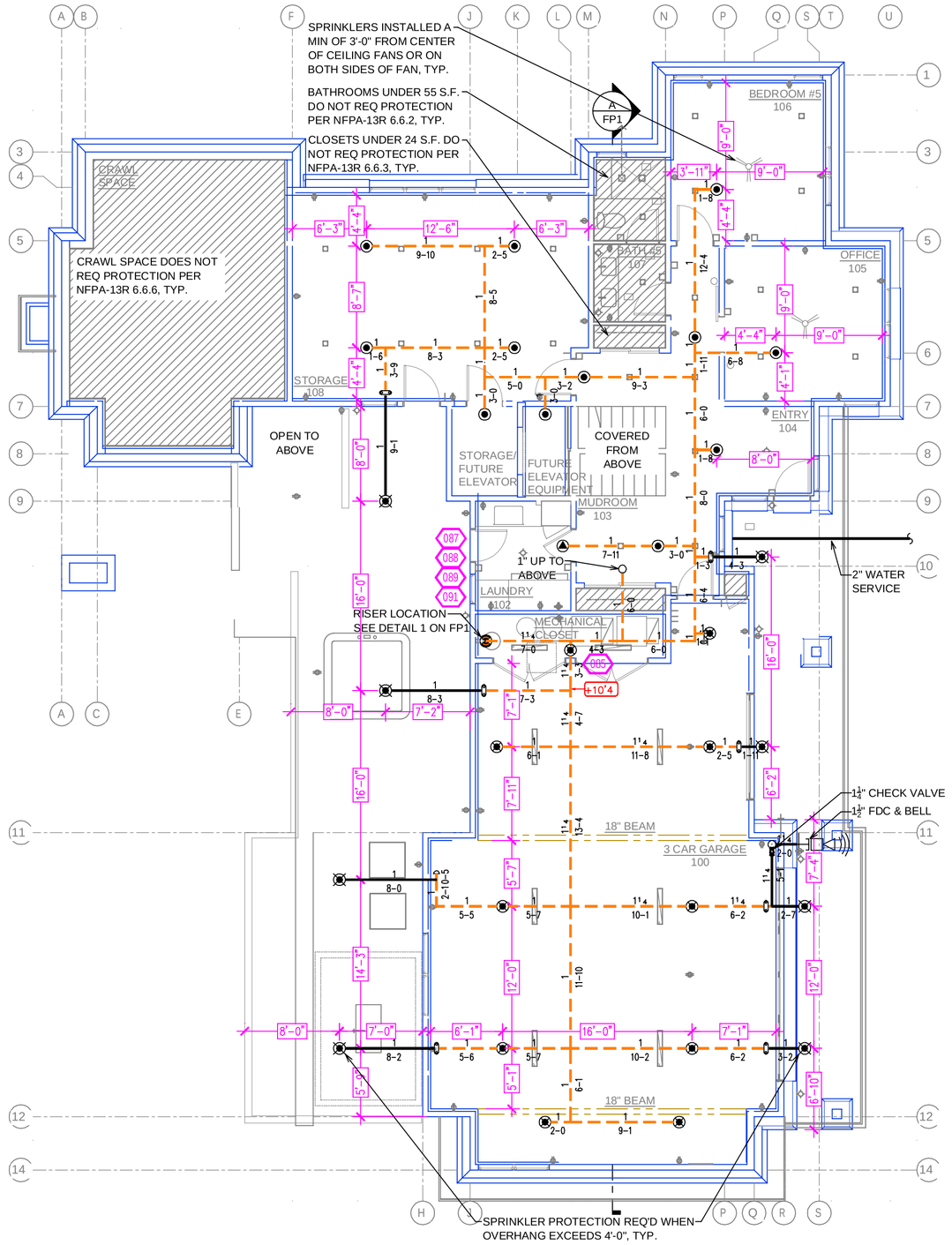
