

NO.	DATE	REVISIONS	DRAWN	CHECKED

GENERAL CONTRACTOR: AUTHORITY HAVING JURISDICTION:
 ADDRESS: RENO FIRE DEPT
 ADDRESS: 1 E. 1ST ST., 4TH FLOOR
 CITY: RENO, NV 89501
 PHONE: 775-334-2300
 CONTACT: CONTACT:

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

FIRE SPRINKLER NOTES:

- THE PROPOSED FIRE SPRINKLER SYSTEM IS AN ANTI-FREEZE SYSTEM AND SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 13R AND THE AUTHORITY HAVING JURISDICTION.
- THIS SPRINKLER SYSTEM IS HYDRAULICALLY CALCULATED IN ACCORDANCE WITH NFPA 13R 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 4 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 13R 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).

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

PROJECT SUMMARY:

PROJECT NAME: 307 PINE
 PROJECT ADDRESS: 307 PINE STREET, RENO NV
 APN: []
 PROJECT TYPE: NEW T.I.
 TYPE OF CONSTRUCTION: V-B
 OCCUPANCY GROUP(S): R-2
 OCCUPIED LEVELS: 4
 TOTAL SPRINKLERED AREA: 10,093 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: 106
 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. FPP1 dated 7/9/2021 for 307 Pine at [] 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 [] sq ft (m²) when supplied with water at the rate of 54.4 gpm (L/min) at 61.9 psi (bars) at the base of the riser. Hose stream allowance of 0 gpm (L/min) is included in the above.

Occupancy classification: 130 LIGHT HAZARD
 Commodity classification: N/A
 Maximum storage height: N/A
 Safety factor: 12.0

REMOTE AREA 2

Hydraulically Calculated System

This system as shown on Fire Protection Plan company print no. FPP1 dated 7/9/2021 for 307 Pine at [] 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 [] sq ft (m²) when supplied with water at the rate of 21.0 gpm (L/min) at 53.7 psi (bars) at the base of the riser. Hose stream allowance of 0 gpm (L/min) is included in the above.

