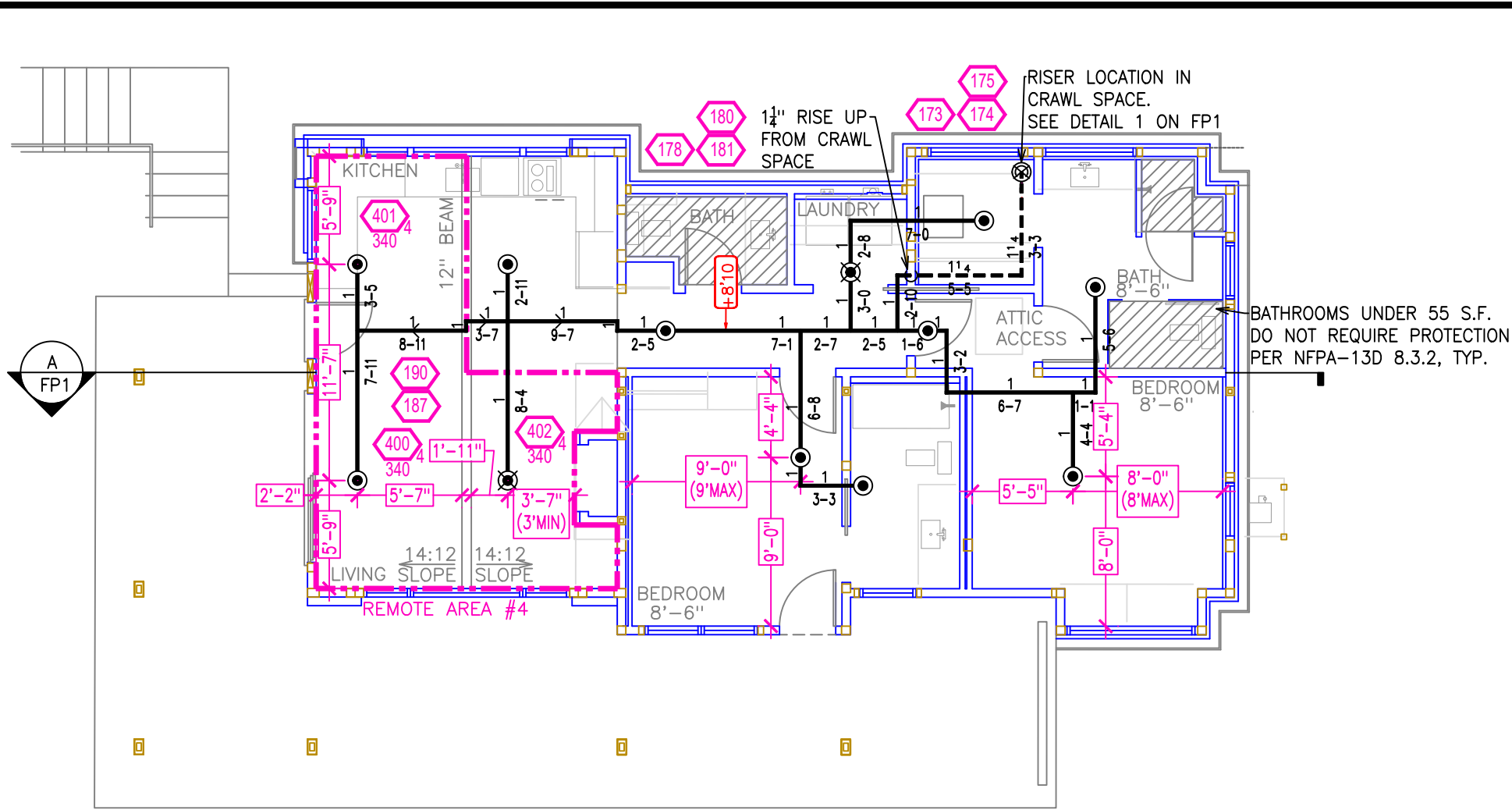
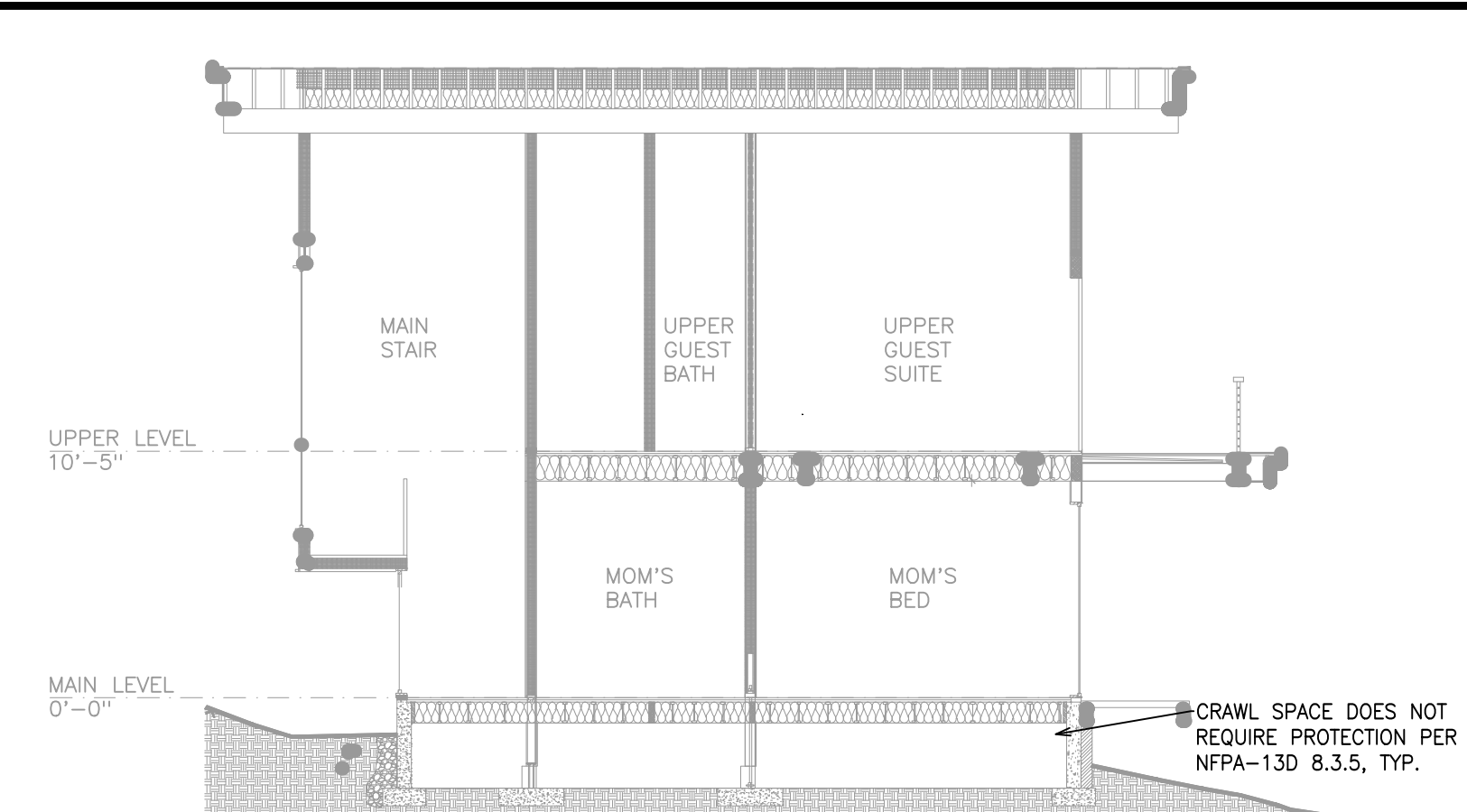
