

1. RANGER FIRE'S WORK SHALL CONSIST OF ALL NECESSARY LABOR AND MATERIAL TO DESIGN AND INSTALL NEW AUTOMATIC FIRE SPRINKLER SYSTEMS IN THE REFERENCED BUILDINGS.
2. RANGER FIRE EXCLUDES ALL ELECTRICAL WORK.
3. ALL DESIGN AND INSTALLATION SHALL CONFORM TO 2018 IFC/IBC WITH AMENDMENTS, THE 2016 EDITIONS OF NFPA 13, NFPA 13R, NFPA 14 AND ALL COLUMBIA FIRE CODE REQUIREMENTS.
4. ALL MATERIAL TO BE UL/FM APPROVED FOR FIRE SERVICES.
5. PIPING MATERIAL SHALL CONSIST OF THE FOLLOWING:
RISER ROOM: BLACK SCH. 10 & 40 STEEL PIPE W/ GROOVED & THREADED FITTINGS (U.O.N.)
UNITS: CPVC PIPE W/ CPVC FITTINGS (U.O.N.)
STANDPIPE: BLACK SCH. 10 & 40 STEEL PIPE W/ GROOVED & THREADED FITTINGS (U.O.N.)
FIRST FLOOR CLUB/AMENITY: CPVC PIPE W/ CPVC FITTINGS (U.O.N.)
6. OWNER OR TENANT IS RESPONSIBLE FOR MAINTAINING ADEQUATE THERMOSTATICALLY CONTROLLED HEAT (MIN. 40 DEGREES F.) THROUGHOUT THE AREA PROTECTED BY A WET SYSTEM.
7. SPRINKLER EQUIPMENT ROOM AND EQUIPMENT COMPONENTS SHALL BE PROPERLY IDENTIFIED.
8. ALL HANGERS SHALL BE IN ACCORDANCE WITH NFPA 13 AND THE HANGER LISTING REQUIREMENTS.
9. ALL SYSTEMS SHALL BE TESTED AT 200 PSI FOR 2 HOURS AND WITNESSED BY A REPRESENTATIVE OF LEE'S SUMMIT FIRE DEPARTMENT. ANY LEAKS SHALL BE REPAIRED.
10. THE SYSTEMS HAVE BEEN HYDRAULICALLY CALCULATED PER NFPA 13R AND NFPA 14 REQUIREMENTS.
11. GENERAL CONTRACTOR TO FULLY INSULATE TRUSS SPACES ABOVE NFPA 13 SECTION.
12. SCOPE STARTING AT 1'-0" AFF AT RISER SPIGOT (FROM OTHERS).

1. ALIGN ALL SIDEWALL SPRINKLER DEFLECTORS PARALLEL TO CEILING SLOPE (IF ANY).
2. FIELD VERIFY ALL SPRINKLER AND PIPE LOCATIONS PRIOR TO INSTALLATION.
3. ALL BRANCHLINE PIPING IS 3/4" CPVC (U.O.N.).
4. ROUTE AUXILLARY DRAINS (AS NEEDED) FOR UNFORSEEN TRAPPED AREAS.
5. FIRE CAULK ALL FIRE RATED WALLS THAT ARE PENETRATED.
6. ALL CPVC PIPE DIMENSIONS ARE CENTER OF THE FITTING.

OCCUPANCY TYPE

HOTEL UNITS:	R-1
UNCONCENTRATED:	A-2
SWIMMING POOL:	A-4
BACK OF HOUSE:	B

SPRINKLER TYPE
HOTEL UNITS: 2016 NFPA 13R
UNCONCENTRATED,
BACK OF HOUSE: 2016 NFPA 13

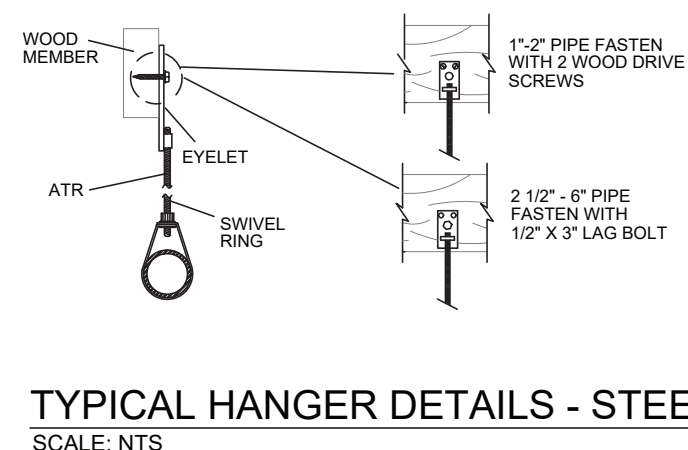
FITNESS	LIGHT HAZARD	.10 DENSITY
LOBBY	LIGHT HAZARD	.10 DENSITY
OFFICE	LIGHT HAZARD	.10 DENSITY
GUEST LAUNDRY	ORDINARY HAZARD	.15 DENSITY

BEDROOM	LIGHT HAZARD	.05 DENSITY
LIVING ROOM	LIGHT HAZARD	.05 DENSITY
BATHTOOM	LIGHT HAZARD	.05 DENSITY
CORRIDOR	LIGHT HAZARD	.10 DENSITY

NOMINAL PIPE SIZE (IN.)	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	6
STEEL PIPE	N/A	12-0	12-0	15-0	15-0	15-0	15-0	15-0	15-0
CPVC	5-6	6-0	6-6	7-0	8-0	9-0	10-0	N/A	N/A

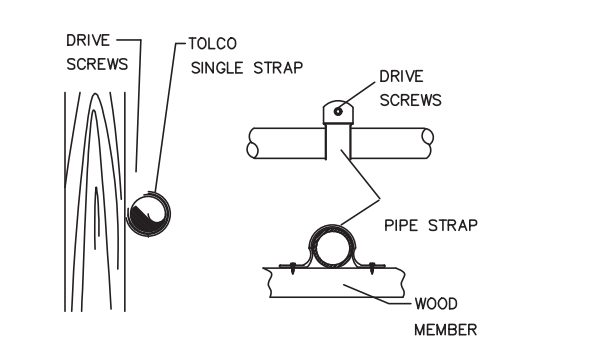


PIPE SIZE	DIAM. OF ROD	PIPE SIZE	DIAM. OF ROD
UP TO AND INCLUDING 4"	3/8"	6 AND 8	1/2"



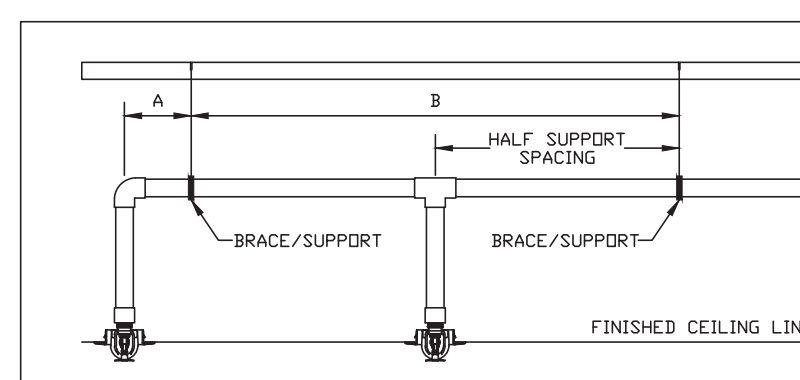
TYPICAL HANGER DETAILS - STEEL
SCALE: NTS

PIPE SIZE	ROD SIZE	MAXIMUM DISTANCE BETWEEN HANGERS
1"	3/8"	12'
1 1/4"	3/8"	12'
1 1/2"	3/8"	15'
2"	3/8"	15'
2 1/2"	3/8"	15'
3"	3/8"	15'
4"	3/8"	15'
6"	1/2"	15'
8"	1/2"	15'



