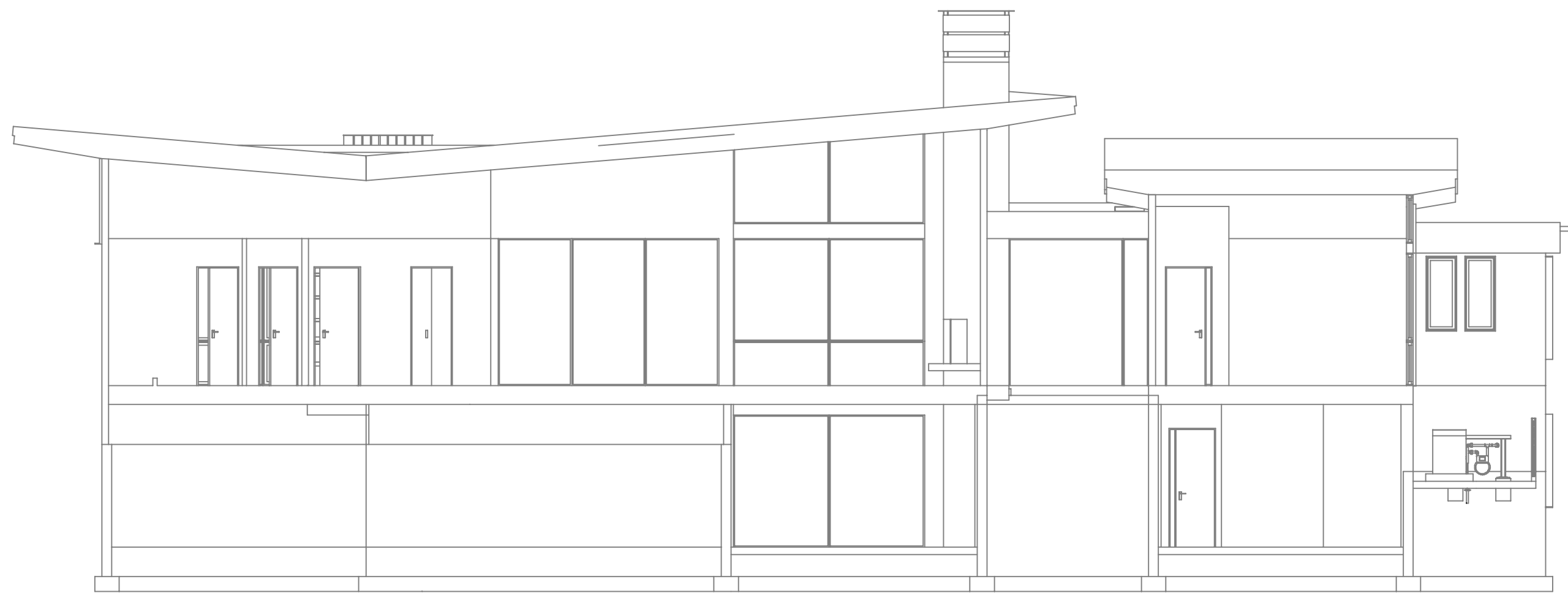


LOWER LEVEL FIRE SPRINKLER PLAN
SCALE: 1/8" = 1'-0"



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

NO.	DATE	REVISIONS	DRAWN	CHECKED

GENERAL CONTRACTOR: AUTHORITY HAVING JURISDICTION:
 EAST FORK FIRE PROTECTION DISTRICT
 ADDRESS: 1694 COUNTY RD
 CITY: MINDEN, NV 89423
 PHONE: 775-782-9048
 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 13D.
- 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.
- 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 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).