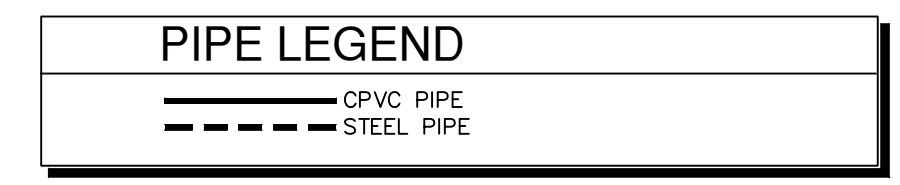
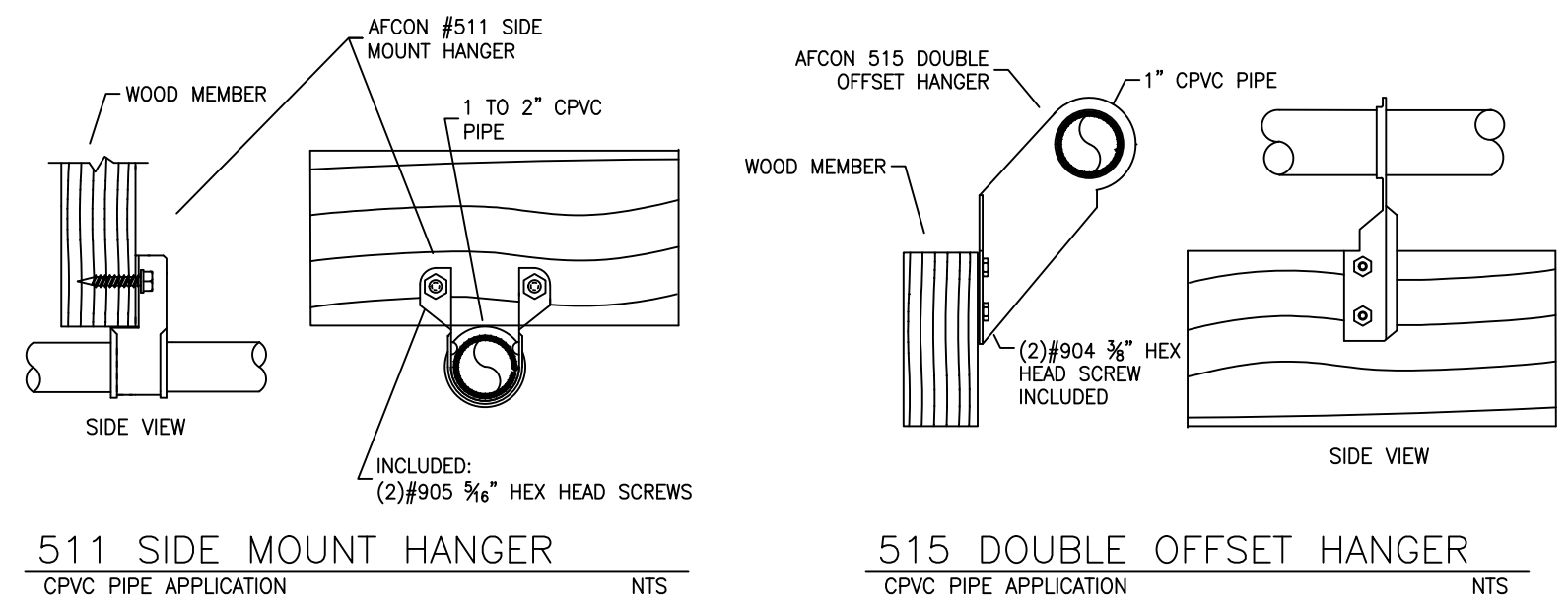
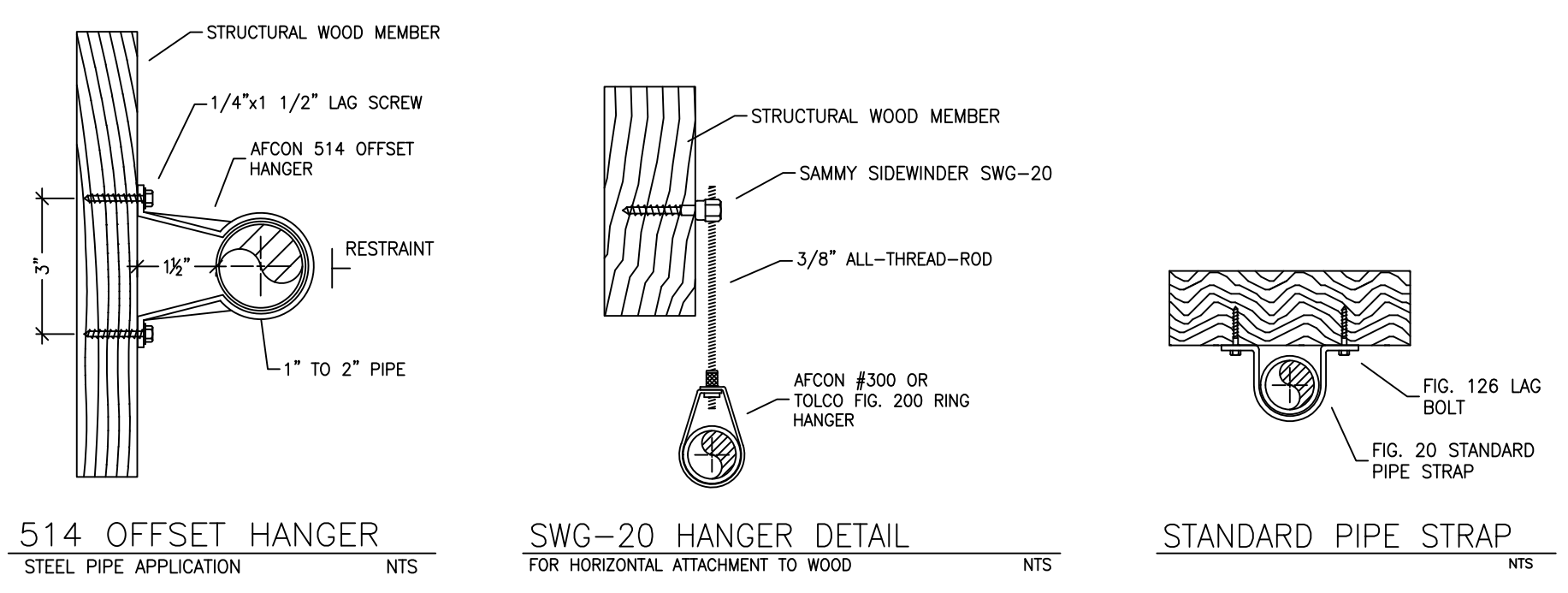
Occupancy classification: 130 LIGHT HAZARD
 Commodity classification: N/A
 Maximum storage height: N/A
 Safety factor: 20.3

REMOTE AREA 3

Hydraulically Calculated System

This system as shown on Fire Protection Plan company print no. FPP1 dated 7/9/2021 for 307 Pine at [] contract no. [] is designed to discharge at a rate of 0.15 gpm (L/min) per sq ft (m²) of floor area over a maximum area of [] sq ft (m²) when supplied with water at the rate of 195.5 gpm (L/min) at 55.9 psi (bars) at the base of the riser. Hose stream allowance of 0 gpm (L/min) is included in the above.

