

BIM 360://3-24016 SLE ED Patient Treatment/2-24016_SLE ED Patient Treatment_R21.rvt



Saint Luke's East Hospital

ED Patient Treatment Renovation

100 NE Saint Luke's Blvd

Lee's Summit, MO 64086

PROJECT TEAM

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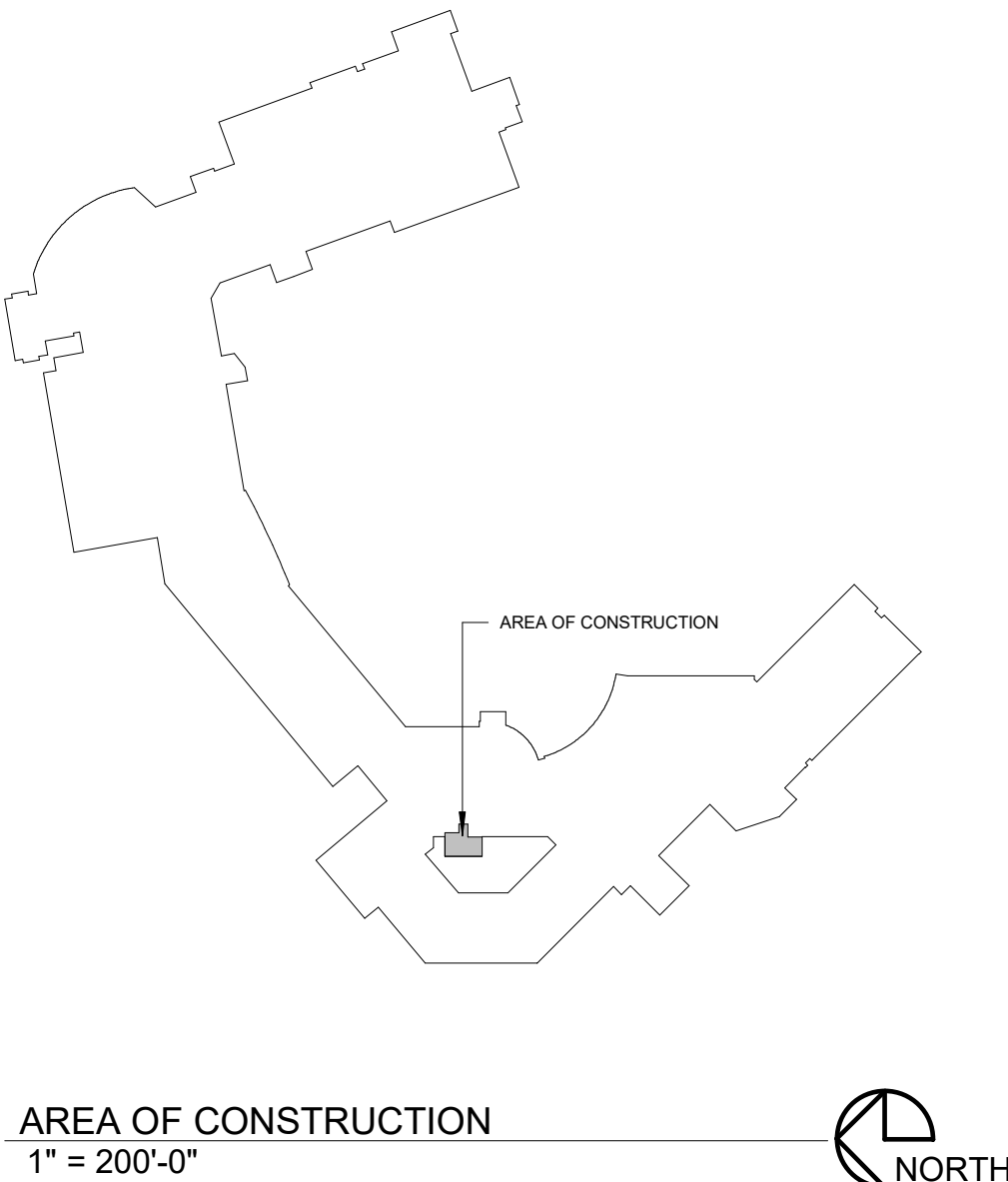
ABBREVIATIONS

AC.	ACOUSTIC/ACOUSTICAL	FLOR.	FLUORESCENT	PTD.	PAINTED
ADD.	ADDENDUM	FTG.	FOOTING	PG.	PAGE
ADDN.	ADDITION	FND.	FOUNDATION	PLAM.	PLASTIC LAMINATE
ABC.	AGGREGATE BASE COURSE	FR.	FRAME	PAR.	PART
AFF.	ABOVE FINISH FLOOR	F.H.C.	FIRE HOSE CAB.	PNL.	PANEL
AGG.	AGGREGATE	FV.	FIELD VERIFY	PTN.	PARTITION
AC.	AIR CONDITIONING	4		PL.	PLATE
AL.	ALUMINUM	GA.	GAUGE	PLBS.	PLUMBING
ALT.	ALTERNATE	GL.	GLASS / GLAZING	PLYWD.	PLYWOOD
A.B.	ANCHOR BOLT	GR.	GRADE	PT.	POINT
ARCH.	ARCHITECT	G.	GRAM	P.S.I.	POUNDS PER SQ. IN.
ASP.	ASPHALT	GRIL.	GRILLE	P.S.F.	POUNDS PER SQ. FT.
@	AT	GRD.	GRID	P.C.	PRECAST
ACT.	ACQUSTIC CEILING TILE/PANEL	GND.	GROUND	P.L.	PROPERTY LINE
ANGLE	ANGLE	G.S.	GAUVANIZED STEEL		
		GYP.	GYPSPUM		
		GWB/G.B.	GYPSPUM BOARD		
BLKG.	BLOCKING	H.R.	HAND RAIL	R.	RISER, RISERS
BSMT.	BASEMENT	HDN.	HARDENER	RAD.	RADIUS
BM.	BEAM	HDW.	HARDWARE	R.D.	ROOF DRAIN
B.M.	BENCHMARK	HDWD.	HARDWOOD	RB.	RESILIENT BASE
BD.	BOARD	HTR.	HEATER	RE.	REFER TO
B.O.	BOTTOM OF BUILDING	HT.	HEIGHT	REG.	REGISTER
		H.P.	HIGH POINT	REQD.	REQUIRED
CABT.	CABINET	H.M.	HOLLOW METAL	REV.	REVISION
C.I.P.	CAST IN PLACE	HORIZ.	HORIZONTAL	RFG.	ROOFING
C.B.	CATCH BASIN	HOSE BB.	HOSE BIB	RCH.	ROUGH
C.G.	CEILING	H.W.	HOT WATER	RM.	ROOM
CEM.	CEMENT/CEMENTITIOUS			RND.	ROUND
CG.	CENTIGRAM			R.O.	ROUGH OPENING
CM.	CENTIMETER				
CL.	CENTER LINE	IN.	INCH / INCHES	SCHED.	SCHEDULE
CER.	CERAMIC	ID.	INSIDE DIAMETER	S.C.	SEALED CONCRETE
C.T.	CERAMIC TILE	INSUL.	INSULATION	SCR.	SCREW
CHAN.	CHANNEL	INT.	INTERIOR	SECT.	SECTION
CLR.	CLEAR	INV.	INVERT	SEL.	SELECT
C.O.	CLEAN OUT	JAN.	JANITOR	SHG.	SHEATHING
CLOS.	CLOSET	JT.	JOINT	SHT.	SHEET
COL.	COLUMN	JST.	JOIST	SDG.	SIDING
CONC.	CONCRETE	K.P.	KICK PLATE	SLD.	SIMILAR
CONN.	CONNECTION	LAM.	LAMINATED	SLNG.	SLENDER
CONSL.	CONSTRUCTION	LB.	POUND	SM.	SMOOTH
C.J.	CONTROL JOINT	LDG.	LANDING	SQ.	SPECIFICATION
CONTR.	CONSTRUCTION JOINT	LTH.	LATH	ST.	STANDARD
CORP.	CORRUGATED	LAV.	LAVATORY	STD.	STANDARD
CTR.	COUNTER	LENTH.	LENGTH	S.S.I.	STAINLESS STEEL
CTSK.	COUNTERSUNK	LOC.	LOCATION	STRUC.	STRUCTURE
C.M.U.	CONCRETE MASONRY UNIT	LOC.	LOCATION	SUSP.	SUSPENDED
		L.W.C.	LIGHT WEIGHT CONCRETE	SWD.	SWITCHBOARD
		LVR.	LOUVER	SYS.	SYSTEM
		LOC.	LOCATION		
D.P.	DAMP PROOFING	M.O.	MASONRY OPENING	T.	TREAD
DS.	DECREASE	MATL.	MATERIAL	T.C.	TOP OF CURB
DIAG.	DIAGONAL	MFR.	MANUFACTURER	T.G.	TEMPERED GLASS
DIAM.	DIAMETER	MB.	MARKER BOARD	T.O.	TOP OF
DM.	DIMENSION	MECH.	MECHANICAL	T.S.D.	TOP OF STEEL DECK
DISP.	DISPENSER	MAX.	MAXIMUM	T.W.	TEACHERS WARDROBE
DWL.	DOWEL	M.L.	METAL	TYP.	TYPICAL
DN.	DOWN	MTL.	METAL LATH		
D.S.	DOWNSPOUT	M.	METER	U.N.O.	UNLESS NOTED OTHERWISE
DWG.	DRAWING	MIN.	MINIMUM		
		MOLD.	MOLDING		
		MULL.	MULLION		
EA.	EACH			V.	VENT
ELEC.	ELECTRIC			VERT.	VERTICAL
E.W.C.	ELECTRIC WATER COOLER	N.G.	NATURAL GRADE	V.G.	VERTICAL DRAIN
EL.	ELEVATION	NOM.	NOMINAL	VEST.	VESTIBULE
ELEV.	ELEVATOR	N.I.C.	NOT IN CONTRACT	V.C.T.	VINYL COMPOSITION TILE
EQ.	EQUAL	N.T.S.	NOT TO SCALE	VCP.	VITREOUS CLAY PIPE
EQUIP.	EQUIPMENT	NO. / #	NUMBER		
EXH.	EXHAUST			W.W.M.	WELDED WIRE MESH
EXPAN.	EXPANSION	OS.	OBSCURE	W.C.	WATER CLOSET
E.J.	EXPANSION JOINT	O.C.	ON CENTER	W.H.	WATER HEATER
EXIST.	EXISTING	OPNG.	OPENING	W.F.	WIDE FLANGE
EXT.	EXTERIOR	O.A.	OVERALL	W.	WITH
		O.D.	OUTSIDE DIAMETER	WID.	WITHOUT
FT.	FEET / FOOT	O.F.S.	OVERFLOW SCUPPER	WD.	WOOD
FIN.	FINISH	O.F.D.	OVERFLOW DRAIN	WDW.	WINDOW
FKT.	FIXTURE	O.H.D.	OVERHEAD DOOR	W.W.	WINDOW WALL
FL.	FLASHING				
FLR.	FLOOR				
F.D.	FLOOR DRAIN				

LOCATION PLAN



KEY PLAN



AREA OF CONSTRUCTION
1" = 200'-0"

CODE FOOTPRINT LEGEND

PARTITION TYPES	
0 HR SMOKE PARTITION (SMOKE RESISTIVE)	
1 HR SMOKE BARRIER	
1 HR FIRE BARRIER	
2 HR FIRE BARRIER	
2 HR FIRE SMOKE BARRIER	
3 HR FIRE BARRIER	

AREA DESIGNATIONS	
CORRIDOR	
HAZARDOUS ROOM	
EXIT ENCLOSURE	
SHAFT	

BOUNDARY DESIGNATIONS	
SMOKE COMPARTMENT 1 HR SMOKE BARRIER	SUITE - SLEEPING 0 HR SMOKE PARTITION (SMOKE RESISTIVE)
NOT IN ARCHITECTURAL SCOPE	SUITE - NON SLEEPING 0 HR SMOKE PARTITION (SMOKE RESISTIVE)

SYMBOLS	
FIRE EXIT	
OCCUPANT LOAD	
EXIT WIDTH PROVIDED	
EXIT WIDTH REQUIRED	
EXISTING FIRE EXTINGUISHER CABINET	
EXIT SIGN	
FIRE DOOR RATING	
TRAVEL DISTANCE	
STROBE	
STROBE/SPEAKER	
HORN/STROBE	
HORN	
FIRE PULL STATION	

CODE SUMMARY

PROJECT CONSTRUCTION PURPOSE: Renovating existing offices into 3 new exam rooms for the ED.

OWNER:
Saint Luke's East Hospital
120 NE Saint Luke's Blvd
Lee's Summit, MO 64083

DESIGNER:
ACI BOLAND ARCHITECTS
1710 WYANDOTTE ST.
KANSAS CITY, MO 64108
PHONE: (816) 763-9600

LOCAL AUTHORITY:
RESPONDING FIRE SERVICE: CITY OF LEE'S SUMMIT MO
LOCAL BUILDING INSPECTION: CITY OF LEE'S SUMMIT MO

CODE INFORMATION:
2018 INTERNATIONAL BUILDING CODE
2018 INTERNATIONAL PLUMBING CODE
2018 INTERNATIONAL MECHANICAL CODE
2018 INTERNATIONAL ELECTRICAL CODE (NFPA 70)
2018 INTERNATIONAL FIRE CODE
2012 LIFE SAFETY CODE: NFPA 101 (CHAPTER 20)
2012 NFPA 101 LIFE SAFETY CODE (LSC)
2018 ADA STANDARDS FOR ACCESSIBLE DESIGN / AMERICANS WITH DISABILITIES ACT OF 1990
STATE OF MISSOURI DEPT. OF HEALTH & ENVIRONMENT REFERENCES THE FOLLOWING CODES:
2012 NFPA 101 LIFE SAFETY CODE (LSC)
2018 FGI GUIDELINES FOR DESIGN & CONSTRUCTION OF HOSPITALS & OUTPATIENT FACILITIES 1979 1B-2SR-30
NOTE: IF CODE REQUIREMENTS OVERLAP, THE MOST STRINGENT SHALL APPLY

TYPE OF CONSTRUCTION: TYPE 1-A - SECTION 602.2 (TYPE 1 - 3/2 SPRINKLERED - SECTION 18.1.8.1)
1-2 - SECTION 308.3 (HEALTHCARE - SECTION 8.1.5)

OCCUPANCY GROUP: 785SF
TOTAL NUMBER OF OCCUPANTS = 6

DEAD END CORRIDOR LENGTH LIMIT: 20'

EXIT ACCESS TRAVEL DISTANCE: 200'

AREA OF CONSTRUCTION: 785+/- SF

REQUIRED FIRE RESISTANCE RATINGS (IN HOURS):
PER NFPA 101, 8.4.1.2

EXTERIOR BEARING WALLS	3 HR
INTERIOR BEARING WALLS	3 HR
PRIMARY STRUCTURAL FRAME	3 HR
FLOOR CONSTRUCTION	2 HR
ROOF CONSTRUCTION	1 1/2 HR
INTERIOR NON-BEARING WALLS	0 HR

PLUMBING FIXTURE CALCULATIONS: EXISTING TO REMAIN
NO CHANGE IN OCCUPANCY

ACTIVE FIRE SAFETY FEATURES:
- FIRE ALARM SYSTEM - THE FIRE ALARM SYSTEM IS SPECIFIED AS AN ADDRESSABLE TYPE SYSTEM. THE DEVICE TYPE AND LOCATIONS ARE PER THE APPLICABLE CODES AS WELL AS ADA REQUIREMENTS.
- SMOKE CONTROL SYSTEM - ALL DUCTWORK PENETRATING SMOKE RATED WALLS WILL HAVE A SMOKE OR COMBINATION FIRE/SMOKE DAMPER AS INDICATED ON CONSTRUCTION DOCUMENTS. THESE DAMPERS WILL CLOSE UPON DETECTION OF SMOKE BY THE AREA SMOKE DETECTORS OR DUCT SMOKE DETECTORS IN THE AIR HANDLING UNITS.
- FIRE SPRINKLER SYSTEM - SPECIFIED TO BE PER NFPA 13. THE SPRINKLER HEADS ARE SPECIFIED TO BE QUICK RESPONSE TYPE.
- EMERGENCY LIGHTING AND POWER - EMERGENCY LIGHTING, LIFE SAFETY AND CRITICAL LOADS WILL RECEIVE POWER FROM A BACKUP GENERATOR LOCATED OUTSIDE THE MAIN ELECTRICAL ROOM.
- ILLUMINATED EXIT SIGNS

PASSIVE FIRE SAFETY FEATURES:
- SMOKE COMPARTMENTS NO GREATER THAN 22,500 SF

SHEET INDEX

SHEET NUMBER	SHEET NAME
GENERAL	
A000	COVER SHEET & LIFE SAFETY PLAN
A030	PARTITION TYPES, DETAILS, GENERAL NOTES & SYMBOLS
ARCHITECTURE	
A211	OVERALL FLOOR PLAN, RCP, DEMO, AND ELEVATIONS
A700	INTERIOR FINISH PLAN, MATERIAL LEGENDS, SCHEDULES, AND DETAILS
PLUMBING, MECHANICAL, ELECTRICAL	
MP001	MECHANICAL DETAILS AND SCHEDULE
MP002	MECHANICAL SPECIFICATIONS
MP003	MECHANICAL DETAILS AND SCHEDULE
P101	FIRST FLOOR PLUMBING PLAN
P102	FIRST FLOOR MEDICAL GAS PLAN
P501	PLUMBING DETAILS AND SCHEDULES
M101	FIRST FLOOR HVAC PLAN
M102	FIRST FLOOR MECHANICAL PIPING PLAN
M501	MECHANICAL DETAILS AND SCHEDULE
E-002	ELECTRICAL SPECIFICATIONS
E-101	ELECTRICAL DEMOLITION PLAN
E-131	POWER PLAN
E-141	LIGHTING PLAN
E-151	SYSTEMS PLAN
E-501	ELECTRICAL DETAILS
E-601	ELECTRICAL GENERAL NOTES AND SYMBOLS



7/11/2024 10:24:46 AM
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Saint Luke's East ED Patient Treatment Renovation
100 NE Saint Luke's Blvd
Lee's Summit, MO 64086

Date 07/10/2024
Job Number 3-24016
Drawn By CN
Checked By BD

Revision		
Number	Date	Description

A1 LIFE SAFETY PLAN
1/8" = 1'-0"



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A000

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COVER SHEET & LIFE SAFETY PLAN

2 TOP ANCHORAGE OF PARTITION TO METAL DECK
1'-10" x 1'-0"

ENCLOSE TOP, BOTTOM, BACK AND SIDES OF ALL MECHANICAL AND ELECTRICAL DEVICES VACUOUS. SEALANT AT PARTITION TYPES WITH SOUND ATTENUATION BLANKETS

NO. OF LAYERS OF GYP. BOARD AS INDICATED BY PARTITION TYPE

BASE VARIES - REF. SCHEDULE

MTL. RUNNER TRACK W/POWDER DRIVEN FASTENERS @ 24" O.C.

1/4" BEAD OF ACQUS. SEALANT AT PARTITION TYPES WITH SOUND ATTENUATION BLANKETS

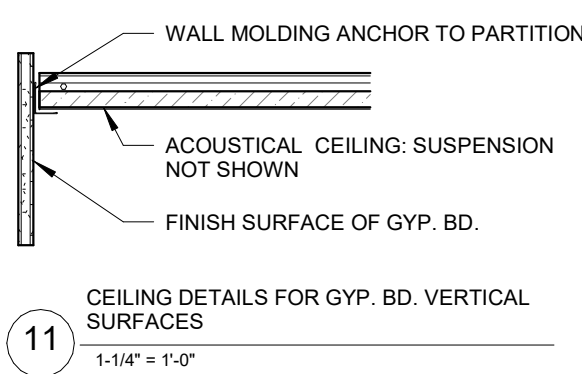
3 STRUCTURE SEE 3A AND 3B FOR ADDITIONAL INFORMATION
1'-10" x 1'-0"

ANCHOR 1 5/8" MTL. RUNNER TRACK TO PARTITION

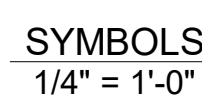
GYP. BD. CEILING: SUSPENSION NOT SHOWN

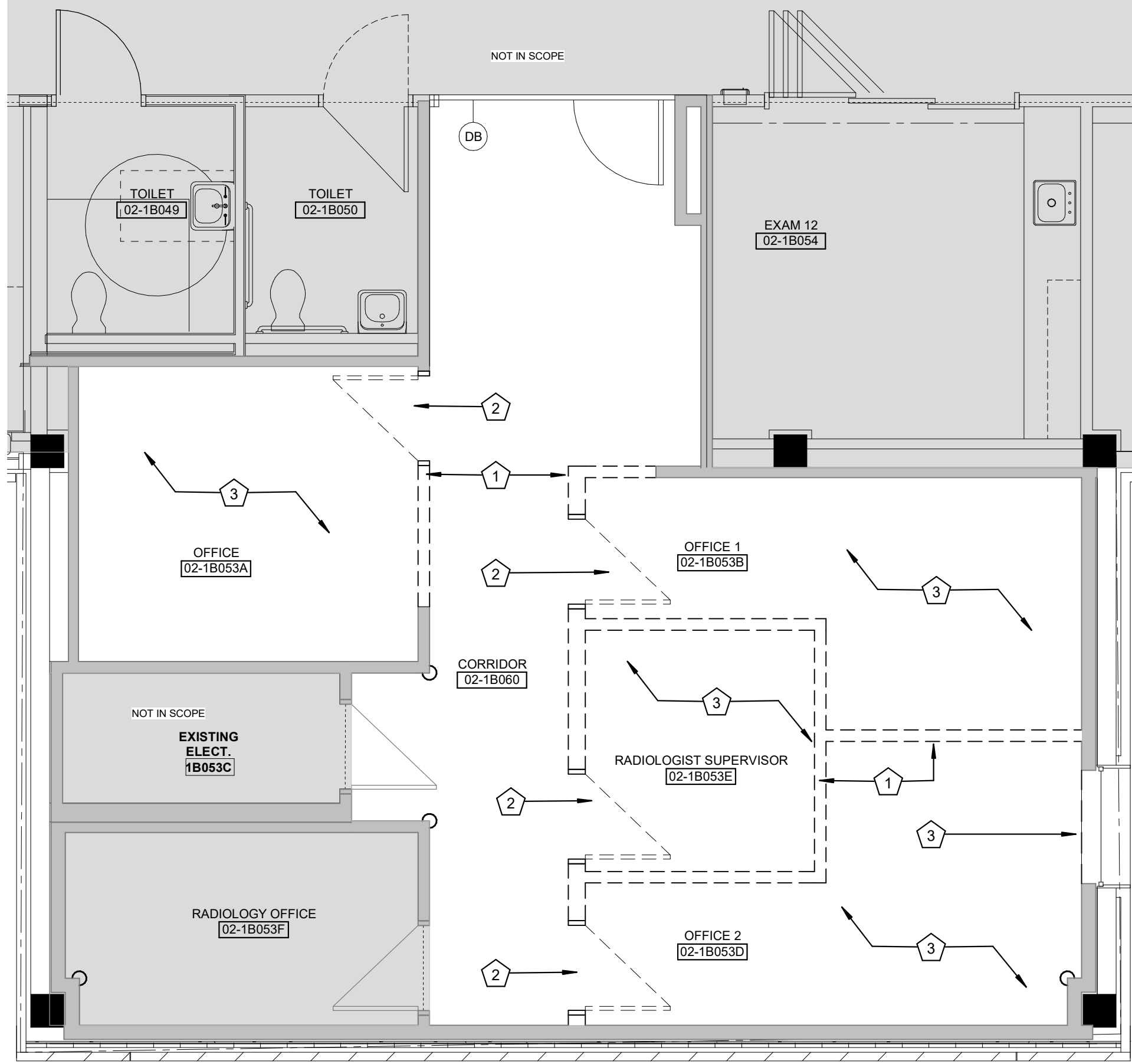
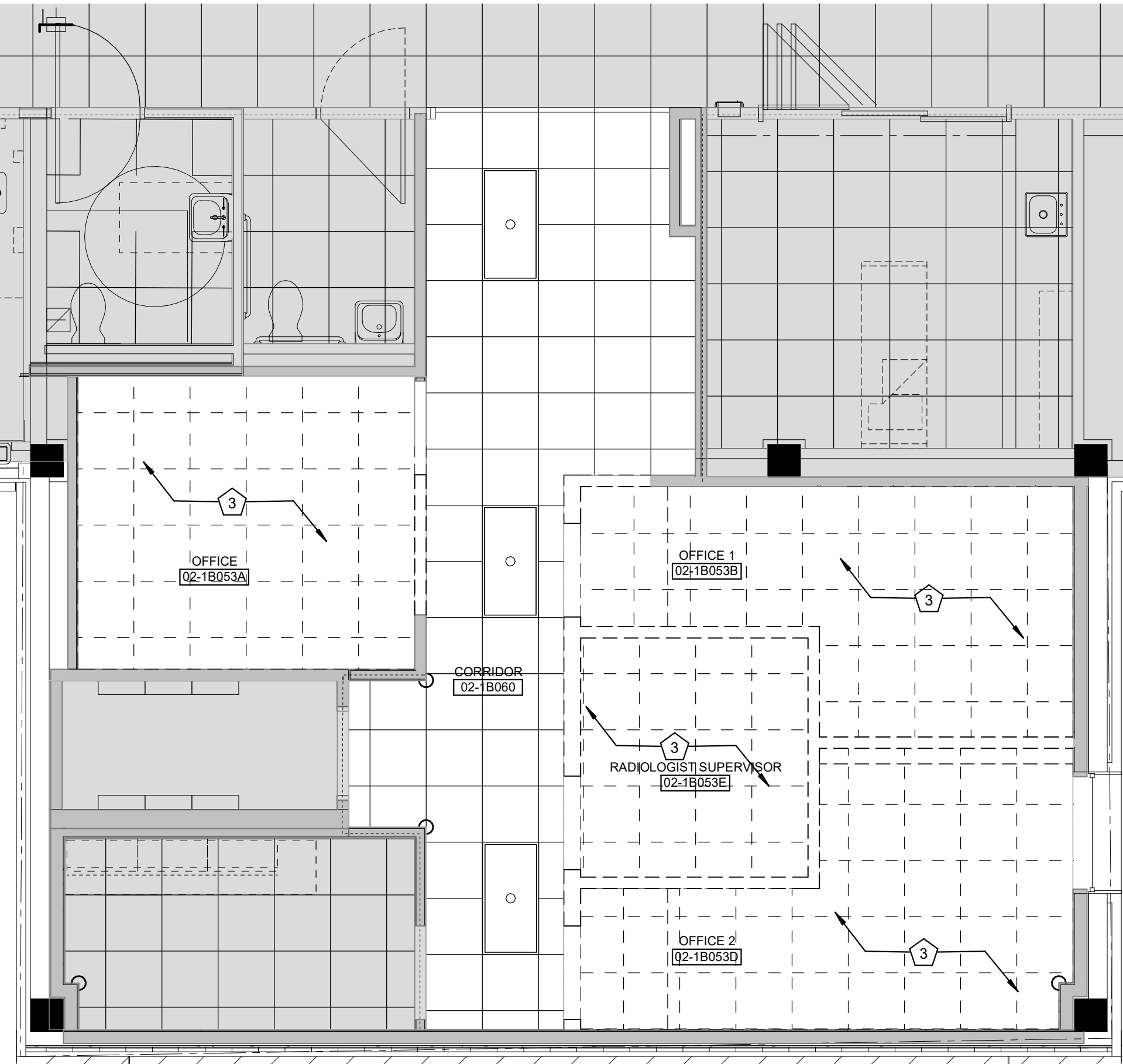
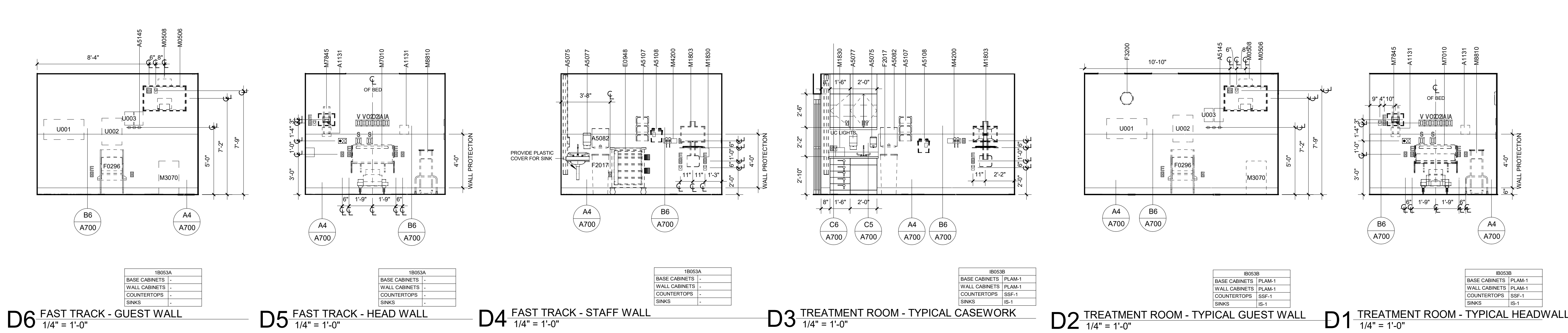
TAPE, FLOAT AND LEVEL CORNER

FINISH SURFACE OF GYP. BD.



1. ANY OBJECTS PROJECTING MORE THAN 4 INCHES FROM THE FINISHED FACE OF WALL INTO A CIRCULATION PATH SHALL NOT HAVE A HEAD CLEARANCE OF LESS THAN 80" (6'-8").
2. GENERAL CONTRACTOR TO INSTALL FIRE RETARDANT WOOD BLOCKING FOR ALL EQUIPMENT OVER 50LBS AND FIRE RETARDANT PLYWOOD FOR EQUIPMENT UNDER 50 LBS, AS REQUIRED FOR THE MOUNTING OF ALL EQUIPMENT.

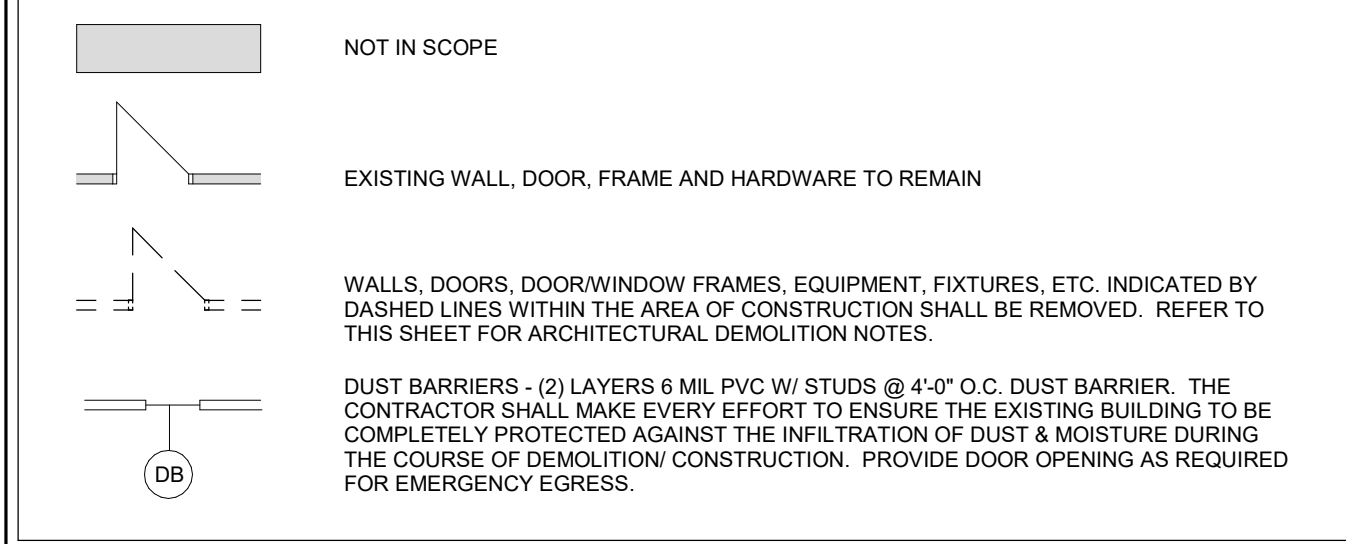


**A6 FLOOR PLAN - DEMO**
1/4" = 1'-0"

GENERAL DEMOLITION NOTES

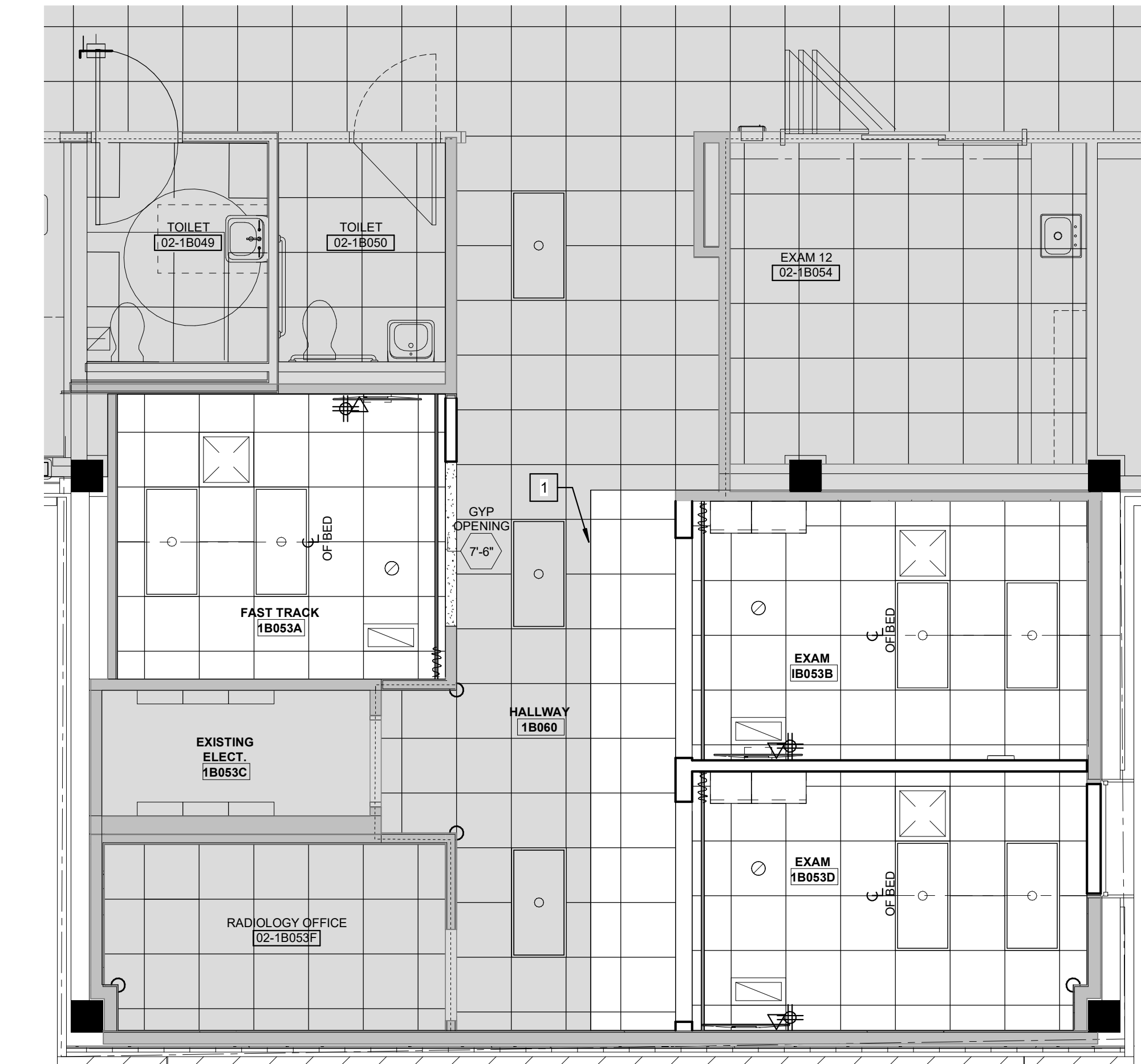
- THE OWNER SHALL VACATE THE EXISTING ROOMS AS INDICATED ON THE PLAN AND BE RESPONSIBLE FOR THE REMOVAL OF ANY EQUIPMENT NOT OTHERWISE DESIGNATED PRIOR TO ANY WORK DONE BY THE CONTRACTOR.
- INSTALL TEMPORARY DUST PARTITION AND/OR BARRIERS AND OTHER METHODS AS MAY BE REQUIRED NECESSARY AS INDICATED ON THE PLAN AND AS NECESSARY TO CONTAIN DEMOLITION/ CONSTRUCTION DUST AND DEBRIS WITHIN THE AREA OF CONSTRUCTION. REFER TO DUST BARRIER "DB" ON THIS SHEET AND THE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- IT IS THE INTENT OF THIS DEMOLITION TO REMOVE ALL EXISTING CONSTRUCTION WHICH CONFLICTS WITH THE INTENT OF THE NEW CONSTRUCTION. EVERY DEMOLITION DETAIL MAY NOT NECESSARILY BE COVERED ON THESE DRAWINGS. FIELD VERIFY THE EXTENT OF ALL DEMOLITION.
- THE CONTRACTOR SHALL USE EXTREME CARE IN THE PROTECTION OF ALL ADJACENT AREAS FOR IT IS IMPERATIVE TO PROVIDE CONTINUOUS OPERATION OF ALL OCCUPIED AREAS DURING THE DEMOLITION, CONSTRUCTION AND RENOVATION.
- THE CONTRACTOR SHALL COORDINATE ALL DEMOLITION WORK WITHIN OCCUPIED SPACES ABOVE, BELOW AND ADJACENT TO THE WORK. TWO WEEKS PRIOR TO COMMENCING WORK, SUCH SPACES ARE TO REMAIN OCCUPIED DURING DEMOLITION AND ALL WORK SHALL BE PERFORMED IN SUCH A MANNER TO MINIMIZE DISRUPTION TO OCCUPIED SPACES. EXISTING FLOOR, WALL AND CEILING FINISHES TO REMAIN SHALL BE PROTECTED AND ANY DAMAGE DONE AS A RESULT OF DEMOLITION WORK SHALL BE REPAIRED.
- WHERE NEW FINISHES ARE CALLED FOR, REMOVE AND DISCARD EXISTING FLOORING, CEILINGS AND WALL COVERING THROUGHOUT AREA DESIGNATED FOR NEW CONSTRUCTION AND PREP EXISTING FLOOR AND WALL SUBSTRATE TO RECEIVE THE INSTALLATION OF NEW FINISH AS SCHEDULED.
- SEE NEW WORK PLAN FOR REPAIR AND PREPARATION OF ADJACENT SURFACES.
- WHERE CEILING IS TO REMAIN, REMOVE ALL DAMAGED CEILING PANELS/ TILES AND REPLACE WITH NEW TO MATCH EXISTING.
- REMOVE EXISTING PLUMBING FIXTURES AS NOTED. CAP ALL SUPPLY AND WASTE LINES AS REQUIRED. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
- THE CONTRACTOR SHALL PATCH TO MATCH ADJACENT SURFACES OF EXISTING WALLS, FLOOR, AND CEILINGS IN ALL AREAS THAT REQUIRE THE REMOVAL OF GENERAL MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION WORK AND OF EQUIPMENT AND FIXTURES.
- IF REMOVAL OR ABANDONMENT OF UTILITY SERVICES WILL AFFECT ADJACENT OCCUPIED BUILDINGS, THEN PROVIDE TEMPORARY UTILITIES THAT BYPASS BUILDINGS AND STRUCTURES TO BE DEMOLISHED AND THAT MAINTAIN CONTINUITY OF SERVICE TO OTHER BUILDINGS AND STRUCTURES.
- REFER TO MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION DRAWINGS FOR WORK REQUIRED FOR NEW CONSTRUCTION.
- REMOVE, CAP OFF, AND RELOCATE MECHANICAL AS REQUIRED ELECTRICAL DEVICES, TELEPHONE AND COMMUNICATION LINES, AND PLUMBING LINES WHICH OCCUR IN CONSTRUCTION BEING REMOVED UNLESS NOTED OTHERWISE. OPERATION OF REMAINING SYSTEMS SHALL CONTINUE UNINTERRUPTED EXCEPT AS REARRANGED WITH FACILITIES.
- WHERE EXISTING WALLS, CEILINGS, OR FLOORS ARE DAMAGED BY THE CONTRACTOR FOR ACCESS TO SERVICES AND NEW CONSTRUCTION WHICH MAY NOT BE INDICATED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE TO PATCH TO MATCH MATERIAL AND FINISHES TO ORIGINAL CONDITIONS. IF EXISTING FINISHES CANNOT BE MATCHED, THE ENTIRE WALL, CEILING, OR FLOOR SHALL BE REFINISHED TO THE NEAREST CORNER OR POSITIVE BREAKING POINT.
- WHEN DEMOLITION CAUSES DAMAGE TO FLOOR SLAB, WALL, OR CEILING SURFACES WHICH WILL REMAIN EXPOSED IN THE FINISHED WORK, SUCH CONDITIONS SHALL BE REPAIRED AND LEVELED AS REQUIRED TO RECEIVE NEW FINISHES.
- WHEN DEMOLITION EXPOSES DAMAGE TO FLOOR SLAB, WALL, OR CEILING SURFACES WHICH WILL REMAIN EXPOSED IN THE FINISHED WORK, SUCH CONDITIONS SHALL BE REPORTED TO THE ARCHITECT AND OWNER WITH A RECOMMENDATION FOR RESOLUTION OF THE CONDITIONS.
- CLEAN AIR GRILLES AND LIGHT FIXTURES THROUGHOUT PROJECT AREA UPON COMPLETION OF WORK.
- WHERE EXISTING PHONE, DATA, OR PHONE/DATA OUTLETS ARE REMOVED, THE CONTRACTOR SHALL USE EXTREME CARE IN PULLING WIRE THROUGH THE EXISTING CONDUITS, COIL AND WRAP ABOVE EXISTING CEILING FOR REUSE.
- WHERE EXTERIOR WALLS, WINDOWS, AND/OR DOORS ARE BEING REMOVED, THE CONTRACTOR WILL BE RESPONSIBLE TO CONSTRUCT TEMPORARY PARTITIONS AS REQUIRED TO ENSURE THAT THE EXISTING BUILDINGS REMAIN WATER/TIGHT, SECURE, AND WITHOUT DRAFTS DURING DEMOLITION WORK. THESE PARTITIONS SHALL REMAIN IN PLACE DURING THE NEW CONSTRUCTION WORK, OR AS REQUIRED TO MAINTAIN THIS SEPARATION.
- PROVIDE SHORING AND BRACING AS REQUIRED DURING DEMOLITION AND CONSTRUCTION TO PRESERVE STABILITY, PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF STRUCTURE AND PROTECT ANY ADJACENT CONSTRUCTION THAT IS TO REMAIN.

