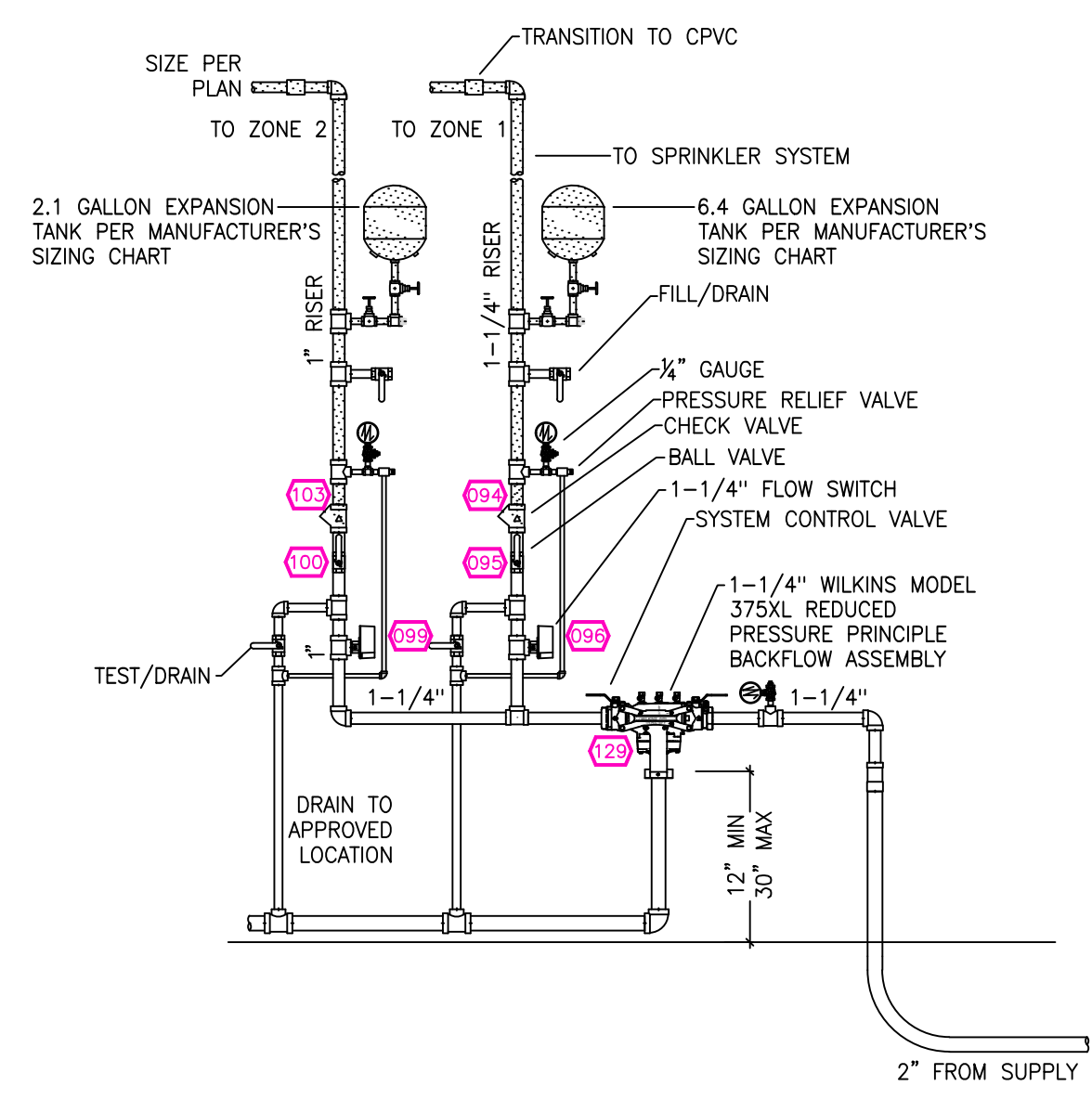
