



ITD DIST. 3 TENANT IMPROVEMENT

8150 WEST CHINDEN BLVD

GARDEN CITY, ID

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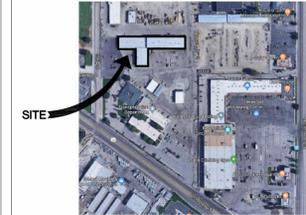
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SITE LOCATION



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G11 CODE PLAN & DETAIL ASSEMBLIES
G71 ASSEMBLIES

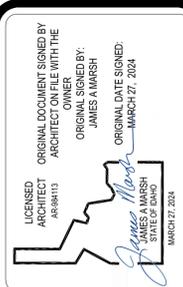
CIVIL
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P00.1 PLUMBING COVER SHEET



LICENSED ARCHITECT ARCHITECTURE
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ORIGINAL DOCUMENT SIGNED BY ARCHITECT ON FILE WITH THE ARCHITECTURE BOARD OF IDAHO
ORIGINAL SIGNED BY: JAMES A. MARSH
ORIGINAL DATE SIGNED: MARCH 27, 2024

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CSHQ

L2 TENANT IMPROVEMENT PERMIT SET

PROJECT	DATE
23002	03-27-24
DRAWN	CHECKED
SS	LB

REVISION

SHEET TITLE

TITLE SHEET

SHEET

G00

ORIGINAL SHEET SIZE
24" x 36"

ABBREVIATIONS

C	CENTERLINE	HT.	HEIGHT
CH	CHANGING	HVAC	HEATING VENTILATING AND AIR CONDITIONING
Ø	DIAMETER	I.D.	INSIDE DIAMETER
(E)	EXISTING	IN.	INCH
(F)	FUTURE	INSUL.	INSULATION
(N)	NEW	INT.	INTERIOR
(R)	RENEW/RELOCATED	JAN.	JANITOR
AB	AIR CONDITIONING	JT.	JOINT
A.D.A.A.G.	AMERICANS WITH DISABILITIES ACT	K.F.	KNOCKOUT
A.F.F.	ABOVE FINISH FLOOR	KIT.	KITCHEN
A.O.A.	AIRLINES OPERATION AREA	L.F.	LINEAL FEET OR FOOT
AC	AIR CONDITIONING	L.P.	LOW POINT
ABV.	ABOVE	LAM.	LAMINATE
ACCUPT.	ACCUSTICAL	LAV.	LAVATORY
ADJ.	ADJUSTABLE	LBS.	POUNDS
ADG.	ADGREGATE	M.B.	MACHINE BOLT
ALT.	ALTERNATIVE	M.O.	MANNHOLE
ALUM.	ALUMINUM	MAX.	MAXIMUM
APPROX.	APPROXIMATE	MECH.	MECHANICAL
ARCH.	ARCHITECTURAL	MET.	METAL
AUTO.	AUTOMATIC	MFR.	MANUFACTURER
AVE.	AVENUE	MN.	MINIMUM
B.O.	BOTTOM OF	MISC.	MISCELLANEOUS
B.O.C.	BASE OF CURB	MTD	MOUNTED
B.U.	BUILT UP	N.	NORTH
BD.	BOARD	N.I.C.	NOT IN CONTRACT
BLD.	BUILDING	N.S.	NEAR SIDE
BLK.	BLOCK	N.T.S.	NOT TO SCALE
BM.	BEAM	NO.	NUMBER
BS.	BOTTOM	NOM.	NOMINAL
C.B.	CATCH BASIN	O.A.	OVER ALL
C.C.	CENTER TO CENTER	O.C.	ON CENTER
C.I.	CAST IRON	O.D.	OUTSIDE DIAMETER
C.I.P.	CAST IN PLACE	O.P.	OPPOSITE HAND
C.M.U.	CONCRETE MASONRY UNIT	O.S.	OPEN TO STRUCTURE
C.O.	CONCRETE OPENING OR CLEAN-OUT	OH	OVERHEAD
C.T.	CERAMIC TILE	OFF.	OFFICE
C.W.	COLD WATER	OPNG.	OPENING
CAB.	CABINET	OPP.	OPPOSITE
CEM.	CEMENT	OZ.	OUNCE
CEM.	CURB FEETMINUTE	PL.	PLUMBING
CFM.	CUBIC FEET PER MINUTE	P.LAM.	PLASTIC LAMINATE
CLG.	CLEAR	P.T.D.	PAPER TOWEL DISPENSER
CLR.	COUNTERSINK	PL.	PROPERTY LINE
COL.	COLUMN	PLNT.	PLANT
CONC.	CONCRETE	PL.	PLATE
CONTR.	CONTRACTOR	PLUMB.	PLUMBING
CORR.	CORRIDOR	P.WOOD.	PLYWOOD
OW	COORDINATE WITH	PRE-ENG.	PRE-ENGINEERED
D.	DEEP	PNT.	POINT
D.B.A.	DEFORMED BAR ANCHOR	QT.	QUARRY TILE
D.F.	DRINKING FOUNTAIN	R.	RADIUS OR RISE
D.S.	DOWNSPUT	R.D.	ROOF DRAIN
D.S.P.	DRY STANDOFF	R.O.	ROUGH OPENING
DET.	DIAMETER	R.W.L.	RAIN WATER LEADER
DIA.	DIAGONAL	RE.	REFERENCE (C/W)
DNA.	DIAMENSION	REINF.	REINFORCED
DN.	DOWN	REQD.	REQUIRED
DWG.	DRAWING	R.N.	ROOM NUMBER
E.B.	EXPANSION BOLT	R.S.C.	RIGID SOLID CORE
E.I.F.S.	EXTERIOR INSULATION & FINISHING SYSTEM	S.C.D.	SOFT COVER DISPENSER
E.J.	EXPANSION JOINT	S.D.	SOAP DISPENSER
E.P.	ELECTRICAL PANELBOARD	S.F.	SQUARE FEET OR FOOT
E.W.C.	ELECTRIC WATER COOLER	S.I.D.A.	SECURITY IDENTIFICATION DISPLAY AREA
EA.	EACH	S.N.D.	SANITARY NAPKIN DISPENSER
EL.	ELEVATION	S.N.R.	SANITARY NAPKIN RECEPTACLE
ELEC.	ELECTRICAL	S.S.	STAINLESS STEEL
ELEV.	ELEVATOR	SCHED.	SCHEDULE
EQ.	EQUAL	SECT.	SECTION
EQUIP.	EQUIPMENT	SHR.	SHOWER
EXH.	EXHAUST	SHR.	SHOWER
EXP.	EXPANSION	SIM.	SIMILAR OR SIMILAR TO
EXT.	EXTERIOR	SPEC.	SPECIFICATIONS
F.A.	FIRE ALARM	SQ.	SQUARE
F.B.	FLAT BAR	ST.	STREET
F.D.	FLOOR DRAIN	STD.	STANDARD
F.E.	FIRE EXTINGUISHER	STRUC.	STRUCTURAL
F.E.C.	FIRE EXTINGUISHER CABINET	SUSP.	SUSPENDED
F.F.C.	FIRE HOSE CABINET	SYM.	SYMMETRICAL
F.O.	FACE OF	T.A.G.	TONGUE & GROOVE
F.O.C.	FACE OF CURB/CONCRETE	T.B.	TREAD
F.O.F.	FACE OF FINISH	T.D.	TOWEL BAR
F.O.M.	FACE OF MASONRY	T.D.	TOP OF DRAIN
F.O.S.	FACE OF STUDS	T.O.F.	TOP OF
F.O.T.	FACE OF TREAD	T.O.C.	TOP OF CURB/CONCRETE
F.S.	FIRE SIDE	T.O.M.	TOP OF MASONRY
FDN.	FOUNDATION	T.O.P.	TOP OF PARAPET
FIN.	FINISH	T.O.S.	TOP OF SLAB
FLASH.	FLASHING	T.O.W.	TOP OF WALL
FT.	FOOT OR FEET	T.P.D.	TOILET PAPER DISPENSER
FTG.	FOOTING	TEL.	TELEPHONE
FTW.	FIRE TREATED WOOD	THK.	THICKNESS
FURR.	FURRING	THRES.	THRESHOLD
G.	GAS	TYP.	TYPICAL
G.B.	GIRDER	U.B.C.	UNIFORM BUILDING CODE
GA.	GAUGE OR GAGE	U.O.N.	UNLESS OTHERWISE NOTED
GALV.	GALVANIZED	V.C.T.	VENTILATION TILE
GVP.	GYPSONUM	V.F.	VERIFY IN FIELD
H.	HIGH	VERT.	VERTICAL
H.A.S.	HEADED ANCHOR STUD	VEST.	VESTIBULE
H.A.S.	HEADED CONCRETE ANCHOR	W.	WALL BEYOND
H.B.	HOLE BIBB	W.C.	WATER CLOSET OR WALL COVERING
H.C.	HANDICAPPED - A.D.A.A.G.	W.G.	WIRE GLASS
H.M.	HOLLOW METAL	W.G.L.	WIRE GLASS
H.P.	HIGH POINT	W.P.	WORK POINT
H.W.	HOT WATER	WR.	WASTE RECEPTACLE
HORIZ.	HORIZONTAL	W.W.F.	WELDED WIRE FABRIC
HR.	HOUR	W.	WITH
		WO.	WITHOUT
		WD.	WOOD

GENERAL NOTES

- THE APPLICABLE BUILDING CODE IS THE 2018 INTERNATIONAL BUILDING CODE (2018 IBC).
- THE DRAWINGS INDICATE LOCATION, DIMENSIONS, REFERENCE, AND TYPICAL DETAILS OF CONSTRUCTION. THE DRAWINGS DO NOT INDICATE EVERY CONDITION. WORK NOT PARTICULARLY DETAILED SHALL BE OF CONSTRUCTION SIMILAR TO PARTS THAT ARE DETAILED.
- DO NOT SCALE DRAWINGS.
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DRAWINGS. WHERE DISCREPANCIES OCCUR, THEY SHALL BE REPORTED TO ARCHITECT FOR RESOLUTION.
- DETAILED DRAWINGS AND LARGER SCALE DRAWINGS TAKE PRECEDENCE OVER SMALLER SCALE DRAWINGS.
- CONCRETE AND BRICK DIMENSIONS ARE GIVEN TO THE FACE OF CONCRETE OR MASONRY AND TO THE FACE OF ROUGH OPENINGS.
- PARTITION DIMENSIONS ARE GIVEN TO THE FACE OF STUD UNLESS OTHERWISE NOTED.
- DOOR OPENING LOCATIONS ARE DIMENSIONED TO ROUGH OPENING OR CENTERLINE OF OPENING.
- WHERE NO MATERIAL NOTES OCCUR, THE GRAPHIC MATERIAL INDICATION SHALL INDICATE MATERIAL TYPES AND ITEMS. SEE SYMBOL AND MATERIALS LIST ON THIS SHEET.
- THE U. S. ENVIRONMENTAL PROTECTION AGENCY MUST BE NOTIFIED 10 WORKING DAYS IN ADVANCE FOR ALL RENOVATIONS THAT DISTURB 260 L.F. /160 SQ. FT. /35 CU. FT. OF ASBESTOS CONTAINING MATERIALS.
- ALL NEW CONSTRUCTION TO COMPLY WITH THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (A.D.A.A.G.), ICC/ANSI A117.1-2010 (2018 IBC SECTION 1101).
- PROVIDE LANDINGS AND FLOOR LEVELS AT DOORS THAT COMPLY WITH THE 2018 IBC SECTION 1003.5/1010.1.6/1010.1.7.
- UNLESS OTHERWISE INDICATED ALL DRAWINGS, NOTES WHICH DO NOT READ "N.I.C.", "EXISTING", OR "EXISTING TO REMAIN", OR "BY OTHERS" SHALL INDICATE NEW WORK WHICH SHALL BE CONTRACTOR FURNISHED AND CONTRACTOR INSTALLED.
- ALL MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
- THE CONTRACTOR(S) SHALL KEEP ALL AREAS OF CONSTRUCTION CLEAN AND FREE OF DEBRIS. AFTER CONSTRUCTION IS COMPLETE, THE GENERAL CONTRACTOR SHALL PROVIDE FINAL CLEAN UP.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS FOR ACCURACY PRIOR TO COMMENCING WITH THE WORK. ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.
- PENETRATIONS THROUGH RATED ASSEMBLIES SHALL BE FIRE STOPPED IN ACCORDANCE WITH 2018 IBC SECTION 714.4.1 AND 714.4.1.2. PROVIDE A FIRESTOPPING SYSTEM APPROPRIATE FOR THE WORK BEING PERFORMED. PAINTABLE SEALANT SHALL BE PROVIDED AT ALL EXPOSED AREAS. PROVIDE COPIES OF THE SPECIFIC FIRE-STOP SYSTEMS POINTED FOR USE IN THIS PROJECT AT PENETRATIONS OF ONE-HOUR WALLS OR TWO-HOUR SHAFTS AND FLOOR ASSEMBLIES. FOR APPROVAL AND INSPECTION USE BY THE FIRE AND STRUCTURAL INSPECTORS. ASSEMBLIES SHALL SHOW ALL REQUIRED COMPONENTS AND METHOD OF INSTALLATION TO PROVIDE THE REQUIRED FIRE-STOP RATINGS AS SYSTEM BEING PENETRATED.
- THIS SPACE MAY NOT BE OCCUPIED UNTIL IT RECEIVES A CERTIFICATE OF OCCUPANCY AND FIRE DEPARTMENT APPROVAL. CONTRACTOR SHALL NOT CORE DRILL WITHOUT VERIFYING LOCATION OF CONCRETE REINFORCING.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND FEES NECESSARY TO EXECUTE THE INTENT OF THESE CONSTRUCTION DOCUMENTS.
- EXIT SIGNAGE SHALL BE EXTERNALLY OR INTERNALLY ILLUMINATED BY THE PREMISES' WIRING, STORAGE BATTERIES AND, BE IN COMPLIANCE WITH 2018 IBC SECTION 1013.
- PROVIDE BLOCKING AS REQUIRED FOR ALL AREAS TO RECEIVE MILLWORK AND WALL-ATTACHED ITEMS AS SHOWN IN PLANS. ALL EXITS SHALL BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT. 2018 IBC, SECTION 1010.1.9.
- EXIT WAYS SHALL BE ILLUMINATED. THE POWER SUPPLY FOR EXIT ILLUMINATION SHALL NORMALLY BE PROVIDED BY THE PREMISES' WIRING SYSTEM, 2018 IBC SECTION 1008.
- COORDINATE MECHANICAL AND ELECTRICAL REQUIREMENTS, ROUTING, AND FIELD VERIFICATION.
- WHERE NEW CONSTRUCTION JOINS WITH EXISTING CONSTRUCTION, ALIGN FINISHED SURFACE OF NEW CONSTRUCTION WITH EXISTING CONSTRUCTION.
- PROVIDE COPY OF FIRE-RESISTANCE RATING ASSEMBLIES TO THE STRUCTURAL INSPECTOR FOR VERIFICATION OF TESTING LISTING COMPLIANCE AND TO INSPECT ASSEMBLY CONSTRUCTION THEREWITH.
- COORDINATE CONSTRUCTION ACTIVITIES WITH OWNER.
- FIRE SPRINKLER AND ALARM MODIFICATIONS REQUIRE SEPARATE APPLICATION AND PLAN SUBMITTALS PRIOR TO PERFORMING WORK. ALL LIFE-SAFETY FEATURES SHALL BE APPROVED BY THE FIRE AND STRUCTURAL INSPECTORS PRIOR TO OCCUPANCY.
- ALL CONSTRUCTION ADDENDA, CHANGE ORDERS, OR DESIGN CLARIFICATIONS TO THOSE ITEMS REGULATED BY THE CODES MUST BE SUBMITTED TO THE FIELD INSPECTOR FOR REVIEW AND APPROVAL PRIOR TO COMMENCING WITH ANY OF THE PROPOSED WORK RELATED TO THE PROPOSED FIELD CHANGE.
- SUSPENDED CEILING SYSTEMS TO BE INSTALLED IN ACCORDANCE WITH 2018 IBC SECTION 808.1.1.1 AND ASTM C 635 AND ASTM C 636.
- ALL INSULATION MATERIALS SHALL COMPLY WITH 2018 IBC SECTION 720.
- HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERABLE PARTS ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST TO OPERATE. SUCH HARDWARE SHALL BE AT 34" MINIMUM AND 48" MAXIMUM ABOVE THE FLOOR OR GROUND. 2018 IBC SECTION 1010.1.9.
- COMBUSTIBLE MATERIALS SHALL NOT BE USED IN CONCEALED SPACES UNLESS EVIDENCE OF COMPLIANCE WITH 2018 IBC SECTION 717.5 IS PROVIDED TO THE STRUCTURAL INSPECTOR FOR REVIEW AND APPROVAL.
- DECORATIVE MATERIALS AND TRIM SHALL BE RESTRICTED BY COMBUSTIBILITY AND THE FLAME PROPAGATION PERFORMANCE CRITERIA OF NFPA 701, IN ACCORDANCE WITH 2018 IBC SECTION 806. CONTRACTOR SHALL HAVE CERTIFICATE OF COMPLIANCE FOR DECORATIVE MATERIALS AND TRIM, INDICATING COMPLIANCE WITH THIS CODE SECTION AS APPLICABLE TO THIS PROJECT AVAILABLE AT PROJECT SITE.
- CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE EVIDENCE OF CODE COMPLIANCE OF RATING OF WALL AND CEILING FINISH MATERIALS AT CONSTRUCTION SITE FOR REVIEW BY FIRE AND STRUCTURAL FIELD INSPECTORS IN ACCORDANCE WITH 2018 IBC SECTION 803 AND TABLE 803.13.
- ACCESS TO MECHANICAL APPLIANCES INSTALLED IN UNDER-FLOOR AREAS, IN ATTIC SPACES AND ON ROOFS OR ELEVATED STRUCTURES SHALL BE IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE.
- CONTROLS, OPERATING MECHANISMS AND HARDWARE INTENDED FOR OPERATION BY THE OCCUPANT, INCLUDING SWITCHES THAT CONTROL LIGHTING AND ACCESSIBLE.
- VENTILATION AND EXHAUST SYSTEMS SHALL BE PROVIDED AS REQUIRED BY THE INTERNATIONAL MECHANICAL CODE AND THE INTERNATIONAL FIRE CODE.

Plan Review Note
The Fire Sprinkler/Smoke Detectors/CO Detectors the submitted drawings and plans shall not have been reviewed, deletion, or movement of substantially code compliant, other code compliance requirements shall be waived. Conditions with drawings may affect the sprinkler performance. A sprinkler approval by a licensed sprinkler contractor should be made to ensure that any modification to the sprinkler system is warranted. Any alteration deletions or additions to the system shall be approved by a licensed sprinkler contractor and be approved by the fire marshal through plan review and inspection. Inspection shall not take place without a complete set of the Idaho Division of Occupational and Professional Licenses (IDOPL) plan review notes and approved, stamped plans on site.

MATERIALS & SYMBOLS

	EARTH		WINDOW TYPE, RE: A82 WINDOW TYPES
	POROUS FILL - GRAVEL		DOOR NUMBER, RE: A82 DOOR SCHEDULE
	SAND FILL		MATERIAL FINISH, RE: A81 & I81 FINISH SCHEDULE
	CONCRETE		RELATED SPECIFICATION DIVISION
	CONCRETE MASONRY UNIT (NORMAL WEIGHT)		RELATED SPECIFICATION SECTION
	SINGLE GLAZING		SHEET NOTE, RE: SHEET NOTES LIST ON CURRENT PAGE
	INSULATED GLAZING		SHEET NOTE
	METAL, (LARGE SCALE DRAWING)		WALL TYPE, RE: A21 FOR WALL TYPES WITH VARIABLE HEIGHT, SEE TOP OF WALL ELEVATION
	METAL, (SMALL SCALE DRAWING)		ACCESSORY/FIXTURE TYPE, RE: A42
	FRAMING LUMBER		REVISION KEY RE: REVISED BOX IN TITLE BLOCK OF CURRENT PAGE
	PLYWOOD		PROPERTY LINE
	PARTICLE BOARD		SWALE/FLOW LINE
	FINISH LUMBER		TRENCH DRAIN
	GYPSONUM BOARD		AREA DRAIN / CATCH BASIN
	ACOUSTIC TILE/PANEL		FLUSH SURFACE MEETING
	BATT INSULATION		BUILDING GRID LINE
	SEMI-RIGID INSULATION		STRUCTURE CENTERLINE
	RIGID INSULATION		ELEVATION POINT
	MOISTURE BARRIER		DRAWING MATCH LINE
	ASPHALT PAVING		BUILDING SECTION MARK REF. (SEE DWG. #1 @ SHT. A61)
			WALL SECTION MARK REF. (SEE DWG. #1 @ SHT. A63)
			DETAIL REFERENCE (SEE DWG. #1 @ SHT. A71)
			DETAIL SECTION MARK
			INTERIOR ELEVATIONS SEE DWG. #1 @ SHT. I51, I52, I53
	ROOM name		ROOM NAME
	ROOM NUMBER		ROOM NUMBER
	ACCESSORY USE		ACCESSORY USE
	AREA OF ROOM		AREA OF ROOM
	NUMBER OF OCCUPANTS		NUMBER OF OCCUPANTS
	OCCUPANCY FACTOR		OCCUPANCY FACTOR

PROJECT DESCRIPTION

SCOPE OF WORK INCLUDES TENANT IMPROVEMENT WITHIN THE EXISTING SHOP BUILDING ON THE DISTRICT 3 CAMPUS. THE WORK INCLUDES:
- TENANT IMPROVEMENT ON LEVEL TWO
- ADDITION OF NEW MEP SYSTEMS TO ACCOMMODATE TENANT IMPROVEMENT LAYOUT
- SCOPE OF WORK INCLUDES INSTALLATION OF FIRE SPRINKLER SYSTEM

CODE DATA

CODE REFERENCES ARE THOSE CURRENTLY ADOPTED BY CITY OF BOISE.

2018 INTERNATIONAL BUILDING CODE (IBC)
2018 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
2017 IDAHO STATE PLUMBING CODE
2018 INTERNATIONAL MECHANICAL CODE (IMC)
2018 INTERNATIONAL FUEL GAS CODE (IFGC)
2017 NATIONAL ELECTRICAL CODE (NEC)
2018 INTERNATIONAL EXISTING BUILDING CODE (IEBC)

PROJECT ADDRESS: 8150 WEST CHINDEN BOULEVARD

BUILDING USE: VEHICLE MAINTENANCE AND REPAIR (NO CHANGE)

CONSTRUCTION TYPE: III-B (NO CHANGE)

OCCUPANCY GROUP: F1 (EXISTING), B (PROPOSED)

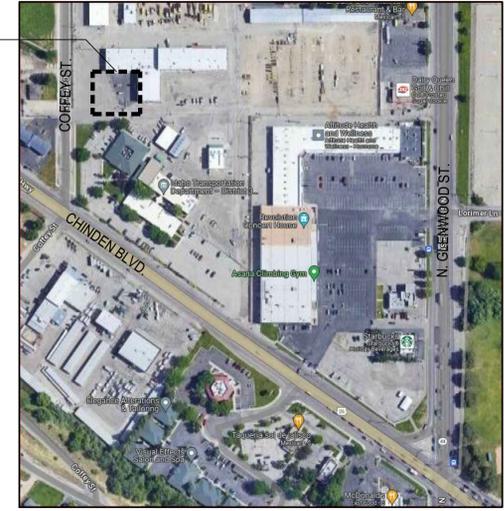
NUMBER OF STORIES: 2 (NO CHANGE)

BUILDING AREA: 34,165 SF (NO CHANGE)

FIRE SPRINKLER: UNDER SEPARATE PERMIT

OCCUPANCY COUNT: SEE SHEET G 11

AREA OF WORK

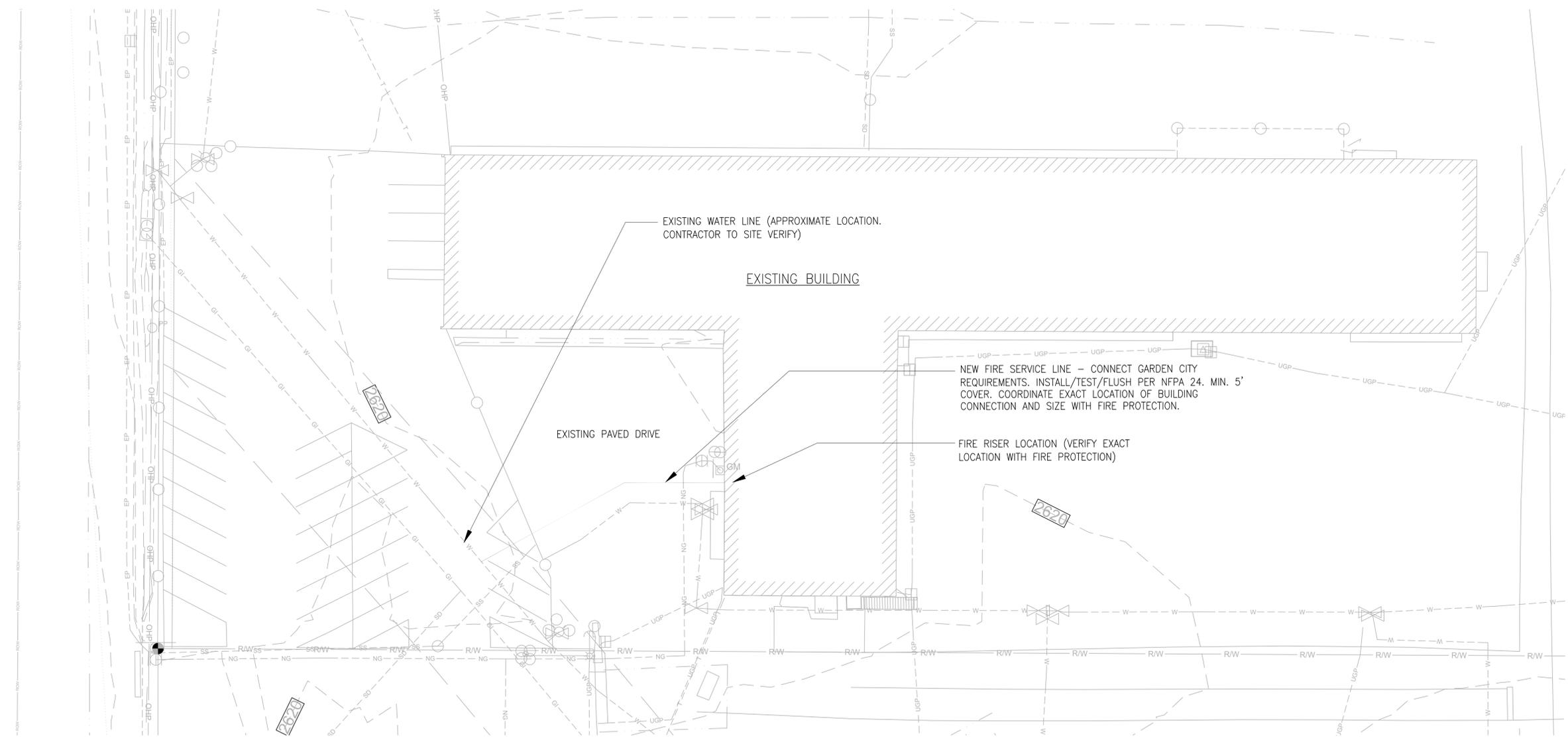


VICINITY MAP
 (NOT TO SCALE)

NOTE:
 UTILITY TRENCHING AND BACKFILLING SHALL BE IN ACCORDANCE WITH THE SOILS REPORT AND LOCAL REQUIREMENTS, AND SHALL COMPLY WITH ALL LOCAL, STATE, AND NATIONAL SAFETY STANDARDS.

EXISTING UTILITIES ARE SHOWN APPROXIMATELY AND FOR GENERAL INFORMATION PURPOSES ONLY. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL EXISTING UTILITIES.

ALL PAVEMENT REPAIR ONSITE PER ISPMC SD-301, SD-303 AND SD-806.



1 SITE PLAN
 1"=20'
 SCALE IN FEET

ORIGINAL DOCUMENT SIGNED BY ARCHITECT ON FILE WITH THE ARCHITECT ORIGINAL SIGNED BY JAMES A MARSH ORIGINAL DATE SIGNED: MARCH 27, 2024

LICENSED ARCHITECT AR84819
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8150 WEST CHINDEN BLVD GARDEN CITY, ID
CSH&A

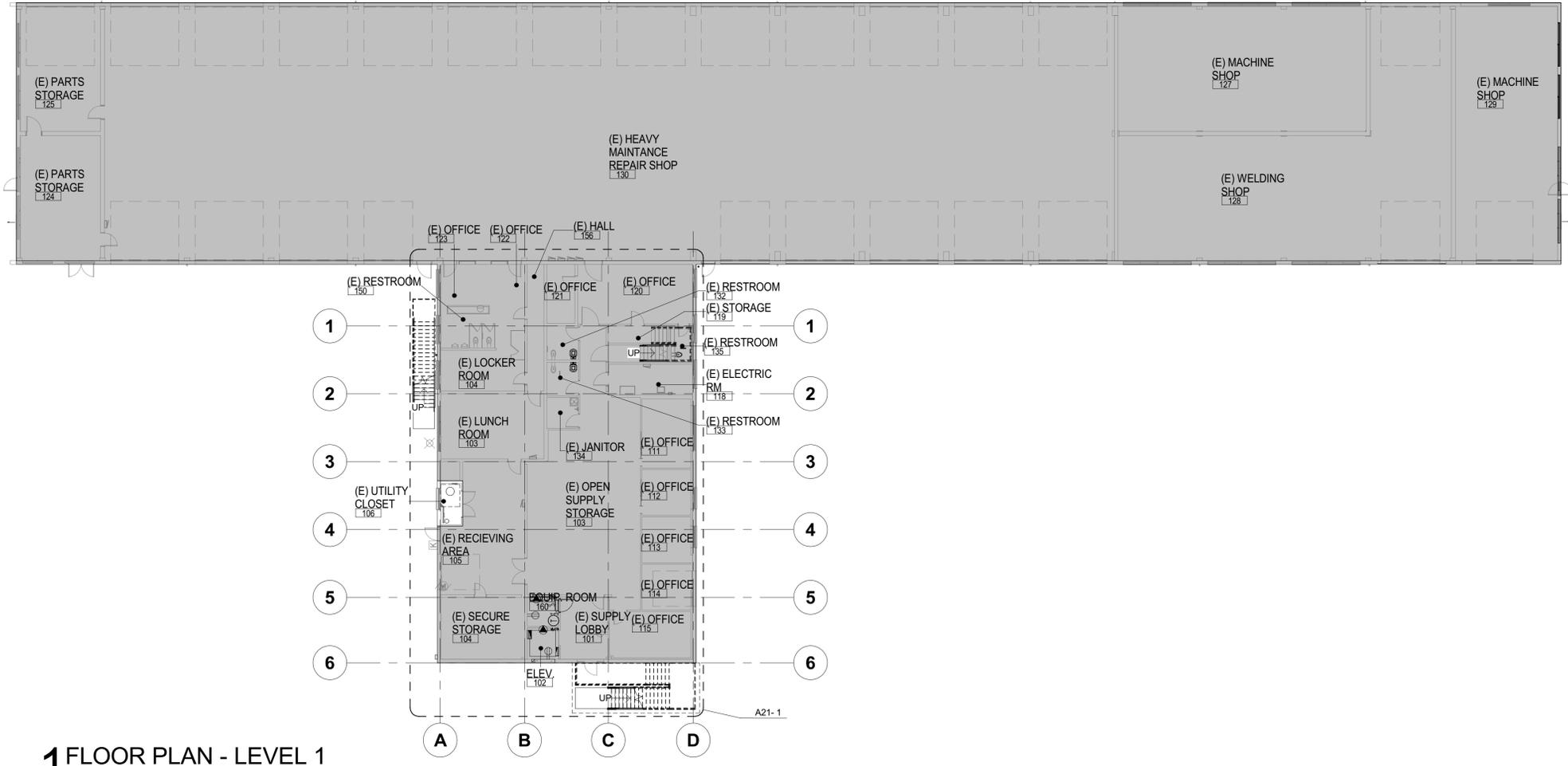
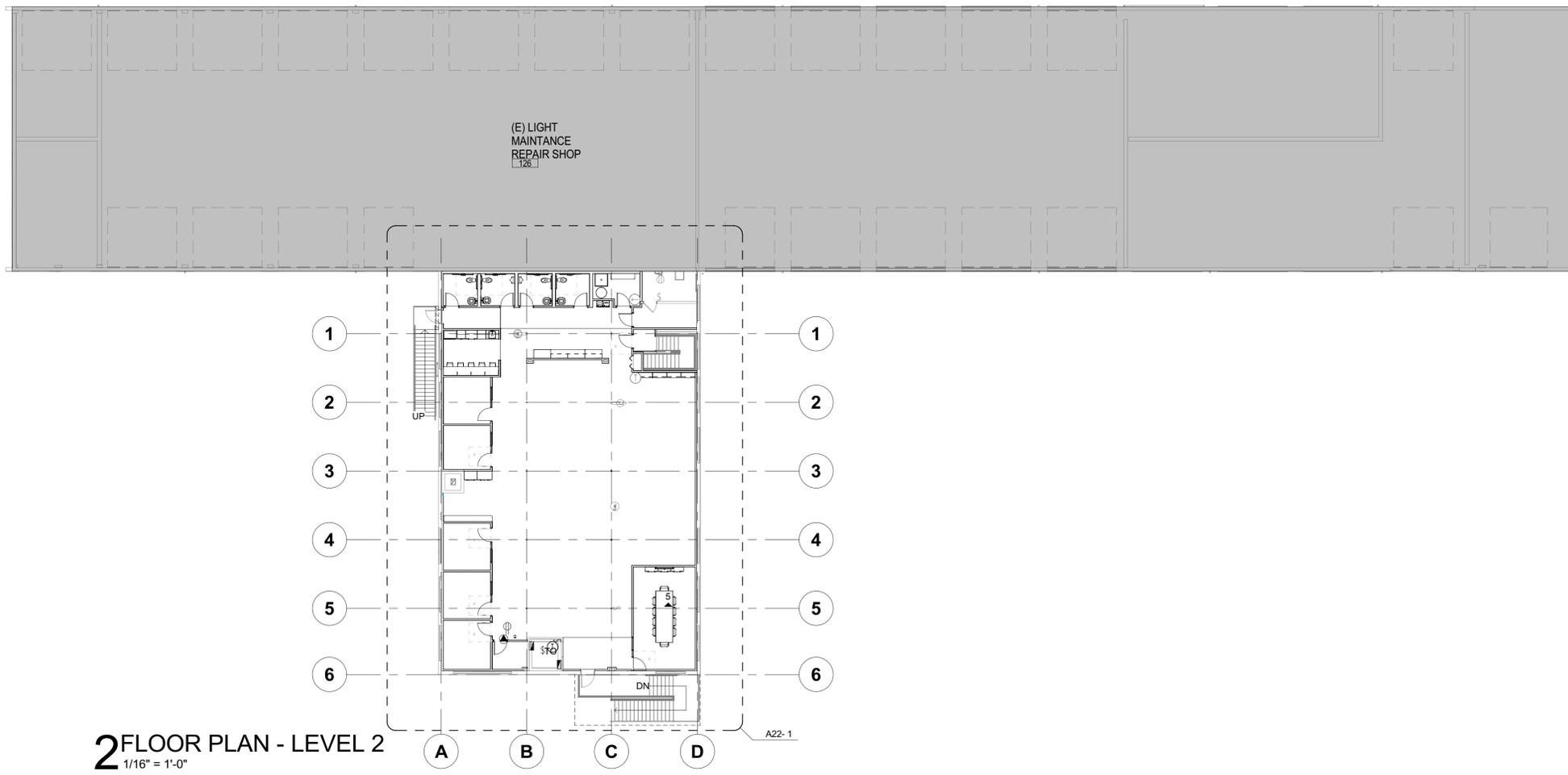
L2 TENANT IMPROVEMENT PERMIT SET

PROJECT 23002	DATE 03-27-24
DRAWN	CHECKED

REVISED

SHEET TITLE
SITE PLAN

SHEET
C10
 ORIGINAL SHEET SIZE
 24" x 36"



GENERAL NOTES:

- A. CONTRACTOR TO COORDINATE THE LOCATION OF ALL FLOOR DRAINS AND FLOOR SINKS WITH PLUMBING DRAWINGS.

