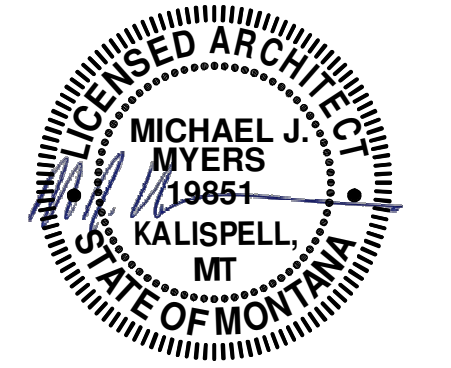


LINFIELD HALL MONTANA STATE UNIVERSITY

1000 SOUTH 11TH AVENUE, BOZEMAN, MT 59715

ROOM #113
PPA#: 23-0828

DEFERRED SUBMITTALS



FOR PERMIT & BIDDING

THE INFORMATION CONTAINED HEREIN IS PROPRIETARY. THIS DOCUMENT MAY NOT BE USED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF JACKOLA ENGR. & ARCH., P.C.

INDEX OF DRAWINGS

SHEET NUMBER	SHEET NAME
TITLE	
G-001	TITLE SHEET
G-013	ACCESSIBILITY DETAILS
ARCHITECTURAL	
A-001	ARCHITECTURAL NOTES
A-111	CLASSROOM FLOOR PLAN
A-121	CLASSROOM REFLECTED CEILING PLAN & DEMO
A-131	CLASSROOM FLOOR FINISH PLAN
A-211	INTERIOR ELEVATIONS
MECHANICAL	
M-001	MECHANICAL TITLE SHEET
M-111	HVAC PLAN
ELECTRICAL	
E-001	ELECTRICAL TITLE SHEET
ED111	ELECTRICAL DEMOLITION PLAN
E-111	LIGHTING PLAN
E-121	POWER PLAN

BUILDING REQUIREMENTS FROM THE INTERNATIONAL EXISTING BUILDING CODE 2021

ALTERATION - LEVEL 1: ALTERATIONS INCLUDE THE REMOVAL AND REPLACEMENT OR THE COVERING OF EXISTING MATERIALS, ELEMENTS, EQUIPMENT OR FIXTURES USING NEW MATERIALS, ELEMENTS, OR EQUIPMENT OR FIXTURES THAT SERVE THE SAME PURPOSE.

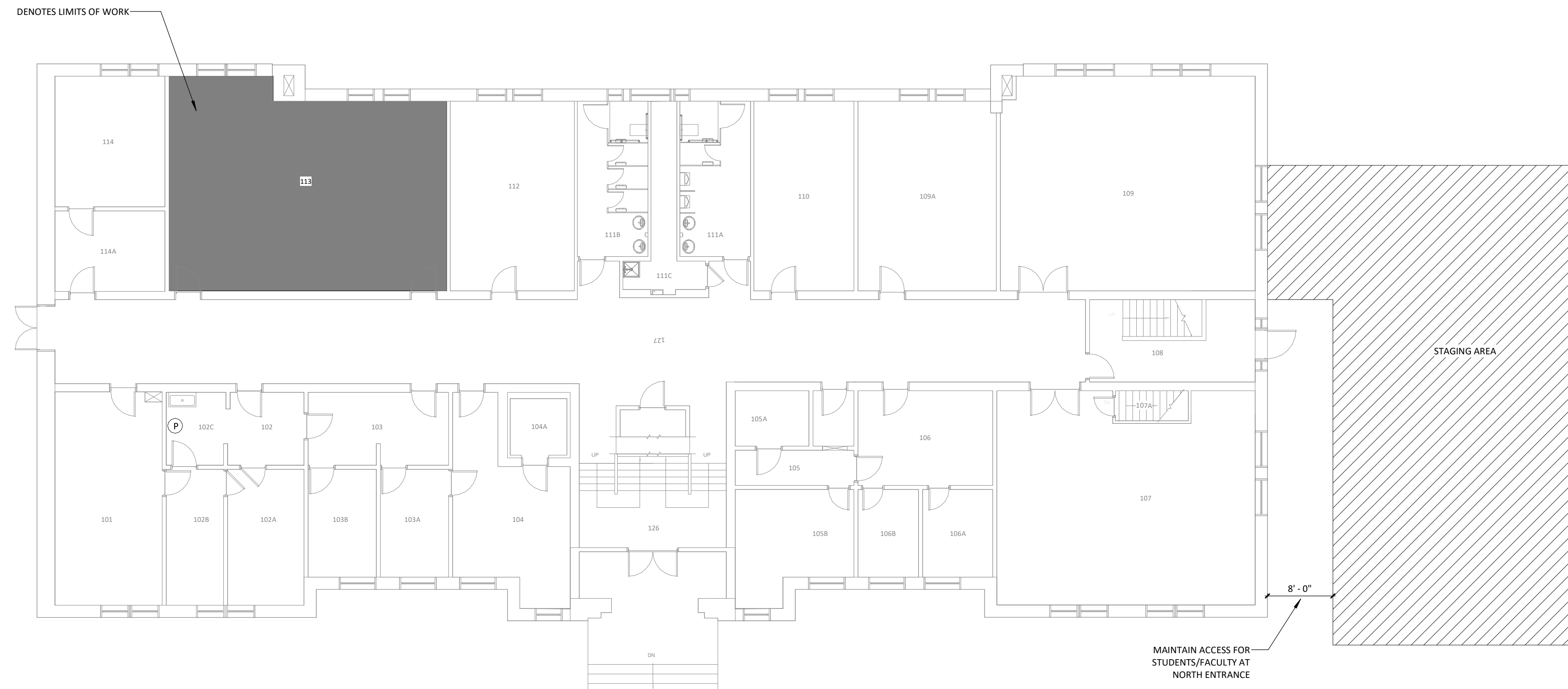
COMPLIANCE METHOD:

PRESCRIPTIVE - CHAPTER 5
ALTERATIONS: EXCEPT AS PROVIDED BY SECTION 302.4, 302.5 OR THIS SECTION, ALTERATIONS TO ANY BUILDING OR STRUCTURE SHALL COMPLY WITH THE REQUIREMENTS OF THE IBC FOR NEW CONSTRUCTION. ALTERATIONS SHALL BE SUCH THAT THE EXISTING BUILDING OR STRUCTURE IS NOT LESS COMPLYING WITH THE PROVISIONS OF THE IBC THAN THE EXISTING BUILDING OR STRUCTURE WAS PRIOR TO THE ALTERATION.

NO CHANGE IS BEING MADE TO OCCUPANCY SIZE OR TYPE.

NO CHANGE TO EXIT DISTANCE OR PATH.

Ⓧ LOCATION OF EXISTING ELECTRICAL PANEL.



LINFIELD HALL
MONTANA STATE UNIVERSITY
ROOM #113
PPA#: 23-0828

GENERAL CONDITIONS

- THE GENERAL CONTRACTOR IS TO GUARANTEE ALL WORK INCLUDING WORK DONE BY SUBCONTRACTORS FOR A PERIOD OF ONE (1) YEAR COMMENCING WITH THE FINAL ACCEPTANCE AND FULL COMPLETION OF THE PROJECT.
- ALL WORK IS TO BE PERFORMED IN ACCORDANCE WITH ALL GOVERNING CODES, ORDINANCES AND AUTHORITIES HAVING JURISDICTION. GENERAL CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL REQUIRED BUILDING PERMITS.
- THE GENERAL CONTRACTOR IS TO HAVE A FULL TIME QUALIFIED SUPERVISOR ON THE SITE AT ALL TIMES WHILE WORK IS BEING PERFORMED.
- ALL MATERIAL SPECIFIED IS TO BE NEW & INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND SPECIFICATIONS. GENERAL CONTRACTOR IS TO CONSTRUCT PROJECT IN ACCORDANCE WITH THE DOCUMENTS. ANY DEVIATION FROM THE INTENT OF THE DOCUMENTS, WITHOUT ARCHITECT OR ENGINEER'S APPROVAL, ARE AT THE CONTRACTOR'S OWN RISK AND MAY RESULT IN THE WORK BEING DONE OVER AT CONTRACTOR'S EXPENSE (MATERIALS AND LABOR).

GENERAL NOTES

- CONTRACTOR TO REVIEW AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK. ANY CONDITIONS NOT INDICATED ON CONTRACT DOCUMENTS ARE TO BE REPORTED TO THE ARCHITECT PRIOR TO BEGINNING WORK.
- CONTRACTOR TO CONTACT LOCAL UTILITIES, IF NECESSARY, SUBMIT ALL APPLICABLE PERMIT DOCUMENTS, QUALIFICATIONS, ETC., AND BE RESPONSIBLE FOR ALL FEES ASSOCIATED WITH PERMITS, UTILITY EXTENSIONS, TAP-INS, ETC.
- THE CONTRACTOR SHALL REMOVE ALL DEBRIS AS A RESULT OF THIS PROJECT. THE CONTRACTOR WILL REMOVE EXISTING EQUIPMENT, FIXTURES, ETC., IN THE SPACE PRIOR TO CONSTRUCTION AND RELOCATE PER OWNER.
- THE CONTRACTOR SHALL SCHEDULE HIS WORK AND MATERIAL AND EQUIPMENT DELIVERIES SO AS NOT TO INTERFERE WITH THE DAILY OPERATIONS OF THE REMAINDER OF THE FACILITY.
- THE CONTRACTOR SHALL PROTECT EXISTING FACILITIES, EQUIPMENT, FIXTURES, ETC., FROM DAMAGE DURING THE COURSE OF CONSTRUCTION.

- ALL SURFACES AND/OR FINISHES DAMAGED AS A RESULT OF AND ADJACENT TO THE WORK SHALL BE REPAIRED AND FINISHED TO THEIR ORIGINAL CONDITION.
- USE DETAILS MARKED "TYPICAL" (TYP) WHEREVER APPLICABLE.
- ALL ITEMS REQUIRED BY THE DRAWINGS AND SPECIFICATIONS SHALL BE PERFORMED IN A WORKMANLIKE MANNER BY PERSONS SKILLED IN THEIR RESPECTIVE TRADE AND WHO NORMALLY PARTICIPATE IN THE WORK OF THAT TRADE.
- WORDS WHICH HAVE WELL KNOWN TECHNICAL OR TRADEMEANINGS ARE USED IN THE DRAWINGS AND SPECIFICATIONS IN ACCORDANCE WITH SUCH RECOGNIZED MEANINGS.
- WITHIN THE DRAWINGS AND RELATED SPECIFICATIONS THERE SHALL BE THE FOLLOWING PRECEDENCE:
 - ADDENDA OR MODIFICATION TO THE DRAWINGS AND SPECIFICATIONS TAKE PRECEDENCE OVER THE ORIGINAL, WHEN ISSUED BY THE ARCHITECT.

- SPECIFICATIONS SHALL TAKE PRECEDENCE OVER DRAWINGS.
 - WITHIN THE DRAWINGS THE LARGER SCALE TAKES PRECEDENCE OVER THE SMALLER, FIGURED DIMENSIONS OVER SCALED AND NOTED MATERIALS OVER GRAPHIC INDICATIONS.
- THE ARCHITECT OR ENGINEER SHALL BE IN THE FIRST INSTANCE THE SOLE INTERPRETER OF THE DRAWINGS AND SPECIFICATIONS WITH REGARD TO THEIR MEANING OR INTENT.
 - CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES AND PROCEDURES.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF SAFETY DURING BUILDING CONSTRUCTION.

- SUBMITTALS AND SAMPLES REQUIRED ON ALL FINISH MATERIALS AND COLORS, AND SHALL BE REVIEWED BY OWNER'S REPRESENTATIVE FOR FINAL APPROVAL PRIOR TO ORDERING. SAMPLES SHALL BE FULL SIZE WITH PAINTS/STAINS APPLIED TO ACTUAL SUBSTRATES. ALL MATERIALS SHALL BE VIEWED ON SITE AT SAME TIME IN SPACES USED, ONE MEETING FOR EXTERIOR FINISHES AND ONE MEETING FOR INTERIOR FINISHES.

PROJECT INFORMATION:

OWNER / DEVELOPER

STATE OF MONTANA - MONTANA STATE UNIVERSITY
UNIVERSITY FACILITIES MANAGEMENT,
MANAGED BY: PLANNING, DESIGN, & CONSTRUCTION
PLEW BUILDING 6TH & GRANT
PO BOX 172760
BOZEMAN, MT 59717-2760
ATTN: JENNISSE WATERS
EMAIL: JENNISSE.WATERS@MONTANA.EDU
TEL: (406) 994-5970

DESIGN PROFESSIONALS

JACKOLA ENGINEERING & ARCHITECTURE, P.C.
2250 HWY 93 SOUTH
PO BOX 1134
KALISPELL, MT 59903
TEL: (406) 755-3208

ARCHITECT: MIKE J MYERS, AIA

MECHANICAL ENGINEER: TYLER TONUUM, PE

ELECTRICAL ENGINEER: JON RUONAVARA, PE

BUILDING DEPARTMENT

CITY OF BOZEMAN
20 E. OLIVE ST. 1ST FLOOR
PO BOX 1230
BOZEMAN, MT 59711
EMAIL: PLANNINGTECH@BOZEMAN.NET
TEL: (406) 582-2260

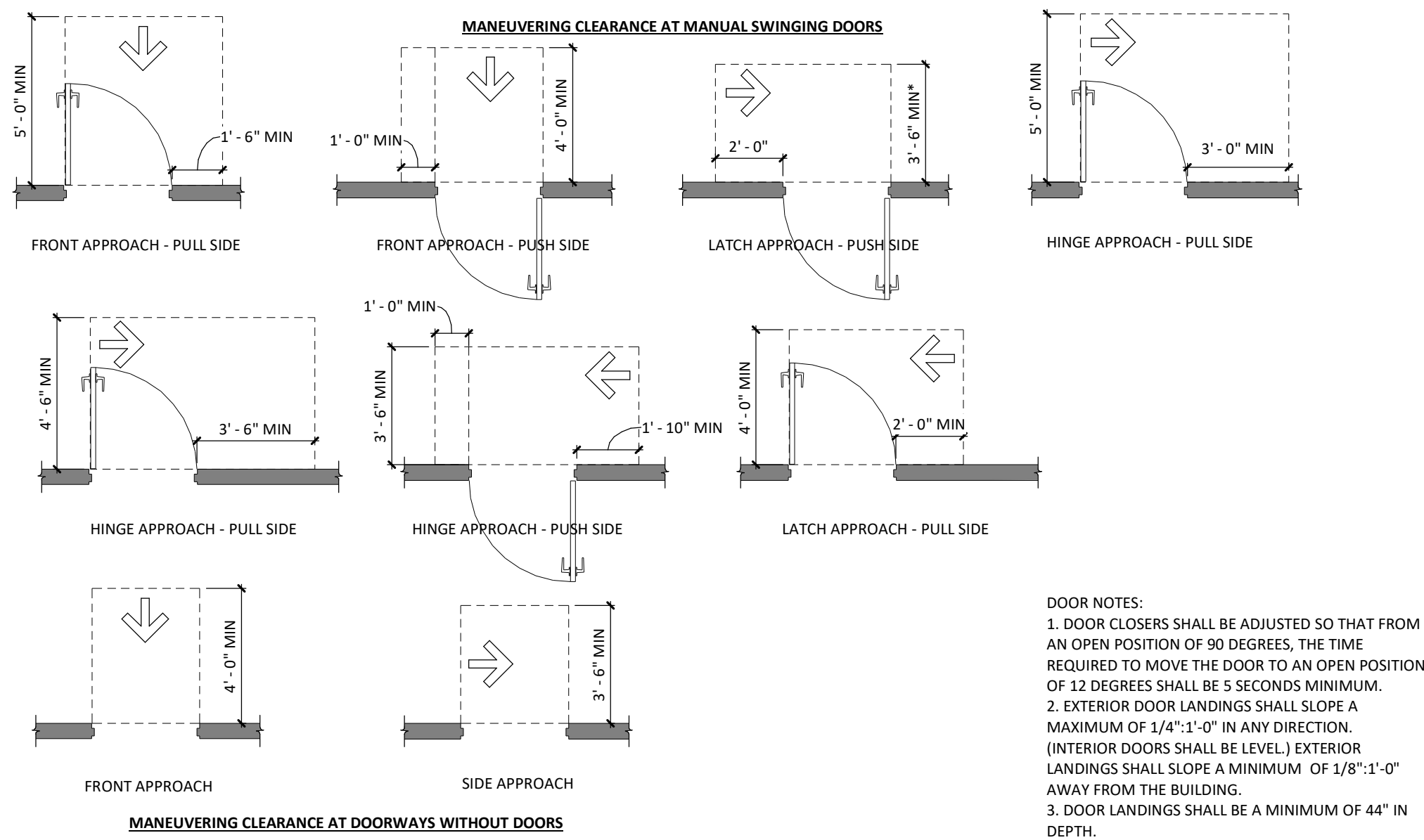
DRAWN: KCE CHECKED: MJM

DATE: 11/19/2024

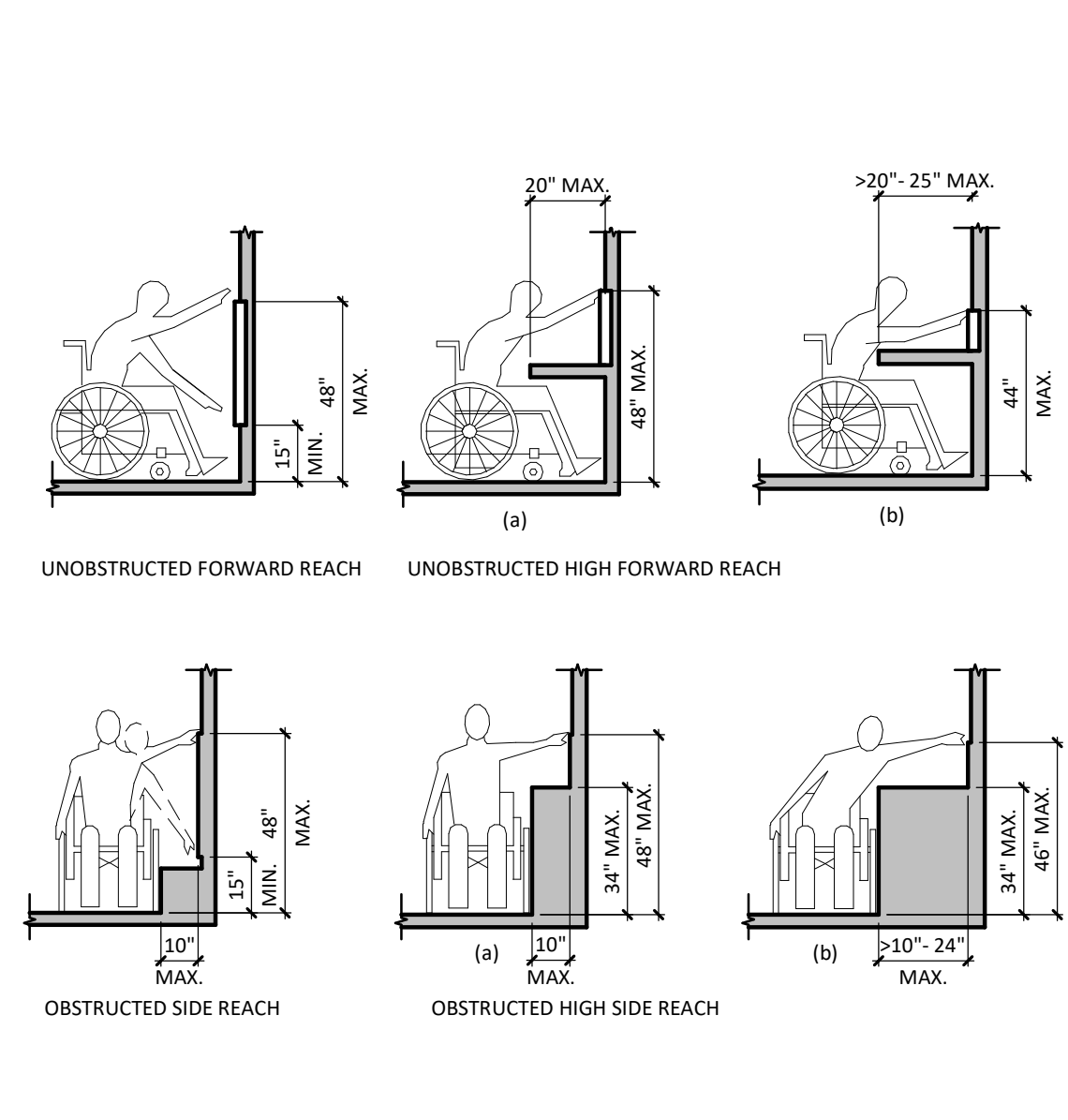
REVISIONS:

TITLE SHEET

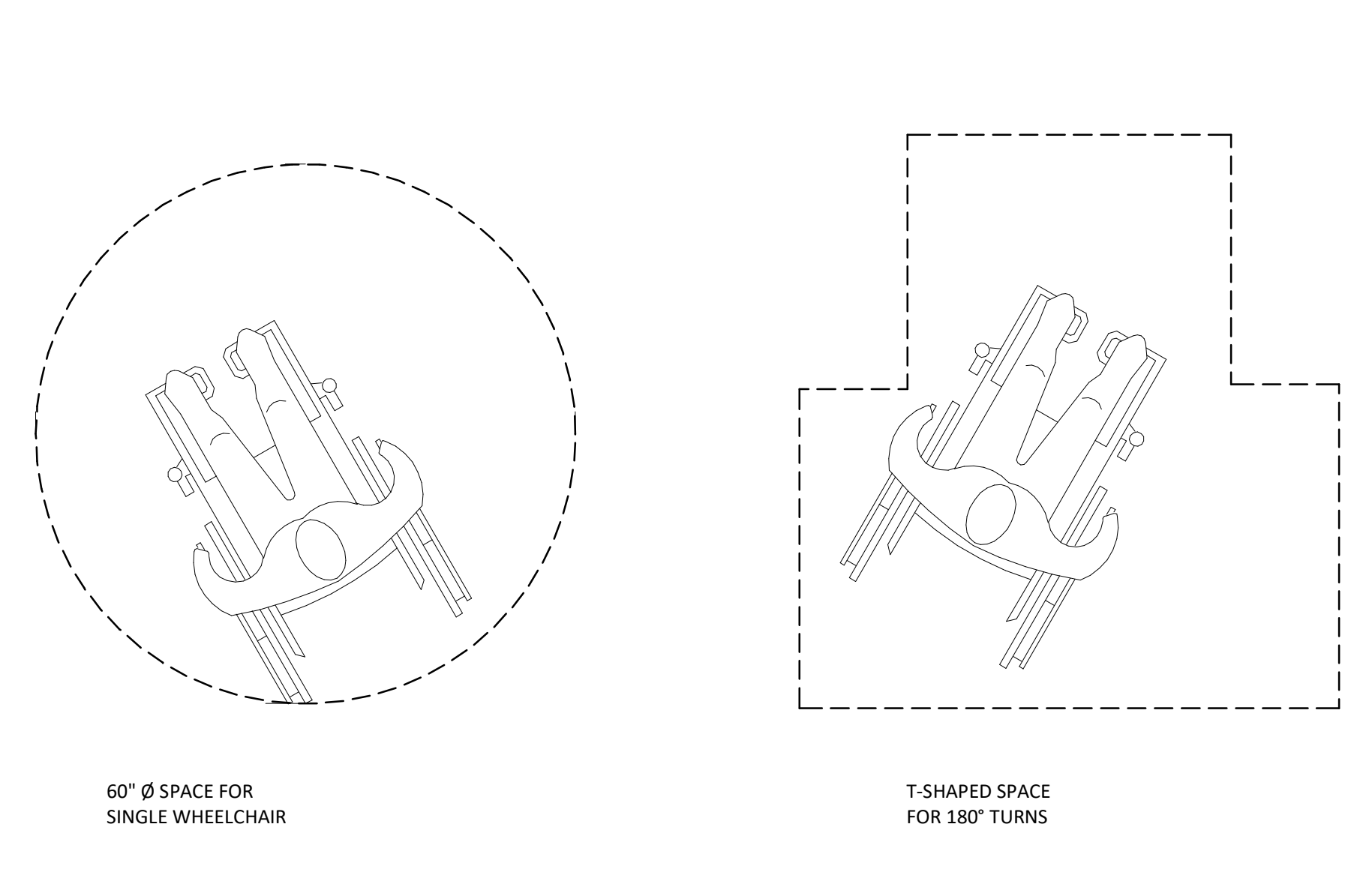
G-001



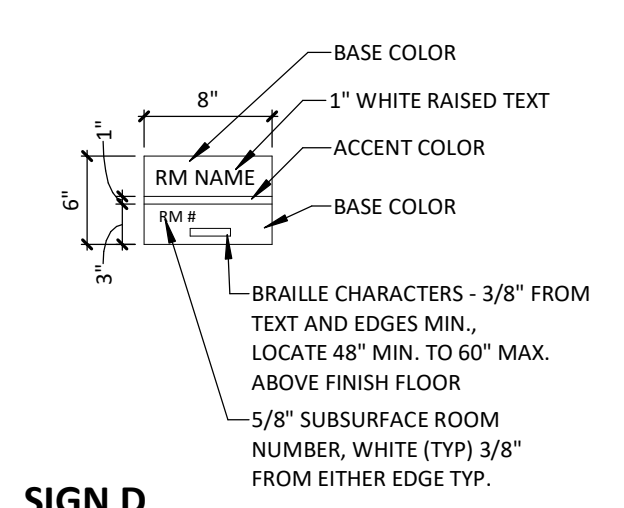
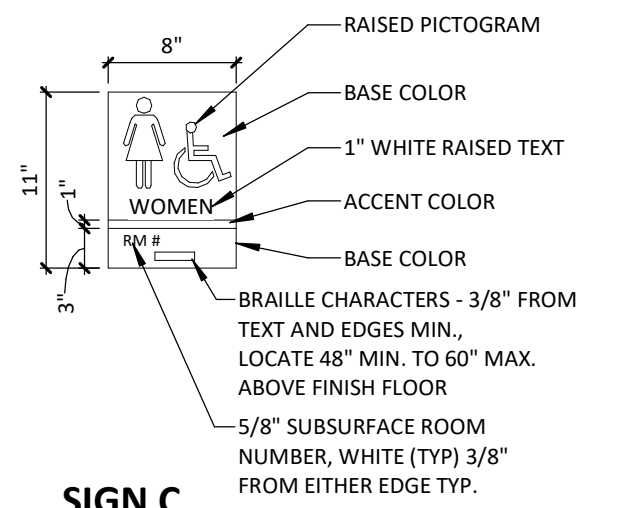
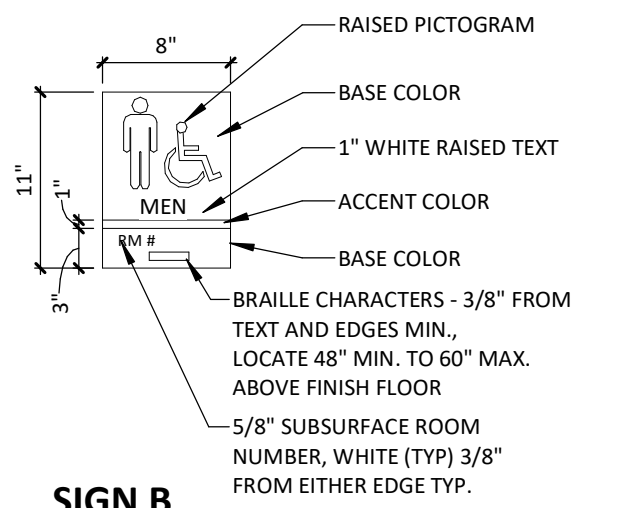
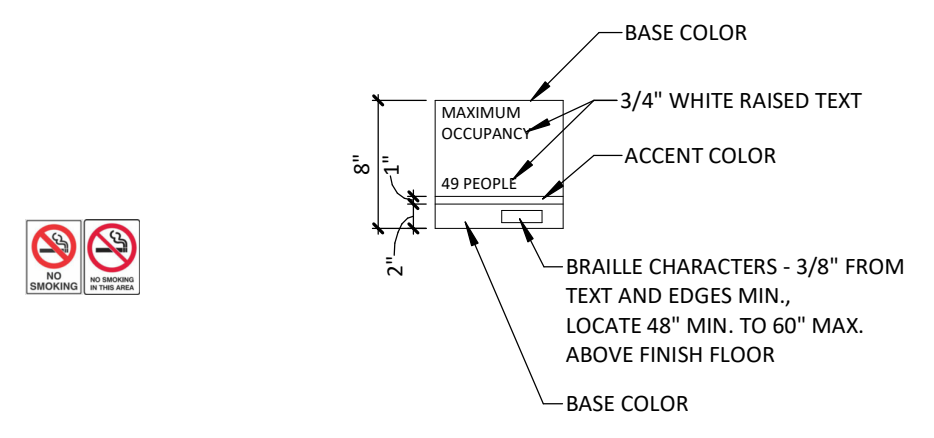
1 DOOR CLEARANCE AND LANDING REQUIREMENTS
1/4" = 1'-0"



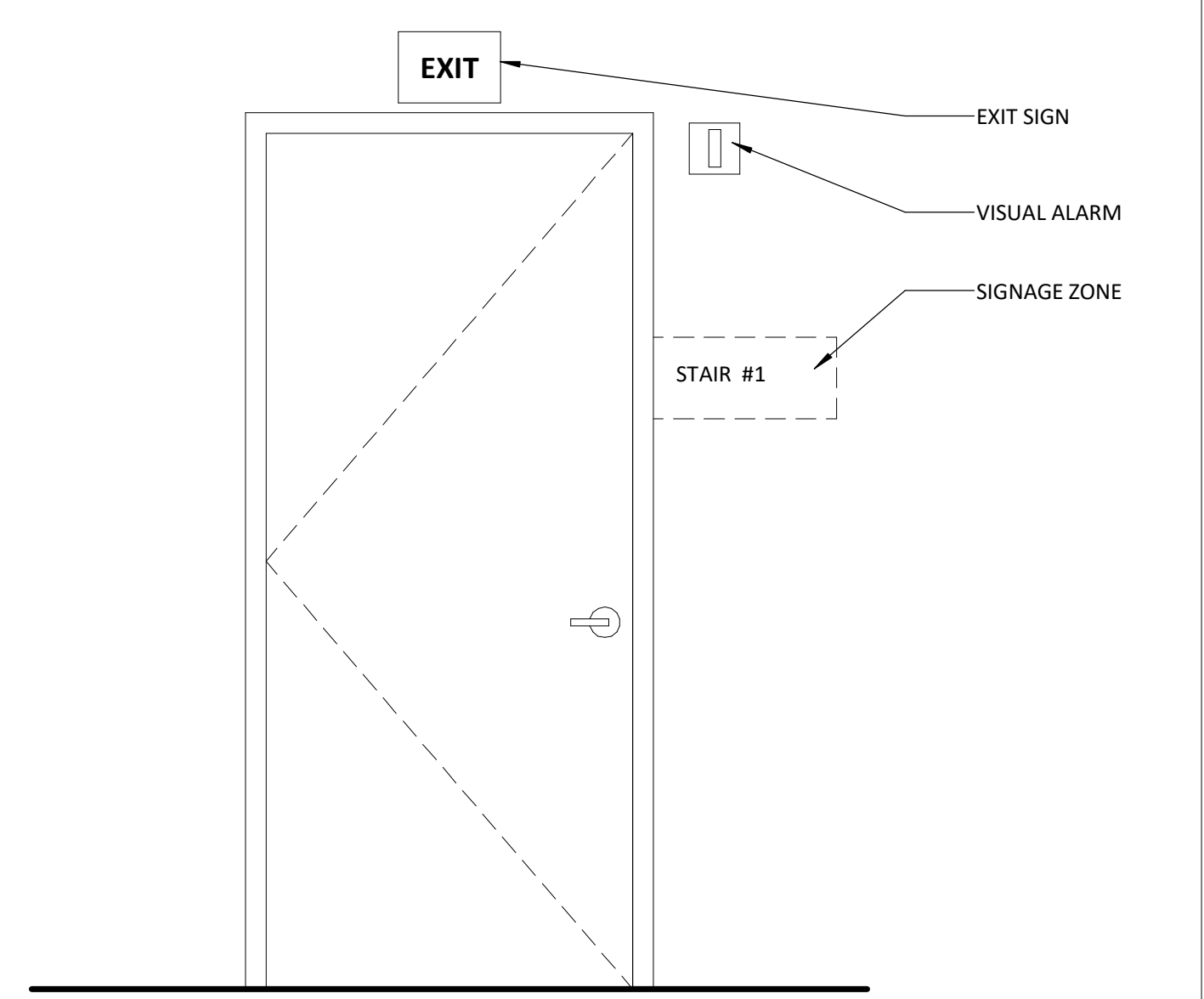
2 ADA REACH RANGES
1/4" = 1'-0"



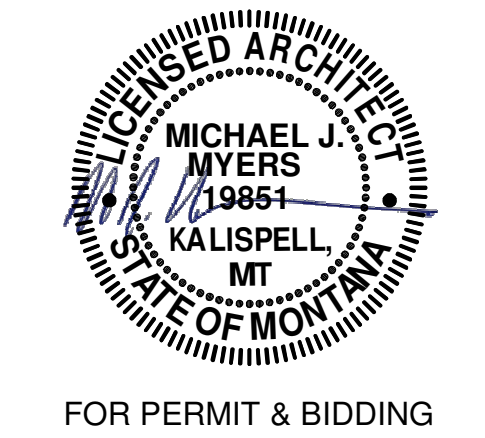
3 WHEELCHAIR TURNING REQUIREMENTS
NTS



4 ACCESSIBLE SIGNAGE
1" = 1'-0"



5 TYP. MOUNTING HTS. @ EXIT DOOR
3/4" = 1'-0"



FOR PERMIT & BIDDING

THE INFORMATION CONTAINED HEREIN IS PROPRIETARY. THIS DOCUMENT MAY NOT BE USED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF JACKOLA ENGR. & ARCH., P.C.

LINFIELD HALL
MONTANA STATE UNIVERSITY
ROOM #113
PPA#: 23-0828

DRAWN: KCE CHECKED: MJM

DATE: 11/19/2024

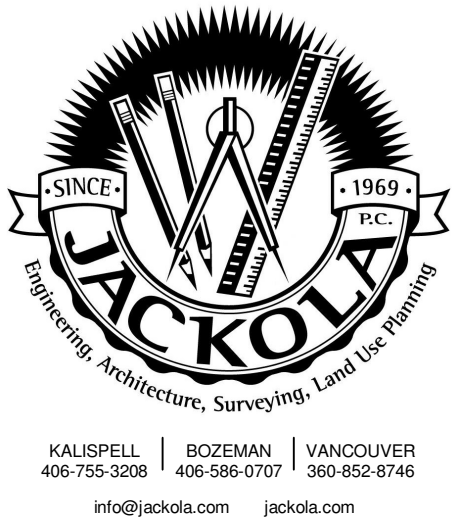
REVISIONS:

ACCESSIBILITY DETAILS

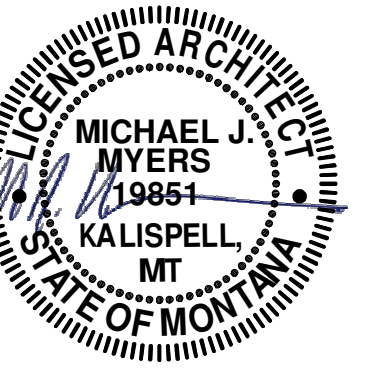
G-013

ARCHITECTURAL SHEET INDEX

A-001	ARCHITECTURAL NOTES
A-111	CLASSROOM FLOOR PLAN
A-121	CLASSROOM REFLECTED CEILING PLAN & DEMO
A-131	CLASSROOM FLOOR FINISH PLAN
A-211	INTERIOR ELEVATIONS



KALISPELL | BOZEMAN | VANCOUVER
 406-755-3206 | 406-586-0707 | 360-852-8746
 info@jackola.com | jackola.com



FOR PERMIT & BIDDING

THE INFORMATION CONTAINED HEREIN IS PROPRIETARY. THIS DOCUMENT MAY NOT BE USED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF JACKOLA ENGR. & ARCH., P.C.

LINFIELD HALL
MONTANA STATE UNIVERSITY
 ROOM #113
 PPA#: 23-0828

ABBREVIATIONS

A	AFF ABOVE FINISH FLOOR ACT ACOUSTICAL CEILING TILE ADJ ADJUSTABLE AB ANCHOR BOLT ALUM ALUMINUM ALT ALTERNATE ANOD ANODIZED APPROX APPROXIMATE ARCH ARCHITECT B BSMT BASEMENT BATH BATHROOM BM BEAM BRG BEARING BEDRM BEDROOM BET BETWEEN BLDG BUILDING BO BOTTOM OF BOT BOTTOM BN BOUNDARY NAILING BS BOTH SIDES C CFCI CONTRACTOR FURNISHED CONTRACTOR INSTALLED CPT CARPET CLS CEILING CT CERAMIC TILE CLR CLEAR CLST CLOSET COL COLUMN CONC CONCRETE CONST CONSTRUCTION CONT CONTINUOUS CONTR CONTRACT, CONTRACTOR CORR CORRIDOR CJ CONTROL JOINT CMU CONCRETE MASONRY UNIT D DEMO DEMOLISH, DEMOLITION DTL DETAIL DIA DIAMETER DIM DIMENSION DW DISHWASHER DIV DIVISION DL DEAD LOAD DR DOOR DN DOWN DS DOWNSPOUT DWG DRAWING DF DRINKING FOUNTAIN D DRYER E EA EACH E EAST ELEC ELECTRIC ELEV ELEVATION, ELEVATOR EQ EQUAL EQUIP EQUIPMENT EXIST EXISTING EXP EXPANSION EJ EXPANSION JOINT EXT EXTERIOR F FOB FACE OF BRICK FOC FACE OF CONCRETE FOM FACE OF MASONRY	FOS FACE OF STUDS FIN FINISH FF FINISH FLOOR FEC FIRE EXTINGUISHER/AND OR CABINET FLASHING FL FLOOR FD FLOOR DRAIN FT FOOT, FEET FTG FOOTING FND FOUNDATION FURN FURNITURE FUT FUTURE FBO FURNISHED BY OTHERS FRP FIBER REINFORCED PANEL G GA GAUGE GALV GALVANIZED GEN GENERAL GL GLASS GWB GYPSUM WALL BOARD GYPC GYPCRETE H HALL HALLWAY HDW HARDWARE HVAC HEATING, VENTILATING, & AIR CONDITIONING HT HEIGHT HM HOLLOW METAL HORIZ HORIZONTAL HWT HOT WATER TANK HR HOUR I IBC INTERNATIONAL BUILDING CODE INCL INCLUDE, INCLUDED (ING) INFO INFORMATION ID INSIDE DIAMETER INSUL INSULATE, INSULATION INT INTERIOR J JAN JANITOR JC JANITOR'S CLOSET JT JOINT K KIT KITCHEN KO KNOCK OUT L LBL LABEL LAM LAMINATED LNDRY LAUNDRY LAV LAVATORY LVL LEVEL LL LIVE LOAD LR LIVING ROOM LOC'N LOCATION M MFR MANUFACTURER MAS MASONRY MO MASONRY OPENING	MATL MATERIAL MAX MAXIMUM MECH MECHANICAL, MECHANICAL ROOM MTL METAL MIN MINIMUM MIRR MIRROR MISC MISCELLANEOUS N NOM NOMINAL N NORTH NA NOT APPLICABLE NIC NOT IN CONTRACT NTS NOT TO SCALE NO NUMBER O OC ON CENTER OFCI OWNER FURNISHED CONTRACTOR INSTALLED OFOI OWNER FURNISHED OWNER INSTALLED OFF OFFICE OPG OPENING OPP OPPOSITE OD OUTSIDE DIAMETER OF OUTSIDE FACE O/O OUT TO OUT P PNT PAINT, PAINTED PNL PANEL PH PHASE PLAS PLASTIC P-LAM PLASTIC LAMINATE PL PLATE PLYWD PLYWOOD PVC POLYVINYL CHLORIDE PREFIN PREFINISHED PROP PROPERTY Q QUAN QUANTITY R RAD RADIUS RWL RAIN WATER LEADER REF REFERENCE REINF REINFORCE, REINFORCEMENT RCP REFLECTED CEILING PLAN REQD REQUIRED RFI REQUEST FOR INFORMATION REV REVISION R RISER RD ROOF DRAIN RM ROOM RO ROUGH OPENING S SCHED SCHEDULE SEC SECTION SG SAFETY GLASS SHTG SHEATHING SIM SIMILAR SOG SLAB ON GRADE S SOUTH SPEC SPECIFICATION SQ SQUARE STD STANDARD STL STEEL STOR STORAGE STRUCT STRUCTURAL SF SQUARE FEET SUSP SUSPENDED	I TEAL TECHNOLOGY ENHANCED ACTIVE LEARNING TEL TELEPHONE TV TELEVISION TEMP TEMPERED, TEMPORARY T&G TONGUE AND GROOVE TOB TOP OF BRICK TOS TOP OF SLAB TOW TOP OF WALL TOM TOP OF MASONRY T TREAD TYP TYPICAL U UAS UPWARD ACTING SECTIONAL DOOR UBC UNIFORM BUILDING CODE UNO UNLESS NOTED OTHERWISE UTIL UTILITY V VB VAPOR BARRIER VNR VENEER VERT VERTICAL VG VERTICAL GRAIN VCT VINYL COMPOSITION TILE W WSCT WAINSCOT WC WATER CLOSET WIN WINDOW WP WATERPROOF (ING) WRB WEATHER RESISTANT BARRIER WWF WELDED WIRE FABRIC WWM WELDED WIRE MESH WT WEIGHT W WEST, WASHER W/ WITH W/D WASHER / DRYER
----------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

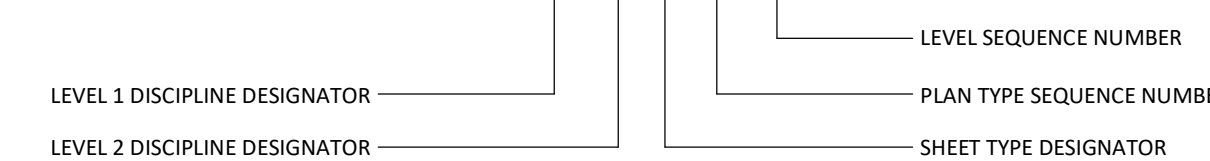
SYMBOLS USED AS ABBREVIATIONS

&	AND
L	ANGLE
@	AT
CL	CENTERLINE
u	CHANNEL
Ø	DIAMETER
PL	PLATE

SYMBOLS & MATERIALS

	STRUCTURAL FILL		FINISHED WOOD
	UNDISTURBED EARTH		PLYWOOD
	DISTURBED EARTH		RIGID INSULATION
	GRAVEL		BATT INSULATION
	POURED CONCRETE		SPRAYFOAM INSULATION
	CONCRETE BLOCK VENEER		SAND, PLASTER, GROUT
	BRICK VENEER		METAL
	EIFS		STEEL
	ROUGH WOOD		WINDOW TYPE
	BLOCKING		DOOR NUMBER
	SECTION		ROOM NUMBER
	ELEVATION		WALL TYPE
	DETAIL		REVISION NUMBER
	ITEM IDENTIFICATION SHEET WHERE ITEM IS CUT		KEY NOTE
	NORTH ARROW		DEMOLITION NOTE
			FINISH TAG
			EQUIPMENT TAG
			ROOM FINISH KEY

A-102



*** NOTE ***
 THE SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE USED IN THIS SET OF DRAWINGS

DRAWN: KCE CHECKED: MJM

DATE: 11/19/2024

REVISIONS:

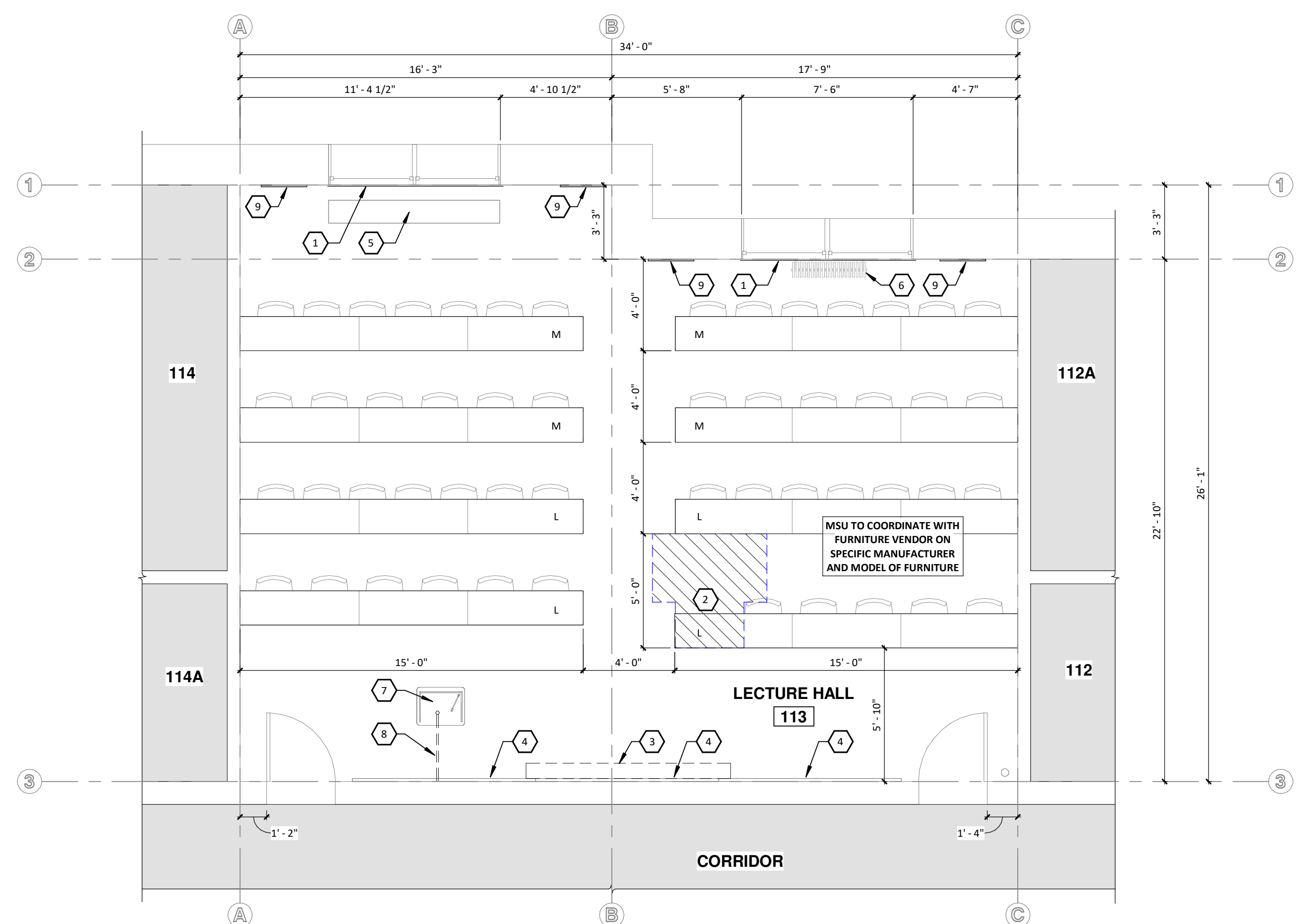
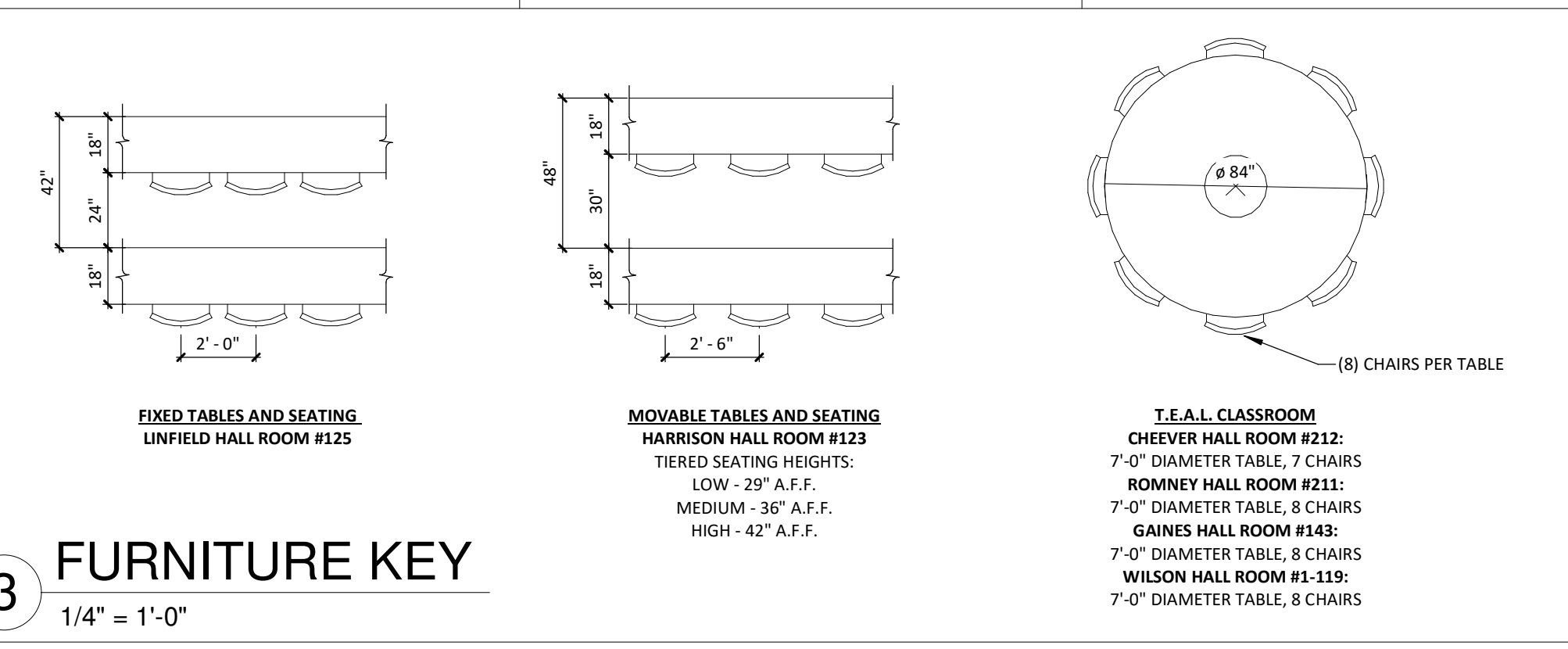
ARCHITECTURAL NOTES

