

FIRE PROTECTION CODE ANALYSIS
 *SYSTEM DESIGN IS BASED ON 2018 IBC, NFPA 13 2016, NFPA 20 2016
 *SPRINKLER DESIGN DEMANDS SHALL BE AS FOLLOWS
 *ALL SPACES ARE LIGHT HAZARD UNLESS NOTED OTHERWISE ON DRAWINGS
 *LIGHT HAZARD: 0.10 GPM/SF OVER 1500 SQ. FT. + 100 GPM HOSE ALLOWANCE
 *ORDINARY HAZARD GROUP 1: 0.15 GPM/SF OVER 1500 SQ. FT. + 250 GPM HOSE ALLOWANCE
 *ORDINARY HAZARD GROUP 2: 0.20 GPM/SF OVER 1500 SQ. FT. + 250 GPM HOSE ALLOWANCE
 *DESIGN AREAS UTILIZE QUICK RESPONSE SPRINKLER AREA REDUCTION IN ACCORDANCE WITH NFPA 13 2016

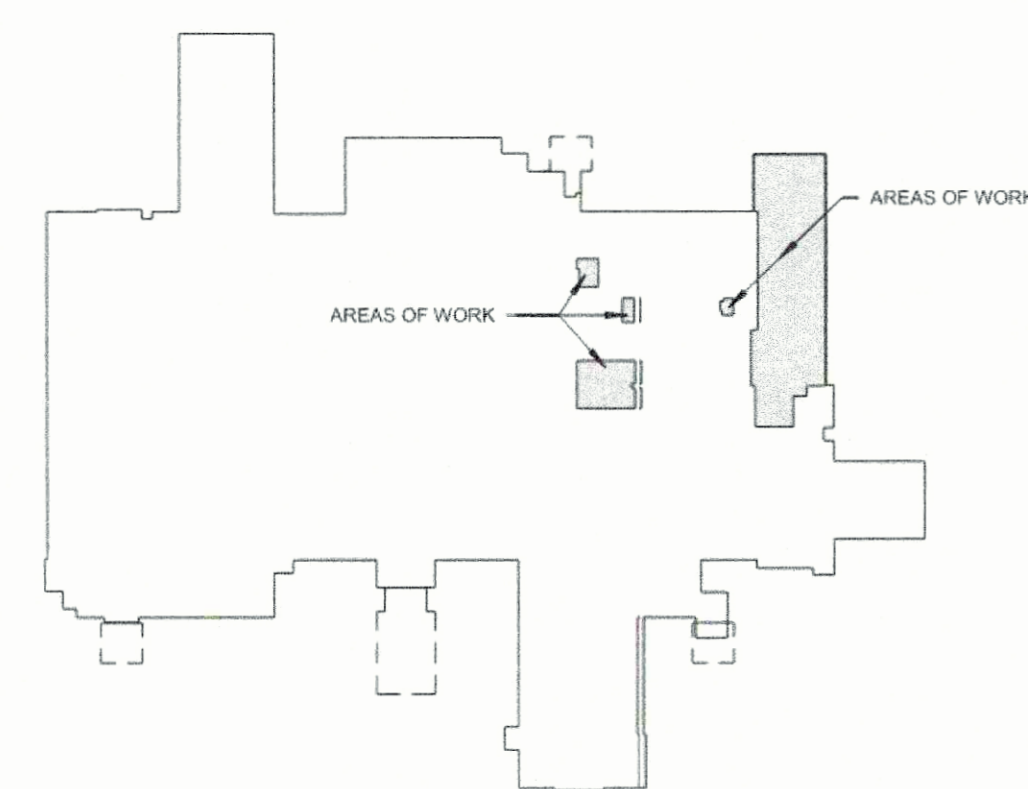
ALL SPRINKLER SYSTEMS SHALL CONFORM WITH THE REQUIREMENTS OF NFPA 13 2016
ALL SECTIONS OF TRAPPED PIPING TO HAVE AUXILIARY DRAINS WHERE REQUIRED PER NFPA 13
ALL HANGER TO BE INSTALLED PER REQUIREMENTS OF NFPA 13 2016
PENETRATIONS THROUGH THE WALL SHALL BE FIRE CALKED AS REQUIRED PER CONTRACT
THE OWNER SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE FLEET TO PREVENT
WATER FILLED PIPE FROM FREEZING
*AMERICAN FIRE SPRINKLER CORP. IS NOT CONTRACTED TO PROVIDE THE ALARM WIRING TO THE
CENTRAL STATION ALARM SYSTEM
"THREADED PIPING 1/2" SHALL BE SCH 40 BLACK STEEL WITH DUCTILE THREADED FITTINGS
"THREADED PIPING 3/4" SHALL BE SCH 40 BLACK STEEL WITH VCTCULOID GROOVED FITTINGS
"THREADED PIPING 1" SHALL BE SCH 40 BLACK STEEL WITH VCTCULOID GROOVED FITTINGS
"GROOVED PIPING 1 1/2" SHALL BE SCH 10 BLACK STEEL WITH VCTCULOID GROOVED FITTINGS
ALL CEILINGS SHALL BE 6" AFF OTHERWISE NOTED

