



## Historic Preservation Services

Community Development & Neighborhood Services

281 North College Avenue

P.O. Box 580

Fort Collins, CO 80522.0580

970.416.4250

[preservation@fcgov.com](mailto:preservation@fcgov.com)

[fcgov.com/historicpreservation](http://fcgov.com/historicpreservation)

### CERTIFICATE OF APPROPRIATENESS – Minor Alteration

ISSUED: April 27, 2021

EXPIRATION: April 27, 2022

Progressive Old Town  
5 Old Town Square  
Fort Collins, CO 80524

Dear Property Owner:

This letter provides you with certification that proposed work to your designated Fort Collins landmark property, the H.C. Howard Block at 214 E. Mountain Avenue/3 Old Town Square has been approved by the City's Historic Preservation Division (HPD) because the proposed work appears to be routine in nature with minimal effects to the historic resource, and meets the requirements of Chapter 14, [Article IV](#) of the Fort Collins Municipal Code. Please note conditions on the two proposed work items on the building's exterior.

The alterations reviewed include:

- Minor carpentry repair to wood store front, subject to the following conditions:
  - *Condition 1: Replacement of wood features due to deterioration will be limited to the wood framing at grade that was previously noted as deteriorated. Replacement shall be in-kind (i.e., same dimensions and same or similar wood material). If, after removal, field conditions require replacement of further wood framing (kick plate, window framing, etc.), the applicant will contact Historic Preservation Services immediately for a consultation prior to altering the approved work.*
  - *Condition 2: Wood repair that requires heavy sanding or other abrasive measures will not be used.*
- Repaint of wood elements of exterior
  - *Condition 1: Application of water sealants, including waterproof wood treatments or waterproof paints is generally discouraged and will require additional consultation with Historic Preservation Services.*
  - *Highly abrasive paint removal methods such as use of rotary sanders or sandblasting are discouraged due to likelihood of damage to the underlying material and will require additional consultation with Historic Preservation Services.*

Notice of the approved application has been provided to building and zoning staff to facilitate the processing of any permits that are needed for the work. Please consider National Park Service Preservation Brief #10, [Exterior Paint Problems on Historic Woodwork](#) as you complete this project.

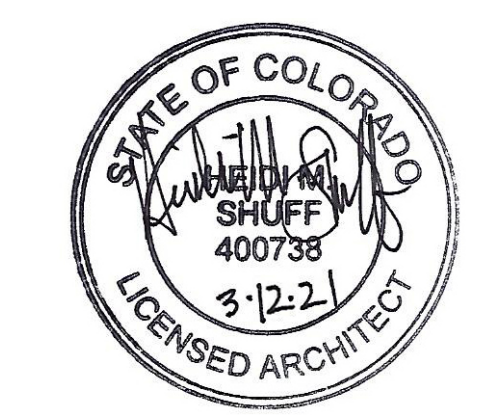
Please note that work beyond that indicated in your permit application/correspondence requires additional approval.

If the approved work is not completed prior to the expiration date noted above, you may apply for an extension by contacting staff at least 30 days prior to expiration. Extensions may be granted for up to 12 additional months, based on a satisfactory staff review of the extension request.

If you have any questions regarding this approval, or if I may be of any assistance, please do not hesitate to contact me. I may be reached at [jbertolini@fcgov.com](mailto:jbertolini@fcgov.com) or 970-416-4250.

Sincerely,

Jim Bertolini  
Historic Preservation Planner



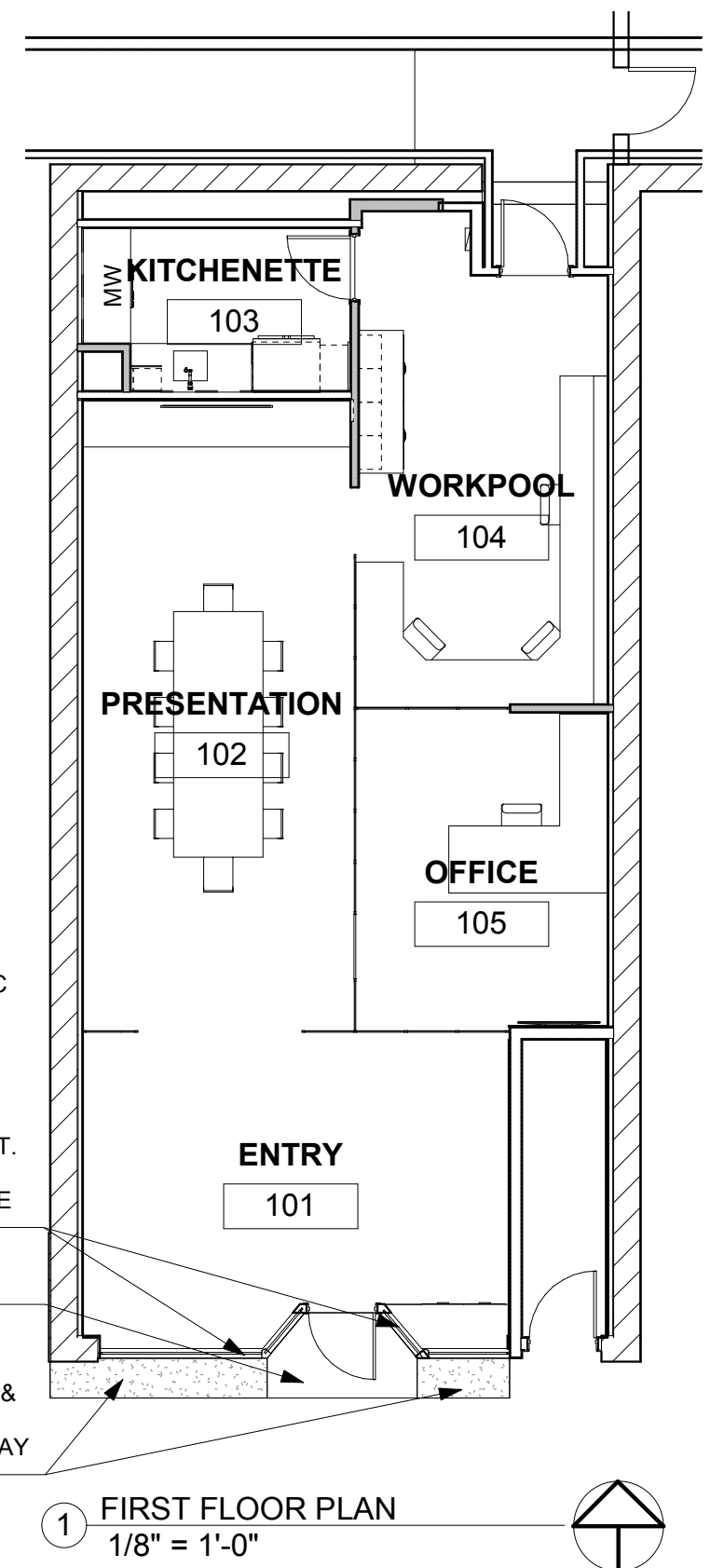
existing cornice:  
antique white (sw 6119)

existing storefront:  
tricorn black (sw 6259)

existing entry door:  
naval (sw 6244)

PATCH & REPAIR EXISTING WOOD STOREFRONT AS NEEDED, MAINTAINING THE EXISTING HISTORIC MATERIALS & DESIGN PER THE CITY OF FORT COLLINS 'OLD TOWN HISTORIC DESIGN STANDARDS'. REPLACEMENT OF EXST. DETERIORATED MATERIALS TO BE DONE IN-KIND. (PAINT)

EXST. STONE SLAB TO REMAIN. DEMOLISH EXST. CRACKED/ DETERIORATED CONC. & REPLACE W/ NEW CIP CONCRETE- SLOPE AWAY FROM BLDG.



1 FIRST FLOOR PLAN  
1/8" = 1'-0"

ABBREVIATIONS

@	At	(N)	New
A.F.F.	Above Finished Floor	N.I.C.	Not in Contract
A.H.U.	Air-Handling Unit	N.T.S.	Not to Scale
B.O.	Bottom Of	NOM.	Nominal
B.M.	Benchmark	O.A.	Overall
C.J.	Control Joint	O.C.	On Center
C.M.U.	Concrete Masonry Unit	O.D.	Outside Diameter
C.U.	Condensing Unit	O.H.	Overhead
CAB.	Cabinet	PL.LAM.	Plastic Laminate
CER.TL.	Ceramic Tile	P.T.	Pressure-Treated
CONT.	Continuous	P.TL.	Paper Towel Dispenser
D.F.	Drinking Fountain	PLYWD.	Plywood
DBL.	Double	PNT.	Paint
D.S.	Downspout	R.D.	Roof Drain
DWG.	Drawings	R.O.	Rough Opening
E.C.	Electrical Conduit	R.T.U.	Roof - Top Unit
E.F.	Exhaust Fan	REINF.	Reinforce or Reinforcing
E.J.	Expansion Joint	RESIL.	Resilient (flooring or base)
E.W.C.	Electric Water Cooler	REQ'D	Required
EA.	Each	RLG.	Rolling
E.P.P.T.	Epoxy Paint	RND.	Round
EQ.	Equal	RW.	Redwood
EXIST or (E)	Existing	S.AC.TL.	Suspended Acoustical Tile
EXT.	Exterior	S.C.	Solid Core (wood)
F.D.	Floor Drain	S.D.	Soap Dispenser
F.E.	Fire Extinguisher	S.S.	Stainless Steel
F.V.	Field Verify	SAIL.CRS.	Sailor Course (masonry)
FIN.	Finish	STL.	Sheet
FLR.	Floor	T.P.	Toilet Paper Dispenser
FTG.	Footing	TEMP.	Tempered (glass)
GALV.	Galvanized	T.O.	Top Of
GYP.BD.	Gypsum Wallboard	TYP.	Typical
HC	Handicapped	U.N.O.	Unless Noted Otherwise
H.C.	Hollow Core (Wood)	V.C.T.	Vinyl Composition Tile
HDR.	Header	V.	Vent
H.M.	Hollow Metal	VERT.	Vertical
HORIZ.	Horizontal	V.T.R.	Vent Thru Roof
I.D.	Inside Diameter	V.WC.	Vinyl Wallcovering
INS.STL.	Insulated Steel	W/	With
INT.	Interior	W/O	Without
M.O.	Masonry Opening	WD.	Wood
MANUF.	Manufacturer		
MTL.	Metal		

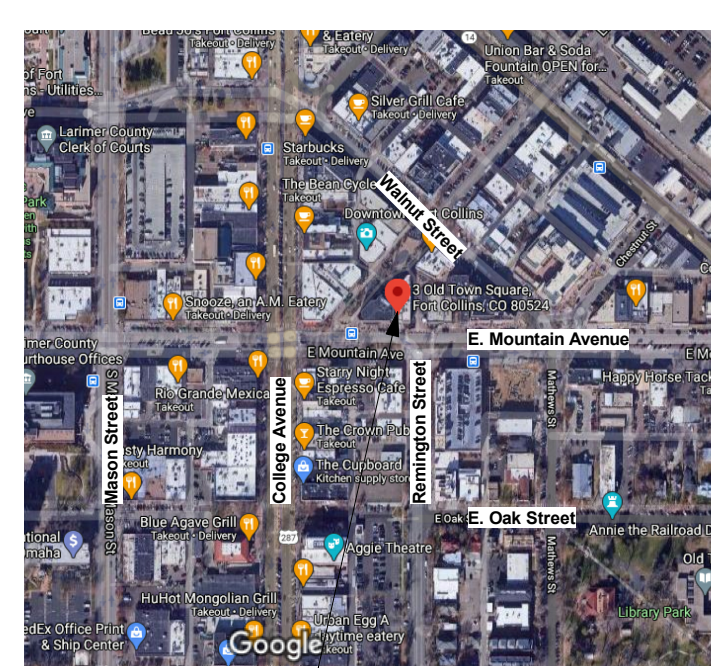
ARCHITECTURAL SYMBOLS

Property Line	---	Wall Elevation	(A1)
Existing Contour	---10---	Detail	(1/A1)
New Contour	---10---	Building Section	(1/A1)
Easement / Setback	---	Wall Section	(A)
Sanitary Sewer	SS	Grid Line	(A)
Water Line	W		
Gas Line	G		
Storm Drain	SD		
Datum	+		
Spot Elevation	⊙		
Window Type	(A)		
Drawing Title	DWG TTL		
Sheet Number	1/A1		
Scale	3/4" = 1'-0"		
Room Name	ROOM NAME		
Room Number			

MATERIALS

Dimensional Wood	Steel	Gypsum Board	Batt Insulation
Wood Blocking	Cast in Place Conc.	Rigid Insulation	Precast Concrete
Finish Wood	Concrete Masonry	Earth	Granular Fill
Plywood	Brick	Stone	

VICINITY MAP



VICINITY MAP  
NTS

SITE & BUILDING DATA

Property Address: 3 Old Town Square

Property Owner: Progressive Old Town Square LLC

Parcel No: 9712308013

Legal Description: LOTS A, 17, 16, 15, & 14 & POR LOTS 13, 12, 11, & 10 INBLK 19, FTC & POR OF ABANDONED LINDEN ST IN CITY OF FT COLLINS, DESC AS FOLLOWS: BEG AT SW COR BLK 18, FTC, TH N 89 57' 40" E 59.79 FT, N 41 16' 20" E 91.31 FT.

Zoning District: Downtown District (D)

Subdivision: 10019 - FTC BLK 19

Total Tenant Area: 1,092 SF

Occupancy Type: Business Group B

DRAWING INDEX

ARCHITECTURAL:

A0.1 COVER SHEET & PROJECT INFORMATION

A1.0 CODE PLANS & CODE ANALYSIS

INTERIORS:

I1.1 FIRST FLOOR DEMOLITION PLAN

I1.2 FIRST FLOOR PLAN

I5.1 KITCHENETTE INTERIOR ELEVATIONS

I6.1 FIRST FLOOR REFLECTED CEILING PLAN

MECHANICAL/ PLUMBING:

H0.1 HVAC NOTES, LEGEND & INDEX

H2.1 HVAC PLAN, SCHEDULES & DETAILS

P0.1 PLUMBING NOTES, LEGEND, SCHEDULES & INDEX

P2.1 PLUMBING FLOOR PLANS

ELECTRICAL:

E-1 POWER AND LIGHTING REMODEL PLANS AND SCHEDULES

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE 2018 INTERNATIONAL BUILDING CODE, THE 2018 INTERNATIONAL ENERGY CONSERVATION CODE, THE 2018 INTERNATIONAL PLUMBING CODE, THE 2018 INTERNATIONAL MECHANICAL CODE, THE 2017 NATIONAL ELECTRIC CODE, AS WELL AS ALL LOCAL & GREEN AMENDMENTS. CONTRACTOR SHALL OBTAIN ALL LICENSES AND PERMITS REQUIRED BY THE JURISDICTION WITH AUTHORITY OVER THE CONSTRUCTION OF THIS PROJECT.
- ALL DIMENSIONS ARE TO FACE OF CONCRETE, BRICK, WOOD FRAMING OR CENTERLINE OF STRUCTURAL LINES, UNLESS NOTED OTHERWISE.
- ALL WINDOW HEAD HEIGHTS ARE TO ADJACENT FINISH FLOOR.
- ALL INTERIOR DOORS TO BE LOCATED 5" OFF ADJACENT WALL UNLESS OTHERWISE NOTED.
- ALL EXTERIOR AND INTERIOR MATERIALS AND FINISHES SHALL BE AS SHOWN IN THE ARCHITECTURAL & INTERIOR DRAWINGS OR AS NEGOTIATED BY THE OWNER & CONTRACTOR FOR ITEMS NOT DETAILED.
- CONTRACTOR SHALL REVIEW THE DRAWINGS FOR THIS PROJECT, AND VERIFY ALL EXISTING CONDITIONS, FIELD DIMENSIONS, AND OTHER ASPECTS OF THIS PROJECT PRIOR TO BEGINNING CONSTRUCTION. NOTIFY OWNER OR ARCHITECT OF ANY DISCREPANCIES.
- THE EXISTING CONDITIONS DEPICTED ON THESE DRAWINGS ARE BASED ON THE BEST AVAILABLE INFORMATION AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
- REFER TO MECHANICAL, PLUMBING & ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- USE ONLY APPROVED, NON-EXPANSIVE, GRANULAR MATERIAL AS FILL. ALL FILL MATERIAL TO BE APPROVED BY OWNER.
- ALL MATERIALS TO BE INSTALLED PER MANUFACTURERS SPECIFICATIONS UNLESS OTHERWISE NOTED.