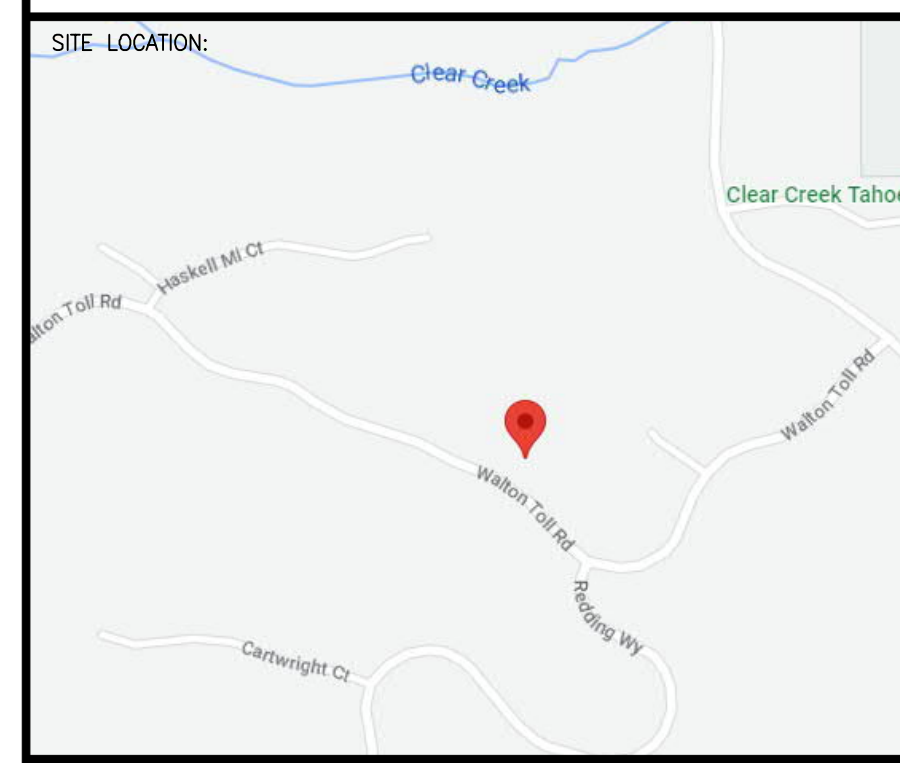
SPRINKLER HEAD LEGEND

SYM	QTY	TYPE	MFG.	MODEL#	NPT	K	TEMP	FINISH	S.L.N.
⊗	31	CONCEALED	SENJU	RC-RES	1/2"	4.9	162	WHITE	SS8464
⊗	6	CONCEALED	SENJU	RC-RES	1/2"	4.9	205	WHITE	SS8464
⊗	7	SEM-RECESS	SENJU	FR-RES	1/2"	4.9	205	WHITE	SS4451
<	1	CONCEALED	SENJU	HF-RES	1/2"	4.2	162	WHITE	SS4423

45 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	PIPE HANGER & TYPE DESIGNATION	CHANGE ELEVATION UP
—	PIPE HANGER & TYPE DESIGNATION	CHANGE ELEVATION DN
⊕	HYDRAULIC REF PT	INSPECTORS TEST
⊕	GRID OR THRD CAP	AUX DRAIN
⊕	GRID COUPLING	REVISION NOTATION
⊕	TYPICAL POINT OF CONNECTION (POC)	LOCAL ALARM