SHEET NOTES:

ORIGINAL DOCUMENT SIGNED BY ARCHITECT ON FILE WITH THE ORIGINAL SIGNED BY: JAMES A MARSH
 ORIGINAL DATE SIGNED: MARCH 17, 2024
 LICENSED ARCHITECT 1888113
 JAMES A MARSH
 STATE OF IDAHO
 MARCH 17, 2024

JAMES MARSH, ARCHITECT
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 BOISE, IDAHO
 PHONE: 208-343-4635 • FAX: 208-343-1658
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 BOISE, ID 83702
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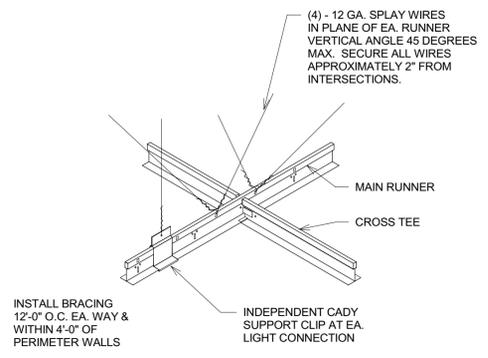
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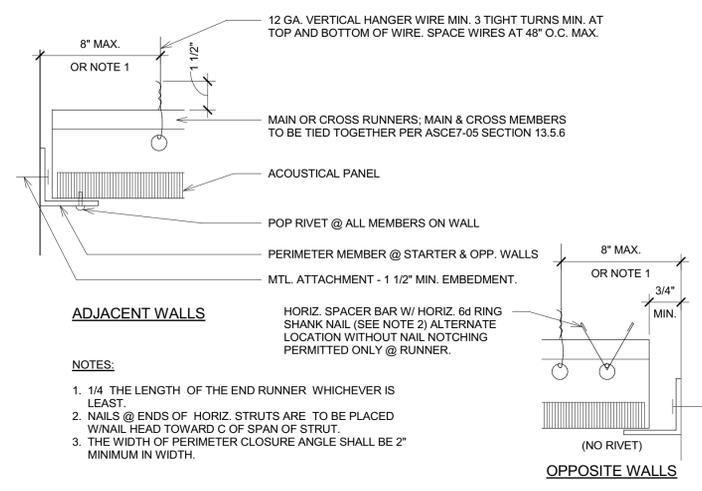
PROJECT	DATE
23002	03-27-24
DRAWN	CHECKED
SS	LB
REVISED	

SHEET TITLE
OVERALL PLANS TI

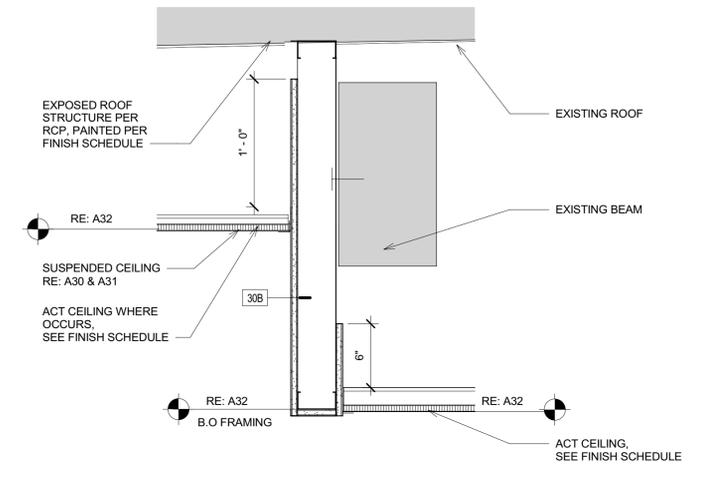
SHEET
A11
 ORIGINAL SHEET SIZE
 24" x 36"



1 SUSPENDED CEILING SYSTEM
 1 1/2" = 1'-0"



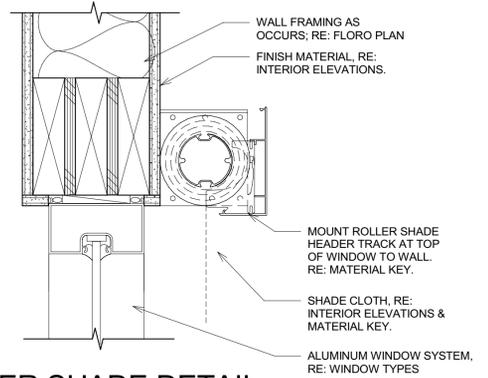
2 CEILING PERIMETER
 6" = 1'-0"



3 OPEN OFFICE CEILING DETAIL
 1 1/2" = 1'-0"

Ceiling grids
 Any alteration, installation or deletion of any suspended ceiling grids, the installation of new lights fixtures, HVAC equipment, sprinklers, etc. in an existing ceiling grid shall be inspected by the building department to ensure the requirements of ASTM 635 and 636 are compliant.

Acoustical ceiling systems note
 808.1.1.1 Suspended acoustical ceilings. Suspended acoustical ceiling systems shall be installed in accordance with the provisions of ASTM C635 and ASTM C636.



4 ROLLER SHADE DETAIL
 3" = 1'-0"

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 LICENSED ARCHITECT AS 884113
 JAMES MARSH
 STATE OF IDAHO
 MARCH 17, 2024

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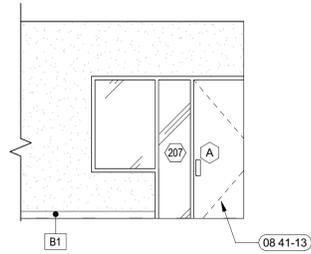
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PROJECT 23002	DATE 03-27-24
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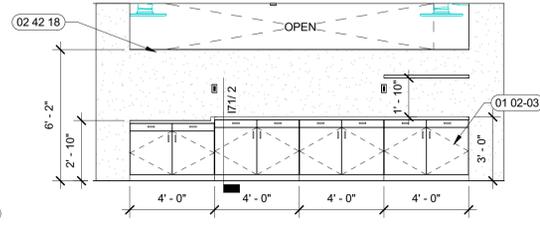
REVISIONS

SHEET TITLE
CEILING DETAILS

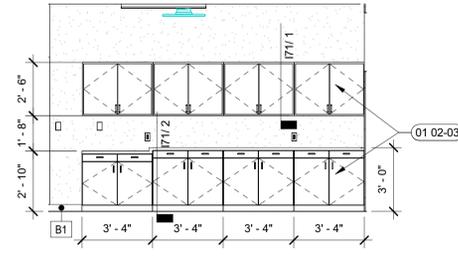
SHEET
A73
 ORIGINAL SHEET SIZE
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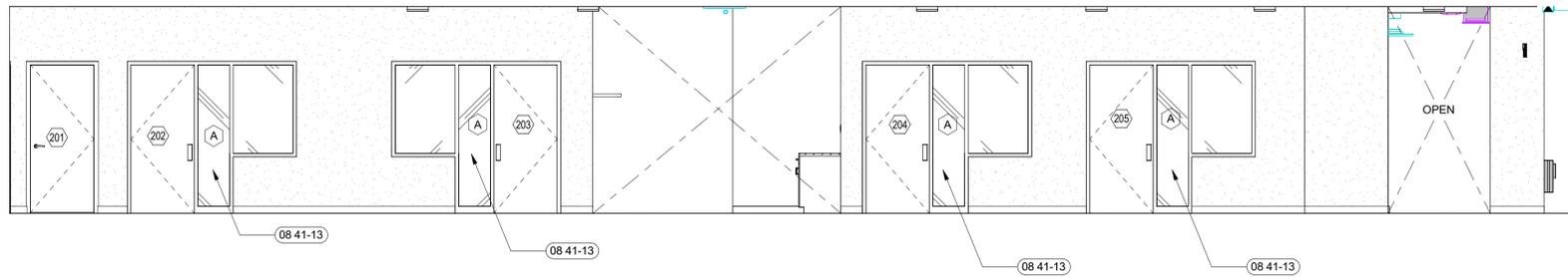
1 LOBBY - EAST
 1/4" = 1'-0"



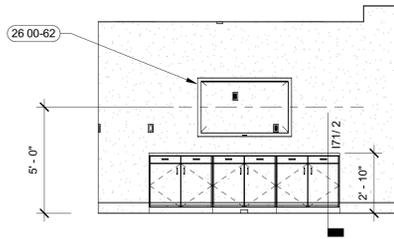
2 FLEX SPACE 1 - S.
 1/4" = 1'-0"



3 FLEX SPACE 2 - N.
 1/4" = 1'-0"



4 INTERIOR ELEVATION- OFFICES
 1/4" = 1'-0"



5 CONF ROOM-N
 1/4" = 1'-0"

LEGEND:

- SCREENED LINES INDICATE EXISTING ASSEMBLIES/SYSTEMS TO REMAIN AND BE PROTECTED DURING CONSTRUCTION.
- INDICATES ASSEMBLIES/SYSTEMS TO BE CONSTRUCTED
- SHEET NOTE, RE: SHEET NOTES LIST ON CURRENT PAGE
- MATERIAL DESIGNATION, RE: FINISH SCHEDULE I81
- WALL FINISH/BASE DESIGNATION, RE: FINISH SCHEDULE I81
- WOOD GRAIN DESIGNATION, RE: FINISH SCHEDULE I81

GENERAL NOTES:

- A. DIMENSION IS NOT SHOWN ON INTERIOR SHEETS UNLESS INTERIOR SPECIFIC. REFER ARCHITECTURAL DRAWINGS FOR DIMENSIONS.
- B. FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION / ORDERING.
- C. ALL TRANSITION IN FLOORING ARE TO OCCUR DIRECTLY BENEATH DOORS U.N.O.
- D. ALL GYPSUM BOARD APPLICATIONS SHALL BE SANDED, TAPED AND MUDDED AS NECESSARY.
- E. PROVIDE A MAXIMUM OF 1/2" OFFSET AT ALL THRESHOLDS AND AT ANY CHANGES OF FLOORING MATERIAL. ICC/ANSI A117.1 SECTION 303.
- F. ALL HOLLOW METAL DOOR FRAMES TO BE PAINTED (P__).
- G. ALL MATERIALS ARE TO BE INSTALLED PER MANUFACTURERS INSTRUCTIONS USING APPROPRIATE ADHESIVE.
- H. SMOOTH FLOOR SUBSTRATE SURFACES. SAND OR GRIND SUBFLOORS TO REMOVE IRREGULARITIES. FILL LOW SPOTS. CONTROL OR CONSTRUCTION JOINTS AND OTHER DEFECTS AS REQUIRED TO PROVIDE UNIFORM SUBSTRATE FOR FLOOR FINISHES.
- I. FINISHES NOT REQUIRED ON WALL AREA CONCEALED BY PERMANENT FIXTURES.
- J. FINISHES SHALL EXTEND A MINIMUM OF 6" BEHIND FIXTURE.
- K. PAINT ALL INTERIOR GYPSUM BOARD CEILINGS AND SOFFITS.
- L. NO ITEM TO BE INSTALLED ON FINISH WALL MATERIALS WITHOUT PROJECT MANAGER AND OWNER'S APPROVAL.
- M. ALL EXPOSED VENTS, ACCESS PANELS AND SIMILAR ITEMS TO BE PAINTED TO MATCH THE WALL OR CEILING SURFACES THAT THEY ARE ON.
- N. REFER TO ENLARGED PLANS, ELEVATIONS, FINISH SCHEDULES FOR ADDITIONAL FINISH INFORMATION.
- O. EXTEND RUBBER BASE A MINIMUM OF 6", MAXIMUM OF 12" BEHIND FIXTURES.

SHEET NOTES:

- 01 02-03 EQUIPMENT / MILLWORK / COUNTER, BY OWNER.
- 02 42 18 PARTIAL HEIGHT WALL
- 08 41-13 STOREFRONT SYSTEM - COLOR TBD
- 26 00-62 OWNER PROVIDED TV SCREEN

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 JAMES MARSH ARCHITECT
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 MARCH 17, 2024

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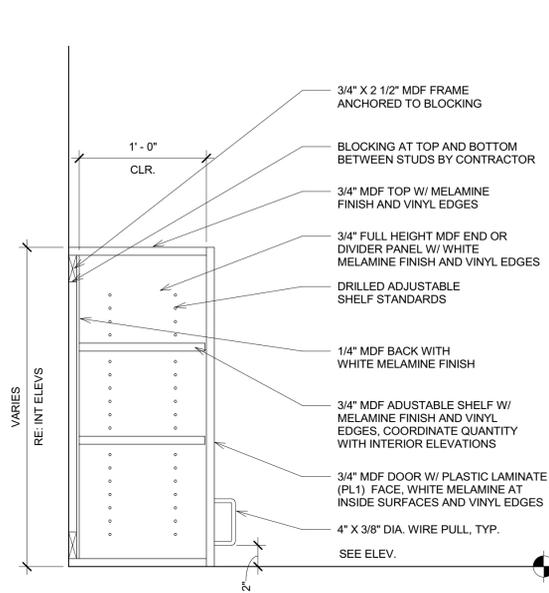
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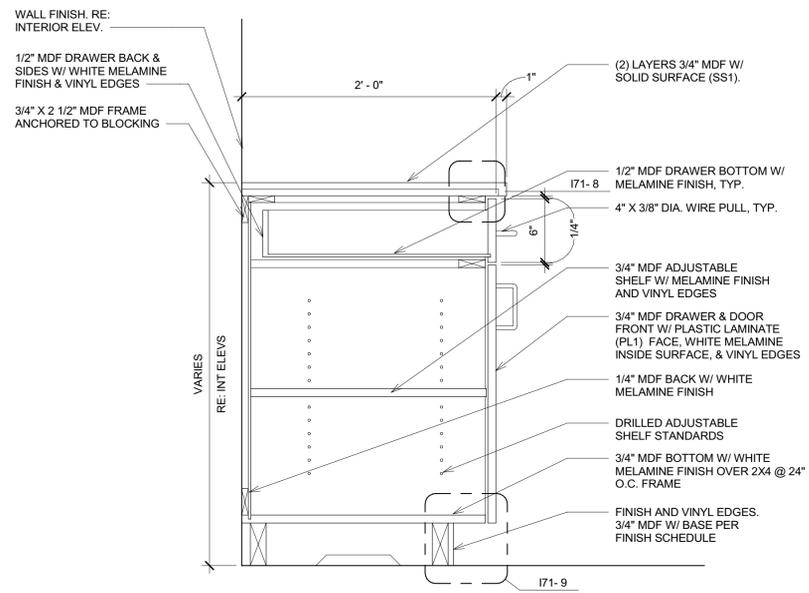
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SHEET TITLE
INTERIOR ELEVATIONS

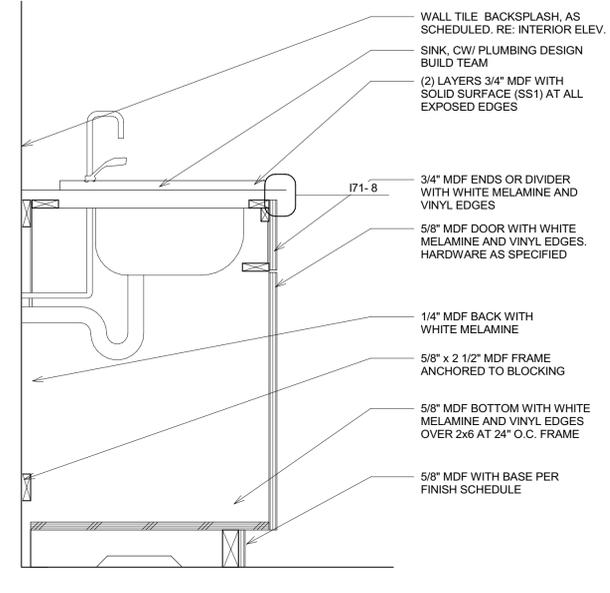
SHEET
151
 ORIGINAL SHEET SIZE
 24" x 36"



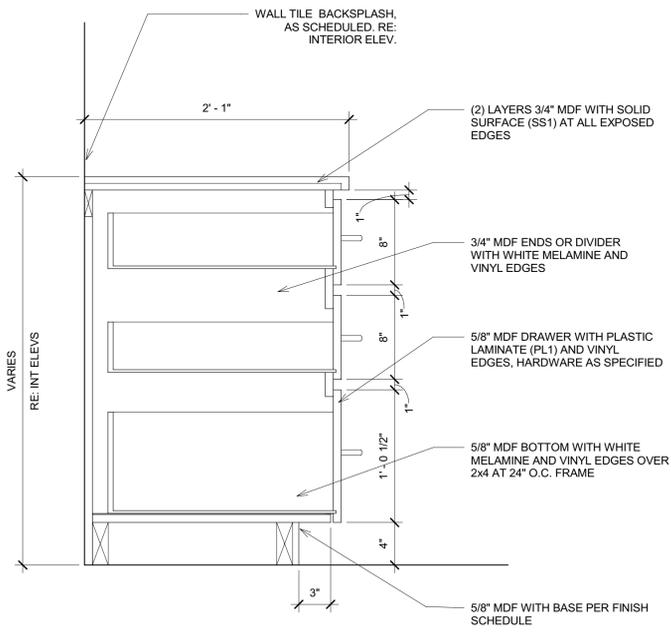
1 UPPER CABINET DETAIL
 1 1/2" = 1'-0"



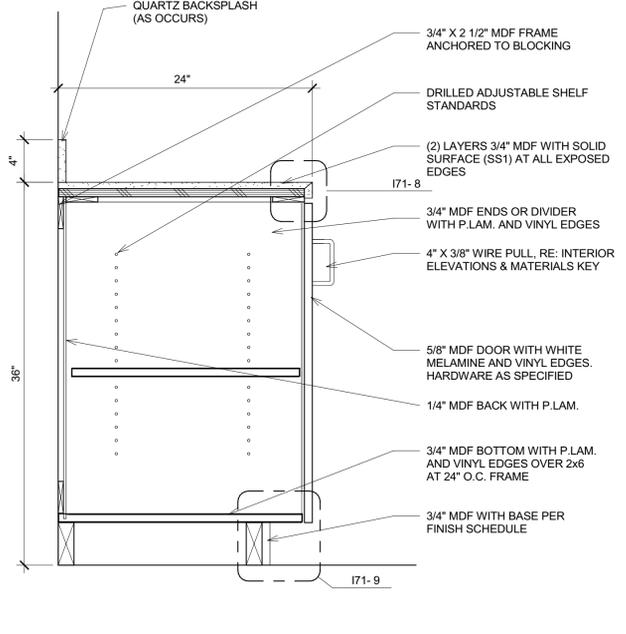
2 TYP. BASE CABINET DETAIL
 1 1/2" = 1'-0"



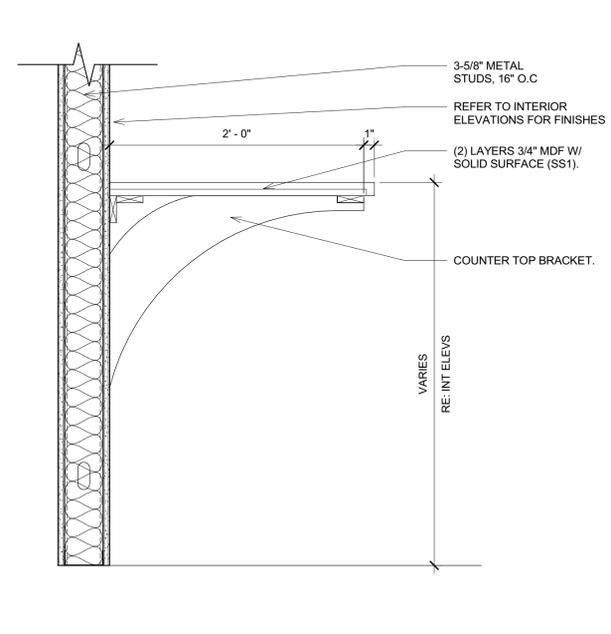
3 BASE CABINET - SINK
 1 1/2" = 1'-0"



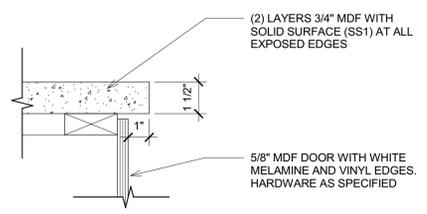
4 BASE CABINET - 3 DRAWERS
 1 1/2" = 1'-0"



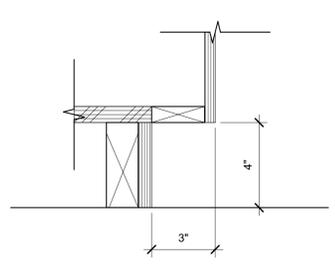
5 TYP. BASE CABINET DETAIL- DRAWERS
 1 1/2" = 1'-0"



6 BREAKROOM CASEWORK DETAIL
 1 1/2" = 1'-0"



8 COUNTERTOP EDGE DETAIL
 3" = 1'-0"



9 CABINET BASE DETAIL
 3" = 1'-0"

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 LICENSED ARCHITECT ARCHITECT ID: 188113
 JAMES MARSH
 STATE OF IDAHO
 MARCH 17, 2024

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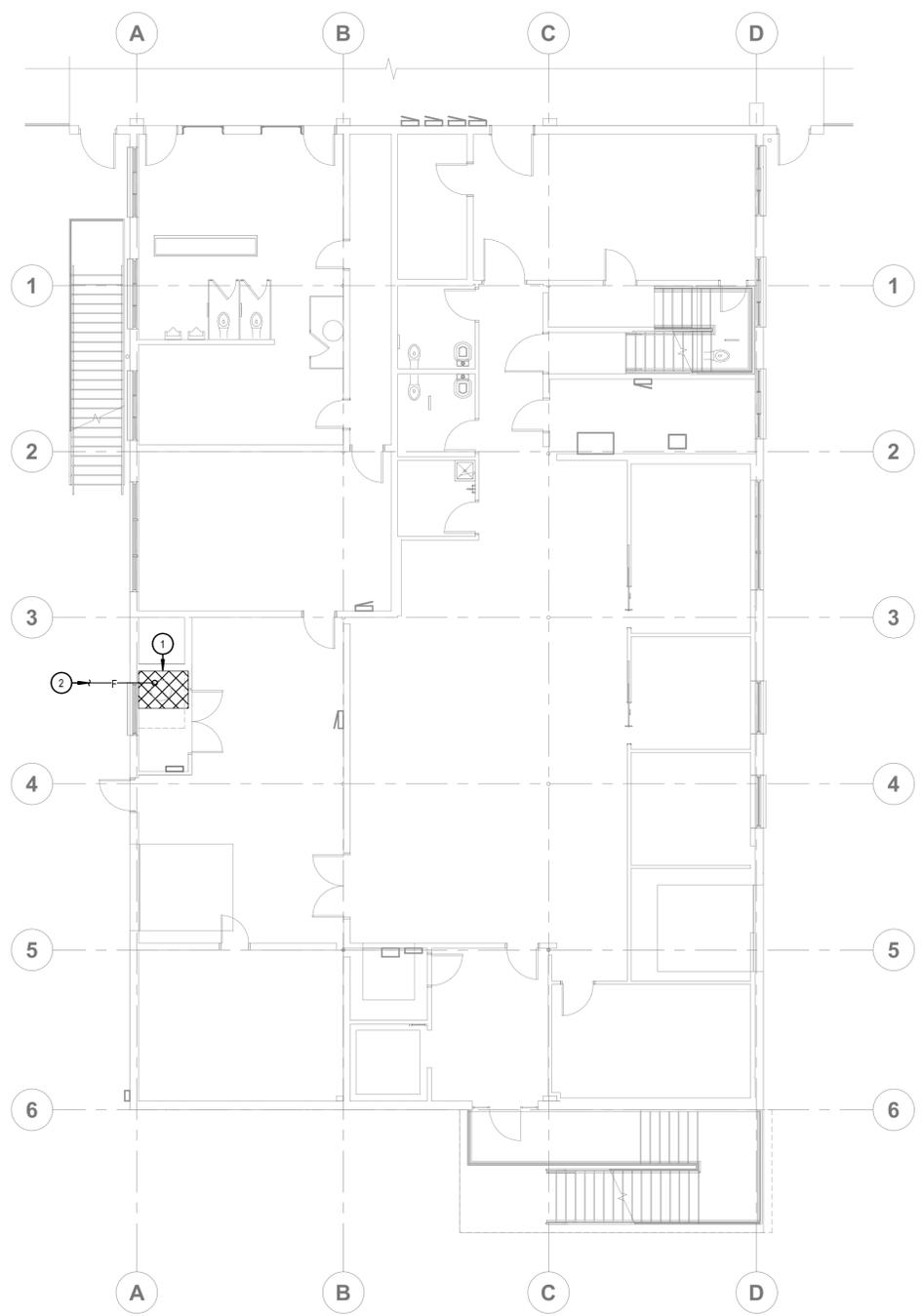
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23002	03-27-24
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SS	Checker

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SHEET TITLE
CASEWORK DETAILS

SHEET
171
 ORIGINAL SHEET SIZE
 24" x 36"



1 FIRE SPRINKLER PLAN
 1/8" = 1'-0"

KEYED NOTES:

- # SYMBOL USED FOR CALLOUT
- 1. AREA RESERVED FOR FIRE SPRINKLER RISER SYSTEM. FIRE SPRINKLER RISER SYSTEM SHALL INCLUDE A TAMPER SWITCH, FLOW SWITCH, ALARM BELL, FIRE DEPARTMENT CONNECTION, AND POST INDICATOR VALVE (PIV).
- 2. FIRE SPRINKLER LINE TO BE SIZED AND INSTALLED BY FIRE SPRINKLER CONTRACTOR. REFER TO SPECIFICATIONS FOR ADDITIONAL FIRE SPRINKLER SYSTEM REQUIREMENTS.

FIRE SPRINKLER NOTES:

- A. THE FIRE SPRINKLER SYSTEM SHALL BE DESIGNED AND INSTALLED FOR THE ENTIRE BUILDING (EXISTING FIRST FLOOR OFFICE SPACE, EXISTING WAREHOUSE/SHOP AND NEW SECOND FLOOR OFFICE SPACE) BY THE FIRE SPRINKLER CONTRACTOR. THIS PLAN INDICATES GENERAL PARAMETERS THE FIRE SPRINKLER CONTRACTOR MUST DESIGN AND INSTALL AROUND. THE ENGINEER/ARCHITECT/OWNER RESERVES THE RIGHT TO REVIEW AND APPROVE TEST VALVES, ZONING VALVES, FLOW SENSORS, ETC. DURING THE SUBMITTAL PROCESS.
- B. FIRE SPRINKLER CONTRACTORS SHALL BE LICENSED BY THE IDAHO STATE FIRE MARSHAL, AND SHALL HAVE IN HIS/HER EMPLOY AND WITHIN 50 MILES OF THE JOB SITE AN ENGINEERING TECHNICIAN (LEVEL III), CERTIFIED BY NICET (NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES). PROOF OF BOTH MUST BE SUBMITTED TO THE ENGINEER PRIOR TO THE START OF ANY FIRE SPRINKLING DESIGN AND/OR INSTALLATION, NO EXCEPTIONS.
- C. ALL WORK REQUIRED FOR THE FIRE PROTECTION SYSTEM SHALL BE THE RESPONSIBILITY OF THE FIRE SPRINKLER CONTRACTOR. THE FIRE SPRINKLER SYSTEM SHALL BE INSTALLED BY THE FIRE SPRINKLER CONTRACTOR AS REQUIRED TO SATISFY THE REQUIREMENTS OF THE LOCAL JURISDICTION AND NFPA 13, LATEST EDITION. ARCHITECT/ENGINEER ASSUMES NO RESPONSIBILITY OR LIABILITY FOR THE DESIGN OF THE FIRE SPRINKLER SYSTEM.
- D. REFER TO FIRE SPRINKLER SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- E. PROVIDE RECESSED HEADS IN ALL AREAS EXCEPT WHERE ROOM IS OPEN TO STRUCTURE.
- F. NO STANDOFF SPRINKLER HEADS (THOSE THAT DROP BELOW CEILING OR SOFFIT TO PROVIDE BETTER COVERAGE) ALLOWED. ALL SPRINKLER HEADS MUST BE FLUSH WITH CEILING OR EXTERIOR SOFFIT.
- G. REFERENCE ARCHITECTURAL SECTIONS FOR LOCATION OF BUILDING INSULATION ENVELOPES.
- H. PROVIDE SPRINKLER COVERAGE AT ALL SKYLIGHTS REQUIRING COVERAGE. COORDINATE EXACT ROUTING OF SPRINKLER LINE WITH THE ARCHITECT.
- I. PIPE ALL AUXILIARY DRAINS TO EXTERIOR OF BUILDING OR APPROVED RECEPTACLE. COORDINATE WITH ARCHITECT.
- J. IN COLD SPACES WHERE A NON-FREEZE FIRE SPRINKLER SYSTEM IS REQUIRED, CONTRACTOR SHALL PROVIDE A DRY PIPE SPRINKLER SYSTEM.