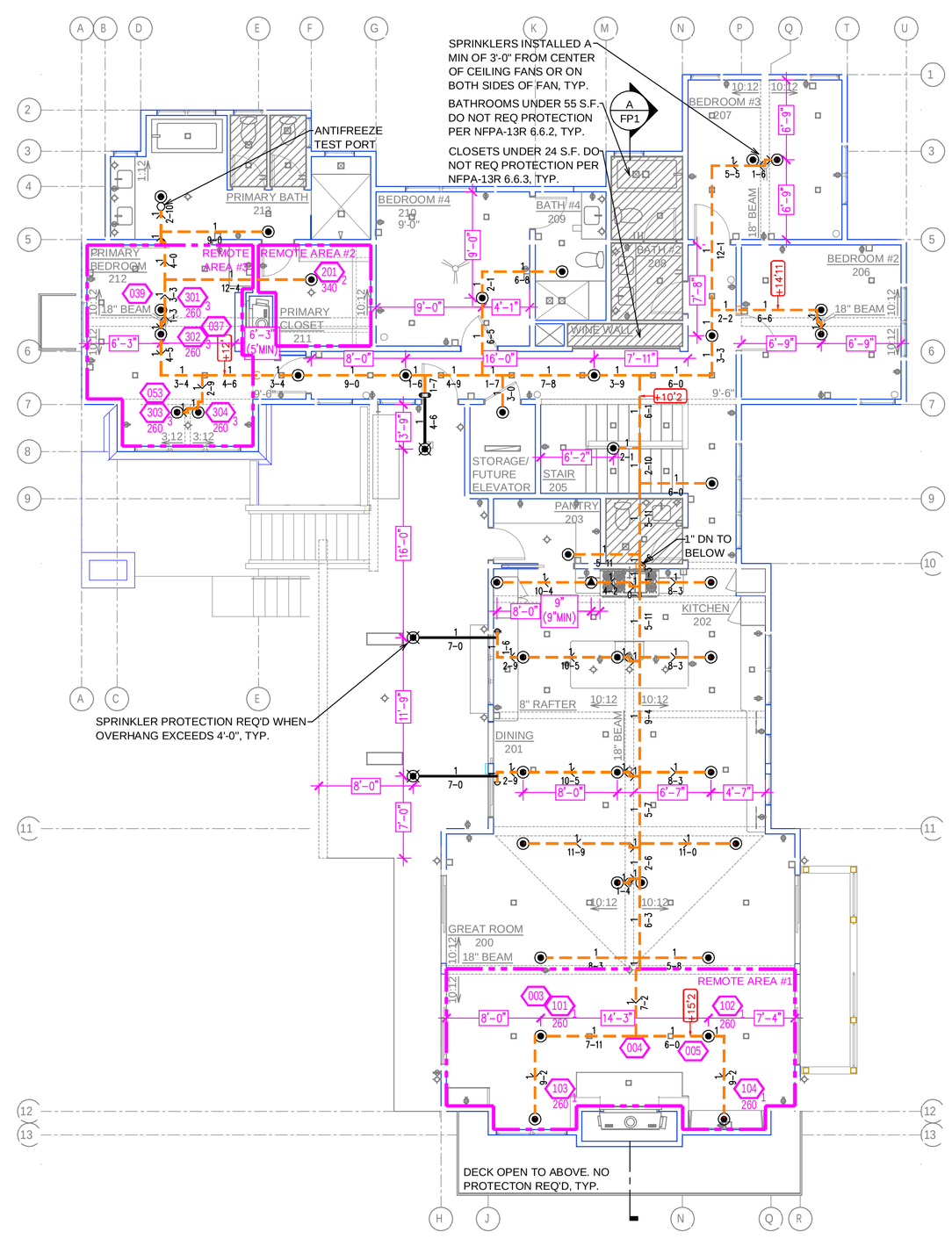