A-001



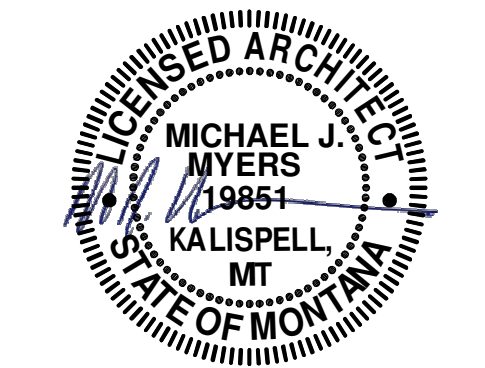
1 DEMO FLOOR PLAN
 1/4" = 1'-0" APPROXIMATE OCCUPANCY: 52 (15.9 S.F./STUDENT)

- DEMO FLOOR PLAN KEYNOTES**
- 1 DEMO RISERS, RECYCLE WHERE POSSIBLE, DISPOSE OTHERWISE
 - 2 REMOVE ALL FURNITURE, TYP. DELIVER TO OWNER'S STORAGE ON CAMPUS
 - 3 REMOVE WHITE BOARD, DELIVER TO OWNER'S STORAGE ON CAMPUS
 - 4 REMOVE PROJECTOR SCREEN, DELIVER TO OWNER'S STORAGE ON CAMPUS
 - 5 REMOVE AND REUSE LECTURN PODIUM, DELIVER TO OWNER'S STORAGE ON CAMPUS
 - 6 REMOVE AND REUSE STEAM RADIATOR, SEE MECHANICAL
 - 7 REMOVE AND REPLACE UNIT VENTILATOR, SEE MECHANICAL



2 FLOOR PLAN
 1/4" = 1'-0" APPROXIMATE OCCUPANCY: 52 (15.9 S.F./STUDENT)

- FLOOR PLAN KEYNOTES**
- 1 MANUAL LIGHT FILTERING SHADES, FIELD VERIFY DIMENSIONS (CFCI)
 - 2 ADA ACCESSIBLE LOCATION
 - 3 MOTORIZED 9'-0" DIAGONAL PROJECTOR SCREEN (OFCI)
 - 4 8' x 4' WHITE BOARD, NO TRAY (CFCI)
 - 5 NEW UNIT VENTILATOR, SEE MECHANICAL
 - 6 REUSE STEAM RADIATOR, SEE MECHANICAL
 - 7 LECTERN PODIUM, B.O.D.: DELUXE LECTERN - LE3040 (OFOI)
 - 8 POWER/DATA SUPPLY AT LECTERN PODIUM
 - 9 ACOUSTIC WALL PANEL, B.O.D.: ARMSTRONG SOUNDSOAK 85 FIBERGLASS, 24" x 72", 1" THICK, 0.80 NRC, COLOR: FR-701 GREY MIX (CFCI)
- GENERAL NOTES:**
 A. TABLES AND CHAIRS ARE OFOI.



FOR PERMIT & BIDDING

THE INFORMATION CONTAINED HEREIN IS PROPRIETARY. THIS DOCUMENT MAY NOT BE USED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF JACKOLA ENGR. & ARCH., P.C.

LINFIELD HALL
MONTANA STATE UNIVERSITY
 ROOM #113
 PPA#: 23-0828

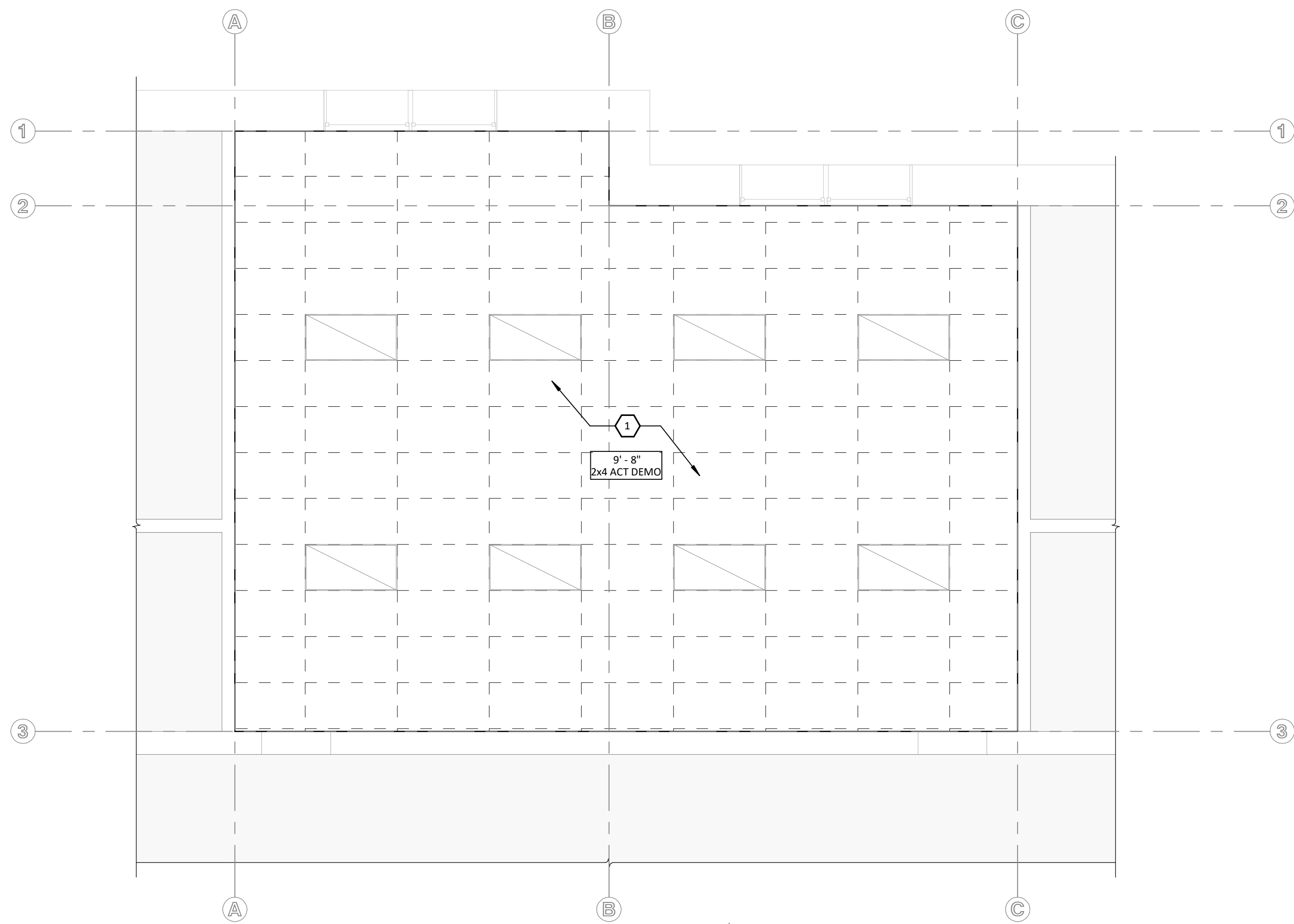
DRAWN: KCE CHECKED: MJM

DATE: 11/19/2024

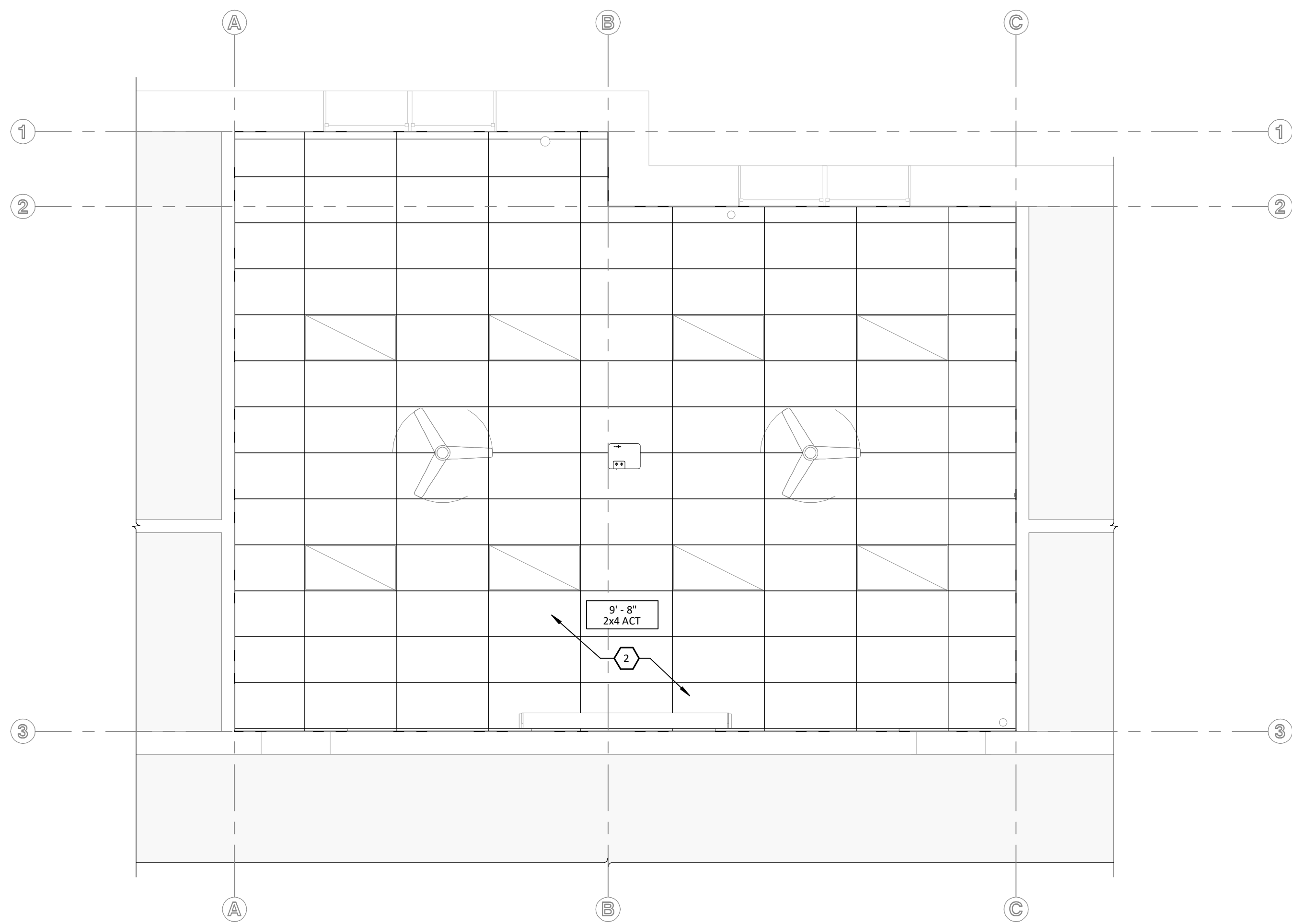
REVISIONS:

CLASSROOM FLOOR PLAN

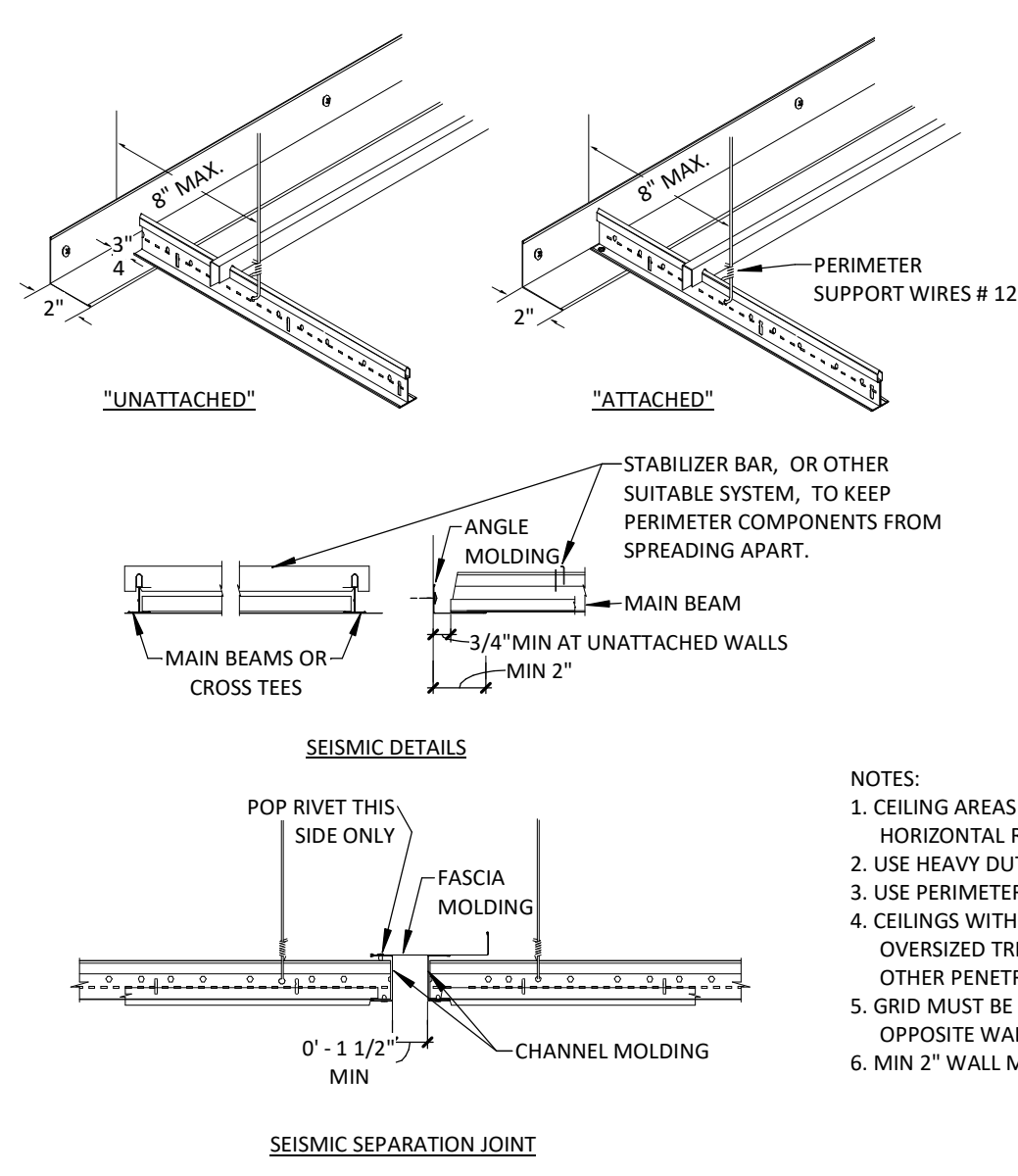
A-111



1 REFLECTED CEILING PLAN DEMO PLAN
1/4" = 1'-0"



2 REFLECTED CEILING PLAN
1/4" = 1'-0"



- NOTES:**
1. CEILING AREAS OVER 1,000 SF MUST HAVE HORIZONTAL RESTRAINT WIRE OR RIGID BRACING
 2. USE HEAVY DUTY GRID SYSTEM
 3. USE PERIMETER SUPPORT WIRES
 4. CEILINGS WITHOUT RIGID BRACING MUST HAVE 2" OVERSIZED TRIM RINGS FOR SPRINKLERS AND OTHER PENETRATIONS
 5. GRID MUST BE ATTACHED TO 2 ADJACENT WALLS, OPPOSITE WALLS MUST HAVE 3/4" CLEARANCE
 6. MIN 2" WALL MOLDING

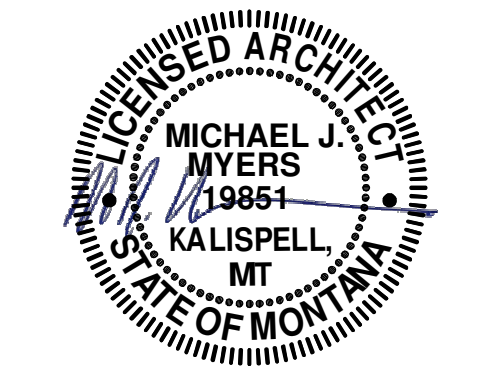
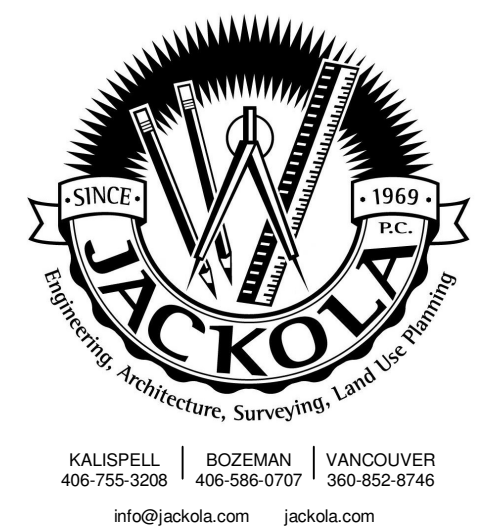
3 HUNG CLG DTL - SEISMIC
1 1/2" = 1'-0"

LEVEL 1 RCP KEYNOTES

- 1 DEMO EXISTING ACT AND GRID
- 2 NEW 2x4 ACT CEILING

CEILING PLAN LEGEND

	DEMO ACT (2x4) ACOUSTIC CEILING TILE
	ACT-1 (2x4) ACOUSTIC CEILING TILE



FOR PERMIT & BIDDING

THE INFORMATION CONTAINED HEREIN IS PROPRIETARY. THIS DOCUMENT MAY NOT BE USED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF JACKOLA ENGR. & ARCH., P.C.