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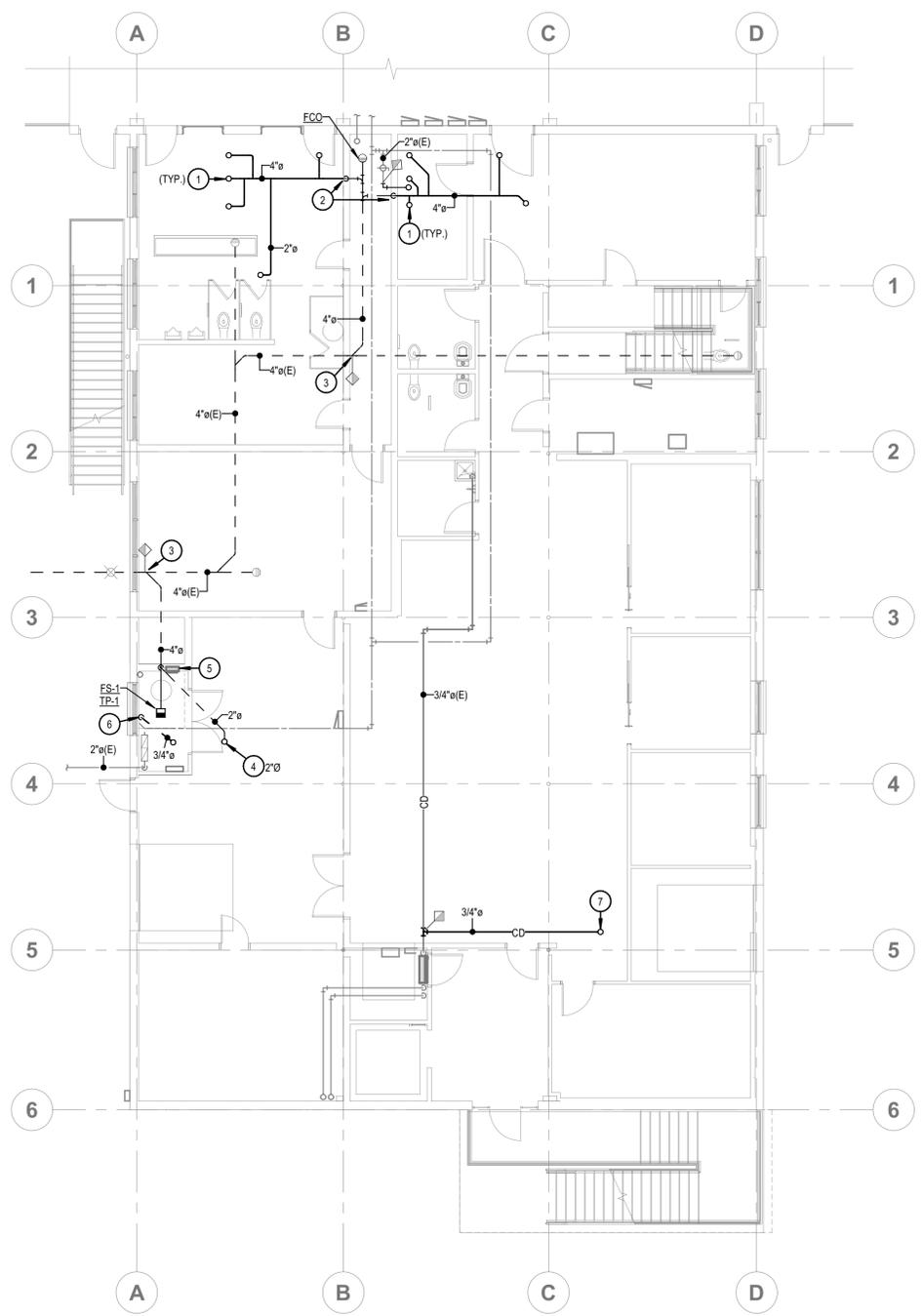
PROJECT 23002	DATE 03-27-24
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SHEET TITLE
FIRE SPRINKLER PLAN

SHEET
P00
 ORIGINAL SHEET SIZE
 24" x 36"

200 BROAD STREET
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KEYED NOTES:

- 1. WASTE FROM PLUMBING FIXTURE ABOVE.
- 2. 4" WASTE DOWN IN WALL TO BELOW FLOOR.
- 3. CONNECT NEW 4" WASTE TO EXISTING 4" MAIN, CONTRACTOR TO VERIFY EXACT LOCATION BEFORE SAWCUTTING.
- 4. ROUTE VENT LINE UP TO ROOF WITH INDICATED SIZE VTR, ENSURE THAT VENT LINE IS IN WALL OF FUTURE TI SPACE ON SECOND FLOOR.
- 5. EXISTING ELECTRIC HEATER TO REMAIN, COORDINATE EXISTING CONDITIONS WITH NEW FIRE RISER REQUIREMENTS TO SEE IF RELOCATION IS REQUIRED.
- 6. ROUTE 3/4" CD EXPOSED DOWN WALL. TERMINATE INDIRECTLY AT NEW FLOOR SINK.
- 7. ROUTE 3/4" CD FROM FLOOR ABOVE. SEE SHEET P20 FOR CONTINUATION.

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

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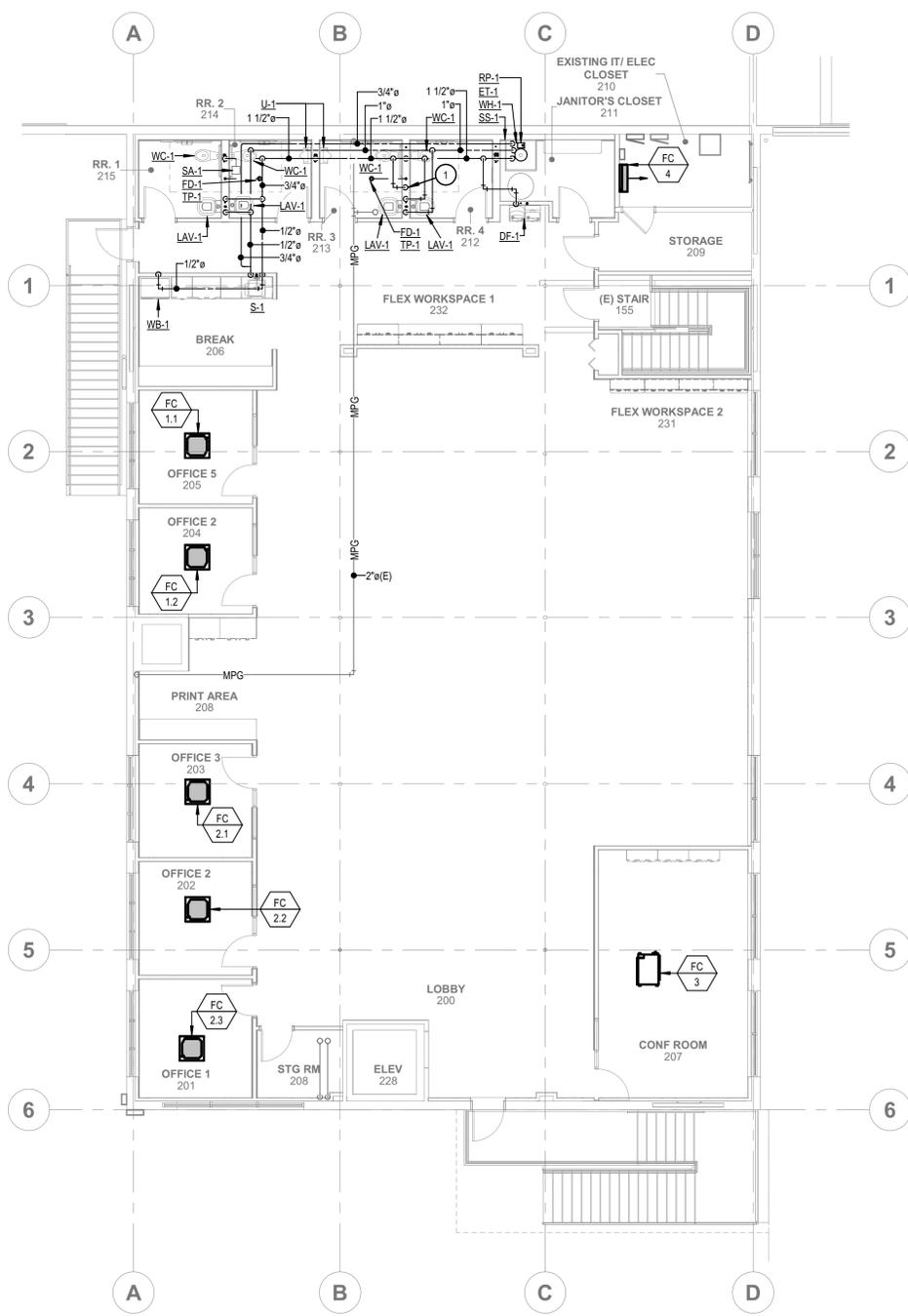
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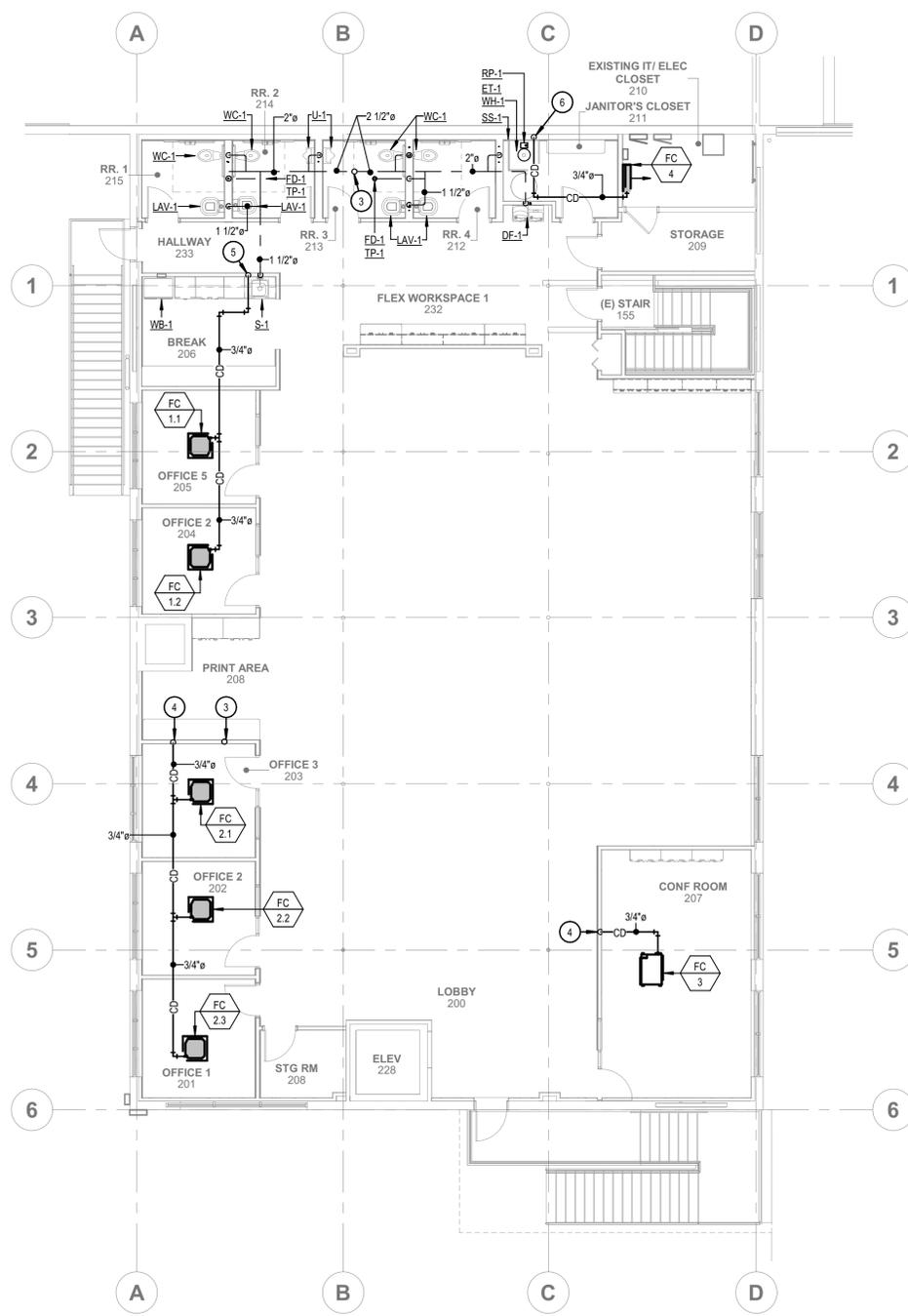
PLUMBING FIRST FLOOR PLAN

SHEET

P10
 ORIGINAL SHEET SIZE
 24" x 36"



1 WATER AND GAS SECOND FLOOR PLAN
 1/8" = 1'-0"



2 WASTE & VENT SECOND FLOOR PLAN
 1/8" = 1'-0"

KEYED NOTES:

- # SYMBOL USED FOR CALLOUT
- 1. 2" WATER LINE FROM FIRST FLOOR.
- 2. 2" VENT FROM BELOW UP THROUGH ROOF.
- 3. ROUTE 3/4" CD DOWN INSIDE WALL TO FLOOR BELOW. SEE FIRST FLOOR PLUMBING PLAN FOR CONTINUATION.
- 4. ROUTE 3/4" CD DOWN INSIDE WALL AND CONNECT TO TAILPIECE OF SINK. SEE DETAIL FOR INSTALLATION REQUIREMENTS.
- 5. ROUTE 3/4" CD DOWN INSIDE WALL AND INDIRECT TO SERVICE SINK WITH 1" AIR GAP.
- 6. ROUTE 3/4" CD DOWN INSIDE WALL AND INDIRECT TO SERVICE SINK WITH 1" AIR GAP.

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PLUMBING SECOND FLOOR PLAN

SHEET

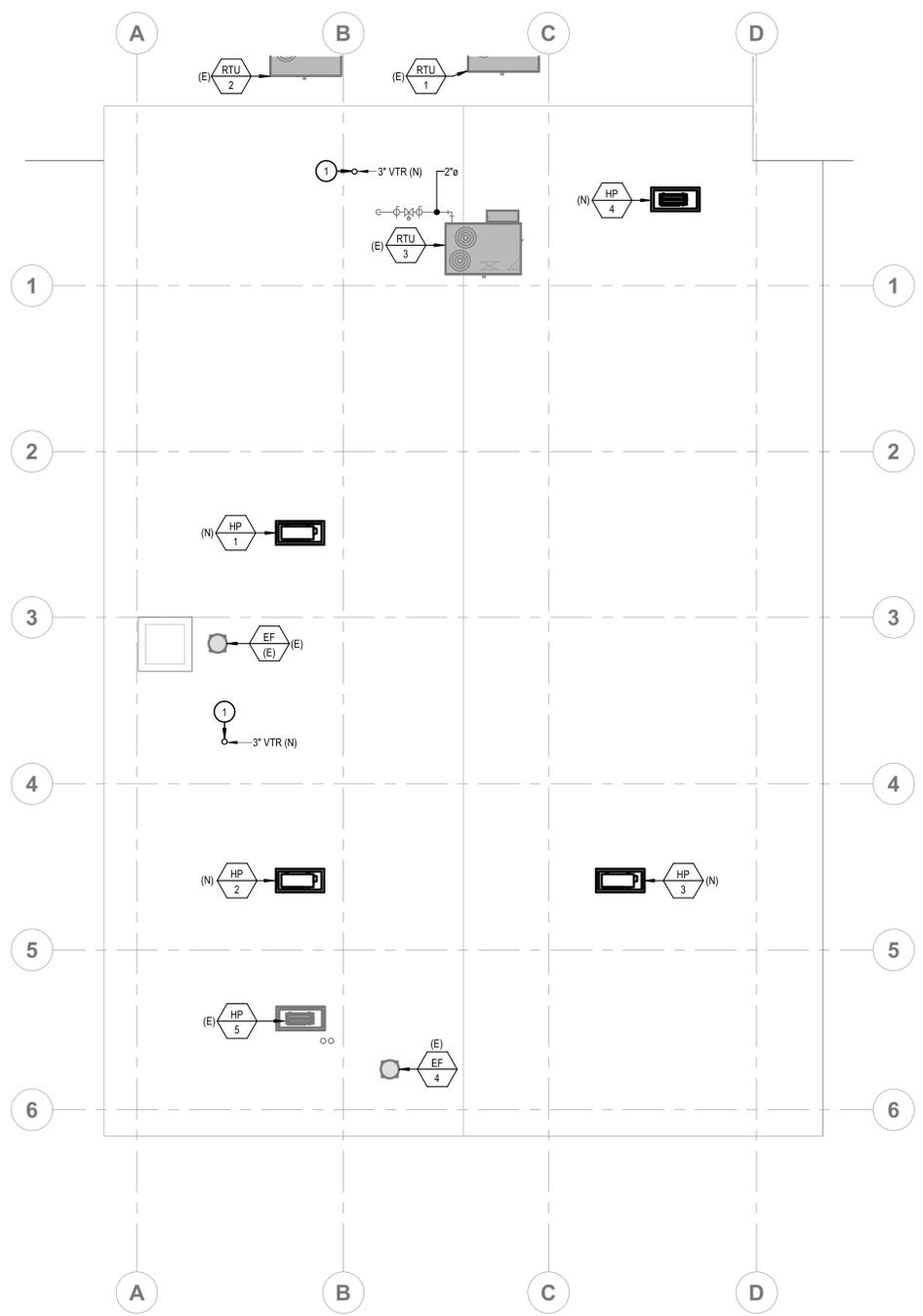
P20
 ORIGINAL SHEET SIZE
 24" x 36"

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KEYED NOTES:

- # SYMBOL USED FOR CALLOUT
- ROUTE NEW VENT THROUGH ROOF. SEAL AND MAINTAIN ROOF WARRANTY.



1 PLUMBING NEW ROOF PLAN
 1/8" = 1'-0"

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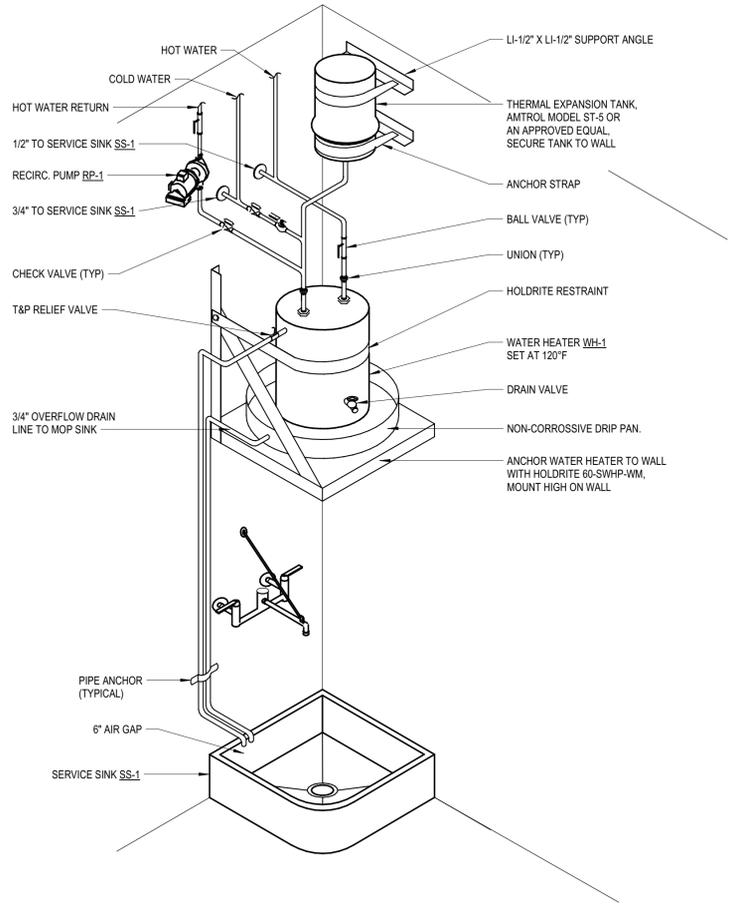
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SHEET TITLE
PLUMBING ROOF PLAN

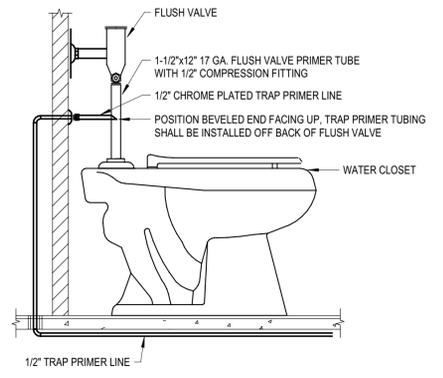
SHEET
P30
 ORIGINAL SHEET SIZE
 24" x 36"

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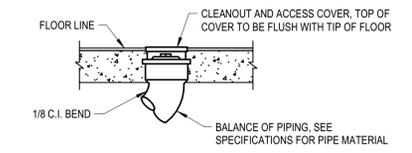


1 SERVICE SINK & WATER HEATER DETAIL
 NTS

- FLUSH VALVE TRAP PRIMER NOTES:**
1. THE FLUSH VALVE PRIMER IS DESIGNED TO PRIME ONE FLOOR DRAIN TRAP AT A DISTANCE NOT TO EXCEED 20 FEET FROM POINT OF INSTALLATION.
 2. THE FLUSH VALVE PRIMER SHALL BE INSTALLED WITH A VACUUM BREAKER.
 3. FLUSH VALVE PRIMER IS INTENDED FOR USE WITH WATER CLOSETS CONSUMING 3.5 TO 1.0 GAL/FLUSH.
 4. TRAP PRIMER SHALL BE PRECISION PLUMBING PRODUCTS MODEL FVP-1VB WITH VACUUM BREAKER. APPROVED ALTERNATES: MIFAB, SIOUX CHIEF, AND ZURN.

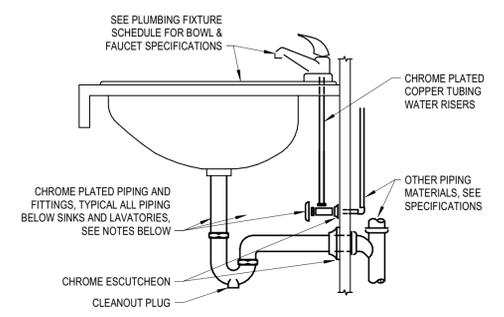


2 TRAP PRIMER CONNECTION DETAIL
 NTS



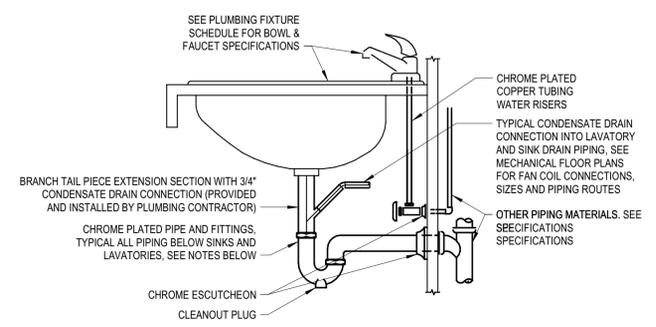
- NOTE:**
1. CLEANOUTS SHALL BE PROVIDED AT EACH HORIZONTAL DRAINAGE PIPE AT ITS UPPER TERMINAL AND EACH RUN OF PIPING WHICH IS MORE THAN 100 FEET, AND SHALL BE PROVIDED FOR EACH 100 FEET DEVELOPED LENGTH, OR FRACTION THEREOF OF SUCH PIPING. AN ADDITIONAL CLEANOUT SHALL BE PROVIDED FOR EACH AGGREGATE HORIZONTAL CHANGE OF DIRECTION EXCEEDING ONE HUNDRED THIRTY-FIVE DEGREES, PER APPLICABLE PLUMBING CODE. THIS SHALL BE PROVIDED REGARDLESS OF WHAT IS SHOWN ON THE DRAWINGS.

3 FLOOR CLEANOUT (FCO) DETAIL
 NTS



- NOTES:**
- A. INTERIOR EXPOSED PIPE, VALVES AND FIXTURE TRIM, INCLUDING TRIM BEHIND CASEWORK DOORS SHALL BE CHROME PLATED.
 - B. ALL PIPING PENETRATIONS THROUGH FINISHED WALLS SHALL BE PROVIDED WITH CHROME ESCUTCHEONS.
 - C. ALL SINK TRAPS SHALL BE PROVIDED WITH A CLEANOUT PLUG IN THE BOTTOM OF THE TRAP.
 - D. ALL PLUMBING FIXTURES SHALL BE CAULKED AND SEALED TO SURROUNDING SURFACES.

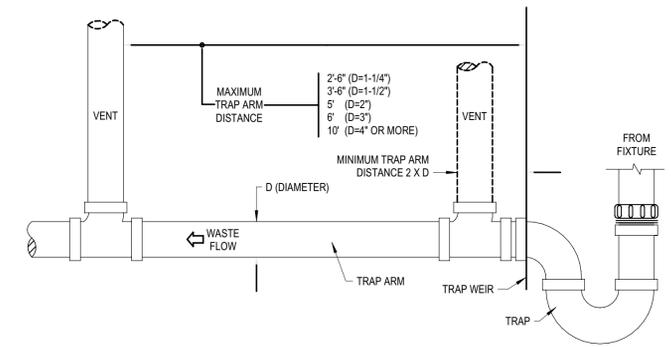
4 SINK/LAVATORY TAILPIECE & TRAP DETAIL
 NTS



- NOTES:**
1. INTERIOR EXPOSED PIPE, VALVES AND FIXTURE TRIM, INCLUDING TRIM BEHIND CASEWORK DOORS, SHALL BE CHROME PLATED.
 2. ALL PIPING PENETRATIONS THROUGH FINISHED WALLS SHALL BE PROVIDED WITH CHROME ESCUTCHEONS.
 3. ALL SINK AND LAVATORY TRAPS SHALL BE PROVIDED WITH A CLEANOUT PLUG IN THE BOTTOM OF THE TRAP.
 4. ALL PLUMBING FIXTURES SHALL BE CAULKED AND SEALED TO SURROUNDING SURFACES.
 5. PLUMBING CONTRACTOR SHALL VERIFY THE LOCATION OF ALL LAVATORIES AND SINKS THAT NEED TO BE INSTALLED WITH THE BRANCH TAIL PIECE SECTION WITH 3/4\"/>

5 SINK/LAVATORY TAILPIECE & TRAP DETAIL (W/ CONDENSATE)
 NTS

- NOTES:**
1. MAINTAIN ONE-FOURTH (1/4) INCH PER FOOT SLOPE.
 2. THE DEVELOPED LENGTH BETWEEN THE TRAP OF A WATER CLOSET OR SIMILAR FIXTURE (MEASURED FROM THE TOP OF THE CLOSET FLANGE TO THE INNER EDGE OF THE VENT) AND ITS VENT SHALL NOT EXCEED SIX (6) FEET.
 3. ALL PLUMBING EQUIPMENT AND SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST ADOPTED PLUMBING CODE, AND ALL LOCAL AND STATE CODES.



6 TRAP ARM DETAIL
 NTS

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 GARDEN CITY, ID

CSHOA

L2 TENANT IMPROVEMENT PERMIT SET

PROJECT 23002	DATE 03-27-24
DRAWN ED	CHECKED TN

SHEET TITLE
PLUMBING DETAILS

SHEET
P40
 ORIGINAL SHEET SIZE
 24" x 36"

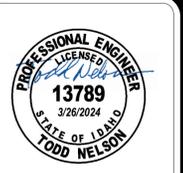
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 208.533.2962
 www.musgrovepa.com
 Project No. 23-264



PLUMBING FIXTURE SCHEDULE							
SYMBOL	FIXTURE DESCRIPTION	CONNECTION SIZE					MANUFACTURER / MODEL NUMBER / DESCRIPTION / ADDITIONAL COMMENTS
		WASTE	VENT	TRAP	CW	HW	
DF-1	DRINKING FOUNTAIN WITH BOTTLE FILLING STATION (INTERIOR DUAL BUBBLERS) (ELECTRIC WATER COOLER) (ADA COMPLIANT) (HIGH/LOW)	1 1/2	1 1/2	1 1/2	1/2	--	ELKAY MODEL MODEL EZSTL8WSVRSK (NON-FILTERED) 8H-LEVEL ADA COOLER WITH BOTTLE FILLING STATION FURNISHED WITH FLEXI-GUARD SAFETY BUBBLER. BUBBLER ACTIVATED BY PUSHBAR. BOTTLE FILLER ACTIVATED BY ELECTRONIC SENSOR WITH AUTOMATIC 30-SECOND SHUT-OFF TIMER. 115 VOLT, 5.0 AMPS, 60 HERTZ. PROVIDE WITH JAY R. SMITH 0834 FLOOR MOUNTED SUPPORT CARRIER.
ET-1	EXPANSION TANK	--	--	--	3/4	--	AMTROL THERM-X-TRO L ST-5, OR APPROVED EQUAL, NON-ASME SERIES THERMAL EXPANSION ABSORBER, ANTI-MICROBIAL LINER, AND 5 YEAR WARRANTY.
FD-1	FLOOR DRAIN (DUCTILE IRON BODY) (CONCRETE FLOOR)	2	2	2	--	--	SILOUX CHIEF SERIES NUMBER 832-25DNR, POST-CONSTRUCTION LEVELING FLOOR DRAIN, NO-HUB OUTLET, 5-1/2" ROUND, ADJUSTABLE NICKEL BRONZE STRAINER AND TRAP PRIMER PORT. INSTALL TOP OF DRAIN 1/8" BELOW FINISH FLOOR AND CAULK EDGE.
FS-1	FLOOR SINK (10" DEEP) (HALF GRATE, FOOT TRAFFIC RATED)	4	2	4	--	--	JAY R. SMITH FIGURE NUMBER 3160Y-12, CAST IRON RECEPTOR, ALUMINUM DOME STRAINER, NICKEL BRONZE GRATE, AND TRAP PRIMER. INSTALL TOP OF SINK 1/8" BELOW FINISH FLOOR AND CAULK EDGE.
LAV-1	LAVATORY (COUNTERTOP / CABINET MOUNTED) (ADA COMPLIANT)	1 1/2	1 1/2	1 1/4	1/2	1/2	KOHLER PENNINGTON MODEL K-2196-4 VITREOUS CHINA, COUNTERTOP-MOUNTED SINK WITH HOLES ON 4" CENTERS, AND GRID STRAINER. KOHLER CORALAIS MODEL K-15198-4RA, 4-1/2" LONG, SINGLE LEVER FAUCET WITH 0.5 GPM AERATOR. PROVIDE WITH WATTS SERIES LFUSG-B LEAD-FREE, THERMOSTATIC MIXING VALVE, ASSE STANDARD 1070 LISTED, BRASS BODY, INTEGRAL CHECK VALVES, AND SELECTABLE TEMPERATURE RANGE FROM 80°F TO 120°F. PROVIDE WITH PIPING INSULATION, TRUEBRO LAV GUARD, PLUMBEREX HANDI-SHIELD, OR EQUAL.
RP-1	RECIRCULATION PUMP (HOT WATER RETURN SYSTEM) (MEDIUM SIZED SYSTEM)	--	--	--	--	3/4	BELL AND GOSSETT BRONZE MODEL NBF-22, 115 VOLT, 0.8 AMPS, 92 WATTS, AND SHALL PROVIDE 7 GPM AT 10 FEET HEAD. INCLUDE 7-DAY PROGRAMMABLE ELECTRONIC TIME CLOCK WITH BATTERY BACKUP. INTERMATIC MODEL GM40AVE-RD89. APPROVED ALTERNATE: ARMSTRONG, TACO, GRUNDFOS.
S-1	SINK - SINGLE COMPARTMENT (17" X 20" X 6 1/2") (ADA COMPLIANT)	2	1 1/2	1 1/2	1/2	1/2	ELKAY LUSTERTONE MODEL LRAD172065, 6-1/2" DEEP, STAINLESS STEEL SINK. PROVIDE AND INSTALL ELKAY MODEL LK3001CR SINGLE LEVER CHROME FAUCET WITH SWING SPOUT AND HOSE SPRAY, ELKAY MODEL LK35 STAINLESS STEEL STRAINER BASKET A NO TAILPIECE, AND WATTS SERIES LFUSG-B LEAD-FREE, THERMOSTATIC MIXING VALVE, ASSE STANDARD 1070 LISTED, BRONZE BODY, INTEGRAL CHECK VALVES, AND SELECTABLE TEMPERATURE RANGE FROM 80°F TO 120°F.
SA-1	SHOCK ABSORBER (WATER HAMMER ARRESTOR)	--	--	--	--	--	JAY R. SMITH FIGURE NUMBER 5005 TO 5050, SIZED PER FIXTURES SERVED. PROVIDE AN ACCESS PANEL AND A BALL TYPE SHUT-OFF VALVE UPSTREAM OF SHOCK ABSORBER.
SS-1	SERVICE SINK (24" X 24" X 10") (FLOOR MOUNTED)	3	2	3	1/2	1/2	ACORN TERRAZZO-WARE MODEL TRH-242410. PROVIDE AND INSTALL WITH MODEL KFC CHROME UTILITY FAUCET, STAINLESS STEEL BUMPER GUARD, DRAIN GASKET, 3/8" HOSE AND WALL HANGER, MOP HANGER, AND (2) STAINLESS STEEL WALL GUARDS. MOUNT FAUCET 36" AFF.
TP-1	TRAP PRIMER (FLUSH VALVE PRIMER) (1 TRAP)	--	--	--	1/2"	--	PRECISION PLUMBING PRODUCTS MODEL FVP-1VB WITH VACUUM BREAKER. TRAP PRIMER TUBING SHALL BE INSTALLED OFF BACK OF FLUSH VALVE.
U-1	URNAL (FLUSH VALVE) (SEE ARCH. FOR MOUNTING HEIGHT)	2	1 1/2	INT.	3/4	--	KOHLER BARDON MODEL K-4891-ET WALL MOUNTED URINAL WITH 3/4" TOP SPUD, SLOAN REGAL MODEL 186-0.5 FLUSHOMETER, 0.5 GPF. INCLUDE BEEHIVE STRAINER AND JAY R. SMITH FIGURE NUMBER 0637 ADJUSTABLE FIXTURE SUPPORT.
WB-1	WALL BOX (WATER SUPPLY TO ICE MAKER)	--	--	--	1/2	--	QATEY FIREMASTER MODEL 39121 WITH FACEPLATE AND ADJUSTABLE METAL SUPPORT BRACKETS. FIRE-RATED, LOW LEAD, OR APPROVED EQUAL.
WC-1	WATER CLOSET (17-1/2" SEAT HEIGHT) (FLUSH VALVE) (FLOOR MOUNTED) (COMFORT HEIGHT / ADA COMPLIANT)	4	2	INT.	1	--	KOHLER HIGHCLIFF ULTRA MODEL K-96057 FLOOR MOUNTED WITH ELONGATED BOWL. KOHLER LUSTRA MODEL K-4666-C ELONGATED OPEN FRONT SEAT WITH HINGE. SLOAN REGAL MODEL 111-1.6 FLUSHOMETER, 1.6 GPF.
WCO	WALL CLEANOUT	SEE PLANS	--	--	--	--	JAY R. SMITH 4472T SERIES WITH CAST BRONZE TAPER THREAD PLUG, STAINLESS STEEL ROUND COVER, AND A STAINLESS STEEL VANDAL PROOF SCREW.
WH-1	WATER HEATER (20 GALLON LOWBOY MODEL) (208V-1Ø ELECTRIC)	--	--	--	SEE PLANS	SEE PLANS	BRADFORD WHITE MODEL LE120L3-3, NON-SIMULTANEOUS DUAL ELEMENTS, (2) 4.5 KW, 208V/1Ø, 18" DIAMETER, 25" TALL, WITH SIDE CONNECTIONS. PROVIDE WITH WALL BRACKET SUPPORT SIZED FOR WEIGHT, SEISMIC STRAPS, AND DRAIN PAN. PROVIDE WATER HEATER WITH HEAT TRAP.

