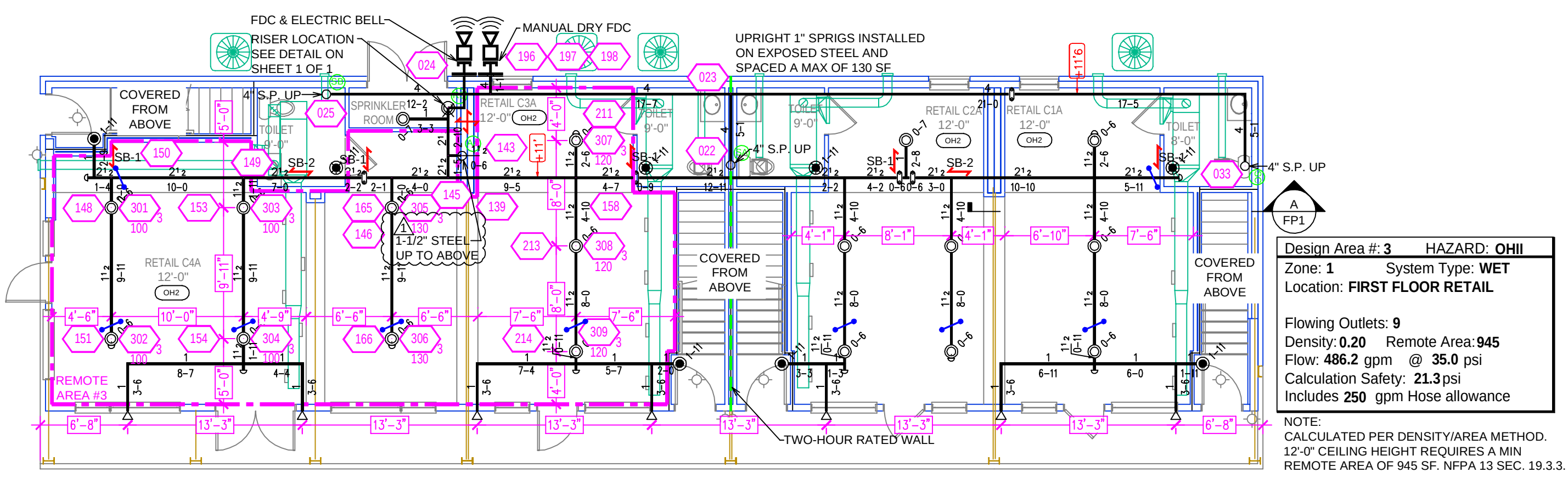
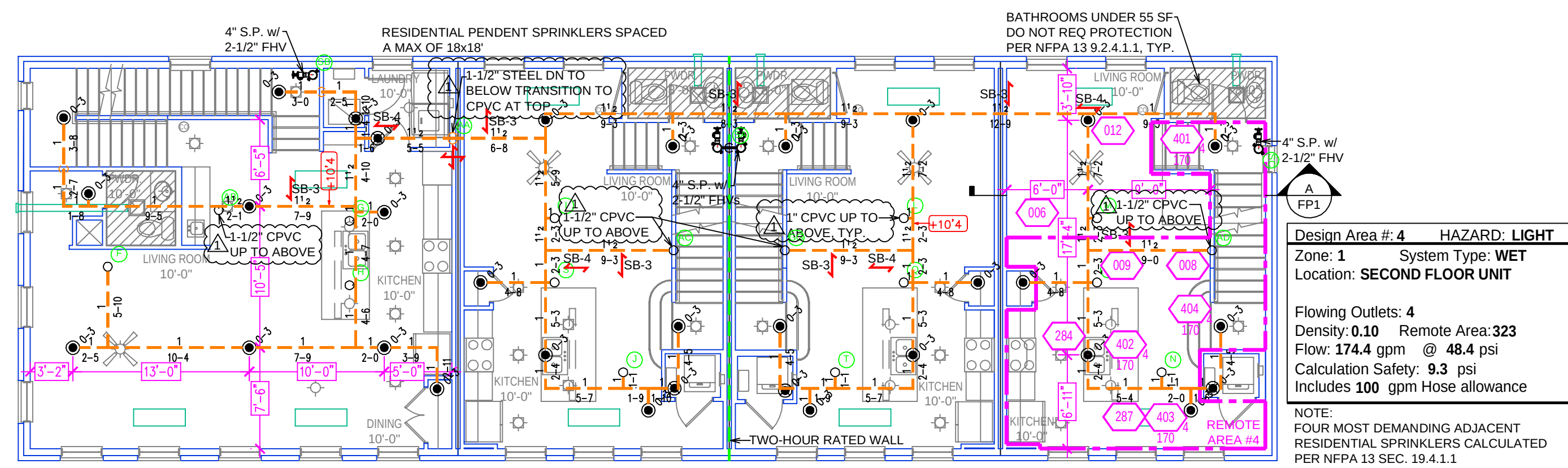




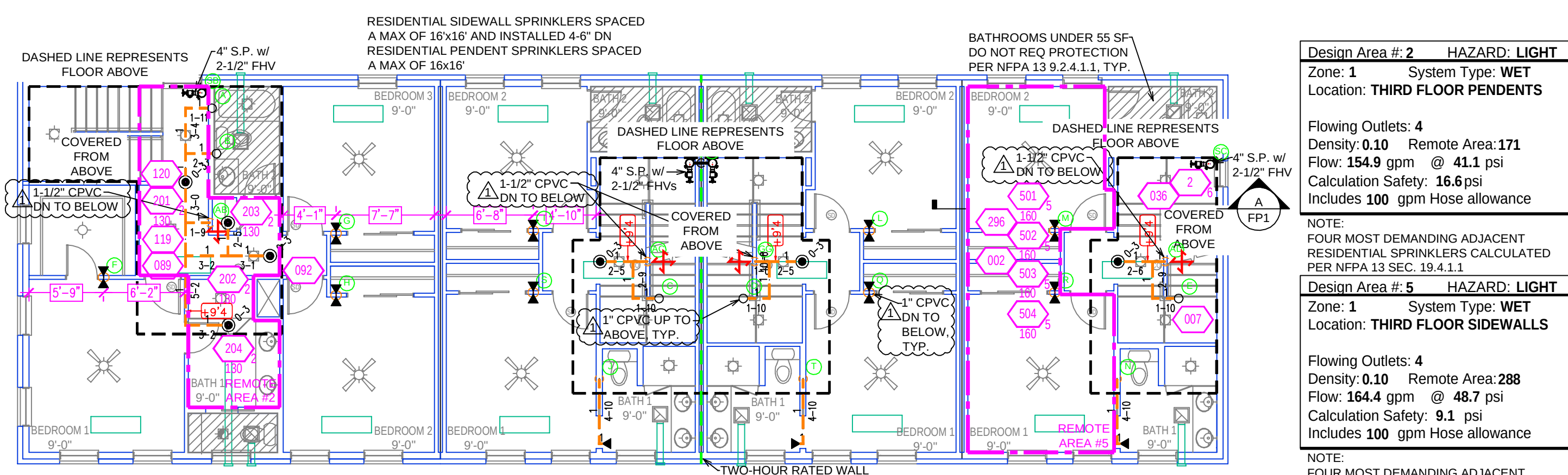
FIRE SPRINKLER PLAN FIRST FLOOR
 SCALE: 1/8" = 1'-0"

FLOOR AREA: 2185 S.F.
 GRAPHIC SCALE: 1/8" = 1'-0"



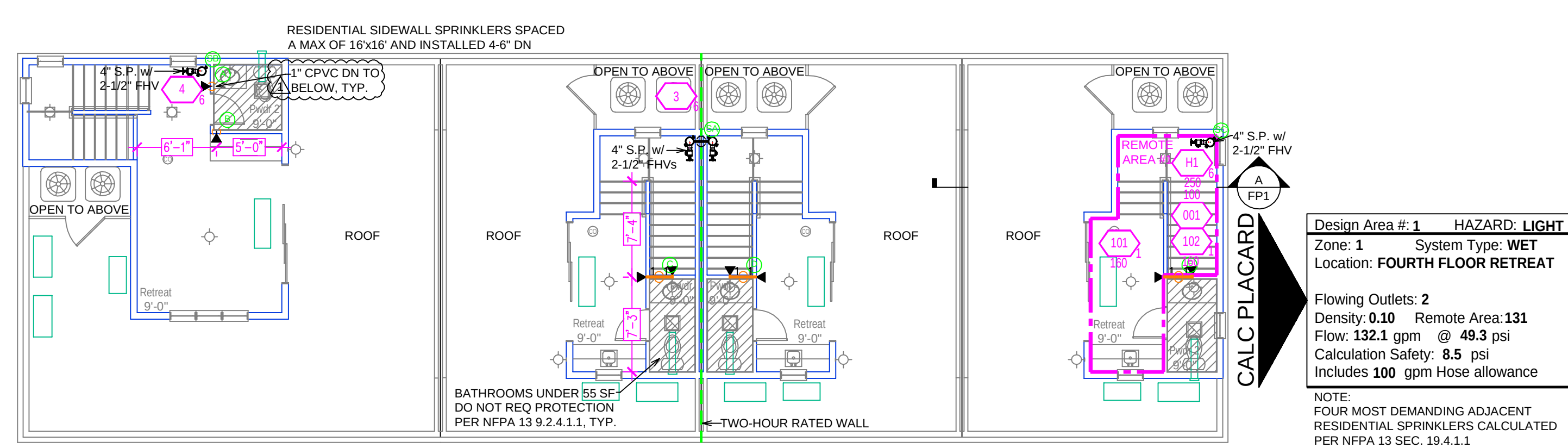
FIRE SPRINKLER PLAN SECOND FLOOR
 SCALE: 1/8" = 1'-0"

FLOOR AREA: 2558 S.F.
 GRAPHIC SCALE: 1/8" = 1'-0"



FIRE SPRINKLER PLAN THIRD FLOOR
 SCALE: 1/8" = 1'-0"

FLOOR AREA: 2558 S.F.
 GRAPHIC SCALE: 1/8" = 1'-0"



FIRE SPRINKLER PLAN FOURTH FLOOR
 SCALE: 1/8" = 1'-0"

FLOOR AREA: 2558 S.F.
 GRAPHIC SCALE: 1/8" = 1'-0"

PIPE LEGEND

BLACK STEEL PIPING
 CPVC PIPING

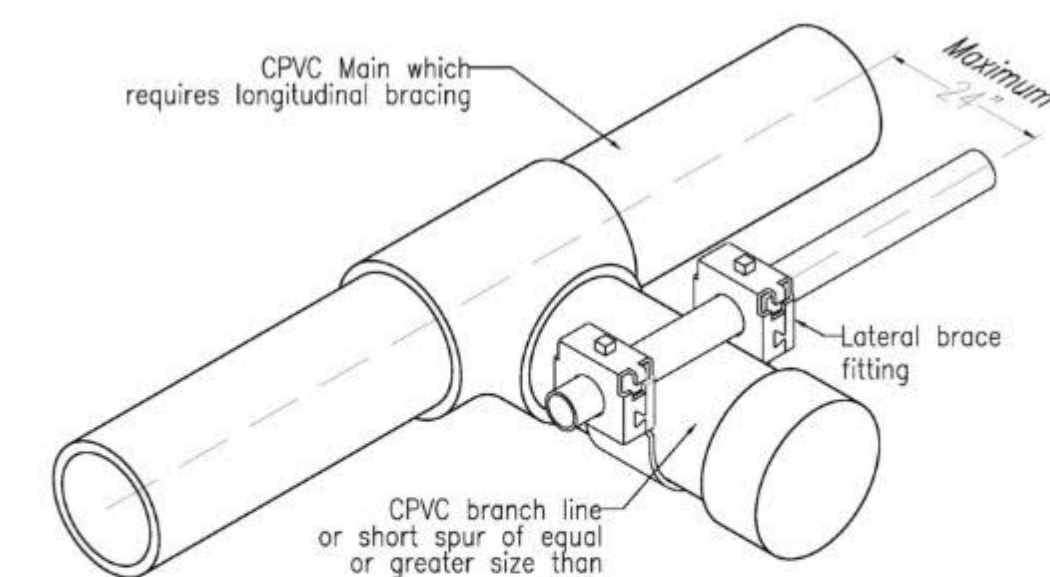
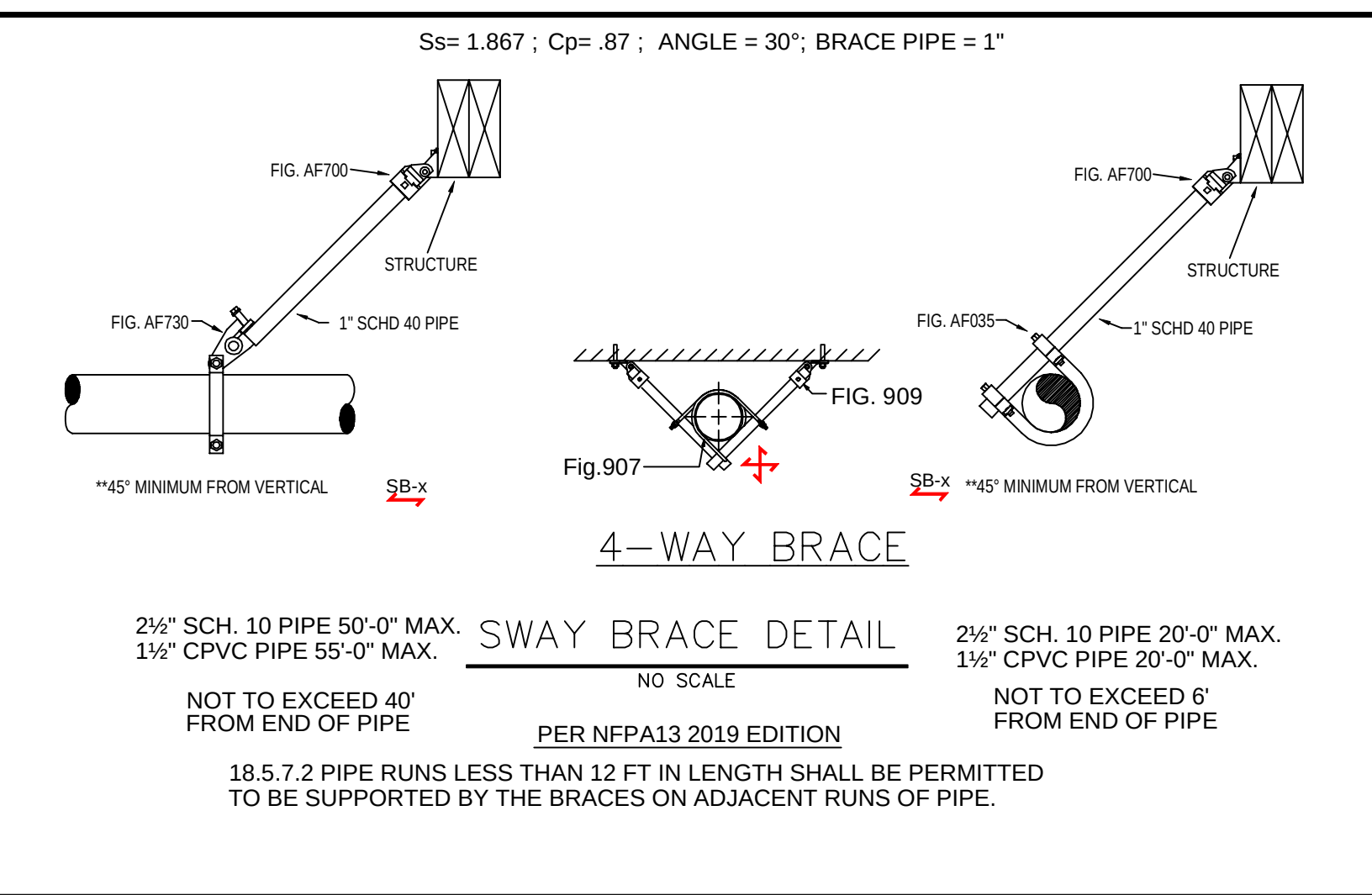
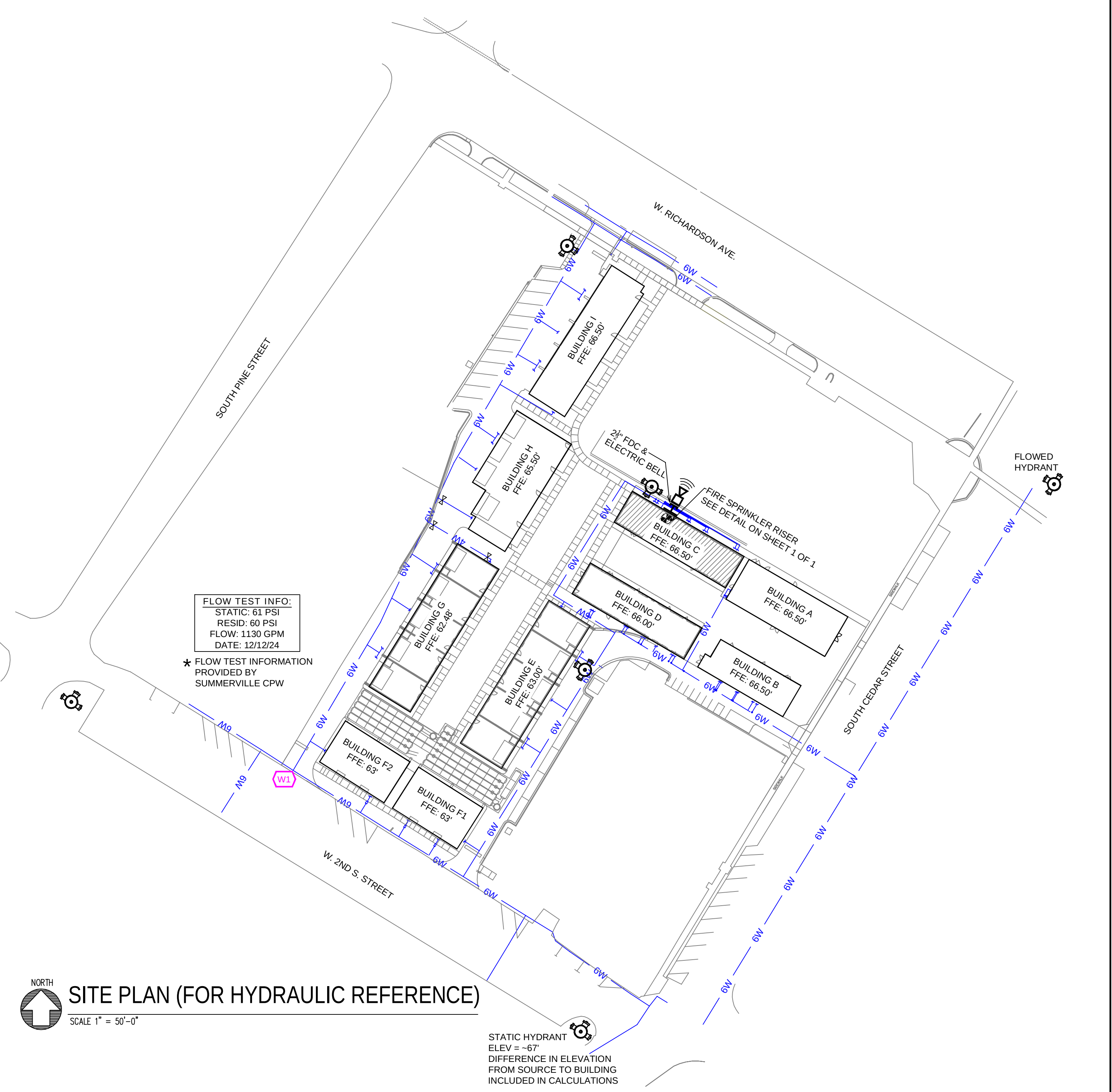
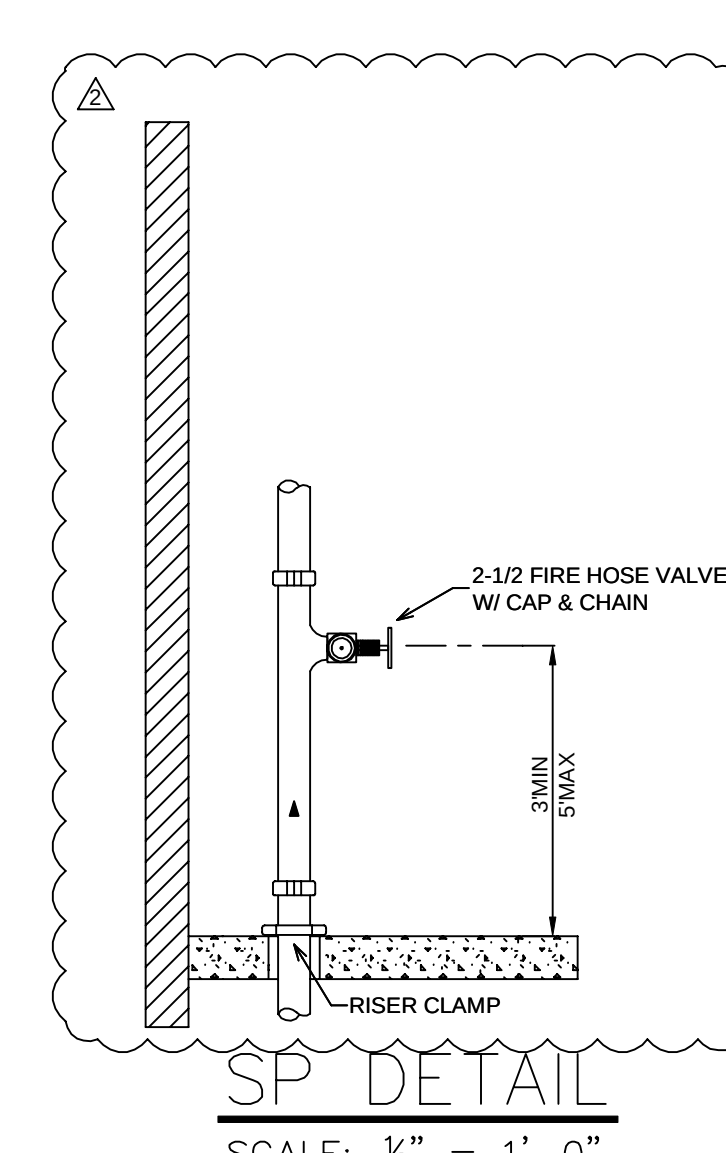
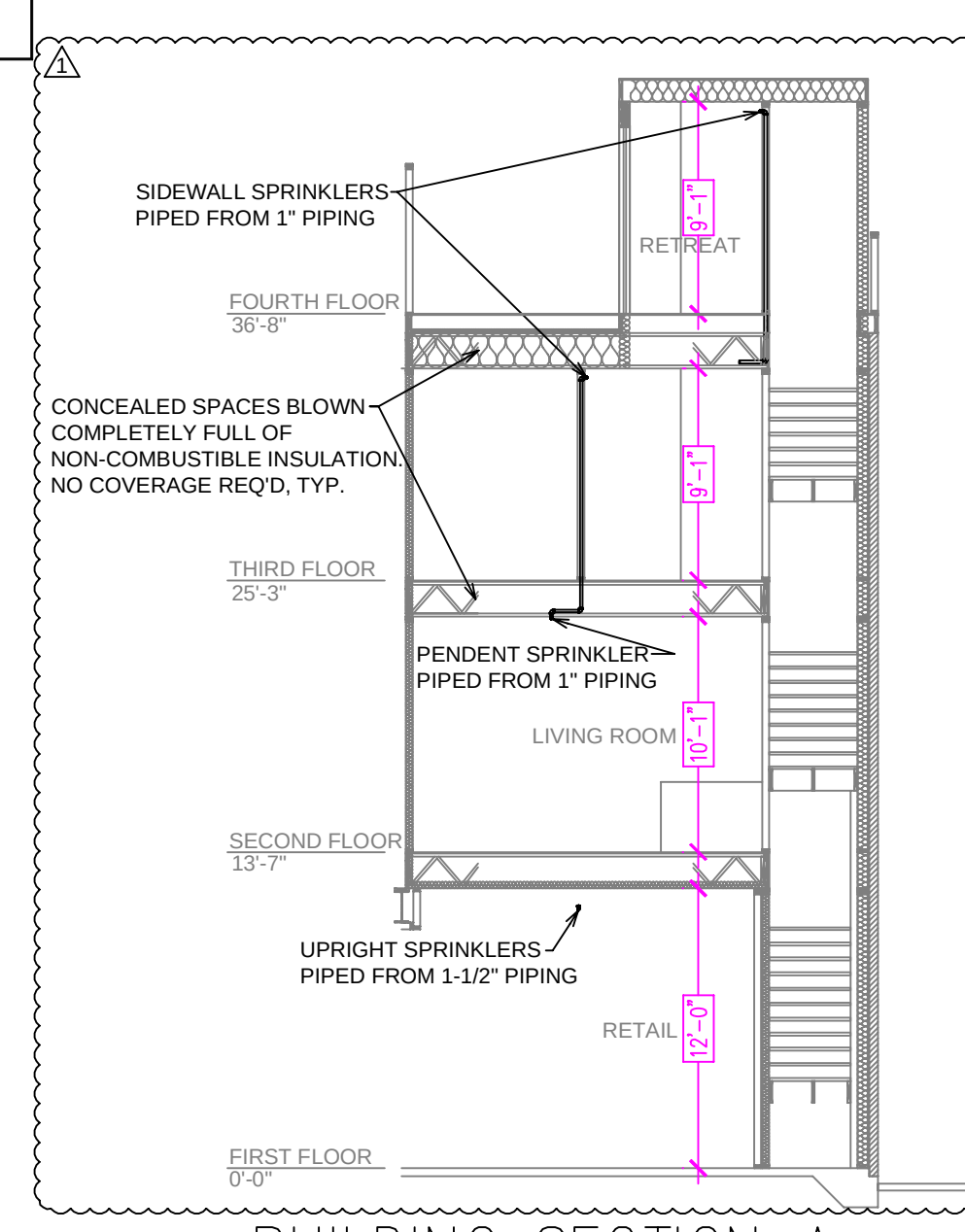
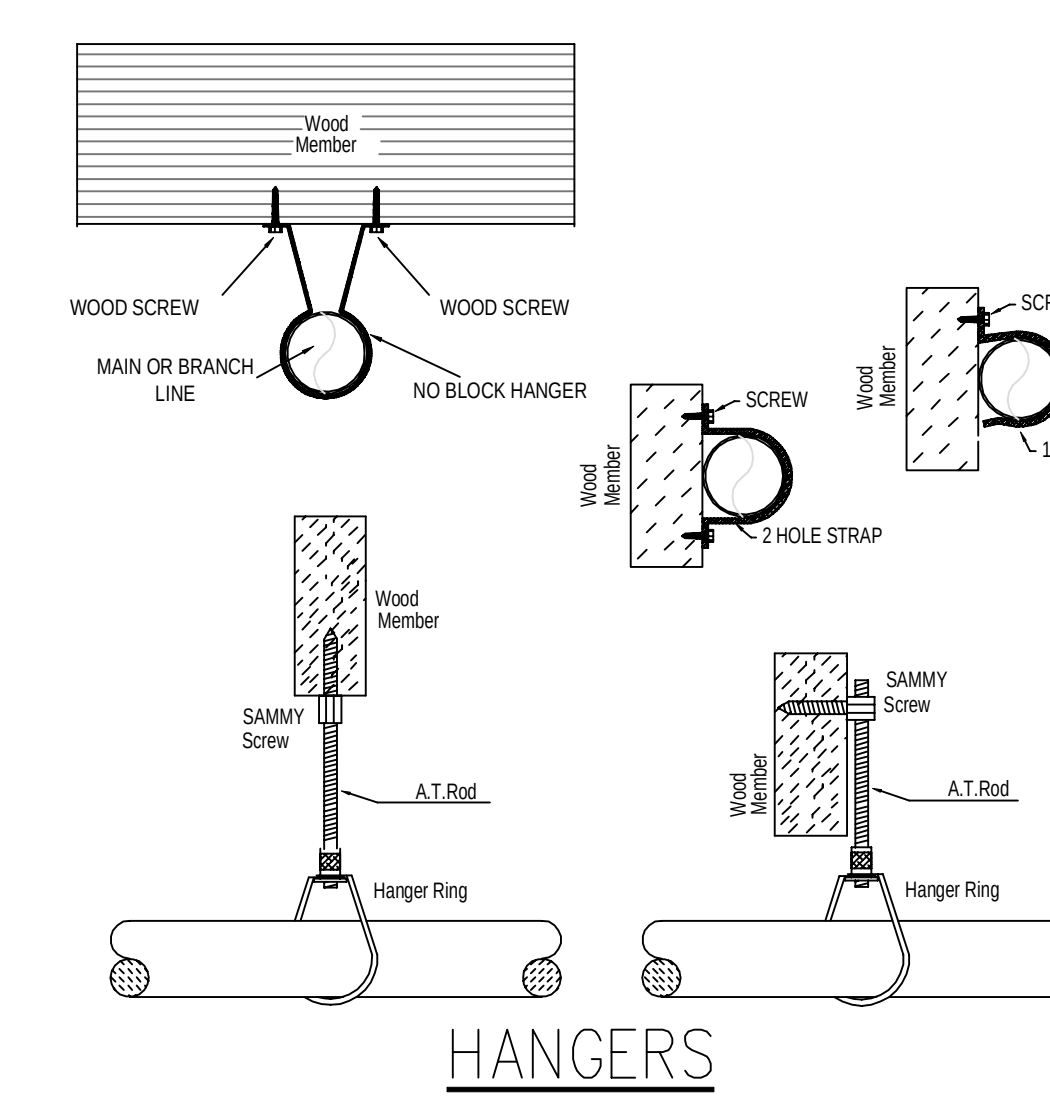


Figure 2. Example of lateral brace providing longitudinal brace for CPVC.

