

PERMIT SET

PROJECT NUMBER 23\_05\_19  
DATE 01.15.2024

C3 - BRANSON MO

3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616



DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331



FOR BUILDING PERMIT

C3 - BRANSON MO  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616

DATE  
01.15.2024

DESCRIPTION  
PERMIT SET

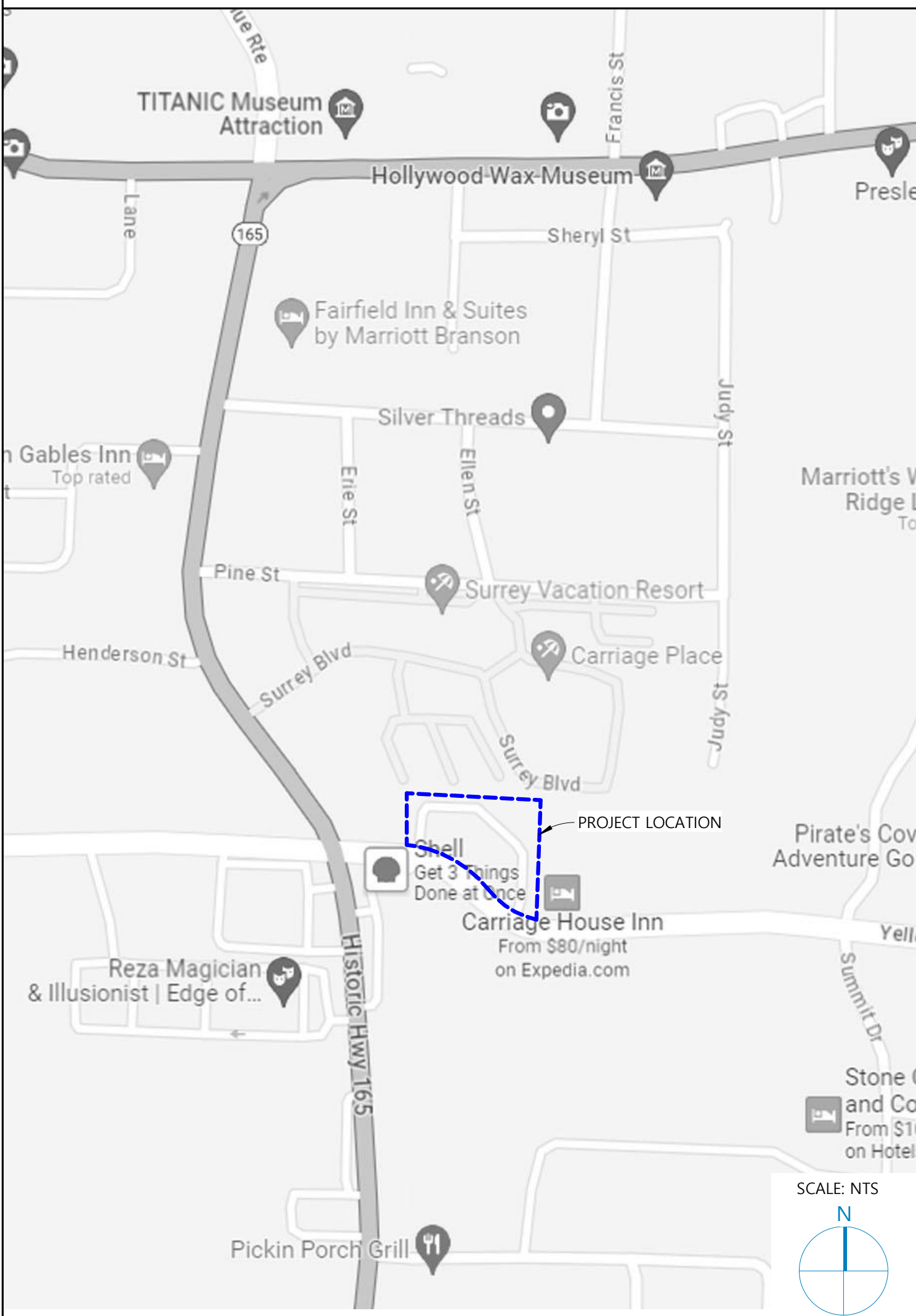
DESIGN  
DRAWN  
PROJECT NO.

Designer  
Author  
23\_05\_19

COVER SHEET

To.o

VICINITY MAP



PROJECT DIRECTORY

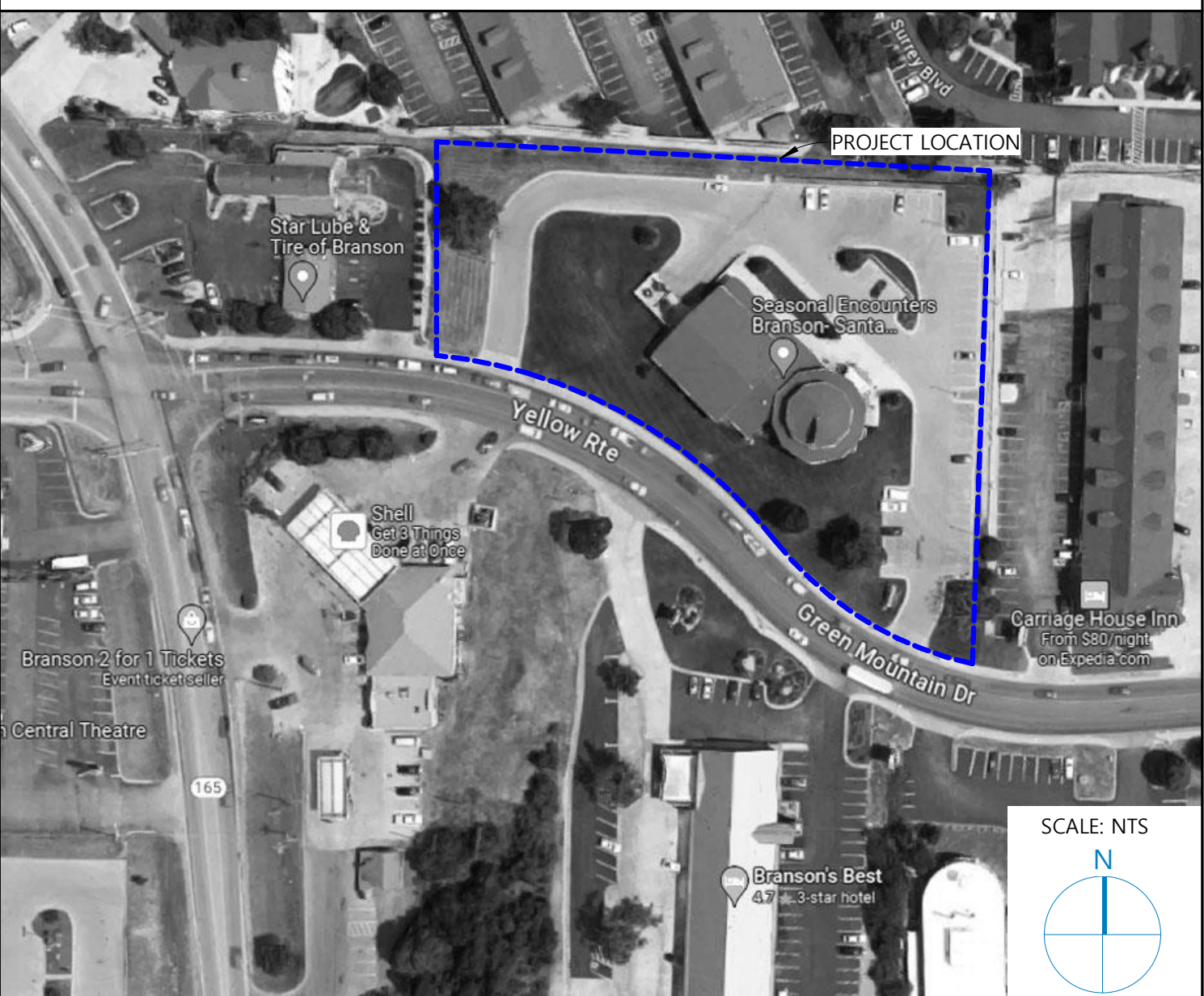
**APPLICANT**  
OWG II, LLC  
STEPHANIE STENGER  
890 E SAN MARTIN  
BOLIVAR, MO 65613

**ARCHITECT**  
DAMIAN FARRELL DESIGN GROUP PLLC  
359 METTY DRIVE, SUITE 4A  
ANN ARBOR MICHIGAN 48103  
PH. 734.998.1331

**DIRECTOR OF DESIGN + CONSTRUCTION:**  
C3 INDUSTRIES  
4420 VARSITY DRIVE  
ANN ARBOR, MI 48108  
CONTACT: BOB PHILLIPS  
E: bob@c3industries.com  
P: 1.303.886.6184

**MEP ENGINEER:**  
HALLBERG ENGINEERING, INC.  
1750 COMMERCE COURT  
WHITE BEAR LAKE, MN 55110

LOCATION MAP



GENERAL PROJECT INFORMATION

LEGAL DESCRIPTION FOR PARCEL, 18-1.0-02-004-012-002.004:  
LOT 37, THOUSAND HILLS SUBDIVISION, AS PER THE RECORDED RE-PLAT THEREOF, IN PLAT BOOK/SLIDE D, AT PAGE 743, OF THE TANEY COUNTY RECORDER'S OFFICE, TANEY COUNTY, MISSOURI. SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.  
LOT 36, THOUSAND HILLS, A SUBDIVISION, AS PER THE RECORDED PLAT THEREOF, IN PLAT BOOK 25, AT PAGES 64 THROUGH 68 OF THE RECORDER'S OFFICE OF TANEY COUNTY, MISSOURI. SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.

PROJECT DATA

**MUNICIPALITY:** CITY OF BRANSON  
**ZONING DISTRICT:** CC - COMMUNITY COMMERCIAL  
**LOT AREA REQUIRED:** 7,500 SF MIN.  
**LOT AREA:** 2.12 ACRES  
**MAX. BUILDING HEIGHT:** 100'  
**PROPOSED BUILDING HEIGHT:** +/- 36' - 8" (NO CHANGE PROPOSED)  
**SCOPE OF WORK:** THIS PROJECT INCLUDES THE INTERIOR RENOVATION OF AN EXISTING 8,972 SF BUILDING. THE PROPOSED USE IS ADULT-USE CANNABIS DISPENSARY.  
**CODE REVIEW**

**PROPOSED METHOD OF COMPLIANCE:** PRESCRIPTIVE  
**ALTERATION LEVEL:** LEVEL 3

**PREVIOUS OCCUPANCY CLASSIFICATION:** A-3 ASSEMBLY

**PROPOSED OCCUPANCY CLASSIFICATION:** M - MERCANTILE

**MAXIMUM ALLOWABLE AREA (SF):**  
M MERCANTILE 36,000 SF TABLE 506

**CONSTRUCTION TYPE:** VB CHAP. 6

**MAX. TRAVEL DISTANCE:** TABLE 1016.2  
MAX. ALLOWABLE TRAVEL DISTANCE w/ SPRINKLERS:  
GROUP M MERCANTILE 250 ft.

**MEANS OF EGRESS SIZING (BASED ON OCC. LOAD):** SECTION 1005.3.2  
0.2 (128 OCC.) = 26"

**MINIMUM CORRIDOR WIDTH:** 44" TABLE 1020.2

**MINIMUM DOOR SIZE:** 32" CLEAR SECTION 1010.1.1

**DEAD END CORRIDORS:** SECTION 1018.4  
MAX. ALLOWABLE w/ SPRINKLERS: 20 ft.

**OCCUPANCY CALCULATION:** TABLE 1004.1.2

OCCUPANCY LOAD			
FUNCTION OF SPACE	OCCUPANT LOAD FACTOR	AREA	OCCUPANCY LOAD
ACCESSORY	1/300 SF	1180 SF	3.93
MERCANTILE	1/60 SF	7379 SF	122.98
MERCANTILE STORAGE	1/300 SF	414 SF	1.38
<b>TOTAL:</b>		8972 SF	128 OCC.

SHEET INDEX

SHEET NUMBER	SHEET NAME
T0.0	COVER SHEET
T1.0	GENERAL NOTES & ABBREVIATIONS
T2.0	ADA DETAILS - EXISTING BUILDINGS
T3.0	CODE REVIEW & LIFE SAFETY PLAN
T4.0	SCHEDULES
C1.0	SITE PLAN
D1.0	DEMO PLANS
A1.1	FLOOR PLANS
A2.1	REFLECTED CEILING PLANS
A4.0	ELEVATIONS
A5.0	BUILDING SECTIONS
A6.0	WALL SECTIONS
A6.1	COLUMN DETAILS
A8.0	INTERIOR ELEVATIONS
A8.1	RETAIL & BOH ENLARGED PLAN
A8.2	RETAIL INTERIOR ELEVATIONS
A8.3	BOH & LOBBY INTERIOR ELEVATIONS
SEC.1	SECURITY PLAN
M0.1	MECHANICAL SPECIFICATIONS
M1.1	MECHANICAL PLAN
E0.1	ELECTRICAL SPECIFICATIONS
E0.2	ELECTRICAL DETAILS AND SCHEDULES
E1.1	ELECTRICAL LIGHTING PLAN
E1.2	ELECTRICAL PLAN
P0.1	PLUMBING SPECIFICATIONS
P1.0	SANITARY PIPING PLAN
P1.1	DOMESTIC FLOOR PLAN

**APPLICABLE CODES:**  
2018 INTERNATIONAL BUILDING CODE  
2018 INTERNATIONAL MECHANICAL CODE  
2018 INTERNATIONAL PLUMBING CODE  
2014 NATIONAL ELECTRICAL CODE

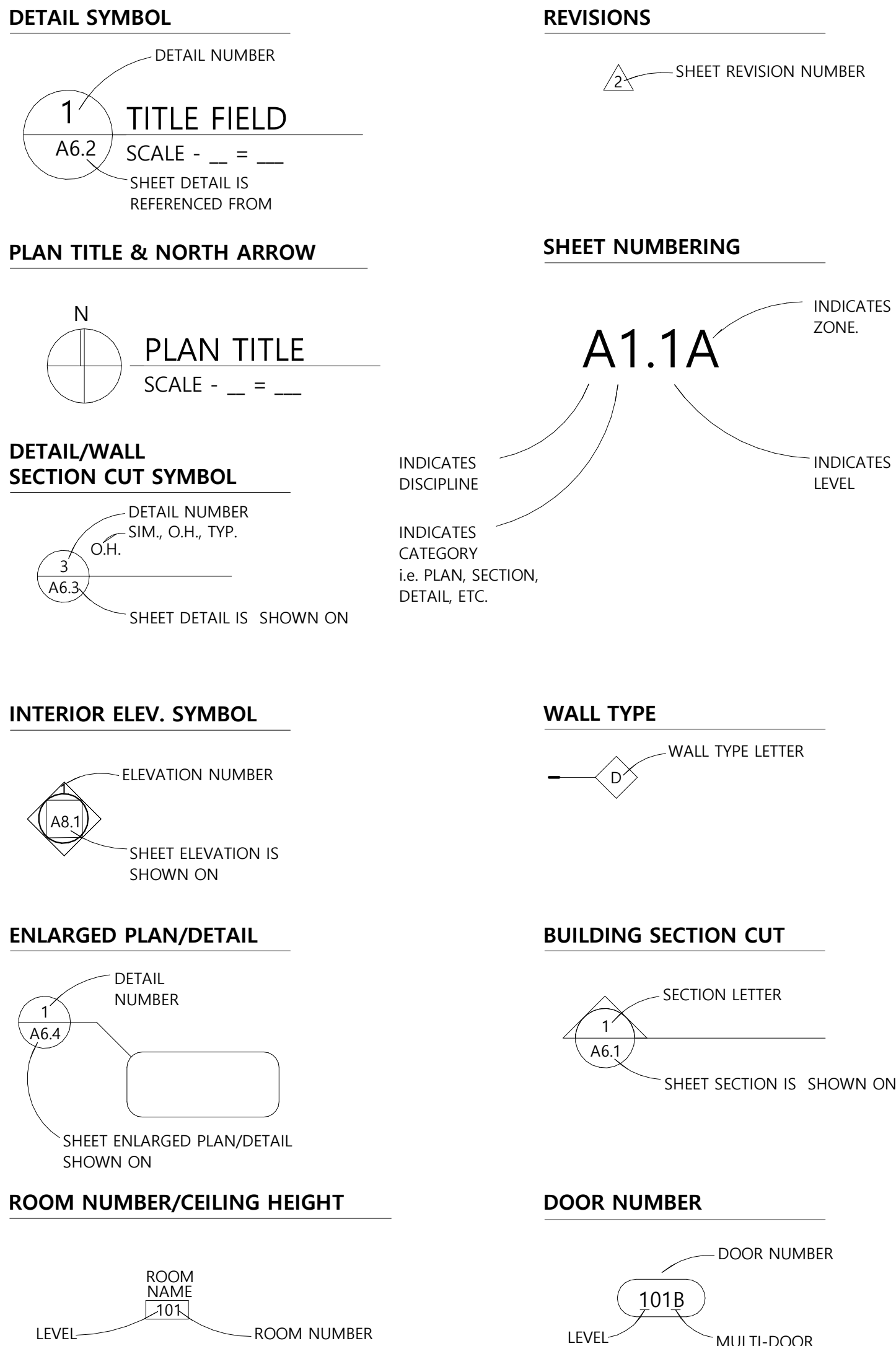


C:\Users\Warchitect.DFDG1\Documents\W231206\_Branson MO C3 Central\_Mourad@dfdgonline.com.rvt

ABBREVIATIONS

#	POUND/NUMBER	EQ	EQUAL	P.C.	PRECAST
&	AND	EQUIP	EQUIPMENT	P.O.C.	POINT OF CONNECTION
(D)	DEMO	EXP	EXPANSION	P.T.	PRESSURE TREATED
(E)	EXISTING	EXT	EXTERIOR	P/L	PROPERTY LINE
(F)	FUTURE	F.A.	FIRE ALARM	PERF.	PERFORATED
(N)	NEW	F.D.	FLOOR DRAIN	PL	PLATE
<	ANGLE	F.E.	FIRE EXTINGUISHER	PLAM	PLASTIC LAMINATE
@	AT	F.O.	FACE OF	PLYWD	PLYWOOD
ø/DIA.	DIAMETER/ROUND	F.O.C.	FACE OF CONCRETE/CURB	PNT	PAINT
		F.O.F.	FACE OF FINISH	PR.	PAIR
		F.O.M.	FACE OF MASONRY	PT.	POINT
		F.O.S.	FACE OF STUDS	PTL BD	PARTICLE BOARD
		F.R.	FIRE RATED	PTN	PARTITION
		F.R.P.	FIBER-REINFORCED PLASTIC	PVC	POLYVINYL CHLORIDE
		F.R.T.	FIRE RETARDANT TREATED	PVMT	PAVEMENT
		F.S.	FIRE SPRINKLER	Q.T.	QUARRY TILE
		FDC	FIRE DEPARTMENT CONNECTION		
		FDN	FOUNDATION	R	RISER/RADIUS
		FEC	FIRE EXTINGUISHER CABINET	R.D.	ROOF DRAIN
		FF	FINISH FLOOR	R.O.	ROUGH OPENING
		FFE	FINISH FLOOR ELEVATION	R.O.W.	RIGHT OF WAY
		FHVC	FIRE HOSE VALVE CABINET	RB	RUBBER OR RESILIENT BASE
		FIN.	FINISH	RE:	REFERENCE
		FLR	FLOORING	REF.	REFRIGERATOR
		FLUOR	FLUORESCENT	REINF	REINFORCED
		FRMG	FRAMING	REQD	REQUIRED
		FT	FOOT/FEET	RESIL	RESILIENT
		FTG	FOOTING	REV	REVISED
		FURR	FURRING	RH	ROOF HATCH
				RM	ROOM
				RTU	ROOF TOP UNIT
B.O.	BOTTOM OF	G.F.R.G.	GLASS FIBER REINFORCED GYPSUM	S.	SOUTH
BD	BOARD	G.I.	GALVANIZED IRON	S.C.	SOLID CORE
BDF	BUILDING DISTRIBUTION FACILITY	GA	GAUGE	S.F.	STOREFRONT
BFP	BACK FLOW PREVENTER	GALV	GALVANIZED	S.V.	SHEET VINYL
BIT	BITUMINOUS	GB	GRAB BAR	SCHED	SCHEDULE
BLDG	BUILDING	GC	GENERAL CONTRACTOR	SD	STORM DRAIN OR SMOKE DETECTOR
BLK	BLOCK	GFI	GROUND FAULT INTERRUPTED	SECT.	SECTION
BLKG	BLOCKING	GL	GLASS	SGT	STRUCTURAL GLAZED TILE
BM	BEAM	GYP. BD.	GYPSUM BOARD	SH	SHELF
BOT	BOTTOM			SHT	SHEET
BRG	BEARING	H.M.	HOLLOW METAL	SHTHG	SHEATHING
BTWN	BETWEEN	HB	HOSE BIBB	SHWR	SHOWER
BW	BACK OF WALK	HC	HANDICAP ACCESSIBLE	SIM.	SIMILAR
		HDR	HEADER	SKY	SKYLIGHT
C.B.	CATCH BASIN	HDWRE	HARDWARE	SMH	SEWER MANHOLE
C.G.	CORNER GUARD	HGT	HEIGHT	SPEC	SPECIFICATION
C.I.	CAST IRON	HORIZ	HORIZONTAL	SQ.	SQUARE
C.J.	CONTROL JOINT	HR	HOUR	SS	SOLID SURFACE
C.L.	CENTERLINE	HRV	HEAT RECOVERY UNIT	SST	STAINLESS STEEL
C.O.	CLEAN OUT	HSS.	HOLLOW STEEL SECTION	STD	STANDARD
CAB	CABINET	HVAC	HEATING/VENTILATING/ AIR CONDITIONING	STL	STEEL
CEM	CEMENT	I.D.	INSIDE DIAMETER/DIMENSION	STOR.	STORAGE
CFL	COUNTERFLASHING	INC'D	INCLUDED	STRUC	STRUCTURAL
CID	CLEAR INSIDE DIMENSION	INSUL	INSULATION	SUSP.	SUSPENDED
CLG	CEILING	INT	INTERIOR	SYM.	SYMMETRICAL
CLKG	CAULKING	JAN	JANITOR	T&B	TOP AND BOTTOM
CLO	CLOSET	JT	JOINT	T&G	TONGUE AND GROOVE
CLR	CLEAR			T.	TREAD
CMU	CONCRETE MASONRY UNIT	KIT	KITCHEN	T.O.	TOP OF
CNTR	COUNTER	LAB	LABORATORY	T.O.C.	TOP OF CONCRETE
COL	COLUMN	LAV	LAVATORY	T.O.M.	TOP OF MASONRY
CONC	CONCRETE	LKR	LOCKER	T.O.S.	TOP OF STEEL
CONN	CONNECTION	LT	LIGHT	T.S.	TUBE STEEL
CONSTR	CONSTRUCTION	LVR	LOUVER	T.V.	TELEVISION
CONT	CONTINUOUS	M.O.	MASONRY OPENING	TEL	TELEPHONE
COORD	COORDINATE	MATL	MATERIAL	TER	TERAZZO
CORR	CORRIDOR	MAX.	MAXIMUM	TRANS	TRANSITION
CSK	COUNTERSINK/COUNTERSUNK	MDF	MEDIUM DENSITY FIBERBOARD	TYP.	TYPICAL
CSMT	CASEMENT	MISC.	MISCELLANEOUS	U.N.O.	UNLESS NOTED OTHERWISE
CT	CERAMIC OR PORCELIN TILE	MTD	MOUNTED	UNFIN.	UNFINISHED
CU FT	CUBIC FOOT/FEET	MTL	METAL	UR	URINAL
		MULL	MULLION	VCT.	VINYL COMPOSITION TILE
D.F.	DRINKING FOUNTAIN	N.	NORTH	VERT	VERTICAL
D.I.	DRAIN INLET	N.I.C.	NOT IN CONTRACT	VEST	VESTIBULE
D.O.	DOOR OPENING	N.R.	NOT RATED	VIF	VERIFY IN FIELD
DBL	DOUBLE	N.T.S.	NOT TO SCALE	VWC	VINYL WALL COVERING
DEG	DEGREE	NO.	NUMBER	W.	WEST
DEPT	DEPARTMENT	NOM	NOMINAL	W.C.	WATER CLOSET
DIA	DIAMETER	O.C.	ON CENTER	W/	WITH
DIAG	DIAGONAL	O.D.	OVERFLOW DRAIN	W/O	WITHOUT
DIM	DIMENSION	O.H.	OVERHEAD	WD	WOOD
DISP	DISPENSER	OF/CI	OWNER FURNISH/ CONTRACTOR INSTALL	WDW	WINDOW
DIV	DIVISION	OFF	OWNER FURNISH/ OWNER INSTALL	WF	WIDE FLANGE
DN	DOWN	OPNG	OPENING	WH	WATER HEATER
DR	DOOR	OPP	OPPOSITE	WP	WATERPROOF
DS	DOWNSPOUT			WRB	WEATHER-RESISTIVE BARRIER
DTL	DETAIL			WT.	WEIGHT
DWG	DRAWING			WTR	WATER
DWR	DRAWER			WWF	WELDED WIRE FABRIC
				XFMR	TRANSFORMER

SYMBOLS LEGEND



GENERAL NOTES

- CONTRACTOR SHALL VERIFY AND COORDINATE ALL NEW AND EXISTING CONDITIONS AND DIMENSIONS AT JOB SITE FOR COMPARISON WITH DRAWINGS AND SPECIFICATIONS PRIOR TO BIDDING AND START OF CONSTRUCTION. IF ANY DISCREPANCIES, INCONSISTENCIES OR OMISSIONS ARE FOUND THE ARCHITECT SHALL BE NOTIFIED, IN WRITING FOR CLARIFICATION PRIOR TO PROCEEDING WITH WORK.
- DO NOT SCALE DRAWINGS. CONTRACTOR SHALL RELY ON ON WRITTEN DIMENSIONS AS GIVEN. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT FOR CLARIFICATION. ALL DIMENSIONS SHALL BE FIELD VERIFIED BY CONTRACTOR AND COORDINATED WITH ALL THE WORK OF ALL TRADES. IF DISCREPANCIES ARE FOUND, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING FOR CLARIFICATION BEFORE COMMENCEMENT OR RESUMPTION OF WORK.
- ABBREVIATIONS THROUGHOUT THE PLANS ARE THOSE IN COMMON USE. NOTIFY THE ARCHITECT OF ANY ABBREVIATIONS IN QUESTION.
- CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE VARIOUS TRADE ITEMS WITHIN THE SPACE ABOVE ALL CEILINGS (INCLUDING, BUT NOT LIMITED TO: STRUCTURAL MEMBERS, MECHANICAL DUCTS AND INSULATION, CONDUITS, RACEWAYS, SPRINKLER SYSTEM, LIGHT FIXTURES, CEILING SYSTEM, AND ANY SPECIAL STRUCTURAL SUPPORTS REQUIRED) AND SHALL BE RESPONSIBLE FOR MAINTAINING THE FINISH CEILING HEIGHT ABOVE THE FINISHED FLOOR INDICATED IN THE DRAWINGS AND THE FINISH SCHEDULE. (CEILING HEIGHT DIMENSIONS ARE TO THE FINISH SURFACE OF THE CEILING).
- ACCESS PANELS SHALL BE PROVIDED AND INSTALLED WHEREVER REQUIRED BY BUILDING CODE OR FOR THE PROPER OPERATION OR MAINTENANCE OF MECHANICAL OR ELECTRICAL EQUIPMENT, WHETHER OR NOT INDICATE ON THE DRAWINGS. CONTRACTOR SHALL COORDINATE SIZE, LOCATION, AND TYPE OF ACCESS PANEL WITH OTHER CONTRACTORS WORK AND RECEIVE APPROVAL OF THE ARCHITECT. ACCESS PANEL SHALL BE LOCATED, FRAMED OR INSTALLED WITHOUT EXPRESSED APPROVAL OF THE ARCHITECT.
- DIMENSIONS SHOWN ON THE FLOOR PLANS, SECTIONS, ELEVATIONS, AND DETAILS ARE TO FACE OF STUD, MASONRY, CONCRETE OR GRINDLINES, UNLESS OTHERWISE NOTED.
- IN THE CASE OF A CONFLICT BETWEEN THE DRAWINGS AND THE SPECIFICATIONS, SPECIFICATIONS SHALL TAKE PRECEDENCE. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER OF ANY CONFLICT BEFORE PROCESSING WITH THE WORK.
- ALL DUCT PENETRATION THROUGH PARTITIONS AND CEILINGS SHALL BE PROVIDED WITH NECESSARY FRAMES AND BRACING AROUND THE OPENING AND SHALL BE PROVIDED WITH AUTOMATIC FIRE DAMPERS AND REQUIRED BY THE BUILDING DEPARTMENT FOR FIRE-RATED PENETRATIONS.
- THE SPECIFICATIONS AND ALL CONSULTANT DRAWINGS ARE SUPPLEMENTAL TO THE ARCHITECTURAL DRAWINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE ARCHITECTURAL DRAWINGS BEFORE THE INSTALLATION OF ANY OF THE CONSULTANT'S WORK AND TO BRING ANY DISCREPANCIES OR CONFLICT TO THE ARCHITECT'S ATTENTION IN WRITING, FOR CLARIFICATION. IMPROPERLY INSTALLED WORK SHALL BE CORRECTED BY THE GENERAL CONTRACTOR AT HIS EXPENSE AND AT NOT EXPENSE TO THE ARCHITECT, HIS CONSULTANTS, OR THE OWNER.
- CONTRACTOR SHALL PROVIDE AND INSTALL ACCESS PANELS WHERE SHOWN ON THE REFLECTED CEILING PLANS AND AS REQUIRED BY THE BUILDING DEPARTMENT OR NORMAL GOOD PRACTICE TO PROVIDE ACCESS TO ALL TERMINAL BOXES, VOLUME DAMPERS, AND VALVES, ETC. (ALSO SEE NOTE 5)
- THE ARCHITECT SHALL BE CONSULTED IN ALL CASES WHERE CUTTING INTO AN EXISTING STRUCTURAL PORTION OF ANY BUILDING IS EITHER EXPEDIENT OR NECESSARY, PRIOR TO PROCEEDING WITH WORK, REINFORCEMENT AND/OR SUPPORT SATISFACTORY TO ARCHITECT AND STRUCTURAL ENGINEER SHALL BE PROVIDED BY CONTRACTOR PRIOR TO CUTTING INTO STRUCTURAL PORTIONS OF ANY BUILDING.
- ALL EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT AND SHALL BE ACCESSIBLE BY THE HANDICAPPED.
- MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED THE FOLLOWING: - INTERIOR DOORS: 5 LBS - EXTERIOR DOORS: 8.5 LBS - FIRE DOORS: 15 LBS
- LEGAL EXITS SHALL NOT BE BLOCKED AT ANYTIME.
- ALL EXIT LIGHTING AND SIGNS TO HAVE MINIMUM 6-INCH-HIGH LETTERS IN ACCORDANCE WITH SECTION 19, CHAPTER 33 OF THE CODE.
- EMERGENCY LIGHTING SHALL BE PROVIDED GIVING A VALUE ONE FOOTCANDLE AT FLOOR LEVEL. EXIT SIGNS SHALL BE ILLUMINATED BY TWO SEPARATE SOURCES OF POWER PER LOCAL FIRE DEPARTMENT. (ONE SOURCE ON EMERGENCY POWER, SEE ELEC. DWGS.)
- TEMPORARY PEDESTRIAN PROTECTION SHALL BE PROVIDED AS REQUIRED BY CITY CODE.
- FINAL CLEAN UP AND DISPOSAL: REMOVE DEBRIS, RUBBISH AND WASTE MATERIAL FROM THE OWNER'S PROPERTY TO A LAWFUL DISPOSAL AREA AND PAY ALL HAULING AND DUMPING COSTS. CONFORM TO PERTAINING FEDERAL STATE AND LOCAL LAWS, REGULATIONS AND ORDERS UPON COMPLETION OF WORK, ALL CONSTRUCTION AREAS SHALL BE LEFT VACUUM-CLEAN AND FREE FROM DEBRIS. CLEAN ALL DUST, DIRT, STAINS, HAND MARKS, PAINT SPOTS, DROPPINGS, AND OTHER BLEMISHES.
- PRIOR TO INSPECTION OF THE EXISTING FACILITY, THE CONTRACTOR MUST RECEIVE PERMISSION FOR SITE ACCESS FROM THE OWNER OR THE DESIGNATED REPRESENTATIVE.
- WHEN IT IS NECESSARY TO INTERRUPT ANY EXISTING UTILITY SERVICE TO MAKE CORRECTIONS AND/OR CONNECTION, A MINIMUM OF 48 HOURS ADVANCE NOTICE SHALL BE GIVEN THE OWNER. INTERRUPTIONS IN UTILITY SERVICES SHALL BE OF THE SHORTEST POSSIBLE DURATION FOR THE WORK AT AND HAND AND SHALL BE APPROVED IN ADVANCE BY THE OWNER.
- IN THE EVENT THE UTILITY SERVICE IS INTERRUPTED WITHOUT THE REQUIRED 48 HOURS NOTICE, THEN THE CONTRACTOR SHALL BE FINANCIALLY LIABLE FOR ALL DAMAGES SUFFERED BY THE OWNER DUE TO THE UNAUTHORIZED INTERRUPTION. RECONNECTION SHALL BE MADE IMMEDIATELY.
- IF THE CONTRACTOR ASCERTAINS AT ANY TIME THAT REQUIREMENTS OF THIS CONTRACT CONFLICT WITH, OR ARE IN VIOLATION OF, APPLICABLE LAWS, CODES, REGULATIONS AND ORDINANCES, HE SHALL NOT PROCEED WITH WORK IN QUESTION. EXCEPT AT HIS OWN RISK, UNTIL ARCHITECT HAS BEEN NOTIFIED IN WRITING AND WRITTEN DETERMINATION IS MADE BY THE ARCHITECT. WHERE COMPLETED OR PARTIALLY COMPLETED WORK IS DISCOVERED TO BE IN VIOLATION WITH APPLICABLE LAWS, CODES, AND REGULATIONS AND ORDINANCES, CONTRACTOR SHALL BE REQUIRED TO REMOVE THAT WORK FROM THE PROJECT AND REPLACE SUCH WORK WITH ALL NEW COMPLYING WORK AT NOT ADDITIONAL COST TO THE OWNER OR ARCHITECT.
- ANY WORK INSTALLED IN CONFLICT WITH THE CONTRACT DOCUMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT HIS EXPENSE AND AT NOT ADDITIONAL EXPENSE TO THE OWNER, ARCHITECT, OR CONSULTANTS.
- FINISH FLOOR ELEVATIONS ARE AS ESTABLISHED BY DATUM LINE, UNLESS OTHERWISE NOTED.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR VERIFYING FLOOR-TO-FLOOR ELEVATIONS. THE NEW BUILDING EXPANSIONS GROUND FLOOR SHALL ALIGN IN ELEVATION WITH RESPECTIVE FLOORS IN EXISTING BUILDING.
- THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, EQUIPMENT, TRANSPORTATION AND SERVICES NECESSARY FOR THE SATISFACTORY COMPLETION OF WORK UNLESS DESIGNATED (N.I.C.) OR (O.F.O.). ALL EQUIPMENT, WORK AND MATERIALS SHALL COMPLY WITH CURRENT AND LOCAL APPLICABLE CODES AND GOVERNING REGULATIONS, AND THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL PROTECT ALL FINISH WORK AND SURFACES FROM DAMAGE DURING THE COURSE OF CONSTRUCTION AND SHALL REPLACE AND/OR REPAIR ALL DAMAGED SURFACES CAUSED BY CONTRACTOR OR SUBCONTRACTOR PERSONNEL TO THE SATISFACTION OF THE OWNER AND ARCHITECT.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY PERMITS AND INSPECTIONS.
- SIZE OF MECHANICAL AND ELECTRICAL EQUIPMENT PADS AND BASES ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY DIMENSIONS WITH RESPECTIVE EQUIPMENT MANUFACTURER.
- SPECIAL NOTICE TO CONTRACTORS: ALL CONTRACTORS PERFORMING WORK ON THE PREMISES SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING A REASONABLE AND PRUDENT SAFETY PROGRAM INCLUDING BUT NOT LIMITED TO THE ISOLATION OF OWNER AREAS AND THE PROMPT REMOVAL OF ANY DEBRIS OR TOOLS WHICH MIGHT ENDANGER VISITORS AND STAFF OF THE OWNER OR ARCHITECT.
- CONTRACTOR SHALL PROVIDE AND INSTALL ALL STIFFENERS, BRACING, BACK-UP PLATES AND SUPPORTING BRACKETS REQUIRED FOR THE INSTALLATION OF ALL CASEWORK, TOILET ACCESSORIES AND OF ALL FLOOR-MOUNTED OR SUSPENDED MECHANICAL AND ELECTRICAL EQUIPMENT.
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITY BELOW GARDE AND RELATED SERVICE CONNECTIONS WITH THE RESPECTIVE UTILITY COMPANIES.
- THE CONTRACTOR SHALL COORDINATE THE REMOVAL, ABANDONMENT, AND/OR RELOCATION OF THE EXISTING ABOVE OR BELOW GRADE WITH THE RESPECTIVE UTILITY COMPANIES.
- THE CONTRACTOR SHALL PERFORM ALL WORK WITHIN PUBLIC RIGHT-OF-WAY ACCORDING TO THE LOCAL JURIDISTRICTION STANDARD PLANS AND SPECIFICATIONS. CONTRACTOR SHALL OBTAIN PERMIT FROM APPROPRIATE AGENCIES.
- THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACES, SHORES AND GUYS REQUIRED TO SUPPORT ALL LOADS TO WHICH THE BUILDING STRUCTURES, UTILITIES AND RIGHT-OF-WAY MAY BE SUBJECTED DURING CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE SANITARY FACILITIES FOR WORKERS' USE. EXISTING FACILITIES SHALL NOT BE USED.
- THE CONTRACTOR SHALL OBTAIN OSHA PERMITS FOR ANY VERTICAL EXCAVATIONS OVER 5'-0" DEEP INTO WHICH PERSONS MUST DESCEND.
- THE CONTRACTOR SHALL COORDINATE WITH REPRESENTATIVES OF WATER, ELECTRICAL, GAS, TELEPHONE AND TELEVISIONS COMPANIES TO VERIFY AVAILABLE FACILITIES AND, IF APPLICABLE, TO ESTABLISH TEMPORARY FACILITIES.
- CONTRACTOR SHALL VERIFY ALL COLUMN COORDINATES AND CHECK THEM AGAINST DIMENSIONS SHOWN ON PLANS AND DETAILS. CONSTRUCTION MANAGER SHOULD BE NOTIFIED OF ANY DISCREPANCIES DURING STAKING.
- CONTRACTOR AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL PERMITS AND FEES REQUIRED, NOT NORMALLY COVERED BY THE BUILDING PERMITS.
- SUBSTITUTIONS: - REFERENCE TO MAKERS, BRAND, MODELS, ETC., IS TO ESTABLISH THE TYPE QUALITY DESIRED; SUBSTITUTION OF ACCEPTABLE EQUIVALENTS WILL BE PERMITTED IF APPROVED BY THE ARCHITECT AND OWNER PRIOR TO BID (UNLESS NOTED OTHERWISE). - THE ARCHITECT, ACTING AS THE OWNER'S DESIGNATED AGENT FOR THE DESIGN FOR THE PROJECT, WILL EXERCISE SOLE AUTHORITY FOR DETERMINING CONFORMANCE OF MATERIALS, EQUIPMENT AND SYSTEMS WITH THE INTENT OF THE DESIGN.
- ONLY NEW MATERIALS AND EQUIPMENT OF RECENT MANUFACTURE, OF QUALITY SPECIFIED, FREE FROM DEFECTS, WILL BE PERMITTED ON THE WORK.
- SHOP DRAWINGS: - SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL EQUIPMENT AND MATERIALS WHICH MUST INTERFACE AND COORDINATE WITH OTHERS, WHETHER DETAILED OR NOT. - SHOP DRAWINGS SHALL BE SUBMITTED IN A MINIMUM OF 3 COPIES AND ONE OZALID TRANSPARENCY; BROCHURES IN NOT LESS THAN 8 COPIES/
- TEMPORARY FACILITIES: - THE CONTRACTOR SHALL PROVIDE A STAGING AND MATERIAL STORAGE AREA ADJACENT TO THE AREA OF CONSTRUCTION. LOCATION SHALL BE COORDINATED WITH THE OWNER. - THE CONTRACTOR SHALL MAKE NECESSARY CONNECTIONS TO THE EXISTING UTILITIES FOR TEMPORARY POWER AND WATER SUPPLIES, AND SHALL COORDINATE SUCH USE WITH THE OWNER PRIOR TO CONNECTION. - THE CONTRACTOR SHALL PROVIDE TEMPORARY BARRICADES TO SEPARATE CONSTRUCTION AREAS FOR PUBLIC SAFETY AROUND ENTIRE PERIMETER OF CONSTRUCTION AREA.
- THE CONTRACTOR SHALL PROVIDE A BLANKET ONE (1) YEAR GUARANTEE FOR THE CONTRACT PROJECT WITH SEPARATE GUARANTEES AS SPECIFIED FOR TRADES/EQUIPMENT ITEMS WITH NAMES OF LOCAL REPRESENTATIVES TO BE CONTACTED FOR SERVICE. PROVIDE OPERATING MAINTENANCE BROCHURES, AND GUARANTEES AS REQUIRED.
- THE CONTRACTOR SHALL PROVIDE ONE COMPLETE SET OF AS-BUILT DRAWINGS INDICATING ALL DISCREPANCIES, CHANGES, ETC., AND ACTUAL LOCATIONS OF CONCEALED WORK TO THE ARCHITECT AT THE COMPLETION OF WORK PRIOR TO FINAL PAYMENTS. CHANGED MUST BE DRAFTED. NO FREEHAND REVISIONS WILL BE ACCEPTED.
- DRAWINGS OF EXISTING CONDITIONS HAVE BEEN COMPILED FROM EXISTING DATA SUPPLIED BY THE OWNER TO THE ARCHITECT. THE ARCHITECT MAKES NO WARRANTY EITHER EXPRESSED OR IMPLIED, FOR THE ACCURACY OR COMPLETENESS OF THE EXISTING INFORMATION RECORDED. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS. NOTIFY ARCHITECT IN WRITING OF ANY DISCREPANCIES FOR CLARIFICATION PRIOR TO PROCEEDING WITH WORK.
- THE EXIT DOOR MUST OPEN OVER A LANDING NOT MORE THAN 1" BELOW THE THRESHOLD 3304(h).
- A PERMIT FROM THE DEPARTMENT OF PUBLIC WORKS IS REQUIRED FOR A PROTECTION FENCE OR CANOPY ON OR OVER ANY STREET OR PUBLIC SPACE
- APPROVED NUMBERS OR ADDRESSES SHALL BE PROVIDED IN SUCH A POSITION AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET.



DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331

FOR BUILDING PERMIT

C3 - BRANSON MO  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616

DATE	DESCRIPTION
01.15.2024	PERMIT SET
DESIGN DRAWN PROJECT NO.	Designer Author 23_05_19

GENERAL NOTES &  
ABBREVIATIONS

T1.0



- NOTES:
1. PROTRUDING OBJECTS SHALL NOT REDUCE THE REQUIRED WIDTH OF AN ACCESSIBLE ROUTE (307.5)
  2. PROTRUDING OBJECTS ON A CIRCULATION PATH SHALL COMPLY W/ SECTION 307 (204.1)

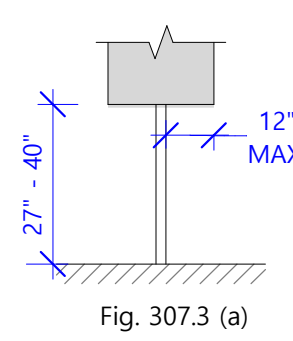


Fig. 307.3 (a)

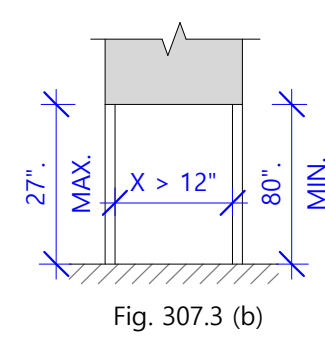


Fig. 307.3 (b)

POST-MOUNTED PROTRUDING OBJECTS

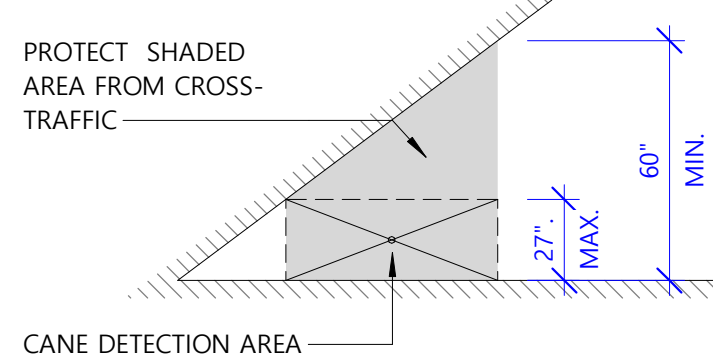


Fig. 307.5  
VERTICAL CLEARANCES

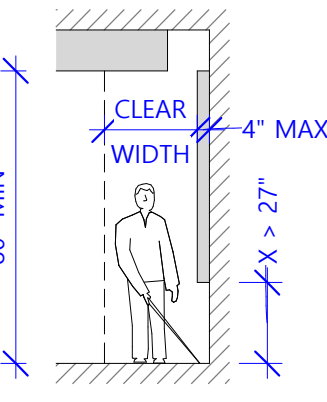
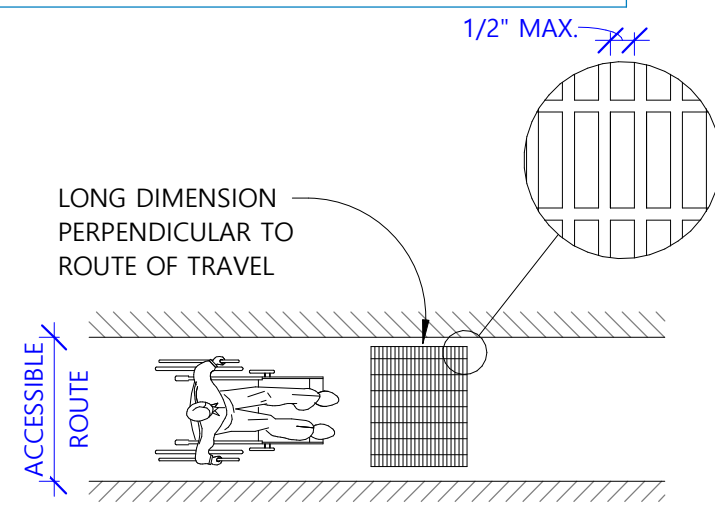


Fig. 307.2  
LIMITS OF PROTRUDING OBJECTS

PROTRUDING OBJECTS  
Ref. Section 307

NOTE:  
CHANGES IN LEVEL GRATER THAN 1/2" SHALL BE RAMPED,  
AND SHALL COMPLY W/ SECTIONS 405 AND 406. (303.4)



OPENINGS IN FLOOR OR GROUND SURFACE  
Ref. Section 302.3

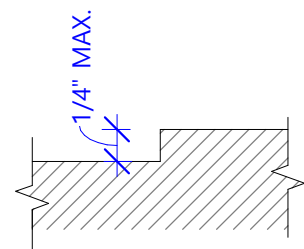


Fig. 303.2

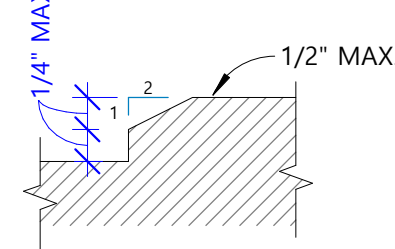


Fig. 303.3

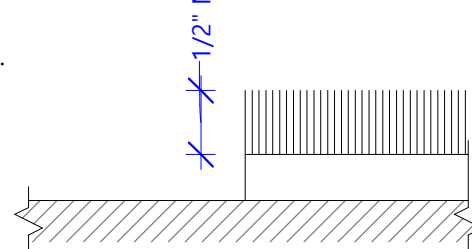
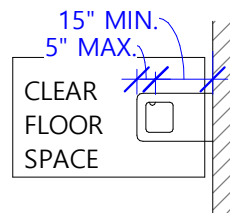
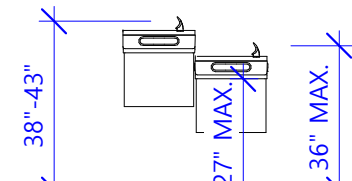


Fig. 302.2  
CARPET PILE THICKNESS

FLOOR & GROUND SURFACES  
Ref. Sections 302 & 303



DRINKING FOUNTAIN SPOUT  
LOCATION  
Fig. 602.5



Ref. 602.7  
Ref. 602.4  
DRINKING FOUNTAIN OUTLET  
HEIGHTS

DRINKING FOUNTAIN  
Ref. SECTION 602

DRINKING FOUNTAIN  
NOTES:

1. KNEE & TOE CLEARANCE PROVIDING WITH 306 SHALL BE PROVIDED (602.2)
2. WHERE A DRINKING FOUNTAIN IS REQUIRED, TWO SHALL BE PROVIDED; ONE HIGH & ONE LOW (211.2)
3. UNITS SHALL HAVE A CLEAR FLOOR SPACE COMPLYING WITH 305 POSITIONED FOR FORWARD APPROACH AND CENTERED ON UNIT (602.2)

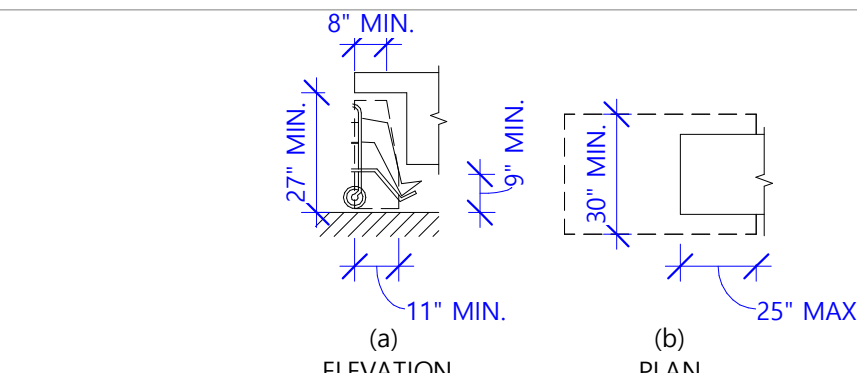


Fig. 306.3  
KNEE CLEARANCES

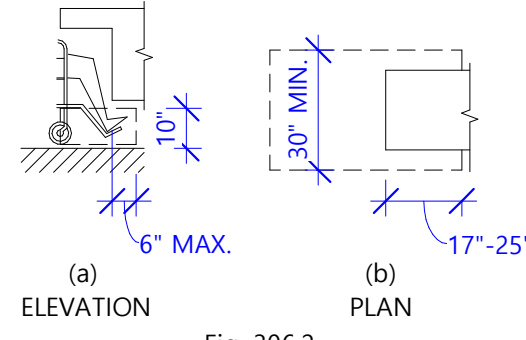
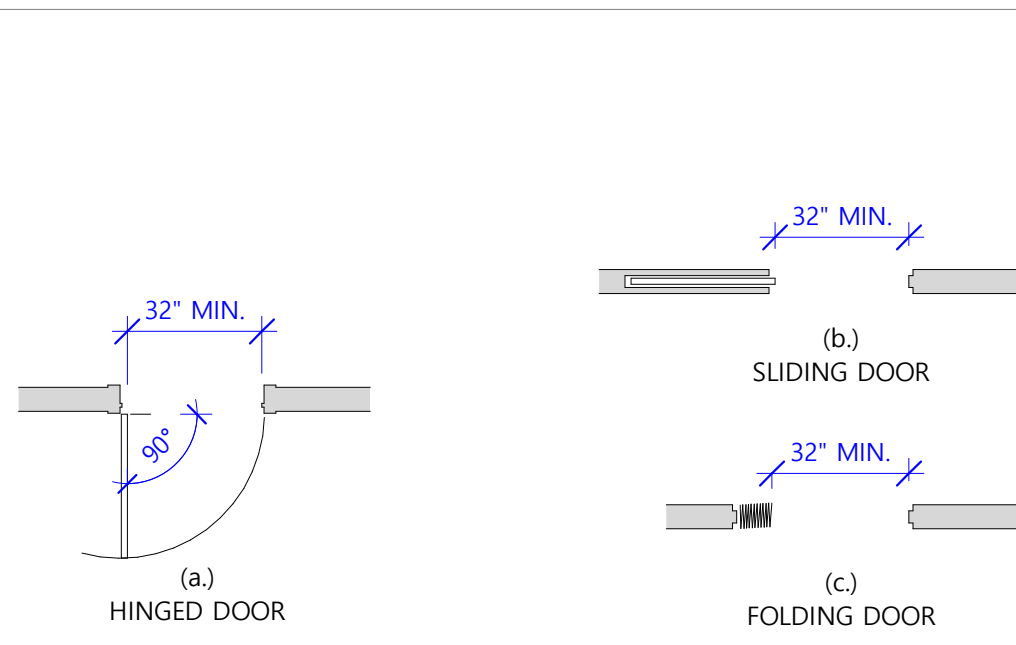


