

#### **TRANSMITTAL No. 001**

To: City of Lee's Summit			Date: 9/18/24	
			Contract No: 20755M	
Attn: Plan Reviewer			Job Name: SLH East ED Patient Treatment Expansion	
The following listed items are enclosed:				
$oxed{oxed}$ Drawings $oxed{oxed}$ Submittal Data $oxed{oxed}$ Hydraulics $oxed{oxed}$ Other				
Copies	Dated	Drawing No.	Description	
1	9/13/24	1 of 1	FP Drawings for Approval (PDF COPY)	
These are transmitted to you for:				
Please return2_ copy(s) bearing your approval.				
<b>REMARKS:</b> Please find attached the above referenced item(s). Please return (2) copy(s) bearing your approval. If you have any questions, please contact Coby A. at (913) 422-3770. Thank you.				
	Shelly Meyers Administrative Assistant			





HANGER SPACING TABLE

NOMINAL PIPE SIZE | ¾" |

THREADED LIGHTWALL

THREADED LIGHTWALL

STEEL PIPE

COPPER TUBE

1" 1¼" 1½" 2" 2½" 3" 3½" 4" 5" 6" 8"

| 5-6 | 6-0 | 6-6 | 7-0 | 8-0 | 9-0 | 10-0 | N/A | N/A | N/A | N/A | N/A

THIS HATCH INDICATES NO SPRINKLER

#### **WORK IN THESE AREAS.** NFPA 13 - OBSTRUCTION CODES: 8.6.6 Clearance to Storage (Standard Pendent and Upright **Table 8.6.5.1.2 Positioning of Sprinklers to Avoid** Table 8.6.5.2.2 Suspended or Floor-Mounted Obstructions Spray Sprinklers). **Obstructions to Discharge [Standard Spray** in Light Hazard Occupancies Only (SSU/SSP) **8.6.6.1** The clearance between the deflector and the top of Upright/Standard Spray Pendent (SSU/SSP)] Ceiling or roof storage shall be 18 in. (450 mm) or greater. **Minimum Vertical Distance** Maximum Allowable Below Deflector (B) **8.6.6.2** The 18 in. (450 mm) dimension shall not limit the **Distance of Deflector Above Horizontal Distance** (A) height of shelving on a wall or shelving against a wall in accor-[in. (mm)] Distance from Sprinklers to Bottom of Obstruction (B) dance with 8.6.6, 8.7.6, 8.8.6, and Section 8.9. Side of Obstruction (A) [in. (mm)] 6 in. (150 mm) or less 3(75)**8.6.6.2.1** Where shelving is installed on a wall and is not di-More than 6 in. (150 mm) to 4 (100) rectly below sprinklers, the shelves, including storage thereon, Less than 1 ft (300 mm) 0(0)9 in. (225 mm) shall be permitted to extend above the level of a plane located 1 ft (300 mm) to less than 1 ft $2\frac{1}{2}$ (65) 6 (150) More than 9 in. (225 mm) to 18 in. (450 mm) below ceiling sprinkler deflectors. 6 in. (450 mm) 12 in. (300 mm) 1 ft 6 in. (450 mm) to less than 3½ (90) More than 12 in. (300 mm) to 8 (200) **8.6.6.2.2** Shelving, and any storage thereon, directly below the sprinklers shall not extend above a plane located 18 in. (450 mm) below the ceiling sprinkler deflectors. 2 ft (600 mm) 15 in. (375 mm) 2 ft (600 mm) to less than 2 ft 5½ (140) More than 15 in. (375 mm) to 9½ (240) 6 in. (750 mm) 18 in. (400 mm) **8.6.6.3** Where other standards specify greater clearance to 2 ft 6 (750 mm) in. to less than $7\frac{1}{2}$ (190) More than 18 in. (400 mm) to $12\frac{1}{2}$ (315) storage minimums, they shall be followed. 3 ft (900 mm) FIGURE 8.6.5.2.2 Suspended or Floor-Mounted Obstruction 24 in. (600 mm) 3 ft (900 mm) to less than 3 ft 9½ (240) 15½ (395) More than 24 in. (600 mm) to in Light Hazard Occupancies Only (SSU/SSP). 6 in. (1.1 m) 30 in. (750 mm) 12 (300) 3 ft 6 in. (1.1 m) to less than More than 30 in. (750 mm) 18 (450) 4 ft (1.2 m) 4 ft (1.2 m) to less than 4 ft 14 (350) For SI units, 1 in. = 25.4 mm. 6 in. (1.4 m) Note: For *A* and *B*, refer to Figure 8.6.5.2.2. 4 ft 6 in. (1.4 m) to less than 16½ (420) 5 ft (1.5 m) 5 ft (1.5 m) to less than 5 ft 18 (450) 6 in. (1.7 m) 5 ft 6 in. (1.7 m) to less than 20 (510) Ceiling 6 ft (1.8 m) Ceiling or roof 6 ft (1.8 m) to less than 6 ft 24 (600) Open web steel 6 in. (2.0 m) or wood truss 30 (750) 6 ft 6 in. (2.0 m) to less than Obstruction 7 ft (2.1 m) 7 ft (2.1 m) to less than 7 ft 35 (875) 6 in. (2.3 m) lo maximum For SI units, 1 in. = 25.4 mm; 1 ft = 0.3048 m. Note: For A and B, refer to Figure 8.6.5.1.2(a). $A \ge (D - 8 \text{ in.}) + B$ [ $A \ge (D - 200 \text{ mm}) + B$ ] Obstruction Ceiling where: $D \le 30$ in. (750 mm) **Elevation View of Truss** (Obstruction in horizontal orientation) 24 in. (600 mm) $A \ge 3C \text{ or } 3D$ $A \le 24 \text{ in. (600 mm)}$ No additional **Elevation View** (Use dimension C or D, whichever is greater) protection is required FIGURE 8.6.5.1.2(b) Obstruction Against Wall (SSU/SSP). FIGURE 8.6.5.2.1.3(b) Minimum Distance from an Obstruction in the Horizontal Orientation (SSU/SSP). FIGURE 8.6.5.1.2(c) Obstructions Against Walls (SSU/SSP). Elevation View FIGURE 8.6.5.1.2(a) Positioning of Sprinkler to Avoid Obstruction to Discharge (SSU/SSP).