Occupancy classification: 130 LIGHT HAZARD
 Commodity classification: N/A
 Maximum storage height: N/A
 Safety factor: 16.8



HANGER DETAILS

SPRINKLER SPACING

- A SINGLE PENDENT SPRINKLER MAY BE SPACED AT A MAXIMUM OF 20'x20'(400SQ. FT.) OR UP TO 10' OFF A WALL.
- 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.
- SPRINKLERS SHALL BE MEASURED AT PERPENDICULAR ANGLES TO WALLS AND ALONG THE SLOPES OF CEILING.

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"

PIPE VOLUMES (ZONE 1):

TOTAL PIPE FOOTAGE AND CAPACITY:
 1" CPVC = 607' (30.02 GAL)
 1/2" CPVC = 57' (4.52 GAL)

ADD 10% FOR DROPS AND PIPE SIZE DISCREPANCIES
TOTAL VOLUME: ±37.99GALLONS

PIPE VOLUMES (ZONE 2):

TOTAL PIPE FOOTAGE AND CAPACITY:
 1" STEEL = 13' (0.58 GAL)
 1/2" STEEL = 148' (15.61 GAL)
 2" STEEL = 38' (7.21 GAL)

ADD 10% FOR DROPS AND PIPE SIZE DISCREPANCIES
TOTAL VOLUME: ±25.75GALLONS

SUBMITTAL

PROJECT SQUARE FOOTAGES

MAIN LEVEL = 676 S.F.
 SECOND LEVEL = 2540 S.F.
 THIRD LEVEL = 2752 S.F.
 LOFT LEVEL = 1916 S.F.

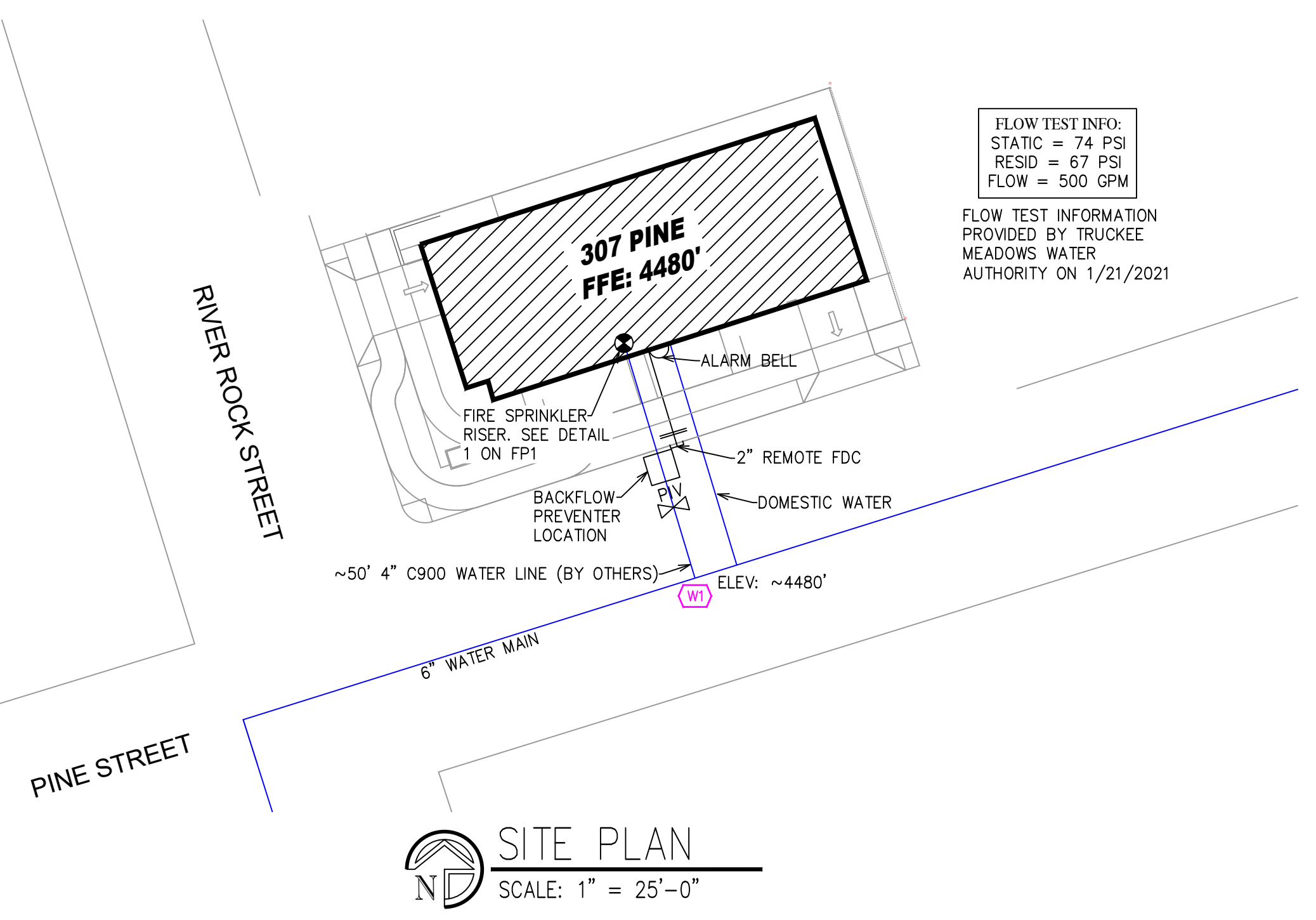
PARKING = 2209 S.F.
 ZONE 1 & 2 TOTAL = 10,093 S.F.

