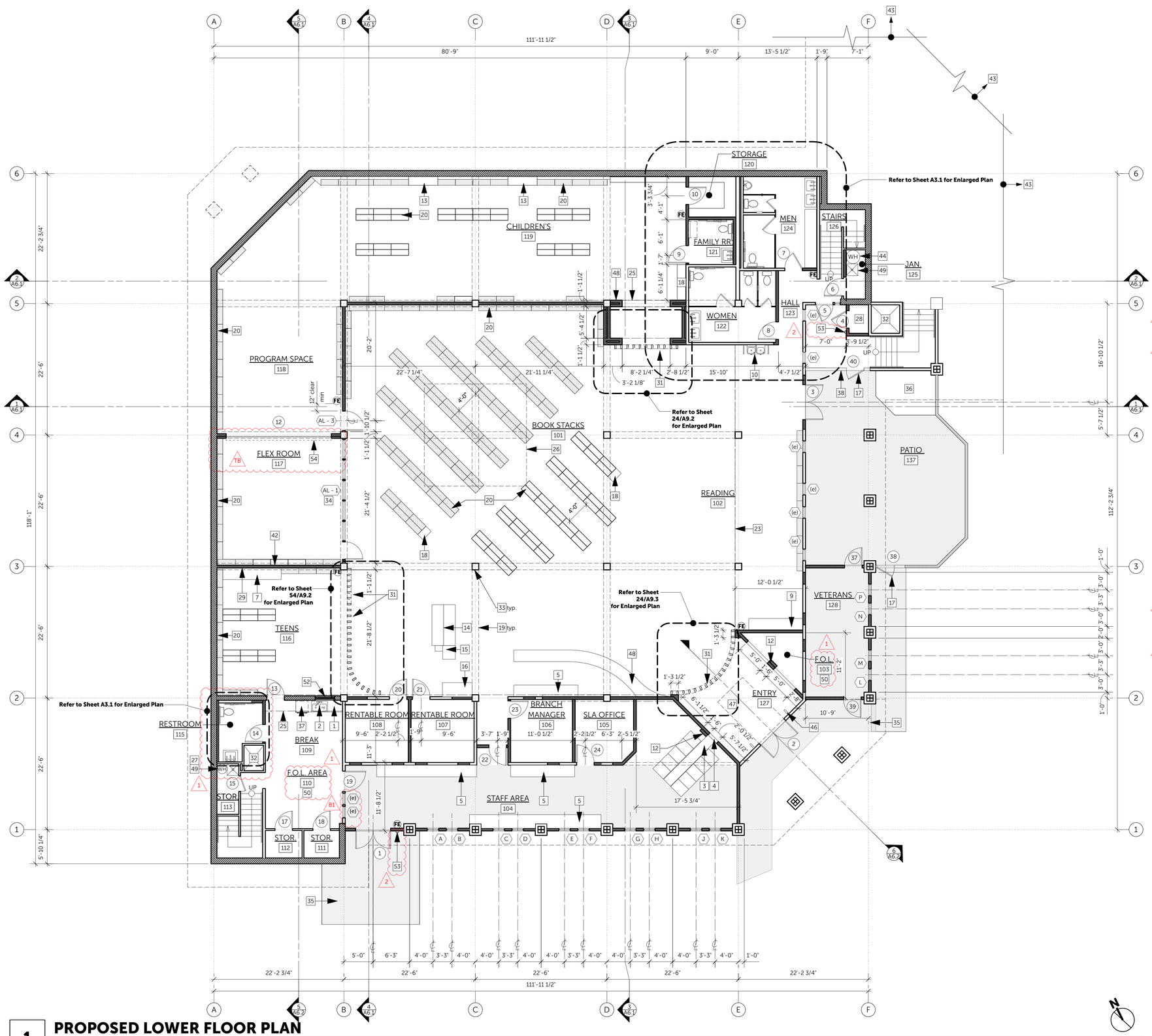
DATE:
April 4, 2024

REVISIONS:
1 Plan Check 1 County of SLO, 10/28/2024
2 Plan Check 2 County of SLO, 01/22/2025
3 Owner Revision Roof Deck, 03/10/2025
4 Engineer Update 05/27/2025
5 Engineer Update 05/30/2025

JOB NUMBER:
2308

SHEET:
T1.0


Date: September 16, 2025 Time: 2:50:55 PM File name: 01_02_Arroyo Grande Library_CA_Title_Site.vwx




# 1 PROPOSED LOWER FLOOR PLAN

Scale: 1/8" = 1'-0"

## FLOOR PLAN GENERAL NOTES

1. Do not scale drawings.
2. All dimensions shall be field verified prior to commencement of work. If any variation, discrepancy or omission is found, the Contractor or Sub-contractor shall notify the Architect in writing and obtain written resolution from Architect prior to proceeding with any work.
3. All new walls shall be 2x6 framing with insulation or per Title 24, U.N.O. Refer to Wall Legend. Infill walls to match (e) wall thickness.
4. STAIRWAYS
   Existing stairwells to remain untouched. No significant work proposed upstairs. Due to no public access upstairs, and offices upstairs matching offices downstairs, the stairwell will remain as it is currently with no modifications.
5. BOOK STACKS
   Library book stacks available for public use shall be 54 inches maximum above the finish floor. Book stacks available for public use may be higher than 54 inches maximum above the finish floor when an attendant is available to assist persons with disabilities. Book stacks restricted to employee use are not required to comply with these requirements. CBC 11B-225.2.3

## FLOOR PLAN REFERENCE NOTES

1. (N) Base Cabinet and Countertop with 6" min. splash
2. (N) Sink, refer to Plumbing Plans and knee clearance detail 21/ADA1.1
3. (N) AMH supplied and installed by owner
4. (N) +34" Book Drop, refer to detail 44/A9.4
5. (N) +34" Counter height Cabinetry, see Electrical Plans for outlet charging locations
6. Not used
7. (N) Bench seating and desk, see Electrical Plans for outlet locations, and detail 22/A9.4.
8. (N) +34" Help Desk, refer to 54/A9.3
9. (N) +42" Laptop Bar, refer to Electrical Plans
10. (N) Drinking Fountain, refer to Plumbing Plans and detail 21/ADA1.2
11. (E) Sink to remain
12. (N) Structural column, refer to Structural Plans
13. (N) Built in wall cubby, refer to detail 24/A9.4.
14. (N) Computer Station - refer to Electrical and Structural Plans. Equipment and furniture by Owner.
15. (N) Copy Station. Provide power/ data. Equipment & furniture by Owner.
16. (N) Printing Station. Provide power/ data. Equipment & furniture by Owner.
17. (N) 36" wide gate, refer to Door Schedule on A8.1 and provide alarm
18. Proposed location for electronic catalogs - refer to Electrical and Structural Plans
19. (E) Structural beam
20. Book Stacks, +40" @ 3 shelves, and +66" @ 5 shelves, refer to wall legend. To be OFCI (Owner Furnished, Owner Installed)
21. (E) Deck, refer to A4.5, reference note #12.
22. Electrical Panel, see Electrical Plans
23. Line indicates floor above
24. Line indicates floor below
25. Soffit above, refer to RCP
26. (N) Skylight above
27. (E) Water Heater, to be reinstalled. Refer to Demo and Plumbing Plans.
28. (N) Fire Riser room
29. (N) Bench and TV area
30. (N) Mechanical Chase
31. (N) Decorative Slat wall, refer to sheet 24/A9.2, 54/A9.2, 24/A9.3
32. (E) Mechanical Chase
33. (E) Structural column
34. (N) Storefront System, refer to A8.1
35. Area of re-poured concrete slab, see Civil Plans.
36. (N) Planter
37. (N) Undercounter Fridge
38. (N) Fence, refer to Civil Plans
39. (E) Parapet to remain
40. Line indicates roof above
41. Line indicates roof below
42. (N) Accent TV wall area
43. Roof connection to remain (not in scope)
44. (N) Water heater, refer to Plumbing Plans
45. (E) Planter to remain, refer to Civil Plans
46. (N) RFID book alarm, supplied and installed by Owner
47. Recessed carpet tiling at entry, see Interior Finish Schedule on sheet A8.1. Carpeted area to be 6-ft wide by 10-ft deep.
48. (N) Self-checkout location. Provide power/data, equipment by Owner.
49. (N) Floor/ Mop sink per Plumbing Plans
50. F.O.L. is acronym for Friends of Library
51. (E) 2-hr fire rated wall to remain.
    (N) 2-hr fire rated wall to be constructed as a continuation of existing fire rated wall. See detail 53/A9.1 for wall assembly. Noted by heavy dashed lines at grid line F, between gridlines 4-6.
52. 2x4 Wood wall infill, refer to Structural Plans. All 2x4 wood to be pressure treated where it touches CMU. Gypsum board finish along both sides of the wall.
53. (N) Knox Box, per fire deparment jurisdiction requirements. Also see Door Schedule on A8.1 and AS1.1
54. (N) Sectional overhead roll up door, refer to specifications. Furr-out wall to be flush with beam above on Flex Room side to accommodate vertical track.

## WALL LEGEND

- (E) 2x Wall to be demolished
- (E) 2x Wall to remain
- (E) CMU Wall to remain
- (N) 2x6 Wall @ 16" o.c.
- (N) 2x4 Wall @ 16" o.c.
- FE — Fire extinguisher and cabinet. Mount at +48" at centerline of valve handle. At doors maintain strike side clearances
- Book stacks , + 66" tall @ 5 shelves
- Book stacks , + 40" tall @ 3 shelves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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Goverment Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**PROPOSED LOWER FLOOR PLAN**

CONSULTANT:

STAMP:

LICENSED ARCHITECT C-32912 SHANA MARIE REISS REN. 09-30-25 STATE OF CALIFORNIA

DATE:

July 2, 2024

REVISIONS:

1 Plan Check 1 County of SLO, 10/28/2024
2 Plan Check 2 County of SLO, 01/22/2025
B1 Bid Set Update 07/25/2025
TB T-Bar Replacement Alternate County of SLO, 08/28/25

JOB NUMBER:

2308

SHEET:

A2.1

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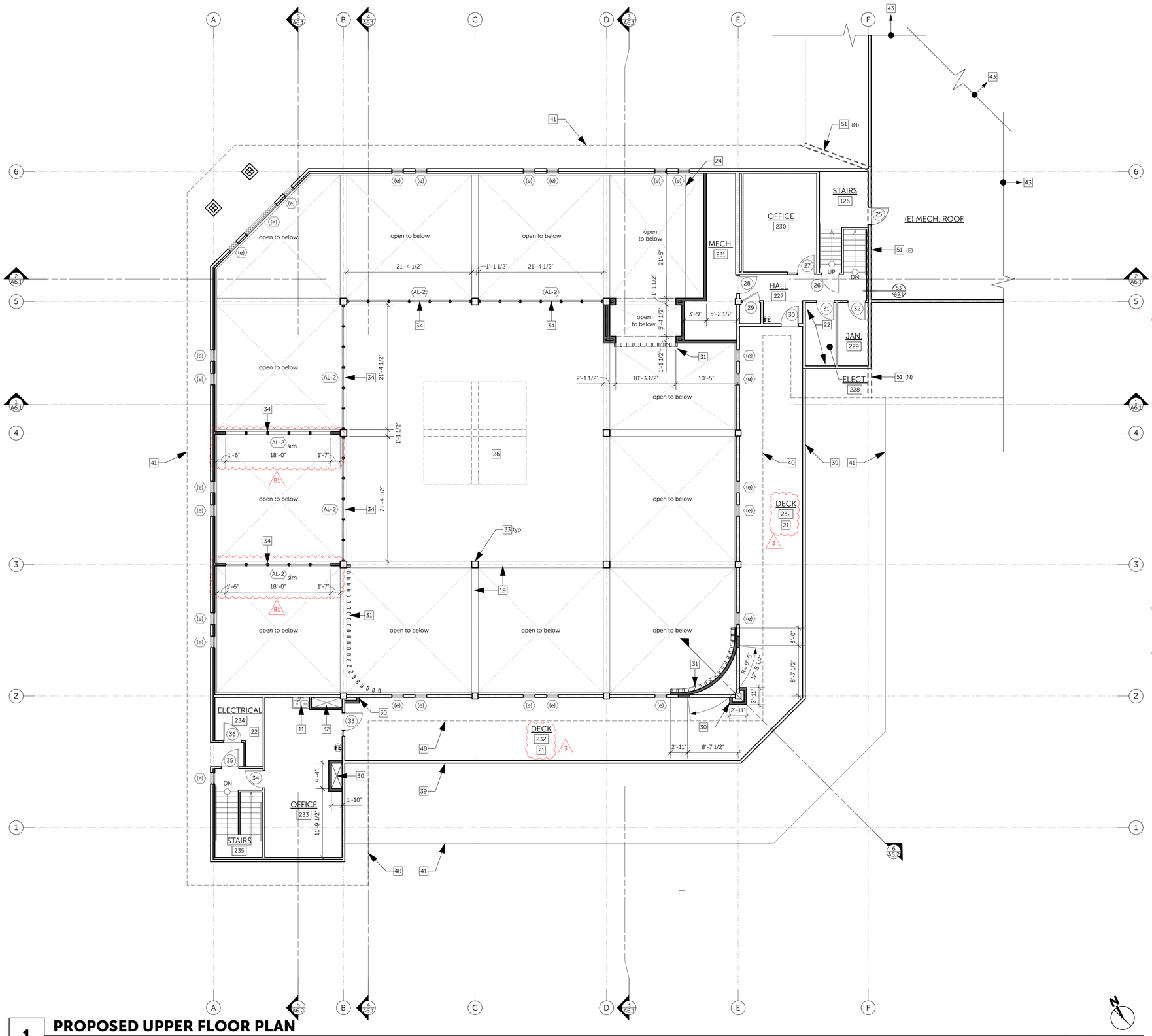


# FLOOR PLAN GENERAL NOTES

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# FLOOR PLAN REFERENCE NOTES

1. (N) Base Cabinet and Countertop with 6" min. splash
2. (N) Sink, refer to Plumbing Plans and knee clearance detail 21/ADA1.1
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9. (N) +42" Laptop Bar, refer to Electrical Plans
10. (N) Drinking Fountain, refer to Plumbing Plans and detail 21/ADA1.2
11. (E) Sink to remain
12. (N) Structural column, refer to Structural Plans
13. (N) Built in wall cubby, refer to detail 24/A9.4.
14. (N) Computer Station - refer to Electrical and Structural Plans. Equipment and furniture by Owner.
15. (N) Copy Station. Provide power/ data. Equipment & furniture by Owner.
16. (N) Printing Station. Provide power/ data. Equipment & furniture by Owner.
17. (N) 36" wide gate, refer to Door Schedule on A8.1 and provide alarm
18. Proposed location for electronic catalogs - refer to Electrical and Structural Plans
19. (E) Structural beam
20. Book Stacks, +40" @ 3 shelves, and +66" @ 5 shelves, refer to wall legend. To be OFCI (Owner Furnished, Owner Installed).
21. (E) Deck, refer to A4.5, reference note #12.
22. Electrical Panel, see Electrical Plans
23. Line indicates floor above
24. Line indicates floor below
25. Soffit above, refer to RCP
26. (N) Skylight above
27. (E) Water Heater, to be reinstalled. Refer to Demo and Plumbing Plans.
28. (N) Fire Riser room
29. (N) Bench and TV area
30. (N) Mechanical Chase
31. (N) Decorative Slat wall, refer to sheet 24/A9.2, 54/A9.2, 24/A9.3
32. (E) Mechanical Chase
33. (E) Structural column
34. (N) Storefront System, refer to A8.1
35. Area of re-poured concrete slab, see Civil Plans.
36. (N) Planter
37. (N) Undercounter Fridge
38. (N) Fence, refer to Civil Plans
39. (E) Parapet to remain
40. Line indicates roof above
41. Line indicates roof below
42. (N) Accent TV wall area
43. Roof connection to remain (not in scope)
44. (N) Water heater, refer to Plumbing Plans
45. (E) Planter to remain, refer to Civil Plans
46. (N) RFID book alarm, supplied and installed by Owner
47. Recessed carpet tiling at entry, see Interior Finish Schedule on sheet A8.1. Carpeted area to be 6-ft wide by 10-ft deep.
48. (N) Self-checkout location. Provide power/data, equipment by Owner.
49. (N) Floor/ Mop sink per Plumbing Plans
50. F.O.L. is acronoym for Friends of Library
51. (E) 2-hr fire rated wall to remain.
    (N) 2-hr fire rated wall to be constructed as a continuation of existing fire rated wall. See detail 53/A9.1 for wall assembly. Noted by heavy dashed lines at grid line F, between gridlines 4-6.
52. 2x4 Wood wall infill, refer to Structural Plans. All 2x4 wood to be pressure treated where it touches CMU. Gypsum board finish along both sides of the wall.
53. (N) Knox Box, per fire deparment jurisdiction requirements. Also see Door Schedule on A8.1 and AS1.1.
54. (N) Sectional overhead roll up door, refer to specifications. Furr-out wall to be flush with beam above on Flex Room side to accommodate vertical track.

# WALL LEGEND

- (E) 2x Wall to be demolished
- (E) 2x Wall to remain
- (E) CMU Wall to remain
- (N) 2x6 Wall @ 16" o.c.
- (N) 2x4 Wall @ 16" o.c.
- FE — Fire extinguisher and cabinet. Mount at +48" at centerline of valve handle. At doors maintain strike side clearances

**Scale: 1/8" = 1'-0"**

## 1 PROPOSED UPPER FLOOR PLAN


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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Goverment Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**PROPOSED UPPER FLOOR PLAN**

CONSULTANT:

STAMP:

LICENSED ARCHITECT C-32912 SHANA MARIE REISS 09-30-25 RENEWAL STATE OF CALIFORNIA

DATE:

July 2, 2024

REVISIONS:

1 Plan Check 1 County of SLO, 10/28/2024
2 Plan Check 2 County of SLO, 01/22/2025
3 Owner Revision Roof Deck, 03/10/2025
B1 Bid Set Update 07/25/2025
TB T-Bar Replacement Alternate County of SLO, 08/28/25

JOB NUMBER:

2308

SHEET:

A2.2


Date: September 5, 2025 Time: 12:30:30 PM File name: 03_Arroyo Grande Library_CA_Plans.vwx

# 1 LOWER FLOOR REFLECTED CEILING PLAN

**Scale: 1/8" = 1'-0"**

## RCP GENERAL NOTES

1. Refer to Interior Finish Notes for additional ceiling finish requirements
2. Refer to Lighting Plans for Lighting General Notes and Legend
3. Refer to Building Sections and Structural Plans for description of exposed structural members.
4. All fixtures identified as centered or aligned shall be installed as indicated. Any obstacles that prevent installation at designated locations, such as framing, structural, or otherwise shall be brought to the attention of the Architect.

## RCP REFERENCE NOTES

1. Light Fixture, refer to Electrical Drawings
2. Painted gypsum board ceiling
3. (E) Structural beam
4. Return air per Mechanical Plans
5. Supply air per Mechanical Plans
6. Existing lighting to remain, refer to Electrical Drawings
7. Backing and hook for hanging mobile kinetic bird/butterfly display. Mobile to be supplied by Owner.
8. (N) Soffit or beam, refer to Structural drawings.
9. (E) Exterior wall sconce to be replaced in place, refer to Electrical drawings
10. Provide backing and support for future abstract tree installation. Abstract trees to be provided by Owner.
11. (N) Skylight above
12. (N) Decorative slat wall, refer to sheet 24/A9.2, 54/A9.2, 24/A9.3
13. Center light fixture in room/ space
14. Equally space lighting fixture in space
15. Open to above, refer to A4.2
16. Edge of roof above
17. Edge of roof below
18. (E) Stucco finish to be removed and replaced with painted gypsum board ceiling
19. (E) Supply and Return air vent to be demolished, refer to Mechanical drawings
20. Roof connection to remain (not in scope)
21. Edge of ceiling
22. (E) Stucco to remain
23. (E) Soffit vent to remain
24. (N) Structural beam, refer to structural drawings. Wrap in gypsum board to match ceiling.
25. (N) Sectional overhead roll up door, refer to specifications. Furr-out wall to be flush with beam above on Flex Room side to accommodate vertical track.
26. (N) T-bar ceiling w/ acoustic tile. Ceiling Grid: Armstrong, 15/16" Prelude XL, Acoustical Ceiling Tile: Armstrong, School-Zone Fine Fissured. Install per manufacturer instructions. Standard 2'x4' tiles, unless the tile is clearly cut to fit an irregular space, or is gray. Gray tiles represent tiles that are not 2'x4', but will be cut from a 2'x4' tile. The actual color of the tiles will be consistent throughout the ceiling.
27. (E) Diffuser panel system to remain. Lenses to be replaced in kind with frosted, insulated lenses.
28. Verify dimension of skylight in field. If more than 18'-6"x18'-6", the surround around the skyight will need to be furred out to finish nicely on a clean whole dimension with the t-bar grid.

## RCP LEGEND

- Surface Wall Mounted Light, refer to Electrical drawings
- Pendant Light, refer to Electrical drawings
- Recessed Ceiling Mounted Light, refer to Electrical drawings
- Light Fixture, refer to Electrical drawings
- Light Fixture, refer to Electrical drawings
- Light Fixture, refer to Electrical drawings
- Exhaust Fan, refer to Mechanical drawings
- Supply Air, refer to Mechanical drawings
- Return Air, refer to Mechanical drawings
- Emergency Egress Light Fixture, refer to Electrical drawings
- 1 EM Emergency Egress Lighting, refer to Electrical drawings
- Light Fixture, refer to Electrical drawings
- B1 Emergency Egress Light Fixture, refer to Electrical drawings

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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Goverment Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**LOWER FLOOR REFLECTED CEILING PLAN**

CONSULTANT:

STAMP:

LICENSED ARCHITECT C-32912 SHANA MARIE REISS REN. 09-30-25 STATE OF CALIFORNIA

DATE:

July 2, 2024

REVISIONS:

1 Plan Check 1 County of SLO, 10/28/2024
B1 Bid Set Update 07/25/2025
TB T-Bar Replacement Alternate County of SLO, 08/28/25

JOB NUMBER:

2308

SHEET:

A4.1

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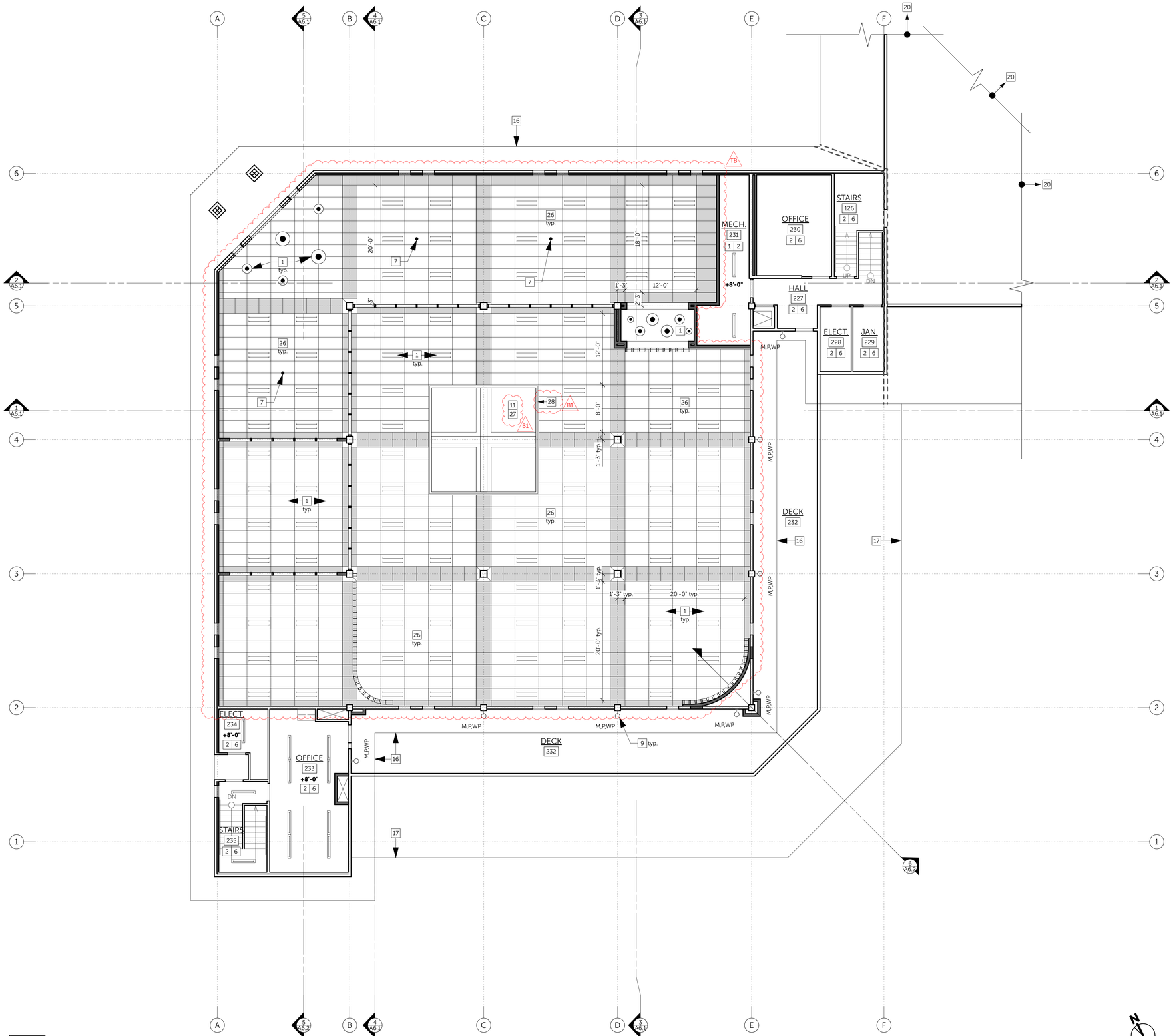
Date: September 9, 2025




# 1 UPPER FLOOR REFLECTED CEILING PLAN

Scale: 1/8" = 1'-0"

## RCP GENERAL NOTES

1. Refer to Interior Finish Notes for additional ceiling finish requirements
2. Refer to Lighting Plans for Lighting General Notes and Legend
3. Refer to Building Sections and Structural Plans for description of exposed structural members.
4. All fixtures identified as centered or aligned shall be installed as indicated. Any obstacles that prevent installation at designated locations, such as framing, structural, or otherwise shall be brought to the attention of the Architect.