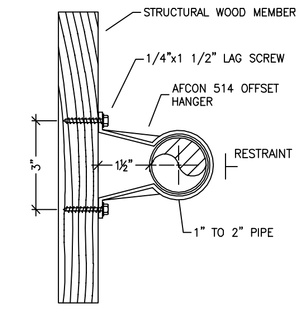
LOWER FLOOR FIRE SPRINKLER PLAN

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

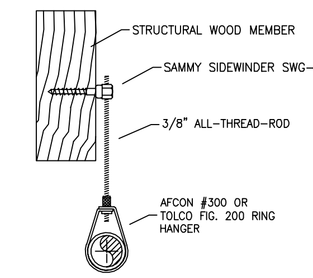


UPPER FLOOR FIRE SPRINKLER PLAN

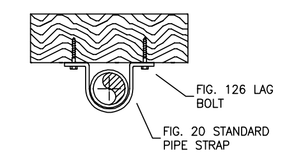
SCALE: 1/8" = 1'-0"



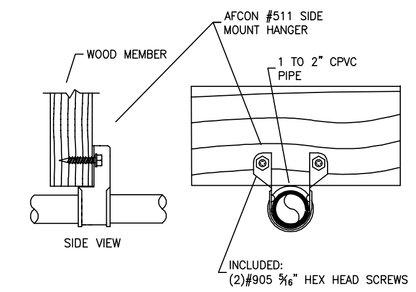
514 OFFSET HANGER
STEEL PIPE APPLICATION NTS



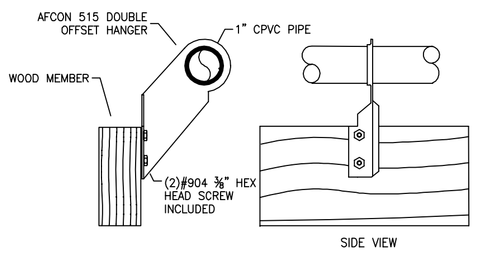
SWG-20 HANGER DETAIL
FOR HORIZONTAL ATTACHMENT TO WOOD NTS



STANDARD PIPE STRAP
NTS



511 SIDE MOUNT HANGER
CPVC PIPE APPLICATION NTS



515 DOUBLE OFFSET HANGER
CPVC PIPE APPLICATION NTS

HANGER DETAILS

REMOTE AREA 1

Hydraulically Calculated System

This system as shown on Fire Protection Plan
company print no. FP1 dated 11/17/2025
for DAVIS RESIDENCE
at GREAT ROOM 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 NFPA 13R - 4 SPRINKLERS sq ft (m) when supplied with water at the rate of 55.7 gpm (L/min) at 96.0 psi (bars) at the base of the riser.
Hose stream allowance of 0 gpm (L/min) is included in the above.
Occupancy classification NFPA 13R - LIGHT
Commodity classification N/A
Maximum storage height N/A
Safety factor 19.0

NO DOMESTIC DEMAND INCLUDED DUE TO DEDICATED FIRE LINE

REMOTE AREA 2

Hydraulically Calculated System

This system as shown on Fire Protection Plan
company print no. FP1 dated 11/17/2025
for DAVIS RESIDENCE
at PRIMARY CLOSET 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 NFPA 13R - 4 SPRINKLERS sq ft (m) when supplied with water at the rate of 17.0 gpm (L/min) at 47.4 psi (bars) at the base of the riser.
Hose stream allowance of 0 gpm (L/min) is included in the above.
Occupancy classification NFPA 13R - LIGHT
Commodity classification N/A
Maximum storage height N/A
Safety factor 67.5

NO DOMESTIC DEMAND INCLUDED DUE TO DEDICATED FIRE LINE

REMOTE AREA 3

Hydraulically Calculated System

This system as shown on Fire Protection Plan
company print no. FP1 dated 11/17/2025
for DAVIS RESIDENCE
at PRIMARY BEDROOM 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 NFPA 13R - 4 SPRINKLERS sq ft (m) when supplied with water at the rate of 55.0 gpm (L/min) at 98.7 psi (bars) at the base of the riser.
Hose stream allowance of 0 gpm (L/min) is included in the above.
Occupancy classification NFPA 13R - LIGHT
Commodity classification N/A
Maximum storage height N/A
Safety factor 16.3

NO DOMESTIC DEMAND INCLUDED DUE TO DEDICATED FIRE LINE

NO.	DATE	REVISIONS	DRAWN	CHECKED

GENERAL CONTRACTOR:	AUTHORITY HAVING JURISDICTION: NORTH LAKE TAHOE FIRE PROTECTION DISTRICT
ADDRESS:	ADDRESS: 866 ORIOLE WAY
CITY:	CITY: INCLINE VILLAGE, NV
PHONE:	PHONE: 775-831-0351
CONTACT:	CONTACT:
ARCHITECT:	FIELD INSPECTIONS:
	1.
ADDRESS:	2.
CITY:	3.
PHONE:	4.

