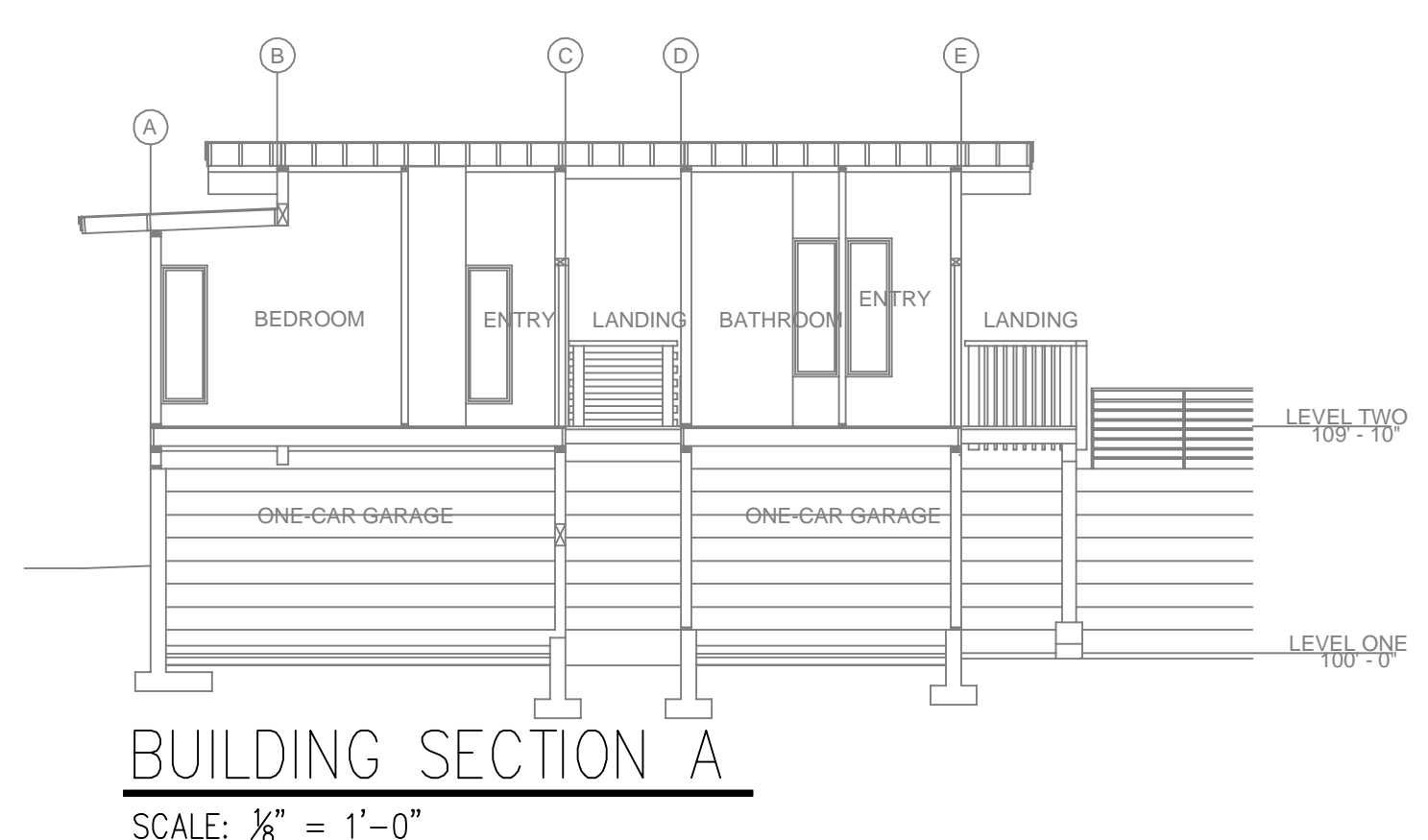


### REMOTE AREA 1

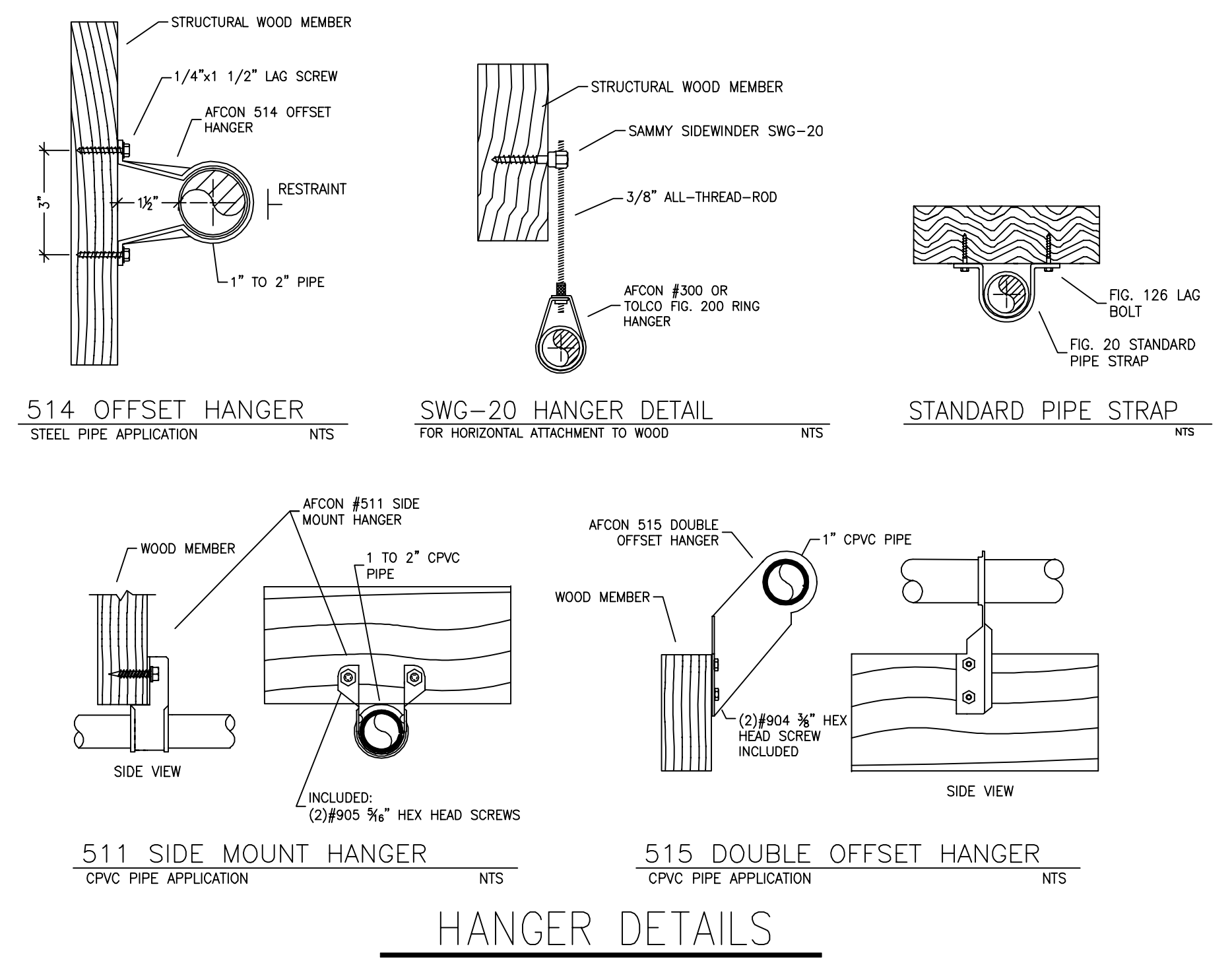
Hydraulically Calculated System

This system as shown on Fire Protection Plan  
company print no. FP1 dated 11/27/2023  
for DONNER LAKE 6 RESIDENCE  
at BEDROOM 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 13D-2 SPRINKLERS sq ft (m<sup>2</sup>) when supplied  
with water at the rate of 39.0 gpm (L/min)  
at 24.7 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: 18.9



TYPICAL LAYOUT OF THREE BUILDINGS.  
MOST REMOTE BUILDING HYDRAULICALLY CALCULATED (BUILDING 3)



### PIPE VOLUMES: (CPVC)

TOTAL PIPE FOOTAGE AND CAPACITY:  
1" = 139' (6.87 GAL)