## RCP REFERENCE NOTES

1. Light Fixture, refer to Electrical Drawings
2. Painted gypsum board ceiling
3. (E) Structural beam
4. Return air per Mechanical Plans
5. Supply air per Mechanical Plans
6. Existing lighting to remain, refer to Electrical Drawings
7. Backing and hook for hanging mobile kinetic bird/butterfly display. Mobile to be supplied by Owner.
8. (N) Soffit or beam, refer to Structural drawings.
9. (E) Exterior wall sconce to be replaced in place, refer to Electrical drawings
10. Provide backing and support for future abstract tree installation. Abstract trees to be provided by Owner.
11. (N) Skylight above
12. (N) Decorative slat wall, refer to sheet 24/A9.2, 54/A9.2, 24/A9.3
13. Center light fixture in room/ space
14. Equally space lighting fixture in space
15. Open to above, refer to A4.2
16. Edge of roof above
17. Edge of roof below
18. (E) Stucco finish to be removed and replaced with painted gypsum board ceiling
19. (E) Supply and Return air vent to be demolished, refer to Mechanical drawings
20. Roof connection to remain (not in scope)
21. Edge of ceiling
22. (E) Stucco to remain
23. (E) Soffit vent to remain
24. (N) Structural beam, refer to structural drawings. Wrap in gypsum board to match ceiling.
25. (N) Sectional overhead roll up door, refer to specifications. Furr-out wall to be flush with beam above on Flex Room side to accommodate vertical track.
26. (N) T-bar ceiling w/ acoustic tile. Ceiling Grid: Armstrong, 15/16" Prelude XL, Acoustical Ceiling Tile: Armstrong, School-Zone Fine Fissured. Install per manufacturer instructions. Standard 2'x4' tiles, unless the tile is clearly cut to fit an irregular space, or is gray. Gray tiles represent tiles that are not 2'x4', but will be cut from a 2'x4' tile. The actual color of the tiles will be consistent throughout the ceiling.
27. (E) Diffuser panel system to remain. Lenses to be replaced in kind with frosted, insulated lenses.
28. Verify dimension of skylight in field. If more than 18'-6"x18'-6", the surround around the skyight will need to be furred out to finish nicely on a clean whole dimension with the t-bar grid.

## RCP LEGEND

- Surface Wall Mounted Light, refer to Electrical drawings
- Pendant Light, refer to Electrical drawings
- Recessed Ceiling Mounted Light, refer to Electrical drawings
- Light Fixture, refer to Electrical drawings
- Light Fixture, refer to Electrical drawings
- Light Fixture, refer to Electrical drawings
- Exhaust Fan, refer to Mechanical drawings
- Supply Air, refer to Mechanical drawings
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- 1 EM Emergency Egress Lighting, refer to Electrical drawings
- Light Fixture, refer to Electrical drawings
- Emergency Egress Light Fixture, refer to Electrical drawings

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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Goverment Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**UPPER FLOOR REFLECTED CEILING PLAN**

CONSULTANT:

STAMP:

LICENSED ARCHITECT C-32913 SHANA MARIE REISS REN. 09-30-25 STATE OF CALIFORNIA

DATE:

July 2, 2024

REVISIONS:

1 Plan Check 1 County of SLO, 10/28/2024

B1 Bid Set Update 07/25/2025

TB T-Bar Replacement Alternate County of SLO, 08/28/25

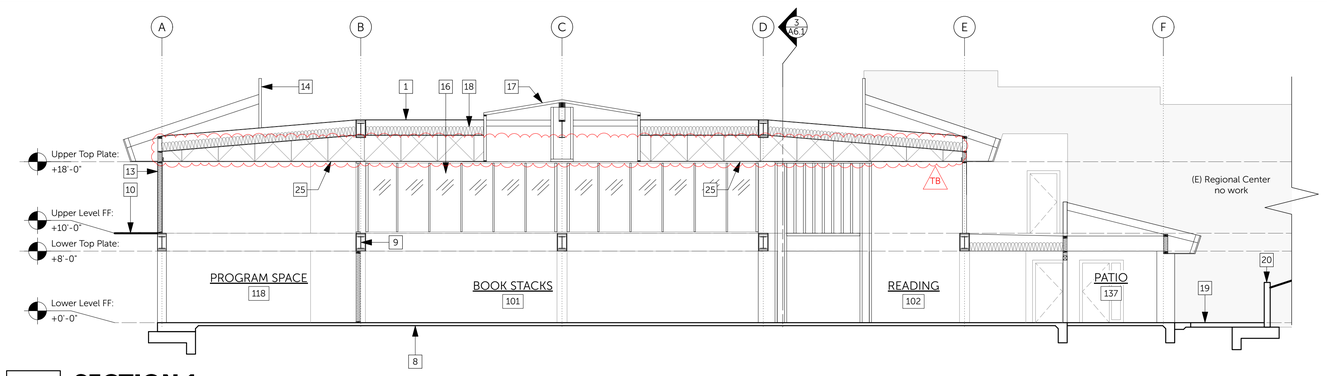
JOB NUMBER:

2308

SHEET:

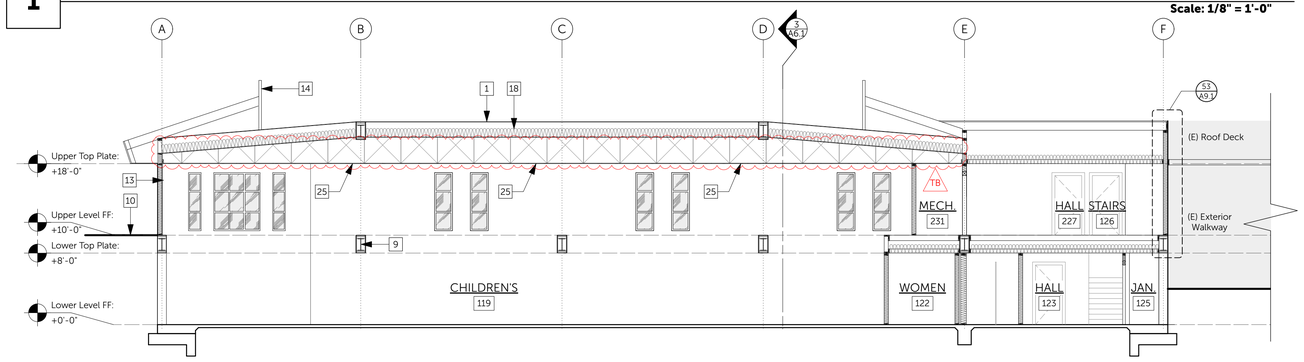
A4.2

Date: September 5, 2025 Time: 12:30:31 PM File name: 03_Arroyo Grande Library_CA_Plans.vwx



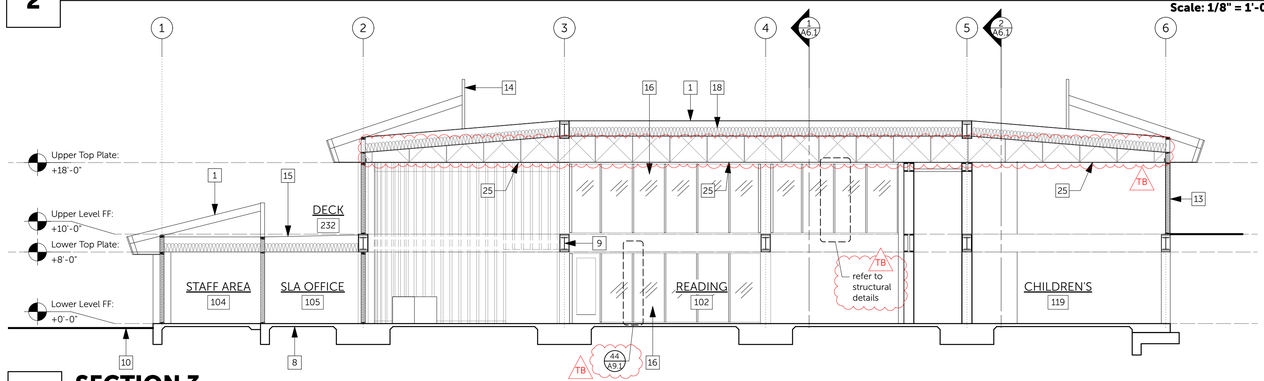

## 1 SECTION 1

Scale: 1/8" = 1'-0"



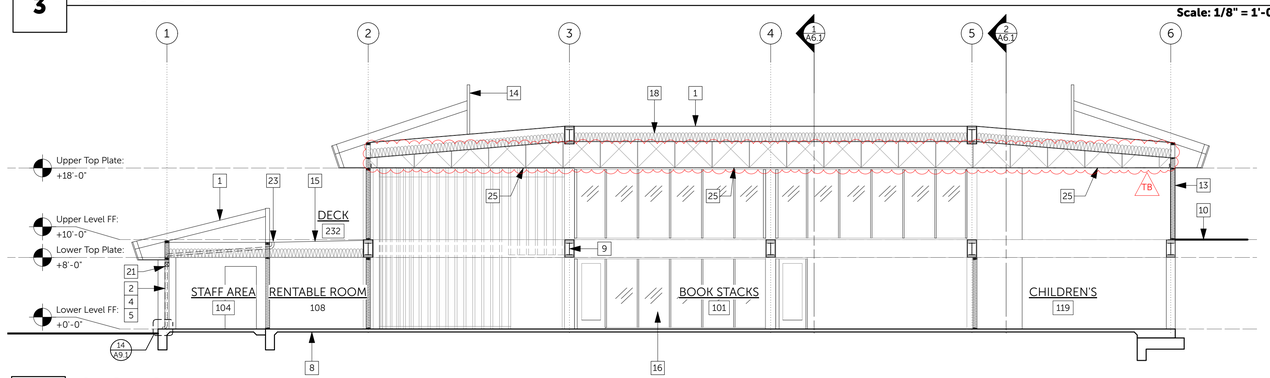

## 2 SECTION 2

Scale: 1/8" = 1'-0"




## 3 SECTION 3

Scale: 1/8" = 1'-0"




## 4 SECTION 4

Scale: 1/8" = 1'-0"

## BUILDING SECTION REFERENCE NOTES

1. Existing (E) Roofing to remain, all drainage to remain
2. Exterior finish per Exterior Elevations
3. 2x4 vertical wall framing per Floor Plan(s) and Structural Plan(s)
4. 2x6 vertical wall framing per Floor Plan(s) and Structural Plan(s)
5. R-19 insulation min. or Refer to Title 24 Report/Mandatory Measures
6. R-30 insulation min. or Refer to Title 24 Report/Mandatory Measures
7. (E) Sheathing over floor framing
8. (E) Slab on grade.
9. (E) Beam/Header to remain
10. Finish grade.
11. (E) Stairs
12. Soffit
13. (E) Wall to remain. Patch and refinish as necessary.
14. (E) Parapet. Refer to Roof Plan and referenced detail(s).
15. (E) Deck
16. (N) Storefront beyond
17. (N) Skylight
18. (E) Insulation to remain
19. (N) Planter
20. (N) Retaining Wall 5' tall
21. (N) Beam/Header per Structural Plans
22. (N) Slab on grade. Refer to Foundation Plan General Notes & Title 24 for waterproofing.
23. Existing drain to remain where occurs, terminate at bottom of wall to splash block/hardscape
24. (N) Floor joists per Structural Plans
25. (N) Ceiling Grid and Ceiling Tiles. Refer to RCP and Structural for Specifications and Details. Install per manufacturer instructions.

B1 TB

## BUILDING SECTION GENERAL NOTES

1. Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19% moisture content. Refer to Cal Green 5.505 (non-residential), for moisture content verification methods. Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Wet-applied insulation products shall follow the manufacturers' drying recommendations prior to enclosure. Exterior sheathing shall be dry before applying exterior cover.
2. Concrete slab foundations required to have a vapor retarder by Cal Green Code and CBC, California Code of Regulations, Title 24, Part 2, Chapter 19. Concrete slabs shall be installed with a capillary break per Cal Green Code 4.505.2.1.
3. Water absorption rate for slab edge insulation material alone without facing is no greater than 0.3%, water vapor permeance rate is no greater than 2.0 perm/inch and shall be protected from physical damage and UV light deterioration.
4. New roofing, gutters, flashings and moisture sealants between new work and existing construction shall be installed such that exterior moisture will not penetrate the building envelope.
5. Exterior plaster shall be in compliance with ASTM C 926 and ASTM C 1063 & CRC R703.6.
   • Lath and lath attachments shall be of corrosion resistant materials. Expanded metal or woven lath shall be attached with 1-1/2" long, 11 gauge nails having a 7/16" head, or 7/8" long, 16 gauge staples, spaced at no more than 6", or as otherwise approved.
   • Plastering with Portland cement plaster shall be not less than three coats when applied over metal lath or wire lath and shall be not less than two coats when applied over masonry, concrete, pressure-preservative treated wood, decay-resistant wood or gypsum backing.
   • On wood-frame construction with an on-grade floor slab system, exterior plaster shall be applied to cover, but not extend below, lath, paper and screed.
   • A minimum 0.019" (no. 26 galvanized sheet gauge), corrosion-resistant weep screed or plastic weep screed, with a minimum vertical attachment flange of 3 1/2" shall be provided at or below the foundation plate line on exterior stud walls in accordance with ASTM C 926. The weep screed shall be placed a minimum of 4" above the earth or 2" above paved areas and shall be a type that will allow trapped water to drain to the exterior of the building. The weather-resistant barrier shall lap the attachment flange. The exterior lath shall cover and terminate on the attachment flange of the weep screed.
   • Water-resistive barriers shall be installed and, where applied over wood-based sheathing, shall include a water-resistive vapor-permeable barrier with a performance at least equivalent to two layers of Grade D paper. Where the water-resistive barrier that is applied over wood-based sheathing has a water resistance equal to or greater than that of 60 minute Grade D paper and is separated from the stucco by an intervening, substantially nonwater-absorbing layer or designed drainage space.
6. Lap roofing, gutters, flashings, moisture barriers and sealants to direct exterior moisture away from the building envelope.
7. One layer of No. 15 asphalt felt, free from holes and breaks, complying with ASTM D 226 for Type I felt or other approved water-resistive barrier, shall be applied over studs or sheathing of all exterior walls. Such felt or material shall be applied horizontally, with the upper layer lapped over the lower layer not less than 2". Where the joints occur, felt shall be lapped not less than 6". The felt or approved material shall be continuous to the top of the walls and terminated at penetrations and building appendages in a manner to prevent the accumulation of water within the wall assembly. Omission of the water-resistive barrier is permitted under paperbacked stucco lath when the paper backing is an approved water-resistive barrier.
8. Penetration of fire-resistant walls, floor ceilings and roof ceilings shall be protected as required in CBC Section 712.
9. Refer to Exterior Elevations and Structural Plans for framing sizing, plate/header heights and schedules.
10. Refer to Floor Plan General Notes and Title 24 report for insulation ratings, requirements and additional information.
11. Unless specified otherwise, all wall coverings shall be securely fastened in accordance with CBC 1404.4 or with other approved aluminum, stainless steel, zinc-coated or other approved corrosion-resistive fasteners.
12. Weep screeds shall be a minimum of 26 gauge galvanized sheet, corrosion-resistant, with a minimum vertical attachment flange of 3 1/2". Weep screeds shall be provided at or below the foundation plate line on all exterior walls. The screed shall be placed a min. of 4" above the earth or 2" above paved areas and shall be a type that will allow trapped water to drain to the exterior of the building. The weather-resistive barrier shall lap the attachment flange, and the exterior lath shall cover and terminate on the attachment flange of the screed.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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Goverment Center, Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**SECTIONS**

CONSULTANT:

STAMP:

LICENSED ARCHITECT C-32913 SHANA MARIE REISS REN. 09-30-25 STATE OF CALIFORNIA

DATE:

April 4, 2024

REVISIONS:

B1 Bid Set Update 07/25/2025

TB T-Bar Replacement Alternate County of SLO, 08/28/25

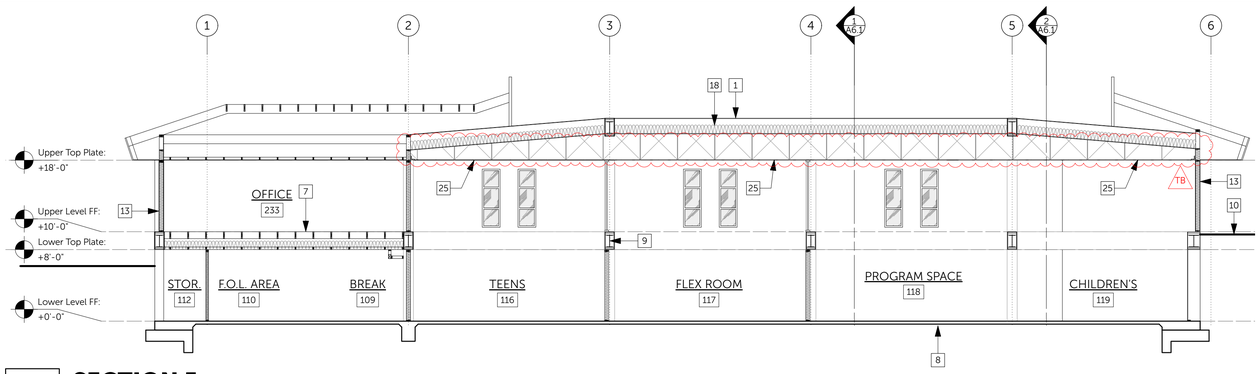
JOB NUMBER:

2308

SHEET:

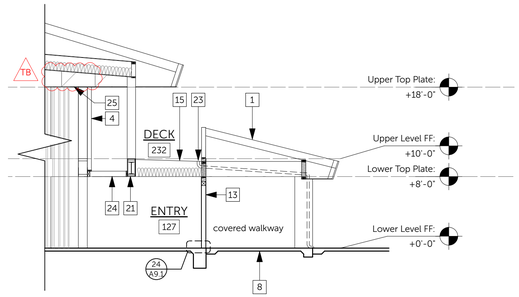
A6.1


Date: September 5, 2025 Time: 1:12:17 PM File name: 04_Arroyo Grande Library_CA_Elevations Sections.vwx




## 5 SECTION 5

**Scale: 1/8" = 1'-0"**




## 6 SECTION 6

**Scale: 1/8" = 1'-0"**

## BUILDING SECTION REFERENCE NOTES

1. Existing (E) Roofing to remain, all drainage to remain
2. Exterior finish per Exterior Elevations
3. 2x4 vertical wall framing per Floor Plan(s) and Structural Plan(s)
4. 2x6 vertical wall framing per Floor Plan(s) and Structural Plan(s)
5. R-19 insulation min. or Refer to Title 24 Report/Mandatory Measures
6. R-30 insulation min. or Refer to Title 24 Report/Mandatory Measures
7. (E) Sheathing over floor framing
8. (E) Slab on grade.
9. (E) Beam/Header to remain
10. Finish grade.
11. (E) Stairs
12. Soffit
13. (E) Wall to remain. Patch and refinish as necessary.
14. (E) Parapet. Refer to Roof Plan and referenced detail(s).
15. (E) Deck
16. (N) Storefront beyond
17. (N) Skylight — B1
18. (E) Insulation to remain
19. (N) Planter
20. (N) Retaining Wall 5' tall
21. (N) Beam/Header per Structural Plans
22. (N) Slab on grade. Refer to Foundation Plan General Notes & Title 24 for waterproofing.
23. Existing drain to remain where occurs, terminate at bottom of wall to splash block/hardscape
24. (N) Floor joists per Structural Plans
25. (N) Ceiling Grid and Ceiling Tiles. Refer to RCP and Structural for Specifications and Details. Install per manufacturer instructions. — TB

## BUILDING SECTION GENERAL NOTES

1. Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19% moisture content. Refer to Cal Green 5.505 (non-residential), for moisture content verification methods. Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Wet-applied insulation products shall follow the manufacturers' drying recommendations prior to enclosure. Exterior sheathing shall be dry before applying exterior cover.
2. Concrete slab foundations required to have a vapor retarder by Cal Green Code and CBC, California Code of Regulations, Title 24, Part 2, Chapter 19. Concrete slabs shall be installed with a capillary break per Cal Green Code 4.505.2.1.
3. Water absorption rate for slab edge insulation material alone without facing is no greater than 0.3%, water vapor permeance rate is no greater than 2.0 perm/inch and shall be protected from physical damage and UV light deterioration.
4. New roofing, gutters, flashings and moisture sealants between new work and existing construction shall be installed such that exterior moisture will not penetrate the building envelope.
5. Exterior plaster shall be in compliance with ASTM C 926 and ASTM C 1063 & CRC R703.6.
   • Lath and lath attachments shall be of corrosion resistant materials. Expanded metal or woven lath shall be attached with 1-1/2" long, 11 gauge nails having a 7/16" head, or 7/8" long, 16 gauge staples, spaced at no more than 6", or as otherwise approved.
   • Plastering with Portland cement plaster shall be not less than three coats when applied over metal lath or wire lath and shall be not less than two coats when applied over masonry, concrete, pressure-preservative treated wood, decay-resistant wood or gypsum backing.
   • On wood-frame construction with an on-grade floor slab system, exterior plaster shall be applied to cover, but not extend below, lath, paper and screed.
   • A minimum 0.019" (no. 26 galvanized sheet gauge), corrosion-resistant weep screed or plastic weep screed, with a minimum vertical attachment flange of 3 1/2" shall be provided at or below the foundation plate line on exterior stud walls in accordance with ASTM C 926. The weep screed shall be placed a minimum of 4" above the earth or 2" above paved areas and shall be a type that will allow trapped water to drain to the exterior of the building. The weather-resistant barrier shall lap the attachment flange. The exterior lath shall cover and terminate on the attachment flange of the weep screed.
   • Water-resistive barriers shall be installed and, where applied over wood-based sheathing, shall include a water-resistive vapor-permeable barrier with a performance at least equivalent to two layers of Grade D paper. Where the water-resistive barrier that is applied over wood-based sheathing has a water resistance equal to or greater than that of 60 minute Grade D paper and is separated from the stucco by an intervening, substantially nonwater-absorbing layer or designed drainage space.
6. Lap roofing, gutters, flashings, moisture barriers and sealants to direct exterior moisture away from the building envelope.
7. One layer of No. 15 asphalt felt, free from holes and breaks, complying with ASTM D 226 for Type I felt or other approved water-resistive barrier, shall be applied over studs or sheathing of all exterior walls. Such felt or material shall be applied horizontally, with the upper layer lapped over the lower layer not less than 2". Where the joints occur, felt shall be lapped not less than 6". The felt or approved material shall be continuous to the top of the walls and terminated at penetrations and building appendages in a manner to prevent the accumulation of water within the wall assembly. Omission of the water-resistive barrier is permitted under paperbacked stucco lath when the paper backing is an approved water-resistive barrier.
8. Penetration of fire-resistant walls, floor ceilings and roof ceilings shall be protected as required in CBC Section 712.
9. Refer to Exterior Elevations and Structural Plans for framing sizing, plate/header heights and schedules.
10. Refer to Floor Plan General Notes and Title 24 report for insulation ratings, requirements and additional information.
11. Unless specified otherwise, all wall coverings shall be securely fastened in accordance with CBC 1404.4 or with other approved aluminum, stainless steel, zinc-coated or other approved corrosion-resistive fasteners.
12. Weep screeds shall be a minimum of 26 gauge galvanized sheet, corrosion-resistant, with a minimum vertical attachment flange of 3 1/2". Weep screeds shall be provided at or below the foundation plate line on all exterior walls. The screed shall be placed a min. of 4" above the earth or 2" above paved areas and shall be a type that will allow trapped water to drain to the exterior of the building. The weather-resistive barrier shall lap the attachment flange, and the exterior lath shall cover and terminate on the attachment flange of the screed.

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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Goverment Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**SECTIONS**

CONSULTANT:

STAMP:

LICENSED ARCHITECT
C-32912
SHANA MARIE REISS
REN. 09-30-25
STATE OF CALIFORNIA

DATE:

April 4, 2024

REVISIONS:

B1 Bid Set Update 07/25/2025
TB T-Bar Replacement Alternate County of SLO, 08/28/25

JOB NUMBER:

2308

SHEET:

A6.2

Date: September 2, 2025 Time: 4:41:27 PM File name: 04_Arroyo Grande Library_CA_Elevations Sections.vwx

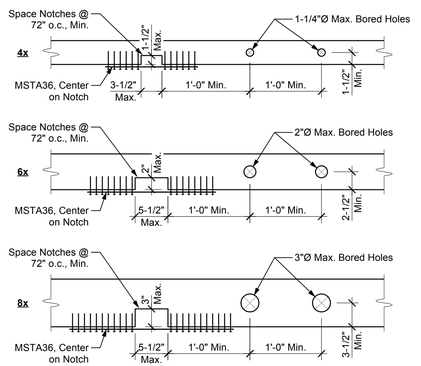
# Arroyo Grande Library

## 800 W Branch St.
## Arroyo Grande, CA 93420

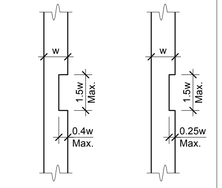
## STANDARD DETAILS

### 9 TYPICAL NOTCHING & BORING

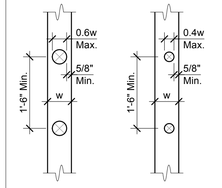
**PENETRATIONS IN TOP PLATES & SILL PLATES**




**NOTCHING LIMITS FOR WOOD STUDS**

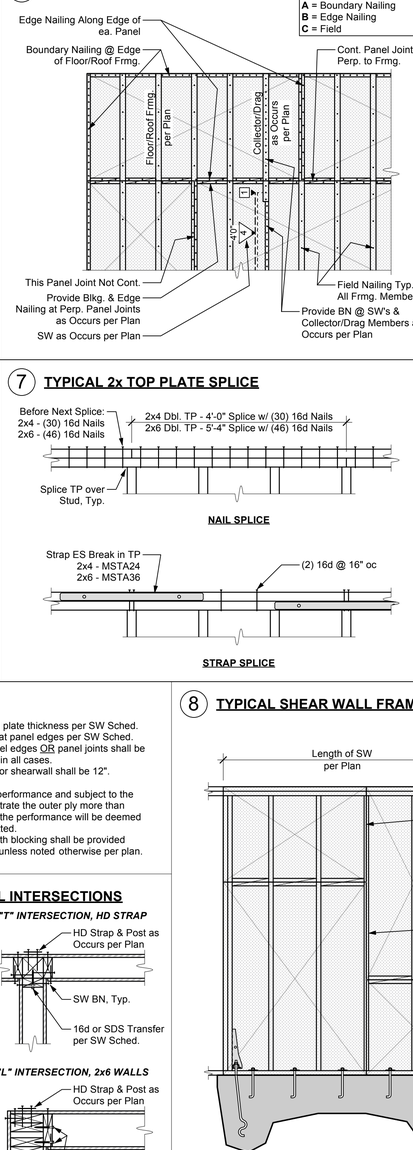



**BORING LIMITS FOR WOOD STUDS**

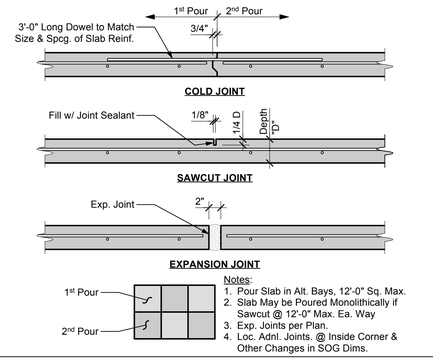



### 6 TYPICAL FLOOR / ROOF NAILING

Nailing per Plan w/ Spcg.
Denoted as **@ A", B", C"**
**A** = Boundary Nailing
**B** = Edge Nailing
**C** = Field

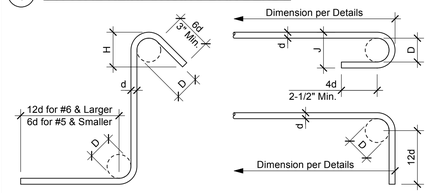



### 4 TYPICAL CONCRETE SLAB JOINTS




Notes:
1. Pour Slab in Alt. Bays, 12'-0" Sq. Max.
2. Slab May be Poured Monolithically if Sawcut @ 12'-0" Max. Ea. Way
3. Exp. Joints per Plan.
4. Loc. Adnl. Joints. @ Inside Corner & Other Changes in SOG Dims.