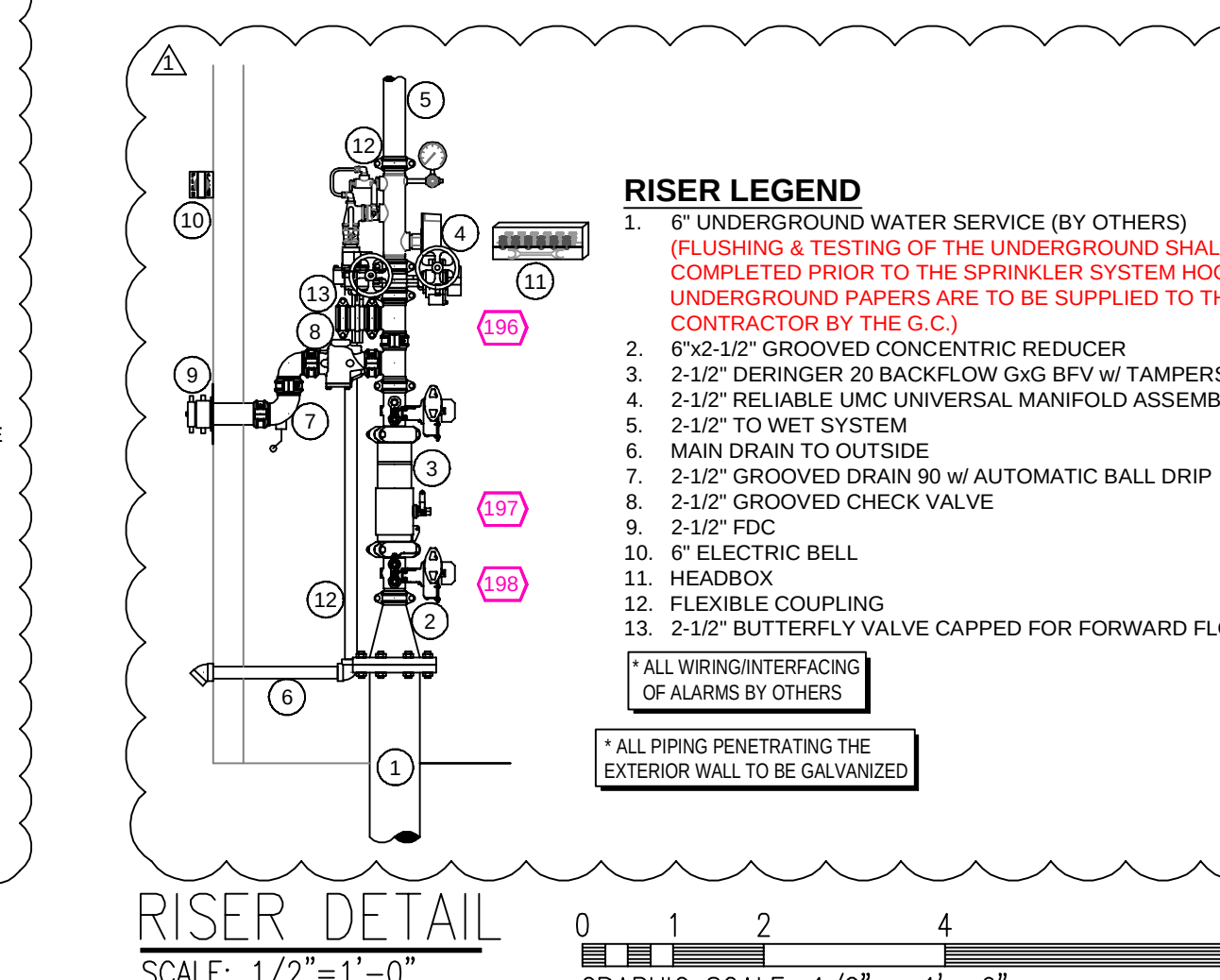


GENERAL NOTES

- SOUTH CAROLINA BUILDING CODE (2021)
 - OCCUPANCY: B & R-2
 - TYPE OF CONSTRUCTION: V-B (UNPROTECTED, COMBUSTIBLE)
 - SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
 - FIRST FLOOR = 2185 S.F.
 - SECOND FLOOR = 2558 S.F.
 - THIRD FLOOR = 2558 S.F.
 - FOURTH FLOOR = 2558 S.F.
 - TOTAL = 9861 S.F.
- INSTALLATION STANDARDS: SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13 & NFPA-14 (2019)
- SPRINKLERED PIPING TYPES:
 - RESIDENTIAL SPACE
 - 1" BRANCH LINES TO BE BLAZEMASTER CPVC PIPING WITH CEMENTED FITTINGS
 - 1-1/4" THROUGH 1-1/2" MAIN & BRANCH LINES TO BE BLAZEMASTER CPVC PIPING WITH CEMENTED FITTINGS
 - 1" BRANCH LINES TO BE BLK SCH 40 PIPING WITH THREADED FITTINGS
 - 1/2" THROUGH 2-1/2" MAIN & BRANCH LINES TO BE BLK SCH 10 PIPING WITH SHORT RADIUS GROOVED FITTINGS
 - DESIGN CRITERIA
 - RETAL SPACE DESIGNED TO ORDINARY HAZARD GROUP II
 - RESIDENTIAL UNITS DESIGNED TO LIGHT HAZARD
 - REMOTE AREA REDUCTIONS HAVE BEEN TAKEN WHERE APPLICABLE PER NFPA 13 SEC. 19.3.2.3.1
 - NOTES:
 - ALL MATERIAL TO BE NEW AND MEET U.L. STANDARDS
 - HANGERS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13 (2019) - SEE PLAN FOR HANGING REQUIREMENTS
 - SYMBOLS USED ON DRAWINGS:
 - PIPE ELEVATION A.F.F.
 - PIPE ELEVATION BELOW B.O.D.
 - ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD UNLESS NOTED)
 - HYDRAULIC CALCULATION JUNCTION POINT
 - CEILING HEIGHT
 - BRANCH LINE RESTRAINT
 - SCOPE OF WORK:
 - TO INSTALL A NEW WET SPRINKLER SYSTEM IN BONAIRE PARK BUILDING C. THE BUILDING HAS A RETAIL SPACE WITH RESIDENTIAL TOWNHOUSES. THE SYSTEM SHALL HAVE ONE ZONE COVERING THE ENTIRE BUILDING.
 - ALL AREAS OF THE BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13

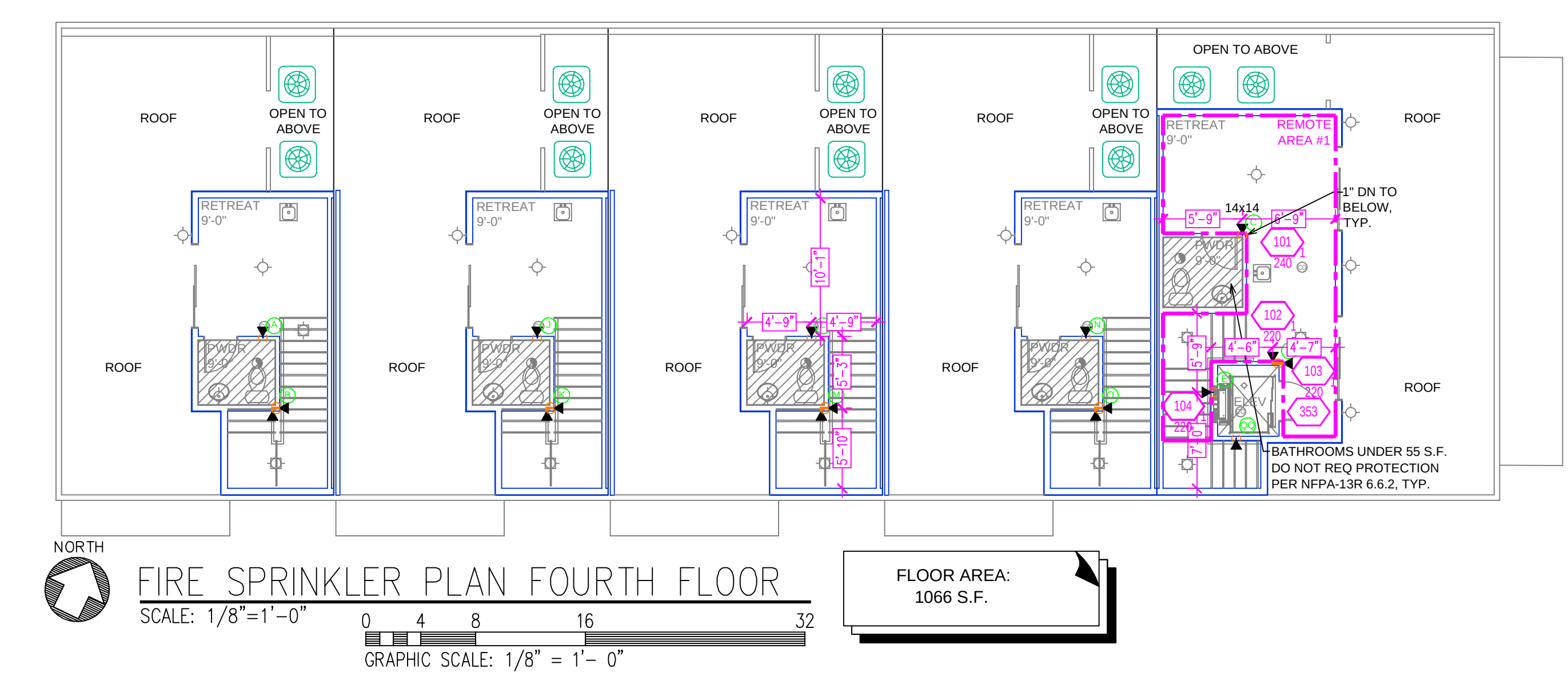
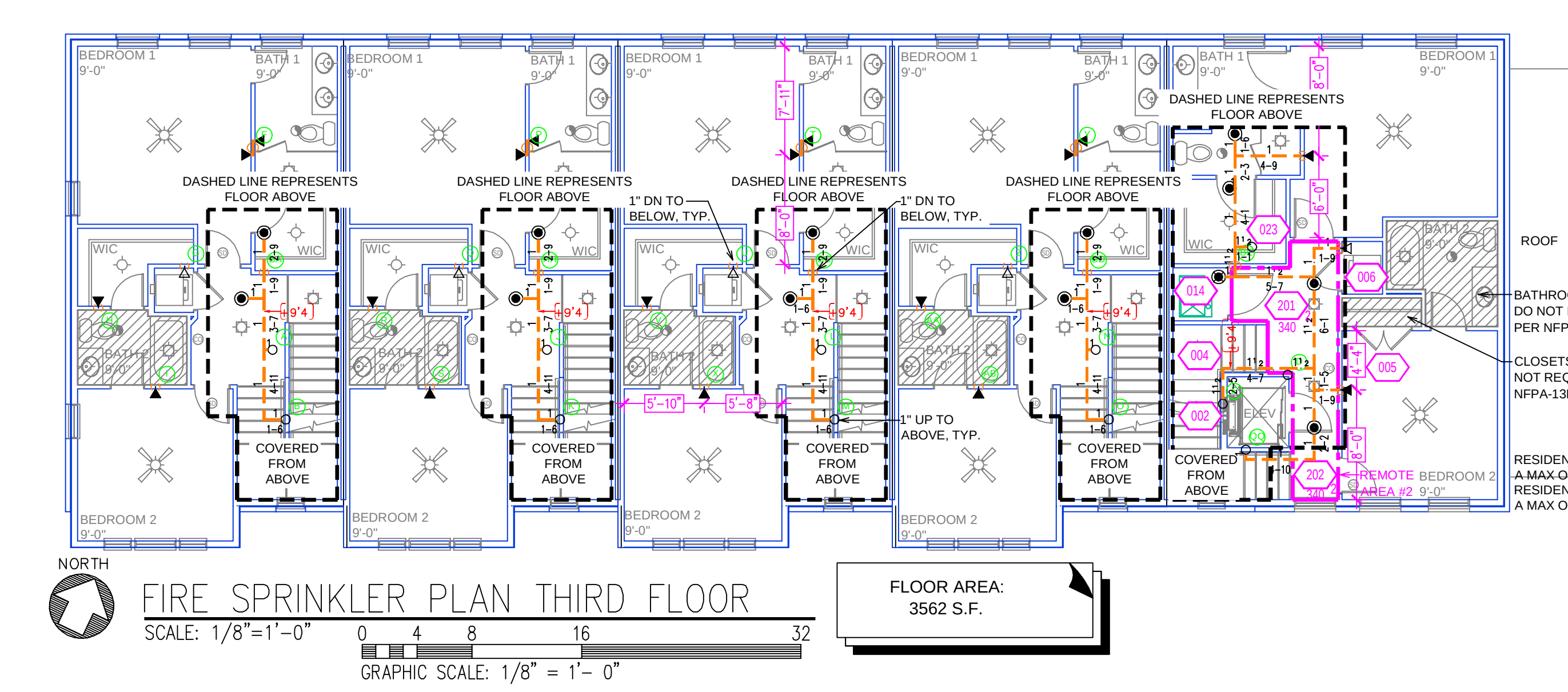
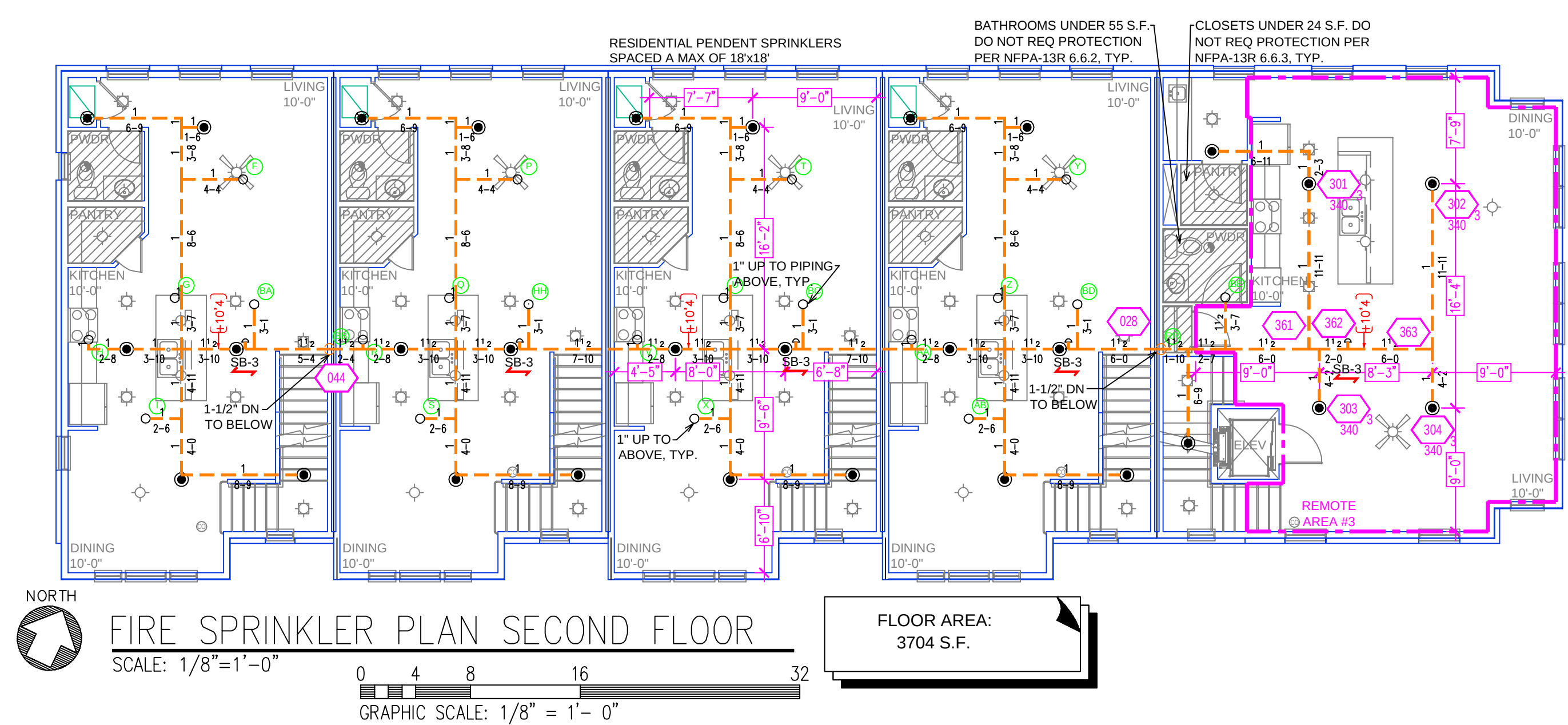
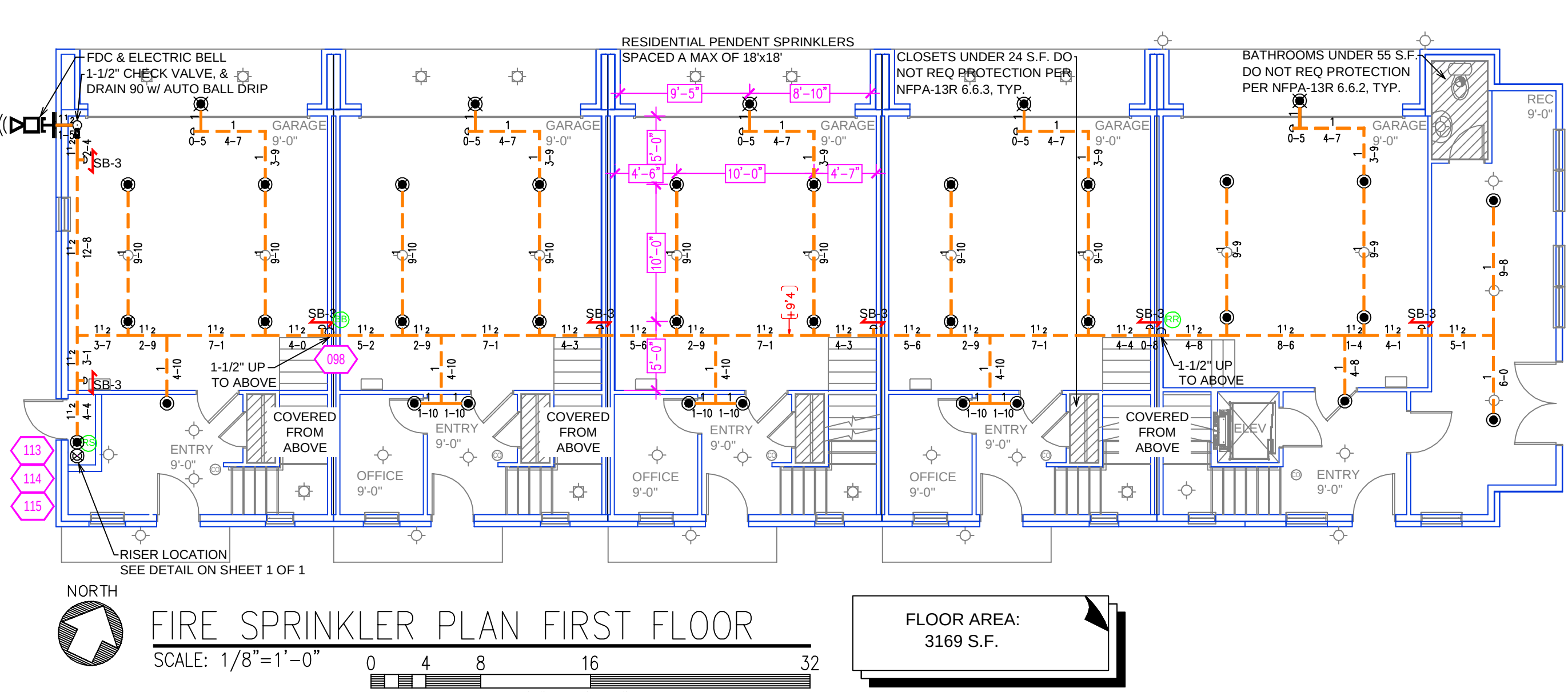
MANUAL DRY STANDPIPE	
LOCATION: STAIRS FLOW: 1000 GPM OUTLET PSI: 100 REQUIRED INLET PSI: 135.6 VOLUME: 58.49 GAL	

NFPA 13 STEEL PIPE HANGER SPACING	
(EXCEPT LIGHT WALL THRD PIPING)	
NOMINAL SIZE Inches	MAX SPACING feet
1"	12'-0"
1-1/4"	12'-0"
1-1/2"	15'-0"
2"	15'-0"
2-1/2"	15'-0"
3"	15'-0"
4" & LARGER	15'-0"



SUBMITTAL

JOB No.	HR1262	Sprinkler Plan		FILE: BNAIR PARK BLDG C.dwg
DATE	9-8-25	BONAIRE PARK BLDG. C		SHEET No.
DESIGNER	DVG	200 SOUTH CEDAR STREET		1 OF 1
SCALE	1/8" = 1'-0"	SUMMERVILLE, SOUTH CAROLINA		
		ARNETT CONSTRUCTION		



Design Area #3 HAZARD LIGHT
Zone: 1 System Type: WET
Location: 2ND FLOOR LIVING/DINING
Flowing Outlets: 4
Density: 0.05 Remote Area: 720
Flow: 123.9 gpm @ 40.8 psi
Calculation Safety: 17.1 psi
Includes 55 gpm Hose allowance
NOTE:
UP TO THE FOUR MOST DEMANDING
ADJACENT RESIDENTIAL SPRINKLERS
CALCULATED PER NFPA 13R SEC. 7.1.1.3.1

Design Area #2 HAZARD LIGHT
Zone: 1 System Type: WET
Location: 3RD FLOOR CORRIDOR
Flowing Outlets: 2
Density: 0.05 Remote Area: 87
Flow: 89.2 gpm @ 37.7 psi
Calculation Safety: 20.2 psi
Includes 55 gpm Hose allowance
NOTE:
UP TO THE FOUR MOST DEMANDING
ADJACENT RESIDENTIAL SPRINKLERS
CALCULATED PER NFPA 13R SEC. 7.1.1.3.1
BATHROOMS UNDER 55 S.F. DO NOT REQ PROTECTION PER NFPA-13R 6.6.2, TYP.
CLOSETS UNDER 24 S.F. DO NOT REQ PROTECTION PER NFPA-13R 6.6.3, TYP.
RESIDENTIAL SIDEWALL SPRINKLERS SPACED A MAX OF 18'x18' AND INSTALLED 4-6" DN
RESIDENTIAL PENDENT SPRINKLERS SPACED A MAX OF 18'x18'

Design Area #1 HAZARD LIGHT
Zone: 1 System Type: WET
Location: 4TH FLOOR RETREAT
Flowing Outlets: 4
Density: 0.05 Remote Area: 256
Flow: 101.8 gpm @ 42.9 psi
Calculation Safety: 15.0 psi
Includes 55 gpm Hose allowance
NOTE:
UP TO THE FOUR MOST DEMANDING
ADJACENT RESIDENTIAL SPRINKLERS
CALCULATED PER NFPA 13R SEC. 7.1.1.3.1
RESIDENTIAL SIDEWALL SPRINKLERS SPACED A MAX OF 12'x12' UNO ON THIS FLOOR AND INSTALLED 4-6" DN

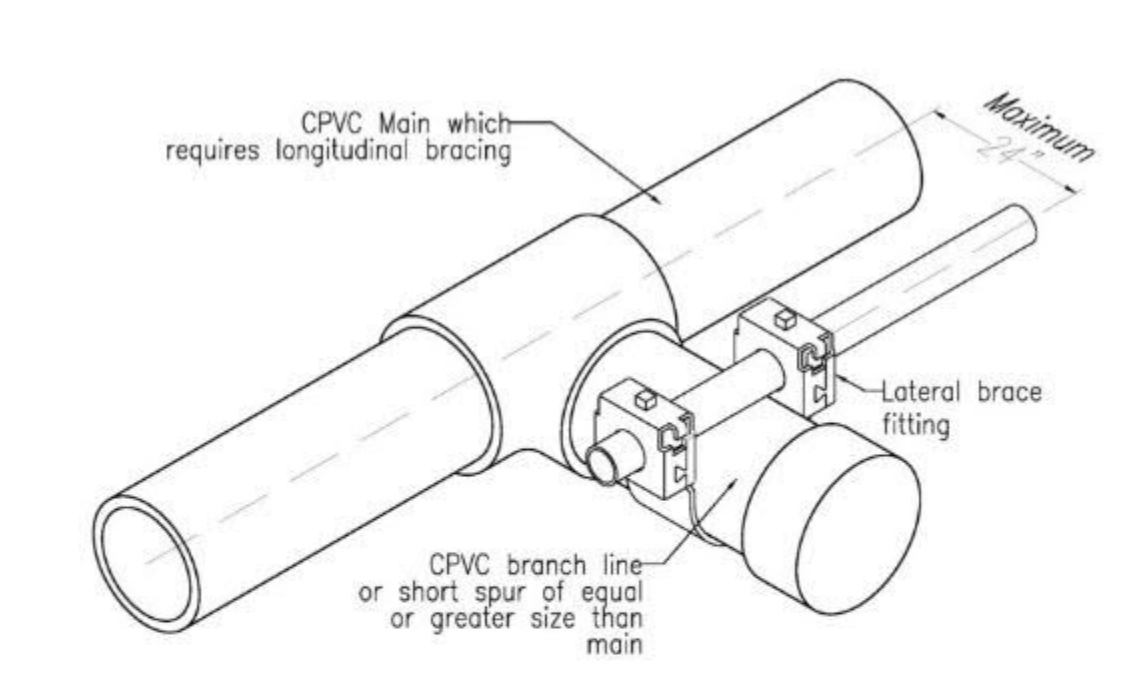
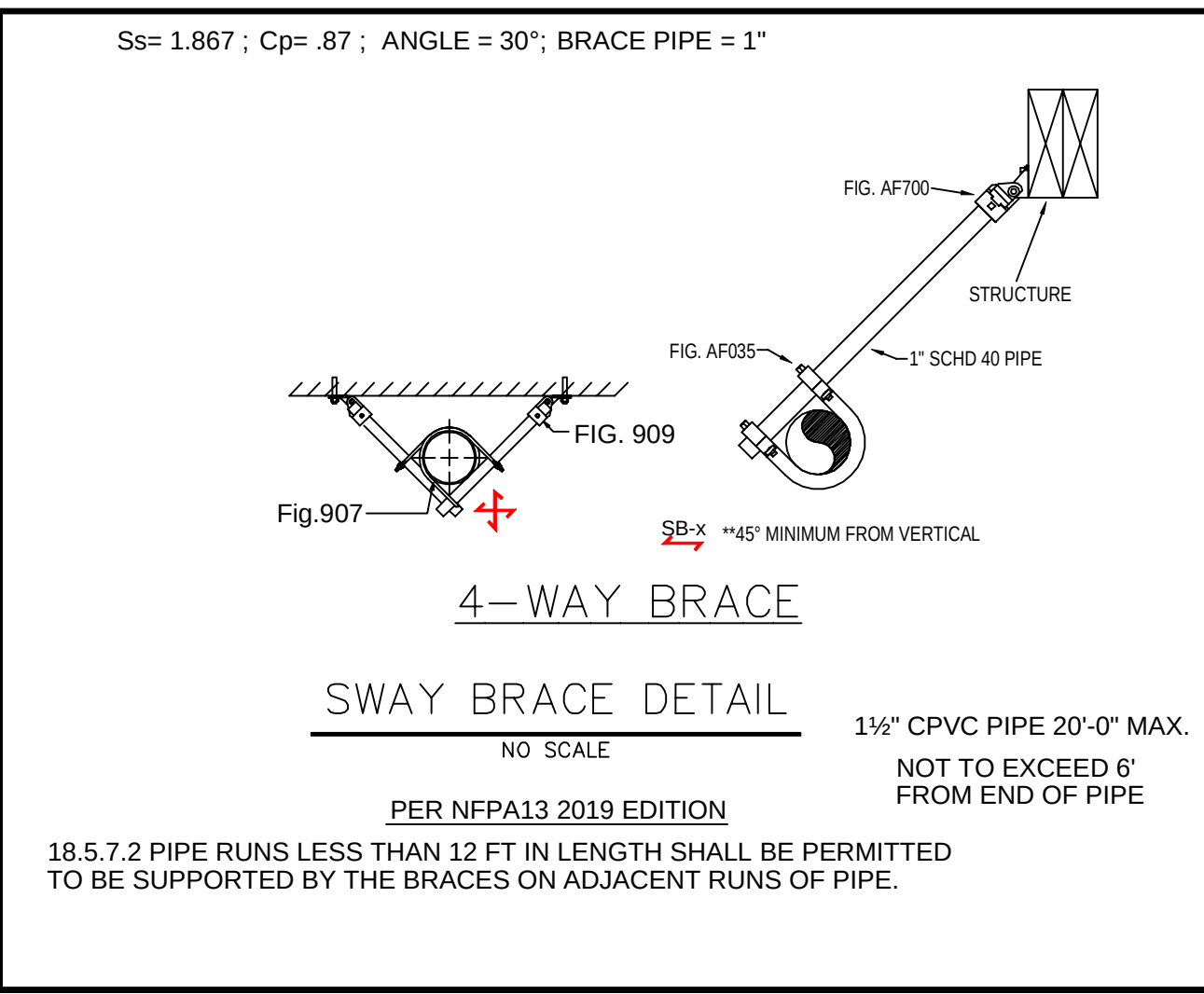
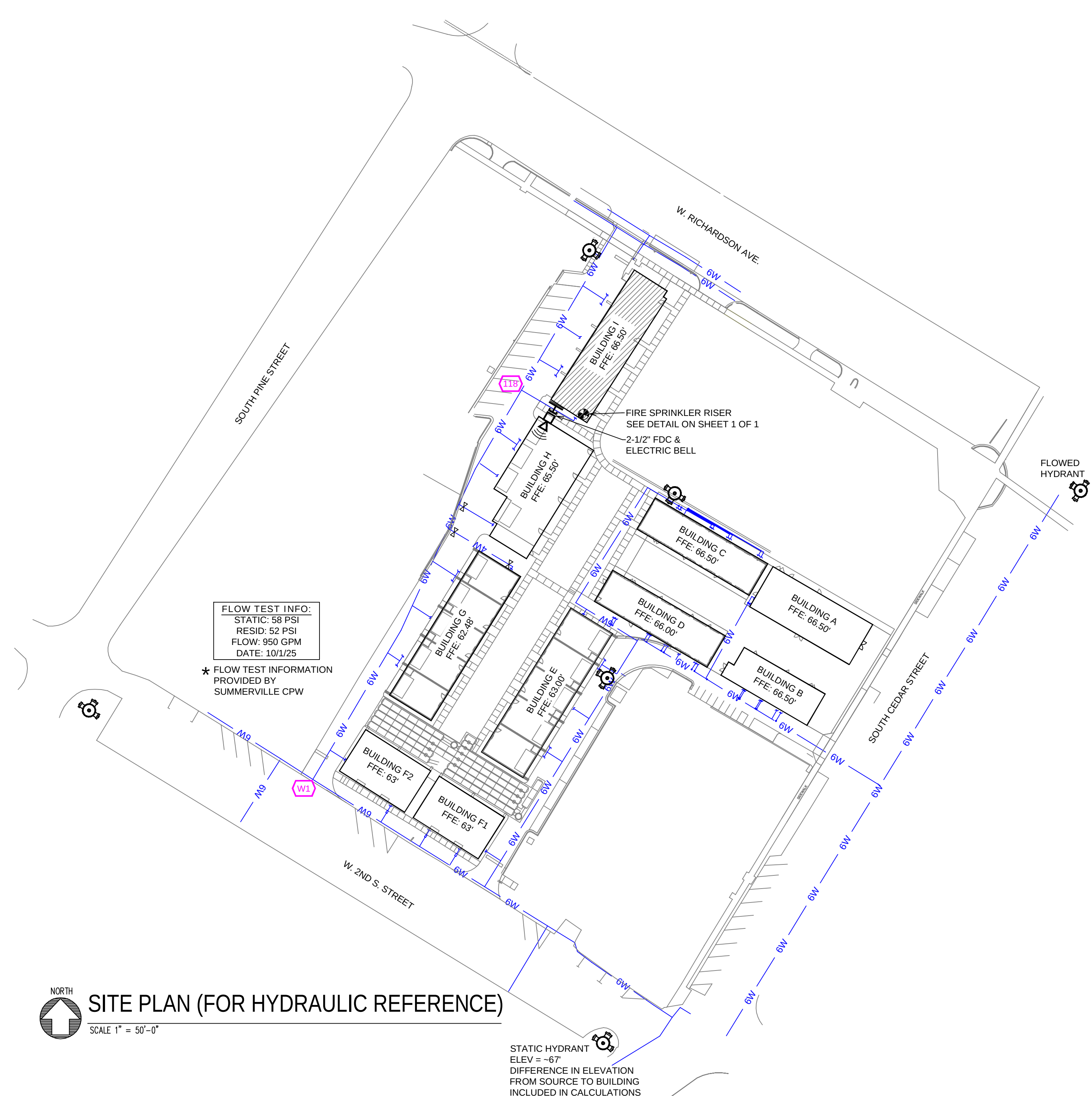
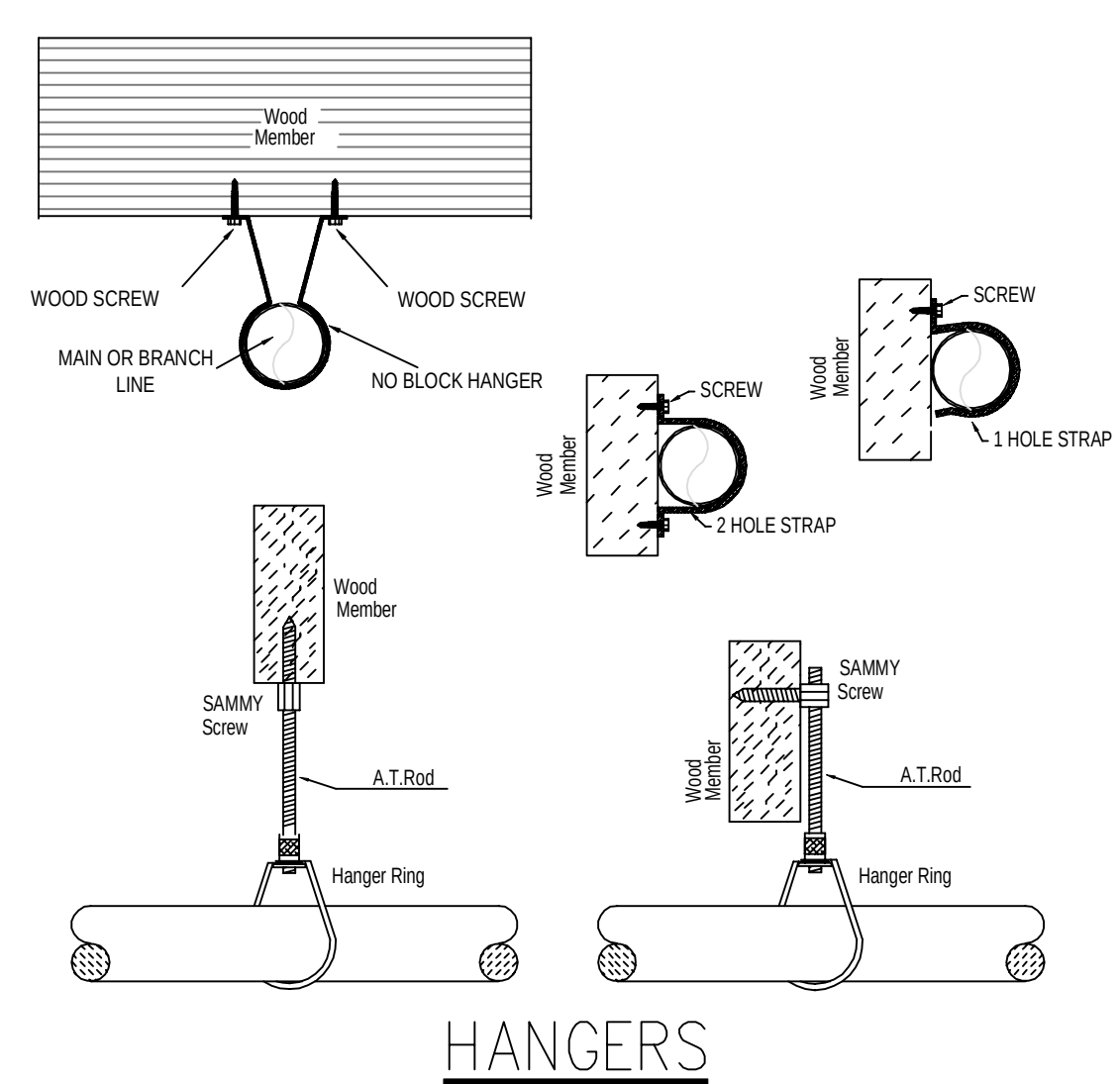
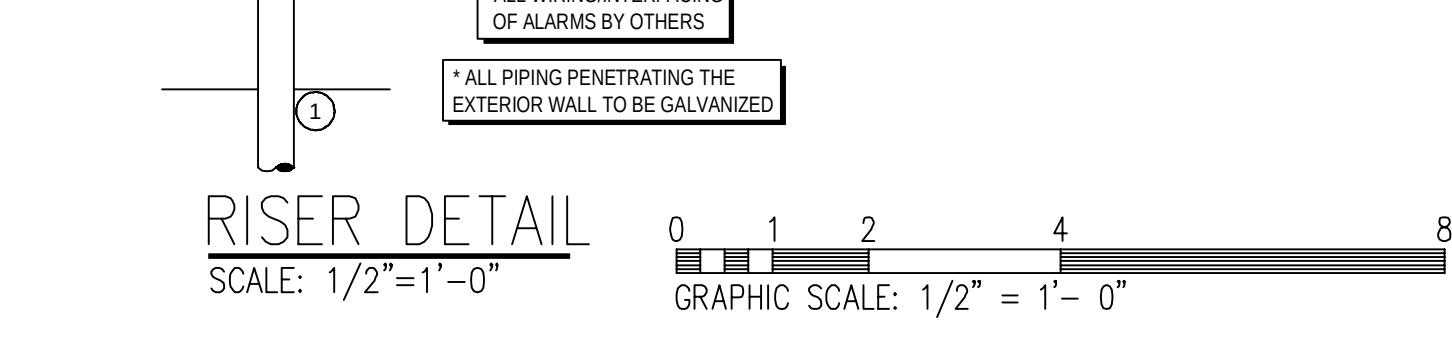


Figure 2. Example of lateral brace providing longitudinal brace for CPVC.