Fig. 306.2  
TOE CLEARANCES  
KNEE AND TOE CLEARANCES  
Ref. Section 306



CLEAR WIDTH OF DOORWAYS  
Fig. 404.2.3

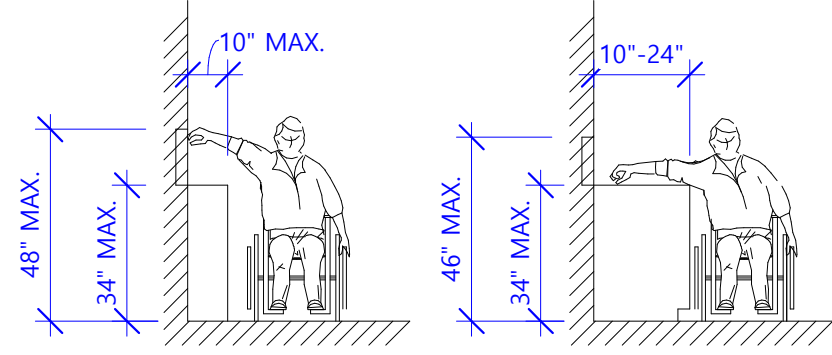


Fig. 308.3.2  
OBSTRUCTED HIGH SIDE REACH

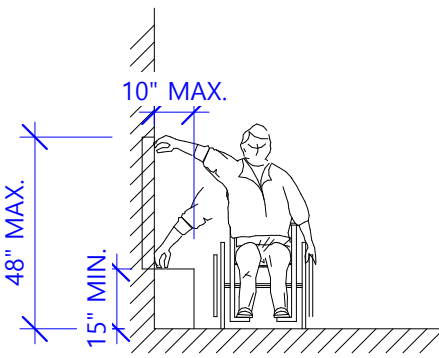


Fig. 308.3.1  
UNOBSTRUCTED SIDE REACH

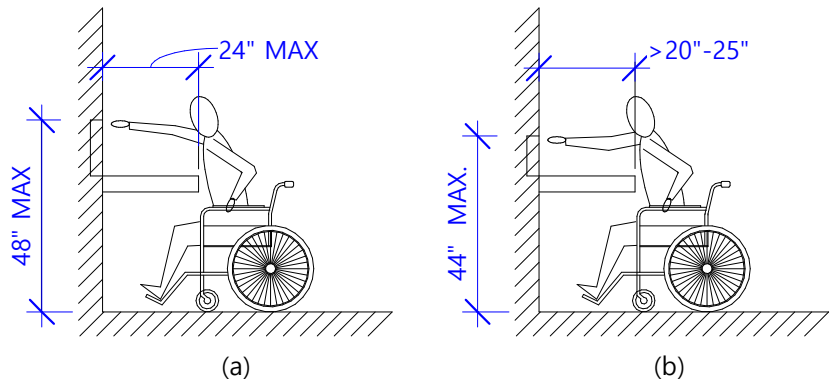


Fig. 308.2.2  
OBSTRUCTED HIGH  
FORWARD REACH

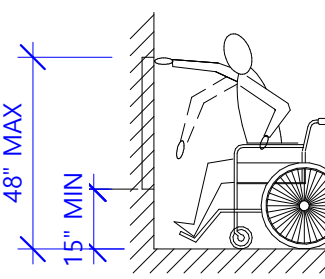


Fig. 308.2.1  
UNOBSTRUCTED  
FORWARD REACH  
REACH RANGES  
Ref. Section 308

NOTE:  
ANY OPERABLE PART OF  
ANY DEVICE SHALL BE  
INSTALLED WITHIN THE  
REACHES SHOWN (309)

- CLEAR FLOOR SPACE NOTES:
1. DOOR SHALL BE PERMITTED TO SWING INTO TURNING SPACES (304.4)
  2. ONE FULL UNOBSTRUCTED SIDE OF THE CLEAR FLOOR SPACE MUST ADJOIN AN ACCESSIBLE ROUTE OR ANOTHER CLEAR FLOOR SPACE (305.6)
  3. A CLEAR FLOOR SPACE IS REQUIRED AT ANY DEVICE WITH AN OPERABLE PART (309.2)

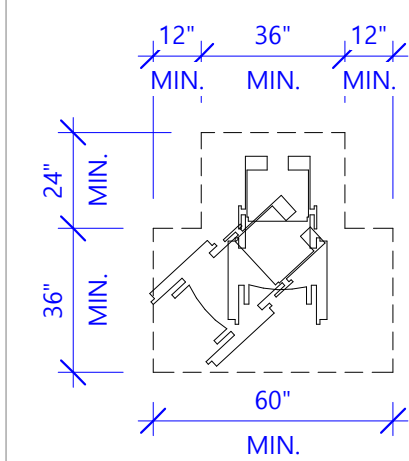
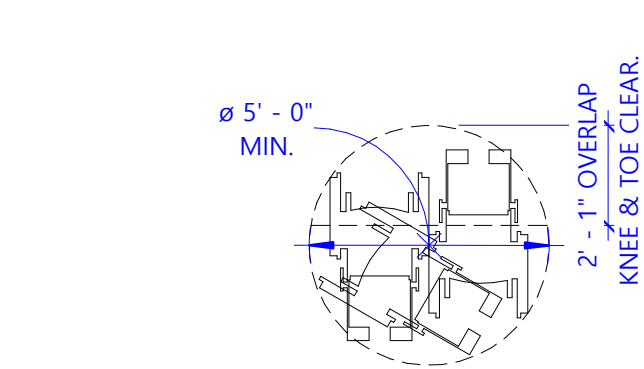


Fig. 304.3.2  
T-SHAPED SPACE



Ref. 304.3.2  
CIRCULAR SPACE

TURNING SPACE  
Ref. Section 304

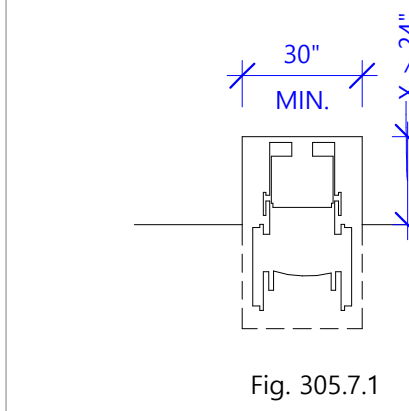


Fig. 305.7.1

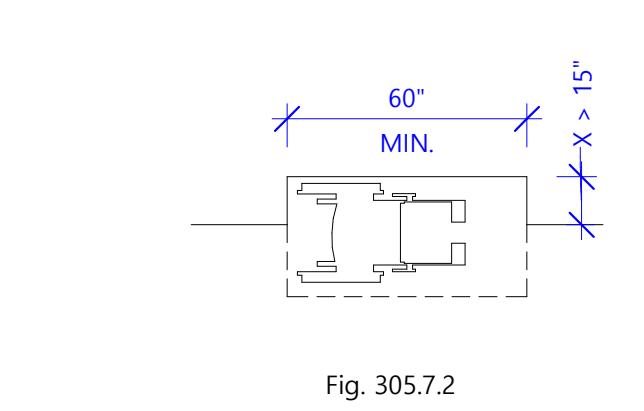
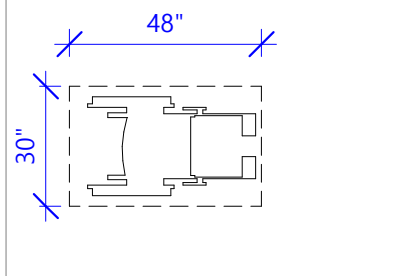
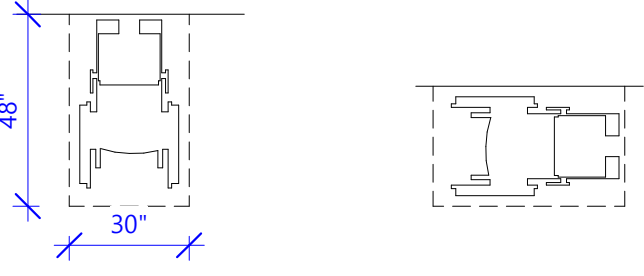


Fig. 305.7.2

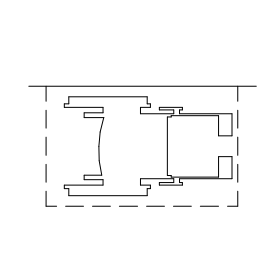
CLEAR FLOOR SPACE IN ALCOVES



CLEAR FLOOR SPACE  
Fig. 305.3



FORWARD APPROACH  
Fig. 305.5 (a)



PARALLEL APPROACH  
Fig. 305.5 (b)

MINIMUM CLEAR FLOOR SPACE  
Ref. Section 304 & 305

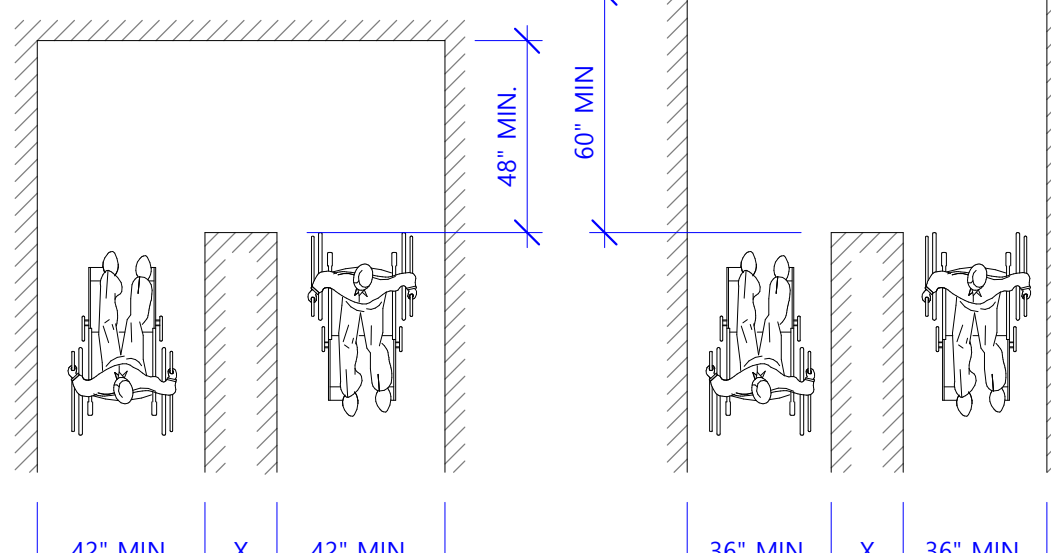
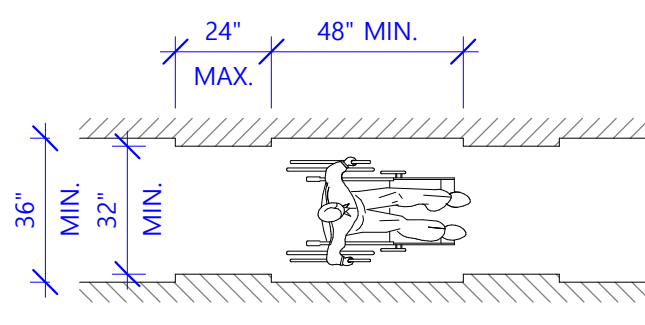


Fig. 403.5.2 (a)

Fig. 403.5.2 (b)

CLEAR WIDTHS AT 180 DEGREE TURNS



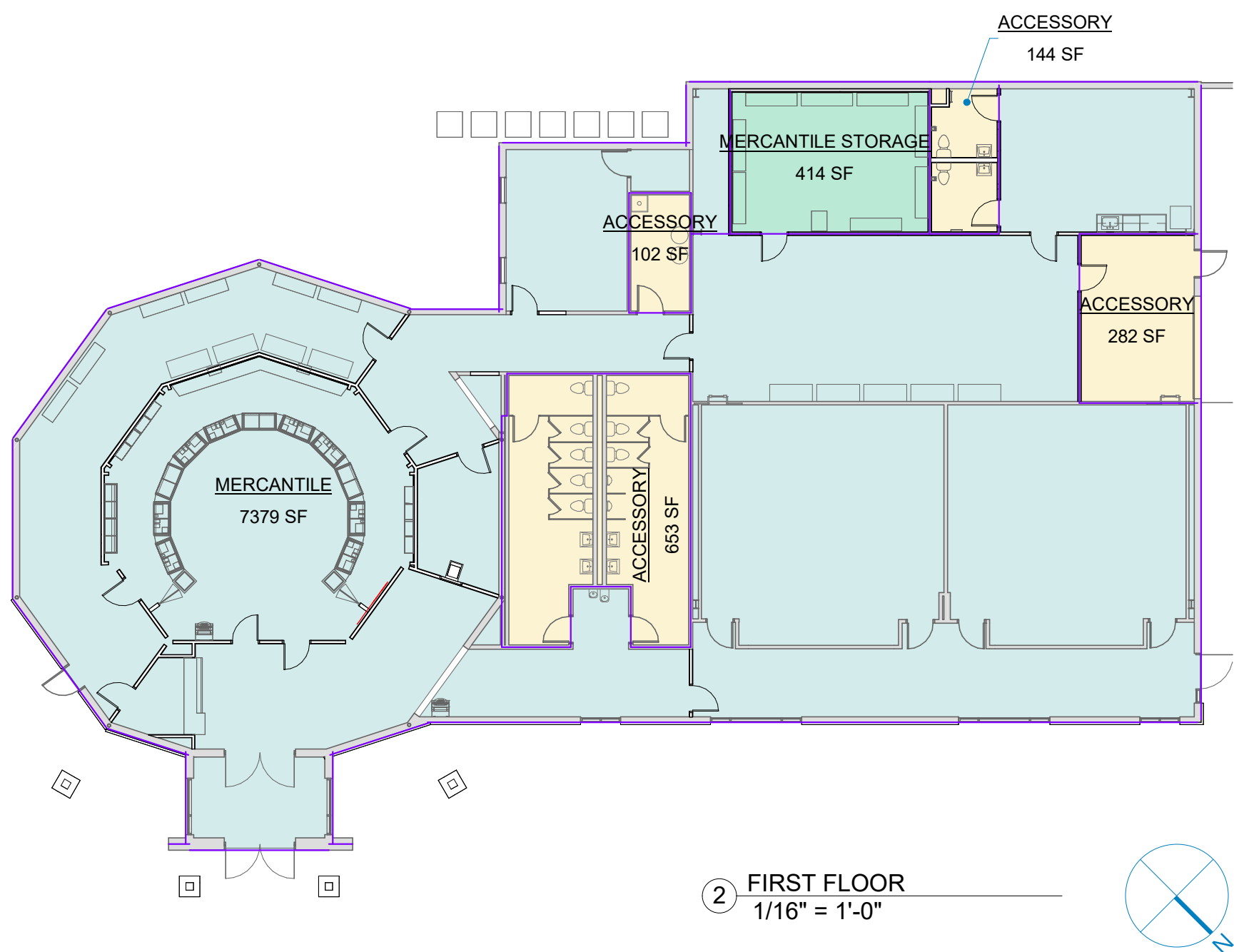
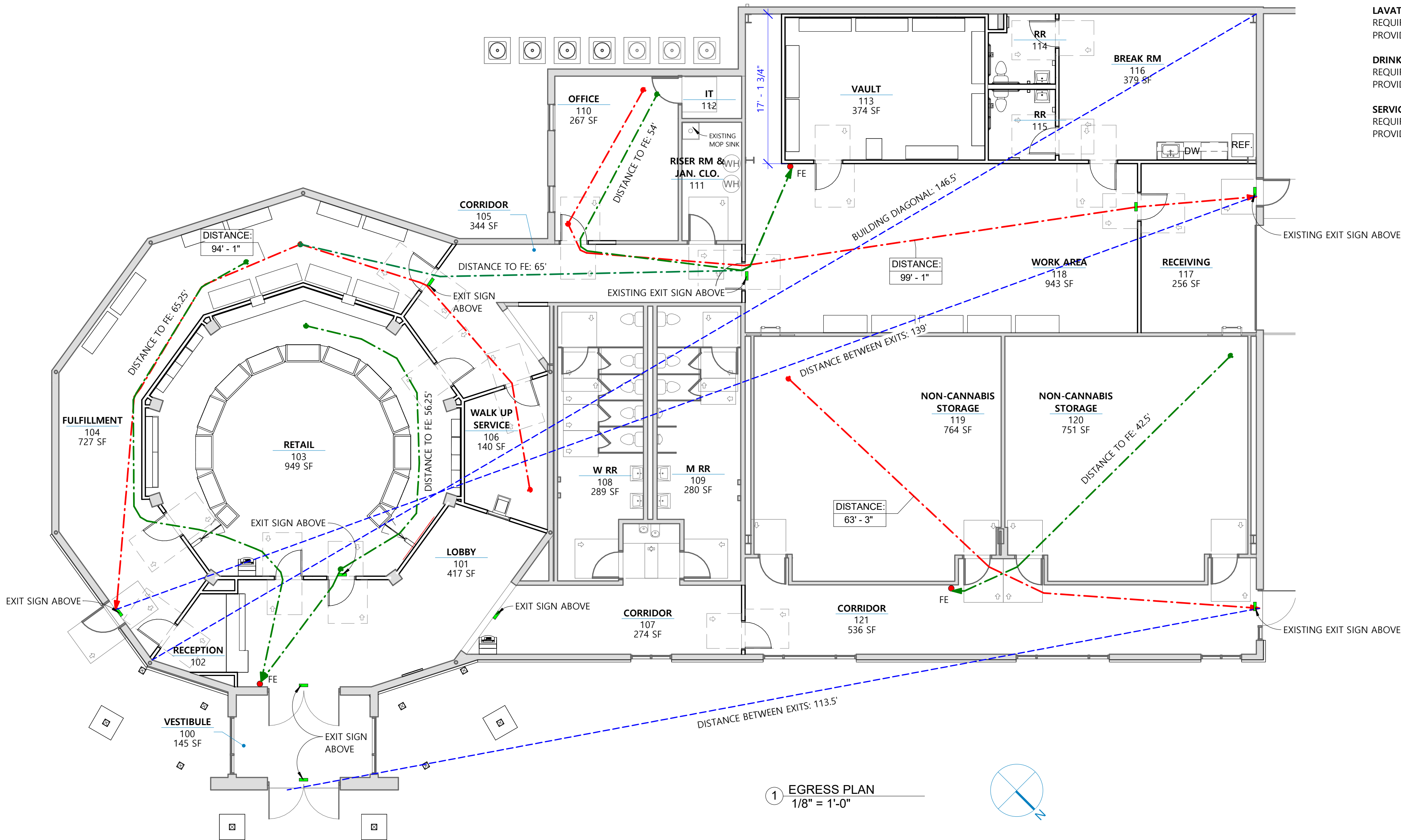
CLEAR WIDTHS  
Fig. 403.5.1

ACCESSIBLE ROUTE NOTE:  
THE SLOPE OF A WALKING SURFACE ALONG AN  
ACCESSIBLE ROUTE SHALL NOT BE STEEPER THAN 1:20  
AND CROSS SLOPES SHALL NOT EXCEED 1:48 (402)

ACCESSIBLE ROUTE  
Ref. Section 402

 (a) FRONT APPROACH	 (a) FRONT APPROACH, PULL SIDE	 (b) FRONT APPROACH, PUSH SIDE	 (c) FRONT APPROACH, PUSH SIDE: DOOR w/ BOTH CLOSER & LATCH	 (a) PULL SIDE		
 (b) SIDE APPROACH	 (d) HINGE APPROACH, PULL SIDE	 (e) HINGE APPROACH, PULL SIDE	 (f) HINGE APPROACH, PUSH SIDE	 (b) PUSH SIDE		
 (c) POCKET OR HINGE APPROACH	 (g) HINGE APPROACH, PUSH SIDE: DOOR w/ BOTH CLOSER & LATCH	 (h) LATCH APPROACH, PULL SIDE	 (i) LATCH APPROACH, PULL SIDE: DOOR w/ CLOSER	 (c) PUSH SIDE: DOOR w/ BOTH CLOSER & LATCH		
 (d) STOP OR LATCH APPROACH	 (i) LATCH APPROACH, PUSH SIDE	 (k) LATCH APPROACH, PULL SIDE: DOOR w/ CLOSER	<p><u>MANUAL SWING DOORS &amp; GATES</u> Fig 404.2.4.1</p> <p><u>RECESSED DOORS &amp; GATES</u> Fig 404.2.3</p>			
<p><u>DOORWAYS w/o DOORS, SLIDING DOORS, GATES &amp; FOLDING DOORS</u> Fig 404.2.4.2</p>					<p><b>MANEUVERING CLEARANCE NOTES:</b></p> <ol style="list-style-type: none"><li>1. DOORS, DOORWAYS AND GATES PROVIDING USER PASSAGE SHALL COMPLY (206.5)</li><li>2. ADJUST DOOR CLOSER SO THAT THE DOOR TAKES AT LEAST 5 SECONDS TO MOVE FROM 90 DEGREE OPEN POSITION TO 12 DEGREES FROM LATCH (404.2.8)</li><li>3. FIRE DOORS SHALL HAVE A MINIMUM OPENING FORCE ALLOWABLE BY THE BUILDING AND FORE CODES. OTHER INTERIOR DOORS, 5 POUNDS MAXIMUM. (404.2.9)</li><li>4. MANEUVERING CLEARANCES ARE REQUIRED AT AUTOMATIC DOORS UNLESS DOOR OPERATION HAS STANDBY POWER (404.3.2)</li></ol>	
<p><b>MANEUVERING CLEARANCES</b> Ref. Section 404.2.3</p>						





**PLUMBING CALCS**  
OCCUPANCY CLASSIFICATION: MERCANTILE  
OCCUPANT LOAD: 128 OCC.

**WATER CLOSETS: 1 PER 500 OCC.**  
REQUIRED: 1  
PROVIDED: 10

**LAVATORIES: 1 PER 750 OCC.**  
REQUIRED: 1  
PROVIDED: 6

**DRINKING FOUNTAIN: 1 PER 1000 OCC.**  
REQUIRED: 1  
PROVIDED: 1 HIGH-LOW

**SERVICE SINK:**  
REQUIRED: 1  
PROVIDED: 1

**APPLICABLE CODES:**  
2018 INTERNATIONAL BUILDING CODE  
2018 INTERNATIONAL MECHANICAL CODE  
2018 INTERNATIONAL PLUMBING CODE  
2014 NATIONAL ELECTRICAL CODE

**CODE REVIEW**

PROPOSED METHOD OF COMPLIANCE: PRESCRIPTIVE  
ALTERATION LEVEL: LEVEL 3

PREVIOUS OCCUPANCY CLASSIFICATION: A-3 ASSEMBLY

PROPOSED OCCUPANCY CLASSIFICATION: M - MERCANTILE

MAXIMUM ALLOWABLE AREA (SF):  
M MERCANTILE 36,000 SF

CONSTRUCTION TYPE: VB

MAX. TRAVEL DISTANCE:  
MAX. ALLOWABLE TRAVEL DISTANCE w/ SPRINKLERS:  
GROUP M - MERCANTILE 250 ft.

MEANS OF EGRESS SIZING (BASED ON OCC. LOAD):  
0.2 (128 OCC.) = 26"

MINIMUM CORRIDOR WIDTH: 44"

MINIMUM DOOR SIZE: 32" CLEAR

DEAD END CORRIDORS: SECTION 1018.4  
MAX. ALLOWABLE w/ SPRINKLERS: 20 ft.

OCCUPANCY CALCULATION: TABLE 1004.1.2

OCCUPANCY LOAD			
FUNCTION OF SPACE	OCCUPANT LOAD FACTOR	AREA	OCCUPANCY LOAD
ACCESSORY	1/300 SF	1180 SF	3.93
MERCANTILE	1/60 SF	7379 SF	122.98
MERCANTILE STORAGE	1/300 SF	414 SF	1.38
TOTAL:		8972 SF	128 OCC.

**FIRE SUPPRESSION** SECTION 903

**EXISTING SPRINKLER SYSTEM TO REMAIN**  
GROUP M: **NO SPRINKLER SYSTEM REQUIRED**  
AUTOMATIC SPRINKLER SYSTEMS REQUIRED WHERE:

- FIRE AREA EXCEEDS 12,000 SF
- FIRE AREA IS LOCATED MORE THAN THREE STORIES ABOVE GRADE PLANE
- THE COMBINED AREA OF ALL GROUP M FIRE AREAS ON ALL FLOORS, INCLUDING ANY MEZZANINES, EXCEEDS 24,000 SF.
- A GROUP M OCCUPANCY USED FOR THE DISPLAY AND SALE OF UPHOLSTERED FURNITURE OR MATTRESSES EXCEEDS 5,000 SF.

**FIRE ALARM & DETECTION SYSTEMS** SECTION 907

GROUP M: **NO FIRE ALARM REQUIRED**  
FIRE ALARMS REQUIRED WHERE:

- GROUP M OCCUPANT LOAD OF ALL FLOORS IS 500 OR MORE PERSONS.
- THE GROUP M OCCUPANT LOAD IS MORE THAN 100 PERSONS ABOVE OR BELOW THE LOWEST LEVEL OF EXIT DISCHARGE.

**FIRE EXTINGUISHERS** TABLE 906.3

MINIMUM RATED SINGLE EXTINGUISHER: 2-A

MAXIMUM FLOOR AREA PER UNIT OF A: 3,000 SF

MAXIMUM TRAVEL DISTANCE TO EXTINGUISHER: 75'

**AREA LEGEND**

- ACCESSORY
- MERCANTILE
- MERCANTILE STORAGE

LEGEND	
	NEW CONSTRUCTION
	EXISTING TO REMAIN



DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331

FOR BUILDING PERMIT

C3 - BRANSON MO  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616

DATE  
01.15.2024

DESCRIPTION  
PERMIT SET

DESIGN  
DRAWN  
PROJECT NO.

Designer  
Author  
23\_05\_19

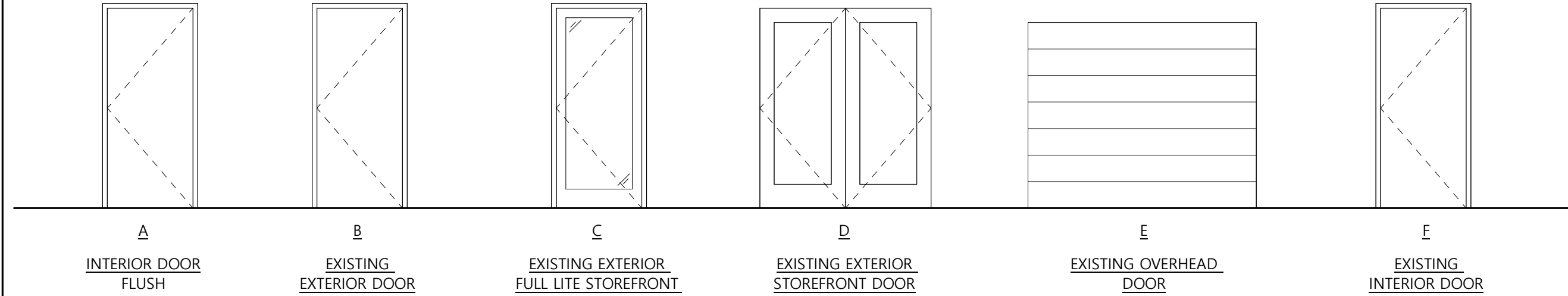
CODE REVIEW &  
LIFE SAFETY PLAN

T3.0



C:\Users\warchitect\Documents\231206\_Branson MO C3\_Central\_Tmourad@dfdgonline.com.rvt

DOOR SCHEDULE																																					
LOCATION	DOOR NUMBER	DOOR SIZE		THICKNESS	DOOR			FRAME		OPERATION	HARDWARE SET	KEY	ACCESS CONTROLS	HINGES	ELECTRIC STRIKE	POWER SUPPLY	LOCK GUARD	CARD READER	FOB	EXIT DEVICE	EXIT DEVICE TRIM	SMOKE SEAL	KICK-DOWN HOLD OPEN	FLUSH BOLT	ASTRAGAL	PUSH PLATE	PULL PLATE	THRESHOLD	WALL BUMPER	DOOR BOTTOM	DOOR CLOSER	WEATHERSTRIPPING	AUTO DOOR BOTTOM	ADHESIVE CORNER PAD	DEADLOCK W/ VAC. INDICATOR	COMMENTS	
		WIDTH	HEIGHT		PANEL TYPE	MATERIAL	FINISH	MATERIAL	FINISH																												
VESTIBULE	100	8' - 0"	8' - 0"	2"	D	EXIST.	PNT-4	EXIST.	PNT-4	SWING	ENTRY	A					X															X	X				
LOBBY	101	8' - 0"	8' - 0"	2"	D	EXIST.	PNT-4	EXIST.	PNT-4	SWING		B																				X					
RECEPTION	102	3' - 0"	7' - 0"	1 3/4"	A	HM	PNT-4	HM	PNT-4	SWING	STOREROOM	B	X		X			X														X					
LOBBY	103A	3' - 0"	7' - 0"	1 3/4"	A	HM	PNT-4	HM	PNT-4	SWING	STOREROOM	B	X		X		X	X														X					
RETAIL	103B	3' - 0"	7' - 0"	1 3/4"	A	HM	PNT-4	HM	PNT-4	SWING	STOREROOM	B	X		X		X	X														X					
RETAIL	103C	3' - 0"	7' - 0"	1 3/4"	A	HM	PNT-4	HM	PNT-4	SWING	STOREROOM	B	X		X		X	X														X					
FULFILLMENT	104A	3' - 0"	7' - 0"	1 3/4"	B	EXIST.	PNT-4	EXIST.	PNT-4	SWING	STOREROOM	A	X		X		X	X														X	X				
CORRIDOR	104B	3' - 0"	7' - 0"	1 3/4"	A	HM	PNT-4	HM	PNT-4	SWING	STOREROOM	B																				X					
CORRIDOR	105	3' - 0"	7' - 0"	1 3/4"	A	HM	PNT-4	HM	PNT-4	SWING	STOREROOM	B	X		X			X														X					
WALK UP SERVICE	106	3' - 0"	7' - 0"	1 3/4"	A	HM	PNT-4	HM	PNT-4	SWING	STOREROOM	B	X		X			X														X					
W RR	108	3' - 0"	7' - 0"	1 3/4"	F	EXIST.	PNT-4	EXIST.	PNT-4	SWING																						X					
M RR	109	3' - 0"	7' - 0"	1 3/4"	F	EXIST.	PNT-4	EXIST.	PNT-4	SWING																						X					
OFFICE	110	3' - 0"	7' - 0"	1 3/4"	A	HM	PNT-4	HM	PNT-4	SWING	STOREROOM	B	X		X			X														X					
RISER RM & JAN. CLO.	111	3' - 0"	7' - 0"	1 3/4"	F	EXIST.	PNT-4	EXIST.	PNT-4	SWING	STOREROOM	B							X													X					
IT	112	3' - 0"	7' - 0"	1 3/4"	F	EXIST.	PNT-4	EXIST.	PNT-4	SWING	STOREROOM	B	X		X			X														X					
VAULT	113	3' - 0"	7' - 0"	1 3/4"	A	HM	PNT-4	HM	PNT-4	SWING	STOREROOM	C	X		X		X	X														X					
RR	114	3' - 0"	7' - 0"	1 3/4"	A	HM	PNT-4	HM	PNT-4	SWING	PRIVACY	B																				X					
RR	115	3' - 0"	7' - 0"	1 3/4"	A	HM	PNT-4	HM	PNT-4	SWING	PRIVACY	B																				X					
BREAK RM	116	3' - 0"	7' - 0"	1 3/4"	A	HM	PNT-4	HM	PNT-4	SWING	CLASS ROOM	B																				X					
RECEIVING	117A	3' - 0"	7' - 0"	1 3/4"	B	EXIST.	PNT-4	EXIST.	PNT-4	SWING	STOREROOM	A	X		X		X	X														X	X				
RECEIVING	117B	12' - 0"	12' - 0"	1 1/2"	E	EXIST.	PNT-4	EXIST.	PNT-4	OVERHEAD	STOREROOM	B																				X					
RECEIVING	117C	3' - 0"	7' - 0"	1 3/4"	A	HM	PNT-4	HM	PNT-4	SWING	STOREROOM	B																				X					
WORK AREA	118	3' - 0"	7' - 0"	1 3/4"	A	HM	PNT-4	HM	PNT-4	SWING	STOREROOM	B																				X					
NON-CANNABIS STORAGE	119A	3' - 0"	7' - 0"	1 3/4"	F	EXIST.	PNT-4	EXIST.	PNT-4	SWING	STOREROOM	B																				X					
NON-CANNABIS STORAGE	119B	3' - 0"	7' - 0"	1 3/4"	F	EXIST.	PNT-4	EXIST.	PNT-4	SWING	STOREROOM	B																				X					
NON-CANNABIS STORAGE	120A	3' - 0"	7' - 0"	1 3/4"	F	EXIST.	PNT-4	EXIST.	PNT-4	SWING	STOREROOM	B																				X					
NON-CANNABIS STORAGE	120B	3' - 0"	7' - 0"	1 3/4"	F	EXIST.	PNT-4	EXIST.	PNT-4	SWING	STOREROOM	B																				X					
CORRIDOR	121A	4' - 0"	8' - 0"	1 3/4"	C	EXIST.	PNT-4	EXIST.	PNT-4	SWING	STOREROOM	A																				X					
CORRIDOR	121B	3' - 0"	7' - 0"	1 3/4"	A	HM	PNT-4	HM	PNT-4	SWING	STOREROOM	B	X		X		X	X														X	X				
MECHANICAL MEZZANINE	200	3' - 0"	7' - 0"	1 3/4"	F	EXIST.	PNT-4	EXIST.	PNT-4	SWING	STOREROOM	B																				X					
MECHANICAL MEZZANINE	202	3' - 0"	7' - 0"	1 3/4"	F	EXIST.	PNT-4	EXIST.	PNT-4	SWING	STOREROOM	B																				X					



**HARDWARE NOTES:**

ALL HM HANDLESETS TO BE HAGER 3400 GRADE 1 OR SIM.  
ALL EXTERIOR CLOSERS TO BE HEAVY DUTY.

**KEYING SCHEDULE**

- A. KEY FOR ALL EXTERIOR DOORS.  
B. KEY FOR ALL INTERIOR DOORS EXCLUDING THE VAULT.  
C. KEY FOR VAULT ONLY.

**NOTE:** PROVIDE MASTER KEY FOR ALL DOORS.

**NOTES:**

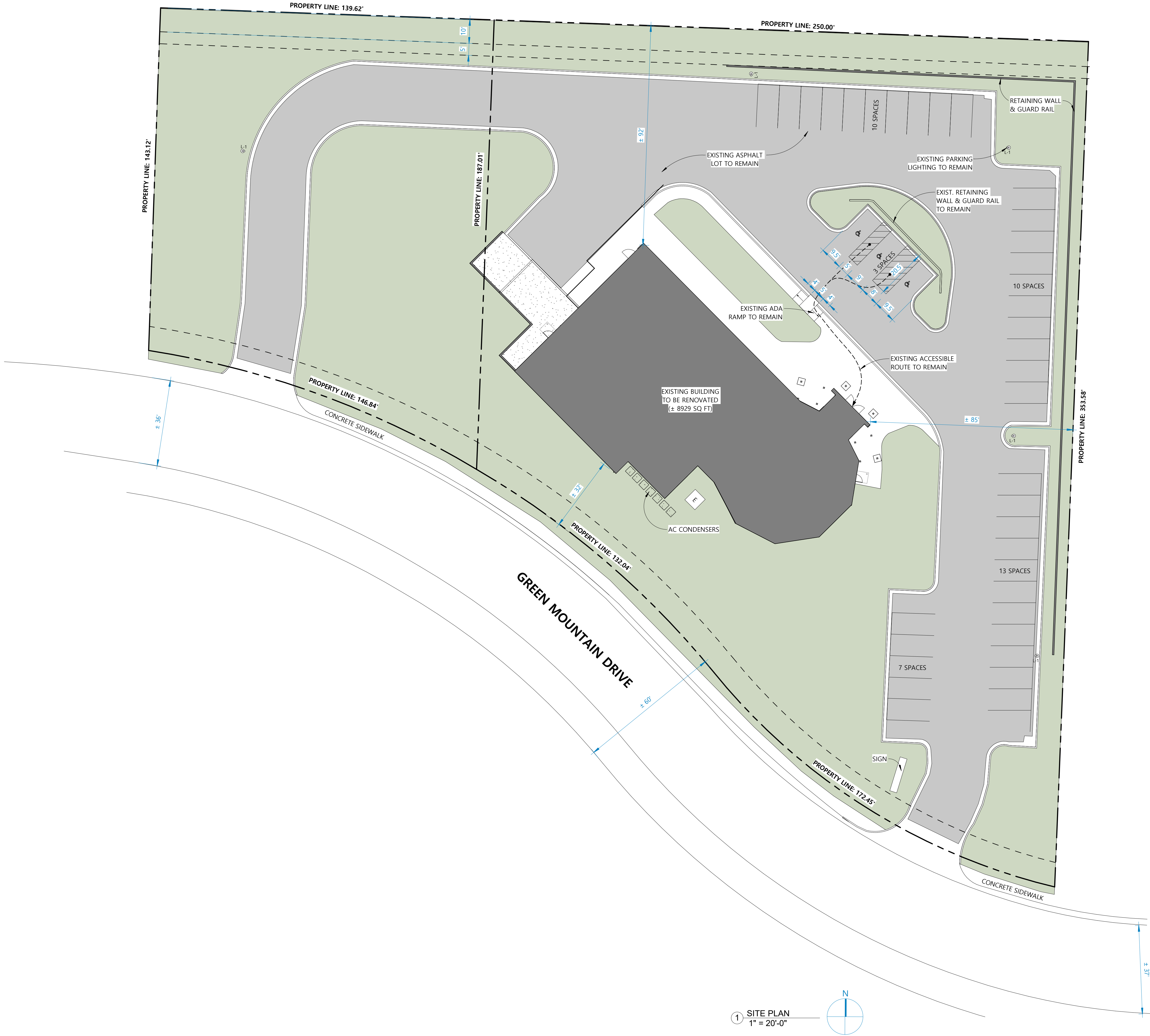
1. ALL DOOR HARDWARE ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST TO OPERATE. OPERABLE PARTS OF THE HARDWARE SHALL BE BETWEEN 34 INCHES AND 48 INCHES ABOVE THE FLOOR.
2. GLASS IS TO BE TEMPERED IF IT MEETS ANY OF THE FOLLOWING:
- A. ALL GLASS THAT IS BOTH WITHIN 60 INCHES OF THE FLOOR AND 24 INCHES OF THE VERTICAL EDGE OF A DOOR
- B. GLASS IN A SWINGING OR SLIDING DOORS
- C. GLAZING WITH AN AREA OF GREATER THAN 9 SF AND 18 INCHES OR LESS ABOVE THE FLOOR SURFACE AND TOP EDGE GREATER THAN 36 INCHES ABOVE THE FLOOR.
- D. GLAZING IN GUARD RAILS AND RAILINGS
- E. GLAZING ADJACENT TO STAIRWAYS, LANDINGS AND RAMPS WITHIN A 36 INCH HORIZONTAL DISTANCE OF A WALKING SURFACE AND LESS THAN 60 INCHES ABOVE THE FLOOR OR WALKING SURFACE AND 60 INCHES HORIZONTALLY FROM THE BOTTOM OF A STAIRWAY IN ANY DIRECTION
- F. GLAZING NEAR WET SURFACES AS OUTLINED IN 2406.4.5

ROOM FINISH SCHEDULE									
ROOM NUMBER	ROOM NAME	AREA	PERIMETER	FINISH			CEILING HEIGHT	COMMENTS	
				FLOOR	BASE	WALL	CEILING		
100	VESTIBULE	145 SF	49' - 6 1/2"	EXIST.	WB-1	WP-1	EX. GYP. BD.	± 10' - 0"	BID ALTERNATE: FLOOR TO BE CONC-1
101	LOBBY	417 SF	98' - 7"	EXIST.	WB-1	PNT-1, WP-1	EX. GYP. BD., EX. ACT/ PNT-5	± 16' - 0", 18' - 0"	BID ALTERNATE: FLOOR TO BE CONC-1
102	RECEPTION	67 SF	33' - 2"	EXIST.	WB-1	PNT-1	EX. GYP. BD., EX. ACT/ PNT-5	± 16' - 0", 18' - 0"	BID ALTERNATE: FLOOR TO BE CONC-1
103	RETAIL	949 SF	133' - 5"	EXIST.	WB-1	PNT-1	EX. GYP. BD.	± 34' - 6" SLOPED	BID ALTERNATE: FLOOR TO BE CONC-1
104	FULFILLMENT	727 SF	171' - 10 1/2"	EXIST.	VB-1	PNT-1	EX. GYP. BD., EX. ACT	± 16' - 0", 18' - 0"	
105	CORRIDOR	344 SF	109' - 1"	EXIST.	VB-1	PNT-1	EX. ACT	± 11' - 0", 16' - 0", 18' - 0"	
106	WALK UP SERVICE	140 SF	49' - 4 1/2"	EXIST.	VB-1	PNT-1	EX. GYP. BD., EX. ACT	± 16' - 0", 18' - 0"	
107	CORRIDOR	274 SF	90' - 4"	EXIST.	WB-1	PNT-1	EX. ACT	± 11' - 0"	BID ALTERNATE: FLOOR TO BE CONC-1
108	W RR	289 SF	82' - 7 1/2"	EXIST.	EXIST.	EXIST.	EX. ACT	± 9' - 0"	BID ALTERNATE: REPLACE EXISTING WALL PAPER W/ WP-1 AND FLOOR TO BE CONC-1
109	M RR	280 SF	82' - 2"	EXIST.	EXIST.	EXIST.	EX. ACT	± 9' - 0"	BID ALTERNATE: REPLACE EXISTING WALL PAPER W/ WP-1 AND FLOOR TO BE CONC-1
110	OFFICE	267 SF	66' - 0 1/2"	EXIST.	VB-1	PNT-1	EX. ACT	± 9' - 0"	
111	RISER RM & JAN. CLO.	93 SF	40' - 10 1/2"	EXIST.	VB-1	PNT-1, FRP	EXIST.	EXIST.	
112	IT	33 SF	23' - 5 1/2"	EXIST.	VB-1	PNT-1	EX. GYP. BD., EX. ACT	± 9' - 0", 23' - 11" SLOPED	
113	VAULT	374 SF	78' - 5 1/2"	EXIST.	VB-1	PNT-1	GYP. BD.	12' - 0"	
114	RR	57 SF	31' - 3 1/2"	EXIST.	VB-1	PNT-1, FRP	GYP. BD.	9' - 0"	
115	RR	62 SF	31' - 5"	EXIST.	VB-1	PNT-1, FRP	GYP. BD.	9' - 0"	
116	BREAK RM	379 SF	78' - 8 1/2"	EXIST.	VB-1	PNT-1	EX. GYP. BD.	± 23' - 11 SLOPED	
117	RECEIVING	256 SF	65' - 2 1/2"	EXIST.	VB-1	PNT-1	EX. GYP. BD.	± 28' - 2" SLOPED	
118	WORK AREA	943 SF	163' - 0"	EXIST.	VB-1	PNT-1	EX. GYP. BD.	± 28' - 2" SLOPED	
119	NON-CANNABIS STORAGE	764 SF	112' - 10"	EXIST.	EXIST.	PNT-1	EX. GYP. BD., EX. ACT	± 9' - 0", 11' - 0"	REPAIR OR REPLACE WALL BASE AND CEILING TILES AS NECESSARY
120	NON-CANNABIS STORAGE	751 SF	111' - 10 1/2"	EXIST.	EXIST.	PNT-1	EX. GYP. BD., EX. ACT	± 9' - 0", 11' - 0"	REPAIR OR REPLACE WALL BASE AND CEILING TILES AS NECESSARY
121	CORRIDOR	536 SF	153' - 4 1/2"	EXIST.	VB-1	PNT-1	EX. ACT	± 11' - 0"	
200	LANDING	52 SF	29' - 4"	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	
201	MECHANICAL MEZZANINE	407 SF	109' - 10"	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	
202	LANDING	52 SF	29' - 4 1/2"	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	

WINDOW SCHEDULE							
TAG	WINDOW TYPE	WINDOW SIZE		MANUFACTURER	MODEL	FINISH	COMMENTS
		WIDTH	HEIGHT				
A	DRIVE THRU	2' - 8 1/4"	4' - 1 1/4"	QUIKSERV CORP	QSP-7135		
<div><div>2' - 8 3/4" R.O.</div><div>1' - 10 5/8" 4' - 1 5/8" R.O.</div><div>3' - 0" T.O. DRAWER</div><div>A</div></div>							
FINISH MATERIALS	FINISH CODE	MATERIAL	MANUFACTURER	STYLE	COLOR	SIZE	PATTERN/COMMENTS
	VB-1	VINYL WALL BASE	JOHNSONITE	ROLLED VINYL BASE	GREY	6"	ROLLED
	WB-1	MDF	LUMBER YARD	FLAT	PNT-1	6"	STRAIGHT
	PNT-1	PAINT	SHERWIN WILLIAMS	PROMAR 200, ZERO VOC	PURE WHITE SW7005	NA	EG. SHEL TYP. (FLAT IN RETAIL ONLY)
	PNT-2	PAINT	SHERWIN WILLIAMS	PROMAR 200, ZERO VOC	CAVIAR SW6990	NA	EG. SHEL TYP. (FLAT IN RETAIL ONLY)
	PNT-3	PAINT	SHERWIN WILLIAMS	PROMAR 200, ZERO VOC	CEILING BRIGHT WHITE, SW7007	NA	FLAT
	PNT-4	HM DOOR PAINT	SHERWIN WILLIAMS	PRO INDUSTRIAL - WATERBASED ALKYD URETHANE ENAME	CAVIAR-SW6990	NA	SEMI-GLOSS
	PNT-5	EXPOSED CEILING PAINT	SHERWIN WILLIAMS	PRO INDUSTRIAL - WATERBORNE ACRYLIC DRYFALL, EG-SHEL	CAVIAR-SW6990	NA	EG-SHEL</



C:\Users\Wgonzalez\Documents\W231206\_Branson MO C3 Central\_Lkgonzalez@dfdgr.rvt



PARKING REQUIREMENTS	
REQUIRED: 1/200 SF GFA (8,972 SF) = 45 SPACES	
EXISTING: 45 SPACES	
LEGEND	
<div></div>	EXISTING BUILDING TO BE RENOVATED
<div></div>	PROPOSED CONCRETE DRIVE
<div></div>	EXISTING CONCRETE
<div></div>	PROPOSED GREEN SPACE
<div></div>	EXISTING GREEN SPACE
<div></div>	PROPERTY LINE
<div></div>	SETBACK LINE
<div></div>	EXISTING FENCE
<div></div>	EXISTING RETAINING WALL
<div>SS</div>	EXISTING SANITARY SERVICE LEAD
<div>W</div>	EXISTING WATER LEAD
<div>OH</div>	EXISTING OVERHEAD LINES
<div>G</div>	EXISTING GAS LEAD
<div>L-1</div>	EXISTING POLE LIGHT

DESIGN	Designer
DRAWN	Author
PROJECT NO.	23_05_19

SITE PLAN

C1.0

FOR BUILDING PERMIT

DATE  
01.15.2024

DESCRIPTION  
PERMIT SET

C3 - BRANSON MO  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616



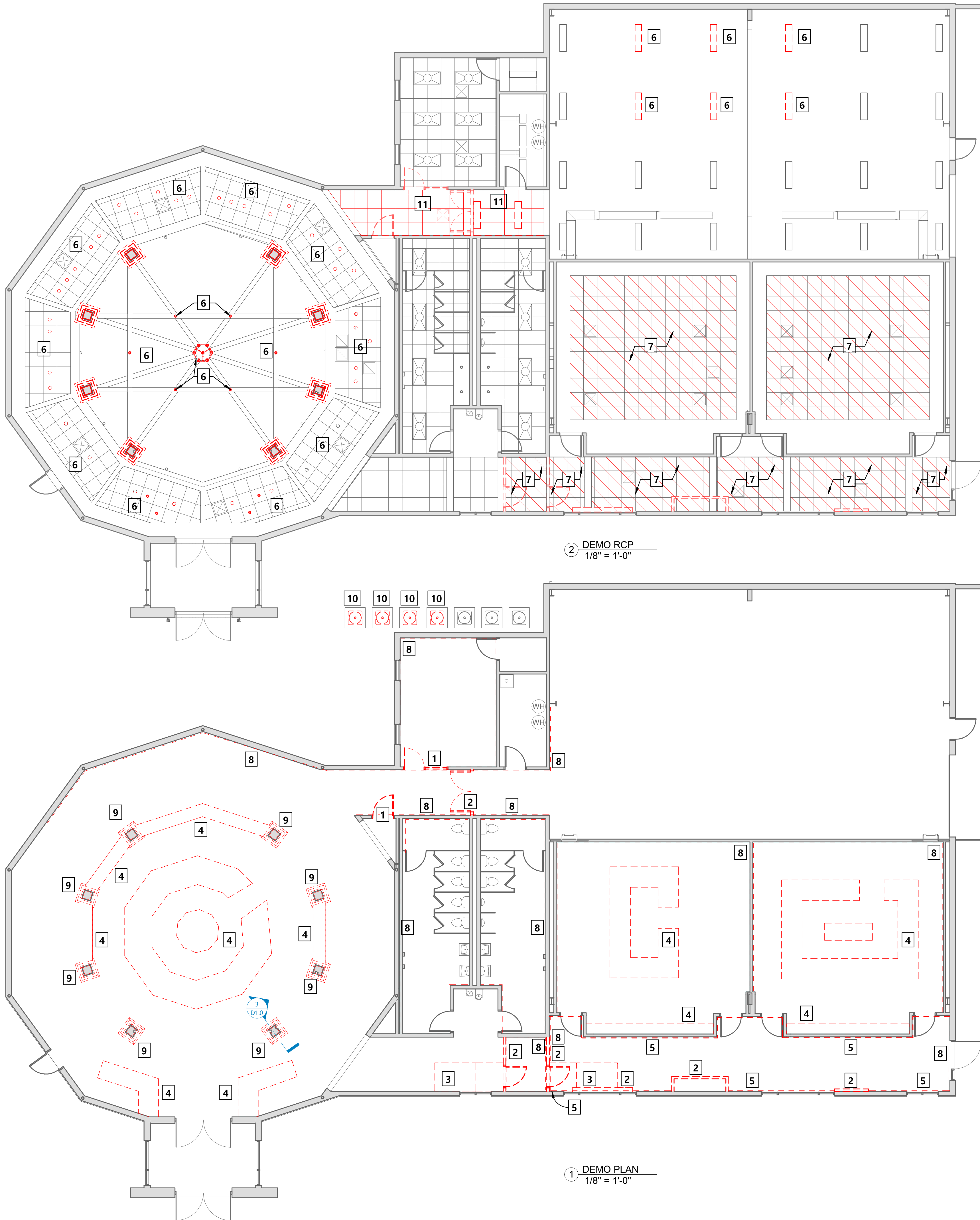
DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331



C:\Users\Warchitect.DFDG1\Documents\231206\_Branson MO C3 Central\_Tmourad@dfdgonline.com.rvt

Copyright © 2024 Damian Farrell Design Group PLLC. All rights reserved. No part of this drawing may be used or reproduced in any form or by any means, or stored in a database or retrieval system, without prior written permission of Damian Farrell Design Group PLLC.



#### GENERAL DEMOLITION NOTES

ALL ITEMS TO BE RELOCATED ARE TO BE REMOVED, STORED, PROTECTED, AND REINSTALLED BY THE CONTRACTOR. THE CONTRACTOR IS TO ENSURE THE ITEM IS IN WORKING ORDER PRIOR TO AND AFTER RELOCATION. OWNER IS TO BE NOTIFIED IF DEFECTS ARE FOUND.

DEMOLITION IN THE EXISTING BUILDING IS TO BE LIMITED TO WITHIN THE AREAS INDICATED. WITHIN THE DEMOLITION AREA, THE DEMOLITION IS TO INCLUDE THE FOLLOWING, UNLESS NOTED OTHERWISE: REMOVAL OF ALL INDICATED FLOOR FINISHES TO THE EXISTING SUBFLOOR; ALL INDICATED CEILING FINISHES AND SYSTEMS ARE TO BE DEMOLISHED TO THE UNDERSIDE OF EXISTING FLOOR JOISTS; ALL INDICATED WALL FINISHES ARE TO BE DEMOLISHED TO WOOD STUD FRAMING AS REQUIRED FOR THE PROPER INSTALLATION OF THE NEW FINISHES; ALL EXISTING STRUCTURAL ELEMENTS ARE TO REMAIN UNDISTURBED.

COORDINATE WITH ALL DRAWINGS AND DESIGN-BUILD REQUIREMENTS FOR ADDITIONAL AREAS OF DEMOLITION BEYOND THE EXTENT SHOWN ON THIS DRAWING. PROVIDE ALL CUT-OUT DEMOLITION REQUIRED FOR THE REMOVAL OF DUCTS, FLOOR DRAINS, ETC. THE SUBCONTRACTOR SHALL FULLY PROTECT ALL ADJACENT FINISHES AND MATERIALS AT THESE LOCATIONS.

DIMENSIONS SHOWN ON THIS DRAWING ARE FOR REFERENCE ONLY. DEMOLITION SHOULD BE SUFFICIENT TO ACCOMMODATE THE NEW WORK DESCRIBED IN THESE DRAWINGS.


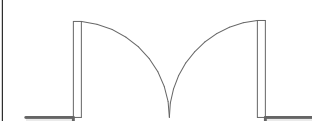
PROTECT EXISTING TREES DURING CONSTRUCTION. PRESERVE ALL LANDSCAPING WHERE POSSIBLE.

ALL CABINETS AND FIXTURES THAT ARE TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION.

#### DEMO KEY NOTES

- 1 REMOVE DOORS & WINDOWS AS SHOWN.
- 2 REMOVE INTERIOR WALLS.
- 3 REMOVE RAMP, RAILING AND LANDING.
- 4 REMOVE CASEWORK.
- 5 REMOVE WALL PANELING.
- 6 REMOVE LIGHT FIXTURE.
- 7 REMOVE "CLOUD" ON CEILING.
- 8 REMOVE WALLPAPER.
- 9 REMOVE STONE BASE, WOOD BLOCKING, FIRST LAYER OF METAL FURRING AND CONCRETE CAP. SEE DETAIL 3/D1.0
- 10 REMOVE AC CONDENSER. CONCRETE PAD TO REMAIN
- 11 REMOVE DROP CEILING.