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

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 (gal)
1	0.045	0.049
1 1/4	0.076	0.085
1 1/2	0.106	0.115
2	0.174	0.190
2 1/2	0.248	0.283



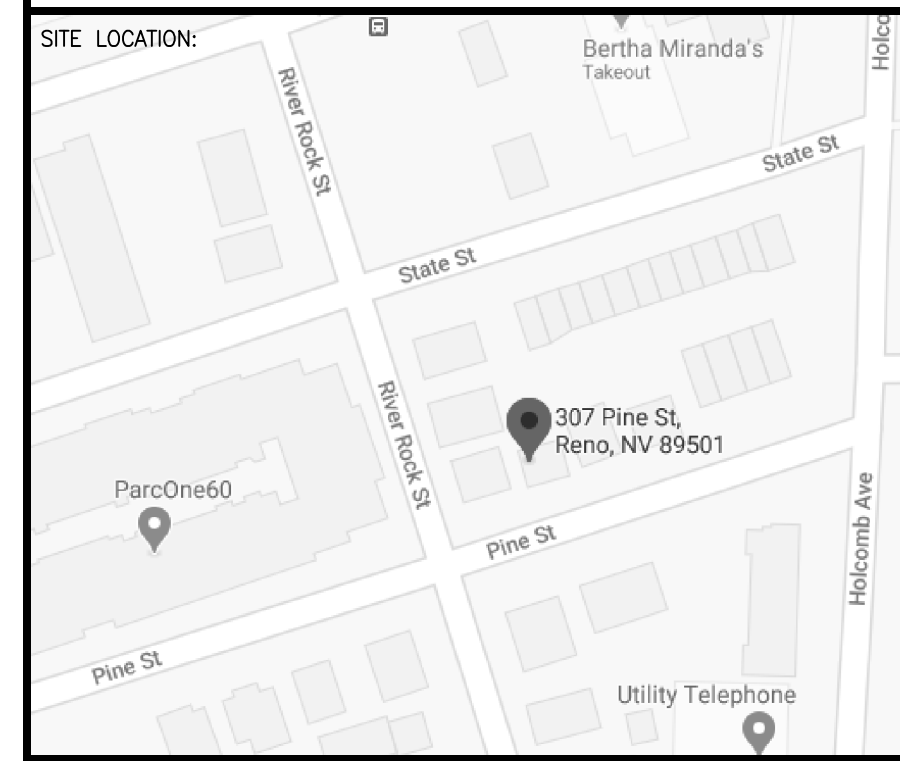
SPRINKLER HEAD LEGEND

SYM	QTY	TYPE	MFG.	MODEL#	NPT	K	TEMP	FINISH	S.I.U.
⊗	56	CONCEALED	SENJN	RC-RES	1/2"	4.9	162	WHITE	SS8464
⊗	9	CONCEALED	SENJN	RC-RES	1/2"	4.9	175	WHITE	SS8464
⊗	16	SEMI-RECESS	SENJN	FR-OR	1/2"	5.6	162	BRASS	SS2553
⊗	25	SEMI-RECESS	SENJN	FR-OR	1/2"	5.6	205	BRASS	SS2551

106 TOTAL SPRINKLERS

FIRE SPRINKLER SYMBOLS

- ⊗ AUTOMATIC SPRINKLER RISER
- ⊕ EARTHQUAKE BRACING
- ⊖ PIPE HANGER & TYPE DESIGNATION
- ⊙ HYDRAULIC REF PT
- ⊕ GRVD OR THRD CAP
- ⊕ GRVD COUPLING
- ⊕ TYPICAL POINT OF CONNECTION (POC)
- +12"-9" ELEV. ABOVE FINISHED FLOOR
- CHANGE ELEVATION UP
- CHANGE ELEVATION DN
- ⊖ INSPECTORS TEST
- ⊖ AUX DRAIN
- ⊖ REVISION NOTATION
- ⊖ LOCAL ALARM

