

PROJECT SUMMARY:
 PROJECT NAME: SULLIVAN RESIDENCE
 PROJECT ADDRESS: 8125 VILLANDRY DR, TRUCKEE, CA
 APN: 106-320-001
 PROJECT TYPE: NEW T.I.
 TYPE OF CONSTRUCTION: V
 OCCUPANCY GROUP(S): R3
 OCCUPIED LEVELS: 2
 TOTAL SPRINKLERED AREA: 5618 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: 55
 SPECIAL NOTES: SEE FIRE SPRINKLER NOTES THIS SHEET

NO SPRINKLERS REQUIRED IN:
 BATHROOMS 55 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
 MAIN LEVEL = 4807 S.F.
 UPPER LEVEL = 811 S.F.

SPRINKLER HEAT ZONES:

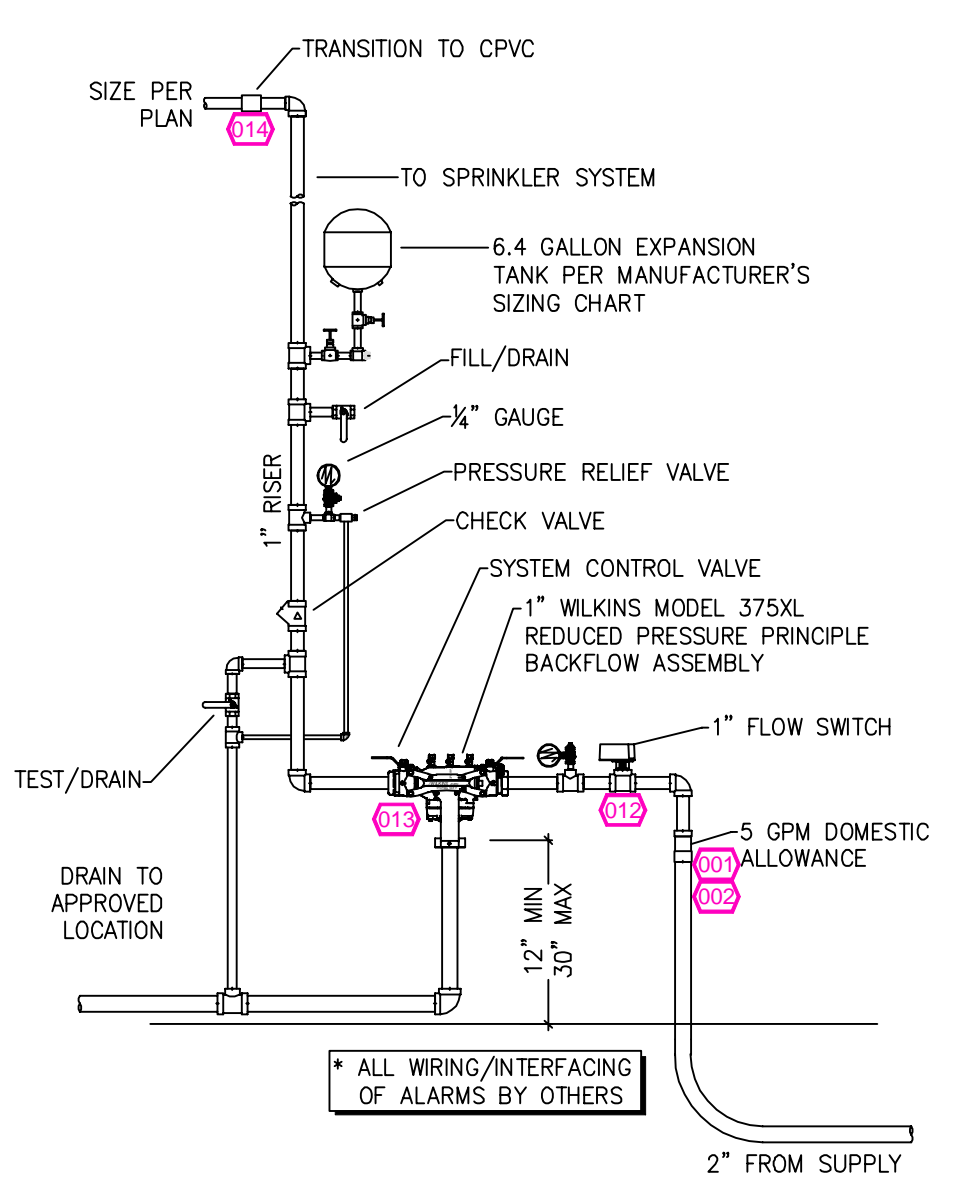
HEAT SOURCE:	ORDINARY TEMP SPRINKLER	INTERMEDIATE TEMP SPRINKLER
SIDE OF OPEN OR RECESSED FIRE PLACE	36"	12"
FRONT OF RECESSED FIRE PLACE	60"	36"
COAL OR WOOD BURNING STOVE	42"	12"
RANGE/OVEN, HOT AIR FLUES & UNINSULATED HEAT DUCT	18"	9"
250-499 WATT LIGHTS	12"	6"
SIDE OF CEILING OR WALL MOUNTED HOT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