#### LEGEND

-  EXISTING TO BE REMOVED
-  EXISTING TO REMAIN



DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331

FOR BUILDING PERMIT

C3 - BRANSON MO  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616

DATE  
01.15.2024

DESCRIPTION  
PERMIT SET

DESIGN  
DRAWN  
PROJECT NO.

Designer  
Author  
23\_05\_19

DEMO PLANS

D1.0





DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331

C3 - BRANSON MO  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616

FOR BUILDING PERMIT

DATE  
01.15.2024

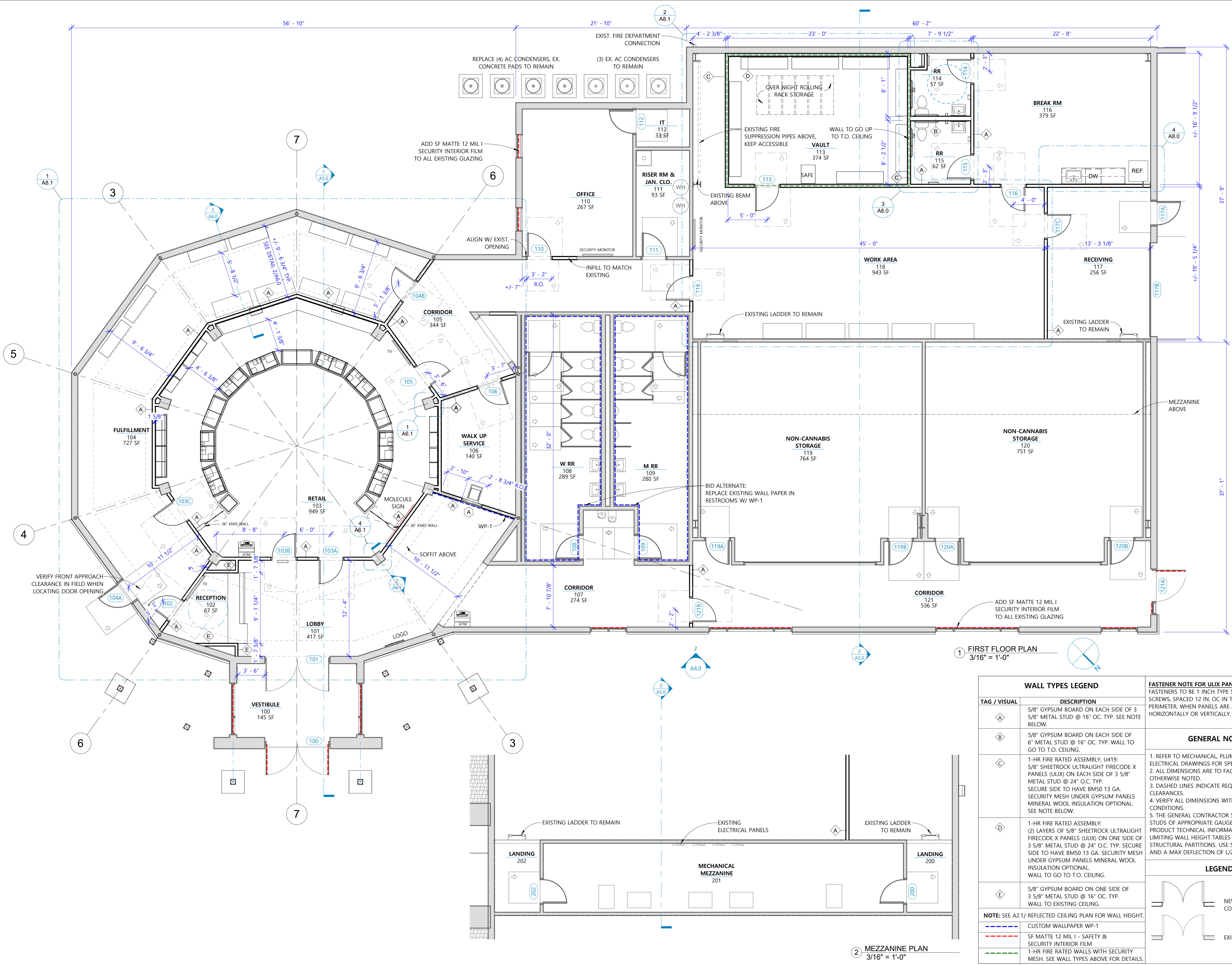
DESCRIPTION  
PERMIT SET

DESIGN  
DRAWN  
PROJECT NO.

Designer  
Author  
23\_05\_19

FLOOR PLANS

A1.1







DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331

FOR BUILDING PERMIT

C3 - BRANSON MO  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616

DATE  
01.15.2024

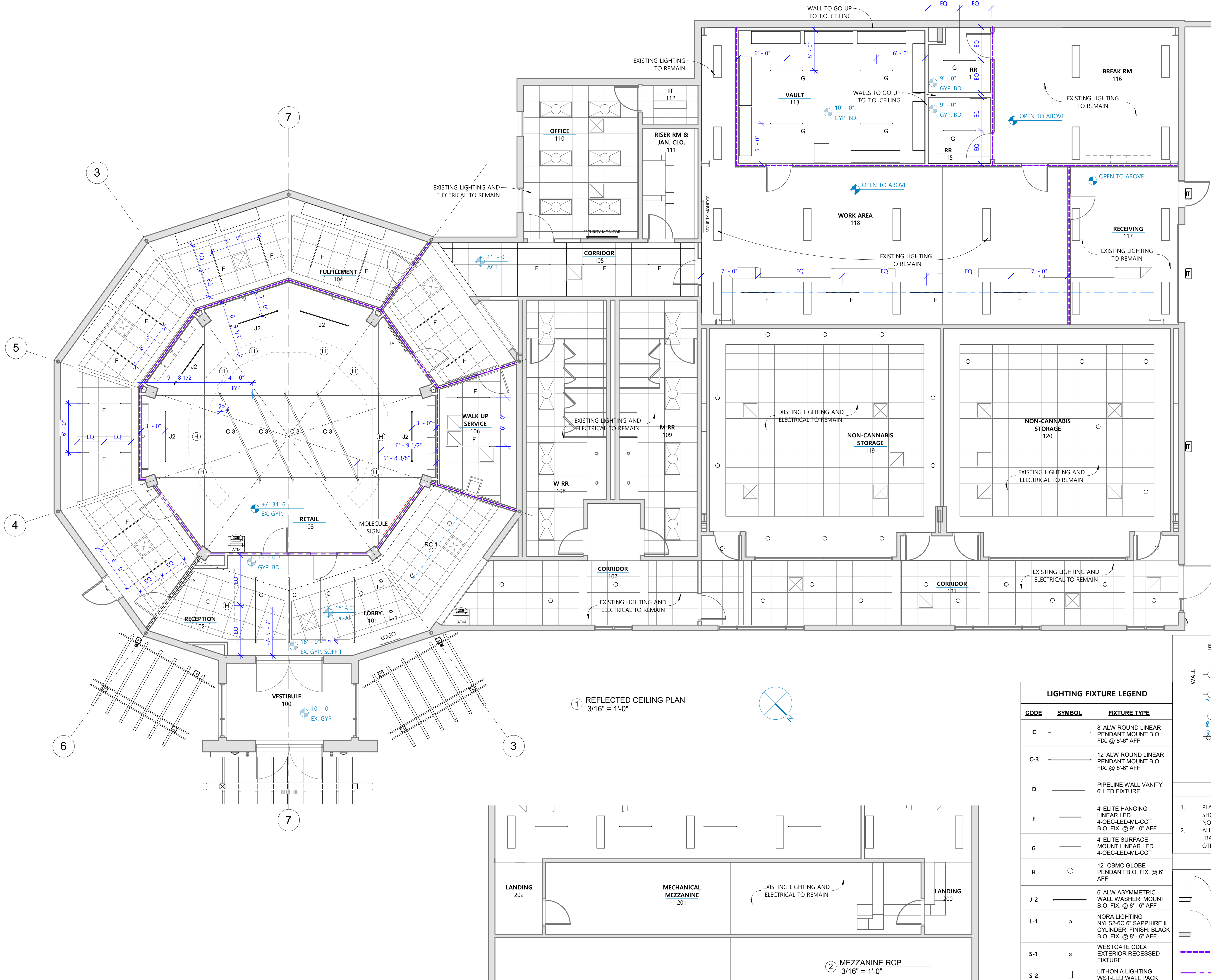
DESCRIPTION  
PERMIT SET

DESIGN  
DRAWN  
PROJECT NO.

Designer  
Author  
23\_05\_19

REFLECTED CEILING  
PLANS

A2.1



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

2 MEZZANINE RCP  
3/16" = 1'-0"

LIGHTING FIXTURE LEGEND		
CODE	SYMBOL	FIXTURE TYPE
C		8' ALW ROUND LINEAR PENDANT MOUNT B.O. FIX. @ 8'-6" AFF.
C-3		12' ALW ROUND LINEAR PENDANT MOUNT B.O. FIX. @ 8'-6" AFF.
D		PIPELINE WALL VANITY 6' LED FIXTURE
F		4' ELITE HANGING LINEAR LED 4-0EC-LED-ML-CCT B.O. FIX. @ 9'-0" AFF.
G		4' ELITE SURFACE MOUNT LINEAR LED 4-0EC-LED-ML-CCT
H		12' CBMC GLOBE PENDANT B.O. FIX. @ 6' AFF.
J-2		6' ALW ASYMMETRIC WALL WASHER MOUNT B.O. FIX. @ 8'-6" AFF.
L-1		NORA LIGHTING NYLS2-6C 6" SAPPHIRE II CYLINDER. FINISH: BLACK B.O. FIX. @ 8'-6" AFF.
S-1		WESTGATE CDLX EXTERIOR RECESSED FIXTURE
S-2		LITHONIA LIGHTING WST-LED WALL PACK

ELECTRICAL SYMBOL LEGEND

WALL		SWITCH
		3-WAY SWITCH
		MOTION SENSOR
		OUTLET - GFI - GROUND FAULT INTERRUPTER
		WP - WATER PROOF
		NUMBER INDICATED INSTALLATION HEIGHT A.F.F.

ELECTRICAL NOTES

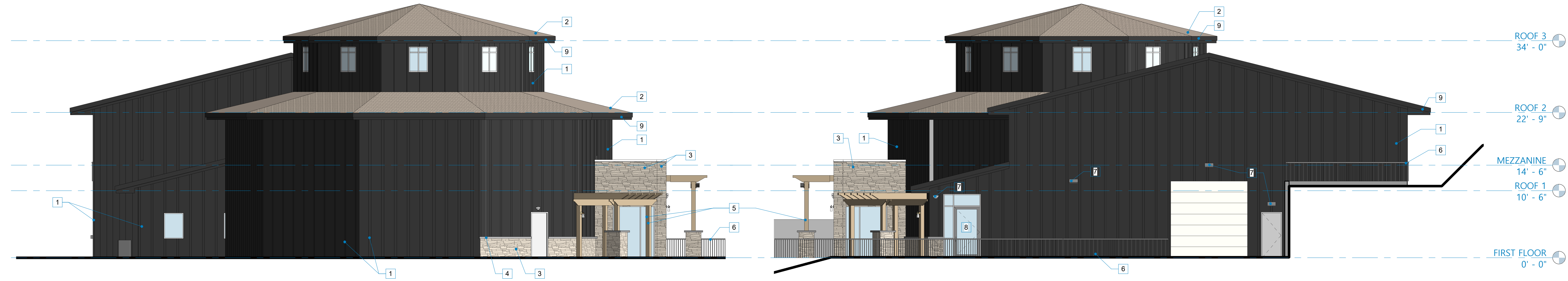
- PLACE FIXTURES AND OUTLETS WHERE SHOWN AND AS REQUIRED BY CODE IF NOT SHOWN ON THESE DRAWINGS. ALL DIMENSIONS ARE TO ROUGH FRAMING OR BRICK SURFACES UNLESS OTHERWISE NOTED.

LEGEND

	NEW CONSTRUCTION
	EXISTING TO REMAIN
	WALL TO GO UP TO B.O. DECK OR EXIST. CEILING
	WALL TO GO UP TO 16'-6" A.F.F.

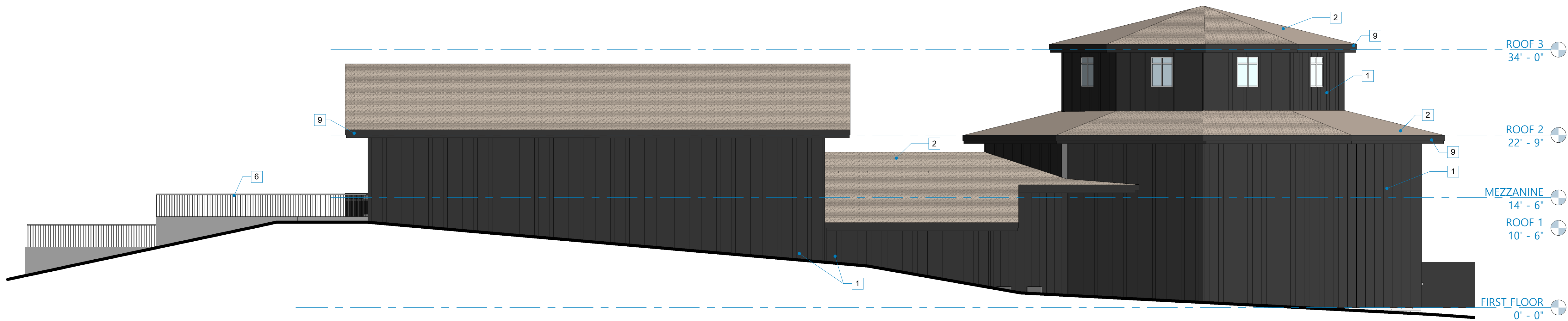


C:\Users\Warchitect.DFDG1\Documents\W231206\_Branson MO C3 Central\_Tmourad@dfdgonline.com.rvt

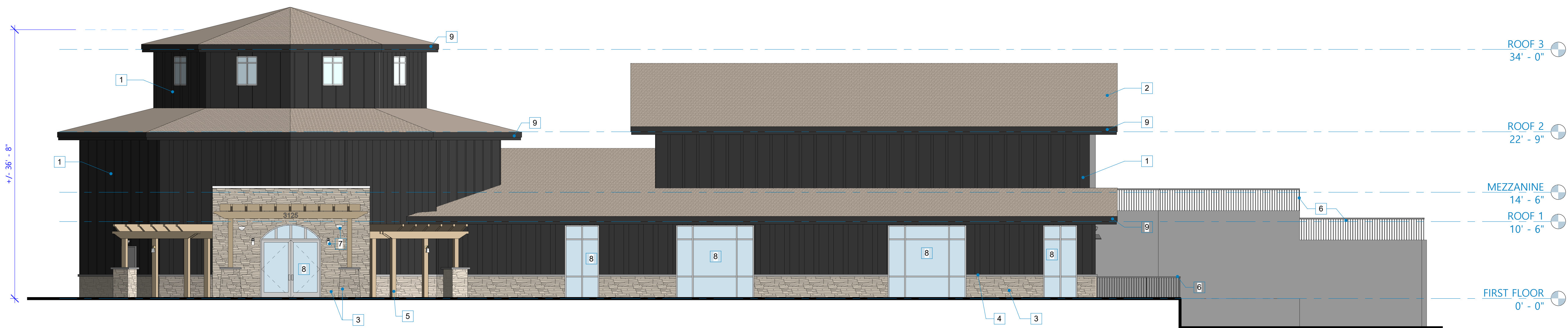


④ EAST ELEVATION  
1/8" = 1'-0"

③ WEST ELEVATION  
1/8" = 1'-0"



① SOUTH ELEVATION  
1/8" = 1'-0"



② NORTH ELEVATION  
1/8" = 1'-0"

MATERIAL LEGEND	
TAG	DESCRIPTION
1	PAINT EXISTING FIBER CEMENT BOARD AND BATTEN, PNT-6. REPAIR IF NECESSARY.
2	EXISTING ASPHALT SHINGLES TO REMAIN
3	EXISTING STONE TO REMAIN
4	EXISTING LIMESTONE CAP TO REMAIN
5	EXISTING CEDAR PERGOLA TO REMAIN
6	EXISTING GUARDRAIL TO REMAIN
7	EXISTING LIGHT FIXTURE TO REMAIN
8	ADD SF MATTE 12 MIL I SECURITY INTERIOR FILM TO ALL EXISTING EXTERIOR GLAZING
9	PAINT EXISTING FASCIA AND SOFFIT, PNT-6. REPAIR IF NECESSARY.

DESIGN  
DRAWN  
PROJECT NO.

Designer  
Author  
23\_05\_19

## ELEVATIONS

# A4.0



DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331

FOR BUILDING PERMIT

C3 - BRANSON MO  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616

DATE  
01.15.2024

DESCRIPTION  
PERMIT SET





DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331

FOR BUILDING PERMIT

C3 - BRANSON MO  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616

DATE

01.15.2024

DESCRIPTION

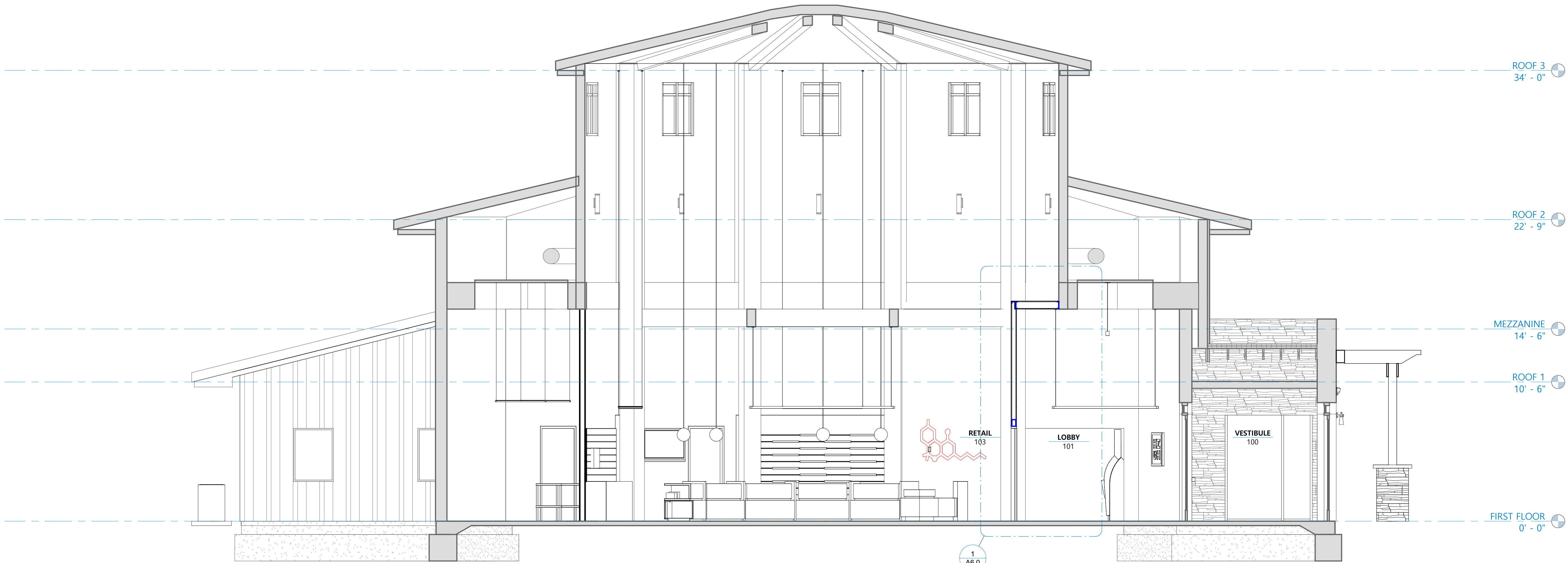
PERMIT SET

DESIGN  
DRAWN  
PROJECT NO.

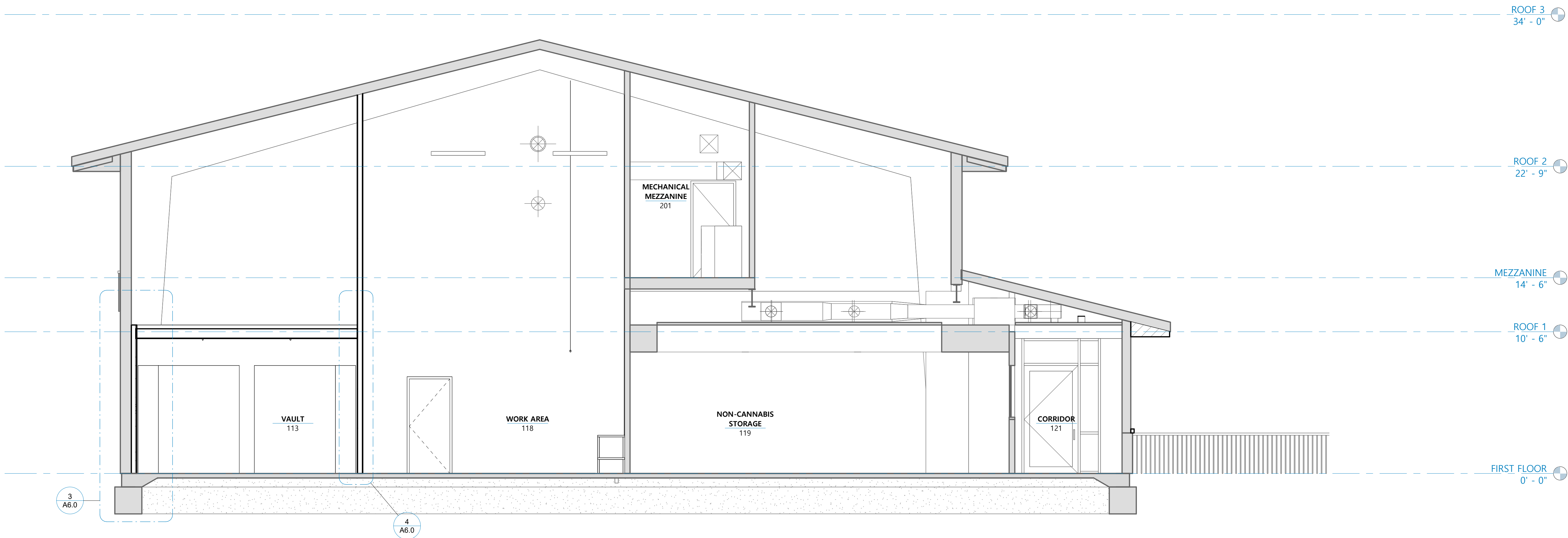
Designer  
Author  
23\_05\_19

BUILDING SECTIONS

A5.0



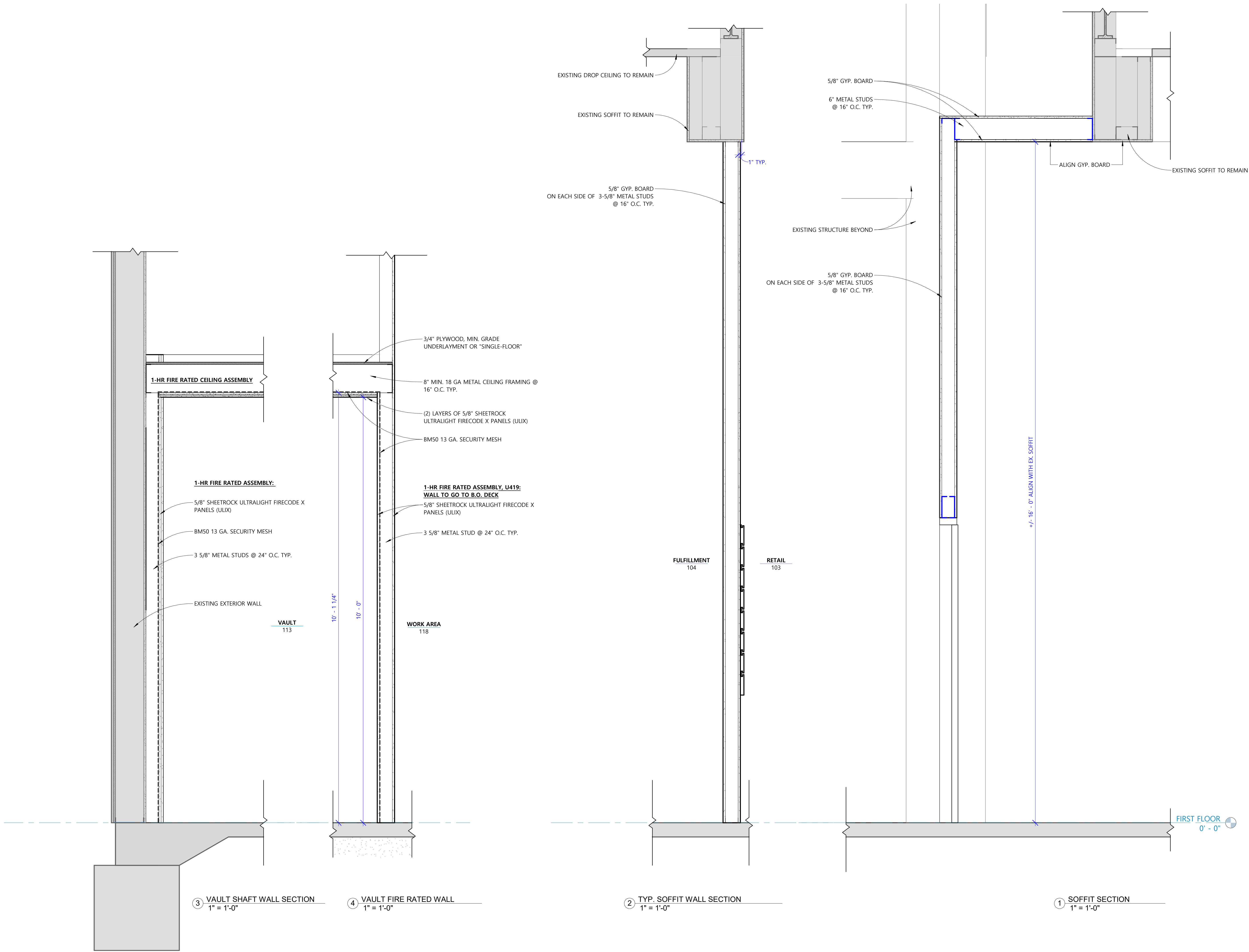
① SECTION THROUGH RETAIL  
1/4" = 1'-0"



② SECTION @ VAULT  
1/4" = 1'-0"



C:\Users\Warchitect.DFDG1\Documents\231206\_Branson MO C3 Central\_Tmourad@dfdgonline.com.rvt



DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331

FOR BUILDING PERMIT

C3 - BRANSON MO  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616

DATE  
01.15.2024

DESCRIPTION  
PERMIT SET

DESIGN  
DRAWN  
PROJECT NO.

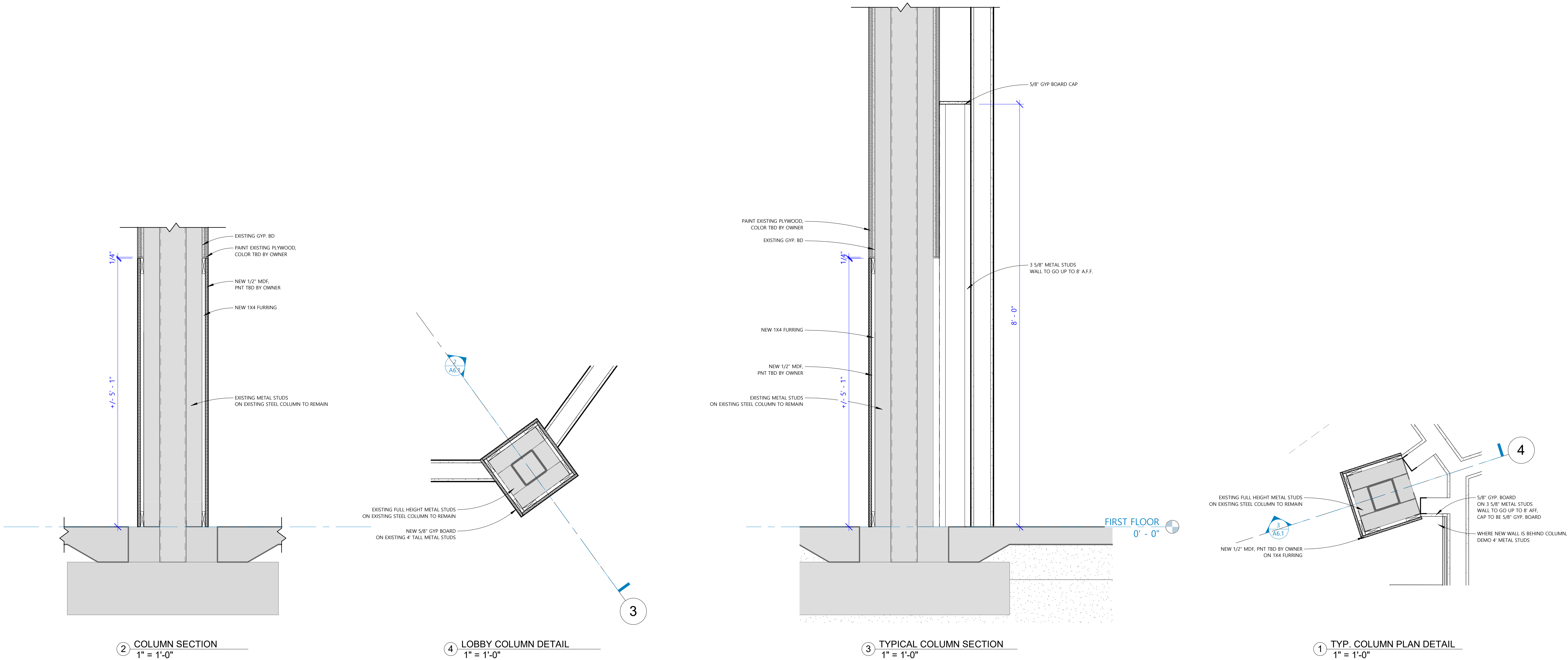
Designer  
Author  
23\_05\_19

WALL SECTIONS

A6.o



C:\Users\Warchitect.DFDG1\Documents\231206\_Branson MO C3 Central\_Tmourad@dfdgonline.com.rvt



DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331

FOR BUILDING PERMIT

C3 - BRANSON MO  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616

DATE  
01.15.2024

DESCRIPTION  
PERMIT SET

DESIGN  
DRAWN  
PROJECT NO.

Designer  
Author  
23\_05\_19

COLUMN DETAILS

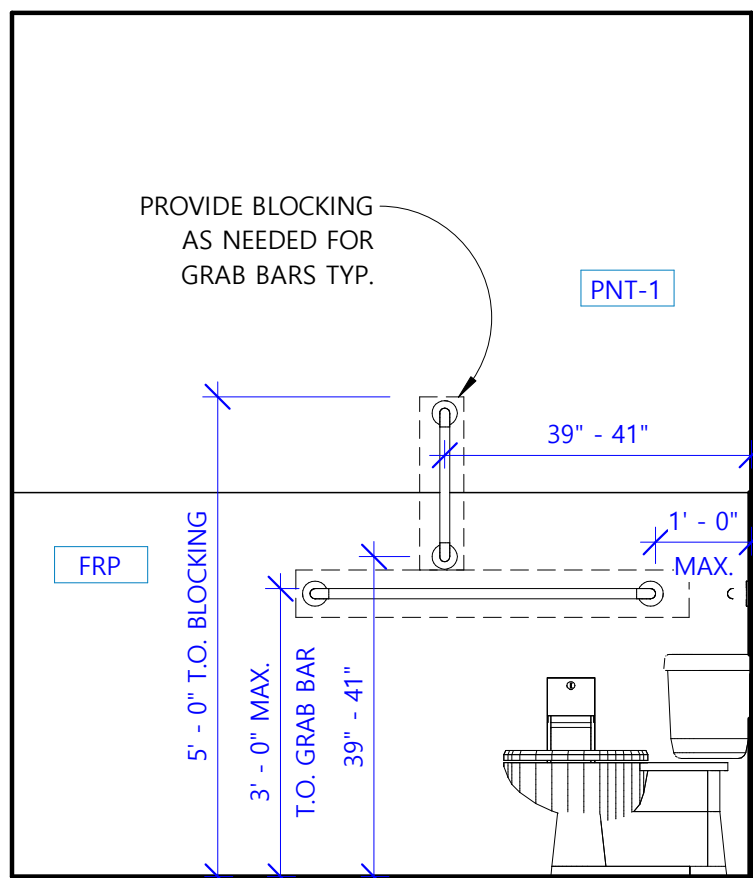
A6.1



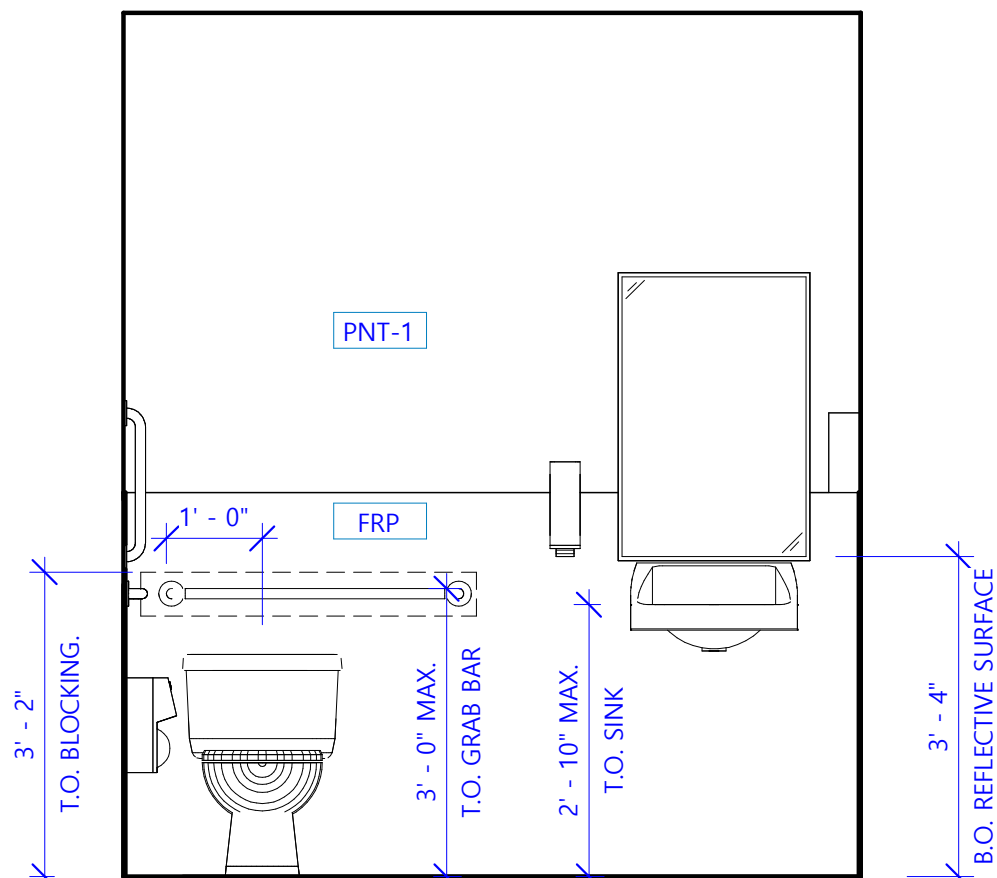
C:\Users\Warchitect.DFDG1\Documents\W231206\_Branson MO C3 Central\_Imourad@dfdgonline.com.rvt

PLUMBING FIXTURE SCHEDULE						
TYPE	MANUFACTURER	MODEL	FINISH	TRIM / FAUCET	QUANTITY	COMMENTS
KITCHENETTE SINK	ELKAY	LR1919	STAINLESS STEEL	LKD2432BH FAUCET	1	
TOILET	AMERICAN STANDARD	2467.016	WHITE	CHICAGO FAUCET 1016	2	
WALL MOUNTED SINK	AMERICAN STANDARD	LUCERNE 0355.012	WHITE	CHICAGO FAUCET 802-A317CP	2	

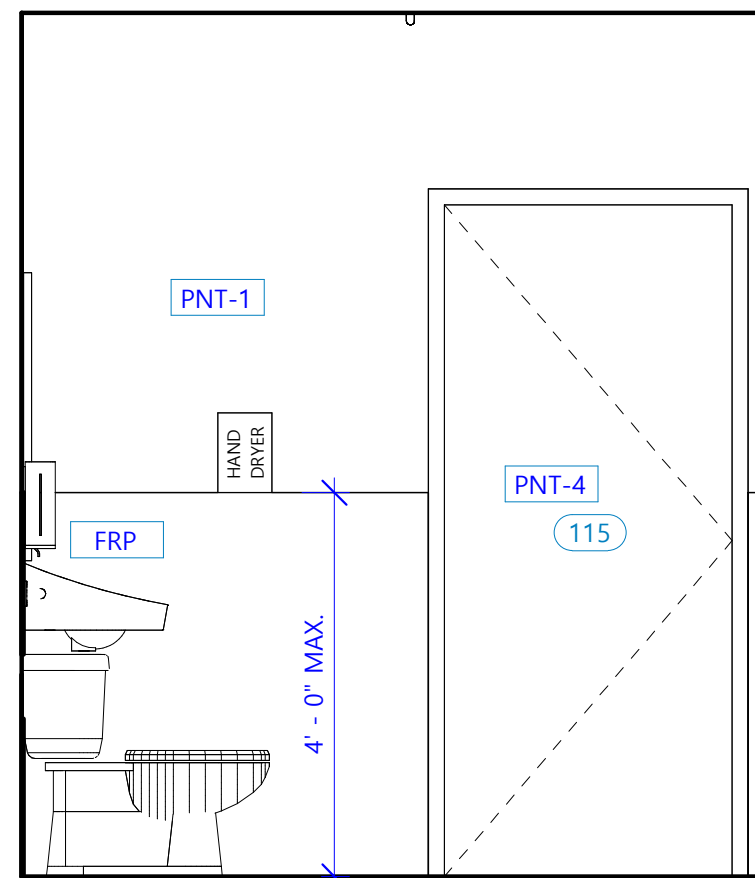
BATHROOM ACCESSORY SCHEDULE					
TYPE	MANUFACTURER	MODEL	FINISH	QUANTITY	COMMENTS
MIRROR	BOBRICK	B-165 1830	-	2	-
AUTOMATIC HAND DRYER	GLOBAL INDUSTRIAL	T9F641951	STAINLESS STEEL	2	-
WASTE RECEPTACLE	BOBRICK	B-43644	STAINLESS STEEL	2	-
TOILET PAPER DISPENSER	BOBRICK	B-2888	STAINLESS STEEL	2	-
SOAP DISPENSER	-	-	-	2	BY OWNER
GRAB BARS (SET OF THREE)	-	-	STAINLESS STEEL	2	36" (SIDE), 42" (BACK), 18" (VERTICAL)



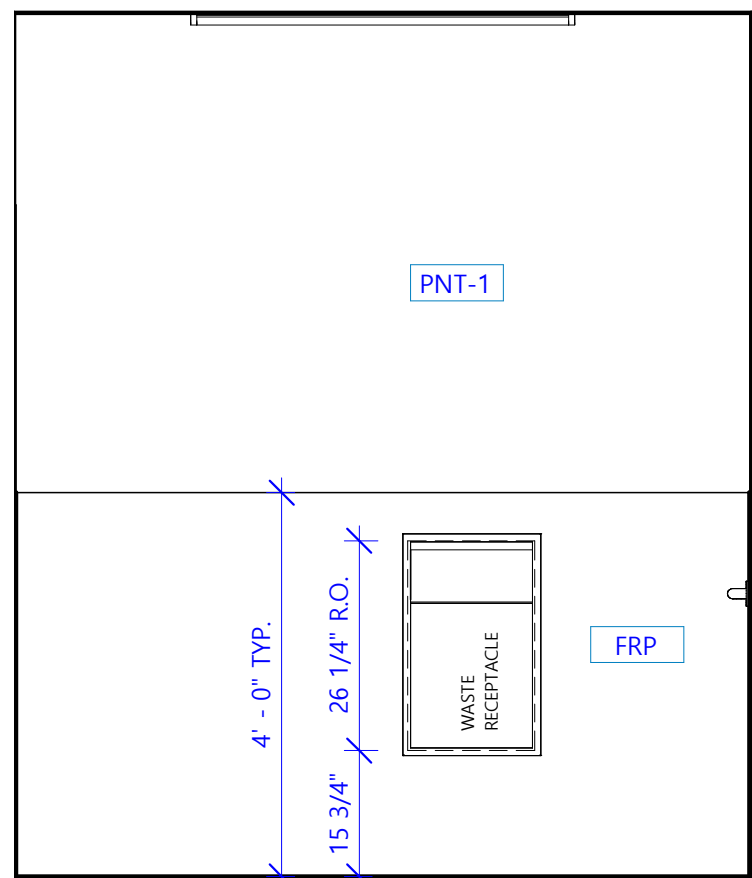
8 RR 115 - E  
1/2" = 1'-0"



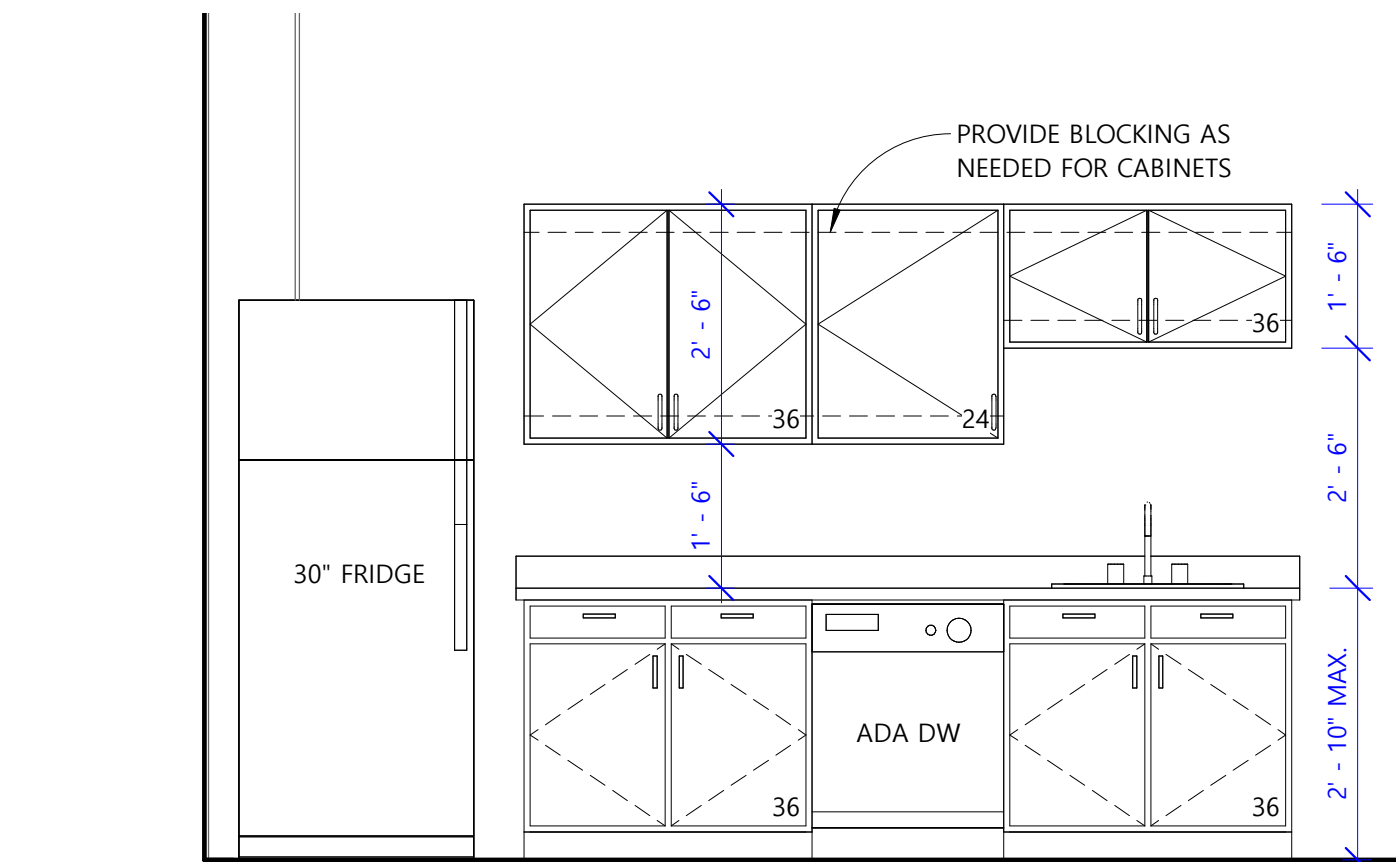
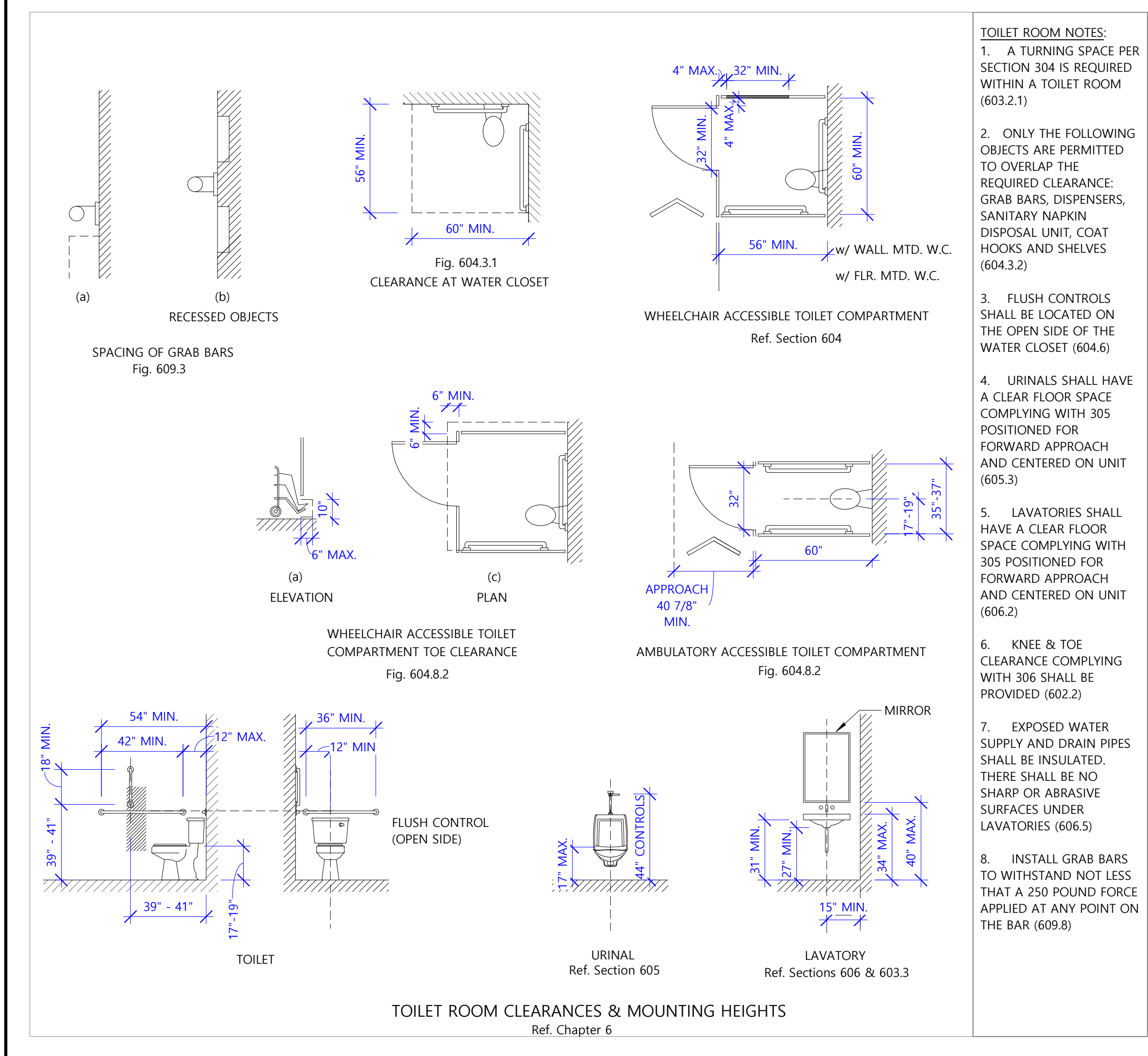
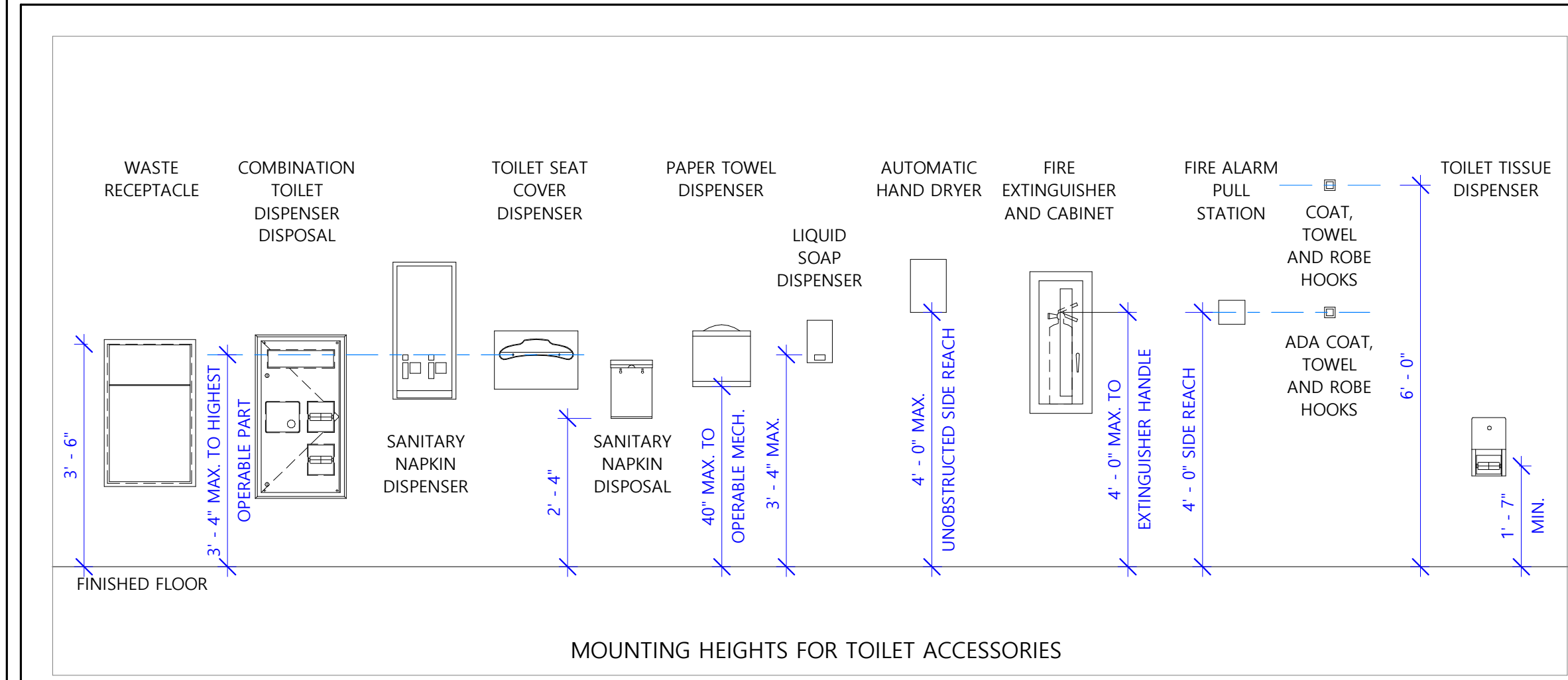
6 RR 115 - S  
1/2" = 1'-0"



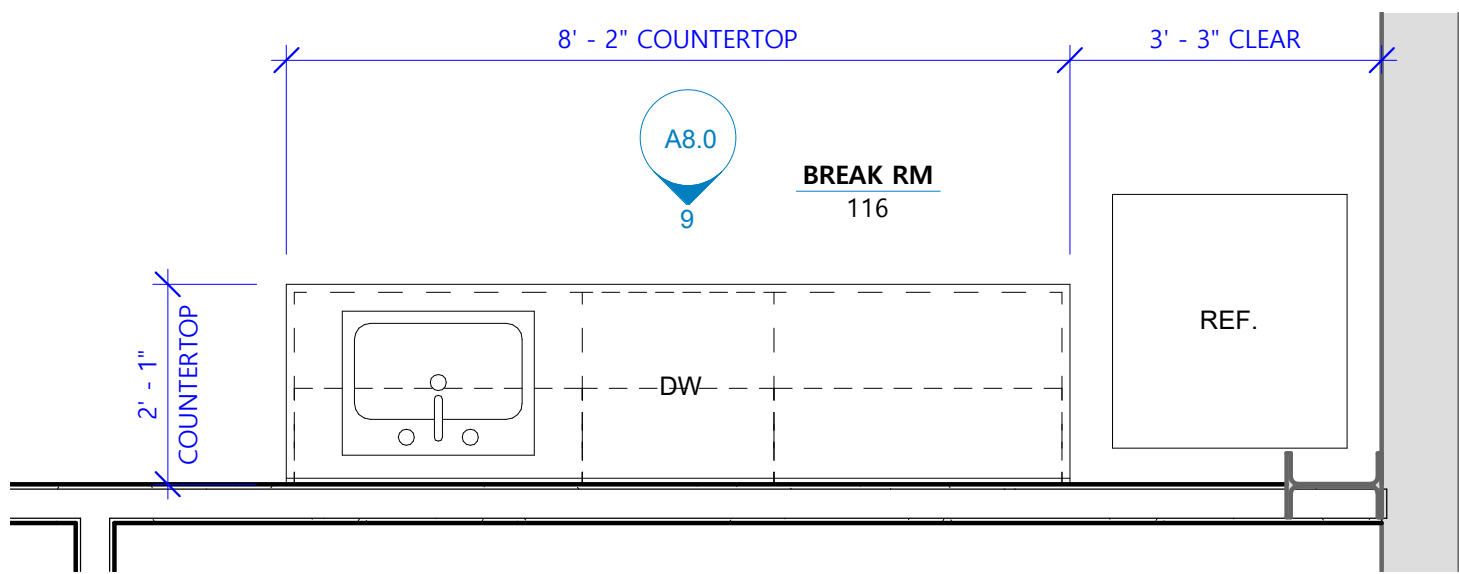
5 RR 115 - W  
1/2" = 1'-0"



