

**PROJECT SUMMARY:**  
 PROJECT NAME: MAURER RESIDENCE  
 PROJECT ADDRESS: 733 CHAMPAGNE RD, INCLINE VILLAGE, NV  
 APN: 126-262-06  
 PROJECT TYPE:  NEW  T.I.  
 TYPE OF CONSTRUCTION: V  
 OCCUPANCY GROUP(S): R3  
 OCCUPIED LEVELS: 4  
 TOTAL SPRINKLERED AREA: 6880 SQ. FT.  
 NFPA CODE REQUIREMENT:  NFPA 13  NFPA 13R  NFPA 13D  
 NUMBER OF SYSTEMS: 2  
 SYSTEM TYPE(S):  WET  ANTI-FREEZE  DRY  PREACTION  
 TOTAL SPRINKLERS: 85  
 SPECIAL NOTES: SEE FIRE SPRINKLER NOTES THIS SHEET

**SPRINKLER SPACING**

- A SINGLE PENDENT SPRINKLER MAY BE SPACED AT A MAXIMUM OF 20'x20' (400SQ. FT.) OR UP TO 10' OFF A WALL (MINIMUM 8'-0" BETWEEN SPRINKLERS)
- FOUR OR MORE HEADS IN A COMPARTMENT SHALL BE SPACED AT A MAXIMUM OF 16'x16' (256SQ. FT.) OR UP TO 8' OFF A WALL (MINIMUM 8'-0" BETWEEN SPRINKLERS)
- SPRINKLERS SHALL BE MEASURED AT PERPENDICULAR ANGLES TO WALLS AND ALONG THE SLOPES OF CEILINGS.

THIS FIRE SPRINKLER SYSTEM UTILIZES THE NOBLE COMPANY FIREFIGHTER ELIMINATOR ANTI-FREEZE SOLUTION

**SPRINKLER HEAT ZONES:**

HEAT SOURCE:	ORDINARY TEMP SPRINKLER	INTERMEDIATE TEMP SPRINKLER
SIDE OF OPEN OR RECESSED FIRE PLACE	36"	12"
FRONT OF RECESSED FIRE PLACE	60"	36"
COAL OR WOOD BURNING STOVE	42"	12"
RANGE/OVEN, HOT AIR FLUES & UNINSULATED HEAT DUCT	18"	9"
UNINSULATED HOT WATER PIPES & 250-499 WATT LIGHTS	12"	6"
SIDE OF CEILING OR WALL MOUNTED HOT AIR DIFFUSERS	24"	12"
FRONT OF WALL MOUNTED HOT AIR DIFFUSERS	36"	18"
HOT WATER HEATER, FURNACE, LIGHT FIXTURE 0-250 WATT	6"	3"

**PIPE VOLUMES: MAIN & UPPER LEVELS (ZONE 1) CPVC**

TOTAL PIPE FOOTAGE AND CAPACITY:  
 1" = 377' (18.64 GAL)  
 1-1/4" = 245' (19.42 GAL)

TOTAL VOLUME: ±38.07 GALLONS

**PIPE VOLUMES: LOWER MECH & LOWER LEVELS (ZONE 2) CPVC**

TOTAL PIPE FOOTAGE AND CAPACITY:  
 1" = 302' (14.94 GAL)  
 1-1/4" = 26' (2.06 GAL)

TOTAL VOLUME: ±17.00 GALLONS

NFPA 13 - Table A.7.2.3 Capacity of 1 ft of pipe (Based on Actual Internal Pipe Diameter)

Nominal Pipe Diameter (in.)	Pipe	
	Schedule 40 (gal)	Schedule 10 CPVC (gal)
1	0.045	0.049
1/4	0.078	0.085
1/2	0.106	0.115
2	0.174	0.190
2 1/2	0.248	0.283