SUBMITTAL

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)
- TWO OR MORE HEADS IN A COMPARTMENT SHALL BE SPACED AT A MAXIMUM OF 18'x18'(324SQ. FT.) OR UP TO 9' OFF A WALL UNO. (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



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

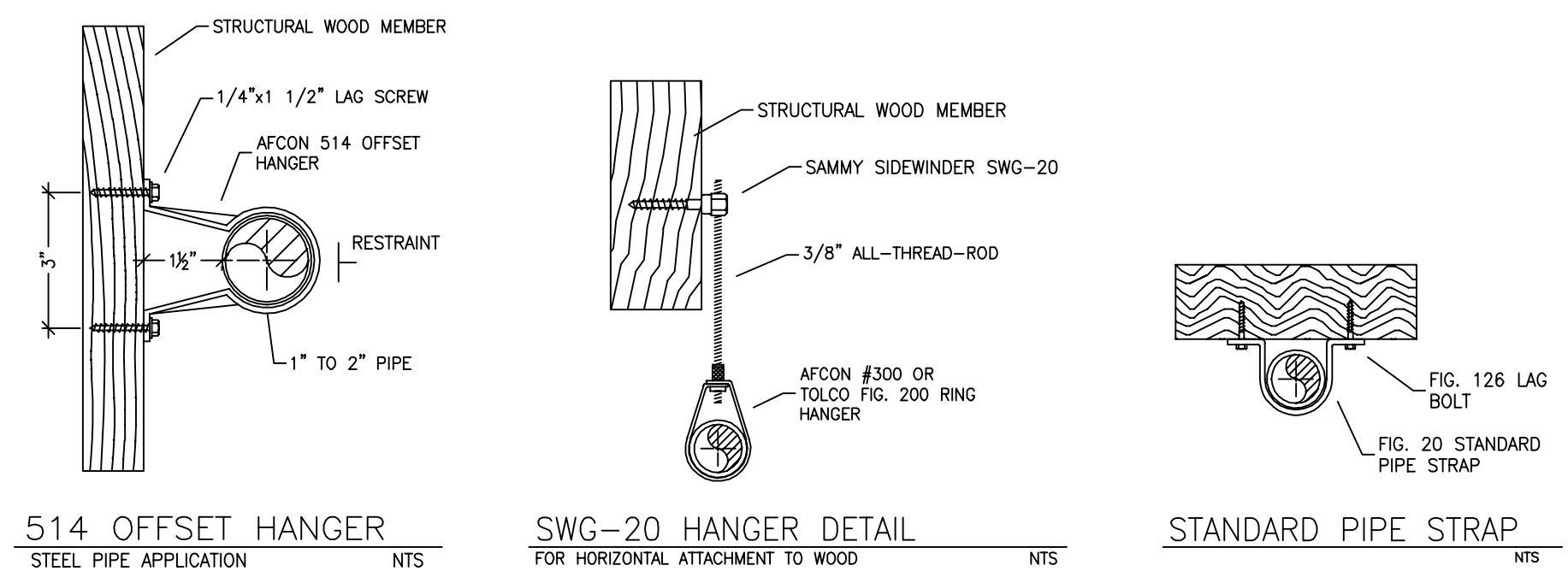
PIPE VOLUMES:
 (CPVC)
 TOTAL PIPE FOOTAGE AND CAPACITY:
 1" = 642' (31.75 GAL)
 ADD 10% FOR DROPS AND PIPE SIZE DISCREPANCIES
 TOTAL VOLUME: ± 34.92 GALLONS

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

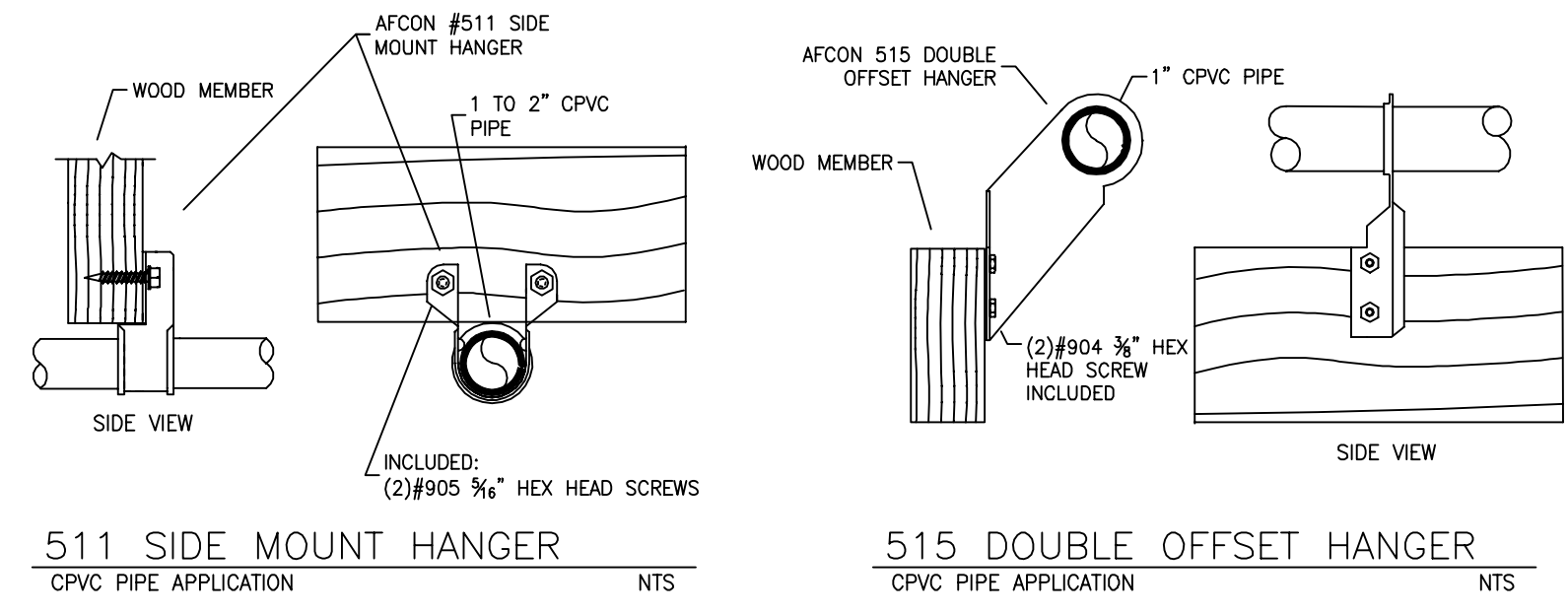
Nominal Pipe Diameter (in.)	Schedule 40	Schedule 10	CPVC
1	0.045	0.049	0.049
1 1/4	0.078	0.085	0.079
1 1/2	0.106	0.115	0.104
2	0.174	0.190	
2 1/2	0.248	0.283	