### 1 TYPICAL REINFORCING BAR BENDS




**STANDARD TIES & STIRRUPS**

| Bar Size | D | H (Approx.) |
|---|---|---|
| #3 | 1-1/2" | 3" |
| #4 | 2" | 3" |
| #5 | 2-1/2" | 3-3/4" |
| #6 | 4-1/2" | 4-1/2" |
| #7 | 5-1/4" | 5-1/4" |
| #8 | 6" | 6" |

**STANDARD END HOOKS**

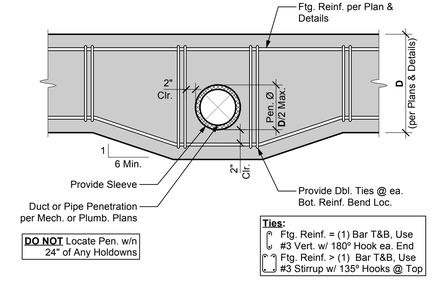
| Bar Size | D | J |
|---|---|---|
| #3 | 2-1/4" | 3" |
| #4 | 3" | 4" |
| #5 | 3-3/4" | 5" |
| #6 | 4-1/2" | 6" |
| #7 | 5-1/4" | 7" |
| #8 | 6" | 8" |

Note:
All Bar Bend Diameters & End Lengths Must Conform to the CRSI Manual of Standard Practice

### 7 TYPICAL 2x TOP PLATE SPLICE



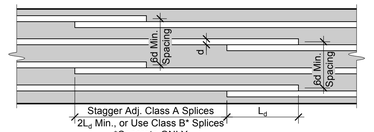

### 5 TYP. PENETRATION THROUGH FOUNDATION




**DO NOT** Locate Pen. w/n 24" of Any Holdowns

**Ties:**
- Ftg. Reinf. = (1) Bar T&B, Use #3 Vert. w/ 180° Hook ea. End
- Ftg. Reinf. > (1) Bar T&B, Use #3 Stirrup w/ 135° Hooks @ Top

### 2 STD. DEVELOPMENT LENGTHS & LAP SPLICES

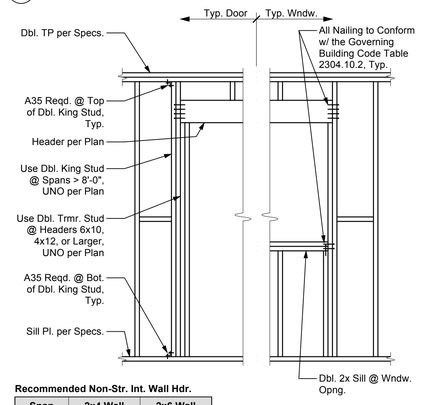



*Concrete ONLY

| Bar Size | CONCRETE f'c = 2500 psi Length of Lap Lap & Class A | Lap Class B | Hook Embed Ldh |
|---|---|---|---|
| #3 | 15" | 19" | 7" |
| #4 | 19" | 25" | 10" |
| #5 | 24" | 31" | 14" |
| #6 | 29" | 37" | 18" |
| #7 | 41" | 54" | 22" |
| #8 | 47" | 61" | 27" |

| Bar Size | MASONRY f'm = 1500 psi Length of Lap, Ld | Hook Embed Ldh |
|---|---|---|
| #3 | 12" | 5" |
| #4 | 20" | 7" |
| #5 | 31" | 8" |
| #6 | 59" | 10" |
| #7 | 80" | 11" |
| #8 | 121" | 13" |

### 3 TYPICAL WOOD FRAMED OPENING



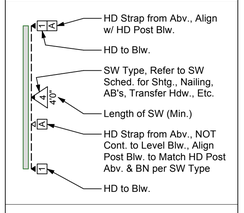

**Recommended Non-Str. Int. Wall Hdr.**

| Span | 2x4 Wall | 2x6 Wall |
|---|---|---|
| < 4'-0" | Dbl. 2x4 Flat | Dbl. 2x6 Flat |
| < 6'-0" | 4x4 | 4x6 Flat |
| < 8'-0" | 4x6 | 6x6 |
| > 8'-0" | Span in Feet Equals Beam Depth in Inches | |

### TYPICAL SHEAR WALL FRAMING NOTES:

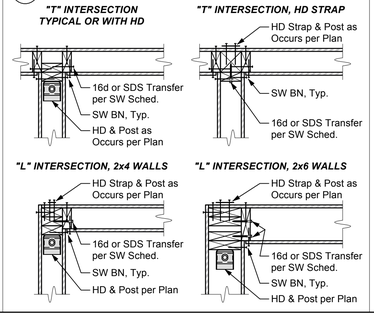
1. Single sided shear walls may be placed on EITHER side of the framed wall.
2. Sill plates on masonry or concrete to be pressure treated per Timber / Lumber specifications. Sill plate thickness per SW Sched.
3. Wall studs and blkg. are required at all adjoining panel edges. Thickness of wall studs and blkg. at panel edges per SW Sched.
4. Where plywood is applied on both faces of a wall, edge nails shall be staggered on adjacent panel edges OR panel joints shall be offset to fall on different framing members. Plywood joint and sill plate nailing shall be staggered in all cases.
5. Plywood panels shall butt along centerlines of framing members. Minimum plywood dimension for shearwall shall be 12".
6. Nails shall be located at least 3/8" from all panel edges.
7. The use of pneumatic nail guns for shear wall nailing is subject to continued satisfactory jobsite performance and subject to the review and approval by the Engineer of Record and/or Building Inspector. If the nail heads penetrate the outer ply more than would be normal for a hand held hammer, or if the minimum edge distances are not maintained, the performance will be deemed as unsatisfactory and the continued use of pneumatic for shear wall nailing will not be permitted.
8. At all bearing walls (both exterior and interior walls) not noted as shear walls, continuous full depth blocking shall be provided between joists and rafters with LTP4 or A35 to top plates @ 32" oc at floors and 48" oc at roofs, unless noted otherwise per plan.
9. Refer to material specifications for additional framing requirements.

### SHEAR WALL LEGEND

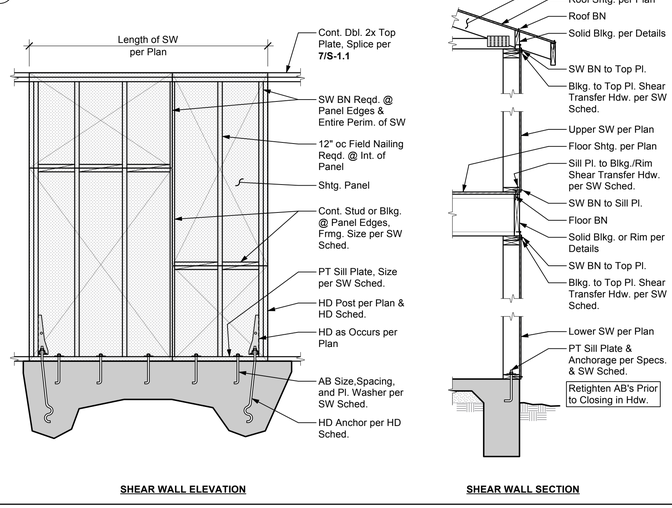



Refer to Plans for Specific Transfer & Connection Detail at each Shear Wall Location

### 10 TYPICAL SHEAR WALL INTERSECTIONS




### 8 TYPICAL SHEAR WALL FRAMING




## ABBREVIATIONS

| | | | |
|---|---|---|---|
| AB | Anchor Bolt | Mas. | Masonry |
| A&B | Above and Below | Max. | Maximum |
| Abv. | Above | MB | Machine Bolt |
| Adn. | Addition (al) | MF | Moment Frame |
| Adj. | Adjacent,Adjustable | Mfr. | Manufacture(r) |
| Alt. | Alternate (ive) | Min. | Minimum, Minute |
| Appd. | Approved | Mod. | Modif(y), (cation) |
| Arch. | Architect(ural) | Mtl. | Metal |
| Avg. | Average | (N) | New |
| Bdry. | Boundary | N/A | Not Applicable |
| Bldg. | Building | Nat. | Natural |
| Blk(g). | Block (ing) | NTS | Not to Scale |
| Bm. | Beam | o/ | Over |
| BN | Boundary Nailing | oc | On Center |
| B-O | Bottom of | OD | Outside Diameter |
| BO | By Others | Opng. | Opening |
| Bot. | Bottom | Opp. | Opposite |
| Brg. | Bearing | Opt. | Optional |
| Btwn. | Between | Para. | Parallel |
| BW | Both Ways | PCF | Lbs per Cubic Ft. |
| Cant. | Cantilever(ed) | Pen. | Penetrate, (tion) |
| CIP | Cast in Place | Perf. | Perforated |
| CJ | Ceiling Joist | Perim. | Perimeter |
| CJP | Complete Joint Penetration | Perp. | Perpendicular |
| | | Pl | Panel Index |
| CL | Center Line | PJP | Partial Joint Pen. |
| Clg. | Ceiling | PL | Plate |
| CMU | Conc. Masonry Unit | PLF | Lbs per Linear Ft. |
| Col. | Column | Ply. | Plywood |
| Com. | Common | Prep. | Prepare, (ation) |
| Comp. | Component | Press. | Pressure |
| Conc. | Concrete | Proj. | Project |
| Conn. | Connection | Prop. | Property |
| Const. | Construction | PSF | Lbs per Square Ft. |
| Cont. | Continue (ous) | PSI | Lbs per Square In. |
| Ctr. | Center | PT | Pressure-Treated |
| d | Penny | PV | Photovoltaic (Solar Panels) |
| Dbl. | Double | | |
| Defl. | Deflection | R | Radius |
| Deg. | Degree | Rec(s). | Recommendation(s) |
| Demo. | Demolish(tion) | Rect. | Rectangular |
| Dep. | Depress(ed) | Ref. | Reference |
| DF | Douglas Fir | Reinf. | Reinforce(d), (ment),(ing) |
| Dia. | Diameter | | |
| Diaph. | Diaphragm | Req(d). | Require(d) |
| Dif. | Different | Reqs. | Requirements |
| Dim. | Dimension | Ret. | Retain(ing) |
| Dist. | Distance | RJ | Roof Joist |
| DJ | Deck Joist | RR | Roof Rafter |
| DL | Dead Load | RW | Redwood |
| Dwg. | Drawing | SAD | See Arch Dwg's |
| (E) | Existing | Sched. | Schedule |
| Ea. | Each | Sgl. | Single |
| EF | Each Face | Shtg. | Sheathing |
| EFP | Equivalent Fluid Pressure | Sim. | Similar |
| | | SIP | Str. Insulated Panel |
| Elev. | Elevator, Elevation | SM | Sheet Metal |
| Embed. | Embed(ed), (ment) | SMS | Sheet Metal Screw |
| Engr. | Engineer | SOG | Slab on Grade |
| EOR | Engineer of Record | Spec. | Specif(ied),(cations) |
| Eq. | Equal, Equivalent | Sq. | Square |
| ES | Each Side | SS | Structural Steel |
| EW | Each Way | Std. | Standard |
| Exp. | Expand, Expansion | Stgr. | Stagger(ed) |
| Ext. | Exterior | Stl. | Steel |
| Fdn. | Foundation | Struc. | Structure, (al) |
| FF | Finished Floor | SW | Shear Wall |
| FJ | Floor Joist | Sym. | Symmet(ry), (rical) |
| Flr(g). | Floor (ing) | T&B | Top and Bottom |
| FOC | Face of Concrete | T&G | Tongue and Groove |
| FOM | Face of Masonry | Temp. | Temporary |
| FOS | Face of Studs | Thk. | Thick(ness) |
| FOW | Face of Wall | Thru | Through |
| Frmg. | Framing | TN | Toe-Nail |
| Ft. | Foot, Feet | TP | Top Plate |
| Ftg. | Footing | T-O | Top of |
| Ga. | Gage, Gauge | TOB | Top of Beam |
| Galv. | Galvanized | TOC | Top of Concrete |
| GB | Grade Beam | TOG | Top of Grade |
| GC | General Contractor | TOM | Top of Masonry |
| GLB | Glulam Beam | TOS | Top of Steel |
| Gyp. | Gypsum | TOW | Top of Wall |
| HD | Holdown | TRU | To Remain Unchanged |
| Hdr. | Header | | |
| Hdw. | Hardware | Trmr. | Trimmer Stud |
| Hgr. | Hanger | Typ. | Typical |
| Hor(iz). | Horizontal | UNO | Unless Noted Otherwise |
| Ht. | Height | | |
| ID | Inside Diameter | Vert. | Vertical |
| In. | Inch(es) | VIF | Verify in Field |
| Insp. | Inspect(ion) | VWA | Verify with Arch |
| Int. | Interior | w/ | With |
| Inv. | Invert, Inverted | w/n | Within |
| Jst. | Joist | w/o | Without |
| K | Kips (1,000 pounds) | WS | Wood Screw |
| KLF | Kips per Linear Ft. | Wndw. | Window |
| King | King Stud | Wt. | Weight |
| KP | King Post | WWF | Welded Wire Fabric |
| KSF | Kips per Square Ft. | Yd. | Yard |
| KSI | Kips per Square In. | | |
| Lb(s). | Pound(s) | @ | At |
| LL | Live Load | ° | Degrees |
| Loc. | Location | Ø | Diameter |
| LW | Light Weight | > | Greater Than |
| | | < | Less Than |
| | | # | Number, Pound(s) |
| | | / | Per |
| | | % | Percent(age) |
| | | ± | Plus or Minus |

## PROJECT INFORMATION

**OWNER:**
County of San Luis Obispo
Department of Public Works
County Government Center, Room 206
San Luis Obispo, CA 93408

**ARCHITECT:**
Reiss Design Studio, PC
3055 Duncan Lane, Suite A
San Luis Obispo, CA 93401
(805) 706-0645

## DESIGN PARAMETERS

**GENERAL PARAMETERS**

| | |
|---|---|
| Building Code | 2022 CBC * |
| Roof Loads | |
| Dead Loads** (DL) | 29 psf |
| **Includes 3 psf PV Loads | |
| Live Loads (LL) | 20 psf |
| Floor Loads - Typ. | |
| Dead Loads (DL) | 15 psf |
| Live Loads (LL) | 40 psf |
| Floor Loads - Deck | |
| Dead Loads (DL) | 11 psf |
| Live Loads (LL) | 60 psf |

**SOILS VALUES** (Table 1806.2)

| | |
|---|---|
| Bearing Pressure | 1500 psf |
| Active EFP | 45 pcf |
| Lateral Passive EFP | 130 pcf |

**WIND DESIGN BASIS**

| | |
|---|---|
| Ultimate Wind Speed, $V_{ULT}$ | 95 mph |
| Nominal Wind Speed, $V_{ASD}$ | 74 mph |
| Risk Category | II |
| Exposure | B |
| Importance Factor, $I_w$ | 1.00 |

**SEISMIC DESIGN BASIS**

| | |
|---|---|
| Seismic Design Category | D |
| Site Class | D |
| Seismic Factors | |
| $S_S$ / $S_1$ | 1.065 / 0.389 |
| $S_{DS}$ / $S_{D1}$ | 0.852/ 0.496 |
| Risk Category | II |
| Importance Factor, $I_e$ | 1.00 |
| Resisting System: | Wood Shear Walls |
| Response Mod. Coefficient, R | 6.5 |
| Design Base Shear | V = 0.131W |
| Analysis Procedure: | Eqv. Lateral Force (ASCE 7-16, T. 12.6-1) |

* The 2022 California Building Code (CBC), based on the 2021 International Building Code (IBC), is the governing code in the State of California.

All As Built Information Take from Archived Plans by Architect Stuhr Dodson Foster Mcclave with Approval Dated 12/6/78

## SHEET INDEX


| | |
|---|---|
| S-1.1 | Structural Title Sheet |
| S-1.2 | Structural Specifications |
| S-1.3 | Special Inspections |
| S-2.1 | Foundation Plan |
| S-2.2 | Floor Framing Plan |
| S-2.3 | Roof Framing Plan |
| S-3.1 | Structural Details |
| S-3.2 | Structural Details |
| S-3.3 | Structural Details |



Ashley&Vance ENGINEERING, INC.
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Engineer of Record:

REGISTERED PROFESSIONAL ENGINEER TAN J. SHOEBRIDGE S 6293 STRUCTURAL STATE OF CALIFORNIA

Arroyo Grande Library
800 W Branch St.
Arroyo Grande, CA 93420

Revision:

| | | |
|---|---|---|
| 1 | Plan Check | 18 Oct. 2024 |
| 2 | Bid Set Update | 25 Jul. 2025 |
| 3 | T-Bar Replacement Alternate | 28 Aug. 2025 |
| | | |
| | | |
| | | |
| | | |
| | | |

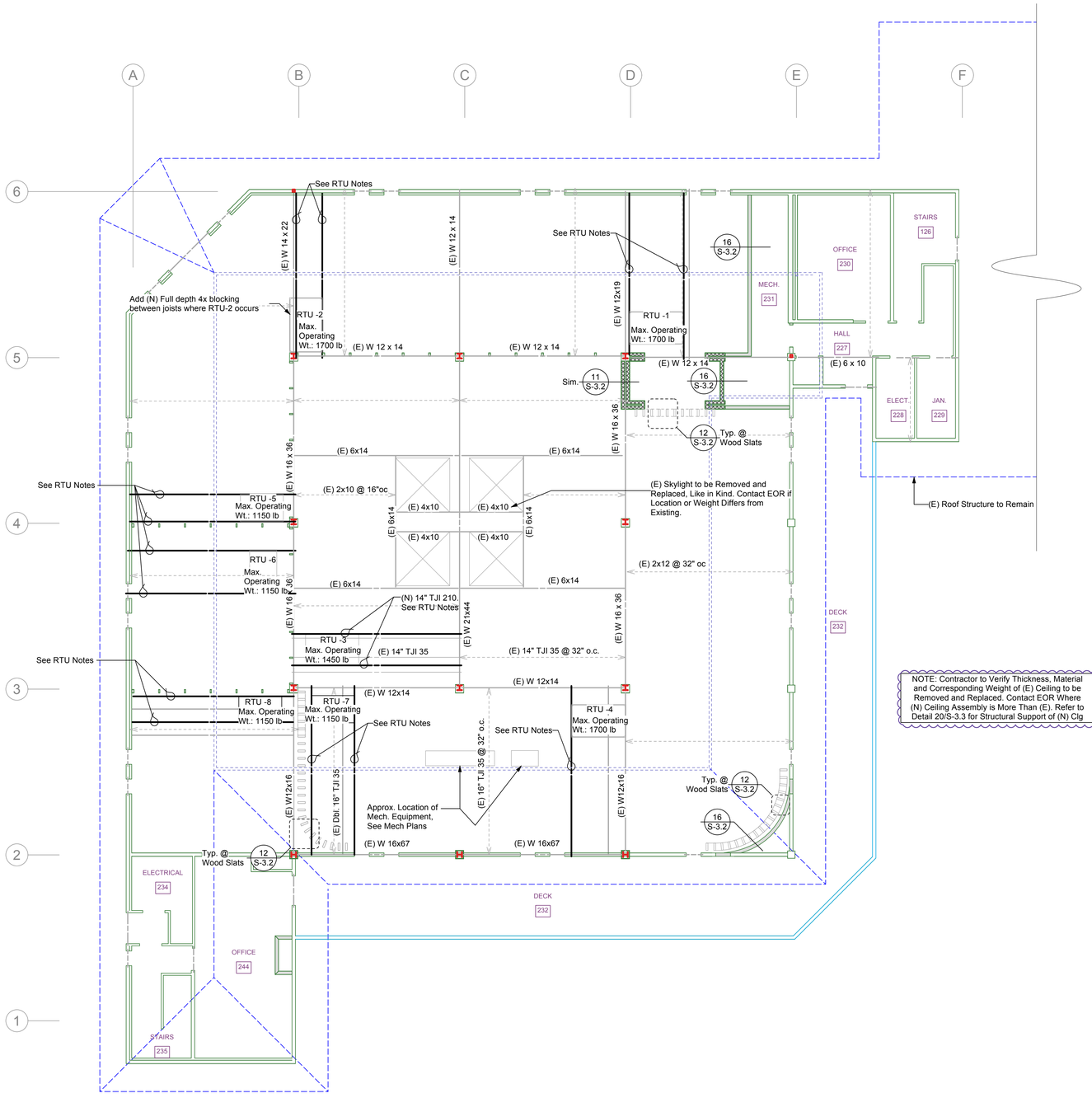
Proj. Engr.: Emma W. Phone Ext.: 224
Proj. Mngr.: Ian S.
Date: 29 Mar. 2024 Scale: 1/8"=1'-0"
A&V Job No.: 22373

STRUCTURAL TITLE SHEET

S-1.1

DO NOT SCALE THESE DRAWINGS. Refer to Architectural plans for all dimensions.

Sep 2, 2025
2:31:09 PM




NOTE: Contractor to Verify Thickness, Material and Corresponding Weight of (E) Ceiling to be Removed and Replaced. Contact EOR Where (N) Ceiling Assembly is More Than (E). Refer to Detail 20/S-3.3 for Structural Support of (N) Clg

TB

## RTU NOTES:

1. Provide (N) 16" TJI 210 Dbl. Joist Where Unit Anchorage Locations Occur (UNO per Plan). OK to omit (N) Dbl Joists where (E) Dbl TJI 35's occur in field.
**Member Size Dependent on RTU Locations and Orientations. Contact EOR Where discrepancies occur.**

2. Attach (N) Dbl Joists to (E) Steel Beams w/ Simpson MIU Hangers per **Detail 1/S-3.3**.

3. Where Removal of (E) Joists is Req(d), See **Detail 19/S-3.2.**

4. For Mechanical Curb Attachment See **Detail 6/S-3.3**.

## NOTES:

1. Repair or Replace (E) Damaged/ Decaying Rafter Tails As Req(d) w/ Like-In-Kind Replacement.
2. Fall Protection System Around Roof Hatch by Others. Install per Manufacturer's Specs.

## EXISTING BUILDING NOTES

All As Built Information Taken From Archived Plans By Architect Stuhr Dodson Foster Mcclave With Approval Dated 12/6/78

## WALL SCHEDULE

Stud wall locations per Architecturals.

(E) Wood-Framed Wall to Remain

(N) Non-Struc. Wood-Framed Wall

Wall Thickness per Arch.
Min. 2x4 D.F. Stud @ 16" o.c.

(N) Non-Struc. Wood-Framed Wall

Wall Thickness per Arch.
Min. 2x6 D.F. #2 @ 16" o.c.

(N) Wood Slat Wall

3 1/2" x 11 7/8" LVL

All Walls to have Continuous Double Top Plates, All Splices to be per Detail 7**/S-1.1**

Walls above

(shown for clarity)

Walls Below

(shown for clarity)

## GENERAL FRAMING NOTES

(N) Beams

(E) Beams (to Remain)

All Lumber 4x6, 6x6 and Smaller to be DF #2 UNO
All Lumber 4x8, 6x8 and Larger to be DF #1 UNO

All Beams to Bear on Plates w/ Indicated Post or Doubler Below UNO

All Hangers Shall be Installed w/ Max. Nailing per Mfr. & Sized for Full Width & Depth of Supported Members, UNO

Where Required for Repair or Replacement, Roof Sheathing Thickness to Match Existing, 5/8" Min., T & G, PI 40/20, glued and nailed w/ 10d commons at 6", 6", 12"

Provide wall length continuous full depth solid blocking (where floor joists perpendicular) or double floor joist (where joists parallel) for all walls above.

(E) Roof Framing (to Remain)

Denotes Step in Framing.
Step Ht. & Extent per Arch.

Waterproofing, flashing, & finish details per Architecturals.

See General Notes & Specifications for additional requirements and material specifications.

All dimensions per Architectural plans

Contractor to VERIFY all dimensions w/ Architectural plans PRIOR to commencement of construction.

**Contractor shall verify all existing conditions prior to construction & contact Engineer and Architect regarding any discrepancies.**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Engineer of Record:

REGISTERED PROFESSIONAL ENGINEER
IAN J. SHOEBRIDGE
S 6293
STRUCTURAL
STATE OF CALIFORNIA

# Arroyo Grande Library

800 W Branch St.
Arroyo Grande, CA 93420

Revision:

| | | |
|---|---|---|
| 1 | Plan Check | 18 Oct. 2024 |
| 2 | Bid Set Update | 25 Jul. 2025 |
| 1TB | T-Bar Replacement Alternate | 28 Aug. 2025 |
| | | |
| | | |
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| | | |
| | | |
| | | |

Proj. Engr.: Emma W. Phone Ext.: 224

Proj. Mngr.: Ian S.

Date: 29 Mar. 2024 Scale: 1/8"=1'-0"

A&V Job No.: 22373

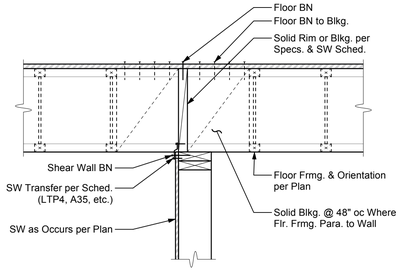
ROOF FRAMING PLAN

# S-2.3

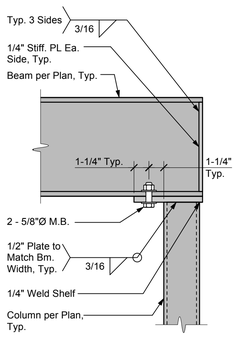
DO NOT SCALE THESE DRAWINGS. Refer to Architectural plans for all dimensions.

