



DUMPSTER LOCATION  
EQUIPMENT STAGING LOCATION  
CONTRACTOR ENTRANCE AT SERVICE DOCK,  
SERVICE DOOR, USE SERVICE ELEVATOR



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FIRE SPRINKLER	
SESMVC	

# UNIVERSITY PHYSICIANS MEDICAL BUILDING - 3RD FLOOR RENOVATION

MU PROJECT NO. - CP221943

AT UNIVERSITY OF MISSOURI  
COLUMBIA, MO  
FOR THE CURATORS OF THE UNIVERSITY OF MISSOURI

## BID SET



BSA LifeStructures  
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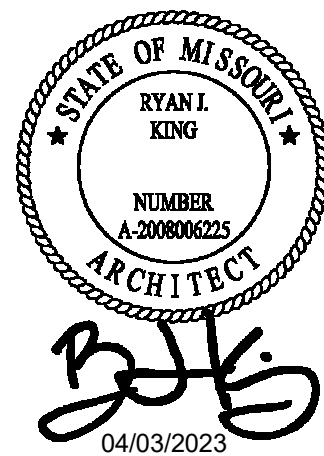
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MEP ENGINEERING:  
Introba Inc.  
6 S Old Orchard Ave  
St. Louis, MO 63119  
ph 314.918.8383 www.introba.com  
Missouri State Certificate of Authority #2023008136



LIGHTING ENGINEERING:  
Timberlake Engineering  
912 Old Highway 63 South  
Columbia, MO 65201  
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BID SET  
03 APRIL 2023

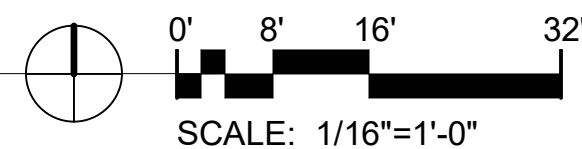
COVER SHEET

BSALS PROJECT NO. 14110010  
DATE 03 APRIL 2023

G000



② ALTERNATE #1 - BASEMENT LIFE SAFETY PLAN  
1/16" = 1'-0"



① THIRD FLOOR PLAN  
1/16" = 1'-0"



Department Legend	
MPM - NO WORK	
MPM - RENOVATION	
PEDS ENT - RENOVATION	
PEDS NEUROLOGY - NO WORK	
PEDS SURGERY/NEPHROLOGY - RENOVATION	
SHARED - NO WORK	
SHARED - RENOVATION	
UROLOGY - NO WORK	
UROLOGY - RENOVATION	

PLUMBING FIXTURE COUNT (TABLE 2902.1)		
OCCUPANCY TYPE: BUSINESS		
REQUIREMENT		NUMBER REQUIRED
1ST: 19,000 SQFT/150 = 127 OCCUPANT LOAD		3RD FLOOR
WATER CLOSETS	1 PER 25 FOR THE FIRST 50 AND 1 PER 50 FOR THE REMAINDER EXCEEDING 50	4
LAVATORIES	1 PER 40 FOR THE FIRST 80 AND 1 PER 80 FOR THE REMAINDER EXCEEDING 80	3
DRINKING FOUNTAINS	1 PER 100	2
SERVICE SINK	1 SERVICE SINK	1

CODE SUMMARY	
<b>PROJECT INFORMATION:</b>	
NAME:	UPMB 3RD FLOOR RENOVATION
ADDRESS:	1020 HITT ST. COLUMBIA, MO 65212
PROJECT DESCRIPTION:	INTERIOR RENOVATION OF THE 3RD FLOOR OF UPMB. EXISTING FLOOR IS 19,000 SF. FULL RENOVATION OF APPROXIMATELY 6,419 SF. EXTENSIVE MODIFICATIONS OF APPROXIMATELY 601 SF. APPROXIMATELY 37% OF THE FLOOR WILL BE RENOVATED.
OWNER:	UNIVERSITY OF MISSOURI - UNIVERSITY PHYSICIANS MEDICAL BUILDING, FOR THE CURATORS OF THE UNIVERSITY OF MISSOURI
<b>DESIGN PROFESSIONAL:</b>	
ARCHITECT:	BSA LIFESTRUCTURES
ADDRESS:	12645 OLIVE BLVD, SUITE 227 CREVE COEUR, MO 63141
CONTACT:	ENKU ASSEFA 913-748-8813, EXT 6017 EASSEFA@BSALIFESTRUCTURES.COM
<b>CODE INFORMATION:</b>	
2021	INTERNATIONAL BUILDING CODE
2021	INTERNATIONAL EXISTING BUILDING CODE (FOR LEVEL 1 LEVEL 2 ALTERATIONS ONLY WITH PREAPPROVAL FROM AHJ)
2021	INTERNATIONAL PLUMBING CODE
2021	INTERNATIONAL MECHANICAL CODE
2021	INTERNATIONAL FIRE CODE
2017	ICC A117.1 ACCESSIBLE NAD USABLE BUILDINGS AND FACILITIES
2020	NATIONAL ELECTRIC CODE/ NFPA 70
2019	NFPA 110 STANDARD FOR EMERGENCY AND STANDBY POWER SYSTEMS
2012	NFPA 101 LIFE SAFETY CODE
2012	NFPA 99 STANDARD FOR HEALTH CARE FACILITIES
2018	NFPA 90A INSTALLATION OF AIR CONDITIONING NAD VENTILATING SYSTEMS
2017	NFPA 75 STANDARD FOR THE FIRE PROTECTION OF INFORMATION TECHNOLOGY EQUIPMENT
2019	NFPA 72 NATIONAL FIRE ALARM CODE
2019	NFPA 518 STANDARD FOR FIRE PREVENTION DURING WELDING, CUTTING, AND OTHER HOT WORK
2019	NFPA 13 INSTALLATION OF FIRE SPRINKLER SYSTEMS
2019	ASHRAE 62.1 VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY
2019	VENTILATION RATES FOR SPACES NOT FOUND IN ASHRAE STANDARD 170 OR THE HIGHER OF THE TWO AIR CHANGE RATES PRESCRIBED IN BOTH
2019	ASHRAE 90.1 ENERGY STANDARD FOR BUILDINGS
2017	ASHRAE 170 VENTILATION OF HEALTH CARE FACILITIES
2016	ASME A17.1 - SAFETY CODE FOR ELEVATORS AND ESCALATORS
2010	AMERICANS WITH DISABILITIES ACT - STANDARDS FOR ACCESSIBLE DESIGN
2018	FACILITIES GUIDELINES INSTITUTE
<b>BUILDING DATA:</b>	
OCCUPANCY:	B
CONSTRUCTION TYPE:	I-B
ALLOWABLE AREA:	UNLIMITED/19,000 SF EXISTING
ALLOWABLE STORES:	12 STORES/4 STORES EXISTING
ALLOWABLE HEIGHT:	160'#/52' # EXISTING
<b>COMMON PATH OF EGRESS TRAVEL:</b>	
B OCCUPANCY	100 FT
<b>EXIT ACCESS TRAVEL DISTANCE:</b>	
B OCCUPANCY	300 FT
<b>EXIT CAPACITY:</b>	
B OCCUPANCY	STAIRWAYS = 38 INCHES OTHER = 25 INCHES
<b>CORRIDORS:</b>	
MINIMUM WIDTH:	44"
DEAD END:	50'
<b>FIRE EXTINGUISHERS:</b>	
MAXIMUM TRAVEL DISTANCE:	75'
<b>LIFE-SAFETY FEATURES:</b>	
SPRINKLER SYSTEM THROUGH-OUT SMOKE DETECTORS & FIRE ALARM SYSTEM EMERGENCY LIGHTS- INVERTER BACKUP EXIT LIGHTS- INVERTER BACKUP	
<b>FIRE RESISTANCE RATING REQUIREMENTS:</b>	
STRUCTURAL FRAME:	2 HOURS - EXISTING
FLOOR CONSTRUCTION:	2 HOURS - EXISTING
ROOF CONSTRUCTION:	0 HOURS - EXISTING
SHAFT ENCLOSURE:	2 HOURS - EXISTING
STAIR CONSTRUCTION:	2 HOURS - EXISTING

#### LIFE-SAFETY SYMBOLS LEGEND

XX	COLUMN LINE
ROOM 000	ROOM NAME DESIGNATION ROOM NUMBER DESIGNATION
#	PLAN NOTE DESIGNATION
EXIT	EXIT SYMBOL
(FEX)	FIRE EXTINGUISHER
(FEC)	FIRE EXTINGUISHER CABINET

#### WALL RATINGS

1-HOUR RATED FIRE - (1HR)	
2-HOUR RATED FIRE - (2HR)	

#### KEYNOTE LEGEND

REFER TO A000 FOR GENERAL NOTES

#### SPECIAL INSPECTIONS

CHECK IF REQUIRED	INSPECTION TASK	CONTINUOUS	PERIODIC	STANDARD	NOTES/COMMENTS
<input checked="" type="checkbox"/>	PENETRATION FIRESTOPS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	ASTM E2174	TESTING TO BE CONDUCTED BY AN APPROVED AGENCY
<input checked="" type="checkbox"/>	INSTALLATION OF MECHANICAL AND ELECTRICAL EQUIPMENT, INCLUDING DUCT WORK, PIPING SYSTEMS, AND THEIR STRUCTURAL SUPPORTS, WHERE AUTOMATIC FIRE SPRINKLER SYSTEMS ARE INSTALLED.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	IBC 2021 1705.13.6	

BSA

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Missouri State Certificate of Authority #F00518223



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St. Louis, MO 63119

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Missouri State Certificate of Authority #202308136



LIGHTING ENGINEERING:

Timberlake Engineering

912 Old Highway 63 South

Columbia, MO 65201

ph 573.875.4365 ext 209 www.customenrg.com

Missouri State Certificate of Authority #000239

Health Care

MU PROJECT NO. - CP221943

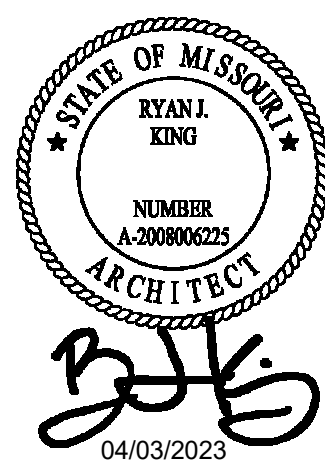
UNIVERSITY PHYSICIANS  
MEDICAL BUILDING - 3RD  
FLOOR RENOVATION

1020 Hitt St. Columbia, MO 65212

BID SET

MARK	DATE	DESCRIPTION
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I hereby certify these drawings and/or specifications have been prepared by me, or under my supervision. I further certify that to the best of my knowledge these drawings and/or specifications are as required by and in compliance with the Building Codes of the University of Missouri.



CODE SUMMARY & LIFE  
SAFETY PLAN

- THIS SHEET SHALL BE PRINTED IN COLOR -

DATE	03 APRIL 2023
BSALS PROJECT NO.	14110010

G200



GENERAL DEMOLITION NOTES	
A.	ALL ITEMS SHOWN IN A BOLD DASHED LINE AND NOT OTHERWISE CALLED OUT, INDICATE EXISTING ITEMS OR WALLS TO BE DEMOLISHED. REMOVE SUCH ITEMS TOTALLY AND COMPLETELY.
B.	REMOVE ALL EXISTING WALL MOUNTED ITEMS WITHIN THE PROJECT UNIT AREA WHICH ARE NOT NOTED TO REMAIN. DISPOSE OF THESE ITEMS AFTER INSPECTION BY THE OWNER DETERMINES THEY ARE NOT TO BE SALVAGED. IF ITEMS ARE REMOVED FROM WALLS THAT OPEN UP REMAIN PATCH WALLS AS REQUIRED TO RECEIVE NEW FINISHES AND/OR SURFACES.
C.	REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS AND SPECIFICATIONS FOR ANY ADDITIONAL DEMOLITION INFORMATION.
D.	REMOVE EXISTING CEILING FINISHES, INCLUDING BULKHEADS, AS APPLICABLE IN ALL AREAS WITHIN THE PROJECT LIMITS THAT ARE SCHEDULED TO RECEIVE NEW CEILINGS.
E.	REMOVE DRYWALL AS REQUIRED FOR NEW ELECTRICAL AND DATA BOXES PER MEP.
F.	MAINTAIN ALL EXISTING FIREPROOFING.
G.	AS REQUIRED BY MEP, TEMPORARY EXISTING CEILING REMOVAL MAY OCCUR. COORDINATE AND MINIMIZE EXTENT WITH SCOPE OF MEP DRAWINGS. ALL CEILINGS EXISTING CONDITIONS TO BE MAINTAINED. PATCH/PAINT GYP. BD. CEILINGS AS REQUIRED, REPLACE DAMAGED TILES & GRID AS REQUIRED. PROTECT ALL LIGHT FIXTURES AND DIFFUSERS.
H.	PROVIDE FIRESTOPPING INFILL OF HOLES AND OPENINGS LEFT AFTER DEMOLITION TO MAINTAIN FIRE RATINGS AND INTEGRITY OF FLOOR-CEILING ASSEMBLIES. ALL THROUGH SLAB PENETRATIONS TO BE FIRE STOPPED FROM ABOVE.

GENERAL DIMENSION NOTES	
A.	ALL DIMENSIONS ARE TO FACE OF GYPSUM BOARD, FACE OF MASONRY OR CONCRETE, OR TO FACE OF EXISTING WALL FINISH UNLESS NOTED OTHERWISE.
B.	INSTALL CONTROL JOINTS IN GYPSUM BOARD WALLS, CEILINGS AND BULKHEADS AS INDICATED ON THE DIMENSION PLANS.
C.	REFLECTED CEILING PLANS, INTERIOR ELEVATIONS AND AS INDICATED IN THE SPECIFICATIONS. CONSULT ARCHITECT FOR LOCATIONS IF NOT INDICATED.
D.	THE DIMENSION PLANS ARE INTENDED TO SHOW DIMENSIONS, WALL RATINGS, WALL TYPES AND DOOR AND WINDOW LOCATIONS ONLY.
E.	PROVIDE 18" MINIMUM ADA REQUIRED CLEARANCE ADJACENT TO STRIKE OF DOOR ON SWING SIDE OF DOOR. PROVIDE 12" MINIMUM ON OPPOSITE SIDE OF DOOR.
F.	REFER TO MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR SIZES AND LOCATIONS OF EQUIPMENT PADS. COORDINATE SLAB CONSTRUCTION WITH MECHANICAL AND STRUCTURAL.
G.	WALLS NOT FULLY EXTENDED TO DECK OR ROOF ABOVE SHALL BE DIAGONALLY BRACED AT 10'-0" MAXIMUM ON CENTER FROM TOP OF WALL TO DECK OR ROOF STRUCTURE ABOVE.
H.	PROVIDE FULL HEIGHT STRUCTURAL STUDS TO THE STRUCTURE ABOVE AT ALL CORNERS, AT DOOR AND BORROWED LIGHT FRAMES, AND JAMBS.
I.	REFER TO STRUCTURAL DRAWINGS FOR MASONRY REINFORCEMENT.
J.	ALL INTERIOR WALLS SHALL BE TYPE 'B3.1' UNLESS NOTED OTHERWISE. ALL COLUMN SURROUNDS SHALL BE WALL TYPE 'A2.1' UNLESS NOTED OTHERWISE.
K.	INSTALL CONTROL JOINTS IN GYPSUM BOARD WALLS, CEILINGS AND BULKHEADS AS INDICATED ON THE DIMENSION, REFLECTED CEILING PLANS, INTERIOR ELEVATIONS AND PER SPECIFICATION DIVISION 09.
L.	ALL STUDS SHALL BE AT 16" O.C. UNLESS NOTED OTHERWISE.
M.	ALL SHAFT WALL STUDS SHALL BE AT 24" O.C. UNLESS NOTED OTHERWISE.
N.	UNLESS NOTED OTHERWISE, PROVIDE WATER RESISTANT GYPSUM BOARD AT ALL WALLS COMMON TO WATER CLOSETS, URINALS, LAVATORIES, SINKS AND SHAFTS.
O.	WHERE RATED WALLS ARE INDICATED, ENTIRE WALL ASSEMBLY SHALL BE CONTINUOUS AS SHOWN OR IMPLIED ON THE CONTRACT DOCUMENTS. WHERE PENETRATIONS THROUGH RATED WALL PARTITIONS ARE REMOVED, PATCH AND REPAIR SUCH WALLS TO MAINTAIN THE RATING. REFER TO MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR FURTHER COORDINATION.
P.	SMOKE AND FIRE RATED WALLS SHALL BE CONTINUOUS THROUGH AND ABOVE DOOR AND WINDOW OPENINGS.
Q.	WHERE GYPSUM BOARD COLUMN SURROUNDS ARE ADJACENT TO CASEWORK, THE DEPTH OF THE COLUMN SURROUND SHALL EXTEND 1" BEYOND FACE OF CASEWORK OR EDGE OF COUNTERTOP.
R.	VERIFY FINAL LOCATION OF PUSH PADS, CARD READERS AND TOUCHLESS ACTUATORS WITH OWNER BEFORE INSTALLATION. PROVIDE WOOD BLOCKING AT WALL STUDS TO SUPPORT GRAB BARS, HANDRAILS, DOOR STOPS AND TOILET PARTITIONS.

GENERAL ARCHITECTURAL NOTES	
A.	REFER TO THE EQUIPMENT SCHEDULE ON SHEET A-143 FOR EQUIPMENT INFORMATION. COORDINATE BLOCKING AND MECHANICAL, ELECTRICAL AND PLUMBING CONNECTIONS AS REQUIRED.
B.	VERIFY WITH OWNER REQUIREMENTS FOR ALL EQUIPMENT (MOUNTING HEIGHTS, LOCATIONS AND SIZES) INCLUDING ALL OWNER FURNISHED OWNER INSTALLED ITEMS.
C.	INSTALL STEEL BACKING, 20 GAUGE, AT ANY WALL HUNG ITEMS EXCEEDING 20 POUNDS.
D.	REFER TO THE DIMENSION PLAN FOR ADDITIONAL INFORMATION REGARDING WALL AND OPENING CONSTRUCTION.
E.	REFER TO MECHANICAL, ELECTRICAL AND PLUMBING PLANS FOR ADDITIONAL INFORMATION.
F.	VERIFY EXISTING CONDITIONS PRIOR TO ANY FABRICATION OR CONSTRUCTION. IF EXISTING CONDITIONS ARE DIFFERENT THAN SHOWN, NOTIFY ARCHITECT/ENGINEER IMMEDIATELY.
G.	LOOSE FURNITURE, SHOWN HALF CIRCLE & DASHED, IS SHOWN IS FOR REFERENCE PURPOSES ONLY AND IS OWNER FURNISHED AND INSTALLED.

GENERAL FRAME ELEVATION NOTES	
A.	FRAME TYPES: HM = HOLLOW METAL, SF = STOREFRONT, CW = CURTAIN WALL, AG = ALL GLASS, SSF = SPECIALTY STOREFRONT, FSF = FIRE-RATED STOREFRONT.
B.	REFER TO DIVISION 06 IN THE PROJECT MANUAL FOR ALL FRAME PANEL TYPE DESIGNATIONS.
C.	ALL HOLLOW METAL SYSTEMS TO BE 2" TALL (FACE FRAME) x 5 1/4" DEEP UNITS U.N.O.
D.	SEE SHEET A-000 FOR DETAIL SETS.
E.	FRAME MANUFACTURER TO VERIFY IN FIELD ACTUAL CONDITIONS PRIOR TO FRAME MANUFACTURE AND INSTALLATION.
F.	MULLION LOCATIONS ARE INDICATED TO THE CENTERLINE OF THE MULLION U.N.O.
G.	ALL FRAME ELEVATIONS ARE SHOWN AS SEEN FROM THE PUBLIC APPROACH SIDE OF FRAME.

GENERAL REFLECTED CEILING NOTES	
A.	ALL LAY-IN ACOUSTICAL CEILINGS SHALL BE INSTALLED AT 8'-0" ABOVE FINISH FLOOR, UNLESS INDICATED OTHERWISE.
B.	ALL LAY-IN ACOUSTICAL TILE SHALL BE TYPE ACT1, UNLESS OTHERWISE INDICATED.
C.	ALL GYPSUM BOARD BULKHEADS SHALL BE INSTALLED AT 7'-10" ABOVE FINISH FLOOR, UNLESS NOTED OTHERWISE.
D.	REFER TO A-000 FOR TYPICAL BULKHEAD DETAIL.
E.	REFER TO A-000 FOR TYPICAL CUBICLE CURTAIN TRACK DETAIL.
F.	INSTALL CONTROL JOINTS IN GYPSUM BOARD WALLS, CEILINGS AND BULKHEADS AS INDICATED ON THE DIMENSION PLANS, REFLECTED CEILING PLANS, INTERIOR ELEVATIONS AND AS INDICATED IN THE SPECIFICATIONS.
G.	FIRE RATED WALLS SHALL EXTEND FROM FLOOR TO STRUCTURE ABOVE.
H.	ALL CEILINGS SHALL BE CENTERED WITHIN THE ROOM UNLESS INDICATED OTHERWISE.
I.	ALL LIGHTING FIXTURES, MECHANICAL DIFFUSERS AND GRILLES, ET CETERA ARE SHOWN ON REFLECTED CEILING PLANS FOR REFERENCE ONLY. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS.

GENERAL INTERIOR ELEVATION NOTES	
A.	REFER TO FLOOR PLANS AND THE EQUIPMENT SCHEDULE FOR EQUIPMENT. COORDINATE CONNECTIONS. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
B.	REFER TO PLUMBING DRAWINGS FOR LAVATORIES AND SINK TYPES.
C.	ALL DIMENSIONS ARE TAKEN TO THE FACE OF FINISHED MATERIAL UNLESS OTHERWISE INDICATED.
D.	FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OF CABINETRY.
E.	CONSTRUCT GYPSUM BOARD BULKHEADS ABOVE UPPER CABINETRY TO BE 1" DEEPER AND LONGER THAN CABINETRY BELOW UNLESS INDICATED OTHERWISE.
F.	COORDINATE ALL WALL DEVICES TO AVOID CONFLICT WITH CASEWORK AND COUNTERTOPS.
G.	COORDINATE SUPPORT BRACKET LOCATIONS WITH UNDER COUNTER EQUIPMENT INDICATED ELSEWHERE IN CONTRACT DOCUMENTS.
H.	ALL BASE CABINETS SHALL BE 2'-0" DEEP UNLESS NOTED OTHERWISE.
I.	ALL CASEWORK SHALL BE FINISHED IN PLASTIC LAMINATE UNLESS NOTED OTHERWISE.
J.	PROVIDE 1" MINIMUM FILLER PANELS AT ALL LOCATIONS WHERE CABINETRY ABUTS A WALL.
K.	PROVIDE A 4" HIGH INTEGRAL BACK SPLASH ON ALL COUNTERS WITH RECESSED SINKS. INSTALL SIDE/END SPLASHES WHERE THESE COUNTERS ABUT A WALL.
L.	PROVIDE ADJUSTABLE SHELVING WITHIN ALL WALL AND BASE CABINETRY AS SHOWN BY DASHED LINE.
M.	BOTTOM OF UPPER CABINETS TO BE FINISHED TO MATCH VERTICAL FACES.
N.	PROVIDE 12" CLEAR INTERIOR DIMENSION ON ALL UPPER WALL CABINETS UNLESS NOTED OTHERWISE.
O.	ALL CABINET CASEWORK PULLS TO BE U-SHAPED WIRE PULLS, 4" CENTERS, UNLESS NOTED OTHERWISE.

ARCHITECTURAL SYMBOLS LEGEND	
GENERAL SYMBOLS	
	COLUMN LINE
	SECTION INDICATOR
	DETAIL INDICATOR
	DETAIL NUMBER
	SIMILAR
	SHEET NUMBER
	ELEVATION TAG
	ROOM NAME DESIGNATION
	ROOM NUMBER DESIGNATION
	PLAN NOTE DESIGNATION

DEMOLITION SYMBOLS	
	EXISTING WALL TO REMAIN
	EXISTING WALL TO BE REMOVED
	EXISTING DOOR AND FRAME TO REMAIN
	EXISTING DOOR, FRAME, AND HARDWARE TO BE REMOVED
	EXISTING WINDOW AND FRAME TO REMAIN
	EXISTING WINDOW AND FRAME TO BE REMOVED

DEMO CEILING SYMBOLS	
	REMOVE SUSPENDED LAY-IN CEILING SYSTEM
	ROOM NUMBER
	REMOVE LIGHTING FIXTURE
	REMOVE RECESSED "CAN" LIGHT FIXTURE OR PENDANT
	REMOVE RETURN AIR GRILLE
	REMOVE EXHAUST AIR GRILLE
	REMOVE SUPPLY AIR GRILLE
	REMOVE GYPSUM WALLBOARD BULKHEAD/CEILING

NEW CONSTRUCTION SYMBOLS	
	EXIT SYMBOL
	FLOOR DRAIN
	FIRE EXTINGUISHER AND CABINET
	FIRE EXTINGUISHER
	EQUIPMENT DESIGNATION. REFER TO EQUIPMENT SCHEDULE.
	TOILET ACCESSORY
	WALL TYPE
	WALL TYPE SUFFIX
	DOOR NUMBER DESIGNATION
	CARD READER FOR ELECTRIC DOOR LATCH
	TOUCHLESS ACTUATOR
	REMOTE RELEASE
	NEW WALL
	NEW DOOR
	DOOR WITH AUTOMATIC DOOR OPERATOR

CEILING SYMBOLS	
	SUSPENDED LAY-IN CEILING SYSTEM
	ROOM NUMBER
	ACOUSTICAL CEILING TILE - TYPE
	CEILING HEIGHT ABOVE FINISH FLOOR
	RECESSED "CAN" LIGHT FIXTURE OR PENDANT
	CEILING MOUNTED EXIT LIGHT
	CUBICLE CURTAIN TRACK AND CURTAIN
	2x4 LIGHTING FIXTURE
	2x2 LIGHTING FIXTURE
	1x4 LIGHTING FIXTURE
	RETURN AIR GRILLE
	EXHAUST AIR GRILLE
	SUPPLY AIR GRILLE
	GYPSUM CONTROL JOINT
	ACCESS PANEL
	GYPSUM WALLBOARD BULKHEAD/CEILING

CEILING SYMBOLS	
	SUSPENDED LAY-IN CEILING SYSTEM
	ROOM NUMBER
	ACOUSTICAL CEILING TILE - TYPE
	CEILING HEIGHT ABOVE FINISH FLOOR
	RECESSED "CAN" LIGHT FIXTURE OR PENDANT
	CEILING MOUNTED EXIT LIGHT
	CUBICLE CURTAIN TRACK AND CURTAIN
	2x4 LIGHTING FIXTURE
	2x2 LIGHTING FIXTURE
	1x4 LIGHTING FIXTURE
	RETURN AIR GRILLE
	EXHAUST AIR GRILLE
	SUPPLY AIR GRILLE
	GYPSUM CONTROL JOINT
	ACCESS PANEL
	GYPSUM WALLBOARD BULKHEAD/CEILING

ABBREVIATIONS		
NOTE: NOT ALL ABBREVIATIONS USED ON PROJECT		
<b>A</b>	A/E ACT ADH ADJ ADU AFF AHU AL ALUM ALU ANOD APPROX ARCH AUTO	ARCHITECT/ENGINEER ACOUSTICAL CEILING TILE AMERICANS WITH DISABILITIES ACT ADHESIVE ADJACENT ACCESS FLOORING ABOVE FINISH FLOOR AIR HANDLING UNIT ALTERNATE ALUMINUM ALUMINUM ANODIZED APPROXIMATELY ARCHITECT(TURAL) AUTOMATIC
<b>B</b>	BL BLDG BLKHD BO BOT BR BSMT BTWN	BLINDS BUILDING BULKHEAD BY OTHERS BOTTOM BUMP RAIL BASEMENT BETWEEN
<b>C</b>	CC CCJ CFOI CFVI CG CJ CL CLG CLR CMU COL CONC CONST CONT COORD CORR CPT CR CS CTB CTR CURT CWT	CUBICLE CURTAIN CONTRACTOR FURNISHED/CONTRACTOR INSTALLED CONTRACTOR FURNISHED/DOWNER INSTALLED CONTRACTOR FURNISHED/VENDOR INSTALLED CORNER GUARD CONTROL JOINT CENTER LINE CEILING CLEARANCE CONCRETE MASONRY UNIT COLUMN CONCRETE CONSTRUCTION CONTINUOUS COORDINATE CORRIDOR CARPET CARD READER, CRASH RAIL OR CHAIR RAIL CAST STONE OR CULTURED STONE CERAMIC TILE CERAMIC TILE BASE CENTER CURTAIN CERAMIC WALL TILE
<b>D</b>	D DAFS DEMO DEPT DF DG DIA DIM DIA DISP DN DP DR DTL DWG DWGS	DEPTH (DEEP) DIRECT APPLIED FINISH SYSTEM DEMOLITION DEPARTMENT DRINKING FOUNTAIN DECORATIVE GLASS DIAMETER DIAGONAL DIMENSION DISPENSER DOWN DECORATIVE PANEL DOOR DETAIL DRAWING DRAWINGS
<b>E</b>	E EA ECT EIFS EJ EL ELEV ELEC ELEV EMER ENGR EP EPO EQUIP ETR EWC EWS EXH EXIST EXT	EAST EACH ET CETERA (AND SO FORTH) EXTERIOR INSULATION AND FINISH SYSTEM EXPANSION JOINT ELEVATION ELECTRICAL ELEVATOR EMERGENCY ENGINEER EDGE OF SLAB EPOXY PAINT EMERGENCY POWER OFF EQUIP EQUIPMENT EXISTING TO REMAIN ELECTRIC WATER COOLER EYE WASH STATION EXHAUST EXISTING EXTERIOR
<b>F</b>	FB FD FDTN FE FEV FF FIXT FLOR FP FRP FRMG FSTNR FT FTG FURN FWC	FABRIC FLOOR DRAIN FOUNDATION FIRE EXTINGUISHER FIRE EXTINGUISHER CABINET FINISH FACE FIXTURE FLOOR FIREPROOF FIBER REINFORCED PANEL FRAMING FASTENER FOOT (FEET) FOOTING FURNITURE FABRIC WALLCOVERING
<b>G</b>	GA GALV GC GL GLT GLZ GYP GYP BD	GAUGE GALVANIZE(ED) GENERAL CONTRACTOR GLASS GLASS TILE GLAZING GYPSUM GYPSUM BOARD
<b>H</b>	H HAZ HCP HWD HM HO HORIZ HR HSPKG HT	HIGH HAZARD HANDICAPPED HARDWARE HOLLOW METAL HOLD OPEN HORIZONTAL HOUR(S) [FIRE RESISTANCE RATING], OR HANDRAIL HOUSEKEEPING HEIGHT
<b>I</b>	IBC ID IDEN INFO INSUL INT	INTERNATIONAL BUILDING CODE INSIDE DIAMETER (DIMENSION) IDENTIFICATION INFORMATION INSULATION INTERIOR
<b>L</b>	LAV LBS LED LSF LTF LL LVT LWC	LAVATORY POUND(S) LIGHT EMITTING DIODE LINOLEUM SHEET FLOORING LINOLEUM TILE FLOORING LEAD LINED LUXURY VINYL TILE LIGHTWEIGHT CONCRETE
<b>M</b>	MATL MAX MB MECH MEP MFD MFG MFR MIN MISC MO MT MTD MTL	MATERIAL MAXIMUM MARKER BOARD MECHANICAL MECHANICAL, ELECTRICAL AND PLUMBING MANUFACTURED MANUFACTURING MANUFACTURER MINIMUM MISCELLANEOUS MASONRY OPENING MOSAIC TILE MOUNTED METAL
<b>N</b>	N NOM NTS	NORTH NOMINAL NOT TO SCALE
<b>Q</b>	Q OC OD OFICI OFICI OFICI OH OH DR OPNG OPP OR ORIG OVRHD	ON CENTER OUTSIDE DIAMETER (DIMENSION) OWNER FURNISHED/CONTRACTOR INSTALLED OWNER FURNISHED/OWNER INSTALLED OWNER FURNISHED/VENDOR INSTALLED OPPOSITE HAND OVERHEAD (CEILING) DOOR OPENING OPPOSITE OPERATING ROOM ORIGINAL OVERHEAD
<b>P</b>	P PB PERF PL PLAM PLBG PLYWID PNE PNEU PP PR PREFAB PREP PREV PSI PT PTB PTN PWR	PAINT PUSH BUTTON PERFORATED PROPERTY LINE, OR PLASTIC LAMINATE PLASTIC LAMINATE PLUMBING PLYWOOD PAINT OR PATCH TO MATCH EXISTING PNEUMATIC PUSH/PULL (PUSH PAD) PAIR PREFABRICATE PREPARATION PREVIOUS POUNDS PER SQUARE INCH PORCELAIN TILE PORCELAIN TILE BASE PARTITION POWER
<b>Q</b>	Q QT QTY QZ	QUARRY TILE QUANTITY QUARTZ SURFACE
<b>R</b>	R RB RCP RCTPN RD REBAR REC RECP REF REG REIN REQD REST REV RF RFI RM RO RS RST	RESILIENT BASE REFLECTED CEILING PLAN RECEPTION ROOF DRAIN REINFORCING STEEL BARS RECESSED RECEPTACLE REFERENCE (REFER TO) REGISTERED REINFORCEMENT REQUIRED RESTROOM REVISION RUBBER FLOORING REQUEST FOR INFORMATION ROOM ROUGH OPENING ROLLERS SHAFT RESILIENT STAIR TREAD
<b>S</b>	S SC SCWD SDT SF SGD SGL SHR SIM SPEC SPKR SQ SS SST STC STD STL STOR STRUCT SUB SV	SOUTH SEALED CONCRETE SOLID CORE WOOD DOOR STATIC DISSIPATIVE TILE SQUARE FOOT (FEET) SLIDING GLASS DOOR SINGLE SHOWER SIMILAR SPECIFICATION SPEAKER SQUARE SOLID SURFACE STAINLESS STEEL SOUND TRANSMISSION CLASS STANDARD STEEL STORAGE STRUCTURE(L) SUBSTITUTE SHEET VINYL
<b>T</b>	T TA TB TE TEMP TF THK THRU TOC TOS TS TSTAT TV TYP TZ TZB	TOP OF TOUCHLESS ACTUATOR TACKBOARD TELEPHONE TEMPORARY (TEMPERATURE) TEMP TACKABLE FABRIC THICKNESS THROUGH TOP OF CONCRETE TOP OF STEEL TUBE STEEL THERMOSTAT TELEVISION TYPICAL TERRAZZO FLOORING TERRAZZO BASE
<b>U</b>	U UBC UL UNO UTIL	UNIFORM BUILDING CODE UNDERWRITERS LABORATORIES UNLESS NOTED OTHERWISE UTILITY
<b>V</b>	V VAR VB VCT VERT VEST VET VIF VWC	VARIES VINYL BASE VINYL COMPOSITION TILE VERTICAL VESTIBULE VINYL ENHANCED TILE VERIFY IN FIELD VINYL WALL COVERING
<b>W</b>	W W W/O WD WDW WF WM WP WPT WR WT WW WWF	WEST (WIDE) WITH WITHOUT WOOD PANELING WINDOW WIDE FLANGE WALK-OFF MAT WALL PROTECTION ASSEMBLY WORKING POINT WEATHER RESISTANT WEIGHT WOOD VENEER WALLCOVERING WELDED WIRE FABRIC

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# Health Care

MU PROJECT NO. - CP221943

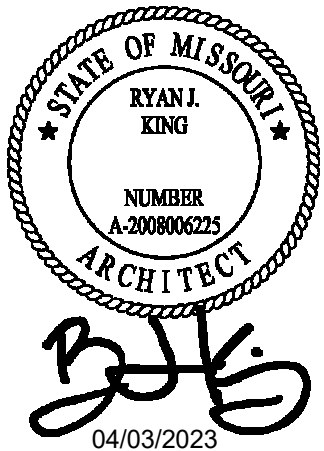
## UNIVERSITY PHYSICIANS MEDICAL BUILDING - 3RD FLOOR RENOVATION

1020 Hitt St. Columbia, MO 65212

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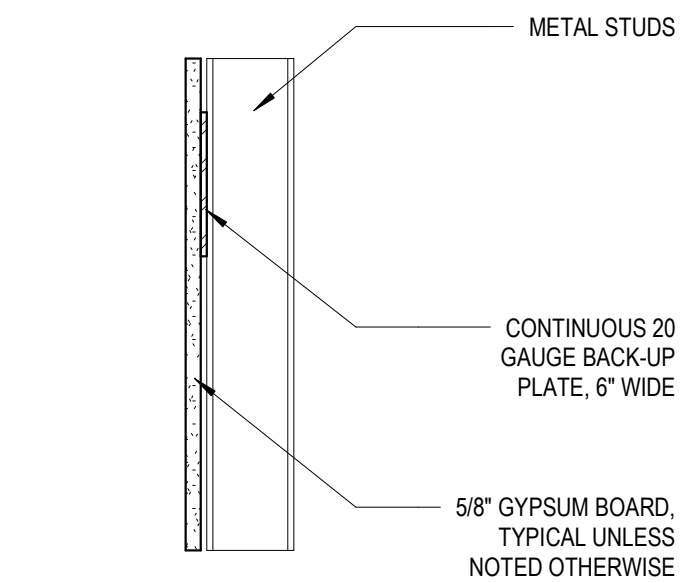
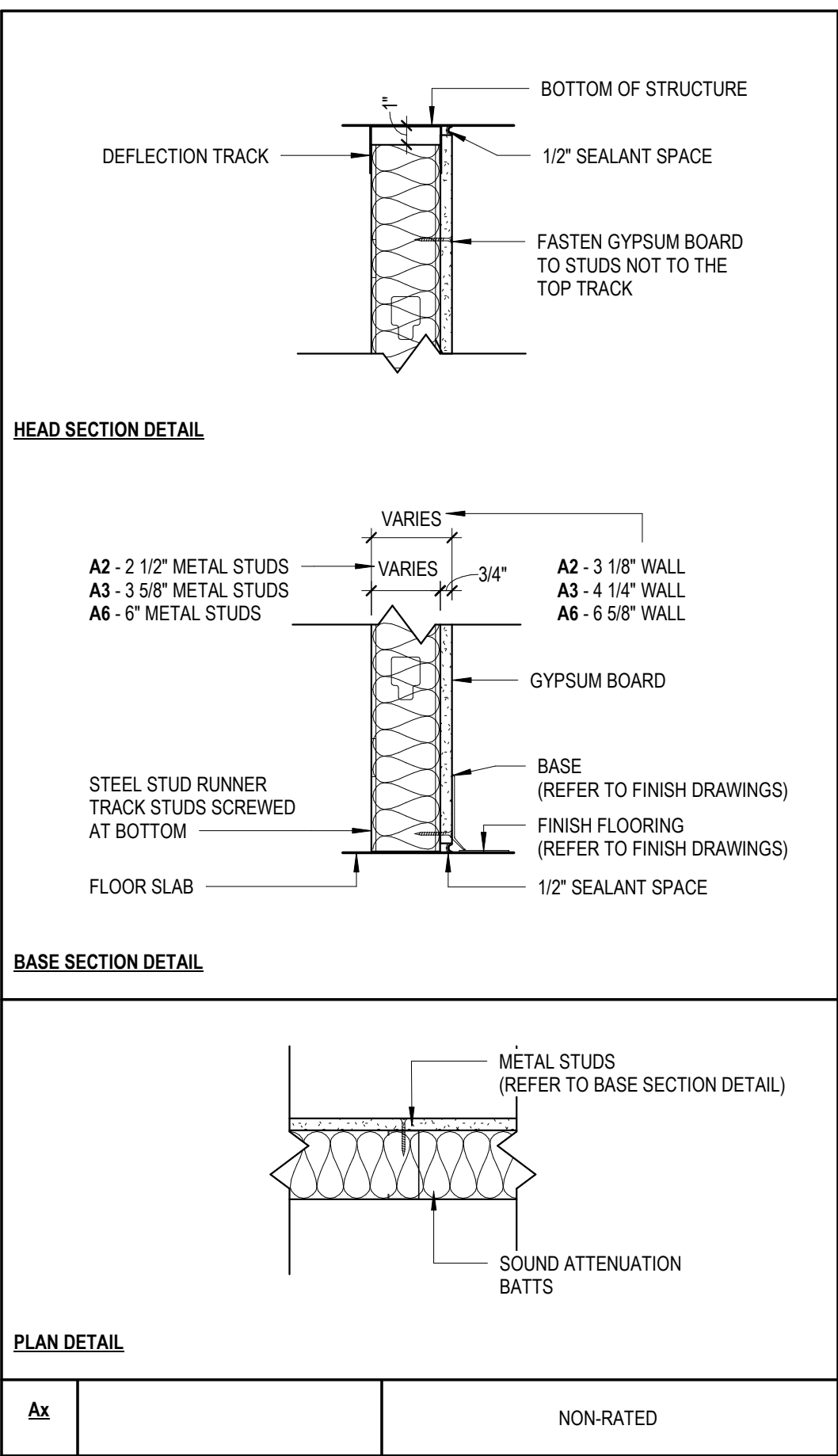
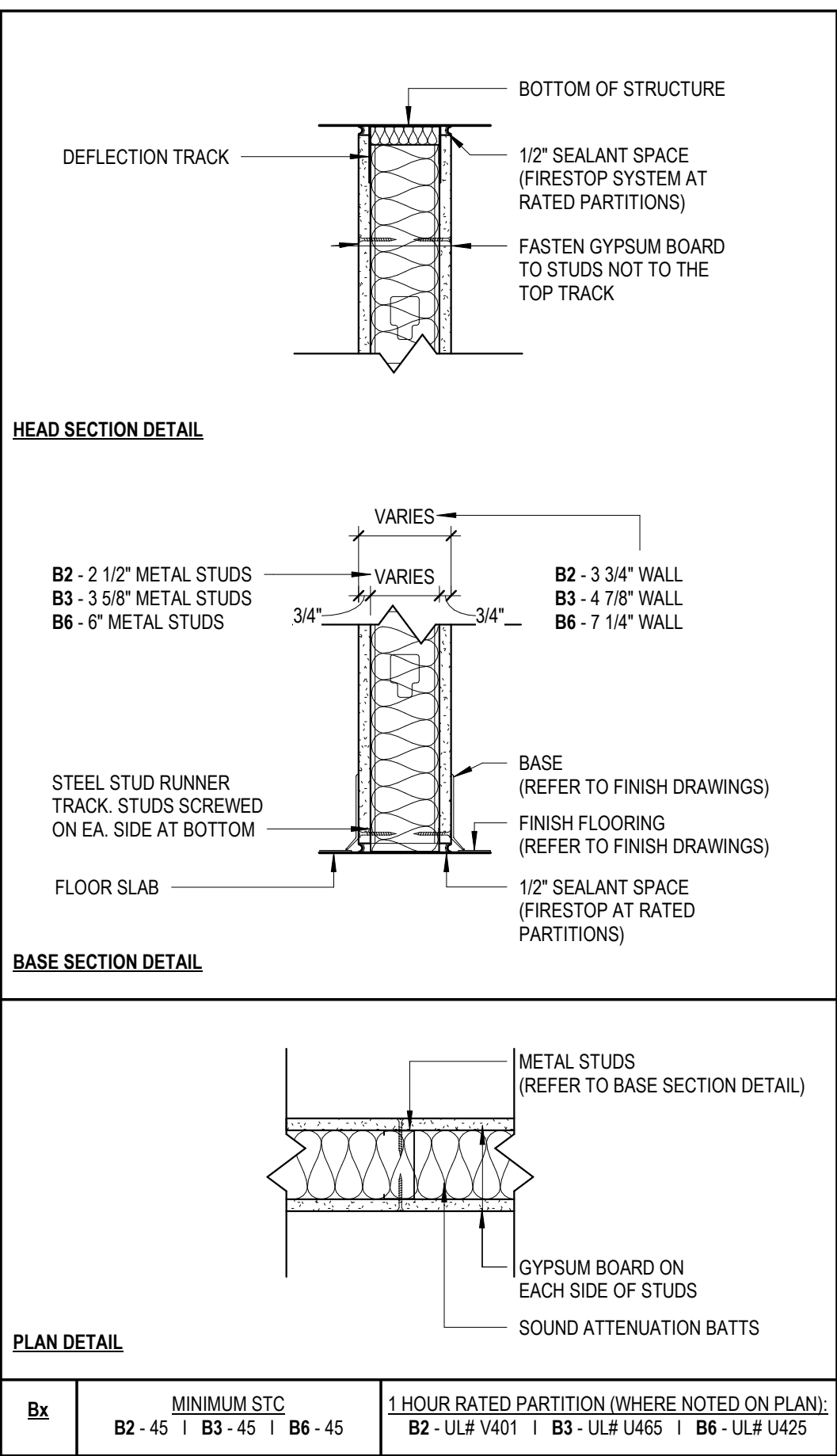
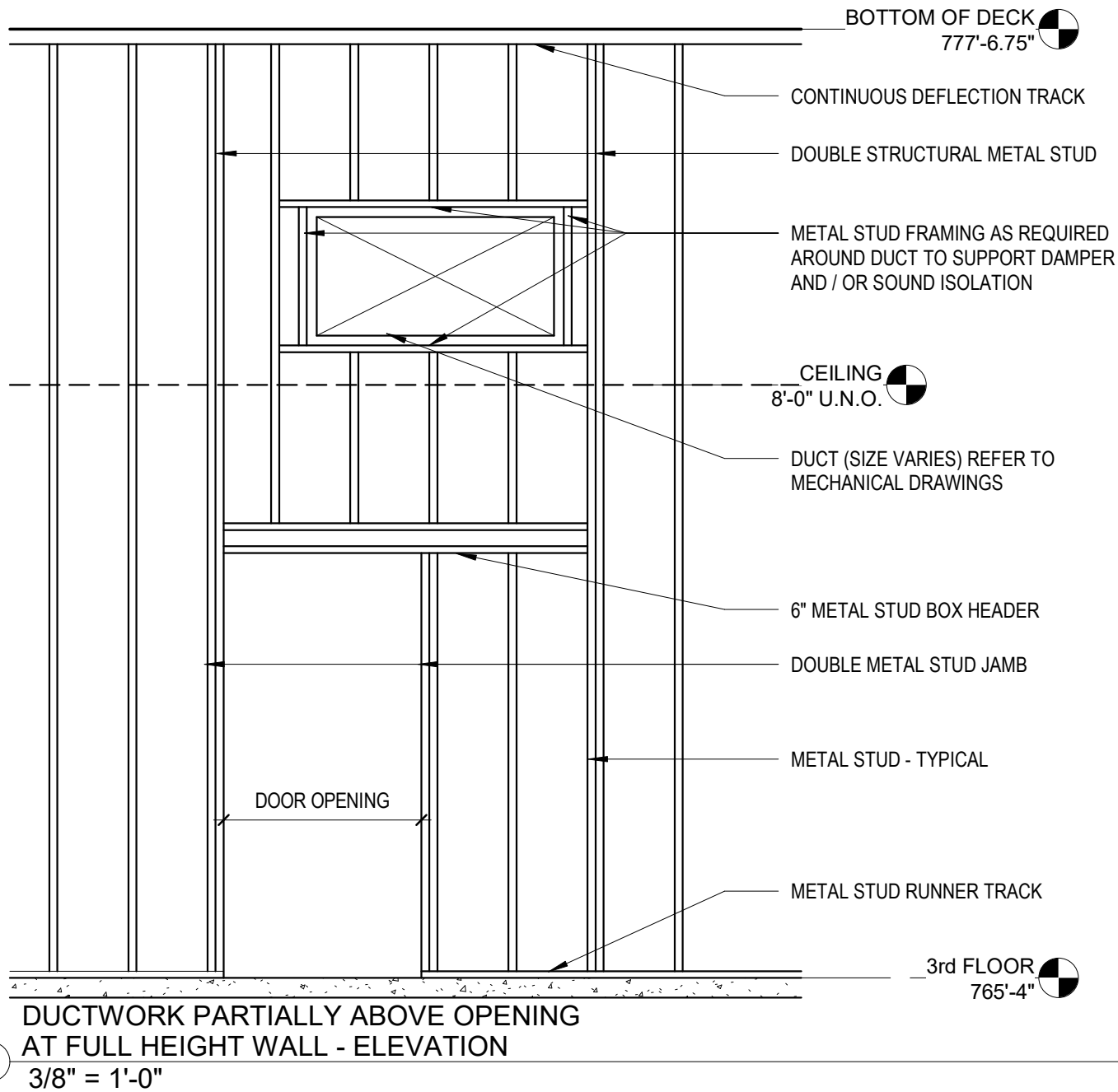
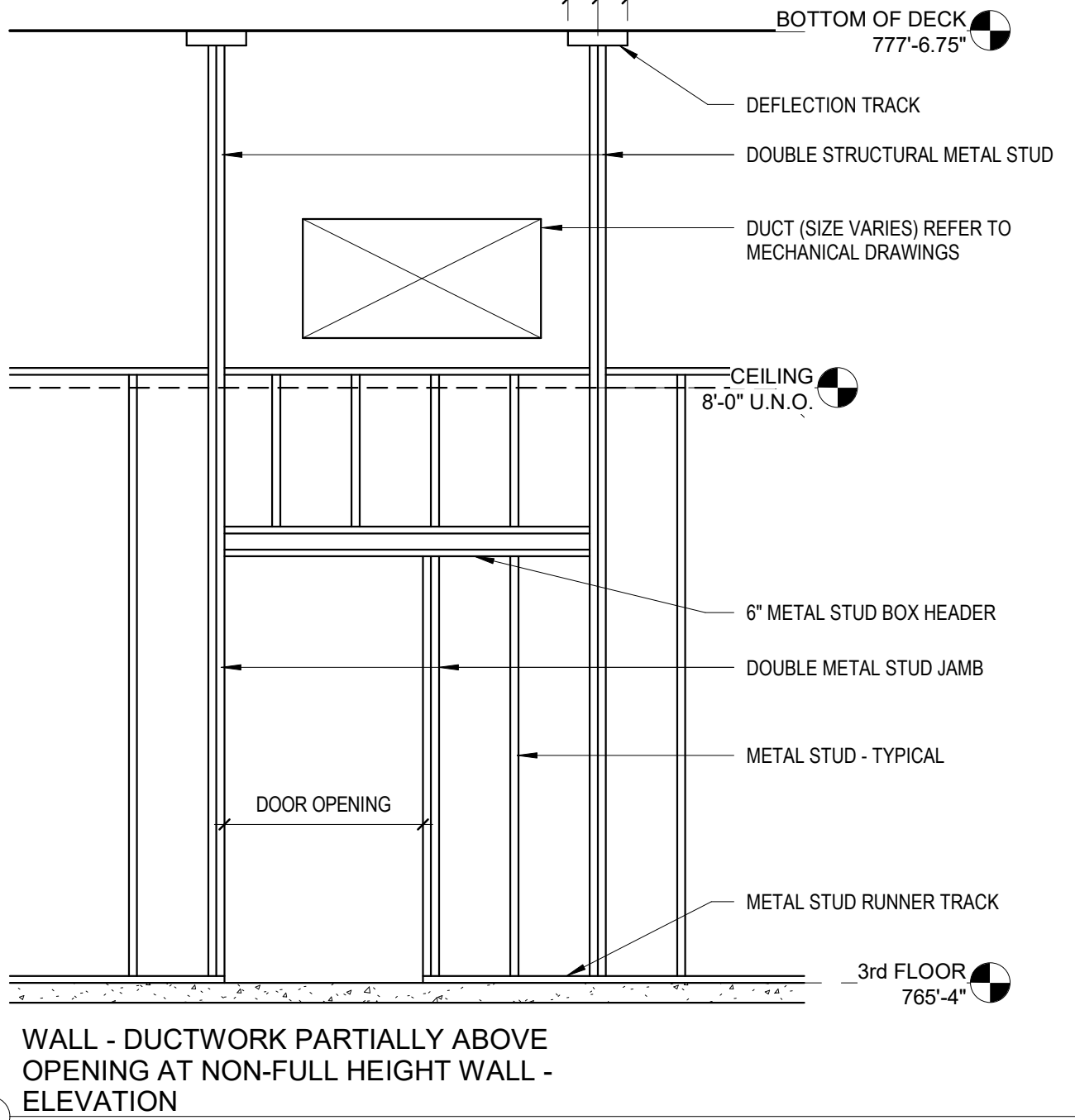
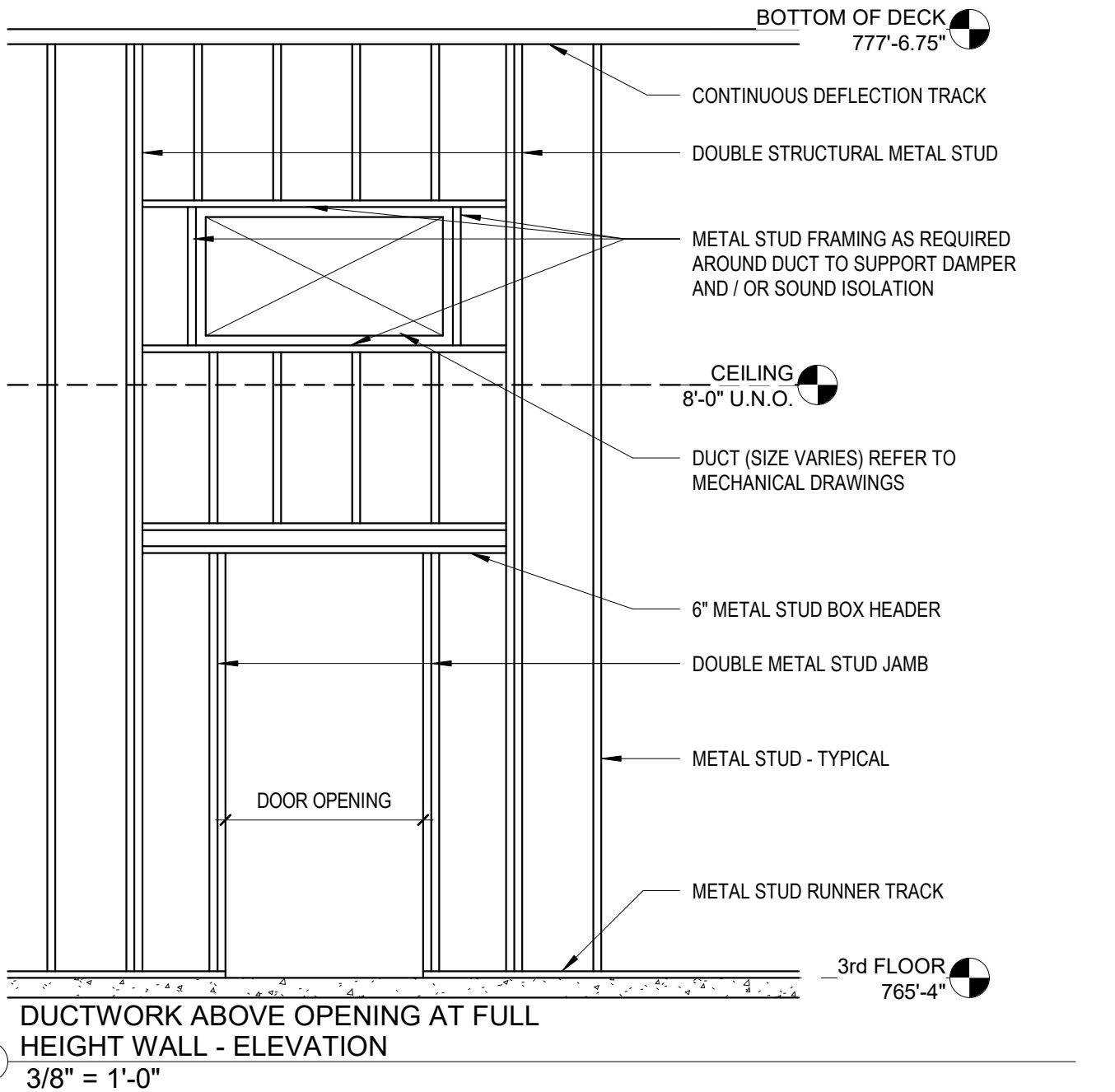
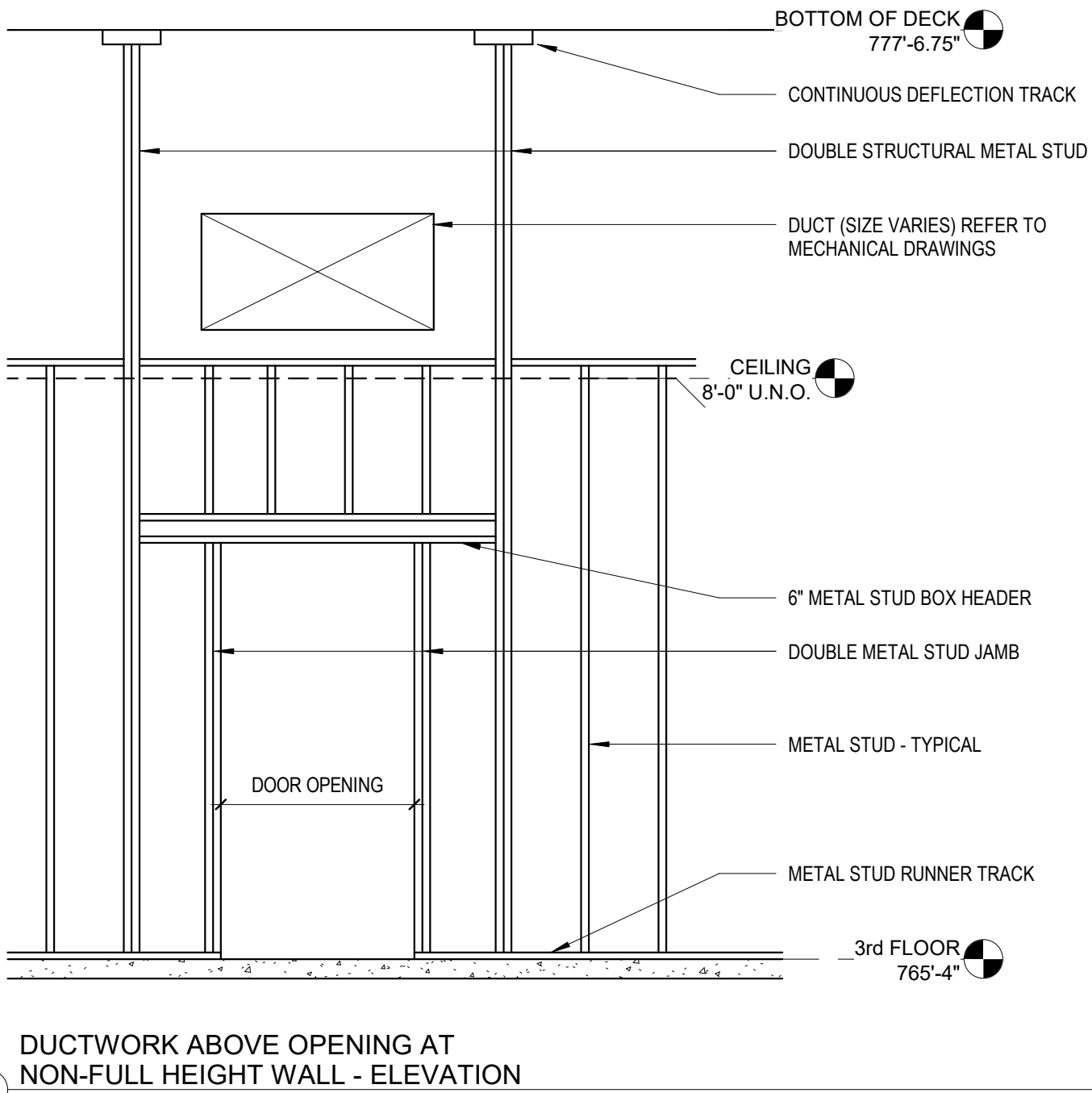
## GENERAL NOTES AND ABBREVIATIONS

DATE	03 APRIL 2023
BSALS PROJECT NO.	14110010

# A000



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DESIGNED BY: Ryan J. King  
CHECKED BY: Ryan J. King  
APPROVED BY: Ryan J. King



TYPE A  
LOCATIONS: AT DOOR STOPS, OVERHEAD MOUNTING FOR DOOR STOPS, AND ALL WALL HUNG ITEMS EXCEEDING 20 POUNDS UNLESS NOTED OTHERWISE

BACKING FOR WALL HUNG ITEMS -  
SECTION  
9 1 1/2" = 1'-0"

**WALL TYPE SYMBOL**  

SUFFIX INDICATES VERTICAL OR HORIZONTAL MODIFICATIONS  
NUMERICAL INDICATION OF STUD/MASONRY SIZE INDICATES CONSTRUCTION TYPE

**WALL TYPES SUFFIX**  

- INDICATES GYPSUM WALL CONSTRUCTION TO STOP 6" ABOVE FINISHED CEILING. STUD CONSTRUCTION TO CONTINUE TO DECK.
- INDICATES GYPSUM BOARD ON ONE SIDE TO STOP 6" ABOVE FINISHED CEILING.
- INDICATES ENTIRE WALL CONSTRUCTION TO STOP 6" ABOVE FINISHED CEILING.
- INDICATES PARTIAL HEIGHT WALL. PROVIDE PARTIAL HEIGHT WALL SUPPORT PER SPECIFICATIONS.

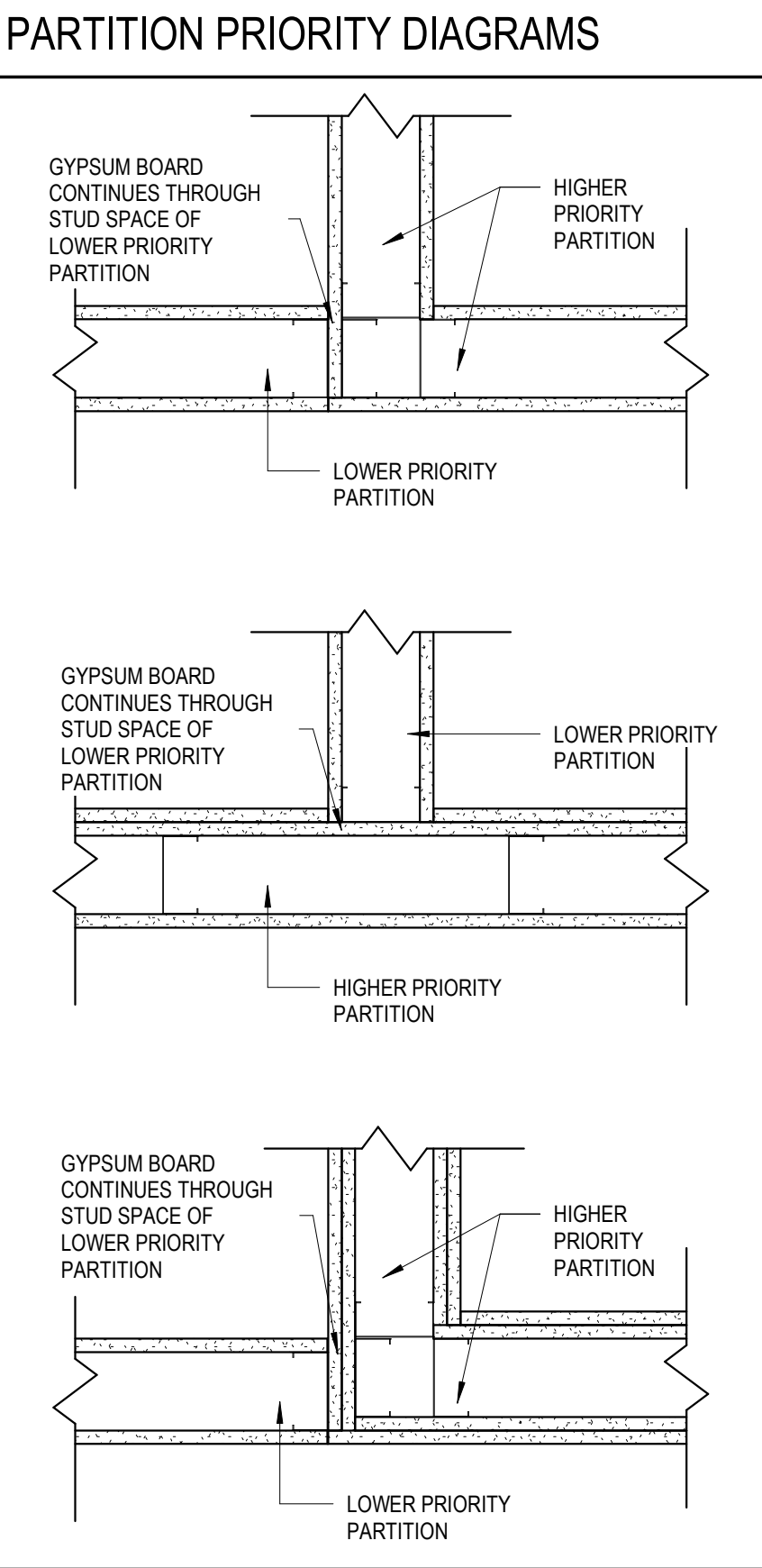
a. INDICATES NO SOUND ATTENUATION BLANKETS  
b. INDICATES MASONRY FILL INSULATION IN ALL OPEN CORES OF CMU.  
c. INDICATES 1/2" 4x8 SHEETS OF FIRE RETARDANT PLYWOOD APPLIED TO TELECOM. SIDE OF ROOM. APPLY TO A HEIGHT OF 8'-0" A.F.F.  
d. INDICATES ADDITIONAL LAYER OF 5/8" GYPSUM BOARD OVER WALL. INDICATES FOIL-FACED GYPSUM BOARD.

**GENERAL WALL TYPE NOTES**  

A. ALL INTERIOR GYPSUM BOARD WALLS SHALL BE TYPE B3.1 UNLESS NOTED OTHERWISE.  
B. ALL GYPSUM BOARD COLUMN SURROUNDS SHALL BE TYPE A2.1 UNLESS NOTED OTHERWISE. FINISHED FACE OF COLUMN ENCLOSURE CONSTRUCTION SHALL BE 1" FROM CENTER LINE OF COLUMN UNLESS NOTED OTHERWISE.  
C. REFER TO A500 FOR TYPICAL LOCATION OF INTERIOR DOOR OPENINGS.  
D. REFER TO A500 SERIES SHEETS FOR OPENING SCHEDULE AND REFER TO SPECIFICATIONS FOR HARDWARE INFORMATION.

**PARTITION PRIORITY LEGEND**  

PARTITION FIRE RATING (AS NOTED)	PRIORITY
3 HOUR FIRE BARRIER WALL	HIGHEST
2 HOUR FIRE BARRIER WALL	
1 HOUR FIRE BARRIER WALL	
SMOKE BARRIER	
SMOKE PARTITION	
NON RATED PARTITION	LOWEST



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## Health Care

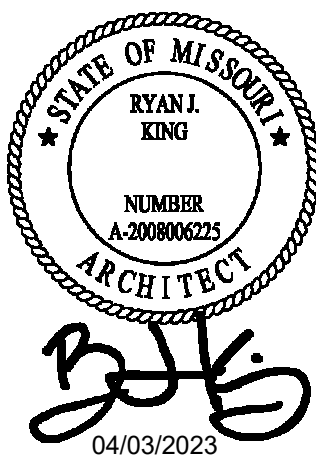
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GENERAL PARTITION CONTRUCTION REQUIREMENTS							
PARTITION TYPE SEE PLANS FOR PARTITION TYPE(S)	GENERAL USE	FIRE RATING OF PARTITION	PARTITION HORIZONTAL CONTINUITY	PARTITION VERTICAL CONTINUITY	OPENINGS (SUCH AS WINDOWS AND DOORS)	PENETRATIONS (SUCH AS DUCTS, PIPING, CONDUITS)	JOINTS (SUCH AS HEAD, SILL, AND VERTICAL JOINTS)
FIRE BARRIER	SEPARATES SHAFT ENCLOSURES, EXIT ENCLOSURES, EXIT PASSAGEWAYS, HORIZONTAL EXITS, INCIDENTAL USE AREAS AND OCCUPANCY SEPARATION FROM OTHER SPACES.	1-HOUR OR 2-HOUR RATED AS INDICATED	CONTINUOUS AROUND ENCLOSURE OR SEPARATING SPACE	FULL HEIGHT FROM FLOOR TO UNDERSIDE OF FLOOR OR ROOF ABOVE. CONTINUOUS THROUGH CONCEALED SPACES SUCH AS ABOVE SUSPENDED CEILINGS.	FIRE RATED. REFER TO OPENING SCHEDULE	FIRE RATED PROTECTED BY APPROVED FIRESTOP SYSTEM	FIRE RATED. PROTECTED BY APPROVED FIRESTOP SYSTEM
							FIRE DAMPER REQUIRED WHERE DUCT OR AIR TRANSFER OPENING PENETRATES THE FIRE BARRIER

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INTERIOR PARTITION  
TYPES & DETAILS

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BSALS PROJECT NO. 14110010

A001

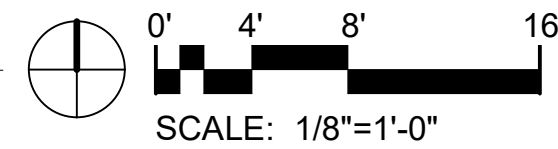
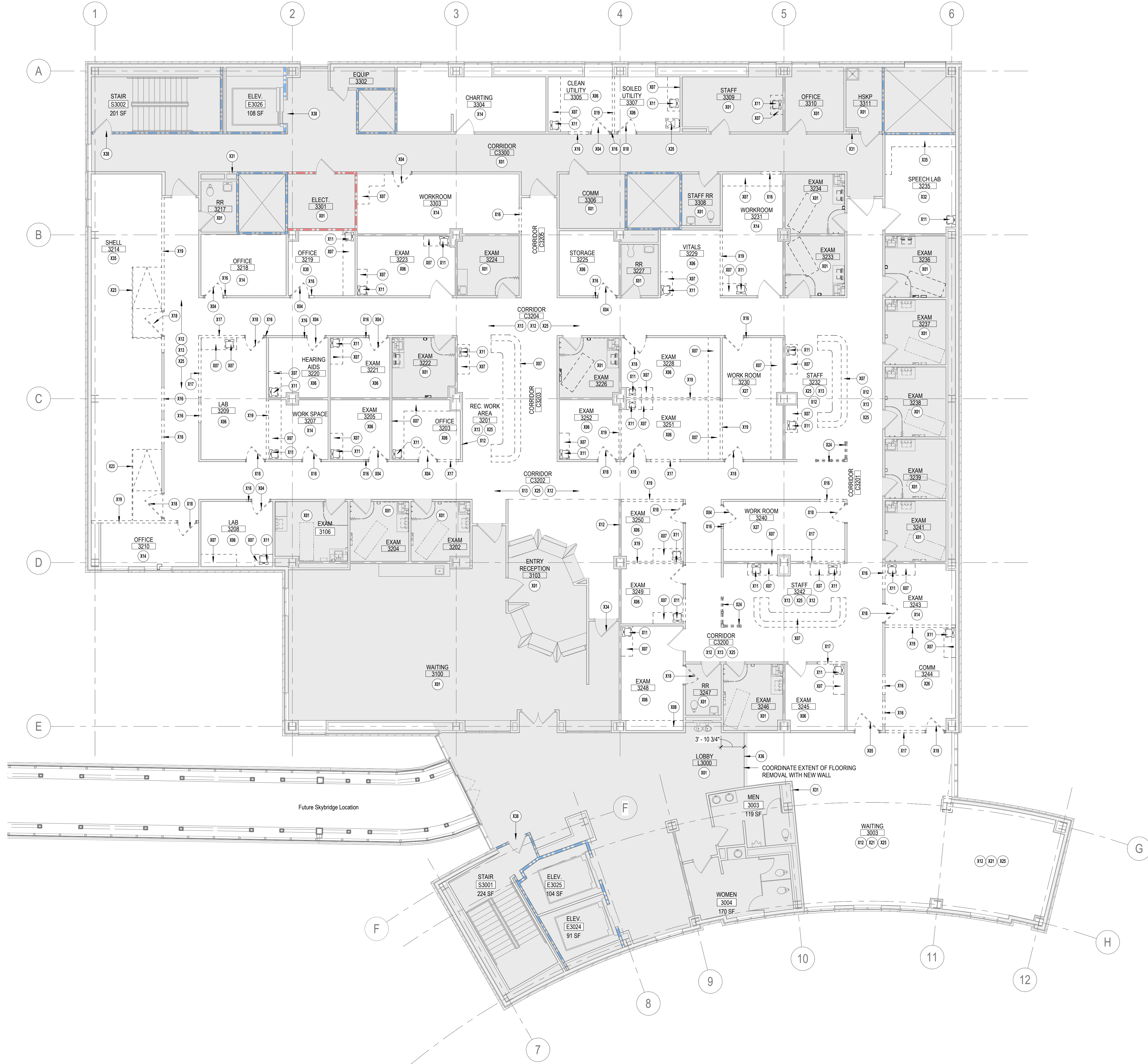






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1 THIRD FLOOR DEMOLITION PLAN  
1/8" = 1'-0"



GENERAL NOTES	
A	ROOM NUMBERS INDICATED ON THIS PLAN ARE EXISTING NUMBERS AND DO NOT CORRELATE WITH NEW WORK ROOM NUMBERS
KEYNOTE LEGEND	
REFER TO A000 FOR GENERAL NOTES	
X01	EXISTING TO REMAIN.
X04	REMOVE EXISTING DOOR, FRAME, AND HARDWARE IN ITS ENTIRETY. PREPARE OPENING TO RECEIVE NEW DOOR, FRAME, AND HARDWARE.
X05	REMOVE EXISTING DOOR, FRAME, AND HARDWARE IN ITS ENTIRETY. PREPARE OPENING TO BE INFILLED WITH NEW WALL CONSTRUCTION. REFER TO ARCHITECTURAL DIMENSION PLANS FOR ADDITIONAL INFORMATION.
X06	REMOVE EXISTING RESILIENT FLOORING AND BASE IN THEIR ENTIRETY. REMOVE EXISTING WALL PROTECTION IN ITS ENTIRETY. PREPARE FLOOR SLAB TO RECEIVE NEW FLOOR FINISH. PREPARE WALL TO RECEIVE NEW BASE. REFER TO INTERIOR FINISH PLANS FOR ADDITIONAL INFORMATION.
X07	REMOVE EXISTING CASEWORK IN ITS ENTIRETY. PREPARE WALL AS NEEDED FOR NEW FINISH.
X08	REMOVE EXISTING CASEWORK IN ITS ENTIRETY. PREPARE WALL TO RECEIVE NEW WALL FINISH. REFER TO INTERIOR FINISH PLANS FOR ADDITIONAL INFORMATION.
X11	REMOVE EXISTING PLUMBING FIXTURE. PREPARE WALL AS NEEDED FOR NEW FINISH.
X12	REMOVE EXISTING WALL COVERING IN ITS ENTIRETY. PREPARE WALLS TO RECEIVE NEW PAINT.
X13	REMOVE EXISTING CARPET IN ITS ENTIRETY.
X14	REMOVE EXISTING CARPET AND BASE IN THEIR ENTIRETY. REMOVE ALL EXISTING CASEWORK. PREPARE FLOOR SLAB TO RECEIVE NEW FLOOR FINISH. PREPARE WALL TO RECEIVE NEW BASE AND NEW PAINT. REFER TO INTERIOR FINISH PLANS FOR ADDITIONAL INFORMATION.
X16	REMOVE PORTION OF EXISTING WALL TO ACCOMMODATE NEW OPENING. COORDINATE WITH NEW WORK PLAN AND OPENING DETAILS.
X17	REMOVE PORTION OF EXISTING WALL.
X18	REMOVE EXISTING DOOR, FRAME, HEADER AND HARDWARE IN ITS ENTIRETY.
X19	REMOVE EXISTING WALL IN ITS ENTIRETY.
X20	REMOVE EXISTING CONCRETE BASE.
X21	SALVAGE EXISTING CARPET.
X23	REMOVE EXISTING WOOD RAMP AND GUARDRAIL SYSTEM IN ITS ENTIRETY.
X24	REMOVE EXISTING WINDOW AND WALL IN ITS ENTIRETY.
X25	REMOVE EXISTING WALL BASE IN ITS ENTIRETY.
X26	REMOVE EXISTING CARPET AND BASE IN THEIR ENTIRETY. REMOVE EXISTING ACOUSTIC WALL PANELS. PREPARE FLOOR SLAB TO RECEIVE NEW FLOOR FINISH. PREPARE WALL TO RECEIVE NEW BASE AND NEW PAINT. REFER TO INTERIOR FINISH PLANS FOR ADDITIONAL INFORMATION.
X27	REMOVE EXISTING CARPET AND BASE IN THEIR ENTIRETY. REMOVE EXISTING TACK WALL PANELS. PREPARE FLOOR SLAB TO RECEIVE NEW FLOOR FINISH. PREPARE WALL TO RECEIVE NEW BASE AND NEW PAINT. REFER TO INTERIOR FINISH PLANS FOR ADDITIONAL INFORMATION.
X30	REMOVE EXISTING GYP. BD. CEILING & ALL CEILING MOUNTED FIXTURES.
X31	EXISTING FEC TO REMAIN. PROTECT.
X32	REMOVE EXISTING CARPET AND BASE IN THEIR ENTIRETY. REMOVE EXISTING WALL PROTECTION. PREPARE FLOOR SLAB TO RECEIVE NEW FLOOR FINISH. PREPARE WALL TO RECEIVE NEW BASE AND NEW PAINT. REFER TO INTERIOR FINISH PLANS FOR ADDITIONAL INFORMATION.
X34	EXISTING AUTOMATION TO REMAIN. PROTECT.
X35	ALIGN FLOORING DEMOLITION WITH EXISTING WALL.
X36	REMOVE EXISTING WALLCOVERING TO COORDINATE WITH INSTALLATION OF THE NEW WALL. REFERENCE NEW WORK DRAWINGS.
X38	PROVIDE INFECTION CONTROL PROVISIONS & DUST PROTECTION AT EXISTING ACCESS POINTS TO FLOOR.

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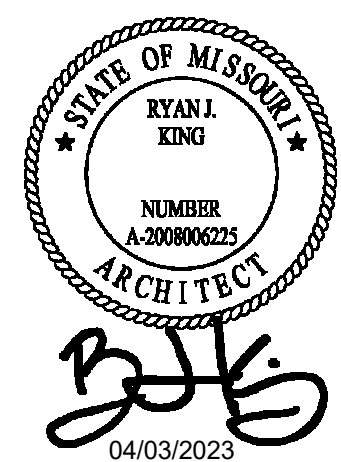
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DEMOLITION PLAN - THIRD FLOOR

DATE	03 APRIL 2023
BSALS PROJECT NO.	14110010

A100





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DESIGNED Designer  
DRAWN Author  
APPROVED Approver



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DRAWN BY: Ryan J. King  
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THIRD FLOOR REFLECTED CEILING  
PLAN-DEMOLITION  
1/8" = 1'-0"



#### KEYNOTE LEGEND

- REFER TO A000 FOR GENERAL NOTES
- X28 REMOVE EXISTING LAY-IN CEILING TILES & GRID, AND CEILING MOUNTED FIXTURES IN THEIR ENTIRETY.
  - X30 REMOVE EXISTING GYP. BD. CEILING & ALL CEILING MOUNTED FIXTURES.
  - X33 CEILING WITHIN THIS OCCUPIED AREA TO BE TEMPORARILY REMOVED FOR SCOPE OF HVAC AND PLUMBING DEMONWORK. CEILING'S TILES SHALL NOT BE DOWN FOR MORE THAN 24 HOURS. MODIFY CEILING GRID AS REQUIRED TO ACCOMMODATE NEW LIGHT FIXTURES AND DIFFUSERS. REPLACE DAMAGED TILES & GRID AS REQUIRED. PROTECT ALL LIGHT FIXTURES AND DIFFUSERS.
  - X37 REMOVE EXISTING CEILING TO COORDINATE WITH THE INSTALLATION OF THE NEW WALL. REFER TO NEW WORK DRAWINGS.

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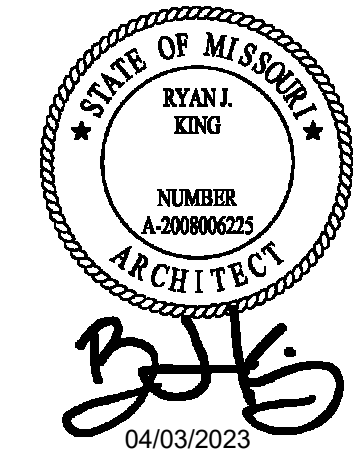
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**DEMOLITION REFLECTED  
CEILING PLAN - THIRD  
FLOOR**

DATE 03 APRIL 2023  
BSALS PROJECT NO. 14110010

# A103

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1 THIRD FLOOR ARCHITECTURAL PLAN  
1/8" = 1'-0"

WALL RATINGS	
1-HOUR RATED FIRE - (1HR)	
2-HOUR RATED FIRE - (2HR)	

KEYNOTE LEGEND	
REFER TO A000 FOR GENERAL NOTES	
A01	REFER TO ULTRASOUND 3144 FOR TYPICAL INTERIOR ELEVATIONS.
A02	NO ARCHITECTURAL MODIFICATIONS TO THIS SPACE.
A04	FLOOR DRAIN TO BE CENTERED IN ROOM. REF. PLUMBING DRAWINGS.
A05	REFER TO ULTRASOUND 3154 FOR TYPICAL INTERIOR ELEVATIONS.
A06	NURSE CALL DEVICE. REF. ELEC. DRAWINGS.
A07	NURSE CALL AUDIO PATH TO THIS ROOM. REF. ELEC. DRAWINGS.
A08	REFER TO TREATMENT 3109 FOR TYPICAL INTERIOR ELEVATIONS & NOTES.
A09	REFER TO EXAM 3105 FOR TYPICAL INTERIOR ELEVATIONS.
A10	IN FLOOR POWER BOX. MAINTAIN EXISTING FLOOR RATINGS. VERIFY LOCATION WITH EXISTING STRUCTURE.
A11	OFOT "IN USE" SIGNAGE
A12	REFER TO EXAM 3111 FOR TYPICAL INTERIOR ELEVATIONS & NOTES.
A13	INFILL PANEL AT SOUND BOOTHS TO BE PROVIDED BY VENDOR.
A14	UTILITY SINK. REF. PLUMBING DRAWINGS.
A15	EMERGENCY EYEWASH. REF. PLUMBING DRAWINGS.
A16	PROVIDE VISION CONTROL GLAZING SURFACE FILM.