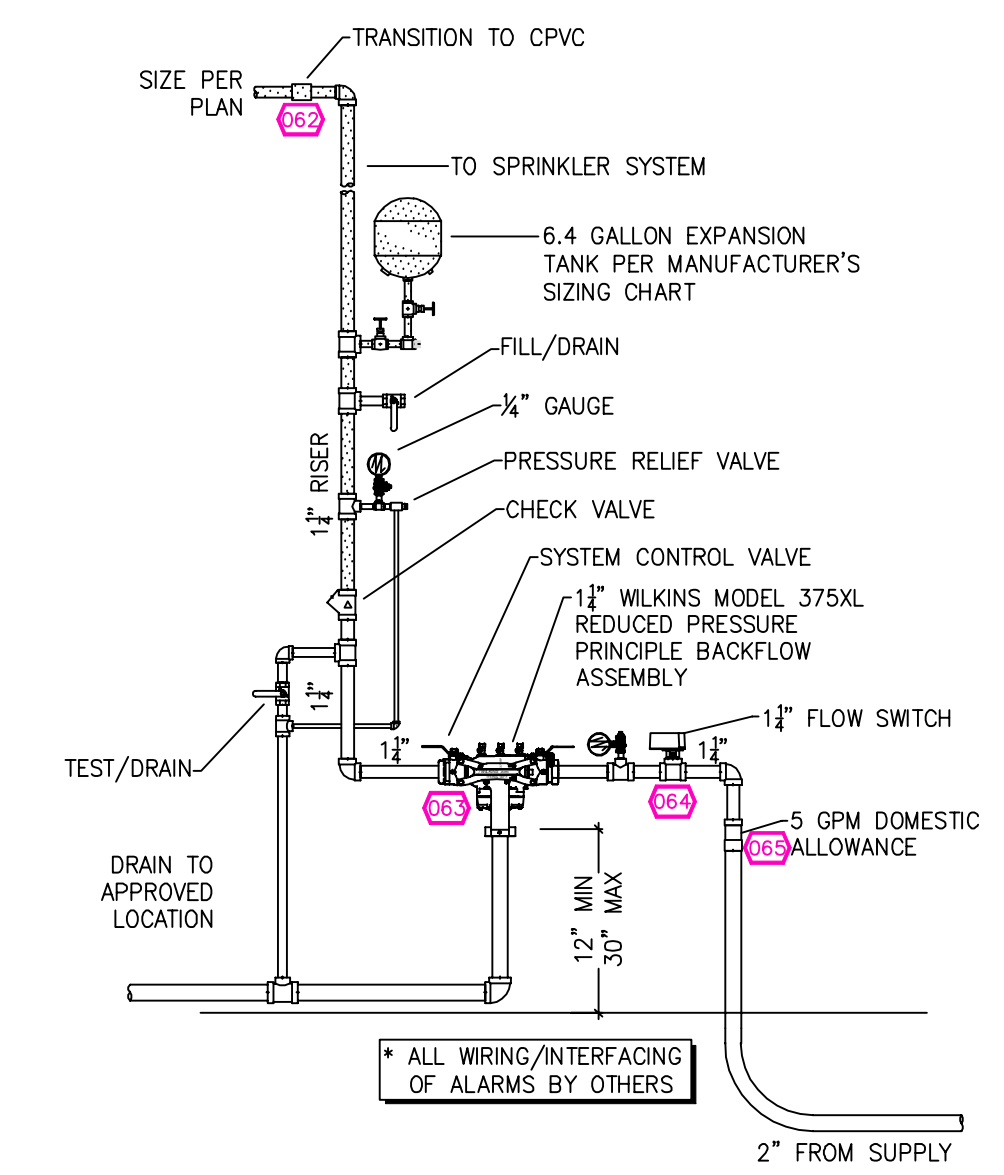


PROJECT NAME: FIRE SPRINKLER PLANS FOR
CARMEL/RUEHSEN RESIDENCE
 210 WALTON TOLL ROAD
 CARSON CITY, NV 89705
 LOT 213 CCT

STAMP:

DRAWING TITLE:
FIRE SPRINKLER PLAN

SCALE: 1/8" = 1'-0" JOB NO.:
 DRAWN BY: DWG NO.:
 BORN ON DATE: 3/10/2023 FILE: **FP-1**
 SHEET 1 OF 2



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

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 = 2,363 S.F.
 MAIN LEVEL = 3,925 S.F.

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"
0-250 WATT		

PIPE VOLUMES:
 (CPVC)

TOTAL PIPE FOOTAGE AND CAPACITY:
 1" = 484 (23.94 GAL)
 1 1/2" = 38 (3.01 GAL)

