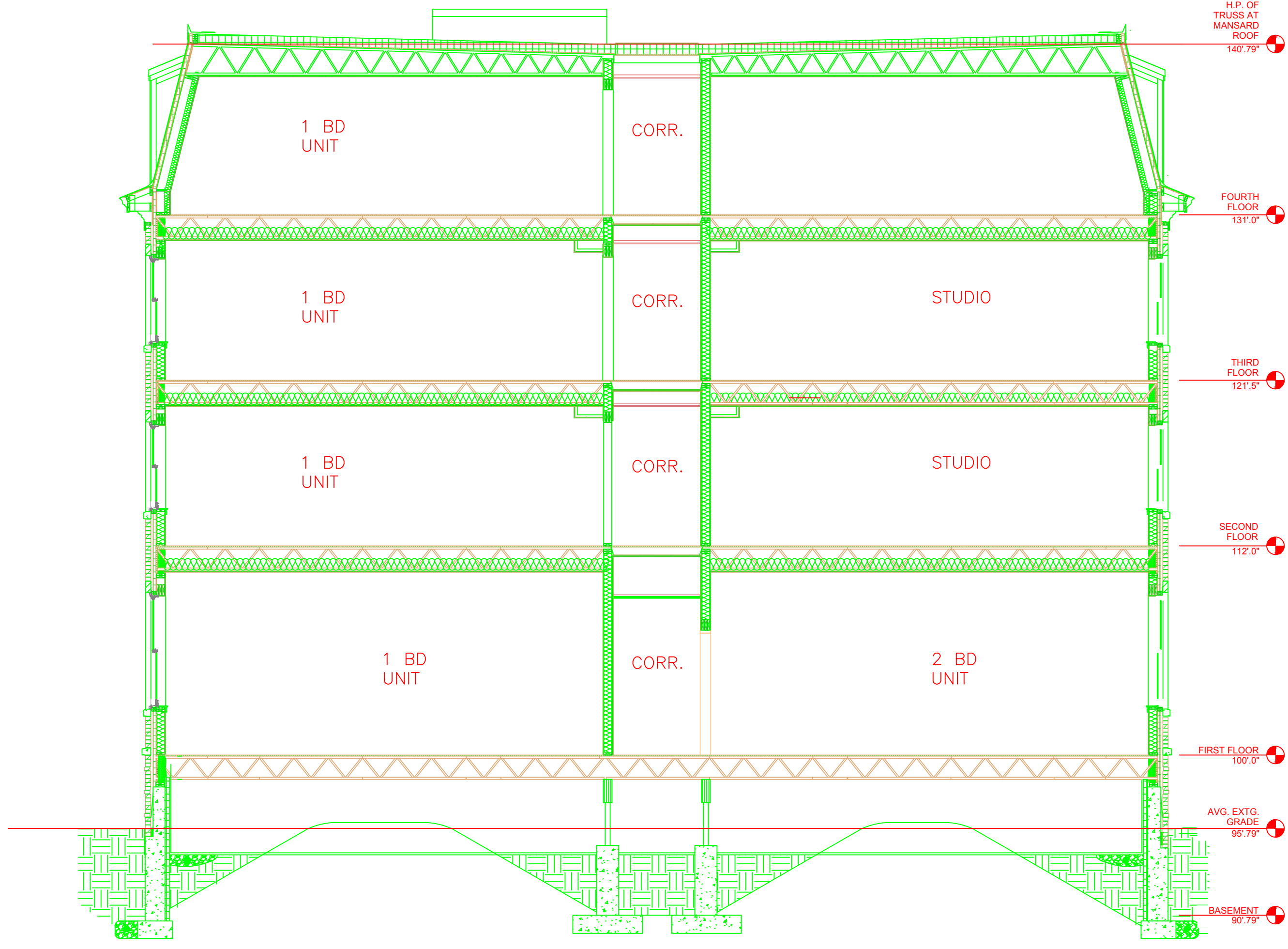
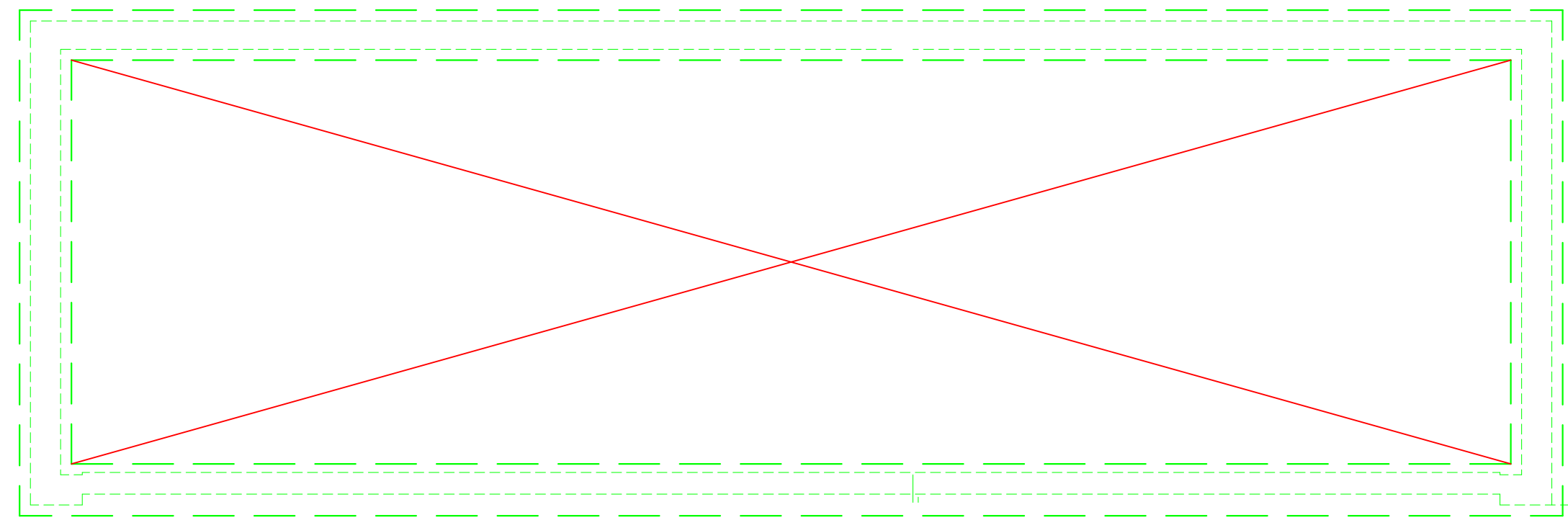