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Health Care

MU PROJECT NO. - CP221943

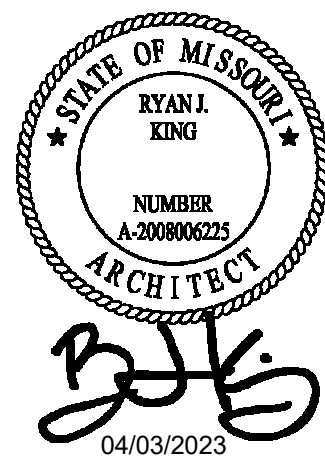
UNIVERSITY PHYSICIANS  
MEDICAL BUILDING - 3RD  
FLOOR RENOVATION

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ARCHITECTURAL PLAN -  
THIRD FLOOR

DATE 03 APRIL 2023  
BSALS PROJECT NO. 14110010

A123

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DESIGNED BY: RYAN J. KING  
DRAWN BY: JACOB  
CHECKED BY: JACOB  
APPROVED BY: JACOB

1 THIRD FLOOR REFLECTED CEILING PLAN  
1/8" = 1'-0"



0' 4' 8' 16'  
SCALE: 1/8"=1'-0"

REFLECTED CEILING SCHEDULE									
TYPE	REFERENCE STANDARD MANUFACTURER	STYLE NAME	CEILING TYPE			SUSPENSION SYSTEM			
			MODEL #	SIZE	COLOR	GRID SYSTEM	SIZE	COLOR	DESCRIPTION
ACT1	ARMSTRONG	2X2 ULTIMA SQUARE EDGE		2' X 2'	WHITE	PRELUDE HD	15/16"	WHITE	
ACT2	ARMSTRONG	2X4 ULTIMA SQUARE EDGE		2' X 4'	WHITE	PRELUDE HD	15/16"	WHITE	
ACT3	ARMSTRONG	2X2 ULTIMA CREATE SQUARE EDGE - CUSTOM GRAPHIC		2' X 2'	WHITE	PRELUDE HD	15/16"	CUSTOM GRAPHIC	GRAPHIC: ADOBE STOCK FILE #278721171, CROPPED INTO 4 DIFFERENT UNIQUE TILES
GWB	REFER TO PROJECT MANUAL							REFER TO INTERIOR FINISH PLANS FOR PAINT	

KEYNOTE LEGEND	
REFER TO A000 FOR GENERAL NOTES	
C07	CEILING MOUNTED CURTAIN TRACK. REFER TO S/A800 FOR TRACK MOUNTING DETAIL.
C12	MANUALLY-OPERATED DUAL BLACKOUT ROLLER SHADE (RS1 AND RS2). REFER TO DETAILS ON A800.
C13	MANUALLY-OPERATED SINGLE ROLLER SHADE (RS1). REFER TO DETAILS ON A800.
C18	PAINT GYPSUM WALL BOARD BULKHEAD P8
C19	PROVIDE & COORDINATE STANDARDIZED STRUT SYSTEM, SUPPORT RODS, STIFFENER PLATES, AND MOUNTING PLATES TO SUPPORT OWNER PROVIDED OVERHEAD EXAM LIGHT, ANCHORED TO STRUCTURE ABOVE. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF OVERHEAD SUPPORT TO ENSURE IT IS CONSTRUCTED IN A WAY TO BE COMPATIBLE WITH ALL EQUIPMENT AND ACCESSORIES PROVIDED BY OWNER. REFER TO ELECTRICAL DRAWINGS. LIGHT TO BE CENTERED IN CEILING TILE AS SHOWN.
C20	PROVIDE SOUND BATTS AROUND THE PERIMETER OF THIS ROOM, 36". REFER TO MECHANICAL DRAWINGS FOR SOUND BOOTS. ENSURE THESE DO NOT POINT TO OTHER BOOT OPENINGS.
C21	COORDINATE SOUND BOOTH CONNECTIONS WITH MEP DRAWINGS. LIGHTING AND DIFFUSERS SHOWN ON BOOTH DRAWINGS.
C22	APRON AT SOUND BOOTHS TO BE PROVIDED BY VENDOR.
C23	PROVIDE CEILING TILE GASKETS AT CEILINGS IN PRESSURIZED SPACES.

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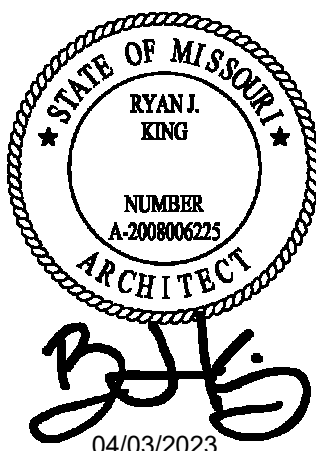
MU PROJECT NO. - CP221943  
**UNIVERSITY PHYSICIANS  
MEDICAL BUILDING - 3RD  
FLOOR RENOVATION**

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REFLECTED CEILING PLAN  
- THIRD FLOOR

DATE 03 APRIL 2023  
BSALS PROJECT NO. 14110010

A133

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1 THIRD FLOOR EQUIPMENT PLAN  
1/8" = 1'-0"



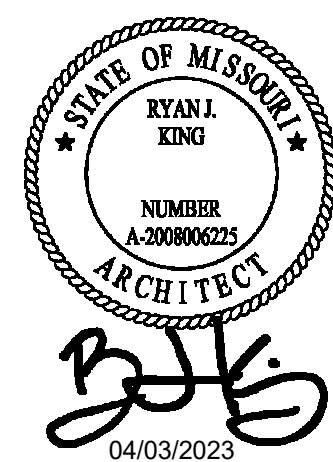
EQUIPMENT SCHEDULE							
NUMBER	NAME	FURNISHED	INSTALLED	MANUFACTURER	MODEL NUMBER	DIMENSIONS (WxDxH)	REMARKS
E001	VITAL SIGNS MONITOR	OWNER	CONTRACTOR	WELCH ALLYN	901060	11"x10"x5"	WALL MOUNTED 48"H, POWER & DATA 42"H
E002	SCALE	OWNER	OWNER	SECA	?	16.1"x22.7"x3.4"	POWER
E003	MICROSCOPE	OWNER	OWNER	SEILER / REICHERT	/ MICROSTAR 4	7"x13"x15" / 8"x15"x15.5"	POWER
E005	COUNTERTOP PRINTER	OWNER	OWNER	?	?	?	POWER & DATA
E007	SOILED LINEN HAMPER	OWNER	OWNER	?	?	18"x18"x38" / 19"x23"x35.5"	INSTALL PER DETAIL S/A800. REF. INTERIOR FINISH DRAWINGS & SPECIFICATIONS
E009	CUBICLE CURTAIN AND TRACK	CONTRACTOR	CONTRACTOR				
E010	EXAM TABLE	OWNER	OWNER	HUMANSCALE	V-FLEX	?	POWER & DATA 60"H
E011	WALL MOUNTED COMPUTER	OWNER	CONTRACTOR				POWER
E012	REFRIGERATOR- UNDERCOUNTER	OWNER	OWNER	FOLETT	REFSP-00-00	23.75"x25.62"x34"	POWER (2 PLUG-IN LOCATIONS) & DATA
E013	COMPUTER WORKSTATION- SINGLE MONITOR	OWNER	OWNER	?	?	?	POWER (2 PLUG-IN LOCATIONS) & DATA
E014	COMPUTER WORKSTATION- DUAL MONITORS	OWNER	OWNER	?	?	?	POWER. REFER TO STRYKER DOCUMENTATION FOR STANDARD MOUNTING STRUCTURE.
E020	OVERHEAD EXAM LIGHT	OWNER	OWNER	STRYKER-BERCH TOLD CORPORATION	F300-CE 2863075	-	
E021	SHRED BIN	OWNER	OWNER	CINTAS	?	20"x11"x24"21.5"x15.5"x35.5"	
E024	CREDIT CARD MACHINE	OWNER	OWNER	?	?	?	
E025	LABEL PRINTER	OWNER	OWNER	?	?	?	
E026	SCANNER	OWNER	OWNER	?	?	?	
E027	MULTIFUNCTION PRINT/ COPY/ SCAN	OWNER	OWNER	?	?	?	POWER & DATA
E029	TROPHOM	OWNER	OWNER	TROPHOM	EPR	13"x12.5"x19"	POWER
E030	ULTRASOUND	OWNER	OWNER	GE	VOLUSON	23"x37"x55"	POWER, DATA, & HDMI
E031	GEL WARMER	OWNER	OWNER	PARKER LABS	THERMASONIC	5.9"x4.9"x8.5"	POWER
E032	TELEPHONE	OWNER	OWNER	?	?	?	POWER & DATA
E034	MONITOR WALL MOUNTED 32"	OWNER	CONTRACTOR	?	?	?	POWER & DATA 72" H U.N.O.
E035	MONITOR WALL MOUNTED 43"	OWNER	CONTRACTOR	?	?	?	POWER & DATA 72" H U.N.O.
E036	URINALYSIS SCANNER	OWNER	OWNER	SIEMENS	CLINITEK	6.7"x10.7"x6.2"	POWER
E037	URINALYSIS	OWNER	OWNER	?	?	?	POWER & DATA
E039	PROBE STORAGE RACK	OWNER	CONTRACTOR	CVCO	610-942	19.6"x9.5"x7.1"	INSTALL IN CABINET
E040	SAFE	OWNER	OWNER	MESA	WBS896483	14"x14"x20.25"	
E041	MOBILE NST	OWNER	OWNER	GE	COROMETRICS 172	?	POWER
E042	AED	OWNER	OWNER	?	?	?	
E043	OXYGEN	OWNER	OWNER	?	?	?	
E044	BP	OWNER	OWNER	WELCH ALLYN	?	?	POWER & DATA
E045	MONITOR WALL MOUNTED 27"	OWNER	CONTRACTOR	?	?	?	REFER TO ELEVATION
E046	MAIL SLOTS	OWNER	OWNER	?	?	?	INSTALL BOTTOM OF HOLDER TO 30" A.F.F.
E049	MONITOR WALL MOUNTED 55"	OWNER	CONTRACTOR	?	?	?	POWER & DATA 60"H
E050	DIAGNOSTIC CTO WALL SET	OWNER	CONTRACTOR	WELCH ALLYN	767	?	WALL MOUNTED 48"H, POWER & DATA 42"H
E051	INFANT SCALE COUNTERTOP	OWNER	OWNER	MIDMARK	640	41.9"x20.8"x35.8"	POWER
E052	SCALE- ROLL ON	OWNER	OWNER	SCALE-TRONIX	?	?	POWER
E054	WALL MT. MICROSCOPE	OWNER	CONTRACTOR	LEICA	M320	?	POWER @ 88" H
E055	IBIT CHAIR	OWNER	OWNER	RELIANCE	710H	?	POWER
E056	CART ENDOSCOPY	OWNER	OWNER	STORZ	ENDOSKOPE	?	POWER & DATA
E057	CART STORAGE	OWNER	OWNER	SMA	?	?	POWER
E058	CYSTOSCOPY TOWER	OWNER	OWNER	?	?	?	
E059	IV POLE	OWNER	OWNER	?	?	?	
E060	MAYO	OWNER	OWNER	?	?	?	
E061	24" x 48" WIRE SHELVING	OWNER	OWNER	?	?	?	
E062	24" x 48" WIRE SHELVING	OWNER	OWNER	?	?	?	
E063	CABINET DRYING SINGLE	OWNER	CONTRACTOR	MASS MEDICAL	SAS-8M-LGH	21.5"x19"x88.5"	POWER
E064	DISINFECTION UNIT	OWNER	CONTRACTOR	PCI MEDICAL	G14ENT	15"x12.25"x16"	POWER
E065	18 x 36 WIRE SHELVING	OWNER	OWNER	?	?	?	
E066	O2 CYLINDERS	OWNER	OWNER	?	?	?	
E067	CART- SOILED LINEN	OWNER	OWNER	?	?	?	
E069	CART CLEAN LINEN 55 IN	OWNER	OWNER	?	?	?	
E070	BLANKET WARMER COUNTERTOP	OWNER	OWNER	?	?	?	POWER
E071	NEPH EXAM TABLE	OWNER	OWNER	RITTER	224225	28"x60"x18"	POWER, WA
E072	EXAM LIGHT MOBILE	OWNER	OWNER	STERIS	HEXALUX	?	POWER
E073	COMMODE	OWNER	OWNER	?	?	?	
E074	URODYNAMIC MACHINE	OWNER	OWNER	AQUARIUS	XT	?	POWER & DATA
E075	URO EXAM TABLE	OWNER	OWNER	SONESTA	?	?	
E076	MICROWAVE	OWNER	OWNER	?	?	?	
E077	ICE MACHINE	OWNER	OWNER	?	?	?	POWER IN CABINET
E078	REFRIGERATOR	OWNER	OWNER	?	?	?	

TOILET ACCESSORIES				
NUMBER	DESCRIPTION	PURCHASE	INSTALL	INSTALL NOTES
T01	SOAP DISPENSER	OWNER	CONTRACTOR	REFER TO A002
T02	PAPER TOWEL DISPENSER	CONTRACTOR	CONTRACTOR	REFER TO A002
T03	AUTOMATIC PAPER TOWEL DISPENSER	OWNER	CONTRACTOR	REFER TO A002
T04	GRAB BARS- ADA	CONTRACTOR	CONTRACTOR	REFER TO A002
T05	CHANGING TABLE	CONTRACTOR	CONTRACTOR	REFER TO A002
T06	TOILET PAPER DISPENSER	CONTRACTOR	CONTRACTOR	REFER TO A002
T08	MIRROR 24x36	CONTRACTOR	CONTRACTOR	REFER TO A002
T09	WOOD FLIP COAT RACK	OWNER	CONTRACTOR	REFER TO A002
T10	HAND SANITIZER DISPENSER	OWNER	CONTRACTOR	REFER TO A002
T11	(3) GLOVE BOX - VERTICAL MOUNT	OWNER	CONTRACTOR	REFER TO A002
T12	(3) GLOVE BOX - HORIZONTAL MOUNT	OWNER	CONTRACTOR	REFER TO A002
T13	SHARPS CONTAINER	OWNER	CONTRACTOR	REFER TO A002
T14	MAGNETIC WHITEBOARD - 28"H X 42"W	CONTRACTOR	CONTRACTOR	INSTALL BOTTOM OF WHITEBOARD TO 30" A.F.F.
T15	MAGNETIC WHITEBOARD - 48"H X 48"W	CONTRACTOR	CONTRACTOR	INSTALL BOTTOM OF WHITEBOARD TO 30" A.F.F.
T16	MAGNETIC WHITEBOARD - 48"H X 36"W	CONTRACTOR	CONTRACTOR	INSTALL BOTTOM OF WHITEBOARD TO 30" A.F.F.
T17	TRASH	OWNER	OWNER	-
T18	BIO-HAZARD BIN	OWNER	OWNER	-
T19	SPECIMEN PASS-THROUGH CABINET (RECESSED)	CONTRACTOR	CONTRACTOR	-
T20	FEMININE NAPKIN DISPOSAL - SURFACE MOUNTED	CONTRACTOR	CONTRACTOR	REFER TO A002
T21	MAGNETIC WHITEBOARD - 48"H X 60"W	CONTRACTOR	CONTRACTOR	INSTALL BOTTOM OF WHITEBOARD TO 30" A.F.F.
T22	MAGNETIC WHITEBOARD - 48"H X 72"W	CONTRACTOR	CONTRACTOR	INSTALL BOTTOM OF WHITEBOARD TO 30" A.F.F.
T23	MAGNETIC WHITEBOARD - 48"H X 30"W	CONTRACTOR	CONTRACTOR	INSTALL BOTTOM OF HOLDER TO 30" A.F.F.
T24	MOP AND BROOM HOLDER/SHELF	CONTRACTOR	CONTRACTOR	REFER TO A002

KEYNOTE LEGEND	
E01	REFER TO A000 FOR GENERAL NOTES
E01	REFER TO ULTRASOUND 3144 FOR EQUIPMENT TAGS.
E02	REFER TO ULTRASOUND 3154 FOR EQUIPMENT TAGS.
E03	REFER TO EXAM 3105 FOR EQUIPMENT TAGS.
E04	POWER & DATA AT 66" H.
E05	REFER TO TREATMENT 3109 FOR EQUIPMENT TAGS.
E06	REFER TO EXAM 3111 FOR EQUIPMENT TAGS.
E07	OWNER PROVIDED VENDOR INSTALLED SOUND BOOTHS & CONTROL. REFER TO SHEET 1000 FOR ADDITIONAL INFORMATION. CONTRACTOR TO COORDINATE VENDOR INSTALLATION.
E08	REFER TO EXAM 3136 FOR EQUIPMENT TAGS. U.N.O.
E09	REFER TO EXAM 3130 FOR EQUIPMENT TAGS.
E11	OFFSET COUNTERTOP FROM WALL BY 1 1/2" FOR WIRE MANAGEMENT

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## EQUIPMENT PLAN - THIRD FLOOR

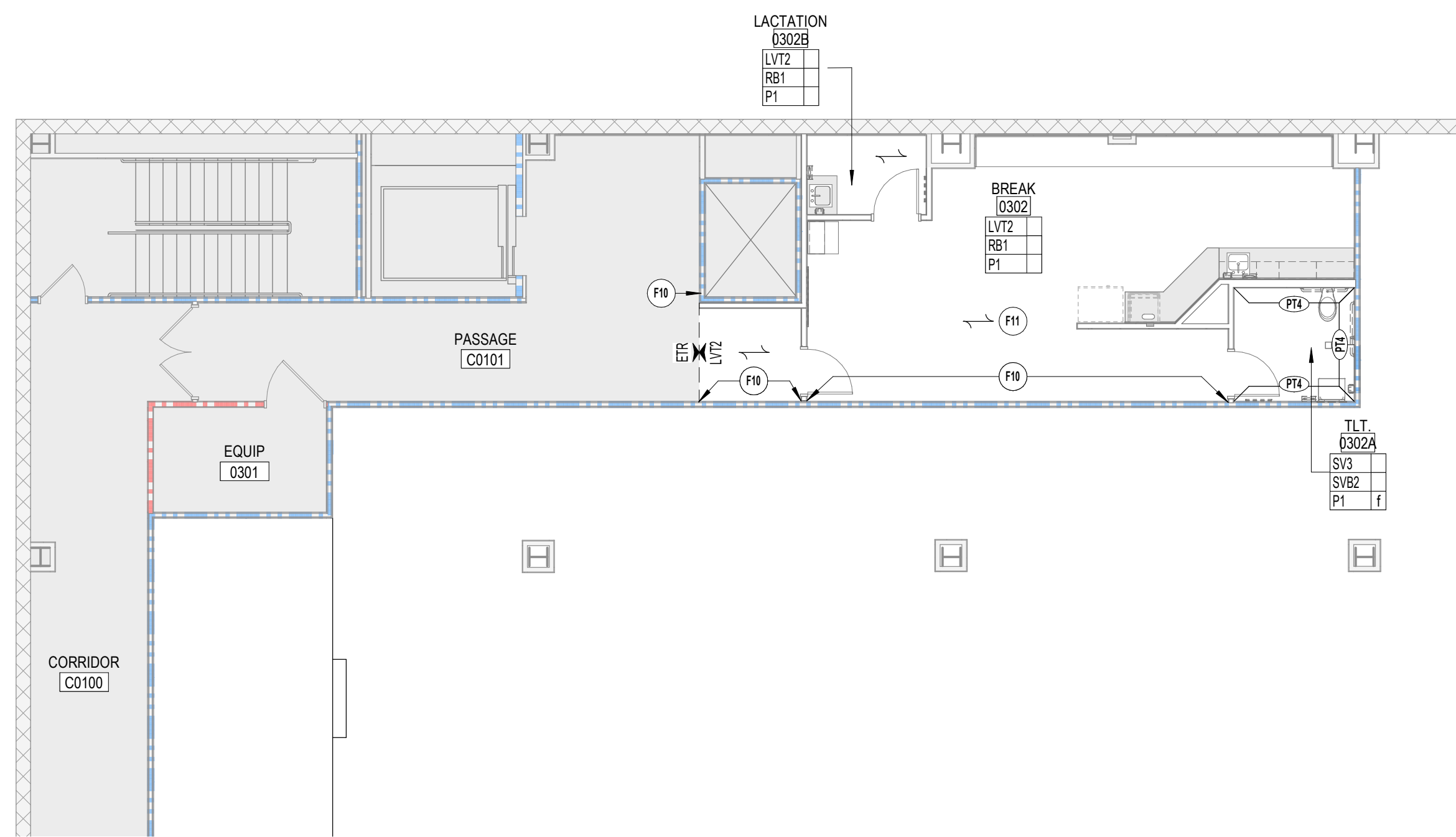
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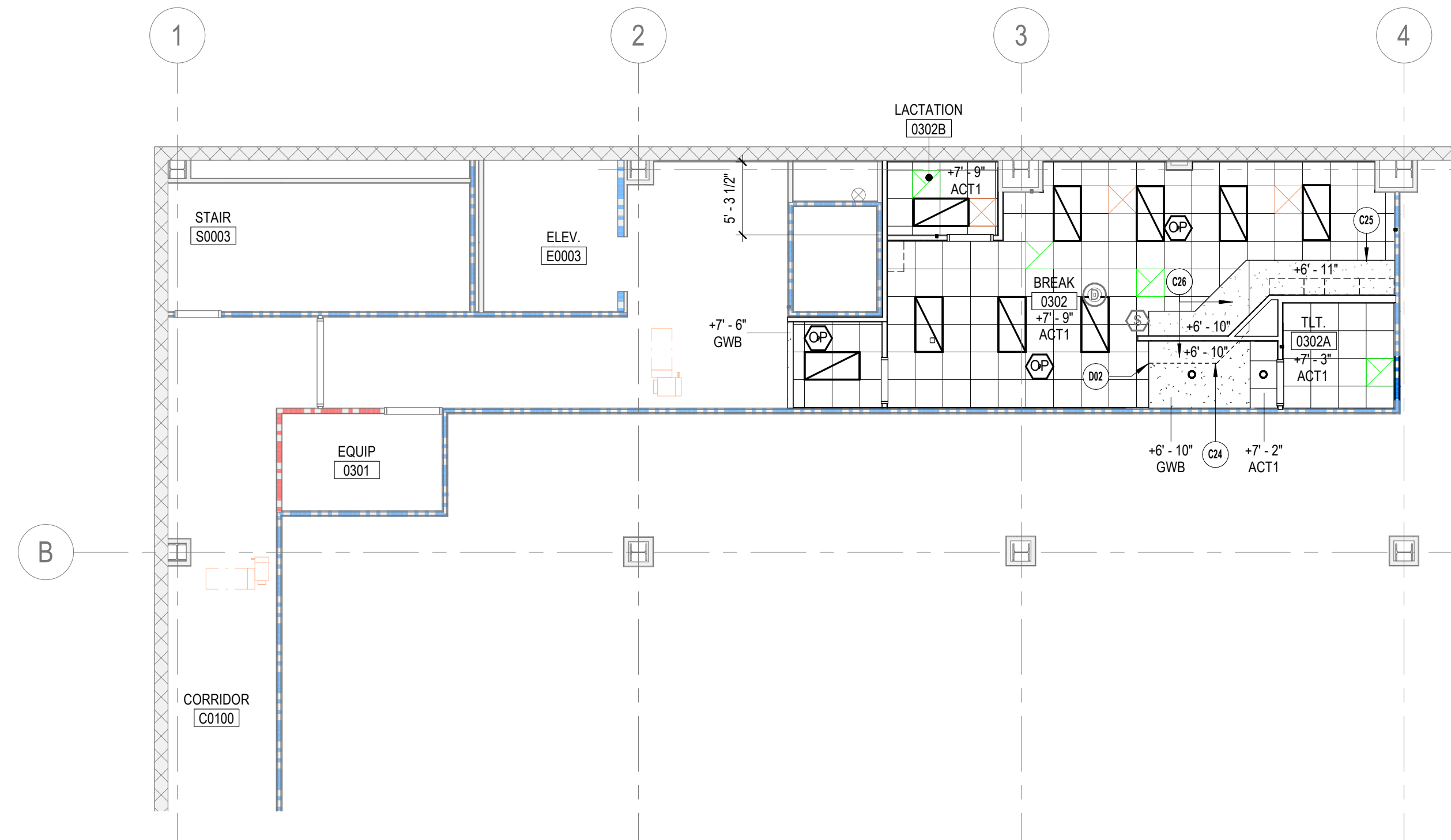


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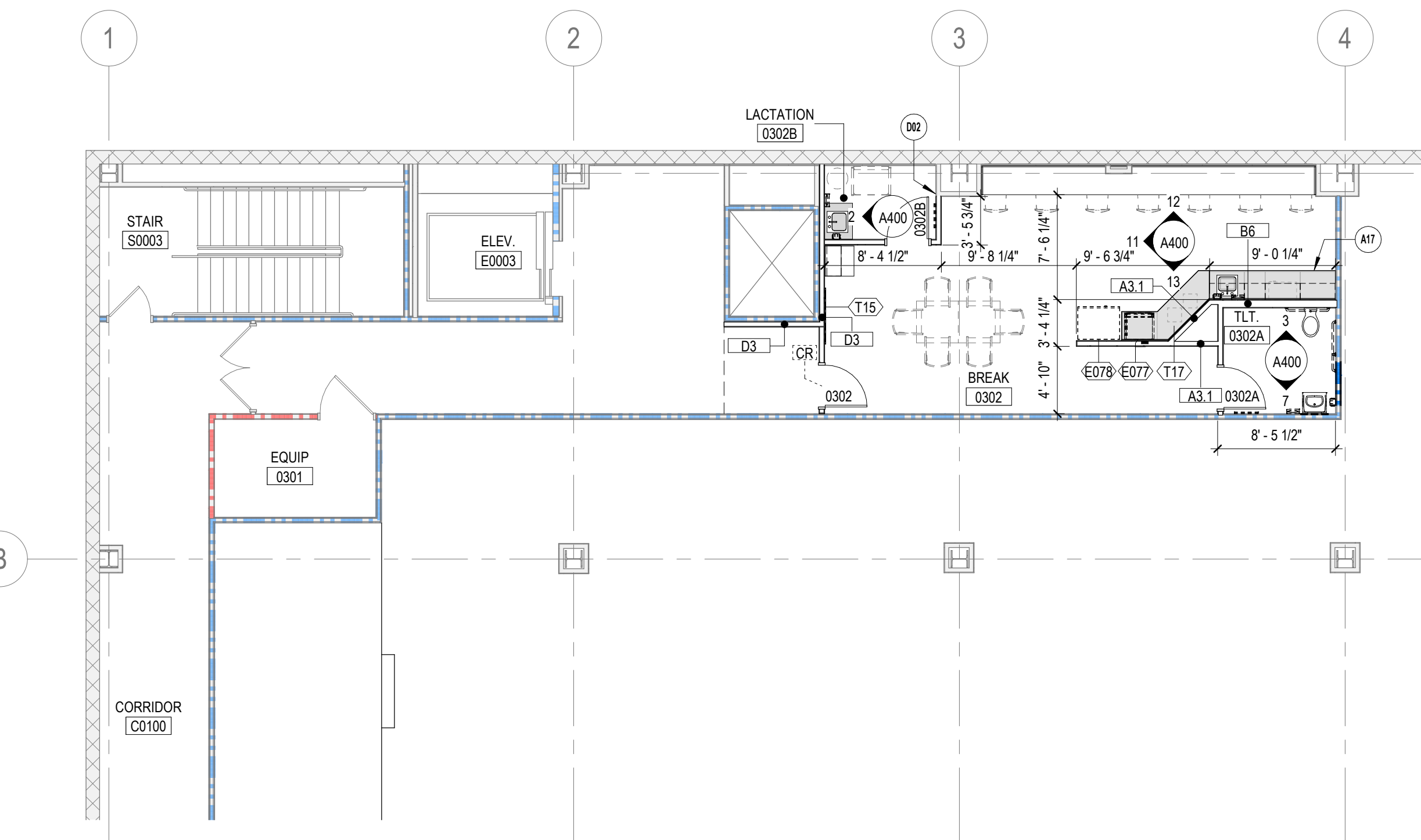
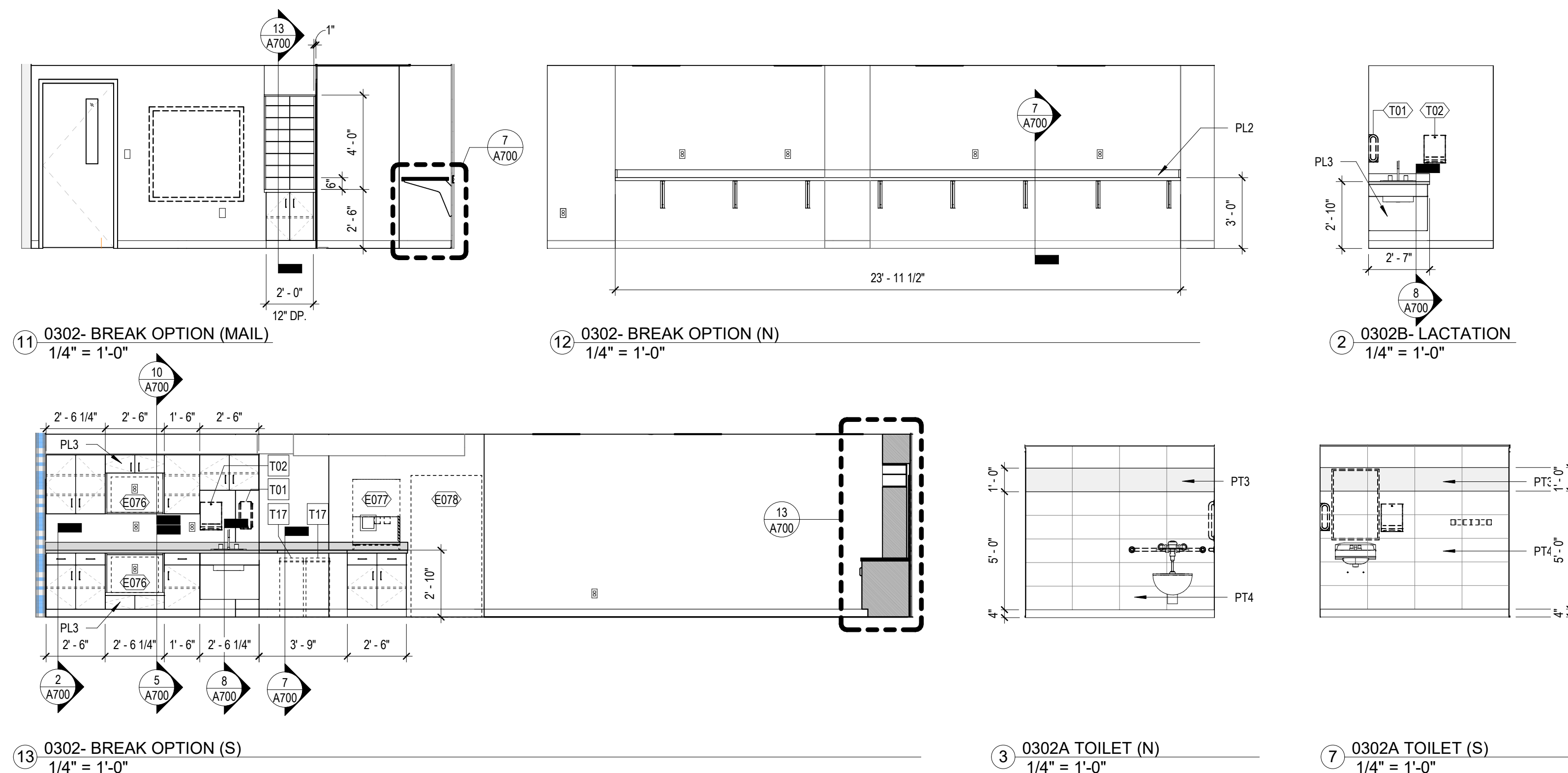


\*REFER TO IF SHEET IF000 FOR INTERIOR FINISH SPECIFICATIONS

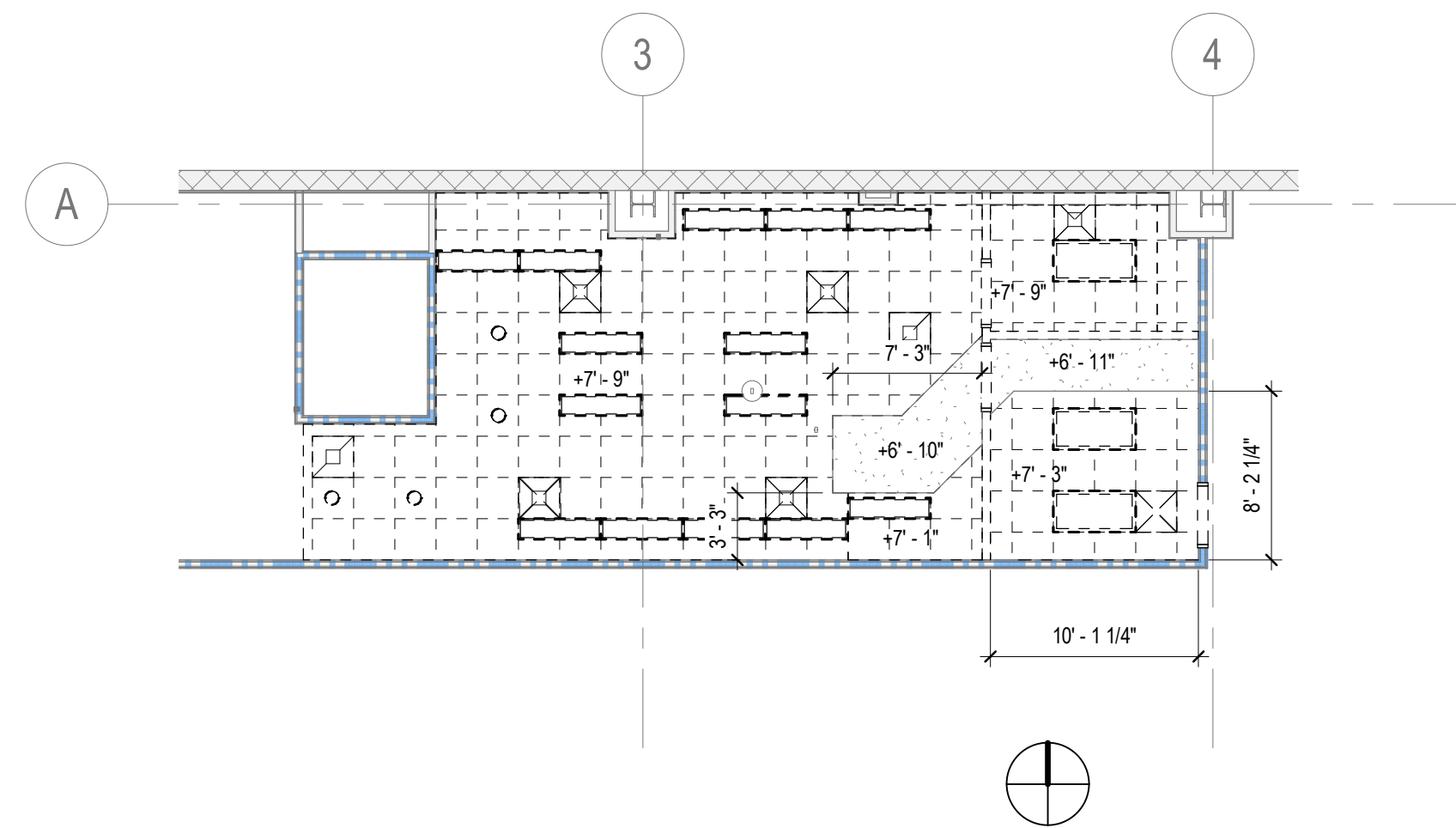
8 GROUND FLOOR INTERIOR FINISH PLAN  
1/8" = 1'-0"



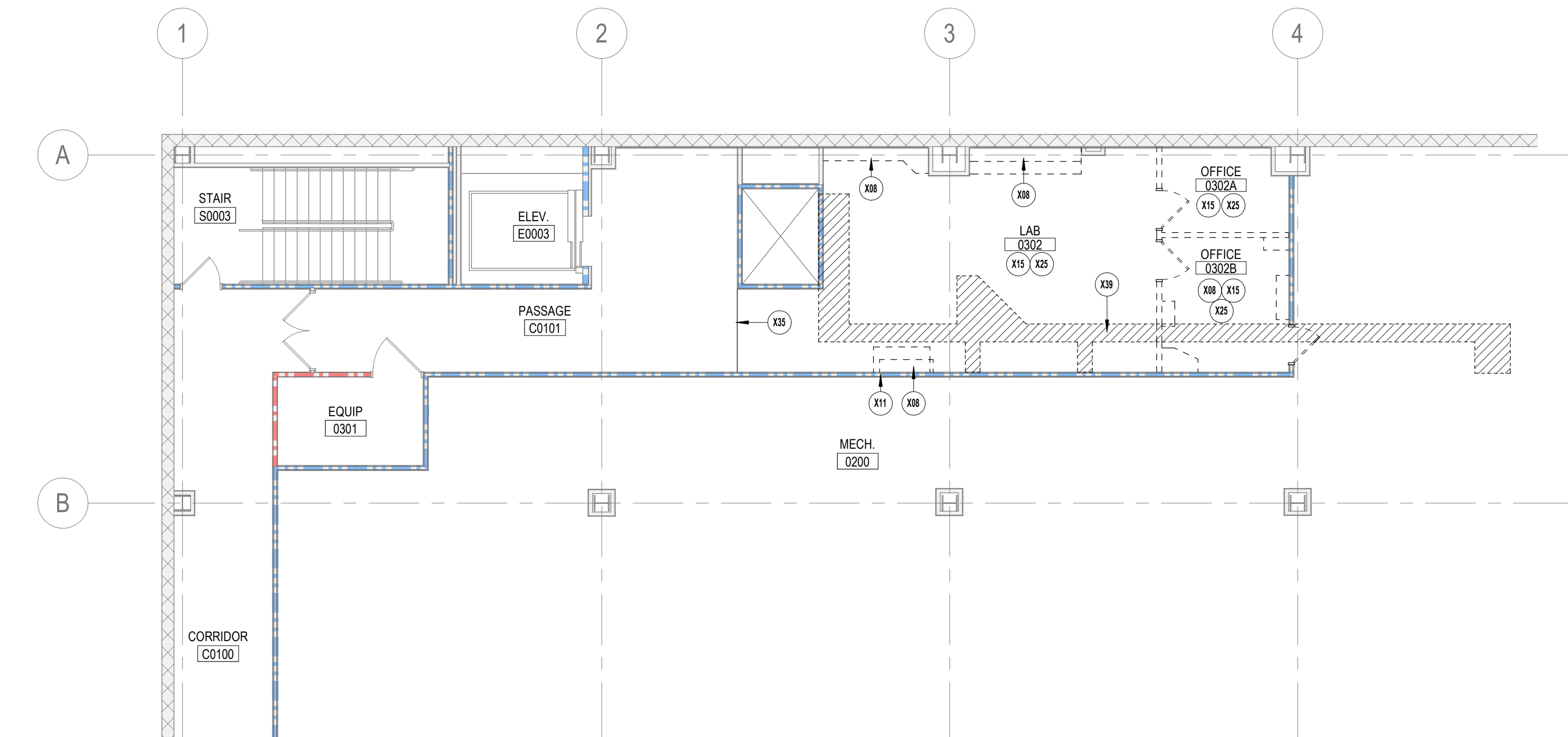
6 GROUND FLOOR REFLECTED CEILING PLAN  
1/8" = 1'-0"



4 GROUND FLOOR DIMENSION/ ARCHITECTURAL PLAN  
1/8" = 1'-0"



5 GROUND FLOOR REFLECTED CEILING PLAN DEMO  
1/8" = 1'-0"



1 GROUND FLOOR DEMOLITION PLAN  
1/8" = 1'-0"

WALL RATINGS	
1-HOUR RATED FIRE - (1HR)	
2-HOUR RATED FIRE - (2HR)	

KEYNOTE LEGEND	
REFER TO 4000 FOR GENERAL NOTES	
A17	ALIGN OUTSIDE EDGE OF COUNTERTOP WITH OUTSIDE FACE OF EXISTING OVERHEAD SOFFIT.
C24	LINE OF EXISTING GYPSUM WALL BOARD SOFFIT. EXTEND SOFFIT AT SAME ELEVATION FOR SEAMLESS FINISH.
C25	ALIGN OUTSIDE FACE OF SOFFIT TO OUTSIDE EDGE OF COUNTERTOP BELOW.
C26	EXISTING GYPSUM WALL BOARD SOFFIT TO REMAIN.
D02	ALIGN.
F10	EXISTING WALL. PAINT TO MATCH EXISTING ADJACENT WALL. ADD NEW BASE TO MATCH ADJACENT EXISTING BASE.
F11	PAIN ALL NEW WALLS P1. NEW BASE TO MATCH EXISTING.
X08	REMOVE EXISTING CASEWORK IN ITS ENTIRETY. PREPARE WALL TO RECEIVE NEW WALL FINISH. REFER TO INTERIOR FINISH PLANS FOR ADDITIONAL INFORMATION.
X11	REMOVE EXISTING PLUMBING FIXTURE. PREPARE WALL AS NEEDED FOR NEW FINISH.
X15	REMOVE EXISTING RESILIENT FLOORING. PREPARE FLOORS TO RECEIVE NEW FLOORING.
X25	REMOVE EXISTING WALL BASE IN ITS ENTIRETY.
X35	ALIGN FLOORING DEMOLITION WITH EXISTING WALL.
X39	REMOVE PORTION OF EXISTING CONCRETE FLOOR SLAB FOR UNDER GROUND PLUMBING WORK AS NEEDED. REFER TO PLUMBING DRAWINGS.

### FINISH REMARKS

- \* NOT ALL REMARKS MAY BE USED
- REFER TO INTERIOR FINISH PLAN NOTES FOR ACCENT WALL LOCATIONS.
  - REFER TO INTERIOR FINISH PLANS FOR FLOOR PATTERN. ALTERNATE #1. REMOVE AND REPLACE EXISTING CARPETING WITH LVT1.
  - WALL TO RECEIVE PORCELAIN TILE. PT1 WITH 12" ACCENT TILE PT2. REFER TO ELEVATION.
  - WALL TO RECEIVE PORCELAIN TILE. PT1 WITH 12" ACCENT TILE PT3. REFER TO ELEVATION.
  - WALL TO RECEIVE PORCELAIN TILE. PT4 WITH 12" ACCENT TILE PT3. REFER TO ELEVATION.

### FINISH ABBREVIATIONS

\* NOT ALL FINISHES LISTED ARE USED IN PROJECT

ACB	ACOUSTICAL CEILING	PT	PORCELAIN TILE
ACT	ACOUSTICAL CEILING TILE	PTB	PORCELAIN TILE BASE
AF	ACCESS FLOORING	QZ	QUARTZ SURFACE
AWC	ACOUSTICAL WALL CARPET	RB	RESILIENT BASE
BF	BAMBOO FLOORING	RSP	RUBBER SHEET FLOORING
BL	BLINDS	RT	RUBBER TILE FLOORING
BR	BUMP RAIL	RR	RUB RAIL
BRK	BRICK	RST	RESILIENT STAIR TREAD
CC	CUBICLE CURTAIN	RS	ROLLER SHADE
CF	CORK FLOORING	SAP	SOUND-ABSORBING PANEL
CG	CORNER GUARD	SC	SEALED CONCRETE (SPEC 0330)
CMU	CONCRETE MASONRY UNIT	SDT	STATIC DISSIPATIVE TILE
CPT	CARPET	SHC	SHOWER CURTAIN
CS	CAST STONE OR CULTURED STONE	SSB	SOLID SURFACE BASE
CTB	CERAMIC TILE BASE	SS	SOLID SURFACE
CT	CERAMIC TILE	SSK	SOLID SURFACE SINK
CR	CRASH RAIL OR CHAIR RAIL	SSP	SOLID SURFACE WALL PANEL
DG	DECORATIVE GLASS	STB	STAINLESS STEEL BASE
DGF	DECORATIVE GLASS FILM	STN	STONE OR STONE VENEER
DP	DECORATIVE PANEL	STP	STONE SLAB WALL PANEL
EP	EPOXY PAINT	SV	SHEET VINYL
ERB	EPOXY RESIN BASE	SVT	SOLID VINYL TILE
ERF	EPOXY RESIN FLOOR	SWP	SHEET WALL PROTECTION
ETR	EXISTING TO REMAIN	TB	TACKBOARD
FB	FABRIC	TF	TACKABLE FABRIC
FRP	FIBER REINFORCED PANEL	TZ	TERRAZZO FLOORING
FWC	FABRIC WALLCOVERING	TZB	TERRAZZO BASE
GYP	GYPSUM	TZT	TERRAZZO FLOOR TILE
GYP BD	GYPSUM BOARD	VB	VINYL BASE
GLT	GLASS TILE	VCF	VISION CONTROL FILM
HR	HANDRAIL	VCT	VINYL COMPOSITION TILE
LSF	LINOLEUM SHEET FLOORING	VET	VINYL ENHANCED TILE
LTF	LINOLEUM TILE FLOORING	VWC	VINYL WALL COVERING
LVT	LUXURY VINYL TILE	WB	WOOD BASE
MB	MARKER BOARD	WD	WOOD PANELING
MT	MOSAIC TILE	WDF	WOOD FLOORING
MWC	MARKER WALLCOVERING	WP	WALL PROTECTION ASSEMBLY
P	PAINT	WM	WALK-OFF MAT
PL	PLASTIC LAMINATE	WWW	WOOD VENEER WALLCOVERING
PME	PATCH TO MATCH EXISTING		

### FLOOR TRANSITION INDICATOR

FLOOR FINISH TRANSITION → FLOOR FINISH AS INDICATED IN ROOM FINISH TAG  
→ DIFFERING FLOOR FINISH

### ROOM FINISH TAG LEGEND

FLOOR	BASE	WALL	ROOM NAME	ROOM NUMBER	REMARKS COLUMN

NOTE: FINISHES INDICATED IN ROOM FINISH TAG ARE GENERAL OVERALL FINISHES FOR ROOM UNLESS OTHERWISE NOTED BY NOTE, REMARK, DETAIL, AND/OR ELEVATION.

SYMBOL INDICATES MATERIAL / PATTERN / GRAIN DIRECTION

INDICATES AREAS NOT IN SCOPE

# BSA

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## Timberlake ENGINEERING

A Custom Engineering Company

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## Health Care

MU PROJECT NO. - CP221943

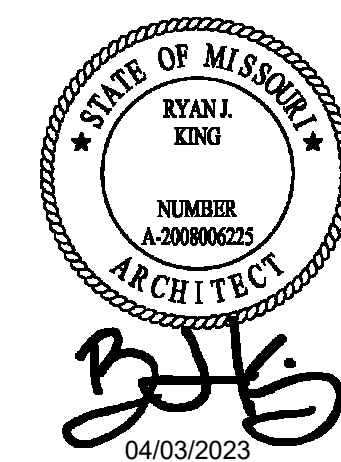
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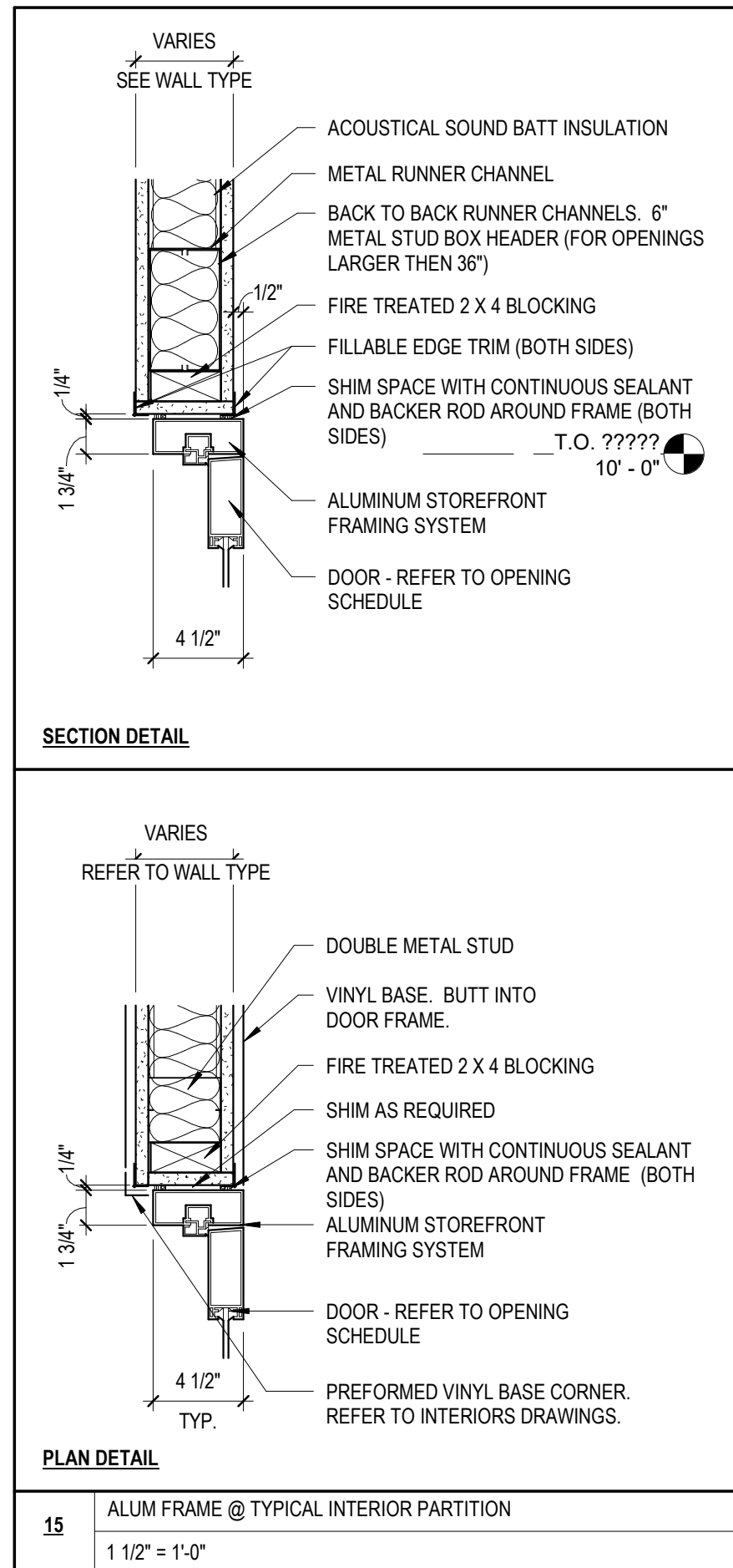
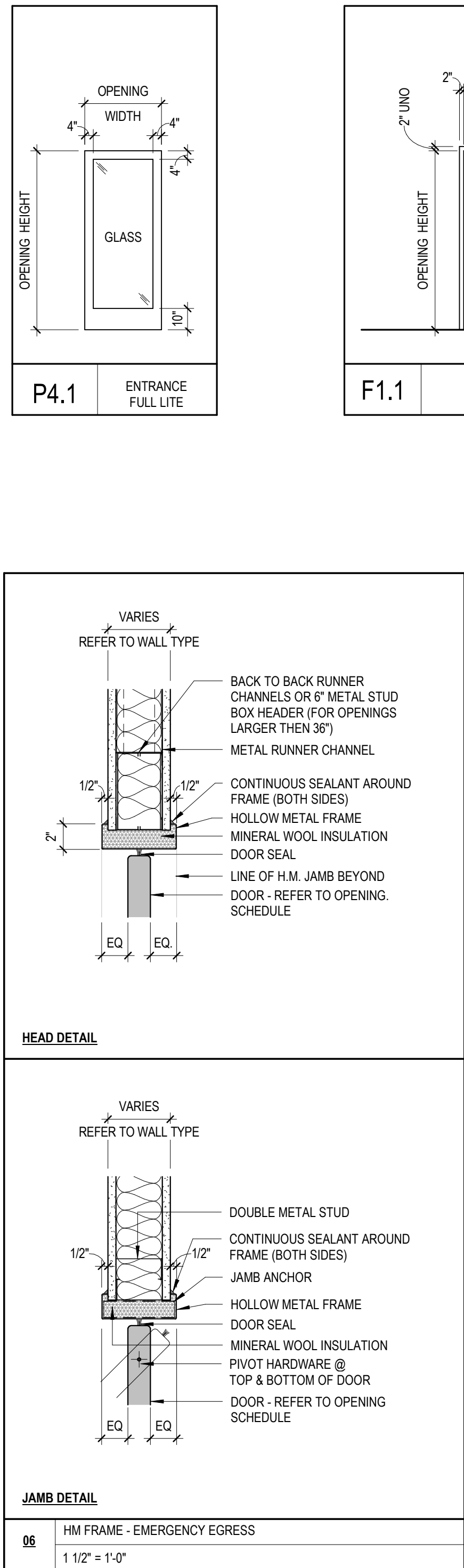
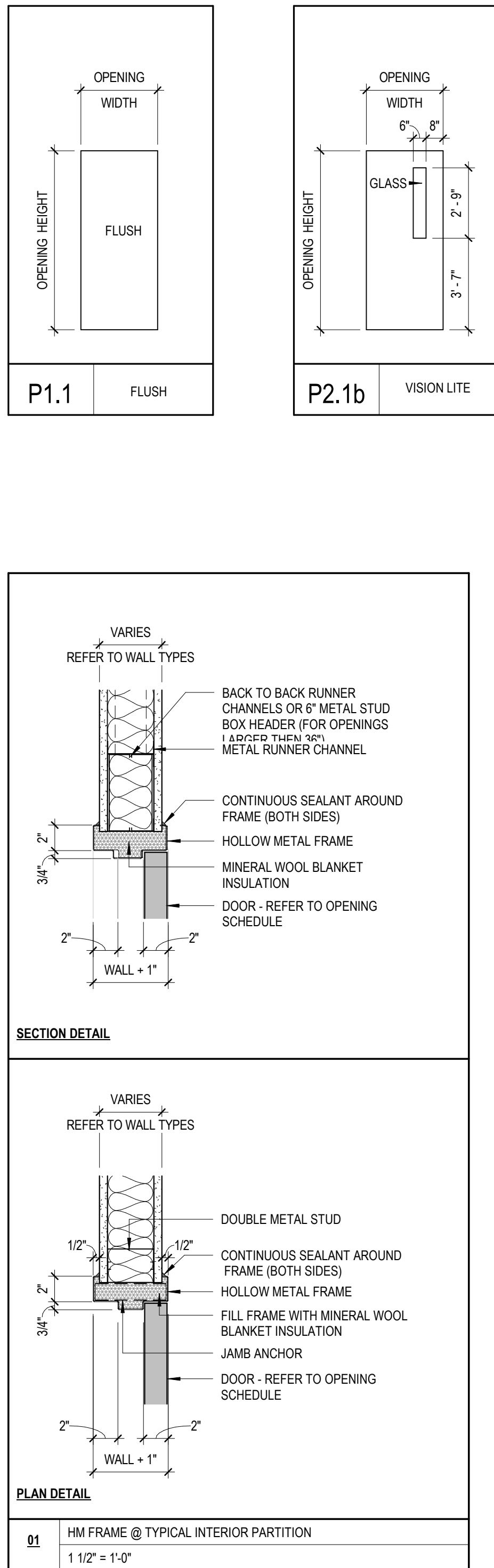
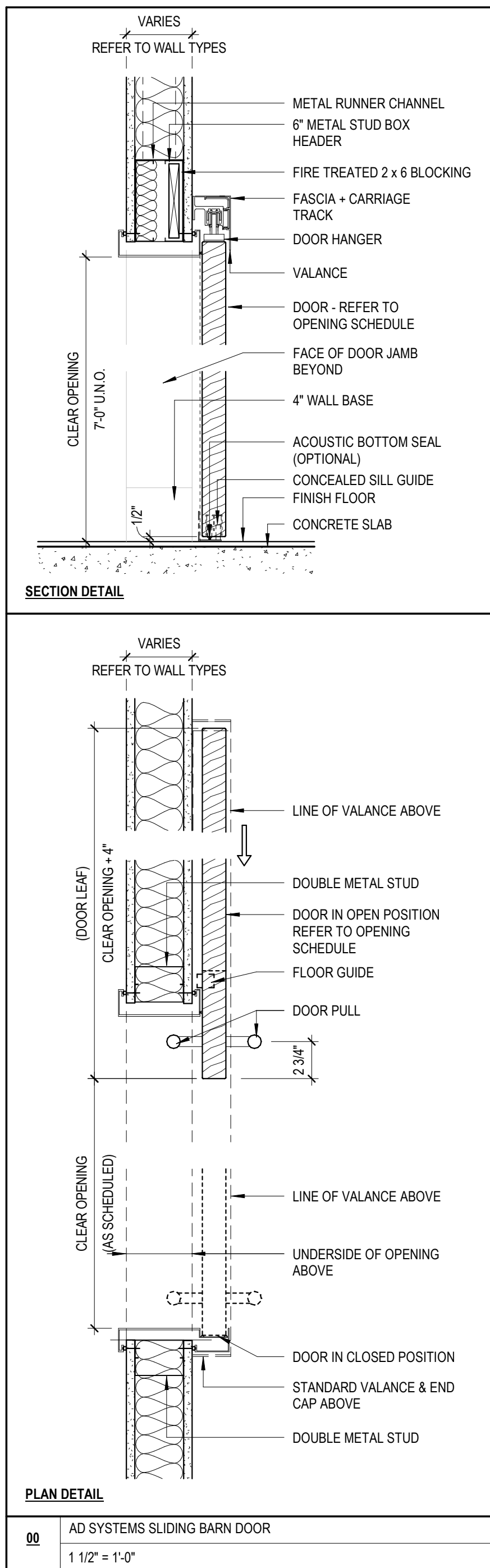
### ALTERNATE #1 - GROUND FLOOR

DATE 03 APRIL 2023  
BSALS PROJECT NO. 14110010

# A400

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OPENING SCHEDULE																			
OPENING NUMBER	ROOMS		OPENING SIZE		MATERIAL	PANEL CONSTRUCTION				ELEVATION	FRAME CONSTRUCTION				GLASS TYPE	FIRE RATING (MINUTES)	HARDWARE SET	COMMENTS	
	ROOM A	ROOM B	WIDTH	HEIGHT		WIDTH		ELEVATION			MATERIAL	ELEVATION	SIDE LITE WIDTH						DETAIL SET
						PRIMARY	SECONDARY	PRIMARY	SECONDARY				HINGE SIDE	WIDTH SIDE					
0302	BREAK	PASSAGE	3'-0"	7'-0"	WD	3'-0"	0"	P2.1b: VISION LITE	--	HM	F1.1: STANDARD	0"	0"	01	G1	--	ALTERNATE #1 OPENING. CARD READ IN.		
0302A	BREAK	TLT.	3'-0"	7'-0"	WD	3'-0"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	06	-	--	ALTERNATE #1 OPENING. PRIVACY SET.		
0302B	BREAK	LACTATION	3'-0"	7'-0"	WD	3'-0"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	01	-	--	ALTERNATE #1 OPENING. PRIVACY SET.		
3002	WAITING	LOBBY	6'-0"	7'-0"	AL/GL	3'-0"	3'-0"	P4.1: ENTRANCE FULL LITE	P4.1: ENTRANCE FULL LITE	AL	F1.1: STANDARD	0"	0"	15	G1	--	AUTO OPENING. TOUCHLESS ACTUATOR IN/OUT FOR NORMAL HOURS. CARD READ IN AFTER HOURS ONLY.		
3002A	CHECK-IN CHECK-OUT	WAITING	3'-0"	7'-0"	WD	3'-0"	0"	P2.1b: VISION LITE	--	HM	F1.1: STANDARD	0"	0"	01	-	--	CARD READ IN.		
3002A1	CHECK-IN CHECK-OUT	WORKROOM	3'-0"	7'-0"	WD	3'-0"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	01	-	--	PASSAGE SET.		
3002A2	CHECK-IN CHECK-OUT	OFFICE	3'-0"	7'-0"	WD	3'-0"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	01	-	--	OFFICE LOCKSET.		
3103	CORRIDOR	EXAM	3'-8"	7'-0"	WD	3'-8"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	01	-	--	PASSAGE SET.		
3105	CORRIDOR	EXAM	3'-8"	7'-0"	WD	3'-8"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	01	-	--	PASSAGE SET.		
3107	CORRIDOR	EXAM	3'-8"	7'-0"	WD	3'-8"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	01	-	--	PASSAGE SET.		
3108	CORRIDOR	WORKROOM	3'-0"	7'-0"	WD	3'-0"	0"	P2.1b: VISION LITE	--	HM	F1.1: STANDARD	0"	0"	01	G1	--	PASSAGE SET.		
3109	CORRIDOR	TREATMENT	3'-8"	7'-0"	WD	3'-8"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	01	-	--	PASSAGE SET.		
3110	CORRIDOR	WORKROOM	3'-0"	7'-0"	WD	3'-0"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	01	-	--	PASSAGE SET.		
3111	CORRIDOR	EXAM ROOM	3'-8"	7'-0"	WD	3'-8"	0"	P1.1: FLUSH	--	AL	F4.2: AD SYSTEMS FRAME	0"	0"	00	-	--	PASSAGE SET.		
3117	CORRIDOR	TREATMENT	3'-8"	7'-0"	WD	3'-8"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	01	-	--	PASSAGE SET.		
3118	CORRIDOR	EXAM	3'-8"	7'-0"	WD	3'-8"	0"	P1.1: FLUSH	--	AL	F4.2: AD SYSTEMS FRAME	0"	0"	00	-	--	PASSAGE SET.		
3119	CORRIDOR	EXAM	3'-8"	7'-0"	WD	3'-8"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	01	-	--	PASSAGE SET.		
3120	CORRIDOR	EXAM	3'-8"	7'-0"	WD	3'-8"	0"	P1.1: FLUSH	--	AL	F4.2: AD SYSTEMS FRAME	0"	0"	00	-	--	PASSAGE SET.		
3125	CORRIDOR	EXAM	3'-8"	7'-0"	WD	3'-8"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	01	-	--	PASSAGE SET.		
3127	CORRIDOR	EXAM	3'-8"	7'-0"	WD	3'-8"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	01	-	--	PASSAGE SET.		
3129	RR	CORRIDOR	3'-8"	7'-0"	WD	3'-8"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	06	-	--	PRIVACY SET, RESCUE HARDWARE.		
3130	CORRIDOR	EXAM	3'-8"	7'-0"	WD	3'-8"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	01	-	--	PASSAGE SET.		
3141	CORRIDOR	SOILED HOLDING	3'-0"	7'-0"	WD	3'-0"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	01	-	--	CARD READ IN, CLOSER.		
3142	CORRIDOR	ULTRASOUND	3'-8"	7'-0"	WD	3'-8"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	01	-	--	PASSAGE SET.		
3143	CORRIDOR	OFFICE	3'-0"	7'-2"	WD	3'-0"	0"	P1.1: FLUSH	--	AL	F4.2: AD SYSTEMS FRAME	0"	0"	00	-	--	OFFICE LOCKSET.		
3144	CORRIDOR	ULTRASOUND	3'-8"	7'-0"	WD	3'-8"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	01	-	--	PASSAGE SET.		
3150	CORRIDOR	ULTRASOUND	3'-8"	7'-0"	WD	3'-8"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	01	-	--	PASSAGE SET.		
3151	ULTRASOUND	CORRIDOR	3'-8"	7'-0"	WD	3'-8"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	01	-	--	PASSAGE SET.		
3152	CORRIDOR	ULTRASOUND	3'-8"	7'-0"	WD	3'-8"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	01	-	--	PASSAGE SET.		
3153	CORRIDOR	RR	3'-8"	7'-0"	WD	3'-8"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	06	-	--	PRIVACY SET, RESCUE HARDWARE.		
3154	CORRIDOR	ULTRASOUND	3'-8"	7'-0"	WD	3'-8"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	06	-	--	PRIVACY SET, RESCUE HARDWARE.		
3155	CORRIDOR	READING ROOM	3'-0"	7'-0"	WD	3'-0"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	01	-	--	PASSAGE SET.		
3156	CONFERENCE	CORRIDOR	3'-0"	7'-0"	WD	3'-0"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	01	-	--	PASSAGE SET.		
3157	CORRIDOR	WORKROOM	3'-0"	7'-0"	WD	3'-0"	0"	P2.1b: VISION LITE	--	HM	F1.1: STANDARD	0"	0"	01	G1	--	PASSAGE SET, NO CLOSER.		
3203	CORRIDOR	PAR SUPPLY	3'-0"	7'-0"	WD	3'-0"	0"	P2.1b: VISION LITE	--	HM	F1.1: STANDARD	0"	0"	01	G1	--	CARD READ IN.		
3206	CORRIDOR	CLEAN SCOPE STORAGE	3'-0"	7'-0"	WD	3'-0"	0"	P2.1b: VISION LITE	--	HM	F1.1: STANDARD	0"	0"	01	G1	--	CARD READ IN.		
3207	CORRIDOR	SOILED HOLDING	3'-0"	7'-0"	WD	3'-0"	0"	P2.1b: VISION LITE	--	HM	F1.1: STANDARD	0"	0"	01	G1	--	CARD READ IN.		
3210	CORRIDOR	CLEAN UTILITY	3'-0"	7'-0"	WD	3'-0"	0"	P2.1b: VISION LITE	--	HM	F1.1: STANDARD	0"	0"	01	G1	--	CARD READ IN.		
C3108	CORRIDOR	CORRIDOR	3'-8"	7'-0"	WD	3'-8"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	01	-	--	CARD READ IN.		
C3109	WAITING	CORRIDOR	3'-8"	7'-0"	WD	3'-8"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	01	-	--	AUTO OPENING. TOUCHLESS ACTUATOR IN & OUT.		
C3112	CORRIDOR	CORRIDOR	4'-0"	7'-0"	WD	4'-0"	0"	P1.1: FLUSH	--	HM	F1.1: STANDARD	0"	0"	01	-	--	CARD READ IN.		

OPENING SCHEDULE GENERAL NOTES	
1.	REFER TO PROJECT MANUAL FOR DOOR HARDWARE INFORMATION. DIMENSIONS DO NOT REFLECT SIZE OF PACKAGED DOORS. REFER TO OPENING ELEVATIONS.
2.	SLIDING DOORS ARE SIZED INSIDE TO INSIDE.
3.	REFER TO ELECTRICAL WIRING DIAGRAMS OF POWERED OPENINGS FOR ADDITIONAL INFORMATION.
4.	REFER TO SHET A113 FOR MODIFICATIONS ON EXISTING OPENINGS.
GLASS TYPES	
G1	SAFETY GLASS
G2	FIRE-RATED GLASS
G3	DECORATIVE GLASS
G4	ONE WAY VISION GLASS
G5	LEAD LINED GLASS
G6	ELECTRIFIED GLASS
DOOR FRAME LOCATION	

# BSA

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## Timberlake

ENGINEERING  
A Custom Engineering Company

LIGHTING ENGINEERING:  
Timberlake Engineering  
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Columbia, MO 65201  
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# Health Care

MU PROJECT NO. - CP221943

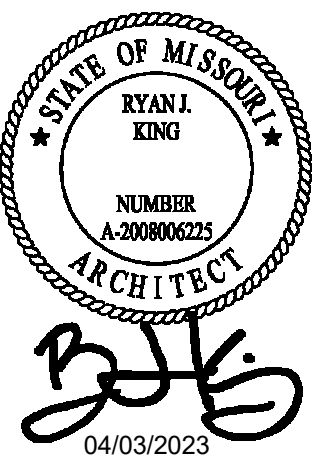
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MEDICAL BUILDING - 3RD  
FLOOR RENOVATION**

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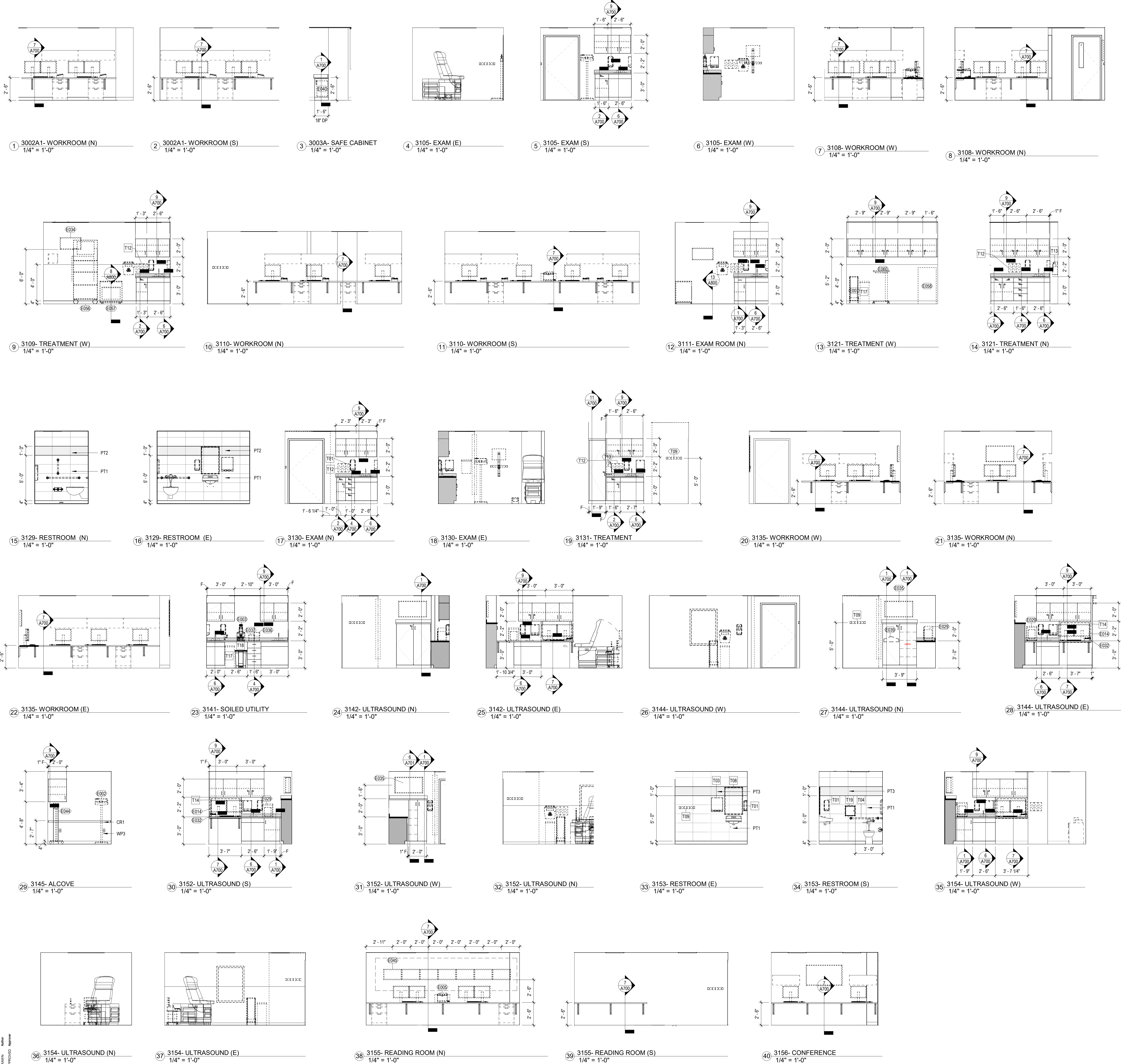


OPENING SCHEDULE,  
ELEVATIONS, AND DETAILS

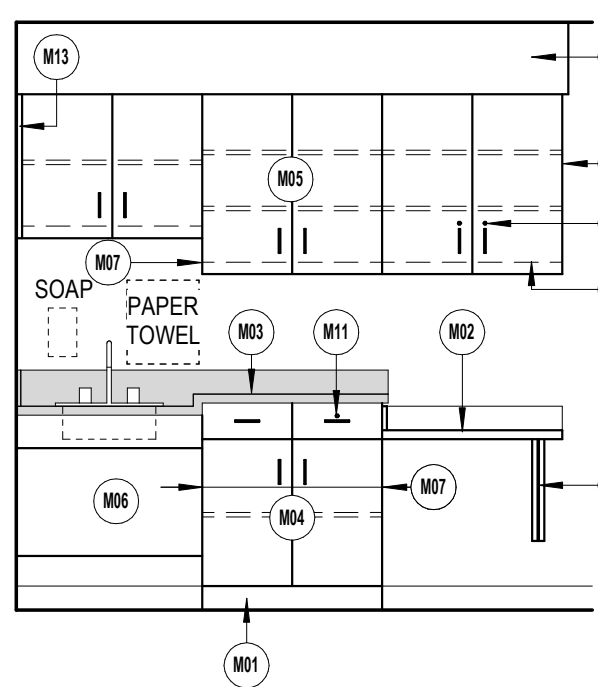
DATE	03 APRIL 2023
BSALS PROJECT NO.	14110010



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DESIGNED BY: Ryan J. King  
DRAWN BY: Ryan J. King  
APPROVED BY: Ryan J. King



#### CASEWORK LEGEND



\*LEGEND INDICATES GRAPHIC REPRESENTATION OF CASEWORK ELEMENTS. NOT A TYPICAL LAYOUT.  
\*ALL NOTES ARE TYPICAL UNLESS OTHERWISE NOTED (UNO) AND EVERY INSTANCE MAY NOT BE NOTED ON INTERIOR ELEVATIONS.

#### KEYNOTE LEGEND

	REFER TO A600 FOR GENERAL NOTES
M01	4\"/>
M02	PLASTIC LAMINATE COUNTERTOP WITH SIDE AND BACK SPLASHES, AS INDICATED. COUNTERTOP DEPTH EQUALS BASE CABINET AND CABINET DOORS PLUS 1\"/>
M03	SOLID SURFACE COUNTERTOP (SHADED) WITH SIDE AND BACK SPLASHES, AS INDICATED. COUNTERTOP DEPTH EQUALS BASE CABINET AND CABINET DOORS PLUS 1\"/>
M04	24\"/>
M05	12\"/>
M06	ACCESSIBLE (BARRIER FREE) SINK SKIRT ASSEMBLY WITH REMOVABLE PANEL.
M07	FINISHED END PANEL - TYPICAL ALL VISIBLE SURFACES.
M08	COUNTER SUPPORT BRACKET @ 48\"/>
M09	GYPSUM BULKHEAD CONSTRUCTION TO BE 1\"/>
M11	CASEWORK LOCK, WHERE INDICATED.
M12	2\"/>
M13	FILLER PANEL (FP). WHEN CASEWORK DOES NOT ABUT AN ADJACENT WALL A FILLER PANEL IS REQUIRED. RETURN FINISHED FILLER ACROSS BOTTOM OF CASEWORK TO BACK WALL.