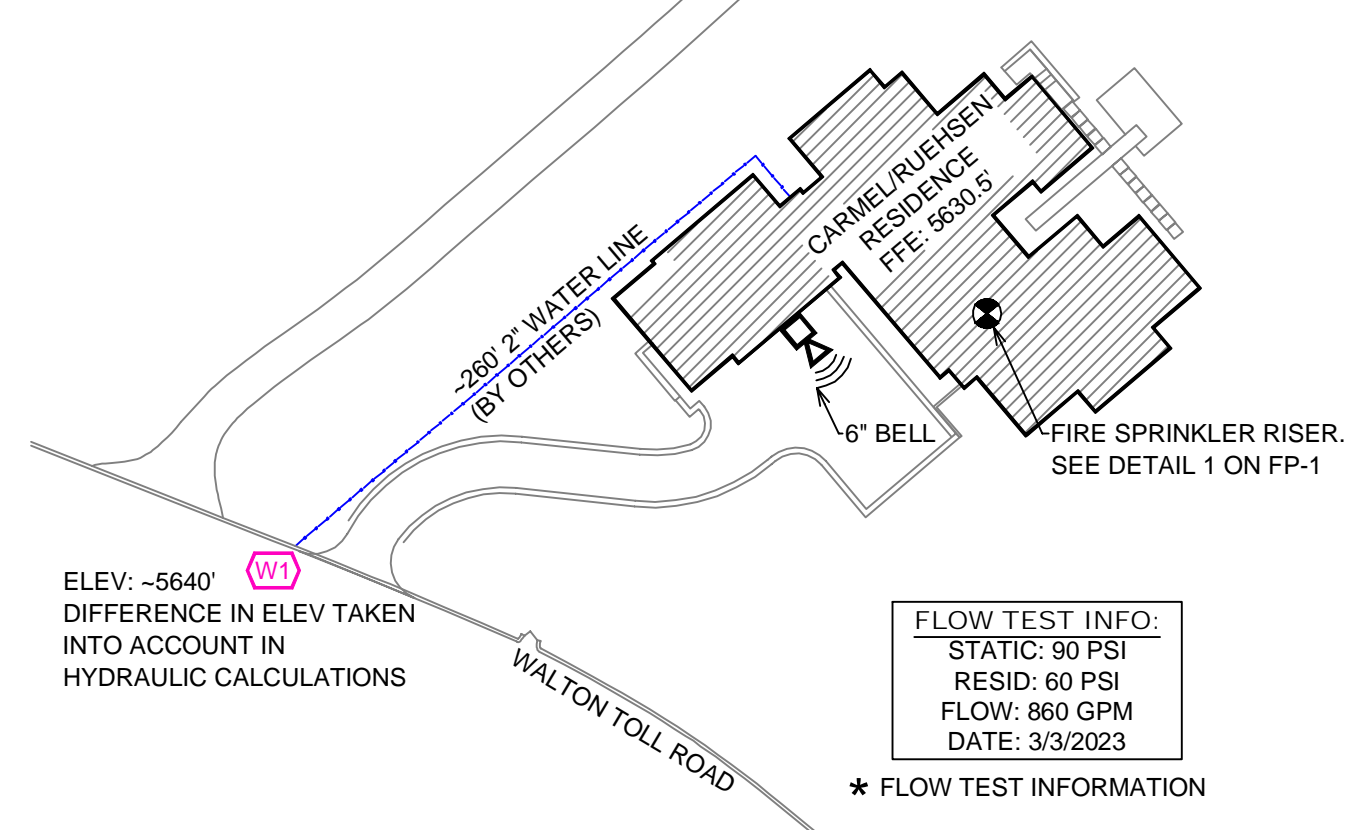
ADD 10% FOR DROPS AND PIPE SIZE DISCREPANCIES
 TOTAL VOLUME: ±29.64 GALLONS

NFPA 13 - Table A.7.2.3 Capacity of 1 ft of pipe (Based on Actual Internal Pipe Diameter)

