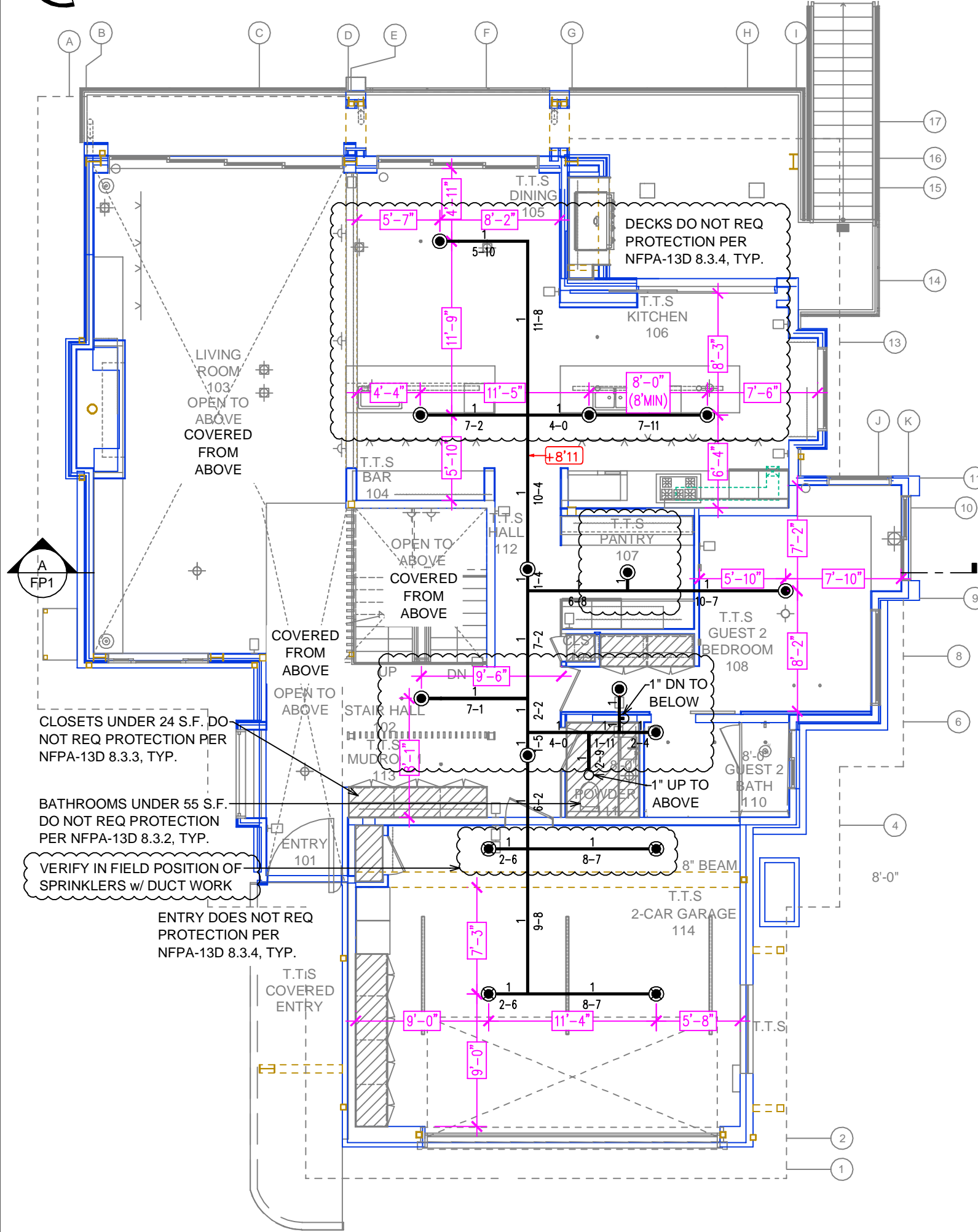
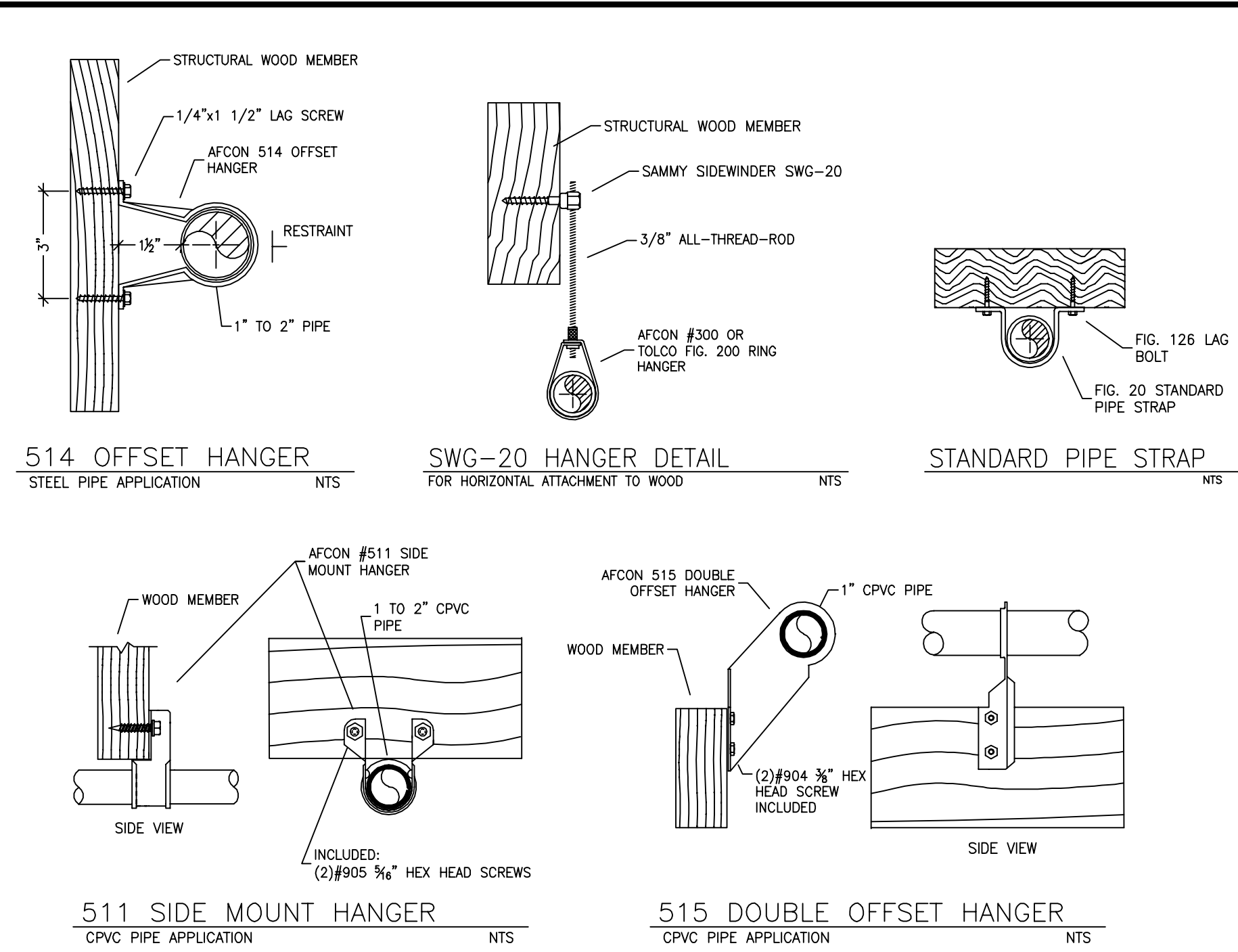