PROJECT TEAM

TENANT:  
Frameworks Timber  
208 Raquette Drive, Unit F  
Fort Collins, CO 80524  
Contact: Pete Grant  
phone: 970-568-4900  
email: pete@frameworkstimber.com

GENERAL CONTRACTOR:  
Integrated Mechanical, LLC  
223 Linden Street, Suite 204  
Fort Collins, CO 80524  
Contact: Gimie Schofield  
phone: 970-556-0570  
email: gimie-s@int-mech.com

ARCHITECT:  
Studio S Architecture, LLC  
715 W. Mountain Avenue  
Fort Collins, CO 80521  
Contact: Heidi Shuff  
phone: 970-231-1040  
email: heidi@studio-s-arch.com

INTERIOR DESIGNER:  
K Squared Design  
Fort Collins, CO  
Contact: Kathryn Kurtz  
phone: 970-420-5209  
email: kathryn@k-squaredesign.com

ELECTRICAL DESIGN:  
Gust Engineering  
2621 Rigden Farms Parkway, Suite C5  
Fort Collins, CO 80525  
Contact: Mike Gust  
phone: 970-482-1776  
email: mgust@gustengineering.com

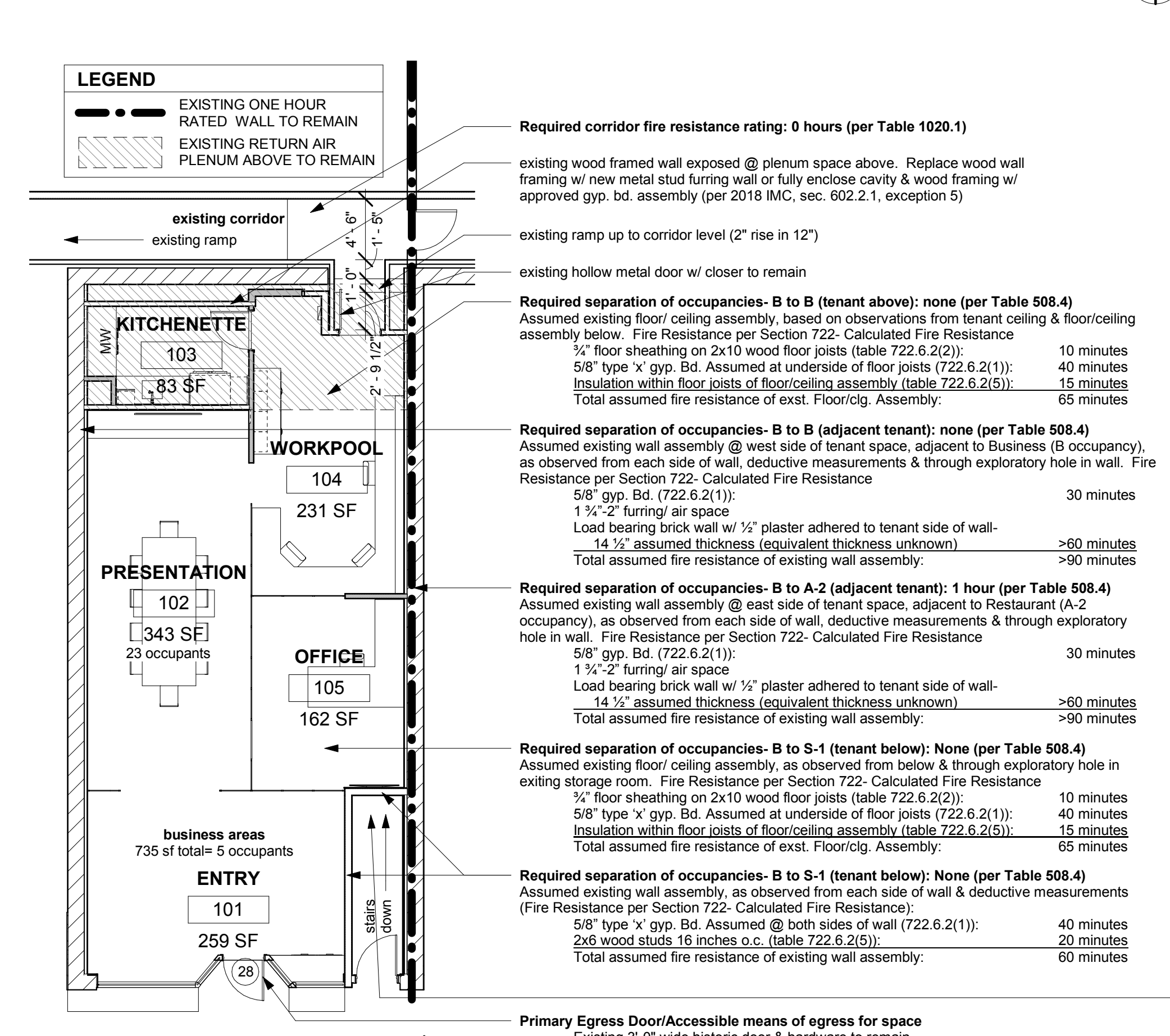
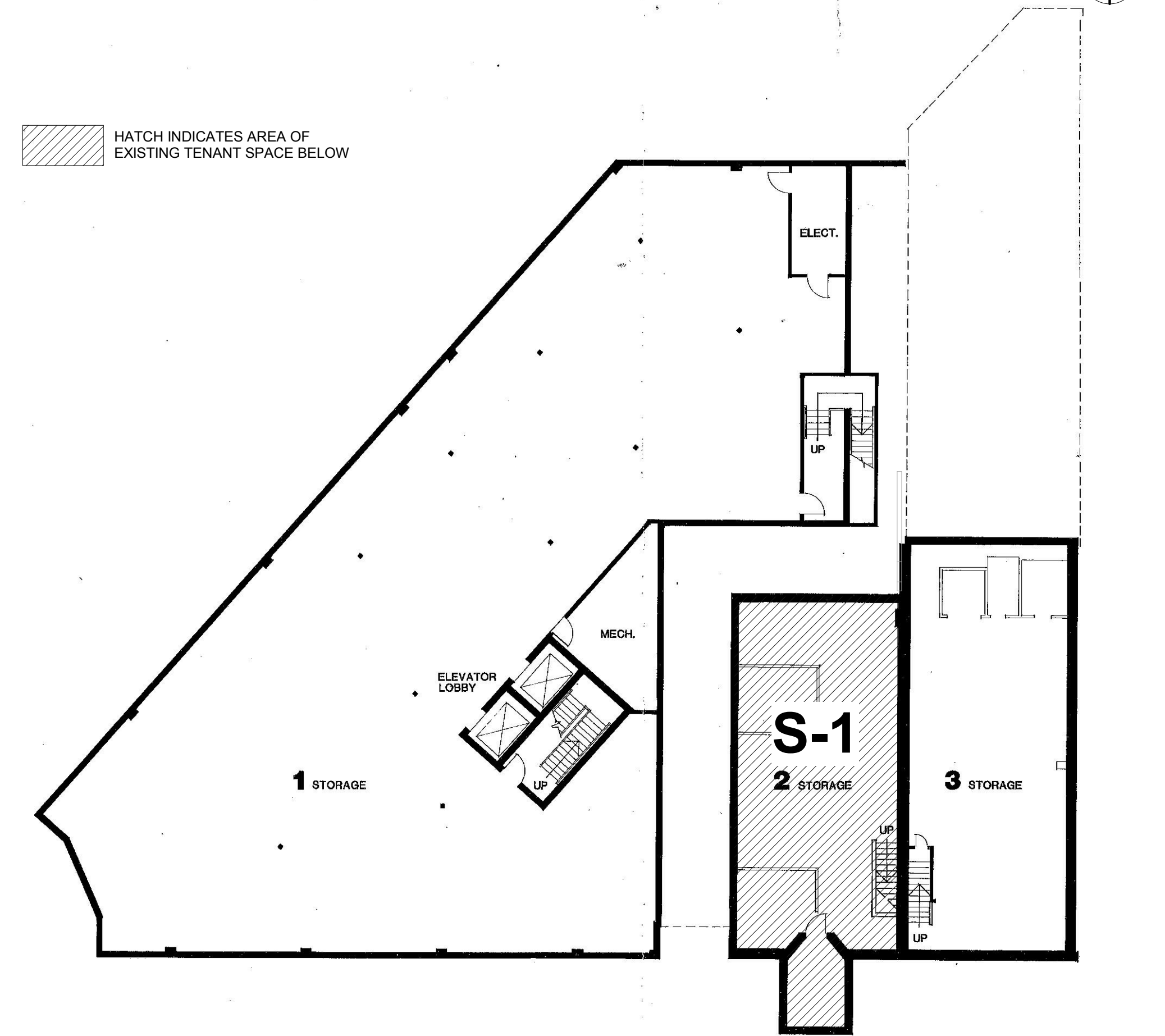
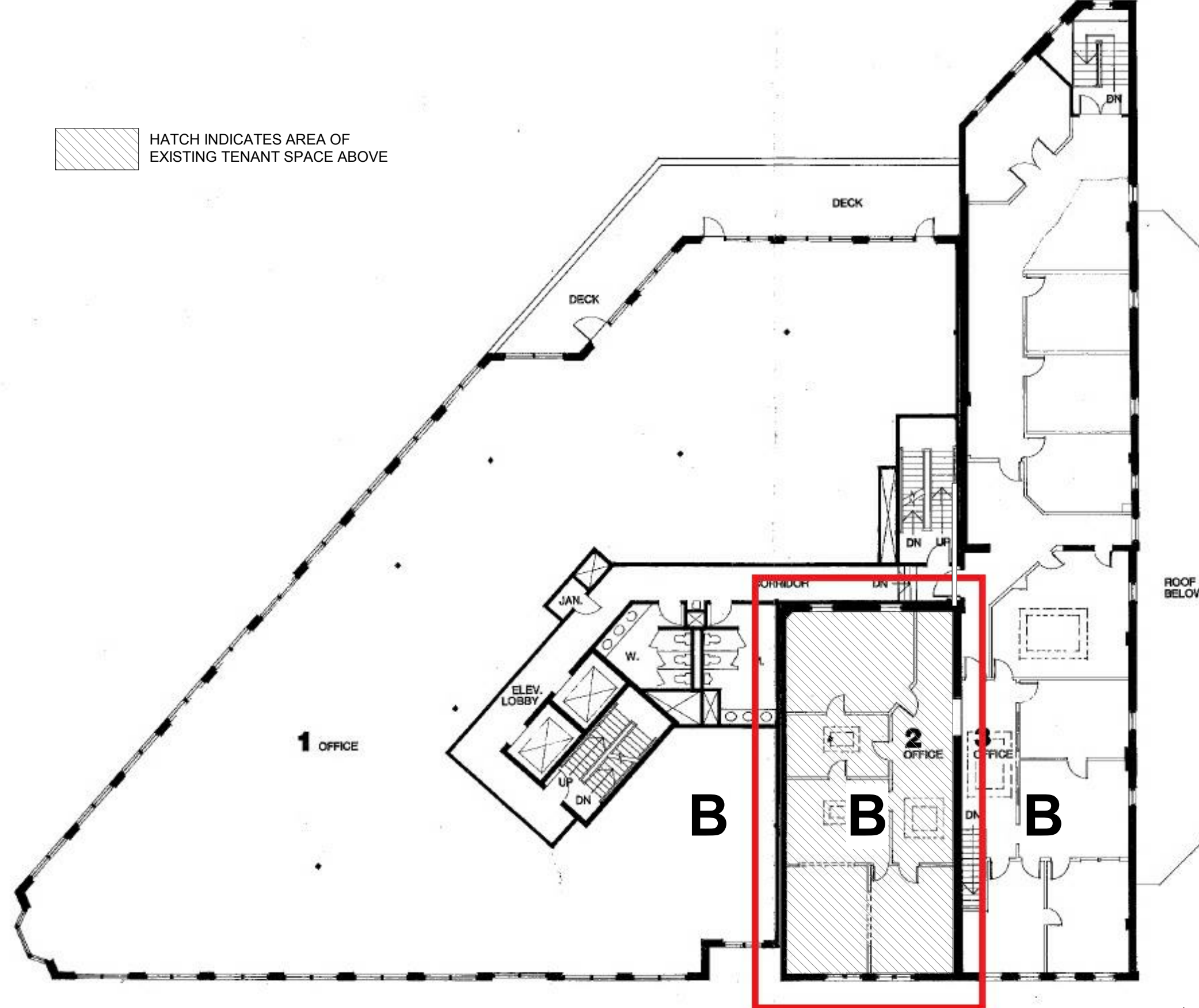
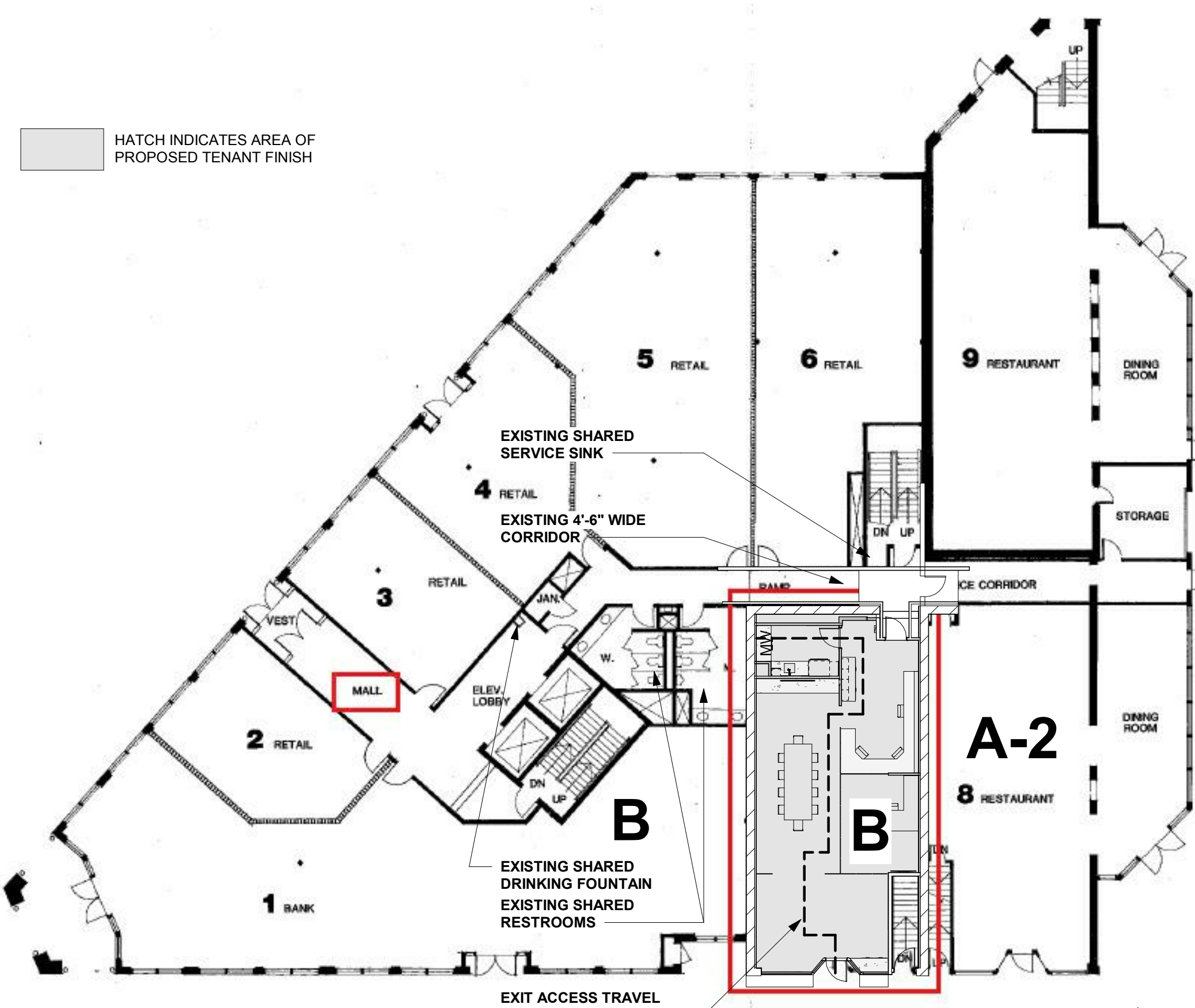
Frameworks Timber  
3 Old Town Square  
Fort Collins, Colorado

No.	Description	Date
	ISSUED FOR PERMIT	3.12.21

COVER SHEET, PROJECT INFORMATION & EXTERIOR IMPROVEMENTS

Project number	Project Number
Date	03.12.21
Drawn by	HMS
Checked by	HMS

A0.1



**CODE ANALYSIS**  
 Tenant Area: 1,092 SF  
 Note: Tenant area & surrounding building is fully sprinkled (NFPA 13 sprinkler system assumed)

**Occupancy Classification:**  
 Previous: Mercantile Group M (309.1)  
 Proposed: Business Group B (304.1)  
 Per 303.1.2 Small assembly spaces: A room or space used for assembly purposes that is less than 750 SF in area and accessory to another occupancy shall be classified as Group B occupancy or as part of that occupancy.