- NOTES:
- ALL ADA COMPLIANT FIXTURES MUST COMPLY WITH ICC/ANSI A117.1. SEE ARCHITECTURAL PLANS FOR HANDICAPPED FIXTURE DESIGNATIONS, LOCATIONS, CLEARANCES, AND MOUNTING HEIGHTS.
 - ALL EXPOSED HW PIPING, CW PIPING, AND DRAIN LINES BENEATH ALL LAVATORIES AND ALL ADA COMPLIANT SINKS MUST BE INSULATED TO PREVENT INJURY. REFER TO ARCHITECTURAL PLANS. INSULATE WITH MOLDED CLOSED CELL VINYL INSULATION - TRUEBRO, PLUMBEREX, OR EQUAL.
 - PROVIDE P-TRAP PRIMERS FOR ALL FLOOR DRAINS AND FLOOR SINKS (NOT ALL TRAP PRIMERS ARE INDICATED ON PLANS - REFERENCE DETAILS FOR ADDITIONAL INFORMATION). PROVIDE A BALL TYPE SHUT-OFF VALVE UPSTREAM OF PRIMER VALVE. SEE SPECIFICATIONS.
 - SEE SPECIFICATIONS FOR ALTERNATE APPROVED MANUFACTURERS.
 - LOCATE CONTROLS PER ADA STANDARDS, REFERENCE ARCHITECTURAL DRAWINGS FOR TUB/SHOWER ELEVATIONS.
 - BACKFLOW PREVENTION: THIS BUILDING IS PROVIDED WITH A BACKFLOW PREVENTION DEVICE ON THE MAIN WATER SERVICE.

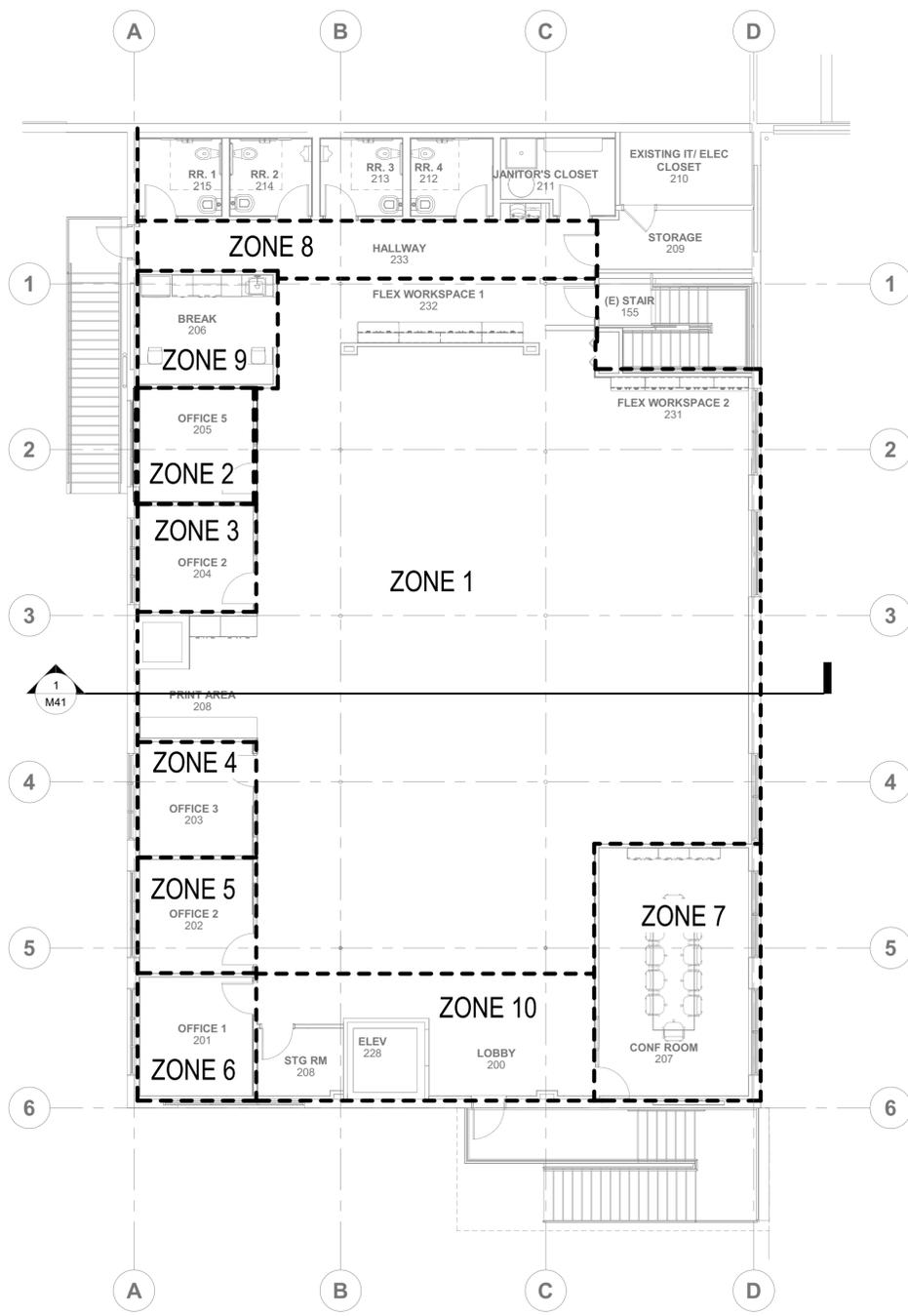
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 CSHQA
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 BOISE, ID 83702
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L2 TENANT IMPROVEMENT PERMIT SET

PROJECT 23002	DATE 03-27-24
DRAWN ED	CHECKED TN
REVISED	

SHEET TITLE
PLUMBING SCHEDULE

SHEET
P50
 ORIGINAL SHEET SIZE
 24" x 36"



1 HVAC ZONE PLAN
 1/8" = 1'-0"

MECHANICAL COMCHECK

COMcheck Software Version COMcheckWeb
Mechanical Compliance Certificate

Project Information
 Energy Code: 2018 IECC
 Project Title: ITD D3 2nd Floor Remodel
 Location: Boise, Idaho
 Climate Zone: 5b
 Project Type: Alteration

Mechanical Compliance Statement
 Compliance Statement: The proposed mechanical alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2018 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Chris Dyke, Engineer
 Title: Title
 Date: 2/26/2024

Mechanical Systems List
Quantity System Type & Description

- HP 1 (Unknown)
 VRF Condensing Unit, Air Cooled Heat Pump
 Heating Mode Capacity = 37 kBtu/h,
 No minimum efficiency requirement applies
 Cooling Mode Capacity = 36 kBtu/h,
 No minimum efficiency requirement applies
 Fan System: None
- HP 2 (Unknown)
 VRF Condensing Unit, Air Cooled Heat Pump
 Heating Mode Capacity = 37 kBtu/h,
 No minimum efficiency requirement applies
 Cooling Mode Capacity = 36 kBtu/h,
 No minimum efficiency requirement applies
 Fan System: None
- HP 3 / FC 3 (Single Zone)
 Split System Heat Pump
 Heating Mode Capacity = 20 kBtu/h,
 Required Efficiency = 13.00 SEER, Required Efficiency = 8.30 HSPF
 Cooling Mode Capacity = 17 kBtu/h,
 Proposed Efficiency = 20.50 SEER, Required Efficiency = 14.00 SEER
 Proposed Part Load Efficiency = 0.00, Required Part Load Efficiency = 0.00
 Fan System: FAN SYSTEM 1 - Compliance (Motor nameplate HP and fan efficiency method) / Passes
 Fan: FAN 1 Supply, Constant Volume, 450 CFM, 0.1 motor nameplate hp, 80.0 fan efficiency grade, 80.0 total fan efficiency, 80.0 design fan efficiency, fan exception: Single fan <= 50hp
- FC 1 (1) / FC 2 (3) (Single Zone)
 Heating: 1 each, Other, Electric, Capacity = 10 kBtu/h,
 No minimum efficiency requirement applies
 Cooling: 1 each, VRF Zone Fan Unit, Capacity = 9 kBtu/h, Unknown Economizer
 No minimum efficiency requirement applies
 Fan System: FAN SYSTEM 1 - Compliance (Motor nameplate HP and fan efficiency method) / Passes
 Fan: FAN 1 Supply, Constant Volume, 450 CFM, 0.1 motor nameplate hp, 80.0 fan efficiency grade, 80.0 total fan efficiency, 80.0 design fan efficiency, fan exception: Single fan <= 50hp

Project Title: ITD D3 2nd Floor Remodel
 Data Filename: Report date: 02/26/24
 Page: 4 of 13
 Project Title: ITD D3 2nd Floor Remodel
 Data Filename: Report date: 02/26/24
 Page: 5 of 13

ZONE LOADS SUMMARY

MUSGROVE ENGINEERING, PA
 234 S. WHISPERWOOD WAY BOISE, IDAHO 83709

Zone Summary

PROJECT:	Design Conditions		Winter		Summer						
	ITD D3 Second Floor TI	20-Feb-24	CHK BY: TN	11.4	98.7						
COMPUTED BY: ED	Heating Load		Sensible Cooling Load		Total Cooling Load				Unit Selection Size		
Zone Reference	FLOOR SQ. FT.	BTUH	KW	BTUH	BTUH	NOMINAL TON (12000-BTU/H-TON)	SQ. FT PER NOMINAL TON	NUMBER OF PEOPLE	OSA	EXHAUST	TONS
1 ZONE 1: Open Workspace 230	2900	63,734	19	52,074	57,684	4.8	603.3	20	343	0	RTU-1 (EXIST)
2 ZONE 2: Office 5 205	120	3,788	1	4,084	4,645	0.4	310.0	2	22	0	FC-1.1 (0.75)
3 ZONE 3: Office 2 204	113	3,679	1	4,039	4,600	0.4	294.8	2	21	0	FC-1.2 (0.75)
4 ZONE 4: Office 3 203	120	3,788	1	4,084	4,645	0.4	310.0	2	22	0	FC-1.3 (0.75)
5 ZONE 5: Office 2 202	120	3,788	1	4,084	4,645	0.4	310.0	2	22	0	FC-1.4 (0.75)
6 ZONE 6: Office 1 201	125	5,094	1	5,196	5,697	0.5	263.3	2	22	0	FC-1.5 (0.75)
7 ZONE 7: Conference Room 207	345	12,511	4	14,916	17,721	1.5	233.6	10	88	0	FC-3 (1.5)
8 Zone 8: Hallway 233	236	4,526	1	1,985	1,985	0.2	1427.0	0	18	0	RTU-1 (EXIST)
9 ZONE 9: Break 206	136	5,090	1	6,120	7,523	0.6	216.9	5	41	0	RTU-1 (EXIST)
10 ZONE 10: Lobby 200	323	8,817	3	5,601	7,564	0.6	512.4	7	68	0	RTU-1 (EXIST)
Total Loads =	4538	114,613	34	102,121	116,707	9.7	467	52	665	0	

Energy Compliance Calculations (Not Equipment Schedule)
 Equipment is selected based on next available size.
 Load calculations based on ASHRAE CLTD/CLF - Cooling Load Temperature Difference/Cooling Load Factor Methods

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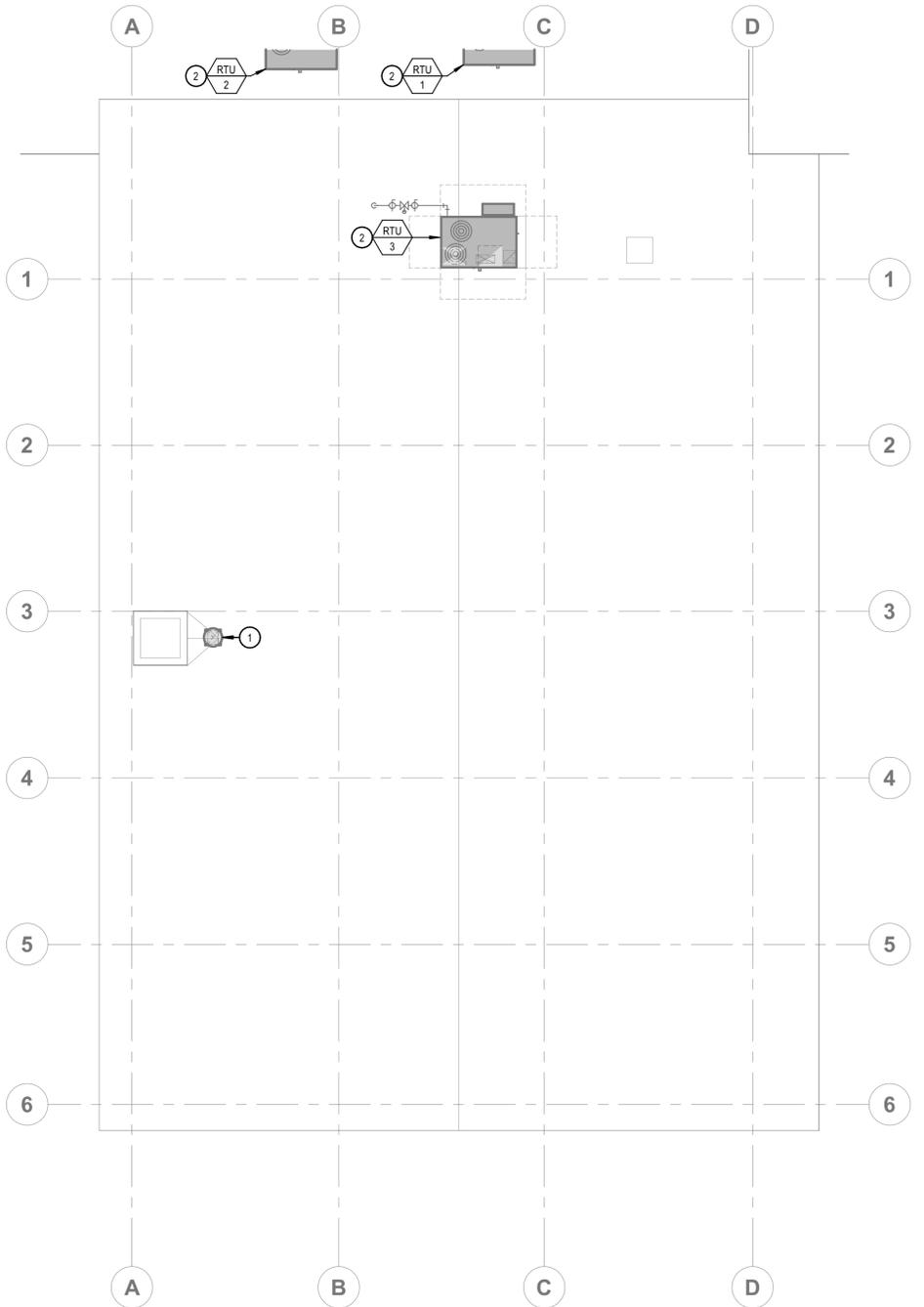
L2 TENANT IMPROVEMENT PERMIT SET

PROJECT	DATE
23002	03-27-24
DRAWN	CHECKED
ED	TN

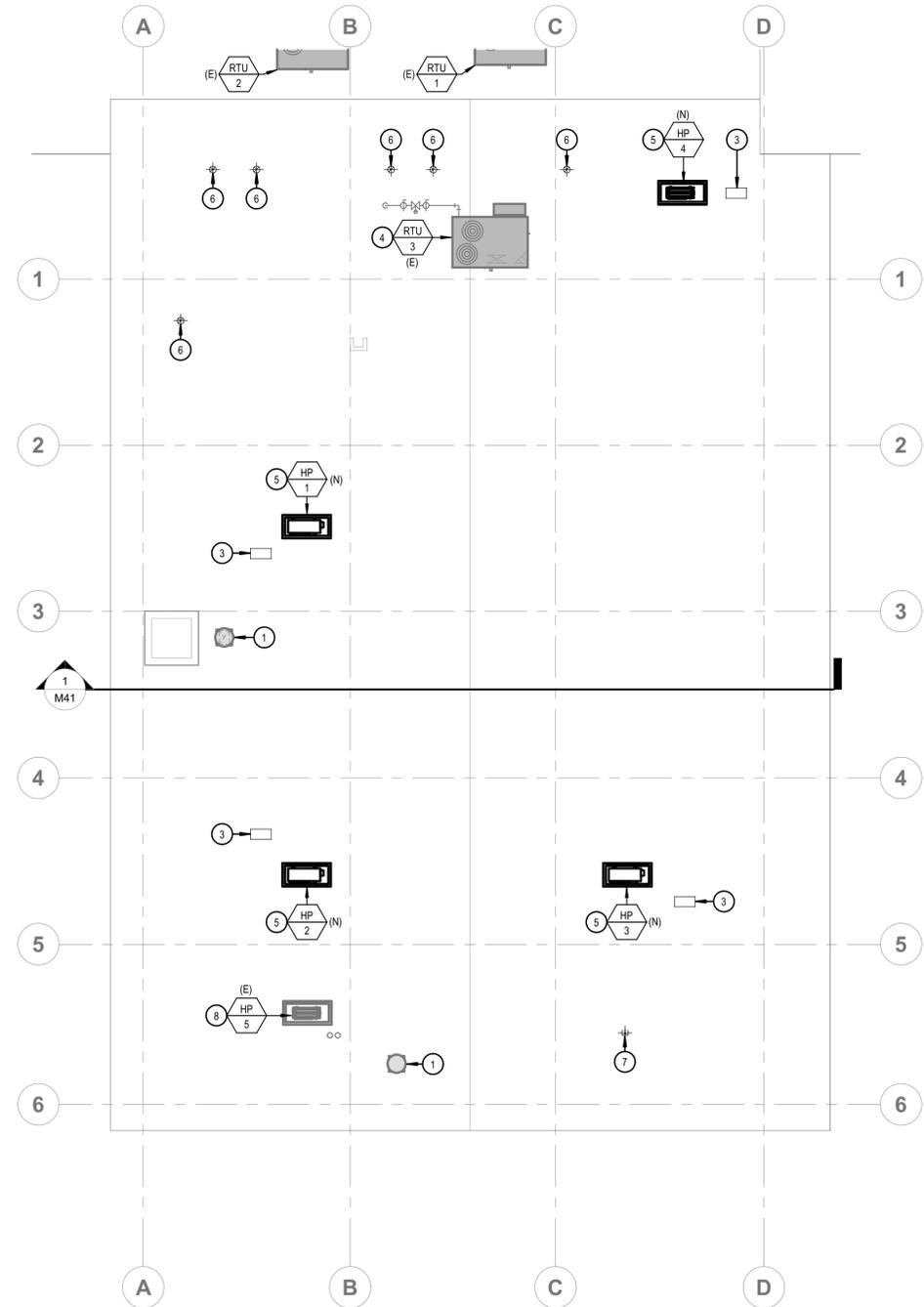
REVISED

SHEET TITLE
HVAC ZONE PLAN

SHEET
M10
 ORIGINAL SHEET SIZE
 24" x 36"



1 HVAC DEMOLITION ROOF PLAN
 1/8" = 1'-0"



2 HVAC NEW WORK ROOF PLAN
 1/8" = 1'-0"

KEYED NOTES:

- # SYMBOL USED FOR CALLOUT
- EXISTING EXHAUST FAN TO REMAIN AS-IS
 - EXISTING ROOFTOP UNIT TO REMAIN AS-IS
 - PROVIDE AND ROUTE REFRIGERANT LINES THROUGH REFRIGERANT HOOD. SEE DETAIL FOR REQUIREMENTS.
 - EXISTING ROOFTOP UNIT TO REMAIN. REBALANCE TO 4,000-CFM AND VERIFY UNIT OPERATION.
 - INSTALL NEW ROOF MOUNTED HEAT PUMP ON MIRO STAND. SEE DETAIL FOR INSTALLATION REQUIREMENTS.
 - EXHAUST FAN ROOF CAP. SEAL AROUND ROOF PENETRATION.
 - ROUTE 8" OUTSIDE AIR DUCT FROM FLOOR BELOW. PROVIDE AND INSTALL GOOSENECK VENT TERMINATION PER DETAIL.
 - EXISTING HEAT PUMP UNIT TO REMAIN.

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L2 TENANT IMPROVEMENT PERMIT SET

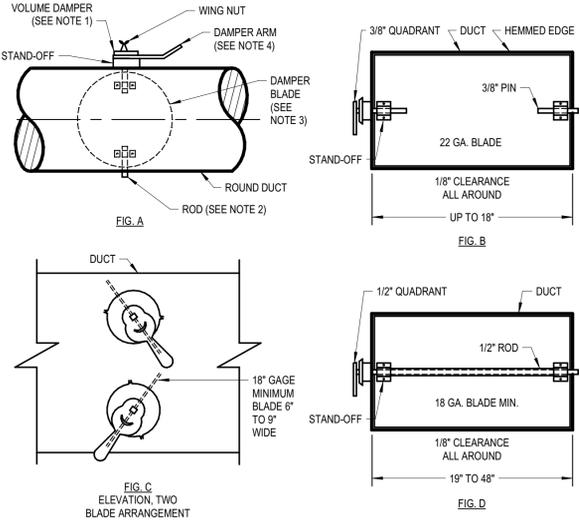
PROJECT 23002	DATE 03-27-24
DRAWN ED	CHECKED TN

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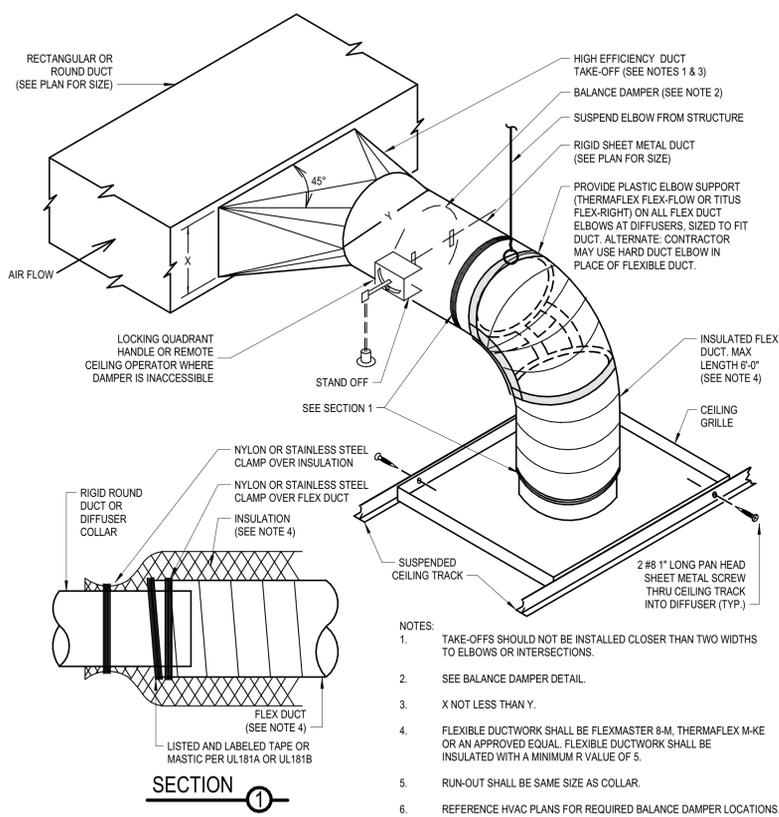
SHEET TITLE
HVAC ROOF PLAN

SHEET
M30
 ORIGINAL SHEET SIZE
 24" x 36"

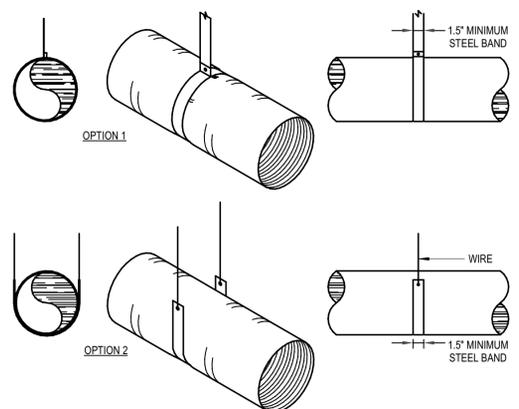
- NOTES:**
- FOR TAKE-OFFS LARGER THAN 12" DIAMETER, USE A FACTORY MANUFACTURED DAMPER, LOUVERS & DAMPERS, INC. MODEL CD-800 WITH A LOCKING HAND QUADRANT OR EQUAL.
 - ROD CONTINUOUS ON 2" W.G. CLASS AND ON ALL DAMPERS OVER 12" DIAMETER.
 - BLADE 22 GAGE MIN., BUT NOT LESS THAN TWO GAGES MORE THAN THE DUCT GAGE.
 - PROVIDE REMOTE CEILING OPERATOR WHERE DAMPER IS INACCESSIBLE.
 - FOR DUCTS OVER 12" HIGH USE MULTIPLE BLADE DAMPERS (SEE FIG. C).
 - ALTERNATE MANUFACTURERS INCLUDE: AMERICAN WARMING, SAFE-AIR/DOWCO, J&J, LOUVERS & DAMPERS, RUSKIN, NAILOR, ARROW UNITED, POTTORFF, & CESCO.
 - PROVIDE STAND-OFF FOR DAMPER ARMS LOCATED W/EXTERNAL INSULATION.



1 BALANCE DAMPER DETAIL
 NTS

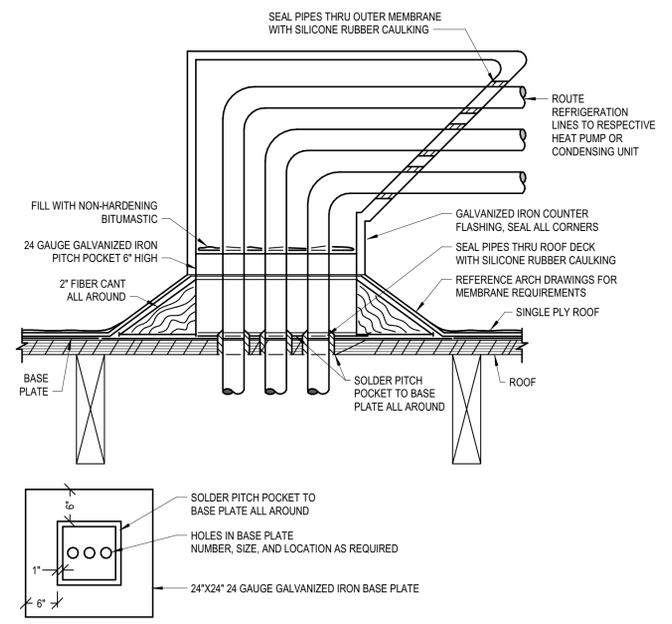


2 DUCT TAKEOFF DETAIL - HIGH EFFICIENT
 NTS

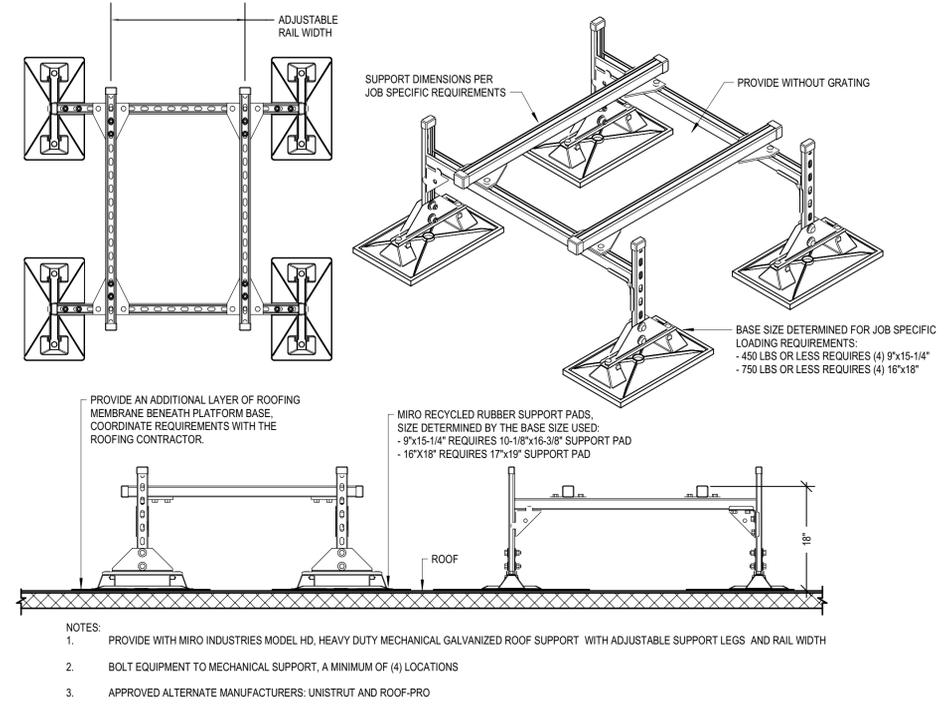


- NOTES:**
- SUPPORT SYSTEM SHALL NOT DAMAGE, CRIMP, OR INHIBIT DUCT FREE AREA IN ANY WAY.
 - FLEXIBLE DUCT MUST NOT EXCEED 6'-0" FROM CONNECTION TO TERMINATION.
 - MAXIMUM LENGTH BETWEEN SUPPORTS MUST NOT EXCEED 3'-0" ON CENTER.
 - ATTACH BANDS OR WIRES TO SUPPORT STRUCTURE ABOVE.
 - FLEXIBLE DUCTWORK SHALL BE FLEXMASTER 1-M OR APPROVED EQUAL.
 - FLEXIBLE DUCTWORK SHALL BE INSULATED WITH A MINIMUM R-VALUE OF 6.0.
 - FLEXIBLE DUCTWORK IS FOR INDOOR USE ONLY. DO NOT INSTALL OR STORE PRODUCT WHERE EXPOSURE TO DIRECT SUNLIGHT CAN OCCUR. PROLONGED EXPOSURE TO SUNLIGHT MAY CAUSE DETERIORATION OF VAPOR BARRIER.
 - TERMINAL DEVICES SHALL BE SUPPORTED INDEPENDENTLY OF THE FLEXIBLE DUCTWORK.
 - REPAIR TURN OR DAMAGED VAPOR BARRIER/JACKET WITH DUCT TAPE LISTED AND LABELED TO UL 181B. IF INTERNAL CORE IS PENETRATED, REPLACE FLEXIBLE DUCTWORK.
 - AVOID BENDING DUCT ACROSS SHARP CORNERS OR INCIDENTAL CONTACT WITH METAL FIXTURES, PIPES, OR CONDUITS.
 - FLEXIBLE DUCTWORK SHALL NOT BE INSTALLED WITHIN 4 INCHES OF HOT EQUIPMENT (FURNACES, BOILERS, STEAM PIPES, ETC.) THAT IS ABOVE 250°F.
 - FLEXIBLE DUCTWORK SHALL NOT BE INSTALLED IN CONCRETE, BURIED BELOW GRADE, OR IN CONTACT WITH THE GROUND.
 - DO NOT INSTALL FLEXIBLE DUCTWORK IN EXPOSED CEILING AREA.