GENERAL NOTES:

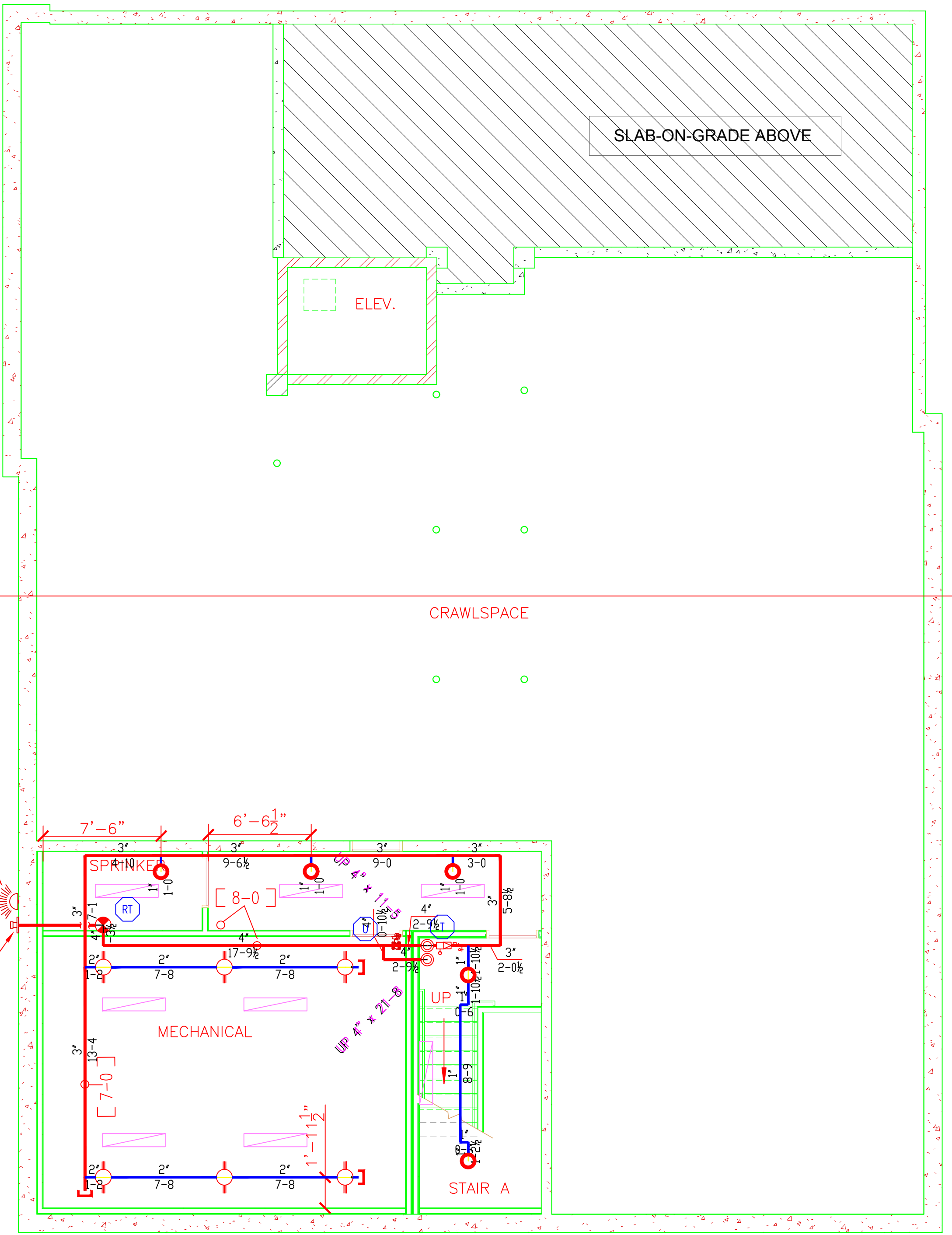
- IT IS THE BUILDING OWNERS RESPONSIBILITY TO PROVIDE ADEQUATE HEAT FOR ALL AREAS IN THE BUILDING PROTECTED BY WET SPRINKLER SYSTEMS AND FOR ALL WATER FILLED SUPPLY PIPES, VALVES AND SYSTEM RISERS IN ALL DRY PIPE SPRINKLER SYSTEMS.
- ALL NEW PIPING IS TO BE HYDROSTATICALLY TESTED AT NOT LESS THAN 200 PSI FOR 2 HOURS, OR AT 50 PSI IN EXCESS OF THE MAXIMUM PRESSURE, WHEN THE MAXIMUM PRESSURE TO BE MAINTAINED IS IN EXCESS OF 150 PSI. (PER NFPA 13)
- WHETHER OR NOT INDICATED ON DRAWINGS, THE FOLLOWING ITEMS ARE TO BE PROVIDED:
 - SPARE HEAD CABINET WITH WRENCH (NFPA 13)
 - PROVISIONS FOR FLUSHING CONNECTIONS AND DRAINING OF ALL PIPE.
 - INSPECTORS TEST CONNECTION SHALL BE PROVIDED FOR EACH SYSTEM
 - A) FOR WET PIPE SYSTEMS SEE NFPA 13
 - B) FOR DRY PIPE SYSTEMS SEE NFPA 13
 - AIR PRESSURE SHALL BE MAINTAINED ON ALL DRY PIPE SYSTEMS BY AN APPROVED AUTOMATIC AIR COMPRESSOR OR PLANT AIR SYSTEM SPECIFICALLY APPROVED FOR AND CAPABLE OF AUTOMATICALLY MAINTAINING THE REQUIRED AIR PRESSURE.
 - WET PIPE SYSTEMS SHALL BE PROVIDED WITH A RELIEF VALVE NOT LESS THAN 1/2" IN SIZE. (NFPA 13).
- ALL PIPE 2" AND SMALLER SHALL BE CPVC WITH CPVC FITTINGS.
- ALL PIPE 2" AND SMALLER IN ORDINARY HAZARD AREAS TO BE SCHEDULE 40 STEEL.
- ALL PIPE 3" AND LARGER, SHALL BE SCHEDULE 10 STEEL, WITH GROOVED COUPLINGS AND VICTAULIC MECHANICAL FITTINGS OR EQUIVALENT.
- ALL MECHANICAL TRADES ARE TO COORDINATE THEIR WORK WITH SPRINKLER WORK AS SHOWN ON THESE PLANS.
- ALL HANGERS AND LOCATIONS ARE TO BE IN ACCORDANCE WITH N.F.P.A. 13.
- ALL PIPING IS TO BE PITCHED IN ACCORDANCE WITH N.F.P.A. 13.
- HYDRAULIC DATA REFERENCE POINTS: (25) (12)
- CENTER LINE OF PIPE ABOVE FINISH FLOOR 12'-0" BELOW DECK 12"
- PROTECTIVE CAPS ARE TO REMAIN ON THE SPRINKLER HEADS UNTIL AFTER CEILINGS ARE INSTALLED.
- THE SCOPE OF WORK UNDER THIS CONTRACT IS TO DESIGN AND INSTALL A WET SPRINKLER SYSTEM PER NFPA 13R.