## 17 NOT USED

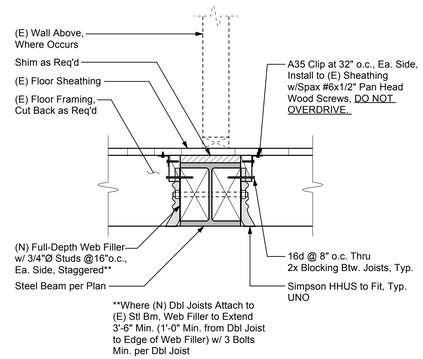
## 13 NOT USED




## 9 SHEAR TRANSFER: FLOOR AT WALL BLW.

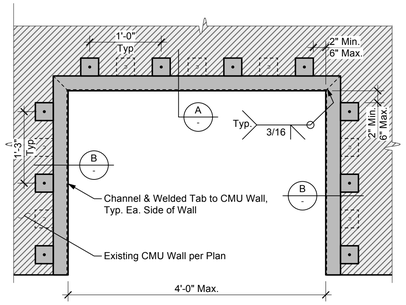



## 5 STEEL BEAM TO COLUMN

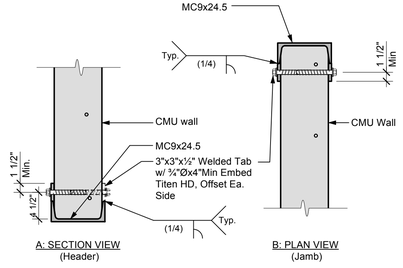


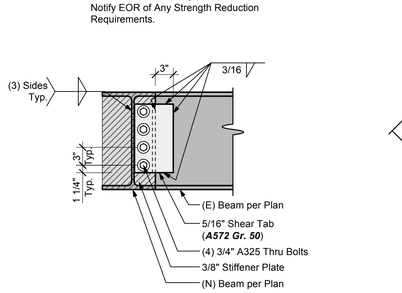

## 1 EXISTING FRAMING TO STEEL BEAM

**NOTE: All Fasteners into Grouted Cells**

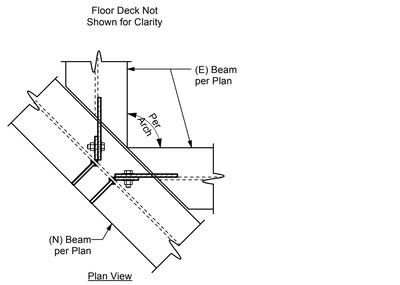


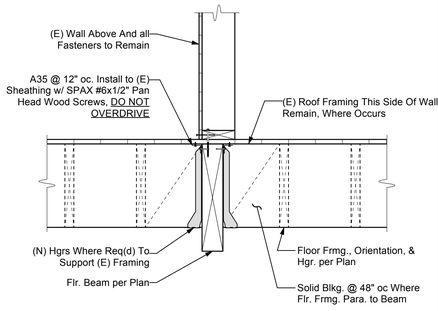

## 18 OPENING IN CMU WALL



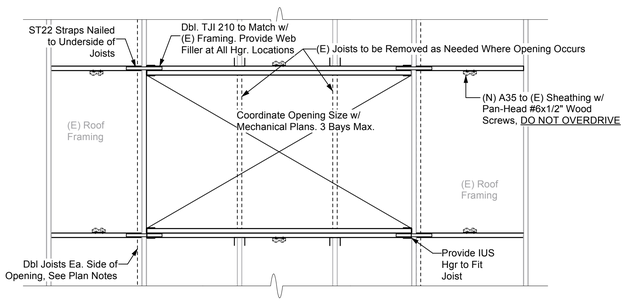




## 10 SKEWED FLOOR BEAM CONNECTION

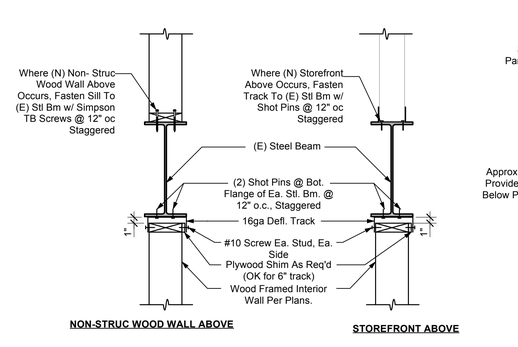


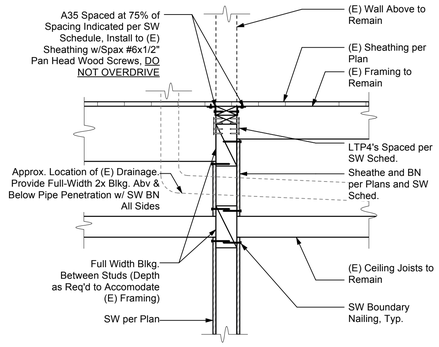




## 2 SHEAR TRANSFER: FLUSH BEAM AT WALL

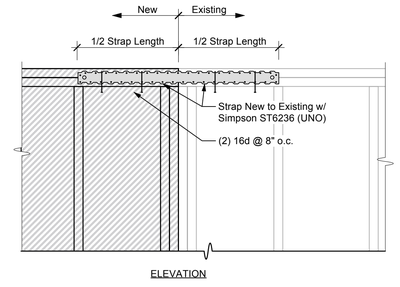



## 19 ROOF FRAMING FOR RTUS

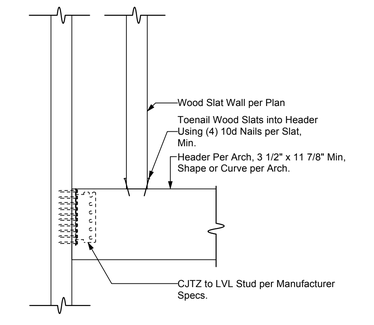


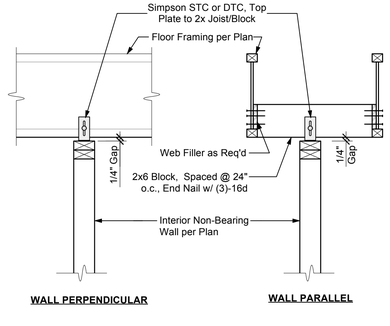

## 7 SHEAR WALL AT EXISTING ROOF



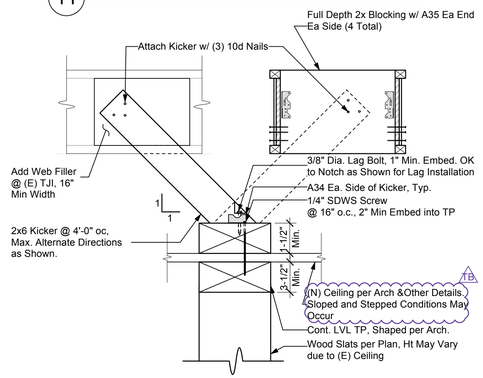

## 3 NEW WALL TO EXISTING WALL



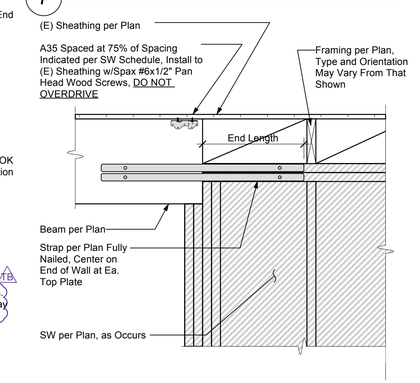

## 20 WOOD SLAT WALL AT HEADER



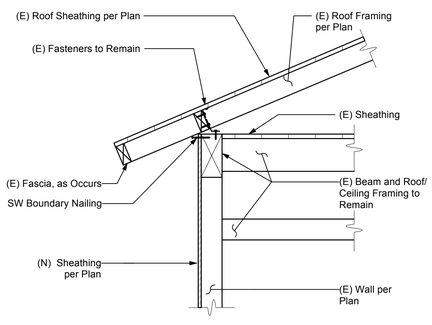

## 16 TYP. INTERIOR WALL TO FRAMING




## 11 TYP. INT. WALL TO (E) STL. BM.




## 8 DRAG STRAP TO WALL




## 4 SHEAR TRANSFER AT EXISTING ROOF

## 12 TOP OF WALL BRACING

## 8 DRAG STRAP TO WALL

## 4 SHEAR TRANSFER AT EXISTING ROOF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Engineer of Record:

REGISTERED PROFESSIONAL ENGINEER IAN J. SHOEBRIDGE S 6293 STRUCTURAL STATE OF CALIFORNIA

# Arroyo Grande Library

800 W Branch St.
Arroyo Grande, CA 93420

Revision:

| | | |
|---|---|---|
| 1 | Plan Check | 18 Oct. 2024 |
| 2 1B | Bid Set Update | 25 Jul. 2025 |
| 1 1B | T-Bar Replacement Alternate | 28 Aug. 2025 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Proj. Engr.: Emma W. Phone Ext.: 224
Proj. Mngr.: Ian S.
Date: 29 Mar. 2024 Scale: 1:12
A&V Job No.: 22373

STRUCTURAL DETAILS

S-3.2

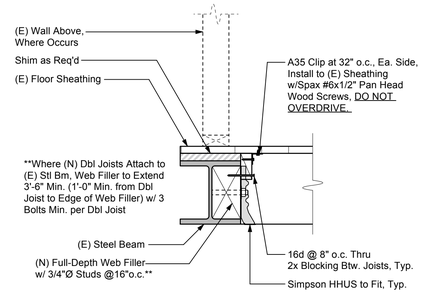

DO NOT SCALE THESE DRAWINGS. Refer to Architectural plans for all dimensions.

17 NOT USED

13 NOT USED

9 NOT USED

5 NOT USED

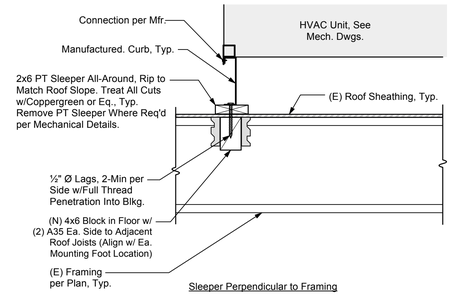


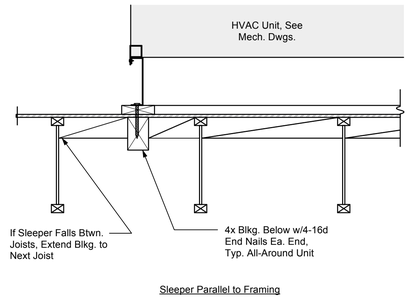

1 NEW FRAMING TO (E) STEEL BEAM

18 NOT USED

14 NOT USED

10 NOT USED



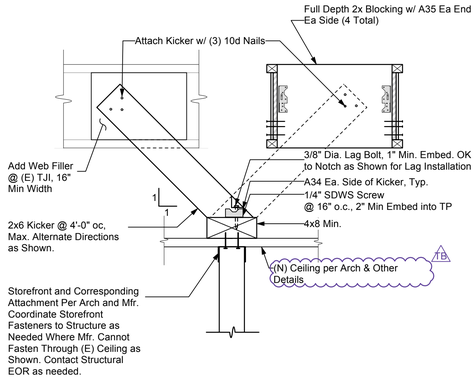

6 HVAC UNIT AT EXISTING ROOF

19 NOT USED

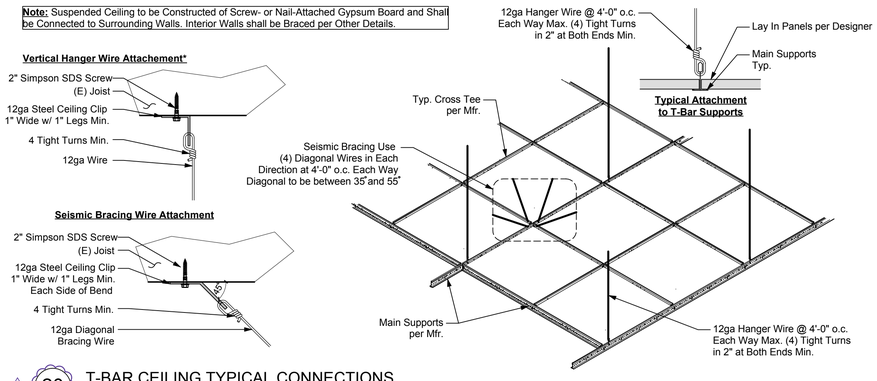
15 NOT USED

11 NOT USED

7 NOT USED



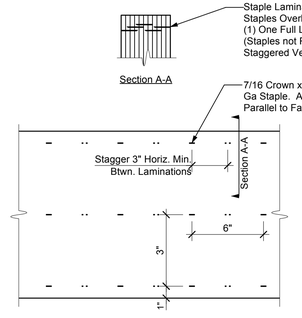

3 TOP OF STOREFRONT BRACING




T-Bar 20 T-BAR CEILING TYPICAL CONNECTIONS

12 NOT USED

8 NOT USED




4 STAPLE SPCG FOR BUILT-UP PLYWOOD BM

Sep 2, 2025
2:21:11 PM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Engineer of Record:

REGISTERED PROFESSIONAL ENGINEER TANYA J. SHOEBRIDGE S 6293 STRUCTURAL STATE OF CALIFORNIA

# Arroyo Grande Library

800 W Branch St.
Arroyo Grande, CA 93420

| Revision: | | |
|---|---|---|
| 1 | Plan Check | 18 Oct. 2024 |
| 1B | Bid Set Update | 25 Jul. 2025 |
| 1TB | T-Bar Replacement Alternate | 28 Aug. 2025 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Proj. Engr.: Emma W. Phone Ext.: 224
Proj. Mngr.: Ian S.
Date: 29 Mar. 2024 Scale: NTS
A&V Job No.: 22373

## STRUCTURAL DETAILS

# S-3.3

DO NOT SCALE THESE DRAWINGS. Refer to Architectural plans for all dimensions.

## RELIEF HOOD SCHEDULE

| MARK | MAKE | MODEL | TYPE | THROAT DIMENSIONS | THROAT AREA (ft2) | CFM | SP | VELOCITY | ACCESSORIES | | | WEIGHT (LBS) | REMARKS | MOUNTING DETAIL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | BIRD GUARD | BACKDRAFT DAMPER | ROOF CURB | | | |
| RH-1 | GREENHECK | FGR-16x18 | RELIEF | 16x18 | 2.0 | 1,200 | 0.05 | 600 | YES | NOTE 2 | YES | 80 | NOTES 1,2 | 6/M1.2 |
| RH-2 | GREENHECK | FGR-16x18 | RELIEF | 16x18 | 2.0 | 1,200 | 0.05 | 600 | YES | NOTE 2 | YES | 80 | NOTES 1,2 | 6/M1.2 |
| RH-3 | GREENHECK | FGR-28x28 | RELIEF | 28x28 | 5.44 | 2,500 | 0.05 | 459 | YES | NOTE 2 | YES | 120 | NOTES 1,2 | 6/M1.2 |
| RH-4 | GREENHECK | FGR-28x28 | RELIEF | 28x28 | 5.44 | 2,500 | 0.05 | 459 | YES | NOTE 2 | YES | 120 | NOTES 1,2 | 6/M1.2 |

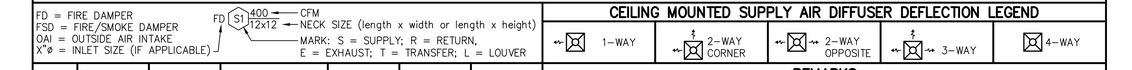
Notes: 1. Provide with roof curb compatible with roof slope and type.
2. Provide with horizontal gravity backdraft damper. Balance damper to open at positive 0.03 in.wc.

## GRILLE, REGISTER & DIFFUSER SCHEDULE

FD = FIRE DAMPER
FSD = FIRE/SMOKE DAMPER
OAI = OUTSIDE AIR INTAKE
X"ø = INLET SIZE (IF APPLICABLE)

FD S1 400 / 12x12 — 400 = CFM; 12x12 = NECK SIZE (length x width or length x height); S1 = MARK: S = SUPPLY; R = RETURN, E = EXHAUST; T = TRANSFER; L = LOUVER

CEILING MOUNTED SUPPLY AIR DIFFUSER DEFLECTION LEGEND




| MARK | MAKE | MODEL | CONSTRUCTION | FINISH | BORDER | OBD | REMARKS (SEE BELOW) |
|---|---|---|---|---|---|---|---|
| **SUPPLY** | | | | | | | |
| S1 | TITUS | TDC | STEEL | WHITE | 1 | – | – |
| TB S2 | TITUS | 300RL | STEEL | WHITE | 1 | – | – |
| S3 | TITUS | TDC | STEEL | WHITE | 3 | – | – |
| **RETURN** | | | | | | | |
| TB R1 | TITUS | 50F | ALUMINUM | WHITE | 1 | – | – |
| R2 | TITUS | 50F | ALUMINUM | WHITE | 3 | – | – |
| **EXHAUST** | | | | | | | |
| E1 | TITUS | 50F | ALUMINUM | WHITE | 1 | – | – |
| E2 | TITUS | 350RL | STEEL | WHITE | 1 | – | – |
| **LOUVER** | | | | | | | |
| L1 | GREENHECK | ESJ-401 | ALUMINUM | HYPRO POLY | 1-1/2" FLANGE | – | – |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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

MECHANICAL SCHEDULES

CONSULTANT:


BMA Mechanical +
689 Tank Farm Rd., Ste 240
SLO, CA 93401
OFF: (805) 544-4269
BMA JOB# 23156.00


STAMP:

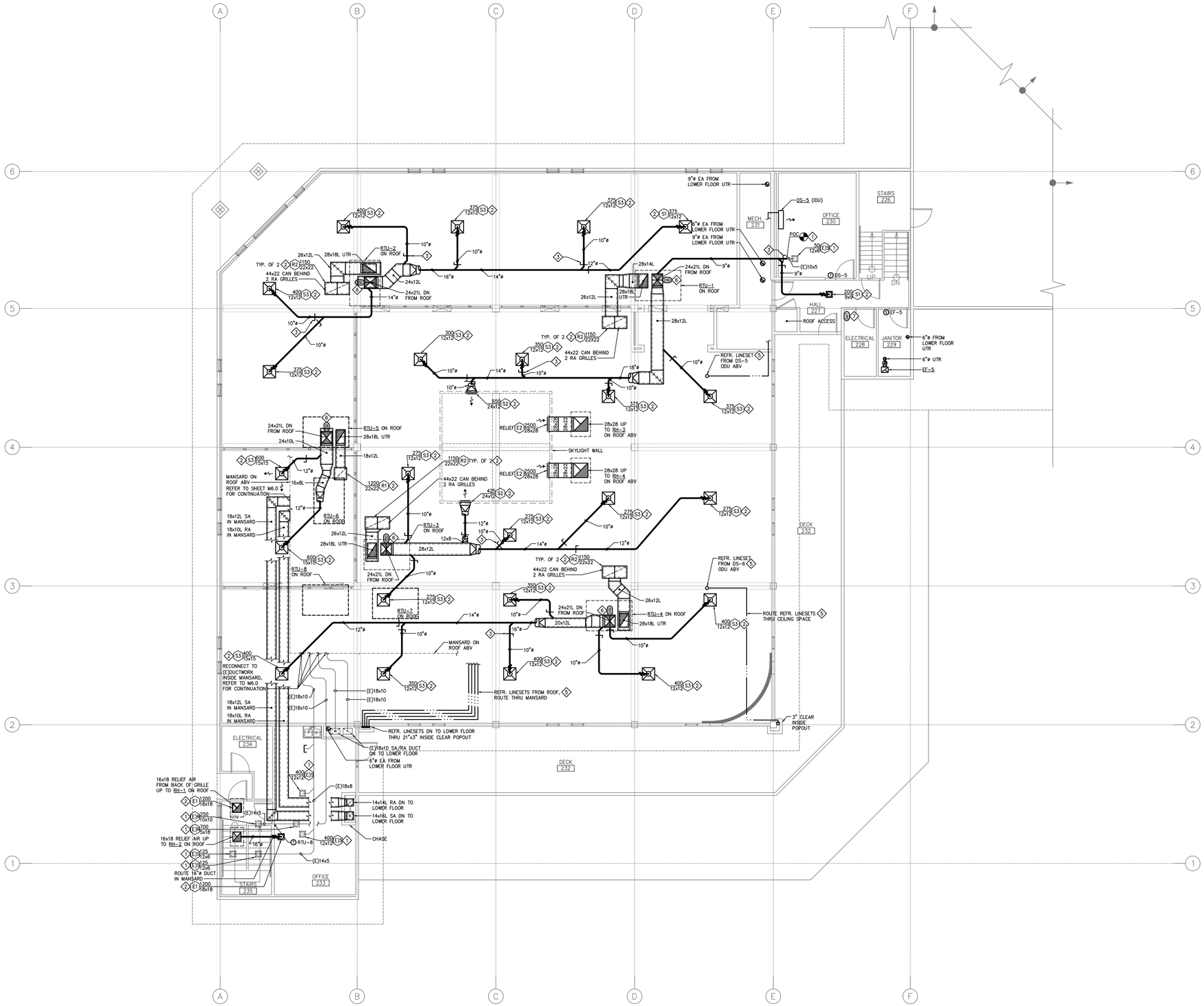
DATE:
June 18, 2024

REVISIONS:
1 Plan Check 1 County of SLO, 10/28/24
2 Plan Check 2 County of SLO, 12/11/24
1B T-Bar Replacement Alternate County of SLO, 8/28/25

JOB NUMBER:
2028

SHEET:
M1.1


F:\Drawings\2023\23156.00_AG Library Remod\mech\23156.00_M1.0_M1.1_M1.2_M1.3_SCHEDULES & DETAILS.dwg ClaytonLahodny Aug 28,2025-3:19pm




# MECHANICAL OVERALL UPPER FLOOR PLAN

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

## GENERAL NOTES

1. Refer to partial enlarged mechanical upper floor plans on M5.1 and M5.2 for all reference notes and revisions.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PROJECT:

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County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**MECHANICAL OVERALL UPPER FLOOR PLAN**

CONSULTANT:


BMA Mechanical +
689 Tank Farm Rd., Ste 240
SLO, CA 93401
OFF.: (805) 544-4269
BMA JOB# 23156.00


STAMP:

REGISTERED PROFESSIONAL ENGINEER
BRANDON ROSS REISS
M 38,662
EXP 6/30/27
MECHANICAL
STATE OF CALIFORNIA

DATE:

June 18, 2024

REVISIONS:

1 Plan Check 1
County of SLO, 10/28/24
2 Plan Check 2
County of SLO, 12/11/24
1B T-Bar Replacement Alternate
County of SLO, 8/28/25

JOB NUMBER:

2028

SHEET:

M5.0


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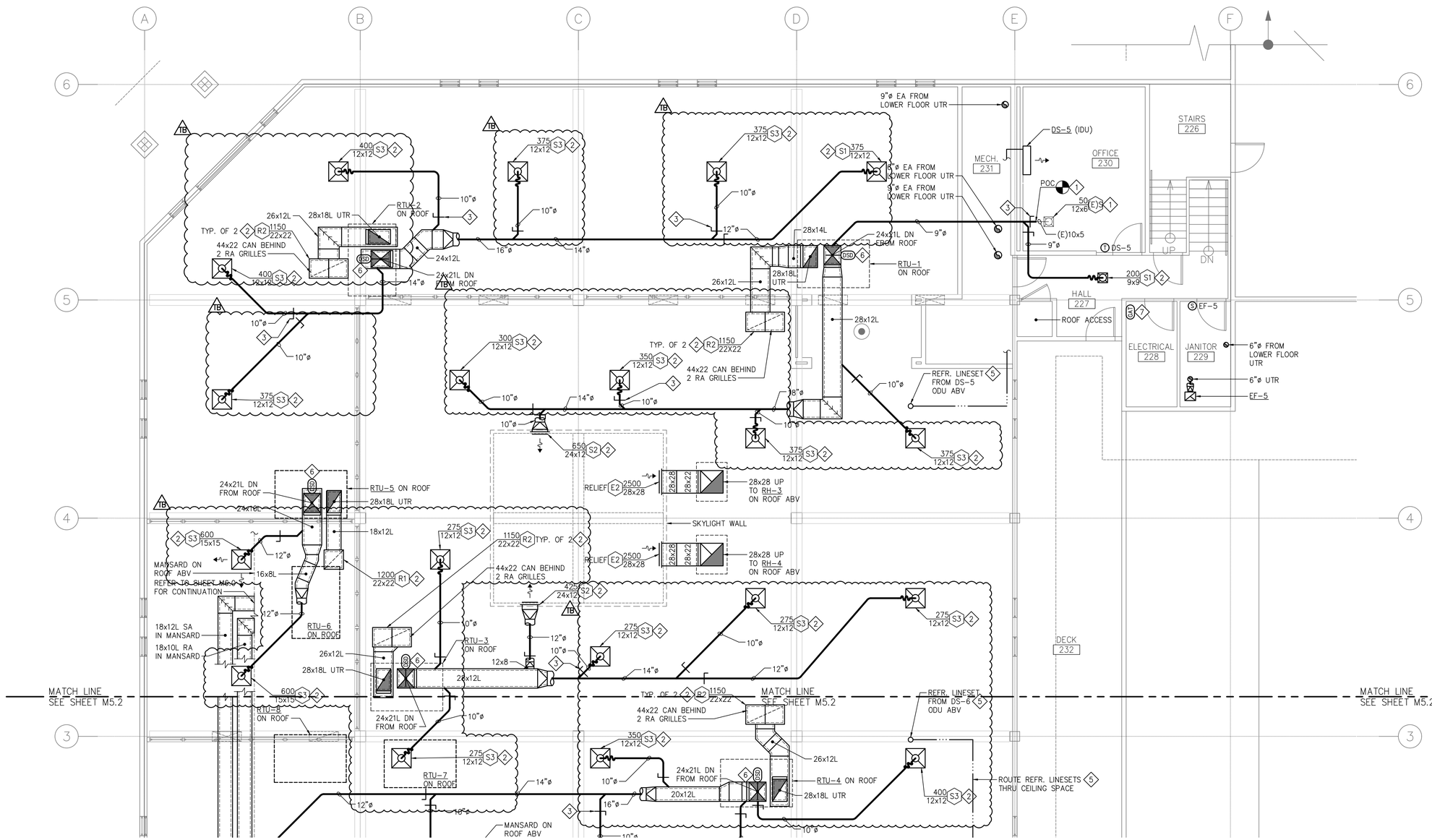


# MECHANICAL ENLARGED UPPER FLOOR PLAN - NORTH

SCALE: 3/16" = 1'-0"

## REFERENCE NOTES

1. Re-balance existing grille to value shown, typical. Provide balancing damper if needed. Refer to detail 17/M1.2 or 18/M1.2, depending on condition. Provide remote cable operated dampers above a hard lid, refer to detail 14/M1.2.
2. Provide new grille at this location. Refer to details 13/M1.2 or 15/M1.2 for grille connection, depending on condition.
3. Typical volume damper. Refer to detail 17/M1.2 or 18/M1.2, depending on condition. Provide remote cable operated dampers above a hard lid, refer to detail 14/M1.2.
4. Connect new duct to existing duct or new duct to back of existing grille at Point of Connection (POC) shown.
5. Route refrigerant lineset shortest distance between IDU and ODU, refer to detail 7/M1.2 for support.
6. Duct Smoke Detector (DSD), refer to detail 30/M1.3.