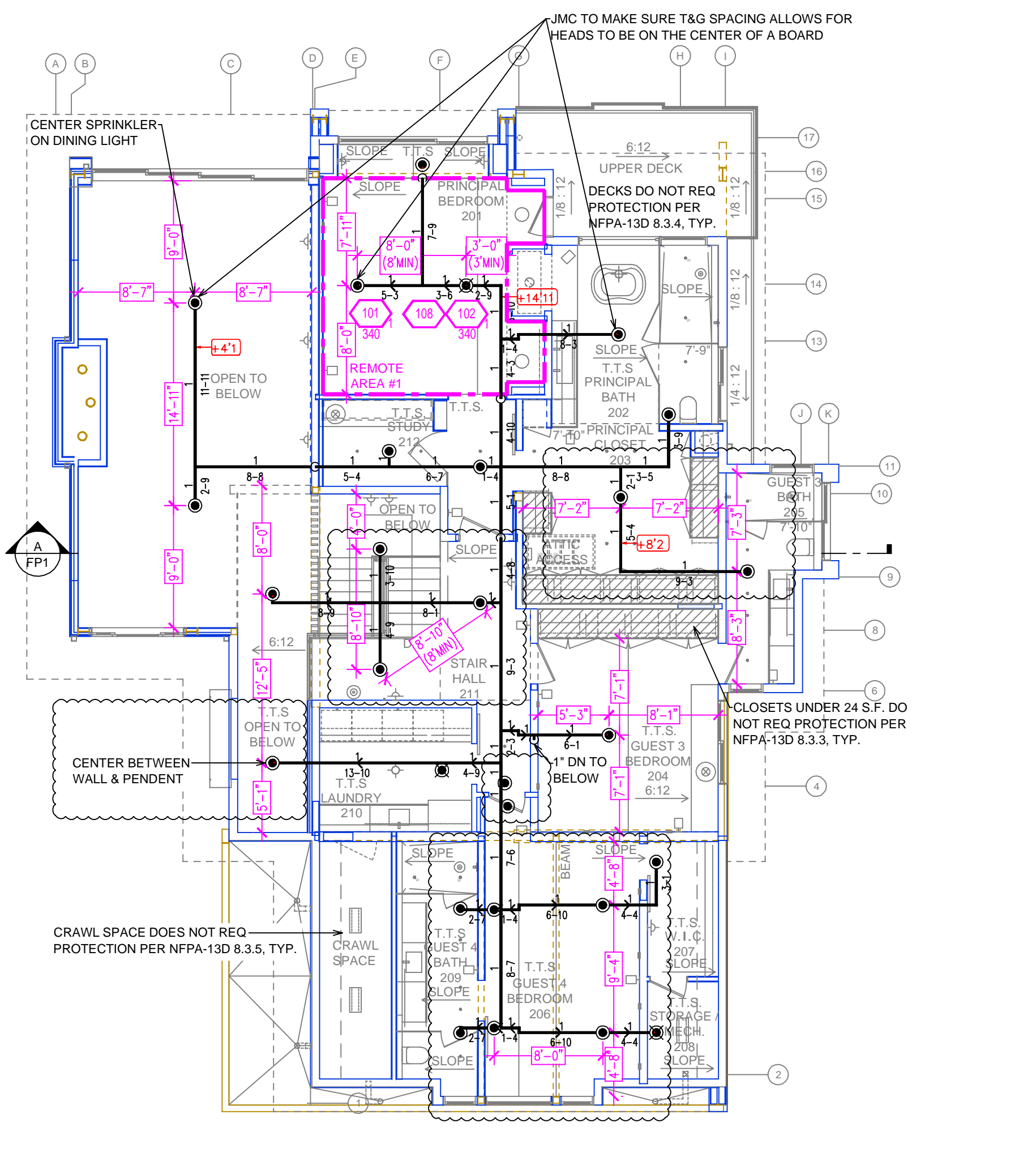
LOWER FLOOR FIRE SPRINKLER PLAN
SCALE: 1/8" = 1'-0"