### ER AREA:

# 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 64063

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

2017 NATIONAL ELECTRICAL CODE (NFPA 70)

2018 INTERNATIONAL FIRE CODE 2012 LIFE SAFETY CODE (NFPA 101 CHAPTER 20)

2009 ICC/ANSI A117.1 AS AMENDED AND ADOPTED BY THE CITY OF LEE'S SUMMIT 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN / AMERICANS WITH DISABILITIES ACT OF 1990 STATE OF MISSOURI DEPT. OF HEALTH & ENVIRONMENT REFERENCES THE FOLLOWING

2012 NFPA 101 LIFE SAFETY CODE (LSC) 2018 FGI GUIDELINES FOR DESIGN & CONSTRUCTION OF HOSPITALS & OUTPATIENT FACILITIES NOTE: IF CODE REQUIREMENTS OVERLAP, THE MOST STRINGENT SHALL APPLY

TYPE OF CONSTRUCTION TYPE 1-A -SECTION 602.2 (TYPE 1 - 332 SPRINKLERED - SECTION 18.1.6.1)

I-2 -SECTION 308.3 (HEALTHCARE - SECTION 6.1.5) OCCUPANCY GROUP:

OCCUPANT LOAD:
TOTAL SQUARE FOOTAGE: SF / = 785SF TOTAL NUMBER OF OCCUPANTS = DEAD END CORRIDOR LENGTH LIMIT:

EXIT ACCESS TRAVEL DISTANCE: **AREA OF CONSTRUCTION:** 785+/- SF

REQUIRED FIRE RESISTANCE RATINGS (IN HOURS) PER NFPA 101 A.8.2.1.2:

INTERIOR BEARING WALLS PRIMARY STRUCTURAL FRAME 3 HR 1 1/2 HR ROOF CONSTRUCTION

INTERIOR NON-BEARING WALLS 0 HR

PLUMBING FIXTURE CALCULATIONS: EXISTING TO REMAIN NO CHANGE IN OCCUPANCY

<u>ACTIVE FIRE SAFETY FEATURES:</u>
- 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

- ILLUMINATED EXIT SIGNS

ELECTRICAL ROOM.