TB 7. Mount Pelican Gateway on wall in electrical Rm. Refer to MC sheets for requirements. Electrical to provide 120 volt power outlet for this device. Device is provided with adapter that plugs into wall.

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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:
**MECHANICAL ENLARGED UPPER FLOOR PLAN - NORTH**

CONSULTANT:

BMA Mechanical +
689 Tank Farm Rd., Ste 240
SLO, CA 93401
OFF: (805) 544-4269
BMA JOB# 23156.00

STAMP:

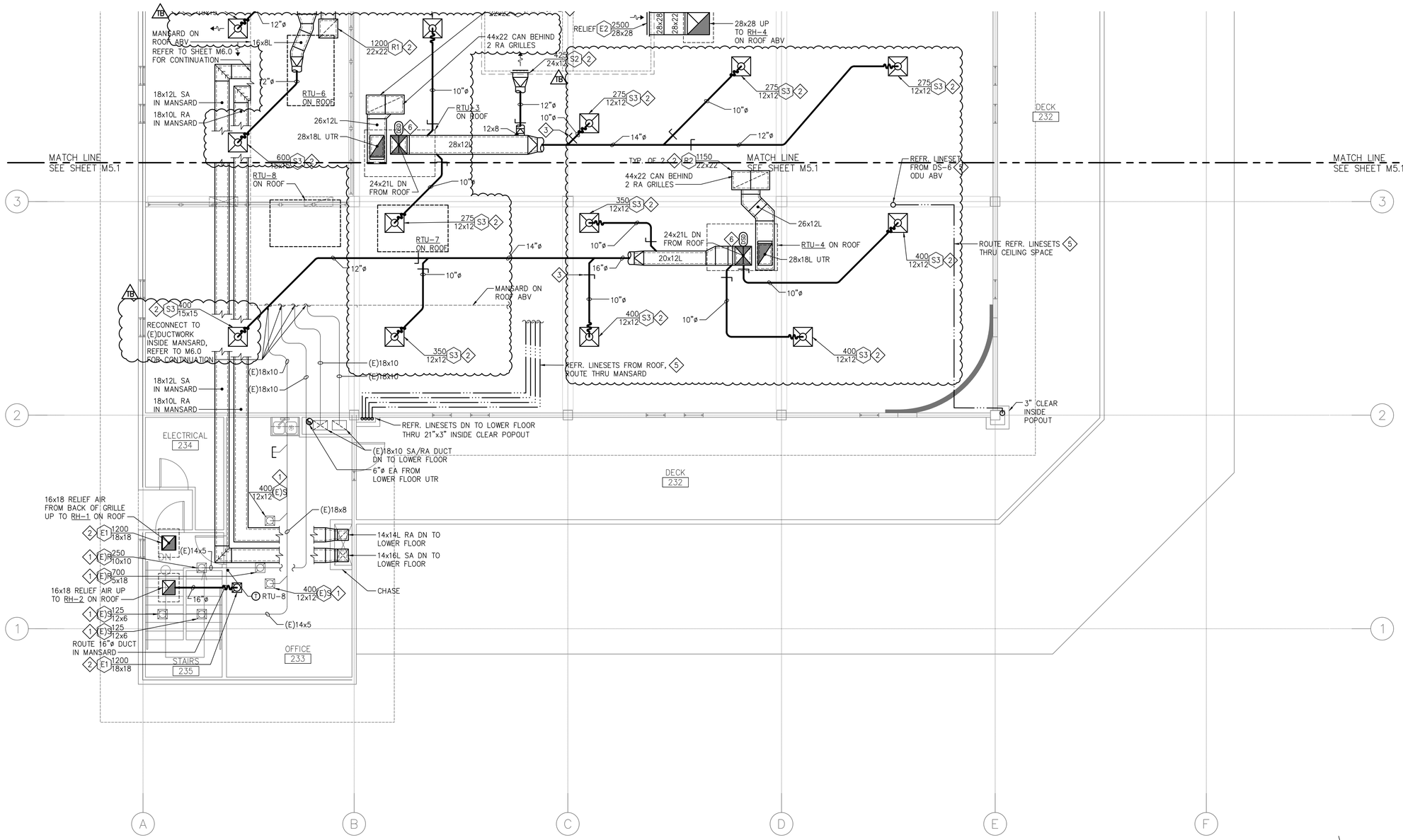
DATE:
June 18, 2024

REVISIONS:
1 Plan Check 1 County of SLO, 10/28/24
2 Plan Check 2 County of SLO, 12/11/24
TB T-Bar Replacement Alternate County of SLO, 8/28/25

JOB NUMBER:
2028

SHEET:
M5.1

F:\Drawings\2023\23156.00_AG Library Remod\mech\23156.00_M5.0_M5.1_M5.2_UPPER FLOOR PLAN.dwg ClaytonLahodny Aug 28,2025 - 3:19pm




# MECHANICAL ENLARGED UPPER FLOOR PLAN - SOUTH

SCALE: 3/16" = 1'-0"

## REFERENCE NOTES

1. Re-balance existing grille to value shown, typical. Provide balancing damper if needed. Refer to detail 17/M1.2 or 18/M1.2, depending on condition. Provide remote cable operated dampers above a hard lid, refer to detail 14/M1.2.
2. Provide new grille at this location. Refer to details 13/M1.2 or 15/M1.2 for grille connection, depending on condition.
3. Typical volume damper. Refer to detail 17/M1.2 or 18/M1.2, depending on condition. Provide remote cable operated dampers above a hard lid, refer to detail 14/M1.2.
4. Connect new duct to existing duct or new duct to back of existing grille at Point of Connection (POC) shown.
5. Route refrigerant lineset shortest distance between IDU and ODU, refer to detail 7/M1.2 for support.
6. Duct Smoke Detector (DSD), refer to detail 30/M1.3.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(805) 706-0645
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3055 DUNCAN LANE, SUITE A
SAN LUIS OBISPO, CA 93401



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PROJECT:

Renovation & Addition

**Arroyo Grande Library**

APN: 007-011-050
800 W. Branch Street,
Arroyo Grande, CA 93420

CLIENT:

County of San Luis Obispo
Department of Public Works
County Government Center,
Room 206
San Luis Obispo, CA 93408

SHEET CONTENTS:

**MECHANICAL ENLARGED UPPER FLOOR PLAN - SOUTH**

CONSULTANT:


BMA Mechanical +
689 Tank Farm Rd., Ste 240
SLO, CA 93401
OFF.: (805) 544-4269
BMA JOB# 23156.00


STAMP:

REGISTERED PROFESSIONAL ENGINEER
BRANDON ROSS REISS
M 38,662
EXP 6/30/27
MECHANICAL
STATE OF CALIFORNIA

DATE:

June 18, 2024

REVISIONS:

1 Plan Check 1 County of SLO, 10/28/24
2 Plan Check 2 County of SLO, 12/11/24
TB T-Bar Replacement Alternate County of SLO, 8/28/25

JOB NUMBER:

2028

SHEET:

M5.2


F:\Drawings\2023\23156.00_AG Library Remod\mech\23156.00_M5.0_M5.1_M5.2_UPPER FLOOR PLAN.dwg CloytonLahodny Aug 28,2025 - 3:19pm

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:** Arroyo Grande Library | **Report Page:** (Page 1 of 10) |
| **Project Address:** 800 W Branch St | **Date Prepared:** 9/9/2025 |

| A. GENERAL INFORMATION | | | | | |
|---|---|---|---|---|---|
| 01 | Project Location (city) | Arroyo Grande | 04 | Total Conditioned Floor Area (ft²) | 10,600 |
| 02 | Climate Zone | 5 | 05 | Total Unconditioned Floor Area (ft²) | 718 |
| 03 | Occupancy Types Within Project (select all that apply): | | 06 | # of Stories (Habitable Above Grade) | 1 |

● Library ● Office ● Support Areas ● All Other Occupancies

**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 | | | | |
| ☐ New Lighting System - Parking Garage | | | | |
| ☒ Altered Lighting System | Area Category Method | 10600 | Area Category Method | 718 |
| **Total Area of Work (ft²)** | 10600 | | 718 | |



STATE OF CALIFORNIA
## Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | NRCC-ELC-E |
|---|---|
| **Project Name:** Arroyo Grande Library | **Report Page:** (Page 4 of 4) |
| **Project Address:** 800 W Branch St | **Date Prepared:** 9/9/2025 |

**DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**

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

| Documentation Author Name: | Documentation Author Signature: |
|---|---|
| Heather A. Gray | |
| Company: Gray Electrical Consulting + Engineering, Corp | Signature Date: 2025-09-09 |
| Address: P.O. Box 368 | CEA/ HERS Certification Identification (if applicable): |
| City/State/Zip: Santa Maria CA 93456 | Phone: (805) 361-0525 |

**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: | Responsible Designer Signature: |
|---|---|
| Heather Gray | |
| Company: Gray Electrical Consulting + Engineering, Corp | Date Signed: 2025-09-09 |
| Address: P.O. Box 368 | License: E18927 |
| City/State/Zip: Santa Maria CA 93456 | Phone: (805)361-0525 |



STATE OF CALIFORNIA
## Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | NRCC-ELC-E |
|---|---|
| *This document is used to demonstrate compliance with mandatory requirements in 130.5, for electrical systems in newly constructed nonresidential and hotel/motel occupancies and 160.6 and 160.9 for electrical systems in newly constructed multifamily occupancies. Additions and alterations to electrical service systems in nonresidential and hotel/motel occupancies will also use this document to demonstrate compliance per 141.0(a) or 141.0(b)2P for alterations. For multifamily addition or alterations compliance will be documented per 180.1(a) or 180.2 (b)4Bvii* | |
| **Project Name:** Arroyo Grande Library | **Report Page:** (Page 1 of 4) |
| **Project Address:** 800 W Branch St | **Date Prepared:** 9/9/2025 |

| A. GENERAL INFORMATION | | | | | |
|---|---|---|---|---|---|
| 01 | Project Location (city) | Arroyo Grande | 02 | Climate Zone | 5 |
| | | | 03 | Occupancy Types Within Project: | All Other OccupanciesLibraryOfficeSupport Areas |

**B. PROJECT SCOPE**

*This table includes electrical systems that are within the scope of the permit application.*

| 01 | 02 | 03 | 04 | 05 | 06 | 07 |
|---|---|---|---|---|---|---|
| Electrical Service Designation/ Description | Scope of Work[1] | Rating[2] (kVA) | Utility Provided Metering System Exception to 130.5(a)/ 160.6(a)[3] | System subject to CA Elec Code Article 517 Exception to 130.5(a)and (b) | Demand Response Controls | Provides power to dwelling units/common living areas only in multifamily occupancy |
| (E)"MS" | Add/Alt to feeders and branch circuits only | 149 | ☐ | ☐ | Where required, demand response controls must be specified which are capable of receiving and automatically responding to at least one standards based messaging protocol which enables demand response after receiving a demand response signal. Sections 120.2/ 160.3, 130.1/ 160.5, and 130.3/ 160.5, and mechanical, indoor lighting, and sign lighting Certificate of Compliance documents will indicate when demand response controls are required. | ☐ |

[1] *FOOTNOTES: Adding only new feeders and branch circuits triggers Voltage Drop 130.5(c)/160.6(c), no other requirements from 130.5/160.6 are required.*
[2] *If common use areas in a multifamily are submetered, rating is for submeter size serving common use areas.*
[3] *Applicable if the utility company is providing a metering system that indicates instantaneous kW demand and kWh for a utility-defined period.*



STATE OF CALIFORNIA
## Indoor Lighting
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | NRCC-LTI-E |
|---|---|
| **Project Name:** Arroyo Grande Library | **Report Page:** (Page 2 of 10) |
| | **Date Prepared:** 9/9/2025 |

**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** | | 8,875.6 | 0 | | = | 8,876 | ≥ | 6,362 | 0 | = | 6362 | COMPLIES |
| **Unconditioned** | | 431.7 | 0 | | = | 432 | ≥ | 429 | 0 | = | 429 | COMPLIES |
| **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.*



STATE OF CALIFORNIA
## Indoor Lighting
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | NRCC-LTI-E |
|---|---|
| **Project Name:** Arroyo Grande Library | **Report Page:** (Page 3 of 10) |
| | **Date Prepared:** 9/9/2025 |

**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 |
| C1 | C1_42W LED | No | NA | 42 | Mfr. Spec | 36 | No | 1,512 | ☐ | ☐ |
| C2 | C2_20W LED | No | NA | 20 | Mfr. Spec | 1 | No | 20 | ☐ | ☐ |
| C3 | C3_61W LED | No | NA | 61 | Mfr. Spec | 1 | No | 61 | ☐ | ☐ |
| C4 | C4_13W LED | No | NA | 13 | Mfr. Spec | 8 | No | 104 | ☐ | ☐ |
| C5A | C5A_10W LED | No | NA | 10 | Mfr. Spec | 2 | No | 20 | ☐ | ☐ |
| C5B | C5B_10W LED | No | NA | 10 | Mfr. Spec | 2 | No | 20 | ☐ | ☐ |
| C5C | C5C_14W LED | No | NA | 14 | Mfr. Spec | 2 | No | 28 | ☐ | ☐ |
| C6A | C6A_39W LED | No | NA | 39 | Mfr. Spec | 53 | No | 2,067 | ☐ | ☐ |
| C6B | C6B_48W LED | No | NA | 48 | Mfr. Spec | 48 | No | 2,304 | ☐ | ☐ |
| C7A | C7A_42W LED | No | NA | 42 | Mfr. Spec | 3 | No | 126 | ☐ | ☐ |
| C7B | C7B_50W LED | No | NA | 50 | Mfr. Spec | 2 | No | 100 | ☐ | ☐ |
| | | | | | | | **Total Designed Watts: CONDITIONED SPACES** | 6,362 | | |

**Designed Wattage: Unconditioned 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 |
| C1 | C1_42W LED | No | NA | 42 | Mfr. Spec | 8 | No | 336 | ☐ | ☐ |
| C2 | C2_20W LED | No | NA | 20 | Mfr. Spec | 4 | No | 80 | ☐ | ☐ |
| C4 | C4_13W LED | No | NA | 13 | Mfr. Spec | 1 | No | 13 | ☐ | ☐ |
| | | | | | | | **Total Designed Watts: UNCONDITIONED SPACES** | 429 | | |



STATE OF CALIFORNIA
## Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | NRCC-ELC-E |
|---|---|
| **Project Name:** Arroyo Grande Library | **Report Page:** (Page 2 of 4) |
| | **Date Prepared:** 9/9/2025 |

**C. COMPLIANCE RESULTS**

*Results in this table are automatically calculated from data input and calculations in Tables F through J. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see applicable Table referenced below.*

| 01 | | 02 | | 03 | | 04 | 05 | 06 |
|---|---|---|---|---|---|---|---|---|
| Service Electrical Metering 130.5(a)/ 160.6(a) (See Table F) | AND | Separation for Monitoring 130.5(b)/ 160.6(b) (See Table G) | AND | Voltage Drop 130.5(c)/ 160.6(c) (See Table H) | AND | Controlled Receptacles 130.5(d)/ 160.6(d) (See Table I) | Electric Ready 160.9 (See Table J) | **Compliance Results** |
| Yes | AND | Yes | AND | Yes | AND | Yes | Yes | COMPLIES |

**D. EXCEPTIONAL CONDITIONS**

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

**E. ADDITIONAL REMARKS**

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

**F. SERVICE ELECTRICAL METERING**

*This section does not apply to this project.*

**G. SEPARATION OF ELECTRICAL CIRCUITS FOR ENERGY MONITORING**

*This section does not apply to this project.*

**H. VOLTAGE DROP**

*This table includes entirely new or complete replacement electrical power distribution systems, or alterations that add, modify or replace both feeders and branch circuits to demonstrate compliance with 130.5(c)/ 160.6(c). For alterations, only the altered circuits must demonstrate compliance per 141.0(b)2Pii/ 180.2(b)4Bviic.*

| 01 | 02 | 03 | 04 | 05 | |
|---|---|---|---|---|---|
| Electrical Service Designation/Description | Combined Voltage Drop on Installed Feeder/Branch Circuit Conductors Compliance Method | Location of Voltage Drop Calculations[1] | Sheet Number for Voltage Drop Calculations in Construction Documents | Field Inspector | |
| | | | | Pass | Fail |



STATE OF CALIFORNIA
## Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | NRCC-ELC-E |
|---|---|
| **Project Name:** Arroyo Grande Library | **Report Page:** (Page 3 of 4) |
| | **Date Prepared:** 9/9/2025 |

**H. VOLTAGE DROP**

| (E)"MS" | ☒ | Voltage drop less than 5% | ☐ | Permitted by CA Elec Code (Exception to 130.5(c))* | In construction documents | E1.1-E1.3 | ☐ | ☐ |
|---|---|---|---|---|---|---|---|---|

** NOTES: If "Permitted by CA Elec Code "* is selected under Compliance Method above, please indicate where the exception applies in the space provided below.*

*[1] FOOTNOTES: Voltage drop calculations may be attached to the permit application outside the construction documents if allowed by the Authority Having Jurisdiction. Select "attached" if applicable. If calculations will be the responsibility of the installing contractor, select "Contractor Responsible".*

**I. CIRCUIT CONTROLS FOR 120-VOLT RECEPTACLES AND CONTROLLED RECEPTACLES**

*This section does not apply to this project.*

**J. ELECTRIC READY BUILDINGS**

*This section does not apply to this project.*

**K. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION**

*Selections have been made based on information provided in this document. If any selection 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-ELC-E - Must be submitted for all buildings |




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www.reissdesignstudio.com
3055 Duncan Lane, Suite A
San Luis Obispo, CA 93401



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PROJECT:

**Arroyo Grande Library**

**APN: 007-011-050**
**800 W. Branch Street,**
**Arroyo Grande, CA 93420**

CLIENT:


DRAWINGS, SPECIFICATIONS, AND OTHER DOCUMENTS, INCLUDING THOSE IN ELECTRONIC FORM, PREPARED BY GRAY ELECTRICAL CONSULTING + ENGINEERING, CORP. ARE THE INSTRUMENTS OF SERVICE FOR USE SOLELY WITH RESPECT TO THIS PROJECT UNLESS OTHERWISE AUTHORIZED IN WRITING, GRAY ELECTRICAL CONSULTING + ENGINEERING, CORP. SHALL BE DEEMED THE AUTHOR AND OWNER OF THE INSTRUMENTS OF SERVICE AND SHALL RETAIN ALL COMMON LAW, STATUTORY AND OTHER RESERVED RIGHTS, INCLUDING COPYRIGHTS.


SHEET CONTENTS:

**TITLE 24 COMPLIANCE DOCUMENTATION**

CONSULTANT:


GECE
GRAY ELECTRICAL CONSULTING + ENGINEERING, CORP
2529 PROFESSIONAL PKWY
SUITE A - P.O. BOX #368
SANTA MARIA, CA 93455
P. 805-361-0525
E.INFO@GECECORP.COM
WWW.GECECORP.COM


STAMP:

REGISTERED PROFESSIONAL ENGINEER
HEATHER ANN GRAY
NO.E18927
ELECTRICAL
STATE OF CALIFORNIA
EXPIRES: 12.31.2025
GECE #2309

DATE: 6/28/2024

REVISIONS:

1 **Plan Check 1 County of SLO, 10/28/24**
2 **Plan Check 2 County of SLO, 12/11/24**
S1 **Bid Set Update County of SLO, 7/25/25**
TB **T-Bar Replacement Alternate County of SLO, 8/28/25**

JOB NUMBER:

SHEET:

**E0.2**
TB

STATE OF CALIFORNIA
**Indoor Lighting**
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | NRCC-LTI-E |
|---|---|---|
| **Project Name:** Arroyo Grande Library | **Report Page:** | (Page 10 of 10) |
| **Project Address:** 800 W Branch St | **Date Prepared:** | 9/9/2025 |

**DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**

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

| Documentation Author Name: | Documentation Author Signature: |
|---|---|
| Heather A. Gray | |
| Company: Gray Electrical Consulting + Engineering, Corp | Signature Date: 2025-09-09 |
| Address: P.O. Box 368 | CEA/ HERS Certification Identification (if applicable): |
| City/State/Zip: Santa Maria CA 93456 | Phone: (805) 361-0525 |

**RESPONSIBLE PERSON'S DECLARATION STATEMENT**

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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: | Responsible Designer Signature: |
|---|---|
| Heather Gray | |
| Company: Gray Electrical Consulting + Engineering, Corp | Date Signed: 2025-09-09 |
| Address: P.O. Box 368 | License: E18927 |
| City/State/Zip: Santa Maria CA 93456 | Phone: (805)361-0525 |



STATE OF CALIFORNIA
**Indoor Lighting**
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | NRCC-LTI-E |
|---|---|---|
| **Project Name:** Arroyo Grande Library | **Report Page:** | (Page 7 of 10) |
| | **Date Prepared:** | 9/9/2025 |

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

| | | | | | | |
|---|---|---|---|---|---|---|
| Electrical, Mechanical, Telephone Rooms | Electrical Mechancial Telephone Room | 0.4 | 21 | 8.4 | No | No |
| | | **TOTALS:** | 718 | 431.7 | See Tables J, or P for detail | |

**J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM**

*This section does not apply to this project.*

**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.*



STATE OF CALIFORNIA
**Indoor Lighting**
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | NRCC-LTI-E |
|---|---|---|
| **Project Name:** Arroyo Grande Library | **Report Page:** | (Page 4 of 10) |
| | **Date Prepared:** | 9/9/2025 |

**F. INDOOR LIGHTING FIXTURE SCHEDULE**

*[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: <= 80 % LP (alt only) | See Area/Space Level Controls | ☐ | ☐ |



STATE OF CALIFORNIA
**Indoor Lighting**
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | NRCC-LTI-E |
|---|---|---|
| **Project Name:** Arroyo Grande Library | **Report Page:** | (Page 8 of 10) |
| | **Date Prepared:** | 9/9/2025 |

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

*This section does not apply to this project.*

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

*This section does not apply to this project.*

**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 |



STATE OF CALIFORNIA
**Indoor Lighting**
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | NRCC-LTI-E |
|---|---|---|
| **Project Name:** Arroyo Grande Library | **Report Page:** | (Page 5 of 10) |
| | **Date Prepared:** | 9/9/2025 |

**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 |
| Office | Office ( <=250 square feet) | Readily Accessible | Dimmer | Occupancy Sensor | NA: General Ltg < 120W | NA: General Ltg < 120W | No | ☐ | ☐ |
| Office | Office ( >250 square feet) | Readily Accessible | Dimmer | Occupancy Sensor | NA: General Ltg < 120W | NA: General Ltg < 120W | No | ☐ | ☐ |
| Break Room | Lounge | Readily Accessible | Dimmer | Occupancy Sensor | NA: General Ltg < 120W | NA: General Ltg < 120W | No | ☐ | ☐ |
| Rentable Room | Lounge | Readily Accessible | Dimmer | Occupancy Sensor | NA: General Ltg < 120W | NA: General Ltg < 120W | No | ☐ | ☐ |
| Restroom | Restroom | Readily Accessible | NA: Restrooms | Occupancy Sensor | NA: General Ltg < 120W | NA: General Ltg < 120W | No | ☐ | ☐ |
| Corridor | Corridor | Auth. Personnel | NA: General Ltg <= 0.5W/SF | Occupancy Sensor | NA: General Ltg < 120W | NA: General Ltg < 120W | No | ☐ | ☐ |
| Reading | Library - Reading Area | Auth. Personnel | NA: <= 80 % LP (alt only) | Occupancy Sensor | NA: Overhang | NA: Overhang | No | ☐ | ☐ |
| Storage | All Other Space Types | Readily Accessible | NA: Enclosed area <100SF | Occupancy Sensor | NA: General Ltg < 120W | NA: General Ltg < 120W | No | ☐ | ☐ |
| Staff Area | Office ( >250 square feet) | Readily Accessible | Dimmer | Occupancy Sensor | Included | Included | No | ☐ | ☐ |
| Lobby | Main Entry Lobby | Readily Accessible | Dimmer | Occupancy Sensor | NA: General Ltg < 120W | NA: General Ltg < 120W | No | ☐ | ☐ |
| Main Library (Book Stacks) | Library - Stacks | Readily Accessible | Dimmer | Occupancy Sensor | Included | NA: General Ltg < 120W | No | ☐ | ☐ |



STATE OF CALIFORNIA
**Indoor Lighting**
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | NRCC-LTI-E |
|---|---|---|
| **Project Name:** Arroyo Grande Library | **Report Page:** | (Page 9 of 10) |
| | **Date Prepared:** | 9/9/2025 |

**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. | Office; Office; Break Room; Rentable Room; Restroom; Corridor; Reading; Storage; Staff Area; Lobby; Main Library (Book Stacks); Main Library (Reading Area); |
| NRCA-LTI-03-A - Must be submitted for automatic daylight controls. | Staff Area; Main Library (Book Stacks); Main Library (Reading Area); |



STATE OF CALIFORNIA
**Indoor Lighting**
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | NRCC-LTI-E |
|---|---|---|
| **Project Name:** Arroyo Grande Library | **Report Page:** | (Page 6 of 10) |
| | **Date Prepared:** | 9/9/2025 |

**H. INDOOR LIGHTING CONTROLS (Not including PAFs)**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Main Library (Reading Area) | Library - Reading Area | Readily Accessible | Dimmer | Occupancy Sensor | Included | NA: General Ltg < 120W | No | ☐ | ☐ |
| | | | | | | 13 | | | |
| | | | | | | Plan Sheet Showing Daylit Zones: | | | |
| | | | | | | E3.1-E3.2 | | | |