**Mixed use and occupancy:**  
 Required separation of occupancies (Table 508.4)  
 -B to S-2 (to basement tenant space): 1 hour  
 -B to A-2 (to adjacent tenant space to east): 1 hour  
 -B to B (to adjacent tenant spaces to west & above): no separation requirement

**Occupant Load (per table 1004.5):**  
 Previous:  
 -60 gross for retail area (960 SF)= 16 occupants  
 -300 gross for storage area (132 SF)= 1 occupant  
 -Total: 17 occupants  
 Proposed:  
 -150 gross for business areas (735 SF)= 5 occupants  
 -15 SF/person for conference room (343 SF)= 23 occupants  
 -Total: 28 occupants

**Means of Egress**  
 Ceiling height- the means of egress shall have a ceiling height of not less than 7'-6" above the finished floor (1003.2)  
 Egress from spaces- one exit required per Table 1006.2.1  
 -Occupancy- B, maximum occupant load of space- 49 (actual = 28), maximum common path of egress travel distance (with sprinkler system)- 100 feet (actual = 77 feet)  
 Accessible means of egress- one accessible means of egress required (1009.1)  
 Doors:  
 -Size of doors- 32" minimum clear opening width (1010.1.1)  
 -Door swing- egress doors shall be of the pivoted or side-hinged swinging type (1010.1.2)  
 -Exception 1- private office areas with an occupant load of 10 or less  
 -Direction of swing- not required to swing in the direction of egress travel, as the occupant load is less than 50 (1010.1.2.1)  
 -Door opening force- the force for pushing or pulling open interior swinging egress doors, other than fire doors, shall not exceed 5 pounds (1010.1.3)  
 -Floor elevation- variations in elevation due to difference in finish materials, up to 1/2" elevation difference, is allowed at each side of a door (1010.1.5, exception 4)  
 -Thresholds- thresholds at doorways shall not exceed 1/2" in height above the finished floor or landing. Raised thresholds and floor level changes greater than 1/4" at doorways shall be beveled with a slope not greater than one unit vertical in two units horizontal (50% slope) (1010.1.7)

**Exit Access-**  
 -Egress through intervening spaces can be provided when such adjoining rooms or areas and the area served are accessory to one or the other, are not a Group H occupancy and provide a discernible path of egress travel to an exit (1016.2, exception 2)  
 Exit Access Travel Distance- 300' (per Table 1017.2)  
 Corridors:  
 -Required fire resistance rating = 0 hours (per table 1020.1)  
 -Use of the space between the corridor ceiling and the floor or roof structure above as a return air plenum is permitted if the corridor is not required to be of fire-resistance-rated construction (1020.5.1.1)

**Accessibility**  
 Accessible Entrances- At least one accessible entrance shall be provided to each tenant in a facility (1105.1.6)

**Plumbing Fixture Requirements (per table 2902.1)**  
 Previous- Mercantile, 18 occupants  
 -Water Closets- Male (9): 1 per 500 = 1  
 -Water Closets- Female (9): 1 per 500 = 1  
 -Lavatories- Male (9): 1 per 750 = 1  
 -Lavatories- Female (9): 1 per 750 = 1  
 -Drinking fountains (18): 1 per 1,000 = 1  
 -Service Sink: 1  
 Proposed- Business, 28 occupants:  
 -Water Closets- Male (14): 1 per 25 for the first 50 = 1  
 -Water Closets- Female (14): 1 per 25 for the first 50 = 1  
 -Lavatories- Male (14): 1 per 40 for the first 80 = 1  
 -Lavatories- Female (14): 1 per 40 for the first 80 = 1  
 -Drinking fountains (28): 1 per 100 = 1  
 -Service Sink: 1  
 Shared facilities provided for building via corridor to north:  
 -Water Closets- Male: 3  
 -Water Closets- Female: 3  
 -Lavatories- Male: 2  
 -Lavatories- Female: 2  
 -Drinking fountains: 1  
 -Service Sink: 1

**Return Air Plenum**  
 -Existing return air plenum to remain above proposed kitchenette & hall @ north end of tenant space (above existing gyp. bd. drop ceiling & existing gyp. bd. ceiling @ underside of floor joists above)  
 -Plenum enclosure construction materials that are exposed to the airflow shall comply with the requirements of Section 703.5 of the International Building Code or such materials shall have a flame spread index of not more than 25 and a smoke-developed index of not more than 50 when tested in accordance with ASTM E84 or UL 723  
 -Plenum construction & materials within plenum space to comply with 2018 IMC, section 602.2

**ACCESSIBLE MEANS OF EGRESS**  
 -Size of doors- 32" minimum clear opening width (1010.1.1)  
 -Door swing- egress doors shall be of the pivoted or side-hinged swinging type (1010.1.2)  
 -Exception 1- private office areas with an occupant load of 10 or less  
 -Direction of swing- not required to swing in the direction of egress travel, as the occupant load is less than 50 (1010.1.2.1)  
 -Door opening force- the force for pushing or pulling open interior swinging egress doors, other than fire doors, shall not exceed 5 pounds (1010.1.3)  
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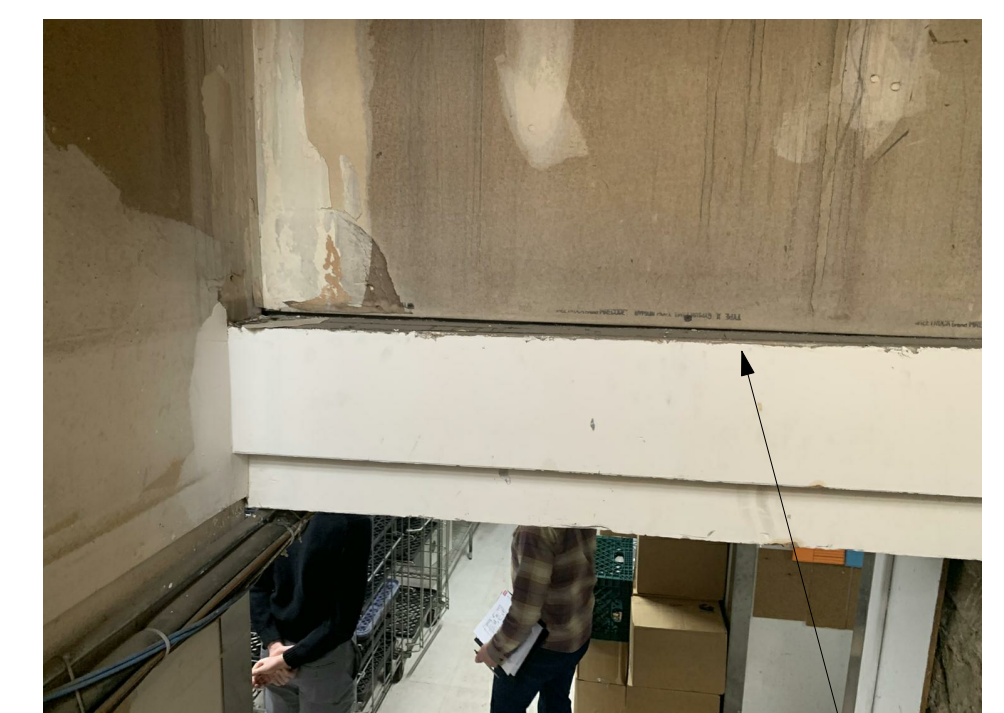


photo looking north from existing stairway east of proposed tenant space, illustrating evidence of use of type 'x' gypsum board

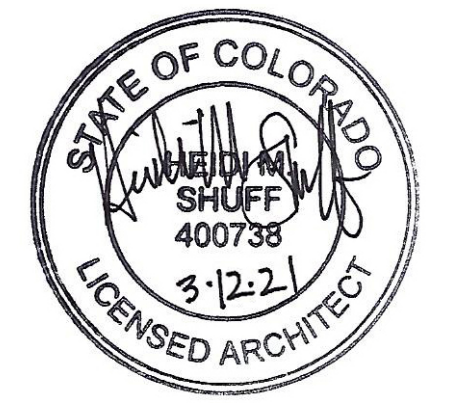
**studio S**  
 architecture

715 w. mountain avenue  
 fort collins, colorado 80521

phone: 970.231.1040  
 e-mail: heidi@studio-s-arch.com

**k** K SQUARED DESIGN, LLC

970-420-5209  
 kathryn@k-squaredesign.com



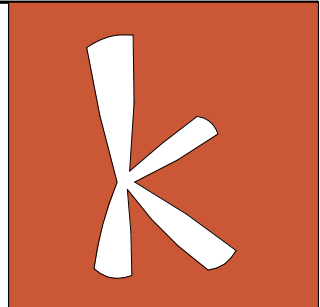
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No.	Description	Date
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**CODE PLANS & CODE ANALYSIS**

Project number	Project Number
Date	03.12.21
Drawn by	HMS
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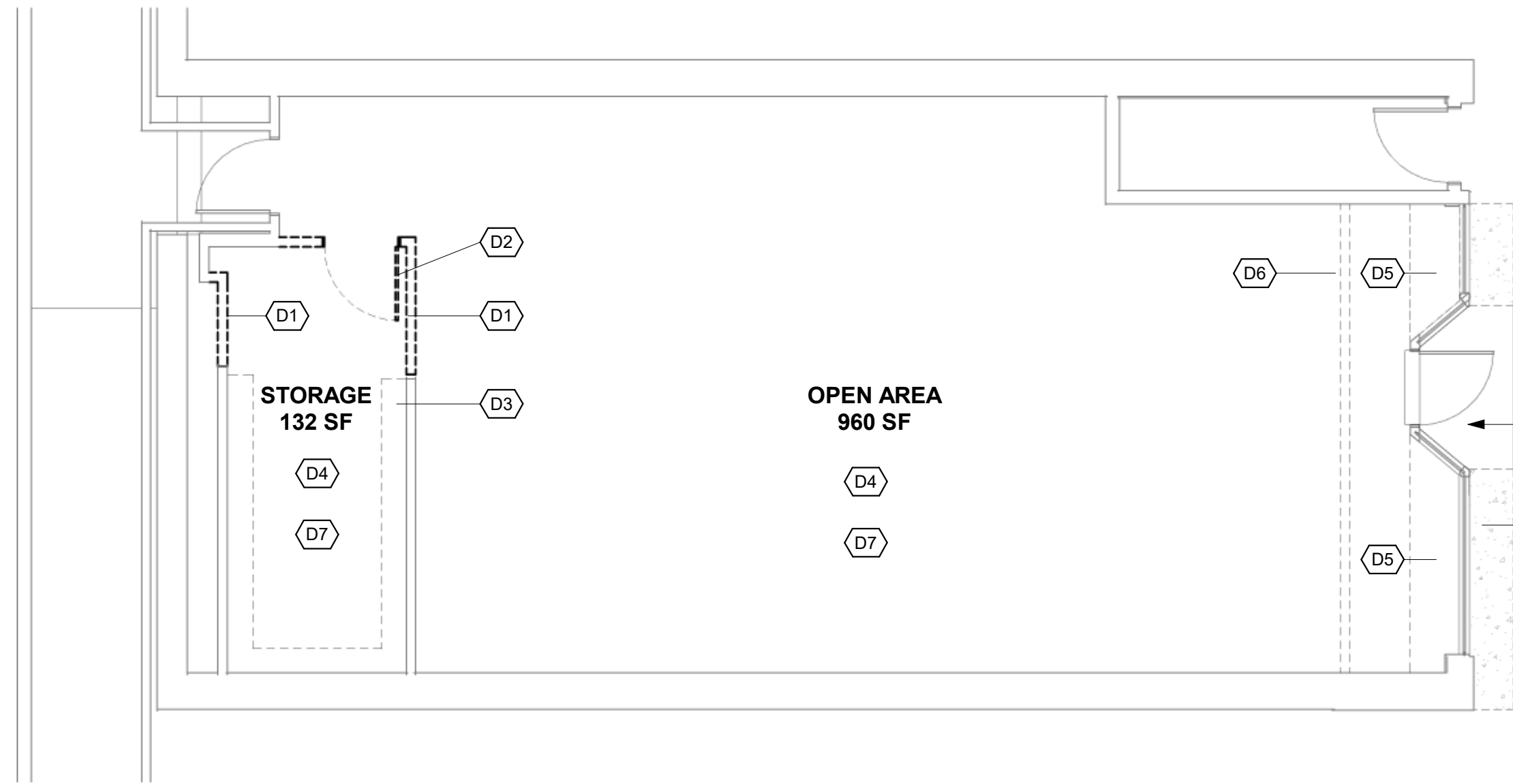
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**K SQUARED DESIGN, LLC**  
 space planning - interior design  
 1032 valley view road  
 fort collins, CO  
 kathryn@k-squaredesign.com  
 (970) 420-5209

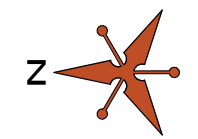
**DEMO NOTES:**

- D1 REMOVE WALLS AS INDICATED BY DASHED LINE, REVIEW WITH STRUCTURAL ENGINEER PRIOR TO REMOVAL
- D2 REMOVE DOOR AND FRAME
- D3 REMOVE EXISTING SHELVING
- D4 REMOVE FLOORING
- D5 REMOVE BUILT-INS
- D6 REMOVE BULKHEAD (IF POSSIBLE)
- D7 REMOVE OVERHEAD LIGHTING FIXTURES
- D8 REMOVE EXISTING CONCRETE STRIP ADJACENT TO BUILDING AND PREP FOR REPLACEMENT

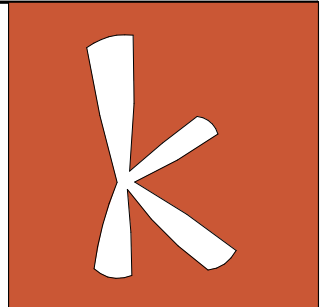


**FRAMEWORKS OFFICE  
 #3 OLD TOWN SQUARE**

PRELIM:	01/25/21
PERMIT:	03/12/21
REV. #:	
REV. DATE:	



**1** FIRST FLOOR DEMOLITION PLAN  
 3/16" = 1'-0"



**K SQUARED DESIGN, LLC**  
*space planning - interior design*  
 1032 valley view road  
 fort collins, CO  
 kathryn@k-squaredesign.com  
 (970) 420-5209