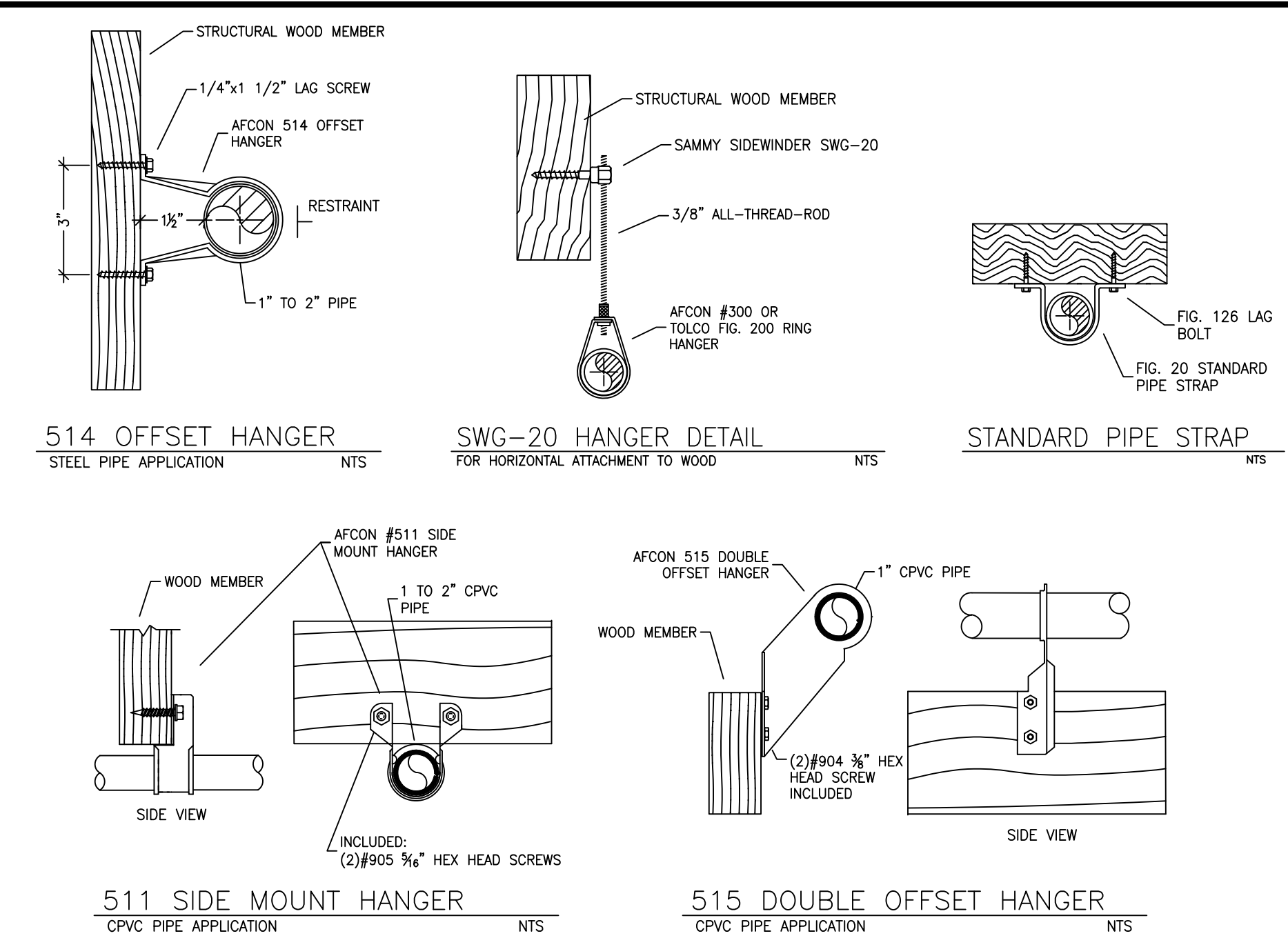




