

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 UPON BY AN APPROVED METHOD.

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

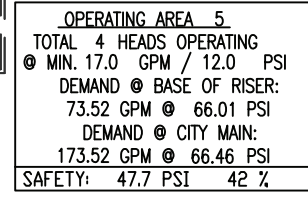
ALL ELECTRICAL WIRING OF ALARM BELLS, FLOW SWITCHES AND TAMPER SWITCHES (OF REQUIRED) TO BE DONE BY OTHERS.

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

HANGERS TO BE SPACED TO MEET NFPA REQUIREMENTS

CL = CENTER LINE OF PIPE BELOW TOP OF STEEL

EL = CENTER LINE OF PIPE ABOVE FINISHED FLOOR



2nd FLOOR

F.F. EL. 16'-4"
 T.J. = 10'-11" / S.J.=9'-1" AFF.
 JOIST TO BE FILLED W/ INSULATION (BY OTHERS)
 CEILING HEIGHTS TO 8'-0" UN.D.
 ALL HANGERS TO BE SPACED PER NFPA - 13 (SEE CHART)
 ALL HANGERS TO BE CDJ

PER NFPA-13R: HEADS ARE NOT REQUIRED)
 BATHROOMS UNDER 55 SQ. FT.
 CLOSE 1/2" UNDER 24 SQ. FT.

- * VERT. RISER IN WALL (FOR HSW HEADS UNDER 9'-0" CEILING TO BE 1 x 9'-0"
- * VERT. RISER IN WALL (FOR HSW HEADS UNDER 8'-6" CEILING TO BE 1 x 8'-6"

* ALL PIPING TO BE @ EL. 10'-0" UN.D. &

Symbols		SPRINKLER LEGEND						
Symbol	Description	Symbol	Description	SIN #	FINISH	TEMP	OFFICE K-FACTOR	COUNT
	Hydraulic Reference Points	⊙	REMARK: "THROW ARMED NOT REMARK"	45016	WHITE	175"	1/2"	4.9
[= a]	Elev. Below Top of Steel	⊙	REMARK: "THR OF OR DECREASED REMARK"	RA144	CHROME	200"	1/2"	5.6
[= b]	Elev. Above Finished Floor	⬆	REMARK: "TOP OF BASED NOT REM"	BF734	BRASS	200"	1/2"	5.6
+ (TOS 20'-0")	Elev. of Top of Steel							22
	Ceiling Height							
	Denotes Hanger Location							
	Rise up or down							
							TOTAL THIS SHEET	234

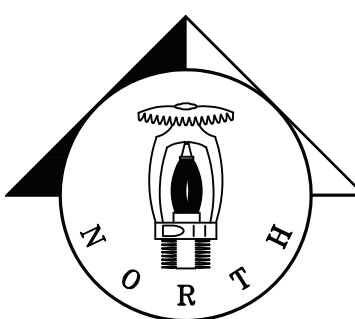
Plan Notes
1. All Pipe Locations are to be Field Measured Prior to Fabrication and Installation by Spinner Contractor.
2. All Pipe Dimensions Shown are Center to Center.
3. High Temperature Heads are to be Field Located Where Required.
4. All Pipes and Hangers are to be Installed per NFPA #13.
5. Hangers are to be U.L. Listed and F.M. Approved.