TYPICAL HANGER DETAILS - CPVC
SCALE: NTS

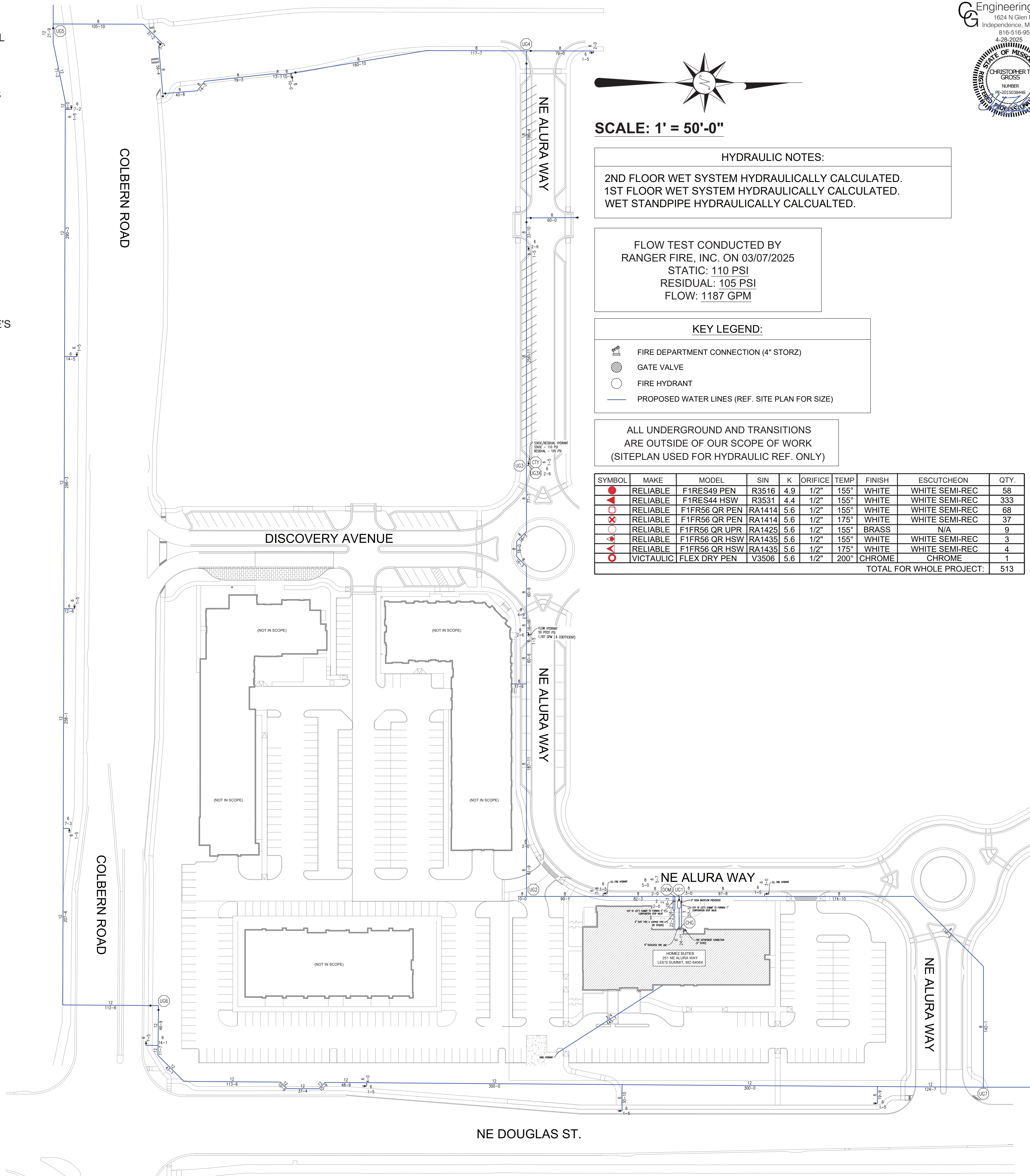
PIPE SIZE	ROD SIZE	MAXIMUM DISTANCE BETWEEN HANGERS
3/4"	3/8"	5 1/2'
1"	3/8"	6'
1 1/4"	3/8"	6 1/2'
1 1/2"	3/8"	7'
2"	3/8"	8'
2 1/2"	3/8"	9'
3"	3/8"	10'



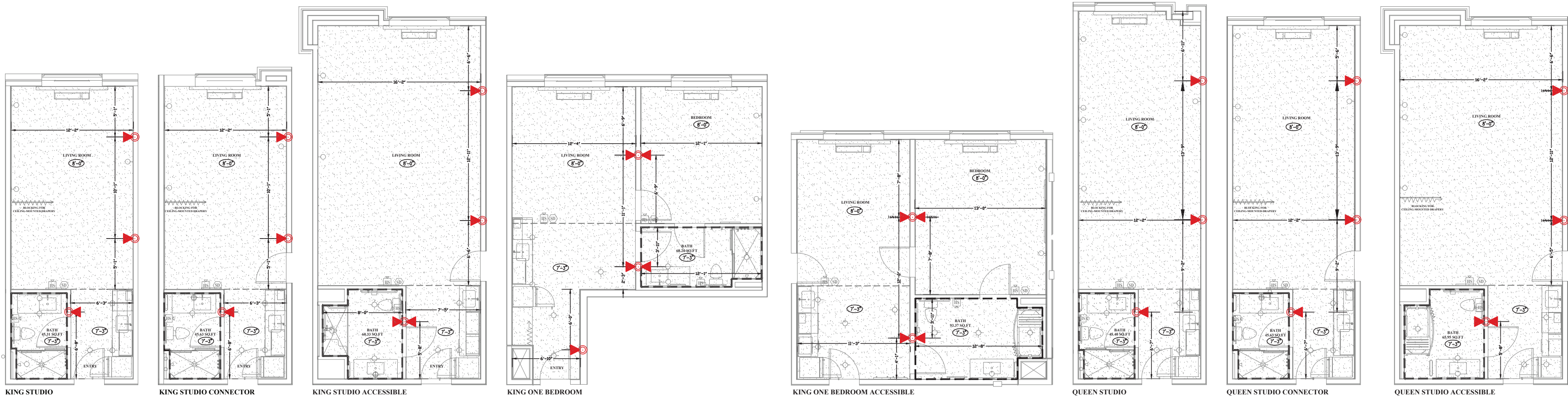
HANGER SPACING DETAILS

MAXIMUM SUPPORT SPACING DISTANCE END LINE SPRINKLER HEAD DROP ELBOW		
NOMINAL PIPE SIZE (IN.)	LESS THAN 100 PSI	MORE THAN 100 PSI
3"	9'	6'
1"	12'	9'
1 1/2"	16'	12'
1 1/2" - 3"	24'	12'

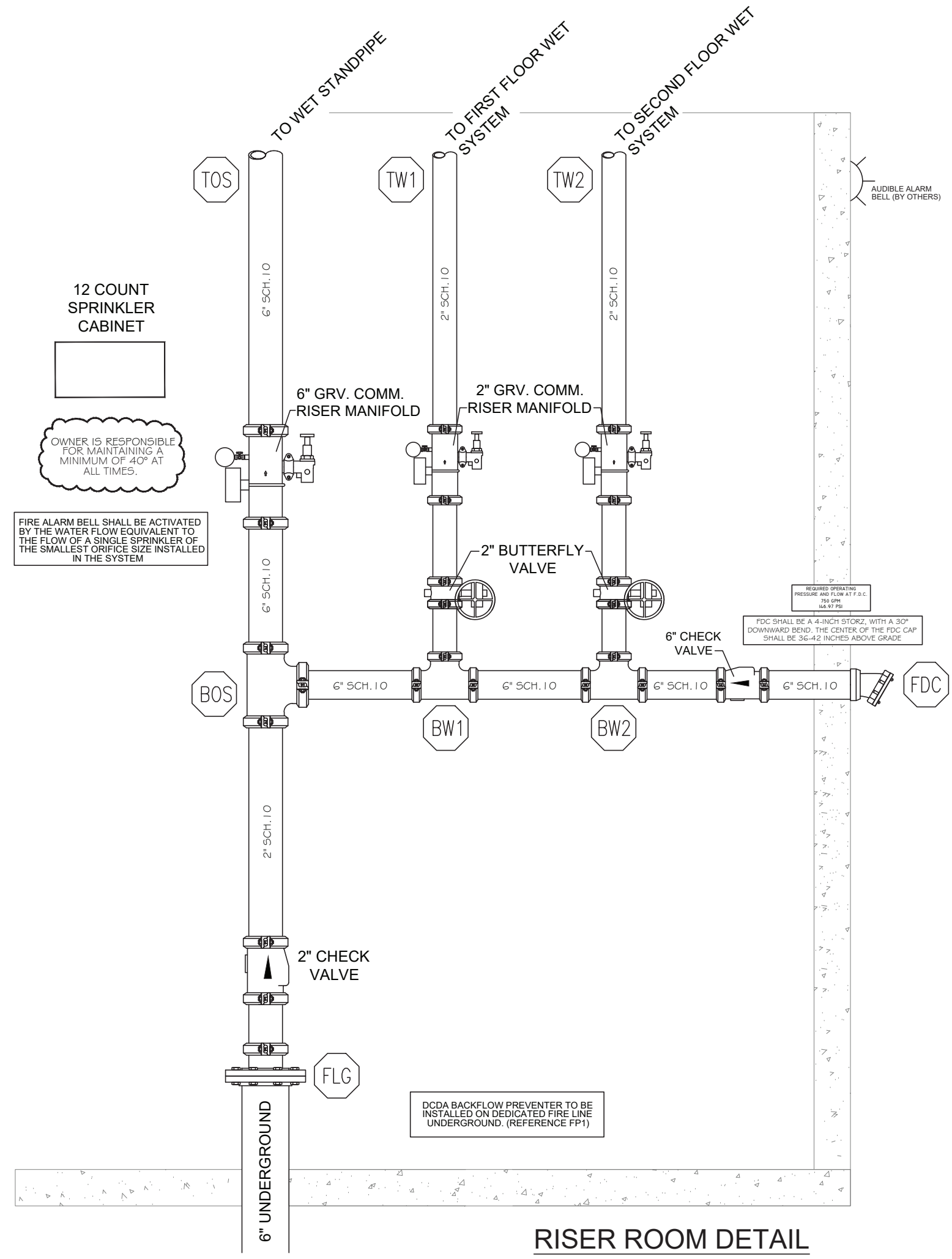
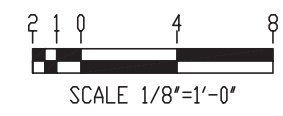
MAXIMUM SUPPORT SPACING DISTANCE IN LINE SPRINKLER HEAD DROP TEE		
NOMINAL PIPE SIZE (IN.)	LESS THAN 100 PSI	MORE THAN 100 PSI
1"	4'	3'
1½"	5'	4'
2"	6'	5'
1½"-3"	7'	7'



