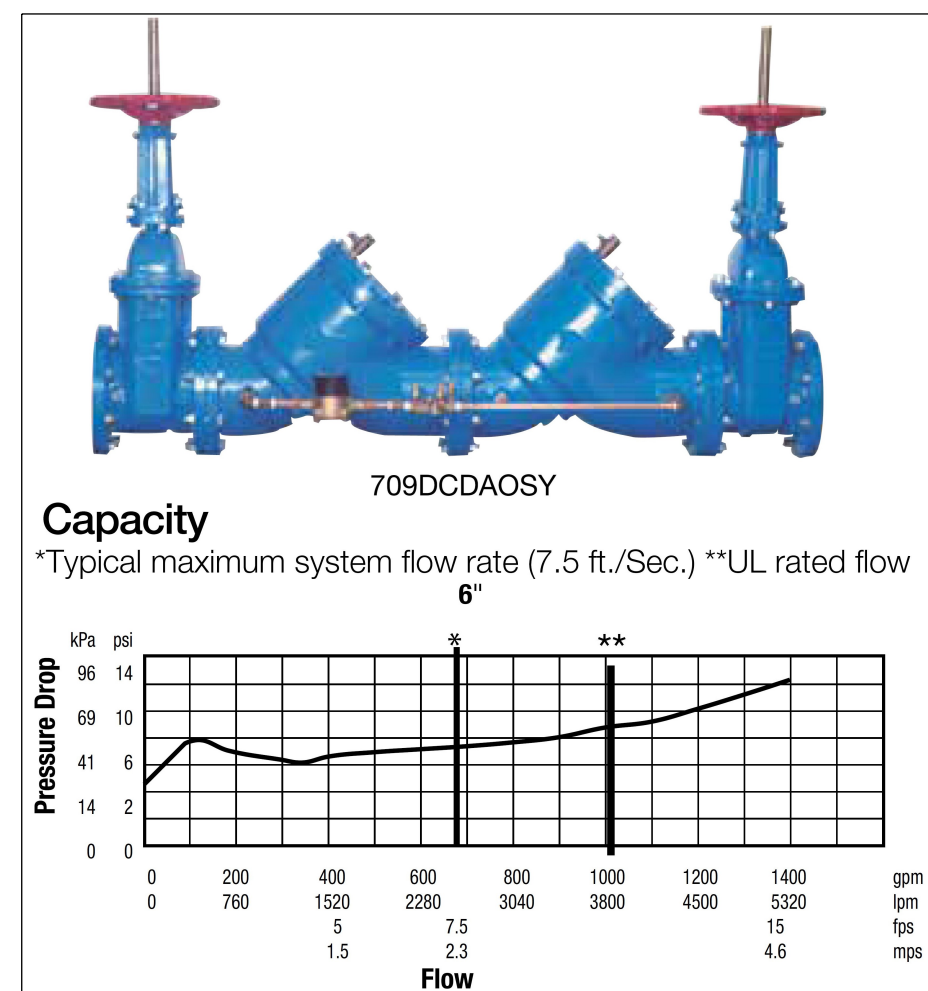


HOME 2 SUITES BY HILTON 4-STORY HOTEL CONSTRUCTION FIRE PROTECTION

475 Hospitality Blvd, Greenwood, SC 29649



VICINITY SITE MAP - N.T.S.



6" WATTS 709DCDAOSY BACKFLOW

SCALE: N.T.S.
LOCATED AT VAULT - (BY OTHERS) FOR HYDRAULIC REFERENCE ONLY

DRAWING INDEX

SHEET NO.	SHEET TITLE
FP-01	SITE PLAN & DESIGN NOTES
FP-02	SEISMIC & GENERAL NOTES
FP-03	FIRE PUMP DETAILS
FP-04	FIRE SUPPRESSION PLAN - FIRST FLOOR
FP-05	FIRE SUPPRESSION PLAN - SECOND FLOOR
FP-06	FIRE SUPPRESSION PLAN - THIRD FLOOR
FP-07	FIRE SUPPRESSION PLAN - FOURTH FLOOR
FP-08	STANDPIPE HYDRAULIC CALCULATION REFERENCE

OVERALL FIRE SPRINKLER DESIGN CRITERIA

SYMBOL	OCCUPANCY	TYPE	DENSITY (GPM/FT ²)	REMOTE AREA (SQFT)	HOSE ALLOWANCE
LH	LIGHT HAZARD RESIDENTIAL	WET	0.10	REMOTE 4 HEADS	100
LH	LIGHT HAZARD OTHERS	WET	0.10	1500	100
OH-1	ORDINARY HAZARD GROUP I	WET	0.15	1500	250
OH-1D	ORDINARY HAZARD GROUP I	DRY	0.15	387 ENTIRE CANOPY	250
MAX COVERAGE PER SPRINKLER (SF)					
LIGHT HAZARD			225 STANDARD COVERAGE / 400 EXT COVERAGE		
ORDINARY HAZARD GROUP I			130		
RESIDENTIAL SPRINKLERS			400 **		

* AREA REDUCTIONS ALLOWED FOR QUICK-RESPONSE SPRINKLERS PER NFPA 13 19.3.3.2.3.1
OR USE ROOM DESIGN METHOD PER NFPA 13 19.3.3.3 WHERE APPLICABLE
** OR PER LISTING OF RESIDENTIAL HEAD

FIRE SPRINKLER DESIGN CRITERIA

SYSTEM TYPE	AREA OF APPLICATION	HOSE ALLOWANCE	RESIDENTIAL AREA OF APPLICATION	RESIDENTIAL HOSE ALLOWANCE	FACILITY USAGE
WET & DRY SYSTEMS	1500 SQ. FT. (AREA REDUCTIONS ALLOWED PER NFPA 13)	100 GPM FOR LIGHT HAZARD / 250 FOR ORDINARY HAZARD	HOT REMOTE COMPARTMENT (UP TO 4 HEADS)	100 GPM	RESIDENTIAL

CODE SUMMARY

CODE	YEAR
NFPA 13	2019
NFPA 24	2019
NFPA 20	2019
NFPA 24 (UNDERGROUND BY OTHERS)	2019
NFPA 72	2019
NFPA 25	2020
NFPA 101	2021
INTERNATIONAL BUILDING CODE W/ SC AMENDMENTS	2021
INTERNATIONAL FIRE CODE W/ SC AMENDMENTS	2021

USE GROUP & CONSTRUCTION

CONSTRUCTION TYPE:	V-A
OCCUPANCY GROUP:	PRIMARY R-1 W/ A2, A3 & B
BUILDING HEIGHT IN FEET:	49'-0" SHOWN ON PLAN
NUMBER OF STORIES:	4 STORIES
SPRINKLER SYSTEM:	NFPA 13 WET & DRY
STANDPIPE SYSTEM:	YES (WET/DRY/CLASS 1)

ZONE AREA OF PROTECTION

ZONE NUMBER	LOCATION	TOTAL SQFT
ZONE P	PUMP ROOM	232 SQFT
ZONE 1	1ST FLOOR	14,372 SQFT
ZONE 1D	FRONT CANOPY	387 SQFT
ZONE 2	2ND FLOOR	14,564 SQFT
ZONE 3	3RD FLOOR	14,564 SQFT
ZONE 4	4TH FLOOR	14,564 SQFT
PROJECT TOTAL		58,683 SQFT

SEISMIC NOTES

- PIPES GOING THRU BLOCK WALLS OR FLOORS TO HAVE FLEXIBLE COUPLINGS ON EACH SIDE OF THE WALLS/FLOORS OR PROVIDE OVERSIZED HOLES PER NFPA 13 18.4.2.
- 1" - 3" PIPE THE OVERSIZED HOLES SHALL BE 2" LARGER THAN THE DIAMETER.
- A LARGER PIPE THE OVERSIZED HOLES SHALL BE 4" LARGER THAN THE DIAMETER.
- RISER NIPPLES BETWEEN 3' 0" AND 7' 0" IN LENGTH TO HAVE ONE FLEXIBLE COUPLING WITHIN 24" OF THE TOP OR BOTTOM OF THE RISER NIPPLE.
- BRANCH LINES SUPPORTED BY RODS LESS THAN 6' LONG SHALL NOT REQUIRE ADDITIONAL RESTRAINT PER NFPA 13 18.6.5.
- ALL RISERS OVER 1' LONG TO HAVE A 4-WAY BRACE.
- CRISERS DO NOT INCLUDE RISER NIPPLES AS DEFINED IN NFPA 13.
- RETAINING STRAPS TO BE INSTALLED ON ALL C - TYPE CLAMPS.

SEISMIC DESIGN INFORMATION

REFERENCE USED: IBC-2021 / ASCE 7-16 (REFERENCE 5-001 GENERAL NOTES)
SITE CLASS: D
SEISMIC DESIGN CATEGORY (a): C
SEISMIC OCCUPANCY CATEGORY (b): III
SEISMIC RISK CATEGORY (c): II
SEISMIC COEFFICIENT (S _s = 0.30) / C _p = 0.35

OWNERS RESPONSIBILITY

PROVIDE ADEQUATE WATER VOLUME AND PRESSURE TO THE SPRINKLER SYSTEM.
PROVIDE BUILDING STRUCTURE CAPABLE OF HANDLING ALL REQUIRED LIVE LOADS AND SEISMIC LOADS AS REQUIRED BY CODE.

NOTIFY SPRINKLER CONTRACTOR IN WRITING OF PROJECT SCHEDULE, CHANGES TO SCHEDULE, CHANGES TO SITE CONDITIONS AND STRUCTURE THAT COULD IMPACT OUR DESIGN AND INSTALLATION.

OWNER SHALL MAINTAIN BUILDING TEMPERATURES ABOVE 40 DEGREES FAHRENHEIT WHERE WET PIPE SYSTEMS ARE INSTALLED TO PREVENT FREEZING OF PIPE.

CONTRACT RESPONSIBILITIES

ITEM	HILLER	EXIST/OTHERS
STREET WATER CONNECTION	☐	☒
UNDERGROUND WATER MAINS TO 5'-0" OUTSIDE	☐	☒
AT STUB-UP 1'-0" ABOVE FINISHED FLOOR	☒	☐
WIRING	☐	☒
PIPE IDENTIFICATION MARKERS OR PAINTING	☐	☒
FIRE EXTINGUISHERS AND/OR HOSE RACKS	☐	☒
FIRE DEPARTMENT CONNECTION	☐	☒
CUTTING & PATCHING OF CEILINGS	☐	☒

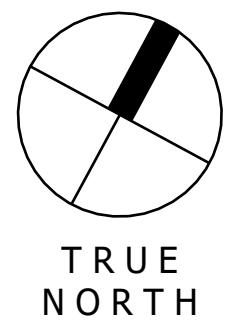
ASBUILTS

TOR NAME:	Home 2 Suites 475 Hospitality Blvd. Greenwood, SC 29649
CONTRACT WITH:	John M. Campbell Company 102 Winchester Avenue Monroe, NC 28110
PHONE: (704) 254-3214	
DRAWING NAME: SITE PLAN & DESIGN NOTES	
DRAWN BY: TWH	
DATE: 07/27/26	
SCALE: AS NOTED	
CONTRACT NO.: CP0588	

THE Hiller COMPANIES
CONTRACTOR LICENSE NUMBER: NC # 36018 / SC # FSC 1078-B
P O BOX 1090 PH: 704-784-4218
CONCORD, N.C. 28026 FAX: 704-784-4405
P O BOX 458 PH: 757-391-0050
PORTSMOUTH VA. 23705 FAX: 757-391-0098

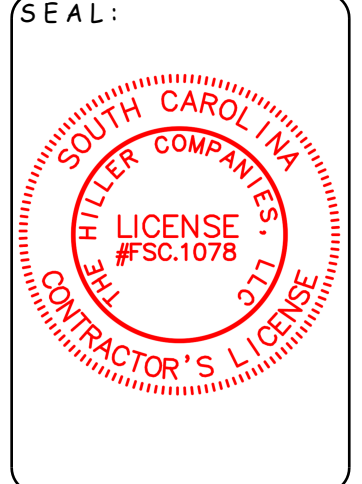
SITE PLAN GENERAL NOTES			
1.	ALL US PIPING AND UNDERGROUND APPURTENANCES BY OTHERS: THE HILLER COMPANIES TO START 1'-0" ABOVE FINISHED FLOOR.		
2.	UNDERGROUND PIPE, INCLUDING FIRE SPRINKLER FLANGED SPIGOT PIPE, SHALL BE HYDROSTATICALLY TESTED FOR TWO HOURS AT 200 PSI OR 50 PSI IN EXCESS OF NORMAL WORKING PRESSURE WHEN NORMAL WORKING PRESSURE EXCEEDS 150 PSI PER NFPA 24: 10.10.2.2 AND FLUSHED PER 24: 10.10.2.1 PRIOR TO CONNECTION TO SPRINKLER RISER. (TEST CONDUCTED BY OTHERS)		

1 SITE PLAN (FOR HYDRAULIC REFERENCE ONLY)
SCALE: 1" = 32'-0"



Sprinkler Legend - Total Project										
Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature
⊗	Viking	VK360	Microfast	9	5.6	Upright	1/2"	Quick	Brass	200°F
⊗	Viking	VK4621	Concealed	55	5.6	Concealed Pendant	1/2"	Quick	Brass	155°F
⊗	Viking	VK362	Microfast	33	5.6	Pendent	1/2"	Quick	Chrome	200°F
⊗	Viking	VK4621	Concealed	1	5.6	Concealed Pendant	1/2"	Quick	Brass	200°F
⊗	Viking	VK484	Freedom	59	4.9	Concealed Pendant	1/2"	Fast	Brass	155°F
⊗	Viking	VK365	Microfast	3	5.6	Horizontal Sidewall	1/2"	Quick	Chrome	200°F
⊗	Viking	VK460	Freedom	104	5.6	Horizontal Sidewall	1/2"	Fast	Chrome	155°F
⊗	Viking	VK482	Dry	7	5.6	Pendent	1"	Quick	White Polyester	205°F
⊗	Viking	VK465	Freedom	208	4.9	Pendent	1/2"	Fast	Chrome	155°F
⊗	Reliable	R1015	G	4	5.6	Pendent	1/2"	Standard	Brass	165°F
Total: 442										

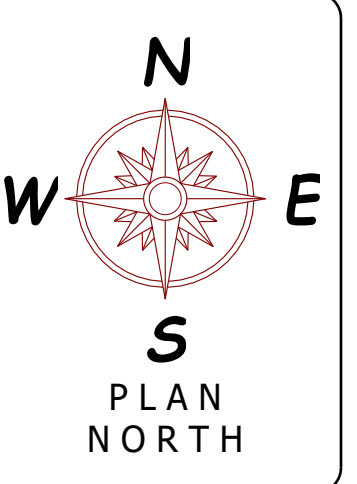
NICET REVIEW STAMP
JUAN OCHOA NICET #0194445 LEVEL IV WATER BASED SYSTEMS LAYOUT
SIGNED: <i>[Signature]</i> VALID THROUGH 01/01/2027

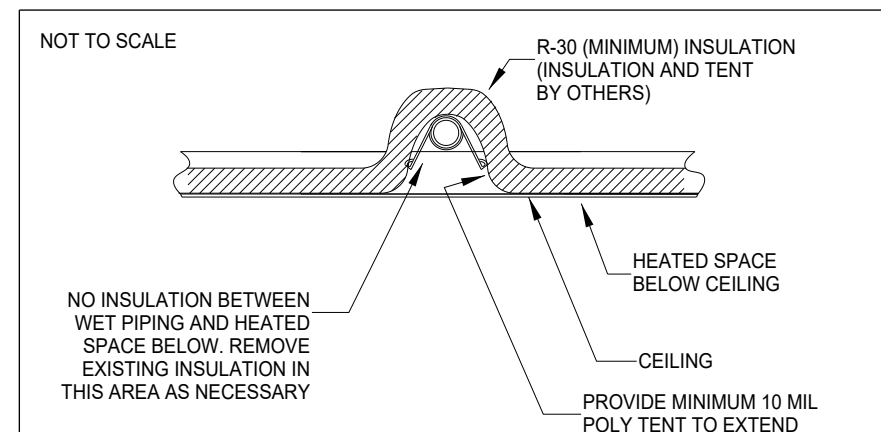


WATER SUPPLY INFORMATION			
STATIC PRESSURE	53	FIRE PUMP	YES
RESIDUAL PRESSURE	51	SIZE GPM @ PSI	300 @ 60
FLOW G.P.M.	1160	TYPE OF DRIVER	VIP
DATE OF TEST	09/30/2025	ELECTRICAL REQ.S	208V
HYDRANT LOCATION	@ TEST NODE (SEE SITE PLAN)		
TEST TAKEN BY	GREENWOOD CPW	NODE #1	(864) 942-8199

- GENERAL NOTES:
- SYSTEMS ARE DESIGNED AND INSTALLED PER NFPA 13 (2019 EDITION)
 - RESIDENTIAL SYSTEM PIPING 2" AND SMALLER TO BE CPVC WITH CPVC FITTINGS. CONVERT TO BLACK STEEL PIPE AND FITTINGS WHERE EXPOSED.
 - STEEL SYSTEM PIPING 2" AND SMALLER TO BE SCH. 40 BLACK STEEL PIPE AND FITTINGS ARE THREADED / GROOVED / FLANGED / WELDED.
 - STEEL SYSTEM PIPING 2 1/2" OR LARGER TO BE SCH. 10 BLACK STEEL PIPE AND FITTINGS ARE GROOVED / FLANGED / WELDED.
 - ALL HANGERS ARE TO MEET THE CRITERIA SET FORTH BY NFPA 13 (2019 EDITION) AND SPACED ACCORDING TO MANUFACTURERS SPECIFICATIONS.
 - WIRING OF ELECTRICAL EQUIPMENT IS TO BE BY OTHERS.
 - PAINTINGS OF PIPE OR COMPONENTS SHALL BE BY OTHERS.
 - REPRESENTS A HYDRAULIC REFERENCE POINT.
 - THE HILLER COMPANIES TO START 1'-0" ABOVE FINISHED FLOOR.
 - ALL UNDERGROUND PIPING BY OTHERS.
 - SPRINKLERS LOCATED 7'-6" OR LESS FROM FLOOR TO BE PROTECTED WITH APPROVED GUARDS.

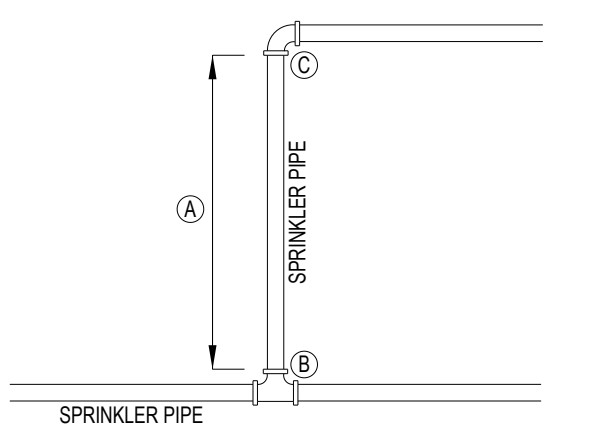
It is the sole responsibility of owner and owners representative to insure that this building/buildings has proper heat and insulation to prevent fire sprinkler pipe, fittings and devices from freezing.





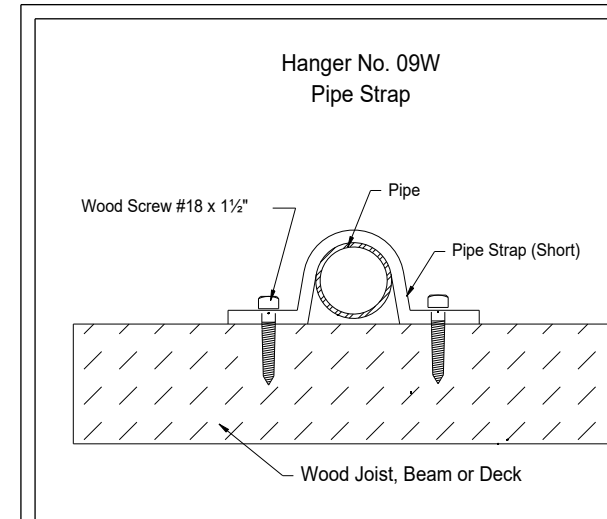
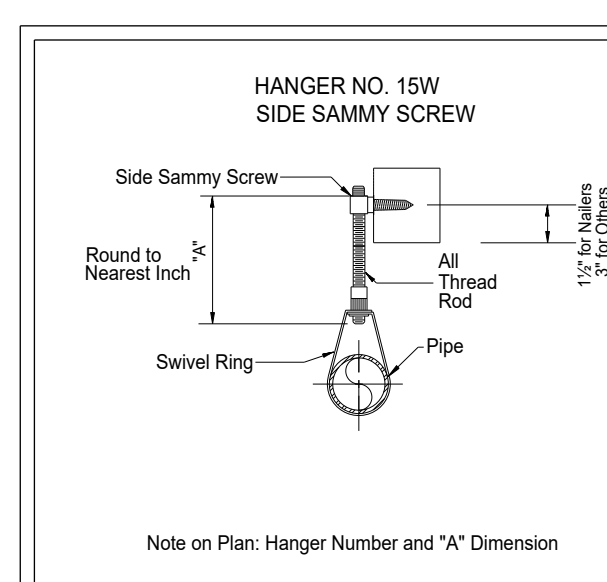
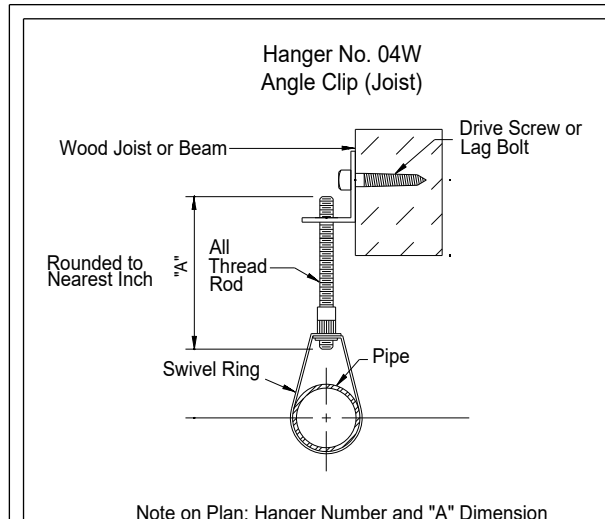
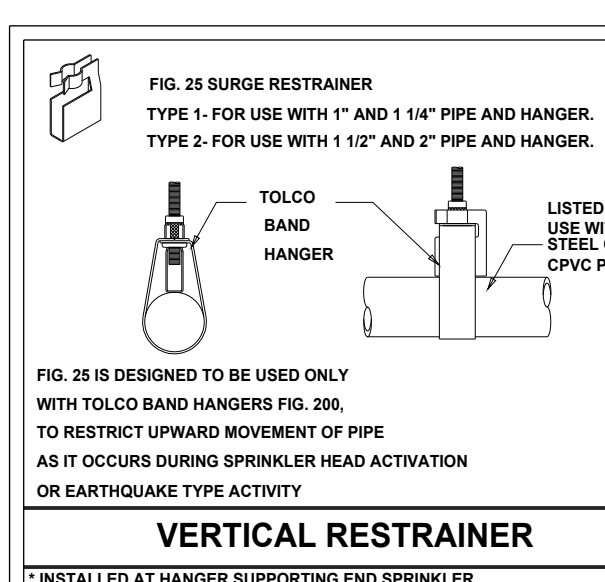
FREEZE PROTECTION DETAIL FOR WET ATTIC PIPING

FLEXIBLE COUPLINGS



- FLEXIBLE COUPLING NOTES:**
1. INSTALL WITHIN 12" ABOVE AND WITHIN 24" BELOW THE FLOOR IN MULTISTORY BUILDINGS.
 2. INSTALL ON BOTH SIDES OF MASONRY OR CONCRETE WALL WITHIN 12" OF THE WALL SURFACE UNLESS CLEARANCE HAS BEEN PROVIDED.
 3. INSTALL WITHIN 24" OF BUILDING EXPANSION JOINTS.
 4. LENGTHS OF PIPE WITH MORE FLEXIBLE COUPLINGS THAN REQUIRED SHALL HAVE ADDITIONAL SWAY BRACING INSTALLED.
 5. COUPLINGS SHALL BE RIGID UNLESS WHERE REQUIRED.
 6. SYMBOL DENOTES FLEXIBLE COUPLING.
- FLEXIBLE COUPLINGS TO BE INSTALLED ON ALL VERTICAL PIPES 2-1/2" AND LARGER AS FOLLOWS:**
- WHEN "A" IS MORE THAN 3'-0" BUT LESS THAN 7'-0", INSTALL FLEXIBLE COUPLING AT "B".
 - WHEN "A" IS GREATER THAN 7'-0", INSTALL FLEXIBLE COUPLINGS AT "B" AND "C".