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 #3 OLD TOWN SQUARE**

**GENERAL NOTES:**

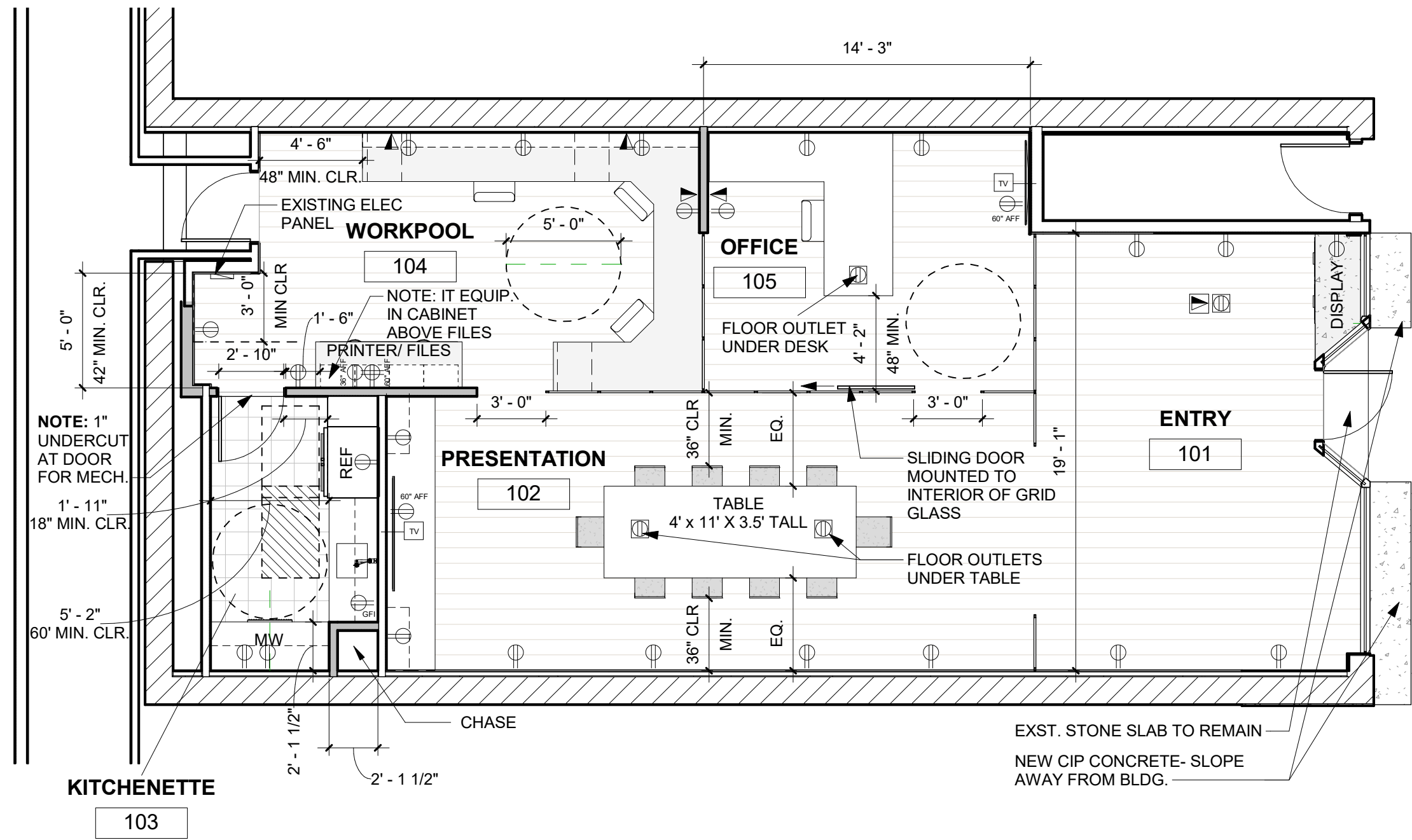
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE OF CURRENT CODES AND LOCAL ADMENDMENTS. CONTRACTOR SHALL OBTAIN ALL LICENSES AND PERMITS REQUIRED BY THE JURISDICTION WITH AUTHORITY OVER THE CONSTRUCTION OF THIS PROJECT.
2. ALL WALLS TO BE REMOVED TO BE VERIFIED BY STRUCTURAL ENGINEER PRIOR TO REMOVAL.
3. CONTRACTOR SHALL REVIEW THE DRAWINGS FOR THIS PROJECT AND VERIFY ALL EXISTING CONDITIONS, FIELD DIMENSIONS AND OTHER ASPECTS PRIOR TO BEGINNING CONSTRUCTION. NOTIFY OWNER OF ANY DISCREPANCIES.
4. MECHANICAL, ELECTRICAL AND PLUMBING SHALL BE DESIGN/ BUILD BY SELECTED SUBCONTRACOR
5. THE EXISTING CONDITIONS DEPICTED IN THESE DRAWINGS ARE BASED ON THE BEST AVAILABLE INFORMATION AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
6. DIMENSIONS ARE TO FINISH (IF EXISTING) AND FRAMING (IF NEW), UNLESS NOTED OTHERWISE.

**ELECTRICAL LEGEND:**

- ⊕ DUPLEX RECEPTACLE
- ⊕<sub>GFI</sub> GROUND FAULT RECEPTACLE
- Ⓢ SINGLE POLE SWITCH
- Ⓢ<sub>3</sub> THREE-WAY SWITCH
- TV TV
- ⊕ FLOOR OUTLET
- ▲ DATA, WALL MOUNTED
- ▼ DATA, FLOOR MOUNTED

**ELECTRICAL NOTES:**

1. THIS ELECTRICAL PLAN IS TO SERVE AS A DESIGN GUIDELINE ONLY. ALL ELECTRICAL WORK IS TO CONFORM TO THE CURRENT ELECTRICAL CODE W/ LOCAL AMENDMENTS.
2. CONTRACTOR TO ARRANGE WALK-THRU W/ OWNER AFTER FRAMING IS COMPLETED TO FIELD LOCATE ALL DEVICES & FIXTURES.
3. CONTRACTOR TO REVIEW EQUIPMENT SPECIFICATIONS AND VERIFY POWER NEEDS
4. ONLY OUTLETS FOR SPECIFIC USE HAVE BEEN INDICATED. ALL OTHER OUTLETS TO BE DETERMINED BY CODE AND DURING OWNER WALK-THROUGH.
5. COORDINATE ALL FIXTURE & DEVICE SELECTIONS W/ THE OWNER.



**1** NEW FIRST FLOOR PLAN  
 3/16" = 1'-0"

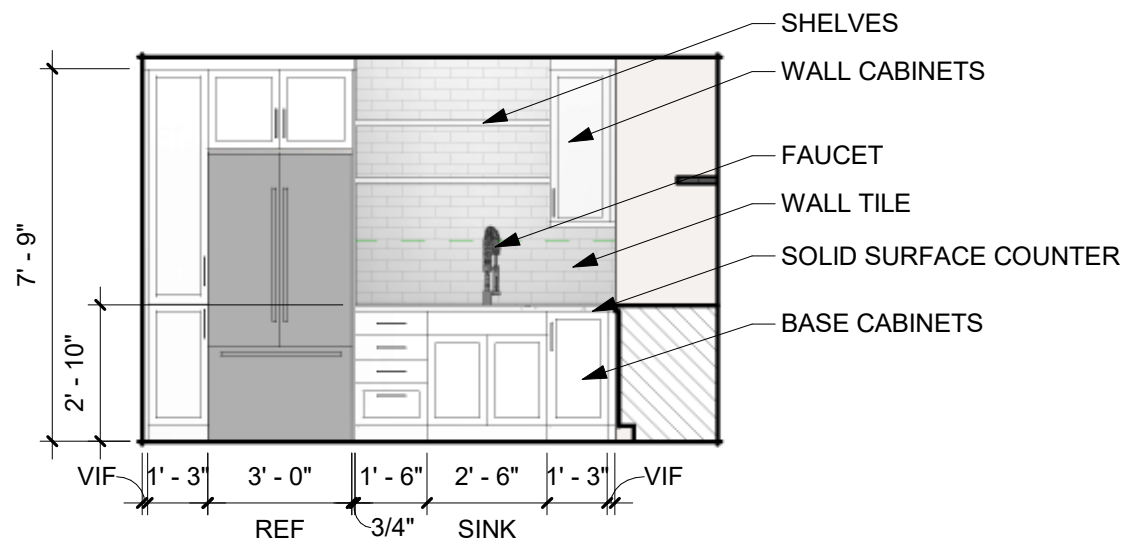
PRELIM:	02/22/21
PERMIT:	03/12/21
REV. #:	
REV. DATE:	



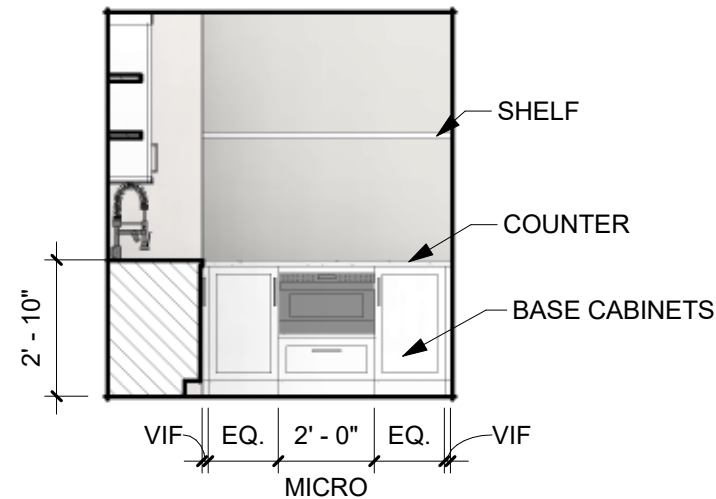
1 Kitchenette - North  
1/4" = 1'-0"



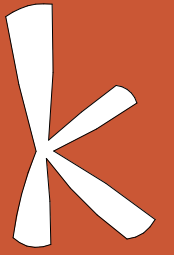
2 Kitchenette - East  
1/4" = 1'-0"



3 Kitchenette - South  
1/4" = 1'-0"



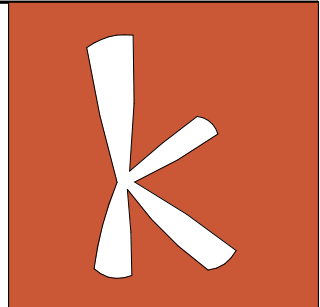
4 Kitchenette - West  
1/4" = 1'-0"



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 kathryn@k-squaredesign.com  
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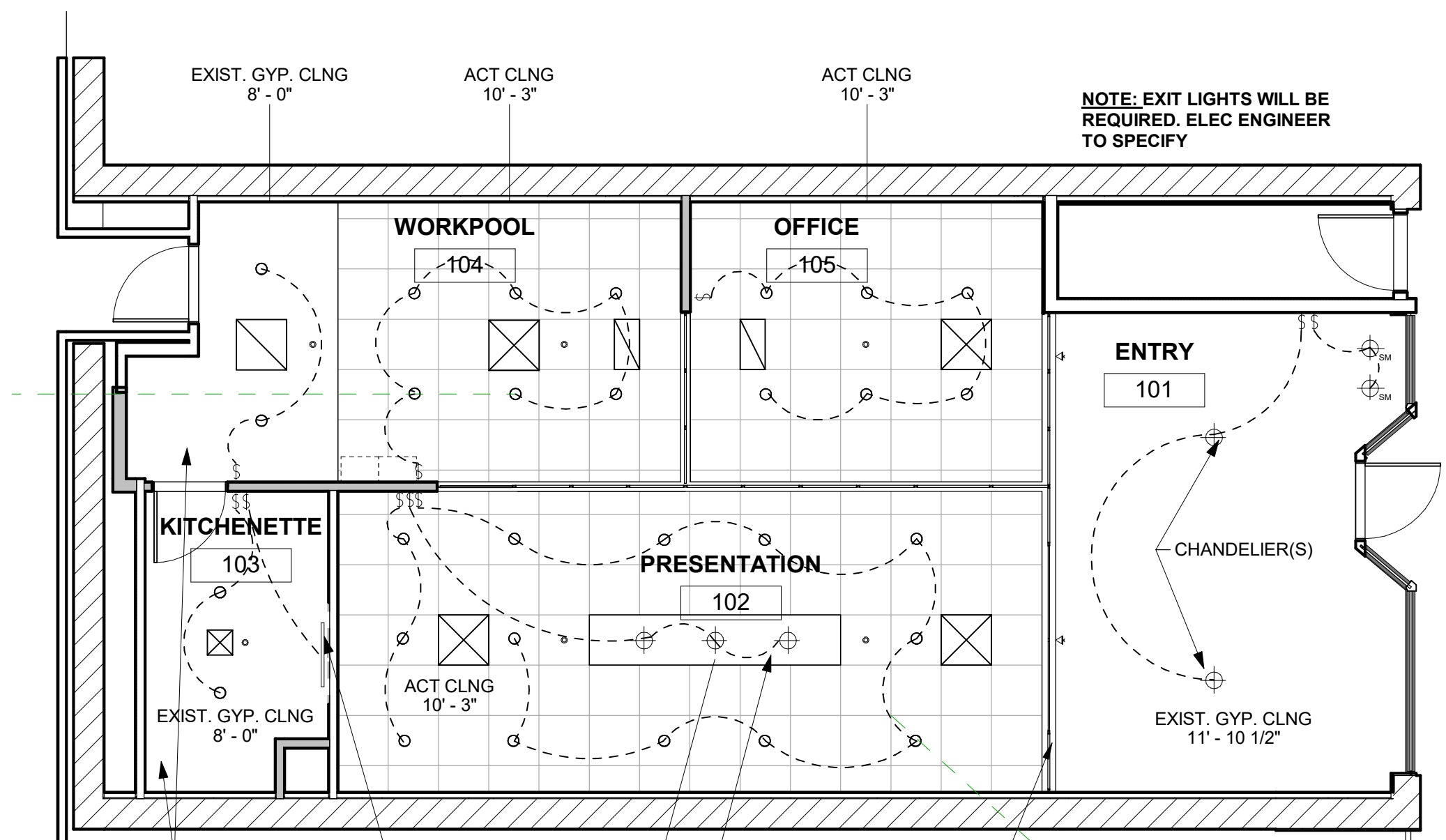
**FRAMEWORKS OFFICE  
 #3 OLD TOWN SQUARE**

**LIGHTING/ HVAC LEGEND:**

- PENDANT FIXTURE
- SURFACE MTD. FIXTURE
- WALL MTD. FIXTURE
- RECESSED CAN FIXTURE
- SUPPLY
- RETURN
- UNDER CABINET FIXTURE
- CONCEALED FIRE SPRINKLER HEAD
- HORIZONTAL SIDEWALL FIRE SPRINKLER HEAD

**ELECTRICAL NOTES:**

1. THIS ELECTRICAL PLAN IS TO SERVE AS A DESIGN GUIDELINE ONLY. ALL ELECTRICAL WORK IS TO CONFORM TO THE CURRENT ELECTRICAL CODE W/ LOCAL AMENDMENTS.
2. CONTRACTOR TO ARRANGE WALK-THRU W/ OWNER AFTER FRAMING IS COMPLETED TO FIELD LOCATE ALL DEVICES & FIXTURES.
3. CONTRACTOR TO REVIEW EQUIPMENT SPECIFICATIONS AND VERIFY POWER NEEDS
4. ONLY OUTLETS FOR SPECIFIC USE HAVE BEEN INDICATED. ALL OTHER OUTLETS TO BE DETERMINED BY CODE AND DURING OWNER WALK-THROUGH.
5. COORDINATE ALL FIXTURE & DEVICE SELECTIONS W/ THE OWNER.



**NOTE: EXIT LIGHTS WILL BE REQUIRED. ELEC ENGINEER TO SPECIFY**

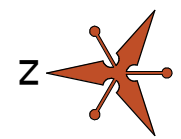
NOTE: THIS IS BEING USED AS A RETURN AIR PLENUM. RE: A1.0 AND MECH. DRAWINGS FOR REQUIREMENTS

LED TAPE IN CHANNEL AT TOP OF TOP SHELF AND BOTTOM OF BOTTOM SHELF

NEW. GYP. CLNG 10'-0"

ACCENT LIGHTING

NEW BULKHEAD. B.O. BULKHEAD AT 10'-0"



**1 FIRST FLOOR - REFLECTED CEILING PLAN**  
 3/16" = 1'-0"

PRELIM:	02/22/21
PERMIT:	03/12/21
REV. #:	
REV. DATE:	



**GENERAL MECHANICAL REQUIREMENTS:**

**CODES AND PERMITS**

WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODES, REGULATIONS AND ORDINANCES. PERMITS NECESSARY FOR PERFORMANCE OF WORK SHALL BE SECURED AND PAID FOR BY THE CONTRACTOR.