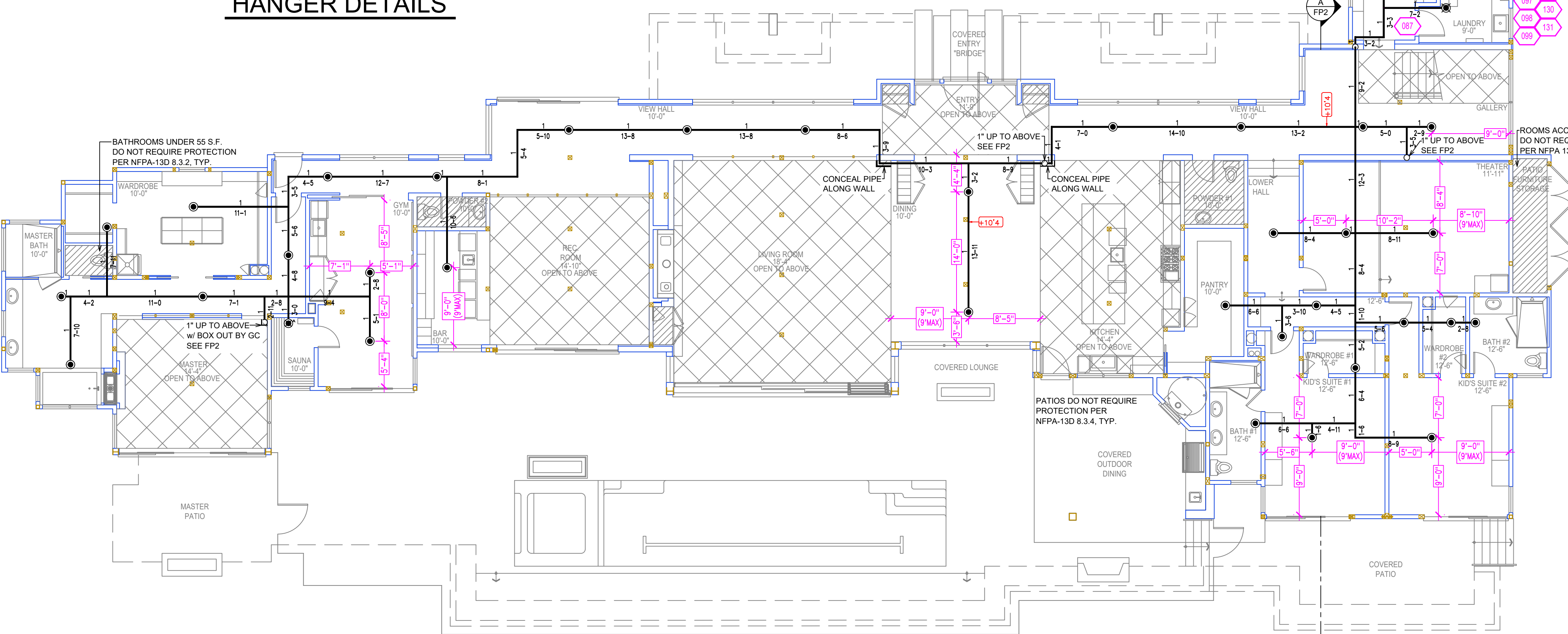