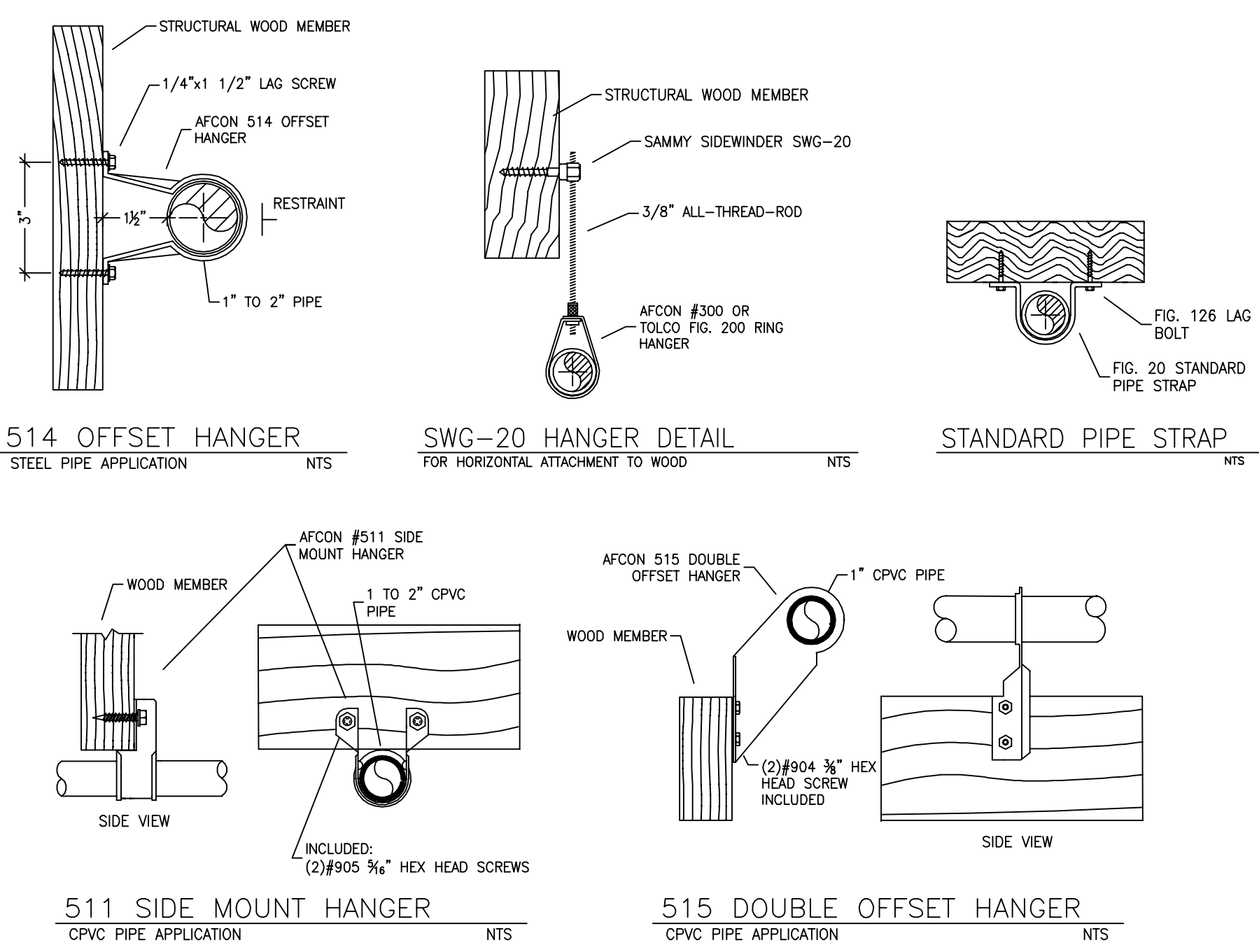
Nominal Pipe Diameter (in.)	Schedule 40 Schedule 10 (gal)	CPVC (gal)
1	0.045	0.049
1 1/4	0.078	0.085
1 1/2	0.106	0.115
2	0.174	0.190
2 1/2	0.248	0.283

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	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