LINFIELD HALL
MONTANA STATE UNIVERSITY
ROOM #113
PPA#: 23-0828

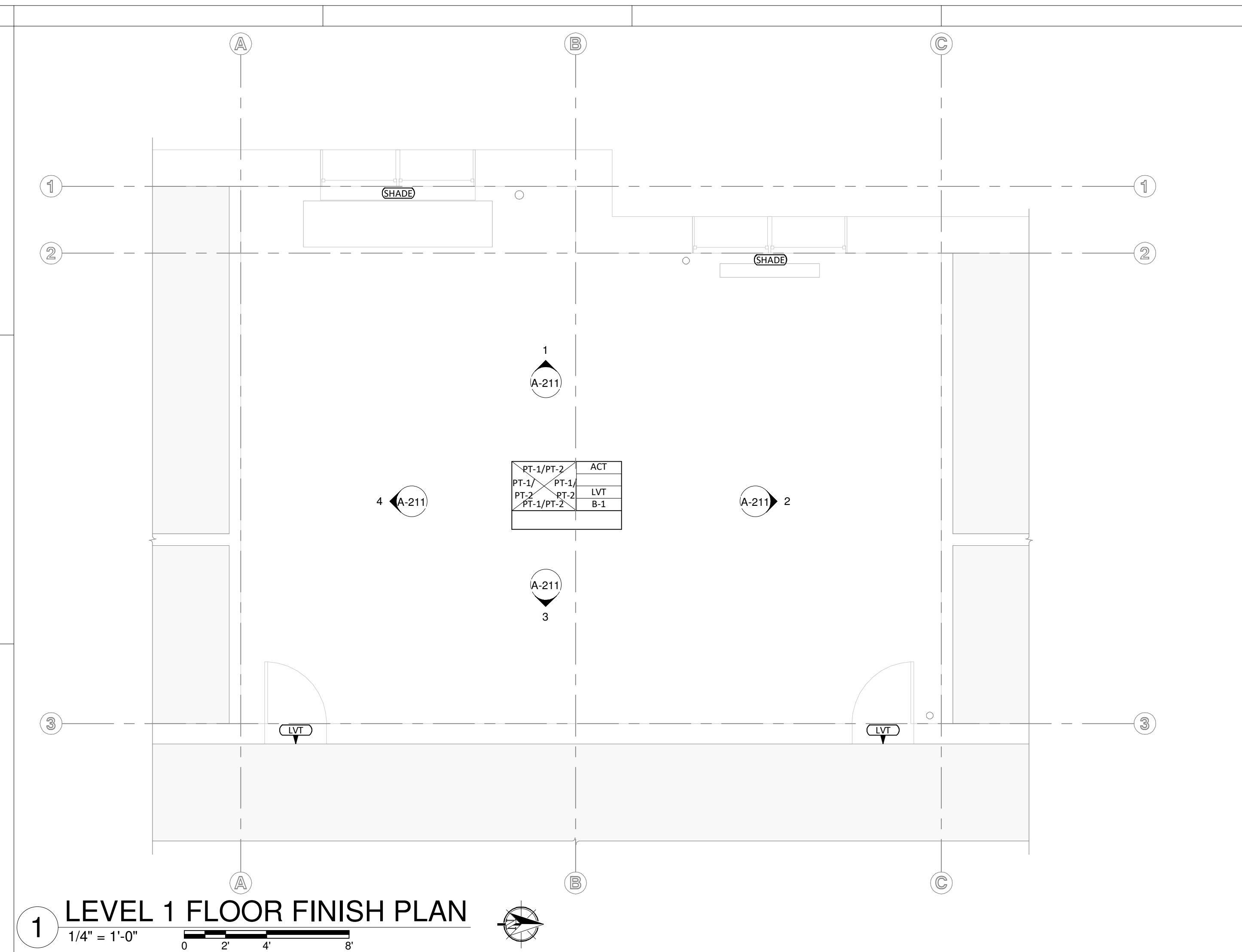
DRAWN: KCE CHECKED: MJM

DATE: 11/19/2024

REVISIONS:

CLASSROOM REFLECTED CEILING PLAN & DEMO

A-121

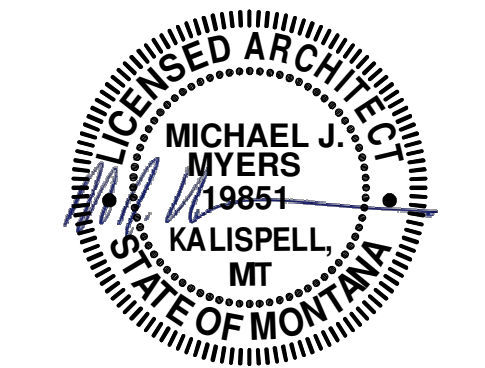
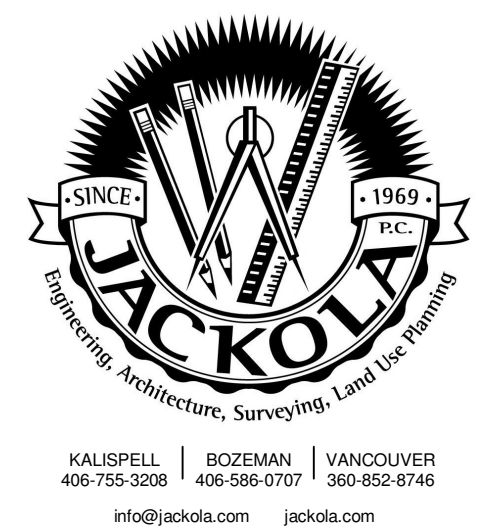


ROOM FINISH KEY

WALL	CEILING
WALL	SILL
WALL	FLOOR
WALL	BASE
NOTES	

FINISH SCHEDULE

TAG	KEY	COLOR	MANUFACTURER	STYLE	NOTE
ACT	ACOUSTICAL CEILING TILES	WHITE	ARMSTRONG	CIRRUS 584	ANGLED TEGULAR EDGE
B-1	6" RUBBER BASE	BLACK	JOHNSONITE	DURACOVE 6"	THERMOPLASTIC RUBBER 1/8"
LVT	LUXURY VINYL TILE	IMPLY 43518	SHAW	DIALOGUE	BRICK INSTALLATION METHOD
PT-1	PAINT	SW 7011 NATURAL CHOICE	SHERWIN WILLIAMS	EGGSHELL	ABOVE CHAIR RAIL
PT-2	PAINT	SW 7602 INDIGO BATIK	SHERWIN WILLIAMS	EGGSHELL	BELOW CHAIR RAIL
SHADE	LIGHT FILTERING SHADE	WHITE	HUNTER DOUGLAS	Rb 500+ MANUAL ROLLER SHADES	E SCREEN 7503, 3% OPENNESS
SS-1	SOLID SURFACE	DEEP STORM	CORIAN		CHAIR RAIL (9 5/8" H x 1/2" D)



FOR PERMIT & BIDDING

THE INFORMATION CONTAINED HEREIN IS PROPRIETARY. THIS DOCUMENT MAY NOT BE USED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF JACKOLA ENGR. & ARCH., P.C.

LINFIELD HALL
MONTANA STATE UNIVERSITY
ROOM #113
PPA#: 23-0828

DRAWN: KCE CHECKED: MJM

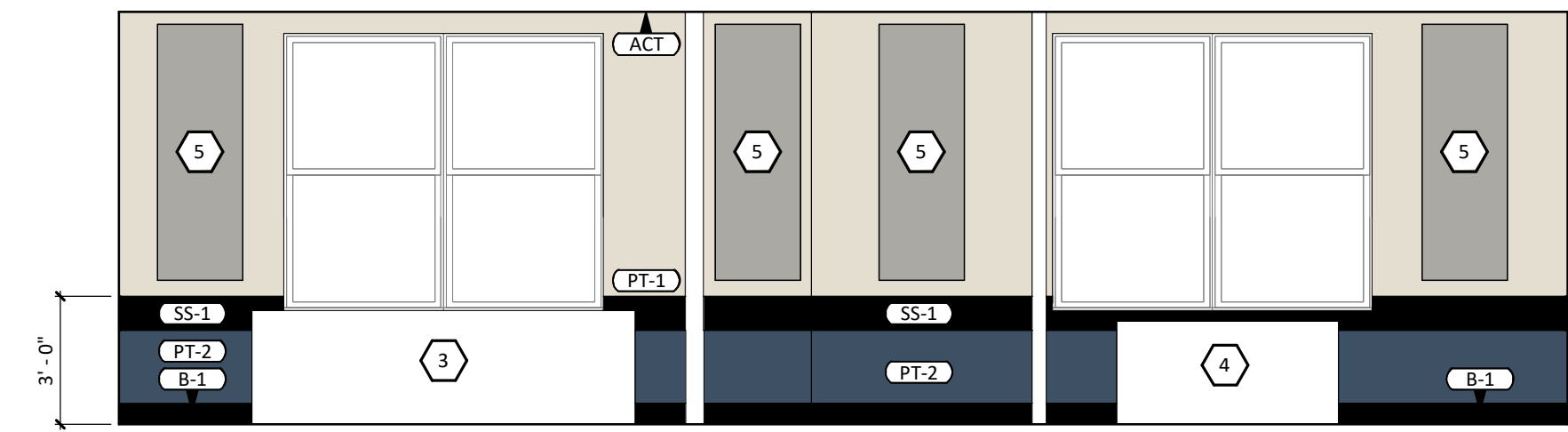
DATE: 11/19/2024

REVISIONS:

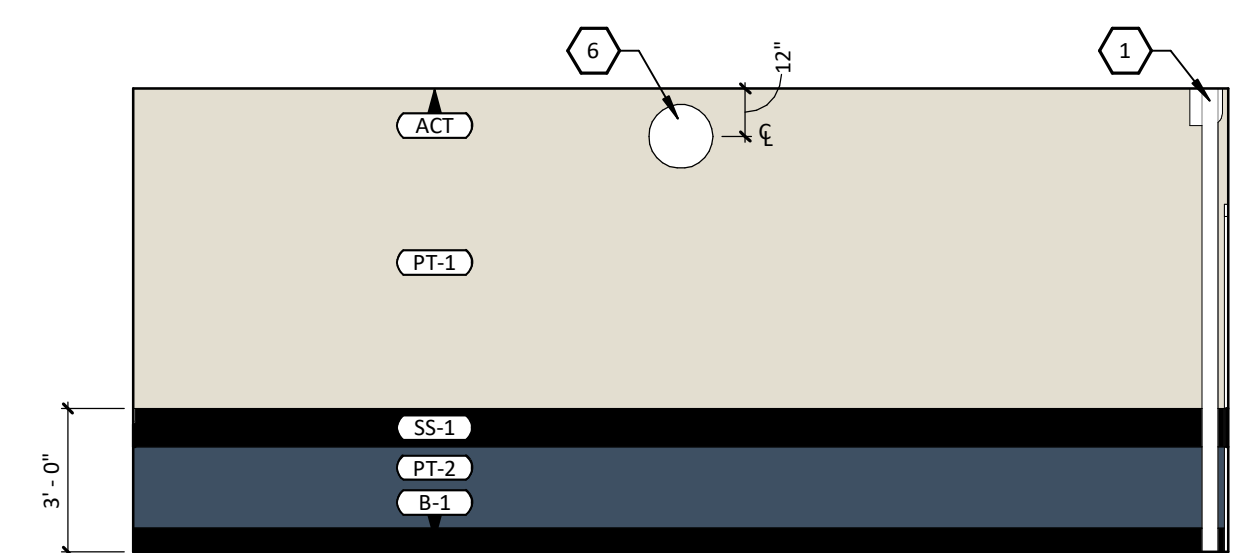
CLASSROOM
FLOOR FINISH
PLAN

A-131

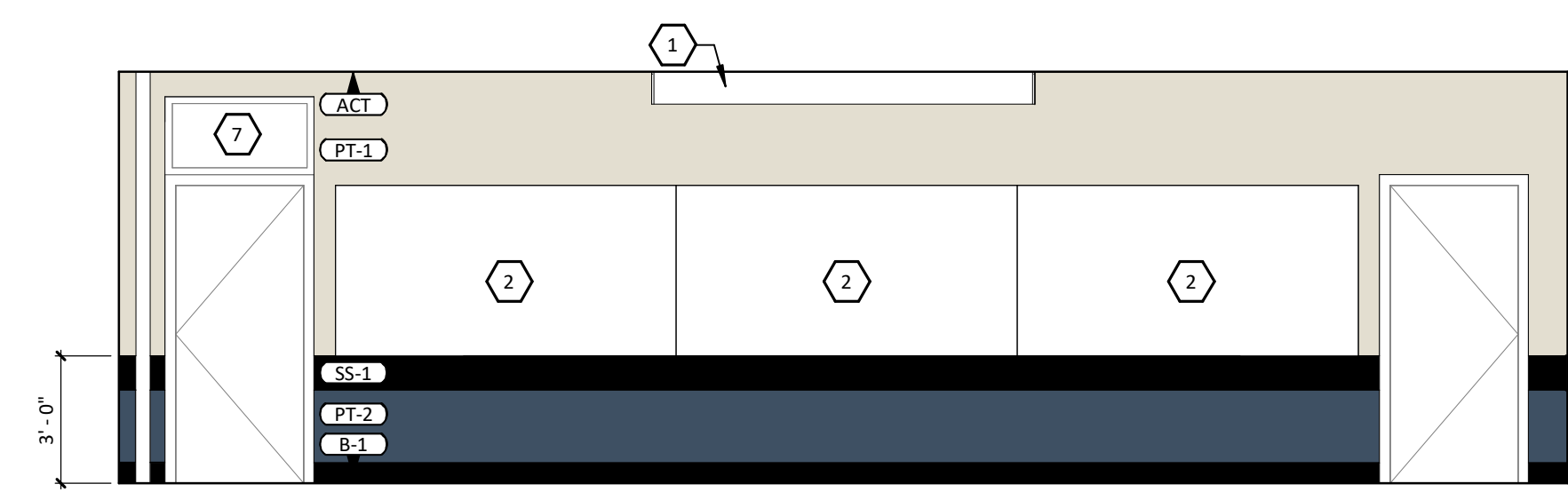
- INTERIOR ELEVATION KEYNOTES**
- 1 MOTORIZED 9'-0" DIAGONAL PROJECTOR SCREEN (DFCI)
 - 2 8' x 4' WHITE BOARD, NO TRAY (CFCI)
 - 3 NEW UNIT VENTILATOR, SEE MECHANICAL
 - 4 REUSE STEAM RADIATOR, SEE MECHANICAL
 - 5 ACOUSTIC WALL PANEL, B.O.D: ARMSTRONG SOUNDSOAK 85 FIBERGLASS, 24" x 72", 1" THICK, 0.80 NRC, COLOR: FR-701 GREY MIX (CFCI)
 - 6 POE WALL CLOCK (DFCI)
 - 7 EXISTING TRANSOM WINDOW TO REMAIN



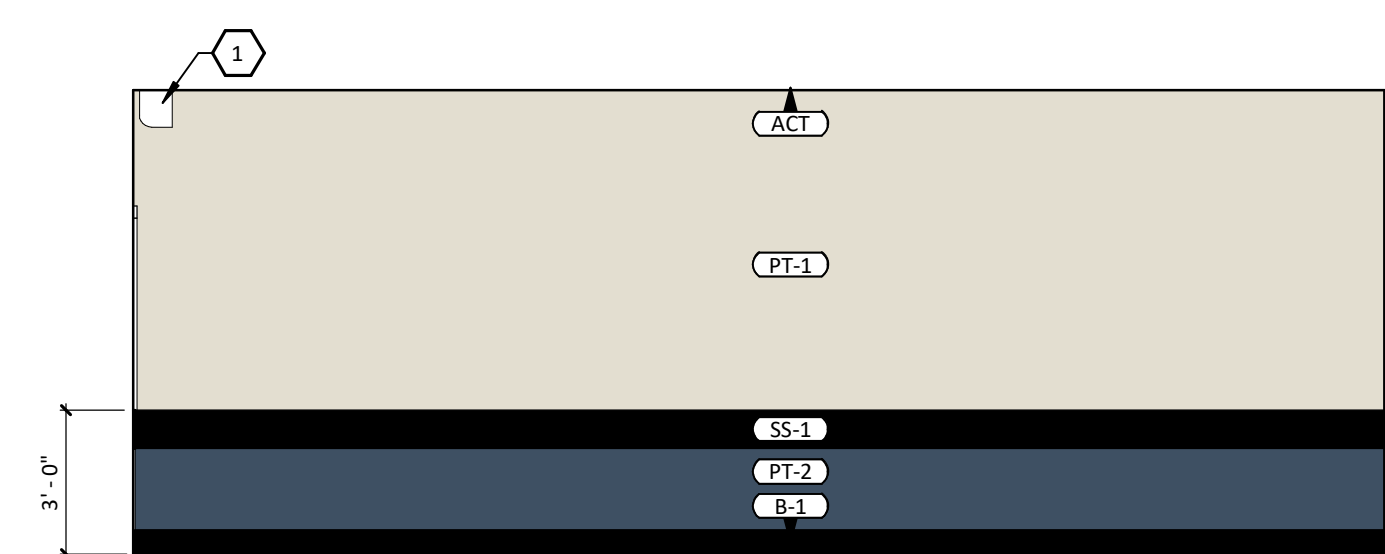
1 WEST INTERIOR ELEVATION
1/4" = 1'-0"



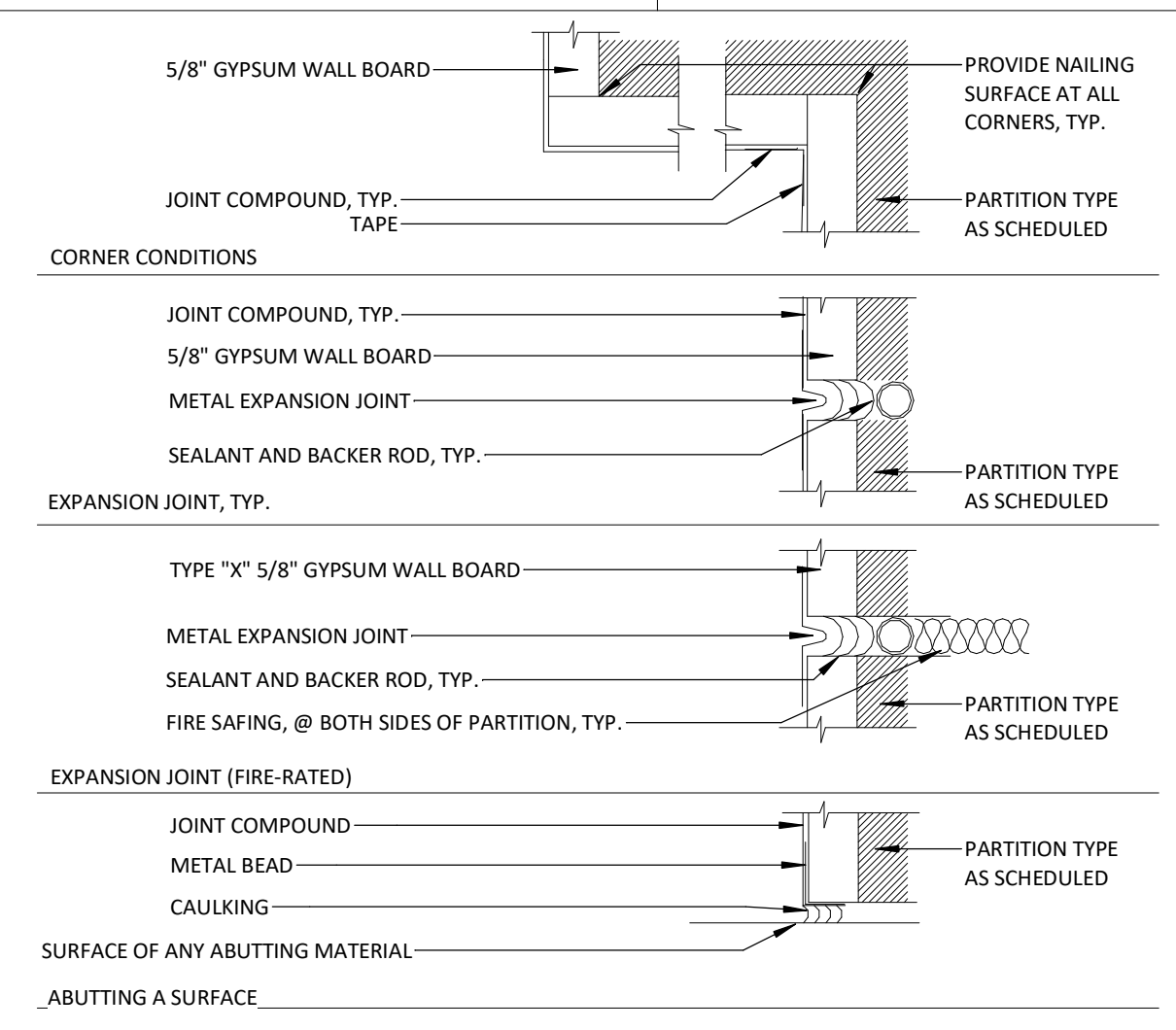
2 NORTH INTERIOR ELEVATION
1/4" = 1'-0"



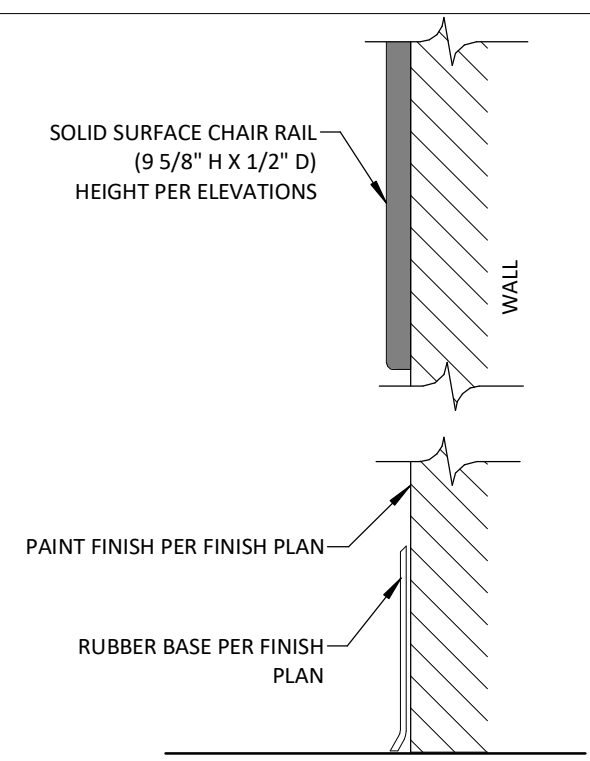
3 EAST INTERIOR ELEVATION
1/4" = 1'-0"



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



5 GYPSUM WALLBOARD DET (SQUARE)
3" = 1'-0"



6 FINISH WALL DTL
3" = 1'-0"

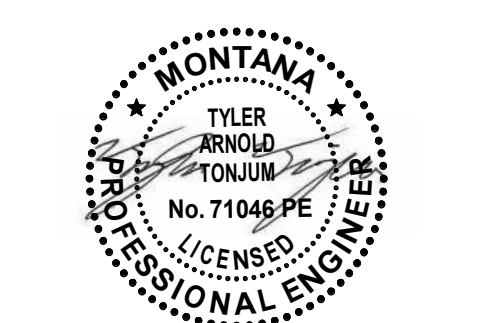
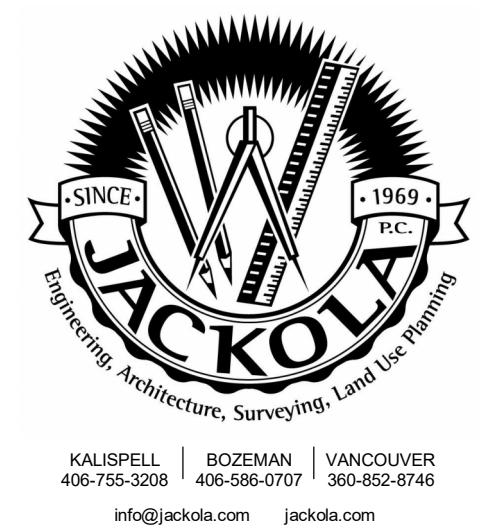
DRAWN: KCE CHECKED: MJM

DATE: 11/19/2024

REVISIONS:

NO.	DESCRIPTION

INTERIOR ELEVATIONS



FOR PERMIT & BIDDING

THE INFORMATION CONTAINED HEREIN IS PROPRIETARY. THIS DOCUMENT MAY NOT BE USED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF JACKOLA ENGR. & ARCH., P.C.