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



HANGER DETAILS



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

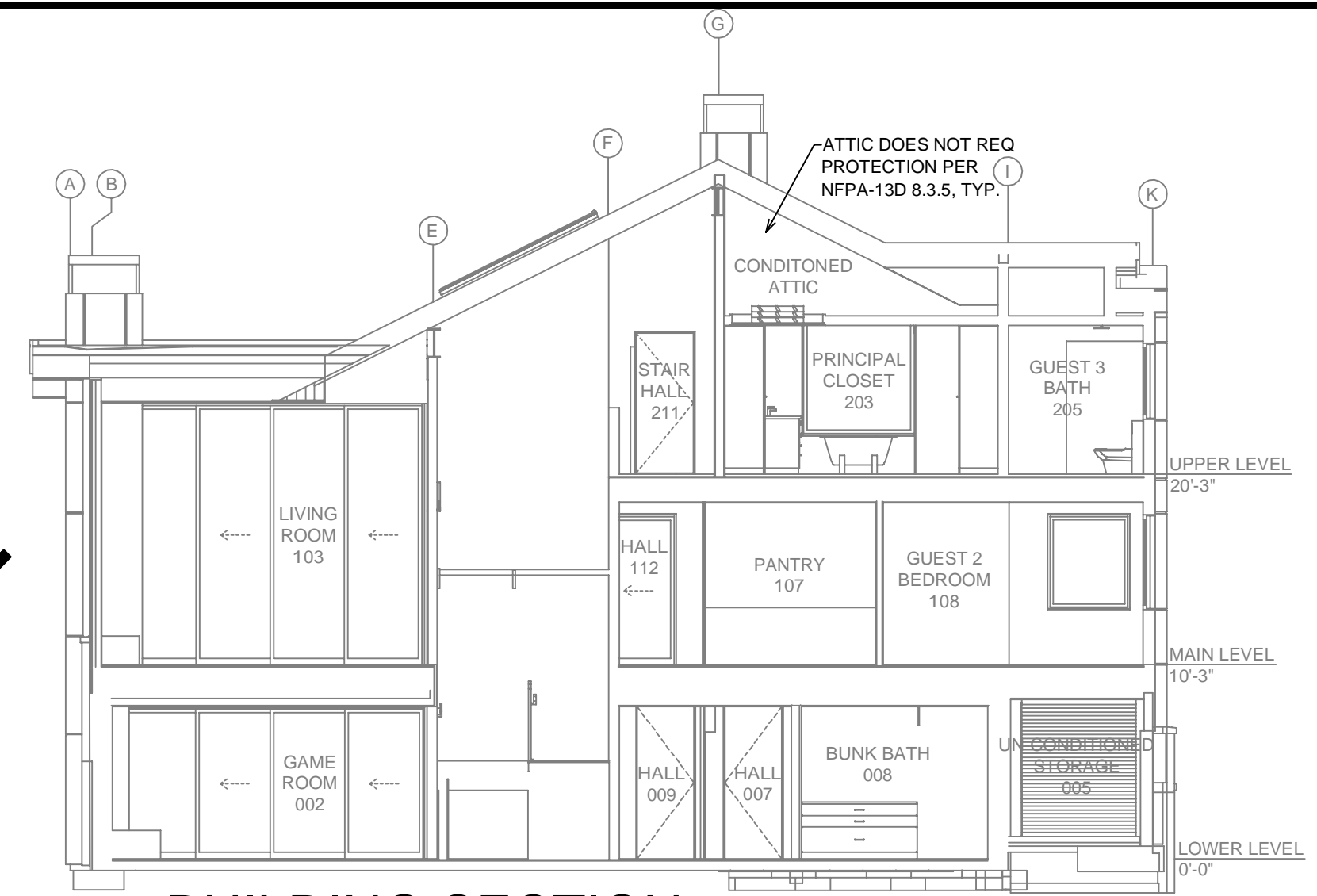
SUBMITTAL

PIPE VOLUMES:
(CPVC)
TOTAL PIPE FOOTAGE AND CAPACITY:
1" = 545' (26.95 GAL)
1/2" = 10' (0.79 GAL)

ADD 10% FOR DROPS AND PIPE SIZE DISCREPANCIES
TOTAL VOLUME: ±30.52 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 (gal)	CPVC (gal)
1	0.045	0.049	0.049
1/2	0.078	0.085	0.079
3/4	0.106	0.115	0.104
1	0.174	0.190	
1 1/2	0.248	0.283	



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

SPRINKLER SPACING

- A SINGLE PENDENT SPRINKLER MAY BE SPACED AT A MAXIMUM OF 18'x18' (324 SQ. FT.) OR UP TO 9' OFF A WALL (MINIMUM 8'-0" BETWEEN SPRINKLERS)
- TWO OR MORE HEADS IN A COMPARTMENT SHALL BE SPACED AT A MAXIMUM OF 18'x18' (324 SQ. FT.) OR UP TO 9' OFF A WALL (MINIMUM 8'-0" BETWEEN SPRINKLERS)
- SPRINKLERS SHALL BE MEASURED AT PERPENDICULAR ANGLES TO WALLS AND ALONG THE SLOPES OF CEILING.