**SUBMITTAL**

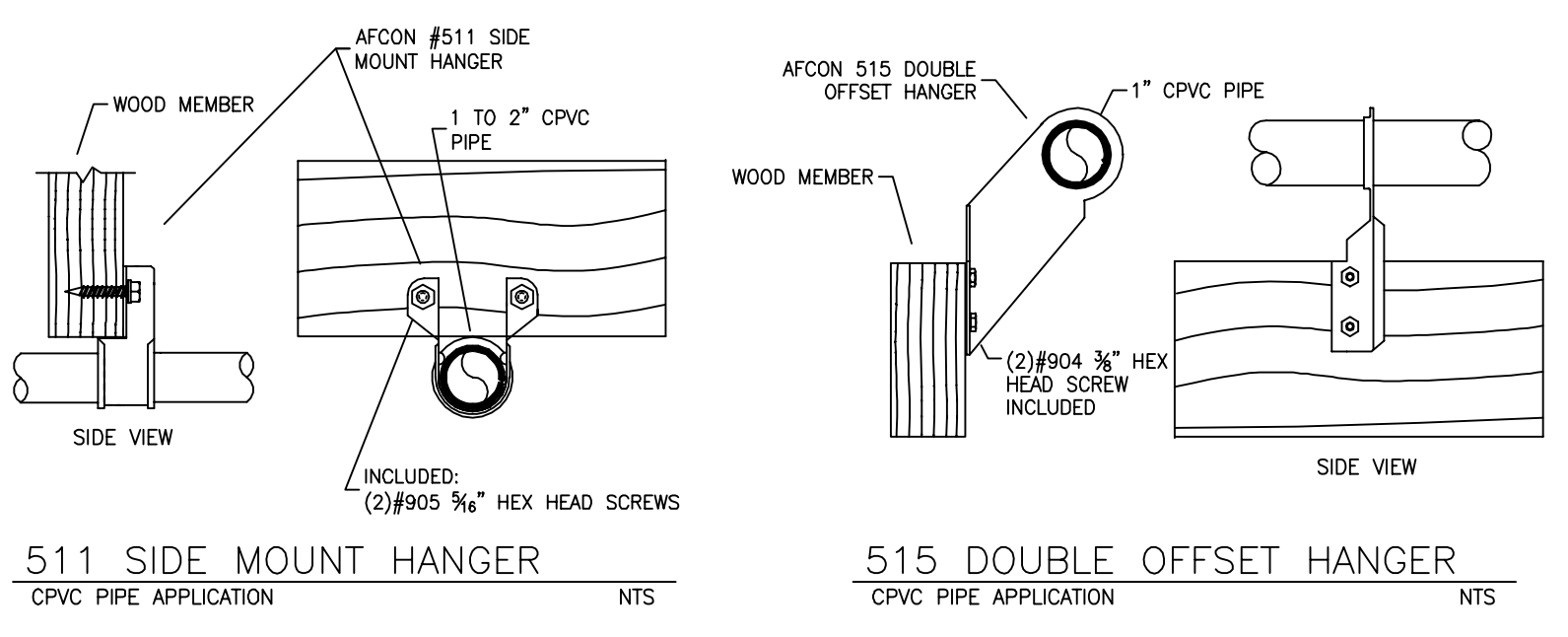
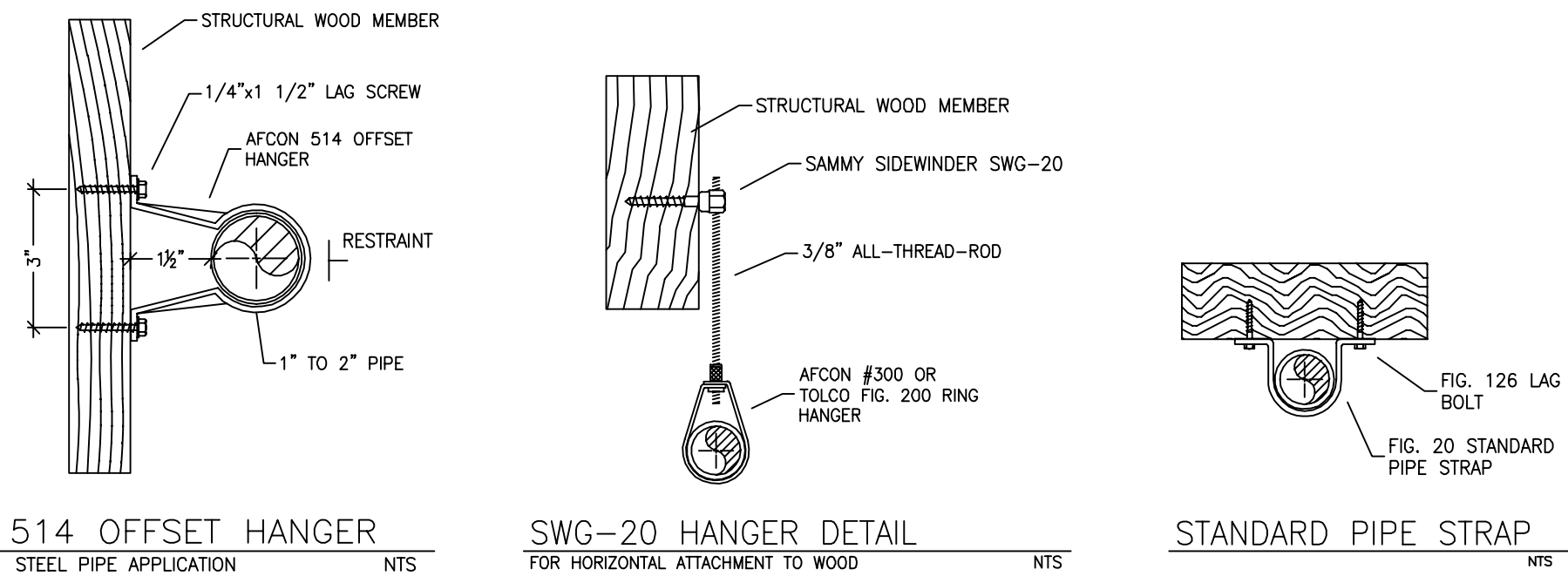
NO SPRINKLERS REQUIRED IN:  
 BATHROOMS 55 SQ.FT. OR LESS IN AREA PER NFPA 13R SECTION 6.6.2  
 CLOSETS 24 SQ.FT. OR LESS IN AREA PER NFPA 13R SECTION 6.6.3