NFPA 13R EXCEPTIONS

- SPRINKLERS SHALL BE INSTALLED IN ALL AREAS.
- EXCEPTION NO. 1: SPRINKLERS SHALL NOT BE REQUIRED IN BATHROOMS WHERE THE AREA DOES NOT EXCEED 55 FEET SQUARED AND THE WALLS AND CEILING, INCLUDING WALLS AND CEILING BEHIND FIXTURES, ARE NON-COMBUSTIBLE OF LIMITED COMBUSTIBLE MATERIALS PROVIDING A 15 MINUTE THERMAL BARRIER. THE AREA OCCUPIED BY A NON-COMBUSTIBLE, FULL HEIGHT, SHOWER/BATHING ENCLOSURE SHALL NOT BE REQUIRED TO BE ADDED TO THE FLOOR AREA WHEN DETERMINING THE AREA OF THE BATHROOM.
- EXCEPTION NO. 2: SPRINKLERS SHALL NOT BE REQUIRED IN CLOTHES CLOSETS, LINEN CLOSETS, AND PANTRIES WITHIN THE DWELLING UNITS WHERE THE AREA OF SPACE DOES NOT EXCEED 24 FEET SQUARED, THE LEAST DIMENSION DOES NOT EXCEED 3 FEET, AND THE WALLS AND CEILING ARE SURFACED WITH NON-COMBUSTIBLE MATERIALS AS DEFINED BY NFPA 220, STANDARD ON TYPES OF BUILDING CONSTRUCTION.
- EXCEPTION NO. 3: SPRINKLERS SHALL NOT BE REQUIRED IN ANY PORCHES, BALCONIES, CORRIDORS, AND STAIRS THAT ARE OPEN TO ATTACHED.
- EXCEPTION NO. 4: SPRINKLERS SHALL NOT BE REQUIRED IN ATTICS, PENTHOUSE, EQUIPMENT ROOMS, CRAWL SPACES, FLOOR/CEILING SPACES, ELEVATOR SHAFTS, AND OTHER CONCEALED SPACES THAT ARE NOT USED OR INTENDED FOR LIVING PURPOSES OR STORAGE.
- EXCEPTION NO. 5: SPRINKLERS SHALL NOT BE REQUIRED IN CLOSETS ON EXTERIOR BALCONIES REGARDLESS OF SIZE AS LONG AS THERE ARE NO DOORS OR UNPROTECTED PENETRATIONS FROM THE CLOSET DIRECTLY INTO THE DWELLING UNIT.