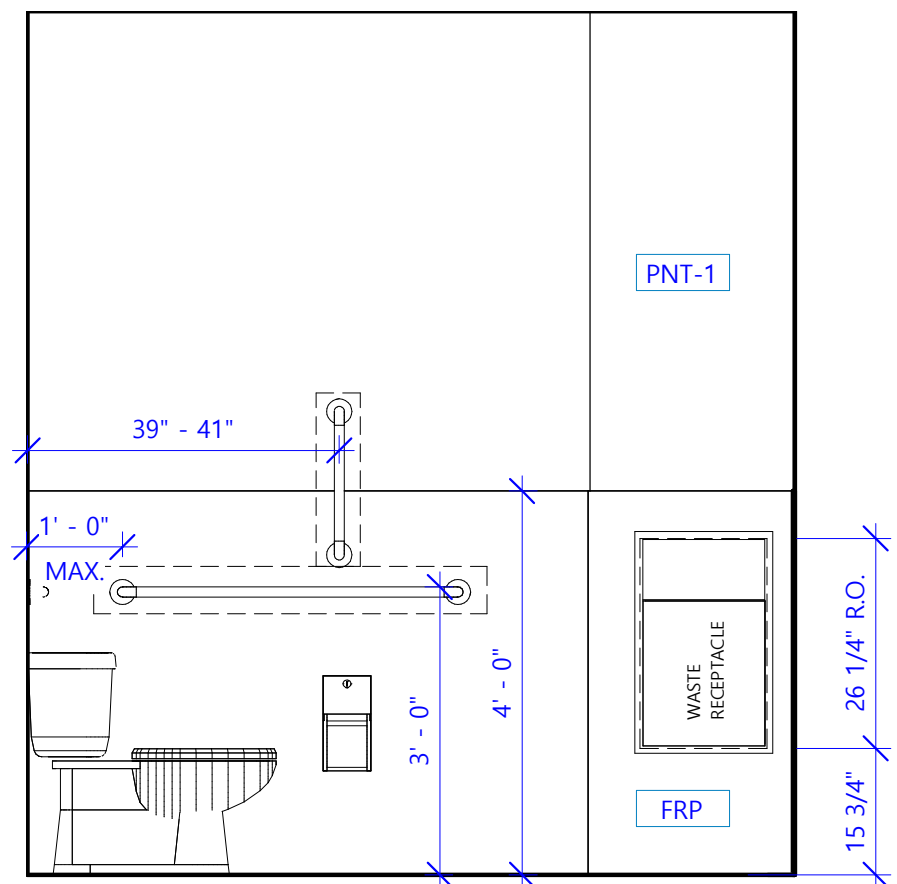
7 RR 115 - N  
1/2" = 1'-0"



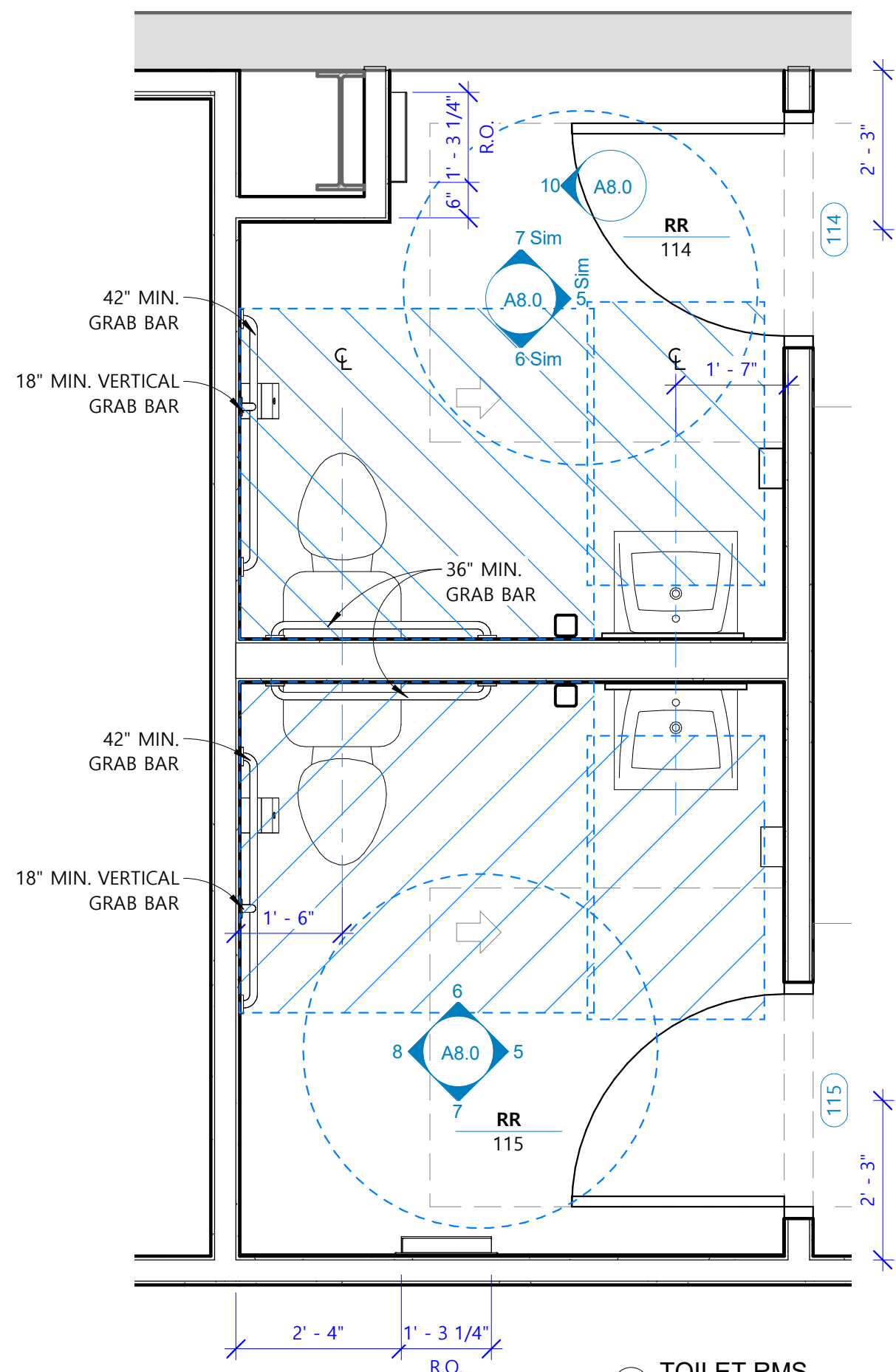
9 KITCHENETTE ELEVATION  
1/2" = 1'-0"



4 KITCHENETTE PLAN  
1/2" = 1'-0"



10 RR-114  
1/2" = 1'-0"



3 TOILET RMS  
1/2" = 1'-0"

FOR BUILDING PERMIT

DATE  
01.15.2024

C3 - BRANSON MO  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616

DESCRIPTION  
PERMIT SET

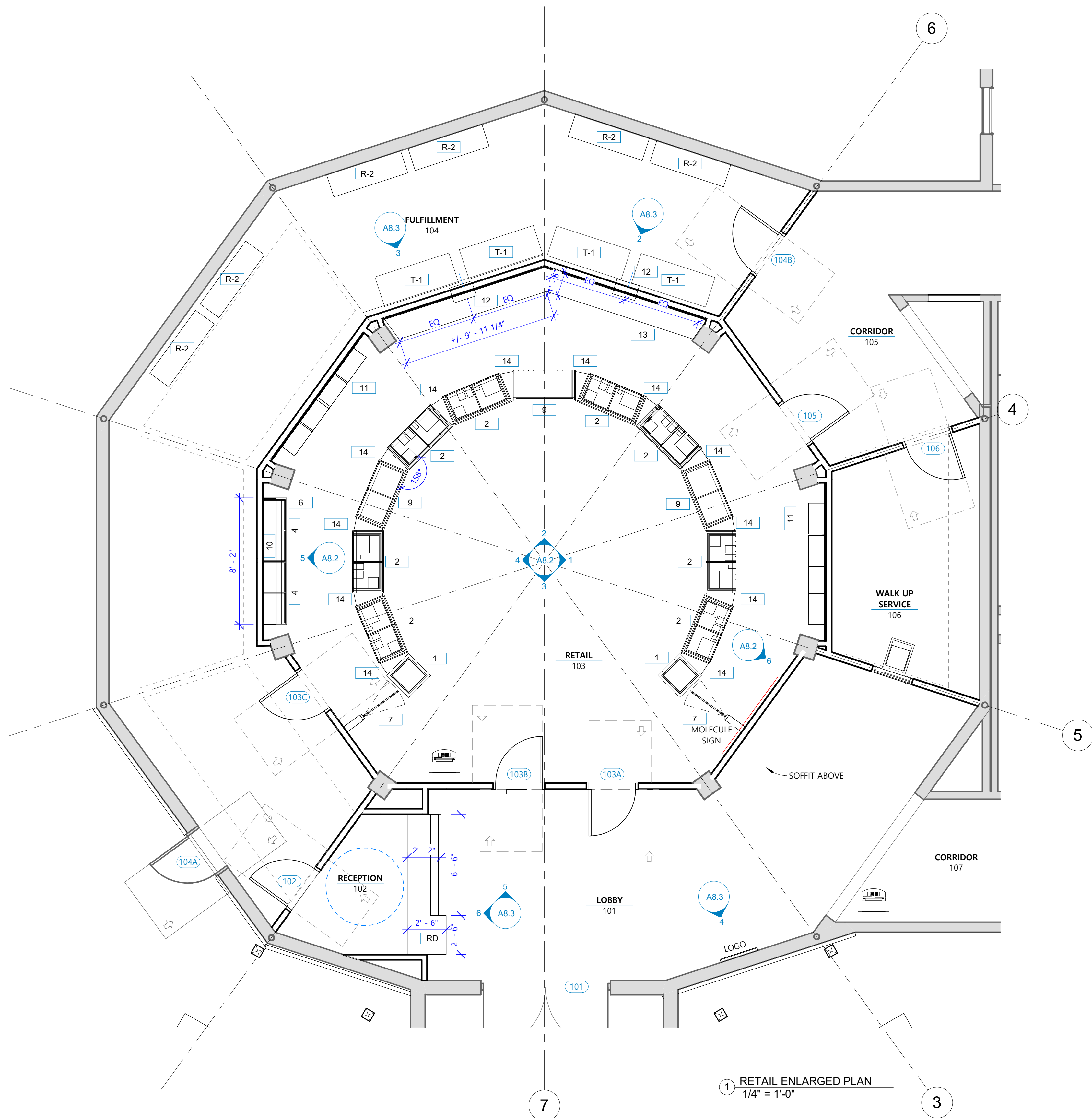
DESIGN  
DRAWN  
PROJECT NO.

Designer  
Author  
23.05.19

INTERIOR  
ELEVATIONS

A8.0



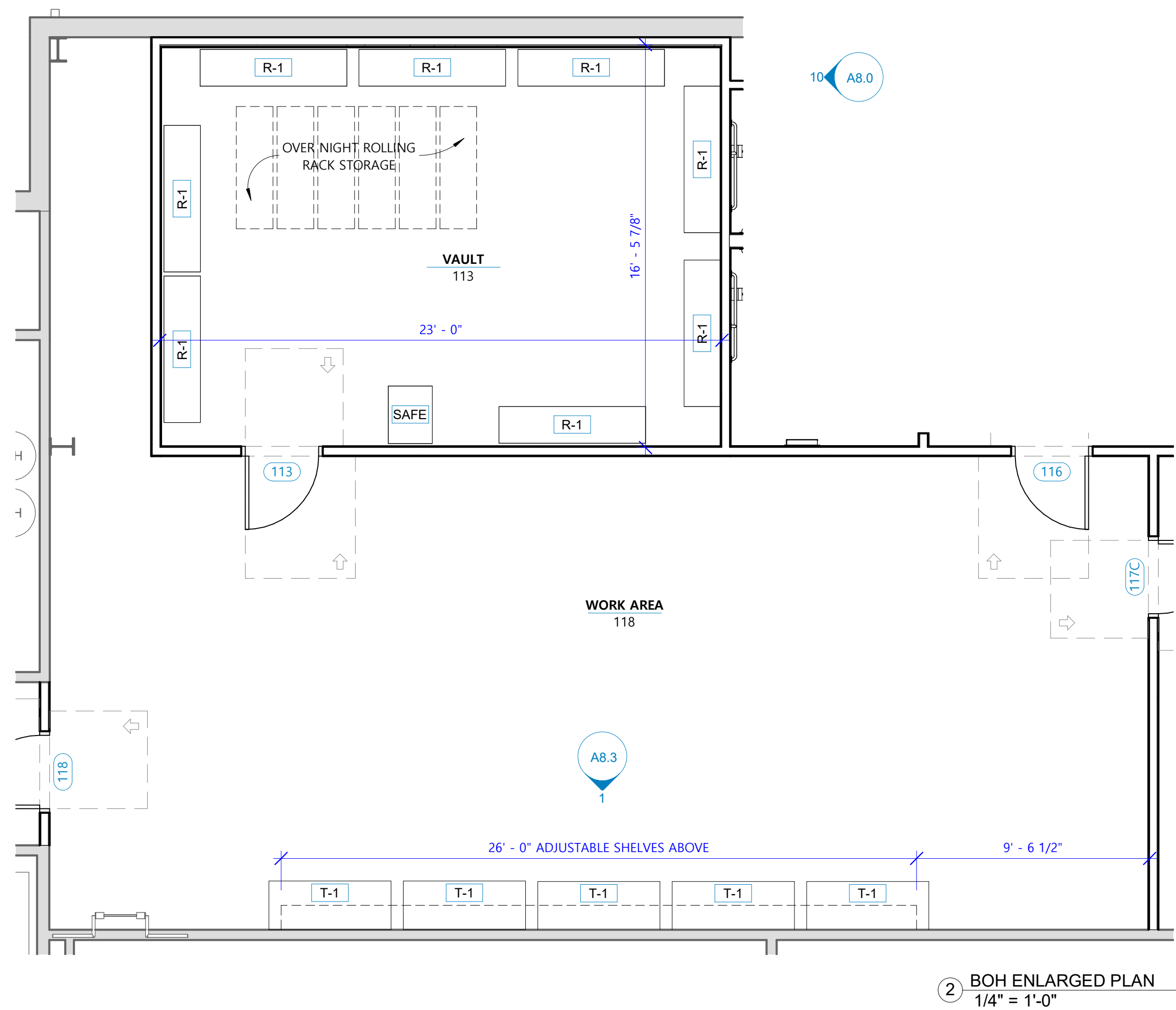


RETAIL CASEWORK SCHEDULE		
TAG	DESCRIPTION	QUANTITY
1	24x24x27 CORNER UNIT	2
2	48x24x34 POS	8
4	48x18x34 BASE BACK WALL	2
6	18.25" COUNTERTOP	1
7	MESH SWING GATE 36" MIN.	2
9	48x24x34 DISPLAY	3
10	96x48 UPR DISPLAY WALL	1
11	SLAT WALL W/ (18) 12"x24" SHELVES	2
12	PASS THRU CABINET	2
13	BACK WALL BASE CABINET	1
14	TRAPEZOIDAL FILLER CABINET	12
RD	RECEPTION DESK	1

**CASEWORK TO BE PROVIDED BY OWNER  
AND INSTALLED BY CONTRACTOR**

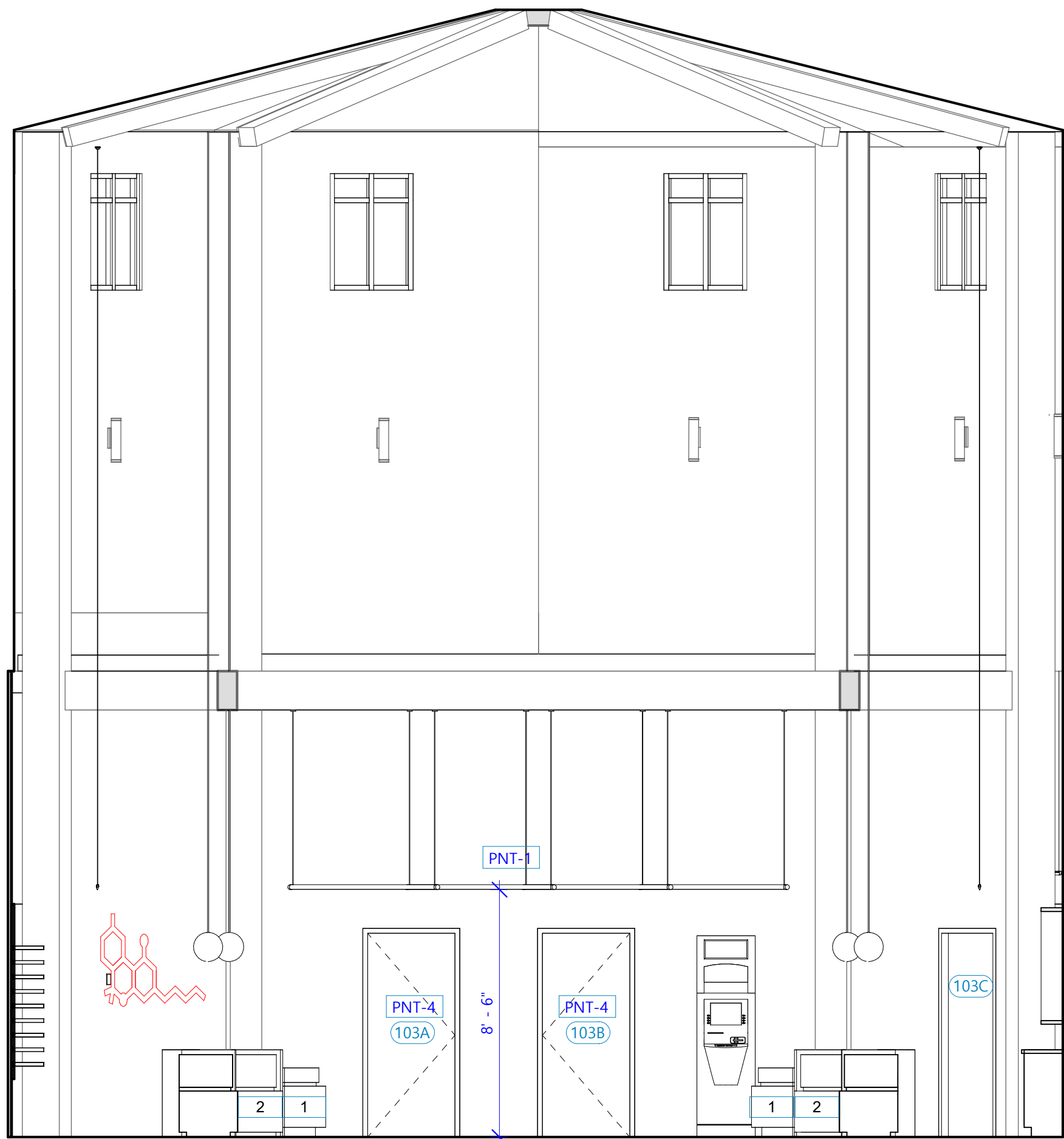
BOH FURNITURE SCHEDULE		
TAG	DESCRIPTION	QUANTITY
R-1	ULINE CHROME WIRE SHELVING UNIT - 72"W x 18"D x 72"H	8
R-2	ULINE CHROME MOBILE SHELVING UNIT - 60"W x 18"D	6
SAFE	ARMOR SAFE TECHNOLOGIES 7300XL	1
T-1	24" x 60" STAINLESS STEEL TABLE	9

**NOTE:** STORAGE RACKS AND STAINLESS STEEL TABLES TO BE PROVIDED AND INSTALLED BY OWNER

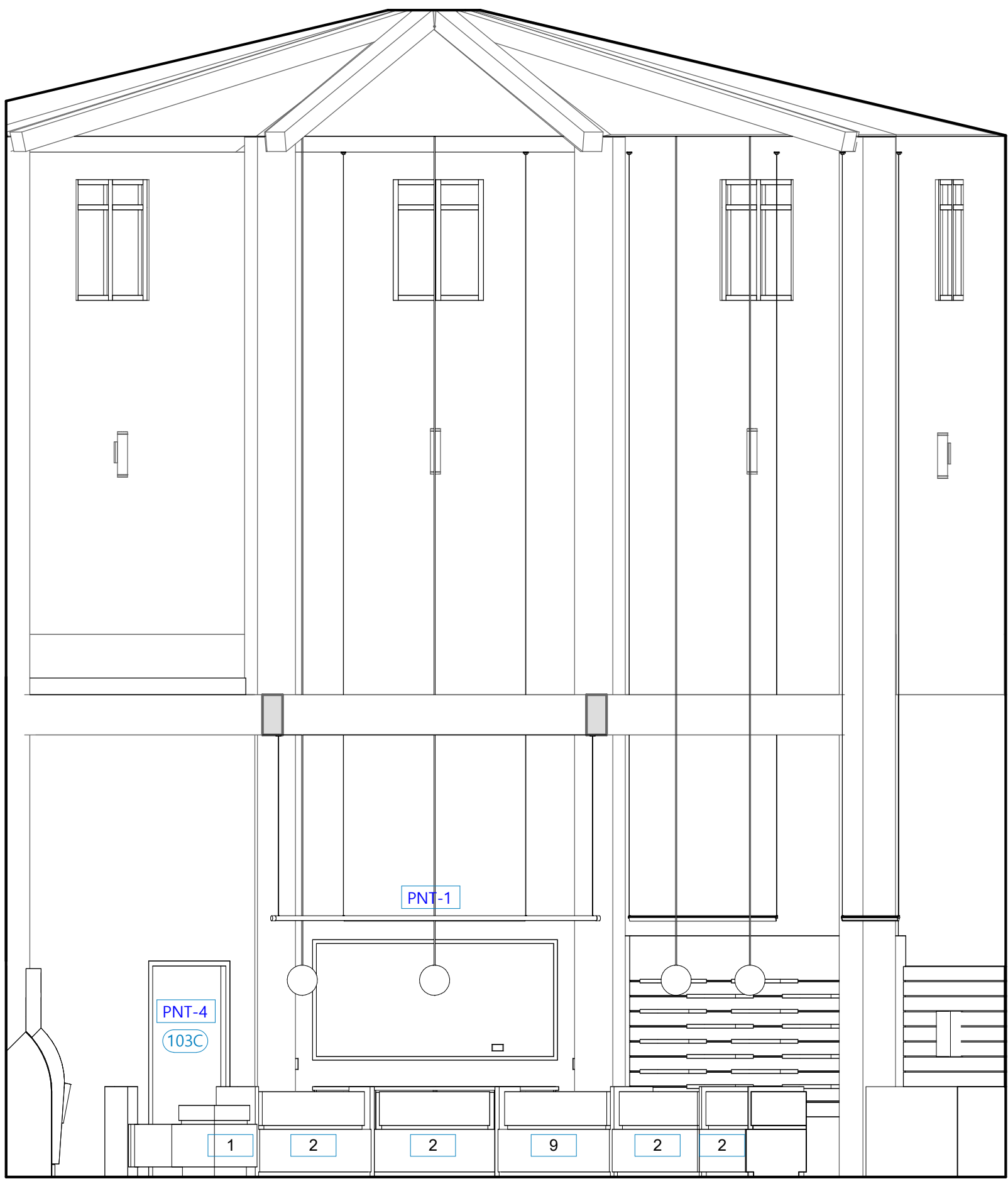




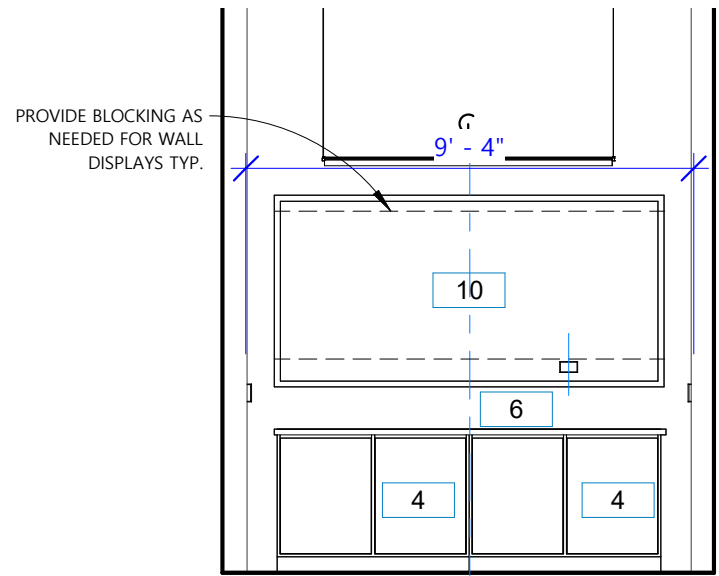
C:\Users\Warchitect.DFDG1\Documents\W231206\_Branson MO C3 Central\_L\_tmourad@dfdgonline.com.rvt



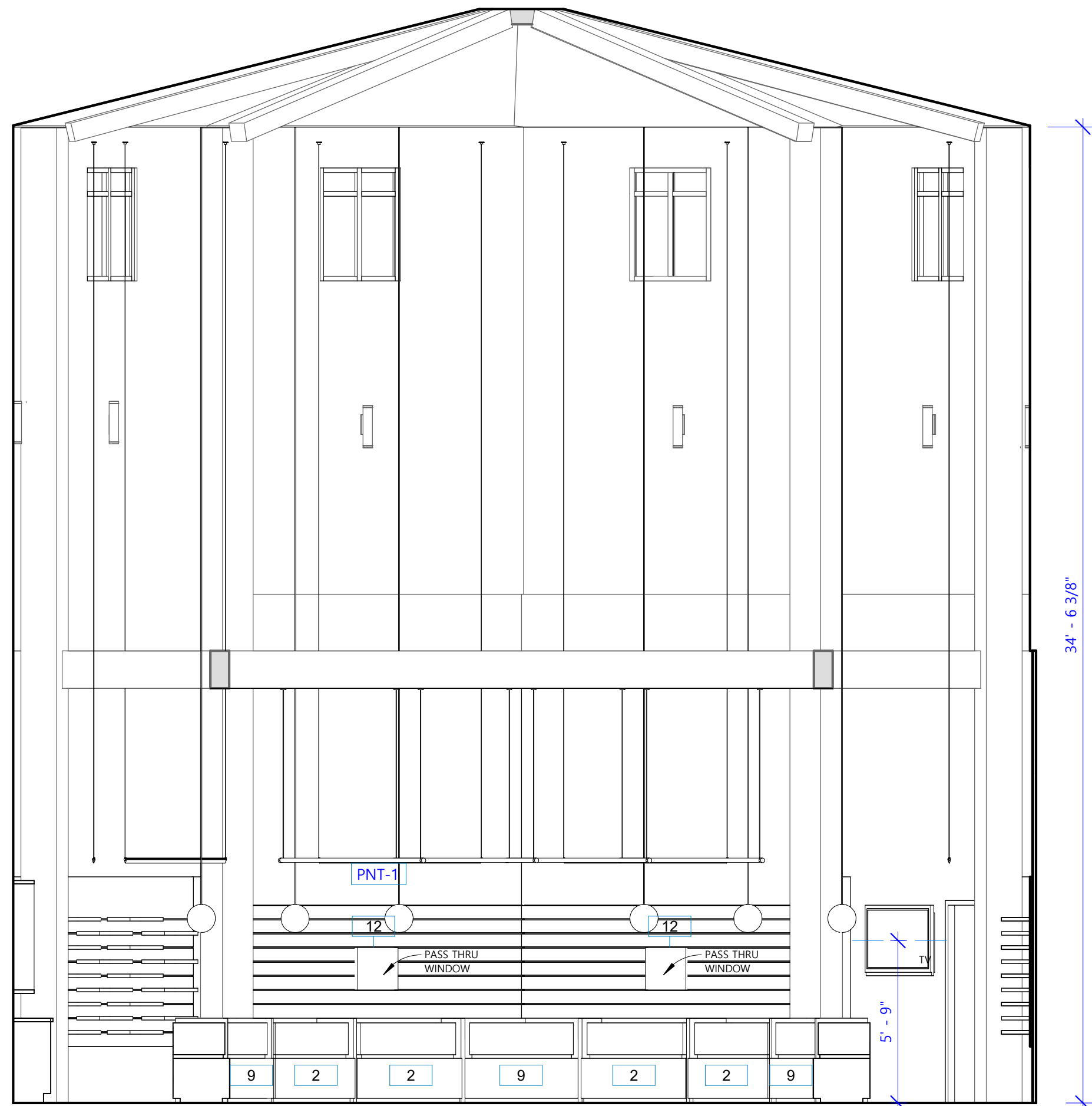
③ RETAIL - N  
1/4" = 1'-0"



④ RETAIL - E  
1/4" = 1'-0"



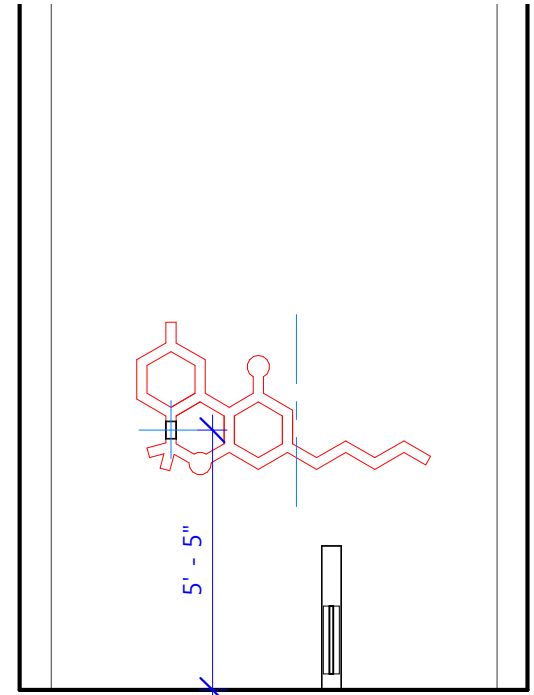
⑤ FLOWER DISPLAY ELEVATION  
1/4" = 1'-0"



② RETAIL - S  
1/4" = 1'-0"



① RETAIL - W  
1/4" = 1'-0"



⑥ MOLECULE SIGN ELEVATION  
1/4" = 1'-0"



DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331

FOR BUILDING PERMIT

C3 - BRANSON MO  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616

DATE  
01.15.2024

DESCRIPTION  
PERMIT SET

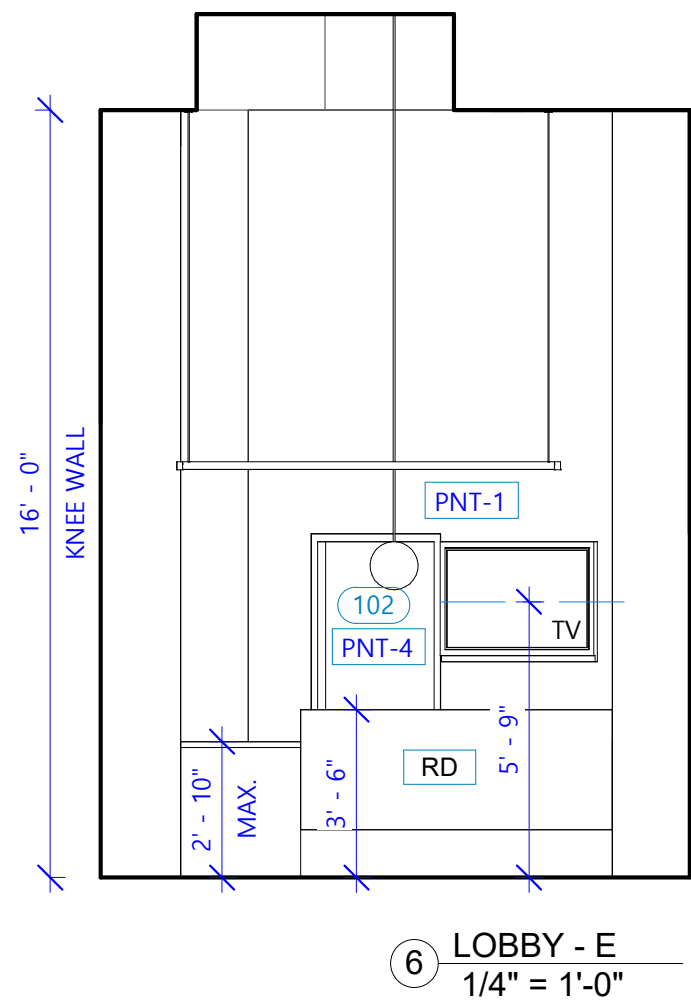
DESIGN  
DRAWN  
PROJECT NO.

Designer  
Author  
23.05.19

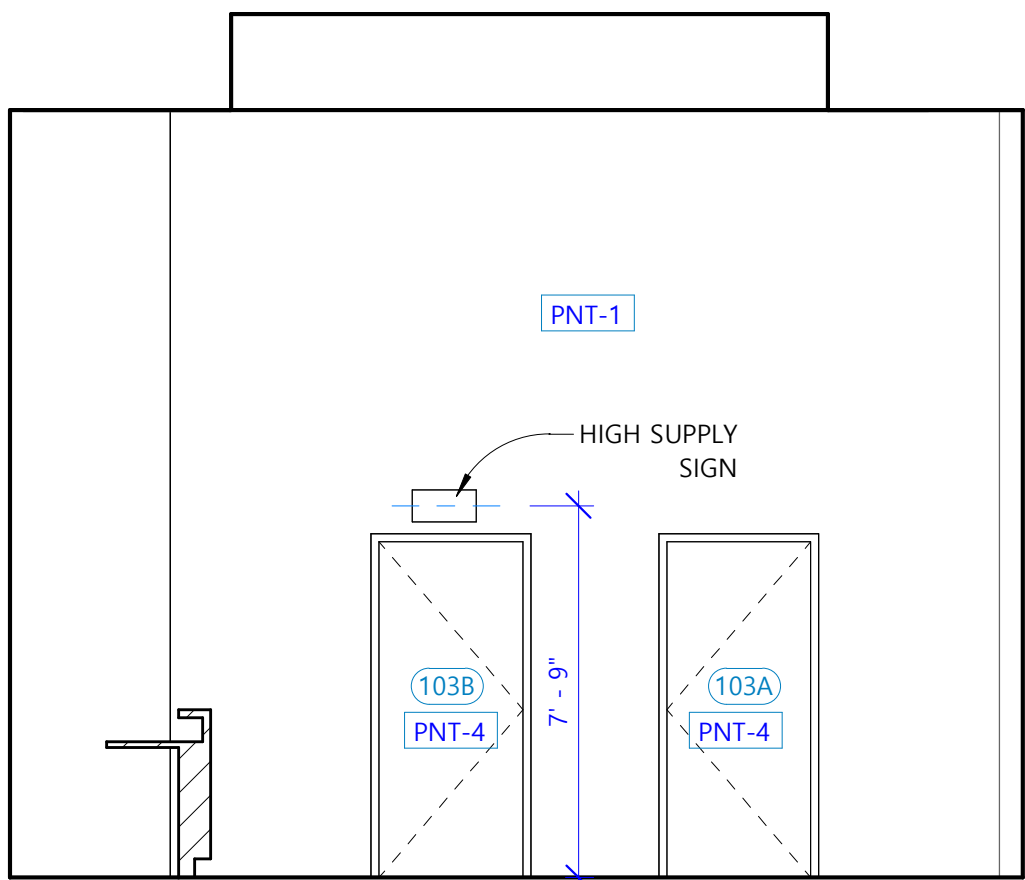
RETAIL INTERIOR  
ELEVATIONS

A8.2

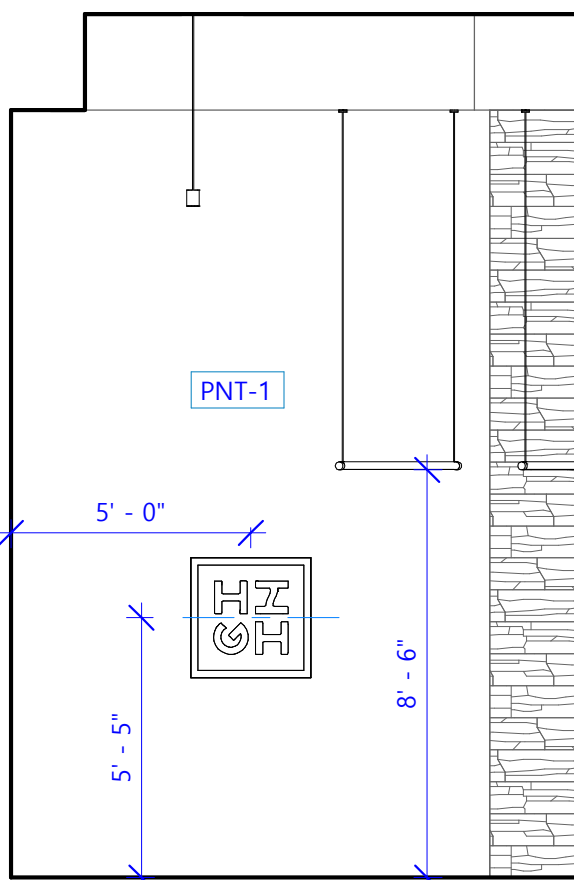




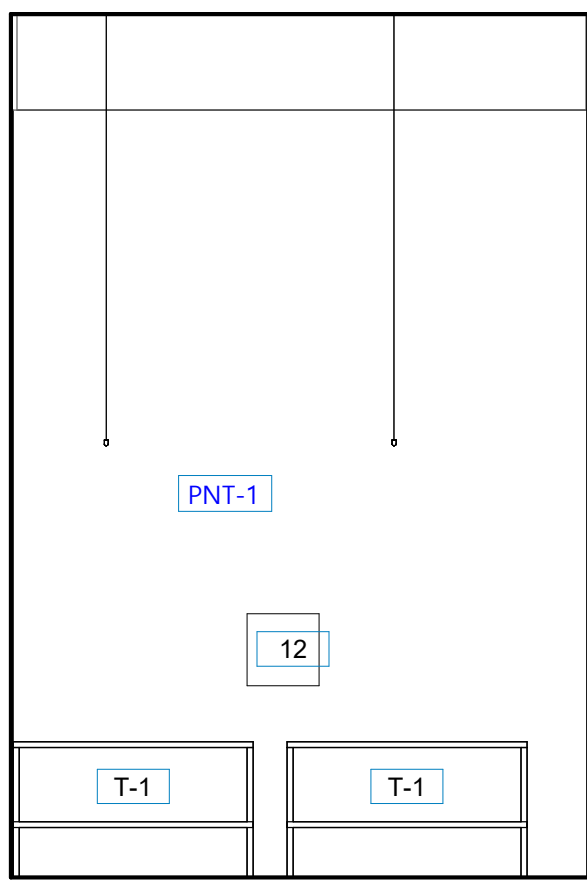
⑥ LOBBY - E  
1/4" = 1'-0"



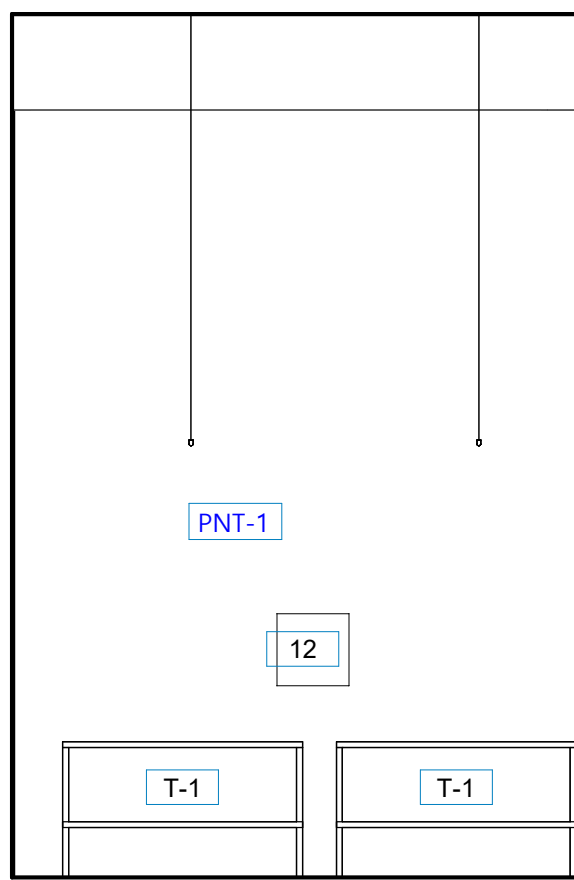
⑤ LOBBY - S  
1/4" = 1'-0"



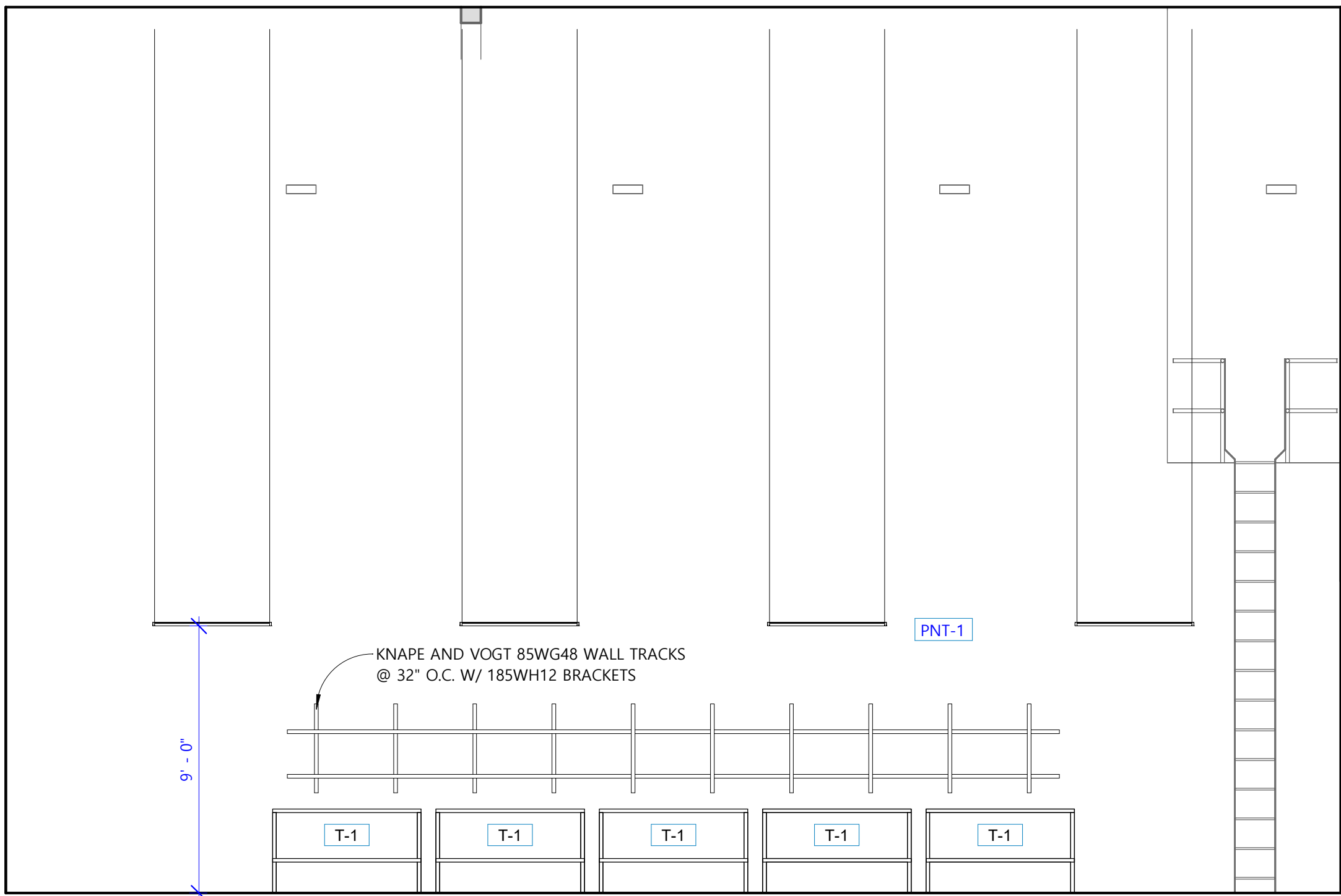
④ LOBBY - LOGO WALL  
1/4" = 1'-0"



③ FULFILLMENT - 1  
1/4" = 1'-0"



② FULFILLMENT - 2  
1/4" = 1'-0"



① WORK RM - N  
1/4" = 1'-0"



DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331

FOR BUILDING PERMIT

C3 - BRANSON MO  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616

DATE  
01.15.2024

DESCRIPTION  
PERMIT SET

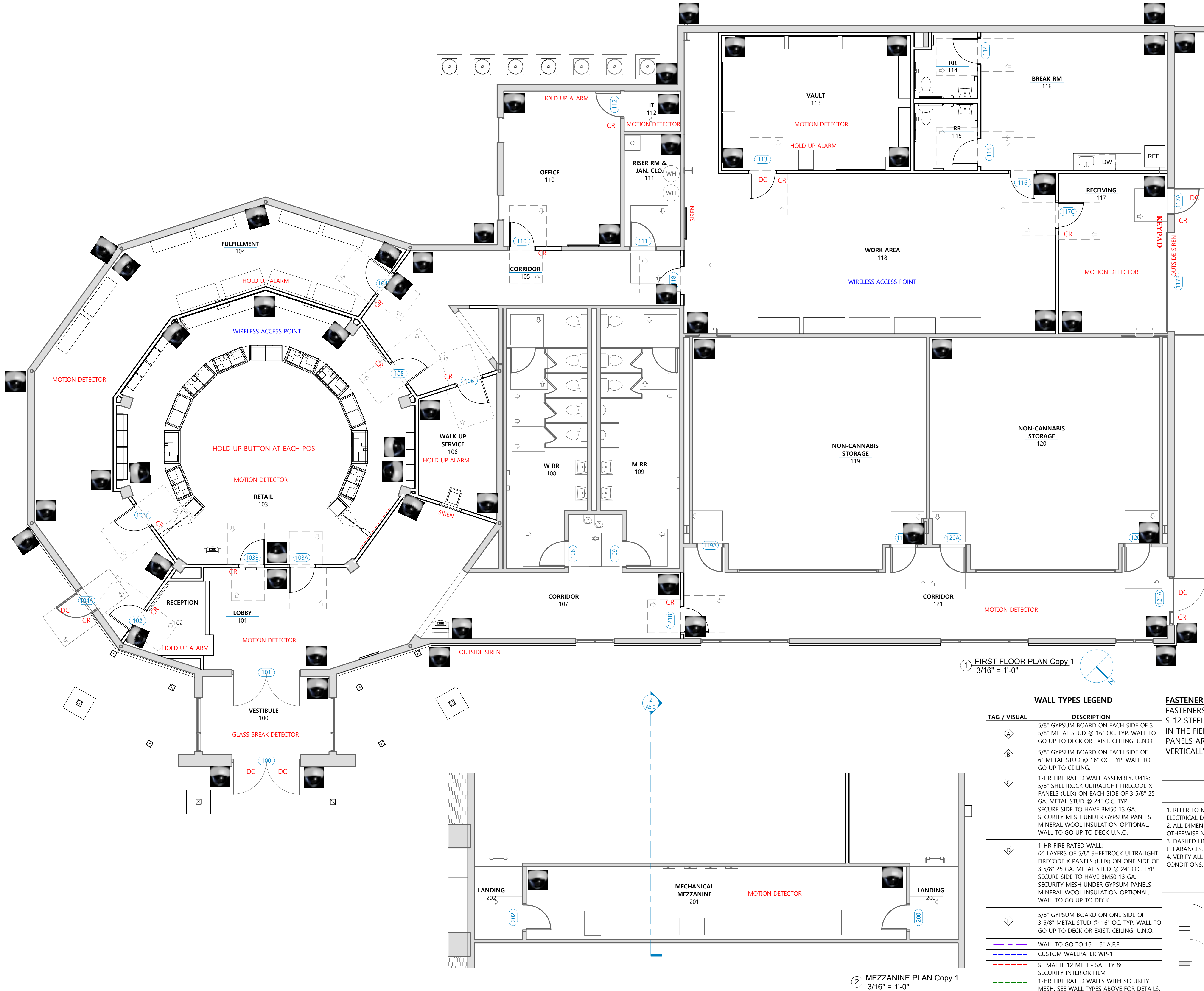
DESIGN  
DRAWN  
PROJECT NO.

Designer  
Author  
23\_05\_19

BOH & LOBBY  
INTERIOR  
ELEVATIONS  
A8.3



C:\Users\Wgonzalez\Documents\W231206\_Branson MO C3 Central\_Kgonzalez@dfdg.rvt



DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331

PRELIMINARY NOT FOR CONSTRUCTION

DATE

C3 - BRANSON MO  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616

DESCRIPTION

DESIGN  
DRAWN  
PROJECT NO.

