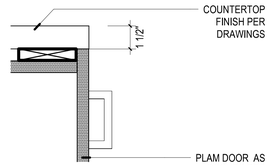
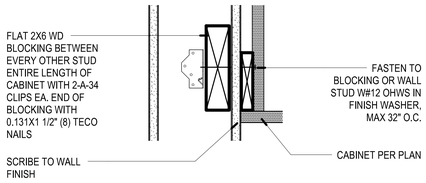
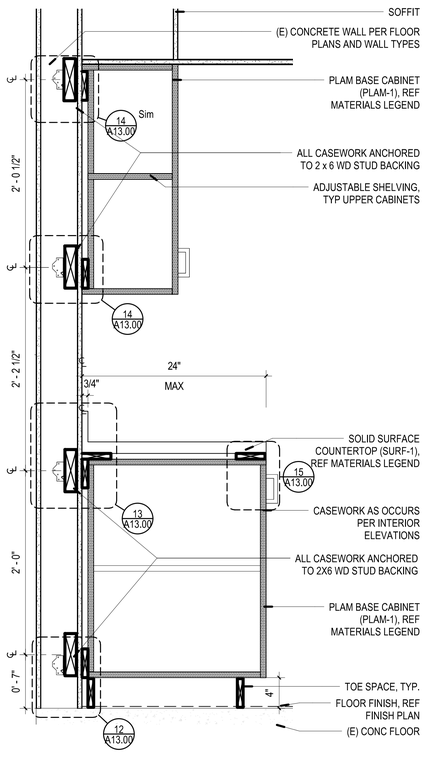



15 CASEWORK DETAIL @ FRONT
3" = 1'-0"

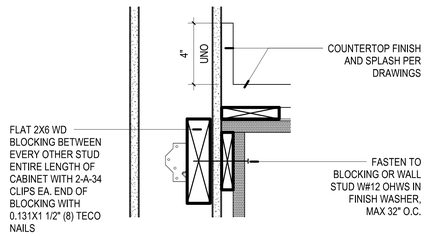



14 CASEWORK DETAIL @ HIGH CASE
3" = 1'-0"

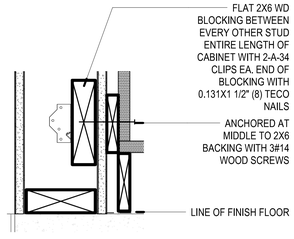



NOTE: NO ANCHOR @ DISHWASHER

16 CASEWORK @ KITCHEN
1 1/2" = 1'-0"

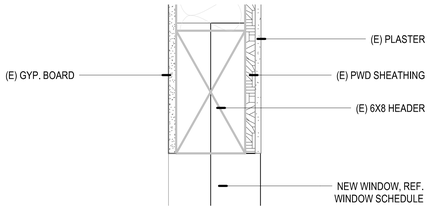



13 CASEWORK DETAIL @ MIDDLE CASE
3" = 1'-0"

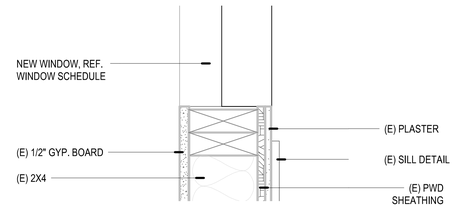



NOTE: CABINET, FLOOR & BASE FINISHES PER DRAWINGS

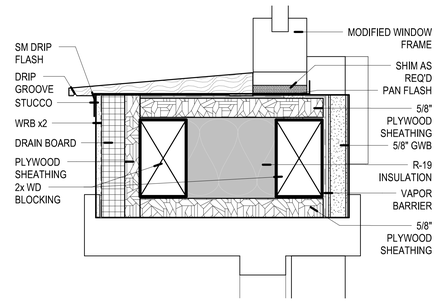
12 CASEWORK DETAIL @ BASE CASE
3" = 1'-0"



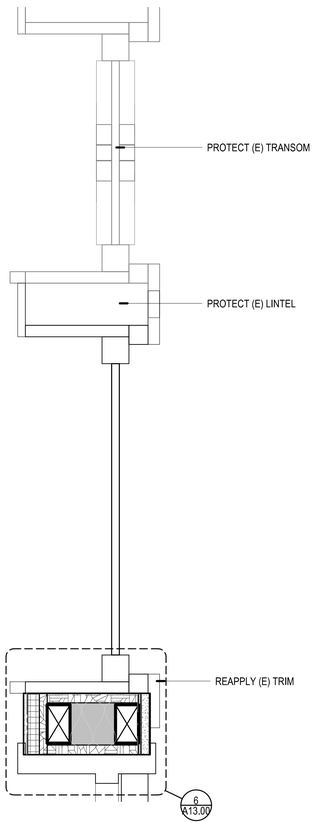

8 DETAIL - WINDOW HEAD @ OPEN WORKSPACE
3" = 1'-0"



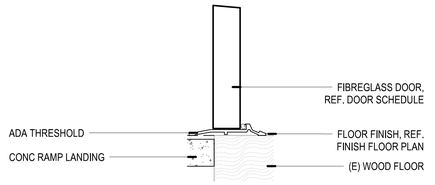

7 DETAIL - WINDOW SILL @ OPEN WORKSPACE
3" = 1'-0"



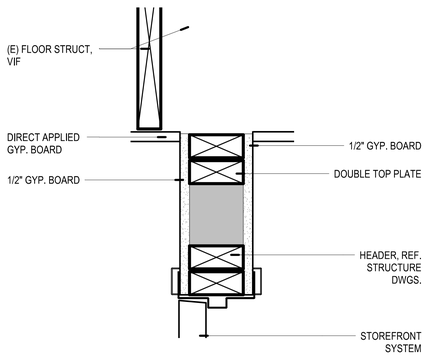

6 ADA ENTRY - DOOR HEAD
6" = 1'-0"



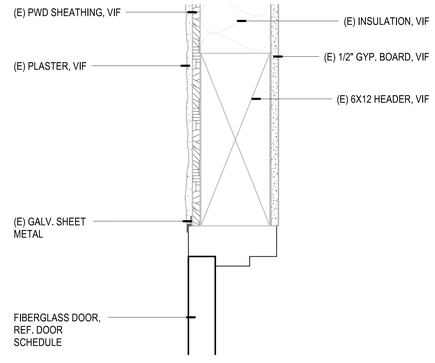

5 DETAIL - DOORHEAD @ ADA ENTRANCE
3" = 1'-0"



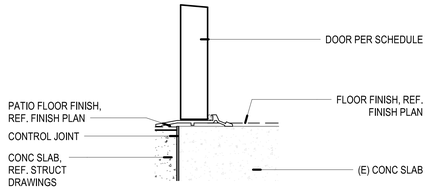

4 DETAIL - DOOR SILL @ ADA ENTRANCE
3" = 1'-0"




3 DETAIL - DOORHEAD @ CONFERENCE ROOM
3" = 1'-0"




2 DETAIL - DOORHEAD @ BACK ENTRANCE
3" = 1'-0"




1 DETAIL - DOOR SILL @ BACK ENTRANCE
3" = 1'-0"

SCALE: 3" = 1'-0"
SCALE: 1 1/2" = 1'-0"
SCALE: 1/4" = 1'-0"
SCALE: 3/8" = 1'-0"
SCALE: 1/8" = 1'-0"
SCALE: 3/32" = 1'-0"
12/20/2022 8:14:23 AM BIM 360

ORW ARCHITECTURE
WWW.ORWARCHITECTURE.COM
29 S GRAPE STREET
MEDFORD OR 97501
P 541.779.5237

REGISTERED ARCHITECT
J. DAVID WILKERSON, II
DIGITAL SIGNATURE
MEDFORD, OR
5068
STATE OF OREGON
2022.12.20 08:30:17 -08'00'

YREKA CARNEGIE LIBRARY REHABILITATION
412 W MINER ST, YREKA, CA 96097
SISKIYOU ECONOMIC DEVELOPMENT
ASSESSOR'S PARCEL NUMBER: 53-352-100

DETAILS

PROJECT: 2146
DATE: 12/20/2022

| No. | Description | Date |
|---|---|---|

A13.00

## ABBREVIATIONS:

| | |
|---|---|
| ADD'L | ADDITIONAL |
| ALT | ALTERNATE |
| A.B. | ANCHOR BOLT |
| APPROX | APPROXIMATE |
| BM | BEAM |
| BRG | BEARING |
| BEL | BELOW |
| BET | BETWEEN |
| BLK | BLOCK |
| B/S | BOTH SIDES |
| BOT | BOTTOM |
| B.N. | BOUNDARY NAILING |
| BLDG | BUILDING |
| CANT | CANTILEVER |
| C.B. | CARRIAGE BOLT |
| CLG | CEILING |
| CL | CENTERLINE |
| CHNL | CHANNEL |
| CLR | CLEAR |
| COL | COLUMN |
| CP | COMPLETE PENETRATION |
| CONC. | CONCRETE |
| CMU | CONCRETE MASONRY UNIT |
| CONT | CONTINUOUS |
| CJ | CONTROL JOINT |
| C.M.J. | CONTROL MASONRY JOINT |
| C/S | COUNTERSINK |
| D.L. | DEAD LOAD |
| DET | DETAIL |
| DIA. | DIAMETER |
| DIM | DIMENSION |
| DO | DITTO |
| DJ | DOWEL JOINT |
| DBL | DOUBLE |
| DF | DOUGLAS FIR |
| DWG | DRAWING |
| EA | EACH |
| EE | EACH END |
| EF | EACH FACE |
| ES | EACH SIDE |
| EW | EACH WAY |
| E.N. | EDGE NAIL |
| ELEV | ELEVATION |
| EMBED | EMBEDMENT |
| EQ | EQUAL |
| (E) | EXISTING |
| EXP | EXPANSION |
| E.B. | EXPANSION BOLT |
| EJ | EXPANSION JOINT |
| EXT | EXTERIOR |
| F.O.C. | FACE OF CONCRETE |
| F.O.M. | FACE OF MASONRY |
| F.O.S. | FACE OF STUD |
| F.N. | FIELD NAIL/FACE NAIL |
| FIN FLR | FINISH FLOOR |
| FTG | FOOTING |
| FEF | FORCED-ENTRY FASTNERS |
| FDN | FOUNDATION |
| GA | GAGE |
| GALV | GALVANIZED |
| GLL | GLU-LAM |
| G.L.B. | GLUED-LAMINATED BEAM |
| GYP BD | GYPSUM BOARD |
| HGR | HANGER |
| HSA | HEADED STUD ANCHOR |
| HDR | HEADER |
| HT | HEIGHT |
| HF | HEM-FIR |
| HSB | HIGH-STRENGTH BOLT |
| HORIZ | HORIZONTAL |
| INFO | INFORMATION |
| ID | INSIDE DIAMETER |
| INT | INTERIOR |
| IF | ISOLATION |
| JST | JOINT |
| KD | JOIST KILN DRIED |
| KING | KING STUD |
| LVL | LAMINATED VENEER LUMBER |
| LT | LIGHT |
| LL | LIVE LOAD |
| LG | LONG |
| LLH | LONG LEG HORIZONTAL |
| LLV | LONG LEG VERTICAL |
| MB | MACHINE BOLT |
| MIW | MALLEABLE IRON WASHER |
| MANUF. | MANUFACTURER |
| MAX | MAXIMUM |
| MECH | MECHANICAL |
| ML | MICRO-LAM (BY TRUS JST) |
| MIN | MINIMUM |
| MISC | MISCELLANEOUS |
| (N) | NEW |
| N.I.C. | NOT IN CONTRACT |
| NTS | NOT TO SCALE |
| # | NUMBER/POUNDS |
| O.C. | ON CENTER |
| O/S | ONE SIDE |
| OPP | OPPOSITE |
| OH | OPPOSITE HAND |
| O.S.B. | ORIENTED STRAND BOARD |
| OD | OUTSIDE DIAMETER |
| o/ | OVER |
| PSL | PARALLAM (BY TRUS JST) |
| PARL or // | PARALLEL |
| PP | PARTIAL PENETRATION |
| PEN | PENETRATION |
| PL | PLATE |
| PLY | PLYWOOD |
| PSF | POUNDS PER SQUARE FOOT |
| PSI | POUNDS PER SQUARE INCH |
| P.A.F. | POWER ACTUATED FASTENER |
| PDF | POWER DRIVEN FASTENER |
| PT | PRESSURE TREATED |
| PRT | PRESERVATIVE TREATED |
| PL | PROPERTY LINE or PLATE |
| R. | RADIUS |
| RWD | REDWOOD |
| REF | REFERENCE |
| REQ'D | REQUIRED |
| RMT. | ROSBORO MFG. TIMBER |
| SCHED | SCHEDULE |
| SAD | SEE ARCHITECTURAL DWGS |
| SMD | SEE MECHANICAL DWGS |
| STS | SELF-TAPPING SCREW |
| SW | SHEAR WALL |
| SIM | SIMILAR |
| SJ | SLAB JOINT |
| S.O.G. | SLAB ON GRADE |
| SB | SOLID BLOCK |
| SPEC | SPECIFICATION |
| SQ | SQUARE |
| STD | STANDARD |
| STL | STEEL |
| SYM | SYMMETRICAL |
| THRD | THREADED |
| T.N. | TOE NAIL |
| T&G | TONGUE & GROOVE |
| T&B | TOP & BOTTOM |
| T.O. | TOP OF |
| TS | TUBE STEEL |
| TRMR. | TRIMMER |
| TYP | TYPICAL |
| UBC | UNIFORM BUILDING CODE |
| UNO | UNLESS NOTED OTHERWISE |
| VERT | VERTICAL |
| WT | WEIGHT |
| WS | WELDED STUD/WOOD SCREW |
| WWF | WELDED WIRE FABRIC |
| WWM | WELDED WIRE MESH |

## GENERAL NOTES AND SPECIFICATIONS:

**DIVISION 1 - GENERAL:**

a. All work shall conform to the 2019 CBC and applicable local codes.
b. Where applicable allowable stresses have been increased 15% (Except Alpine and Placer Counties) for short duration and 60% for seismic and wind loading.
c. Dunagan Engineering, Inc. is responsible for the structural items in the plans only. Should any changes be made, or should the results of these calculations not be fully or properly transferred to the plans by others, Dunagan Engineering, Inc. assumes no responsibility for the structure. No deviation from structural details shall be made without the written approval of the Structural Engineer. Approval by governing agency does not constitute authority to deviate from plans or specifications.
d. All codes and standards shall be the most current edition as of the date of the calculations.
e. The details shown on the drawings are typical. Similar details apply to similar conditions.
f. The calculations are based upon a complete structure. Should an unfinished structure be subjected to loads, Dunagan Engineering, Inc. should be consulted for an interim design or if not, will assume no liability.
g. Temporary supports, etc., are the sole responsibility of the framing contractor and have not been considered by the structural engineer. Framing contractor is responsible for the stability of the structure prior to the application of shear walls, roof and floor diaphrams and finish materials. He shall provide the necessary bracing to provide stability prior to the application of the aforementioned materials. Observation visits to the site by field representative of the Structural Engineer do not include inspections of construction means and methods. Observation performed by Architect and/or Structural Engineer during construction are not continuous and detailed inspection services are performed by others. Observations performed by Structural Engineer are performed solely for the purpose of determining if contractor understands design intent conveyed in the contract documents. Observations do not guarantee contractor's performance and are not to be construed as supervision of construction.
h. Dunagan Engineering, Inc. expressly reserves its common law copyright and other property rights in these plans. These plans are not to be reproduced, changed or copied in any manner whatsoever, nor are to be assigned to a third party without first obtaining the written permission and consent of Dunagan Engineering, Inc. In the event of unauthorized reuse of these plans by a third party, the third party shall hold Dunagan Engineering, Inc. harmless.
i. These drawings and all written material herein are instruments of service and constitute original and unpublished work of the Engineer. They remain the property of the Engineer whether the project for which they are made be executed or not. They may not be duplicated, used on other projects or by other than the original Owner whose name appears herein without the express written consent of the Engineer.
j. Adhesive anchors shall be Simpson AT-XP Epoxy per ICBO ESR-2508 with ASTM A36 threaded rod or approved equal, U.N.O., Expansion anchors shall be Simpson Strong Bolts per ICBO-ESR-1771, U.N.O., Adhesive or expansion anchors shall not be installed without authorization by Structural Engineer and until concrete and masonry has cured to design strength.

**DIVISION 2 - FOUNDATION:**

a. Building sites are assumed to be drained and free of clay or expansive soil. Any other conditions should be brought to the attention of Dunagan Engineering, Inc.
b. These calculations assume stable, undisturbed soils and level or stepped footings. Any other conditions should be reported to Dunagan Engineering, Inc.
c. All footings shall bear on undisturbed soil with a footing depth 24" below frostline.
d. All finish grade shall slope away from foundation for a minimum of 10'-0".
e. An assumed soil bearing pressure is determined and will be increased in accordance with CBC Table 1806.2
f. Fill material shall be free from debris, vegetation, and other foreign substances.
g. Backfill trenches shall be compacted to 90% relative density per ASTM D1557 to within 12" of finished grade. The top 12" shall be landscape fill.
h. Backfill at pipe trenches shall be compacted on both sides of pipe in 6" lifts.
i. Waterproof exterior faces of all foundation walls adjacent to usable spaces. Waterproofing of all foundation and retaining walls to be the responsibility of the owner and/or contractor.
j. All backfill against foundation walls must be compacted to 90% relative density, unless otherwise directed by a soils report.
k. Perforated pipe sub-drain typical behind all retaining walls. Use 4" diameter PVC except where noted otherwise. Slope pipe to drain to daylight and drywell.

**DIVISION 3 - CONCRETE:**

a. All concrete shall have a minimum 28 day compressive strength of 2500 psi. To accommodate the "Severe Weather for Concrete" category, concrete shall have a minimum 28 day compressive strength of 3000 psi for foundation walls and other vertical concrete exposed to weather and a minimum compressive strength of 3500 psi for slabs, porches and other exterior flatwork, including garage slabs, exposed to weather as recommended by Table R402.2 of the IRC and Table 1940.2 of the IBC. No special inspection is required as design assumes 2500 psi.
b. Reinforcement shall be per ASTM A615 grade 60 ksi, U.N.O.
c. Lap reinforcing Per Detail 5/S0.2, U.N.O.
d. Reinforcement cover in cast-in-place concrete shall be as follows:
   - 3" - Concrete cast against and permanently exposed to earth.
   - 1 1/2" - Concrete exposed to earth or weather with #5 bars or smaller.
   - 1 1/2" - Concrete not exposed to weather or in contact with ground, #11 bars and smaller.
   - 1 1/2" - Beams, columns, and pilaster, cover over ties.
   - 1 1/2" - Clear to top for reinforcement in slabs on grade.
e. All slabs on grade, S.O.G., shall have a minimum thickness of 4" and be reinforced with #3 at 18" o.c., or with Fibermesh as per manufacturers specifications equivalent to reinforcement specified above, U.N.O.
f. Concrete shall be air-entrained to 6% +/- 1%. (For exterior slabs only)
g. Provide slab control joints (saw cut or plastic inserts) at 10'-0" maximum spacing each way for 4" slab. Joint depth to be 1/4 of slab depth.
h. All Post Tension concrete shall be Type II and have a minimum 28 day compressive strength of 4000 psi., U.N.O.
i. Post Tension Concrete shall be air-entrained per Post Tension Designer.

**DIVISION 4 - MASONRY:**

a. All masonry units shall conform to ASTM C90 grade N units, U.N.O.
b. All masonry cells are to be solid grouted with mortar conforming to ASTM C279, type S, with a 28 day compressive strength of 1500 psi. minimum, U.N.O.
c. Vertical steel placement in masonry walls to be #4 bars at 16" o.c. maximum spacing, U.N.O.
d. Horizontal steel placement in masonry walls to be #4 bars at 24" o.c. maximum spacing, U.N.O.

**DIVISION 5 - METALS:**

a. All hardware called for shall be Simpson Strong-Tie Co, Inc. and installed per the manufacturer's specifications, U.N.O.
b. Structural steel shall conform to ASTM A992, grade 50 U.N.O. Miscellaneous steel such as plates, channels and angles may be ASTM A36. Steel pipe columns shall conform to ASTM A53, Type E or S. Steel tube sections shall conform to ASTM A500, Grade B.
c. All steel exposed to weather shall be hot-dip galvanized after fabrication or other approved weather proofing methods may be used.
d. Where finish is attached to steel provide 1/2" dia. bolt holes at 36" o.c., U.N.O.. For attachment of nailers see architectural drawings for finishes. (alternate 1/2" dia. x 3" nelson studs at dv36" o.c., U.N.O.)
e. All grout under steel bearing plates shall be solid drypack or non-shrink grout placed as directed by the manufacturer.
f. Shop drawings shall be submitted to the Structural Engineer for review and comment prior to fabrication.
g. All welding shall conform to the American Welding Society specifications. All welding shall be performed by certified welders approved by the local building authority. All shop welding shall be in an approved fabricator's shop authorized by the local building authority or special inspection per the CBC shall be provided. All field welding shall require special inspection per CBC Section 1704.
h. All welding electrodes shall be E70XX or shielded wires with Fy = 70 ksi.
i. All nails specified are common nails. No substitutions unless approved in writing by Dunagan Engineering, Inc. or specifically addressed in these calculations or the plans. All nails exposed to weather shall be galvanized. Fasteners for pressure-preservative treated and fire-retardant treated wood shall be of hot-dipped zinc coated galvanized, stainless steel, silicon bronze or copper.
j. The minimum nailing for all framing shall conform to CBC Table 2306.2.1
k. All bolts specified must meet ASTM A307. Bolt holes to be 1/32" to 1/16" larger than specified bolt. Washers shall be used at each bolt head and nut next to wood. All washers to be not less than standard cut washers.
l. Wood plates or sills shall be bolted to the foundation or foundation wall. Steel bolts with a minimum nominal diameter of 1/2" shall be used. Bolts shall be embedded at least 7 inches into the concrete or masonry. In a two post system embedment shall be into the first pour. There shall be a minimum of two bolts per piece with one bolt located not more than 12 inches or less than 7 bolt diameters from each end of the piece.
m. Plate washers a minimum of 3"x3"x1/4" thick shall be used on each bolt. See CBC section 2305.3.11 for alternate.

**DIVISION 6 - WOOD:**

a. All lumber framing shall be Douglas Fir Larch (DOC PS20) with moisture content < 19% at time of covering, U.N.O.
b. Glu-Lams used for simple spans shall be 24F-V4 U.N.O. Glu-Lams used for continuous spans or cantilever shall be 24F-V8, U.N.O. Glu-Lams exposed to weather shall be rated for exterior use by manufacturer or approved protection from exposure to be provided.
c. All plywood shall conform to APA DOC PS1 or DOC PS2. All shear plywood shall be C-D, C-C, 303 (T1-11), or approved equal.
d. Where multiple trimmers or studs are specified, those trimmers are to be stacked in all wall framing and solid blocking to be provided at all floors down to the foundation.
e. Where posts with column caps, straps, or bearing plates are called for, the load is to be transferred to the foundation with posts as specified in the plans and solid vertical grain blocking at all floors, U.N.O.
f. All studs to be stud grade or better, U.N.O. In no instance shall a stud wall be used to resist lateral pressures due to snow or soil. It is the owner and/or contractor's responsibility to eliminate snow and/or soil to stud wall contact.
g. All laminated veneer lumber (LVL) and parallel strand lumber (PSL) specified shall have the following minimum design strengths: 1 3/4" wide: Fb=2600 psi, Fv=285 psi, E=1,900,000 psi. 3 1/2" wide and greater: Fb=2900 psi, Fv=290 psi, E=2,000,000 psi.
h. All multiple-ply LVL members to be attached with (3) rows of 16d common nails at 12" o.c. for entire length of member. For a three piece member the nailing is from each side.
i. Foundation sill plates, nailers, and ledgers in direct contact with concrete and within 6" of ground to be preservative treated Douglas Fir.
j. Fasteners for preservative treated and fire treated wood shall be of hot dipped, zinc coated, galvanized steel, silicon, bronze or copper. The coating weights for zinc coated fasteners shall be in accordance with ASTMA 153.
k. All framing members specified in these calculations and/or plans are minimums, and larger members of equal or better grade may be substituted.
l. All floor openings shall be between joists, U.N.O.
m. Do NOT notch beams, joists, and studs, U.N.O.
n. Provide double joists below all parallel partition walls.
o. No green lumber at time of covering shall be used on this project.
p. No framing of any type shall be concealed prior to inspection by governing agencies.
q. Sawn lumber shall have the following minimum grades (U.N.O.):
   - all 4x12 & smaller framing members .....#2
   - all 4x14, 4x16, 6x & 8x framing members .....#1
   - 4x4 posts .....#2
   - all other posts and timbers .....#1
   - all 2x joists and rafters .....#2
   - all 2x & 3x studs (unbraced length up to 10') .....stud or construction
   - all 2x & 3x studs (unbraced length exceeding 10') .....#2
   - all 2x top plates .....standard
   - all 2x and 3x sills .....standard
   - manuf. truss components .....grade per manuf.
r. All resawn and roughsawn beams are to be free of heart center.
s. Double joists shall be attached with (2) rows of 16d's at 12" o.c. edge distance of nailing to be 2".
t. All multiple studs to be attached with 16d's at 12" o.c.

### THESE NOTES APPLY TO ALL SHEETS

1. It shall be the contractors direct responsibility to comply with typical details and general notes as delineated or defined on the typical detail drawings of these contract documents regardless of specific flagging or reference to applicable note or detail.
2. It shall be the contractor's responsibility to coordinate with all trades regarding utilities passing through and under footings. Structural requirements for these conditions are delineated in typ. details.
3. Top of footing elevations noted are minimum. See note 2 for additional requirements.
4. Contractor to verify and coordinate all locations and sizes of openings in slabs, slab depressions, and curbs for all related construction prior to floor layout or construction. Contractor shall then use appropriate detail's or appropriate wall section for each applicable condition.
5. Contractor to verify dimensions with architect prior to construction.
6. Drawings are diagrammatic in nature and are not intended to indicate every opening or penetration in roof or other structure. Contractor shall coordinate and verify location and size of all such openings and penetrations with related subcontractors prior to roof or other framing layout or construction. Contractor shall then use appropriate typical or referenced details for each opening or penetration.
7. Contractor to verify with appropriate sub-contractors the exact location, weight, and intended method of attachment of all items to be suspended from or in any way attached to any roof framing or other structural member unless such item(s) are clearly addressed by the structural construction documents. This information shall be transmitted in writing to structural engineer prior to final design or fabrication of structural framing members.
8. Contractor to verify all existing conditions and dimensions and notify the architect in writing of any discrepancies.