**DRAWINGS AND COORDINATION**

DRAWINGS FOR MECHANICAL WORK ARE DIAGRAMMATIC IN NATURE, AND ARE NOT INTENDED TO BE SCALED FOR EXACT MEASUREMENTS NOR TO SERVE AS SHOP DRAWINGS. CHANGES FROM THE PLANS MADE WITHOUT CONSENT OF THE ENGINEER SHALL RELIEVE THE ENGINEER OF RESPONSIBILITY FOR ALL CONSEQUENCES ARISING OUT OF SUCH CHANGES. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. WHERE CONDITIONS REQUIRE REASONABLE CHANGES TO THOSE INDICATED ON THE DRAWINGS, MAKE SUCH CHANGES WITHOUT ADDITIONAL COST TO THE OWNER. COORDINATE ALL WORK WITH OTHER TRADES.

**WARRANTY**

WORKMANSHIP, MATERIALS, EQUIPMENT AND PROPER OPERATION SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE FROM THE OWNER. INITIAL ACCEPTANCE OF WORK SHALL NOT WAIVE THIS GUARANTEE. THIS GUARANTEE SHALL NOT INCLUDE NORMAL MAINTENANCE REQUIRED BY THE OWNER AS DESCRIBED IN EQUIPMENT OPERATION AND MAINTENANCE MANUALS.

**SUBMITTALS**

CONTRACTOR SHALL SUBMIT TO THE ARCHITECT/ENGINEER A MINIMUM OF (5) COPIES OF SUBMITTAL BROCHURES FOR REVIEW. PROVIDE INFORMATION ON ALL MAJOR EQUIPMENT AS LISTED ON DRAWING EQUIPMENT SCHEDULES, AS WELL AS VALVES, DUCTWORK ACCESSORIES AND TEMPERATURE CONTROL DIAGRAMS AS APPLICABLE.

**OPERATION AND MAINTENANCE MANUALS**

CONTRACTOR SHALL FURNISH AT THE COMPLETION OF THE PROJECT (2) COPIES OF COMPLETE OPERATION AND MAINTENANCE MANUALS TO THE ARCHITECT/ENGINEER FOR REVIEW PRIOR TO TURNOVER TO OWNER. MANUALS TO BE BOUND AND INCLUDE INSTALLATION INSTRUCTIONS, REPLACEMENT PARTS LISTS AND MAINTENANCE INFORMATION ON ALL EQUIPMENT AS DESCRIBED IN THE SUBMITTALS SECTION. COMPLETED OPERATION AND MAINTENANCE MANUALS ARE TO BE FORWARDED TO THE OWNER WITHIN 90 DAYS AFTER OWNER BUILDING ACCEPTANCE.

**PRODUCT SUBSTITUTIONS**

MANUFACTURER MODEL NUMBERS LISTED ON THE DRAWINGS AND/OR SPECIFICATIONS ARE TO BE CONSIDERED AS THE BASIS OF DESIGN. WHERE TWO OR MORE ALTERNATE MANUFACTURERS OR MATERIALS ARE LISTED, THE CHOICE OF THESE SHALL BE OPTIONAL WITH THE CONTRACTOR. PRIOR TO THE AWARDED OF THE CONTRACT, CONTRACTOR MAY REQUEST A PROPOSED SUBSTITUTION OF MATERIALS IN WRITING TO THE ARCHITECT/ENGINEER NO LATER THAN SEVEN DAYS PRIOR TO THE RECEIPT OF BIDS. THE COST OF ANY CHANGES REQUIRED BY OTHER TRADES, INCLUDING A/E DESIGN, DUE TO THE USE OF EQUIPMENT AND/OR MATERIALS OTHER THAN THAT OF THE BASIS OF DESIGN SHALL BE PAID BY THE CONTRACTOR.

**RECORD DRAWINGS**

CONTRACTORS SHALL MAINTAIN A COMPLETE AND ACCURATE SET OF MARKED UP DRAWINGS SHOWING ACTUAL LOCATIONS OF INSTALLED WORK. THESE DRAWINGS ARE TO BE FORWARDED TO THE OWNER AS PART OF THE OPERATION AND MAINTENANCE MANUALS AT THE COMPLETION OF THE PROJECT.

**ACCESS DOORS**

PROVIDE ALL ACCESS DOORS/PANELS AS REQUIRED FOR ACCESS TO VALVES, DAMPERS, CONTROL DEVICES, FILTERS AND ANY OTHER ITEMS FOR WHICH ACCESS IS REQUIRED FOR EITHER OPERATION OR SERVICING. WHERE ACCESS DOORS ARE TO BE INSTALLED IN ASSEMBLIES REQUIRED TO HAVE A SPECIFIC FIRE RATING, ACCESS DOORS SHALL ALSO BE FIRE RATED.

**PIPING AND DUCTWORK SEALANT THROUGH RATED ASSEMBLIES**

PENETRATIONS SHALL BE SEALED AS REQUIRED IN ACCORDANCE WITH BUILDING AND MECHANICAL CODES TO RESIST THE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION IN ORDER TO MAINTAIN THE RESISTANCE RATING OF THE CONSTRUCTION BEING PENETRATED.

**PROTECTION OF MATERIALS AND EQUIPMENT**

CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL WORK, MATERIALS, AND EQUIPMENT PROVIDED UNDER THIS SECTION. PIPE OPENINGS SHALL BE CLOSED WITH CAPS OR PLUGS TO PREVENT THE ENTRANCE OF DEBRIS DURING CONSTRUCTION. ALL DUCTWORK OPENINGS SHALL BE SEALED CLOSED DURING CONSTRUCTION.

**EQUIPMENT AND PIPING IDENTIFICATION**

PROVIDE EQUIPMENT LABELS FOR ALL MAJOR EQUIPMENT, INCLUDING BUT NOT LIMITED TO AIR HANDLING SYSTEMS, FANS, VAV BOXES, CONTROLS, DAMPERS, CONTROL VALVES AND PUMPS.

PROVIDE PIPE MARKERS ON CW, HW AND HWC SYSTEMS. LABELS TO BE AT MAXIMUM 8 FEET APART, WITH FLOW DIRECTION INDICATED, AS APPLICABLE.

ADDITIONALLY, PROVIDE LABELING ON POTABLE WATER MANIFOLDS INDICATING PLUMBING FIXTURE SERVED BY THE OUTLET, AS APPLICABLE.

LABELS SHALL BE AFFIXED OR ADHERED PERMANENTLY TO EQUIPMENT. EQUIPMENT INSTALLED INDOORS TO BE LABELED WITH EMBOSSED TAPE.

EQUIPMENT INSTALLED OUTDOORS TO BE LABELED WITH ENGRAVED PLASTIC LAMINATE SIGNS.

PIPE MARKERS TO BE SELF-ADHESIVE, MANUFACTURED FOR SUCH PURPOSE.

**STARTERS AND DISCONNECTS**

EQUIPMENT STARTERS SHALL BE FURNISHED BY THE MECHANICAL CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR. EQUIPMENT DISCONNECTS SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR UNLESS NOTED OTHERWISE ON THE DRAWINGS. STARTERS SHALL BE NEMA TYPE, AND SHALL INCLUDE PHASE MONITORING FOR MOTORS 5 HP AND LARGER.

**TESTING**

TESTING SHALL BE PERFORMED ON THE FOLLOWING SYSTEMS SPECIFIED. ALL SYSTEMS LISTED MAY NOT BE INCLUDED IN PROJECT, REFER TO DRAWINGS FOR APPLICABLE SYSTEMS.

SOIL, WASTE AND STORM DRAINAGE PIPING SHALL BE TESTED IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL CODES. DOMESTIC WATER PIPING SHALL BE TESTED AND PROVEN WATERTIGHT UNDER A PRESSURE NOT LESS THAN THE WORKING PRESSURE OF THE SYSTEM FOR A 24 HOUR PERIOD.

DOMESTIC WATER PIPING SYSTEM SHALL BE CHLORINATED AND STERILIZED IN ACCORDANCE WITH REQUIREMENTS OF LOCAL JURISDICTION.

NATURAL GAS PIPING SHALL BE TESTED WITH AN AIR PRESSURE OF MINIMUM TWO TIMES THE DESIGN SYSTEM PRESSURE, BUT NO LESS THAN 3 PSIG, FOR A PERIOD OF 24 HOURS WITHOUT PRESSURE DROP.

**BALANCING**

SYSTEM BALANCING SHALL BE PERFORMED BY A CERTIFIED BALANCING CONTRACTOR. BALANCE ALL SYSTEMS INCLUDING AIRFLOW TO AND FROM ALL OPENINGS, AND PUMPED WATER SYSTEMS INCLUDING DOMESTIC WATER RECIRCULATION SYSTEMS AS APPLICABLE. MAKE ANY ADJUSTMENTS NECESSARY TO RESULT IN CONDITIONS INDICATED AND PROVIDE READJUSTMENTS TO ITEMS IN REPORT AS MAY BE REQUESTED BY ARCHITECT/ENGINEER. SUBMIT TWO COPIES OF TEST AND BALANCE REPORT FOR APPROVAL. FAN AND PUMP SYSTEMS TO BE BALANCED WITHIN PLUS OR MINUS 5 PERCENT OF LISTED VALUES. AIR INLETS AND OUTLETS TO BE BALANCED WITHIN PLUS 10 PERCENT OR MINUS 5 PERCENT OF LISTED VALUES. BALANCE REPORT TO INCLUDE:

- UNIT IDENTIFICATION
- MANUFACTURER AND NAMEPLATE DATA
- EQUIPMENT NAMEPLATE AMPERAGE AND ACTUAL AMPERAGE
- RPM (DESIGN AND ACTUAL)
- FAN CFM (DESIGN AND ACTUAL)
- FAN STATIC PRESSURE (DESIGN AND ACTUAL)
- REGISTER, GRILLE, DIFFUSER REFERENCE NUMBER AND LOCATION
- INLET/OUTLET CFM (DESIGN AND ACTUAL)
- FLOW DEVICE PRESSURE DROP, CFM OR GPM

A FINAL BALANCING REPORT SHALL BE PROVIDED TO THE OWNER AFTER COMPLETION OF THE PROJECT.

**CLEANING**

AT THE COMPLETION OF WORK, ALL FIXTURES AND EQUIPMENT SHALL BE THOROUGHLY CLEANED AND DELIVERED IN A CONDITION SATISFACTORY TO THE ARCHITECT. ALL FILTERS SHALL BE REPLACED WITH NEW PRIOR TO OWNER ACCEPTANCE OF THE BUILDING.

**HVAC LEGEND:**

- RECT DUCT (NEW SHADED/EXISTING UNSHADED)
- ROUND DUCT (NEW SHADED/EXISTING UNSHADED)
- RECT DUCT SIZE CHANGE
- RECT DUCT CHANGE TO ROUND
- RECT ELBOW UP (SUPPLY)
- RECT ELBOW UP (NON-SUPPLY)
- RECT ELBOW DOWN (SUPPLY)
- RECT ELBOW DOWN (NON-SUPPLY)
- ROUND ELBOW UP
- ROUND ELBOW DOWN
- RECT ELBOW W/ TURNING VANES
- ROUND ELBOW
- ROUND TAKE-OFF W/ DAMPER FROM RECT MAIN
- ROUND TAKE-OFF W/ DAMPER FROM ROUND MAIN
- RECT TAKE-OFF W/ DAMPER FROM RECT MAIN
- RECT TAKE-OFF W/ DAMPER FROM ROUND MAIN
- DIFFUSER WITH FLEX DUCT
- RETURN GRILLE (UNDUCTED)
- RETURN/EXHAUST GRILLE (DUCTED)
- AIRFLOW PATTERNS
- THERMOSTAT WITH ZONE TAG
- SENSOR WITH ZONE TAG
- CARBON DIOXIDE SENSOR
- FIRE DAMPER TAG
- FIRE/SMOKE DAMPER WITH DUCT DETECTOR
- SMOKE DAMPER WITH DUCT DETECTOR
- DUCT WITH VOLUME DAMPER
- DUCT WITH MOTORIZED DAMPER
- DUCT WITH COUNTERBALANCED DAMPER
- HVAC SCOPE TO BE REMOVED
- RL — REFRIGERANT LIQUID
- RS — REFRIGERANT SUCTION
- HP — REFRIGERANT HIGH PRESSURE
- LP — REFRIGERANT LOW PRESSURE

**CITY OF FORT COLLINS GREEN CODE REQUIREMENTS**

- 1 BEFORE OCCUPANCY AND AFTER ALL INTERIOR FINISHES ARE COMPLETE, THE BUILDING IS TO BE FLUSHED OUT (VENTILATED) FOR A PERIOD OF 14 DAYS. WHERE CONTINUOUS VENTILATION IS NOT POSSIBLE, THE AGGREGATE OF FLUSH-OUT PERIODS SHALL BE EQUIVALENT TO 14 DAYS. CONTRACTOR SHALL PROVIDE FLUSH-OUT REPORTS TO THE BUILDING OFFICIAL UPON COMPLETION OF WORK. CONTRACTOR TO COORDINATE WITH BUILDING OFFICIAL FOR INFORMATION TO BE CONTAINED IN FLUSH-OUT REPORTS.
- 2 PROTECT HVAC EQUIPMENT FROM CONSTRUCTION DUST AND DEBRIS. DO NOT OPERATE HVAC EQUIPMENT DURING CONSTRUCTION AND SEAL ALL DUCT OPENINGS WITH PLASTIC.
- 3 LOW-VOLATILE ORGANIC COMPOUND (VOC) DUCT INSULATION ADHESIVE SHALL BE USED: DESIGN POLYMERICS 2501, 2502 OR APPROVED EQUAL.
- 4 LOW-VOLATILE ORGANIC COMPOUND (VOC) DUCT SEALANT SHALL BE USED: DESIGN POLYMERICS 1010, 1015 OR APPROVED EQUAL.
- 5 LOW-VOLATILE ORGANIC COMPOUND (VOC) FIRE CAULK SHALL BE USED: 3M FIRE BARRIER 1C 15WB+, PD 150+, CP 25WB+ OR APPROVED EQUAL.
- 6 A CONSTRUCTION WASTE MANAGEMENT PLAN WILL BE IMPLEMENTED REQUIRING RECYCLING OF NONHAZARDOUS CONSTRUCTION DEBRIS. COORDINATE WITH G.C. FOR RECYCLING OF ITEMS RELATED TO THE MECHANICAL SCOPE OF WORK.

**INSULATION NOTES AND HVAC ENERGY CODE**

- 1 THE MECHANICAL DESIGN IS BASED ON THE 2018 INTERNATIONAL ENERGY CONSERVATION CODE.
- 2 ALL SUPPLY, RETURN AND EXHAUST DUCTWORK SHALL BE SEALED AIRTIGHT WITH DUCT SEALANT ALONG ALL SEAMS AND JOINTS.
- 3 SEE HVAC INSULATION SCHEDULE FOR DUCT INSULATION REQUIREMENTS.