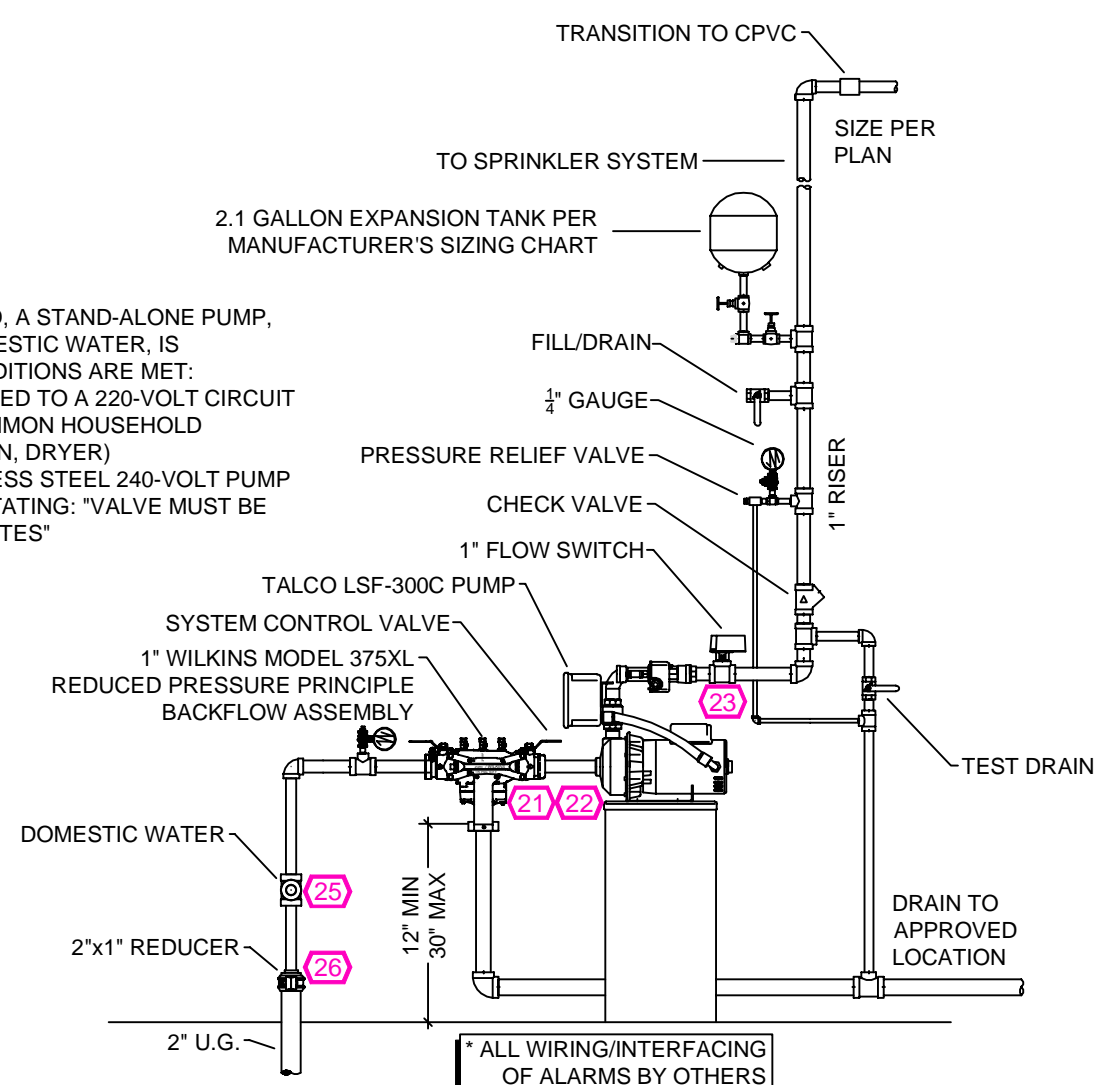
ADD 10% FOR DROPS AND PIPE SIZE DISCREPANCIES  
TOTAL VOLUME: ±7.56 GALLONS

### 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 Pipe (gal)	CPVC (gal)
1	0.045	0.049
1 1/4	0.078	0.085
1 1/2	0.106	0.115
2	0.174	0.190
2 1/2	0.248	0.283

NOTE:  
PER CFC AMENDMENTS TO NFPA 13D, A STAND-ALONE PUMP, WHICH DOES NOT SUPPLY THE DOMESTIC WATER, IS PERMITTED IF THE FOLLOWING CONDITIONS ARE MET:  
A) THE PUMP SHALL BE CONNECTED TO A 220-VOLT CIRCUIT BREAKER SHARED WITH A COMMON HOUSEHOLD APPLIANCE (E.G., RANGE, OVEN, DRYER)  
B) THE PUMP SHALL BE A STAINLESS STEEL 240-VOLT PUMP  
C) A SIGN SHALL BE PROVIDED STATING: VALVE MUST BE OPENED MONTHLY FOR 5 MINUTES



### SUBMITTAL

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  
LEVEL ONE = 685 S.F.  
LEVEL TWO = 685 S.F.