### SPECIAL INSPECTIONS AND DEFERRED SUBMITTALS:

a. Special inspection, per the California Building Code chapter 17, Table 1704.A.3 for steel and 1704.4 for concrete shall be required for the following types of work. See project Specifications for specified requirements:
b. All concrete work for strengths greater than 2500 psi, except for slabs on grade, footings and non structural concrete.
c. All reinforcing steel for concrete strengths greater than 2500 psi.
d. All field welding (except metal studs, furring channels, etc.). Shop welding for procedures and multiple pass welds.
e. All full penetration welds shall be specially inspected in accordance with AWS and the current California Building Code.
f. All fillet welds shall be visually inspected in accordance with AWS and the current California Building Code.
g. All masonry work, see notes under `MASONRY" for requirements. All masonry inspection shall also comply with the National Concrete Masonry Institute.
h. Bolts installed in conc. or masonry. Does not include sill PL, anchor bolts and Holdown anchor bolts.
i. All ASTM A-325 and/or ASTM A-490 High Strength Bolts.
j. All expansion bolts and adhesive anchors.
k. All grouted dowels.
l. All insulating concrete.

**DESIGN CRITERIA :**
2019 California Building Code (CBC)
Local Building Department Standards
Soil Bearing (CBC Table 1806.2)

**WIND DESIGN DATA**
Ultimate Design Wind Speed, Vu = 120 m.p.h. (3-Second Gust)
Risk Category II
Wind Importance Factor, Iw = 1.00
Wind Exposure C
Internal Pressure Coefficient = +/- 0.18
Components & Cladding Design Pressures (ASCE 7 Section 30.4.2):
a = 3.2 ft (ASCE 7 Figure 30.4-1)

**SEISMIC DESIGN DATA**
Importance Factor, Ie = 1.00 (Risk Category II)
Ss = 0.627 g and S1 = 0.349 g
Site class: = D
SDs = 0.543 g , SD1 = 0.100 g
Seismic design category: = D
Basic seismic-force-resisting system(s): =
Light-Framed Walls Sheathed with Wood Structural Panels Rated for Shear Resistance, R = 6.5
Analysis Procedure Used = Equivalent Lateral Force Procedure

**SNOW LOAD DATA:**

| | | | |
|---|---|---|---|
| Site Elevation | 2630 | FT. | |
| Ground Snow Load | Pg | = | 54 psf |
| Flat-Roof Snow Load | Pf | = | 40 psf |
| Snow Exposure Factor | Ce | = | 0.9 |
| Snow Importance Factor | Is | = | 1.0 |
| Thermal Factor | Ct | = | 1.1 |

**FLOOR FRAMING DESIGN LOADS**

| | UPPER: | LOWER DECK: |
|---|---|---|
| Floor Live Load = | 50 PSF | 100 PSF |
| Floor Dead Load = | 30 PSF | 50 PSF |
| Total Floor Load = | 80 PSF | 150 PSF |

**RAFTER LOADING:**

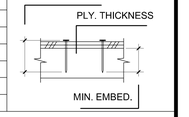
| | TYPICAL |
|---|---|
| Snow Load = | 40 PSF |
| Dead Load = | 20 PSF |
| Total Load = | 60 PSF |

## CONNECTION CROSS REFERENCE

| Simpson Strong-Tie | USP Structural Connectors | Simpson Strong-Tie | USP Structural Connectors | Simpson Strong-Tie | USP Structural Connectors | Simpson Strong-Tie | USP Structural Connectors |
|---|---|---|---|---|---|---|---|
| Product Number | Product Number | Product Number | Product Number | Product Number | Product Number | Product Number | Product Number |
| SSTB16 | STB16 | CB66 | KCB66 | HU410 | HD410 | HGUS26-3 | THDH26-3 |
| SSTB24 | STB24 | CB68 | KCB68 | HU412 | HD412 | HGUS28-3 | THDH28-3 |
| HDU5-SDS2.5 | PHD5 | HUC Q1.81/9-SDS | HDQ179IF | HU68 | HD68 | TJC37 | SNP3 |
| HDQ8-SDS3 | UPHD8 | HUC Q1.81/11-SDS | HDQ1711IF | HU610 | HD610 | THJA26 | HJC26 |
| HHDQ11-SDS2.5 | UPHD11 | -- -- | HDQ1714IF | HU612 | HD612 | MTHM | HJHC26 |
| HHDQ14-SDS2.5 | UPHD14 | HUCQ310-SDS | HDQ310IF | LSU26 | LSSH15-TZ | DSC4R/L-SDS3 | DSC4R/L |
| HD15 | TD15 | HUCQ210-2-SDS | HDQ210-2IF | LSSU28 | -- -- | ST6224 | KST224 |
| ABU44 | PAU44 | HUCQ410-SDS | HDQ410IF | LSSU210 | LSSH210 | CS16 | RS150 |
| ABU46 | PAU46 | HUCQ412-SDS | HDQ412IF | SUR/L24 | SKH24R/L | MSTC48B3 | -- -- |
| ABU66 | PAU66 | HUCQ210-3-SDS | HDQ210-3IF | SUR/L26 | SKH26R/L | H1 | RT15 |
| ABU88 | PAU88 | HUCQ5.25/9-SDS | HDQ5210IF | SUR/L210 | SKH210R/L | H2.5A | RT7A |
| PB44 | WE44 | HUCQ5.25/11-SDS | HDQ5212IF | IUS | THF | H2A | RT10 |
| PB46 | WE46 | HUCCQ610-SDS | HDQ610IF | HU11 | HD17112 | HGA10KT | HGA10 |
| PB66 | WE66 | HUCQ612-SDS | HDQ612IF | IUT | THF | A34 | MP34 |
| CBQ44 | KCBQ44 | LUS24 | JUS24 | ITS | THO/TFL | A35 | MPA1 |
| CBQ46 | KCBQ46 | LUS26 | JUS26 | ITT | THO/TFL | LTP4 | MP4F |
| CBQ66 | KCBQ66 | LUS28 | JUS28 | LUS26-2 | JUS26-2 | LS50 | MP5 |
| CB44 | KCB44 | LUS210 | JUS210 | HHUS26-2 | THD26-2 | LS70 | MP7 |
| CB46 | KCB46 | LUS46 | JUS46 | HGUS26-2 | THDH26-2 | LS90 | MP9 |
| CB48 | KCB48 | HU46 | HD46 | HHUS28-2 | THD28-2 | CCQ/ECCQ | KCCQ/KECCQ |

## NAIL SPECIFICATIONS

| NAIL TYPE | NOMINAL DIAMETER (GAGE) | NOMINAL LENGTH | MIN. EMBED FOR P.W. SHEATHING |
|---|---|---|---|
| 6d COMMON | 0.113" (11 ga.) | 2" | 1 3/8" |
| 8d COMMON | 0.131" (10 1/4 ga.) | 2 1/2" | 1 3/8" |
| 10d COMMON | 0.148" (9 ga.) | 3" | 1 3/4" |
| 12d COMMON | 0.148" (9 ga.) | 3 1/2" | - |
| 16d COMMON | 0.162" (8 ga.) | 3 1/4" | - |
| 16d G.V. SINKER | 0.148" (9 ga.) | 3 1/4" | - |



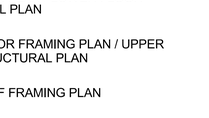

## DETERMINE REQ'D NAIL DIAMETER AND LENGTH

| REQUIRED COMMON NAIL | 8d | | | | | 10d | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| PLYWOOD THICKNESS | 3/8" | 1/2" | 5/8" | 3/4" | 1 1/8" | 3/8" | 1/2" | 5/8" | 3/4" | 1 1/8" |
| MINIMUM EMBEDMENT | 1 3/8" | | | | | 1 3/4" | | | | |
| MIN. NAIL LENGTH REQ'D | 2" | 2 1/8" | 2 1/4" | 2 3/8" | 2 3/4" | 2 1/8" | 2 1/4" | 2 3/8" | 2 1/2" | 2 7/8" |
| MIN. DIAMETER REQ'D | 0.131" (10 1/4" ga.) | | | | | 0.148" (10 1/4" ga.) | | | | |

**FOOTING AND STEMWALL REQUIREMENTS**
- 8" Wide w/ (1) #4 continuous top and #4 at 48" o.c. vertical, hook at footing (alternate hooks). Locate vertical at all Holdown Anchor Bolts. If top of sternwall exceeds 36" above top of footing, use #4 at 18" o.c. horizontal continuous and #4 at 24" o.c. vertical.
- All footings shall bear on undisturbed soil. Assumed soil bearing pressure is determined & increased in accordance w/ IBC Table 1806.2.
- Exterior footings to be placed 24" below grade minimum, U.N.O.

**HOLDOWN INFORMATION**
- See holdown schedule above and per plan.

**THREADED ROD END CONDITION AT HOLDOWNS**




**SOILS & FOUNDATIONS:**
Dunagan Engineering, Inc. has not made a geotechnical review of the building site and is not responsible for general site stability or soil suitability for the proposed project. A review by a geological engineer or qualified civil engineer may be desirable. Foundation design is based on minimum footing dimensions and bearing capacities set forth in Table 1806.2 of Chapter 18 in the 2018 International Building Code. Assume Class 5 soil with allowable soil bearing pressure of 1500 psf., with a constant expansion index less than 20. Footings shall extend 24" (minimum) below grade.

### SHEET INDEX



REVISIONS

| # | Date | Description | By |
|---|---|---|---|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STRUCTURAL ONLY

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Brian Dunagan
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Reason: I have reviewed this document
Date: 2022.10.13 15:42:55-07'00'

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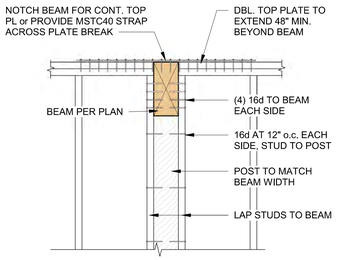
| SCALE | AS NOTED |
| JOB NO. | B22000 |
| SHEET NO. | |

GENERAL NOTES & TYPICAL DETAILS

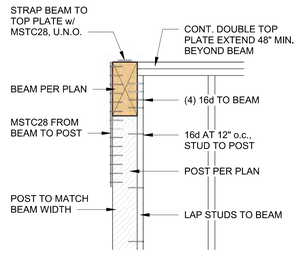
S0.1

SHEET of SHEETS

PLEASE RECYCLE



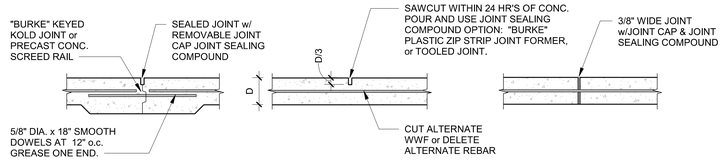

**BEAM POCKET AT INTERIOR**




**BEAM POCKET AT CORNER**

## 10 BEAM POCKET

3/4" = 1'-0"



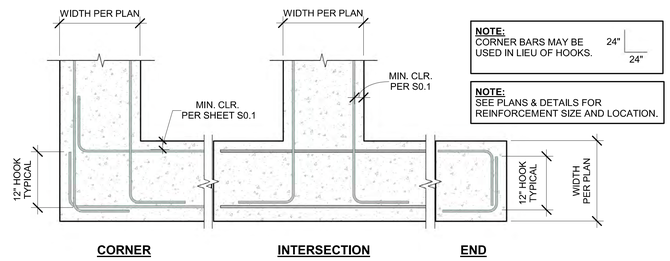

**DOWEL JOINT (DJ)** **CONTROL JOINT (CJ)** **ISOLATION JOINT (IJ)**

*SEE NOTE 1

NOTE:
1. PLACE CONCRETE SLAB ON GRADE IN MONOLITHIC POURS IN LARGEST AREAS FEASABLE. WHERE POURS AND THUS COLD JOINTS OCCUR, USE DOWEL JOINT SEE (DJ) ABOVE

## 9 SLAB JOINTS

3/4" = 1'-0"



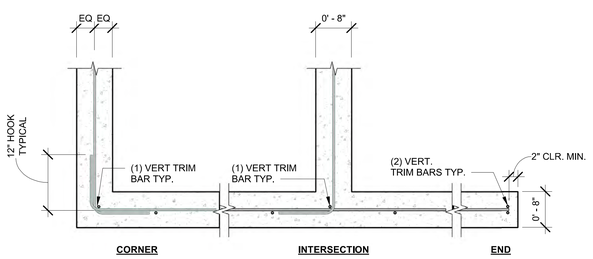

**NOTE:** CORNER BARS MAY BE USED IN LIEU OF HOOKS. 24" / 24"

**NOTE:** SEE PLANS & DETAILS FOR REINFORCEMENT SIZE AND LOCATION.

**CORNER** **INTERSECTION** **END**

## 8 LAP FOOTING REINFORCING

3/4" = 1'-0"



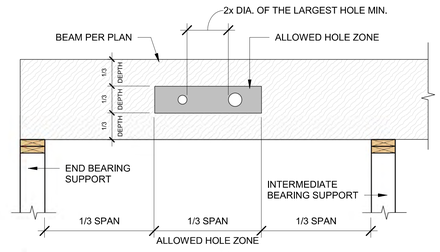

**CORNER** **INTERSECTION** **END**

**NOTE:** SEE PLANS & DETAILS FOR REINFORCEMENT SIZE AND LOCATION.

**NOTE:** CORNER BARS MAY BE USED IN LIEU OF HOOKS. 24" / 24"

## 7 STEMWALL REINFORCING

3/4" = 1'-0"



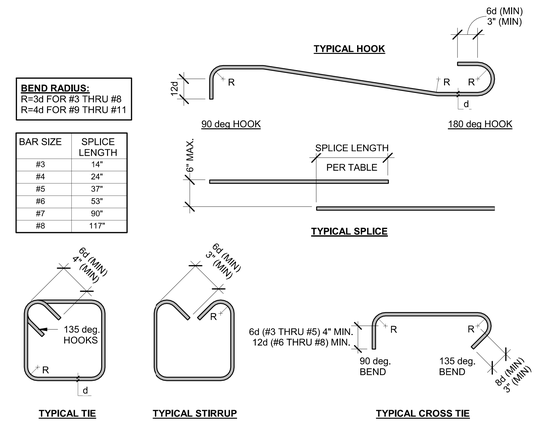

| BEAM DEPTH | MAX DIA. HOLE SIZE |
|---|---|
| 5-1/2" | 3/4"Ø |
| 7-1/4" | 1"Ø |
| 9-1/4" & GREATER | 2"Ø |

**NOTES:**

1. DO NOT CUT, NOTCH, OR DRILL BEAM, EXCEPT AS INDICATED WITHOUT PRIOR APPROVAL FROM THE ENGINEER OF RECORD.
2. SQUARE & RECTANGULAR HOLES ARE NOT PERMITTED.
3. ROUND HOLES MAY BE DRILLED OR CUT WITH A HOLE SAW ANYWHERE WITHIN THE ALLOWED HOLE ZONE OF THE BEAM.
4. THE HORIZONTAL DISTANCE BETWEEN ADJACENT HOLES MUST BE AT LEAST TWO TIMES THE SIZE OF THE LARGER HOLE.
5. DO NOT CUT MORE THAN THREE ACCESS HOLES IN ANY FOUR FOOT LONG SECTION OF BEAM
6. THESE LIMITATIONS APPLY TO HOLES DRILLED FOR PLUMBING OR WIRING ACCESS ONLY. THE SIZE AND LOCATION OF HOLES DRILLED FOR FASTENERS ARE GOVERNED BY THE PROVISIONS OF THE NDS FOR WOOD CONSTRUCTION.
7. BEAMS DEFLECT UNDER LOAD. SIZE HOLES TO PROVIDE CLEARANCE WHERE REQUIRED.
8. THE HOLE CHART IS VALID FOR BEAMS SUPPORTING UNIFORM LOAD ONLY. FOR BEAMS SUPPORTING CONCENTRATED LOADS OR FOR BEAMS WITH LARGER HOLES, CONTACT ENGINEER OF RECORD.
9. DO NOT PLACE HOLES BELOW POSTS ABOVE ON BEAMS.
10. HOLES IN CANTILEVERS REQUIRE ADDITIONAL ANALYSIS.

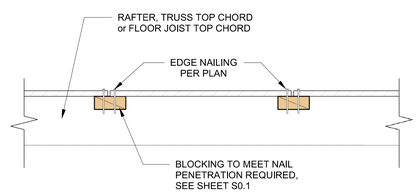
## 6 HOLES IN BEAM

3/4" = 1'-0"



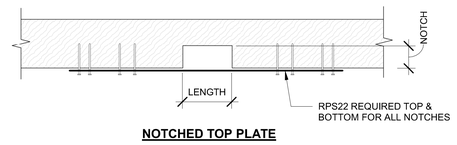

## 5 REBAR BENDS & LAP REQUIREMENTS

3/4" = 1'-0"

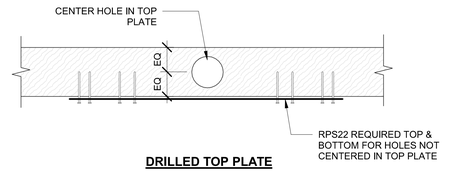



## 4 BLOCKED DIAPHRAGM

1 1/2" = 1'-0"




**NOTCHED TOP PLATE**

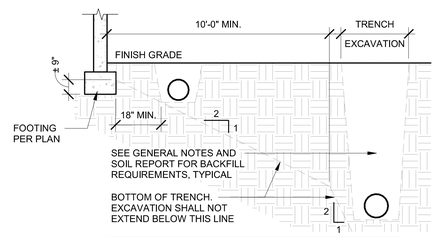



**DRILLED TOP PLATE**

| WALL TYPE | MAX. NOTCH | MAX. DRILLED HOLE |
|---|---|---|
| 2x4 BEARING | 1 1/2" x 5 1/2" | 1 1/2" DIA AT CL. |
| 2x4 NON-BEARING | 2 1/2" x 5 1/2" | 2 1/2" DIA AT CL. |
| 2x6 BEARING | 2 1/2" x 5 1/2" | 3 1/2" DIA AT CL. |
| 2x6 NON-BEARING | 3 1/2" x 5 1/2" | 4" DIA AT CL. |

## 3 NOTCH IN TOP PLATE

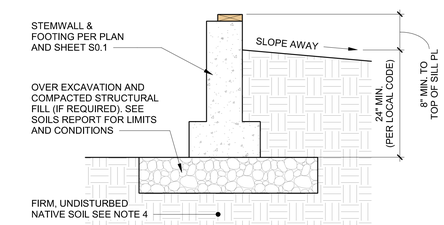
1 1/2" = 1'-0"




**NOTE:**
1. THE CONTRACTOR SHALL COORDINATE ALL EXCAVATION OPERATIONS WITH BUILDING FOUNDATION REQUIREMENTS.

## 2 EXCAVATION PARALLEL TO FOOTING

3/4" = 1'-0"




**NOTES:**

1. REFERENCE FOUNDATION NOTES ON SHEET S0.1 FOR ALL SOILS AND FOUNDATION REQUIREMENTS.
2. PROVIDE COMPACTED STRUCTURAL FILL BENEATH CONTINUOUS AND SPREAD FOOTINGS IF REQUIRED (SEE SOILS REPORT)
3. SEE THE PROJECT SOILS REPORT, GRADING PLANS AND SHEET S0.1 FOR ALL SOILS REQUIREMENTS INCLUDING COMPACTION, FILL AND ALL OTHER REQUIREMENTS.
4. NATIVE SOIL SHOULD BE SCARIFIED A MINIMUM OF 12" AND BROUGHT TO NEAR OPTIMUM MOISTURE CONTENT AND COMPACTED TO AT LEAST 90% OF RELATIVE COMPACTION.

## 1 TYPICAL SOIL PREPARATION

3/4" = 1'-0"

REVISIONS

| # | Date | Description | By |
|---|---|---|---|

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TYPICAL DETAILS

S0.2

SHEET of SHEETS

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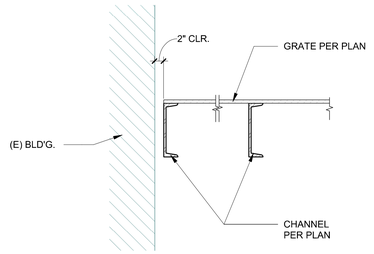
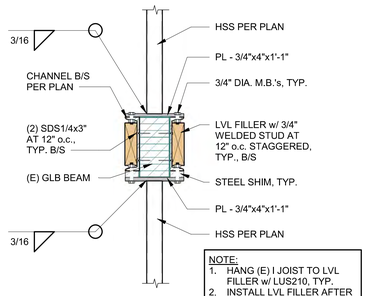
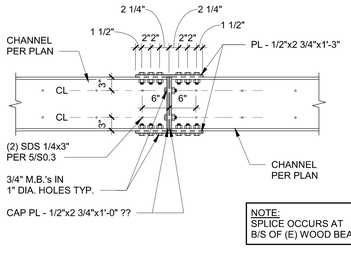



## 11 (E) WALL / CHANNEL
3/4" = 1'-0"



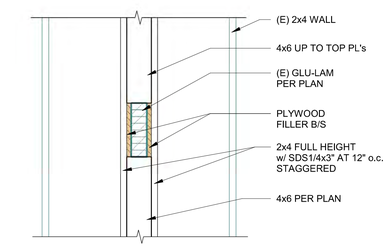

NOTE:
1. HANG (E) I JOIST TO LVL FILLER w/ LUS210, TYP.
2. INSTALL LVL FILLER AFTER ALL STEEL IS IN PLACE

## 10 HSS COL TO (E) BEAM AT FLOOR
3/4" = 1'-0"



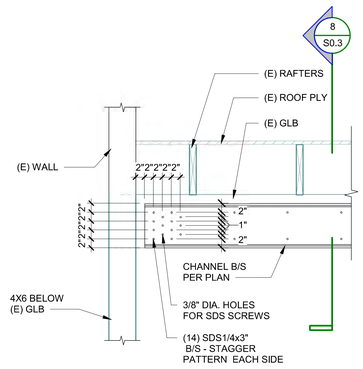

NOTE:
SPLICE OCCURS AT B/S OF (E) WOOD BEAM

## 9 BEAM SPLICE
3/4" = 1'-0"

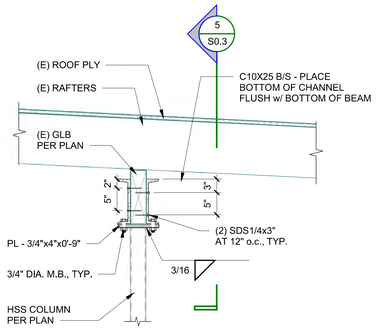



## 8 BEAM POCKET
3/4" = 1'-0"

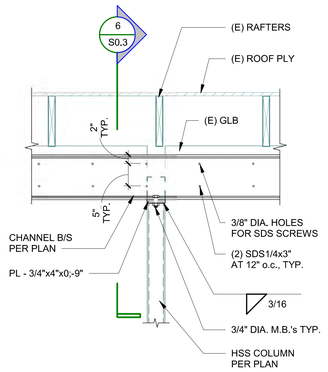
240-014M



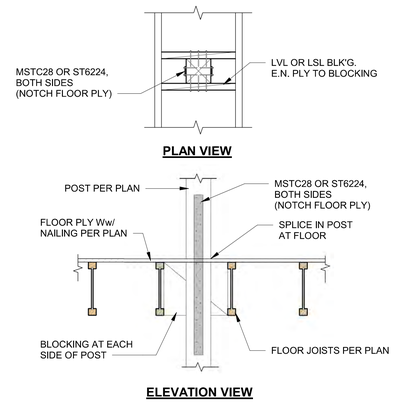

## 7 BEAM POCKET
3/4" = 1'-0"




## 6 HSS BEAM SECTION
3/4" = 1'-0"

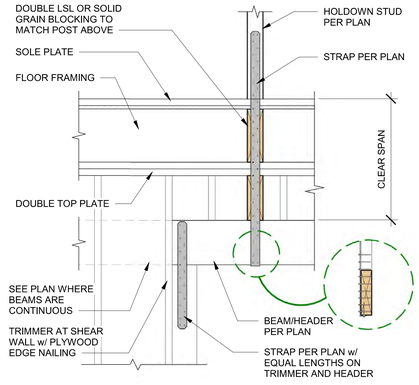



## 5 HSS TO (E) BEAM
3/4" = 1'-0"

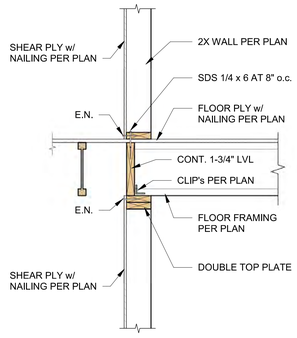



## 3 POST SPLICE AT FLOOR
3/4" = 1'-0"

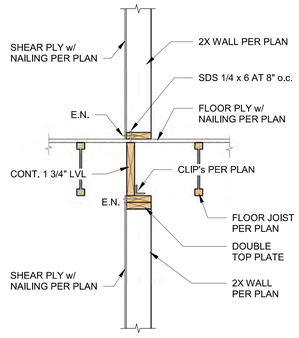
NOTE:
RESPONSIBILITY TO COMPLY WITH TYPICAL DETAILS AND GENERAL NOTES AS DELINEATED or DEFINED ON THE TYPICAL DETAIL DRAWINGS OF THESE CONTRACT DOCUMENTS REGARDLESS OF SPECIFIC FLAGGING or REFERENCE TO APPLICABLE NOTE or DETAIL.