**GENERAL HVAC NOTES**

- 1 MECHANICAL WORK SHALL COMPLY WITH ALL APPLICABLE CODES. VERIFY ALL REQUIREMENTS PRIOR TO SUBMITTING BID OR COMMENCING WORK. THE MECHANICAL DESIGN IS BASED ON THE 2018 INTERNATIONAL MECHANICAL CODE.
- 2 ALL DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED SHEET METAL - CONSTRUCTION AND INSTALLATION SHALL CONFORM TO THE CURRENT EDITION OF SMACNA OR AS REQUIRED BY ALL APPLICABLE CODES.
- 3 CONSTRUCT ALL SUPPLY AND RETURN DUCTWORK TO SMACNA 2" PRESSURE CLASS.
- 4 DIMENSIONS OF DUCTWORK SHOWN INDICATES CLEAR INSIDE DIMENSIONS - WHERE DUCT LINER IS TO BE ADDED, INCREASE THE SIZE OF SHEET METAL ACCORDINGLY.
- 5 UNLESS NOTED OTHERWISE, THE SIZE OF THE BRANCH DUCT SERVING A SINGLE DIFFUSER SHALL BE THE SAME AS THE NECK SIZE OF THE DIFFUSER SERVED. FLEXIBLE DUCTWORK SHALL NOT EXCEED 8'-0" IN LENGTH. FLEXIBLE DUCTWORK SHALL BE UL181 LISTED WITH 50/25 SMOKE/FLAME RATING, CONSISTING OF POLYESTER FILM ENCAPSULATING AN INNER CORROSION RESISTANT STEEL WIRE HELIX CORE. FLEXIBLE DUCT SHALL INCLUDE AN EXTERIOR FIBERGLASS INSULATION WITH FOIL SCRIM FILM VAPOR BARRIER JACKET, R-6.
- 6 WALL MOUNTED THERMOSTATS AND SENSORS SHALL BE INSTALLED 48" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE. THERMOSTATS AND SENSORS LOCATED ON EXTERIOR WALL SURFACES SHALL BE PROVIDED WITH AN INSULATED SUB-BASE.
- 7 THERMOSTATS FOR COOLING AND HEATING EQUIPMENT SHALL BE 7-DAY PROGRAMMABLE TYPE, 4 PERIODS PER DAY, 10-HOUR BATTERY BACK-UP, 2-HOUR OVERRIDE, 5 DEG DEAD-BAND, HEAT/COOL/OFF/AUTO CHANGEOVER, AUTO SETBACK TO 55 DEG F (HEAT) AND 85 DEG F (COOL), LCD BACKLIT DISPLAY, HARD WIRED POWER, HARD WIRED CONTROL.
- 8 TEMPORARY HEATING: THE PERMANENT HVAC SYSTEM MAY NOT BE UTILIZED FOR HEATING UNTIL ALL GYPSUM WORK IS COMPLETED AND HAS BEEN PAINTED. IF THE PERMANENT HVAC SYSTEM IS UTILIZED DURING CONSTRUCTION, ALL DUCT INTAKES SHALL BE COVERED WITH FILTER MEDIA (MERV-8 RATING). IF EXCESSIVE DUST OR DEBRIS HAS ENTERED THE SYSTEM THEN ALL COIL AND DUCT SURFACES SHALL BE CLEANED. NEW FILTERS ARE TO BE PROVIDED JUST PRIOR TO TURNOVER TO OWNER. TEMPORARY HEATING OF THE BUILDING PRIOR TO ANY USE OF THE PERMANENT HVAC SYSTEM SHALL BE THE RESPONSIBILITY OF THE G.C.
- 9 TEMPERATURE CONTROLS SHALL BE DESIGN BUILD, CUSTOM, FIELD FABRICATED TO MATCH CORRESPONDING EQUIPMENT. THE SYSTEM SHALL UTILIZE STAND ALONE ELECTRONIC COMPONENTS. THE CONTRACTOR SHALL PROPERLY SELECT, PROVIDE AND INSTALL SYSTEM(S) INCLUDING ALL COMPONENTS NECESSARY FOR A FULL AND COMPLETE, OPERATIONAL SYSTEM. THIS INCLUDES, BUT IS NOT LIMITED TO: LOW VOLTAGE WIRING, THERMOSTATS, DAMPER MOTORS, SOLENOIDS, RELAYS, CONTACTORS, STARTERS, TIME CLOCKS, CONTROL PANELS, SYSTEM COMMISSIONING AND OWNER TRAINING. ALL LINE VOLTAGE INTERFACING SHALL BE COORDINATED DIRECTLY WITH THE ELECTRICAL CONTRACTOR. PROVIDE SUBMITTALS ON COMPONENTS AND WIRING DIAGRAMS PRIOR TO ORDERING

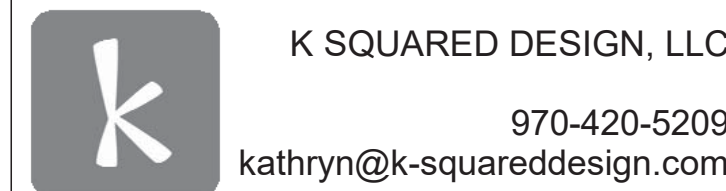
**MECHANICAL DRAWING INDEX**

SHEET NUMBER	SHEET NAME
H0.1	HVAC NOTES, LEGEND & INDEX
H2.1	HVAC PLAN, SCHEDULES & DETAILS



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fort collins, colorado 80521

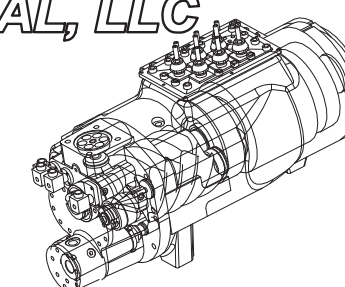
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12 MAR 2021

**FRAMEWORKS TIMBER**

3 OLD TOWN SQUARE  
FORT COLLINS, CO

No.	Description	Date
	ISSUED FOR PERMIT	03.12.21

**HVAC NOTES, LEGEND & INDEX**

Project number	21-023
Date	03-12-2021
Drawn by	GJS
Checked by	GMG

H0.1



## PLUMBING FIXTURE SCHEDULE

FIXTURE TAG	FIXTURE SPECIFICATIONS
S-1	SINK *SINK - ELKAY CROSSTOWN ECTRU17179T, SINGLE COMPARTMENT, 18.5" x 18.5" O.D. x 9" DEEP BOWL, 18 GAUGE, 304 STAINLESS STEEL, COUNTERTOP, UNDERMOUNT, 1 HOLE *FAUCET - DELTA EMERY #19805Z, ADA, SINGLE HANDLE, SINGLE HOLE, PULLDOWN SPOUT, PUSH BUTTON SPRAY/AERATED, 20" HOSE, 1.8 GPM, STAINLESS FINISH, SOAP DISPENSER, SHIELD SPRAY *DISPOSAL - ISE CONTRACTOR 333, 3/4 HP, CONTINUOUS FEED, STAINLESS STEEL GRIND COMPONENTS, 120/1/60 VOLT, STAINLESS FLANGE AND STOPPER *ACCESSORIES - ELKAY LK99 DRAIN, 1-1/2" PVC P-TRAP, CHROME STOPS AND SUPPLIES
RB-1	REFRIGERATOR BOX - OATEY 39150 BOX WITH INTEGRAL SHOCK ABSORBER TOP MOUNTED COLD WATER VALVE - CONFIRM PIPE MATERIAL CONNECTION TYPE
WCO-1	WALL CLEANOUT - ZURN Z-1469 COVER PLATE, POLISHED 304 STAINLESS STEEL, PVC PIPE CLEANOUT - SEE PLAN FOR PIPE SIZE
PWH-1	POTABLE WATER HEATER - RHEEM EGSP6, TANK TYPE, ELECTRIC, 6 GALLON, 3000 WATTS, 120/6/1 VOLTAGE
FD-1	FLOOR DRAIN - ZURN FD-2280, PVC DRAIN BODY, FLASHING COLLAR 5" DIAMETER NICKEL BRONZE STRAINER, ADJUSTABLE HEAD HEIGHT - SEE PLAN FOR DRAIN SIZE.
AAV-1	AIR ADMITTANCE VALVE - STUDOR MINI VENT 20301, PVC, WITH SCREEN, LIFETIME WARRANTY - SEE PLAN FOR PIPE SIZE

## PIPE SUPPORT SCHEDULE

PIPING MATERIAL	MAX HORIZ SPACING	MAX VERT SPACING
ABS PLASTIC < 2.5"	4 FEET	5 FEET
ABS PLASTIC > 2"	4 FEET	10 FEET
ALUMINUM COMPRESSED AIR	8 FEET	10 FEET
CAST-IRON < 10 FOOT SEGMENTS	5 FEET	15 FEET
CAST-IRON 10 FOOT SEGMENTS	10 FEET	15 FEET
CPVC < 1.25"	3 FEET	5 FEET
CPVC > 1" AND < 2.5"	4 FEET	5 FEET
CPVC > 2"	4 FEET	10 FEET
COPPER < 1.5"	6 FEET	10 FEET
COPPER > 1.25"	10 FEET	10 FEET
PEX < 2.5"	32 INCHES	5 FEET
PEX > 2"	32 INCHES	10 FEET
PVC < 2.5"	4 FEET	5 FEET
PVC > 2"	4 FEET	10 FEET
STEEL	12 FEET	15 FEET

## GENERAL PLUMBING NOTES

- PLUMBING WORK SHALL COMPLY WITH ALL APPLICABLE CODES. VERIFY ALL REQUIREMENTS PRIOR TO SUBMITTING BID OR COMMENCING WORK. THE PLUMBING DESIGN IS BASED ON THE 2018 INTERNATIONAL PLUMBING CODE.
- WASTE AND VENT PIPING BELOW SLAB SHALL BE SCHEDULE 40, DWV, PVC, PLASTIC. FITTINGS SHALL BE PVC.
- WASTE AND VENT PIPING ABOVE SLAB (NOT IN RETURN AIR PLENUM) SHALL BE SCHEDULE 40, DWV, PVC, PLASTIC. FITTINGS SHALL BE PVC.
- POTABLE WATER PIPING 2" AND SMALLER SHALL BE PEX-A TUBING MANUFACTURED BY UPONOR/WIRSBO OR APPROVED EQUAL FITTINGS SHALL BE EXPANSION TYPE WITH SECONDARY EXPANSION RING (NOT CRIMPED). CW SHALL BE RUN IN BLUE PIPE, HW & HWC IN RED, OTHER SYSTEMS CLEAR. PIPING SHALL BE PROPERLY SUPPORTED USING PLENUM RATED GALVANIZED TROUGHS OR CHANNELS HUNG AT MAXIMUM 8' INTERVALS. UNSUPPORTED PEX MAY NOT EXCEED 32".
- POTABLE WATER VALVES SHALL BE FULL PORT, BALL TYPE.
- HANGERS FOR 2" AND SMALLER PIPE SHALL BE BAND TYPE, 2.5" AND LARGER SHALL BE CLEVIS TYPE. USE COPPER COATED TYPE ON COPPER PIPE.
- INSTALL FULL SIZE CONDENSATE AND TRAP FOR ALL COOLING COILS. DISCHARGE FULL SIZE DRAIN TO MOP SINK OR LAVATORY P-TRAP TAILPIECE AND TO ROOF FOR ROOFTOP UNITS.

## GENERAL MECHANICAL REQUIREMENTS:

### CODES AND PERMITS

WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODES, REGULATIONS AND ORDINANCES. PERMITS NECESSARY FOR PERFORMANCE OF WORK SHALL BE SECURED AND PAID FOR BY THE CONTRACTOR.

### DRAWINGS AND COORDINATION

DRAWINGS FOR MECHANICAL WORK ARE DIAGRAMMATIC IN NATURE, AND ARE NOT INTENDED TO BE SCALED FOR EXACT MEASUREMENTS NOR TO SERVE AS SHOP DRAWINGS. CHANGES FROM THE PLANS MADE WITHOUT CONSENT OF THE ENGINEER SHALL RELIEVE THE ENGINEER OF RESPONSIBILITY FOR ALL CONSEQUENCES ARISING OUT OF SUCH CHANGES. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. WHERE CONDITIONS REQUIRE REASONABLE CHANGES TO THOSE INDICATED ON THE DRAWINGS, MAKE SUCH CHANGES WITHOUT ADDITIONAL COST TO THE OWNER. COORDINATE ALL WORK WITH OTHER TRADES.

### WARRANTY

WORKMANSHIP, MATERIALS, EQUIPMENT AND PROPER OPERATION SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE FROM THE OWNER. INITIAL ACCEPTANCE OF WORK SHALL NOT WAIVE THIS GUARANTEE. THIS GUARANTEE SHALL NOT INCLUDE NORMAL MAINTENANCE REQUIRED BY THE OWNER AS DESCRIBED IN EQUIPMENT OPERATION AND MAINTENANCE MANUALS.

### SUBMITTALS

CONTRACTOR SHALL SUBMIT TO THE ARCHITECT/ENGINEER A MINIMUM OF (5) COPIES OF SUBMITTAL BROCHURES FOR REVIEW. PROVIDE INFORMATION ON ALL MAJOR EQUIPMENT AS LISTED ON DRAWING EQUIPMENT SCHEDULES, AS WELL AS VALVES, DUCTWORK ACCESSORIES AND TEMPERATURE CONTROL DIAGRAMS AS APPLICABLE.

### OPERATION AND MAINTENANCE MANUALS

CONTRACTOR SHALL FURNISH AT THE COMPLETION OF THE PROJECT (2) COPIES OF COMPLETE OPERATION AND MAINTENANCE MANUALS TO THE ARCHITECT/ENGINEER FOR REVIEW PRIOR TO TURNOVER TO OWNER. MANUALS TO BE BOUND AND INCLUDE INSTALLATION INSTRUCTIONS, REPLACEMENT PARTS LISTS AND MAINTENANCE INFORMATION ON ALL EQUIPMENT AS DESCRIBED IN THE SUBMITTALS SECTION. COMPLETED OPERATION AND MAINTENANCE MANUALS ARE TO BE FORWARDED TO THE OWNER WITHIN 90 DAYS AFTER OWNER BUILDING ACCEPTANCE.

### PRODUCT SUBSTITUTIONS

MANUFACTURER MODEL NUMBERS LISTED ON THE DRAWINGS AND/OR SPECIFICATIONS ARE TO BE CONSIDERED AS THE BASIS OF DESIGN. WHERE TWO OR MORE ALTERNATE MANUFACTURERS OR MATERIALS ARE LISTED, THE CHOICE OF THESE SHALL BE OPTIONAL WITH THE CONTRACTOR. PRIOR TO THE AWARDED OF THE CONTRACT, CONTRACTOR MAY REQUEST A PROPOSED SUBSTITUTION OF MATERIALS IN WRITING TO THE ARCHITECT/ENGINEER NO LATER THAN SEVEN DAYS PRIOR TO THE RECEIPT OF BIDS. THE COST OF ANY CHANGES REQUIRED BY OTHER TRADES, INCLUDING A/E DESIGN, DUE TO THE USE OF EQUIPMENT AND/OR MATERIALS OTHER THAN THAT OF THE BASIS OF DESIGN SHALL BE PAID BY THE CONTRACTOR.

### RECORD DRAWINGS

CONTRACTORS SHALL MAINTAIN A COMPLETE AND ACCURATE SET OF MARKED UP DRAWINGS SHOWING ACTUAL LOCATIONS OF INSTALLED WORK. THESE DRAWINGS ARE TO BE FORWARDED TO THE OWNER AS PART OF THE OPERATION AND MAINTENANCE MANUALS AT THE COMPLETION OF THE PROJECT.

### ACCESS DOORS

PROVIDE ALL ACCESS DOORS/PANELS AS REQUIRED FOR ACCESS TO VALVES, DAMPERS, CONTROL DEVICES, FILTERS AND ANY OTHER ITEMS FOR WHICH ACCESS IS REQUIRED FOR EITHER OPERATION OR SERVICING. WHERE ACCESS DOORS ARE TO BE INSTALLED IN ASSEMBLIES REQUIRED TO HAVE A SPECIFIC FIRE RATING, ACCESS DOORS SHALL ALSO BE FIRE RATED.

### PIPING AND DUCTWORK SEALANT THROUGH RATED ASSEMBLIES

PENETRATIONS SHALL BE SEALED AS REQUIRED IN ACCORDANCE WITH BUILDING AND MECHANICAL CODES TO RESIST THE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION IN ORDER TO MAINTAIN THE RESISTANCE RATING OF THE CONSTRUCTION BEING PENETRATED.

### PROTECTION OF MATERIALS AND EQUIPMENT

CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL WORK, MATERIALS, AND EQUIPMENT PROVIDED UNDER THIS SECTION. PIPE OPENINGS SHALL BE CLOSED WITH CAPS OR PLUGS TO PREVENT THE ENTRANCE OF DEBRIS DURING CONSTRUCTION. ALL DUCTWORK OPENINGS SHALL BE SEALED CLOSED DURING CONSTRUCTION.