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

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

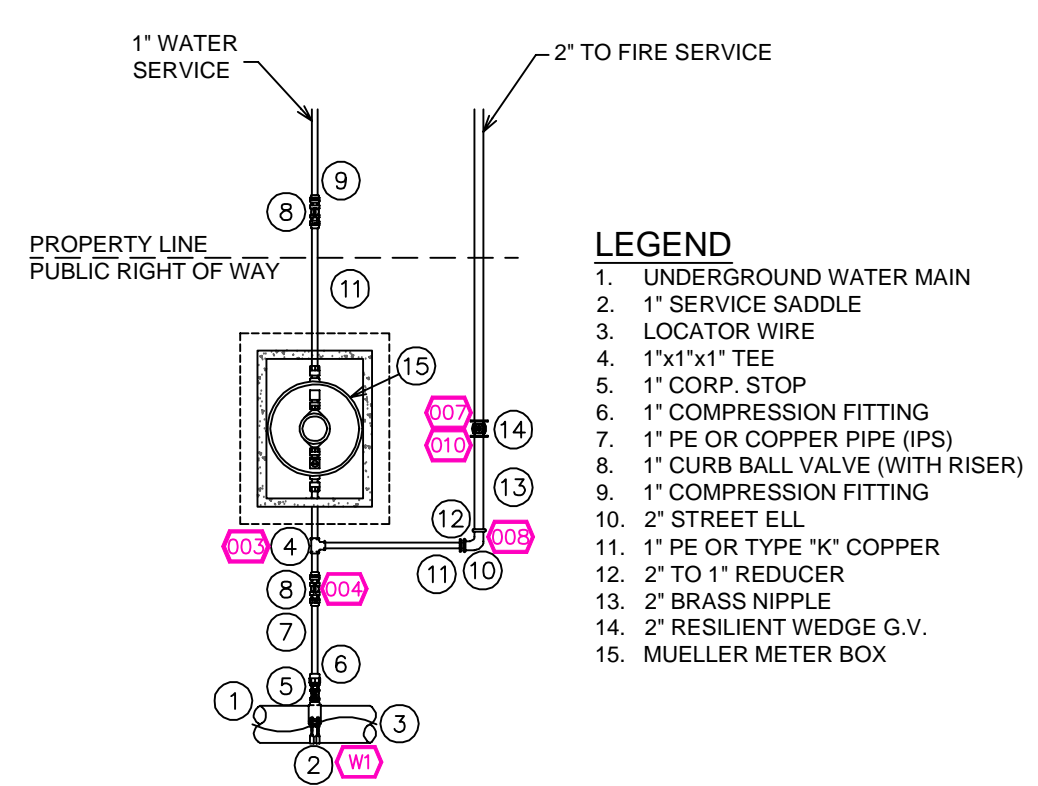


514 OFFSET HANGER STEEL PIPE APPLICATION NTS
SWG-20 HANGER DETAIL FOR HORIZONTAL ATTACHMENT TO WOOD NTS
STANDARD PIPE STRAP NTS