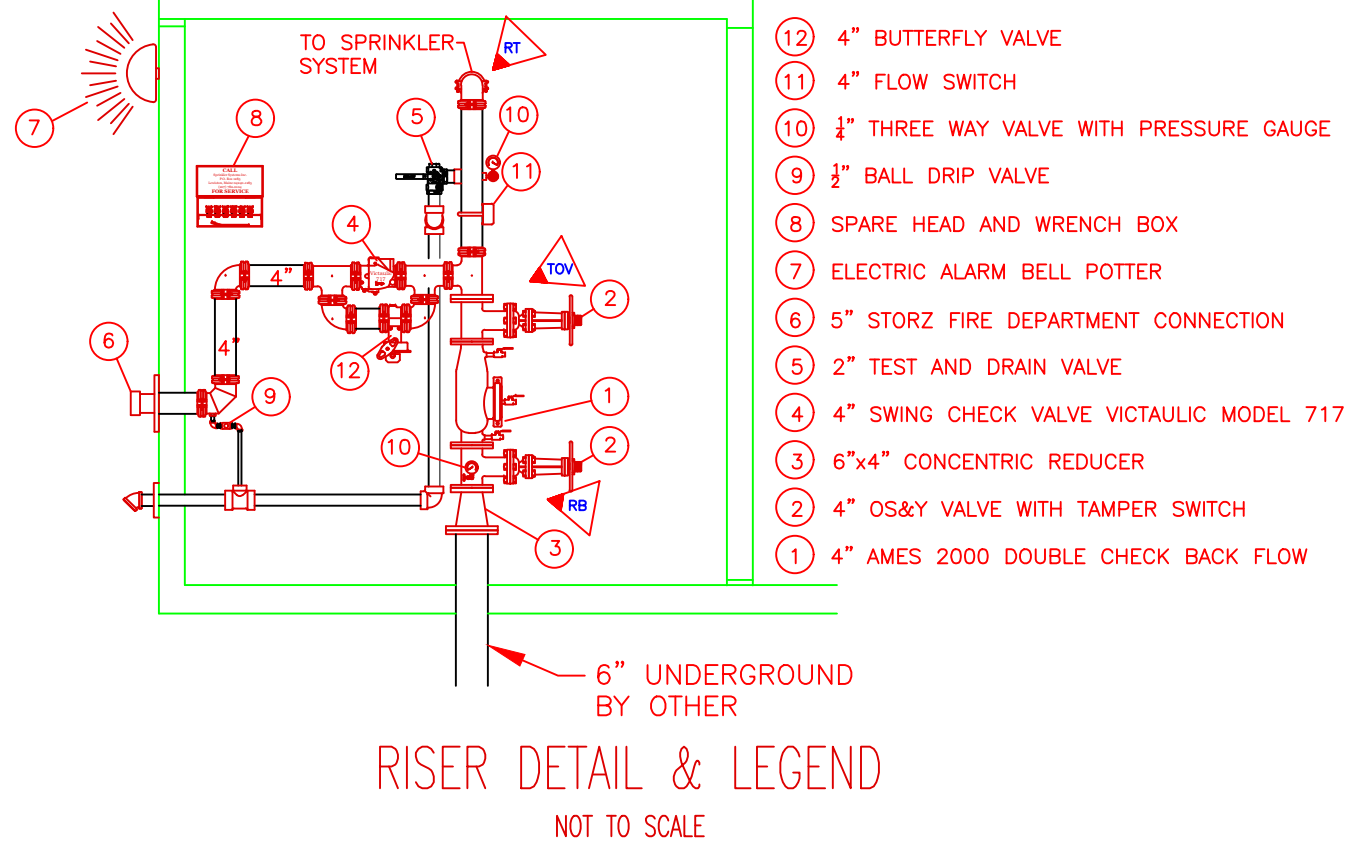


BUILDING SECTION "A"
SCALE: 3/16" = 1'-0"



BASEMENT SPRINKLER PLAN

SCALE: 3/16" = 1'-0"
FINISH FLOOR ELEV. 90.79'