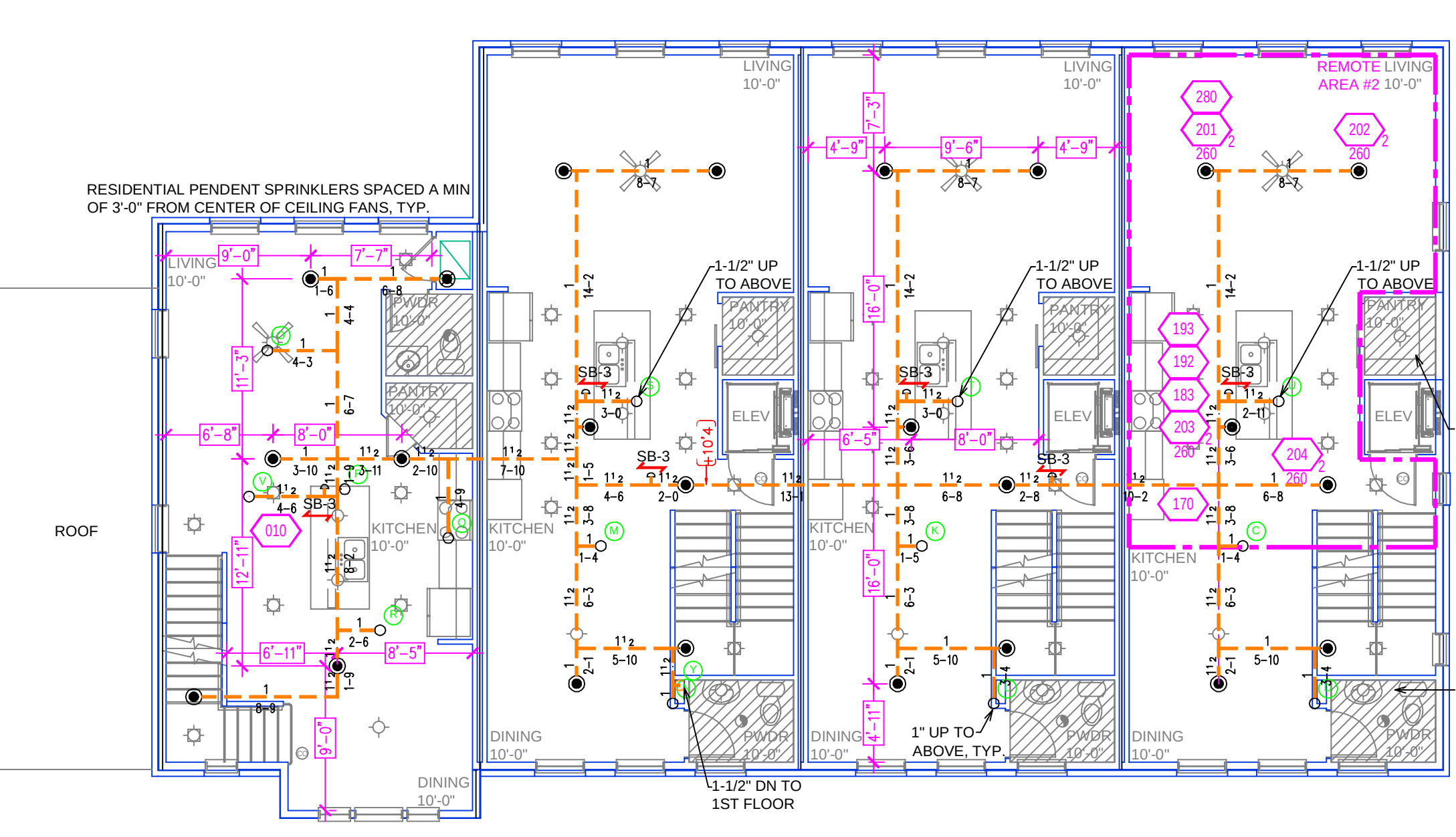
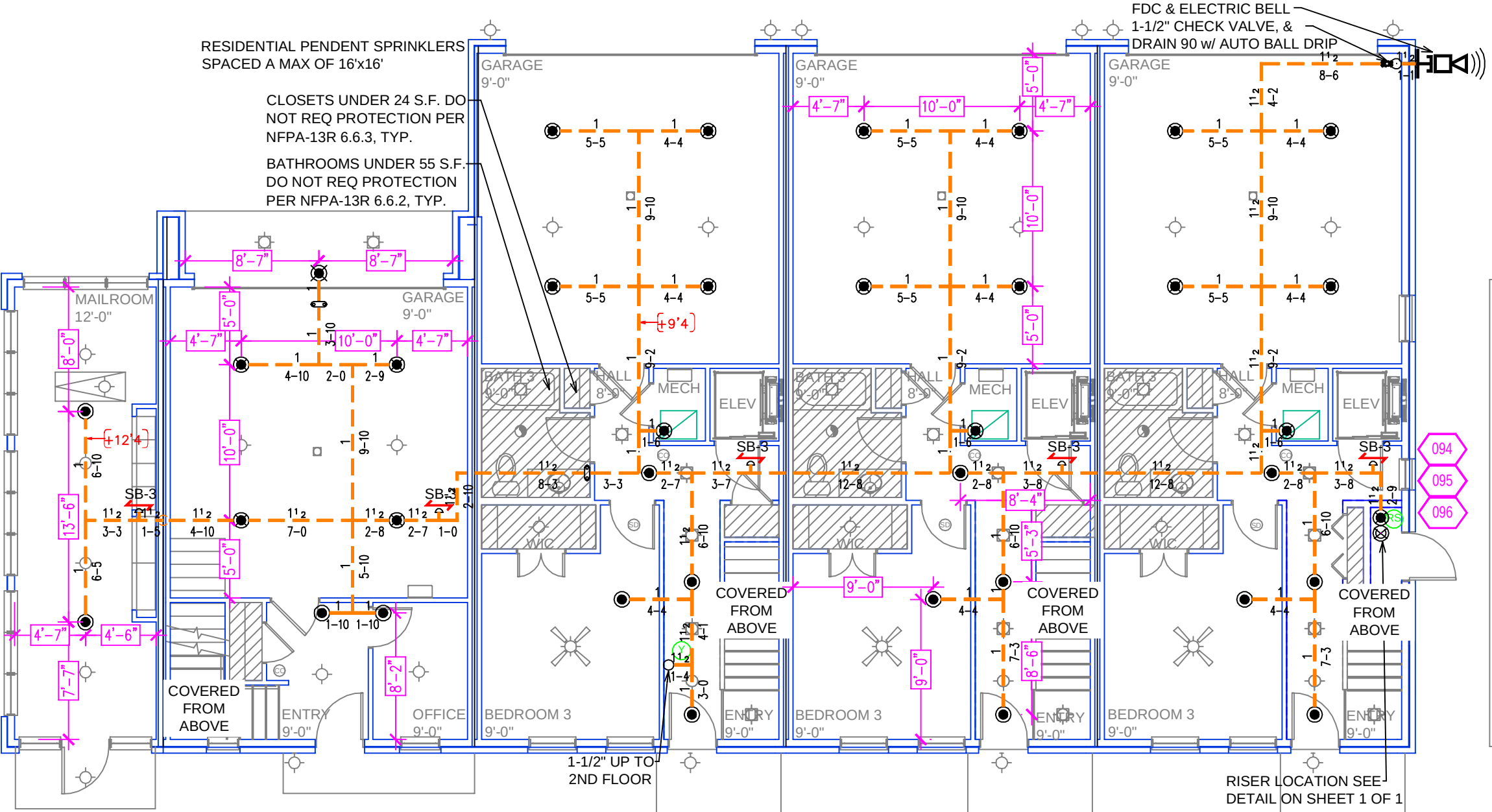


- GENERAL NOTES**
- SOUTH CAROLINA BUILDING CODE (2021)
 - OCCUPANCY: R-2
 - TYPE OF CONSTRUCTION: V-A (PROTECTED, COMBUSTIBLE)
 - SPRINKLER AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
FIRST FLOOR = 3169 S.F.
SECOND FLOOR = 3704 S.F.
THIRD FLOOR = 3562 S.F.
FOURTH FLOOR = 1066 S.F.
TOTAL = 11,501 S.F.
 - INSTALLATION STANDARDS:
SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13R (2019)
 - SPRINKLER PIPE TYPES:
2.1. 1" BRANCH LINES TO BE CPVC PIPING WITH CEMENTED FITTINGS
2.2. 1 1/2" THROUGH 1 1/2" MAIN & BRANCH LINES TO BE CPVC PIPING WITH CEMENTED FITTINGS
 - DESIGN CRITERIA
3.1. RESIDENTIAL UNITS DESIGNED TO LIGHT HAZARD
3.2. REMOTE AREA REDUCTIONS HAVE BEEN TAKEN WHERE APPLICABLE PER NFPA 13 SEC. 19.3.3.2.3.1
 - NOTES:
4.1. ALL MATERIAL TO BE NEW AND MEET U.L. STANDARDS
4.2. HANGERS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13 (2019) - SEE PLAN FOR HANGING REQUIREMENTS
 - SYMBOLS USED ON DRAWINGS:
- (E) PIPE ELEVATION A.F.F.
- (B) PIPE ELEVATION BELOW B.O.D.
- (H) ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD UNLESS NOTED)
- (C) HYDRAULIC CALCULATION JUNCTION POINT
- (C) CEILING HEIGHT
 - SCOPE OF WORK:
6.1. TO INSTALL A NEW WET SPRINKLER SYSTEM IN BONAIRE PARK BUILDING 1, THE BUILDING IS RESIDENTIAL TOWNHOUSES. THE SYSTEM SHALL HAVE ONE ZONE COVERING THE ENTIRE BUILDING.
6.2. ALL AREAS OF THE BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13R (2019)

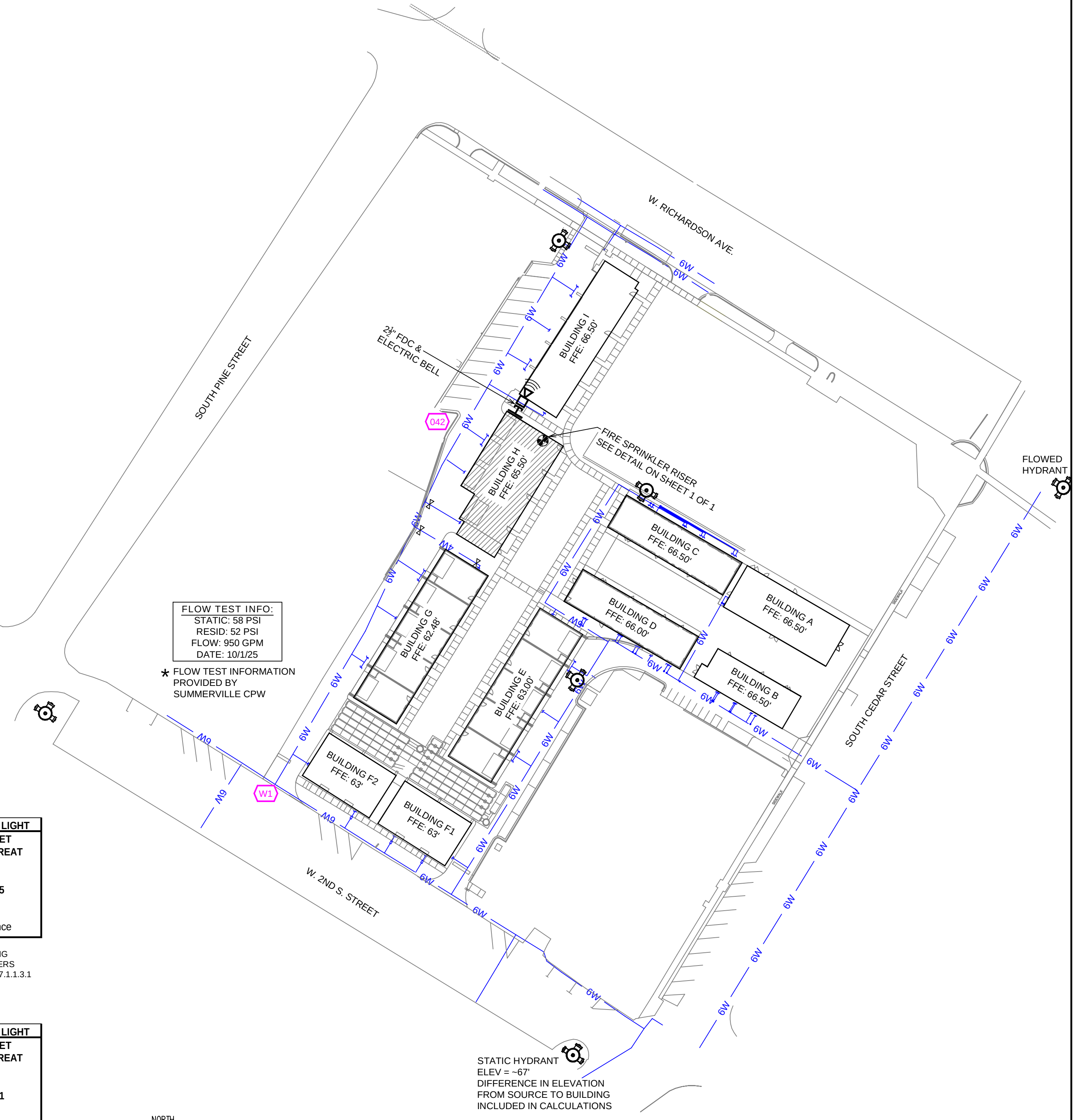


SUBMITTAL

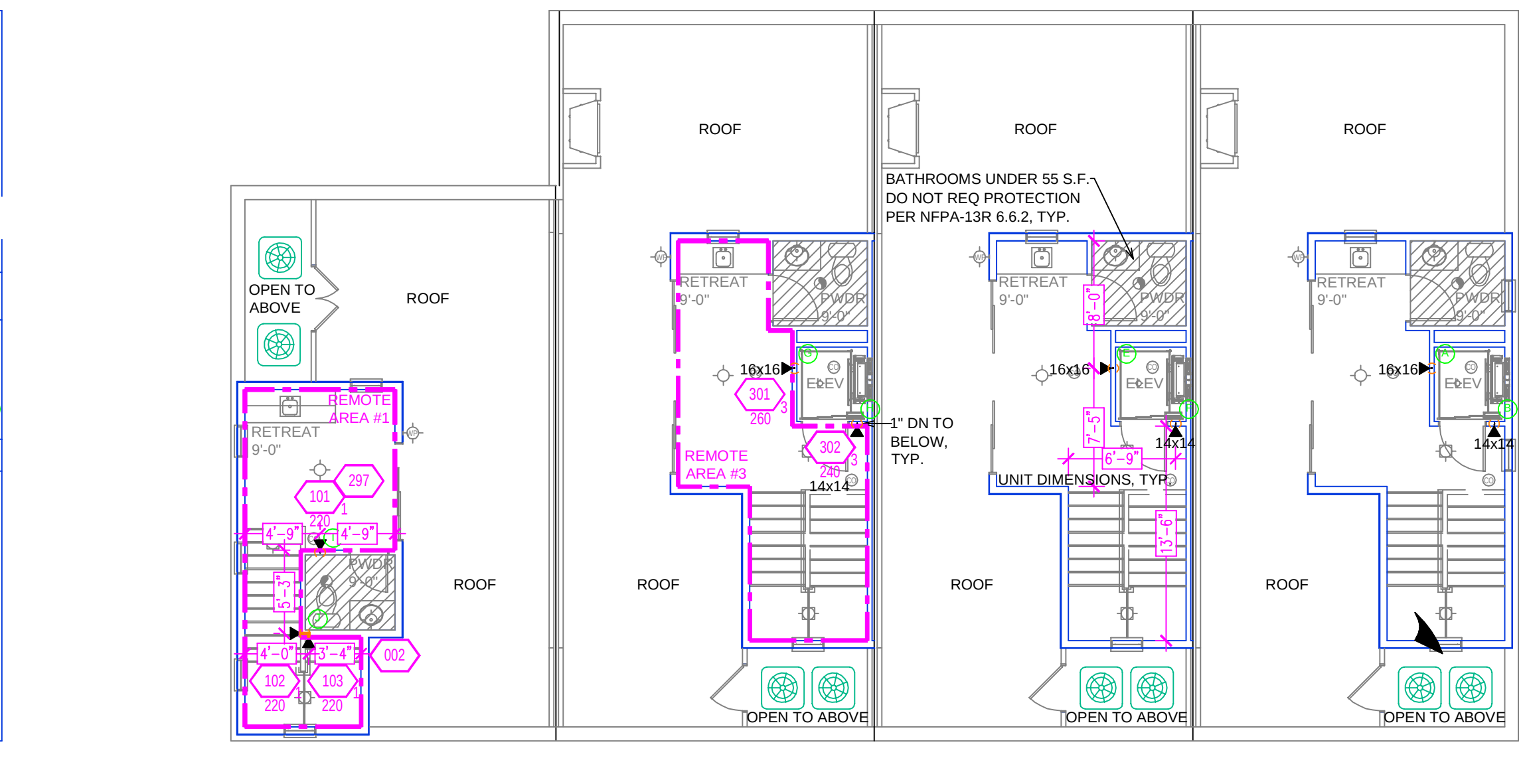
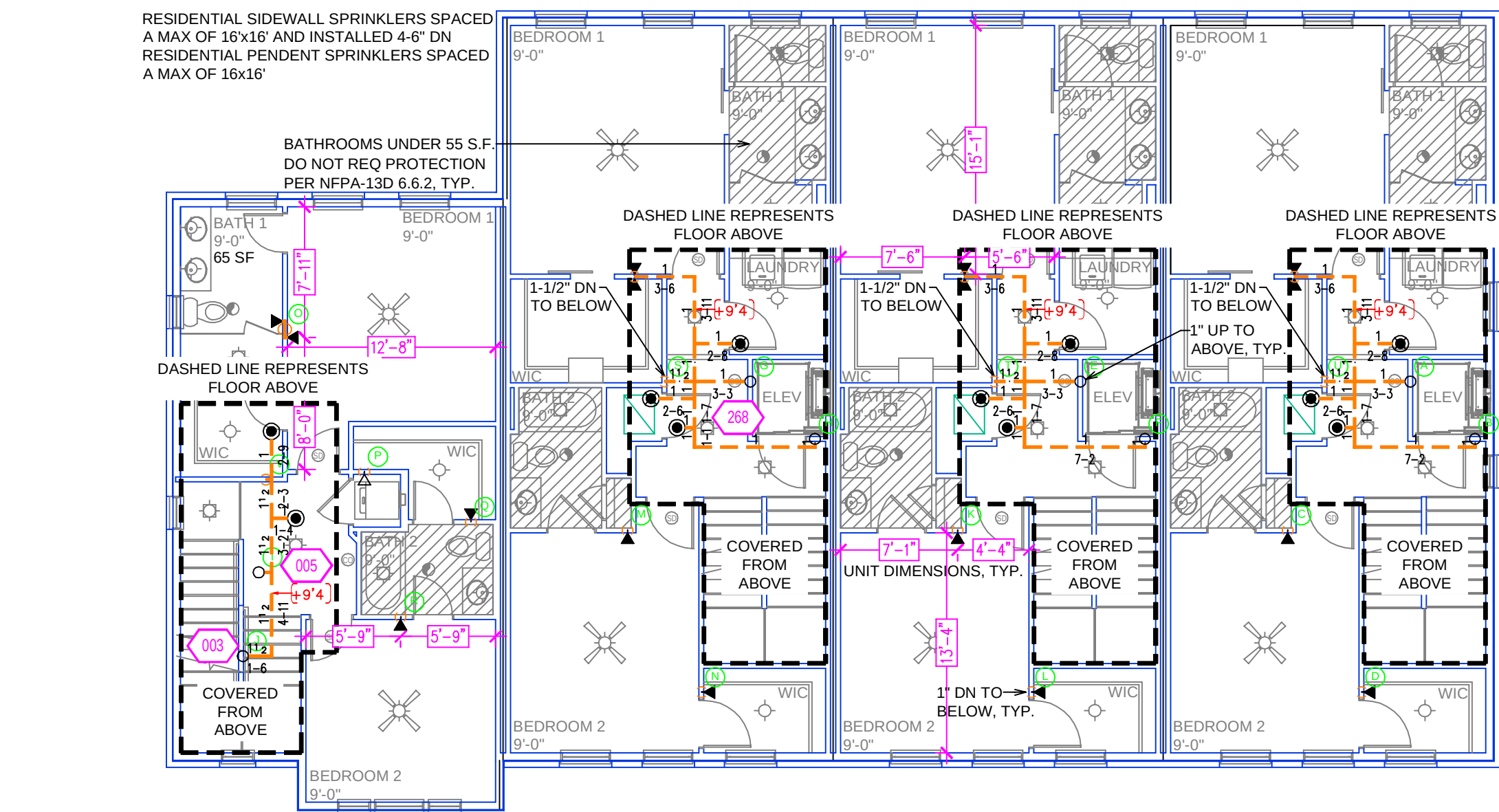
JOB No.	HR1262	Sprinkler Plan	FILE: BONAIRE PARK BLDG 1.dwg
DATE	3/19/2026	BONAIRE PARK BLDG. I	SHEET No.
DESIGNER	DVG	200 SOUTH CEDAR ST.	1 OF 1
SCALE	1/8" = 1'-0"	SUMMERVILLE, SOUTH CAROLINA	
		ARNETT CONSTRUCTION	



Design Area #2 HAZARD: LIGHT
Zone: 1 System Type: WET
Location: 2ND FLOOR LIVING/KITCHEN
Flowing Outlets: 4
Density: 0.05 Remote Area: 282
Flow: 100.7 gpm @ 42.2 psi
Calculation Safety: 15.7 psi
Includes 45 gpm Hose allowance
NOTE:
UP TO THE FOUR MOST DEMANDING
ADJACENT RESIDENTIAL SPRINKLERS
CALCULATED PER NFPA 13R SEC. 7.1.1.3.1
RESIDENTIAL PENDENT SPRINKLERS
SPACED A MAX OF 16'x16'
CLOSETS UNDER 24 S.F. DO
NOT REQ PROTECTION PER
NFPA-13R 6.6.2, TYP.
BATHROOMS UNDER 55 S.F.
DO NOT REQ PROTECTION
PER NFPA-13R 6.6.2, TYP.



FLOW TEST INFO:
STATIC: 58 PSI
RESID: 52 PSI
FLOW: 950 GPM
DATE: 10/1/25
* FLOW TEST INFORMATION
PROVIDED BY
SUMMERVILLE CPW



Design Area #1 HAZARD: LIGHT
Zone: 1 System Type: WET
Location: FOURTH FLOOR RETREAT
Flowing Outlets: 3
Density: 0.05 Remote Area: 155
Flow: 78.4 gpm @ 45.4 psi
Calculation Safety: 12.6 psi
Includes 45 gpm Hose allowance
NOTE:
UP TO THE FOUR MOST DEMANDING
ADJACENT RESIDENTIAL SPRINKLERS
CALCULATED PER NFPA 13R SEC. 7.1.1.3.1
RESIDENTIAL SIDEWALL SPRINKLERS SPACED
A MAX OF 12'x12' UNO AND INSTALLED 4-6" DN

Design Area #3 HAZARD: LIGHT
Zone: 1 System Type: WET
Location: FOURTH FLOOR RETREAT
Flowing Outlets: 2
Density: 0.05 Remote Area: 191
Flow: 70.6 gpm @ 42.8 psi
Calculation Safety: 15.1 psi
Includes 45 gpm Hose allowance
NOTE:
UP TO THE FOUR MOST DEMANDING
ADJACENT RESIDENTIAL SPRINKLERS
CALCULATED PER NFPA 13R SEC. 7.1.1.3.1
RESIDENTIAL SIDEWALL SPRINKLERS SPACED
A MAX OF 12'x12' UNO AND INSTALLED 4-6" DN

NORTH
SITE PLAN (FOR HYDRAULIC REFERENCE)
SCALE 1" = 50'-0"

GENERAL NOTES

1. SOUTH CAROLINA BUILDING CODE (2021)
 - 1.1. OCCUPANCY: R-2
 - 1.2. TYPE OF CONSTRUCTION: V-A (PROTECTED, COMBUSTIBLE)
 - 1.3. SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
 - FIRST FLOOR = 3480 S.F.
 - SECOND FLOOR = 3301 S.F.
 - THIRD FLOOR = 3301 S.F.
 - FOURTH FLOOR = 950 S.F.
 - TOTAL = 11,032 S.F.
- 1.4. INSTALLATION STANDARDS:
SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13R (2019)
2. SPRINKLER PIPE TYPES:
WET:
 - 2.1. 1" BRANCH LINES TO BE CPVC PIPING WITH CEMENTED FITTINGS
 - 2.2. 1 1/2" THROUGH 1-1/2" MAIN & BRANCH LINES TO BE CPVC PIPING WITH CEMENTED FITTINGS
3. DESIGN CRITERIA
 - 3.1. RESIDENTIAL UNITS DESIGNED TO LIGHT HAZARD
 - 3.2. REMOTE AREA REDUCTIONS HAVE BEEN TAKEN WHERE APPLICABLE PER NFPA 13 SEC. 19.3.3.2.3.1
4. NOTES:
 - 4.1. ALL MATERIAL TO BE NEW AND MEET U.L. STANDARDS
 - 4.2. HANGERS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13 (2019) - SEE PLAN FOR HANGING REQUIREMENTS
5. SYMBOLS USED ON DRAWINGS:
 - 1096 PIPE ELEVATION A.F.F
 - 1125 PIPE ELEVATION BELOW B.O.D
 - (CH) ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD UNLESS NOTED)
 - (H) HYDRAULIC CALCULATION JUNCTION POINT
 - 8'-0" CEILING HEIGHT
6. SCOPE OF WORK:
 - 6.1. TO INSTALL A NEW WET SPRINKLER SYSTEM IN BONAIRE PARK BUILDING H. THE BUILDING IS RESIDENTIAL TOWNHOUSES. THE SYSTEM SHALL HAVE ONE ZONE COVERING THE ENTIRE BUILDING.
 - 6.2. ALL AREAS OF THE BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13R (2019)