FIRE SPRINKLER LAKE HOUSE PLAN
SCALE: 1/8" = 1'-0"



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



HANGERS

ZONE VOLUMES:
ZONE 1 33.5 GALLONS
ZONE 2 13.6 GALLONS
LAKE HOUSE 7.5 GALLONS

SUBMITTAL

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 (gal)	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	

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.)												
	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												
Threaded lightwall steel pipe	N/A	12-0	12-0	15-0	15-0	15-0	N/A	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	15-0		
CPVC	5-6	6-0	6-6	7-0	8-0	9-0	10-0	N/A	N/A	N/A		

REMOTE AREA 4

Hydraulically Calculated System

This system as shown on Fire Protection Plan

company print no. FP1 dated 12/10/2021

for NEWMAN RESIDENCE

at LAKE HOUSE LIVE/DINE 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 (m²) when supplied with water at the rate of 57.8 gpm (L/min) at 76.9 psi (bars) at the base of the riser.

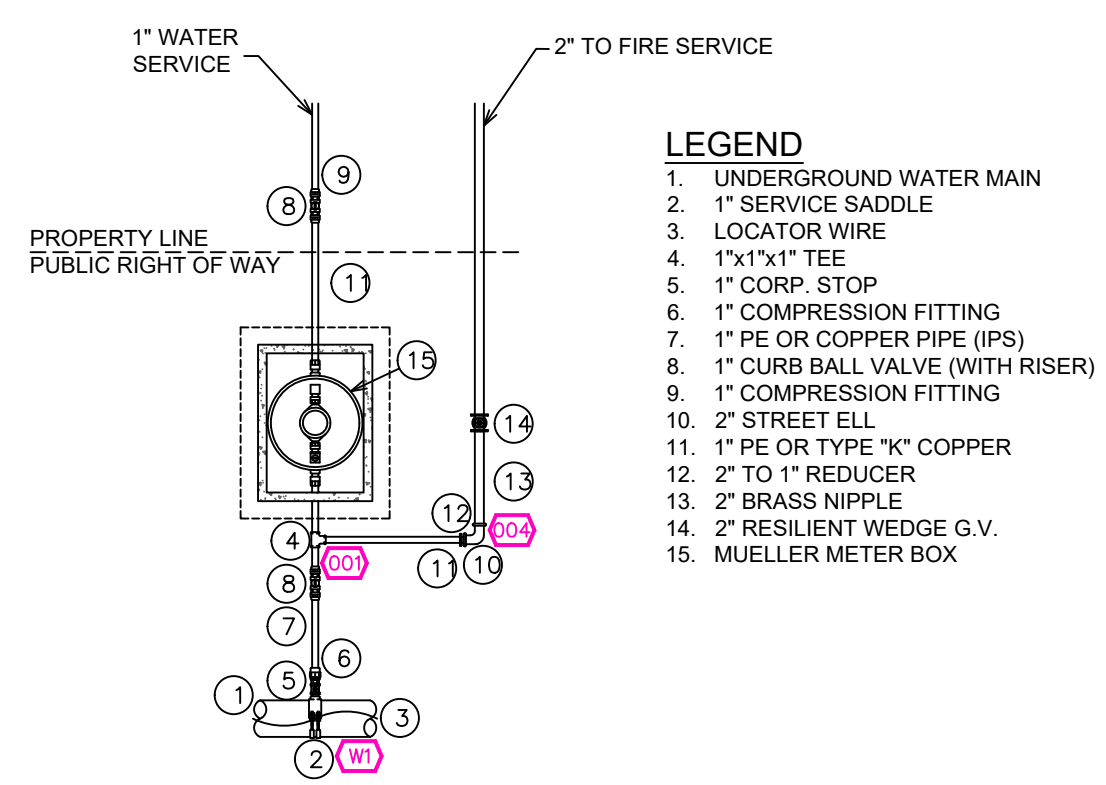
Hose stream allowance of 5 gpm (L/min) is included in the above.

Occupancy classification 13D LIGHT HAZARD

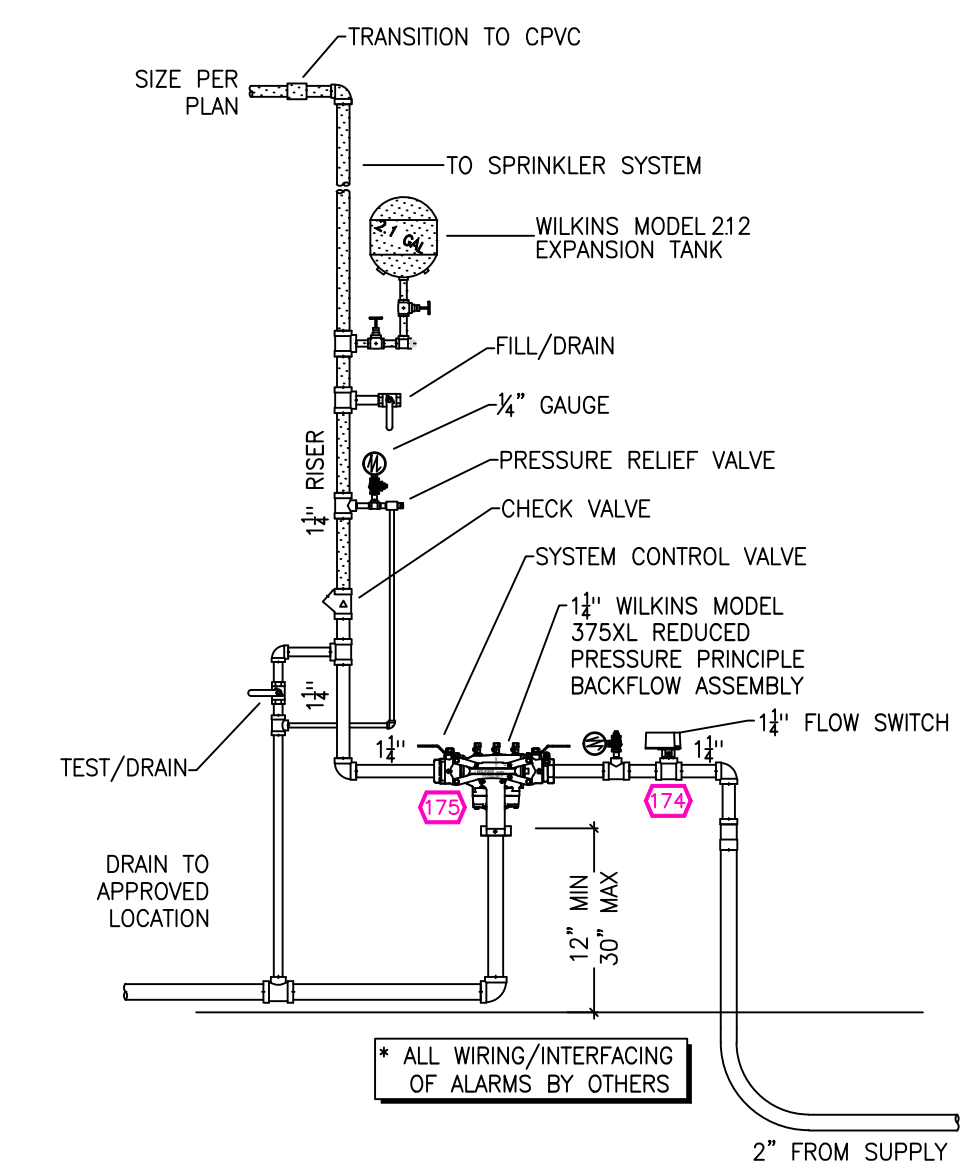
Commodity classification N/A

Maximum storage height N/A

Safety factor 12.0



WATER METER DETAIL
SCALE: NTS



LAKE HOUSE RISER DETAIL
SCALE: NTS

PROJECT SUMMARY:

PROJECT NAME: NEWMAN RESIDENCE

PROJECT ADDRESS: 8800 GEORGE WHITTLE

APN:

PROJECT TYPE: ☒ NEW ☐ T.I.