DEMOLITION LEGEND



KEYNOTES - DEMO PLAN

NUMBER	COMMENTS
1	REMOVE PORTION OF WALLS TO COORDINATION WITH NEW CONSTRUCTION
2	CAREFULLY REMOVE EXISTING DOOR AND FRAME, SALVAGE TO OWNER
3	

**A2 FLOOR PLAN**
1/4" = 1'-0"

FFE SCHEDULE

TYPE MARK	DESCRIPTION	RESPON SIBILITY	COMMENTS
A1131	BASKET	OF/OI	
A5075	DISPENSER, SOAP	OF/OI	
A5077	DISPENSER, HAND SANITIZER	OF/OI	BLOCKING AS REQUIRED, RE: SPECS.
A5082	PAPER TOWEL	OF/OI	BLOCKING AS REQUIRED, RE: SPECS.
A5107	GLOVE DISPENSER, 3 HOLE	OF/OI	BLOCKING AS REQUIRED, RE: SPECS.
A5108	SHARPS, WALL MOUNTED	OF/OI	BLOCKING AS REQUIRED, RE: SPECS.
A5145	GARMENT HOOK	OF/OI	BLOCKING AS REQUIRED, RE: SPECS.
A5180a	CUBICLE CURTAIN TRACK	OF/OI	
A5180b	CUBICLE CURTAIN	OF/OI	
E0948	STORAGE CART	OF/OI	
F2036	CHAIR, FOLDING, WALL MOUNTED	OF/OI	BLOCKING AS REQUIRED, RE: SPECS.
F2017	WASTE RECEPTACLE	OF/OI	
F2001	CLOCK	OF/OI	
M0506	MONITOR, TELEVISION	OF/OI	PROVIDE IN-WALL BLOCKING, POWER & CABLE REQUIRED, RE: MEP. COORDINATE BRACKET TYPE WITH OWNER.
M0508	HELLO CARE SYSTEM	OF/OI	POWER REQUIRED, RE: MEP.
M1803	WORKSTATION, WALL MOUNTED	OF/OI	BLOCKING AS REQUIRED, RE: SPECS. POWER & DATA REQUIRED, RE: MEP.
M1830	PRINTER, LABEL	OF/OI	POWER & DATA REQUIRED, RE: MEP. PROVIDE ERGOTRON SHELF IN FAST TRACK ROOM.
M3070	LINEN HAMPER	OF/OI	
M4200	OTOSCOPE	OF/OI	BLOCKING AS REQUIRED, RE: SPECS. POWER REQUIRED, RE: MEP.
M7010	BED, PATIENT, ELECTRIC	OF/OI	POWER REQUIRED, RE: MEP.
M7845	MONITOR, VITALS	OF/OI	BLOCKING AS REQUIRED, RE: SPECS. POWER & DATA REQUIRED, RE: MEP.
M8810	MAYO STAND	OF/OI	
U001	SIGNAGE	OF/OI	
U002	SIGNAGE	OF/OI	
U003	SIGNAGE	OF/OI	

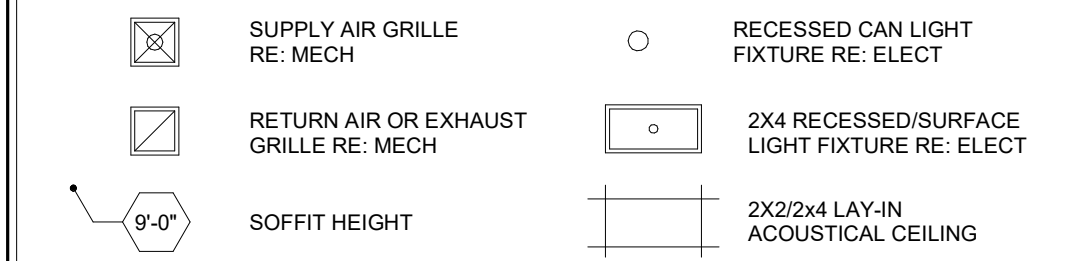
GENERAL EQUIPMENT NOTES

- FOR ALL OFCI ITEMS, CONTRACTOR TO COORDINATE FINAL EQUIPMENT LOCATION WITH OTHERS.

REFLECTED CEILING NOTES

- EXISTING MEFP DEVICES SHOWN ARE BASED ON EXISTING DRAWINGS AND/OR FIELD OBSERVATIONS. THE OWNER/ARCHITECT DOES NOT GUARANTEE THE ACCURACY/LOCATION OR QUANTITY OF EXISTING DEVICES.
- CONTRACTOR TO PROVIDE ALL REQUIRED LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO MEET AND COMPLETE THE REQUIREMENTS OF THE NEW CONSTRUCTION.
- ALL EXISTING CONSTRUCTION TO REMAIN SHALL BE PATCHED, REPAIRED, AND PREP AS REQUIRED FOR NEW FINISH APPLICATION.
- THIS PLAN SHALL BE USED TO COORDINATE THE CEILING LAYOUT WITH MECHANICAL AND ELECTRICAL WORK. VERIFY THE EXACT QUANTITY REQUIRED.
- CONTRACTOR TO REFER TO THE ELECTRICAL PLANS FOR ACTUAL LIGHTING SIZES AND FIXTURE TYPES.
- SEE SPECIFICATIONS AND FINISH SCHEDULE FOR CEILING TYPES.
- REFER TO FINISH FLOOR PLANS FOR MATERIAL LEGEND OF ALL TYPES.
- ALL CEILINGS SHALL BE 9'-0" AFF UNLESS OTHERWISE NOTED.
- REPLACE ANY DAMAGED CEILING TILES.

CEILING LEGEND



KEYNOTES - RCP

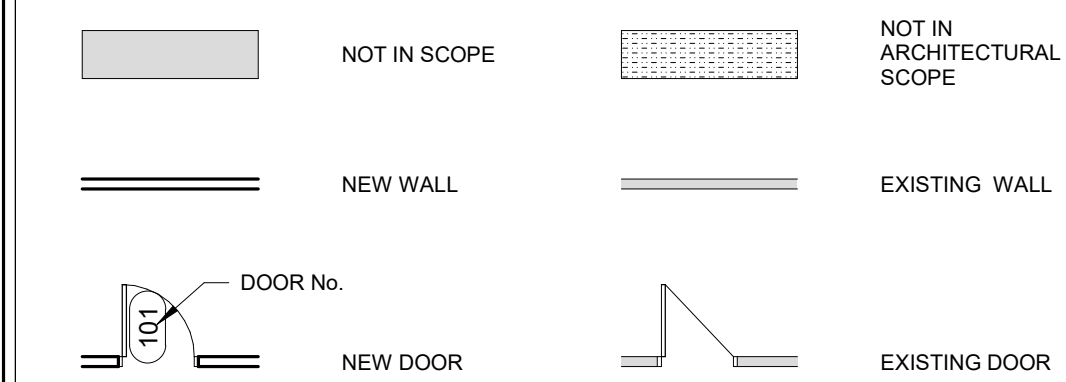
NUMBER	COMMENTS
1	EXTEND GRID AND INSTALL NEW CEILING TILES TO MATCH EXISTING.

GENERAL PLAN NOTES

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH A.D.A. REQUIREMENTS AND ALL APPLICABLE LOCAL, STATE, AND FEDERAL BUILDING CODES AND REGULATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY BUILDING PERMITS.
- THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY THE ARCHITECT OF ANY INCONSISTENCIES OR DISCREPANCIES WITH THE PROJECT DOCUMENTS. ACCESS TO THE SITE AND/OR SPACE UNDER CONSTRUCTION DURING BIDDING AND CONSTRUCTION SHALL BE COORDINATED WITH THE OWNER.
- IF MATERIAL SUSPECTED OF CONTAINING HAZARDOUS MATERIALS ARE ENCOUNTERED, DO NOT DISTURB. IMMEDIATELY NOTIFY ARCHITECT AND OWNER. OWNER SHALL COORDINATE WITH CONTRACTOR ON THE REMOVAL OF SUCH ITEMS. WORK MAY PROCEED AFTER HAZARDOUS MATERIAL HAS BEEN REMOVED.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING AND CONFIRMING ALL SUBSTRATE CONDITIONS WHERE NEW MATERIALS ARE APPLIED. THE SUBSTRATE SHALL BE SMOOTH AND FREE OF DEFECTS AND SHALL CONFORM TO THE REQUIREMENTS OF THE FINISHED MATERIAL MANUFACTURERS RECOMMENDATIONS.
- CONTRACTOR SHALL FURNISH AND INSTALL CONCEALED FIRE-TREATED WOOD BLOCKING BEHIND ALL CABINETS, TOILET ACCESSORIES, PLUMBING FIXTURES, AND OTHER WALL MOUNTED ITEMS AS REQUIRED FOR ADEQUATE SUPPORT.
- CONTRACTOR TO PROVIDE ALL REQUIRED LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO MEET AND COMPLETE THE REQUIREMENTS OF THE NEW CONSTRUCTION.
- ALL EXISTING CONSTRUCTION TO REMAIN SHALL BE PATCHED, REPAIRED, AND PREP AS REQUIRED FOR NEW FINISH APPLICATION.
- DO NOT CLOSE OR OBSTRUCT WALKWAYS, EXITS, OR OTHER FACILITIES USED BY OCCUPANTS OF BUILDINGS WITHOUT WRITTEN PERMISSION FROM AUTHORITIES HAVING JURISDICTION.
- CONDUCT ALL OPERATIONS IN A SAFE WORKING MANNER TO PREVENT DAMAGE OR INJURY TO ADJACENT SPACES, BUILDING, STRUCTURE, OTHER FACILITIES, AND PERSONS.
- REFER TO GENERAL NOTES, LEGENDS & SYMBOLS SHEET F FOR ADDITIONAL GENERAL NOTES AS APPLICABLE.
- SEE FINISH SCHEDULE FOR FINISH LOCATION AND SPECIFICATIONS.
- SEE DOOR SCHEDULE FOR DOOR SPECIFICATIONS.

- REMODEL/RENOVATION NOTES**
- THE CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY ARCHITECT OF ANY INCONSISTENCIES OR DISCREPANCIES WITH THE PROJECT DOCUMENTS. ACCESS TO THE SITE AND/OR SPACE UNDER CONSTRUCTION DURING BIDDING AND CONSTRUCTION SHALL BE COORDINATED WITH THE OWNER.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING AND CONFIRMING ALL SUBSTRATE CONDITIONS WHERE NEW MATERIALS ARE APPLIED. THE SUBSTRATE SHALL BE SMOOTH AND FREE OF DEFECTS AND SHALL CONFORM TO THE REQUIREMENTS OF THE FINISHED MATERIAL MANUFACTURERS RECOMMENDATIONS.
 - UPON VERIFICATION OF THE EXISTING CONDITIONS, THE CONTRACTOR SHALL DETERMINE AND RECOMMEND THE BEST ACTION TO MINIMIZE THE EXTENT OF REMOVAL WORK FOR INSTALLATION OF NEW WORK.
 - ALL EXISTING CONSTRUCTION TO REMAIN SHALL BE PATCHED, REPAIRED, AND PREPPED AS REQUIRED FOR NEW FINISH APPLICATION.

FLOOR PLAN LEGEND



KEYNOTES - FLOOR PLAN

NUMBER	COMMENTS
1	COVER EXISTING WINDOW WITH NEW GYP BOARD AND METAL STUD CONSTRUCTION TO MATCH ADJACENT WALL THICKNESS. PROVIDE BLACKED-OUT PANEL AT WINDOW SYSTEM TO BLOCK OUT VIEW OF WALL CONSTRUCTION
2	PAINT WALLS ALONG LENGTH OF CORRIDOR. Tie NEW CEILING GRID INTO EXISTING CEILING SYSTEM
3	NEW FLOORING AND BASE TIED INTO EXISTING. MATCH FINISHES
4	NEW SPANEL ICU SLIDING DOORS, ALTERNATE WITH INTEGRAL BLINDS

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Saint Luke's East ED Patient Treatment Renovation

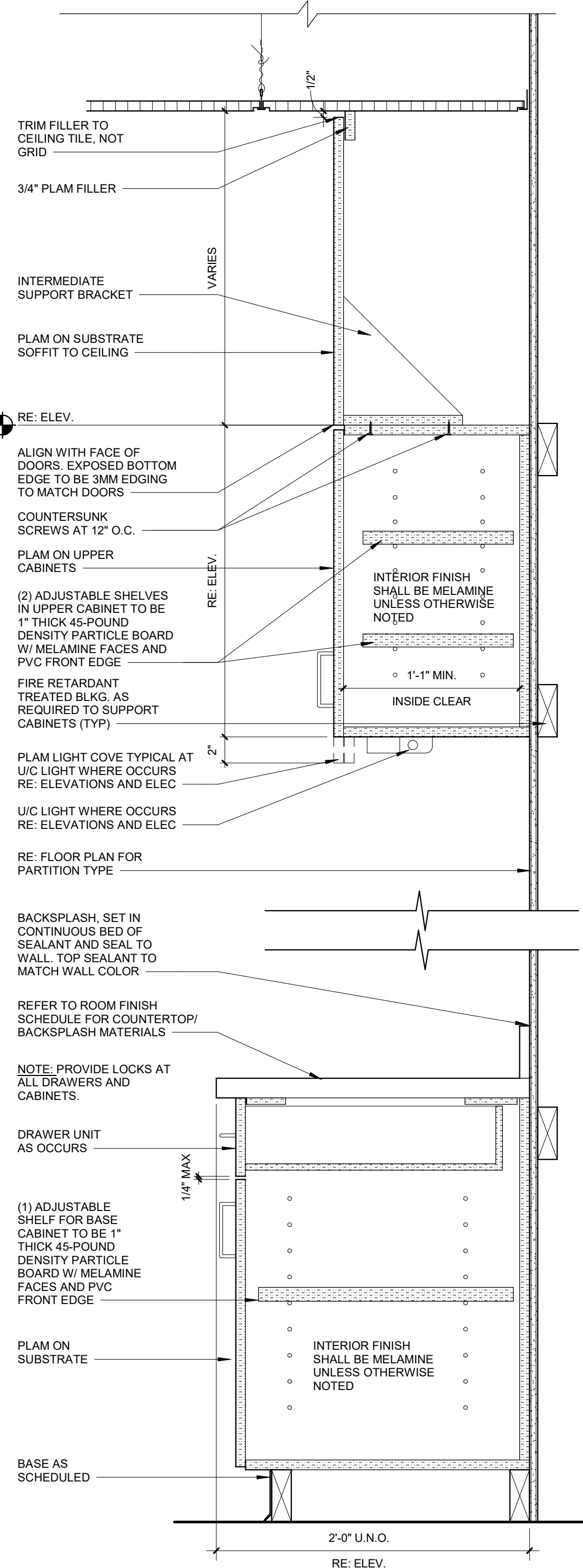
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Lee's Summit, MO 64086

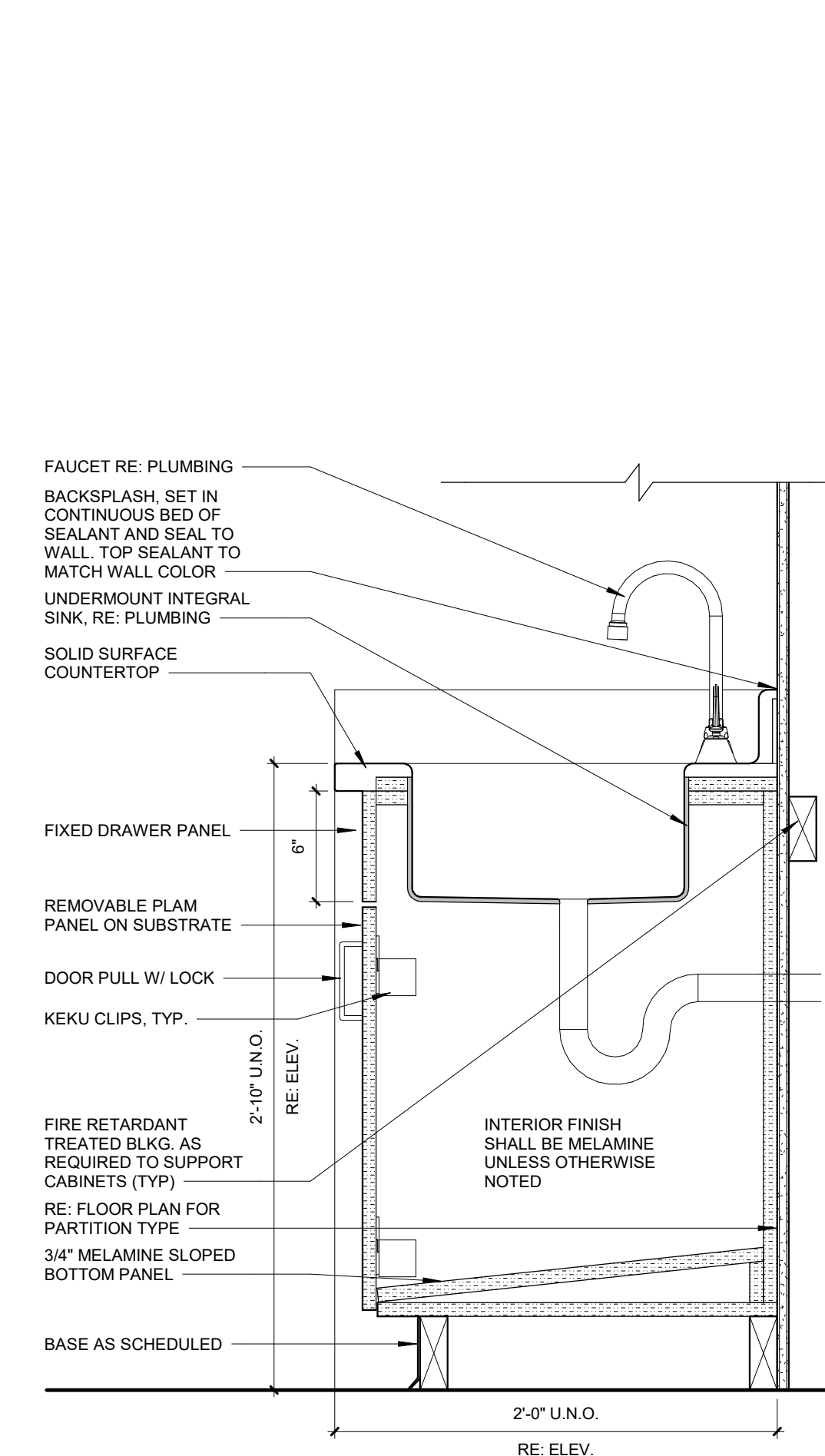
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Job Number 3-24016
Drawn By CN
Checked By BDRevision
Number Date Description**A211**

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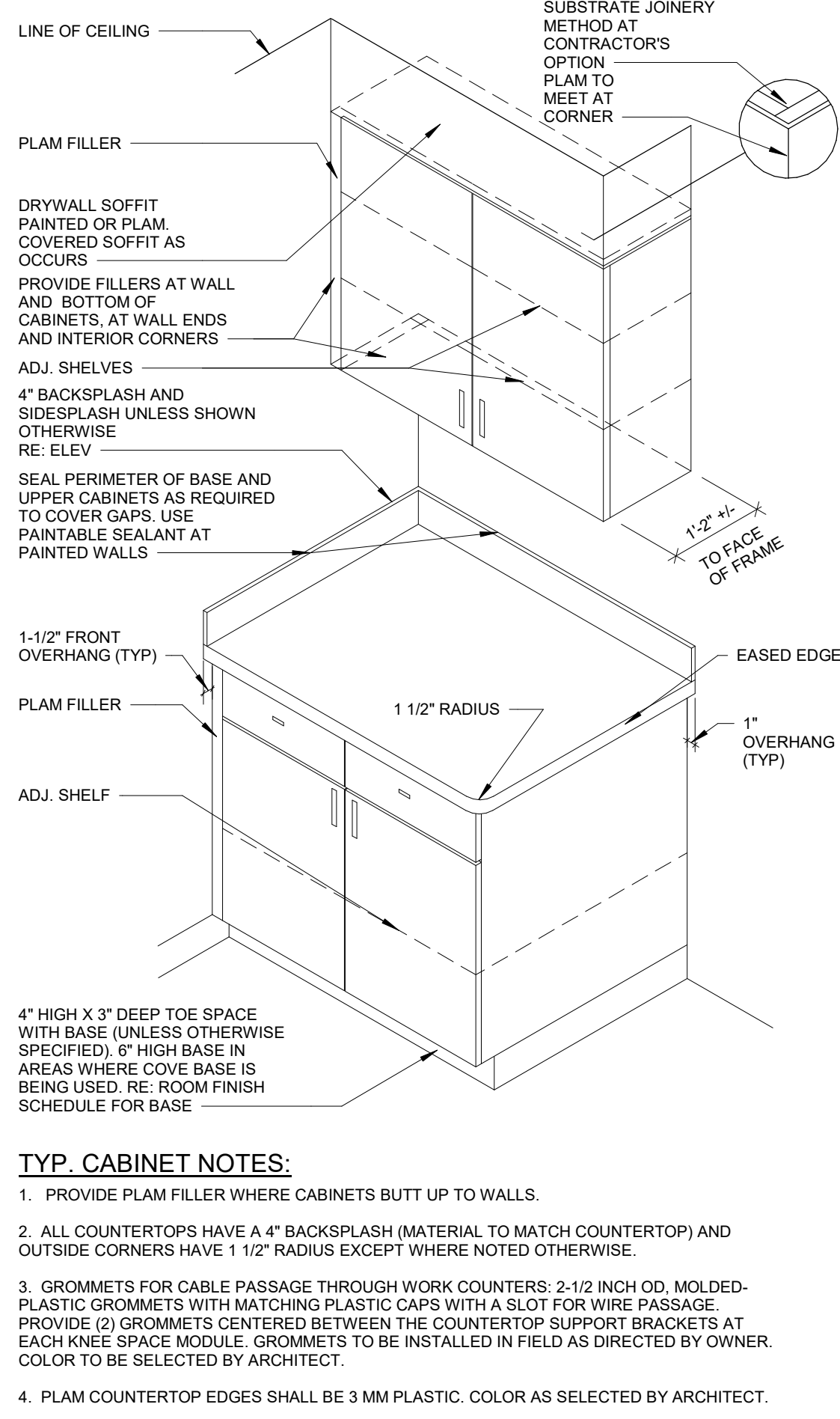
OVERALL FLOOR PLAN, RCP, DEMO,
AND ELEVATIONS



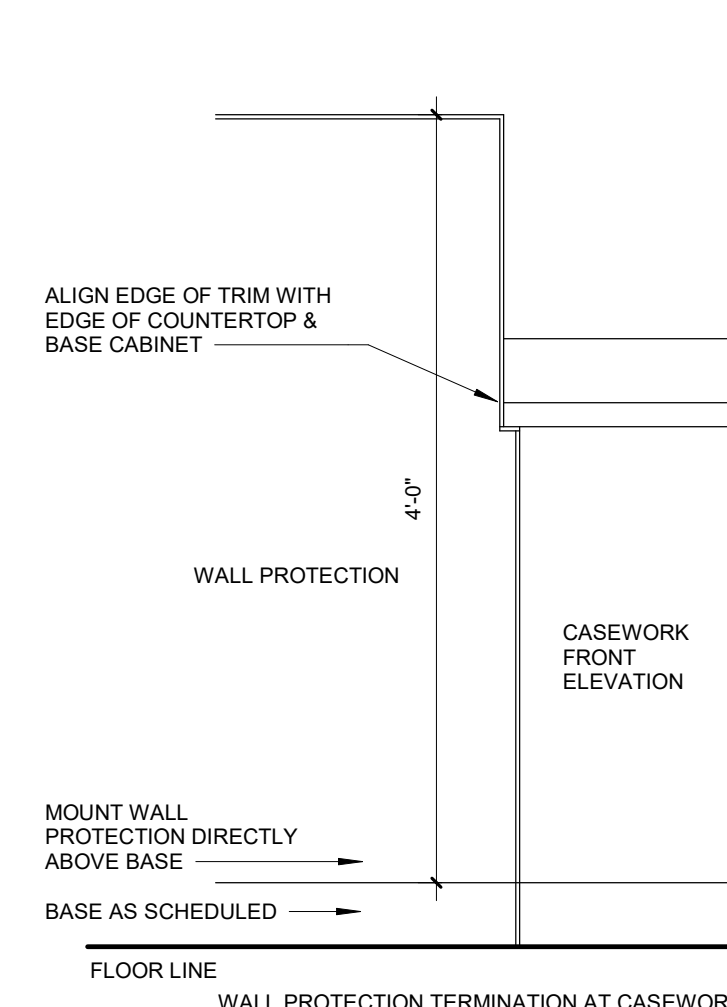
C6 DETAIL AT CASEWORK
1 1/2" = 1'-0"



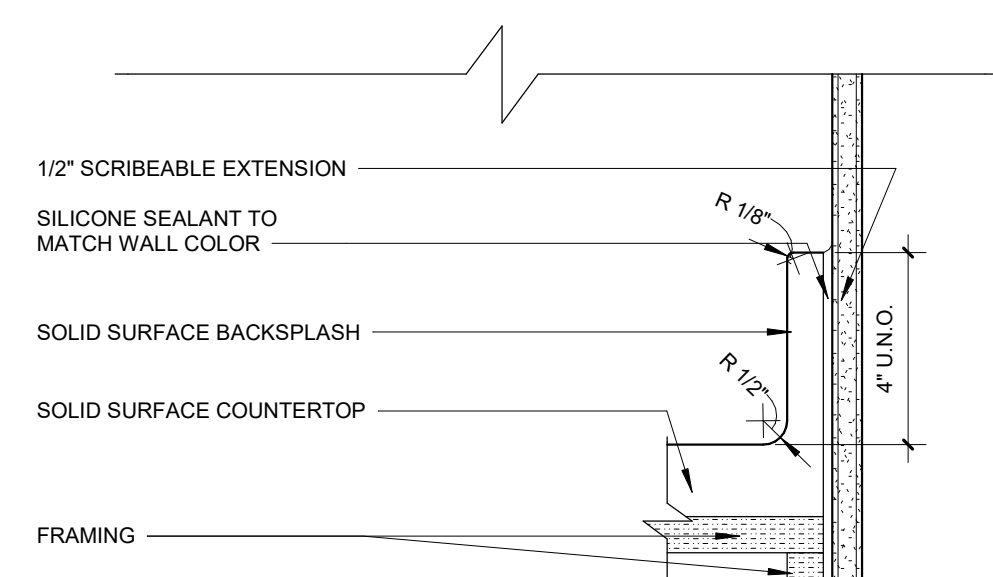
C5 DETAIL AT SINK BASE CABINET - SOLID SURFACE
1 1/2" = 1'-0"



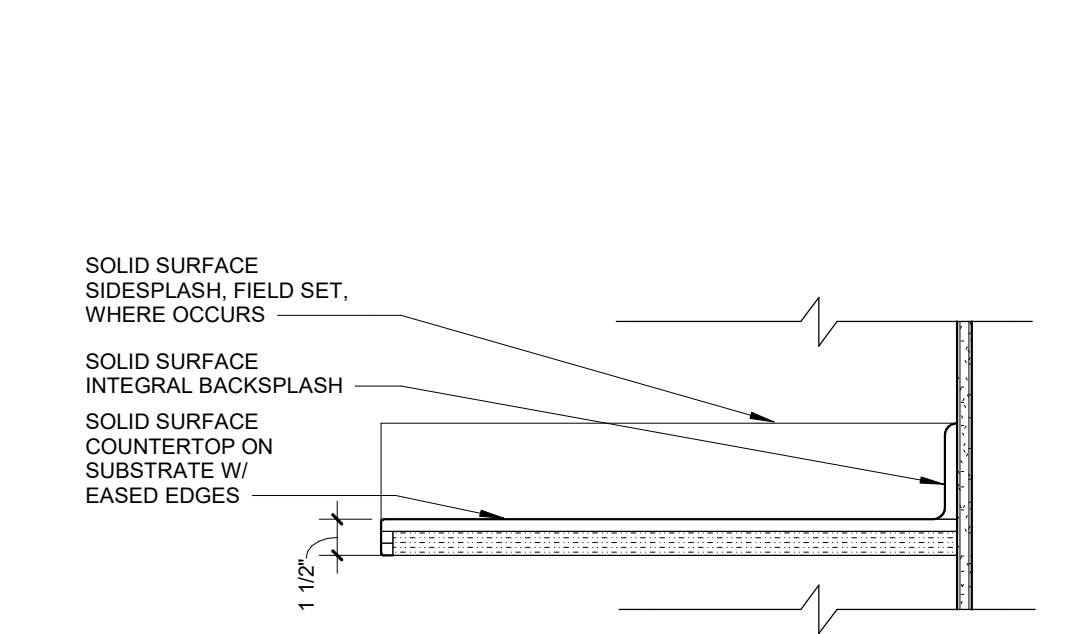
C4 CASEWORK ISOMETRIC
1 1/2" = 1'-0"



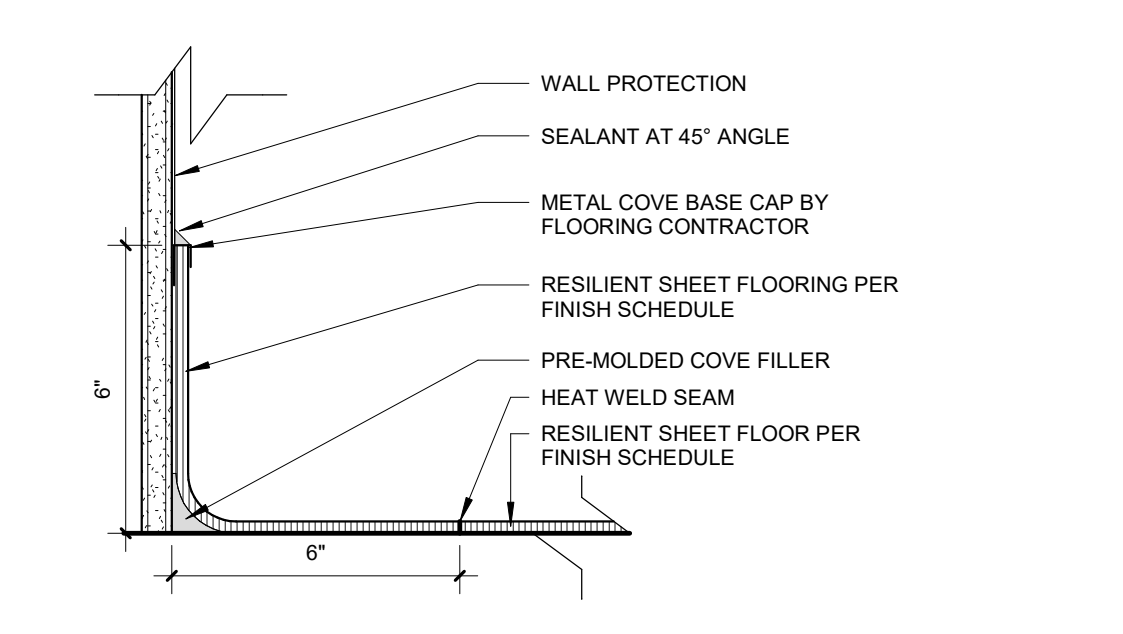
B6 TYP- ELEV- OF WALL PROTECTION-CORNER GUARD
1" = 1'-0"



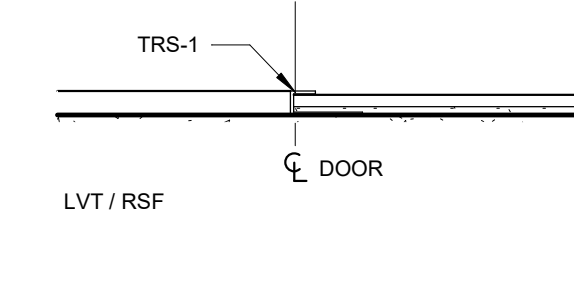
A6 DETAIL AT SOLID SURFACE BACKSPLASH
3" = 1'-0"



A5 TYPICAL SOLID SURFACE COUNTERTOP
1 1/2" = 1'-0"



A4 DETAIL AT SHEET FLOORING COVE BASE TERMINATION & TRANSITION
3" = 1'-0"



A3 TRANSITION STRIP DETAILS
6" = 1'-0"

GENERAL CASEWORK NOTES	
1.	GENERAL CASEWORK NOTES APPLY TO ALL INTERIOR ELEVATIONS.
2.	PROVIDE 3 MM PVC EDGE BANDING ON COUNTERTOP EDGE AND (218 MIN.) VINYL EDGING ON DRAWER AND DOOR EDGES UNLESS NOTED OTHERWISE. EDGE BANDING TO MATCH ADJACENT PLAM SURFACE.
3.	ALL EXPOSED FACES AND SHELVES TO BE WRAPPED WITH PLAM UNLESS NOTED OTHERWISE.
4.	ALL INTERIOR SURFACES TO BE WHITE MELAMINE UNLESS NOTED OTHERWISE.
5.	PROVIDE WOOD BLOCKING OR 12" HIGH X 16 GA. CONTINUOUS SHEET METAL BRIDGING IN WALL AS REQUIRED FOR ADEQUATE SUPPORT OF ALL CASEWORK.
6.	WALL BASE TO BE INSTALLED ON ALL CASEWORK UNLESS NOTED OTHERWISE. REFER TO FINISH SCHEDULE FOR TYPE.
7.	"P" INDICATES FILLER PANEL, 1-1/2" MIN.
8.	"EP" INDICATES END PANEL, 1-1/2" MIN.
9.	PROVIDE FINISHED ENDS AT ALL EXPOSED ENDS OF CASEWORK.
10.	ALL ELECTRICAL, MECHANICAL, AND PLUMBING ITEMS SHOWN IN ELEVATION ARE FOR REFERENCE AND LOCATION ONLY. REFER TO MEP DRAWINGS FOR SIZES, TYPES AND QUANTITIES.
11.	ALL SOFFITS ABOVE CASEWORK TO BE PLAM UNLESS NOTES OTHERWISE.

FINISH FLOOR PLAN LEGEND	
---	WALL TREATMENT
---	FLOOR TRANSITION
---	CORNER GUARD
---	FLOOR FINISH DIRECTION
1.	FOR ALL FLOORING TRANSITIONS, REFER TO TYPICAL TRANSITION DETAILS ON SHEET A700, UNLESS OTHERWISE NOTED ON THIS PLAN.
2.	THIS FINISH PLAN IS TO BE USED FOR ADDITIONAL LOCATION CLARIFICATION OF FINISHES NOTED IN FINISH SCHEDULE.