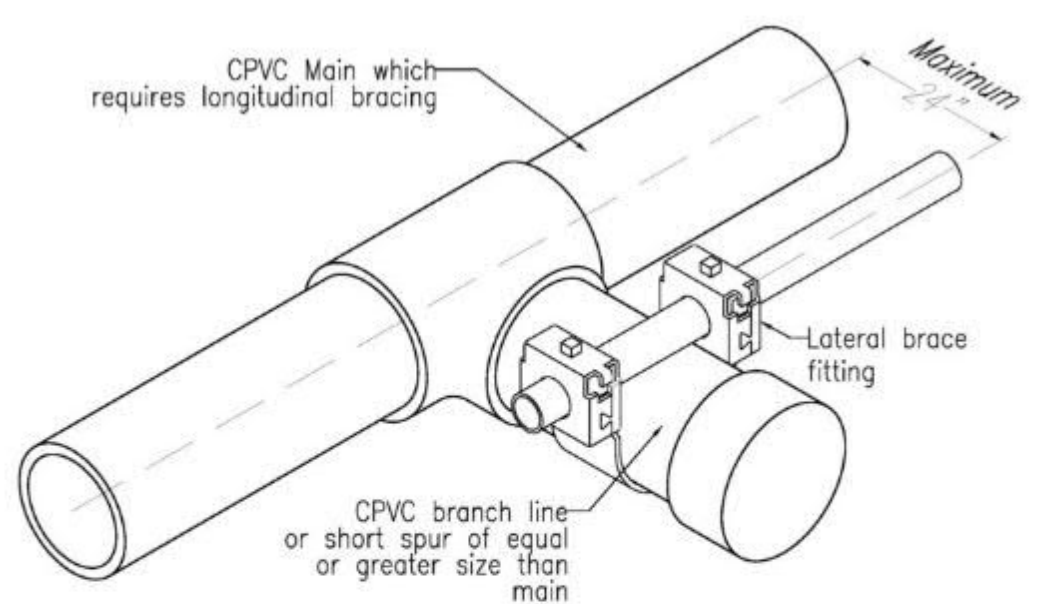
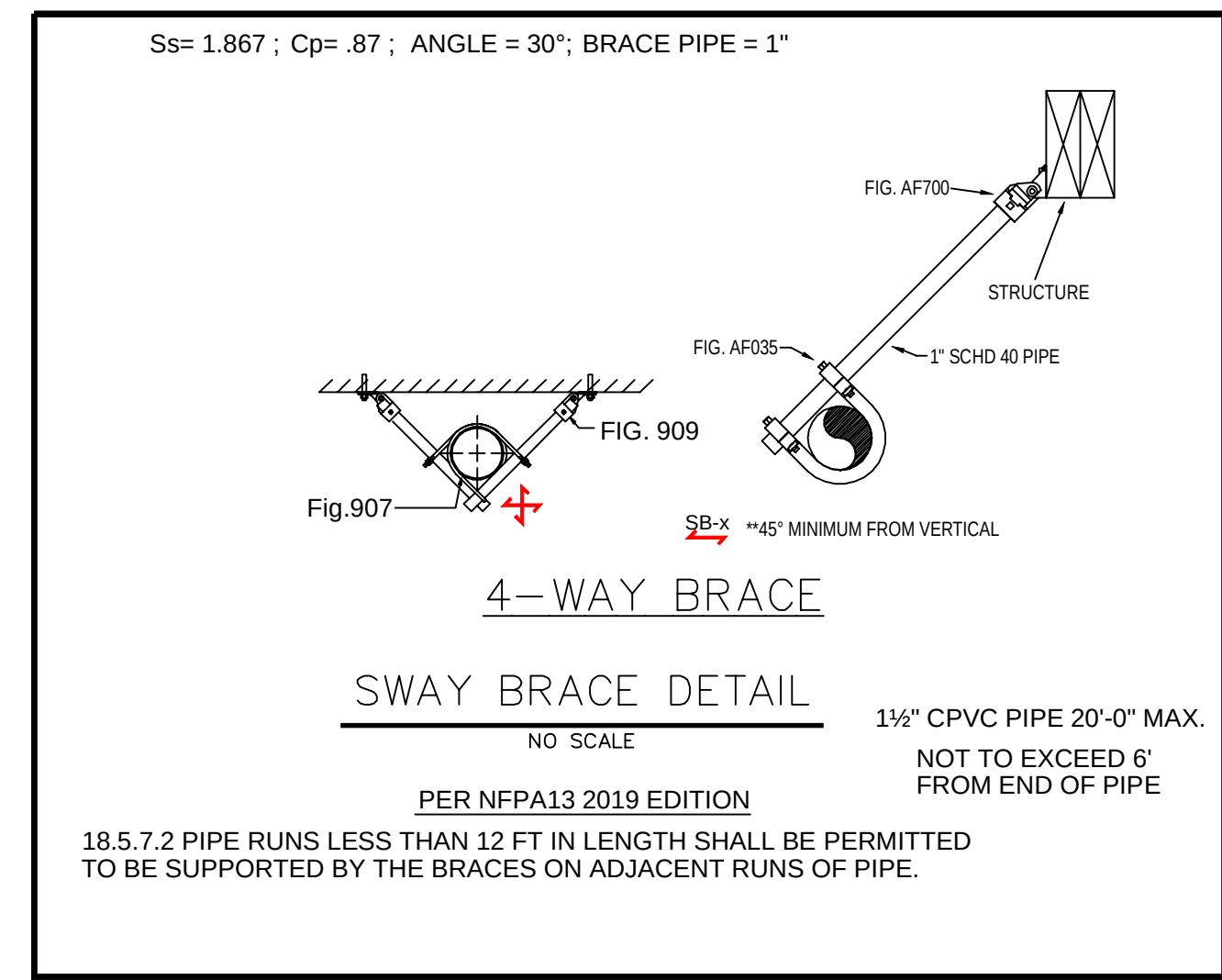
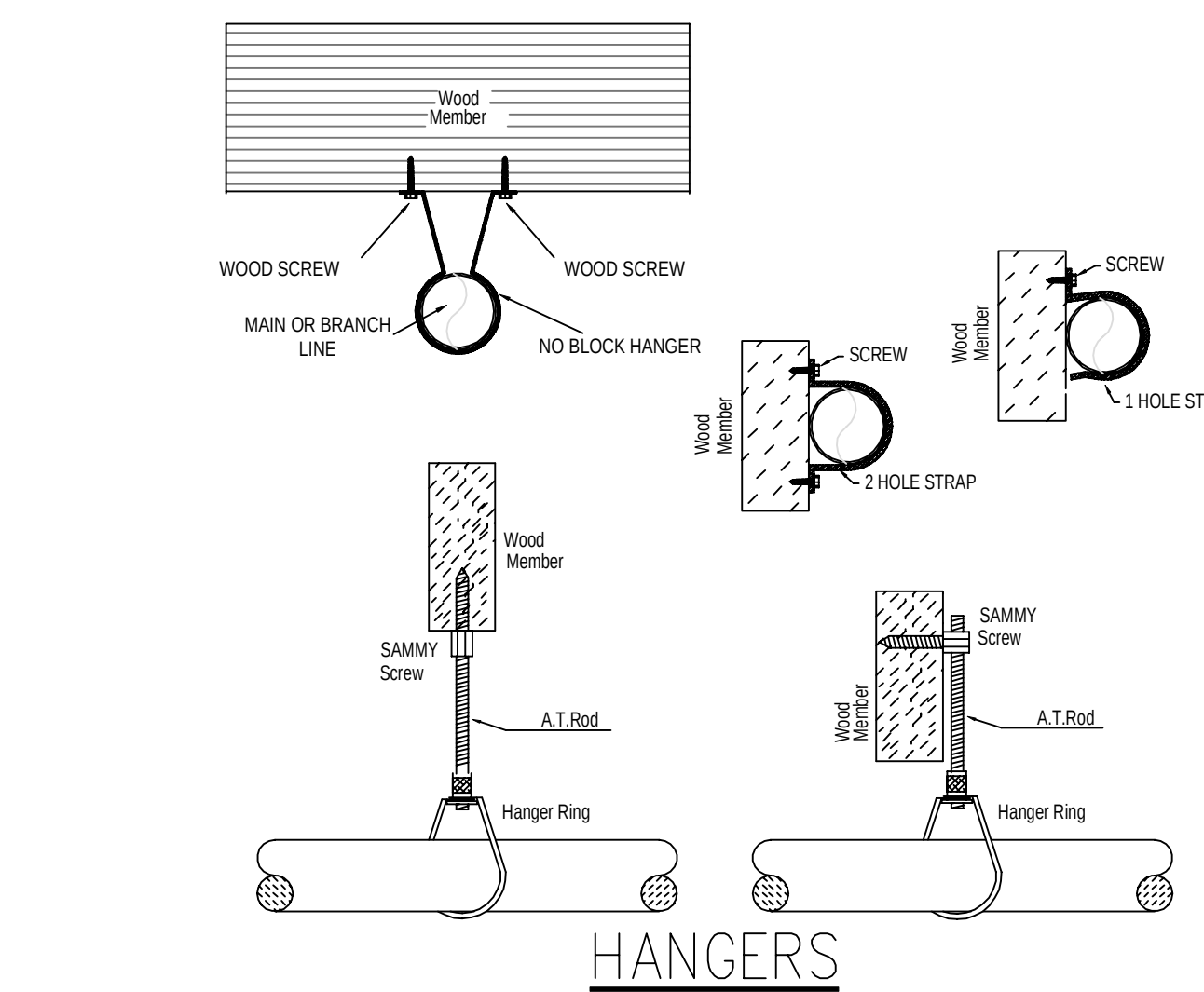
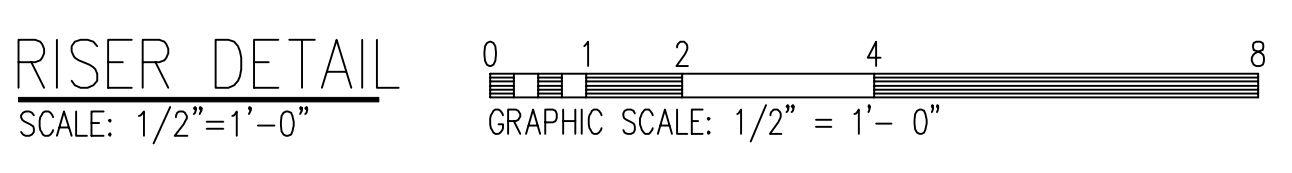
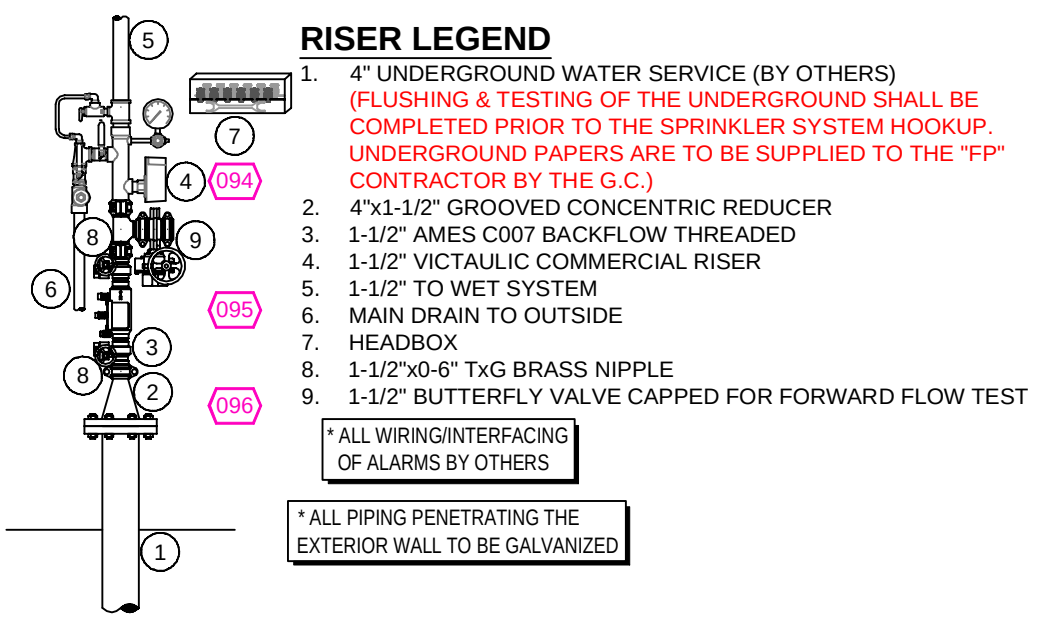


Figure 2. Example of lateral brace providing longitudinal brace for CPVC.

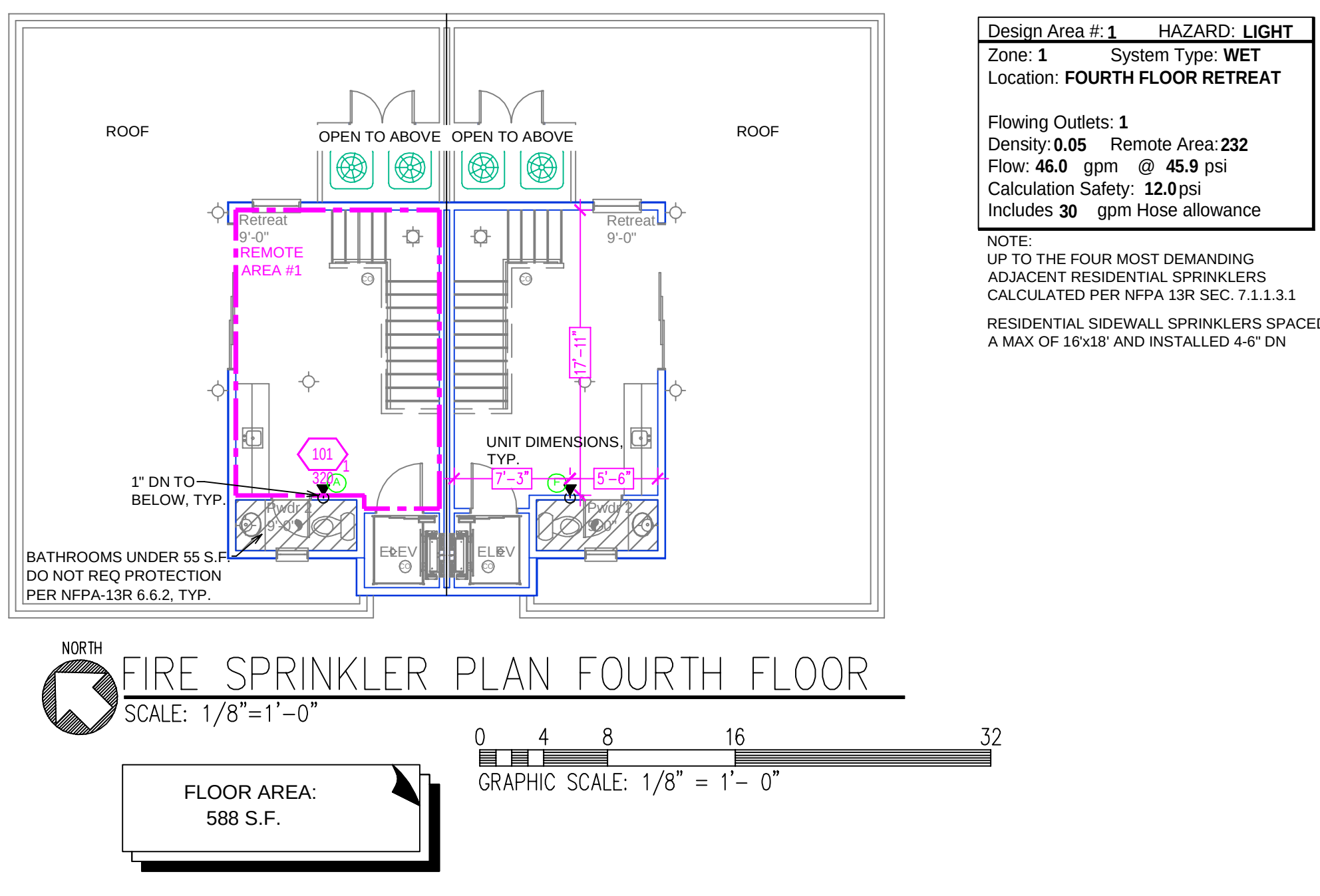
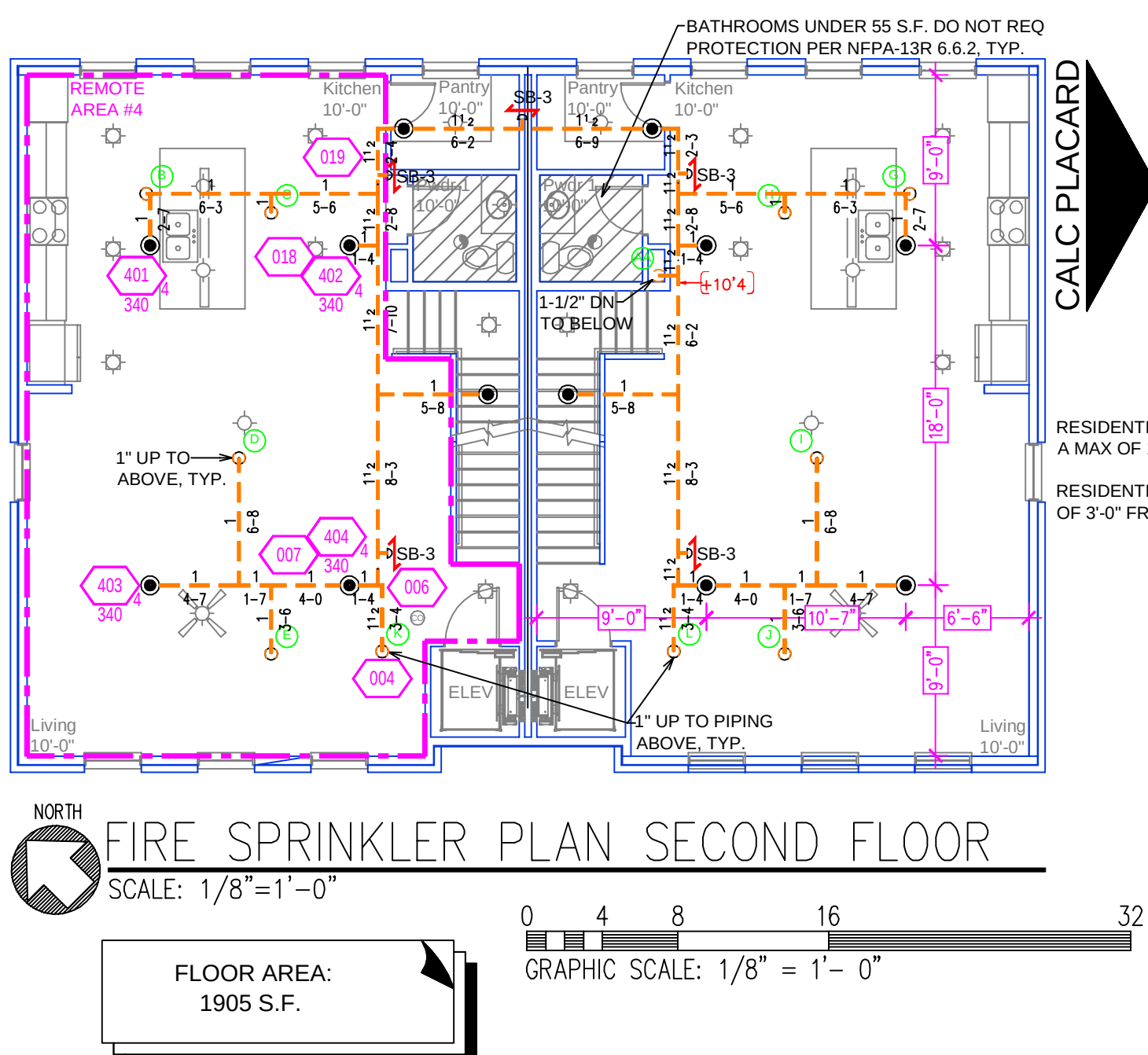
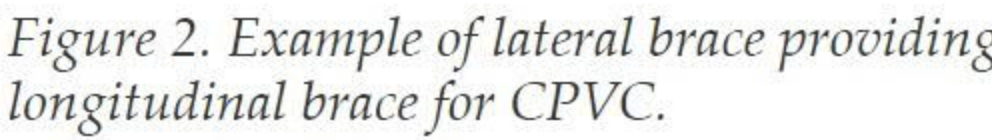
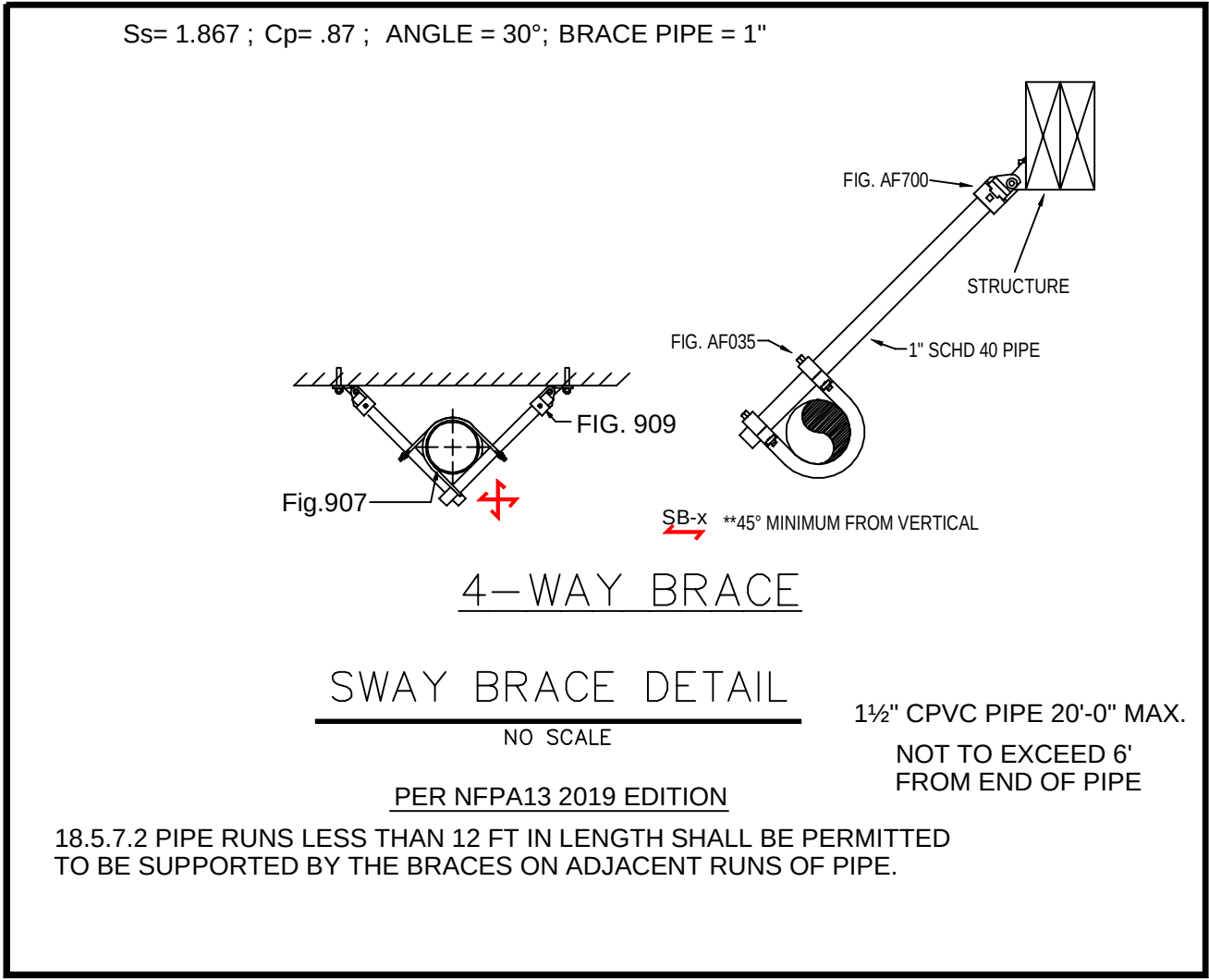
PIPE LEGEND

BLACK STEEL PIPING
CPVC PIPING



SUBMITTAL

JOB No.	HR1262	Sprinkler Plan	FILE: PARK BLDG 140mm
DATE	3/19/26	BONAIRE PARK BLDG. H	SHEET No.
DESIGNER	DVG	200 SOUTH CEDAR ST.	1 OF 1
SCALE	1/8" = 1'-0"	SUMMERVILLE, SOUTH CAROLINA	
		ARNETT CONSTRUCTION	



- GENERAL NOTES**
1. SOUTH CAROLINA BUILDING CODE (2021)
- 1.1. OCCUPANCY: B-2
- 1.2. TYPE OF CONSTRUCTION: V-A (PROTECTED, COMBUSTIBLE)
- 1.3. SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
- | | |
|--------------|--------------------|
| FIRST FLOOR | = 1711 S.F. |
| SECOND FLOOR | = 1905 S.F. |
| THIRD FLOOR | = 1905 S.F. |
| FOURTH FLOOR | = 988 S.F. |
| TOTAL | = 6109 S.F. |
- 1.4. INSTALLATION STANDARDS:
SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13R (2019)
2. SPRINKLER PIPE TYPE:
WET
- 2.1. 1" BRANCH LINES TO BE CPVC PIPING WITH CEMENTED FITTINGS
- 2.2. 1-1/4" THROUGH 1-1/2" MAIN & BRANCH LINES TO BE CPVC PIPING WITH CEMENTED FITTINGS
- 2.3. 1" BRANCH LINES TO BE BLACK SCHEDULE 40 PIPING WITH THREADED FITTINGS
3. DESIGN CRITERIA
- 3.1. RESIDENTIAL UNITS DESIGNED TO LIGHT HAZARD
- 3.2. REMOVE AREA REDUCTIONS HAVE BEEN TAKEN WHERE APPLICABLE PER NFPA 13 SEC. 19.3.3.2.3.1
4. NOTES:
- 4.1. ALL MATERIAL TO BE NEW AND MEET U.L. STANDARDS
- 4.2. HANGERS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13 (2019) - SEE PLAN FOR HANGING REQUIREMENTS
5. SYMBOLS USED ON DRAWINGS:
- (H9) PIPE ELEVATION A.F.F
- (H9) PIPE ELEVATION BELOW S.O.D
- (GH) ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD UNLESS NOTED)
- (F) HYDRAULIC CALCULATION JUNCTION POINT
- 8' - 0" CEILING HEIGHT
6. SCOPE OF WORK:
- 6.1. TO INSTALL A NEW WET SPRINKLER SYSTEM IN BONAIRE PARK BUILDING F2, THE BUILDING IS RESIDENTIAL TOWNHOUSES. THE SYSTEM SHALL HAVE ONE ZONE COVERING THE ENTIRE BUILDING.
- 6.2. THE AREAS OF THE BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13R (2019)

JOB No.	HR1262	Sprinkler Plan	FILE: BONAR PARK BLDG.F2.dwg
DATE	3/18/26	BONAIRE PARK BLDG. F2	SHEET No.
DESIGNER	DVG	208 SOUTH CEDAR ST.	1 OF 1
SCALE	1/8" = 1'-0"	SUMMERVILLE, SOUTH CAROLINA	
		ARNETT CONSTRUCTION	

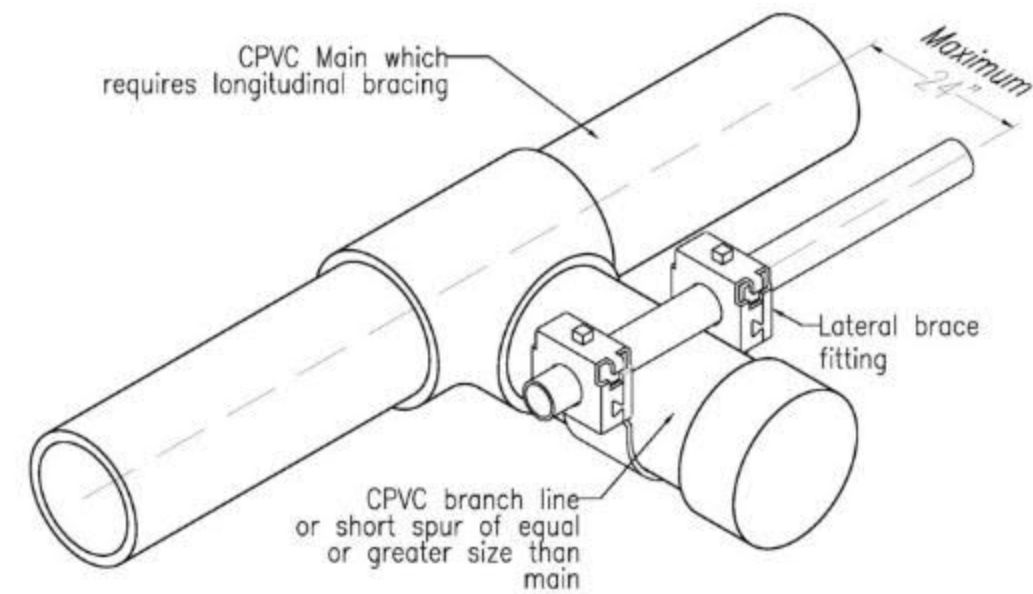
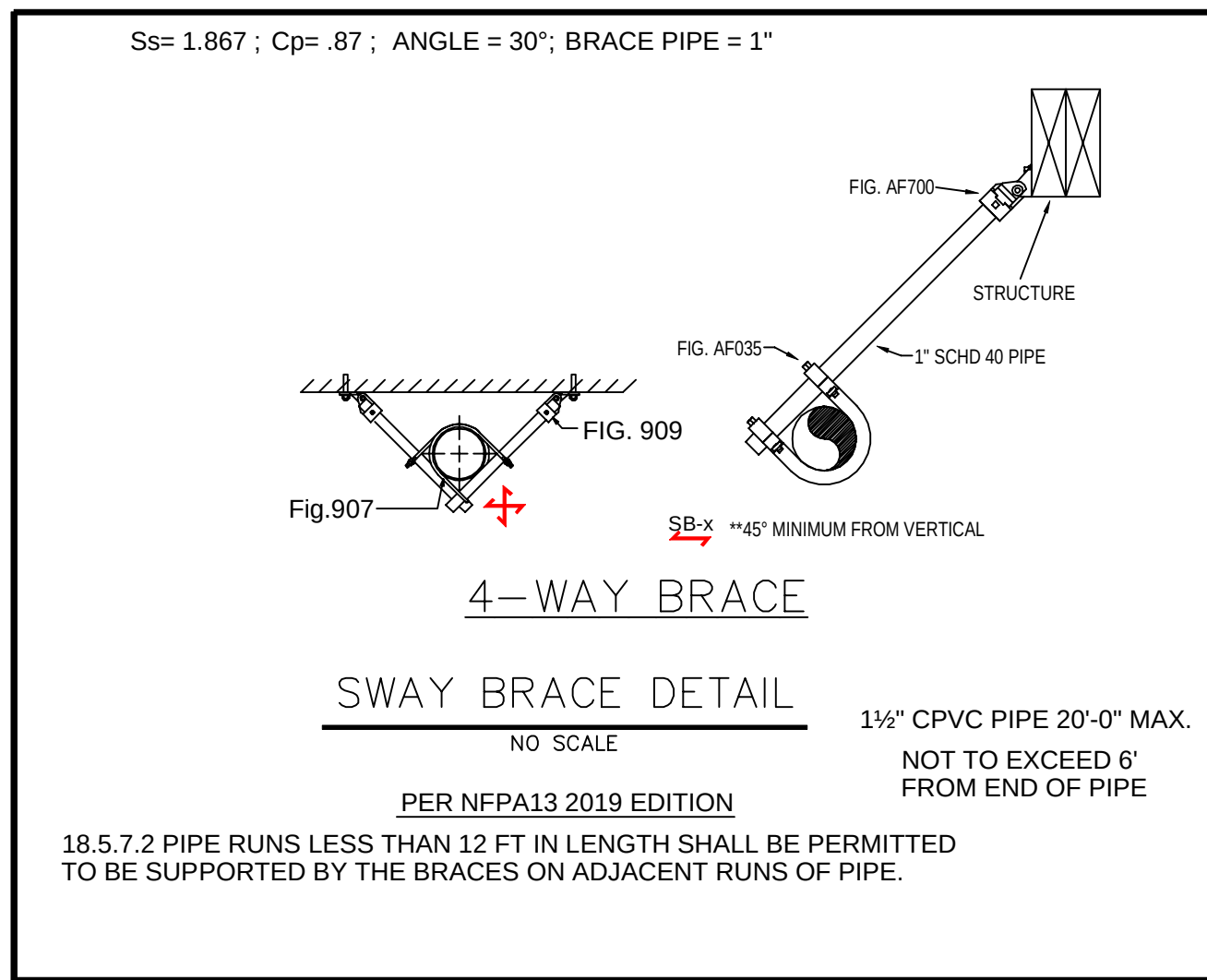
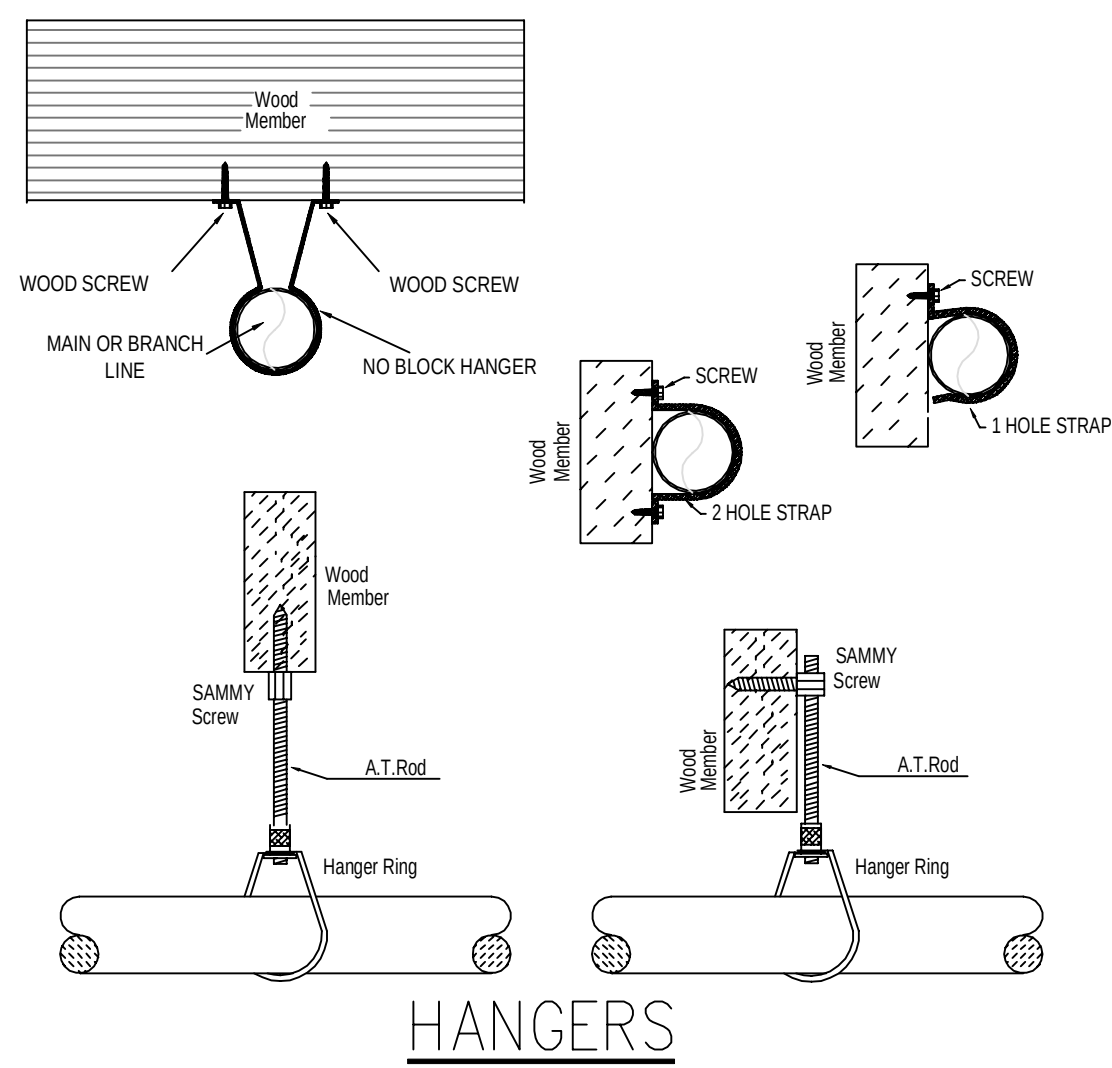
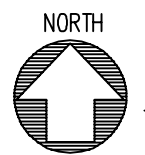
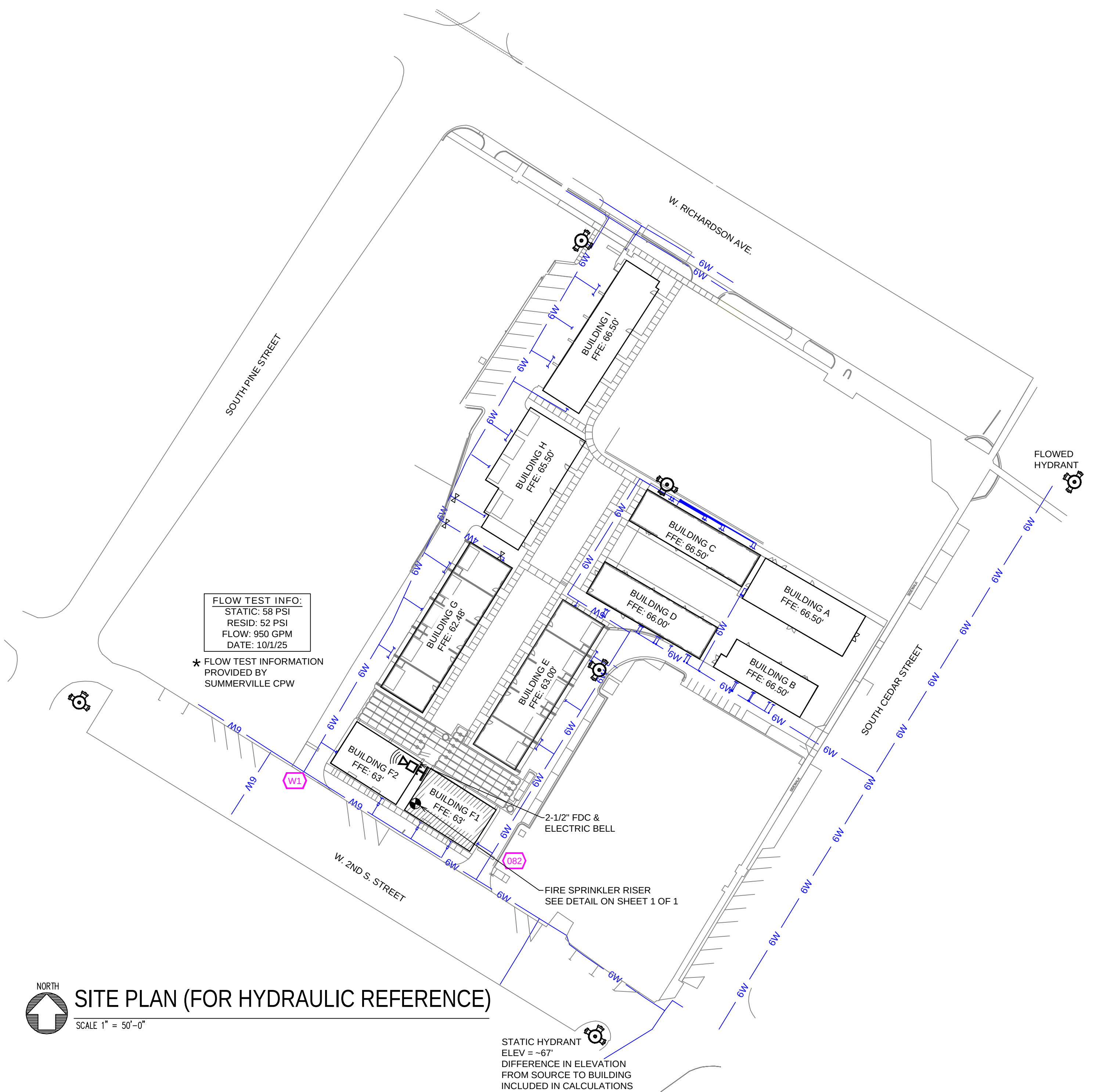