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

REMOTE AREA 1

Hydraulically Calculated System

This system as shown on Fire Protection Plan company print no. [] dated 2/21/2024 for SIMONS RESIDENCE contract no. [] is designed to discharge at a rate of 0.05 gpm (L/min) per sq ft (m²) of floor area over a maximum area of [] sq ft (m²) when supplied with water at the rate of 39.3 gpm (L/min) at 78.6 psi (bars) at the base of the riser.

Hose stream allowance of 5 gpm (L/min) is included in the above.

Occupancy classification: 130 LIGHT HAZARD
Commodity classification: N/A
Maximum storage height: N/A
Safety factor: 6.1

PROJECT SUMMARY:

PROJECT NAME: SIMONS RESIDENCE
PROJECT ADDRESS: 636 OLYMPIC DR, TAHOE CITY CA
APN: 094-273-013
PROJECT TYPE: NEW T.I. RENOVATION
TYPE OF CONSTRUCTION: V-A
OCCUPANCY GROUP(S): R-3
OCCUPIED LEVELS: 1
TOTAL SPRINKLERED AREA: 6142 SQ. FT.
NFPA CODE REQUIREMENT: NFPA 13 NFPA 13R NFPA 13D
NUMBER OF SYSTEMS: 1
SYSTEM TYPE(S): WET ANTI-FREEZE DRY PREACTION
TOTAL SPRINKLERS: 54
SPECIAL NOTES: SEE FIRE SPRINKLER NOTES THIS SHEET

NFPA 13 - Table 8.2.2.1(a) Maximum Distance Between Hangers (ft-in.)

Nominal Pipe Size (in.)	Nominal Pipe Size (in.)									
	1/2	3/4	1	1 1/2	2	2 1/2	3	4	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
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

NO SPRINKLERS REQUIRED IN:
BATHROOMS 50 SQ. FT. OR LESS IN AREA PER NFPA 13D SECTION 8.6.2
CLOSETS 24 SQ. FT. OR LESS IN AREA PER NFPA 13D SECTION 8.6.3