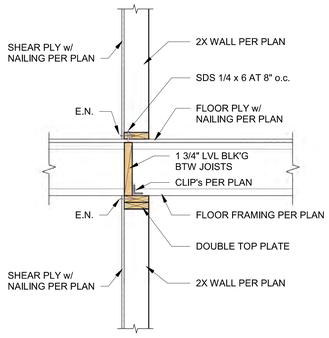

## 2 STRAP CONNECTION TO HEADER/ BEAM
3/4" = 1'-0"




**JOISTS BOTH DIRECTIONS w/ SHEAR WALL**

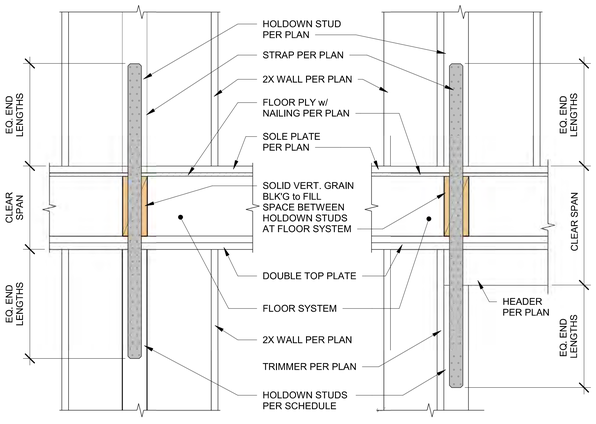



**JOISTS PARALLEL w/ SHEAR WALL**




**JOISTS PERPENDICULAR w/ SHEAR WALL**

## 4 UPPER FLOOR INTERIOR SHEAR TRANSFER
3/4" = 1'-0"




## 1 STRAP ACROSS FLOOR
3/4" = 1'-0"

REVISIONS

| # | Date | Description | By |
|---|---|---|---|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STRUCTURAL ONLY

REGISTERED PROFESSIONAL ENGINEER
BRYAN D. DUNAGAN
No. C047236
Exp. 12-31-23
CIVIL
STATE OF CALIFORNIA

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| | |
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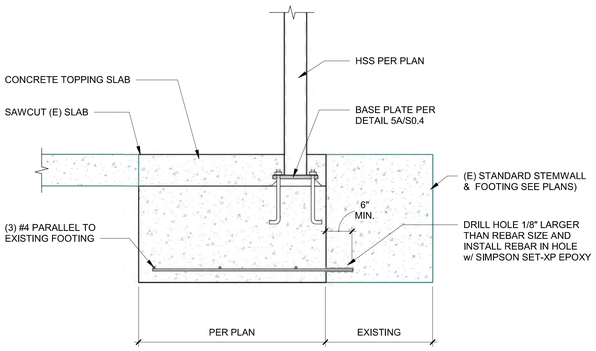
| CHECKED BY | BDD |
| DATE | 9-26-22 |
| SCALE | AS NOTED |
| JOB NO. | B22000 |
| SHEET NO. | |
| TYPICAL DETAILS / DETAILS | |

S0.3

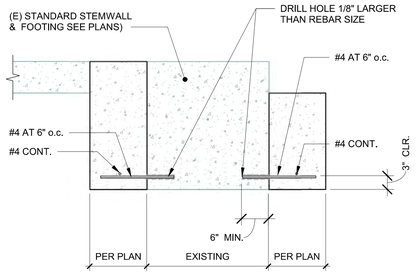
SHEET of SHEETS

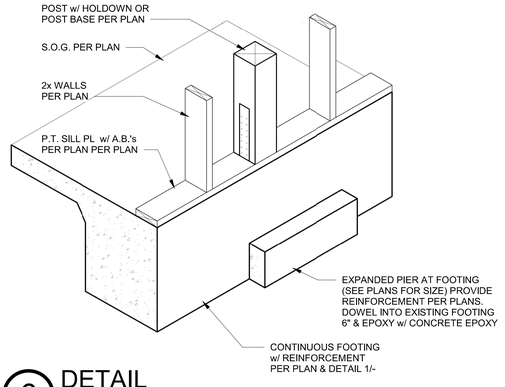
PLEASE RECYCLE




## 7 DETAIL

3/4" = 1'-0"

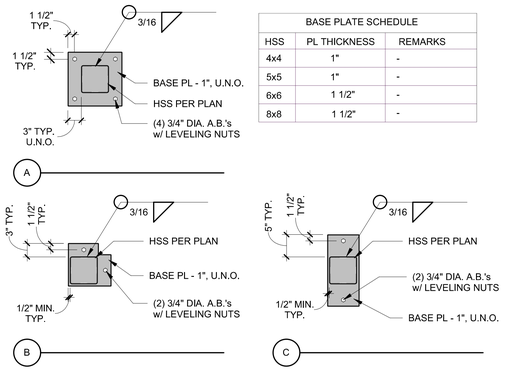



## 6 DETAIL

3/4" = 1'-0"

120-073

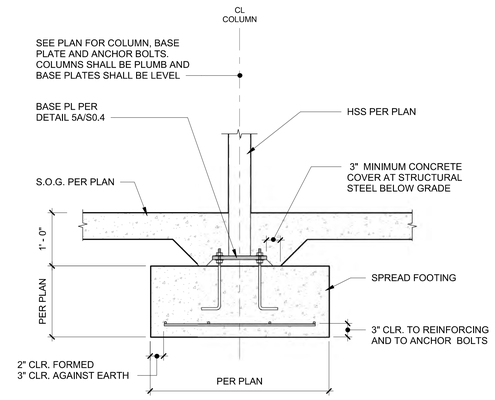



| BASE PLATE SCHEDULE | | |
|---|---|---|
| HSS | PL THICKNESS | REMARKS |
| 4x4 | 1" | - |
| 5x5 | 1" | - |
| 6x6 | 1 1/2" | - |
| 8x8 | 1 1/2" | - |

## 5 DETAIL

3/4" = 1'-0"

420-016

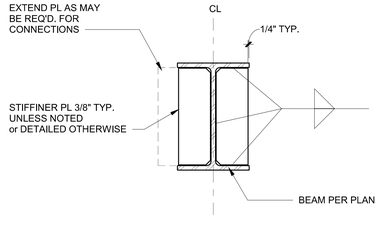



NOTES:
1. SEE PLAN FOR SIZE OF FOOTING AND FOR REINFORCING STEEL
2. ANCHOR BOLTS SHALL BE SECURED IN PLACE. DO NOT DISPLACE OR OTHERWISE DISTURB THE ANCHOR BOLTS.
3. PLACE THE GROUT BEFORE APPLYING SIGNIFICANT LOADS TO THE COLUMN(S)

## 4 DETAIL

3/4" = 1'-0"

420-012

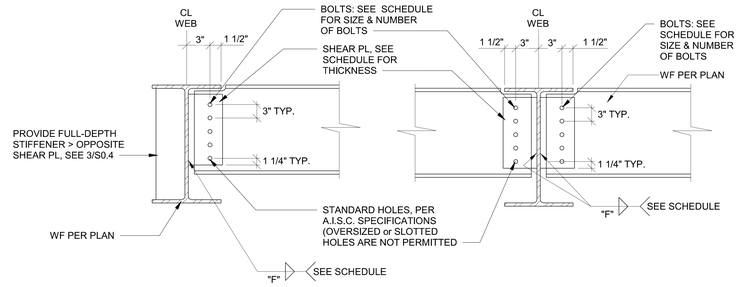



NOTE:
USE LARGER PLATE AND WELD AS MAY BE REQ'D. BY BEAM CONNECTION SCHEDULE

## 3 DETAIL

3/4" = 1'-0"

430-211




A SINGLE BEAM CONDITION

B OPPOSING BEAM CONDITION

| BEAM SIZE | NUMBER of A325 BOLTS REQ'D PER SHEAR PL SEE NOTES # 1,2,3,4,5 | | SHEAR PL THICKNESS (INCHES) | WELD SIZE "F" | REMARKS |
|---|---|---|---|---|---|
| | 3/4" DIA. | 1" DIA. | | | |
| W6, C6 | 2 | | 5/16" | 1/4" | LOCATE BOLTS IN HORIZONTAL PATTERN |
| W8, C8 | 2 | | 5/16" | 1/4" | |
| W10, C10 | 2 | | 5/16" | 1/4" | |
| W12, C12 | 3 | | 5/16" | 1/4" | |
| W14, C15 | 3 | | 5/16" | 1/4" | |
| W16 | 4 | | 5/16" | 1/4" | |
| W18, MC18 | 5 | | 5/16" | 1/4" | |
| W21 | | 5 | 7/16" | 5/16" | |
| W24 | | 6 | 7/16" | 5/16" | |
| W27 | | 7 | 7/16" | 5/16" | |
| W30 | | 8 | 1/2" | 3/8" | |
| W33 | | 9 | 1/2" | 3/8" | |
| W36 | | 9 | 1/2" | 3/8" | |
| W40 | | 9 | 1/2" | 3/8" | |

NOTE:
IF SHEAR PL's ARE NOT DIRECTLY OPPOSING (OFFSETS OF 2" OR GREATER ARE NOT DIRECTLY OPPOSED) THEN PROVIDE STIFFENER PL OPPOSITE SHEAR PL PER CONDITION 'A'

NOTE(S):

1. Provide A325-N high-strength bolts, TYP., U.N.O.

2. High-strength bolts used in beam to beam connections shall be "snug-tight" per requirements of American Institute of Steel Construction (A.I.S.C.) TYP., U.N.O.

3. Connections which have A325-SC bolts shall conform to the following requirements:

   a). The bolts shall be tightened to slip-critical pretensioning
   b). Unqualified paint is not permitted on the faying surfaces of connections utilizing A325-SC bolts.

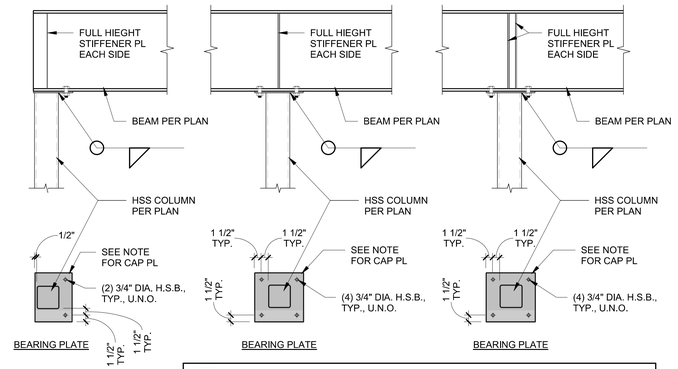
4. Provide special inspection of bolt tightening per Sheet. S0.1

5. High-strength bolts which are part of moment resisting frame beam and column connections shall be fully pretensioned per "tensioned shear-bearing connections" pretensioning requirements of A.I.S.C.

## 2 DETAIL

3/4" = 1'-0"

430-104




NOTE:
COLUMN CAP PL SHALL BE THE SAME WIDTH AS THE BEAM FLANGE or (COLUMN DIMENSION +1/2") WHICHEVER IS GREATER. THICKNESS SHALL BE SAME THICKNESS AS BEAM FLANGE (1/2" MIN.)

## 1 DETAIL

3/4" = 1'-0"

430-117

REVISIONS

| # | Date | Description | By |
|---|---|---|---|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| SCALE | AS NOTED |
| JOB NO. | B22000 |
| SHEET NO. | |

DETAILS

S0.4

SHEET of SHEETS

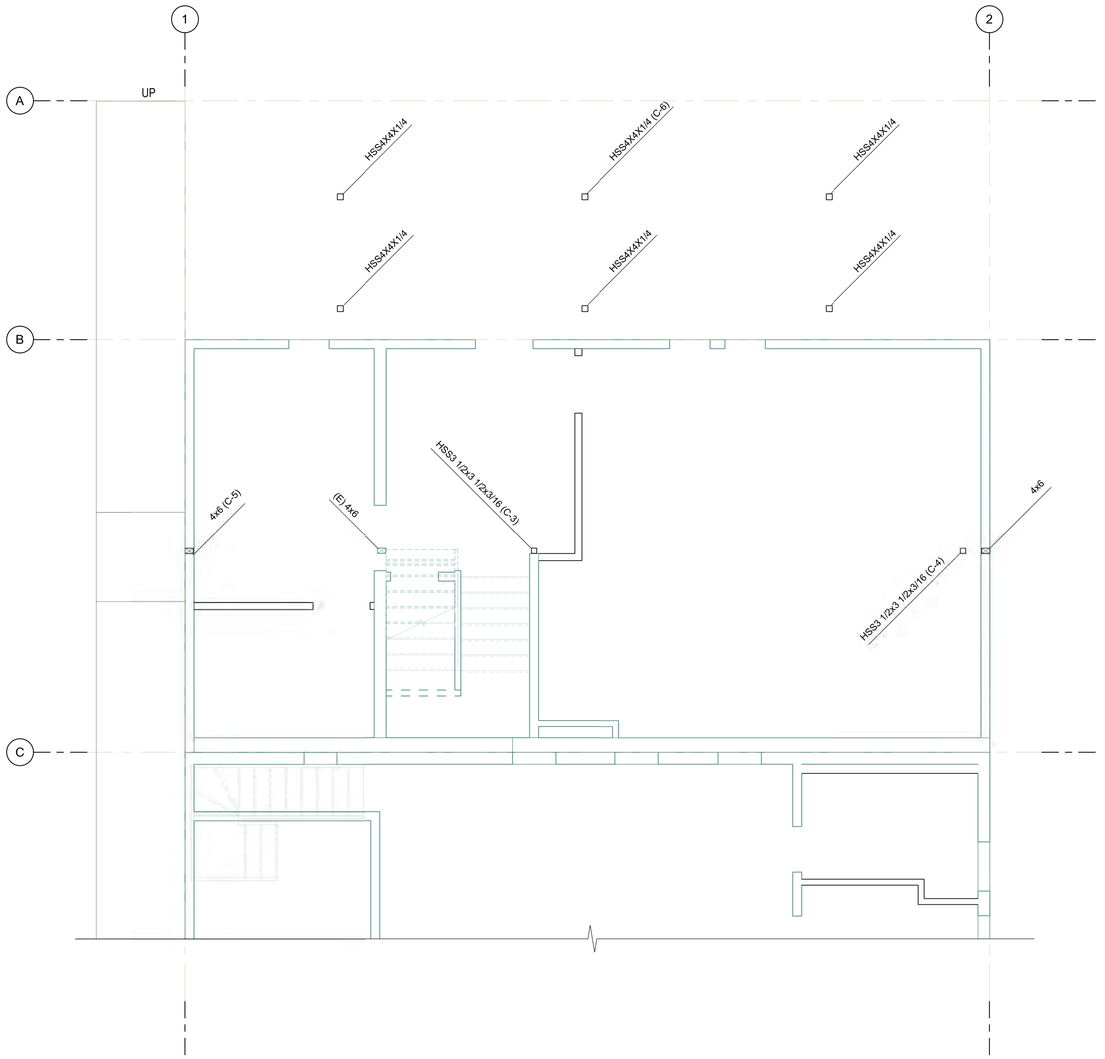
PLEASE RECYCLE

## PIER SCHEDULE

| MARK | WIDTH (each side) | DEPTH | STEEL (each way) |
|---|---|---|---|
| F2.0 | 24" | 10" | (3) #4's |
| F2.5 | 30" | 12" | (4) #4's |
| F3.0 | 36" | 12" | (4) #4's |
| F3.5 | 42" | 14" | (6) #4's or (4) #5's |
| F4.0 | 48" | 14" | (7) #4's or (4) #5's |

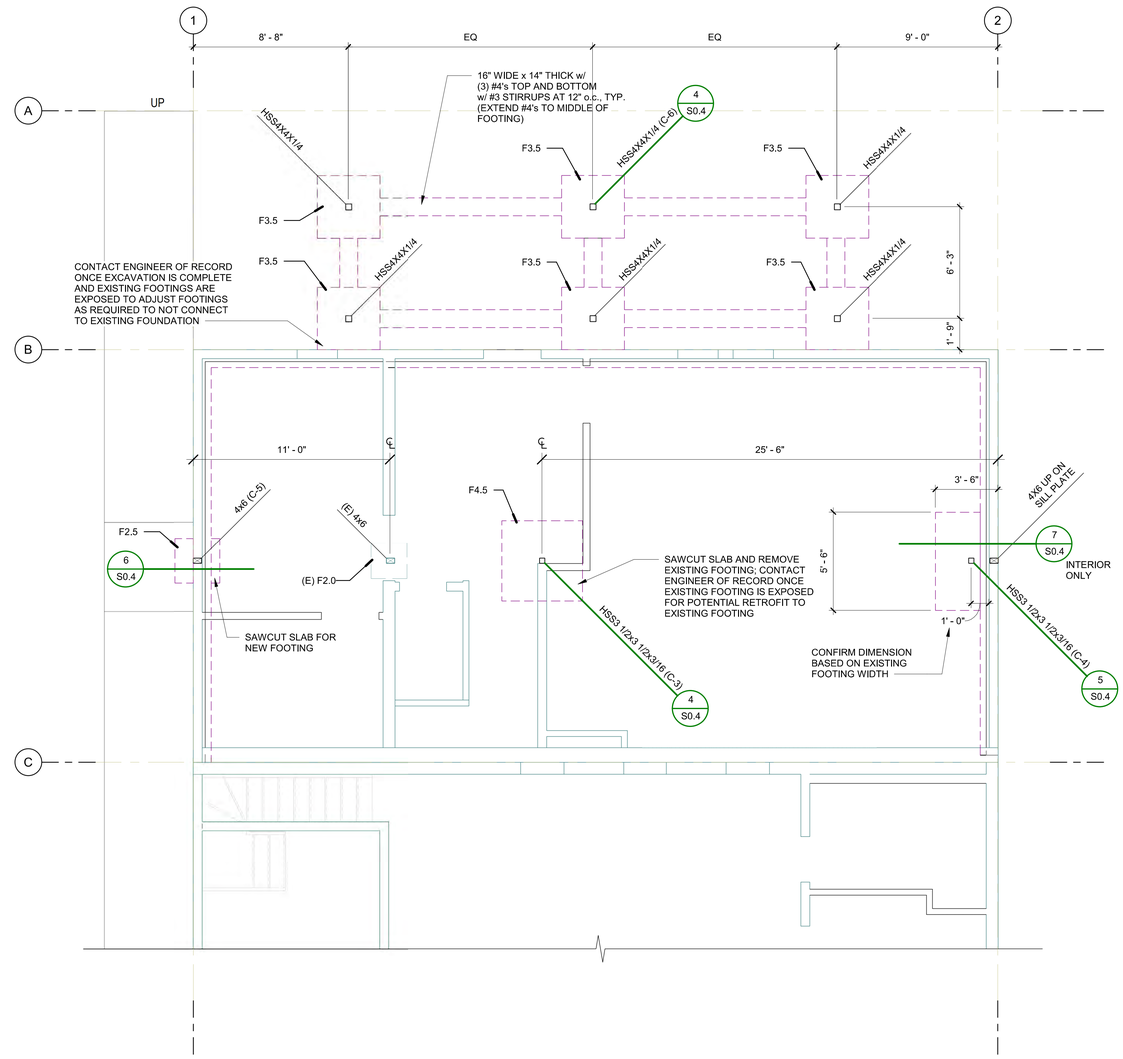
- ALL FOOTINGS SHALL BEAR ON UNDISTURBED SOIL, ASSUMED SOIL BEARING PRESSURE IS DETERMINED IN ACCORDANCE w/ IBC TABLE 1806.2, UNLESS SOIL REPORT IS PROVIDED.
- EXTERIOR FOOTINGS TO BE PLACED 24" BELOW GRADE PER APPLICABLE CODES.

**NOTE:**
SEE DETAILS FOR SPECIAL REINFORCING OF STEMWALL AND FOOTINGS.




## LOWER FLOOR STRUCTURAL PLAN

1/4" = 1'-0"




## FOUNDATION PLAN

1/4" = 1'-0"

REVISIONS

| # | Date | Description | By |
|---|---|---|---|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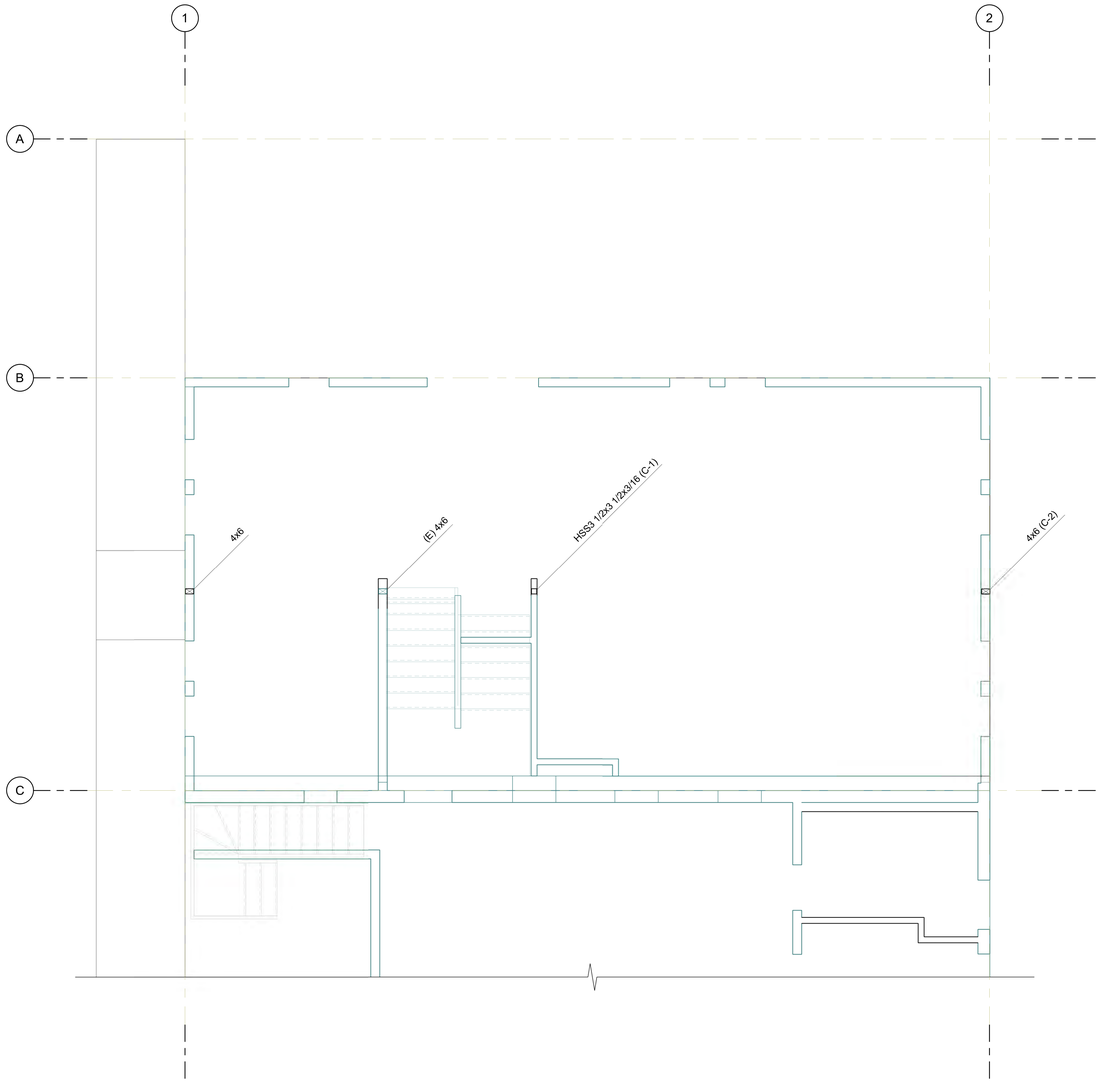
| SCALE | AS NOTED |
| JOB NO. | B22000 |
| SHEET NO. | |

FOUNDATION PLAN / LOWER FLOOR STRUCTURAL PLAN

**S1.1**

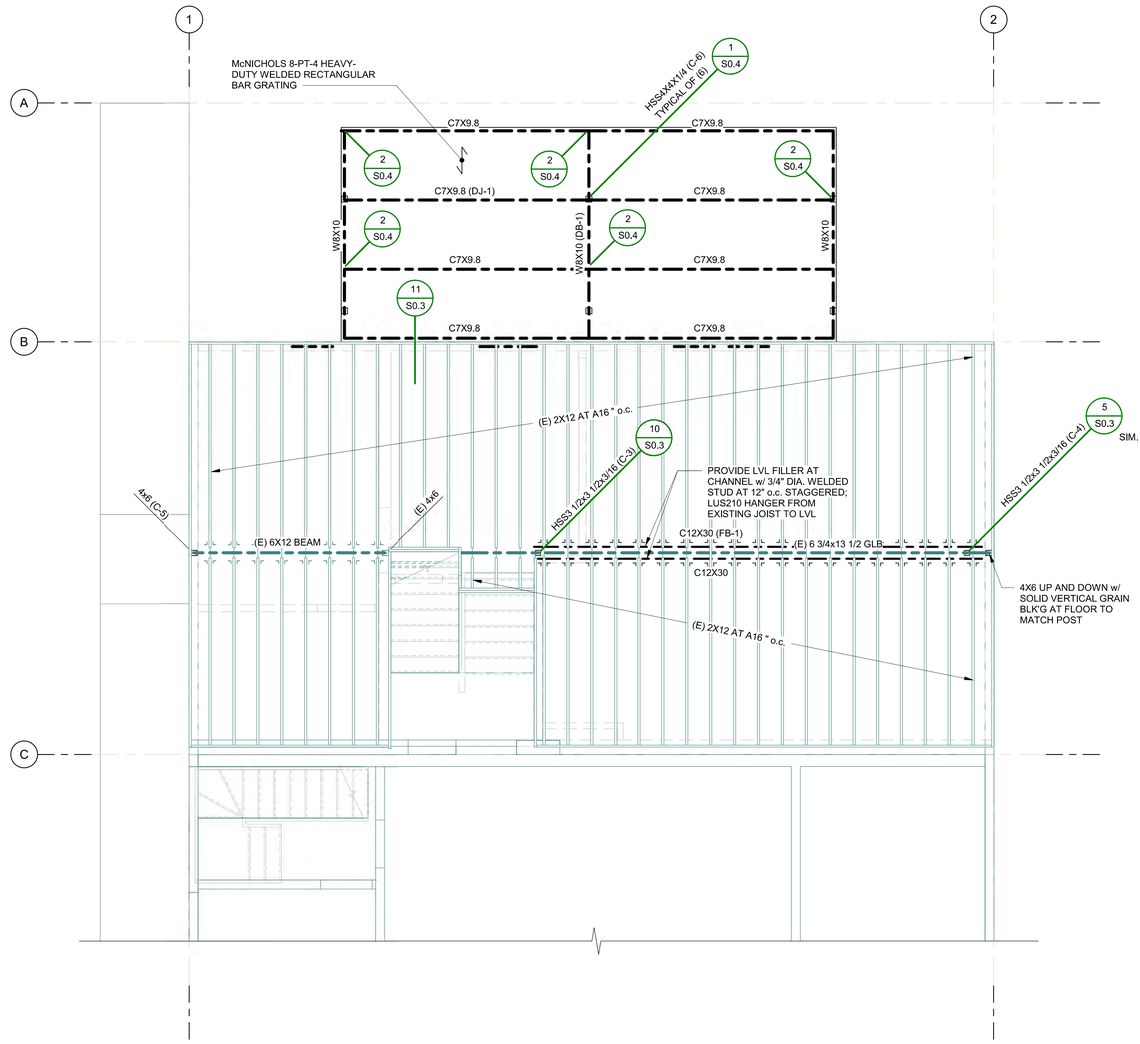
SHEET of SHEETS

PLEASE RECYCLE




## UPPER FLOOR STRUCTURAL PLAN

1/4" = 1'-0"