LINFIELD HALL
MONTANA STATE UNIVERSITY
ROOM #113
PPA#: 23-0828

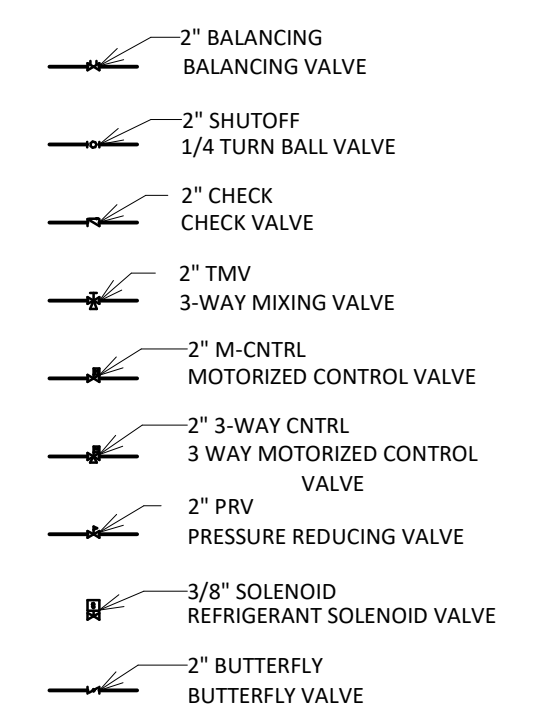
DRAWN: ADM CHECKED: TAT
DATE: 11/19/2024

REVISIONS:

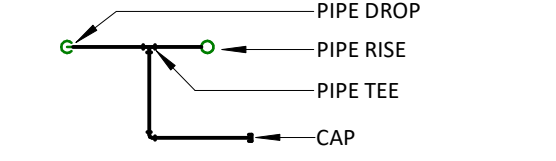
MECHANICAL TITLE SHEET

M-001

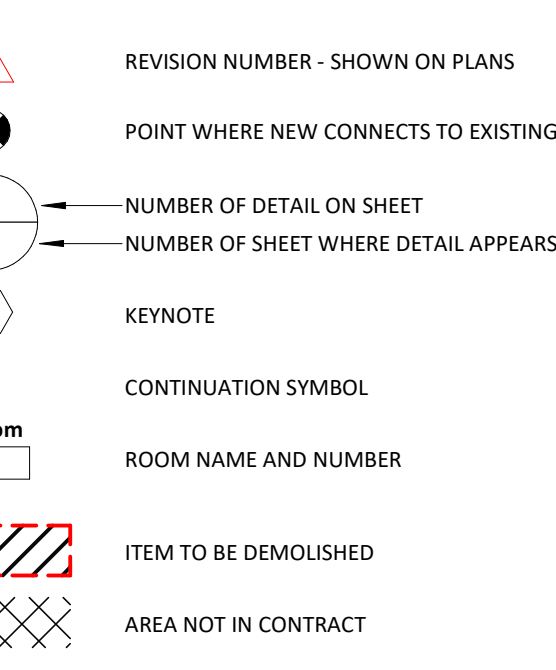
PIPE ACCESSORY TAGS



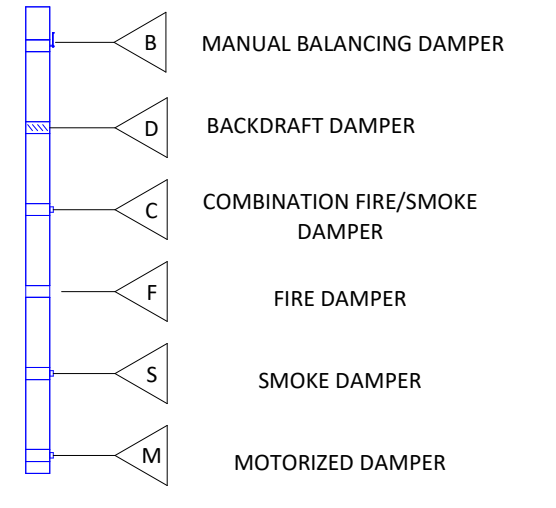
PIPE SYMBOLS



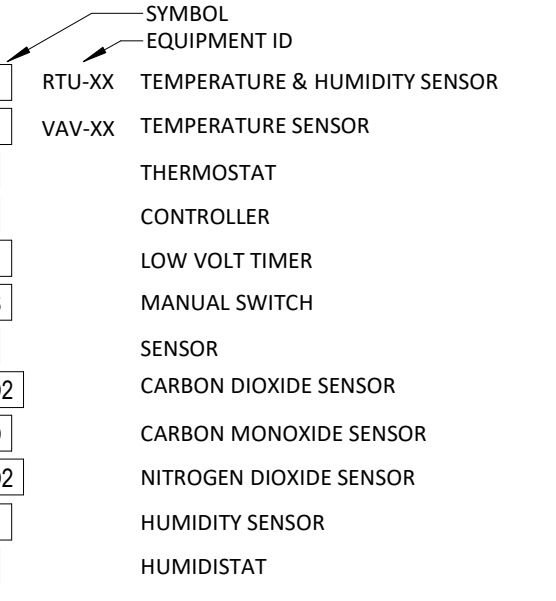
GENERAL DRAWING SYMBOLS



DAMPER TAGS



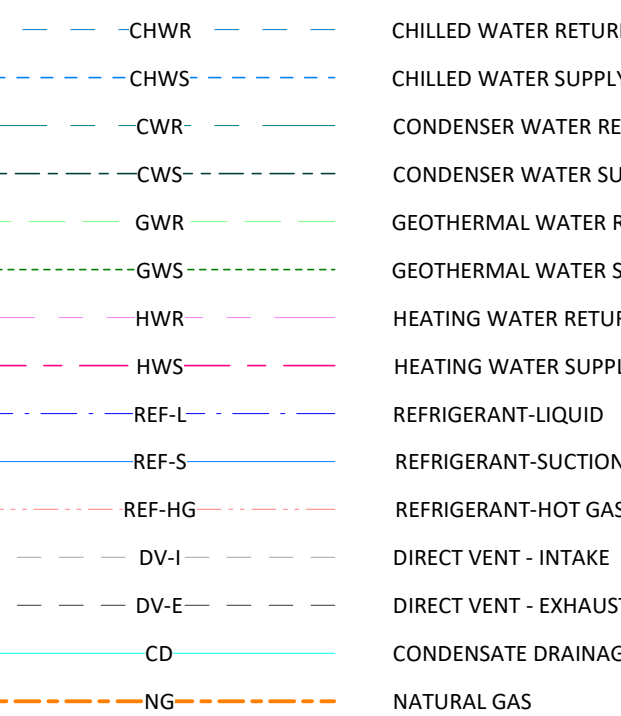
MECHANICAL CONTROL DEVICE TAGS



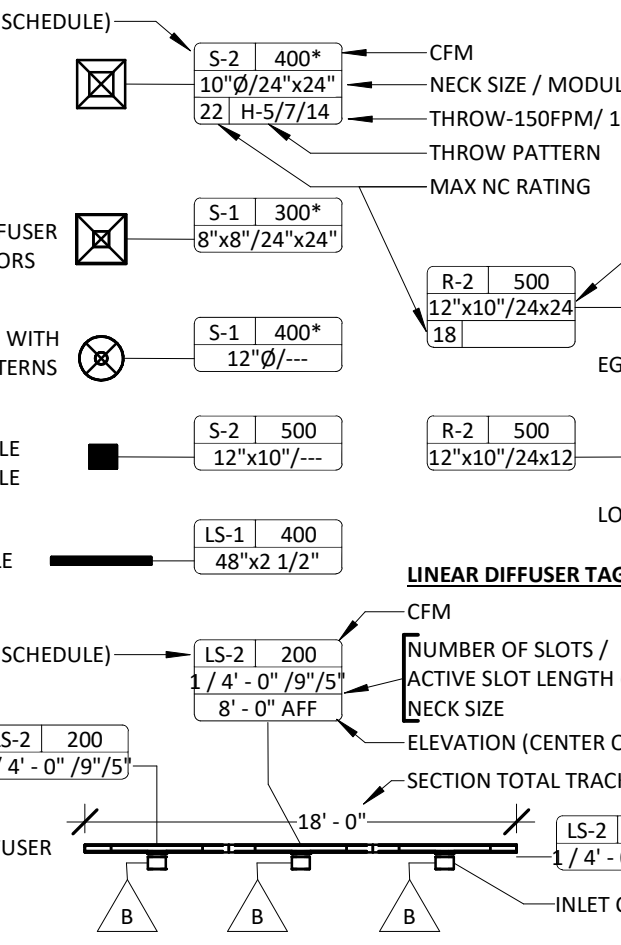
MECHANICAL SHEET INDEX

Table with 2 columns: Sheet ID, Description. Includes M-001 MECHANICAL TITLE SHEET, M-111 HVAC PLAN.

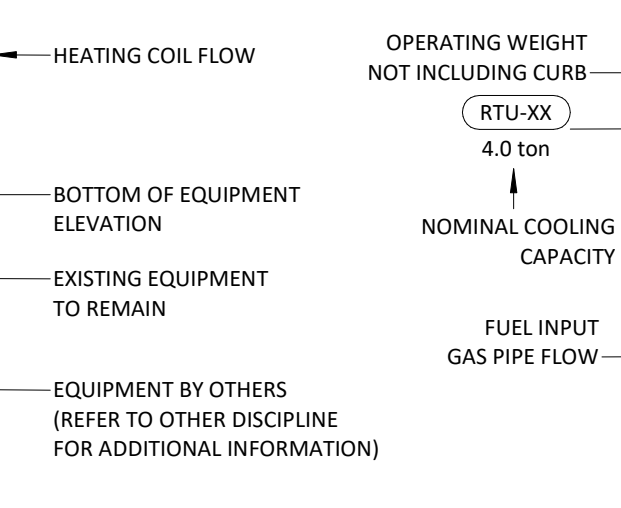
PLUMBING AND PIPING SYMBOLS



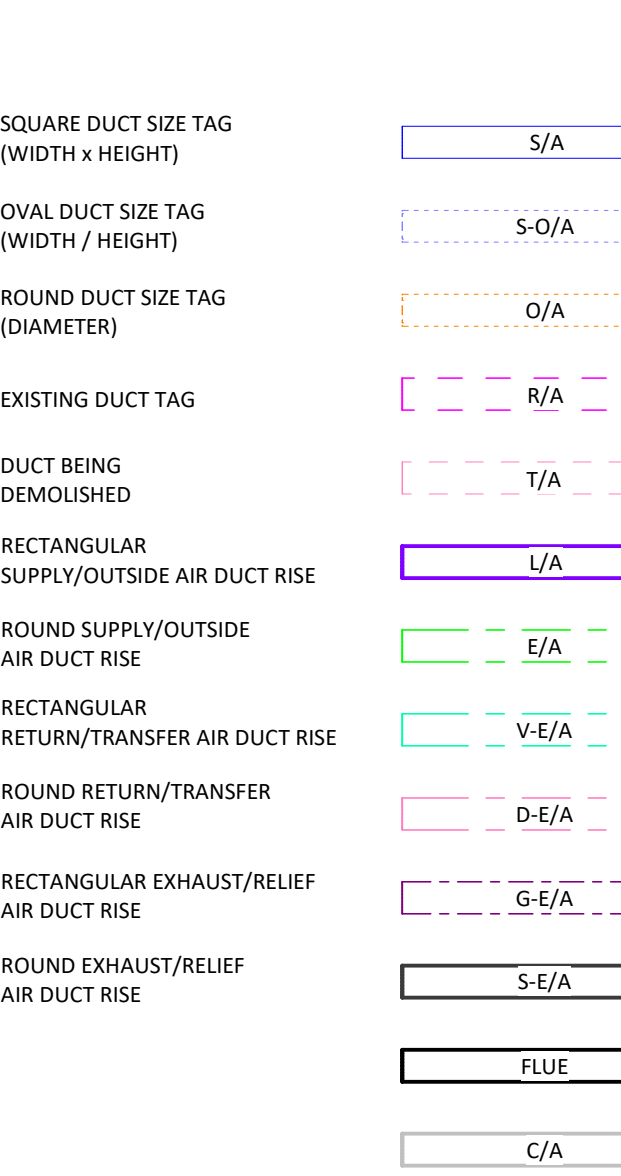
GRILLES, REGISTERS & DIFFUSERS TAG



MECHANICAL EQUIPMENT TAGS



HVAC SYMBOLS



CODE COMPLIANCE

BUILDING MECHANICAL SYSTEMS ARE DESIGNED IN ACCORDANCE WITH THE FOLLOWING CODES:
• 2021 INTERNATIONAL MECHANICAL CODE
• 2021 UNIFORM PLUMBING CODE
• 2021 IECC INTERNATIONAL ENERGY CONSERVATION CODE
• ANSI/ASHRAE/IESNA STANDARD 90.1-2019 ENERGY STANDARD FOR BUILDINGS EXCEPT FOR LOW-RISE RESIDENTIAL BUILDINGS
• ANSI/ASHRAE STANDARD 62.2-2019 VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY

HVAC DESIGN CRITERIA

BOZEMAN, MONTANA
ANNUAL DESIGN CONDITIONS: ASHRAE FUNDAMENTALS 2017
WEATHER STATION - BOZEMAN, MT WMO# 726797
ELEVATION: 4427' LAT: 45.788N LONG: 111.161W
WINTER: -13.4 (99.6%)
SUMMER: 98.1 DRY BULB (0.4%)
62.5 WET BULB (0.4%)
INDOOR DESIGN CONDITIONS:
WINTER: 70 ± 2° F
SUMMER: 75 ± 2° F

EQUIPMENT ABBREVIATIONS

Table of equipment abbreviations: AC AIR CONDITIONING UNIT, AHU AIR HANDLING UNIT, AS AIR SEPARATOR, etc.

2021 INTERNATIONAL ENERGY CONSERVATION CODE NOTES

- 1. PROVIDE COMMISSIONING PLAN IN ACCORDANCE WITH INTERNATIONAL ENERGY CONSERVATION CODE SECTION C408.2.1.
2. PROVIDE COMMISSIONING COMPLIANCE REPORT IN ACCORDANCE WITH INTERNATIONAL ENERGY CONSERVATION CODE SECTION C407.3.1 & C407.3.2.
3. PROVIDE SYSTEMS TESTING AND BALANCING IN ACCORDANCE WITH INTERNATIONAL ENERGY CONSERVATION CODE SECTION C408.2.2.
4. PROVIDE TAB REPORT FOR ALL AIR MOVING EQUIPMENT TO ENGINEER OF RECORD. ALL AIRFLOWS INDICATED ON PLANS ARE UNDER NORMAL OPERATING CONDITIONS WITH ALL SYSTEMS RUNNING IN OCCUPIED MODE AT MINIMUM OUTSIDE AIR.
5. PROVIDE SYSTEMS, EQUIPMENT, AND CONTROLS FUNCTIONAL TESTING IN ACCORDANCE WITH INTERNATIONAL ENERGY CONSERVATION CODE SECTION C408.2.3.
6. PROVIDE SUPPORTING DOCUMENTATION IN ACCORDANCE WITH INTERNATIONAL ENERGY CONSERVATION CODE CHAPTER 1 CHECKLIST, INCLUDING OPERATION AND MAINTENANCE MANUALS, HVAC CONTROL SYSTEM MAINTENANCE AND CALIBRATION INFORMATION, HVAC CONTROL SEQUENCE OF OPERATIONS, COMMISSIONING REPORT, AND RECORD DRAWINGS.
7. PROVIDE OWNER SYSTEMS OPERATION TRAINING IN ACCORDANCE WITH INTERNATIONAL ENERGY CONSERVATION CODE SECTION C103.6.
8. MOTORS SHALL COMPLY WITH SECTION C403.8 OF THE INTERNATIONAL ENERGY CONSERVATION CODE. FOR ADDITIONAL DETAILS, SEE EQUIPMENT SCHEDULES CONTAINED WITHIN THIS DRAWING SET.
9. SYSTEMS SHALL BE INSULATED AS PRESCRIBED IN SECTION C403.12. FOR ADDITIONAL DETAILS, SEE DUCTWORK AND PIPING SPECIFICATION MATRICES CONTAINED WITHIN THIS DRAWING SET.

M-102



* NOTE *
THE SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE USED IN THIS SET OF DRAWINGS.

PROJECT GENERAL NOTES

- REMOVE ALL UNUSED PIPING, DUCTWORK AND ACCESSORIES. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING, PRIOR TO FINAL BID, ALL EXISTING CONDITIONS FOR PLUMBING AND MECHANICAL SYSTEMS WITHIN TENANT SPACE AND WITHIN CLOSE PROXIMITY OF TENANT SPACE.
- WHERE FLOOR DRAINS OCCUR WITHIN THE LIMITS OF CONSTRUCTION, PREVENT CONSTRUCTION DEBRIS FROM ENTERING DRAIN BODY BY SEALING DRAIN OPENINGS PRIOR TO START OF WORK. UNSEAL DRAINS AT COMPLETION OF CONSTRUCTION.
- COORDINATE INSTALLATION OF PIPING, DUCTWORK, CONDUIT, LIGHTS, CABLE TRAY, STRUCTURE, AND EQUIPMENT TO PREVENT CONFLICTS.
- THE CONTRACTOR SHALL BE FAMILIAR WITH ALL THE CONDITIONS BOTH EXISTING AND THOSE ILLUSTRATED BY THESE DOCUMENTS AS WELL AS THOSE WHICH CAN BE REASONABLY ANTICIPATED INCLUDING, BUT NOT LIMITED TO ARCHITECTURAL, ELECTRICAL, VENTILATION, PLUMBING, AND OTHER SYSTEMS INVOLVED ON THIS PROJECT.
- FINAL PRODUCT SHALL BE A COMPLETE AND FUNCTIONING SYSTEM, AND SHALL CONFORM TO ALL REQUIREMENTS OF APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING BUT NOT LIMITED TO THE INTERNATIONAL BUILDING CODE AND INTERNATIONAL MECHANICAL CODE.
- LOCATE DUCTWORK, PIPING AND MECHANICAL EQUIPMENT AWAY FROM THE SPACE ABOVE ELECTRICAL PANELS, TRANSFORMERS AND OTHER ELECTRICAL EQUIPMENT.
- FIRE SEAL AROUND DUCT AND PIPING PENETRATIONS OF FIRE RATED WALLS. REFER TO SPECIFICATIONS.
- PROVIDE SLEEVES AND/OR OPENINGS TO RUN PIPES AND DUCTS THROUGH FOUNDATIONS, FLOORS, WALLS, AND ROOF.
- ADJUST PIPING AND DUCTWORK SIZES TO PROPERLY CONNECT TO MECHANICAL EQUIPMENT.
- PIPE SIZES SHOWN SHALL BE CONTINUED IN THE DIRECTION OF FLOW UNTIL ANOTHER SIZE IS SHOWN.
- INSTALL ALL EQUIPMENT IN ACCORDANCE WITH THE RESPECTIVE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS, AT A LEVEL OF QUALITY AND WORKMANSHIP CONSISTENT WITH THE SPECIFICATIONS.
- LOCATIONS OF PIPING, DUCTWORK AND EQUIPMENT AS INDICATED ON THE DRAWINGS, ARE APPROXIMATE AND SUBJECT TO MINOR ADJUSTMENTS IN THE FIELD. WORK SHALL BE COORDINATED WITH ALL OTHER TRADES TO AVOID INTERFERENCE IN THE FIELD.
- INSTALL EXPOSED PIPING AND DUCTWORK AS HIGH AS PRACTICAL IN ROOMS WITHOUT CEILINGS U.N.O.

HVAC GENERAL NOTES

- ALL SUPPLY, RETURN, AND EXHAUST DUCTWORK SHALL BE RATED FOR PRESSURE CLASS OF 2" W.G. UNLESS NOTED OTHERWISE.
- THIS CONTRACTOR SHALL BE REQUIRED TO REPLACE FILTERS ON HVAC EQUIPMENT AFTER ALL DUST PRODUCING CONSTRUCTION HAS BEEN COMPLETED AND PRIOR TO THE FINAL PUNCH.