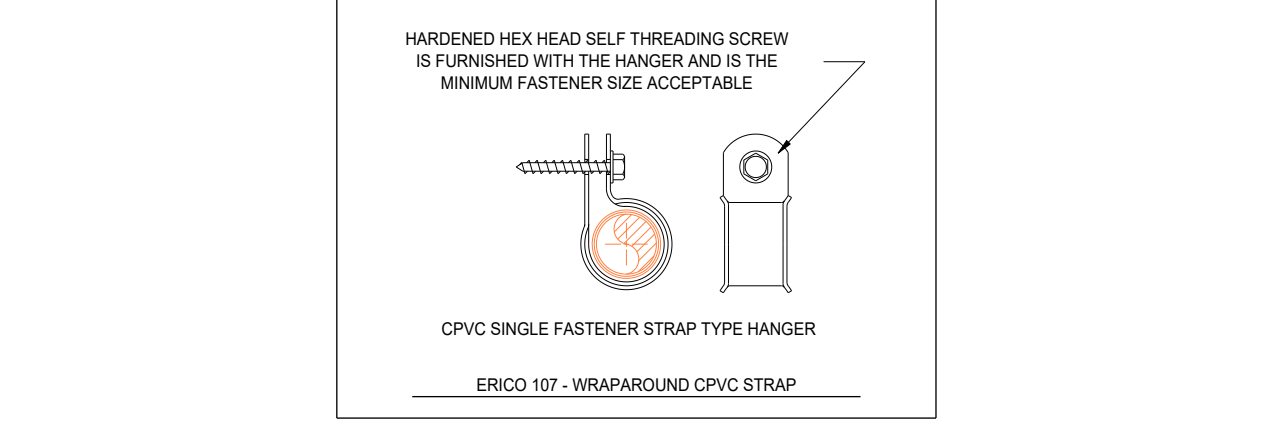
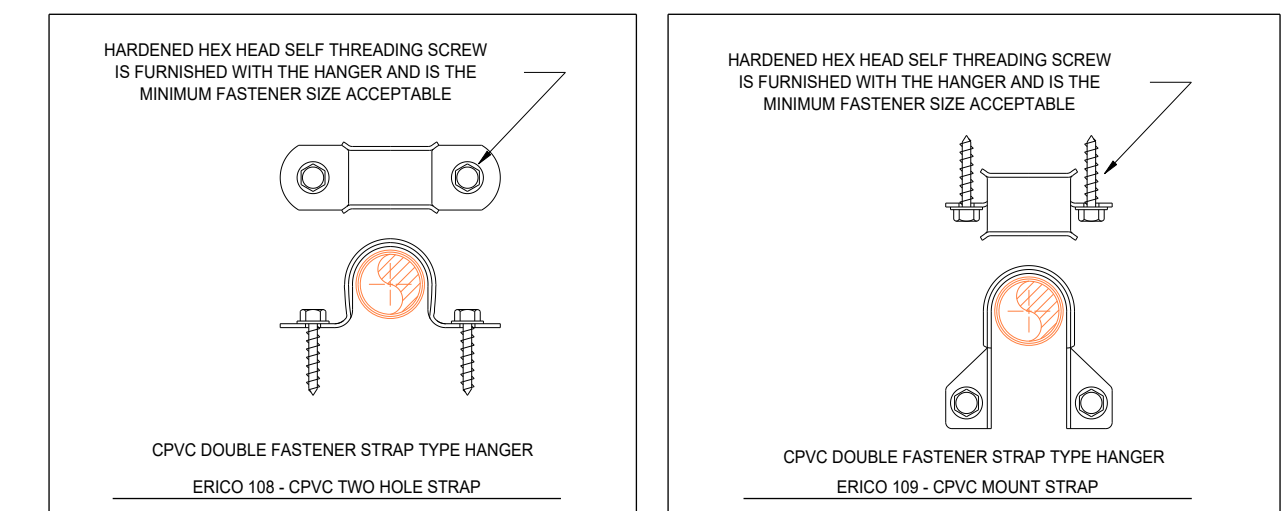
CONCRETE & WOOD HANGER DETAILS



MAXIMUM DISTANCE BETWEEN HANGERS (ft.-in.)

NOMINAL PIPE SIZE (in.)	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"	5"	6"	8"
STEEL PIPE EXCEPT THREADED LIGHTWALL	N/A	12'-0"	12'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"
CPVC	5'-0"	6'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	N/A	N/A	N/A	N/A	N/A

CPVC PLASTIC HANGER DETAILS



SPECIAL FIRE PROTECTION MATERIAL NOTES

1. ALL SYSTEM COMPONENTS AND HARDWARE SHALL BE IN COMPLIANCE WITH NFPA 13.
2. ALL MATERIAL & EQUIPMENT USED SHALL BE U.L. LISTED.
3. WHERE NON-METALLIC PIPE IS USED IN COMBINATION SYSTEMS UTILIZING STEEL PIPE THAT IS INTERNALLY COATED WITH CORROSION INHIBITORS, THE STEEL PIPING SHALL BE COMPATIBLE WITH THE NON-METALLIC PIPE MATERIALS.
4. WHERE NON-METALLIC PIPE IS USED IN COMBINATION SYSTEMS UTILIZING STEEL PIPE, CUTTING OILS AND LUBRICANTS USED FOR FABRICATION OF THE STEEL PIPING SHALL BE COMPATIBLE WITH THE NON-METALLIC PIPE MATERIALS.
5. POWER DRIVEN ANCHORS SHALL NOT BE USED. REFER TO THE STRUCTURAL PLANS AND DETAILS FOR ACCEPTABLE LOCATIONS TO ATTACH HANGERS AND SUPPORTS TO THE BUILDING STRUCTURE. HANGERS SHALL NOT ATTACH TO THE ROOF DECK.
6. SPRINKLER PIPE PASSING THROUGH SMOKE/FIRE BARRIERS (INCLUDING WALLS, FLOORS & CEILINGS) SHALL BE FIRESTOPPED TO MAINTAIN THE INTEGRITY OF THAT BARRIER. PROVIDE ESCUTCHEON PLATES AT EACH SIDE OF PENETRATIONS IN FINISHED AREAS. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS.
7. FIRE STOPPING BARRIERS: ALL NON-RATED FLOOR PENETRATIONS SHALL BE SEALED WATER TIGHT WITH A FLEXIBLE SEALANT.
8. PIPE AND FITTINGS:
 - CPVC PIPE AND CPVC FITTINGS WHERE ALLOWED BY NFPA 13 AND MFG DATA SHEETS.
 - BLACK SCH. 40 PIPE WITH WELDED OUTLETS AND GROOVED FITTINGS.
 - BLACK SCH. 40 PIPE WITH THREADED DUCTILE IRON FITTINGS.

FIRE PROTECTION GENERAL NOTES

1. THE HILLER COMPANIES STARTS 1'-0" ABOVE FINISHED FLOOR, ALL UNDERGROUND PIPING BY OTHERS.
2. SPRIGS 4 FT (1.2M) OR LONGER SHALL BE RESTRAINED AGAINST LATERAL MOVEMENT.
3. SYSTEM DRAINS SHALL BE INSTALLED AS REQUIRED PER NFPA 13 AND EXTENDED OUTSIDE THE BUILDING.
4. ALL CORRIDOR CEILING HEIGHTS AT 8'-6" AND UNIT CELLING HEIGHTS AT 10'-0" UNLESS NOTED OTHERWISE WITH NFPA 13.3.2.4.1.
5. FIRE SPRINKLERS SHALL NOT BE REQUIRED IN BATHROOMS THAT ARE LESS THAN 56 FT² IN AREA IN ACCORDANCE WITH NFPA 13.3.2.4.1.
6. FIRE SPRINKLERS ARE NOT REQUIRED PER NFPA 13.3.2.4.1 IN CLOSETS, LINEN CLOSETS AND PANTRIES WITH DWELLING UNITS THAT MEET ALL THE FOLLOWING CONDITIONS:
 - THE AREA OF THE SPACE DOES NOT EXCEED 24 FT².
 - THE WALLS AND CEILING ARE SURFACED WITH NONCOMBUSTIBLE OR LIMITED-COMBUSTIBLE MATERIALS AS DEFINED BY NFPA 220.
7. THE ATTIC AND INTERSTITIAL SPACES ARE TO BE FILLED WITH NONCOMBUSTIBLE INSULATION. FIRE SPRINKLERS ARE NOT REQUIRED FOR THIS CONCEALED SPACE WITH THE REQUIREMENTS OF NFPA 13.3.2.1.7 BEING MET.
8. CPVC USED ABOVE CEILINGS IN ALL RESIDENTIAL AREAS, CONVERT PIPING TO STEEL IN EXPOSED AREAS AND ROOMS OF ORDINARY HAZARD OCCUPANCIES EXCEEDING 450 FT².
9. SPRINKLERS SHALL BE INSTALLED AT THE TOP OF COMBUSTIBLE STAIR SHAMTS, UNDER THE LANDINGS AT EACH FLOOR LEVEL AND BENEATH THE LOWEST INTERMEDIATE LANDING PER NFPA 13.3.4.1.
10. ALL PIPING VALVES AND APPURTENANCES SHALL BE INSTALLED SUCH AS NOT TO OBSTRUCT ANY PORTION OF WINDOWS, DOORWAYS, STAIRS, PASSAGEWAYS OR ACCESS TO EQUIPMENT.

RESIDENTIAL AREA NOTES PER NFPA 13 2019:

- 19.4 SPECIAL DESIGN APPROACHES.**
- 19.4.1 RESIDENTIAL SPRINKLERS.**
- 19.4.1.1* THE DESIGN AREA SHALL BE THE AREA THAT INCLUDES THE FOUR ADJACENT SPRINKLERS THAT PRODUCE THE GREATEST HYDRAULIC DEMAND.
- 19.4.1.3 UNLESS THE REQUIREMENTS OF 19.4.1 ARE MET, THE MINIMUM REQUIRED DISCHARGE FROM EACH DESIGN AREA SPRINKLER SHALL BE THE GREATER OF THE FOLLOWING:
- (1) IN ACCORDANCE WITH MINIMUM FLOW RATES INDICATED IN THE SPRINKLER LISTINGS
 - (2) IN ROOMS OR COMPARTMENTS GREATER THAN 800 FT² (74 M²) CALCULATED BASED ON DELIVERING A MINIMUM OF 0.1 GPM/FT² (4.1 L/MIN) OVER THE DESIGN AREA IN ACCORDANCE WITH THE PROVISIONS OF 9.5.2.1
 - (3) IN ROOMS OR COMPARTMENTS 800 FT² (74 M²) OR LESS CALCULATED BASED ON DELIVERING A MINIMUM OF 0.1 GPM/FT² (4.1 L/MIN) OVER THE ROOM OR THE COMPARTMENT USING THE AREA OF THE ROOM DIVIDED BY THE NUMBER OF SPRINKLERS IN THE ROOM
- DESIGN CRITERIA DETERMINATION**
- SMALL ROOM METHOD
- COMPARTMENT AREA = 484 FT² (KING ONE BEDROOM 429)
- 484 FT² x 121 FT² x 10 = 12.1 GPM
- PER MANUFACTURE CUT SHEET, THIS IS LESS DEMANDING
- USE TABLE BELOW FOR VK468 RES PENDENT DESIGN CRITERIA.

CALCULATIONS USED

MAX SPACING 16 x 16
17 GPM @ 12.0 PSI

Approval Chart Viking VK468, 4.9 K-Factor Residential Pendent Sprinkler

Sprinkler Base Part Number*	SIN	NPT Thread Size		Nominal K-Factor		Maximum Water Working Pressure		Overall Length	
		Inches	mm	U.S.	metric*	psi	bar	Inches	mm
13637	VK468	1/2	15	4.9	70.8	175 psi (12 bar)		2-1/4	58
Max. Coverage Area*									
Flow*	Pressure*	Flow*	Pressure*	Deflector	Installation	Listings and Approvals*		Minimum	
Fl. X Ft. (m x m)	GPM (L/min)	Fl. X Ft. (m x m)	GPM (L/min)	psi (bar)	psi (bar)	C-UL-US-EU*	Vds	NSF*	Spacing Ft. (m)
12 x 12 (3.7 x 3.7)	13 (49.2)	7.0 (26.7)	13 (49.2)	7.0 (26.7)	0.8 (28.3)	See Foot-note 6 and 8.	See Foot-note 6 and 8.	See Foot-note 6.	8 (2.4)
14 x 14 (4.3 x 4.3)	(49.2)	(0.48)	(49.2)	(0.48)	(0.48)				
16 x 16 (4.9 x 4.9)	(49.2)	(0.48)	(49.2)	(0.48)	(0.48)				
18 x 18 (5.5 x 5.5)	(64.4)	(0.83)	(64.4)	(0.83)	(0.83)				
20 x 20 (6.1 x 6.1)	(75.7)	(1.15)	(75.7)	(1.15)	(1.15)				

Footnotes

- * Part number shown is the base part number. For complete part number refer to Viking's current price schedule.
- * Metric K-factor measurement shown is when pressure is measured in Bar. When pressure is measured in kPa, divide the metric K-factor shown by 10.0.
- * This chart shows the listings and approvals available at the time of printing. Other approvals may be in process. Check with the manufacturer for any additional approvals. Refer also to Design Criteria.
- * For areas of coverage smaller than shown, use the "Flow" and "Pressure" for the next larger area listed. Flows and pressures listed are per sprinkler. The distance from sprinklers to walls shall not exceed one-half the sprinkler spacing indicated for the minimum "Flow" and "Pressure" used.
- * Listed by Underwriter's Laboratories, Inc. for use in the U.S., Canada, and European Union.
- * Approved Finishes are: Brass, Chrome, White Polyester, and Black Polyester. Other point colors are available on request with the same C-UL-US-EU listings as the standard finish colors.
- * U.L. Classified to: NSF/ANSI/Canadian Standard 61, Drinking Water System Components (NSF/ANSI 372 (MH48034)).
- * Approved finish is Electroless Nickel (ENT). Sprinklers with ENT, White Polyester, and Black Polyester finishes are C-UL-US-EU Listed as corrosion-resistant. ENT is available with standard surface-mounted escutcheons or the Micromatic Model E-1 Recessed Escutcheon.

DESIGN CRITERIA DETERMINATION

SMALL ROOM METHOD

COMPARTMENT AREA = 484 FT² (KING ONE BEDROOM 429)

484 FT² x 121 FT² x 10 = 12.1 GPM

PER MANUFACTURE CUT SHEET, THIS IS LESS DEMANDING

USE TABLE BELOW FOR VK468 HSW DESIGN CRITERIA.

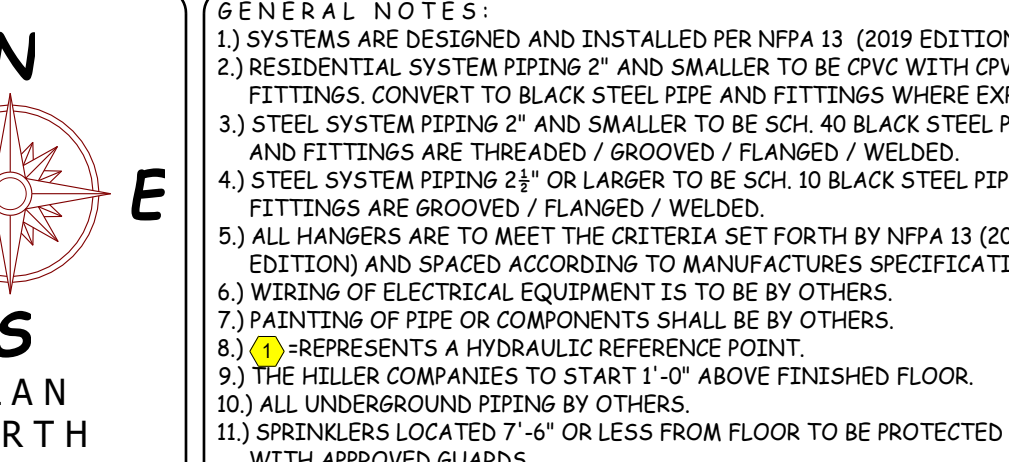
CALCULATIONS USED

MAX SPACING 16 x 16
20 GPM @ 11.9 PSI

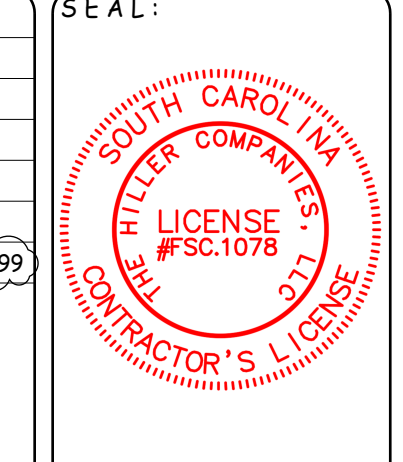
Approval Chart Viking VK460, 5.8 K-Factor Residential Horizontal Sidewall Sprinkler

Sprinkler Base Part Number*	SIN	NPT Thread Size		Nominal K-Factor		Maximum Water Working Pressure		Overall Length	
		Inches	mm	U.S.	metric*	psi	bar	Inches	mm
13033	VK460	1/2	15	5.8	83.6	175 psi (12 bar)		2-1/2	63.5
Max. Coverage Area*									
Width X Length Ft. X Ft. (m x m)	Max. Spacing Ft. (m)	Ordinary Temp Rating (155°F/68°C)	Intermediate Temp Rating (175°F/78°C)	Flow* GPM (L/min)	Pressure* PSI (bar)	Flow* GPM (L/min)	Pressure* PSI (bar)	Top of Deflector	Installation Type
12 x 12 (3.7 x 3.7)	12 (3.7)	16 (60.6)	7.6 (0.52)	16 (60.6)	7.6 (0.52)	16 (60.6)	7.6 (0.52)	4 to 6 inches	Standard surface-mounted escutcheons or recessed with the Micromatic® Model E-1, E-2, or E-3 Recessed Escutcheon, or G-1 Adjustable Escutcheon.
14 x 14 (4.3 x 4.3)	14 (4.3)	20 (75.7)	11.9 (0.82)	21 (79.5)	13.1 (0.90)	21 (79.5)	13.1 (0.90)		
16 x 16 (4.9 x 4.9)	16 (4.9)	22 (83.3)	14.4 (0.99)	22 (83.3)	14.4 (0.99)	22 (83.3)	14.4 (0.99)		
18 x 18 (5.5 x 5.5)	18 (5.5)	26 (109.8)	25.0 (1.7)	26 (109.8)	25.0 (1.7)	26 (109.8)	25.0 (1.7)		
20 x 20 (6.1 x 6.1)	20 (6.1)	30 (113.6)	26.8 (1.8)	30 (113.6)	26.8 (1.8)	30 (113.6)	26.8 (1.8)		
14 x 26 (4.3 x 7.9)	14 (4.3)	42 (159)	52.4 (3.82)	--	--	--	--		Standard surface-mounted escutcheons only

It is the sole responsibility of owner and owners representative to insure that this building/buildings has proper heat and insulation to prevent fire sprinkler pipe, fittings and devices from freezing.



WATER SUPPLY INFORMATION			
STATIC PRESSURE	53	FIRE PUMP	YES
RESIDUAL PRESSURE	51	SIZE GPM @ PSI	300 @ 60
FLOW G.P.M.	1160	TYPE OF DRIVER	VIP
DATE OF TEST	09/30/2025	ELECTRICAL REQ.	208V
HYDRANT LOCATION	@ TEST NODE (SEE SITE PLAN)		
TEST TAKEN BY	GREENWOOD CPE		
NOTES:	TESTED BY: MIKE PROCTOR WITNESSED BY: RUSSELL HOLLEY CONTACT EMAIL: rholley@greenwoodcpe.com HYDRANT LOCATION: SEE FIG. 01		



NICET REVIEW STAMP

JUAN OCHOA

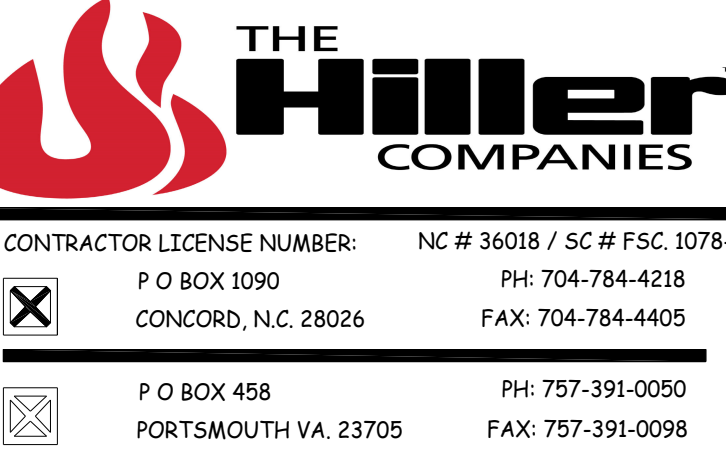
LEVEL IV

WATER BASED SYSTEMS LAYOUT

VALID THROUGH 01/01/2027

Sprinkler Legend - Total Project									
Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish
●	Viking	VK4621	Concealed	55	5.8	Concealed Pendant	1/2"	Quick	Brass
●	Viking	VK302	Microfast	3	5.6	Pendant	1/2"	Quick	Chrome
●	Viking	VK4621	Concealed	1	5.6	Concealed Pendant	1/2"	Quick	Brass
●	Viking	VK464	Freedom	59	4.9	Concealed Pendant	1/2"	Fast	Brass
●	Viking	VK305	Microfast	3	5.8	Horizontal Sidewall	1/2"	Quick	Chrome
●	Viking	VK460	Freedom	104	5.8	Horizontal Sidewall	1/2"	Fast	Chrome
●	Viking	VK482	Dry	7	5.6	Pendant	1"	Quick	White Polyester
●	Viking	VK468	Freedom	208	4.9	Pendant	1/2"	Fast	Chrome
●	Reliable	R-615	0	5.8	Pendant	1"	Standard	Brass	155°F
				Total = 483					

NO.	DATE	REVISION DESCRIPTION	BY
1	12/18/25	ENGINEER'S COMMENTS	TWH
2	01/13/26	FIRE MARSHAL'S COMMENTS (DEREK ALLMOND)	TWH
3	02/06/26	STAIR 1 (RISER LOCATION CHANGE)	TWH
4	07/27/26	PUMP ROOM REVISION	TWH



TOR NAME: Home 2 Suites

475 Hospitality Blvd.
Greenwood, SC 29649

CONTRACT WITH: John M. Campbell Company

102 Winchester Avenue
Monroe, NC 28110

PHONE: (704) 254-3214

DRAWING NAME: SEISMIC & GENERAL NOTES

DRAWN BY: TWH

AHJ: LLR / Greenwood FM

DATE: 07/27/26

SCALE: AS NOTED

CONTRACT NO.: CP-0588

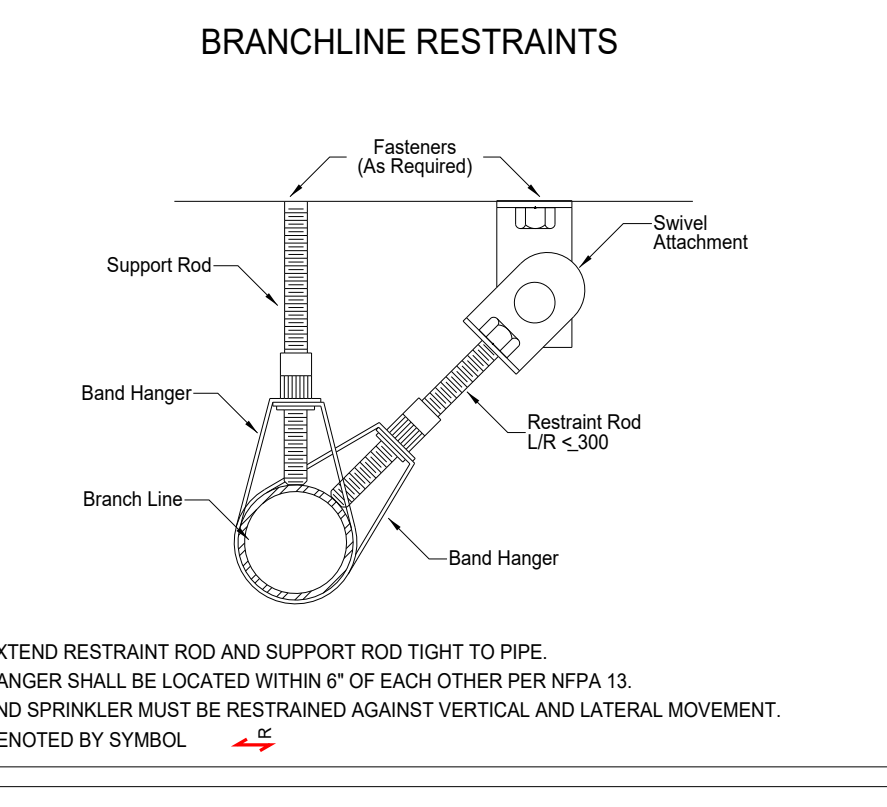
BRANCHLINE RESTRAINTS

Table 18.6(a) NFPA 13 (STEEL PIPE)				
Pipe (in.)	Seismic Coefficient, C _p for this project	0.5 < C _p ≤ 0.71	0.71 < C _p ≤ 1.40	C _p ≥ 1.40
1"	43	36	26	22
1 1/2"	46	39	27	24
1 1/2"	49	41	29	25
2"	53	45	31	27

* Maximum Spacing of Branch Line Restraints, (feet)

Table 18.6(b) NFPA 13 (CPVC PIPE)				
Pipe (in.)	Seismic Coefficient, C _p for this project	0.5 < C _p ≤ 0.71	0.71 < C _p ≤ 1.40	C _p ≥ 1.40
1"	34	26	20	17
1 1/2"	37	31	22	19
1 1/2"	40	34	24	20
2"	45	38	37	23

* Maximum Spacing of Branch Line Restraints, (feet)