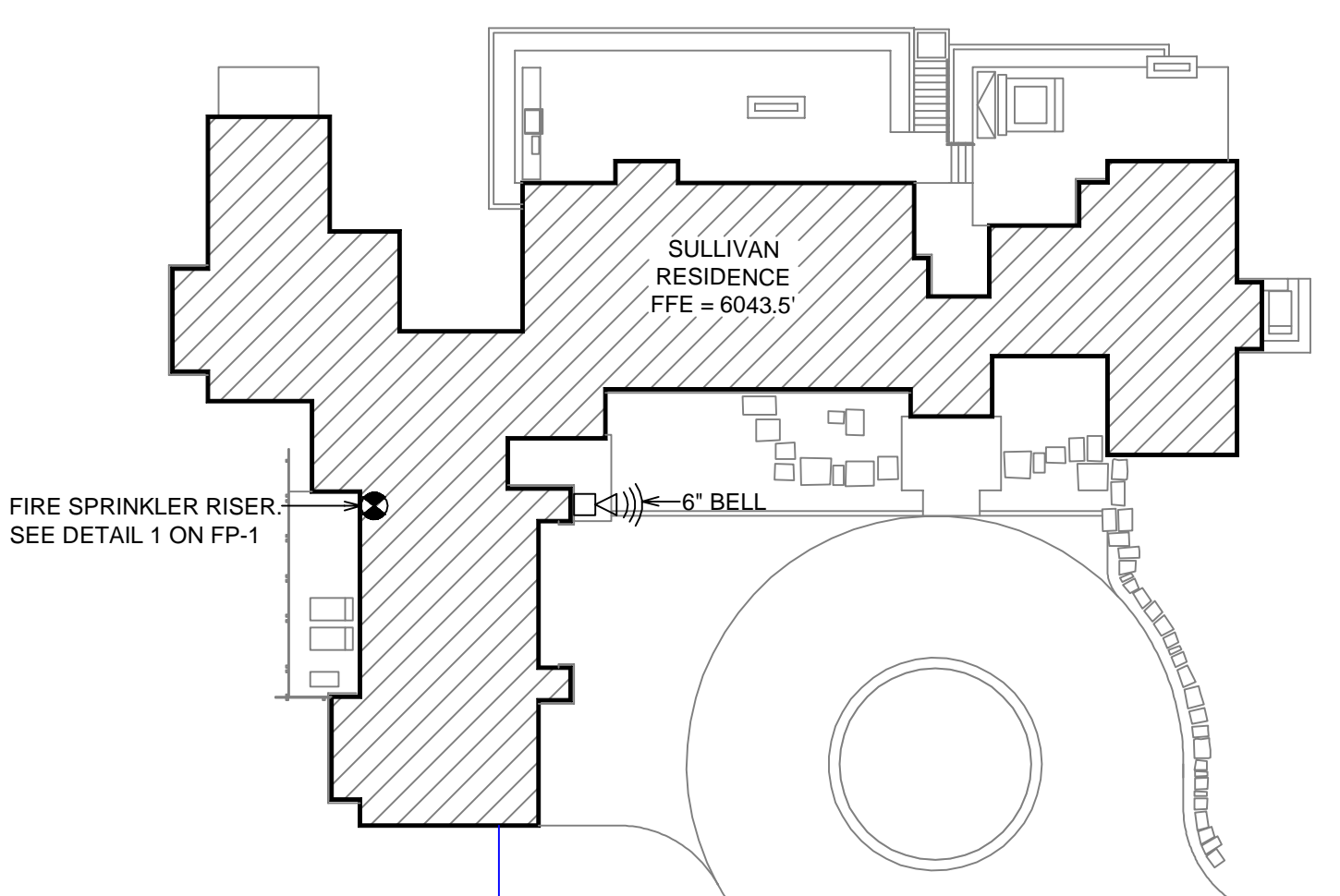


511 SIDE MOUNT HANGER CPVC PIPE APPLICATION NTS
515 DOUBLE OFFSET HANGER CPVC PIPE APPLICATION NTS

HANGER DETAILS



2 WATER METER DETAIL
 SCALE: NTS



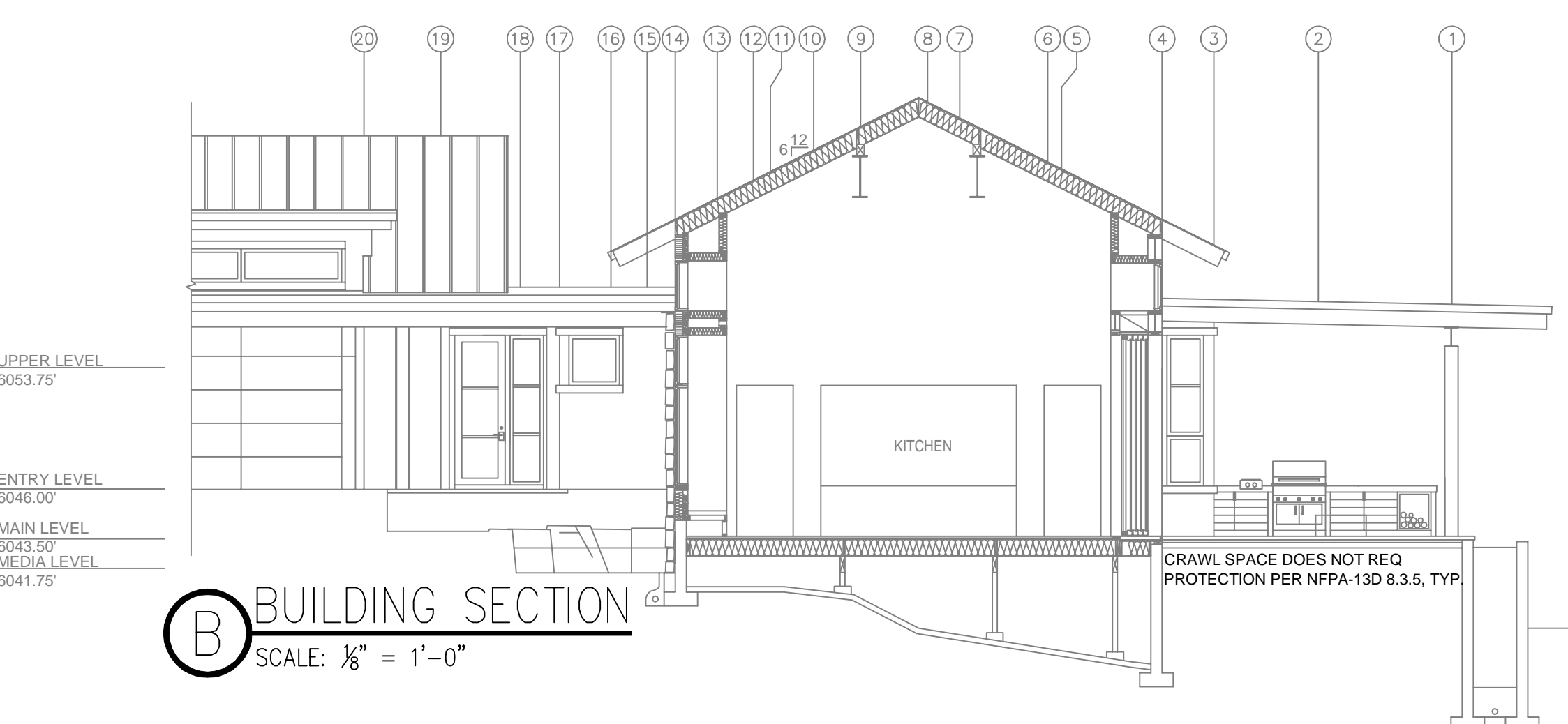
FIRE SPRINKLER RISER. SEE DETAIL 1 ON FP-1

FLOW TEST INFO:
 STATIC: 115 PSI
 RESID: 110 PSI
 FLOW: 924 GPM
 DATE: 11/14/24

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

1" WATER METER - SEE DETAIL 2 ON FP-1

ELEV. -6076' DIFFERENCE IN ELEV. TAKEN INTO ACCOUNT IN CALCULATIONS



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

NO.	DATE	REVISIONS	DRAWN	CHECKED

GENERAL CONTRACTOR: AUTHORITY HAVING JURISDICTION:
 TOWN OF TRUCKEE BUILDING DIVISION
 ADDRESS: 10183 TRUCKEE AIRPORT RD
 CITY: TRUCKEE, CA 96161
 PHONE: 530-582-7820
 CONTACT: CONTACT:

ARCHITECT: FIELD INSPECTIONS:
 1.
 ADDRESS: 2.
 CITY: 3.
 PHONE: 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 2019 PIPING UNLESS OTHERWISE NOTED.
- 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 CEILINGS 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).