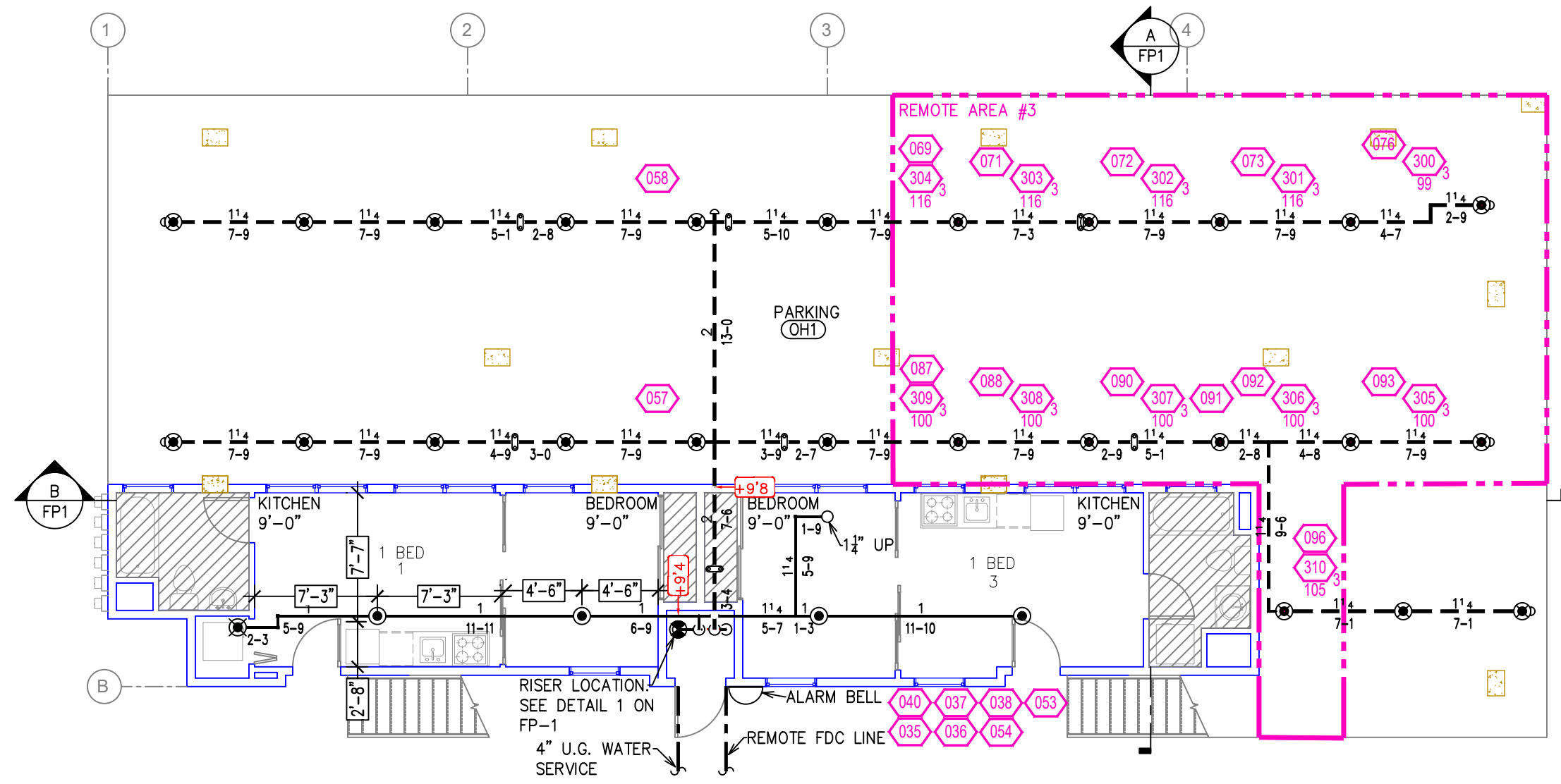


PROJECT NAME: FIRE SPRINKLER PLANS FOR
307 PINE
 307 PINE STREET
 RENO, NV 89501

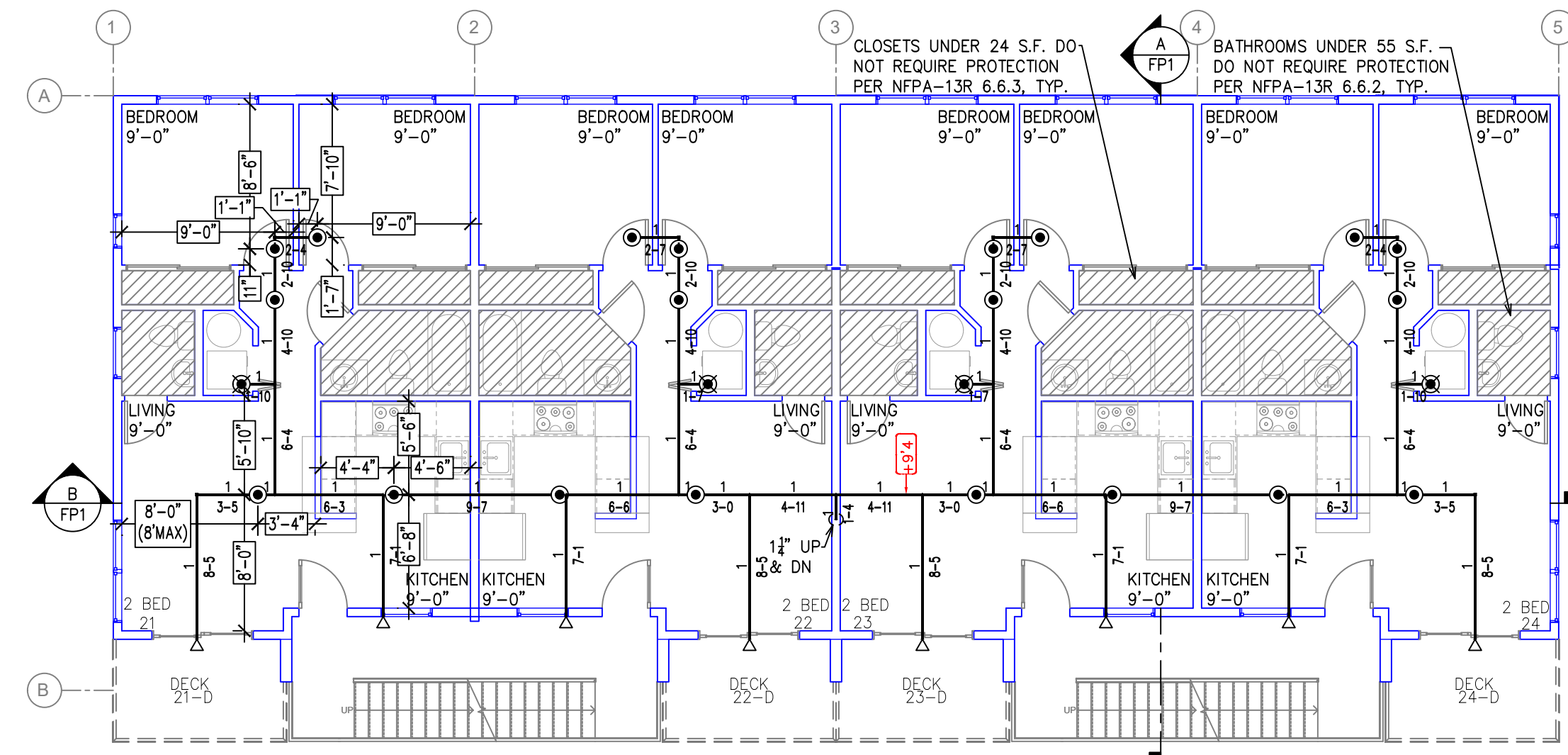
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FIRE SPRINKLER PLAN

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 BORN ON DATE: 7/9/2021
 FILE: 7/9/2021