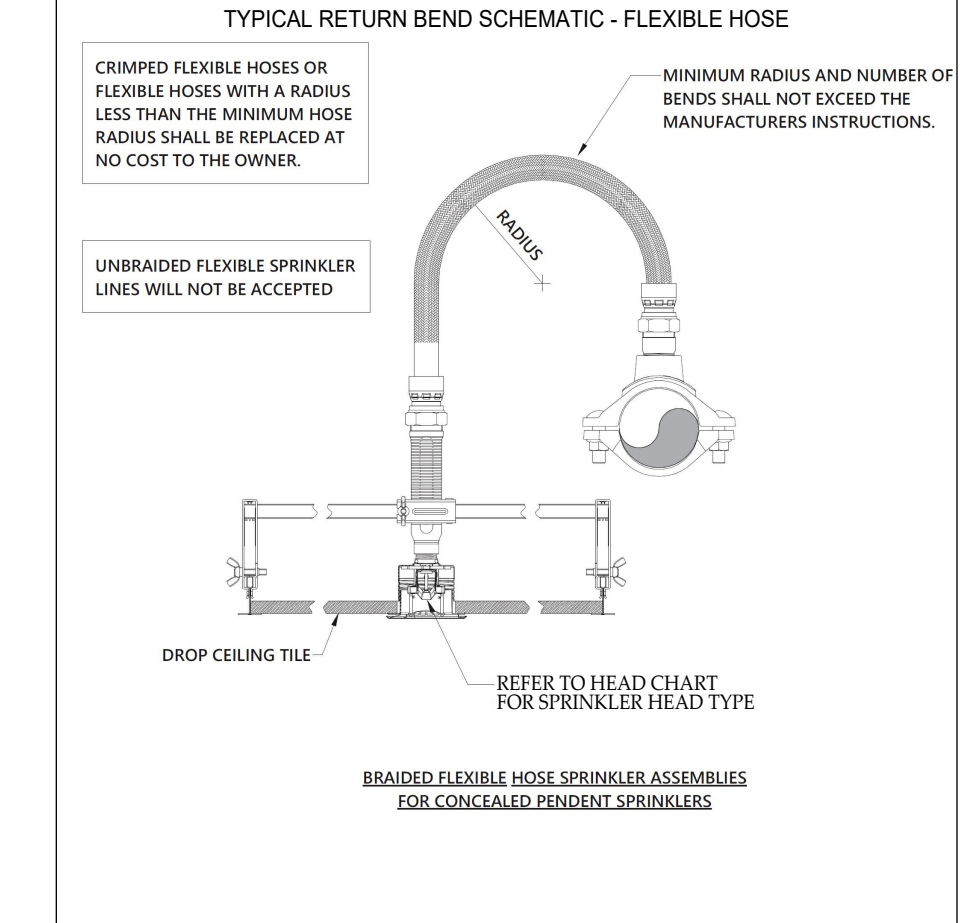
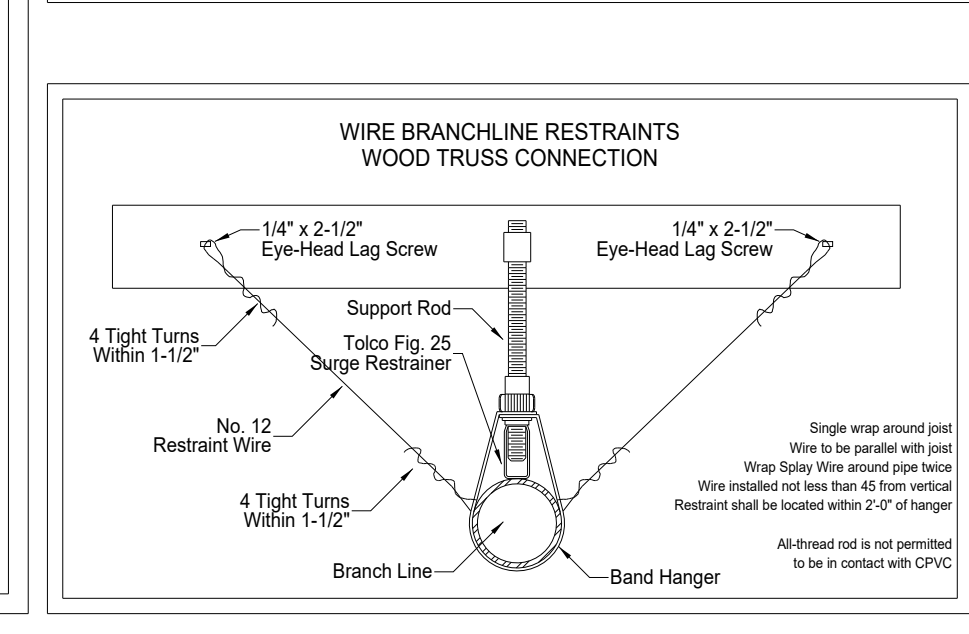
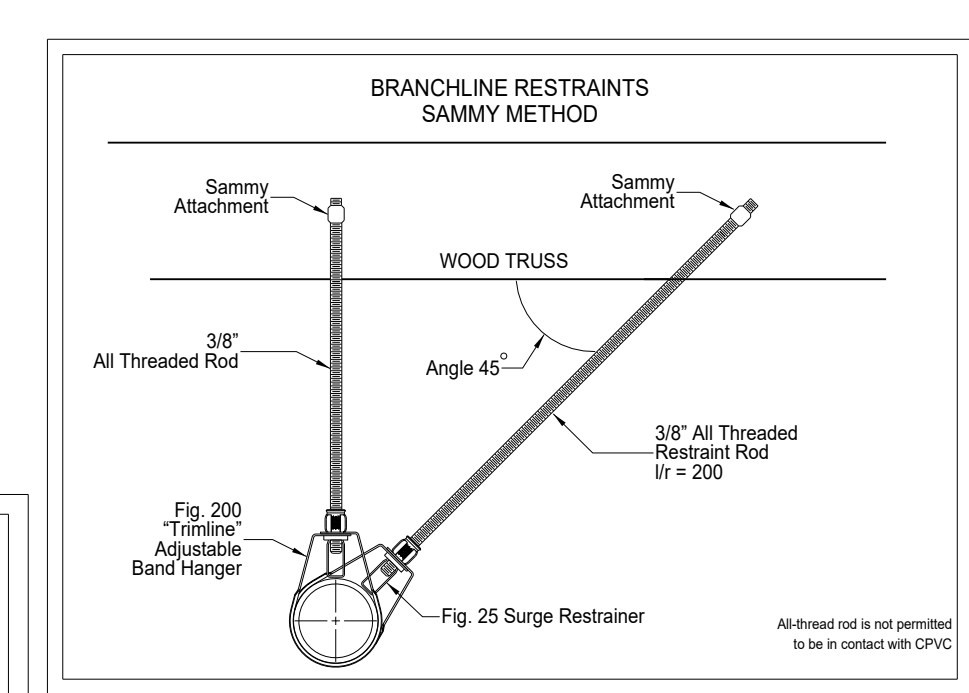


* EXTEND RESTRAINT ROD AND SUPPORT ROD TIGHT TO PIPE.

* HANGER SHALL BE LOCATED WITHIN 6" OF EACH OTHER PER NFPA 13.

* END SPRINKLER MUST BE RESTRAINED AGAINST LATERAL MOVEMENT.

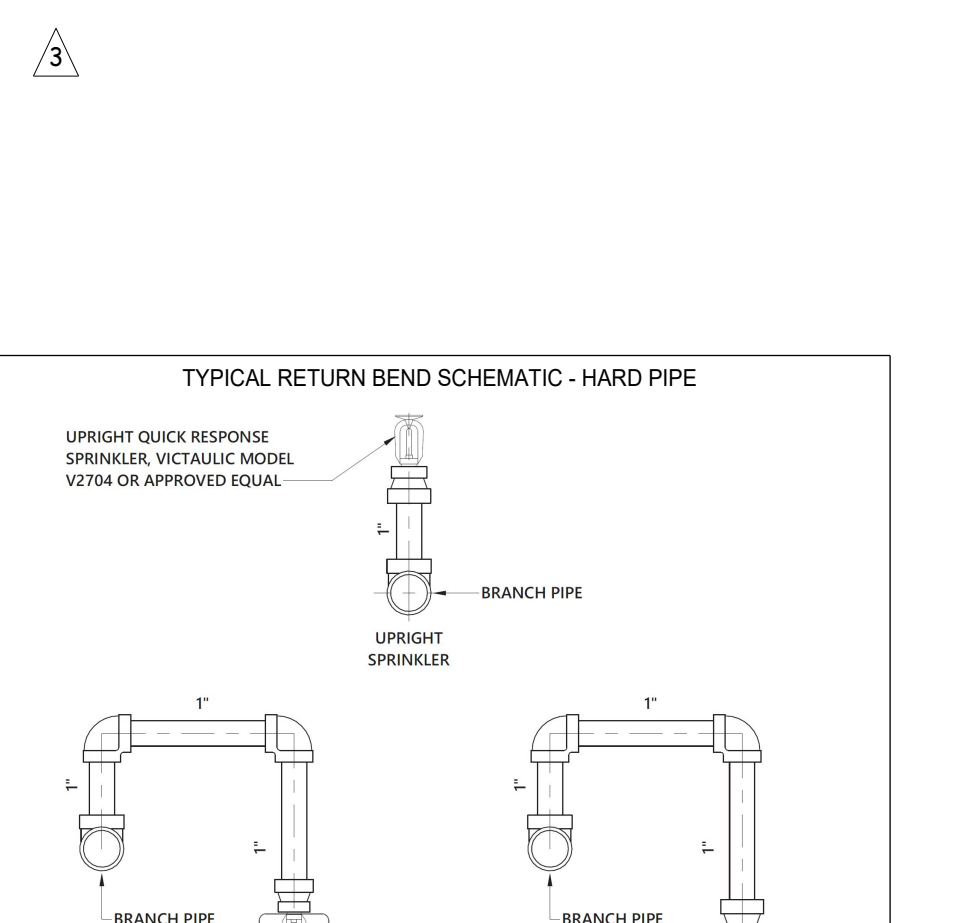
* DENOTED BY SYMBOL



cULus Friction Loss Data									
Nominal Length of Hose (feet)	NPT Threads	Reducer	Type	Maximum Sprinkler Flow (gpm) (L/min)	Maximum Sprinkler Pressure (psi) (bar)	Equivalent length of 1" (25.4mm) hose (feet) (m)	Equivalent length of 1" (25.4mm) hose (feet) (m)	Equivalent length of 1" (25.4mm) hose (feet) (m)	Equivalent length of 1" (25.4mm) hose (feet) (m)
24	1/2	Straight	5.8 (80)	14.0 (200)	2	13 (4.0)	13 (4.0)	13 (4.0)	13 (4.0)
30	1/2	Straight	5.8 (80)	14.0 (200)	3	14 (4.3)	14 (4.3)	14 (4.3)	14 (4.3)
36	1/2	Straight	5.8 (80)	14.0 (200)	4	15 (4.6)	15 (4.6)	15 (4.6)	15 (4.6)
42	1/2	Straight	5.8 (80)	14.0 (200)	4	16 (4.9)	16 (4.9)	16 (4.9)	16 (4.9)
48	1/2	Straight	5.8 (80)	14.0 (200)	4	17 (5.2)	17 (5.2)	17 (5.2)	17 (5.2)
54	1/2	Straight	5.8 (80)	14.0 (200)	4	18 (5.5)	18 (5.5)	18 (5.5)	18 (5.5)
60	1/2	Straight	5.8 (80)	14.0 (200)	4	19 (5.8)	19 (5.8)	19 (5.8)	19 (5.8)
66	1/2	Straight	5.8 (80)	14.0 (200)	4	20 (6.1)	20 (6.1)	20 (6.1)	20 (6.1)
72	1/2	Straight	5.8 (80)	14.0 (200)	5	21 (6.4)	21 (6.4)	21 (6.4)	21 (6.4)

UL Notes:

1. Data is based on standard 1" (25.4mm) straight length.
2. Sprinkler K-factor: 5.8 (80) for 1/2 inch reducer and 14.0 (200) for 3/4 inch reducer.
3. Reduced K-factor Sprinkler Connection (see below) and approved by Underwriter's Laboratories, Inc. for use in wet, preaction, and dry sprinkler systems per NFPA 13, 13.1, 13.2, 13.3 and UL2424.



3 FP-02 N.T.S.

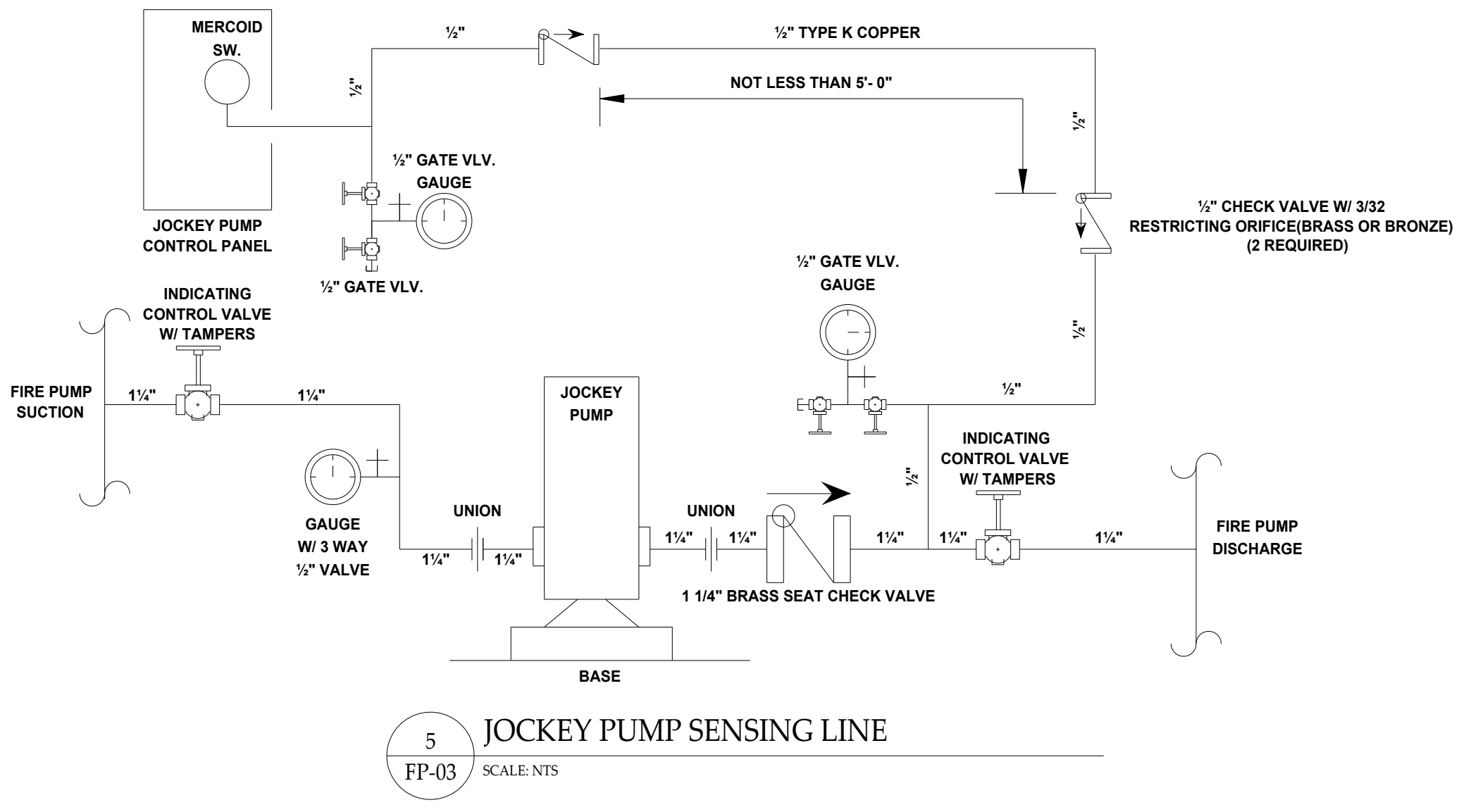
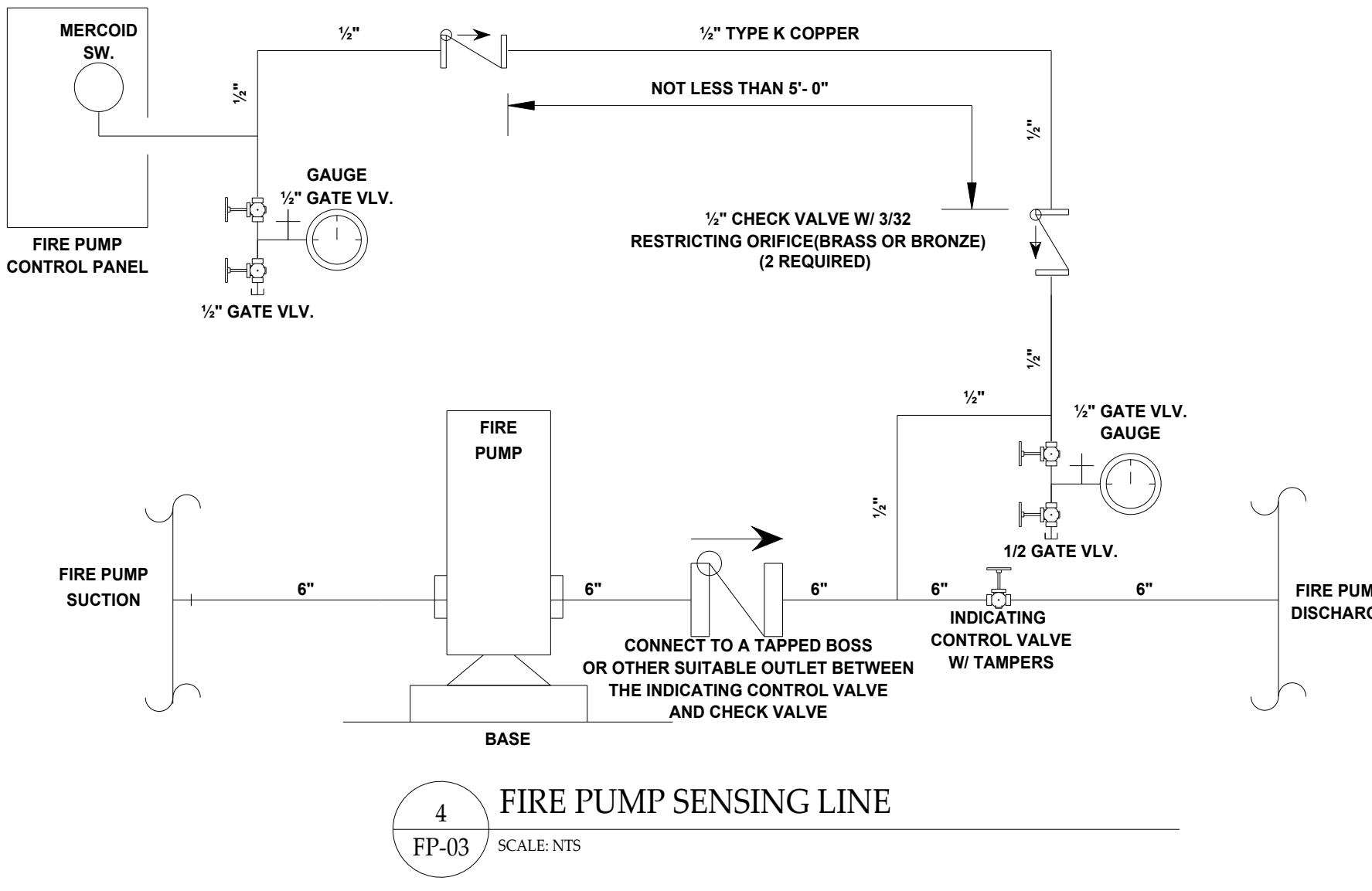
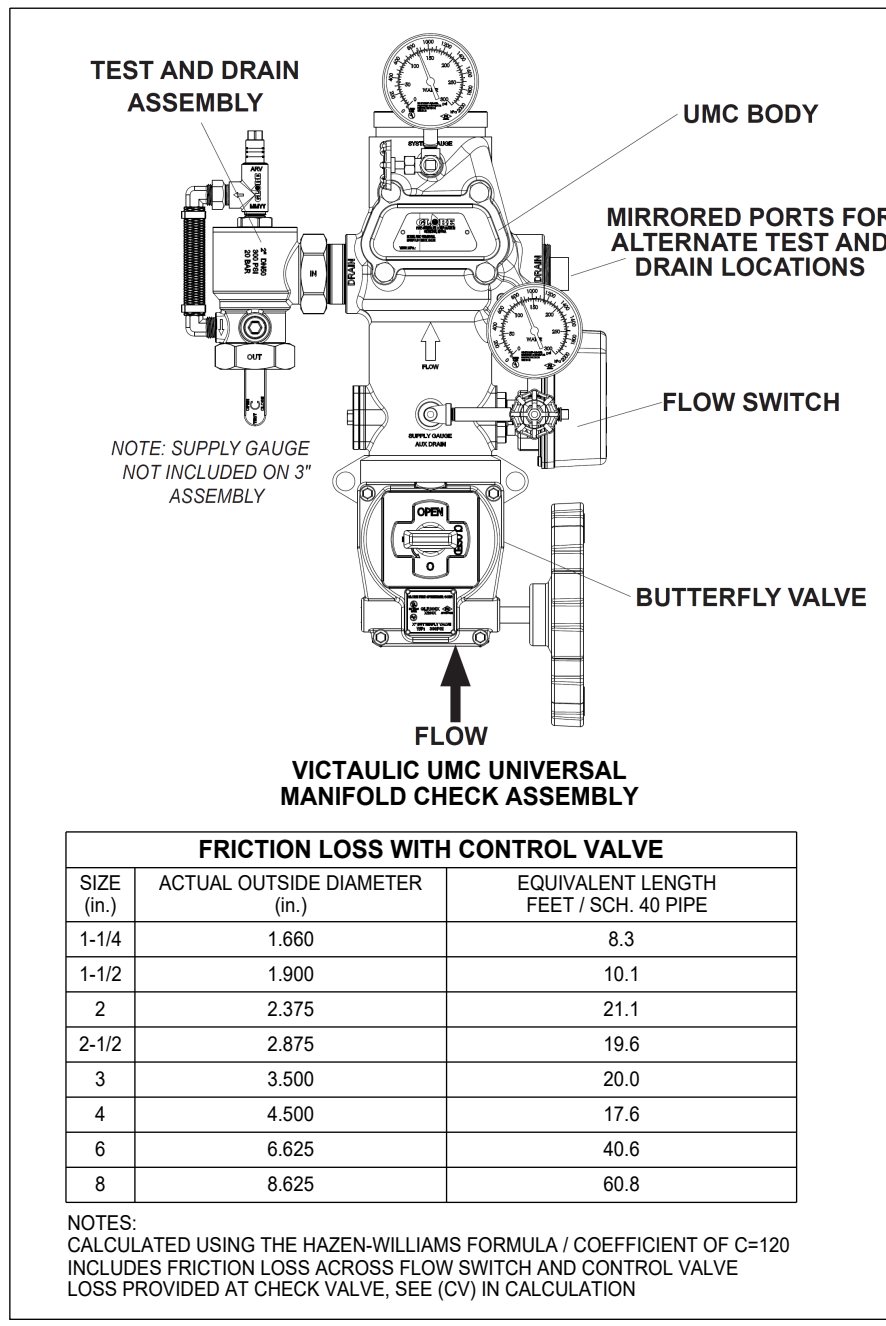
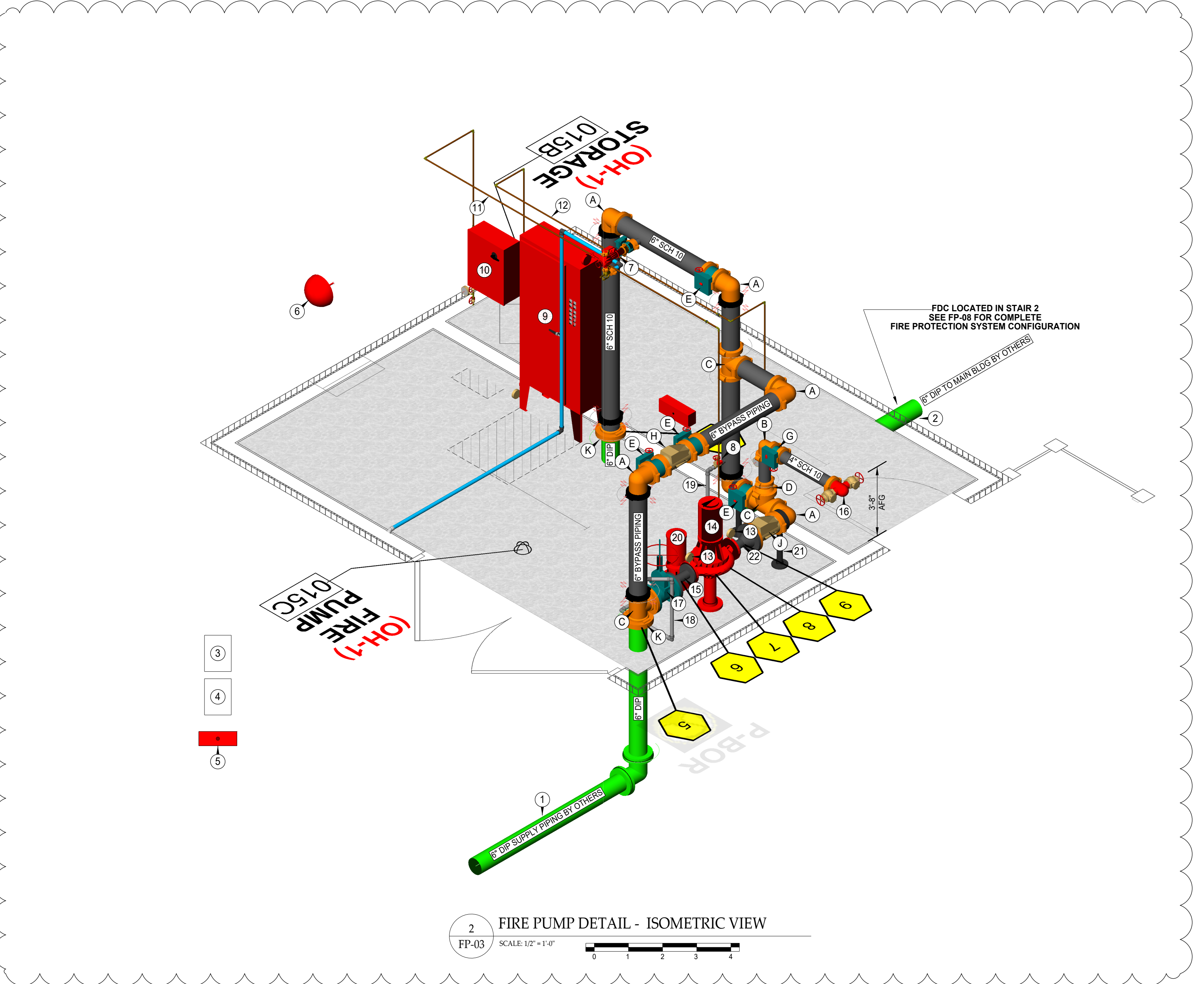
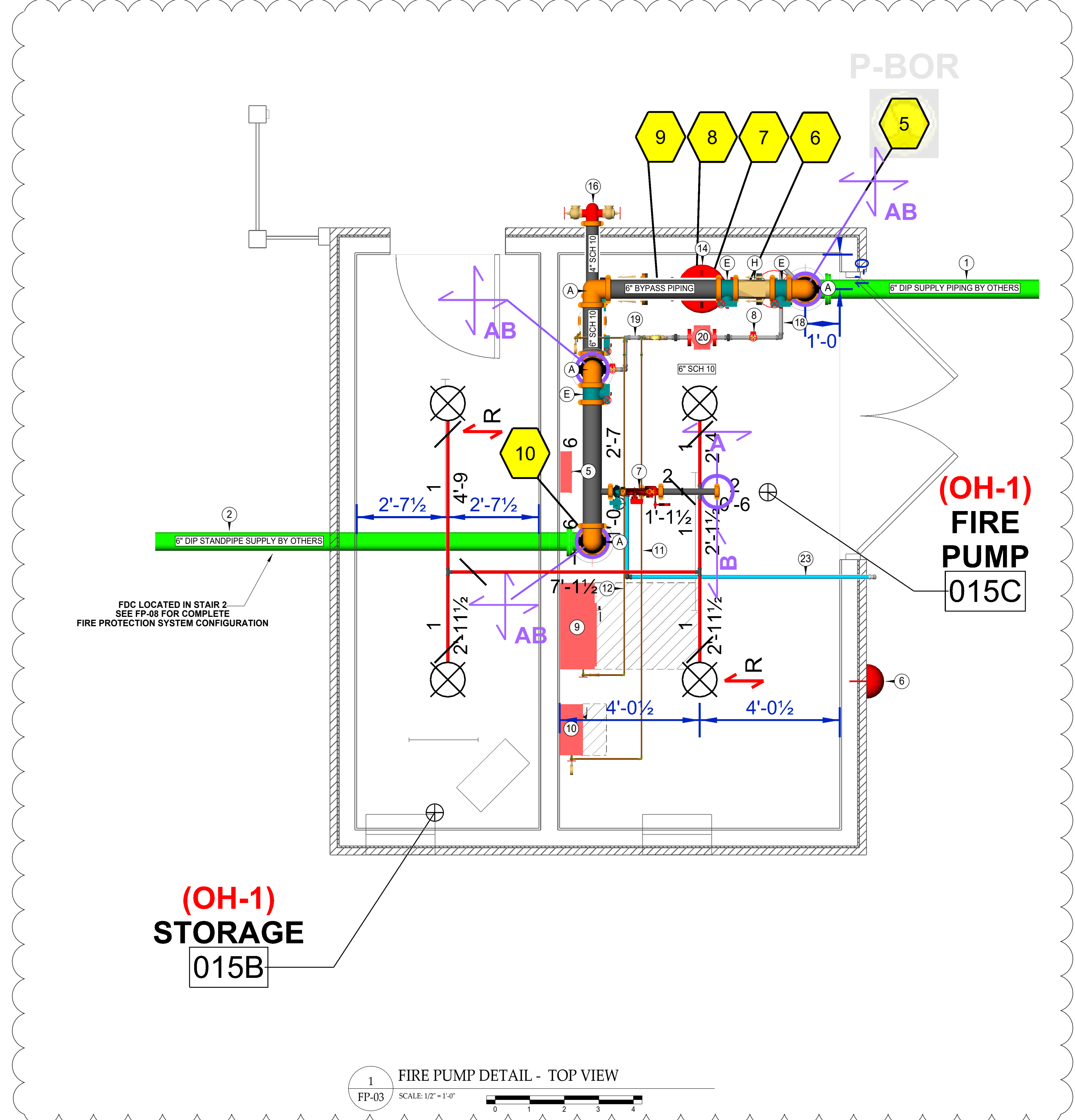
RETURN BEND DETAIL - HARD PIPE