Figure 2. Example of lateral brace providing longitudinal brace for CPVC.



SITE PLAN (FOR HYDRAULIC REFERENCE)

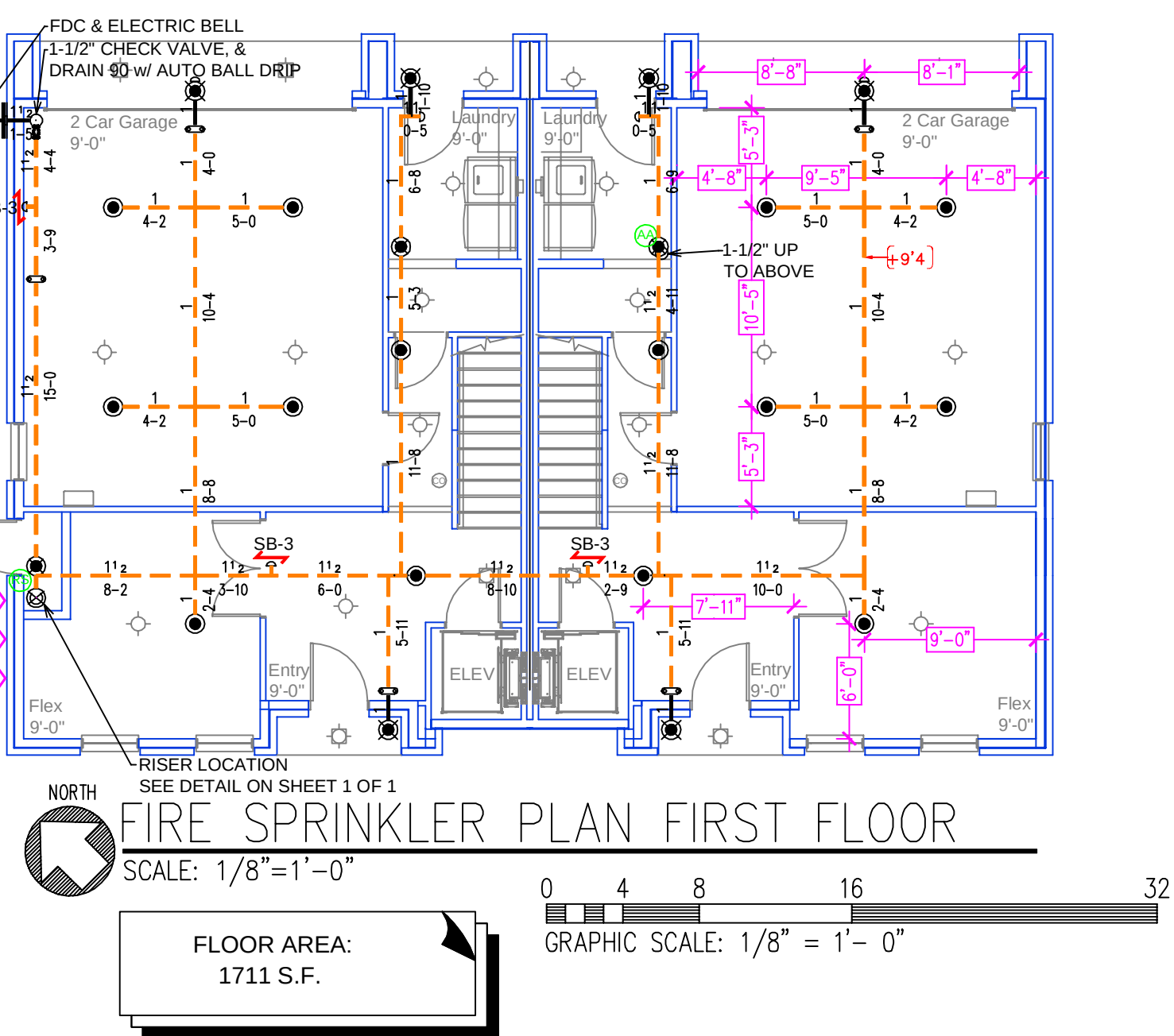
SCALE: 1" = 50'-0"

STATIC HYDRANT
ELEV = -67'
DIFFERENCE IN ELEVATION
FROM SOURCE TO BUILDING
INCLUDED IN CALCULATIONS

GENERAL NOTES

- SOUTH CAROLINA BUILDING CODE (2021)
- OCCUPANCY: R-2
- TYPE OF CONSTRUCTION: V.A. (PROTECTED, COMBUSTIBLE)
- SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
- FIRST FLOOR = 1711 S.F.
- SECOND FLOOR = 1905 S.F.
- THIRD FLOOR = 1905 S.F.
- FOURTH FLOOR = 588 S.F.
- TOTAL = 6109 S.F.
- INSTALLATION STANDARDS: SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13R (2019)
- SPRINKLER PIPE TYPES:
 - WET:
 - 1" BRANCH LINES TO BE CPVC PIPING WITH CEMENTED FITTINGS
 - 1-1/2" THROUGH 1-1/2" MAIN & BRANCH LINES TO BE CPVC PIPING WITH CEMENTED FITTINGS
- DESIGN CRITERIA
 - 3.1 RESIDENTIAL UNITS DESIGNED TO LIGHT HAZARD
 - 3.2 REMOTE AREA REDUCTIONS HAVE BEEN TAKEN WHERE APPLICABLE PER NFPA 13 SEC. 19.3.3.2.3.1
- NOTES:
 - 4.1 ALL MATERIAL TO BE NEW AND MEET U.L. STANDARDS
 - 4.2 HANGERS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13 (2019) - SEE PLAN FOR HANGING REQUIREMENTS
- SYMBOLS USED ON DRAWINGS:
 - PIPE ELEVATION A.F.F.
 - PIPE ELEVATION BELOW B.O.D.
 - ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD UNLESS NOTED)
 - HYDRAULIC CALCULATION JUNCTION POINT
 - CEILING HEIGHT
- SCOPE OF WORK:
 - 6.1 TO INSTALL A NEW WET SPRINKLER SYSTEM IN BONAIRE PARK BUILDING F1. THE BUILDING IS RESIDENTIAL TOWNHOUSES. THE SYSTEM SHALL HAVE ONE ZONE COVERING THE ENTIRE BUILDING.
 - 6.2 ALL AREAS OF THE BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13R (2019)

SUBMITTAL

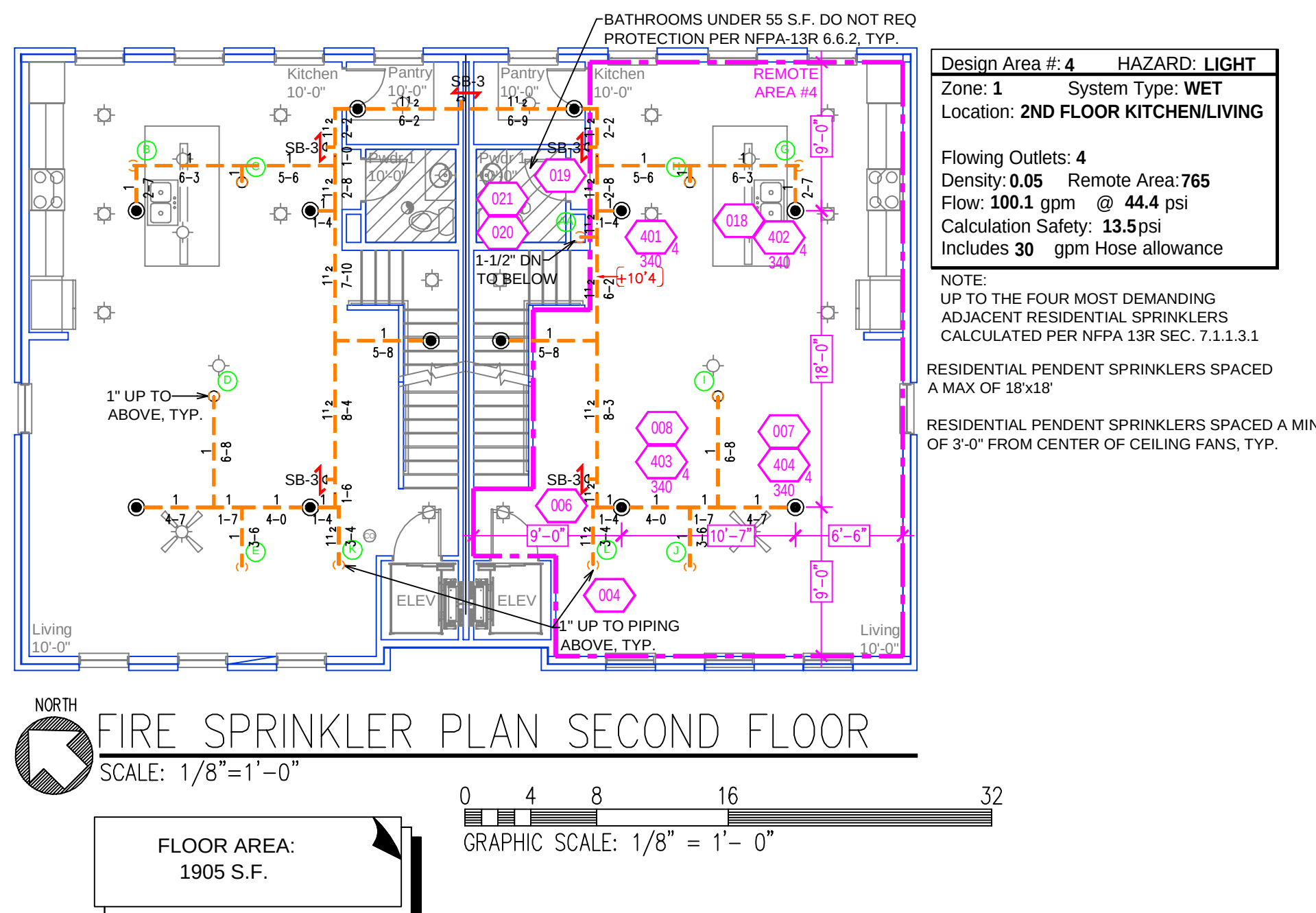


FIRE SPRINKLER PLAN FIRST FLOOR

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

FLOOR AREA:
1711 S.F.

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

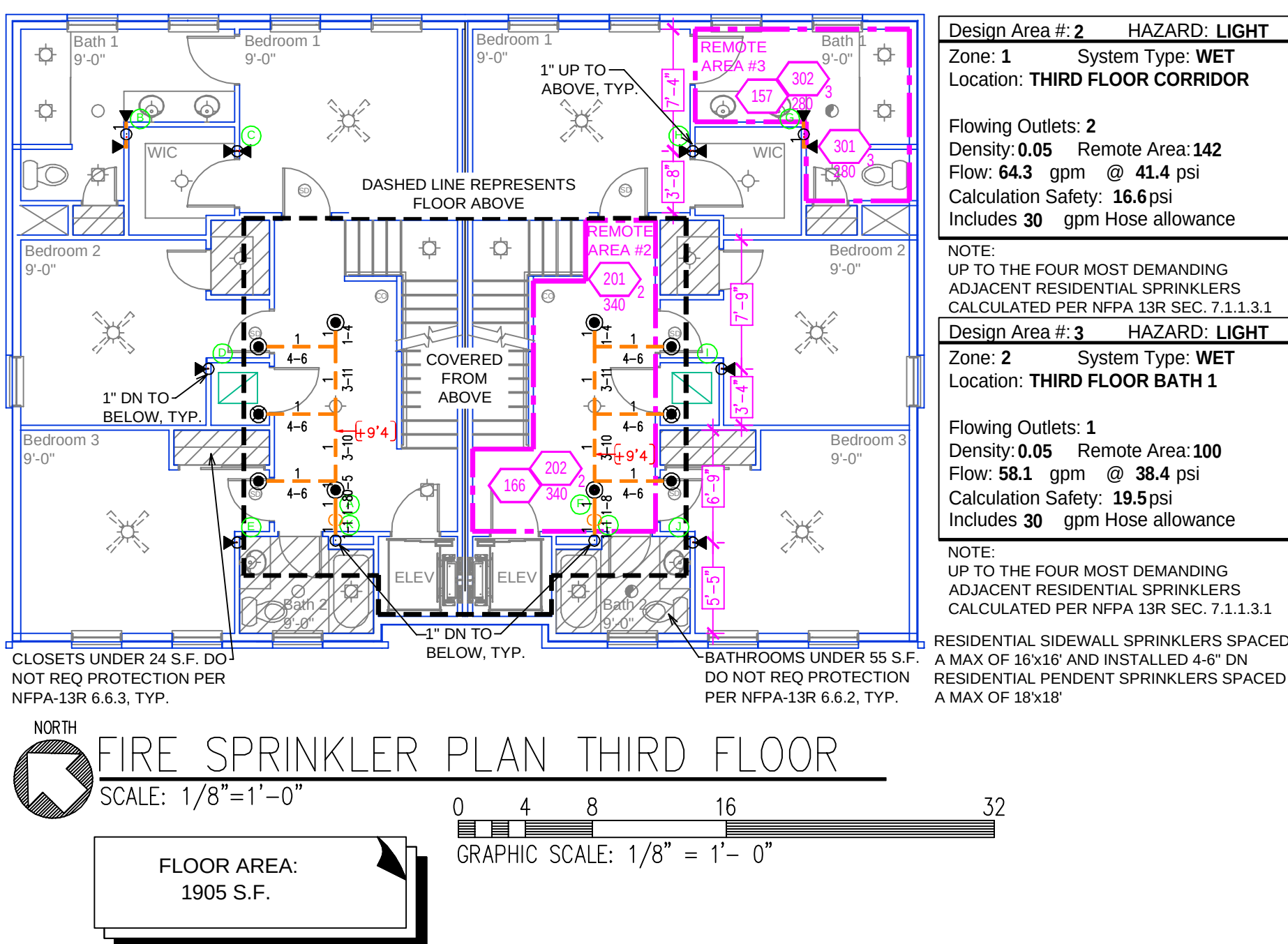


FIRE SPRINKLER PLAN SECOND FLOOR

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

FLOOR AREA:
1905 S.F.

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

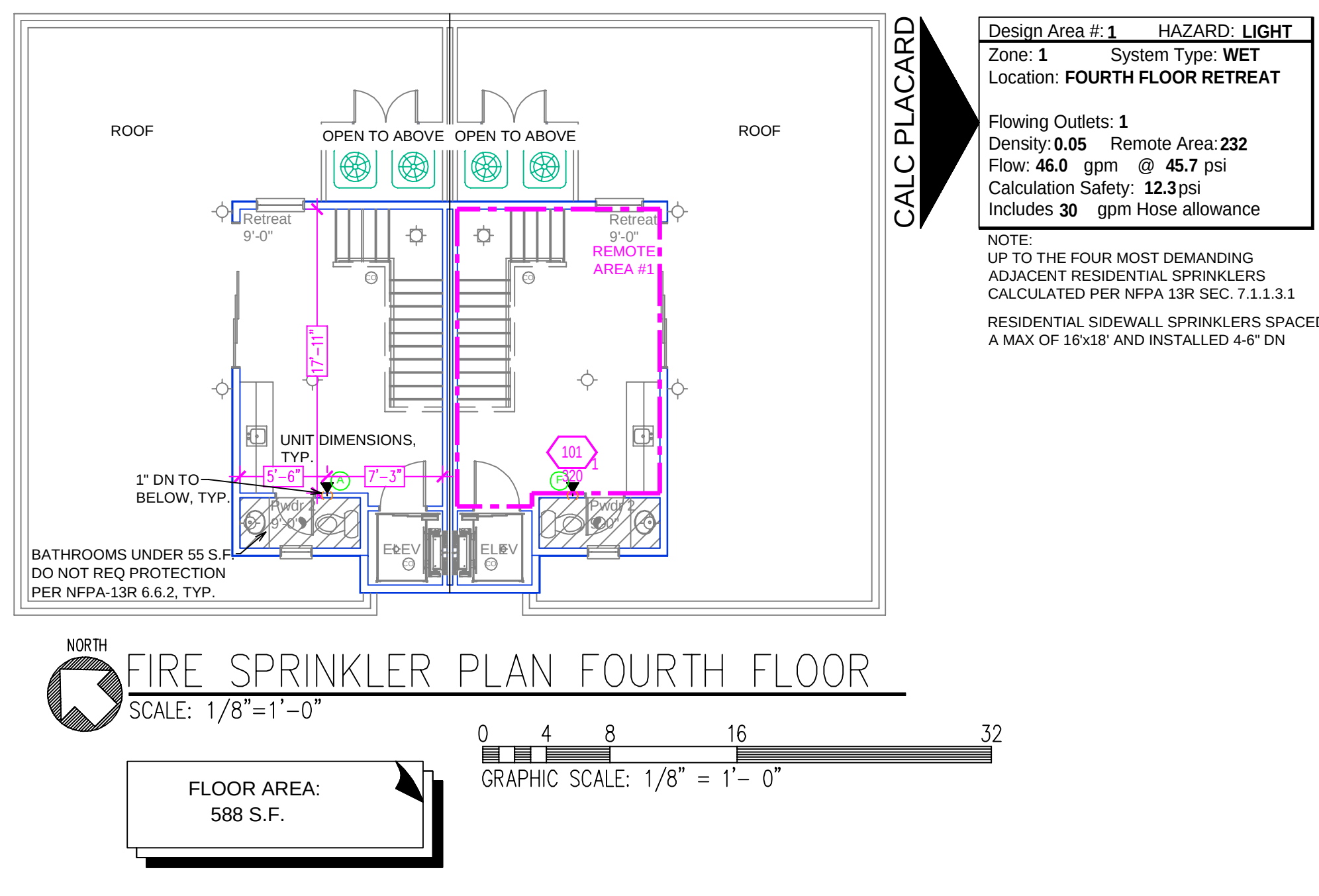


FIRE SPRINKLER PLAN THIRD FLOOR

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

FLOOR AREA:
1905 S.F.

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

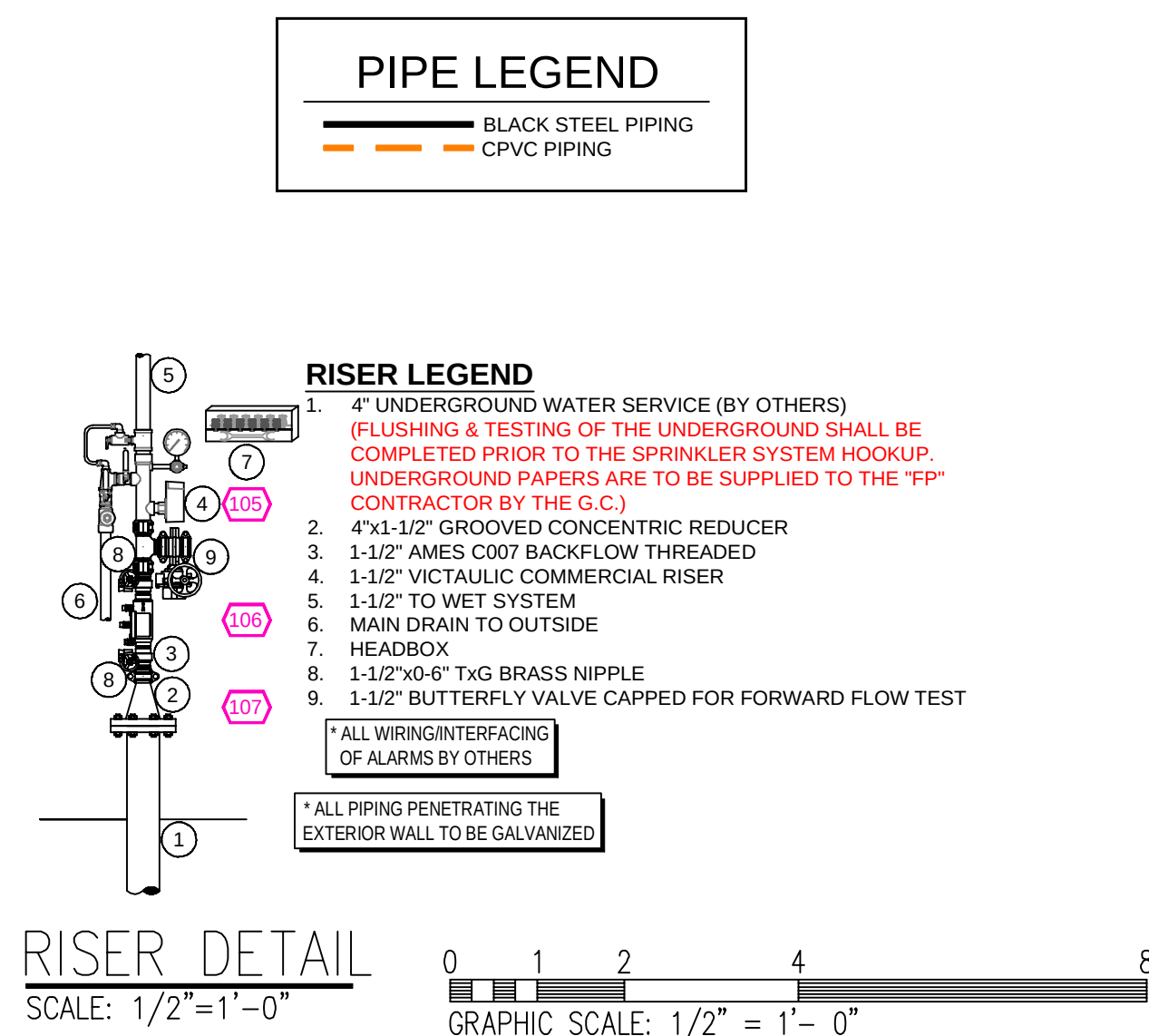


FIRE SPRINKLER PLAN FOURTH FLOOR

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

FLOOR AREA:
588 S.F.