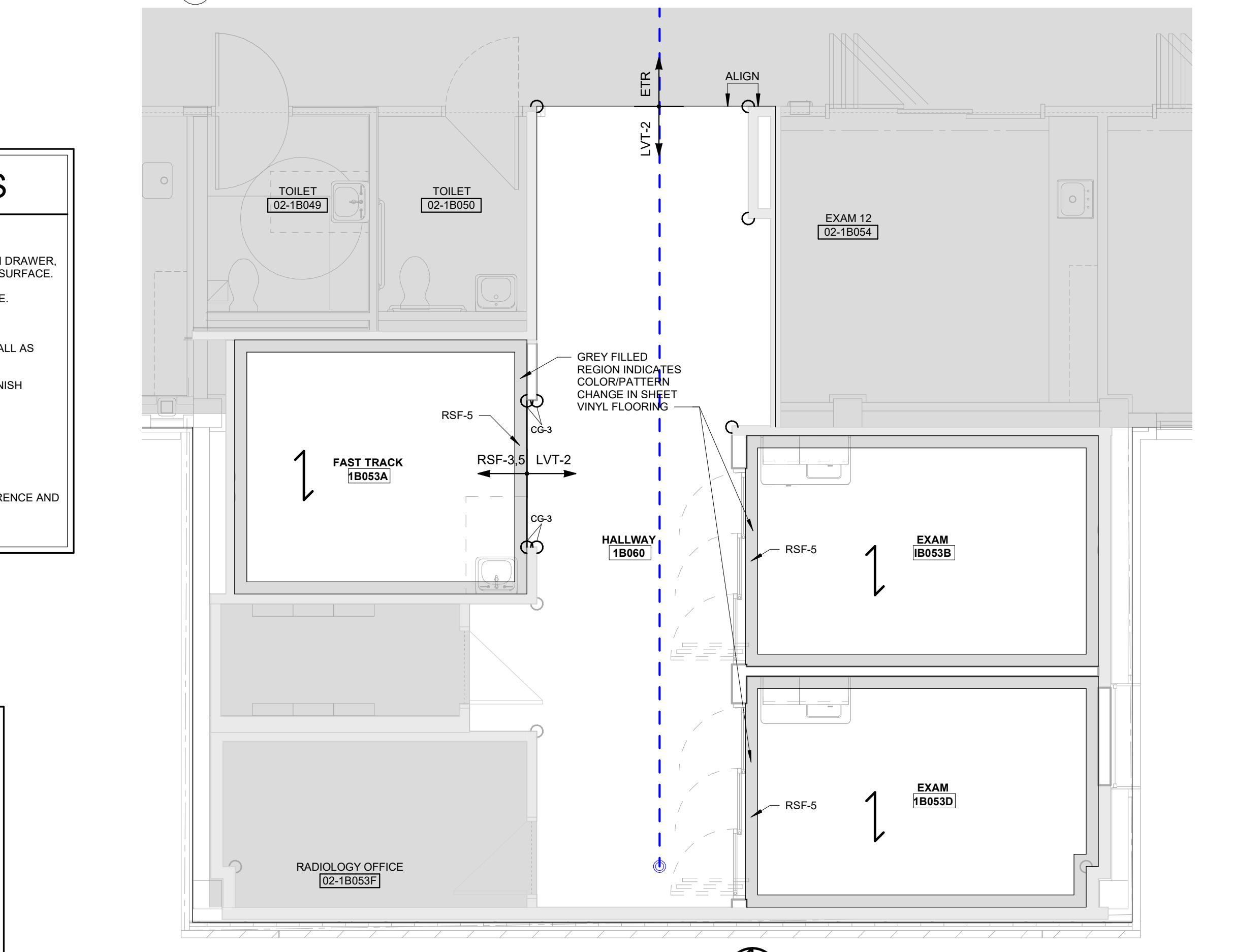
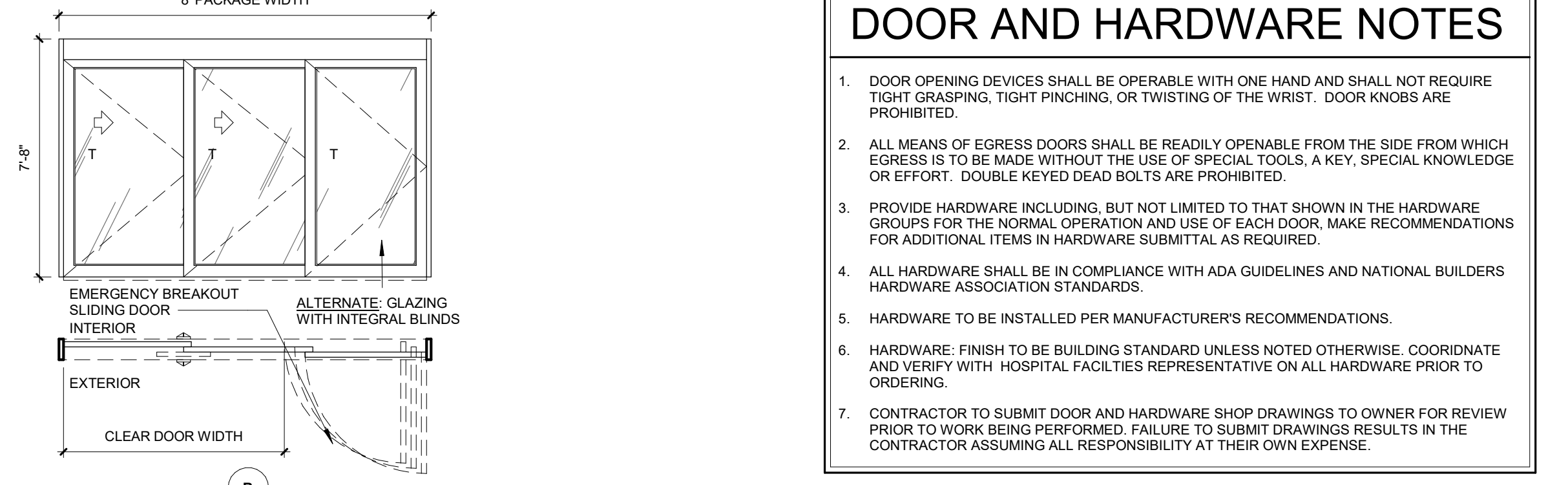
INTERIOR FINISH LEGEND						
MARK	ITEM	MANUFACTURER	MODEL/ PATTERN	COLOR	SIZE	REMARKS
FLOOR						
LVT-2	LUXURY VINYL TILE	MANNINGTON	AMTICO STONE	CORINTHIAN MARBLE AROSTV13	18" X 18"	STRAIGHT EDGE ONLY. ASHLAR INSTALLATION.
RSF-5	RESILIENT SHEET FLOORING	SHAW CONTRACT	NATURELIFE WOOD II 002V	VINTAGE HICKORY 09655	6'-0" ROLL	MATCHING WELD ROD. HETEROGENEOUS FLOORING.
RSF-5	RESILIENT SHEET FLOORING	MOHAWK	MEDELLA HUES	H5422 WALNUT	6'-0" ROLL	MATCHING WELD ROD. HOMOGENEOUS FLOORING.
TRS-1	TRANSITION STRIP	SCHLUTER	VINPRO S	BRUSHED CHROME ANODIZED ALUMINUM	-	RE: FLOORING TRANSITION DETAILS
BASE						
IB-S	INTEGRAL BASE	MOHAWK	MEDELLA HUES	H5422 WALNUT	8" COVE	JMOLD SCHLUTER STRIP AT THE TOP.
RB-1	RESILIENT BASE	ROPP	PINNACLE PLUS, PROFILE #65	#129 DOLPHIN	4.5/8"	
WALL						
CG-1	CORNER GUARDS	C/S ACROVYN	SM-20AN-ACROVYN-4000	#933 MISSION WHITE	3"	90 DEGREE, ABOVE BASE TO 48" AFF
PT-1	PAINT	SHERWIN WILLIAMS	EGGSHELL FINISH	SW7008 ALABASTER	-	FIELD PAINT
PT-4	PAINT	SHERWIN WILLIAMS	SEAM-GLOSS FINISH	SW7008 ANONYMOUS	-	ALL HOLLOW METAL DOOR AND WINDOW FRAMES
PT-8	PAINT	SHERWIN WILLIAMS	EGGSHELL FINISH	SW7621 SILVERMIST	-	ACCENT PAINT
WP-2	WALL PROTECTION	C/S ACROVYN	ACROVYN 4000	#933 MISSION WHITE	4" X 10" SHEETS, .040" THICK	WALL PROTECTION AT 48" AFF. INCLUDE ALL ACCESSORIES AND TRIM PIECES
CASEWORK						
IB-S	INTEGRAL SINK	WILSONART	AK1413 SQUARE	DESIGNER WHITE	17" X 15-3/8" X 14-3/4"	-
PLAM-1	PLASTIC LAMINATE	WILSONART	#766K-12	WALNUT HEIGHTS	-	CUSTOM 3MM PVC DOELLEN WALNUT HEIGHTS 870TES, RUN VERTICALLY.
SSF-1	SOLID SURFACE	WILSONART	9199MG	PEARL MIRAGE	1/2"; 30" X 144" SHEET, 36" X 144" SHEET	
CEILING						
ACT-1	ACOUSTIC CEILING TILE	USG	RADAR CLIMA PLUS #2210	WHITE	2' X 2'	SQUARE EDGE, DOWN DX TEE 15/16" GRID SYSTEM
MISC						
CCT-1	CUBICLE CURTAIN TRACK	INPRO CORPORATION	OPTITRAC CUBICLE TRACK	WHITE	1-1/2" X 3/4"	INCLUDE ALL TRACK AND CARRIER ACCESSORIES.
ETR	EXISTING TO REMAIN	-	-	-	-	

ROOM FINISH SCHEDULE									
ROOM NUMBER	ROOM NAME	FLOOR FINISH	BASE FINISH	NORTH	EAST	WEST	BASE CABINETS	WALL CABINETS	REVISION #
1B03A	FAST TRACK	RSF-5.5	IB-S	WP-2 / PT-1	WP-2 / PT-1	WP-2 / PT-1	PLAM-1	PLAM-1	2
1B03D	EXAM	RSF-3.5	IB-S	WP-2 / PT-1	WP-2 / PT-1	WP-2 / PT-1	PLAM-1	PLAM-1	2
1B060	HALLWAY	LVT-2	RB-1	WP-2 / PT-1	WP-2 / PT-1	WP-2 / PT-1	PLAM-1	PLAM-1	1
1B05B	EXAM	RSF-3.5	IB-S	WP-2 / PT-1	WP-2 / PT-1	WP-2 / PT-1	PLAM-1	PLAM-1	2

GENERAL ROOM FINISH SCHEDULE NOTES									
A.	REFER TO FINISH PLAN AND INTERIOR ELEVATIONS FOR WALL FINISHES, WALL PROTECTION, CORNER GUARDS, WINDOW TREATMENTS, FLOOR FINISH APPLICATION AND LOCATIONS.								
B.	ALL SOLID WOOD, WOOD VENEER, AND PLASTIC LAMINATE GRASS SHALL BE VERTICALLY ORIENTED UNLESS OTHERWISE NOTED.								
C.	DOOR FRAMES, HOLLOW METAL WINDOW FRAMES TO BE PT-1 UNLESS OTHERWISE NOTED.								
D.	WALL EXPANSION JOINTS TO BE PT-1 UNLESS OTHERWISE NOTED.								
E.	ALL ELECTRICAL PANELS AND METAL GRILLES SHALL BE PT-1 TO MATCH ADJACENT WALL SURFACE UNLESS OTHERWISE NOTED.								
F.	ALL COLUMNS SURROUND FINISHES TO MATCH ADJACENT WALL SURFACE UNLESS OTHERWISE NOTED.								
G.	WHERE A WALL IS INDICATED TO HAVE PARTIAL OR FULL HT WALL PROTECTION, THE ENTIRE WALL IS TO BE PT-1 PRIOR TO WALL PROTECTION INSTALLATION.								
H.	EXTEND ALL FINISHES BENEATH, BEHIND, AROUND ALL CASEWORK, EQUIPMENT, SIGNAGE, ETC.								
I.	SUBMIT SAMPLES OF ALL FINISHES TO ARCHITECT FOR REVIEW PRIOR TO THE ORDERING OF MATERIAL.								
J.	NO IRREGULARITIES OR IMPERFECTIONS SHALL BE PRESENT IN ANY OF THE MATERIAL BEING INSTALLED. IF SUCH ITEMS ARE IDENTIFIED DURING APPLICATION, WORK SHALL BE STOPPED AND THE ARCHITECT NOTIFIED.								
K.	PROVIDE ALL MAINTENANCE MANUALS AND WARRANTY INFORMATION FOR EACH FINISH MATERIAL TO OWNER AT COMPLETION OF THE PROJECT.								
L.	FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO COMPLETE WORK OF FINISH APPLICATIONS.								
M.	ALL FINISHES SHALL BE INSTALLED AND MAINTAINED PER MANUFACTURER'S RECOMMENDATION AND INDUSTRY STANDARDS.								
N.	THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING AND CONFIRMING ALL SUBSTRATE CONDITIONS WHERE NEW MATERIALS ARE APPLIED. SUBSTRATE SHALL BE SMOOTH, FREE OF DEFECTS AND SHALL CONFORM TO THE REQUIREMENTS OF THE FINISHED MATERIAL MANUFACTURER'S RECOMMENDATIONS.								
O.	ALL MATERIAL TO COMPLY WITH FLAME SPREAD CLASSIFICATION EITHER CLASS (1) ONE OR CLASS A DEPENDING ON GOVERNING CODE IN EFFECT.								
P.	SMOKE DEVELOPMENT RATING < 450 FOR ALL FINISHES.								

SPECIFIC ROOM FINISH SCHEDULE NOTES									
1.	THE FINISHES TO EXISTING AT CORRIDOR								
2.	RE: E4 / A700 FOR DIRECTION ON SHEET VINYL TRANSITION AND COVE BASE TERMINATION								

DOOR SCHEDULE									
DOOR #	ROOM NAME	DOOR INFORMATION	FRAME INFORMATION	HARDWARE	OPENING DETAIL	REMARKS	REV #		
02-1B03B	EXAM	8'-0" X 7'-5 3/4" 3 R ALUM	NO. OF LEAVES: 1 ELEV. MATL. GLAZING	SET	HEAD JAMB	STANLEY 8600. ALTERNATE: PROVIDE INTERIOR INTEGRAL BLINDS.			
02-1B03D	EXAM	8'-0" X 7'-5 3/4" 3 R ALUM	NO. OF LEAVES: 1 ELEV. MATL. GLAZING	SET	HEAD JAMB	STANLEY 8600. ALTERNATE: PROVIDE INTERIOR INTEGRAL BLINDS.			
02-1B03M	HALLWAY	6'-0" X 9'-0" 100% 28"	NO. OF LEAVES: 1 ELEV. MATL. GLAZING	SET	HEAD JAMB				



A2 FINISH PLAN
1/4" = 1'-0"

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Job Number 3-24016
Drawn By CN
Checked By BD

Revision
Number Date Description

A700
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INTERIOR FINISH PLAN, MATERIAL LEGENDS, SCHEDULES, AND DETAILS

MECHANICAL ABBREVIATIONS

Ø	ROUND DIAMETER	HTG	HEATING
ABV	ABOVE	IN	INCH
AC	AIR CONDITIONING	INV	INVERT
ADD	ADDENDUM	LB / (#)	POUND
AF	ABOVE FINISHED FLOOR	LBHR	POUNDS PER HOUR
AFMS	AIRFLOW MEASURING STATION	LWT	LEAVING WATER TEMPERATURE
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY	MAT	MIXED AIR TEMPERATURE
ALT	ALTERNATE	MAX	MAXIMUM
ARCH	ARCHITECT/ARCHITECTURAL	MBH	ONE THOUSAND BTU PER HOUR
BFF	BELOW FINISHED FLOOR	MC	MECHANICAL CONTRACTOR
BFG	BELOW FINISHED GRADE	MECH	MECHANICAL
BLW	BELOW	MFR	MANUFACTURER
BOD	BOTTOM OF DUCT ELEVATION ABOVE FLOOR	MIN	MINIMUM
BOP	BOTTOM OF PIPE ELEVATION ABOVE FLOOR	MISC	MISCELLANEOUS
BOS	BOTTOM OF STEEL	MTR	MOTOR
BTU	BRITISH THERMAL UNITS	NCR	NOISE CRITERIA RATING
BTUH	BRITISH THERMAL UNITS PER HOUR	NC	NORMALLY CLOSED
CAP	CAPACITY	NO	NORMALLY OPEN
CFM	CUBIC FEET PER MINUTE	NTS	NOT TO SCALE
CI	CAST IRON	OB	OPPOSED BLADE DAMPER
CLG	CEILING	PC	PLUMBING CONTRACTOR
COP	COEFFICIENT OF PERFORMANCE	PD	PRESSURE DROP
CV	CONSTANT AIR VOLUME	PV	POST INDICATOR VALVE
DB	DECI BELS	PLBG	PLUMBING
DB	DRY BULB TEMPERATURE	PRESS	PRESSURE
DIA	DIAMETER	PVC	POLYVINYL CHLORIDE PIPE
DEMO	DEMOLISH	PSI	POUNDS PER SQUARE INCH
DN	DOWN	PSIG	POUNDS PER SQUARE INCH GAUGE
DP	DIFFERENTIAL PRESSURE	PWR	POWER
EA	EXISTING COMPONENT DESIGNATION	RH	RELOCATED COMPONENT DESIGNATION
EAT	ENTERING AIR TEMPERATURE	RM	ROOM
EC	ELECTRICAL CONTRACTOR	RPM	REVOLUTIONS PER MINUTE
ELEC	ELECTRICAL	SF	SQUARE FEET
ETR	EXISTING TO REMAIN	SP	STATIC PRESSURE
EQUIP	EQUIPMENT	STM	STEAM
EWT	ENTERING WATER TEMPERATURE	TCC	TEMPERATURE CONTROL CONTRACTOR
"F"	DEGREES FAHRENHEIT	TOD	TOP OF DUCT ELEVATION ABOVE FLOOR
FDC	FIRE DEPARTMENT CONNECTION	TOP	TEMPERATURE
FHC	FIRE HOSE CABINET	TEMP	TEMPERATURE
FLR	FLOOR	TYP	TYPICAL
FL	FLOW LINE	UG	UNDERGROUND
FOG	FUEL OIL GAUGE	VAV	VARIABLE AIR VOLUME
FOV	FUEL OIL VENT	VVT	VARIABLE VOLUME AND TEMPERATURE
FPM	FEET PER MINUTE	VCP	VITRIFIED CLAY PIPE
FT	FOOT/FEET	VENT	VENTILATION
GAL	GALLON	VFD	VARIABLE FREQUENCY DRIVE
GC	GENERAL CONTRACTOR	VTR	VENT THROUGH ROOF
GPM	GALLONS PER MINUTE	WB	WET BULB TEMPERATURE
HP	HORSE POWER		
HR	HOSE REEL		

COMPONENT ABBREVIATIONS

AC-#	AIR CONDITIONING UNIT	HWP-#	HEATING WATER PUMP
AD-#	AREA DRAIN	HWPP-#	HEATING WATER PRIMARY PUMP
AHU-#	AIR HANDLING UNIT	HWSP-#	HEATING WATER SECONDARY PUMP
AS-#	AIR SEPARATOR	HRU-#	HEAT RECOVERY UNIT
B-#	BOILER	IL-#	INDOOR UNIT
BF-#	BOTTLE FILLER	L-#	LOUVER
BT-#	BATH TUB	LV-#	LAVATORY
CH-#	CHILLER	MAU-#	MAKE-UP AIR UNIT
CRAC-#	COMPUTER ROOM AIR CONDITIONING UNIT	MB-#	MOP BASIN
CQ	CLEANOUT	MSS-#	MINI SPLIT SYSTEM
CT-#	COOLING TOWER	ORD	OVERFLOW ROOF DRAIN
CU-#	AIR COOLED CONDENSING UNIT	OU-#	OUTDOOR UNIT
CUH-#	CABINET UNIT HEATER	PRV	PRESSURE REDUCING VALVE
CWP-#	CHILLED WATER PUMP	RCP-#	RADIANT CEILING PANEL
CWSP-#	CHILLED WATER SECONDARY PUMP	RD	ROOF DRAIN
DWB-#	DOMESTIC WATER BOOSTER PUMP	RE-#	RETURN/RELIEF FAN
DF-#	DRINKING FOUNTAIN / WATER COOLER	RH-#	ROOF HOOD
DHW-#	DOMESTIC HOT WATER CIRCULATING PUMP	RHD-#	ROOF HYDRANT
EE-#	EMERGENCY EYE WASH	RLU-#	ROOF TOP UNIT
EF-#	EXHAUST FAN	SE-#	SUPPLY AIR FAN
EDH-#	ELECTRIC DUCT HEATER	SH-#	SHOWER
ES-#	EMERGENCY SHOWER	SK-#	SINK
ET-#	EXPANSION TANK	SUMP	SUMP PUMP
F-#	FURNACE	ST-#	STEAM TRAP
FCO	FLOOR CLEANOUT	TD	TRENCH DRAIN
FCL-#	FAN COIL UNIT	TMV-#	THERMOSTATIC MIXING VALVE
FD-#	FLOOR DRAIN	TUL-#	TERMINAL UNIT
FS-#	FLOOR SINK	UH-#	UNIT HEATER
FTU-#	FAN POWERED TERMINAL UNIT	UL-#	ULTRAVIOLET STERILE CONDITIONER
FP-#	FIRE PUMP	UV	WALL BOX (PLUMBING UTILITY)
ETR-#	FIN TUBE RADIATOR	WC-#	WATER CLOSET
GL-#	GREASE INTERCEPTOR	WH-#	WATER HEATER
H-#	HUMIDIFIER	WHD-#	WALL HYDRANT
HB-#	HOSE BIBB		

NOTE:
ALL GENERAL NOTES ON THIS SHEET ARE TO BE APPLIED TO ALL OTHER DRAWINGS IN THIS SET.
THE SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE USED IN THIS SET OF DRAWINGS.

GENERAL SYMBOLS

① ② ③	REFER TO PLAN NOTES
— — — — —	EXISTING COMPONENT PEN WEIGHT
— — — — —	DEMOLITION PEN WEIGHT - COMPONENT SHADED
ROOM 111	ROOM CALLOUT
— — — — —	AREA NOT IN SCOPE HATCHING
⚠	REVISION NUMBER
— — — — —	CONNECT NEW TO EXISTING - VERIFY EXACT LOCATION
— — — — —	DISCONNECT FROM EXISTING - VERIFY EXACT LOCATION
— — — — —	PIPE / DUCT CONTINUATION SYMBOL
5 M3.6	DETAIL NUMBER
— — — — —	SHEET NUMBER WHERE DRAWN
8 M3.6	SECTION LETTER
FC-01	UNIQUE I.D. (FAN COIL UNIT NO. 1) TYPICAL EQUIPMENT CALLOUT EQUIPMENT TYPE (FC=FAN COIL UNIT)

HVAC SYMBOLS

— — — — —	LOW VELOCITY SUPPLY AIR DUCT (SA)
— — — — —	MEDIUM VELOCITY SUPPLY AIR DUCT (MVSA)
— — — — —	RETURN AIR DUCT (RA)
— — — — —	EXHAUST AIR DUCT (EA)
— — — — —	OUTDOOR AIR DUCT (OA)
— — — — —	RELIEF AIR DUCT (RLF)
— — — — —	FLUE GAS DUCT (FG)
— — — — —	COMBUSTION AIR DUCT (CA)
✉ 24x12	(UP)DUCT SECTION, POSITIVE PRESSURE. FIRST SIZE IS TOP DIM.(TYP.)
24x12	(DOWN) DUCT SECTION, POSITIVE PRESSURE
24x12	(UP) DUCT SECTION, NEGATIVE PRESSURE
24x12	(DOWN) DUCT SECTION, NEGATIVE PRESSURE
	FLEXIBLE DUCT
	TURNING VANES
18x12	DUCT SIZE, FIRST IS SIDE SHOWN CLEAR INSIDE DIM.
— — — — —	DUCT CHANGE OF ELEVATION RISE(R) DROP(D)
— — — — —	FLEXIBLE CONNECTION
— — — — —	SIDE WALL SUPPLY REGISTER
— — — — —	BALANCE DAMPER - MANUAL LOCKING QUADRANT RECT: OPPOSED BLADE / ROUND: BUTTERFLY
— — — — —	BALANCE DAMPER - MOTORIZED LOCKING QUADRANT RECT: OPPOSED BLADE / ROUND: BUTTERFLY
FD + + + FD	FIRE DAMPER (FD) IN WALL / FLOOR
SD + + + SD	SMOKE DAMPER (SD) IN WALL / FLOOR
FSD + + + FSD	COMBO FIRE/SMOKE DAMPER (FSD) IN WALL / FLOOR
Ⓢ / Ⓣ	THERMOSTAT (TSTAT) / TEMPERATURE SENSOR
Ⓢ / Ⓜ	HUMIDISTAT (HSTAT) / HUMIDITY SENSOR
Ⓜ	PRESSURE SENSOR
Ⓜ	MOTOR
— — — — —	SUPPLY FLOW ARROW / RETURN FLOW ARROW
T1.1 (200)	EQUIPMENT CALLOUT EQUIPMENT AIRFLOW (CFM)
GRD CALLOUT SYMBOLS	
ROUND	MARK IN SCHEDULE SUPPLY DIFFUSER — SB10 — CONNECTION & RUNOUT SIZE (10"ø) CFM — 250 — ALT → SB10-250
RECTANGULAR	MARK IN SCHEDULE RETURN GRILLE — RB12x12 — CONNECTION & RUNOUT SIZE (12x12) CFM — 250 — ALT → RB12x12-250
SLOT	MARK IN SCHEDULE SLOT DIFFUSER — LSL8-2s — CONNECTION & RUNOUT SIZE (8"ø) CFM — 200 — NUMBER OF SLOTS ALT → LSL8-2s-200

SEISMIC RESTRAINTS:
THIS IS A LIFE SAFETY BUILDING WHICH MEANS IT SHALL REMAIN REASONABLY OPERATIONAL IN THE CASE OF A SEISMIC EVENT. THEREFORE ALL STATIONARY EQUIPMENT ON THE FLOOR AND ALL CONCRETE PADS SHALL BE FIXED RIGIDLY TO THE STRUCTURE. ALL ROTATING OR RECIPROCATING OR VIBRATING EQUIPMENT SHALL BE INSTALLED WITH EARTHQUAKE SNUBBERS TO LIMIT MOVEMENT. ALL HANGING EQUIPMENT, PIPING, AND DUCTWORK SHALL BE BRACED TO THE STRUCTURE. REFER TO SPECIFICATION SECTIONS 21 0546, 22 0548, AND 23 0548.

PLUMBING SYMBOLS

— — — — —	DOMESTIC COLD WATER (CW)
— — — — —	DOMESTIC HOT WATER (HW)
— — — — —	DOMESTIC HOT WATER RECIRC. (HWR)
— — — — —	WASTE (W)
— — — — —	BELOW GRADE WASTE (W)
— — — — —	VENT
— — — — —	RAINLEADER
— — — — —	OVERFLOW RAINLEADER
— — — — —	NATURAL GAS
— — — — —	LIQUID PROPANE
— — — — —	COMPRESSED AIR
— — — — —	CONDENSATE DRAIN
— — — — —	DRAIN
— — — — —	OIL WASTE
— — — — —	GREASE WASTE
— — — — —	INDUSTRIAL WASTE
— — — — —	PRODUCTION WASTE
— — — — —	SOFT COLD WATER
— — — — —	FILTERED COLD WATER
— — — — —	REVERSE OSMOSIS WATER
— — — — —	REVERSE OSMOSIS RETURN WATER
— — — — —	DEIONIZED WATER
— — — — —	DEIONIZED WATER RETURN
— — — — —	DOMESTIC HOT WATER HIGH TEMP
— — — — —	DOMESTIC HOT WATER HIGH TEMP RECIRC
— — — — —	FLUE GAS
— — — — —	COMBUSTION AIR
— — — — —	CLEANOUT (FLOOR)
— — — — —	2-WAY CO — 2-WAY CLEANOUT (FLOOR/GRADE)
— — — — —	WALL CLEANOUT / END OF LINE CLEANOUT

PIPE SYMBOLS

— — — — —	DIRECTION OF FLOW
— — — — —	PIPE DROP / SIDE CONNECTION / PIPE RISE
— — — — —	TEE OUTLET DOWN / TEE OUTLET UP
— — — — —	BOTTOM / TOP CONNECTION, 45° OR 90°
— — — — —	CAP / CAPPED OUTLET
— — — — —	BALL VALVE / GLOBE VALVE
— — — — —	CENTRIC / ECCENTRIC REDUCER OR INCREASER
— — — — —	ANCHOR / FLEXIBLE CONNECTION
— — — — —	BUTTERFLY VALVE
— — — — —	CIRCUIT SETTER
— — — — —	CHECK VALVE
— — — — —	STRAINER / UNION
— — — — —	BLIND FLANGE / FLOW METER
— — — — —	BACKFLOW PREVENTER (BFP)
— — — — —	PRESSURE REDUCING VALVE / PLUG VALVE
— — — — —	WATER METER / IRRIGATION WATER METER
— — — — —	PLUG VALVE / NEEDLE VALVE
— — — — —	GAS COCK
— — — — —	PRESSURE REGULATING VALVE / PETE'S PLUG
— — — — —	WATER HAMMER ARRESTOR (WHA)
— — — — —	SLEEVE / EXPANSION JOINT
— — — — —	PIPE PITCH DOWN / PIPE RISE UP
— — — — —	SOLENOID VALVE / PNEUMATIC 3-WAY CONTROL VALVE
— — — — —	ELECTRIC 3-WAY / 2-WAY CONTROL VALVE
— — — — —	MANUAL / EMERGENCY 3-WAY CONTROL VALVE
— — — — —	THERMOMETER / PRESSURE GAUGE
— — — — —	STEAM TRAP
— — — — —	TEMPERATURE/PRESSURE RELIEF VALVE

MEDICAL GAS SYMBOLS

— — — — —	O2 — OXYGEN
— — — — —	MA — MEDICAL COMPRESSED AIR
— — — — —	VAC — MEDICAL VACUUM
— — — — —	WAGO — WASTE ANESTHESIA GAS DISPOSAL
— — — — —	N2O — NITROUS OXIDE
— — — — —	CO2 — CARBON DIOXIDE
— — — — —	IA — INSTRUMENT AIR
— — — — —	N2 — NITROGEN
— — — — —	— — ZONE VALVE BOX (ZVB)
— — — — —	— — MEDICAL GAS OUTLET (MGO)

MECH. PIPING SYMBOLS

— — — — —	HWS — HEATING WATER SUPPLY
— — — — —	— — HWR — HEATING WATER RETURN
— — — — —	— — CWS — CHILLED WATER RETURN
— — — — —	— — CWR — CHILLED WATER RETURN
— — — — —	— — CHWS — CHILLED/HEATING WATER SUPPLY
— — — — —	— — CHWR — CHILLED/HEATING WATER RETURN
— — — — —	— — CS — CONDENSER WATER RETURN
— — — — —	— — CR — CONDENSER WATER RETURN
— — — — —	— — RL — REFRIGERANT LIQUID LINE (SUPPLY)
— — — — —	— — RS — REFRIGERANT SUCTON LINE (RETURN)
— — — — —	— — RLS — REFRIGERANT DUAL TEMPERATURE LINE
— — — — —	— — FOS — FUEL OIL SUPPLY
— — — — —	— — FOR — FUEL OIL RETURN
— — — — —	— — BFW — BOILER FEEDWATER
— — — — —	— — BMW — BOILER MAKEUP WATER
— — — — —	— — LPS — LOW PRESSURE STEAM SUPPLY
— — — — —	— — LPR — LOW PRESSURE STEAM RETURN
— — — — —	— — MPS — MEDIUM PRESSURE STEAM SUPPLY
— — — — —	— — MPR — MEDIUM PRESSURE STEAM RETURN
— — — — —	— — HPS — HIGH PRESSURE STEAM SUPPLY
— — — — —	— — HPR — HIGH PRESSURE STEAM RETURN
— — — — —	— — T1.1 — EQUIPMENT CALLOUT (0.75)
— — — — —	— — — — WATER COIL FLOW (GPM)

GENERAL DEMO. NOTES

- VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK. BRING ANY DISCREPANCIES FROM THE DRAWINGS AND NOTES TO THE ARCHITECT IMMEDIATELY. MINOR CHANGES IN THE SCOPE OF THE DEMOLITION WORK SHALL NOT JUSTIFY AN ADDITIONAL COST.
- REMOVAL OF EXISTING FIXTURES AND EQUIPMENT WILL REQUIRE ISOLATING THE PIPING RISERS OR MAINS VIA SHUT-OFF VALVES. INSTALL NEW ISOLATION VALVES WHERE REQUIRED FOR COMPLETION OF WORK.
- REMOVAL OF EXISTING PLUMBING FIXTURES AND EQUIPMENT, ETC. WILL REQUIRE CAPPING AND SEALING EXISTING MAINS OR BRANCHES AS NECESSARY AND REQUIRED TO ALLOW THE REMAINING SYSTEMS TO FULLY OPERATE WITHOUT DEGRADATION.
- CONTRACTOR SHALL PROVIDE PROTECTIVE PLASTIC DROP CLOTHS TO PROTECT THE EXISTING OCCUPIED AREAS AND EQUIPMENT FROM DUST AND DEBRIS DURING THE CONSTRUCTION WORK, AND SHALL CLEAN THE AREAS OF ALL CONSTRUCTION DIRT DAILY, AND UPON COMPLETION OF THE WORK.
- ALL DRAINED PIPING RISERS AND MAINS SHALL BE REFILLED WITH PROPER FLUID AND PROPERLY VENTED BY THIS CONTRACTOR, ONCE NEW WORK HAS BEEN INSTALLED.
- COORDINATE WITH GENERAL CONTRACTOR THE REMOVAL AND REPLACEMENT OF ALL EXISTING CEILINGS, WALLS, ETC. AS REQUIRED FOR MECHANICAL DEMOLITION WORK.
- EXISTING PIPING AND EQUIPMENT, ETC., NOT TO BE UTILIZED IN THE COMPLETED BUILDING SHALL BE DISCONTINUED OR REMOVED AS REQUIRED. ALL ENDS OF DISCONTINUED PIPING SHALL BE CAPPED IN THE NEAREST WALL, CEILING OR FLOOR SO THAT THEY ARE COMPLETELY CONCEALED. OPENINGS LEFT IN WALLS, CEILINGS, ETC., WHERE EQUIPMENT AND PIPE, ETC., ARE REMOVED AND NOT REPLACED, SHALL BE PATCHED NEATLY WITH SIMILAR MATERIAL TO ADJACENT CONSTRUCTION. REFER TO DRAWINGS DELINEATING NEW WORK FOR ADDITIONAL INFORMATION REGARDING SYSTEMS OR PORTIONS OF SYSTEMS WHERE USE IS TO BE DISCONTINUED.
- EXISTING PIPING, FIXTURES AND EQUIPMENT THAT ARE NOT TO BE REUSED SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE OWNER IF THEY WISH TO RETAIN OWNERSHIP OF SAME. IF NOT, EQUIPMENT SHALL BECOME THE PROPERTY OF THIS CONTRACTOR AND SHALL BE REMOVED FROM THE SITE AS SOON AS PRACTICAL AND DISPOSED OF IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS.
- ALL CUTTING AND CHANNELING OF EXISTING BUILDING SHALL BE ACCOMPLISHED IN A NEAT AND WORKMANLIKE MANNER WITHOUT REMOVAL OF EXCESS MATERIALS. THE CONTRACTOR SHALL PATCH AND REPLACE WITH MATERIAL SIMILAR TO ADJACENT CONSTRUCTION.
- PORTIONS OF EXISTING SYSTEMS MAY BE SHOWN FOR CLARITY EVEN THOUGH IT MAY NOT BE NECESSARY TO MODIFY OR REVISE THEM. ALL EXISTING SYSTEMS ARE SHOWN BASED ON ORIGINAL OR REMODEL BUILDING DRAWINGS. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS.
- ALL WORK MUST BE COORDINATED AND SCHEDULED WITH THE OWNER AND OCCUPANTS OF THIS BUILDING SO AS TO PROVIDE THE LEAST AMOUNT OF DISRUPTION OF BUILDING ACTIVITIES AS POSSIBLE. MAINTAIN CONDITIONED SPACE FOR ALL OWNER OCCUPIED AREAS DURING CONSTRUCTION.
- ALL ACCESSIBLE ABANDONED PIPING AND DUCTWORK SHALL BE REMOVED AND PROPERLY DISPOSED OF.
- CAP ALL EXISTING PIPING AND DUCTWORK SHOWN TO BE DISCONNECTED AND NOT REUSED AT MAIN. ALL ACCESSIBLE PIPING SHALL BE REMOVED.
- RELOCATE EXISTING DUCTWORK, PIPING, ELECTRICAL CONDUITS, AND CABLING AS NECESSARY TO ACCOMPLISH FINAL INSTALLATION AS SHOWN. ALERT ENGINEER TO ANY MAJOR RELOCATIONS REQUIRED.

GENERAL NOTES

- VERIFY JOB SITE CONDITIONS AND DIMENSIONS BEFORE BEGINNING WORK. PLANS ARE SCHEMATIC IN NATURE. LAYOUT IS BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND DIMENSIONS.
- NO PIPING, DUCTWORK, ETC. SHALL PENETRATE STRUCTURAL MEMBERS. PROVIDE MISCELLANEOUS CUTTING, PATCHING AND REPAIRING OF FINISHES, ROOF, WALLS, ETC., AS REQUIRED TO ACCOMMODATE THE NEW WORK.
- G.C. IS TO PATCH ANY OPENINGS IN CORRIDORS REQUIRED TO BE CONSTRUCTED TO LIMIT THE TRANSFER OF SMOKE AND IN SMOKE BARRIERS AS REQUIRED TO MEET CODE REQUIREMENTS. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY EXACT LOCATION, CONFIGURATION AND ROUTING OF EXISTING SYSTEMS REQUIRED TO REMAIN IN OPERATION DURING THE PROJECT TO PREVENT DAMAGE DURING DEMOLITION AND PHASING.
- REMOVE ALL EXISTING EQUIPMENT, DUCTWORK AND PIPING THAT IS NOT REQUIRED FOR A WORKING INSTALLATION.
- COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION.
- UNLESS OTHERWISE INDICATED, INSTALL ALL SPACE THERMOSTATS AND OTHER OCCUPANT ADJUSTABLE CONTROL DEVICES SAME HEIGHT AS ADJACENT LIGHT SWITCHES, BUT IN NO CASE HIGHER THAN 48 INCHES ABOVE FINISHED FLOOR PER ADA REQUIREMENTS. COORDINATE EXACT HEIGHT WITH ARCHITECT PRIOR TO INSTALLATION.
- ALL CUTTING AND PATCHING SHALL BE CLOSELY COORDINATED WITH THE G.C. COORDINATE ROUTING OF PLUMBING, AND HVAC PIPING WITH DUCTWORK, LIGHTS, ARCHITECTURAL CEILING AND STRUCTURAL ELEMENTS. PIPING SHALL RISE AND DROP, JOG OR OFFSET AS REQUIRED TO AVOID CONFLICTS. DUCTWORK SHALL TAKE PRECEDENCE OVER ALL PIPING, EXCEPT WHERE GRADE MUST BE MAINTAINED FOR DRAINAGE. REWORK OF INSTALLED WORK TO RESOLVE CONFLICTS ARISING FROM LACK OF COORDINATION SHALL NOT JUSTIFY AN INCREASE IN THE CONTRACT AMOUNT.
- ALL DIFFUSERS ARE 4-WAY BLOW UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
- FLEXIBLE DUCTWORK IS ALLOWED ON RUNOUTS TO SUPPLY DIFFUSERS ONLY. UTILIZE ONLY ABOVE LAY-IN ACCESSIBLE CEILINGSS. DO NOT INSTALL FLEX DUCT ABOVE HARD CEILINGSS OR WHERE EXPOSED. A MAXIMUM LENGTH OF 6'-0" MAY BE USED AT EACH CONNECTION.
- SEAL TRANSVERSE AND LONGITUDINAL JOINTS OF ALL DUCTWORK USING HARDCAST DT TAPE AND FTA-20 ADHESIVE OR HARDCAST AFG-1402 "FOIL GRIP" PER MANUFACTURERS INSTRUCTIONS.
- INSTALL BALANCE DAMPER WITH STANDOFF AND LOCKING QUADRANT IN AN ACCESSIBLE LOCATION AT EACH RUNOUT TO SUPPLY DIFFUSERS, EXHAUST GRILLES, AND RETURN GRILLES WHERE AIRFLOW IS INDICATED, OR AS INDICATED OTHERWISE.
- ALL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES SHALL BE FIRE STOPPED BY THE TRADE MAKING THE PENETRATION. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR REQUIREMENTS.
- DO NOT ROUTE PIPING OR DUCTWORK OVER ELECTRICAL PANELS OR EQUIPMENT. PIPING OR DUCTWORK SHALL NOT BE ROUTED THROUGH ELEVATOR ROOMS, TELECOM ROOMS OR STRUCTURAL EQUIPMENT ROOMS UNLESS SPECIFICALLY SERVING THAT ROOM. COORDINATE WITH E.C. PROVIDE WATER/TIGHT DRIP PAN WITH DRAIN TO NEAREST APPROVED RECEPTOR WHERE REQUIRED.
- COORDINATE SIZE AND LOCATION OF ACCESS DOORS IN CONSTRUCTION REQUIRED FOR ACCESS TO MECHANICAL EQUIPMENT WITH G.C.
- COORDINATE SIZE AND LOCATION OF MECHANICAL EQUIPMENT PADS WITH G.C.
- ALL WORK IS TO CONFORM WITH APPLICABLE CODES AND STANDARDS.
- DUCT SIZES SHOWN ARE ACTUAL INSIDE CLEAR DIMENSIONS. INCREASE SHEET DIMENSIONS AS REQUIRED TO ACCOMMODATE DUCT LINER WHERE LINER IS SPECIFIED.
- ALL EQUIPMENT SUPPORT STANDS SHALL BE PRIMED AND PAINTED WITH EPOXY ENAMEL.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF ALL CEILING MOUNTED AIR DISTRIBUTION DEVICES.
- PAINT INSIDE OF DUCTWORK BLACK ANYWHERE VISIBLE THROUGH FACE OF GRILLE OR DIFFUSER.
- WHERE HYDRONIC RUNOUT SIZES ARE NOT INDICATED, SIZE PER THE FOLLOWING:
UP TO 3 GPM - 3/4"; UP TO 6 GPM - 1"; UP TO 10 GPM - 1-1/4"; UP TO 17 GPM - 1-1/2"
- HYDRONIC PIPING SHALL BE MAINTAINED FULL SIZE UP TO COIL CONNECTIONS. SHUT-OFF VALVES, STRAINERS, BALANCE VALVES, ETC. WILL NOT BE ALLOWED TO REDUCE FROM LINE RUNOUT SIZE. CONTROL VALVES MAY BE BLOWN SIZE FOR FLOW RATE, NOT TO EXCEED 4 PSIG PRESSURE DROP AT DESIGN FLOW.
- UNDERGROUND-TYPE UTILITY MARKER, PROVIDED AND INSTALLED PER SPECIFICATION SECTIONS 220553 AND 230553 AT EVERY 100 FEET FOR ALL UNDERGROUND UTILITIES (INCLUDING HEAT PUMP WELL FIELD). LABEL WITH THE APPROPRIATE UTILITY. EACH VERTICAL GROUND SOURCE HEAT PUMP WELL/BORE SHALL BE LABELED "GCHP WELL #X" WITH APPROPRIATE NUMERIC WELL NUMBER IDENTIFICATION.
- TEMPERATURE CONTROLS CONTRACTOR (T.C.C.) SHALL FURNISH AND INSTALL ALL LOW VOLTAGE WIRING AND ASSOCIATED CONDUIT REQUIRED FOR MECHANICAL CONTROL SYSTEM. WIRING SHALL BE IN CONDUIT INSIDE WALLS, IN ROOMS WITH EXPOSED CEILINGS, AND ABOVE HARD CEILINGS. LINE VOLTAGE WIRING AND ASSOCIATED CONDUIT SHALL BE PROVIDED AND INSTALLED BY E.C. CONTROL SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH SPECIFICATIONS.
- ALL CONTROL DAMPERS SHALL BE FURNISHED BY T.C.C. AND INSTALLED BY THE M.C. MOTOR OPERATORS SHALL BE FURNISHED AND INSTALLED BY THE T.C.C.
- COORDINATE ACCESS TO EQUIPMENT AND VALVES INSTALLED ABOVE HARD CEILINGS AND IN MASONRY CHASSES WITH GENERAL CONTRACTOR. PROVIDE LOOKING ACCESS DOORS FOR INSTALLATION BY CONTRACTOR AS REQUIRED TO SERVICE CONCEALED DAMPERS, VALVES AND EQUIPMENT. CEILING ACCESS DOORS FOR FIRE DAMPERS, SMOKE DAMPERS AND FIRE SMOKE DAMPERS FURNISHED AND INSTALLED BY CONTRACTOR.
- CONTRACTOR TO INSTALL TEMPORARY FILTERS OVER ALL RETURN AND EXHAUST GRILLES IN WORK AREA DURING CONSTRUCTION.
- THESE DRAWINGS ARE ACCOMPANIED BY SPECIFICATIONS. REFER TO SPECIFICATIONS FOR FURTHER INFORMATION.
- EQUIPMENT THAT REQUIRES MAINTENANCE SHALL BE LOCATED A MINIMUM OF 10'-0" FROM THE BUILDING ROOF EDGE WHERE REQUIRED BY CODE.
- REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF TEMPORARY PARTITIONS.
- SQUARE THROAT NOT ALLOWED ON RADIUS ELBOWS.
- TERMINAL UNITS, MANUAL BALANCE DAMPERS, HYDRONIC AND PLUMBING VALVES, CIRCUIT SETTERS AND OTHER ACCESSORIES REQUIRING ACCESS SHALL BE ACCESSIBLE VIA A STANDARD LADDER SO COMPONENTS MAY BE REPLACED, REPAIRED, OR UTILIZED WITHOUT THE NEED FOR EXTENSIVE CEILING REMOVAL, SCAFFOLDING OR A MAN LIFT. WHERE POSSIBLE NO MORE THAN 48" ABOVE THE FINISHED CEILING.