UPRIGHT QUICK RESPONSE SPRINKLER VICTALINE MODEL V3802 OR APPROVED EQUAL

REFER TO ARCHITECTURAL PLANS FOR CEILING TYPE. REFER TO SPRINKLER LEGEND FOR LISTING

BRANCH PIPE

CEILING



FIRE PUMP, JOCKEY PUMP AND CONTROLLER INFORMATION:

FIRE PUMP: SYNCROFLO
 MODEL: SD08LFX
 SIZE: 3" x 3" VERTICAL INLINE
 GPM: 300
 PSI: 60
 MOTOR FRAME: 254JIP
 MOTOR: 20 HP, 3600 RPM, 208V/3Ph/60Hz, ODP ENCLOSURE

FIRE PUMP CONTROLLER: FIRETROL
 MODEL: FTA1000-AM20H
 TYPE: FULL VOLTAGE STARTING
 OPERATING VOLTAGE: 208V/3Ph/60Hz
 MAXIMUM MOTOR HORSEPOWER: 20 HP
 ENCLOSURE TYPE: NEMA 2
 PRESSURE SWITCH / TRANSDUCER RANGE: 0-300 PSI
 LOAD TERMINALS TO MOTOR: 208-220V, 20HP MAX
 AUTOMATIC TRANSFER SWITCH: N/A

JOCKEY PUMP: WEBTROL
 MODEL: NVB87FEST
 SIZE: 1 1/2" x 1 1/2"
 GPM: 5
 PSI: 70
 MOTOR: 0.75 HP, 3500 RPM, 220V/3Ph/60Hz

JOCKEY PUMP CONTROLLER: FIRETROL
 MODEL: FTA570F-AG034B
 TYPE: ACROSS THE LINE
 OPERATING VOLTAGE: 208V/3Ph/60Hz
 MAXIMUM MOTOR HORSEPOWER: 0.75 HP
 ENCLOSURE TYPE: NEMA 2
 PRESSURE SWITCH / TRANSDUCER RANGE: 0-300 PSI
 LOAD TERMINALS TO MOTOR: 208-220V, 20HP MAX

- PUMP ROOM INFORMATION:**
- 6" DUCTILE IRON SUPPLY TO FLANGE 1'-0" AFF. (BY OTHERS, HILLER STARTS 1'-0" AFF)
 - 6" DUCTILE IRON FROM FLANGE 1'-0" AFF TO STANDPIPE IN MAIN BLDG
 - HYDRAULIC DESIGN INFORMATION SIGN LOCATED AT EACH RISER PER NFPA 13, 25.5.1
 - A GENERAL INFORMATION SIGN SHALL BE INSTALLED PER NFPA 13, 25.6.1
 - 12 COUNT HEAD BOX
 - 6" 120V ELECTRIC BELL MOUNTED OUTSIDE PUMP ROOM
 - 2" VICTAULIC UMC CHECK ASSEMBLY FOR ZONE P SYSTEM (SEE DETAIL 3/FP-03)
 - 4" NORMALLY CLOSED BUTTERFLY VALVE W/ TAMPER
 - 6" GROOVED CHECK VALVE
 - 4" GROOVED CHECK VALVE
 - 6" CHECK VALVE AT PUMP
 - 6" FLANGE (1'-0" AFF) BY OTHERS
 - 6" GROOVED 90
 - 4" GROOVED 90
 - 6" GROOVED TEE
 - 6" x 4" GROOVED REDUCER
 - 6" GROOVED BUTTERFLY VALVE W/ TAMPER
 - 4" GROOVED BUTTERFLY VALVE W/ TAMPER
 - 6" GROOVED CHECK VALVE
 - 4" GROOVED CHECK VALVE
 - 6" CHECK VALVE AT PUMP
 - 6" FLANGE (1'-0" AFF) BY OTHERS
 - 6" OS&Y W/ TAMPER
 - 1 1/2" LINE TO JOCKEY PUMP
 - 1 1/2" LINE FROM JOCKEY PUMP
 - JOCKEY PUMP (SEE NOTES THIS SHEET)
 - PIPE STANDHANGER SUPPORT (TYPICAL)
 - 3" x 6" FLANGED PUMP INCREASER
 - PUMP ROOM SYSTEM DRAIN TO DISCHARGE AT 12" AGF.

ASBUILTS

It is the sole responsibility of owner and owners representative to insure that this building/buildings has proper heat and insulation to prevent fire sprinkler pipe, fittings and devices from freezing.

GENERAL NOTES:

- SYSTEMS ARE DESIGNED AND INSTALLED PER NFPA 13 (2019 EDITION)
- RESIDENTIAL SYSTEM PIPING 2" AND SMALLER TO BE CPVC WITH CPVC FITTINGS. CONVERT TO BLACK STEEL PIPE AND FITTINGS WHERE EXPOSED.
- STEEL SYSTEM PIPING 2" AND SMALLER TO BE SCH. 40 BLACK STEEL PIPE AND FITTINGS ARE THREADED / GROOVED / FLANGED / WELDED.
- STEEL SYSTEM PIPING 2 1/2" OR LARGER TO BE SCH. 10 BLACK STEEL PIPE AND FITTINGS ARE GROOVED / FLANGED / WELDED.
- ALL HANGERS ARE TO MEET THE CRITERIA SET FORTH BY NFPA 13 (2019 EDITION) AND SPACED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
- WIRING OF ELECTRICAL EQUIPMENT IS TO BE BY OTHERS.
- PAINTINGS OF PIPE OR COMPONENTS SHALL BE BY OTHERS.
- REPRESENTS A HYDRAULIC REFERENCE POINT.
- THE HILLER COMPANIES TO START 1'-0" ABOVE FINISHED FLOOR.
- ALL UNDERGROUND PIPING BY OTHERS.
- SPRINKLERS LOCATED 7'-6" OR LESS FROM FLOOR TO BE PROTECTED WITH APPROVED GUARDS.

WATER SUPPLY INFORMATION

STATIC PRESSURE	53	FIRE PUMP	YES
RESIDUAL PRESSURE	51	SIZE GPM @ PSI	300 @ 60
FLOW G.P.M.	1160	TYPE OF DRIVER	VIP
DATE OF TEST	09/30/2025	ELECTRICAL REQ.	208V
HYDRANT LOCATION	© TEST NODE (SEE SITE PLAN)	TEST TAKEN BY	GREENWOOD CPW
TEST TAKEN BY	GREENWOOD CPW	TEST TAKEN BY	GREENWOOD CPW

SPRINKLER LEGEND - Total Project

Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature	Note	Max Spacing
⊙	Viking	VK4621	Concealed	55	5.6	Concealed Pendant	1/2"	Quick	Brass	155°F	White Coverplate	130°F OH / 225°F LH
⊙	Viking	VK302	Microfast	33	5.6	Pendent	1/2"	Quick	Chrome	200°F	White Coverplate	130°F OH / 225°F LH
⊙	Viking	VK4621	Concealed	1	5.6	Concealed Pendant	1/2"	Quick	Brass	200°F	White Coverplate	130°F OH / 225°F LH
⊙	Viking	VK464	Freedom	59	4.9	Concealed Pendant	1/2"	Fast	Brass	155°F	White Coverplate	15 x 18 / 324H
⊙	Viking	VK305	Microfast	3	5.8	Horizontal Sidewall	1/2"	Quick	Chrome	200°F	Chrome Res Esc	100°F OH / 195°F LH
⊙	Viking	VK460	Freedom	104	5.8	Horizontal Sidewall	1/2"	Fast	Chrome	155°F	Chrome Res Esc	16 x 16 / 256H
⊙	Viking	VK482	Dry	7	5.6	Pendent	1	Quick	White Polyester	205°F	White Flat Esc	130°F OH / 225°F LH
⊙	Viking	VK468	Freedom	208	4.9	Pendent	1/2"	Fast	Chrome	155°F	Chrome Res Esc	15 x 18 / 324H
⊙	Reliable	R1615	O	4	5.8	Pendent	1/2"	Standard	Brass	165°F	Connect Chute Head	100°F OH / 195°F LH
				Total	483							

CONTRACTOR LICENSE NUMBER: NC # 36018 / SC # FSC 1078-B

CONTRACTOR: THE HILLER COMPANIES

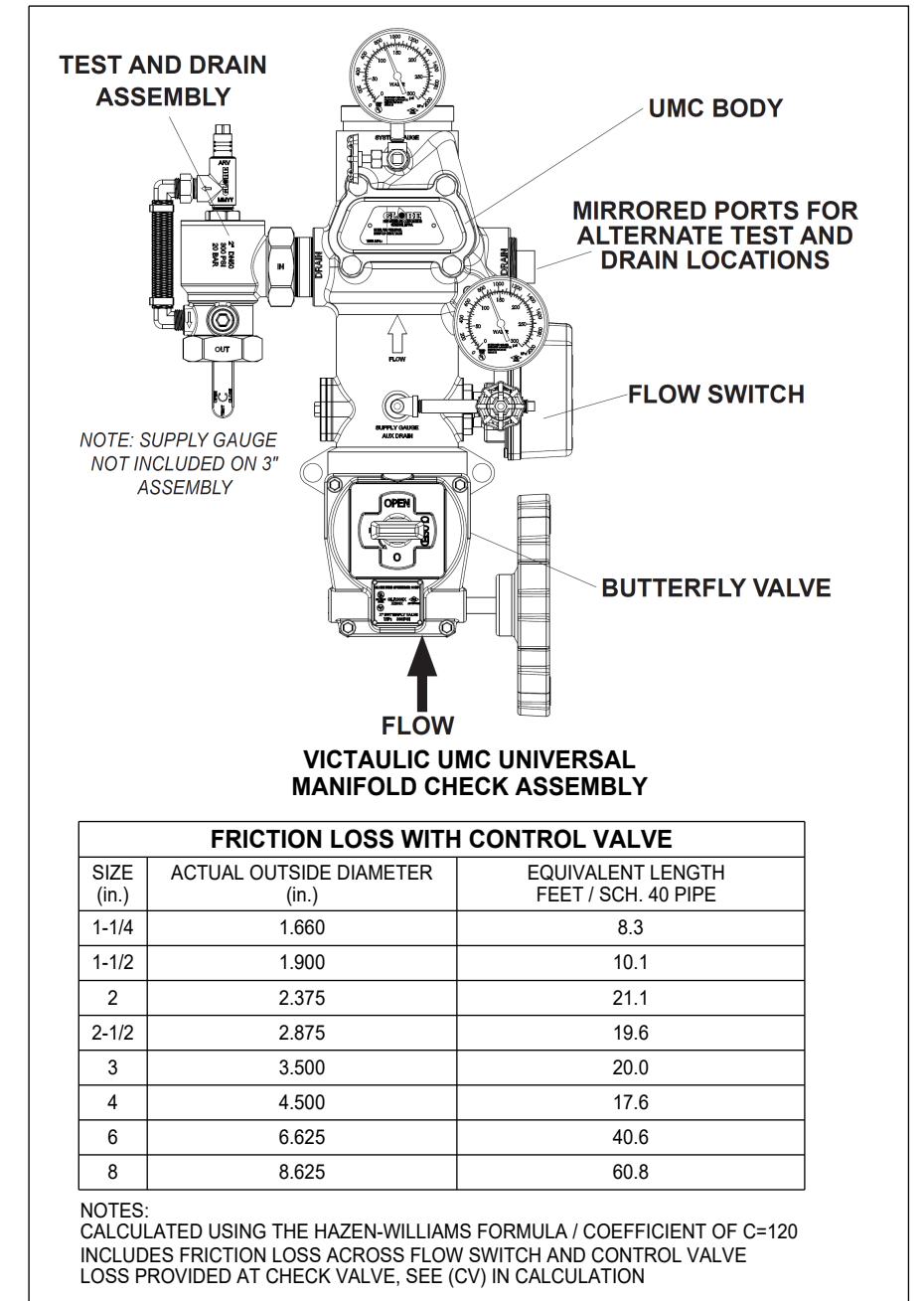
PH: 704-784-4218
FAX: 704-784-4405

PORTSMOUTH VA. 23705
PH: 757-391-0050
FAX: 757-391-0098

CONTRACT NAME: Home 2 Suites
 475 Hospitality Blvd.
 Greenwood, SC 29649

CONTRACT WITH: John M. Campbell Company
 102 Winchester Avenue
 Monroe, NC 28110

PHONE: (704) 254-3214
DRAWING NAME: FIRE PUMP DETAILS
DRAWN BY: TWH
DATE: 07/27/26
SCALE: AS NOTED
CONTRACT NO.: CP0588



FRICION LOSS WITH CONTROL VALVE

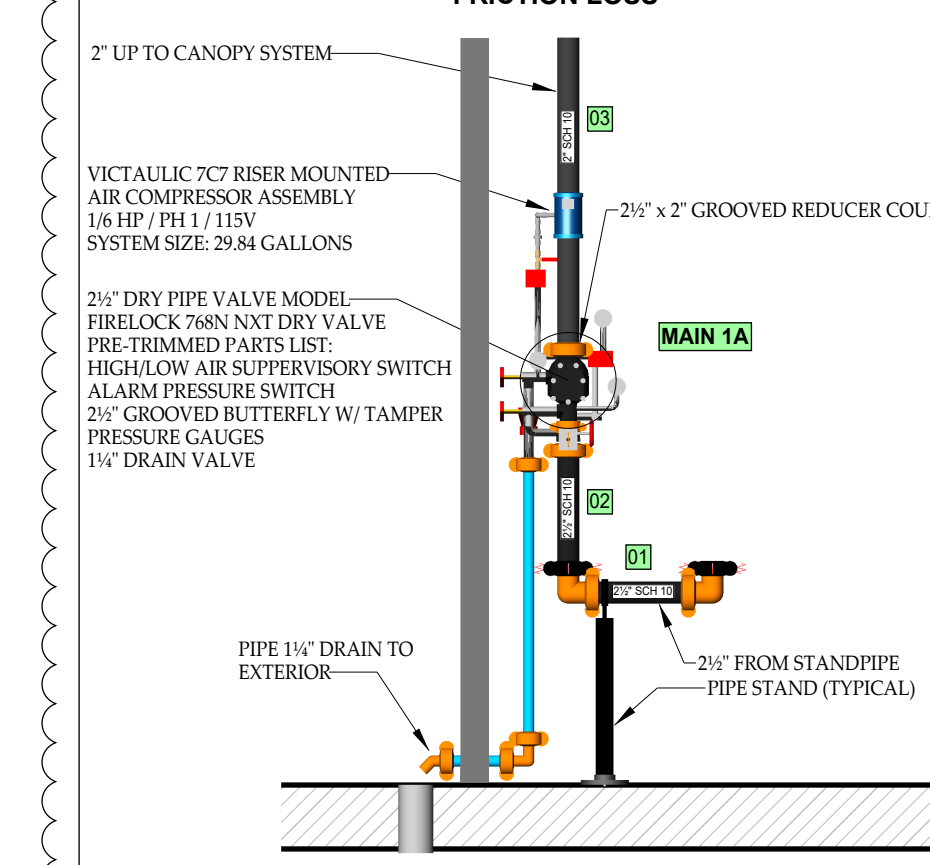
SIZE (IN)	ACTUAL OUTSIDE DIAMETER (IN)	EQUIVALENT LENGTH FEET (SCH. 40 PIPE)
1-1/4	1.660	8.3
1-1/2	1.900	10.1
2	2.375	21.1
2-1/2	2.875	19.6
3	3.500	20.0
4	4.500	17.8
6	6.625	40.6
8	8.625	60.8

NOTE: CALCULATED USING THE HAZEN-WILLIAMS FORMULA (COEFFICIENT OF C=120) INCLUDES FRICTION LOSS ACROSS FLOW SWITCH AND CONTROL VALVE LOSS PROVIDED AT CHECK VALVE. SEE CIVIL CALCULATION.

ZONE CONTROL ASSEMBLY DETAIL WITH CONTROL VALVE

FP-04 SCALE: 1/8" = 1'-0"

Nominal Size (in)	Actual Outside Diameter (in)	Equivalent Length of Pipe (feet)
1 1/4	1.900	3.00
1 1/2	2.375	9.00
2	2.875	2.743
2 1/2	3.500	8.00
3	4.500	2.438
3 1/2	5.000	17.00
4	5.500	5.182
4 1/2	6.000	21.00
5	6.625	6.401
6	7.625	22.00
6 1/2	8.625	6.706
8	10.625	30.00
10	13.625	15.200



CANOPY DRY PIPE VALVE DETAIL VICTAULIC FIRELOCK 768N

FP-04 SCALE: 1/2" = 1'-0"

Hydraulic Information

Remote Area Zone 1 - Laundry

Ordinary Group 1

DENSITY (gpm/ft²) 0.15 for 1500ft² (Actual 661ft²)

QUICK RESPONSE REDUCTION 10'-0" Ceiling (40.0%) 900ft²

TOTAL HOSE STREAMS 250.00

TOTAL HEADS FLOWING 11

K-FACTOR 5.6

Zone 1 BASE OF RISER (gpm) 233.00

Zone 1 BASE OF RISER (psi) 72.148

P-BOR BASE OF RISER (gpm) 233.00

P-BOR BASE OF RISER (psi) 13.677

SAFETY MARGIN (psi) +28.895 (54.8%)

HYDRAULIC DESIGN NOTES:

(1) PER NFPA 13 19.2.2(2) ADJACENT HAZARDS OR DESIGN METHODS WITH PARTITIONS INSTALLED

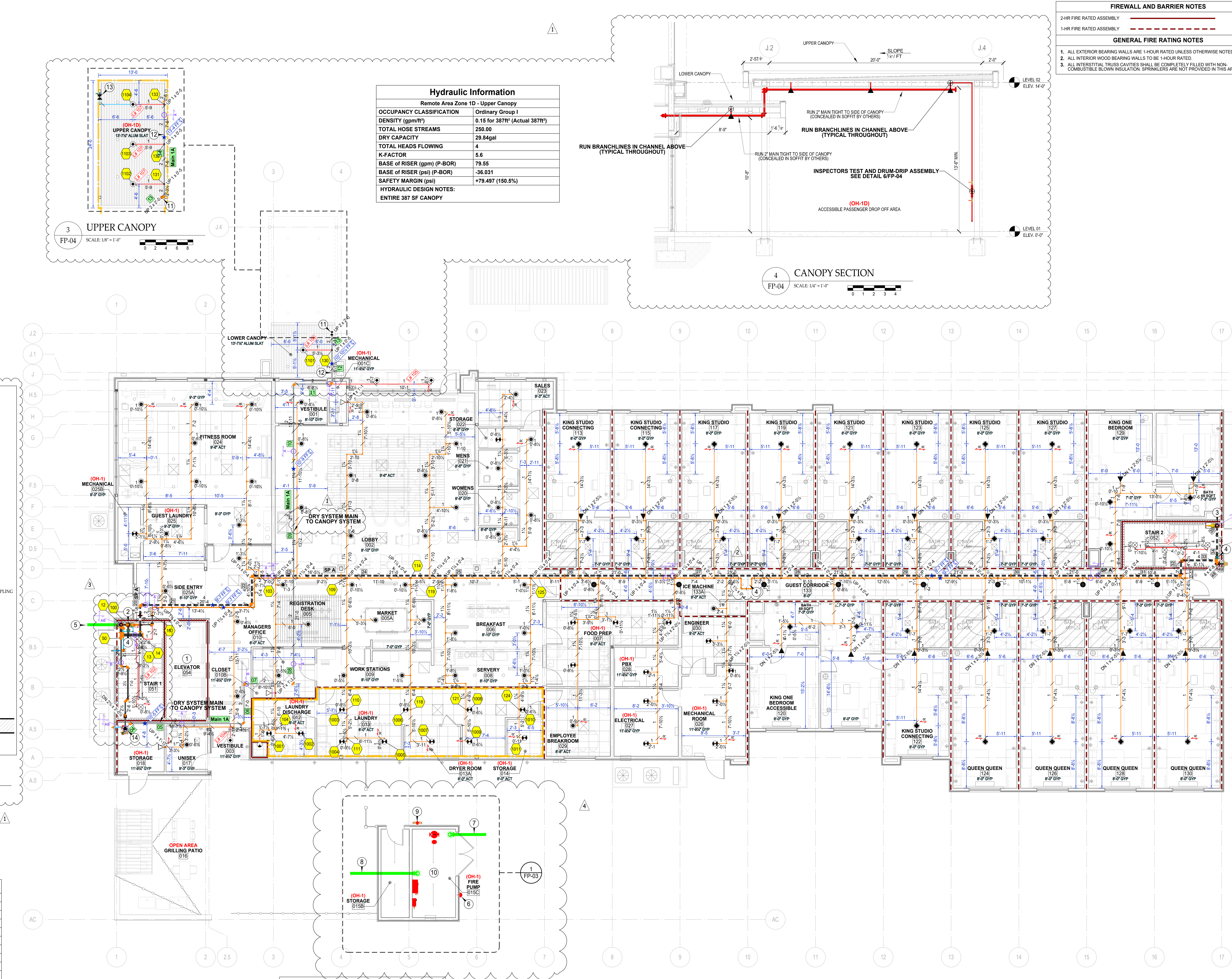
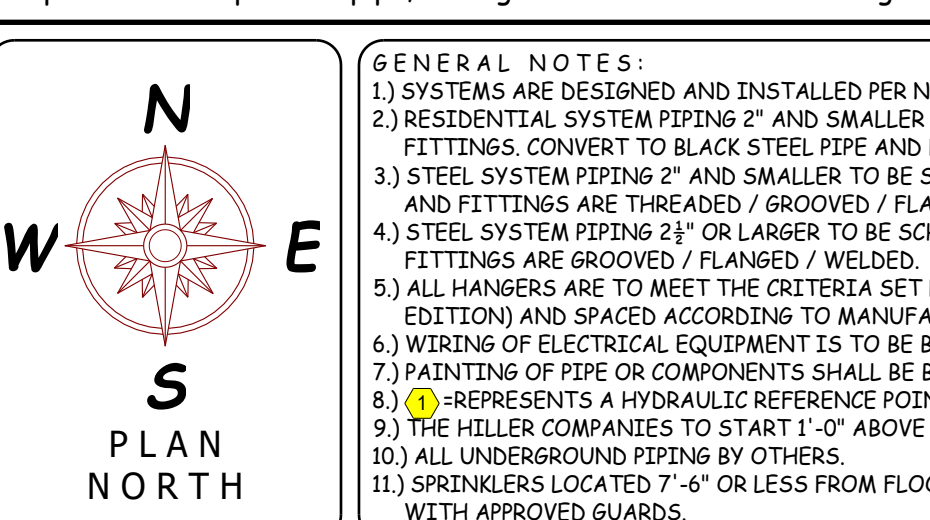
(2) AREA REDUCTION PER NFPA 13 19.3.3.2.3.1 FOR QR SPRINKLERS AND 10'-0" CEILINGS

COMPLIANCE PER NFPA 13 27.2.4.2.4 AND 27.2.4.2.5:

(1) ORDINARY HAZARD AREA = 900 SQFT W/ AREA REDUCTION (15 GPM PER SQFT x 900 SQFT = 135 GPM)

(2) TOTAL DESIGN DISCHARGE = 483 GPM

It is the sole responsibility of owner and owners representative to insure that this building/buildings has proper heat and insulation to prevent fire sprinkler pipe, fittings and devices from freezing.