**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 |
| Corridor | Corridor | 0.4 | 48 | 19.2 | No | No |
| Office < 250 sqft | Office ( <=250 square feet) | 0.65 | 241 | 156.6 | No | No |
| Office > 250 sqft | Office ( >250 square feet) | 0.6 | 1,193 | 715.8 | No | No |
| Lounge Break | Lounge | 0.55 | 562 | 309.1 | No | No |
| Lobby | Main Entry Lobby | 0.7 | 323 | 226.1 | No | No |
| Reading Area | Library - Reading Area | 0.8 | 568 | 454.4 | No | No |
| Main Library (Reading Area) | Library - Reading Area | 0.8 | 3,353 | 2,682.4 | No | No |
| Main Library (Book Stacks) | Library - Stacks | 1 | 4,312 | 4,312 | No | No |
| | | **TOTALS:** | 10,600 | 8,875.6 | See Tables J, or P for detail | |

**Unconditioned 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 |
| Restrooms | Restroom | 0.65 | 578 | 375.7 | No | No |
| Storage | All Other Space Types | 0.4 | 119 | 47.6 | No | No |




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PROJECT:

**Arroyo Grande Library**

**APN: 007-011-050**
**800 W. Branch Street,**
**Arroyo Grande, CA 93420**

CLIENT:


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SHEET CONTENTS:

**TITLE 24 COMPLIANCE DOCUMENTATION**

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REGISTERED PROFESSIONAL ENGINEER
HEATHER ANN GRAY
NO.E18927
ELECTRICAL
STATE OF CALIFORNIA

EXPIRES: 12.31.2025
GECE #2309

DATE: 6/28/2024

REVISIONS:

1 **Plan Check 1**
**County of SLO, 10/28/24**

2 **Plan Check 2**
**County of SLO, 12/11/24**

B1 **Bid Set Update**
**County of SLO, 7/25/25**

TB **T-Bar Replacement Alternate**
**County of SLO, 8/28/25**

JOB NUMBER:

SHEET:

**E0.3**

TB

## LIGHTING CONTROL ZONE SCHEDULE (LCS)

LIGHTING CONTROLS VIA NETWORK SYSTEM

| ZONE | DESCRIPTION | CONTROL | DIMMING TECHNOLOGY | BRANCH CIRCUIT | CONNECTED LOAD (VA) | LOAD TYPE | NOTES |
|---|---|---|---|---|---|---|---|
| 1 | LIBRARY NORTH PRIMARY DAYLIT | OS, PC-DIM | 0-10V | K-1 | (SEE PANEL SCHEDULE) | LED | 1,2 |
| | | | | K-3 | (SEE PANEL SCHEDULE) | LED | 1,2 |
| 2 | LIBRARY EAST PRIMARY DAYLIT | OS, PC-DIM | 0-10V | K-2 | (SEE PANEL SCHEDULE) | LED | 1,2 |
| | | | | K-4 | (SEE PANEL SCHEDULE) | LED | 1,2 |
| 3 | LIBRARY SOUTH PRIMARY DAYLIT | OS, PC-DIM | 0-10V | K-9 | (SEE PANEL SCHEDULE) | LED | 1,2 |
| 4 | LIBRARY WEST PRIMARY DAYLIT | OS, PC-DIM | 0-10V | K-7 | (SEE PANEL SCHEDULE) | LED | 1,2 |
| | | | | K-5 | (SEE PANEL SCHEDULE) | LED | 1,2 |
| | | | | K-8 | (SEE PANEL SCHEDULE) | LED | 1,2 |
| 5 | LIBRARY WEST PRIMARY DAYLIT | OS, PC-DIM | 0-10V | K-6 | (SEE PANEL SCHEDULE) | LED | 1,2 |
| 6 | LIBRARY SKYLIT | OS, PC-DIM | 0-10V | K-13 | (SEE PANEL SCHEDULE) | LED | 1,2 |
| | | | | K-15 | (SEE PANEL SCHEDULE) | LED | 1,2 |
| 7 | READING 102 | OS | 0-10V | K-14 | (SEE PANEL SCHEDULE) | LED | 1 |

NOTES:

1. DURING OPERATING HOURS AUTO SCHEDULING SHALL TURN LIGHTS ON AND OFF. AFTER HOURS LIGHTS SHALL TURN OFF UPON VACANCY.

2. WHEN DAYLIT ILLUMINANCE IS GREATER THAN 50% OF THE DESIGN ILLUMINANCE, DIM LUMINAIRES IN THE DAYLIT ZONES AS DEFINED BY THE OWNER BUT NO LESS THAN 60%.

## EXISTING PANEL "K"

TYPE: PANELBOARD — FIELD VERIFY AIC PANEL & BRANCH CIRCUITS — LOCATION: UPPER FLOOR TELE 28 OR JAN 29
BUS: 225A — 42 FULL SIZE [BOLT ON] [PLUG IN] — NEMA: 1
120/208V, 3-PHASE, 4W — CIRCUIT BREAKER SPACES — MOUNTING: SURFACE
MAIN LUGS ONLY — PROVIDE WITH EQUIPMENT GROUND BUS — FEED FROM: (E)"DP1"

| NOTES | CIRCUIT | DESCRIPTION | BREAKER | WIRE | LF | VD(%) | PF | TYPE | PHASE A | PHASE B | PHASE C | TYPE | PF | VD(%) | LF | WIRE | BREAKER | DESCRIPTION | CIRCUIT | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 1 | LIGHTING RM#1 (READING) | 20/1 | 12 | 150 | 2.38 | 0.9 | C | 576 | | | C | 0.9 | 1.35 | 105 | 12 | 20/1 | LIGHTING RM#1 (READING) | 2 | 3 |
| 3 | 3 | LIGHTING RM#1 (READING) | 20/1 | 12 | 150 | 1.19 | 0.9 | C | 468 | | | C | 0.9 | 0.91 | 120 | 12 | 20/1 | LIGHTING RM#1 (READING) | 4 | 3 |
| 3 | 5 | LIGHTING RM#1 (READING) | 20/1 | 12 | 180 | 1.9 | 0.9 | C | | 288 | | C | 0.9 | 0.99 | 160 | 12 | 20/1 | LIGHTING RM#1 (READING) | 6 | 3 |
| 3 | 7 | LIGHTING RM#1 (READING) | 20/1 | 12 | 200 | 2.11 | 0.9 | C | | 273 | | C | 0.9 | 1.69 | 160 | 12 | 20/1 | LIGHTING RM#1 (READING) | 8 | 3 |
| 3 | 9 | LIGHTING RM#1 (READING) | 20/1 | 10 | 200 | 2.15 | 0.9 | C | | | 384 | C | 0.9 | 1.69 | 160 | 12 | 20/1 | LIGHTING RM#1 (READING) | 10 | 3 |
| 3 | 11 | LIGHTING RM#1 (READING) | 20/1 | - | - | - | - | - | | | 226 | - | - | - | - | - | 20/1 | LIGHTING RM#1 (READING) | 12 | 3 |
| 3 | 13 | LIGHTING RM#1 (READING) | 20/1 | 12 | 150 | 2.38 | 0.9 | C | 384 | | | C | 0.9 | 0.64 | 150 | 12 | 20/1 | LIBRARY ENTRY | 14 | 5 |
| 3 | 15 | LIGHTING RM#1 (READING) | 20/1 | 12 | 150 | 2.3 | 0.9 | C | 384 | | | C | 0.9 | 1.39 | 150 | 12 | 20/1 | READING 102 | 16 | 5 |
| 3 | 17 | EMERGENCY LIGHTS | 20/1 | - | - | - | - | - | | 624 | | - | - | - | - | - | 20/1 | LIGHTING RM#1 (READING) | 18 | 3 |
| 5 | 19 | RM 115, 110, 109, 108, 107, 106, 105 | 20/1 | 12 | 150 | 1.98 | 0.9 | C | 480 | 2100 | | - | - | - | - | - | 20/1 | LIGHTING LOWER FLOOR | 20 | 3 |
| 3 | 21 | LIGHTING LOWER FLOOR | 20/1 | - | - | - | - | - | 1000 | | | - | - | - | - | - | 20/1 | LIGHTING LOWER FLOOR | 22 | 3 |
| 3 | 23 | LIGHTING LOWER FLOOR | 20/1 | - | - | - | - | - | 1000 | | | - | - | - | - | - | 20/1 | TIME CLOCK TRANSFORMER | 24 | 3 |
| 8 | 25 | RM 104 | 20/1 | 12 | 150 | 2.43 | 0.9 | C | 588 | | | - | - | - | - | - | 20/1 | ROUTER CIRCUIT | 26 | 3 |
| 8 | 27 | RM 231, 121, 122, 124, 125 AND STORAGE | 20/1 | 12 | 150 | 2.18 | 0.9 | C | 1000 | 528 | | - | - | - | - | - | 20/1 | ` | 28 | 3 |
| 3 | 29 | AREA LIGHTING | 20/2 | - | - | - | - | - | | 1000 | | - | - | - | - | - | 20/2 | AREA LIGHTING | 30 | 3 |
| 3 | 31 | " | | - | - | - | - | - | | | 1000 | - | - | - | - | - | | " | 32 | 3 |
| 3 | 33 | AREA LIGHTING | 20/2 | - | - | - | - | - | | | 1000 | - | - | - | - | - | 20/2 | AREA LIGHTING | 34 | 3 |
| 3 | 35 | " | | - | - | - | - | - | | | 1000 | - | - | - | - | - | | " | 36 | 3 |
| 3 | 37 | AREA LIGHTING | 20/2 | - | - | - | - | - | 126 | | | C | 0.7 | 0.26 | 80 | 12 | 20/1 | VETERANS ROOM LIGHTING | 38 | |
| 3 | 39 | " | | - | - | - | - | - | | | | - | - | - | - | - | 20/1 | SPARE | 40 | |
| | 41 | SPARE | 20/1 | - | - | - | - | - | | | | - | - | - | - | - | 20/1 | SPARE | 42 | |
| | | | | | | | | SUBTOTAL (VA) | 5747 | 7707 | 10885 | | | | | | | | | |
| | | | | | | | | CONTINUOUS | 937 | 652 | 153 | | | | | | | | | |
| | | | | | | | | AMPS @ 120 | 56 | 70 | 92 | | | | | | | | | |

**26.08 KVA**
**72 AMPS @ 120/208V, 3 PHASE**

## (N) PANEL "M2"

TYPE: PANELBOARD — 10K AIC PANEL & BRANCH CIRCUITS — LOCATION: UPPER FLOOR MECH 231
BUS: 100A — 30 FULL SIZE [BOLT ON] [PLUG IN] — NEMA: 1
120/208V, 3-PHASE, 4W — CIRCUIT BREAKER SPACES — MOUNTING: SURFACE
100A MAIN CIRCUIT BREAKER, 100% RATED — PROVIDE WITH EQUIPMENT GROUND BUS — FEED FROM: DP1

| NOTES | CIRCUIT | DESCRIPTION | BREAKER | WIRE | LF | VD(%) | PF | TYPE | PHASE A | PHASE B | PHASE C | TYPE | PF | VD(%) | LF | WIRE | BREAKER | DESCRIPTION | CIRCUIT | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | DS-1 | 20/2 | 10 | 120 | 1.72 | 0.8 | M | 1248 | | | M | 0.8 | 1.06 | 40 | 12 | 20/1 | FAUCET | 2 | 1 |
| 1 | 3 | " | | 10 | 120 | 1.72 | 0.8 | M | 960 | | | M | 0.8 | 0.66 | 25 | 12 | 20/1 | FAUCET | 4 | 1 |
| 1 | 5 | DS-2 | 20/2 | 10 | 120 | 1.72 | 0.8 | M | | 1248 | | M | 0.8 | 0.66 | 25 | 12 | 20/1 | FAUCET | 6 | 1 |
| 1 | 7 | " | | 10 | 120 | 1.72 | 0.8 | M | | 480 | | M | 0.8 | 2.15 | 130 | 10 | 20/1 | FAUCET | 8 | 1 |
| 1 | 9 | DS-3 | 20/2 | 10 | 120 | 1.72 | 0.8 | M | 1248 | | | M | 0.8 | 2.11 | 40 | 12 | 20/1 GFCI | HAND DRYER | 10 | 1 |
| 1 | 11 | " | | 10 | 120 | 1.72 | 0.8 | M | 1920 | | | M | 0.8 | 2.11 | 40 | 12 | 20/1 GFCI | HAND DRYER | 12 | 1 |
| 1 | 13 | DS-4 | 20/2 | 10 | 120 | 1.72 | 0.8 | M | | 1248 | | M | 0.8 | 1.32 | 25 | 12 | 20/1 GFCI | HAND DRYER | 14 | 1 |
| 1 | 15 | " | | 10 | 120 | 1.72 | 0.8 | M | | 1920 | | M | 0.8 | 1.32 | 25 | 12 | 20/1 GFCI | HAND DRYER | 16 | 1 |
| 1 | 17 | DS-5 | 20/2 | 12 | 20 | 0.46 | 0.8 | M | | | 1248 | M | 0.8 | 1.32 | 25 | 12 | 20/1 GFCI | HAND DRYER | 18 | 1 |
| 1 | 19 | " | | 12 | 20 | 0.46 | 0.8 | M | 1248 | | 1920 | M | 0.8 | 2.7 | 130 | 8 | 20/1 GFCI | HAND DRYER | 20 | 1 |
| 1 | 21 | WH-1 | 20/1 | 10 | 45 | 1.16 | 0.8 | M | 1920 | 1500 | | R | 0.6 | 1.98 | 100 | 12 | 20/1 | VETERANS | 22 | |
| 1 | 23 | CP-1 | 20/1 | 12 | 45 | 0.03 | 0.8 | M | | 720 | | R | 0.6 | 2.97 | 100 | 12 | 20/1 | VETERANS SW | 24 | |
| 1 | 25 | DS-6 | 20/2 | 12 | 60 | 1.37 | 0.8 | M | 1248 | | 20 | M | 0.8 | 0.25 | 90 | 12 | 20/1 | SF-1 | 26 | 1 |
| 1 | 27 | " | | 12 | 60 | 1.37 | 0.8 | M | 10 | 1248 | 1080 | - | - | - | - | - | 20/1 | SPARE | 28 | |
| | 29 | SPARE | 20/1 | - | - | - | - | - | | | | - | - | - | - | - | 20/1 | SPARE | 30 | |
| | | | | | | | | SUBTOTAL (VA) | 11530 | 11532 | 9644 | | | | | | | | | |
| | | | | | | | | CONTINUOUS | 0 | 0 | 0 | | | | | | | | | |
| | | | | | | | | AMPS @ 120 | 96 | 96 | 80 | | | | | | | | | |

**32.71 KVA**
**91 AMPS @ 120/208V, 3 PHASE**


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PROJECT:

**Arroyo Grande Library**

**APN: 007-011-050**
**800 W. Branch Street,**
**Arroyo Grande, CA 93420**


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SHEET CONTENTS:

**ELECTRICAL SCHEDULES**

CONSULTANT:


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REGISTERED PROFESSIONAL ENGINEER — BRANDON ANDREW GRAY — NO.E18927 — ELECTRICAL — STATE OF CALIFORNIA
EXPIRES: 12.31.2025
GECE #2309

DATE: 6/28/2024

REVISIONS:

1 **Plan Check 1**
**County of SLO, 10/28/24**

2 **Plan Check 2**
**County of SLO, 12/11/24**

B1 **Bid Set Update**
**County of SLO, 7/25/25**

TB **T-Bar Replacement Alternate**
**County of SLO, 8/28/25**

JOB NUMBER:

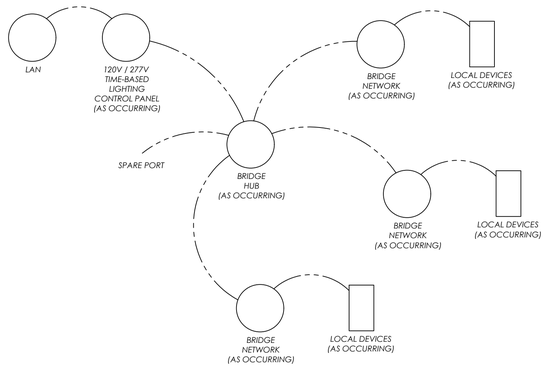
SHEET:

**E1.4**

# FLOOR/WALL BOX SCHEDULE

| | SYMBOL | MANUFACTURER | SPECIFICATION | DESCRIPTION | AC VOLTAGE | MOUNTING |
|---|---|---|---|---|---|---|
| F1 | | LEGRAND | WIREMOLD OMNI BOX 880CS1-1 | SINGLE (1) GANG FLOORBOX, FLUSH IN FLOOR. PROVIDE WITH DEVICE AS INDICATED. | 120V | FLUSH IN FLOOR |
| F2 | | LEGRAND | WIREMOLD OMNI BOX 880CS2-1 | TWO (2) GANG FLOORBOX, FLUSH IN FLOOR. PROVIDE WITH DEVICES AS INDICATED. | 120V | FLUSH IN FLOOR |
| F3 | | LEGRAND | WIREMOLD OMNI BOX 880CS3-1 | THREE (3) GANG FLOORBOX, FLUSH IN FLOOR. PROVIDE WITH DEVICES AS INDICATED. | 120V | FLUSH IN FLOOR |
| F4 | | LEGRAND | WIREMOLD OMNI BOX 880CS2-1 | TWO (2) GANG FLOORBOX, FLUSH IN FLOOR. PROVIDE WITH DEVICES AS INDICATED. | 120V | FLUSH IN FLOOR |

NOTE: FLOORBOXES SHALL BE PROVIDED WITH APPROPRIATE TRIM AS PER FLOORING APPLICATION (IE. LUXURY VINYL PLANK). FINISH SELECTION SHALL BE PER ARCHITECTURAL REQUIREMENTS.




GENERAL NOTES:

1. THIS DETAIL HAS BEEN PREPARED ON A SCHEMATIC LEVEL AND DOES NOT FULLY IDENTIFY ALL INSTALLATION CRITERIA AS REQUIRED BY THE MANUFACTURER. PRIOR TO PROCUREMENT, INSTALLATION THE CONTRACTOR SHALL FURNISH A COMPLETE MANUFACTURER ENGINEERING DRAWING, INCLUDING SYSTEM SCHEMATIC AND SPECIFICATIONS, CAPABLE OF ACHIEVING THE DESIGN INTENT AS REPRESENTED ON THE DRAWINGS FOR ENGINEER APPROVAL. MANUFACTURER DRAWINGS SHALL INCLUDE, HOWEVER, SHALL NOT BE LIMITED TO:
   A. SCALED FLOOR PLANS INDICATING DEVICE LOCATION AND SYSTEM INTERCONNECTION (SEE NOTE #2).
   B. CONFIRMATION OF CONTROL DEVICE SPECIFICATIONS, QUANTITIES, AND LOCATION PER PLANS TO MAXIMIZE AND CONFIRM DEVICE COVERAGE. EEOR WILL REVIEW DOCUMENTATION TO ENSURE COMPLIANCE WITH LOCAL AND STATE CODES.
   C. WIRING DETAILS.
   D. SINGLE LINE DIAGRAM, INCLUDING BRIDGE PORT CONNECTION POINTS, LAN SYSTEM CONNECTION, WIRELESS NETWORK, ETC.
   E. INSTALLATION INSTRUCTIONS.
   F. BILL OF MATERIALS.
2. THE LIGHTING CONTROL SYSTEM BASIS OF DESIGN HAS BEEN DEVELOPED PURSUANT TO AN ACUITY BRANDS nLIGHT SYSTEM.
   A. RELAY CONTROLLED LOADS SHALL BE CONNECTED VIA A LIGHTING CONTROL PANEL WITH T-24 APPROVED AUTOMATIC MEANS FOR LIGHTING CONTROL VIA ASTRONOMICAL TIME CLOCK AND PHOTOCELL.
   B. LIGHTING CONTROL DEVICES SHALL BE INTERCONNECTED VIA CAT-5E WIRING SYSTEM AS PER MANUFACTURER REQUIREMENTS. INTERCONNECTION SHALL BE "DAISY-CHAIN" WITH OVERALL CABLE LENGTH NOT EXCEEDING 1,000-FEET FROM INITIAL TO LAST DEVICE.
   C. LUMINAIRES SHALL BE nLIGHT ENABLED.
   D. ENSURE DEVICES ARE LABELED IN THE FIELD, CORRESPONDING TO FACTORY SCHEMATIC DIAGRAMS.
   E. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONTROL TERMINATIONS. SPLICING WITHIN THE CONTROL SYSTEM IS NOT PERMITTED.
   F. POWER AND CONTROL WIRING ARE NOT PERMITTED TO SHARE THE SAME CONDUIT OR RACEWAY.
   G. MAINTAIN A MINIMUM OF 12" SEPARATION BETWEEN LINE VOLTAGE AND LOW VOLTAGE SYSTEM WIRING. KEEP LOW VOLTAGE SYSTEM WIRING AWAY FROM EMF DEVICES (I.E. TRANSFORMERS).
   H. EMERGENCY AND NORMAL POWER DEVICES SHALL SWITCH TOGETHER.
   I. EMERGENCY DEVICES SHALL ENABLE LUMINAIRES TO POWER AT 100% UPON LOSS OF NORMAL POWER.
3. THE LIGHTING CONTROL SYSTEM SHALL PROVIDE APPROPRIATE SEPARATION BETWEEN NORMAL AND EMERGENCY POWERED LOADS. NORMAL AND EMERGENCY POWERED LOADS SHALL BE KEPT ENTIRELY INDEPENDENT AS OUTLINED IN CEC ARTICLE 700.
4. THE INSTALLED SYSTEM SHALL BE CAPABLE OF RECEIVING A (FUTURE) DEMAND RESPONSE SIGNAL FROM THE UTILITY COMPANY AS REQUIRED PER CALIFORNIA TITLE 24.
5. REFER TO SYSTEM DIVISION 26 PERFORMANCE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

## 1 LIGHTING CONTROL CONCEPTUAL SCHEMATIC

NOT TO SCALE

# NEW LUMINAIRE SCHEDULE - INTERIOR

| TYPE | MANUFACTURER | SPECIFICATION | LAMP | AC VOLTAGE | SYSTEM WATTAGE | MOUNTING | NOTES |
|---|---|---|---|---|---|---|---|
| C1 | LITHONIA OR ENGINEER APPROVED EQUAL | TRUM 48 ALO6-5000L FMP 8SWW2-40K ZT MVOLT | LED (4000K) | 120V | 42W | SURFACE (CEILING) | 4' LONG LOW PROFILE LED WRAPAROUND LUMINAIRE, 80+CRI, 5,000 LUMENS, DAMP LOCATION LISTED. PROVIDE EMERGENCY BATTERY BACKUP (10W RATED) FOR ALL LUMINAIRES LABELED (EM). ACUITY IOTA MODEL ILBCP10 HESDA. FIELD INSTALLED. |
| C2 | LITHONIA OR ENGINEER APPROVED EQUAL | FMLWL 24 840 ZT MVOLT | LED (4000K) | 120V | 20W | SURFACE (CEILING) | 2' LONG LOW PROFILE LED WRAPAROUND LUMINAIRE, 85+CRI, 1,200 LUMENS, DAMP LOCATION LISTED |
| C3 | MARK ARCHITECTURAL LIGHTING OR ENGINEER APPROVED EQUAL | MGLS 48IN 80CRI 40K 5500LM MIN1 FLL MVOLT FLT ZT | LED (4000K) | 120V | 61W | SURFACE (CEILING) | 48" DIA. LED SURFACE MOUNTED LUMINAIRE, 80+CRI, 5,516 LUMENS. FINISH PER OWNERSHIP / OWNER. |
| C4 | JUNO LIGHTING OR ENGINEER APPROVED EQUAL | JSF 10LM 40K 90CRI MVOLT ZT WH | LED (4000K) | 120V | 13W | SURFACE (CEILING) | 7" LED SURFACE MOUNTED DOWNLIGHT, 90 CRI, 1000 LUMENS, WET LOCATION LISTED |
| C5A | EUREKA LIGHTING OR ENGINEERING APPROVED EQUAL | QS10 4232-23 LED 30 80 120V DV C ** RC1 WHE XXX XX WH | LED (3000K) | 120V | 9.8W | PENDANT | SMALL QUADRANT PENDANT, 23.62" H X 7.87" W, 9.8W, 916 LUMENS, FELT FINISH AND CUTOUT PATTERN PER OWNERSHIP. |
| C5B | EUREKA LIGHTING OR ENGINEERING APPROVED EQUAL | QS10 4232-35 LED 30 80 120V DV C ** RC1 WHE XXX XX WH | LED (3000K) | 120V | 9.8W | PENDANT | MEDIUM QUADRANT PENDANT, 35.43" H X 11.81" W, 9.8W, 970 LUMENS, FELT FINISH AND CUTOUT PATTERN PER OWNERSHIP. |
| C5C | EUREKA LIGHTING OR ENGINEERING APPROVED EQUAL | QS10 4232-47 LED 30 80 120V DV C ** RC1 WHE XXX XX WH | LED (3000K) | 120V | 14.1W | PENDANT | LARGE QUADRANT PENDANT, 47.24" H X 16" W, 14.1W, 1366 LUMENS, FELT FINISH AND CUTOUT PATTERN PER OWNERSHIP. |
| C6A | LITHONIA OR ENGINEER APPROVED EQUAL | 2VLT4 48L ADP EZ1 LP840 | LED (4000K) | 120V | 39W | RECESSED (CEILING) | 2' X 4' VOLUMETRIC LED TROFFER. 4800 LUMENS. |
| C6B | LITHONIA OR ENGINEER APPROVED EQUAL | 2VLT4 60L ADP EZ1 LP840 | LED (4000K) | 120V | 48W | RECESSED (CEILING) | 2' X 4' VOLUMETRIC LED TROFFER. 6000 LUMENS. |
| C7A | MARK ARCHITECTURAL LIGHTING OR ENGINEER APPROVED EQUAL | MGLP 18IN 80CRI 40K 2500LM I80CRI I40K I800LM SCT MIN1 FLL MVOLT FLT ZT F6/96F | LED (4000K) | 120V | 42W | PENDANT | 18" DIAMETER DIRECT/INDIRECT PENDANT. 2500 LUMENS DOWNLIGHT, 800 LUMENS UPLIGHT. MOUNT FIXTURE AT +10'-0" AFF. COLOR/FINISH OPTIONS PER OWNERSHIP. |
| C7B | MARK ARCHITECTURAL LIGHTING OR ENGINEER APPROVED EQUAL | MGLP 24IN 80CRI 40K 4000LM I80CRI I40K I2000LM SCT MIN1 FLL MVOLT FLT ZT | LED (4000K) | 120V | 50W | PENDANT | 24" DIAMETER DIRECT/INDIRECT PENDANT. 4000 LUMENS DOWNLIGHT, 2000 LUMENS UPLIGHT. MOUNT FIXTURE AT +10'-0" AFF. COLOR/FINISH OPTIONS PER OWNERSHIP. |
| X1 | LITHONIA OR ENGINEER APPROVED EQUAL | LHQM LED R M6 | LED | 120V | 4W | SURFACE | COMBINATION EXIT SIGN/EMERGENCY LIGHTING WITH INTEGRAL BATTERY BACK-UP (90 MINUTE MIN.) AND SELF DIAGNOSTICS. PROVIDE WITH CHEVRON AND SINGLE OR DUAL FACE INDICATIONS AS PER PLANS, FINISH PER OWNERSHIP / OWNER. |

1B

# LUMINAIRE SCHEDULE GENERAL NOTES

- LUMINAIRES SHALL BE RATED BY UL FOR BRANCH CIRCUIT THROUGH-WIRING. IF LUMINAIRES ARE NOT RATED FOR THRU WIRING, THE CONTRACTOR SHALL MAKE APPROPRIATE ACCOMMODATIONS WHEN WIRING.
- VERIFY CEILING TYPES/FINISHES FOR ALL RECESSED FIXTURES PRIOR TO FORWARDING SUBMITTALS.

