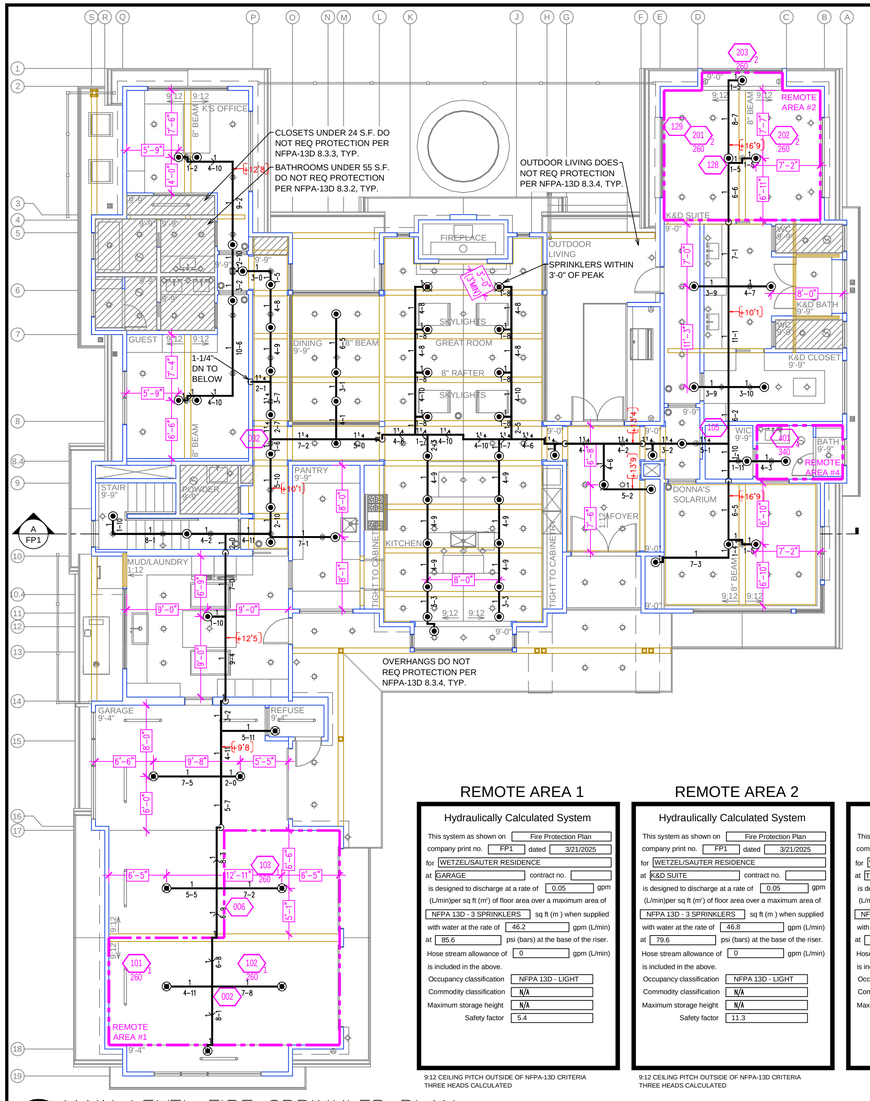
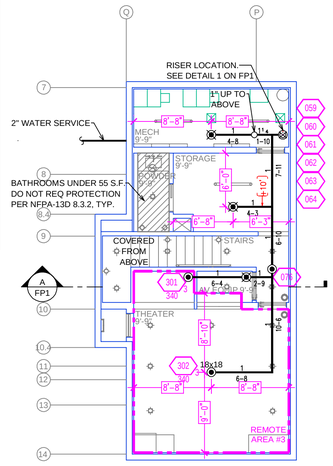