TYPE OF CONSTRUCTION: V

OCCUPANCY GROUP(S): R3

OCCUPIED LEVELS: 2

TOTAL SPRINKLERED AREA: 6705 SQ. FT.

NFPA CODE REQUIREMENT: ☐ NFPA 13 ☐ NFPA 13R ☒ NFPA 13D

NUMBER OF SYSTEMS: 2

SYSTEM TYPE(S): ☐ WET ☒ ANTI-FREEZE ☐ DRY ☐ PREACTION

TOTAL SPRINKLERS: 59

SPECIAL NOTES: SEE FIRE SPRINKLER NOTES THIS SHEET

PROJECT SQUARE FOOTAGES

MAIN LEVEL = 5407 S.F.

UPPER LEVEL GUEST (A) = 639 S.F.

UPPER LEVEL BUNK (B) = 659 S.F.

LAKE HOUSE = 1116 S.F.

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

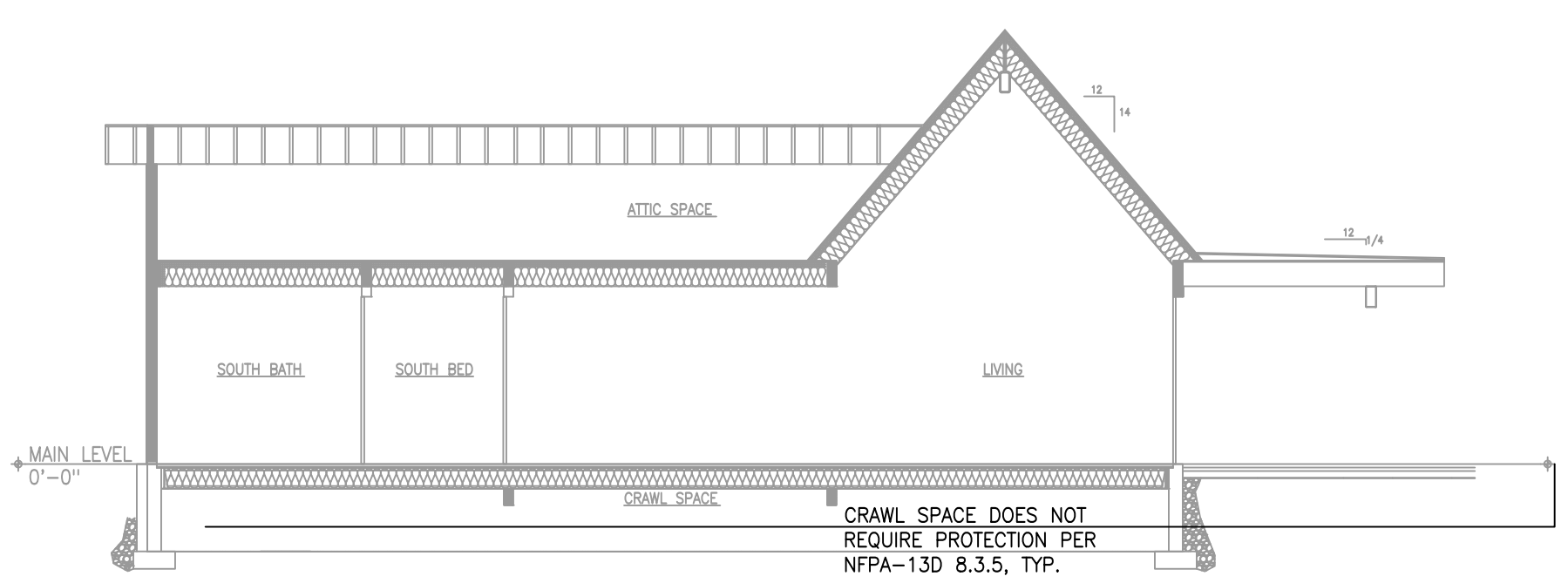
SPRINKLER SPACING

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

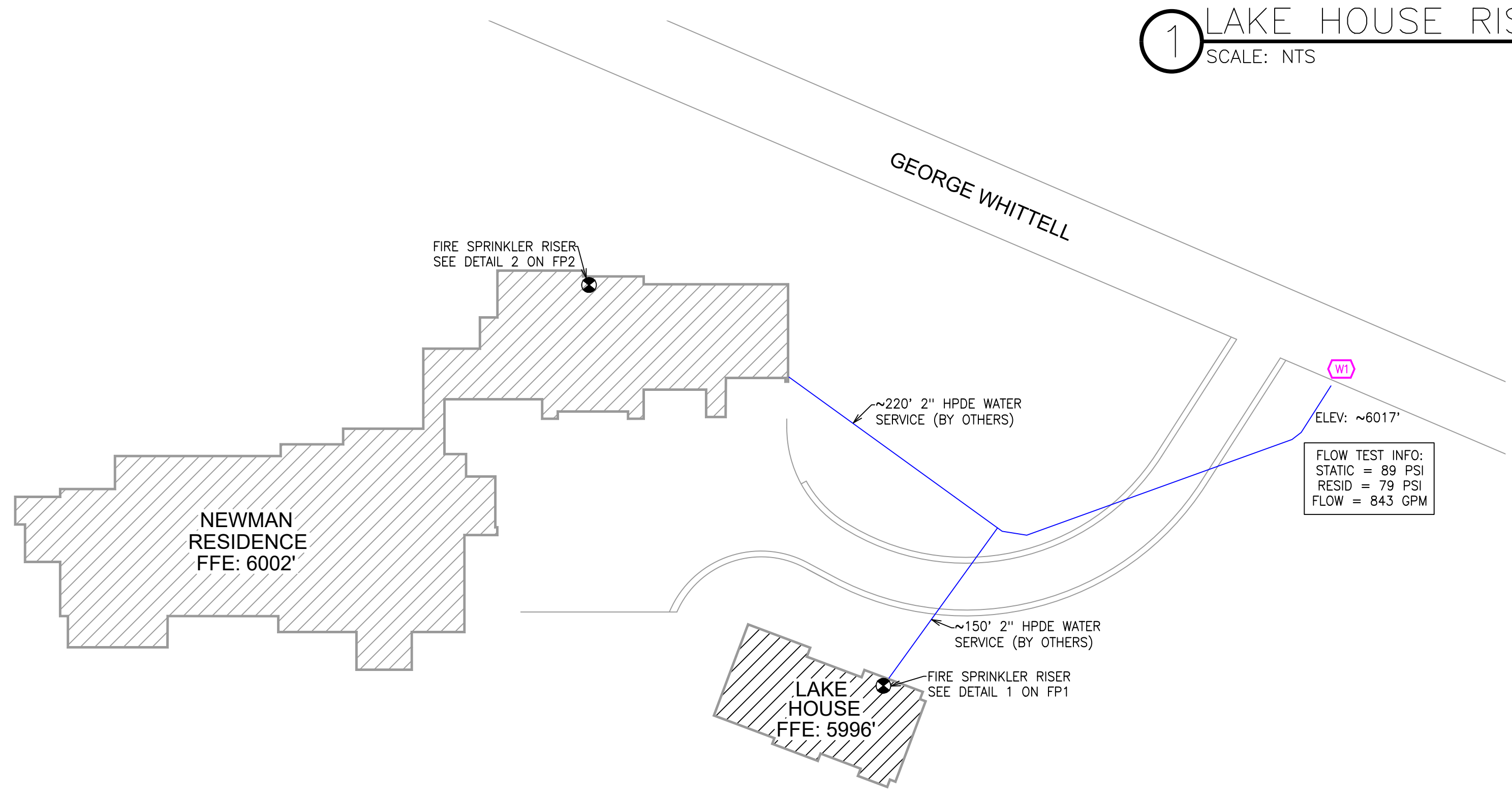
2. TWO OR MORE HEADS IN A COMPARTMENT SHALL BE SPACED AT A MAXIMUM OF 16'x16' (256 SQ. FT.) OR UP TO 8' OFF A WALL U.N.C.