# CONTROL DEVICE LEGEND

| TYPE | MANUFACTURER | SPECIFICATION | TECHNOLOGY | AC VOLTAGE | MOUNTING | OPERATIONAL SETTINGS |
|---|---|---|---|---|---|---|
| $ | CONTRACTOR SELECT | LINE VOLTAGE SWITCH | - | 120V | WALL | LINE VOLTAGE |
| $OS | SENSOR SWITCH OR ENGINEER APPROVED EQUAL | WSX PDT | DUAL TECHNOLOGY | 120V | SURFACE | LINE VOLTAGE WITH OCCUPANCY SENSOR. PROVIDE WITH 2P WHERE REQUIRED TO CONTROL MECHANICAL EXHAUST FAN. |
| $D2 | SENSOR SWITCH OR ENGINEER APPROVED EQUAL | sPODMRD | - | 120V | WALL | LINE VOLTAGE DIMMER SWITCH WITH 0-10V DIMMING CAPABILITIES. COLOR TO BE SELECTED BY OWNER / ARCHITECT. |
| $D | SENSOR SWITCH OR ENGINEER APPROVED EQUAL | sPODM D | - | LV | WALL | LOW VOLTAGE DIMMER SWITCH WITH 0-10V DIMMING CAPABILITIES. COLOR TO BE SELECTED BY OWNER / ARCHITECT. |
| $ LV | nLIGHT CONTROLS OR ENGINEER APPROVED EQUAL | nPOD | - | LV | RECESSED | nLIGHT nPOD LOW-VOLTAGE SWITCH. REFER TO PLANS AND SWITCHBANK ELEVATIONS FOR ADDITIONAL INFORMATION |
| PPN | nLIGHT CONTROLS OR ENGINEER APPROVED EQUAL | nPP16D | DUAL TECHNOLOGY | LV | SURFACE | POWER PACK WITH 0-10V DIMMING CAPABILITIES. |
| PPL | nLIGHT CONTROLS OR ENGINEER APPROVED EQUAL | nPP20L | - | LV | SURFACE | PLUG LOAD CONTROL POWER PACK. LOAD PLUG SHALL SWITCH UP TO 20A LOADS. |
| OS1 | nLIGHT CONTROLS OR ENGINEER APPROVED EQUAL | nCM PDT 9(RJB) | DUAL TECHNOLOGY | LV | SURFACE | LOW VOLTAGE OCCUPANCY SENSOR FOR SMALL MOTION DETECTION. |
| OS2 | nLIGHT CONTROLS OR ENGINEER APPROVED EQUAL | nCM PDT 9(RJB) ADCX | DUAL TECHNOLOGY | LV | SURFACE | LOW VOLTAGE OCCUPANCY SENSOR FOR SMALL MOTION DETECTION. PROVIDE WITH PHOTOCELL FOR DAYLIGHT ZONES. |
| OS3 | SENSOR SWITCH OR ENGINEER APPROVED EQUAL | CMR PDT 10 | DUAL TECHNOLOGY | 120V | SURFACE | LINE VOLTAGE OCCUPANCY SENSOR WITH PIR & MICROPHONICS TECHNOLOGY. CONTROL AUTO "ON"; AUTO "OFF" TIME DELAY: 3 MIN; GRACE PERIOD: 15 SEC. |
| OS4 | nLIGHT CONTROLS OR ENGINEER APPROVED EQUAL | nCM 6 (RJB) ADCX | DUAL TECHNOLOGY | LV | SURFACE | LOW VOLTAGE OCCUPANCY SENSOR FOR HIGH MOUNT 15'-45' MOUNTING HEIGHTS. PROVIDE WITH PHOTOCELL FOR DAYLIGHT ZONES. |

1B

# LIGHTING CONTROL SCHEDULE GENERAL NOTES

- ILLUMINATION LEVELS DURING HOURS OF DARKNESS SHALL BE ADJUSTED TO 20% OR MORE BELOW DAYTIME ILLUMINATION LEVELS.
- SENSOR AND DIMMING SETTINGS SHALL BE CALIBRATED AND FINALIZED PURSUANT TO FINAL INSTALLATION OF ALL LUMINAIRES, COMPLETION OF FINAL FINISHES AND FURNITURE INSTALLATION IS COMPLETE.
- TO ENSURE EVEN LIGHTING LEVELS AND ENERGY SAVINGS, LUMINAIRES WITHIN DAYLIGHT ZONES THAT INCLUDE MORE THAN ONE ROW OF FIXTURES SHALL BE PROGRAMMED SUCH THAT FIXTURES CLOSER TO WINDOWS RECEIVE LOWER LIGHT COMMANDS THAN FIXTURES FARTHER FROM WINDOWS.
- PHOTOSENSORS SHALL NOT BE INSTALLED IN DIRECT SUNLIGHT OR DIRECT ILLUMINATION PATH OF LUMINAIRES.
- LUMINAIRES WITHIN PRIMARY OR SECONDARY DAYLIGHT ZONES SHALL REDUCE LUMEN OUTPUT BY A MINIMUM OF 65% WHEN DETECTED DAYLIGHTING MEETS OR EXCEEDS 150% OF DESIGN ILLUMINATION LEVELS.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SHEET CONTENTS:

**LIGHTING SCHEDULES**

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EXPIRES: 12.31.2025
GECE #2309

DATE: 6/28/2024

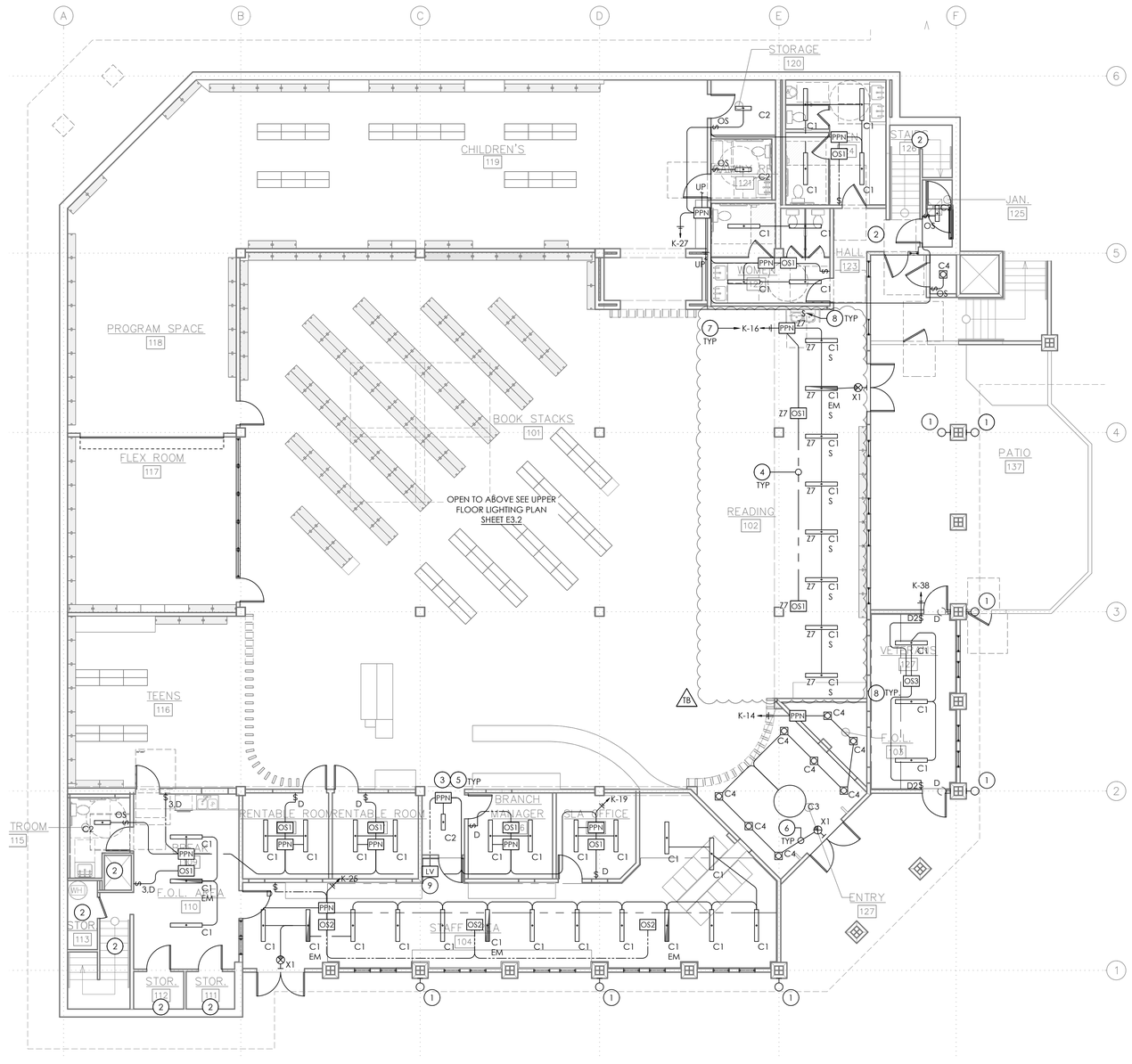
REVISIONS:

1 **Plan Check 1 County of SLO, 10/28/24**
2 **Plan Check 2 County of SLO, 12/11/24**
B1 **Bid Set Update County of SLO, 7/25/25**
1B **T-Bar Replacement Alternate County of SLO, 8/28/25**

JOB NUMBER:

SHEET:

**E1.5**




# LOWER FLOOR LIGHTING PLAN

SCALE: 1/8" = 1'0"

## REFERENCE NOTES

(#) GENERAL NOTE: REFERENCE NOTES ARE TYPICAL FOR SHEETS E3.1-E3.2. ALL REFERENCE NOTES MAY NOT OCCUR ON THIS SHEET.

1. EXISTING EXTERIOR WALL SCONCE TO BE REPLACED IN PLACE. PROVIDE ANP LIGHTING WG012-1-FR-M010LD-D-W-30K-XX-WM1211-73 OR ENGINEERING APPROVED EQUAL. ALTERATION DOES NOT INCREASE CONNECTED LIGHTING LOAD, EXCEPTION 1 TO CEC SECTION 141.0(b)2Lii APPLIES.
2. EXISTING LIGHTING DEVICES TO REMAIN.
3. LOW VOLTAGE LIGHTING CONTROL SYSTEM GROUPING AS PER LIGHTING SCHEDULES. COORDINATE WITH ENGINEER APPROVED MANUFACTURER SUBMITTAL. TYPICAL. LOW VOLTAGE CAT5E EXTENSION TO WALL POD TO CONTROL.
4. INTERCONNECT LOW VOLTAGE OCCUPANCY SENSORS WITH CAT5E LIGHTING CONTROL WIRING TO POWER PACK AS PER MANUFACTURER REQUIREMENTS. TYPICAL.
5. INSTALL POWER PACKS IN A ACCESSIBLE LOCATION.
6. EXTEND UN-SWITCHED BRANCH CIRCUIT CONNECTION TO EXIT SIGNAGE. TYPICAL.
7. INTERCEPT EXISTING BRANCH CIRCUIT AT SWITCH PANEL TO BE DEMOLISHED. EXTEND TO NEW POWER PACK LOCATION.
8. EXISTING SWITCHING TAGS USED FOR REFERENCE ONLY.
9. NEW WALL POD CONTROL TOUCH SCREEN DIGITAL TIME CLOCK, ACUITY BRANDS nDTC WH OR ENGINEERING APPROVED EQUAL.
10. LUMINAIRES IN LIBRARY TO REMAIN ONLY LIGHTING CONTROLS ADDED. EXCEPTION 5 TO SECTION 141.0(b)2I APPLIES.
11. ONE FOR ONE LUMINAIRE ALTERATION IN READING AREA OF LESS THAN 50 LUMINAIRES LIGHTING CONTROLS ADDED. EXCEPTION 5 AND 6 TO CEC SECTION 141.0(b)2I APPLIES. ENSURE LIGHTING CONTROLS DIM LUMINAIRES TO 50% AT ALL TIMES.
12. POWER PACK TO BE INSTALLED IN AN ACCESSIBLE LOCATION. FIELD LOCATE.
13. LIGHTING CONTROL ZONE. REFER TO LIGHTING CONTROL ZONE SCHEDULE SHEET E1.4.
14. PRIMARY DAYLIT ZONE.
15. SKYLIT ZONE.

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SHEET CONTENTS:

**LOWER FLOOR LIGHTING PLAN**

CONSULTANT:

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ELECTRICAL
STATE OF CALIFORNIA

EXPIRES: 12.31.2025
GECE #2309

DATE: 6/28/2024

REVISIONS:

1 **Plan Check 1**
**County of SLO, 10/28/24**

2 **Plan Check 2**
**County of SLO, 12/11/24**

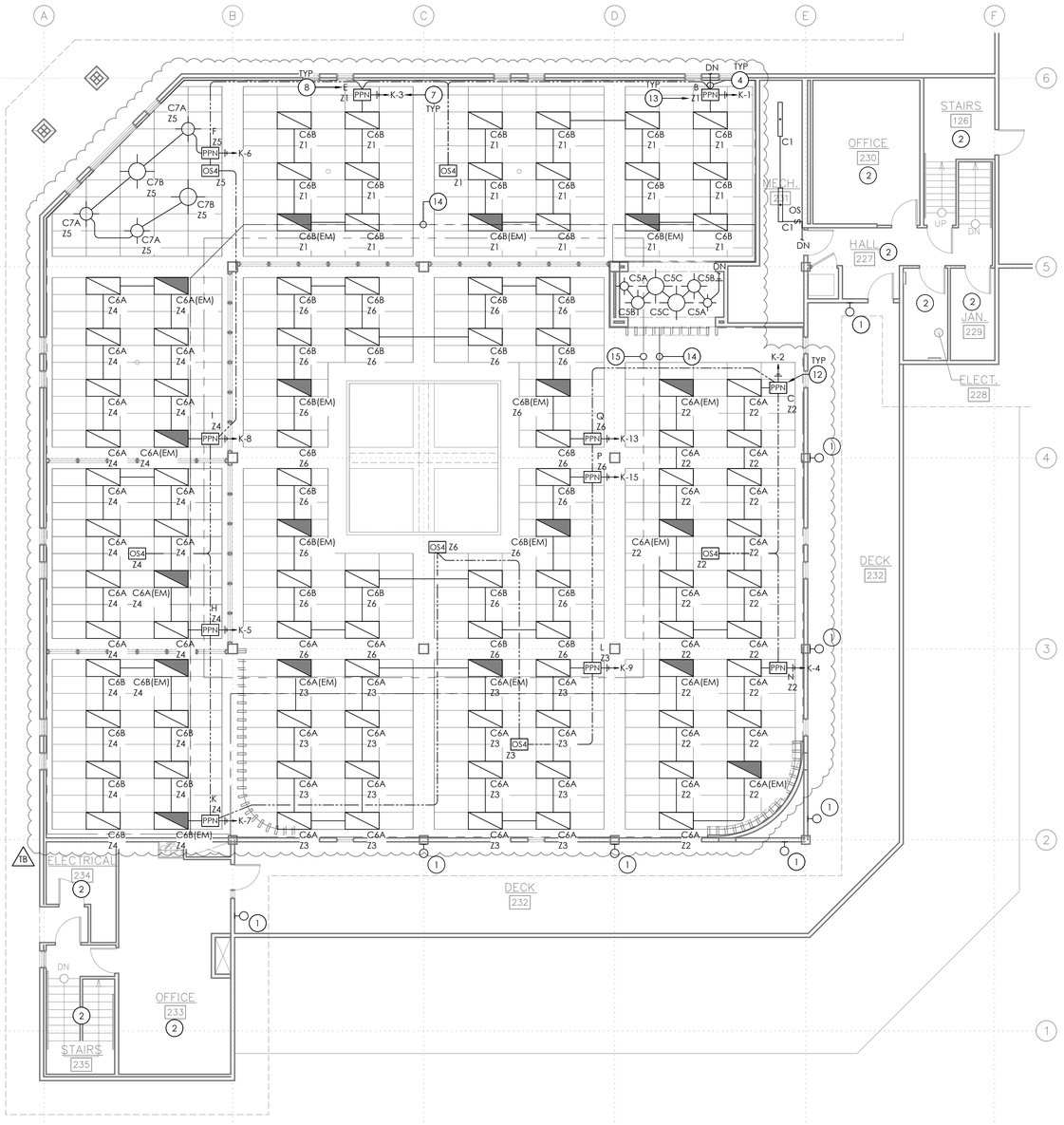
B1 **Bid Set Update**
**County of SLO, 7/25/25**

TB **T-Bar Replacement Alternate**
**County of SLO, 8/28/25**

JOB NUMBER:

SHEET:

**E3.1**




# UPPER FLOOR LIGHTING PLAN

SCALE: 1/8" = 1'0"

## REFERENCE NOTES

(#) GENERAL NOTE: REFERENCE NOTES ARE TYPICAL FOR SHEETS E3.1-E3.2. ALL REFERENCE NOTES MAY NOT OCCUR ON THIS SHEET.

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2. EXISTING LIGHTING DEVICES TO REMAIN.
3. LOW VOLTAGE LIGHTING CONTROL SYSTEM GROUPING AS PER LIGHTING SCHEDULES. COORDINATE WITH ENGINEER APPROVED MANUFACTURER SUBMITTAL. TYPICAL. LOW VOLTAGE CAT5E EXTENSION TO WALL POD TO CONTROL.
4. INTERCONNECT LOW VOLTAGE OCCUPANCY SENSORS WITH CAT5E LIGHTING CONTROL WIRING TO POWER PACK AS PER MANUFACTURER REQUIREMENTS. TYPICAL.
5. INSTALL POWER PACKS IN A ACCESSIBLE LOCATION.
6. EXTEND UN-SWITCHED BRANCH CIRCUIT CONNECTION TO EXIT SIGNAGE. TYPICAL.
7. INTERCEPT EXISTING BRANCH CIRCUIT AT SWITCH PANEL TO BE DEMOLISHED. EXTEND TO NEW POWER PACK LOCATION.
8. EXISTING SWITCHING TAGS USED FOR REFERENCE ONLY. TB
9. NEW WALL POD CONTROL TOUCH SCREEN DIGITAL TIME CLOCK, ACUITY BRANDS nDTC WH OR ENGINEERING APPROVED EQUAL.
10. LUMINAIRES IN LIBRARY TO REMAIN ONLY LIGHTING CONTROLS ADDED. EXCEPTION 5 TO SECTION 141.0(b)2I APPLIES.
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12. POWER PACK TO BE INSTALLED IN AN ACCESSIBLE LOCATION. FIELD LOCATE.
13. LIGHTING CONTROL ZONE, REFER TO LIGHTING CONTROL ZONE SCHEDULE SHEET E1.4.
14. PRIMARY DAYLIT ZONE.
15. SKYLIT ZONE.

TB


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STATE OF CALIFORNIA

EXPIRES: 12.31.2025
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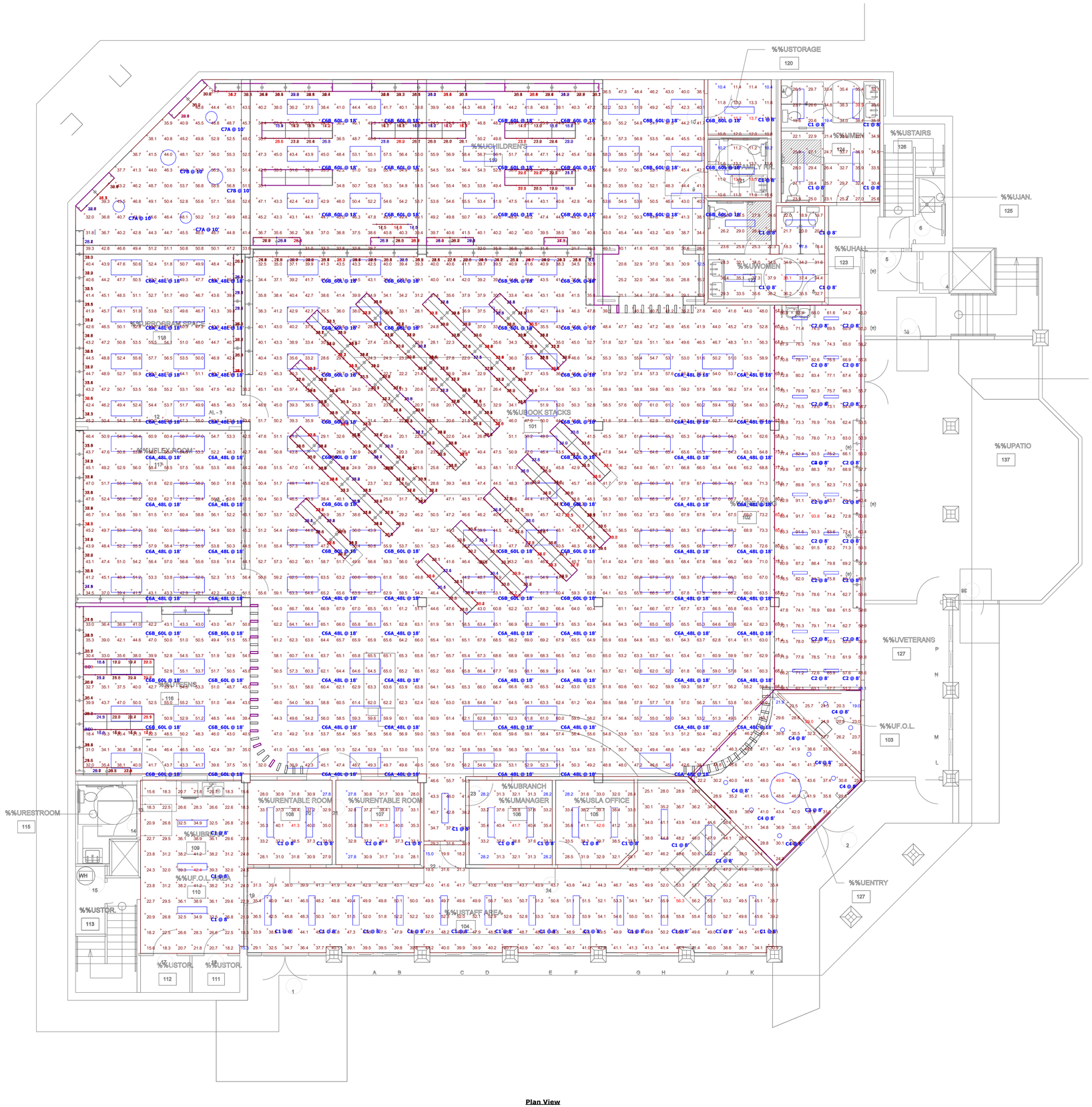
**County of SLO, 7/25/25**

TB **T-Bar Replacement Alternate**
**County of SLO, 8/28/25**

JOB NUMBER:

SHEET:

**E3.2**




**Plan View**

## Schedule

| Symbol | Label | Image | QTY | Catalog Number | Description | Number Lamps | Lumens per Lamp | LLF | Wattage |
|---|---|---|---|---|---|---|---|---|---|
| | C1 | | 2 | TRUM 48 ALO6-5000LM CMP 8SWW2-40K | Medium Wraparound 48 Inches 5000 lumens Curved Microprismatic 4000 K | 1 | 5544 | 0.45 | 41.5402 |
| | C1 | | 34 | TRUM 48 ALO6-5000LM CMP 8SWW2-40K | Medium Wraparound 48 Inches 5000 lumens Curved Microprismatic 4000 K | 1 | 5544 | 0.9 | 41.5402 |
| | C2 | | 18 | FMLWL 24 840 ZT MVOLT | FMLWL 2ft, 4000K CCT, 0-10V Dimming, Multi Volt | 1 | 3131 | 0.9 | 29 |
| | C3 | | 1 | MGLS 48IN 80CRI 40K 5500LM FLL FLT | Magellan Surface 48" Diameter 80 CRI 40K 5500 Lumens Flush Lens Flat Lens White Acrylic | 1 | 5234 | 0.9 | 61.2 |
| | C4 | | 8 | JSF 7IN 10LM 40K 90CRI MVOLT ZT WH | 7" Round Edgelit (Slimform) Surface Mount, 4000K, 90CRI, MV | 1 | 1135 | 0.9 | 12.8 |
| | C6A_ 48L | | 53 | 2VTL4 48L ADP LP840 | 2X4 VTL 4800 NOMINAL LUMENS, Curved Linear Prismatic Diffuser, 80CRI, 4000K | 1 | 5326 | 0.9 | 38.43 |
| | C6B_ 60L | | 48 | 2VTL4 60L ADP LP840 | 2X4 VTL 6000 NOMINAL LUMENS, Curved Linear Prismatic Diffuser, 80CRI, 4000K | 1 | 6407 | 0.9 | 47.74 |
| | C7A | | 3 | MGLP 18IN 80CRI 40K 2500LM I80CRI I40K 1800LM FLL FLT | Magellan Pendant 18" Diameter 80 CRI 40K 2500 Lumens 80CRI 4000K 800 Lumens Flush Lens Flat Lens White Acrylic | 1 | 3179 | 0.9 | 42.1004 |
| | C7B | | 2 | MGLP 24IN 80CRI 40K 4000LM I80CRI I40K 12000LM FLL FLT | Magellan Pendant 24" Diameter 80 CRI 40K 4000 Lumens 80CRI 4000K 2000 Lumens Flush Lens Flat Lens White Acrylic | 1 | 5348 | 0.9 | 49.6077 |