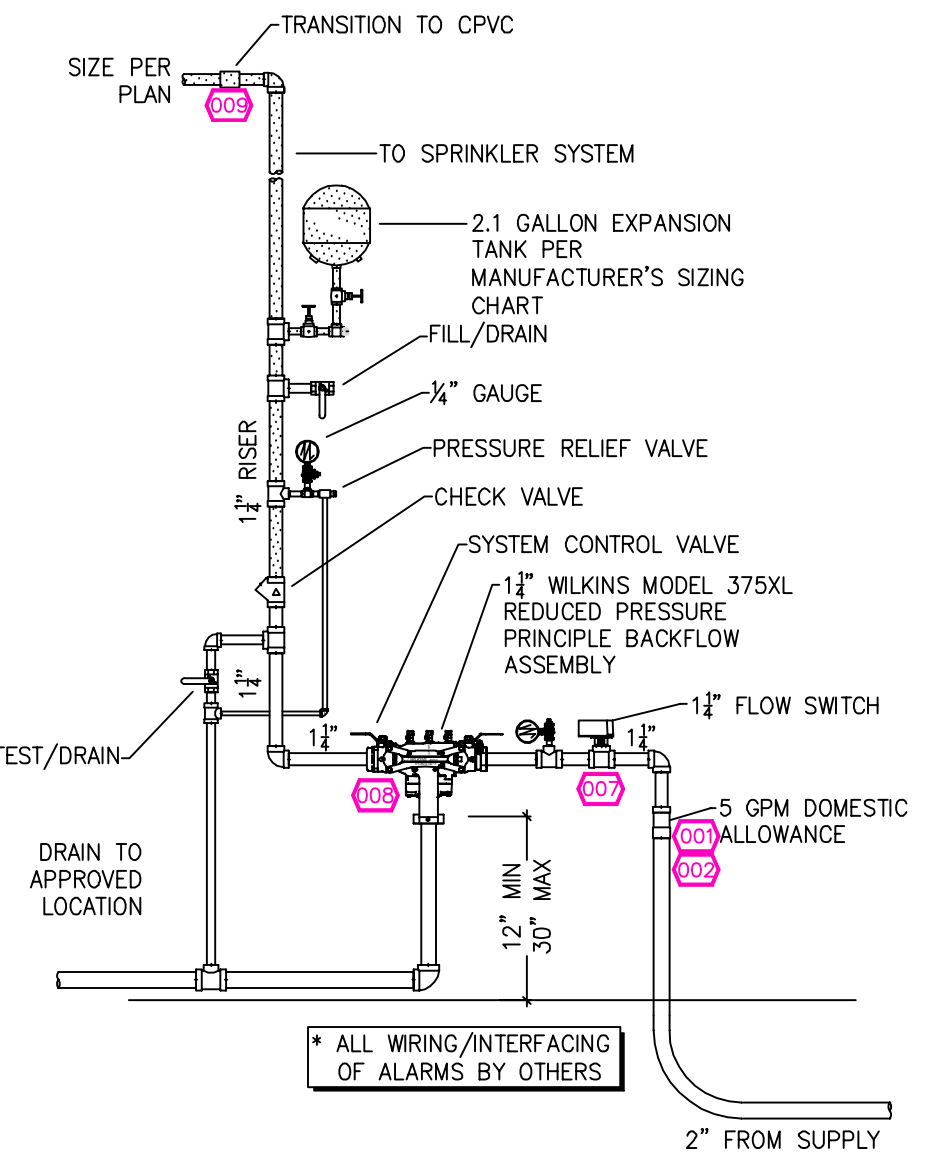
PROJECT SQUARE FOOTAGES

LOWER LEVEL = 1572 S.F.