# BSA

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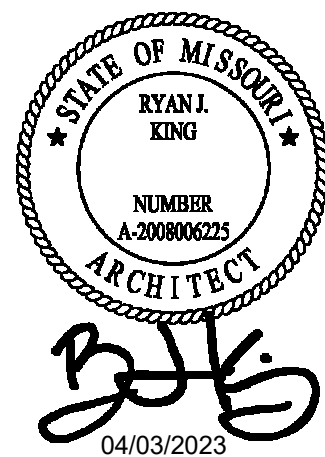
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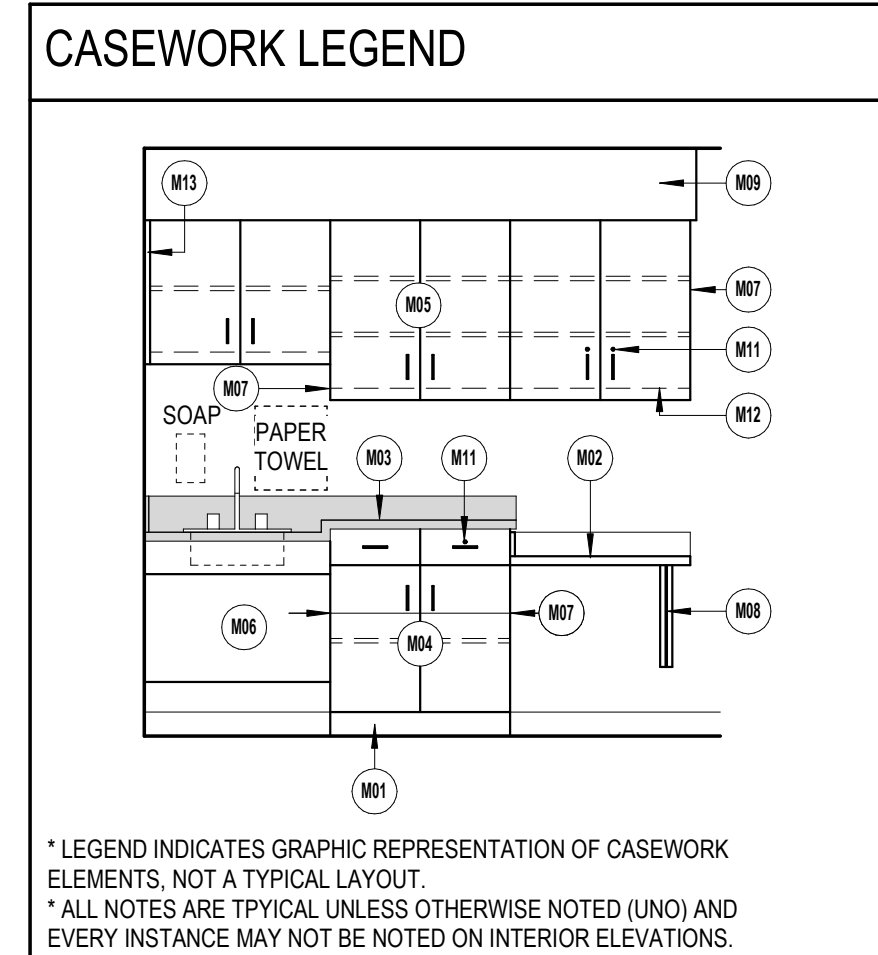
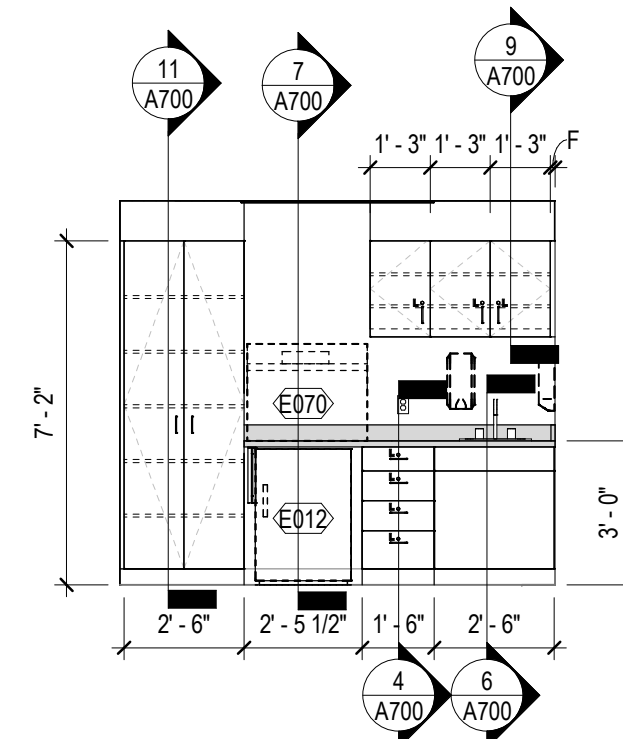
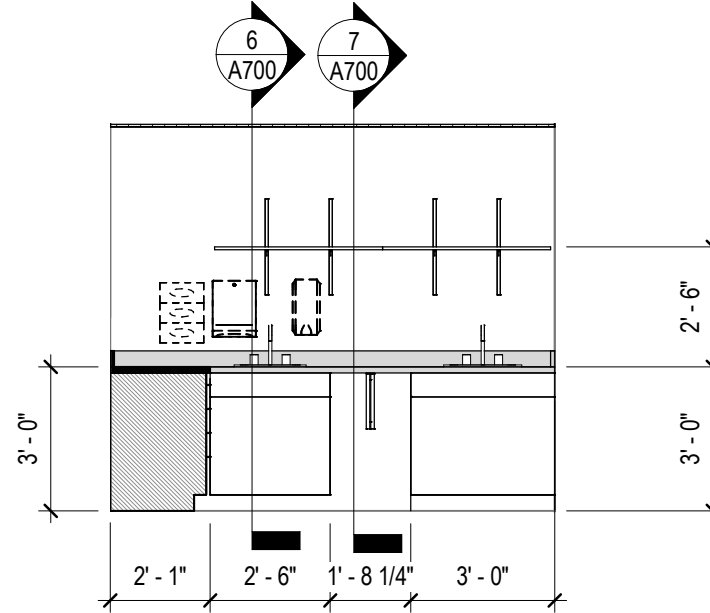
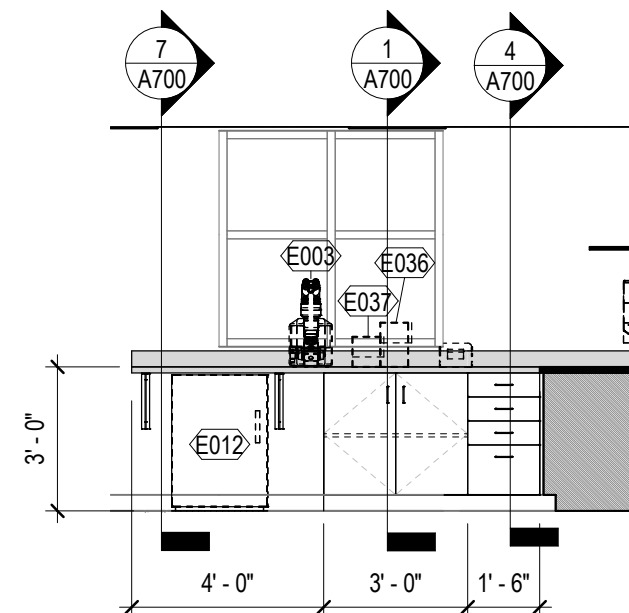
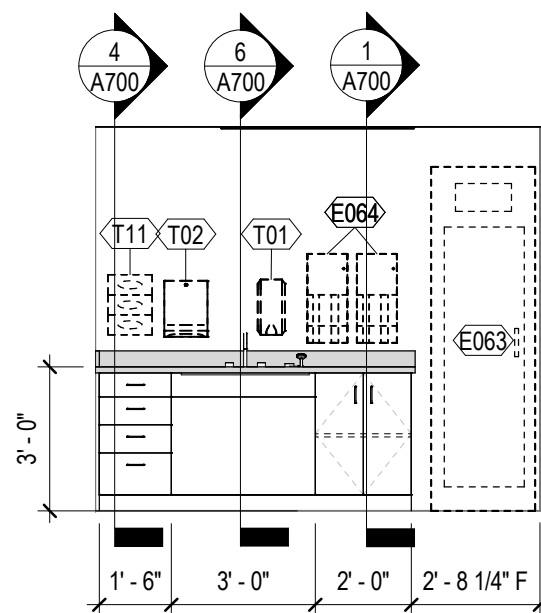
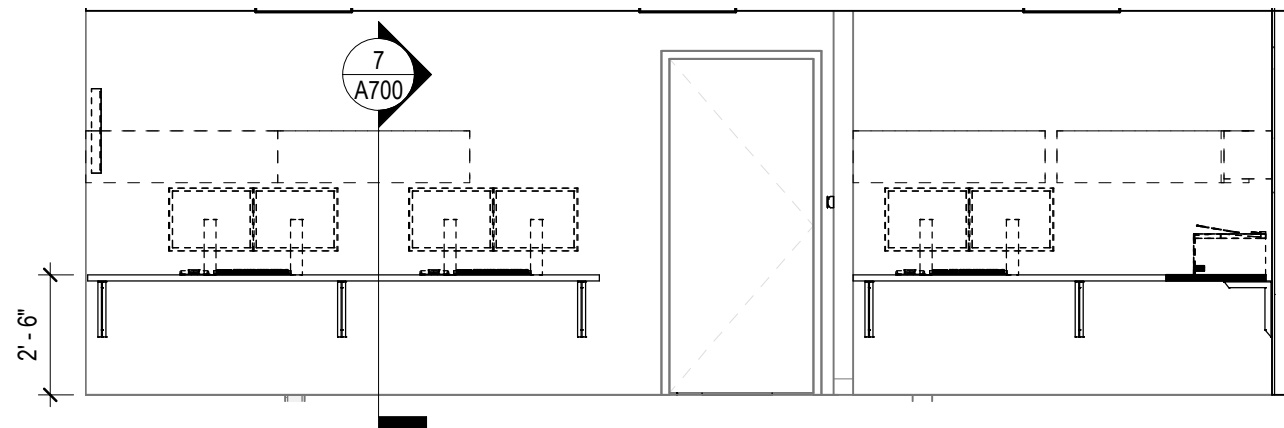
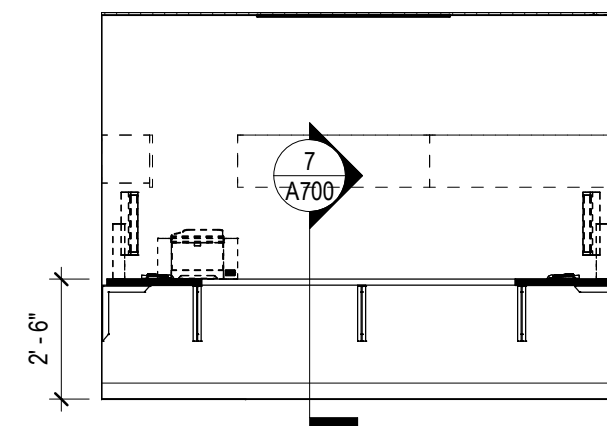
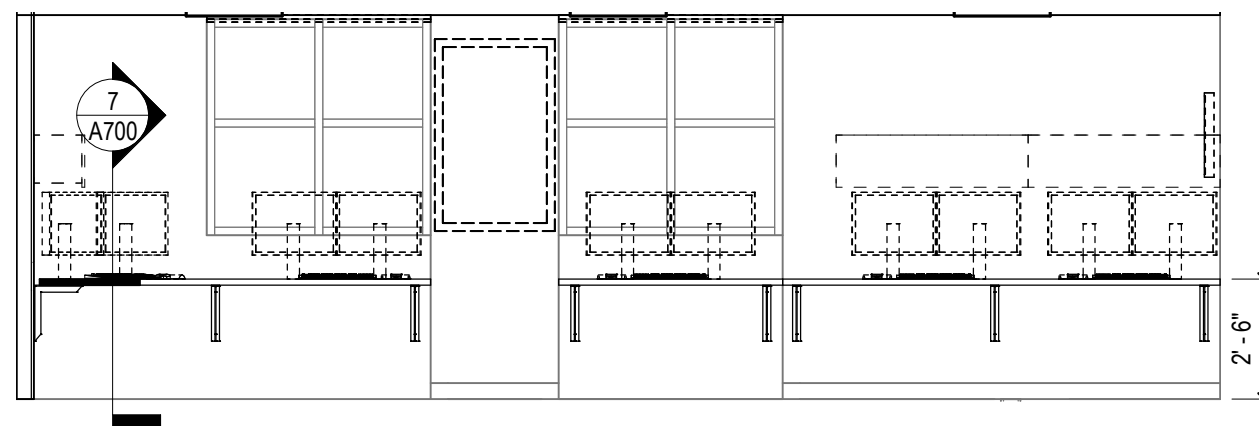
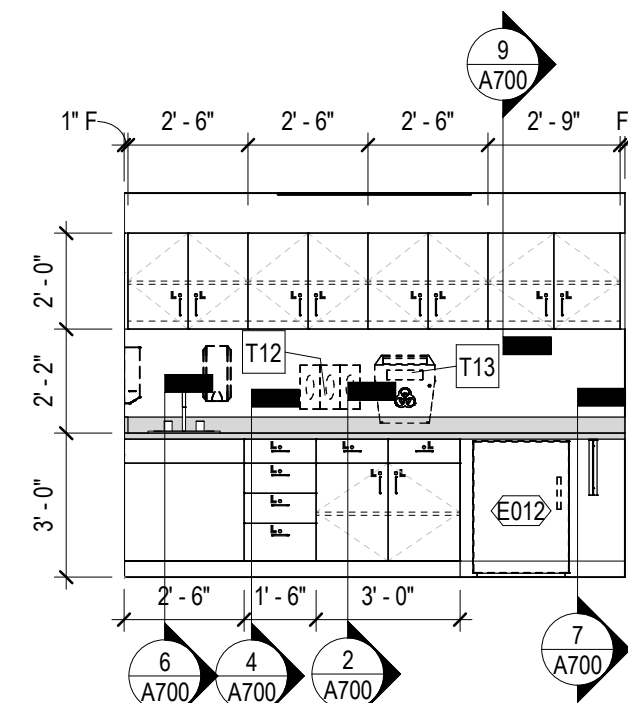
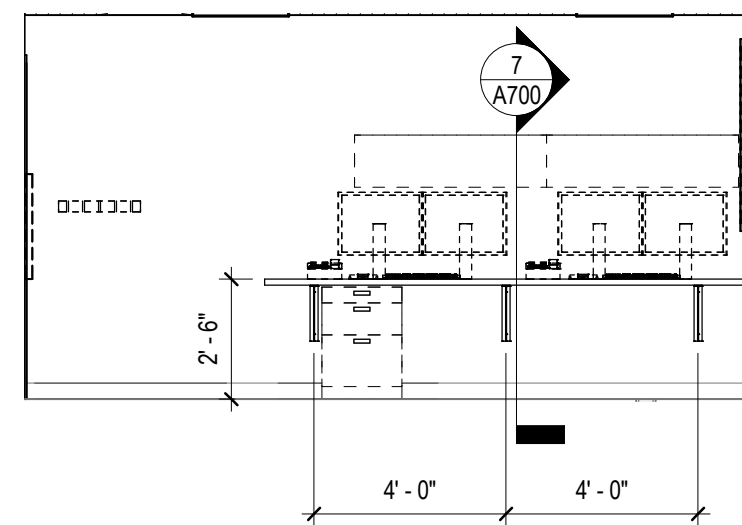
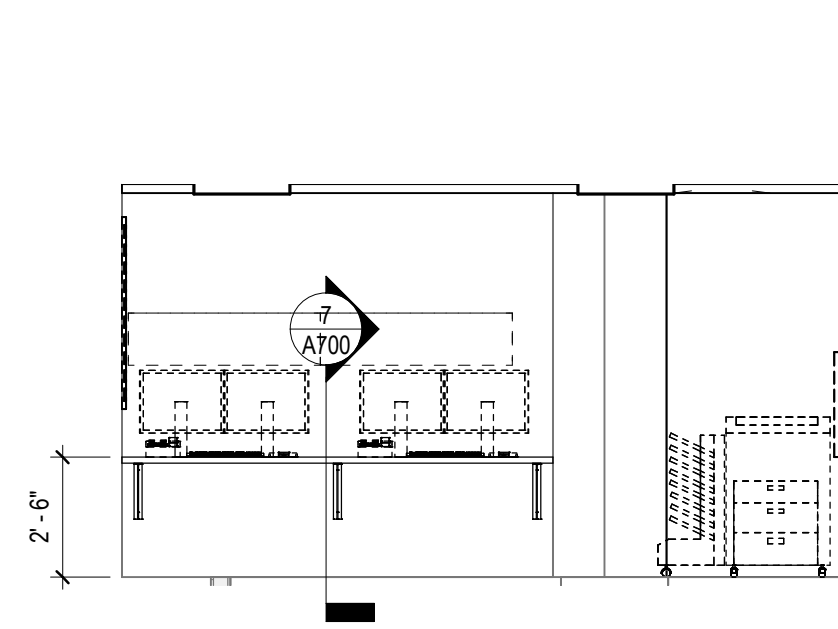
INTERIOR ELEVATIONS

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BSALS PROJECT NO. 14110010

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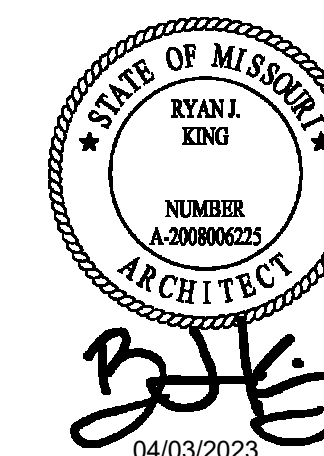
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FLOOR RENOVATION**

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## INTERIOR ELEVATIONS

DATE	03 APRIL 2023
BSA'S PROJECT NO	14110010

# A601

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## Health Care

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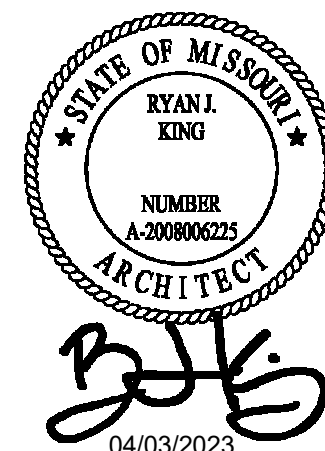
UNIVERSITY PHYSICIANS  
MEDICAL BUILDING - 3RD  
FLOOR RENOVATION

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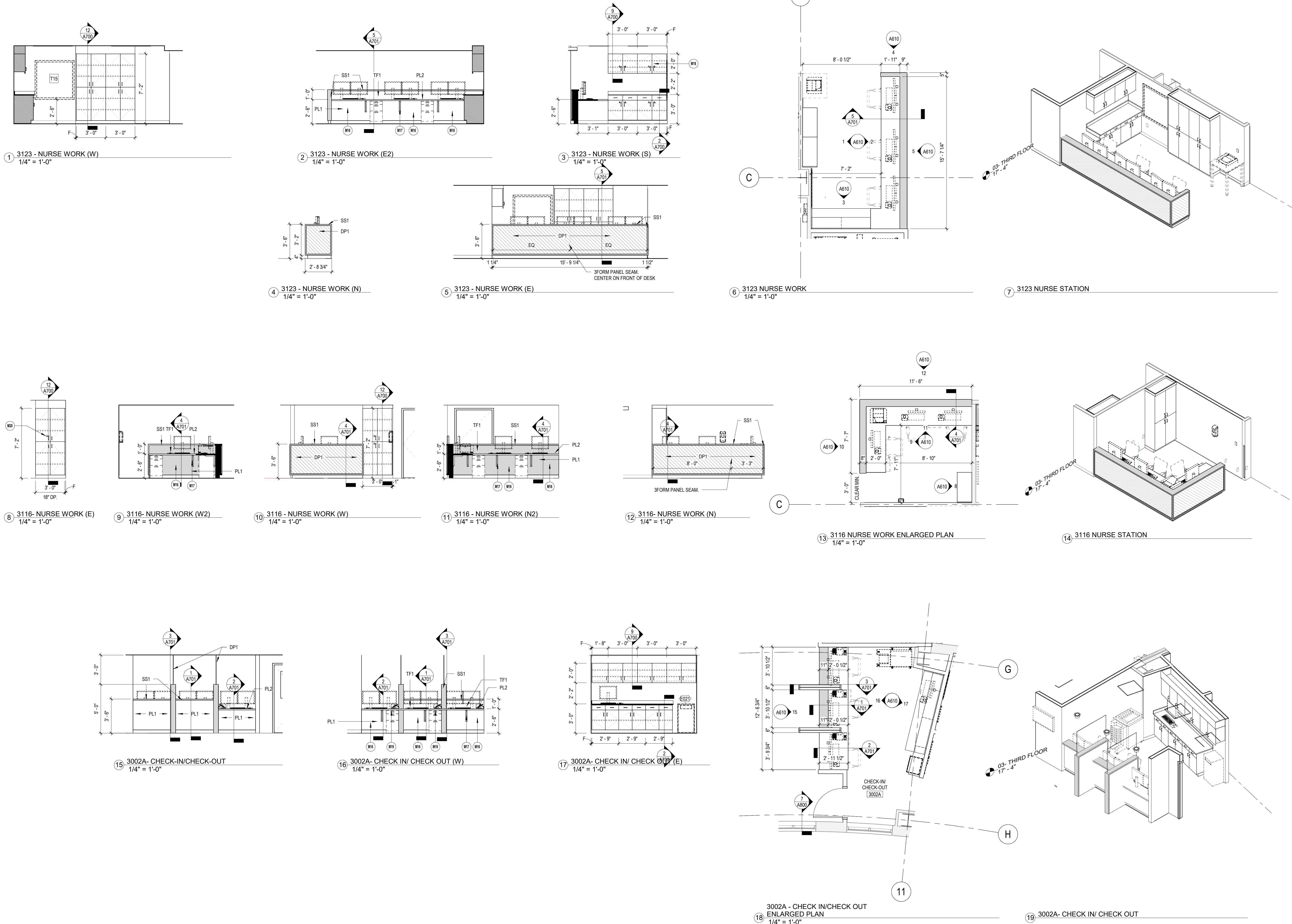
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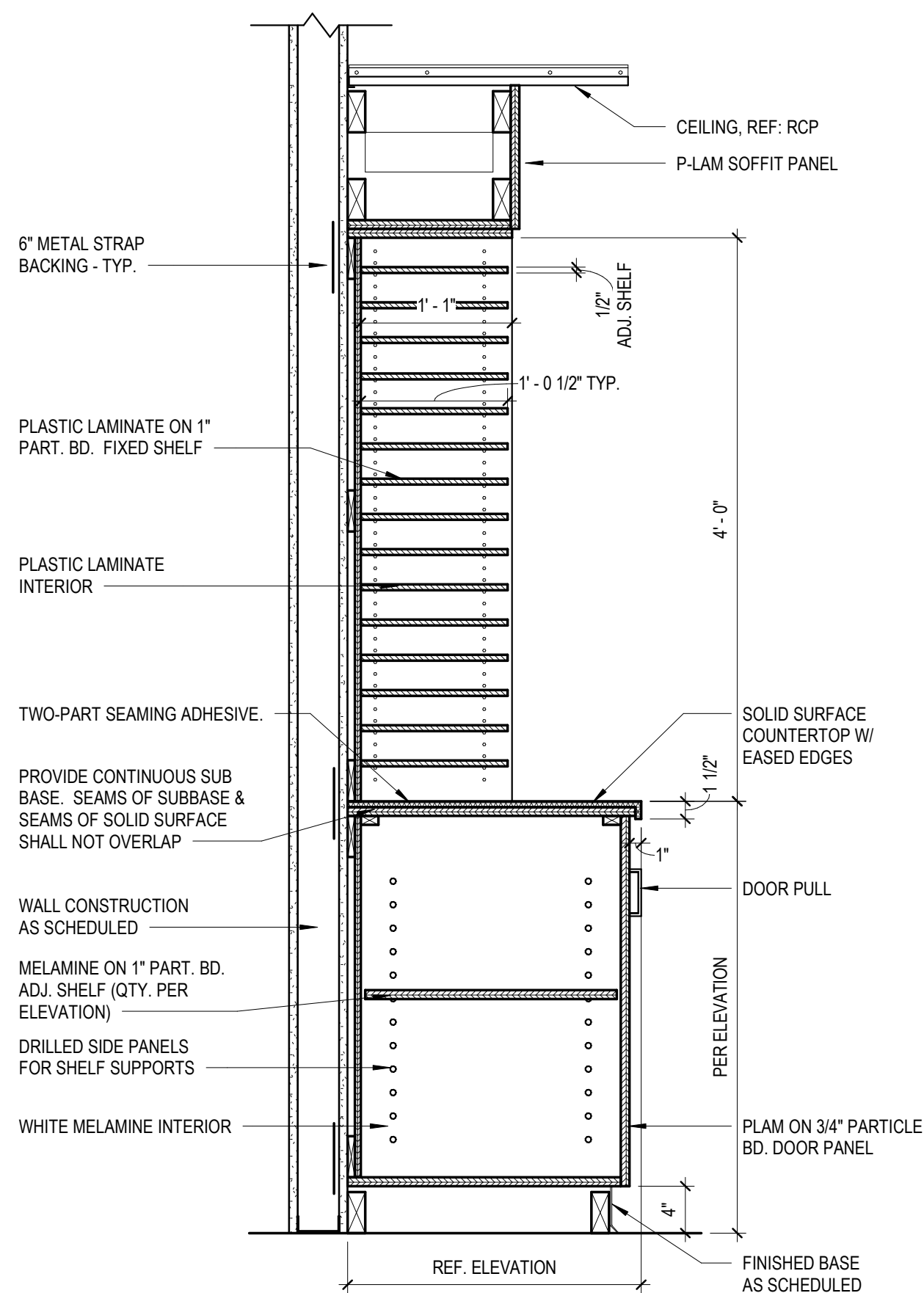
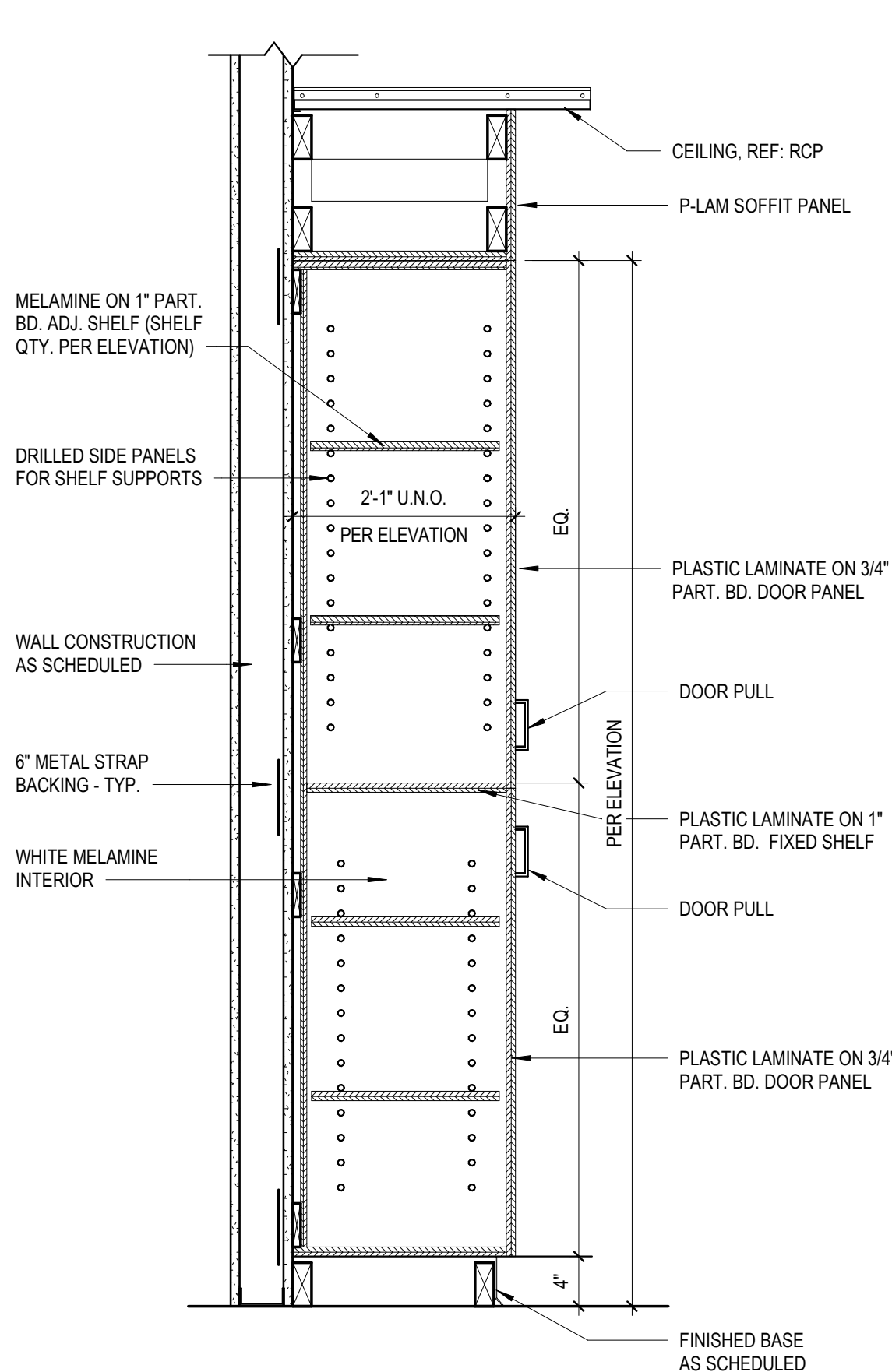
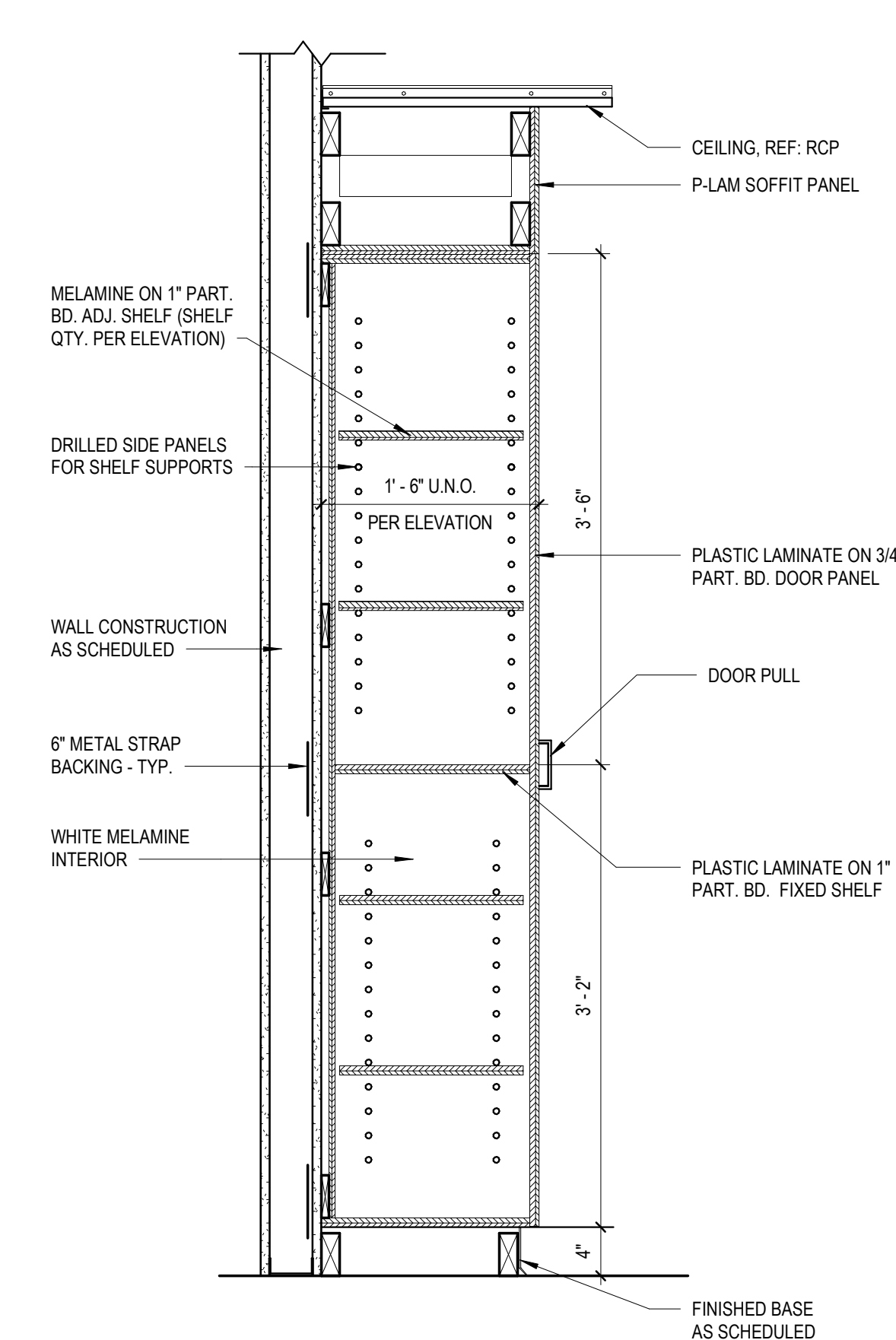
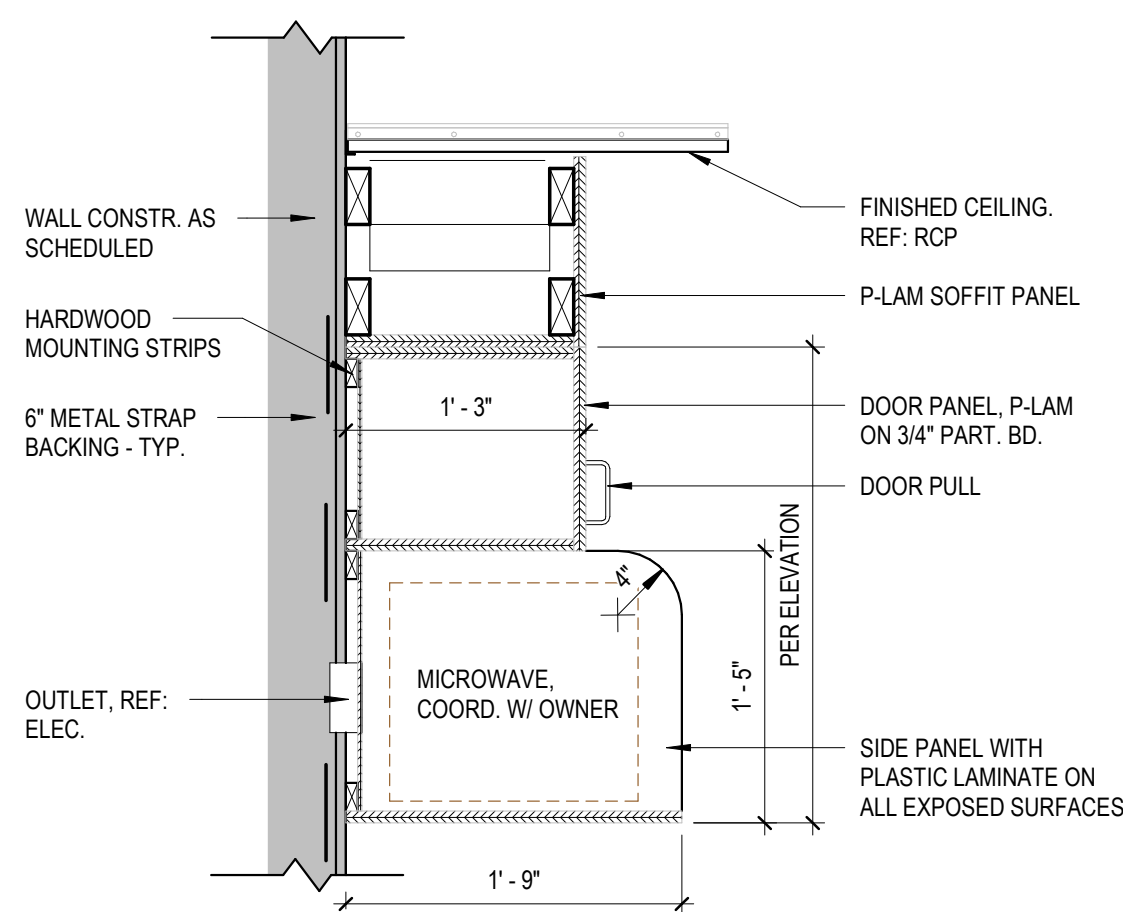
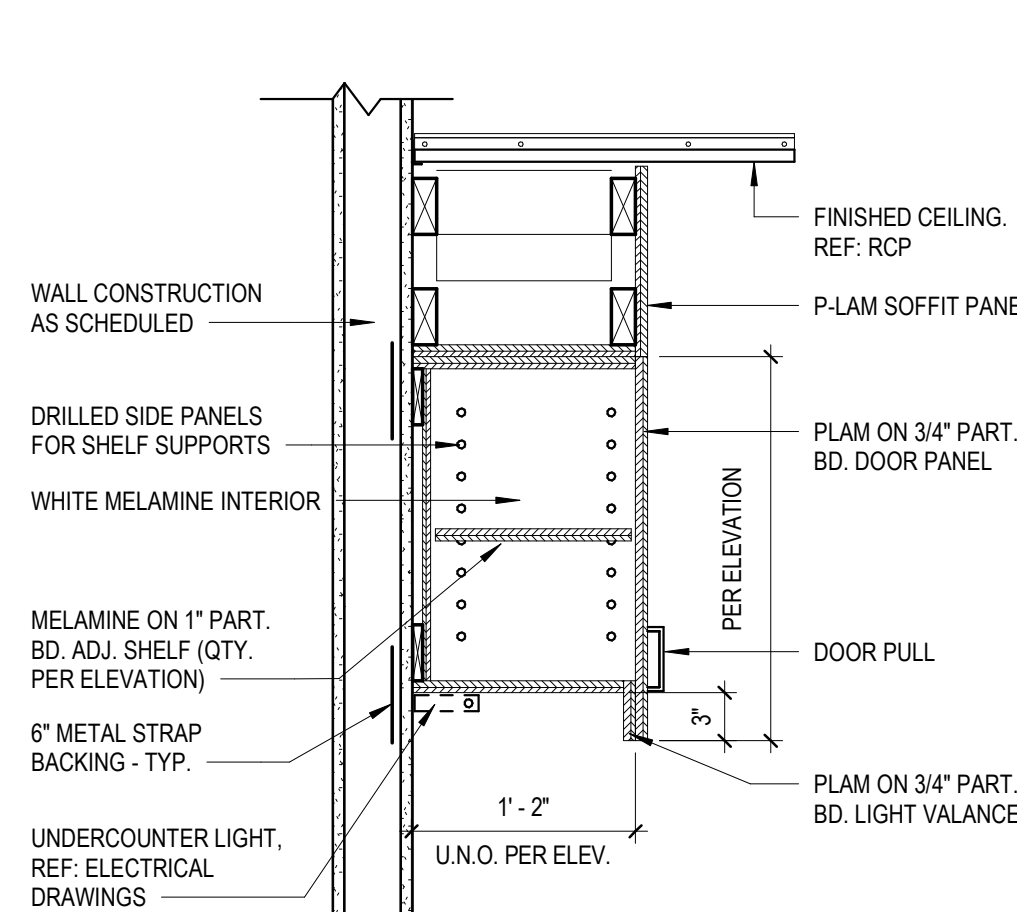
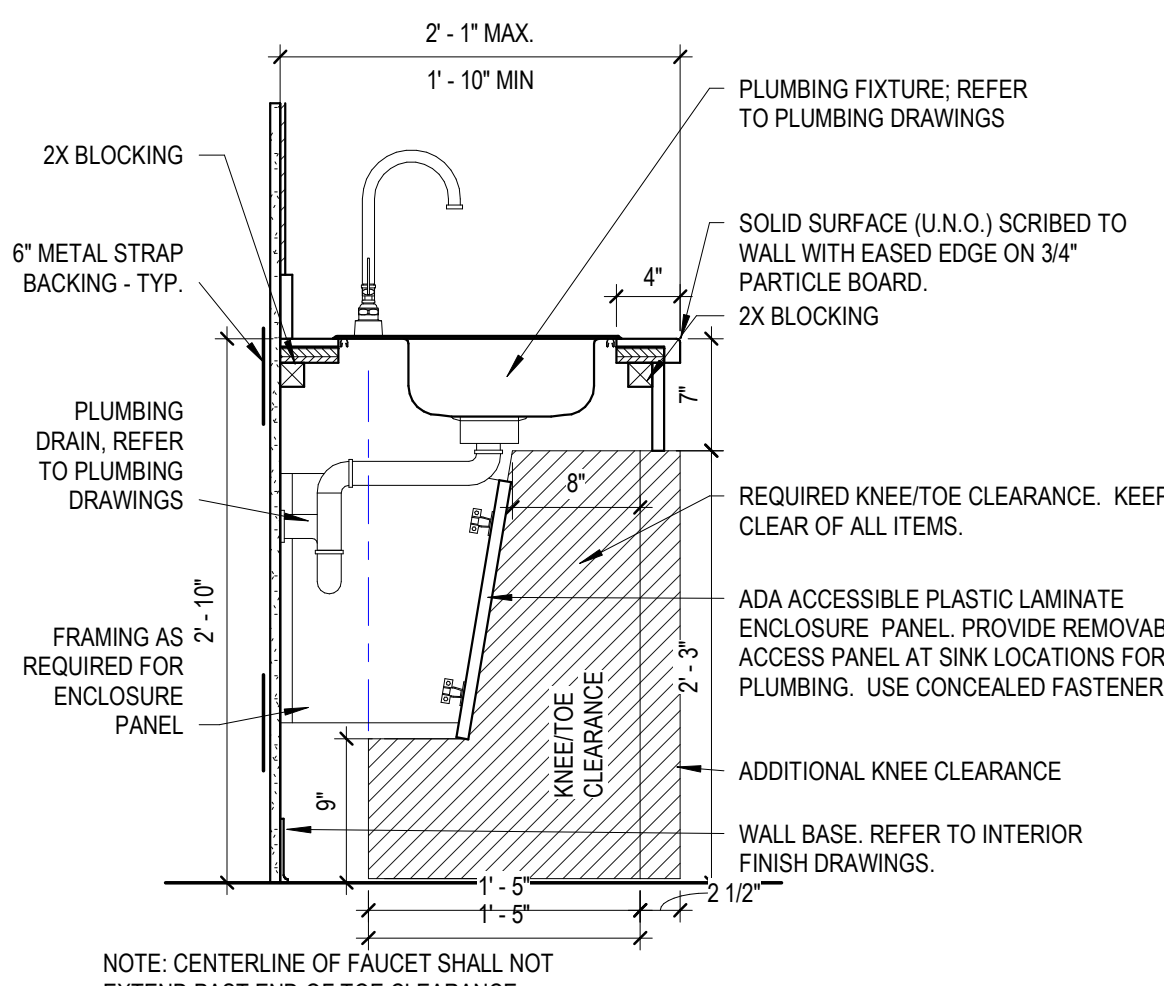
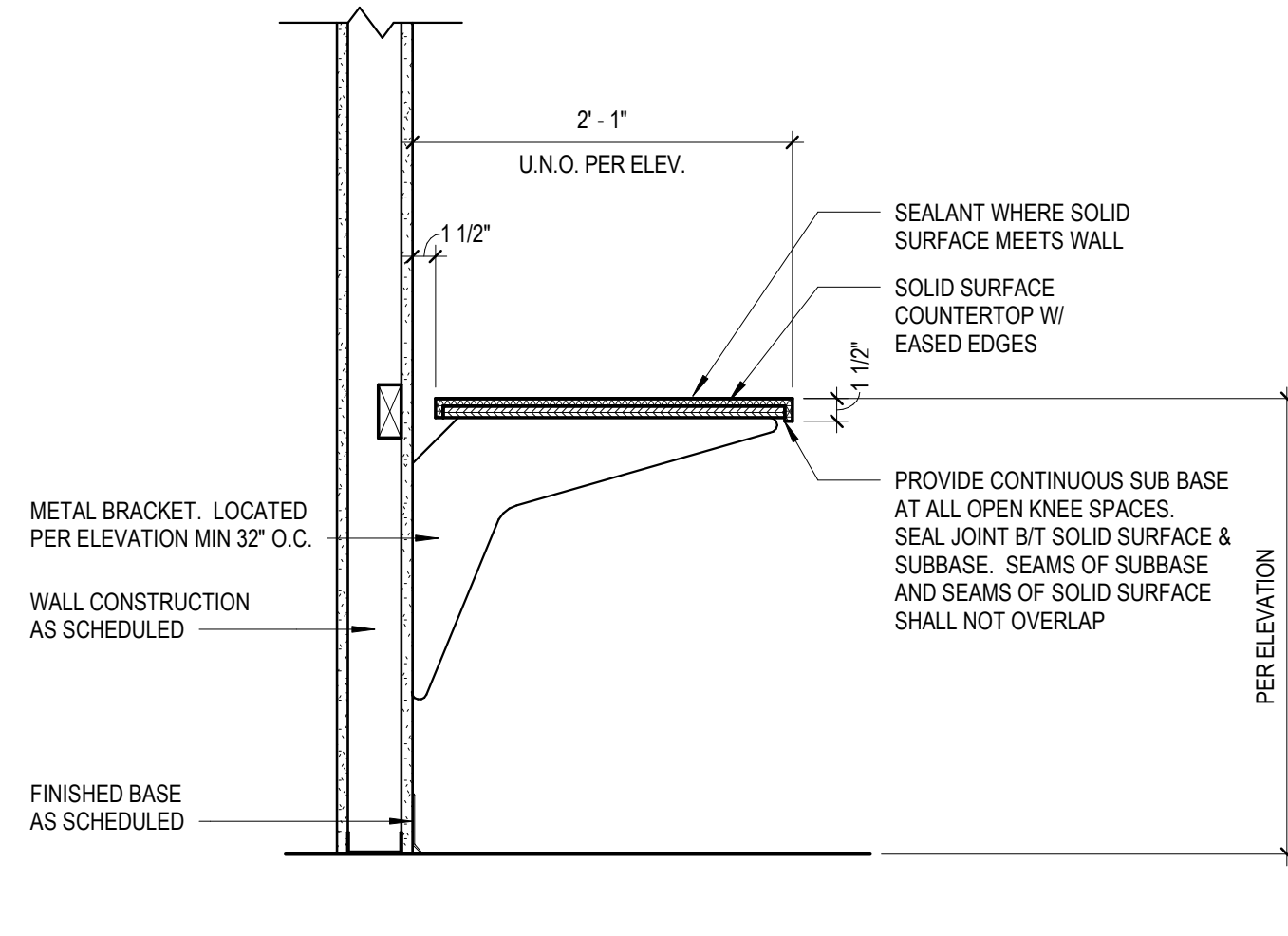
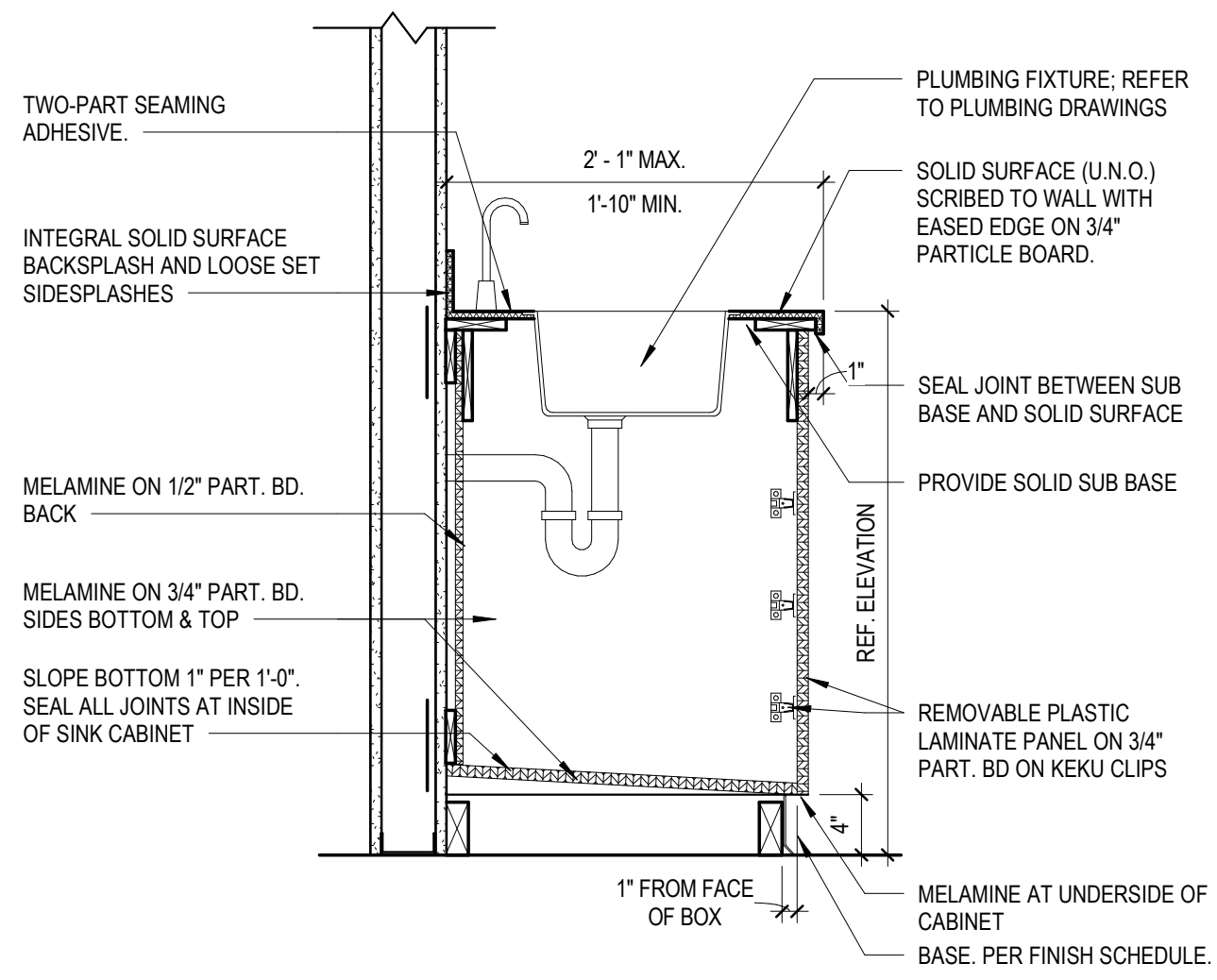
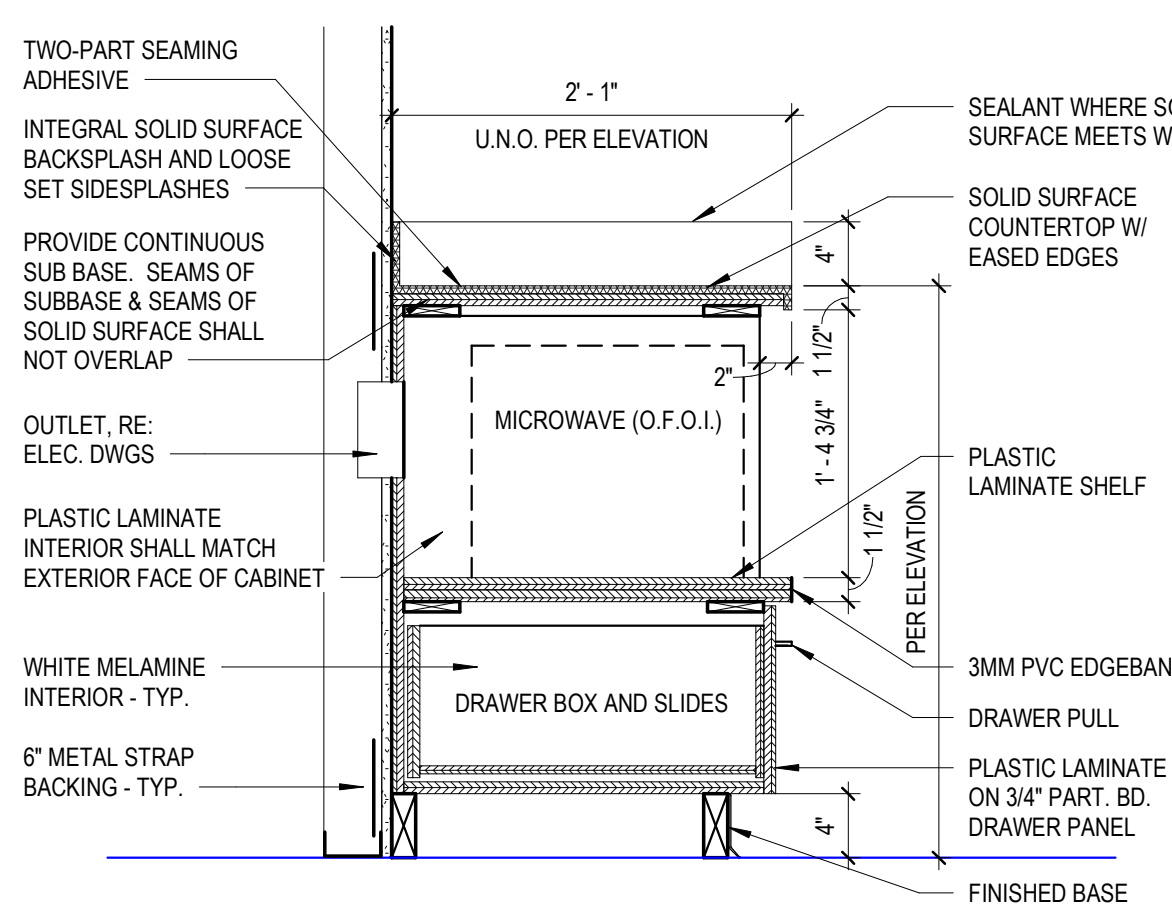
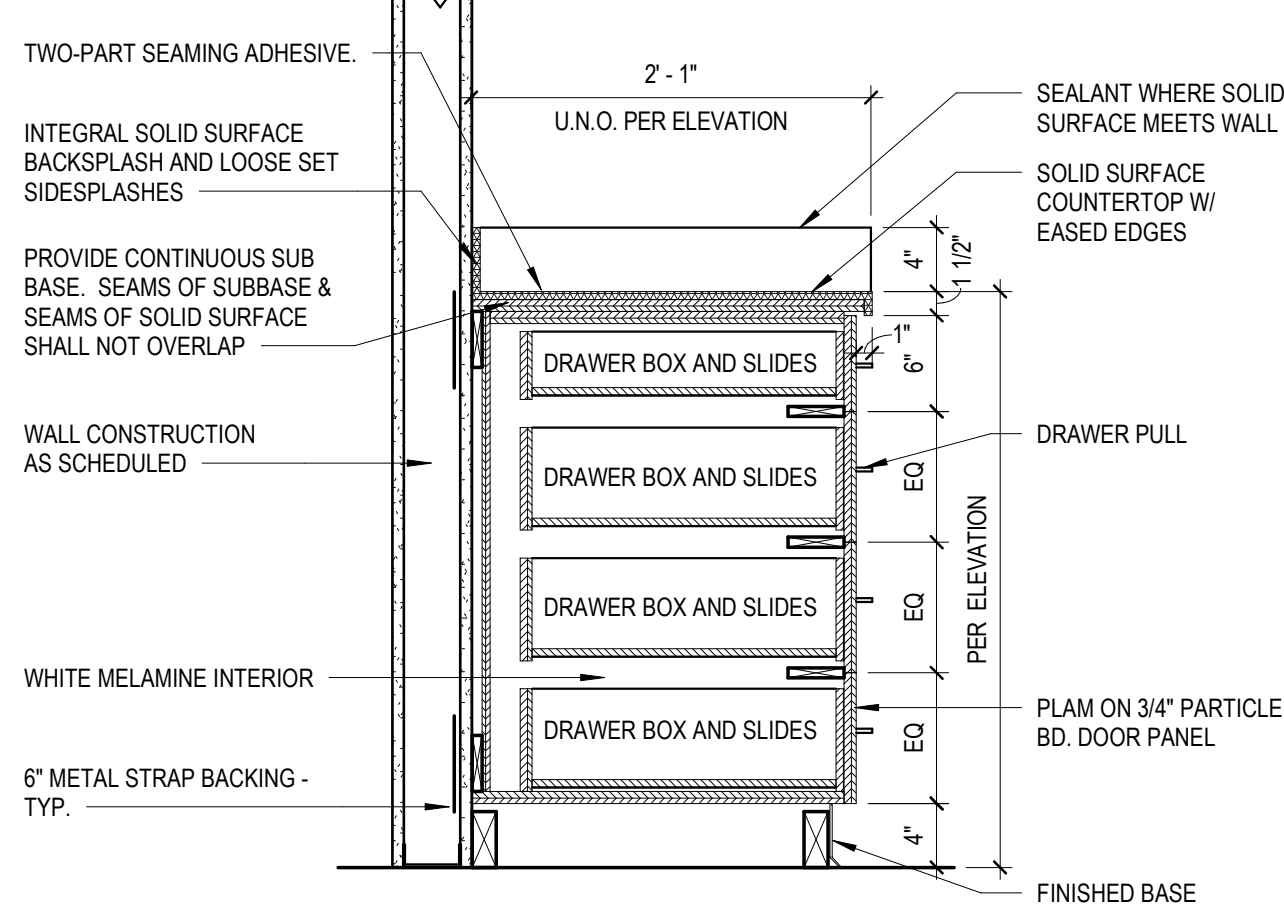
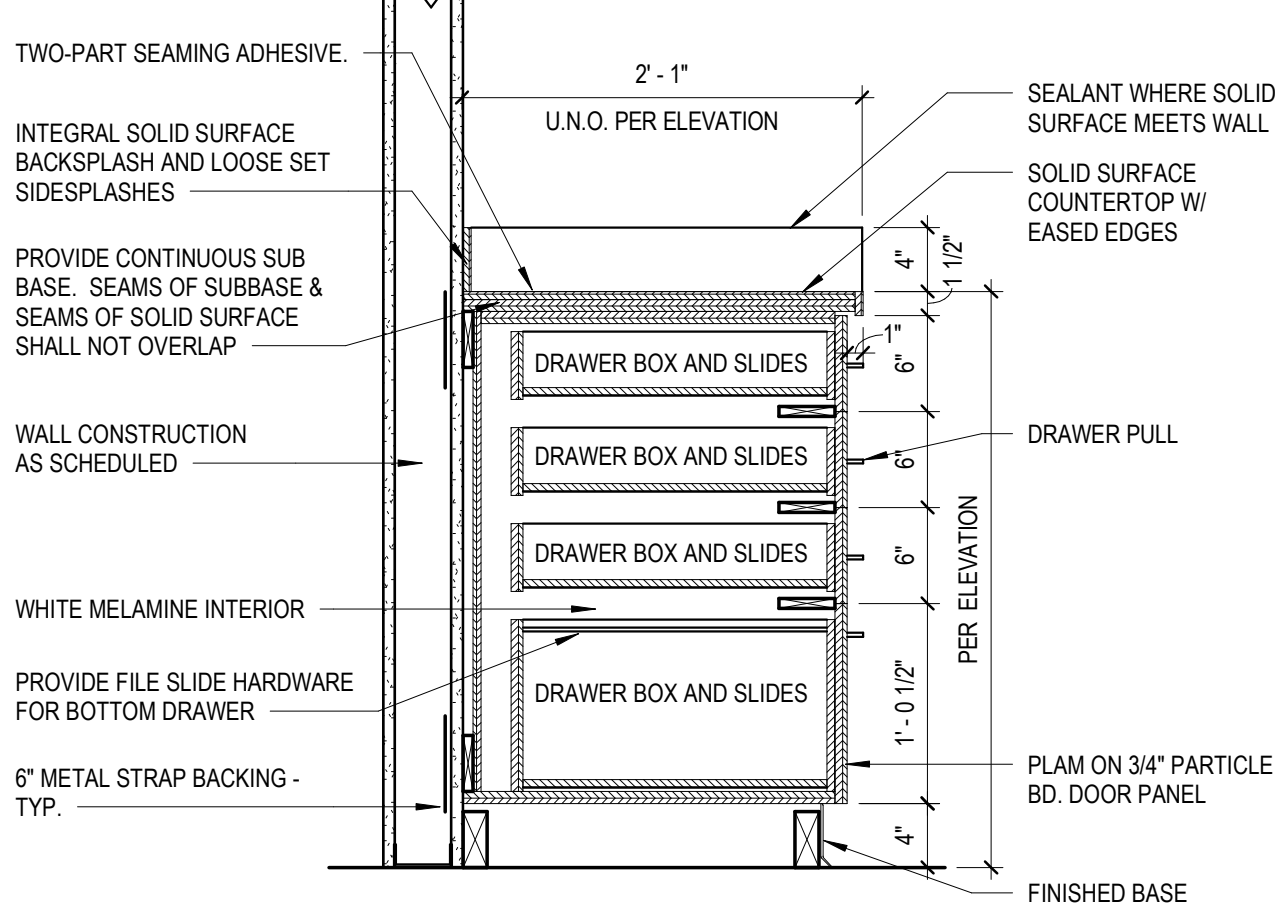
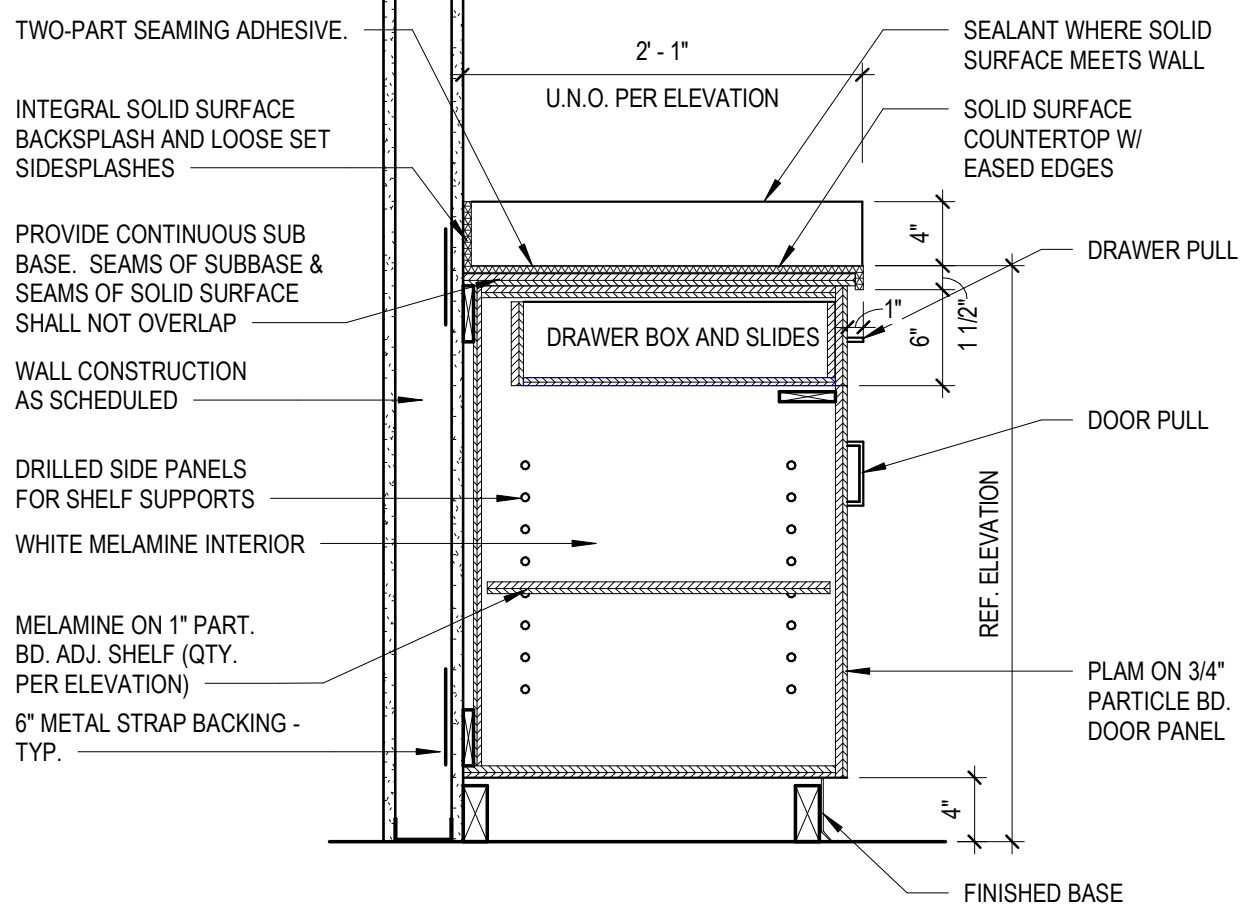
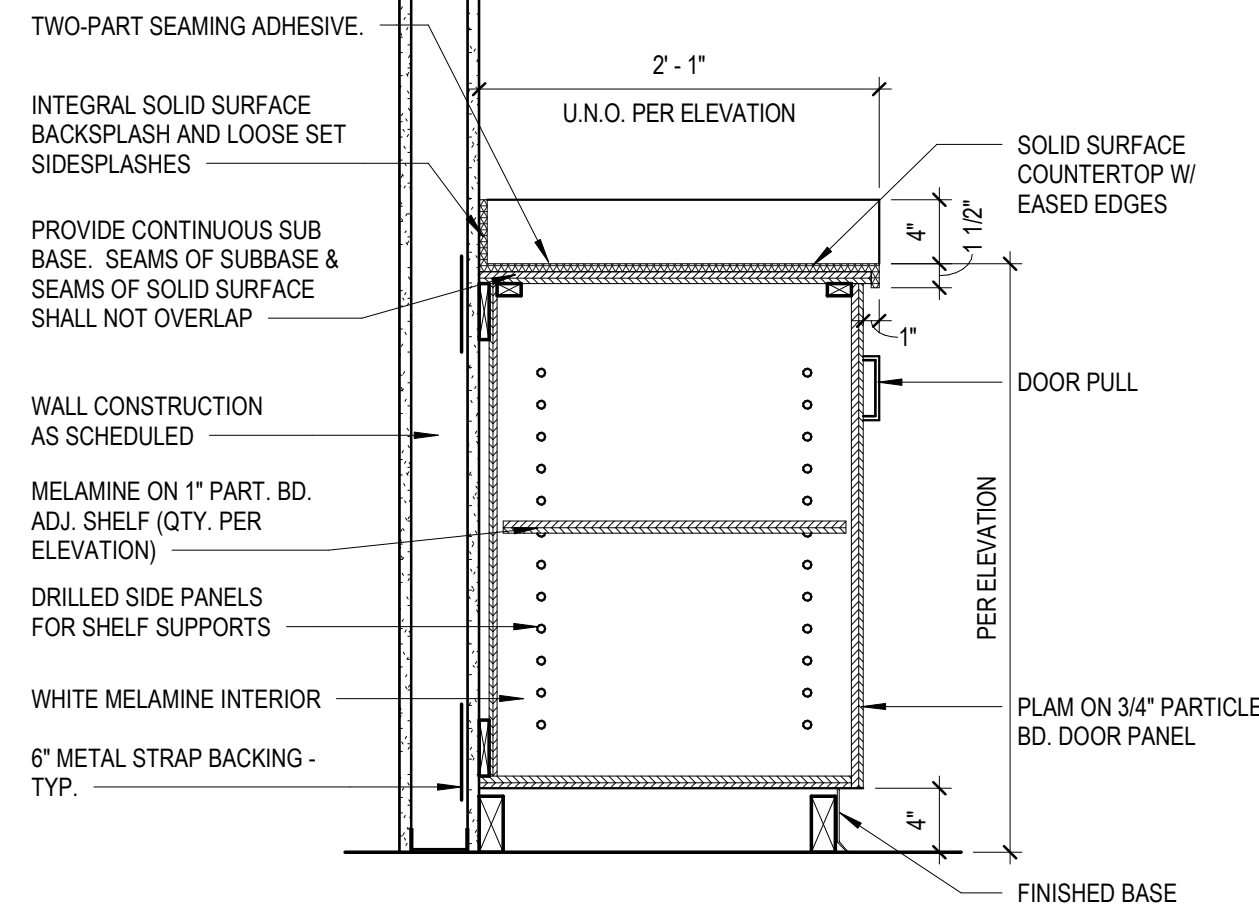
INTERIOR ELEVATIONS  
AND ENLARGED PLANSDATE 03 APRIL 2023  
BSALS PROJECT NO. 14110010

A610

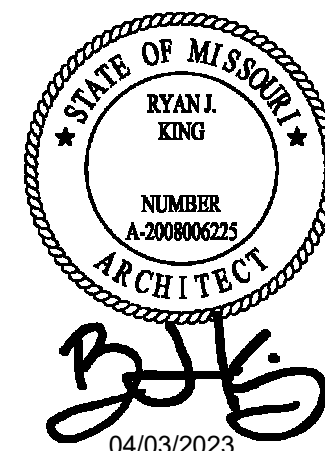
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**13 BREAK ROOM MAIL SLOTS**  
1" = 1'-0"**12 FULL- DOUBLE DOOR- GYP.**  
1" = 1'-0"**11 FULL- DOOR- GYP.**  
1" = 1'-0"**10 UPPER- MICRO - GB**  
1" = 1'-0"**9 UPPER- UCL- P-LAM**  
1" = 1'-0"**8 ADA STAINLESS STEEL SINK WITH  
REMOVABLE PANEL - SECTION**  
1" = 1'-0"**7 BASE- OPEN KNEE AT COMPUTER  
WORKSTATION - SS**  
1" = 1'-0"**6 BASE- SINK**  
1" = 1'-0"**5 BASE- MICRO W/ DRAWER- PLAM**  
1" = 1'-0"**4 BASE- (4) DRAWERS- SS**  
1" = 1'-0"**3 BASE- (3) DRAWERS (1) FILE- SS**  
1" = 1'-0"**2 BASE- DOOR W/ DRAWER- SS**  
1" = 1'-0"**1 BASE- DOOR- SS**  
1" = 1'-0"

I hereby certify these drawings and/or specifications have been prepared by me, or under my supervision. I further certify that to the best of my knowledge these drawings and/or specifications are as required by and in compliance with the Building Codes of the University of Missouri.



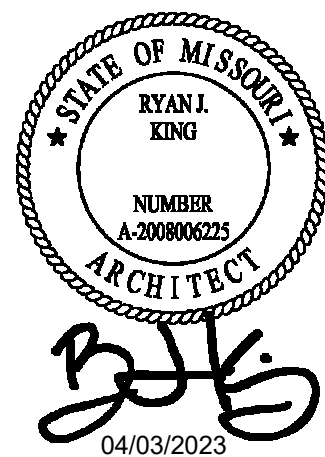
## INTERIOR SECTIONS

DATE: 03 APRIL 2023  
BSALS PROJECT NO.: 14110010



MARK	DATE	DESCRIPTION
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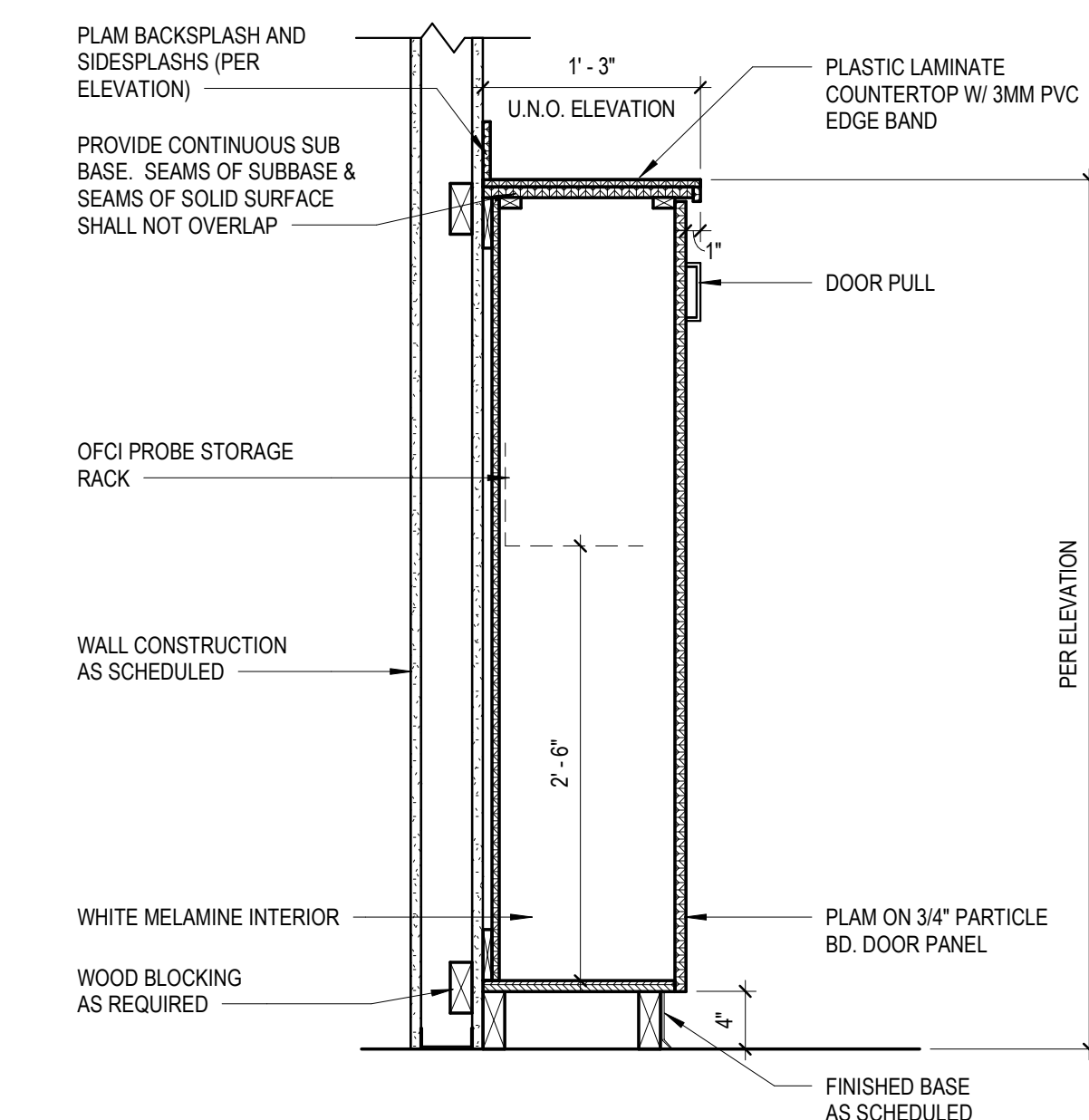


## INTERIOR SECTIONS

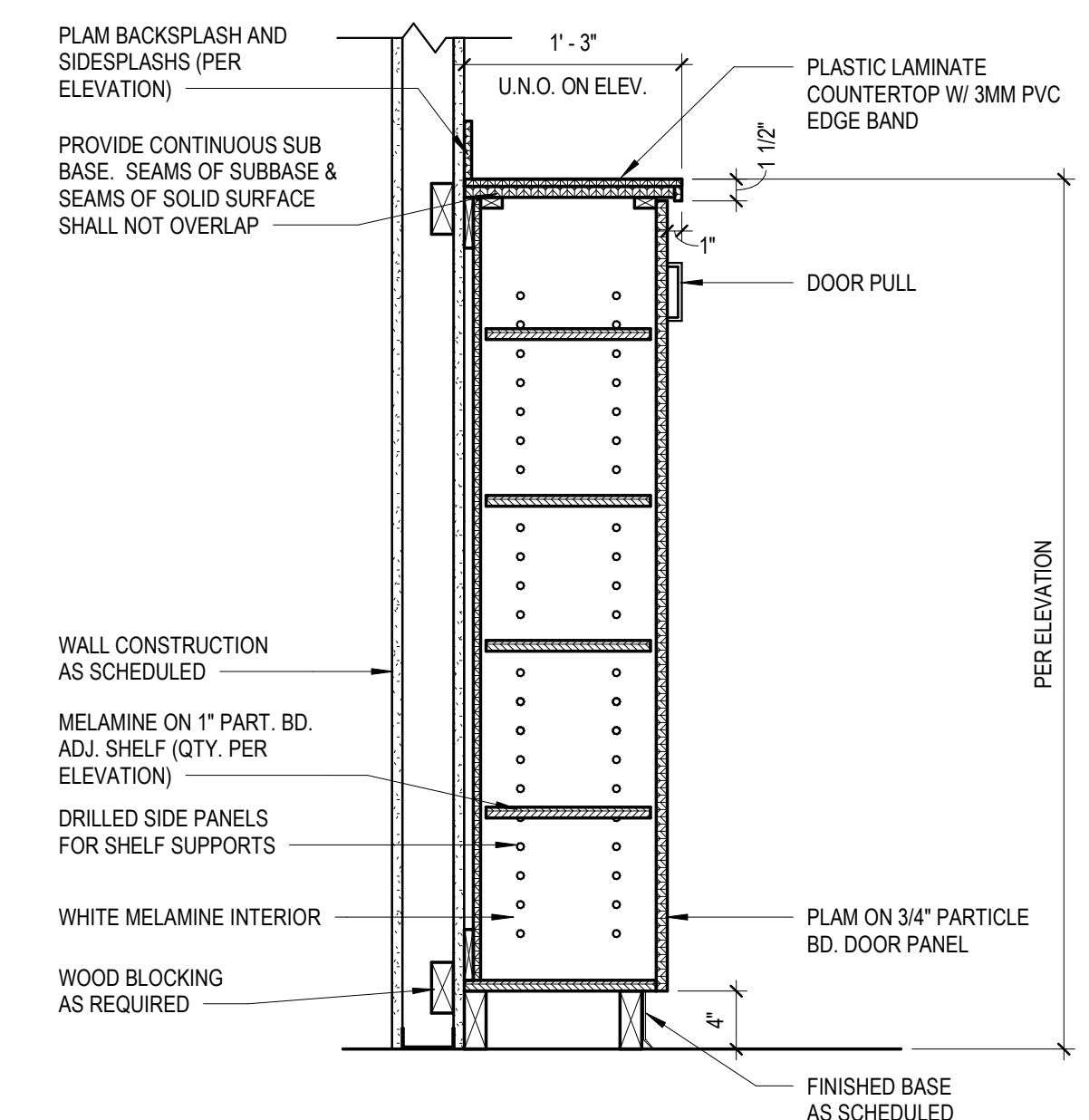
DATE	03 APRIL 2023
BSALS PROJECT NO.	14110010

# A701

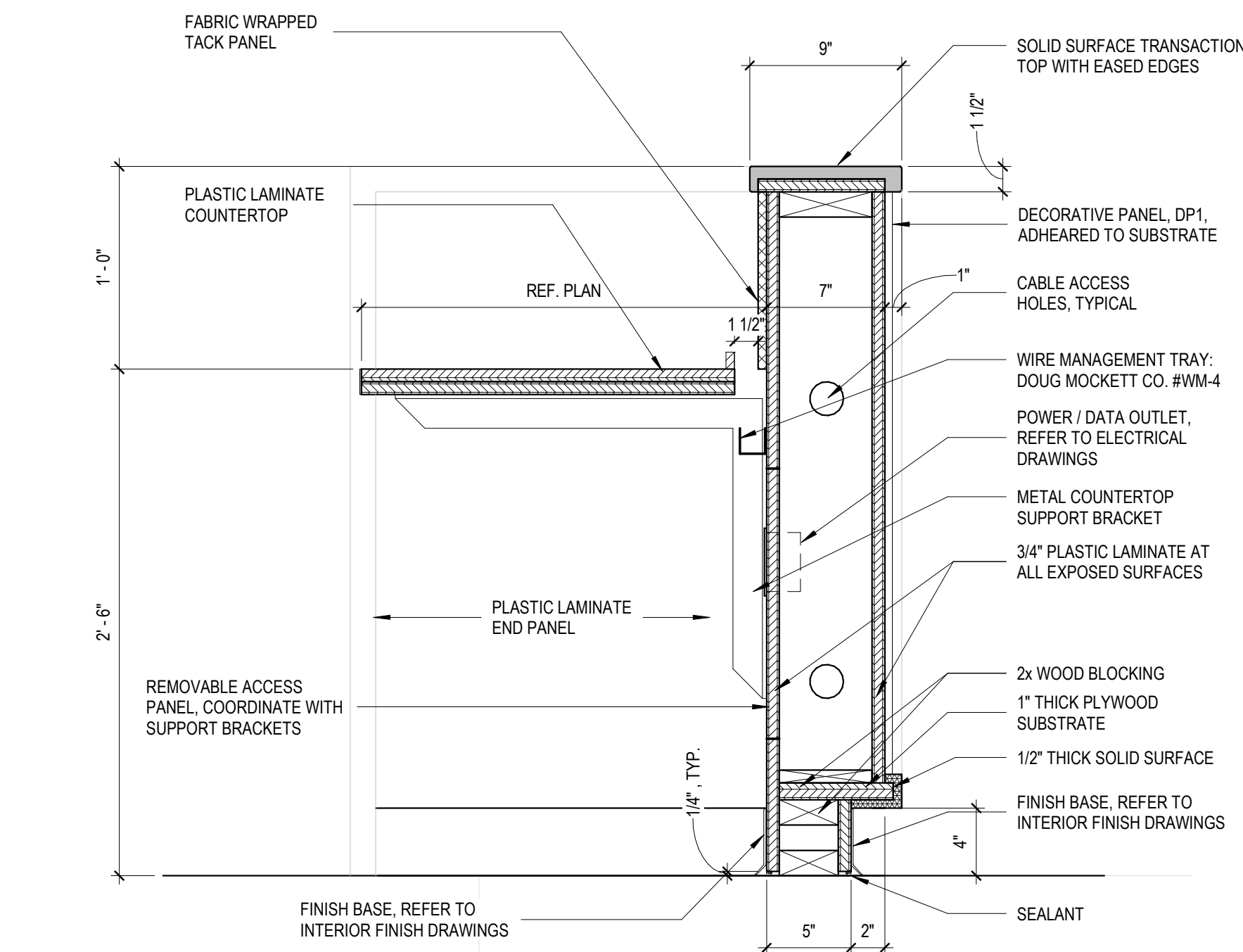
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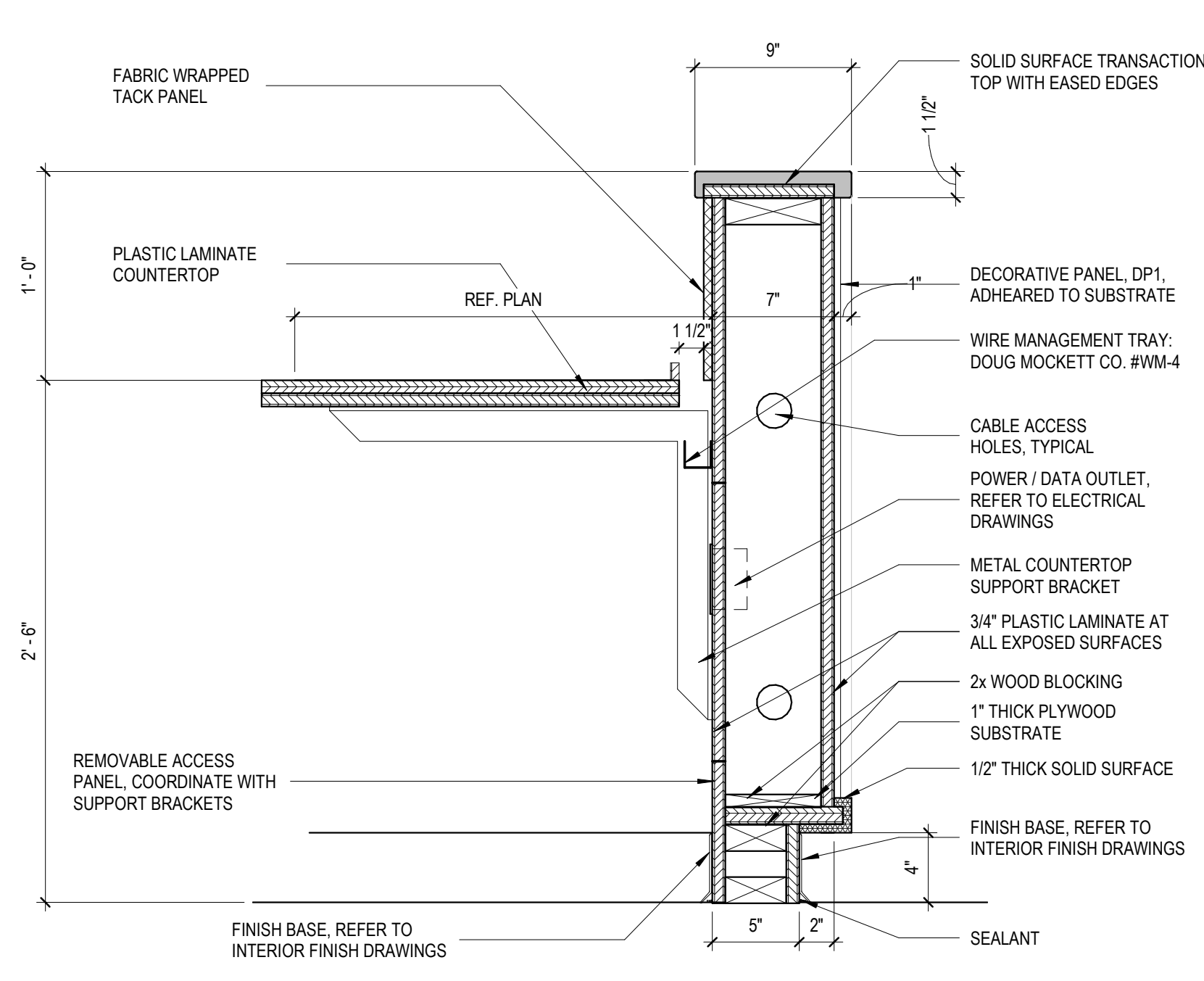
7 SECTION @ PROBE STORAGE CABINET  
1" = 1'-0"



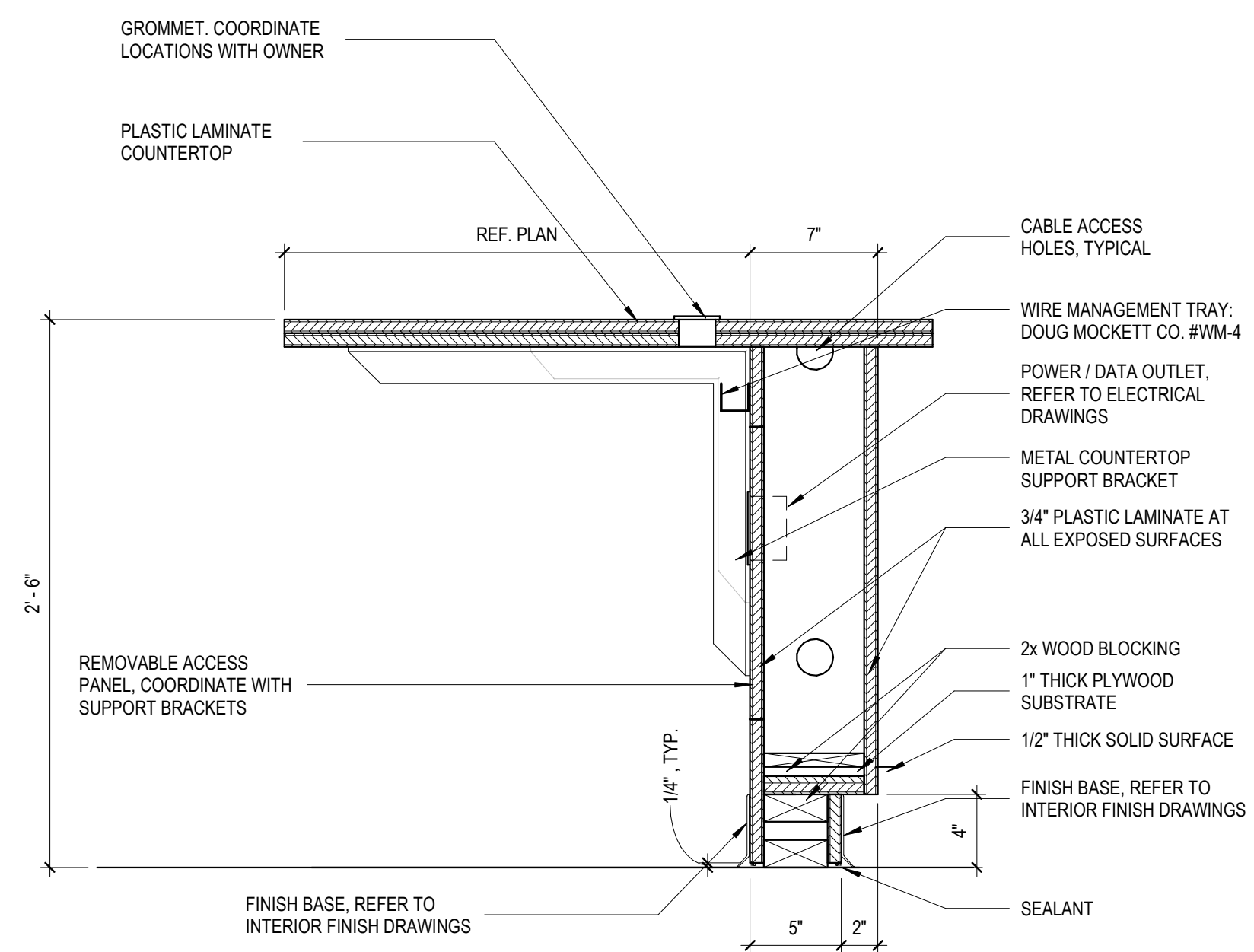
⑥ SECTION @ LINEN SHELVES  
1" = 1'-0"



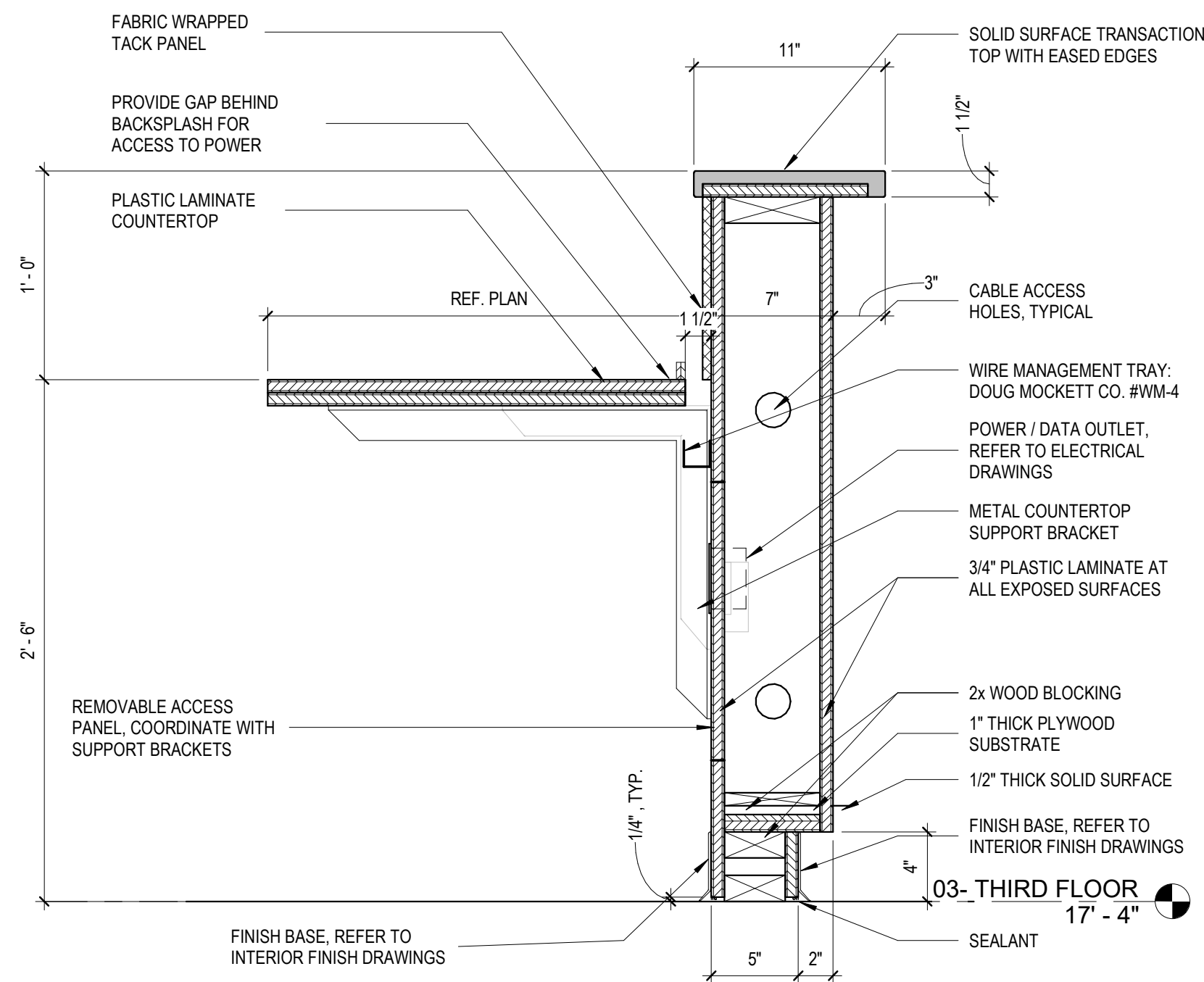
⑤ NURSE STATION SECTION  
1 1/2" = 1'-0"