PRESSURE CLASS SCHEDULE

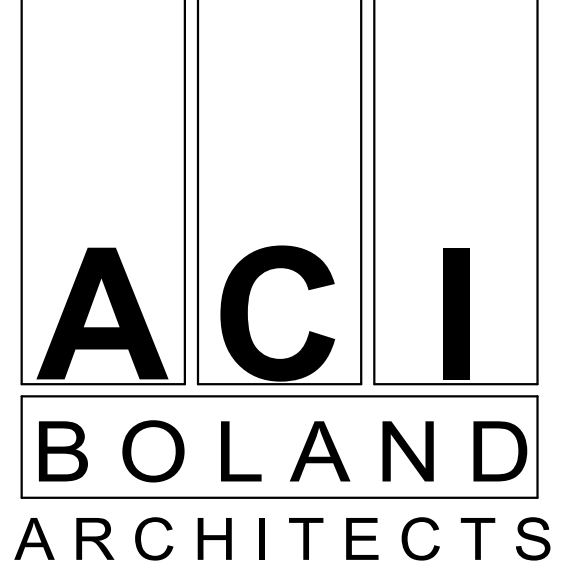
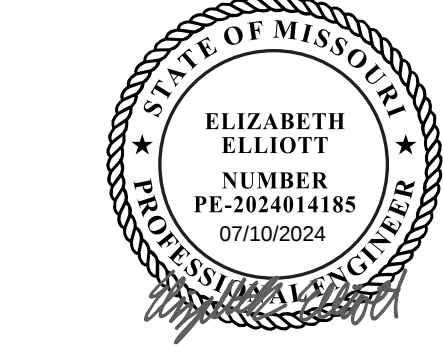
AIR SYSTEM	PRESSURE CLASS	SEAL CLASS	LEAKAGE CLASS	
			ROUND	RECT
LOW-PRESSURE SUPPLY	2 INCH WG (500 PA)	A	6	12
MEDIUM PRESSURE SUPPLY (UPSTREAM OF VAV & CV BOXES)	6 INCH WG (1500 PA)	A	3	6
RETURN AND RELIEF	2 INCH WG (500 PA)	A	6	12

MECHANICAL SHEET INDEX

MP001	MECHANICAL COVER SHEET
MP002	MECHANICAL SPECIFICATIONS
MP003	MECHANICAL SPECIFICATIONS
P101	FIRST FLOOR PLUMBING PLAN
P102	FIRST FLOOR MEDICAL GAS PLAN
M501	PLUMBING DETAILS AND SCHEDULES
M101	FIRST FLOOR HVAC PLAN
M102	FIRST FLOOR MECHANICAL PIPING PLAN
M501	MECHANICAL DETAILS AND SCHEDULES

HVAC DESIGN CONDITIONS

SPACE OR AREA	OUTDOOR AIR		INDOOR HEATING °F	INDOOR COOLING °F	RELATIVE HUMIDITY %RH	CODE MIN ACH	ACTUAL DESIGN ACH	REMARKS
	SUMMER DBWB	WINTER DB						
FAST TRACK/EXAM ROOM	96/77	6	88	72	60	6	6.2	1



ACI/Boland, Inc.
Kansas City | St. Louis
1710 Wyandotte
Kansas City, MO 64108
T: 816.763.9600
Licensee's Certificate of Authority Number:
Missouri: #000958



Saint Luke's.
EAST HOSPITAL

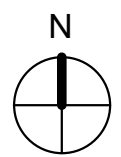
Saint Luke's East ED Patient Treatment Renovation
100 NE Saint Luke's Blvd
Lee's Summit, MO 64086

Date	07/10/2024
Job Number	3-24016

6	SECTION 200500 - COMMON WORK RESULTS FOR FIRE PROTECTION, PLUMBING, AND MECHANICAL	1.1 GENERAL CONDITIONS	A. The General Conditions, Supplemental General Conditions, Special Conditions and General Requirements in Division 01 are part of this contract and shall be referred to as they apply to this section of the specifications.	1.2 EXAMINATION OF SITE	A. Visit the site, inspect the existing conditions, and check the drawings and specifications so as to be fully informed of the requirements for completion of the work. Lack of such information shall not justify an extra to the contract price.	1.3 SCOPE	A. The Mechanical Work shall include labor, materials, and equipment to install systems as shown on plans and hereinafter specified. The installation shall include all labor, materials, tools, transportation, equipment, services, and facilities, required for the complete, proper and substantial installation of all mechanical work shown on the plans, and/or outlined in these specifications. The installation shall include all materials, appliances, and apparatus not specifically mentioned herein or noted on the drawings, but which are necessary to make a complete working installation of all mechanical systems.	1.4 CODES	A. Execute work in compliance with all applicable Federal, State and Municipal laws, codes, ordinances, and local customs regarding the trade to perform the work. The Contractor is required to verify that all installations comply with applicable codes. The codes applicable to this specific project may be listed on the Architect's code compliance sheet. If not, it is the Contractor's responsibility to determine which codes apply to the installations.	1.5 DEFINITIONS	A. It shall be understood that the drawings and specifications complement one another, and items specified shall also meet the criteria set forth on the drawings.	1.6 ABBREVIATIONS	ADA - Americans with Disabilities Act AGA - American Gas Association AISI - American Iron and Steel Institute AMCA - Air Moving and Conditioning Association, Inc. ANSI - American National Standards Institute ASHRAE - American Society of Heating, Refrigeration & Air-Conditioning Engineers, Inc. ASME - American Society of Mechanical Engineers ASTM - American Society for Testing and Materials AWWA - American Water Works Association BPVC - Boiler and Pressure Vessel Code of ASME CISPI - Cast Iron Soil Pipe Institute NFPA - National Fire Protection Association SMACNA - Sheet Metal and Air-Conditioning Contractors National Association UL - Underwriters' Laboratories, Inc. ETL - ETL Testing Laboratories, Inc. OSHA - Occupational Safety and Health Administration	1.7 PERMITS	A. Obtain and pay for all licenses and permits, fees, inspection and certificates required for the execution of this work.	1.8 RESPONSIBILITY	A. This contractor will be held responsible for any and all damage to any part of the building or to the work of other contractors, as may be caused through his operation.	1.9 WORK TO BE DONE BY GENERAL CONTRACTOR	A. Build in all openings, sleeves, chases, etc., for piping, as established, furnished, and set by this contractor.	1.10 WORK TO BE DONE BY ELECTRICAL CONTRACTOR	A. The Electrical Contractor shall provide all motor starters complete with auxiliary controls where required for the function of this system unless specifically noted otherwise on the plans or in these specifications.	1.11 ELECTRICAL REQUIREMENTS BY MECHANICAL CONTRACTOR	A. Mechanical Contractor shall furnish all motors, motor interlocking control devices, certain magnetic starters, etc.	1.12 WORKMANSHIP AND COORDINATION	A. Make installation substantially as shown on the plans.	1.13 MATERIALS	A. Material and equipment shall be new, of best quality and design and free from defects. A manufacturer's nameplate affixed in a conspicuous place will be required on each major component of equipment stating manufacturer's name, address, and catalog number.	1.14 MATERIALS OF APPROVED EQUAL	A. Where items of equipment and/or materials are specifically identified herein by a manufacturer's name, model, or catalog number, only such specific items may be used in the base bid, except as hereinafter provided.	1.15 SUBSTITUTION OF EQUIPMENT	A. After execution of the contract, substitution of equipment of makes other than those specifically named in the contract documents will be approved by the Engineer only if the equipment named in the specifications cannot be delivered to the job in time to complete the work in proper sequence to work of other contractors, due to conditions beyond control of the contractor.	1.16 SUBMITTALS	A. Contractor shall send to the Architect for approval submittals on all equipment, accessories, and components.	1.17 CUTTING AND PATCHING	A. Notify the General Contractor in ample time, of the location of all chases, sleeves, and any other openings required in connection with the work of this contract.	1.18 TESTING	A. Furnish testing equipment and test all piping systems under methods and conditions as specified or per code.	1.19 PAINTING	A. All painting shall be done by the General Contractor.	1.20 LABELING	A. Install mechanically engraved metal or plastic label at equipment, not less than 2-1/2 inches wide by 3/4 inch tall with letters between 1/4 inch and 1/2 inch tall. Utilize labels with pre-drilled holes and stainless-steel rivets or self-tapping screws, or labels with contact-type permanent adhesive.	1.21 OPERATING INSTRUCTIONS	A. Prepare and submit to the Engineer for approval operating instructions made in conjunction with Equipment Manufacturer's representative. Instruction shall contain equipment starting sequence, interlocks, controls, switches, etc. which affect the equipment operation. Place copies in maintenance instructions brochure.	1.22 MAINTENANCE INSTRUCTIONS	A. Prepare a brochure covering all systems and equipment furnished and installed under this contract. Each brochure shall include certified equipment drawings and/or catalog data as submitted, complete maintenance instructions, parts lists for each item of equipment, any special emergency operating instructions, all equipment warranties with starting dates identified, and a list of service organizations including addresses and telephone numbers.	1.23 LOOSE EQUIPMENT	A. All keys and special wrenches furnished with the equipment shall be kept in a safe place during construction and presented to the Owner at the completion of the project.	1.24 FINAL INSPECTION	A. Final inspection will be made upon written request from the Mechanical Contractor after the project is completed and Test and Balance (TAB) has been completed.	1.25 GUARANTEE	A. Guarantee all work, material and equipment for a period of one year after date of final certificate of acceptance by the Architect.	1.26 VALVES	A. Provide all valves required for operation, service, and maintenance of systems and equipment, i.e., shut off valves both sides of equipment, coils, etc.	1.27 PIPING SYSTEMS - GENERAL	A. Pipe for piping systems shall be cut accurately to measurements taken on the job.	1.28 PIPE AND FITTINGS	A. Each piece of pipe must be clearly labeled or stenciled with manufacturer's name, type of pipe and length, in accordance with ASTM standards. All pipe must be new. Re-processed pipe which has been cleaned and re-finished due to extended yard storage will not be accepted. All pipe must be corrosion free. Submit shop drawings on piping along with certified mill specifications.	1.29 HANGERS AND SUPPORTS	A. Use strap type pipe ring hangers on pipe up thru 3" equal to Grinnel Fig. 69 or CT-69. Use standard duty clevis hangers on piping larger than 3" equal to Grinnel Fig. 260.	1.30 BUTTERFLY VALVES	A. Butterfly valves shall conform to MSS-SP-67. Liners and discs shall be suitable for the intended service.	1.31 SLEEVES AND COVER PLATES	A. Install for all pipes passing through floors, walls, or partitions. Size sleeves large enough to allow for free movement of the pipes with expansion.	1.32 STRAINERS	A. Provide basket or "Y" type strainers with iron bodies of same size as piping, removable screen inserts of not less than 22 gauge brass, perforated for a total net free area opening equal to four times the pipe area.	1.33 UNIONS	A. Unions 2" and Smaller (150 WSP - 200 WOG): Standard Weight brass to iron seat malleable iron body with screwed ends.	1.34 MOTOR STARTERS	A. Unless specifically noted otherwise on the mechanical plans, or in the specifications, all motor starters shall be furnished and installed by the Electrical Contractor. Refer to the Electrical Specifications for Motor Starter requirements.	1.35 V-BELT DRIVES	A. Capacity of V-Belt Drives at rated RPM shall be not less than 150 percent of motor nameplate horsepower rating.	1.36 ACCESS DOORS	A. Where valves, traps, dampers, devices or equipment of any kind is subject to service and maintenance, an accessible concealed space, access doors shall be furnished by the Mechanical Contractor and installed by the General Contractor. Doors shall be 12" x 12" for handhole and 24" x 24" for manhole where required.	1.37 DRIP PANS	A. Provide drip pans fabricated from corrosion-resistant sheet metal with watertight joints, and with edges turned up 2-1/2". Reinforce top, either by structural angles or by rolling top over 1/4" steel rod. Provide hole, gasket, and flange at low point for watertight joint and 1" drain line connection.	1.38 FIRE BARRIER THROUGH PENETRATION PROTECTION SYSTEMS	A. Manufacturer: Subject to compliance with requirements, provide fire barrier penetration seals of one of the following:	1.39 FIRE BARRIER THROUGH PENETRATION PROTECTION SYSTEMS	A. Manufacturer: Subject to compliance with requirements, provide fire barrier penetration seals of one of the following:	1.40 PRESSURE GAGES	A. Manufacturers: Ashcroft - Flo Fab - Miljoco - Palmer Wahl - Tel-Tru - Terlice - Watts - Weiss - Winters.	1.41 THERMOMETERS	A. Polyphase motors: NEMA MG 1, Design B medium induction motor, premium efficient, with 1.15 service factor. Multispeed motors shall have a separate winding for each speed. Bearings shall be regreassable, shielded, antifriction ball bearings suitable for radial and thrust loading. Class B temperature rise with class F insulation.	1.42 EQUIPMENT SUPPORTS	A. Provide each piece of equipment or apparatus suspended from ceilings or mounted above floor level with suitable structural support, platform or carrier in accordance with best recognized practice. All such supporting or mounting means shall be furnished by respective contractor who shall arrange for their inclusion and attachment to building structure, unless otherwise indicated on plans or herein specified. Contractors shall exercise extreme care that structural members of building are not overloaded by such equipment. In all cases details of such hangers, platforms, and supports, together with total weights of mounted equipment shall be approved by Architect-Engineer.	1.43 MOTORS	A. Polyphase motors: NEMA MG 1, Design B medium induction motor, premium efficient, with 1.15 service factor. Multispeed motors shall have a separate winding for each speed. Bearings shall be regreassable, shielded, antifriction ball bearings suitable for radial and thrust loading. Class B temperature rise with class F insulation.	1.44 MOTOR STARTERS	A. Unless specifically noted otherwise on the mechanical plans, or in the specifications, all motor starters shall be furnished and installed by the Electrical Contractor. Refer to the Electrical Specifications for Motor Starter requirements.	1.45 V-BELT DRIVES	A. Capacity of V-Belt Drives at rated RPM shall be not less than 150 percent of motor nameplate horsepower rating.	1.46 ACCESS DOORS	A. Where valves, traps, dampers, devices or equipment of any kind is subject to service and maintenance, an accessible concealed space, access doors shall be furnished by the Mechanical Contractor and installed by the General Contractor. Doors shall be 12" x 12" for handhole and 24" x 24" for manhole where required.	1.47 DRIP PANS	A. Provide drip pans fabricated from corrosion-resistant sheet metal with watertight joints, and with edges turned up 2-1/2". Reinforce top, either by structural angles or by rolling top over 1/4" steel rod. Provide hole, gasket, and flange at low point for watertight joint and 1" drain line connection.	1.48 FIRE BARRIER THROUGH PENETRATION PROTECTION SYSTEMS	A. Manufacturer: Subject to compliance with requirements, provide fire barrier penetration seals of one of the following:	1.49 FIRE BARRIER THROUGH PENETRATION PROTECTION SYSTEMS	A. Manufacturer: Subject to compliance with requirements, provide fire barrier penetration seals of one of the following:	1.50 PRESSURE GAGES	A. Manufacturers: Ashcroft - Flo Fab - Miljoco - Palmer Wahl - Tel-Tru - Terlice - Watts - Weiss - Winters.	1.51 THERMOMETERS	A. Polyphase motors: NEMA MG 1, Design B medium induction motor, premium efficient, with 1.15 service factor. Multispeed motors shall have a separate winding for each speed. Bearings shall be regreassable, shielded, antifriction ball bearings suitable for radial and thrust loading. Class B temperature rise with class F insulation.	1.52 EQUIPMENT SUPPORTS	A. Provide each piece of equipment or apparatus suspended from ceilings or mounted above floor level with suitable structural support, platform or carrier in accordance with best recognized practice. All such supporting or mounting means shall be furnished by respective contractor who shall arrange for their inclusion and attachment to building structure, unless otherwise indicated on plans or herein specified. Contractors shall exercise extreme care that structural members of building are not overloaded by such equipment. In all cases details of such hangers, platforms, and supports, together with total weights of mounted equipment shall be approved by Architect-Engineer.	1.53 MOTORS	A. Polyphase motors: NEMA MG 1, Design B medium induction motor, premium efficient, with 1.15 service factor. Multispeed motors shall have a separate winding for each speed. Bearings shall be regreassable, shielded, antifriction ball bearings suitable for radial and thrust loading. Class B temperature rise with class F insulation.	1.54 MOTOR STARTERS	A. Unless specifically noted otherwise on the mechanical plans, or in the specifications, all motor starters shall be furnished and installed by the Electrical Contractor. Refer to the Electrical Specifications for Motor Starter requirements.	1.55 V-BELT DRIVES	A. Capacity of V-Belt Drives at rated RPM shall be not less than 150 percent of motor nameplate horsepower rating.	1.56 ACCESS DOORS	A. Where valves, traps, dampers, devices or equipment of any kind is subject to service and maintenance, an accessible concealed space, access doors shall be furnished by the Mechanical Contractor and installed by the General Contractor. Doors shall be 12" x 12" for handhole and 24" x 24" for manhole where required.	1.57 DRIP PANS	A. Provide drip pans fabricated from corrosion-resistant sheet metal with watertight joints, and with edges turned up 2-1/2". Reinforce top, either by structural angles or by rolling top over 1/4" steel rod. Provide hole, gasket, and flange at low point for watertight joint and 1" drain line connection.	1.58 FIRE BARRIER THROUGH PENETRATION PROTECTION SYSTEMS	A. Manufacturer: Subject to compliance with requirements, provide fire barrier penetration seals of one of the following:	1.59 FIRE BARRIER THROUGH PENETRATION PROTECTION SYSTEMS	A. Manufacturer: Subject to compliance with requirements, provide fire barrier penetration seals of one of the following:	1.60 PRESSURE GAGES	A. Manufacturers: Ashcroft - Flo Fab - Miljoco - Palmer Wahl - Tel-Tru - Terlice - Watts - Weiss - Winters.	1.61 THERMOMETERS	A. Polyphase motors: NEMA MG 1, Design B medium induction motor, premium efficient, with 1.15 service factor. Multispeed motors shall have a separate winding for each speed. Bearings shall be regreassable, shielded, antifriction ball bearings suitable for radial and thrust loading. Class B temperature rise with class F insulation.	1.62 EQUIPMENT SUPPORTS	A. Provide each piece of equipment or apparatus suspended from ceilings or mounted above floor level with suitable structural support, platform or carrier in accordance with best recognized practice. All such supporting or mounting means shall be furnished by respective contractor who shall arrange for their inclusion and attachment to building structure, unless otherwise indicated on plans or herein specified. Contractors shall exercise extreme care that structural members of building are not overloaded by such equipment. In all cases details of such hangers, platforms, and supports, together with total weights of mounted equipment shall be approved by Architect-Engineer.	1.63 MOTORS	A. Polyphase motors: NEMA MG 1, Design B medium induction motor, premium efficient, with 1.15 service factor. Multispeed motors shall have a separate winding for each speed. Bearings shall be regreassable, shielded, antifriction ball bearings suitable for radial and thrust loading. Class B temperature rise with class F insulation.	1.64 MOTOR STARTERS	A. Unless specifically noted otherwise on the mechanical plans, or in the specifications, all motor starters shall be furnished and installed by the Electrical Contractor. Refer to the Electrical Specifications for Motor Starter requirements.	1.65 V-BELT DRIVES	A. Capacity of V-Belt Drives at rated RPM shall be not less than 150 percent of motor nameplate horsepower rating.	1.66 ACCESS DOORS	A. Where valves, traps, dampers, devices or equipment of any kind is subject to service and maintenance, an accessible concealed space, access doors shall be furnished by the Mechanical Contractor and installed by the General Contractor. Doors shall be 12" x 12" for handhole and 24" x 24" for manhole where required.	1.67 DRIP PANS	A. Provide drip pans fabricated from corrosion-resistant sheet metal with watertight joints, and with edges turned up 2-1/2". Reinforce top, either by structural angles or by rolling top over 1/4" steel rod. Provide hole, gasket, and flange at low point for watertight joint and 1" drain line connection.	1.68 FIRE BARRIER THROUGH PENETRATION PROTECTION SYSTEMS	A. Manufacturer: Subject to compliance with requirements, provide fire barrier penetration seals of one of the following:	1.69 FIRE BARRIER THROUGH PENETRATION PROTECTION SYSTEMS	A. Manufacturer: Subject to compliance with requirements, provide fire barrier penetration seals of one of the following:	1.70 PRESSURE GAGES	A. Manufacturers: Ashcroft - Flo Fab - Miljoco - Palmer Wahl - Tel-Tru - Terlice - Watts - Weiss - Winters.	1.71 THERMOMETERS	A. Polyphase motors: NEMA MG 1, Design B medium induction motor, premium efficient, with 1.15 service factor. Multispeed motors shall have a separate winding for each speed. Bearings shall be regreassable, shielded, antifriction ball bearings suitable for radial and thrust loading. Class B temperature rise with class F insulation.	1.72 EQUIPMENT SUPPORTS	A. Provide each piece of equipment or apparatus suspended from ceilings or mounted above floor level with suitable structural support, platform or carrier in accordance with best recognized practice. All such supporting or mounting means shall be furnished by respective contractor who shall arrange for their inclusion and attachment to building structure, unless otherwise indicated on plans or herein specified. Contractors shall exercise extreme care that structural members of building are not overloaded by such equipment. In all cases details of such hangers, platforms, and supports, together with total weights of mounted equipment shall be approved by Architect-Engineer.	1.73 MOTORS	A. Polyphase motors: NEMA MG 1, Design B medium induction motor, premium efficient, with 1.15 service factor. Multispeed motors shall have a separate winding for each speed. Bearings shall be regreassable, shielded, antifriction ball bearings suitable for radial and thrust loading. Class B temperature rise with class F insulation.	1.74 MOTOR STARTERS	A. Unless specifically noted otherwise on the mechanical plans, or in the specifications, all motor starters shall be furnished and installed by the Electrical Contractor. Refer to the Electrical Specifications for Motor Starter requirements.	1.75 V-BELT DRIVES	A. Capacity of V-Belt Drives at rated RPM shall be not less than 150 percent of motor nameplate horsepower rating.	1.76 ACCESS DOORS	A. Where valves, traps, dampers, devices or equipment of any kind is subject to service and maintenance, an accessible concealed space, access doors shall be furnished by the Mechanical Contractor and installed by the General Contractor. Doors shall be 12" x 12" for handhole and 24" x 24" for manhole where required.	1.77 DRIP PANS	A. Provide drip pans fabricated from corrosion-resistant sheet metal with watertight joints, and with edges turned up 2-1/2". Reinforce top, either by structural angles or by rolling top over 1/4" steel rod. Provide hole, gasket, and flange at low point for watertight joint and 1" drain line connection.	1.78 FIRE BARRIER THROUGH PENETRATION PROTECTION SYSTEMS	A. Manufacturer: Subject to compliance with requirements, provide fire barrier penetration seals of one of the following:	1.79 FIRE BARRIER THROUGH PENETRATION PROTECTION SYSTEMS	A. Manufacturer: Subject to compliance with requirements, provide fire barrier penetration seals of one of the following:	1.80 PRESSURE GAGES	A. Manufacturers: Ashcroft - Flo Fab - Miljoco - Palmer Wahl - Tel-Tru - Terlice - Watts - Weiss - Winters.	1.81 THERMOMETERS	A. Polyphase motors: NEMA MG 1, Design B medium induction motor, premium efficient, with 1.15 service factor. Multispeed motors shall have a separate winding for each speed. Bearings shall be regreassable, shielded, antifriction ball bearings suitable for radial and thrust loading. Class B temperature rise with class F insulation.	1.82 EQUIPMENT SUPPORTS	A. Provide each piece of equipment or apparatus suspended from ceilings or mounted above floor level with suitable structural support, platform or carrier in accordance with best recognized practice. All such supporting or mounting means shall be furnished by respective contractor who shall arrange for their inclusion and attachment to building structure, unless otherwise indicated on plans or herein specified. Contractors shall exercise extreme care that structural members of building are not overloaded by such equipment. In all cases details of such hangers, platforms, and supports, together with total weights of mounted equipment shall be approved by Architect-Engineer.	1.83 MOTORS	A. Polyphase motors: NEMA MG 1, Design B medium induction motor, premium efficient, with 1.15 service factor. Multispeed motors shall have a separate winding for each speed. Bearings shall be regreassable, shielded, antifriction ball bearings suitable for radial and thrust loading. Class B temperature rise with class F insulation.	1.84 MOTOR STARTERS	A. Unless specifically noted otherwise on the mechanical plans, or in the specifications, all motor starters shall be furnished and installed by the Electrical Contractor. Refer to the Electrical Specifications for Motor Starter requirements.	1.85 V-BELT DRIVES	A. Capacity of V-Belt Drives at rated RPM shall be not less than 150 percent of motor nameplate horsepower rating.	1.86 ACCESS DOORS	A. Where valves, traps, dampers, devices or equipment of any kind is subject to service and maintenance, an accessible concealed space, access doors shall be furnished by the Mechanical Contractor and installed by the General Contractor. Doors shall be 12" x 12" for handhole and 24" x 24" for manhole where required.	1.87 DRIP PANS	A. Provide drip pans fabricated from corrosion-resistant sheet metal with watertight joints, and with edges turned up 2-1/2". Reinforce top, either by structural angles or by rolling top over 1/4" steel rod. Provide hole, gasket, and flange at low point for watertight joint and 1" drain line connection.	1.88 FIRE BARRIER THROUGH PENETRATION PROTECTION SYSTEMS	A. Manufacturer: Subject to compliance with requirements, provide fire barrier penetration seals of one of the following:	1.89 FIRE BARRIER THROUGH PENETRATION PROTECTION SYSTEMS	A. Manufacturer: Subject to compliance with requirements, provide fire barrier penetration seals of one of the following:	1.90 PRESSURE GAGES	A. Manufacturers: Ashcroft - Flo Fab - Miljoco - Palmer Wahl - Tel-Tru - Terlice - Watts - Weiss - Winters.	1.91 THERMOMETERS	A. Polyphase motors: NEMA MG 1, Design B medium induction motor, premium efficient, with 1.15 service factor. Multispeed motors shall have a separate winding for each speed. Bearings shall be regreassable, shielded, antifriction ball bearings suitable for radial and thrust loading. Class B temperature rise with class F insulation.	1.92 EQUIPMENT SUPPORTS	A. Provide each piece of equipment or apparatus suspended from ceilings or mounted above floor level with suitable structural support, platform or carrier in accordance with best recognized practice. All such supporting or mounting means shall be furnished by respective contractor who shall arrange for their inclusion and attachment to building structure, unless otherwise indicated on plans or herein specified. Contractors shall exercise extreme care that structural members of building are not overloaded by such equipment. In all cases details of such hangers, platforms, and supports, together with total weights of mounted equipment shall be approved by Architect-Engineer.	1.93 MOTORS	A. Polyphase motors: NEMA MG 1, Design B medium induction motor, premium efficient, with 1.15 service factor. Multispeed motors shall have a separate winding for each speed. Bearings shall be regreassable, shielded, antifriction ball bearings suitable for radial and thrust loading. Class B temperature rise with class F insulation.	1.94 MOTOR STARTERS	A. Unless specifically noted otherwise on the mechanical plans, or in the specifications, all motor starters shall be furnished and installed by the Electrical Contractor. Refer to the Electrical Specifications for Motor Starter requirements.	1.95 V-BELT DRIVES	A. Capacity of V-Belt Drives at rated RPM shall be not less than 150 percent of motor nameplate horsepower rating.	1.96 ACCESS DOORS	A. Where valves, traps, dampers, devices or equipment of any kind is subject to service and maintenance, an accessible concealed space, access doors shall be furnished by the Mechanical Contractor and installed by the General Contractor. Doors shall be 12" x 12" for handhole and 24" x 24" for manhole where required.	1.97 DRIP PANS	A. Provide drip pans fabricated from corrosion-resistant sheet metal with watertight joints, and with edges turned up 2-1/2". Reinforce top, either by structural angles or by rolling top over 1/4" steel rod. Provide hole, gasket, and flange at low point for watertight joint and 1" drain line connection.	1.98 FIRE BARRIER THROUGH PENETRATION PROTECTION SYSTEMS	A. Manufacturer: Subject to compliance with requirements, provide fire barrier penetration seals of one of the following:	1.99 FIRE BARRIER THROUGH PENETRATION PROTECTION SYSTEMS	A. Manufacturer: Subject to compliance with requirements, provide fire barrier penetration seals of one of the following:	1.100 PRESSURE GAGES	A. Manufacturers: Ashcroft - Flo Fab - Miljoco - Palmer Wahl - Tel-Tru - Terlice - Watts - Weiss - Winters.	1.101 THERMOMETERS	A. Polyphase motors: NEMA MG 1, Design B medium induction motor, premium efficient, with 1.15 service factor. Multispeed motors shall have a separate winding for each speed. Bearings shall be regreassable, shielded, antifriction ball bearings suitable for radial and thrust loading. Class B temperature rise with class F insulation.	1.102 EQUIPMENT SUPPORTS	A. Provide each piece of equipment or apparatus suspended from ceilings or mounted above floor level with suitable structural support, platform or carrier in accordance with best recognized practice. All such supporting or mounting means shall be furnished by respective contractor who shall arrange for their inclusion and attachment to building structure, unless otherwise indicated on plans or herein specified. Contractors shall exercise extreme care that structural members of building are not overloaded by such equipment. In all cases details of such hangers, platforms, and supports, together with total weights of mounted equipment shall be approved by Architect-Engineer.	1.103 MOTORS	A. Polyphase motors: NEMA MG 1, Design B medium induction motor, premium efficient, with 1.15 service factor. Multispeed motors shall have a separate winding for each speed. Bearings shall be regreassable, shielded, antifriction ball bearings suitable for radial and thrust loading. Class B temperature rise with class F insulation.	1.104 MOTOR STARTERS	A. Unless specifically noted otherwise on the mechanical plans, or in the specifications, all motor starters shall be furnished and installed by the Electrical Contractor. Refer to the Electrical Specifications for Motor Starter requirements.	1.105 V-BELT DRIVES	A. Capacity of V-Belt Drives at rated RPM shall be not less than 150 percent of motor nameplate horsepower rating.	1.106 ACCESS DOORS	A. Where valves, traps, dampers, devices or equipment of any kind is subject to service and maintenance, an accessible concealed space, access doors shall be furnished by the Mechanical Contractor and installed by the General Contractor. Doors shall be 12" x 12" for handhole and 24" x 24" for manhole where required.	1.107 DRIP PANS	A. Provide drip pans fabricated from corrosion-resistant sheet metal with watertight joints, and with edges turned up 2-1/2". Reinforce top, either by structural angles or by rolling top over 1/4" steel rod. Provide hole, gasket, and flange at low point for watertight joint and 1" drain line connection.	1.108 FIRE BARRIER THROUGH PENETRATION PROTECTION SYSTEMS	A. Manufacturer: Subject to compliance with requirements, provide fire barrier penetration seals of one of the following:	1.109 FIRE BARRIER THROUGH PENETRATION PROTECTION SYSTEMS	A. Manufacturer: Subject to compliance with requirements, provide fire barrier penetration seals of one of the following:	1.110 PRESSURE GAGES	A. Manufacturers: Ashcroft - Flo Fab - Miljoco - Palmer Wahl - Tel-Tru - Terlice - Watts - Weiss - Winters.	1.111 THERMOMETERS	A. Polyphase motors: NEMA MG 1, Design B medium induction motor, premium efficient, with 1.15 service factor. Multispeed motors shall have a separate winding for each speed. Bearings shall be regreassable, shielded, antifriction ball bearings suitable for radial and thrust loading. Class B temperature rise with class F insulation.	1.112 EQUIPMENT SUPPORTS	A. Provide each piece of equipment or apparatus suspended from ceilings or mounted above floor level with suitable structural support, platform or carrier in accordance with best recognized practice. All such supporting or mounting means shall be furnished by respective contractor who shall arrange for their inclusion and attachment to building structure, unless otherwise indicated on plans or herein specified. Contractors shall exercise extreme care that structural members of building are not overloaded by such equipment. In all cases details of such hangers, platforms, and supports, together with total weights of mounted equipment shall be approved by Architect-Engineer.	1.113 MOTORS	A. Polyphase motors: NEMA MG 1, Design B medium induction motor, premium efficient, with 1.15 service factor. Multispeed motors shall have a separate winding for each speed. Bearings shall be regreassable, shielded, antifriction ball bearings suitable for radial and thrust loading. Class B temperature rise with class F insulation.	1.114 MOTOR STARTERS	A. Unless specifically noted otherwise on the mechanical plans, or in the specifications, all motor starters shall be furnished and installed by the Electrical Contractor. Refer to the Electrical Specifications for Motor Starter requirements.	1.115 V-BELT DRIVES	A. Capacity of V-Belt Drives at rated RPM shall be not less than 150 percent of motor nameplate horsepower rating.	1.116 ACCESS DOORS	A. Where valves, traps, dampers, devices or equipment of any kind is subject to service and maintenance, an accessible concealed space, access doors shall be furnished by the Mechanical Contractor and installed by the General Contractor. Doors shall be 12" x 12" for handhole and 24" x 24" for manhole where required.	1.117 DRIP PANS	A. Provide drip pans fabricated from corrosion-resistant sheet metal with watertight joints, and with edges turned up 2-1/2". Reinforce top, either by structural angles or by rolling top over 1/4" steel rod. Provide hole, gasket, and flange at low point for watertight joint and 1" drain line connection.	1.118 FIRE BARRIER THROUGH PENETRATION PROTECTION SYSTEMS	A. Manufacturer: Subject to compliance with requirements, provide fire barrier penetration seals of one of the following:	1.119 FIRE BARRIER THROUGH PENETRATION PROTECTION SYSTEMS	A. Manufacturer: Subject to compliance with requirements, provide fire barrier penetration seals of one of the following:	1.120 PRESSURE GAGES	A. Manufacturers: Ashcroft - Flo Fab - Miljoco - Palmer Wahl - Tel-Tru - Terlice - Watts - Weiss - Winters.	1.121 THERMOMETERS	A. Polyphase motors: NEMA MG 1, Design B medium induction motor, premium efficient, with 1.15 service factor. Multispeed motors shall have a separate winding for each speed. Bearings shall be regreassable, shielded, antifriction ball bearings suitable for radial and thrust loading. Class B temperature rise with class F insulation.	1.122 EQUIPMENT SUPPORTS	A. Provide each piece of equipment or apparatus suspended from ceilings or mounted above floor level with suitable structural support, platform or carrier in accordance with best recognized practice. All such supporting or mounting means shall be furnished by respective contractor who shall arrange for their inclusion and attachment to building structure, unless otherwise indicated on plans or herein specified. Contractors shall exercise extreme care that structural members of building are not overloaded by such equipment. In all cases details of such hangers, platforms, and supports, together with total weights of mounted equipment shall be approved by Architect-Engineer.	1.123 MOTORS	A. Polyphase motors: NEMA MG 1, Design B medium induction motor, premium efficient, with 1.15 service factor. Multispeed motors shall have a separate winding for each speed. Bearings shall be regreassable, shielded, antifriction ball bearings suitable for radial and thrust loading. Class B temperature rise with class F insulation.	1.124 MOTOR STARTERS	A. Unless specifically noted otherwise on the mechanical plans, or in the specifications, all motor starters shall be furnished and installed by the Electrical Contractor. Refer to the Electrical Specifications for Motor Starter requirements.	1.125 V-BELT DRIVES	A. Capacity of V-Belt Drives at rated RPM shall be not less than 150 percent of motor nameplate horsepower rating.	1.126 ACCESS DOORS	A. Where valves, traps, dampers, devices or equipment of any kind is subject to service and maintenance, an accessible concealed space, access doors shall be furnished by the Mechanical Contractor and installed by the General Contractor. Doors shall be 12" x 12" for handhole and 24" x 24" for manhole where required.	1.127 DRIP PANS	A. Provide drip pans fabricated from corrosion-resistant sheet metal with watertight joints, and with edges turned up 2-1/2". Reinforce top, either by structural angles or by rolling top over 1/4" steel rod. Provide hole, gasket, and flange at low point for watertight joint and 1" drain line connection.	1.128 FIRE BARRIER THROUGH PENETRATION PROTECTION SYSTEMS	A. Manufacturer: Subject to compliance with requirements, provide fire barrier penetration seals of one of the following:	1.129 FIRE BARRIER THROUGH PENETRATION PROTECTION SYSTEMS	A. Manufacturer: Subject to compliance with requirements, provide fire barrier penetration seals of one of the following:	1.130 PRESSURE GAGES	A. Manufacturers: Ashcroft - Flo Fab - Miljoco - Palmer Wahl - Tel-Tru - Terlice - Watts - Weiss - Winters.	1.131 THERMOMETERS	A. Polyphase motors: NEMA MG 1, Design B medium induction motor, premium efficient, with 1.15 service factor. Multispeed motors shall have a separate winding for each speed. Bearings shall be regreassable, shielded, antifriction ball bearings suitable for radial and thrust loading. Class B temperature rise with class F insulation.	1.132 EQUIPMENT SUPPORTS	A. Provide each piece of equipment or apparatus suspended from ceilings or mounted above floor level with suitable structural support, platform or carrier in accordance with best recognized practice. All such supporting or mounting means shall be furnished by respective contractor who shall arrange for their inclusion and attachment to building structure, unless otherwise indicated on plans or herein specified. Contractors shall exercise extreme care that structural members of building are not overloaded by such equipment. In all cases details of such hangers, platforms, and supports, together with total weights of mounted equipment shall be approved by Architect-Engineer.	1.133 MOTORS	A. Polyphase motors: NEMA MG 1, Design B medium induction motor, premium efficient, with 1.15 service factor. Multispeed motors shall have a separate winding for each speed. Bearings shall be regreassable, shielded, antifriction ball bearings suitable for radial and thrust loading. Class B temperature rise with class F insulation.	1.134 MOTOR STARTERS	A. Unless specifically noted otherwise on the mechanical plans, or in the specifications, all motor starters shall be furnished and installed by the Electrical
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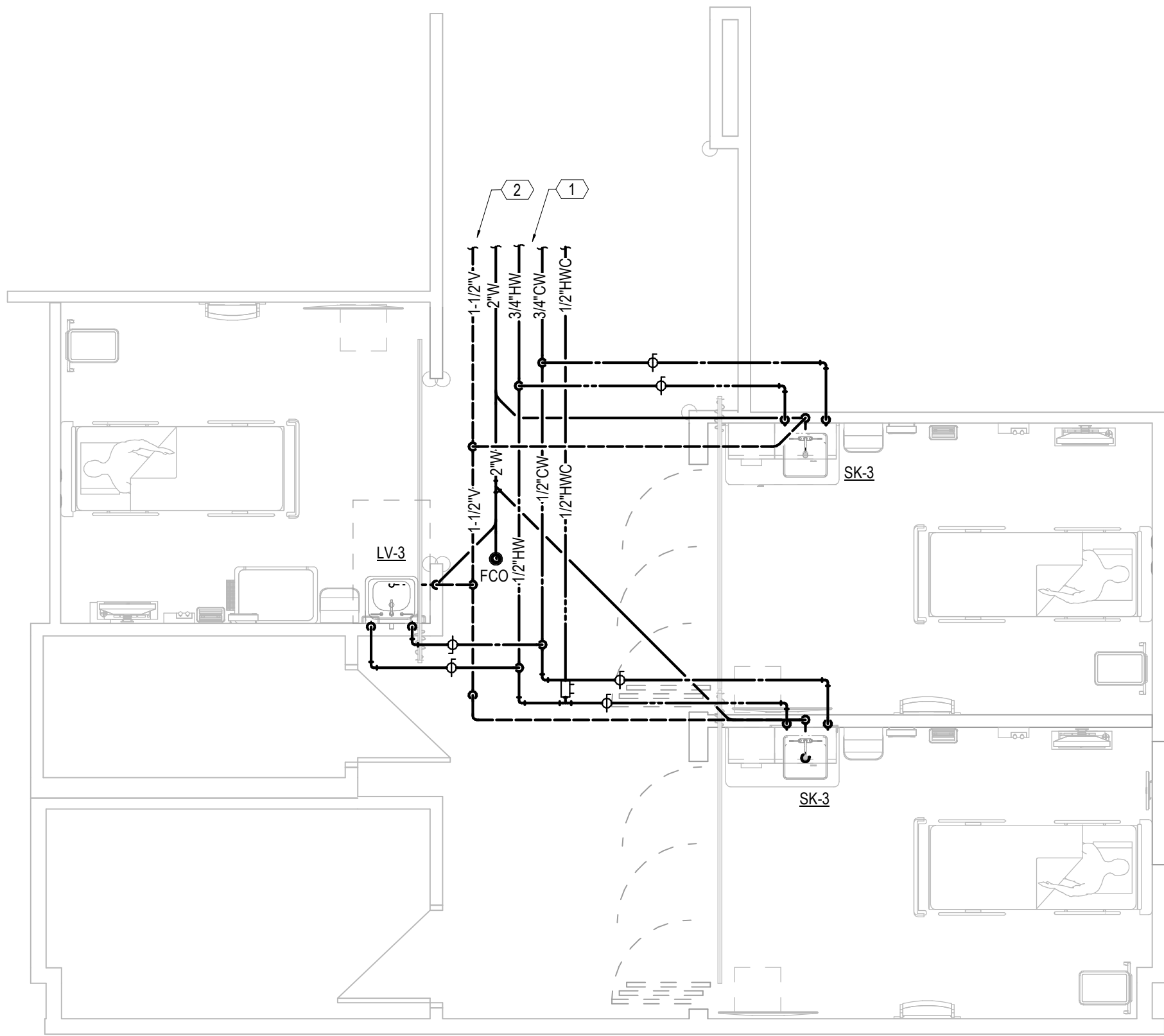
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1