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

Nominal Pipe Size (in.)	Maximum Distance Between Hangers (ft-in.)									
	3/4	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
lightwall	N/A	12-0	12-0	15-0	15-0	15-0	15-0	15-0	N/A	N/A
Threaded lightwall steel pipe	N/A	12-0	12-0	15-0	15-0	15-0	15-0	15-0	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 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"

### PROJECT SUMMARY:

PROJECT NAME: DONNER LAKE 6 RESIDENCE  
PROJECT ADDRESS: 10199 DONNER LAKE RD, TRUCKEE, CA 017-170-032-000  
APN: \_\_\_\_\_  
PROJECT TYPE:  NEW  T.I.  
TYPE OF CONSTRUCTION: V \_\_\_\_\_  
OCCUPANCY GROUP(S): R3  
OCCUPIED LEVELS: 2  
TOTAL SPRINKLERED AREA: 1370 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: 13  
SPECIAL NOTES: SEE FIRE SPRINKLER NOTES THIS SHEET

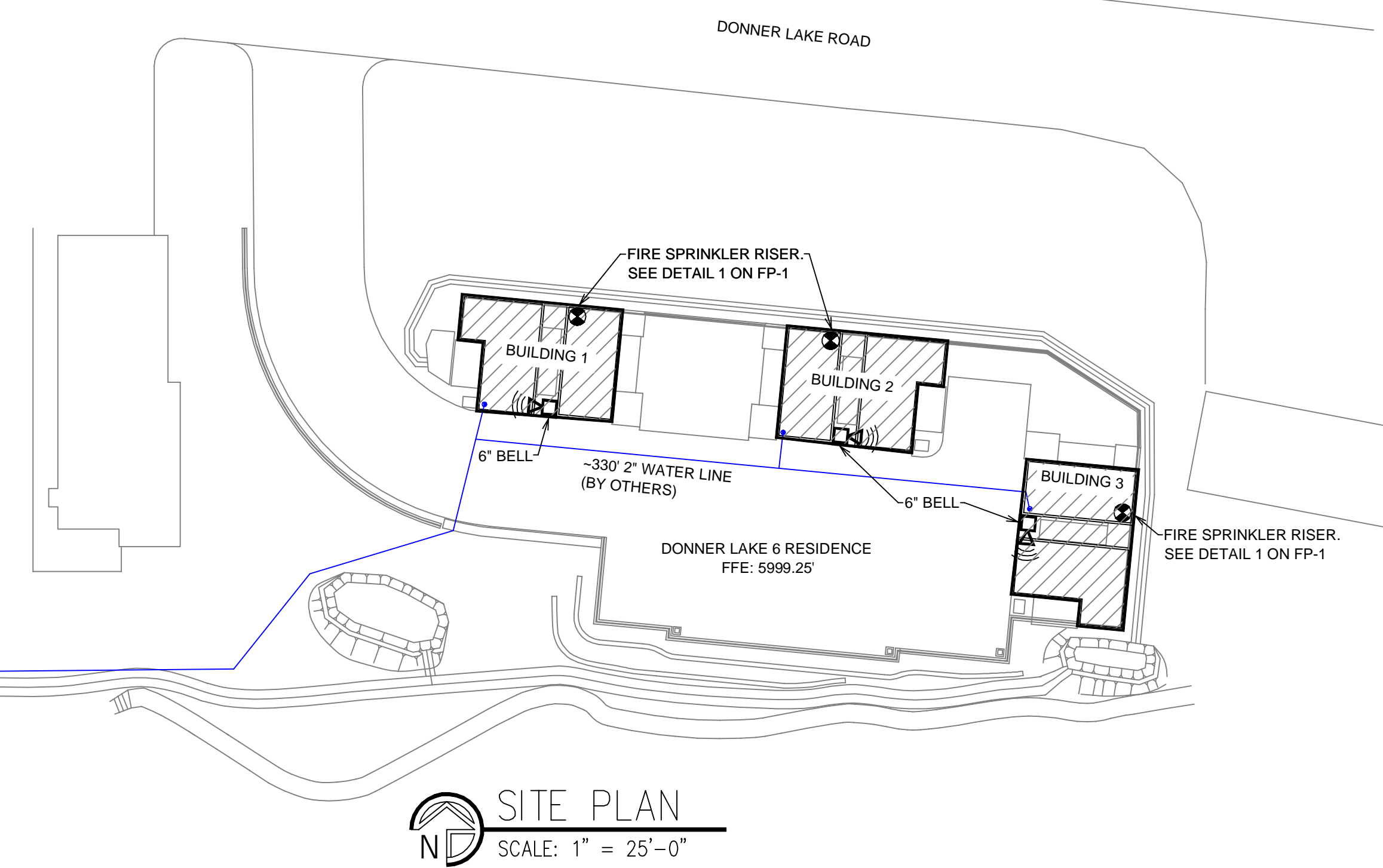
### SPRINKLER SPACING

- 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 CEILINGS.