SEISMIC AND BRANCHLINE RESTRAIN NOTE

1. WHERE SHORT RODS AND STRAPS ARE USED - NO LATERAL BRACING REQUIRED PER NFPA 13 18.5.5.10.2

2. WHERE SHORT RODS AND STRAPS ARE USED - NO BRANCHLINE RESTRAINTS REQUIRED PER NFPA 13 18.5.5.10.1 AND 18.5.5.1

Sprinkler Legend - Total 1st Floor

Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature	Note	Max Spacing
⊗	Viking	VK300	Microfast	5	5.6	Upright	1/2"	Quick	Brass	200°F	Exposed	130R OH / 225R LH
⊗	Viking	VK4621	Concealed	47	5.6	Concealed Pendant	1/2"	Quick	Brass	155°F	White Coverplate	130R OH / 225R LH
⊗	Viking	VK302	Microfast	24	5.6	Pendant	1/2"	Quick	Chrome	200°F	Chrome Res Esc	130R OH / 225R LH
⊗	Viking	VK4621	Concealed	1	5.6	Concealed Pendant	1/2"	Quick	Brass	200°F	White Coverplate	130R OH / 225R LH
⊗	Viking	VK494	Freedom	8	4.9	Concealed Pendant	1/2"	Fast	Brass	155°F	White Coverplate	15 x 18 / 324R
⊗	Viking	VK305	Microfast	3	5.6	Horizontal Sidewall	1/2"	Quick	Chrome	200°F	Chrome Res Esc	100R OH / 196R LH
⊗	Viking	VK460	Freedom	17	5.8	Horizontal Sidewall	1/2"	Fast	Chrome	155°F	Chrome Res Esc	16 x 16 / 256R
⊗	Viking	VK482	Dry	4	5.6	Pendant	1/2"	Quick	White Polyester	205°F	White Flat Esc	130R OH / 225R LH
⊗	Viking	VK448	Freestop	31	5.6	Pendant	1/2"	Fast	Chrome	155°F	Chrome Res Esc	15 x 18 / 324R
⊗	Reliable	R1615		1	5.6	Pendant	1/2"	Standard	Brass	155°F	Connect Chute Head	100R OH / 196R LH
Total = 141												

SEISMIC AND BRANCHLINE RESTRAIN NOTE

1. WHERE SHORT RODS AND STRAPS ARE USED - NO LATERAL BRACING REQUIRED PER NFPA 13 18.5.5.10.2

2. WHERE SHORT RODS AND STRAPS ARE USED - NO BRANCHLINE RESTRAINTS REQUIRED PER NFPA 13 18.5.5.10.1 AND 18.5.5.1

SEISMIC AND BRANCHLINE RESTRAIN NOTE

1. WHERE SHORT RODS AND STRAPS ARE USED - NO LATERAL BRACING REQUIRED PER NFPA 13 18.5.5.10.2

2. WHERE SHORT RODS AND STRAPS ARE USED - NO BRANCHLINE RESTRAINTS REQUIRED PER NFPA 13 18.5.5.10.1 AND 18.5.5.1

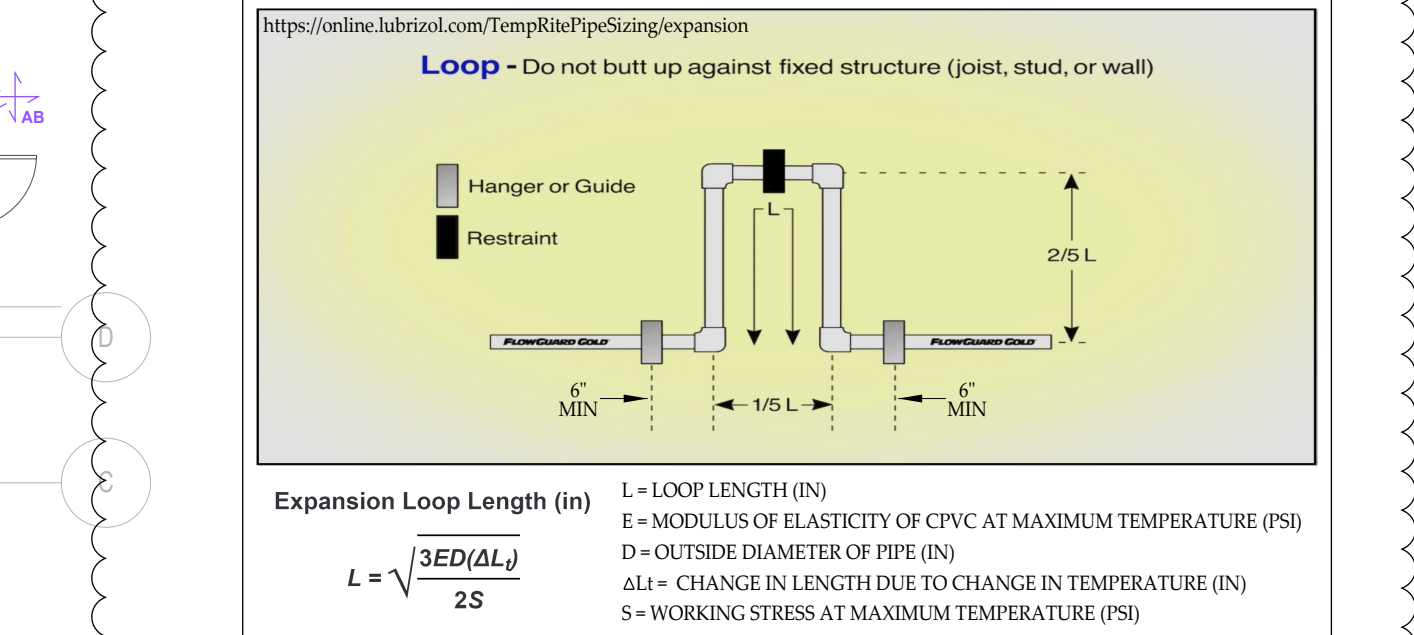
- FIRE PROTECTION KEY NOTES**
- SPRINKLERS AT THE TOP AND BOTTOM OF ELEVATOR SHAFT ARE NOT REQUIRED PER NFPA 13 9.3.6.2 (BOTTOM) AND 9.3.6.1 (TOP, AND ANNE A7.1)
 - EXPOSED 4" MANUAL CLASS-I COMBINATION STANDPIPE W/ 2" PCA (ZONE 1) AND 2 1/2" HOSE ANGLE VALVE
 - EXPOSED 4" MANUAL CLASS-I STANDPIPE SYSTEM
 - 4" STANDPIPE ISOLATION CONTROL VALVE W/ TAMPER
 - 8" DIP SUPPLY FROM PUMP ROOM BY OTHERS. (SEE SITE PLAN ON FP-01 FOR CONTINUATION)
 - 8" ALARM BELL LOCATION
 - 8" DIP FROM FDC AND BACKFLOW VAULT BY OTHERS. (SEE SITE PLAN ON FP-01 FOR CONTINUATION)
 - 8" DIP TO MAIN BUILDING BY OTHERS. (SEE SITE PLAN ON FP-01 FOR CONTINUATION)
 - 4" (2) x 2 1/2" GROOVED FIRE PUMP TEST HEADER
 - SEE FP-03 FOR PUMP ROOM CONFIGURATION
 - 2" UP TO UPPER CANOPY
 - INSTALL 2" MAIN TIGHT TO SIDE OF CANOPY. MAIN TO BE CONCEALED IN SOFFIT BY OTHERS.
 - DRY PIPE SYSTEM INSPECTOR'S TEST W/ DRUM DRIP. SEE DETAIL SFP-04
 - ZONE 10 VICTAULIC DRY PIPE VALVE ASSEMBLY FOR CANOPY SYSTEM. SEE DETAIL SFP-04
 - PROVIDE THERMAL EXPANSION LOOP ON 2" CPVC WHERE LONG STRAIGHT RUNS EXCEED MANUFACTURER LIMITS. SEE DETAIL THIS SHEET

- FIRE PROTECTION GENERAL NOTES**
- THE MILLER COMPANIES STARTS 1'-0" ABOVE FINISHED FLOOR. ALL UNDERGROUND PIPING BY OTHERS
 - SPRINGS 4 FT (1.2M) OR LONGER SHALL BE RESTRAINED AGAINST LATERAL MOVEMENT
 - SYSTEM DRAINS SHALL BE INSTALLED AS REQUIRED PER NFPA 13 AND EXTENDED OUTSIDE THE BUILDING
 - ALL CORRIDOR CEILING HEIGHTS AT 8'-0" AND UNIT CEILING HEIGHTS AT 10'-0" UNLESS NOTED OTHERWISE
 - FIRE SPRINKLERS SHALL NOT BE REQUIRED IN BATHROOMS THAT ARE LESS THAN 55 SQ FT IN AREA IN ACCORDANCE WITH NFPA 13 9.2.4.1
 - FIRE SPRINKLERS ARE NOT REQUIRED PER NFPA 13 9.2.4.2 IN CLOSETS, LINEN CLOSETS AND PANTRIES WITH DWELLING UNITS THAT MEET ALL THE FOLLOWING CONDITIONS:
 - THE AREA OF THE SPACE DOES NOT EXCEED 24 FT²
 - THE WALLS AND CEILINGS ARE SURFACED WITH NONCOMBUSTIBLE OR LIMITED-COMBUSTIBLE MATERIALS AS DEFINED BY NFPA 220
 - THE ATTIC AND INTERSTITIAL SPACES ARE TO BE FILLED WITH NONCOMBUSTIBLE INSULATION. FIRE SPRINKLERS ARE NOT REQUIRED FOR THIS CONCEALED SPACE WITH THE REQUIREMENTS OF NFPA 13 9.2.1.7 BEING MET
 - CPVC USED ABOVE CEILINGS IN ALL RESIDENTIAL AREAS. CONVERT PIPING TO STEEL IN EXPOSED AREAS AND ROOMS OF ORDINARY HAZARD OCCUPANCIES EXCEEDING 400 FT²
 - SPRINKLERS SHALL BE INSTALLED AT THE TOP OF COMBUSTIBLE STAIR SHAFTS, UNDER THE LANDINGS AT EACH FLOOR LEVEL AND BENEATH THE LOWEST INTERMEDIATE LANDING PER NFPA 13 9.2.4.1
 - ALL PIPING VALVES AND APPURTENANCES SHALL BE INSTALLED SUCH AS NOT TO OBSTRUCT ANY PORTION OF WINDOWS, DOORWAYS, STAIRS, PASSAGEWAYS OR ACCESS TO EQUIPMENT
 - DRY SYSTEM PIPING SHALL BE FITTED TO DRUM PER NFPA 13 9.2.4.3
 - BRANCHLINES SHALL BE FITTED AT LEAST 1/4 IN PER 10 FT
 - MAINS SHALL BE FITTED AT LEAST 1/4 IN PER 10 FT

PIPE SIZE 2" / 2.375 O.D.

LINEAR EXPANSION OF PIPE 5.7 IN

PIPE SIZE	MAX TEMP	MIN TEMP	PIPE RUN
2"	110°F	40°F	200 FT

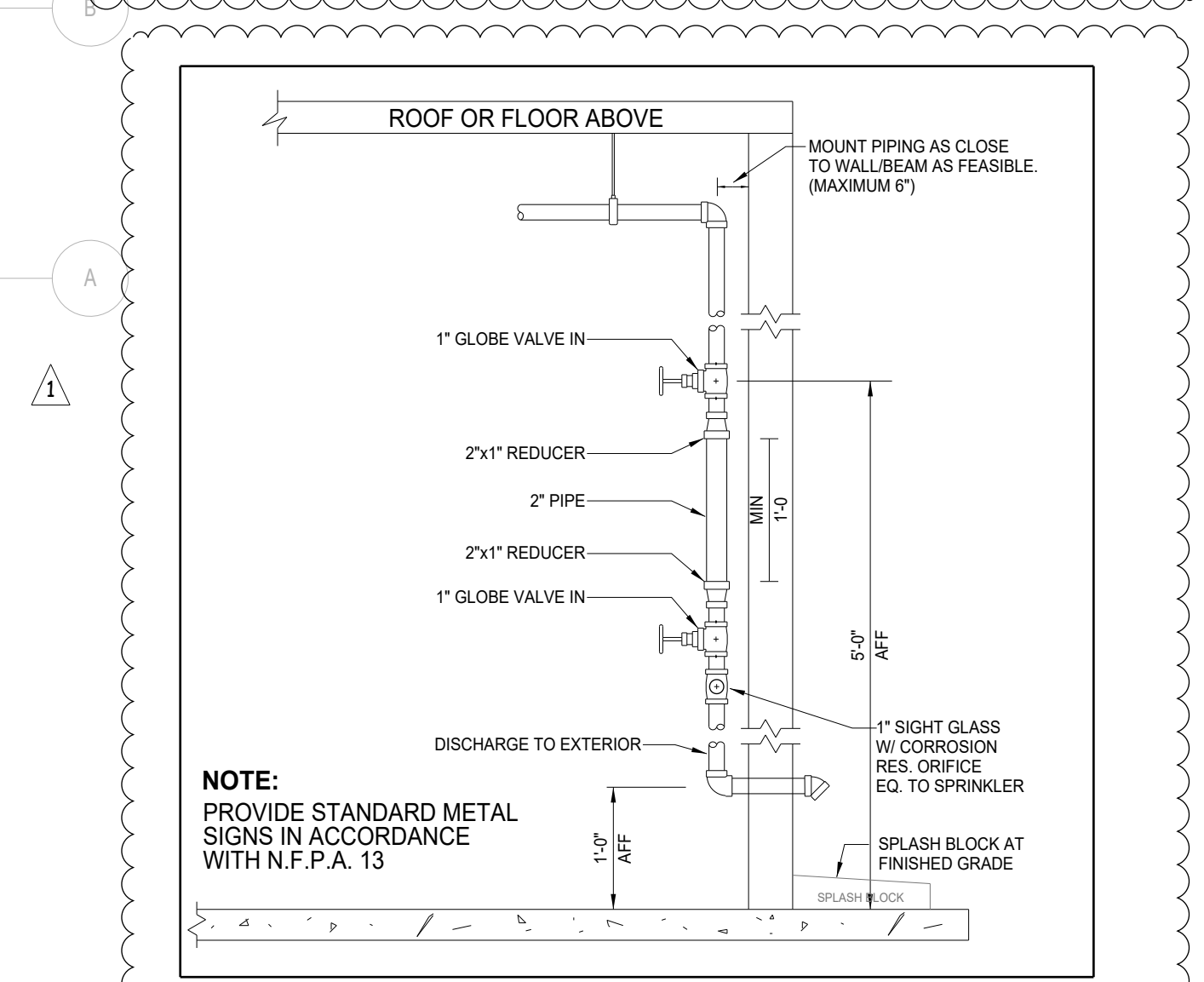


THERMAL EXPANSION LOOP DETAIL

SCALE: N.T.S.

CPVC PIPING SUBJECT TO THERMAL EXPANSION SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER INSTALLATION INSTRUCTIONS AND NFPA 13

EXPANSION LOOPS OR DIRECTION CHANGES ARE PROVIDED WHERE STRAIGHT RUNS EXCEED MANUFACTURER LIMITS



DRY PIPE SYSTEM - INSPECTORS TEST/RAIN DETAIL

FP-04 SCALE: N.T.S.

SIGHT GLASS AND ORIFICE REQUIRED AT INSPECTOR TEST LOCATION ONLY

ASBUILTS

TOR NAME: Home 2 Suites
475 Hospitality Blvd.
Greewood, SC 29649

CONTRACT WITH: John M. Campbell Company
102 Winchester Avenue
Monroe, NC 28110

PHONE: (704) 254-3214
DRAWN BY: TWH
DATE: 07/27/26
SCALE: AS NOTED
CONTRACT NO.: CP088

THE Miller COMPANIES

CONTRACTOR LICENSE NUMBER: NC # 36018 / SC # FSC 1078-B

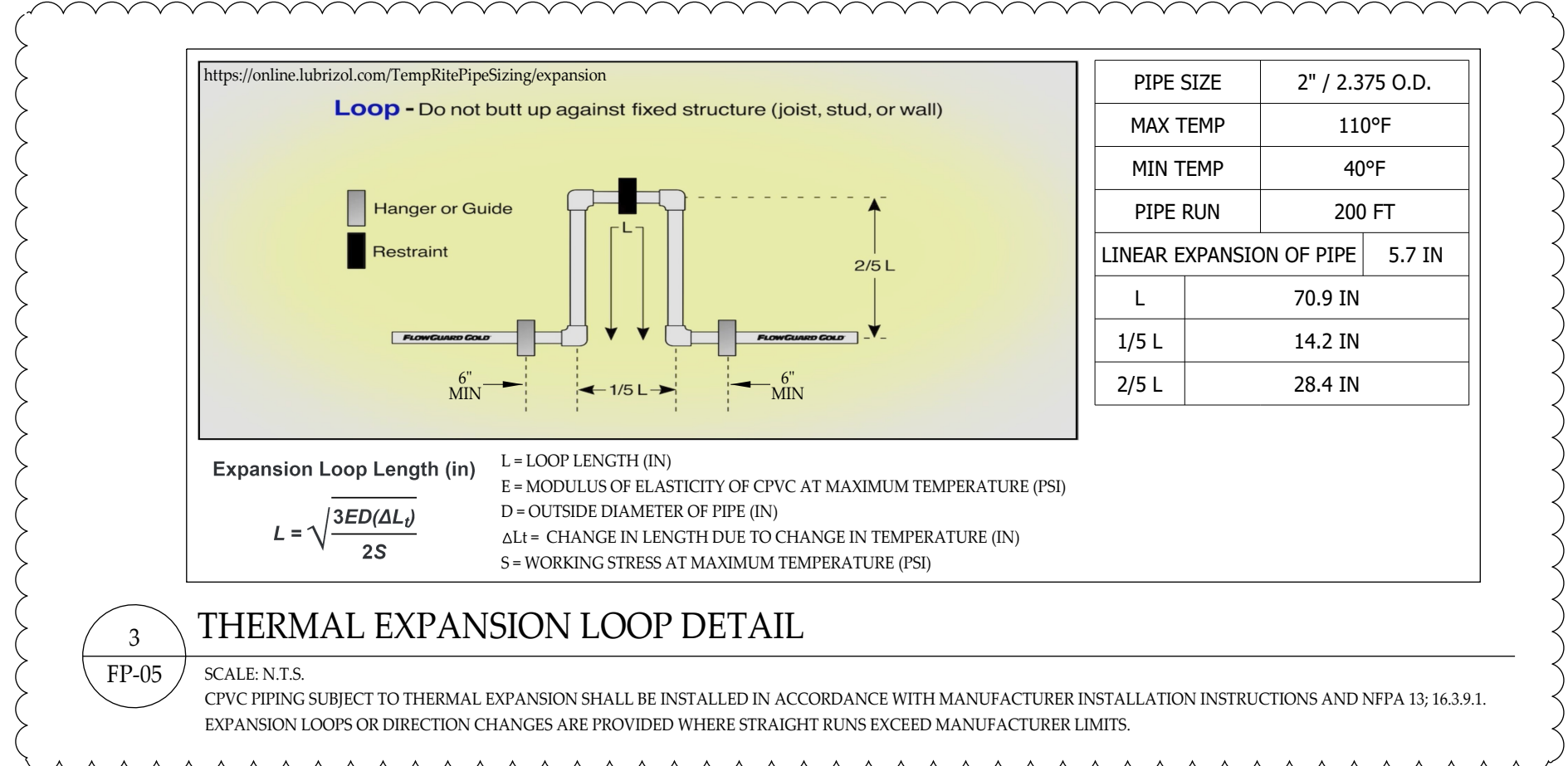
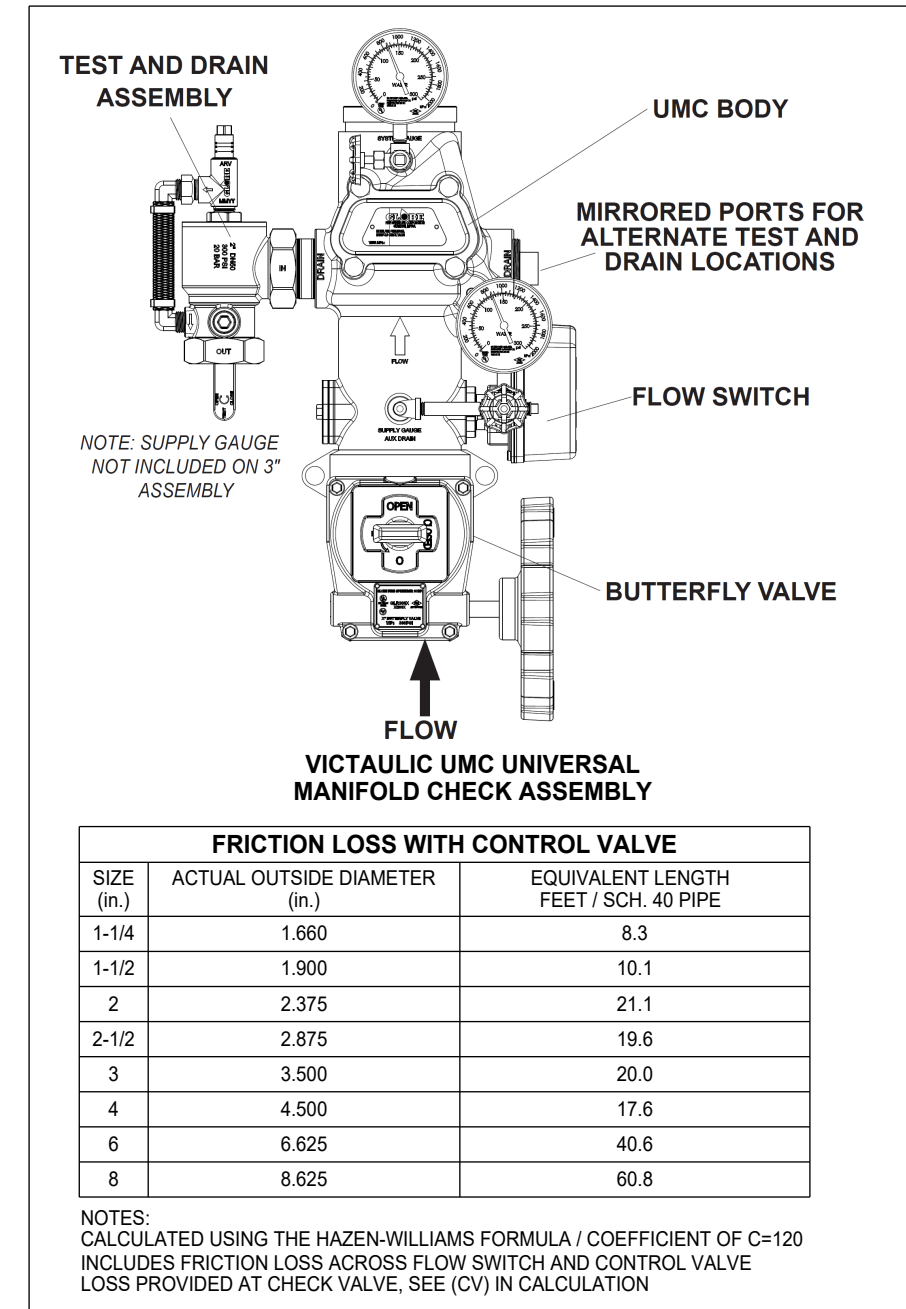
P O BOX 1090
CONCORD, N.C. 28026

P O BOX 458
PORTSMOUTH VA. 23705

PH: 704-784-4218
FAX: 704-784-4405

PH: 757-391-0090
FAX: 757-391-0098

FP-04 of 08



FIREWALL AND BARRIER NOTES	
2-HR FIRE RATED ASSEMBLY	
1-HR FIRE RATED ASSEMBLY	
GENERAL FIRE RATING NOTES	
1. ALL EXTERIOR BEARING WALLS ARE 1-HOUR RATED UNLESS OTHERWISE NOTED.	
2. ALL INTERIOR WOOD BEARING WALLS TO BE 1-HOUR RATED.	
3. ALL INTERSTITIAL TRUSS CAVITIES SHALL BE COMPLETELY FILLED WITH NON-COMBUSTIBLE BLOWN INSULATION. SPRINKLERS ARE NOT PROVIDED IN THIS AREA.	

Hydraulic Information	
Remote Area Zone 2 - King One Bedroom 229	
OCCUPANCY CLASSIFICATION	Residential
DENSITY (gpm/ft²)	0.10 for 484ft² (Actual 484ft²)
TOTAL HOSE STREAMS	100.00
TOTAL HEADS FLOWING	4
K-FACTOR	5.8, 4.9
P-BOR BASE OF RISER (gpm)	86.42
P-BOR BASE OF RISER (psi)	16.991
Zone 2 BASE OF RISER (gpm)	86.42
Zone 2 BASE OF RISER (psi)	76.556
SAFETY MARGIN (psi)	+26.278 (49.6%)

HYDRAULIC DESIGN NOTES:

USE OF VK468 RESIDENTIAL PENDENT HEADS

Max Spacing: 18x18

Minimum Flow: 17 GPM

Minimum Pressure: 12.0 PSI

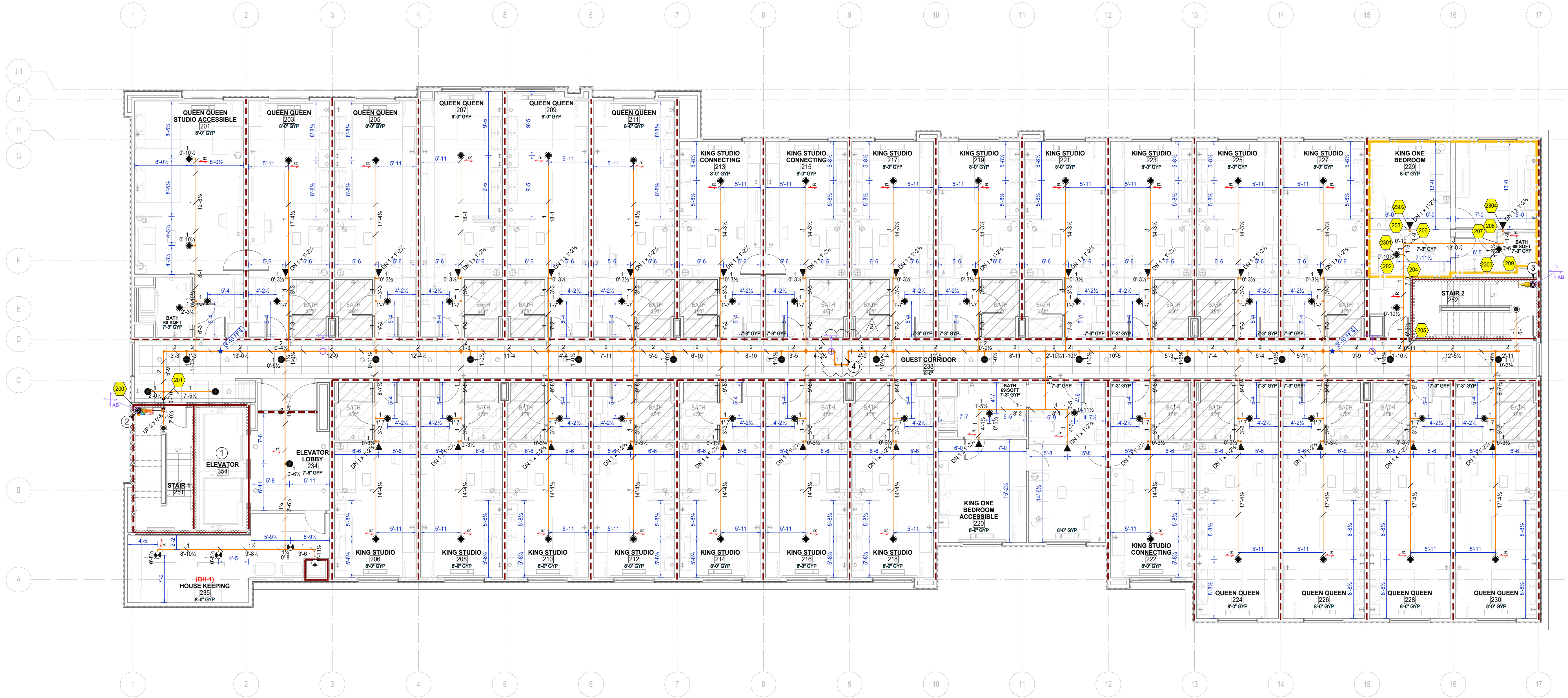
USE OF VK460 RESIDENTIAL SIDEWALL HEADS

Max Spacing: 16x16

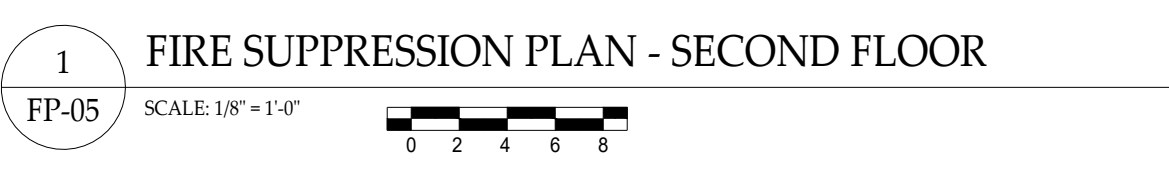
Minimum Flow: 20 GPM

Minimum Pressure: 11.9 PSI

FIRE PROTECTION KEY NOTES	
1. SPRINKLERS AT THE TOP AND BOTTOM OF ELEVATOR SHAFT ARE NOT REQUIRED PER NFPA 13, 9.3.6.2 (BOTTOM) AND 9.3.6.3 (TOP) AND ANNE 4.1.1.	2.
2. EXPOSED 4" MANUAL CLASS-I COMBINATION STANDPIPE W/ 2" PCA (ZONE 2) AND 2 1/2" HOSE ANGLE VALVE.	2.
3. EXPOSED 4" MANUAL CLASS-I STANDPIPE SYSTEM.	2.
FIRE PROTECTION GENERAL NOTES	
1. THE HILLER COMPANIES STARTS 1'-0" ABOVE FINISHED FLOOR, ALL UNDERGROUND PIPING BY OTHERS.	
2. SPRIGS 4 FT (1.2M) OR LONGER SHALL BE RESTRAINED AGAINST LATERAL MOVEMENT.	
3. SYSTEM DRAINS SHALL BE INSTALLED AS REQUIRED PER NFPA 13 AND EXTENDED OUTSIDE THE BUILDING.	
4. ALL CORRIDOR CEILING HEIGHTS AT 8'-6" AND UNIT CEILING HEIGHTS AT 10'-0" UNLESS NOTED OTHERWISE.	
5. FIRE SPRINKLERS SHALL NOT BE REQUIRED IN BATHROOMS THAT ARE LESS THAN 55 FT² IN AREA IN ACCORDANCE WITH NFPA 13, 9.2.4.1.1.	
6. FIRE SPRINKLERS ARE NOT REQUIRED PER NFPA 13, 9.2.4.2, IN CLOSETS, LINEN CLOSETS AND PANTRIES WITHIN DWELLING UNITS THAT MEET ALL THE FOLLOWING CONDITIONS: • THE AREA OF THE SPACE DOES NOT EXCEED 34 FT². • THE WALLS AND CEILINGS ARE SURFACED WITH NONCOMBUSTIBLE OR LIMITED-COMBUSTIBLE MATERIALS AS DEFINED BY NFPA 220.	
7. THE ATTIC AND INTERSTITIAL SPACES ARE TO BE FILLED WITH NONCOMBUSTIBLE INSULATION. FIRE SPRINKLERS ARE NOT REQUIRED FOR THIS CONCEALED SPACE WITH THE REQUIREMENTS OF NFPA 13, 9.2.1.7 BENDING MET.	
8. CPVC USED ABOVE CEILINGS IN ALL RESIDENTIAL AREAS. CONVERT PIPING TO STEEL IN EXPOSED AREAS AND ROOMS OF ORDINARY HAZARD OCCUPANCIES EXCEEDING 400 FT².	
9. SPRINKLERS SHALL BE INSTALLED AT THE TOP OF COMBUSTIBLE STAIR SHAFTS, UNDER THE LANDINGS AT EACH FLOOR LEVEL AND BENEATH THE LOWEST INTERMEDIATE LANDING PER NFPA 13, 9.3.4.1.	
10. ALL PIPING VALVES AND APPURTENANCES SHALL BE INSTALLED SUCH AS NOT TO OBSTRUCT ANY PORTION OF WINDOWS, DOORWAYS, STAIRS, PASSAGEWAYS OR ACCESS TO EQUIPMENT.	