FIRST FLOOR PLUMBING PLAN

0' 4' 8' 12' 1/4" = 1'-0"



PLUMBING GENERAL NOTES

- REFER TO THE PLUMBING FIXTURE SCHEDULE FOR PIPE SIZES TO INDIVIDUAL FIXTURES
- NOT ALL REQUIRED CLEANOUTS ARE NECESSARILY SHOWN ON THESE PLANS. PROVIDE CLEANOUTS ON WASTE, VENT AND STORM PIPING AS REQUIRED BY CODE AND FOR REASONABLE MAINTENANCE BASED ON ACTUAL FIELD INSTALLATION.
- PIPING ON EXTERIOR WALLS OR PRE-CAST WALLS TO BE ROUTED IN FRAMED WALL ON INTERIOR SIDE OF INSULATION.
- AVOID ROUTING OVER ELECTRICAL ROOMS AND ELECTRICAL PANELS. MAINTAIN N.E.C. CLEARANCES. COORDINATE ROUTING WITH ELECTRICAL CONTRACTOR.
- ROUTE DOMESTIC HOT WATER RECIRCULATION PIPES DOWN THE WALL TO WITHIN 2' OF ALL PUBLIC LAVATORIES WITH A 1/2" RUNOUT. IF TWO OR MORE LAVATORIES SHARE A 1/2" OR LARGER BRANCH PIPE, THE HOT WATER RECIRCULATION PIPE SHALL CONNECT TO WITHIN 6" OF EACH LAVATORY.
- ALL VALVES SHALL BE INSTALLED ABOVE DROP-IN CEILINGS IN ACCESSIBLE LOCATIONS, OR WITH ACCESS PANELS IN HARD LID CEILINGS.
- ACCESS PANELS SHALL BE 24X24, UNLESS NOTED OTHERWISE. LOCATIONS SHOWN ARE APPROXIMATE. EXACT LOCATIONS SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS AND EQUIPMENT LOCATIONS. PROVIDE RATED ACCESS PANELS WHEREVER REQUIRED BY APPLICABLE CODES.
- ALL PIPING SHALL BE ROUTED AS HIGH AS POSSIBLE IN THE CEILING SPACE. UTILIZE JOIST SPACE WHEN POSSIBLE, ESPECIALLY WHERE CROSSING OTHER PIPES, DUCTS AND ELECTRICAL.
- PROVIDE ACCESSIBLE SHUT-OFF VALVES TO ALL APPLIANCES AND EQUIPMENT.
- COORDINATE ROUTING OF CONDENSATE DRAIN LINES WITH OTHER TRADES PRIOR TO INSTALLATION TO ENSURE SLOPE CAN BE MET.
- VERIFY AND REFER TO ARCHITECTURAL DIMENSIONAL FLOOR PLAN FOR EXACT LOCATIONS OF ALL FIXTURES AND EQUIPMENT.

SHEET KEYNOTES

- CONTRACT TO CONNECT COLD WATER, HOT WATER, AND HOT WATER RECIRCULATION PIPING TO EXISTING PIPING THE VICINITY. CONTRACTOR TO FIELD VERIFY EXACT LOCATION PRIOR TO BID.
- CONTRACTOR TO CONNECT SANITARY SEWER AND VENT PIPING TO EXISTING PIPING THE VICINITY. CONTRACTOR TO FIELD VERIFY EXACT LOCATION PRIOR TO BID.



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Saint Luke's East ED Patient Treatment Renovation
100 NE Saint Luke's Blvd
Lee's Summit, MO 64086

Date 07/10/2024
Job Number 3-24016
Drawn By KMB
Checked By EKE

Number	Date	Description

P101

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FIRST FLOOR PLUMBING PLAN

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Saint Luke's
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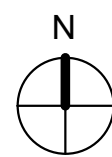
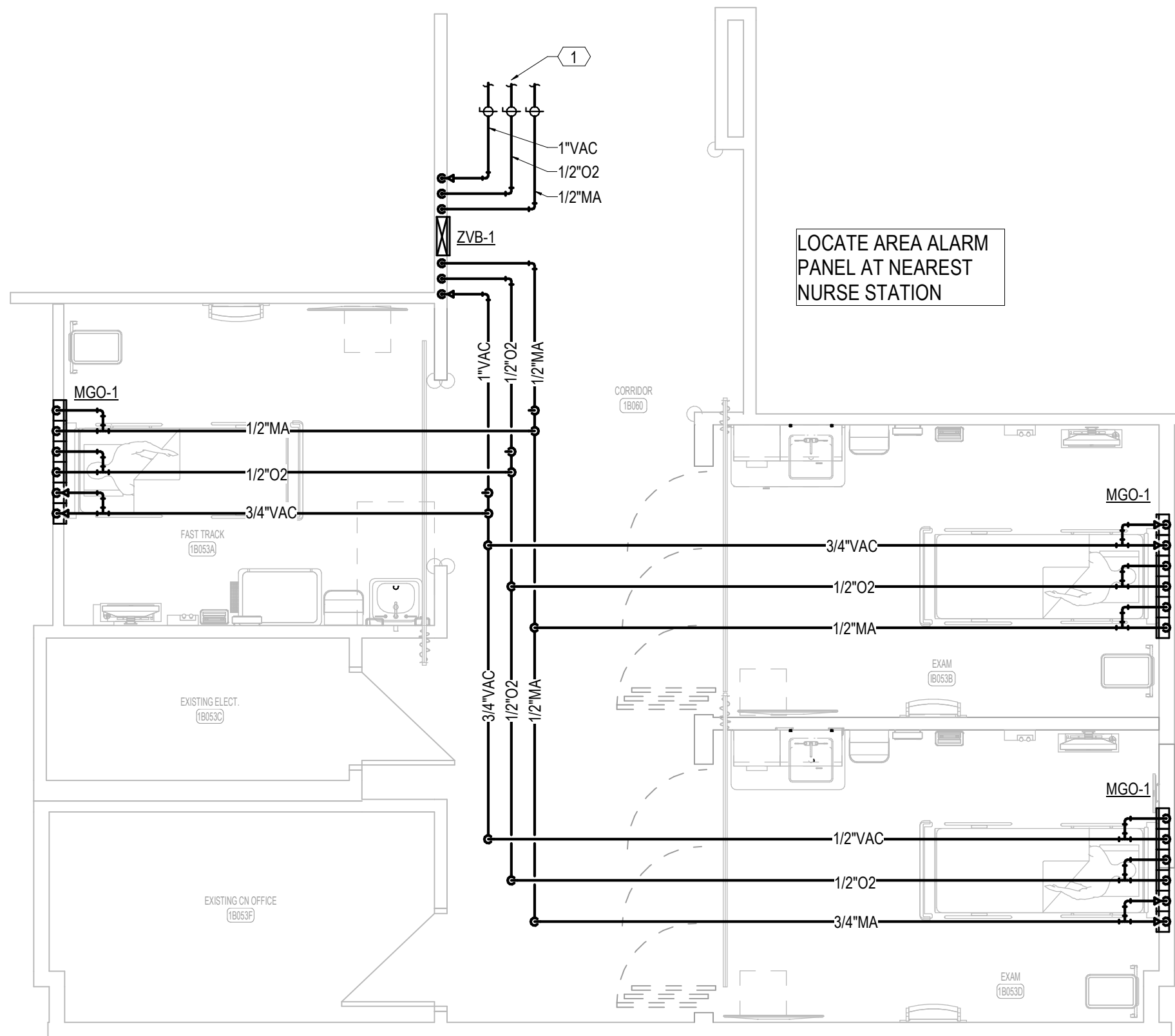
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FIRST FLOOR MEDICAL GAS PLAN

MED GAS GENERAL NOTES

1. PLANS ARE SCHEMATIC IN NATURE. LAYOUT IS BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND DIMENSIONS.
2. ALL CUTTING, PATCHING, AND DEMOLITION WORK SHALL BE CLOSELY COORDINATED WITH THE EXISTING CONDITIONS AND THE REQUIRED NEW WORK. G.C. SHALL PATCH AND FINISH PENETRATIONS OF EXISTING SURFACES TO MATCH ADJACENT SURFACES.
3. FIELD VERIFY BEST ROUTING FOR NEW PIPING AND DUCTWORK. COORDINATE WITH EXISTING EQUIPMENT, PIPING, AND DUCTWORK. PIPING SHALL RISE AND DROP, JOG OR OFFSET AS REQUIRED TO AVOID CONFLICTS. DUCTWORK SHALL TAKE PRECEDENCE OVER ALL PIPING, EXCEPT WHERE GRADE MUST BE MAINTAINED FOR DRAINAGE. ANY EXPENSES ARISING FROM LACK OF COORDINATION SHALL BE MADE AT THE CONTRACTOR'S EXPENSE.
4. REFER TO ARCHITECTURAL SPECIFICATIONS AND PLANS FOR PHASING OF DEMOLITION AND NEW WORK. ADJACENT AREAS ARE OCCUPIED AND CONTRACTOR SHALL WORK CLOSELY WITH OWNER TO SCHEDULE DEMOLITION AND CONSTRUCTION TO BE AS LEAST DISRUPTIVE AS POSSIBLE.

SHEET KEYNOTES

- 1 CONTRACTOR SHALL CONNECT NEW MEDICAL GAS PIPING TO EXISTING PIPING IN VICINITY. FIELD VERIFY EXACT LOCATIONS PRIOR TO BID.



1

FIRST FLOOR MEDICAL GAS PLAN

0' 4' 8' 12' 1/4" = 1'-0"

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PLUMBING FIXTURE SCHEDULE

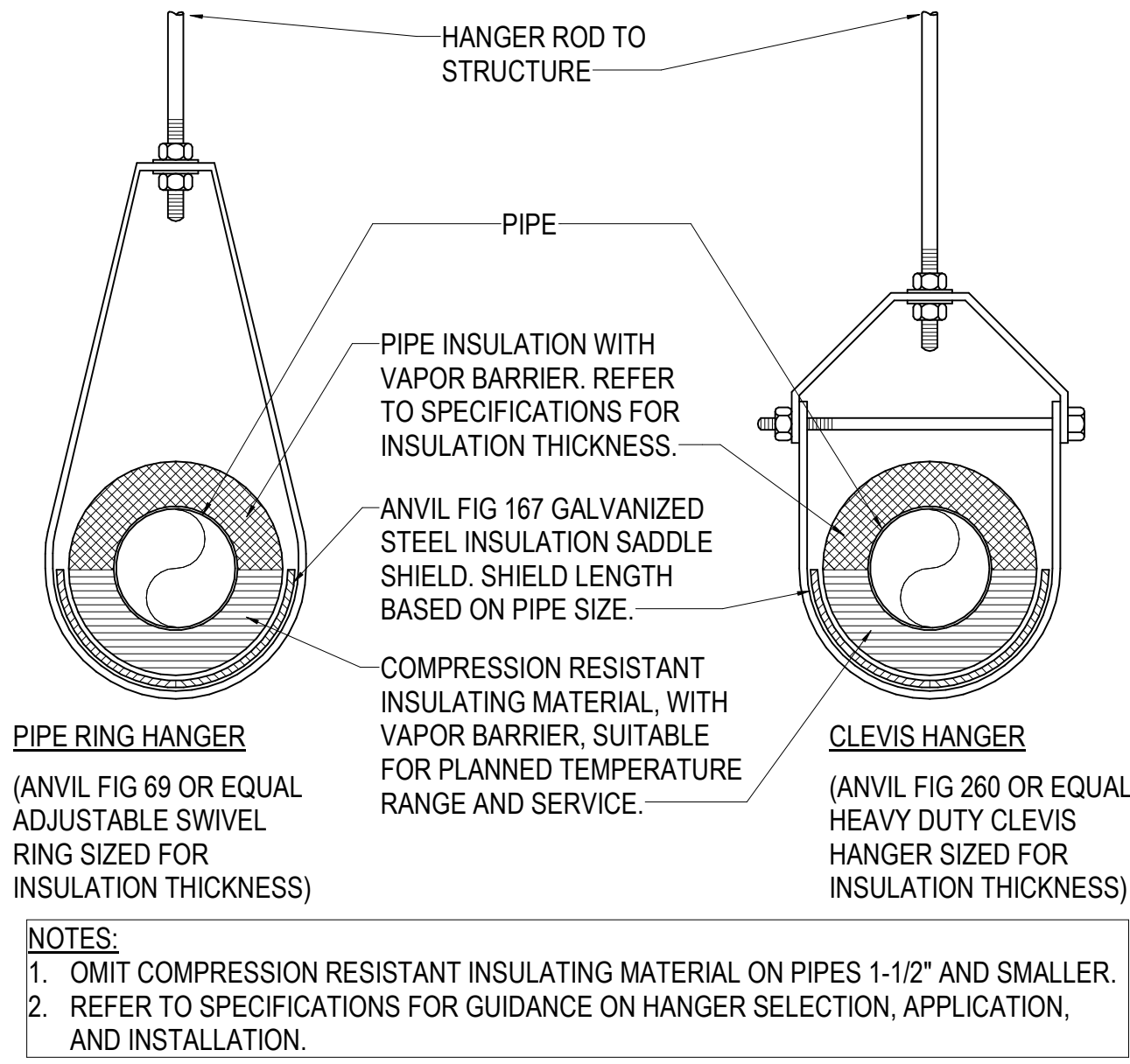
MARK	DESCRIPTION	MANUFACTURER	MODEL	DIMENSIONS	ADA COMPLIANT	MATERIAL AND FINISH	TRIM			CONTROL TYPE	POWER	FLOW		PIPE RUNOUT SIZES				SPECIFICATION
							MANUFACTURER	MODEL	FINISH			GALLONS PER MINUTE (GPM)	GALLONS PER FLUSH (GPF)	COLD WATER	HOT WATER	WASTE	VENT	
LV-3	LAVATORY - WALL HUNG - MANUAL	AMERICAN STANDARD	NO. 0355.012 "LUCERNE"	20-1/2" x 18-1/4"	YES	WHITE VITREOUS CHINA	CHICAGO FAUCET	NO. 895-GN2FC-317-XK		MANUAL	--	1.2	--	1/2"	1/2"	2"	1-1/2"	WALL HUNG LAVATORY WITH 3 HOLES ON 4" CENTERS - 4" WRIST BLADE HANDLES WITH CERAMIC DISC CARTRIDGE AND FLOW CONTROL. AMERICAN STANDARD NO. 2411.015 AMERICAN STANDARD NO. 2411.015 PERFORATED GRID STRAINER DRAIN WITH 1-1/4" TAILPIECE. DEARBORN NO. 510 1-1/2" 17 GAUGE "P" TRAP WITH ADAPTER FOR 1-1/4" TAILPIECE, CLEANOUT AND ESCUTCHEONS. DEARBORN NO. 2712 KOW HOT AND COLD WATER COMPRESSION INLET SUPPLIES WITH STOPS. PROVIDE TRUEBRO "LAVSHIELD" PVC ENCLOSURE MODEL 2018-AS-L1.
SK-3	SINK-INTEGRAL WITH COUNTERTOP	--	--	--	--	--	CHICAGO FAUCET	895-317XKCPR		MANUAL	--	1.0	--	1/2"	1/2"	2"	1-1/2"	INTEGRAL WITH COUNTERTOP - ELKAY NO. LK08 C.P. BRASS GRID STRAINER AND 1-1/2" C.P. BASS TAILPIECE. CHICAGO FAUCET NO. 895-317XKCPR FAUCET, 4" CENTERS, NO. GN2A 5-3/8" SPOUT, NO. 317 4" WRIST BLADE HANDLES AND "FC" FLOW CONTROL DEVICE. DEARBORN NO. 510-17GAUGE 1-1/2" "P" TRAP WITH CLEANOUT AND ESCUTCHEON. DEARBORN NO.2712 KOW HOT AND COLD WATER COMPRESSION INLET SUPPLIES WITH STOPS.

MEDICAL GAS CONNECTION SCHEDULE

REMARKS: 1. WHERE ZONE VALVE BOXES OR AREA ALARM PANELS ARE LOCATED IN SMOKE WALL, PROVIDE APPROPRIATE PROTECTION AROUND THE BOX TO MAINTAIN THE RATING. A. INDICATE ABNORMAL PRESSURE.									
MARK	MFR.	LOC.	PIPING CONNECTIONS (IN)			ALARM SIGNAL			REMARKS
			OXYGEN	VACUUM	MEDICAL AIR	OXYGEN	VACUUM	MEDICAL AIR	
AAP-1	BEACON MEADES	NURSE STATION				A	A	A	--
ZVB-1	BEACON MEADES	CORRIDOR 1B060	1/2	3/4	1/2				1

MEDICAL GAS OUTLET SCHEDULE

REMARKS: 1. MINIMUM RUNOUT SIZE TO BRANCH MAIN TO BE 1/2" FOR OXYGEN AND MED AIR; 3/4" FOR VAC. 2. LOCATE A VACUUM SLIDE AT EACH VACUUM WALL TERMINAL. 3. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION FOR MEDICAL GAS WALL OUTLETS.					
MARK	MFR.	OXYGEN (O2)	VAC (VAC)	MEDICAL AIR (MA)	REMARKS
MGO-1	BEACON MEADES	2	2	2	1-3



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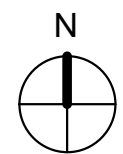
Saint Luke's East ED Patient Treatment Renovation
100 NE Saint Luke's Blvd
Lee's Summit, MO 64086

Date	07/10/2024
Job Number	3-24016
Drawn By	KMB
Checked By	EKE

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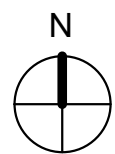
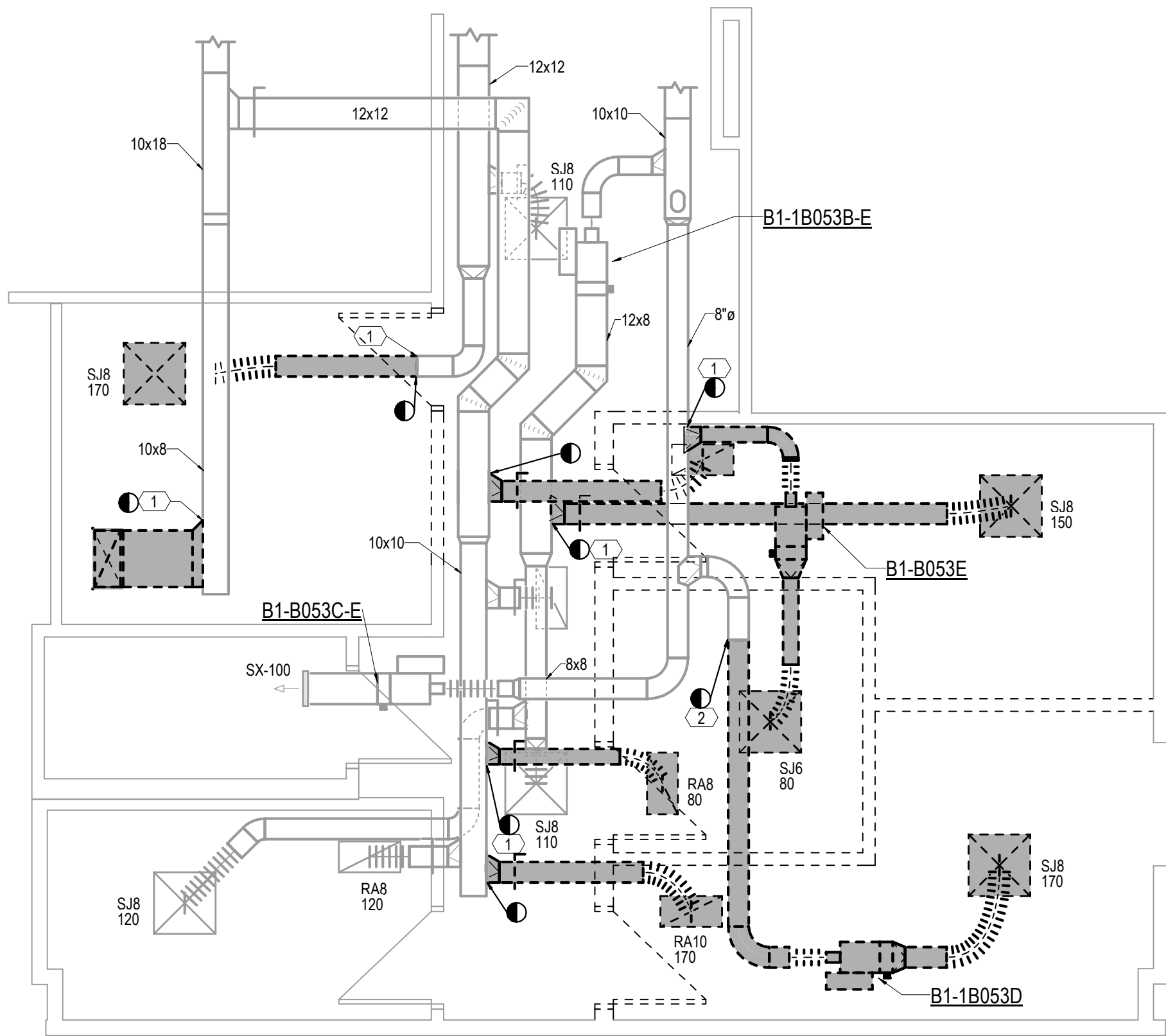
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2

FIRST FLOOR HVAC PLAN- DEMOLITION

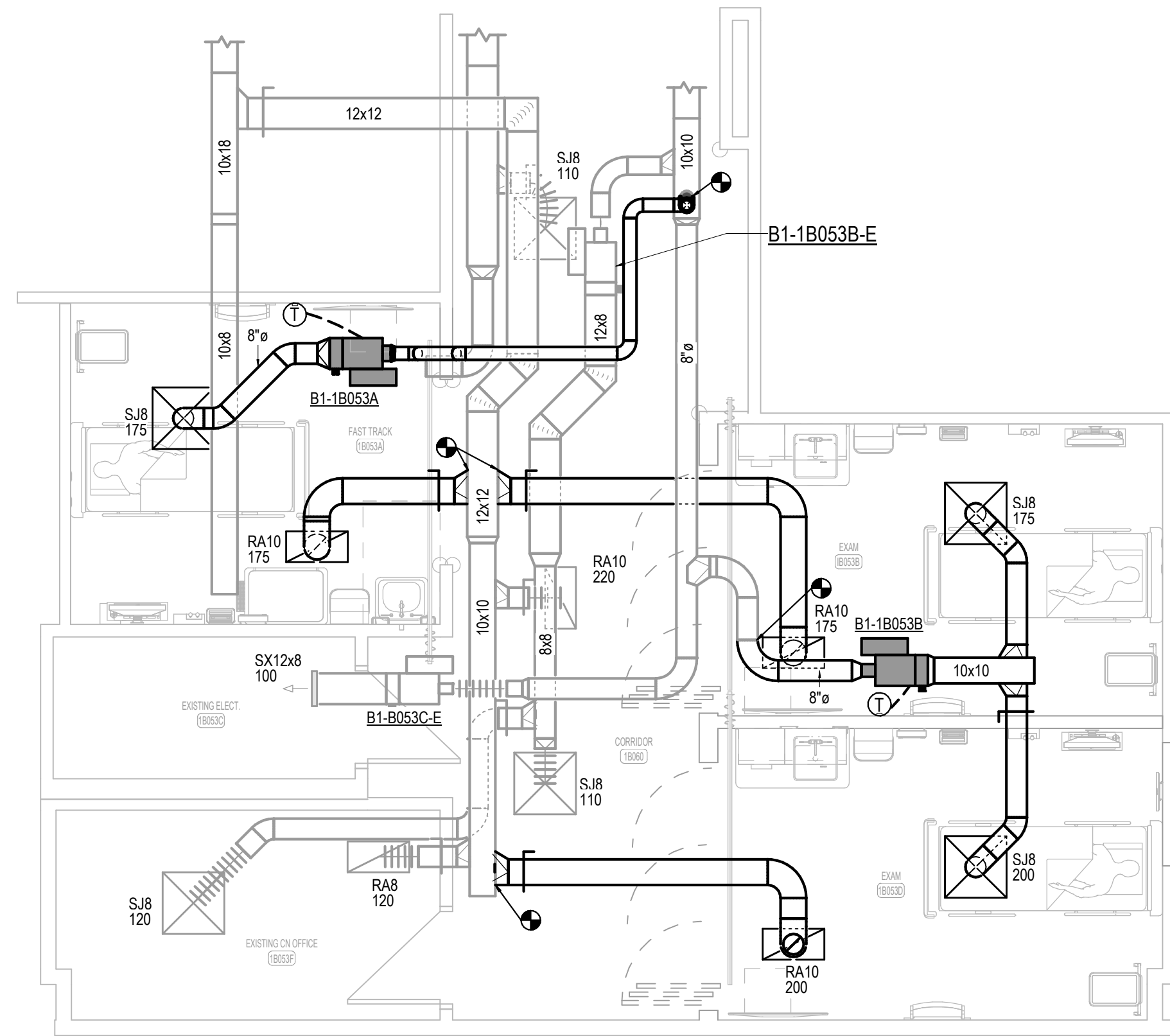
0' 4' 8' 12' 1/4" = 1'-0"



1

FIRST FLOOR HVAC PLAN- NEW WORK

0' 4' 8' 12' 1/4" = 1'-0"



HVAC GENERAL NOTES

- DUCT SIZES SHOWN ARE ACTUAL INSIDE CLEAR DIMENSIONS. INSULATION THICKNESS HAS NOT BEEN ACCOUNTED FOR. DUCTWORK EXPOSED TO SPACE SHALL NOT HAVE EXTERIOR INSULATION.
- T-STATS, HUMIDISTATS AND CO2 SENSORS SHALL BE LOCATED NEXT TO LIGHT SWITCH WITHIN THE ROOM SHOWN. COORDINATE WITH GC AND ELECTRICAL CONTRACTOR TO MATCH HEIGHT AND LOCATION.
- AVOID ROUTING DUCTWORK OVER ELECTRICAL ROOMS AND ELECTRICAL PANELS. MAINTAIN 1'-0" C-C CLEARANCES. COORDINATE ROUTING WITH ELECTRICAL CONTRACTOR.
- ALL SUPPLY AND EXHAUST AIR BRANCHES FOR DIFFUSERS OR GRILLES SHALL HAVE MANUAL BALANCE DAMPERS. RETURN AIR BRANCHES SHALL HAVE MANUAL BALANCE DAMPERS EXCEPT IN THE CASE OF RETURN AIR PLENUM. FOR PLAN CLARITY, NOT ALL DAMPERS MAY BE SHOWN. WHERE HARD LID CEILINGS PREVENT BALANCE DAMPER ACCESS, CONFIRM WITH GRD SCHEDULE OR CONFIRM WITH ENGINEER TO USE OBD'S OR REMOTE BALANCE DAMPERS IF NOT ALREADY INDICATED.
- ALL DUCTWORK SHALL BE ROUTED AS HIGH AS POSSIBLE WITHIN THE CEILING SPACE. UTILIZE JOIST SPACE WHERE POSSIBLE. ESPECIALLY WHEN CROSSING OTHER DUCT, PIPE, AND ELECTRICAL.
- PROVIDE FLEXIBLE DUCT AND PIPE CONNECTIONS TO ALL MOTORIZED EQUIPMENT.
- VERIFY ALL EQUIPMENT ACCESS PANELS WITH MANUFACTURER AND ARCHITECT. ACCESS PANELS SHALL BE 24X24 UNLESS NOTED OTHERWISE. LOCATIONS SHALL BE COORDINATED WITH THE ARCHITECT AND THE LOCATIONS OF THE EQUIPMENT THEY SERVE.
- REFER TO GRD SCHEDULE FOR DUCT CONNECTION SIZES. REFER TO TERMINAL BOX SCHEDULE FOR INLET DUCT SIZES.
- CEILING COORDINATION OF ALL MEP SYSTEMS (LIGHTING, DUCTWORK, DIFFUSERS, ELECTRICAL, ETC.) MUST BE COMPLETED BY THE CONTRACTOR PRIOR TO THE START OF ANY NEW INSTALLATION.

SHEET KEYNOTES

- DEMOLISH EXISTING DUCTWORK TO POINT SHOWN AND CAP. SEAL PER SMACNA REQUIREMENTS.
- DEMOLISH EXISTING DUCTWORK TO POINT SHOWN AND PREPARE FOR NEW CONNECTION.



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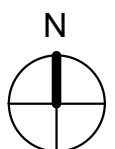
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FIRST FLOOR HVAC PLAN

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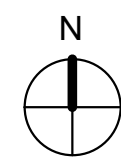
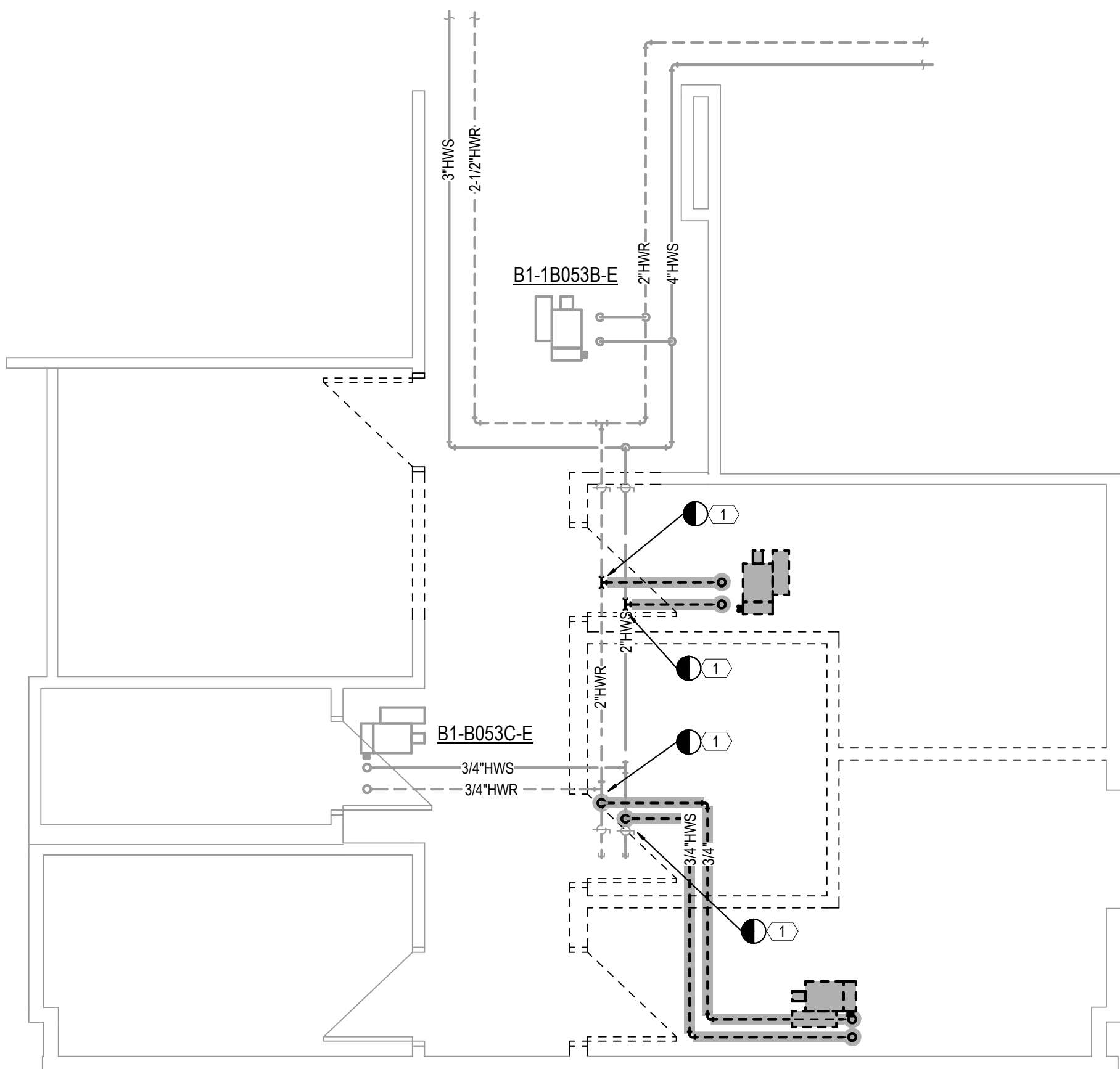
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2

FIRST FLOOR MECHANICAL PIPING PLAN- DEMOLITION

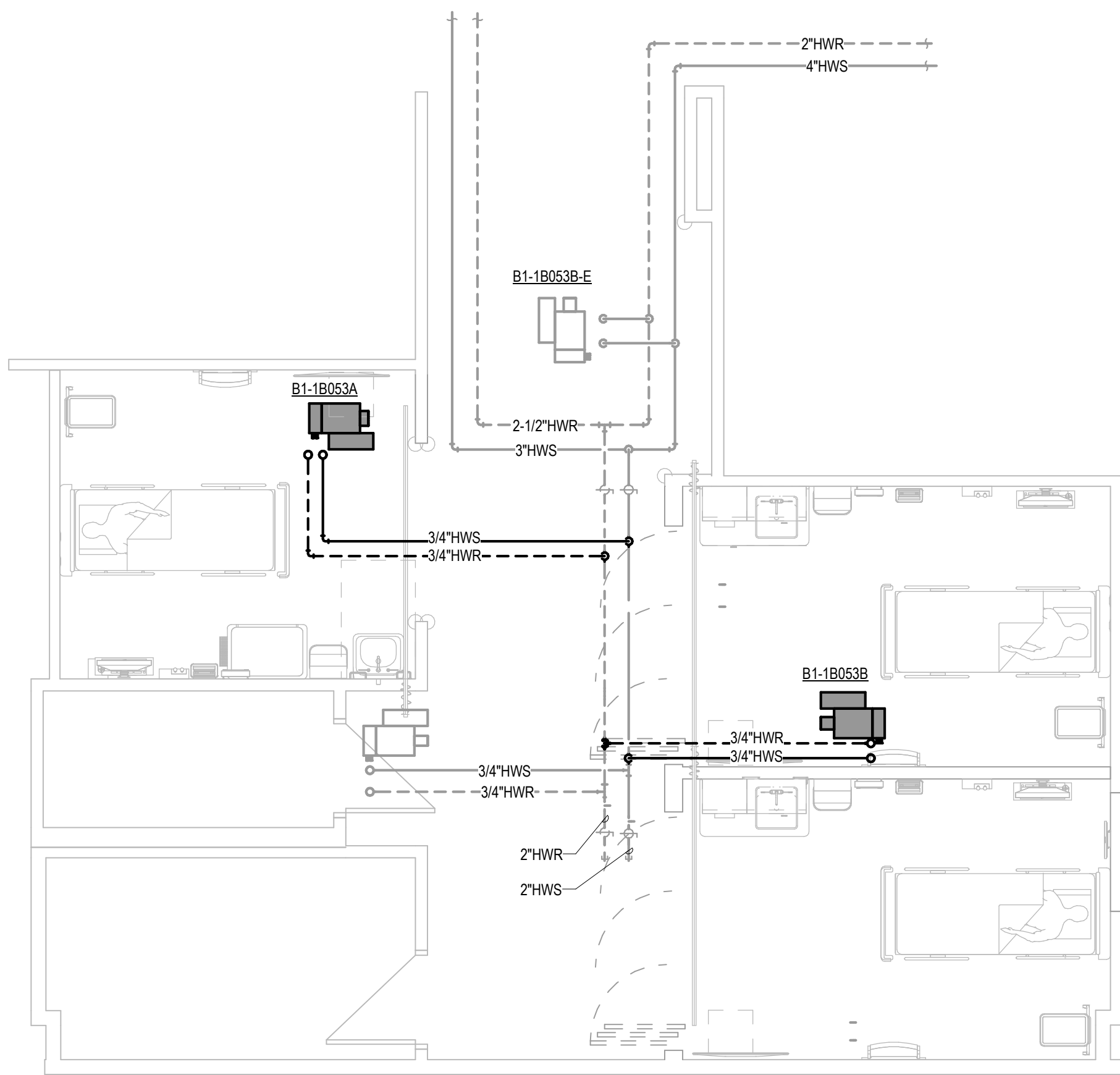
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1

FIRST FLOOR MECHANICAL PIPING PLAN-NEW WORK

0' 4' 8' 12' 1/4" = 1'-0"



- MECH. PIPING GENERAL NOTES**
1. PIPING ON EXTERIOR WALLS OR PRE-CAST CONCRETE WALLS TO BE ROUTED IN FRAMED WALL ON INTERIOR SIDE OF INSULATION.
 2. AVOID ROUTING PIPING OVER ELECTRICAL ROOMS OR ELECTRICAL PANELS. MAINTAIN N.E.C. CLEARANCES. COORDINATE ROUTING WITH ELECTRICAL CONTRACTOR.
 3. PROVIDE FLEXIBLE PIPE CONNECTIONS TO ALL MOTORIZED EQUIPMENT.
 4. VERIFY ALL EQUIPMENT ACCESS PANELS WITH MANUFACTURER AND ARCHITECT.
 5. REFER TO TERMINAL BOX SCHEDULE FOR ALL BRANCH HEATING WATER PIPE SIZES.
 6. ALL VALVES SHALL BE INSTALLED ABOVE DROP-IN CEILINGS IN AN ACCESSIBLE LOCATIONS, OR WITH ACCESS PANELS IN HARD LID CEILINGS. ACCESS PANELS SHALL BE 24X24 UNLESS NOTED OTHERWISE. COORDINATE PANEL LOCATIONS WITH ARCHITECT.
 7. CONTRACTOR SHALL MAINTAIN MINIMUM 4" CLEAR ABOVE LAY-IN CEILINGS.