Job: THE VILLAGE AT DISCOVERY
LOT 7
1920 NE DISCOVERY AVE
LEE'S SUMMIT, MO

 **Goal Fire Protection, LLC**
"Reliable Service is our Goal!"

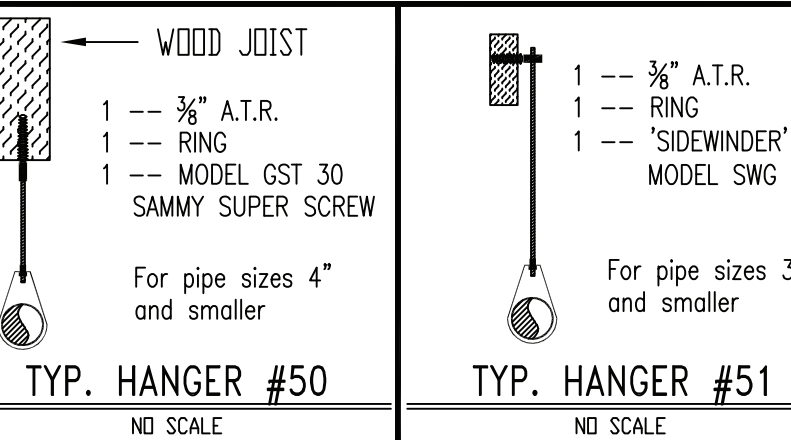
20920 147th Street
Basehor, KS. 66007
(913) 441-3390

SHEET 2 OF 3



MISSOURI PE COA #2016025677
CG Engineering, LLC
 1624 N Glen Ellyn
 Independence, MO 64056
 816-516-9540

Maximum Distance between Hangers (ft.-in.) Per NFPA-13	1"	1 1/4"	1 1/2"	1 3/4"	2"	2 1/2"	3"	4"	6"	8"
STEEL PIPE EXCEPT THREADED LIGHTWALL	12-0	12-0	15-0	15-0	15-0	15-0	15-0	15-0	15-0	15-0
THREADED LIGHTWALL STEEL PIPE	12-0	12-0	12-0	12-0	12-0	12-0	12-0	N/A	N/A	N/A
CPVC	6-0	6-6	7-0	8-0	9-0	10-0	10-0	N/A	N/A	N/A