Designer  
Author  
23\_05\_19

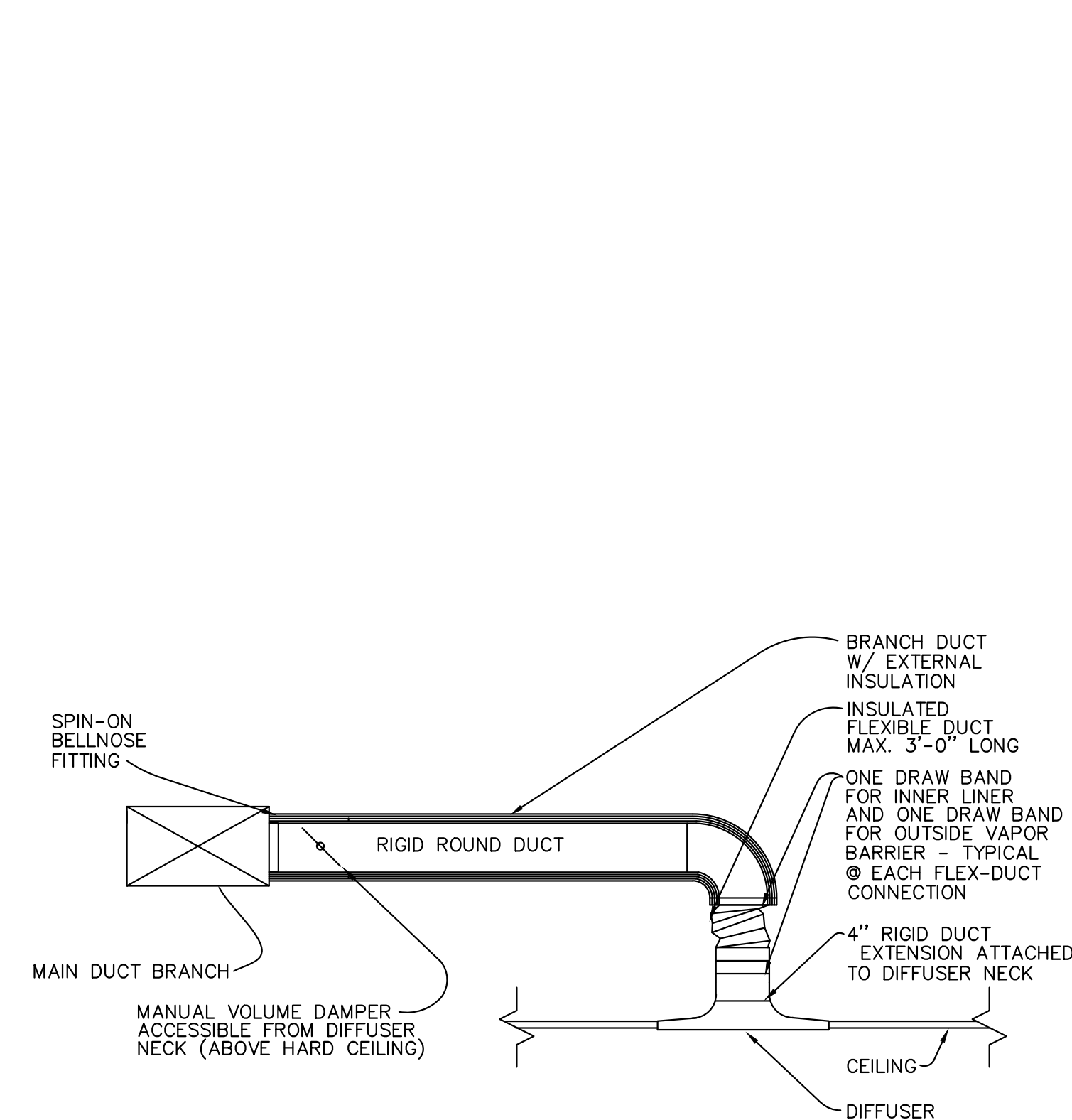
SECURITY PLAN

SEC.1



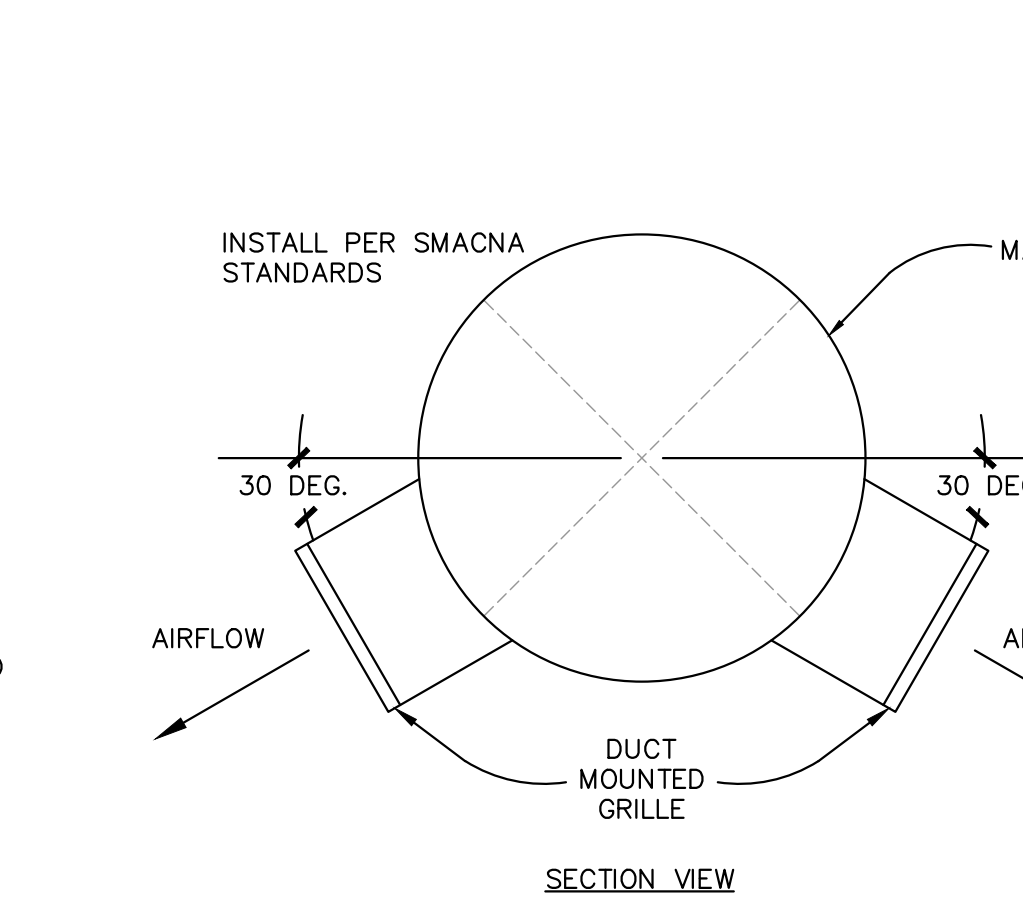
ABBREVIATIONS			
AC	AIR CONDITION (-ING, -ED)	INV	INVERT
AFF	ABOVE FINISHED FLOOR	KW	KILOWATT
AMP	AMPERE (AMP, AMPS)	LAT	LEAVING AIR TEMPERATURE
AP	ACCESS PANEL	LBS	POUNDS
BTU	BRITISH THERMAL UNIT	LWB	LEAVING WET BULB
CBV	CIRCUIT BALANCING VALVE	LWT	LEAVING WATER TEMPERATURE
CFH	CUBIC FEET PER HOUR	MA	MIXED AIR
CFM	CUBIC FEET PER MINUTE	MAX	MAXIMUM
CHW	CIRCULATING HOT WATER	MBH	THOUSAND BTU'S/HR
CHWR	CHILLED WATER RETURN	MIN	MINIMUM
CHWS	CHILLED WATER SUPPLY	MISC	MISCELLANEOUS
CLG	CEILING	NA	NOT APPLICABLE
CO	CLEANOUT	NC	NOISE CRITERIA
CR	CONDENSATE RETURN	NIC	NOT IN CONTRACT
CW	COLD WATER	NTS	NOT TO SCALE
DB	DECIBEL	OA	OUTSIDE AIR
DEMO	DEMOLITION	OB	OPPOSED BLADE DAMPER
DIA	DIAMETER	ORD	OVERFLOW ROOF DRAIN
DIFF	DIFFUSER	PH	PHASE (ELECTRICAL)
DWG	DRAWING	PVC	POLYVINYL CHLORIDE
DX	DIRECT EXPANSION	RA	RETURN AIR
EAT	ENTERING AIR TEMPERATURE	RD	ROOF DRAIN
ELEC	ELECTRICAL	REC	RECESSED
ELEV	ELEVATION	REL	RELIEF
EMS	ENERGY MANAGEMENT SYSTEM	RH	RELATIVE HUMIDITY
ESP	EXTERNAL STATIC PRESSURE	RM	ROOM
EWB	ENTERING WET BULB	RPM	REVOLUTIONS PER MINUTE
EWI	ENTERING WATER TEMPERATURE	SA	SUPPLY AIR
EXH	EXHAUST	SAN	SANITARY
EXIST	EXISTING	SD	SMOKE DAMPER
F	FAHRENHEIT	SF	SQUARE FEET
FSD	COMBINATION FIRE/SMOKE DAMPER	SP	STATIC PRESSURE
FCO	FLOOR CLEANOUT	SPEC	SPECIFICATION
FD	FIRE DAMPER	ST	STORM
FD	FLOOR DRAIN	STD	STANDARD
FDC	FIRE DEPARTMENT CONNECTION	TD	TEMPERATURE DIFFERENCE
FFE	FINISHED FLOOR ELEVATION	TSP	TOTAL STATIC PRESSURE
FLR	FLOOR	TYP	TYPICAL
FPM	FEET PER MINUTE	V	VOLTS
FT	FOOT OR FEET	VFD	VARIABLE FREQUENCY DRIVE
GA	GAGE OR GAUGE	VSD	VARIABLE SPEED DRIVE
GAL	GALLONS	VOL	VOLUME
GC	GENERAL CONTRACTOR	VTR	VENT THROUGH ROOF
GP	GALLONS PER HOUR	W	WATTS
HP	HORSEPOWER	W/O	WITHOUT
HT	HEIGHT	WC	WATER CLOSET
HVAC	HEATING, VENTILATING, AIR CONDITIONING	WCO	WALL CLEANOUT
HW	HOT WATER	WT	WEIGHT
HZ	HERTZ		
ID	INSIDE DIAMETER		

EQUIPMENT TAGS			
ACCU	AIR COOLED CONDENSING UNIT	GWH	GAS WATER HEATER
AHU	AIR HANDLING UNIT	HU	HUMIDIFIER
AHUP	AIR HANDLING UNIT PUMP	HUH	HORIZONTAL UNIT HEATER
BP	BOOSTER PUMP	HWP	HEATING WATER PUMP
CDWP	CONDENSER WATER PUMP	IH	INTAKE HOOD
CEF	CEILING EXHAUST FAN	MAU	MAKE-UP AIR UNIT
CHWP	CHILLED WATER PUMP	PCWP	PRIMARY CHILLED WATER PUMP
CP	CIRCUATING PUMP	PHWP	PRIMARY HEATING WATER PUMP
CPR	CONDENSATE PUMP AND RECEIVER	PRV	POWER ROOF VENTILATOR
CRP	CONDENSATE RETURN PUMP	REF	RELIEF EXHAUST FAN
CUH	CABINET UNIT HEATER	RF	RETURN FAN
DHC	DUCT HEATING COIL	RH	RELIEF HOOD
ECH	ELECTRIC CABINET HEATER	RTU	ROOFTOP UNIT
EF	EXHAUST FAN	SCWP	SECONDARY CHILLED WATER PUMP
EHC	ELECTRIC HEATING COIL	SEP	SEWAGE EJECTOR PUMP
ES	ELECTRONIC SENSOR	SHWP	SECONDARY HEATING WATER PUMP
EUH	ELECTRIC UNIT HEATER	SP	SUMP PUMP
EW	ELECTRIC WATER COOLER	TF	TRANSFER FAN
EW	ELECTRIC WATER HEATER	USF	UTILITY SET FAN
FCU	FAN COIL UNIT	VAV	VARIABLE AIR VOLUME BOX
FPB	FAN POWERED VARIABLE AIR VOLUME BOX	VUH	VERTICAL UNIT HEATER
		WS	WATER SOFTENER



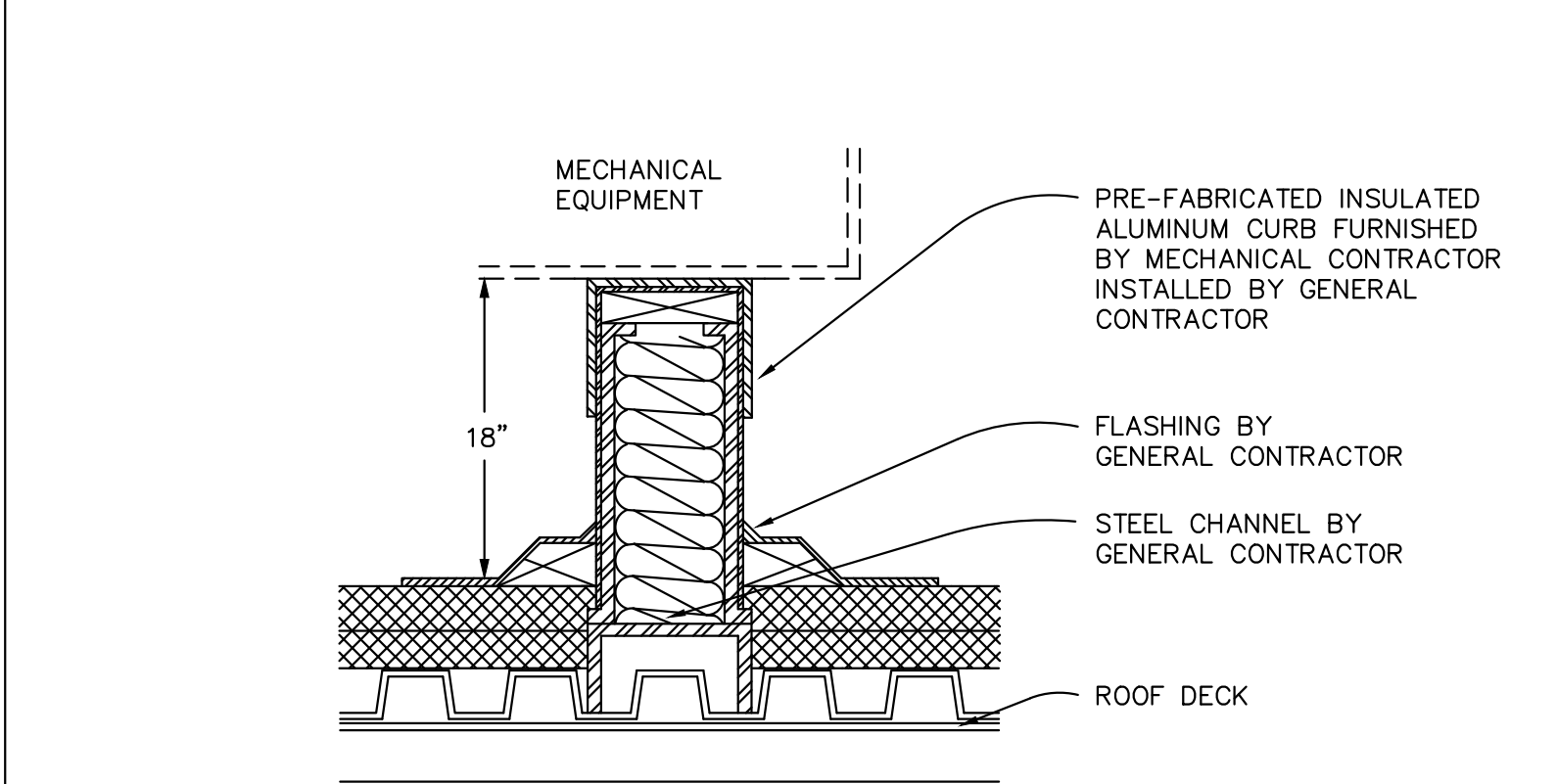
1 TYP. DIFFUSER/DUCT CONNECTIONS  
NO SCALE SURFACE MOUNT DIFFUSER

HVAC SYMBOL LEGEND	
DUCTWORK	12/12
SUPPLY DUCT UP	12/12
SUPPLY DUCT DOWN	12/12
SUPPLY DUCT UP THROUGH ROOF	12/12
RETURN/RELIEF DUCT UP	12/12
RETURN/RELIEF DUCT DOWN	12/12
RETURN/RELIEF DUCT UP THROUGH ROOF	12/12
EXHAUST DUCT UP	12/12
EXHAUST DUCT DOWN	12/12
EXHAUST DUCT UP THROUGH ROOF	12/12
MANUAL VOLUME DAMPER	12/12
MOTORIZED DAMPER	12/12
REMOTELY ACCESSIBLE VOLUME DAMPER	12/12
FIRE DAMPER W/ACCESS PANEL	12/12
FIRE/SMOKE DAMPER W/ACCESS PANEL	12/12
SMOKE DAMPER W/ACCESS PANEL	12/12
DUCT RISE (OR DROP)	UP (OR DN)
EXISTING DUCTWORK TO REMAIN	12/12
EXISTING DUCTWORK TO BE REMOVED	12/12
SUPPLY AIR TERMINAL	
RETURN/EXHAUST/TRANSFER AIR TERMINAL	
VAV BOX	
ACCESS PANEL	
THERMOSTAT	
TEMPERATURE SENSOR	
SMOKE DETECTOR	
CO2 SENSOR	
LONG RADIUS ELBOW	
SHORT RADIUS ELBOW WITH VANES	
DIFFUSER TYPE   NECK SIZE	
AIRFLOW QUANTITY	

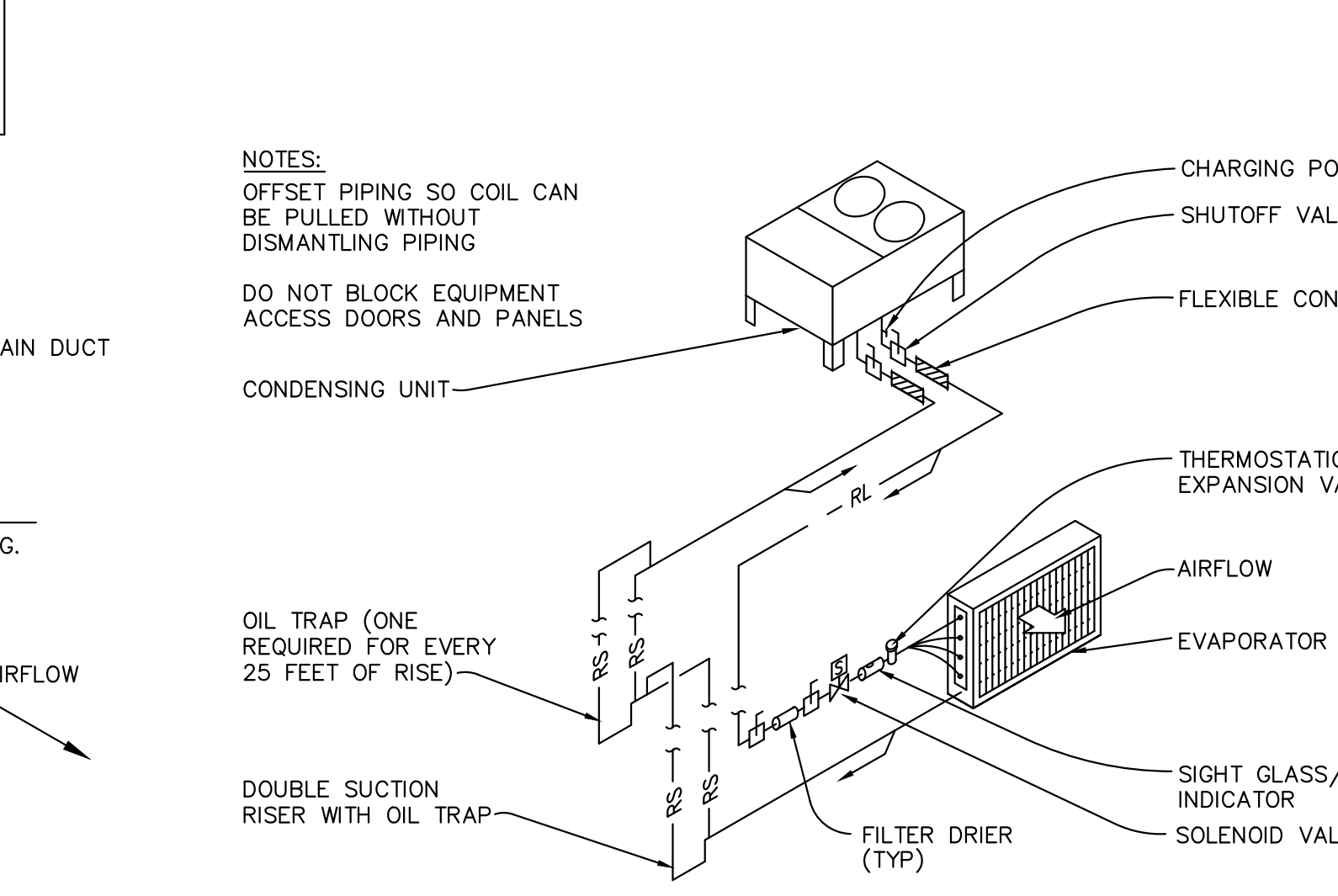


2 DUCT MOUNTED GRILLE  
NO SCALE

PLUMBING SYMBOL LEGEND		
FLOOR DRAIN	ANCHOR	REDUCER
FLOOR SINK W/HALF GRATE	PIPE FLANGE	FLOW ARROW
FLOOR SINK W/FULL GRATE	PIPE GUIDE	STEAM TRAP (F&T)
BALL VALVE	AIR CHAMBER	THERMOSTAT WELL
GATE VALVE	WATER HAMMER ARRESTER	EXPANSION JOINT
CHECK VALVE	WALL HYDRANT/HOSE BIBB	FLEXIBLE CONNECTOR
DRAIN VALVE	EXPANSION TANK	TEST PLUG
2-WAY VALVE	WATER METER	STEAM TRAP (THERMOSTATIC)
SOLENOID VALVE	FLOW METER	VACUUM RELIEF VALVE
MOTORIZED VALVE	THERMOMETER	AQUASTAT
EMERGENCY GAS SHUT-OFF VALVE	PRESSURE GAGE	PRESSURE REGULATOR
THERMOSTATIC/PRESSURE BALANCE MIXING VALVE	STRAINER	PIPE DOWN
TRAP PRIMING VALVE	PUMP	PIPE UP
PRESSURE RELIEF VALVE	PLUMBING FIXTURE TAG	TEE DOWN
BUTTERFLY VALVE	FLOOR RECEPTOR TAG	UNION
GLOBE VALVE	FLOW SWITCH	PIPE CAP
CIRCUIT BALANCING VALVE	3-WAY VALVE	PIPE BREAK
PLUG VALVE	BACKFLOW PREVENTER	



4 MECH EQUIPMENT CURB DETAIL  
NO SCALE



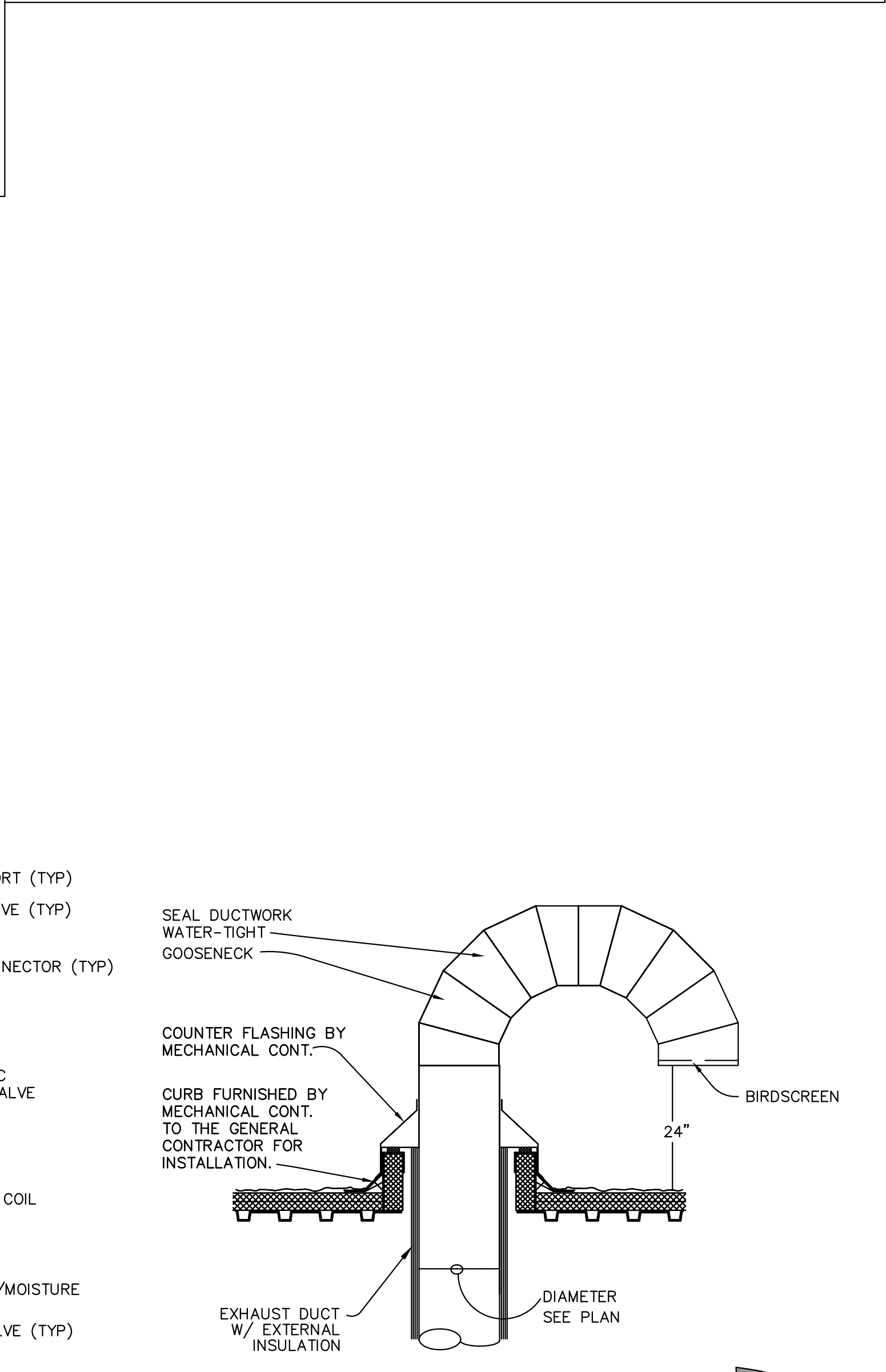
5 REFRIGERANT PIPING  
NO SCALE

PLUMBING LINETYPE LEGEND	
DOMESTIC COLD WATER	
DOMESTIC COLD WATER (BELOW FLOOR/GRADE)	
DOMESTIC COLD WATER (EXISTING)	
DOMESTIC HOT WATER	
DOMESTIC HOT WATER (EXISTING)	
GAS	
GAS (ON ROOF)	
GAS (EXISTING)	
GAS (EXISTING ON ROOF)	
SANITARY SEWER (ABOVE FLOOR/GRADE)	
SANITARY SEWER (BELOW FLOOR/GRADE)	
SANITARY SEWER (EXISTING)	
VENT	
VENT (UNDERFLOOR/GRADE)	
VENT (EXISTING)	

HVAC PIPING LINETYPE LEGEND	
CONDENSATE DRAIN	
CONDENSATE DRAIN (EXISTING)	

MISC. SYMBOL LEGEND	
EQUIPMENT TAG	CONNECTION TO EXISTING
REVISION TRIANGLE	KEY NOTE

SHEET INDEX	
M0.0	MECHANICAL TITLE SHEET AND DETAILS
M1.0	MAIN LEVEL HVAC PLAN
M1.1	MEZZANINE HVAC PLAN
M2.0	MECHANICAL SPECIFICATIONS
P1.0	PLUMBING PLANS
P2.0	PLUMBING RISERS, SCHEDULES AND DETAILS



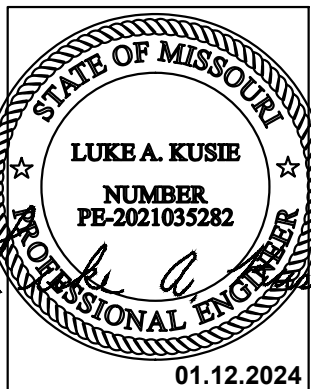
5 GOOSENECK VENT THRU ROOF  
NO SCALE

HALLBERG  
ENGINEERING  
Mechanical/Electrical Consulting Engineers  
750 Commerce Court  
White Bear Lake, MN 55110  
Phone (651) 748-1100 • Fax (651) 748-3370



DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331



FOR PERMIT ISSUE

C3 - BRANSON MO

3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616

DATE

12.28.2023  
01.12.2024

DESCRIPTION

REVIEW SET  
PERMIT SET

CHECKED

LAK

DRAWN

TMS

HEI PROJECT NO.

R23-4590.006

MECHANICAL  
TITLE SHEET  
AND DETAILS

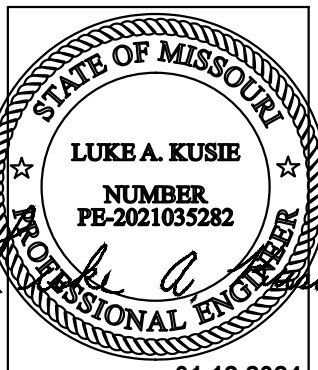
Mo.o





DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331



FOR PERMIT ISSUE

DATE

12.28.2023  
01.12.2024

DESCRIPTION

REVIEW SET  
PERMIT SET

C3 - BRANSON MO  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616

CHECKED

LAK

DRAWN

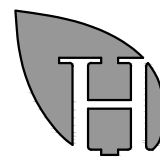
TMS

HEI PROJECT NO.

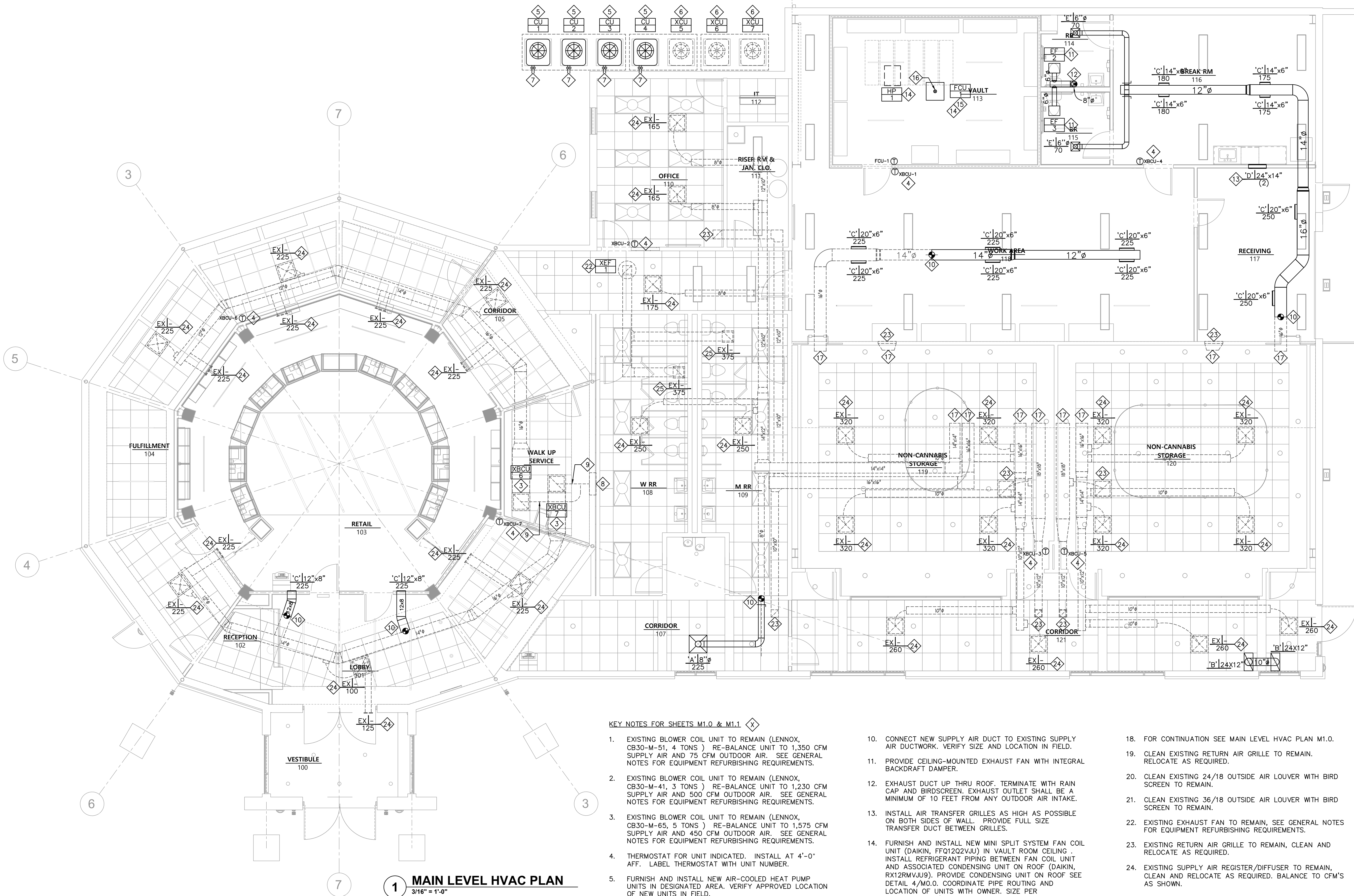
R23-4590.006

MAIN LEVEL  
HVAC PLAN

M1.0



HALLBERG  
ENGINEERING  
Mechanical/Electrical Consulting Engineers  
1750 Commerce Court  
White Bear Lake, MN 55110  
Phone (651) 748-1100 • Fax (651) 748-3370



KEY NOTES FOR SHEETS M1.0 & M1.1

- EXISTING BLOWER COIL UNIT TO REMAIN (LENNOX, CB30-M-51, 4 TONS ) RE-BALANCE UNIT TO 1,350 CFM SUPPLY AIR AND 75 CFM OUTDOOR AIR. SEE GENERAL NOTES FOR EQUIPMENT REFURBISHING REQUIREMENTS.
- EXISTING BLOWER COIL UNIT TO REMAIN (LENNOX, CB30-M-41, 3 TONS ) RE-BALANCE UNIT TO 1,230 CFM SUPPLY AIR AND 500 CFM OUTDOOR AIR. SEE GENERAL NOTES FOR EQUIPMENT REFURBISHING REQUIREMENTS.
- EXISTING BLOWER COIL UNIT TO REMAIN (LENNOX, CB30-M-65, 5 TONS ) RE-BALANCE UNIT TO 1,575 CFM SUPPLY AIR AND 450 CFM OUTDOOR AIR. SEE GENERAL NOTES FOR EQUIPMENT REFURBISHING REQUIREMENTS.
- THERMOSTAT FOR UNIT INDICATED. INSTALL AT 4'-0" AFF. LABEL THERMOSTAT WITH UNIT NUMBER.
- FURNISH AND INSTALL NEW AIR-COOLED HEAT PUMP UNITS IN DESIGNATED AREA. VERIFY APPROVED LOCATION OF NEW UNITS IN FIELD.
- EXISTING AIR-COOLED HEAT PUMP UNITS IN DESIGNATED AREA TO REMAIN.
- ROUTE REFRIGERANT PIPING UP AND OVER TO MEZZANINE FOR CONNECTION TO UNITS ON THE MEZZANINE AREA. FOLLOW ROUTING OF EXISTING LINESETS.
- CLEAN EXISTING 30/24 OUTSIDE AIR LOUVER WITH BIRD SCREEN TO REMAIN.
- 12"Ø OUTSIDE AIR DUCT WITH BALANCING DAMPER TO REMAIN.
- CONNECT NEW SUPPLY AIR DUCT TO EXISTING SUPPLY AIR DUCTWORK. VERIFY SIZE AND LOCATION IN FIELD.
- PROVIDE CEILING-MOUNTED EXHAUST FAN WITH INTEGRAL BACKDRAFT DAMPER.
- EXHAUST DUCT UP THRU ROOF. TERMINATE WITH RAIN CAP AND BIRDSCREEN. EXHAUST OUTLET SHALL BE A MINIMUM OF 10 FEET FROM ANY OUTDOOR AIR INTAKE.
- INSTALL AIR TRANSFER GRILLES AS HIGH AS POSSIBLE ON BOTH SIDES OF WALL. PROVIDE FULL SIZE TRANSFER DUCT BETWEEN GRILLES.
- FURNISH AND INSTALL NEW MINI SPLIT SYSTEM FAN COIL UNIT (DAIKIN, FF01202VJU) IN VAULT ROOM CEILING. INSTALL REFRIGERANT PIPING BETWEEN FAN COIL UNIT AND ASSOCIATED CONDENSING UNIT ON ROOF (DAIKIN, RX12RMVJU9). PROVIDE CONDENSING UNIT ON ROOF SEE DETAIL 4/M.O.O. COORDINATE PIPE ROUTING AND LOCATION OF UNITS WITH OWNER. SIZE PER MANUFACTURER'S INSTRUCTIONS. PROVIDE THERMOSTAT AND MOUNT AT 4'0" AFF. BALANCE AS REQUIRED TO PROVIDE 30 CFM OUTSIDE AIR.
- EXTEND 1" PRIMARY CONDENSATE PIPES TO DISCHARGE AT MOP SINK. PROVIDE 4" DEEP TRAP ON PRIMARY CONDENSATE PIPE. PROVIDE 2" AIR GAP AT DISCHARGE. PROVIDE MANUFACTURER'S CONDENSATE PUMP.
- 4"Ø OUTDOOR AIR DUCT UP THROUGH THE ROOF TO THE GOOSENECK. SEE DETAIL 5/M.O.O. AIR INTAKE SHALL BE A MINIMUM OF 10 FEET FROM ANY EXHAUST DISCHARGE.
- FOR CONTINUATION SEE MEZZANINE HVAC PLAN M1.1.
- FOR CONTINUATION SEE MAIN LEVEL HVAC PLAN M1.0.
- CLEAN EXISTING RETURN AIR GRILLE TO REMAIN. RELOCATE AS REQUIRED.
- CLEAN EXISTING 24/18 OUTSIDE AIR LOUVER WITH BIRD SCREEN TO REMAIN.
- CLEAN EXISTING 36/18 OUTSIDE AIR LOUVER WITH BIRD SCREEN TO REMAIN.
- EXISTING EXHAUST FAN TO REMAIN, SEE GENERAL NOTES FOR EQUIPMENT REFURBISHING REQUIREMENTS.
- EXISTING RETURN AIR GRILLE TO REMAIN, CLEAN AND RELOCATE AS REQUIRED.
- EXISTING SUPPLY AIR REGISTER/DIFFUSER TO REMAIN, CLEAN AND RELOCATE AS REQUIRED. BALANCE TO CFM'S AS SHOWN.
- EXISTING EXHAUST AIR GRILLE TO REMAIN, CLEAN AND RELOCATE AS REQUIRED.
- EXISTING BLOWER COIL UNIT TO REMAIN (LENNOX, CB30-M-65, 5 TONS ) RE-BALANCE UNIT TO 1,800 CFM SUPPLY AIR AND 450 CFM OUTDOOR AIR. SEE GENERAL NOTES FOR EQUIPMENT REFURBISHING REQUIREMENTS.



GENERAL MECHANICAL NOTES

- A. ALL REFERENCES ON THE DRAWINGS AND IN THE SPECIFICATIONS TO "CONTRACTOR" AND "MECHANICAL CONTRACTOR" REFER TO THE TENANT'S MECHANICAL CONTRACTOR, UNLESS NOTED OTHERWISE.
- B. ALL WORK SHOWN AND SPECIFIED HEREIN SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR, UNLESS SPECIFICALLY NOTED OTHERWISE.
- C. THE CONTRACTOR SHALL VISIT THE SITE TO VERIFY EXISTING CONDITIONS PRIOR TO SUBMITTING HIS BID, INCLUDING ALL EXISTING EQUIPMENT, DUCTWORK, PIPING, STUB-INS, TAPS, ETC. NO CLAIMS FOR EXTRAS DUE TO LACK OF FAMILIARITY WITH SITE CONDITIONS WILL BE APPROVED.
- D. THE CONTRACTOR SHALL REVIEW THE DRAWINGS AND SPECIFICATIONS FOR ALL DIVISIONS OF WORK AND SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES. IT IS THIS CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL HIS SUBCONTRACTORS WITH A COMPLETE SET OF BID DOCUMENTS.
- E. THESE DRAWINGS ARE SCHEMATIC IN NATURE AND SHALL NOT BE SCALED. THE CONTRACTOR SHALL FIT THE WORK TO THE JOB, CAREFULLY INVESTIGATING STRUCTURAL, MECHANICAL, ELECTRICAL AND FINISH CONDITIONS AFFECTING THE WORK, AND SHALL FURNISH AND INSTALL ALL NECESSARY BENDS, OFFSETS, FITTINGS, JUNCTIONS, ETC. WHETHER OR NOT SPECIFICALLY SHOWN OR CALLED FOR, AND SEE THAT THERE ARE NO INTERFERENCES BETWEEN THIS WORK AND THE WORK OF OTHER TRADES.
- F. PROVIDE ALL EQUIPMENT AND MATERIALS, AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE MECHANICAL SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED, AND AS REQUIRED BY APPLICABLE CODES.
- G. INSTALL ALL MECHANICAL EQUIPMENT, MATERIALS AND APPURTENANCES IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, THE CONTRACT DOCUMENTS, AND APPLICABLE CODES AND REGULATIONS.
- H. ALL EQUIPMENT, MATERIALS AND INSTALLATION SHALL COMPLY WITH ALL APPLICABLE LANDLORD CRITERIA.
- I. THE LOCATIONS OF ALL ITEMS SHOWN ON THE DRAWINGS THAT ARE NOT DIMENSIONED ARE APPROXIMATE ONLY. THE EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULTS SHALL BE BASED ON SITE CONDITIONS. INSTALL ALL EQUIPMENT AS REQUIRED TO MAINTAIN MANUFACTURER'S RECOMMENDED SERVICE CLEARANCES.
- J. COORDINATE DIFFUSER, REGISTER AND GRILLE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLAN, LIGHTING, AND OTHER CEILING-MOUNTED ITEMS, AND MAKE MINOR ADJUSTMENTS IN DIFFUSER LOCATIONS AND DUCTWORK AS REQUIRED.
- K. ALL ROOF CUTTING, PATCHING AND FLASHING REQUIRED TO INSTALL THE MECHANICAL SYSTEMS SHALL BE BY A LANDLORD-APPROVED ROOFING CONTRACTOR AT THIS CONTRACTOR'S EXPENSE. COORDINATE ROOF PENETRATIONS WITH LANDLORD AND GENERAL CONTRACTOR.
- L. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FINAL CONNECTIONS TO LANDLORD'S BASE BUILDING SYSTEMS. RE-USE EXISTING CONNECTION POINTS WHERE POSSIBLE. COORDINATE ALL REQUIREMENTS IN FIELD WITH LANDLORD.
- M. NOTIFY TENANT'S PROJECT MANAGER IF ANY EXISTING DUCTWORK OR PIPING CONNECTION POINTS ARE SMALLER THAN SIZES SHOWN ON DRAWINGS.
- N. REPLACE UNIT COMPONENTS AS REQUIRED TO MAKE UNIT FULLY FUNCTIONAL, INCLUDING BUT NOT LIMITED TO: FANS, MOTORS, DRIVES, BELTS, BEARINGS, COILS, HEAT EXCHANGERS, REFRIGERATION, DAMPERS, DAMPER MOTORS, VALVES, AND OPERATING AND SAFETY CONTROLS. CHANGE FILTERS UPON COMPLETION OF SERVICE WORK AND JUST PRIOR TO JOB TURNOVER.
- O. REMOVE ALL EXISTING MECHANICAL EQUIPMENT, DUCTWORK, PIPING SYSTEMS, CONTROLS, ETC. NOT BEING RE-USED. DO NOT ABANDON IN PLACE. MAINTAIN SERVICES PASSING THROUGH SPACE TO OTHER TENANT SPACES.
- P. CONTRACTOR MAY, AT HIS OPTION, INSTALL ROUND SPIRAL DUCTWORK OF EQUIVALENT CAPACITY IN LIEU OF RECTANGULAR DUCTWORK SHOWN AS LONG AS CEILING HEIGHTS ARE NOT AFFECTED.
- Q. FIBERGLASS DUCTBOARD IS NOT ALLOWED.
- R. BRANCH DUCT RUNOUTS TO DIFFUSERS SHALL BE SAME SIZE AS DIFFUSER NECK, UNLESS SHOWN OTHERWISE.
- S. RIGID DUCTWORK SHALL BE UTILIZED FOR ALL RUNOUTS TO DIFFUSERS IN OPEN CEILING AREAS.
- T. CONTRACTOR SHALL BALANCE ALL HVAC SYSTEMS IN ACCORDANCE WITH THE MECHANICAL SPECIFICATIONS. SUBMIT COPIES OF TEST & BALANCE REPORT TO TENANT, LANDLORD AND ENGINEER.

CONDENSING UNIT SCHEDULE

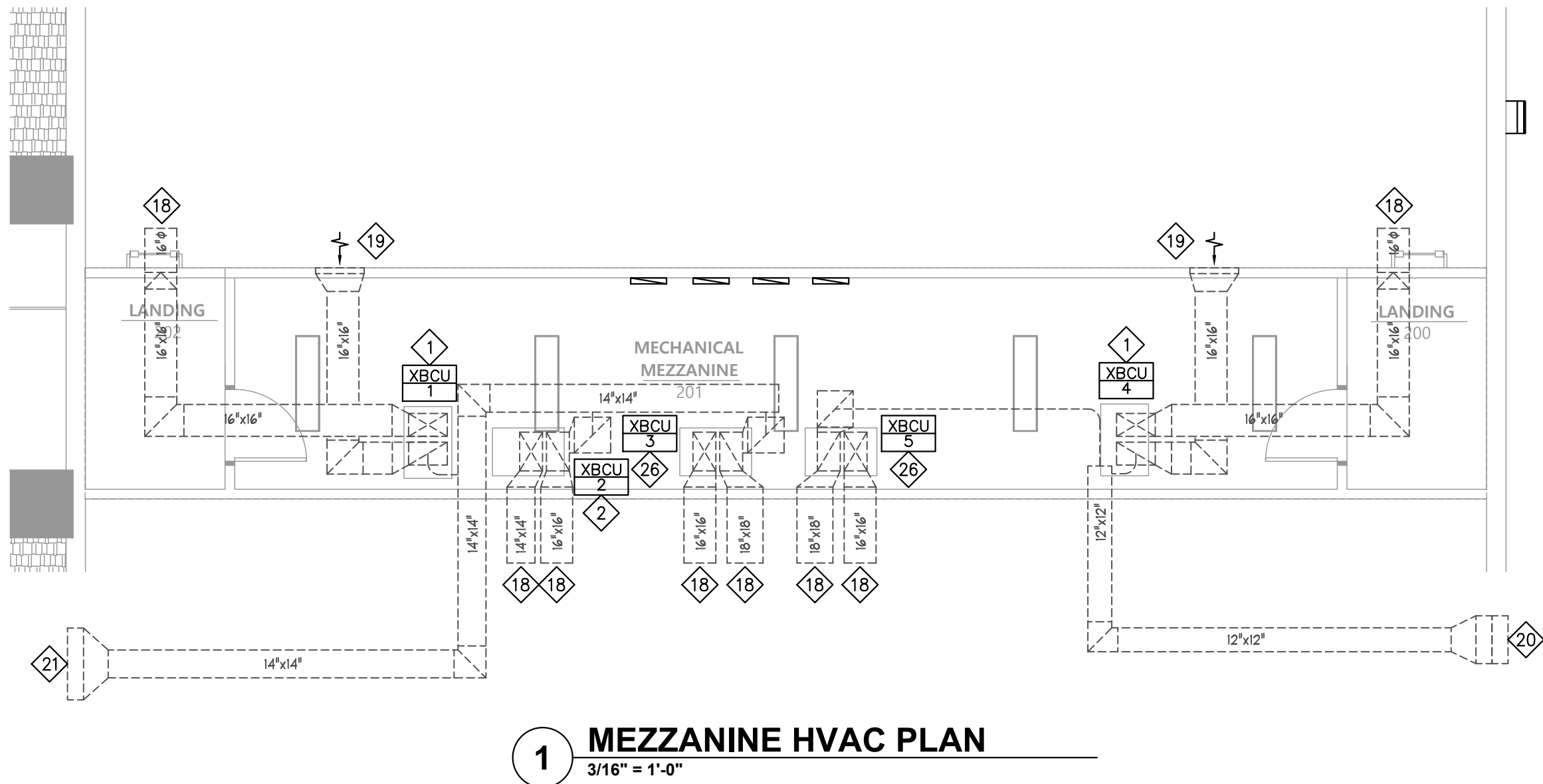
UNIT TAG	CU-1	CU-2	CU-3	CU-4
LOCATION	GROUND	GROUND	GROUND	GROUND
MANUFACTURER	CARRIER	CARRIER	CARRIER	CARRIER
MODEL NUMBER	25SPA548A003	25SPA536A003	25SPA560A003	25SPA548A003
SERVICE	XBCU-1	XBCU-2	XBCU-3	XBCU-4
REFRIGERANT TYPE	R-410A	R-410A	R-410A	R-410A
NOMINAL CAPACITY (TON)	4	3	5	4
SEER	14.3	14.3	14.3	14.3
CIRCUITS (DUAL, SINGLE)	SINGLE	SINGLE	SINGLE	SINGLE
COMPRESSOR TYPE	SCROLL	SCROLL	SCROLL	SCROLL
QUANTITY	1	1	1	1
UNLOADING %	0-100	0-100	0-100	0-100
CONDENSER NUMBER OF FANS	1	1	1	1
HP	-	-	-	-
MBH (OUTPUT)	48.0	36.0	60.0	48.0
AMBIENT AIR TEMP	95.0	95.0	95.0	95.0
REFR SUCTION TEMP	45°F	45°F	45°F	45°F
REFRIGERANT PIPE SIZES				
LIQUID	PER MANUF.	PER MANUF.	PER MANUF.	PER MANUF.
SUCTION	PER MANUF.	PER MANUF.	PER MANUF.	PER MANUF.
HOT GAS	PER MANUF.	PER MANUF.	PER MANUF.	PER MANUF.
ELECTRICAL				
MCA	32.8	20.3	33.2	32.8
V-PH-CY	208/1/60	208/1/60	208/1/60	208/1/60
STARTER	DIV. 15	DIV. 15	DIV. 15	DIV. 15
DISCONNECT	DIV. 16	DIV. 16	DIV. 16	DIV. 16
OPERATING WEIGHT (LBS)	245	245	245	245
REMARKS	PROVIDE UNIT WITH LOW AMB. CONTROL CRANKCASE HEATER HARD SHUT-OFF TXV, COMPRESSOR HARD START ASSIST, FOLLOW LONGLINE GUIDE FOR PIPE SIZING.	PROVIDE UNIT WITH LOW AMB. CONTROL CRANKCASE HEATER HARD SHUT-OFF TXV, COMPRESSOR HARD START ASSIST, FOLLOW LONGLINE GUIDE FOR PIPE SIZING.	PROVIDE UNIT WITH LOW AMB. CONTROL CRANKCASE HEATER HARD SHUT-OFF TXV, COMPRESSOR HARD START ASSIST, FOLLOW LONGLINE GUIDE FOR PIPE SIZING.	PROVIDE UNIT WITH LOW AMB. CONTROL CRANKCASE HEATER HARD SHUT-OFF TXV, COMPRESSOR HARD START ASSIST, FOLLOW LONGLINE GUIDE FOR PIPE SIZING.

GRILLE AND DIFFUSER SCHED.

TYPE	A	B	C	D	E
ITEM	SUPPLY	RETURN/TRANS	SUPPLY	TRANSFER	SUPPLY
DESCRIPTION	LAY-IN	LAY-IN	DUCT MOUNT	WALL MOUNT	LAY-IN
MANUFACTURER	TITUS	TITUS	TITUS	TITUS	TITUS
MODEL NUMBER	TMS	50F	300RS	350FL	TMS
REMARKS	STD. WHITE FINISH 24"x24" FACE W/EG EQUALIZING GRID, OBD & "LAY-IN" TRM FRAME	STD. WHITE FINISH W/ "LAY-IN" TRM FRAME	STD. WHITE FINISH W/ OBD	STD. WHITE FINISH	STD. WHITE FINISH 12"x12" FACE W/EG EQUALIZING GRID, OBD & "LAY-IN" TRM FRAME

EXHAUST FAN SCHED.