3. SPRINKLERS SHALL BE MEASURED AT PERPENDICULAR ANGLES TO WALLS AND ALONG THE SLOPES OF CEILINGS.

THIS FIRE SPRINKLER SYSTEM UTILIZES THE TYCO LFP ANTI-FREEZE SOLUTION

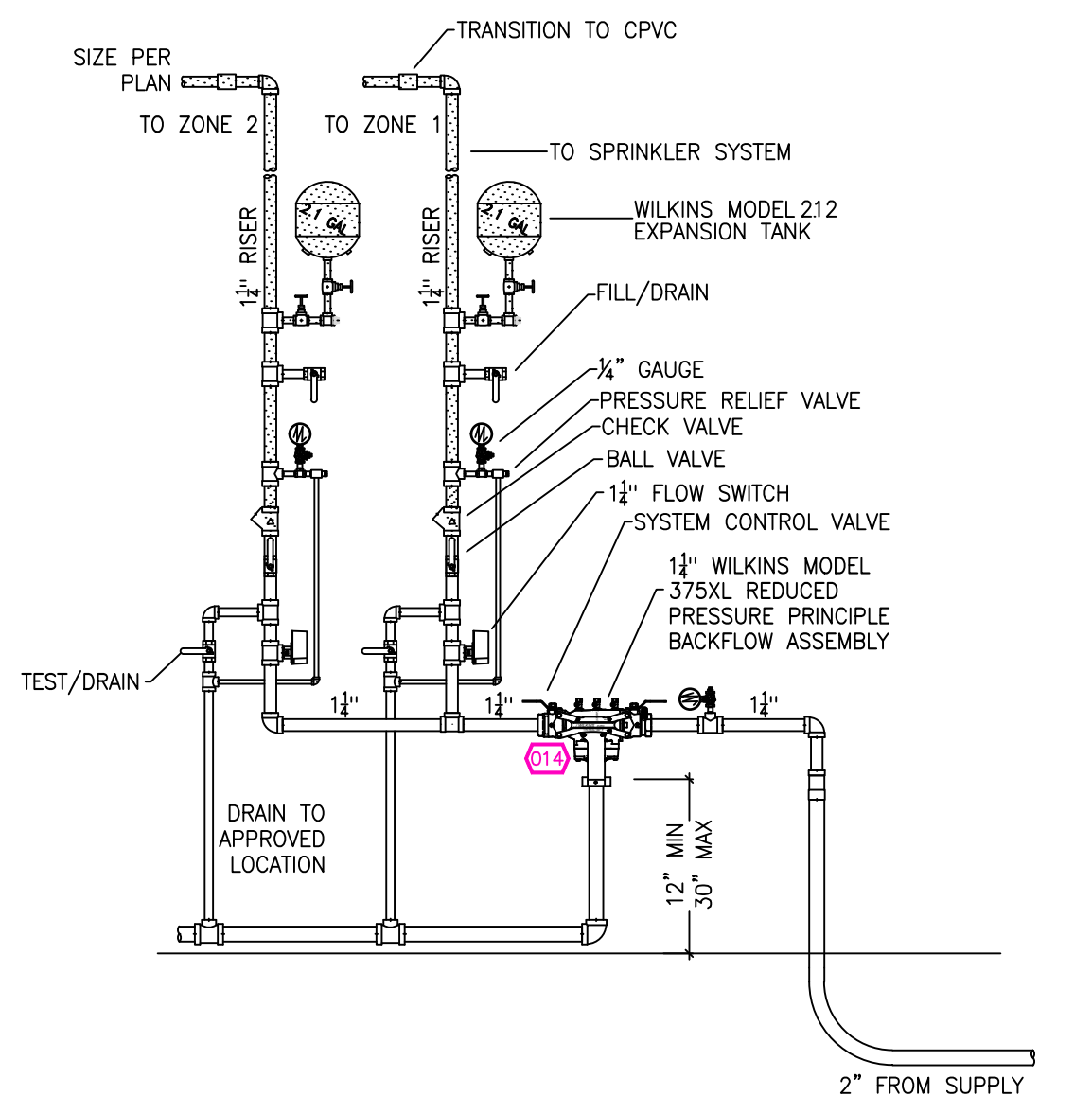
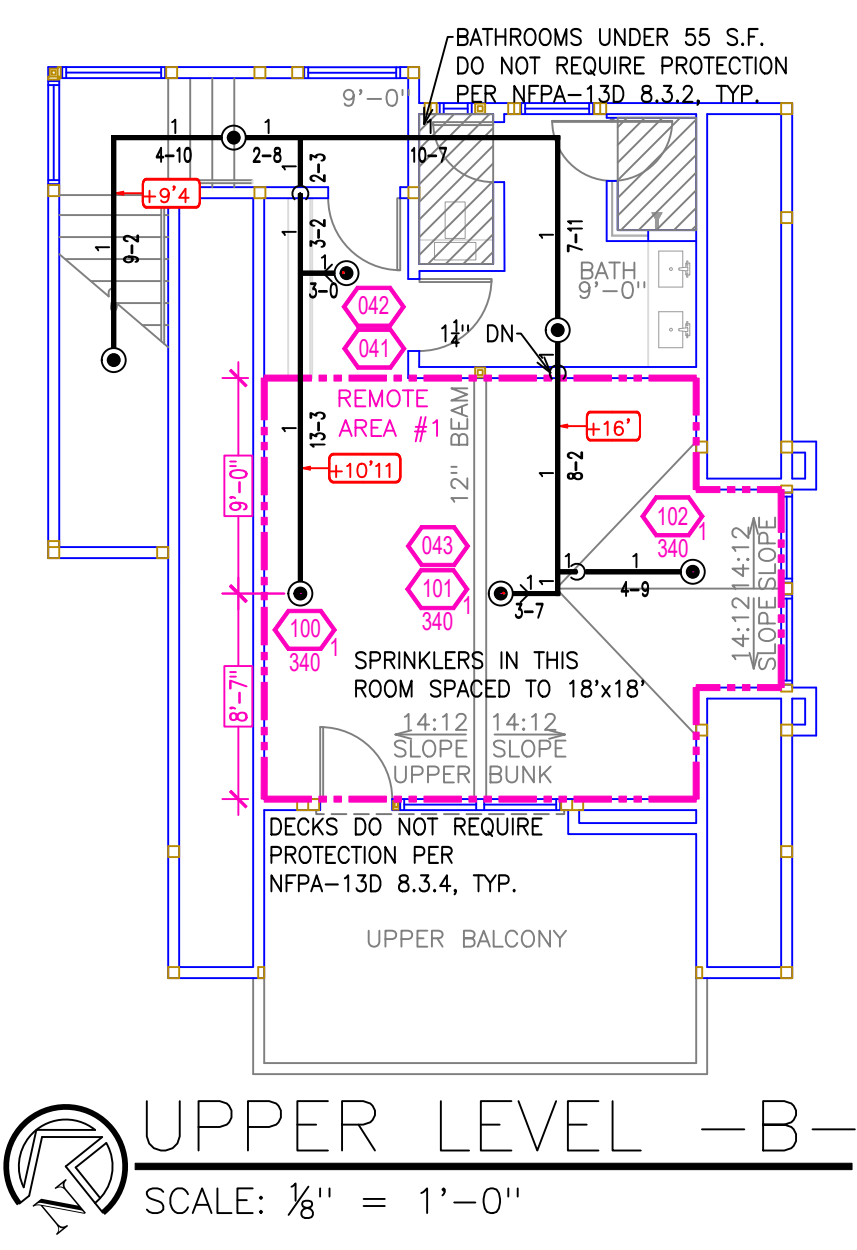