HANGER DETAILS



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



PIPE VOLUMES:
ZONE 2 (GARAGE)
(CPVC)
TOTAL PIPE FOOTAGE AND CAPACITY:
1" = 156' (7.71 GAL)
TOTAL VOLUME: ±7.71 GALLONS

PIPE VOLUMES:
ZONE 1 (HOUSE)
(CPVC)
TOTAL PIPE FOOTAGE AND CAPACITY:
1" = 722' (35.71 GAL)
1 1/2" = 54' (4.28 GAL)
TOTAL VOLUME: ±39.99 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	

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.

FIRE SPRINKLER NOTES:

- THE PROPOSED FIRE SPRINKLER SYSTEM IS AN ANTI-FREEZE SYSTEM AND SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 130.
- THIS SPRINKLER SYSTEM IS HYDRAULICALLY CALCULATED IN ACCORDANCE WITH NFPA 130 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 130 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).

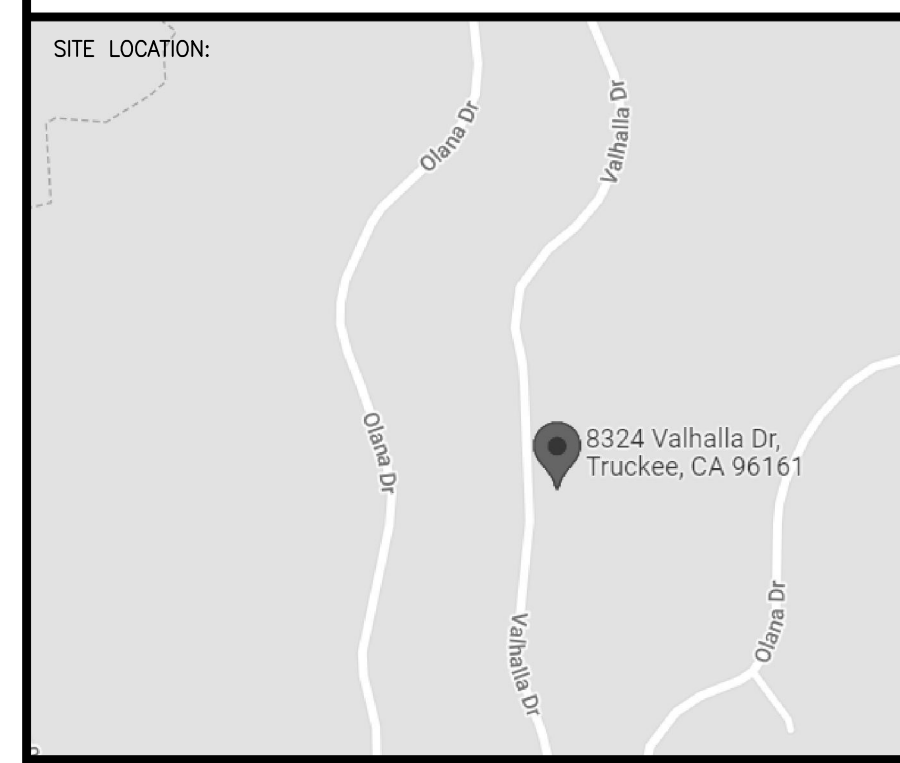
SPRINKLER HEAD LEGEND

SYM	QTY	TYPE	MFG.	MODEL#	NPT	K	TEMP	FINISH	S.L.N.
⊗	63	CONCEALED	SEN-J	RC-RES	1/2"	4.9	162	WHITE	SS8464
⊗	2	CONCEALED	SEN-J	FR-RES	1/2"	4.9	205	WHITE	SS8464
⊗	6	SEM-RECESS	SEN-J	FR-RES	1/2"	4.9	205	WHITE	SS4461
⊗	1	CONCEALED	SEN-J	2N-UF	1/2"	5.6	282	WHITE	SS2531

72 TOTAL SPRINKLERS

FIRE SPRINKLER SYMBOLS

- ⊗ AUTOMATIC SPRINKLER RISER
- ⊕ EARTHQUAKE BRACING
- ⊖ 2-WAY & 4-WAY
- ⊙ PIPE HANGER & TYPE DESIGNATION
- ⊙ HYDRAULIC REF. PT.
- ⊙ GRID OR THRD. CAP
- ⊙ GRID 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



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

SUBMITTAL

NO SPRINKLERS REQUIRED IN:
BATHROOMS 55 SQ. FT. OR LESS IN AREA PER NFPA 130 SECTION 8.6.2
CLOSETS 24 SQ. FT. OR LESS IN AREA PER NFPA 130 SECTION 8.6.3

PROJECT SQUARE FOOTAGES
MAIN LEVEL = 8279 S.F.
UPPER LEVEL = 1262 S.F.