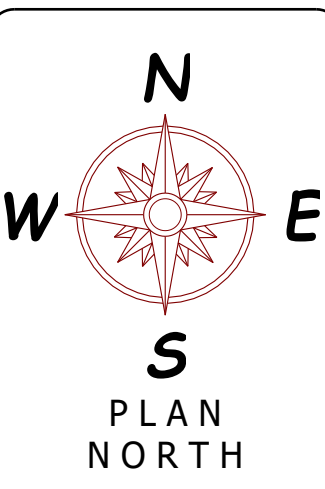


SEISMIC AND BRANCHLINE RESTRAIN NOTE	
1. WHERE SHORT RODS AND STRAPS ARE USED - NO LATERAL BRACING REQUIRED PER NFPA 13, 18.5.5.10.2.	
2. WHERE SHORT RODS AND STRAPS ARE USED - NO BRANCHLINE RESTRAINTS REQUIRED PER NFPA 13, 18.5.5.10.1 AND 18.6.5.	



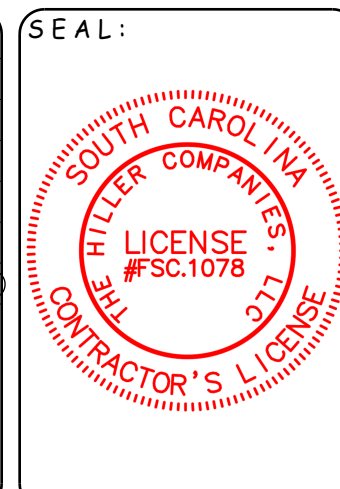
Sprinkler Legend - Total 2nd Floor										
Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature
⬤	Viking	VK468	Freedom	59	4.9	Pendent	1/2"	Fast	Chrome	155°F
⬤	Viking	VK460	Freedom	29	5.8	Horizontal Sidewall	1/2"	Fast	Chrome	155°F
⬤	Viking	VK302	Microfast	3	5.6	Pendent	1/2"	Quick	Chrome	200°F
⬤	Viking	VK494	Freedom	17	4.9	Concealed Pendent	1/2"	Fast	Brass	155°F
⬤	Viking	VK4621	Concealed	2	5.8	Concealed Pendent	1/2"	Quick	Brass	155°F
⬤	Reliable	R1015	G	1	5.6	Pendent	1/2"	Standard	Brass	165°F
				Total = 111						

It is the sole responsibility of owner and owners representative to insure that this building/buildings has proper heat and insulation to prevent fire sprinkler pipe, fittings and devices from freezing.



GENERAL NOTES:
1. SYSTEMS ARE DESIGNED AND INSTALLED PER NFPA 13 (2019 EDITION)
2. RESIDENTIAL SYSTEM PIPING 2" AND SMALLER TO BE CPVC WITH CPVC FITTINGS. CONVERT TO BLACK STEEL PIPE AND FITTINGS WHERE EXPOSED.
3. STEEL SYSTEM PIPING 2" AND SMALLER TO BE SCH. 40 BLACK STEEL PIPE AND FITTINGS ARE THREADED / GROOVED / FLANGED / WELDED.
4. STEEL SYSTEM PIPING 2 1/2" OR LARGER TO BE SCH. 10 BLACK STEEL PIPE AND FITTINGS ARE GROOVED / FLANGED / WELDED.
5. ALL HANGERS ARE TO MEET THE CRITERIA SET FORTH BY NFPA 13 (2019 EDITION) AND SPACED ACCORDING TO MANUFACTURER SPECIFICATIONS.
6. WIRING OF ELECTRICAL EQUIPMENT IS TO BE BY OTHERS.
7. PAINTINGS OF PIPE OR COMPONENTS SHALL BE BY OTHERS.
8. ⬤ - REPRESENTS A HYDRAULIC REFERENCE POINT.
9. THE HILLER COMPANIES TO START 1'-0" ABOVE FINISHED FLOOR.
10. ALL UNDERGROUND PIPING BY OTHERS.
11. SPRINKLERS LOCATED 7'-6" OR LESS FROM FLOOR TO BE PROTECTED WITH APPROVED GUARDS.

WATER SUPPLY INFORMATION			
STATIC PRESSURE	53	FIRE PUMP	YES
RESIDUAL PRESSURE	51	SIZE GPM @ PSI	300 @ 60
FLOW G.P.M.	1160	TYPE OF DRIVER	VIP
DATE OF TEST	09/30/2025	ELECTRICAL REQ.S	208V
HYDRANT LOCATION	© TEST NODE (SEE SITE PLAN)		
TEST TAKEN BY	GREENWOOD CPW		
NOTES:	TESTED BY - MIKE PROCTOR WITNESSED BY - RUSSELL HOLLEY CONTACT EMAIL - RHOLLEY@GREENWOODCPW.COM HYDRANT LOCATION - SEE FP-01		



NICET REVIEW STAMP

JUAN OCHOA

NICET #0199445

LEVEL IV

WATER BASED SYSTEMS LAYOUT

SIGNED: *[Signature]*

VALID THROUGH 01/01/2027

Sprinkler Legend - Total Project										
Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature
⬤	Viking	VK300	Microfast	9	5.6	Upright	1/2"	Quick	Brass	200°F
⬤	Viking	VK4621	Concealed	55	5.8	Concealed Pendent	1/2"	Quick	Brass	155°F
⬤	Viking	VK302	Microfast	33	5.6	Pendent	1/2"	Quick	Chrome	200°F
⬤	Viking	VK4621	Concealed	1	5.6	Concealed Pendent	1/2"	Quick	Brass	200°F
⬤	Viking	VK494	Freedom	59	4.9	Concealed Pendent	1/2"	Fast	Brass	155°F
⬤	Viking	VK305	Microfast	3	5.8	Horizontal Sidewall	1/2"	Quick	Chrome	200°F
⬤	Viking	VK460	Freedom	104	5.8	Horizontal Sidewall	1/2"	Fast	Chrome	155°F
⬤	Viking	VK482	Dry	7	5.6	Pendent	1	Quick	White Polyester	205°F
⬤	Viking	VK468	Freedom	208	4.9	Pendent	1/2"	Fast	Chrome	155°F
⬤	Reliable	R1015	G	4	5.6	Pendent	1/2"	Standard	Brass	165°F
				Total = 483						

NO.	DATE	REVISION DISCRIPTION	BY
1	12/18/25	ENGINEER'S COMMENTS	TWH
2	01/13/26	FIRE MARSHAL'S COMMENTS (DEREK ALLMOND)	TWH
3	02/06/26	STAIR 1 (RISER LOCATION CHANGE)	TWH
4	07/27/26	PUMP ROOM REVISION	TWH

THE Hiller COMPANIES

CONTRACTOR LICENSE NUMBER: NC # 36018 / SC # FSC 1078-B

P O BOX 1090
CONCORD, N.C. 28026

PH: 704-784-4218
FAX: 704-784-4405

P O BOX 458
PORTSMOUTH VA. 23705

PH: 757-391-0090
FAX: 757-391-0098

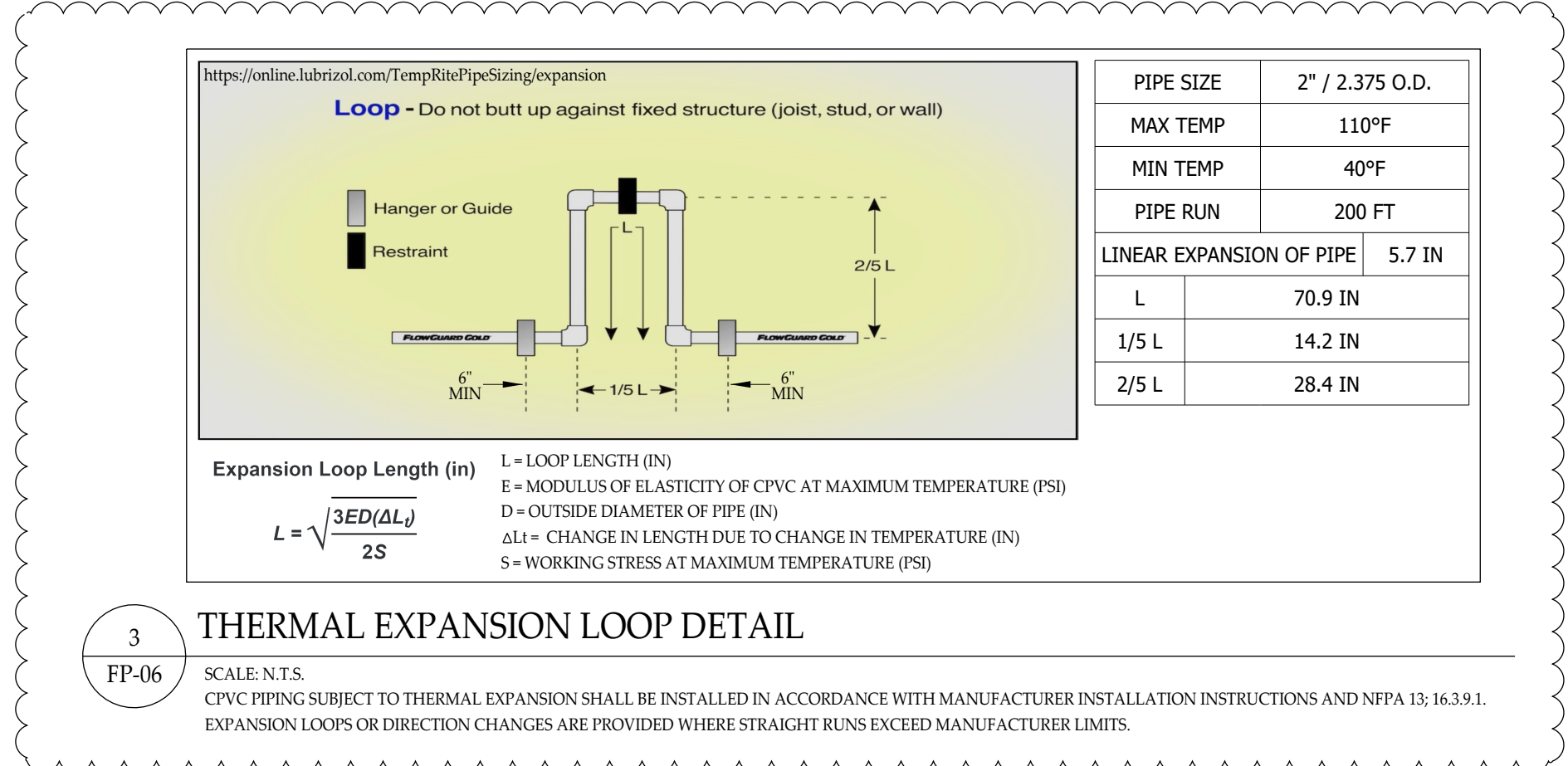
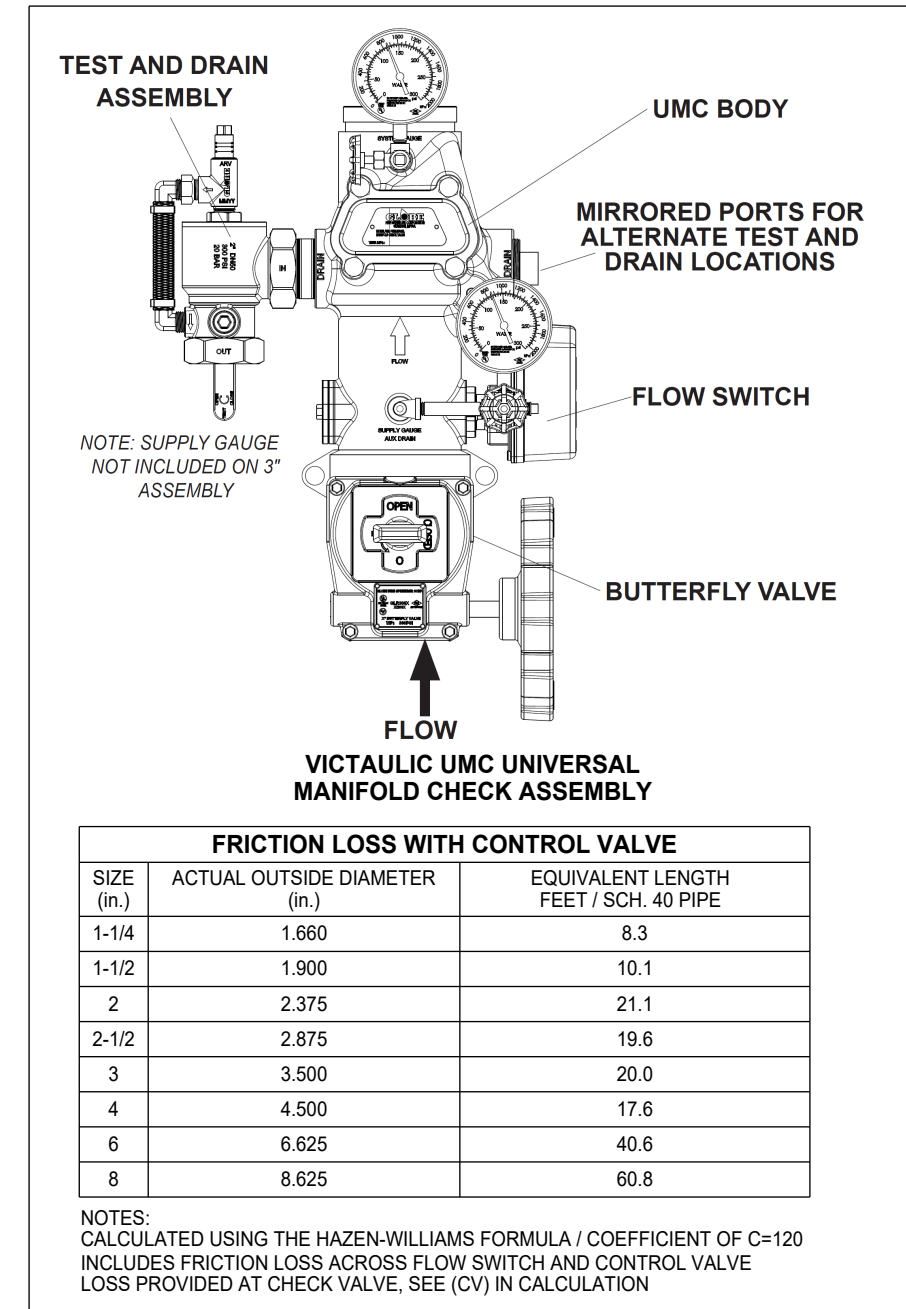
TOR NAME: Home 2 Suites
475 Hospitality Blvd.
Greenwood, SC 29649

CONTRACT WITH: John M. Campbell Company
102 Winchester Avenue
Monroe, NC 28110

PHONE: (704) 254-3214
DRAWING NAME: FIRE SUPPRESSION PLAN - SECOND FLOOR
DRAWN BY: TWH
AHL: LLR / Greenwood FM
DATE: 07/27/26
SCALE: AS NOTED
CONTRACT NO.: CP5888

FP-05 of 08

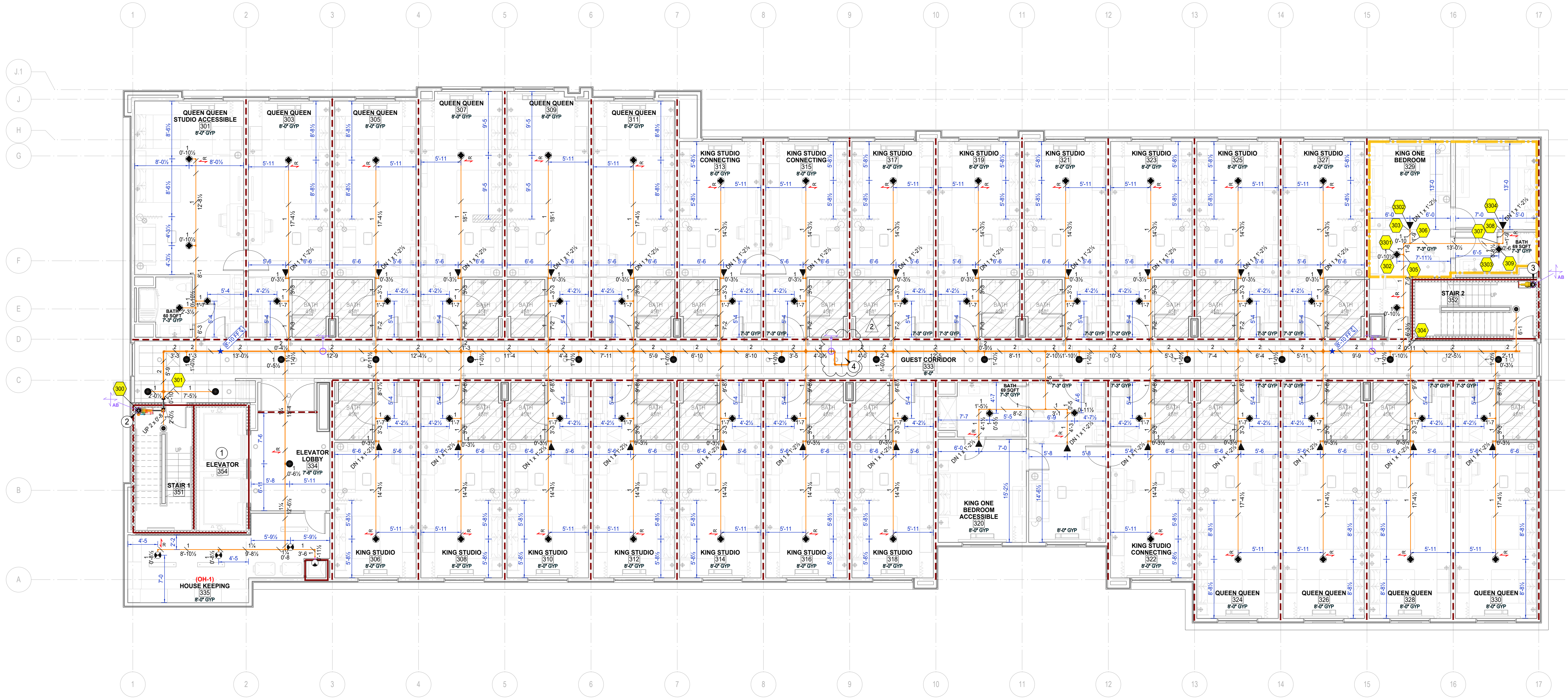
ASBUILTS



FIREWALL AND BARRIER NOTES	
2-HR FIRE RATED ASSEMBLY	-----
1-HR FIRE RATED ASSEMBLY	-----
GENERAL FIRE RATING NOTES	
1. ALL EXTERIOR BEARING WALLS ARE 1-HOUR RATED UNLESS OTHERWISE NOTED.	
2. ALL INTERIOR WOOD BEARING WALLS TO BE 1-HOUR RATED.	
3. ALL INTERSTITIAL TRUSS CAVITIES SHALL BE COMPLETELY FILLED WITH NON-COMBUSTIBLE BLOWN INSULATION. SPRINKLERS ARE NOT PROVIDED IN THIS AREA.	

FIRE PROTECTION KEY NOTES	
1. SPRINKLERS AT THE TOP AND BOTTOM OF ELEVATOR SHAFT ARE NOT REQUIRED PER NFPA 13, 9.3.6.2 (BOTTOM) AND 9.3.6.3 (TOP) AND ANGLE AT 1/2".	2.
2. EXPOSED 4" MANUAL CLASS-I COMBINATION STANDPIPE W/ 2" FCA (ZONE 3) AND 2 1/2" HOSE ANGLE VALVE.	2.
3. EXPOSED 4" MANUAL CLASS-I STANDPIPE SYSTEM.	2.
FIRE PROTECTION GENERAL NOTES	
1. THE HILLER COMPANIES STARTS 1'-0" ABOVE FINISHED FLOOR, ALL UNDERGROUND PIPING BY OTHERS.	
2. SPRIGS 4 FT (1.2M) OR LONGER SHALL BE RESTRAINED AGAINST LATERAL MOVEMENT.	
3. SYSTEM DRAINS SHALL BE INSTALLED AS REQUIRED PER NFPA 13 AND EXTENDED OUTSIDE THE BUILDING.	
4. ALL CORRIDOR CEILING HEIGHTS AT 8'-6" AND UNIT CEILING HEIGHTS AT 10'-0" UNLESS NOTED OTHERWISE.	
5. FIRE SPRINKLERS SHALL NOT BE REQUIRED IN BATHROOMS THAT ARE LESS THAN 55 FT ² IN AREA IN ACCORDANCE WITH NFPA 13, 9.2.4.1.1.	
6. FIRE SPRINKLERS ARE NOT REQUIRED PER NFPA 13, 9.2.4.2, IN CLOSETS, LINEN CLOSETS AND PANTRIES WITHIN DWELLING UNITS THAT MEET ALL THE FOLLOWING CONDITIONS: • THE AREA OF THE SPACE DOES NOT EXCEED 34 FT ² . • THE WALLS AND CEILINGS ARE SURFACED WITH NONCOMBUSTIBLE OR LIMITED-COMBUSTIBLE MATERIALS AS DEFINED BY NFPA 220.	
7. THE ATTIC AND INTERSTITIAL SPACES ARE TO BE FILLED WITH NONCOMBUSTIBLE INSULATION. FIRE SPRINKLERS ARE NOT REQUIRED FOR THIS CONCEALED SPACE WITH THE REQUIREMENTS OF NFPA 13, 9.2.1.7 BENDING MET.	
8. CPVC USED ABOVE CEILINGS IN ALL RESIDENTIAL AREAS. CONVERT PIPING TO STEEL IN EXPOSED AREAS AND ROOMS OF ORDINARY HAZARD OCCUPANCIES EXCEEDING 400 FT ² .	
9. SPRINKLERS SHALL BE INSTALLED AT THE TOP OF COMBUSTIBLE STAIR SHAFTS, UNDER THE LANDINGS AT EACH FLOOR LEVEL AND BENEATH THE LOWEST INTERMEDIATE LANDING PER NFPA 13, 9.3.4.1.	
10. ALL PIPING VALVES AND APPURTENANCES SHALL BE INSTALLED SUCH AS NOT TO OBSTRUCT ANY PORTION OF WINDOWS, DOORWAYS, STAIRS, PASSAGEWAYS OR ACCESS TO EQUIPMENT.	