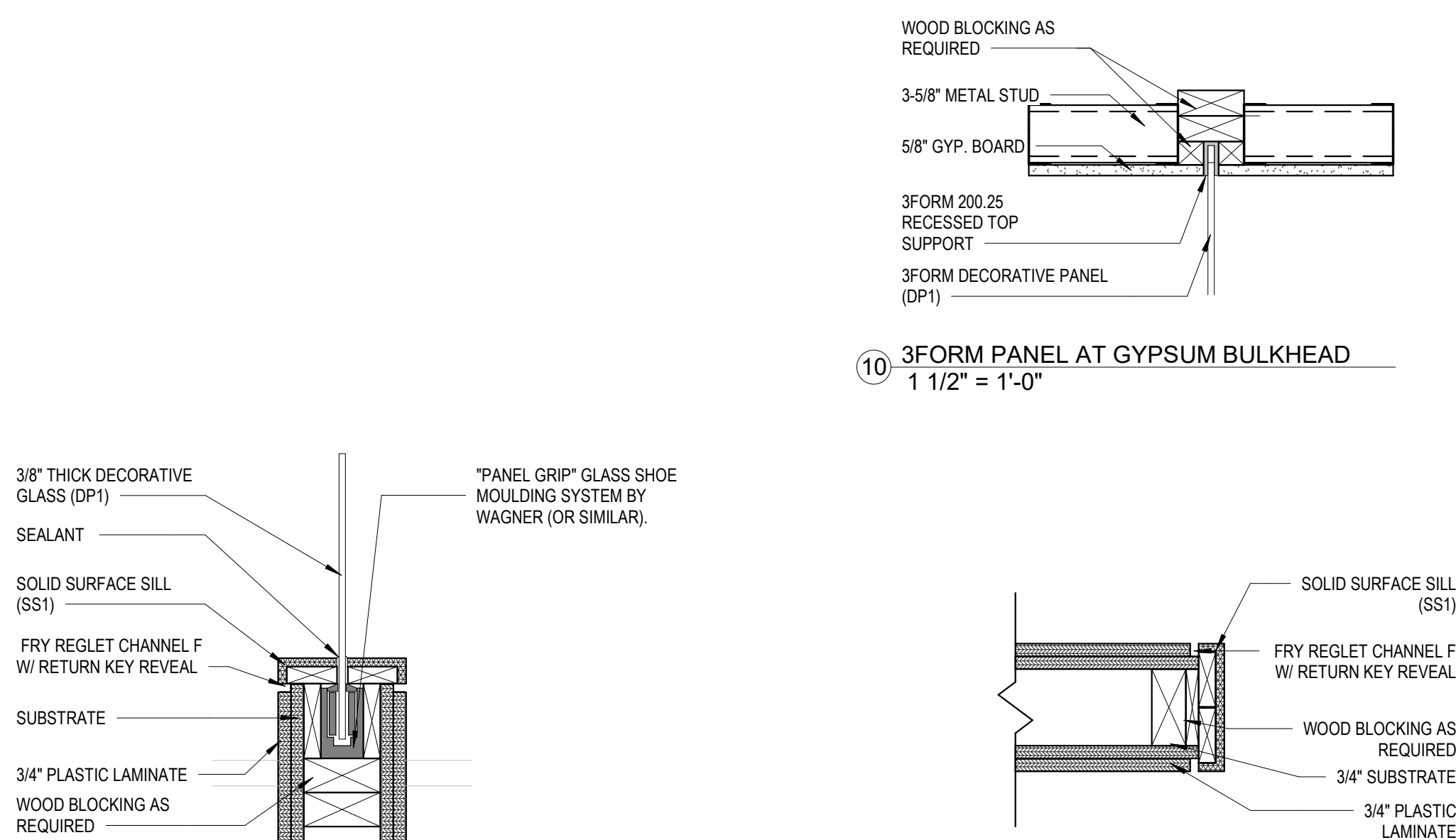
④ NURSE STATION SECTION 2  
1 1/2" = 1'-0"



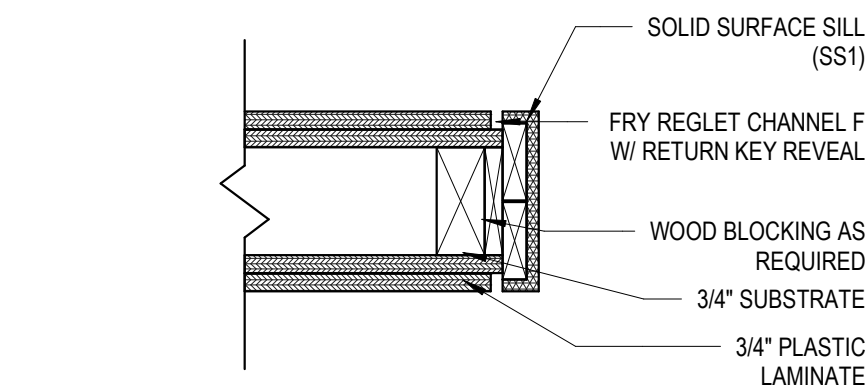
CHECK-IN/CHECK-OUT DESK SECTION -  
ADA  
②  $1\frac{1}{2}" = 1'-0"$



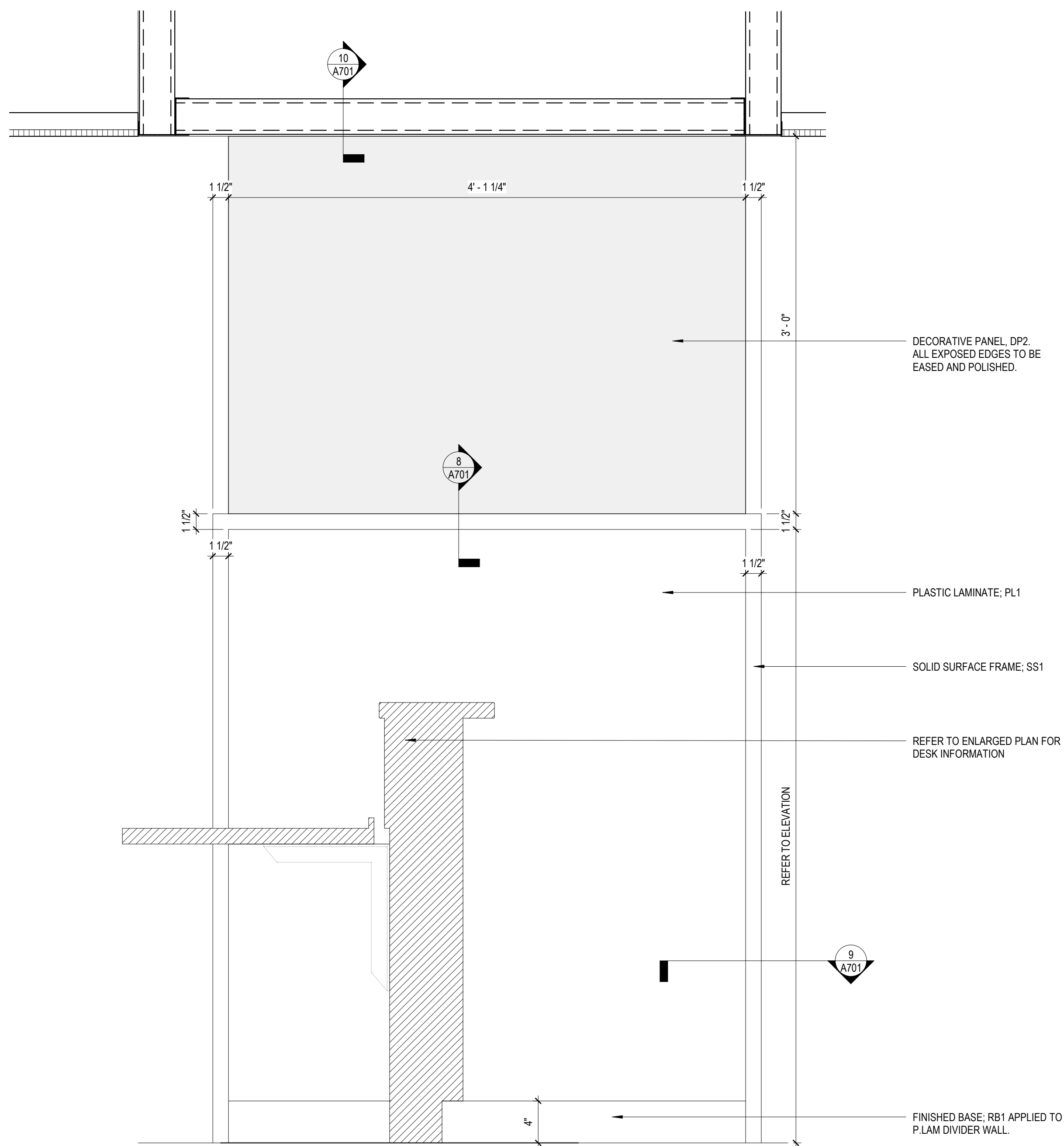
① CHECK-IN/CHECK-OUT DESK SECTION  
1 1/2" = 1'-0"



⑧ 3FORM PANEL AT HALF HEIGHT WALL  
1 1/2" = 1'-0"



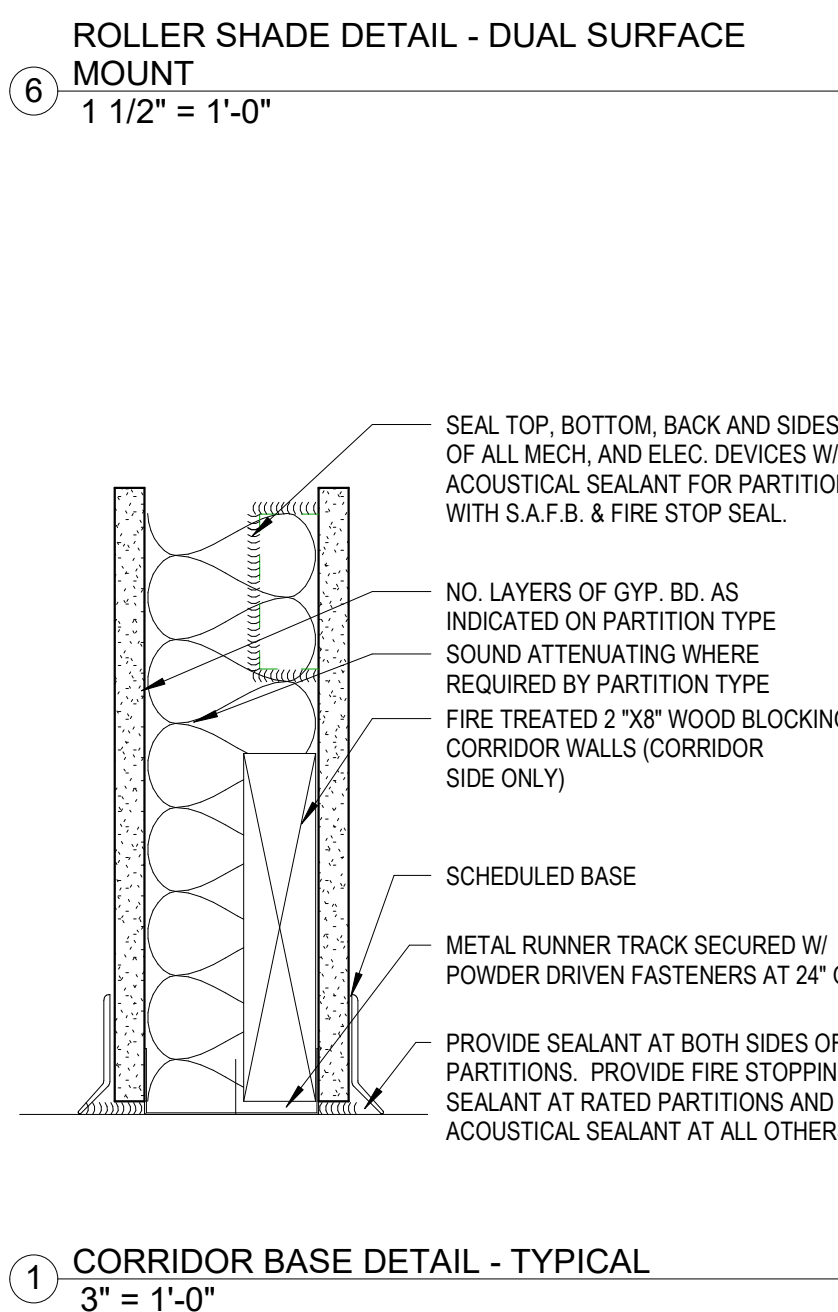
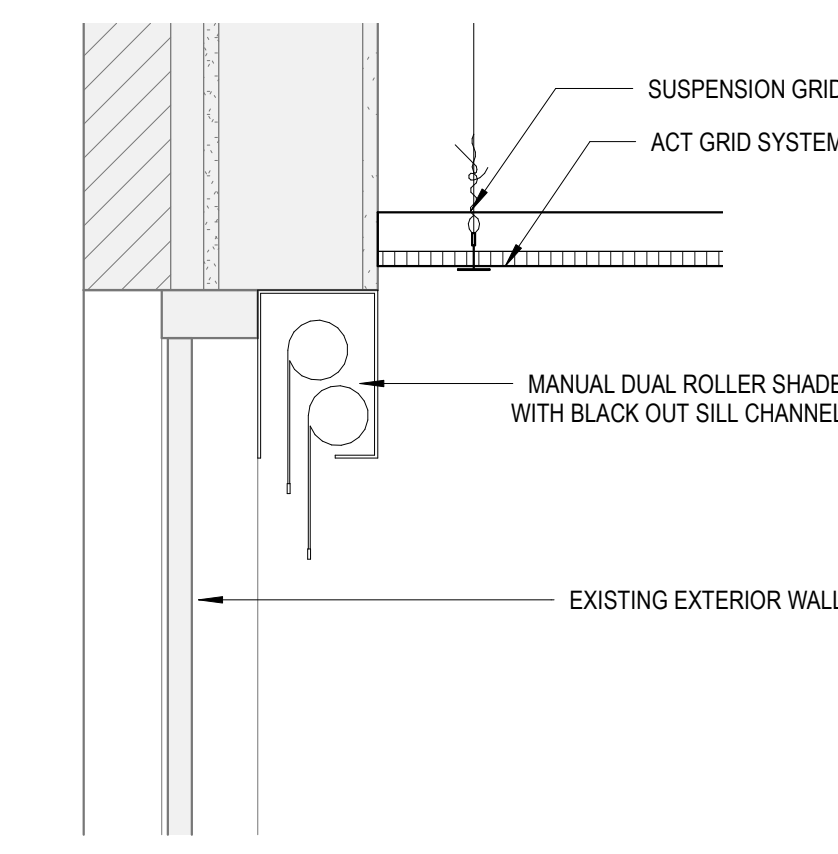
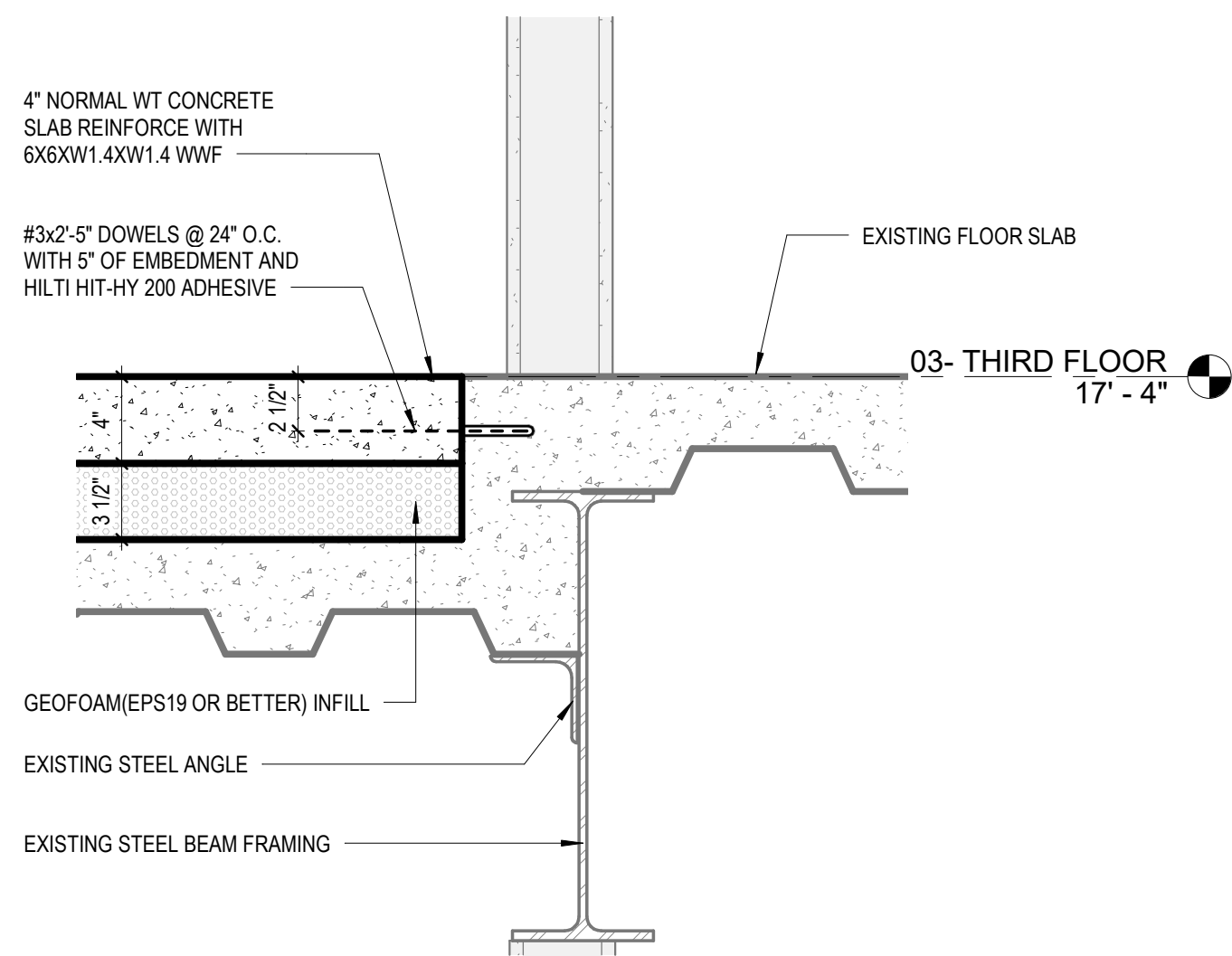
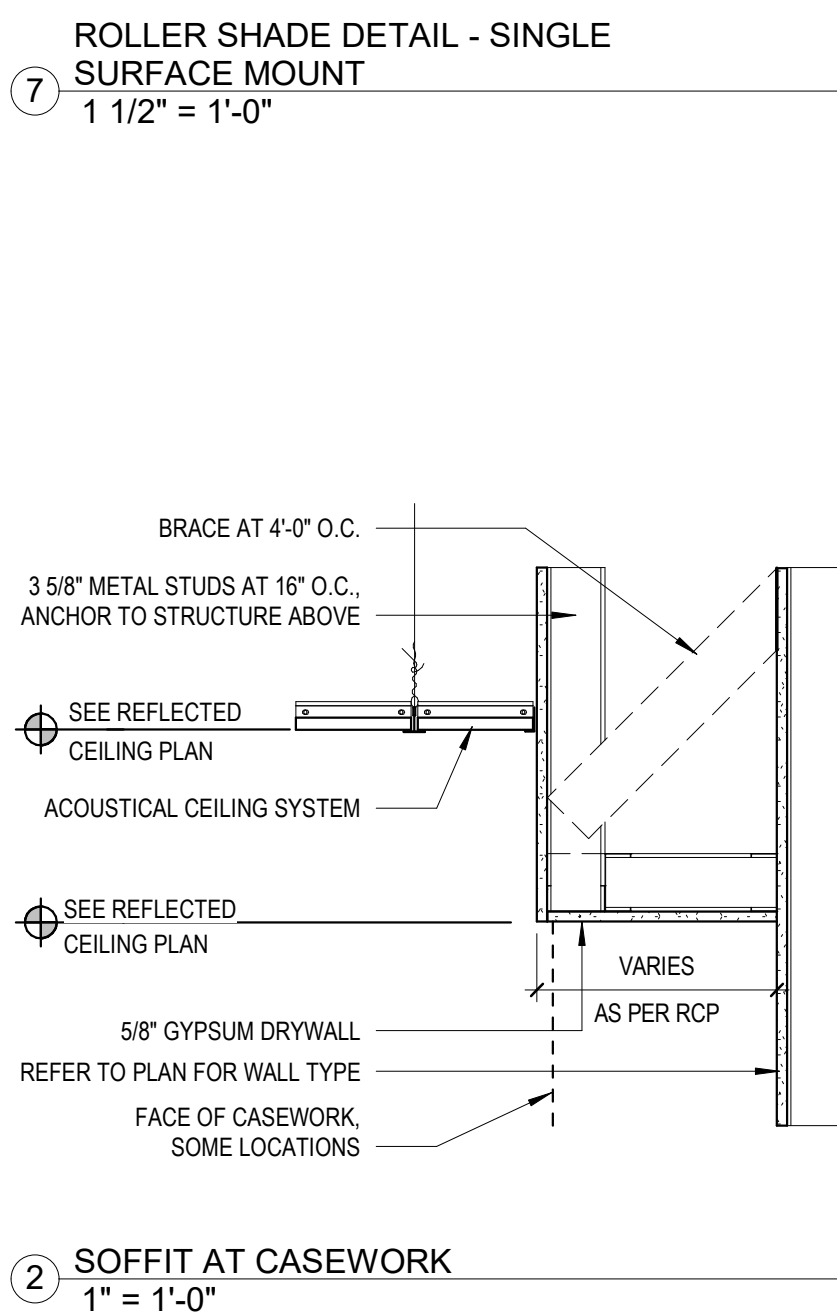
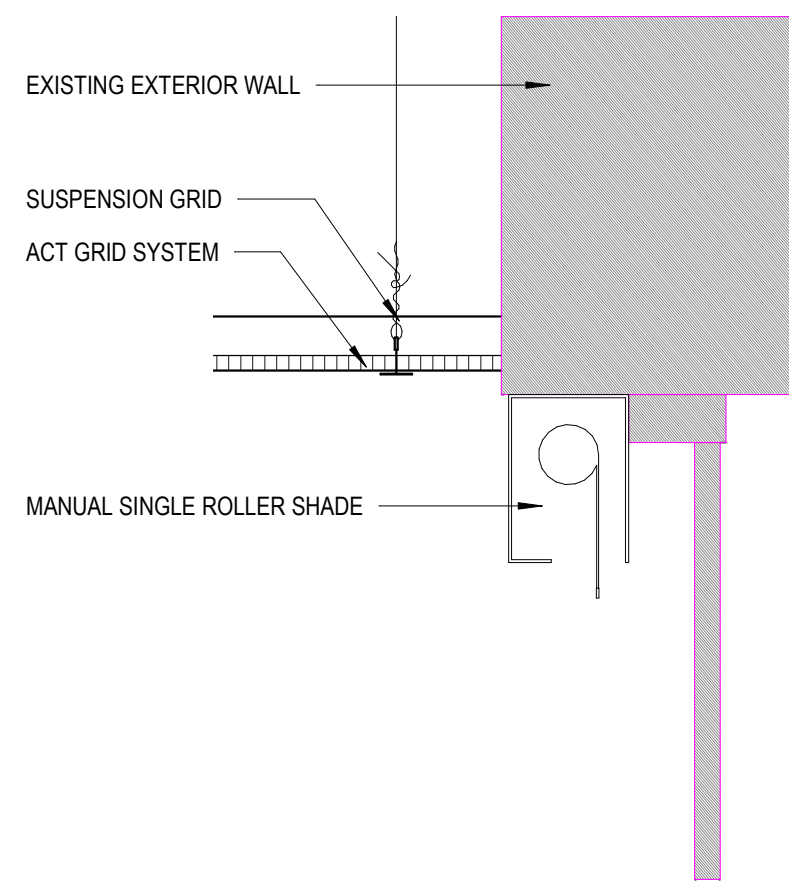
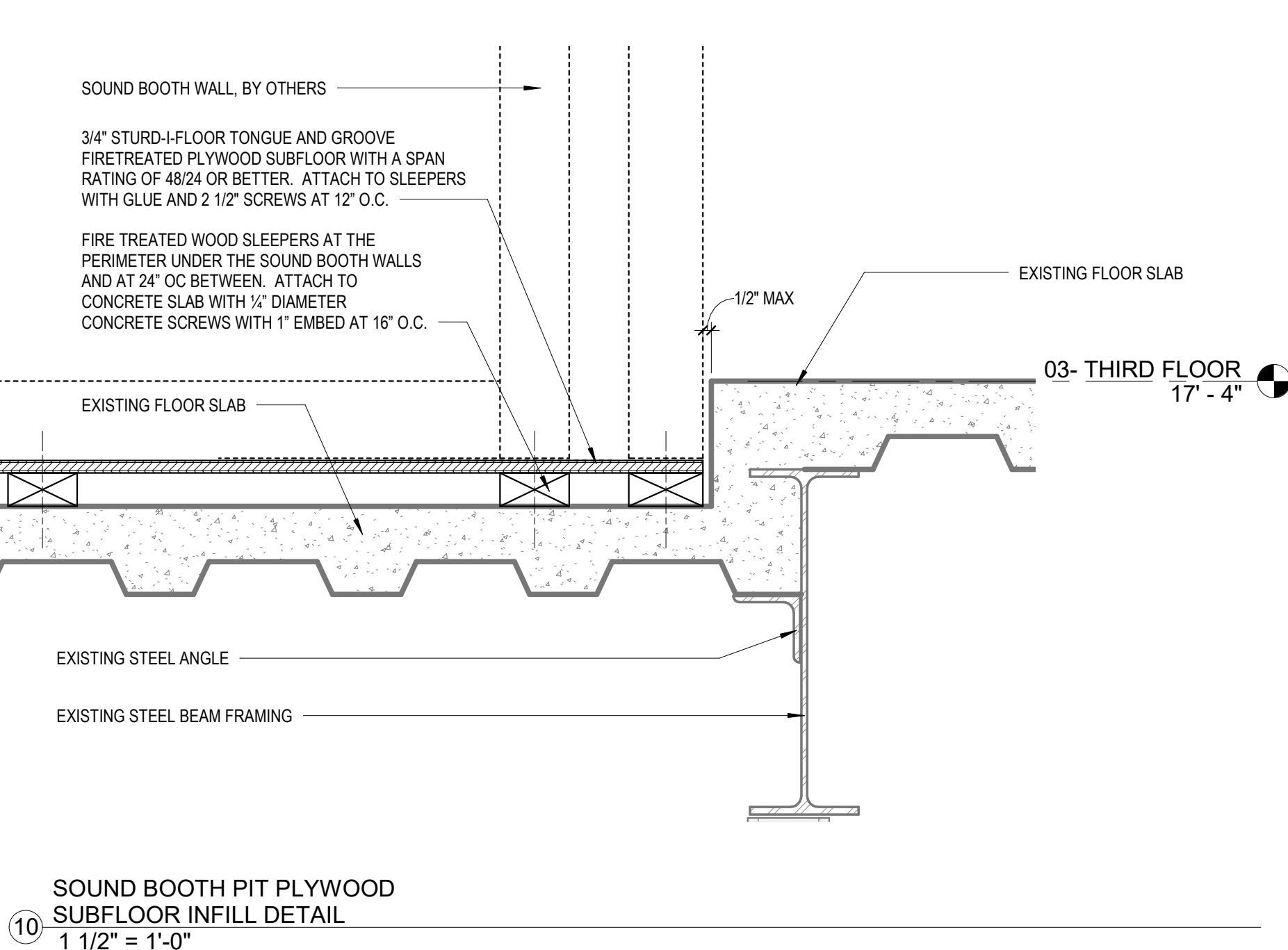
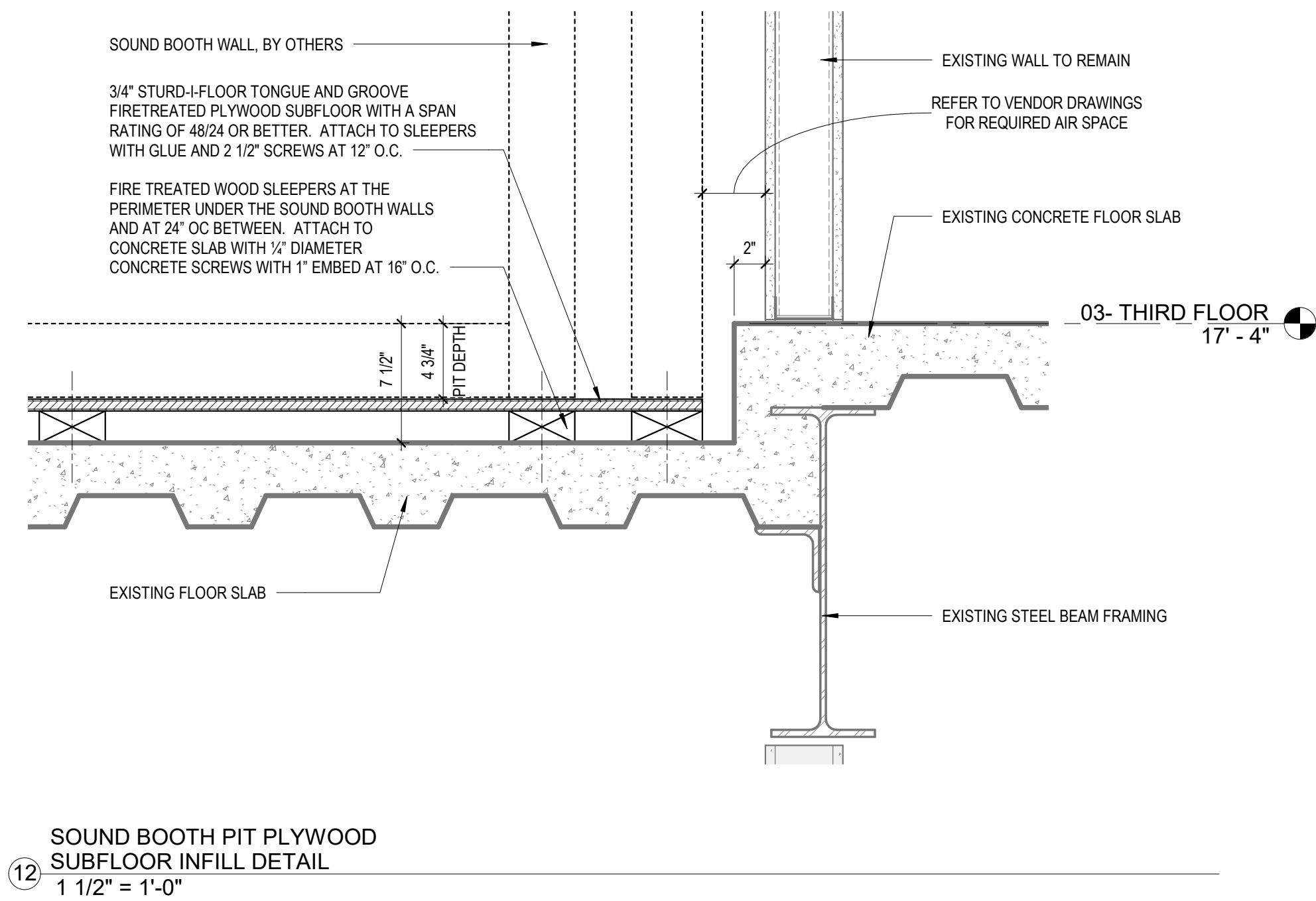
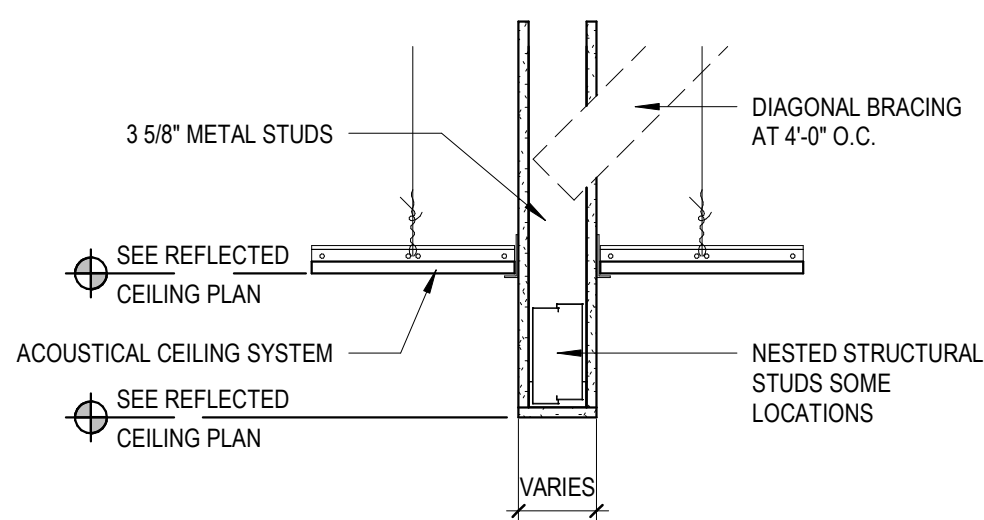
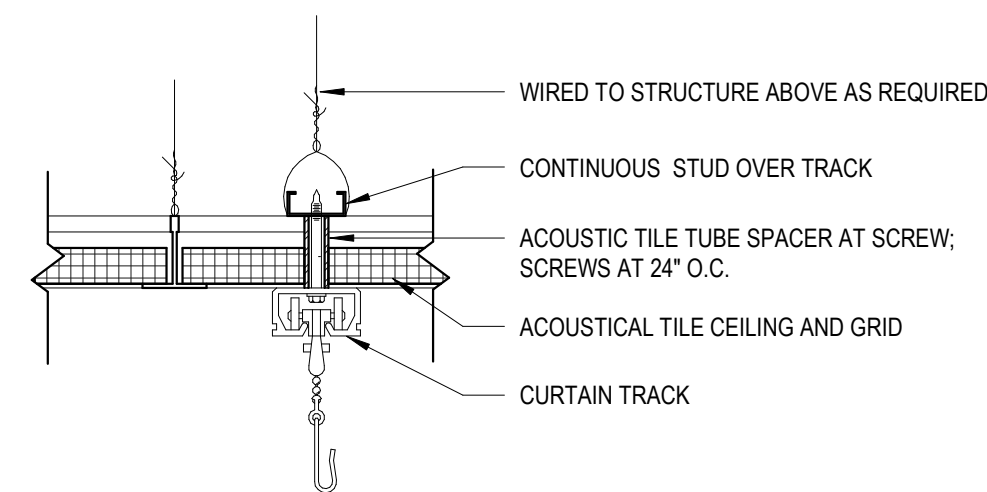
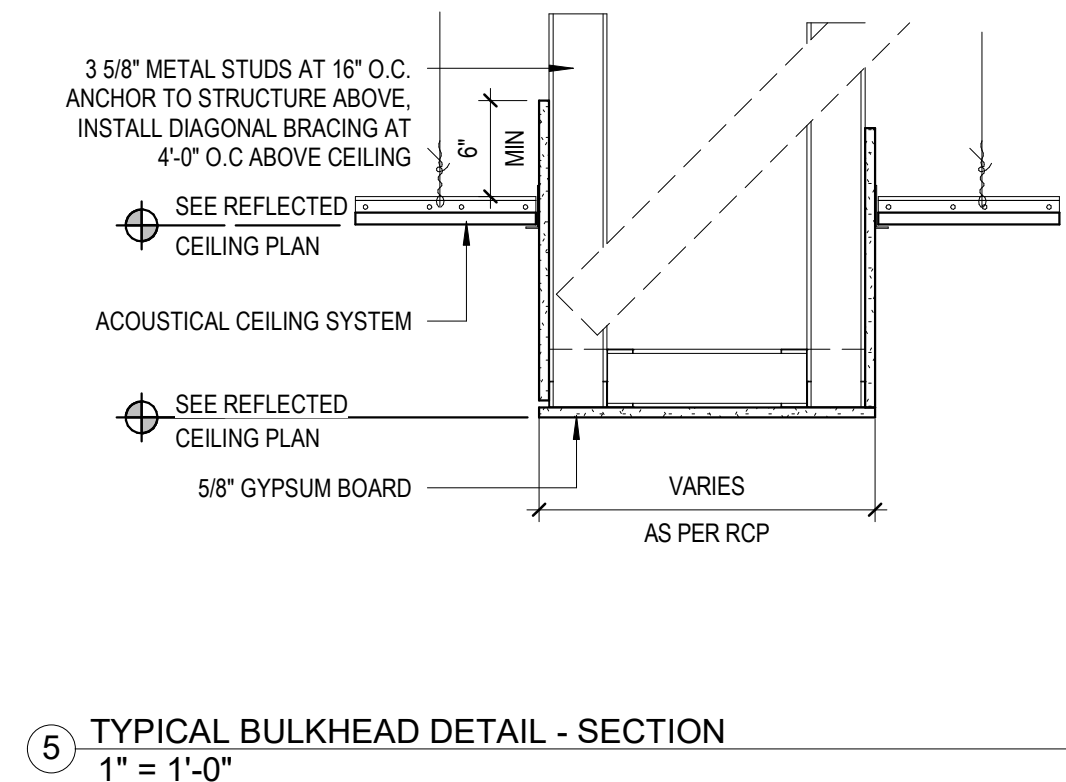
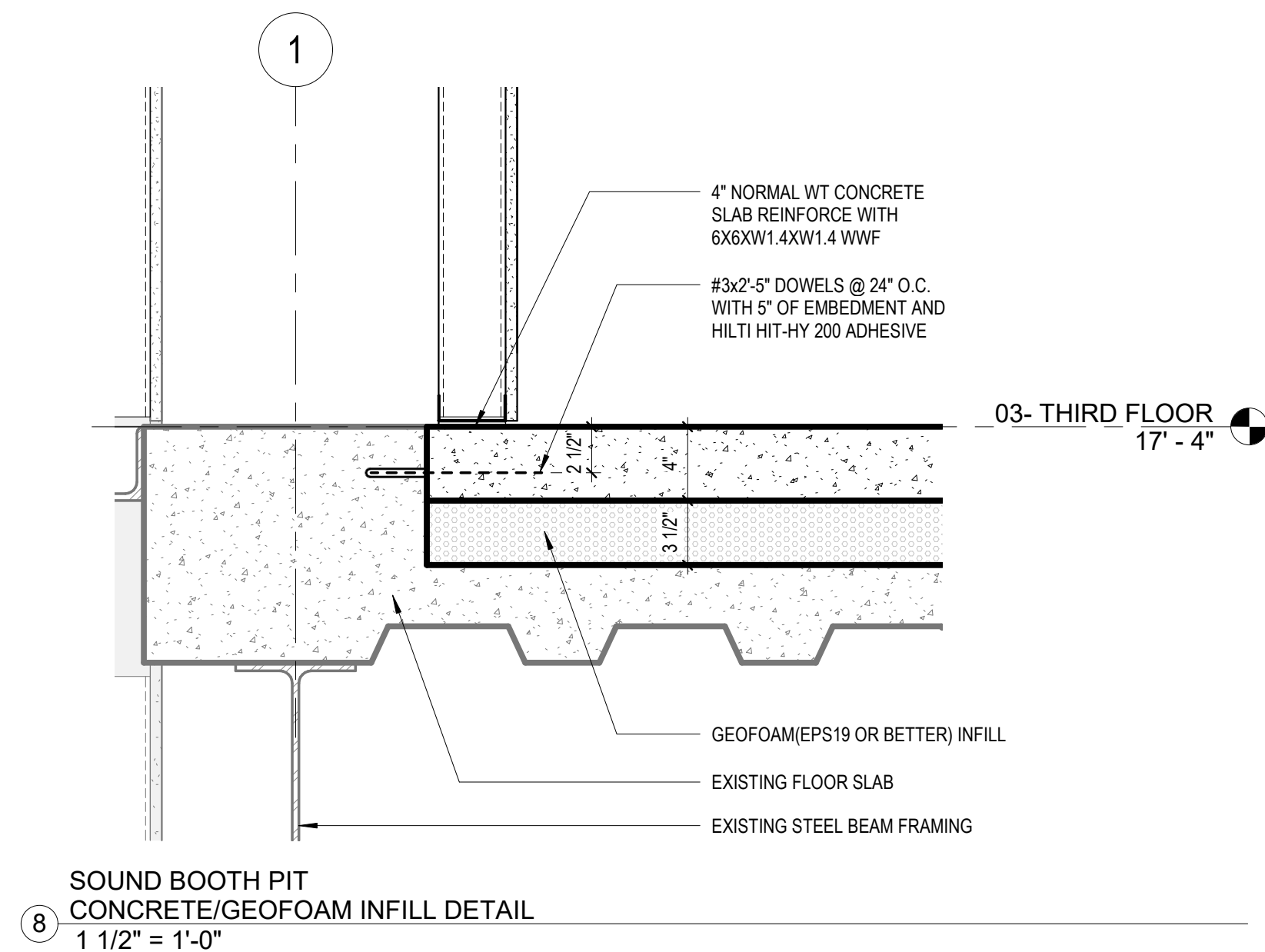
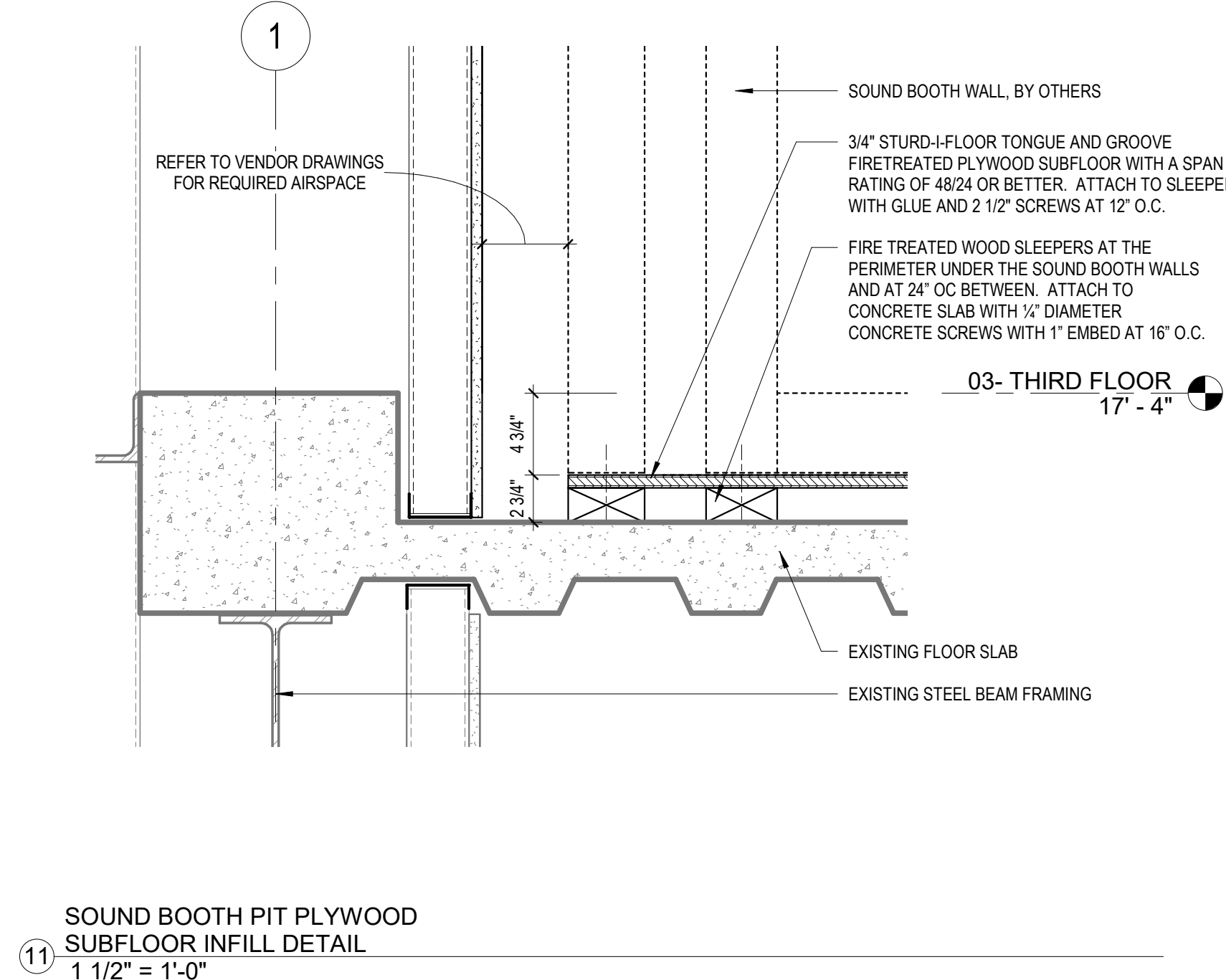
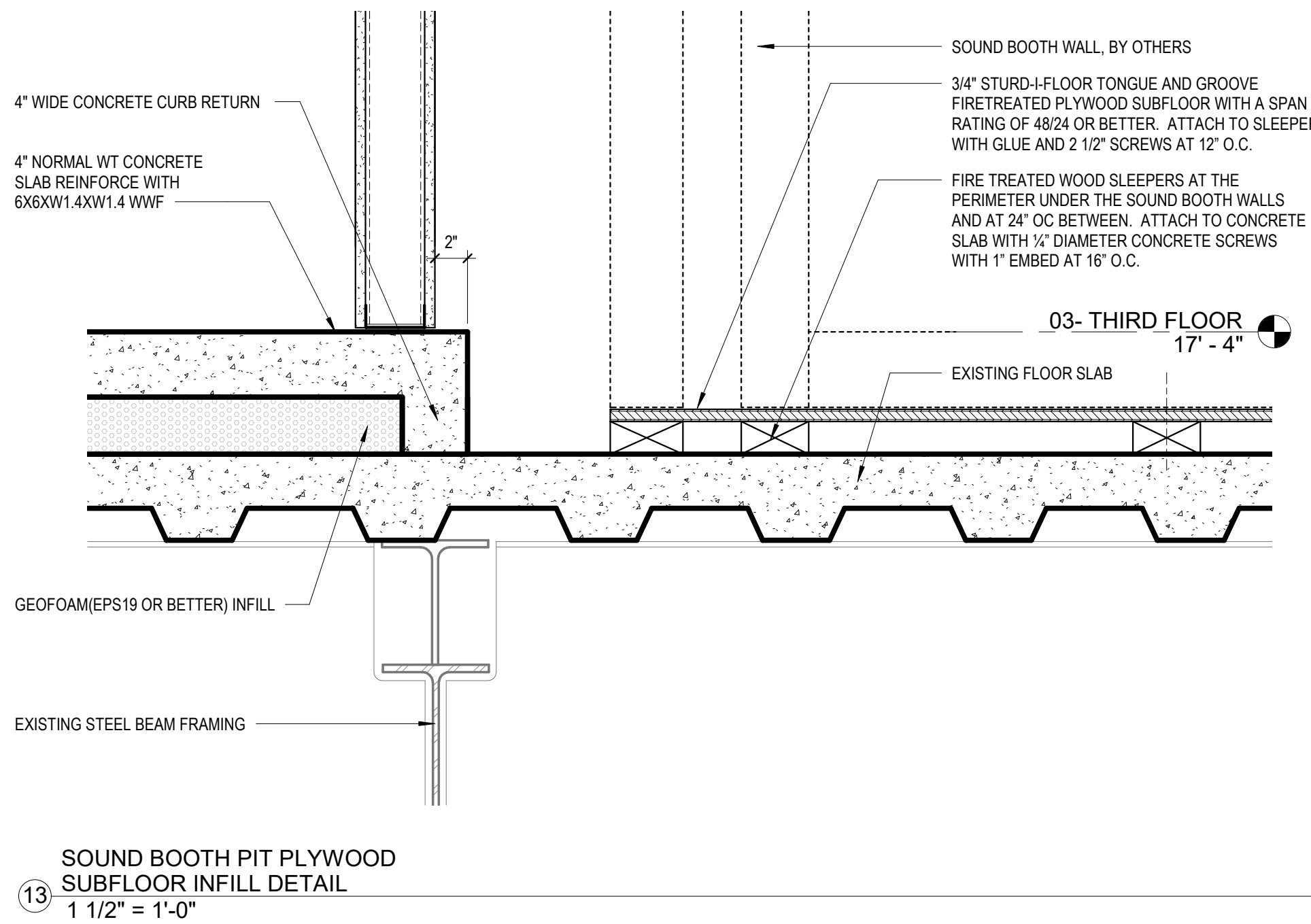
9 SOLID SURFACE END CAP AT HALF HEIGHT WALL  
1 1/2" = 1'-0"



3 CHECK-IN/CHECK-OUT DESK SECTION -  
DIVIDER  
 $1\frac{1}{2}" = 1'-0"$



3/30/2023 4:30:25 PM  
BIM 360://4410010 - UPMB Renovation - 3rd Floor/4410010-ARCH-BSALS\_0201.rvt  
User: Ryan J. King  
Status: Approved  
APPROVED



BSA

BSA LifeStructures  
12645 Olive Blvd, Suite 100  
Creve Coeur, MO 63141  
ph 314.754.6306 fx 314.754.4452  
Missouri State Certificate of Authority #F00518223



MEP ENGINEERING:  
Introba Inc.  
6 S Old Orchard Ave  
St. Louis, MO 63119  
ph 314.918.8383 www.introba.com  
Missouri State Certificate of Authority #2023008136



LIGHTING ENGINEERING:  
Timberlake Engineering  
912 Old Highway 63 South  
Columbia, MO 65201  
ph 573.875.4365 ext 209 www.customengr.com  
Missouri State Certificate of Authority #000239



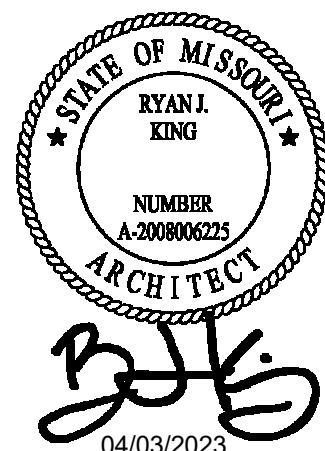
MU PROJECT NO. - CP221943  
**UNIVERSITY PHYSICIANS  
MEDICAL BUILDING - 3RD  
FLOOR RENOVATION**

1020 Hitt St. Columbia, MO 65212

BID SET

MARK	DATE	DESCRIPTION
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INTERIOR DETAILS

DATE	03 APRIL 2023
BSALS PROJECT NO.	14110010

A800

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INTERIORS- FINISH SPECIFICATIONS-ORG

MARK:	MANUFACTURER:	STYLE:	NUMBER:	COLOR:	SIZE:	COMMENTS:	CONTACT:
CARPET							
CP1	MANNINGTON COMMERCIAL	SEEDS	83377	PHOENIX	18" x 36"	VERTICAL ASHLAR INSTALLATION METHOD	KRISTEN KOMIS, KRISTEM_KOMIS@MANNINGTON.COM
CORNER GUARD							
CG1	CS GROUP	ACROVYN CORNER GUARD	SM-20AN #305	MUSHROOM #305	4" TALL CORNER GUARD	BOTTOM OF CORNER GUARD TO START AT TOP OF BASE	RED RAMSEY, RRAMSEY@MMSTLKC.COM
CRASH RAIL							
CR1	INPRO	2500 CHAIR RAIL	0258	CHINO	2" PROFILE	-	TOM FORSTER,TFORSTER@INPROCORP.COM
CUBICLE CURTAIN							
CC1	MOMENTUM	SONG	09194986	JULEP	72" WIDTH, RAILROADED. REPEAT: 75 1/2"V, 24-12"H	ON THE RIGHT TRACK TRACK SYSTEM - ORDER (x2) AMOUNT SHOWN	MICHELE LAND, MLAND@MOMTEX.COM
DECORATIVE PANEL							
DP1	3FORM	VARIA Ecoresin GO GO - SANDSTONE FINISH	114" THICK	CASTAWAY	--	AVALANCE OPAQUE BACKER, DECORATIVE PANEL TO BE ADHERED TO SUBSTRATE	MELISSA BEITHMAN, MELISSA.BEITHMAN@3-FORM.COM
DP2	3FORM	INTERLAYERS - SANDSTONE FINISH	112" THICK	WHISPER	--		MELISSA BEITHMAN, MELISSA.BEITHMAN@3-FORM.COM
EPOXY PAINT							
EP1	SHERWIN WILLIAMS	REFER TO PROJECT MANUAL	SW 7036	ACCESSIBLE BEIGE	--		HANK MEINKING, HANK.MEINKING@SHERWIN.COM
LUXURY VINYL TILE							
LV1	MANNINGTON COMMERCIAL	ACCESS / WOOD	SK5W8000	ASHDOWN PLUM	6" X 36", 0.098" THICKNESS	STAGGERED PLANK METHOD	KRISTEN KOMIS, KRISTEM_KOMIS@MANNINGTON.COM
LV2	MANNINGTON COMMERCIAL	COLOR ANCHOR- STRIDE	C138	COTTONTAIL	6" X 36"	STAGGERED PLANK METHOD - BASEMENT ALTERNATE #1	KRISTEN KOMIS, KRISTEM_KOMIS@MANNINGTON.COM
PAIN							
P1	SHERWIN WILLIAMS	REFER TO PROJECT MANUAL	SW 7036	ACCESSIBLE BEIGE	--	FIELD PAINT	HANK MEINKING, HANK.MEINKING@SHERWIN.COM
P2	SHERWIN WILLIAMS	REFER TO PROJECT MANUAL	SW 0012	EMPIRE GOLD	--	ACCENT AT MFM	HANK MEINKING, HANK.MEINKING@SHERWIN.COM
P3	SHERWIN WILLIAMS	REFER TO PROJECT MANUAL	SW 7617	MEDITERRANEAN	--	ACCENT AT MFM	HANK MEINKING, HANK.MEINKING@SHERWIN.COM
P4	SHERWIN WILLIAMS	REFER TO PROJECT MANUAL	SW 6193	PRIVILEGE GREEN	--	ACCENT AT MFM	HANK MEINKING, HANK.MEINKING@SHERWIN.COM
P5	SHERWIN WILLIAMS	REFER TO PROJECT MANUAL	SW 7710	BRANDYWINE	--	ACCENT AT PEDS	HANK MEINKING, HANK.MEINKING@SHERWIN.COM
P6	SHERWIN WILLIAMS	REFER TO PROJECT MANUAL	SW 9038	CUCUZZA VERDE	--	ACCENT AT PEDS	HANK MEINKING, HANK.MEINKING@SHERWIN.COM
P7	SHERWIN WILLIAMS	REFER TO PROJECT MANUAL	SW 0020	PEACOCK PLUME	--	ACCENT AT PEDS	HANK MEINKING, HANK.MEINKING@SHERWIN.COM
P8	SHERWIN WILLIAMS	REFER TO PROJECT MANUAL	SW 7007	CEILING BRIGHT WHITE	--	GYPSSUM BOARD CEILINGS / BULKHEADS	HANK MEINKING, HANK.MEINKING@SHERWIN.COM
PLASTIC LAMINATE							
PL1	WILSONART	--	7957K-78	ZANZIBAR	--	VERTICAL	PATTY EGAN, PEAGAN@WILSONART.COM
PL2	WILSONART	--	4990-38	FLAX LINEN	--	COUNTERTOP (NO SINKS)	PATTY EGAN, PEAGAN@WILSONART.COM
PL3	FORMICA	--	8886-43	SORREL CHERRY	--	ARTISAN FINISH - BASEMENT ALTERNATE #1	BROOKE CORCORAN, BROOKE.CORCORAN@FORMICA.COM
PORCELAIN TILE							
PT1	CROSSVILLE	SHADES 2.0	SHD42.11224UPS	VAPOR SEMI-POLISHED	12" X 24", 9.5 MM THICKNESS	STACKED, GROUT:TEC'S #940 ANTIQUE WHITE GROUT, GROUT JOINT 3MM WIDE	NIKKI STELLOH, NIKKI.STELLOH@VIRGINATILE.COM
PT2	FIRECLAY TILE	KITE	--	KELP	5.5" X 7.5", 5/16" THICKNESS	SEE DETAIL 61F000 FOR INSTALLATION, GROUT:TEC'S #940 ANTIQUE WHITE GROUT, GROUT JOINT 3MM WIDE	DAVE SPAULDING, DAVE@FIRECLAYTILE.COM
PT3	TILEBAR	NABI VALOR	--	DEEP EMERALD	9.25" X 11.75" SHEET, 10 MM THICKNESS	STACKED, GROUT:TEC'S #940 ANTIQUE WHITE GROUT, GROUT JOINT 3MM WIDE - BASEMENT ALTERNATE #1: GROUT:TEC'S #903 BIRCH GROUT	SCOTT SIEGAL, SSIEGAL@TILEBAR.COM
PT4	DALTILE	FABRIQUE	P089	CREME LINEN	12" X 24", 5/16" THICKNESS	STACKED, GROUT:TEC'S #903 BIRCH GROUT, GROUT JOINT 3MM WIDE - BASEMENT ALTERNATE #1	JOANNA WHITTAKER, JOANNA.WHITTAKER@DALTILE.COM
RESILIENT BASE							
RB1	TARKETT	TIGHTLOCK WALL BASE	66	EITHER ORE	4", 25" THICKNESS	--	AMY ELLIS, AMY.ELLIS@TARKETT.COM
ROLLER SHADE							
RS1	DRAPER	SHEERWAVE	SW2400	OYSTER BEIGE	--	--	ROSS RHODES, RRHODES@DRAPERINC.CO
RS2	DRAPER	SUNBLOC	S89000	OYSTER	--	--	ROSS RHODES, RRHODES@DRAPERINC.CO
SHEET VINYL							
SV1	MANNINGTON COMMERCIAL	ASSURANCE III	16343	RIVIERA	6'-6" ROLLS	HEAT WELD SEAMS, WELD ROD TO MATCH SHEET VINYL	KRISTEN KOMIS, KRISTEM_KOMIS@MANNINGTON.COM
SV2	MANNINGTON COMMERCIAL	SUBER	ETW450	DUN	6' ROLL	HEAT WELD SEAMS, WELD ROD TO MATCH SHEET VINYL	KRISTEN KOMIS, KRISTEM_KOMIS@MANNINGTON.COM
SV3	MANNINGTON COMMERCIAL	ASSURANCE III	16345	MARL	6'-6" ROLLS	HEAT WELD SEAMS, WELD ROD TO MATCH SHEET VINYL	KRISTEN KOMIS, KRISTEM_KOMIS@MANNINGTON.COM
SHEET VINYL INTEGRAL BASE							
SVB1	MANNINGTON COMMERCIAL	ASSURANCE III	16343	RIVIERA	--	REFER TO DETAIL, 11F000	KRISTEN KOMIS, KRISTEM_KOMIS@MANNINGTON.COM
SVB2	MANNINGTON COMMERCIAL	ASSURANCE III	16345	MARL	--	REFER TO DETAIL, 11F000	KRISTEN KOMIS, KRISTEM_KOMIS@MANNINGTON.COM
SOLID SURFACE							
SS1	WILSONART	--	9200CS	MYSTIQUE	--	--	PATTY EGAN, PEAGAN@WILSONART.COM
TACK FABRIC							
TF1	MAHARAM	MUSE	009	MISO	--	--	AMBER KRAMER,AKRAMER@MAHARAM.COM
WALL PROTECTION							
WP1	MDC	DIGITAL FRP PANELS		GREEN BLUE ART	THICKNESS: 0.090"; SHEET SIZE: 4' x 8'	INSTALL PANELS VERTICALLY. WHITE BACKED	MELISSA PUSATERI, MPUSATERI@MDCWALL.COM
WP2	INPRO	RIGID SHEET WALL PROTECTION		CHINO	THICKNESS: 0.060"; SHEET SIZE: 4' X 10'		TOM FORSTER,TFORSTER@INPROCORP.COM
WP3	INPRO	ASPEX PRINTED WALL PROTECTION		INKLING CASHMERE	THICKNESS: 0.060"; SHEET SIZE: 4' X 10'		TOM FORSTER,TFORSTER@INPROCORP.COM

GENERAL FINISH NOTES

A.

PATTERN NAME, COLOR AND NUMBER FOR EACH MATERIAL ARE GIVEN WHENEVER POSSIBLE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BRING ANY DISCREPANCIES TO THE ATTENTION OF THE ARCHITECT / INTERIOR DESIGNER TO ENSURE THAT THE CORRECT MATERIAL IS INSTALLED.

B.

PAIN

ALL BULKHEADS, SOFFITS, AND GYPSUM WALLBOARD CEILING SURFACES (P8) U.N.O. ALL BULKHEADS, SOFFITS, AND GYPSUM WALLBOARD CEILING SURFACES SHALL BE FINISHED WITH THE SAME MATERIAL AND / OR COLOR ON ALL FACES (VERTICAL AND HORIZONTAL) U.N.O.

C.

REFER TO REFLECTED CEILING PLAN(S) FOR ADDITIONAL CEILING FINISHES.

D.

ALL FLOOR MATERIAL TRANSITIONS SHALL BE CENTERED UNDER THE DOOR IN THE CLOSED POSITION.

E.

ALL FLOORING SHALL BE INSTALLED PERPENDICULAR TO ROOM WALLS U.N.O.

F.

REFER TO PROJECT MANUAL SECTION "CAST-IN-PLACE CONCRETE" FOR SPECIFICATIONS FOR SEALED CONCRETE (SC).

G.

REFER TO SHEET (1F000) FOR FLOOR TRANSITION DETAILS.

H.

REFER TO SHEET (1F000) FOR WALL BASE DETAILS.

I.

REFER TO MANUFACTURER'S INSTRUCTIONS FOR CARPET TILE INSTALLATION PATTERNS AS INDICATED.

J.

PROVIDE SEALANT AT ALL DOOR AND WINDOW FRAMES WHERE THEY MEET HARD SURFACE FLOORING.

K.

ALL NEW HOLLOW METAL DOOR AND WINDOW FRAMES SHALL BE PAINTED TO MATCH ADJACENT WALL. REFER TO SPECIFICATIONS FOR PAINT TYPE AND FINISH U.N.O.

L.

ALL EXISTING HOLLOW METAL DOOR AND WINDOW FRAMES SHALL BE PAINTED TO MATCH ADJACENT WALL. REFER TO SPECIFICATIONS FOR PAINT TYPE AND FINISH, ONLY IF ADJACENT WALL IS SCHEDULED TO RECEIVE NEW PAINT / WALL FINISH OR U.N.O.

M.

ALL NEW INTERIOR WOOD DOORS SHALL BE STAINED TO MATCH EXISTING DOORS. DOORS TO BE PREFINISHED, REFER TO PROJECT MANUAL.

N.

ALL NEW INTERIOR HOLLOW METAL DOORS SHALL BE PAINTED TO MATCH ADJACENT WALL. REFER TO SPECIFICATIONS FOR PAINT TYPE AND FINISH.

O.

ALL EXISTING INTERIOR HOLLOW METAL DOORS SHALL BE PAINTED TO MATCH ADJACENT WALL, ONLY IF ADJACENT WALL IS SCHEDULED FOR NEW PAINT / WALL FINISH OR U.N.O. REFER TO SPECIFICATIONS FOR PAINT TYPE AND FINISH.

P.

ALL VERTICAL PLASTIC LAMINATE SURFACES SHALL BE (PL1) U.N.O. ALL HORIZONTAL PLASTIC LAMINATE COUNTERTOPS AND BACKSPLASH SHALL BE (PL2) U.N.O.

Q.

ALL SOLID SURFACE COUNTERTOPS AND BACKSPLASH SHALL BE (SS1) U.N.O.

R.

ALL COUNTERTOPS WITH SINKS SHALL BE SOLID SURFACE (SS1) U.N.O.

S.

ALL FABRIC WRAPPED TACKABLE SURFACES AND TACKBOARDS SHALL BE (TF1) U.N.O.

T.

THERE SHALL NOT BE PAINT CONDITIONS THAT OCCUR CAUSING FINISH OR COLOR TO TERMINATE ON AN OUTSIDE CORNER UNLESS SPECIFICALLY NOTED OTHERWISE. IF THIS CONDITION OCCURS, BRING IT TO THE ATTENTION OF THE INTERIOR DESIGNER IMMEDIATELY.

U.

ALL REFERENCES TO EPOXY PAINT (EP1) ON THE DRAWINGS, SHALL MATCH CORRESPONDING PAINT (P1) COLOR. REFER TO PROJECT MANUAL FOR PAINT (P) AND EPOXY PAINT (EP) TYPES AND FINISHES.

V.

PAIN

ALL WALL MOUNTED GRILLES, VENTS, ELECTRICAL PANELS, ACCESS PANELS, ETC. TO MATCH ADJACENT WALL U.N.O.

W.

PAINT STEEL COLUMNS, BEAMS, STRUCTURE, ETC. EXPOSED TO VIEW IN FINISHED AREAS (P8) U.N.O.

X.

FINISH BEHIND FIXED EQUIPMENT SUCH AS CABINetry, CASEWORK, CHALK AND TACK / MARKERBOARDS, LOCKERS ETC.

Y.

WALL RATINGS ARE SHOWN FOR REFERENCE ONLY. REFER TO "A" SERIES DRAWINGS FOR WALL RATINGS LEGEND.

Z.

BOTTOM OF ALL CORNER GUARDS SHALL BE MOUNTED ABOVE FINISHED WALL BASE, U.N.O.

AA.

WINDOW SELLS SHALL BE EXISTING U.N.O.

BB.

FURNITURE INDICATED BY DASHED LINES SHALL BE OWNER FURNISHED, OWNER INSTALLED.

CC.

ALL CUBICLE CURTAINS SHALL BE (CC1) WITH (WHITE) MESH COLOR, U.N.O.

DD.

PATCH AND MATCH EXISTING FINISHES AS NEEDED FOR NEW CONSTRUCTION.

6

DETAIL - PT2 LAYOUT

1 1/2" = 1'-0"

5

DOOR FRAME SPLIT PAINT

1 1/2" = 1'-0"

4

FLOOR TRANSITION - CONCRETE TO RESILIENT

6" = 1'-0"

3

FLOOR TRANSITION - RESILIENT TO CARPET

6" = 1'-0"

2

FLOOR TRANSITION - RESILIENT TO CARPET

6" = 1'-0"

1

BASE DETAIL - SHEET VINYL COVE

3" = 1'-0"

3/30/2023 4:30:23 PM

BSM 360144110010 - UPMB Renovation - 3rd Floor 14110010-ARCH-BSALS\_2023.rvt

DESIGNED BY: JKL

DRAWN BY: JKL

APPROVED BY: JKL

1'-0"

6

DETAIL - PT2 LAYOUT

1 1/2" = 1'-0"

HOLLOW METAL FRAME

EXISTING SIDE, EXISTING DOOR FRAME PAINT TO REMAIN

DOOR - REFER TO OPENING SCHEDULE

NEW PAINT TO MATCH ADJACENT WALL PAINT

PAINT DOOR FRAMES WHERE INDICATED ON INTERIOR FINISH DRAWINGS. WHERE FRAME IS BETWEEN NEW AND EXISTING TO REMAIN SPACES, SPLIT PAINT ON FRAME AS INDICATED ON DETAIL.

METAL TRANSITION STRIP (SCHLUTER VINPRO-U, OR EQUAL)

CONCRETE

RESILIENT

CONCRETE SLAB - LEVEL AS REQUIRED

USE MANUFACTURER'S RECOMMENDED ADHESIVE TO ADHERE VINPRO METAL TO CONCRETE.

RESILIENT

NO TRANSITION STRIP REQUIRED

RESILIENT

CONCRETE SLAB - LEVEL AS REQUIRED

PROVIDE TROWELABLE UNDERLAYMENT AS REQUIRED TO ALLOW FOR FLUSH AND LEVEL TRANSITION.

RESILIENT

METAL TRANSITION STRIP (SCHLUTER SCHIENE, OR EQUAL)

CARPET

CONCRETE SLAB - LEVEL AS REQUIRED

PROVIDE TROWELABLE UNDERLAYMENT AS REQUIRED TO ALLOW FOR FLUSH AND LEVEL TRANSITION.

WALL FINISH, REFER TO INTERIOR FINISH PLANS

1/8" METAL L-STRIP

SHEET VINYL INTEGRAL BASE

COVE STICK SHEET VINYL FLOORING

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STATE OF MISSOURI

RYAN J. KING

NUMBER A-200800025

ARCHITECT

04/03/2023

INTERIOR FINISH SPECIFICATIONS

DATE

BSALS PROJECT NO.

03 APRIL 2023

14110010

IF000

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	REFER TO ADD FOR GENERAL NOTES
F01	NEW WALL. MATCH EXISTING ADJACENT WALL FINISH. ADD NEW BASE TO MATCH ADJACENT EXISTING BASE.
F02	EXISTING WALL COVERING TO REMAIN AS INDICATED.
F03	INSTALL NEW CARPET (GPR) ON BASE (R51), AND PANT (P1) IN SOUND BOOTHS. COORDINATE WITH SOUNDING WITH VENDOR.
F04	NEW WALL. MATCH AND MATCH EXISTING PANT, WALL PROTECTION AND BASE.
F06	PANT ALL HOLLOW METAL DOOR FRAMES. NEW AND EXISTING. IN ROOMS ARE INDICATED TO MATCH EXISTING WALL COLOR. SPU FRAME PANT THAT OPPOSITE SIDE OF FRAME IS NOT IN SCOPE OF WORK. REFER TO DETAIL A4100.
F07	EXISTING CARPET TO REMOVE. PANT AREAS OF CONSTRUCTION AS NEEDED.
F09	DECORATIVE PANEL. ABOVE HALF-HEIGHT WALL.

- a. REFER TO INTERIOR FINISH PLAN NOTES FOR ACCENT WALL LOCATIONS.
- b. REFER TO INTERIOR FINISH PLANS FOR FLOOR PATTERN.
- c. ALTERNATE #1: REMOVE AND REPLACE EXISTING CARPETING WITH LVLT1.
- d. WALL TO RECEIVE PORCELAIN TILE, PT1 WITH 12" ACCENT TILE PT2. REFER TO ELEVATION.
- e. WALL TO RECEIVE PORCELAIN TILE, PT1 WITH 12" ACCENT TILE PT3. REFER TO ELEVATION.
- f. WALL TO RECEIVE PORCELAIN TILE, PT4 WITH 12" ACCENT TILE PT3. REFER TO ELEVATION.

\* NOT ALL FINISHES LISTED ARE USED IN PROJECT

ACT	ACOUSTICAL CEILING	PT	PORCELAIN TILE
BAF	BAFFLE	PTB	PORCELAIN TILE BASE
ACC	ACOUSTICAL CEILING TIE	Q	QUARTZ SURFACING
AF	ACCESS FLOORING	R	RESILIENT BASE
AWC	ACOUSTICAL WALL CARPET	RSF	RUBBER SHEET FLOORING
BF	BUFF FLOORING	RST	RUBBER TILE FLOORING
BL	BLIND	RST	RUB RAIL
BL	BUMPS	RSR	RUBBER STRIP STRECH
BL	BUMPS	RO	ROLLER SHAM
CB	CUBICLE CURTAIN	SAC	SOUND-ABSORBING PANEL
CF	CORR FLOORING	SA	SEALED CONCRETE
CG	CORR GUARD	SC	SCREED (1000)
CMU	CONCRETE MASONRY UNIT	SDT	SOLID DISSIPATIVE TILE
CP	CARPET	SH	SHOWER CURTAIN
CA	CARPET STONE OR CULTURED STONE	SSB	SOLID SURFACE BASE
CTB	CERAMIC TILE	SPC	SPECIAL COATING
CT	CERAMIC TILE	SS	SPRINKLER SINK
CR	CRASH RAIL OR CHAIR RAIL	SSP	SOLID SURFACE WALL PANEL
DG	DECORATIVE GLASS	ST	STAINLESS STEEL BASE
DL	DECORATIVE LAMINATE FLM	STF	STAINLESS STEEL FLOOR
DP	DECORATIVE PANEL	STP	STONE SLAB WALL PANEL
EP	EPOXY PAINT	SV	SHEET VINYL
ERF	EPOXY RESIN BASE	SWP	SHEET WALL PROTECTION
ETR	EPOXY RESIN FLOOR	TB	TACKBOARD
ETR	EPOXY TO REMAIN	TBF	TERRAZZO FLOORING
FB	FIBER	TZ	TERRAZZO BASE
FR	FIBER REINFORCED FLOOR	TZ	TERRAZZO FLOORING
FWC	FIBER WALL COVERING	TZB	TERRAZZO BASE
GYP	GYP	VF	VINYL FLOOR TILE
GL	GYP BOARD	VFB	VINYL BASE
GYD	GLASS TILE	VCF	VINYL CONTROL FLM
HS	HARDWARE	VCM	VINYL COMPOSITION TILE
LSF	LINOLEUM SHEET FLOORING	VET	VINYL ENHANCED TILE
LF	LINOLEUM TILE FLOORING	VYC	VINYL WALL COVERING
LY	LYNEX WALT. LVT	W	WOOD BASE
M	MARKER BOARD	WD	WOOD PANELING
MT	MOSAIC TILE	WDF	WOOD FLOORING
MC	MOSAIC WALL COVERING	WPA	WOOD PANELING ASSEMBLY
P	PANT	WV	WALK-OFF MAT
PL	PLASTIC LAMINATE	WVW	WOOD VENEER WALL COVERING
PL	PLANT TO MATCH EXISTING		

FLOOR FINISH TRANSITION

CPT2

FLOOR FINISH AS INDICATED IN ROOM FINISH TAG

DIFFERING FLOOR FINISH

The diagram illustrates the layout of the room schedule form. It shows a grid of boxes. Labels with arrows point to specific boxes: 'ROOM NAME' points to the top-right box; 'ROOM NUMBER' points to the box below 'ROOM NAME'; 'FLOOR' points to the second box from the top; 'BASE' points to the third box from the top; 'WALL' points to the bottom-most box; and 'REMARKS COLUMN' points to the rightmost column of boxes.

NOTE: FINISHES INDICATED IN ROOM FINISH TAG ARE GENERAL OVERALL FINISHES FOR ROOM UNLESS OTHERWISE NOTED BY NOTE, REMARK, DETAIL, AND/OR ELEVATION.