FIRE SPRINKLER NOTES:

1. THE PROPOSED FIRE SPRINKLER SYSTEM IS AN ANTI-FREEZE SYSTEM AND SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 13R 2022 WITH MODIFICATIONS MANDATED BY THE AHJ AS FOLLOWS:
   - SPRINKLER PROTECTION FOR BALCONIES, DECKS, PATIOS & OTHER OVERHANGS OVER 4'-0".
   - 4 HEAD CALCULATION
   - ANTIFREEZE TESTPORT
2. THIS SPRINKLER SYSTEM IS HYDRAULICALLY CALCULATED IN ACCORDANCE WITH NFPA 13R TO PROVIDE 0.05 GPM PER SQ. FT. OVER THE MOST REMOTE AREA.
3. THE NUMBER OF DESIGN SPRINKLERS SHALL INCLUDE ALL SPRINKLERS WITHIN A COMPARTMENT UP TO A MAXIMUM OF 4 SPRINKLERS
4. ALL SPRINKLER PIPING CONCEALED ABOVE CEILINGS SHALL BE CPVC PIPING UNLESS OTHERWISE NOTED.
5. ALL DIMENSIONS SHOWN ARE CENTER TO CENTER U.O.N.
6. ALL HANGERS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 13R AND/OR NFPA 13 REQUIREMENTS.
7. HOLES THROUGH SOLID STRUCTURAL MEMBERS SHALL BE PERMITTED TO SERVE AS HANGERS FOR THE SUPPORT OF SYSTEM PIPING.
8. ALL SYSTEM PIPING SHALL BE TESTED FOR LEAKAGE AT NORMAL SYSTEM OPERATING PRESSURE.
9. 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

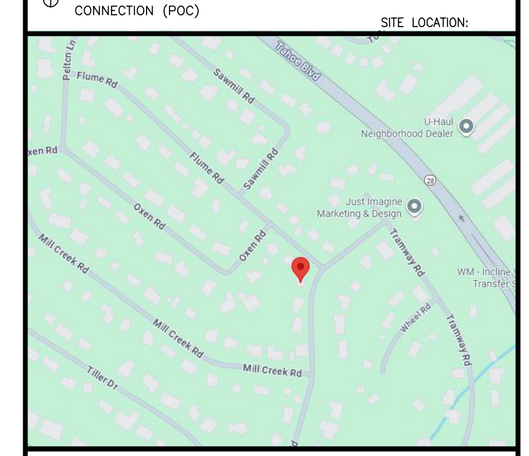
SYM	QTY	TYPE	MFG.	MODEL#	NPT	K	TEMP	FINISH	S.I.N.
⊗	51	CONCEALED	SENJU	RC-RES	1/2"	4.9	162	WHITE	SS8464
⊠	11	EXPOSED	SENJU	RC-RES	1/2"	4.9	205	BRASS	SS8464
⊗	10	SEMI-RECESS	SENJU	FR-RES	1/2"	4.9	205	WHITE	SS4451
⊗	2	CONCEALED	SENJU	RC-RES	1/2"	4.9	205	WHITE	SS8464

74 TOTAL SPRINKLERS

FIRE SPRINKLER SYMBOLS

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

SITE LOCATION:



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"

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

	Nominal Pipe Size (in.)								
	¾	1	1¼	1½	2	2½	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	15-0	N/A	N/A	N/A
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

SPRINKLER SPACING

1. A SINGLE PENDENT SPRINKLER IN A COMPARTMENT MAY BE SPACED AT A MAXIMUM OF 18'x18' (324 SQ. FT.) OR UP TO 9' OFF A WALL.
2. 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)
3. 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