MAIN LEVEL = 2553 S.F.
UPPER LEVEL = 2017 S.F.

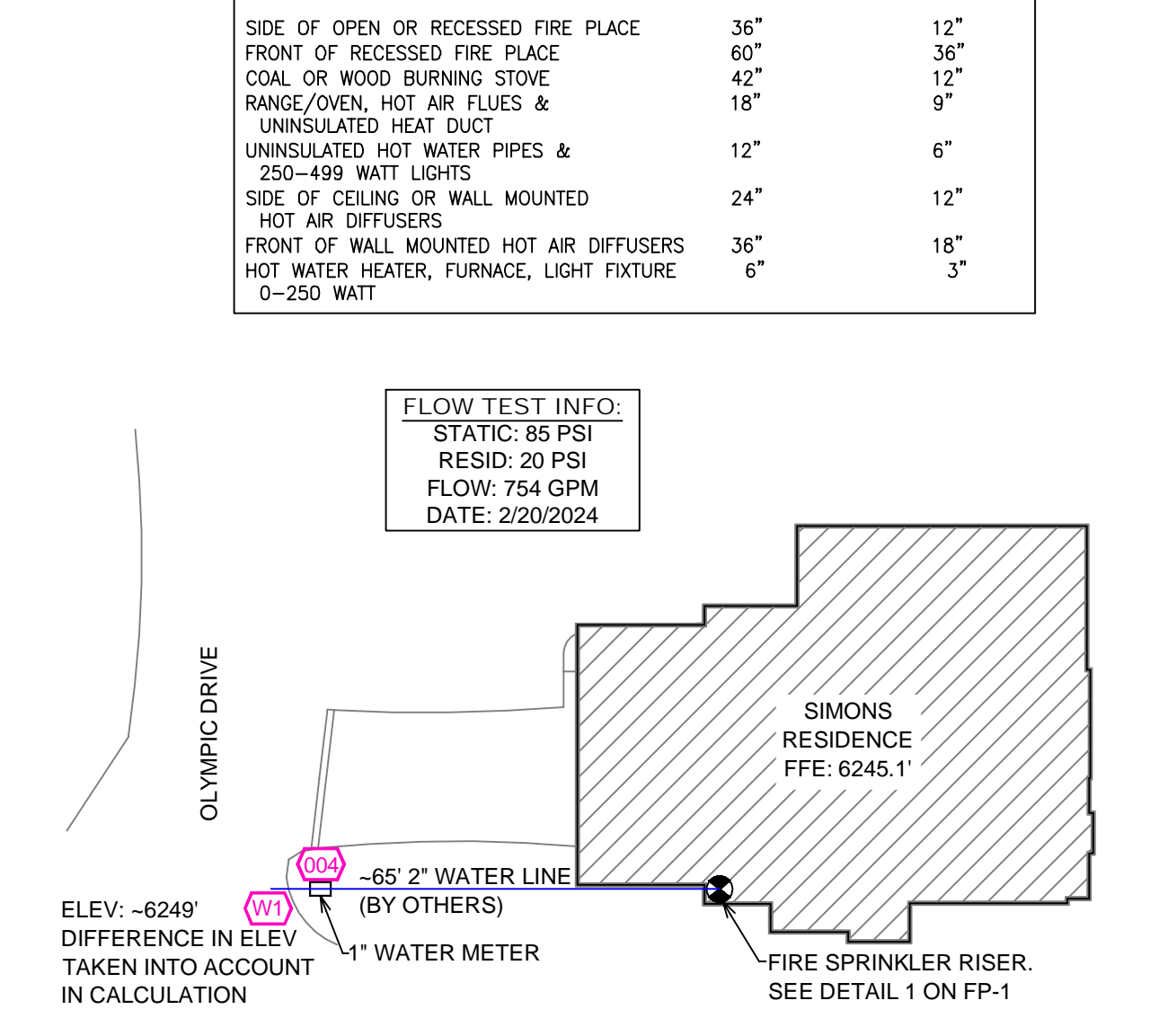
SPRINKLER HEAT ZONES:

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"

FLOW TEST INFO:
STATIC: 85 PSI
RESID.: 20 PSI
FLOW: 754 GPM
DATE: 2/20/2024



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



SITE PLAN
SCALE: 1" = 25'-0"

NO.	DATE	REVISIONS	DRAWN	CHECKED

GENERAL CONTRACTOR: AUTHORITY HAVING JURISDICTION:
N. TAHOE FIRE PROTECTION DISTRICT
ADDRESS: 222 FAIRWAY DR
CITY: TAHOE CITY, CA
PHONE: 530-583-6913
CONTACT: CONTACT:

ARCHITECT: FIELD INSPECTIONS:
1.
2.
3.
4.

FIRE SPRINKLER NOTES:

- THE PROPOSED FIRE SPRINKLER SYSTEM IS AN ANTI-FREEZE SYSTEM AND SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 13D.
- THIS SPRINKLER SYSTEM IS HYDRAULICALLY CALCULATED IN ACCORDANCE WITH NFPA 13D TO PROVIDE 0.05 GPM PER SQ. FT. OVER THE MOST REMOTE AREA.
- THE NUMBER OF DESIGN SPRINKLERS SHALL INCLUDE ALL SPRINKLERS WITHIN A COMPARTMENT UP TO A MAXIMUM OF 2 SPRINKLERS.
- ALL SPRINKLER PIPING CONCEALED ABOVE CEILING SHALL BE CPVC PIPING UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS SHOWN ARE CENTER TO CENTER U.O.N.
- ALL HANGERS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 13D AND/OR NFPA 13 REQUIREMENTS.
- HOLES THROUGH SOLID STRUCTURAL MEMBERS SHALL BE PERMITTED TO SERVE AS HANGERS FOR THE SUPPORT OF SYSTEM PIPING.
- ALL SYSTEM PIPING SHALL BE TESTED FOR LEAKAGE AT NORMAL SYSTEM OPERATING PRESSURE.
- THE OWNER SHALL BE RESPONSIBLE FOR MAINTAINING A MINIMUM TEMPERATURE OF 40° FAHRENHEIT TO PROTECT FROM FREEZING, THE SECTIONS OF THE SPRINKLER SYSTEM WHERE THERE IS NO ANTI-FREEZE IN THE PIPING (UPSTREAM OF THE RISER).
- EXISTING SPRINKLER SYSTEM TO BE REMOVED AND A NEW SYSTEM WILL BE INSTALLED AS PART OF THIS RENOVATION.