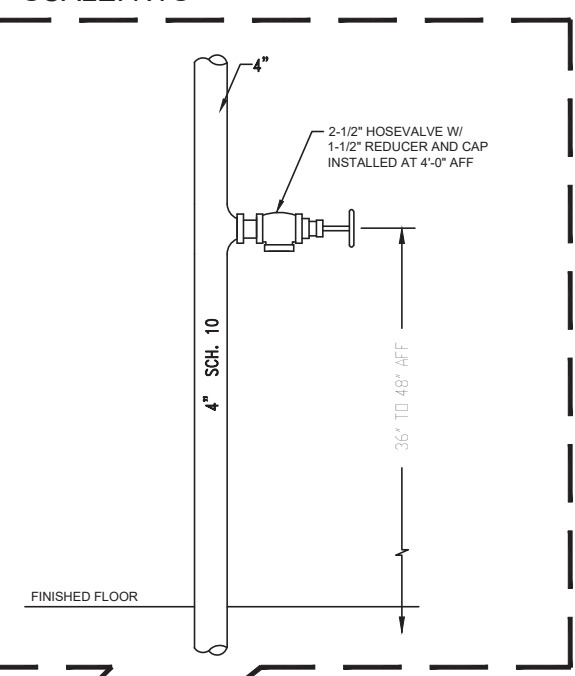
SCALE: AS SHOWN	HOME2 SUITES BY HILTON		SYMBOL MAKE MODEL SIN K OFFICE TEMP FINISH ESG/OTHER QUANTITY	OWNER INTRINSIC DEVELOPMENT 3622 ENDEAVOR AVENUE, SUITE 101 COLUMBIA, MD 21051 CONTRACTOR INTRINSIC DEVELOPMENT 3622 ENDEAVOR AVENUE, SUITE 101 COLUMBIA, MD 21051 (703) 681-4260	CONFIDENTIALITY STATEMENT This drawing, the information and design application were prepared, conceived, designed, drawn, and/or prepared by the author or under the direct supervision of the author. The information and design application were prepared for the exclusive use of the client and are not to be used for any other purpose without the written consent of the author. The information and design application are the property of the author and are not to be used for any other purpose without the written consent of the author.	Ranger Fire, Inc. 1000 South Main Street, Suite 150 Columbia, MD 21051 Phone: 817-410-9070
DRAWN BY: R.C.	251 NE ALURA WAY					
CHECKED BY: J.G.	LEE'S SUMMIT, MO 64064					
DATE:						
30% MTD	Multi-Family					
FP1	04/22/2025	RANGER FIRE				
	DESCRIPTION: INSTALLATION PER NFPA 13, NFPA 13R & NFPA 14					
	CONTRACT # FV25-013					



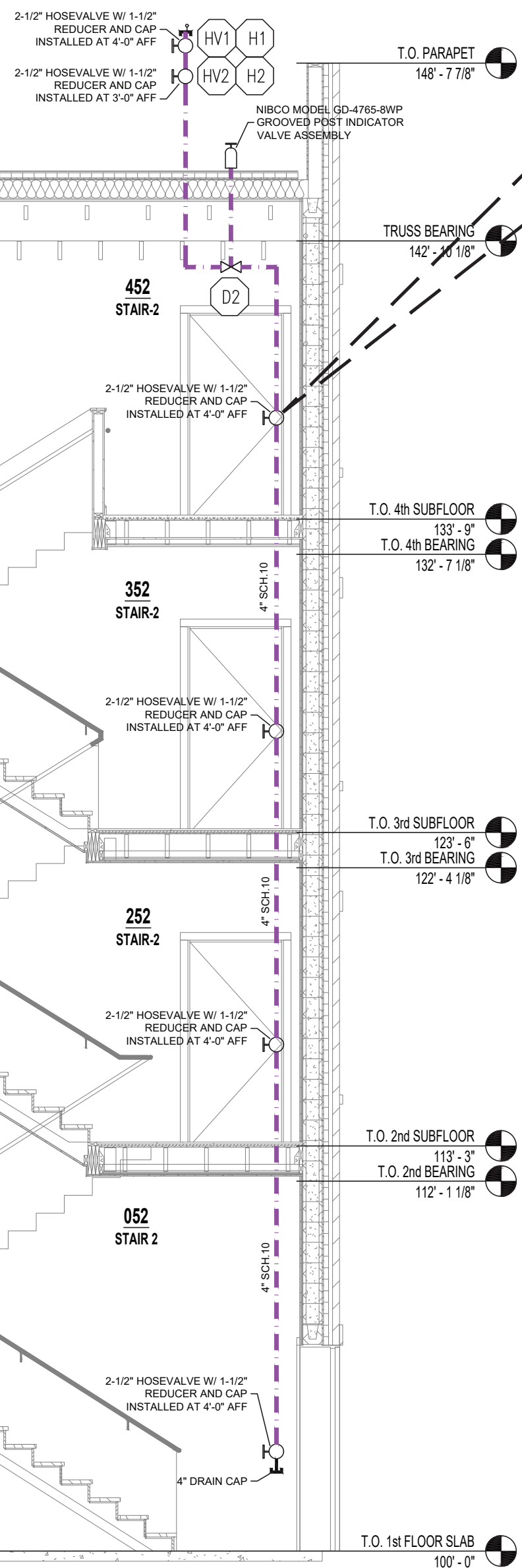
NFPA 13R UNIT REVIEW NOTES (BUILDINGS 1-7):
SPRINKLERS SHALL NOT BE REQUIRED IN BATHROOMS IN DWELLING UNITS WHERE THE BATHROOM AREA DOES NOT EXCEED 55 SQ.FT PER NFPA 13R 6.6.2
SPRINKLERS SHALL NOT BE REQUIRED IN CLOSETS, LINEN CLOSETS, OR PANTRIES NOT EXCEEDING 24 SQ.FT PER NFPA 13R 6.6.3
SPRINKLERS SHALL BE INSTALLED IN ANY CLOSET USED FOR HEATING OR AIR-CONDITIONING EQUIPMENT, WASHERS, DRYERS, OR WATER HEATERS PER NFPA13 R 6.6.4