KEY
E: EXISTING TO REMAIN
R: RELOCATE/REPLACE
N: NEW SPRINKLER HEAD ADDED
P: PLUG EXISTING OUTLET

EXISTING PIPE: — — — — —
NEW PIPE: —————
NOT IN SCOPE: [REDACTED]

Hydraulic Information	
Remote Area 2	
OCCUPANCY CLASSIFICATION	Light Hazard
DENSITY (gpm/ft²)	0.10 for 1500ft² (Actual 937ft²)
QUICK RESPONSE REDUCTION	9.0° Ceiling (40.0%) 900ft²
TOTAL HOSE STREAMS	10.00
DRY CAPACITY	0.00gal
TOTAL HEADS FLOWING	1.00
K-FACTOR	5.6
TOTAL WATER REQUIRED	303.85
TOTAL PRESSURE REQUIRED	52.365
BASE OF RISER (gpm)	203.85
BASE OF RISER (psi)	46.788
SAFETY MARGIN (psi)	+26.928 (34.0%)

HYDRAULIC REFERENCE



FIRST FLOOR KEY PLAN
1" = 100'-0"



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



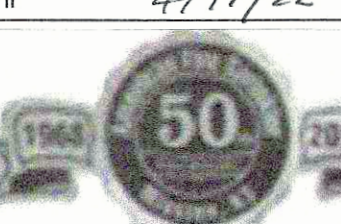
Sprinkler Legend											
Symbol	Manufacturer	SINI	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature	Note
	Viking	VK462	MIRAGE	23	5.6	Pendent	1/2"	Quick	White	200°F	EXISTING HEAD LOCATION
	Viking	VK3001	GR UP	6	5.6	Upright	1/2"	Quick	Brass	200°F	EXISTING HEAD LOCATION
	Reliable	RA14.14	F1FR56	111	5.6	Pendent	1/2"	Quick	Chrome	200°F	EXISTING HEAD LOCATION
	Viking	VK462	MIRAGE	84	5.6	Pendent	1/2"	Quick	White	200°F	CONCEALED PENDENT
	Viking	VK3001	GR UP	4	5.6	Upright	1/2"	Quick	Brass	200°F	UPRIGHT
				Total = 226							

REVISIONS: _____ DATE: _____

LEE'S SUMMIT MEDICAL CENTER
ICU EXPANSION

2100 SE BLUE PARKWAY
LEE'S SUMMIT, MO 64063

PE STAMP:



AMERICAN
FIRE SPRINKLER

OFFICE 6750 W. 47TH TERR. MISSOURI KS. 66203
MAIL P.O. BOX 568 MISSOURI KS. 66201-0568
913/722-6600

FIRE PROTECTION SYSTEMS - CONSULTANTS - DESIGN
FABRICATION - SALES - SERVICE

PAY ITEM:	SPR
VIEWING AUTHORITY:	
OWNER / LEE'S SUMMIT, MO	
TOTAL HEADS THIS SHEET:	22
TOTAL HEADS THIS JOB:	8
DRAWN BY: BROOKE LYNN	
DATE:	4/7/202
REVISION DATE	
SCALE:	AS SHOWN
CONTRACT #	SK091
WG #:	

FP1

HEET: 1 OF