### EQUIPMENT AND PIPING IDENTIFICATION

PROVIDE EQUIPMENT LABELS FOR ALL MAJOR EQUIPMENT, INCLUDING BUT NOT LIMITED TO AIR HANDLING SYSTEMS, FANS, VAV BOXES, CONTROLS, DAMPERS, CONTROL VALVES AND PUMPS. PROVIDE PIPE MARKERS ON CW, HW AND HWC SYSTEMS. LABELS TO BE AT MAXIMUM 6 FEET APART, WITH FLOW DIRECTION INDICATED, AS APPLICABLE. ADDITIONALLY, PROVIDE LABELING ON POTABLE WATER MANIFOLDS INDICATING PLUMBING FIXTURE SERVED BY THE OUTLET, AS APPLICABLE.

LABELS SHALL BE AFFIXED OR ADHERED PERMANENTLY TO EQUIPMENT. EQUIPMENT INSTALLED INDOORS TO BE LABELED WITH EMBOSSING TAPE.

EQUIPMENT INSTALLED OUTDOORS TO BE LABELED WITH ENGRAVED PLASTIC LAMINATE SIGNS.

PIPE MARKERS TO BE SELF-ADHESIVE, MANUFACTURED FOR SUCH PURPOSE.

### STARTERS AND DISCONNECTS

EQUIPMENT STARTERS SHALL BE FURNISHED BY THE MECHANICAL CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR. EQUIPMENT DISCONNECTS SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR UNLESS NOTED OTHERWISE ON THE DRAWINGS. STARTERS SHALL BE NEMA TYPE, AND SHALL INCLUDE PHASE MONITORING FOR MOTORS 5 HP AND LARGER.

### TESTING

TESTING SHALL BE PERFORMED ON THE FOLLOWING SYSTEMS SPECIFIED. ALL SYSTEMS LISTED MAY NOT BE INCLUDED IN PROJECT, REFER TO DRAWINGS FOR APPLICABLE SYSTEMS.

SOIL, WASTE AND STORM DRAINAGE PIPING SHALL BE TESTED IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL CODES. DOMESTIC WATER PIPING SHALL BE TESTED AND PROVEN WATERTIGHT UNDER A PRESSURE NOT LESS THAN THE WORKING PRESSURE OF THE SYSTEM FOR A 24 HOUR PERIOD.

DOMESTIC WATER PIPING SYSTEM SHALL BE CHLORINATED AND STERILIZED IN ACCORDANCE WITH REQUIREMENTS OF LOCAL JURISDICTION.

NATURAL GAS PIPING SHALL BE TESTED WITH AN AIR PRESSURE OF MINIMUM TWO TIMES THE DESIGN SYSTEM PRESSURE, BUT NO LESS THAN 3 PSIG, FOR A PERIOD OF 24 HOURS WITHOUT PRESSURE DROP.

### BALANCING

SYSTEM BALANCING SHALL BE PERFORMED BY A CERTIFIED BALANCING CONTRACTOR. BALANCE ALL SYSTEMS INCLUDING AIRFLOW TO AND FROM ALL OPENINGS, AND PUMPED WATER SYSTEMS INCLUDING DOMESTIC WATER RECIRCULATION SYSTEMS AS APPLICABLE. MAKE ANY ADJUSTMENTS NECESSARY TO RESULT IN CONDITIONS INDICATED AND PROVIDE READJUSTMENTS TO ITEMS IN REPORT AS MAY BE REQUESTED BY ARCHITECT/ENGINEER. SUBMIT TWO COPIES OF TEST AND BALANCE REPORT FOR APPROVAL. FAN AND PUMP SYSTEMS TO BE BALANCED WITHIN PLUS OR MINUS 5 PERCENT OF LISTED VALUES. AIR INLETS AND OUTLETS TO BE BALANCED WITHIN PLUS 10 PERCENT OR MINUS 5 PERCENT OF LISTED VALUES. BALANCE REPORT TO INCLUDE:

#### UNIT IDENTIFICATION

MANUFACTURER AND NAMEPLATE DATA  
 EQUIPMENT NAMEPLATE AMPERAGE AND ACTUAL AMPERAGE  
 RPM (DESIGN AND ACTUAL)  
 FAN CFM (DESIGN AND ACTUAL)  
 FAN STATIC PRESSURE (DESIGN AND ACTUAL)  
 REGISTER, GRILLE, DIFFUSER REFERENCE NUMBER AND LOCATION  
 INLET/OUTLET CFM (DESIGN AND ACTUAL)  
 FLOW DEVICE PRESSURE DROP, CFM OR GPM

A FINAL BALANCING REPORT SHALL BE PROVIDED TO THE OWNER AFTER COMPLETION OF THE PROJECT.

### CLEANING

AT THE COMPLETION OF WORK, ALL FIXTURES AND EQUIPMENT SHALL BE THOROUGHLY CLEANED AND DELIVERED IN A CONDITION SATISFACTORY TO THE ARCHITECT. ALL FILTERS SHALL BE REPLACED WITH NEW PRIOR TO OWNER ACCEPTANCE OF THE BUILDING.

## INSULATION NOTES AND PLUMBING ENERGY CODE

- THE MECHANICAL DESIGN IS BASED ON THE 2018 INTERNATIONAL ENERGY CONSERVATION CODE.
- HOT WATER PIPING SHALL BE INSULATED USING FIBERGLASS INSULATION WITH ALL SERVICE JACKET HAVING MAXIMUM 'K' FACTOR OF 0.27. INSULATION THICKNESS SHALL BE 1".
- COLD WATER PIPING SHALL BE INSULATED USING FIBERGLASS INSULATION WITH ALL SERVICE JACKET HAVING MAXIMUM 'K' FACTOR OF 0.27. INSULATION THICKNESS SHALL BE 0.5". DO NOT REMOVE THIS ITEM FROM THE PROJECT AS IT IS REQUIRED FOR CONDENSATE CONTROL.

## PLUMBING LEGEND:

—CW—	COLD WATER PIPING	—○—	BALL VALVE
—HW—	HOT WATER PIPING	—X—	GATE VALVE
—HWC—	HOT WATER CIRC.	—V—	GAS COCK
—TW—	TEMPERED WATER	—R—	PRESS. RED. VALVE
—V—	VENT PIPING	—T & P—	T & P RELIEF VALVE
—W—	WASTE PIPING	—S—	SOLENOID VALVE
—GW—	GREASE WASTE PIPING	—○—	BALANCE VALVE
—CD—	CONDENSATE PIPING	—N—	CHECK VALVE
—G—	NATURAL GAS PIPING	—  —	UNION
—F—	FIRE PIPING	—□—	PIPE CAP
—LP—	PROPANE PIPING	—>—	PIPE CONTINUATION
—VAC—	VACUUM PIPING	—RD—	ROOF DRAIN PIPE
—CA—	COMP AIR PIPING	—ORD—	OVERFLOW RD PIPE
—○—	PIPE ELBOW DOWN	—○—	ROOF DRAIN
—○—	PIPE ELBOW UP	—○—	FLOOR CLEANOUT
—○—	PIPE TEE UP	—○—	GRADE CLEANOUT
—○—	PIPE TEE DOWN	—○—	WALL CLEANOUT
—X—	DETAIL X	—○—	PIPE TO BE REMOVED
SHT #	SHEET #	—(N)—	INVERT ELEVATION
101	REFERENCE	—(E)—	NEW
	DETAIL	—(R)—	EXISTING
	OR ISOMETRIC		RELOCATE

## PLUMBING DRAWING INDEX

SHEET NUMBER	SHEET NAME
P0.1	PLUMBING NOTES, LEGEND, SCHEDULES & INDEX
P2.1	PLUMBING FLOOR PLANS & DETAILS

studio S  
architecture

715 w. mountain avenue  
fort collins, colorado 80521

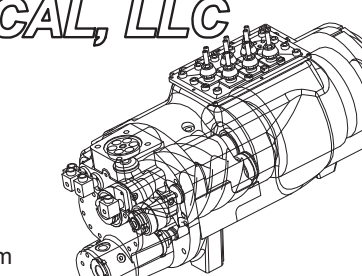
phone: 970.231.1040  
e-mail: heidi@studio-s-arch.com

k K SQUARED DESIGN, LLC  
970-420-5209  
kathryn@k-squaredesign.com

INTEGRATED  
MECHANICAL, LLC

223 Linden St., Suite 204  
Fort Collins, CO 80524

Phone: 970-556-0570  
Front-desk@int-mech.com



## FRAMEWORKS TIMBER

3 OLD TOWN SQUARE  
FORT COLLINS, CO

No.	Description	Date
	ISSUED FOR PERMIT	03.12.21

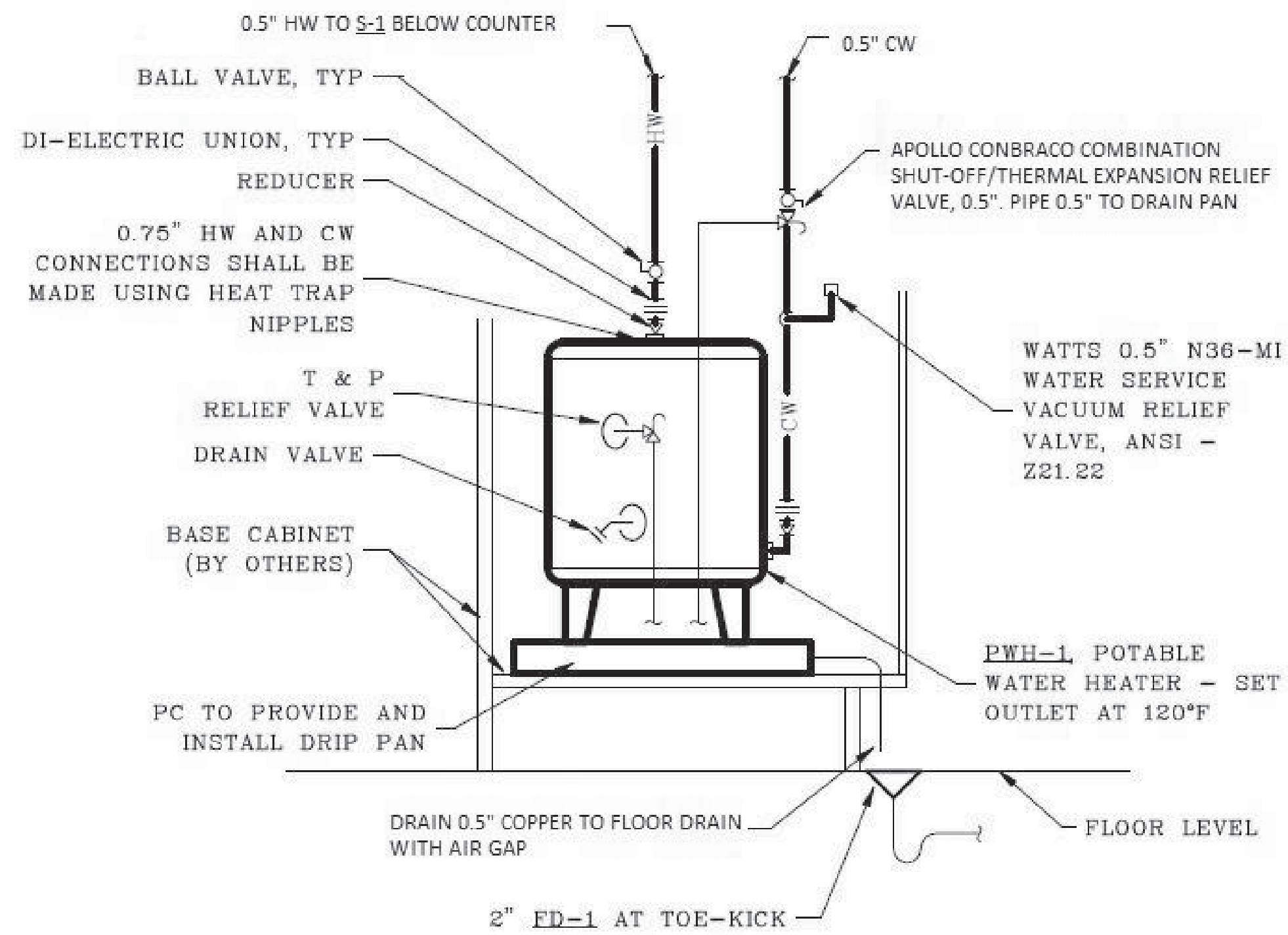
## PLUMBING NOTES, LEGEND, SCHEDULES & INDEX