HOSE VALVE DETAIL
SCALE: NTS



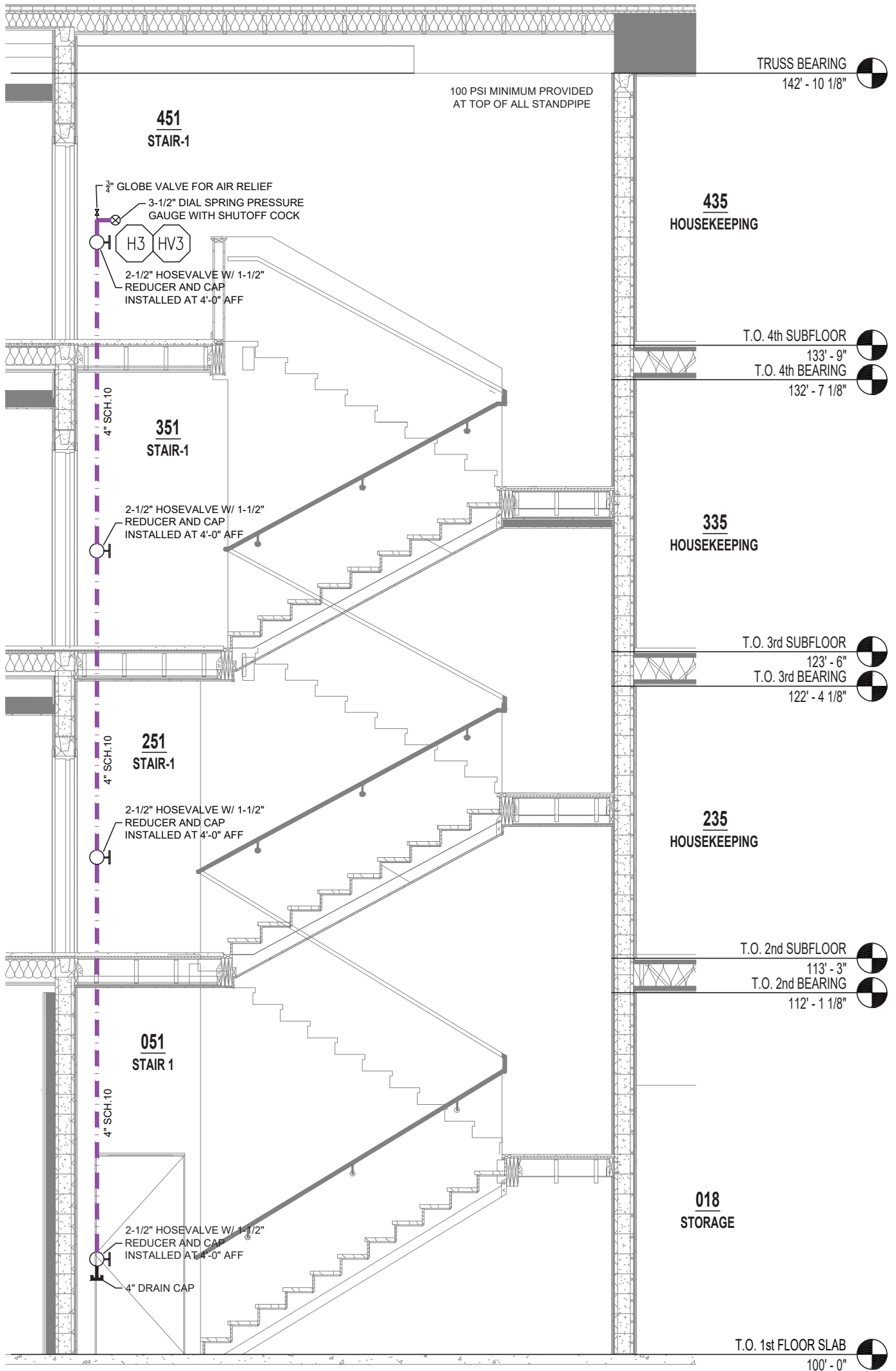
INSTALLATION NOTE:
UTILIZE GALVANIZED PIPE & FITTING ON ROOFTOP



STAIR 2 - CROSS SECTION



BUILDING CROSS SECTION



STAIR 1 - CROSS SECTION

MISSOURI PE COA #2016025677
Engineering, LLC
1624 N Glen City
Independence, MO 64056
816-516-9540
4-28-2025
CHRISTOPHER GROSS
NUMBER
PS-2015030848
Professional Engineer
State of Missouri

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OWNER: INTRINSIC DEVELOPMENT 3822 ENDEAVOR AVENUE, SUITE 101 COLUMBIA, MO 65201 (633) 881-0280	QUANTITY: ESGUTCHCAN
DESIGNER: RANGER FIRE, INC. 1000 SOUTH MAIN STREET, SUITE 150 GRAPEVINE, TEXAS 76051 (817) 410-9070	FINISH: TOTAL HEADCOUNT SHOWN ON FLOOR PLAN
REVISIONS:	SYMBOL: MAKE MODEL SIN K ORIFICE TEMP
OWNER: INTRINSIC DEVELOPMENT 3822 ENDEAVOR AVENUE, SUITE 101 COLUMBIA, MO 65201 (633) 881-0280	FINISH: RANGER FIRE

AS SHOWN	R.C.
DRAWN BY:	CHECKED BY:
DATE:	DATE:
SCALE:	SCALE:
04/22/2025	04/22/2025
FP2	FP2

HOME'S SUITES BY HILTON
251 NE ALUKA WAY
LEE'S SUMMIT, MO 64064
Multi-Family
CONTRACT # 17-025-013 | DESCRIPTION: INSTALLATION PER NFPA 13, NFPA 13R & NFPA 14

DETAILS

Ranger Fire, Inc.
1000 South Main Street, Suite 150
Grapevine, Texas 76051
Phone: 817-410-9070

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REVISIONS

OWNER:	CONTRACTOR:
INTRINSIC DEVELOPMENT	INTRINSIC DEVELOPMENT
3622 ENDEAVOR AVENUE, SUITE 101	3622 ENDEAVOR AVENUE, SUITE 101
COLUMBIA, MO 65201	
(573) 881-0280	

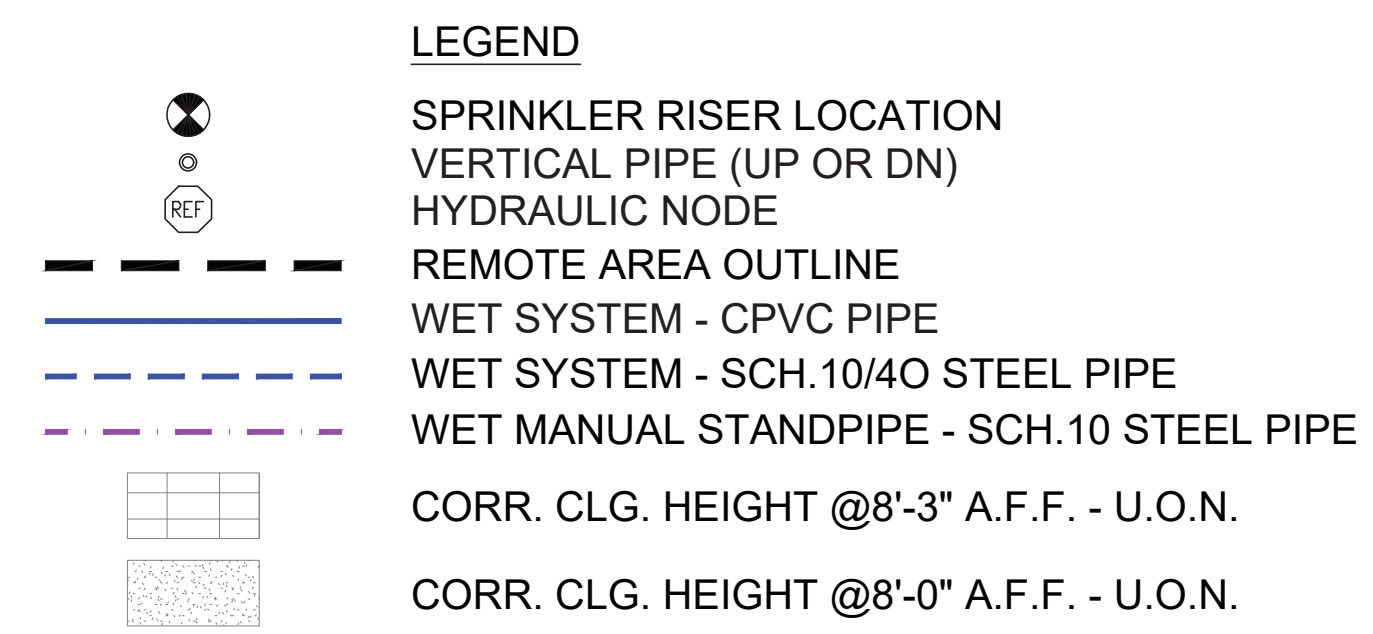
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TOTAL HEADCOUNT SHOWN ON FLOOR PLAN								