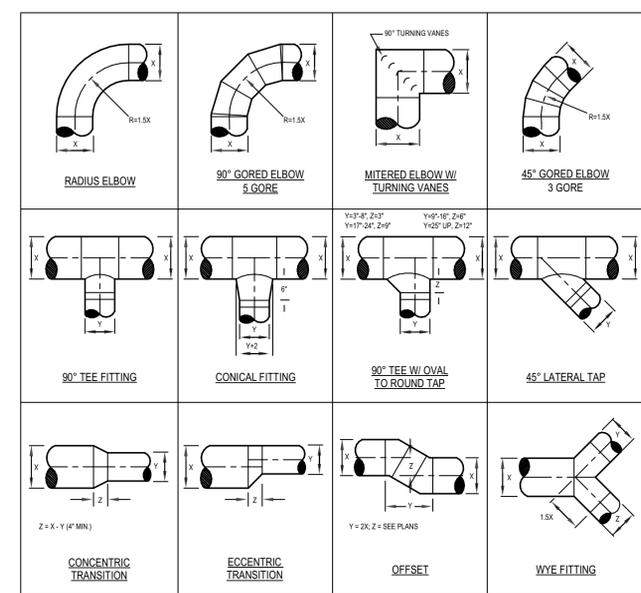
3 FLEXIBLE DUCT SUPPORT DETAIL
 NTS



4 PIPING THROUGH ROOF DETAIL
 NTS

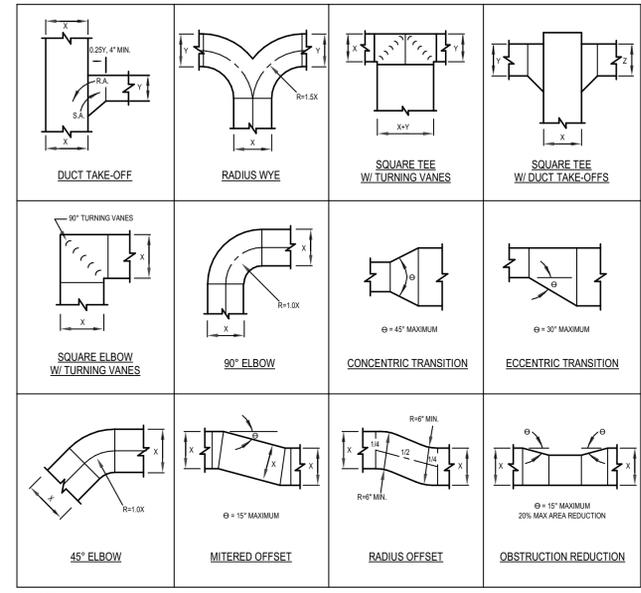


5 ROOFTOP HEAT PUMP PLATFORM DETAIL
 NTS



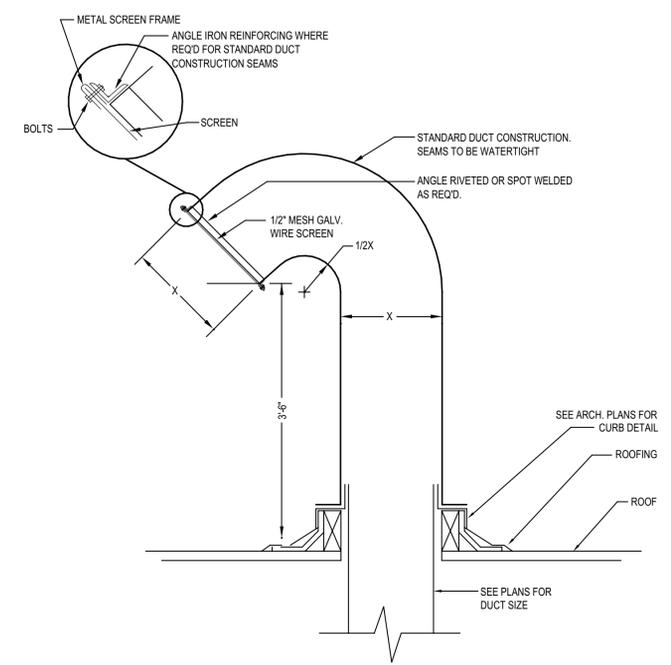
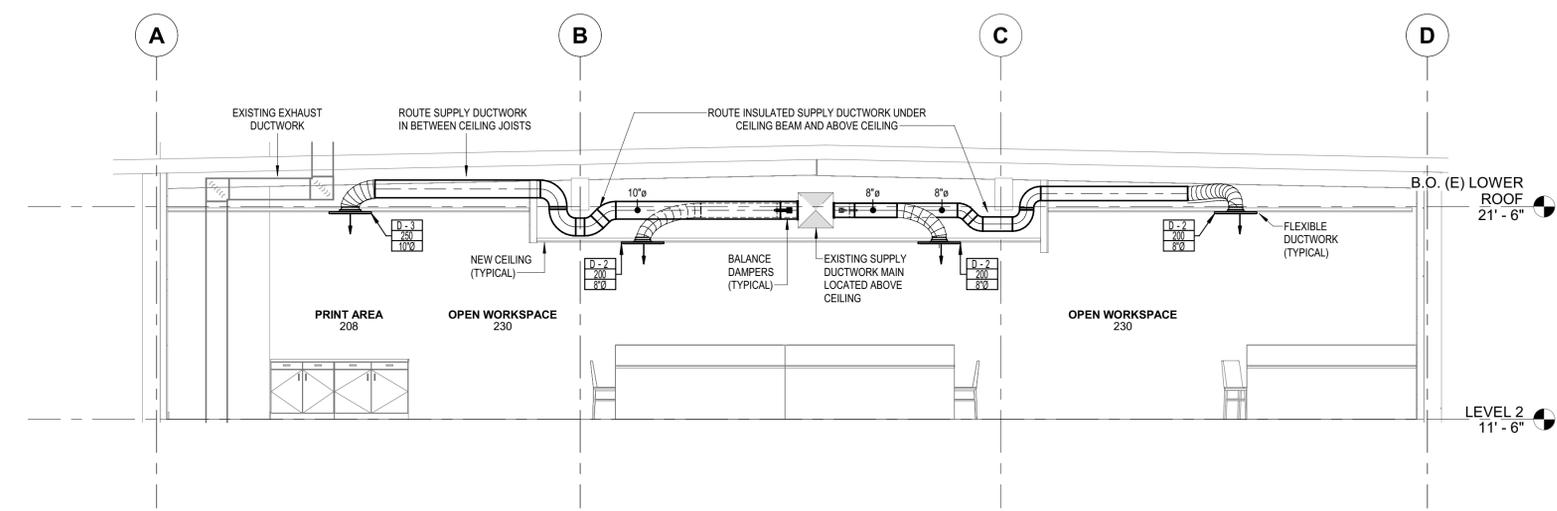
- NOTE:**
- ALL DUCTWORK TRANSITIONS SHALL BE CONSTRUCTED AND INSTALLED TO SMACNA, SPECIFICATIONS, AND THE ABOVE NOTED STANDARDS. ANY DEVIATIONS SHALL BE COORDINATED WITH THE ENGINEER.

6 ROUND DUCT FITTING DETAILS
 NTS



- NOTE:**
- ALL DUCTWORK TRANSITIONS SHALL BE CONSTRUCTED AND INSTALLED TO SMACNA, SPECIFICATIONS AND THE ABOVE NOTED STANDARDS. ANY DEVIATIONS SHALL BE COORDINATED WITH THE ENGINEER.

7 RECTANGULAR DUCT FITTING DETAILS
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L2 TENANT IMPROVEMENT PERMIT SET

PROJECT 23002	DATE 03-27-24
DRAWN ED	CHECKED TN

REVISED

SHEET TITLE
HVAC DETAILS

SHEET
M41
 ORIGINAL SHEET SIZE
 24" x 36"



EXISTING PACKAGED AIR CONDITIONING SCHEDULE

SYMBOL	AREA SERVED	NOM. TONS	SUPPLY FAN				COOLING CAPACITY				GAS HEATING @ ALTITUDE		RTU ELECTRICAL			ELECTRICAL POWER EXHAUST				OSA CFM	EER	OPER. WEIGHT (LBS)	MANUFACTURER AND MODEL	REMARKS	
			CFM	ESP	BRAKE HP	DRIVE	TOTAL MBH	SENS. MBH	INPUT MBH	OUTPUT MBH	MCA	MOC	V/Ø	STATIC	MCA	MOC	V/Ø								
RTU-3[E]	OPEN AREA	10	4,000	0.65"	EXIST	EXIST	EXIST	EXIST	EXIST	EXIST	EXIST	EXIST	EXIST	EXIST	EXIST	EXIST	EXIST	EXIST	EXIST	EXIST	470	EXIST	EXIST	EXISTING UNIT	1, 2, 3

- REMARKS:
- REBALANCE EXISTING UNIT TO NOTED SUPPLY AIRFLOW AND OUTSIDE AIRFLOW.
 - REPLACE ALL FILTERS AT END OF PROJECT.
 - CLEAN UNIT AS REQUIRED AT THE END OF PROJECT.

DUCTLESS MULTI-SPLIT SYSTEM HEAT PUMP UNIT SCHEDULE

OUTDOOR HEAT PUMP UNITS

SYMBOL	AREA SERVED	NOMINAL TONS	UNIT TYPE	COOLING REQUIRED AT 80°F OSA, 80°F EDB, 62°F EWB		HEATING REQUIRED AT 47°F OSA		ELECTRICAL			MINIMUM SEER	OPERATING WEIGHT (LBS)	MANUFACTURER AND MODEL	REMARKS
				TOTAL MBH	SENSIBLE MBH	TOTAL MBH	MCA	MOC	V / Ø					
HP-1	OFFICES	3	HEAT PUMP	36,000	36,000	37,000	30	45	208 / 1	20	225	LENNOX MODEL MLB036	1, 2, 4, 6, 7	
HP-2	OFFICES	3	HEAT PUMP	36,000	36,000	37,000	30	45	208 / 1	20	225	LENNOX MODEL MLB036	1, 2, 4, 6, 7	
HP-3	CONFERENCE ROOM	1.5	HEAT PUMP	18,000	18,000	20,000	17	25	208 / 1	20.5	95	LENNOX MODEL MMD8018S4-2P	1, 2, 4, 6, 7	

INDOOR FAN COIL UNITS

HEAT PUMP SYMBOL	FAN COIL SYMBOL	AREA SERVED	NOMINAL TONS	UNIT TYPE	SUPPLY FAN		HEATING (47°F OUTDOOR TEMP)		ELECTRICAL			OSA (CFM)	SOUND (dB)	OPERATING WEIGHT (LBS)	MANUFACTURER AND MODEL	REMARKS
					CFM H/L	MBH	MBH	MCA	MOC	V / Ø						
HP-1	FC-1.1	OFFICE 5 205	0.75	CEILING	300	9,000	10,000	THROUGH OUTDOOR UNIT			25	37	10	LENNOX MODEL M22A009	1, 3, 5, 6, 7	
	FC-1.2	OFFICE 2 204	0.75	CEILING	300	9,000	10,000	THROUGH OUTDOOR UNIT			25	37	10	LENNOX MODEL M22A009	1, 3, 5, 6, 7	
HP-2	FC-2.1	OFFICE 3 203	0.75	CEILING	300	9,000	10,000	THROUGH OUTDOOR UNIT			25	37	10	LENNOX MODEL M22A009	1, 3, 5, 6, 7	
	FC-2.2	OFFICE 2 202	0.75	CEILING	300	9,000	10,000	THROUGH OUTDOOR UNIT			25	37	10	LENNOX MODEL M22A009	1, 3, 5, 6, 7	
	FC-2.3	OFFICE 1 201	0.75	CEILING	300	9,000	10,000	THROUGH OUTDOOR UNIT			25	37	10	LENNOX MODEL M22A009	1, 3, 5, 6, 7	
HP-3	FC-3	CONFERENCE ROOM 207	1.5	DUCTED	450	17,800	20,000	THROUGH OUTDOOR UNIT			90	37	55	LENNOX MODEL MPC018S4S-1P	1, 3, 5, 6, 7	

- REMARKS:
- APPROVED ALTERNATE MANUFACTURERS: DAIKIN, SAMSUNG, LG, CARRIER, OR APPROVED EQUAL.
 - PROVIDE MANUFACTURER'S CRANKCASE HEATER, LOW AMBIENT CONTROLS (TO 0°F), WIND BAFFLES, REFRIGERATION LINE SET AND TEES, SIZED BY MANUFACTURER, AND TAMPER PROOF PORT CAPS.
 - CONTROL UNIT WITH MANUFACTURER'S HARD-WIRED WALL MOUNTED 7 DAY PROGRAMMABLE THERMOSTAT (LENNOX MODEL MOSTAT64Q-2) WITH 5 DEGREE DEADBAND.
 - PROVIDE WITH MIRO INDUSTRIES HEAVY DUTY MECHANICAL GALVANIZED ROOF SUPPORT WITH ADJUSTABLE SUPPORT LEGS. SUPPORT SHALL EXTEND A MINIMUM OF 2" BEYOND EQUIPMENT IN EACH DIRECTION. BOLT EQUIPMENT TO MECHANICAL SUPPORT. PROVIDE HEAT TAPE ON PLATFORM TO NEAREST DRAIN.
 - PROVIDE WITH MANUFACTURER'S CONDENSATE PUMP, LITTLE GIANT MINI CONDENSATE PUMP. CONCEAL PUMP BEHIND UNIT WITHIN MOUNTING BRACKET ASSEMBLY.
 - ELECTRICAL TO PROVIDE DISCONNECT.
 - SEE CONTROL DRAWINGS FOR SEQUENCE OF OPERATION.

EXHAUST FAN SCHEDULE

SYMBOL	AREA SERVED	UNIT TYPE	BLOWER				ELECTRICAL		MAXIMUM SONES	OPERATING WEIGHT (LBS)	MANUFACTURER AND MODEL	REMARKS
			CFM	ESP	MAXIMUM RPM	DRIVE	HP/W	V/Ø				
EF-1	RESTROOM	CEILING CABINET	100	.375	1075	DIRECT	46.5 W	115/1	2.5	15	COOK MODEL GC-148	1, 2, 3
EF-2	RESTROOM	CEILING CABINET	100	.375	1075	DIRECT	46.5 W	115/1	2.5	15	COOK MODEL GC-148	1, 2, 3
EF-3	RESTROOM	CEILING CABINET	100	.375	1075	DIRECT	46.5 W	115/1	2.5	15	COOK MODEL GC-148	1, 2, 3
EF-4	RESTROOM	CEILING CABINET	100	.375	1075	DIRECT	46.5 W	115/1	2.5	15	COOK MODEL GC-148	1, 2, 3
EF-5	JANITORS ROOM	CEILING CABINET	75	.375	1075	DIRECT	46.5 W	115/1	2.5	15	COOK MODEL GC-148	1, 2, 3
EF-6	BREAK ROOM	CEILING CABINET	150	.375	1160	DIRECT	57.7 W	115/1	3.5	15	COOK MODEL GC-186	1, 2, 3

- REMARKS:
- APPROVED ALTERNATE MANUFACTURERS: A.C.M.E. GREENHECK, PENNBARRY, TWIN CITY FAN COMPANY AND SOLER & PALAU.
 - PROVIDE UNIT WITH MANUFACTURER'S ALUMINUM ROOF CAP (FLAT ROOF) EQUAL TO COOK MODEL PR (W/ INTEGRAL BIRD SCREEN AND ROOF CURB), BACKDRAFT DAMPER, OUTLET FLEX DUCT CONNECTION, STANDARD PLUG DISCONNECT, PRE-WIRED FAN SPEED CONTROLLER, THERMAL OVERLOAD PROTECTION, HANGING VIBRATION ISOLATORS, AND WHITE ALUMINUM GRILLE.
 - SEE CONTROL DRAWINGS FOR SEQUENCE OF OPERATION.

DIFFUSER SCHEDULE

SYMBOL	NOMINAL SIZE	NECK / RUNOUT SIZE	CFM RANGE	REMARKS
D-1 CFM 8'Ø	6X6	6"Ø	0 - 90	1, 2, 3, 4, 5, 6, 7
D-2 CFM 8'Ø	9X9	8"Ø	90 - 200	1, 2, 3, 4, 5, 6, 7
D-3 CFM 10'Ø	12X12	10"Ø	200 - 350	1, 2, 3, 4, 5, 6, 7

- REMARKS:
- ALTERNATE MANUFACTURERS: ANEMOSTAT, J&J REGISTER, NAILOR, METAL-AIRE, TUTTLE & BAILEY, KRUEGER, AND UNITED ENERTECH.
 - SIZES BASED ON TITUS MODEL.
 - SIZES BASED ON A MAXIMUM NC LEVEL OF 25.
 - ALL DIFFUSERS LOCATED IN LAY-IN CEILING AREAS SHALL BE BORDER TYPE 3 AND BE MOUNTED IN MANUFACTURER PROVIDED 24"x24" PANELS. ALL DIFFUSERS LOCATED IN HARD CEILING AREAS SHALL BE BORDER TYPE 6 (BEVELED) SURFACE MOUNTED. SEE ARCHITECTURAL PLANS FOR LOCATIONS OF VARIOUS CEILING TYPES.
 - SEE HVAC FLOOR PLANS FOR DIRECTIONAL THROW REQUIREMENTS FOR EACH DIFFUSER.
 - WHENEVER THERE IS A DISCREPANCY BETWEEN THE RUNOUT DUCT SIZE SHOWN ON THE PLANS AND THAT SHOWN IN THE SCHEDULE, ALWAYS USE THE LARGER OF THE TWO DUCT SIZES.
 - COLOR TO BE SELECTED BY ARCHITECT.

RETURN & EXHAUST GRILLE SCHEDULE

SYMBOL	NOMINAL SIZE	NECK / RUNOUT SIZE	CFM RANGE	REMARKS
R-1 22X10	22X10	22X10	500-1100	1, 2, 3, 4, 5, 6

- REMARKS:
- ALTERNATE MANUFACTURERS: ANEMOSTAT, CARNES, PRICE, NAILOR, METAL-AIRE, TUTTLE & BAILEY, KRUEGER, J&J REGISTER, AND UNITED ENERTECH.
 - SIZES BASED ON TITUS MODEL 50F, ALUMINUM EGGGRATE RETURN GRILLE, 1/2" x 1/2" x 1" SPACING (SINGLE CORE), PROVIDE SQUARE TO ROUND TRANSITION (WHERE ROUND RUN-OUT INDICATED).
 - SIZES BASED ON A MAXIMUM NC LEVEL OF 25.
 - ALL GRILLES LOCATED IN LAY-IN CEILING AREAS SHALL HAVE BORDER #3, UNLESS OTHERWISE INDICATED. ALL GRILLES LOCATED IN HARD CEILING AREAS SHALL HAVE BORDER #1, UNLESS OTHERWISE INDICATED. REFER TO ARCHITECTURAL PLANS FOR LOCATIONS OF VARIOUS CEILING TYPES. SHEET METAL DUCTWORK VISIBLE BEHIND GRILLE SHALL BE PAINTED FLAT BLACK.
 - WHENEVER THERE IS A DISCREPANCY BETWEEN THE RUNOUT DUCT SIZE SHOWN ON THE PLANS AND THAT SHOWN IN THE SCHEDULE, ALWAYS USE THE LARGER OF THE TWO DUCT SIZES.
 - COLOR TO BE SELECTED BY ARCHITECT.

VENTILATOR / ENERGY RECOVERY UNIT

SYMBOL	SPEED	GROSS AIR DELIVERY AT .01" WG		ELECTRICAL		TOTAL RECOVERY EFFICIENCY (%)		APPARENT SENSIBLE EFFECTIVENESS (%)		MAXIMUM SONES	OPERATING WEIGHT (LBS)	MANUFACTURER AND MODEL	REMARKS
		SUPPLY (CFM)	EXHAUST (CFM)	W	V/Ø	HEATING	COOLING	HEATING	COOLING				
ERU-1	HIGH	30	30	5.2	120/1	HEATING	COOLING	HEATING	COOLING	1.2	10	BLAUBERG MODEL: VENTO A50-1 PRO	1, 2, 3
	LOW	9	9			N/A	82	82	N/A				
ERU-2	HIGH	30	30	5.2	120/1	HEATING	COOLING	HEATING	COOLING	1.2	10	BLAUBERG MODEL: VENTO A50-1 PRO	1, 2, 3
	LOW	9	9			N/A	82	82	N/A				
ERU-3	HIGH	30	30	5.2	120/1	HEATING	COOLING	HEATING	COOLING	1.2	10	BLAUBERG MODEL: VENTO A50-1 PRO	1, 2, 3
	LOW	9	9			N/A	82	82	N/A				
ERU-4	HIGH	30	30	5.2	120/1	HEATING	COOLING	HEATING	COOLING	1.2	10	BLAUBERG MODEL: VENTO A50-1 PRO	1, 2, 3
	LOW	9	9			N/A	82	82	N/A				
ERU-5	HIGH	30	30	5.2	120/1	HEATING	COOLING	HEATING	COOLING	1.2	10	BLAUBERG MODEL: VENTO A50-1 PRO	1, 2, 3
	LOW	9	9			N/A	82	82	N/A				

- REMARKS:
- PROVIDE WITH MANUFACTURERS KIT VENTO EXPERT A50-1S WITH HEAT REGENERATOR, FAN, MERV 6 FILTER, INDOOR UNIT CONTROLLER, SHUTTERS AND REMOTE CONTROL. PROVIDE SLEEVE FOR WALL THICKNESS, CONTRACTOR TO VERIFY LENGTH REQUIRED. UNIT SHALL BE HARD WIRED. SEE ELECTRICAL FOR REQUIREMENTS.
 - UNIT TO RUN CONTINUOUSLY.
 - UNIT TO BE SET ON HIGH.

DUCTLESS SPLIT HIGH WALL COOLING & HEATING UNIT SCHEDULE

SYMBOL	AREA SERVED	NOMINAL TONS	UNIT TYPE	SUPPLY FAN			COOLING REQUIRED AT 85°F OSA, 80°F EDB, 62°F EWB		HEATING REQUIRED AT 32°F OSA, 69°F EDB.		ELECTRICAL OUTDOOR UNIT			INDOOR/ OUTDOOR OPERATING WEIGHT (LBS)	MANUFACTURER AND MODEL	REMARKS
				CFM	WATTS	V/Ø	TOTAL MBH	SENSIBLE MBH	TOTAL MBH	MCA	MOC	V / Ø				
FC-4, HP-4	EXISTING IT / ELEC CLOSET 210	1.0	HIGH WALL COOL/HEAT UNIT	176-335	20.0	THROUGH OUTDOOR UNIT	12.0	9.0	12.0	13.0	15.0	208 / 1	23.2 / 13.2	2565	LENNOX INDOOR UNIT MODEL MWMC012 LENNOX OUTDOOR UNIT MODEL MPC012	1, 2, 3, 4, 5, 6

- REMARKS:
- APPROVED ALTERNATE MANUFACTURERS: CARRIER, SAMSUNG, LG, DAIKIN, OR APPROVED EQUAL BY ENGINEER.
 - CONTROL UNIT WITH MANUFACTURER'S HARD-WIRED WALL MOUNTED 7 DAY PROGRAMMABLE THERMOSTAT WITH AUTO CHANGE OVER.
 - PROVIDE MANUFACTURERS CRANKCASE HEATER, LOW AMBIENT CONTROLS & (TO -0°F COOLING & TO -0°F HEATING) WIND BAFFLES, REFRIGERATION LINE SET SIZED BY MANUFACTURER, AND TAMPER PROOF PORT CAPS.
 - PROVIDE WITH MIRO INDUSTRIES HEAVY DUTY MECHANICAL GALVANIZED ROOF SUPPORT WITH ADJUSTABLE SUPPORT LEGS. SUPPORT SHALL EXTEND A MINIMUM OF 6" BEYOND EQUIPMENT IN EACH DIRECTION. BOLT EQUIPMENT TO MECHANICAL SUPPORT.
 - PROVIDE WITH MANUFACTURERS CONDENSATE PUMP, OR LITTLE GIANT MINI CONDENSATE PUMP. CONCEAL PUMP BEHIND UNIT WITHIN MOUNTING BRACKET ASSEMBLY. ELECTRICAL CIRCUIT FOR PUMP SHALL BE INTEGRATED TO FAN COIL.
 - ELECTRICAL TO PROVIDE DISCONNECT AND HEAT TRACE BENEATH UNIT AND TO ROOF DRAIN.

ELECTRIC HEATER SCHEDULE

SYMBOL	AREA SERVED	UNIT TYPE	FAN			ELECTRICAL			MANUFACTURER AND MODEL	REMARKS	
			CFM	RPM	HP	KW	STEPS	V / Ø			AMPS
EH-1	ENTRY	SEMI-RECESSED	245	1400	1/8	2	1	208 / 1	9.6	MARKEL MODEL 3420 SERIES	1, 2, 3
EH-2	ENTRY	SEMI-RECESSED	245	1400	1/8	2	1	208 / 1	9.6	MARKEL MODEL 3420 SERIES	1, 2, 3

- REMARKS:
- APPROVED ALTERNATE MANUFACTURERS: BRASCH, QMARK, INDECO, OUELLET, AND CHROMALOX.
 - MOUNT BOTTOM OF HEATER 12" ABOVE FINISH FLOOR.
 - PROVIDE UNIT WITH AN INTEGRAL THERMOSTAT. THERMOSTAT SHALL BE COVERED WITH A TAMPER-PROOF ACCESS COVER.



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L2 TENANT IMPROVEMENT PERMIT SET

PROJECT 23002 DATE 03-27-24
DRAWN ED CHECKED TN

REVISED

SHEET TITLE
HVAC SCHEDULES

SHEET

M50

ORIGINAL SHEET SIZE 24" x 36"



GENERAL :
THE DUCTLESS MULTIPOINT SPLIT HEAT PUMP SYSTEM SHALL CONSIST OF AN OUTDOOR HEAT PUMP UNIT WITH A VARIABLE SPEED COMPRESSOR, MULTIPLE INDOOR FAN COIL UNITS, AND MULTIPLE MANUFACTURER PROVIDED UNIT CONTROLLERS.

ALL PARAMETERS SHALL BE ADJUSTABLE FROM THE MANUFACTURER UNIT CONTROLLER. EACH SYSTEM SHALL BE STANDALONE AND NOT TIED INTO A BUILDING ENERGY MANAGEMENT SYSTEM.

HEAT PUMP (HP-1) IS CONNECTED TO THE INDOOR FAN COIL UNITS (FC-1.1 & FC-1.2).
HEAT PUMP (HP-2) IS CONNECTED TO THE INDOOR FAN COIL UNITS (FC-2.1, FC-2.2, & FC-2.3).

OPERATION :
THE OCCUPANTS SHALL BE ALLOWED CONTROL OF THEIR INDIVIDUAL FAN COILS INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

1. ON/OFF STATUS
2. MODE OF OPERATION.
3. SET POINT TEMPERATURE.
4. FAN SPEED.

OCCUPIED MODE :
THE DUCTLESS SPLIT SYSTEM OCCUPIED SPACE TEMPERATURE COOLING SET POINT SHALL BE SET AT 75°F (ADJUSTABLE).
THE DUCTLESS SPLIT SYSTEM UNOCCUPIED SPACE TEMPERATURE HEATING SET POINT SHALL BE SET AT 55°F (ADJUSTABLE).

UNOCCUPIED MODE :
THE DUCTLESS SPLIT SYSTEM INDOOR FAN COIL SHALL OPERATE BASED ON ITS OWN INTERNAL CONTROLS TO MAINTAIN THE UNOCCUPIED SPACE TEMPERATURE SET POINTS.

THE DUCTLESS SPLIT SYSTEM UNOCCUPIED SPACE TEMPERATURE COOLING SET POINT SHALL BE SET AT 85°F (ADJUSTABLE).
THE DUCTLESS SPLIT SYSTEM UNOCCUPIED SPACE TEMPERATURE HEATING SET POINT SHALL BE SET AT 55°F (ADJUSTABLE).

SPACE TEMPERATURE COOLING MODE OF OPERATION (DX COOLING) :
THE SPACE TEMPERATURE COOLING MODE OF OPERATION (DX COOLING) SHALL BE ENABLED WHENEVER THE FOLLOWING CONDITION EXISTS:

1. THE SPACE TEMPERATURE INCREASES 1°F (ADJUSTABLE) ABOVE THE DUCTLESS SPLIT SYSTEM'S SPACE TEMPERATURE COOLING SET POINT.

WHEN THE ABOVE CONDITION IS MET, THE UNIT CONTROLLER SHALL SEQUENCE THE FOLLOWING:

1. SEND AN ENABLE COMMAND TO THE COMPRESSORIZED COOLING SYSTEM.
 - a. THE COMPRESSORIZED COOLING SYSTEM SHALL MODULATE TO MAINTAIN THE DUCTLESS SPLIT SYSTEM'S SPACE TEMPERATURE COOLING SET POINT.

THE SPACE TEMPERATURE COOLING MODE OF OPERATION (DX COOLING) SHALL BE DISABLED WHENEVER THE FOLLOWING CONDITION EXISTS:

1. THE SPACE TEMPERATURE DECREASES 1°F (ADJUSTABLE) BELOW THE DUCTLESS SPLIT SYSTEM'S SPACE TEMPERATURE COOLING SET POINT.

WHEN THE ABOVE CONDITION IS MET, THE WIRED CONTROLLER SHALL SEQUENCE THE FOLLOWING:

1. SEND A DISABLE COMMAND TO THE COMPRESSORIZED COOLING SYSTEM.

SPACE TEMPERATURE HEATING MODE OF OPERATION (DX HEATING) :
THE SPACE TEMPERATURE HEATING MODE OF OPERATION (DX HEATING) SHALL BE ENABLED WHENEVER THE FOLLOWING CONDITION EXISTS:

1. THE SPACE TEMPERATURE DECREASES 1°F (ADJUSTABLE) BELOW THE DUCTLESS SPLIT SYSTEM'S SPACE TEMPERATURE COOLING SET POINT.

WHEN THE ABOVE CONDITION IS MET, THE UNIT CONTROLLER SHALL SEQUENCE THE FOLLOWING:

1. SEND AN ENABLE COMMAND TO THE COMPRESSORIZED HEATING SYSTEM.
 - a. THE COMPRESSORIZED HEATING SYSTEM SHALL MODULATE TO MAINTAIN THE DUCTLESS SPLIT SYSTEM'S SPACE TEMPERATURE HEATING SET POINT.

THE SPACE TEMPERATURE HEATING MODE OF OPERATION (DX HEATING) SHALL BE DISABLED WHENEVER THE FOLLOWING CONDITION EXISTS:

1. THE SPACE TEMPERATURE INCREASES 1°F (ADJUSTABLE) ABOVE THE DUCTLESS SPLIT SYSTEM'S SPACE TEMPERATURE HEATING SET POINT.