— SYMBOL INDICATES MATERIAL / PATTERN / GRAIN DIRECTION

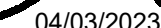
 INDICATES AREAS NOT IN SCOPE

INDICATES AREAS NOT IN SCOPE

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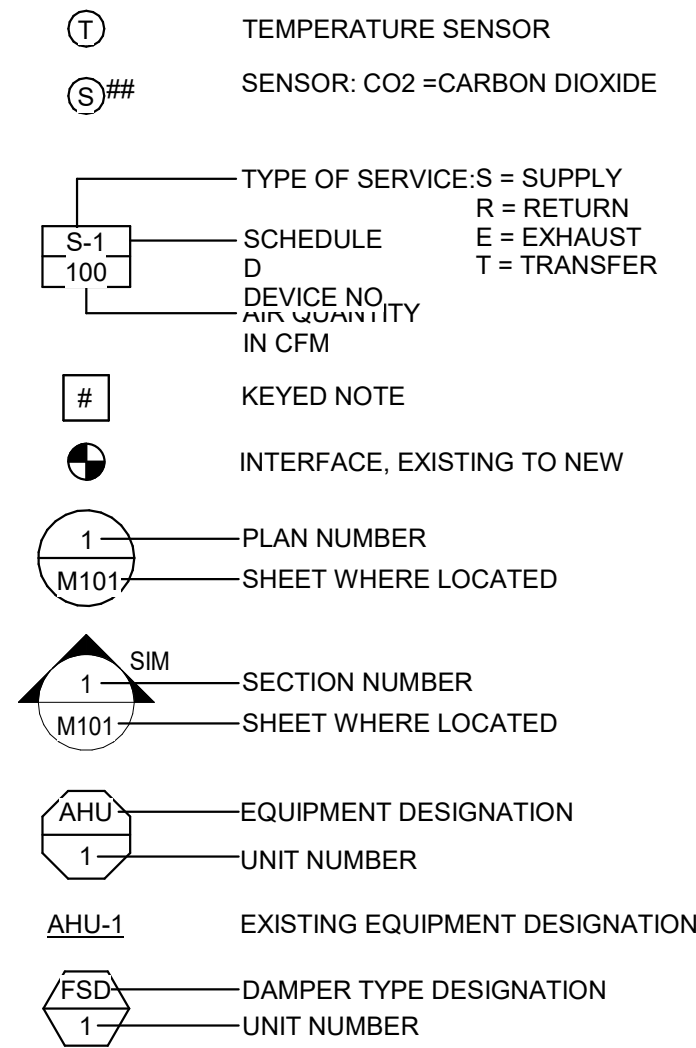
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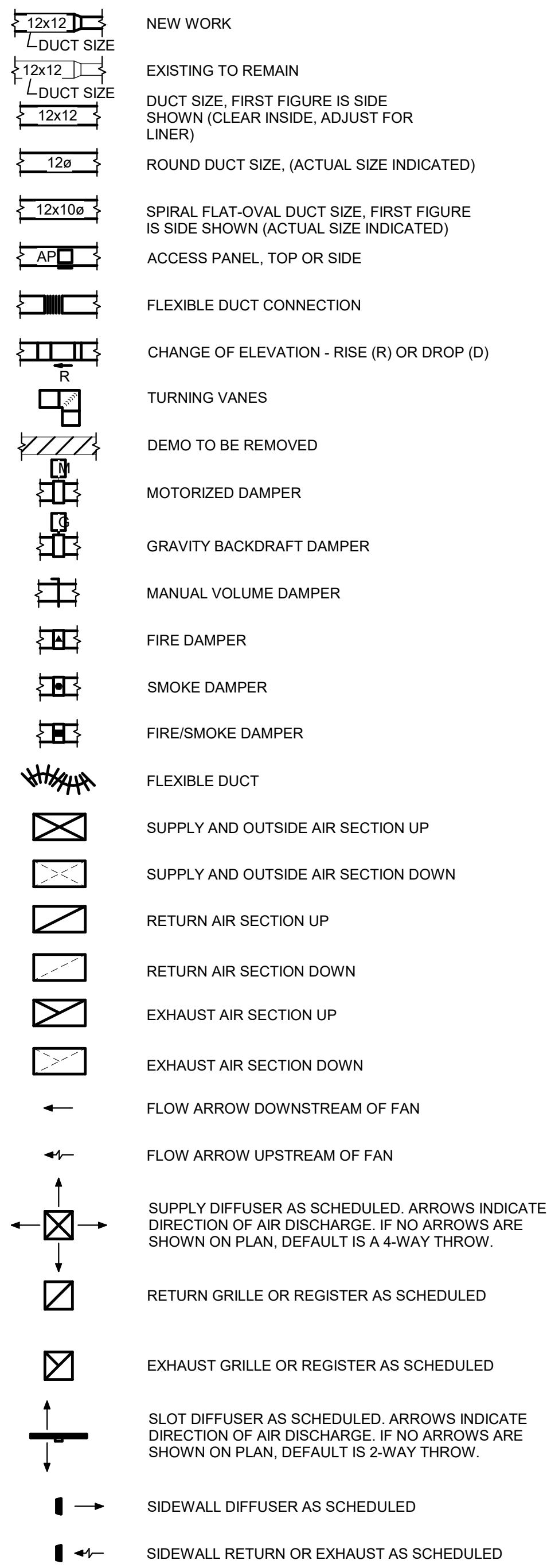




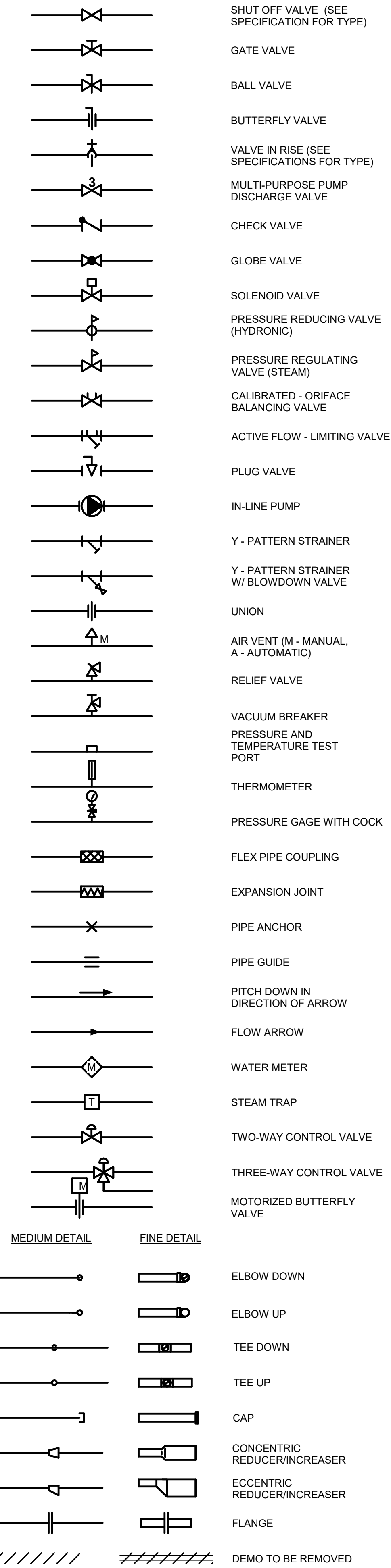
## GENERAL SYMBOLS



## DUCT SYSTEM SYMBOLS



## PIPE LINE SYMBOLS



## PIPE SYSTEM ABBREVIATIONS

SD	BLOW DOWN
CA	COMPRESSED AIR
CD	CONDENSATE (STEAM) DRAIN
CF	CHEMICAL FEED
CHR	CHILLED/HOT WATER RETURN
CHS	CHILLED/HOT WATER SUPPLY
CR	CONDENSER WATER RETURN
CS	CONDENSER WATER SUPPLY
CW	COLD WATER, DOMESTIC
CWR	CHILLED WATER RETURN
CWS	CHILLED WATER SUPPLY
D	DRAIN
E	EQUALIZING LINE
FOF	FUEL OIL FILL
FOR	FUEL OIL RETURN
FOS	FUEL OIL SUPPLY
FOV	FUEL OIL VENT
G	NATURAL GAS
GLR	GLYCOL RETURN
GLS	GLYCOL SUPPLY
HG	REFRIGERANT HOT GAS
HPR	HIGH PRESSURE CONDENSATE RETURN (100 PSIG)
HPS	HIGH PRESSURE STEAM SUPPLY (100 PSIG)
HW	DOMESTIC HOT WATER
HWR	HEATING WATER RETURN
HWS	HEATING WATER SUPPLY
LPG	LIQUEFIED PETROLEUM GAS
LPR	LOW PRESSURE CONDENSATE RETURN (15 PSIG)
LPS	LOW PRESSURE STEAM SUPPLY (15 PSIG)
MPR	MEDIUM PRESSURE CONDENSATE RETURN (60 PSIG)
MPS	MEDIUM PRESSURE STEAM SUPPLY (60PSIG)
MU	MAKE-UP WATER (NON-POTABLE)
PC	PUMPED CONDENSATE
PD	PUMP DISCHARGE
PCWR	PRIMARY CHILLED WATER RETURN
PCWS	PRIMARY CHILLED WATER SUPPLY
PHWR	PRIMARY HEATING WATER RETURN
PHWS	PRIMARY HEATING WATER SUPPLY
RL	REFRIGERANT LIQUID
RS	REFRIGERANT SUCTION
RV	REFRIGERANT VENT
SCWR	SECONDARY CHILLED WATER RETURN
SCWS	SECONDARY CHILLED WATER SUPPLY
SHWR	SECONDARY HEATING WATER RETURN
SHWS	SECONDARY HEATING WATER SUPPLY
SRV	STEAM RELIEF VENT
V	VENT

## EQUIPMENT DESIGNATION

AC	AIR CURTAIN
ACC	AIR COOLED CONDENSER
ACU	AIR CONDITIONING UNIT
AF	AIR FILTER
AHS	AIR HANDLING UNIT
AS	AIR SEPARATOR
B	BOILER
BCU	BLOWER COIL UNIT
CAV	CONSTANT AIR VOLUME
CP	ACCESS PANEL
CC	COOLING COIL
CFP	CHEMICAL FEED PUMP
CH	CHILLER
CP	CONDENSER WATER PUMP
CRAC	COMPUTER ROOM AIR CONDITIONING UNIT
CRP	CONDENSATE RETURN PUMP
CSG	CLEAN STEAM GENERATOR
CT	COOLING TOWER
CTF	COOLING TOWER FILTER
BFP	BACKFLOW PREVENTER
CJ	CABINET UNIT HEATER
CUR	CONVECTOR
CWP	CHILLED WATER PUMP
DRH	DEAERATING FEEDWATER HEATER
EAV	EXHAUST AIR VALVE
EF	EXHAUST FAN
EJ	EXPANSION JOINT
ERU	ENERGY RECOVERY UNIT
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNITS PER HOUR
BWE	BAKED WHITE ENAMEL
CAP	CAPACITY
CAV	CONSTANT AIR VOLUME
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CI	CAST IRON
CLG	COOLING DUCT (COLD DUCT)
CO	CLEAN OUT
COND	COMPRESSOR
CONC	CONCRETE
COND	CONDENSATE
CONN	CONNECTION
CORR	CORRIDOR
CV	CONTROL VALVE
D	DEPTH
DB	DRY BULB
DBA	A-WEIGHTED DECIBELS
DEFL	DEFLECTION
DEG	DEGREES
DEG F	DEGREES FAHRENHEIT
DES	DESIGN
DIA	DIAMETER
DM	DIMENSION
DISCH	DISCHARGE
DIV	DIVISION
DN	DOWN
DP	DIFFERENTIAL PRESSURE SENSOR
DRS	DIFFERENTIAL PRESSURE SWITCH
DPT	DIFFERENTIAL PRESSURE TRANSMITTER
DTL	DETAIL
DWG(S)	DRAWING(S)
EA	EXHAUST AIR OR EACH (PER CONTEXT)
EAT	ENTERING AIR TEMPERATURE
EER	ENERGY EFFICIENT RATIO
EFF	EFFICIENCY
ELEC	ELECTRIC
ELEV	ELEVATION
EQ	EQUAL
ESP	EXTERNAL STATIC PRESSURE
EWB	ENTERING AIR WET BULB TEMPERATURE
EWT	ENTERING WATER TEMPERATURE
EXH	EXHAUST
EXIST, EX	EXISTING
EXT	EXTERNAL
F	FAHRENHEIT
F&T	FLOAT AND THERMOSTATIC
FC	FLEXIBLE CONNECTION
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FIN	FINISHED
FLR	FLOOR
FFP	FINS PER FOOT
FFM	FEET PER MINUTE
FS	FLOW SWITCH
FT	FEET
FT-HD	HEAD IN FEET
G	GAUGE
GAL	GALLONS
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
H	HEIGHT
HD	HEAD
HEV	HOSE END VALVE
HORIZ	HORIZONTAL
HP	HORSEPOWER
HR	HOUR
HTG	HEATING DUCT (HOT DECK)
HVAC	HEATING, VENTILATING & AIR CONDITIONING
HW	HOT WATER
HZ	HERTZ
IB	INVERTED BUCKET
IE	INVERT ELEVATION
IN	INCH/INCHES
INDIC	INDICATOR

## GENERAL ABBREVIATIONS

A	AIR OR AMP (PER CONTEXT)
ACC	ACCESSORIES
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AFS	AIR FLOW SWITCH
AIR	AIR HANDLING UNIT
AIRI	AIR CONDITIONING, HEATING, AND REFRIGERATION INSTITUTE
AUX	AUXILIARY
AMB	AMBIENT
AO	ANALOG SIGNAL OUTPUT
AP	ACCESS PANEL
APD	AIR PRESSURE DROP
APLV	APPLICATION PART LOAD VALUE
APPROX	APPROXIMATE
ARCH	ARCHITECTURE/ARCHITECT
AUX	AUXILIARY
AV	AUTOMATIC VENT
AVG	AVERAGE
BDD	BACK DRAFT DAMPER
BFC	BELOW FINISHED CEILING
BFRV	BACKFLOW PREVENTER
BHP	BRAKE HORSEPOWER
BI	BINARY SIGNAL INPUT
BMS	BUILDING MANAGEMENT SYSTEM
BO	BINARY SIGNAL OUTPUT
BOB	BOTTOM OF BEAM
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
BS	BEAM SPACE
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNITS PER HOUR
BWE	BAKED WHITE ENAMEL
CAP	CAPACITY
CAV	CONSTANT AIR VOLUME
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CI	CAST IRON
CLG	COOLING DUCT (COLD DUCT)
CO	CLEAN OUT
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COND	CONDENSATE
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DEG F	DEGREES FAHRENHEIT
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DISCH	DISCHARGE
DIV	DIVISION
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DTL	DETAIL
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EFF	EFFICIENCY
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EWT	ENTERING WATER TEMPERATURE
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EXT	EXTERNAL
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F&T	FLOAT AND THERMOSTATIC
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FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FIN	FINISHED
FLR	FLOOR
FFP	FINS PER FOOT
FFM	FEET PER MINUTE
FS	FLOW SWITCH
FT	FEET
FT-HD	HEAD IN FEET
G	GAUGE
GAL	GALLONS
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
H	HEIGHT
HD	HEAD
HEV	HOSE END VALVE
HORIZ	HORIZONTAL
HP	HORSEPOWER
HR	HOUR
HTG	HEATING DUCT (HOT DECK)
HVAC	HEATING, VENTILATING & AIR CONDITIONING
HW	HOT WATER
HZ	HERTZ
IB	INVERTED BUCKET
IE	INVERT ELEVATION
IN	INCH/INCHES
INDIC	INDICATOR

## GENERAL ABBREVIATIONS, CONTINUED

IPLV	INTEGRATED PART-LOAD VALUE
ISP	INTERNAL STATIC PRESSURE
JS	JOIST SPACE
KW	KILOWATTS
L	LENGTH
LAT	LEAVING AIR TEMPERATURE
LB(S)	POUNDS
LF	LINEAR FEET
LRA	LOCKED ROTOR AMPS
LS	LIGHT SPACE
LVL	LEVEL
LWT	LEAVING WATER TEMPERATURE
MAN	MANUAL
MANU	MANUFACTURER
MAX	MAXIMUM
MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR
MCA	MINIMUM CIRCUIT AMPS
MCC	MOTOR CONTROL CENTER
MECH	MECHANICAL
MERV	MINIMUM EFFICIENCY REPORTING VALUE (ASHRAE 52.2)
MFR	MANUFACTURER
MIN	MINIMUM OR MINUTE (PER CONTEXT)
MTD	MOUNTED
MTL	METAL
MV	MANUAL VENT
NC	NORMALLY CLOSED OR NOISE CRITERIA (PER CONTEXT)
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN OR NUMBER (PER CONTEXT)
NOM	NOMINAL
NPLV	NON-STANDARD PART LOAD VALUE
NPSH	NET POSITIVE SUCTION HEAD
NTS	NOT TO SCALE
OA	OUTSIDE AIR
ORB	OPPOSED BLADE DAMPER
ON	ON CENTER
OD	OUTSIDE DIAMETER
OT	OIL TRAP
PA	PIPE ANCHOR
PBD	PARALLEL BLADE DAMPER
PD	PRESSURE DROP
PENT	PENTHOUSE
PH	PHASE
PHC	PRE-HEAT COIL
CV	PULMING FOOT
PNEU	PNEUMATIC
PPH	POUNDS PER HOUR
PRESS	PRESSURE
PRV	PRESSURE REGULATING VALVE
PSIA	POUNDS PER SQUARE INCH
PSIA	POUNDS PER SQUARE INCH ABSOLUTE
PSIG	POUNDS PER SQUARE INCH GAUGE
QTY	QUANTITY
RA	RADIANT AIR
RAD	RADIATED
RD	ROOF DRAIN
REFR	REFRIGERANT
REQ	REQUIRED
RH	RELATIVE HUMIDITY
RLA	RUNNING LOAD AMPS
RM	ROOM
RND	ROUND
RPM	REVOLUTIONS PER MINUTE
SA	SUPPLY AIR
SAN	SANITARY
SECN	SECTION
SEER	SEASONAL ENERGY EFFICIENCY RATIO
SENS	SENSIBLE
EQ	SQUARE FOOT
SH	SENSIBLE HEAT
SHT	SHEET
SND	SOUND
SOL	SOLENOID
SP	STATIC PRESSURE
SPD	STATIC PRESSURE DIFFERENTIAL
SPT	STATIC PRESSURE TRANSMITTER
SQ	SQUARE
SST	STAINLESS STEEL
STL	STEEL
STM	STEAM
T&P	TEMPERATURE AND PRESSURE
TC	TEMPERATURE CONTROL
TD	THERMODYNAMIC OR TEMPERATURE DIFFERENTIAL (PER CONTEXT)
TDH	TOTAL DYNAMIC HEAD
TEMP	TEMPERATURE
TOT	TOTAL
TPD	TOTAL PRESSURE DROP
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UC	UNDERCUT DOOR
UG	UNDERGROUND
UNO	UNLESS NOTED OTHERWISE
V	VOLTS
VAC	VACUUM
VD	VOLUME DAMPER (MANUAL)
VEL	VELOCITY
VERT	VERTICAL
VFD	VARIABLE FREQUENCY DRIVE
VOL	VOLUME
VTR	VENT THRU ROOF
W	WATT OR WIDTH (PER CONTEXT)
WV	WITH
WO	WITHOUT
WB	WET BULB
WC	WATER COLUMN
WG	WATER GAUGE
WPD	WATER PRESSURE DIFFERENTIAL
WT	WEIGHT

## GENERAL NOTES:

- THESE PLANS ARE DIAGRAMMATIC IN NATURE. THE CONTRACTOR SHALL BE PREPARED TO MAKE SOME ALTERATIONS TO THE EXACT LOCATION OF DUCTWORK, PIPING AND EQUIPMENT FROM THE LOCATION INDICATED ON THESE DRAWINGS TO FIT ACTUAL JOB CONDITIONS.
- ALL ELBOWS, FITTINGS, ETC., IN PIPING AND DUCTWORK REQUIRED TO CLEAR ALL JOB OBSTRUCTIONS ARE NOT NECESSARILY INDICATED. ALL NECESSARY TRANSITIONS, FITTINGS AND OFFSETS ARE REQUIRED WHETHER SHOWN OR NOT.
- BECAUSE OF THE LIMITED SPACE AVAILABLE TO INSTALL ALL OF THE MECHANICAL WORK, COORDINATION BETWEEN THE VARIOUS TRADES IS OF THE UTMOST IMPORTANCE. SEE SPECIFICATION 230100 FOR REQUIRED COORDINATION DRAWINGS.
- THE CONTRACTOR SHALL COORDINATE STAGING AND SCHEDULING WITH THE OWNER'S REPRESENTATIVE.
- EXISTING CONDITIONS ARE BASED ON INFORMATION OBTAINED FROM PREVIOUS CONSTRUCTION DOCUMENTS AND INFORMAL FIELD OBSERVATION AND SHALL NOT BE CONSTITUTED AS "AS BUILT." THE CONTRACTOR SHALL FIELD-VERIFY EXISTING CONDITIONS BEFORE THE ONSET OF CONSTRUCTION.
- DEMOLISH ALL PIPING, DUCTWORK EQUIPMENT, ETC., SHOWN TO BE REMOVED, IN ITS ENTIRETY, INCLUDING ALL HANGERS AND SUPPORTS.
- WHERE CONTRACTOR IS REQUIRED TO CONCEAL NEW WORK, REMOVE OR MODIFY EXISTING CONSTRUCTION OR EQUIPMENT, OR ATTACH TO EXISTING CONSTRUCTION, THE CONTRACTOR SHALL REPAIR OR REPLACE EXISTING CONSTRUCTION AND MATERIALS TO MATCH CONDITIONS AT THE ONSET OF CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE AND REPLACE EXISTING CEILINGS AND WALLS REQUIRED FOR INSTALLATION OF MECHANICAL SYSTEMS.
- THE OWNER SHALL MAINTAIN ALL SALVAGE RIGHTS OF EXISTING VAV CONTROLLERS. ALL REMAINING EQUIPMENT AND MATERIALS SHALL BE REMOVED FROM THE PREMISES BY THIS CONTRACTOR.
- CONTRACTOR SHALL PROVIDE SEISMIC BRACING AND MOUNTING OF EQUIPMENT AND MATERIALS IN COMPLIANCE WITH ALL LOCAL CODE REQUIREMENTS AND THE REQUIREMENTS OF SPECIFICATION REGARDLESS OF WHETHER SHOWN OR NOT.
- ALL WORK SHALL BE INSTALLED PER THE REFERENCE DETAILS, REGARDLESS OF WHETHER OR NOT THE DETAILS ARE CALLED OUT ON THE PLANS. SEE SHEET M600.
- PROVIDE VENTS AT ALL HYDRONIC PIPING HIGH POINTS, AND DRAINS AT ALL PIPING LOW POINTS, REGARDLESS OF WHETHER SHOWN OR NOT.
- DO NOT SCALE THE LOCATION OF HVAC CEILING ELEMENTS, SUCH AS AIR INLETS AND OUTLETS, FROM THE M-SERIES DRAWINGS. SEE ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT HVAC CEILING ELEMENT LOCATIONS. REFLECTED CEILING PLANS GOVERN THE LOCATION OF DIFFUSERS, REGISTERS, AND GRILLES. M-SERIES DRAWINGS GOVERN TYPE, STYLE, AND SIZE OF DIFFUSERS, REGISTERS, AND GRILLES.
- ALL DUCTWORK SHALL COMPLY WITH "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE" 3RD EDITION, SMACNA 2005, EXCEPT WHERE MORE RESTRICTIVE REQUIREMENTS ARE SPECIFIED. ANY PLAN REFERENCES TO "SMACNA FIGURE --" REFERS TO THIS STANDARD. SEE SPECIFICATIONS FOR SCHEDULE OF DUCT PRESSURE CLASS AND SEAL CLASS.
- IN GENERAL, THE FINAL FLEX DUCT RUNOUT TO EACH DIFFUSER, REGISTER, OR GRILLE IS NOT SIZED ON PLANS. FLEX DUCT RUNOUT SIZE SHALL MATCH AIR OUTLET NECK SIZE, UNO.
- IT IS THE INTENT OF THESE DRAWINGS THAT A MANUAL BALANCING DAMPER BE PROVIDED AT EVERY INDIVIDUAL DUCTED CONNECTION TO AN AIR DEVICE, UNLESS A BALANCING DAMPER IS SCHEDULED TO BE FURNISHED WITH AIR DEVICE. VAV BOXES WITH SINGLE DIFFUSERS ARE NOT REQUIRED TO HAVE A BALANCING DAMPER.
- THE CONTRACTOR SHALL CONNECT THE NEW HVAC SYSTEM TO THE OWNER'S EXISTING BUILDING CONTROL SYSTEM. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

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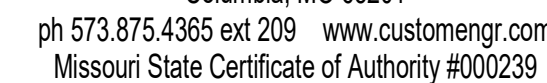
TORI JANELLE GILLESPIE  
PE-201800203

## MECHANICAL SYMBOLS & ABBREVIATIONS

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INTROBA PROJECT NO.	0011593

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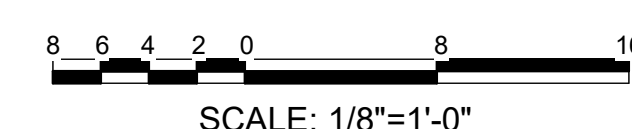
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TORI JANELLE GILLESPIE  
PE-2018000203

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1. REMOVE EXISTING AIR DEVICES AND DUCTWORK TO POINT SHOWN.
2. REMOVE EXISTING NON-DUCTED RETURN GRILLE AND ASSOCIATED RETURN AIR BOOT IF APPLICABLE.
3. CAP EXISTING DUCTWORK AIRTIGHT WITH SHEETMETAL. INSULATE CAP WITH 1-1/2" THICK FOIL FACED DUCT WRAP INSULATION IF DUCT IS SUPPLY DUCT.
4. PROVIDE TEMPORARY CAP ON EXISTING DUCTWORK. SYSTEM NEW DUCTWORK IS INSTALLED. EXISTING SYSTEM MUST REMAIN OPERATIONAL AT ALL TIMES.
5. EXISTING OPEN-ENDED RETURN AIR DUCT ABOVE CEILING. INSTALL MERV 11 FILTER MATERIAL OVER DUCT OPENING DURING CONSTRUCTION. VISUALLY CHECK FOR CLEANLINESS AND REPLACE AS REQUIRED.
6. ENGAGE OWNER'S REPRESENTATIVE TO CONTACT UNIVERSITY OF MISSOURI HOSPITAL CONTROL SHOP FOR AIR TERMINAL UNIT DAMPER RISERS TO STARTING DEMOLITION WORK. EXISTING SYSTEM MUST REMAIN OPERATIONAL AT ALL TIMES.
7. CONTRACTOR TO PROVIDE TEMPORARY COOLING FOR ROOM DURING CONSTRUCTION.
8. NO WORK REQUIRED FOR EXISTING AIR TERMINAL UNIT.
9. REFER TO ARCHITECTURAL AND ELECTRICAL DRAWINGS FOR TEMPORARY REMOVAL AND RE-INSTALLMENT OF EXISTING AIR TERMINAL LIGHTS FOR MECHANICAL WORK SHOWN TO BE INSTALLED ABOVE EXISTING CEILINGS THAT ARE TO REMAIN. COORDINATE REMOVAL OF WORK WITH OWNER'S REPRESENTATIVE.
10. REMOVE PORTION OF EXISTING AHU-1 SUPPLY MAIN AS SHOWN FOR INSTALLATION OF NEW FITTING. REFER TO SHEET M101 FOR NEW WORK.
11. EXISTING NON-DUCTED RETURN AIR DEVICE TO REMAIN.
12. EXISTING AIR DEVICE TO REMAIN AND BE RE-USED. REFER TO SHEET M101 FOR NEW WORK ASSOCIATED WITH EXISTING AIR DEVICE. REMOVE EXISTING FLEXIBLE DUCT AND PROVIDE NEW IF EXISTING IS SHOWN TO BE REMOVED.
13. EXISTING AIR TERMINAL UNIT VAV 2-300 WITH HOT WATER REHEAT COIL. RE-DECOMMISSIONED AND RE-USED. REFER TO SHEET M101 FOR NEW WORK. EXISTING CONTROL WIRES SHALL BE RE-PULLED NOT SPliced. REFER TO SHEET M101 FOR PIPING DEMOLITION RELATED TO AIR TERMINAL UNIT.
14. REMOVE EXISTING AIR TERMINAL UNIT WITH HOT WATER REHEAT COIL. EXISTING VAV CONTROLLER TO BE REMOVED BY OWNER. REFER TO SHEET MD201 FOR PIPING DEMOLITION RELATED TO AIR TERMINAL UNIT.
15. EXISTING AIR TERMINAL UNIT TO BE UTILIZED FOR PROVIDING COOLING DURING CONSTRUCTION. COORDINATE WITH OWNER'S REPRESENTATIVE.
16. INSTALL PROTECTIVE COVERING OVER AIR DEVICE DURING CONSTRUCTION TO AVOID CONTAMINATION DURING CONSTRUCTION. COORDINATE WITH OWNER'S REPRESENTATIVE FOR PROVIDING COVERING AFTER COMPLETION OF REMODEL PROJECT.

SUPPLY AIR IS DUCTED FROM THE AIR HANDLING UNIT AND IS DISTRIBUTED TO MULTIPLE SPACES ON MULTIPLE FLOORS. VAV BOXES WITH HOT WATER REHEAT COILS MODULATE AIRFLOW TO EACH ZONE AND PROVIDE HEATING AT THE ZONE LEVEL FOR TEMPERATURE CONTROL. ALL AIR THAT IS NOT EXHAUSTED IS RETURNED BACK TO THE MAIN UNIT THROUGH THE CEILING RETURN AIR PLENUM.



### THIRD FLOOR KEY PLAN

1/8" = 1'-0"

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 DESIGNED Designer  
 DRAWN Author  
 APPROVED Approver



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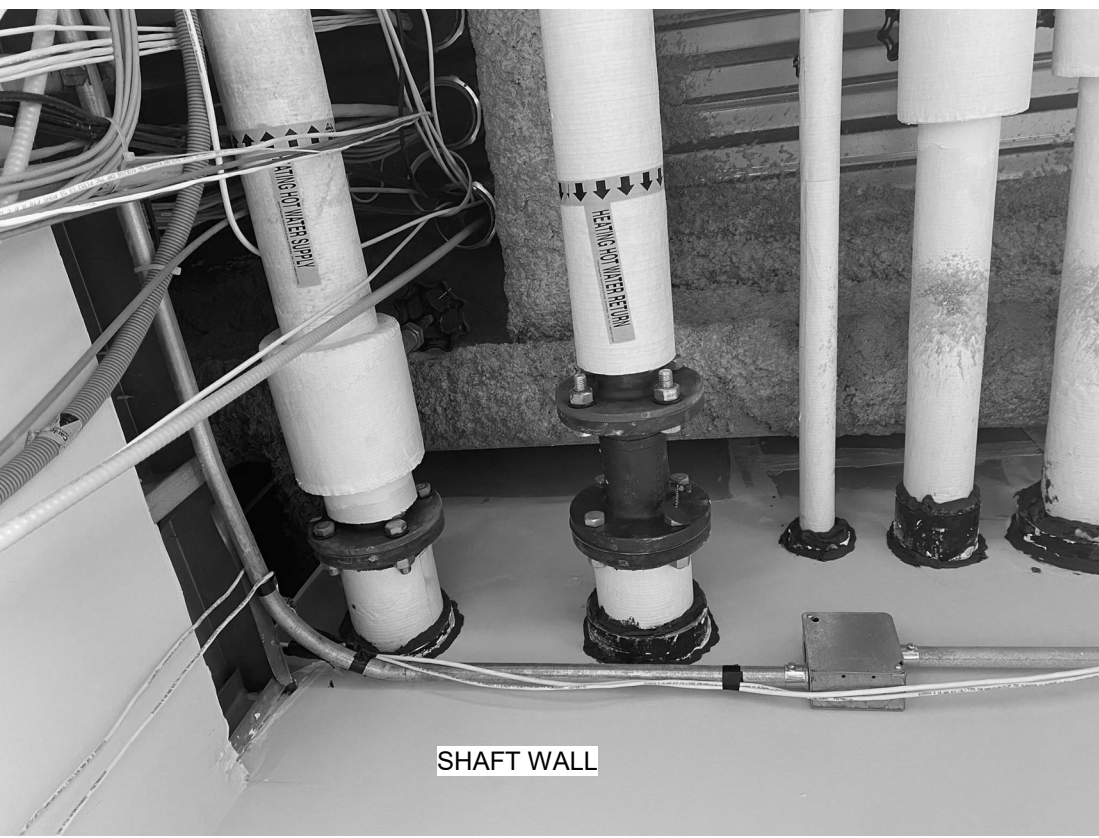


IMAGE 1

## GENERAL NOTES

A. REFER TO SHEET M000 FOR GENERAL NOTES.

## KEYED NOTES

1. CLOSE EXISTING SHUT-OFF VALVES PRIOR TO STARTING ANY DEMOLITION. EXISTING VALVES SERVE ALL AIR TERMINAL UNITS ON THIRD FLOOR. COORDINATE REQUIRED SHUT-DOWN WITH OWNER'S REPRESENTATIVE. SEVERAL SHUTDOWNS MAY BE REQUIRED. REFER TO IMAGE 1 ON THIS SHEET.
2. EXISTING AIR TERMINAL UNIT VAV 2-300 TO BE RELOCATED AND RE-USED. EXISTING VAV DDC CONTROLLER TO BE SALVAGED AND RE-USED FOR EXISTING VAV BOX AT NEW LOCATION. THE EXISTING FC BUS SHALL REMAIN INTACT DURING CONSTRUCTION AND ANY EXISTING CONTROL WIRES THAT ARE TOO SHORT SHALL BE RE-PULLED, NOT SPICED. REFER TO SHEET M201 FOR NEW WORK.
3. REMOVE EXISTING HEATING HOT WATER SUPPLY AND RETURN BRANCH PIPING, 2-WAY CONTROL VALVE, PIPING ACCESSORIES AND SHUT-OFF VALVES BACK TO MAIN AND CAP. EXISTING 2-WAY CONTROL VALVE TO BE RE-USED. REFER TO SHEET M201 FOR NEW WORK.
4. EXISTING WALL MOUNTED DDC THERMOSTAT TO REMAIN.
5. EXISTING WALL MOUNTED DDC THERMOSTAT TO BE REMOVED AND RELOCATED. CONTACT OWNER BEFORE DEMOLITION BEGINS. EXISTING THERMOSTATS TO BE REMOVED BY OWNER. FC BUS SHALL REMAIN INTACT DURING CONSTRUCTION AND ANY EXISTING CONTROL WIRES THAT ARE TOO SHORT SHALL BE RE-PULLED, NOT SPICED. REFER TO SHEET M201 FOR NEW WORK ASSOCIATED WITH EXISTING DDC THERMOSTAT. PATCH EXISTING WALL IF EXISTING THERMOSTAT IS REMOVED FROM AN EXISTING WALL THAT IS TO REMAIN.
6. NO WORK REQUIRED FOR EXISTING AIR TERMINAL UNIT.
7. REMOVE EXISTING HEATING HOT WATER SUPPLY AND RETURN BRANCH PIPING, 2-WAY CONTROL VALVE, PIPING ACCESSORIES AND SHUT-OFF VALVES TO POINT SHOWN. EXISTING 2-WAY CONTROL VALVE TO BE RE-USED. REFER TO SHEET M201 FOR NEW WORK.

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## Health Care

MU PROJECT NO. - CP221943

**UNIVERSITY PHYSICIANS  
MEDICAL BUILDING - 3RD  
FLOOR RENOVATION**

1020 Hitt St. Columbia, MO 65212

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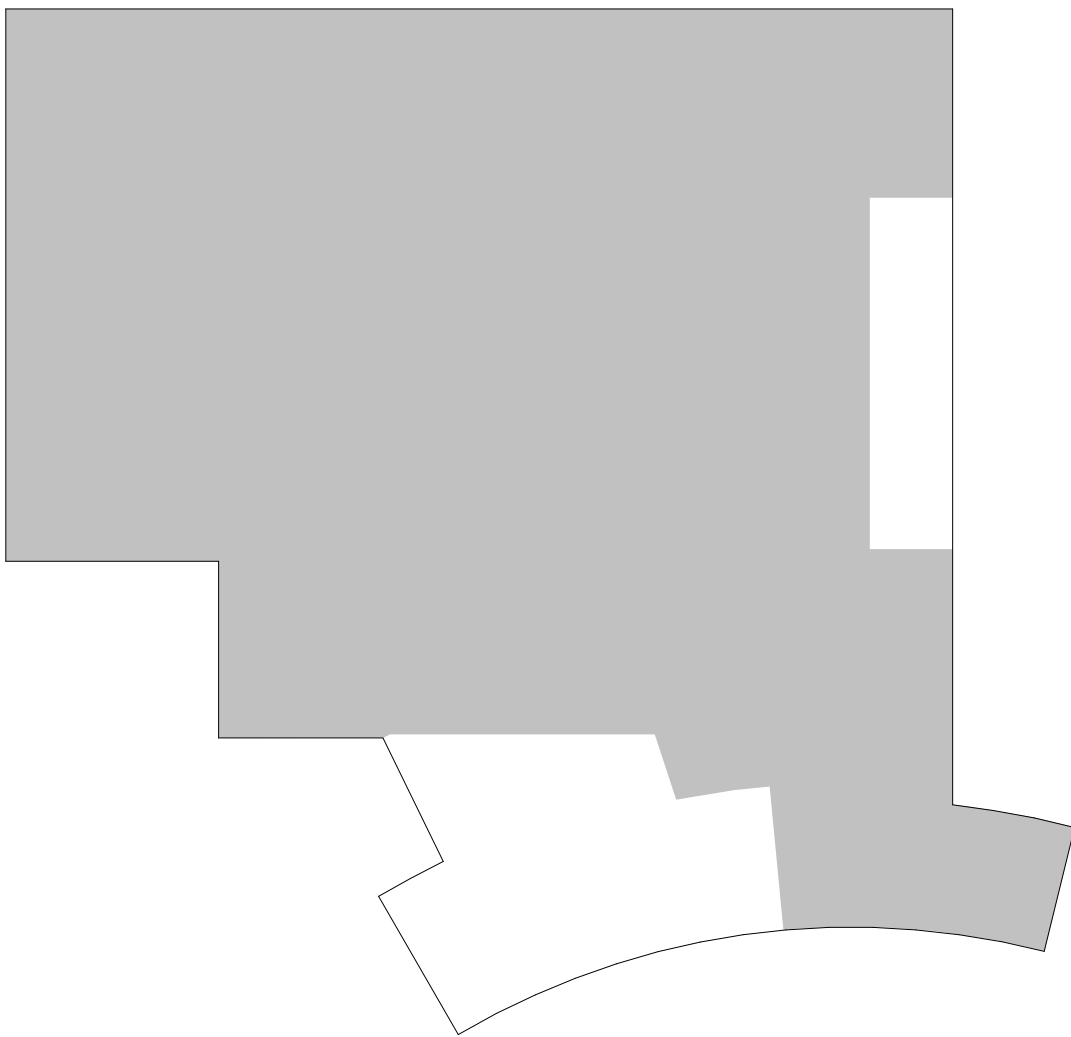
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**THIRD FLOOR PIPING PLAN  
- DEMOLITION**

DATE: 03 APRIL, 2023  
INTROBA PROJECT NO. 0011593

# MD201

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THIRD FLOOR KEY PLAN





THIRD FLOOR - VAV ZONING PLAN  
1/8" = 1'-0"

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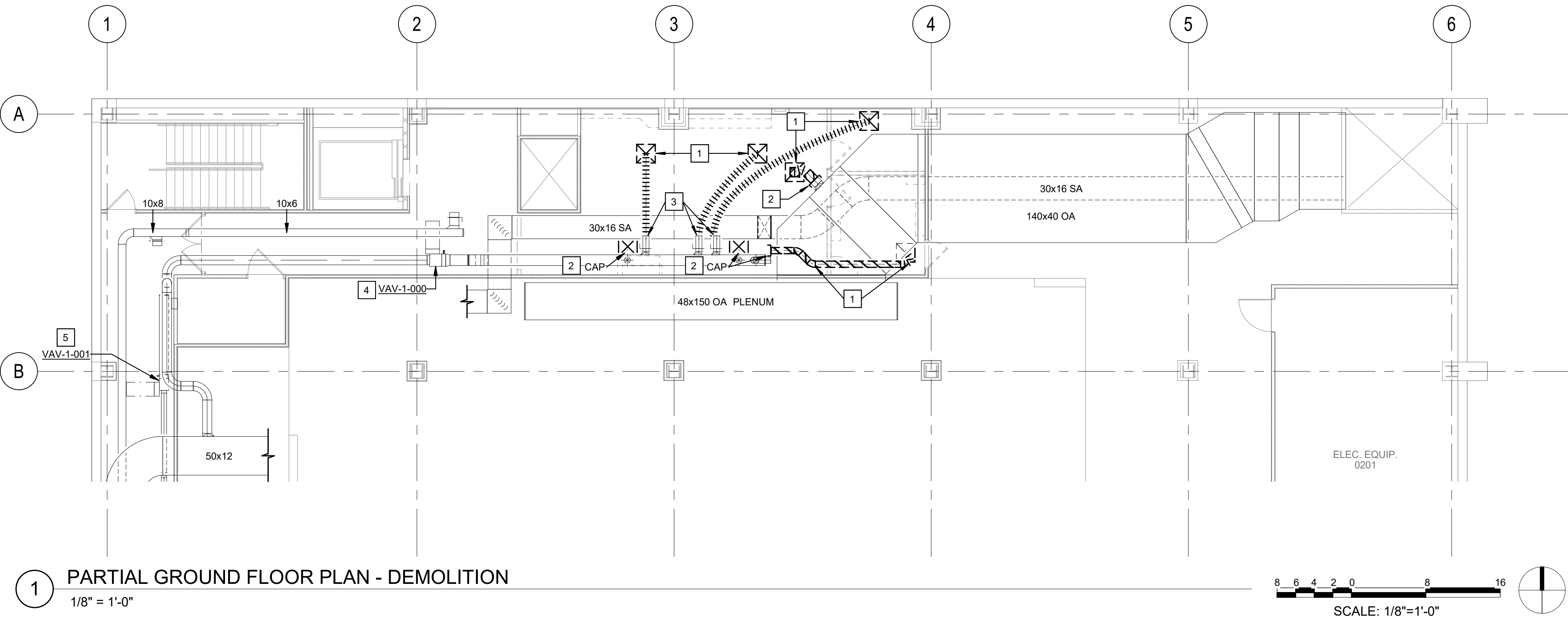
THIRD FLOOR VAV ZONING PLAN

DATE 03 APRIL, 2023  
INTROBA PROJECT NO. 0011593

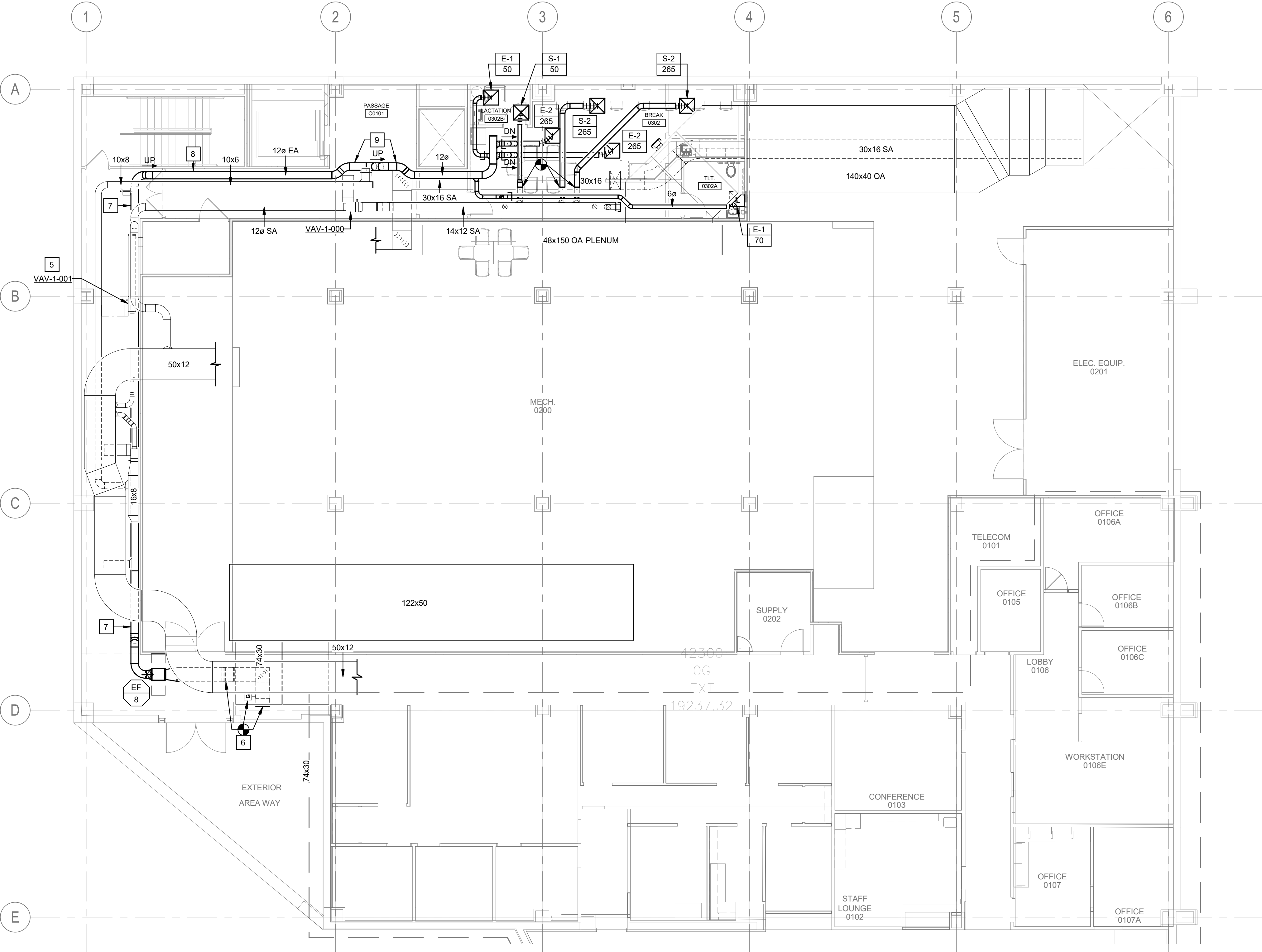
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1 PARTIAL GROUND FLOOR PLAN - DEMOLITION  
1/8" = 1'-0"



2 PARTIAL GROUND FLOOR PLAN - NEW WORK  
1/8" = 1'-0"



IMAGE 1

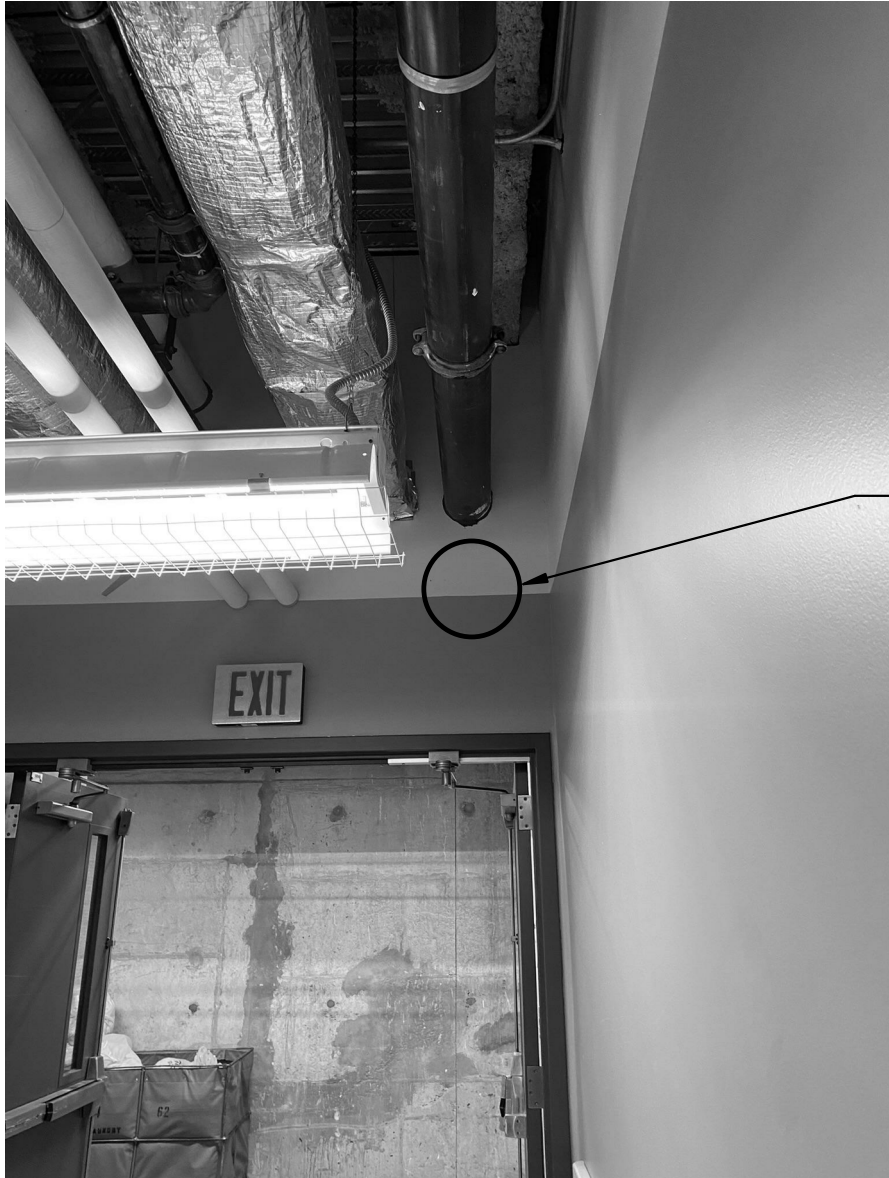


IMAGE 2



IMAGE 3



IMAGE 4

GENERAL NOTES

A. REFER TO SHEET M000 FOR GENERAL NOTES.

B. ALL DUCTWORK WITH OPEN ENDS SHALL BE COVERED FOR PROTECTION DURING CONSTRUCTION PER SPEC SECTION 233113, 3.3 (P).

KEYED NOTES

1. REMOVE EXISTING AIR DEVICES AND DUCTWORK TO POINT SHOWN.

2. CAP EXISTING DUCTWORK AIRTIGHT WITH SHEETMETAL. INSULATE CAP WITH 1-1/2" THICK FOIL FACED DUCT WRAP INSULATION IF DUCT IS SUPPLY DUCT.

3. PROVIDE TEMPORARY CAP IN EXISTING DUCTWORK UNTIL NEW DUCTWORK IS INSTALLED. EXISTING SYSTEM MUST REMAIN OPERATIONAL AT ALL TIMES.

4. ENGAGE OWNER'S REPRESENTATIVE TO CONTACT UNIVERSITY OF MISSOURI HOSPITAL CONTROL SHOP TO CLOSE AIR TERMINAL UNIT DAMPER PRIOR TO STARTING DEMOLITION WORK. EXISTING SYSTEM MUST REMAIN OPERATIONAL AT ALL TIMES.

5. NO WORK REQUIRED FOR EXISTING AIR TERMINAL UNIT.

6. CONNECT NEW 22"x6" EXHAUST TAP TO EXISTING LOUVER SHOWN IN IMAGE 1 ON THIS SHEET. ROUTE AS TIGHT AS POSSIBLE BENEATH EXISTING 74"x30" RELIEF DUCT SHOWN IN IMAGE 4 ON THIS SHEET. PROVIDE 22"x6" BACKDRAFT DAMPER BEFORE WALL PENETRATION TO EXISTING LOUVER. COORDINATE EXHAUST DUCT LOCATION WITH EXISTING 74"x30" RELIEF DUCT ACCESS DOORS.

7. ROUTE NEW 12"Ø EXHAUST AT APPROXIMATELY 7'-5" A.F.F. DOWN LENGTH OF CORRIDOR.

8. ROUTE NEW 12"Ø EXHAUST AT APPROXIMATELY 9'-2" A.F.F. BELOW EXISTING FIRE PROTECTION SYSTEM IN THIS AREA. COORDINATE WITH ROUTE WITH EXISTING LIGHTING FIXTURES. REFER TO IMAGE 2 ON THIS SHEET.

9. ROUTE NEW 12"Ø EXHAUST BENEATH EXISTING CHILLED WATER SUPPLY AND RETURN THEN RISE TO ROUTE ABOVE EXISTING 30"x16" SUPPLY DUCT TO ENTER PASSAGE C0101. REFER TO IMAGE 3 ON THIS SHEET.

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Health Care

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**UNIVERSITY PHYSICIANS  
MEDICAL BUILDING - 3RD  
FLOOR RENOVATION**  
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STATE OF MISSOURI

TORI JANELLE GILLESPIE

REGISTERED PROFESSIONAL ENGINEER

PE-2018000203

4/3/2023

TORI JANELLE GILLESPIE  
PE-2018000203

ALTERNATE #1 - GROUND  
FLOOR PLAN - DEMOLITION  
& NEW WORK

DATE	03 APRIL, 2023
INTROBA PROJECT NO.	0011593

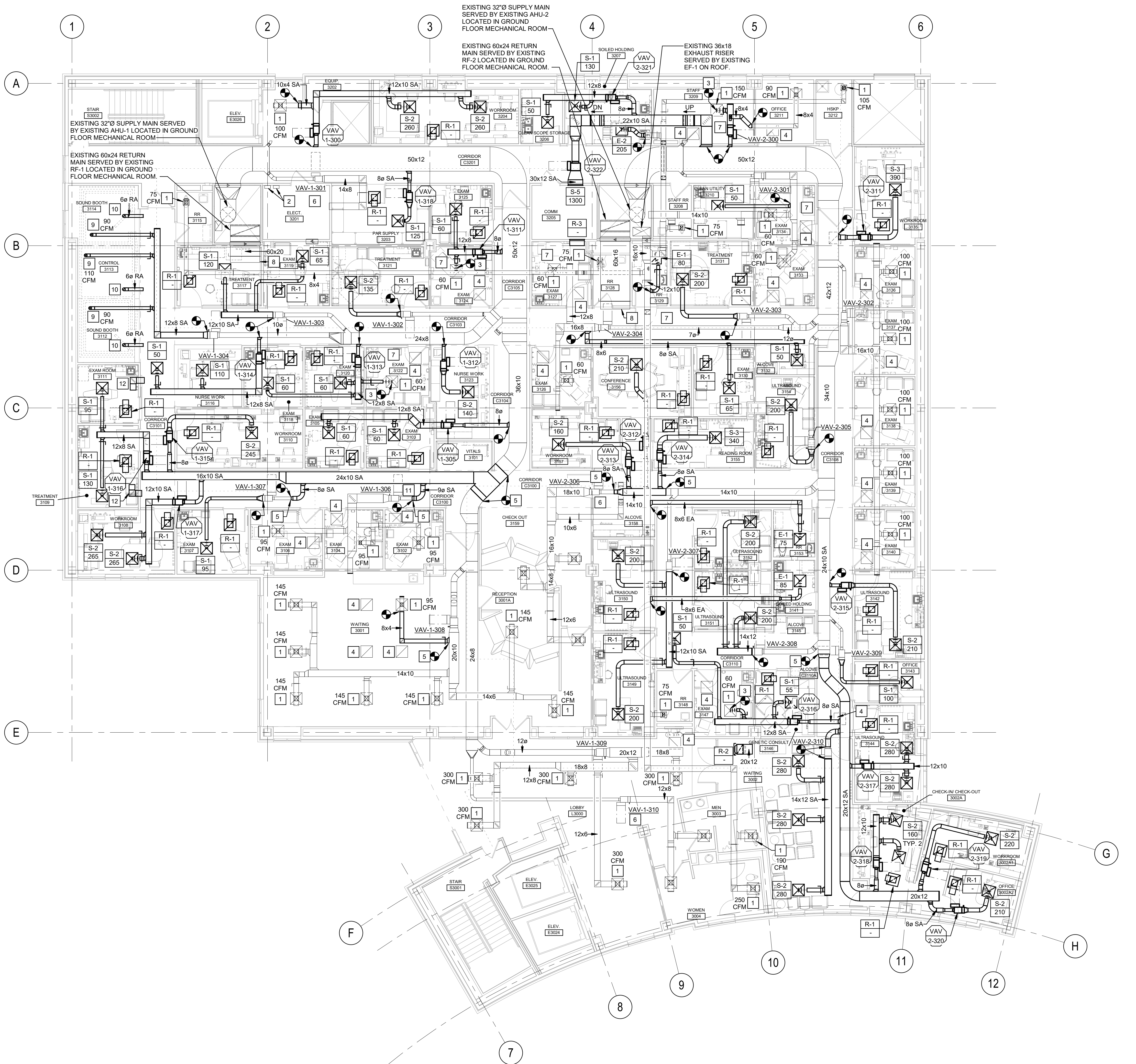
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DRAWN BY: J. GILLESPIE  
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1 THIRD FLOOR - DUCTWORK PLAN - NEW WORK  
1/8" = 1'-0"

#### EXISTING AHU DESCRIPTION AND COMPONENTS

THE EXISTING HVAC SYSTEM IS SET UP FOR A STANDARD MEDICAL OFFICE BUILDING. VARIABLE AIRFLOW AIR HANDLING UNITS ARE LOCATED IN THE BASEMENT MECHANICAL ROOM WITHIN THE BUILDING. AHU-1 FEEDS THE WEST HALF OF THE BUILDING AND AHU-2 FEEDS THE EAST HALF OF THE BUILDING. WE WILL FOCUS ON AHU-1 SINCE IT SERVES THE RENOVATION AREA, BUT BOTH UNITS ARE ESSENTIALLY IDENTICAL. THE AIR HANDLING UNITS CONSIST OF THE FOLLOWING COMPONENTS:

- REMOTE RETURN FAN - SUSPENDED WITHIN THE MECHANICAL ROOM (40,000 CFM, 3" TSP, 40HP, 480V/3PH)
- MIXING SECTION
- AIR BLENDER
- PRE-FILTER (MERV 8)
- SUPPLY FAN (45,000 CFM, 9" TSP, 100 HP, 480V/3PH)
- BLOW THROUGH COIL - CAMPUS CHILLED WATER (1512 MBH, 250 GPM, 18 FT. HEAD PRESSURE)
- DISCHARGE SECTION
- REMOTE, DUCT MOUNTED, STEAM DISPERSION HUMIDIFIER

SUPPLY AIR IS DUCTED FROM THE AIR HANDLING UNIT AND IS DISTRIBUTED TO MULTIPLE SPACES ON MULTIPLE FLOORS. VAV BOXES WITH HOT WATER REHEAT COILS MODULATE AIRFLOW TO EACH ZONE AND PROVIDE HEATING AT THE ZONE LEVEL FOR TEMPERATURE CONTROL. ALL AIR THAT IS NOT EXHAUSTED IS RETURNED BACK TO THE MAIN UNIT THROUGH THE CEILING RETURN AIR FLENUM.

#### GENERAL NOTES

- REFER TO SHEET M000 FOR GENERAL NOTES.
- REFER TO AIR TERMINAL UNIT SCHEDULE ON SHEET M000 FOR INLET SIZE OF AIR TERMINAL UNITS.
- ALL NON-DUCTED RETURN AIR DEVICES SHALL HAVE A LINED SOUND BOOT PER DETAIL 4 ON SHEET M-500.
- ALL DUCTWORK WITH OPEN ENDS SHALL BE COVERED FOR PROTECTION DURING CONSTRUCTION PER SPEC SECTION 233113, 3.3 (P).

#### KEYED NOTES

- REBALANCE EXISTING AIR DEVICE TO CFM NOTED ON PLANS.
- EXISTING VAV DDC POWER SUPPLY UNIT ON WALL TO REMAIN.
- CONNECT NEW FLEXIBLE BRANCH DUCT TO EXISTING SUPPLY AIR DEVICE. PROVIDE TRANSITION TO EXISTING AIR DEVICE NECK SIZE AS REQUIRED.
- EXISTING NON-DUCTED RETURN AIR DEVICE TO REMAIN.
- CONNECT NEW SUPPLY DUCT TO EXISTING. PROVIDE TRANSITION AS REQUIRED. PROVIDE PROPER VAPOR BARRIER WHERE NEW DUCT WRAP INSULATION BUTTS EXISTING INSULATION.
- NO WORK REQUIRED FOR EXISTING AIR TERMINAL UNIT.
- REFER TO ARCHITECTURAL AND ELECTRICAL DRAWINGS FOR TEMPORARY REMOVAL AND REPLACEMENT OF EXISTING CEILING AND LIGHTS FOR MECHANICAL WORK SHOWN TO BE INSTALLED ABOVE EXISTING CEILINGS THAT ARE TO REMAIN. COORDINATE SCHEDULING OF WORK WITH OWNER'S REPRESENTATIVE.
- EXISTING OPEN-ENDED RETURN AIR DUCT ABOVE CEILING. REMOVE FILTER MATERIAL INSTALLED ON OPEN ENDED DUCT AFTER REMODEL IS COMPLETE. REFER TO KEYED NOTE 5 ON SHEET MD101.
- PROVIDE 6" Ø RIGID SUPPLY AIR DUCT CONNECTION TO SOUND BOOTH MANUFACTURER PROVIDED CEILING GRILLE. BALANCE FOR CFM NOTED ON PLAN.
- PROVIDE 6" Ø RIGID RETURN AIR DUCT CONNECTION TO SOUND BOOTH MANUFACTURER PROVIDED CEILING GRILLE.
- REBALANCE EXISTING AIR TERMINAL UNIT VAV-1-306 TO CFM NOTED ON PLAN. AIRFLOW IS BASED ON TESTING, ADJUSTING AND BALANCING REPORT FOR PROJECT #CP171063 DATED JULY 26, 2019.
- INSTALL 12"x12" RETURN AIR TRANSFER DUCT ABOVE CEILING. SIZE NOTED IS SHEETMETAL SIZE. REFER TO DETAIL 7 ON SHEET M500.

AIR TERMINAL UNITS MUST BE INSTALLED IN LOCATIONS THAT PROVIDE ACCESS TO CONTROLLER. DO NOT INSTALL NEW OR RELOCATED AIR TERMINAL UNITS WITH CONTROLLER NEXT TO WALLS OR ABOVE FIXED FURNITURE/SHELVING TO ALLOW ACCESS FOR MAINTENANCE.

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PE-2018000203

#### THIRD FLOOR DUCTWORK PLAN - NEW WORK

DATE: 03 APRIL, 2023  
INTROBA PROJECT NO. 0011593

M101

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MU PROJECT NO. - CP221943

#### UNIVERSITY PHYSICIANS MEDICAL BUILDING - 3RD FLOOR RENOVATION

1020 Hitt St. Columbia, MO 65212

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THIRD FLOOR KEY PLAN

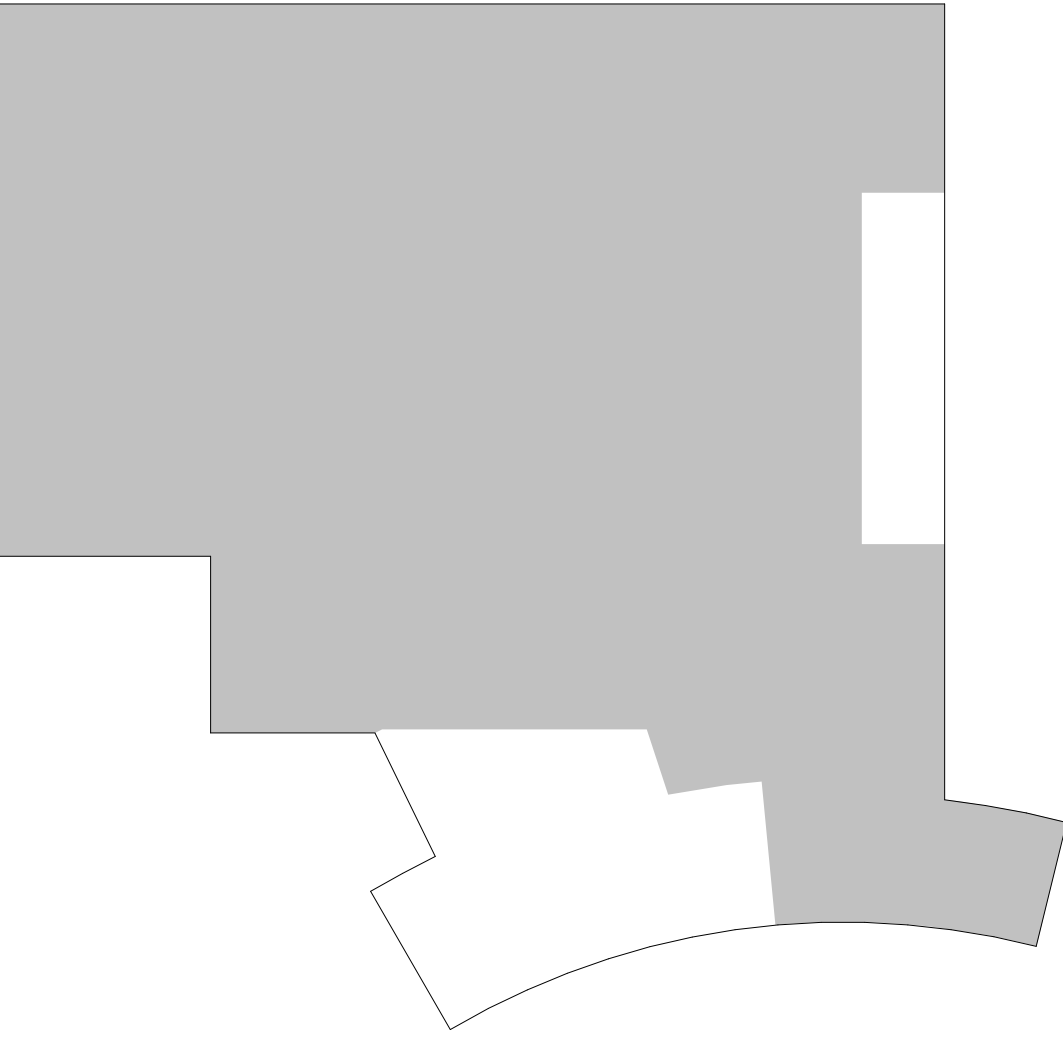


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1 THIRD FLOOR - PIPING PLAN - NEW WORK  
1/8" = 1'-0"

8 6 4 2 0 8 16  
SCALE: 1/8"=1'-0"



THIRD FLOOR KEY PLAN

GENERAL NOTES

A. REFER TO SHEET M000 FOR GENERAL NOTES.

B. BRANCH PIPE SIZES TO AIR TERMINAL UNITS REHEAT COILS SHALL BE 3/4" UNLESS NOTED OTHERWISE.

# KEYED NOTES

1. OPEN EXISTING SHUT-OFF VALVES AFTER ALL PIPING WORK IN ANY SCHEDULED SHUTDOWN HAS BEEN COMPLETED AND PRESSURE TESTED. COORDINATE WITH OWNERS REPRESENTATIVE. VALVES SHUTDOWN ENTIRE FOURTH FLOOR. SEVERAL SHUTDOWNS MAY BE REQUIRED.

2. NEW LOCATION OF EXISTING AIR TERMINAL UNIT VAV-2-300. PROVIDE NEW PIPING ACCESSORIES. EXISTING 2-WAY CONTROL VALVE TO BE RE-USED PER KEYED NOTE 3 ON SHEET M201. PROVIDE NEW SHUT-OFF VALVES AND PIPING ACCESSORIES PER DETAIL 6 ON SHEET M500. CONNECT EXISTING DDC THERMOSTAT TO EXISTING VAV BOX AT NEW LOCATION. IF EXISTING CONTROL WIRING IS NOT LONG ENOUGH, PROVIDE NEW. SPLICING OF CONTROL WIRING IS PROHIBITED.

3. NEW LOCATION OF EXISTING DDC THERMOSTAT. CONNECT TO EXISTING ASSOCIATED VAV BOX SHOWN ON PLANS. IF EXISTING CONTROL WIRING IS NOT LONG ENOUGH, PROVIDE NEW. SPLICING OF CONTROL WIRING IS PROHIBITED. PATCH WALL TO MATCH EXISTING FINISH IF THERMOSTAT IS TO BE INSTALLED ON AN EXISTING WALL.

4. EXISTING DDC THERMOSTAT TO REMAIN.

5. INSTALL NEW OWNER FURNISHED WALL MOUNTED DDC THERMOSTAT ON WALL. PATCH WALL TO MATCH EXISTING FINISH IF THERMOSTAT IS TO BE INSTALLED ON AN EXISTING WALL. INSTALL AN ADHESIVE LABEL ON THERMOSTAT WITH CORRESPONDING AIR TERMINAL UNIT TAG AND AIR TERMINAL UNIT LOCATION FROM THERMOSTAT. LETTERS SHALL BE MINIMUM 1/8" HIGH. COORDINATE LABEL TYPE AND LETTERING HEIGHT WITH OWNER'S REPRESENTATIVE.

6. INSTALL A 1/2" WIDE ENGRAVED PHENOLIC PLASTIC ADHESIVE LABEL ON THE LAY-IN CEILING GRID TO IDENTIFY AIR TERMINAL UNIT LOCATION AND CEILING TILE TO BE USED TO ACCESS AIR TERMINAL UNIT. LABEL SHALL HAVE A WHITE BACKGROUND WITH 3/8" HIGH BLACK LETTERS. ENGAGE OWNER'S REPRESENTATIVE FOR VERIFICATION OF CEILING TILE TO BE USED FOR ACCESS PRIOR TO INSTALLING LABEL.

7. EXISTING VAV DDC POWER SUPPLY UNITS ON WALL.

8. CONNECT NEW HEATING HOT WATER BRANCH PIPING TO EXISTING MAINS. REFER TO KEYED NOTE 1 ON THIS SHEET FOR MAIN SHUT-OFF VALVES.

9. NO WORK REQUIRED FOR EXISTING AIR TERMINAL UNIT.

10. CONNECT EXISTING DDC THERMOSTAT TO NEW ASSOCIATED VAV BOX SHOWN ON PLANS. IF EXISTING CONTROL WIRING IS NOT LONG ENOUGH, PROVIDE NEW. SPLICING OF CONTROL WIRING IS PROHIBITED.

11. CONNECT TO EXISTING HEATING HOT WATER BRANCH PIPING AND EXTEND TO NEW AIR TERMINAL UNIT AS SHOWN. RE-USE EXISTING 2-WAY CONTROL VALVE PER KEYED NOTE 7 ON SHEET M201. PROVIDE NEW SHUT-OFF VALVES AND PIPING ACCESSORIES PER DETAIL 6 ON SHEET M500.

12. INSTALL EXISTING RELOCATED THERMOSTAT IN SOUND BOOTH. COORDINATE INSTALLATION WITH SOUND BOOTH MANUFACTURER.

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PE-2018000203

THIRD FLOOR PIPING PLAN  
- NEW WORK

DATE 03 APRIL, 2023  
INTROBA PROJECT NO. 0011593

M201

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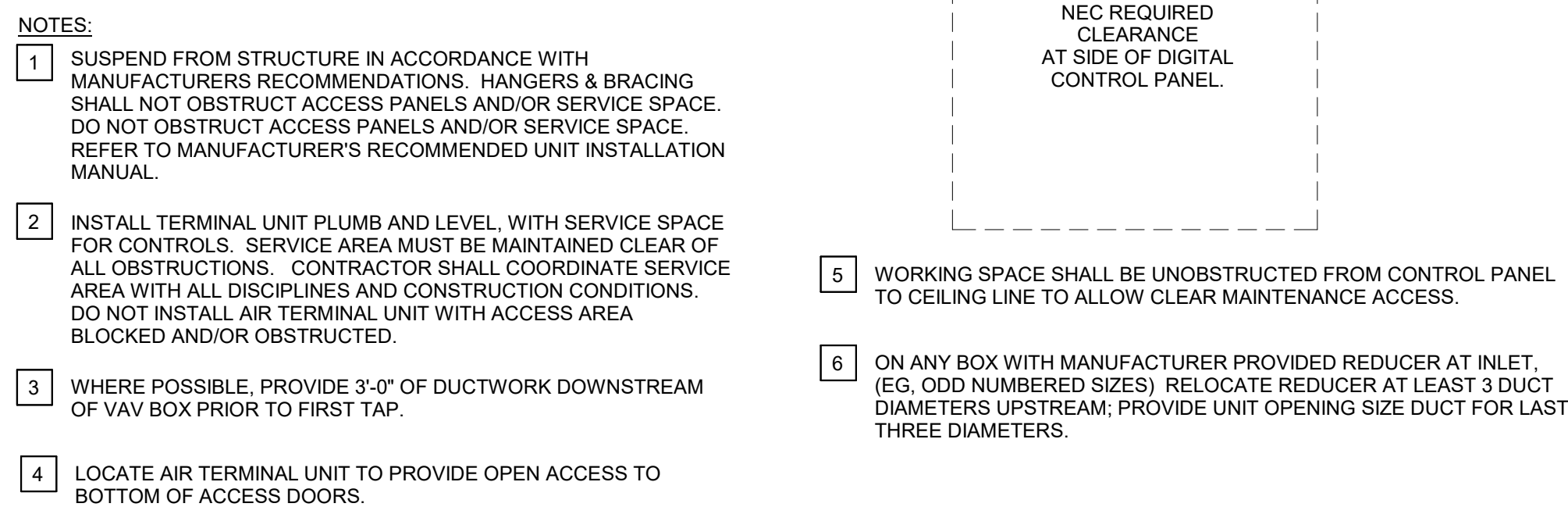
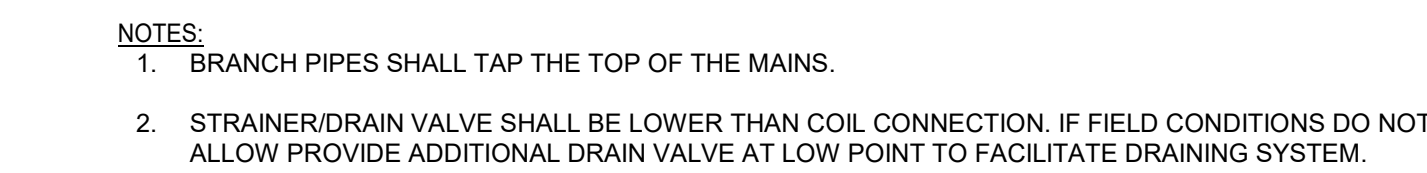


MU PROJECT NO. - CP221943  
**UNIVERSITY PHYSICIANS  
MEDICAL BUILDING - 3RD  
FLOOR RENOVATION**

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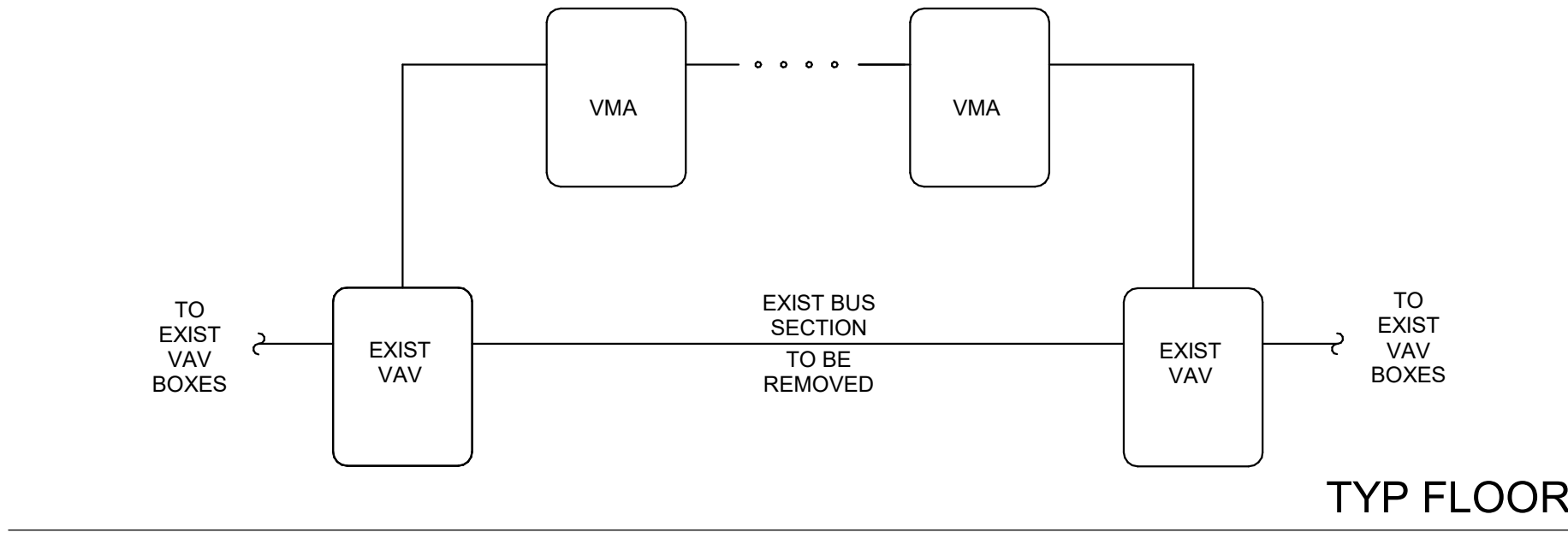
AIR TERMINAL UNIT SCHEDULE

MARK		#	EXISTING/ NEW	MFR.	MODEL	TYPE	ROUND DUCT INLET SIZE (IN)	PRIMARY AIRFLOW (CFM)		UNOCCUPIED AIRFLOW (CFM)	DESIGN INLET STATIC PRESSURE (IN WC)	(1) MAX PRESSURE DROP (IN WC)	OUTLET DUCT SIZE WxD (IN)	AUXILIARY HOT WATER HEATING COIL										MAX NC LEVEL @ MAX CFM		NOTES
ID								COOLING MAX	COOLING/ HEATING MIN.					AIRFLOW (CFM)	CAPACITY (MBH)	EAT (°F)	LAT (°F) (NOTE 3)	EWTL/WT (°F)	FLOW (GPM)	MAX WPD (FT HD) (FT HD)	MAX APD (IN WC) (IN WC)	CONTROL VALVE	DISCHARGE	RADIATED		
VAV	1-000	EXISTING	CARNES	AVWD	SINGLE DUCT PRESSURE INDEPENDENT	12	580	290	135	-	-	-	16x15	290	-	55	-	180/140	-	-	-	-	-	-	5, 6	
VAV	1-001	EXISTING	CARNES	AVWD	SINGLE DUCT PRESSURE INDEPENDENT	7	650	-	-	-	-	-	12x10	-	-	55	-	180/140	-	-	-	-	-	-	5, 6, 7	
VAV	1-300	NEW	TITUS	DESV	SINGLE DUCT PRESSURE INDEPENDENT	8	620	620	310	1.2	0.5	12x10	620	26.8	55	95	180/140	1.3	5.0	0.25	-	-	30	30	2, 4	
VAV	1-301	EXISTING	CARNES	AVWD	SINGLE DUCT PRESSURE INDEPENDENT	7	510	50	50	-	-	-	12x10	-	-	55	-	180/140	-	-	-	-	-	-	5, 7, 8	
VAV	1-302	EXISTING	CARNES	AVWD	SINGLE DUCT PRESSURE INDEPENDENT	8	135	70	50	-	-	-	12x10	70	-	55	-	180/140	-	-	-	-	-	-	5, 6	
VAV	1-303	EXISTING	CARNES	AVWD	SINGLE DUCT PRESSURE INDEPENDENT	8	185	95	50	-	-	-	12x10	95	-	55	-	180/140	-	-	-	-	-	-	5, 6	
VAV	1-304	EXISTING	CARNES	AVWD	SINGLE DUCT PRESSURE INDEPENDENT	10	290	145	75	-	-	-	14x12 1/2	145	-	55	-	180/140	-	-	-	-	-	-	5, 6	
VAV	1-305	NEW	TITUS	DESV	SINGLE DUCT PRESSURE INDEPENDENT	6	120	60	50	1.2	0.5	12x8	60	2.6	55	95	180/140	0.5	-	-	-	-	-	-	2, 4	
VAV	1-306	EXISTING	CARNES	AVWD	SINGLE DUCT PRESSURE INDEPENDENT	7	285	145	145	-	-	-	12x10	145	-	55	-	180/140	-	-	-	-	-	-	5, 6	
VAV	1-307	EXISTING	CARNES	AVWD	SINGLE DUCT PRESSURE INDEPENDENT	6	95	95	50	-	-	-	12x8	95	-	55	-	180/140	-	-	-	-	-	-	5, 6	
VAV	1-308	EXISTING	CARNES	AVWD	SINGLE DUCT PRESSURE INDEPENDENT	12	1110	555	555	-	-	-	16x15	555	-	55	-	180/140	-	-	-	-	-	-	5, 6	
VAV	1-309	EXISTING	CARNES	AVWD	SINGLE DUCT PRESSURE INDEPENDENT	12	1500	750	750	-	-	-	16x15	750	-	55	-	180/140	-	-	-	-	-	-	5, 6	
VAV	1-310	EXISTING	CARNES	AVWD	SINGLE DUCT PRESSURE INDEPENDENT	6	340	170	170	-	-	-	12x8	170	-	55	-	180/140	-	-	-	-	-	-	5, 7	
VAV	1-311	NEW	TITUS	DESV	SINGLE DUCT PRESSURE INDEPENDENT	6	120	60	50	1.2	0.5	12x8	60	2.6	55	95	180/140	0.5	5.0	0.25	2-WAY	30	30	2, 4		
VAV	1-312	NEW	TITUS	DESV	SINGLE DUCT PRESSURE INDEPENDENT	6	140	70	50	1.2	0.5	12x8	70	3.0	55	95	180/140	0.5	5.0	0.25	2-WAY	30	30	2, 4		
VAV	1-313	NEW	TITUS	DESV	SINGLE DUCT PRESSURE INDEPENDENT	6	180	90	50	1.2	0.5	12x8	90	3.9	55	95	180/140	0.5	5.0	0.25	2-WAY	30	30	2, 4		
VAV	1-314	NEW	TITUS	DESV	SINGLE DUCT PRESSURE INDEPENDENT	6	160	80	50	1.2	0.5	12x8	80	3.5	55	95	180/140	0.5	5.0	0.25	2-WAY	30	30	2, 4		
VAV	1-315	NEW	TITUS	DESV	SINGLE DUCT PRESSURE INDEPENDENT	6	245	125	65	1.2	0.5	12x8	125	5.4	55	95	180/140	0.5	5.0	0.25	2-WAY	30	30	2, 4		
VAV	1-316	NEW	TITUS	DESV	SINGLE DUCT PRESSURE INDEPENDENT	6	225	115	55	1.2	0.5	12x8	115	9.7	55	95	180/140	0.5	5.0	0.25	2-WAY	30	30	2, 4		
VAV	1-317	NEW	TITUS	DESV	SINGLE DUCT PRESSURE INDEPENDENT	8	530	530	265	1.2	0.5	12x10	530	22.9	55	95	180/140	1.1	5.0	0.25	2-WAY	30	30	2, 4		
VAV	1-318	NEW	TITUS	DESV	SINGLE DUCT PRESSURE INDEPENDENT	6	125	50	50	1.2	0.5	12x8	50	2.2	55	95	180/140	0.5	5.0	0.25	2-WAY	30	30	2, 4		
VAV	2-300	EXISTING	CARNES	AVWD	SINGLE DUCT PRESSURE INDEPENDENT	7	240	240	120	-	-	-	12x10	240	10.4	55	-	180/140	0.5	-	-	-	-	-	5, 6	
VAV	2-301	EXISTING	CARNES	AVWD	SINGLE DUCT PRESSURE INDEPENDENT	5	170	85	50	-	-	-	12x8	85	-	55	-	180/140	-	-	-	-	-	-	5, 6	
VAV	2-302	EXISTING	CARNES	AVWD	SINGLE DUCT PRESSURE INDEPENDENT	7	500	500	250	-	-	-	12x10	500	-	55	-	180/140	-	-	-	-	-	-	5, 6	
VAV	2-303	EXISTING	CARNES	AVWD	SINGLE DUCT PRESSURE INDEPENDENT	7	200	100	50	-	-	-	12x10	100	-	55	-	180/140	-	-	-	-	-	-	5, 6	
VAV	2-304	EXISTING	CARNES	AVWD	SINGLE DUCT PRESSURE INDEPENDENT	7	235	120	60	-	-	-	12x10	120	-	55	-	180/140	-	-	-	-	-	-	5, 6	
VAV	2-305	EXISTING	CARNES	AVWD	SINGLE DUCT PRESSURE INDEPENDENT	10	200	100	50	-	-	-	14x12 1/2	100	-	55	-	180/140	-	-	-	-	-	-	5, 6	
VAV	2-306	EXISTING	CARNES	AVWD	SINGLE DUCT PRESSURE INDEPENDENT	8	895	445	445	-	-	-	12x10	445	-	55	-	180/140	-	-	-	-	-	-	5, 7	
VAV	2-307	EXISTING	CARNES	AVWD	SINGLE DUCT PRESSURE INDEPENDENT	7	400	200	100	-	-	-	12x10	200	-	55	-	180/140	-	-	-	-	-	-	5, 6	
VAV	2-308	EXISTING	CARNES	AVWD	SINGLE DUCT PRESSURE INDEPENDENT	10	400	200	100	-	-	-	14x12 1/2	100	-	55	-	180/140	-	-	-	-	-	-	5, 6	
VAV	2-309	EXISTING	CARNES	AVWD	SINGLE DUCT PRESSURE INDEPENDENT	5	100	50	50	-	-	-	12x8	100	-	55	-	180/140	-	-	-	-	-	-	5, 6	
VAV	2-310	EXISTING	CARNES	AVWD	SINGLE DUCT PRESSURE INDEPENDENT	10	840	840	420	-	-	-	14x12 1/2	840	-	55	-	180/140	-	-	-	-	-	-	5, 6	
VAV	2-311	NEW	TITUS	DESV	SINGLE DUCT PRESSURE INDEPENDENT	8	390	390	195	1.2	0.5	12x10	390	16.8	55	95	180/140	0.8	5.0	0.25	-	30	30	2, 4		
VAV	2-312	NEW	TITUS	DESV	SINGLE DUCT PRESSURE INDEPENDENT	6	210	105	55	1.2	0.5	12x8	105	4.5	55	95	180/140	0.5	5.0	0.25	-	30	30	2, 4		
VAV	2-313	NEW	TITUS	DESV	SINGLE DUCT PRESSURE INDEPENDENT	6	160	80	50	1.2	0.5	12x8	80	3.5	55	95	180/140	0.5	5.0	0.25	-	30	30	2, 4		
VAV	2-314	NEW	TITUS	DESV	SINGLE DUCT PRESSURE INDEPENDENT	6	340	75	50	1.2	0.5	12x8	170	7.4	55	95	180/140	0.5	5.0	0.25	-	30	30	2, 4		
VAV	2-315	NEW	TITUS	DESV	SINGLE DUCT PRESSURE INDEPENDENT	6	210	105	55	1.2	0.5	12x8	105	4.5	55	95	180/140	0.5	5.0	0.25	-	30	30	2, 4		
VAV	2-316	NEW	TITUS	DESV	SINGLE DUCT PRESSURE INDEPENDENT	6	165	85	50	1.2	0.5	12x8	85	3.7	55	95	180/140	0.5	5.0	0.25	-	30	30	2, 4		
VAV	2-317	NEW	TITUS	DESV	SINGLE DUCT PRESSURE INDEPENDENT	8	560	560	280	1.2	0.5	12x10	560	24.2	55	95	180/140	1.2	5.0	0.25	-	30	30	2, 4		
VAV	2-318	NEW	TITUS	DESV	SINGLE DUCT PRESSURE INDEPENDENT	6	320	160	160	1.2	0.5	12x8	320	13.8	55	95	180/140	0.7	5.0	0.25	-	30	30	2, 4		
VAV	2-319	NEW	TITUS	DESV	SINGLE DUCT PRESSURE INDEPENDENT	6	220	110	110	1.2	0.5	12x8	220	9.5	55	95	180/140	0.5	5.0	0.25	-	30	30	2, 4		
VAV	2-320	NEW	TITUS	DESV	SINGLE DUCT PRESSURE INDEPENDENT	6	210	110	110	1.2	0.5	12x8	210	9.1	55	95	180/140	0.5	5.0	0.25	-	30	30	2, 4		
VAV	2-321	NEW	TITUS	DESV	SINGLE DUCT PRESSURE INDEPENDENT	6	180	180	180	1.2	0.5	12x8	180	7.8	55	95	180/140	0.5	5.0	0.25	-	30	30	2, 4		
VAV	2-322	NEW	TITUS	DESV	SINGLE DUCT PRESSURE INDEPENDENT	14	1300	180	180	1.2	0.5	20x17 1/2	-	-	-	-	-	-	-	-	-	-	30	30	4, 8	

AIR CHANGE RATE SCHEDULE																
ROOM #	ROOM NAME	AREA (SF)	CEILING HEIGHT (FT)	ROOM VOLUME (CU.FT.)	SUPPLY AIR				OUTSIDE AIR				EXHAUST AIR			
					ASHRAE 170-2017		DESIGN		ASHRAE 170-2017		DESIGN		ASHRAE 170-2017		DESIGN	
					AC/ HOUR	SA CFM	SA CFM	AC/ HOUR	AC/ HOUR	OA CFM	OA CFM	AC/ HOUR	AC/ HOUR	EA CFM	EA CFM	AC/ HOUR
3111	EXAM	102	8	816	4	54.4	95	7.0	2	27.2	27.2	2	-	-	-	-
3109	TREATMENT	144	8	1152	6	115.2	130	6.8	2	38.4	38.4	2	-	-	-	-
3107	EXAM	132	8	1056	4	70.4	95	5.4	2	35.2	35.2	2	-	-	-	-
3118	EXAM	99	8	792	4	52.8	60	4.5	2	26.4	26.4	2	-	-	-	-
3120	EXAM	101	8	808	4	53.9	60	4.5	2	26.9	26.9	2	-	-	-	-
3122	EXAM	105	8	840	4	56	60	4.3	2	28.0	28.0	2	-	-	-	-
3105	EXAM	101	8	808	4	53.9	60	4.5	2	28.0	28.0	2	-	-	-	-
3103	EXAM	112	8	896	4	59.7	60	4.0	2	29.9	29.9	2	-	-	-	-
3117	TREATMENT	8	8	1184	6	118.4	120	6.1	2	34.5	34.5	2	-	-	-	-
3119	EXAM	120	8	960	4	64	65	4.1	2	32.0	32.0	2	-	-	-	-
3121	TREATMENT	164	8	1312	6	131.2	135	6.2	2	43.7	43.7	2	-	-	-	-
3124	EXAM	104	8	832	4	55.5	60	4.3	2	27.7	27.7	2	-	-	-	-
3125	EXAM	104	8	832	4	55.5	60	4.3	2	27.7	27.7	2	-	-	-	-
3207	SOILED HOLDING	8	8	1216	-	-	-	-	-	-	-	-	10	202.7	205	10.1
3127	EXAM	108	8	864	4	57.6	60	4.2	2	28.8	28.8	2	-	-	-	-
3131	TREATMENT	154	8	1232	6	123.2	200	9.7	2	41.1	41.1	2	-	-	-	-
3133	EXAM	100	8	800	4	53.3	60	4.5	2	26.7	26.7	2	-	-	-	-
3134	EXAM	800	8	800	4	53.3	60	4.5	2	26.7	26.7	2	-	-	-	-
3206	CLEAN SCOPE STORAGE	64	8	512	4	34.1	50	5.6	2	17.1	17.1	2	-	-	-	-
3210	CLEAN UTILITY	92	8	736	4	49.1	50	4.1	2	24.5	24.5	2	-	-	-	-
3126	EXAM	100	8	800	4	53.3	60	4.5	2	26.7	26.7	2	-	-	-	-
3130	EXAM	117	8	936	4	62.4	65	4.2	2	31.2	31.2	2	-	-	-	-
3154	ULTRASOUND	151	8	1208	6	120.8	200	9.9	2	40.3	40.3	2	-	-	-	-
3150	ULTRASOUND	161	8	1288	6	128.8	200	9.3	2	42.9	42.9	2	-	-	-	-
3149	ULTRASOUND	182	8	1456	6	145.6	200	8.2	2	48.5	48.5	2	-	-	-	-
3152	ULTRASOUND	129	8	1032	6	103.2	200	11.6	2	34.4	34.4	2	-	-	-	-
3151	ULTRASOUND	125	8	1000	6	200	120	12.0	2	33.3	33.3	2	-	-	-	-
3147	EXAM	111	8	888	4	59.2	60	4.1	2	29.6	29.6	2	-	-	-	-
3153	RR	56	8	448	-	-	-	-	-	-	-	-	10	74.7	75	10.0
3141	SOILED HOLDING	63	8	504	-	-	-	-	-	-	-	-	10	84	85	10.1
3142	ULTRASOUND	176	8	1408	6	140.8	210	8.9	2	46.9	46.9	2	-	-	-	-
3144	ULTRASOUND	184	8	1472	6	147.2	560	22.8	2	49.1	49.1	2	-	-	-	-
3129	RR	60	8	480	-	-	-	-	-	-	-	-	10	80	80	10.0



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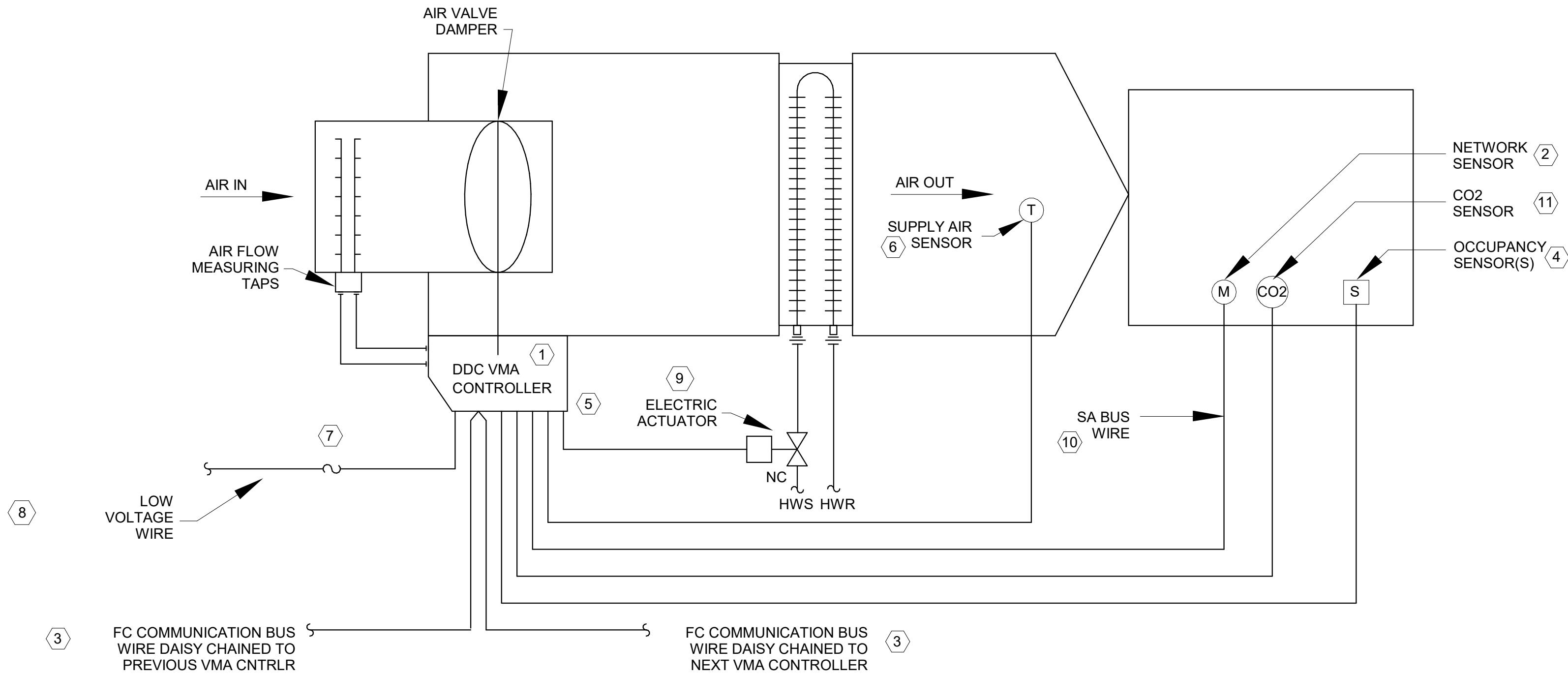


#### NOTES:

- FC BUS TO BE CONTINUOUS DAISY CHAIN WITHOUT SPICES. CONNECTIONS CAN ONLY BE MADE AT CONTROLLERS. SEE PLANS FOR QUANTITY AND LOCATIONS OF VMA CONTROLLERS.
- BREAK BUS BETWEEN TWO EXISTING CONNECTED VAV CONTROLLERS AND REROUTE AS SHOWN. BUS CAN BE REROUTED IN MULTIPLE LOCATIONS TO KEEP OVERALL BUS LENGTH SHORT. COORDINATE FC BUS ROUTING AND OUTAGES WITH OWNERS REP.
- FC COMMUNICATION BUS WIRE SHALL BE 22 AWG, PLENUM RATED, TWISTED SHIELDED, 3 CONDUCTOR, WITH BLUE OUTER CASING, DESCRIPED AS 22-03 QAS STR PLNM NEON BLU JK DISTRIBUTED BY WINDY CITY WIRE, CONSTRUCTED BY CABLE-TEK, OR APPROVED EQUIVALENT.