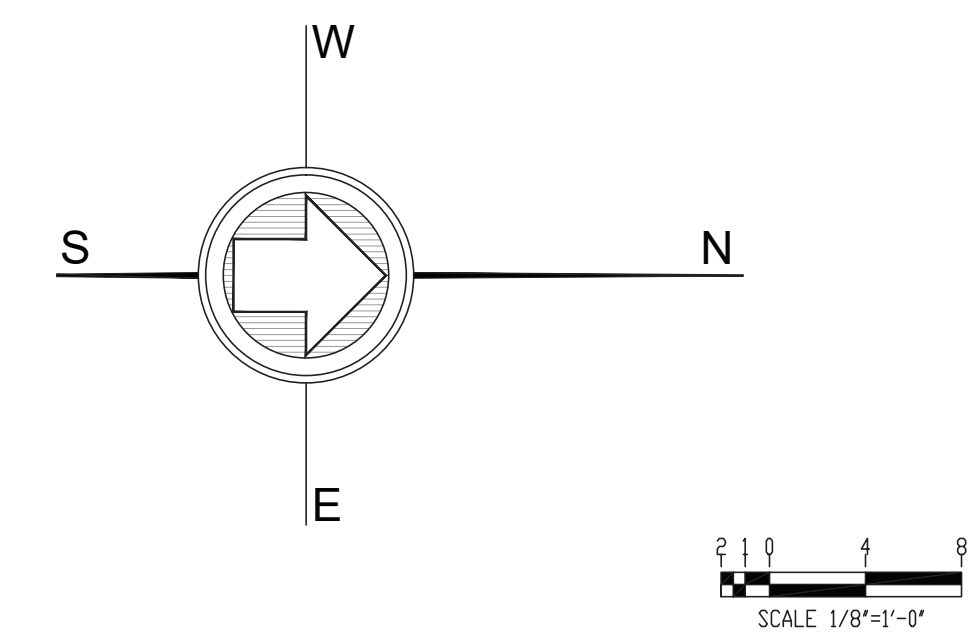
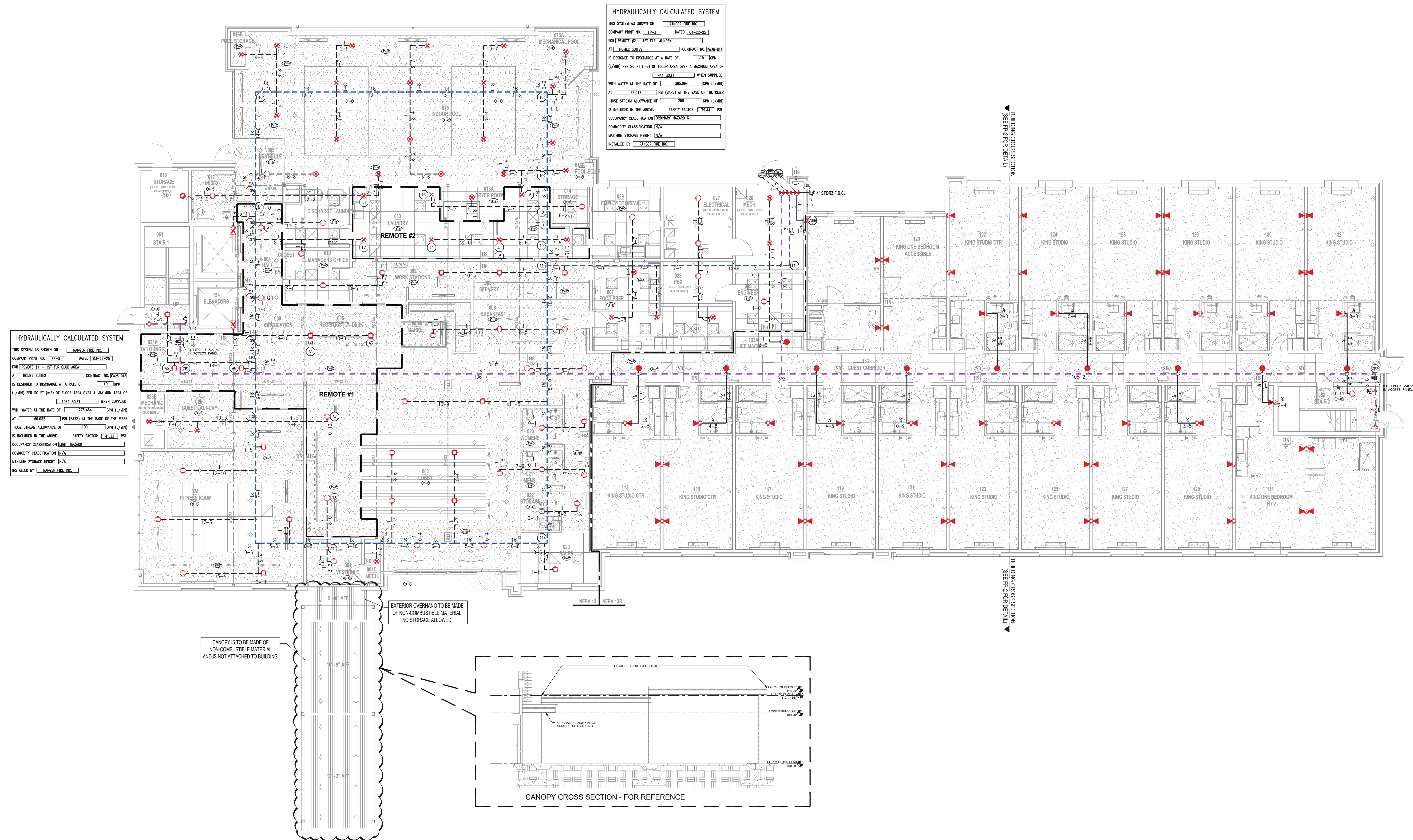
HOME2 SUITES BY HILTON
251 NE ALURA WAY
LEE'S SUMMIT, MO 64064