UNIT TAG	EF-2	EF-3
AREA SERVED	TOILET ROOM 114	TOILET ROOM 115
MANUFACTURER	GREENHECK	GREENHECK
MODEL NUMBER	SP-A125	SP-A125
DRIVE (BELT, DIRECT)	DIRECT	DIRECT
FAN DATA		
CFM	100	100
ESP	0.25"	0.25"
RPM	1100	1100
HP	53 WATTS	53 WATTS
ELECTRICAL		
V-PH-CY	115/1/60	115/1/60
STARTER	-	-
DISCONNECT	DIV. 16	DIV. 16
WEIGHT (LBS)	15	15
REMARKS	WITH INTEGRAL BACKDRAFT DAMPER, E.C. SHALL INTERLOCK WITH TOILET ROOM LIGHTS	WITH INTEGRAL BACKDRAFT DAMPER, E.C. SHALL INTERLOCK WITH TOILET ROOM LIGHTS



1 MEZZANINE HVAC PLAN  
3/16" = 1'-0"

FOR PERMIT ISSUE

DATE	DESCRIPTION
12.28.2023	REVIEW SET
01.12.2024	PERMIT SET
CHECKED	LAK
DRAWN	TMS
HEI PROJECT NO.	R23-4590.006

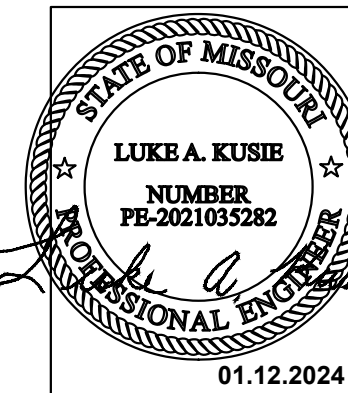
MEZZANINE HVAC PLAN

M1.1



DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331



C3 - BRANSON MO  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616





MECHANICAL SPECIFICATIONS

15000 GENERAL PROVISIONS

- 0.01 DEFINITIONS: THE TERMS LISTED BELOW ARE DEFINED AS FOLLOWS WHEN USED IN DIVISION 15 WORK AND ONLY DIVISION 15 WORK.
- A. WORK: LABOR AND MATERIALS OF THE CONTRACTOR AND/OR SUBCONTRACTOR.
- B. FURNISH: OBTAIN, COORDINATE, SUBMIT THE NECESSARY DRAWINGS, DELIVER TO THE JOBSITE IN NEW CONDITION AND GUARANTEE.
- C. INSTALL: RECEIVE AT THE JOB-SITE, UNLOAD, STORE, SET IN PLACE, CONNECT, PLACE IN OPERATION AND GUARANTEE.
- D. PROVIDE: FURNISH AND INSTALL.
- E. CONNECT: BRING SERVICE TO THE EQUIPMENT AND MAKE FINAL ATTACHMENTS INCLUDING NECESSARY PIPE FITTINGS, DUCTWORK, TRANSITIONS, ETC.
- F. CONCEALED: HIDDEN FROM SIGHT IN CHASES, FURRED SPACES, SHAFTS, ABOVE CEILING, EMBEDDED IN CONSTRUCTION, IN CRAWL SPACES OR BURIED.
- G. EXPOSED: NOT INSTALLED UNDERGROUND OR CONCEALED AS DEFINED ABOVE.
- H. REMOVE: REMOVE ALL EQUIPMENT AND MATERIALS NOT BEING RE-USED. DISPOSE OF OFF-SITE IN A LEGAL AND ENVIRONMENTALLY CONCIIOUS MANNER.
- 0.02 PERFORMANCE: MECHANICAL CONTRACTOR SHALL PERFORM ALL WORK SPECIFIED, INDICATED AND REQUIRED UNLESS OTHERWISE NOTED, INCLUDING FINAL CONNECTIONS, IN A WORKMANLIKE MANNER USING WORKERS SKILLED AND EXPERIENCED IN THE TRADE.
- 0.03 SITE EXAMINATION: EXAMINE SITE BEFORE BIDDING. CLAIM NO EXTRAS RESULTING FROM LACK OF KNOWLEDGE OF SITE CONDITIONS. IF SITE CONDITIONS REQUIRE MODIFICATION OF THE SYSTEMS INDICATED IN THESE DOCUMENTS, SO ADVISE ENGINEER, AND IF ACCEPTED BY ENGINEER, INCLUDE COST OF SUCH MODIFICATIONS IN BID.
- 0.04 JOBSITE CONDITIONS: ACCEPT SOLE AND COMPLETE RESPONSIBILITY FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK.
- 0.05 FULL FUNCTION: PROVIDE ALL MINOR ITEMS NECESSARY FOR A COMPLETE AND FULLY FUNCTIONAL INSTALLATION.
- 0.06 ADMINISTRATION: PROVIDE EVIDENCE OF LICENSING, BONDING, AND INSURANCE, AND PERFORM OTHER ADMINISTRATIVE FUNCTIONS, AS REQUIRED.
- 0.07 PERMITS: PROCURE AND PAY FOR ALL REQUIRED PERMITS AND SERVICE CHARGES.
- 0.08 UTILITY SERVICES: ARRANGE FOR ALL REQUIRED UTILITY SERVICES AND PAY ALL UTILITY SERVICE FEES.
- 0.09 COORDINATION: CONFORM TO GENERAL CONSTRUCTION CONTRACT DOCUMENTS EXCEPT AS MODIFIED HEREIN. REFER ALSO TO STRUCTURAL AND ELECTRICAL CONTRACT DOCUMENTS. COORDINATE ALL WORK WITH OTHER TRADES.
- 0.10 CUTTING AND PATCHING: CUT AND PATCH AS REQUIRED. CUT OR WELD STRUCTURAL MEMBERS ONLY WITH APPROVAL OF STRUCTURAL ENGINEER. PATCHING SUBJECT TO APPROVAL BY ARCHITECT.
- 0.11EXISTING FLOORS: TRENCH OR CORE BORE EXISTING FLOORS PER LANDLORD REQUIREMENTS.
- 0.12 ROOF PENETRATIONS: ALL ROOFING WORK SHALL BE PERFORMED BY LANDLORD-APPROVED ROOFING CONTRACTOR AT THIS CONTRACTOR'S COST. COORDINATE WITH LANDLORD.
- 0.13 EQUIPMENT SUBSTITUTIONS: REIMBURSE ELECTRICAL CONTRACTOR, AT NO CHARGE TO TENANT, FOR HIS COSTS INCURRED DUE TO SUBSTITUTION OF MECHANICAL EQUIPMENT HAVING ELECTRICAL REQUIREMENTS DIFFERING FROM THOSE INDICATED.
- 0.14 ADJUSTMENTS: MAKE MINOR ADJUSTMENTS TO WORK WHERE REQUESTED BY TENANT, WHEN SUCH ADJUSTMENTS ARE NECESSARY TO PROPER OPERATION AND WITHIN THE INTENT OF THE CONTRACT.
- 0.15 REFERENCE STANDARDS: COMPLY WITH APPLICABLE STANDARDS OF NFPA, ANSI, UL, ASHRAE, AND SMACNA, EXCEPT AS SUPERSEDED BY LOCAL AUTHORITY. CONFORM WITH CONTRACT DOCUMENTS WHERE THEY EXCEED CODE MINIMUM REQUIREMENTS.
- 0.16 LOCAL REQUIREMENTS: COMPLY WITH THE REQUIREMENTS OF APPLICABLE CODES, LANDLORD, SERVING UTILITIES, AND THE LOCAL AUTHORITY HAVING JURISDICTION. SECURE APPROVAL OF INSTALLATION BY LANDLORD, LOCAL AUTHORITY, AND OTHERS AS REQUIRED.
- 0.17 MATERIALS AND EQUIPMENT: PROVIDE NEW, UL LISTED, COMMERCIAL GRADE MATERIALS, DEVICES, EQUIPMENT, AND FIXTURES, SUITABLE FOR ENVIRONMENT. REUSE EXISTING ONLY WHEN COMPLIANT WITH THE CONTRACT DOCUMENTS, IN GOOD CONDITION, AND APPROVED BY THE ENGINEER.
- 0.18 SHOP DRAWINGS: BEFORE ORDERING EQUIPMENT AND MATERIALS, SUBMIT NOT LESS THAN FIVE CERTIFIED COPIES OF ALL SHOP AND EQUIPMENT DRAWINGS FOR ENGINEER'S REVIEW, WHO WILL RETAIN TWO COPIES. ONLY FURNISH SYSTEMS AND EQUIPMENT IN COMPLIANCE WITH ACCEPTED SHOP DRAWINGS.
- 0.19 INSTALLATION: INSTALL ALL MATERIALS, EQUIPMENT AND SYSTEMS IN FULL ACCORD WITH MANUFACTURER'S INSTRUCTIONS.
- 0.20 LAYOUT: INSTALL ALL PIPING AND DUCTWORK TO PRESENT A NEAT AND ORDERLY APPEARANCE. RUN ALL LINES PARALLEL WITH BUILDING CONSTRUCTION. MAINTAIN HEADROOM AND EQUIPMENT CLEARANCE, AND GRADIENT WHERE REQUIRED. ALLOW FOR EXPANSION AND CONTRACTION.
- 0.21 ACCESS DOORS: PROVIDE ACCESS DOORS OR PANELS FOR ALL VALVES, CLEANOUTS, DAMPERS, CONTROLS, DEVICES, AND OTHER ITEMS REQUIRING INSPECTION OR MAINTENANCE. ACCESS PANELS SERVING HVAC COMPONENTS SHALL BE 12-INCHES BY 12-INCHES MINIMUM OR LARGER TO PROVIDE SUFFICIENT WORKING CLEARANCE FOR COMPONENT BEING ACCESSED.
- 0.22 COMMISSIONING: THOROUGHLY TEST AND DEMONSTRATE PROPER OPERATION OF ALL SYSTEMS AND EQUIPMENT FURNISHED OR INSTALLED UNDER THIS CONTRACT.
- 0.23 RECORD DRAWINGS: PREPARE AND SUBMIT TO GENERAL CONTRACTOR RECORD DRAWINGS SHOWING ALL SIGNIFICANT DEVIATIONS FROM CONSTRUCTION DOCUMENTS. INCLUDE MANUFACTURER AND MODEL NUMBERS FOR ALL EQUIPMENT INSTALLED.
- 0.24 O & M MANUALS: AN OPERATION AND MAINTENANCE MANUAL SHALL BE PROVIDED TO THE BUILDING OWNER OR OPERATOR. THE MANUAL SHALL INCLUDE BASIC DATA RELATING TO THE OPERATION AND MAINTENANCE OF HVAC SYSTEMS AND EQUIPMENT. REQUIRED ROUTINE MAINTENANCE ACTIONS SHALL BE CLEARLY IDENTIFIED. WHERE APPLICABLE, HVAC CONTROLS INFORMATION SUCH AS DIAGRAMS, SCHEMATICS, CONTROL SEQUENCE DESCRIPTIONS, AND MAINTENANCE AND CALIBRATION INFORMATION SHALL BE INCLUDED.
- 0.25 WARRANTY: UNCONDITIONALLY WARRANT ALL WORK TO BE FREE OF DEFECTS IN MATERIALS AND WORKMANSHIP FOR ONE YEAR FROM DATE OF FINAL ACCEPTANCE, EXCEPT WARRANT AIR CONDITIONING COMPRESSORS FOR FIVE YEARS AND GAS-FIRED HEAT EXCHANGERS FOR 10 YEARS. DURING WARRANTY PERIOD, REPAIR OR REPLACE DEFECTIVE MATERIALS, EQUIPMENT OR WORKMANSHIP WITHOUT COST TO TENANT.
- 0.26 EQUIPMENT IDENTIFICATION: IDENTIFY ALL APPLICABLE ROOFTOP EQUIPMENT WITH TENANT'S NAME, SPACE NUMBER AND UNIT NUMBER, USING 2" HIGH PAINTED CHARACTERS OR STAMPED METAL TAG. LABEL INDOOR EQUIPMENT WITH UNIT NUMBER IN LIKE MANNER.
- 0.27 DRAWINGS ARE DIAGRAMMATIC: VERIFY ALL DIMENSIONS AND LENGTHS, AND ADJUST EQUIPMENT, PIPE AND DUCT LOCATIONS TO AVOID CONFLICTS WITH OTHER CONSTRUCTION AND TRADES.
- 0.28 DOCUMENT PRIORITY: DRAWING INDICATIONS AND NOTATIONS SUPERSEDE THESE SPECIFICATIONS.
- 0.29 RATINGS: REFER TO DRAWINGS AND SCHEDULES FOR ADDITIONAL RATINGS AND REQUIREMENTS.

0.30 PROJECT REQUIREMENTS: REFER TO DRAWINGS FOR PARTICULAR PROJECT REQUIREMENTS, AS NOT ALL ITEMS INCLUDED IN THESE SPECIFICATIONS MAY BE REQUIRED FOR THIS PROJECT.

0.31 DOCUMENT ERRORS: NOTIFY THE ENGINEER OF ANY ERRORS, DISCREPANCIES OR OMISSIONS BEFORE CONSTRUCTION OR FABRICATION OF AFFECTED WORK, OR, FAILING SUCH NOTICE, BE RESPONSIBLE FOR CORRECTING SAME WITHOUT COST TO TENANT, ARCHITECT OR ENGINEER.

15100 BASIC MATERIALS AND METHODS

1.10PIPE HANGERS AND SUPPORTS: PROPERLY SUPPORT ALL PIPING FROM JOISTS (TOP CHORD) OR OTHER STRUCTURAL MEMBERS. FOR PIPES UP TO 4" O.D., USE GRINNELL FIG. 260 CLEVIS HANGERS WITH 3/8" ROD, OR FIG. 195 BRACKETS.

1.20 INSULATION SHIELDS: PROVIDE 18 GAUGE X 12" LONG GALVANIZED INSULATION SHIELDS AT SUPPORT POINTS FOR INSULATED PIPES.

1.30 PIPE SUPPORT SPACING: SUPPORT PIPE NOT LESS THAN 6 FT. ON CENTER FOR COPPER PIPE UP TO 2" O.D., OR NOT LESS THAN 10 FT. ON CENTER FOR STEEL PIPE UP TO 4" O.D.

1.40 COPPER CONTACT: PROVIDE COPPER PLATED HANGERS AND SUPPORTS WHERE IN CONTACT WITH COPPER PIPE.

1.50 PIPE SLEEVES: SLEEVE ALL HORIZONTAL PIPING WHICH PENETRATES WALLS WITH STANDARD WEIGHT STEEL PIPE OF 1" GREATER DIAMETER THAN PIPE OR INSULATION O.D. CUT SLEEVE FLUSH WITH WALL. FINISH BOTH SIDES.

1.60 SEALANT: SEAL PIPE SLEEVES WITH ROPE AND EXPANDO NON-SHRINK SEALANT. FIRE/SMOKE SEAL PENETRATIONS OF RATED CONSTRUCTION TO MAINTAIN RATING.

1.70 WALL PLATES: FIT UNCOVERED PIPE PASSING THROUGH WALLS WITH WALL PLATES, CRANE NO. 10 OR EQUAL.

15200 THERMAL AND ACOUSTIC INSULATION

2.10 VIBRATION ISOLATION: PROVIDE EFFECTIVE VIBRATION ISOLATION DEVICES, AND FLEXIBLE CONNECTIONS, FOR ALL MOVING MACHINERY. PROVIDE DEVICES IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE ASHRAE HANDBOOK, HVAC APPLICATIONS (LATEST EDITION), CHAPTER "SOUND AND VIBRATION CONTROL".

2.20 NOISE TRANSMISSION: INSTALL PIPING AND DUCTWORK FREE FROM CONTACT WITH STRUCTURE OR EQUIPMENT TO PREVENT NOISE TRANSMISSION.

2.30 INSULATION REQUIREMENTS: INSULATE SYSTEMS AS SPECIFIED ONLY AFTER THEY HAVE BEEN TESTED AND INSPECTED. CLEAN ALL SURFACES THOROUGHLY OF MOISTURE, FOREIGN MATERIAL, GREASE, AND RUST. INSTALL INSULATION CONTINUOUS THROUGH WALL AND FLOOR PENETRATIONS.

2.31 EXISTING SYSTEMS BEING RE-USED: INSULATE EXISTING PIPE AND DUCT SYSTEMS BEING RE-USED SAME AS SPECIFIED FOR NEW SYSTEMS. REPAIR/REPLACE EXISTING INSULATION TO LIKE-NEW CONDITION AS REQUIRED.

2.32 INSULATION HAZARDS: USE ONLY INSULATION, JACKETS, ADHESIVES, SEALERS, AND COATINGS WITH FIRE HAZARD RATING NOT TO EXCEED 25/50/50 FLAME SPREAD, FUEL CONTRIBUTED, AND SMOKE DEVELOPED, IN ACCORDANCE WITH UL 723 AND ASTM E84.

2.33 INSULATED PLUMBING SYSTEMS: INSULATE HOT AND COLD WATER PIPING WITH 1" THICK CLOSED CELL, SELF SEALING FLEXIBLE TUBING, ARMAFLEX 2000 OR EQUAL.

2.34 INSULATED HVAC PIPING SYSTEMS: INSULATE REFRIGERANT SUCTION PIPING AND COOLING COIL CONDENSATE PIPING WITH 3/4" THICK CLOSED CELL FOAM INSULATION, ARMAFLEX 2000 OR EQUAL. INSULATE HVAC HOT AND CHILLED WATER PIPING SYSTEMS, LOW PRESSURE STEAM PIPING AND STEAM CONDENSATE PIPING WITH 1-1/2" THICK HEAVY DENSITY FIBERGLASS PIPE INSULATION HAVING A FACTORY-APPLIED ALL-SERVICE JACKET WITH DOUBLE SELF-SEALING LAP, OWENS-CORNING FIBERGLASS ASJ/SSL-II, OR EQUAL.

2.35 ACOUSTICALLY LINED SUPPLY AND RETURN DUCT: UNLESS OTHERWISE INDICATED ON THE PLANS, LINE SUPPLY AND RETURN DUCTWORK WITHIN 10-FEET OF THE DISCHARGE AND INTAKE OF AIR MOVING EQUIPMENT WITH 1" THICK GLASS FIBER ACOUSTICAL DUCT LINER BOARD, OWENS-CORNING, OR EQUAL. INCREASE DUCT SIZE INDICATED ON PLANS 2" EACH DIMENSION TO ACCOMMODATE DUCT LINER. MATERIAL SHALL BE RATED FOR 4,000 FPM AIR VELOCITY AND SHALL HAVE A MOLD-, HUMIDITY-, AND CORROSION-RESISTANT SURFACE THAT MEETS THE REQUIREMENTS OF UL 181.

2.36 EXTERNALLY INSULATED SUPPLY AND RETURN DUCT: INSULATE SHEET METAL DUCTWORK WITH 1-1/2" THICK FIBERGLASS INSULATION WITH AN INTEGRAL VAPOR BARRIER FACING, OWENS-CORNING, OR EQUAL. INSULATION INSTALLED ON DUCTWORK WITHIN THE CONDITIONED SPACE OR RETURN AIR PLENUM SHALL HAVE MINIMUM R=5 HR-SQ.FT.-DEG. F/BTU-IN. THERMAL RESISTANCE. INSULATION INSTALLED ON EXTERIOR DUCTWORK SHALL HAVE MINIMUM R=8.0 HR-SQ.FT.-DEG. F/BTU-IN. THERMAL RESISTANCE. PORTIONS OF DUCTWORK WHICH ARE INTERNALLY LINED SHALL ALSO BE EXTERNALLY INSULATED. EXTERNAL INSULATION INSTALLED ABOVE CEILINGS OR OTHERWISE OUT OF VIEW SHALL BE BLANKET TYPE. EXPOSED INSULATION SHALL BE RIGID TYPE. DO NOT INSULATE SUPPLY AIR DUCTWORK IN CONDITIONED SPACES UNLESS OTHERWISE INDICATED ON THE DRAWINGS (RETURN AIR PLENUMS ARE NOT CONSIDERED CONDITIONED SPACES). RETURN AIR DUCTWORK INSTALLED IN A RETURN AIR PLENUM NEED NOT BE EXTERNALLY INSULATED. EXTERIOR DUCTWORK AND INSULATION SHALL BE PROTECTED WITH A WEATHER-PROOF JACKET.

2.37 INSULATED OUTDOOR AIR AND EXHAUST DUCTWORK: EXTERNALLY INSULATE ALL OUTDOOR AIR DUCTWORK AND EXHAUST DUCTWORK WITHIN 10-FEET OF THE BUILDING ENVELOPE PENETRATION WITH 2" THICK GLASS FIBER INSULATION WITH KRAFT FOIL VAPOR BARRIER, MINIMUM R=8.0 HR-SQ.FT.-DEG. F/BTU-IN. THERMAL RESISTANCE, OWENS-CORNING, OR EQUAL.

2.40 INSULATED FLEXIBLE DUCT: GENERAL ENVIRONMENTAL CORPORATION TYPE G30A OR EQUAL, 5'-0" MAXIMUM LENGTH WITH A MINIMUM ELBOW RADIUS OF 1.5 X D AND A MINIMUM R = 5 HR SQ. FT.- DEG. F/BTU-IN. THERMAL RESISTANCE. USE ONLY FOR FINAL CONNECTIONS TO CEILING DIFFUSERS. DO NOT USE FOR VAV BOX INLET CONNECTIONS.

15400 PLUMBING

4.10 DRAIN, WASTE AND VENT PIPING:

- A. BELOW GRADE:
1. PVC PIPE ASTM D2665, WITH PVC FITTINGS AND ASTM D2855 SOLVENT WELD JOINTS WITH ASTM D2564 SOLVENT CEMENT.
  2. NO-HUB CAST IRON SANITARY SYSTEM PER CISPI 301-69T.
  3. SERVICE WEIGHT CAST IRON HUB AND SPIGOT WITH NEOPRENE GASKET, PER CISPI HSN-68T.
- B. ABOVE GRADE:
1. NO-HUB CAST IRON SANITARY SYSTEM PER CISPI 301-69T.
  2. GALVANIZED PIPE WITH CAST IRON DRAINAGE FITTINGS.
  3. INDIRECT DRAINS: COPPER TUBE, ASTM B306, DWV, WITH COPPER FITTINGS AND SOLDERED JOINTS.

4.20 DOMESTIC (POTABLE) WATER SUPPLY PIPING:

- A. BELOW GRADE: TYPE K SOFT TEMPER COPPER TUBE, WITH NO JOINTS.
- B. ABOVE GRADE: TYPE L HARD TEMPER COPPER TUBE PER ASTM B88, WITH WROUGHT COPPER FITTINGS PER USASI B16.18 AND .18A.
- C. JOINTS: USE ONLY 95/5 LEAD-FREE SOLDER IN POTABLE WATER PIPING. PROVIDE DIELECTRIC UNIONS AT EVERY JUNCTION OF TWO DISSIMILAR METAL PIPE MATERIALS.

4.30 NATURAL GAS PIPING, ABOVE GRADE:

- A. PIPE SIZE 2" AND SMALLER: ASTM A53 SCHEDULE 40 BLACK STEEL PIPE, WITH CLASS 150 MALLEABLE IRON FITTINGS AND THREADED JOINTS.
- B. PIPE SIZE 2-1/2" AND LARGER: ASTM A53 SCHEDULE 40 BLACK STEEL PIPE, WITH FORGED STEEL FITTINGS AND BUTT-WELDED JOINTS.
- C. EXTERIOR PIPING SHALL BE GALVANIZED, PAINTED OR COATED WITH AN APPROVED RUST-RESISTANT COATING.
- D. ROOF-MOUNTED PIPING SHALL BE SUPPORTED 10' O.C. WITH PRE-MANUFACTURED PIPE SUPPORTS.

4.40 VALVES: FURNISH AND INSTALL VALVES WHERE INDICATED ON PLAN AND AS NECESSARY FOR PROPER SYSTEM OPERATION AND COMPONENT ISOLATION. PROVIDE VALVES RATED FOR 125 PSIG OR GREATER WORKING PRESSURE IN WATER PIPING.

- A. CHECK VALVE UP TO 3": CRANE NO. 37, OR EQUAL.
- B. GLOBE VALVE UP TO 3": CRANE NO. 1, 17TF, OR EQUAL.
- C. GATE VALVE UP TO 3": CRANE NO. 428, 1334, OR EQUAL.
- D. BALL VALVE UP TO 3": APOLLO SERIES 70-100, 70-200, OR EQUAL.
- E. SHOCKSTOP: WADE W-5 (HOT), WADE W-10 (COLD), OR EQUAL.
- F. BACKFLOW PREVENTER: WATTS NO. 98D, OR EQUAL.
- G. VACUUM RELIEF VALVE: WATTS NO. N36 - 3/4", OR EQUAL.
- H. PRESSURE REDUCING VALVE: WATTS NO. U5 SERIES, OR EQUAL.
- I. TRAP SEAL PRIMER: JOSAM NO. 88250.

4.50 PLUMBING FIXTURES AND EQUIPMENT: FURNISH AND INSTALL PLUMBING FIXTURES AND EQUIPMENT AS SCHEDULED ON DRAWINGS, OR APPROVED EQUAL.

4.60 INSTALLATION:

- A. INSTALL AND SECURE FIXTURES IN PLACE WITH WALL CARRIERS AND BOLTS. PROVIDE BRACKETS, BRACES AND REINFORCING ANGLES AS REQUIRED IN ALL PARTITIONS NOT SUFFICIENT IN THEMSELVES TO SUPPORT PLUMBING FIXTURES OR OTHER WALL-HUNG EQUIPMENT.
- B. INSTALL EACH FIXTURE WITH CHROME PLATED, 17 GAUGE TUBING TRAP WITH CLEANOUT, EASILY REMOVABLE FOR SERVICING AND CLEANING.
- C. INSTALL COMPONENTS LEVEL, PLUMB AND SECURE.
- D. SEAL FIXTURES TO WALL AND FLOOR SURFACES WITH SEALANT, COLOR TO MATCH FIXTURE.
- E. ROUTE PIPING IN ORDERLY MANNER. INSTALL PIPING TO CONSERVE BUILDING SPACE AND NOT INTERFERE WITH USE OF SPACE. GROUP PIPING AT COMMON ELEVATION WHENEVER PRACTICAL. INSTALL PIPING TO ALLOW FOR EXPANSION AND CONTRACTION WITHOUT STRESSING PIPE, JOINTS OR CONNECTED FIXTURES/EQUIPMENT. PROVIDE CLEARANCE FOR INSTALLATION OF INSULATION AND ACCESS TO VALVES AND FITTINGS. PROVIDE ACCESS WHERE VALVES AND FITTINGS ARE NOT EXPOSED. SLOPE PIPING AND ARRANGE TO DRAIN AT LOW POINTS.
- F. INSTALL NON-CONDUCTING DIELECTRIC CONNECTIONS WHENEVER JOINING DISSIMILAR METALS.
- G. PROVIDE SHUT-OFF VALVES AT ALL SUPPLY CONNECTIONS TO FIXTURES AND EQUIPMENT.
- H. INSULATE SUPPLY AND WASTE PIPES OF ALL HANDICAP FIXTURES.
- I. EXPOSED WATER PIPING SHALL BE CHROME-PLATED BRASS.

4.95 CLEANING AND TESTING: CLEAN, DISINFECT, AND TEST ALL PLUMBING AND PIPING SYSTEMS.

15500 HVAC PIPING AND SPECIALTIES

5.65 MISCELLANEOUS DRAIN LINES, RECEIVING COOLING COIL CONDENSATE, DRIP FOR HUMIDIFIERS, ETC.: TYPE "DWV" COPPER, WITH WROUGHT COPPER FITTINGS AND SOLDERED JOINTS.

15600 HVAC EQUIPMENT

6.10 GENERAL

- A. FURNISH AND INSTALL HVAC EQUIPMENT AS SCHEDULED ON DRAWINGS, OR APPROVED EQUAL.
- B. ALL EQUIPMENT SHALL BE NEW, OF COMMERCIAL QUALITY, AND MANUFACTURED BY AN APPROVED NATIONAL, RECOGNIZED MANUFACTURER AS SCHEDULED ON DRAWINGS.
- C. ALL EQUIPMENT SHALL BE UL LISTED, AND CERTIFIED BY ARI, AMCA, OR OTHER APPLICABLE INDUSTRY STANDARD ORGANIZATION.
- D. INSTALLATION:
1. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
  2. MAINTAIN SERVICE CLEARANCES RECOMMENDED BY MANUFACTURER.
  3. ALL EQUIPMENT SHALL BE SUPPORTED WITH VIBRATION ISOLATORS.
  4. ALL ROOF-MOUNTED EQUIPMENT SHALL BE SUPPORTED WITH FACTORY-FABRICATED FULL PERIMETER CURBS, UNLESS NOTED OTHERWISE. ALL SUPPORTS FOR ROOF-MOUNTED EQUIPMENT SHALL BE FLSHD INTO THE ROOF SYSTEM.
  5. CHANGE FILTERS ON ALL HVAC EQUIPMENT PRIOR TO TURN-OVER TO TENANT.

6.20 EXISTING EQUIPMENT BEING RE-USED SHALL BE CLEANED AND REFURBISHED AS NOTED ON DRAWINGS.

15800 DUCTWORK AND APPURTENANCES

8.10 SHEET METAL DUCTWORK:

- A. FABRICATE AND INSTALL AS RECOMMENDED IN LATEST EDITIONS OF SMACNA HVAC DUCT CONSTRUCTION STANDARDS--METAL AND FLEXIBLE AND THE ASHRAE GUIDE AND DATA BOOK FOR SHEET METAL DUCTWORK SERVING SUPPLY, RETURN AND EXHAUST SYSTEMS OPERATING BETWEEN -2.0 IN.-W.G. AND +2.0 IN.-W.G. MAXIMUM PRESSURE. INSTALL WHERE INDICATED ON THE PLANS. DUCT SIZES SHOWN ON THE DRAWINGS ARE NOMINAL INSIDE CLEAR DIMENSIONS. WHERE INTERNAL INSULATION IS PROVIDED, DUCT SIZES SHALL BE INCREASED APPROPRIATELY TO MAINTAIN THE INDICATED CLEAR INSIDE DIMENSIONS. ASSEMBLE AND INSTALL DUCTWORK IN ACCORDANCE WITH RECOGNIZED INDUSTRY PRACTICE FOR ACHIEVING AIR TIGHT (5% LEAKAGE) AND NOISELESS (NO OBJECTIONABLE NOISE) SYSTEMS, CAPABLE OF PERFORMING EACH INDICATED SERVICE. FURNISH AND INSTALL ALL REQUIRED DAMPERS, TRANSITIONS, CONNECTIONS TO AIR TERMINALS, AND OTHER ACCESSORIES NECESSARY FOR A COMPLETEAND PROPERLY OPERATING SYSTEM.
- B. FABRICATE DUCTWORK FROM GALVANIZED SHEET STEEL COMPLYING WITH ANSI/ASTM A-527, LOCKFORMING QUALITY, WITH ANSI/ASTM A-525 G90 ZINC COATING; MILL PHOSPHATIZED FOR EXPOSED LOCATIONS. MINIMUM SHEET THICKNESS AND REINFORCING SHALL BE AS FOLLOWS:
- DUCTS UP TO 12" WIDEST DIMENSION OR DIAMETER: 26 GAUGE.
- DUCTS 13" TO 24" WIDEST DIMENSION: 24 GAUGE.
- DUCTS 25" TO 42" WIDEST DIMENSION: 22 GAUGE.
- DUCTS 43" TO 84" WIDEST DIMENSION: 20 GAUGE.
- C. DUCT SEALANT: UNITED DUCT SEALER, OR EQUAL.
- D. SUPPORT MATERIALS: EXCEPT AS OTHERWISE INDICATED, PROVIDE HOT-DIPPED GALVANIZED STEEL FASTENERS, ANCHORS, RODS STRAPS, TRIM AND ANGLES FOR SUPPORT OF DUCTWORK.
- E. ANY SUPPLY DUCTWORK AND PLENUMS THAT ARE DESIGNED TO OPERATE AT STATIC PRESSURE FROM 0.25 INCHES TO 2 INCHES WATER COLUMN INCLUSIVE WHICH ARE LOCATED OUTSIDE OF THE CONDITIONED SPACE OR IN RETURN PLENUMS SHALL HAVE JOINTS SEALED IN ACCORDANCE WITH SEAL CLASS C AS DEFINED IN THE SMACNA HVAC DUCT LEAKAGE TEST MANUAL. PRESSURE SENSITIVE TAPE SHALL NOT BE USED AS THE PRIMARY SEALANT WHERE SUCH DUCTS ARE DESIGNED TO OPERATE AT STATIC PRESSURES OF 1 INCH WATER COLUMN OR GREATER.
- F. EXPOSED DUCTWORK: EXPOSED DUCTWORK SHALL HAVE A PAINTABLE FINISH ON THE EXTERIOR SURFACE.

8.20 DUCTWORK ACCESSORIES:

- A. BALANCING DAMPERS: AIR BALANCE, INC., LOUVERS & DAMPERS, INC., RUSKIN OR EQUAL. PROVIDE MANUAL, SINGLE OR MULTIBLADE DAMPERS, AS INDICATED AND AS CONSTRUCTED IN ACCORDANCE WITH SMACNA STANDARDS.
- B. DAMPERS SHALL HAVE RIGID 2" X 1/2" X 10 GAUGE CHANNEL FRAMES, BALL OR BRONZE SLEEVE BEARINGS, 1/2" POLISHED STEEL AXLES, 16-GAUGE, REINFORCED, FELT-EDGED BLADES (NOT OVER 8" WIDE) AND STOP FRAMES AROUND THE ENTIRE PERIMETER. VOLUME DAMPERS IN DUCTS LARGER THAN 12" X 6" SHALL BE THE OPPOSED BLADE TYPE. DAMPERS IN ROUND DUCTS AND DUCTS 12" X 6" AND SMALLER SHALL BE BUTTERFLY TYPE. ROUND BUTTERFLY TYPE VOLUME DAMPERS SHALL BE 30 GAUGE, GALVANIZED STEEL THROUGH 12" DIAMETER; 28 GAUGE FOR ABOVE 12".
- C. ALL DAMPERS SHALL BE EQUIPPED WITH STANDARD QUADRANTS OF SUITABLE SIZE IN EQUIPMENT ROOMS/AREAS AND YOUNG #301A, OR EQUAL, RECESSED-TYPE IN FINISHED AREAS. PROVIDE QUADRANT LOCKING DEVICE FOR EACH DAMPER ON ONE END OF THE SHAFT AND AN END BEARING PLATE ON THE OTHER END FOR DAMPER LENGTHS OVER 12". PROVIDE EXTENDED QUADRANT LOCKS AND EXTENDED BEARING PLATES FOR EXTERNALLY INSULATED DUCTWORK. APPROVED MANUFACTURERS ARE VENTFABRICS, AND YOUNG REGULATOR CO.
- D. DAMPERS SHALL BE COATED WITH RED ZINC CHROMATE PRIMER OVER A BOND COAT.
- E. VOLUME DAMPERS, SPLITTERS AND DEFLECTORS SHALL BE PROVIDED IN ALL DUCTS TO PERMIT ACCURATE BALANCING OF THE SYSTEM. THE DAMPERS, SPLITTERS AND DEFLECTORS SHALL BE ADJUSTED TO SATISFY THE HEATING AND VENTILATING REQUIREMENTS OF THE CONDITIONED SPACE AND LOCKED IN PLACE.
- F. WHERE SHOWN ON DRAWINGS AND IN CASES OF INACCESSIBLE VOLUME DAMPERS, PROVIDE REMOTELY ADJUSTABLE VOLUME DAMPERS, YOUNG REGULATOR, OR EQUAL.

8.40 AIR OUTLETS AND INLETS: FURNISH AND INSTALL AIR TERMINALS AS SCHEDULED ON DRAWINGS, OR APPROVED EQUAL. THE CONTRACTOR SHALL PROVIDE MISCELLANEOUS ITEMS AS NECESSARY FOR A COMPLETE AND PROPER INSTALLATION IN THE TYPES OF WALLS AND CEILINGS USED ON THE PROJECT. THIS SHALL INCLUDE SUCH ITEMS AS FASTENERS, PLASTER RINGS, SUPPORTS, ETC.

8.60 FLEXIBLE CONNECTIONS: PROVIDE FLEXIBLE DUCT CONNECTIONS WHEREVER DUCTWORK CONNECTS TO VIBRATION ISOLATED EQUIPMENT AND WHERE SHOWN OR NOTED. MAKE AIR-TIGHT JOINTS. PROVIDE ADEQUATE JOINT FLEXIBILITY TO ALLOW FOR THERMAL, AXIAL, TRANSVERSE AND TORSIONAL MOVEMENT.

15900 SYSTEM CONTROL AND OPERATION

9.10 SPACE TEMPERATURE CONTROL: FURNISH AND INSTALL, UNLESS NOTED OTHERWISE, ALL THERMOSTATS, SENSORS, CONTROLLERS, RELAYS, CONTACTORS, DAMPERS, ACTUATORS, TUBING, CONTROL WIRING AND ALL OTHER ITEMS AND MATERIALS NECESSARY FOR A COMPLETE AND PROPERLY OPERATING TEMPERATURE CONTROL SYSTEM AS SPECIFIED. ALL THERMOSTATS AND OTHER CONTROL COMPONENTS SHALL BE HONEYWELL, OR APPROVED EQUAL, UNLESS SPECIFIED OTHERWISE. ALL CONTROL WIRING SHALL BE BY MECHANICAL CONTRACTOR AND SHALL BE INSTALLED IN CONDUIT IN ACCORDANCE WITH DIVISION 16.

9.11THERMOSTATS: REFER TO "HVAC CONTROLS" ON DRAWINGS.

9.20 SEQUENCE OF OPERATION: REFER TO "HVAC CONTROLS" ON DRAWINGS.

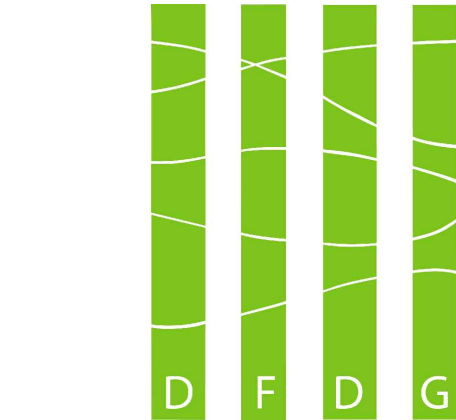
15950 TESTING, ADJUSTING, BALANCING

9.51 NEBB, AABC, OR TABB CERTIFIED TESTING AND BALANCING CONTRACTOR SHALL BE RESPONSIBLE FOR THE TESTING AND BALANCING OF EVERY HEATING, VENTILATING AND AIR CONDITIONING SYSTEM. THE PERSON OR AGENCY RESPONSIBLE FOR BALANCING OF THE SYSTEMS SHALL DOCUMENT IN WRITING THE AMOUNT OF OUTDOOR AIR BEING PROVIDED AND DISTRIBUTED FOR THE BUILDING OCCUPANTS AND ANY OTHER SPECIALTY VENTILATION. TWO (2) COPIES OF A WRITTEN REPORT IN FORMAT LISTED ABOVE SHALL BE SUBMITTED TO THE OWNER, TWO (2) COPIES SHALL BE SUBMITTED TO THE LANDLORD PRIOR TO OCCUPANCY, AND TWO (2) COPIES SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW.

9.52 AIR SYSTEMS SHALL BE BALANCED IN A MANNER TO MINIMIZE LOSSES FROM DAMPER THROTTLING BY FIRST ADJUSTING FAN SPEED, THEN ADJUSTING DAMPERS IN MAIN DUCTS, AND THEN ADJUSTING DAMPERS IN BRANCH DUCTS IN ORDER TO MEET DESIGN FLOW CONDITIONS. FOR VAV SYSTEMS, ENSURE THAT ALL VAV BOXES ON THIS AIR HANDLER ARE ADJUSTED TO THEIR RESPECTIVE MAXIMUM SETPOINTS DURING BALANCING TO ENSURE PROPER AIRFLOW WHEN SYSTEM IS OPERATING AT MAXIMUM (PEAK) COOLING CAPACITY. COORDINATE SETTING OF VAV BOXES IN OTHER TENANT SPACES IN FIELD WITH LANDLORD'S FIELD REPRESENTATIVE.

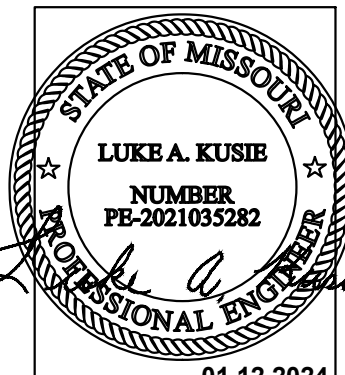
9.53 HVAC CONTROL SYSTEMS SHALL BE TESTED TO ASSURE THAT CONTROL ELEMENTS ARE CALIBRATED, ADJUSTED, AND IN PROPER WORKING ORDER.

- A. MECHANICAL CONTRACTOR SHALL HIRE A COMMISSIONING AGENT APPROVED BY THE AUTHORITY HAVING JURISDICTION TO PROVIDE THE COMMISSIONING OF THE FOLLOWING SYSTEMS (AS APPLICABLE FOR THIS PROJECT):
1. AIR SYSTEMS BALANCING.
  2. FUNCTIONAL PERFORMANCE TESTING.
  3. ECONOMIZERS.
  4. CONTROLS.
  5. MECHANICAL EQUIPMENT.
- B. COMMISSIONING AGENT SHALL PROVIDE WRITTEN REPORT ON ALL SYSTEMS COMMISSIONED. THIS REPORT SHALL BE PROVIDED TO THE TENANT, LANDLORD AND AUTHORITY HAVING JURISDICTION AS REQUIRED.



DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331

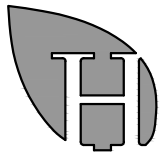


FOR PERMIT ISSUE

C3 - BRANSON MO  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616

DATE	DESCRIPTION
12.28.2023	REVIEW SET
01.12.2024	PERMIT SET
CHECKED	LAK
DRAWN	TMS
HEI PROJECT NO.	R23-4590.006

MECHANICAL  
SPECIFICATIONS



HALLBERG  
ENGINEERING  
Mechanical/Electrical Consulting Engineers  
750 Commerce Court  
White Bear Lake, MN 55110  
Phone (651) 748-1100 • Fax (651) 748-3370

M2.0



## GENERAL NOTES

GENERAL ELECTRICAL NOTES

- A. ALL REFERENCES ON THE DRAWINGS AND IN THE SPECIFICATIONS TO "CONTRACTOR" AND "ELECTRICAL CONTRACTOR" REFER TO THE TENANT'S ELECTRICAL CONTRACTOR, UNLESS NOTED OTHERWISE.
- B. ALL WORK SHOWN AND SPECIFIED HEREIN SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR, UNLESS SPECIFICALLY NOTED OTHERWISE.
- C. THE CONTRACTOR SHALL VISIT THE SITE TO VERIFY EXISTING CONDITIONS PRIOR TO SUBMITTING HIS BID, INCLUDING ALL EXISTING SERVICES, EQUIPMENT, ETC. NO CLAIMS FOR EXTRAS DUE TO LACK OF FAMILIARITY WITH SITE CONDITIONS WILL BE APPROVED.
- D. THE CONTRACTOR SHALL REVIEW THE DRAWINGS AND SPECIFICATIONS FOR ALL DIVISIONS OF WORK AND SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES. IT IS THIS CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL HIS SUBCONTRACTORS WITH A COMPLETE SET OF BID DOCUMENTS.
- E. THESE DRAWINGS ARE SCHEMATIC IN NATURE AND SHALL NOT BE SCALED. THE CONTRACTOR SHALL FIT THE WORK TO THE JOB, CAREFULLY INVESTIGATING STRUCTURAL, MECHANICAL, ELECTRICAL AND FINISH CONDITIONS AFFECTING THE WORK, AND SHALL FURNISH AND INSTALL ALL NECESSARY BENDS, OFFSETS, FITTINGS, JUNCTIONS, ETC. WHETHER OR NOT SPECIFICALLY SHOWN OR CALLED FOR, AND SEE THAT THERE ARE NO INTERFERENCES BETWEEN THIS WORK AND THE WORK OF OTHER TRADES.
- F. PROVIDE ALL EQUIPMENT AND MATERIALS, AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE ELECTRICAL SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED, AND AS REQUIRED BY APPLICABLE CODES.
- G. INSTALL ALL ELECTRICAL EQUIPMENT, MATERIALS AND APPURTENANCES IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, THE CONTRACT DOCUMENTS, AND APPLICABLE CODES AND REGULATIONS.
- H. THE CONTRACTOR SHALL PROVIDE ALL MISCELLANEOUS SUPPORTING STEEL, ETC. FOR THE PROPER INSTALLATION OF ALL ELECTRICAL SYSTEMS.
- I. NO ELECTRICAL EQUIPMENT, CONDUITS, FIXTURES, ETC. SHALL BE SUSPENDED FROM THE DECK, DUCTWORK, WATER PIPING, ETC. ALL ATTACHMENTS SHALL EXTEND TO THE TOP CHORD OF STRUCTURAL JOISTS, BEAMS OR AT PANEL POINT LOCATIONS.
- J. ALL ELECTRICAL EQUIPMENT AND DEVICES FURNISHED FOR THIS PROJECT SHALL BE UL LISTED, OR APPROVED EQUIVALENT. DEVICES, EQUIPMENT, SYSTEMS SHALL BE INSTALLED PER N.E.C REQUIREMENTS AND MANUFACTURER'S INSTRUCTIONS.
- K. ALL EQUIPMENT, MATERIALS AND INSTALLATION SHALL COMPLY WITH ALL APPLICABLE LANDLORD CRITERIA.
- L. ALL 120V AND 277V BRANCH CIRCUITS SHALL BE PROVIDED WITH SEPARATE NEUTRAL CONDUCTORS. SHARED NEUTRALS WILL NOT BE PERMITTED FOR MULTI-CIRCUIT INSTALLATIONS. WHERE MULTIPLE CIRCUITS ARE RUN IN A COMMON RACEWAY, THE AMPCACITY OF THE CONDUCTORS SHALL BE PROPERLY DERATED & CONDUIT SHALL BE SIZED PER CODE. UNDER NO CIRCUMSTANCES SHALL MORE THAN SIX (6) CURRENT CARRYING CONDUCTORS BE RUN IN A SINGLE CONDUIT. REFERENCE NEC ARTICLE AND TABLE 310.15(B)(2)(A).
- M. THE LOCATIONS OF ALL ITEMS SHOWN ON THE DRAWINGS THAT ARE NOT DIMENSIONED ARE APPROXIMATE ONLY. THE EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULTS SHALL BE BASED ON SITE CONDITIONS. INSTALL ALL EQUIPMENT AS REQUIRED TO MAINTAIN MANUFACTURER'S RECOMMENDED SERVICE CLEARANCES.
- N. COORDINATE LIGHT FIXTURE AND ELECTRICAL DEVICE LOCATIONS WITH ARCHITECTURAL PLANS, AND MAKE MINOR ADJUSTMENTS IN LOCATIONS AS REQUIRED.
- O. ALL ROOF CUTTING, PATCHING AND FLASHING REQUIRED TO INSTALL THE ELECTRICAL SYSTEMS SHALL BE BY A LANDLORD-APPROVED ROOFING CONTRACTOR AT THIS CONTRACTOR'S EXPENSE. COORDINATE ROOF PENETRATIONS WITH LANDLORD AND GENERAL CONTRACTOR.
- P. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FINAL CONNECTIONS TO LANDLORD'S BASE BUILDING SYSTEMS. RE-USE EXISTING CONNECTION POINTS WHERE POSSIBLE. COORDINATE ALL REQUIREMENTS IN FIELD WITH LANDLORD.
- Q. NOTIFY TENANT'S PROJECT MANAGER IF ANY EXISTING ELECTRICAL CONNECTION POINTS ARE SMALLER THAN SIZES SHOWN ON DRAWINGS.
- R. CONTRACTOR SHALL CLEAN AND SERVICE ALL EXISTING ELECTRICAL EQUIPMENT THAT IS BEING RE-USED. REPAIR OR REPLACE UNIT COMPONENTS AS REQUIRED TO MAKE UNIT FULLY FUNCTIONAL.
- S. REMOVE ALL EXISTING ELECTRICAL EQUIPMENT, FEEDERS, BRANCH CIRCUITING, WIRING DEVICES, CONTROLS, ETC. NOT BEING RE-USED. DO NOT ABANDON IN PLACE. MAINTAIN SERVICES PASSING THROUGH SPACE TO OTHER TENANT SPACES.
- T. ALL DEVICES, EQUIPMENT, FIXTURES, ETC. MUST BE GROUNDED BY USE OF A PROPERLY SIZED GROUNDING CONDUCTOR. MECHANICAL/ ELECTRICAL BONDS OF THE METALLIC RACEWAY SYSTEM SHALL ALSO BE MAINTAINED.
- U. COORDINATE LOCATIONS OF ALL MECHANICAL, PLUMBING, AND FIRE PROTECTION EQUIPMENT WITH RESPECTIVE SUBCONTRACTOR.
- V. ELECTRICAL INSTALLATION REQUIREMENTS FOR ALL HVAC, PLUMBING, FIRE PROTECTION, SPECIAL SYSTEMS AND OWNER EQUIPMENT BEING FURNISHED BY OTHERS SHALL BE REVIEWED AND COORDINATED WITH OTHER TRADES PRIOR TO ROUGH-IN. OBTAIN EQUIPMENT SHOP DRAWINGS FROM PARTY FURNISHING EQUIPMENT, FOR REVIEW AND COORDINATION. CONTACT ARCHITECT/ENGINEER PRIOR TO ROUGH-IN REGARDING ANY DISCREPANCIES FOUND BETWEEN CONSTRUCTION DRAWINGS AND EQUIPMENT BEING FURNISHED.
- W. ALL RECEPTACLES SHOWN BACK-TO-BACK IN WALLS SHALL BE SEPARATED HORIZONTALLY BY 8" MINIMUM.
- X. ELECTRICAL CONTRACTOR SHALL INCLUDE IN HIS BID ALL CUTTING, TRENCHING AND PATCHING ASSOCIATED WITH THE ELECTRICAL INSTALLATION.
- Y. ALL PENETRATIONS THROUGH FIRE RATED WALLS ASSOCIATED WITH THE ELECTRICAL INSTALLATION SHALL BE SLEEVED AND FIRE-STOPPED USING A UL APPROVED METHOD. UL APPROVED METHOD SHALL MEET OR EXCEED FIRE RATING OF STRUCTURE BEING PENETRATED. REFERENCE ARCHITECTURAL PLANS FOR FIRE RATED STRUCTURES.
- Z. CONTRACTOR SHALL FIELD VERIFY SLAB ON GRADE FLOOR CONSTRUCTION TYPE PRIOR TO CUTTING. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR CUT A STRUCTURAL FLOOR SLAB THICKER THAN FOUR (4") INCHES WITHOUT PRIOR WRITTEN APPROVAL FROM ENGINEER OF RECORD. NOTIFY ENGINEER OF RECORD OF ANY SLAB THICKNESS GREATER THAN FOUR (4") INCHES PRIOR TO PROCEEDING WITH ANY SAW CUTTING.
- AA. IF THE SPACE ABOVE THE CEILING IS DESIGNED AS A RETURN AIR PLENUM. ALL CONSTRUCTION MATERIALS ABOVE CEILING SHALL BE NON-COMBUSTIBLE, AND SHALL HAVE MAXIMUM FLAME SPREAD/FUEL CONTRIBUTED/SMOKE DEVELOPED RATING OF 25/25/50 IN ACCORDANCE WITH UL 723, NFPA 90A AND ASTM E84. WIRING SHALL BE LABELED PLENUM RATED PER NFPA 70, OR INSTALLED IN CONDUIT. THIS ALSO APPLIES TO ALL EXISTING MATERIALS.

ELECTRICAL SYMBOLS																															
WIRING DEVICE		DESCRIPTION	MOUNTING	DESIGN	PRESENTATION	DESCRIPTION	BRANCH	CIRCUITING	MISCELLANEOUS	DESCRIPTION	MOUNTING																				
<p>RECEPTACLE OPTIONS DENOTED BY "X", WHERE "X" CAN BE ONE OF THE FOLLOWING:</p> <p>D = DEDICATED CIRCUIT DG = DEDICATED GROUND GFI = GROUND FAULT INTERRUPTER TR = TAMPER RESISTANT SS = SURGE SUPPRESSOR WP = WEATHERPROOF (blank) = STANDARD RECEPTACLE</p> <p>20A-2P-3W-125V SPLIT (2-CIRCUIT) GROUNDING TYPE DUPLEX RECEPTACLE MOUNTED AT 18" A.F.F., UNLESS NOTED OTHERWISE. ONE CIRCUIT SHALL FEED TOP HALF AND ONE CIRCUIT SHALL FEED BOTTOM HALF OF RECEPTACLE.</p>				<p>1</p> <p>1</p> <p>1</p>		<p>KEY NOTE, REFER TO LIST OF KEY NOTES ON THE SAME PLAN</p> <p>FEEDER NOTE, REFER TO FEEDER SCHEDULE ON THE SAME PLAN</p> <p>DRAWING REVISION NOTE</p> <p>CONCEALED RACEWAY</p> <p>RACEWAY INSTALLED IN FLOOR OR BELOW FINISHED GRADE</p> <p>EXPOSED RACEWAY</p> <p>RACEWAY UP</p> <p>RACEWAY DOWN</p> <p>CONDUIT STUB, BUSHED AND CAPPED</p> <p>UNDERFLOOR DUCT, POWER AND COMMUNICATIONS RACEWAYS</p>		<p>LP-1-1</p> <p>1,3,5</p> <p>GROUND CONDUCTOR</p> <p>NEUTRAL CONDUCTOR</p> <p>PHASE CONDUCTORS</p> <p>CONDUIT AND WIRE SIZE (3/4" C, 2#12, UNLESS NOTED OTHERWISE)</p> <p>A</p> <p>1</p> <p>SWITCH LEG</p> <p>CIRCUIT NUMBER</p>		<p>JUNCTION BOX, RECESSED WALL</p> <p>JUNCTION BOX, RECESSED CEILING</p> <p>LINE VOLTAGE THERMOSTAT (USE BLACK THERMOSTAT SENSORS AT VISIBLE RETAIL AREAS. MASTER THERMOSTAT CONTROL AT STOCKROOM)</p> <p>PUSHBUTTON</p> <p>TIME SWITCH</p> <p>CONTACTOR</p> <p>KEYPAD</p> <p>MOTION DETECTOR</p> <p>OVERHEAD DOOR CONTACT</p>		<p>46"</p> <p>46"</p>																			
<p>FLOOR</p> <p>CLG</p> <p>WALL</p>				<p>X</p> <p>X</p>		<p>DUPLEX RECEPTACLE, NORMAL POWER</p> <p>FOURPLEX RECEPTACLE</p>		<p>18"</p> <p>18"</p>																							
<p>10-30R</p>				<p>1</p>		<p>SPECIAL PURPOSE RECEPTACLE, WITH NEMA CONFIGURATION NOTED</p>		<p>18"</p>																							
<p>1</p> <p>F</p>				<p>1</p> <p>F</p>		<p>DISCONNECT SWITCH, NON-FUSED</p> <p>DISCONNECT SWITCH, FUSED</p>		<p>54"</p> <p>54"</p>																							
<p>MS</p> <p>MSS</p>				<p>1</p> <p>1</p>		<p>MOTOR STARTER SWITCH WITHOUT OVERLOAD PROTECTION</p> <p>MOTOR STARTER SWITCH WITH OVERLOAD PROTECTION</p>		<p>54"</p> <p>54"</p>																							
<p>EF-1</p> <p>EF-1</p>				<p>1</p> <p>1</p>		<p>MAGNETIC MOTOR STARTER WITH EQUIPMENT NUMBER INDICATED</p> <p>COMBINATION MOTOR STARTER AND FUSED DISCONNECT WITH EQUIPMENT NUMBER INDICATED</p>		<p>54"</p> <p>54"</p>																							
<p>AHU</p> <p>1</p>				<p>1</p>		<p>EQUIPMENT TAG (REFER TO EQUIPMENT SCHEDULE)</p>		<p>54"</p>																							
<p>208/120 VOLT PANELBOARD</p> <p>480/277 VOLT PANELBOARD</p>				<p>1</p> <p>1</p>		<p>208/120 VOLT PANELBOARD</p> <p>480/277 VOLT PANELBOARD</p>		<p>54"</p> <p>54"</p>																							
				<p>1</p>				<p>COMMUNICATIONS</p> <p>DESCRIPTION</p> <p>MOUNTING</p>		<p>VOICE/DATA OUTLET</p> <p>BELL (REVIEW WITH DESIGNER'S LOCATIONS, IF IN RETAIL AREA)</p> <p>SPEAKER, CEILING MOUNTED WITH TYPE AND ZONE NUMBER INDICATED (REFER TO SPECIFICATION FOR TYPE)</p> <p>SPEAKER, WALL MOUNTED WITH TYPE AND ZONE NUMBER INDICATED (REFER TO SPECIFICATION FOR TYPE)</p>		<p>18"</p> <p>80"</p>																			
<h3>ELECTRICAL SHEET INDEX</h3> <table><tr><td>E0.0</td><td>ELECTRICAL TITLE SHEET</td></tr><tr><td>E1.0</td><td>MAIN LEVEL LIGHTING PLAN</td></tr><tr><td>E1.1</td><td>MEZZANINE LEVEL LIGHTING PLAN</td></tr><tr><td>E2.0</td><td>MAIN LEVEL POWER PLAN</td></tr><tr><td>E2.1</td><td>MEZZANINE LEVEL POWER PLAN AND NOTES</td></tr><tr><td>E2.2</td><td>MAIN LEVEL MECHANICAL EQUIPMENT PLAN</td></tr><tr><td>E2.3</td><td>MEZZANINE LEVEL MECHANICAL EQUIPMENT PLAN</td></tr><tr><td>E3.0</td><td>ELECTRICAL ONE-LINE DIAGRAM &amp; PANEL SCHEDULES</td></tr><tr><td>E4.0</td><td>LIGHT FIXTURE SCHEDULE, NOTES &amp; DETAILS</td></tr><tr><td>E5.0</td><td>ELECTRICAL SPECIFICATIONS</td></tr></table>												E0.0	ELECTRICAL TITLE SHEET	E1.0	MAIN LEVEL LIGHTING PLAN	E1.1	MEZZANINE LEVEL LIGHTING PLAN	E2.0	MAIN LEVEL POWER PLAN	E2.1	MEZZANINE LEVEL POWER PLAN AND NOTES	E2.2	MAIN LEVEL MECHANICAL EQUIPMENT PLAN	E2.3	MEZZANINE LEVEL MECHANICAL EQUIPMENT PLAN	E3.0	ELECTRICAL ONE-LINE DIAGRAM & PANEL SCHEDULES	E4.0	LIGHT FIXTURE SCHEDULE, NOTES & DETAILS	E5.0	ELECTRICAL SPECIFICATIONS
E0.0	ELECTRICAL TITLE SHEET																														
E1.0	MAIN LEVEL LIGHTING PLAN																														
E1.1	MEZZANINE LEVEL LIGHTING PLAN																														
E2.0	MAIN LEVEL POWER PLAN																														
E2.1	MEZZANINE LEVEL POWER PLAN AND NOTES																														
E2.2	MAIN LEVEL MECHANICAL EQUIPMENT PLAN																														
E2.3	MEZZANINE LEVEL MECHANICAL EQUIPMENT PLAN																														
E3.0	ELECTRICAL ONE-LINE DIAGRAM & PANEL SCHEDULES																														
E4.0	LIGHT FIXTURE SCHEDULE, NOTES & DETAILS																														
E5.0	ELECTRICAL SPECIFICATIONS																														

EQUIPMENT TAG	EQUIPMENT NAME	VOLT/ PHASE					CONDUIT – WIRE	STARTER BY	STARTER TYPE STARTER SIZE	DISCONNECT BY	DISC. SWITCH	FUSE SIZE	PANEL	CIRCUIT NUMBER	NOTE
			MCA	MOCP	HP	KW									
XBCU-1	EXISTING BLOWER COIL	208/3			1/3	15	EXISTING TO REMAIN	EXIST.	EXIST.	EXIST.	EXIST.	NA	M-B	1,3,5	
XBCU-2	EXISTING BLOWER COIL	208/3			1/3	15	EXISTING TO REMAIN	EXIST.	EXIST.	EXIST.	EXIST.	NA	M-B	7,9,11	
XBCU-3	EXISTING BLOWER COIL	208/3			1/2	20	EXISTING TO REMAIN	EXIST.	EXIST.	EXIST.	EXIST.	NA	M-B	13,15,17 14,16,18	
XBCU-4	EXISTING BLOWER COIL	208/3			1/3	15	EXISTING TO REMAIN	EXIST.	EXIST.	EXIST.	EXIST.	NA	M-B	19,21,23	
XBCU-5	EXISTING BLOWER COIL	208/3			1/2	20	EXISTING TO REMAIN	EXIST.	EXIST.	EXIST.	EXIST.	NA	M-B	25,27,29 26,28,30	
XBCU-6	EXISTING BLOWER COIL	208/3			1/2	20	EXISTING TO REMAIN	EXIST.	EXIST.	EXIST.	EXIST.	NA	M-B	31,33,35 32,34,36	
XBCU-7	EXISTING BLOWER COIL	208/3			1/2	20	EXISTING TO REMAIN	EXIST.	EXIST.	EXIST.	EXIST.	NA	M-B	37,39,41 38,40,42	
CU-1	CONDENSING UNIT	208/1	32.8	50			3/4"C 2#8, 1#10 GND.	DIV-15	WITH UNIT	DIV-16	60A/2P	NA	M-A	2,4	
CU-2	CONDENSING UNIT	208/1	20.3	30			3/4"C 2#10, 1#10 GND.	DIV-15	WITH UNIT	DIV-16	30A/2P	NA	M-A	6,8	
CU-3	CONDENSING UNIT	208/1	33.2	50			3/4"C 2#8, 1#10 GND.	DIV-15	WITH UNIT	DIV-16	60A/2P	NA	M-A	10,12	
CU-4	CONDENSING UNIT	208/1	32.8	50			3/4"C 2#8, 1#10 GND.	DIV-15	WITH UNIT	DIV-16	60A/2P	NA	M-A	14,16	
XCU-5	EXISTING CONDENSING UNIT	208/3	23.5	40			EXISTING TO REMAIN	EXIST.	EXIST.	EXIST.	EXIST.	NA	M-A	26,28,30	
XCU-6	EXISTING CONDENSING UNIT	208/3	23.5	40			EXISTING TO REMAIN	EXIST.	EXIST.	EXIST.	EXIST.	NA	M-A	32,34,36	
XCU-7	EXISTING CONDENSING UNIT	208/3	23.5	40			EXISTING TO REMAIN	EXIST.	EXIST.	EXIST.	EXIST.	NA	M-A	38,40,42	
FCU-1	FAN COIL UNIT	208/1				50w	3/4"C 2#12, 1#12 GND.	DIV-15	WITH UNIT	DIV-16	30A/2P	--	--	--	E.C. TO PROVIDE WIRING FROM HP-1 TO FCU-1
HP-1	HEAT PUMP	208/1	9.1	15			3/4"C 2#12, 1#12 GND.	DIV-15	WITH UNIT	DIV-16	30A/2P	NA	M-A	13,15	
XEF-1	EXISTING EXHAUST FAN	120/1			1/6		EXISTING TO REMAIN	EXIST.	EXIST.	EXIST.	EXIST.	NA	P	13	
EF-2	EXHAUST FAN	120/1				53W	3/4"C-2#12, 1#12 GND.	DIV-16	MSS	DIV-16	30A/1P	NA	L	17	
EF-3	EXHAUST FAN	120/1				53W	3/4"C-2#12, 1#12 GND.	DIV-16	MSS	DIV-16	30A/1P	NA	L	17	
CP-1	CIRCULATION PUMP	120/1				1/12	3/4"C-2#12, 1#12 GND.	DIV-16	MSS	DIV-16	30A/1P	NA	P	5	
XEWH-1	EXISTING WATER HEATER	208/3				11	EXISTING TO REMAIN	EXIST.	EXIST.	EXIST.	EXIST.	NA	M-A	1,3,5	
XEWH-2	EXISTING WATER HEATER	208/3				11	EXISTING TO REMAIN	EXIST.	EXIST.	EXIST.	EXIST.	NA	M-A	7,9,11	



# Eo.o





DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331



FOR PERMIT ISSUE

DATE  
12.28.2023  
01.12.2024

DESCRIPTION  
REVIEW SET  
PERMIT SET

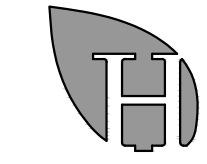
C3 - BRANSON MO  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616

CHECKED  
DRAWN  
HEI PROJECT NO.