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

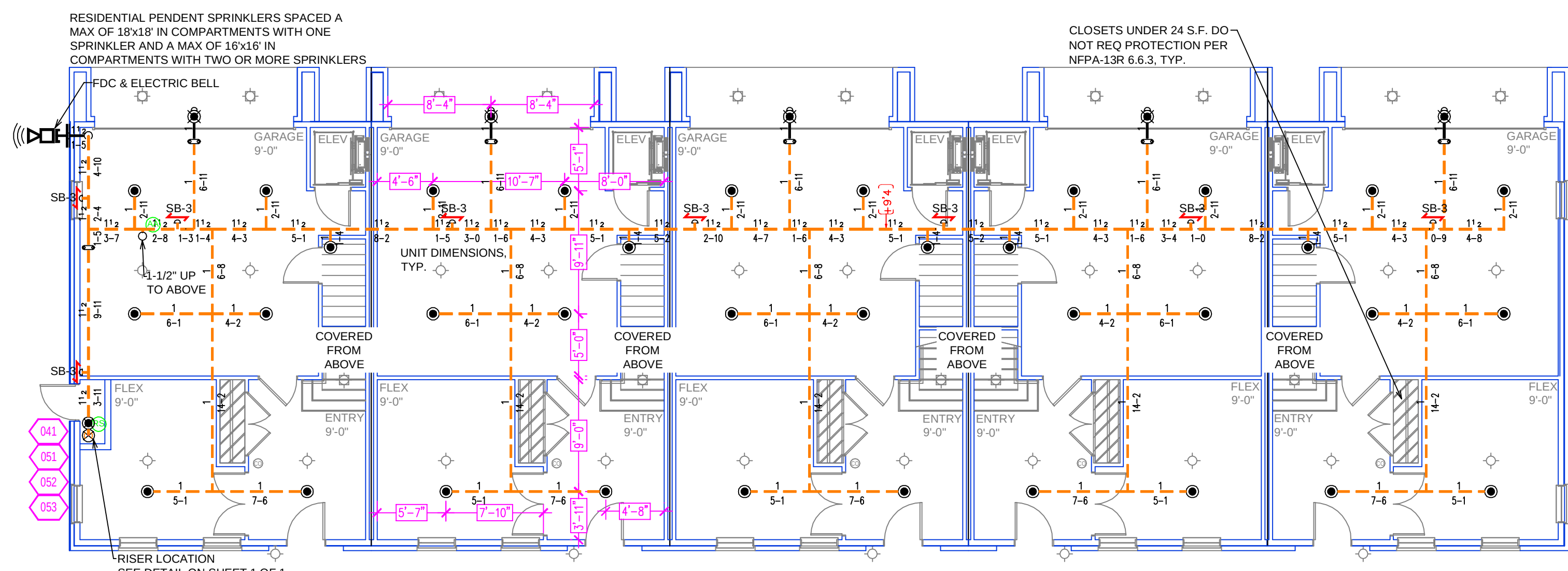


RISER DETAIL

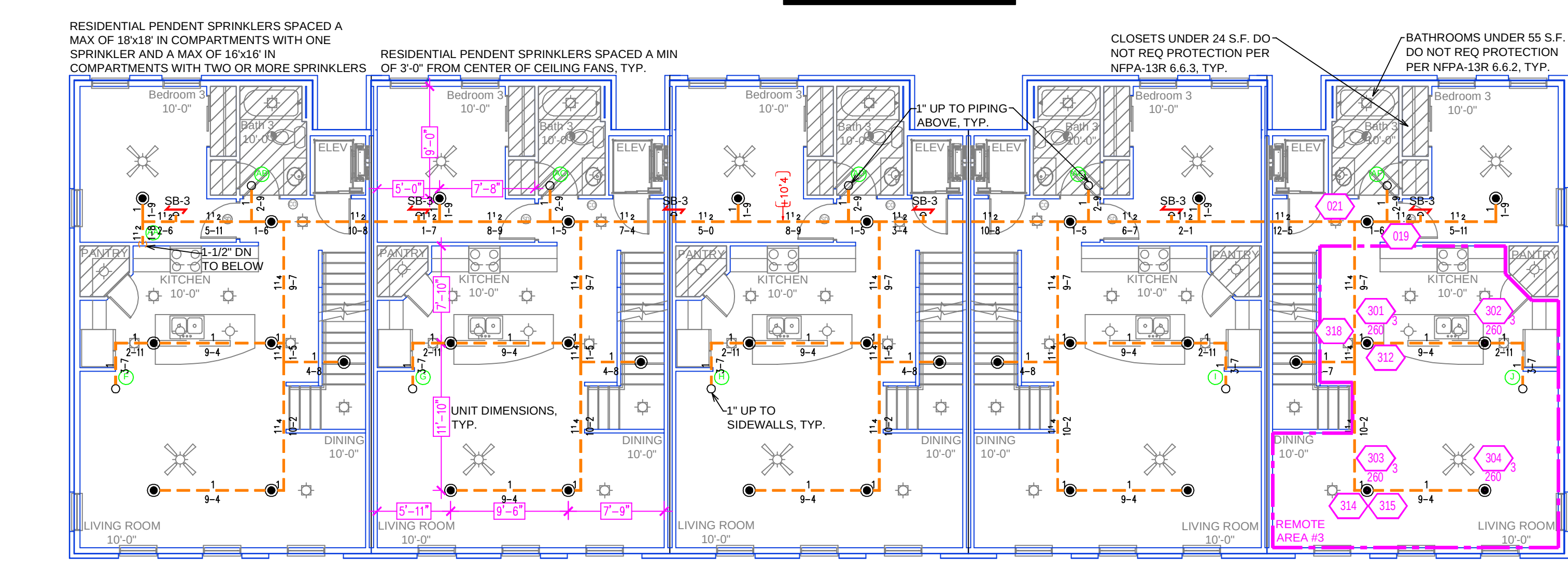
SCALE: 1/2" = 1'-0"

GRAPHIC SCALE: 1/2" = 1'-0"

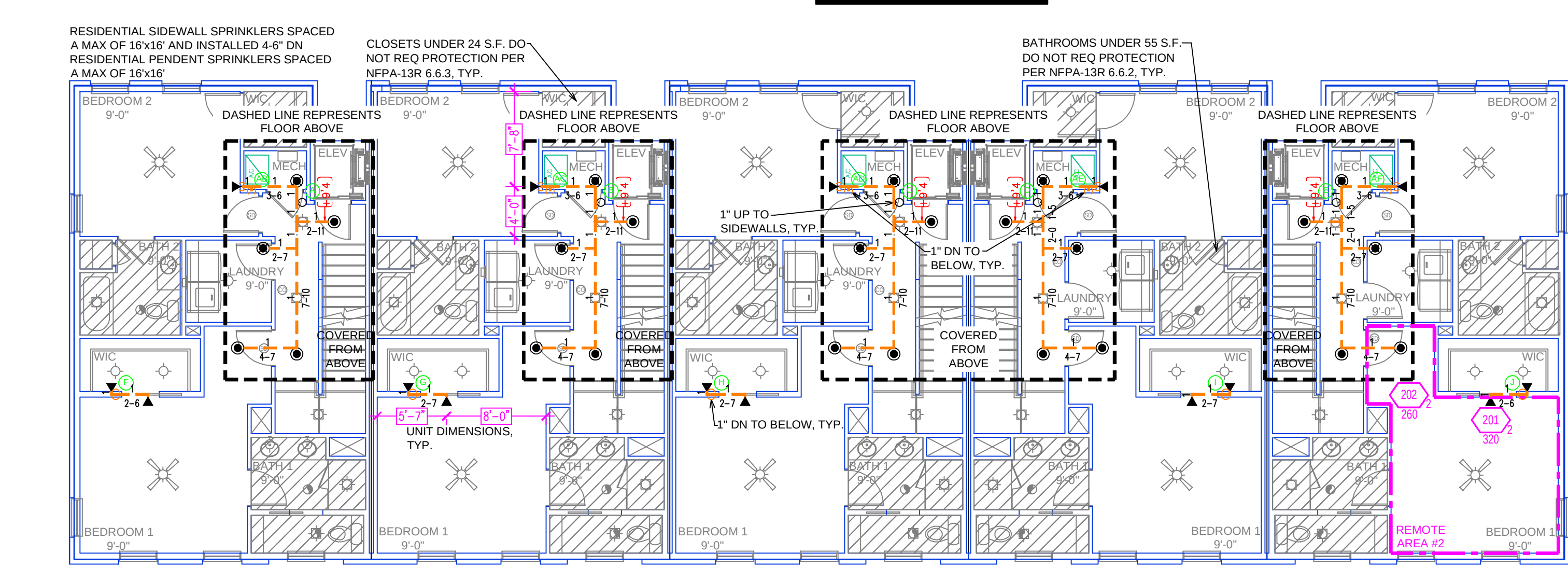
JOB No.	HR1262	Sprinkler Plan	FILE: 300W_PRR_BDG_F1.dwg
DATE	3/18/26	BONAIRE PARK BLDG. F1	SHEET No.
DESIGNER	DVG	208 SOUTH CEDAR ST.	1 OF 1
SCALE	1/8" = 1'-0"	SUMMERVILLE, SOUTH CAROLINA	
		ARNETT CONSTRUCTION	



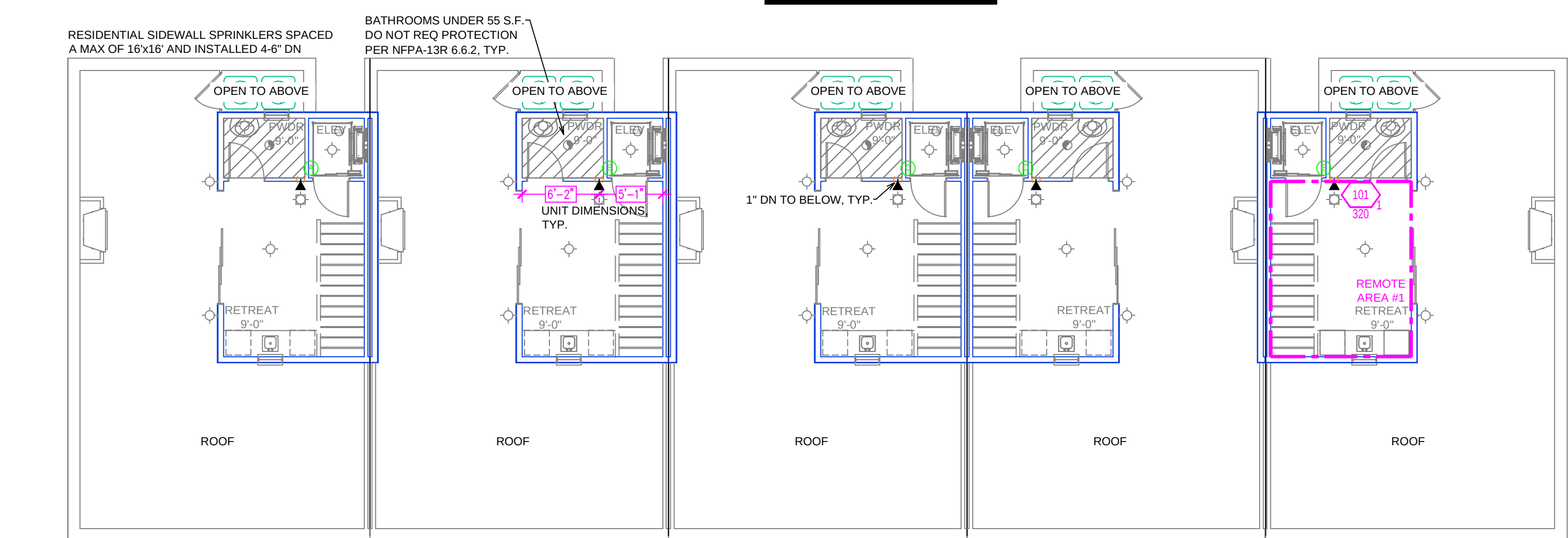
FIRE SPRINKLER PLAN FIRST FLOOR
SCALE: 1/8" = 1'-0"
FLOOR AREA: 3936 S.F.
GRAPHIC SCALE: 1/8" = 1'-0"



FIRE SPRINKLER PLAN SECOND FLOOR
SCALE: 1/8" = 1'-0"
FLOOR AREA: 4407 S.F.
GRAPHIC SCALE: 1/8" = 1'-0"



FIRE SPRINKLER PLAN THIRD FLOOR
SCALE: 1/8" = 1'-0"
FLOOR AREA: 4407 S.F.
GRAPHIC SCALE: 1/8" = 1'-0"



FIRE SPRINKLER PLAN FOURTH FLOOR
SCALE: 1/8" = 1'-0"
FLOOR AREA: 1135 S.F.
GRAPHIC SCALE: 1/8" = 1'-0"

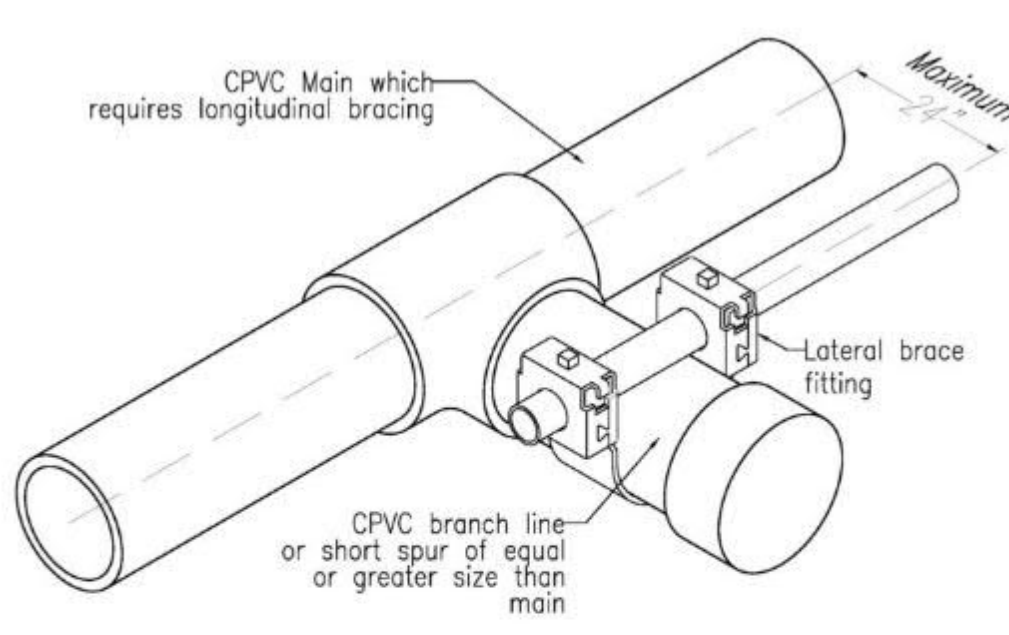
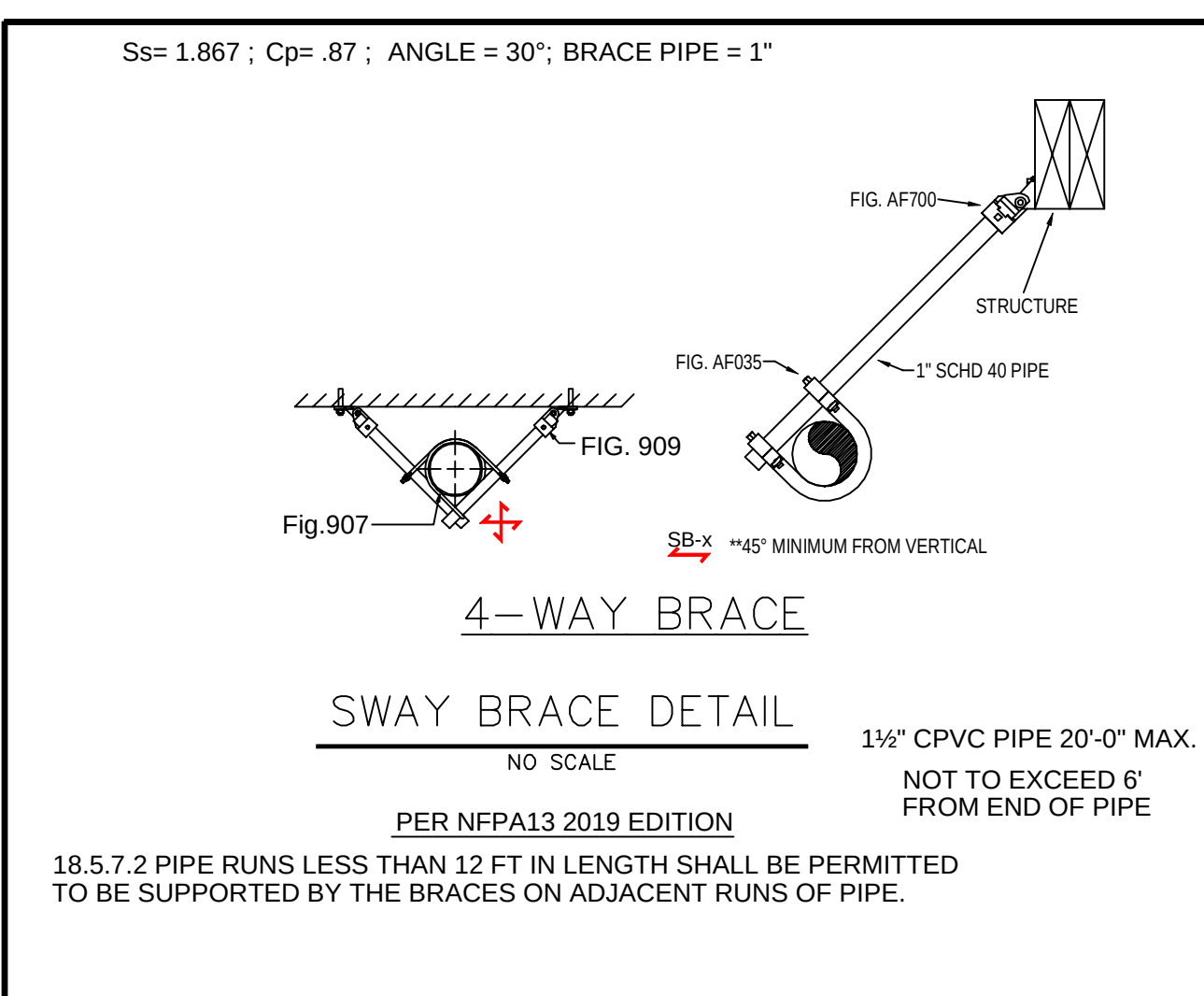
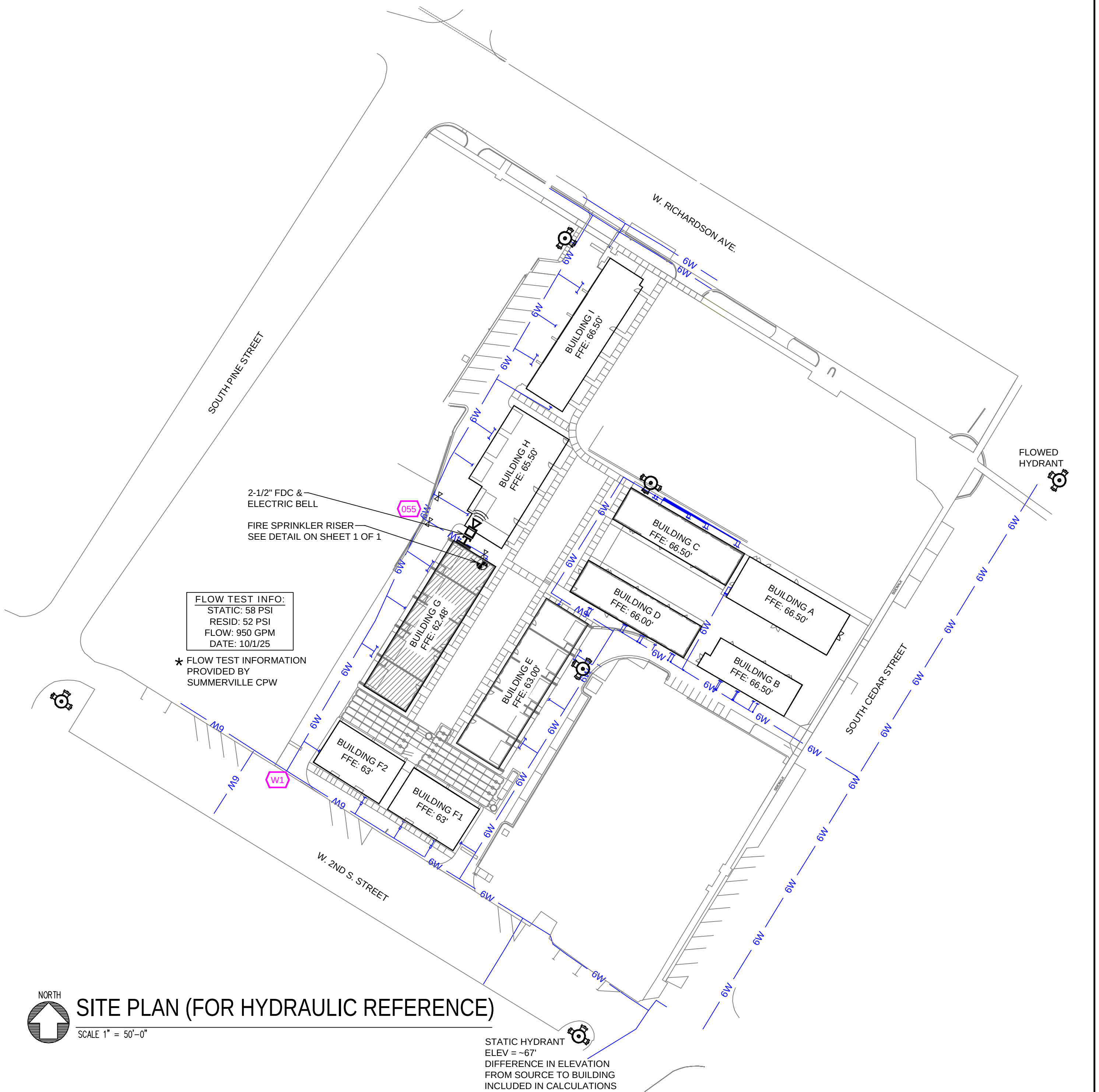
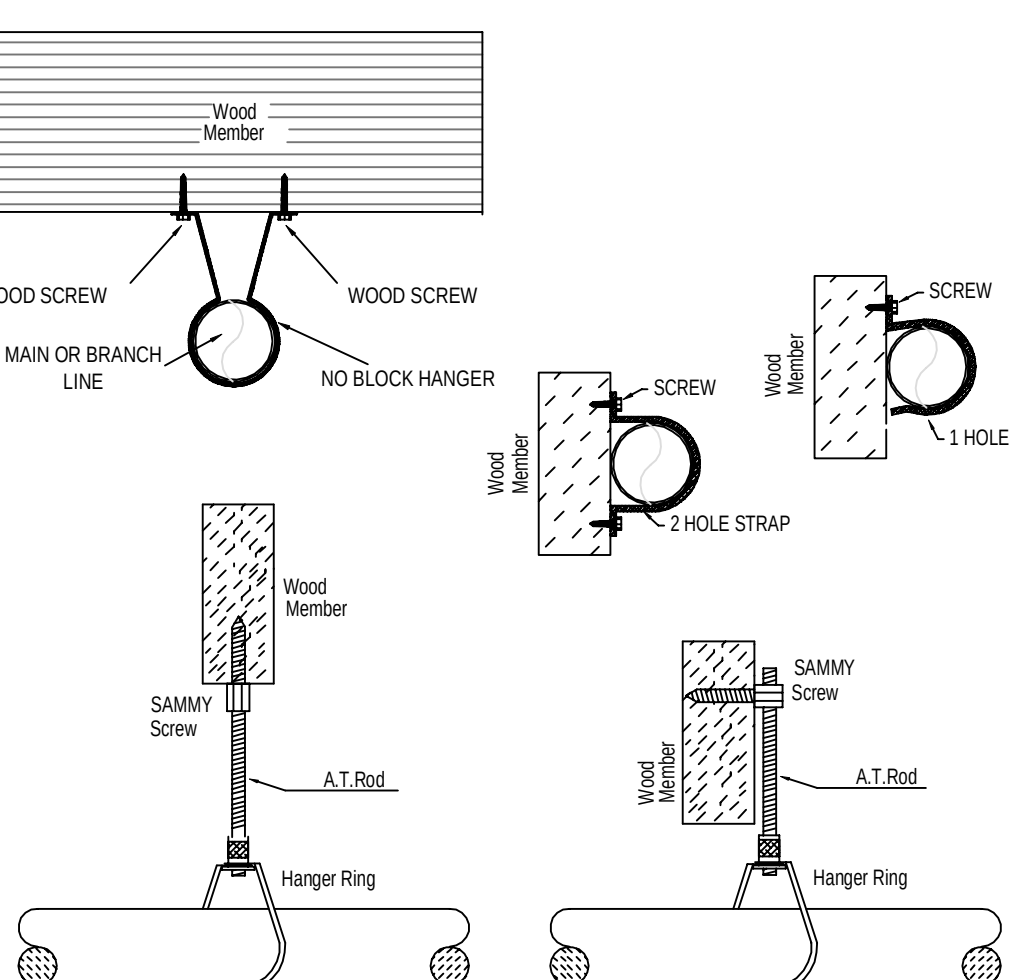


Figure 2. Example of lateral brace providing longitudinal brace for CPVC.



GENERAL NOTES

- SOUTH CAROLINA BUILDING CODE (2021)
- OCCUPANCY: R-2
- TYPE OF CONSTRUCTION: V-A (PROTECTED, COMBUSTIBLE)
- SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
 - FIRST FLOOR = 3936 S.F.
 - SECOND FLOOR = 4407 S.F.
 - THIRD FLOOR = 4407 S.F.
 - FOURTH FLOOR = 1135 S.F.
 - TOTAL = 13,885 S.F.
- INSTALLATION STANDARDS:
 - SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13R (2019)
- SPRINKLER PIPE TYPES:
 - WET:
 - 2.1. 1" BRANCH LINES TO BE CPVC PIPING WITH CEMENTED FITTINGS
 - 2.2. 1-1/4" THROUGH 1-1/2" MAIN & BRANCH LINES TO BE CPVC PIPING WITH CEMENTED FITTINGS
 - 2.3. 1" BRANCH LINES TO BE BLACK SCHEDULE 40 WITH THREADED FITTINGS
- DESIGN CRITERIA:
 - 3.1. RESIDENTIAL UNITS DESIGNED TO LIGHT HAZARD
 - 3.2. REMOTE AREA REDUCTIONS HAVE BEEN TAKEN WHERE APPLICABLE PER NFPA 13 SEC. 19.3.3.2.3.1
- NOTES:
 - 4.1. ALL MATERIAL TO BE NEW AND MEET U.L. STANDARDS
 - 4.2. HANGERS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13 (2019) - SEE PLAN FOR HANGING REQUIREMENTS
- SYMBOLS USED ON DRAWINGS:
 - PIPE ELEVATION A.F.F.
 - PIPE ELEVATION BELOW B.O.D.
 - ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD UNLESS NOTED)
 - HYDRAULIC CALCULATION JUNCTION POINT
 - CEILING HEIGHT
- SCOPE OF WORK:
 - TO INSTALL A NEW WET SPRINKLER SYSTEM IN BONAIRE PARK BUILDING G, THE BUILDING IS RESIDENTIAL TOWNHOUSES. THE SYSTEM SHALL HAVE ONE ZONE COVERING THE ENTIRE BUILDING.
 - ALL AREAS OF THE BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13R (2019)

PIPE LEGEND

- BLACK STEEL PIPING
- CPVC PIPING

RISER DETAIL
SCALE: 1/2" = 1'-0"
GRAPHIC SCALE: 1/2" = 1'-0"

RISER LEGEND

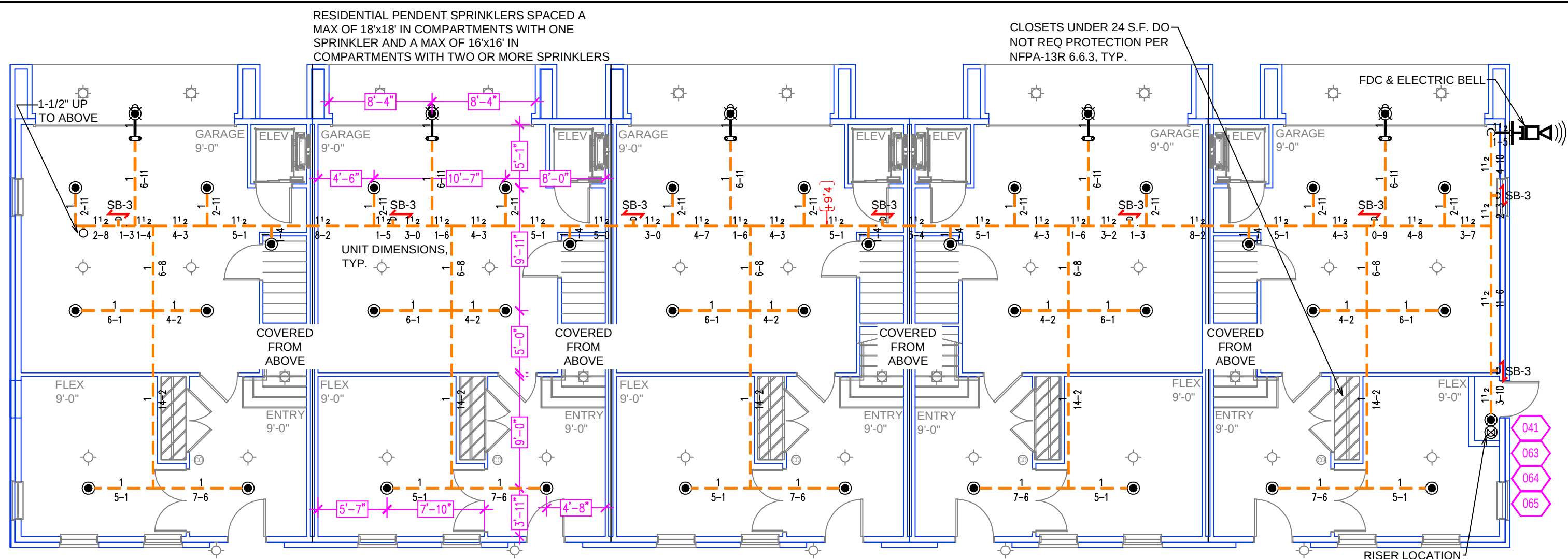
- 4" UNDERGROUND WATER SERVICE (BY OTHERS) (PUSHING & TESTING OF THE UNDERGROUND SHALL BE COMPLETED PRIOR TO THE SPRINKLER SYSTEM HOOKUP. UNDERGROUND PAPERS ARE TO BE SUPPLIED TO THE "P" CONTRACTOR BY THE G.C.)
- 4"x1-1/2" GROOVED CONCENTRIC REDUCER
- 1-1/2" AMES COT BACKFLOW THREADED
- 1-1/2" VICTALIC COMMERCIAL RISER
- 1-1/2" TO WET SYSTEM
- MAIN DRAIN TO OUTSIDE
- HEADBOX
- 1-1/2"x6" TYP BRASS NIPPLE
- 1-1/2" BUTTERFLY VALVE CAPPED FOR FORWARD FLOW TEST

*ALL WIRING/INTERFACING OF ALARMS BY OTHERS

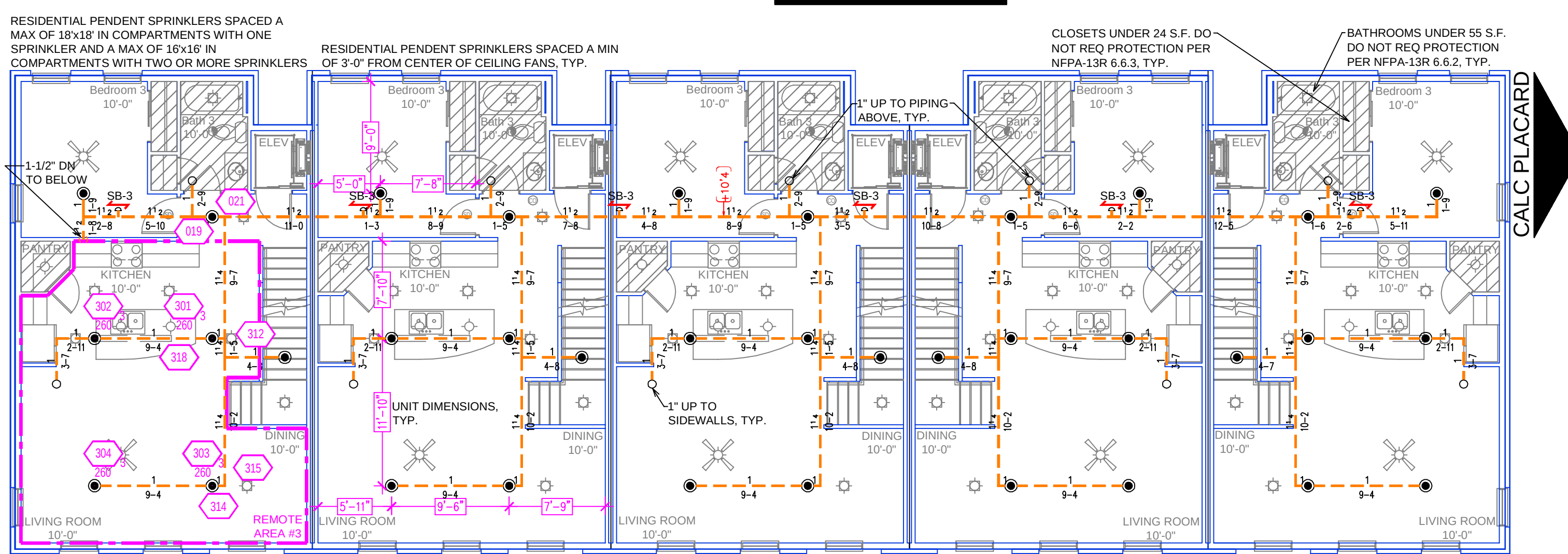
*ALL PIPING PENETRATING THE EXTERIOR WALL TO BE GALVANIZED

SUBMITTAL

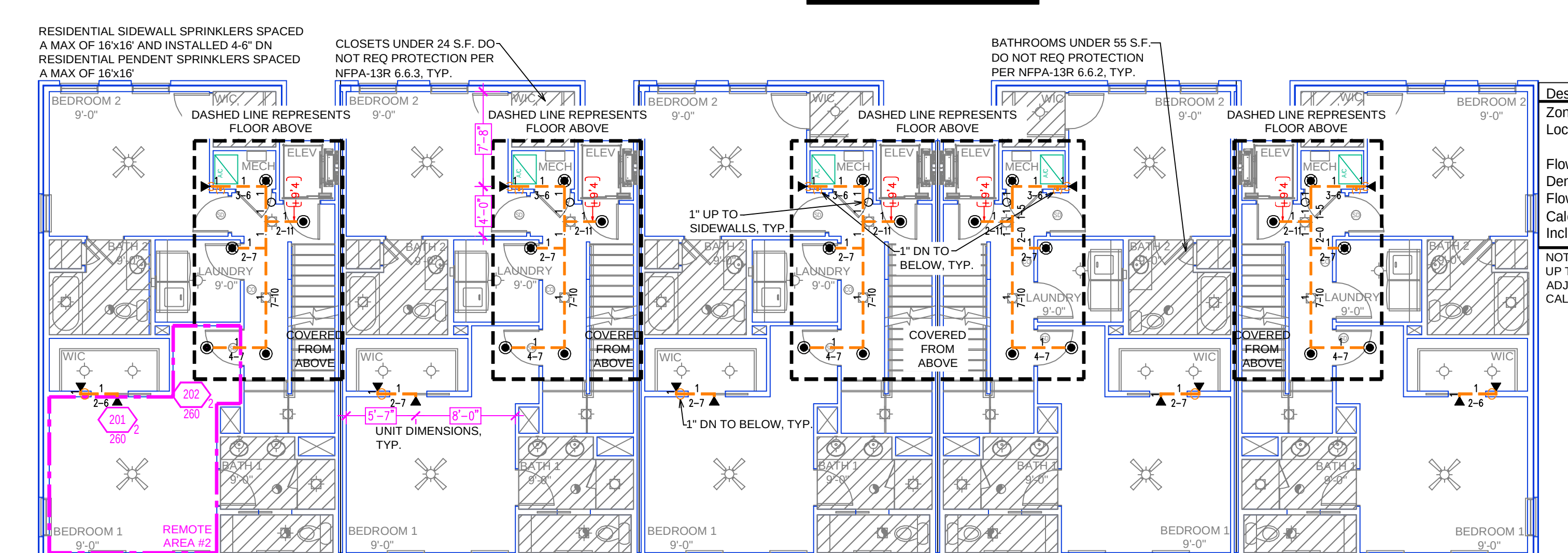
JOB No.	HR1262	Sprinkler Plan	FILE: BONAIRE PARK BLDG G.dwg
DATE	3/17/2026	BONAIRE PARK BLDG. G	SHEET No.
DESIGNER	DVG	208 SOUTH CEDAR ST.	1 OF 1
SCALE	1/8" = 1'-0"	SUMMERVILLE, SOUTH CAROLINA	
		ARNETT CONSTRUCTION	