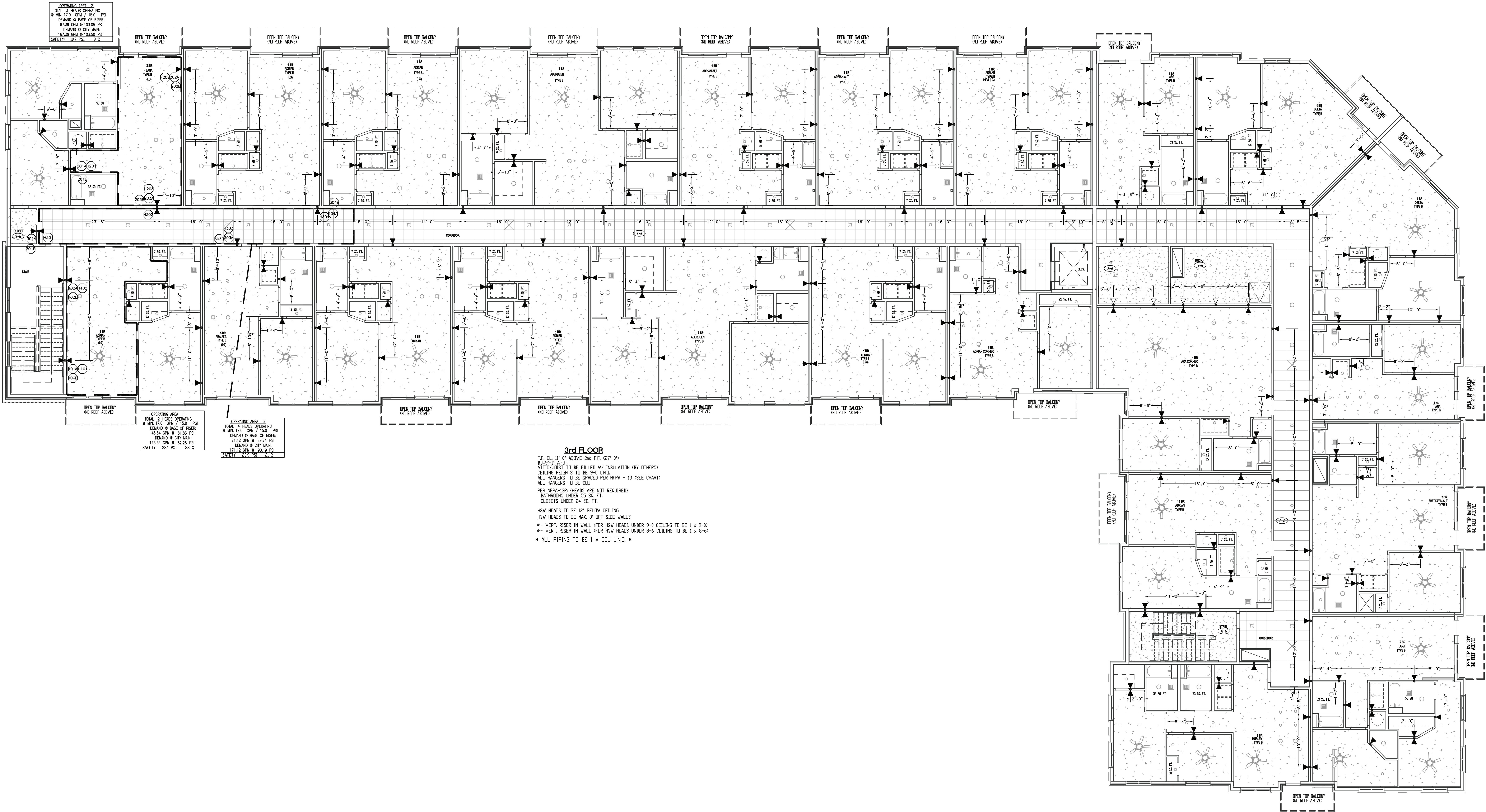


DESIGN CRITERIA:
LEVELS 2 & 3
PER NFPA-13R, 2016 EDITION
ALL HEADS IN A SINGLE COMPARTMENT, UP TO 4 OPERATING
OUTSIDE HOSE ALLOWANCE = 100 GPM.

PIPE TYPE:
ALL PIPING TO BE CPVC PLASTIC PIPE

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EL = CENTER LINE OF PIPE ABOVE FINISHED FLOOR

CONSTRUCTION:
WOOD JOISTS



3rd FLOOR
F.F. EL. 11'-0" ABOVE 2nd F.F. (27'-0")
R-22-1 A.C.F.
ATTIC/JOIST TO BE FILLED W/ INSULATION (BY OTHERS)
CEILING HEIGHTS TO BE 8'-0" UNL.
ALL HANGERS TO BE SPACED PER NFPA - 13 (SEE CHART)
ALL HANGERS TO BE CCL
PER NFPA-13R: HEADS ARE NOT REQUIRED:
BATHROOMS UNDER 55 SQ. FT.
CLOSETS UNDER 24 SQ. FT.
HSW HEADS TO BE 12" BELOW CEILING
HSW HEADS TO BE MAX. 8' OFF SIDE WALLS
• - VERT. RISER IN WALL FOR HSW HEADS UNDER 9'-0" CEILING TO BE 1 x 9'-0"
• - VERT. RISER IN WALL FOR HSW HEADS UNDER 8'-6" CEILING TO BE 1 x 8'-6"
* ALL PIPING TO BE 1 x COJ UNL. *

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LOT 7
1920 NE DISCOVERY AVE
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GOAL FIRE PROTECTION, LLC
20920 147th Street
Boschhor, KS. 66007
(913) 441-3390

MISSOURI PE COA #2016025677
Engineering, LLC
1624 N Glen Elyn
Independence, MO 64056
816-516-9540

8-26-2025
STATE OF MISSOURI
CHRISTOPHER T. GROSS
REGISTERED PROFESSIONAL ENGINEER
NUMBER: PE-201503848
EXPIRATION: 8-26-2028

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SPRINKLER LEGEND

Symbol	Description	Hydraulic Reference Points
○	RELIABLE TYPED OR BOR. SIDEWALL	Elev. Below Top of Steel [B-4]
△	RELIABLE TYPED OR BOR. SIDEWALL	Elev. Above Finished Floor [A-4]
○	RELIABLE TYPED OR BOR. SIDEWALL	Elev. of Top of Steel
○	RELIABLE TYPED OR BOR. SIDEWALL	Denotes Hanger Location
○	RELIABLE TYPED OR BOR. SIDEWALL	Rise up or down

Drawing Title

Revisions:

Contract No.:

Drawn By: B & K

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

Date: 8-6-2025

TOTAL THIS SHEET: 221