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



HANGER DETAILS

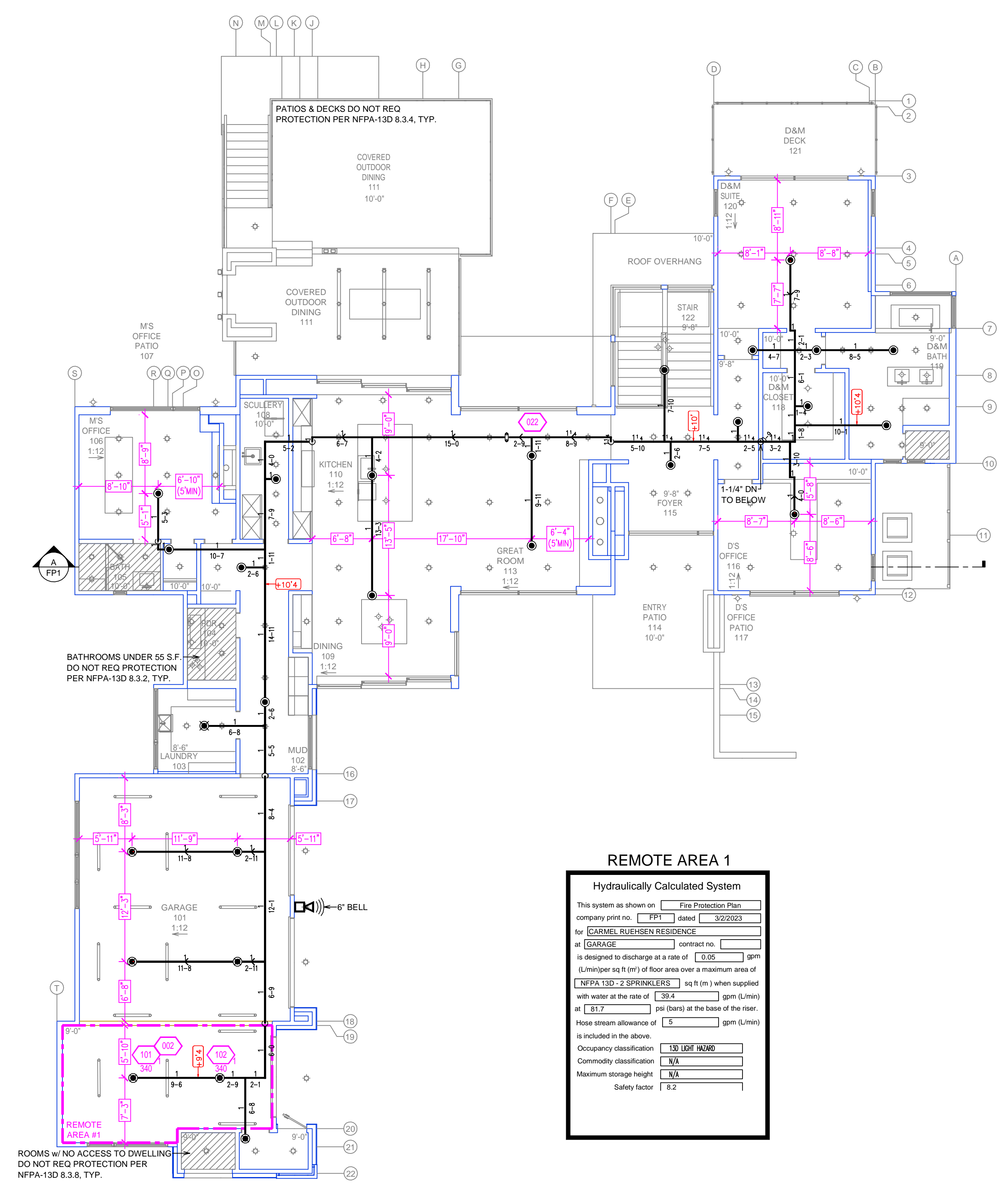
SPRINKLER SPACING

- 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

PROJECT SUMMARY:

PROJECT NAME: CARMEL/RUEHSEN RESIDENCE
 PROJECT ADDRESS: 210 WALTON TOLL RD, CARSON CITY, NV 89705
 APN: 1419-03-002-011
 PROJECT TYPE: NEW T.I.
 TYPE OF CONSTRUCTION: VB
 OCCUPANCY GROUP(S): R-3 / U
 OCCUPIED LEVELS: 2
 TOTAL SPRINKLERED AREA: 6288 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: 45
 SPECIAL NOTES: SEE FIRE SPRINKLER NOTES THIS SHEET



MAIN LEVEL 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. FPI dated 3/2/2023
for CARMEL RUEHSEN 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 (m²) when supplied
with water at the rate of 38.4 gpm (L/min)
at 81.7 psi (bars) at the base of the riser.
Hose stream allowance of 5 gpm (L/min)
is included in the above.