SHEET KEYNOTES

- 1 DEMOLISH EXISTING HYDRONIC PIPING TO POINT SHOWN AND CAP AND SEAL.



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FIRST FLOOR MECHANICAL PIPING
PLAN

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GRILLE, REGISTER, AND DIFFUSER SCHEDULE

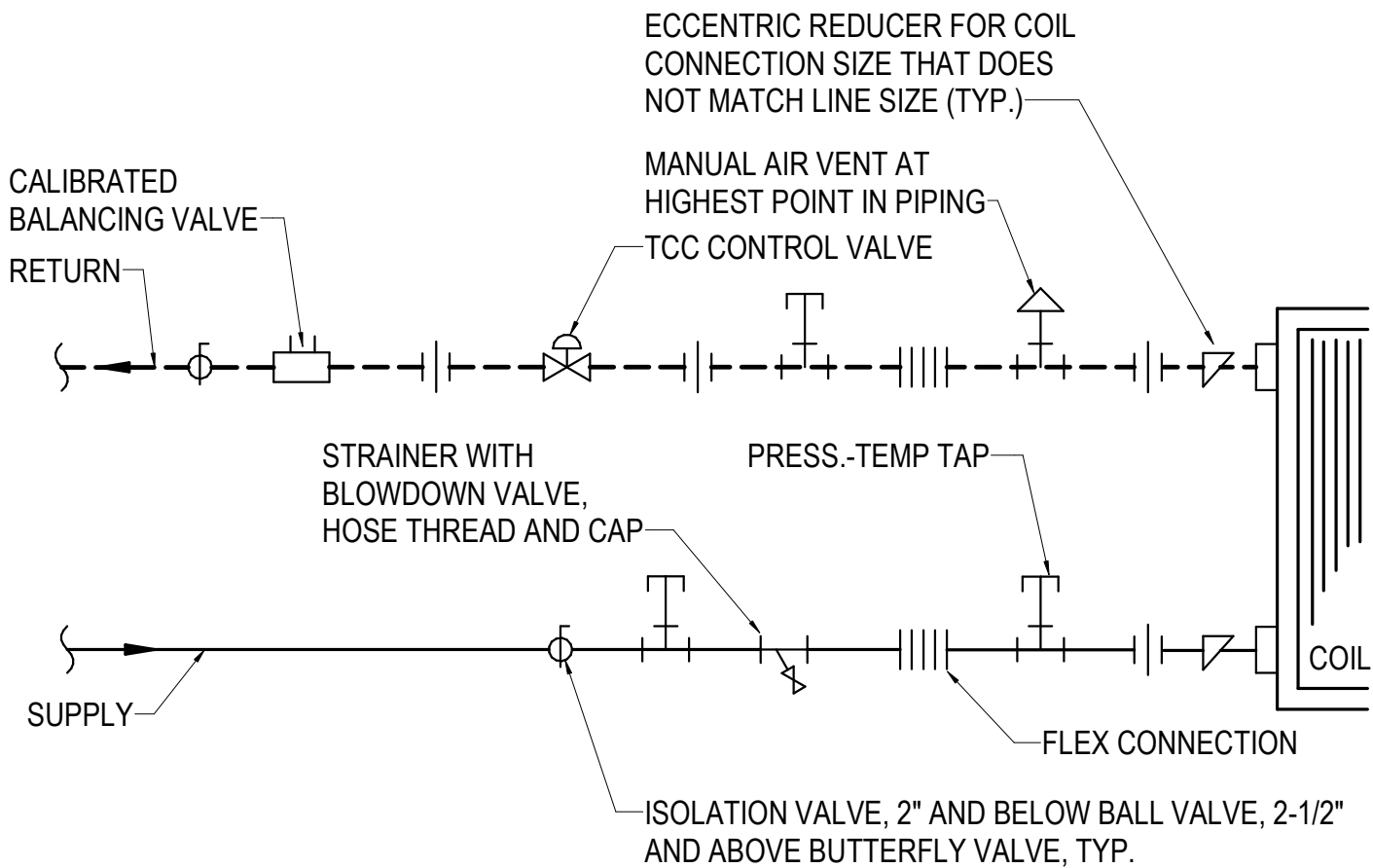
- FIRST LETTER IN MARK:**
S = SUPPLY DIFFUSER
R = RETURN GRILLE
P = PLENUM RETURN GRILLE
E = EXHAUST GRILLE
L = SLOT DIFFUSER
M = LAMINAR FLOW SUPPLY DIFFUSER
C = SECURITY GRILLE
U = FLOOR MOUNTED SUPPLY GRILLE
- NOTES:**
1. PROVIDE SQUARE TO ROUND ADAPTERS AS REQUIRED TO ACCOMMODATE ROUND RUNOUTS.
2. PROVIDE ALL LAY-IN GRDs WITH 24x24 LAY-IN PANEL AS REQUIRED.
3. FINISH TO BE WHITE UNLESS OTHERWISE SPECIFIED. COORDINATE AND VERIFY ALL FINISHES WITH ARCHITECT.
4. ALL SELECTIONS ARE BASED ON A MAXIMUM NC OF 25 UNLESS NOTED OTHERWISE.
5. CONTRACTOR SHALL VERIFY ALL CEILING TYPES AND ASSOCIATED BORDER TYPES.
6. MARKS USED MAY NOT BE IN SEQUENCE.
7. LOUVERED GRILLES TO HAVE FRONT BLADES PARALLEL TO LONG DIMENSION UNLESS WALL MOUNTED.
8. WALL MOUNTED LOUVERED GRILLES TO HAVE FRONT BLADES PARALLEL TO FLOOR.

MARK	TYPE	IMAGE	BASED ON		MOUNT	PANEL SIZE (FACE SIZE)	MATERIAL	BLADE SPACING / SLOT WIDTH	DEFLECTION	COLOR	REMARKS
			MFR	MODEL							
SJ	SUPPLY DIFFUSER		TITUS	OMNI-AA	LAY-IN	24x24	ALUMINUM	--	--	WHITE	--
RA	RETURN GRILLE		TITUS	350FL	LAY-IN	24x12 (22x10)	ALUMINUM	3/4"	35°	WHITE	--

TERMINAL UNIT SCHEDULE

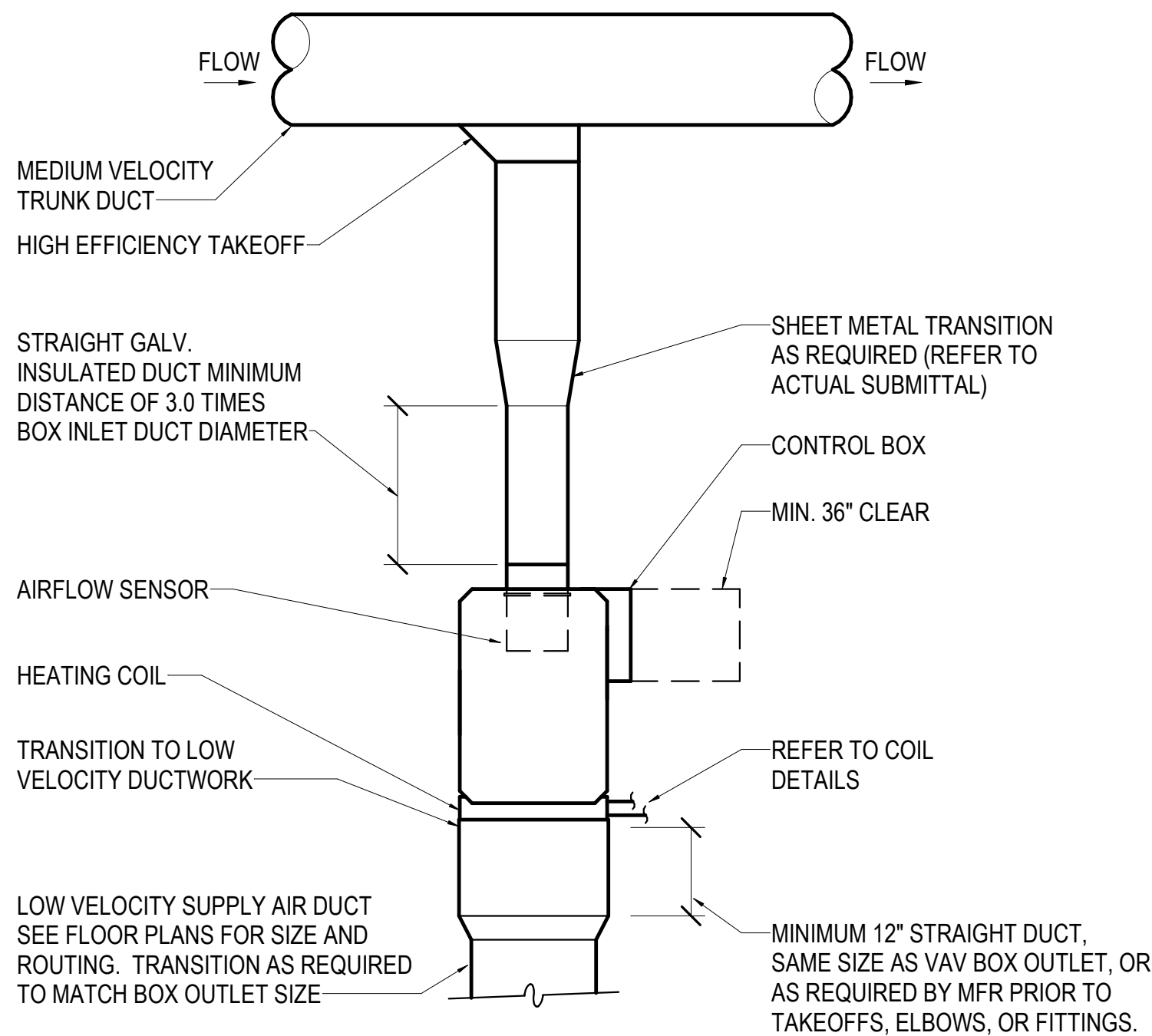
- REMARKS:**
- ALL TERMINAL UNITS SHALL BE PROVIDED WITH FLOW-RING SERVICE 'T'.
 - ALL TERMINAL UNITS FOR USE IN HEALTHCARE APPLICATIONS SHALL BE PROVIDED WITH FIBER FREE STERIOLOC LINER. UNLESS INDICATED OTHERWISE.
 - EXISTING TERMINAL UNIT TO REMAIN .

MARK	BASED ON		UNIT SIZE	INLET SIZE (INCH)	PRIMARY AIRFLOW		OP SP (IN WC)	MAX NC RAD	HEATING COIL													ELEC		LINER TYPE	REMARKS
	MFR	MODEL			MAX (CFM)	MIN (CFM)			HOT WATER COIL													VOLT	PHASE		
									AIR																
									CFM	EAT (°F)	LAT (°F)	CAP. (MBH)	EWT (°F)	LWT (°F)	APD (IN WG)	FLOW (GPM)	WPD (FT H2O)	ROWS	FPI	S & R RUNOUT SIZE (INCH)					
B1-1B053A	TITUS	DESV	6	6"	375	210	0.5	30	375	55	99	10	180	146	0.17	0.6	0.08	2	10	1/2"	120	1	STERILOLOC	1,2	
B1-1B053B	TITUS	DESV	5	5"	175	100	0.5	30	175	55	92	4	180	152	0.03	0.3	0.08	1	10	1/2"	120	1	STERILOLOC	1,2	
B1-1B053B-E	TITUS	DESV	5	5"	230	0	0.5	30	230	55	90	7.9	180	140	0.1	0.5	0.3	1	10	1/2"	120	1	STERILOLOC	3	
B1-8053C-E	TITUS	DESV	4	4"	100	0	0.5	30	100	55	90	3.4	180	140	0.1	0.5	0.3	1	10	1/2"	120	1	STERILOLOC	3	

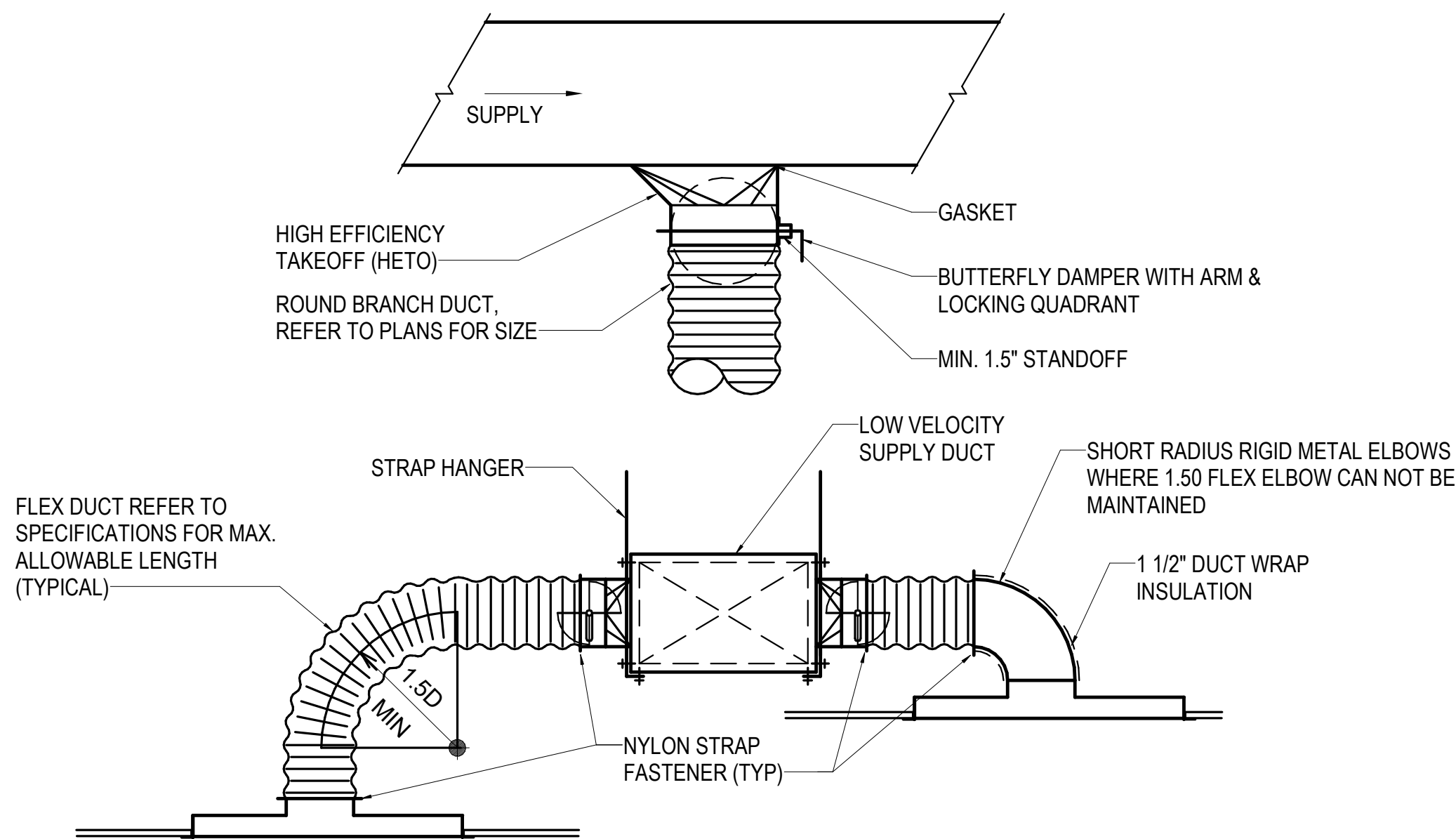


- NOTES:**
- FLEXIBLE PIPE CONNECTOR REQUIRED FOR EQUIPMENT CONTAINING FANS OR COMPRESSORS, BUT NOT REQUIRED FOR EQUIPMENT SUCH AS DUCT COILS. BRAIDED STAINLESS OR COPPER ONLY, NO RUBBER ALLOWED. MAX LENGTH OF 6 INCHES.
 - PIPE ALL MULTI-ROW COILS FOR COUNTERFLOW (WATER ENTERS MOST DOWNSTREAM COIL, LEAVES MOST UPSTREAM COIL).
 - REFER TO CONTROLS DRAWINGS FOR ADDITIONAL INFORMATION.
 - 2-WAY VALVE NORMALLY OPEN FOR HEATING AND NORMALLY CLOSED FOR COOLING.
 - CONFIRM SUPPLY AND RETURN CONNECTION LOCATIONS WITH EQUIPMENT MANUFACTURER PRIOR TO INSTALLATION.
 - MEET MANUFACTURER'S REQUIREMENTS FOR ACTUATOR CLEARANCES AND STEM ORIENTATION.
 - COORDINATE PIPING LOCATION WITH EQUIPMENT ACCESS DOORS, ELECTRICAL JUNCTION BOXES AND DRAIN PIPING.
 - HYDRONIC PIPING SHALL BE MAINTAINED FULL SIZE UP TO COIL CONNECTIONS. SHUT-OFF VALVES, STRAINERS, BALANCE VALVES, ETC. WILL NOT BE ALLOWED TO REDUCE FROM LINE SIZE. CONTROL VALVES MAY BE DOWN SIZED FOR FLOW RATE, BUT NOT TO EXCEED 4 PSIG PRESSURE DROP AT DESIGN FLOW.

3 COIL PIPING DETAIL - TERMINAL UNIT-2-WAY NO SCALE



1 TERMINAL UNIT REHEAT DETAIL NO SCALE



2 DIFFUSER INSTALLATION DETAIL NO SCALE



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Saint Luke's
EAST HOSPITAL

Saint Luke's East ED Patient Treatment Renovation
100 NE Saint Luke's Blvd
Lee's Summit, MO 64086

Date 07/10/2024
Job Number 3-24016
Drawn By KMB
Checked By EKE

Revision
Number Date Description

M501

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MECHANICAL DETAILS AND
SCHEDULES

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GENERAL NOTES

HEALTHCARE	
H1.	DO NOT ROUTE BRANCH CIRCUITS OR FEEDERS ABOVE OR BELOW IMAGING ROOMS BECAUSE OF POSSIBLE ELECTROMAGNETIC INTERFERENCE.
H2.	BOND PANELBOARDS SERVING THE SAME PATIENT CARE VICINITY WITH #6 AWG MINIMUM COPPER CONDUCTOR PER NEC ARTICLE 517. THIS INCLUDES NORMAL AND ESSENTIAL PANELBOARDS AND ESSENTIAL PANELBOARDS FED FROM DIFFERENT TRANSFER SWITCHES.
H3.	THE GROUNDING SYSTEM IN PATIENT CARE AREAS SHALL BE TESTED BY VOLTAGE AND IMPEDANCE MEASUREMENTS PER NFPA 99 REQUIREMENTS BY A THIRD-PARTY TESTING AGENCY. TEST REPORTS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW PRIOR TO SUBSTANTIAL COMPLETION AND SHALL BE INCLUDED IN THE FINAL CLOSEOUT DOCUMENTS.
H4.	MEDICAL GAS ALARM CABLING SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. VERIFY ALL REQUIREMENTS WITH THE MEDICAL GAS SUPPLIER. ALL MEDICAL GAS CABLING SHALL BE IN CONDUIT.
H5.	COORDINATE ALL BOX ROUGH-IN AND PATHWAY REQUIREMENTS FOR SOUND SYSTEMS IN OPERATING ROOMS WITH THE EQUIPMENT SUPPLIER
H6.	REFER TO THE SPECIFICATIONS FOR REQUIREMENTS ON COLOR CODING BOXES AND/OR CONDUIT ACCORDING TO THE SPECIFIC BRANCH OF THE ESSENTIAL ELECTRICAL SYSTEM.
H7.	REFER TO THE SPECIFICATIONS FOR REQUIREMENTS ON COLOR CODING OF NAMEPLATES ACCORDING TO THE SPECIFIC BRANCH OF THE ESSENTIAL ELECTRICAL SYSTEM.
H8.	THIS IS A LIFE SAFETY BUILDING WHICH MEANS IT SHALL REMAIN REASONABLY OPERATIONAL IN THE CASE OF A SEISMIC EVENT. REFER TO THE SPECIFICATIONS FOR SPECIFIC REQUIREMENTS ON EQUIPMENT BRACING.
H9.	FOR ISOLATION PANEL CIRCUITS, USE 1" MINIMUM ENT CONDUIT ROUTED AS DIRECT AS POSSIBLE. MAXIMUM OF 2 CIRCUITS PER CONDUIT. REFERENCE SPECIFICATION SECTION 260527 FOR ADDITIONAL REQUIREMENTS.
H10.	ALL PATIENT CARE AREAS (PATIENT ROOMS AND SUPPORT SPACES) SHALL HAVE TWO GROUND PATHS PER N.E.C. ARTICLE 517.
H11.	REFER TO MANUFACTURER DRAWINGS FOR ALL IMAGING EQUIPMENT REQUIREMENTS, INCLUDING BUT NOT NOT LIMITED TO CIRCUIT BREAKER SIZE, CABLE TRAY, DUCTS, CONDUITS, CABLES, CONDUCTORS, EPO SWITCHES, AND ALL DEVICES REQUIRED FOR A COMPLETE INSTALLATION.
H12.	THE LIFE SAFETY BRANCH AND THE CRITICAL BRANCH OF THE ESSENTIAL ELECTRICAL SYSTEM SHALL BE KEPT ENTIRELY INDEPENDENT OF ALL OTHER WIRING AND EQUIPMENT AND SHALL NOT ENTER THE SAME RACEWAY, BOXES, OR CABINETS WITH EACH OTHER OR OTHER WIRING PER N.E.C. ARTICLE 517.
H13.	DIGITAL CLOCK WITH INTEGRAL TIMER SHALL BE SIMPLEX #6303-9103 CLOCK WITH #6303-9202 CONTROL STATION OR APPROVED EQUAL. PROVIDE 120V. POWER TO CLOCK AND CONTROL WIRING FROM CLOCK TO CONTROL STATION AS REQUIRED.
H14.	DIGITAL CLOCK SHALL BE SIMPLEX #6334-9125 WITH #6334-9802 MOUNTING BRACKET AND #6334-9803 HARNESS ASSEMBLY OR APPROVED EQUAL. CLOCK SHALL BE 120V. WITH 2-1/2" LED (4) DIGIT DISPLAY.
H15.	HOSPITAL GRADE RECEPTACLES SHALL ONLY BE PROVIDED IN PATIENT CARE AREAS AS DEFINED BY NEC ARTICLE 517.

GENERAL NOTES

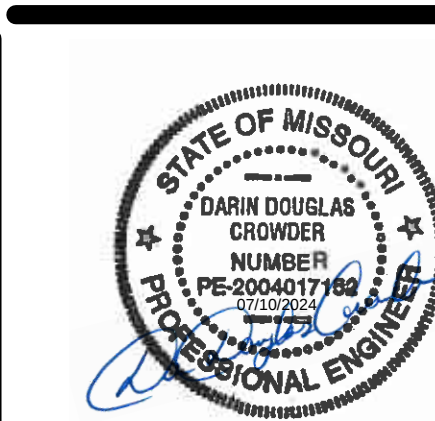
1.	ALL ELECTRICAL WORK SHALL COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) & THE AMERICANS WITH DISABILITIES ACT (ADA).	12.	LABEL THE FRONT OF EACH RECEPTACLE COVERPLATE WITH PANEL DESIGNATION AND CIRCUIT NUMBER USING CLEAR THERMAL TRANSFER (ELECTRONIC DYMO) LABELS WITH 1/8" HIGH BLACK LETTERS (OR CONTRASTING COLOR IF COVERPLATES ARE BLACK OR BROWN). LABELS SHALL BE SUITABLE FOR INDOOR/OUTDOOR USE. LABEL THE BACK OF EACH LIGHT SWITCH COVERPLATE WITH PANEL DESIGNATION AND CIRCUIT NUMBER USING A FINE BLACK PERMANENT MARKER.
2.	REFER TO RELATED ARCHITECTURAL, MECHANICAL, STRUCTURAL, AND CIVIL DRAWINGS FOR RELATED INFORMATION.	13.	PROVIDE 18" LONG (MIN.) CONDUIT SLEEVES THRU ALL WALLS WHERE CABLES ARE INDICATED OR REQUIRED TO PASS THRU WALLS. PROVIDE BUSHINGS ON BOTH ENDS. SIZE CONDUIT FOR CABLES INSTALLED. AT CABLE TRAYS, PROVIDE ONE 4" CONDUIT SLEEVE FOR EACH 4" WIDTH OF CABLE TRAY. MAXIMUMS SHALL BE: 1"C. = 10 CABLES 2 1/2"C. = 20 CABLES 3"C. = 30 CABLES 4"C. = 50 CABLES
3.	REFER TO THE SPECIFICATIONS FOR DATA NOT ON THE DRAWINGS.	14.	LOCATE CABLE TRAYS 6" ABOVE CEILING. OFFSET TRAY UP AND OVER LIGHT FIXTURES AND DUCTWORK (FIELD VERIFY AND PROVIDE AS REQUIRED). IF PHYSICALLY IMPOSSIBLE TO RUN CABLE TRAY UP AND OVER, THEN PROVIDE CABLE SUPPORT HOOKS FROM STRUCTURE ABOVE. SIZED AND RATED FOR INSTALLED CABLES PLUS 25% SPARE.
4.	E.C. SHALL REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS FOR THE REQUIREMENTS ASSOCIATED WITH WIRING AND CONNECTION OF INTERLOCKING AND CONTROLS OF MECHANICAL UNITS AND THERMOSTAT LOCATIONS.	15.	PROVIDE DIMMER PER THE SPECIFICATIONS. COORDINATE DIMMER TYPE AND WIRING WITH ASSOCIATED LIGHT FIXTURE DIMMING REQUIREMENTS (I.E. 3-WIRE, 0-10V, ELECTRONIC OR MAGNETIC LOW VOLTAGE, ETC.) OR WITH LIGHTING CONTROL SYSTEM PROPRIETARY REQUIREMENTS (I.E. LUTRON, N.LIGHT, DALI, ETC.) AS NECESSARY. 3-WIRE DIMMERS SHALL BE PROVIDED WITH A DEDICATED NEUTRAL FOR EACH CONTROL ZONE. 0-10V DIMMERS SHALL BE PROVIDED WITH DIM/ON/OFF CONTROL. COORDINATE PHASE CONTROL OF LED DRIVERS (I.E. REVERSE PHASE, FORWARD PHASE, ETC.) WITH LIGHT FIXTURE MANUFACTURER'S RECOMMENDATIONS. LOW VOLTAGE CONTROL WIRING IS NOT SHOWN ON PLANS FOR CLARITY, BUT SHALL BE PROVIDED AS REQUIRED.
5.	COORDINATE OUTLET BOX LOCATIONS WITH MASONRY TO MINIMIZE CUTTING OF BRICK OR BLOCK.	16.	"C" INDICATED ADJACENT TO DEVICE INDICATES DEVICE MOUNTED ABOVE BACKSPLASH OF COUNTER TOP. VERIFY EXACT HEIGHT WITH ARCHITECTURAL PLANS AND ELEVATIONS.
6.	ALL MOUNTING HEIGHTS TO CENTERLINE OF ITEM UNLESS OTHERWISE NOTED. VERIFY ALL OUTLET LOCATIONS ON THE JOB PRIOR TO ROUGH-IN.		
7.	CONDUIT RUN W/CONDUCTORS AS INDICATED & GROUND WIRE SIZED PER N.E.C. 250.122. CONDUIT SIZE AS REQUIRED.		
8.	WHEN INCREASED CONDUCTOR SIZES ARE SHOWN ON THE PLANS, THE LARGER CONDUCTOR SIZE SHALL BE USED THROUGHOUT THE LENGTH OF THE CIRCUIT, INCLUDING NEUTRAL AND GROUND.		
9.	E.C. SHALL REFERENCE ARCHITECTURAL FINISH DRAWINGS FOR LOCATIONS AND HEIGHTS OF RIGID WALL COVERINGS, TILE, CHAIR RAIL, WAINSCOTING, ETC. AND ADJUST ELECTRICAL BOX ROUGH-IN HEIGHTS SO THAT COVERPLATES DO NOT PARTIALLY OVERLAP THESE ITEMS.		
10.	BRANCH CIRCUITS ARE INDICATED AS ONE CIRCUIT HOME RUNS WITH INDIVIDUAL NEUTRALS. A MAXIMUM OF THREE CIRCUITS (MAXIMUM OF THREE PHASE CONDUCTORS) MAY BE GROUPED IN A SINGLE CONDUIT. WHERE MULTIPLE CIRCUITS ARE LOCATED IN THE SAME RACEWAY, JUNCTION BOX OR ENCLOSURE, NEUTRALS SHALL BE MARKED OR LABELED TO INDICATE WHICH CIRCUIT THEY ARE ASSOCIATED WITH. SEE SPECIFICATION SECTION "LOW VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES" FOR ADDITIONAL INFORMATION.		
11.	JUNCTION BOX OR RECEPTACLE FOR DRINKING FOUNTAINS SHALL BE LOCATED BEHIND THE EQUIPMENT SKIRT UNLESS OTHERWISE NOTED. COORDINATE CONNECTION TYPE AND LOCATION WITH EQUIPMENT PROVIDED.		
COMMUNICATION / DATA (ROUGH-IN ONLY)			
T1.	EACH DATA, TELEPHONE, VIDEO, OR OTHER SYSTEMS OUTLET REQUIRES DOUBLE GANG BACKBOX WITH SINGLE GANG PLASTER RING AND 1"C. WITH PULL ROPE STUBBED 6" ABOVE NEAREST ACCESSIBLE CEILING UNLESS OTHERWISE NOTED ON PLANS. CONDUITS STUBBED UP ABOVE CEILINGS SHALL BE TURNED OUT 90 DEGREES. PROVIDE INSULATED BUSHINGS ON ALL CONDUITS. LABEL CONDUIT TO IDENTIFY ITS INTENDED USE (I.E. TELEPHONE, DATA, ETC.).		
FIRE ALARM			
F1.	THE FIRE ALARM SYSTEM SHOWN HAS BEEN DESIGNED PER THE REQUIREMENTS OF NFPA 72, 2013 EDITION. DEVICES SHOWN INDICATE DESIGN INTENT AND SHALL BE THE MINIMUM PROVIDED. SYSTEM SUPPLIER SHALL PROVIDE ANY ADDITIONAL CODE REQUIRED DEVICES OR DEVICES REQUIRED BY THE AUTHORITY HAVING JURISDICTION.	F4.	LABEL REMOTE ALARM INDICATOR FOR DUCT MOUNTED SMOKE DETECTORS (I.E. RTU=1 SUPPLY, RTU=2 RETURN, FIRE/SMOKE DAMPER, ETC.). DUCT DETECTORS SHOULD BE LOCATED IN THE AREA BETWEEN 6 AND 10 DUCT EQUIVALENT DIAMETERS OF STRAIGHT, UNINTERRUPTED DUCTWORK. DUCT DETECTORS FOR FIRE/SMOKE DAMPERS SHOULD BE LOCATED BETWEEN THE LAST INLET OR OUTLET UPSTREAM OF THE DAMPER AND THE FIRST INLET OR OUTLET DOWNSTREAM OF THE DAMPER.
F2.	FIELD VERIFY LOCATIONS OF AREA SMOKE DETECTORS AND HEAT DETECTORS. DO NOT LOCATE WITHIN 36" OF A HVAC DIFFUSER (SUPPLY OR RETURN), IN A DIRECT AIR FLOW, WITHIN 36" OF A SPRINKLER HEAD, OR WITHIN 36" OF THE TIP OF A CEILING FAN BLADE. SMOKE DETECTORS FOR DOOR RELEASE SHALL BE LOCATED ON THE CENTER LINE OF THE DOOR AND A MAXIMUM OF 5 FEET FROM THE DOOR. THE MINIMUM DISTANCE FROM THE DOOR IS THE DEPTH OF THE WALL SECTION ABOVE THE DOOR, BUT NOT LESS THAN 12".	F5.	PROVIDE 120V POWER AND FUSTAT FOR EACH FIRE/SMOKE DAMPER. INTERLOCK WITH FIRE ALARM CONTROL PANEL TO CLOSE THE FIRE/SMOKE DAMPER UPON ANY ALARM AT THE FIRE ALARM CONTROL PANEL AND TO SHUTDOWN THE ASSOCIATED MECHANICAL UNIT.
F3.	FAN SHUTDOWN RELAY WIRING SHALL BE LOCATED WITHIN 3 FEET OF THE FAN CONTROLS AND THE WIRING TO THE RELAY SHALL BE MONITORED.		
NURSE CALL (ROUGH-IN ONLY)			
N1.	THE CONTRACTOR SHALL PROVIDE OUTLET BOXES AND 1"C. TO ABOVE NEAREST ACCESSIBLE CEILING FOR ALL NURSE CALL DEVICE LOCATIONS. ALL NURSE CALL DEVICE LOCATIONS SHALL BE COORDINATED WITH THE FINAL DRAWINGS FROM THE NURSE CALL SYSTEM SUPPLIER. COORDINATE ALL REQUIREMENTS WITH THE NURSE CALL SYSTEM SUPPLIER. MOUNTING HEIGHT FOR EMERGENCY BATH STATIONS SHALL BE PER AIA GUIDELINES.		