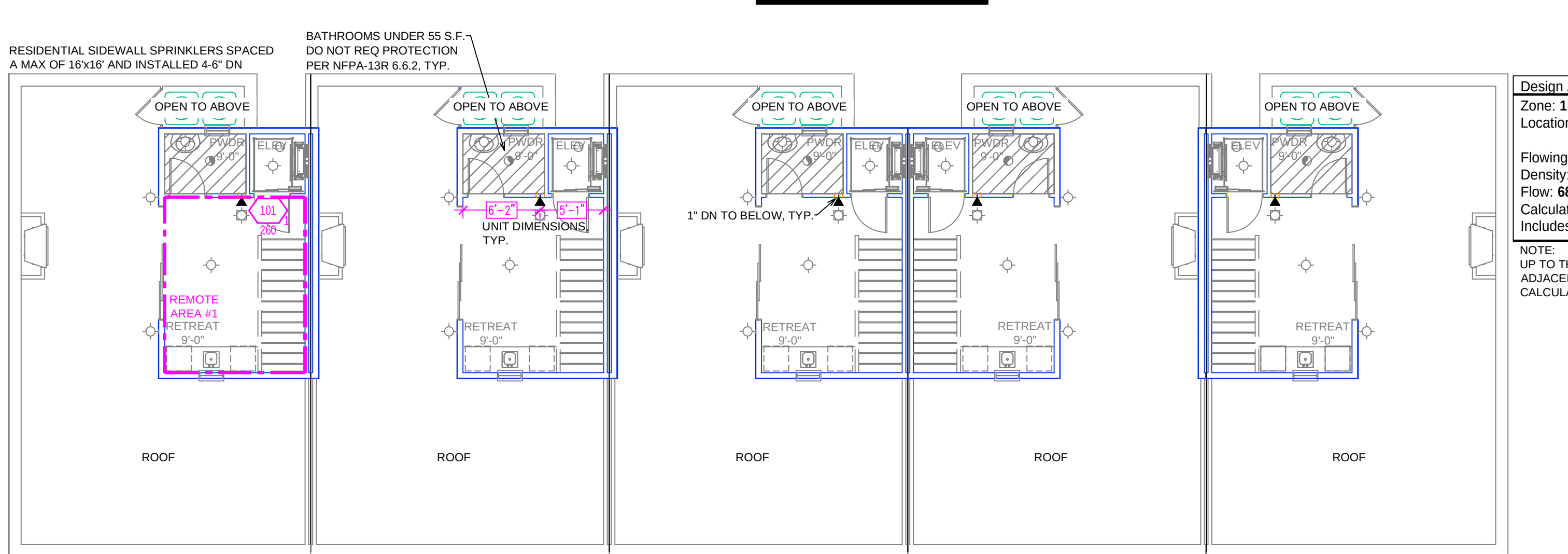
FIRE SPRINKLER PLAN FIRST FLOOR
SCALE: 1/8" = 1'-0"
FLOOR AREA: 3936 S.F.
GRAPHIC SCALE: 1/8" = 1'-0"



FIRE SPRINKLER PLAN SECOND FLOOR
SCALE: 1/8" = 1'-0"
FLOOR AREA: 4407 S.F.
GRAPHIC SCALE: 1/8" = 1'-0"



FIRE SPRINKLER PLAN THIRD FLOOR
SCALE: 1/8" = 1'-0"
FLOOR AREA: 4407 S.F.
GRAPHIC SCALE: 1/8" = 1'-0"



FIRE SPRINKLER PLAN FOURTH FLOOR
SCALE: 1/8" = 1'-0"
FLOOR AREA: 1135 S.F.
GRAPHIC SCALE: 1/8" = 1'-0"

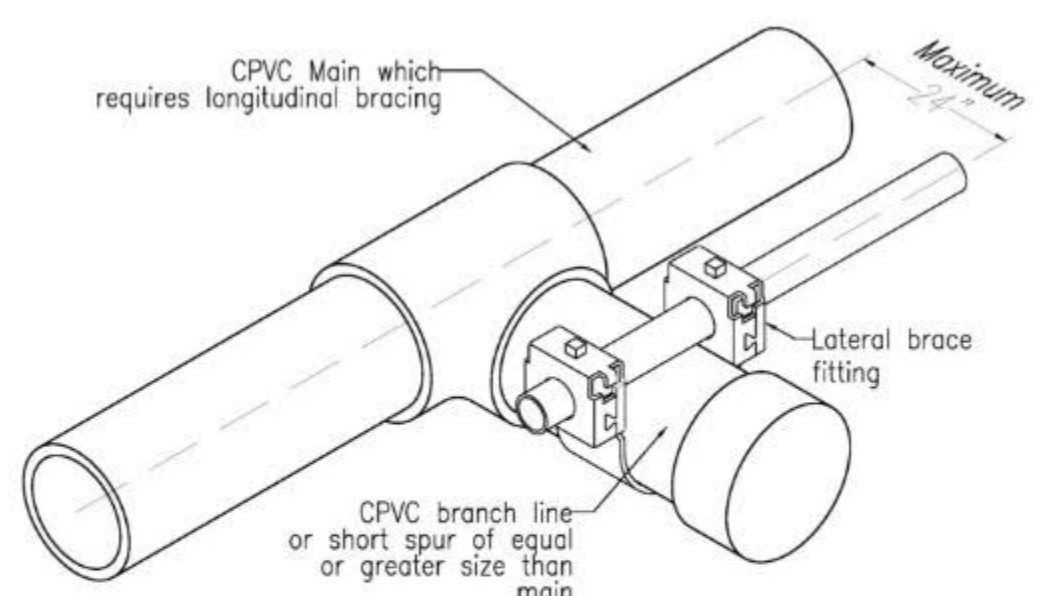
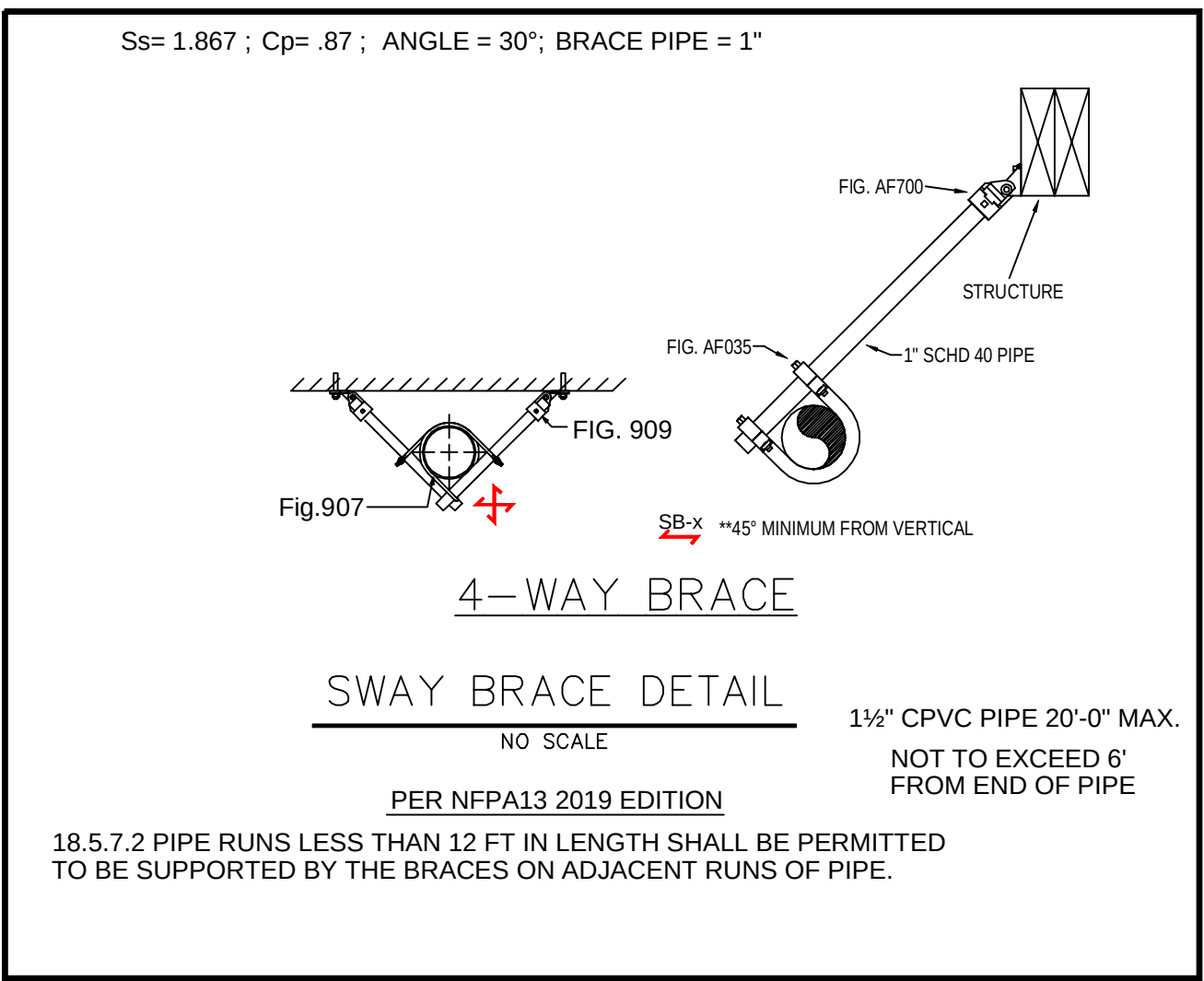
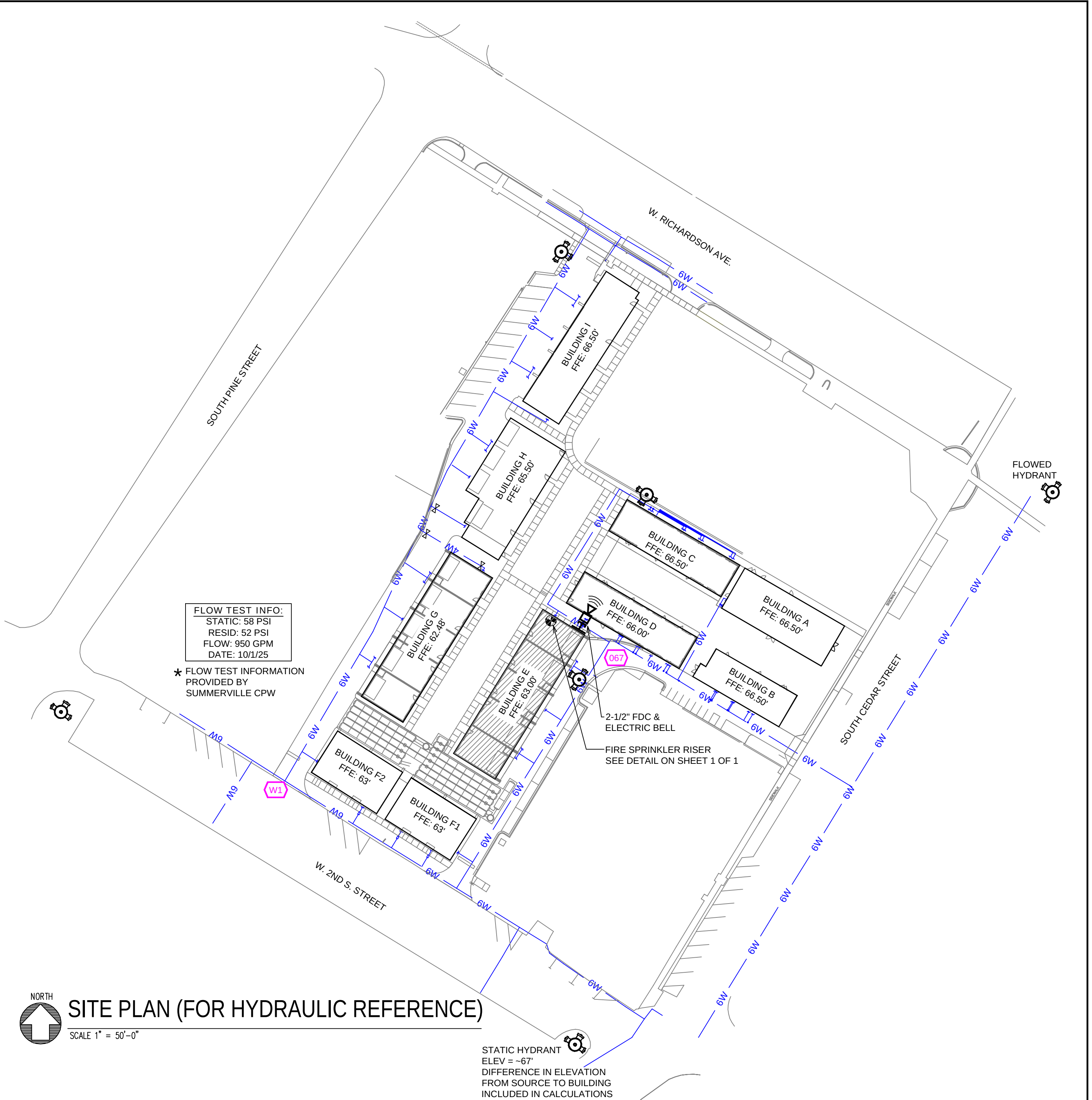
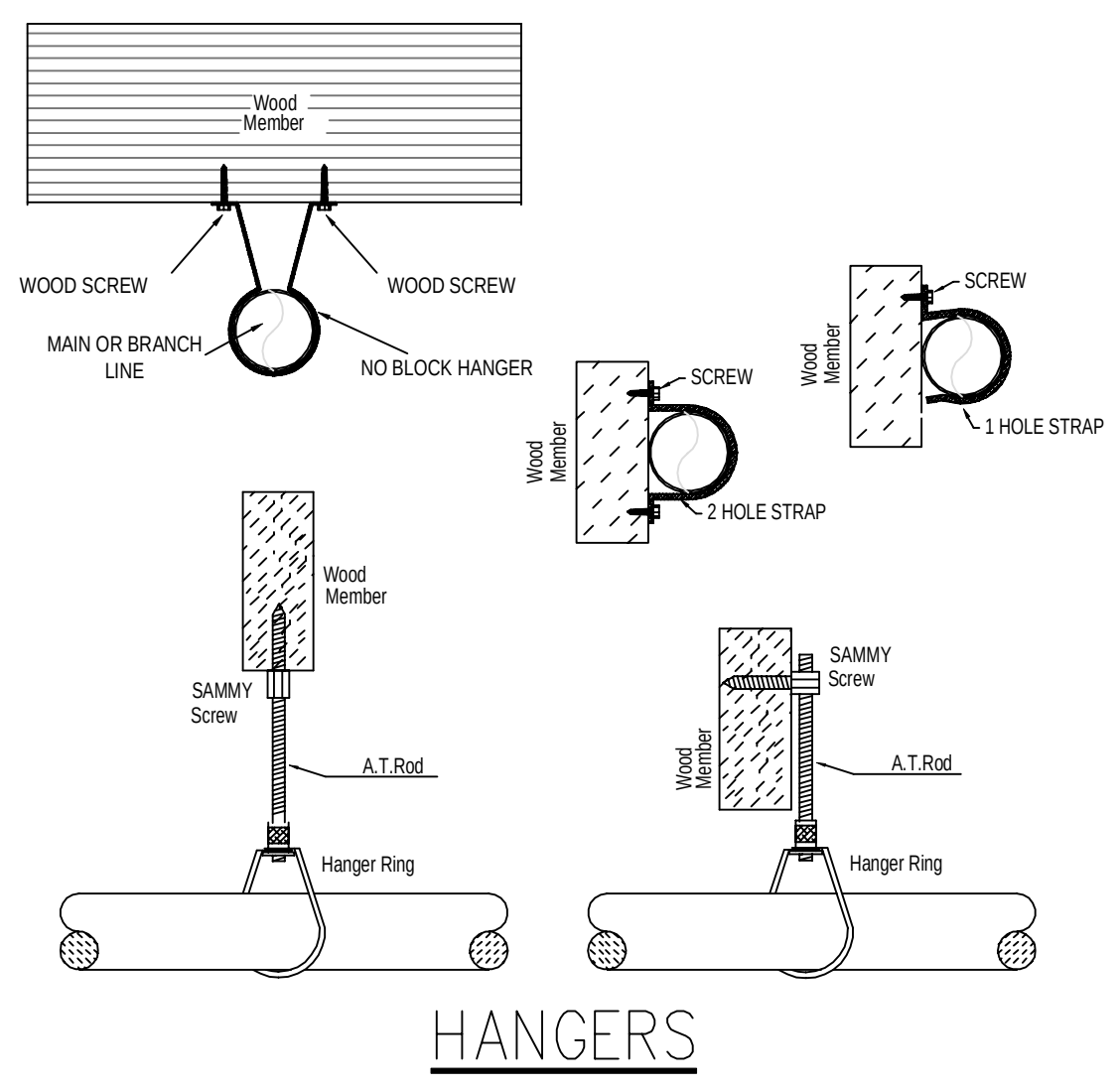


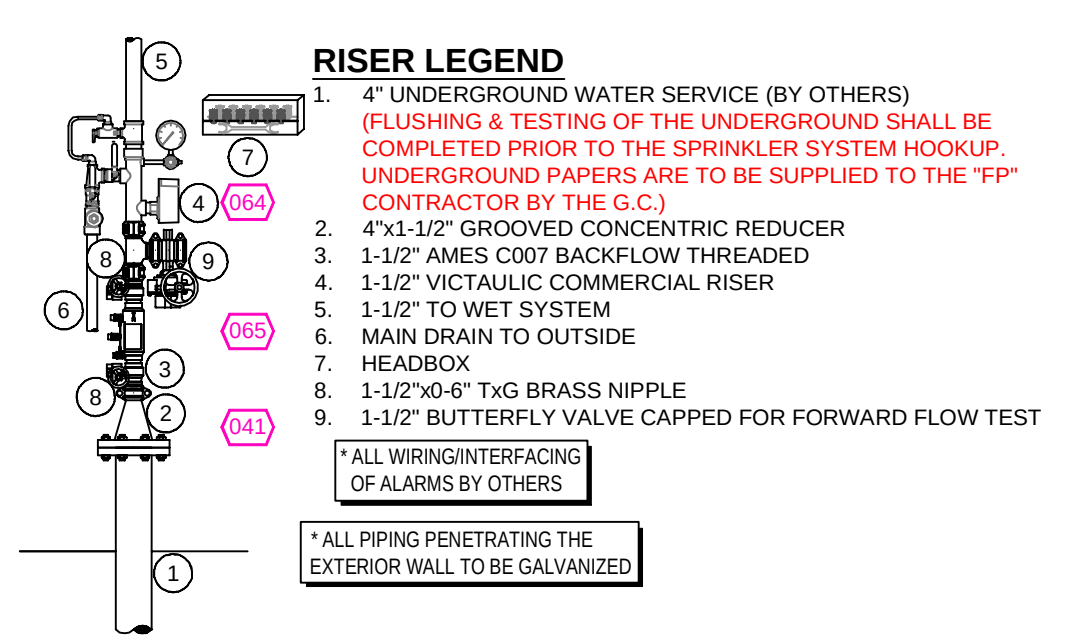
Figure 2. Example of lateral brace providing longitudinal brace for CPVC.



SITE PLAN (FOR HYDRAULIC REFERENCE)
SCALE 1" = 50'-0"

PIPE LEGEND

—	BLACK STEEL PIPING
—	CPVC PIPING

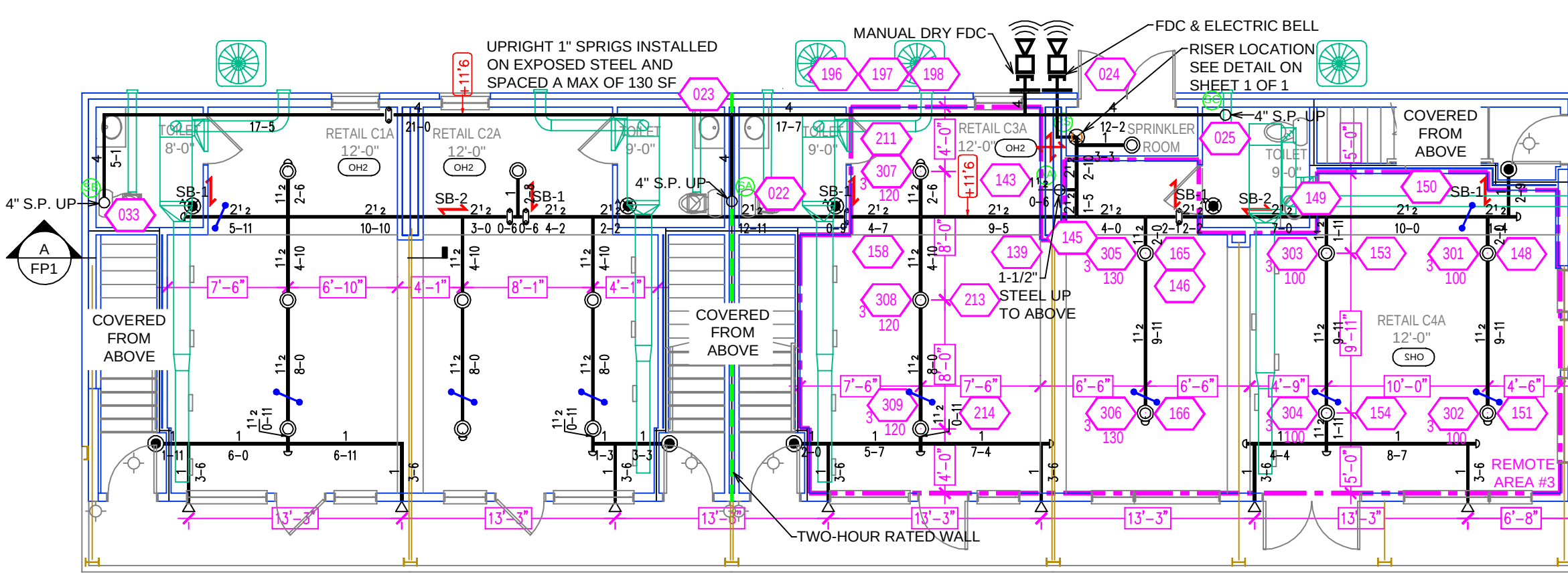


RISER DETAIL
SCALE: 1/2" = 1'-0"
GRAPHIC SCALE: 1/2" = 1'-0"

- GENERAL NOTES**
- SOUTH CAROLINA BUILDING CODE (2021)
 - OCCUPANCY: R-2
 - TYPE OF CONSTRUCTION: V-A (PROTECTED, COMBUSTIBLE)
 - SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
 - FIRST FLOOR = 3936 S.F.
 - SECOND FLOOR = 4407 S.F.
 - THIRD FLOOR = 4407 S.F.
 - FOURTH FLOOR = 1135 S.F.
 - TOTAL = 13,885 S.F.
 - INSTALLATION STANDARDS: SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13R (2019)
 - SPRINKLER PIPE TYPES:
 - 2.1. 1" BRANCH LINES TO BE CPVC PIPING WITH CEMENTED FITTINGS
 - 2.2. 1/2" THROUGH 1-1/2" MAIN & BRANCH LINES TO BE CPVC PIPING WITH CEMENTED FITTINGS
 - DESIGN CRITERIA
 - 3.1. RESIDENTIAL UNITS DESIGNED TO LIGHT HAZARD
 - 3.2. REMOTE AREA REDUCTIONS HAVE BEEN TAKEN WHERE APPLICABLE PER NFPA 13 SEC. 19.3.3.2.3.1
 - NOTES:
 - 4.1. ALL MATERIAL TO BE NEW AND MEET U.L. STANDARDS
 - 4.2. HANGERS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13 (2019) - SEE PLAN FOR HANGING REQUIREMENTS
 - SYMBOLS USED ON DRAWINGS:
 - (ELEV) PIPE ELEVATION A.F.F.
 - (B.O.D) PIPE ELEVATION BELOW B.O.D
 - (RH) ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD UNLESS NOTED)
 - (J) HYDRAULIC CALCULATION JUNCTION POINT
 - 8'-0" CEILING HEIGHT
 - SCOPE OF WORK:
 - 6.1. TO INSTALL A NEW WET SPRINKLER SYSTEM IN BONAIRE PARK BUILDING E. THE BUILDING IS RESIDENTIAL TOWNHOUSES. THE SYSTEM SHALL HAVE ONE ZONE COVERING THE ENTIRE BUILDING.
 - 6.2. ALL AREAS OF THE BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13R (2019)

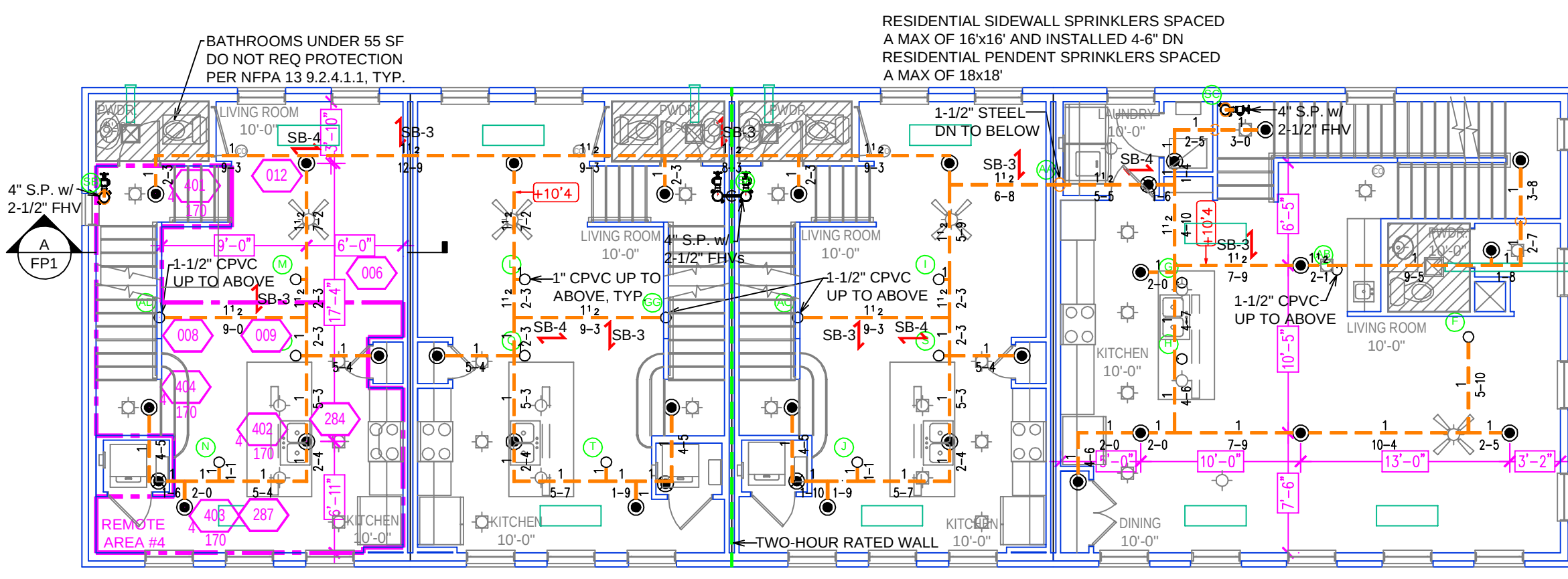
SUBMITTAL

JOB No.	HR1262	Sprinkler Plan	FILE: BOWAR PARK BLDG E.dwg
DATE	3/17/26	BONAIRE PARK BLDG. E	SHEET No.
DESIGNER	DVG	208 SOUTH CEDAR ST.	1
SCALE	1/8" = 1'-0"	SUMMERVILLE, SOUTH CAROLINA	OF 1
		ARNETT CONSTRUCTION	



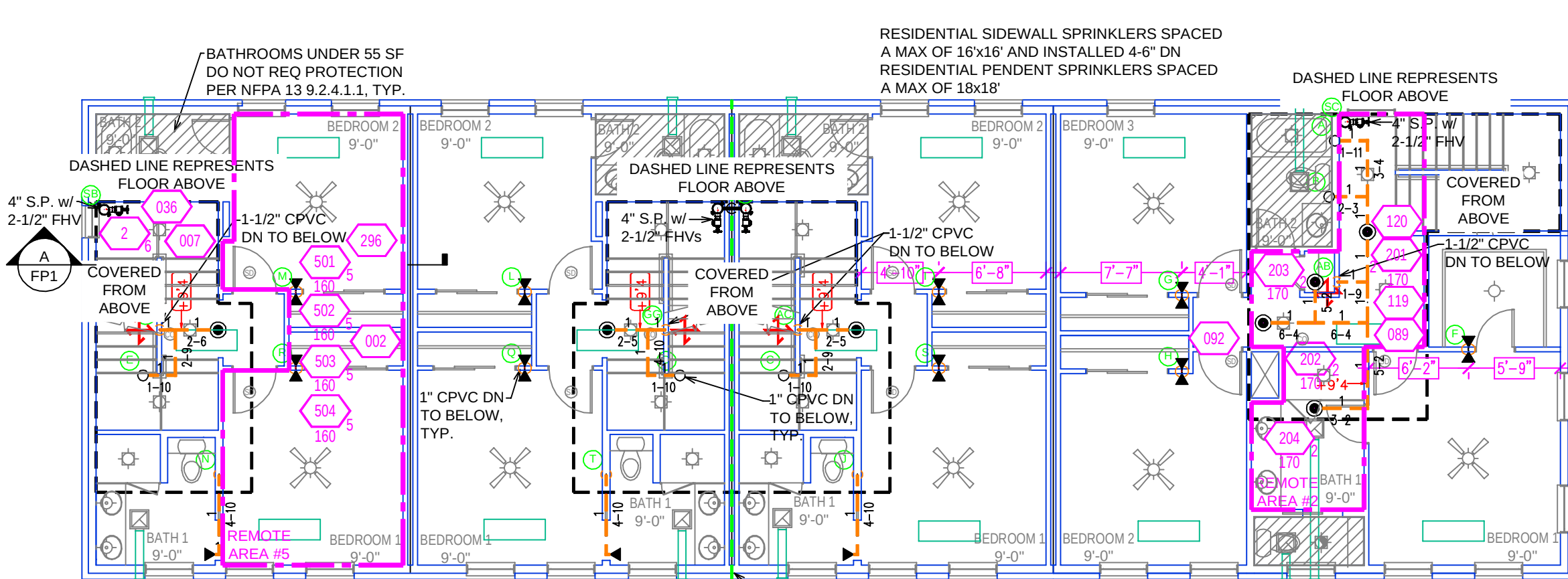
Design Area #3 HAZARD: OHM
Zone: 1 System Type: WET
Location: FIRST FLOOR RETAIL
Flowing Outlets: 9
Density: 0.20 Remote Area: 945
Flow: 486.2 gpm @ 35.0 psi
Calculation Safety: 21.3 psi
Includes 250 gpm Hose allowance
NOTE: CALCULATED PER DENSITY/AREA METHOD.
15'-0" CEILING HEIGHT REQUIRES A MIN
REMOTE AREA OF 945 SF. NFPA 13 SEC. 19.3.3.