## UPPER FLOOR FRAMNG PLAN

1/4" = 1'-0"

REVISIONS

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|---|---|---|---|

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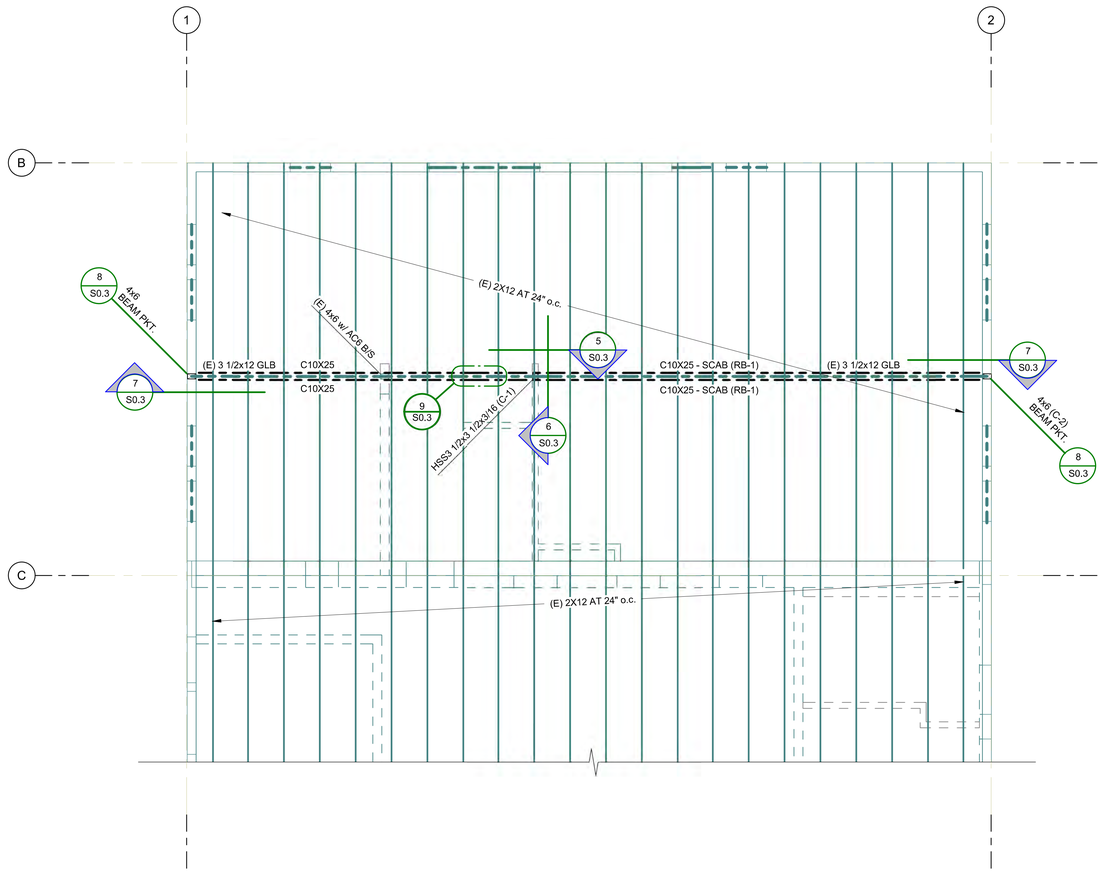
| DATE | 9-26-22 |
| SCALE | AS NOTED |
| JOB NO. | B22000 |
| SHEET NO. | |

LOWER FLOOR FRAMING PLAN / UPPER FLOOR STRUCTURAL PLAN

S1.2

SHEET of SHEETS

PLEASE RECYCLE




## ROOF FRAMING PLAN

1/4" = 1'-0"

REVISIONS

| # | Date | Description | By |
|---|---|---|---|

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| SHEET NO. | |

UPPER ROOF FRAMING PLAN

S2.1

SHEET of SHEETS

PLEASE RECYCLE

# MECHANICAL LEGEND

## HVAC SYMBOLS

| SYMBOL | IDENTIFICATION |
|---|---|
| | DUCT; SINGLE-LINE; SIZES AS SHOWN ON PLANS |
| | DUCT; DOUBLE-LINE; SIZES AS SHOWN ON PLANS |
| | 45 DEGREE DUCT ELBOW; SINGLE-LINE; SIZES AS SHOWN ON PLANS |
| | 45 DEGREE DUCT ELBOW; DOUBLE-LINE; SIZES AS SHOWN ON PLANS |
| | 90 DEGREE DUCT ELBOW; SINGLE-LINE; SIZES AS SHOWN ON PLANS |
| | 90 DEGREE DUCT ELBOW; DOUBLE-LINE; SIZES AS SHOWN ON PLANS |
| | 90 DEGREE DUCT ELBOW WITH TURNING VANES; SIZES AS SHOWN ON PLANS |
| | DUCT TRANSITION; SINGLE-LINE |
| | DUCT TRANSITION; DOUBLE-LINE |
| | DUCT TRANSITION SQUARE TO ROUND; DOUBLE-LINE |
| | HORIZONTAL MOUNTED SUPPLY AIR DIFFUSER OR SUPPLY AIR DUCT IN CROSS-SECTION ROUTED UP |
| | HORIZONTAL MOUNTED RETURN OR TRANSFER AIR GRILLE, OR RETURN AIR DUCT IN CROSS-SECTION ROUTED UP |
| | HORIZONTAL MOUNTED EXHAUST AIR GRILLE OR EXHAUST AIR DUCT IN CROSS-SECTION ROUTED UP |
| | SUPPLY AIR DUCT IN CROSS-SECTION ROUTED DOWN |
| | RETURN AIR DUCT IN CROSS-SECTION ROUTED DOWN |
| | EXHAUST AIR DUCT IN CROSS-SECTION ROUTED DOWN |
| | SUPPLY AIR TO/FROM DEVICE |
| | RETURN/EXHAUST AIR TO/FROM DEVICE |
| | BALANCING DAMPER |
| M | MOTORIZED DAMPER |
| | FIRE DAMPER |
| | FIRE/SMOKE DAMPER |
| T | THERMOSTAT |
| T | TEMPERATURE SENSOR |

## DESIGNATION SYMBOLS

| SYMBOL | IDENTIFICATION |
|---|---|
| A | GRID LINE DESIGNATOR |
| # | SHEET KEYNOTE TAG |
| XX-# | CONTRACTOR EQUIPMENT TAG |
| # | REVISION DELTA WITH REVISION NUMBER |
| | POINT OF CONNECTION |

## ABBREVIATIONS

| ABBRV. | IDENTIFICATION |
|---|---|
| Ø | DIAMETER |
| & | AND |
| AFF | ABOVE FINISH FLOOR |
| AFUE | ANNUAL FUEL UTILIZATION EFFICIENCY |
| BD | BALANCING DAMPER |
| BHP | BREAK HORSEPOWER |
| BTU | BRITISH THERMAL UNITS |
| CFM | CUBIC FEET PER MINUTE |
| CONT | CONTINUED |
| COP | COEFFICIENT OF PERFORMANCE |
| dBA | A-WEIGHTED DECIBELS |
| DN | DOWN |
| DSD | DUCT SMOKE DETECTOR |
| DWGS | DRAWINGS |
| (E) | EXISTING TO REMAIN |
| EA | EXHAUST AIR |
| EER | ENERGY EFFICIENCY RATIO |
| EF | EXHAUST FAN |
| EFF | EFFICIENCY |
| ESP | EXTERNAL STATIC PRESSURE |
| F/D | FIRE DAMPER |
| F/SD | FIRE/SMOKE DAMPER |
| FLA | FULL-LOAD AMPERES |
| FLR | FLOOR |
| FT | FEET |
| G | GAS |
| GPD | GALLONS PER DAY |
| GPM | GALLONS PER MINUTE |
| GPR | GAS PRESSURE REGULATOR |
| HP | HORSEPOWER OR HEAT PUMP |
| HSPF | HEATING SEASONAL PERFORMANCE FACTOR |
| IMC | INTERNATIONAL MECHANICAL CODE |
| IN | INCHES |
| KW | KILOWATTS |
| LBS | POUNDS |
| MAX | MAXIMUM |
| MBH | 1000 BTU PER HOUR |
| MCA | MINIMUM CURRENT AMPACITY |
| MECH | MECHANICAL |
| MIN | MINIMUM |
| MOCP | MAXIMUM OVERCURRENT PROTECTION |
| (N) | NEW |
| NC | NOISE CRITERIA |
| NTS | NOT TO SCALE |
| OC | ON CENTER |
| OMSC | OREGON MECHANICAL SPECIALTY CODE |
| OSA | OUTSIDE AIR |
| PD | PRESSURE DROP |
| PH | PHASE |
| POC | POINT OF CONNECTION |
| PSI | POUNDS PER SQUARE INCH |
| QTY | QUANTITY |
| (R) | RELOCATE EXISTING |
| REFR | REFRIGERATION LINE |
| REQD | REQUIRED |
| REQS | REQUIREMENTS |
| RPM | REVOLUTIONS PER MINUTE |
| SA | SUPPLY AIR |
| SC | SENSIBLE (COOLING) CAPACITY |
| SEER | SEASONAL ENERGY EFFICIENCY RATIO |
| SF | SUPPLY FAN OR SQUARE FEET |
| SOV | SHUT-OFF VALVE |
| SQ | SQUARE |
| TC | TOTAL (COOLING) CAPACITY |
| TYP | TYPICAL |
| V | VOLTS |
| W | WATTS |
| W/ | WITH |
| WC | WATER COLUMN |
| (X) | REMOVE EXISTING |

### LEGEND NOTES:

A. ALL SYMBOLS MAY NOT BE USED IN THIS PROJECT.
B. SYMBOLS DO NOT ALWAYS REPRESENT REAL LIFE DIMENSIONS.
C. SEE BOOK SPECIFICATIONS FOR ADDITIONAL INFORMATION.

# GENERAL MECHANICAL NOTES:

A. THIS PROJECT IS A REMODEL OF A HISTORIC BUILDING. THE PLANS AND SPECIFICATIONS INDICATE THE GENERAL EXTENT OF THE WORK BASED ON OWNER PROVIDED INFORMATION AND LIMITED FIELD VERIFICATION. CONTRACTOR SHALL VISIT SITE, VERIFY EXISTING CONDITIONS, AND REPORT ANY DISCREPANCIES NOTED TO THE ARCHITECT PRIOR TO SUBMITTING A BID. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISCONNECTION AND RECONNECTION OF MECHANICAL, PLUMBING, AND ELECTRICAL SYSTEMS NECESSARY TO ACCOMPLISH THE WORK WHETHER OR NOT SPECIFIED AND/OR INDICATED.
B. BUILDING IS COVERED UNDER 2019 CHBC SECTION 8-901.5 ENERGY CONSERVATION: QUALIFIED HISTORICAL BUILDINGS OR PROPERTIES COVERED BY THIS PART ARE EXEMPTED FROM COMPLIANCE WITH ENERGY CONSERVATION STANDARDS.
C. TEMPORARILY CAP ANY (E) SERVICES THAT WILL REMAIN UNTIL CONNECTION TO NEW CAN BE MADE.
D. CONTRACTOR SHALL NOTIFY GENERAL CONTRACTOR TO REPAIR WALL, FLOOR, AND CEILING SURFACES AS REQURED DUE TO DEMOLITION OR INSTALLTION WORK.
E. REMOVE ALL ABANDONED PIPING, WIRING, EQUIPMENT AND FIXTURES.
F. ALL CONTROL WIRING SHALL BE IN CONDUIT. PROVIDE AND INSTALL RIGID CONDUIT IN AREAS EXPOSED TO THE ELEMENTS.
G. SUPPORT DUCTS AND PIPES TIGHT BELOW STRUCTURE WHEREVER POSSIBLE
H. COORDINATE WITH OTHER ON SPACE REQUIRED AND TIME SCHEDULE FOR DELIVERY OF ALL ITEMS.
I. FOR ROOF PENETRATIONS WITHOUT CURBS, PROVIDE WEATHERPROOF FLASHING PER SMACNA ARCHITECTUREAL SHEET METAL MANUAL AND DRAWINGS NOTES.
J. ALL PIPING IS CONCEALED UNLESS OTHERWISE NOTED.
K. ALL PIPING, FIXTURES, EQUIPMENT, ETC SHOWN IS NEW UNLESS OTHERWISE NOTED.
L. PROVIDE OPERATING AND MAINTENANCE MANUAL TO OWNER UPON SYSTEM COMMISSIONING.
M. WHERE BRANCH CONN ECTION SIZES IS NOT SHWON, REFER TO FIXTURE CONNECTION SCHEDULE ABOVE.
N. WATER HAMMER ARRESTORS SHALL BE PLACED AT ALL QUICK ACTING VALVES 2019 CALIFORNIA PLUMBING CODE
O. ALL FLOOR DRAINS / SINKS AND SIMILAR FIXTURES SHALL BE PROVIDED WITH TRAP PRIMERS

## MECHANICAL SHEET KEY

| SHEET NUMBER | DESCRIPTION |
|---|---|
| M00.10 | MECHANICAL - LEGEND & NOTES |
| M00.20 | MECHANICAL - SCHEDULES |
| M03.01 | MECHANICAL - BASEMENT, LOWER AND UPPER LEVEL FLOOR PLANS |
| M03.02 | MECHANICAL - BASEMENT, LOWER AND UPPER LEVEL PIPING PLANS |
| M04.01 | MECHANICAL - REFRIGERATION PIPING DIAGRAMS |
| M08.01 | MECHANICAL - DETAILS |

SCALE: 3" = 1'-0"
SCALE: 1 1/2" = 1'-0"
SCALE: 1/4" = 1'-0"
SCALE: 3/8" = 1'-0"
SCALE: 1/8" = 1'-0"
SCALE: 3/32" = 1'-0"
10/12/2022 6:25:43 PM

TRUE

ORW ARCHITECTURE
WWW.ORWARCHITECTURE.COM
29 S GRAPE STREET
MEDFORD OR 97501
P 541.779.5237

REGISTERED PROFESSIONAL ENGINEER
KATE R. CONNER
No. M36477
EXP. SEPT 30, 2023
MECHANICAL
STATE OF CALIFORNIA

COLEBREIT ENGINEERING + AXIOM ENGINEERS
BEND | CORVALLIS
MONTEREY | NAPA | SANTA CRUZ

YREKA CARNEGIE LIBRARY REHABILITATION
412 W MINER ST, YREKA, CA 96097

MECHANICAL - LEGEND & NOTES

PROJECT: 20220412
DATE: 10/12/2022

| No. | Description | Date |
|---|---|---|
| | | |

M00.10

## VRF BRANCH SELECTOR BOXES

| MARK | LOCATION | SERVING | RATED MBH | PORTS | V/PH | UNIT MCA | UNIT MOCP | WT LBS | MAKE & MODEL | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|
| BS-1 | BASEMENT MECH. RM. | FC-1, FC-2 | 216,000 | 4 | 1/230 | 2 | 15 | 55 | SAMSUNG MCU-S4 | |
| BS-2 | BASEMENT MECH. RM. | FC-4, FC-5, FC-6, FC-7 | 216,000 | 4 | 1/230 | 2 | 15 | 55 | SAMSUNG MCU-S4 | |

**NOTES:**

## SPLIT SYSTEM HEAT PUMPS

| MARK | SERVING | COOL MBH TC | HEAT MBH | TONS | CFM | ESP | W | V/PH | UNIT MCA | UNIT MOCP | WT LBS | SEER | MAKE & MODEL | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FC-1 | OPEN WORKSPACE 83 | 15 | 17 | 1.25 | 392 | | 65 | 230/1 | .33 | 15 | 42 | | SAMSUNG AM015AN1PCH/AA 1-WAY CASSETTE | 1,2,4,5,7,9 |
| FC-2 | OPEN WORKSPACE 83 | 15 | 17 | 1.25 | 392 | | 65 | 230/1 | .33 | 15 | 42 | | SAMSUNG AM015AN1PCH/AA 1-WAY CASSETTE | 1,2,4,5,7,9 |
| FC-4 | CONFERENCE 100 | 12 | 13.5 | 1 | 364 | | 27 | 230/1 | 0.31 | 15 | 21 | | SAMSUNG AM012TNVDCH/AA WALL MOUNTED UNIT | 1,2,5,8,9 |
| FC-5 | CONFERENCE 100 | 12 | 13.5 | 1 | 364 | | 27 | 230/1 | 0.31 | 15 | 21 | | SAMSUNG AM012TNVDCH/AA WALL MOUNTED UNIT | 1,2,5,8,9 |
| FC-6 | LOBBY 101 | 5 | 5.8 | .5 | 173 | | 27 | 230/1 | 0.16 | 15 | 20 | | SAMSUNG AM005TNVDCH/AA WALL MOUNTED UNIT | 1,2,5,8,9 |
| FC-7 | KITCHEN LOUNGE 102 | 5 | 5.8 | .5 | 173 | | 27 | 230/1 | 0.16 | 15 | 20 | | SAMSUNG AM005TNVDCH/AA WALL MOUNTED UNIT | 1,2,5,8,9 |
| FC-3 | HISTORIC BUILDING | 72 | 80 | 6 | 2110 | 0.4 | 950 | 230/1 | 7.2 | 15 | 239 | | SAMSUNG AM072TNZDCH/AA MULTIPOTITION AHU | 1,2,6,8,9 |
| HP-1 | | 60 | 60 | 5 | | | 139X2 | 230/1 | 32 | 50 | 276 | 17.1 | SAMSUNG AM060NXMDCR/AA | 1,3,9 |
| HP-3 | | 60 | 60 | 5 | | | 139X2 | 230/1 | 32 | 50 | 276 | 17.1 | SAMSUNG AM060MXMDCH/AA | 1,3,9 |

**NOTES:**

1. SIZE AND INSTALL REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS.
2. PROVIDE PROGRAMMABLE THERMOSTAT.
3. PROVIDE CONCRETE HOUSEKEEPING PAD.
4. PROVIDE WITH FASCIA PANEL
5. CONNECT TO HP-1
6. CONNECT TO HP-3
7. WITH BUILT IN CONDENSATE PUMP. RUN CONDENSATE DIRECT TO THE OUTSIDE.
8. DRAIN PAN WITH CONDENSATE PUMP, GOBI II 3004145. RUN CONDENSATE DIRECT TO THE OUTSIDE OF TO THE NEAREST FIXTURE WITH AN APPROVED AIR GAP FITTING
9. SEE M4.01 FOR REFRIGERANT PIPING DIAGRAM

## LOUVERS

| MARK | SERVING | TYPE | CFM | PD WC | MAKE & MODEL | NOTES |
|---|---|---|---|---|---|---|
| LV-1 | KITCHEN | OUT | 100 | 0.04 | GREENHECK ESD-635, 18X12 | 1 |
| LV-2 | VARIOUS | IN | 1000 | 0.04 | GREENHECK ESD-635 | 1, 2 |

**NOTES:**

1. PROVIDE INSECT SCREEN.
2. SIZE TO FIT WITHIN CRAWLSPACE WINDOW SPACE

## AIR DISTRIBUTION

| MARK | TYPE | MAKE & MODEL | REMARKS |
|---|---|---|---|
| RG-1 | RETURN | HART COOLEY 265 | HEAVY DUTY STEEL FLOOR GRILL, SIZE AS INDICATED |
| EG-1 | EXHAUST | TITUS 350RL | LOUVERED FACE EXHAUST, WITH OBD, MATCH FRAME TO CEILING TYPE, SIZE AS INDICATED |
| EG-2 | EXHAUST | TITUS 8F | PERFORATED FACE EXHAUST, WITH OBD, MATCH FRAME TO CEILING TYPE, SIZE AS INDICATED |
| SD-1 | SUPPLY | TITUS PAS | 24X24 PERFORATED FACE DIFFUSER, MATCH FRAME TO CEILING TYPE, NECK SIZE AS INDICATED |
| SD-2 | SUPPLY | TITUS 300RL | DOUBLE DEFLECTION LOUVERED FACE SUPPLY WITH OBD, SIZE AS INDICATED |
| SD-3 | SUPPLY | HART COOLEY 210 | HEAVY DUTY STEEL FLOOR GRILL, SIZE AS INDICATED |

**NOTES:**

1. MAY PROVIDE EQUIVALENT EQUIPMENT FROM NAILOR, PRICE, SHOEMAKER, TITUS.

## FANS

| MARK | SERVING | CFM | ESP | TIP SPEED / SONES | MOTOR V/PH | MOTOR WATTS/HP | FAN RPM | WT LBS | MAKE & MODEL | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|
| EF-1 | RESTROOM 203/204 | 150 | .4 | 3669 | 115/1 | 1/15 | 1725 | 31 | GREENHECK SQ-70-VG | 2,3, |
| EF-2 | RESTROOM 203/204 | 100 | .4 | 3515 | 115/1 | 1/15 | 1725 | 31 | GREENHECK SQ-70-VG | 2,3 |
| EF-3 | KITCHEN | 100 | .4 | 2 | 115/1 | 91W | 950 | 11 | GREENHECK CSP-B110 | 2,3 |
| SF-1 | VARIOUS | 1000 | .9 | 5052 | 115/1 | 1/4 | 1725 | 87 | GREENHECK SQ-100-VG | 1,2,3 |

**NOTES:**

1. PROVIDE WITH MERV 8 PRE FILTER AND MERV 13 FILTER BOX
2. OPERATE BY TIMECLOCK DURRING OCCUPIED HOURS, 7AM TO 6PM (ADJUSTABLE)
3. PROVIDE LOCAL DISCONNECT SWITCH

SCALE: 1 1/2" = 1'-0"
SCALE: 1/4" = 1'-0"
SCALE: 3/8" = 1'-0"
SCALE: 1/8" = 1'-0"
SCALE: 3/32" = 1'-0"
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STATE OF CALIFORNIA

COLEBREIT ENGINEERING + AXIOM ENGINEERS
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MONTEREY | NAPA | SANTA CRUZ

YREKA CARNEGIE LIBRARY REHABILITATION
412 W MINER ST, YREKA, CA 96097

MECHANICAL - SCHEDULES

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DATE: 10/12/2022

| No. | Description | Date |
|---|---|---|

M00.20



TRUE

SCALE: 3" = 1'-0"

SCALE: 1 1/2" = 1'-0"

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

SCALE: 3/8" = 1'-0"

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

SCALE: 3/32" = 1'-0"

