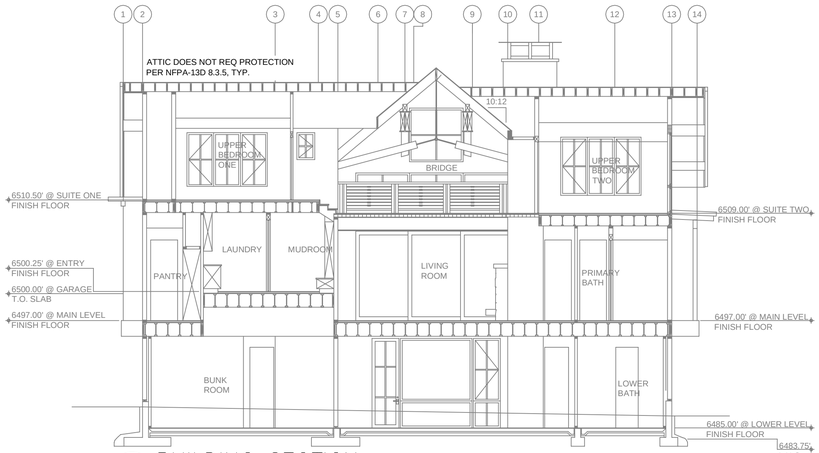
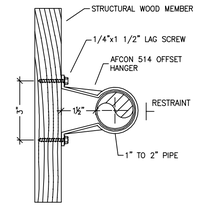
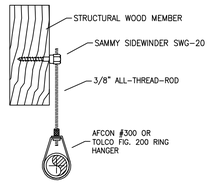


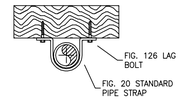

## A BUILDING SECTION
SCALE: ⅛" = 1'-0"



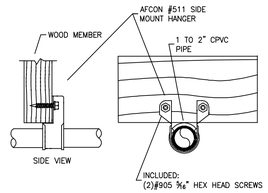

## 514 OFFSET HANGER
STEEL PIPE APPLICATION NTS



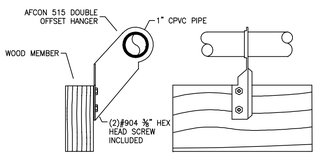

## SWG-20 HANGER DETAIL
FOR HORIZONTAL ATTACHMENT TO WOOD NTS




## STANDARD PIPE STRAP
NTS




## 511 SIDE MOUNT HANGER
CPVC PIPE APPLICATION NTS




## 515 DOUBLE OFFSET HANGER
CPVC PIPE APPLICATION NTS

# HANGER DETAILS

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 |

## 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: | PORAT GREENBERG RESIDENCE |
| PROJECT ADDRESS: | 188 EDGEWOOD DR, TAHOE CITY, CA |
| APN: | 093-330-003 |
| PROJECT TYPE: | ☑ NEW ☐ T.I. |
| TYPE OF CONSTRUCTION: | V |
| OCCUPANCY GROUP(S): | R3 |
| OCCUPIED LEVELS: | 3 |
| TOTAL SPRINKLERED AREA: | 6748 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: | 62 |
| SPECIAL NOTES: | SEE FIRE SPRINKLER NOTES THIS SHEET |

## PIPE VOLUMES:
(CPVC)

TOTAL PIPE FOOTAGE AND CAPACITY:
1" = 573' (28.34 GAL)
1-1/4" = 38' (3.01 GAL)

ADD 10% FOR DROPS AND PIPE SIZE DISCREPANCIES
TOTAL VOLUME: ±34.48 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 | |

## SPRINKLER SPACING

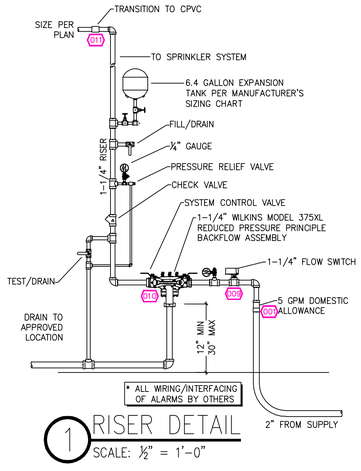
1. A SINGLE PENDENT SPRINKLER MAY BE SPACED AT A MAXIMUM OF 18'x18' (324 SQ. FT.) OR UP TO 9' OFF A WALL. (MINIMUM 8'-0" BETWEEN SPRINKLERS)
2. TWO OR MORE HEADS IN A COMPARTMENT SHALL BE SPACED AT A MAXIMUM OF 18'x18' (324 SQ. FT.) OR UP TO 9' OFF A WALL UNO. (MINIMUM 8'-0" BETWEEN SPRINKLERS)
3. SPRINKLERS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