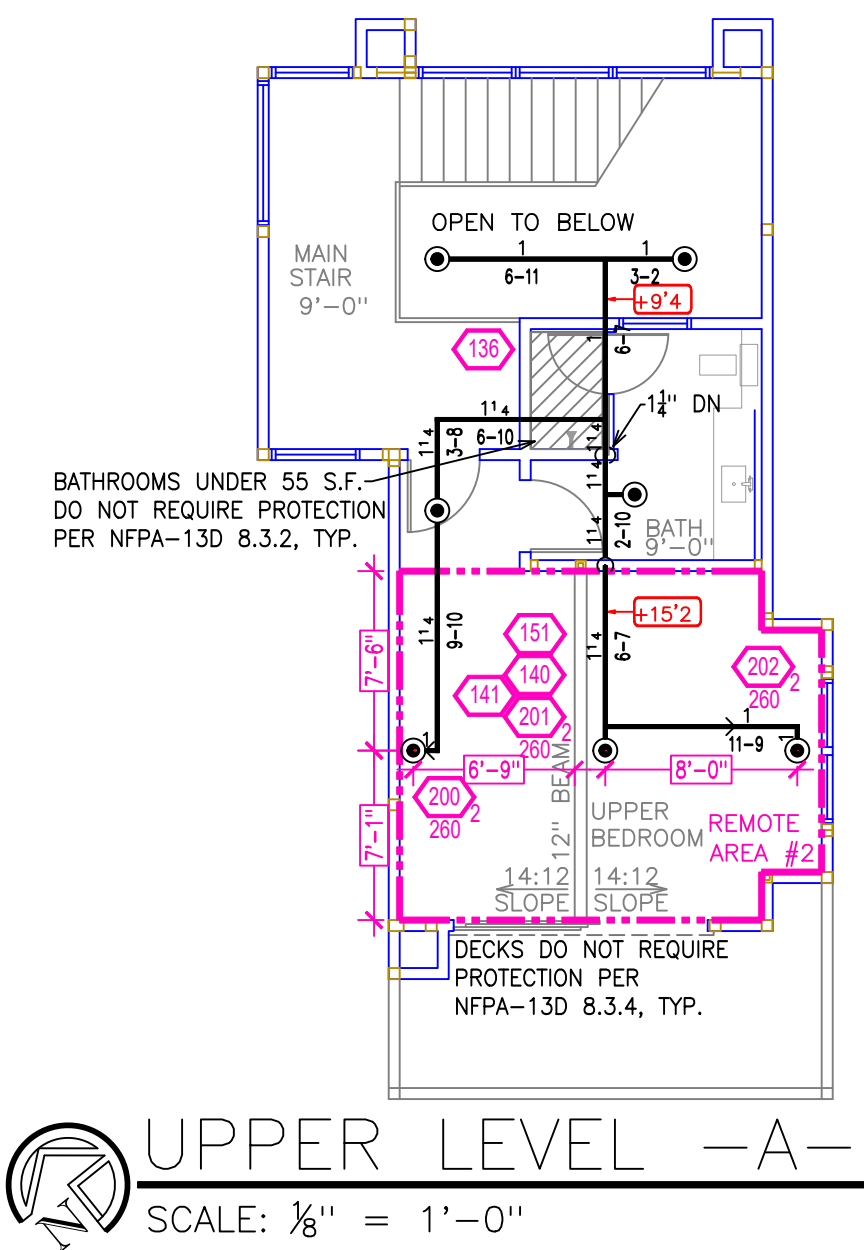
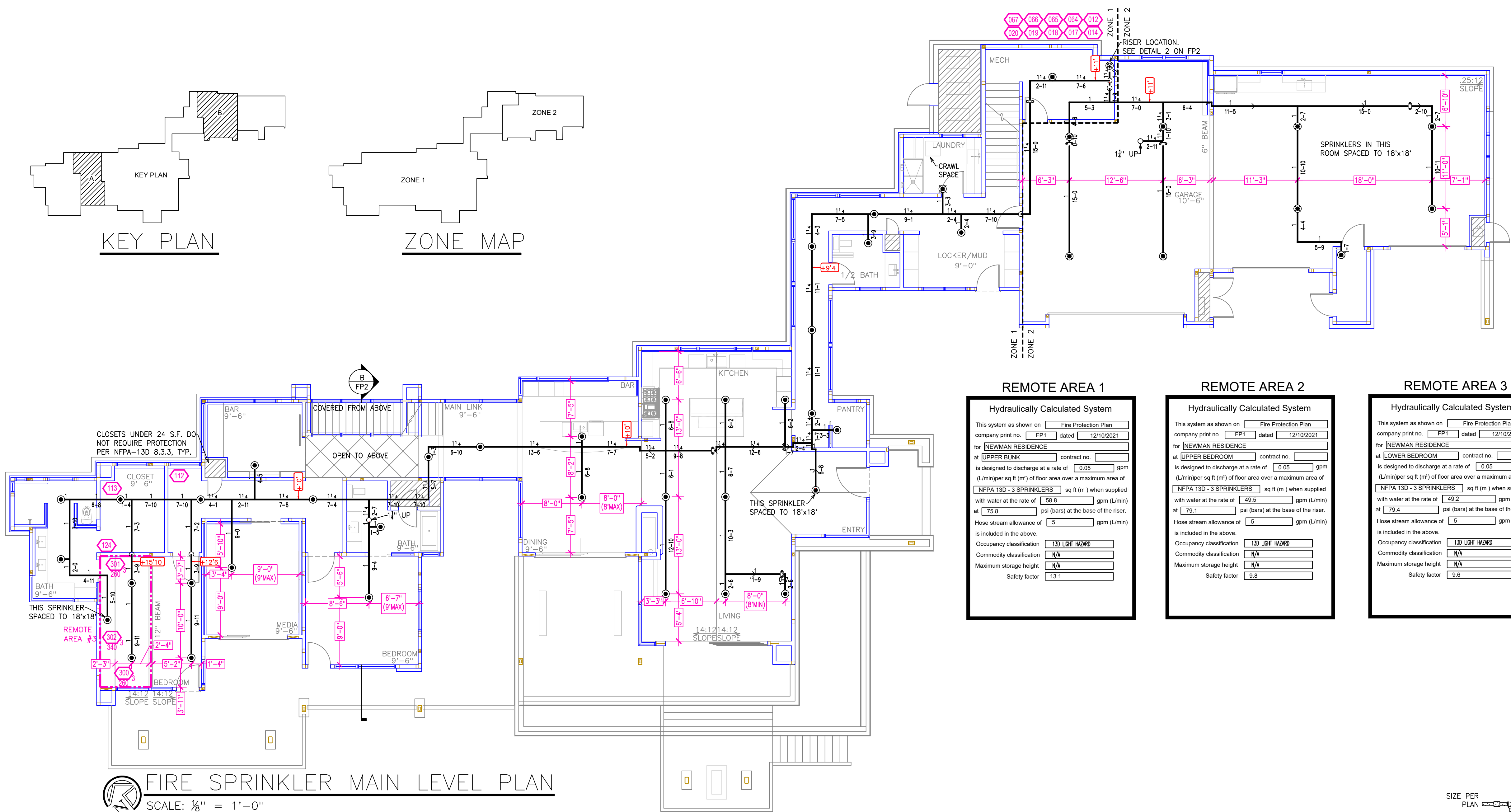
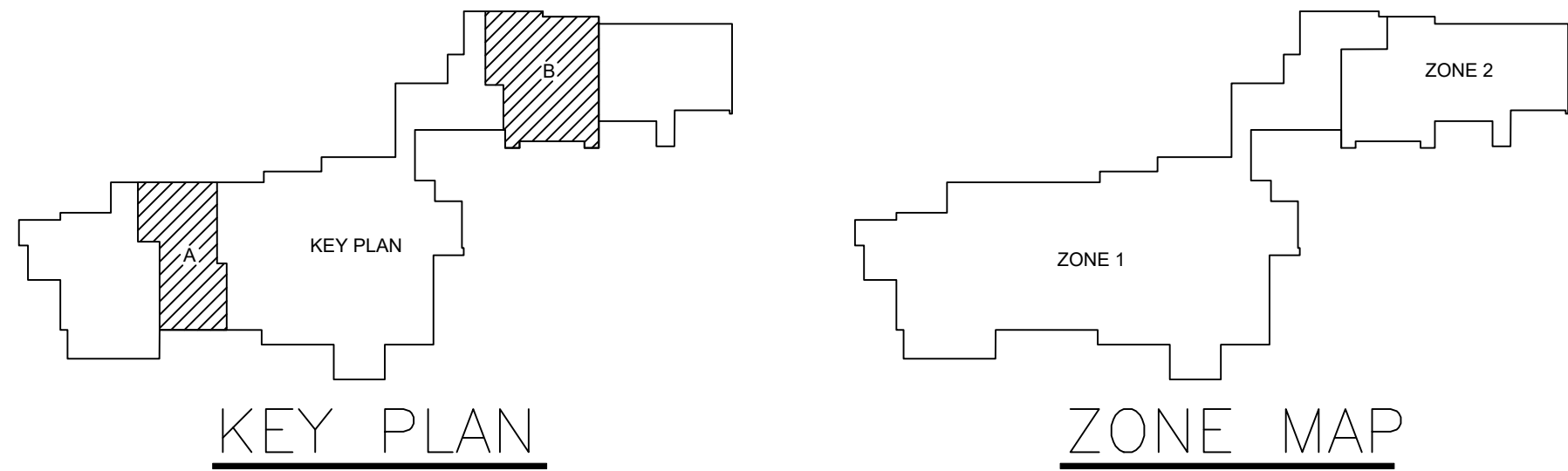