Project number 21-023  
 Date 03-12-2021  
 Drawn by GJS  
 Checked by GMG

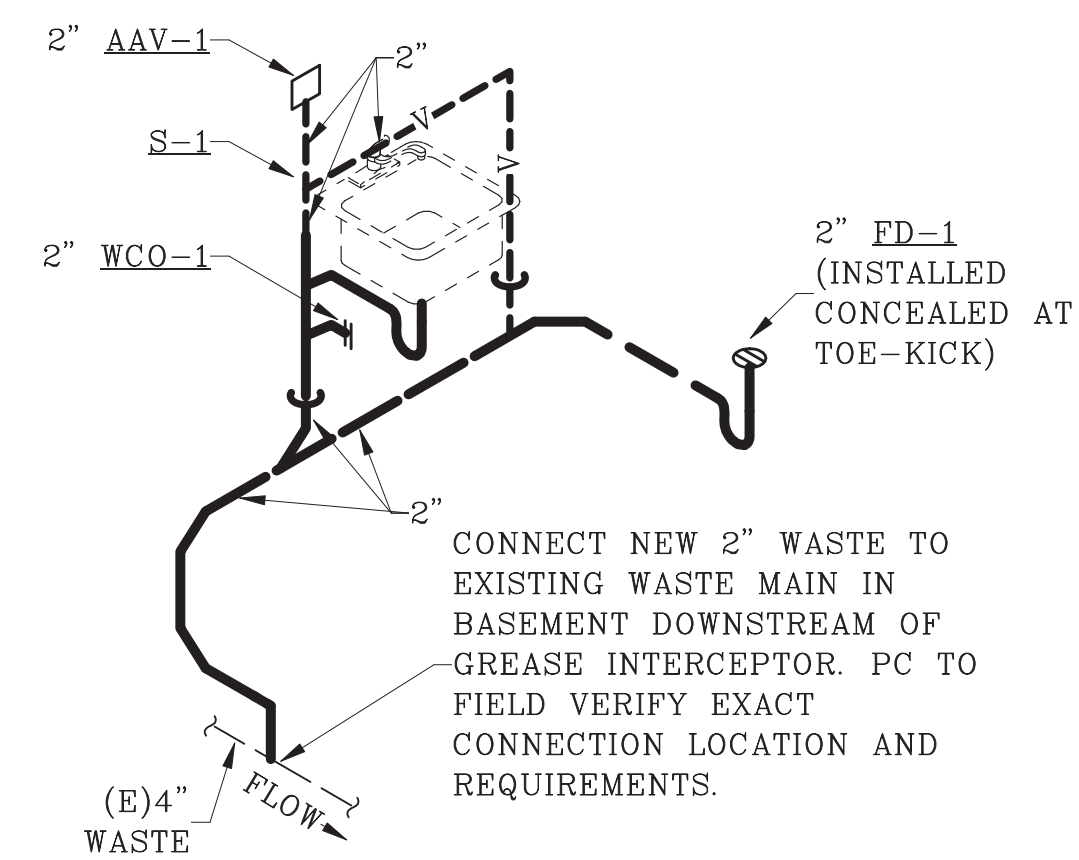
P0.1

**FIXTURE ROUGH-IN SCHEDULE**

FIXTURE TYPE	COLD WATER	HOT WATER
SINK	0.5"	0.5"
REFRIGERATOR BOX (ICE)	0.5"	-



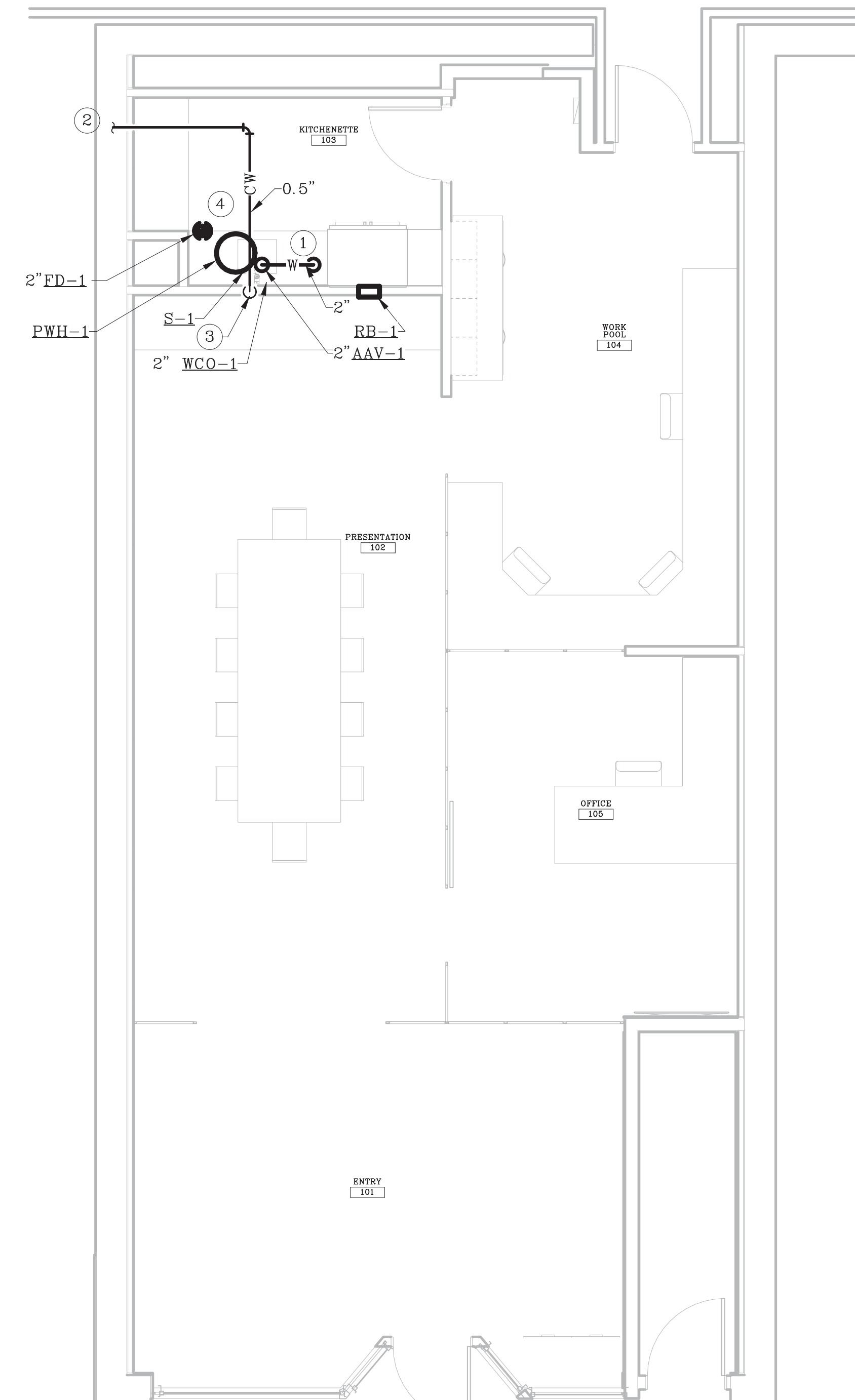
**POTABLE WATER HEATER  
INSTALLATION DETAIL** SCALE: NONE



**WASTE AND VENT  
ISOMETRIC** NO SCALE

**FLAG NOTES:**

- ① ROUTE NEW 2" WASTE FROM KITCHENETTE DOWN TO WITHIN BASEMENT. CONNECT TO EXISTING WASTE LINE DOWNSTREAM OF EXISTING GREASE INTERCEPTOR. REFER TO WASTE AND VENT ISOMETRIC ON THIS SHEET. CONTRACTOR SHALL FIELD VERIFY CONNECTION REQUIREMENTS AND COORDINATE SCOPE OF WORK IN NEIGHBORING TENANT SPACE WITH GC.
- ② CONNECT NEW 0.75" CW PIPING TO (E) BUILDING CW PIPING FROM THE RESTROOM GROUP TO THE WEST OF THE KITCHENETTE. FIELD VERIFY AND COORDINATE CONNECTION LOCATION.
- ③ 0.5" CW ROUTED DOWN IN WALL AND INTO CASEWORK TO SERVE PWH-1, S-1 AND RB-1. ROUTE 0.5" CW TO PWH-1 MOUNTED WITHIN CASEWORK AND REFER TO FIXTURE ROUGH-IN SCHEDULE ON THIS SHEET FOR ADDITIONAL INFORMATION.
- ④ PWH-1 MOUNTED WITHIN CASEWORK. REFER TO POTABLE WATER HEATER INSTALLATION DETAIL ON THIS SHEET FOR ADDITIONAL INFORMATION.



**PLUMBING FLOOR PLAN** 1/4" = 1'-0"



No.	Description	Date
1	ISSUED FOR PERMIT	03.12.21

**PLUMBING FLOOR PLANS & DETAILS**

Project number	21-023
Date	03-12-2021
Drawn by	GJS
Checked by	GMG





**TABLE C405.3.2(2)**  
**INTERIOR LIGHTING POWER ALLOWANCES:**  
**SPACE-BY-SPACE METHOD**

<b>COMMON SPACE TYPES<sup>a</sup></b>	<b>LPD</b> (watts/sq.ft)
Atrium	
Less than (<) 40 feet in height	0.03 per ft/height
Greater than (>) 40 feet in height	0.40+0.02 per ft/height
Audience seating area	
In an auditorium	0.63
In a convention center	0.82
In a gymnasium	0.65
In a motion picture theater	1.14
In a penitentiary	0.28
In a performing arts theater	2.03
In a religious building	1.53
In a sports arena	0.43
Otherwise	0.43
Banking activity area	0.86
Breakroom (See Lounge/breakroom)	
Classroom/lecture hall/training room	
In a penitentiary	1.34
Otherwise	0.96
Computer room	1.33
Conference/meeting/multipurpose	1.07
Copy /print room	0.56
Corridor	
In a facility for the visually impaired (not used primarily by staff) <sup>b</sup>	0.92
In a hospital	0.92
In a manufacturing facility	0.29
Otherwise	0.66
Courtroom	1.39
Dining area	
In a bar/lounge or leisure dining	0.93
In a cafeteria or fast food dining	0.63
In a facility for the visually impaired (not used primarily by staff) <sup>b</sup>	2.00
In family dining	0.71
In a penitentiary	0.96
Otherwise	0.63
Electrical/mechanical room	0.43
Emergency vehicle garage	0.41
Food preparation area	1.06
Guestroom <sup>c,d</sup>	0.77
Laboratory	
In or as a classroom	1.20

<b>COMMON SPACE TYPES<sup>a</sup></b>	<b>LPD</b> (watts/sq.ft)
Otherwise	1.45
Laundry/washing area	0.43
Loading dock, interior	0.58
Lobby	
For an elevator	0.68
In a facility for the visually impaired (not used primarily by staff) <sup>b</sup>	2.03
In a hotel	1.06
In a motion picture theater	0.45
In a performing arts theater	1.7
Otherwise	1.0
Locker room	0.48
Lounge/breakroom	
In a healthcare facility	0.78
Otherwise	0.62
Office	
Enclosed	0.93
Open plan	0.81
Parking area, interior	0.14
Pharmacy area	1.34
Restroom	
In a facility for the visually impaired (not used primarily by staff) <sup>b</sup>	0.96
Otherwise	0.85
Sales area	1.22
Seating area, general	0.42
Stairway (see space containing stairway)	
Stairwell	0.58
Storage room	0.46
Vehicular maintenance area	0.56
Workshop	1.14
<b>BUILDING TYPE SPECIFIC SPACE TYPES<sup>a</sup></b>	<b>LPD</b> (watts/sq.ft)
Automotive (see vehicular maintenance area)	
Convention center-exhibit space	0.88
Dormitory-living quarters <sup>c,d</sup>	0.54
Facility for the visually impaired <sup>b</sup>	
In a chapel (not used by primary staff)	1.06
In rec room (not used by primary staff)	1.80
Fire station-sleeping quarters <sup>c</sup>	0.20
Gymnasium/fitness center	
In an exercise area	0.50
In a playing area	0.82

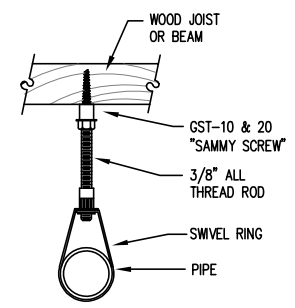
*(continued)*

<b>BUILDING TYPE SPECIFIC SPACE TYPES<sup>a</sup></b>	<b>LPD</b> (watts/sq.ft)
<b>Healthcare facility</b>	
In an exam/treatment room	1.68
In an imaging room	1.06
In a medical supply room	0.54
In a nursery	1.00
In a nurse's station	0.81
In an operating room	2.17
In an patient room <sup>c</sup>	0.62
In a physical therapy room	0.84
In a recovery room	1.03
<b>Library</b>	
In a reading area	0.82
In the stacks	1.20
<b>Manufacturing facility</b>	
In a detailed manufacturing area	0.93
In an equipment room	0.65
In an extra-high-bay area > 50' high	1.05
In a low-bay-area 25'-50' high	0.75
In a low-bay-area < 25' high	0.96
<b>Museum</b>	
In a general exhibition area	1.05
In a restoration room	0.85
Performing arts theater dressing rm	0.36
Post office-sorting area	0.68
<b>Religious buildings</b>	
In a fellowship hall	0.55
In a worship/pulpit/choir area	1.53
<b>Retail facilities</b>	
In a dressing/fitting room	0.5
In a mall concourse	0.9
<b>Sports arena-playing area</b>	
For a Class I facility <sup>e</sup>	2.47
For a Class II facility <sup>f</sup>	1.96
For a Class III facility <sup>g</sup>	1.7
For a Class IV facility <sup>h</sup>	1.13
<b>Transportation facility</b>	
In a baggage/carousel area	0.45
In an airport concourse	0.31
At a terminal ticket counter	0.62
<b>Warehouse-storage area</b>	
For med to bulky, palletized items	0.35
For smaller, hand-carried items	0.69



I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION. I AM A DULY LICENSED NICET III

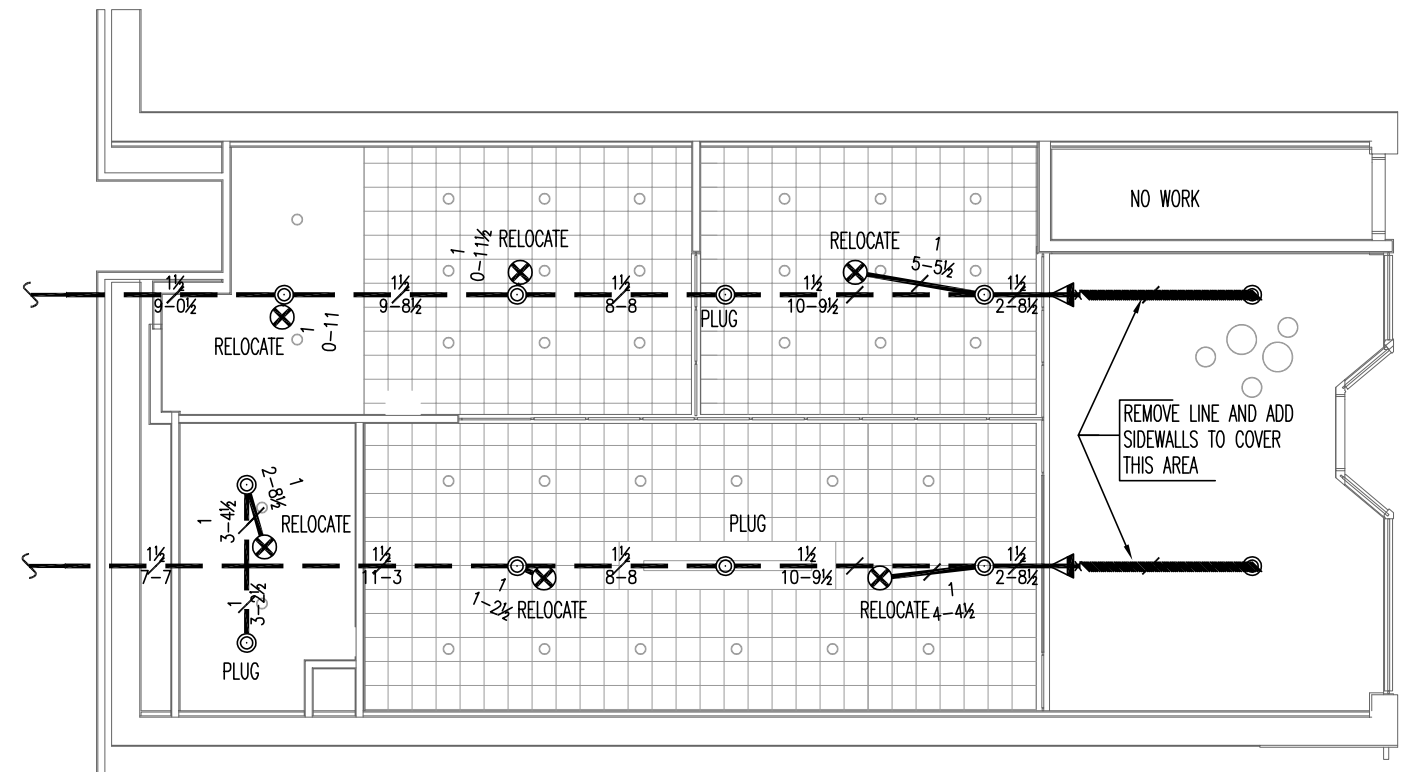
**BRUCE & THOMAS**  
 SIGNATURE  
 BRUCE S THOMAS-ENGINEERING TECHNICIAN  
 NICET LICENSE# 98592 FIRE PROTECTION  
 DATE: 2-18-2021  
 MN STATE LICENSE# CO-78



**HANGER DETAIL**  
 NOT TO SCALE

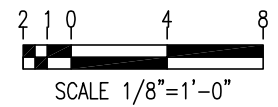
**OWNER RESPONSIBILITY**

SPECIAL NOTE--ALL AREAS THAT ARE CONDITIONED MUST NOT DROP BELOW 40 DEGREES. ANY DROP BELOW 40 DEGREES MAY CAUSE THE SYSTEM TO FREEZE.



**FLOOR PLAN** 1/8"=1'-0"

ALL EXISTING PIPE IS DASHED



SCOPE OF WORK  
 RELOCATE HEADS FOR NEW TENANT

GENERAL NOTES

1. SYSTEM PER NFPA 13 2016
2. HANGERS PER NFPA 13 2016
3. SYSTEM WILL NOT BE TESTED
4. 1" PIPE TO BE SCH 30 WLS
5. SCREWED PIPE TO HAVE DUCTILE IRON SCREWED FITTINGS
6. ALL HEADS IN LIGHT HAZARD AREAS TO BE QUICK RESPONSE

HD'S THIS SHEET 8		SPRINKLER'S		TOTAL HD'S JOB 8						Drawing Title FIRE PROTECTION		<b>FLOW FIRE PROTECTION, INC</b> 3054 LAKE CANAL COURT / UNIT 100 FORT COLLINS, CO 80524 <small>COLORADO STATE LIC # 21-S-04285    COLORADO STATE BACKFLOW LIC #21-B-08191</small>	
SYM.	DESCRIPTION	SIN	Type	DEG.	K	NPT	Finish	ESC	Qty	Contract No.	Drawn By:		
⊙	EXISTING 1" OUT-LET									21-024	DESIGN LINE CO-78 BRUCE THOMAS 763-274-0768		
⊗	RELIABLE MOD G5 CONCEALED	RA3415	PENDENT	155	5.6	1/2"	WHITE	CONCEALED	6				
◁	RELIABLE MOD F1FR56	RA1435	HORZ SIDEWALL	155	5.6	1/2"	CHROME	FLAT	2				
										Scale:	AS NOTED		
										Date:	2/18/21		
										Approval By:	CITY		
											Job: <b>FRAMEWORKS OFFICE</b> <b>3 OLD TOWN SQUARE</b> <b>FORT COLLINS, CO</b>		

SHEET 1 OF 1