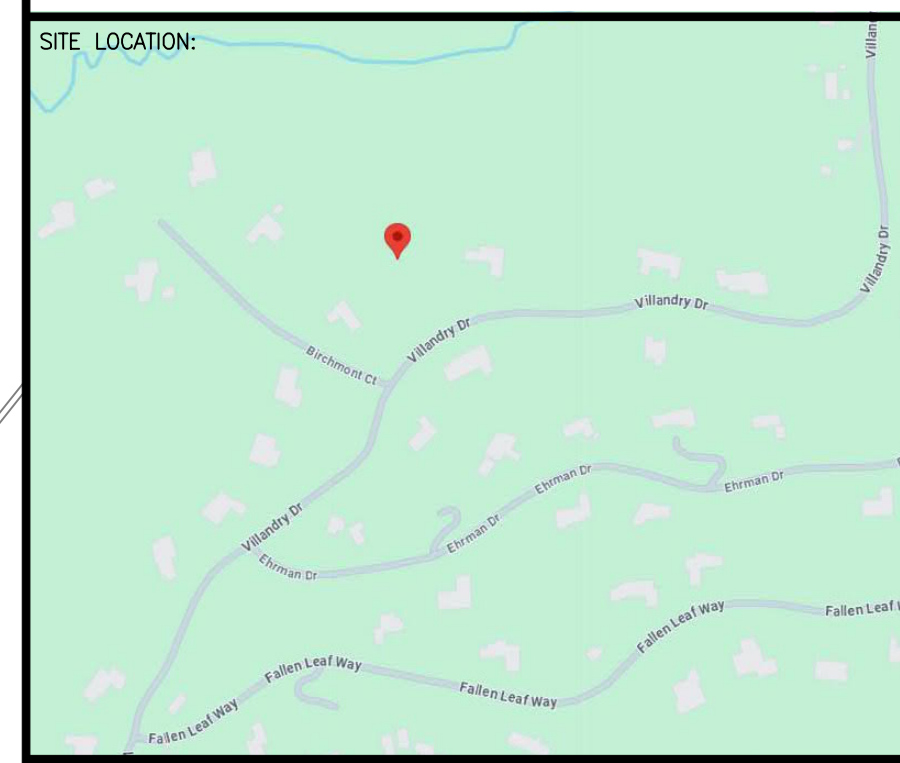
SPRINKLER HEAD LEGEND

SYM	QTY	TYPE	MFG.	MODEL#	NPT	K	TEMP	FINISH	S.L.
⊗	41	CONCEALED	SENJU	RC-RES	1/2"	4.9	162	WHITE	SS8464
⊗	12	SEM-RECESS	SENJU	FR-RES	1/2"	4.9	205	WHITE	SS4491
⊗	1	CONCEALED	SENJU	RC-RES	1/2"	4.9	205	WHITE	SS8464
⊗	1	SEM-RECESS	SENJU	FR-OR	1/2"	5.8	286	WHITE	SS2551

55 TOTAL SPRINKLERS

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
- ⊕ PIPE HANGER & TYPE DESIGNATION
- ⊕ HYDRAULIC REF PT → INSPECTORS TEST
- ⊕ GRVD OR THRD CAP → AUX DRAIN
- ⊕ GRVD COUPLING → REVISION NOTATION
- ⊕ TYPICAL POINT OF CONNECTION (POC) → LOCAL ALARM