MAIN LEVEL FIRE SPRINKLER PLAN

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



LOWER LEVEL FIRE SPRINKLER PLAN

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

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

SUBMITTAL

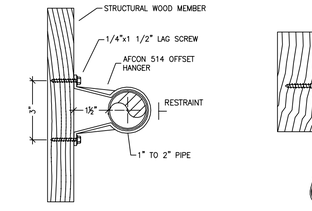
PIPE VOLUMES:

(CPVC)

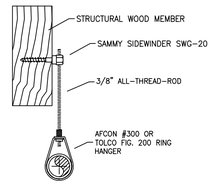
TOTAL PIPE FOOTAGE AND CAPACITY:
1" CPVC = 520' (25.72 GAL)
1-1/4" CPVC = 88' (6.98 GAL)

ADD 10% FOR DROPS AND PIPE SIZE DISCREPANCIES
TOTAL VOLUME: ±35.96 GALLONS

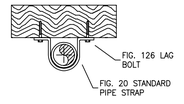
NFPA 13 - Table A.7.2.3 Capacity of 1 ft of pipe (Based on Actual Internal Pipe Diameter)			
Nominal Pipe Diameter (in.)	Pipe Schedule 40 (gal)	Schedule 10 (gal)	CPVC
1	0.045	0.049	0.049
1¼	0.078	0.085	0.079
1½	0.106	0.115	0.104
2	0.174	0.190	
2½	0.248	0.283	



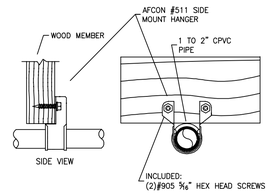
514 OFFSET HANGER
STEEL PIPE APPLICATION NTS



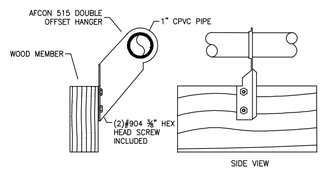
SWG-20 HANGER DETAIL
FOR HORIZONTAL ATTACHMENT TO WOOD NTS



STANDARD PIPE STRAP
NTS



511 SIDE MOUNT HANGER
CPVC PIPE APPLICATION NTS



515 DOUBLE OFFSET HANGER
CPVC PIPE APPLICATION NTS

HANGER DETAILS

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"

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

LOWER LEVEL = 620 SF
MAIN LEVEL = 4943 SF

SPRINKLER SPACING

1. A SINGLE PENDENT SPRINKLER MAY BE SPACED AT A MAXIMUM OF 18'x18'(324SQ. FT.) OR UP TO 9' OFF A WALL.(MINIMUM 8'-0" BETWEEN SPRINKLERS)
2. TWO OR MORE HEADS IN A COMPARTMENT SHALL BE SPACED AT A MAXIMUM OF 16'x16'(256SQ. FT.) OR UP TO 8' OFF A WALL U.N.O. (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

PROJECT SUMMARY:

PROJECT NAME:	WETZEL/SAUTER RESIDENCE
PROJECT ADDRESS:	3544 KNOB POINT TRAIL, CARSON CITY, NV
APN:	1419-09-001-084
PROJECT TYPE:	☑ NEW ☐ T.I.
TYPE OF CONSTRUCTION:	V
OCCUPANCY GROUP(S):	R3
OCCUPIED LEVELS:	2
TOTAL SPRINKLERED AREA:	5563 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

REMOTE AREA 1	
Hydraulically Calculated System	
This system as shown on	Fire Protection Plan
company print no. FP1 dated	3/21/2025
for	WETZEL/SAUTER 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 - 3 SPRINKLERS sq ft (m) when supplied
with water at the rate of	46.2 gpm (L/min)
at	85.6 psi (bars) at the base of the riser.
Hose stream allowance of	0 gpm (L/min)
is included in the above.	
Occupancy classification	NFPA 13D - LIGHT
Commodity classification	N/A
Maximum storage height	N/A
Safety factor	5.4