SCALE:	1/8" = 1'-0"
DRAWN BY:	R.C.
CHECKED BY:	J.G.
DATE:	04/22/2025

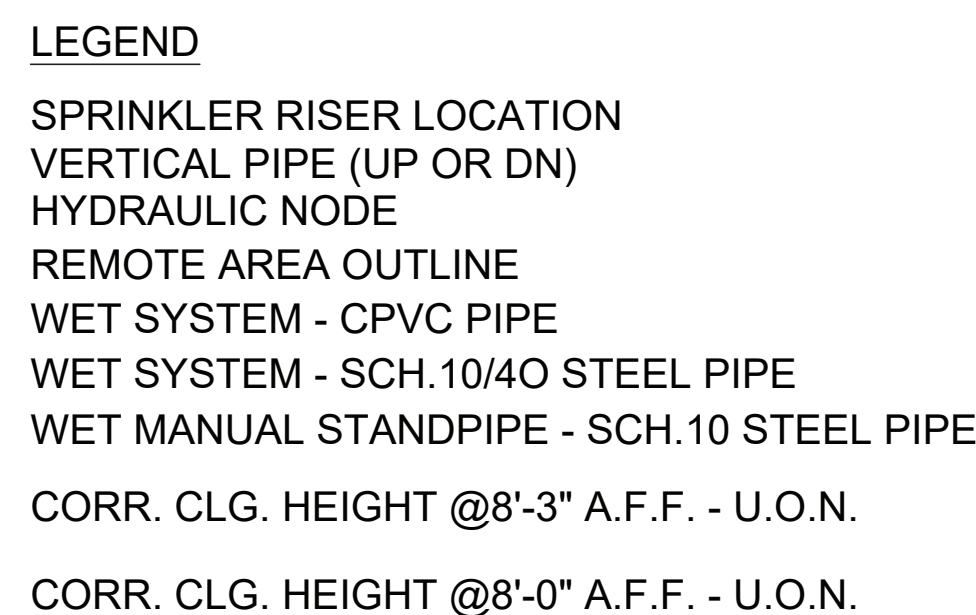
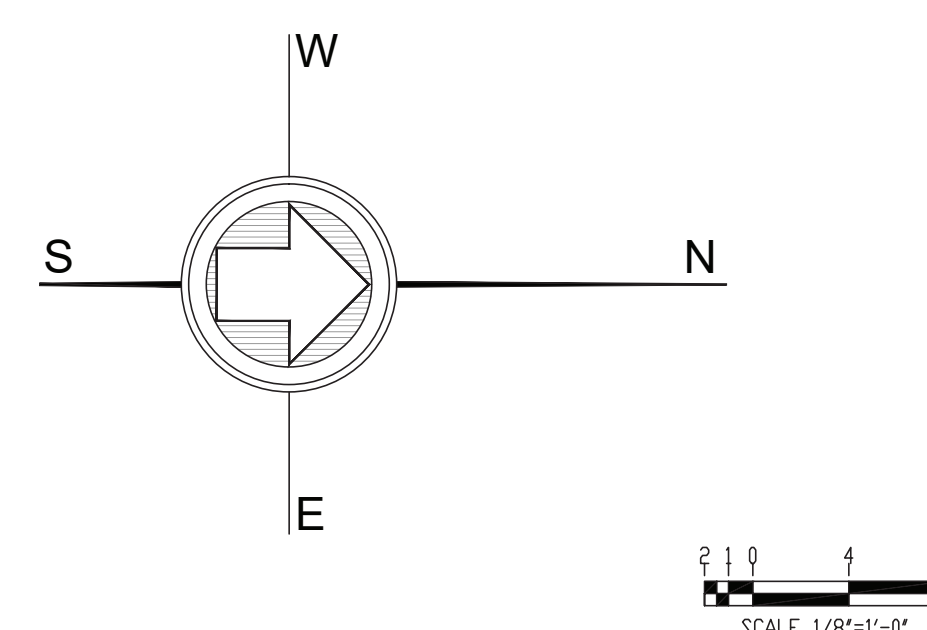
Multi-Family



SYMBOL	MAKE	MODEL	SIN	K	ORIFICE	TEMP	FINISH	ESCUTCHEON	QTY.
    	RELIABLE	F1RES49 PEN	R3316	4.9	1/2"	155°	WHITE	WHITE SEMI-REC	10
	RELIABLE	F1RES44 HSW	R3331	4.4	1/2"	155°	WHITE	WHITE SEMI-REC	54
	RELIABLE	F1FRS6 QR PEN	RA1414	5.6	1/2"	155°	WHITE	WHITE SEMI-REC	53
	RELIABLE	F1FRS6 QR PEN	RA1414	5.6	1/2"	175°	WHITE	WHITE SEMI-REC	37
	RELIABLE	F1FRS6 QR HSW	RA1435	5.6	1/2"	175°	WHITE	WHITE SEMI-REC	2
 	VICTAULIC	FLEX S49 PEN	V3506	5.6	1/2"	200°	CHROME	CHROME	1
TOTAL FOR FIRST FLOOR:									157



FIRST FLOOR PLAN

[illegible]

SECOND FLOOR PLAN

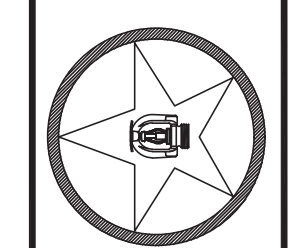
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Grapevine, Texas 76051
Phone: 817-410-9070

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OWNER:	CONTRACTOR:
INTRINSIC DEVELOPMENT	INTRINSIC DEVELOPMENT
622 ENDEAVOR AVENUE, SUITE 101	622 ENDEAVOR AVENUE, SUITE 101
COLUMBIA, MO 65201	COLUMBIA, MO 65201
(573) 881-0280	

SYMBOL	NAME	MODEL	SIN	K	OFFICE TEMP	FINISH	ESQJUTCHEN	QUANTITY
TOTAL HEADCOUNT SHOWN ON FLOOR PLAN								



RANGER FIRE

HOME2 SUITES BY HILTON
251 NE ALURA WAY
LEE'S SUMMIT, MO 64064

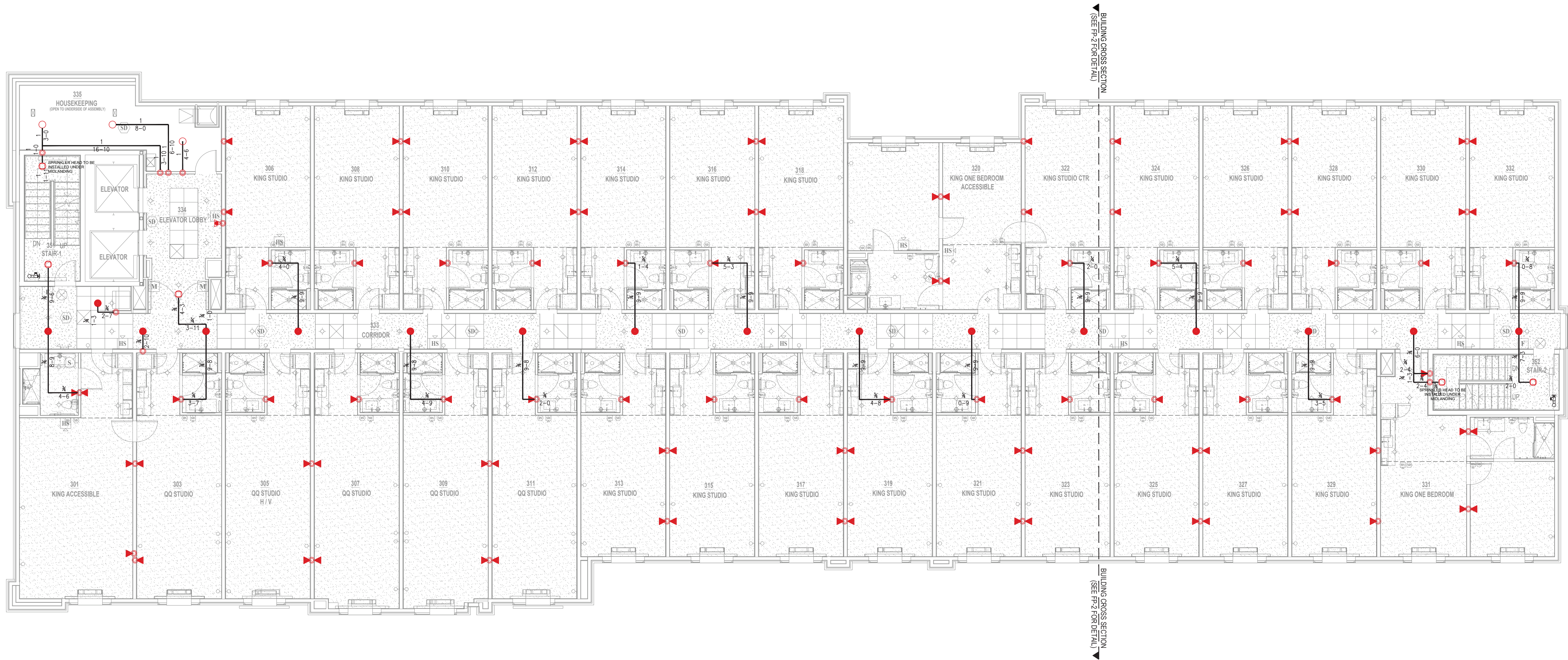
Multi-Family

025

SCALE:	1/8" = 1'-0"
DRAWN BY:	R.C.
CHECKED BY:	J.G.
DATE:	04/22/2025
DWG. NO.:	

- LEGEND
- SPRINKLER RISER LOCATION
VERTICAL PIPE (UP OR DN)
HYDRAULIC NODE
REMOTE AREA OUTLINE
WET SYSTEM - CPVC PIPE
WET SYSTEM - SCH.10/40 STEEL PIPE
WET MANUAL STANDPIPE - SCH.10 STEEL PIPE
CORR. CLG. HEIGHT @8'-3" A.F.F. - U.O.N.
CORR. CLG. HEIGHT @8'-0" A.F.F. - U.O.N.