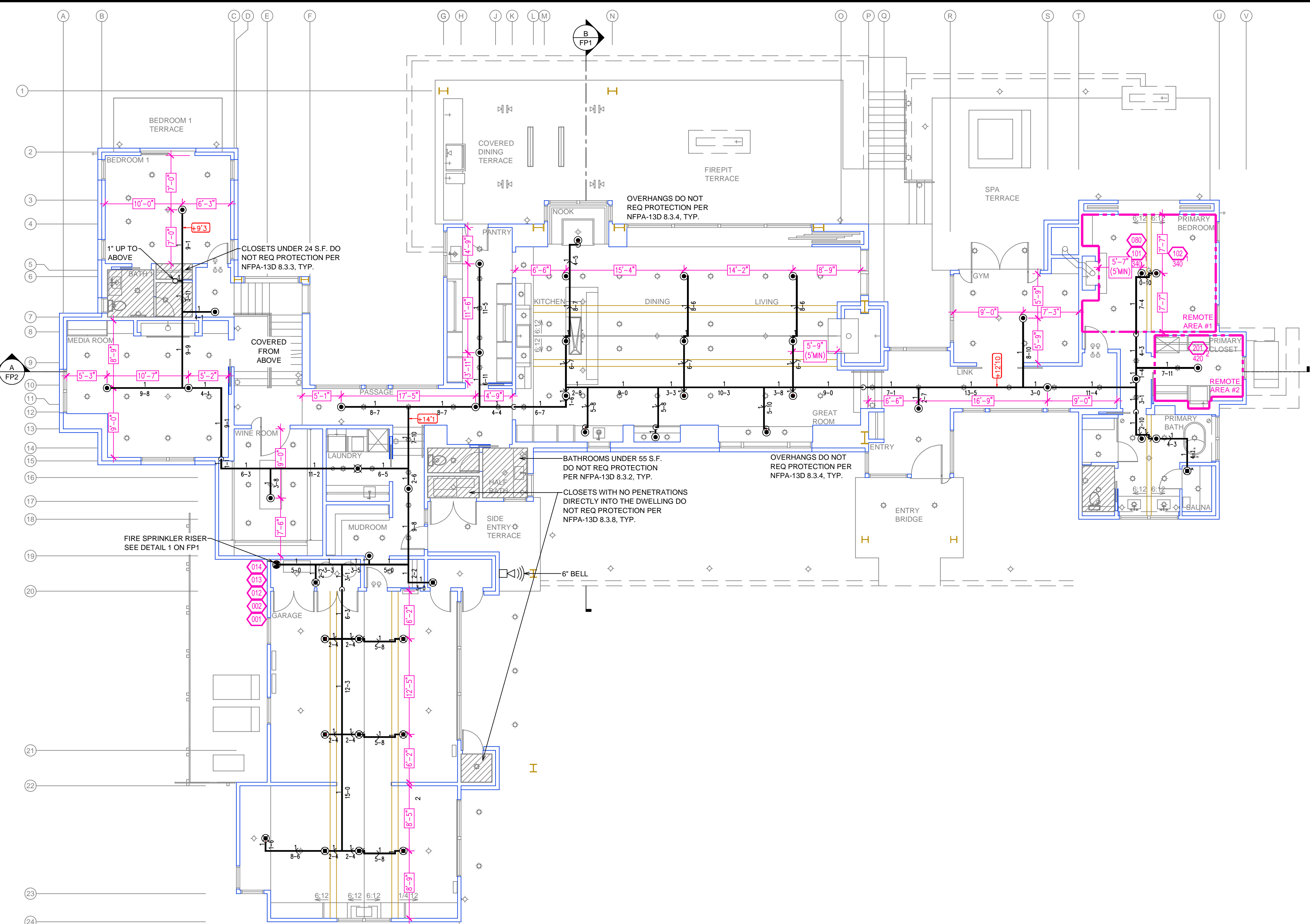


PROJECT NAME: FIRE SPRINKLER PLANS FOR
SULLIVAN RESIDENCE
 8125 VILLANDRY DRIVE
 TRUCKEE, CA 96161

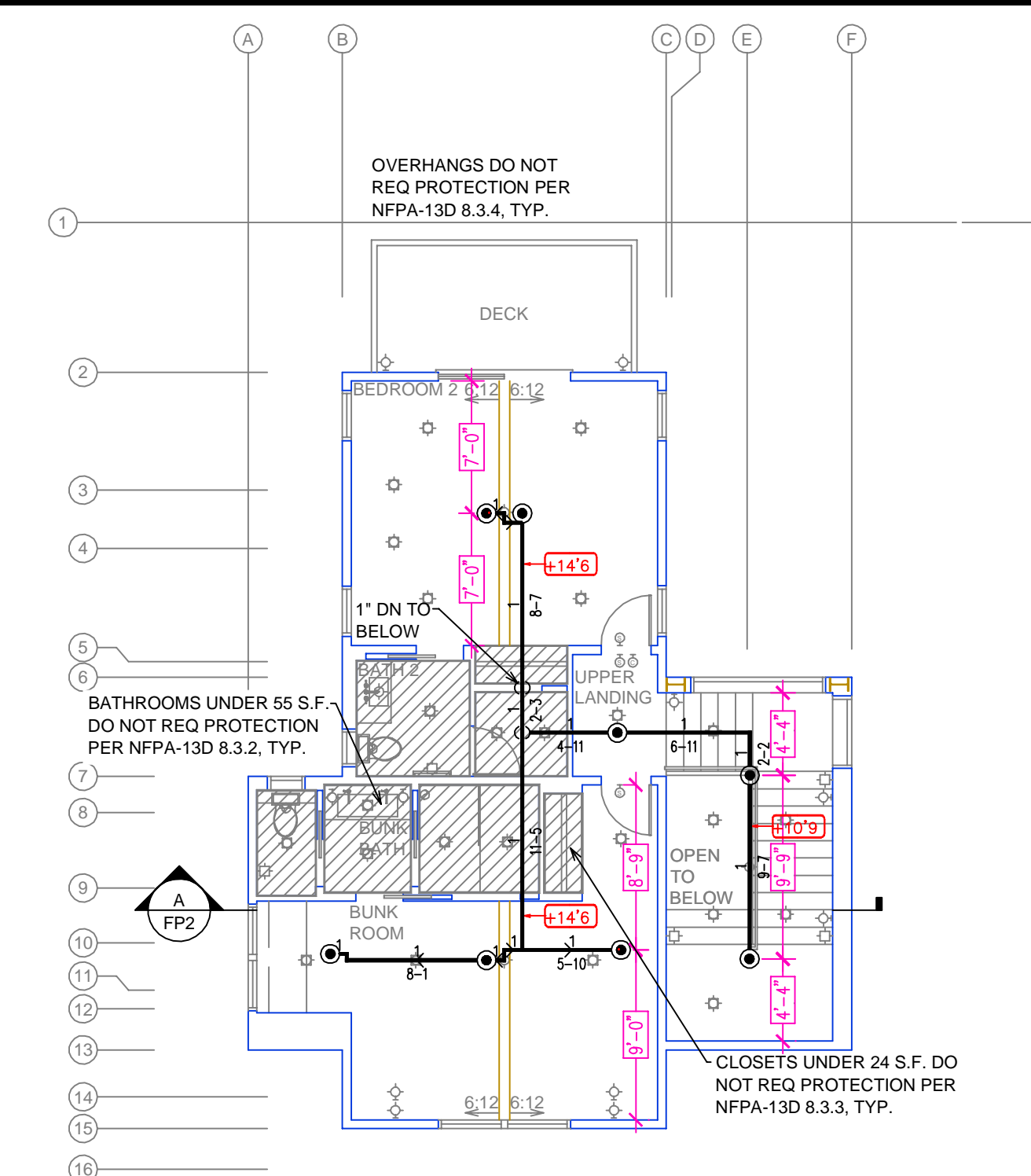
STAMP:

DRAWING TITLE:
FIRE SPRINKLER PLAN

SCALE: 1/8"=1'-0" JOB NO.:
 DRAWN BY: DWG NO.:
 BORN ON DATE: 12/13/2024 **FP-1**
 FILE: SHEET 1 OF 2



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



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

REMOTE AREA 1		REMOTE AREA 2	
Hydraulically Calculated System		Hydraulically Calculated System	
This system as shown on	Fire Protection Plan	This system as shown on	Fire Protection Plan
company print no.	FP1 dated 12/13/2024	company print no.	FP1 dated 12/13/2024
for	SULLIVAN RESIDENCE	for	SULLIVAN RESIDENCE
at	PRIMARY BEDROOM contract no.	at	PRIMARY CLOSET contract no.
is designed to discharge at a rate of	0.05 gpm	is designed to discharge at a rate of	0.05 gpm
(L/min per sq ft (m ²) of floor area over a maximum area of	NFPA 13D - 2 SPRINKLERS sq ft (m ²)	(L/min per sq ft (m ²) of floor area over a maximum area of	NFPA 13D - 1 SPRINKLER sq ft (m ²)
with water at the rate of	39.2 gpm (L/min)	with water at the rate of	25.0 gpm (L/min)
at	32.7 psi (bars) at the base of the riser.	at	54.5 psi (bars) at the base of the riser.
Hose stream allowance of	5 gpm (L/min)	Hose stream allowance of	5 gpm (L/min)
is included in the above.		is included in the above.	
Occupancy classification	130 LIGHT HAZARD	Occupancy classification	130 LIGHT HAZARD
Commodity classification	NA	Commodity classification	NA
Maximum storage height	NA	Maximum storage height	NA
Safety factor	22.3	Safety factor	60.5