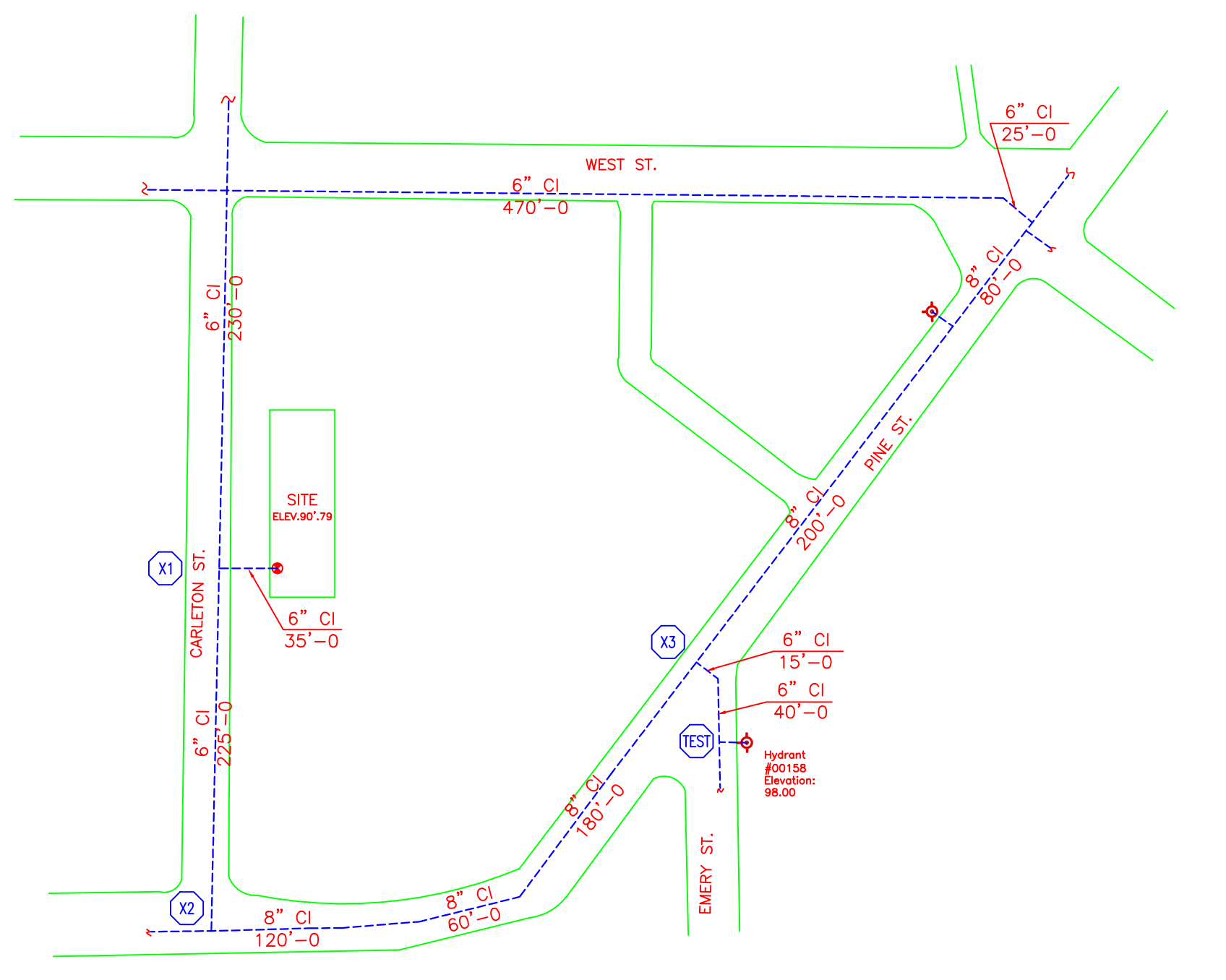
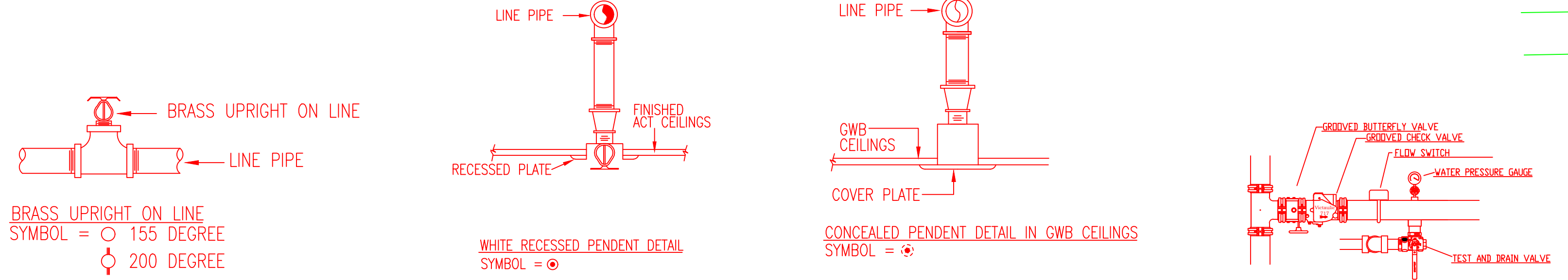
RISER DETAIL & LEGEND
NOT TO SCALE

HYDRAULIC DATA NAMEPLATE
This Building is protected by a hydraulically designed Automatic Sprinkler System

Location: AREA-1
No. of Sprinkler: 4
Basis of design:
1. Density: .05 gpm/ft²
2. Design area of discharge: 4 HEAD CAL68
System Demand:
1. Water Flow Rate: 66.136 gpm
Base/Pump: 46.155 psi
CUSHION = 6.403 psi

HYDRAULIC DATA NAMEPLATE
This Building is protected by a hydraulically designed Automatic Sprinkler System