## Statistics

| Description | Symbol | Avg | Max | Min | Max/Min | Avg/Min |
|---|---|---|---|---|---|---|
| Branch Manager 106 | + | 34.3 fc | 41.7 fc | 28.2 fc | 1.5:1 | 1.2:1 |
| Break 109 & F.O.L. 110 | + | 27.3 fc | 42.4 fc | 15.3 fc | 2.8:1 | 1.8:1 |
| Entry 136 | + | 38.2 fc | 49.8 fc | 21.9 fc | 2.3:1 | 1.7:1 |
| F.O.L 103 | + | 24.2 fc | 29.0 fc | 19.0 fc | 1.5:1 | 1.3:1 |
| Family RR 121 | + | 11.8 fc | 13.5 fc | 10.2 fc | 1.3:1 | 1.2:1 |
| Library | + | 49.6 fc | 80.6 fc | 12.5 fc | 6.4:1 | 4.0:1 |
| Library 5' Vertical | + | 15.9 fc | 17.8 fc | 14.0 fc | 1.3:1 | 1.1:1 |
| Men 124 | + | 29.7 fc | 39.5 fc | 19.4 fc | 2.0:1 | 1.5:1 |
| Reading 102 | + | 71.1 fc | 93.8 fc | 44.1 fc | 2.1:1 | 1.6:1 |
| Rentable Room 107 | + | 33.9 fc | 41.3 fc | 27.8 fc | 1.5:1 | 1.2:1 |
| Rentable Room 108 | + | 34.0 fc | 41.3 fc | 27.8 fc | 1.5:1 | 1.2:1 |
| SLA Office 105 | + | 34.8 fc | 42.6 fc | 28.2 fc | 1.5:1 | 1.2:1 |
| Stacks | + | 31.4 fc | 35.4 fc | 29.0 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 31.9 fc | 36.1 fc | 28.2 fc | 1.3:1 | 1.1:1 |
| Stacks | + | 26.1 fc | 31.9 fc | 20.7 fc | 1.5:1 | 1.3:1 |
| Stacks | + | 22.7 fc | 29.8 fc | 17.4 fc | 1.7:1 | 1.3:1 |
| Stacks | + | 21.8 fc | 30.6 fc | 15.4 fc | 2.0:1 | 1.4:1 |
| Stacks | + | 20.6 fc | 31.1 fc | 12.3 fc | 2.5:1 | 1.7:1 |
| Stacks | + | 21.9 fc | 30.5 fc | 13.5 fc | 2.3:1 | 1.6:1 |
| Stacks | + | 23.6 fc | 32.0 fc | 16.2 fc | 2.0:1 | 1.5:1 |
| Stacks | + | 24.4 fc | 31.4 fc | 17.8 fc | 1.8:1 | 1.4:1 |
| Stacks | + | 21.0 fc | 26.3 fc | 15.8 fc | 1.7:1 | 1.3:1 |
| Stacks | + | 28.0 fc | 31.9 fc | 24.3 fc | 1.3:1 | 1.2:1 |
| Stacks | + | 27.7 fc | 30.7 fc | 25.7 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 27.7 fc | 31.3 fc | 25.1 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 26.4 fc | 35.7 fc | 8.0 fc | 4.5:1 | 3.3:1 |
| Stacks | + | 29.1 fc | 34.6 fc | 24.0 fc | 1.4:1 | 1.2:1 |
| Stacks | + | 30.7 fc | 35.1 fc | 26.0 fc | 1.4:1 | 1.2:1 |
| Stacks | + | 29.3 fc | 31.9 fc | 26.5 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 28.7 fc | 32.3 fc | 25.2 fc | 1.3:1 | 1.1:1 |
| Stacks | + | 27.5 fc | 31.0 fc | 25.1 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 20.5 fc | 22.6 fc | 18.4 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 24.2 fc | 26.9 fc | 21.5 fc | 1.3:1 | 1.1:1 |
| Stacks | + | 15.5 fc | 17.0 fc | 13.8 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 18.3 fc | 20.3 fc | 16.4 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 31.5 fc | 36.2 fc | 27.4 fc | 1.3:1 | 1.1:1 |
| Stacks | + | 31.1 fc | 33.3 fc | 28.4 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 31.0 fc | 34.7 fc | 26.8 fc | 1.3:1 | 1.2:1 |
| Stacks | + | 28.4 fc | 31.8 fc | 23.8 fc | 1.3:1 | 1.2:1 |
| Stacks | + | 24.8 fc | 28.4 fc | 20.8 fc | 1.4:1 | 1.2:1 |
| Stacks | + | 27.2 fc | 35.3 fc | 20.0 fc | 1.8:1 | 1.4:1 |
| Stacks | + | 26.2 fc | 29.2 fc | 23.8 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 28.1 fc | 31.0 fc | 26.0 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 22.7 fc | 32.2 fc | 15.5 fc | 2.1:1 | 1.5:1 |
| Stacks | + | 20.3 fc | 30.3 fc | 12.5 fc | 2.4:1 | 1.6:1 |
| Stacks | + | 21.2 fc | 32.7 fc | 12.2 fc | 2.7:1 | 1.7:1 |
| Stacks | + | 23.7 fc | 34.1 fc | 14.2 fc | 2.4:1 | 1.7:1 |
| Stacks | + | 28.1 fc | 36.0 fc | 20.7 fc | 1.7:1 | 1.4:1 |
| Stacks | + | 29.2 fc | 35.6 fc | 20.9 fc | 1.7:1 | 1.4:1 |
| Stacks | + | 29.7 fc | 32.6 fc | 26.4 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 24.6 fc | 38.9 fc | 0.0 fc | N/A | N/A |
| Stacks | + | 34.1 fc | 38.3 fc | 27.9 fc | 1.4:1 | 1.2:1 |
| Stacks | + | 32.5 fc | 36.7 fc | 28.7 fc | 1.3:1 | 1.1:1 |
| Stacks | + | 27.2 fc | 28.9 fc | 25.8 fc | 1.1:1 | 1.1:1 |
| Stacks | + | 28.9 fc | 35.9 fc | 21.2 fc | 1.7:1 | 1.4:1 |
| Stacks | + | 15.4 fc | 17.0 fc | 13.9 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 20.9 fc | 22.8 fc | 18.7 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 18.5 fc | 20.7 fc | 16.4 fc | 1.3:1 | 1.1:1 |
| Stacks | + | 15.4 fc | 17.1 fc | 13.8 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 15.4 fc | 16.9 fc | 14.0 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 24.8 fc | 27.5 fc | 22.0 fc | 1.3:1 | 1.1:1 |
| Stacks | + | 25.6 fc | 28.6 fc | 23.3 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 29.9 fc | 36.4 fc | 23.2 fc | 1.6:1 | 1.3:1 |
| Stacks | + | 30.5 fc | 38.2 fc | 22.5 fc | 1.7:1 | 1.4:1 |
| Staff Area 104 | + | 44.4 fc | 56.3 fc | 15.0 fc | 3.8:1 | 3.0:1 |
| Storage 120 | + | 11.9 fc | 13.7 fc | 10.4 fc | 1.3:1 | 1.1:1 |
| Women 122 | + | 28.8 fc | 38.1 fc | 17.8 fc | 2.1:1 | 1.6:1 |

VISUAL

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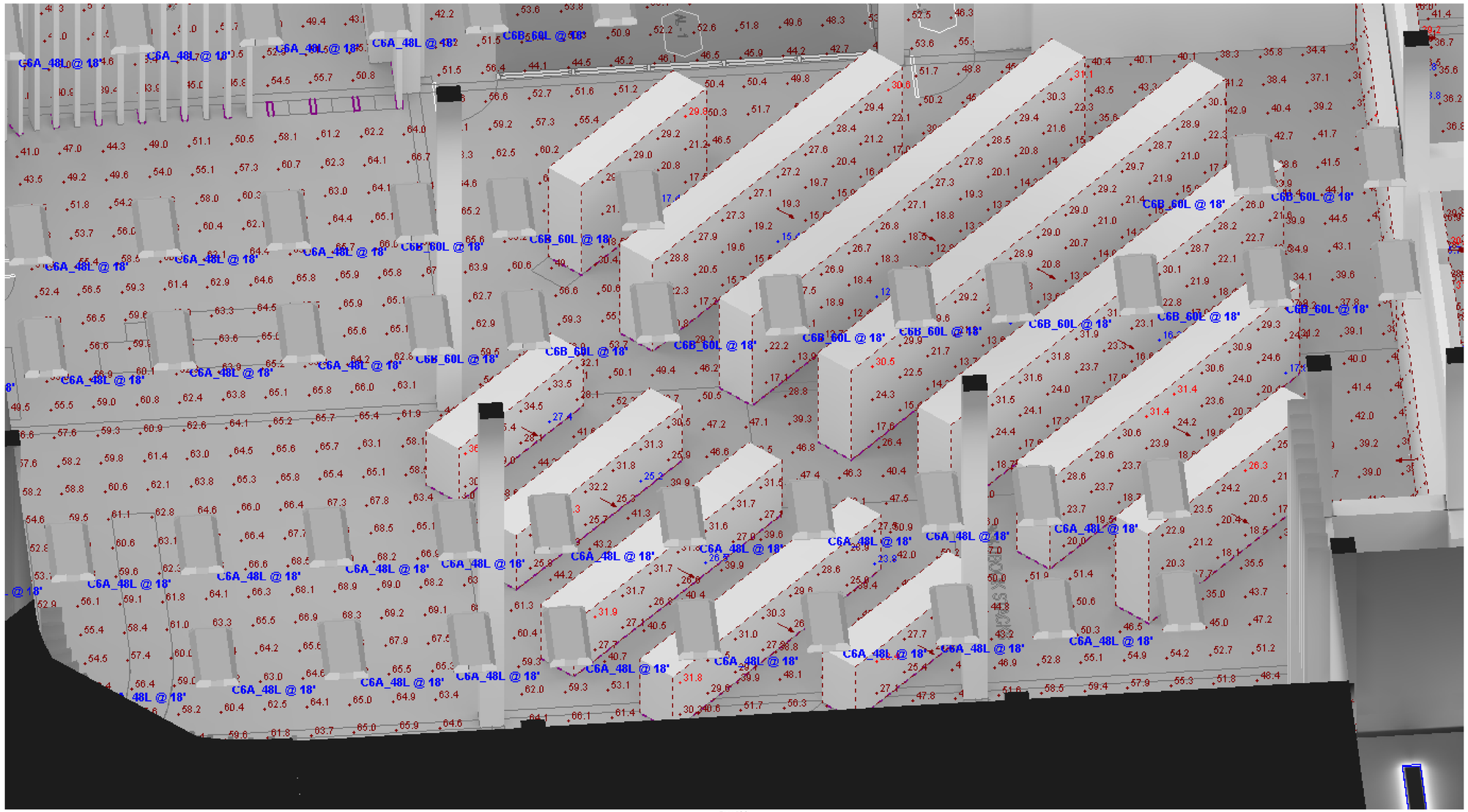
GRAY ELECTRICAL CONSULTING + ENGINEERING, CORP

**Designer**
GECE
**Date**
8/26/2025
**Scale**
Not to Scale
**Drawing No.**

**Summary**

| Schedule | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Symbol | Label | Image | QTY | Catalog Number | Description | Number Lamps | Lumens per Lamp | LLF | Wattage |
| | C6A_48L | | 53 | 2VTL4 48L ADP LP840 | 2X4 VTL 4800 NOMINAL LUMENS, Curved Linear Prismatic Diffuser, 80CRI, 4000K | 1 | 5326 | 0.9 | 38.43 |
| | C6B_60L | | 48 | 2VTL4 60L ADP LP840 | 2X4 VTL 6000 NOMINAL LUMENS, Curved Linear Prismatic Diffuser, 80CRI, 4000K | 1 | 6407 | 0.9 | 47.74 |

| Statistics | | | | | | |
|---|---|---|---|---|---|---|
| Description | Symbol | Avg | Max | Min | Max/Min | Avg/Min |
| Stacks | + | 31.4 fc | 35.4 fc | 29.0 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 31.9 fc | 36.1 fc | 28.2 fc | 1.3:1 | 1.1:1 |
| Stacks | + | 26.1 fc | 31.9 fc | 20.7 fc | 1.5:1 | 1.3:1 |
| Stacks | + | 22.7 fc | 29.8 fc | 17.4 fc | 1.7:1 | 1.3:1 |
| Stacks | + | 21.8 fc | 30.6 fc | 15.4 fc | 2.0:1 | 1.4:1 |
| Stacks | + | 20.6 fc | 31.1 fc | 12.3 fc | 2.5:1 | 1.7:1 |
| Stacks | + | 21.9 fc | 30.5 fc | 13.5 fc | 2.3:1 | 1.6:1 |
| Stacks | + | 23.6 fc | 32.0 fc | 16.2 fc | 2.0:1 | 1.5:1 |
| Stacks | + | 24.4 fc | 31.4 fc | 17.8 fc | 1.8:1 | 1.4:1 |
| Stacks | + | 21.0 fc | 26.3 fc | 15.8 fc | 1.7:1 | 1.3:1 |
| Stacks | + | 28.0 fc | 31.9 fc | 24.3 fc | 1.3:1 | 1.2:1 |
| Stacks | + | 27.7 fc | 30.7 fc | 25.7 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 27.7 fc | 31.3 fc | 25.1 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 26.4 fc | 35.7 fc | 8.0 fc | 4.5:1 | 3.3:1 |
| Stacks | + | 29.1 fc | 34.6 fc | 24.0 fc | 1.4:1 | 1.2:1 |
| Stacks | + | 30.7 fc | 35.1 fc | 26.0 fc | 1.4:1 | 1.2:1 |
| Stacks | + | 29.3 fc | 31.9 fc | 26.5 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 28.7 fc | 32.3 fc | 25.2 fc | 1.3:1 | 1.1:1 |
| Stacks | + | 27.5 fc | 31.0 fc | 25.1 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 20.5 fc | 22.6 fc | 18.4 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 24.2 fc | 26.9 fc | 21.5 fc | 1.3:1 | 1.1:1 |
| Stacks | + | 15.5 fc | 17.0 fc | 13.8 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 18.3 fc | 20.3 fc | 16.4 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 31.5 fc | 36.2 fc | 27.4 fc | 1.3:1 | 1.1:1 |
| Stacks | + | 31.1 fc | 33.7 fc | 28.4 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 31.0 fc | 34.7 fc | 26.8 fc | 1.3:1 | 1.2:1 |
| Stacks | + | 28.4 fc | 31.8 fc | 23.8 fc | 1.3:1 | 1.2:1 |
| Stacks | + | 24.8 fc | 28.4 fc | 20.8 fc | 1.4:1 | 1.2:1 |
| Stacks | + | 27.2 fc | 35.3 fc | 20.0 fc | 1.8:1 | 1.4:1 |
| Stacks | + | 26.2 fc | 29.2 fc | 23.8 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 28.1 fc | 31.0 fc | 26.0 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 22.7 fc | 32.2 fc | 15.5 fc | 2.1:1 | 1.5:1 |
| Stacks | + | 20.3 fc | 30.3 fc | 12.5 fc | 2.4:1 | 1.6:1 |
| Stacks | + | 21.2 fc | 32.7 fc | 12.2 fc | 2.7:1 | 1.7:1 |
| Stacks | + | 23.7 fc | 34.1 fc | 14.2 fc | 2.4:1 | 1.7:1 |
| Stacks | + | 28.1 fc | 36.0 fc | 20.7 fc | 1.7:1 | 1.4:1 |
| Stacks | + | 29.2 fc | 35.6 fc | 20.9 fc | 1.7:1 | 1.4:1 |
| Stacks | + | 29.7 fc | 32.6 fc | 26.4 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 24.6 fc | 38.9 fc | 0.0 fc | N/A | N/A |
| Stacks | + | 34.1 fc | 38.3 fc | 27.9 fc | 1.4:1 | 1.2:1 |
| Stacks | + | 32.5 fc | 36.7 fc | 28.7 fc | 1.3:1 | 1.1:1 |
| Stacks | + | 27.2 fc | 28.9 fc | 25.8 fc | 1.1:1 | 1.1:1 |
| Stacks | + | 28.9 fc | 35.9 fc | 21.2 fc | 1.7:1 | 1.4:1 |
| Stacks | + | 15.4 fc | 17.0 fc | 13.9 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 20.9 fc | 22.8 fc | 18.7 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 18.5 fc | 20.7 fc | 16.4 fc | 1.3:1 | 1.1:1 |
| Stacks | + | 15.4 fc | 17.1 fc | 13.8 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 15.4 fc | 16.9 fc | 14.0 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 24.8 fc | 27.5 fc | 22.0 fc | 1.3:1 | 1.1:1 |
| Stacks | + | 25.6 fc | 28.6 fc | 23.3 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 29.9 fc | 36.4 fc | 23.2 fc | 1.6:1 | 1.3:1 |
| Stacks | + | 30.5 fc | 38.2 fc | 22.5 fc | 1.7:1 | 1.4:1 |




East ISO

VISUAL

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**Designer**
GECE
**Date**
8/26/2025
**Scale**
Not to Scale
**Drawing No.**

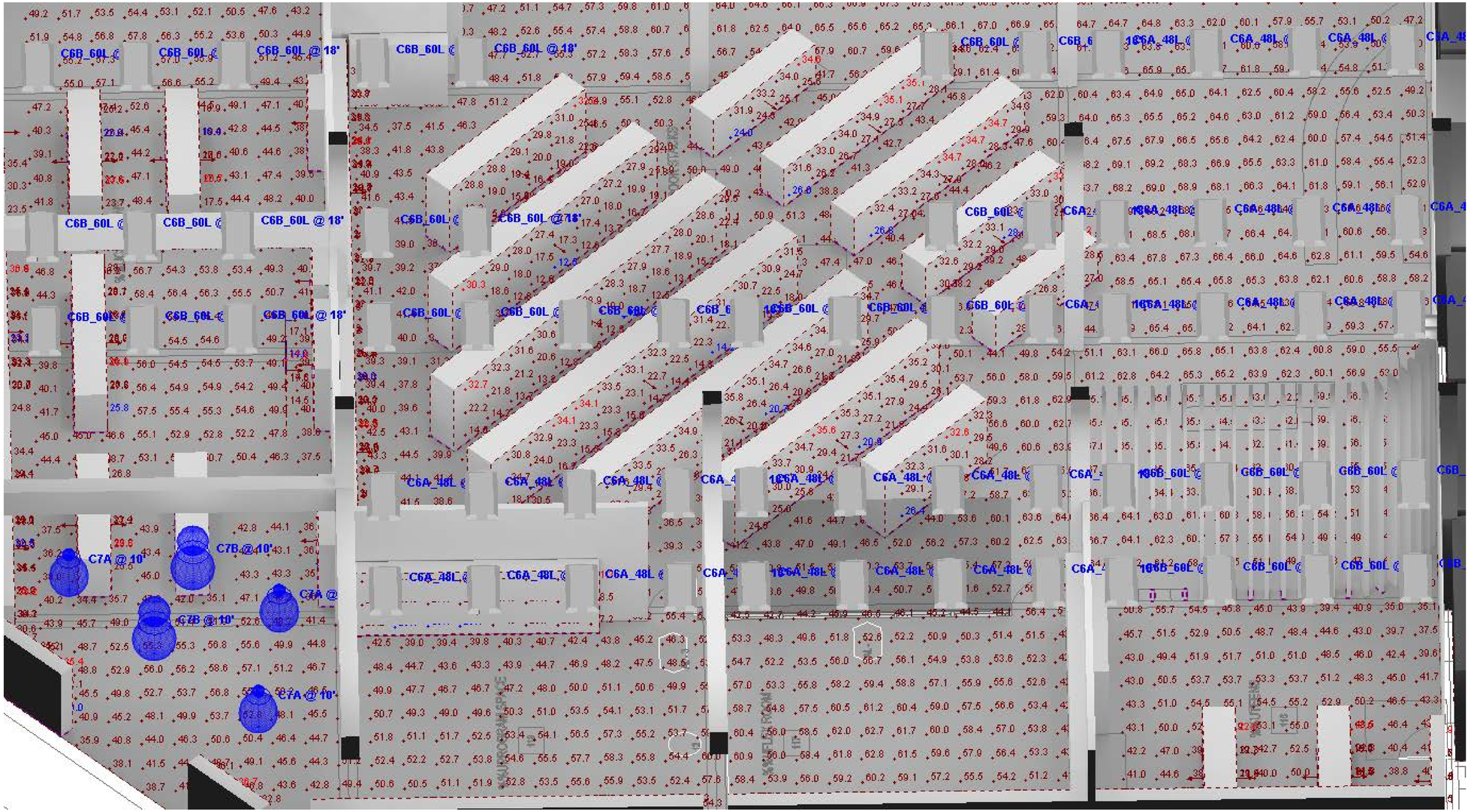
**Summary**
Isometric

## Schedule

| Symbol | Label | Image | QTY | Catalog Number | Description | Number Lamps | Lumens per Lamp | LLF | Wattage |
|---|---|---|---|---|---|---|---|---|---|
| | C6A_48L | | 53 | 2VTL4 48L ADP LP840 | 2X4 VTL 4800 NOMINAL LUMENS, Curved Linear Prismatic Diffuser, 80CRI, 4000K | 1 | 5326 | 0.9 | 38.43 |
| | C6B_60L | | 48 | 2VTL4 60L ADP LP840 | 2X4 VTL 6000 NOMINAL LUMENS, Curved Linear Prismatic Diffuser, 80CRI, 4000K | 1 | 6407 | 0.9 | 47.74 |

## Statistics

| Description | Symbol | Avg | Max | Min | Max/Min | Avg/Min |
|---|---|---|---|---|---|---|
| Stacks | + | 31.4 fc | 35.4 fc | 29.0 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 31.9 fc | 36.1 fc | 28.2 fc | 1.3:1 | 1.1:1 |
| Stacks | + | 26.1 fc | 31.9 fc | 20.7 fc | 1.5:1 | 1.3:1 |
| Stacks | + | 22.7 fc | 29.8 fc | 17.4 fc | 1.7:1 | 1.3:1 |
| Stacks | + | 21.8 fc | 30.6 fc | 15.4 fc | 2.0:1 | 1.4:1 |
| Stacks | + | 20.6 fc | 31.1 fc | 12.3 fc | 2.5:1 | 1.7:1 |
| Stacks | + | 21.9 fc | 30.5 fc | 13.5 fc | 2.3:1 | 1.6:1 |
| Stacks | + | 23.6 fc | 32.0 fc | 16.2 fc | 2.0:1 | 1.5:1 |
| Stacks | + | 24.4 fc | 31.4 fc | 17.8 fc | 1.8:1 | 1.4:1 |
| Stacks | + | 21.0 fc | 26.3 fc | 15.8 fc | 1.7:1 | 1.3:1 |
| Stacks | + | 28.0 fc | 31.9 fc | 24.3 fc | 1.3:1 | 1.2:1 |
| Stacks | + | 27.7 fc | 30.7 fc | 25.7 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 27.7 fc | 31.3 fc | 25.1 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 26.4 fc | 35.7 fc | 8.0 fc | 4.5:1 | 3.3:1 |
| Stacks | + | 29.1 fc | 34.6 fc | 24.0 fc | 1.4:1 | 1.2:1 |
| Stacks | + | 30.7 fc | 35.1 fc | 26.0 fc | 1.4:1 | 1.2:1 |
| Stacks | + | 29.3 fc | 31.9 fc | 26.5 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 28.7 fc | 32.3 fc | 25.2 fc | 1.3:1 | 1.1:1 |
| Stacks | + | 27.5 fc | 31.0 fc | 25.1 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 20.5 fc | 22.6 fc | 18.4 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 24.2 fc | 26.9 fc | 21.5 fc | 1.3:1 | 1.1:1 |
| Stacks | + | 15.5 fc | 17.0 fc | 13.8 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 18.3 fc | 20.3 fc | 16.4 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 31.5 fc | 36.2 fc | 27.4 fc | 1.3:1 | 1.1:1 |
| Stacks | + | 31.1 fc | 33.7 fc | 28.4 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 31.0 fc | 34.7 fc | 26.8 fc | 1.3:1 | 1.2:1 |
| Stacks | + | 28.4 fc | 31.8 fc | 23.8 fc | 1.3:1 | 1.2:1 |
| Stacks | + | 24.8 fc | 28.4 fc | 20.8 fc | 1.4:1 | 1.2:1 |
| Stacks | + | 27.2 fc | 35.3 fc | 20.0 fc | 1.8:1 | 1.4:1 |
| Stacks | + | 26.2 fc | 29.2 fc | 23.8 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 28.1 fc | 31.0 fc | 26.0 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 22.7 fc | 32.2 fc | 15.5 fc | 2.1:1 | 1.5:1 |
| Stacks | + | 20.3 fc | 30.3 fc | 12.5 fc | 2.4:1 | 1.6:1 |
| Stacks | + | 21.2 fc | 32.7 fc | 12.2 fc | 2.7:1 | 1.7:1 |
| Stacks | + | 23.7 fc | 34.1 fc | 14.2 fc | 2.4:1 | 1.7:1 |
| Stacks | + | 28.1 fc | 36.0 fc | 20.7 fc | 1.7:1 | 1.4:1 |
| Stacks | + | 29.2 fc | 35.6 fc | 20.9 fc | 1.7:1 | 1.4:1 |
| Stacks | + | 29.7 fc | 32.6 fc | 26.4 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 24.6 fc | 38.9 fc | 0.0 fc | N/A | N/A |
| Stacks | + | 34.1 fc | 38.3 fc | 27.9 fc | 1.4:1 | 1.2:1 |
| Stacks | + | 32.5 fc | 36.7 fc | 28.7 fc | 1.3:1 | 1.1:1 |
| Stacks | + | 27.2 fc | 28.9 fc | 25.8 fc | 1.1:1 | 1.1:1 |
| Stacks | + | 28.9 fc | 35.9 fc | 21.2 fc | 1.7:1 | 1.4:1 |
| Stacks | + | 15.4 fc | 17.0 fc | 13.9 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 20.9 fc | 22.8 fc | 18.7 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 18.5 fc | 20.7 fc | 16.4 fc | 1.3:1 | 1.1:1 |
| Stacks | + | 15.4 fc | 17.1 fc | 13.8 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 15.4 fc | 16.9 fc | 14.0 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 24.8 fc | 27.5 fc | 22.0 fc | 1.3:1 | 1.1:1 |
| Stacks | + | 25.6 fc | 28.6 fc | 23.3 fc | 1.2:1 | 1.1:1 |
| Stacks | + | 29.9 fc | 36.4 fc | 23.2 fc | 1.6:1 | 1.3:1 |
| Stacks | + | 30.5 fc | 38.2 fc | 22.5 fc | 1.7:1 | 1.4:1 |




West ISO

VISUAL

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GECE
GRAY ELECTRICAL CONSULTING + ENGINEERING, CORP

**Designer** GECE
**Date** 8/26/2025
**Scale** Not to Scale
**Drawing No.**

**Summary** Isometric