Hydraulic Information	
Remote Area Zone 3 - King One Bedroom 329	
OCCUPANCY CLASSIFICATION	Residential
DENSITY (gpm/ft ²)	0.10 for 484ft ² (Actual 484ft ²)
TOTAL HOSE STREAMS	100.00
TOTAL HEADS FLOWING	4
K-FACTOR	5.8, 4.9
P-BOR BASE OF RISER (gpm)	86.42
P-BOR BASE OF RISER (psi)	21.783
Zone 2 BASE OF RISER (gpm)	86.42
Zone 2 BASE OF RISER (psi)	81.348
Zone 3 BASE OF RISER (gpm)	86.42
Zone 3 BASE OF RISER (psi)	76.556
SAFETY MARGIN (psi)	+21.486 (40.6%)
HYDRAULIC DESIGN NOTES:	
USE OF VK468 RESIDENTIAL PENDENT HEADS	
Max Spacing: 18x18	
Minimum Flow: 17 GPM	
Minimum Pressure: 12.0 PSI	
USE OF VK460 RESIDENTIAL SIDEWALL HEADS	
Max Spacing: 16x16	
Minimum Flow: 20 GPM	
Minimum Pressure: 11.9 PSI	



SEISMIC AND BRANCHLINE RESTRAIN NOTE

1. WHERE SHORT RODS AND STRAPS ARE USED - NO LATERAL BRACING REQUIRED PER NFPA 13, 18.5.5.10.2.

2. WHERE SHORT RODS AND STRAPS ARE USED - NO BRANCHLINE RESTRAINTS REQUIRED PER NFPA 13, 18.5.5.10.1 AND 18.6.5.

1

FP-06

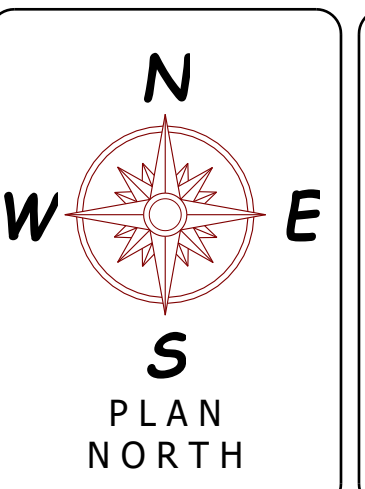
SCALE: 1/8" = 1'-0"

0 2 4 6 8

FIRE SUPPRESSION PLAN - THIRD FLOOR

Sprinkler Legend - Total 3rd Floor												
Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature	Note	Max Spacing
	Viking	VK494	Freedom	17	4.9	Concealed Pendent	1/2"	Fast	Brass	155°F	White Coverplate	18 x 18 / 324ft²
	Viking	VK460	Freedom	29	5.8	Horizontal Sidewall	1/2"	Fast	Chrome	155°F	Chrome Res Esc	16 x 16 ft / 256ft²
	Viking	VK460	Freedom	59	4.9	Pendent	1/2"	Fast	Chrome	155°F	Chrome Res Esc	18 x 18 / 324ft²
	Viking	VK4621	Concealed	2	5.6	Concealed Pendent	1/2"	Quick	Brass	155°F	White Coverplate	130ft² OH / 225ft² LH
	Viking	VK302	Microfast	3	5.6	Pendent	1/2"	Quick	Chrome	200°F	Chrome Res Esc	130ft² OH / 225ft² LH
	Reliable	R1015	G	1	5.6	Pendent	1/2"	Standard	Brass	165°F	Connect Chute Head	100ft² OH / 196ft² LH
				Total = 111								

It is the sole responsibility of owner and owners representative to insure that this building/buildings has proper heat and insulation to prevent fire sprinkler pipe, fittings and devices from freezing.



GENERAL NOTES:

1. SYSTEMS ARE DESIGNED AND INSTALLED PER NFPA 13 (2019 EDITION)

2. RESIDENTIAL SYSTEM PIPING 2" AND SMALLER TO BE CPVC WITH CPVC FITTINGS. CONVERT TO BLACK STEEL PIPE AND FITTINGS WHERE EXPOSED.

3. STEEL SYSTEM PIPING 2" AND SMALLER TO BE SCH. 40 BLACK STEEL PIPE AND FITTINGS ARE THREADED / GROOVED / FLANGED / WELDED.

4. STEEL SYSTEM PIPING 2 1/2" OR LARGER TO BE SCH. 10 BLACK STEEL PIPE AND FITTINGS ARE GROOVED / FLANGED / WELDED.

5. ALL HANGERS ARE TO MEET THE CRITERIA SET FORTH BY NFPA 13 (2019 EDITION) AND SPACED ACCORDING TO MANUFACTURER SPECIFICATIONS.

6. WIRING OF ELECTRICAL EQUIPMENT IS TO BE BY OTHERS.

7. PAINTINGS OF PIPE OR COMPONENTS SHALL BE BY OTHERS.

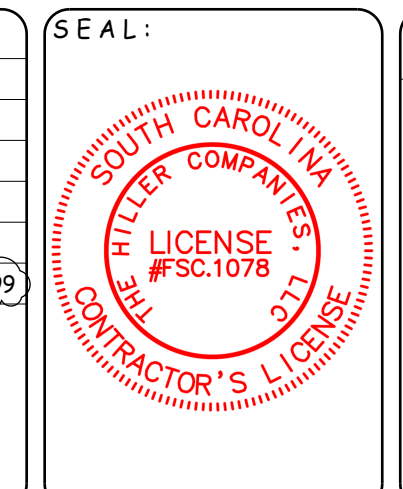
8. ○ REPRESENTS A HYDRAULIC REFERENCE POINT.

9. THE HILLER COMPANIES TO START 1'-0" ABOVE FINISHED FLOOR.

10. ALL UNDERGROUND PIPING BY OTHERS.

11. SPRINKLERS LOCATED 7'-6" OR LESS FROM FLOOR TO BE PROTECTED WITH APPROVED GUARDS.

WATER SUPPLY INFORMATION			
STATIC PRESSURE	53	FIRE PUMP	YES
RESIDUAL PRESSURE	51	SIZE GPM @ PSI	300 @ 60
FLOW G.P.M.	1160	TYPE OF DRIVER	VIP
DATE OF TEST	09/30/2025	ELECTRICAL REQ.S	208V
HYDRANT LOCATION	© TEST NODE (SEE SITE PLAN)		
TEST TAKEN BY	GREENWOOD CPW	NODE #1	(864) 942-8199
NOTES: TESTED BY - MIKE PROCTOR WITNESSED BY - RUSSELL HOLLEY CONTACT EMAIL - RHOLLEY@GREENWOODCPW.COM HYDRANT LOCATION - SEE PP-01			



NICET REVIEW STAMP

JUAN OCHOA

NICET #1939445

LEVEL IV

WATER BASED SYSTEMS LAYOUT

SIGNED: *[Signature]*

VALID THROUGH 01/01/2027

Sprinkler Legend - Total Project												
Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature	Note	Max Spacing
	Viking	VK300	Microfast	9	5.6	Upright	1/2"	Quick	Brass	200°F	Exposed	130ft ² OH / 225ft ² LH
	Viking	VK4621	Concealed	55	5.6	Concealed Pendent	1/2"	Quick	Brass	155°F	White Coverplate	130ft ² OH / 225ft ² LH
	Viking	VK302	Microfast	33	5.6	Pendent	1/2"	Quick	Chrome	200°F	Chrome Res Esc	130ft ² OH / 225ft ² LH
	Viking	VK4621	Concealed	1	5.6	Concealed Pendent	1/2"	Quick	Brass	200°F	White Coverplate	130ft ² OH / 225ft ² LH
	Viking	VK494	Freedom	59	4.9	Concealed Pendent	1/2"	Fast	Brass	155°F	White Coverplate	18 x 18 / 324ft ²
	Viking	VK305	Microfast	3	5.6	Horizontal Sidewall	1/2"	Quick	Chrome	200°F	Chrome Res Esc	100ft ² OH / 196ft ² LH
	VK460	Freedom	104	5.8	Horizontal Sidewall	1/2"	Fast	Chrome	155°F	Chrome Res Esc	16 x 16 / 256ft ²	
	Viking	VK482	Dry	7	5.6	Pendent	1	Quick	White Polyester	205°F	White Flat Esc	130ft ² OH / 225ft ² LH
	Viking	VK468	Freedom	208	4.9	Pendent	1/2"	Fast	Chrome	155°F	Chrome Res Esc	18 x 18 / 324ft ²
	Reliable	R1015	G	4	5.6	Pendent	1/2"	Standard	Brass	165°F	Connect Chute Head	100ft ² OH / 196ft ² LH
				Total = 483								

NO.	DATE	REVISION DISCRIPTION	BY
1	12/18/25	ENGINEER'S COMMENTS	TWH
2	01/13/26	FIRE MARSHAL'S COMMENTS (DEREK ALLMOND)	TWH
3	02/06/26	STAIR 1 (RISER LOCATION CHANGE)	TWH
4	07/27/26	PUMP ROOM REVISION	TWH

THE Hiller COMPANIES

CONTRACTOR LICENSE NUMBER: NC # 36018 / SC # FSC 1078-B

P O BOX 1090
CONCORD, N.C. 28026

PH: 704-784-4218
FAX: 704-784-4405

P O BOX 458
PORTSMOUTH VA. 23705

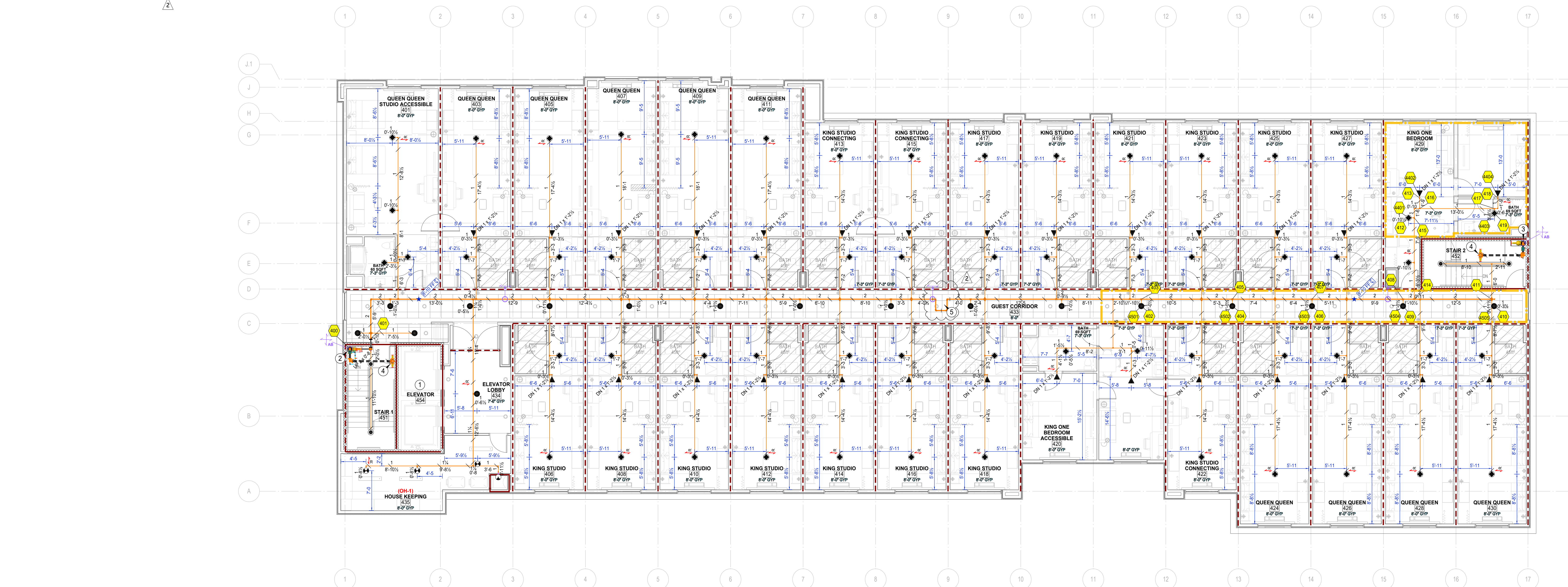
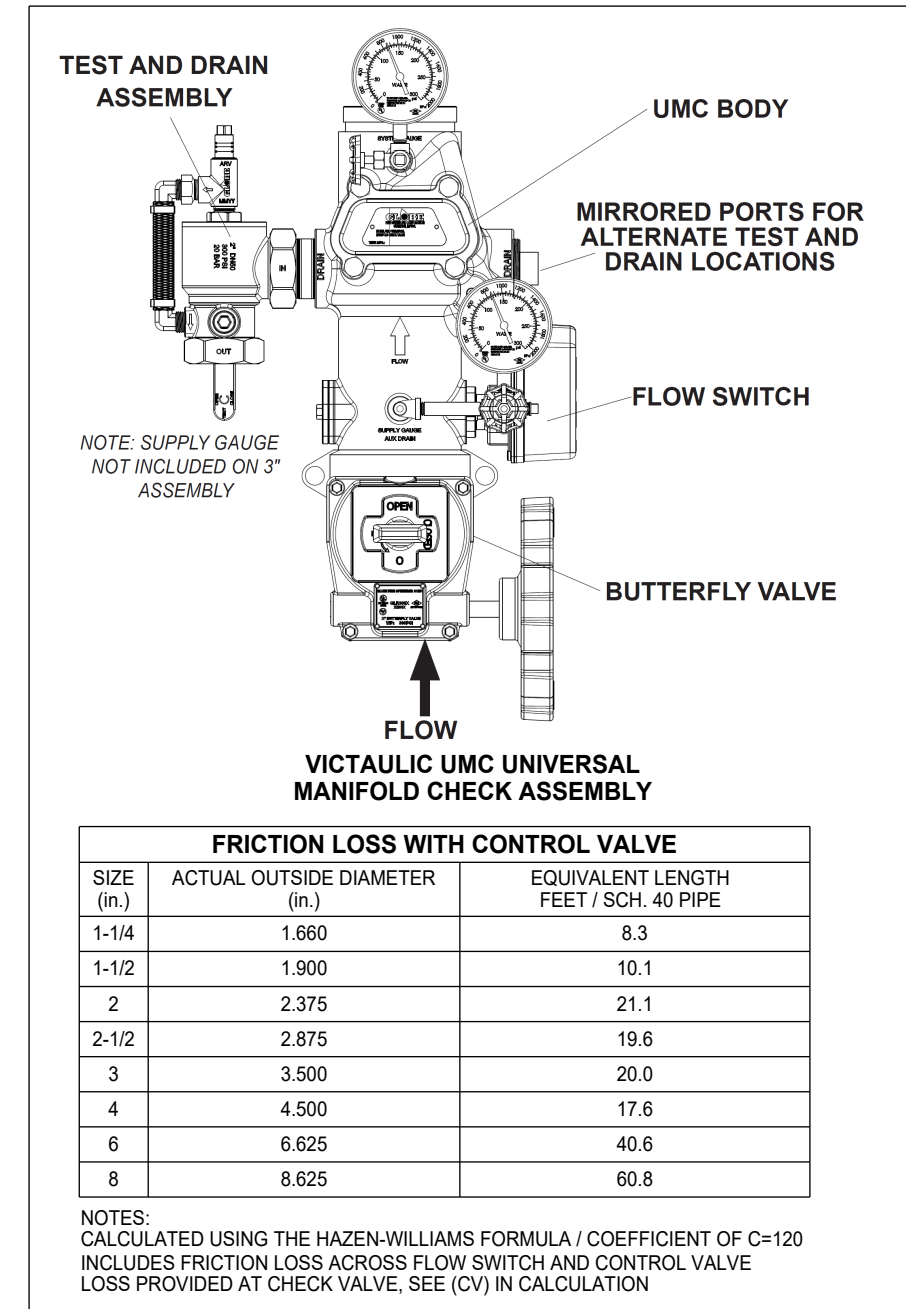
PH: 757-391-0050
FAX: 757-391-0098

TOR NAME: Home 2 Suites
475 Hospitality Blvd.
Greenwood, SC 29649

CONTRACT WITH: John M. Campbell Company
102 Winchester Avenue
Monroe, NC 28110

PHONE: (704) 254-3214
DRAWING NAME: FIRE SUPPRESSION PLAN - THIRD FLOOR
DRAWN BY: TWH
AHJ: LLR / Greenwood FM
DATE: 07/27/26
SCALE: AS NOTED
CONTRACT NO.: CP0588

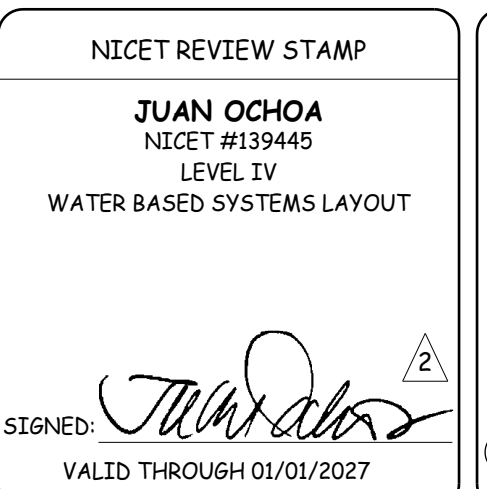
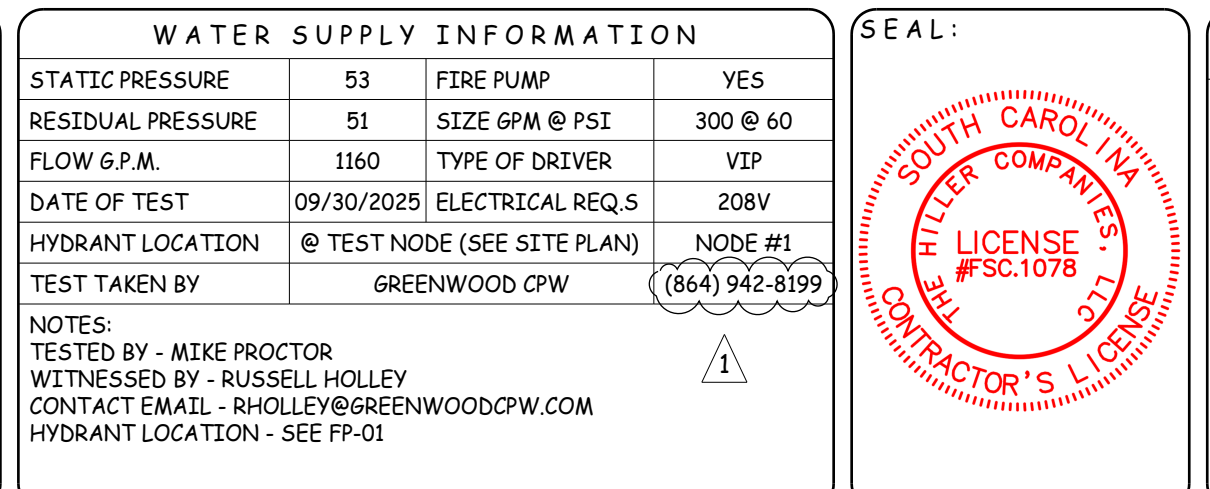
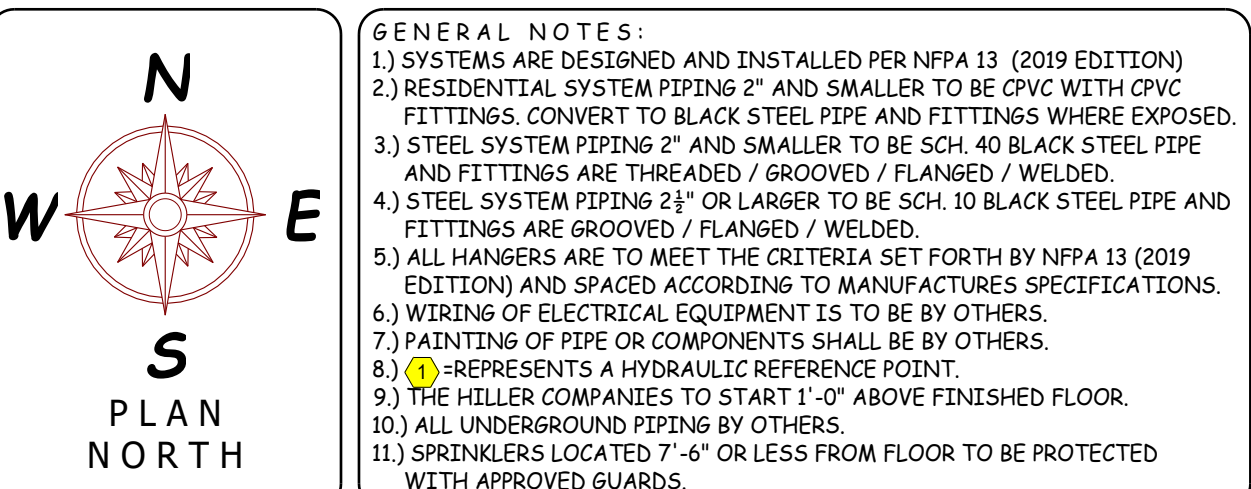
FP-06 of 08



Sprinkler Legend - Total 4th Floor

Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature	Note	Max Spacing
●	Viking	VK460	Freedom	29	5.8	Horizontal Sidewall	1/2"	Fast	Chrome	155°F	Chrome Res Esc	16 x 16 ft / 256ft²
●	Viking	VK494	Freedom	17	4.9	Concealed Pendant	1/2"	Fast	Brass	155°F	White Coverplate	16 x 16 / 324ft²
●	Viking	VK4621	Concealed	4	5.8	Concealed Pendant	1/2"	Quick	Brass	155°F	White Coverplate	130ft² OH / 225ft² LH
●	Viking	VK468	Freedom	59	4.9	Pendant	1/2"	Fast	Chrome	155°F	Chrome Res Esc	16 x 16 / 324ft²
●	Viking	VK302	Microfast	3	5.6	Pendant	1/2"	Quick	Chrome	200°F	Chrome Res Esc	130ft² OH / 225ft² LH
●	Reliable	R1015	G	1	5.6	Pendant	1/2"	Standard	Brass	165°F	Connect Chute Head	100ft² OH / 196ft² LH
Total 9-113												

It is the sole responsibility of owner and owners representative to insure that this building/buildings has proper heat and insulation to prevent fire sprinkler pipe, fittings and devices from freezing.



Sprinkler Legend - Total Project

Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature	Note	Max Spacing
●	Viking	VK300	Microfast	9	5.6	Upright	1/2"	Quick	Brass	200°F	White Coverplate	130ft² OH / 225ft² LH
●	Viking	VK4621	Concealed	55	5.8	Concealed Pendant	1/2"	Quick	Brass	155°F	White Coverplate	130ft² OH / 225ft² LH
●	Viking	VK302	Microfast	33	5.6	Pendant	1/2"	Quick	Chrome	200°F	Chrome Res Esc	130ft² OH / 225ft² LH
●	Viking	VK4621	Concealed	1	5.6	Concealed Pendant	1/2"	Quick	Brass	200°F	White Coverplate	130ft² OH / 225ft² LH
●	Viking	VK494	Freedom	59	4.9	Concealed Pendant	1/2"	Fast	Brass	155°F	White Coverplate	16 x 16 / 324ft²
●	Viking	VK305	Microfast	3	5.8	Horizontal Sidewall	1/2"	Quick	Chrome	200°F	Chrome Res Esc	100ft² OH / 196ft² LH
●	Viking	VK460	Freedom	104	5.8	Horizontal Sidewall	1/2"	Fast	Chrome	155°F	Chrome Res Esc	16 x 16 ft / 256ft²
●	Viking	VK482	Dry	7	5.6	Pendant	1	Quick	White Polyester	205°F	White Flat Esc	130ft² OH / 225ft² LH
●	Viking	VK468	Freedom	208	4.9	Pendant	1/2"	Fast	Chrome	155°F	Chrome Res Esc	16 x 16 / 324ft²
●	Reliable	R1015	G	4	5.6	Pendant	1/2"	Standard	Brass	165°F	Connect Chute Head	100ft² OH / 196ft² LH
Total 483												

NO.	DATE	REVISION DISCRIPTION	BY
1	12/18/25	ENGINEER'S COMMENTS	TWH
2	01/13/26	FIRE MARSHAL'S COMMENTS (DEREK ALLMOND)	TWH
3	02/06/26	STAIR 1 (RISER LOCATION CHANGE)	TWH
4	07/27/26	PUMP ROOM REVISION	TWH

THE Hiller COMPANIES

CONTRACTOR LICENSE NUMBER: NC # 36018 / SC # FSC 1078-B

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PH: 757-391-0090
FAX: 757-391-0098

TOR NAME: Home 2 Suites
475 Hospitality Blvd
Greenwood, SC 29649

CONTRACT WITH: John M. Campbell Company
102 Winchester Avenue
Monroe, NC 28110

PHONE: (704) 254-3214
DRAWING NAME: FIRE SUPPRESSION PLAN - FOURTH FLOOR
DRAWN BY: TWH
DATE: 07/27/26
SCALE: AS NOTED
CONTRACT NO.: CP0588

FP-07 of 08

FIREWALL AND BARRIER NOTES

2-HR FIRE RATED ASSEMBLY

1-HR FIRE RATED ASSEMBLY

GENERAL FIRE RATING NOTES

- ALL EXTERIOR BEARING WALLS ARE 1-HOUR RATED UNLESS OTHERWISE NOTED.
- ALL INTERIOR WOOD BEARING WALLS TO BE 1-HOUR RATED.
- ALL INTERSTITIAL TRUSS CAVITIES SHALL BE COMPLETELY FILLED WITH NON-COMBUSTIBLE BLOWN INSULATION. SPRINKLERS ARE NOT PROVIDED IN THIS AREA.