Location: AREA-2
No. of Sprinkler: 10
Basis of design:
1. Density: .20 gpm/ft²
2. Design area of discharge: ENTIRE
System Demand:
1. Water Flow Rate: 256.25 gpm
Base/Pump: 42.760 psi
CUSHION = 5.567 psi
MOST REMOTE



SITE PLAN

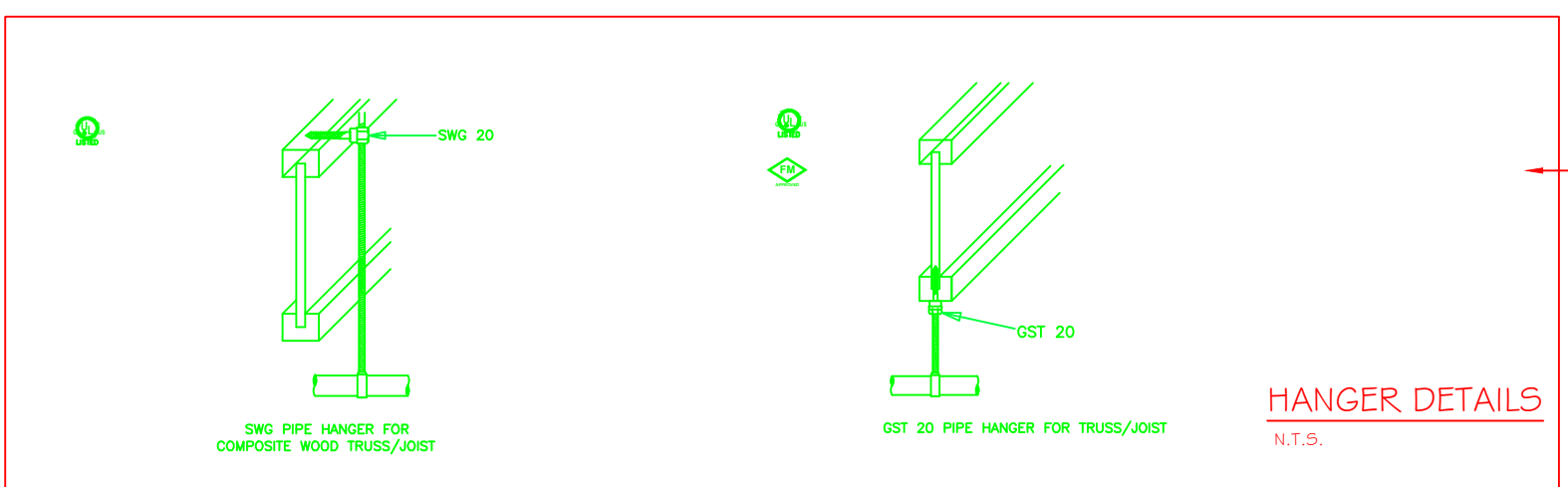
SCALE: "N12" FINISH FLOOR ELEV. 90.79'

WATER DATA

STATIC	50 PSI
RESIDUAL	47 PSI
FLOW	1034 GPM
BY	PORTLAND WATER DISTRICT
DATE	04/28/15
HYDRANT ELEV.	98.00' +/-

SUBMITTAL COPY

1. Type of Hazard	LIGHT	2. Deflector Distance	PER SPEC
3. Pipe Type Used	BLK_SCH_10/CPVC	4. Sprinkler Area	PER SPEC
5. Type of Construction	NON-COMBUSTIBLE		
6. Maximum Spacing Allowed	PER NFPA 13R		
7. PIPE SIZING METHOD: PIPE SCHEDULE	<input type="checkbox"/>	HYDRAULICALLY CALCULATED	<input checked="" type="checkbox"/>
8. ALL HANGERS AND LOCATIONS TO BE IN ACCORDANCE WITH N.F.P.A. PAMPHLET NO. 13			
9. HIGH DEGREE TEMPERATURE SPRINKLER HEADS TO BE INSTALLED IN ACCORDANCE WITH N.F.P.A. PAMPHLET NO. 13			



HANGERS

AS SHOWN IN DETAIL	
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ABBREVIATIONS

B	Bottom of Beam
D	Bottom of Deck
P	Bottom of Pipe
HV	Heat Valve
N & C	Nipple and Cap
N	Net in Contract
NIS	Net to Scale
OB	Open Bar Joints
PRV	Pressure Red Valve
RM	Roof Membrane
SP	Staircase
TDB	Top of Beam
TOP	Top of Slab
TOS	Top of Steel
UN	Unlabeled Orientation Noted
CL	Centerline
NAC	No Automatic Sprinklers
OTA	Open to Above

CONTRACT RESPONSIBILITIES

ITEM	FPC	OTHERS
STREET CORN		
LUIG MAN		
EXCAVATION		
FLUSHING		
WIRING		
PAINTING		
TAMPER SWITCHES		
FLOW SWITCHES		
STREET CORN		