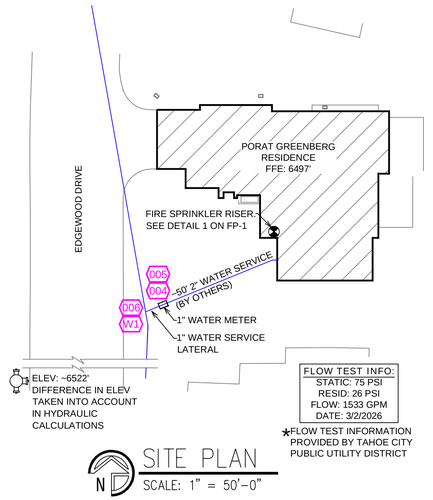
**SUBMITTAL**

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
LOWER LEVEL = 2546 S.F.
MAIN LEVEL = 3367 S.F.
UPPER LEVEL = 835 S.F.




## 1 RISER DETAIL
SCALE: ½" = 1'-0"




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

| NO. | DATE | REVISIONS | DRAWN | CHECKED |
|---|---|---|---|---|
| | | | | |

| GENERAL CONTRACTOR: | AUTHORITY HAVING JURISDICTION: |
|---|---|
| | N TAHOE FIRE DISTRICT |
| ADDRESS: | ADDRESS: 222 FAIRWAY DR |
| CITY: | CITY: TAHOE CITY, CA 96145 |
| PHONE: | PHONE: 530-583-6911 |
| 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 WITH NFPA 13D 2022
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

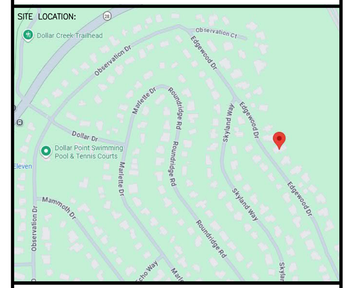
| SYM | QTY | TYPE | MFG. | MODEL# | NPT | K | TEMP | FINISH | S.I.N. |
|---|---|---|---|---|---|---|---|---|---|
| ⊗ | 54 | CONCEALED | SEN.NJ | RC-RES | 1/2" | 4.9 | 162 | WHITE | SS8464 |
| ⊠ | 3 | CONCEALED | SEN.NJ | RC-RES | 1/2" | 4.9 | 205 | WHITE | SS8464 |
| ⊗ | 5 | SEMI-RECESS | SEN.NJ | FR-RES | 1/2" | 4.9 | 205 | WHITE | SS4451 |
| | | | | | | | | | |