WHEN THE ABOVE CONDITION IS MET, THE UNIT CONTROLLER SHALL SEQUENCE THE FOLLOWING:

1. SEND A DISABLE COMMAND TO THE COMPRESSORIZED HEATING SYSTEM.

WIRED CONTROLLER CAPABILITIES :

1. INDOOR UNIT CONTROLS:
 - a. ON/OFF STATUS
 - b. MODE OF OPERATION (AUTO, COOL/DRY, HEAT, FAN)
 - c. SET POINT TEMPERATURE
 - d. AIRFLOW DIRECTION
 - e. FAN SPEED
 - f. FILTER REPLACEMENT ALARM AND RESET
 - g. QUIET AND SLEEP MODES
 - h. THERMOSTAT STATE (ON/OFF)
 - i. LIMIT THE SET POINT TEMPERATURE RANGE (LOW LIMIT, HIGH LIMIT)
 - j. *SIMPLIFIED LOCKING* - LOCKS THE OCCUPANTS ABILITY TO CHANGE ANY SETTINGS ON THE THERMOSTAT EXCEPT FOR THE ON/OFF CONTROL
2. ENERGY SAVING OPERATION:
 - a. UPPER / LOWER TEMPERATURE RESTRICTION SETTINGS
 - b. OCCUPIED / UNOCCUPIED SETTINGS
 - c. SETBACK FUNCTION
 - d. ENERGY SAVING OPERATION MODE
 - e. ENERGY CONSUMPTION MONITORING
3. WEEKLY OPERATING SCHEDULE SETTING:
 - a. WEEKLY OPERATING SCHEDULE
 - b. SET DESIRED A/C OPERATION MODE, SETTING TEMPERATURE AND FAN SPEED TO OPERATED BASED ON WEEKLY SCHEDULES
 - c. APPLY SCHEDULE EXCEPTION DAY
4. OTHER FEATURES:
 - a. PERMISSION LEVELS
 - b. PARTIAL BUTTON LOCK OPTIONS
 - c. DAYLIGHT SAVINGS
 - d. REAL-TIME CLOCK FUNCTION
 - e. INDEPENDENT LOUVER CONTROL
 - f. AIRFLOW DIRECTION CONTROL
 - g. WIND-FREE CONTROL

SAFETIES
IF THE OVERFLOW SENSOR DETECTS WATER IT SHALL SHUTDOWN THE UNIT.

GENERAL :
THE DUCTED SPLIT HEAT PUMP SYSTEM SHALL CONSIST OF AN OUTDOOR HEAT PUMP UNIT WITH A VARIABLE SPEED COMPRESSOR, AN INDOOR DUCTED FAN COIL UNIT, AND A MANUFACTURER PROVIDED UNIT CONTROLLER.

ALL PARAMETERS SHALL BE ADJUSTABLE FROM THE MANUFACTURER UNIT CONTROLLER. THIS SYSTEM SHALL BE STANDALONE AND NOT TIED INTO A BUILDING ENERGY MANAGEMENT SYSTEM.

OPERATION :
THE OCCUPANTS SHALL BE ALLOWED CONTROL OF THEIR INDIVIDUAL FAN COIL INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

1. ON/OFF STATUS
2. MODE OF OPERATION.
3. SET POINT TEMPERATURE.
4. FAN SPEED.

OCCUPIED MODE :
THE DUCTED SPLIT SYSTEM OCCUPIED SPACE TEMPERATURE COOLING SET POINT SHALL BE SET AT 75°F (ADJUSTABLE).
THE DUCTED SPLIT SYSTEM UNOCCUPIED SPACE TEMPERATURE HEATING SET POINT SHALL BE SET AT 70°F (ADJUSTABLE).

UNOCCUPIED MODE :
THE DUCTED SPLIT SYSTEM INDOOR FAN COIL SHALL OPERATE BASED ON ITS OWN INTERNAL CONTROLS TO MAINTAIN THE UNOCCUPIED SPACE TEMPERATURE SET POINTS.

THE DUCTED SPLIT SYSTEM UNOCCUPIED SPACE TEMPERATURE COOLING SET POINT SHALL BE SET AT 85°F (ADJUSTABLE).
THE DUCTED SPLIT SYSTEM UNOCCUPIED SPACE TEMPERATURE HEATING SET POINT SHALL BE SET AT 55°F (ADJUSTABLE).

SPACE TEMPERATURE COOLING MODE OF OPERATION (DX COOLING) :
THE SPACE TEMPERATURE COOLING MODE OF OPERATION (DX COOLING) SHALL BE ENABLED WHENEVER THE FOLLOWING CONDITION EXISTS:

1. THE SPACE TEMPERATURE INCREASES 1°F (ADJUSTABLE) ABOVE THE DUCTLESS SPLIT SYSTEM'S SPACE TEMPERATURE COOLING SET POINT.

WHEN THE ABOVE CONDITION IS MET, THE UNIT CONTROLLER SHALL SEQUENCE THE FOLLOWING:

1. SEND AN ENABLE COMMAND TO THE COMPRESSORIZED COOLING SYSTEM.
 - a. THE COMPRESSORIZED COOLING SYSTEM SHALL MODULATE TO MAINTAIN THE DUCTED SPLIT SYSTEM SPACE TEMPERATURE COOLING SET POINT.

THE SPACE TEMPERATURE COOLING MODE OF OPERATION (DX COOLING) SHALL BE DISABLED WHENEVER THE FOLLOWING CONDITION EXISTS:

1. THE SPACE TEMPERATURE DECREASES 1°F (ADJUSTABLE) BELOW THE DUCTED SPLIT SYSTEM SPACE TEMPERATURE COOLING SET POINT.

WHEN THE ABOVE CONDITION IS MET, THE WIRED CONTROLLER SHALL SEQUENCE THE FOLLOWING:

1. SEND A DISABLE COMMAND TO THE COMPRESSORIZED COOLING SYSTEM.

SPACE TEMPERATURE HEATING MODE OF OPERATION (DX HEATING) :
THE SPACE TEMPERATURE HEATING MODE OF OPERATION (DX HEATING) SHALL BE ENABLED WHENEVER THE FOLLOWING CONDITION EXISTS:

1. THE SPACE TEMPERATURE DECREASES 1°F (ADJUSTABLE) BELOW THE DUCTED SPLIT SYSTEM SPACE TEMPERATURE COOLING SET POINT.

WHEN THE ABOVE CONDITION IS MET, THE UNIT CONTROLLER SHALL SEQUENCE THE FOLLOWING:

1. SEND AN ENABLE COMMAND TO THE COMPRESSORIZED HEATING SYSTEM.
 - a. THE COMPRESSORIZED HEATING SYSTEM SHALL MODULATE TO MAINTAIN THE DUCTED SPLIT SYSTEM SPACE TEMPERATURE HEATING SET POINT.

THE SPACE TEMPERATURE HEATING MODE OF OPERATION (DX HEATING) SHALL BE DISABLED WHENEVER THE FOLLOWING CONDITION EXISTS:

1. THE SPACE TEMPERATURE INCREASES 1°F (ADJUSTABLE) ABOVE THE DUCTED SPLIT SYSTEM SPACE TEMPERATURE HEATING SET POINT.

WHEN THE ABOVE CONDITION IS MET, THE UNIT CONTROLLER SHALL SEQUENCE THE FOLLOWING:

1. SEND A DISABLE COMMAND TO THE COMPRESSORIZED HEATING SYSTEM.

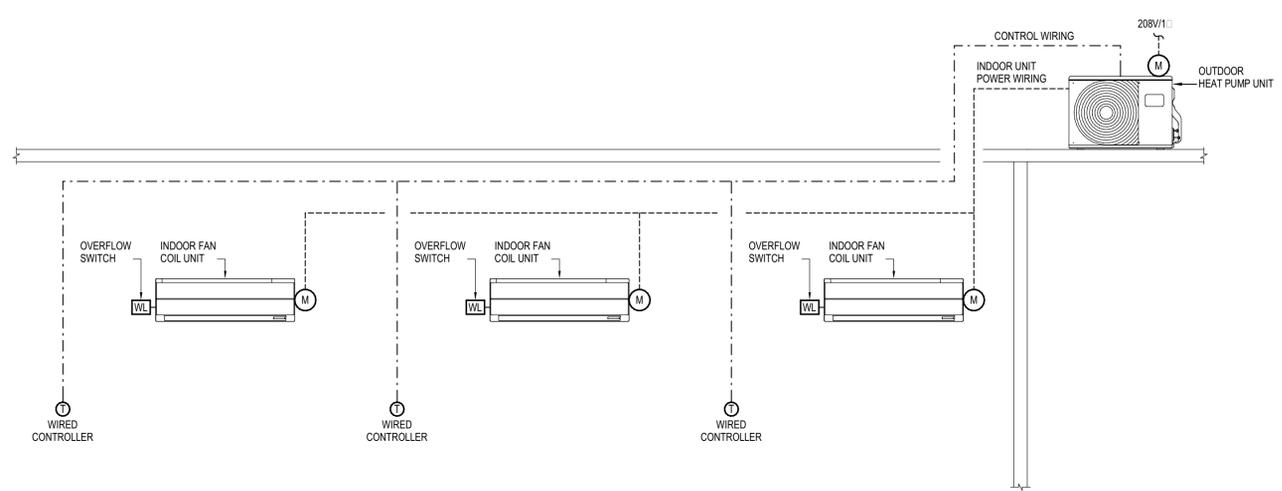
WIRED CONTROLLER CAPABILITIES :

1. INDOOR UNIT CONTROLS:
 - a. ON/OFF STATUS
 - b. MODE OF OPERATION (AUTO, COOL/DRY, HEAT, FAN)
 - c. SET POINT TEMPERATURE
 - d. AIRFLOW DIRECTION
 - e. FAN SPEED
 - f. FILTER REPLACEMENT ALARM AND RESET
 - g. QUIET AND SLEEP MODES
 - h. THERMOSTAT STATE (ON/OFF)
 - i. LIMIT THE SET POINT TEMPERATURE RANGE (LOW LIMIT, HIGH LIMIT)
 - j. *SIMPLIFIED LOCKING* - LOCKS THE OCCUPANTS ABILITY TO CHANGE ANY SETTINGS ON THE THERMOSTAT EXCEPT FOR THE ON/OFF CONTROL
2. ENERGY SAVING OPERATION:
 - a. UPPER / LOWER TEMPERATURE RESTRICTION SETTINGS
 - b. OCCUPIED / UNOCCUPIED SETTINGS
 - c. SETBACK FUNCTION
 - d. ENERGY SAVING OPERATION MODE
 - e. ENERGY CONSUMPTION MONITORING
3. WEEKLY OPERATING SCHEDULE SETTING:
 - a. WEEKLY OPERATING SCHEDULE
 - b. SET DESIRED A/C OPERATION MODE, SETTING TEMPERATURE AND FAN SPEED TO OPERATED BASED ON WEEKLY SCHEDULES
 - c. APPLY SCHEDULE EXCEPTION DAY
4. OTHER FEATURES:
 - a. PERMISSION LEVELS
 - b. PARTIAL BUTTON LOCK OPTIONS
 - c. DAYLIGHT SAVINGS
 - d. REAL-TIME CLOCK FUNCTION
 - e. INDEPENDENT LOUVER CONTROL
 - f. AIRFLOW DIRECTION CONTROL
 - g. WIND-FREE CONTROL

SAFETIES
IF THE OVERFLOW SENSOR DETECTS WATER IT SHALL SHUTDOWN THE UNIT.

MULTIPOINT DUCTLESS SPLIT SYSTEM SEQUENCE OF OPERATION

(FC-1.1/FC-1.2/HP-1 & FC-2.1/FC-2.2/FC-2.3/HP-2)

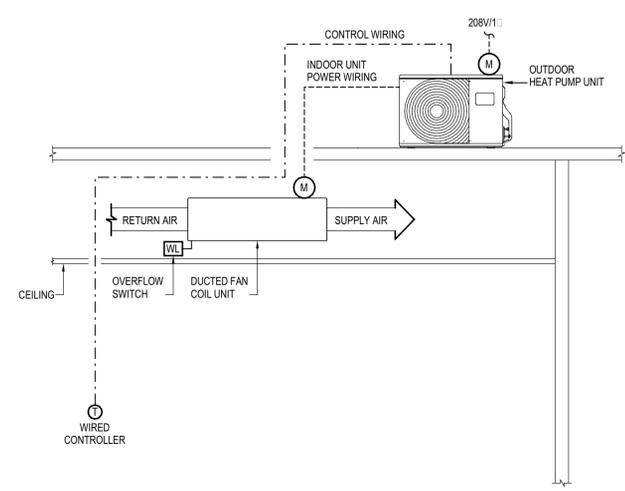


MULTIPOINT DUCTLESS SPLIT SYSTEM CONTROL SCHEMATIC

(FC-1.1/FC-1.2/HP-1 & FC-2.1/FC-2.2/FC-2.3/HP-2)

DUCTED SPLIT SYSTEM SYSTEM SEQUENCE OF OPERATION

(FC-3/HP-3)



DUCTED SPLIT SYSTEM CONTROL SCHEMATIC

(FC-3/HP-3)

ITD DIST. 3 TENANT IMPROVEMENT
8150 West Chinden Boulevard
GARDEN CITY, ID
BOISE, ID 83702
(208) 343-4635 • FAX (208) 343-1658
http://www.cshoa.com



L2 TENANT IMPROVEMENT PERMIT SET

PROJECT 23002	DATE 03-27-24
DRAWN ED	CHECKED TN

REVISED

SHEET TITLE
HVAC CONTROLS

SHEET

M60
ORIGINAL SHEET SIZE
24" x 36"



ELECTRICAL LEGEND - LIGHTING

- REFERENCE FIXTURE SCHEDULE FOR MOUNTING TYPE, MOUNTING HEIGHT, AND FIXTURE TYPE:
- DOUBLE FACE EXIT SIGN, CEILING MOUNTED, PROVIDE UNSWITCHED CONDUCTOR.
 - WALL MOUNTED DOUBLE FACE EXIT SIGN PROVIDE UNSWITCHED CONDUCTOR. MOUNT AT +8'-0" UNO.
 - SINGLE FACE EXIT SIGN, CEILING MOUNTED PROVIDE UNSWITCHED CONDUCTOR.
 - WALL MOUNTED SINGLE FACE EXIT SIGN PROVIDE UNSWITCHED CONDUCTOR. MOUNT AT +8'-0" UNO.
 - ARROW INDICATES DIRECTION TO BE SHOWN ON SIGN.
 - 1'X1' LIGHT FIXTURE.
 - 1'X1' LIGHT FIXTURE, PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR.
 - TRACK LIGHT
 - 1'X4' LIGHT FIXTURE.
 - 1'X4' LIGHT FIXTURE, PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR.
 - 2'X4' LIGHT FIXTURE.
 - 2'X4' LIGHT FIXTURE, PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR.
 - 2'X2' LIGHT FIXTURE.
 - 2'X2' LIGHT FIXTURE, PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR.
 - DIRECT/INDIRECT LIGHT FIXTURE. SEE SCHEDULE FOR LENGTH.
 - DIRECT/INDIRECT LIGHT FIXTURE. SEE SCHEDULE FOR LENGTH. PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR
 - STRIP LIGHT FIXTURE. SEE SCHEDULE FOR LENGTH.
 - STRIP LIGHT FIXTURE. SEE SCHEDULE FOR LENGTH. PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR
 - WALL MOUNTED LIGHT FIXTURE.
 - WALL MOUNTED LIGHT FIXTURE, PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR.
 - RECESSED LIGHT FIXTURE
 - RECESSED LIGHT FIXTURE. PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR.
 - ROUND LIGHT FIXTURE
 - ROUND EMERGENCY LIGHT FIXTURE. PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR.
 - WALL MOUNTED LIGHT FIXTURE.
 - WALL MOUNTED EMERGENCY LIGHT FIXTURE. PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR.
 - POLE LIGHT 1 HEAD WITH POLE
 - TIME CLOCK
 - PHOTO CONTROL CELL LOCATED 12" ABOVE ROOF FACING NORTH.
 - OCCUPANCY SENSOR. PROVIDE RELAYS AND POWER PACKS AS REQUIRED.
 - LED DRIVER
 - EMERGENCY EGRESS LIGHTING WITH OUT FIXTURE HEADS. CONNECT TO AN UNSWITCHED CONDUCTOR.
 - EMERGENCY EGRESS LIGHTING. CONNECT TO AN UNSWITCHED CONDUCTOR.
 - WALL MOUNTED SINGLE FACE EXIT SIGN WITH EMERGENCY EGRESS LIGHTING. PROVIDE UNSWITCHED CONDUCTOR.
 - CEILING MOUNTED SINGLE FACE EXIT SIGN WITH EMERGENCY EGRESS LIGHTING. PROVIDE UNSWITCHED CONDUCTOR.
 - CEILING MOUNTED DOUBLE FACE EXIT SIGN WITH EMERGENCY EGRESS LIGHTING. PROVIDE UNSWITCHED CONDUCTOR.
 - INDICATES FIXTURE TYPE. REFER TO FIXTURE SCHEDULE.
 - EXTERIOR WALL PACK
 - EMERGENCY EXTERIOR WALL PACK. PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR

DEVICES

- SWITCH, TYPE AS INDICATED. +48" AFF
- DOUBLE POLE
- 3-WAY
- 4-WAY
- KEYED
- PILOT LIGHT
- DIMMER
- HORSEPOWER RATED
- THERMAL OVERLOAD
- LOW VOLTAGE
- OCCUPANCY SENSOR
- LOW VOLTAGE, MOMENTARY OVERRIDE
- VACANCY SENSOR
- SUPERSCRIPT INDICATES LIGHTS TO BE SWITCHED TOGETHER
- DUAL LEVEL SWITCHING, INSIDE AND OUTSIDE LAMPS OF FIXTURE TO BE SWITCHED SEPARATELY.
- DUAL LEVEL SWITCHING WITH OCCUPANCY SENSOR, INSIDE AND OUTSIDE LAMPS OF FIXTURE TO BE SWITCHED SEPARATELY.
- OCCUPANCY SENSOR WITH MANUAL DIMMING, SET FOR 50% AUTOMATIC ON, AUTOMATIC OFF, WITH MANUAL DIMMING.
- SINGLE CONVENIENCE OUTLET, +18" AFF UNO
- FLOOR MOUNT SINGLE CONVENIENCE OUTLET
- DUPLEX CONVENIENCE OUTLET, +18" AFF UNO
- FLOOR MOUNT DUPLEX CONVENIENCE OUTLET
- EMERGENCY DUPLEX CONVENIENCE OUTLET, +18" AFF UNO
- SWITCHED DUPLEX CONVENIENCE OUTLET, +18" AFF UNO
- FLOOR MOUNTED SWITCHED DUPLEX CONVENIENCE OUTLET
- USB DUPLEX CONVENIENCE OUTLET, +18" AFF UNO
- USB FOURPLEX CONVENIENCE OUTLET, +18" AFF UNO
- FOURPLEX CONVENIENCE OUTLET. +18" AFF UNO
- FLOOR MOUNT FOURPLEX CONVENIENCE OUTLET
- CONNECTION POINT TO EQUIPMENT SPECIFIED. ELECTRICAL CONTRACTOR TO SUPPLY RACEWAY AND CONDUCTORS AND MAKE FINAL CONNECTION TO EQUIPMENT UNDER THIS SECTION. UNO
- FLOOR MOUNTED CONNECTION POINT. SEE NOTE ABOVE FOR REQUIREMENTS
- FLOOR MOUNTED JUNCTION BOX
- JUNCTION BOX
- WALL MOUNTED PUSH BUTTON, MOUNT AT SWITCH HEIGHT UNO
- WALL MOUNTED PUSH BUTTON, HANDICAPPED MOUNT AT SWITCH HEIGHT UNO
- WALL MOUNTED PUSH BUTTON, MOUNT AT SWITCH HEIGHT UNO
- MOTOR STARTER/CONTACTOR, SIZE/POLES NEMA 1 UNO AS INDICATED
- COMBINATION STARTER AND DISCONNECT, SIZE/POLES, STARTER SIZE AS INDICATED, NEMA 1 UNO
- FUSED DISCONNECT SWITCH, SIZE/POLES, FUSE SIZES AS INDICATED, NEMA 1 UNO
- NON-FUSED DISCONNECT SIZE/ POLES AS INDICATED, NEMA 1 UNO
- THERMOSTAT, +48" AFF PROVIDE CONDUIT, J-BOX, CONDUCTORS AS REQUIRED TO CONTROL ASSOCIATED UNITS. UNO COORDINATE WITH DIVISION 15.
- HUMIDISTAT, +48" AFF PROVIDE CONDUIT, J-BOX, CONDUCTORS AS REQUIRED TO CONTROL ASSOCIATED UNITS.
- POWER POLE - DUAL CHANNEL
- RECESSED ENTERTAINMENT BOX
- TRANSFORMER
- PANELBOARD. SEE SCHEDULE FOR TYPE.
- EQUIPMENT CABINET, SURFACE MOUNTED
- EQUIPMENT CABINET FLUSH MOUNTED
- SURFACE MULTI-OUTLET RACEWAY
- MECHANICAL EQUIPMENT CALL OUT
- KITCHEN EQUIPMENT CALLOUT

FIRE ALARM - DESIGN BUILD NOTES

- THE FIRE ALARM SYSTEM WILL BE DESIGN BUILD BY THE CONTRACTOR. THE FIRE ALARM CONTRACTOR SHALL PRODUCE A FIRE ALARM SUBMITTAL THAT INCLUDES ALL DRAWINGS, CALCULATIONS AND CUT SHEETS REQUIRED TO OBTAIN COMPLETE APPROVAL FROM ALL APPROVING AGENCIES.
- THE FIRE ALARM CONTRACTOR SHALL PROVIDE FIRE ALARM SUBMITTALS TO THE ENGINEER OF RECORD FOR REVIEW PRIOR TO SUBMITTING TO THE AUTHORITY HAVING JURISDICTION AND SHALL NOT PROCEED UNTIL THESE SUBMITTALS HAVE BEEN REVIEWED, APPROVED AND RETURNED.
- REFER TO THE ARCHITECTURAL CODE PLAN(S) FOR THE OCCUPANCY TYPES AND OCCUPANCY LOADS FOR EACH AREA.
- UTILIZE CURRENTLY ADOPTED CODES AND AMENDMENTS FOR FIRE ALARM REQUIREMENTS.
- THE FIRE ALARM CONTRACTOR SHALL PROVIDE AND INSTALL ALL FIRE ALARM INITIATING, MONITORING (SMOKE/FIRE/HEAT), INTERFACE AND RELATED DEVICES AND EQUIPMENT AS REQUIRED FOR A COMPLETE AND FUNCTIONING CODE COMPLIANT SYSTEM.
- THE FIRE ALARM SYSTEM SHALL PROVIDE ALL REQUIRED NOTIFICATION THROUGHOUT THE FACILITY. COORDINATE THE MOUNTING HEIGHTS OF THE NOTIFICATION DEVICES WITH THE CEILING AND STRUCTURE HEIGHTS IN THE BUILDING. REFER TO ARCHITECTURAL PLANS FOR CEILING/STRUCTURE INFORMATION.
- THE FIRE ALARM CONTROL PANEL, AND NOTIFICATION APPLANCE CIRCUIT POWER SUPPLIES SHALL BE LOCATED IN ELECTRICAL ROOMS, STORAGE AND SIMILAR ROOMS ADJACENT TO ELECTRICAL PANELS.
- PROVIDE ALL 120V CIRCUITS AS REQUIRED TO ACCOMMODATE FIRE ALARM CONTROL PANEL, NAC EXTENDER PANELS, AMPLIFIER PANELS AND RELATED ITEMS.
- ALL FIRE ALARM CIRCUIT BREAKERS SHALL HAVE A RED HANDLE AND BE LOCKABLE TYPE.
- FIRE ALARM CABLING SHALL BE CONCEALED. AREAS IN WALLS, ABOVE HARD CEILINGS AND SIMILAR (NON-ACCESSIBLE AREAS) SHALL BE IN CONDUIT. EXPOSED CABLING IS NOT ALLOWED.
- PROVIDE ALL DETECTION, MONITOR AND CONTROL DEVICES AS REQUIRED FOR THE ELEVATORS(S).
- THE FIRE ALARM CONTRACTOR SHALL PRODUCE RECORD DOCUMENTS OF THE ACTUAL SYSTEM AS INSTALLED. THE RECORD DOCUMENTS SHALL BE PRODUCED TO THE ACCEPTANCE OF THE ARCHITECT AND ENGINEER. ONE COMPLETE SET OF PRINTED DOCUMENTS AND A PDF VERSION SHALL BE DELIVERED TO THE ARCHITECT.
- INSTALL PLENUM RATED FIRE ALARM CONDUCTORS FROM ALL FIRE ALARM DEVICES INDICATED TO THE FIRE ALARM CONTROL PANEL OR NAC EXTENDER PANEL(S) AS REQUIRED. STUB 3/4" CONDUIT FROM DEVICE TO VOID ABOVE CEILING. PROVIDE NAC EXTENDER PANELS (QUANTITY AS REQUIRED) IN LOCATIONS INDICATED AND CIRCUITING AS REQUIRED FOR A COMPLETE INSTALLATION. CIRCUIT THE FIRE ALARM NOTIFICATION AND INITIATION DEVICES PER THE ELECTRICAL SPECIFICATIONS. FURNISH AND INSTALL ALL APPURTENANCES AND PROGRAMMING REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. REFER TO ELECTRICAL FIRE ALARM SPECIFICATIONS FOR SYSTEM REQUIREMENTS AND SUBMITTAL PROCEDURES.
- REFER TO THE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

FIRE ALARM

- PULL STATION, +44" AFF WITH PRE-ALARM COVER
- FIRE ALARM STROBE, +84" AFF UNO, STROBE INTENSITY INDICATED. 'C' INDICATES CEILING MOUNTED
- FLOW SWITCH, PROVIDE MONITOR MODULE AS REQUIRED
- TAMPER SWITCH, PROVIDE MONITOR MODULE AS REQUIRED
- PRESSURE SWITCH, PROVIDE MONITOR MODULE AS REQUIRED
- POST INDICATOR VALVE, PROVIDE MONITOR MODULE AS REQUIRED
- FIRE ALARM CONTROL PANEL
- SMOKE DETECTOR, CEILING MOUNTED UNO
 - H HEAT
 - I IONIZATION
 - ID IN DUCT
 - P PHOTOELECTRIC
 - R RELAY
 - WG PROVIDE PROTECTIVE WIRE GUARD

COMMUNICATIONS

- JUNCTION BOX FOR FUTURE TELEPHONE/DATA OUTLET. MOUNT AT 18" A.F.F. UNO. PROVIDE SINGLE-GANG MUD RING WITH BLANK COVER PLATE. PROVIDE 1" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE.
- TELEPHONE/DATA OUTLET. MOUNT AT 18" A.F.F. UNO. PROVIDE 1" CONDUIT TO NEAREST ACCESSIBLE CEILING. INSTALL QUANTITY OF DATA (4D) AND TELEPHONE (4T) CABLES INDICATED TO THE NEAREST DATA RACK. PROVIDE (2) DATA CABLES IF A CABLE QUANTITY IS NOT INDICATED.
- FLOOR MOUNTED BOX FOR FUTURE TELEPHONE/DATA OUTLET. JUNCTION BOX WITH SINGLE-GANG MUD RING. PROVIDE 1" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE. PROVIDE BLANK COVER PLATE.
- FLOOR MOUNTED TELEPHONE/DATA OUTLET. PROVIDE 1" CONDUIT TO NEAREST ACCESSIBLE CEILING. INSTALL QUANTITY OF DATA (4D) AND TELEPHONE (4T) CABLES INDICATED TO THE NEAREST DATA RACK. PROVIDE (2) DATA CABLES IF A CABLE QUANTITY IS NOT INDICATED.
- CEILING MOUNTED SPEAKER WITH BACKBOX
- WALL MOUNTED SPEAKER, WITH BACKBOX +80" UNO
- TELEPHONE TERMINAL BOARD

NOTE: THIS IS A STANDARD LIST OF COMMONLY USED ELECTRICAL SYMBOLS. SOME OF THE SYMBOLS SHOWN MAY NOT HAVE BEEN USED IN THIS DRAWING PACKAGE.

ELECTRICAL ABBREVIATIONS

A	AMPERES
AC	6" ABOVE BACKSPLASH
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AF	AMP FRAME
AIC	AMPS INTERRUPTING CAPACITY
AT	AMP TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BD	BOTTOM OF DECK
BS	BOTTOM OF STRUCTURE
C	CEILING MOUNTED
CB	CIRCUIT BREAKER
CF	COMPACT FLUORESCENT
CKT	CIRCUIT
CO	CONDUIT ONLY, PROVIDE PULL-LINE
CT	CURRENT TRANSFORMER
CTL	CONTROL
DC	DIRECT CURRENT
(D)	DEMOLITION
DEM	DEMOLITION
DET	DETAIL
DTT	DOUBLE TWIN TUBE
E	EMERGENCY
EG	EGRESS
EC	ELECTRICAL CONTRACTOR
EL	EMERGENCY LIGHT
F	FUSE
(F)	FUTURE
FACP	FIRE ALARM CONTROL PANEL
G/ND	GROUND
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFI	GROUND FAULT INTERRUPTER
HH	HAND HOLE
HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTO
HPS	HIGH PRESSURE SODIUM
HVAC	HEATING, VENTILATION, & AIR CONDITIONING
IG	ISOLATED GROUND
IPCO	IDAHO POWER COMPANY
J-BOX	JUNCTION BOX
KA	KILOAMP
KVA	KILOVOLT-AMP
KW	KILOWATT
KWH	KILOWATT HOUR
LCP	LIGHTING CONTROL PANEL
MB	MAIN BREAKER
MBR	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MAIN DISTRIBUTION PANEL
MLO	MAIN LUGS ONLY
MMC	MODULAR METERING CENTER
MH	METAL HALIDE
MSB	MAIN SWITCH BOARD
MTG	MOUNTING
N	NEUTRAL
(N)	NEW
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OH	OVERHEAD
OS	OCCUPANCY SENSOR
P	POLES
PC	PHOTO-CONTROL
PVC	POLYVINYL CHLORIDE
PWR	POWER
RE	REFERENCE
REC	RECEPTACLE
(R)	RELOCATED
SF	SQUARE FEET
TBD	TO BE DETERMINED
TDR	TIME DELAY RELAY
TK	TOE KICK
TR	TAMPER RESISTANT
TSP	TWISTED SHIELDED PAIR
TRT	TRIPLE TUBE
TTB	TELEPHONE TERMINAL BOARD (TYP.)
UC	UNDERCABINET
UG	UNDERGROUND
U.N.O.	UNLESS NOTED OTHERWISE
V	VOLT
VA	VOLT-AMPERE
W	WATT
WG	WIRE GUARD
WP	WEATHER PROOF/NEMA 3R
PROVIDE/ PROVIDE BY INSTALLED/ INSTALL	PROVIDE AND INSTALL / PROVIDED AND INSTALLED BY / PROVIDE AND INSTALL
NOTE:	THIS IS A STANDARD LIST OF COMMONLY USED ELECTRICAL ABBREVIATIONS. SOME OF THE ABBREVIATIONS SHOWN ABOVE MAY NOT BE USED IN THIS DRAWING PACKAGE.