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

Pipe	Nominal Pipe Size (in.)								
	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	
Steel Pipe except threaded	N/A	12-0	12-0	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	N/A	N/A
Threaded lightwall steel pipe	N/A	12-0	12-0	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	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

PROJECT SUMMARY:

PROJECT NAME: KAHL RESIDENCE
PROJECT ADDRESS: 8324 VALHALLA DR, TRUCKEE, CA
APN: 106-050-002
PROJECT TYPE: NEW T.I.
TYPE OF CONSTRUCTION: V-B
OCCUPANCY GROUP(S): R-3
OCCUPIED LEVELS: 2
TOTAL SPRINKLER AREA: 9541 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: 72
SPECIAL NOTES: SEE FIRE SPRINKLER NOTES THIS SHEET

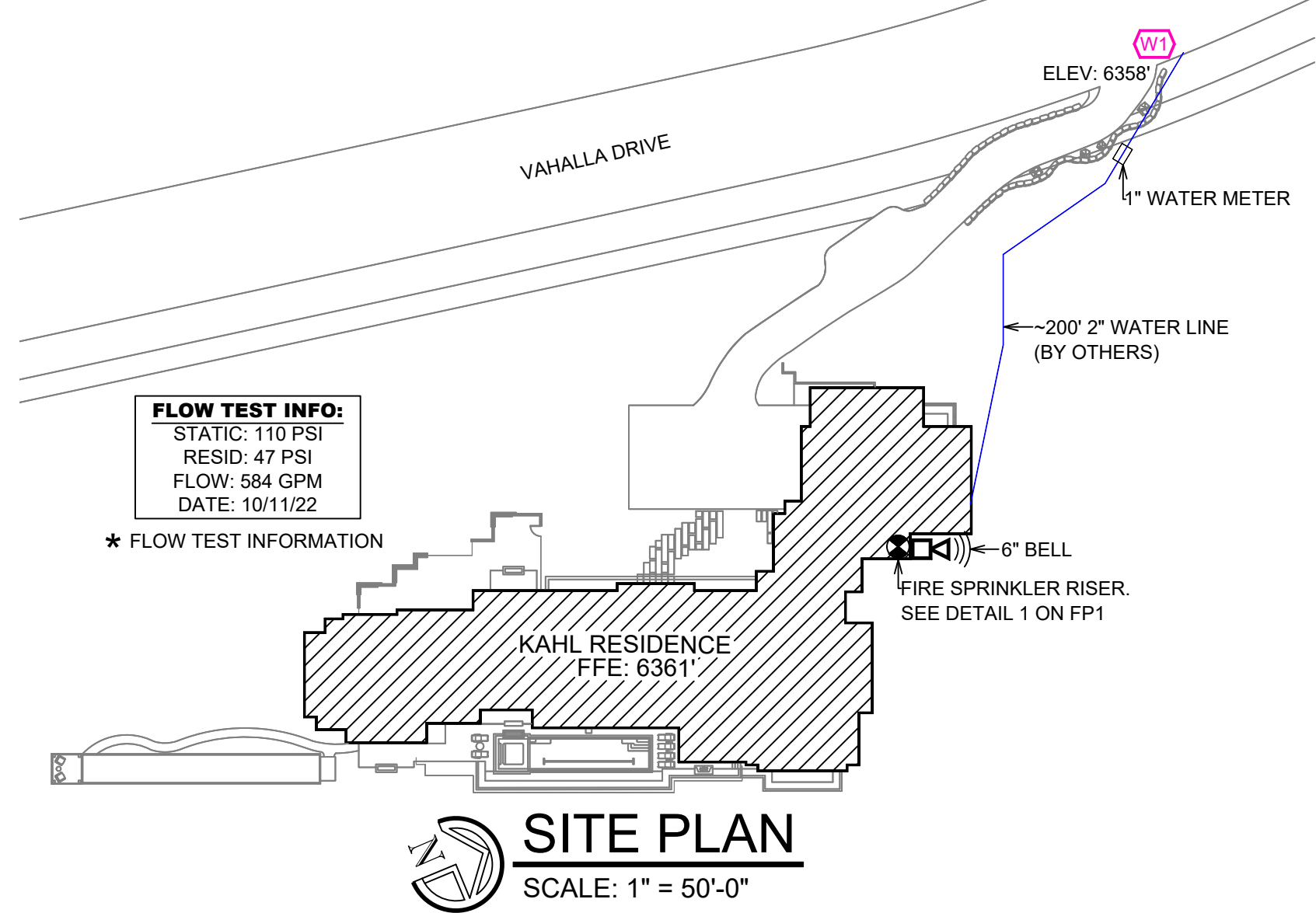
SPRINKLER SPACING

- 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" SPACING 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" SPACING BETWEEN SPRINKLERS)
- SPRINKLERS SHALL BE MEASURED AT PERPENDICULAR ANGLES TO WALLS AND ALONG THE SLOPES OF CEILING.