62 TOTAL SPRINKLERS

## 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:



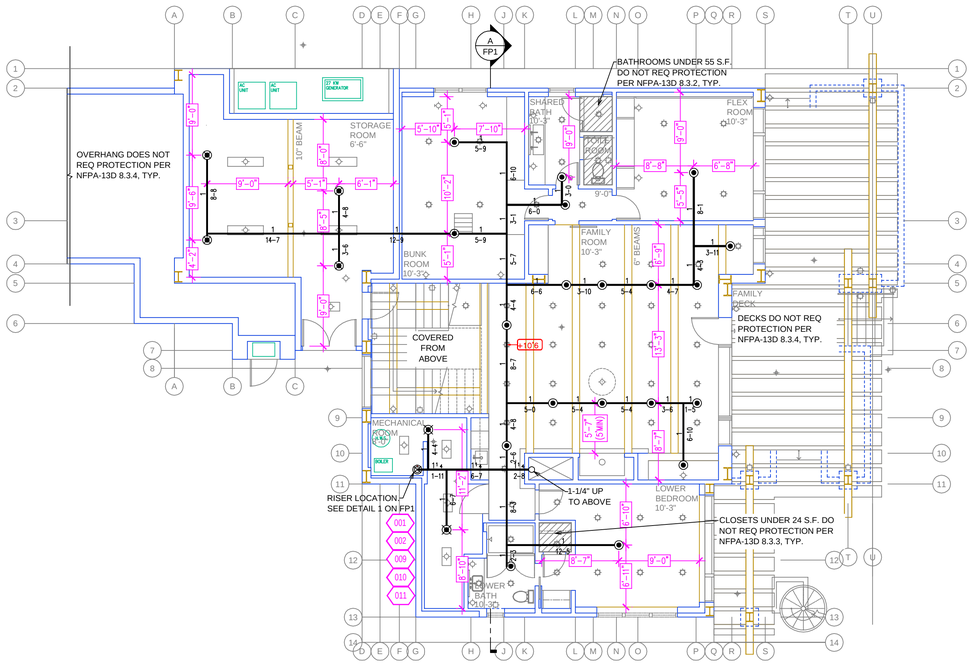

PROJECT NAME: FIRE SPRINKLER PLANS FOR

# PORAT GREENBERG RESIDENCE
188 EDGEWOOD DRIVE
TAHOE CITY, CA 96145

STAMP:

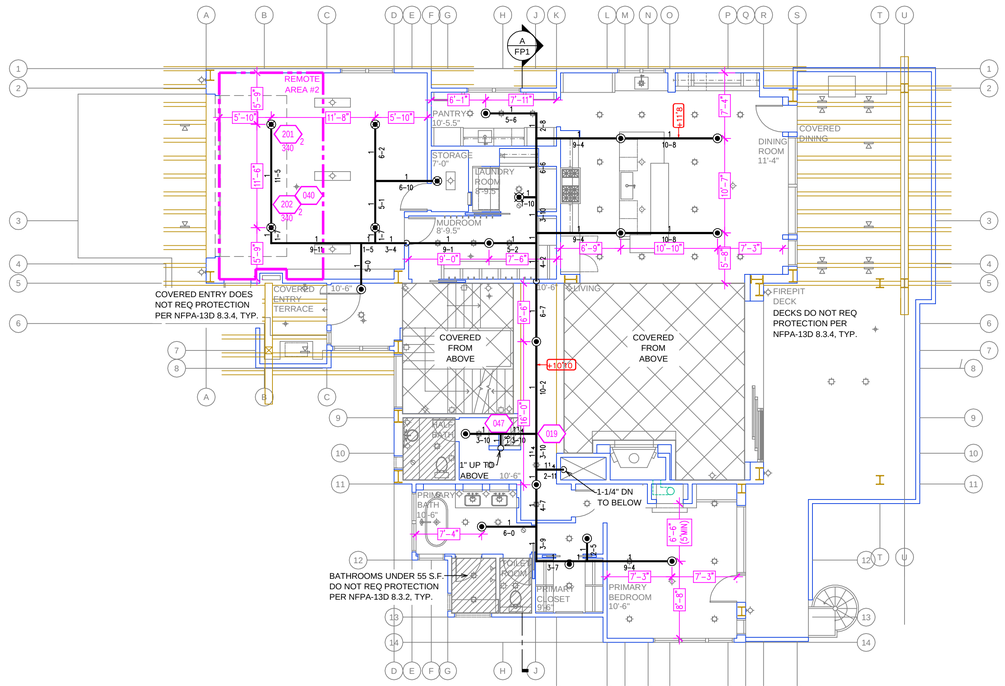
DRAWING TITLE:
## FIRE SPRINKLER PLAN

| | |
|---|---|
| SCALE: 1/8"=1'-0" | JOB NO.: 26-6044 |
| DRAWN BY: | DWG NO.: FP-1 |
| BORN ON DATE: 8/24/2026 | |
| FILE: | SHEET 1 OF 2 |