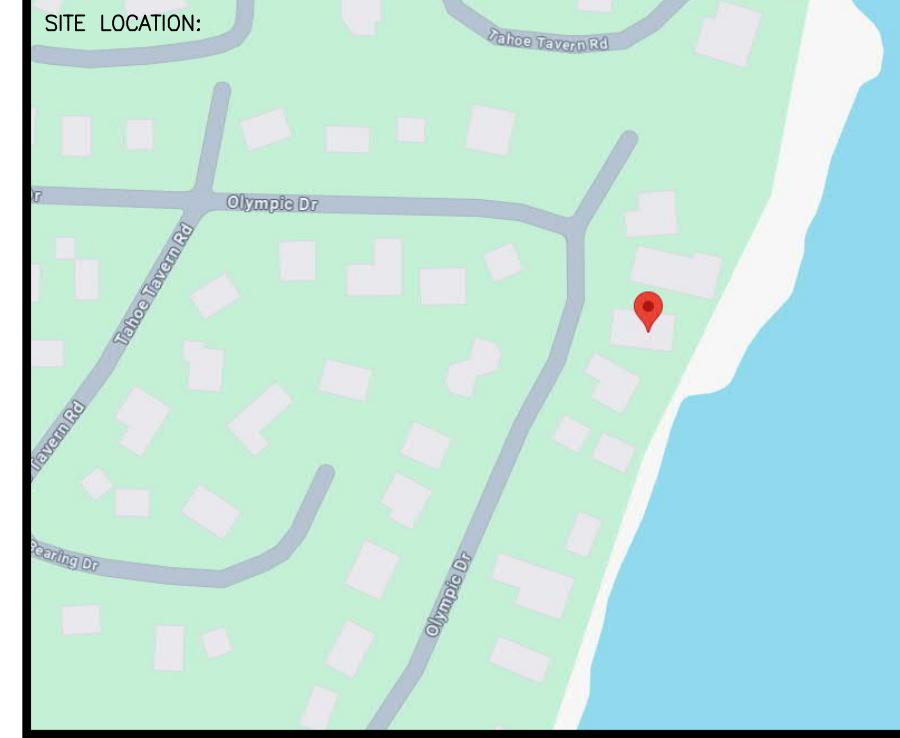
SPRINKLER HEAD LEGEND

SYM.	QTY.	TYPE	MFG.	MODEL#	NPT	K	TEMP.	FINISH	S.I.N.
⊗	48	CONCEALED	SENJ	RC-RES	1/2"	4.9	152	WHITE	SS4464
⊗	5	CONCEALED	SENJ	RC-RES	1/2"	4.9	205	WHITE	SS4464
⊗	4	SEM-RECESS	SENJ	FR-RES	1/2"	4.9	205	WHITE	SS4461

57 TOTAL SPRINKLERS ON THIS SHEET

FIRE SPRINKLER SYMBOLS

- ⊗ AUTOMATIC SPRINKLER RISER +13" ELEV. BELOW DECK OR TOS
- ⊕ EARTHQUAKE BRACING +12'-9" ELEV. ABOVE FINISHED FLOOR
- ↕ 2-WAY & 4-WAY
- ↔ CHANGE ELEVATION UP
- ↔ CHANGE ELEVATION DN
- ⊕ TYPE DESIGNATION
- ⊕ HYDRAULIC REF. PT
- ⊕ INSPECTORS TEST
- ⊕ GRID OR THIRD CAP
- ⊕ AUX. DRAIN
- ⊕ GRID COUPLING
- ⊕ REVISION NOTATION
- ⊕ TYPICAL POINT OF CONNECTION (POC)
- ⊕ LOCAL ALARM



PROJECT NAME: FIRE SPRINKLER PLANS FOR
SIMONS RESIDENCE
636 OLYMPIC DRIVE
TAHOE CITY, CA 96145

STAMP:

DRAWING TITLE: **FIRE SPRINKLER PLAN**

SCALE: 1/8" = 1'-0" JOB NO.:
DRAWN BY: DWG NO.:
BORN ON DATE: 2/21/2024 FILE: **FP-1**
SHEET 1 OF 1