THIS FIRE SPRINKLER SYSTEM UTILIZES THE TYCO LFP 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	6"	3"



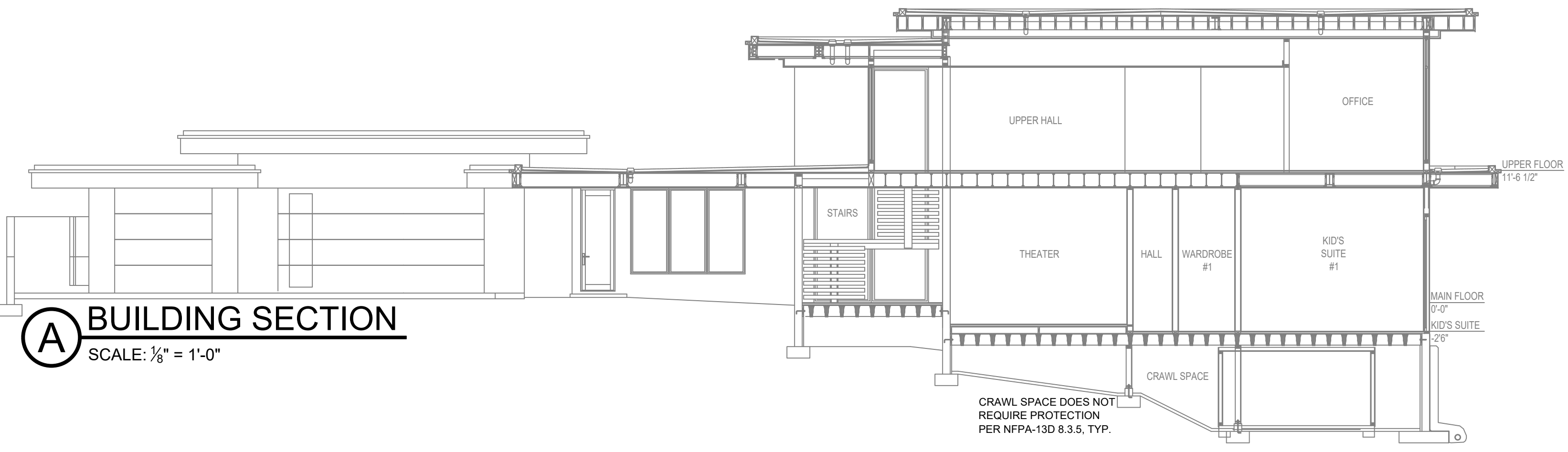
SITE PLAN
SCALE: 1" = 50'-0"

PROJECT NAME: FIRE SPRINKLER PLANS FOR
KAHL RESIDENCE
8324 VALHALLA DRIVE, MARTIS CAMP - LOT #57
TRUCKEE, CA

STAMP:

DRAWING TITLE: **FIRE SPRINKLER PLAN**

JOB NO.:
DWG NO.:
FILE: **FP-1**
SHEET 1 of 2



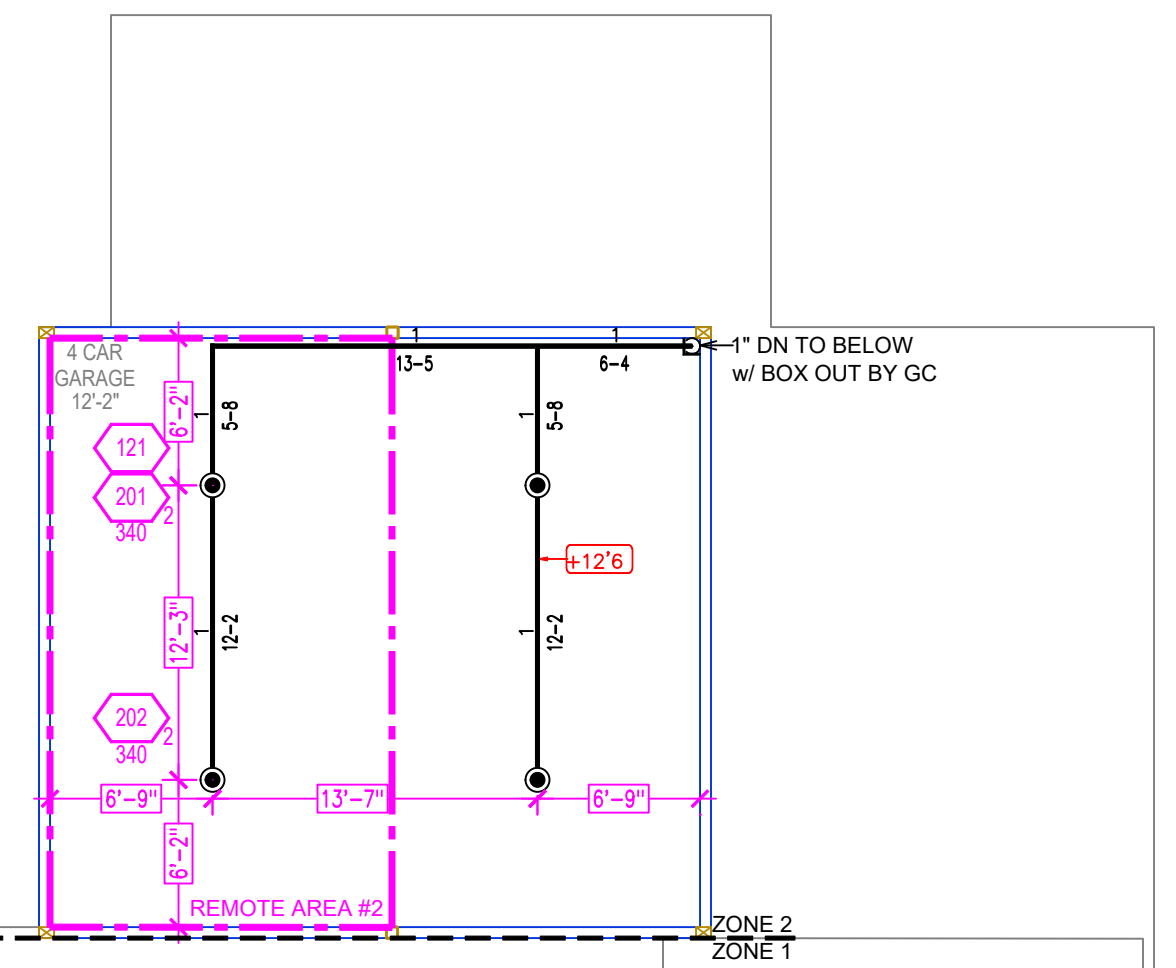
A BUILDING SECTION
SCALE: 1/8" = 1'-0"

REMOTE AREA 2

Hydraulically Calculated System

This system as shown on Fire Protection Plan company print no. FP1 dated 12/7/2022 for KAHL RESIDENCE at GARAGE 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 13D - 2 SPRINKLERS sq ft (m) when supplied with water at the rate of 39.5 gpm (L/min) at 80.1 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: 29.5