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

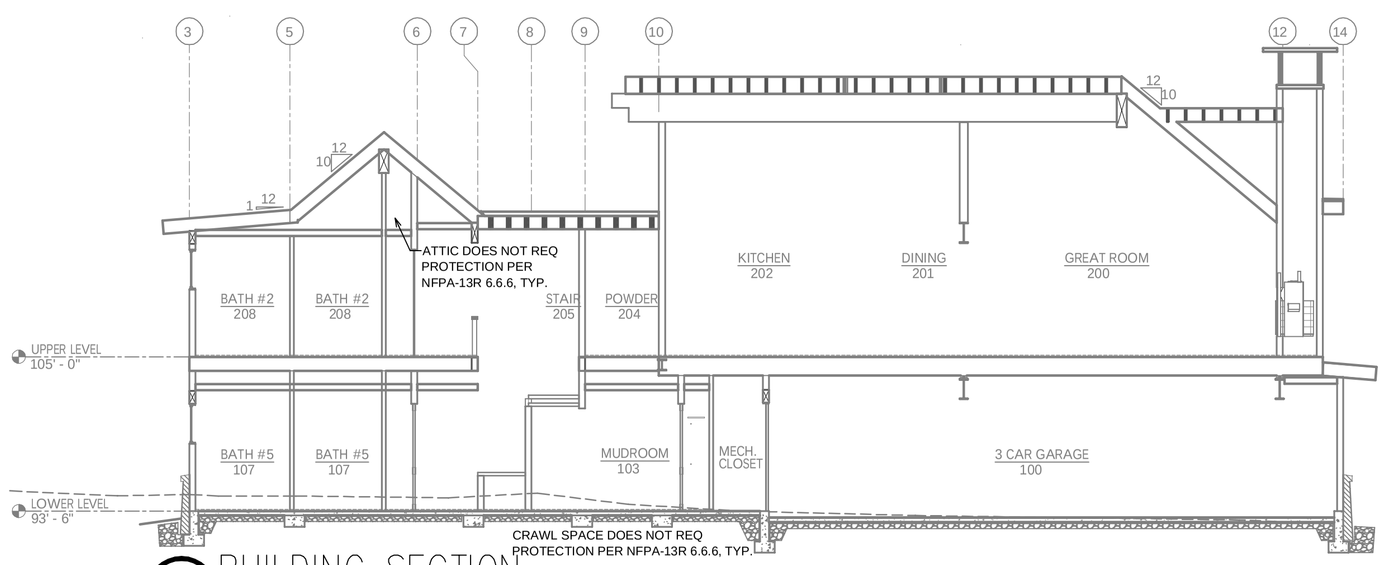
LOWER LEVEL = 2315 SF
UPPER LEVEL = 3210 SF

PIPE LEGEND

- CPVC PIPING
- BLACK STEEL PIPING

PROJECT SUMMARY:

PROJECT NAME:	DAVIS RESIDENCE
PROJECT ADDRESS:	225 PINE CONE RD, INCLINE VILLAGE, NV
APN:	130-203-29
PROJECT TYPE:	☑ NEW ☐ T.I.
TYPE OF CONSTRUCTION:	V
OCCUPANCY GROUP(S):	R3
OCCUPIED LEVELS:	2
TOTAL SPRINKLERED AREA:	5525 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:	74
SPECIAL NOTES:	SEE FIRE SPRINKLER NOTES THIS SHEET



BUILDING SECTION

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

SUBMITTAL

PIPE VOLUMES:

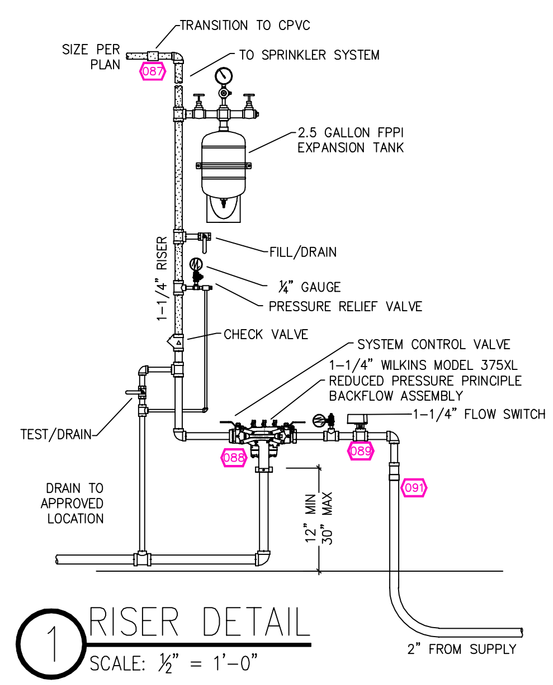
(CPVC)