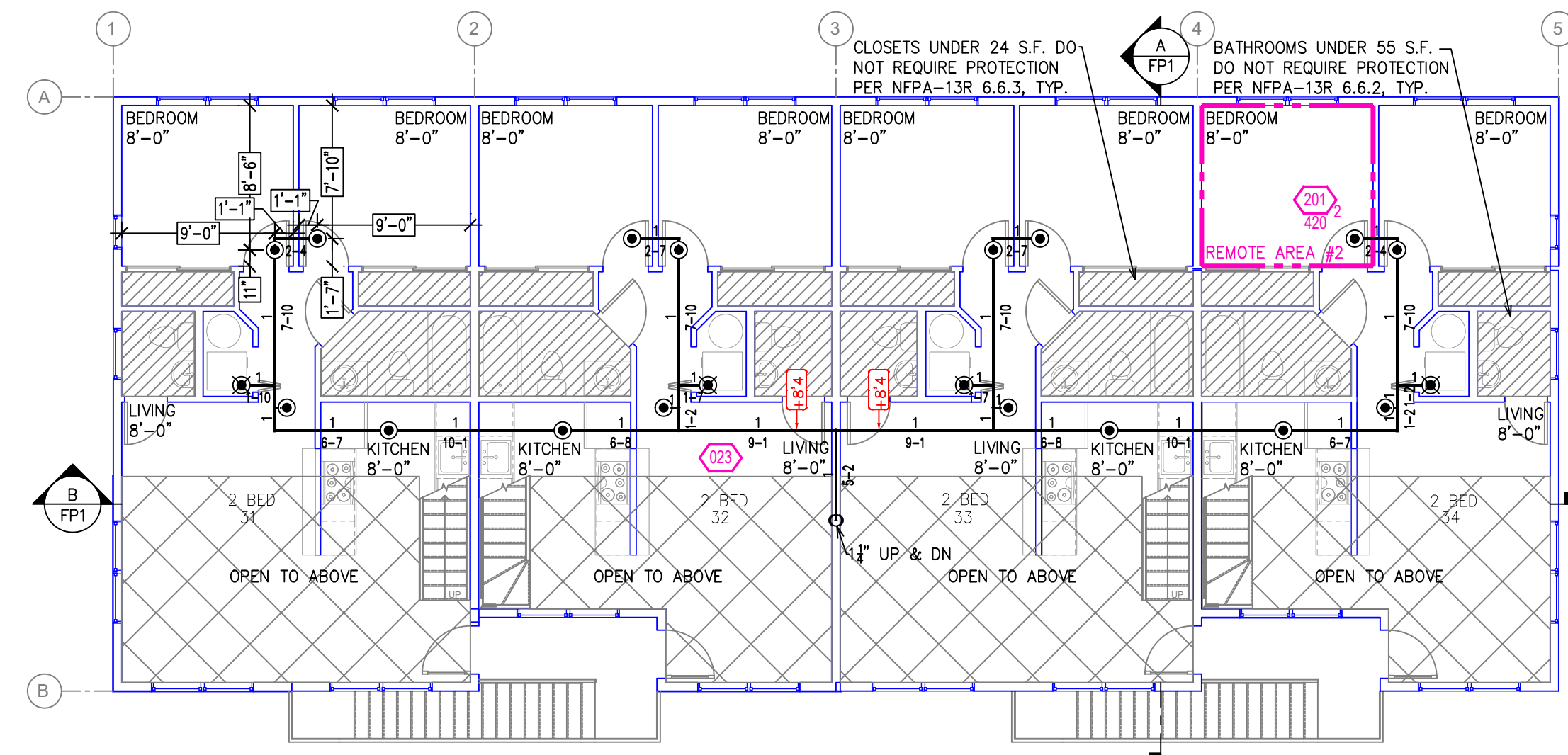
JOB NO.:
 DWG NO.:
FP-1
 SHEET 1 of 2



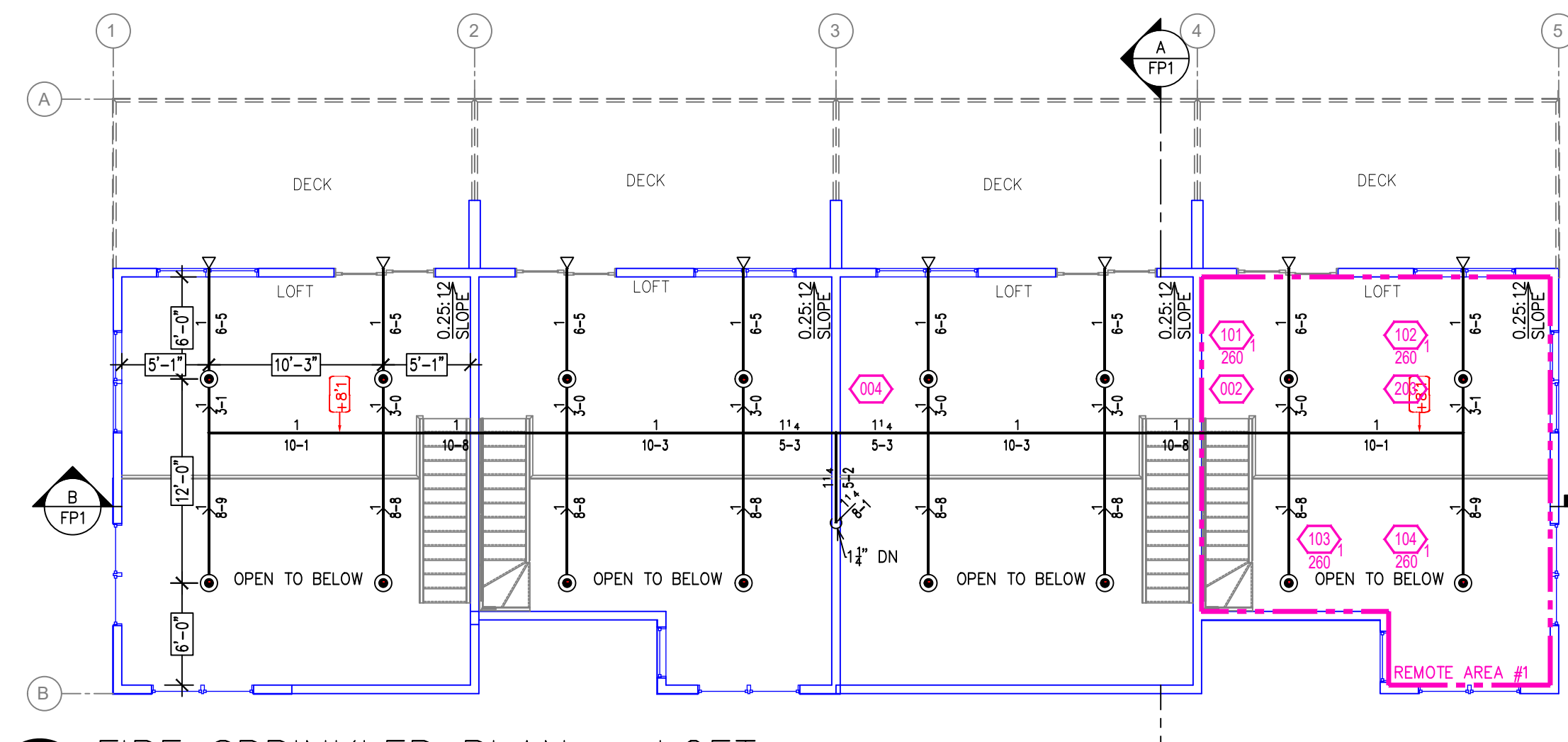
FIRE SPRINKLER PLAN - 1ST FLOOR
SCALE: 1/8" = 1'-0"