FIRE SPRINKLER PLAN FIRST FLOOR
SCALE: 1/8" = 1'-0"
FLOOR AREA: 2185 S.F.
GRAPHIC SCALE: 1/8" = 1'-0"



Design Area #4 HAZARD: LIGHT
Zone: 1 System Type: WET
Location: SECOND FLOOR UNIT
Flowing Outlets: 4
Density: 0.10 Remote Area: 323
Flow: 174.4 gpm @ 48.4 psi
Calculation Safety: 9.3 psi
Includes 100 gpm Hose allowance
NOTE: FOUR MOST DEMANDING ADJACENT
RESIDENTIAL SPRINKLERS CALCULATED
PER NFPA 13 SEC. 19.4.1.1

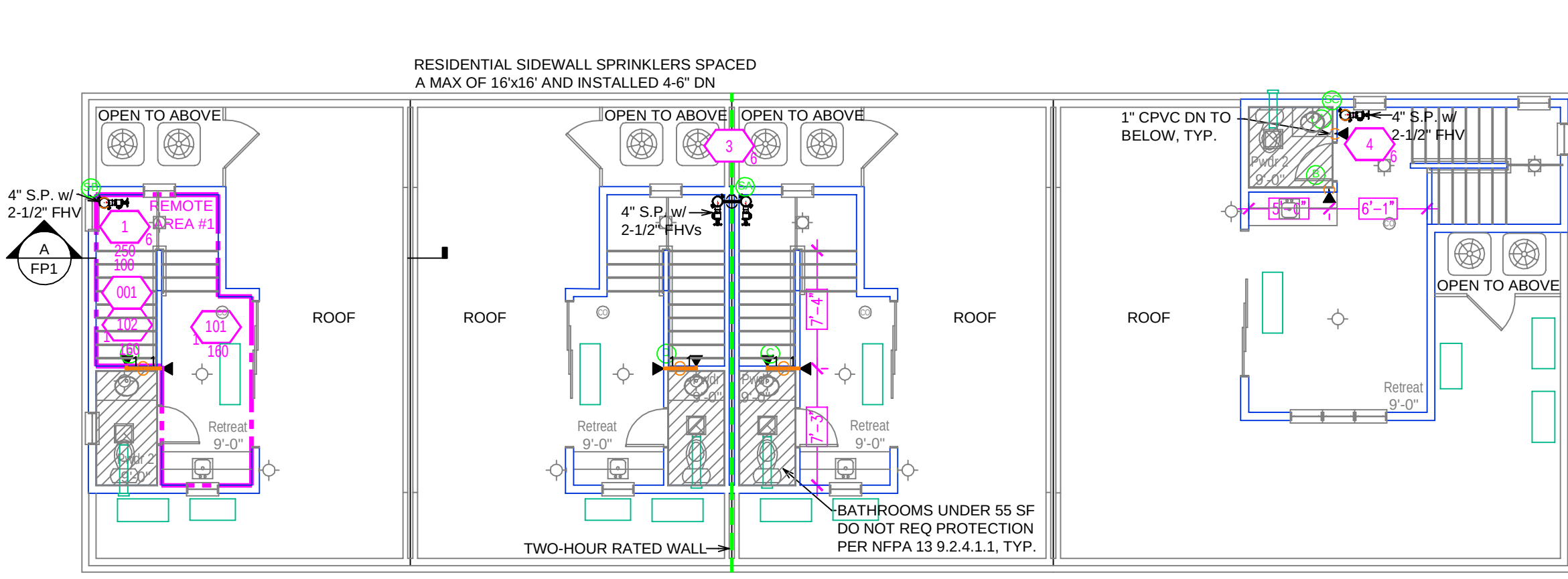
FIRE SPRINKLER PLAN SECOND FLOOR
SCALE: 1/8" = 1'-0"
FLOOR AREA: 2558 S.F.
GRAPHIC SCALE: 1/8" = 1'-0"



Design Area #2 HAZARD: LIGHT
Zone: 1 System Type: WET
Location: THIRD FLOOR PENDENTS
Flowing Outlets: 4
Density: 0.10 Remote Area: 171
Flow: 154.9 gpm @ 41.1 psi
Calculation Safety: 16.6 psi
Includes 100 gpm Hose allowance
NOTE: FOUR MOST DEMANDING ADJACENT
RESIDENTIAL SPRINKLERS CALCULATED
PER NFPA 13 SEC. 19.4.1.1

Design Area #5 HAZARD: LIGHT
Zone: 1 System Type: WET
Location: THIRD FLOOR SIDEWALLS
Flowing Outlets: 4
Density: 0.10 Remote Area: 288
Flow: 164.4 gpm @ 48.7 psi
Calculation Safety: 9.1 psi
Includes 100 gpm Hose allowance
NOTE: FOUR MOST DEMANDING ADJACENT
RESIDENTIAL SPRINKLERS CALCULATED
PER NFPA 13 SEC. 19.4.1.1

FIRE SPRINKLER PLAN THIRD FLOOR
SCALE: 1/8" = 1'-0"
FLOOR AREA: 2558 S.F.
GRAPHIC SCALE: 1/8" = 1'-0"



PIPE LEGEND
— BLACK STEEL PIPING
— CPVC PIPING

FIRE SPRINKLER PLAN FOURTH FLOOR
SCALE: 1/8" = 1'-0"
FLOOR AREA: 2558 S.F.
GRAPHIC SCALE: 1/8" = 1'-0"

Design Area #1 HAZARD: LIGHT
Zone: 1 System Type: WET
Location: FOURTH FLOOR UNIT
Flowing Outlets: 2
Density: 0.10 Remote Area: 131
Flow: 132.1 gpm @ 49.3 psi
Calculation Safety: 8.5 psi
Includes 100 gpm Hose allowance
NOTE: FOUR MOST DEMANDING ADJACENT
RESIDENTIAL SPRINKLERS CALCULATED
PER NFPA 13 SEC. 19.4.1.1

CALC PLACARD

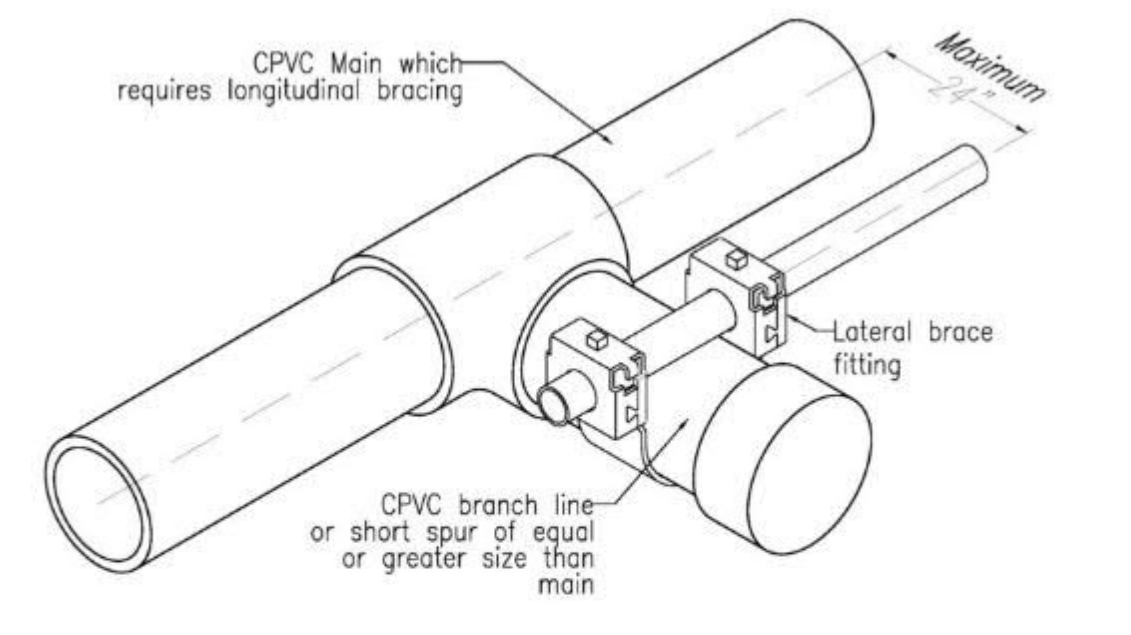
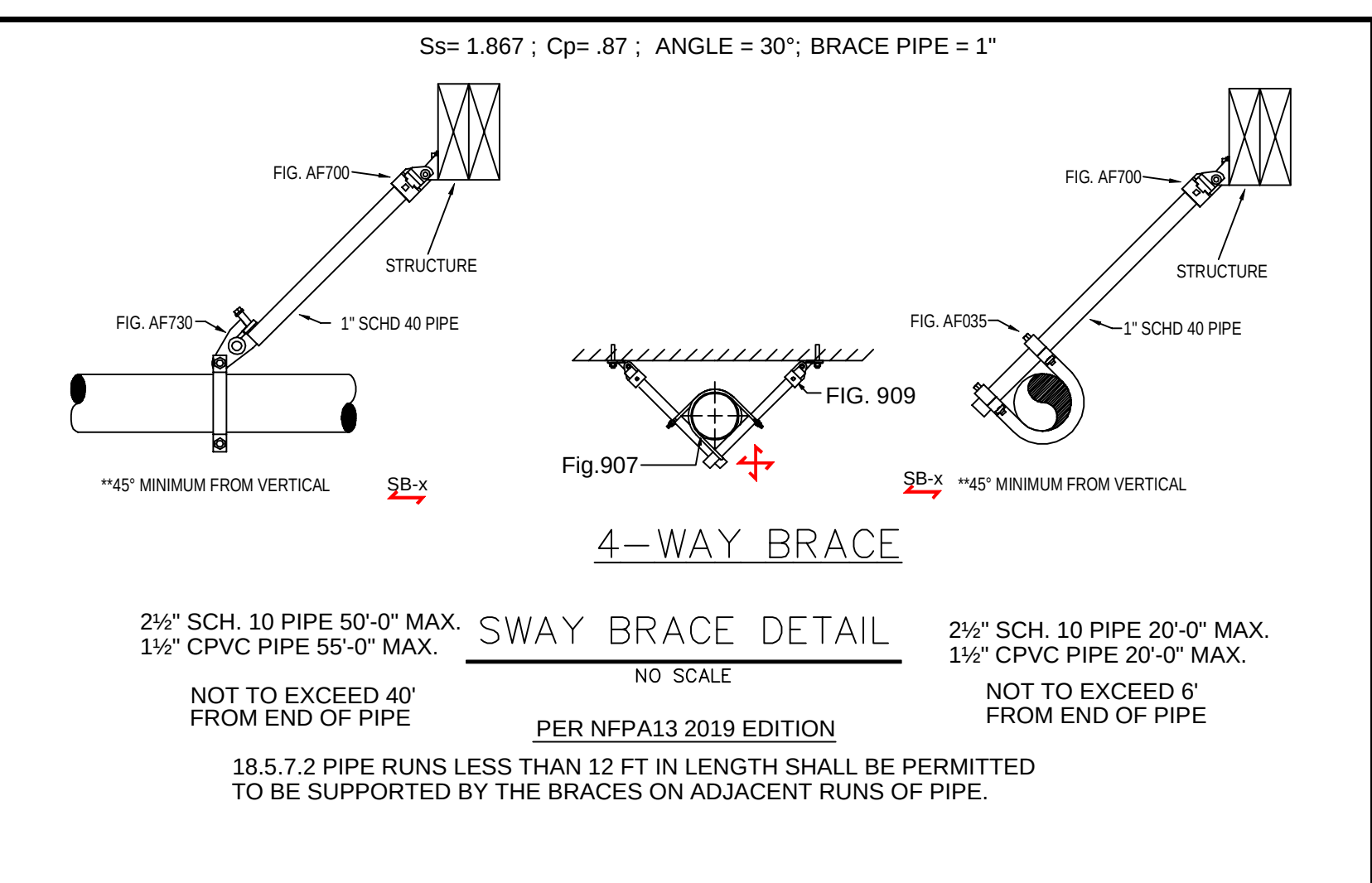
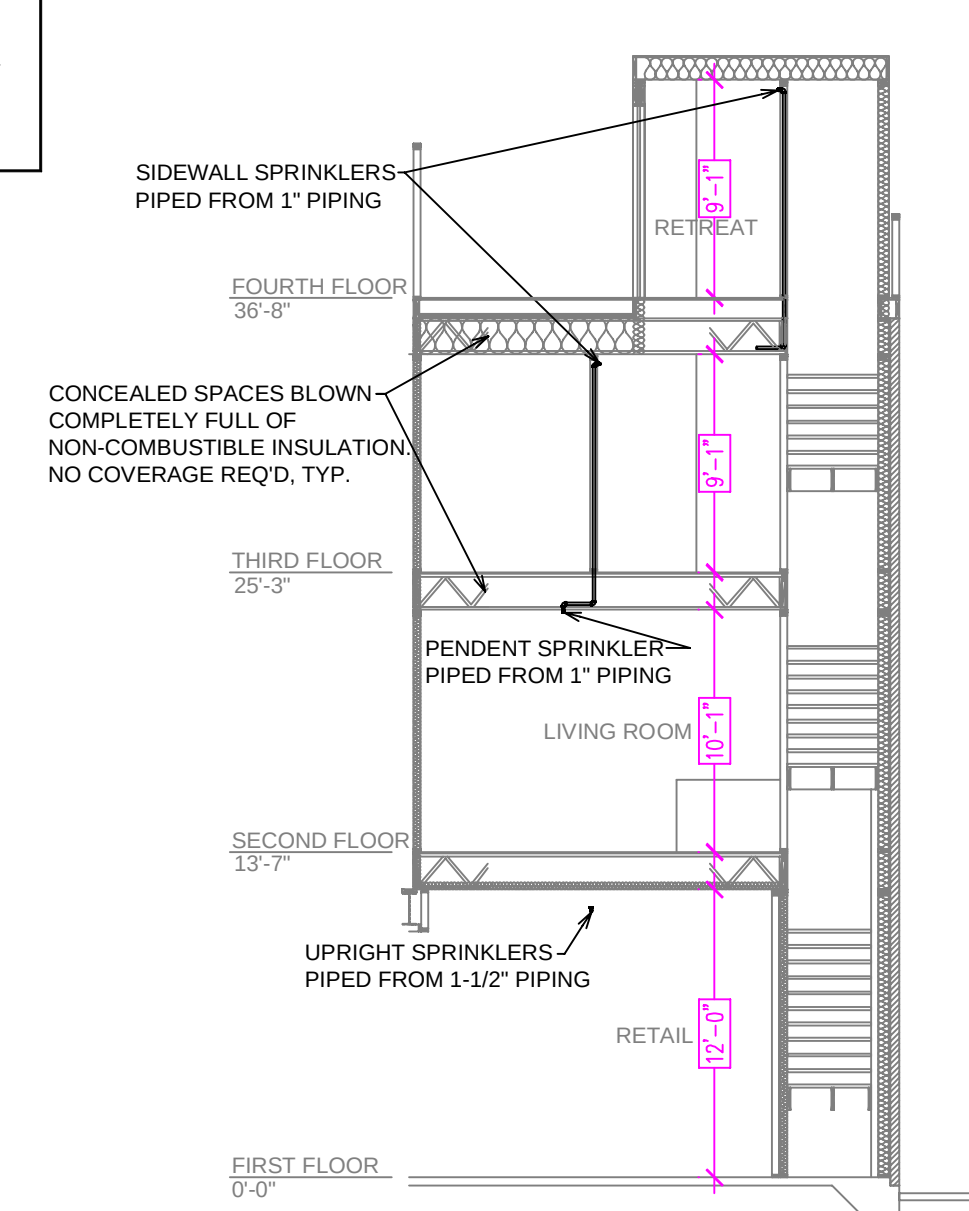
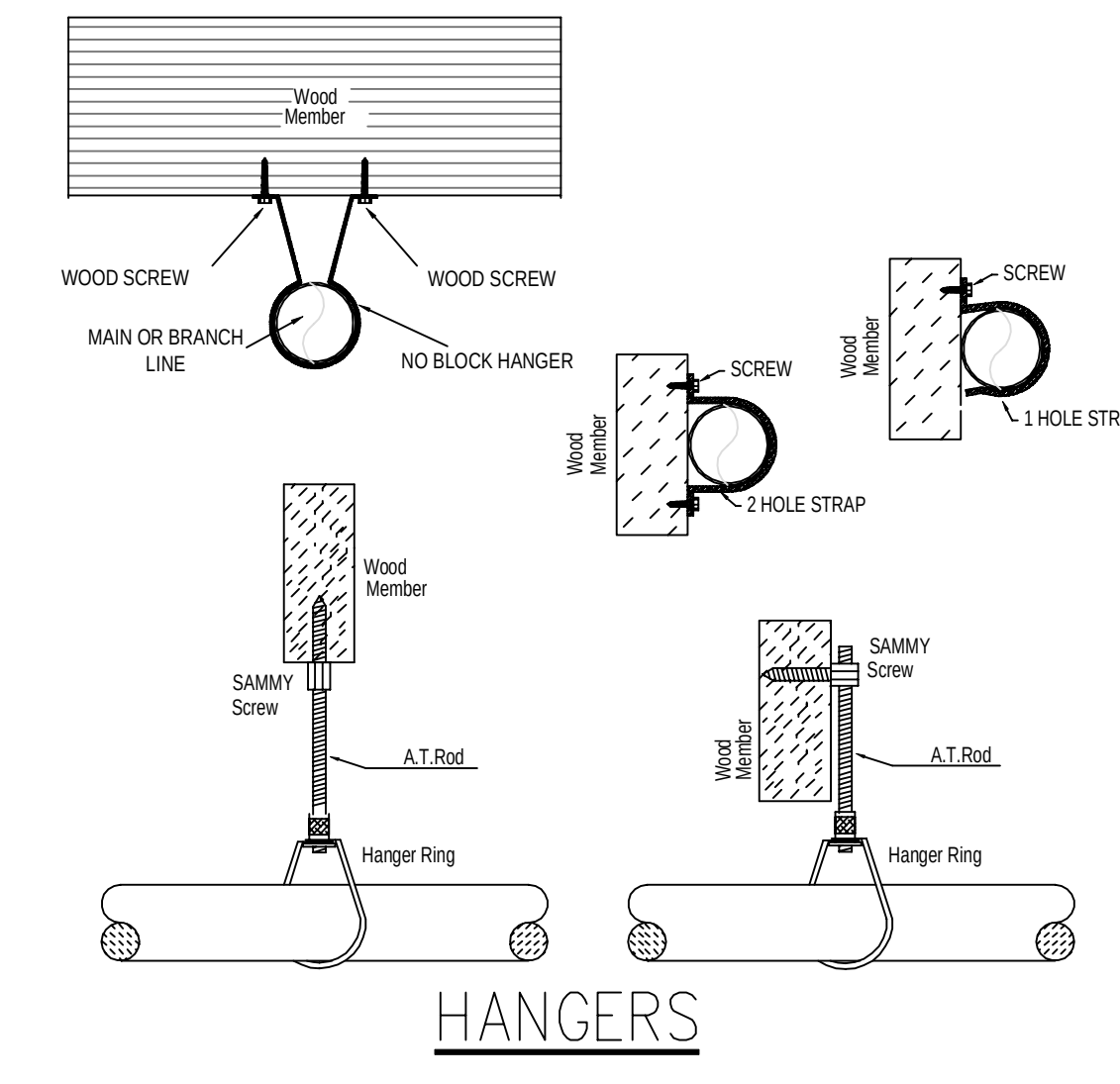
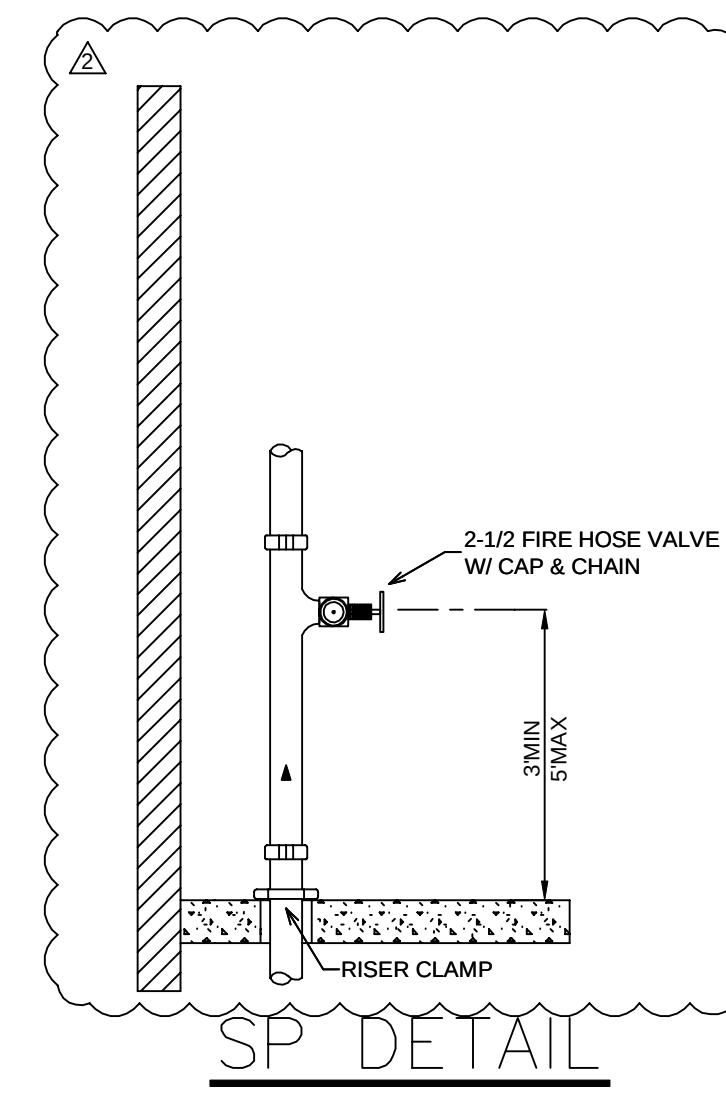


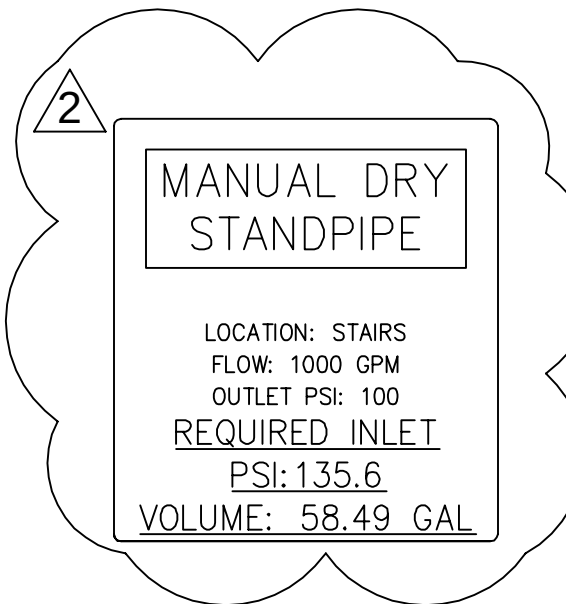
Figure 2. Example of lateral brace providing longitudinal brace for CPVC.



BUILDING SECTION A
SCALE: 1/8" = 1'-0"



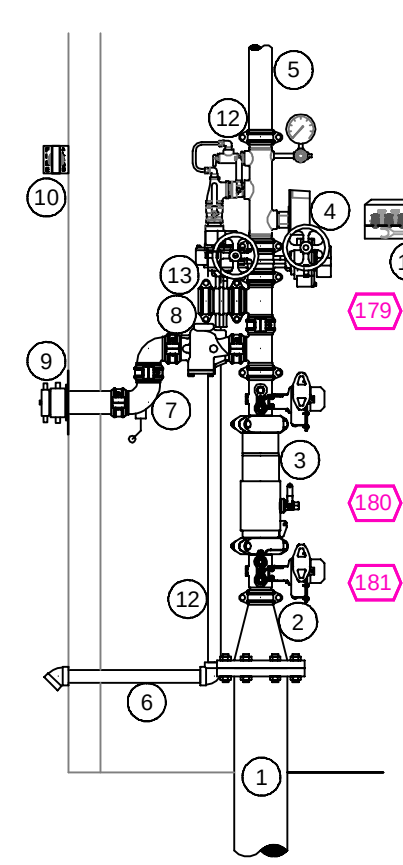
SP DETAIL
SCALE: 1/8" = 1'-0"



NFPA 13 STEEL PIPE HANGER SPACING
(EXCEPT LIGHT WALL THRD PIPING)

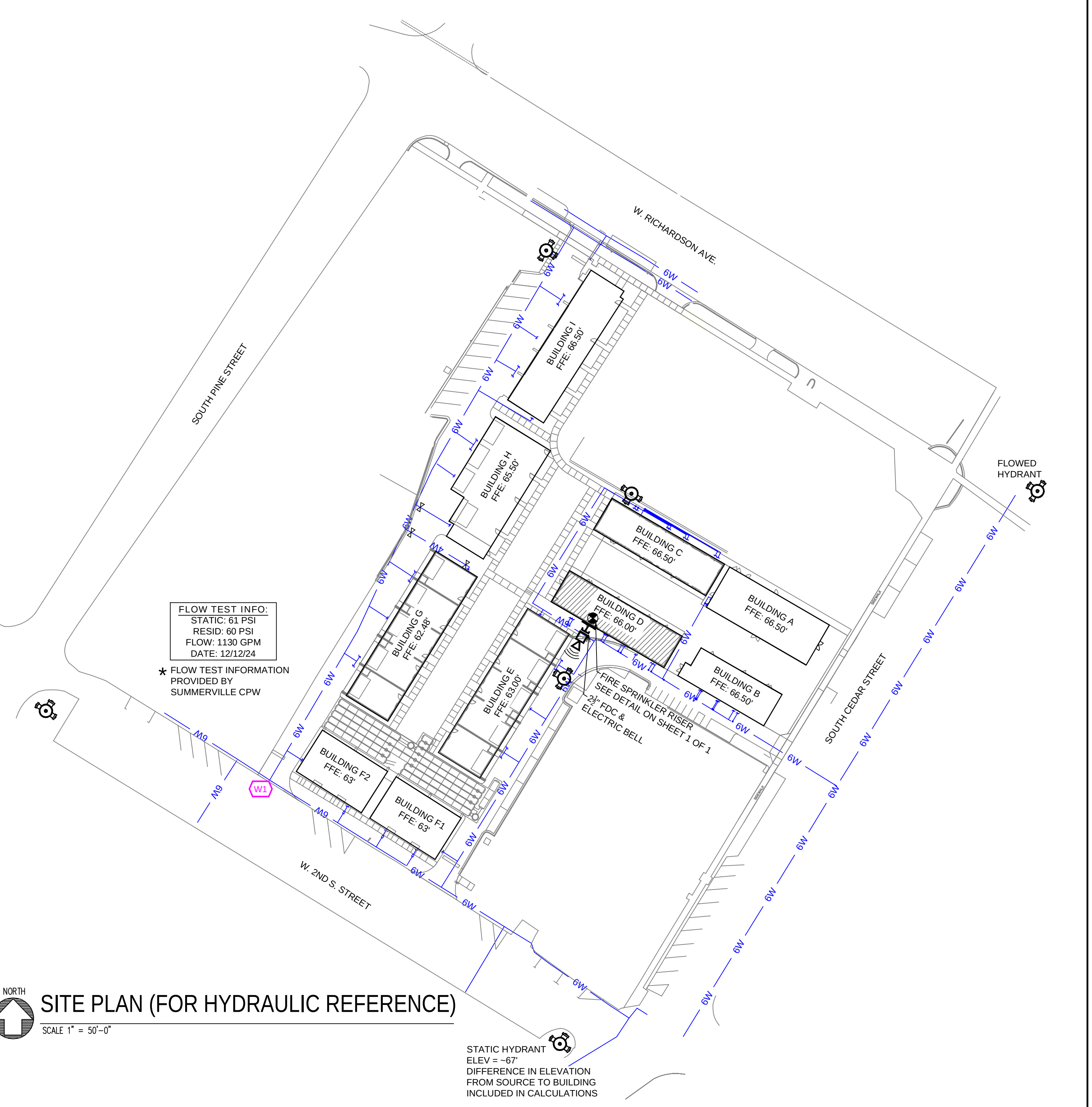
NOMINAL SIZE inches	MAX SPACING feet
1"	12'-0"
1-1/4"	12'-0"
1-1/2"	15'-0"
2"	15'-0"
2-1/2"	15'-0"
3"	15'-0"
4" & LARGER	15'-0"

- RISER LEGEND**
- 6" UNDERGROUND WATER SERVICE (BY OTHERS)
FLUSHING & TESTING OF THE UNDERGROUND SHALL BE COMPLETED PRIOR TO THE SPRINKLER SYSTEM HOOKUP. UNDERGROUND PAPERS ARE TO BE SUPPLIED TO THE "PP" CONTRACTOR BY THE G.C.I.
 - 6"x2-1/2" GROOVED CONCENTRIC REDUCER
 - 2-1/2" DESINGER 20 BACKFLOW GAS BPF W/ TAMPERS
 - 2-1/2" RELIABLE UMC UNIVERSAL MANIFOLD ASSEMBLY
 - 2-1/2" TO WET SYSTEM
 - 2-1/2" GROOVED DRAIN 90 w/ AUTOMATIC BALL DRIP
 - 2-1/2" GROOVED CHECK VALVE
 - 2-1/2" FDC
 - 6" ELECTRIC BELL
 - HEADBOX
 - FLEXIBLE COUPLING
 - 2-1/2" BUTTERFLY VALVE CAPPED FOR FORWARD FLOW TEST



RISER DETAIL
SCALE: 1/2" = 1'-0"

SITE PLAN (FOR HYDRAULIC REFERENCE)
SCALE 1" = 50'-0"



- GENERAL NOTES**
- SOUTH CAROLINA BUILDING CODE (2021)
 - OCCUPANCY: B & R-2
 - TYPE OF CONSTRUCTION: V-B (UNPROTECTED, COMBUSTIBLE)
 - SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
 - FIRST FLOOR = 2185 S.F.
 - SECOND FLOOR = 2558 S.F.
 - THIRD FLOOR = 2558 S.F.
 - FOURTH FLOOR = 792 S.F.
 - TOTAL = 8093 S.F.
 - INSTALLATION STANDARDS: SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13 & NFPA-14 (2019)
 - SPRINKLER PIPE TYPES:
 - WET:
 - RESIDENTIAL SPACE:
 - 1" BRANCH LINES TO BE BLAZEMASTER CPVC PIPING WITH CEMENTED FITTINGS
 - 1-1/4" THROUGH 1-1/2" MAIN & BRANCH LINES TO BE BLAZEMASTER CPVC PIPING WITH CEMENTED FITTINGS
 - RETAIL SPACE:
 - 1" BRANCH LINES TO BE BLK SCH 40 PIPING WITH THREADED FITTINGS
 - 1-1/4" THROUGH 1-1/2" MAIN & BRANCH LINES TO BE BLK SCH 10 PIPING WITH SHORT RADIUS GROOVED FITTINGS
 - DESIGN CRITERIA:
 - RETAIL SPACE DESIGNED TO ORDINARY HAZARD GROUP II
 - RESIDENTIAL UNITS DESIGNED TO LIGHT HAZARD
 - REMOTE AREA REDUCTIONS HAVE BEEN TAKEN WHERE APPLICABLE PER NFPA 13 SEC. 19.3.3.2.3.1
 - NOTES:
 - ALL MATERIAL TO BE NEW AND MEET U.L. STANDARDS
 - HANGERS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13 (2019) - SEE PLAN FOR HANGING REQUIREMENTS
 - SYMBOLS USED ON DRAWINGS:
 - PIPE ELEVATION A.F.F
 - PIPE ELEVATION BELOW B.O.D
 - ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD UNLESS NOTED)
 - HYDRAULIC CALCULATION JUNCTION POINT
 - CEILING HEIGHT
 - BRANCH LINE RESTRAINT
 - SCOPE OF WORK:
 - TO INSTALL A NEW WET SPRINKLER SYSTEM IN BONAIRE PARK BUILDING D. THE BUILDING HAS A RETAIL SPACE WITH RESIDENTIAL TOWNHOUSES. THE SYSTEM SHALL HAVE ONE ZONE COVERING THE ENTIRE BUILDING.
 - ALL AREAS OF THE BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13

SUBMITTAL

JOB No.	HR1262	Sprinkler Plan	FILE: BONAIRE PARK BLDG.dwg
DATE	10-13-2025	BONAIRE PARK BLDG. D	SHEET No.
DESIGNER	DVG	300 BONAIRE PROMENADE LANE	1 OF 1
SCALE	1/8" = 1'-0"	SUMMERVILLE, SOUTH CAROLINA	