TOTAL PIPE FOOTAGE AND CAPACITY:
1" CPVC = 652' (32.24 GAL)
1-1/4" CPVC = 60' (4.76 GAL)
1" STEEL = 60' (2.69 GAL)

TOTAL VOLUME: ±39.69 GALLONS

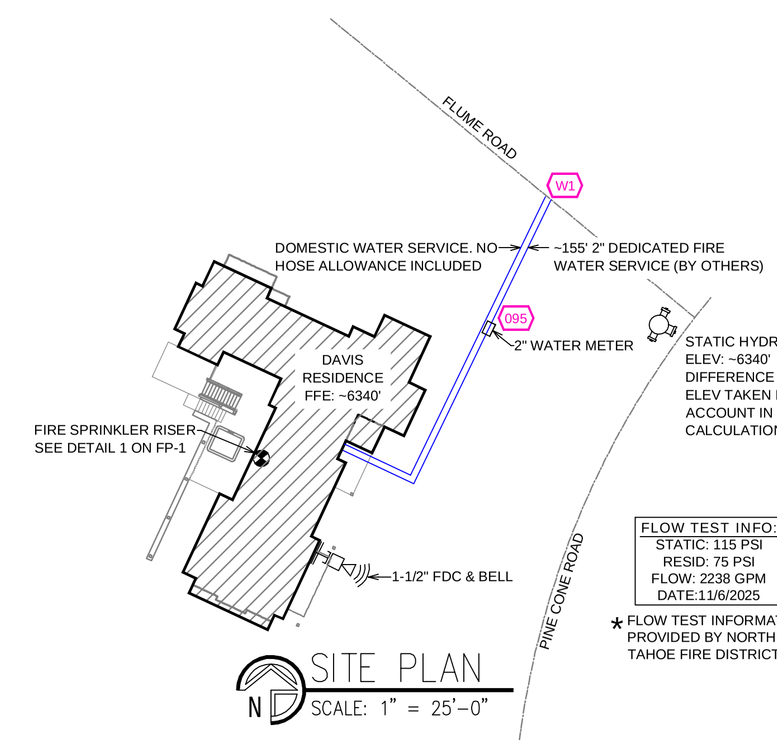
NFPA 13 - Table A.7.2.3 Capacity of 1 ft of pipe (Based on Actual Internal Pipe Diameter)

Nominal Pipe Diameter (in.)	Pipe Schedule 40 (gal)	Schedule 10 (gal)	CPVC
1	0.045	0.049	0.049
1¼	0.078	0.085	0.079
1½	0.106	0.115	0.104
2	0.174	0.190	
2½	0.248	0.283	



RISER DETAIL

SCALE: ½" = 1'-0"



FLOW TEST INFO:
STATIC: 115 PSI
RESID: 75 PSI
FLOW: 2238 GPM
DATE:11/6/2025

* FLOW TEST INFORMATION PROVIDED BY NORTH LAKE TAHOE FIRE DISTRICT

SITE PLAN

SCALE: 1" = 25'-0"

PROJECT NAME: FIRE SPRINKLER PLANS FOR

DAVIS RESIDENCE

225 PINE CONE ROAD
INCLINE VILLAGE, NV 89451

DRAWING TITLE:

FIRE SPRINKLER PLAN

SCALE: 1/8"=1'-0"	JOB NO.: 25-5050
DRAWN BY:	DWG NO.: FP-1
BORN ON DATE: 11/25/2025	
FILE:	SHEET 1 OF 1