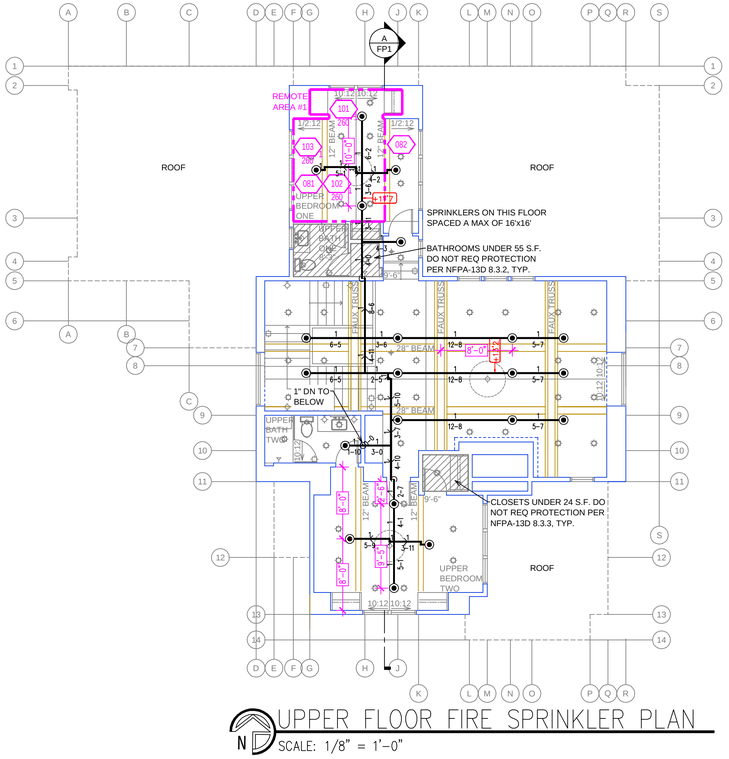

## LOWER FLOOR FIRE SPRINKLER PLAN

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




## MAIN FLOOR FIRE SPRINKLER PLAN

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




## UPPER FLOOR FIRE SPRINKLER PLAN

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

### REMOTE AREA 1

**Hydraulically Calculated System**

This system as shown on: Fire Protection Plan
company print no.: FP1 dated: 8/21/2026
for: PORAT GREENBURG RESIDENCE
at: UPPER BEDROOM ONE 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 45.0 gpm (L/min) at 67.1 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 | 7.9 |

10:12 CEILING SLOPE OUTSIDE SCOPE OF NFPA 13D. THREE SPRINKLERS CALCULATED

### REMOTE AREA 2

**Hydraulically Calculated System**

This system as shown on: Fire Protection Plan
company print no.: FP1 dated: 8/21/2026
for: PORAT GREENBURG 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 39.4 gpm (L/min) at 50.3 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 | 24.6 |

| NO. | DATE | REVISIONS | DRAWN | CHECKED |
|---|---|---|---|---|
| | | | | |

| GENERAL CONTRACTOR: | AUTHORITY HAVING JURISDICTION: |
|---|---|
| | N TAHOE FIRE DISTRICT |
| ADDRESS: | ADDRESS: 222 FAIRWAY DR |
| CITY: | CITY: TAHOE CITY, CA 96145 |
| PHONE: | PHONE: 530-583-6911 |
| 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 WITH NFPA 13D 2022
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**SPRINKLER HEAD LEGEND**

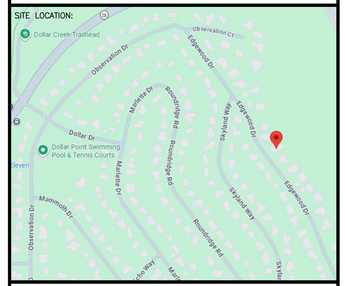
| SYM | QTY | TYPE | MFG. | MODEL# | NPT | K | TEMP | FINISH | S.I.N. |
|---|---|---|---|---|---|---|---|---|---|
| ⊗ | 54 | CONCEALED | SENJU | RC-RES | 1/2" | 4.9 | 162 | WHITE | SS8464 |
| ⊠ | 3 | CONCEALED | SENJU | RC-RES | 1/2" | 4.9 | 205 | WHITE | SS8464 |
| ⊗ | 5 | SEMI-RECESS | SENJU | FR-RES | 1/2" | 4.9 | 205 | WHITE | SS4451 |

**62 TOTAL SPRINKLERS**

**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

# PORAT GREENBERG RESIDENCE

188 EDGEWOOD DRIVE
TAHOE CITY, CA 96145

STAMP:

DRAWING TITLE:

## FIRE SPRINKLER PLAN

| | |
|---|---|
| SCALE: 1/8"=1'-0" | JOB NO.: 26-6044 |
| DRAWN BY: | DWG NO.: FP-2 |
| BORN ON DATE: 8/24/2026 | |
| FILE: | SHEET 2 OF 2 |