### B FC BUS SCHEMATIC DIAGRAM

NO SCALE



### A VAV BOX CONTROL DIAGRAM WITH REHEAT

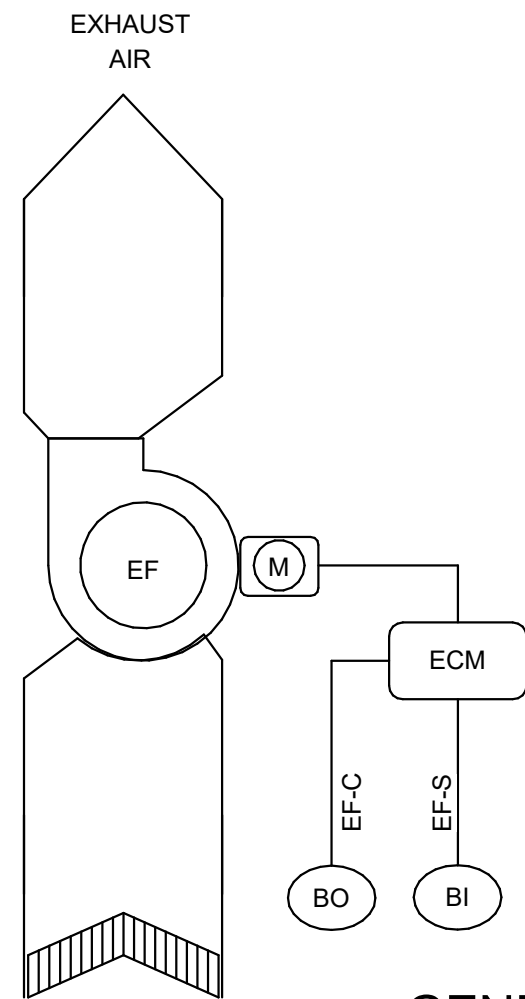
NO SCALE

#### NOTES:

- VMA TERMINAL INCLUDES CONSTANT VOLUME (CV) UNITS & VARIABLE AIR VOLUME (VAV) UNITS. UNLESS OTHERWISE NOTED, ALL CONTROL WORK SHALL BE BY CONTRACTOR.
- CAPS FOR VAV DP TEST PORTS MUST BE NEOPREME CAPS OR 1/4" BRASS PLUGS. NO RUBBER CAPS ALLOWED.

#### KEYED NOTES:

- CONTROLLER WILL BE FURNISHED BY OWNER. CONTROLLER WILL BE JCI MODEL MS-VMA-16XX SERIES OR M4-CVM-3050. PROGRAMMING WILL BE PROVIDED BY OWNER.
- NETWORK SENSOR WILL BE FURNISHED BY OWNER & INSTALLED BY CONTRACTOR. NETWORK SENSOR WILL BE JCI NS SERIES.
- FC COMMUNICATION BUS WIRE SHALL BE 22 AWG, PLENUM RATED, TWISTED SHIELDED, 3 CONDUCTOR, WITH BLUE OUTER CASING, DESCRIPED AS 22-03 QAS STR PLNM NEON BLU JK DISTRIBUTED BY WINDY CITY WIRE CONSTRUCTED BY CABLE-TEK, OR APPROVED EQUIVALENT.
- INSTALLATION OF OCC SENSOR IS WORK OF DIVISION 26. SEE E-SERIES SHEETS FOR FINAL LOCATIONS. A CONTROL CIRCUIT SHALL BE CONNECTED TO ALL OCC SENSORS AS WORK OF DIVISION 23. A CONTROL SIGNAL SHALL BE RELAYED TO THE VAV TERMINAL UNIT THAT SERVES THAT SPACE. IN LOCATIONS WHERE MULTIPLE OCC SENSORS ARE PRESENT, ALL SENSORS SHALL BE MONITORED AND TRANSMIT A SIGNAL TO THE VAV TERMINAL UNIT WITHIN THAT SPACE. ALL SENSORS SHALL BE WIRED IN PARALLEL.
- CONTROLLER MUST HAVE A MINIMUM OF 18 INCHES OF ACCESSIBLE CLEARANCE.
- VAV SUPPLY TEMP SENSOR 1000 OHM PLATINUM RTD LOCATED APPROX. 8 FT. FROM VAV BOX DISCHARGE. PROVIDED, INSTALLED, & WIRED TO CONTROLLER BY CONTRACTOR.
- FUSE LOCATED WITHIN 2 FT. OF VMA CONTROLLER.
- LOW VOLTAGE WIRE BY DIVISION 23. SEE ELECTRICAL DRAWINGS FOR SOURCE.
- VALVE WITH PROPORTIONAL 0-10 VOLT ACTUATOR OR EQUIVALENT.
- SA BUS WIRE SHALL BE 22 AWG, PLENUM RATED, TWISTED SHIELDED, 4 CONDUCTOR.
- CO2 SENSOR. SEE PLANS FOR LOCATIONS.



#### GENERAL NOTES:

- CONNECT POINTS TO NEAREST EMCS CONTROLLER.

#### EXHAUST FANS DDC POINT LIST

TYPE	POINT NAME	DESCRIPTION	DEVICE
BI	EF-S	EXH FAN STATUS	CURRENT SWITCH
BO	EF-C	EXH FAN COMMAND	CONTROL RELAY

### C EXHAUST FAN CONTROL DETAIL

NO SCALE

# BSA

BSA LifeStructures  
12645 Olive Blvd, Suite 227  
Creve Coeur, MO 63141  
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Architectural Registration Number - 2003010309

## Introba

MEP ENGINEERING:  
Introba Inc.  
6 S Old Orchard Ave  
St. Louis, MO 63119  
ph 314.918.8383 www.introba.com  
Missouri State Certificate of Authority #2023008136

## Timberlake

ENGINEERING  
A Custom Engineering Company

LIGHTING ENGINEERING:  
Timberlake Engineering  
912 Old Highway 63 South  
Columbia, MO 65201  
ph 573.875.4365 ext 209 www.customengr.com  
Missouri State Certificate of Authority #000239

## Health Care

MU PROJECT NO. - CP221943

**UNIVERSITY PHYSICIANS  
MEDICAL BUILDING - 3RD  
FLOOR RENOVATION**

1020 Hitt St. Columbia, MO 65212

BID SET

MARK	DATE	DESCRIPTION
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I hereby certify these drawings and/or specifications have been prepared by me, or under my supervision. I further certify that to the best of my knowledge these drawings and/or specifications are as required by and in compliance with the Building Codes of the University of Missouri.



TORI JANELLE GILLESPIE  
PE-2018000203

TEMPERATURE CONTROLS

DATE: 03 APRIL, 2023  
INTROBA PROJECT NO. 0011593

# M700

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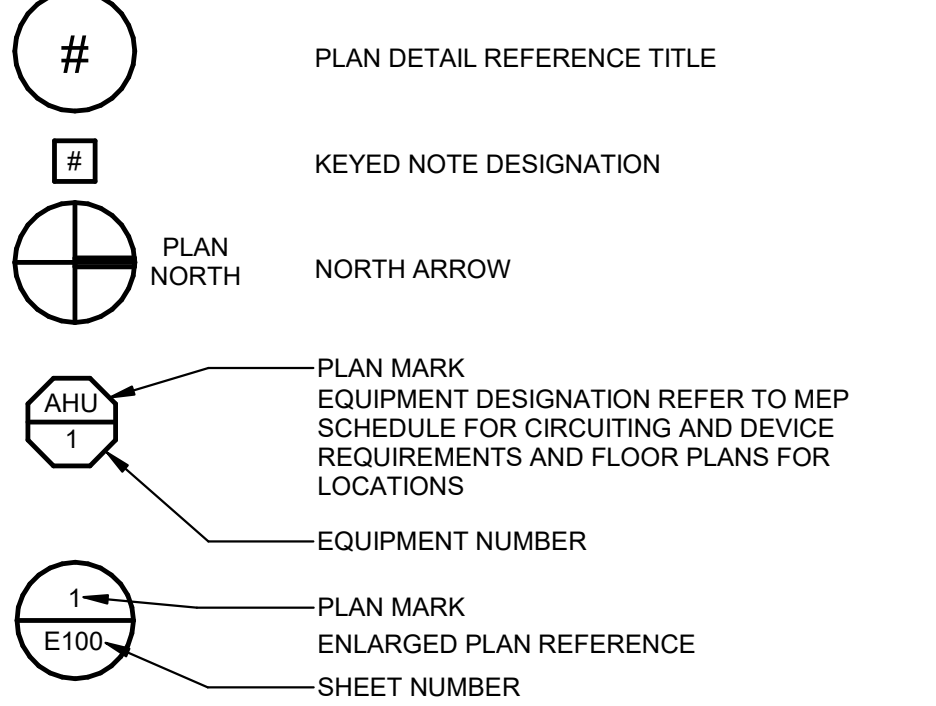
ELECTRICAL GENERAL NOTES

- MAKE ALL INSTALLATIONS IN ACCORDANCE WITH THE (AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) AND/OR ARCHITECTURAL BARRIERS ACT (ABA).
- MOUNTING HEIGHTS INDICATED WITHIN PLANS AND SCHEDULES ARE DIMENSIONED TO THE CENTER LINE OF THE DEVICE, EQUIPMENT, LUMINAIRE, ETC. UNLESS OTHERWISE NOTED.
- COORDINATE EXACT EQUIPMENT LOCATIONS WITH OTHER TRADES. EQUIPMENT LOCATIONS SHOWN ON ELECTRICAL PLANS ARE DIAGRAMMATICAL ONLY AND MIGHT NOT BE EXACT.
- CIRCUIT IDENTIFICATION NUMBERS BESIDE ELECTRICAL DEVICES AND CONNECTION POINTS ON PLANS CORRESPOND TO AN OVERCURRENT DEVICE IN THE DESIGNATED PANELBOARD. NOTE ALL CIRCUIT NUMBER CHANGES MADE IN THE FIELD AT EACH ELECTRICAL DEVICE AND CONNECTION POINT. ALSO CORRECT THE DIRECTORIES AND DEVICE MARKINGS AT PANELBOARDS, SWITCHBOARDS AND SWITCHGEAR TO ACCURATELY REFLECT THE AS-BUILT CONDITIONS.
- INSTALL EMERGENCY AND EXIT LUMINAIRE WIRING IN A SEPARATE RACEWAY FROM THAT OF ANY NORMAL POWER DEVICE.
- CONCEAL ALL CONDUIT IN WALLS, PARTITIONS, ABOVE CEILINGS, AND IN FLOOR SLABS, ETC. UNLESS OTHERWISE INDICATED ON THE PLANS OR IN THE SPECIFICATIONS. CONDUIT ROUTED IN MECHANICAL ROOMS, ELECTRICAL ROOMS, AND STORAGE ROOMS WITHOUT CEILINGS MAY BE ROUTED EXPOSED.
- COORDINATE VERTICAL CONDUIT ROUTING TO WALL MOUNTED DEVICES TO ENSURE DEVICES LOCATED WITHIN AN 18-INCH HORIZONTAL DIMENSION WILL BE CENTER-ALIGNED VERTICALLY.
- CONCEAL ELECTRICAL CONNECTIONS FOR ELECTRIC WATER COOLERS (EWC) BEHIND WATER COOLER ACCESS PLATE OR DIRECTLY BELOW AND CENTERED ON WALL.
- FIELD COORDINATE ALL ELECTRICAL AND TELECOMMUNICATIONS EQUIPMENT MOUNTING LOCATIONS TO AVOID ENCRoACHMENT OF OPERATION AND ACCESS TO EQUIPMENT FROM OTHER TRADES. COORDINATE THE APPROPRIATE MOUNTING LOCATION WITH THE AFFECTED DISCIPLINES WHEN EQUIPMENT IS SPECIFIED TO BE MOUNTED ONTO THE SURFACE OF ANOTHER DISCIPLINE'S EQUIPMENT.
- REPAIR ALL OPENINGS MADE IN EXISTING WALLS, PARTITIONS, ETC TO ACCOMMODATE WORK OF THIS DISCIPLINE TO MATCH THE SURROUNDING CONDITIONS. USING WORKERS QUALIFIED IN THE APPROPRIATE TRADE. APPROPRIATELY GROUT OR SEAL ALL CONDUITS THROUGH WALLS.
- ALL MATERIALS USED TO SEAL PENETRATIONS OF FIRE RATED WALLS AND FLOORS MUST HAVE BEEN TESTED AND CERTIFIED AS A SYSTEM PER ASTM E814 STANDARDS FOR FIRE TESTS OF THROUGH-PENETRATION FIRESTOPS.
- INSTALL A PERMANENT DIRECTORY ACCORDING TO THE NATIONAL ELECTRICAL CODE, ARTICLE 230 AT EACH SERVICE ENTRANCE AND POWER SOURCE.
- PERFORM ALL WELDING ACCORDING TO AMERICAN WELDING SOCIETY STANDARDS. FURNISH CERTIFICATES QUALIFYING EACH WELDER TO THE ARCHITECT OR ENGINEER PRIOR TO START OF WORK. THE ARCHITECT OR ENGINEER RESERVES THE RIGHT TO REQUIRE QUALIFYING DEMONSTRATION, AT NO ADDITIONAL EXPENSE, OF ANY WELDERS ASSIGNED TO THE JOB.
- REPLACE OR REINSTALL ALL PORTIONS OF THE BUILDING (CEILING TILES, WALLS, ETC) REMOVED TO ACCOMMODATE THE INSTALLATION OF ANY ELECTRICAL DEVICE, EQUIPMENT, ETC., USING WORKERS QUALIFIED IN THE APPROPRIATE TRADE.
- COORDINATE LUMINAIRE LOCATIONS SUCH THAT LUMINAIRES RUN PARALLEL TO THE FACE OF THE EQUIPMENT AND OVER AISLES BETWEEN EQUIPMENT IN ALL MECHANICAL AND ELECTRICAL EQUIPMENT AREAS. INSTALL AT PROPER LOCATIONS AND HEIGHTS TO PROPERLY ILLUMINATE ALL GAGES, PANELS, ELECTRICAL EQUIPMENT, CONTROLS, VALVES, ETC. CHAIN HANGING, STEM HANGING, CHANNEL HANGING, ETC. ARE ACCEPTABLE METHODS.

GENERAL DEMOLITION NOTES

- REMOVE, CAP AND RELOCATE EQUIPMENT, OUTLETS, CONDUIT, WIRE, ETC., AS SHOWN AND SPECIFIED ON DRAWINGS, AND AS MAY BECOME NECESSARY BECAUSE OF EXISTING FIELD CONDITIONS. VISIBLY EXAMINE ALL EXISTING WALLS DESIGNATED FOR REMOVAL TO DETERMINE THE CONDUIT AND THE WIRING THAT WILL REQUIRE CAPPING AND REMOVAL. WHETHER OR NOT SUCH CONDITIONS ARE INDICATED ON THE DRAWINGS, FAILURE TO VISIT THE SITE AND TO TAKE ALL EXISTING CONDITIONS INTO ACCOUNT WILL NOT ALLOW FOR CHANGES TO THE SCOPE OF WORK.
- MAINTAIN CIRCUIT CONTINUITY TO ALL EXISTING FIXTURES, EQUIPMENT, OUTLETS, ETC., TO REMAIN IN USE WHETHER NOTED ON THE PLANS OR NOT. FIELD VERIFY EXISTING ITEMS TO REMAIN IN USE. RECONNECT RACEWAYS AND WIRING FOR EXISTING CIRCUITS WHICH MUST BE RE-ROUTED OR WHICH ARE PARTIALLY ABANDONED TO POWER THE REMAINING OUTLETS ON THE CIRCUIT.
- REMOVE ALL UNUSED WIRING AND CABLES BACK TO THEIR SOURCE. REMOVE ALL UNUSED CONDUIT THAT IS EXPOSED OR ABOVE ACCESSIBLE CEILINGS WHICH IS AFFECTED BY OR IS IN THE AREA OF THE DEMOLITION WORK. COORDINATE WITH MU PROJECT MANAGER ON ITEMS TO BE REMOVED.
- THE INTENTION OF THE ELECTRICAL DEMOLITION DRAWINGS IS TO DISCONNECT AND REMOVE ALL ELECTRICAL WORK MADE VOID BY THE SCOPE OF THE CONSTRUCTION AND ALTERATION. FIELD VERIFY EXACT MATERIAL QUANTITIES REQUIRED TO BE REMOVED.
- DISCONNECT AND REMOVE ALL EXISTING ELECTRICAL EQUIPMENT, DEVICES, ASSOCIATED RACEWAYS, SUPPORTING HARDWARE, AND WIRING, WHICH HAVE BEEN MADE OBSOLETE BY THE WORK OR IS SHOWN DASHED ON THE ELECTRICAL DEMOLITION DRAWINGS, UNLESS OTHERWISE NOTED. ALTHOUGH AN ATTEMPT HAS BEEN MADE TO INDICATE ALL OF THIS WORK, TOTAL ACCURACY IS NOT GUARANTEED. VISIBLY EXAMINE ALL AREAS AND WALLS AND CEILINGS SCHEDULED FOR REMOVAL TO DETERMINE EXISTING ELECTRICAL ITEMS TO REMAIN.
- WHERE ELECTRICAL EQUIPMENT, CONDUIT, BOXES, AND SUPPORTING HARDWARE ARE REMOVED, PATCH AND FINISH THE SURFACE AS REQUIRED TO MATCH THE EXISTING, USING WORKERS QUALIFIED IN THE APPROPRIATE TRADE.
- WHERE BURIED CONDUITS EXTENDING OUT OF A CONCRETE SLAB BECOME ABANDONED, CUT AND GRIND THE CONDUITS OFF FLUSH WITH TOP OF SLAB AND PLUG WITH NON-SHRINK WATERPROOF GROUT FILL.
- TAKE ALL REMOVED MATERIALS FROM THE PROJECT SITE, EXCEPT FOR THOSE TO BE RELOCATED, STORED, OR TURNED OVER TO THE OWNER.
- ACCEPTANCE OF CONTRACT MEANS INSTALLER ACCEPTS EXISTING CONDITIONS.
- COORDINATE ALL DEMOLITION WORK WITH ALL OTHER TRADES.
- PROVIDE A BLANK COVER OVER THE OUTLET WHERE A FLUSH DEVICE IS BEING REMOVED FROM FLOORS AND WALLS THAT ARE TO REMAIN. MATCH THE COLOR AND MATERIAL TO THE EXISTING REMAINING COVERS IN THE ROOM OR SPACE.
- LEGALLY DISPOSE OF HAZARDOUS MATERIALS AND BALLASTS OR OTHER EQUIPMENT CONTAINING PCBs AND LAMPS CONTAINING MERCURY. COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS. REFER TO FRONT END DOCUMENTS.
- UPON COMPLETION OF CONSTRUCTION, PROVIDE RED-LINE PANEL SCHEDULE DEPICTING THE ACTUAL CIRCUITS MODIFIED OR ADDED AS PART OF THIS PROJECT TO UMHC. PROVIDE NEW TYPED PANELBOARD DIRECTORY CARDS WITHIN EACH PANEL ENCLOSURE FOR ALL PANELS MODIFIED AS PART OF THIS PROJECT. FOR NEW LOADS, DESCRIBE THE SPECIFIC LOAD TYPE AND LOCATION IN THE CIRCUIT DESCRIPTION FIELD IN THE DIRECTORY CARDS GIVEN TO UMHC. FOR EXISTING TO REMAIN LOADS, TRANSPOSE THE ACTUAL CIRCUIT DESCRIPTION INFORMATION PROVIDED ON THE EXISTING PANELBOARD DIRECTORY CARD. DO NOT USE "EXISTING LOAD" VERBIAGE IN THE CIRCUIT DESCRIPTION WHERE ALL LOADS ARE DEMOLISHED FROM A CIRCUIT. CONTRACTOR TO MOVE CIRCUIT BREAKER HANDLE TO THE OFF POSITION AND INDICATE POLE POSITION AS "SPARE" IN THE NEW PANELBOARD DIRECTORY CARD.

DRAWING REFERENCES



ABBREVIATIONS

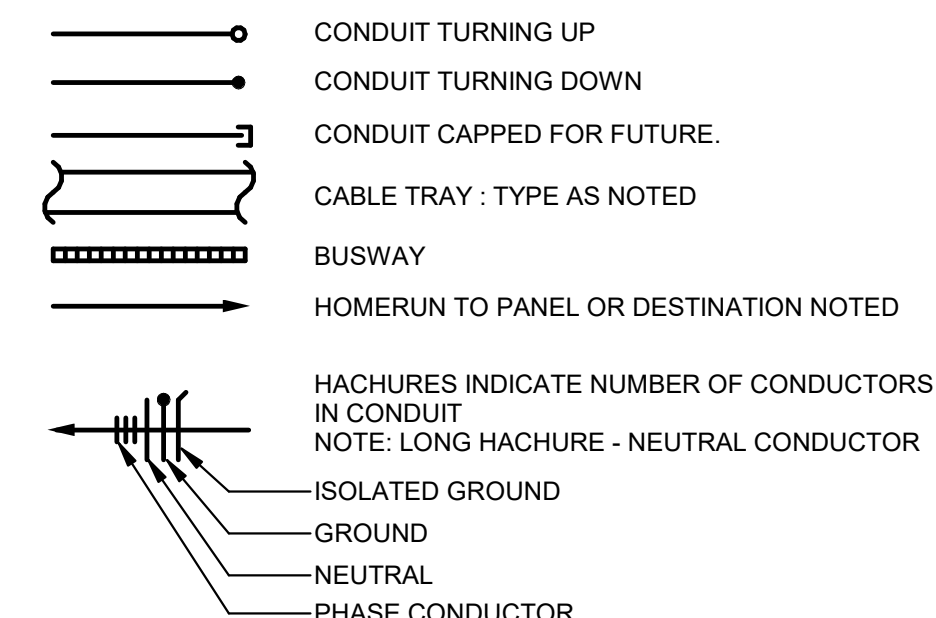
A.F.F.	ABOVE FINISHED FLOOR
C	CONDUIT
E.C.	ELECTRICAL CONTRACTOR
ER	EXISTING RELOCATED
ETR	EXISTING TO REMAIN
EWC	ELECTRIC WATER COOLER
G.C.	GENERAL CONTRACTOR
GND	GROUND
TYP	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED

LINE TYPE LEGEND

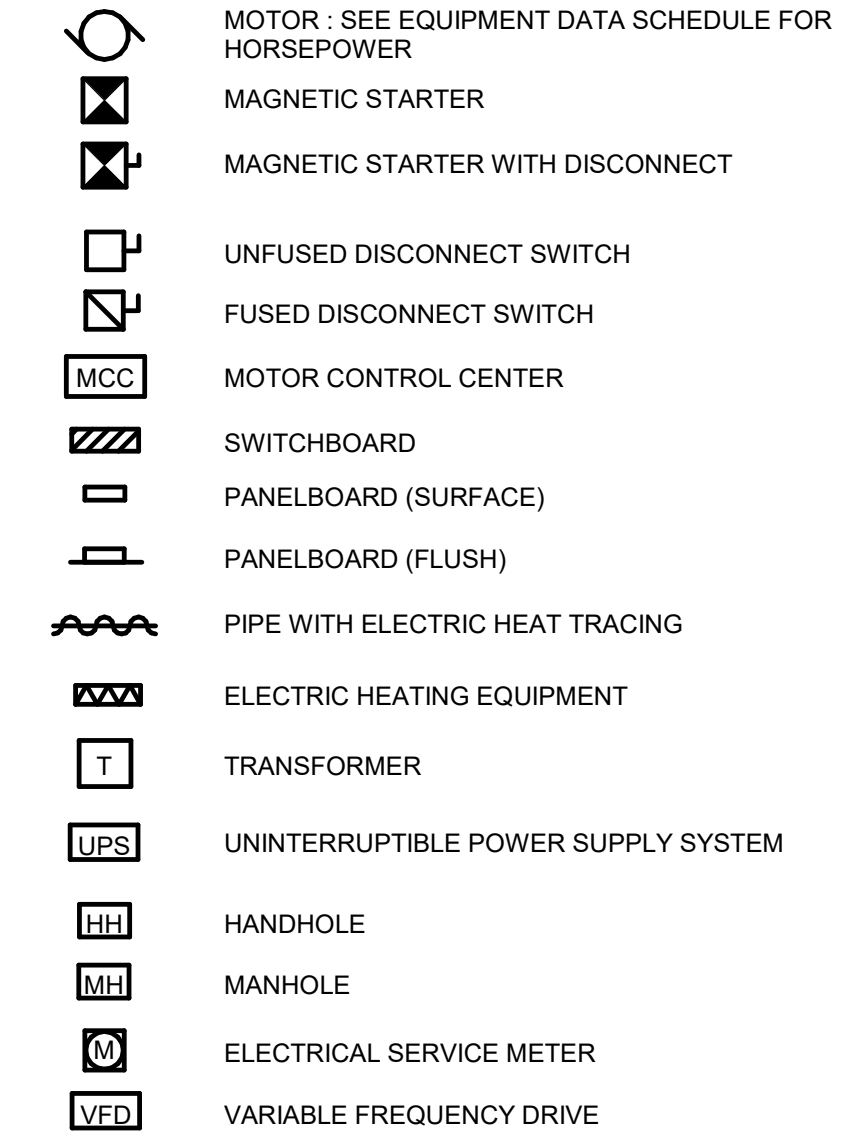
---	EXISTING TO REMAIN OR NEW WORK BY OTHERS (LIGHT, SOLID LINE)
---	NEW WORK BY THIS CONTRACTOR (DARK, SOLID LINE)
- - - -	EXISTING TO BE REMOVED BY THIS CONTRACTOR (DARK, DASHED LINE, DEMOLITION PLANS)
---	NEW WORK BY THIS CONTRACTOR TO BE INSTALLED UNDERGROUND, OR BELOW FLOOR (DARK, LONG DASHED LINE)

WIRING PLANS

- PROVIDE WIRING REQUIRED BY THE CIRCUITING AND SWITCHING REQUIREMENTS FOR THE PARTICULAR CIRCUITS INVOLVED. TYPICAL 120V HOMERUNS SHALL CONSIST OF #12 AWG CONDUCTORS IN 3/4" CONDUIT MINIMUM UNLESS INDICATED OTHERWISE. NO SHARED NEUTRALS SHALL BE ALLOWED. A MAXIMUM OF NINE CURRENT-CARRYING CONDUCTORS ARE ALLOWED IN A RACEWAY. NEUTRAL CONDUCTORS ARE ALSO CONSIDERED CURRENT-CARRYING CONDUCTORS. FOR CIRCUITS EXCEEDING 75'-0" IN LENGTH, PROVIDE THE NEXT LARGER WIRE SIZE FOR THE CIRCUIT AMPACITY.
- WHERE NUMBER OF CURRENT-CARRYING CONDUCTORS IN A RACEWAY EXCEEDS THREE, THE ALLOWABLE AMPACITY OF EACH CONDUCTOR SHALL BE REDUCED AS SHOWN IN THE ADJUSTMENT FACTOR TABLE IN THE NATIONAL ELECTRIC CODE. LOAD DIVERSITY FACTORS SHALL NOT BE USED IN SIZING CONDUCTORS. NEUTRAL CONDUCTORS SHALL BE COUNTED AS CURRENT-CARRYING CONDUCTORS.



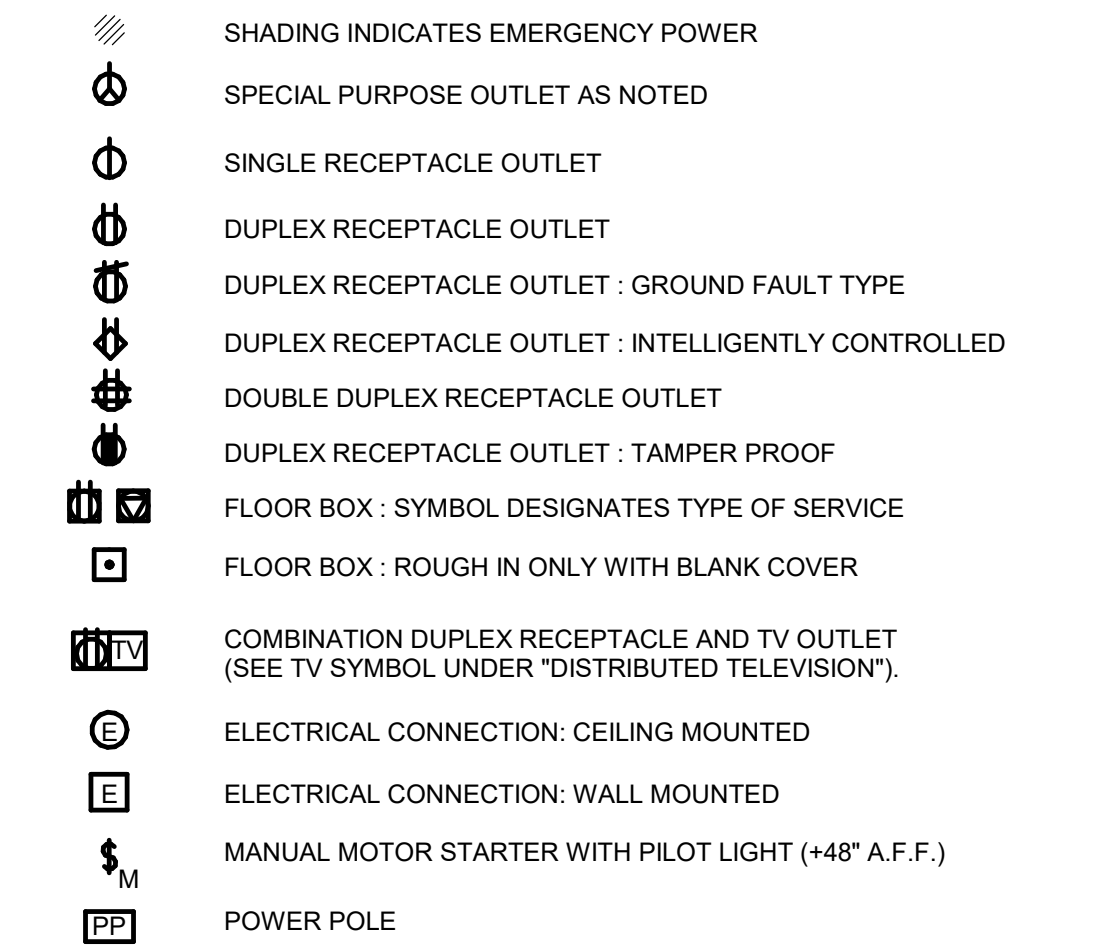
POWER EQUIPMENT



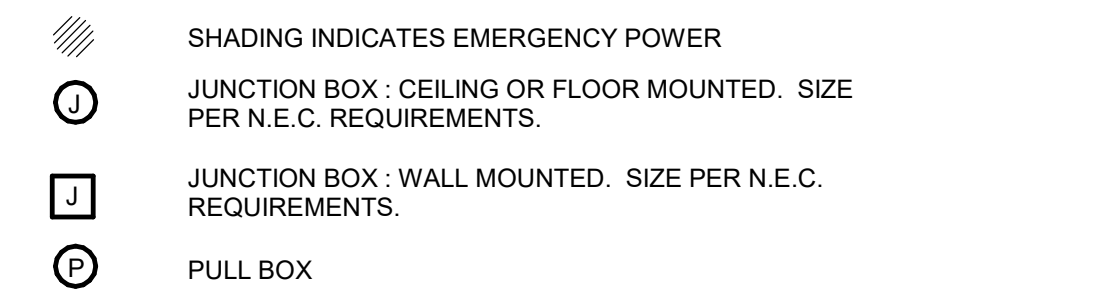
WIRING DEVICES, RECEPTACLES - MISC.

- TYPICAL MOUNTING HEIGHT: +18" A.F.F.
- SUBSCRIPT LEGEND:
  - A: ABOVE COUNTER: MOUNT +6" ABOVE BACKSPASH OR WORK SURFACE.
  - C: CEILING: MOUNT FLUSH WITHIN CEILING TILE OR GYPSUM BOARD.
  - CR: COMPUTER RECEPTACLE: PROVIDE LABEL TO READ: 'COMPUTER'.
  - S: SWITCHED: PROVIDE ONE OUTLET CONTROLLED BY TOGGLE SWITCH.
  - U: UNDER COUNTER: WITHIN CABINETRY OR CASEWORK.
  - FF: FURNITURE FEED: COORDINATE WITH FURNITURE INSTALLER FOR ALL CONNECTION REQUIREMENTS.

A SLASH BETWEEN TWO SUBSCRIPTS INDICATES MULTIPLE PARAMETERS (EXAMPLE: A/3 DENOTES ABOVE COUNTER MOUNTING, CIRCUIT 3).

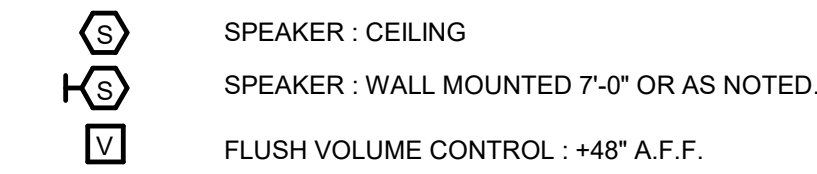


JUNCTION AND PULL BOXES



PUBLIC ADDRESS SYSTEMS

RESPONSIBILITIES: REFER TO RESPONSIBILITY MATRIX ON SHEET E500.

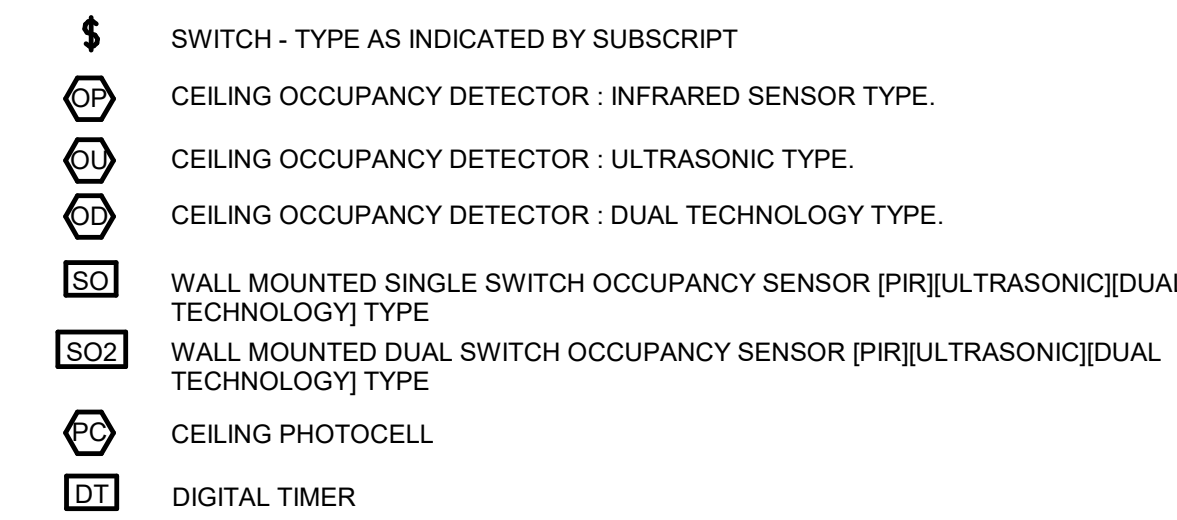


LUMINAIRES

- REFER TO LUMINAIRE SCHEDULE FOR LUMINAIRE DESCRIPTIONS.
- "NL" INDICATES UNSCHEDULED LUMINAIRE
- "SE" DESIGNATION INDICATES LUMINAIRE IS SWITCHED DURING NORMAL OPERATION, BUT UPON LOSS OF POWER, LUMINAIRE REVERTS TO 100% OUTPUT VIA BATTERY BALLAST. REGARDLESS OF THE ON/OFF STATUS OF THE LOCAL LIGHTING CONTROL DEVICE. EXTEND AN UNSWITCHED PORTION OF THE LIGHTING CIRCUIT SERVING AREA, AHEAD OF ALL LIGHTING CONTRACTORS, TO THIS DEVICE.
- SHADING LEGEND (APPLICABLE TO LUMINAIRE SYMBOLS):
  - NO SHADING: NORMAL POWER
  - HALF-SHADING: LIFE SAFETY OR BATTERY BACKUP
  - FULL-SHADING: CRITICAL POWER
- LUMINAIRE DESIGNATION KEY:
  - A: LUMINAIRE TYPE
  - 1: CIRCUIT NUMBER
  - a: CONTROLLING SWITCH

SWITCHES AND LIGHTING CONTROL DEVICES

- TYPICAL MOUNTING HEIGHT : 48" A.F.F. TO CENTER U.O.N.
- WHERE TWO OR MORE SWITCHES ARE SHOWN ADJACENT TO EACH OTHER, PROVIDE A COMMON GANG BOX WITH A SINGLE SEAMLESS FACEPLATE.
- SUBSCRIPT LEGEND:
  - 2 : TWO-POLE SWITCH
  - 3 : THREE-WAY SWITCH
  - 4 : FOUR-WAY SWITCH
  - K : KEY SWITCH
  - D : DIMMER - COORDINATE REQUIREMENTS FOR LUMINAIRE COMPATIBILITY
  - P : PILOT LIGHT SWITCH
  - C : MOMENTARY CONTACT SWITCH
  - LV : LOW VOLTAGE CONTROL MASTER STATION
  - L : LOW VOLTAGE LOCAL SINGLE/PUSH BUTTON STATION
- A LOWERCASE SUBSCRIPT INDICATES THE SWITCH/LEG THE DEVICE CONTROLS.
- REFER TO SPECIFICATION SECTION 26 09 23 FOR ADDITIONAL INFORMATION.



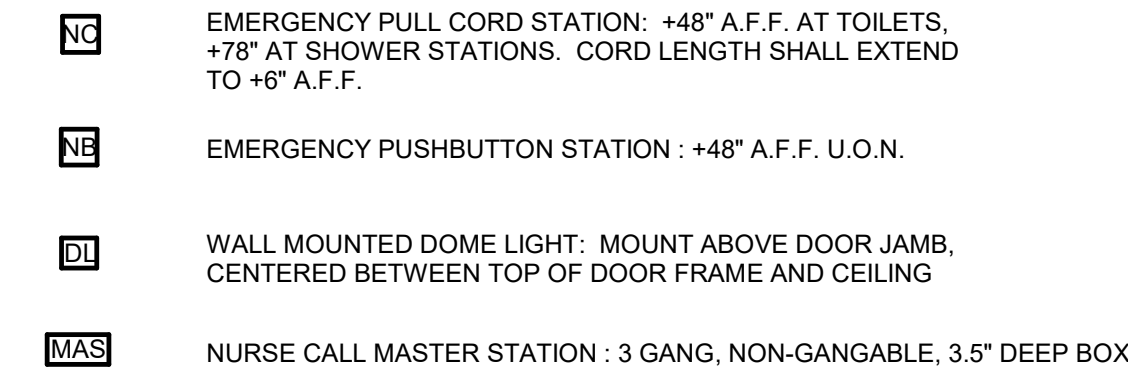
TELECOMMUNICATIONS

- TYPICAL MOUNTING HEIGHT: +18" A.F.F. UNLESS OTHERWISE NOTED. PROVIDE OR 4 11/16" SQUARE BOX WITH SINGLE GANG PLASTER RING (VERTICAL).
- ALL TELECOMMUNICATION CONDUIT SHALL BE A MINIMUM OF 1-1/4" IN DIAMETER STUBBED TO ACCESSIBLE CORRIDOR CEILING SPACE, UNLESS OTHERWISE NOTED.
- ALL TELECOMMUNICATION CABLE SHALL BE OWNER PROVIDED WITH A PLENUM RATED JACKET. ALL CABLES RUN EXPOSED IN STRUCTURE ABOVE OR ABOVE CEILINGS SHALL BE SUPPORTED BY J-HOOKS AT EVERY 5'-0" TO NEAREST CABLE TRAYS. PROVIDE INSULATED BUSHINGS ON ALL RACEWAYS.
- ALL DATA CABLES SHALL BE CAT 6A, YELLOW IN COLOR, AND TERMINATED BY OWNER.
- REFER TO LOW VOLTAGE RESPONSIBILITY MATRIX ON E500 FOR MORE INFORMATION.
- SUBSCRIPT LEGEND:
  - A: ABOVE COUNTER - MOUNT +6" ABOVE BACKSPASH OR WORK SURFACE WITH BOX ORIENTED HORIZONTALLY.
  - C: CEILING MOUNTED - MOUNT FLUSH WITHIN CEILING TILE OR GYPSUM CEILING.
  - W: WALL PHONE - MOUNT +48" A.F.F. OR 6" ABOVE WORK SURFACE. PROVIDE MOUNTING LUGS FOR TELEPHONE.
  - WAP: WIRELESS ACCESS POINT DATA OUTLET - INSTALL ONE (1) OWNER FURNISHED CAT 6A CABLE AND 10'-0" OF SLACK CABLE COILED ABOVE ACCESSIBLE CEILING FROM TELECOM ROOM. WIRELESS ACCESS POINTS ARE OWNER FURNISHED. OWNER INSTALLED.
  - #: QUANTITY OF OWNER FURNISHED CAT 6A CABLES TO BE INSTALLED BY CONTRACTOR. WHEN NOT INDICATED, THREE (3) CABLES SHALL BE ASSUMED. CABLES SHALL ORIGINATE FROM TELECOMMUNICATION.
- A SLASH BETWEEN TWO SUBSCRIPTS INDICATES MULTIPLE PARAMETERS (EXAMPLE: A/3 DENOTES ABOVE COUNTER MOUNTING, 3 CABLES.)

- TELECOMMUNICATION OUTLET: PROVIDE CONDUIT FOR WIRING STUBBED TO THE ACCESSIBLE CEILING SPACE WITH BUSHING, PROVIDE 4 POSITION FACEPLATE AND A TOTAL OF (3) ACTIVE JACKS UNLESS OTHERWISE NOTED.
- EXISTING TELECOMMUNICATION OUTLET TO REMAIN

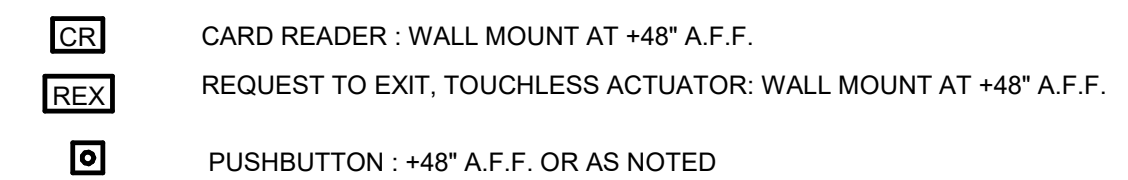
NURSE CALL SYSTEMS

- REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT MOUNTING HEIGHTS AND LOCATIONS. WHERE ELEVATIONS DO NOT SPECIFY, MOUNT DEVICES AS INDICATED.
- PROVIDE RECESSED ROUGH-IN COMPONENTS CONSISTING OF 4" x 4" x 3.5" DOUBLE GANG BOX WITH SINGLE GANG MUD RING AND ONE (1) 1" CONDUIT STUBBED TO ABOVE CEILING SPACE WITH BUSHING. PROVIDE J-HOOK SUPPORTS ABOVE CEILING BETWEEN DEVICE, CORRIDOR FIRE RATED PATHWAY, AND CABLE TRAY.
- REFER TO LOW VOLTAGE RESPONSIBILITY MATRIX ON SHEET E500 FOR MORE INFORMATION.



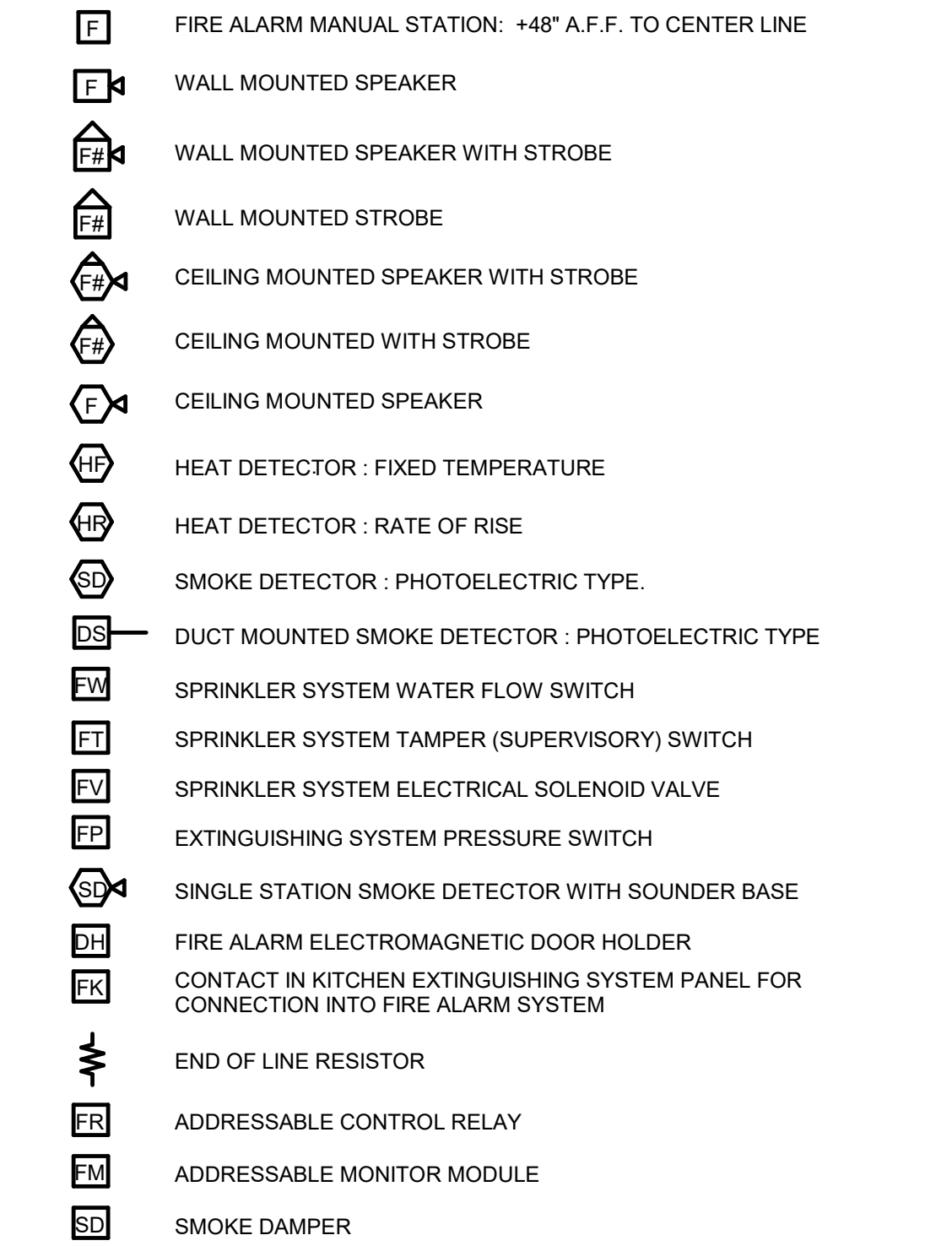
ACCESS CONTROL SYSTEMS

RESPONSIBILITIES: RACEWAY AND BOXES: CONTRACTOR FURNISHED, INSTALLED WIRING: CONTRACTOR FURNISHED, INSTALLED DEVICES: CONTRACTOR FURNISHED, INSTALLED



FIRE ALARM SYSTEMS

- REFER TO SPECIFICATIONS SECTION 283111 FOR ADDITIONAL INFORMATION PERTAINING TO THE FIRE ALARM SYSTEM.
- SIGNALING LINE CIRCUITS SHALL BE ROUTED IN A CLASS B CONFIGURATION.
- NOTIFICATION APPLIANCE CIRCUITS SHALL BE ROUTED IN A CLASS B CONFIGURATION.
- FIRE ALARM CIRCUITS SHALL BE ROUTED IN CONDUIT WHERE INACCESSIBLE. WHERE ROUTED ABOVE ACCESSIBLE CEILINGS, FIRE ALARM CIRCUITS SHALL CONSIST OF PLENUM RATED CABLE SUPPORTED EVERY 4'-0" BETWEEN DEVICES.
- FOR VISUAL DEVICES, THE "V" WITHIN THE SYMBOL CORRESPONDS TO THE CANDELA RATING OF THE DEVICE: 1=15cd, 3=30cd, 5=75cd, 7=110cd.
- WALL MOUNTED NOTIFICATION DEVICES SHALL BE MOUNTED WITH THE TOP OF THE DEVICE +90" A.F.F. OR 6" BELOW THE CEILING, WHICHEVER IS LOWER.



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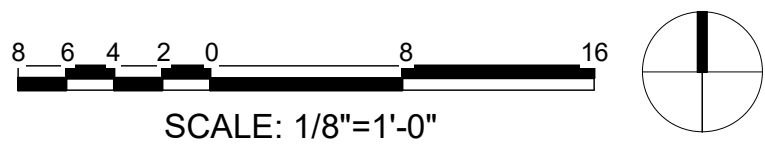
CHRISTOPHER ALAN PHILIPP  
PE 022265

ELECTRICAL SYMBOLS & ABBREVIATIONS





1 ELECTRICAL THIRD FLOOR DEMOLITION PLAN  
1/8" = 1'-0"



- GENERAL NOTES**
- A. REFER TO SHEET E000 FOR GENERAL DEMOLITION NOTES.
- B. REMOVE AND STORE ALL FIRE ALARM DEVICES, WIRELESS ACCESS POINTS, AND ANTENNAS FOR REUSE. SEE NEW WORK PLANS FOR ADDITIONAL INFORMATION.
- C. IN AREAS WHERE DEMOLITION WORK IS NOT SCHEDULED, DISCONNECT, REMOVE, AND SALVAGE EXISTING CEILING MOUNTED DEVICES AS REQUIRED TO COMPLETE ABOVE CEILING WORK FOR ALL TRADES. UPON COMPLETION OF CONSTRUCTION, REINSTALL EXISTING CEILING MOUNTED DEVICES IN ORIGINAL LOCATIONS. DEVICES SHALL OPERATE AS THEY DID PRIOR TO CONSTRUCTION.

- # KEYED NOTES**
1. DISCONNECT AND REMOVE EXISTING EXIT SIGN ABOVE CEILING AT THIS LOCATION. REMOVE ALL ASSOCIATED WIRING, RACEWAY, AND SUPPORTS.
2. DISCONNECT AND REMOVE RECEPTACLE DEVICE AND PRESERVE EXISTING BOX AND WIRING FOR REUSE. SEE NEW WORK PLAN FOR ADDITIONAL INFORMATION.
3. EXISTING SMOKE DAMPER TO BE DEMOLISHED. DISCONNECT AND REMOVE ASSOCIATED WIRING, RACEWAY, AND SUPPORTS.

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Health Care

MU PROJECT NO. - CP221943  
**UNIVERSITY PHYSICIANS  
MEDICAL BUILDING - 3RD  
FLOOR RENOVATION**

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CHRISTOPHER ALAN PHILIPP  
PE 022262

**THIRD FLOOR POWER AND  
SYSTEMS PLAN -  
DEMOLITION**

DATE 03 APRIL, 2023  
INTROBA PROJECT NO. 0011593

ED101

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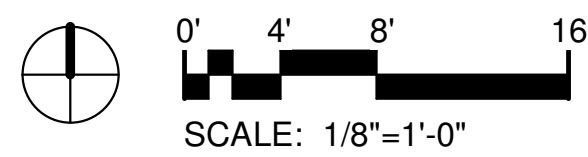
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CHECKED BY: Christopher Philipp  
DESIGNED BY: Christopher Philipp  
APPROVED BY: Christopher Philipp



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DESIGNED BY: Russell A. Vinson  
DRAWN BY: Russell A. Vinson  
APPROVED BY: Russell A. Vinson



2 LIGHTING THIRD FLOOR DEMOLITION PLAN  
1/8" = 1'-0"



- GENERAL NOTES**
- A. REFER TO SHEET E000 FOR ELECTRICAL GENERAL NOTES.
- B. DEMOLISH EXISTING LIGHT FIXTURES AND LIGHTING CONTROL DEVICES SHOWN IN BOLD. REMOVE EXISTING WIRING BACK TO NEAREST JUNCTION BOX AND PREPARE FOR NEW FIXTURES CONNECTED TO THE EXISTING CIRCUITS.
- C. IN AREAS WHERE DEMOLITION WORK IS NOT SCHEDULED, DISCONNECT, REMOVE AND SALVAGE EXISTING CEILING MOUNTED DEVICES, LUMINAIRES, ETC. AS REQUIRED TO COMPLETE ABOVE CEILING WORK FOR ALL TRADES. UPON COMPLETION OF CONSTRUCTION, REINSTALL EXISTING CEILING MOUNTED DEVICES IN ORIGINAL LOCATIONS. DEVICES SHALL OPERATE AS THEY DID PRIOR TO CONSTRUCTION.
- D. RE-SUPPORT ALL EXISTING TO REMAIN ELECTRICAL SYSTEMS (CONDUIT, WIRE, CABLE, ETC.) CURRENTLY SUPPORTED BY WALLS SCHEDULED TO BE DEMOLISHED.
- E. LEGALLY DISPOSE OF LIGHTING BALLASTS AND LAMPS CONTAINING MERCURY. COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS.

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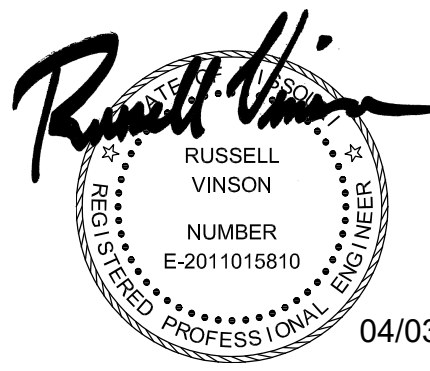
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Russell A. Vinson  
PE-2011015810

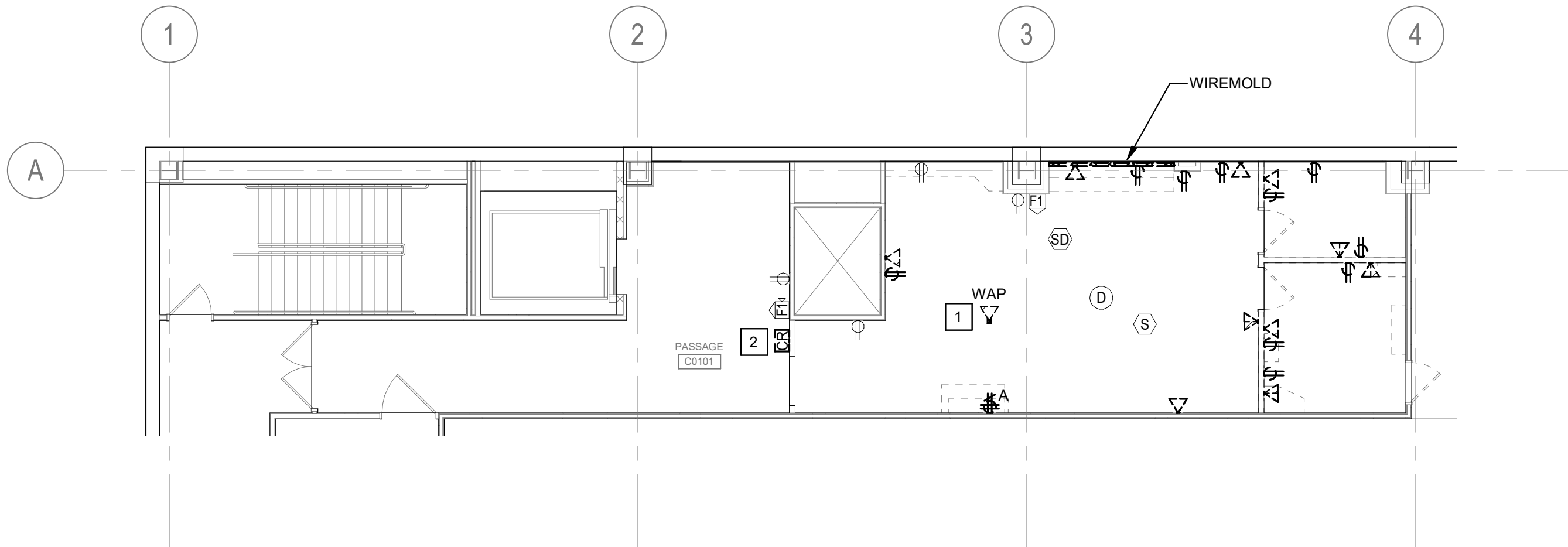
**THIRD FLOOR LIGHTING  
PLAN - DEMOLITION**

DATE	03 APRIL, 2023
INTROBA PROJECT NO.	0011593

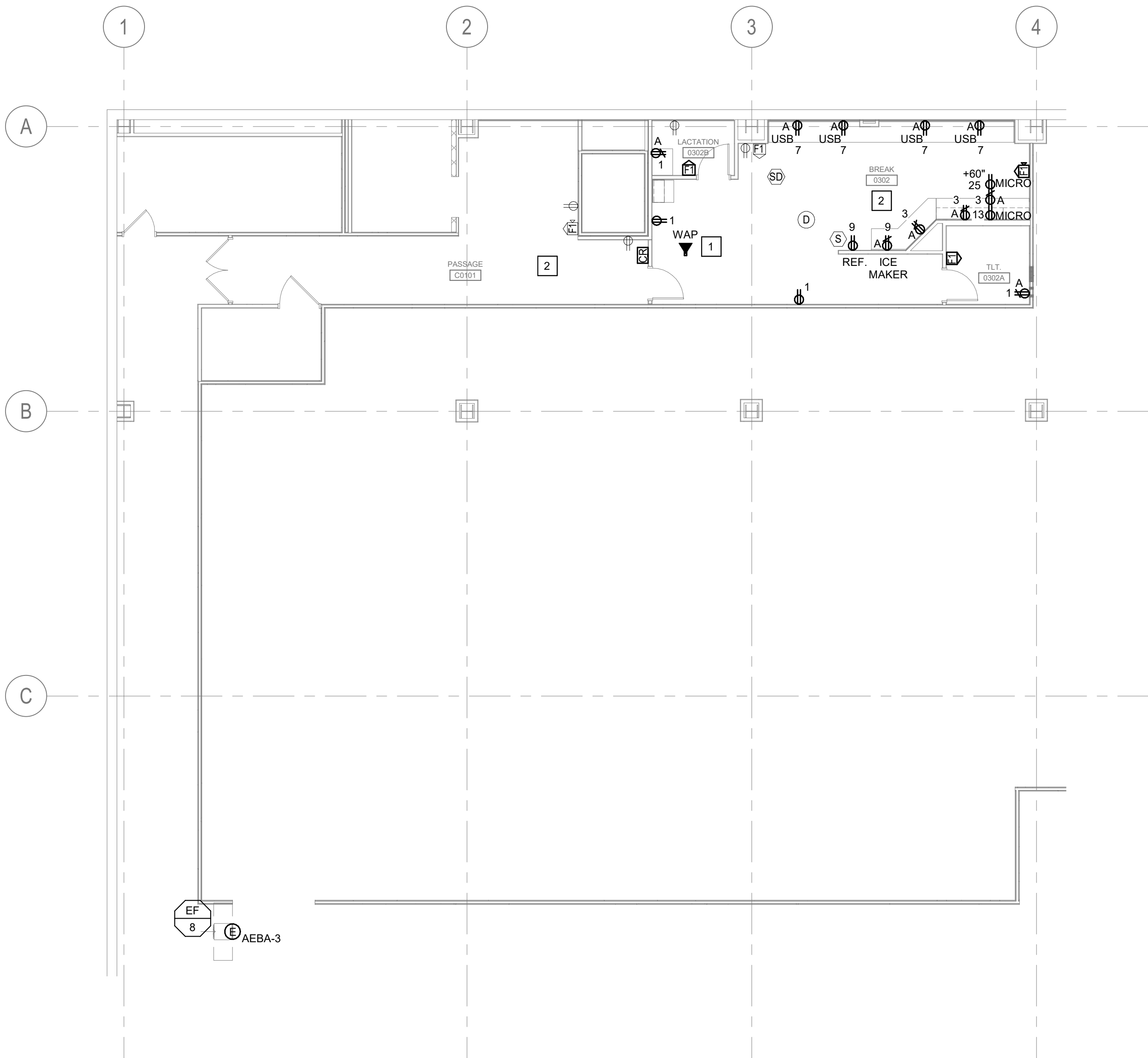
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APPROVED: [Signature]



2 ELECTRICAL PARTIAL GROUND FLOOR DEMOLITION PLAN  
1/8" = 1'-0"



1 ELECTRICAL PARTIAL GROUND FLOOR NEW WORK PLAN  
1/8" = 1'-0"

## GENERAL NOTES

- REFER TO SHEET E000 FOR ELECTRICAL GENERAL NOTES.
- REFER TO ARCHITECTURAL SHEET G200 FOR IDENTIFICATION OF PROJECT SCOPE OF WORK AREAS.
- CIRCUIT NUMBERS ARE FOR REFERENCE AND ARE SHOWN FOR LOADING PURPOSES ONLY. CONTRACTOR TO USE CIRCUITS MADE SPARE FROM DEMOLITION AND AVAILABLE SPARE CIRCUIT BREAKERS IN PANELBOARDS. CONTRACTOR MAY CONNECT NEW RECEPTACLES TO EXISTING CIRCUITS ALREADY IN ROOMS SO LONG AS THERE ARE NO MORE THAN (6) RECEPTACLES ON A SINGLE CIRCUIT. DEVICES SHOWN ON DEDICATED CIRCUITS TO REMAIN ON DEDICATED CIRCUITS.
- ALL ELECTRICAL CIRCUITS SHOWN ARE CONNECTED TO PANEL NBA UNLESS OTHERWISE NOTED.
- ALL FIRE ALARM PULL STATIONS IN AREA OF CONSTRUCTION TO REMAIN IN SERVICE AND SHALL BE BAGGED DAILY DURING WORKING HOURS AND UNBAGGED AT THE END OF THE DAY AND WHEN CONTRACTOR IS NOT ON SITE.

## DEMOLITION KEYED NOTES

- DISCONNECT WIRELESS ACCESS POINT. PROTECT AND PRESERVE WIRELESS ACCESS POINT AND ASSOCIATED DATA CABLE FOR RECONNECTION IN NEW WORK. SEE NEW WORK PLANS ON THIS SHEET.
- CONTACT MU SECURITY TO REMOVE PRIOR TO DEMOLITION. PRESERVE CABLE TO RE-USE FOR INSTALLATION OF NEW CARD READER. SEE NEW WORK PLAN FOR ADDITIONAL INFORMATION.

## NEW WORK KEYED NOTES

- RECONNECT RELOCATED WIRELESS ACCESS POINT TO EXISTING DATA CABLING MADE AVAILABLE BY DEMOLITION.
- ABOVE THE PROJECT WORK AREA SUPPORT EXISTING LOW VOLTAGE AND POWER CONDUITS/CABLES THAT ARE NOT CURRENTLY SUPPORTED PROPERLY.
- RECONNECT CARD

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MU PROJECT NO. - CP221943

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MARK	DATE	DESCRIPTION
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CHRISTOPHER ALAN PHILIPP  
PE 022262

### ALTERNATE #1 - GROUND FLOOR POWER & SYSTEMS PLAN - DEMO -AND NEW WORK-

INTROBA PROJECT NO.

03 APRIL, 2023

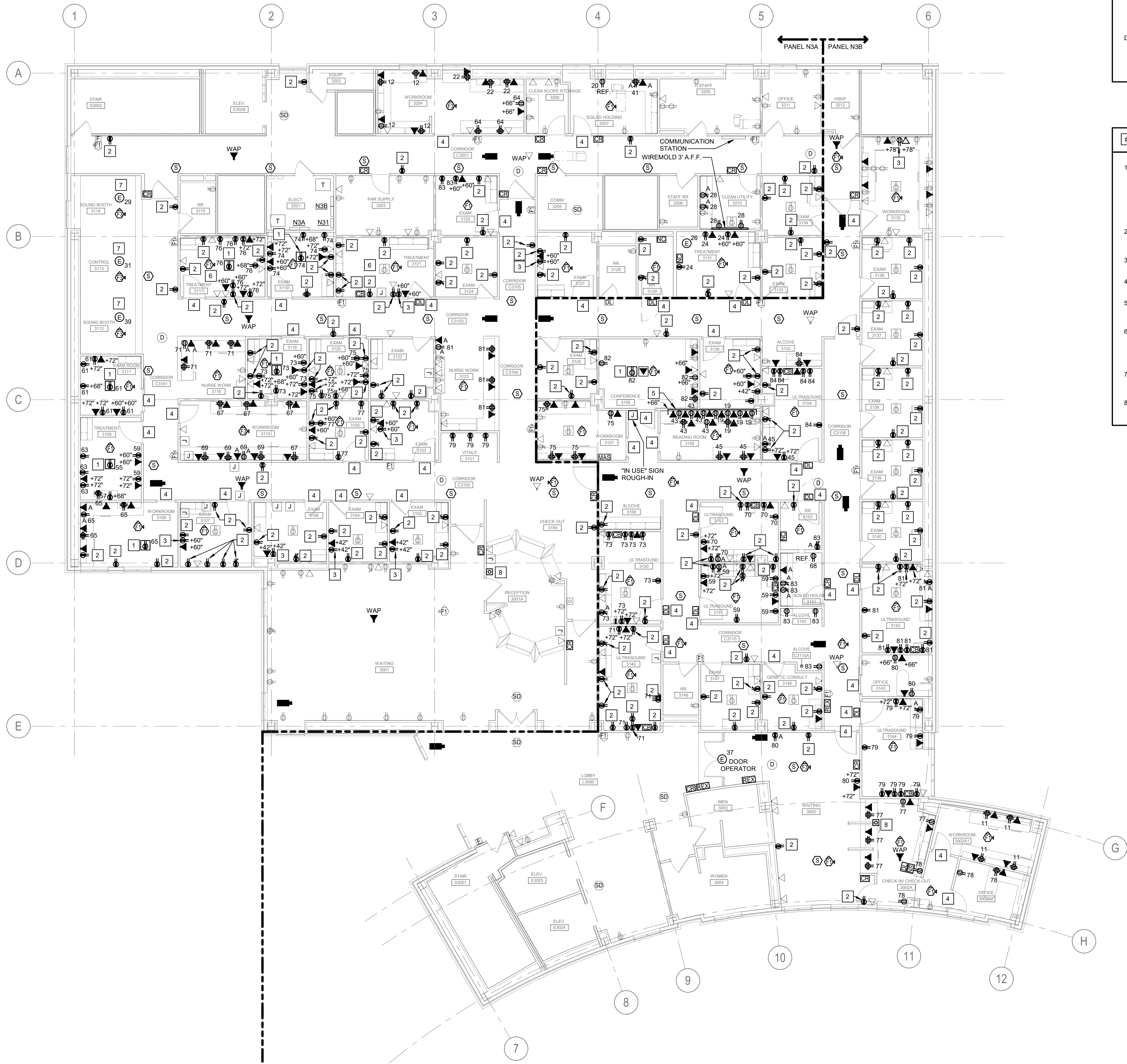
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# E100

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BIM 360://14115919 - UPMB Renovation - 3rd Floor/001-030-000 MUHC UPMB 3rd Floor Renovation-MEP-Floor Plan  
DESIGNED BY: Christopher Alan Philipp  
CHECKED BY: Christopher Alan Philipp  
APPROVED BY: Christopher Alan Philipp



1 ELECTRICAL THIRD FLOOR NEW WORK PLAN  
1/8" = 1'-0"

8 6 4 2 0 8 16  
SCALE: 1/8"=1'-0"

## GENERAL NOTES

- REFER TO SHEET E000 FOR ELECTRICAL GENERAL NOTES.
- REFER TO ARCHITECTURAL SHEET G200 FOR IDENTIFICATION OF PROJECT SCOPE OF WORK AREAS.
- CIRCUIT NUMBERS ARE FOR REFERENCE AND ARE SHOWN FOR LOADING PURPOSES ONLY. CONTRACTOR TO USE CIRCUITS MADE SPARE FROM DEMOLITION AND AVAILABLE SPARE CIRCUIT BREAKERS IN PANELBOARDS. CONTRACTOR MAY CONNECT NEW RECEPTACLES TO EXISTING CIRCUITS ALREADY IN ROOMS SO LONG AS THERE ARE NO MORE THAN (8) RECEPTACLES ON A SINGLE CIRCUIT. DEVICES SHOWN ON DEDICATED CIRCUITS TO REMAIN ON DEDICATED CIRCUITS.
- ALL FIRE ALARM PULL STATIONS IN AREA OF CONSTRUCTION TO REMAIN IN SERVICE AND SHALL BE BAGGED DAILY DURING WORKING HOURS AND UNBAGGED AT THE END OF THE DAY AND WHEN CONTRACTOR IS NOT ON SITE.

## KEYED NOTES

- CORE DRILL FLOOR AND PROVIDE 6" POKE THRU DEVICE WITH (1) GANG OF POWER (DUPLEX RECEPTACLE) AND FLUSH COVER PLATE. WIREMOLD EVOLUTION SERIES 6 OR APPROVED EQUAL. FIELD VERIFY EXISTING STRUCTURE AND VERIFY EXACT LOCATION WITH ARCHITECT PRIOR TO CORE DRILL. ROUTE (2)#12, (1)#12G IN 3/4" C. DOWN WALL TO 3RD FLOOR CEILING SPACE AND OVER TO POKE THRU.
- PROVIDE NEW RECEPTACLE AS INDICATED AND CONNECT TO EXISTING WIRING. PROVIDE NEW FACEPLATE FOR DEVICE.
- CONNECT NEW RECEPTACLE TO SAME CIRCUIT AS ADJACENT RECEPTACLE.
- PROVIDE EZ PATH SERIES 22 FIRE RATED PATHWAY ABOVE DOOR FOR LOW VOLTAGE CABLES.
- PROVIDE WIREMOLD WIREWAY FOR MONITOR, HDMI CABLES AND POWER. COORDINATE LOCATION WITH MONITOR INSTALLATION.
- CONTRACTOR TO VERIFY WHAT CIRCUIT EACH RECEPTACLE IS CONNECTED TO AND PROVIDE ADDITIONAL CIRCUITS AS REQUIRED TO ASSURE THERE ARE AT LEAST 4 SEPARATE CIRCUIT IN THIS ROOM.
- PROVIDE POWER AND FINAL CONNECTION TO SOUND/CONTROL BOOTHS PER MANUFACTURERS WRITTEN INSTRUCTIONS.
- WIRELESS REMOTE RELEASE PROVIDED BY SECURITY VENDOR.

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MU PROJECT NO. - CP221943

**UNIVERSITY PHYSICIANS  
MEDICAL BUILDING - 3RD  
FLOOR RENOVATION**

1020 Hitt St. Columbia, MO 65212

BID SET

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CHRISTOPHER ALAN PHILIPP  
PE 022265

**THIRD FLOOR POWER AND  
SYSTEMS PLAN - NEW  
WORK**

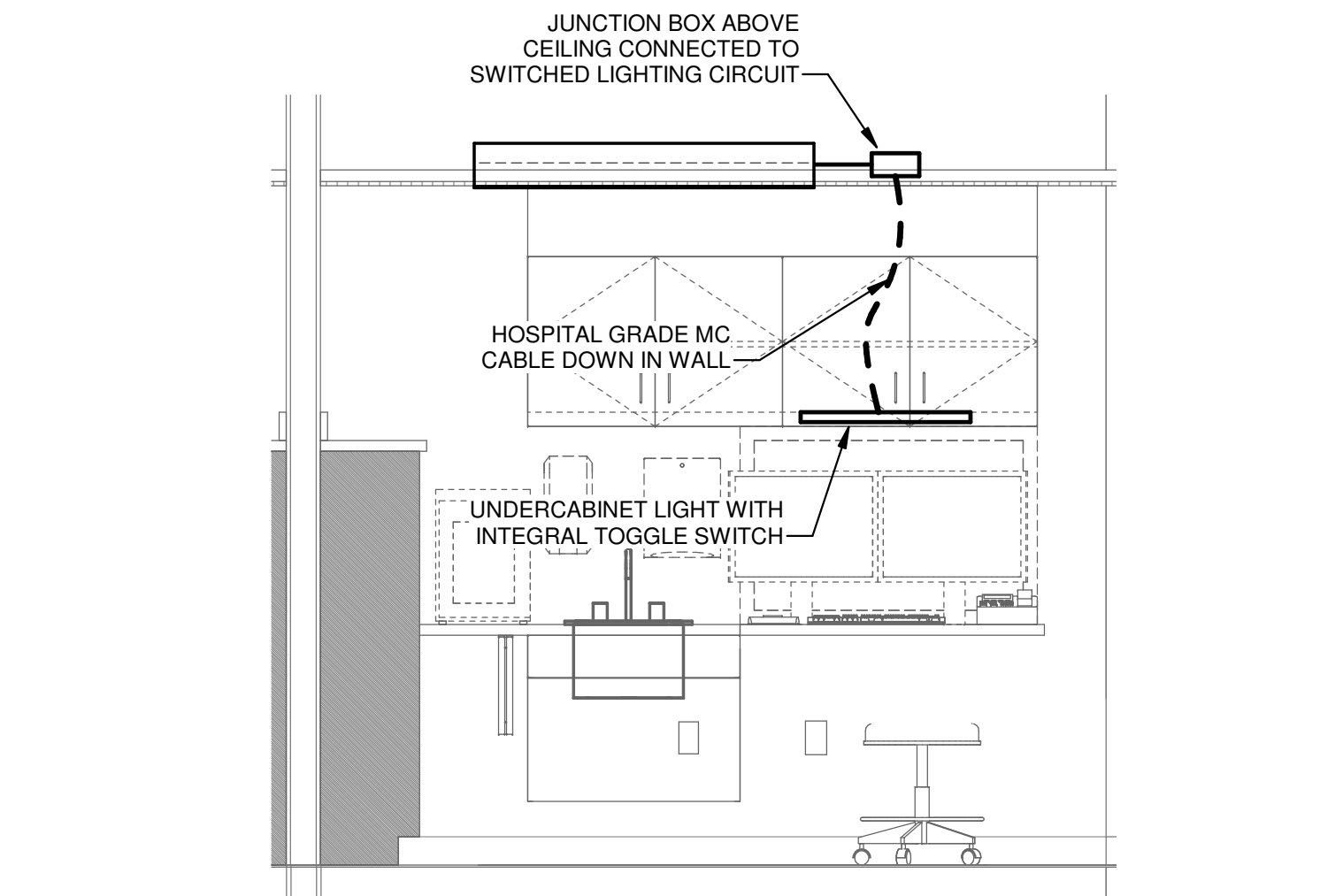
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INTROBA PROJECT NO. 0011593

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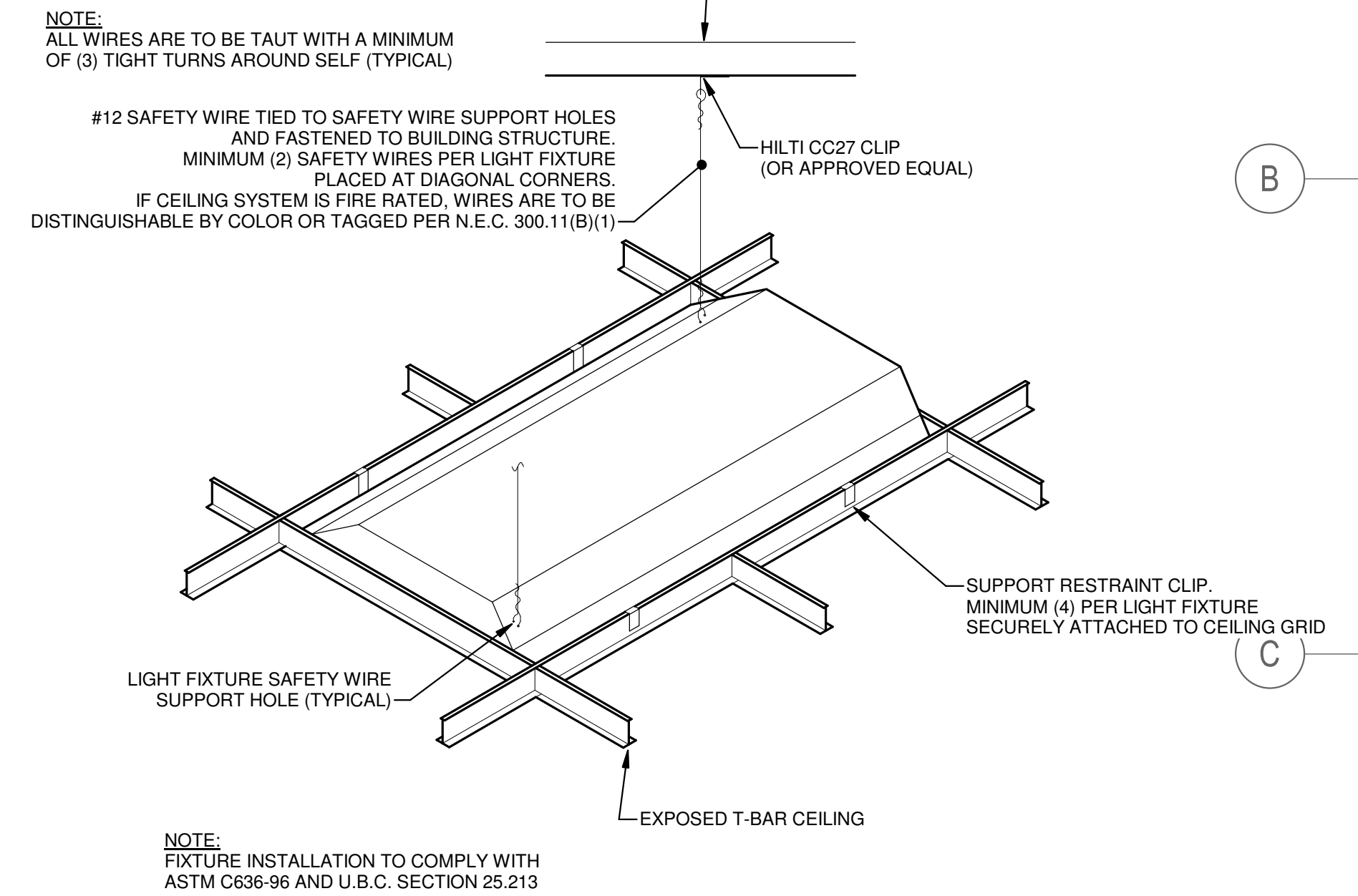
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3/29/2023 1:32:25 PM  
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DESIGNED BY: Russell A. Vinson  
CHECKED BY: Russell A. Vinson  
APPROVED BY: Russell A. Vinson



2 TYPICAL WIRING TO UNDERCABINET LIGHTS  
1/2" = 1'-0"



3 LIGHT FIXTURE SUPPORT DETAIL  
1 1/2" = 1'-0"

LUMINAIRE SCHEDULE										
PLAN MARK	DESCRIPTION	MANUFACTURER & MODEL NO.	REMARKS	# OF LAMPS	LAMP TYPE	LED LUMENS	DRIVER	WATTAGE	VOLTAGE	
L1	2'X2', 3-1/4" TALL, RECESSED LED LUMINAIRE, EXTRUDED ALUMINUM HOUSING WITH INJECTED MOLDED COMPOSITE END PLATES, GRID-LOCK FEATURE, HIGH OPTICAL GRADE ACRYLIC LENS, HIGH REFLECTANCE BAKED WHITE ENAMEL FINISH, DAMP LOCATION LISTED.	METALUX ENCOUNTER 22EN-LD2-34-UNV-L835-CD-1		1	LED	3471	DRIVER, DIM	28.5	277 V	
L2	2'X4', 3-1/4" TALL, RECESSED LED LUMINAIRE, EXTRUDED ALUMINUM HOUSING WITH INJECTED MOLDED COMPOSITE END PLATES, GRID-LOCK FEATURE, HIGH OPTICAL GRADE ACRYLIC LENS, HIGH REFLECTANCE BAKED WHITE ENAMEL FINISH, DAMP LOCATION LISTED.	METALUX ENCOUNTER 24EN-LD2-45-UNV-L835-CD-1		1	LED	4656	DRIVER, DIM	38.0	277 V	
L3	2'X4', 3-1/4" TALL, RECESSED LED LUMINAIRE, EXTRUDED HOUSING WITH INJECTED MOLDED COMPOSITE END PLATES, GRID-LOCK FEATURE, HIGH OPTICAL GRADE ACRYLIC LENS, HIGH REFLECTANCE BAKED WHITE ENAMEL FINISH, DAMP LOCATION LISTED.	METALUX ENCOUNTER 24EN-LD2-54-UNV-L835-CD-1		1	LED	5410	DRIVER, DIM	43	277 V	
L4	RECESSED LENSED DOWNLIGHT, 4" DIAMETER WITH SELECTABLE LUMEN OUTPUT	HALO PR4FS120010 - PR4M12MD8FSMW		1		1000	DRIVER, DIM	22	277 V	
L5	18"W X 0.75"H X 4.37" DEEP LOW PROFILE LED UNDERCABINET TASK LIGHT, ALUMINUM HOUSING, WHITE FINISH, SELECTABLE CCT AND ROCKER SWITCH.	HALO HJ30BSC18P		1	LED	440	DRIVER	8.2	277 V	
L6	DECORATIVE SEMI-RECESSED DOWNLIGHT, 6.6" DIAMETER, OPAL GLASS SHADE	DELRAY YL4742-W35-D-277		1	LED	2000	DRIVER, DIM	22.0	277 V	
X1	CEILING MOUNT, DIE CAST AND EXTRUDED ALUMINUM FINISH, HIGH IMPACT ACRYLIC CLEAR PANEL, EDGE LIT WITH RED LETTERS, SINGLE SIDED, DIRECTIONAL CHEVRONS PER PLANS.	SURE-LITES EUX6-1-R		1	LED	-	DRIVER	1.1	277 V	



1 LIGHTING THIRD FLOOR NEW WORK PLAN  
1/8" = 1'-0"

## GENERAL NOTES

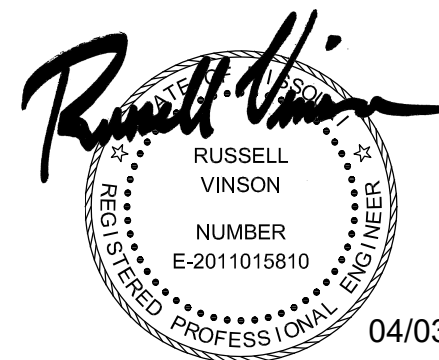
- REFER TO SHEET E000 FOR ELECTRICAL GENERAL NOTES.
- ORIENT LUMINAIRE CENTER DIFFUSER RAILS PARALLEL TO WALLS WHERE INSTALLED IN CORRIDORS. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR ADDITIONAL INFORMATION.
- IN AREAS WHERE DEMOLITION WORK IS NOT SCHEDULED, DISCONNECT, REMOVE AND SALVAGE EXISTING CEILING MOUNTED DEVICES AND FIXTURES AS REQUIRED TO COMPLETE THE ABOVE CEILING WORK FOR ALL TRADES. UPON COMPLETION OF CONSTRUCTION, REINSTALL EXISTING CEILING MOUNTED DEVICES AND FIXTURES IN ORIGINAL LOCATIONS. DEVICES AND FIXTURES SHALL OPERATE AS THEY DID PRIOR TO CONSTRUCTION.
- IN GENERAL, THE USE OF MC CABLE IS NOT PERMITTED ON THIS PROJECT. THE ONE EXCEPTION TO THAT IS FOR THE VERTICAL DROP AND FINAL CONNECTION TO THE UNDER CABINET LIGHT FIXTURES. CONTRACTOR SHALL PROVIDE A JUNCTION BOX ABOVE THE CEILING IN PROXIMITY TO THE WALL(S) THE CABINETS ARE MOUNTED ON AND TRANSITION THE VERTICAL DROP TO THE UNDER CABINET LIGHT FIXTURE TO HOSPITAL GRADE MC CABLE, INCLUSIVE OF FINAL TERMINATION.
- NEW 277V LIGHT FIXTURES SHALL BE WIRED TO EXISTING LIGHTING CIRCUITS FED BY PANEL N31 THAT PREVIOUSLY SERVED FIXTURES IN THE DEMOLISHED AREAS.
- ALL NEW AND EXISTING EMERGENCY EXIT & EGRESS LIGHTING FIXTURES SHALL BE CONNECTED TO THE NEW EMERGENCY LIGHTING INVERTER CIRCUIT. SWITCHED FIXTURES SHALL BE CIRCUITED THRU EMERGENCY LIGHTING RELAYS EQUAL TO WATTSTOPPER ELCU-200.