SYMBOL	MAKE	MODEL	SIN	K	ORIFICE	TEMP	FINISH	ESCUTCHEON	QTY.
	RELIABLE	F1RES49 PEN	R3516	4.9	1/2"	155°	WHITE	WHITE SEMI-REC	16
	RELIABLE	F1RES44 HSW	R3531	4.4	1/2"	155°	WHITE	WHITE SEMI-REC	94
	RELIABLE	F1FR56 QR PEN	RA1414	5.6	1/2"	155°	WHITE	WHITE SEMI-REC	5
	RELIABLE	F1FR56 QR UPR	RA1425	5.6	1/2"	155°	BRASS	N/A	3
	RELIABLE	F1FR56 QR HSW	RA1435	5.6	1/2"	155°	WHITE	WHITE SEMI-REC	1
TOTAL FOR THIRD FLOOR:									119



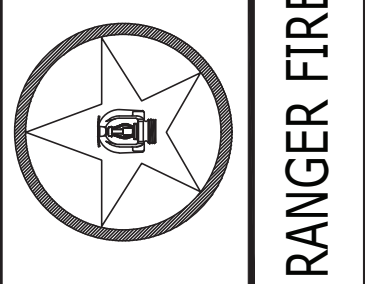
Ranger Fire, Inc.
1000 South Main Street, Suite 150
Grapevine, Texas 76051
Phone: 817-410-9070

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OWNER:
INTRINSIC DEVELOPMENT
3622 ENDEAVOR AVENUE, SUITE 101
COLUMBIA, MO 65201
(620) 381-0280

DESIGNER:
RANGER FIRE, INC.
1000 SOUTH MAIN STREET, SUITE 150
GRAPEVINE, TEXAS 76051
(817) 410-9070

QUANTITY
ESCUTCHEON
TOTAL HEADCOUNT SHOWN ON FLOOR PLAN



HOME2 SUITES BY HILTON
251 NE ALURA WAY
LEE'S SUMMIT, MO 64064

Multi-Family
CONTRACT # 17425-013 | DESCRIPTION: INSTALLATION PER NFPA 13, NFPA 101 & NFPA 14

FP5

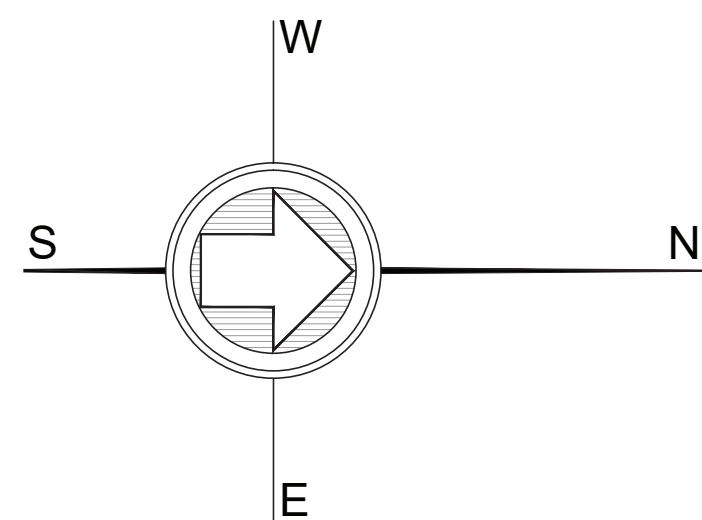
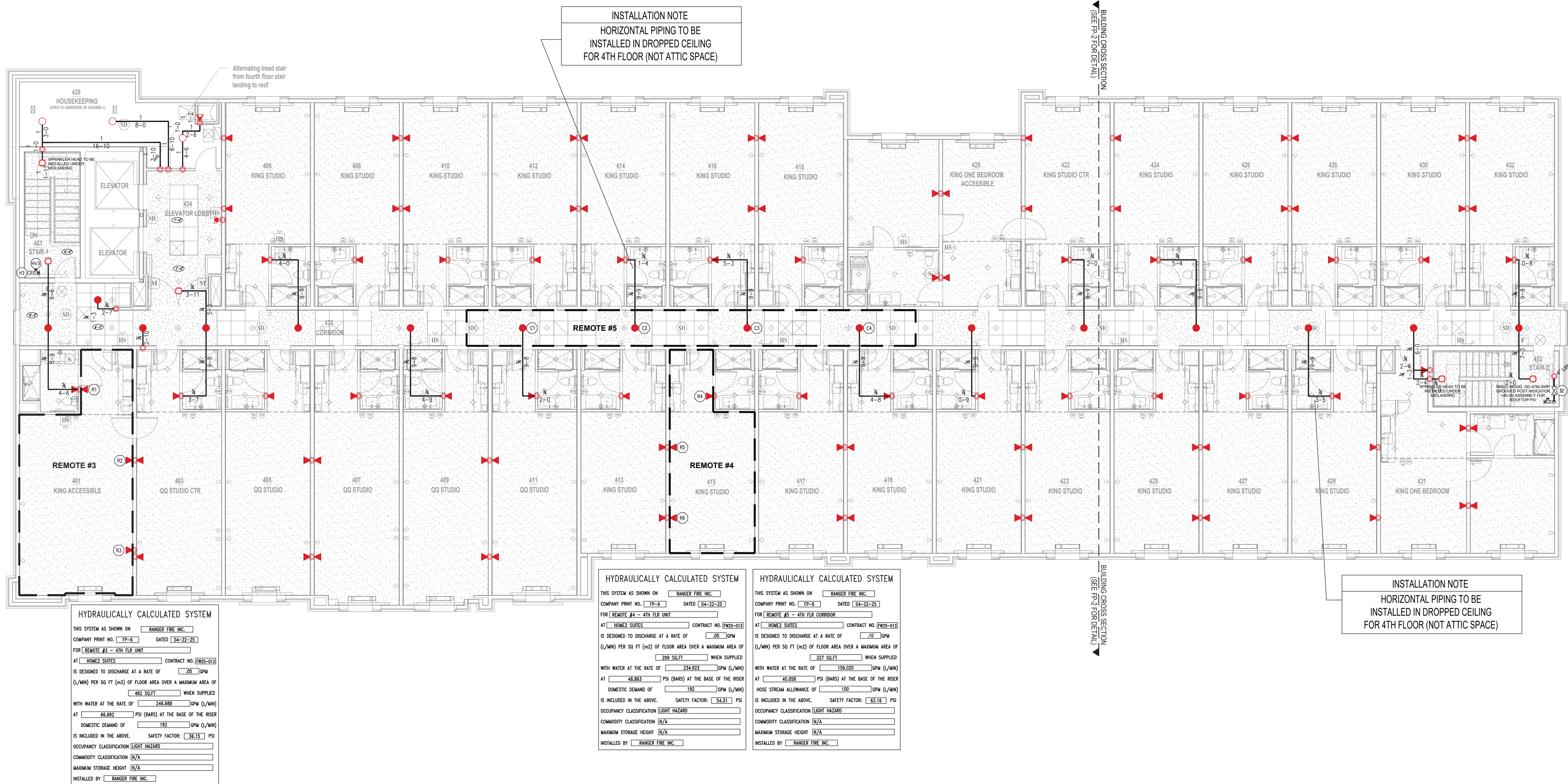
SCALE: 1/8" = 1'-0"
DRAWN BY: R.C.
CHECKED BY: J.G.
DATE: 04/22/2025
DWG. NO.: FP5

LEGEND

SPRINKLER RISER LOCATION
VERTICAL PIPE (UP OR DN)
HYDRAULIC NODE
REMOTE AREA OUTLINE
WET SYSTEM - CPVC PIPE
WET SYSTEM - SCH.10/40 STEEL PIPE
WET MANUAL STANDPIPE - SCH.10 STEEL PIPE

CORR. CLG. HEIGHT @8'-3" A.F.F. - U.O.N.
CORR. CLG. HEIGHT @8'-0" A.F.F. - U.O.N.