**PROJECT SQUARE FOOTAGES**

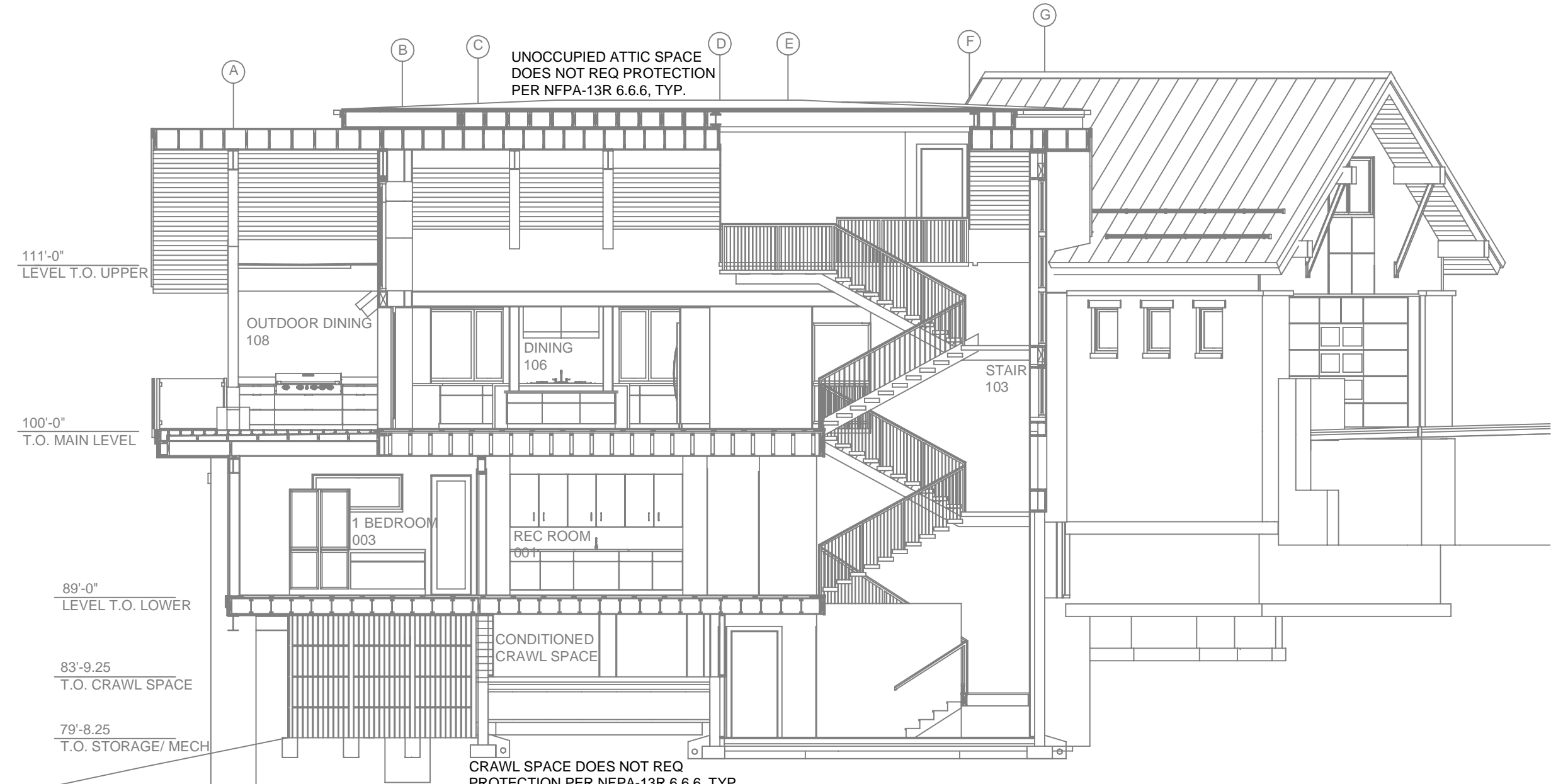
LOWER MECH (ZONE 2) = 599 S.F.  
 LOWER LEVEL (ZONE 2) = 2175 S.F.  
 MAIN LEVEL (ZONE 1) = 2641 S.F.  
 UPPER LEVEL (ZONE 1) = 1465 S.F.

NFPA 13 - Table 9.2.2.1(a) Maximum Distance Between Hangers (ft-in.)