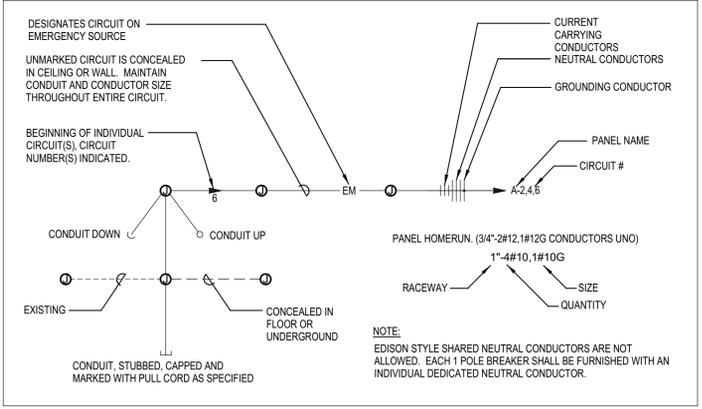
ELECTRICAL GENERAL NOTES

- THESE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC IN NATURE. THEREFORE, THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL ELECTRICAL EQUIPMENT AND DEVICE LOCATIONS WITH ARCHITECTURAL, MECHANICAL, AND PLUMBING DIVISIONS PRIOR TO ROUGH-IN. REFER TO AND COORDINATE WITH ARCHITECTURAL, MECHANICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL WORK THAT IS REQUIRED BY THE ELECTRICAL CONTRACTOR.
- ALL CONDUIT AND JUNCTION BOXES ARE TO BE CONCEALED UNLESS LOCATED WITHIN DEDICATED ELECTRICAL OR MECHANICAL ROOMS. USE OF SURFACE MOUNTED RACEWAYS IN ALL OTHER SPACES MUST BE APPROVED BY THE ARCHITECT FOR EACH LOCATION. WHERE SURFACE RACEWAYS ARE APPROVED, UTILIZE WIREMOLD, OR APPROVED EQUAL. SURFACE MOUNTED RACEWAYS PAINTED TO MATCH SURROUNDING WALLS.
- REFER TO ARCHITECTURAL ELEVATIONS FOR OUTLET HEIGHTS WHERE THE SPECIFIC OUTLET HEIGHT IS NOT INDICATED. REFER TO THE ELECTRICAL LEGEND FOR THE DEFAULT OUTLET HEIGHT WHEN NOT INDICATED ON ELEVATIONS OR ON AT THE DEVICES.
- PROVIDE PULL-LINE IN ALL EMPTY CONDUITS.
- TERMINATE ALL LOW-VOLTAGE CONDUITS WITH INSULATED THROAT BUSHING.
- MECHANICAL EQUIPMENT INDICATED IS SHOWN IN AN APPROXIMATE LOCATION. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
- INSTALL PLENUM RATED FIRE ALARM CONDUCTORS FROM ALL FIRE ALARM DEVICES INDICATED TO THE FIRE ALARM CONTROL PANEL OR NAC EXTENDER PANEL(S) AS REQUIRED. STUB 3/4" CONDUIT FROM DEVICE TO VOID ABOVE CEILING. PROVIDE NAC EXTENDER PANELS (QUANTITY AS REQUIRED) IN LOCATIONS INDICATED AND CIRCUITING AS REQUIRED FOR A COMPLETE INSTALLATION. CIRCUIT THE FIRE ALARM NOTIFICATION AND INITIATION DEVICES PER THE ELECTRICAL SPECIFICATIONS. FURNISH AND INSTALL ALL APPURTENANCES AND PROGRAMMING REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. REFER TO ELECTRICAL FIRE ALARM SPECIFICATIONS FOR SYSTEM REQUIREMENTS AND SUBMITTAL PROCEDURES.
- THE ELECTRICAL DEMOLITION DRAWING(S) PROVIDED ARE INTENDED TO ASSIST THE ELECTRICAL CONTRACTOR IN ESTABLISHING AREAS REQUIRING DISCONNECTION, REMOVAL, OR RELOCATION OF ELECTRICAL EQUIPMENT, OUTLETS, WIRING, DEVICES, FIXTURES, ETC. AND MAY NOT INDICATE ALL DEVICES OR THE FULL EXTENT OF DEMOLITION AND RECONNECTION WHICH MAY BE REQUIRED. THE ELECTRICAL CONTRACTOR SHALL VISIT THE JOB SITE AND THOROUGHLY EXAMINE ALL REQUIRED DEMOLITION WORK AND INCLUDE ALL LABOR AND INCIDENTALS THAT WILL BE NECESSARY TO PERFORM DEMOLITION RECONNECTION AND TEMPORARY POWER CONNECTIONS IN THE BID.
- ALL ELECTRICAL DEVICES AND WALLS INDICATED ON THE ELECTRICAL DEMOLITION DRAWING(S) ARE TO REMAIN UNLESS OTHERWISE NOTED.

ELECTRICAL SHEET INDEX - PHASE 2

SHEET NUMBER	SHEET NAME
E00.2	ELECTRICAL COVERSHEET
E01.2	LIGHTING COMPLIANCE
E10.2	ELECTRICAL OVERALL PLAN
E22.2	ELECTRICAL DEMO FLOOR PLANS
E31.2	ELECTRICAL FIRE RISER FLOOR PLAN
E32.2	ELECTRICAL 2ND FLOOR PLANS
E33.2	ELECTRICAL 2ND FLOOR PLANS
E41.2	ELECTRICAL ROOF PLAN
E50.2	ELECTRICAL DETAILS AND SCHEDULES

CIRCUITING SYMBOLS



MUSGROVE ENGINEERING, P.A.
 234 S. Whisperwood Way
 Boise, ID 83709
 208.384.0585
 645 West 25th Street
 Idaho Falls, ID 83402
 208.523.2862
 www.musgrovepa.com
 Project No. 23-264

200 BROAD STREET
 BOISE, IDAHO
 PHONE: 208-343-4635 • FAX: 208-343-1658

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ITD DIST. 3 TENANT IMPROVEMENT
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 GARDEN CITY, ID

200 BROAD STREET
 BOISE, ID 83702
 (208) 343-4635 • FAX (208) 343-1658
 http://www.cshqa.com



L2 TENANT IMPROVEMENT PERMIT SET

PROJECT	DATE
23002	03-27-24
DRAWN	CHECKED
AN	KL

REVISED

SHEET TITLE

ELECTRICAL COVERSHEET

SHEET

E00.2

ORIGINAL SHEET SIZE 24" x 36"



MUSGROVE
ENGINEERING, P.A.
234 S. Whisperwood Way
Boise, ID 83709
208.384.0585
645 West 25th Street
Boise Falls, ID 83402
208.523.2862
www.musgrovepa.com
Project No. 23-264



COMcheck Software Version 4.1.5.5 Interior Lighting Compliance Certificate

Project Information
Energy Code: 2018 IECC
Project Title: ITD DIST. 3 BLD. IMPROVEMENT
Project Type: Alteration

Construction Site: 8150 West Chinden Boulevard, Garden City, ID 83714
Owner/Agent: CHSQA, 200 Broad St, Boise, ID 83702, (208)343-4635
Designer/Contractor: Musgrove Engineering, 234 S. Whisperwood Way, Boise, ID 83709, (208)384-0585

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts (B X C)
1-Office	5543	0.79	4379
Total Allowed Watts =			4379

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Office (5543 sq.ft.)				
LED 1: BL1: Other:	1	8	18	148
LED 2: D14: Other:	1	6	27	160
LED 3: D14A: Other:	1	2	27	53
LED 4: GL1: Other:	1	54	27	1442
LED 5: RR1: Other:	1	4	10	42
LED 6: WB1: Other:	1	4	18	70
Total Proposed Watts =				1915

Interior Lighting PASSES

Interior Lighting Compliance Statement
Compliance Statement: The proposed interior lighting alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Check.
Angelo Neglia - Electrical Designer
Name - Title: Angelo Neglia Signature: Angelo Neglia Date: 02/09/2024

Project Title: ITD DIST. 3 BLD. IMPROVEMENT Report date: 02/09/24
Data filename: P:\Files\2023\23264\CALCS\ELECC\23264 Electrical_Compliance - PHASE 2.cck Page 1 of 6

IECC 2018 DAYLIGHT-RESPONSIVE CONTROL CALCULATION

IS DAYLIGHT-RESPONSIVE CONTROL REQUIRED ON THIS PROJECT?		=	NO DRC REQUIRED
TCLP	<	LPA _{Adj}	
1,915	<	3,575	
IECC C405.3.1 (EQUATION 4-10)			
TOTAL CONNECTED INTERIOR LIGHTING POWER (W)			
TCLP = LVL+BLL+LED+TRK+OTHER		TCLP =	1,915
IECC C405.2.3 Exception 4 (EQUATION 4-9)			
ADJUSTED BUILDING INTERIOR LIGHTING POWER ALLOWANCE (W)			
LPA _{Adj} = [LPA _{NORM} * (1.0 - (0.4 * (UDZFA/TBFA)))]		LPA _{Adj} =	3,575
REDUCED LIGHTING POWER ALLOWANCE (W)			
LPA _{NORM} = 90% of (LPD * SqFt * .90)		LPA _{NORM} =	3,941
INTERIOR LIGHTING POWER ALLOWANCE (IECC TABLE C405.3.2(1)) LPD		A =	0.79
BUILDING AREA		B =	5,543
REDUCED LIGHTING POWER (IECC C406.3)		R =	0.90
UDZFA = UNCONTROLLED DAYLIGHT ZONE FLOOR AREA THE SUM OF ALL SIDE LIT AND TOPLIT ZONES CALCULATED BY IECC C405.2.3.2 AND IECC C405.2.3.3			
		UDZFA =	1,288
TBFA = TOTAL BUILDING FLOOR AREA			
		TBFA =	5,543
UNCONTROLLED DAYLIGHTING ZONE FLOOR AREA			
	ROOM	SQFT OF DAY LIGHT ZONE	
	OFFICE RM 201, 202, 203, 204, 205		508
	BREAK RM	206	95
	CONFERENCE RM	207	233
	STORAGE 208, STORAGE 209, IT/ELEC 210		147
	FLEX WORKSPACE 2	231	305

ENERGY CODE COMMISSIONING COMPLIANCE NOTES

SECTION 408 SYSTEM COMMISSIONING

IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL BELOW NOTED DOCUMENTS WITHIN 90 DAYS OF CERTIFICATE OF OCCUPANCY:

A. **AS-BUILT DRAWINGS**- DRAWINGS SHALL INCLUDE THE LOCATION AND PERFORMANCE DATA OF ALL PIECES OF MECHANICAL EQUIPMENT.

B. **OPERATING AND MAINTENANCE MANUALS**- MANUALS SHALL INCLUDE THE FOLLOWING:

- SUBMITTAL DATA ON ALL PIECES OF EQUIPMENT REQUIRING MAINTENANCE.
- MANUFACTURER'S OPERATIONS AND MAINTENANCE DATA ON ALL PIECES OF EQUIPMENT. ROUTINE MAINTENANCE ACTIONS SHALL BE CLEARLY IDENTIFIED.
- NAME AND ADDRESS AND PHONE NUMBER OF AT LEAST ONE (1) SERVICE PROVIDER.
- LIGHTING CONTROL SYSTEMS MAINTENANCE AND CALIBRATION INFORMATION INCLUDING WIRING DIAGRAMS, EQUIPMENT AND SYSTEM SCHEMATICS, AND CONTROL SEQUENCES OF OPERATIONS. DESIRED OR FIELD DETERMINED SETPOINTS SHALL BE PERMANENTLY RECORDED ON CONTROL DRAWINGS AT ALL CONTROL DEVICES, OR FOR DIGITAL CONTROL SYSTEMS, IN THE SYSTEM PROGRAMMING INSTRUCTIONS.
- A NARRATIVE ON HOW EACH LIGHTING SYSTEM IN INTENDED TO OPERATE, INCLUDING RECOMMENDED SETPOINTS.

C. **LIGHTING SYSTEM FUNCTIONAL TESTING REQUIREMENTS**

FUNCTIONAL TESTING - ALL AUTOMATIC LIGHTING CONTROL SYSTEM SHALL BE FULLY TESTED TO ENSURE THE CONTROL HARDWARE AND SOFTWARE ARE CALIBRATED, ADJUSTED, PROGRAMMED, AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.

WHERE OCCUPANT SENSORS, TIME SWITCHES, PROGRAMMABLE CONTROLS, PHOTOSENSORS OR DAYLIGHTING CONTROLS ARE INSTALLED, THE FOLLOWING PROCEDURES SHALL BE PERFORMED:

- CONFIRM THAT THE PLACEMENT, SENSITIVITY AND TIME-OUT ADJUSTMENTS FOR OCCUPANT SENSORS YIELD ACCEPTABLE PERFORMANCE.
- CONFIRM THAT THE TIME SWITCHES AND PROGRAMMABLE SCHEDULE CONTROLS ARE PROGRAMMED TO TURN THE LIGHTS OFF.
- CONFIRM THAT THE PLACEMENT AND SENSITIVITY ADJUSTMENTS FOR PHOTOSENSOR CONTROLS REDUCE ELECTRIC LIGHT BASED ON THE AMOUNT OF USABLE DAYLIGHT IN THE SPACE AS SPECIFIED.

D. **FINAL LIGHTING SYSTEM FUNCTIONAL REPORT**: A REPORT OF TEST PROCEDURES AND RESULTS IDENTIFIED AS THE "FINAL LIGHTING CONTROL REPORT" SHALL BE DELIVERED TO THE BUILDING OWNER. THE REPORT SHALL INCLUDE THE FOLLOWING:

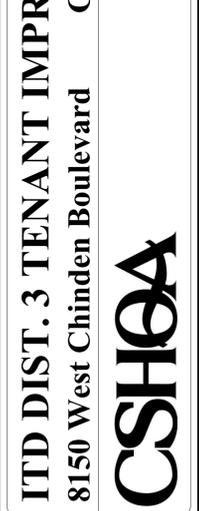
- LIST OF FUNCTIONAL TESTS USED DURING THE COMMISSIONING PROCESS ON EACH PIECE OF EQUIPMENT.
- RESULTS OF ALL FUNCTIONAL TESTS ON ALL PIECES OF EQUIPMENT.
- LIST OF DEFICIENCIES FOUND AND CORRESPONDING CORRECTIVE MEASURES EITHER IMPLEMENTED OR PROPOSED ON EACH PIECE OF EQUIPMENT.
- LIST OF EQUIPMENT NOT ABLE TO BE FUNCTIONALLY TESTED DUE TO CURRENT CLIMATE CONDITIONS. THESE PIECES OF EQUIPMENT WILL FUNCTIONALLY TESTED ONCE CLIMATE CHANGES ALLOW.

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SHEET TITLE
LIGHTING COMPLIANCE

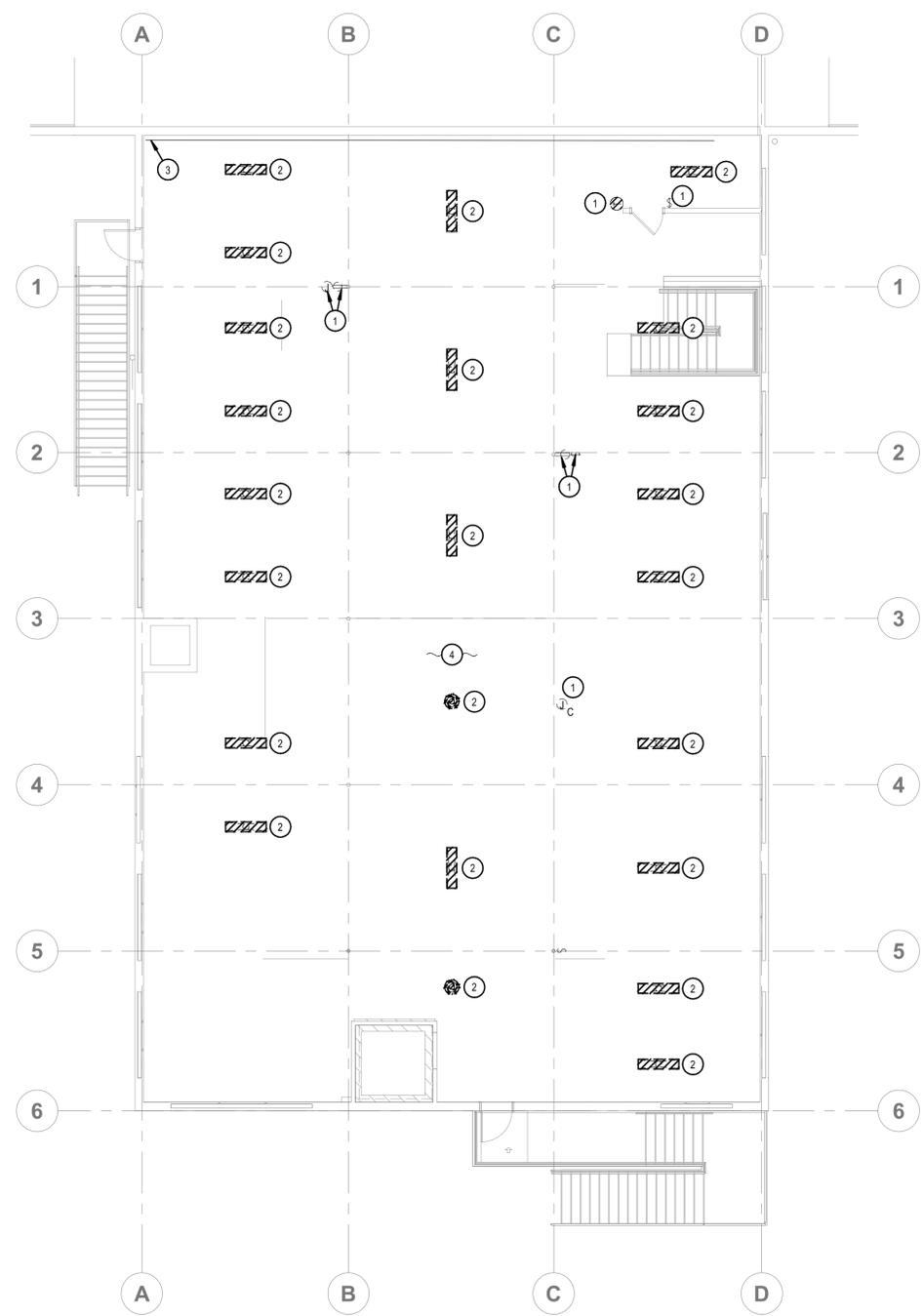
SHEET

E01.2
ORIGINAL SHEET SIZE
24" x 36"



KEYED NOTES:

- # SYMBOL USED FOR CALLOUT
- 1. EXISTING DEVICES TO BE REMOVED. REMOVE ALL CONDUIT, CONDUCTORS, AND JUNCTION BOXES BACK TO SOURCE OR NEAREST UPSTREAM DEVICE THAT IS TO REMAIN. MAINTAIN CONTINUITY TO ALL DOWNSTREAM DEVICES THAT ARE TO REMAIN.
- 2. EXISTING LIGHT FIXTURE TO BE REMOVED. REMOVE ALL CONDUIT, CONDUCTORS, AND JUNCTION BOXES BACK TO SOURCE OR NEAREST UPSTREAM DEVICE THAT IS TO REMAIN. MAINTAIN CONTINUITY TO ALL DOWNSTREAM DEVICES THAT ARE TO REMAIN.
- 3. EXISTING DATA CABLING NOT IN CONDUIT THAT PENETRATES THE EXTERIOR WALL IN THIS LOCATION TO BE REMOVED AND RELOCATED INTO AND ROUTED THROUGH NEW CONDUIT (JUNCTION BOXES) TO THE ITELEC CLOSET 210 ROOM AS REQUIRED. RE: SPECIAL SYSTEMS SECOND FLOOR PLAN.
- 4. EXISTING CEILING DATA CABLING TO BE REMOVED AND RELOCATED. REMOVE ALL UNUSED CONDUIT, DATA CABLING AND JUNCTION BOXES BACK TO SOURCE OR NEAREST UPSTREAM DEVICE THAT IS TO REMAIN. MAINTAIN CONTINUITY TO ALL DOWNSTREAM DATA CABLING THAT ARE TO REMAIN AND RE-ROUTE THROUGH NEW ACT AS REQUIRED TO THE ITELEC CLOSET 210 AS REQUIRED. RE: SPECIAL SYSTEMS SECOND FLOOR PLAN.



1 ELECTRICAL DEMO SECOND FLOOR PLAN
 1/8" = 1'-0"



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ELECTRICAL DEMO FLOOR PLANS

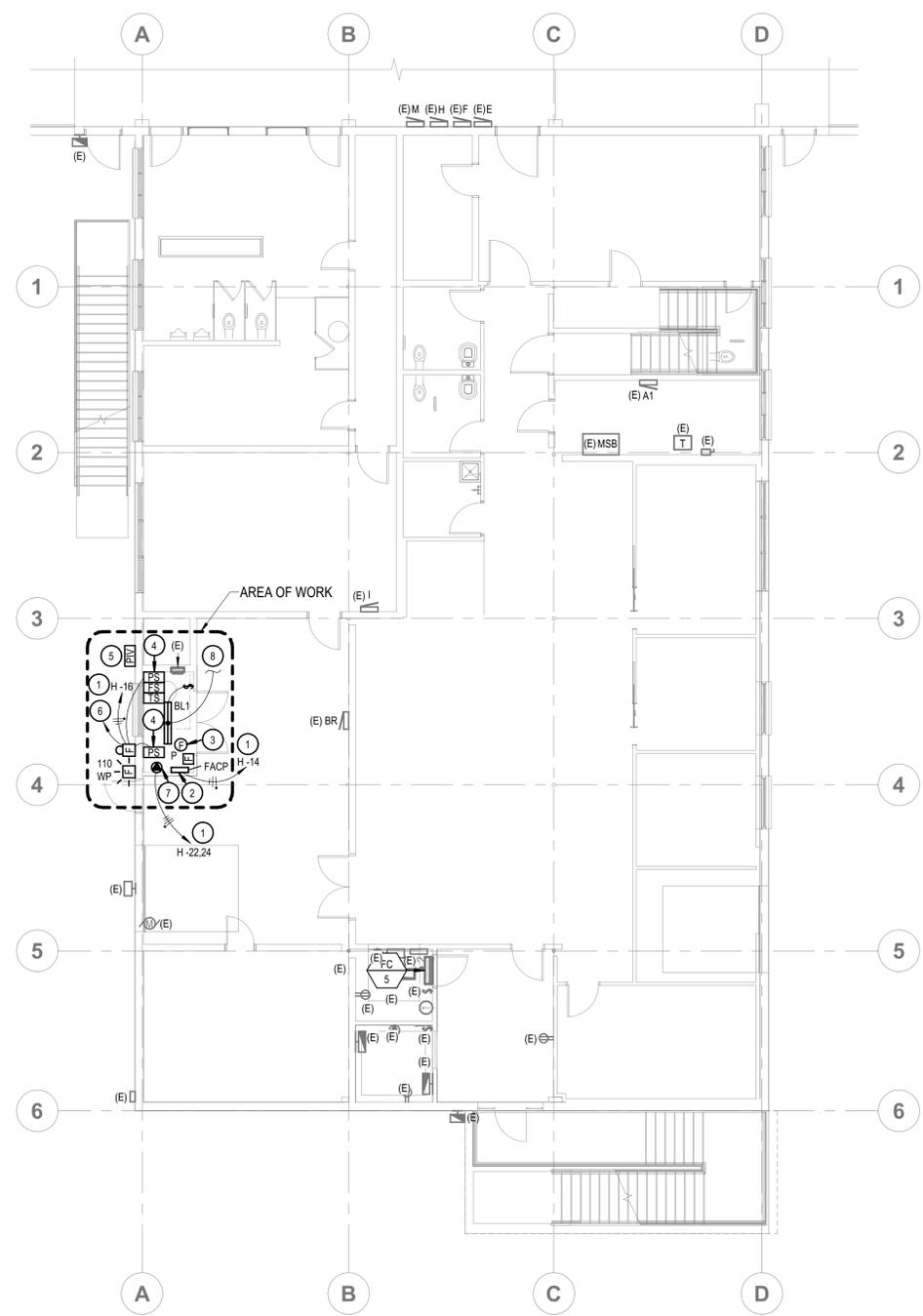
SHEET

E22.2
 ORIGINAL SHEET SIZE
 24" x 36"



KEYED NOTES:

- 1. PROVIDE RED HANDLED LOCKABLE TYPE CIRCUIT BREAKER IN PANEL AT POSITION INDICATED.
- 2. FIRE ALARM CONTROL PANEL.
- 3. FIRE ALARM DEVICE TO BE MOUNTED TO BOTTOM OF STRUCTURE.
- 4. COORDINATE QUANTITY OF TAMPER SWITCHES, FLOW SWITCHES, PRESSURE SWITCHES, WITH FIRE SPRINKLER CONTRACTOR. PROVIDE ALL REQUIRED MONITOR MODULES AS REQUIRED FOR A COMPLETE SYSTEM.
- 5. COORDINATE LOCATION OF PIV WITH SPRINKLER CONTRACTOR.
- 6. TO FIRE ALARM CONTROL PANEL.
- 7. CONNECTION FOR DRY PIPE SPRINKLER COMPRESSOR. COORDINATE LOCATION AND CONNECTION REQUIREMENTS WITH SPRINKLER CONTRACTOR PRIOR TO ROUGH-IN.
- 8. EXTEND CONDUIT AND CONDUCTORS FROM EXISTING LIGHTING CIRCUIT IN THIS ROOM. PROVIDE UNSWITCHED FOR EMERGENCY FIXTURE AS REQUIRED.



1 ELECTRICAL FIRE RISER FLOOR PLAN
 1/8" = 1'-0"

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ELECTRICAL FIRE RISER FLOOR PLAN

SHEET

E31.2
 ORIGINAL SHEET SIZE
 24" x 36"



KEYED NOTES:

- SYMBOL USED FOR CALLOUT
- DAYLIGHT ZONE PERIMETER PER 2018 IECC, SHOWN FOR REFERENCE.
- ROUTE CIRCUIT THROUGH LIGHTING CONTROL PANEL. RE: LIGHTING CONTROL PANEL SCHEDULE
- LIGHTING CONTROL PANEL. RE: LIGHTING CONTROL PANEL SCHEDULE
- PROVIDE MOMENTARY LOW-VOLTAGE OVERRIDE SWITCH WITH CABLING BACK TO LIGHTING CONTROL PANEL, AS REQUIRED. SWITCH SHALL BE LABELED OVERRIDE AND PROVIDE 2 OURS OF OPERATION FOR THE LIGHTING DURING NON-BUSINESS HOURS.
- PROVIDE ROOM CONTROLLER COMPATIBLE WITH DIGITAL SWITCHES AND LIGHT FIXTURES SERVING THIS ROOM. CONNECT SUCH THAT ROOM CONTROLLER CONTROLS ZONE SPECIFIED BY SUBSCRIPT. PROVIDE UNSWITCHED LEG FOR DEVICE. ELECTRICAL CONTRACTOR TO PROVIDE ALL PROGRAMMING, CABLING, POWER PACKS AND RELAYS FOR A COMPLETE SYSTEM. ROOM CONTROLLER CAN CONTROL ONE OR MORE DEVICES BUT SPACES ARE TO BE CONTROLLED INDEPENDENTLY.
- OCCUPANCY SENSOR SHALL BE COMPATIBLE WITH LIGHTING ROOM CONTROLLER IN THIS SPACE AND TO CONTROL OPEN OFFICE ZONES INDICATED BY SUBSCRIPT(S). DETECTION OF OCCUPANCY BY ANY SENSOR IN THIS SPACE SHALL ACTIVATE ALL LIGHTING IN THIS SPACE. NO DETECTION OF OCCUPANCY BY ALL SENSORS IN THIS SPACE SHALL AUTOMATICALLY TURN OFF LIGHTING IN ALL CONTROL ZONES WITHIN 20 MINUTES OF NO OCCUPANCY DETECTION AND SHALL REDUCE LIGHTING POWER BY GREATER THAN OR EQUAL TO 80%. LIGHTING ZONES OF 600 SQUARE FEET OR LESS MARKED INDIVIDUALLY.
- DIGITAL WIRED WALL SWITCHES (WITH RAISE/LOWER AND ON/OFF CONTROL. SWITCHES ARE TO BE COMPATIBLE WITH THE ROOM WIRED LIGHTING CONTROL SYSTEM. PROVIDE ONE SWITCH FOR EACH CONTROL ZONE INDICATED.
- NON-DIGITAL DUAL TECHNOLOGY OCCUPANCY SENSOR. CONNECT SUCH THAT DETECTION OF OCCUPANCY BY ANY SENSOR IN THE ROOM WILL ACTIVATE ALL LIGHTING IN THE ROOM AND TURN OFF THE LIGHTING AFTER 20 MINUTES OF NO OCCUPANCY DETECTION. LOCATE SENSORS PER MANUFACTURER'S RECOMMENDATION TO ENSURE MOTION IS DETECTED WITHIN 2FT OF ENTERING ROOM. PROVIDE AND INSTALL ALL POWER PACKS AND RELAYS AS REQUIRED.
- FIXTURE RELOCATED IN PHASE 1.
- 1/2" CONDUIT TO CORRESPONDING MECHANICAL UNIT. BOX, CONDUIT, AND CONDUCTORS TO BE PROVIDED BY ELECTRICAL CONTRACTOR. LEAVE 12" SLACK AT BOX AND MECHANICAL UNIT. MECHANICAL CONTRACTOR TO MAKE FINAL CONNECTIONS. COORDINATE BOX SIZE AND QUANTITY OF CONDUCTOR(S) WITH MECHANICAL CONTRACTOR. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
- PROVIDE AND INSTALL LINE VOLTAGE AND CONTROL CABLING TO THE CORRESPONDING OUTDOOR UNIT. COORDINATE REQUIREMENTS WITH THE MECHANICAL CONTRACTOR.
- FIELD COORDINATE DISCONNECT AND MECHANICAL UNIT LOCATION WITH MECHANICAL CONTRACTOR TO MAINTAIN ALL REQUIRED CLEARANCES.
- CONNECT WATER HEATER AND ALL ASSOCIATED DEVICES AND EQUIPMENT. COORDINATE WITH PLUMBING CONTRACTOR PRIOR TO ROUGH-IN.

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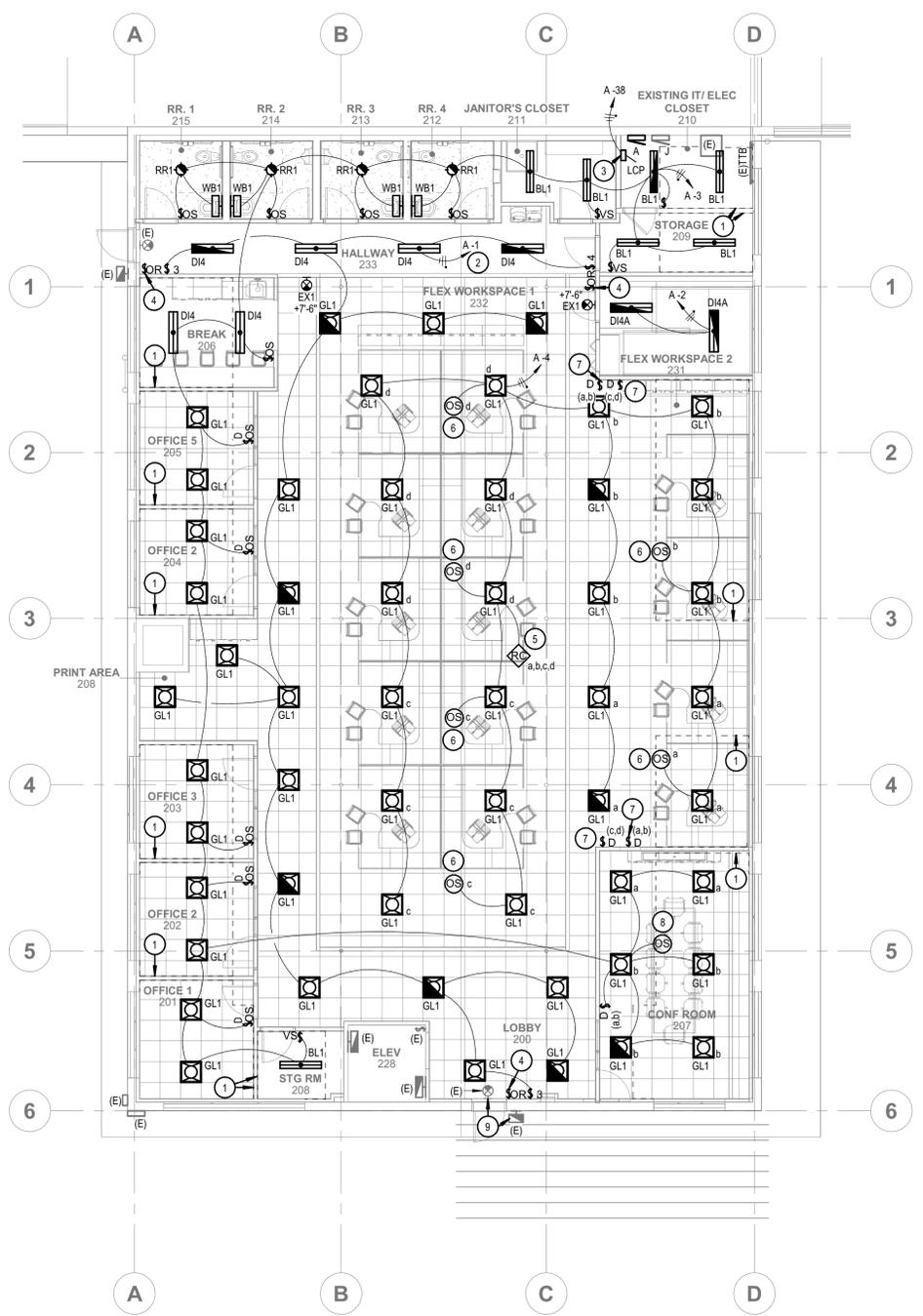
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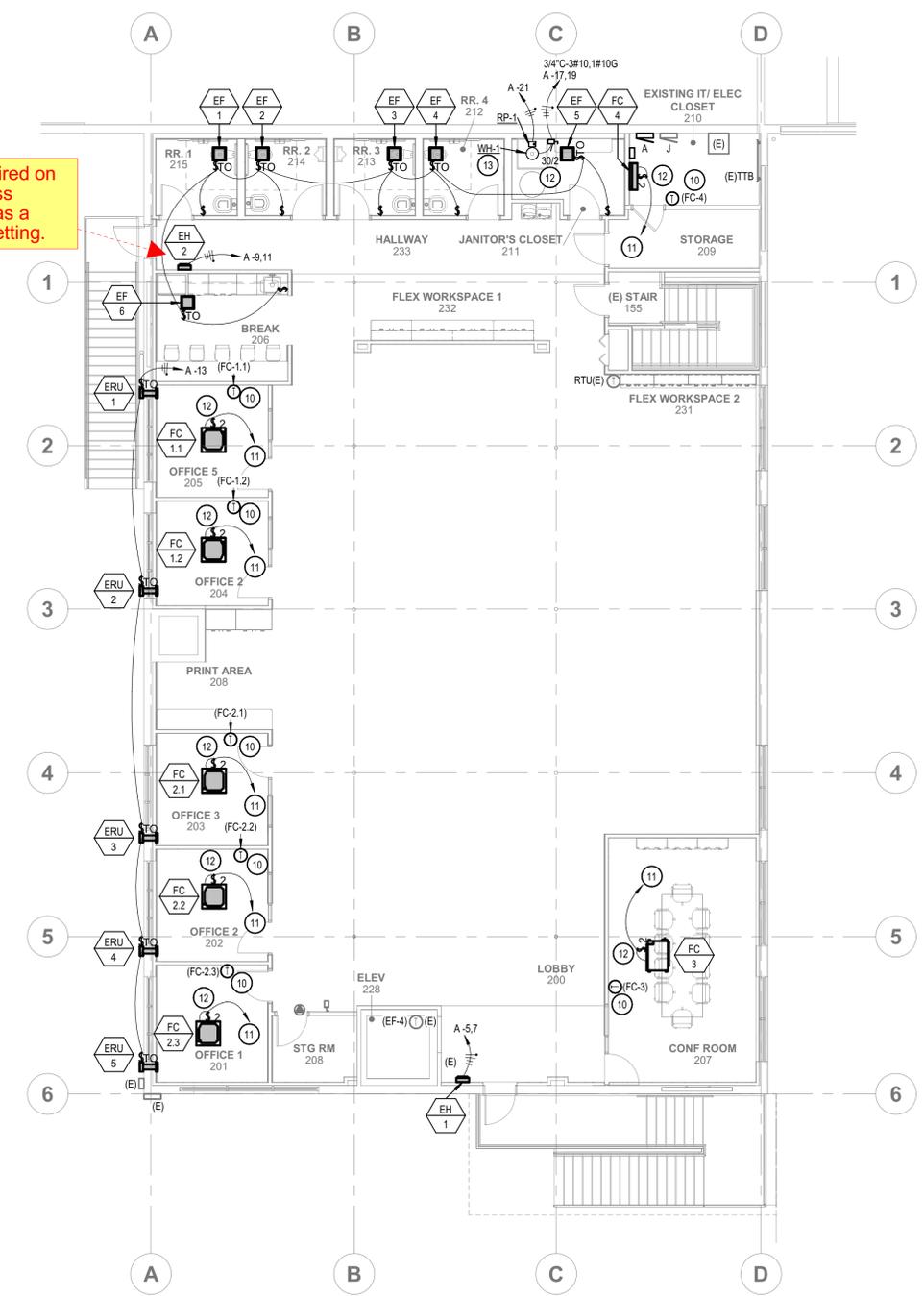
ELECTRICAL 2ND FLOOR PLANS

SHEET
E32.2
 ORIGINAL SHEET SIZE
 24" x 36"



1 LIGHTING SECOND FLOOR PLAN
 1/8" = 1'-0"

Lockout required on breaker unless thermostat has a positive off setting.