SYMBOL	MAKE	MODEL	SIN	K	ORIFICE	TEMP	FINISH	ESCUTCHEON	QTY.
	RELIABLE	F1 RES49 PEN	R3516	4.9	1/2"	155°	WHITE	WHITE SEMI-REC	16
	RELIABLE	F1 RES44 HSW	R3531	4.4	1/2"	155°	WHITE	WHITE SEMI-REC	94
	RELIABLE	F1FR56 QR PEN	RA1414	5.6	1/2"	155°	WHITE	WHITE SEMI-REC	5
	RELIABLE	F1FR56 QR UPR	RA1425	5.6	1/2"	155°	BRASS	N/A	3
	RELIABLE	F1FR56 QR HSW	RA1435	5.6	1/2"	155°	WHITE	WHITE SEMI-REC	1
	RELIABLE	F1FR56 QR HSW	RA1435	5.6	1/2"	175°	WHITE	WHITE SEMI-REC	1
TOTAL FOR FOURTH FLOOR:									120



SCALE 1/8"=1'-0"

FOURTH FLOOR PLAN

MISSOURI PE COA #2016025677
Engineering, LLC
1624 N Glen City
Independence, MO 64056
816-516-9540
4-28-2025
CHRISTOPHER GROSS
PROFESSIONAL ENGINEER
PE-2015038448

Ranger Fire, Inc.
1000 South Main Street, Suite 150
Grapevine, Texas 76051
Phone: 817-410-9070

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REVISIONS

OWNER:
INTRINSIC DEVELOPMENT
3822 ENVOIR AVENUE, SUITE 101
COLUMBIA, MO 65201
(673) 88-0280

DESIGNER:
RANGER FIRE, INC.
1000 SOUTH MAIN STREET, SUITE 150
GRAPEVINE, TEXAS 76051
(817) 410-9070

PROJECT:
INTRINSIC DEVELOPMENT
3822 ENVOIR AVENUE, SUITE 101
COLUMBIA, MO 65201
(673) 88-0280

QUANTITY

ESCUTCHEON

FINISH

TEMP

K

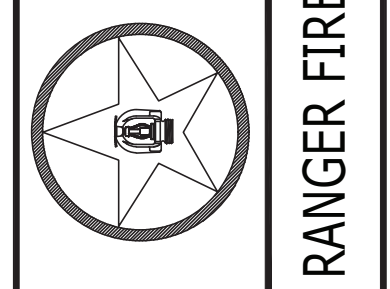
SIN

MODEL

MAKE

SYMBOL

TOTAL HEADCOUNT SHOWN ON FLOOR PLAN



RANGER FIRE

HOME2 SUITES BY HILTON
251 NE ALURA WAY
LEE'S SUMMIT, MO 64064

Multi-Family
CONTRACT # FWS-013 DESCRIPTION INSTALLATION PER NFPA 13, NFPA 99A OR NFPA 14

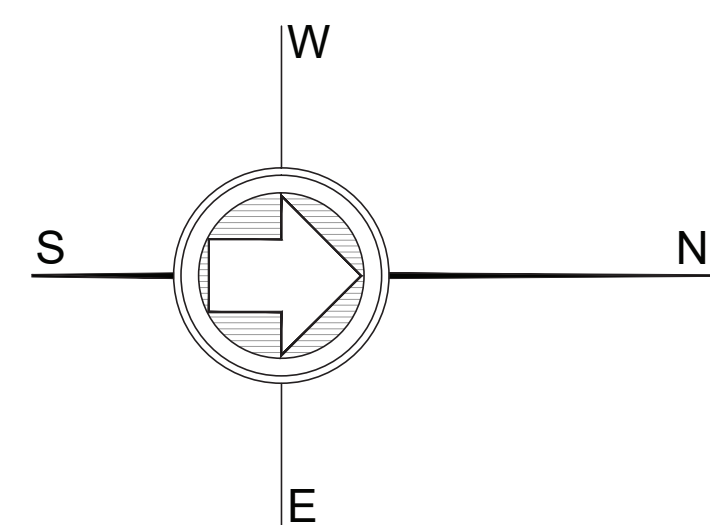
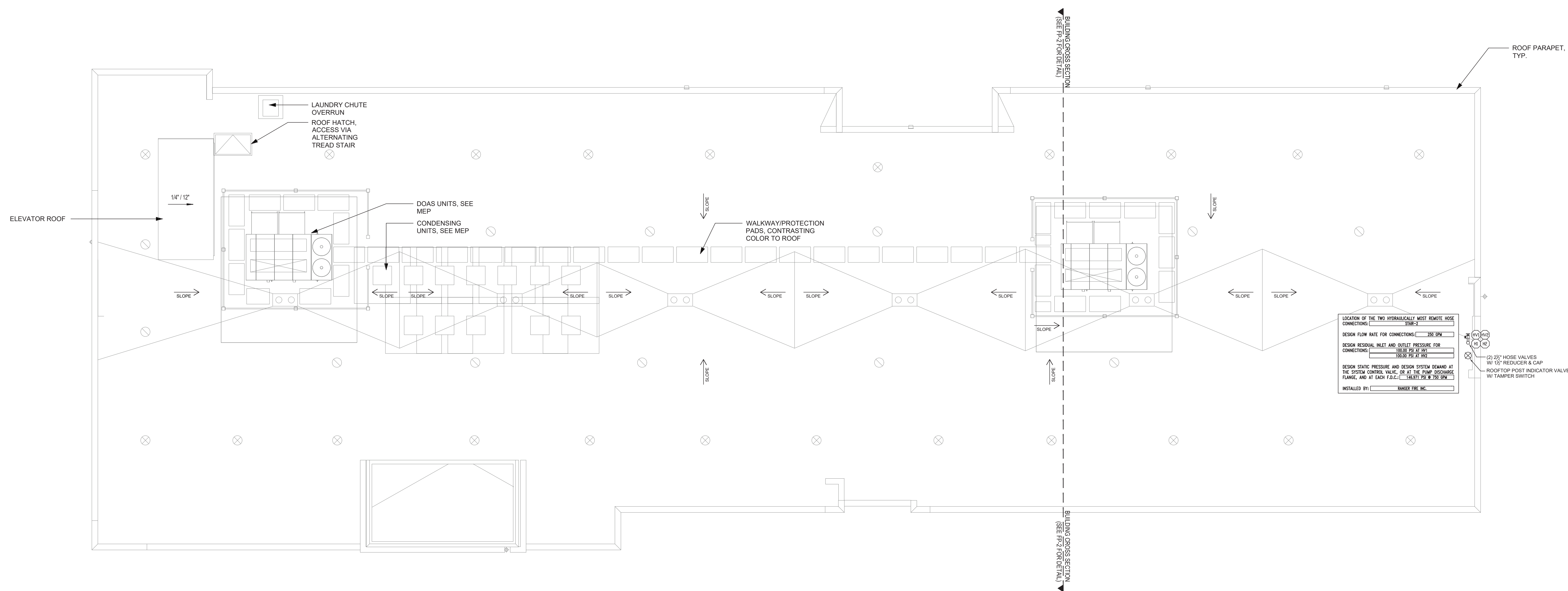
SCALE: 1/8" = 1'-0"

DRAWN BY: R.C.

CHECKED BY: J.G.

DATE: 04/22/2025

DWG. NO.: FP6



2 1 0 4 1
SCALE 1/8"=1'-0"

ROOF FLOOR PLAN

MISSOURI PE COA #2016025677

CG Engineering, LLC
1624 N Glen Ellyn
Independence, MO 64056
816-516-9540
4-28-2025

STATE OF MISSOURI
REGISTERED PROFESSIONAL ENGINEER
CHRISTOPHER T. GROSS
NUMBER
PE-2015038448
UNIVERSITY OF MISSOURI

Ranger Fire, Inc.
11000 South Main Street, Suite 150
Grapevine, Texas 76051
Phone: 817-410-9070

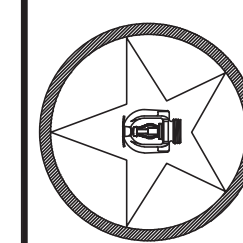
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DEVISIONS

OWNER:
INTRINSIC DEVELOPMENT
9822 ENDEAVOR AVENUE, SUITE 101
COLUMBIA, MO 65201
(973) 881-0280
CONTRACTOR:
INTRINSIC DEVELOPMENT
9822 ENDEAVOR AVENUE, SUITE 101
COLUMBIA, MO 65201

SYMBOL	MAKE	MODEL	SIN	K	ORIFICE	TEMP	FINISH	ESCUTO-REGN	QUANTITY
TOTAL HEADCOUNT SHOWN ON FLOOR PLAN									



RANGER FIRE

HOME2 SUITES BY HILTON
251 NE ALURA WAY
LEE'S SUMMIT, MO 64064

04/22/2025	Multi-Family	RECEIVED INSTALLATION PER NEDA 20 NEDA 200 0 NEDA 200 0
DWG. NO.		CONTRACT NUMBER AND

SCALE:	1/8" = 1'-0"
DRAWN BY:	R.C.
CHECKED BY:	J.G.
DATE:	04/22/2025
DWG. NO.:	