**PASSIVE FIRE SAFETY FEATURES**:

- SMOKE COMPARTMENTS NO GREATER THAN 22,500 SF

### GENERAL NOTES:

ALL FITTINGS CONFORM TO SECTION 2-4 OF NFPA PAMPHLET 13.

VALVES ON CONNECTIONS TO WATER SUPPLIES, SECTIONAL CONTROL VALVES AND OTHER VALVES IN SUPPLY PIPES TO SPRINKLERS SHALL BE SUPERVISED OPEN BY AN APPROVED METHOD.

IT IS THE OWNERS RESPONSIBILITY TO PROVIDE ADEQUATE HEAT TO KEEP THE SPRINKLER SYSTEM FROM FREEZING.

ALL ELECTRICAL WIRING OF ALARM BELLS, FLOW SWITCHES AND TAMPER SWITCHES (IF REQUIRED) TO BE DONE BY OTHERS.

THE SPRINKLER SYSTEM TO BE INSTALLED IN ACCORDANCE WITH NFPA 13.

HANGERS TO BE SPACED TO MEET NFPA REQUIREMENTS

PER NFPA 13, SECTION 8.6.3.2.4, WITHIN SMALL ROOMS AS DEFINED IN SECTION 3.3.20, SPRINKLERS SHALL BE PERMITTED TO BE LOCATED NOT MORE THAN 9 FT. FROM ANY SINGLE WALL, AND SPRINKLER SPACING LIMITATIONS OF SECTION 8.6.3 AND AREA LIMITATIONS OF TABLE 8.6.2.2.1(a) SHALL NOT BE EXCEEDED. JFS MAY MODIFY HEADS SHOWN ON THIS DRAWING TO COMPLY WITH THIS RULE.

- € = CENTER LINE OF PIPE BELOW TOP OF STEEL
- EL = CENTER LINE OF PIPE ABOVE FINISHED FLOOR

#### CONSTRUCTION: CONCRETE SLAB, CONCRETE BEAMS AND TEES

#### PLAN NOTES:

- 1. ALL CEILING HEIGHTS ARE TO BE 9'-0" UNLESS NOTED OTHERWISE
- 2. SPRINKLERS WILL BE CENTERED IN CEILING TILES WHERE POSSIBLE YET NEVER ANY CLOSER THAN 6" FROM GRID.
- 3. ALL THREADED PIPING IS TO BE ALLIED "SCHEDULE 40" WITH THREADED CAST IRON FITTINGS.
- 4. ALL GROOVED PIPING IS TO BE SCH. 10 PIPE, ASTM A-795 WITH ROLLED GROOVED ENDS. ALL FITTINGS TO BE IRON GROOVED OR WELDED STEEL OUTLETS.

8.6.5.2.2.1 IN LIGHT HAZARD OCCUPANCIES, PRIVACY CURTAINS SHALL NOT BE CONSIDERED OBSTRUCTIONS WHERE ALL OF THE FOLLOWING AREA MET: (1) THE CURTAINS ARE SUPPORTED BY FABRIC MESH ON CEILING TRACK (2) OPENINGS IN THE MESH ARE EQUAL TO 70 PERCENT OR GREATER. (3) THE MESH EXTENDS A MINIMUM OF 22 INCHES DOWN FROM CEILING.