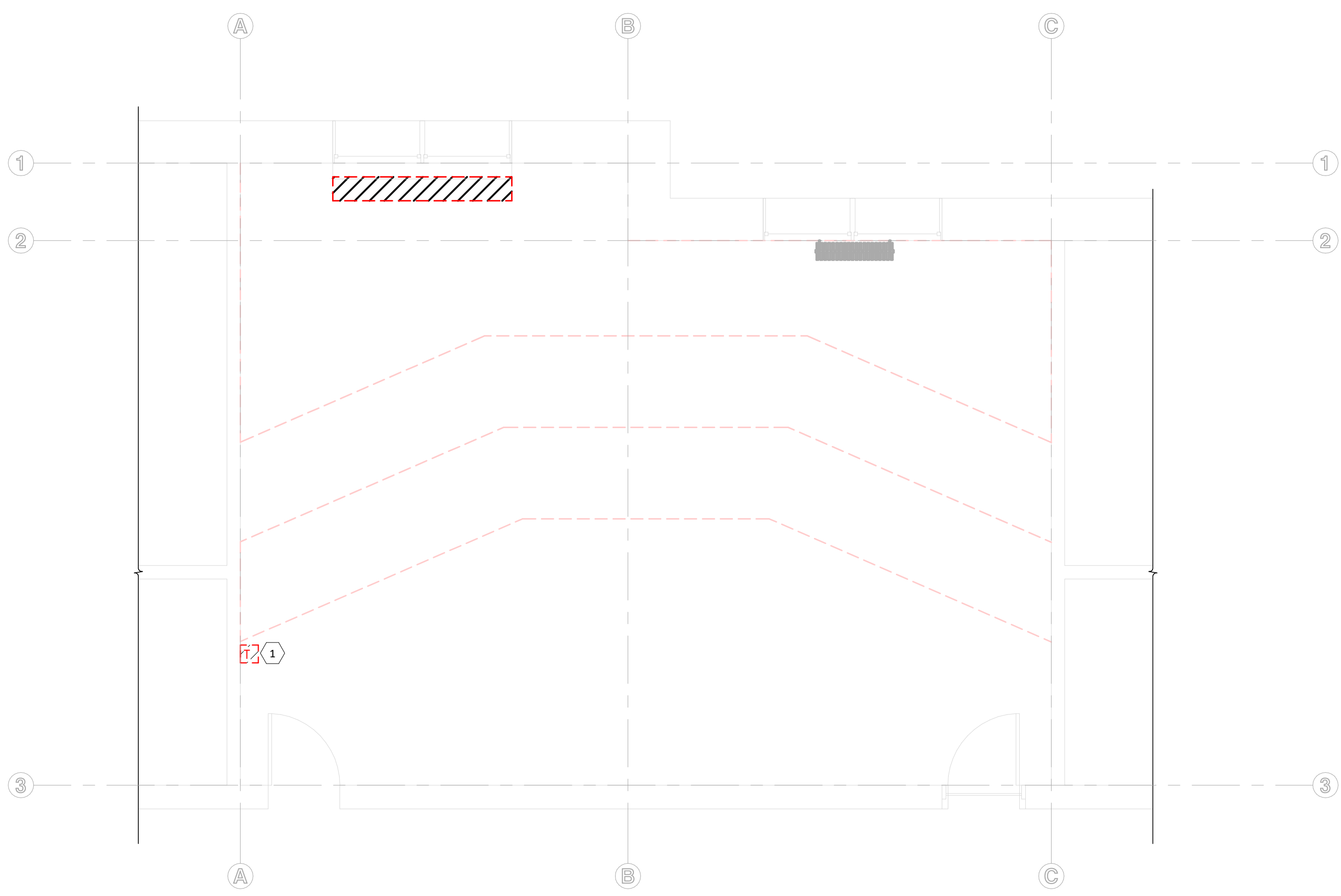
GENERAL MECHANICAL NOTES

- 1. INSTALLATION OF THE MECHANICAL SYSTEM SHALL BE BY A LICENSED CONTRACTOR PER THE STATE BUILDING, MECHANICAL ENERGY, FIRE, PLUMBING AND HEALTH CODES, AND REGULATIONS AS ADOPTED BY LOCAL JURISDICTIONS.
- 2. ALL EQUIPMENT SHALL BE THE CAPACITY AND TYPE AS SHOWN ON THE EQUIPMENT SCHEDULE AND SHALL BE THE LISTED MANUFACTURER AND MODEL NUMBER OR SHALL BE AN EQUAL APPROVED BY THE OWNER/ENGINEER.
- 3. CONTRACTOR IS TO BRING UP THE DISCREPANCIES AND ITEMS WHICH ARE NOT SPECIFICALLY CALLED FOR OR SHOWN BUT ARE REQUIRED FOR A COMPLETE MECHANICAL SYSTEM. ALL SUCH ITEMS REQUIRED FOR A COMPLETE SYSTEM READY FOR THE OWNER'S BENEFICIAL USE SHALL BE FURNISHED AND INSTALLED INCLUDING ALL SUCH DISCREPANCY ITEMS MENTIONED ABOVE, AT NO ADDITIONAL COST TO THE OWNER AND PER LOCAL CODES, MANUFACTURER'S RECOMMENDATIONS AND APPLICABLE STANDARDS WITH THE ARCHITECT/ENGINEER'S APPROVAL.
- 4. ALL EQUIPMENT SUPPLIED FOR THESE SPECIFICATIONS SHALL BE FREE FROM DEFECTS IN MATERIAL, WORKMANSHIP, AND TITLE, AND SHALL BE OF THE KIND AND QUALITY DESCRIBED HEREIN. IF IT APPEARS WITHIN ONE YEAR FROM DATE OF FINAL ACCEPTANCE THAT EQUIPMENT DOES NOT MEET THE WARRANTIES ABOVE, THE CONTRACTOR SHALL IMMEDIATELY CORRECT ANY DEFECT AND SHALL RESTORE THE SYSTEM TO THE ORIGINAL SATISFACTORY CONDITIONS AT HIS EXPENSE. THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF OTHER WARRANTIES, WHETHER WRITTEN, ORAL, IMPLIED, OR STATUTORY. NO WARRANTY OR MERCHANTABILITY OF FITNESS FOR PURPOSE SHALL APPLY (THE WARRANTY SHALL START FROM THE TIME OF ARCHITECT/ENGINEER'S FINAL ACCEPTANCE).
- 5. COORDINATE THE CONSTRUCTION SCHEDULE WITH THE GC AND PERFORM ALL REQUIRED WORK IN STRICT ACCORDANCE WITH THE OWNER'S SCHEDULE.
- 6. MECHANICAL CONTRACTOR SHALL PAY FOR AND OBTAIN ALL REQUIRED PERMITS AND CERTIFICATES REQUIRED BY THE AUTHORITIES HAVING JURISDICTION.
- 7. HVAC NOTES:
A. PROVIDE FLEXIBLE CONNECTION IN ALL DUCTS CONNECTING TO AIR MOVING EQUIPMENT AS CLOSE TO FAN AS POSSIBLE. FLEXIBLE CONNECTION SHALL CONSIST OF 6" OR MORE OF AIR TIGHT, FIRE PROOF FLEXIBLE NEOPRENE COATED WOVEN FIBROUS GLASS MATERIAL. VENT FABRICS, INC. OR APPROVED EQUAL.
B. ALL EQUIPMENT, DUCTWORK AND PIPING SHALL BE STRUCTURALLY SUPPORTED AND SECURELY FASTENED TO BUILDING STRUCTURE IN AN ACCEPTABLE MANNER TO OWNER, ARCHITECT, ENGINEER AND LOCAL JURISDICTION AND SHALL BE SEISMICALLY BRACED PER THE SMACNA AND/OR REQUIRED BY LOCAL JURISDICTION.
- 8. ALL FIRE RATED STRUCTURE SHALL BE FIRE DAMPERED AS REQUIRED BY THE JURISDICTION.
- 9. HVAC SYSTEM SHALL BE STARTED UP AND FUNCTIONALLY TESTED BY MECHANICAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL CONFIRM THAT ALL HVAC SYSTEMS ARE READY FOR TESTING, ADJUSTING, AND BALANCING. HVAC SYSTEMS SHALL BE TESTED, ADJUSTED, AND BALANCED (TAB) BY CONTRACTOR CERTIFIED BY THE AABC, NEBB, OR OTHER APPROVED AGENCY. REFRIGERATION PIPING SHALL BE TESTED UNDER PRESSURE AND PROVEN TO BE LEAK FREE. REFRIGERATION SYSTEM SHALL BE STARTED UP AND BROUGHT DOWN TO DESIGN TEMPERATURE.
- 10. MECHANICAL, HVAC, AND PLUMBING ELEMENTS SHALL AT NO TIME COME IN CONTACT WITH CEILING CONSTRUCTION EXCEPT AS NECESSARY PENETRATIONS MAY REQUIRE. ESCUTCHEONS SHALL BE USED ON ALL VISIBLE PENETRATIONS.
- 11. ACCESS SHALL BE PROVIDED BY GC AS REQUIRED FOR INSTALLATION AND MAINTENANCE OF MECHANICAL, ELECTRICAL, AND OTHER ELEMENTS WITHIN CEILING SPACE AND AS REQUIRED BY CODE. LOCATIONS FOR SPECIAL ACCESS DOORS, HATCHES, ETC. SHALL BE COORDINATED WITH OTHER TRADES.
- 12. INSPECTIONS, AS REQUIRED BY LOCAL AUTHORITIES, SHALL BE COORDINATED BY GC PRIOR TO CLOSING OF CEILING.
- 13. SHOP DRAWINGS FOR ALL RELATED TRADES (PLUMBING, HVAC) SHALL BE SUBMITTED FOR REVIEW/APPROVAL PRIOR TO MANUFACTURING AND INSTALLATION.
- 14. ALL HVAC ELEMENTS SHALL MATCH ADJACENT WALL OR CEILING FINISH COLOR, INSTALLED FLUSH AND TRUE AND CENTERED WITHIN THE CEILING GRID. LOCATIONS SHALL BE PER APPROVED MECHANICAL PLANS.
- 15. ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE TURNED OVER TO THE OWNER AT JOB COMPLETION. ALL PRODUCT WARRANTY REGISTRATION CARDS, APPLICATIONS, AND CERTIFICATES SHALL BE COMPLETED AND TURNED OVER TO THE OWNER.

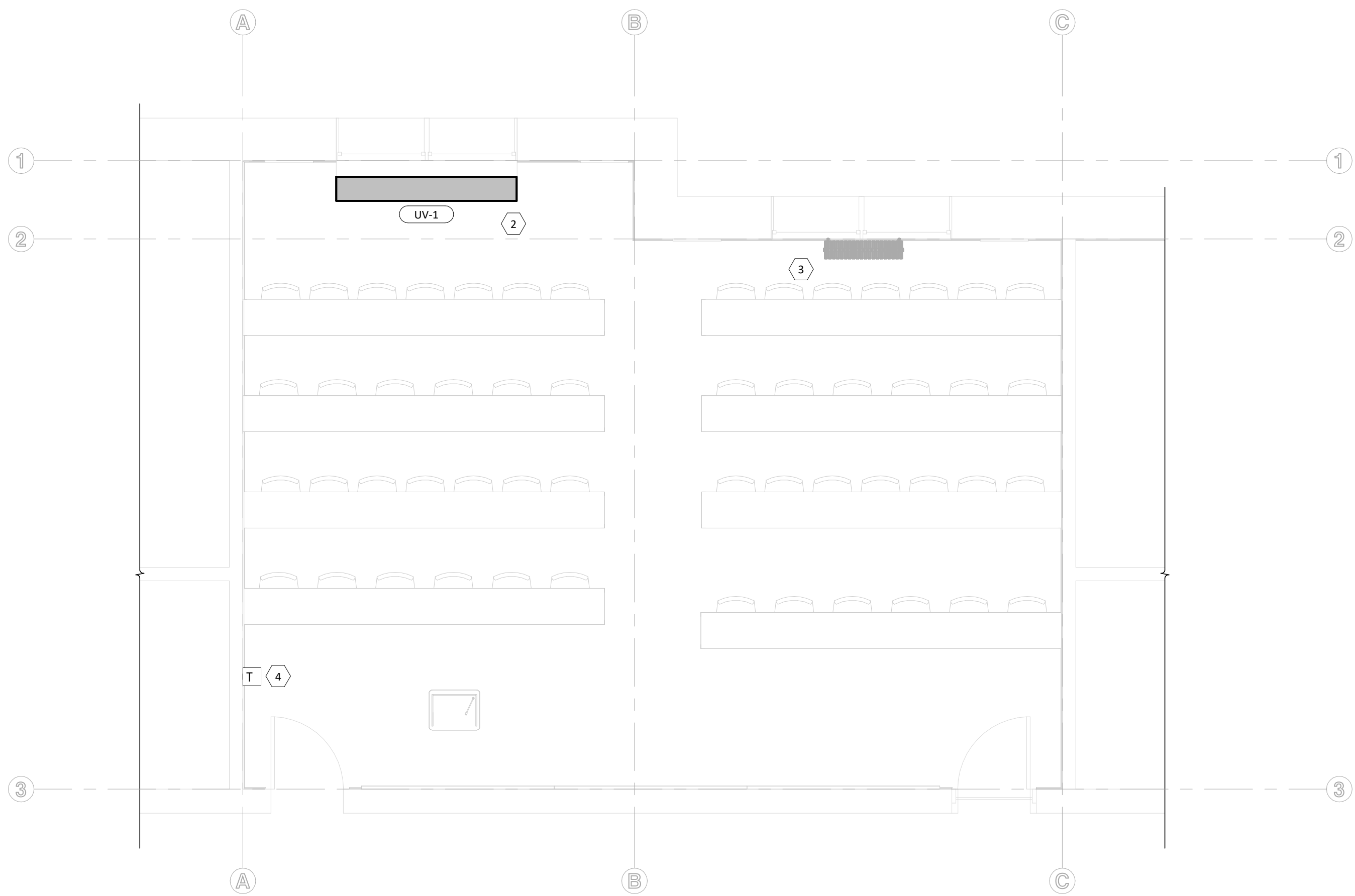
ABBREVIATIONS

Table of abbreviations: Ø ROUND, ABV ABOVE, AC AIR CONDITIONING, AD AREA DRAIN, ADD ADDENDUM, AFF ABOVE FINISHED FLOOR, AFUE ANNUAL FUEL UTILIZATION EFFICIENCY, ALT ALTERNATE, AP ACCESS PANEL, ARCH ARCHITECT/ARCHITECTURAL, BFF BELOW FINISHED FLOOR, BLW BELOW, BTU BRITISH THERMAL UNITS, BTUH BRITISH THERMAL UNITS PER HOUR, CAP CAPACITY, CB CATCH BASIN, CFM CUBIC FEET PER MINUTE, CLG CEILING, CO CLEAN OUT, CW COLD WATER, D DEGREE, DB DRY BULB, DIA DIAMETER, DN DOWN, DW DISTILLED WATER, EA EACH, EAT ENTERING AIR TEMPERATURE, ELEC ELECTRICAL, EQUIP EQUIPMENT, EWC ELECTRIC WATER COOLER, EWT ENTERING WATER TEMPERATURE, E/A EXHAUST AIR, EXIST EXISTING, F FLOOR, F FLOOR CLEAN OUT, FD FLOOR DRAIN, FD FIRE DAMPER, FDV FIRE DEPARTMENT VALVE, FL FLOOR, FO FUEL OIL, FOV FUEL OIL VENT, FOR FUEL OIL RETURN, FOS FUEL OIL SUPPLY, FPM FEET PER MINUTE, FLOOR SINK, FT FOOT/FEET, FTR FIN TUBE RADIATION, GAL GALLON, GC GENERAL CONTRACTOR, GPM GALLONS PER MINUTE, GW GREASE WASTE, HB HOSE BIB, HP HORSE POWER, HTG HEATING, HTR HEATER, HW HOT WATER, HYD HYDRANT, ID INDIRECT, IN INCH, INV INVERT, LB POUND, LB/HR POUNDS PER HOUR, LAT LEAVING AIR TEMPERATURE, LP LOW PRESSURE, LPG LIQUEFIED PETROLEUM GAS, LVR LOUVER, LWT LEAVING WATER TEMPERATURE, M/A MIXED AIR, MAX MAXIMUM, MBH ONE THOUSAND BTU PER HOUR, MCF ONE THOUSAND CUBIC FEET, MD MOTORIZED DAMPER, MECH MECHANICAL, MFR MANUFACTURER, MIN MINIMUM, MISC MISCELLANEOUS, MTR MOTOR, MUA MAKE-UP/AIR, NC NOISE CRITERIA, NC NORMALLY CLOSED, NIC NOT IN CONTRACT, NO NUMBER, NO NORMALLY OPEN, NTS NOT TO SCALE, O OXYGEN, O/A OUTSIDE AIR, ORD OVERFLOW ROOF DRAIN, PD PRESSURE DROP, PIV POST INDICATOR VALVE, PLBG PLUMBING, PRESS PRESSURE, PRV PRESSURE REDUCING VALVE, PSI POUNDS PER SQUARE INCH, PSIG POUNDS PER SQUARE INCH GAUGE, PWR POWER, R DUCT RISER, R/A RETURN AIR, RCP RADIANT CEILING PANEL, RD ROOF DRAIN, REC RECESSED, RED REDUCER, RH RELATIVE HUMIDITY, RL/A RELIEF AIR, RM ROOM, RPM REVOLUTIONS PER MINUTE, RW RAIN WATER, SF SQUARE FOOT, S/A SUPPLY AIR, SAN SANITARY, SP SQUARE FOOT, SMOKE DAMPER, SM SURFACE MOUNT, SP STANDPIPE, SP STATIC PRESSURE, STM STEAM, T THERMOSTAT, TD TEMPERATURE DROP, TOR TRENCH DRAIN, TEMP TEMPERATURE, TYP TYPICAL, UG UNDERGROUND, VAC VACUUM, V VENT, VAV VARIABLE AIR VOLUME, VENT VENTILATION, VTR VENT THROUGH ROOF, W WASTE, WB WET BULB, WCO WALL CLEAN OUT, WH WALL HYDRANT

PROJECT #24002



1 HVAC DEMOLITION PLAN
 1/4" = 1'-0"
 0 2 4 8

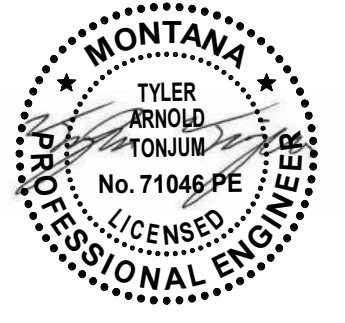


2 HVAC PLAN
 1/4" = 1'-0"
 0 2 4 8

- KEYNOTES**
- CONTRACTOR TO VERIFY THERMOSTAT WIRE ROUTING. IF WIRE IS EXPOSED UNDER DEMOLISHED FLOOR, ROUTE WIRE BEHIND NEW BASE TRIM.
 - NEW UNIT VENTILATOR, SIZE TO MATCH EXISTING. EXTEND OUTDOOR AIR PLENUM BEHIND UNIT DOWN TO NEW FLOOR. EXTEND STEAM AND CONDENSATE PIPES AND VALVES DOWN TO NEW LOCATION. UNIT PLENUM AND LOCATION TO BE VERIFIED.
 - REUSE EXISTING STEAM RADIATOR AND RELOCATE TO NEW FLOOR. EXTEND STEAM AND CONDENSATE PIPES AND VALVES DOWN TO NEW LOCATION.
 - NEW THERMOSTAT IN THE SAME LOCATION AS PREVIOUS THERMOSTAT. REUSE EXISTING WIRE ROUTING.

HVAC SEQUENCE OF OPERATION

UV-1: UNIT VENTILATOR HEATING SET TO MAINTAIN 70°F IN OCCUPIED MODE AND 65°F IN UNOCCUPIED MODE. UNIT TO MAINTAIN 75°F IN COOLING MODE VIA ECONOMIZER COOLING WHEN AVAILABLE. OUTDOOR AIR DAMPER TO BE OPEN AND FAN TO RUN DURING OCCUPIED PERIODS. COORDINATE OCCUPIED PERIODS WITH OWNER. SET POINTS TO BE ADJUSTABLE.



FOR PERMIT & BIDDING

THE INFORMATION CONTAINED HEREIN IS PROPRIETARY. THIS DOCUMENT MAY NOT BE USED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF JACKOLA ENGR. & ARCH., P.C.

LINFIELD HALL
MONTANA STATE UNIVERSITY
 ROOM #113
 PPA#: 23-0828

DRAWN: TAT CHECKED: CLC

DATE: 11/19/2024

REVISIONS:

#	DESCRIPTION

UNIT VENTILATOR SCHEDULE

TAG	DESCRIPTION	BASIS OF DESIGN		FAN				STEAM COIL		ELECTRICAL DATA			
		MANUFACTURER	MODEL NO.	SUPPLY AIR		MOTOR	ECM	OUTPUT	UNIT WEIGHT	MCA	MOC	VOLT	PH
				FLOW	MIN FLOW								
UV-1	UNIT VENTILATOR	TRANE	VUVE1500	1500 CFM	615 CFM	0.10 hp	No	106900 Btu/h	445 lb	5 A	15 A	120 V	1

NOTES: INCLUDE FACE AND BYPASS DAMPER, ACOUSTIC FRONT PANEL, THROWAWAY FILTER, FIELD INSTALLED CONTROLS AND SOFT DOVE UNIT FINISH. UNIT TO HAVE FRONT RETURN AND REAR FRESH AIR WITH 2 PIPE RIGHT HAND CONNECTION. COORDINATE WITH MSU FACILITIES FOR CONTROLS.

HVAC PLAN

M-111

PROJECT #24002

SYMBOL	DESCRIPTION
	SURFACE LIGHT (TYPE DENOTED)
	WALL MOUNTED FLOODLIGHT (TYPE DENOTED)
	RECESSED LIGHT (TYPE DENOTED)
	POLE MOUNTED LIGHT (TYPE DENOTED)
	SURFACE LINEAR LIGHT (TYPE DENOTED)
	SUSPENDED OR PENDANT LIGHT (TYPE DENOTED)
	RECESSED LINEAR LIGHT (TYPE DENOTED)
	STRIP LIGHT (TYPE DENOTED)
	TRACK AND TRACK LIGHT (TYPES DENOTED)
	EMERGENCY BATTERY LIGHT (TYPE DENOTED)
	EXIT SIGN (TYPE DENOTED)
	LIGHT FIXTURE ON (EM) LIFE SAFETY BRANCH
	LIGHT FIXTURE ON (EM) CRITICAL BRANCH
	LIGHT ON CORD REEL (TYPE DENOTED)
	LIGHTING CHANNEL WIRE (TYPE DENOTED)
	LED TAPE LIGHT
	DAYLIGHT ZONE 1
	DAYLIGHT ZONE 2
	SINGLE POLE SWITCH
	2 POLE SINGLE THROW SWITCH
	3-WAY SWITCH
	4-WAY SWITCH
	KEYED SWITCH
	SWITCH W/PILLOT
	DIMMER SWITCH
	OCCUPANCY SENSOR SWITCH
	MOMENTARY CONTACT SWITCH
	TIMER SWITCH
	TIME DELAY SWITCH
	PUSH BUTTON
	SINGLE RECEPTACLE
	DUPLEX RECEPTACLE
	SPLIT DUPLEX RCPT.
	ISOLATED GROUND RCPT (DUPLEX SHOWN)
	RCPT ON EMERGENCY CKT (DUPLEX SHOWN)
	FOURPLEX RCPT.
	FOURPLEX RCPT ON EMERGENCY CIRCUIT
	240 VOLT RECEPTACLE
	FLOOR RECEPTACLE (DUPLEX SHOWN)
	RCPT ON DROP CORD (DUPLEX SHOWN)
	RCPT ON CORD REEL (DUPLEX SHOWN)
	MULTIOULET ASSEMBLY (TYPE DENOTED)
	CLOCK (TYPE DENOTED)

ELECTRICAL SYMBOL LEGEND

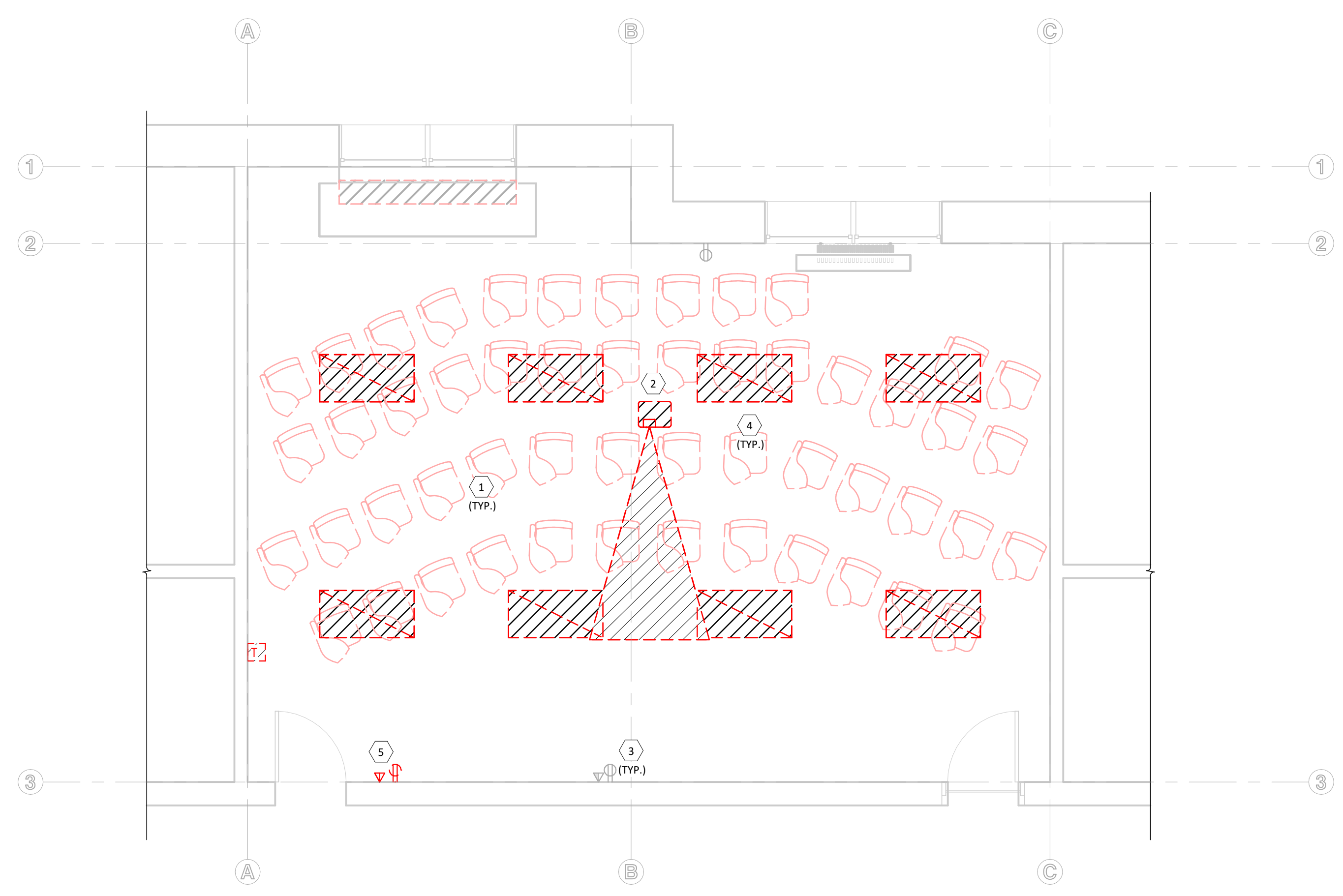
SYMBOL	DESCRIPTION
	STATIC GROUND RECEPTACLE (TYPE DENOTED)
	LIGHTNING PROTECTION AIR TERMINAL
	LIGHTNING PROTECTION CONDUCTOR SPLICE
	GROUND ROD (PLAN VIEW)
	UTILITY SERVICE POWER POLE (SITE)
	SPECIAL RECEPT. OR CONN. (SEE SCHEDULE)
	JUNCTION BOX
	PULL BOX
	CIRCUIT BREAKER PANEL
	POWER OR DISTRIBUTION PANEL
	TRANSFORMER (TYPE DENOTED)
	POWER PACK (TYPE DENOTED)
	MOTOR (SEE SCHEDULE)
	COMB. MOTOR STARTER (FUSED)
	SAFETY DISC. SW. (NON-FUSED)
	SAFETY DISC. SW. (FUSED)
	RELAY
	ENCLOSED CIRCUIT BREAKER
	PRESSURE SWITCH
	FLOAT SWITCH
	OCCUPANCY SENSOR - TYPE DENOTED
	LIGHT LEVEL SENSOR - TYPE DENOTED
	PHOTOCELL
	TIME CONTROL SWITCH (TIME SWITCH)
	HUMIDISTAT
	THERMOSTAT
	SOLENOID VALVE
	HALFTONE SYMBOL INDICATES EXISTING
	DASHED SYMBOL INDICATES DEMOLISHED
	TELEPHONE OUTLET (TYPE DENOTED)
	WALL TELEPHONE OUTLET (TYPE DENOTED)
	INFORMATION OUTLET (TYPE DENOTED)
	WIRELESS ACCESS POINT
	TELEVISION OUTLET
	BELL
	BUZZER
	CHIME
	DOOR SIGNAL - APT. UNIT
	SPEAKER (WALL OR CEILING MT.)
	HORN TYPE SPEAKER
	VOLUME CONTROL
	MICROPHONE OUTLET
	ANTENNA
	FIRE ALARM HORN W/STROBE (CANDELAS)
	FIRE ALARM BELL
	FIRE ALARM BELL W/STROBE (CANDELAS)
	FIRE ALARM CHIME W/STROBE (CANDELAS)
	FIRE ALARM STROBE (CANDELAS)
	FIRE ALARM SPEAKER W/STROBE (CANDELAS)
	FIRE ALARM REMOTE ANNUCIATOR
	SMOKE DETECTOR (TYPE DENOTED)
	HEAT DETECTOR (TYPE & TEMP DENOTED)
	LINEAR HEAT DETECTOR
	DUCT SMOKE DETECTOR (TYPE DENOTED)
	REMOTE TEST/STATUS STATION
	FLAME DETECTOR (TYPE DENOTED)
	GAS DETECTOR (TYPE DENOTED)
	F.A. PULLSTATION (TYPE DENOTED)
	F.A. ZONE ADDRESSABLE MODULE
	F.A. INDIVIDUAL ADDRESSABLE MODULE
	F.A. DOOR HOLDER
	F.A. DOOR CLOSER
	FIRE ALARM SHUT DOWN RELAY
	SPRINKLER FLOW SWITCH
	SPRINKLER VALVE TAMPER SWITCH
	SPRINKLER LEVEL SWITCH
	SPRINKLER PRESSURE SWITCH
	SPRINKLER TEMPERATURE SWITCH
	END OF LINE RESISTOR
	ELECTRIC STRIKE
	MAGNETIC LOCK
	COMBINATION LOCK
	DOOR CONTACTS
	CARD READER
	KEYPAD
	NURSE CALL EMERG. STATION
	NURSE CALL CODE BLUE EMERG. STATION
	NURSE CALL DUTY STATION
	NURSE CALL STAFF STATION
	NURSE CALL SINGLE PATIENT STATION
	NURSE CALL DUAL PATIENT STATION
	NURSE CALL DOME LIGHT (2 LAMP)
	CCTV CAMERA
	CCTV CAMERA WITH PAN/TILT DRIVE
	KEYED NOTE (SEE SCHEDULE)