SYMBOL LIST

SYMBOL	DESCRIPTION	MOUNTING	SYMBOL	DESCRIPTION	MOUNTING
ABBREVIATIONS					
NL	NIGHT LIGHT - WIRE AHEAD OF CONTROLS		AFF	ABOVE FINISHED FLOOR	
EM	ON EMERGENCY POWER		AFG	ABOVE FINISHED GRADE	
WP	WEATHERPROOF		DF	DRINKING FOUNTAIN - SEE GENERAL NOTE 11	
CT	COUNTERTOP (SEE GEN. NOTE 16)		GAP	GENERATOR ANNUNCIATOR PANEL	
UON	UNLESS OTHERWISE NOTED				
W	WALL				
CONDUIT AND WIRING					
	EMERGENCY CIRCUIT	CLG/WALL		CONDUIT HOME RUN, 1 CIRCUIT. 2#12 & 1#12 GRD. - 1/2"C.	CLG/WALL
	MASTER/SLAVE FIXTURE WHIP	CEILING		CONDUIT HOME RUN, 2 CIRCUITS. 4#12 & 1#12 GRD. - 1/2"C.	CLG/WALL
	LOW VOLTAGE WIRING	CLG/WALL		CONDUIT HOME RUN, 3 CIRCUITS. 6#12 & 1#12 GRD. - 1/2"C.	CLG/WALL
	CDT RUN 2#12 & 1#12 GRD. - 1/2"C. OR CDT RUN AS NOTED ON PLAN	CLG/WALL		CONDUIT HOME RUN, 2 CIRCUITS PHASE CONDUCTORS/NEUTRAL CONDUCTOR (#12 UON)	CLG/WALL
	CDT RUN 2#12 & 1#12 GRD. - 3/4"C. OR CDT RUN AS NOTED ON PLAN	EARTH/FLOOR		SWITCH LEGS (#12 UON)	
	CONDUIT HOME RUN, 1 CIRCUIT. 2#10 & 1#10 GRD. (GEN. NOTES 7 & 8)	CLG/WALL		GROUND CONDUCTOR (#12 UON)	
	CONDUIT RUN PARTIAL CIRCUIT. 2#12 & 1#12 GRD. - 1/2"C.	CLG/WALL			
	MISC. EQUIPMENT CONNECTION				
	CONDUIT SEAL OFF				
LIGHTING, SWITCHES AND SENSORS					
	LIGHT FIXTURE & FIXTURE LETTER	CLG SURF/ RECESSED		SWITCHES (1-POLE, 2-POLE, 3-WAY, 4-WAY)	46" AFF
	STRIP LIGHT FIXTURE & FIXT LETTER	CEILING		SWITCHES (KEYED, PILOT, TIMER)	46" AFF
	LIGHT FIXTURE & FIXTURE LETTER	CLG SURF/ RECESSED		INDICATES SWITCHING SCHEME	
	LIGHT FIXTURE & FIXTURE LETTER	WALL		1 RELAY OCCUPANCY SENSOR SW	46" AFF
	EXIT SIGN (SHADING DENOTES EXIT FACE SIDE)	CEIL/WALL		2 RELAY OCCUPANCY SENSOR SW	46" AFF
	LIGHT FIXTURE & FIXTURE LETTER	WALL		1 RELAY OCCUPANCY SENSOR/ DIMMER SWITCH (GEN NOTE 15)	46" AFF
	FIXTURE WITH SHADED LAMP(S) ON EMERGENCY POWER	CLG SURF/ RECESSED		DIMMER SWITCH (GEN NOTE 15)	46" AFF
	EMERGENCY BATTERY LIGHT FIXT	CEIL/WALL		LOW VOLTAGE SWITCH	46" AFF
	COMB EXIT SIGN/EM BATTERY LIGHT	WALL		ON/OFF SWITCH	46" AFF
	LIGHT FIXTURE & FIXTURE LETTER	POLE		ON/OFF 0-10V DIMMING SWITCH	46" AFF
	LIGHTING TRACK, TRACK FIXTURES, & FIXTURE LETTERS	CEILING		DUAL TECH ON/OFF SENSOR	46" AFF
	PHOTOCELL			16-SCENE WALL CONTROLLER	46" AFF
				DUAL TECH ON/OFF 0-10V DIM SW	46" AFF
				OCCUPANCY SENSOR	CLG/WALL
				LIGHTING CONTROL POWER PACK	
				UL-924 LISTED POWER PACK	
				AV SYSTEM/LIGHTING INTERFACE	
				DAYLIGHT SENSOR	CEILING
POWER					
	SINGLE GROUNDED RECEPTACLE	18" AFF		BRANCH CIRCUIT PANEL AND PANEL DESIGNATION	72" TO TOP
	DUPLEX GROUNDED RECEPTACLE	18" AFF		ELECTRICAL DISTRIBUTION EQUIP	
	DUPLEX GROUNDED RECEPTACLE	CEILING		EQUIPMENT - SEE EQUIPMENT CONNECTION SCHEDULE	
	DOUBLE DUPLEX GROUNDED REC	18" AFF		CONDUIT SLEEVE (GEN NOTE 13)	
	GROUND FAULT DUPLEX REC	18" AFF		CABLE TRAY - WIRE BASKET, LADDER (GEN NOTE 14)	
	GRD FAULT DOUBLE DUPLEX REC	18" AFF		MOTOR	
	DUPLEX GRD REC BOTTOM SWITCHCD	18" AFF		DISCONNECT SWITCH	
	TAMPER-PROOF DUPLEX REC	18" AFF		MANUAL STARTER	
	TAMPER-PROOF GFCI DUPLEX REC	18" AFF		CIRCUIT BREAKER	
	SPECIAL OUTLET (SEE SCHEDULE OR AS NOTED)	FLOOR/WALL		STARTER OR ATS (AS NOTED)	
	SPECIAL DEVICE (AS NOTED)			COMBINATION STARTER/DISC	
	FEEDER DESIGNATION			RELAY	
	JUNCTION BOX - 1-GANG			PUSHBUTTON (1-, 2-, 3-BUTTON)	46" AFF
	JUNCTION BOX - 2-GANG			BOX MOUNTED TRANSFORMER	
	FUSTAT BUSS #SSY	46" AFF		CONTACTOR	
	THERMOSTAT/TEMP SENSOR	46" AFF		METER	
	PLUG LOAD SENSOR	CEILING		PLUGMOLD SURFACE RACEWAY	WALL
	HANDICAP DOOR PUSHBUTTON	36" AFF		BUSDUCT PLUG	
NURSE CALL (ROUGH-IN ONLY)					
	NC STAFF ASSIST STATION WITHOUT AUDIO			NC CONTROL PANEL	WALL
	NC STAFF STATION W/ AUDIO			NC ZONE LIGHT	CEILING
	NC STAFF STATION WITH AUDIO AND CODE BLUE			NC VISUAL SIGNAL	CLG/WALL
	NC PATIENT STATION			NC BED INTERFACE UNIT	
	NC PATIENT STATION WITH CODE BLUE			NC CODE BLUE STATION	
	NC DUTY STATION			NC MASTER STATION	DESKTOP
				NC PRESENCE STATION	
				NC AUXILIARY JACK	
				NC EMERGENCY BATH STATION	
--- SYMBOL LIST IS FOR REFERENCE ONLY. ALL SYMBOLS MAY NOT BE USED ON THIS PROJECT. ---					

SYMBOL LIST

SYMBOL	DESCRIPTION	MOUNTING	SYMBOL	DESCRIPTION	MOUNTING
COMMUNICATION / DATA					
	1-DATA OUTLET & JACK (GEN NOTES T1 & T3)	18" AFF		2-DATA OUTLETS & JACKS (GEN NOTES T1 & T3)	18" AFF
	1-VOICE OUTLET & JACK (GEN NOTES T1 & T3)	18" AFF		3-DATA OUTLETS & JACKS (GEN NOTES T1 & T3)	18" AFF
	1-VOICE/1-DATA OUTLET & JACKS (GEN NOTES T1 & T3)	18" AFF		4-DATA OUTLETS & JACKS (GEN NOTES T1 & T3)	18" AFF
	1-VOICE/2-DATA OUTLETS & JACKS (GEN NOTES T1 & T3)	18" AFF		2-VOICE/2-DATA OUTLETS & JACKS (GEN NOTES T1 & T3)	18" AFF
	CABLE TV OR VIDEO OUTLET & CONNECTOR (GEN NOTES T1 & T3)	18" AFF		1-VOICE/3-DATA OUTLETS & JACKS (GEN NOTES T1 & T3)	18" AFF
	VOICE UTP CABLE HOME RUN	GEN NOTE T2		### = TERMINATION ROOM	SEE HOR. CABLE SCHEDULE
	DATA UTP CABLE HOME RUN	GEN NOTE T2		XX = CABLE CONFIGURATION	
	VIDEO COAX CABLE HOME RUN	GEN NOTE T2		FIBER OPTIC CABLE HOME RUN (SINGLE MODE)	GEN NOTE T2
	FIBER OPTIC CABLE HOME RUN (MULTI MODE)	GEN NOTE T2			
FIRE ALARM					
	FIRE ALARM CONTROL PANEL	WALL		FIRE ALARM MANUAL STATION	46" AFF
	FIRE ALARM REMOTE ANNUNCIATOR	WALL		IONIZATION AREA SMOKE DETECTOR (GEN NOTE F2)	
	FIRE ALARM HORN	BOTTOM 80"		PHOTO ELECTRIC AREA SMOKE DETECTOR (GEN NOTE F2)	
	FIRE ALARM HORN	CEILING		DUCT SMOKE DETECTOR (GEN NOTE F4)	DUCTWORK
	FIRE ALARM VISUAL SIGNAL	BOTTOM 80"		DUCT SMOKE DETECTOR & FIRE/ SMOKE DAMPER (GEN NOTES F4 & F5)	DUCTWORK
	COMB. F.A. HORN & VISUAL SIGNAL	CEILING		HEAT DETECTOR (GEN NOTE F2)	
	FIRE ALARM SPEAKER	WALL		CARBON MONOXIDE DETECTOR	
	FIRE ALARM SPEAKER	CEILING		CARBON DIOXIDE DETECTOR	
	COMB. F.A. SPEAKER & VIS SIGNAL	BOTTOM 80"		FIRE SPRINKLER PRESSURE SWITCH	
	CHIME	WALL		FIRE SPRINKLER TAMPER SWITCH	SPRKLR RSR
	FIRE SPRINKLER ALARM BELL	WALL		FIRE SPRINKLER WATER FLOW SW	SPRKLR RSR
	ELECTROMAGNETIC DOOR HOLDER	WALL		FIRE ALARM MONITOR MODULE	
	FIRE ALARM RELAY (GEN NOTE F3)				
	FIRE ALARM CONTROL MODULE				
PEN WEIGHT LEGEND					
ALL DEVICES, LIGHT FIXTURES, ETC., DRAWN IN DARK SOLID LINES ARE NEW TO BE INSTALLED			ALL DEVICES, LIGHT FIXTURES, ETC., DRAWN IN DARK DASHED LINES ARE EXISTING TO BE REMOVED		
	NEW DUPLEX GROUNDED RECEPTACLE			DUPLEX GROUNDED REC TO BE REMOVED	
	NEW LIGHT FIXTURE			LIGHT FIXTURE TO BE REMOVED	
ALL DEVICES, LIGHT FIXTURES, ETC., DRAWN IN HALFTONE SOLID LINES ARE EXISTING TO REMAIN			ALL DEVICES, LIGHT FIXTURES, ETC., DRAWN IN LIGHT DASHED LINES ARE EXISTING TO BE RELOCATED		
	EXISTING DUPLEX GROUNDED REC TO REMAIN			DUPLEX GROUNDED REC TO BE RELOCATED	
	EXISTING LIGHT FIXTURE TO REMAIN			LIGHT FIXTURE TO BE RELOCATED	
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Saint Luke's
EAST HOSPITAL

Saint Luke's East ED Patient Treatment Renovation
100 NE Saint Luke's Blvd
Lee's Summit, MO 64086

Date 07/10/2024
Job Number 3-24016
Drawn By RWK
Checked By DDC

Revision
Number Date Description

DIVISION 26 - ELECTRICAL

A. General Instructions:

1. Codes, Permits and Inspections:
 - a. Wiring shall be in accordance with latest edition National Electrical Code (NEC), NFPA, and/or applicable local, state, and Utility Company rules, laws, codes, and ordinances.
 - b. Secure all permits and inspectors required for the installation of the electrical work.
 - c. All work shall comply with the latest edition of the Americans With Disabilities Act (ADA).
 - d. Pay all fees associated with new utility services.
2. Verifications:
 - a. Verify mounting heights and locations of electrical equipment before installation or rough-in.
 - b. Verify exact location of electrical service entrance including point of service and system characteristics.
3. Wiring Methods:
 - a. The Electrical Contractor shall cooperate with other Contractors and install equipment in proper sequence so as not to interfere with the progress of other Contractors.
 - b. All materials shall be new and carry the Underwriter's Label or be "listed" by that group, and be fully equal to makes specified.
 - c. Use only insulated copper conductors in conduit. Use flexible conduit for connections to motors and similar equipment.
 - d. All wiring shall be concealed and all outlets shall be flush mounted with finished spaces except as noted otherwise.
 - e. All systems wiring in return air plenums shall be in conduit or be plenum rated.
4. Tests:
 - a. This Contractor shall be responsible for performing all tests necessary to prevent concealment of defective or improper work.
 - b. Upon completion of work, test the installation thoroughly and render it free from shorts, grounds or improper connections.
5. Guarantee:
 - a. This Contractor shall guarantee that all defective items of workmanship, material, labor or mechanical operation developing within one (1) year from the date of final acceptance of completed installation shall be replaced to the complete satisfaction of the Owner.
6. Workmanship:
 - a. Electrical equipment shall be installed in a neat and workmanlike manner. Unsightly installations shall be removed or reworked at no additional expense to the Owner.
7. Identification of Disconnecting Means:
 - a. Provide a permanent nomenclature for each disconnect switch indicating its purpose. The marking shall be of sufficient durability to withstand the environment it is used in as required by N.E.C. Section 110.22 and 230.72(A).

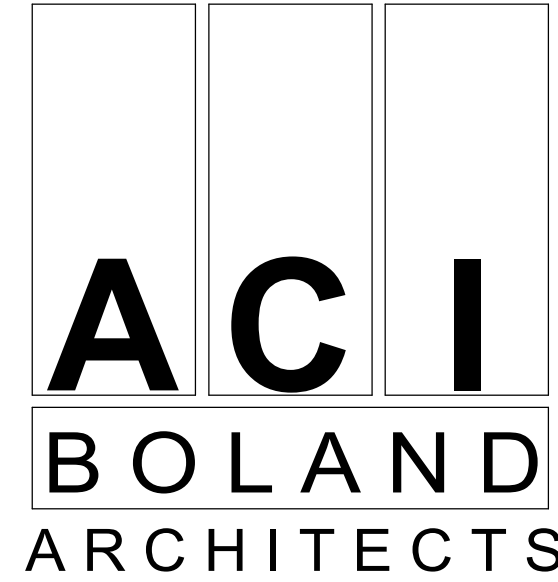
B. Electrical Equipment:

1. **Conduits:**
 - a. All conduit installed in earth, concrete, below concrete on earth, or exposed to weather shall be rigid steel or intermediate metal conduit. Electrical metallic tubing for all dry interior applications. Fittings shall be fully approved in accordance with N.E.C.
 - b. Flexible or P.V.C. conduit may be used where not exposed to damage and approved by N.E.C. and local codes.
 - c. Provide a ground wire sized per N.E.C. Art. 250.122 in all conduits, both metallic and nonmetallic.
 - d. Conduit shall be installed and sized according to code requirements and protected from damage during construction.
 - e. Conduit may be re-routed where such action does not adversely affect the intended design or curving.
 - f. Final connections to all kitchen and mechanical equipment shall be with U.L. approved liquidtight conduit. Liquidtight and fittings shall be U.L. listed for grounding.
2. **Conductors:**
 - a. Conductors shall be copper, generally with 600 volt rated insulation. Branch circuit wiring min. size #12 Type "THW" or "THHN/THF" as required. Service entrance, feeder conductors Type "THWN/THHN" or "XHHW". Low voltage wire shall be Type "TF" or "TFF" minimum #18 gauge unless noted otherwise. All other types shall be as required by N.E.C.
 - b. All conductors shall be color coded with type and size marking. Connections to service equipment, feeder panels shall be made with solderless lugs. All splices, taps, connections to service entrance and conductors shall be made by solderless lugs. All other splices, connections shall be pressure type connectors.
 - c. Insulate joints, splices with Scotch #33 plastic tape or plastic moulded jackets.
3. **Outlet Boxes and Plaster Rings:**
 - a. Outlet boxes shall be galvanized steel of type and size approved for particular installation requirements.
 - b. Use square box with suitable plaster ring installed flush with finish materials in stud or concrete walls.
 - c. Use standard octagon boxes for ceiling light outlets. All boxes shall be securely mounted to building construction and flush with finish materials.
4. **Wall Receptacles:**
 - a. Duplex receptacles shall be "Specification Grade" and flush with grounding type. Manufacturer shall be Hubbell or equal.
 - b. Weatherproof receptacles (indicated "WP") shall be weather resistant GFCI duplex receptacles with extra-duty, weatherproof while-in-use metallic cover plate.

4. Wall Switches:
- a. Wall switches shall be "Specification Grade", 15 or 20A, as required by N.E.C. for the load served.
 - b. Provide mechanically operated single pole, double pole, three way, four way or other types as indicated on the drawings. Manufacturer shall be Hubbell or equal. Maximum load shall be less than 80% of rated capacities.
6. Wall Plates and Covers
- a. Flush wiring devices shall be provided with high impact thermoplastic wall plates as made by the PS/Sierra Electrical and Mfg. Co. or equal.
 - b. Flush junction boxes shall be equipped with blank plates.
 - c. Surface wiring devices shall be provided with suitable heavy steel coverplates with rounded edges and corners.
7. Safety Switches:
- a. Furnish safety switches of size and type indicated on drawings.
 - b. Heavy duty switches shall be fusible unless indicated otherwise. Provide Class "R" fuse clips.
 - c. All exterior switches shall be raintight.
8. Starters:
- a. Starters shall be NEMA rated with H-O-A switch in cover and a control power transformer for controls.
 - b. Provide Class 20 melting alloy or bimetallic overload relays (as required for load served). Size and install overload relay in field based on motor nameplate current.
9. Fuses:
- a. Furnish and install Class RK-5 time delay fuses for each active fuseholder, sized as scheduled or required.
 - b. Provide fuses made by Bussmann or equal.
10. Lighting Fixtures and Lamps:
- a. Install lighting fixtures. Provide lamps as indicated on the drawings.
 - b. No substitutions on lighting fixtures except as approved by Engineer prior to bidding.
 - c. Verify exact locations of fixture outlets so as to cause no interference with piping, equipment and architectural treatment.
 - d. Ballasts by "Advance" or equal, internally or externally fused, high power factor, V.L.H. fully compatible with lamps and shall carry UL label, ETL and CBM certifications of compliance, even though indicated fixture number may indicate otherwise.
 - e. Furnish all fixtures with lamps as scheduled and/or required by final fixture selection. Lamps equal to G.E.
11. Wiring for Mechanical Equipment:
- a. Electrical Contractor to provide all wiring remote from panel to panel. Electrical Contractor to provide all wires for mechanical equipment and controls. ALL WIRING TO BE IN CONDUIT. ELECTRICAL CONTRACTOR TO MAKE FINAL CONNECTIONS. Electrical Contractor shall provide disconnect switch and all power wiring.
 - b. Provide disconnect switches, starters, and all wiring for mechanical and kitchen equipment unless otherwise noted on plans. Coordinate requirements with equipment suppliers.
12. Grounding:
- a. Provide system ground as required by N.E.C. and utility company if not already existing.
 - b. Bond mechanical equipment frames.
 - c. Bond all service entrance equipment and conduit system.
 - d. An equipment grounding conductor sized per N.E.C. Art. 250.122 shall be provided in all conduits. The ground wire is required for both metallic and nonmetallic conduit installations.
13. Branch Circuit Panels
- a. Branch circuit lighting panels equal to Square D, G.E., Siemens, or Cutler Hammer, with thermal magnetic breakers and ground buses. Load on branch construction is not permitted. Electrical Contractor shall obtain available short circuit current from local Utility co. Panelboards shall be U.L. listed for available fault current. Breakers and panels shall be fully rated or U.L. series rated with specified fuses (22,000 AIC minimum).
 - b. Breakers shall have individual plastic cases sized as scheduled. Two pole breakers shall be common trip (single pole units with tie bars not acceptable).
 - c. Panel shall be mounted as noted on the drawings. Provide with a hinged door and a neatly typed circuit directory card.
 - d. Re-assign circuits to properly balance the loads on the phases if final connections and tests show it to be advisable.
14. Equipment Supplied by Other Contractors And/or The Owner
- a. The Electrical Contractor shall furnish, install and connect all wiring, conduit, boxes, toggle switches, thermal switches, disconnect switches, remote pushbutton stations, etc., for all equipment requiring electrical power that is either furnished or specified by other contractors and/or the Owner, shown on drawings or listed below. The E.C. shall receive, install and connect all magnetic starters and controllers, capacitors, power factor correction devices, transformers, alarms, bells, horns, relays, remote switches for equipment supplied by others (i.e. starters or capacitors or power factor correction devices for Mechanical Equip., etc.). In general, all major equipment will be specified to be factory provided with only service and interconnecting required at the site by the Electrical Contractor; however: The E.C. shall check all Divisions of the specification to verify whether the equipment is specified to be factory provided. If not, then it shall be the responsibility of the Electrical Contractor to provide the complete wiring of the equipment in accordance with wiring diagrams provided by other Contractors and/or Owner to the Electrical Contractor. All interconnecting of equipment shall be by the Electrical Contractor.
 - b. All line and low voltage wiring and connections required to control the equipment are a part of this section. All wiring shall be in conduit.
 - c. It shall be assumed the Contractor is familiar with the equipment to be furnished by the other Contractors and/or the Owner in connection with this work and that provisions for such connections and work have been included in the Contractor's price. In no case will extra remuneration be allowed for such work.
 - d. Connections to all equipment have been designed from units as specified on the drawings or in the specifications. In the event equipment or control differs on approved mechanical shop drawings it shall be the responsibility of the supplying contractor to coordinate the electrical connections to the units and reimburse electrical contractor for any changes in the electrical system design. These changes shall not involve additional cost to the Owner.
15. Contractors And Remodelers
- a. Shall be as manufactured by Cutler-Hammer, Allen Bradley, G.E. or Square D. They shall be as sized on the drawings.
 - b. All contractors and relays shall be Tungsten rated.
16. Time Switches:
- a. Time switches by Tork, Intermatic, or Paragon equal to those indicated below and approved by the Engineer will be acceptable.
 - b. Exterior lighting or interior time switches shall be 7 day with carry-over.
 - c. All time switches shall be provided with momentary contacts if required.
 - d. All time switches shall be provided with manual bypass switches and spring wound carry over mechanisms.
17. Photo Electric Controls:
- a. Photo Electric Controls by Tork, Intermatic and Paragon equal to those indicated below and approved by the Engineer will be acceptable.
 - b. Photo Electric Controls (Photo Switches, Photo Cells) shall be rated at 1800W, 120 volts, weatherproof. Mount on roof and orient photo electric controls to the north.
 - c. Photo-electric controls supplied as a part of a fixture assembly shall be as provided by Fixture Manufacturer.
18. Fire Alarm System:
- a. All components shall be U.L. listed for use in a fire alarm system. In addition, the system shall have a U.L. listing as a fire alarm system. The entire installation shall be installed and tested as required by NFPA, AdL, Life Safety Code and local requirements.
 - b. Fire alarm panel shall comply with NFPA 72 and the fire alarm system shall comply with NFPA 101 and ADA. Provide initiation zones for each zone shown on the plans. Include adequate indication circuits for all indicating devices shown on the plans or required by local and state authorities. Batteries shall provide enough power to maintain the system for 24 hours plus 5 minutes in alarm.
 - c. Wiring shall be installed as described below:
 - Initiation circuits - (2) #16 AWG.

- Equipment Supplied By Other Contractors And/Or The Owner
- a. The Electrical Contractor shall furnish, install and connect all wiring, conduit, boxes, toggle switches, thermal switches, disconnect switches, remote pushbutton stations, etc., for all equipment requiring electrical power that is either furnished or supplied by other contractors and/or the Owner, shown on drawings or listed below. The E.C. shall receive, install and connect all magnetic starters and controllers, capacitors, power factor correction devices, transformers, alarms, bells, horns, relays, remote switches for equipment supplied by others (i.e. starters or capacitors or power factor correction devices for Mechanical Equip., etc.). In general, all major equipment will be specified to be factory prewired with only service and interconnecting wiring at the site by the Electrical Contractor. However, the E.C. shall check all Divisions of the specification to verify whether the equipment is specified to be factory prewired. If not, then it shall be the responsibility of the Electrical Contractor to provide the complete wiring of the equipment in accordance with wiring diagrams provided by other Contractors and/or Owner to the Electrical Contractor. All interconnecting of equipment shall be by the Electrical Contractor.
- b. All line and low voltage wiring and connections required to control the equipment are a part of this section. All wiring shall be in conduit.
- c. It shall be assumed the Contractor is familiar with the equipment to be furnished by the other Contractors and/or the Owner in connection with this work and that provisions for such connections and work have been included in the Contractor's price. In no case will extra remuneration be allowed for such work.
- d. Connections to all equipment have been designed from units as specified on the drawings or in the specifications. In the event equipment or control differs on approved mechanical shop drawings it shall be the responsibility of the supplying contractor to coordinate the electrical connections to the units and reimburse electrical contractor for any changes in the electrical system design. These changes shall not involve additional cost to the Owner.
15. Contractors And Relays
- a. Shall be as Manufactured by Cutler-Hammer, Allen Bradley, G.E. or Square D. They shall be as sized on the drawings.
- b. All contactors and relays shall be Tungsten rated.
16. Time Switches:
- a. Time switches by York, Intermatic, or Paragon equal to those indicated below and approved by the Engineer will be acceptable.
- b. Exterior lighting or interior time switches shall be 7 day with carry-over.
- c. All time switches shall be provided with momentary contacts if required.
- d. All time switches shall be provided by manual bypass switches and spring wound carry over mechanisms.
17. Photo Electric Controls
- a. Photo Electric Controls by York, Intermatic and Paragon equal to those indicated below and approved by the Engineer will be acceptable.
- b. Photo Electric Controls (Photo Switches; Photo Cells) shall be rated at 1800WV, 120 volts, weatherproof. Mount on red and orient photo electric controls to the north.
- c. Photo-electric controls supplied as a part of a fixture assembly shall be as provided by Fixture Manufacturer.
18. Fire Alarm System:
- a. All components shall be U.L. listed for use in a fire alarm system. In addition, the system shall have a U.L. listing as a fire alarm system. The entire installation shall be installed and tested as required by NFPA, ADA, Life Safety Code and local requirements.
- b. Fire alarm panel shall comply with NFPA 72 and the fire alarm system panel shall comply with NFPA 101 and ADA. Provide alarm zones for each zone shown on the plans. Include adequate indication circuits for all indicating devices shown on the plans or required by code or local authorities. Batteries shall provide enough power to maintain the system for 24 hours plus 5 minutes in alarm.
- c. Wiring shall be installed as described below:
- Initiation circuits- (2) #16 AWG.
 - Signal wiring- (2) #14 AWG.
 - Relay wiring- (2) #16 AWG.
- d. Fire Alarm Control Panel shall be equal to Simplex # 4004-9101 with 2 initiation zones, 1 signal circuit, power supply, batteries, and charger.
- e. Duct smoke detectors shall be installed in the supply and return ductwork of all HVAC equipment capable of delivering over 2000 CFM. Provide sampling tubes per manufacturers recommendations. Detector shall be equal to Simplex # 2098-9201 with #2938-9649 duct housing and #2098-9806 remote test station.
- f. Shut down relays equal to Simplex #2089-9010shall be provided to shut down power to HVAC equipment over 2000 CFM and to close fire smoke dampers.
- g. Photoelectric area smoke detectors shall be equal to Simplex #2098-9201 with #2098-9211 base.
- h. A/V signals shall have strobes that comply with ADA and NFPA requirements. Audible signals shall meet NFPA requirements for sound transmission. Separate wiring for horns and strobes to comply with requirements for temporal coding.

- Transistorized Variable Frequency Drive: (Provided by TCC, installed by E.C.):
- a. The Variable Frequency Drive (VFD) shall be for use with a standard NEMA B induction motor. Manufacturer shall be AC Tech and must include the following:
 1. Individual or simultaneous operation of the VFDs shall not add more than 5% total harmonic voltage distortion to the normal allowable.
 2. The maximum bus voltage and individual harmonic current distortion limits for each odd harmonic shall not exceed limits as set forth by IEEE 519, 1992. If harmonic filters are required to meet these requirements, the VFD manufacturer must provide the filter.
 3. The VFD shall be a microprocessor based digital Pulse Width Modulated (PWM) design.
 4. The VFD shall be supplied with an input AC Line reactor or 5% impedance. Line reactor is to be factory mounted and windimpedance the VFD enclosure.
 5. The VFD shall be equipped with a load AC line reactor of 5% impedance built-in or motor termination filter to prevent voltage rise of rise, reflective voltage amplitude damage, and other potential damage to motor windings and bearings.
 - b. The PWM VFD shall provide the following design features as standard:
 1. Microprocessor logic. The VFD shall be microprocessor based and utilize digital input for all parameter adjustments.
 2. Auto restart. The VFD shall automatically attempt to restart after a malfunction or an interruption of power. The number of attempted restarts shall be customer selectable (0 to 5).
 3. Display output displays and input parameter programming. Critical frequency avoidance (Frequency jump limits).
 4. The VFD shall provide a minimum of two (2) selectable frequency jump limits, in 1.5 Hz increments, to be used to avoid critical resonance frequencies of the mechanical system.
 5. Motor overload protection. Electronic motor protection shall be provided which is capable of predicting motor winding temperature based on inputting specific parameters including motor design type (TEFC, ODP or other) and speed range.
 - c. Enclosure. The drive shall be furnished in a NEMA enclosure most suitable for the installed equipment. Fanned heatinks and/or cooling fans shall be provided as necessary for proper heat dissipation. Inlet filters are required on all cooling fans, unless they are outside the drive enclosure and no circulated air passes circuit boards, transistors, or other electrical components.
 - d. Protective features. The VFD shall be designed to meet the following specifications and operate within the following parameters:
 1. AC input fuses. The VFD's power circuit shall be fused and isolated internally with respect to ground. Fuses shall provide a minimum of 100,000 A interrupting capacity and shall provide complete Type 2 protection, not allowing any damage to the VFD upon overload or short circuit.
 2. Phase loss protection. Phase loss protection shall be provided to prevent single phasing.
 3. Phase loss ride through. The VFD shall be capable of continued operation during an intermittent loss of power for 0.1 seconds (1/ cycle).
 4. Short circuit and ground fault protection. The VFD shall have an instantaneous electronic trip circuit to protect the VFD from output line to line and line to ground short circuits.
 5. Transient and surge voltage protection. Transient short circuit surge voltage protection shall be provided through the use of Metal Oxide Varistors (MOVs).
 6. Rotating Motor Start. The VFD shall be able to start into a motor rotating in either direction and at any speed, and accelerate to set speed without any time delay, tripping or component loss.
 - e. Additional features.
 1. Operator panel: A door-mounted Softtouch Operator Panel shall be included with selection for Hand/Off/Auto control.
 2. Automatic Bypass Control circuitry. Bypass control circuitry shall be mounted internally to the VFD enclosure. The bypass shall utilize an input switch to feed the VFD and isolate the VFD for trouble shooting. An output contactor which is electronically and mechanically interlocked with the bypass starter shall be utilized on the VFD to provide a positive disconnect between the VFD and the motor. Separate Hand/Off/Auto/Start and Inverter/Bypass switches shall be included to allow manual or automatic transfer to across the line operation. A 120V control circuit transformer (fused on both the primary and secondary), auxiliary contacts, and overload relay with adjustable heater settings shall also be included. Any protective shutdown circuits shall function in all modes (hand, auto, or bypass).
 3. A 120V control circuit transformer used on both the primary and secondary.
 4. Disconnect switch. The operating mechanism shall be designed so that the door can be padlocked in the "OFF" position. The switch shall have an interrupting capacity of 65,000 symmetrical amperes.



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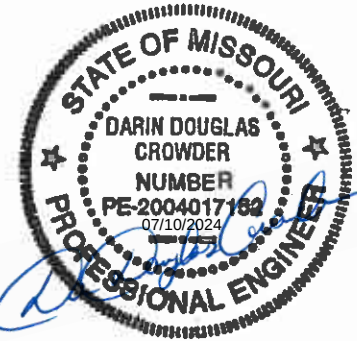
1 ELECTRICAL DEMOLITION PLAN - 1ST FLOOR
1/2" = 1'-0"

DEMOLITION GENERAL NOTES

- DEMOLITION PLANS SHOW THE GENERAL EXTENT OF THE ELECTRICAL DEMOLITION WORK. THE ELECTRICAL CONTRACTOR SHALL DISCONNECT ELECTRICAL SERVICES TO ALL EQUIPMENT BEING REMOVED. SEE MECHANICAL PLANS. OWNER SHALL HAVE THE OPTION TO RETAIN REUSABLE ITEMS, SUCH AS COVERPLATES, RECEPTACLES, LIGHTS, PANELS, ETC. NOT BEING USED IN THE FINISHED WORK. COORDINATE WITH OWNER PRIOR TO STARTING DEMOLITION. PROPERLY AND LEGALLY DISPOSE OF ALL EQUIPMENT AND MATERIALS BEING REMOVED.
- REMOVE ALL CONDUIT LEFT EXPOSED BY REMOVAL OF WALLS AND CEILINGS IN REMODELED AREAS. PLUG BOTH ENDS OF REMAINING CONDUIT IN WALL OR FLOOR WHERE CUT.
- ELECTRICAL OUTLETS, ETC. POSSIBLY CONCEALED BY STORAGE SHELVING, CASEWORK, FURNITURE, ETC. ARE NOT SHOWN AND MAY REQUIRE REMOVAL.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ALL OPENINGS IN EXISTING CONSTRUCTION AFTER REMOVAL OF EQUIPMENT, RACEWAY SYSTEMS, OUTLET BOXES, ETC.
- WHERE EQUIPMENT AND OTHER DEVICES ARE BEING REMOVED, THE CIRCUITING SHALL BE REMOVED, IF POSSIBLE, BACK TO POINT OF SUPPLY. WHERE REQUIRED, CIRCUITING SHALL BE EXTENDED TO MAINTAIN CONTINUITY OF THE CIRCUIT OR OPERATION OF THE SYSTEM.
- ALL DEVICES SHOWN DASHED ON THE DEMOLITION PLAN(S) SHALL BE REMOVED, UNLESS NOTED OTHERWISE.
- PROVIDE MATCHING BLANK COVERPLATES WHERE DEVICES ARE BEING REMOVED FROM FLUSH-MOUNTED OUTLET BOXES IN EXISTING WALLS TO REMAIN.
- FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO BEGINNING WORK.

KEYNOTES

- # D1 REMOVE AND PRESERVE LIGHT FIXTURES TO BE RELOCATED TO NEW CEILING. PRESERVE CIRCUITRY AND LEAVE CONDUCTORS COILED ABOVE CEILING TO RE-CONNECT TO LIGHTS ONCE RELOCATED.



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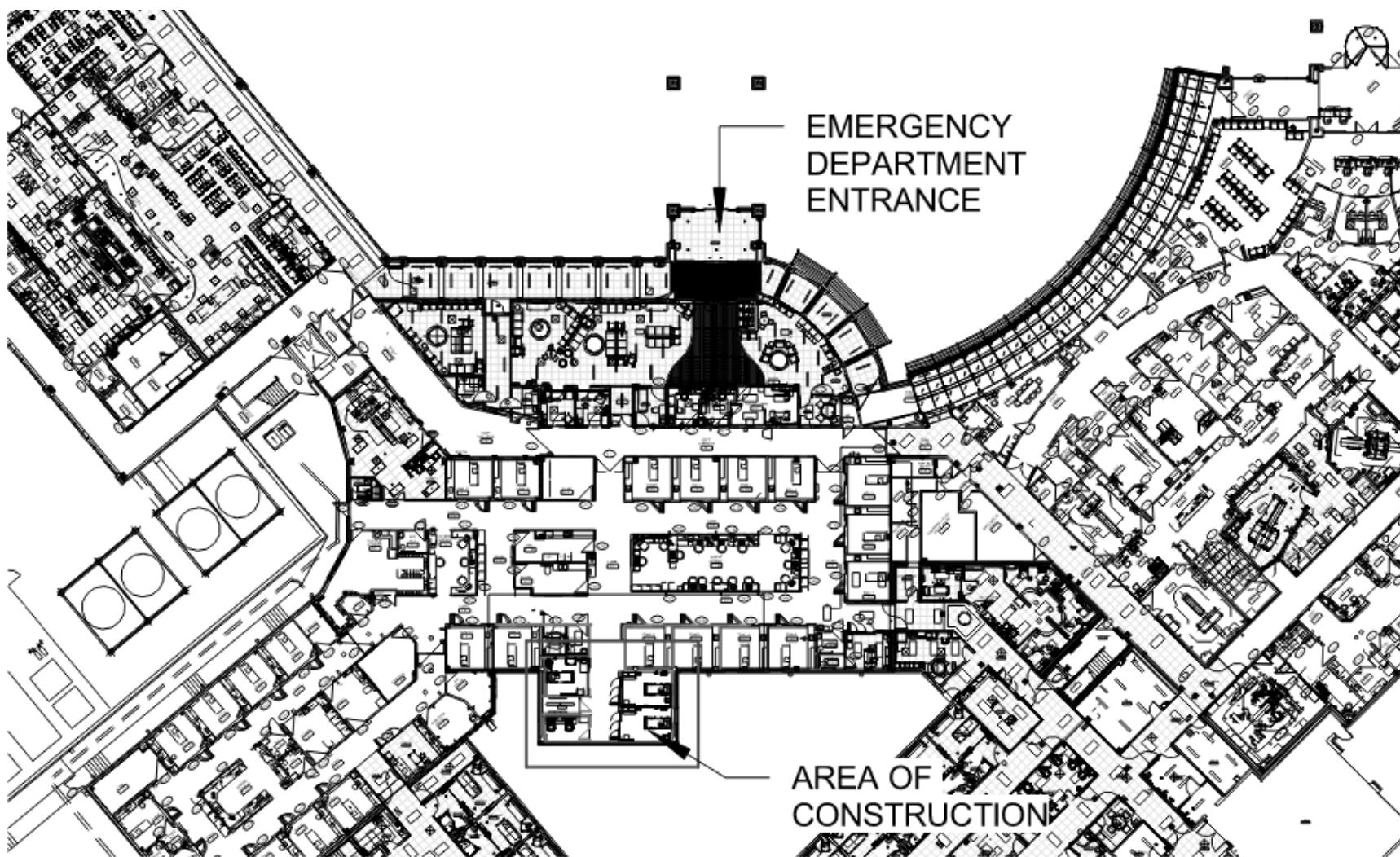
Saint Luke's East ED Patient Treatment Renovation
100 NE Saint Luke's Blvd
Lee's Summit, MO 64086

Date 07/10/2024
Job Number 3-24016
Drawn By RWK
Checked By DDC

Revision
Number Date Description

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ELECTRICAL DEMOLITION PLAN



KEYPLAN

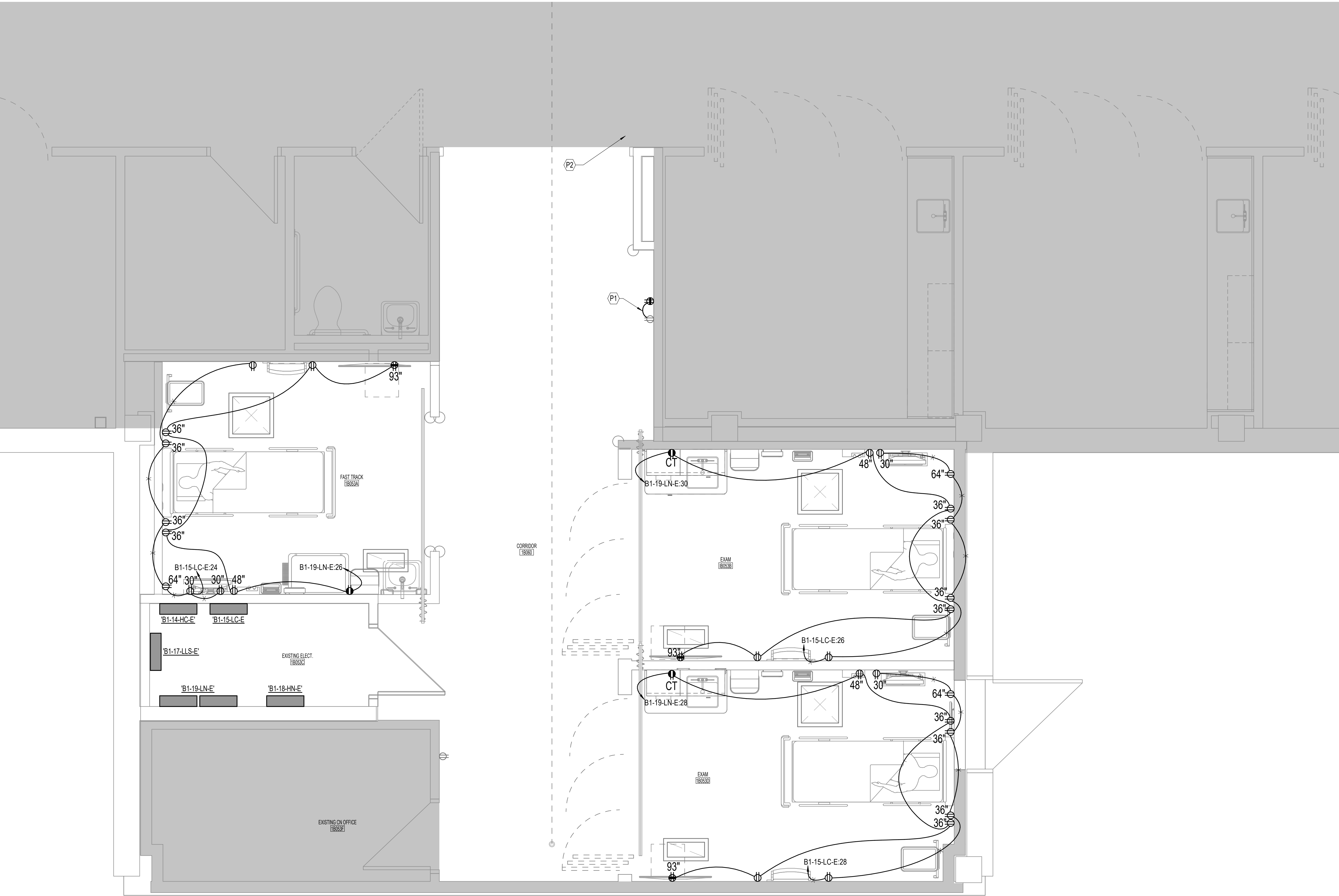
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1 POWER PLAN - 1ST FLOOR

1/2" = 1'-0"

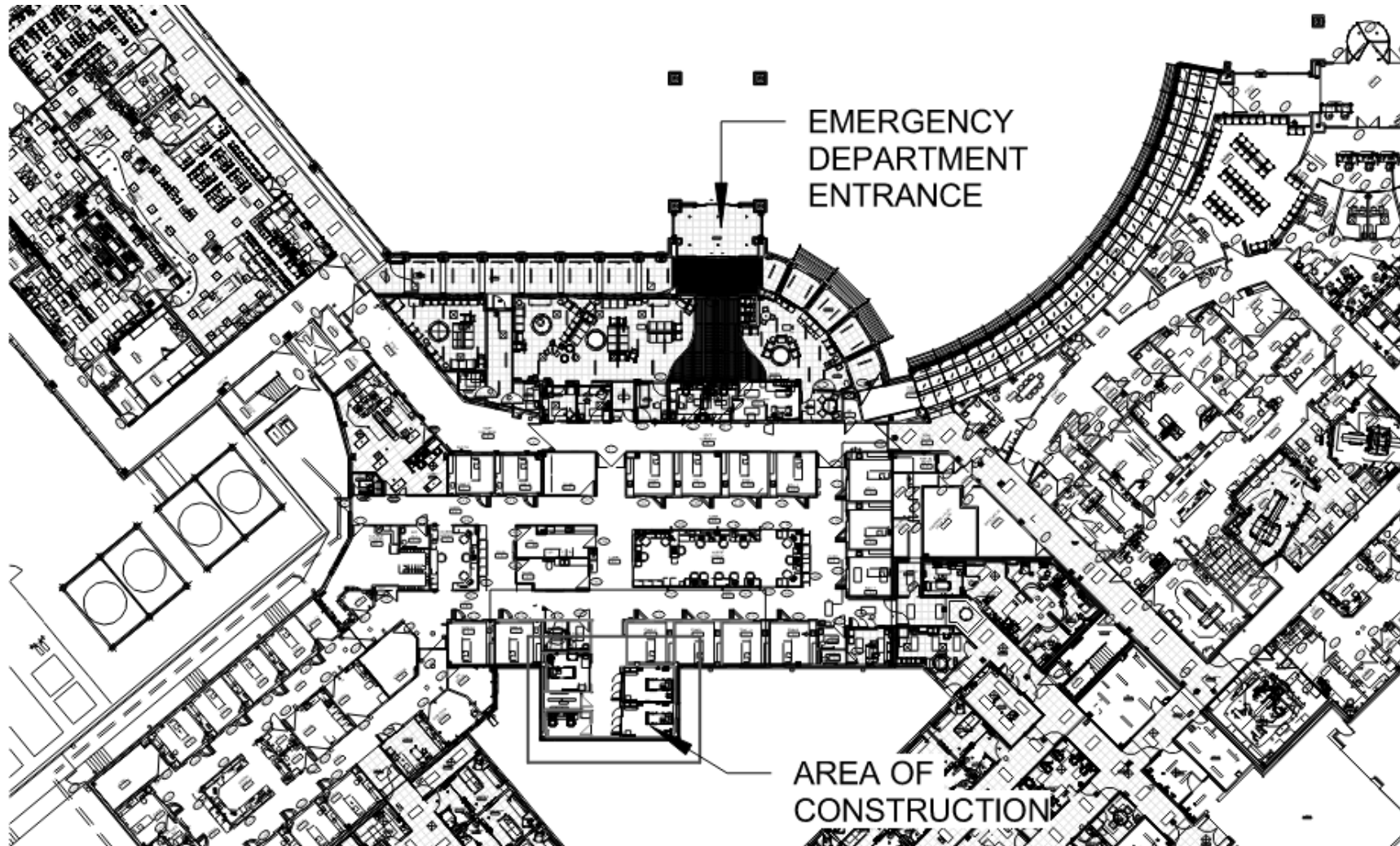


POWER GENERAL NOTES

- BRANCH CIRCUITS ARE INDICATED AS ONE CIRCUIT HOME RUNS WITH INDIVIDUAL NEUTRALS. A MAXIMUM OF THREE CIRCUITS (MAXIMUM OF THREE PHASE CONDUCTORS) MAY BE GROUPED IN A SINGLE CONDUIT. WHERE MULTIPLE CIRCUITS ARE LOCATED IN THE SAME RACEWAY, JUNCTION BOX OR ENCLOSURE, NEUTRALS SHALL BE MARKED OR LABELED TO INDICATE WHICH CIRCUIT THEY ARE ASSOCIATED WITH. SEE SPECIFICATION SECTION "LOW VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES" FOR ADDITIONAL INFORMATION.
- A GROUND CONDUCTOR SIZED PER N.E.C. ARTICLE 250 IS REQUIRED IN ALL CONDUITS.
- FOR CONNECTION REQUIREMENTS TO MECHANICAL UNITS, SEE MECHANICAL EQUIPMENT CONNECTION SCHEDULE.
- REFER TO THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR LOCATIONS OF FIRE RATED WALLS AND CEILINGS AND THE ASSOCIATED U.L. ASSEMBLY NUMBERS.
- FOR ALL PENETRATIONS IN FIRE RATED WALLS AND CEILINGS, PROVIDE AN ASTM E814 COMPLIANT, U.L. LISTED THROUGH PENETRATION FIRE STOPPING SYSTEM THAT IS SPECIFIC TO THE WALL OR CEILING CONSTRUCTION ASSEMBLY. INSTALL SYSTEM IN STRICT COMPLIANCE WITH THE U.L. ASSEMBLY INDICATED IN THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
- ALL PIPING, CONDUIT, AND OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) IN FIRE RATED WALLS OR CEILINGS SHALL BE CONSTRUCTED OF NON-COMBUSTIBLE MATERIAL.
- OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) ON OPPOSITE SIDES OF FIRE RATED WALLS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 24 INCHES OR PROTECTED BY OTHER MEANS ALLOWED BY THE SPECIFIC U.L. ASSEMBLY.
- REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF STC RATED WALLS. OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) ON OPPOSITE SIDES OF STC RATED WALLS SHALL BE LIMITED TO TWO OUTLET BOXES PER STUD SPACE AND COVERED WITH "PUTTY PAD" TYPE MOLDABLE FIRE BARRIER.
- FIELD VERIFY THE EXACT LOCATION OF ALL FLOOR BOXES AND POKE THROUGH WITH ARCHITECT PRIOR TO ROUGH-IN.
- PROVIDE ALL ISOLATED GROUND CIRCUITS WITH INDIVIDUAL NEUTRAL CONDUCTORS AND EQUIPMENT GROUND CONDUCTORS.