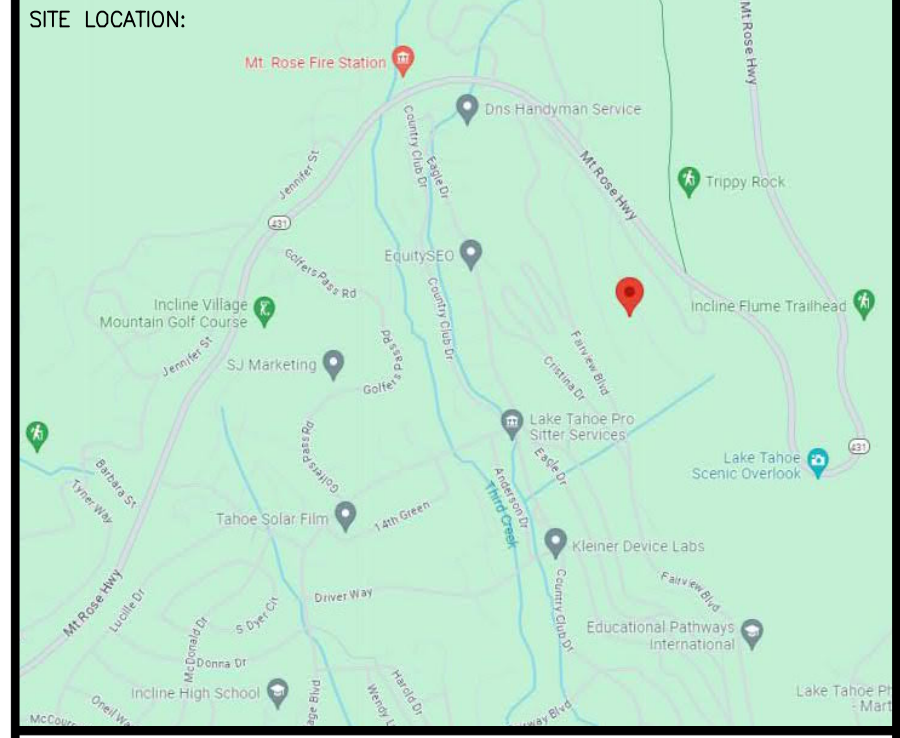
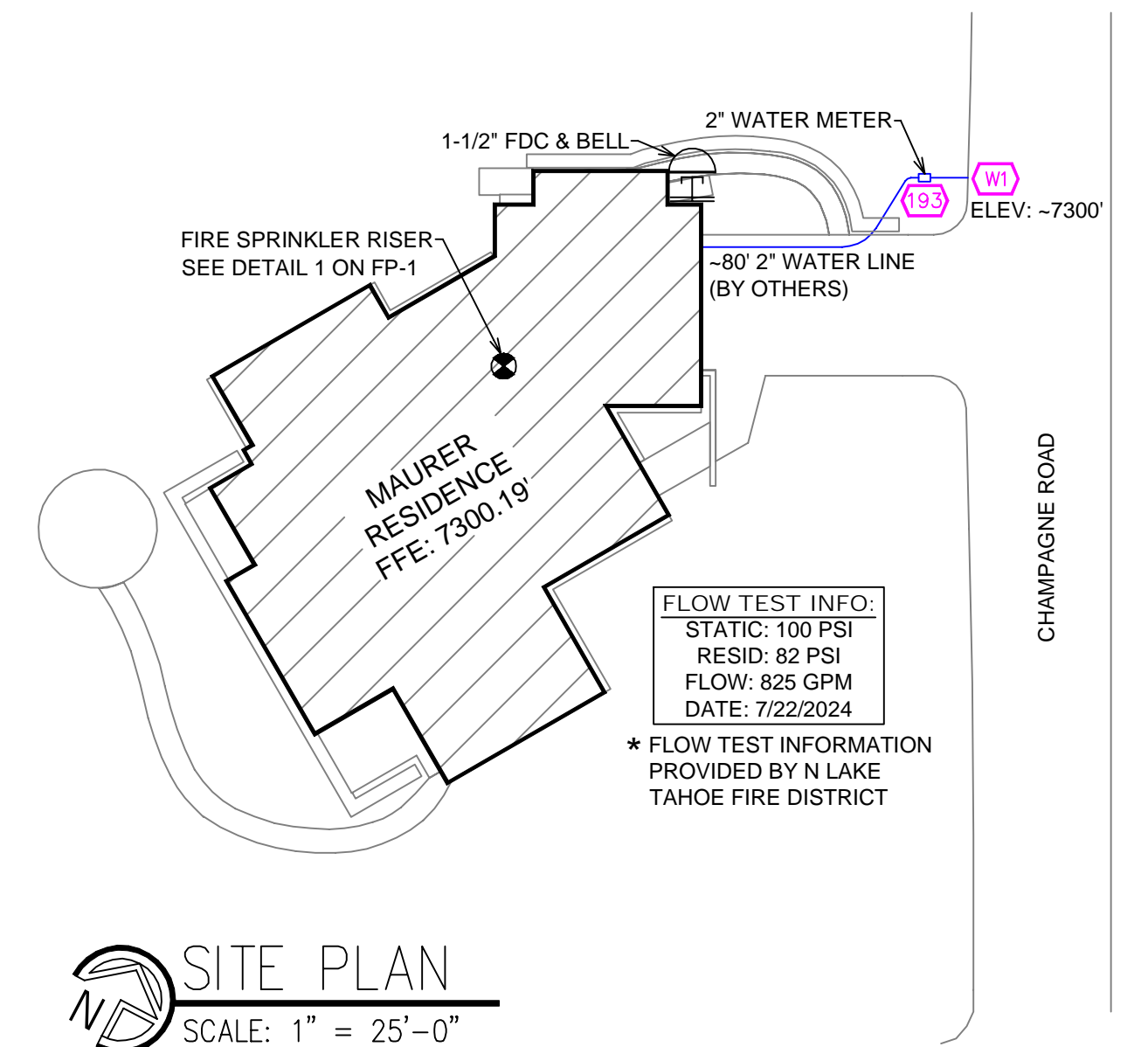
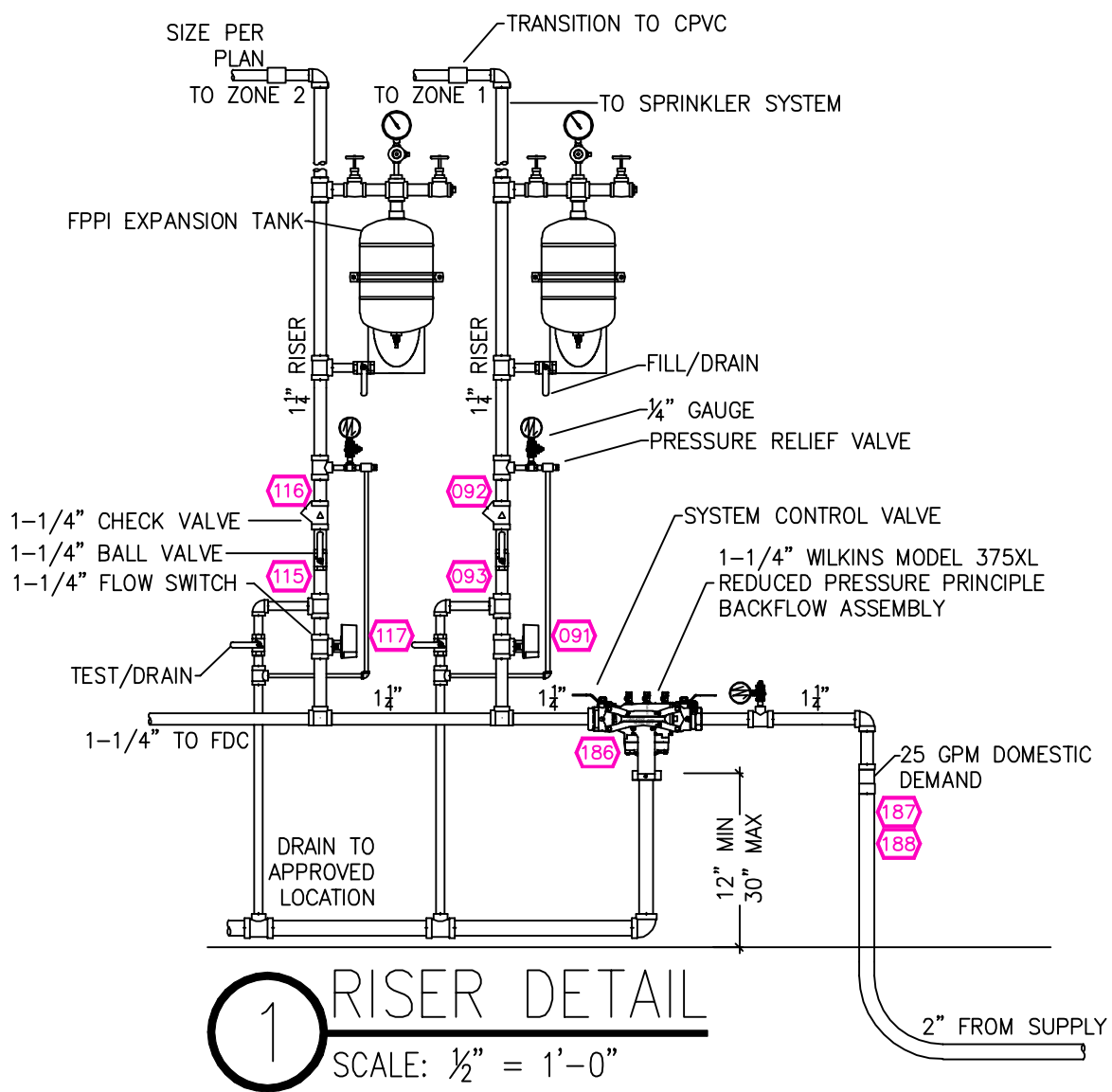
	Nominal Pipe Size (in.)									
	3/8	1	1 1/4	1 1/2	2	2 1/2	3	4	6	8
Steel Pipe except threaded	N/A	12-0	12-0	15-0	15-0	15-0	15-0	15-0	15-0	15-0
Threaded lightwall steel pipe	N/A	12-0	12-0	15-0	15-0	15-0	N/A	N/A	N/A	N/A
Copper tube	8-0	8-0	10-0	10-0	12-0	12-0	15-0	15-0	15-0	15-0
CPVC	5-6	6-0	6-6	7-0	8-0	9-0	10-0	N/A	N/A	N/A