ELECTRICAL ABBREVIATIONS LIST

3P	1 POLE (2P, 3P, 4P, ETC.)	ELEC	ELECTRIC, ELECTRICAL	MCC	MOTOR CONTROL CENTER	S/S	STOP/START PUSHBUTTONS																																																																																																																								
A	AMPERE	ELEV	ELEVATOR	MDC	MAIN DISTRIBUTION CENTER	STA	STATION																																																																																																																								
AC	ABOVE COUNTER OR AIR CONDITIONER	EM	EMERGENCY	MDP	MAIN DISTRIBUTION PANEL	STD	STANDARD																																																																																																																								
ACLG	ABOVE CEILING	EMS	ENERGY MANAGEMENT SYSTEM	MFR	MANUFACTURER	SURF	SURFACE MOUNTED																																																																																																																								
ADO	AUTOMATIC DOOR OPENER	EMT	ELECTRICAL METALLIC TUBING	MFS	MAIN FUSED DISCONNECT SWITCH	SW	SWITCH																																																																																																																								
ADP	AMP FRAME	EP	ELECTRIC PNEUMATIC	MH	MANHOLE	SWBD	SWITCHBOARD																																																																																																																								
AFF	ABOVE FINISHED FLOOR	EQUIP	EQUIPMENT	N	NEW	SYM	SYMMETRICAL																																																																																																																								
AFG	ABOVE FINISHED GRADE	EW	ELECTRIC WATER COOLER	MIN	MINIMUM	SYS	SYSTEM																																																																																																																								
AFI	ARC FAULT CIRCUIT INTERRUPTER	EXIST	EXISTING	MISC	MISCELLANEOUS	TEL	TELEPHONE																																																																																																																								
AHU	AIR HANDLING UNIT	EXH	EXHAUST	MLO	MAIN LUGS ONLY	TEL/DATA	TELEPHONE/DATA																																																																																																																								
AL	ALUMINUM	EXP	EXPLOSION PROOF	MMS	MANUAL MOTOR STARTER	TERM	TERMINAL																																																																																																																								
ALT	ALTERNATE	FA	FIRE ALARM	MOA	MULTIOULET ASSEMBLY	TL	TWIST LOCK																																																																																																																								
AMP	AMPERE	FABP	FIRE ALARM BOOSTER POWER SUPPLY PANEL	MSP	MOTOR STARTER PANELBOARD	TR	TAMPER RESISTANT																																																																																																																								
AMPL	AMPLIFIER	FU	FUSED SAFETY DISCONNECT SWITCH	MSB	MAIN SWITCHBOARD	T-STAT	THERMOSTAT																																																																																																																								
ANUN	ANNUNCIATOR	FUC	FAN COIL UNIT	MT	MOUNT	TTC	TELEPHONE TERMINAL CABINET																																																																																																																								
APPROX	APPROXIMATELY	FX	FIXTURE	MTC	EMPTY CONDUIT	TV	TELEVISION																																																																																																																								
AQ-STAT	AQUASTAT	FL	FLOOR	MTS	MANUAL TRANSFER SWITCH	TVCT	TELEVISION TERMINAL CABINET																																																																																																																								
ARCH	ARCHITECT, ARCHITECTURAL	FLUOR	FLUORESCENT	N	NORMALLY CLOSED	TY	TYPICAL																																																																																																																								
AS	AMP SWITCH	FUSE	NATIONAL ELECTRICAL CODE	NIC	NOT IN CONTRACT	UT	UNDERGROUND TELEPHONE																																																																																																																								
AT	AMP TRIP	FUDES	FUSED SAFETY DISCONNECT SWITCH	NEMA	NATIONAL ELECTRICAL CODE	UC	UNDER COUNTER																																																																																																																								
ATS	AUTOMATIC TRANSFER SWITCH	GA	GAUGE	NEA	MANUFACTURER'S ASSOCIATION	UE	UNDERGROUND ELECTRICAL																																																																																																																								
AUTO	AUTOMATIC	GAL	GALLON	NFCS	NON-FUSED SAFETY DISCONNECT SWITCH	UG	UNDERGROUND																																																																																																																								
AUX	AUXILIARY	GEN	GENERATOR	NFC	NOT TO SCALE	UH	UNIT HEATER																																																																																																																								
AV	AUDIO VISUAL	GC	GENERAL CONTRACTOR	NIC	NOT IN CONTRACT	UH	UNDERGROUND TELEPHONE																																																																																																																								
AWG	AMERICAN WIRE GAUGE	GEN	GENERATOR	NL	NIGHT LIGHT	UTL	UTILITY																																																																																																																								
BATT	BATTERY	GFI	GROUND FAULT CIRCUIT INTERRUPTER	N.O.	NORMALLY OPEN	UV	UNIT VENTILATOR OR ULTRAVIOLET																																																																																																																								
BOARD	BOARD	GFP	GROUND FAULT PROTECTOR	N.P	NORMAL POWER FACTOR	V	VOLT																																																																																																																								
BLDG	BUILDING	GND	GROUND	NOT TO SCALE	V	VOLT-AMPERES	V	VOLT-AMPERES																																																																																																																							
BMS	BUILDING MANAGEMENT SYSTEM	GRS	GALVANIZED RIGID STEEL (CONDUIT)	O	OWNER FURNISHED, CONTRACTOR INSTALLED	VDT	VIDEO DISPLAY TERMINAL																																																																																																																								
C	CONDUIT	GYP BD	GYPSSUM BOARD	OFOI	OWNER FURNISHED, OWNER INSTALLED	VERT	VERTICAL																																																																																																																								
CAB	CABINET	HOA	HANDS-OFF-AUTOMATIC SWITCH	OFI	OWNER FURNISHED, OWNER INSTALLED	VFD	VARIABLE FREQUENCY DRIVE																																																																																																																								
CAT	CATALOG	HORIZ	HORIZONTAL	OH	OVERHEAD	VOL	VOLUME																																																																																																																								
CATV	CABLE TELEVISION	HP	HORSEPOWER	OH	OVERHEAD	W	WATT																																																																																																																								
CB	CIRCUIT BREAKER	HV	HIGH VOLTAGE	OL	OVERLOADS	W	WITH																																																																																																																								
CCTV	CLOSED CIRCUIT TELEVISION	HTG	HEATING	PA	PUBLIC ADDRESS	WAP	WIRELESS ACCESS POINT																																																																																																																								
CF	CONTRACTOR FURNISHED	HTR	HEATER	PE	PNEUMATIC ELECTRIC	WG	WIRE GUARD																																																																																																																								
CFI	CONTRACTOR INSTALLED	HVR	HIGH VOLTAGE	PE	PEDESTAL	W/O	WITHOUT																																																																																																																								
CKT	CIRCUIT	HVAC	HEATING, VENTILATING AND AIR CONDITIONING	PF	POWER FACTOR	WP	WEATHERPROOF																																																																																																																								
CLG	CEILING	HWP	HYDRONIC WATER PUMP	PH	PHASE	XFR	TRANSFER																																																																																																																								
CMPR	COMPRESSOR	IC	INTERRUPTING CAPACITY	PNL	PANEL																																																																																																																										
COMB	COMBINATION	IG	ISOLATED GROUND	PP	POWER POLE																																																																																																																										
CONN	CONNECTION	IMC	INTERMEDIATE METAL CONDUIT	PR	PAIR																																																																																																																										
CONSTR	CONSTRUCTION	INCAND	INCANDESCENT	PROJ	PROJECTION																																																																																																																										
CONT	CONTINUATION OR CONTINUOUS	INFR	INFRARED	PRV	POWER ROOF VENTILATOR	∅	ANGLE																																																																																																																								
CONV	CONVECTOR	I/W	INTERLOCK WITH	PT	POTENTIAL TRANSFORMER	▲	DELTA																																																																																																																								
CP	CIRCULATING PUMP	J-BOX	JUNCTION BOX	PVC	POLYVINYL CHLORIDE (CONDUIT)	-	DEGREES																																																																																																																								
CR	CATHODE-RAY TUBE	KV	KILOVOLT	PWR	POWER	-	FEET																																																																																																																								
CT	CURRENT TRANSFORMER	KVA	KILOVOLT-AMPERE	QUAN	QUANTITY	-	INCHES																																																																																																																								
CTR	CENTER	KVAR	KILOVOLT-AMPERE REACTIVE	RELOC	RELOCATED	#	NUMBER																																																																																																																								
CU	COPPER	KW	KILOWATT	R, RCPT	RECEPTACLE	Ø	PHASE </tr <tr><td>DCP</td><td>DOMESTIC WATER CIRCULATING PUMP</td><td>KWH</td><td>KILOWATT HOUR</td><td>REQD</td><td>REQUIRED</td><td>C</td><td>CENTER LINE</td></tr> <tr><td>DEPT</td><td>DEPARTMENT</td><td>LOC</td><td>LOCATE OR LOCATION</td><td>RM</td><td>ROOM</td><td>P</td><td>PLATE</td></tr> <tr><td>DET</td><td>DETAIL</td><td>L, LTG</td><td>LIGHTS, LIGHTING</td><td>RSC</td><td>RIGID STEEL CONDUIT</td><td></td><td></td></tr> <tr><td>DWH</td><td>DOMESTIC WATER HEATER</td><td>LTNG</td><td>LIGHTING</td><td>RTU</td><td>ROOF TOP UNIT</td><td></td><td></td></tr> <tr><td>DIA</td><td>DIAMETER</td><td>LV</td><td>LOW VOLTAGE</td><td>SC</td><td>SURFACE CONDUIT</td><td></td><td></td></tr> <tr><td>DIA</td><td>DISCONNECT</td><td>M, MTR</td><td>MOTOR, MOTORIZED</td><td>SEC</td><td>SECONDARY</td><td></td><td></td></tr> <tr><td>DIST</td><td>DISTRIBUTION</td><td>MAX</td><td>MAXIMUM</td><td>SHT</td><td>SHEET</td><td></td><td></td></tr> <tr><td>DN</td><td>DOWN</td><td>MAG.S</td><td>MAGNETIC STARTER</td><td>SIM</td><td>SIMILAR</td><td></td><td></td></tr> <tr><td>DS</td><td>SAFETY DISCONNECT SWITCH</td><td>M/C</td><td>MOMENTARY CONTACT</td><td>S/N</td><td>SOLID NEUTRAL</td><td></td><td></td></tr> <tr><td>DT</td><td>DOUBLE THROW</td><td>MCB</td><td>MAIN CIRCUIT BREAKER</td><td>SPEC</td><td>SPECIFICATION</td><td></td><td></td></tr> <tr><td>DWG</td><td>DRAWING</td><td></td><td></td><td>SPKR</td><td>SPEAKER</td><td></td><td></td></tr> <tr><td>(E)</td><td>EXISTING</td><td></td><td></td><td>SP</td><td>SPARE</td><td></td><td></td></tr> <tr><td>EC</td><td>ELECTRICAL CONTRACTOR</td><td></td><td></td><td>SPDT</td><td>SINGLE POLE DOUBLE THROW</td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td>SS</td><td>SURFACE RACEWAY</td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td>ST</td><td>STAINLESS STEEL</td><td></td><td></td></tr>	DCP	DOMESTIC WATER CIRCULATING PUMP	KWH	KILOWATT HOUR	REQD	REQUIRED	C	CENTER LINE	DEPT	DEPARTMENT	LOC	LOCATE OR LOCATION	RM	ROOM	P	PLATE	DET	DETAIL	L, LTG	LIGHTS, LIGHTING	RSC	RIGID STEEL CONDUIT			DWH	DOMESTIC WATER HEATER	LTNG	LIGHTING	RTU	ROOF TOP UNIT			DIA	DIAMETER	LV	LOW VOLTAGE	SC	SURFACE CONDUIT			DIA	DISCONNECT	M, MTR	MOTOR, MOTORIZED	SEC	SECONDARY			DIST	DISTRIBUTION	MAX	MAXIMUM	SHT	SHEET			DN	DOWN	MAG.S	MAGNETIC STARTER	SIM	SIMILAR			DS	SAFETY DISCONNECT SWITCH	M/C	MOMENTARY CONTACT	S/N	SOLID NEUTRAL			DT	DOUBLE THROW	MCB	MAIN CIRCUIT BREAKER	SPEC	SPECIFICATION			DWG	DRAWING			SPKR	SPEAKER			(E)	EXISTING			SP	SPARE			EC	ELECTRICAL CONTRACTOR			SPDT	SINGLE POLE DOUBLE THROW							SS	SURFACE RACEWAY							ST	STAINLESS STEEL		
DCP	DOMESTIC WATER CIRCULATING PUMP	KWH	KILOWATT HOUR	REQD	REQUIRED	C	CENTER LINE																																																																																																																								
DEPT	DEPARTMENT	LOC	LOCATE OR LOCATION	RM	ROOM	P	PLATE																																																																																																																								
DET	DETAIL	L, LTG	LIGHTS, LIGHTING	RSC	RIGID STEEL CONDUIT																																																																																																																										
DWH	DOMESTIC WATER HEATER	LTNG	LIGHTING	RTU	ROOF TOP UNIT																																																																																																																										
DIA	DIAMETER	LV	LOW VOLTAGE	SC	SURFACE CONDUIT																																																																																																																										
DIA	DISCONNECT	M, MTR	MOTOR, MOTORIZED	SEC	SECONDARY																																																																																																																										
DIST	DISTRIBUTION	MAX	MAXIMUM	SHT	SHEET																																																																																																																										
DN	DOWN	MAG.S	MAGNETIC STARTER	SIM	SIMILAR																																																																																																																										
DS	SAFETY DISCONNECT SWITCH	M/C	MOMENTARY CONTACT	S/N	SOLID NEUTRAL																																																																																																																										
DT	DOUBLE THROW	MCB	MAIN CIRCUIT BREAKER	SPEC	SPECIFICATION																																																																																																																										
DWG	DRAWING			SPKR	SPEAKER																																																																																																																										
(E)	EXISTING			SP	SPARE																																																																																																																										
EC	ELECTRICAL CONTRACTOR			SPDT	SINGLE POLE DOUBLE THROW																																																																																																																										
				SS	SURFACE RACEWAY																																																																																																																										
				ST	STAINLESS STEEL																																																																																																																										

GENERAL ELECTRICAL NOTES AND SPECIFICATIONS

GENERAL NOTES:
1. ALL WORK SHALL CONFORM TO ALL APPLICABLE REQUIREMENTS OF FEDERAL AND STATE CODES, REGULATIONS, LAWS AND ORDINANCES, LOCAL LAWS AND REGULATIONS, LOCAL JURISDICTIONS, AND THE AUTHORITY HAVING JURISDICTION (AHJ).
2. ALL ELECTRICAL WORK UNDER THE REQUIREMENTS OF THESE SPECIFICATIONS SHALL MEET THE REQUIREMENTS OF THE CURRENT STATE ADOPTED EDITIONS OF THE NATIONAL ELECTRICAL CODE (NEC) AND SHALL ALSO BE IN COMPLIANCE WITH ALL APPLICABLE STATE AND/OR LOCAL LAWS AND ORDINANCES.
3. THE CONTRACTOR SHALL COOPERATE WITH AND ASSIST THE OWNER IN SECURING FROM THE AHJ ANY "SPECIAL PERMISSION" OR INTERPRETATION NEEDED TO COMPLETE THE WORK.
4. ALL DRAWINGS AND DETAILS PROVIDED ARE GENERAL IN NATURE AND MAY NOT REPRESENT ALL CONDITIONS AND DIMENSIONS FOR THE ACTUAL WORK. ELECTRICAL CONTRACTOR (EC) SHALL REVIEW ALL DOCUMENTS PROVIDED AND/OR REFERENCED. EC SHALL VISIT THE SITE TO VERIFY ALL EXISTING CONDITIONS INCLUDING: ACCESS TO WORK, VERIFICATION OF MEASUREMENTS, VERIFICATION OF QUANTITIES AND LOCATIONS LISTED HEREIN, POWER REQUIREMENTS, STAGING, DISPOSAL AND MATERIAL STORAGE. IF DRAWING OR SPECIFICATIONS ARE NOT AVAILABLE FOR A PARTICULAR CONDITION, OR A NEW CONDITION IS EXPOSED DURING THE PROJECT, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REQUEST INFORMATION OR ADJUSTMENT OF SCOPE FROM OWNER'S REPRESENTATIVE BEFORE PROCEEDING WITH SUCH WORK.
COORDINATION:
1. ALL WORK SHALL BE COORDINATED WITH THE WORK OF OTHER TRADES. EC TO COORDINATE ALL ELECTRICAL MATERIAL, EQUIPMENT, FIXTURES, AND DEVICE LOCATIONS WITH ALL RELATED ARCHITECTURAL, MECHANICAL, STRUCTURAL, AND OTHER TRADE DRAWINGS TO AVOID AND PREVENT IMPROPER INSTALLATIONS OR WASTEFUL PRACTICES.
2. ALL WORK SHALL BE CLOSELY COORDINATED WITH THE ACTIVITIES OF OTHERS AROUND THE WORK SITE.
3. OWNER, GENERAL CONTRACTOR, AND ELECTRICAL CONTRACTOR SHALL COORDINATE AND VERIFY ALL OTHER ELECTRICAL WORK ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
4. ALL ELECTRICAL WORK IS TO BE PERFORMED, AND ALL RELATED ADJUSTMENT PARTS, TOOLS OR DEVICES ARE TO BE TURNED OVER TO OWNER.
5. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
6. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
7. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
8. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
9. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
10. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
11. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
12. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
13. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
14. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
15. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
16. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
17. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
18. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
19. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
20. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
21. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
22. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
23. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
24. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
25. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
26. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
27. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
28. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
29. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
30. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
31. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
32. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
33. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
34. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
35. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
36. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
37. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
38. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
39. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
40. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
41. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
42. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
43. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
44. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
45. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
46. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
47. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
48. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
49. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
50. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
51. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
52. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
53. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
54. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
55. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
56. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
57. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
58. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
59. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
60. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
61. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
62. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
63. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
64. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
65. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
66. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
67. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
68. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
69. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
70. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
71. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
72. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
73. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
74. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
75. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
76. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
77. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
78. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
79. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
80. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
81. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
82. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
83. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
84. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
85. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
86. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
87. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
88. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
89. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
90. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
91. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
92. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
93. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
94. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
95. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
96. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
97. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
98. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
99. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
100. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
101. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
102. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
103. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
104. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
105. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
106. ALL SYSTEMS, AT PROJECT COMPLETION AND BEFORE FINAL ACCEPTANCE, SHALL BE DEMONSTRATED TO HAVE A COMPLETE AND WORKING FUNCTIONAL OPERATION.
1



1 ELECTRICAL DEMOLITION PLAN
 1/4" = 1'-0"
 0 2 4 8'

DEMOLITION GENERAL NOTES

- SAVE CIRCUITS FROM DEMOLISHED ELECTRICAL COMPONENTS FOR REUSE. COORDINATE ELECTRICAL DEMOLITION WORK WITH GENERAL CONTRACTOR.
- FURNISH AND INSTALL CONDUIT AND WIRE AS NECESSARY FOR CONTINUITY OF ANY FEEDERS OR BRANCH CIRCUITS ORIGINATING OUTSIDE THE DEMOLITION AREA THAT SERVES ANY ELECTRICAL EQUIPMENT OR DEVICES TO REMAIN AFTER DEMOLITION. MODIFY OR REPLACE AS REQUIRED.
- NOT ALL EXISTING DEVICES/EQUIP ARE SHOWN. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL DEMOLITION WORK WITH EXISTING CONDITIONS.
- REROUTE/REINSTALL DEMOLISHED ELECTRICAL AS NOTED. DISPOSE OF ALL OTHER DEMOLISHED ELECTRICAL MATERIALS IN A SAFE AND LEGAL MANNER.

KEYNOTES

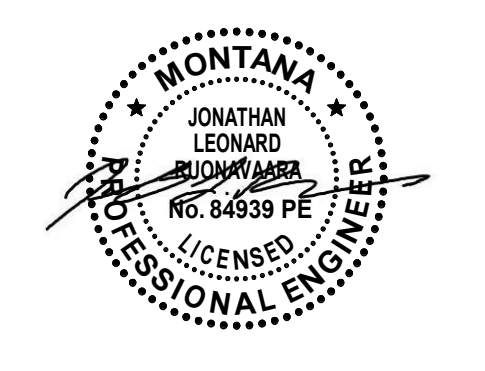
- 1 DEMOLISH ALL TROFFER LIGHT FIXTURES IN ROOM. SAFE OFF EXISTING CIRCUITING FOR RECONNECTION OF NEW FIXTURES, SEE KEYNOTE 1/E-111.
- 2 DEMOLISH EXISTING PROJECTOR. REMOVE WIRING BACK TO NEAREST JUNCTION BOX.
- 3 UNLESS NOTED OTHERWISE, REPLACE HALFTONED EXISTING RECEPTACLE AND PHONE DATA DEVICES AND COVERS. REUSE EXISTING BOXES, CONDUIT, AND WIRING. SEE KEYNOTE 4/E-121.
- 4 DEMOLISH DEVICE, WIRING, AND RACEWAY WHERE SHOWN IN DASHED BOLD.
- 5 DEMOLISH EXISTING SURFACE RACEWAY, POWER, AND DATA WIRING BACK TO CEILING. REROUTE DATA TO NEW LECTURN, SEE KEYNOTE 2/E-121.

DIVISION OF RESPONSIBILITY:

CONTRACTOR FURNISHED, CONTRACTOR INSTALLED (CFCI):
 JUNCTION BOXES, CONDUIT, & HOOKS
 SHADES
 BACKING FOR ALL MOUNTS

OWNER FURNISHED, CONTRACTOR INSTALLED (OFCI):
 CENTER PEDESTAL FOR THE WIRED DESKS (ADD ALTERNATE #4)
 MOUNTS FOR TVS, PROJECTORS, & CAMERAS
 PROJECTOR SCREENS
 SPEAKERS
 FANS

OWNER FURNISHED, OWNER INSTALLED (OFOI):
 LECTURNS
 AV CONTROLS, INCLUDING LIGHTING CONTROLS
 AV EQUIPMENT, INCLUDING TVS, PROJECTORS, WAP, SWITCHES, & COVER PLATES
 AV EQUIPMENT CABINETS
 ALL AV CABLES & WIRING
 WALL CLOCKS



FOR PERMIT & BIDDING

THE INFORMATION CONTAINED HEREIN IS PROPRIETARY. THIS DOCUMENT MAY NOT BE USED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF JACKOLA ENGR. & ARCH., P.C.