Occupancy classification 1D 101F HAUSD
Commodity classification NA
Maximum storage height NA
Safety factor 0.2

NO.	DATE	REVISIONS	DRAWN	CHECKED

GENERAL CONTRACTOR: AUTHORITY HAVING JURISDICTION:
EAST FORK FIRE PROTECTION DISTRICT
ADDRESS: 1694 COUNTY RD
CITY: MINDEN, NV 89423
PHONE: 775-782-9048
CONTACT: CONTACT:

ARCHITECT: FIELD INSPECTIONS:
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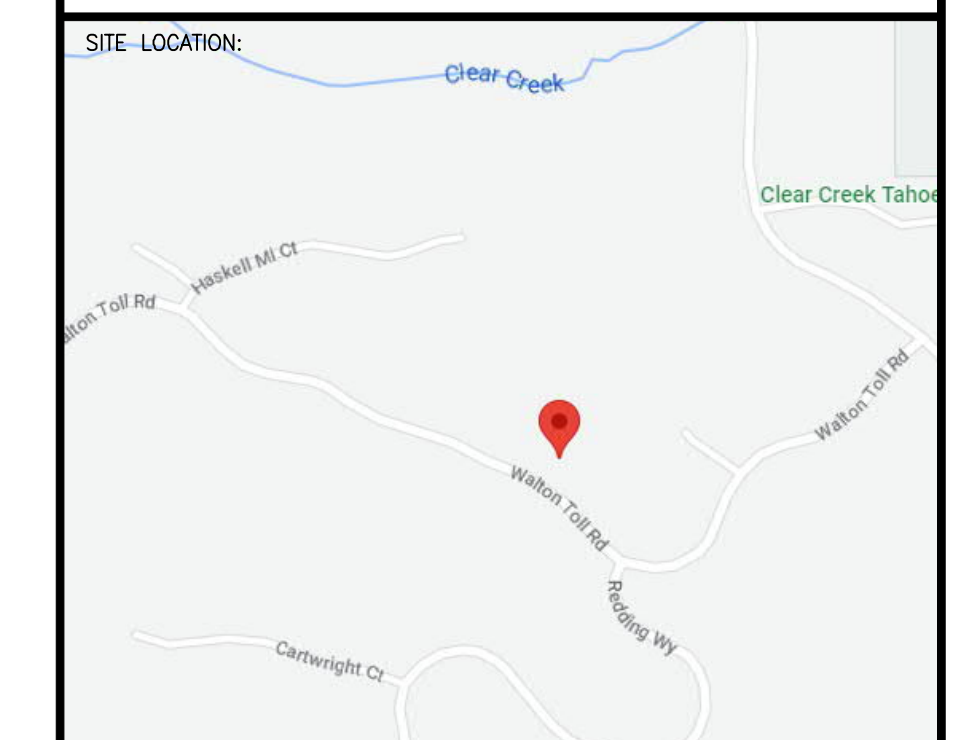
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 - 2-WAY & 4-WAY — CHANGE ELEVATION UP
 - PIPE HANGER & TYPE DESIGNATION — CHANGE ELEVATION DN
 - HYDRAULIC REF PT — INSPECTORS TEST
 - GRID OR THRD CAP — AUX DRAIN
 - GRID COUPLING — REVISION NOTATION
 - ⊕ TYPICAL POINT OF CONNECTION (POC) — LOCAL ALARM



PROJECT NAME:
FIRE SPRINKLER PLANS FOR
CARMEL/RUEHSEN RESIDENCE
210 WALTON TOLL ROAD
CARSON CITY, NV 89705
LOT 213 CCT

STAMP:

DRAWING TITLE:
FIRE SPRINKLER PLAN

SCALE: 1/8" = 1'-0" JOB NO.:
DRAWN BY: DWG NO.:
BORN ON DATE: 3/10/2023 FILE: **FP-2**
SHEET 2 OF 2