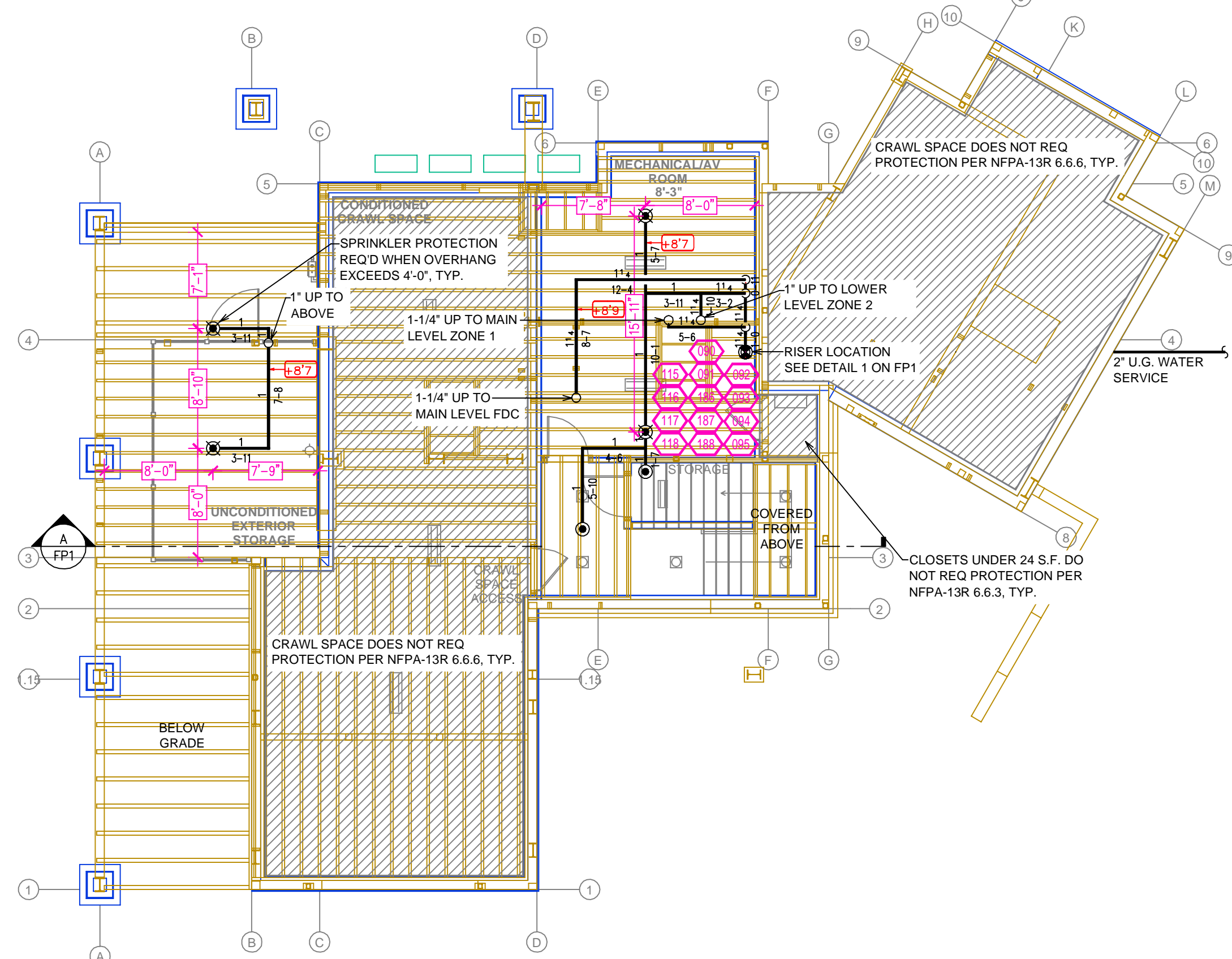
**HANGER DETAILS**



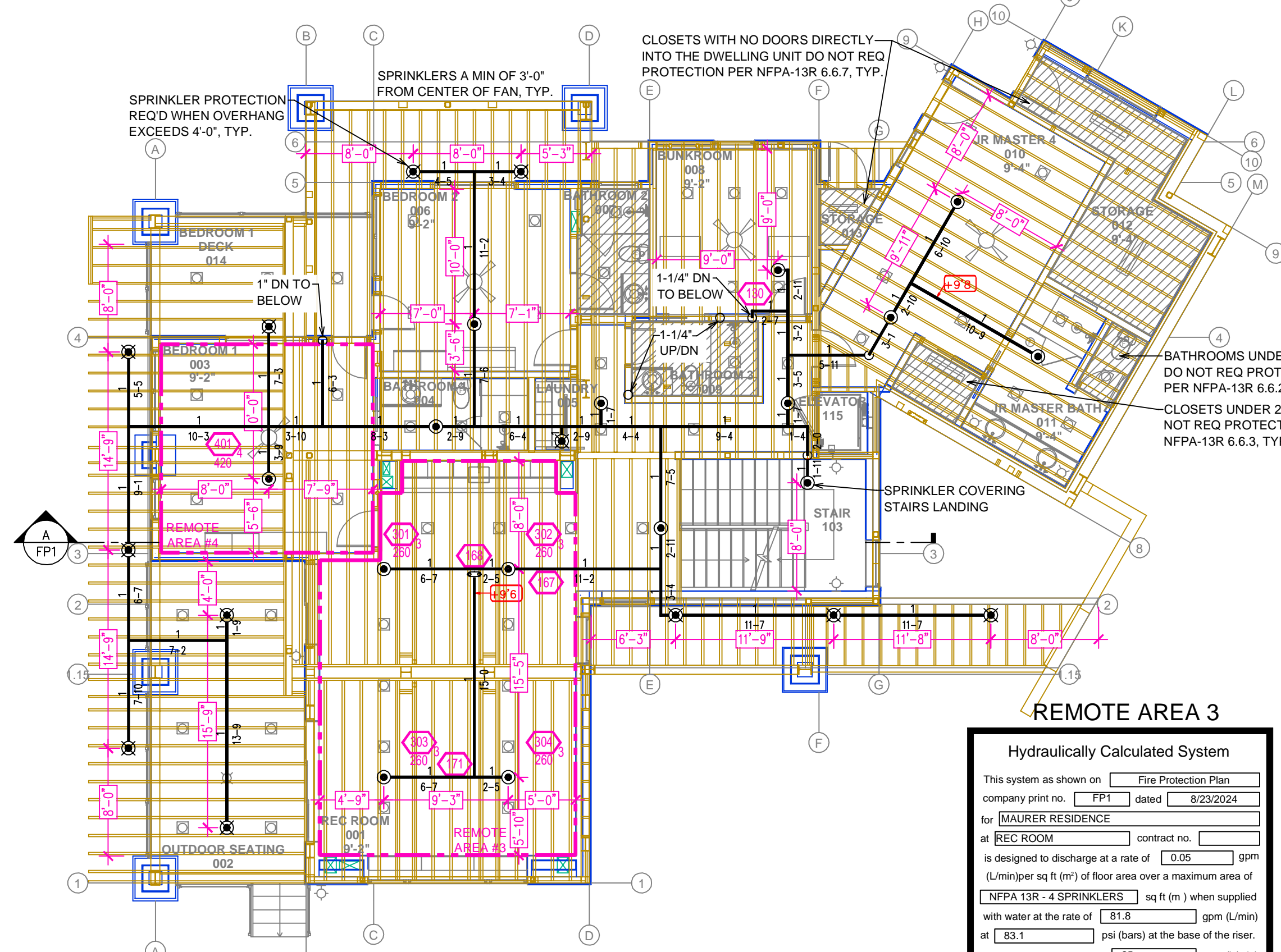
**A BUILDING SECTION**  
 SCALE: 1/8" = 1'-0"



PROJECT NAME: FIRE SPRINKLER PLANS FOR  
**MAURER RESIDENCE**  
 733 CHAMPAGNE ROAD  
 INCLINE VILLAGE, NV



**MECHANICAL ROOM FIRE SPRINKLER PLAN**  
SCALE: 1/8" = 1'-0"



**LOWER LEVEL FIRE SPRINKLER PLAN**  
SCALE: 1/8" = 1'-0"

**REMOTE AREA 3**

Hydraulically Calculated System

This system as shown on Fire Protection Plan company print no. FPI dated 8/23/2024 for MAURER RESIDENCE at REC ROOM contract no. [ ] is designed to discharge at a rate of 0.05 gpm (L/min) per sq ft (m<sup>2</sup>) of floor area over a maximum area of NFPA 13R - 4 SPRINKLERS sq ft (m<sup>2</sup>) when supplied with water at the rate of 81.8 gpm (L/min) at 83.1 psi (bars) at the base of the riser. Hose stream allowance of 25 gpm (L/min) is included in the above.