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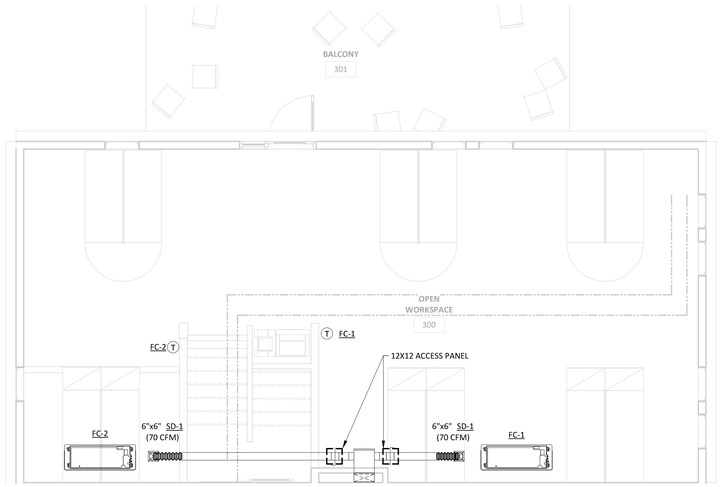
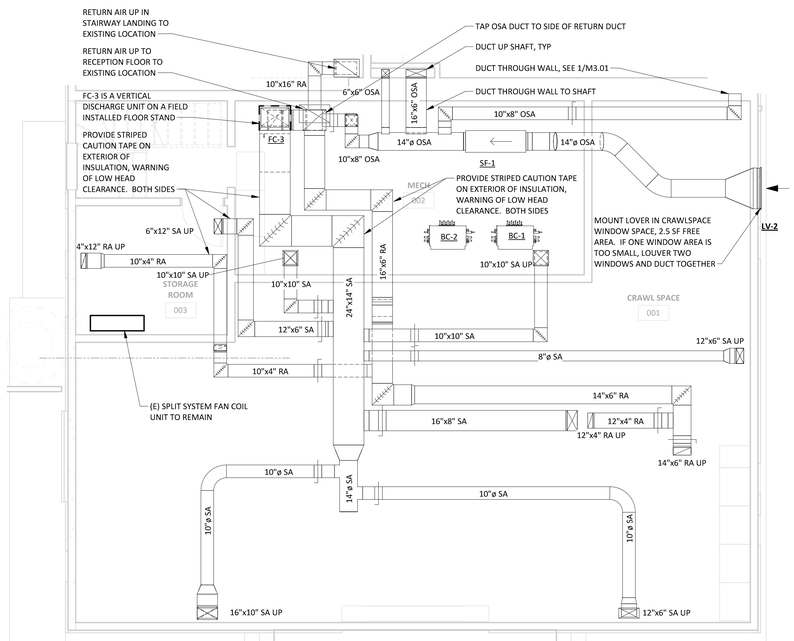
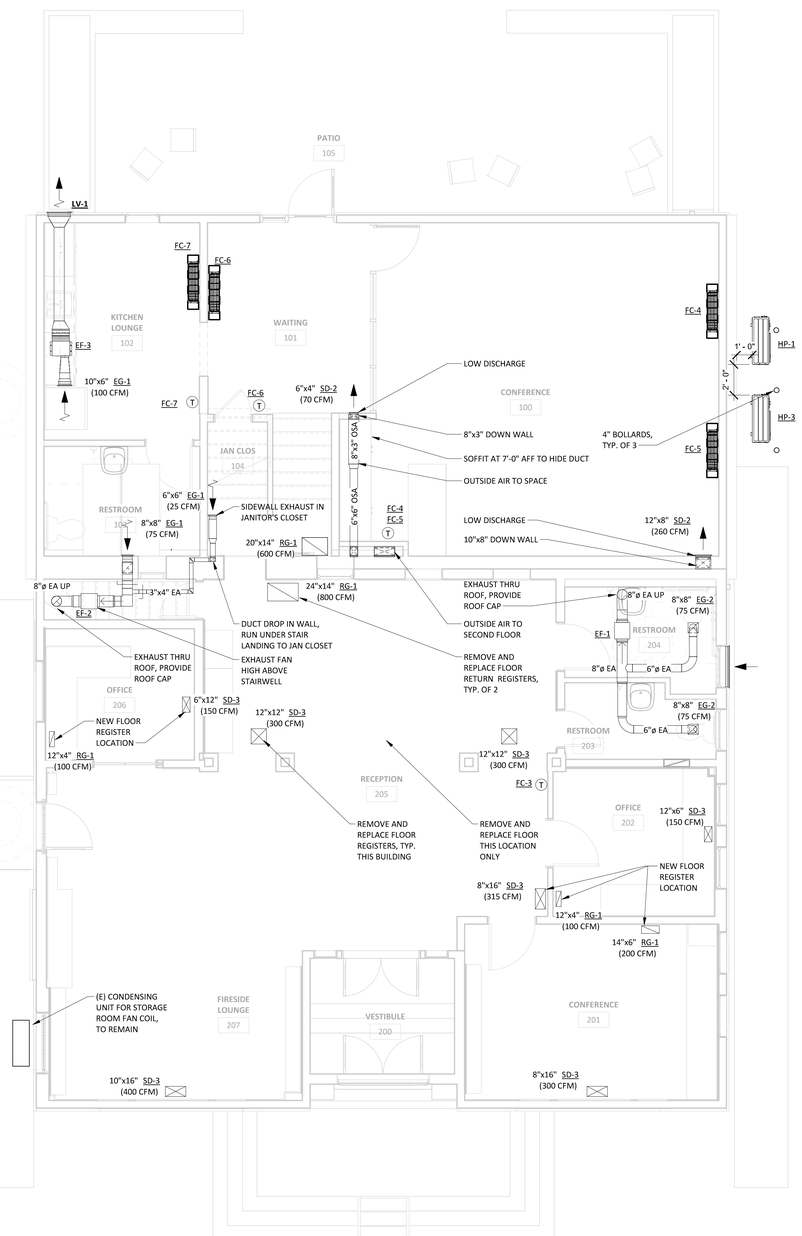



2 M03.01 MECHANICAL - UPPER FLOOR - HVAC
1/4" = 1'-0"




3 M03.01 MECHANICAL - BASEMENT - HVAC
1/4" = 1'-0"




1 M03.01 MECHANICAL - LOWER FLOOR - HVAC
1/4" = 1'-0"

SHEET NOTES:

1 EACH BRANCH OFF MAIN DUCT SHALL HAVE A BALANACING DAMPER INSTALLED BETWEEN THE TAP AND THE GRILL/REGISTER WHETHER SHOWN ON THE DRAWINGS OR NOT
2 FOR DEMO WORK, SEE ARCHITECTURAL DRAWINGS
3 REFRIGERATION PIPING SIZING AND CONNECTIONS BY MANUFACTURER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## MECHANICAL - BASEMENT, LOWER AND UPPER LEVEL FLOOR PLANS

PROJECT: 20220412
DATE: 10/12/2022

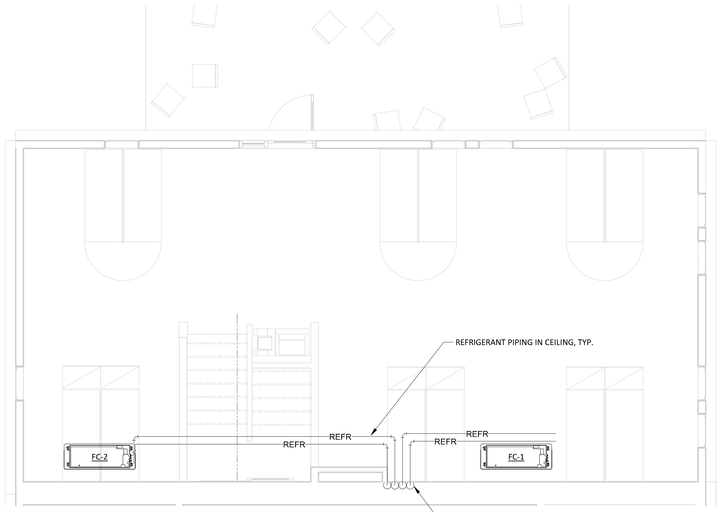
| No. | Description | Date |
|---|---|---|
| | | |



TRUE

M03.01

SCALE: 3" = 1'-0"
SCALE: 1 1/2" = 1'-0"
SCALE: 1/4" = 1'-0"
SCALE: 3/8" = 1'-0"
SCALE: 1/8" = 1'-0"
SCALE: 3/32" = 1'-0"




3 M03.02 MECHANICAL - UPPER FLOOR - PIPING
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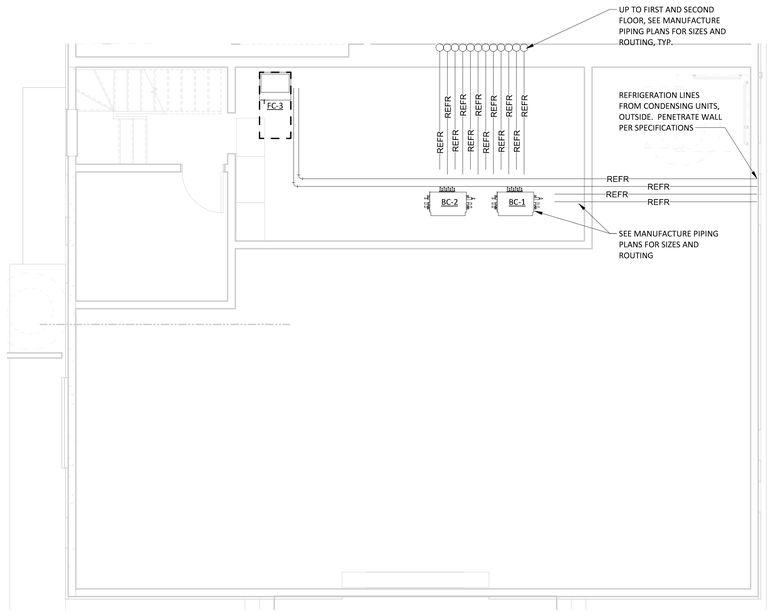
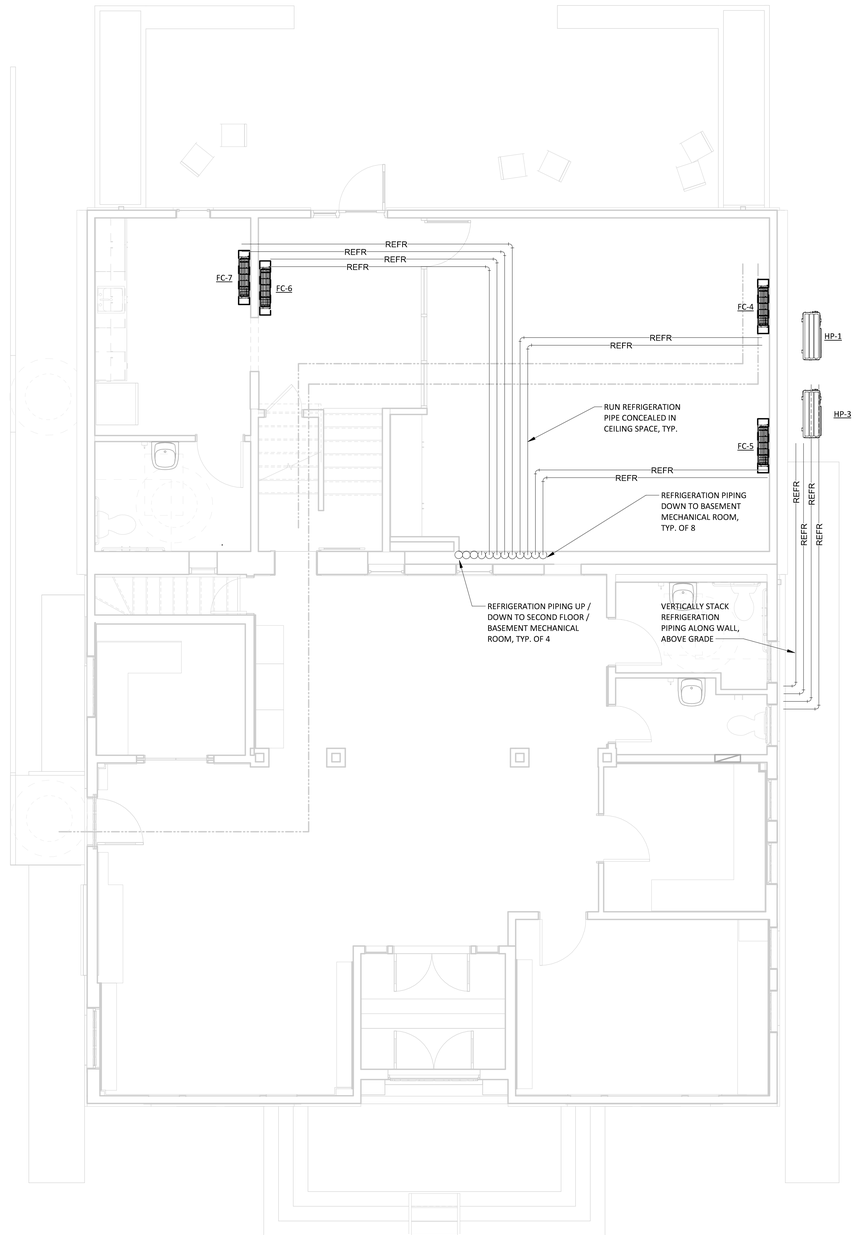



2 M03.02 MECHANICAL - BASEMENT - PIPING
1/4" = 1'-0"




1 M03.02 MECHANICAL - LOWER FLOOR - PIPING
1/4" = 1'-0"

SHEET NOTES:

1 EACH BRANCH OFF MAIN DUCT SHALL HAVE A BALANACING DAMPER INSTALLED BETWEEN THE TAP AND THE GRILL/REGISTER WHETHER SHOWN ON THE DRAWINGS OR NOT
2 FOR DEMO WORK, SEE ARCHITECTURAL DRAWINGS
3 REFRIGERATION PIPING SIZING AND CONNECTIONS BY MANUFACTURER

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MECHANICAL - BASEMENT, LOWER AND UPPER LEVEL PIPING PLANS

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|---|---|
| DATE: | 10/12/2022 |

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|---|---|---|
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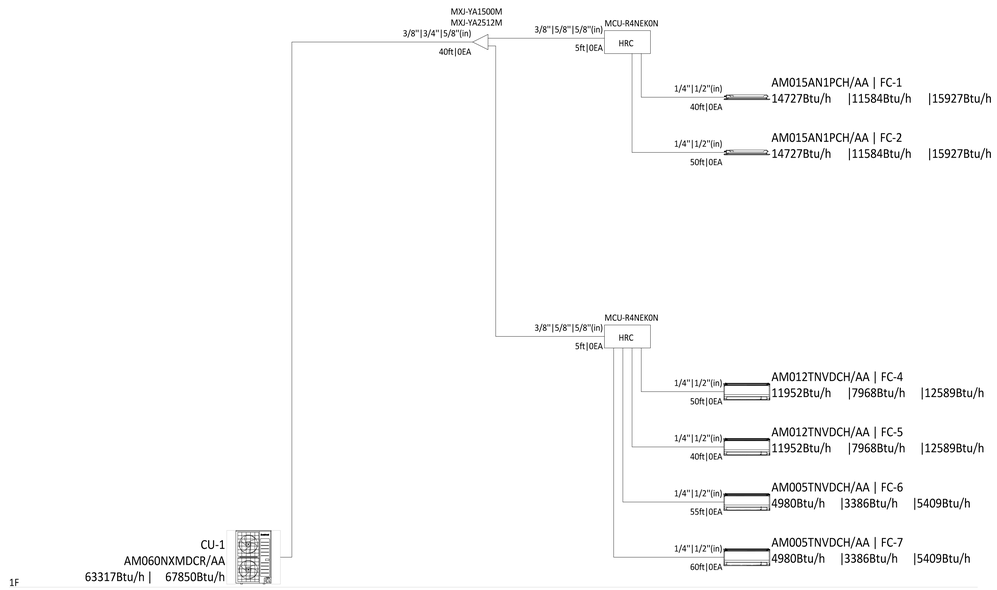
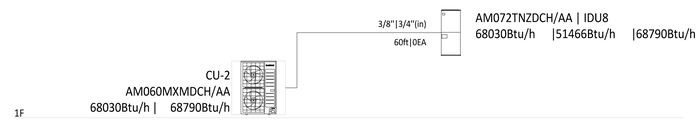



## 1 REFRIGERATION PIPING DIAGRAM HP-1

M04.01

SCALE: NONE




## 2 REFRIGERATION PIPING DIAGRAM HP-3

M04.01

SCALE: NONE

SCALE: 1-4"
SCALE: 3" = 1'-0"
SCALE: 2-8"
SCALE: 1 1/2" = 1'-0"
SCALE: 16'
SCALE: 1/4" = 1'-0"
SCALE: 10'-8"
SCALE: 3/8" = 1'-0"
SCALE: 32'
SCALE: 1/8" = 1'-0"
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MECHANICAL - REFRIGERATION PIPING DIAGRAMS

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DATE: 10/12/2022

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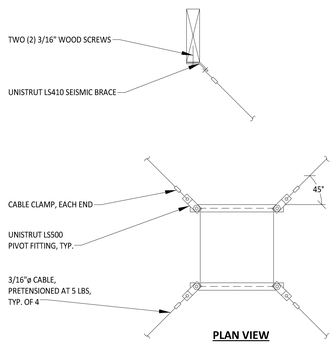
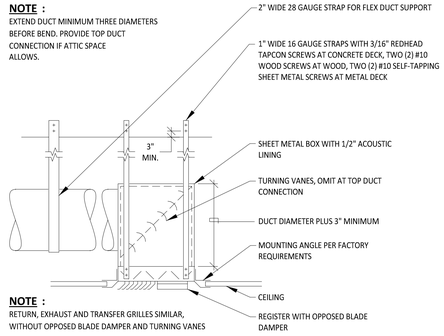
M04.01




**PLAN VIEW**

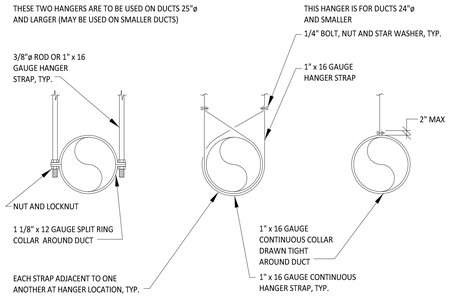
## 6 M8.01 INLINE FAN AND FILTER BOX MOUNTING AND BRACING

NO SCALE

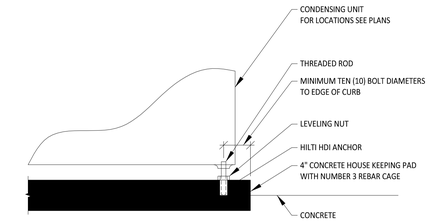



## 3 M8.01 DIFFUSER MOUNTING HARD CEILING

NO SCALE

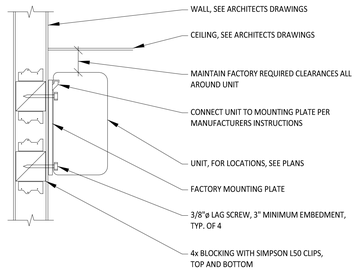



**ROUND DUCT HANGER**



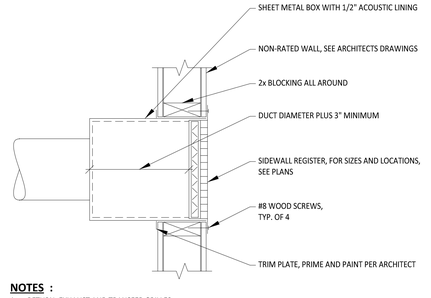

## 9 M8.01 HEAT PUMP UNIT MOUNTING

NO SCALE




## 7 M8.01 FAN COIL MOUNTING

NO SCALE

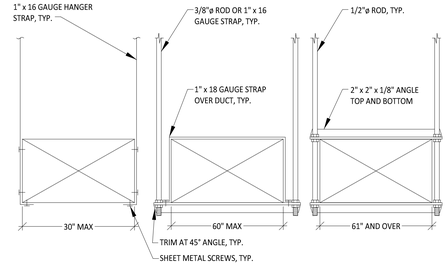



**NOTES :**

1. RETURN, EXHAUST AND TRANSFER GRILLES SIMILAR.
2. EXTEND DUCT MINIMUM THREE DIAMETERS BEFORE BEND .

## 4 M8.01 SIDEWALL MOUNTING

NO SCALE



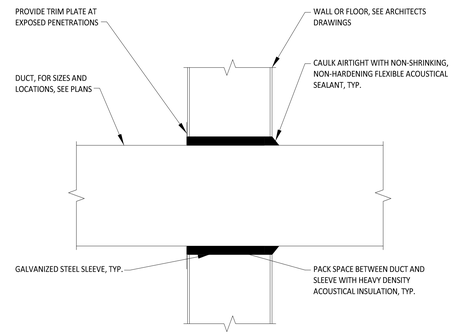

**RECTANGULAR DUCT HANGER**

**NOTES :**

1. REFER TO SPECIFICATIONS AND SMACNA GUIDELINES FOR HANGER SPACING.
2. ATTACHMENTS TO OVERHEAD STRUCTURE SHALL BE MADE IN ACCORDANCE WITH STRUCTURAL ENGINEERS REQUIREMENTS AND WEIGHT LIMITATIONS.
3. PROVIDE SWAY BRACING PER SMACNA SEISMIC GUIDELINES.

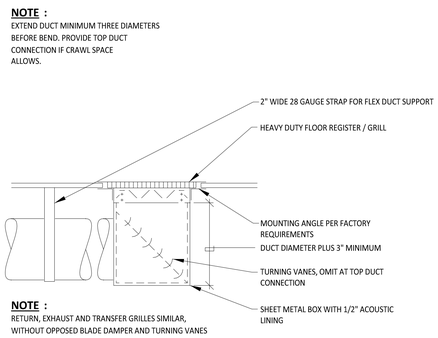
## 1 M8.01 DUCT HANGERS DETAILS

NO SCALE



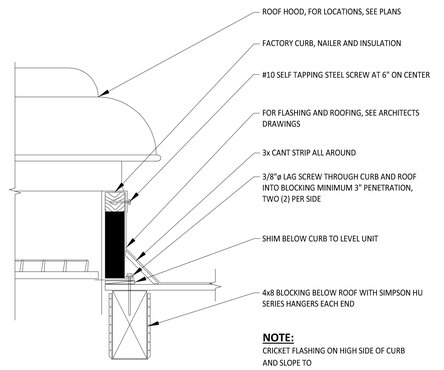

## 8 M8.01 DUCT PENETRATION THROUGH WALL OR FLOOR

NO SCALE




## 5 M8.01 DIFFUSER MOUNTING FLOOR

NO SCALE




## 2 M8.01 ROOF HOOD MOUNTING

NO SCALE

SCALE: 3" = 1'-0"
SCALE: 1 1/2" = 1'-0"
SCALE: 1/4" = 1'-0"
SCALE: 3/8" = 1'-0"
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M08.01

# ELECTRICAL LEGEND

## POWER SYMBOLS

| SYMBOL | IDENTIFICATION |
|---|---|
| | MOTOR CONNECTION |
| | GENERATOR CONNECTION |
| | FUSED DISCONNECT<br>SWITCH XX/XX/XX = AMP SWITCH/POLES/AMP FUSE |
| | NON-FUSED DISCONNECT<br>SWITCH XX/XX/XX = AMP SWITCH/POLES/AMP FUSE |
| | JUNCTION BOX |
| | C = CEILING MOUNTED |
| | JUNCTION BOX; WALL MOUNTED |
| | JUNCTION BOX WITH WHIP-STYLE CONNECTION TO POWERED FURNITURE; POWER AND/OR DATA |
| | TRANSFORMER; BOTTOM OF T DESIGNATES FRONT SIDE |
| | PANELBOARD OR TERMINAL CABINET; SURFACE MOUNTED |
| | PANELBOARD OR TERMINAL CABINET; FLUSH MOUNTED |
| | GROUND BUS BAR |
| | TRANSFORMER |
| | AUTOMATIC TRANSFER SWITCH |
| | NORMALLY OPEN CONTACT |
| | NORMALLY CLOSED CONTACT |
| | DRAWOUT CIRCUIT BREAKER; RATING AS SHOWN ON PLANS |
| | STATIONARY - CIRCUIT BREAKER; RATING AS SHOWN ON PLANS |
| | DISCONNECT; RATING AS SHOWN ON PLANS |
| | SWITCH AND FUSE; RATING AS SHOWN ON PLANS |
| | INVERTER |
| | GROUNDING POINT |
| | UTILITY METER |

## LIGHTING SYMBOLS

| SYMBOL | IDENTIFICATION |
|---|---|
| | LUMINAIRE; CEILING OR SURFACE MOUNTED |
| | LUMINAIRE; WALL MOUNTED |
| | AREA POLE WITH MOUNTED LUMINAIRE |
| | LUMINAIRE ON EMERGENCY POWER |
| | EXIT SIGN; CEILING MOUNTED; ARROWS AND FACES AS SHOWN ON PLANS |
| | EXIT SIGN; WALL MOUNTED; ARROWS AND FACES AS SHOWN ON PLANS |
| | EMERGENCY FIXTURE; DUAL LAMP HEAD |

## WIRING DEVICE SYMBOLS

| SYMBOL | IDENTIFICATION |
|---|---|
| | 20A, 125V, DUPLEX RECEPTACLE OUTLET |
| | 20A, 125V, DOUBLE DUPLEX RECEPTACLE OUTLET |
| | SPECIAL PURPOSE RECEPTACLE OUTLET; RATING AS SHOWN; +18" AFF TP CENTERLINE |
| | 20A, 125V, SINGLE RECEPTACLE OUTLET |
| | A = ABOVE COUNTER<br>C = CEILING MOUNTED<br>G = GFCI<br>S = SWITCHED RECEPTACLE<br>T = TAMPER PROOF<br>U = WITH (2) USB PORTS<br>W = WEATHERPROOF COVER AND GFCI<br>+#" = INCHES ABOVE FINISH FLOOR |
| | 20A, 125V, DUPLEX RECEPTACLE OUTLET; FLOOR RECESSED |
| | 20A, 125V, DOUBLE DUPLEX RECEPTACLE OUTLET; FLOOR RECESSED |
| | 2-CHANNEL FLOOR BOX W/ (2) GANG POWER / (2) GANG DATA; PROVIDE 1"C. FROM EACH DATA OUTLET TO ACCESSIBLE CEILING SPACE. BASIS-OF-DESIGN: WIREMOLD 'RFB4'. |
| | COMMERCIAL CORD REEL RECEPTACLE; CEILING MOUNTED |
| $ | SINGLE POLE SWITCH |
| | 3 = THREE WAY SWITCH<br>4 = FOUR-WAY SWITCH<br>D = DIMMER SWITCH<br>K = KEY OPERATED SWITCH<br>M = MOTOR RATED SWITCH<br>S = DUAL TECH SENSOR SWITCH<br>T = INTERVAL TIMER<br>V = LOW VOLTAGE SWITCH<br>W = SINGLE POLE WEATHERPROOF SWITCH |
| | PUSH BUTTON SWITCH |
| OS | OCCUPANCY LIGHT CONTROL SWITCH; CEILING MOUNTED |
| | OCCUPANCY LIGHT CONTROL SWITCH; WALL MOUNTED |
| | C = DUAL TECH WITH CORRIDOR PATTERN<br>H = DUAL TECH WITH HIGH BAY SENSOR<br>V = DUAL TECH WITH VACANCY SENSOR MODE |
| PS | PHOTOSENSOR; CEILING MOUNTED |
| | D = DIMMING<br>S = SWITCHED |
| EV | ELECTRIC VEHICLE CHARGING STATION |
| | HORN/STROBE COMBINATION; CEILING MOUNTED |
| | HORN/STROBE COMBINATION; WALL MOUNTED |