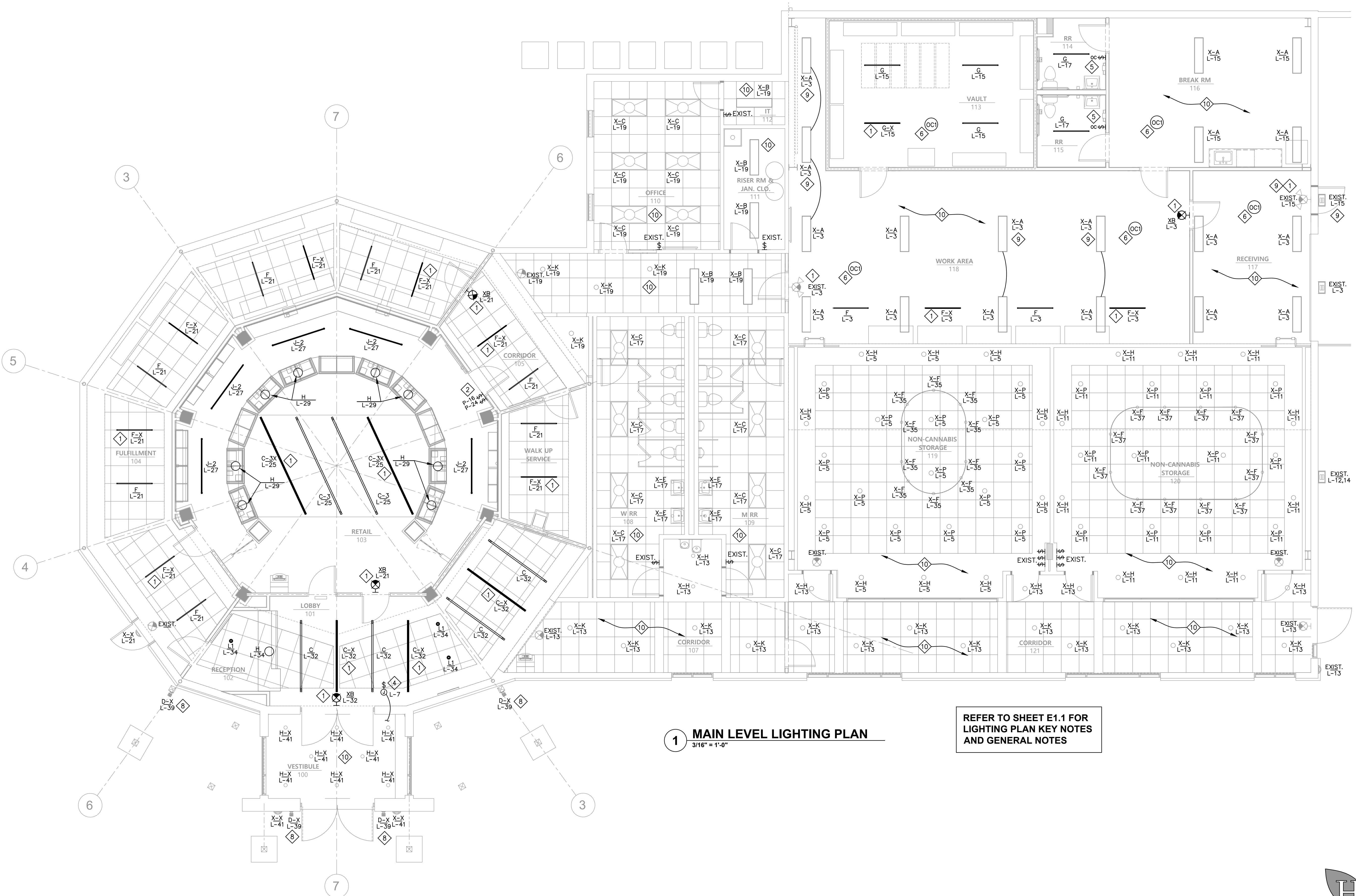
DJQ/PJF  
BJK  
R23-4590.006

MAIN LEVEL  
LIGHTING PLAN

E1.0



HALLBERG  
ENGINEERING  
Mechanical/Electrical Consulting Engineers  
1750 Commerce Court  
White Bear Lake, MN 55110  
Phone (651) 748-1100 • Fax (651) 748-3370



1 MAIN LEVEL LIGHTING PLAN  
3/16" = 1'-0"

REFER TO SHEET E1.1 FOR  
LIGHTING PLAN KEY NOTES  
AND GENERAL NOTES






## ELECTRICAL KEY NOTES

- ALL EXIT SIGNS AND EMERGENCY LIGHTING SHALL BE CONNECTED TO THE LINE SIDE OF LOCAL SWITCHING/CONTROLS.
- MANUAL ON/OFF SWITCH LOCATION FOR CASE LIGHTING. VERIFY LOCATION OF ON/OFF SWITCH WITH CONSTRUCTION MANAGER. REFER TO KEY NOTES #14 AND #25 ON SHEET E2.1 FOR FURTHER INFORMATION.
- PROVIDE 7-DAY TIMECLOCK (TC1) AND MULTIPOLE LIGHTING CONTACTORS (C1 & C2) FOR CONTROL OF SALES AREA LIGHTING AND INTERIOR SIGNS. MOUNT ADJACENT TO ELECTRICAL PANELS. REFER TO DETAIL #2 ON THIS SHEET FOR ADDITIONAL INFORMATION.
- ELECTRICAL CONTRACTOR TO PROVIDE JUNCTION BOX AND DISCONNECTING MEANS IN ACCESSIBLE LOCATION FOR CONNECTION OF NEW TENANT SIGNAGE. TENANT'S ELECTRICAL CONTRACTOR SHALL ROUTE NEW SIGNAGE CIRCUIT VIA TIMECLOCK. COORDINATE EXACT SCHEDULING FORMAT WITH LANDLORD. GC TO MAKE FINAL CONNECTION TO SIGN.
- PROVIDE NEW WALL MOUNTED DUAL-RELAY OCCUPANCY SENSING WALL SWITCH, WATTSTOPPER DW-100-W OR APPROVED EQUAL. SWITCH SHALL CONTROL LIGHT AND EXHAUST FAN IN THIS ROOM.
- PROVIDE CEILING MOUNT OCCUPANCY SENSOR (OC1) FOR CONTROL OF LIGHTING IN THIS ROOM.
- PROVIDE NEW WALL MOUNTED OCCUPANCY SENSING WALL SWITCH, WATTSTOPPER PW-301-W OR APPROVED EQUAL. SWITCH SHALL CONTROL LIGHT IN THIS ROOM.
- EXTERIOR LIGHTING NOTED TO BE CONTROLLED BY TIMECLOCK.
- EXISTING FIXTURE TO REMAIN. E.C. TO INTERCEPT AND RECONNECT EXISTING FIXTURE TO CIRCUIT AS INDICATED ON THE PLAN.
- EXISTING LIGHTING AND CONTROLS TO REMAIN IN THIS ROOM. CIRCUITING SHOWN FOR REFERENCE ONLY. MAINTAIN EXISTING FEEDERS AND CIRCUITING.

## GENERAL NOTES

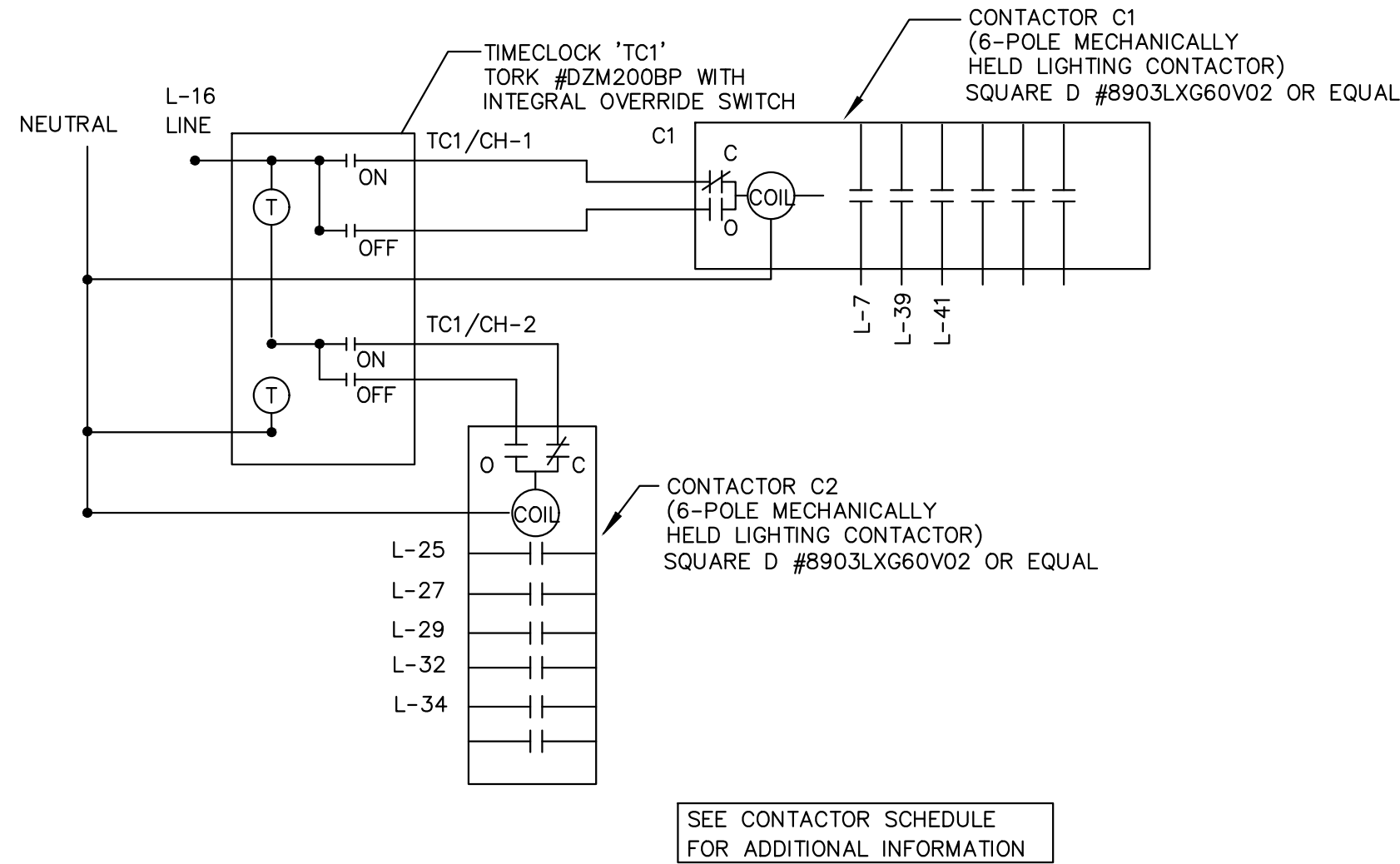
- REFER TO DRAWING E800 FOR LIGHTING FIXTURE SCHEDULE.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR CEILING TYPES, EXACT LOCATIONS AND ADDITIONAL MOUNTING HEIGHT INFORMATION OF LIGHTING FIXTURES.
- ELECTRICAL CONTRACTOR SHALL PROVIDE NEW TYPED PANEL DIRECTORY IN ALL EXISTING PANEL BOARDS BEING AFFECTED BY RENOVATION WORK.

## LIGHTING CONTROL LEGEND

	WALL SWITCH (LVSW-101W OR EQUAL)
	WALL SWITCH/SENSOR, P.I.R. (PW-301 OR EQUAL)
	CEILING MOUNT SENSOR, PASSIVE DUAL TECHNOLOGY, EXTENDED RANGE, 360 DEGREE LENS.

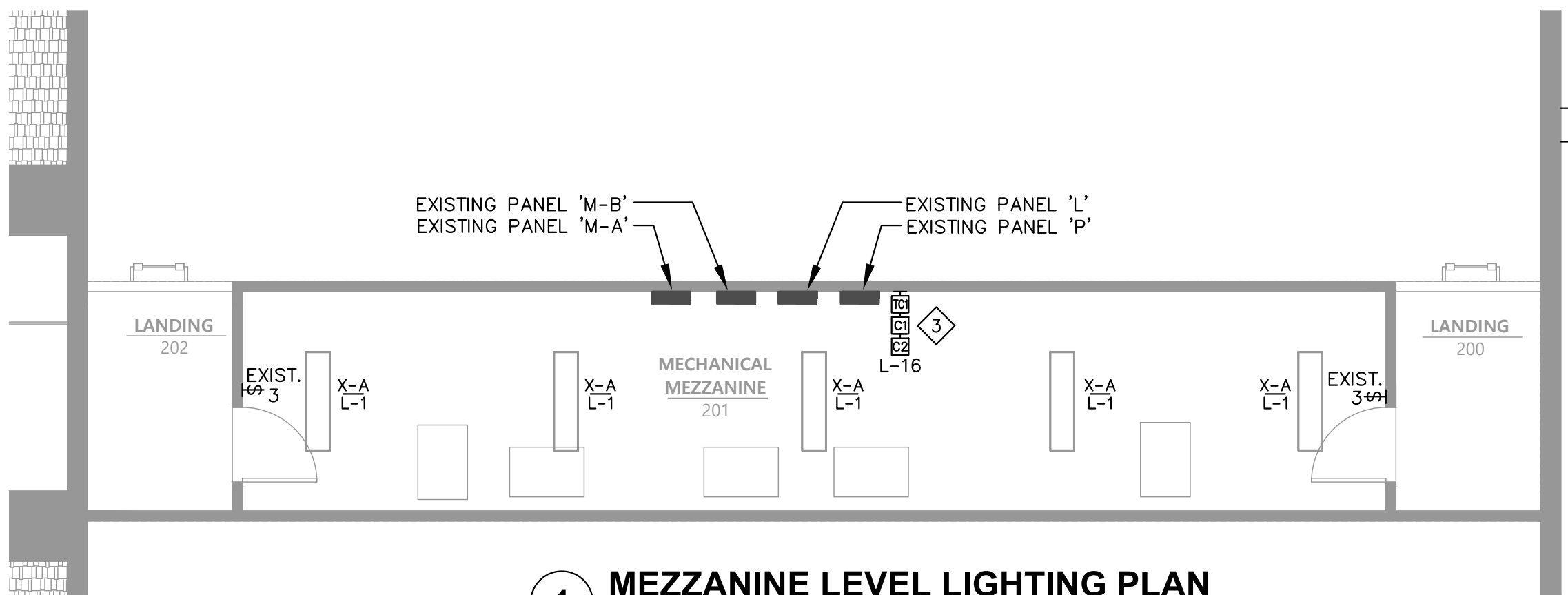
## LIGHTING CONTROL NOTES

- ALL OCCUPANCY SENSORS SHALL BE MOUNTED TO A VIBRATION- FREE SURFACE, WITH SENSORS FACING THE AREA OF COVERAGE. PLACE AT LEAST 48" FROM SUPPLY AIR GRILLES, 72" FROM HORIZONTAL DISCHARGE DUCTS AND 6" FROM POWER PACKS.
- SET TIME DELAY OF EACH SENSOR TO 15 MINUTES.
- COLOR OF LIGHTING CONTROL DEVICES TO BE WHITE.



## 2 LIGHTING CONTROL DIAGRAM

NTS



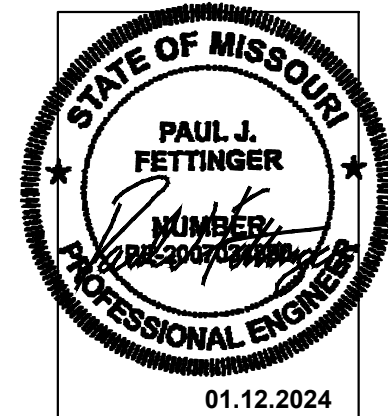
## 1 MEZZANINE LEVEL LIGHTING PLAN

3/16" = 1'-0"



DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331



## FOR PERMIT ISSUE

DATE  
12.28.2023  
01.12.2024

DESCRIPTION  
REVIEW SET  
PERMIT SET

C3 - BRANSON MO  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616

CHECKED  
DRAWN  
HEI PROJECT NO.

DJQ/PJF  
BJK  
R23-4590.006

## MEZZANINE LEVEL LIGHTING PLAN

# E1.1

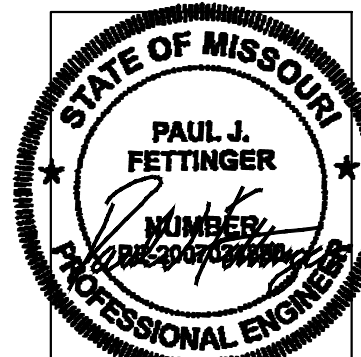






DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331



01.12.2024

FOR PERMIT ISSUE

DATE

12.28.2023  
01.12.2024

DESCRIPTION

REVIEW SET  
PERMIT SET

C3 - BRANSON MO  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616

CHECKED

DJQ/PJF

DRAWN

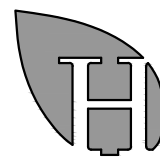
BJK

HEI PROJECT NO.

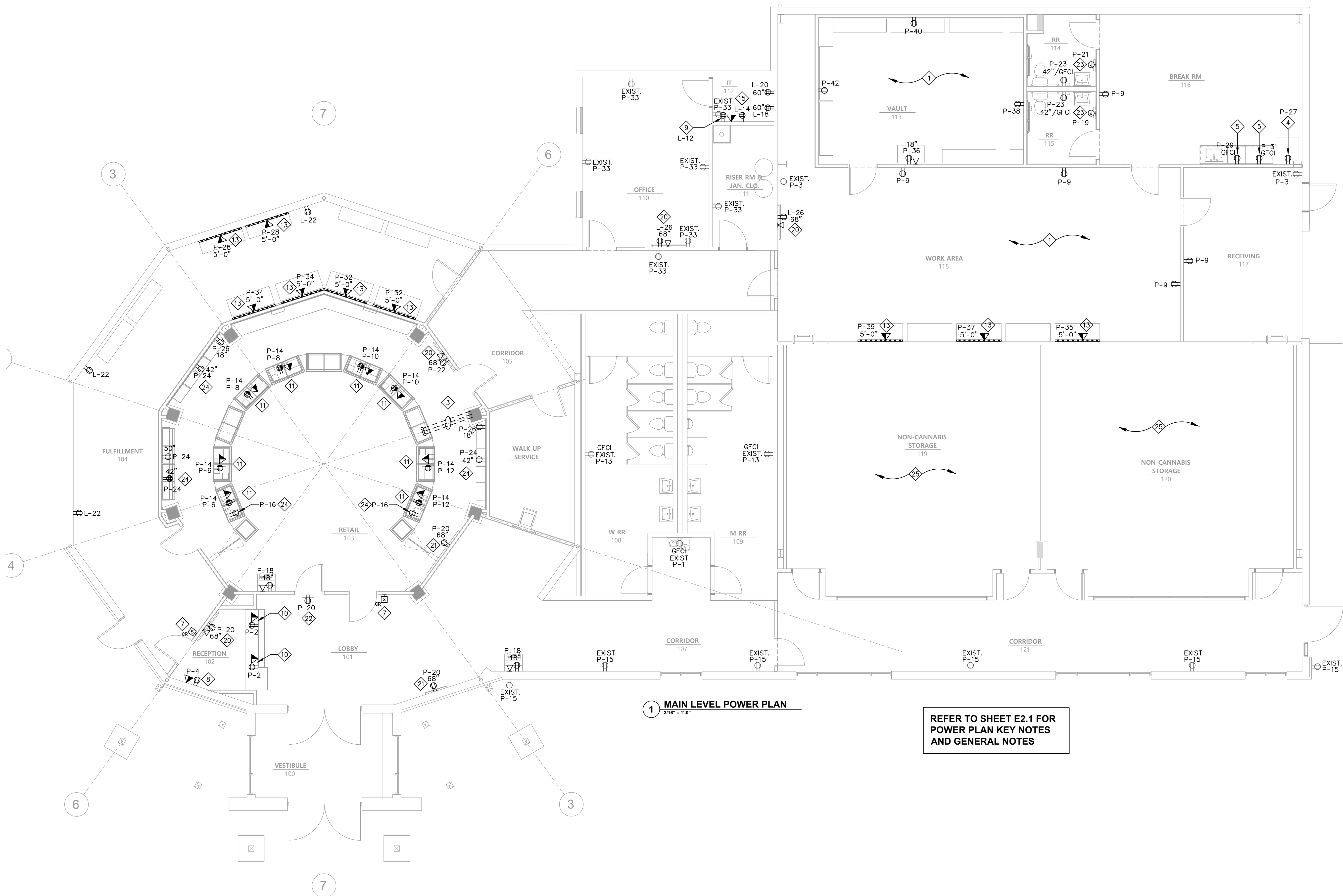
R23-4590.006

MAIN LEVEL  
POWER PLAN

E2.0



HALLBERG  
ENGINEERING  
Mechanical/Electrical Consulting Engineers  
1750 Commerce Court  
White Bear Lake, MN 55110  
Phone (651) 748-1100 • Fax (651) 748-3370



1 MAIN LEVEL POWER PLAN  
3/16" = 1'-0"

REFER TO SHEET E2.1 FOR  
POWER PLAN KEY NOTES  
AND GENERAL NOTES





DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331



FOR PERMIT ISSUE

C3 - BRANSON MO  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616

DATE	DESCRIPTION
12.28.2023	REVIEW SET
01.12.2024	PERMIT SET

CHECKED	DJQ/PJF
DRAWN	BJK
HEI PROJECT NO.	R23-4590.006

MEZZANINE  
LEVEL POWER  
PLAN AND NOTES

E2.1



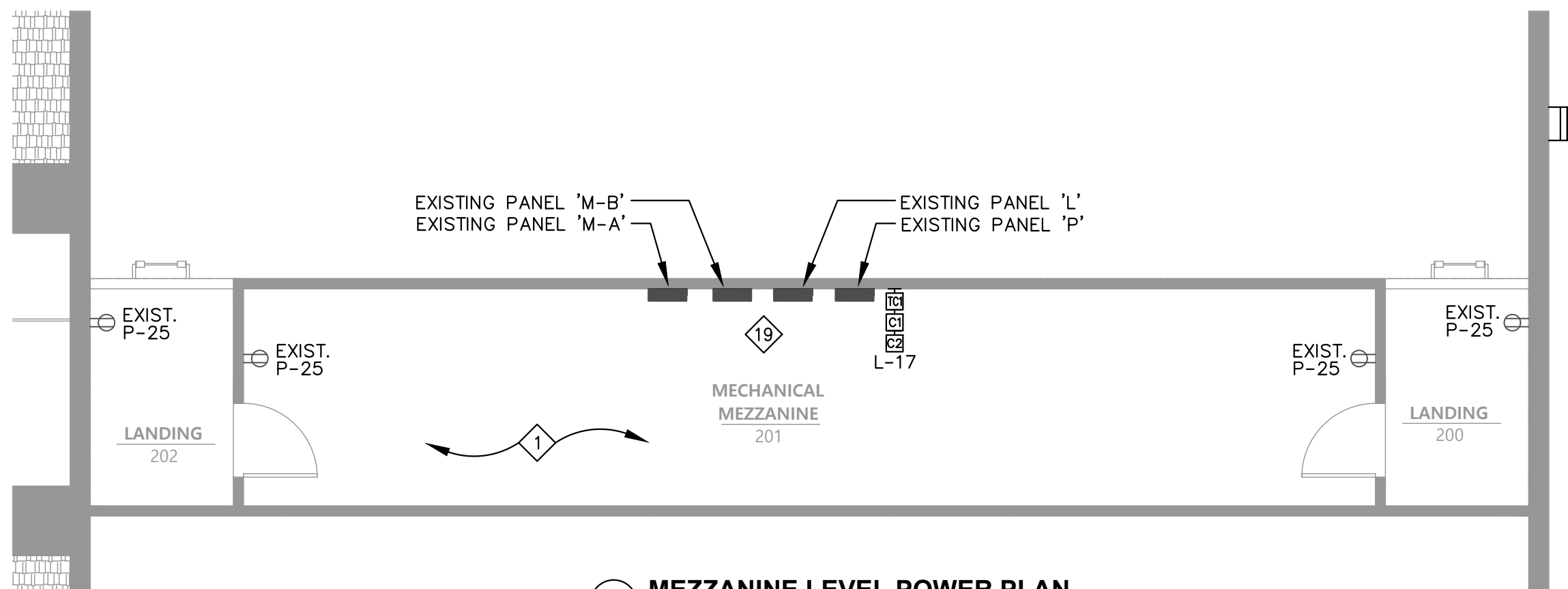
HALLBERG  
ENGINEERING  
Mechanical/Electrical Consulting Engineers  
1750 Commerce Court  
White Bear Lake, MN 55110  
Phone (651) 748-1100 • Fax (651) 748-3370

POWER PLAN KEY NOTES

- MECHANICAL EQUIPMENT. REFER TO MECHANICAL EQUIPMENT POWER PLAN ON SHEETS E2.2 AND E2.3 AND MECHANICAL EQUIPMENT SCHEDULE ON SHEET E0.0 FOR ADDITIONAL INFORMATION.
- NOT USED.
- TRENCH FLOOR FOR ROUTING OF CONDUITS TO BE STUBBED UP INTO MILLWORK FOR CASE LIGHTING, POS POWER AND DATA OUTLETS. PROVIDE (1) 3/4"C. FOR CASE LIGHTING, (1) 3/4"C. FOR POWER AND (1) 1-1/2"C. WITH PULL STRING FOR USE BY OTHERS.
- PROVIDE DUPLEX RECEPTACLE MOUNTED AT 42" AFF ON A DEDICATED CIRCUIT FOR REFRIGERATOR.
- PROVIDE DUPLEX RECEPTACLES ON A DEDICATED CIRCUIT FOR MISCELLANEOUS APPLIANCES. CIRCUIT NUMBER AS INDICATED ON THE PLANS.
- NOT USED.
- PROVIDE RECESSED BACKBOX FOR SECURITY DEVICE. LOW VOLTAGE SECURITY CABLING TO BE RUN FROM SECURITY DEVICE LOCATION TO SECURITY SYSTEM PANEL. COORDINATE EXACT REQUIREMENTS WITH SECURITY SYSTEM SUPPLIER.
- PROVIDE QUAD RECEPTACLE ON A DEDICATED CIRCUIT AND DATA OUTLET FOR PRINTER/ROUTER.
- PROVIDE QUAD RECEPTACLE AND DATA OUTLET FOR SECURITY SYSTEM BATTERY BACK-UP. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
- PROVIDE QUAD RECEPTACLE AND VOICE/DATA OUTLET AT CHECK-IN DESK. VERIFY EXACT LOCATION AND MOUNTING HEIGHT WITH OWNER/ARCHITECT PRIOR TO ROUGH-IN.
- PROVIDE SPLIT CIRCUIT QUAD RECEPTACLE AND DATA OUTLETS FOR POS MOUNTED IN CASEWORK. VERIFY EXACT LOCATION AND MOUNTING HEIGHT WITH OWNER PRIOR TO ROUGH-IN.
- NOT USED.
- PROVIDE PLUGMOLD AND VOICE/DATA OUTLET. VERIFY EXACT LOCATION, LENGTH AND MOUNTING HEIGHT WITH OWNER/ARCHITECT (SHEET G003) PRIOR TO ROUGH-IN.
- NOT USED.
- PROVIDE QUAD RECEPTACLE AND DATA OUTLET FOR NEW IT EQUIPMENT. VERIFY ELECTRICAL REQUIREMENTS, LOCATION AND MOUNTING HEIGHTS OF DEVICES WITH OWNER (SHEET G003) PRIOR TO ROUGH-IN.
- LOCATION OF EXTERIOR DISCONNECT SWITCH/CT CABINET.
- NOT USED.
- LOCATION OF EXTERIOR METER. VERIFY WITH UTILITY COMPANY AND OWNER.
- LOCATION OF ELECTRICAL EQUIPMENT. REFER TO SHEET E3.0 FOR ADDITIONAL INFORMATION.
- PROVIDE RECESSED DUPLEX RECEPTACLE AND DATA OUTLET AT HEIGHT SPECIFIED FOR TV'S.
- PROVIDE RECESSED DUPLEX RECEPTACLE AT HEIGHT SPECIFIED FOR LOGO SIGN. VERIFY REQUIREMENTS WITH SIGN SHOP DRAWINGS.
- PROVIDE DUPLEX RECEPTACLE 8" ABOVE DOOR.
- PROVIDE J-BOX FOR CONNECTION TO HAND DRYER. VERIFY MOUNTING HEIGHT WITH ARCH.
- PROVIDE DUPLEX RECEPTACLE CONCEALED IN DISPLAY CASE FOR LIGHTING PROVIDED BY MILLWORK CONTRACTOR. MANUAL ON/OFF SWITCH TO BE LOCATED IN SWITCHBANK WITH ROOM LIGHTS, SHOWN ON SHEET E1.0. VERIFY EXACT LOCATION AND MOUNTING HEIGHT WITH MILLWORK PACKAGE PRIOR TO ROUGH-IN.
- EXISTING POWER TO BE REMOVED FROM THE BAR AREAS THAT ARE BEING DEMOED. REMOVE DEVICE, CONDUIT AND WIRES BACK TO THE SOURCE.

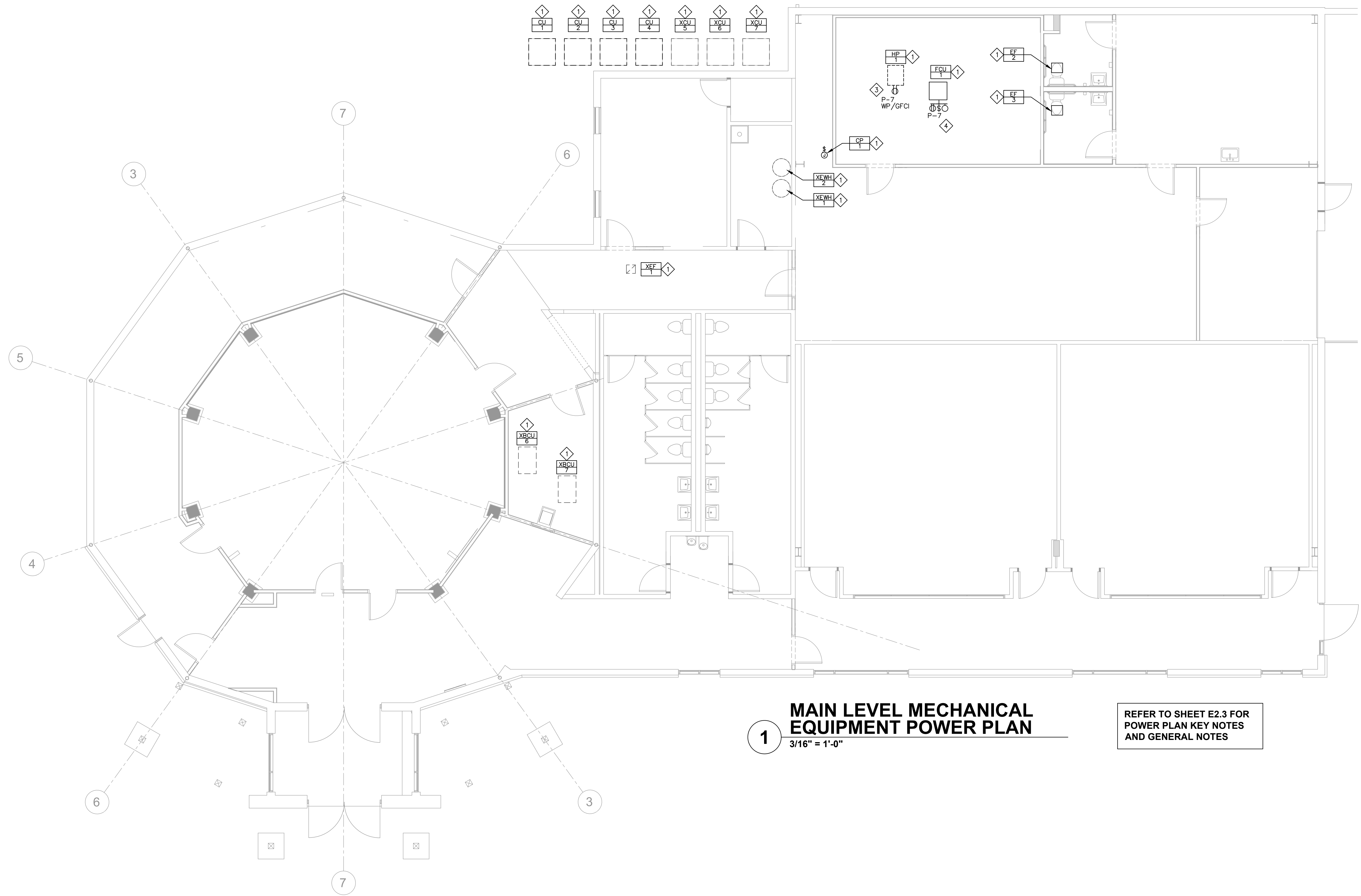
GENERAL NOTES

- CONTRACTOR SHALL COMPLETELY REMOVE ALL EQUIPMENT, PANELBOARDS, DEVICES, FIXTURES, WIRING, CONDUIT, ETC. AND ALL ASSOCIATED SUPPORTS, BRACING, PADS, ETC. NOT BEING REUSED OR SHOWN TO REMAIN WHETHER IN THE DEMISED SPACE, ON THE ROOF OR OTHERWISE LOCATED OUTSIDE OF THE DEMISED SPACE. DO NOT ABANDON IN PLACE.
- ALL 120 VOLT BRANCH CIRCUITS IN EXCESS OF 75' SHALL HAVE CONDUCTOR SIZE INCREASED A MINIMUM OF 1 CONDUCTOR SIZE. INSTALLING CONTRACTOR SHALL DETERMINE ACTUAL CONDUCTOR SIZE TO BE INSTALLED TO ADHERE TO VOLTAGE DROP REQUIREMENTS.
- PROVIDE A NEUTRAL CONDUCTOR FOR EACH BRANCH CIRCUIT. NEUTRAL SHARING IS NOT ALLOWED. PROVIDE MULTI-BREAKER AS ALTERNATE PER NEC REQUIREMENT.
- ELECTRICAL SYSTEM SHALL BE GROUNDED AND BONDED PER NEC REQUIREMENTS AND AUTHORITY HAVING JURISDICTION.
- COORDINATE COLOR OF RECEPTACLES AND COVER PLATES WITH ARCHITECT.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ARCHITECT, LANDLORD OR OWNER OF ANY DISCREPANCIES ENCOUNTERED ON THE PLANS OR IN EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF WORK.



1 MEZZANINE LEVEL POWER PLAN  
3/16" = 1'-0"





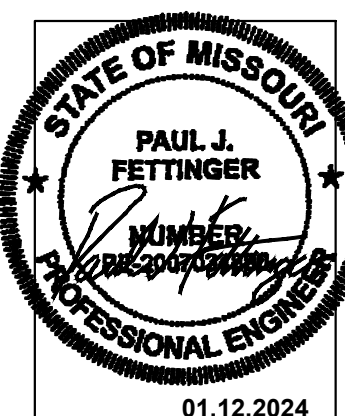
**1** MAIN LEVEL MECHANICAL EQUIPMENT POWER PLAN  
3/16" = 1'-0"

REFER TO SHEET E2.3 FOR  
POWER PLAN KEY NOTES  
AND GENERAL NOTES



DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331



FOR PERMIT ISSUE

DATE	DESCRIPTION
12.28.2023	REVIEW SET
01.12.2024	PERMIT SET

CHECKED	DJQ/PJF
DRAWN	BJK
HEI PROJECT NO.	R23-4590.006

MAIN LEVEL  
MECHANICAL  
EQUIPMENT PLAN

E2.2







DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331



FOR PERMIT ISSUE

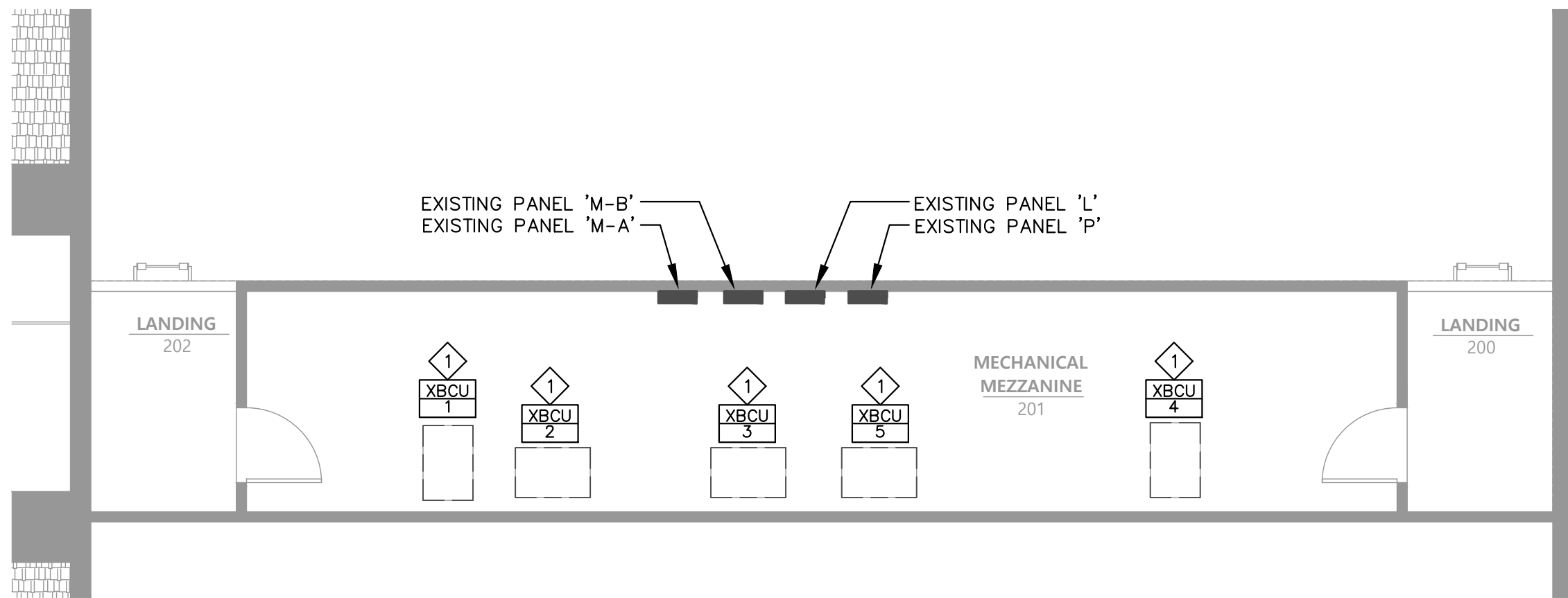
C3 - BRANSON MO  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616

DATE	DESCRIPTION
12.28.2023	REVIEW SET
01.12.2024	PERMIT SET

CHECKED	DJQ/PJF
DRAWN	BJK
HEI PROJECT NO.	R23-4590.006

MEZZANINE LEVEL  
MECHANICAL  
EQUIPMENT PLAN

E2.3



## MEZZANINE LEVEL MECHANICAL EQUIPMENT POWER PLAN

1

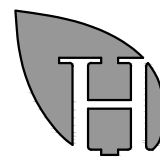
3/16" = 1'-0"

### KEY NOTES

- MECHANICAL EQUIPMENT. REFER TO MECHANICAL EQUIPMENT SCHEDULE ON SHEET E0.0 FOR ADDITIONAL INFORMATION.
- NOT USED.
- WEATHER PROOF, GFCI DUPLEX CONVENIENCE RECEPTACLE PROVIDED WITH UNIT. CONNECT TO 120V CIRCUIT AS INDICATED ON THE PLAN.
- PROVIDE DUPLEX RECEPTACLE, PORCELAIN LAMP HOLDER WITH PULL CHAIN, AND LED LIGHT BULB AT/ADJACENT TO FAN COIL UNIT.

### GENERAL NOTES

- CONTRACTOR SHALL COMPLETELY REMOVE ALL EQUIPMENT, PANELBOARDS, DEVICES, FIXTURES, WIRING, CONDUIT, ETC. AND ALL ASSOCIATED SUPPORTS, BRACING, PADS, ETC. NOT BEING REUSED OR SHOWN TO REMAIN WHETHER IN THE DEMISED SPACE, ON THE ROOF OR OTHERWISE LOCATED OUTSIDE OF THE DEMISED SPACE. DO NOT ABANDON IN PLACE.
- ALL 120 VOLT BRANCH CIRCUITS IN EXCESS OF 75' SHALL HAVE CONDUCTOR SIZE INCREASED A MINIMUM OF 1 CONDUCTOR SIZE. INSTALLING CONTRACTOR SHALL DETERMINE ACTUAL CONDUCTOR SIZE TO BE INSTALLED TO ADHERE TO VOLTAGE DROP REQUIREMENTS.
- PROVIDE A NEUTRAL CONDUCTOR FOR EACH BRANCH CIRCUIT. NEUTRAL SHARING IS NOT ALLOWED. PROVIDE MULTI-BREAKER AS ALTERNATE PER NEC REQUIREMENT.
- ELECTRICAL SYSTEM SHALL BE GROUNDED AND BONDED PER NEC REQUIREMENTS AND AUTHORITY HAVING JURISDICTION.
- COORDINATE COLOR OF RECEPTACLES AND COVER PLATES WITH ARCHITECT.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ARCHITECT, LANDLORD OR OWNER OF ANY DISCREPANCIES ENCOUNTERED ON THE PLANS OR IN EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF WORK.



HALLBERG  
ENGINEERING  
Mechanical/Electrical Consulting Engineers  
1750 Commerce Court  
White Bear Lake, MN 55110  
Phone (651) 748-1100 • Fax (651) 748-3370



EXISTING PANEL 'M-A'													
Location: Mezzanine		A/C: EXISTING										208/120 Volt, 3ø, 4w	
Mounting: Surface												Main: MCB 400A	
Circuit Description		KVA	CB	NO.	NOTE	A	B	C	NOTE	NO.	CB	KVA	Circuit Description
WATER HEATER (XEW-H-1)	3.7	40/3	1	C	X				B	2	50/2	2.8	CU-1
	3.7		3			X		4		2.8			
	3.7		5				X	6		30/2		1.7	
WATER HEATER (XEW-H-2)	3.7	40/3	7	C	X				B	8	50/2	1.7	CU-3
	3.7		9			X		10		2.8			
	3.7		11				X	12		2.8			
FCU-1/HP-1	0.8	20/2	13	B	X				B	14	50/2	2.8	CU-4
	0.8		15			X		16		2.8			
			17				X	18		20/1		SPARE	
SPARE			19		X			C	20	30/3		SPARE	
SPACE			21			X			22				
SPACE			23				X		24				
SPACE			25		X			C	26	40/3	2.3	XCU-5	
SPACE			27			X			28		2.3		
SPACE			29				X		30		2.3		
SPACE			31		X			C	32	40/3	2.3	XCU-6	
SPACE			33			X			34		2.3		
SPACE			35				X		36		2.3		
SPACE			37		X			C	38	40/3	2.3	XCU-7	
SPACE			39			X			40		2.3		
SPACE			41				X		42		2.3		
CONNECTED KVA:		163.4			A	B	C	DESIGN DEMAND KVA:					
CONNECTED HIGH PHASE AMPS:		470.0			55.3	56.4	51.7	DESIGN DEMAND AMPS:					
								120.9					
								335.8					

PANEL NOTES:  
A - PROVIDE CIRCUIT BREAKER WITH LOCK-ON DEVICE.  
B - PROVIDE HACR CIRCUIT BREAKER.  
C - EXISTING BREAKER TO REMAIN. NO NEW LOAD ON CIRCUIT.  
BALANCE PHASE LOADS TO WITHIN 10% OF EACH OTHER.

EXISTING PANEL 'M-B'														
Location: Mezzanine		A/C: EXISTING									208/120 Volt, 3ø, 4w			
Mounting: Surface											Main: MLO 400A			
Circuit Description		KVA	CB	NO.	NOTE	A	B	C	NOTE	NO.	CB	KVA	Circuit Description	
XBCU-1		4.1	45/3	1	C	X				2	20/3		SPARE	
		4.1		3			X			4				
		4.1		5				X				6		
XBCU-2		4.1	45/3	7	C	X				8	20/3		SPARE	
		4.1		9			X			10				
		4.1		11				X				12		
XBCU-3		2.9	30/3	13	C	X			C	14	30/3	2.0	XBCU-3	
		2.9		15			X			16		2.0		
		2.9		17				X				18		2.0
XBCU-4		4.1	45/3	19	C	X			C	20	20/3	1.0	SPARE	
		4.1		21			X			22		1.0		
		4.1		23				X				24		1.0
XBCU-5		2.9	30/3	25	C	X			C	26	30/3	2.0	XBCU-5	
		2.9		27			X			28		2.0		
		2.9		29				X				30		2.0
XBCU-6		2.9	30/3	31	C	X			C	32	30/3	2.0	XBCU-6	
		2.9		33			X			34		2.0		
		2.9		35				X				36		2.0
XBCU-7		2.9	30/3	37		X			C	38	30/3	2.0	XBCU-7	
		2.9		39				X				40		2.0
		2.9		41				X				42		2.0
CONNECTED KVA:		98.7				A	B	C			DESIGN DEMAND KVA:		101.8	
CONNECTED HIGH PHASE AMPS:		274.2				32.9	32.9	32.9			DESIGN DEMAND AMPS:		282.7	

PANEL NOTES:  
A - PROVIDE CIRCUIT BREAKER WITH LOCK-ON DEVICE.  
B - PROVIDE HACR CIRCUIT BREAKER.  
C - EXISTING BREAKER TO REMAIN. NO NEW LOAD ON CIRCUIT.  
BALANCE PHASE LOADS TO WITHIN 10% OF EACH OTHER.