2 MECHANICAL POWER SECOND FLOOR PLAN
 1/8" = 1'-0"



KEYED NOTES:

- 1 SYMBOL USED FOR CALLOUT
- 1. PROVIDE GFCI BREAKER IN PANEL FOR CIRCUIT INDICATED.
- 2. CONNECTION FOR PRINTER. VERIFY CONNECTION REQUIREMENTS AND LOCATION WITH OWNER PRIOR TO ROUGH-IN.
- 3. RECEPTACLE FOR TV. VERIFY TV LOCATION AND HEIGHT PRIOR TO ROUGH-IN. VERIFY CONNECTION REQUIREMENTS AND LOCATION WITH OWNER PRIOR TO ROUGH-IN.
- 4. FURNISH AND INSTALL 6" HUBBELL FIRE RATED MULT-SERVICE POKE-THRU, S1R8PTF1T SERIES OR APPROVED EQUAL. COORDINATE DEVICE PLATES AND COVER FINISH WITH ARCHITECT PRIOR TO ORDERING. RE: SPECIAL SYSTEMS SECOND FLOOR PLAN.
- 5. DUAL CHANNEL POWER POLE FOR FURNITURE FEED. PROVIDE CIRCUITING AS INDICATED. COORDINATE EXACT LOCATION AND CONNECTION REQUIREMENTS WITH FURNITURE INSTALLER PRIOR TO ROUGH-IN.
- 6. JUNCTION BOX FOR FURNITURE FEED. PROVIDE CIRCUITING AS INDICATED. COORDINATE EXACT LOCATION AND CONNECTION REQUIREMENTS WITH FURNITURE INSTALLER PRIOR TO ROUGH-IN.
- 7. PROVIDE JUNCTION BOX(ES) IN FURRED OUT WALL, SIZED AS REQUIRED, TO ROUTE DATA CABLING THAT PENETRATES EXTERIOR WALL IN THIS LOCATION. ROUTE (1) 1-1/4" CONDUIT FROM JUNCTION BOX, TO STRUCTURE AND STUB INTO EXISTING ITELEC CLOSET 210.
- 8. PROVIDE CONDUIT SLEEVES, QUANTITY AND SIZE AS INDICATED, FROM ABOVE THE ACCESSIBLE CEILING AND EXTEND AND STUB INTO ITELEC CLOSET 210. TERMINATE WITH INSULATED THROAT BUSHINGS.
- 9. JUNCTION BOX FOR TV AV CABLING. STUB 1-1/4" CONDUIT ABOVE ACCESSIBLE CEILING. TERMINATE WITH INSULATED THROAT BUSHING.
- 10. FURNISH AND INSTALL 6" HUBBELL FIRE RATED MULT-SERVICE POKE-THRU. ROUTE 2" CONDUIT WITH PULL STRINGS FROM POKE-THRU IN SPACE BELOW, TO FULL HEIGHT WALL ON THIS FLOOR, AND UP TO ABOVE ACCESSIBLE CEILING IN THIS TENANT SPACE. CORE DRILL THE EXISTING FLOOR AS REQUIRED. RE: POWER SECOND FLOOR PLAN.
- 11. DUAL CHANNEL POWER DATA POLE FOR FURNITURE FEED. COORDINATE EXACT LOCATION AND CONNECTION REQUIREMENTS WITH FURNITURE INSTALLER PRIOR TO ROUGH-IN. RE: POWER SECOND FLOOR PLAN.
- 12. STUB 3/4" CONDUIT ABOVE ACCESSIBLE CEILING. TERMINATE WITH INSULATED THROAT BUSHING.
- 13. JUNCTION BOX FOR FURNITURE FEED DATA. ROUTE 1-1/4" CONDUIT FROM J-BOX TO COLUMN AND TO ABOVE ACCESSIBLE CEILING. COORDINATE EXACT LOCATION AND CONNECTION REQUIREMENTS WITH FURNITURE INSTALLER PRIOR TO ROUGH-IN. RE: POWER SECOND FLOOR PLAN.
- 14. ROUTE CONDUIT ABOVE THE FIRST FLOOR CEILING FROM THE FLOOR BOX TO THE JUNCTION BOX FOR TV AV CABLING.

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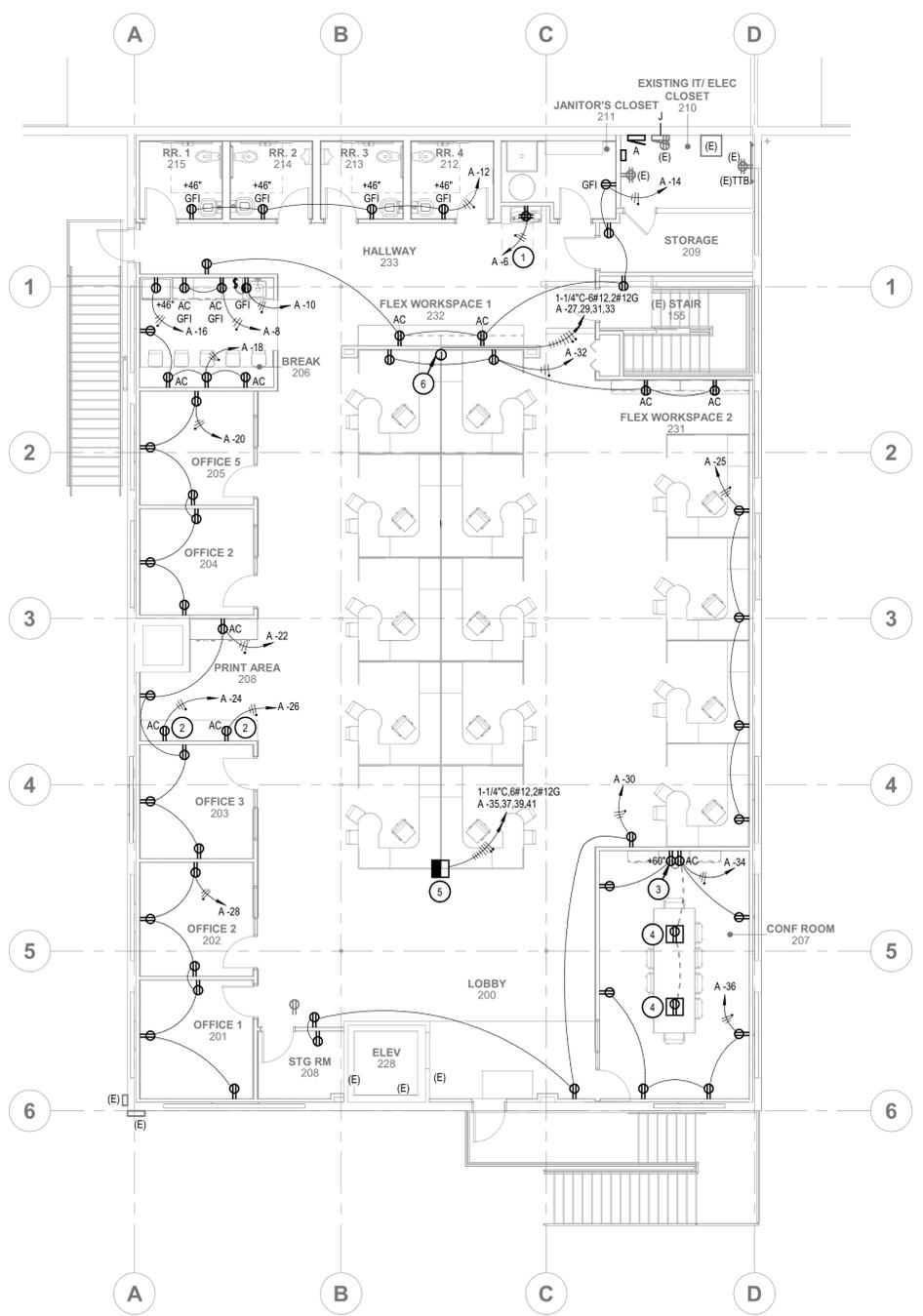
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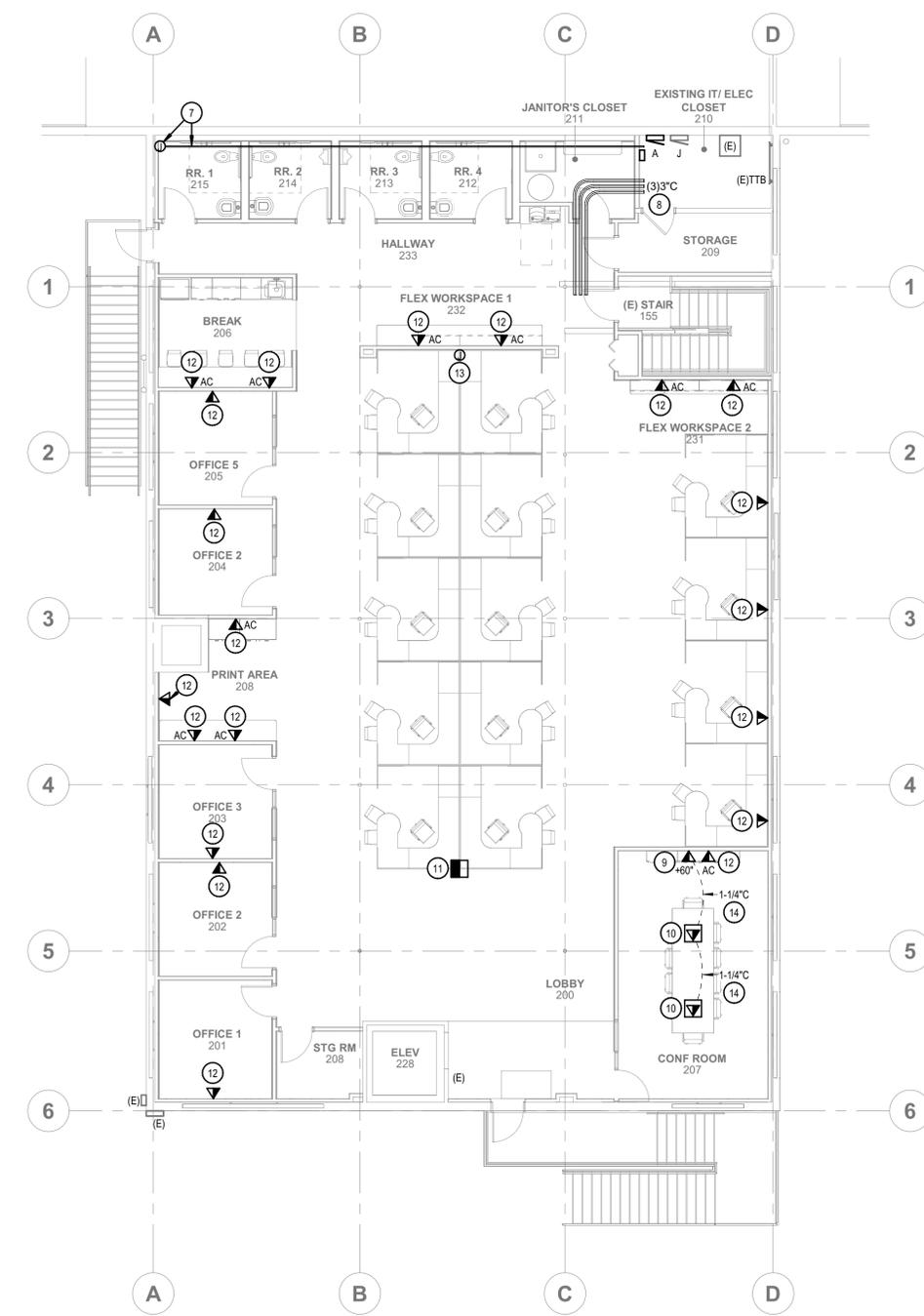
ELECTRICAL 2ND FLOOR PLANS

SHEET

E33.2
 ORIGINAL SHEET SIZE
 24" x 36"



1 POWER SECOND FLOOR PLAN
 1/8" = 1'-0"

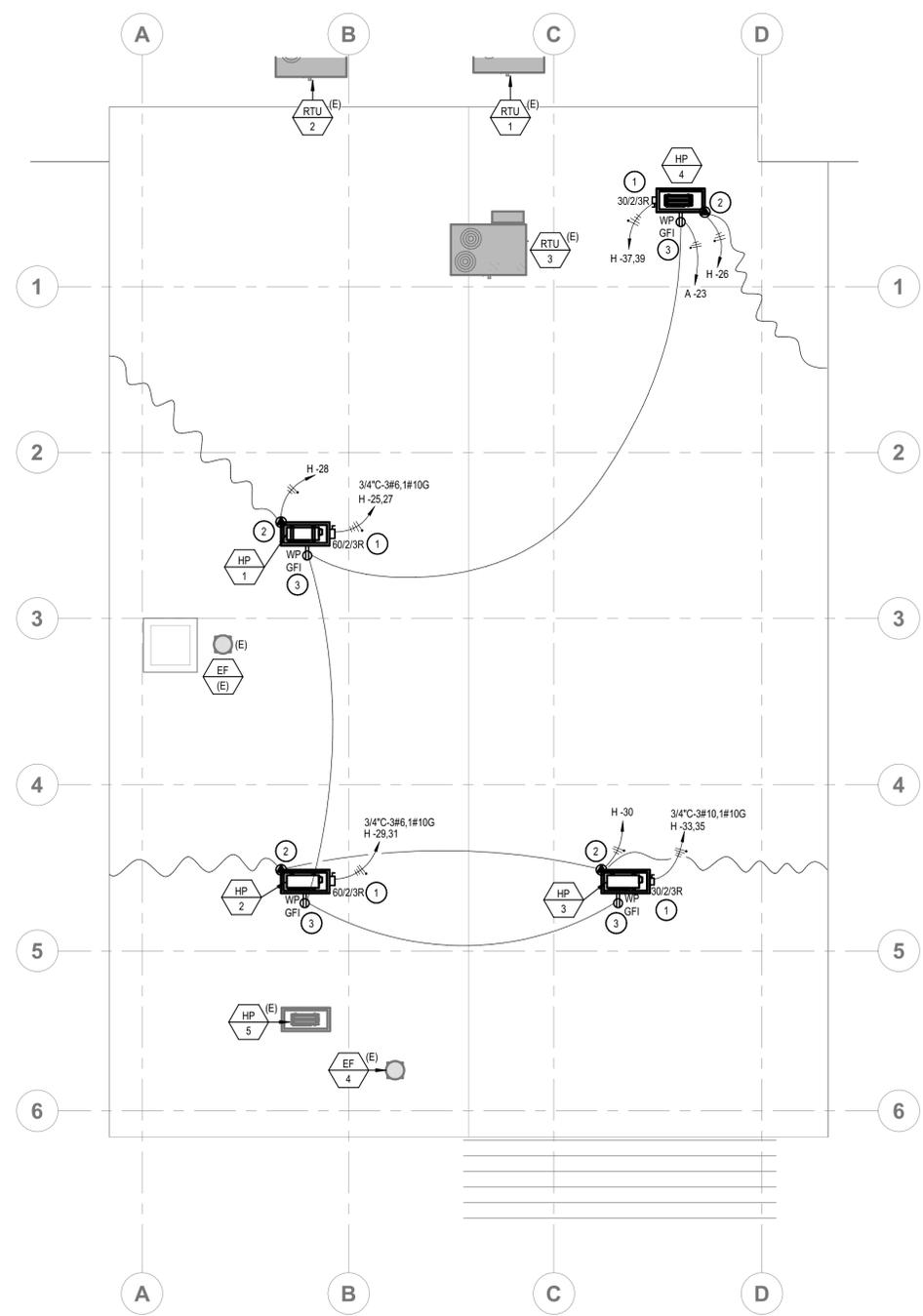


2 SPECIAL SYSTEMS SECOND FLOOR PLAN
 1/8" = 1'-0"



KEYED NOTES:

- Ⓢ SYMBOL USED FOR CALLOUT
- 1. FIELD COORDINATE DISCONNECT AND MECHANICAL UNIT LOCATION WITH MECHANICAL CONTRACTOR TO MAINTAIN ALL REQUIRED CLEARANCES.
- 2. CONNECTION FOR HEAT PUMP HEAT TAPE: PROVIDE AND INSTALL HEAT TAPE AROUND THE BASE OF THE HEAT PUMP. WRAP AROUND THE BASE OF THE UNIT AND ROUTE TO NEAREST GUTTER AND EXTEND DOWN THE DOWNSPOUT TO GRADE. UTILIZE 12W/FT REYCHEM ICESTOP HEAT TAPE OR EQUAL. PROVIDE AND INSTALL (1) PENTAIR AMC-1A TEMPERATURE CONTROL UNIT, OR EQUAL, PER CIRCUIT AND GFEP (30mA) BREAKER. COORDINATE THE INSTALLATION WITH THE MECHANICAL CONTRACTOR.
- 3. MOUNT RECEPTACLE ON RIGID CONDUIT 12" ABOVE ROOF DECK OR ON MECHANICAL UNIT WHERE APPLICABLE.



1 ELECTRICAL ROOF PLAN
 1/8" = 1'-0"



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SHEET TITLE
ELECTRICAL ROOF PLAN

SHEET
E41.2
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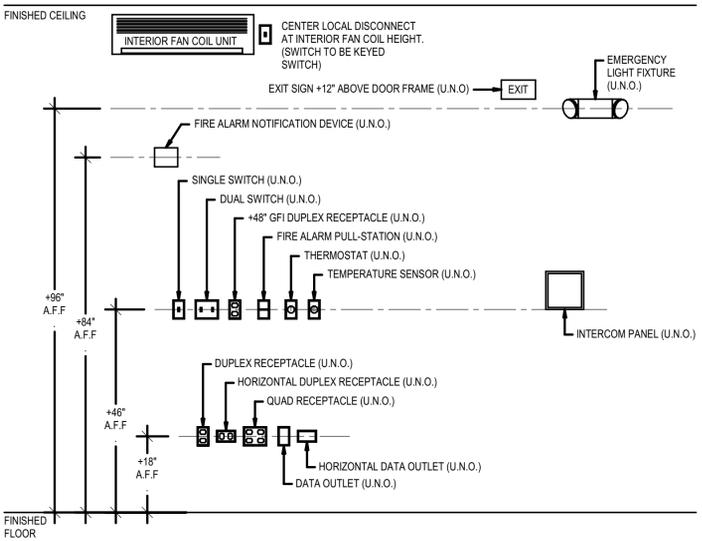


LIGHTING FIXTURE SCHEDULE - PHASE 2

TYPE MARK	DESCRIPTION	MOUNTING	WATTAGE	LAMP	MANUFACTURER	MODEL	OR EQUAL BY	NOTES
BL1	4' LED STRIP, CHAIN HUNG	CHAIN HUNG +8'-0" UNO	18.5	LED, 3000 LUMENS, 4000K	LITHONIA	CLX-L48-SEF-RDL-MVOLT-GZ1-40K-CRI-WH-HC36M12 (PROVIDE WITH 'PS1050-SPD' OPTION FOR EMERGENCY FIXTURES)	COLUMBIA / METALUX	1
D4	4' LED DIRECT/INDIRECT	CABLE HUNG +8'-6" UNO	26.7	LED, 4000K	LITHONIA	STL-30L-GZ10-LP840-STACG72-F2 (PROVIDE WITH 'EL14L' OPTION FOR EMERGENCY FIXTURES)	COLUMBIA / METALUX	1
D4A	4' LED DIRECT PENDANT WITH DIMMING OCCUPANCY SENSOR AND BATTERY BACKUP	CABLE HUNG +8'-6" UNO	26.7	LED, 4000K	LITHONIA	STL-30L-GZ10-LP840-LSXRHL-EL14L-STACG72-F2	COLUMBIA / METALUX	1
EX1	THERMOPLASTIC EXIT SIGN WITH GREEN LETTERING, NICKEL CADMIUM BATTERY AND SELF DIAGNOSTICS	+8'-0" UNO	0.7	LED	LITHONIA	LQM-S-W-3-G-MVOLT-ELN-SD	COMPASS/SURE-LITE	1
GL1	2X2, VOLUMETRIC RECESSED LIGHTING	CEILING GRID	26.7	LED, 3300 LUMENS, 4000K	LITHONIA	2BLT2-33L-ADP-GZ1-LP840 (PROVIDE WITH 'EL14L' OPTION FOR EMERGENCY FIXTURES)	COLUMBIA / METALUX	1
RR1	ROUND RECESSED, 6" APERTURE, LED	CEILING RECESSED	10.4	LED, 1000 LUMENS, 4000K	LITHONIA	LDN6-4010-L06AR-LSS-MVOLT-GZ1-EL	LIGHTOLIER/PORTFOLIO/PRESCOLITE	1
WB1	2' WALL BRACKET, 2-LAMP	WALL MOUNTED	17.5	LED	LITHONIA	WP2-18L-GZ10-LP840	LIGHTCONTROL/METALUX	1

LIGHTING FIXTURE SCHEDULE NOTES - PHASE 2

- SUBSTITUTIONS WILL BE ALLOWED IF SUBMITTED PRIOR TO BID DATE BY THE GREATER OF 7 BUSINESS DAYS OR THE TIME PERIOD SPECIFIED BY DIVISION 1 SPECIFICATIONS, AND IF DEEMED EQUAL BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING SUBSTITUTED FIXTURES MEET OR EXCEED THE SPECIFICATIONS OF THE FIXTURES SPECIFIED.



DETAIL GENERAL NOTES:

- PROVIDE FRAMING AS REQUIRED.

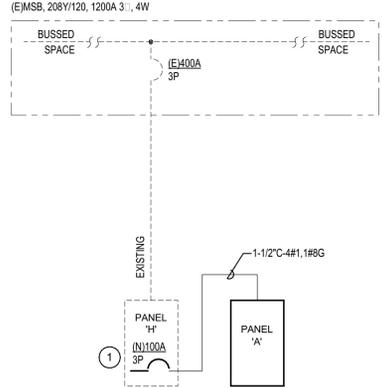
1 STANDARD MOUNTING HEIGHTS - PHASE 2 NTS

GENERAL NOTES:

- CONDUIT, CONDUCTORS AND AIC CALCULATIONS FOR ALL SERVICE, PANEL AND EQUIPMENT FEEDERS INDICATED ON THE ONE-LINE HAVE BEEN SIZED BASED ON COPPER. THE CONTRACTOR MAY USE COMPRESSED ALUMINUM CONDUCTORS FOR THESE FEEDERS PROVIDING THE CONDUIT, CONDUCTOR SIZES AND AIC CALCULATIONS ARE ADJUSTED AS REQUIRED TO MEET ALL NATIONAL ELECTRICAL CODE REQUIREMENTS.
- FURNISH AND INSTALL ENGRAVED LABEL ON THE FRONT OF ALL ELECTRICAL EQUIPMENT NOTING THE AVAILABLE FAULT CURRENT VALUE SHOWN.

KEYED NOTES:

- SYMBOL USED FOR NOTE CALLOUT.
- PROVIDE NEW BREAKER IN EXISTING PANEL



2 PARTIAL ONE-LINE DIAGRAM - PHASE 2 NTS

Branch Panel: H

Location: P17
 Supply From: H
 Mounting: Surface
 Enclosure: Type 1

Volts: 120/208 Wye
 Phases: 3
 Wires: 4

A.I.C. Rating: EXISTING
 Mains Type: 400A
 Mains Rating: 400 A
 MCB Rating: MBR

Notes:
 1)EXISTING BREAKER; 2)NEW BREAKER; 3)RED HANDLED, LOCKABLE BREAKER; 4)GFEP (30mA) FOR EQUIPMENT PROTECTION

CKT	Circuit Description	CKT Note	Trip	Poles	A	B	C	Poles	Trip	CKT Note	Circuit Description	CKT	
1	REC-ROOF (HP-5)	2	20 A	1	180 VA	0 VA					(E)PANEL 'G'	2	
3	HEAT TAPE (HP-5), ROOF	2,4	20 A	1		660 VA	0 VA					4	
5	Spare	1	20 A	2								6	
7	--	--	--	--	0 VA	0 VA				3	15 A	1	8
9	REC-ELEVATOR SHAFT/PIT	1	20 A	1		180 VA	0 VA					10	
11	LTS-ELEVATOR SHAFT/PIT	1	20 A	1			136 VA	0 VA				12	
13	EF-4, ROOF	1	20 A	1	120 VA	0 VA					FACP, FIRE RISER ROOM.	14	
15	LTS/REC-ELEVATOR	2,3	20 A	1		360 VA	0 VA				PIV/BELL, RISER ROOM	16	
17	ELEVATOR SHUNT TRIP	2,3	20 A	1			0 VA	1768 VA			HP-5, ROOF	18	
19	(E)PANEL 'J'	1	60 A	2	0 VA	1768 VA						20	
21	--	--	--	--		0 VA	250 VA			2	20 A	--	22
23	REC-EQUIP. RM 160	1	20 A	1			180 VA	250 VA				24	
25	HP-1, ROOF	2	45 A	2	3120 VA	900 VA					HEAT TAPE (HP-4)	26	
27	--	--	--	--			3120 VA	900 VA			HEAT TAPE (HP-1)	28	
29	HP-2, ROOF	2	45 A	2			3120 VA	1200 VA			HEAT TAPE (HP-2/3)	30	
31	--	--	--	--	3120 VA	0 VA					Spare	32	
33	HP-3, ROOF	2	25 A	2		1768 VA	0 VA				Spare	34	
35	--	--	--	--			1768 VA	--			Space	36	
37	HP-4, ROOF	2	20 A	2	1352 VA	9485 VA				3	100 A	2	38
39	--	--	--	--		1352 VA	8115 VA						40
41	Space	--	--	1			--	8931 VA					42
					Total Load:	20035 VA	16694 VA	17314 VA					
					Total Amps:	168 A	139 A	145 A					

Legend:

Branch Panel: A

Location: IT/ELEC 201
 Supply From: H
 Mounting: Surface
 Enclosure: Type 1

Volts: 120/208 Wye
 Phases: 3
 Wires: 4

A.I.C. Rating: MLO
 Mains Type: MLO
 Mains Rating: 100 A
 MCB Rating:

Notes:
 1)GFCI FOR PERSONAL PROTECTION (5mA); 2)GFEP FOR EQUIPMENT PROTECTION (30mA)

CKT	Circuit Description	CKT Note	Trip	Poles	A	B	C	Poles	Trip	CKT Note	Circuit Description	CKT
1	LTS-HALL 233, FLEX 232, LOBBY...	20 A	1	1	497 VA	53 VA					LTS-STAIRS	2
3	LTS-2ND FLOOR	20 A	1			891 VA	572 VA				LTS-OPEN OFFICE	4
5	EH-1, LOBBY 200	20 A	2				1000 VA	360 VA		1	WATER FOUNTAIN	6
7	--	--	--	--	1000 VA	1380 VA					REC-COUNTER, BREAK 206	8
9	EH-2, HALL 233	20 A	2			1000 VA	720 VA				REC-DISPOSER, BREAK 206	10
11	--	--	--	--			1000 VA	720 VA			REC-RR 1/2/3/4	12
13	ERU 1-5, OFFICES 201-205	20 A	1	1	26 VA	1080 VA					REC-HALL 233/JAN 211/STOR 209	14
15	EF-1/2/3/4/5/6	20 A	1			290 VA	720 VA				REC-FRIDGE, BREAK 206	16
17	WH-1, JAN. 211	30 A	2				2250 VA	720 VA			REC-BREAK 206	18
19	--	--	--	--	2250 VA	1080 VA					REC-OFFICE 204/205	20
21	RP-1 (WH-1), JAN. 211	20 A	1			180 VA	900 VA				REC-PRINT 208/OFFICE 203	22
23	REC-ROOF	20 A	1				720 VA	180 VA			REC-PRINTER, PRINT 208	24
25	REC-DESKS, FLEX 231	20 A	1	1	720 VA	180 VA					REC-PRINTER, PRINT 208	26
27	CUBICLE FURNITURE, FLEX 232	20 A	2			250 VA	1080 VA				REC-OFFICE 201/202	28
29	--	--	--	--			250 VA	720 VA			REC-STOR 208/L LOBBY 200	30
31	CUBICLE FURNITURE, FLEX 232	20 A	2	1	250 VA	720 VA					REC-FLEX 231/232	32
33	--	--	--	--			250 VA	1080 VA			REC-CONF 307	34
35	CUBICLE FURNITURE, FLEX 232	20 A	2				250 VA	720 VA			REC-CONF 307	36
37	--	--	--	--	250 VA	180 VA					LCP, IT/ELEC 210	38
39	CUBICLE FURNITURE, FLEX 232	20 A	2			360 VA	0 VA				Spare	40
41	--	--	--	--				360 VA	0 VA		Spare	42
					Total Load:	9485 VA	8115 VA	8931 VA				
					Total Amps:	80 A	68 A	75 A				

Legend:

200 BROAD STREET
 BOISE, IDAHO
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L2 TENANT IMPROVEMENT PERMIT SET

PROJECT 23002	DATE 03-27-24
DRAWN AN	CHECKED KL

REVISED

ELECTRICAL DETAILS AND SCHEDULES

SHEET

E50.2
 ORIGINAL SHEET SIZE
 24" x 36"