## KEYED NOTES

- INSTALL NEW EMERGENCY LIGHTING INVERTER, MEYERS EMERGENCY POWER SYSTEMS MODEL 6-EM-5-S WITH 2.2 KWH BATTERY CAPACITY. CONNECT TO SPARE 20A 277V BREAKER IN PANEL N31. PROVIDE NEW EMERGENCY CIRCUIT WIRING TO ALL EXISTING AND NEW EXIT SIGNS AND FIXTURES INDICATED AS LIFE SAFETY EMERGENCY EGRESS FIXTURES. APPROXIMATE LOAD OF ALL EMERGENCY FIXTURES IS 1600 WATTS, 5.8 AMPS @ 277V.
- INSTALL OWNER FURNISHED 120V 45VA EXAM LIGHT AND WIRING FROM 120V CIRCUIT SERVING RECEPTACLES WITHIN THE ROOM. PROVIDE STRUCTURAL SUPPORTS AS REQUIRED PER MANUFACTURER'S INSTRUCTIONS. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR ADDITIONAL DETAILS AND COORDINATE WITH GENERAL CONTRACTOR FOR INSTALLATION OF SUPPORT.
- EXTEND NEW EMERGENCY LIGHTING INVERTER CIRCUIT AS REQUIRED AND REWIRE EXISTING LIFE SAFETY EXIT OR EGRESS LIGHTING FIXTURE. PROVIDE EMERGENCY POWER RELAYS EQUAL TO WATTSTOPPER ELCU-200 TO OVERRIDE SWITCHED NORMAL POWER CIRCUITS WITH INVERTER POWER. COORDINATE TIMING OF REWIRING FIXTURES WITH OWNER INSTALLED REPLACEMENT FIXTURES OUTSIDE OF WORK SCOPE AREA.
- INTEGRAL LIGHTS FURNISHED WITH SOUND BOOTHS AND POWERED FROM SINGLE POINT POWER CONNECTION. REFER TO ELECTRICAL PLANS FOR CIRCUIT INFO.
- CONNECT NEW CORRIDOR LIGHTING TO EXISTING SWITCHED CORRIDOR LIGHTING CIRCUIT AS REQUIRED.
- PROVIDE NEW SWITCHING FOR CORRIDOR C312 LIGHT FIXTURES SEPARATED FROM MAIN CORRIDOR BY NEW DOOR. CONNECT TO EXISTING SWITCHED FIXTURES IN CORRIDOR C3109 AS REQUIRED.

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04/03/2023

Russell A. Vinson  
PE-2011015810

## THIRD FLOOR LIGHTING PLAN - NEW WORK

DATE: 03 APRIL, 2023  
INTROBA PROJECT NO.: 0011593

# E102

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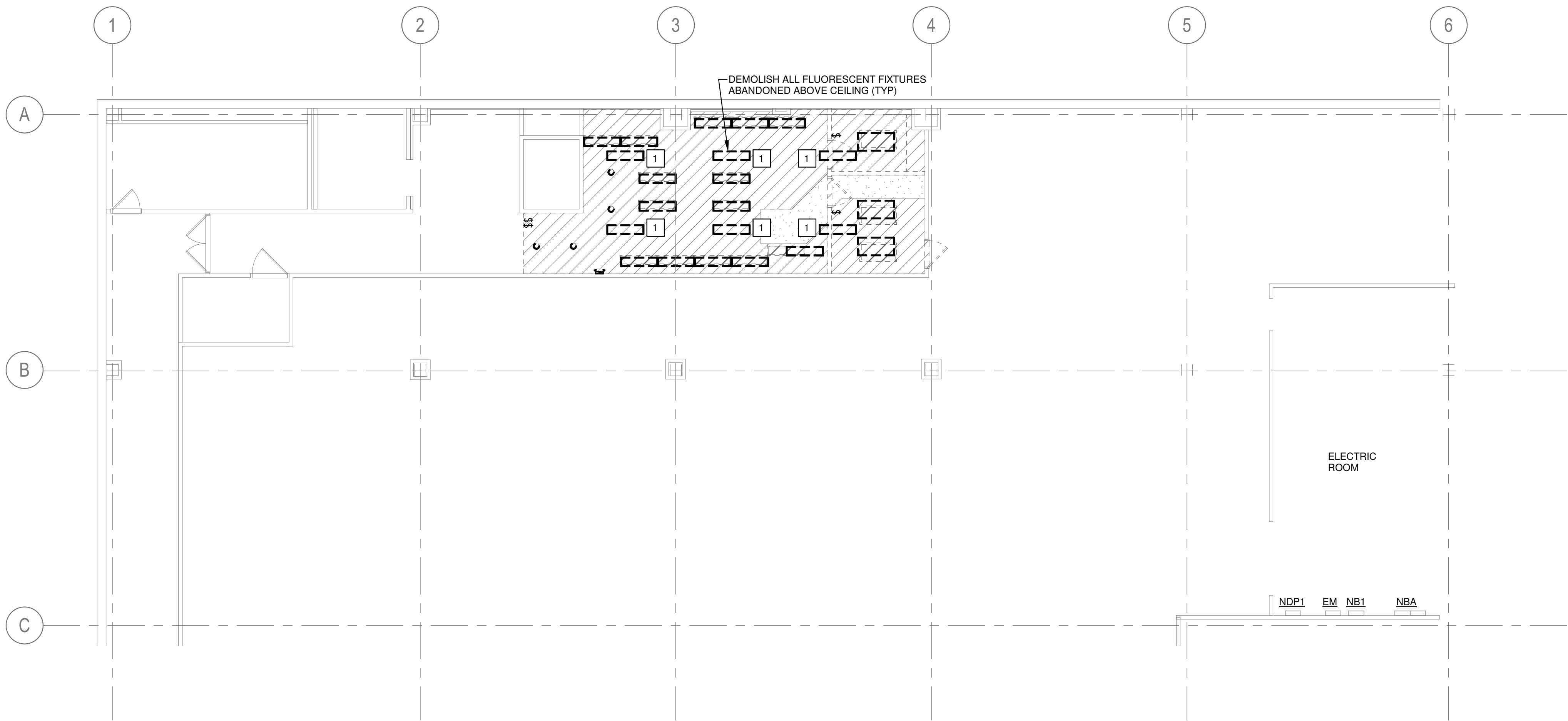


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FLOOR RENOVATION**

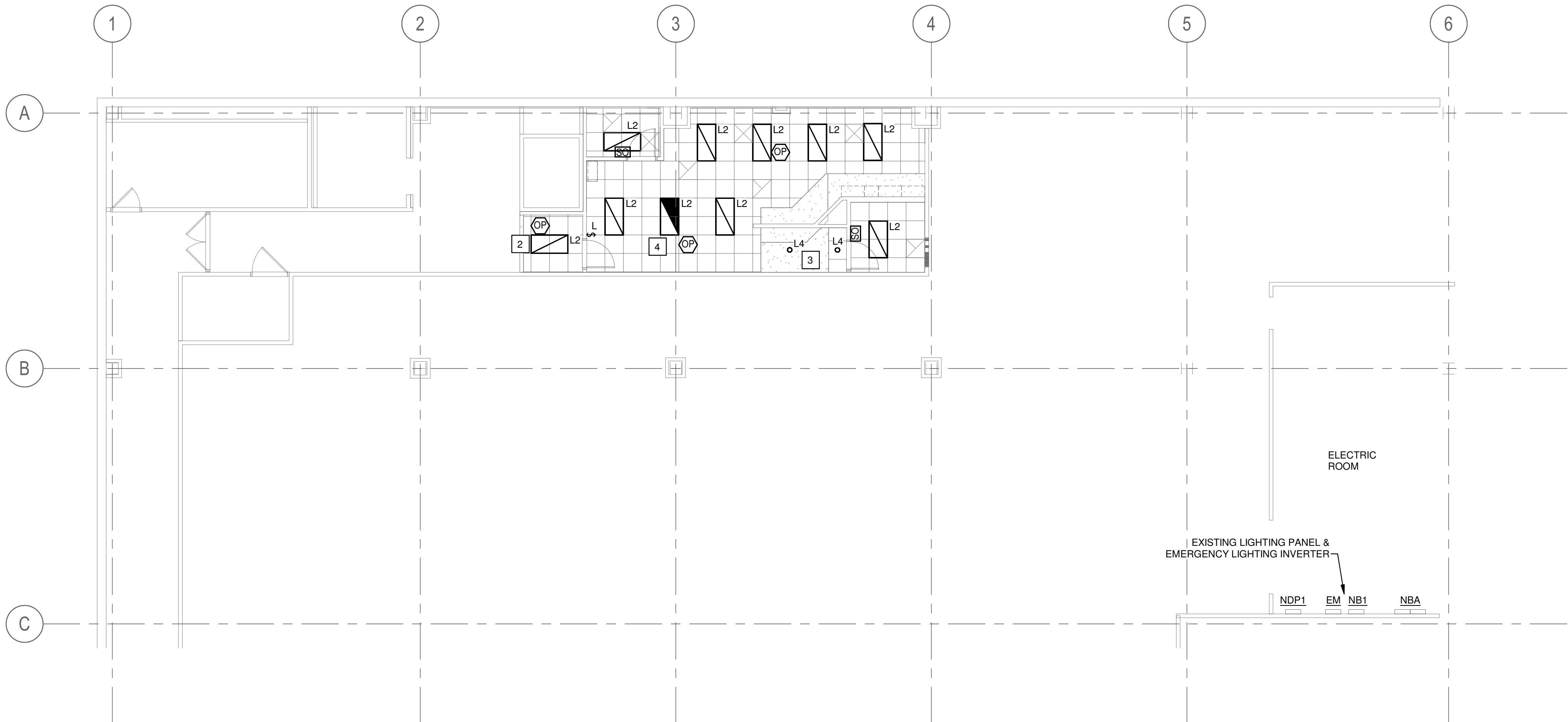
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1 LIGHTING GROUND FLOOR DEMOLITION PLAN  
1/8" = 1'-0"



2 LIGHTING GROUND FLOOR NEW WORK PLAN  
1/8" = 1'-0"

## DEMOLITION NOTES

- REFER TO SHEET E000 FOR ELECTRICAL GENERAL NOTES.
- DEMOLISH EXISTING LIGHT FIXTURES AND LIGHTING CONTROL DEVICES SHOWN IN BOLD, INCLUDING ABANDONED FIXTURES HIDDEN ABOVE THE CEILING. REMOVE EXISTING WIRING BACK TO NEAREST JUNCTION BOX AND PREPARE FOR NEW FIXTURES CONNECTED TO THE EXISTING CIRCUITS.
- IN AREAS WHERE DEMOLITION WORK IS NOT SCHEDULED, DISCONNECT, REMOVE AND SALVAGE EXISTING CEILING MOUNTED DEVICES, LUMINAIRES, ETC. AS REQUIRED TO COMPLETE ABOVE CEILING WORK FOR ALL TRADES. UPON COMPLETION OF CONSTRUCTION, REINSTALL EXISTING CEILING MOUNTED DEVICES IN ORIGINAL LOCATIONS. DEVICES SHALL OPERATE AS THEY DID PRIOR TO CONSTRUCTION.
- RE-SUPPORT ALL EXISTING TO REMAIN ELECTRICAL SYSTEMS (CONDUIT, WIRE, CABLE, ETC.) CURRENTLY SUPPORTED BY WALLS SCHEDULES TO BE DEMOLISHED.
- LEGALLY DISPOSE OF LIGHTING BALLASTS AND LAMPS CONTAINING MERCURY. COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS.

## NEW WORK NOTES

- REFER TO SHEET E000 FOR ELECTRICAL GENERAL NOTES.
- ORIENT LUMINAIRE CENTER DIFFUSER RAILS PARALLEL TO WALLS WHERE INSTALLED IN CORRIDORS. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR ADDITIONAL INFORMATION.
- IN AREAS WHERE DEMOLITION WORK IS NOT SCHEDULED, DISCONNECT, REMOVE AND SALVAGE EXISTING CEILING MOUNTED DEVICES AND FIXTURES AS REQUIRED TO COMPLETE THE ABOVE CEILING WORK FOR ALL TRADES. UPON COMPLETION OF CONSTRUCTION, REINSTALL EXISTING CEILING MOUNTED DEVICES AND FIXTURES IN ORIGINAL LOCATIONS. DEVICES AND FIXTURES SHALL OPERATE AS THEY DID PRIOR TO CONSTRUCTION.
- IN GENERAL, THE USE OF MC CABLE IS NOT PERMITTED ON THIS PROJECT. THE ONE EXCEPTION TO THAT IS FOR THE VERTICAL DROP AND FINAL CONNECTION TO THE UNDER CABINET LIGHT FIXTURES. CONTRACTOR SHALL PROVIDE A JUNCTION BOX ABOVE THE CEILING IN PROXIMITY TO THE WALL(S) THE CABINETS ARE MOUNTED ON AND TRANSITION THE VERTICAL DROP TO THE UNDER CABINET LIGHT FIXTURE TO HOSPITAL GRADE MC CABLE, INCLUSIVE OF FINAL TERMINATION.
- NEW 277V LIGHT FIXTURES SHALL BE WIRED TO EXISTING LIGHTING CIRCUITS FED BY PANEL NB1 THAT PREVIOUSLY SERVED FIXTURES IN THE DEMOLISHED AREAS.

## KEYED NOTES

- DEMOLISH ALL ABANDONED FLOURESCENT LIGHT FIXTURES LOCATED ABOVE GRID CEILING. VERIFY EXACT LOCATION AND QUANTITY.
- CONNECT NEW CORRIDOR LIGHTING TO EXISTING CORRIDOR LIGHTING CIRCUIT AS REQUIRED.
- COORDINATE FIXTURES IN LOWERED SOFFIT WITH EXISTING DUCTWORK AND NEW CEILING.
- CIRCUIT EMERGENCY LIGHTING FIXTURE TO EXISTING EMERGENCY LIGHTING CIRCUIT NB1-10. PROVIDE NEW WIRING FROM PANEL NB1 IN ELECTRICAL ROOM AS REQUIRED. PROVIDE EMERGENCY POWER RELAY EQUAL TO WATTSTOPPER ELOU-200 TO OVERRIDE SWITCHED NORMAL POWER CIRCUIT WITH INVERTER POWER.

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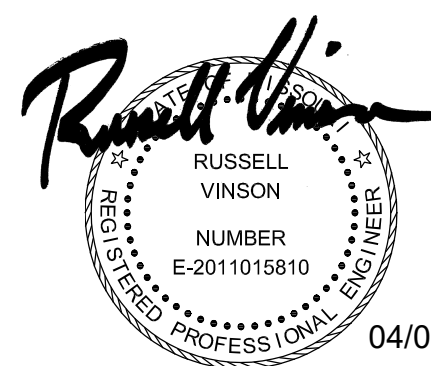
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FLOOR RENOVATION**

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PE-2011015810

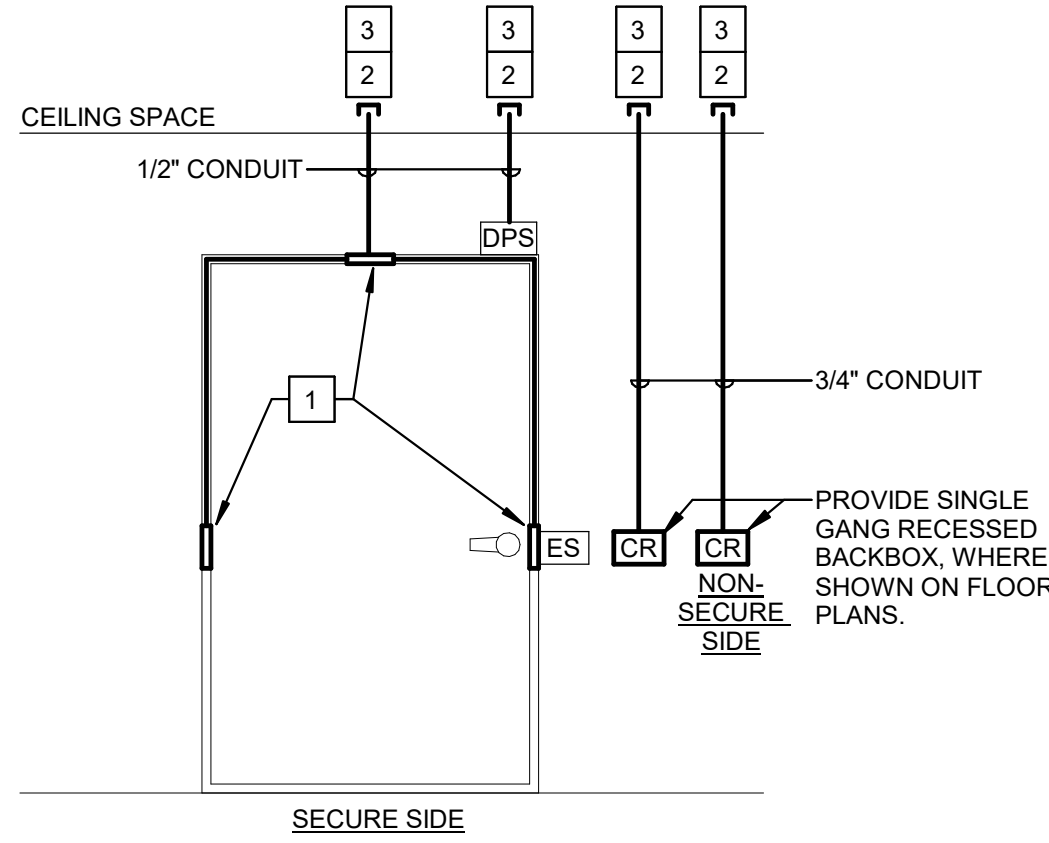
**ALTERNATE #1 - GROUND  
FLOOR LIGHTING PLANS**

DATE: 03 APRIL, 2023  
INTROBA PROJECT NO. 0011593

# E103

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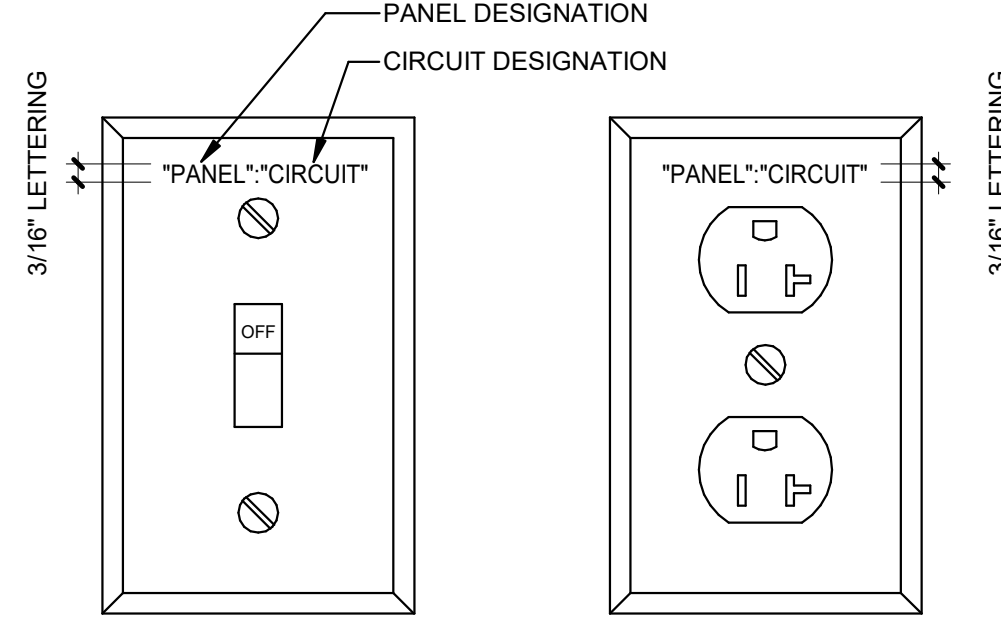


- GENERAL NOTES:**
- DETAIL IS DIAGRAMMATIC ONLY AND MAY NOT REPRESENT ACTUAL DEVICES/QUANTITY OF DEVICES REQUIRED. COORDINATE ALL REQUIREMENTS WITH FINAL DOOR HARDWARE PROVIDED AND AS CALLED OUT ON ARCHITECTURAL DRAWINGS. COORDINATE WITH SECURITY SYSTEM INSTALLER FOR EXACT ROUGH-IN LOCATIONS AND REQUIREMENTS.
  - COORDINATE FINAL REQUIREMENTS WITH ACCESS CONTROL VENDOR. PROVIDE EACH ACCESS CONTROL DOOR WITH ONE (1) 18/6 UNSHIELDED CABLE AND ONE (1) 22/6 SHIELDED CABLE.

- KEYED NOTES:**
- PROVIDE JUNCTION BOXES FLUSH WITHIN THE DOOR FRAME WITH 1/2" FLEXIBLE CONDUIT BETWEEN BOXES AS REQUIRED FOR ROUTING OF ACCESS CONTROL WIRING INSIDE DOOR FRAME.
  - STUB CONDUIT 6" ABOVE ACCESSIBLE CEILING.
  - LOW VOLTAGE ACCESS CONTROL SYSTEM CABLES: ROUTE TO DOOR ACCESS CONTROL PANEL IN LOCAL TELECOMMUNICATION ROOM.

## 5 ACCESS CONTROL ROUGH-IN DIAGRAM

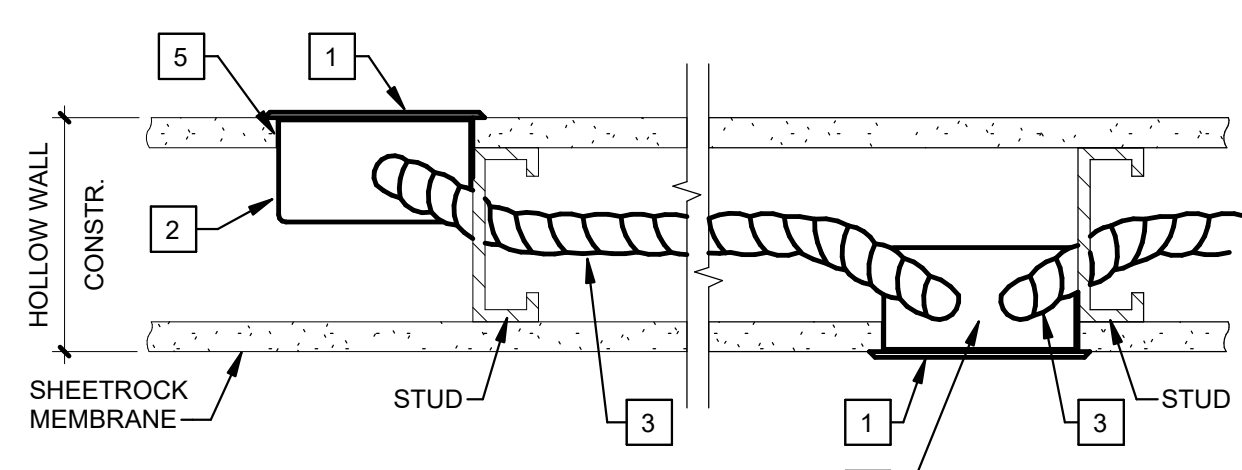
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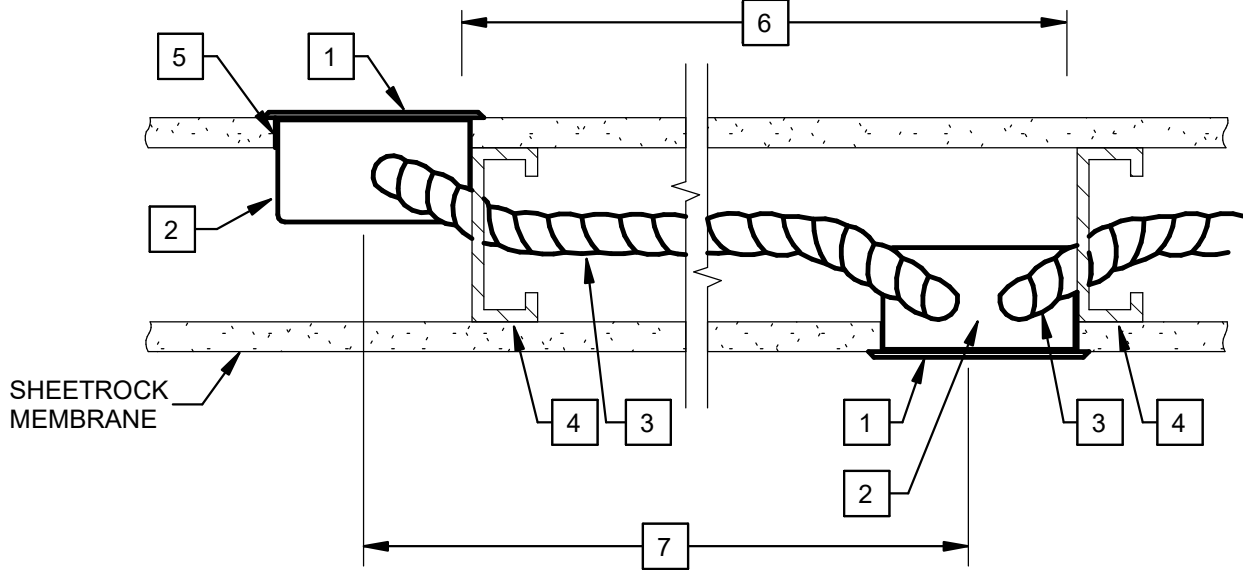
- GENERAL NOTE:**
- TYPICAL OF ALL SWITCH AND RECEPTACLE DEVICE PLATES.
  - REFER TO SPECIFICATION SECTION 260553 IDENTIFICATION FOR ELECTRICAL SYSTEMS FOR ADDITIONAL REQUIREMENTS.

## 2 ELECTRICAL DEVICE PLATE LABELING

NO SCALE



PLAN VIEW - DETAIL A - OUTLET BOXES IN HOLLOW WALL



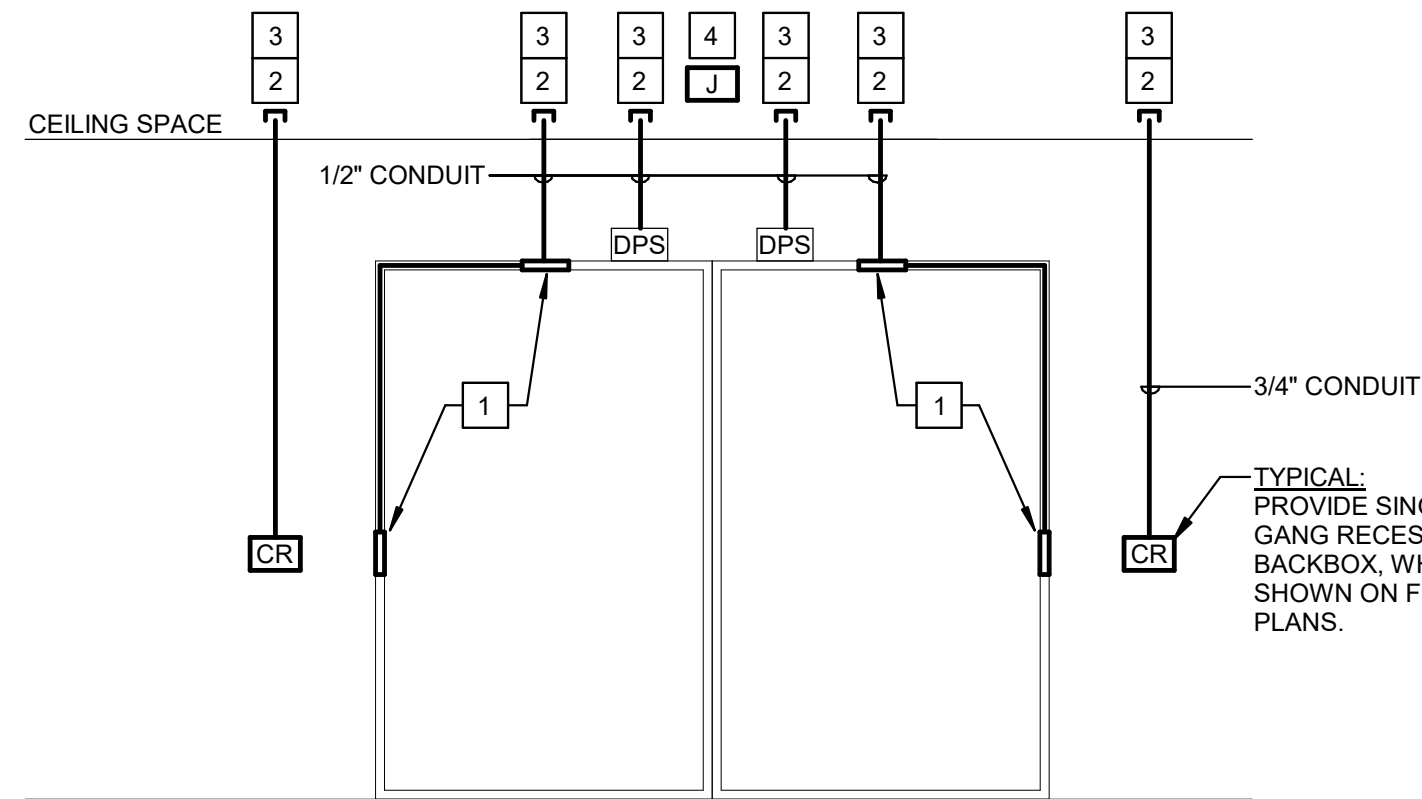
PLAN VIEW - DETAIL B - OUTLET BOXES IN FIRE RATED HOLLOW WALL

- GENERAL NOTES:**
- COORDINATE LOCATIONS OF FIRE RATE WALLS AND THICKNESS OF ALL WALLS WITH G.C. AND ARCHITECTURAL DRAWINGS.
  - DETAIL A IS APPLICABLE TO ALL HOLLOW WALLS ON THIS PROJECT. DETAIL B IS APPLICABLE TO ALL FIRE RATED HOLLOW WALLS ON THIS PROJECT.

- KEYED NOTES:**
- PLATE OR COVER ON FOR OUTLET, BOX OR WIREWAY.
  - NON-FIRE RATED WALL (DETAIL A): OUTLET, SWITCH, RECEPTACLE, TEL., DATA, ETC. OR OTHER BOX SPECIFIED. FIRE RATED WALL (DETAIL B): SAME AS ABOVE EXCEPT BOX MUST BE STEEL WITH NOMINAL AREA NOT TO EXCEED 16 SQ. IN.
  - RACEWAY AS ALLOWED BY SPECIFICATIONS.
  - METAL STUD (NO HOLES). IF STUDS HAVE HOLES, BOXES MAY BE LESS THAN 24" APART AND FIRE RATED PUTTY PADS USED ON BOTH BOXES.
  - BOXES SHALL BE SET BACK FROM FINISHED SURFACE NO MORE THAN 1/4" IN ACCORD WITH NEC. BOXES SHALL BE SET AND THE WALL SHALL BE REPAIRED AS REQUIRED SO THAT THE SPACE BETWEEN THE WALL AND THE EDGE OF THE BOX SHALL BE NO GREATER THAN 1/8" IN ACCORD WITH NEC. FIRE RATED WALLS MAY HAVE MORE THAN ONE LAYER OF SHEETROCK IN ORDER TO OBTAIN FIRE RATING. COORDINATE WITH G.C. AND ARCHITECTURAL DRAWINGS PRIOR TO SETTING BOXES.
  - TYPICAL 24" STUD SPACING. COORDINATE WITH G.C.
  - BOXES IN OPPOSITE SIDES OF A FIRE RATED HOLLOW WALL SHALL BE SEPARATED BY A MINIMUM OF 24" AND THERE SHALL BE A STUD BETWEEN THE 2 BOXES. SEE KEYED NOTE 4 ON THIS SHEET.

## 3 OUTLETS IN HOLLOW WALLS-TYPICAL DETAILS

NO SCALE

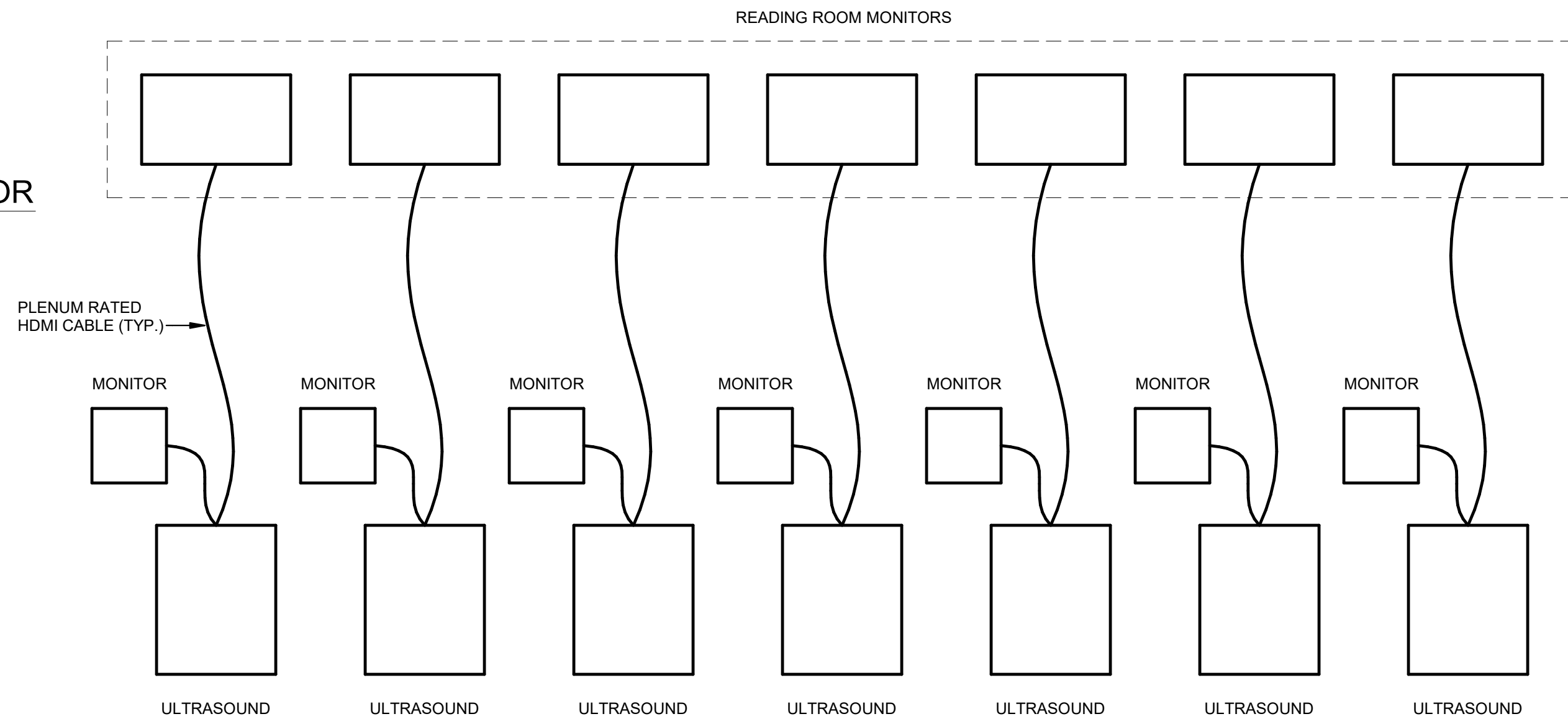


- GENERAL NOTES:**
- DETAIL IS DIAGRAMMATIC ONLY AND MAY NOT REPRESENT ACTUAL DEVICES/QUANTITY OF DEVICES REQUIRED. COORDINATE ALL REQUIREMENTS WITH FINAL DOOR HARDWARE PROVIDED AND AS CALLED OUT ON ARCHITECTURAL DRAWINGS. COORDINATE WITH SECURITY SYSTEM INSTALLER FOR EXACT ROUGH-IN LOCATIONS AND REQUIREMENTS.
  - COORDINATE FINAL REQUIREMENTS WITH ACCESS CONTROL VENDOR. PROVIDE EACH ACCESS CONTROL DOOR WITH ONE (1) 18/6 UNSHIELDED CABLE AND ONE (1) 22/6 SHIELDED CABLE.

- KEYED NOTES:**
- PROVIDE JUNCTION BOXES FLUSH WITHIN THE DOOR FRAME WITH 1/2" FLEXIBLE CONDUIT BETWEEN BOXES AS REQUIRED FOR ROUTING OF ACCESS CONTROL WIRING INSIDE DOOR FRAME.
  - STUB CONDUIT 6" ABOVE ACCESSIBLE CEILING.
  - LOW VOLTAGE ACCESS CONTROL SYSTEM CABLES: ROUTE TO DOOR ACCESS CONTROL PANEL IN LOCAL TELECOMMUNICATION ROOM.
  - PROVIDE 4" SQUARE JUNCTION BOX FOR CONNECTIONS TO DOOR OPERATOR. REFER TO FLOOR PLANS FOR POWER CIRCUITING REQUIREMENTS.

## 6 ACCESS CONTROL ROUGH-IN DIAGRAM - DOUBLE DOOR OPERATOR

SCALE: NO SCALE



## 4 READING ROOM MONITOR CONNECTION

NO SCALE

**LEGEND:**  
F: FURNISHED  
I: INSTALLED

CONTRACTOR RESPONSIBILITY		OWNER RESPONSIBILITY
GENERAL LOW VOLTAGE ITEMS		
LOW VOLTAGE RACKS	F,I	
RACK CABLE MANAGEMENT	F,I	
CONDUIT SLEEVES		F,I
GROUNDING AND BONDING (GROUND BARS, CONDUCTORS, TERMINATIONS, ETC.)	F,I	
CABLE PATHWAYS, CABLE TRAY, LADDER TRAY	F,I	
LADDER RACK	F,I	
FIRESTOPPING FOR LOW VOLTAGE SYSTEMS	F,I	
FIRE RATED PATHWAYS	F,I	
EQUIPMENT, CABLE, AND OUTLET FACEPLATE LABELING	F	I
CORE DRILLING FLOOR/WALL SLEEVES		F,I
TELECOMMUNICATIONS SYSTEMS		
FIBER SERVICE AND HORIZONTAL DISTRIBUTION FROM HOSPITAL	F,I	
FIBER SWITCH AND TERMINATIONS	F,I	
EQUIPMENT (SERVERS, SWITCHES, PDU, ETC.)	F,I	
TELECOM ROOM LADDER RACK	F,I	
PATCH PANELS	F,I	
PATCH CABLES	F,I	
HORIZONTAL CABLING AND TERMINATIONS (SEE NOTE 5)	F	I
BACKBOXES AND CONDUITS		F,I
OUTLET FACEPLATES AND TERMINATIONS (SEE NOTE 5)	F,I	
WIRELESS ACCESS POINTS	F,I	
COMMUNITY ACCESS TELEVISION SYSTEM (CATV)		
CABLE DISTRIBUTION (BETWEEN TELECOM ROOMS)	F,I	
AMPLIFIERS AND SPLITTERS	F,I	
EQUIPMENT: HEAD-END ELECTRONICS	F,I	
HORIZONTAL CABLING AND TERMINATIONS (SEE NOTE 5)	F	I
BACKBOXES AND CONDUITS		F,I
OUTLET FACEPLATES AND TERMINATIONS (SEE NOTE 5)	F,I	
ACCESS CONTROL		
HEAD-END EQUIPMENT	F	I
BACKBOXES AND CONDUITS		F,I
DEVICES (CARD READERS, KEYPADS, ETC.)	F,I	
INTERCONNECTION WIRING AND TERMINATIONS (SEE NOTE 5)	F	I
VIDEO SURVEILLANCE		
HEAD-END EQUIPMENT (HARDWARE, SOFTWARE, DISPLAYS, ETC.)	F	I
CAMERAS AND SUPPORTS	F,I	
HORIZONTAL WIRING AND TERMINATIONS (SEE NOTE 5)	F	I
BACKBOXES AND CONDUITS		F,I
NURSE CALL		
HEAD-END EQUIPMENT, UPS, AND PROGRAMMING	F	I
HORIZONTAL CABLING AND TERMINATIONS (SEE NOTE 5)	F	I
BACKBOXES AND CONDUITS		F,I
DEVICES	F,I	
INTERCONNECTION WIRING AND TERMINATIONS TO PERIPHERALS	F,I	
PUBLIC ADDRESS SYSTEM		
HEAD-END EQUIPMENT	F,I	
HORIZONTAL CABLING AND TERMINATIONS (SEE NOTE 5)	F	I
BACKBOXES AND CONDUITS		F,I
SPEAKERS	F,I	

- NOTES:**
- THE PARTY RESPONSIBLE FOR INSTALLING THE RESPECTIVE EQUIPMENT SHALL ALSO BE RESPONSIBLE FOR CONNECTING, PROGRAMMING AND TESTING THE SYSTEM, UNLESS OTHERWISE SPECIFICALLY NOTED. CONTRACTOR TO COORDINATED TESTING WITH ALL THIRD PARTY VENDORS.
  - ITEMS INDICATED AS FURNISHED AND/OR INSTALLED BY THE OWNER MAY BE PROVIDED BY A THIRD-PARTY VENDOR. CONTRACTOR IS REQUIRED TO COORDINATE ALL INSTALLATIONS.
  - ALL LINE VOLTAGE RECEPTACLE AND HARD-WIRED CONNECTIONS WILL BE PROVIDED BY THE CONTRACTOR.
  - FIRESTOPPING TO BE PROVIDED BY A SINGLE ENTITY. REFER TO DIVISION 07 SPECIFICATIONS FOR REQUIREMENTS.
  - OWNER TO SUPPLY CABLES. CONTRACTOR TO INSTALL CABLES FROM HEAD-END EQUIPMENT TO DEVICES AND OWNER TO TERMINATE CABLES AT HEAD-END EQUIPMENT AND DEVICES.

## 1 LOW VOLTAGE RESPONSIBILITY MATRIX

NO SCALE



MEP ENGINEERING:  
Introba Inc.  
6 S Old Orchard Ave  
St. Louis, MO 63119  
ph 314.918.8383 www.introba.com  
Missouri State Certificate of Authority #202308136



LIGHTING ENGINEERING:  
Timberlake Engineering  
912 Old Highway 63 South  
Columbia, MO 65201  
ph 573.875.4365 ext 209 www.customengr.com  
Missouri State Certificate of Authority #000239



MU PROJECT NO. - CP221943

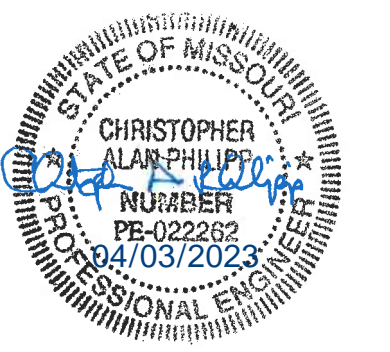
## UNIVERSITY PHYSICIANS MEDICAL BUILDING - 3RD FLOOR RENOVATION

1020 Hitt St. Columbia, MO 65212

## BID SET

MARK	DATE	DESCRIPTION
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I hereby certify these drawings and/or specifications have been prepared by me, or under my supervision. I further certify that to the best of my knowledge these drawings and/or specifications are as required by and in compliance with the Building Codes of the University of Missouri.



CHRISTOPHER ALAN PHILIPP  
PE 022262

## ELECTRICAL DETAILS & SCHEDULES

DATE 03 APRIL, 2023  
INTROBA PROJECT NO. 0011593

## E500



3/30/2023 10:23:47 AM  
BIM 360://1415819 - UPMB Renovation - 3rd Floor 001-530-MHC-UPMB-3rd Floor Renovation-MEP-FP-02-1  
DESIGNED  
CHECKED  
APPROVED

Branch Panel: N3A											
Location: ELECT. 3201				Volts: 120/208 Wye				A.I.C. Rating:			
Supply From:				Phases: 3				Mains Type:			
Mounting: Surface				Wires: 4				Mains Rating: 225 A			
Enclosure: Type 1								MCB Rating: 225 A			
CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT	
1	EXISTING RECEPT. RECORDS 3304	20 A	1	0 VA	0 VA			1	20 A	EXISTING RECEPT. WORK 3303	2
3	EXISTING RECEPT. ELEC 3301	20 A	1		0 VA	0 VA		1	20 A	EXISTING RECEPT. WORK 3303	4
5	EXISTING RECEPT. TOILET CORR. 3217	20 A	1			0 VA	0 VA	1	20 A	EXISTING RECEPT. EXAM 3227	6
7	EXISTING RECEPT. EVOKE 3219	20 A	1	0 VA	0 VA			1	20 A	EXISTING RECEPT. MICRO 3223	8
9	EXISTING RECEPT. 3219	20 A	1		0 VA	0 VA		1	20 A	EXISTING RECEPT. MICRO 3223	10
11	EXISTING RECEPT. NURSE 3201	20 A	1			0 VA	1260...	1	20 A	RECEPTACLE WORK ROOM 3204	12
13	EXISTING RECEPT. NURSE 3201	20 A	1	0 VA	0 VA			1	20 A	EXISTING LIGHTS SHELL SPACE 3214	14
15	EXISTING RECEPT. NURSE 3201	20 A	1		0 VA	0 VA		1	20 A	EXISTING RECEPT. OFFICE 3218	16
17	EXISTING RECEPT. PHYS. 3203	20 A	1			0 VA	0 VA	1	20 A	EXISTING RECEPT. OFFICE 3218	18
19	EXISTING RECEPT. PHYS. 3222	20 A	1	0 VA	500 VA			1	20 A	REFRIGERATOR SOILED HOLDING 3207	20
21	EXISTING RECEPT. EXAM 3221	20 A	1		0 VA	1080...		1	20 A	RECEPTACLE WORKROOM 3204	22
23	EXISTING RECEPT. EXAM 3205	20 A	1			0 VA	540 VA	1	20 A	RECEPTACLE TREATMENT 3131	24
25	EXISTING RECEPT. ASSIST DEV. 3207	20 A	1	0 VA	0 VA			1	20 A	URODYNAMICS TREATMENT 3131	26
27	EXISTING RECEPT. HEAR AIDS 3220	20 A	1		0 VA	720 VA		1	20 A	RECEPTACLE CLEAN UTILITY 3210	28
29	SOUND BOOTH 3114	20 A	1			0 VA	0 VA	1	20 A	EXISTING RECEPT. OFFICE 3210	30
31	CONTROL CENTER 3113	20 A	1	0 VA	0 VA			1	20 A	EXISTING RECEPT. ENG. 3208	32
33	EXISTING RECEPT. 3209	20 A	1		0 VA	0 VA		1	20 A	EXISTING RECEPT. ENG. 3208	34
35	EXISTING RECEPT. CHAIR 3209	20 A	2	0 VA	0 VA			1	20 A	EXISTING RECEPT. MICRO 3206	36
37		20 A	1			0 VA	0 VA	1	20 A	EXISTING RECEPT. MICRO 3206	38
39	SOUND BOOTH 3112	20 A	1		0 VA	0 VA		1	20 A	EXISTING RECEPT. EXAM 3204	40
41	RECEPTACLE SOILED HOLDING	20 A	1			360 VA	0 VA	1	20 A	EXISTING RECEPT. EXAM 3202	42
43	SPARE	20 A	1	0 VA	0 VA			1	20 A	EXISTING UNDERCOUNTER LIGHTS	44
45	EXISTING RECEPT. VEST PLAT 3209	20 A	1		0 VA	0 VA		1	20 A	EXISTING UNDERCOUNTER LIGHTS	46
47	EXISTING RECEPT. PEDS PLAY 3209	20 A	1			0 VA	0 VA	1	20 A	EXISTING RECEPT. 3218	48
49	EXISTING RECEPT. WAITING 3100	20 A	1	0 VA	0 VA			1	20 A	EXISTING RECEPT. 3206	50
51	EXISTING RECEPT. WAITING 3100, 3103A	20 A	1		0 VA	0 VA		1	20 A	EXISTING RECEPT. 3206	52
53	EXISTING RECEPT. 3100A, 3103A	20 A	1			0 VA	0 VA	1	20 A	EXISTING RECEPT. C3200	54
55	RECEPTACLE TREATMENT 3109	20 A	1	180 VA	0 VA			1	20 A	EXISTING RECEPT. 3306	56
57	RECEPTACLE TREATMENT 3109	20 A	1		180 VA	0 VA		1	20 A	EXISTING RECEPT. 3306	58
59	RECEPTACLE TREATMENT 3109	20 A	1			360 VA	0 VA	1	20 A	EXISTING RECEPT. FACP 3306	60
61	RECEPTACLE EXAM ROOM 3111	20 A	1	1080...	0 VA			1	20 A	EXISTING RECEPT. NURSE CALL 3306	62
63	RECEPTACLE TREATMENT 3109	20 A	1		540 VA	900 VA		1	20 A	RECEPTACLE WORK ROOM 3204	64
65	RECEPTACLE WORKROOM 3108	20 A	1			1440...	0 VA	1	20 A	EXISTING RECEPT. CHECK-IN DESK	66
67	RECEPTACLE WORKROOM 3110	20 A	1	1440...	0 VA			1	20 A	EXISTING RECEPT. 3103A	68
69	RECEPTACLE WORKROOM 3110	20 A	1		1260...	0 VA		1	20 A	EXISTING RECEPT. 3206	70
71	RECEPTACLE NURSE WORK 3116	20 A	1			1260...	0 VA	1	20 A	EXISTING RECEPT. 3206	72
73	RECEPTACLE EXAM 3118	20 A	1	900 VA	1080...			1	20 A	RECEPTACLE EXAM 3119	74
75	RECEPTACLE EXAM 3120	20 A	1		900 VA	1260...		1	20 A	RECEPTACLE WORKROOM 3110	76
77	RECEPTACLE EXAM 3105	20 A	1			540 VA	0 VA	1	20 A	SPARE	78
79	RECEPTACLE VITALS 3101	20 A	1	540 VA	0 VA						80
81	RECEPTACLE NURSE WORK 3123	20 A	1		1260...	0 VA		3	20 A	SPARE	82
83	RECEPTACLE EXAM 3125	20 A	1			360 VA	0 VA				84
Total Load:				5720 VA	8100 VA	6120 VA					
Total Amps:				48 A	68 A	52 A					
Panel Totals											
Total Conn. Load: 19940 VA											
Total Est. Demand: 15510 VA											
Total Conn.: 55 A											
Total Est. Demand: 43 A											

Branch Panel: N3B												
Location: ELECT. 3201				Volts: 120/208 Wye				A.I.C. Rating: 10,000				
Supply From:				Phases: 3				Mains Type:				
Mounting: Surface				Wires: 4				Mains Rating: 225 A				
Enclosure: Type 1								MCB Rating: 150 A				
CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT		
1	EXISTING RECEPT. UTILITY 3305	20 A	1	0 VA	0 VA			1	20 A	EXISTING RECEPT. VOICE LAB 3235	2	
3	EXISTING RECEPT. UTILITY 3307	20 A	1		0 VA	0 VA		1	20 A	EXISTING RECEPT. VOICE LAB 3235	4	
5	EXISTING RECEPT. LOUNGE 3309	20 A	1			0 VA	0 VA	1	20 A	EXISTING RECEPT. VOICE LAB 3235	6	
7	EXISTING RECEPT. LOUNGE 3309	20 A	1	0 VA	0 VA			1	20 A	EXISTING RECEPT. VOICE LAB 3235	8	
9	EXISTING RECEPT. OFFICE 3310	20 A	1		0 VA	0 VA		1	20 A	EXISTING RECEPT. EXAM 3236	10	
11	RECEPTACLE ULTRASOUND 3149	20 A	1			1440...	0 VA	1	20 A	EXISTING RECEPT. EXAM 3237	12	
13	EXISTING RECEPT. LOUNGE 3309	20 A	1	0 VA	0 VA			1	20 A	EXISTING RECEPT. EXAM 3238	14	
15	EXISTING RECEPT. TREAT. 3231	20 A	1		0 VA	0 VA		1	20 A	EXISTING RECEPT. EXAM 3239	16	
17	EXISTING RECEPT. TREAT. 3231	20 A	1			0 VA	0 VA	1	20 A	EXISTING RECEPT. EXAM 3241	18	
19	RECEPTACLE READING ROOM 3155	20 A	1	1080...	0 VA			1	20 A	EXISTING RECEPT. EXAM 3243	20	
21	EXISTING RECEPT. ENT. 3223	20 A	1		0 VA	0 VA		1	20 A	EXISTING RECEPT. EXAM 3244	22	
23	EXISTING RECEPT. ENT. 3234	20 A	1			0 VA	0 VA	1	20 A	EXISTING RECEPT. EXAM 3244	24	
25	EXISTING RECEPT. LOUNGE 3309	20 A	1	0 VA	0 VA			1	20 A	EXISTING RECEPT. EXAM 3244	26	
27	EXISTING RECEPT. RECOV. 3229	20 A	1		0 VA	0 VA		1	20 A	EXISTING RECEPT. EXAM 3245	28	
29	EXISTING RECEPT. STOR. 3225	20 A	1			0 VA	0 VA	1	20 A	EXISTING RECEPT. EXAM 3246	30	
31	EXISTING RECEPT. EXAM 3226	20 A	1	0 VA	0 VA			1	20 A	EXISTING RECEPT. TOILET 3247 & EWC	32	
33	EXISTING RECEPT. EXAM 3252	20 A	1		0 VA	0 VA		1	20 A	EXISTING RECEPT. TREAT. 3248	34	
35	EXISTING RECEPT. MICRO 3228	20 A	1			0 VA	0 VA	1	20 A	EXISTING RECEPT. TREAT. 3248	36	
37	DOOR OPERATOR WAITING 3002	20 A	1	500 VA	0 VA			1	20 A	EXISTING RECEPT. TREAT. 3248	38	
39	EXISTING RECEPT. MICRO 3228	20 A	1		0 VA	0 VA		1	20 A	EXISTING RECEPT. EXAM 3249	40	
41	EXISTING RECEPT. MICRO 32351	20 A	1			0 VA	0 VA	1	20 A	EXISTING RECEPT. EXAM 3250	42	
43	RECEPTACLE READING ROOM 3155	20 A	1	1080...	0 VA			1	20 A	EXISTING RECEPT. PHYS 3240	44	
45	RECEPTACLE READING ROOM 3155	20 A	1		1080...	0 VA		1	20 A	EXISTING RECEPT. PHYS 3240	46	
47	EXISTING RECEPT. PHYS. 3230	20 A	1			0 VA	0 VA	1	20 A	EXISTING RECEPT. EDU 3003	48	
49	EXISTING RECEPT. PHYS. 3230	20 A	1	0 VA	0 VA			1	20 A	EXISTING RECEPT. UNDERCOUNTER LIGHT	50	
51	EXISTING RECEPT. COR. C3200	20 A	1		0 VA	0 VA		1	20 A	EXISTING RECEPT. C3000	52	
53	EXISTING UNDERCOUNTER LIGHTS	20 A	1			0 VA	0 VA	1	20 A	EXISTING RECEPT. DIMMER LIGHT 3220, 3251	54	
55	EXISTING RECEPT. EXAM LT. 3231	20 A	1	0 VA	0 VA			1	20 A	EXISTING RECEPT. TOILET 3001, 3002	56	
57	EXISTING RECEPT. NURSE 3232	20 A	1		0 VA	0 VA		1	20 A	EXISTING RECEPT. C3000	58	
59	RECEPTACLE ULTRASOUND 3151	20 A	1			1080...	0 VA	1	20 A	EXISTING MAGNETIC LOCK	60	
61	EXISTING RECEPT. NURSE 3232	20 A	1	0 VA	0 VA			1	20 A	EXISTING RECEPT. NURSE 3242	62	
63	EXISTING RECEPT. CORR C3200	20 A	1		0 VA	0 VA		1	20 A	EXISTING RECEPT. NURSE 3242	64	
65	EXISTING RECEPT. DIMMER 3235	20 A	1			0 VA	0 VA	1	20 A	EXISTING RECEPT. NURSE 3242	66	
67	EXISTING LASER 3231	20 A	2	0 VA	500 VA			1	20 A	REFRIGERATOR SOILED HOLDING 3141	68	
69					0 VA	900 VA		1	20 A	RECEPTACLE ULTRASOUND 3152	70	
71	RECEPTACLE ULTRASOUND 3149	20 A	1			720 VA	0 VA	1	20 A	EXISTING RECEPT. 3305	72	
73	RECEPTACLE ULTRASOUND 3150	20 A	1	1260...	0 VA			1	20 A	RECEPTION DESK 3003	74	
75	RECEPTACLE WORK ROOM 3157	20 A	1		1260...	0 VA		1	20 A	RECEPTION DESK 3003	76	
77	RECEPTACLE CHECK-IN 3002A	20 A	1			1440...	900 VA	1	20 A	RECEPTACLE OFFICE 3002A2	78	
79	RECEPTACLE ULTRASOUND 3144	20 A	1	1440...	720 VA			1	20 A	RECEPTACLE WAITING 3002	80	
81	RECEPTACLE ULTRASOUND 3142	20 A	1		1260...	900 VA		1	20 A	RECEPTACLE CONFERENCE 3156	82	
83	RECEPTACLE SOILED HOLDING 3141	20 A	1			1080...	1260...	1	20 A	RECEPTACLE ULTRASOUND 3154	84	
Total Load:				6580 VA	5400 VA	7920 VA						
Total Amps:				56 A	45 A	68 A						
Panel Totals												
Total Conn. Load: 19900 VA												
Total Est. Demand: 15290 VA												
Total Conn.: 55 A												
Total Est. Demand: 42 A												

Branch Panel: N31															
Location: ELECT. 3201				Volts: 480/277 Wye				A.I.C. Rating:							
Supply From:				Phases: 3				Main Type:							
Mounting: Surface				Wires: 4				Mains Rating: 225 A							
Enclosure: Type 1								MCB Rating:							
CKT	Circuit Description			Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	EXISTING LIGHTING 3302, 3305, 3307, 3217			20 A	1	0 VA	0 VA					1	20 A	EXISTING LIGHTING CORR. C3300, C3200	2
3	EXISTING LIGHTING 3308, 09, 10, 11, 3234, 3...			20 A	1			0 VA	0 VA			1	20 A	EXISTING LIGHTING CORR. C3200	4
5	EXISTING LIGHTING 3224, 25, 27, 29, 31, 3303			20 A	1					0 VA	0 VA	1	20 A	EXISTING LIGHTING 3209, 10, 18, 19, 20, 21...	6
7	EXISTING LIGHTING 3201, 03, 05, 22, 26, 52			20 A	1	0 VA	0 VA					1	20 A	EXISTING LIGHTING 3240, 42, 46, 47, 48	8
9	EXISTING LIGHTING 3228, 30, 51, 52			20 A	1			0 VA	0 VA			1	20 A	EXISTING LIGHTING 3249, 50, 3103A	10
11	EXISTING LIGHTING 3237, 38, 39, 41, 43, 44,...			20 A	1					0 VA	0 VA	1	20 A	EXISTING LIGHTING 3100, 01, 02, 3204, 06	12
13	EXISTING LIGHTING CORR. C3000			20 A	1	0 VA	0 VA					1	20 A	EXISTING EXIT LIGHTS	14
15	EXISTING LIGHTING EDJ. 3003, TOILET 300...			20 A	1			0 VA	0 VA			1	20 A	EXISTING LIGHTING ELEC 3301, TOILET 3217	16
17	SPARE			20 A	1					0 VA	0 VA	1	20 A	EXISTING LIGHTING CORR. C3200	18
19	SPARE			20 A	1	0 VA	0 VA					1	20 A	EXISTING LIGHTING TOILET 3217, 3218	20
21	SPARE			20 A	1			0 VA	0 VA			1	20 A	SPARE	22
23	SPARE			20 A	1					0 VA	0 VA	1	20 A	SPARE	24
25	SPACE			--	1	--	0 VA					1	20 A	SPARE	26
27	SPACE			--	1			--	--			1	--	SPACE	28
29	SPACE			--	1					--	--	1	--	SPACE	30
31	SPACE			--	1	--	--					1	--	SPACE	32
33	SPACE			--	1			--	--			1	--	SPACE	34
35	SPACE			--	1					--	--	1	--	SPACE	36
37						0 VA	0 VA								38
39	EXISTING TRANSFORMER N3B			70 A	3			0 VA	0 VA			3	100 A	EXISTING TRANSFORMER N3A	40
41										0 VA	0 VA				42
Total Load:						0 VA		0 VA		0 VA					
Total Amps:						0 A		0 A		0 A					
Panel Totals															
Total Conn. Load: 0 VA															
Total Est. Demand: 0 VA															
Total Conn.: 0 A															
Total Est. Demand: 0 A															



3/29/2023 1:44:02 PM  
BIM 360://41415810 - UPMB Renovation - 3rd Floor/001-030-000 MUNC UPMB 3rd Floor Renovation-MEPFP-021-01  
DESIGNED  
CHECKED  
DATE  
APPROVED

PROCESS PIPING SYMBOLS & ABBREVIATIONS	
NOT ALL SYMBOLS ARE USED FOR THIS PROJECT	
—AR—	ARGON PIPING
—CA—	COMPRESSED AIR PIPING (NON-MEDICAL)
—CAI—	COMPRESSED AIR INTAKE PIPING (NON-MEDICAL)
—CO2—	CARBON DIOXIDE PIPING
—DA—	DENTAL AIR PIPING
—DAI—	DENTAIL AIR INTAKE PIPING
—DV—	DENTAL VACUUM PIPING
—DVE—	DENTAL VACUUM EXHAUST PIPING
—G—	NATURAL GAS PIPING
—LOW—	LAB COLD WATER
—LHW—	LAB HOT WATER
—LG—	LAB GAS PIPING
—LV—	LAB VACUUM PIPING
—MA—	MEDICAL AIR PIPING
—MAI—	MEDICAL AIR INTAKE PIPING
—MV—	MEDICAL VACUUM PIPING
—MVE—	MEDICAL VACUUM EXHAUST PIPING
—WAGD—	WASTE ANESTHETIC GAS DISPOSAL PIPING
—OX—	OXYGEN PIPING
—N2—	NITROGEN PIPING
—N2O—	NITROUS OXIDE PIPING
□ or ±	EXISTING GAS OUTLET
■ or ±	NEW GAS OUTLET
⊗	EXISTING ZONE VALVE DESIGNATION
⊞	NEW ZONE VALVE DESIGNATION
⊙	EXISTING AREA ALARM DESIGNATION
⊛	NEW AREA ALARM DESIGNATION
⬡	EXISTING MEDICAL GAS MASTER ALARM DESIGNATION
⬢	NEW MEDICAL GAS MASTER ALARM DESIGNATION
AA	AREA ALARM
ESOV	EMERGENCY SHUT-OFF VALVE
ZV	ZONE VALVE

PLUMBING SYMBOLS & ABBREVIATIONS	
NOT ALL SYMBOLS ARE USED FOR THIS PROJECT	
—	TRAPPED CONNECTION
—	STRAINER
—	BALANCING VALVE
—	CLEANOUT (CO)
—	OS & Y GATE VALVE
—	TEMPERATURE GAUGE
—	THERMOSTATIC MIXING VALVE
—	REDUCED PRESSURE BACKFLOW PREVENTER
—	HOSE BIBBWALL HYDRANT
—AV—	ACID VENT
—AW—	ACID WASTE
—D—	DRAIN PIPING
—DI—	DEIONIZED WATER PIPING
—RO—	REVERSE OSMOSIS PIPING (RO)
—	DOMESTIC COLD WATER PIPING (CW)
—	DOMESTIC HOT WATER PIPING (HW)
—	DOMESTIC HOT WATER RETURN PIPING (HWR)
—NP—	NON-POTABLE WATER PIPING
—PD—	PUMP DISCHARGE PIPING
—S—	SANITARY PIPING
—SSD—	SUBSOIL DRAINAGE PIPING
—ST—	STORM PIPING
—OST—	OVERFLOW STORM PIPING
—TW—	TEMPERED WATER
—	VENT PIPING
—	EXISTING FIXTURE TO BE REMOVED
—	EXISTING FIXTURE
—	NEW FIXTURE
—	FLEXIBLE CONNECTION
—	FLOOR DRAIN/FLOOR SINK (FD/FS)
—	CIRCULATION PUMP

COMMON PLUMBING SYMBOLS & ABBREVIATIONS	
NOT ALL SYMBOLS ARE USED FOR THIS PROJECT	
—	DIRECTION OF FLOW
—	BRANCH CONNECTION, BOTTOM
—	BRANCH CONNECTION, TOP
—	ELBOW, TURNED DOWN
—	ELBOW TURNED UP
—	SHUTOFF VALVE
—	CHECK VALVE
—	PRESSURE REDUCING VALVE
—	PRESSURE GAUGE
—	UNION
—	PIPING CAP
—	EXISTING PIPING TO BE REMOVED
—	MATCH LINE
—	CONNECTION TO EXISTING
—	DETAIL DESIGNATION
—	RISER DESIGNATION
—	KEYED NOTE
—	REVISION NOTE
AFF	ABOVE FINISH FLOOR
AHJ	AUTHORITIES HAVING JURISDICTION
AP	ACCESS PANEL
BOP	BOTTOM OF PIPE
DIA	DIAMETER
DN	DOWN
EX OR EXIST	EXISTING
FFE	FINISHED FLOOR ELEVATION
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HP	HORSEPOWER
IE OR INV. ELEV	INVERT ELEVATION
NC	NORMALLY CLOSED
NTS	NOT TO SCALE
PSI	POUNDS PER SQUARE INCH
RPM	REVOLUTIONS PER MINUTE
RI	ROUGH-IN
SOV	SHUTOFF VALVE
TDH	TOTAL DYNAMIC HEAD
VIF	VERIFY IN FIELD

PLUMBING ABBREVIATIONS	
NOT ALL SYMBOLS ARE USED FOR THIS PROJECT	
ADA	AMERICANS WITH DISABILITIES ACT
AP	ACCESS PANEL
BP	BOOSTER PUMP
BT	BATHTUB
BTC	BRANCH TO CONNECTION
BV	BALANCE VALVE
CI	CAST IRON
CO	CLEANOUT
CSS	CLINICAL SERVICE SINK
DCVA	DOUBLE CHECK VALVE ASSEMBLY
DS	DOWNSPOUT
DW	DISHWASHER
DWH	DOMESTIC WATER HEATER
EEW	EMERGENCY EYE WASH
ESEW	EMERGENCY SHOWER & EYE WASH
ESH	EMERGENCY SHOWER
ET	EXPANSION TANK
EWC	ELECTRIC WATER COOLER
FCO	FLOOR CLEAN OUT
GCO	GRADE CLEANOUT
GO	GARBAGE DISPOSAL
HB	HOSE BIBB
HWRP	HOT WATER RETURN PUMP
HWST	HOT WATER STORAGE TANK
IM	ICE MAKER
IW	INDIRECT WASTE
LA	LAVATORY
MB	MOP BASIN
NIC	NOT IN CONTRACT
OB	OUTLET BOX
RD	ROOF DRAIN
RPZ	REDUCED PRESSURE BACKFLOW PREVENTER
S	SANITARY
S/S	STAINLESS STEEL
SH	SHOWER
SK	SINK
SP	SUMP PUMP
SS	SANITARY STACK
SSK	SHOP SINK
SW	SOFT WATER
TMV	THERMOSTATIC MIXING VALVE
UR	URINAL
V	VENT
VB	VACUUM BREAKER
VS	VENT STACK
VTR	VENT THRU ROOF
W	WASTE
WC	WATER CLOSET
WCO	WALL CLEANOUT
WD	WASHER DRAIN
WH	WALL HYDRANT
WHA	WATER HAMMER ARRESTOR
WM	WATER METER
WS	WASTE STACK
WSV	WASTE STACK VENT
YCO	YARD CLEANOUT

PLUMBING GENERAL NOTES	
1.	DUE TO THE LIMITED SPACE AVAILABLE FOR THE INSTALLATION OF ALL THE PLUMBING WORK, COORDINATION BETWEEN ALL OTHER TRADES IS OF UTMOST IMPORTANCE.
2.	THIS CONTRACTOR SHALL VISIT THE PROJECT SITE AND VERIFY LOCATIONS, ELEVATIONS AND SIZES OF ALL UTILITIES AT SITE PRIOR TO PROCEEDING WITH WORK. EXISTING SYSTEMS AND STRUCTURE SHALL BE INVESTIGATED FOR BEST POSSIBLE ROUTING OF COLD WATER, HOT WATER, SANITARY WASTE AND VENT, STORM AND MEDICAL LABORATORY GAS PIPING.
3.	THESE PLANS ARE DIAGRAMMATIC IN NATURE SINCE THE ONLY AVAILABLE INFORMATION HAS BEEN OBTAINED FROM EXISTING PLANS, SPECIFICATIONS, AND FIELD SURVEYS. THE EXACT LOCATION OF PIPING, FIXTURES AND EQUIPMENT MAY DEViate FROM THE LOCATION INDICATED ON THESE DRAWINGS. EXTREME ACCURACY IS NOT GUARANTEED. THIS CONTRACTOR SHALL BE PREPARE TO MAKE ALTERATIONS TO NEW AND/OR EXISTING SERVICES TO FIT JOB CONDITIONS. THIS CONTRACTOR SHALL FURNISH A COMPLETE, CODE COMPLYING SYSTEM. THIS CONTRACTOR SHALL REPORT, IN WRITING, ANY DISCREPANCIES WHICH PREVENT THE INSTALLATION OF WORK AS SHOWN.
4.	IF THIS CONTRACTOR DOES NOT CLEARLY UNDERSTAND THESE PLANS OR IS NOT COMPLETELY SURE OF THEIR MEANING, THIS CONTRACTOR SHOULD OBTAIN THE ENGINEER'S WRITTEN EXPLANATION AND/OR INTERPRETATION PRIOR TO SUBMITTING BIDS. SINCE THIS CONTRACTOR WILL BE HELD RIGIDLY TO THE INTERPRETATION OF THE ENGINEER.
5.	IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO REPAIR THE EXISTING SURFACES TO REMAIN WHERE THEIR WORK HAS BEEN COMPLETED. REPAIR SHALL INCLUDE, BUT NOT LIMITED TO, ANY EXISTING WALL, CEILING OR FLOOR THAT IS SCHEDULED TO REMAIN. REPAIR, PAINTING, AND PATCHING SHALL BE COMPLETED BY AN APPROPRIATE CONTRACTOR QUALIFIED FOR THIS TYPE OF WORK.
6.	THE OWNER SHALL MAINTAIN ALL SALVAGE RIGHTS OF FIXTURES, EQUIPMENT AND MATERIALS REMOVED, HOWEVER, ALL FIXTURES, EQUIPMENT AND MATERIALS NOT CLAIMED BY THE OWNER SHALL BE REMOVED FROM THE PREMISES AND PROPERLY DISPOSED OF THE BY THE DEMOLITION CONTRACTOR.
7.	CEILING REMOVAL, STORAGE AND REPLACEMENT FOR NEW PIPING INSTALLATION SHALL BE BY THE GENERAL CONTRACTOR.
8.	IF HAZARDOUS MATERIALS ARE ENCOUNTERED DURING DEMOLITION OPERATIONS, THE CONTRACTOR WILL NOTIFY BUILDING OWNER OF THE HAZARDOUS MATERIAL.
9.	TEMPORARY CONNECTION SHALL BE PROVIDED BY RESPECTIVE PLUMBING AND FIRE PROTECTION CONTRACTORS WHEN EXTENDED INTERRUPTIONS OF SERVICES AND UTILITIES SUCH AS WATER, WASTE AND FIRE PROTECTION WHICH SERVE OTHER AREAS ARE NECESSARY.
10.	COORDINATE WITH MAINTENANCE PERSONNEL AS TO SOURCE OF UTILITIES AND TEMPORARILY DISCONNECT OR SHUT OFF SERVICES OR UTILITIES AT NEAREST MAIN. TEMPORARY AND ACCESSIBLE ISOLATION VALVES SHALL BE INSTALLED CLOSE TO THIS POINT OF WORK.
11.	IT IS ESSENTIAL THAT BUILDING OPERATIONS CONTINUE WITH MINIMAL INTERRUPTIONS. IT IS NECESSARY THAT OPERATION OF EXISTING SYSTEMS BE INTERFACED WITH AS LITTLE DISRUPTION AS POSSIBLE EXCEPT IN AREAS VACATED FOR CONSTRUCTION WORK. WORK WHICH WILL INTERFERE WITH OPERATION OF EXISTING FIRE SUPPRESSION AND PLUMBING SYSTEMS OR WHICH REQUIRE DOWNTIME WILL BE SCHEDULED ONLY AFTER CONSULTATION WITH AND PERMISSION GIVEN BY THE OWNER. ALLOW 10 DAYS PRIOR TO ANTICIPATED INTERRUPTION OF SYSTEMS. WORK MAY BE REQUIRED TO BE PERFORMED OUTSIDE NORMAL WORKING HOURS.
12.	ARCHITECTURAL DEMOLITION DRAWINGS AND SPECIFICATIONS SHALL BE READ IN CONJUNCTION WITH THESE DRAWINGS.
13.	ALL PIPING HANGERS AND SUPPORTS SHALL BE REMOVED ALONG WITH PIPING BEING REMOVED.
14.	THE CONTRACTOR SHALL COORDINATE DEMOLITION WORK WITH PROJECT'S PHASING SCHEDULE PRIOR TO COMMENCEMENT OF ANY WORK.
15.	WHEN PLACING NEW PLUMBING FIXTURES, CONTRACTOR SHALL VERIFY LOCATIONS OF PLUMBING VENTS. OFFSET VENTS THAT TERMINATE WITHIN 25 FEET OF HVAC UNITS OUTDOOR AIR INTAKES. CONTRACTOR SHALL FIELD VERIFY PRIOR TO BID WHERE THE INTERFERENCE'S ARE PRICE ACCORDINGLY OR MAKE ALLOWANCES IN BID.
16.	USE CAUTION WHEN SAW-CUTTING THROUGH EXISTING CONCRETE FLOOR OR WALL CONSTRUCTION FOR THE INSTALLATION OF PLUMBING SYSTEMS TO AVOID CUTTING REBAR AT EDGE OF OPENING. LEAVE SUFFICIENT REBAR EXPOSED TO TIE NEW REINFORCING REPLACEMENT CONCRETE AND/OR OTHER STRUCTURAL ATTACHMENTS FOR NEW CONSTRUCTION.
17.	CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REVISIONS, TRANSITIONS, OFFSETS, ETC., TO AVOID DUCTWORK, PIPING, EQUIPMENT OR STRUCTURE NEW OR EXISTING AND TO MAKE A COMPLETE AND FUNCTIONING SYSTEM.