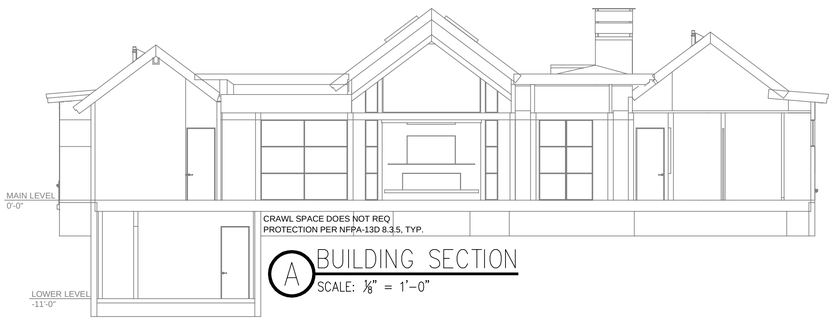
9:12 CEILING PITCH OUTSIDE OF NFPA-13D CRITERIA THREE HEADS CALCULATED

REMOTE AREA 2	
Hydraulically Calculated System	
This system as shown on	Fire Protection Plan
company print no. FP1 dated	3/21/2025
for	WETZEL/SAUTER RESIDENCE
at	K&D SUITE 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 - 3 SPRINKLERS sq ft (m) when supplied
with water at the rate of	46.8 gpm (L/min)
at	79.6 psi (bars) at the base of the riser.
Hose stream allowance of	0 gpm (L/min)
is included in the above.	
Occupancy classification	NFPA 13D - LIGHT
Commodity classification	N/A
Maximum storage height	N/A
Safety factor	11.3

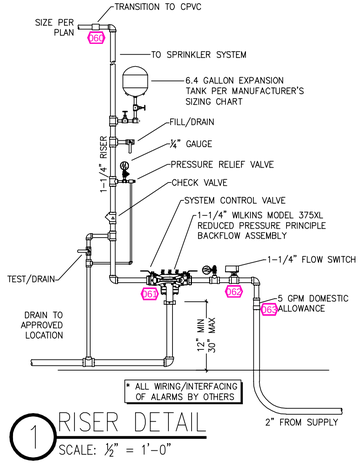
9:12 CEILING PITCH OUTSIDE OF NFPA-13D CRITERIA THREE HEADS CALCULATED

REMOTE AREA 3	
Hydraulically Calculated System	
This system as shown on	Fire Protection Plan
company print no. FP1 dated	3/21/2025
for	WETZEL/SAUTER RESIDENCE
at	THEATER 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	45.9 psi (bars) at the base of the riser.
Hose stream allowance of	0 gpm (L/min)
is included in the above.	
Occupancy classification	NFPA 13D - LIGHT
Commodity classification	N/A
Maximum storage height	N/A
Safety factor	45.1

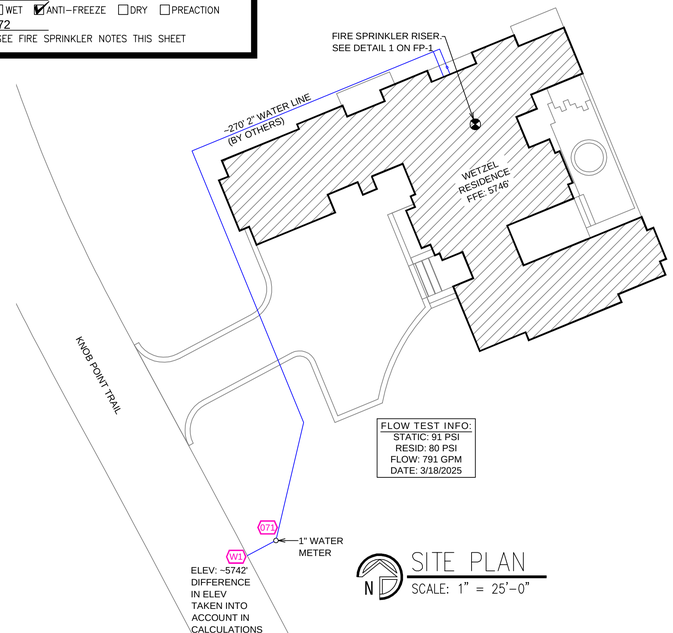
REMOTE AREA 4	
Hydraulically Calculated System	
This system as shown on	Fire Protection Plan
company print no. FP1 dated	3/21/2025
for	WETZEL/SAUTER RESIDENCE
at	BATH contract no.
is designed to discharge at a rate of	0.05 gpm (L/min)per sq ft (m²) of floor area over a maximum area of
	NFPA 13D - 1 SPRINKLER sq ft (m) when supplied
with water at the rate of	22.0 gpm (L/min)
at	38.0 psi (bars) at the base of the riser.
Hose stream allowance of	0 gpm (L/min)
is included in the above.	
Occupancy classification	NFPA 13D - LIGHT
Commodity classification	N/A
Maximum storage height	N/A
Safety factor	52.9