## ABBREVIATIONS

| ABBRV. | IDENTIFICATION |
|---|---|
| AC | ALTERNATING CURRENT |
| AFF | ABOVE FINISH FLOOR |
| AF | FRAME RATING IN AMPERES |
| AS | SWITCH RATING IN AMPERES |
| AT | TRIP RATING IN AMPERES |
| ATS | AUTOMATIC TRANSFER SWITCH |
| AV | AUDIO VISUAL |
| C | CONDUIT |
| CFCI | CONTRACTOR FURNISHED, CONTRACTOR INSTALLED |
| CFOI | CONTRACTOR FURNISHED, OWNER INSTALLED |
| CEC | CALIFORNIA ELECTRIC CODE |
| CL | CENTERLINE |
| CONN | CONNECTED |
| DC | DIRECT CURRENT |
| DPDT | DOUBLE POLE, DOUBLE THROW |
| DPST | DOUBLE POLE SINGLE THROW |
| (E) | EXISTING TO REMAIN |
| ELEV | ELEVATOR |
| EMT | ELECTRO METALLIC TUBING |
| EWC | ELECTRIC WATER COOLER |
| EWH | ELECTRIC WATER HEATER |
| FVNR | FULL-VOLTAGE, NON-REVERSING |
| FVR | FULL-VOLTAGE, REVERSING |
| G | GROUND |
| GFCI | GROUND FAULT CIRCUIT INTERRUPTER |
| GND | GROUND |
| HID | HIGH INTENSITY DISCHARGE |
| IG | ISOLATED GROUND |
| LRC | LIGHTING RELAY CABINET |
| NC | NORMALLY CLOSED |
| NEC | NATIONAL ELECTRIC CODE |
| NEMA | NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION |
| NO | NORMALLY OPEN |
| NTS | NOT TO SCALE |
| OFCI | OWNER FURNISHED, CONTRACTOR INSTALLED |
| PH | PHASE |
| PP | POWER POLE |
| PTS | PNEUMATIC TUBE STATION |
| PVC | POLYVINYL CHLORIDE CONDUIT |
| (R) | RELOCATE EXISTING |
| RSC | RIGID STEEL CONDUIT |
| SPD | SURGE PROTECTION DEVICE |
| SPDT | SINGLE POLE, DOUBLE THROW |
| SPST | SINGLE POLE, SINGLE THROW |
| TB | TERMINAL BACKBOARD |
| TC | TERMINAL CABINET |
| TEL | TELEPHONE |
| UON | UNLESS OTHERWISE NOTED |
| VFD | VARIABLE FREQUENCY DRIVE |
| W | WEATHERPROOF |
| WAP | WIRELESS ACCESS POINT |
| W/ | WITH |
| (X) | REMOVE EXISTING |
| XFMR | TRANSFORMER |
| XP | EXPLOSION PROOF |

## CONDUIT SYMBOLS

| SYMBOL | IDENTIFICATION |
|---|---|
| | CONDUIT INSTALLED ABOVE FINISHED FLOOR OR GRADE |
| | CONDUIT INSTALLED BELOW FINISHED FLOOR OR BELOW GRADE |
| | INDICATES CONDUIT TURNING UP |
| | CONDUIT HOMERUN; ROUTE TO PANELBOARD, CABINET, OR TERMINAL BOARD INDICATED, AND TERMINATE CONDUCTORS TO CIRCUIT OVER CURRENT PROTECTIVE DEVICE |

## TELECOM SYMBOLS

| SYMBOL | IDENTIFICATION |
|---|---|
| | TELEPHONE/DATA OUTLET; PROVIDE 1"C. W/ PULL-STRING TO ACCESSIBLE CEILING SPACE |
| | C = CEILING MOUNTED; BACK BOX ONLY FOR FUTURE WAP UNLESS OTHERWISE NOTED |

## DESIGNATION SYMBOLS

| SYMBOL | IDENTIFICATION |
|---|---|
| | GRID LINE DESIGNATOR |
| #### | FEEDER DESIGNATION TAG |
| # | SHEET KEYNOTE TAG |
| XX-# | MECHANICAL EQUIPMENT TAG |
| XX-# | CONTRACTOR EQUIPMENT TAG |
| # | REVISION DELTA WITH REVISION NUMBER |
| | LETTER INDICATES FIXTURES CONTROL (WHERE SHOWN) |
| | NUMBER INDICATES CIRCUIT NUMBER (WHERE SHOWN) |

## LEGEND NOTES:

A. ALL SYMBOLS MAY NOT BE USED IN THIS PROJECT.
B. SYMBOLS DO NOT ALWAYS REPRESENT REAL LIFE DIMENSIONS.
C. SEE BOOK SPECIFICATIONS FOR ADDITIONAL INFORMATION.
D. SEE DETAIL SHEETS FOR TYPICAL MOUNTING HEIGHTS OF DEVICES.

## GENERAL ELECTRICAL NOTES:

A. BUILDING IS COVERED UNDER 2019 CHBC SECTION 8-901.5 ENERGY CONSERVATION. QUALIFIED HISTORICAL BUILDINGS OR PROPERTIES COVERED BY THIS PART ARE EXEMPTED FROM COMPLIANCE WITH ENERGY CONSERVATION STANDARDS.

## ELECTRICAL SHEET KEY

| SHEET NUMBER | DESCRIPTION |
|---|---|
| E00.10 | ELECTRICAL - LEGEND & NOTES |
| E00.20 | ELECTRICAL - LUMINAIRE SCHEDULE AND LIGHTING CONTROLS |
| E02.01 | ELECTRICAL - BASEMENT, LOWER, AND UPPER LEVEL REFLECTED CEILING PLANS - LIGHTING |
| E03.01 | ELECTRICAL - BASEMENT, LOWER, AND UPPER LEVEL FLOOR PLANS - POWER AND DATA |
| E04.01 | ELECTRICAL - ONE-LINE DIAGRAM AND SCHEDULES |
| E05.01 | ELECTRICAL - DETAILS |

SCALE: 3" = 1'-0"
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ELECTRICAL - LEGEND & NOTES

PROJECT: 20220412
DATE: 10/12/2022

| No. | Description | Date |
|---|---|---|



E00.10

## LUMINAIRE SCHEDULE

| TYPE | DESCRIPTION / MOUNTING | FINISH | LISTINGS | DRIVER/POWER SUPPLY | LAMP(S) | INPUT POWER | | MFG/CATALOG # | NOTES |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | WATTS | UNIT | | |
| P1 | LINEAR PENDANTS IN HISTORICAL AREA | SATIN ALUMINUM | ETL, UL | 120V ,<br>0-10V DIMMING (10%) | LED,<br>3,424 LUMENS UP,<br>5,768 LUMENS DOWN,<br>3500K,<br>90 CRI | 72W | EA | FINELITE<br>#HP-4-P-ID-8'-S-H-935-WSOTG-BG-96LG-120-SC-FC-10%-FA50 | ARCHITECT TO CONFIRM FINSIH |
| P2 | FEATURE CHANDELIER IN ENTRANCE / RECEPTION | | | | | 75W | EA | SELECTION TBD IN SUBMITTAL PHASE, 75W MAX | ARCHITECT TO CONFIRM SELECTION AND FINISH |
| P3 | BACK OF HOUSE LINEAR PENDANT | WHITE | ETL, DLC | 120-277V,<br>NO DIMMING REQ'D | LED,<br>5,500 LUMENS,<br>3500K,<br>80 CRI | 45W | EA | SIGNIFY<br>#FSS-4-55L-835-UNV-DIM | |
| S1 | 2X4 SURFACE TROFFER IN OPEN WORKSPACE | WHITE ENAMEL | UL, DLC | 120-277V,<br>0-10V DIMMING (1%) | LED,<br>5,697 LUMENS,<br>3500K,<br>80 CRI | 51W | EA | SIGNIFY 2SBP,<br>#2SBP3040L8CS-2-UNV-DIM | |
| S2 | 4' SURFACE LINEAR, GENERAL USE | WHITE ENAMEL | ETL | 120-277V,<br>0-10V DIMMING (10%) | LED,<br>4,700 LUMENS,<br>3500K,<br>CRI | 52W | EA | SIGNIFY CUBELITE,<br>#CSW48-4735UDZTZO | |
| S3 | SAME AS TYPE 'P3' EXCEPT SURFACE MOUNT | WHITE | ETL, DLC | 120-277V,<br>NO DIMMING REQ'D | LED,<br>5,500 LUMENS,<br>3500K,<br>80 CRI | 45W | EA | SIGNIFY<br>#FSS-4-55L-835-UNV-DIM | - |
| S4 | ROUND DOWNLIGHT, SURFACE | WHITE MATTE | UL | 120-277V,<br>0-10V DIMMING (10%) | LED,<br>5,500 LUMENS,<br>3500K,<br>80 CRI | 23W | EA | SIGNIFY S7R,<br>#S10R-0-35K-22-AL-Z10U | ARCHITECT TO CONFIRM FINISH |
| U1 | UNDERCABINET LIGHTS IN KITCHEN | STATIC WHITE | UL | 120V,<br>NO DIMMING | LED,<br>157 LUMENS/FT,<br>3500K,<br>98 CRI | 2W | PER FT | CORE LIGHTING,<br>#ULG-2632-35K-WH-120 | |
| U2 | RECESSED DISPLAY CASE LIGHTING | BLACK | UL | 24VDC,<br>NO DIMMING | LED,<br>319 LUMENS/FT,<br>3500K,<br>98 CRI | 6W | EA | Q-TRAN<br>#TILT-01-SW-2.0-35-DRY-DF-1/O-CONNECTOR-BK-WIRE-SST-BK | |
| W1 | EXTERIOR WALL PACK AT PATIO | GRAPHITE | ETL | 120-277V,<br>0-10V DIMMING (10%) | LED,<br>2,300 LUMENS,<br>3000K,<br>80 CRI | 23W | EA | ALVA BEAU,<br>#BEAU-28-GR-3000 | ARCHITECT TO CONFIRM FINISH |
| W2 | EXISTING DECORATIVE WALL SCONCE; RE-LAMPING | GRAPHITE | - | - | LED REPLACEMENT BULB,<br>3000K | 40W | EA | EXISTING RELAMP,<br>#BEAU-28-GR-3000 | DIVISION 26 TO VERIFY BULB REQUIREMENTS AND SELECT REPLACEMENT BULB, TO BE INCLUDED IN SUBMITTALS |
| W3 | HIGH MOUNT WALL PACK | BRONZE | DLC, ETL | 120-277V,<br>0-10V DIMMING | LED,<br>3,766 LUMENS,<br>3000K,<br>70 CRI | 34W | EA | SIGNIFY<br>#LPW16-30-WW-G3-2-UNV-BAC-BZ | ARCHITECT TO CONFIRM FINISH |
| X1 | LED EXIT SIGN | ALUMINUM | UL | 120/277V | LED | 5W | EA | SIGNIFY CHLORIDE CE<br>#CE-FACES-RW-A-ARROWS | SEE RCP'S FOR FACE AND DIRECTIONAL REQUIREMENTS, CONFIRM FINISH WITH ARCHITECT |

**NOTES:**

1 THIS LUMINAIRE SCHEDULE IS NOT COMPLETE WITHOUT A COPY OF THE PROJECT MANUAL CONTAINING THE ELECTRICAL SPECIFICATIONS.
2 DIMMING CONTROL PROTOCOL (0-10VDC, LINE VOLTAGE, DALI, ETC.) COMPATIBLE WITH LIGHTING CONTROL SYSTEM AS SPECIFIED AND SHOWN ON DRAWINGS.
3 PROVIDE +/- 12 INCH ADJUSTABILITY IN AIRCRAFT CABLE LENGTH WHERE USED.
4 COORDINATE ALL CEILING TYPES WITH LUMINAIRE LOCATIONS PRIOR TO ORDERING LUMINAIRES. COORDINATE INSTALLATION WITH REFLECTED CEILING PLAN.
5 SPECIFIED MANUFACTURERS ARE APPROVED TO SUBMIT BID. INCLUSION DOES NOT RELIEVE MANUFACTURER FROM SUPPLYING PRODUCT AS DESCRIBED.
6 PROVIDE SUBMITTALS THAT INCLUDE THE LUMINAIRE, LAMP AND BALLAST INFORMATION OF EACH LUMINAIRE, WITH APPLICABLE OPTIONS CLEARLY CHECKED OR HIGHLIGHTED. SUBMITTALS NOT INCLUDING THIS INFORMATION WILL BE RETURNED AS REJECTED BY THE ENGINEER OF RECORD.
7 REMOTE BALLASTS/DRIVERS: UL LISTED FOR THEIR APPLICATION. BALLASTS/DRIVERS MARKED AS UL RECOGNIZED COMPONENT BUT NOT UL LISTED ARE SUBJECT TO REMOVAL AND REPLACEMENT AT NO COST TO OWNER.
8 PROVIDE COMMISSIONING OF THE LIGHTING AND LIGHTING CONTROLS IN ACCORDANCE WITH OREGON STATE LIGHTING COMMISSIONING REQUIREMENTS.

## LIGHTING CONTROL MATRIX: SPACE BY SPACE

| ROOM NAME | TYPE OF CONTROLS | CONTROL FUNCTIONS | PRODUCT BASIS OF DESIGN |
|---|---|---|---|
| WAITING | WALL SWITCH<br>OCCUPANCY SENSOR,<br>DIMMING | MANUAL CONTROL VIA WALL SWITCH,<br>AUTO ON/OFF VIA OCCUPANCY SENSOR | WATTSTOPPER<br>#LMDM SERIES WALL SWITCH<br>#LMDC SERIES OCCUPANCY SENSOR |
| VESTIBULE TO RECEPTION | WALL SWITCH,<br>LIGHTING CONTROL PANEL 'LCP-1',<br>TIME CLOCK | AUTO ON/OFF VIA 'LCP-1' TIME CLOCK,<br>MANUAL OVERRIDE VIA WALL SWITCH | WATTSTOPPER LMCP,<br>DIVISION 26 TO SELECT STANDARD TOGGLE SWITCH |
| STAIRWAYS | 3-WAY WALL SWITCH | MANUAL ON/OFF AND 3-WAY FUN CTION VIA WALL SWITCHES | WATTSTOPPER<br>#LMDM SERIES WALL SWITCH |
| RECEPTION AREA | 4-WAY WALL SWITCH,<br>DIMMING,<br>OCCUPANCY SENSOR | MANUAL ON/OFF, DIMMING, AND 4-WAY FUN CTION VIA WALL SWITCHES,<br>AUTO ON/OFF VIA OCCUPANCY SENSOR | WATTSTOPPER<br>#LMDM SERIES WALL SWITCH<br>#LMDC SERIES OCCUPANCY SENSOR |
| CONFERENCE | WALL SWITCH / SENSOR SWITCH AS SHOWN,<br>DIMMING,<br>OCCUPANCY SENSOR AS SHOWN | MANUAL AND AUTO ON/OFF AND DIMMING VIA SENSOR SWITCH | WATTSTOPPER<br>#LMDM SERIES WALL SWITCH<br>#LMDW SERIES SENSOR SWITCH<br>#LMDC SERIES OCCUPANCY SENSOR |
| KITCHEN | SENSOR SWITCH,<br>SEPARATE TOGGLE SWITCH FOR UNDERCABINET LIGHTING | MANUAL AND AUTO ON/OFF AND DIMMING VIA SENSOR SWITCH | WATTSTOPPER<br>#DW SERIES SENSOR SWITCH<br>DIVISION 26 TO SELECT STANDARD TOGGLE SWITCH |
| OPEN OFFICE AREA<br>(SEE STAIRWAYS) | 3-WAY WALL SWITCH,<br>DIMMING,<br>OCCUPANCY SENSOR | MANUAL ON/OFF AND 3-WAY FUN CTION VIA WALL SWITCHES,<br>MANUAL DIMMING VIA SWITCH AT TOP OF STAIRS,<br>AUTO ON/OFF VIA OCCUPANCY SENSOR | WATTSTOPPER<br>#LMDM SERIES WALL SWITCH<br>#LMDC SERIES OCCUPANCY SENSOR |
| PRIVATE OFFICES | SENSOR SWITCH,<br>DIMMING | MANUAL AND AUTO ON/OFF AND DIMMING VIA SENSOR SWITCH | WATTSTOPPER<br>#LMDW SERIES SENSOR SWITCH |
| RESTROOMS | SENSOR SWITCH | MANUAL AND AUTO ON/OFF VIA SENSOR SWITCH | WATTSTOPPER<br>#DW SERIES SENSOR SWITCH |
| STORAGE ROOMS | SENSOR SWITCH | MANUAL AND AUTO ON/OFF VIA SENSOR SWITCH | WATTSTOPPER<br>#DW SERIES SENSOR SWITCH |
| BACK OF HOUSE | TOGGLE SWITCH ONLY | MANUAL CONTROL VIA SWITCH | DIVISION 26 TO SELECT STANDARD TOGGLE SWITCH |
| BUILDING EXTERIOR | LIGHTING CONTROL PANEL 'LCP-1',<br>TIME CLOCK | AUTO ON/OFF VIA LCP-1 TIME CLOCK | WATTSTOPPER LMCP |

**NOTES:**

1. SELECT AND PROVIDE QUANTITY OF UL 924 RELAYS AS REQUIRED IN EACH SPACE FOR EGRESS LIGHTING FUNCTIONALITY.
2. PROVIDE QUANTITY OF POWER PACKS AND OTHER LIGHTING CONTROL ACCESSORIES REQUIRED FOR FUNCTIONALITY DESCRIBED.

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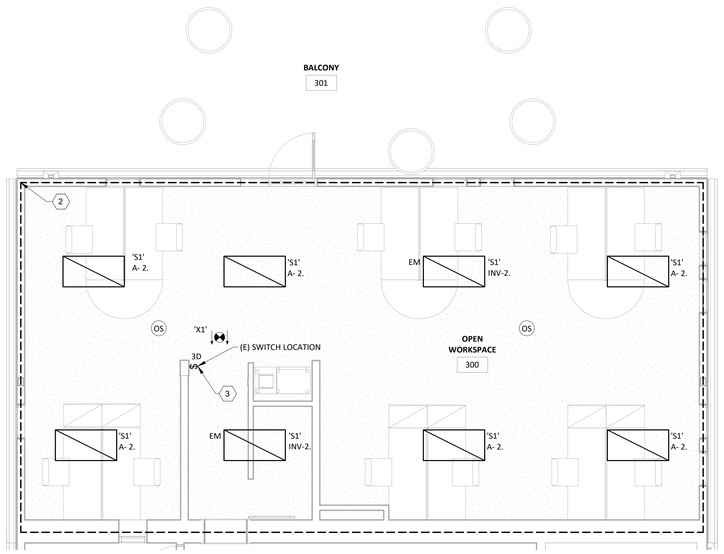
ELECTRICAL - LUMINAIRE SCHEDULE AND LIGHTING CONTROLS

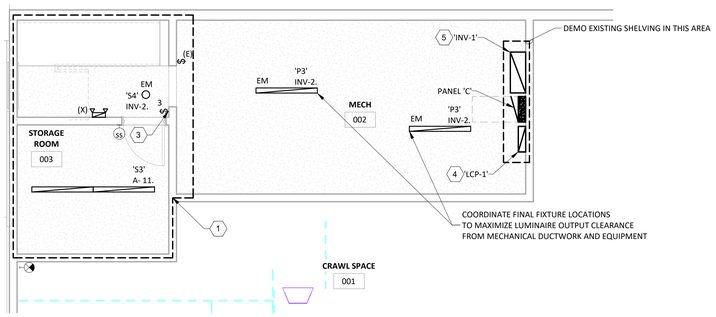
PROJECT: 20220412
DATE: 10/12/2022

| No. | Description | Date |
|---|---|---|

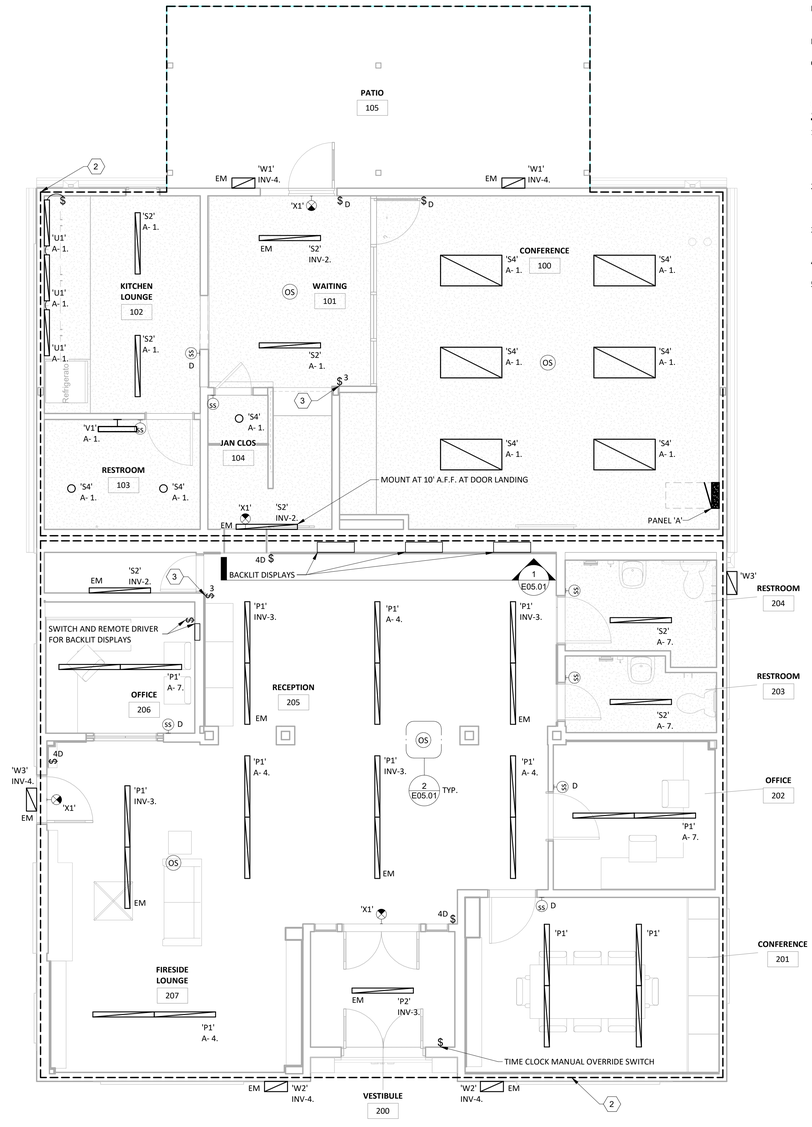
E00.20




3 E02.01 ELECTRICAL - MAIN LEVEL - LIGHTING
1/4" = 1'-0"




1 E02.01 ELECTRICAL - BASEMENT - LIGHTING
1/4" = 1'-0"




2 E02.01 ELECTRICAL - LOWER FLOOR - LIGHTING
1/4" = 1'-0"

## GENERAL ELECTRICAL NOTES:

A. ALL EXISTING LIGHTING FIXTURES AND CONTROLS IN BUILDING TO BE DEMOLISHED UNLESS OTHERWISE NOTED.
B. CONTRACTOR TO SAFE OFF ALL EXISTING BRANCH CIRCUITS IN WALLS AND CEILING/LID AREAS TO BE DEMOLISHED.
C. CONTRACTOR TO ENSURE NO SHOCK HAZARD REMAINS FOR SAFE REMOVAL OF LOW-VOLTAGE DEVICE AND RACEWAY/CABLE.
D. REMOVE AND STORE ANY EXISTING LIGHT FIXTURES TO BE RETAINED BY OWNER. CONFIRM WITH OWNER PRIOR TO DEMO IF ANY LIGHTS ARE TO BE RETAINED/RETURNED. STORE FIXTURES ON SITE IN LOCATION DESIGNATED BY CONTRACTOR.
E. PULL BACK ALL CIRCUITS TO HOMERUN BOXES IN AREAS TO BE REMODELED FOR RE-PURPOSE AS FEASIBLE.
F. LOCK-OUT/TAG-OUT EXISTING CIRCUITS TO BE REPURPOSED.
G. ALL EXIT SIGNS CIRCUITED TO 'INV-1.' UNLESS OTHERWISE NOTED.