Hydraulic Information

Remote Area Zone 4 - King One Bedroom 429

OCCUPANCY CLASSIFICATION	Residential
DENSITY (gpm/ft²)	0.10 for 454ft² (Actual 454ft²)
TOTAL HOSE STREAMS	100.00
TOTAL HEADS FLOWING	4
K-FACTOR	5.8, 4.9
P-BOR BASE OF RISER (gpm)	86.42
P-BOR BASE OF RISER (psi)	26.575
Zone 2 BASE OF RISER (gpm)	86.42
Zone 2 BASE OF RISER (psi)	86.140
Zone 3 BASE OF RISER (gpm)	86.42
Zone 3 BASE OF RISER (psi)	81.348
Zone 4 BASE OF RISER (gpm)	86.42
Zone 4 BASE OF RISER (psi)	76.556
SAFETY MARGIN (psi)	+16.694 (31.5%)

HYDRAULIC DESIGN NOTES:

USE OF VK468 RESIDENTIAL PENDENT HEADS

Max Spacing: 18x18

Minimum Flow: 17 GPM

Minimum Pressure: 12.0 PSI

USE OF VK460 RESIDENTIAL SIDEWALL HEADS

Max Spacing: 16x16

Minimum Flow: 20 GPM

Minimum Pressure: 11.9 PSI

Hydraulic Information

Remote Area Zone 4 - 4th Floor Corridor

OCCUPANCY CLASSIFICATION	Residential
DENSITY (gpm/ft²)	0.10 for 411ft² (Actual 411ft²)
TOTAL HOSE STREAMS	100.00
TOTAL HEADS FLOWING	5
K-FACTOR	4.9
P-BOR BASE OF RISER (gpm)	87.78
P-BOR BASE OF RISER (psi)	-20.440
Zone 2 BASE OF RISER (gpm)	87.78
Zone 2 BASE OF RISER (psi)	39.087
Zone 3 BASE OF RISER (gpm)	87.78
Zone 3 BASE OF RISER (psi)	34.294
Zone 4 BASE OF RISER (gpm)	87.78
Zone 4 BASE OF RISER (psi)	29.501
SAFETY MARGIN (psi)	+63.641 (120.2%)

HYDRAULIC DESIGN NOTES:

DEMANDING 5 CORRIDOR SPRINKLERS

PER NFPA 13 19.3.3.3.6

USE OF VK494 RESIDENTIAL PENDENT HEADS

Max Spacing: 18x18

Minimum Flow: 17 GPM

Minimum Pressure: 12.0 PSI

FIRE PROTECTION KEY NOTES

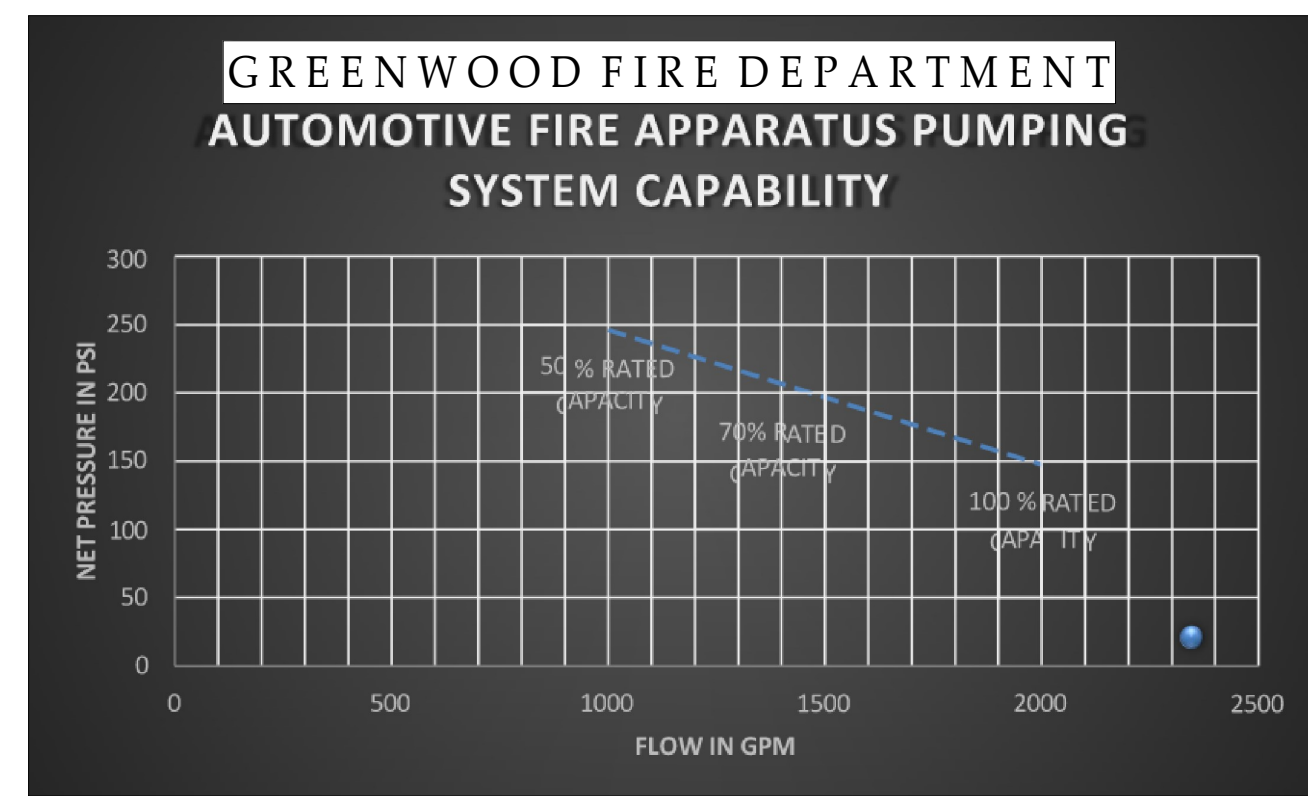
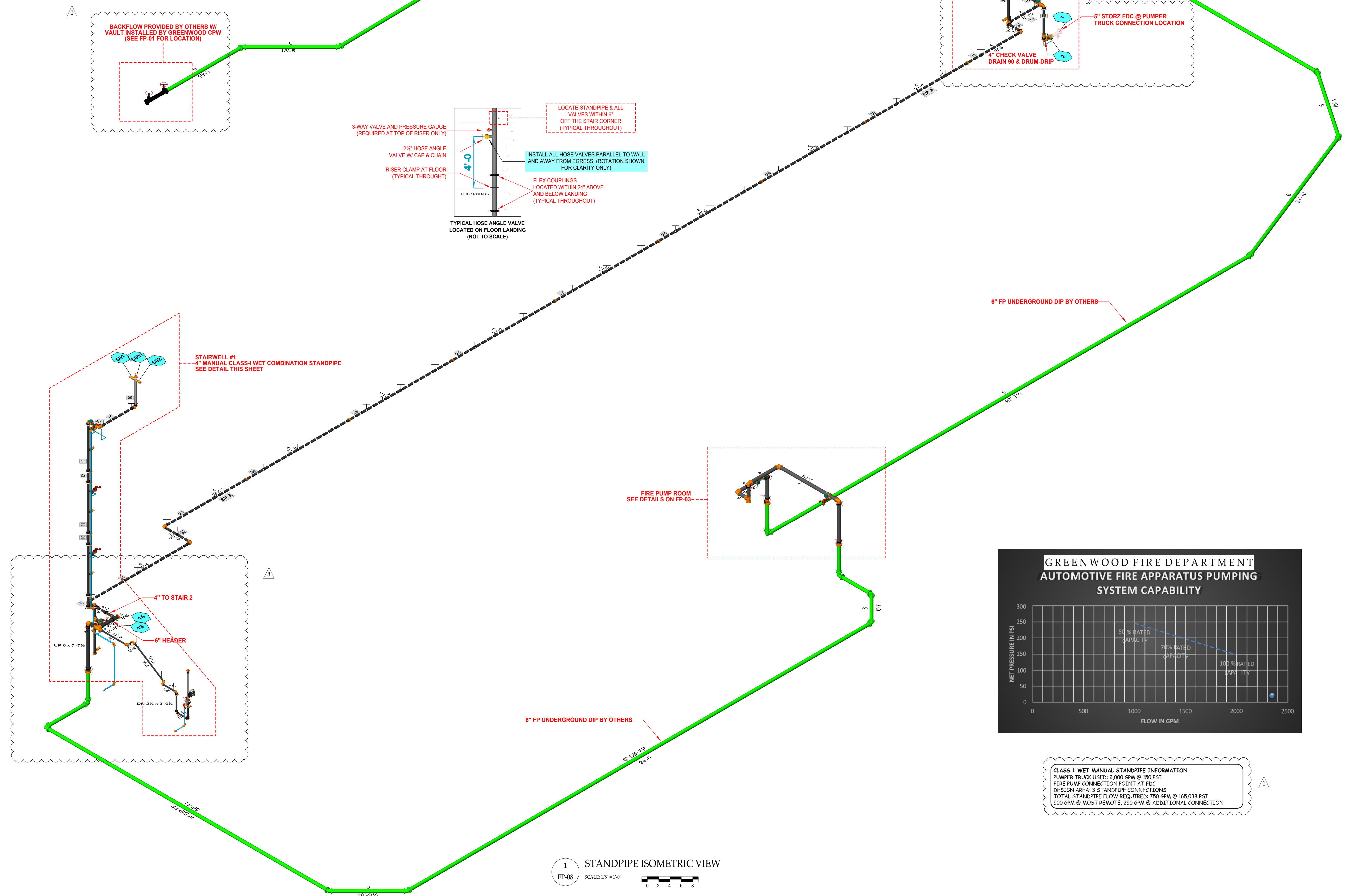
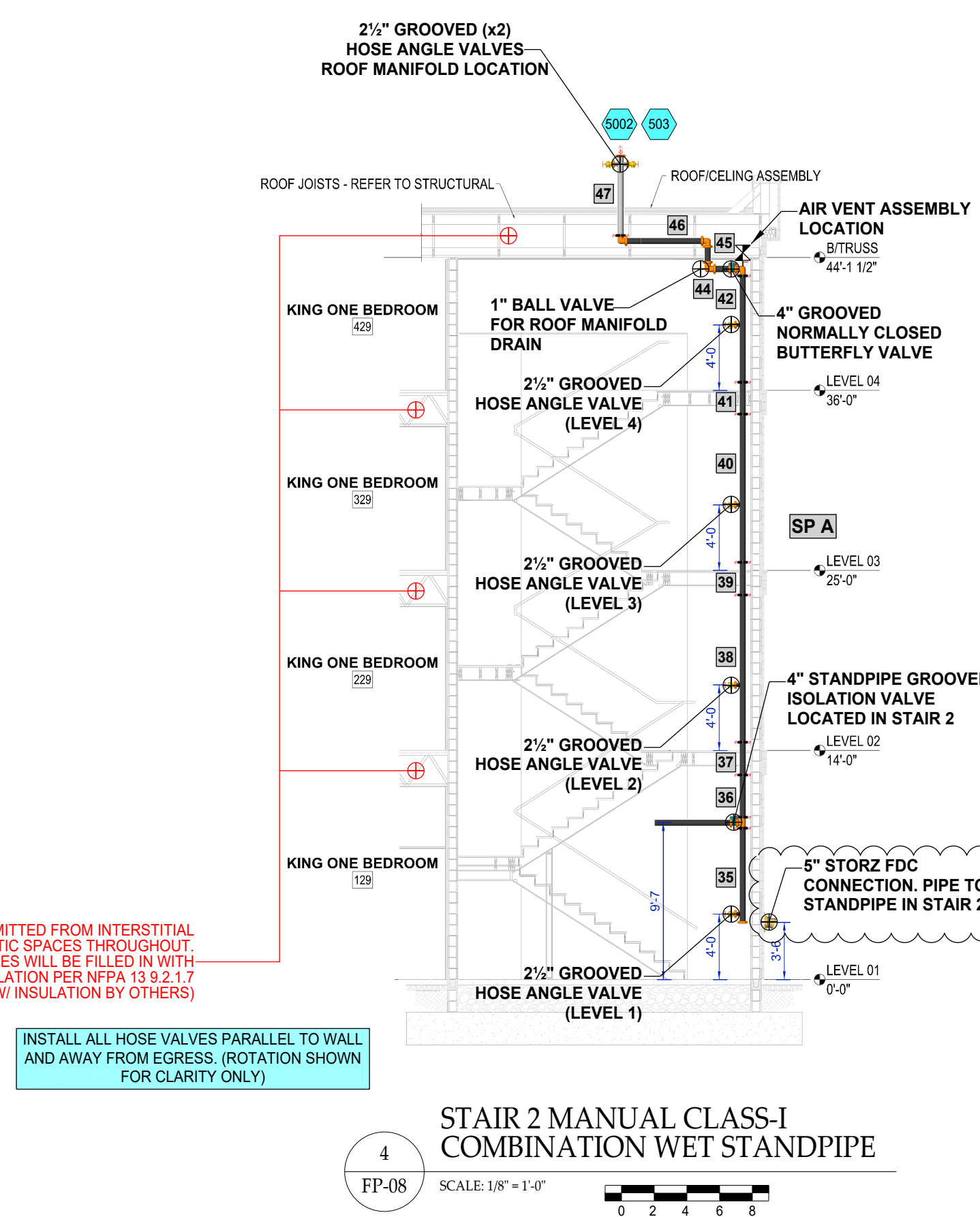
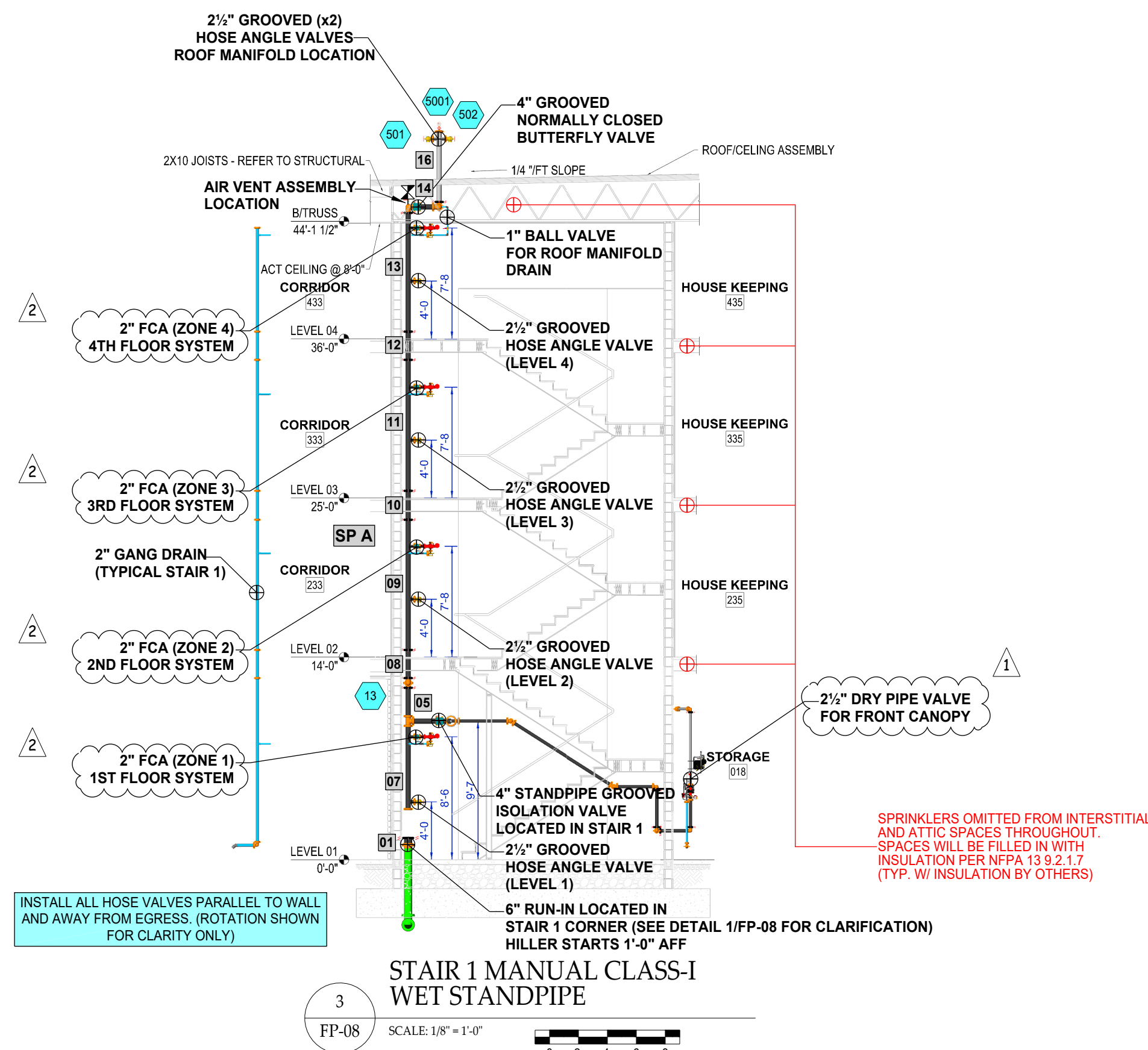
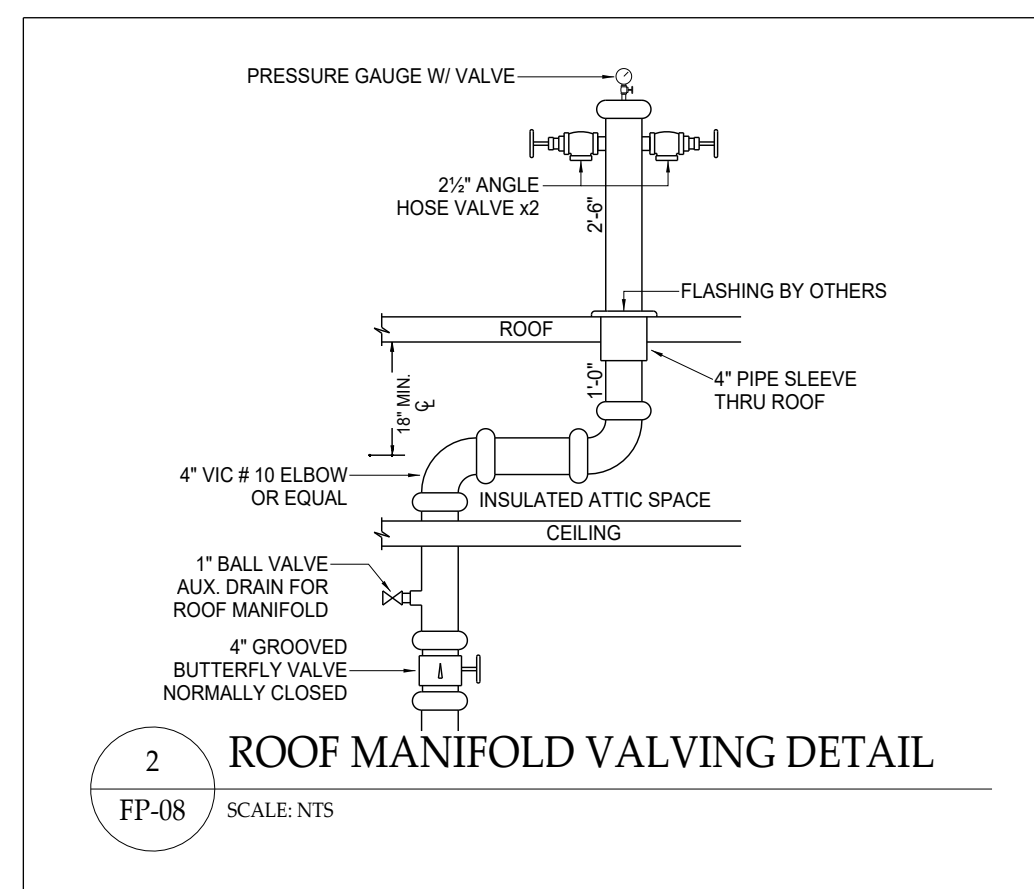
- SPRINKLERS AT THE TOP AND BOTTOM OF ELEVATOR SHAFT ARE NOT REQUIRED PER NFPA 13, 9.3.6.2 (BOTTOM) AND 9.3.6.1 (TOP) AND 9.3.6.1.1.
- EXPOSED 4" MANUAL CLASS-I COMBINATION STANDPIPE W/ 2" PCA (ZONE 4) AND 2 1/2" HOSE ANGLE VALVE.
- EXPOSED 4" MANUAL CLASS-I STANDPIPE SYSTEM.
- ROOF MANHOLE ASSEMBLY - SEE DETAIL ON PP-08.
- PROVIDE THERMAL EXPANSION LOOP ON 2" CPVC WHERE LONG STRAIGHT RUNS EXCEED MANUFACTURER LIMITS - SEE DETAIL THIS SHEET.

FIRE PROTECTION GENERAL NOTES

- THE HILLER COMPANIES STARTS 1'-0" ABOVE FINISHED FLOOR. ALL UNDERGROUND PIPING BY OTHERS.
- SPRIGS 4 FT (1.2M) OR LONGER SHALL BE RESTRAINED AGAINST LATERAL MOVEMENT.
- SYSTEM DRAINS SHALL BE INSTALLED AS REQUIRED PER NFPA 13 AND EXTENDED OUTSIDE THE BUILDING.
- ALL CORRIDOR CEILING HEIGHTS AT 8'-6" AND UNIT CEILING HEIGHTS AT 10'-2" UNLESS NOTED OTHERWISE.
- FIRE SPRINKLERS SHALL NOT BE REQUIRED IN BATHROOMS THAT ARE LESS THAN 35 FT² IN AREA IN ACCORDANCE WITH NFPA 13, 9.3.4.1.
- FIRE SPRINKLERS ARE NOT REQUIRED PER NFPA 13, 9.3.4.2, IN CLOSETS, LINEN CLOSETS AND PANTRIES WITHIN DWELLING UNITS THAT MEET ALL THE FOLLOWING CONDITIONS:
 - THE AREA OF THE SPACE DOES NOT EXCEED 34 FT².
 - THE WALLS AND CEILINGS ARE SURFACED WITH NONCOMBUSTIBLE OR LIMITED-COMBUSTIBLE MATERIALS AS DEFINED BY NFPA 220.
- THE ATTIC AND INTERSTITIAL SPACES ARE TO BE FILLED WITH NONCOMBUSTIBLE INSULATION. FIRE SPRINKLERS ARE NOT REQUIRED FOR THIS CONCEALED SPACE WITH THE REQUIREMENTS OF NFPA 13, 9.2.1.7 BEING MET.
- CPVC USED ABOVE CEILINGS IN ALL RESIDENTIAL AREAS: CONVERT PIPING TO STEEL IN EXPOSED AREAS AND ROOMS OF ORDINARY HAZARD OCCUPANCIES EXCEEDING 400 FT².
- SPRINKLERS SHALL BE INSTALLED AT THE TOP OF COMBUSTIBLE STAIR SHAFTS, UNDER THE LANDINGS AT EACH FLOOR LEVEL AND BENEATH THE LOWEST INTERMEDIATE LANDING PER NFPA 13, 9.3.4.1.
- ALL PIPING VALVES AND APPURTENANCES SHALL BE INSTALLED SUCH AS NOT TO OBSTRUCT ANY PORTION OF WINDOWS, DOORWAYS, STAIRS, PASSAGEWAYS OR ACCESS TO EQUIPMENT.

HOME 2 SUITES BY HILTON 4-STORY HOTEL CONSTRUCTION FIRE PROTECTION

475 Hospitality Blvd, Greenwood, SC 29649



CLASS 1 WET MANUAL STANDPIPE INFORMATION
PUMPER TRUCK USED: 2,000 GPM @ 150 PSI
FIRE PUMP CONNECTION POINT AT FDC
DESIGN AREA: 3 STANDPIPE CONNECTIONS
TOTAL STANDPIPE FLOW REQUIRED: 750 GPM @ 165.038 PSI
500 GPM @ MOST REMOTE, 250 GPM @ ADDITIONAL CONNECTION

SUBMITTALS

It is the sole responsibility of owner and owners representative to insure that this building/buildings has proper heat and insulation to prevent fire sprinkler pipe, fittings and devices from freezing.

GENERAL NOTES:

- SYSTEMS ARE DESIGNED AND INSTALLED PER NFPA 13 (2019 EDITION)
- RESIDENTIAL SYSTEM PIPING 2" AND SMALLER TO BE CPVC WITH CPVC FITTINGS. CONVERT TO BLACK STEEL PIPE AND FITTINGS WHERE EXPOSED.
- STEEL SYSTEM PIPING 2" AND SMALLER TO BE SCH. 40 BLACK STEEL PIPE AND FITTINGS ARE THREADED / GROOVED / FLANGED / WELDED.
- STEEL SYSTEM PIPING 2 1/2" OR LARGER TO BE SCH. 10 BLACK STEEL PIPE AND FITTINGS ARE GROOVED / FLANGED / WELDED.
- ALL HANGERS ARE TO MEET THE CRITERIA SET FORTH BY NFPA 13 (2019 EDITION) AND SPACED ACCORDING TO MANUFACTURER SPECIFICATIONS.
- THE HILLER COMPANIES TO START 1'-0" ABOVE FINISHED FLOOR.
- PAINTINGS OF PIPE OR COMPONENTS SHALL BE BY OTHERS.
- REPRESENTS A HYDRAULIC REFERENCE POINT.
- CONTRACTOR TO VERIFY ALL UNDERGROUND PIPING IS PROTECTED WITH APPROVED GUARDS.

WATER SUPPLY INFORMATION

STATIC PRESSURE	53	FIRE PUMP	YES
RESIDUAL PRESSURE	51	SIZE GPM @ PSI	300 @ 60
FLOW @ 6.0 MP	1160	TYPE OF DRIVER	VDP
DATE OF TEST	09/30/2025	ELECTRICAL REQ.	208V
HYDRANT LOCATION	© TEST NODE (SEE SITE PLAN)	NODE #1	
TEST TAKEN BY	GREENWOOD CPW	(864) 942-8199	

NOTES:

TESTED BY - MIKE PROCTOR
WITNESSED BY - RUSSELL HOLLEY
CONTACT EMAIL - RHOLLEY@GREENWOODCPW.COM
HYDRANT LOCATION - SEE FP-01

SEAL:

SULLY CAROL M.
LICENSE #SC-1078
CONTRACTOR'S LICENSE

NICET REVIEW STAMP

JUAN OCHOA
NICET #019445
LEVEL IV
WATER BASED SYSTEMS LAYOUT

SIGNED: *[Signature]*
VALID THROUGH 01/01/2027

Sprinkler Legend - Total Project

Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature	Note	Max Spacing
⊗	Viking	VK360	Microfast	9	5.6	Upright	1/2"	Quick	Brass	200°F	Exposed	130°F OH / 225°F LH
⊗	Viking	VK4621	Concealed	55	5.6	Concealed Pendant	1/2"	Quick	Brass	155°F	White Coverplate	130°F OH / 225°F LH
⊗	Viking	VK362	Microfast	33	5.6	Pendent	1/2"	Quick	Chrome	200°F	White Coverplate	130°F OH / 225°F LH
⊗	Viking	VK4621	Concealed	1	5.6	Concealed Pendant	1/2"	Quick	Brass	200°F	White Coverplate	130°F OH / 225°F LH
⊗	Viking	VK484	Freedom	59	4.9	Concealed Pendant	1/2"	Fast	Brass	155°F	White Coverplate	15 x 18 / 324H
⊗	Viking	VK305	Microfast	3	5.6	Horizontal Sidewall	1/2"	Quick	Chrome	200°F	Chrome Res Esc	100°F OH / 198°F LH
⊗	Viking	VK460	Freedom	104	5.6	Horizontal Sidewall	1/2"	Fast	Chrome	155°F	Chrome Res Esc	16 x 16 / 256H
⊗	Viking	VK482	Dry	7	5.6	Pendent	1	Quick	White Polyester	205°F	White Flat Esc	130°F OH / 225°F LH
⊗	Viking	VK460	Freedom	208	4.9	Pendent	1/2"	Fast	Chrome	155°F	Chrome Res Esc	10 x 18 / 324H
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Total = 442												

NO.	DATE	REVISION DISCRIPTION	BY
1	12/18/25	ENGINEER'S COMMENTS	TWH
2	01/13/26	FIRE MARSHAL'S COMMENTS (DEREK ALLMOND)	TWH
3	02/06/26	STAIR 1 (RISER LOCATION CHANGE)	TWH

CONTRACTOR LICENSE NUMBER: NC # 36018 / SC # FSC 1078-B

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475 Hospitality Blvd.
Greenwood, SC 29649

CONTRACT WITH: John M. Campbell Company
102 Winchester Avenue
Monroe, NC 28110

PHONE: (704) 254-3214
DRAWING NAME: STANDPIPE HYDRAULIC CALCULATION REFERENCE
DRAWN BY: TWH
DATE: 02/06/26
SCALE: AS NOTED
CONTRACT NO.: CP0588

FP-08 of 08