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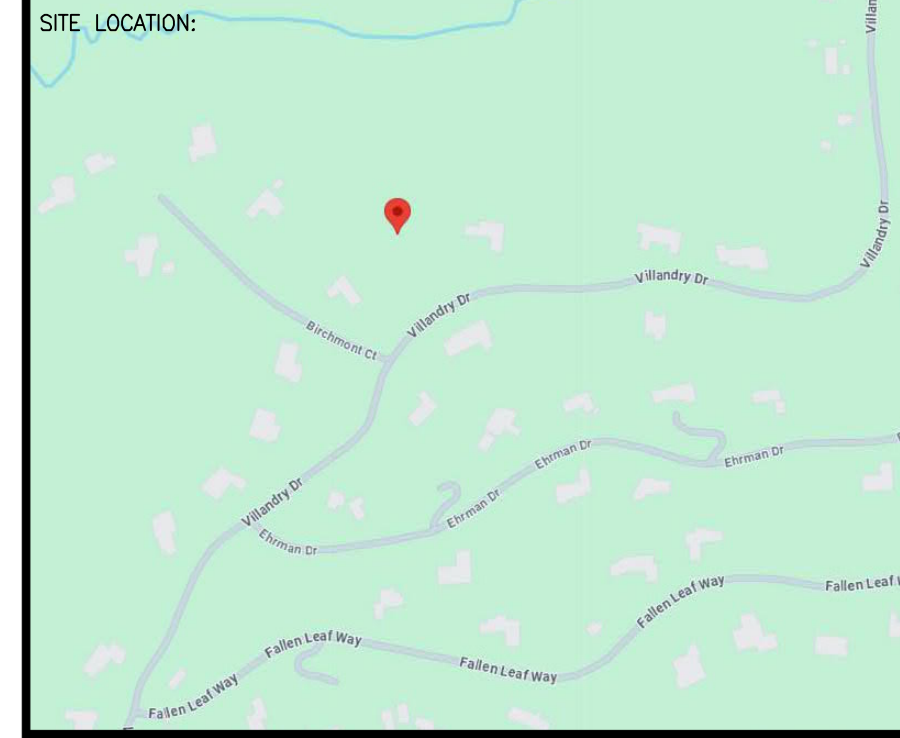
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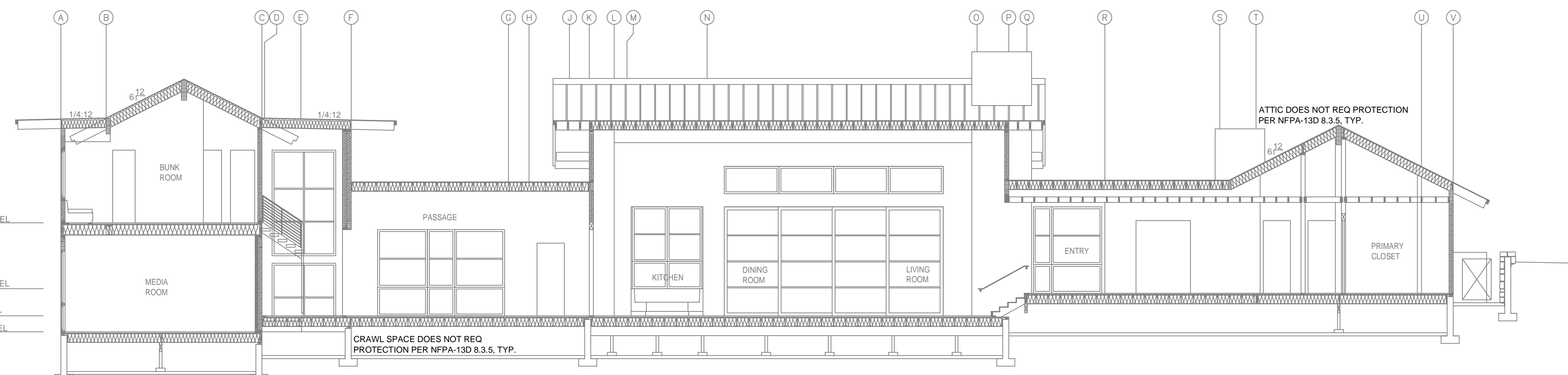


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FIRE SPRINKLER PLAN

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DRAWN BY:	DWG NO.:
BORN ON DATE: 12/13/2024	FP-2
FILE:	SHEET 2 OF 2



BUILDING SECTION
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