A BUILDING SECTION
SCALE: ⅛" = 1'-0"



1 RISER DETAIL
SCALE: ½" = 1'-0"



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

NO.	DATE	REVISIONS	DRAWN	CHECKED

GENERAL CONTRACTOR:	AUTHORITY HAVING JURISDICTION:
	CARSON CITY FIRE DEPT
ADDRESS:	ADDRESS: 777 SOUTH STEWART ST
CITY:	CITY: CARSON CITY, NV 89701
PHONE:	PHONE: 775-887-2210
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 w/ NFPA 13D 2019 AND THE AUTHORITY HAVING JURISDICTION.
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. FOR SLOPED CEILINGS EXCEEDING 8:12 THE NUMBER OF DESIGN SPRINKLERS SHALL BE INCREASED TO INCLUDE 3 SPRINKLERS IN A COMPARTMENT.
5. ALL SPRINKLER PIPING CONCEALED ABOVE CEILINGS SHALL BE CPVC PIPING UNLESS OTHERWISE NOTED.
6. ALL DIMENSIONS SHOWN ARE CENTER TO CENTER U.O.N.
7. ALL HANGERS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 13D AND/OR NFPA 13 REQUIREMENTS.
8. HOLES THROUGH SOLID STRUCTURAL MEMBERS SHALL BE PERMITTED TO SERVE AS HANGERS FOR THE SUPPORT OF SYSTEM PIPING.
9. ALL SYSTEM PIPING SHALL BE TESTED FOR LEAKAGE AT NORMAL SYSTEM OPERATING PRESSURE.
10. 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

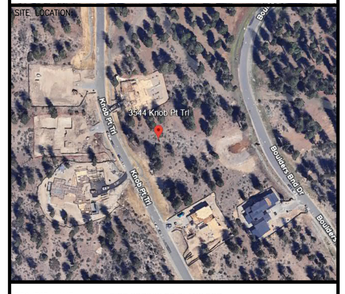
SYM	QTY	TYPE	MFG.	MODEL#	NPT	K	TEMP	FINISH	S.I.N.
⊗	59	CONCEALED	SENJU	RC-RES	1/2"	4.9	162	WHITE	SS8464
⊠	5	CONCEALED	SENJU	RC-RES	1/2"	4.9	205	WHITE	SS8464
⊗	8	SEMI-RECESS	SENJU	FR-RES	1/2"	4.9	205	WHITE	SS4451

72 TOTAL SPRINKLERS ON THIS SHEET

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



PROJECT NAME: FIRE SPRINKLER PLANS FOR

WETZEL/SAUTER RESIDENCE

3544 KNOB POINT TRAIL
CARSON CITY, NV 89705

STAMP:

DRAWING TITLE:

FIRE SPRINKLER PLAN

SCALE: 1/8"=1'-0"	JOB NO.:
DRAWN BY:	DWG NO.: FP-1
BORN ON DATE: 3/21/2025	
FILE:	SHEET 1 OF 1