LINFIELD HALL
MONTANA STATE UNIVERSITY
 ROOM #113
 PPA#: 23-0828

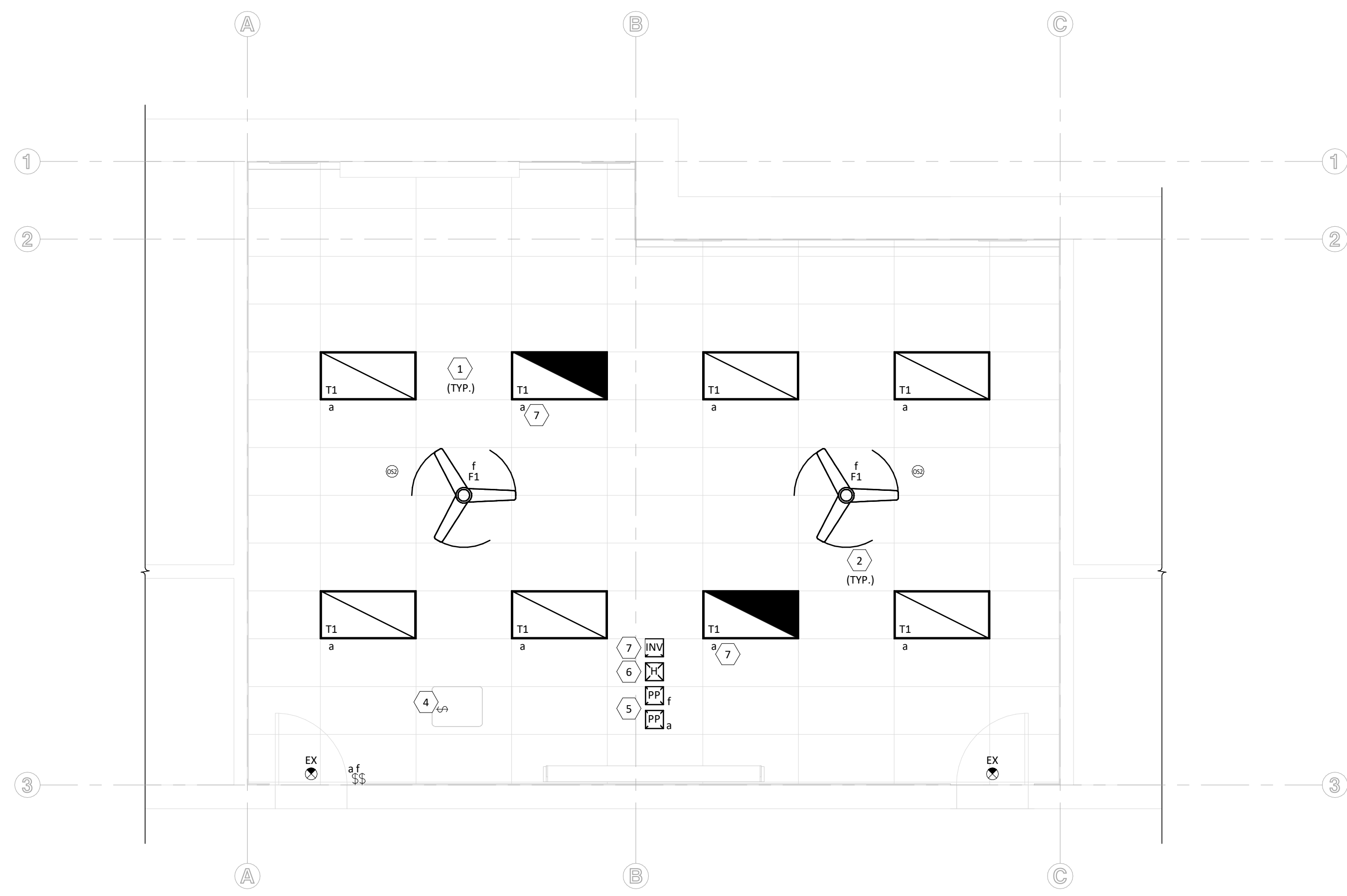
DRAWN: CDH CHECKED: JLR

DATE: 11/19/2024

REVISIONS:

ELECTRICAL DEMOLITION PLAN

ED111



1 LIGHTING PLAN
 1/4" = 1'-0"
 0 2 4 8'

LIGHTING FIXTURE SCHEDULE

TAG	DESCRIPTION	BASIS OF DESIGN			LED LAMP			NOTE		
		MFR	CATALOG SERIES	MOUNTING	VOLT	WATTS	COLOR TEMP		LUMENS	CRI
EX	EXIT - WALL MOUNT	LITHONIA	EDG 1 R EL SD	WALL/SURFACE	120 V	5 W	NA	0 lm	NA	MOUNT BOTTOM OF SIGN 12" ABOVE DOOR.
T1	2'X4' RECESSED TROFFER	RAB	EZPAN 2X4-S0-YN/D10	RECESSED	120 V	49 W	3500K	5569 lm	84	

LIGHTING GENERAL NOTES

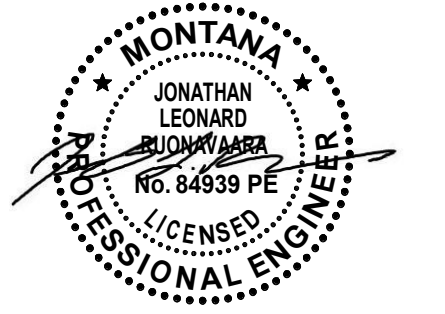
- LIGHTING LAYOUT AND PLACEMENT IS SCHEMATIC ONLY. COORDINATE EXACT LOCATION OF LIGHT FIXTURES WITH ARCHITECTURAL REFLECTED CEILING PLAN TO AVOID INTERFERENCE WITH MECHANICAL, PLUMBING, AND STRUCTURAL SYSTEMS.
- EXIT AND EMERGENCY EGRESS LIGHTING SHALL BE NON-SWITCHED AND CIRCUITED TO THE NEAREST INTERIOR LIGHTING CIRCUIT. EMERGENCY FIXTURES SHALL HAVE A 90 MINUTE MINIMUM BATTERY BACKUP. WHERE EMERGENCY FIXTURES HAVE AN ADJUSTABLE HEAD, DIRECT LIGHT TOWARDS PATH OF EGRESS.
- CIRCUIT WIRING IS NOT SHOWN EXCEPT FOR SWITCHING INTENT OF FIXTURES AND CONTROL OF DEVICES. PROVIDE PROPER NUMBER OF CONDUCTORS TO ACHIEVE CIRCUITING AND SWITCHING SHOWN.
- SEE ELECTRICAL SYMBOL NOTES ON TITLE SHEET E-001 FOR SWITCHING NOMENCLATURE. SWITCHES DESIGNATED WITH LOWER CASE LETTERS TO CONTROL FIXTURES WITH MATCHING DESIGNATIONS.
- ALL LAY-IN LIGHT FIXTURES SHALL BE SUPPORTED INDEPENDENT OF GRID CEILINGS FROM THE STRUCTURE ABOVE FROM AT LEAST TWO CORNERS. ATTACH WITH GRID CLIPS OR TABS RATED FOR LAY-IN CEILINGS.

KEYNOTES

- RECONNECT/REUSE EXISTING CIRCUITING FOR NEW FIXTURES AS POSSIBLE, SEE KEYNOTE 1/ED111. REWIRE AS NECESSARY, CONFORM TO NEC ARTICLE 300 FOR WIRING METHODS.
- COORDINATE EXACT FAN LOCATION AND MOUNTING WITH GC ON-SITE. ROUTE FAN POWER TO LUTRON VIVE CONTROLLER, SEE KEYNOTE 5/E-111.
- LUTRON VIVE SWITCHING WITH DIMMING, PROVIDED BY OWNER'S AV DEPARTMENT.
- LUTRON VIVE POWERPACK, PROVIDED BY OWNER'S AV DEPARTMENT. MOUNT POWER PACK WITHIN 30' OF ALL CONTROLS, SENSORS, AND DEVICES. ROUTE FIXTURE AND FAN POWER AND CONTROLS BACK TO APPROPRIATE POWERPACK.
- LUTRON VIVE HUB, PROVIDED BY OWNER'S AV DEPARTMENT. ROUTE 1-1/2" DATA CABLE PATHWAY FROM HUB TO 521A TELECOMM ROOM.
- PROVIDE AND INSTALL 100VA BATTERY BACKUP INVERTER, BASIS OF DESIGN: BODINE ELI-S-100 OR APPROVED EQUAL. INSTALL PER MANUFACTURER'S RECOMMENDATION. FEED EMERGENCY SECTION OF CONTROL SWITCH LEG A OF EMERGENCY FIXTURE FROM INVERTER.

DIVISION OF RESPONSIBILITY:

- CONTRACTOR FURNISHED, CONTRACTOR INSTALLED (CFCI) :**
 JUNCTION BOXES, CONDUIT, & HOOKS
 SHADES
 BACKING FOR ALL MOUNTS
- OWNER FURNISHED, CONTRACTOR INSTALLED (OFCI) :**
 CENTER PEDESTAL FOR THE WIRED DESKS (ADD ALTERNATE #4)
 MOUNTS FOR TVS, PROJECTORS, & CAMERAS
 PROJECTOR SCREENS
 SPEAKERS
 FANS
- OWNER FURNISHED, OWNER INSTALLED (OFOI) :**
 LECTURNS
 AV CONTROLS, INCLUDING LIGHTING CONTROLS
 AV EQUIPMENT, INCLUDING TVS, PROJECTORS, WAP, SWITCHES, & COVER PLATES
 AV EQUIPMENT CABINETS
 ALL AV CABLES & WIRING
 WALL CLOCKS



FOR PERMIT & BIDDING

THE INFORMATION CONTAINED HEREIN IS PROPRIETARY. THIS DOCUMENT MAY NOT BE USED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF JACKOLA ENGR. & ARCH., P.C.

LINFIELD HALL
MONTANA STATE UNIVERSITY
 ROOM #113
 PPA#: 23-0828

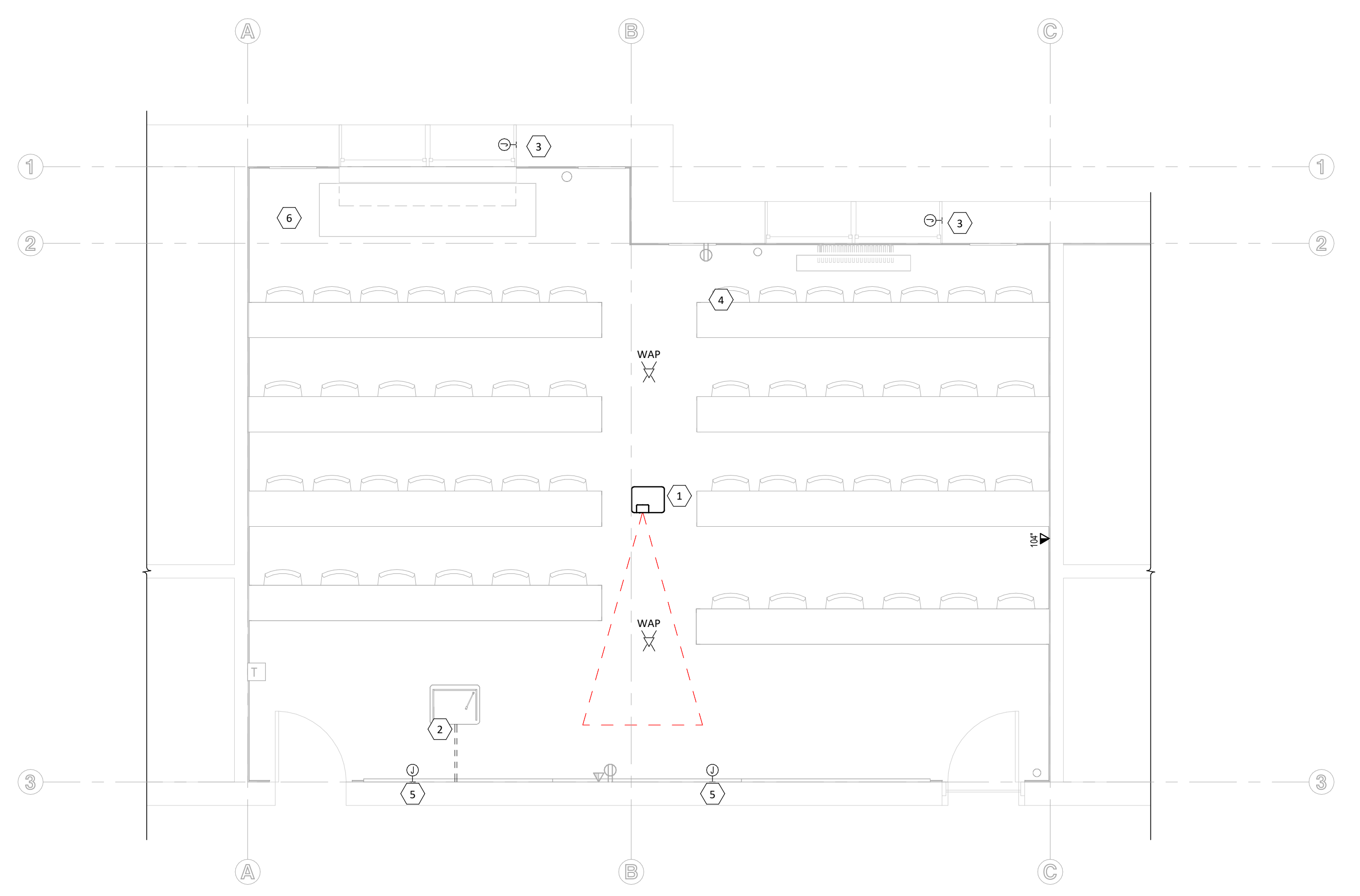
DRAWN: CDH CHECKED: JLR

DATE: 11/19/2024

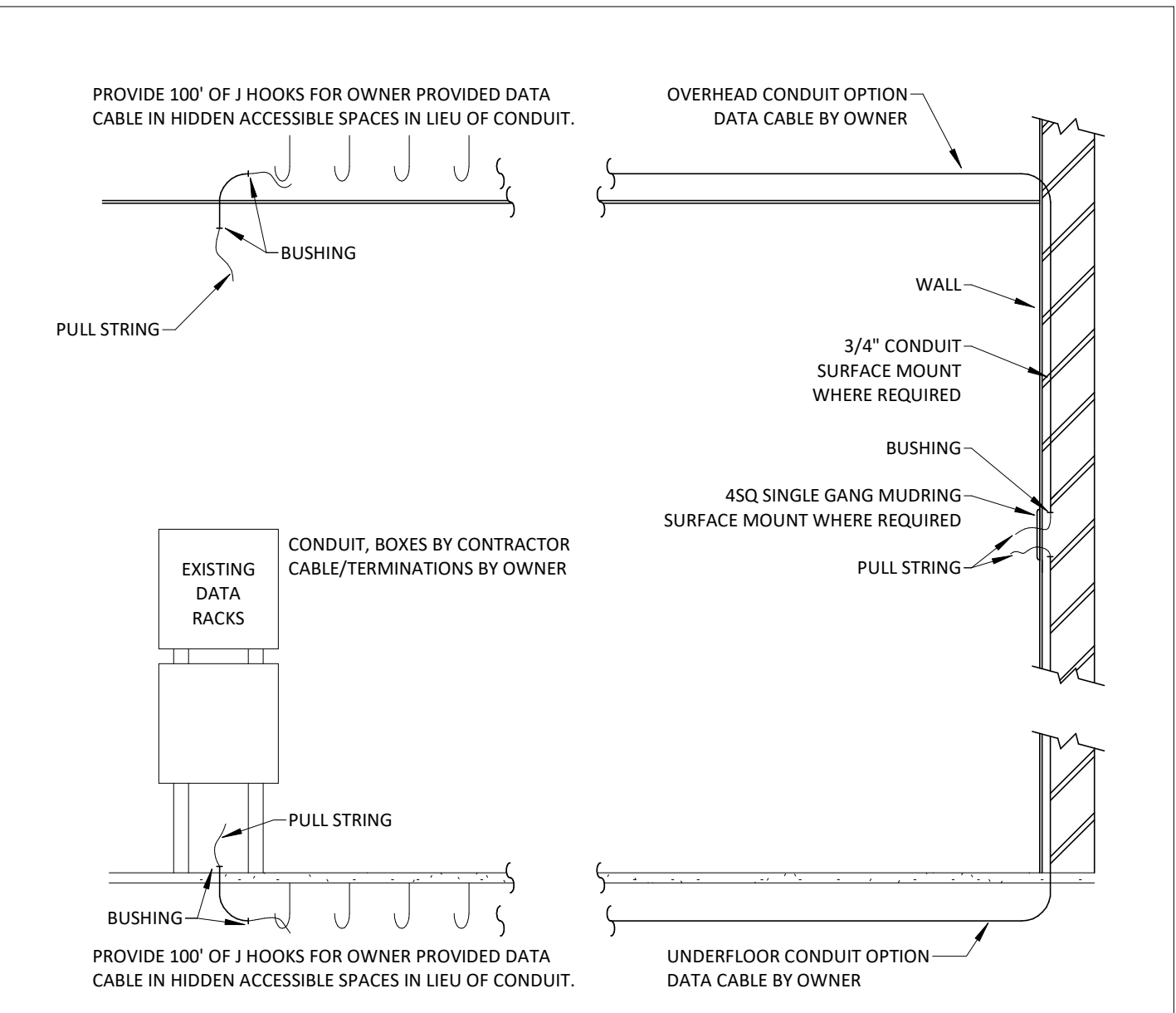
REVISIONS:

LIGHTING PLAN

E-111



1 POWER PLAN
 1/4" = 1'-0"
 0 2 4 8'



2 DATA DETAIL
 N.T.S.

POWER GENERAL NOTES

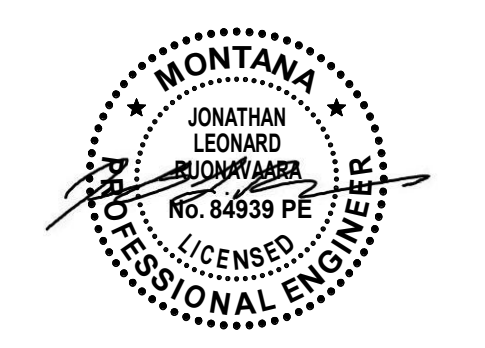
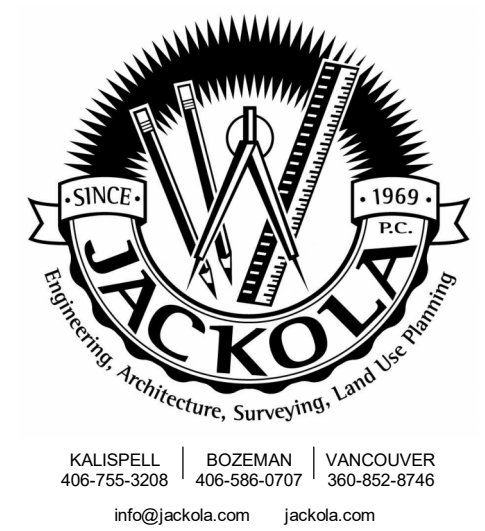
- PRIOR TO ROUGH-IN AND INSTALLATION, ELECTRICAL CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND REQUIREMENTS OF ALL ELECTRICAL ITEMS. COORDINATE WITH MECHANICAL CONTRACTOR FOR EXACT LOCATIONS OF HVAC EQUIPMENT
- CONDUIT IS REQUIRED, PROVIDE 3/4" EMT (MINIMUM) HOMERUNS FOR ALL BRANCH CIRCUITS.
- WHERE POSSIBLE, CONCEAL ALL CONDUITS AND RACEWAYS EXCEPT ABOVE ACT CEILINGS.
- FIRE SEAL ALL PENETRATIONS IN FIRE RATED ASSEMBLIES, SEE FIRE PROTECTION NOTES ON E-001.
- CIRCUIT WIRING IS NOT SHOWN EXCEPT FOR SWITCHING INTENT OF FIXTURES AND CONTROL OF DEVICES. PROVIDE PROPER NUMBER OF CONDUCTORS TO ACHIEVE CIRCUITING AND SWITCHING SHOWN.
- ROUTE ALL DATA CABLE PATHWAYS TO 213C TELECOM ROOM. SEE DETAIL 2/E-121.
- LIMIT LENGTHS OF EXPOSED RACEWAYS WHERE POSSIBLE, MATCH EXISTING INSTALLATION/ROUTING METHODS.
- ROUTE NEW CIRCUITS TO ELECTRICAL PANEL IN ROOM 102C, SEE G-001 FOR LOCATION.

KEYNOTES

- 1 NEW PROJECTOR BY OWNER, COORDINATE DATA AND POWER REQUIREMENTS WITH OWNER'S IT DEPARTMENT. VERIFY INSTALL LOCATION ON-SITE. REROUTE EXISTING WIRING TO NEW LOCATION AND EXTEND AS NECESSARY, SEE KEYNOTE 2/ED111.
- 2 REROUTE EXISTING POWER VIA (2) RUNS OF SURFACE WIREMOLD FROM ACCESSIBLE CEILING TO NEW LECTURN, SEE KEYNOTE 5/ED111. BASIS OF DESIGN: FSR SMART-WAY FLOOR RACEWAY OR APPROVED EQUAL. COORDINATE EXACT LOCATION AND WIREMOLD SELECTION WITH OWNER. COORDINATE ALL REROUTED CONTROLS REQUIREMENTS WITH OWNER'S IT DEPARTMENT PRIOR TO INSTALL.
- 3 WINDOW SHADE BY CONTRACTOR, VERIFY ELECTRICAL REQUIREMENTS AND MOUNTING WITH GC ON-SITE.
- 4 REPLACE HALF TONE EXISTING RECEPTACLE AND PHONE DATA DEVICES AND COVERS. REUSE EXISTING BOXES, CONDUIT, AND WIRING. SEE DEMO KEYNOTE 3/ED111.
- 5 SUSPENDED POWERED PROJECTOR SCREEN BY OTHERS. COORDINATE ELECTRICAL REQUIREMENTS AND MOUNTING WITH GC ON-SITE. PROVIDE CONTROL WIRING BACK TO LECTURN FOR REMOTE CONTROL.
- 6 MC REPLACING DEMOLISHED EQUIPMENT WITH NEW HVAC UNIT. COORDINATE ELECTRICAL REQUIREMENTS WITH MC. VERIFY EXISTING CIRCUIT MEETS NEW EQUIPMENT LOADS. REFEED EQUIPMENT AS NECESSARY.

DIVISION OF RESPONSIBILITY:

- CONTRACTOR FURNISHED, CONTRACTOR INSTALLED (CFCI) :**
 JUNCTION BOXES, CONDUIT, & HOOKS
 SHADES
 BACKING FOR ALL MOUNTS
- OWNER FURNISHED, CONTRACTOR INSTALLED (OFCI) :**
 CENTER PEDESTAL FOR THE WIRED DESKS (ADD ALTERNATE #4)
 MOUNTS FOR TVS, PROJECTORS, & CAMERAS
 PROJECTOR SCREENS
 SPEAKERS
 FANS
- OWNER FURNISHED, OWNER INSTALLED (OFOI) :**
 LECTURNS
 AV CONTROLS, INCLUDING LIGHTING CONTROLS
 AV EQUIPMENT, INCLUDING TVS, PROJECTORS, WAP, SWITCHES, & COVER PLATES
 AV EQUIPMENT CABINETS
 ALL AV CABLES & WIRING
 WALL CLOCKS



FOR PERMIT & BIDDING

THE INFORMATION CONTAINED HEREIN IS PROPRIETARY. THIS DOCUMENT MAY NOT BE USED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF JACKOLA ENGR. & ARCH., P.C.

LINFIELD HALL
MONTANA STATE UNIVERSITY
 ROOM #113
 PPA#: 23-0828

DRAWN: CDH CHECKED: JLR

DATE: 11/19/2024

REVISIONS:

NO.	DESCRIPTION

POWER PLAN

E-121

PROJECT #240902