LAKE HOUSE BUILDING SECTION
SCALE: 1/8" = 1'-0"



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

NO.	DATE	REVISIONS	DRAWN	CHECKED					
GENERAL CONTRACTOR: TRUCKEE FIRE PROTECTION DISTRICT									
AUTHORITY HAVING JURISDICTION: ADDRESS: PO BOX 2768									
CITY: TRUCKEE, CA 96161									
PHONE: 530-582-7850									
CONTACT: CONTACT:									
ARCHITECT: FIELD INSPECTIONS:									
1.									
2.									
3.									
4.									
FIRE SPRINKLER NOTES:									
1. THE PROPOSED FIRE SPRINKLER SYSTEMS ARE ANTI-FREEZE SYSTEMS AND SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 13D 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.
10	10	CONCEALED	SENJ	RC-RES	1/2"	4.9	162	WHITE	SS8464
2	2	CONCEALED	SENJ	RC-RES	1/2"	4.9	175	WHITE	SS8464
12 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									
PIPE HANGER & CHANGE ELEVATION DN									
TYPE DESIGNATION									
HYDRAULIC REF PT									
GRVD OR THRD CAP									
GRVD COUPLING									
TYPICAL POINT OF CONNECTION (POC)									
AUX DRAIN									
REVISION NOTATION									
LOCAL ALARM									
SITE LOCATION:									
PROJECT NAME: FIRE SPRINKLER PLANS FOR									
NEWMAN RESIDENCE									
8800 GEORGE WHITTLE									
LAHONTAN, CA 96161									
DRAWING TITLE:									
FIRE SPRINKLER PLAN									
SCALE: 1/8"=1'-0"					JOB NO.:				
DRAWN BY:					DWG NO.:				
BORN ON DATE: 12/10/2021					FP-1				
FILE: 12/10/2021					SHEET 1 OF 2				



REMOTE AREA 1

Hydraulically Calculated System

This system as shown on Fire Protection Plan company print no. FPI dated 12/10/2021 for NEWMAN RESIDENCE 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 (m²) when supplied with water at the rate of 58.8 gpm (L/min) at 75.8 psi (bars) at the base of the riser. Hose stream allowance of 5 gpm (L/min) is included in the above. Occupancy classification 13D LIGHT HAZARD Commodity classification N/A Maximum storage height N/A Safety factor 13.1

REMOTE AREA 2

Hydraulically Calculated System

This system as shown on Fire Protection Plan company print no. FPI dated 12/10/2021 for NEWMAN RESIDENCE 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 (m²) when supplied with water at the rate of 49.5 gpm (L/min) at 79.1 psi (bars) at the base of the riser. Hose stream allowance of 5 gpm (L/min) is included in the above. Occupancy classification 13D LIGHT HAZARD Commodity classification N/A Maximum storage height N/A Safety factor 9.8

REMOTE AREA 3

Hydraulically Calculated System

This system as shown on Fire Protection Plan company print no. FPI dated 12/10/2021 for NEWMAN RESIDENCE 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 (m²) when supplied with water at the rate of 49.2 gpm (L/min) at 79.4 psi (bars) at the base of the riser. Hose stream allowance of 5 gpm (L/min) is included in the above. Occupancy classification 13D LIGHT HAZARD Commodity classification N/A Maximum storage height N/A Safety factor 9.8

NO.	DATE	REVISIONS	DRAWN	CHECKED

GENERAL CONTRACTOR:	AUTHORITY HAVING JURISDICTION:
ADDRESS:	TRUCKEE FIRE PROTECTION DISTRICT
CITY:	ADDRESS: PO BOX 2768
PHONE:	CITY: TRUCKEE, CA 96161
CONTACT:	PHONE: 530-582-7850
	CONTACT:

ARCHITECT:	FIELD INSPECTIONS:
	1.
ADDRESS:	2.
CITY:	3.
PHONE:	4.

- FIRE SPRINKLER NOTES:
- THE PROPOSED FIRE SPRINKLER SYSTEMS ARE ANTI-FREEZE SYSTEMS AND SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 13D AND THE AUTHORITY HAVING JURISDICTION.
 - 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.
 - FOR SLOPED CEILINGS EXCEEDING 8:12 THE NUMBER OF DESIGN SPRINKLERS SHALL BE INCREASED TO INCLUDE 3 SPRINKLERS IN A COMPARTMENT.
 - 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).

SYM.	QTY.	TYPE	MFG.	MODEL#	NPT	K	TEMP.	FINISH	S.I.N.
48		CONCEALED	SENJ	RC-RES	1/2"	4.9	162	WHITE	SS4644
10		SEMI-RECESS	SENJ	FR-RES	1/2"	4.9	175	WHITE	SS4451
1		CONCEALED	SENJ	RC-RES	1/2"	4.9	175	WHITE	SS4644

59 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



PROJECT NAME: FIRE SPRINKLER PLANS FOR

NEWMAN RESIDENCE

8800 GEORGE WHITTILL
LAHONTAN, CA 96161

DRAWING TITLE:

FIRE SPRINKLER PLAN

SCALE: 1/8"=1'-0"	JOB NO.:
DRAWN BY:	DWG NO.:
BORN ON DATE: 12/10/2021	FILE: 12/10/2021

2 OF 2