SPRINKLER HEAD LEGEND

SYMBOL	MAKE	MODEL	SIN	FINISH	TYPE	TEMP	NPT	ORIFICE	K-FACTOR	TOTAL
●	RELIABLE	G5 80	RA3412	WHITE	CONCEAL	165° F	3/4"	17/32"	8.0	12
●	RELIABLE	F1FR L0	R3622	BRONZE	UPRIGHT	200° F	3/4"	17/32"	8.0	6
●	RELIABLE	F1RES 49	R3516	WHITE	SEMI REC	155° F	1/2"	7/16"	4.9	24
●	RELIABLE	F1FR S6	RA1414	BRONZE	UPRIGHT	155° F	1/2"	7/16"	5.6	13
●	RELIABLE	RFC49	RA0616	WHITE	CONCEAL	165° F	1/2"	7/16"	4.9	146
●	RELIABLE	F1FR L0	R3622	BRONZE	UPRIGHT	155° F	3/4"	17/32"	8.0	7
TOTAL										208

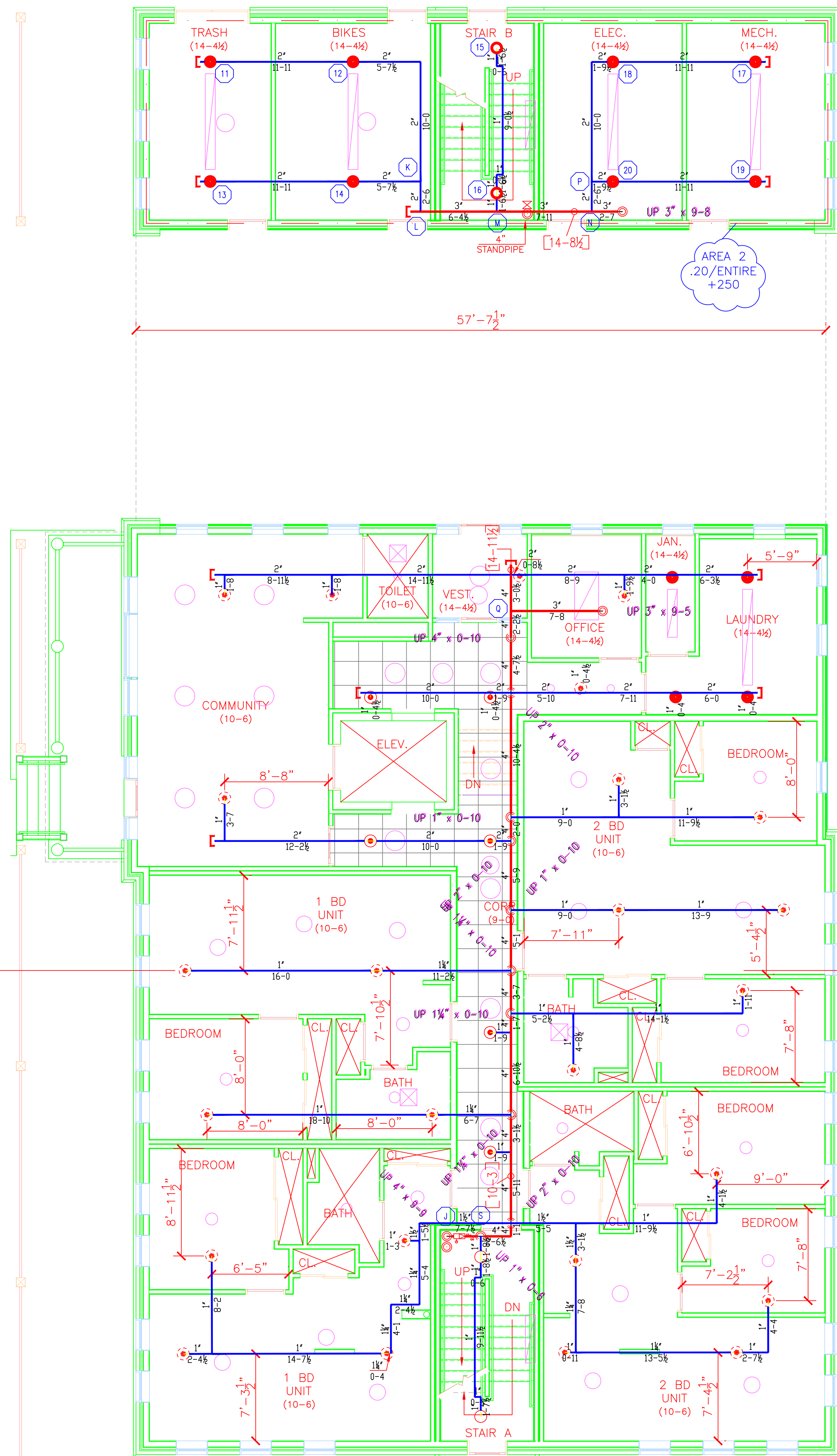
SPRINKLER SYSTEMS INC.
P.O. BOX 1285
LEWISTON MAINE
04243-1285

17 CARLETON ST.
17 CARLETON STREET
PORTLAND, ME 04101

CONTRACT WITH: BENCHMARK

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		

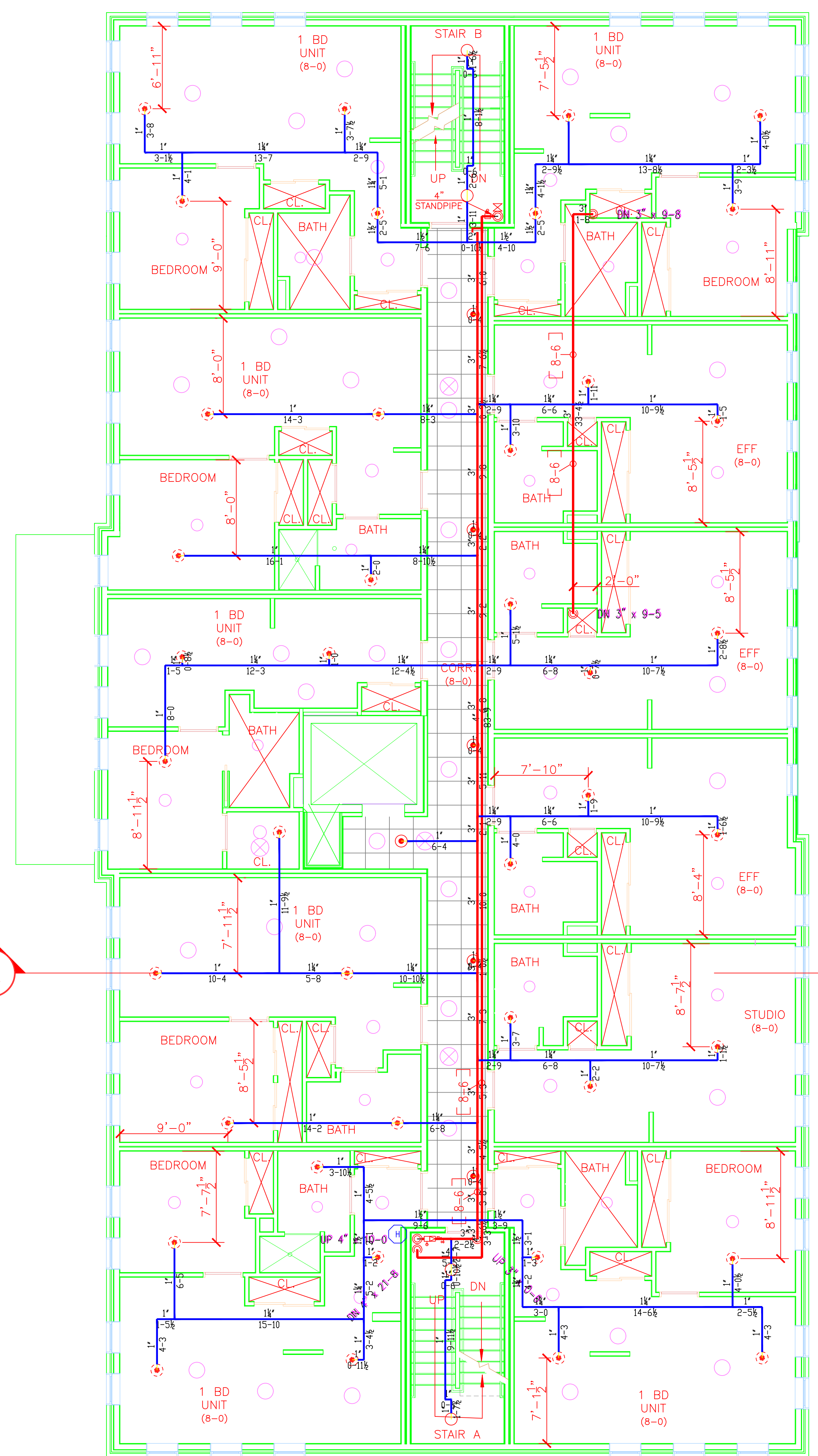
DATE: 3/31/2017
TOTAL SPKRS ON JOB: 208
SHEET# 1 of 3
JOB# 16149