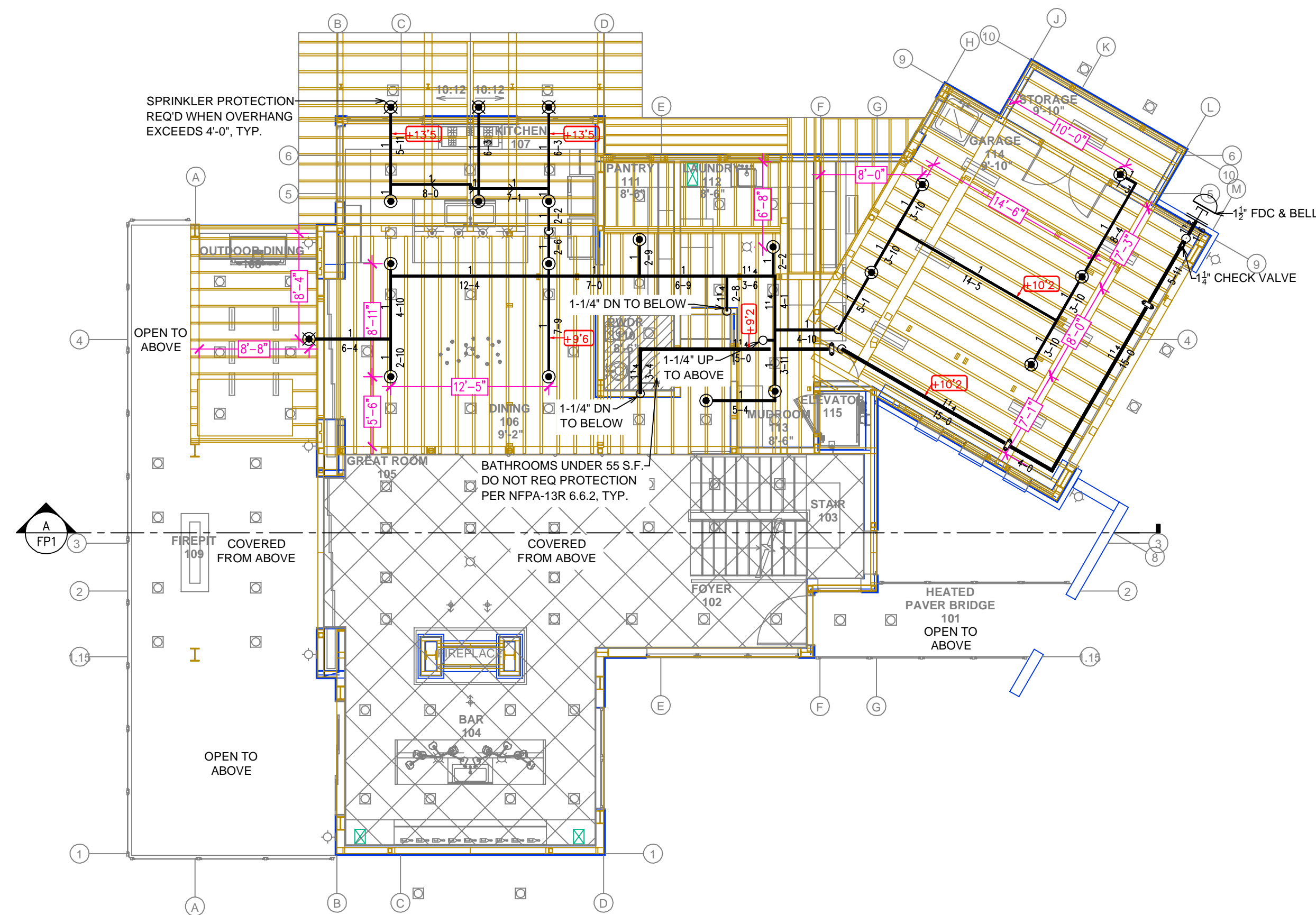
Occupancy classification: NFPA 13R - LIGHT  
Commodity classification: N/A  
Maximum storage height: N/A  
Safety factor: 16.6