## SHEET KEYNOTES:

1. FIXTURES IN THIS AREA ARE TO BE 1:1 REPLACEMENT OF EXISTING WITH NEW LED FIXTURES AND UPDATED CONTROLS. DEMO ALL LIGHTING (AT FIXTURE, FOR REUSE) AND CONTROLS UNLESS OTHERWISE NOTED, SEE GENERAL NOTES.
2. FIXTURES IN THIS AREA ARE TO BE NEW FIXTURES IN NEW LAYOUT AND NEW CONTROLS. DEMO (COMPLETELY) ALL LIGHTING AND CONTROLS UNLESS OTHERWISE NOTED.
3. BOTH INDICATED SWITCHES IN 3-WAY CONFIGURATION TO CONTROL LIGHTING IN OPEN WORKSPACE AREA
4. LIGHTING CONTROL PANEL, BASIS OF DESIGN: WATTSTOPPER LMCP WITH EM RELAYS.
5. LIGHTING INVERTER, BASIS OF DESIGN: MYERS #240-120/240-EM-2-S-B-A-20-6

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ELECTRICAL - BASEMENT, LOWER, AND UPPER LEVEL
REFLECTED CEILING PLANS - LIGHTING

| PROJECT: | 20220412 |
|---|---|
| DATE: | 10/12/2022 |

| No. | Description | Date |
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E02.01



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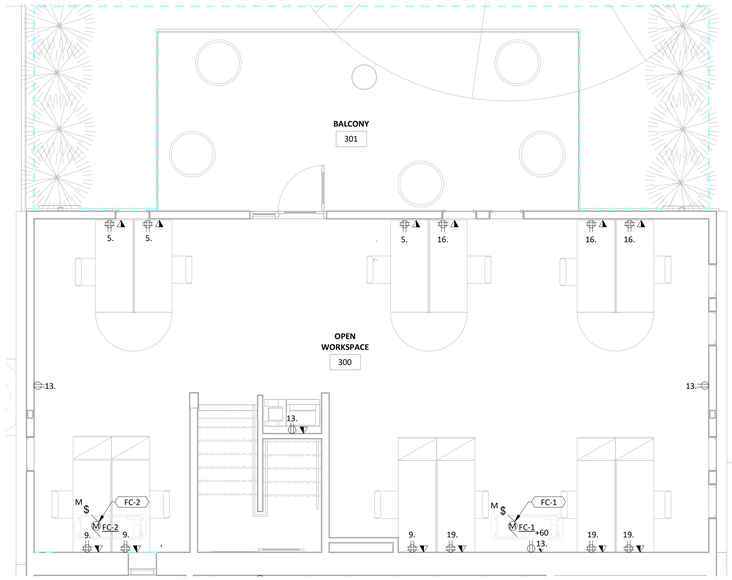
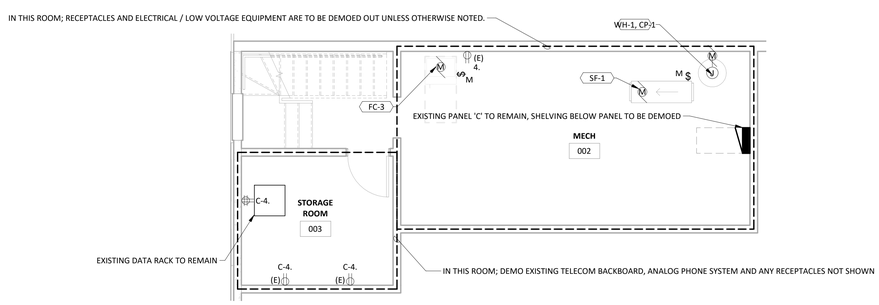
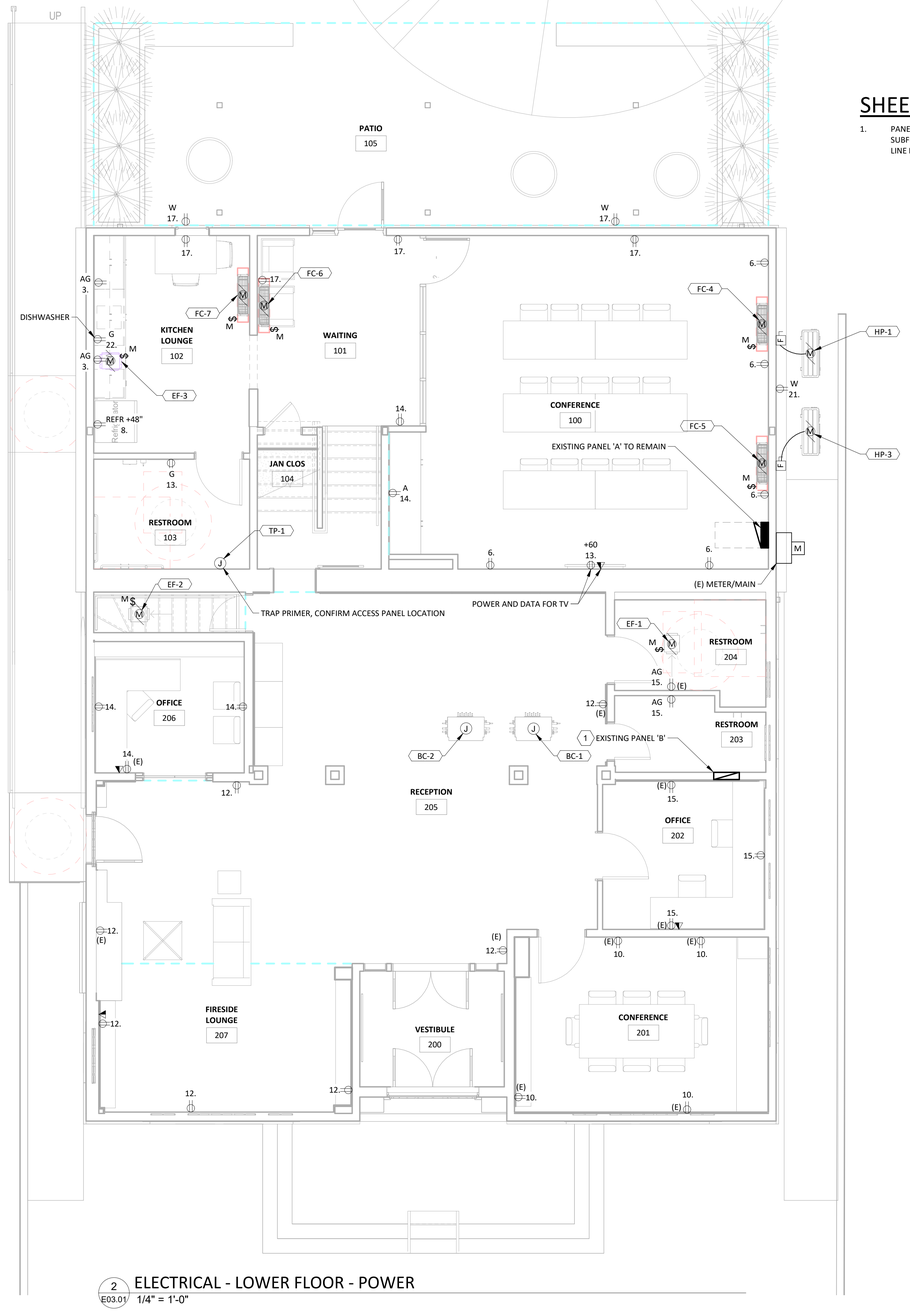



3 E03.01 ELECTRICAL - UPPER FLOOR - POWER
1/4" = 1'-0"




1 E03.01 ELECTRICAL - BASEMENT - POWER
1/4" = 1'-0"




2 E03.01 ELECTRICAL - LOWER FLOOR - POWER
1/4" = 1'-0"

## GENERAL ELECTRICAL NOTES:

A. PROVIDE NEW DEVICES AND FACEPLATES AT EXISTING-TO-REMAIN RECEPTACLE LOCATIONS; INDICATED WITH '(E)'
B. CIRCUIT DESIGNATIONS THIS SHEET ARE TO PANEL 'A' UNLESS OTHERWISE NOTED.

## SHEET KEYNOTES:

1. PANEL 'B' TO BE CONVERTED INTO SPLICE BOX FOR SUBFEED FROM PANEL 'A' TO PANEL 'C'. SEE ONE LINE DIAGRAM FOR FURTHER INFORMATION.

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ELECTRICAL - BASEMENT, LOWER, AND UPPER LEVEL FLOOR PLANS - POWER AND DATA

| PROJECT: | 20220412 |
|---|---|
| DATE: | 10/12/2022 |

| No. | Description | Date |
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E03.01



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## MECHANICAL EQUIPMENT CONNECTION SCHEDULE

| ITEM | DESCRIPTION | LOCATION | VOLTS / PHASE | LOAD | | MCA | MOCP | WIRE / CONDUIT | CIRCUIT | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|
| EF-1 | EXHAUST FAN | RESTROOM 203/204 | 120/1 | 25.0 | W | | 15 | 202 | C-6. | |
| EF-2 | EXHAUST FAN | RESTROOM / JAN CLOS | 120/1 | 20.0 | W | | 15 | 202 | C-6. | |
| SF-1 | INLINE SUPPLY FAN | BASEMENT MECH RM | 120/1 | ### | W | | 15 | 202 | C-2. | |
| | | | | | | | | | | |
| FC-1 | FAN COIL | OPEN WORKSPACE 83 | 240/1 | 65.0 | W | | 15 | 202 | - | 1 |
| FC-2 | FAN COIL | OPEN WORKSPACE 83 | 240/1 | 65.0 | W | | 15 | 202 | - | 1 |
| FC-3 | FAN COIL | HISTORIC BUILDING | 240/1 | ### | W | | 15 | 202 | - | 1 |
| FC-4 | FAN COIL | CONFERENCE 100 | 240/1 | 27.0 | W | | 15 | 202 | - | 1 |
| FC-5 | FAN COIL | CONFERENCE 100 | 240/1 | 27.0 | W | | 15 | 202 | - | 1 |
| FC-6 | FAN COIL | LOBBY 101 | 240/1 | 27.0 | W | | 15 | 202 | - | 1 |
| FC-7 | FAN COIL | KITCHEN LOUNGE 102 | 240/1 | 27.0 | W | | 15 | 202 | - | 1 |
| HP-1 | HEAT PUMP | | 240/1 | 32.0 | A | | 50 | 402 | A-18,20. | |
| (E) CU | CONDENSING UNIT | EXTERIOR, EXISTING | 240/1 | 1.2 | KW | | 15 | 202 | C-8,10. | |
| HP-3 | HEAT PUMP | | 240/1 | 32.0 | A | | 50 | 402 | A-39,41. | |
| | | | | | | | | | | |
| BS-1 | BRANCH SELECTOR | BASEMENT MECH RM | 240/1 | 2.0 | A | | 15 | 202 | C-9. | |
| BS-2 | BRANCH SELECTOR | BASEMENT MECH RM | 240/1 | 2.0 | A | | 15 | 202 | C-9. | |
| | | | | | | | | | | |
| TP-1 | TRAP PRIMER | | 120/1 | ### | W | | 15 | 202 | C-11. | |
| CP-1 | CIRCULATION PUMP | | 240/1 | ### | W | | 15 | 202 | C-1,3. | |
| WH-1 | WATER HEATER | BASEMENT | 240/1 | 6.0 | KW | | 30 | 302 | C-5,7. | |

**GENERAL MECHANICAL EQUIPMENT CONNECTION SCHEDULE NOTES:**

A. THE ABOVE INFORMATION IS FOR A SPECIFIC MANUFACTURER. ACTUAL MANUFACTURER FOR EQUIPMENT MAY BE DIFFERENT. COORDINATE WITH MECHANICAL EQUIPMENT SUBMITTALS FOR LOADS AND OVER CURRENT PROTECTION REQUIREMENTS PRIOR TO INSTALLATION OF WIRING.

B. MOCP = MAXIMUM OVER CURRENT PROTECTION
MCA = MINIMUM CIRCUIT AMPACITY

C. PROVIDE DISCONNECTING MEANS FOR EACH ITEM OF EQUIPMENT LISTED IN THE SCHEDULE ABOVE, EXCEPT AS SPECIFICALLY NOTED OTHERWISE IN SCHEDULE NOTES, BELOW.

**MECHANICAL EQUIPMENT CONNECTION SCHEDULE NOTES:**

1 POWER FED VIA OUTDOOR UNIT; NO CONNECTION TO PANEL REQUIRED.

2 INTERLOCK WITH HOOD EXHAUST.

**WIRE / CONDUIT SCHEDULE**

202 2 #12 CU, 1 #12 CU GND., IN 3/4" C.

302 2 #10 CU, 1 #10 CU GND., IN 3/4" C.

## PANEL 'A'

120/208V, 1Ph, 3W.; 400A Bus with 400A Main Breaker Only Surface Mounted Load Center with an Available Fault Current of 3125A RMS

| NOTE | CIRCUIT DESCRIPTION | CONN LOAD (VA) | LOAD TYPE | CIRCUIT BREAKER A/POLE | CKT. | PH. | CIRCUIT BREAKER CKT. | CIRCUIT BREAKER A/POLE | LOAD TYPE | CONN LOAD (VA) | CIRCUIT DESCRIPTION | NOTE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L-KITCHEN LIGHTING | 392 | L | 20/1 | 1 | A | 2 | 20/1 | L | 400 | MAIN LEVEL LIGHTING | |
| | KITCHEN COUNTER RECP. | 360 | K | 20/1 | 3 | C | 4 | 20/1 | L | 1,503 | VEST. RECEPTION LIGHTING | |
| | MAIN LEVEL DESK RECP. | 1,080 | R | 20/1 | 5 | A | 6 | 20/1 | R | 900 | CONF. ROOM RECP. | |
| | LF OFFICE, CONF. & RR LIGHTING | 600 | L | 20/1 | 7 | C | 8 | 20/1 | C | 1,200 | KITCHEN LOUNGE REFR. | |
| | MAIN LEVEL DESK RECP. | 1,080 | R | 20/1 | 9 | A | 10 | 20/1 | R | 720 | LF CONF. RECP. | |
| | BASEMENT LIGHTING | 104 | L | 20/1 | 11 | C | 12 | 20/1 | R | 900 | RECEPTION & FIRESIDE RECP. | |
| | LF RR & MF WALL RECP. | 900 | R | 20/1 | 13 | A | 14 | 20/1 | R | 900 | LF CONF. COUNTER, LOBBY & OFFICE | |
| | LF RR's AND OFFICE | 900 | R | 20/1 | 15 | C | 16 | 20/1 | R | 1,080 | MAIN LEVEL DESK RECP. | |
| | WNW WALL RECP. | 1,080 | R | 20/1 | 17 | A | 18 | 20/1 | M | 3,840 | CU-1 CONDENSING UNIT | |
| | MAIN LEVEL DESK RECP. | 1,080 | R | 20/1 | 19 | C | 20 | 20/1 | M | 3,840 | --- | |
| | EXTERIOR CONVENIENCE RECEP | 180 | R | 20/1 | 21 | A | 22 | 20/1 | M | 1,200 | KITCHEN DISHWASHER | |
| 1 | NEW BREAKER FEEDING PANEL 'C' | | S | 100/2 | 23 | C | 24 | 20/1 | L | 80 | PATIO LIGHTING | |
| 1 | --- | | S | - | 25 | A | 26 | | | | SPACE | |
| 1 | SPARE, (E) BREAKER | | | 100/2 | 27 | C | 28 | | | | SPACE | |
| 1 | --- | | | - | 29 | A | 30 | 50/2 | | | SPARE, (E) BREAKER | |
| | SPARE, (E) BREAKER | | | 30/2 | 31 | C | 32 | - | | | --- | |
| | --- | | | - | 33 | A | 34 | | | | SPACE | |
| | SPARE, (E) BREAKER | | | 60/2 | 35 | C | 36 | 20/2 | S | | CENTRAL BATTERY INVERTER 'INV1' | |
| | --- | | | - | 37 | A | 38 | - | S | | --- | |
| | HP-3 | 3,840 | M | 30/2 | 39 | C | 40 | 50/2 | | | SPARE, (E) BREAKER | |
| | --- | 3,840 | M | - | 41 | A | 42 | - | | | --- | |

TOTAL CONNECTED LOAD: Ph. A 16,512 VA 138 AMPS — PANEL CONNECTED LOAD: 32.0 KVA 133.3 Amps; SUB-FED CONNECTED LOAD: 9.8 KVA 41.0 Amps; **TOTAL DEMAND LOAD: 44.7 KVA 186.3 Amps**

TOTAL CONNECTED LOAD: Ph. C 15,487 VA 129 AMPS

**NOTES:**
1. PREVIOUS 4P CONNECTION TO PANEL 'B', SEE ONE LINE DIAGRAM.
2.
3.
4.
5.

**PROJECT NUMBER: 20220412**

## PANEL 'C'

120/208V, 1Ph, 3W.; 100A Bus with Main Lug Only Surface Mounted Load Center with an Available Fault Current of 3125A RMS

| NOTE | CIRCUIT DESCRIPTION | CONN LOAD (VA) | LOAD TYPE | CIRCUIT BREAKER A/POLE | CKT. | PH. | CIRCUIT BREAKER CKT. | CIRCUIT BREAKER A/POLE | LOAD TYPE | CONN LOAD (VA) | CIRCUIT DESCRIPTION | NOTE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | CP-1 | 278 | M | 20/1 | 1 | A | 2 | 15/1 | M | 190 | INLINE SUPPLY FAN SF-1 | |
| | --- | 278 | M | 20/1 | 3 | C | 4 | 20/1 | R | 1,080 | R-STORAGE ROOM RECEP | 1 |
| | WH-1 | 3,333 | WH | 30/2 | 5 | A | 6 | 15/1 | M | 45 | EXHAUST FANS EF-1, EF-2 | |
| | --- | 3,333 | WH | - | 7 | C | 8 | 20/2 | M | 600 | (E) CU CONDENSING UNIT | 1 |
| | BS-1 / BS-2 | 480 | G | 15/1 | 9 | A | 10 | - | M | 600 | --- | 1 |
| | TP-1 | 100 | G | 20/1 | 11 | C | 12 | 20/1 | C | 100 | LCP-1 | |
| | SPARE | | | 20/1 | 13 | A | 14 | 20/2 | S | | INV-1 | |
| | SPARE | | | 20/1 | 15 | C | 16 | - | S | | --- | |
| | SPACE | | | | 17 | A | 18 | | | | SPACE | |
| | SPACE | | | | 19 | C | 20 | | | | SPACE | |
| | SPACE | | | | 21 | A | 22 | | | | SPACE | |
| | SPACE | | | | 23 | C | 24 | | | | SPACE | |

TOTAL CONNECTED LOAD: Ph. A 4,926 VA 41 AMPS — PANEL CONNECTED LOAD: 10.4 KVA 43.4 Amps; SUB-FED CONNECTED LOAD: 0.9 KVA 3.8 Amps; **TOTAL DEMAND LOAD: 13.2 KVA 54.9 Amps**

TOTAL CONNECTED LOAD: Ph. C 5,491 VA 46 AMPS

**NOTES:**
1. EXISTING CIRCUIT
2.
3.
4.
5.

**PROJECT NUMBER: 20220412**

## Battery Inverter 'INV1'

120/240V, 1 Ph., 3W.; 1.6 KVA with an Available Fault Current of 2986A RMS

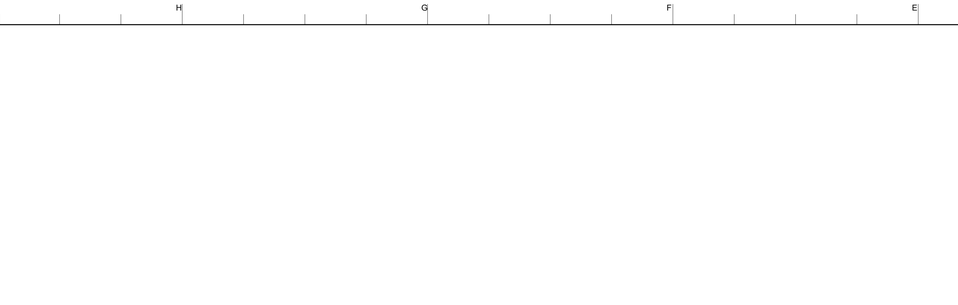
| Ckt. No. | Description / Location | Load (VA) | Type | C.B. A/Pole | Note | Ph. |
|---|---|---|---|---|---|---|
| 1 | EXIT SIGNS | 25 | L | 20/1 | | A |
| 2 | INTERIOR EGRESS, STAIRS | 375 | L | 20/1 | | C |
| 3 | INTERIOR EGRESS, COMMON AREAS | 363 | L | 20/1 | | A |
| 4 | EXTERIOR EGRESS | 160 | L | 20/1 | | C |
| 5 | SPARE | | | 20/1 | | A |
| 6 | SPARE | | | 20/1 | | C |

Notes: 1. 2. 3. 4. 5.

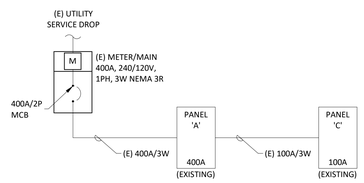
Total Connected Load: Ph. A 388 VA 3 Amps

Total Connected Load: Ph. C 535 VA 4 Amps

Panel Connected Load: 0.9 KVA 2.6 Amps
Sub-Fed Connected Load: 0.0 KVA 0.0 Amps
**Total Demand Load: 1.2 KVA 3.2 Amps**




1 E04.01 ONE-LINE DIAGRAM DEMO




2 E04.01 ONE-LINE DIAGRAM

SCALE: 3" = 1'-0" SCALE: 1 1/2" = 1'-0" SCALE: 1/4" = 1'-0" SCALE: 3/8" = 1'-0" SCALE: 1/8" = 1'-0" SCALE: 3/32" = 1'-0"

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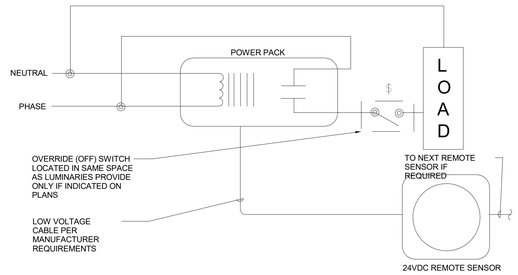
ELECTRICAL - ONE-LINE DIAGRAM AND SCHEDULES

| PROJECT: | 20220412 |
|---|---|
| DATE: | 10/12/2022 |

| No. | Description | Date |
|---|---|---|
| | | |



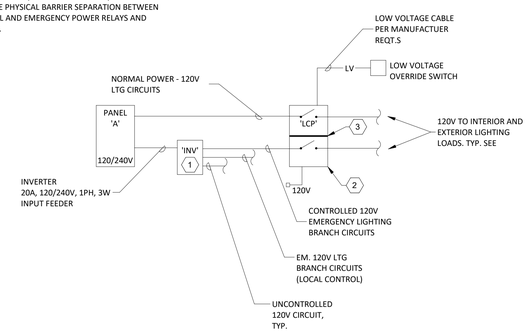
E04.01



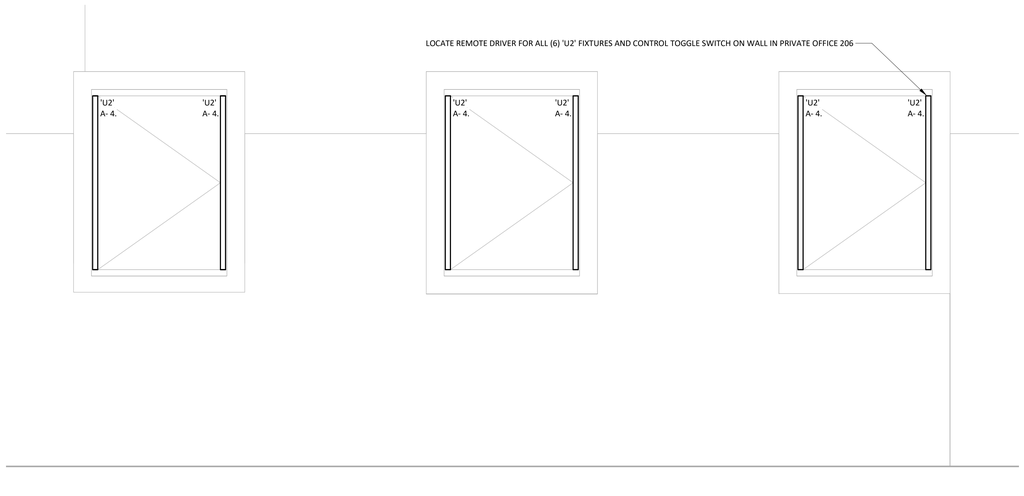

2 E05.01 OCCUPANCY SENSOR DETAIL
12" = 1'-0"

## DETAIL KEYNOTES:

1. EMERGENCY LIGHTING. INVERTER WITH 90 MINUTE BATTERY BACKUP, EQUIVALENT TO MEYERS # ___.
2. LIGHTING RELAY PANEL WITH 8 RELAYS AND ASTRONOMICAL TIMECLOCK, BASIS OF DESIGN AND WATTSTOPPER (MCP WITH EM RELAY).
3. PROVIDE PHYSICAL BARRIER SEPARATION BETWEEN NORMAL AND EMERGENCY POWER RELAYS AND WIRING.




3 E05.01 LCP-1 DETAIL
12" = 1'-0"




1 E05.01 DISPLAY LIGHTING DETAIL
1" = 1'-0"

SCALE: 3" = 1'-0"
SCALE: 1 1/2" = 1'-0"
SCALE: 1/4" = 1'-0"
SCALE: 3/8" = 1'-0"
SCALE: 1/8" = 1'-0"
SCALE: 3/32" = 1'-0"
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ELECTRICAL - DETAILS

PROJECT: 20220412
DATE: 10/12/2022

| No. | Description | Date |
|---|---|---|
| | | |



E05.01

# GENERAL NOTES:

A. SUPPORT PIPES TIGHT TO STRUCTURE WHEREVER POSSIBLE.
B. ALL PIPING IS CONCEALED AND WITHIN ENVELOPE OF BUILDING UNLESS OTHERWISE NOTED. ANY REQUIRED EXPOSED PIPING MUST BE COORDINATED WITH ARCHITECT.
C. ALL HORIZONTAL WASTE LINES TO HAVE MINIMUM OF 1/4 INCH PER FOOT SLOPE UNLESS OTHERWISE NOTED.
D. ALL DRAINAGE LINE CHANGE IN FLOW DIRECTION CONNECTIONS SHALL BE IN ACCORDANCE WITH CALIFORINA PLUMBING CODE.
E. WHERE BRANCH SIZES ARE NOT SHOWN, BRANCH SIZE SHALL BE SAME AS THAT SHOWN IN PLUMBING FIXTURE SCHEDULE.
F. PROVIDE OPERATING AND MAINTENANCE MANUAL TO OWNER UPON SYSTEM COMMISSIONING.
H. PROVIDE ACCESSIBLE FULL-WAY SHUT-OFF VALVES ON THE DISCHARGE SIDE OF WATER METER AND TO THE COLD WATER SUPPLY PIPE TO WATER HEATER.
I. PROVIDE FULL-WAY COLD WATER AND HOT WATER SUPPLY SHUT-OFF VALVES IN EACH UNIT ACCESS PANEL.
J. PROVIDE ACCESS PANEL TO SHUTOFF VALVES WHERE REQUIRED.
K. ALL CONTROL WIRING SHALL BE IN CONDUIT. CONDUIT SHALL BE PROVIDED AND INSTALLED BY THE MECHANICAL CONTRACTOR. PROVIDE AND INSTALL RIGID CONDUIT IN AREAS EXPOSED TO THE ELEMENTS.
L. PROVIDE MECHANICAL WATER HAMMER ARRESTOR AT QUICK-ACTING VALVES, SIZED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
M. LIMIT LAVATORY AND SINK TEMPERATURE TO 120°F FOR SCALDING PREVENTION.
N. PROVIDE CLEANOUTS AT THE BASE OF ALL WASTE STACKS, AT UPPER TERMINALS OF HORIZONTAL DRAINAGE PIPES, IN LOCATIONS REQUIRED BY CODE, AND AS SHOWN ON DRAWINGS.
O. ROUTE ALL CONDENSATE TO APPROVED RECEPTACLE.
P. HEAT TRACE AND INSULATE ALL WASTE AND WATER PIPING EXPOSED TO FREEZING.
Q. ALL FLOOR DRAINS AND FLOOR SINKS AND SIMILAR TRAPS SHALL BE PROVIDED WITH AN APPROVED AUTOMATIC MEANS OF MAINTAINING THEIR WATER SEAL. UNLESS TRAP PRIMERS IS CALLED OUT ON SCHEDULE TRAP PRIMER TYPE, MAKE AND MODEL SHALL BE SELECTED BY CONTRACTOR AND COORDINATED WITH ALL TRADES.