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

FLOW TEST INFO:  
STATIC: 63 PSI  
RESID: 42 PSI  
FLOW: 45 GPM  
DATE: 11/21/2023  
\* FLOW TEST INFORMATION PROVIDED BY \_\_\_\_\_

1" WATER METER INSTALLED PER TDPUD LETTER  
ELEV. -5968'  
DIFFERENCE IN ELEV TAKEN INTO ACCOUNT IN CALCULATION



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.  
2.  
3.  
4.

ADDRESS: 1.  
CITY: 2.  
PHONE: 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 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).

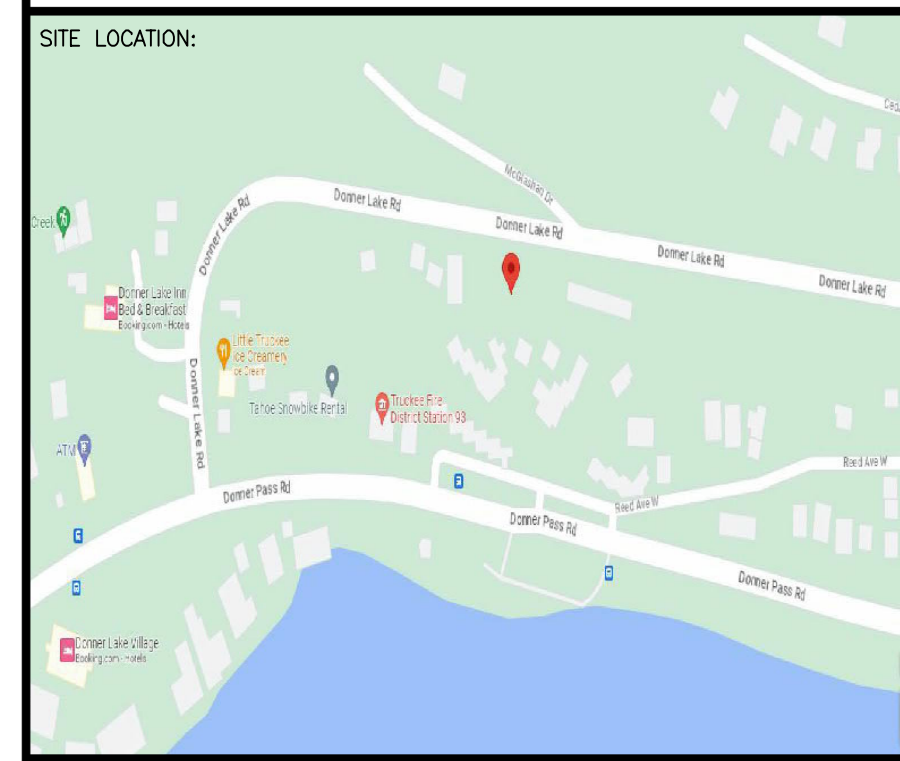
### SPRINKLER HEAD LEGEND

SYM	QTY	TYPE	MFG.	MODEL#	NPT	K	TEMP	FINISH	S.I.N.
⊕	6	CONCEALED	SENJU	RC-RES	1/2"	4.9	162	WHITE	SS8464
⊕	2	CONCEALED	SENJU	RC-RES	1/2"	4.9	205	WHITE	SS8464
⊕	5	SEMI-RECESS	SENJU	FR-RES	1/2"	4.9	205	WHITE	SS4451

13 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
⊕	PIPE HANGER & TYPE DESIGNATION	CHANGE ELEVATION DN
⊕	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  
**DONNER LAKE 6 RESIDENCE**  
10199 DONNER LAKE RD,  
TRUCKEE, CA 96161

DRAWING TITLE: FIRE SPRINKLER PLAN

SCALE: 1/8" = 1'-0"	JOB NO.:
DRAWN BY:	DWG NO.:
BORN ON DATE: 11/27/2023	FP-1
FILE:	SHEET 1 OF 1