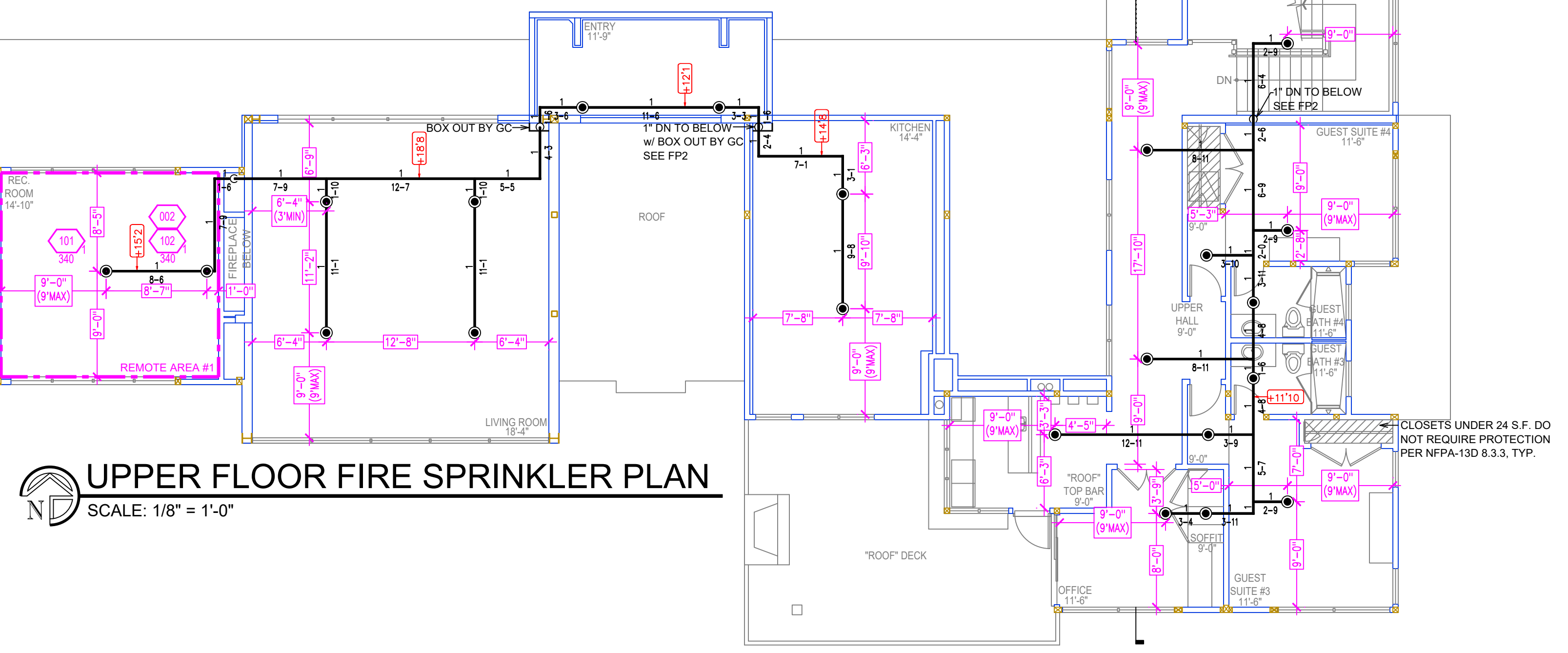
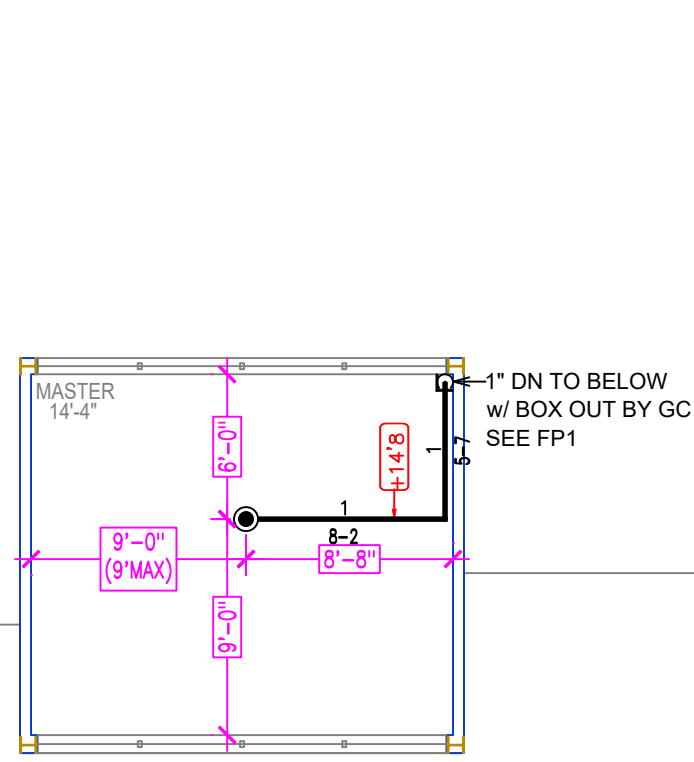


REMOTE AREA 1

Hydraulically Calculated System

This system as shown on Fire Protection Plan company print no. FP1 dated 12/7/2022 for KAHL RESIDENCE at REC 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 13D - 2 SPRINKLERS sq ft (m) when supplied with water at the rate of 39.3 gpm (L/min) at 104.5 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: 5.1