FIRE SPRINKLER PLAN - 2ND FLOOR
SCALE: 1/8" = 1'-0"



FIRE SPRINKLER PLAN - 3RD FLOOR
SCALE: 1/8" = 1'-0"



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

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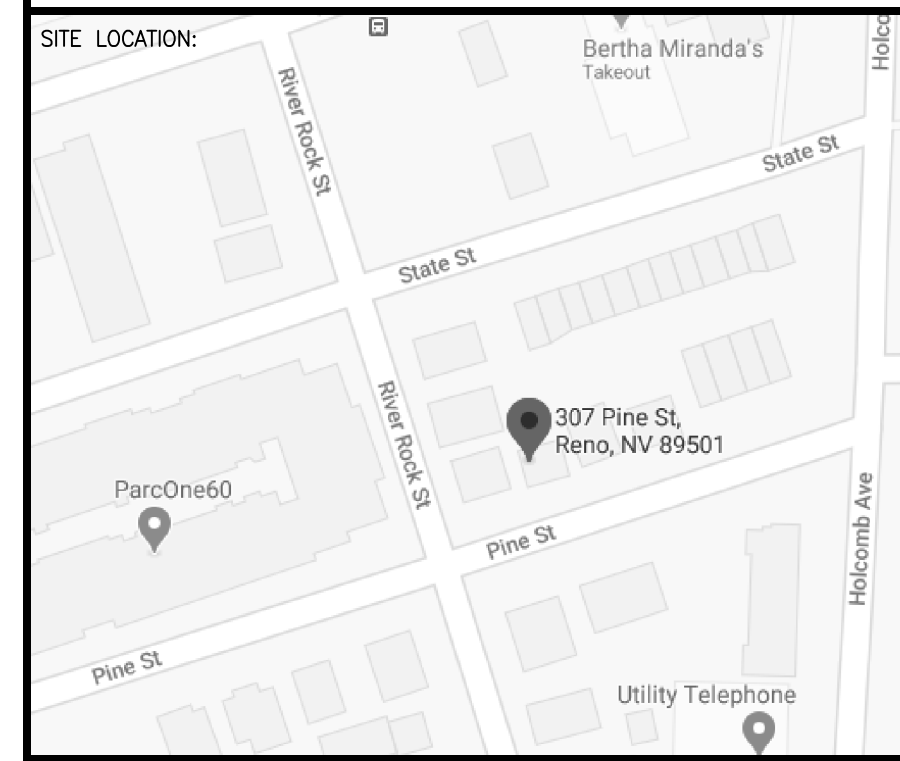
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- 106 TOTAL SPRINKLERS ON THIS SHEET**
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 - ⊕ EARTHQUAKE BRACING +12"-9" ELEV. ABOVE FINISHED FLOOR
 - ⊕ 2-WAY & 4-WAY
 - ⊕ PIPE HANGER & CHANGE ELEVATION UP
 - ⊕ TYPE DESIGNATION CHANGE ELEVATION DN
 - ⊕ HYDRAULIC REF PT
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307 PINE STREET
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DRAWING TITLE:
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SCALE: 1/8"=1'-0"	JOB NO.: 5/20/2021
DRAWN BY:	DWG NO.:
BORN ON DATE: 5/20/2021	FP-2
FILE: 5/20/2021	SHEET 2 of 2