**REMOTE AREA 4**

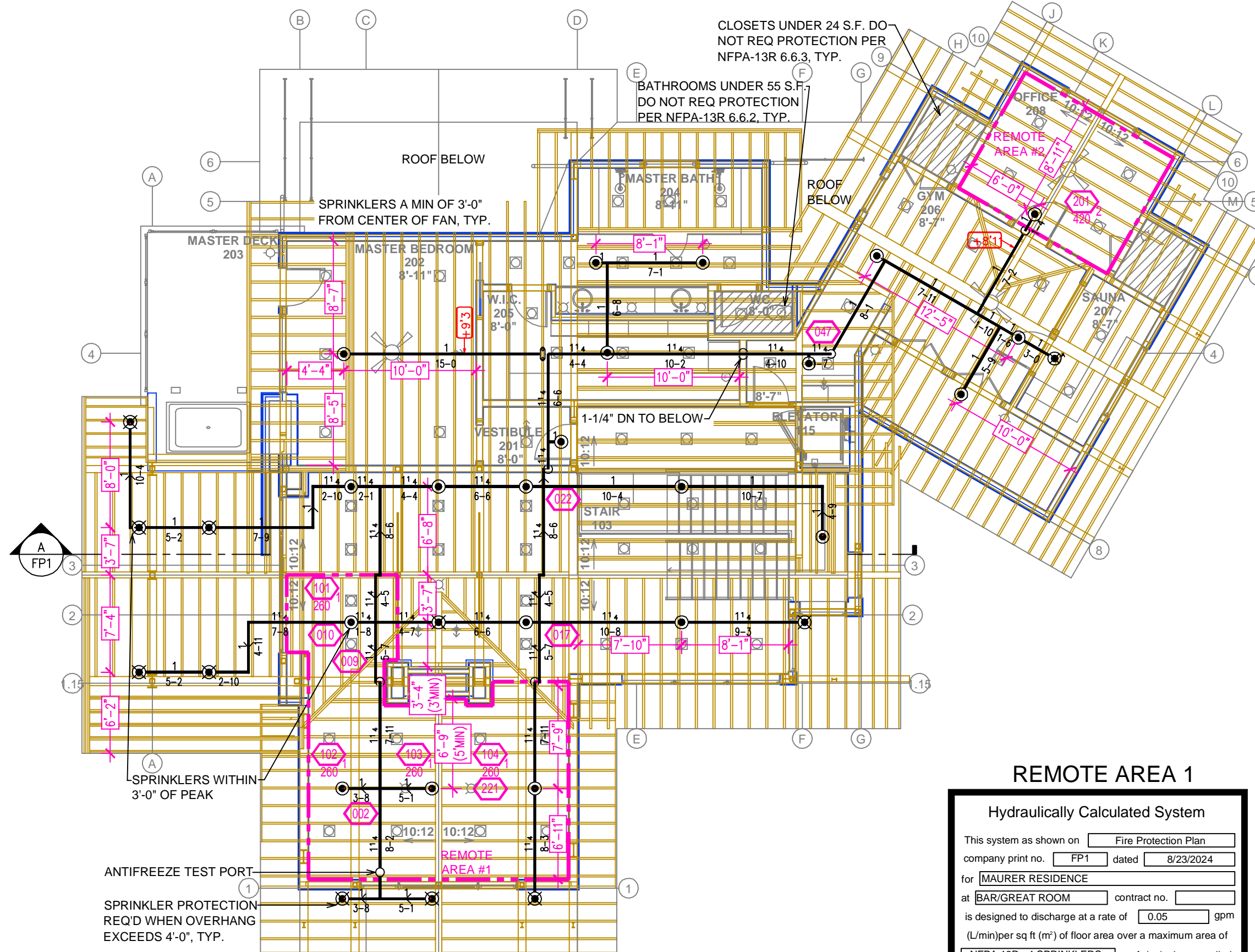
Hydraulically Calculated System

This system as shown on Fire Protection Plan company print no. FPI dated 8/23/2024 for MAURER RESIDENCE at BEDROOM 1 contract no. [ ] is designed to discharge at a rate of 0.05 gpm (L/min) per sq ft (m<sup>2</sup>) of floor area over a maximum area of NFPA 13R - 1 SPRINKLER sq ft (m<sup>2</sup>) when supplied with water at the rate of 46.0 gpm (L/min) at 44.8 psi (bars) at the base of the riser. Hose stream allowance of 25 gpm (L/min) is included in the above.

Occupancy classification: NFPA 13R - LIGHT  
Commodity classification: N/A  
Maximum storage height: N/A  
Safety factor: 55.1



**MAIN LEVEL FIRE SPRINKLER PLAN**  
SCALE: 1/8" = 1'-0"



**UPPER LEVEL FIRE SPRINKLER PLAN**  
SCALE: 1/8" = 1'-0"

**REMOTE AREA 1**

Hydraulically Calculated System

This system as shown on Fire Protection Plan company print no. FPI dated 8/23/2024 for MAURER RESIDENCE at BAR/GREAT ROOM contract no. [ ] is designed to discharge at a rate of 0.05 gpm (L/min) per sq ft (m<sup>2</sup>) of floor area over a maximum area of NFPA 13R - 4 SPRINKLERS sq ft (m<sup>2</sup>) when supplied with water at the rate of 85.4 gpm (L/min) at 84.1 psi (bars) at the base of the riser. Hose stream allowance of 25 gpm (L/min) is included in the above.

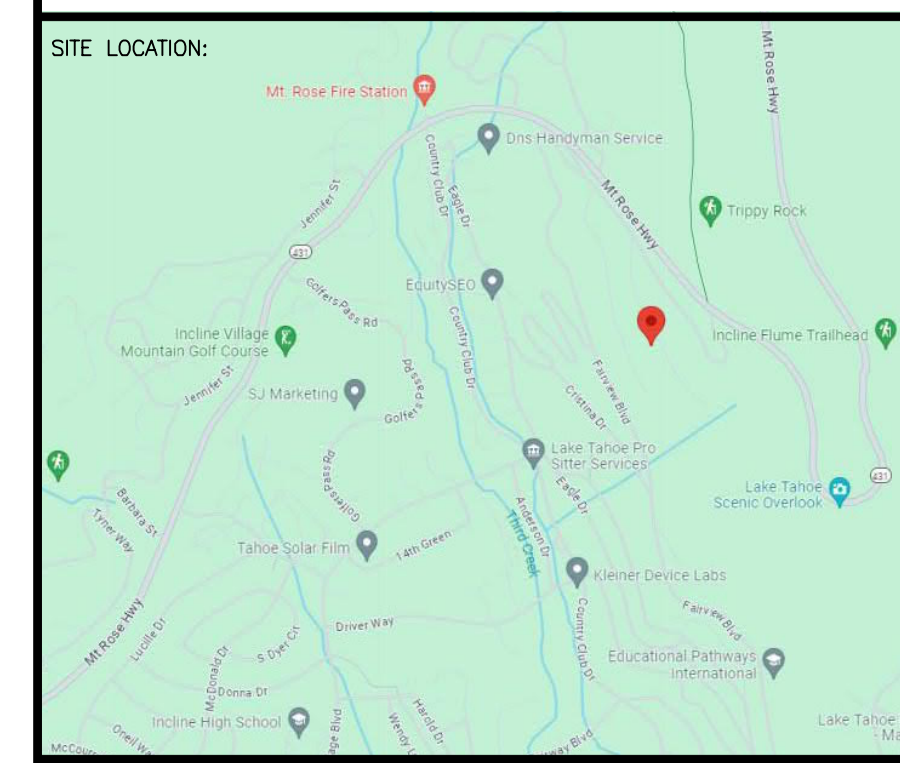
Occupancy classification: NFPA 13R - LIGHT  
Commodity classification: N/A  
Maximum storage height: N/A  
Safety factor: 15.7

**REMOTE AREA 2**

Hydraulically Calculated System

This system as shown on Fire Protection Plan company print no. FPI dated 8/23/2024 for MAURER RESIDENCE at OFFICE contract no. [ ] is designed to discharge at a rate of 0.05 gpm (L/min) per sq ft (m<sup>2</sup>) of floor area over a maximum area of NFPA 13R - 1 SPRINKLER sq ft (m<sup>2</sup>) when supplied with water at the rate of 46.0 gpm (L/min) at 54.6 psi (bars) at the base of the riser. Hose stream allowance of 25 gpm (L/min) is included in the above.

Occupancy classification: NFPA 13R - LIGHT  
Commodity classification: N/A  
Maximum storage height: N/A  
Safety factor: 45.3



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