UPPER FLOOR FIRE SPRINKLER PLAN
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:

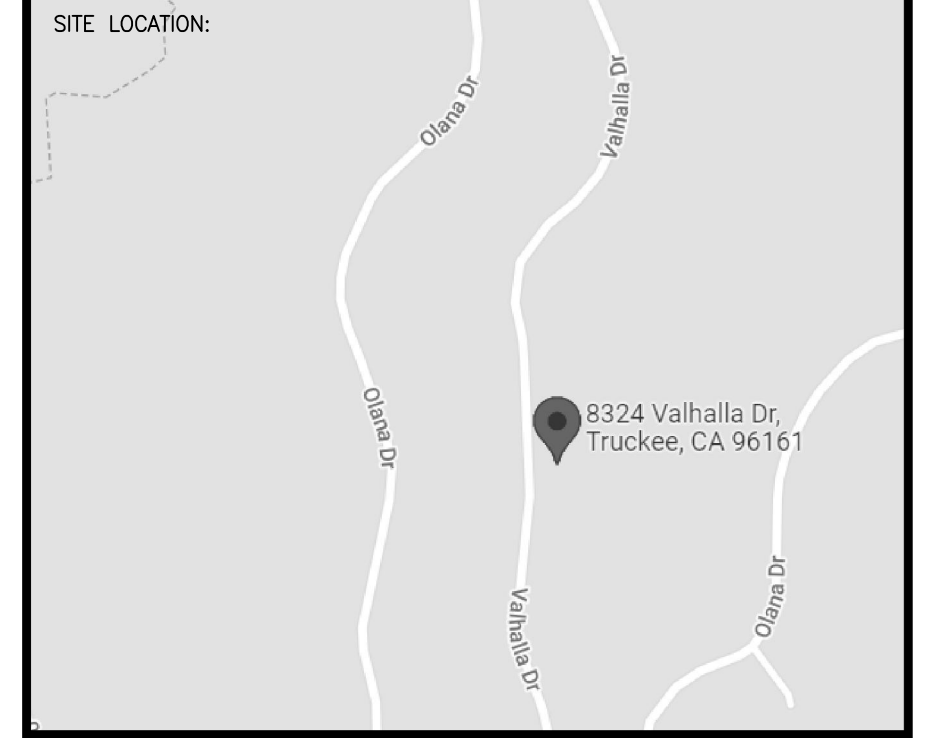
ARCHITECT: FIELD INSPECTIONS:
1.
2.
3.
4.

- FIRE SPRINKLER NOTES:**
1. THE PROPOSED FIRE SPRINKLER SYSTEM IS AN ANTI-FREEZE SYSTEM AND SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 13D.
 2. THIS SPRINKLER SYSTEM IS HYDRAULICALLY CALCULATED IN ACCORDANCE WITH NFPA 13D 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 2 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 13D 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.
⊗	63	CONCEALED	SEN-J	RC-RES	1/2"	4.9	162	WHITE	SS8464
⊗	2	CONCEALED	SEN-J	RC-RES	1/2"	4.9	205	WHITE	SS8464
⊗	6	SEM-RECESS	SEN-J	FR-RES	1/2"	4.9	205	WHITE	SS4451
⊗	1	CONCEALED	SEN-J	ZH-UF	1/2"	5.6	282	WHITE	SS2531

- 72 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 #1
 - INSPECTORS TEST
 - GRID OR THRD CAP
 - GRID OR THRD CAP
 - GRID COUPLING
 - ⊕ TYPICAL POINT OF CONNECTION (POC)
 - ⊕ REVISION NOTATION
 - ⊕ LOCAL ALARM



PROJECT NAME:
FIRE SPRINKLER PLANS FOR KAHL RESIDENCE
8324 VALHALLA DRIVE, MARTIS CAMP - LOT #57
TRUCKEE, CA

STAMP:

DRAWING TITLE:
FIRE SPRINKLER PLAN

SCALE: 1/8"=1'-0" JOB NO.:
DWG NO.:
FP-2

FILE: SHEET 2 of 2