EXISTING PANEL 'P'													
Location: Mezzanine		22,000 A/C										208/120 Volt, 3ø, 4w	
Mounting: Surface												Main: MCB 400A	
Circuit Description	KVA	CB	NO.	NOTE	A	B	C	NOTE	NO.	CB	KVA	Circuit Description	
DRINKING FOUNTAIN	0.5	20/1	1	D	X				2	20/1	0.8	RECEPTION RECEPTACLES	
WAREHOUSE RECEPTACLES	0.2	20/1	3	D		X			4	20/1	0.7	PRINTER/ROUTER	
CP-1	0.1	20/1	5	A			X	A	6	20/1	0.8	P.O.S. DED. RECS.	
HVAC UNIT LIGHT/RECEPTACLES	0.4	20/1	7		X			A	8	20/1	0.8	P.O.S. DED. RECS.	
BACK OF HOUSE CONV. RECEPTACLES	0.9	20/1	9			X		A	10	20/1	0.8	P.O.S. DED. RECS.	
SPARE		20/1	11				X	A	12	20/1	0.8	P.O.S. DED. RECS.	
TOILET RECEPTACLES/XEF-1	0.4	20/1	13	D	X				14	20/1	1.5	P.O.S. GENERAL RECS.	
CORRIDOR RECEPTACLES	1.1	20/1	15	D		X			16	20/1	0.5	DISPLAY CASE LIGHTING	
EXISTING HANDICAP DOOR ACTUATOR	1.0	20/1	17	D			X	A	18	20/1	1.0	ATM MACHINES	
HAND DRYER	0.6	20/1	19	C	X			A	20	20/1	1.2	INTERIOR SIGNS	
HAND DRYER	0.6	20/1	21	C		X			22	20/1	0.5	TV RECEPTACLES	
RESTROOM RECEPTACLES	0.4	20/1	23				X		24	20/1	0.5	WALL CASEWORK DISPLAY LIGHTS	
MEZZANINE MECH RECEPTACLES	0.8	20/1	25	D	X				26	20/1	0.4	RETAIL AREA RECEPTACLES	
REFRIGERATOR	1.0	20/1	27	C		X			28	20/1	1.0	FULFILLMENT AREA PLUGMOLD	
MICROWAVE	1.0	20/1	29				X		30	20/1		SPARE	
APPLIANCE RECEPTACLE	0.5	20/1	31		X				32	20/1	1.0	FULFILLMENT AREA PLUGMOLD	
OFFICE RECEPTACLES	1.3	20/1	33	D		X			34	20/1	1.0	FULFILLMENT AREA PLUGMOLD	
WORK AREA PLUGMOLD	0.5	20/1	35				X	A	36	20/1	1.0	SAFE POWER	
WORK AREA PLUGMOLD	0.5	20/1	37		X				38	20/1	0.2	VAULT P.O.S. DED. REC.	
WORK AREA PLUGMOLD	0.5	20/1	39			X			40	20/1	0.2	VAULT P.O.S. DED. REC.	
SPARE		20/1	41				X		42	20/1	0.2	VAULT P.O.S. DED. REC.	
					A	B	C						
CONNECTED KVA:					57.4			DESIGN DEMAND KVA:					64.2
CONNECTED HIGH PHASE AMPS:					186.7			DESIGN DEMAND AMPS:					178.2

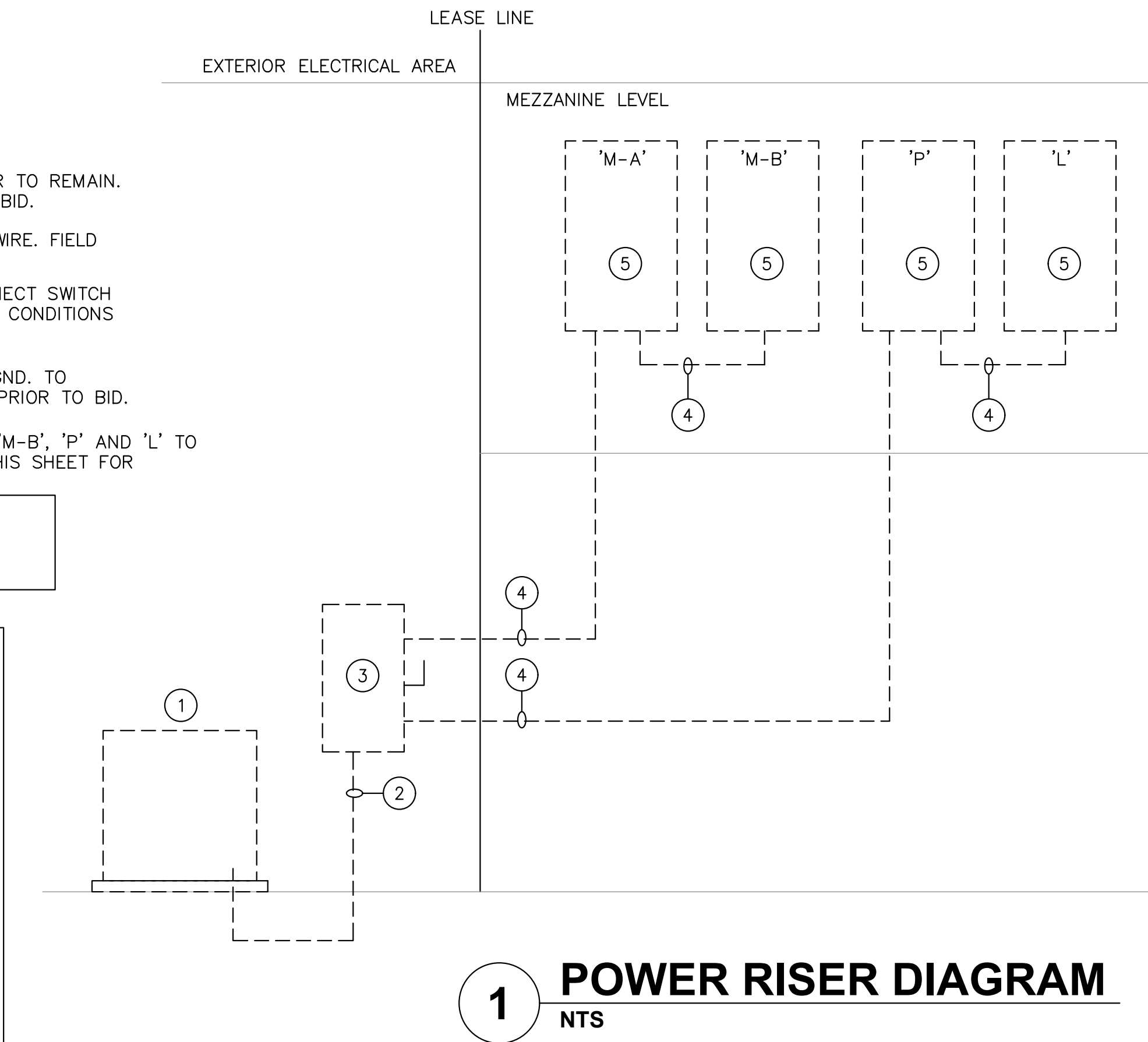
PANEL NOTES:  
A - PROVIDE CIRCUIT BREAKER WITH LOCK-ON DEVICE.  
B - PROVIDE HACR CIRCUIT BREAKER.  
C - BREAKER SHALL BE 5 Ma 'G.F.I.' TYPE  
D - EXISTING BREAKER TO REMAIN. NO NEW LOAD ON CIRCUIT.  
BALANCE PHASE LOADS TO WITHIN 10% OF EACH OTHER.

EXISTING -----  
NEW -----

POWER RISER DIAGRAM NOTES

- EXISTING PAD MOUNTED UTILITY TRANSFORMER TO REMAIN. FIELD VERIFY EXISTING CONDITIONS PRIOR TO BID.
- EXISTING CONDUIT(S) AND 800 AMP FEEDER WIRE. FIELD VERIFY EXISTING CONDITIONS PRIOR TO BID.
- EXISTING 800A/3P, NEMA 3R, FUSED DISCONNECT SWITCH WITH (3) 800A FUSES. FIELD VERIFY EXISTING CONDITIONS PRIOR TO BID.
- EXISTING 3-1/2"C.-4#500 KCMIL CU, + 1#3 GND. TO REMAIN. FIELD VERIFY EXISTING CONDITIONS PRIOR TO BID.
- EXISTING 120/208V, 3PH, 4W PANELS 'M-A', 'M-B', 'P' AND 'L' TO REMAIN. REFER TO PANEL SCHEDULES ON THIS SHEET FOR ADDITIONAL INFORMATION.

NOTE:  
ELECTRICAL SYSTEM SHALL BE GROUNDED AND BONDED PER NEC REQUIREMENTS AND AUTHORITY HAVING JURISDICTION.



LOAD SUMMARY - PANEL 'M-A'			
	CONNECTED	KVA	DESIGN DEMAND
LIGHTING	0.0	1.25	0.0
RECEPTACLES	0.0	1.0	0.0
SIGN	0.0	1.25	0.0
WATER HEATER	22.2	1.0	22.2
HVAC (LARGEST)	0.0	1.25	0.0
HVAC (REMAINING)	98.7	1.0	98.7
HVAC (NONCOINCIDENTAL)	42.5	0.0	0.0
MISCELLANEOUS	0.0	1.0	0.0
TOTAL KVA:	163.4		120.9
TOTAL AMPS:	453.9		335.8

LOAD SUMMARY - PANEL 'M-B'			
	CONNECTED	KVA	DESIGN DEMAND
LIGHTING	0.0	1.25	0.0
RECEPTACLES	0.0	1.0	0.0
SIGN	0.0	1.25	0.0
WATER HEATER	0.0	1.0	0.0
HVAC (LARGEST)	12.3	1.25	15.4
HVAC (REMAINING)	86.4	1.0	86.4
HVAC (NONCOINCIDENTAL)	0.0	0.0	0.0
MISCELLANEOUS	0.0	1.0	0.0
TOTAL KVA:	98.7		101.8
TOTAL AMPS:	274.2		282.7

LOAD SUMMARY - PANEL 'P'			
	CONNECTED	KVA	DESIGN DEMAND
LIGHTING	22.2	1.25	27.8
RECEPTACLES	8.9	1.0	8.9
SIGN	4.8	1.25	6.0
WATER HEATER	0.0	1.0	0.0
HVAC (LARGEST)	0.0	1.25	0.0
HVAC (REMAINING)	0.1	1.0	0.1
HVAC (NONCOINCIDENTAL)	0.0	0.0	0.0
MISCELLANEOUS	21.4	1.0	21.4
TOTAL KVA:	57.4		64.2
TOTAL AMPS:	159.4		178.2



INTERIOR LIGHTING FIXTURE SCHEDULE					
TYPE	DESCRIPTION	LAMPS	VOLTAGE	MANUFACTURER AND MODEL NO.	COMMENTS
'A' NOT USED	2' x 2' SURFACE MOUNTED LED PANEL	31.4w LED 3500K	MVOLT	ELITE #22-FPL-BL-LED-3000L-DIM10-MVOLT-35K-85 W/ 22-FPL1-LED-SMK	0-10V DIMMING DRIVER, ALUMINUM FRAME AND SATIN WHITE LENS
'A2' NOT USED	2' x 2' SUSPENDED LED PANEL	31.4w LED 3500K	MVOLT	ELITE #22-FPL-BL-LED-3000L-DIM10-MVOLT-35K-85 W/ 22-FPL1-LED-SMK-GSS	0-10V DIMMING DRIVER, ALUMINUM FRAME AND SATIN WHITE LENS, WITH SUSPENSION KIT
'B' NOT USED	2' x 4' SURFACE MOUNTED LED PANEL	38.8w LED 3500K	MVOLT	ELITE #24-FPL-BL-LED-3000L-DIM10-MVOLT-35K-85	0-10V DIMMING DRIVER, ALUMINUM FRAME AND SATIN WHITE LENS
'BX' NOT USED	2' x 4' SURFACE MOUNTED LED PANEL	45.8w LED 3500K	MVOLT	ELITE #24-FPL-BL-LED-3000L-DIM10-MVOLT-35K-85 -O-EMG-LED-10W	SIMILAR TO TYPE 'B1' EXCEPT PROVIDED WITH A MINIMUM 90 MINUTE EMERGENCY BATTERY BACK-UP
'C'	8'-0" LONG PENDANT MOUNTED LINEAR LED FIXTURE	40w LED 3000K	120V	ALW #RLP1S-S8-LOW/80/3000/0-10V/ S-EXT-SB-UNV	ELV DIMMING DRIVER, EXTRUDED ALUMINUM HOUSING WITH SATIN BLACK FINISH, DIFFUSED WHITE LENS
'C-X'	8'-0" LONG PENDANT MOUNTED LINEAR LED FIXTURE WITH REMOTE EMERGENCY BATTERY BACKUP	47w LED 3000K	120V	ALW #RLP1S-S8-LOW/3000L/0-10V/S-EXT-SB-UNV-EMB/1	ELV DIMMING DRIVER, EXTRUDED ALUMINUM HOUSING WITH SATIN BLACK FINISH, DIFFUSED WHITE LENS
'C-2' NOT USED	10'-0" LONG PENDANT MOUNTED LINEAR LED FIXTURE	50w LED 3000K	120V	ALW #RLP1S-S10-L-LOW/80/3000/0-10V/ S-EXT-SB-UNV	ELV DIMMING DRIVER, EXTRUDED ALUMINUM HOUSING WITH SATIN BLACK FINISH, DIFFUSED WHITE LENS
'C-2X' NOT USED	10'-0" LONG PENDANT MOUNTED LINEAR LED FIXTURE WITH REMOTE EMERGENCY BATTERY BACKUP	62w LED 3000K	120V	ALW #RLP1S-S10-L-LOW/3000L/0-10V/S-EXT-SB-UNV-EMB/1	ELV DIMMING DRIVER, EXTRUDED ALUMINUM HOUSING WITH SATIN BLACK FINISH, DIFFUSED WHITE LENS
'C-3'	12'-0" LONG PENDANT MOUNTED LINEAR LED FIXTURE	60w LED 3000K	120V	ALW #RLP1S-S12-L-LOW/80/3000/0-10V/ S-EXT-SB-UNV	ELV DIMMING DRIVER, EXTRUDED ALUMINUM HOUSING WITH SATIN BLACK FINISH, DIFFUSED WHITE LENS
'C-3X'	12'-0" LONG PENDANT MOUNTED LINEAR LED FIXTURE WITH REMOTE EMERGENCY BATTERY BACKUP	72w LED 3000K	120V	ALW #RLP1S-S12-L-LOW/3000L/0-10V/S-EXT-SB-UNV-EMB/1	ELV DIMMING DRIVER, EXTRUDED ALUMINUM HOUSING WITH SATIN BLACK FINISH, DIFFUSED WHITE LENS
'D' NOT USED	PIPELINE WALL VANITY 6' LED FIXTURE	5W/FT LED 3000K	120V	ALW #RLP2C-S6-LOW/80/3000L/0-10V/ S-LENS-SB-UNV	DIMMING DRIVER, BRUSHED ALUMINUM CONSTRUCTION WITH EXTRUDED ACRYLIC DIFFUSER
'F'	4'-0" LONG CHAIN HUNG LED STRIP FIXTURE	47W LED 3500K	120V	ELITE #4-OEC-LED-3000L/4000L/5000L-DIM10-MVOLT-35K-85-OCGSS	0-10V DIMMING DRIVER, COLD ROLLED STEEL CHANNEL WITH BAKED WHITE ENAMEL FINISH AND FROSTED ACRYLIC SNAP ON/SNAP OFF LENS
'F-X'	4'-0" LONG CHAIN HUNG LED STRIP FIXTURE	54W LED 3500K	120V	ELITE #4-OEC-LED-3000L/4000L/5000L-DIM10-MVOLT-35K-85-O-EMG-LED-10W-OCGSS	SIMILAR TO TYPE 'F' EXCEPT PROVIDED WITH A BATTERY BACK-UP
'G'	4'-0" LONG SURFACE MOUNTED LED STRIP FIXTURE	47W LED 3500K	120V	ELITE #4-OEC-LED-3000L/4000L/5000L-DIM10-MVOLT-35K-85	0-10V DIMMING DRIVER, COLD ROLLED STEEL CHANNEL WITH BAKED WHITE ENAMEL FINISH AND FROSTED ACRYLIC SNAP ON/SNAP OFF LENS
'GX' NOT USED	4'-0" LONG SURFACE MOUNTED LED STRIP FIXTURE	54W LED 3500K	120V	ELITE #4-OEC-LED-3000L/4000L/5000L-DIM10-MVOLT-35K-85O-EMG-LED-10W	SIMILAR TO TYPE 'G' EXCEPT PROVIDED WITH A BATTERY BACK-UP
'H'	12" DIAMETER GLASS GLOBE PENDANT MOUNTED LED FIXTURE	14W LED 3000K	120V	CBMC #ORN-141P-MB W/LED11WA19/ OMN/830-DIM-B	1 X 14W LED031 PRO-T38LED (INCLUDED), BLACK FINISH, TRIAC DIMMING
'J' NOT USED	8" ASYMMETRIC WALL WASHER	9W/FT LED 3000K	120V	ALW #CMLS-S8-MED/80/3000/0-10V/S-LENS-TB-UNV-COMBO	0-10V DIMMING, TEXTURED BLACK FINISH, FIXTURE TO BE MOUNTED AT 8'-6" AFF.
'J-2'	6" ASYMMETRIC WALL WASHER	9W/FT LED 3000K	120V	ALW #CMLS-S6-MED/80/3000/0-10V/S-LENS-TB-UNV-COMBO	0-10V DIMMING, TEXTURED BLACK FINISH, FIXTURE TO BE MOUNTED AT 8'-6" AFF.
'RC-1' NOT USED	6" CYLINDER RECESSED CAN LIGHT	12W LED 3000K	120V	NORA LIGHTING #NYLS2-6C15130FBB6AC	0-10V DIMMING DRIVER, ALUMINUM HOUSING WITH MATTE BLACK FINISH AND FROSTED GLASS LENS
'L-2' NOT USED	6" DIAMETER RIGID PENDANT MOUNTED FIXTURE	15.5W LED 3000K	120V	NORA LIGHTING #NYLSI-6C15130FBBAC	0-10V DIMMING DRIVER, ALUMINUM HOUSING WITH MATTE BLACK FINISH AND FROSTED GLASS LENS
'L-3' NOT USED	6" DIAMETER DIRECTIONAL PENDANT FIXTURE	20W LED 3000K	120V	BRUCK #350441-20LM-30K-90-60-120-ELV-BK-SMBK	TO BE DETERMINED BY LIGHTING VENDOR AND OWNER
'M' NOT USED	FLEXFIRE ULTRABRIGHT ARCH. DYNAMIC TUNABLE WHITE SERIES LED STRIP LIGHT	4.4W/FT LED 3000K	120V	CORE #LSM105MX-22K-60K-PF-24V	0-10V DIMMING DRIVER, COVE LIGHTING
'XA' NOT USED	WALL MOUNTED, COMBINATION EXIT SIGN/EMERGENCY LIGHTING UNIT (2 LAMP HEADS)	(2) 1.5W LED	120/277V	BEST #CEU-3-G-2	THERMOPLASTIC HOUSING WITH WHITE FINISH AND GREEN LETTERS, HIGH OUTPUT BATTERY BACK-UP
'XB'	UNIVERSAL MOUNT EXIT SIGN FACES AND ARROWS AS INDICATED ON PLAN	1W LED	120/277V	BEST #EZRXTU2GWEM	THERMOPLASTIC HOUSING WITH WHITE FINISH AND GREEN LETTERS, HIGH OUTPUT BATTERY BACK-UP
'S-2' NOT USED	EXTERIOR WALL PACK FIXTURE	45W LED	120V	WESTGATE #CDLX-MD-15-45W-40K	
'S-3' NOT USED	EXTERIOR WALL PACK FIXTURE WITH BATTERY BACK-UP	60W LED 4000K	120V	LSI INDUSTRIES #WPSLL-6L-UNV-40-PC120-CWBB-BZA	

LIGHTING FIXTURE NOTES:

1.

ALTERNATE LIGHTING MANUFACTURER'S EQUIPMENT BY COOPER, PHILIPS OR HUBBELL, SHALL BE SIMILAR IN PERFORMANCE, PHYSICAL APPEARANCE AND CONSTRUCTION TO BE CONSIDERED AS EQUAL TO UNITS SPECIFIED.
2.

ALTERNATE LIGHTING FIXTURE TYPES PROPOSED TO BE SUBSTITUTED BY BIDDING CONTRACTOR MUST BE PRE-APPROVED DURING BIDDING. CONTRACTOR, OR LIGHTING REPRESENTATIVE SHALL FAX OR EMAIL ALL SUCH REQUESTS WITH FIXTURE CUTS TO ENGINEER AT LEAST ONE WEEK PRIOR TO SUBMITTING BIDS. ENGINEER SHALL REVIEW THE PROPOSED ALTERNATE LIGHTING FIXTURES AND ISSUE A WRITTEN ACCEPTANCE OR DENIAL BY RETURN FAX OR EMAIL. VERBAL APPROVAL WILL NOT BE ACCEPTABLE.
3.

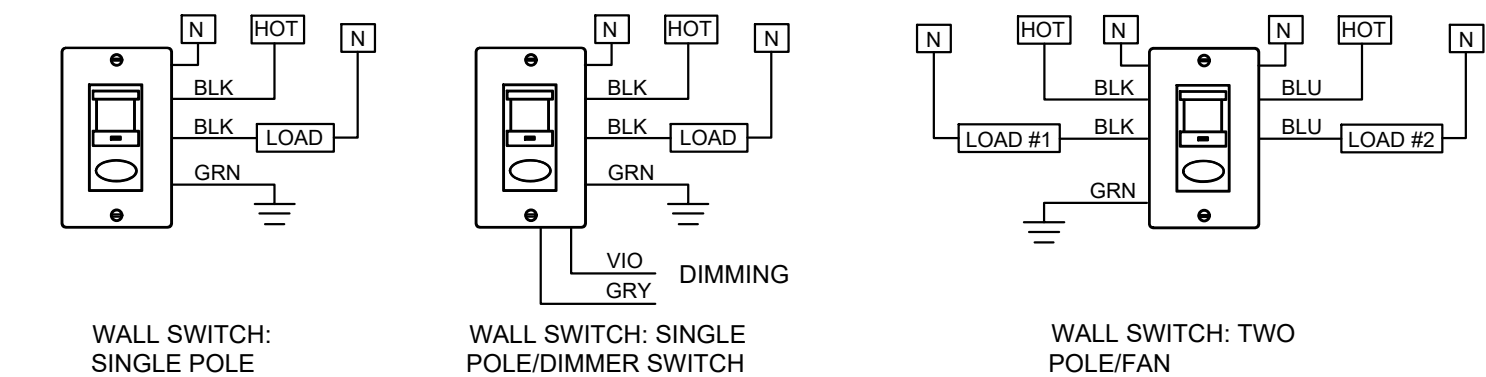
ALL SHOP DRAWINGS SUBMITTED AFTER AWARD OF CONTRACTOR FOR LIGHTING FIXTURES WHICH WERE NOT PRE-APPROVED WILL BE REJECTED.
4.

CHAIN HUNG TYPE 'F' FIXTURES WITH TOP OF FIXTURE FLUSH WITH BOTTOM OF STRUCTURAL STEEL.
5.

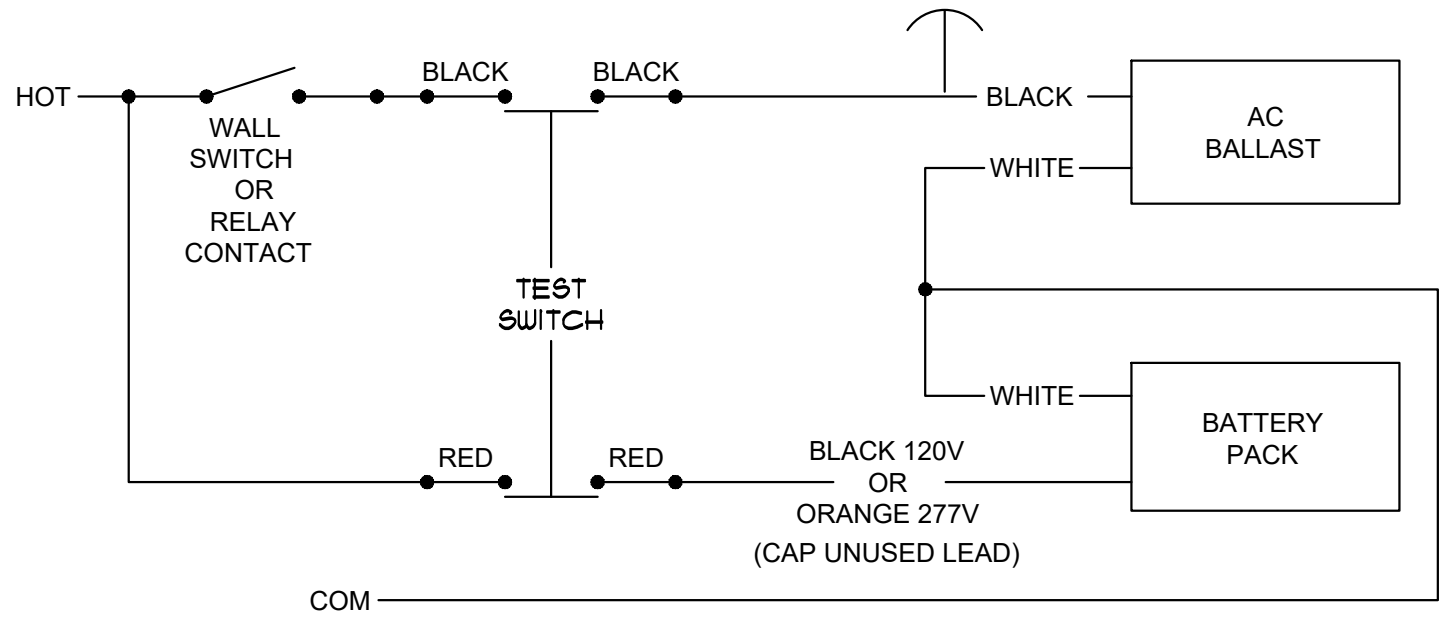
TYPE 'H' FIXTURES SHALL BE MOUNTED WITH BOTTOM AT 7'-0" AFF.
6.

TYPE 'J' FIXTURES SHALL BE SURFACE MOUNTED TO BOTTOM OF STRUCTURAL STEEL.
7.

TYPE 'L' FIXTURES SHALL BE PENDANT MOUNTED WITH BOTTOM OF FIXTURE FLUSH WITH BOTTOM OF STRUCTURAL STEEL.



TYPICAL OCCUPANCY SENSOR/WALL SWITCH WIRING DETAIL



EMERGENCY LIGHTING BATTERY BACK-UP WIRING DIAGRAM



DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331



FOR PERMIT ISSUE

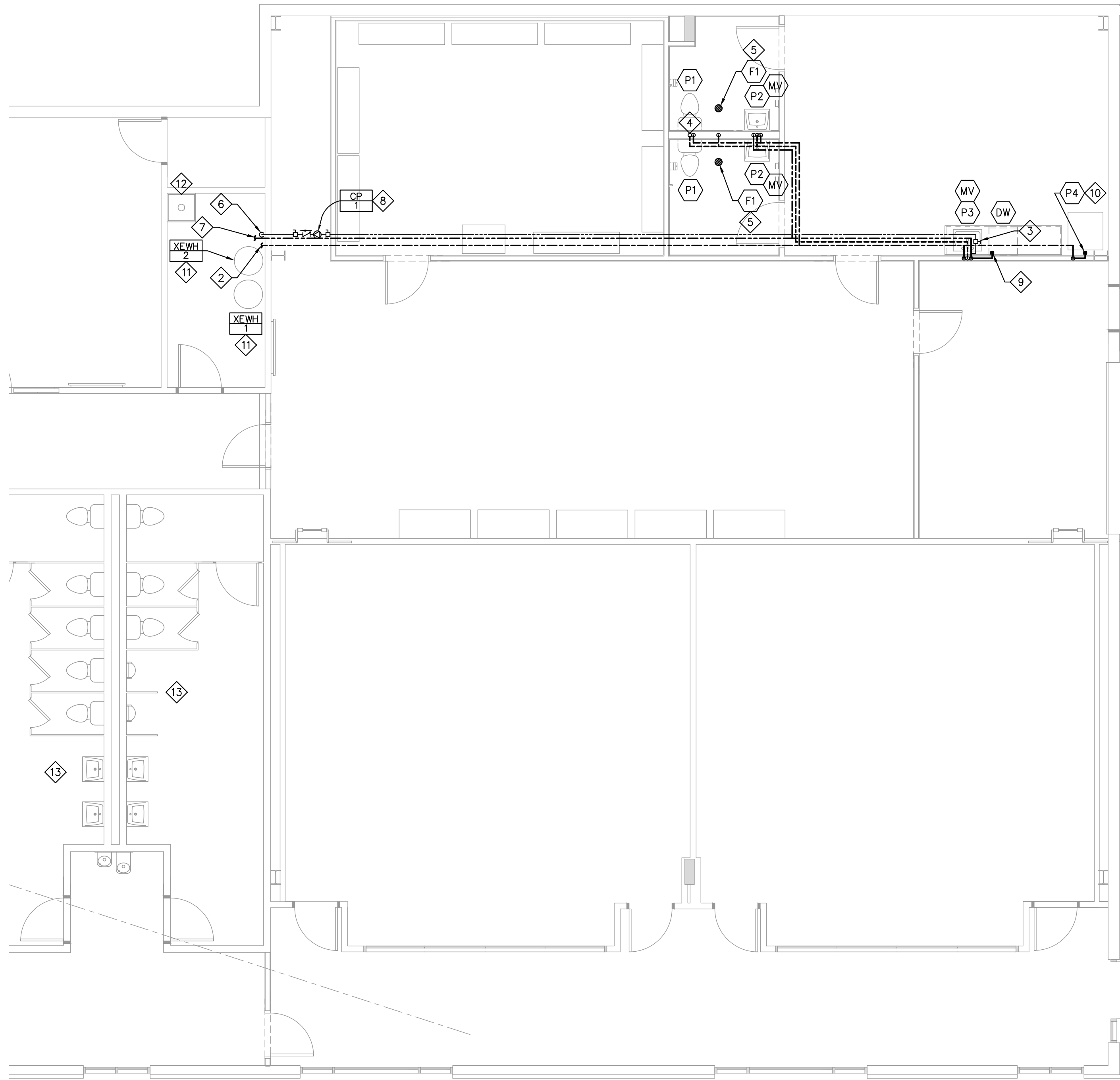
DATE	DESCRIPTION
12.28.2023	REVIEW SET
01.12.2024	PERMIT SET
C3 - BRANSON MO 3125 GREEN MOUNTAIN DRIVE BRANSON, MO 65616	
CHECKED DRAWN HEI PROJECT NO.	DJQ/PJF BJK R23-4590.006

LIGHT FIXTURE  
SCHEDULE, NOTES  
& DETAILS  
E4.0

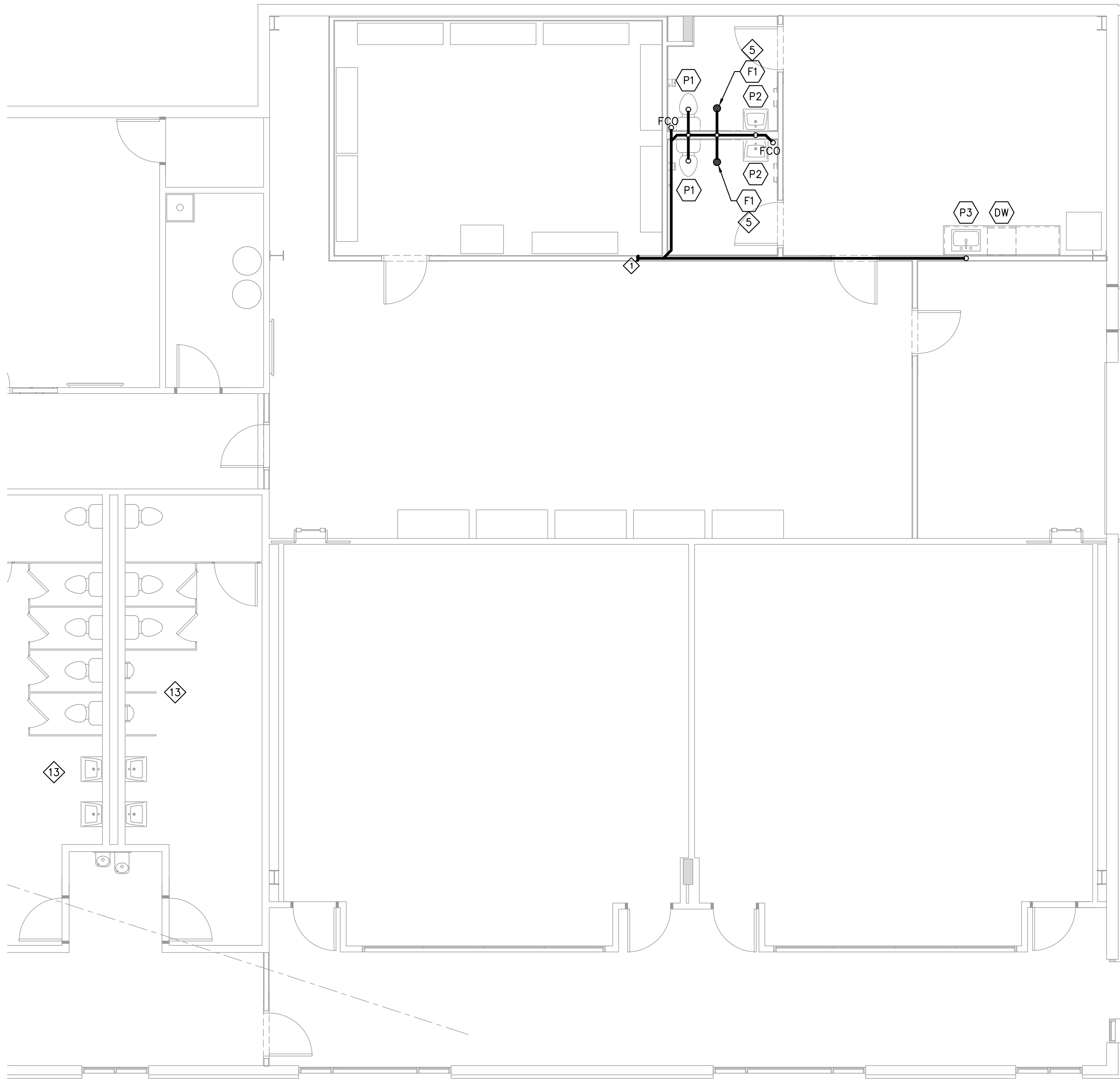








**2** **FIRST FLOOR ABOVE GROUND PLUMBING PLAN**  
3/16" = 1'-0"



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

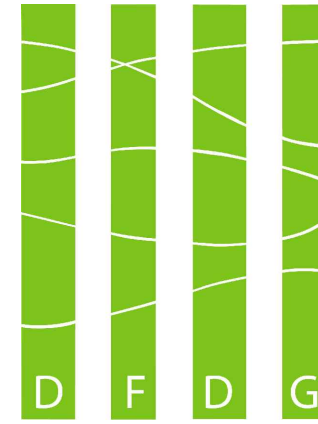
**GENERAL NOTES**

- A. SUBCONTRACTOR TO VERIFY POINT OF CONNECTION AND SCOPE OF WORK TO INSTALL ALL PLUMBING PIPING & EQUIPMENT TO SPACE PRIOR TO BID. IF INCONSISTENCIES OCCUR BETWEEN PLANS AND LANDLORD CRITERIA, OWNER'S CONSTRUCTION MANAGER SHALL BE NOTIFIED PRIOR TO BID SUBMITTAL.
- B. HORIZONTAL DRAINAGE PIPING SHALL BE RUN IN PRACTICAL ALIGNMENT AND A UNIFORM SLOPE OF NOT LESS THAN 1/8 INCH PER FOOT (20.8 MM/M) OR 2 PERCENT TOWARD THE POINT OF DISPOSAL.

**KEY NOTES**

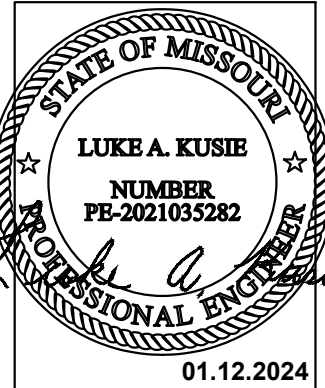
- EXTEND AND CONNECT NEW 4" SANITARY SEWER TO EXISTING 4" (MIN) SANITARY SEWER PIPING. FIELD VERIFY EXACT LOCATION, SIZE, FLOW DIRECTION, AND INVERT ELEVATION OF CONNECTION POINT PRIOR TO ROUGH-IN OF NEW SANITARY SEWER. PROVIDE FCO AT POINT OF CONNECTION TO EXISTING.
- EXTEND AND CONNECT NEW 1" CW PIPING TO EXISTING 1" (MIN) CW PIPING. FIELD VERIFY EXACT LOCATION OF CW PIPING PRIOR TO ROUGH-IN. PROVIDE SHUTOFF VALVE AT POINT OF CONNECTION TO EXISTING.
- HOT WATER RECIRCULATION BALANCING VALVE WITH FLOW MEASUREMENT ORIFICES. SET FOR 1.0 GPM. MOUNT VALVE 1" ABOVE THE CEILING.
- EXTEND NEW 2" VENT PIPING UP TO NEW 4" VTR. LOCATE TOILET VENT STACK SO THAT ALL ROOF PENETRATIONS OCCUR AT A MINIMUM OF TEN FEET (10'-0") AWAY FROM ANY MECHANICAL EQUIPMENT INTAKES OR OUTSIDE AIR INTAKE HOODS. USE ROOFING CONTRACTOR FOR ALL ROOF WORK.
- PROVIDE JOSAM 88250 OR EQUAL TRAP PRIMER WITH ACCESSIBLE SHUT-OFF VALVE.

- SEE DETAIL 1/P2.0 FOR CONTINUATION OF HOT WATER RECIRCULATON PIPE.
- EXTEND AND CONNECT NEW 3/4" HW PIPING TO EXISTING 3/4" (MIN) HW PIPING. FIELD VERIFY EXACT LOCATION OF CW PIPING PRIOR TO ROUGH-IN. PROVIDE SHUTOFF VALVE AT POINT OF CONNECTION TO EXISTING.
- FIELD COORDINATE THE INSTALLATION OF THE INLINE HOT WATER RECIRCULATION PUMP, EXPANSION TANK AND CHECK VALVE ASSEMBLY.
- EXTEND AND CONNECT NEW 1/2" HW PIPING TO NEW DISHWASHER.
- EXTEND AND CONNECT NEW 1/2" CW PIPING TO NEW REFRIGERATOR.
- SERVICE AND CLEAN EXISTING ELECTRIC WATER HEATER TO REMAIN.
- SERVICE AND CLEAN EXISTING MOP SINK TO REMAIN.
- SERVICE AND CLEAN EXISTING BATHROOM FIXTURES TO REMAIN.



**DAMIAN  
FARRELL  
DESIGN  
GROUP**

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331



**FOR PERMIT ISSUE**

DATE	DESCRIPTION
12.28.2023	REVIEW SET
01.12.2024	PERMIT SET

**C3 - BRANSON MO**  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616

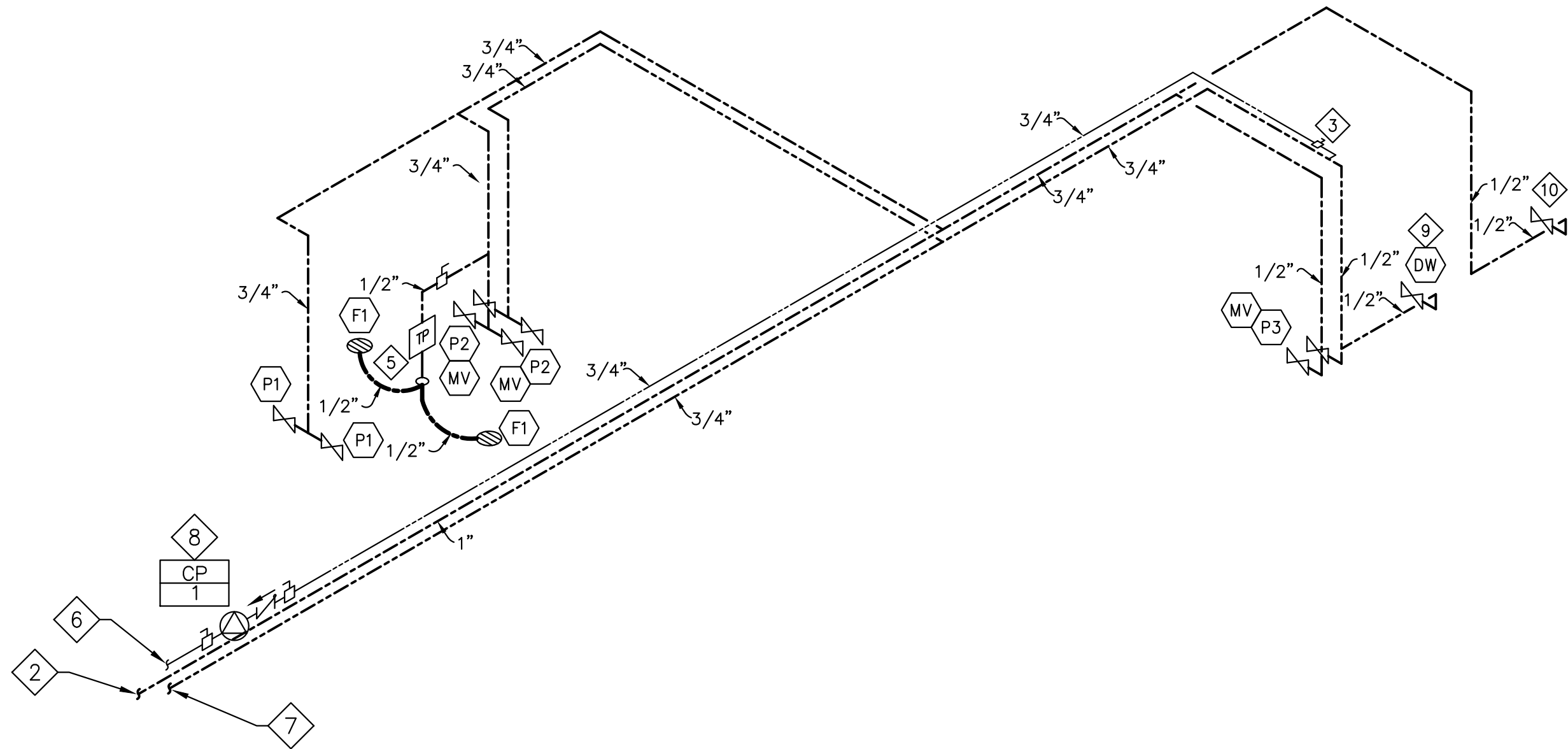
CHECKED	LAK
DRAWN	TMS
HEI PROJECT NO.	R23-4590.006

**PLUMBING  
PLANS**

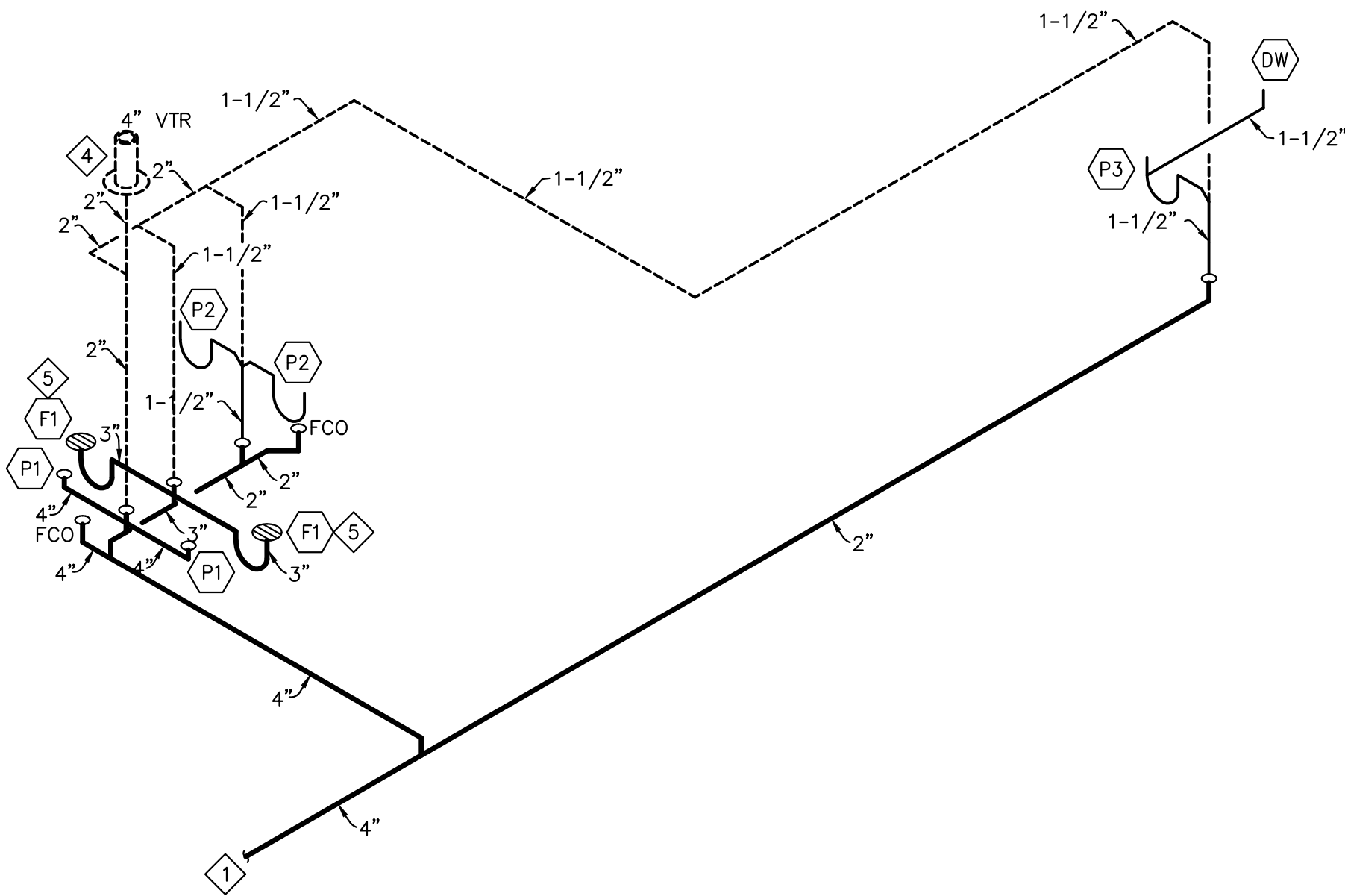
**P1.0**



PLUMBING FIXTURE SCHEDULE												P#	F#
FIXTURE NO.	FIXTURE TYPE	MANUFACTURER	TYPE & MODEL NO.	TRIM/FAUCET NO.	SUPPORT	TRAP	WASTE	VENT	CW	HW	REMARKS		
P1	WATER CLOSET	AMERICAN STANDARD	CADET NO. (WHITE) 2467.016	CHICAGO FAUCET 1016	FLOOR MOUNT	-	4"	2"	1/2"	-	1.6 GPF, ELONGATED, PRESSURE ASSISTED, ADA COMPLIANT 16-1/2" RIM HEIGHT. PROVIDE WITH WHITE OPEN FRONT SEAT		
P2	LAVATORY	AMERICAN STANDARD	LUCERNE (WHITE) 0355.012	CHICAGO FAUCET 802-A317CP	WALL HUNG	1-1/2"	1-1/2"	1-1/2"	1/2"	1/2"	PROVIDE INSULATED CHROME P-TRAP, PROVIDE HANDICAP INSULATION KIT, (2) CHICAGO FAUCET 1016 ANGLE VALVES. PROVIDE CHICAGO NO. E2605.5 AERATOR AND WALL CARRIER.		
P3	SINK	ELKAY	LR1919	LKD2432BH. FAUCET	FLOOR MOUNT	1-1/2"	1-1/2"	1-1/2"	1/2"	1/2"	PROVIDE WITH INTEGRAL BRASS DRAIN, STAINLESS STEEL DOME W/STRAINER, FAUCET W/TOP BRACE, STOPS AND VACUUM BREAKER. PROVIDE GARBAGE DISPOSAL UNDER SINK.		
P4	ICE MAKER OUTLET BOX (FOR REFRIGERATOR)	GUY GRAY/IPS CORP	AB-9700 EZSTL8C	-	-	-	-	-	1/2"	-	PROVIDE W/ LEAD-FREE 1/4 TURN SHUT OFF VALVE AT POINT OF CONNECTION. PROVIDE FINAL CONNECTION TO REFRIGERATOR.		
MV	THERMOSTATIC MIXING VALVE	WATTS	LFUSG-B-M2	-	-	-	-	-	1/2"	1/2"	ASSE 1070 THERMOSTATIC MIXING VALVE.		
F1	FLOOR DRAIN	JOSAM	30000-6A	-	-	3"	3"	1-1/2"	-	-	PROVIDE TRAP PRIMER CONNECTION.		
DW	DISHWASHER	--	--	-	-	-	5/8"	-	-	1/2"	CONNECT DISHWASHER WASTE PIPING TO TAIL PIECE OF KITCHEN SINK.		



2 WATER RISER DIAGRAM  
NTS



1 WASTE AND VENT RISER DIAGRAM  
NTS

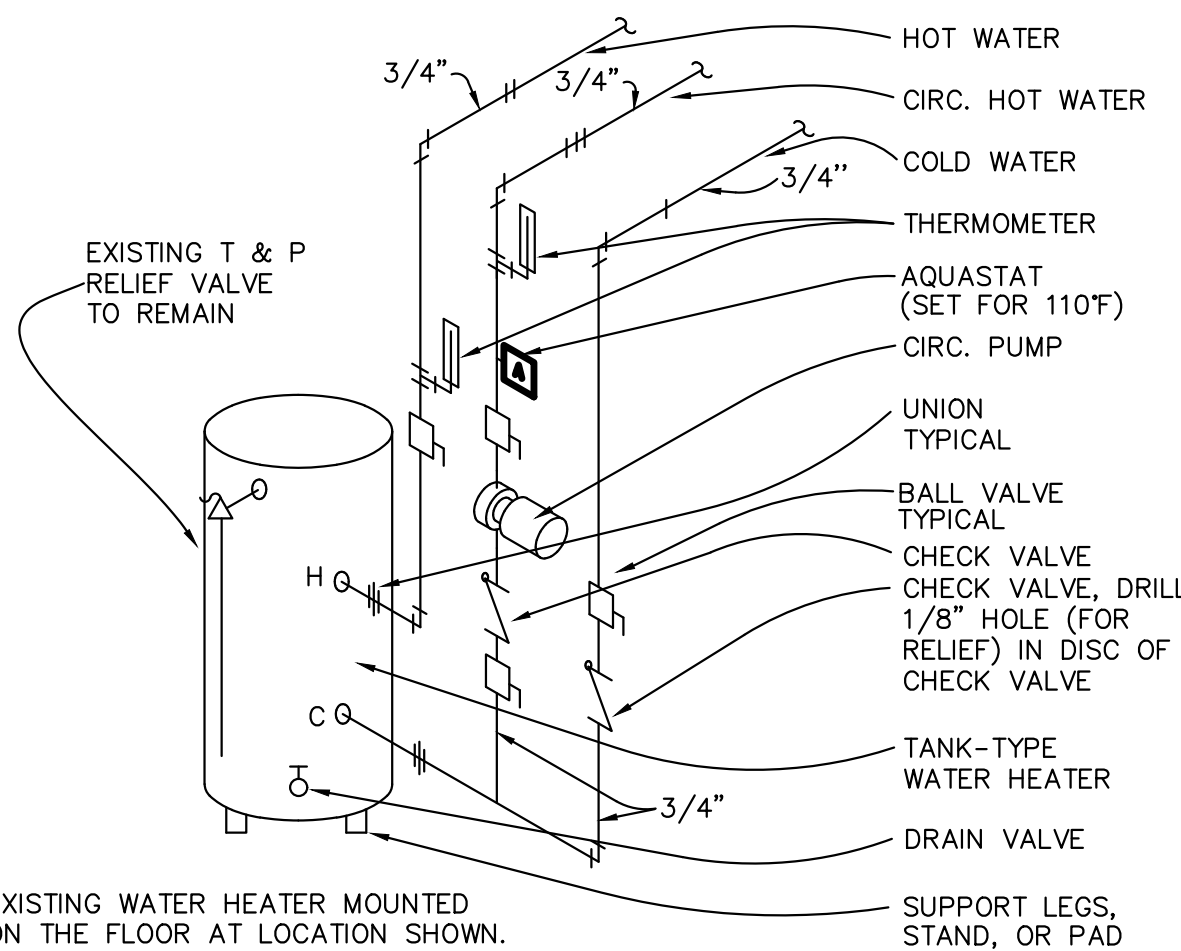
CIRCULATION PUMP SCHEDULE								CP #
ITEM NO.	MANUFACTURER	MODEL	VOLTAGE	HP	GPM	FT. HD.	REMARKS	
CP-1	BELL & GOSSETT	NBF-22U/LW	115/1/60	1/12	1.0	10	PROVIDE AQUASTAT FOR PUMP CONTROL	

GENERAL NOTES

- A. SUBCONTRACTOR TO VERIFY POINT OF CONNECTION AND SCOPE OF WORK TO INSTALL ALL PLUMBING PIPING & EQUIPMENT TO SPACE PRIOR TO BID. IF INCONSISTENCIES OCCUR BETWEEN PLANS AND LANDLORD CRITERIA, OWNER'S CONSTRUCTION MANAGER SHALL BE NOTIFIED PRIOR TO BID SUBMITTAL.
- B. HORIZONTAL DRAINAGE PIPING SHALL BE RUN IN PRACTICAL ALIGNMENT AND A UNIFORM SLOPE OF NOT LESS THAN 1/8 INCH PER FOOT (20.8 MM/M) OR 2 PERCENT TOWARD THE POINT OF DISPOSAL.

KEY NOTES

1. EXTEND AND CONNECT NEW 4" SANITARY SEWER TO EXISTING 4" (MIN) SANITARY SEWER PIPING. FIELD VERIFY EXACT LOCATION, SIZE, FLOW DIRECTION, AND INVERT ELEVATION OF CONNECTION POINT PRIOR TO ROUGH-IN OF NEW SANITARY SEWER. PROVIDE FCO AT POINT OF CONNECTION TO EXISTING.
2. EXTEND AND CONNECT NEW 1" CW PIPING TO EXISTING 1" (MIN) CW PIPING. FIELD VERIFY EXACT LOCATION OF CW PIPING PRIOR TO ROUGH-IN. PROVIDE SHUTOFF VALVE AT POINT OF CONNECTION TO EXISTING.
3. HOT WATER RECIRCULATION BALANCING VALVE WITH FLOW MEASUREMENT ORIFICES. SET FOR 1.0 GPM. MOUNT VALVE 1' ABOVE THE CEILING.
4. EXTEND NEW 2" VENT PIPING UP TO NEW 4" VTR. LOCATE TOILET VENT STACK SO THAT ALL ROOF PENETRATIONS OCCUR AT A MINIMUM OF TEN FEET (10'-0") AWAY FROM ANY MECHANICAL EQUIPMENT INTAKES OR OUTSIDE AIR INTAKE HOODS. USE ROOFING CONTRACTOR FOR ALL ROOF WORK.
5. PROVIDE JOSAM 88250 OR EQUAL TRAP PRIMER WITH ACCESSIBLE SHUT-OFF VALVE.
6. SEE DETAIL 1/P2.0 FOR CONTINUATION OF HOT WATER RECIRCULATON PIPE.
7. EXTEND AND CONNECT NEW 3/4" HW PIPING TO EXISTING 3/4" (MIN) HW PIPING. FIELD VERIFY EXACT LOCATION OF CW PIPING PRIOR TO ROUGH-IN. PROVIDE SHUTOFF VALVE AT POINT OF CONNECTION TO EXISTING.
8. FIELD COORDINATE THE INSTALLATION OF THE INLINE HOT WATER RECIRCULATION PUMP, EXPANSION TANK AND CHECK VALVE ASSEMBLY.
9. EXTEND AND CONNECT NEW 1/2" HW PIPING TO NEW DISHWASHER.
10. EXTEND AND CONNECT NEW 1/2" CW PIPING TO NEW REFRIGERATOR.

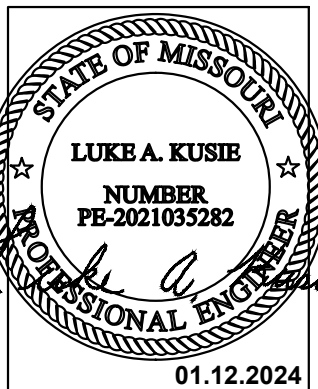


3 WATER HEATER DETAIL  
NO SCALE



DAMIAN  
FARRELL  
DESIGN  
GROUP

359 METTY DRIVE, SUITE 4A  
ANN ARBOR, MI 48103  
tel: 734.998.1331



FOR PERMIT ISSUE

C3 - BRANSON MO  
3125 GREEN MOUNTAIN DRIVE  
BRANSON, MO 65616

DATE	DESCRIPTION
12.28.2023	REVIEW SET
01.12.2024	PERMIT SET

CHECKED	LAK
DRAWN	TMS
HEI PROJECT NO.	R23-4590.006

PLUMBING RISERS,  
SCHEDULES AND  
DETAILS

P2.0