## DESIGN CRITERIA:

BUILDING CODE: SEE CODE SUMMARY

OCCUPANCY: SEE CODE SUMMARY

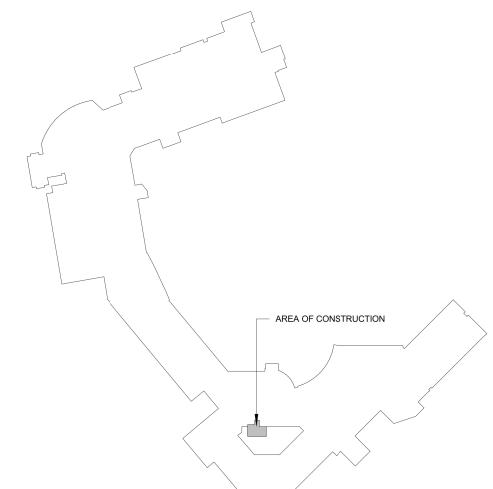
TYPE OF CONSTRUCTION: SEE CODE SUMMARY

AREA OF CONSTRUCTION: SEE CODE SUMMARY

PER NFPA 13, 2016 EDITION:

SYSTEM TYPE: WET (EXISTING)

CORRIDOR, EXAM ROOMS, OFFICES, ETC... LIGHT HAZARD MAXIMUM 225 S.F. SPRINKLER SPACING (STANDARD SPRINKLER) 100 GPM HOSE ALLOWANCE





MISSOURI PE COA #201602567 Engineering, LLC

1624 N Glen Ellyn
Independence, MO 64056

CA **APPROVAL** DRAWING NUMBER

G

umm

FIRE PROTECTION

SPRINKLER RELOCATION **FLOOR PLAN** 1 OF 1

COVERAGE REQUIREMENTS FOR THE SPACE. 816-516-9540 SPRINKLER LEGEND LEGEND SIN # FINISH TEMP. ORIFICE K-FACTOR DESCRIPTION VK462 WHITE VIKING MIRAGE Q.R. CONCEALED PENDENT 1/2" 5.6 K

THE DRAWING INDICATES A "SCHEMATIC LAYOUT" SHALL BE FIRESTOPPED BY OTHERS. | OF THE SPRINKLER HEADS AND SHOW THE INTENT OF THE DESIGN. EXACT LOCATIONS SHALL BE COORDINATED WITH OTHER TRADES, FIELD VERIFIED, AND INSTALLED TO MEET NFPA 13

\*\*ALL SPRINKLER PIPING PASSING THROUGH FIRE RATED ASSEMBLIES FIRE STOPPING MATERIAL SHALL BE SUITABLE FOR THE PIPE MATERIAL IN USE AND THE ASSEMBLY PENETRATED.\*\* \*\*SEALANTS USED FOR CPVC MATERIALS SHALL BE FBC SYSTEM COMPATIBLE.\*\* FIRE STOP CAULK BEAD

1-HILTI Kwik Anchor 夏岁8

1—All Thread Rod 1-Top Beam Clamp

-SPRINKLER TO BE ±2"

FROM THE CENTER OF

2x2 CEILING TILE OR

1-All Thread Rod 🖫

1-Top Beam Clamp /

TYPICAL BEAM HANGER

QUARTER POINT OF

2x4 CEILING TILE

CENTER OF TILE

MAIN OR LINE

NO SCALE

1" ARMOVER

NO SCALE

MAIN OR LINE

TYPICAL JOIST HANGER

TYPICAL HANGER
NO SCALE

PENETRATION FIRESTOP DETAIL FOR RATED CONSTRUCTION ONLY SEE FIRE STOP SUPPLEMENT SHEETS FOR INFO TYP. FIRESTOP DETAIL

FIRE STOP SYMBOL ETR EXISTING SPRINKLER TO REMAIN SYMBOL R EXISTING SPRINKLER TO BE RELOCATED/REPLACED EXISTING SPRINKLER TO BE ADDED NEW SPRINKLER TO BE INSTALLAED SEMI-RECESSED PENDENT TO BE CHANGED TO CONCEALED FIRE SPRINKLER STANDPIPE NEW SPRINKLER LINE — EXISTING SPRINKLER LINE HANGER LOCATION

PIPE END CAP

CHRISTOPHER T. GROSS CHECKED BY: SB SSUE DATE: 09/13/2024 PLOT DATE: 09/13/2024

9-16-2024