# PLUMBING FIXTURE CONNECTIONS

| MARK | FIXTURE DESCRIPTION | FIXURE MANUFACTURER | MODEL NUMBER | CONNECTION SIZE W | CW | HW | MINIMUM BRANCH SIZE W | V | CW | HW | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|
| WC-1 | WATER CLOSET | SLOAN | 8010 | 3" | 1" | - | 3" | 2" | 1-1/2" | - | 1.28 GPF Pressure Assisted Flush Tank |
| L-1 | LAVATORY | AM. STD. | 0955 | 1-1/4" | 3/8" | 3/8" | 1-1/2" | 1-1/2" | 3/4" | 3/4" | SLOAN BASYS Mid height, 0.5 GPM |
| S-1 | SINK | JUST | SL-151 | 1-1/4" | 3/8" | 3/8" | 1-1/2" | 1-1/2" | 3/4" | 3/4" | Chicago Faucet 431 |
| FD-1 | FLOOR DRAIN | ZURN | Z415B | 2" | - | - | 2" | 1-1/2" | - | - | With trap primer, TP-1 |
| TP-1 | TRAP PRIMER | PPP | MPB-500 | - | 1/2" | - | - | - | 3/4" | - | 115v-1ph-60hz |
| MS-1 | MOP SINK | ZURN | Z5850 | 2" | 3/8" | 3/8" | 2" | 1-1/2" | 3/4" | 3/4" | Chicago Faucet 815 Wall Mounted faucet |
| WH-1 | ELECTRIC WATER HEATER | | | | AO SMITH DEL -50 | | - | - | 3/4" | 3/4" | 240V/1ø, Drain Pan, Watts Series WDS with electronically actuated resettable shutoff valve, CP-1: Circ. pump, B&G PL-36, control with aquastat set at 115°F, 230V/1ø |

# WATER SERVICE CALCULATIONS

| MARK | FIXTURE GROUP | OCC. TYPE | QTY | CW WSFU EACH | HW WSFU EACH | TOT. HW WSFU | TOT. CW WSFU |
|---|---|---|---|---|---|---|---|
| | FLOOR/REGION | | | | | | |
| WC-1 | WATER CLOSET, 1.6 GPF FLUSHOMETER TANK | PUBLIC | 3 | 2.5 | 0 | 0 | 7.5 |
| L-1 | LAVATORY | PUBLIC | 3 | 1 | 0.75 | 2.25 | 3 |
| S-1 | SINK, KITCHEN, DOMESTIC | PUBLIC | 1 | 1.5 | 1.125 | 1.125 | 1.5 |
| DW-1 | DISHWASHER, DOMESTIC | PRIVATE | 1 | 1.5 | 1.125 | 1.125 | 1.5 |
| S-1 | SINK, SERVICE OR MOP BASIN | PRIVATE | 1 | 1.5 | 1.125 | 1.125 | 1.5 |
| | | | | SUB TOTAL | | 5.625 | 15 |
| | | | | BUILDING TOTAL WSFU: | | 5.625 | 15 |
| | | | | SYSTEM TYPE: | | Flush Tanks | |
| | | | | TOTAL WSFU FLOW: | | 5.6 GPM | 11.5 GPM |

| | |
|---|---|
| **FLOW AND PRESSURE CALCULATIONS** | |
| DESIGN FLOW RATE | 11.5 GPM |
| **SITE WATER SUPPLY DESIGN INFORMATION** | |
| DAILY SITE SERVICE PRESSURE | 60.0 PSIG |
| TOTAL EQUIVALENT PIPE LENGTH FROM METER TO POC 5 FEET FROM BUILDING | 0.0 FT |
| MAIN SIZE FROM WATER METER TO POC 5 FEET FROM BUILDING | 1" IN |
| A) PRESSURE LOSS FROM PIPING AT DESIGN FLOW RATE FROM WATER METER TO POC 5 FEET FROM BUILDING | 0.0 PSIG |
| B) WATER METER PRESSURE LOSS **1" METER** | 9.0 PSIG |
| TOTAL SITE LEVEL PRESSURE LOSS (A+B+C+D) | 9.0 PSIG |
| **BUILDING WATER SUPPLY DESIGN INFORMATION** | |
| TOTAL PIPE LENGTH FROM POC 5 FEET FROM BUILDING TO MOST HYDRAULICALLY REMOTE FIXTURE | 140.0 FT |
| TOTAL EQUIVALENT PIPE LENGTH FROM POC 5 FEET FROM BUILDING TO MOST HYDRAULICALLY REMOTE FIXTURE | 186.7 FT |
| DAILY SERVICE PRESSURE AT POC 5 FEET FROM BUILDING (DAILY SITE SERVICE PRESSURE - TOTAL SITE LEVEL PRESSURE LOSS) | 51.0 PSIG |
| DESIGN SERVICE PRESSURE AT BUILDING | 51.0 PSIG |
| REQUIRED RESIDUAL PRESSURE AT FURTHEST UNIT/FIXTURE | 25.0 PSIG |
| AVAILABLE PRESSURE FOR PIPING | 26.0 PSIG |
| SERVICE MAIN NOMINAL PIPE SIZE | 1" IN |

**NOTES:**
1. SIZED IN ACCORDANCE WITH CPC 2019, APPENDIX A.
2. CONTRACTOR SHALL VERIFY SUPPLY PRESSURE, METER/BACKFLOW SIZE & TYPE AND REPORT ANY DISCREPANCIES TO ENGINEER.
3. METER PRESSURE LOSS BASED ON 1" 'METER TYPE' AT DESIGN FLOW RATE.

# DFU CALCULATIONS

| MARK | FIXTURE GROUP | OCC. TYPE | QTY. | MIN TRAP SIZE | DFU EACH | TOT. DFU |
|---|---|---|---|---|---|---|
| | FLOOR/LEVEL | | | | | |
| L-1 | LAVATORY, SINGLE | PUBLIC | 3 | 1-1/4" | 1 | 3 |
| WC-1 | WATER CLOSET, 1.6 GPF FLUSHOMETER TANK | PUBLIC | 3 | 3" | 4 | 12 |
| MS-1 | SINK SERVICE OR MOP BASIN | PRIVATE | 1 | 2" | - | 0 |
| S-1 | SINK KITCHEN, DOMESTIC | PRIVATE | 1 | 1-1/2" | 2 | 2 |
| | | SUBTOTAL | | | | 17 |
| | | **SITE WASTE TOTAL** | | | | **17** |

**NOTES:**
1. PROVIDE 4" MINIMUM WASTE. CONTRACTOR TO VERIFY USEABILITY OF EXISTING WASTE LINE

# PLUMBING SHEET KEY

| SHEET NUMBER | DESCRIPTION |
|---|---|
| P00.10 | PLUMBING - LEGEND, SCHEDULES, & NOTES |
| P03.01 | PLUMBING - BASEMENT, LOWER AND UPPER LEVEL FLOOR PLANS |
| P08.01 | PLUMBING - DETAILS |

# PLUMBING LEGEND

## VALVE SYMBOLS

| SYMBOL | IDENTIFICATION |
|---|---|
| | GATE VALVE |
| | GATE VALVE; VERTICAL ORIENTATION |
| | SHUT-OFF VALVE |
| | GAS PRESSURE REGULATOR |
| | BALL VALVE |
| | GLOBE VALVE |
| | BUTTERFLY VALVE |
| | BALANCING VALVE |
| | CIRCUIT SETTER |
| | SOLENOID VALVE |
| | PRESSURE REDUCING VALVE |
| | TEMPERATURE AND PRESSURE RELIEF VALVE |
| | ANGLE VALVE |
| | ANGLE VALVE; VERTICAL ORIENTATION |
| | PRESSURE REGULATING VALVE |
| | CHECK VALVE |
| | WYE STRAINER |
| | REDUCED PRESSURE ZONE ASSEMBLY |
| | DOUBLE CHECK ASSEMBLY |

## PIPING SYMBOLS

| SYMBOL | IDENTIFICATION |
|---|---|
| | COLD WATER PIPE; SIZES AS SHOWN ON PLANS |
| | HOT WATER PIPE; SIZES AS SHOWN ON PLANS |
| | HOT WATER RETURN PIPE; SIZES AS SHOWN ON PLANS |
| | WASTE PIPE; SIZES AS SHOWN ON PLANS |
| | VENT PIPE; SIZES AS SHOWN ON PLANS |
| | PIPE CONTINUED |
| | PIPE UP |
| | PIPE DROP |
| | PIPE DROP AT TEE |
| | PIPE CAP |
| | PIPE UP OR DOWN THROUGH LEVEL |
| | PIPE TRANSITION |
| | TEE |
| | TEE; ISOMETRIC VIEW |
| | FLEXIBLE CONNECTION |
| | PRESSURE/TEMPERATURE PLUG |
| | UNION |
| | WATER HAMMER ARRESTOR |
| | GRADE CLEANOUT OR FLOOR CLEANOUT |
| | WALL CLEANOUT |
| | THERMOMETER |
| P | PRESSURE GAUGE |
| T | TEMPERATURE GAUGE |
| AD | ACCESS DOOR |
| | WATER HAMMER ARRESTOR |
| | DOWNSPOUT NOZZLE |

## ABBREVIATIONS

| ABBRV. | IDENTIFICATION |
|---|---|
| Ø | DIAMETER |
| & | AND |
| AD | ACCESS DOOR |
| AFF | ABOVE FINISH FLOOR |
| BTU | BRITISH THERMAL UNITS |
| COND | CONDENSATE |
| CONT | CONTINUED |
| COORD | COORDINATE |
| CONST | CONSTRUCTION |
| CW | COLD WATER (DOMESTIC) |
| DN | DOWN |
| DWGS | DRAWINGS |
| (E) | EXISTING TO REMAIN |
| EFF | EFFICIENCY |
| ETC | ETCETERA |
| FC | FLEXIBLE CONNECTION |
| FCO | FLOOR CLEANOUT |
| FLA | FULL-LOAD AMPERES |
| FLR | FLOOR |
| FPM | FEET PER MINUTE |
| FT | FEET |
| FT HD | FEET HEAD |
| GA | GAUGE |
| GALV | GALVINIZED |
| GC | GENERAL CONTRACTOR |
| GCO | GRADE CLEANOUT |
| GPM | GALLONS PER MINUTE |
| GPR | GAS PRESSURE REGULATOR |
| GV | GLOBE VALVE |
| GW | GREASE WASTE |
| HP | HORSEPOWER |
| HW | HOT WATER |
| HWR | HOT WATER RETURN |
| ID | INSIDE DIAMETER |
| IE | INVERT ELEVATION |
| IN | INCHES |
| KW | KILOWATTS |
| LBS | POUNDS |
| MAX | MAXIMUM |
| MBH | 1000 BTU PER HOUR |
| MC | MECHANICAL CONTRACTOR |
| MCA | MINIMUM CURRENT AMPACITY |
| MECH | MECHANICAL |
| MFR | MANUFACTURER |
| MIN | MINIMUM |
| MOCP | MAXIMUM OVERCURRENT PROTECTION |
| (N) | NEW |
| NIC | NOT IN CONTRACT |
| NTS | NOT TO SCALE |
| OC | ON CENTER |
| OCC | OCCUPANCY |
| OD | OVERFLOW DRAIN |
| OPSC | OREGON PLUMBING SPECIALTY CODE |
| OSHA | OCCUPATIONAL SAFETY AND HEALTH ADMINISTRAION |
| PD | PRESSURE DROP |
| PH | PHASE |
| P/N | PART NUMBER |
| PRV | PRESSURE REDUCING VALVE |
| POC | POINT OF CONNECTION |
| PSI | POUNDS PER SQUARE INCH |
| QTY | QUANTITY |
| (R) | RELOCATE EXISTING |
| RM | ROOM |
| RPZA | REDUCED PRESSURE ZONE ASSEMBLY |
| SCFM | STANDARD CUBIC FEET PER MINUTE |
| SD | STORM DRAIN |
| SOV | SHUT-OFF VALVE |
| SQ | SQUARE |
| TOT | TOTAL |
| TYP | TYPICAL |
| UPC | UNIFORM PLUMBING CODE |
| V | VENT |
| W | WASTE |
| W/ | WITH |
| WC | WATER COLUMN |
| WCO | WALL CLEANOUT |
| (X) | REMOVE EXISTING |

## FIXTURE SYMBOLS

| SYMBOL | IDENTIFICATION |
|---|---|
| | HOSE BIBB |
| | PUMP |
| | CIRCULATION PUMP |
| | FLOOR DRAIN |
| C | FLOOR SINK |

## DESIGNATION SYMBOLS

| SYMBOL | IDENTIFICATION |
|---|---|
| A | GRID LINE DESIGNATOR |
| | SHEET KEYNOTE TAG |
| | CONTRACTOR EQUIPMENT TAG |
| # | REVISION DELTA WITH REVISION NUMBER |
| | POINT OF CONNECTION |

## LEGEND NOTES:

A. ALL SYMBOLS MAY NOT BE USED IN THIS PROJECT.
B. SYMBOLS DO NOT ALWAYS REPRESENT REAL LIFE DIMENSIONS.
C. SEE BOOK SPECIFICATIONS FOR ADDITIONAL INFORMATION.

SCALE: 3" = 1'-0"
SCALE: 1 1/2" = 1'-0"
SCALE: 1/4" = 1'-0"
SCALE: 3/8" = 1'-0"
SCALE: 1/8" = 1'-0"
SCALE: 3/32" = 1'-0"

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REGISTERED PROFESSIONAL ENGINEER
ESTHER R. CONNER
No. M36477
EXP. SEPT 30, 2023
MECHANICAL
STATE OF CALIFORNIA

COLEBREIT ENGINEERING + AXIOM ENGINEERS
BEND | CORVALLIS
MONTEREY | NAPA | SANTA CRUZ



YREKA CARNEGIE LIBRARY REHABILITATION
412 W MINER ST, YREKA, CA 96097

PLUMBING - LEGEND, SCHEDULES, & NOTES

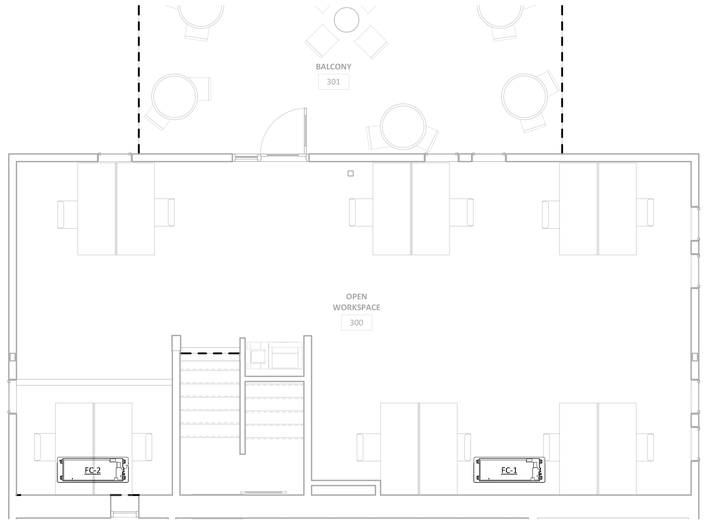
PROJECT: 20220412
DATE: 10/12/2022

| No. | Description | Date |
|---|---|---|

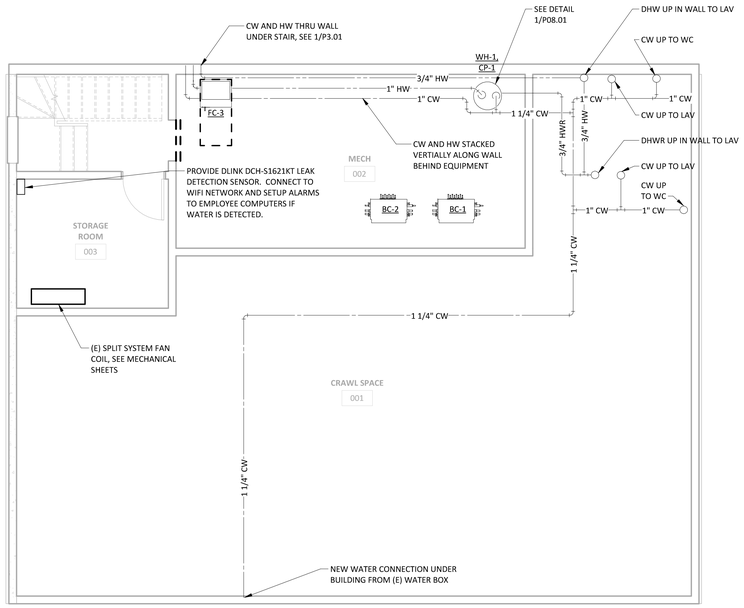
TRUE

P00.10

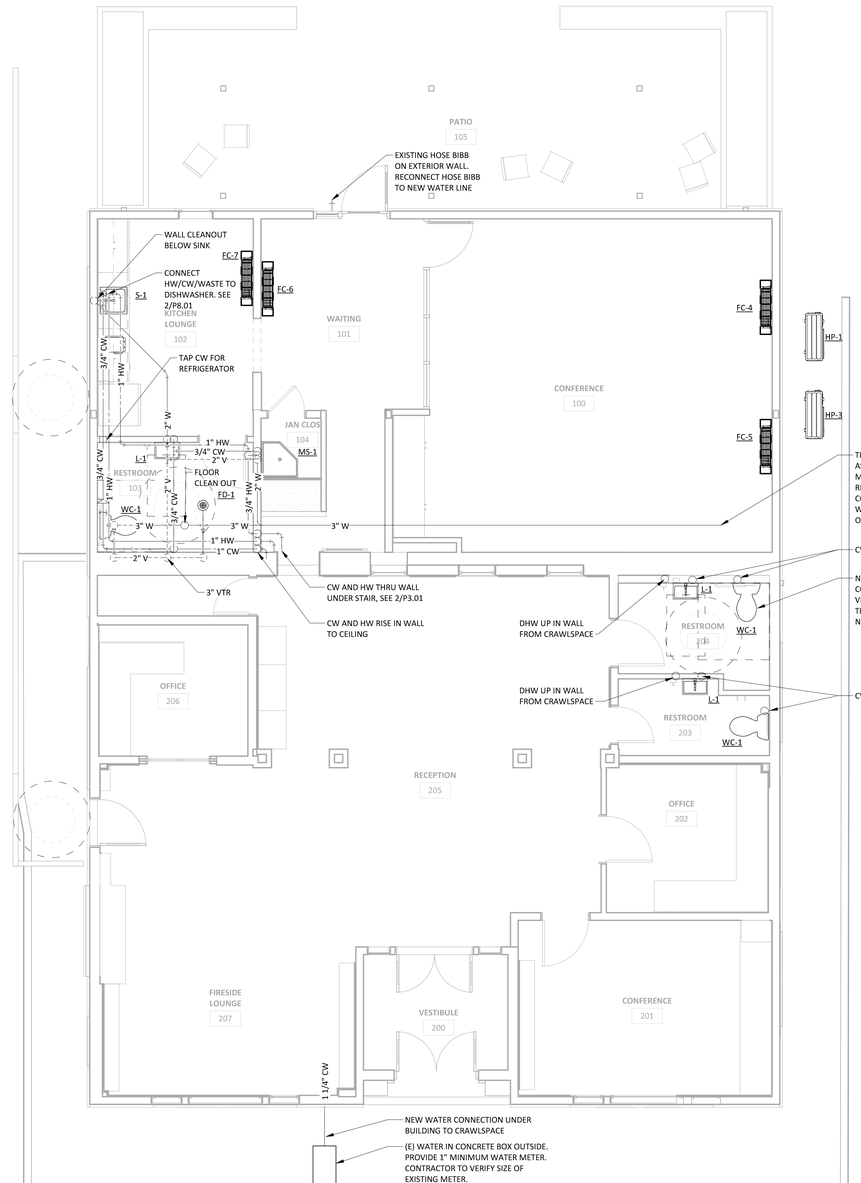
SCALE: 3" = 1'-0"
SCALE: 1 1/2" = 1'-0"
SCALE: 1/4" = 1'-0"
SCALE: 3/8" = 1'-0"
SCALE: 1/8" = 1'-0"
SCALE: 3/32" = 1'-0"




2 PLUMBING - UPPER FLOOR
P03.01 1/4" = 1'-0"




3 PLUMBING - BASEMENT
P03.01 1/4" = 1'-0"




1 PLUMBING - LOWER FLOOR
P03.01 1/4" = 1'-0"

SHEET NOTES:

1 RUN CONDENSATE DIRECT TO THE OUTSIDE OR TO THE NEAREST FIXTURE WITH AN APPROVED AIR GAP FITTING. 3/4" MINIMUM CONDENSATE UP TO 20 TONS. 1" CONDENSATE UP TO 40 TONS.

2 CONTRACTOR TO FIELD LOCATE AND DETERMINE THE VIABILITY OF THE EXISTING WASTE LINE.

3 CONTRACTOR TO VERIFY THE FUNCTION OF EXISTING HOSE BIBB. CONTRACTOR TO REPLACE HOSE BIBB IF DAMAGED OR NOT FUNCTIONING. RECONNECT WATER TO NEW WATER LINE.

ORW ARCHITECTURE
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REGISTERED PROFESSIONAL ENGINEER
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EXP. SEPT 30, 2023
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STATE OF CALIFORNIA

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+
AXIOM ENGINEERS
BEND | CORVALLIS
MONTEREY | NAPA | SANTA CRUZ



YREKA CARNEGIE LIBRARY REHABILITATION
412 W MINER ST, YREKA, CA 96097

PLUMBING - BASEMENT, LOWER AND UPPER LEVEL FLOOR PLANS

| PROJECT: | 20220412 |
|---|---|
| DATE: | 10/12/2022 |

| No. | Description | Date |
|---|---|---|
| | | |

P03.01

TRUE

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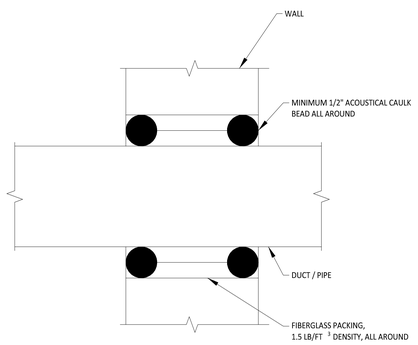
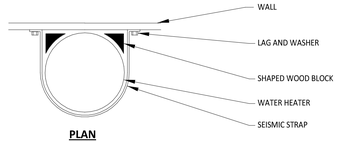
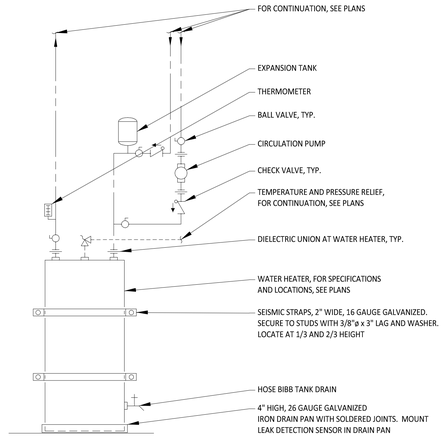



## 3 P8.01 PENETRATION DETAIL

NO SCALE (ACOUSTICAL CAULK)



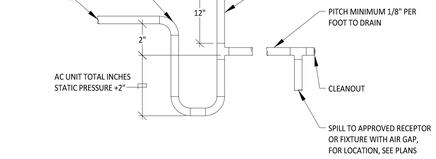

**PLAN**




**ELEVATION**

## 1 P8.01 ELECTRIC WATER HEATER

NO SCALE

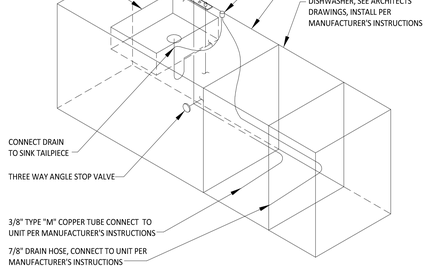



**NOTES :**

1. CD PIPE SIZE SHALL NOT BE SMALLER THAN UNIT DRAIN CONNECTION SIZE.
2. FOR PIPE SIZES AND LOCATIONS, SEE PLANS.

## 4 P8.01 CONDENSATE TRAP

NO SCALE




## 2 P8.01 DISHWASHER PIPING

NO SCALE

SCALE: 3" = 1'-0"
SCALE: 1 1/2" = 1'-0"
SCALE: 1/4" = 1'-0"
SCALE: 3/8" = 1'-0"
SCALE: 1/8" = 1'-0"
SCALE: 3/32" = 1'-0"

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PLUMBING - DETAILS

PROJECT: 20220412
DATE: 10/12/2022

| No. | Description | Date |
|---|---|---|
| | | |

TRUE

P08.01