KEYNOTES

- P1 TIE IN NEW RECEPTACLE TO EXISTING CIRCUIT.
- P2 TIE NEW MEDICAL GAS ZONE VALVE BOX TO EXISTING MEDICAL GAS LIFE SAFETY CIRCUIT LOCATED AT EXISTING NURSE STATION. FIELD VERIFY LOCATION OF EXISTING MEDICAL GAS ZONE VALVE BOX CIRCUIT AND NEW ZONE VALVE BOX WITH PLUMBING CONTRACTOR.



KEYPLAN



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Saint Luke's
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Saint Luke's East ED Patient Treatment Renovation
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Lee's Summit, MO 64086

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Job Number 3-24016
Drawn By RWK
Checked By DDC

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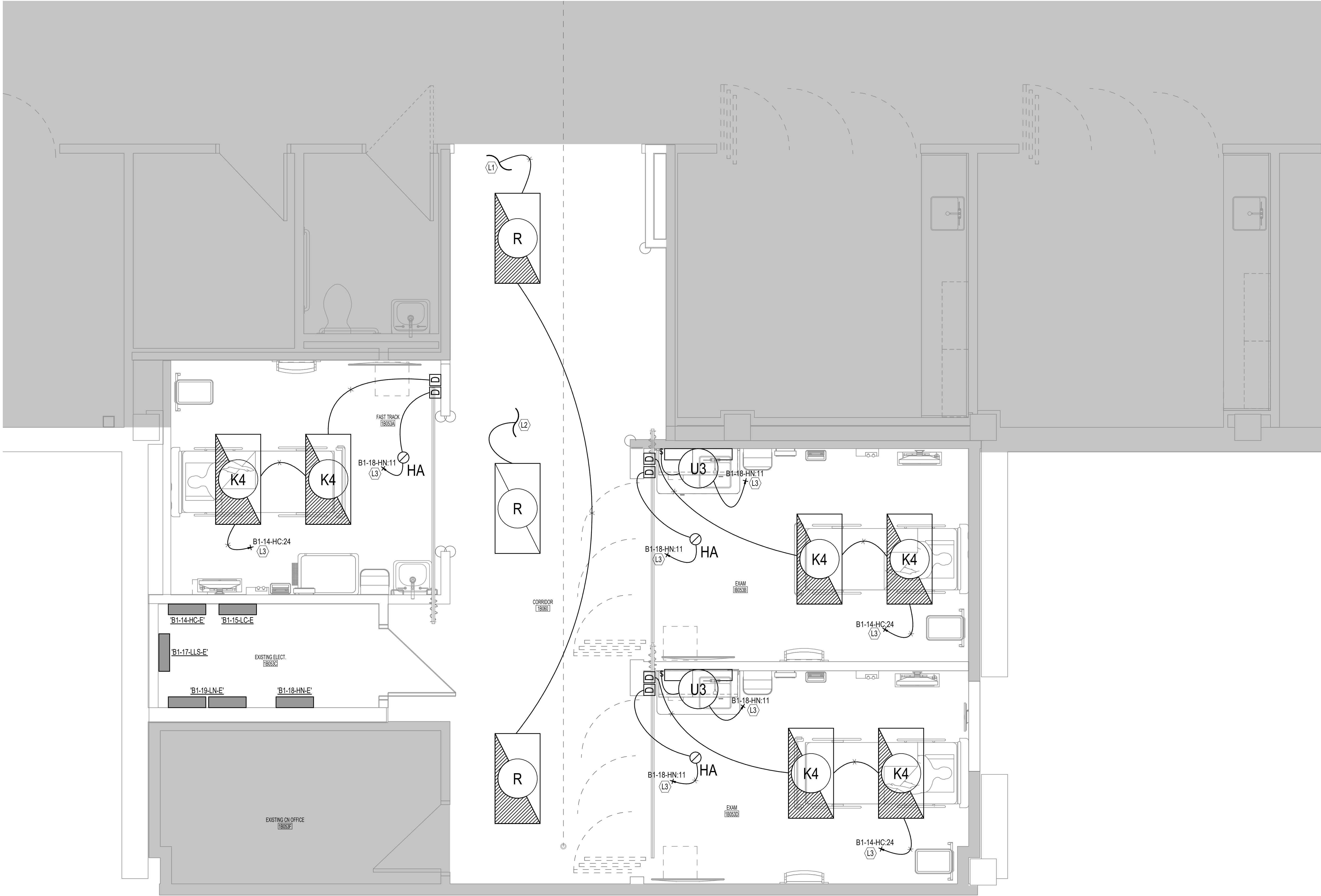
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POWER PLAN

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1 LIGHTING PLAN - 1ST FLOOR

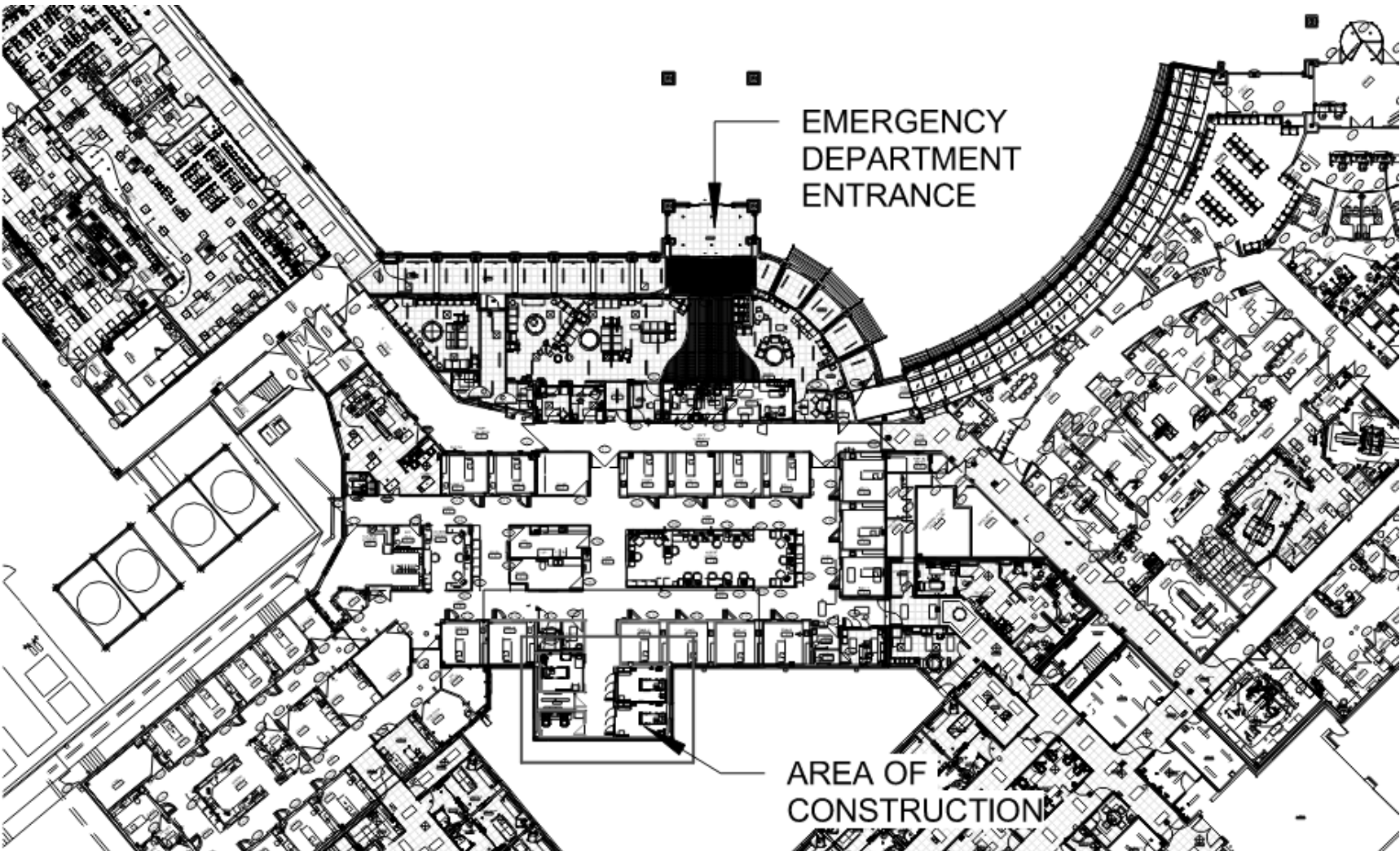
1/2" = 1'-0"

LIGHTING GENERAL NOTES

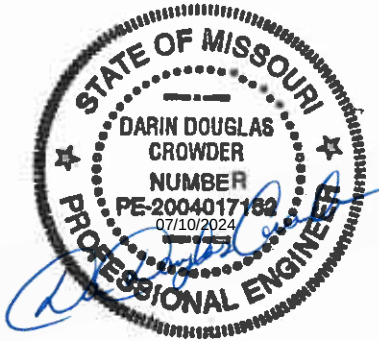
1. BRANCH CIRCUITS ARE INDICATED AS ONE CIRCUIT HOME RUNS WITH INDIVIDUAL NEUTRALS. A MAXIMUM OF THREE CIRCUITS (MAXIMUM OF THREE PHASE CONDUCTORS) MAY BE GROUPED IN A SINGLE CONDUIT. WHERE MULTIPLE CIRCUITS ARE LOCATED IN THE SAME RACEWAY, JUNCTION BOX OR ENCLOSURE, NEUTRALS SHALL BE MARKED OR LABELED TO INDICATE WHICH CIRCUIT THEY ARE ASSOCIATED WITH. SEE SPECIFICATION SECTION "LOW VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES" FOR ADDITIONAL INFORMATION.
2. A GROUND CONDUCTOR SIZED PER N.E.C. ARTICLE 250 IS REQUIRED IN ALL CONDUITS.
3. REFER TO THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR LOCATIONS OF FIRE RATED WALLS AND CEILINGS AND THE ASSOCIATED U.L. ASSEMBLY NUMBERS.
4. FOR ALL PENETRATIONS IN FIRE RATED WALLS AND CEILINGS, PROVIDE AN ASTM E814 COMPLIANT, U.L. LISTED THROUGH PENETRATION FIRE STOPPING SYSTEM THAT IS SPECIFIC TO THE WALL OR CEILING CONSTRUCTION ASSEMBLY. INSTALL SYSTEM IN STRICT COMPLIANCE WITH THE U.L. ASSEMBLY INDICATED IN THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
5. ALL PIPING, CONDUIT, AND OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) IN FIRE RATED WALLS OR CEILINGS SHALL BE CONSTRUCTED OF NON-COMBUSTIBLE MATERIAL.
6. OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) ON OPPOSITE SIDES OF FIRE RATED WALLS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 24 INCHES OR PROTECTED BY OTHER MEANS ALLOWED BY THE SPECIFIC U.L. ASSEMBLY.
7. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF STC RATED WALLS. OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) ON OPPOSITE SIDES OF STC RATED WALLS SHALL BE LIMITED TO TWO OUTLET BOXES PER STUD SPACE AND COVERED WITH "PUTTY PAD" TYPE MOLDABLE FIRE BARRIER.
8. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LIGHT FIXTURE LOCATIONS. VERIFY ALL DISCREPANCIES WITH ARCHITECT PRIOR TO ROUGH-IN.

KEYNOTES

- L1 RE-CONNECT TO EXISTING EMERGENCY CIRCUIT AND CONTROLS AFTER RELOCATING EXISTING FIXTURE INTO NEW CEILING.
- L2 RE-CONNECT TO EXISTING CIRCUIT AND CONTROLS AFTER RELOCATING EXISTING FIXTURE INTO NEW CEILING.
- L3 CONNECT TO SPARE BREAKER CIRCUIT INDICATED ON DRAWINGS. UPDATE PANEL SCHEDULE ACCORDINGLY.



KEYPLAN



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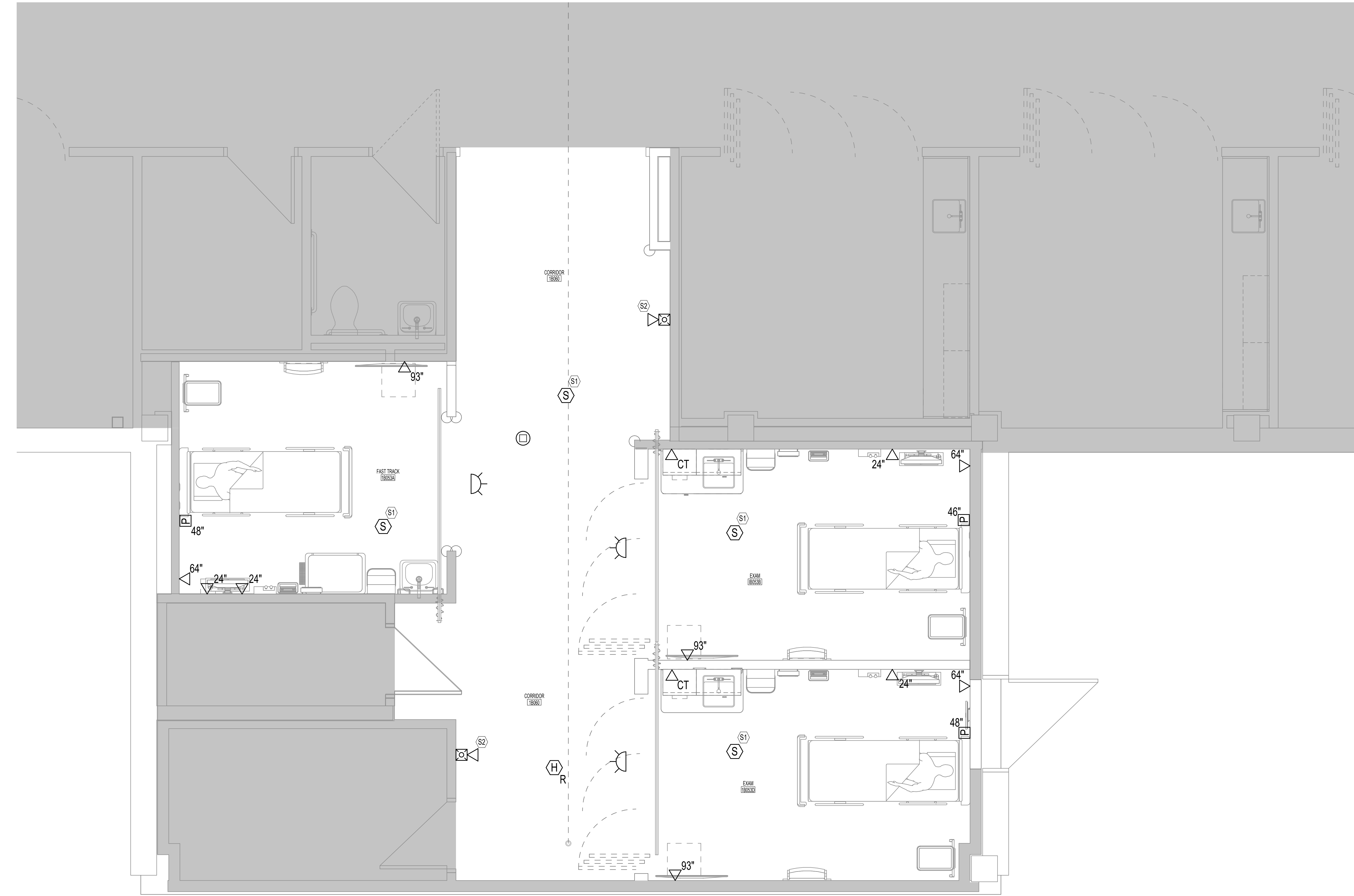
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Number Date Description

E-141

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LIGHTING PLAN

7/10/2024 2:58:15 PM

BM 360:/3-24016 SLE ED Patient Treatment/240219-000_Elec_R21.rvt



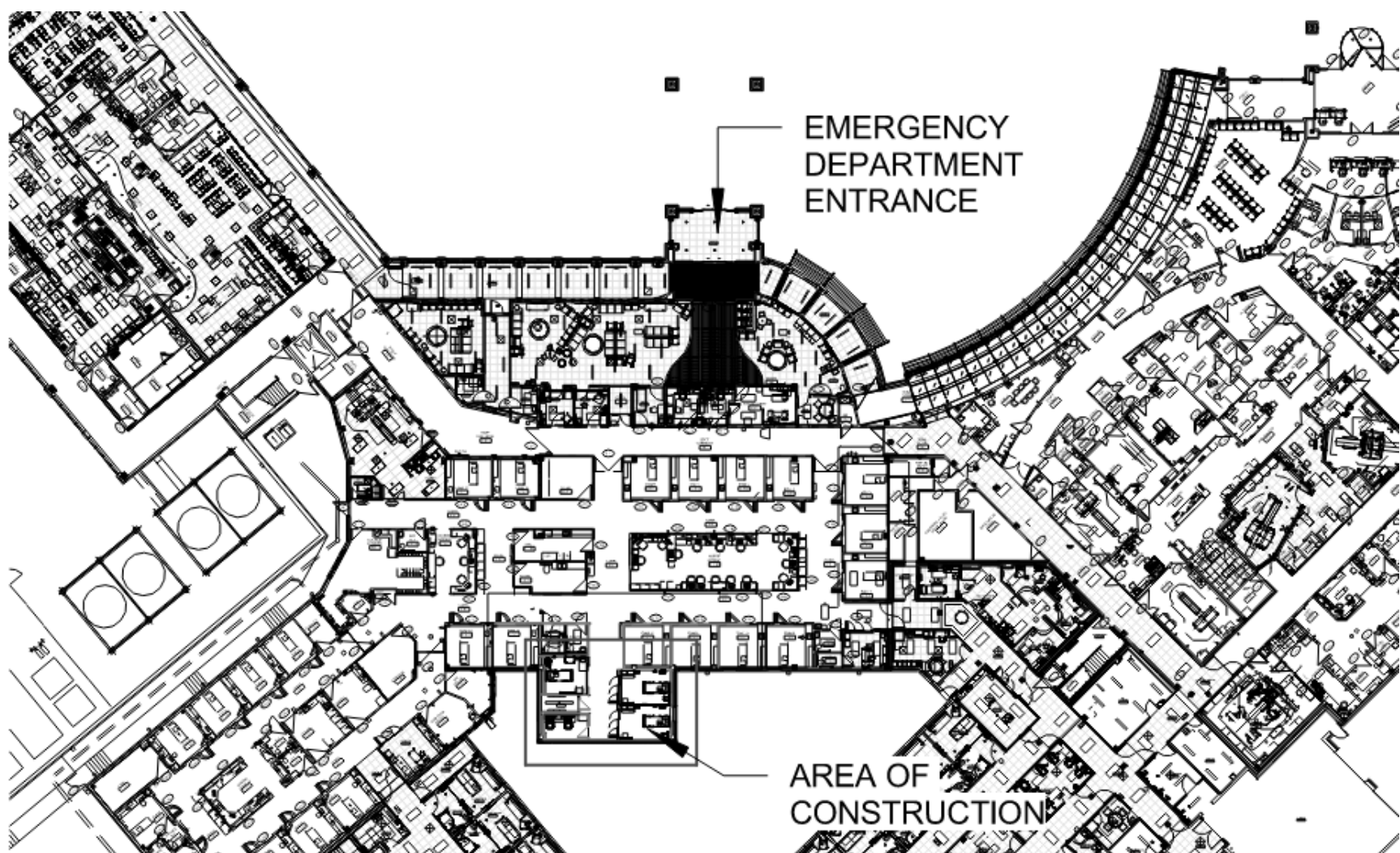
1 SYSTEMS PLAN - 1ST FLOOR
1/2" = 1'-0"

SYSTEMS GENERAL NOTES

- REFER TO THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR LOCATIONS OF FIRE RATED WALLS AND CEILINGS AND THE ASSOCIATED U.L. ASSEMBLY NUMBERS.
- FOR ALL PENETRATIONS IN FIRE RATED WALLS AND CEILINGS, PROVIDE AN ASTM E814 COMPLIANT, U.L. LISTED THROUGH PENETRATION FIRE STOPPING SYSTEM THAT IS SPECIFIC TO THE WALL OR CEILING CONSTRUCTION ASSEMBLY. INSTALL SYSTEM IN STRICT COMPLIANCE WITH THE U.L. ASSEMBLY INDICATED IN THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
- ALL PIPING, CONDUIT, AND OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) IN FIRE RATED WALLS OR CEILINGS SHALL BE CONSTRUCTED OF NON-COMBUSTIBLE MATERIAL.
- OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) ON OPPOSITE SIDES OF FIRE RATED WALLS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 24 INCHES OR PROTECTED BY OTHER MEANS ALLOWED BY THE SPECIFIC U.L. ASSEMBLY.
- REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF STC RATED WALLS. OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) ON OPPOSITE SIDES OF STC RATED WALLS SHALL BE LIMITED TO TWO OUTLET BOXES PER STUD SPACE AND COVERED WITH "PUTTY PAD" TYPE MOLDABLE FIRE BARRIER.
- WHERE THE SAME DEVICE IS SHOWN IN THE SAME LOCATION ON BOTH THE POWER AND SYSTEMS PLAN, ONLY ONE DEVICE IS REQUIRED. PROVIDE BOTH POWER AND SYSTEMS WIRING AS SHOWN.
- THE FIRE ALARM SYSTEM SHOWN HAS BEEN DESIGNED PER THE REQUIREMENTS OF NFPA 72. DEVICES SHOWN INDICATE THE DESIGN INTENT AND SHALL BE THE MINIMUM PROVIDED. SYSTEM SUPPLIER SHALL PROVIDE ANY ADDITIONAL CODE REQUIRED DEVICES OR DEVICES REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

KEYNOTES

#	
S1	TIE NEW FIRE ALARM SMOKE DETECTOR INTO EXISTING FIRE ALARM INITIATING CIRCUIT.
S2	TIE NEW FIRE ALARM AUDIO/VISUAL DEVICE INTO EXISTING FIRE ALARM NOTIFICATION CIRCUIT.



KEYPLAN

SHAWN DOUGLAS CROWDER
NUMBER PE-380401740
07/2023
PROFESSIONAL ENGINEER

ACI BOLD ARCHITECTS

ACI/Boland, Inc.
Kansas City | St. Louis
1710 Wyandotte
Kansas City, MO 64108
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Licensee's Certificate of Authority Number: Missouri: #000958
PEC PROJECT NUMBER: 240215-001

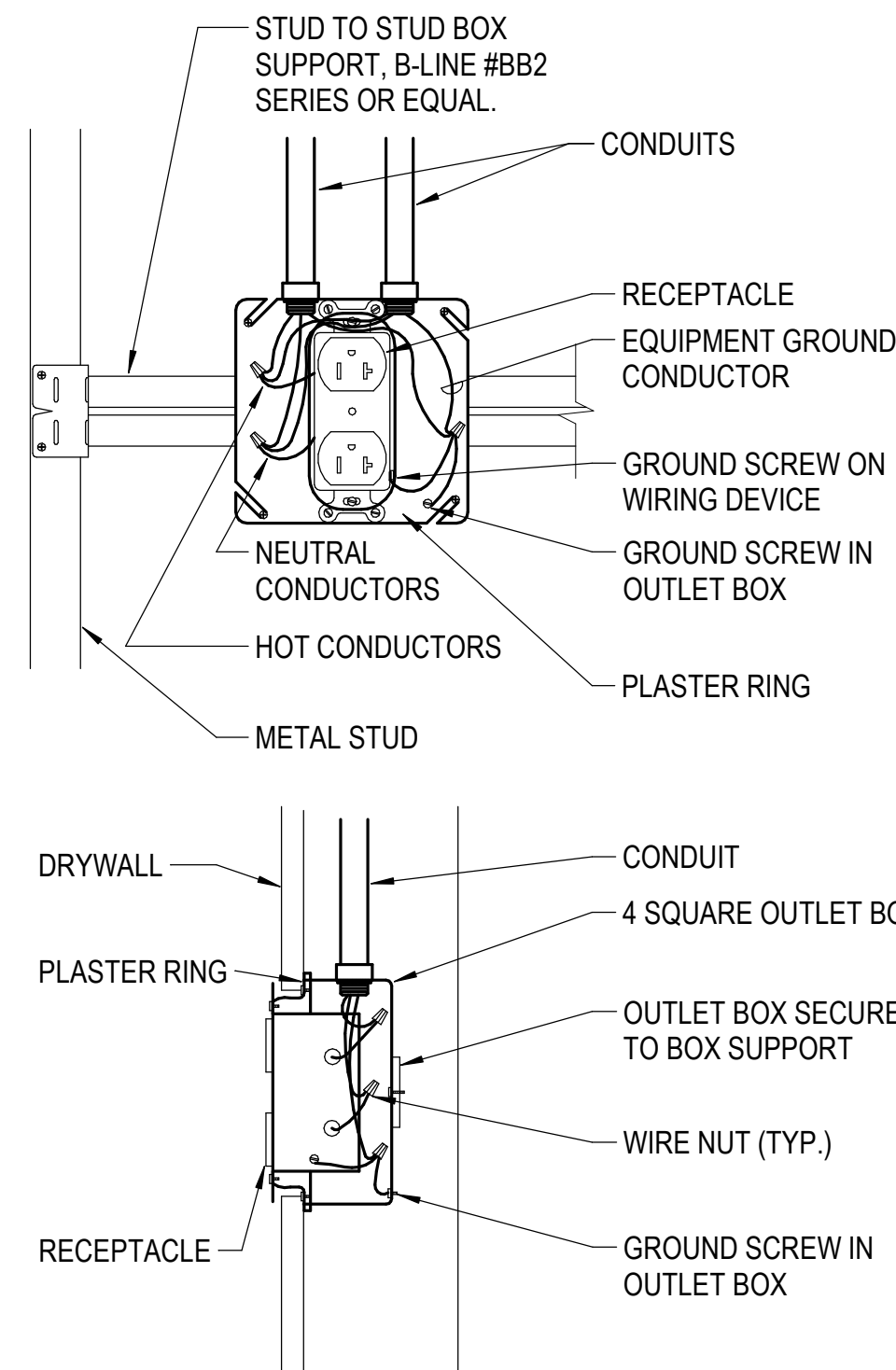
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
623 MASSACHUSETTS ST SUITE 200, LAWRENCE, KS 66044
755-842-6464 www.pecct.com

Saint Luke's EAST HOSPITAL

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100 NE Saint Luke's Blvd
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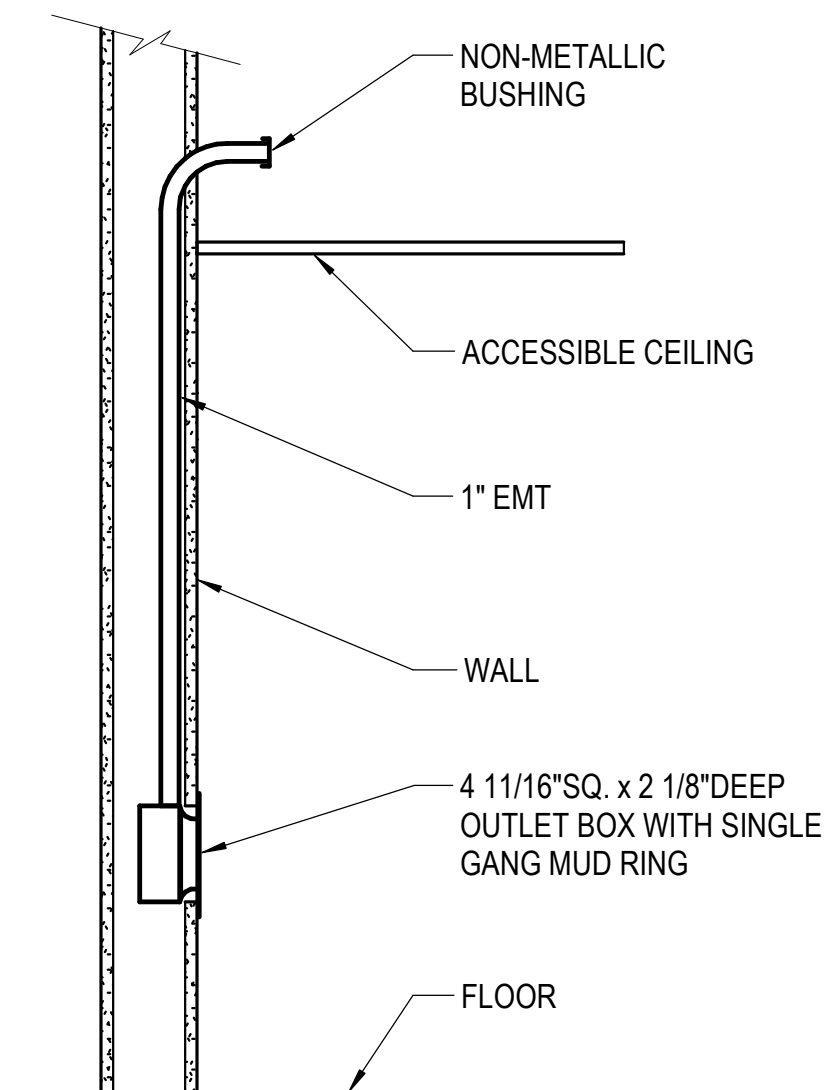
Date	07/10/2024
Job Number	3-24016
Drawn By	RWK
Checked By	DDC

Revision		
Number	Date	Description



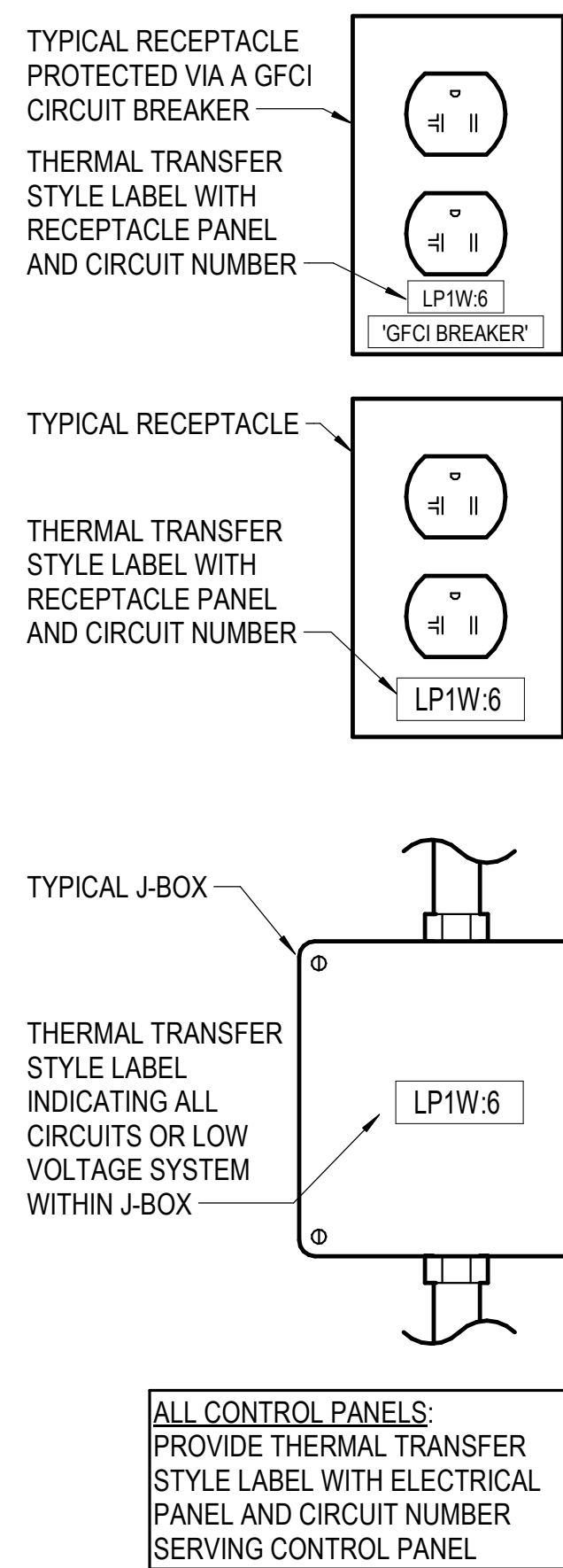
TYPICAL RECEPTACLE MOUNTING DETAIL

4 NO SCALE



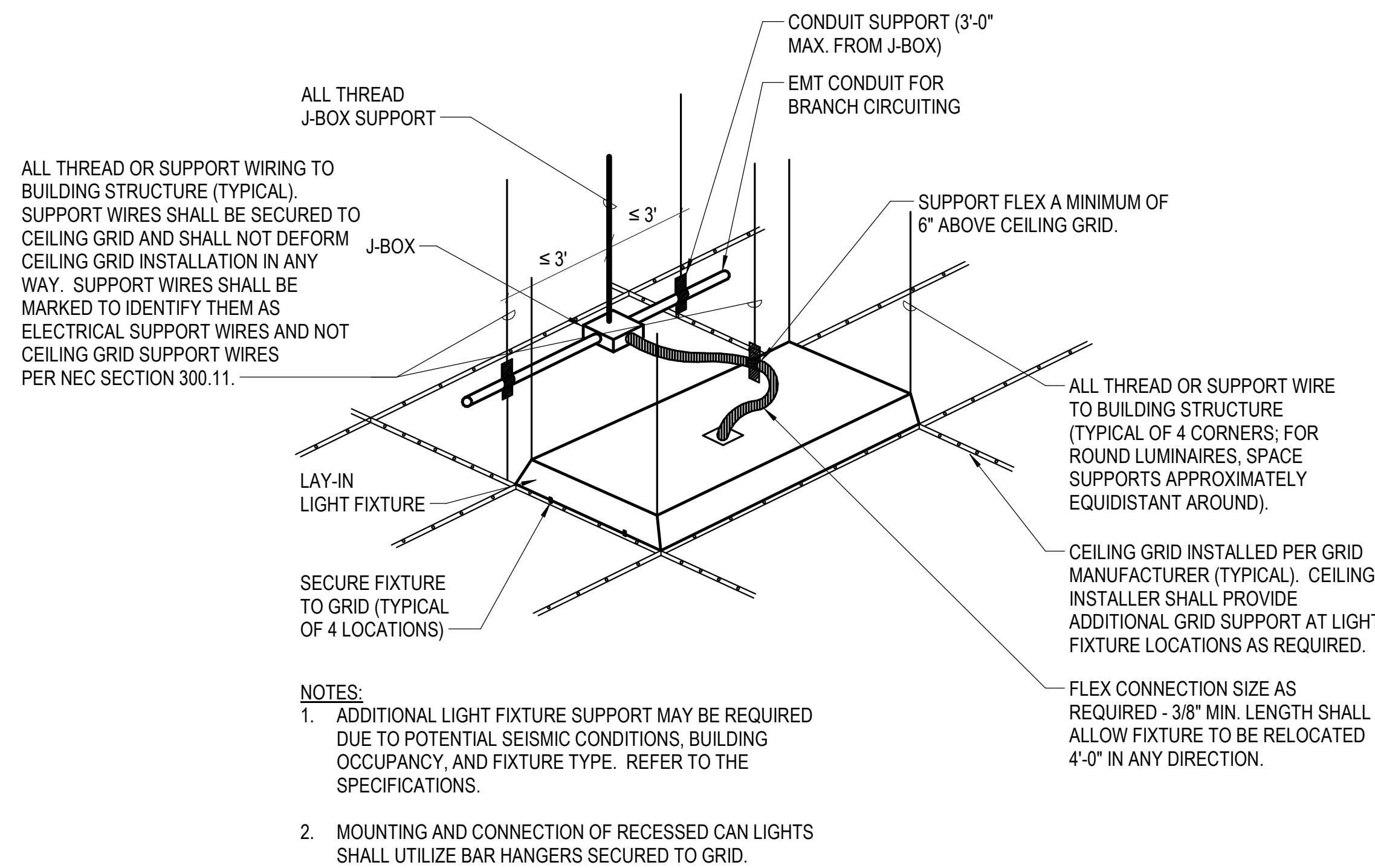
TYPICAL TELECOM OUTLET MOUNTING DETAIL

3 NO SCALE



4 TYPICAL NAMEPLATES AND LABELS

NO SCALE



2 TYPICAL LAY-IN FIXTURE INSTALLATION

2 NO SCALE

(1)(2)(3)(4)