MARK	DATE	DESCRIPTION
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PE-2018000203

## PLUMBING SYMBOLS AND ABBREVIATIONS

DATE	03 APRIL, 2023
INTROBA PROJECT NO.	0011593

P000

BSA

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Creve Coeur, MO 63141  
ph 314.754.6306 fx 314.754.4452

Architectural Registration Number - 2003010309



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MU PROJECT NO. - CP221943

## UNIVERSITY PHYSICIANS MEDICAL BUILDING - 3RD FLOOR RENOVATION

1020 Hitt St. Columbia, MO 65212

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GENERAL NOTES

A. ANY PVC PIPING FOUND IN PROJECT SCOPE TO BE REPLACED WITH CAST IRON.

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Health Care

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**UNIVERSITY PHYSICIANS  
MEDICAL BUILDING - 3RD  
FLOOR RENOVATION**  
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PLUMBING SECOND FLOOR  
DEMOLITION PLAN

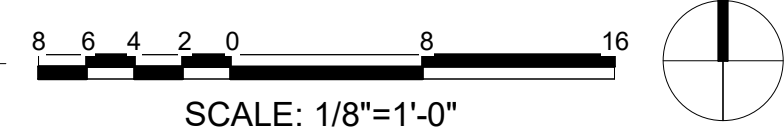
DATE 03 APRIL, 2023  
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PD100

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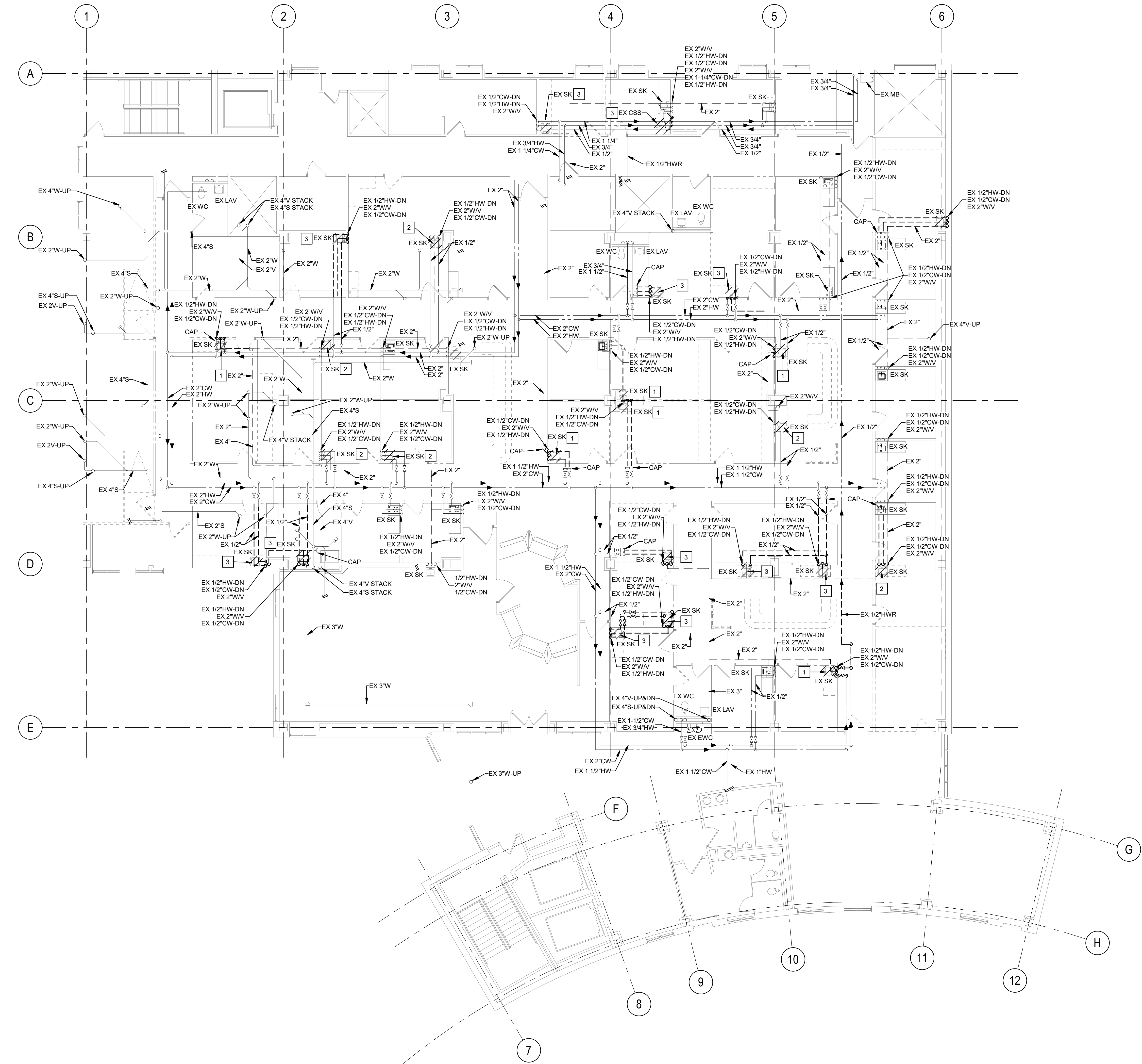
1 PLUMBING - SECOND FLOOR DEMOLITION PLAN  
1/8" = 1'-0"



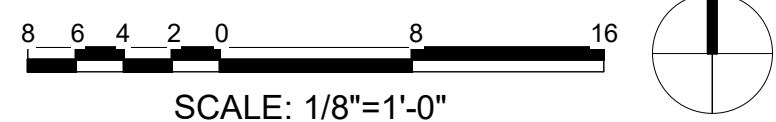
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DWG NO. 0011593  
DATE 03 APRIL, 2023  
DESIGNER  
APPROVED  
APPROVED



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DESIGNED BY: JAG  
CHECKED BY: JAG  
APPROVED BY: JAG



1 PLUMBING - THIRD FLOOR DEMOLITION PLAN  
1/8" = 1'-0"



GENERAL NOTES	
A.	ANY PVC PIPING FOUND IN PROJECT SCOPE TO BE REPLACED WITH CAST IRON.

#	KEYED NOTES
1.	EXISTING PLUMBING FIXTURE TO BE DEMOLISHED, EXISTING DOMESTIC WATER, SANITARY AND VENT PIPING TO BE DEMOLISHED BACK TO MAIN AND CAPPED.
2.	EXISTING SINK TO BE DEMOLISHED AND REPLACED WITH NEW SINK IN NEW WORK PHASE. ROUGH-IN TO REMAIN FOR RECONNECTION.
3.	EXISTING SINK TO BE DEMOLISHED.

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MU PROJECT NO. - CP221943  
**UNIVERSITY PHYSICIANS  
MEDICAL BUILDING - 3RD  
FLOOR RENOVATION**

1020 Hitt St. Columbia, MO 65212

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**PLUMBING THIRD FLOOR  
DEMOLITION PLAN**

DATE	03 APRIL, 2023
INTROBA PROJECT NO.	0011593

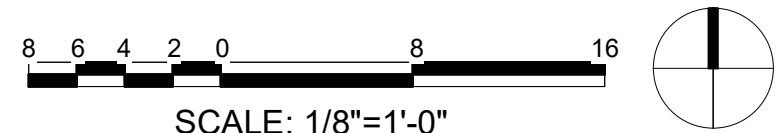
PD101

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1 PLUMBING - SECOND FLOOR NEW WORK PLAN  
1/8" = 1'-0"



## GENERAL NOTES

A. ANY PVC PIPING FOUND IN PROJECT SCOPE TO BE REPLACED WITH CAST IRON.

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## Health Care

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**UNIVERSITY PHYSICIANS  
MEDICAL BUILDING - 3RD  
FLOOR RENOVATION**

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## PLUMBING SECOND FLOOR PLAN

DATE 03 APRIL, 2023  
INTROBA PROJECT NO. 0011593

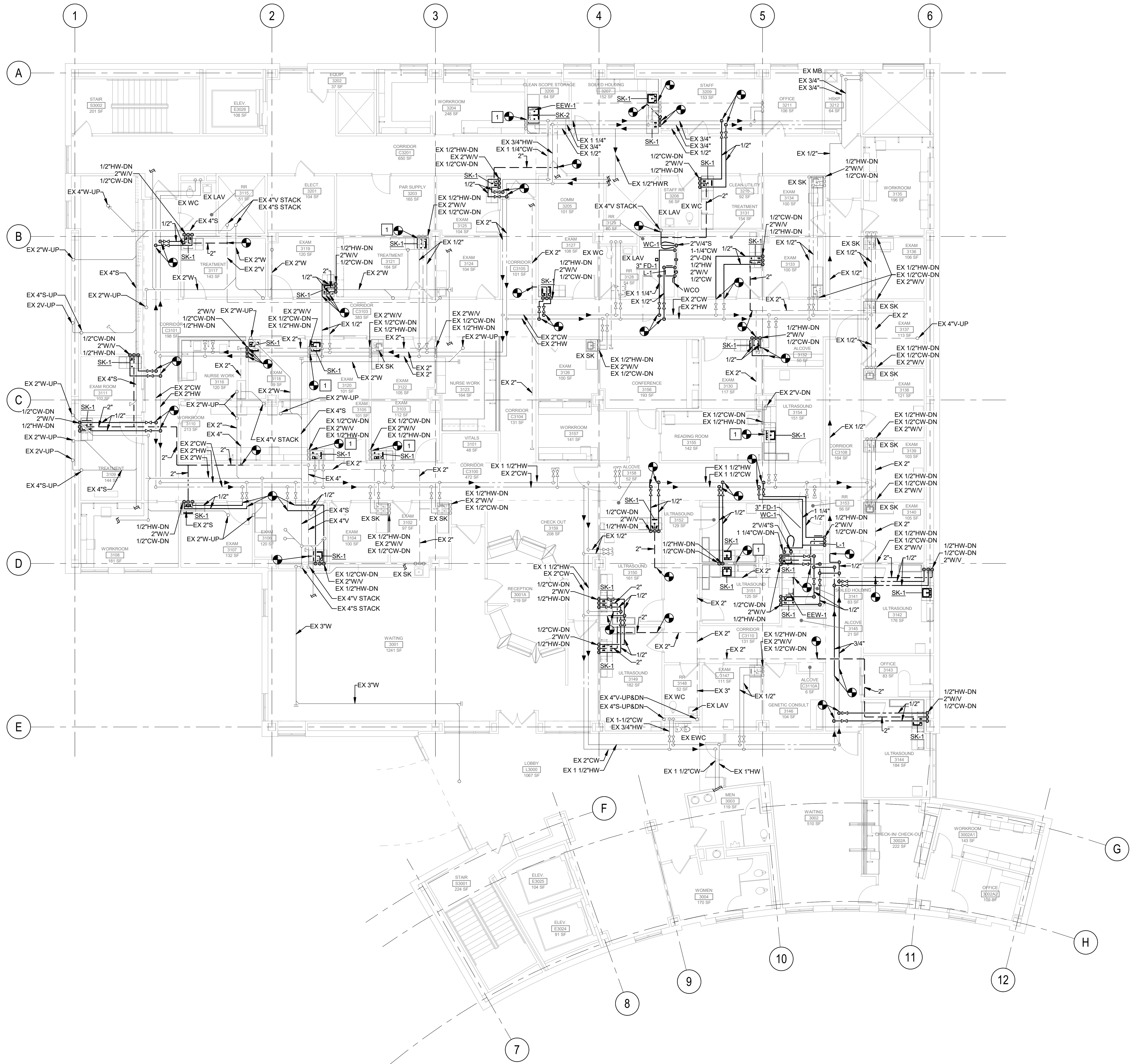
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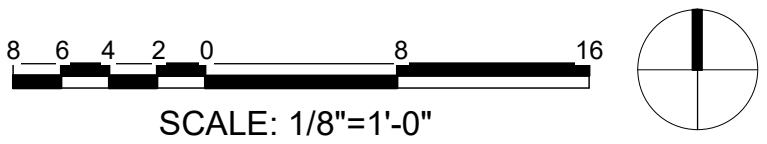
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1 PLUMBING - THIRD FLOOR  
NEW WORK PLAN  
1/8" = 1'-0"



GENERAL NOTES

- A. ANY PVC PIPING FOUND IN PROJECT SCOPE TO BE REPLACED WITH CAST IRON.

KEYED NOTES

1. CONNECT NEW PLUMBING FIXTURE TO EXISTING ROUGH-IN.

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Health Care

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**UNIVERSITY PHYSICIANS  
MEDICAL BUILDING - 3RD  
FLOOR RENOVATION**

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PLUMBING THIRD FLOOR  
PLAN

DATE: 03 APRIL, 2023  
INTROBA PROJECT NO. 0011593

P101

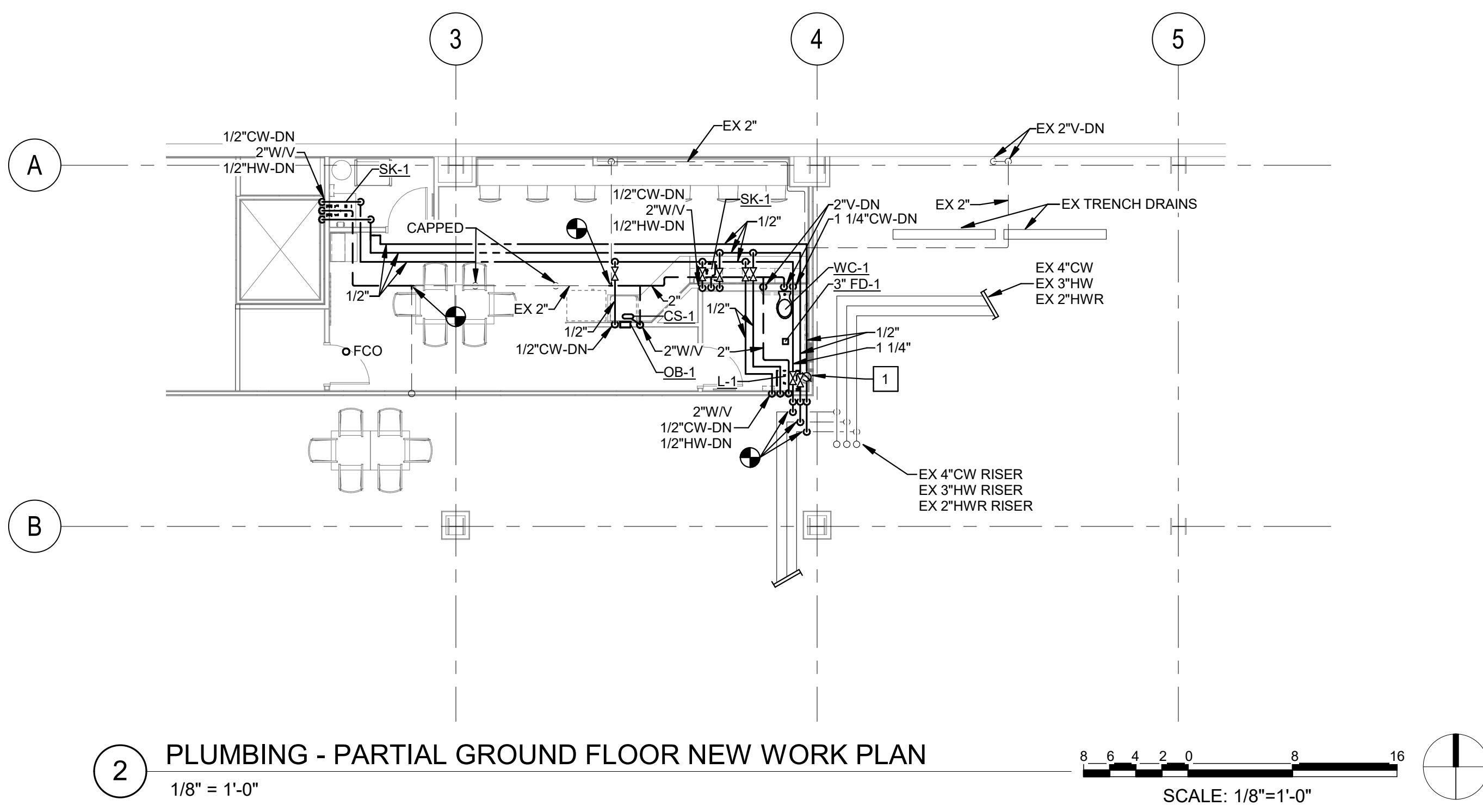
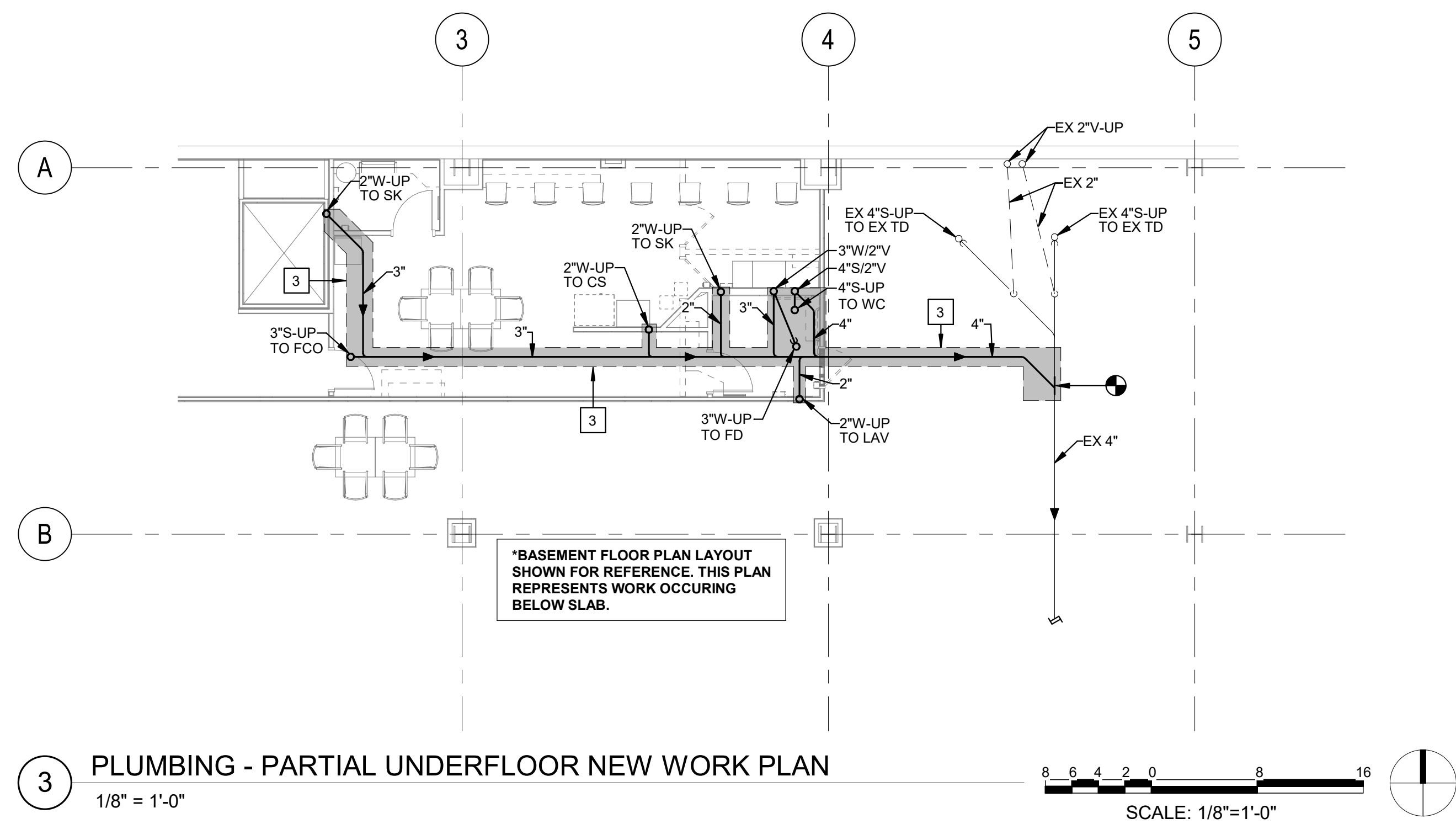
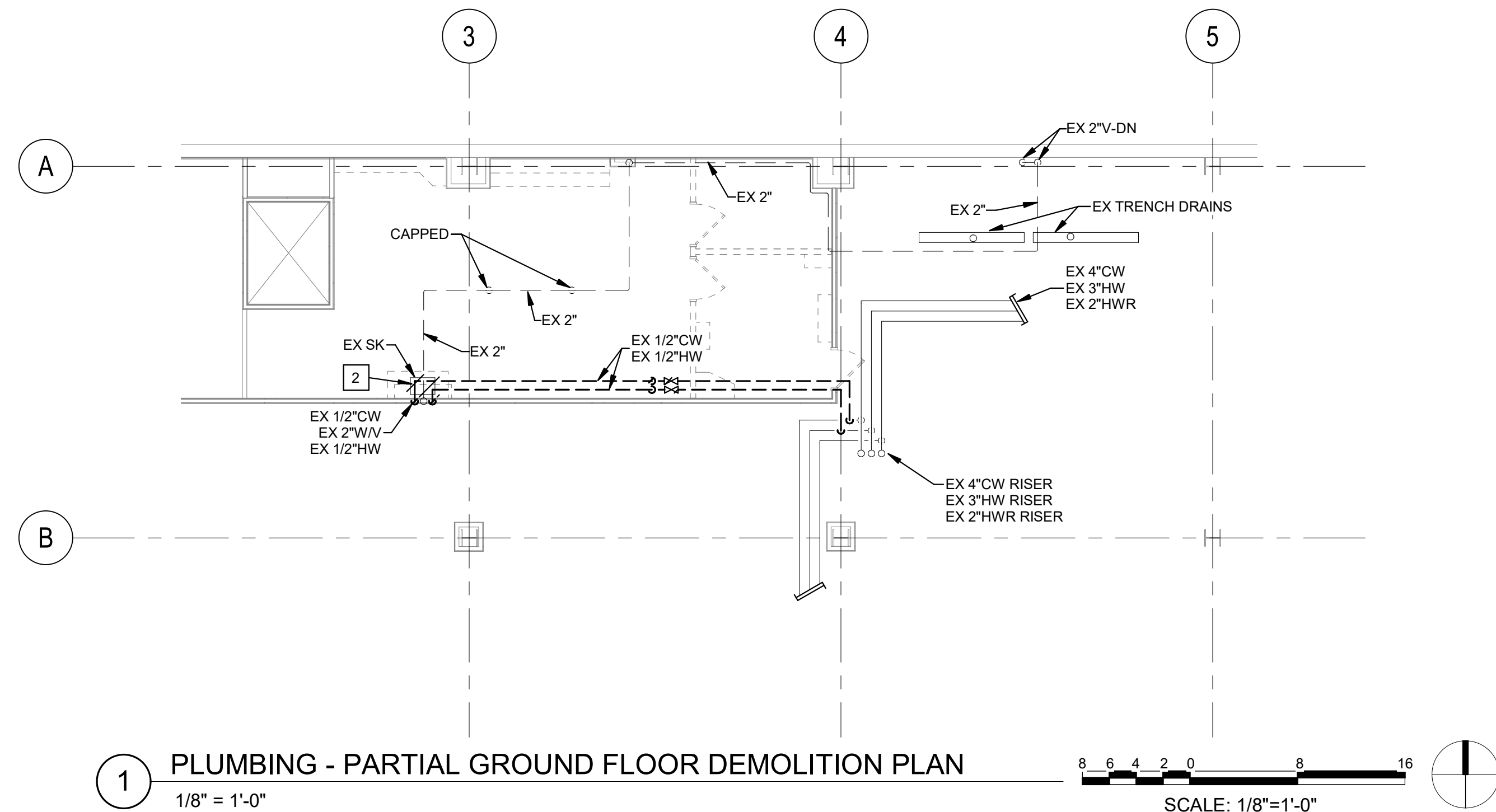
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APPROVED: JAG

## # KEYED NOTES

- SEE "CALIBRATED BALANCING VALVE" DETAIL ON SHEET P900 FOR MORE INFORMATION.
- EXISTING PLUMBING FIXTURE TO BE DEMOLISHED. EXISTING DOMESTIC WATER, SANITARY AND VENT PIPING TO BE DEMOLISHED BACK TO MAIN AND CAPPED.
- SAW CUT EXISTING CONCRETE SLAB FOR INSTALLATION OF NEW WASTE PIPING SERVING GROUND FLOOR PLUMBING FIXTURES. PATCH CONCRETE FLOOR TO MATCH EXISTING SURROUNDING SURFACES. COORDINATE NEW BELOW-SLAB SANITARY PIPING WITH EXISTING STRUCTURAL FOOTINGS.



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## ALTERNATE #1 - PLUMBING GROUND FLOOR PLANS

DATE 03 APRIL, 2023  
INTROBA PROJECT NO. 0011593

**P102**



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DESIGNED  
DRAWN  
APPROVED

PLUMBING FIXTURE SCHEDULE													
PLAN MARK	DESCRIPTION	MANUFACTURER	MODEL	TRIM	DRAIN / TRAP	SUPPLIES	CARRIER	HOT WATER	COLD WATER	TEMPERED WATER	SANITARY / WASTE	VENT	NOTES
CS-1	CUP SINK (ICE MAKER)	ORION	CS1	-	GRID DRAIN/CHROME PLATED P-TRAP	CHICAGO FAUCET LOOSE KEY ANGLE STOPS AND RISERS	-	-	-	-	2"	2"	
EEW-1	SINK MOUNTED EYEWASH	GUARDIAN	G1775	#66020 GUARDIAN EMERGENCY THERMOSTATIC MIXING VALVE	-	-	-	-	-	1/2"	-	-	SEE TRIM FOR EMERGENCY MIXING VALVE SELECTION.
L-1	WALL HUNG LAVATORY	AMERICAN STANDARD	LUCERNE #0355.012	CHICAGO FAUCETS #116 606 AB.1 SENSOR FAUCET; 0.5 GPM	GRID DRAIN/CHROME PLATED P-TRAP	CHICAGO FAUCET LOOSE KEY ANGLE STOPS AND RISERS	JAY R. SMITH	1/2"	1/2"	-	2"	2"	INSULATE SUPPLY AND WASTE PIPING WITH TRUBRO #102 WHITE INSULATION KIT WITH #105 OFFSET DRAIN INSULATION KIT. 0.5 GPM NON-AERATED OUTLET.
OB-1	OUTLET BOX (ICE MAKER)	SIOUX CHIEF	696-G1010MF	-	-	INTEGRAL	-	-	1/2"	-	-	-	
SK-1	SINGLE BOWL STAINLESS STEEL SINK	ELKAY	DLR191910PD	CHICAGO FAUCETS #201-AGN8AE36-317AB MANUAL FAUCET; 1.5GPM	GRID DRAIN/CHROME PLATED P-TRAP	CHICAGO FAUCET LOOSE KEY ANGLE STOPS AND RISERS	-	1/2"	1/2"	-	2"	2"	
SK-2	DOUBLE BOWL STAINLESS STEEL SINK	ELKAY	DLR332210PD	CHICAGO FAUCETS #201-AGN8AE36-317AB MANUAL FAUCET; 1.5GPM	GRID DRAIN/CHROME PLATED P-TRAP	CHICAGO FAUCET LOOSE KEY ANGLE STOPS AND RISERS	-	1/2"	1/2"	-	2"	2"	
WC-1	FLOOR MOUNT FLOOR OULET WATER CLOSET	AMERICAN STANDARD	MADERA FLOWISE #3461.001	SLOAN ROYAL 111-SFSM-1.6 SENSOR FLUSHOMETER; 1.6 GPF, BATTERY OPERATED	INTEGRAL	-	-	-	1 1/4"	-	4"	2"	

DRAIN SCHEDULE						
PLAN MARK	DESCRIPTION	MANUFACTURER	MODEL	BODY	STRAINER	NOTES
FD-1	SQUARE FLOOR DRAIN	SIOUX CHIEF	832 SERIES	CAST IRON	NICKEL BRONZE	PROVIDE TRAP SEAL.

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PLUMBING DETAILS AND SCHEDULES

DATE 03 APRIL, 2023  
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P500

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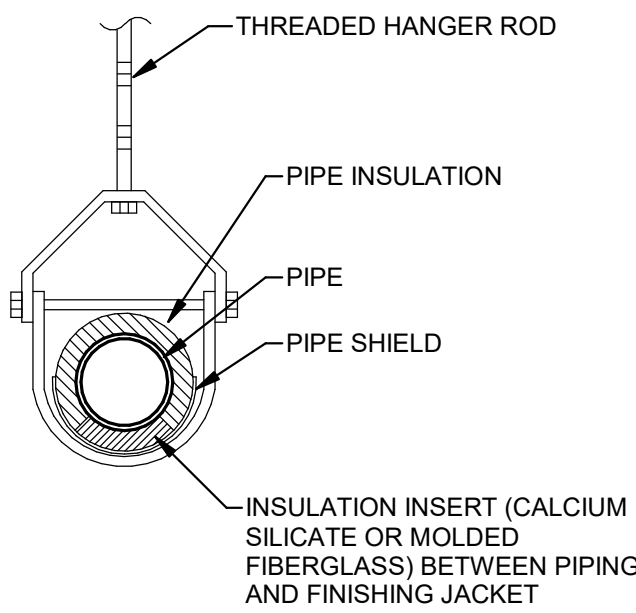
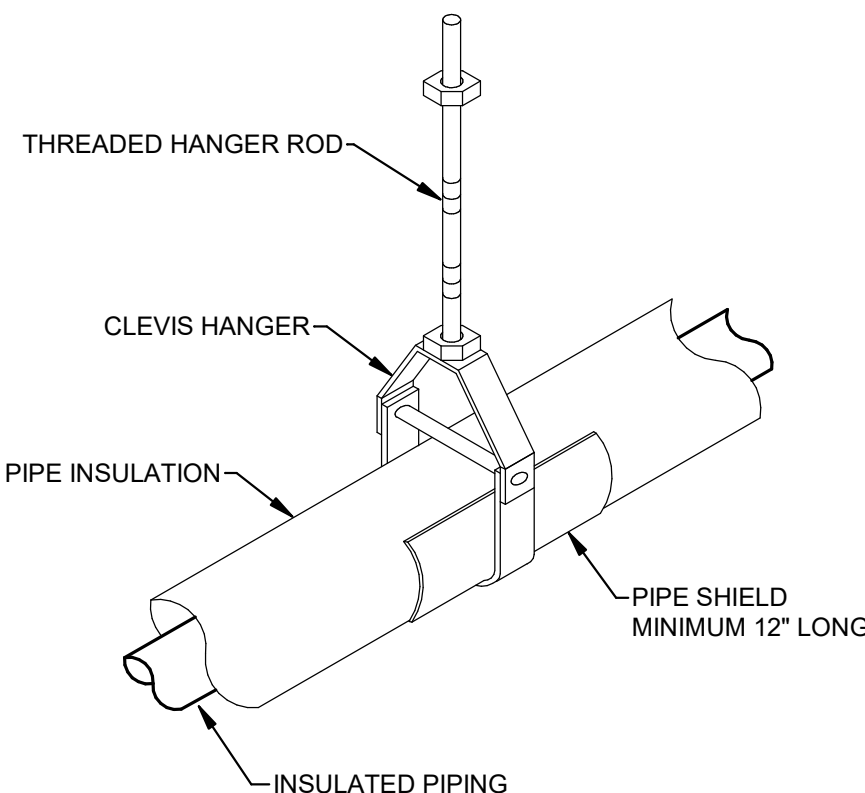
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MU PROJECT NO. - CP221943  
**UNIVERSITY PHYSICIANS  
MEDICAL BUILDING - 3RD  
FLOOR RENOVATION**

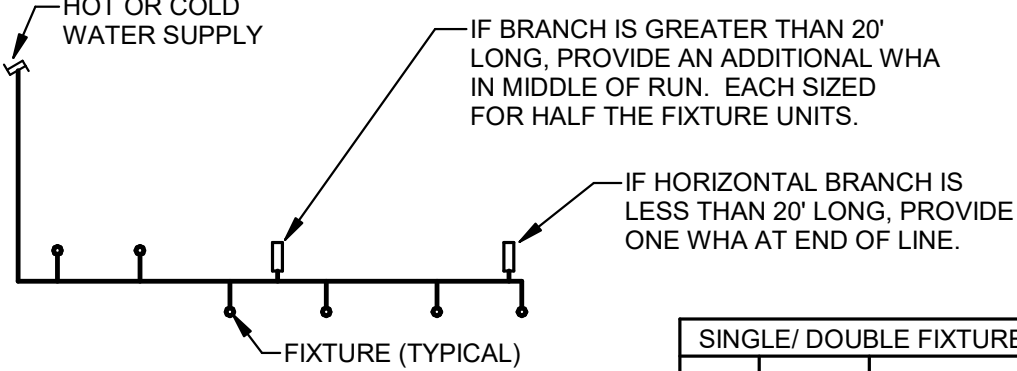
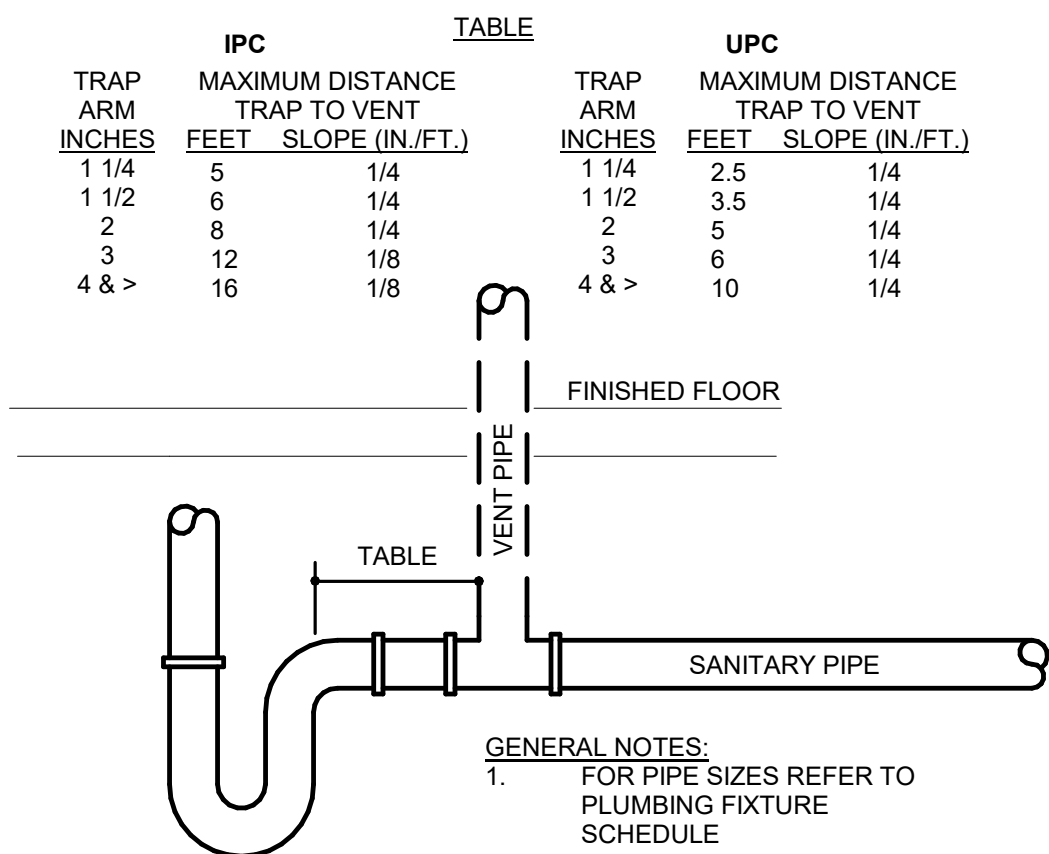
1020 Hitt St. Columbia, MO 65212

BID SET



SECTION THRU HANGER

REFER TO SPECS FOR INSULATION  
AND HANGER SUPPORTS.



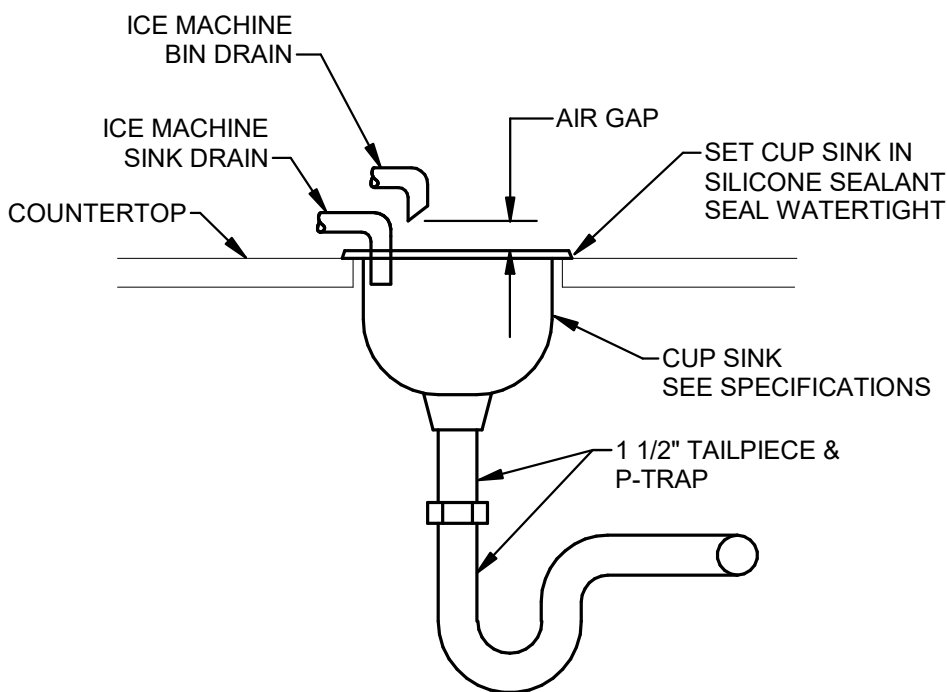
SINGLE/ DOUBLE FIXTURE		
WHA SIZE	PIPE SIZE	FIXTURE UNIT LOAD
A	1/2"	1-11
B	3/4"	12-32
C	1"	33-60
D	1 1/4"	61-113
E	1 1/2"	114-154
F	2"	154-330

NOTE: INSTALL PER  
MANUFACTURER'S  
INSTRUCTIONS. PROVIDE A WHA AT  
ALL QUICK-CLOSING VALVES.

1 INSULATED PIPE HANGER SUPPORT  
NONE

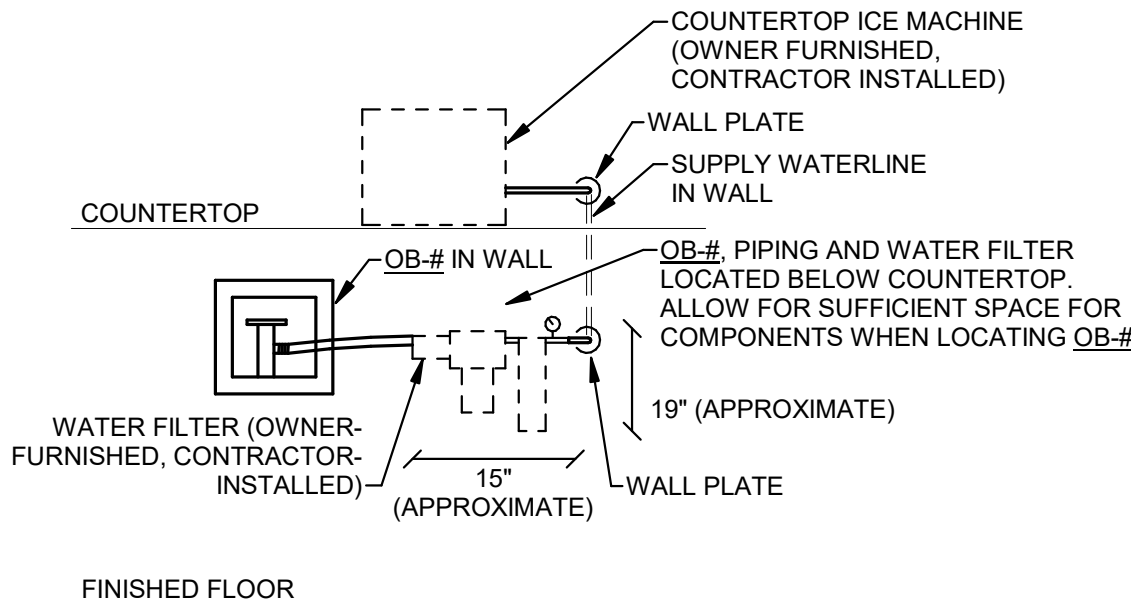
2 TRAP TO VENT MAXIMUM DISTANCE  
NONE

3 WATER HAMMER ARRESTOR SCHEMATIC  
NONE

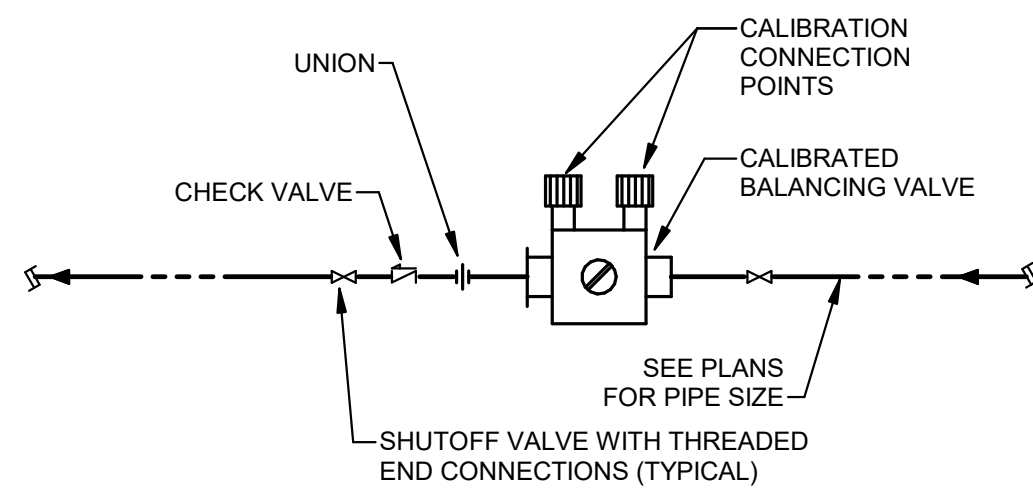


NOTE:  
COORDINATE CUP SINK LOCATION AT REAR OF  
COUNTERTOP EQUIPMENT WITH BASE CABINET  
DRAWER, ETC.

4 COUNTERTOP ICE MACHINE  
INDIRECT WASTE  
CONNECTION  
NONE



5 COUNTERTOP ICE MACHINE  
WATER SUPPLY DETAIL  
NONE



NOTE:  
0.3 GPM TO 0.7 GPM - B&G 1/2" RF MODEL OR EQUAL  
0.75 GPM TO 1.0 GPM - B&G 3/4" RF MODEL OR EQUAL  
1.25 GPM TO 2.5 GPM - B&G CB-1/2" MODEL OR EQUAL  
2.6 GPM TO 4.7 GPM B&G CB-3/4" MODEL OR EQUAL  
4.8 GPM TO 9.7 GPM B&G CB-1" MODEL OR EQUAL

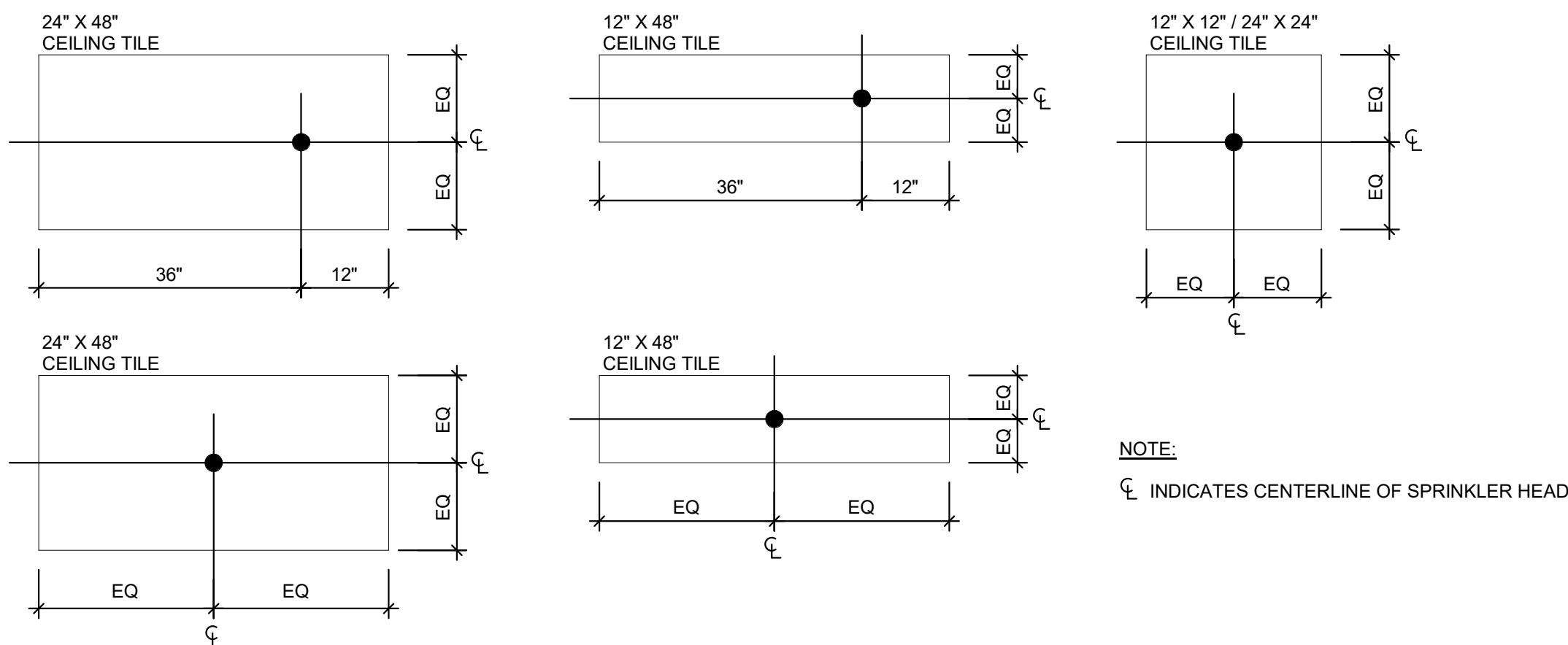
6 CALIBRATED BALANCING  
VALVE  
NONE



## FIRE PROTECTION - FIRE WATCH

### FIRE WATCH BUILDING AND OCCUPANT SAFETY - INTERRUPTION OF FIRE PROTECTION SERVICE

- DURING THE TIME THAT FIRE PROTECTION RENOVATION WORK IS BEING PERFORMED, AND THE FIRE PROTECTION SYSTEM IS DOWN AND OUT OF COMMISSION, THE FIRE PROTECTION CONTRACTOR SHALL HAVE SUFFICIENT PERSONNEL ONSITE TO KEEP A "FIRE WATCH" ON THE FACILITY.
- A FIRE PROTECTION WATCH IS IMPLEMENTED TO ENSURE THE FIRE SAFETY OF A BUILDING IN THE EVENT OF ANY ACT OR SITUATION INSTIGATING AN INCREASED RISK TO PERSONS OR PROPERTY. THE TERM "FIRE WATCH" IS USED TO DESCRIBE A DEDICATED PERSON OR PERSONS WHOSE SOLE RESPONSIBILITY IS TO LOOK FOR FIRES WITHIN AN ESTABLISHED AREA.
- IN THE OPINION OF THE FIRE AND LIFE-SAFETY GROUP (FLS) OR FM GLOBAL (FM), ANY REQUIRED FIRE PROTECTION SYSTEM THAT IS OUT OF SERVICE FOR MORE THAN 4 HOURS AND OCCUPIED IS REQUIRED TO ESTABLISH A FIRE WATCH. FOR THE PERSON OR PERSONS ASSIGNED TO THE FIRE WATCH, THIS MUST BE THEIR ONLY JOB DUTY DURING THE TIME PERIOD OF THE FIRE PROTECTION RENOVATION WORK.
- IN ADDITION, THE BUILDING OWNER IS REQUIRED TO HAVE AN IMPAIRMENT COORDINATOR. THE OUT OF SERVICE EQUIPMENT MUST BE TAGGED OUT OF SERVICE. AN OUT OF SERVICE TAG MUST BE PLACED AT THE FIRE ALARM PANEL AND THE FIRE DEPARTMENT CONNECTION.
- FIRE WATCH PERSONNEL ARE TO KEEP WATCH FOR FIRES IN THE GENERAL AREA OF PERFORMANCE, THE PERSONS PERFORMING THE FIRE WATCH ARE NOT PERMITTED TO PERFORM ANY OTHER DUTIES.
- FIRE WATCH PERSONNEL ARE TO HAVE FIRE EXTINGUISHING EQUIPMENT READILY AVAILABLE AND TO BE TRAINED IN ITS USE.
- THE QUANTITY OF PERSONNEL INVOLVED IN THE FIRE WATCH IS TO BE ADEQUATE SUCH THAT EACH FLOOR, LEVEL, AND ROOM OF THE FIRE AREA IS COVERED.
- IN GENERAL, A FIRE WATCH IS TO FULFILL THE INTENT OF NFPA-72 AS FOLLOWS:
  - NOTIFY OCCUPANTS TO EVACUATE WHEN THERE IS A FIRE IN THE BUILDING.
  - NOTIFY THE CENTRAL MONITORING STATION TO INITIATE EMERGENCY PERSONNEL RESPONSE.
  - ACTIVATE FIRE PROTECTION SYSTEMS IN ORDER TO RELEASE DOOR HOLDERS, CLOSE SMOKE DAMPERS AND SHUT DOWN FANS.
- IF BUILDING OCCUPANTS ASSIST WITH FIRE WATCH DUTIES, THE PROCEDURES FOR CONTACTING EMERGENCY PERSONNEL AND EVACUATING THE BUILDING ARE TO BE DISTRIBUTED TO BUILDING OCCUPANTS. FOR PLANNED OUTAGES, THE PROCEDURES ARE TO BE SENT OUT TO THE BUILDING OWNER FOR DISTRIBUTION.



## FIRE PROTECTION GENERAL NOTES - EXISTING PROJECT

- ALL WORK SHALL BE PERFORMED, INSTALLED, AND TESTED IN COMPLIANCE WITH THE CODES AND AMENDMENTS ADOPTED BY THE INSPECTION AUTHORITY. NOTHING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES OR OTHERS APPLICABLE TO THIS PROJECT:
  - IFC
  - IBC
  - OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA)
  - NATIONAL FIRE PROTECTION ASSOCIATION EDITIONS LISTED IN THE IBC OR MOST CURRENT EDITIONS OF THE FOLLOWING:
    - NFPA 13
    - NFPA 14
    - NFPA 20
    - NFPA 24
    - NFPA 25
- THE WORK CONSISTS OF FURNISHING ALL LABOR AND MATERIALS NECESSARY TO INSTALL, COMPLETE AND READY CONTINUOUS OPERATION, THE FIRE PROTECTION SYSTEMS, APPARATUS AND EQUIPMENT FOR THIS PROJECT, AS SHOWN ON THE DRAWINGS, PLUS AS REQUIRED BY NFPA 13 AND THE AUTHORITY-HAVING JURISDICTION (AHJ).
- THE CONTRACTOR SHALL INCLUDE IN THEIR BID, A FULLY CODE COMPLIANT AND COORDINATED SPRINKLER SYSTEM. SPRINKLER LOCATIONS ARE SHOWN TO ESTABLISH, QUANTITY, AND DESIRED LOCATION. EXACT QUANTITY OF SPRINKLERS IS THE CONTRACTOR'S RESPONSIBILITY. PROJECT SHALL BE DESIGNED, CONSTRUCTED, AND TESTED PER THE NFPA STANDARDS AND/OR FM GLOBAL REQUIREMENTS.
- THESE DRAWINGS ARE ACCURATE TO THE BEST OF OUR KNOWLEDGE. HOWEVER, LOCATIONS, DEPTHS, ELEVATIONS AND SIZES WERE TAKEN FROM DIFFERENT SOURCES AND ARE SUBJECT TO DEVIATION. THE CONTRACTOR SHALL ASSUME SOME DEVIATIONS AND INCLUDE OFFSETS, ADDITIONAL PIPING, ETC AT THE TIME OF BID.
- ALL SYSTEMS, EQUIPMENT, AND MATERIALS ARE TO BE INSTALLED IN A NEAT WORKMAN LIKE MANNER, WORK NOT DONE SO SHALL BE REMOVED AND REINSTALLED SATISFACTORILY.
- THE FIRE PROECTION BID IS A DESIGN/BUILD CONTRACT. BEFORE SUBMITTING THE BID, THE CONTRACTOR SHALL VISIT THE SITE AND BECOME THOROUGHLY FAMILIAR WITH ALL EXISTING CONDITIONS AND VERIFY LOCATIONS, ELEVATIONS, AND SIZES OF ALL UTILITIES AT SITE. PRIOR TO PROCEEDING WITH WORK, THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY ASSUMPTIONS, OMISSIONS, OR ERRORS MADE AS A RESULT OF THE FAILURE TO BECOME FULLY FAMILIAR WITH EXISTING CONDITIONS. EXISTING SYSTEMS AND STRUCTURE SHALL BE INVESTIGATED FOR BEST POSSIBLE ROUTING OF FIRE PROTECTION PIPING.
- WHEN PLACING NEW SPRINKLERS AND ROUTING NEW SPRINKLER PIPING, CONTRACTOR SHALL VERIFY LOCATIONS OF POTENTIAL OBSTRUCTIONS FROM MECHANICAL EQUIPMENT AND ARCHITECTURAL FEATURES PRIOR TO BID AND PRICE ACCORDINGLY TO MAKE ALLOWANCES IN BID.
- THE CONTRACTOR SHALL PERFORM A FLOW TEST PRIOR TO DESIGN AND SUBMITTAL OF THE HYDRAULLICALLY CALCULATED SYSTEM. THE FLOW TEST SHALL NOT BE MORE THAN 12 MONTHS OLD FROM THE DATE OF CONSTRUCTION.
- AT LEAST ONE HYDRAULIC CALCULATION SHALL BE PROVIDED PER SPRINKLER ZONE BASED ON THE CURRENT FLOW TEST. THE CALCULATION WILL INCLUDE HOSE ALLOWANCES AT THE BASE OF THE RISER PER NFPA 13 REQUIREMENTS BASED ON THE IDENTIFIED HAZARD. THERE WILL BE A 10% SAFETY ALLOWANCE PROVIDED FOR THE SPRINKLER SYSTEM BASED ON THE AVAILABLE PRESSURE AT THE SOURCE AND SYSTEM DEMAND, (10% OF THE SUM OF THE SPRINKLER DEMAND PLUS THE SAFETY FACTOR).
- THE CONTRACTOR SHALL SUBMIT ALL DRAWINGS AND CALCULATIONS TO THE FIRE DEPARTMENT, GOVERNING AGENCIES, AND INSURING AGENCY AND RECEIVE APPROVAL PRIOR TO SUBMITTING DESIGN SHOP DRAWINGS.
- SUBMIT ACCURATE AS-BUILT DRAWINGS TO THE ENGINEER AND OWNER.
- IF THIS CONTRACTOR DOES NOT CLEARLY UNDERSTAND THESE PLANS OR IS NOT COMPLETELY SURE OF THEIR MEANING, THIS CONTRACTOR SHOULD OBTAIN THE ENGINEER'S WRITTEN EXPLANATION AND/OR INTERPRETATION PRIOR TO SUBMITTING BIDS. SINCE THIS CONTRACTOR WILL BE HELD RIGIDLY TO THE INTERPRETATION OF THE ENGINEER.
- THESE PLANS ARE DIAGRAMMATIC IN NATURE SINCE THE ONLY AVAILABLE INFORMATION HAS BEEN OBTAINED FROM EXISTING PLANS, SPECIFICATIONS, AND FILED SURVEYS. THE EXACT LOCATION OF PIPING AND EQUIPMENT MAY DEViate FROM THE LOCATION INDICATED BY THESE DRAWINGS. EXTREME ACCURACY IS NOT GUARANTEED. THIS CONTRACTOR SHALL BE PREPARED TO MAKE ALTERATIONS TO NEW AND/OR EXISYNG SERVICES TO FIT JOB CONDITIONS. THIS CONTRACTOR SHALL REPORT, IN WRITING, ANY DISCREPANCIES WHICH PREVENT THE INSTALLATION OF WORK AS SHOWN.
- IT IS ASSUMED THAT AREAS OUTSIDE THE SCOPE OF WORK ARE TESTED, MAINTAINED, AND MEET THE CODE REQUIREMENTS WHEN IT WAS INSTALLED, AND THE EXISTING SYSTEM IS ACCEPTED BY THE LOCAL AHJ. WORK PERFORMED WITHIN SCOPE OF WORK WILL PROVIDE A SYSTEM TO MEET THE REQUIREMENTS SET BY THE AHJ LIMITED BY THE BOUNDARY OF WORK.
- THE SPRINKLER CONTRACTOR PRIOR TO TIME OF BID SHALL EVALUATE THE SITE AND VERIFY ALL SPRINKLER PIPING AND EQUIPMENT THAT IS EXISTING TO REMAIN WITHIN OR SERVING THE SCOPE OF WORK, IS IN GOOD WORKING CONDITION.
- FURNISH AND INSTALL TAMPER SWITCHES ON ALL INDICATING VALVES AND FLOW SWITCHES PER NFPA 13 REQUIREMENTS AND PER THE DESIGN DOCUMENTS BY THE CONTRACTOR.
- THE CONTRACTOR SHALL FURNISH DRAIN VALVES AND INSPECTOR'S TEST CONNECTIONS AS REQUIRED BY NFPA 13 REQUIREMENTS AND AT THE DISCRETION OF THE FIRE MARSHAL, ENGINEER OR GOVERNING AGENCY.
- ALL OPENINGS THROUGH FIRE RATED FLOORS, WALLS, OR PARTITIONS SHALL BE FIRE STOPPED WITH UL RATED ASSEMBLIES OF EQUAL OR GREATER FIRE RATING. REFER TO FIRE STOPPING NOTES FOR ADDITIONAL INFORMATION.
- COORDINATE WITH STRUCTURAL ENGINEER WHEN SAW-CUTTING THROUGH CONCRETE FLOOR OR WALL CONSTRUCTION. LEAVE SUFFICIENT REBAR EXPOSED TO THE NEW REINFORCING REPLACEMENT CONCRETE AND/OR OTHER STRUCTURAL ATTACHMENTS FOR NEW CONSTRUCTION.
- VALVES, TAMPER SWITCHES, OR ANY MECHANICAL/ELECTRICAL ITEM SHALL NOT BE LOCATED ABOVE A HARD CEILING, UNLESS PROVIDED WITH EQUIVALENTLY RATED ACCESS AND SIGNAGE MEETING NFPA 13 REQUIREMENTS.
- SPRINKLERS SHALL BE LOCATED IN THE CENTER OF CEILING TILES, COORDINATE FINAL LAYOUT WITH ARCHITECT, AND OTHER DISCIPLINES.
- EXTENDED COVERAGE SPRINKLERS ARE PERMITTED. CONTRACTOR SHALL VERIFY ADDITIONAL PRESSURE REQUIREMENTS IF THIS TYPE IS SELECTED.
- THE SPRINKLER CONTRACTOR SHALL OBTAIN AND UTILIZE THE ARCHITECTURAL REFLECTED CEILING PLAN FOR THE LOCATING OF SPRINKLER HEADS. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR CEILING DEVICE LOCATIONS AND THE SPECIFICATIONS FOR COORDINATION DRAWING REQUIREMENTS.
- PIPING SHALL BE INSTALLED AT LEAST 12" ABOVE FINISHED CEILING ELEVATION TO ALLOW FOR SUITABLE ACCESS ABOVE CEILING.
- INSTALL NO PIPING IN A LOCATION OR MANNER WHICH WILL ALLOW FREEZING.
- COORDINATE PIPE ROUTING NEAR ELECTRICAL EQUIPMENT PER NFPA 70. PIPING IS NOT TO BE ROUTED ABOVE ELECTRICAL PANELS, TRANSFORMERS, COMPUTER RACKS ETC. FIELD VERIFY AND COORDINATE WITH ELECTRICAL CONTRACTOR ALL EXISTING AND NEW ELECTRICAL LOCATIONS PRIOR TO DESIGN OF THE FIRE PROTECTION PLANS.
- ROUTING OF SPRINKLER MAINS, BRANCHLINES, AND HEADS SHALL BE THOROUGHLY COORDINATED WITH ALL OTHER DISCIPLINES AND BUILDING STRUCTURE PRIOR TO SUBMISSION OF COORDINATED SHOP DRAWINGS. THIS IS OF THE UTMOST IMPORTANCE ESPECIALLY WHERE SPACE IS LIMITED. FIRE PROTECTION CONTRACTOR IS RESPONSIBLE FOR COORDINATING, PREPARING, AND SUBMITTING COORDINATION DRAWINGS FOR APPROVAL/REVIEW.
- ADVISE THE ENGINEERS OF ANY CONFLICTS, ERRORS, OMISSIONS, ETC. AT LEAST 10 DAYS PRIOR TO BID DATE, TO ALLOW CLARIFICATION BY WRITTEN ADDENDUM.
- IF SEISMIC BRACING IS REQUIRED, FIRE PROTECTION CONTRACTOR SHALL FURNISH AND INSTALL ALL END OF BRANCH LINE RESTRAINTS PER NFPA 13.
- SPRINKLER CONTRACTOR TO AVOID ROUTING PIPE THROUGH SHEAR WALLS. ANY SHEAR WALL PENETRATIONS SHALL BE COORDINATED WITH THE STRUCTURAL ENGINEER. REFER TO STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS.
- WHEN WORK REQUIRES TEMPORARY INTERRUPTIONS OF FIRE PROTECTION SERVICES OR UTILITIES THE FOLLOWING ACTIONS WILL BE TAKEN:
  - COORDINATION WITH MAINTENANCE PERSONNEL TO SHUT OF SERVICES AT NEAREST MAIN.
  - PROVIDE TEMPORARY AND ACCESSIBLE ISOLATION VALVES CLOSE TO THE POINT OF WORK.
  - ENSURE BUILDING OPERATIONS CONTINUE WITH MINIMAL INTERRUPTIONS AND OPERATION OF EXISTING SYSTEMS BE INTERFERED WITH AS LITTLE DISRUPTION AS POSSIBLE EXCEPT IN VACATED AREAS.
  - WORK INTERFERING WITH OPERATION OF DOWNTIME WILL BE SCHEDULED AFTER CONSULTATION WITH AND PERMISSION GIVEN BY OWNER (10) DAYS PRIOR TO ANTICIPATED INTERRUPTION OF SYSTEMS.
  - SUCH WORK MAY BE PERFORMED OUTSIDE OF NORMAL WORKING HOURS.
  - REFER TO FIRE WATCH NOTES FOR DISRUPTION OF FIRE SPRINKLER SYSTEMS IN OCCUPIED BUILDINGS WHEN DISRUPTION EXCEEDS 4 HOURS.

## COMMON FIRE PROTECTION SYMBOLS & ABBREVIATIONS

NOT ALL SYMBOLS ARE USED FOR THIS PROJECT

	DIRECTION OF FLOW
	BRANCH CONNECTION, BOTTOM
	BRANCH CONNECTION, TOP
	ELBOW, TURNED DOWN
	ELBOW TURNED UP
	SHUTOFF VALVE
	CHECK VALVE
	PRESSURE REDUCING VALVE
	PRESSURE GAUGE
	UNION
	PIPING CAP
	EXISTING PIPING TO BE REMOVED
	MATCH LINE
	CONNECTION TO EXISTING
	DETAIL DESIGNATION
	RISER DESIGNATION
	KEYED NOTE
	REVISION NOTE
AFF	ABOVE FINISH FLOOR
AHJ	AUTHORITIES HAVING JURISDICTION
AP	ACCESS PANEL
BOP	BOTTOM OF PIPE
DIA	DIAMETER
DN	DOWN
EX OR EXIST	EXISTING
FFE	FINISHED FLOOR ELEVATION
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HP	HORSEPOWER
IE OR INV. ELEV	INVERT ELEVATION
NC	NORMALLY CLOSED
NTS	NOT TO SCALE
PSI	POUNDS PER SQUARE INCH
RPM	REVOLUTIONS PER MINUTE
RI	ROUGH-IN
SOV	SHUTOFF VALVE
TDH	TOTAL DYNAMIC HEAD
VIF	VERIFY IN FIELD

## FIRE PROTECTION SYMBOLS & ABBREVIATIONS

NOT ALL SYMBOLS ARE USED FOR THIS PROJECT

	AIR VENT (AUTOMATIC)
	DOUBLE CHECK VALVE ASSEMBLY
	DRY PIPE VALVE
	ELECTRONIC SUPERVISED INDICATING VALVE
	FIRE DEPARTMENT VALVE (FDV)
	FLOW SWITCH
	PREACTION VALVE
	PRESSURE RELIEF VALVE
	SOLENOID VALVE
	DRAIN LINE
	DRY PIPE
	FIRE MAIN (BULK)
	SPRINKLER MAIN/BRANCH PIPING
	DRIP CONNECTION
	FIRE DEPARTMENT CONNECTION-FREE STANDING
	FIRE DEPARTMENT CONNECTION-WALL MOUNT
	FLUSH TYPE FIRE DEPARTMENT INLET CONNECTION
	FIRE PUMP TEST HEADER-WALL MOUNT
	FIRE PUMP TEST HEADER-FREE STANDING
	EXISTING SPRINKLER HEAD
	EXISTING SPRINKLER HEAD TO BE REMOVED
	SPRINKLER HEAD
	SIDEWALL SPRINKLER HEAD
	PIPING TO BE DEMOLISHED
AP	ACCESS PANEL
AC	AIR COMPRESSOR
AS	AUTOMATIC SPRINKLERS
BFP	BACKFLOW PREVENTER
BTC	BRANCH TO CONNECTION
CI	CAST IRON
DCVA	DOUBLE CHECK VALVE ASSEMBLY
DPV	DRY PIPE VALVE
DSP	DRY STANDPIPE PIPING
DSV	DRY STANDPIPE VALVE
FDC	FIRE DPARTMENT CONNECTION
FDV	FIRE DEPARTMENT VALVE
FEC	FIRE EXTINGUISHER CABINET
FHC	FIRE HOSE CABINET
FP	FIRE PUMP
FPC	FIRE PUMP CONTROLLER
FPTH	FIRE PUMP TEST HEADER
JP	JOCKEY PUMP
JPC	JOCKEY PUMP CONTROLLER
NAS	NO AUTOMATIC SPRINKLERS
NIC	NOT IN CONTRACT
PV	POST INDICATOR VALVE
SP	SUMP PUMP
TS	TAMPER SWITCH

## FIRE STOPPING NOTES

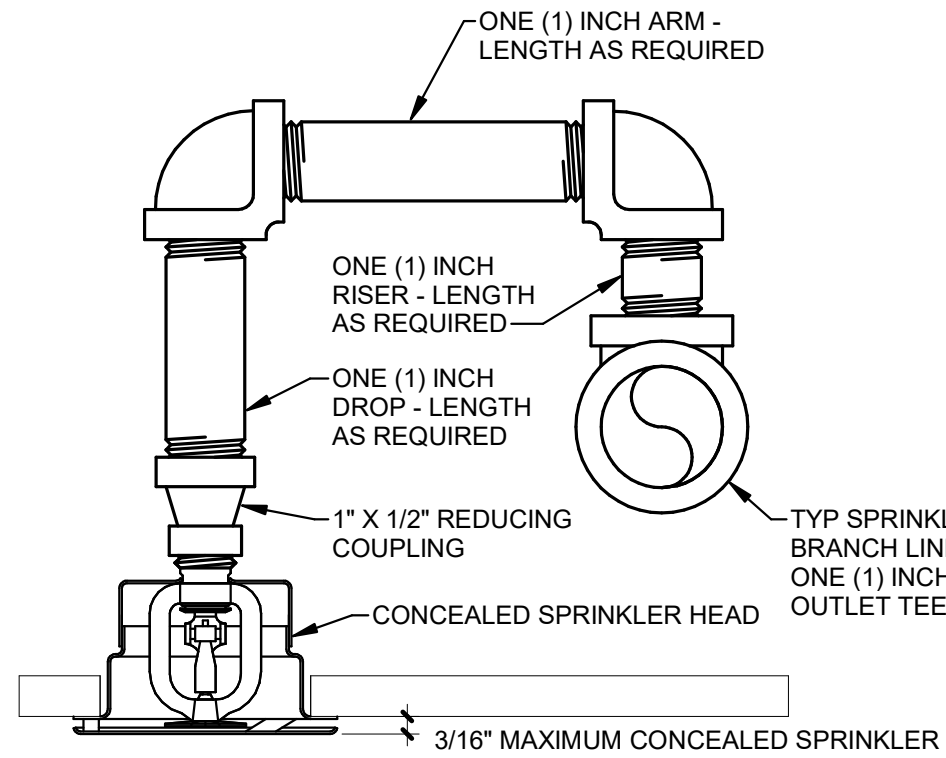
- MATERIALS: USE ONLY FIRE STOP PRODUCTS THAT HAVE BEEN UL 1479, ASTM E-814, OR UL 2079 TESTED FOR SPECIFIC FIRE RATE CONSTRUCTION CONDITIONS CONFORMING TO CONSTRUCTION ASSEMBLY TYPE, PENETRATING ITEM TYPE, ANNULAR SPACE REQUIREMENTS, AND FIRE RATING INVOLVED FOR EACH SEPARATE INSTANCE.
- FOR SINGLE PENETRATIONS: A READY-TO-USE LATEX BASED INTUMESCENT SEALANT IS REQUIRED TO MAINTAIN THE FIRE RATING OF THE ASSEMBLY PENETRATED. THE SEALANT MUST HAVE UL LISTING FOR BOTH SLEEVED AND NON-SLEEVED APPLICATIONS.
- FOR LARGE OPENINGS: CONTAINING MULTIPLE PENETRATIONS (2 OR MORE), A READY-TO-USE FOAM INTUMESCENT BLOCK MATERIAL MUST BE ABLE TO BE REMOVED AND REINSTALLED WITHOUT COMPROMISING FIRE PROTECTION INTEGRITY. COMPLY WITH MANUFACTURER'S RECOMMENDED PROCEDURES AND PRECAUTIONS. DO NOT USE DAMAGED OR EXPIRED MATERIALS.
- MANUFACTURERS: JOHNS MANVILLE INTERNATIONAL, 3M BRAND, CSD SEALING SYSTEMS, HILTI, CIBA-GEIGY, HEAVY-DUTY/NEALSON. REFER TO DIVISION 7 FOR FURTHER REQUIREMENTS.

## FIRE PROTECTION DEMOLITION NOTES

- PROTECT PIPING WHICH IS NOT TO BE REMOVED FROM DAMAGE, DIRT AND DEBRIS.
- ALL FIRE EQUIPMENT AND MATERIALS NOT CLAIMED BY THE OWNER SHALL BE REMOVED FROM THE PREMISES AND PROPERLY DISPOSED OF BY THE DEMOLITION CONTRACTOR.
- THE CONTRACTOR SHALL PLUG OR CAP ALL PIPING OUTLETS NOT INTENDED FOR REUSE.
- CEILING REMOVAL, STORAGE, AND REPLACEMENT WILL BE MADE BY THE CONTRACTOR AND IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO REPAIR THE EXISTING SURFACES TO REMAIN WHERE THEIR WORK HAS BEEN COMPLETED. REPAIR INCLUDES BUT SHALL NOT BE LIMITED TO, ANY EXISTING WALL, CEILING, OR FLOOR THAT IS SCHEDULED TO REMAIN. REPAIR, PAINTING, AND PATCHING SHALL BE COMPLETED BY AN APPROPRIATE CONTRACTOR QUALIFIED FOR THIS TYPE OF WORK.
- IF HAZARDOUS MATERIALS ARE ENCOUNTERED DURING DEMOLITION OPERATIONS, THE CONTRACTOR WILL NOTIFY BUILDING OWNER OF THE HAZARDOUS MATERIAL.
- ARCHITECTURAL DEMOLITION DRAWINGS AND SPECIFICATIONS SHALL BE READ IN CONJUNCTION WITH THESE DRAWINGS.
- THE CONTRACTOR SHALL COORDINATE DEMOLITION WORK WITH PROJECT'S PHASING SCHEDULE PRIOR TO ANY WORK
- ANY GALVANIZED SPRINKLER PIPING FOUND USED ON THE EXISTING SPRINKLER SYSTEM IN SCOPE TO BE DEMOLISHED AND REPLACED WITH SCHEDULE 40 BLACK STEEL PIPE.

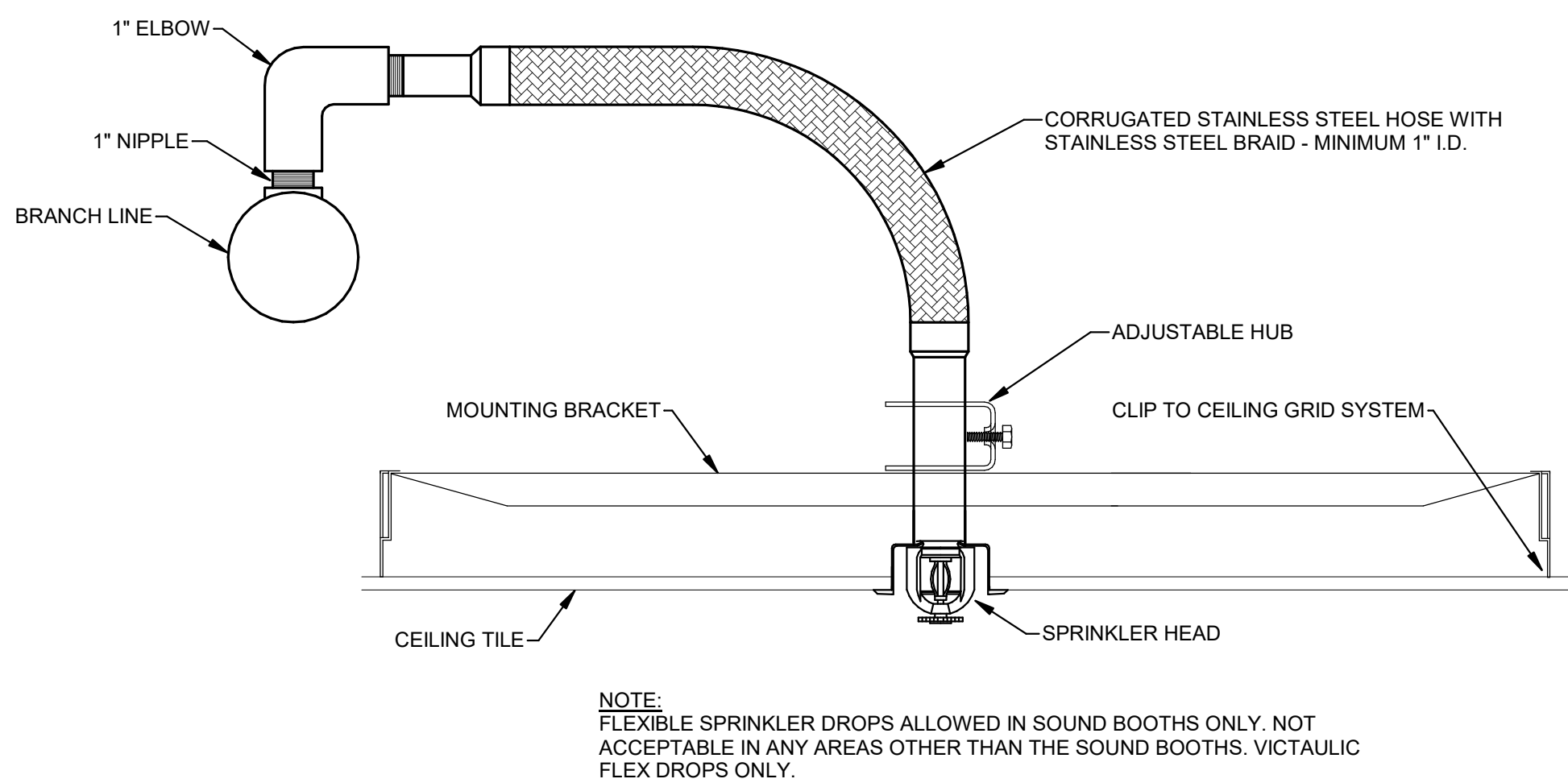
## 1 SPRINKLER HEAD LOCATION

NONE



## 2 CONCEALED SPRINKLER HEAD

NONE



NOTE:  
FLEXIBLE SPRINKLER DROPS ALLOWED IN SOUND BOOTHS ONLY. NOT  
ACCEPTABLE IN ANY AREAS OTHER THAN THE SOUND BOOTHS. VICTAULIC  
FLEX DROPS ONLY.

## 3 FLEXIBLE SPRINKLER DROP

NONE

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MU PROJECT NO. - CP221943

**UNIVERSITY PHYSICIANS  
MEDICAL BUILDING - 3RD  
FLOOR RENOVATION**

1020 Hitt St. Columbia, MO 65212

BID SET

MARK	DATE	DESCRIPTION
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I hereby certify these drawings and/or specifications have been prepared by me, or under my supervision. I further certify that to the best of my knowledge these drawings and/or specifications are as required by and in compliance with the Building Codes of the University of Missouri.



TORI JANELLE GILLESPIE  
PE-2018000203

**FIRE PROTECTION  
SYMBOLS, ABBREV.S, AND  
DETAILS**

DATE 03 APRIL, 2023  
INTROBA PROJECT NO. 0011593

# FP000

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CHECKED BY: JAG  
APPROVED BY: JAG



1 FIRE PROTECTION - THIRD FLOOR DEMOLITION PLAN  
1/8" = 1'-0"

6 4 2 0 8 16  
SCALE: 1/8"=1'-0"

## GENERAL NOTES

- FIRE SPRINKLER SYSTEM OUTAGES SHALL BE LIMITED IN TIME AND APPROVED BY UMHC.
- ONLY SCHEDULE 40 PIPING SHALL BE USED. CONTRACTOR SHALL VERIFY SPRINKLER PIPING SCHEDULE AND NOTIFY OWNER BEFORE WORK COMMENCES.
- ONLY FULLY CONCEALED-TYPE SPRINKLER HEADS SHALL BE USED.
- COORDINATE ALL SPRINKLER HEAD LOCATIONS WITH CEILING LAYOUT, NEW ARCHITECTURAL FEATURES, CEILING-MOUNTED DEVICES, AND ACROSS ALL DISCIPLINES.
- FLEXIBLE SPRINKLER HEADS ARE ONLY ALLOWED FOR THE NEW SOUND BOOTHS. NO FLEXIBLE SPRINKLER HEADS ARE ALLOWED FOR ANY OTHER AREAS FOR THIS PROJECT.
- FIRE PROTECTION SHOP DRAWINGS TO BE PROVIDED, SIGNED AND SEALED BY A LICENSED FIRE PROTECTION ENGINEER IN THE STATE OF MISSOURI.
- A TEMPORARY FIRE PROTECTION METHOD SHALL BE PROVIDED DURING CONSTRUCTION WHILE CEILINGS ARE DOWN OR THE EXISTING SPRINKLER SYSTEM IS OFFLINE. A TEMPORARY FIRE PROTECTION METHOD COULD BE:
  - FIRE WATCH DURING NON-CONSTRUCTION HOURS (MORE DETAILS OUTLINED ON SHEET FP000).
  - SEPARATE NEW SPRINKLER SYSTEM FOR CONSTRUCTION AREA.
  - MODIFIED EXISTING SPRINKLER SYSTEM FOR CONSTRUCTION AREA.
    - ANY METHOD USED SHALL MEET THE AHJ REQUIREMENTS.
- ANY EXISTING GALVANIZED FIRE PROTECTION PIPING FOUND SERVING THE EXISTING SYSTEM TO BE REPLACED WITH SCHEDULE 40 BLACK STEEL PIPE.

## KEYED NOTES

- EXISTING SPINKLER HEAD AND ARM-OVER PIPING TO BE DEMOLISHED BACK TO EXISTING BRANCH LINE.

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MEDICAL BUILDING - 3RD  
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BID SET

MARK	DATE	DESCRIPTION
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TORI JANELLE GILLESPIE  
PE-2018000203

**FIRE PROTECTION THIRD  
FLOOR DEMOLITION PLAN**

DATE: 03 APRIL, 2023  
INTROBA PROJECT NO. 0011593

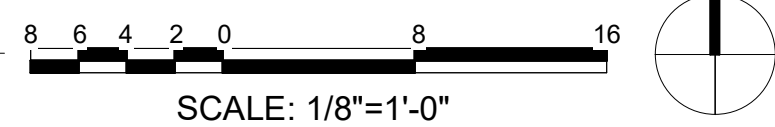
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1 FIRE PROTECTION - THIRD FLOOR NEW WORK PLAN  
1/8" = 1'-0"



GENERAL NOTES

- A. FIRE SPRINKLER SYSTEM OUTAGES SHALL BE LIMITED IN TIME AND APPROVED BY UMHC.
- B. ONLY SCHEDULE 40 PIPING SHALL BE USED. CONTRACTOR SHALL VERIFY SPRINKLER PIPING SCHEDULE AND NOTIFY OWNER BEFORE WORK COMMENCES.
- C. ONLY FULLY CONCEALED-TYPE SPRINKLER HEADS SHALL BE USED.
- D. COORDINATE ALL SPRINKLER HEAD LOCATIONS WITH CEILING LAYOUT, NEW ARCHITECTURAL FEATURES, CEILING-MOUNTED DEVICES, AND ACROSS ALL DISCIPLINES.
- E. FLEXIBLE SPRINKLER HEADS ARE ONLY ALLOWED FOR THE NEW SOUND BOOTHS. NO FLEXIBLE SPRINKLER HEADS ARE ALLOWED FOR ANY OTHER AREAS FOR THIS PROJECT.
- F. FIRE PROTECTION SHOP DRAWINGS TO BE PROVIDED, SIGNED AND SEALED BY A LICENSED FIRE PROTECTION ENGINEER IN THE STATE OF MISSOURI.
- G. A TEMPORARY FIRE PROTECTION METHOD SHALL BE PROVIDED DURING CONSTRUCTION WHILE CEILINGS ARE DOWN OR THE EXISTING SPRINKLER SYSTEM IS OFFLINE. A TEMPORARY FIRE PROTECTION METHOD COULD BE:
  - a. FIRE WATCH DURING NON-CONSTRUCTION HOURS (MORE DETAILS OUTLINED ON SHEET FP000).
  - b. SEPARATE NEW SPRINKLER SYSTEM FOR CONSTRUCTION AREA.
  - c. MODIFIED EXISTING SPRINKLER SYSTEM FOR CONSTRUCTION AREA.ANY METHOD USED SHALL MEET THE AHJ REQUIREMENTS.
- H. ANY EXISTING GALVANIZED FIRE PROTECTION PIPING FOUND SERVING THE EXISTING SYSTEM TO BE REPLACED WITH SCHEDULE 40 BLACK STEEL PIPE.

KEYED NOTES

- 1. AREA TO BE CONSIDERED LIGHT HAZARD WITH A SPRINKLER DISCHARGE DENSITY OF 0.10 GPM/SQ. FT. FOR THE MOST HYDRAULICALLY REMOTE 1500 SQ. FT. AND A HOSE STREAM OF 100 GPM. CONTRACTOR SHALL PROVIDE A COMPLETE CODE COMPLIANT AUTOMATIC WET PIPE SYSTEM. SPRINKLER SPACING SHALL BE BASED ON LISTED VALUE AND DISTANCES ESTABLISHED BY NFPA AND FM.
- 2. THESE AREAS TO BE CONSIDERED ORDINARY HAZARD, GROUP 1 WITH A SPRINKLER DISCHARGE DENSITY OF 0.15 GPM/SQ. FT. FOR THE MOST HYDRAULICALLY REMOTE 1500 SQ. FT. AND A HOSE STREAM OF 250 GPM. CONTRACTOR SHALL PROVIDE A COMPLETE CODE COMPLIANT AUTOMATIC WET PIPE SYSTEM. SPRINKLER SPACING SHALL BE BASED ON LISTED VALUE AND DISTANCES ESTABLISHED BY NFPA.
- 3. THIS AREA TO CONTAIN NEW SOUND BOOTHS. AREA ABOVE SOUND BOOTHS TO BE PROTECTED BY SPRINKLERS. INTERIOR OF SOUND BOOTH TO BE PROTECTED BY FLEX SPRINKLER PIPE DROP.



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Columbia, MO 65201  
ph 573.875.4365 ext 209 www.customengr.com  
Missouri State Certificate of Authority #000239



MU PROJECT NO. - CP221943  
**UNIVERSITY PHYSICIANS  
MEDICAL BUILDING - 3RD  
FLOOR RENOVATION**

1020 Hitt St. Columbia, MO 65212

BID SET

MARK	DATE	DESCRIPTION
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I hereby certify these drawings and/or specifications have been prepared by me, or under my supervision. I further certify that to the best of my knowledge these drawings and/or specifications are as required by and in compliance with the Building Codes of the University of Missouri.



TORI JANELLE GILLESPIE  
PE-2018000203

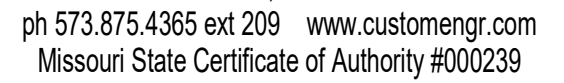
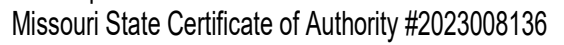
**FIRE PROTECTION THIRD  
FLOOR PLAN**

DATE 03 APRIL, 2023  
INTROBA PROJECT NO. 0011593

**FP101**

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MARK	DATE	DESCRIPTION
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TORI JANELLE GILLESPIE  
PE-2018000203

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1. EXISTING SPINKLER HEAD AND ARM-OVER PIPING TO BE DEMOLISHED BACK TO EXISTING BRANCH LINE.
2. AREA TO BE CONSIDERED LIGHT HAZARD WITH A SPINKLER DISCHARGE DENSITY OF 0.10 GPM/SQ.FT. FOR THE MOST HYDRAULICALLY REMOTE 1500 SQ.FT. AND A HOSE STREAM OF 100 GPM. CONTRACTOR SHALL PROVIDE A COMPLETE CODE COMPLIANT AUTOMATIC WET PIPE SYSTEM. SPINKLER SPACING SHALL BE BASED ON LISTED VALUE AND DISTANCES ESTABLISHED BY NFPA AND FM.