FIRST FLOOR SPRINKLER PLAN

SCALE: 3/16" = 1'-0"
FINISH FLOOR ELEV. 100.0'

- LINES @ 11'-1" A.F.F.
- MAINS @ 10'-3" A.F.F.



SECOND FLOOR SPRINKLER PLAN

SCALE: 3/16" = 1'-0"
FINISH FLOOR ELEV. 112.0'

- LINES @ 8'-6" A.F.F.
- MAINS @ 8'-6" A.F.F.

SPRINKLER HEAD LEGEND										
SYMBOL	MAKE	MODEL	SIN	FINISH	TYPE	TEMP	NPT	ORIFICE	K-FACTOR	TOTAL
●	RELIABLE	Q5 80	RA3412	WHITE	CONCEAL	165° F	3/4"	17/32"	8.0	12
○	RELIABLE	F1FR LO	R3622	BRONZE	UPRIGHT	200° F	3/4"	17/32"	8.0	6
○	RELIABLE	F1FR 49	R3516	WHITE	SEM REC PENDANT	155° F	1/2"	7/16"	4.9	24
○	RELIABLE	F1FR 56	RA1414	BRONZE	UPRIGHT	155° F	1/2"	1/2"	5.6	13
○	RELIABLE	RFC49	RA0616	WHITE	CONCEAL	165° F	1/2"	7/16"	4.9	146
○	RELIABLE	F1FR LO	R3622	BRONZE	UPRIGHT	155° F	3/4"	17/32"	8.0	7
										TOTAL → 208

LICENSE# 093
R.M.S.# 442

PERMIT # ????

P.O. BOX 1285
LEWISTON MAINE
04243-1285

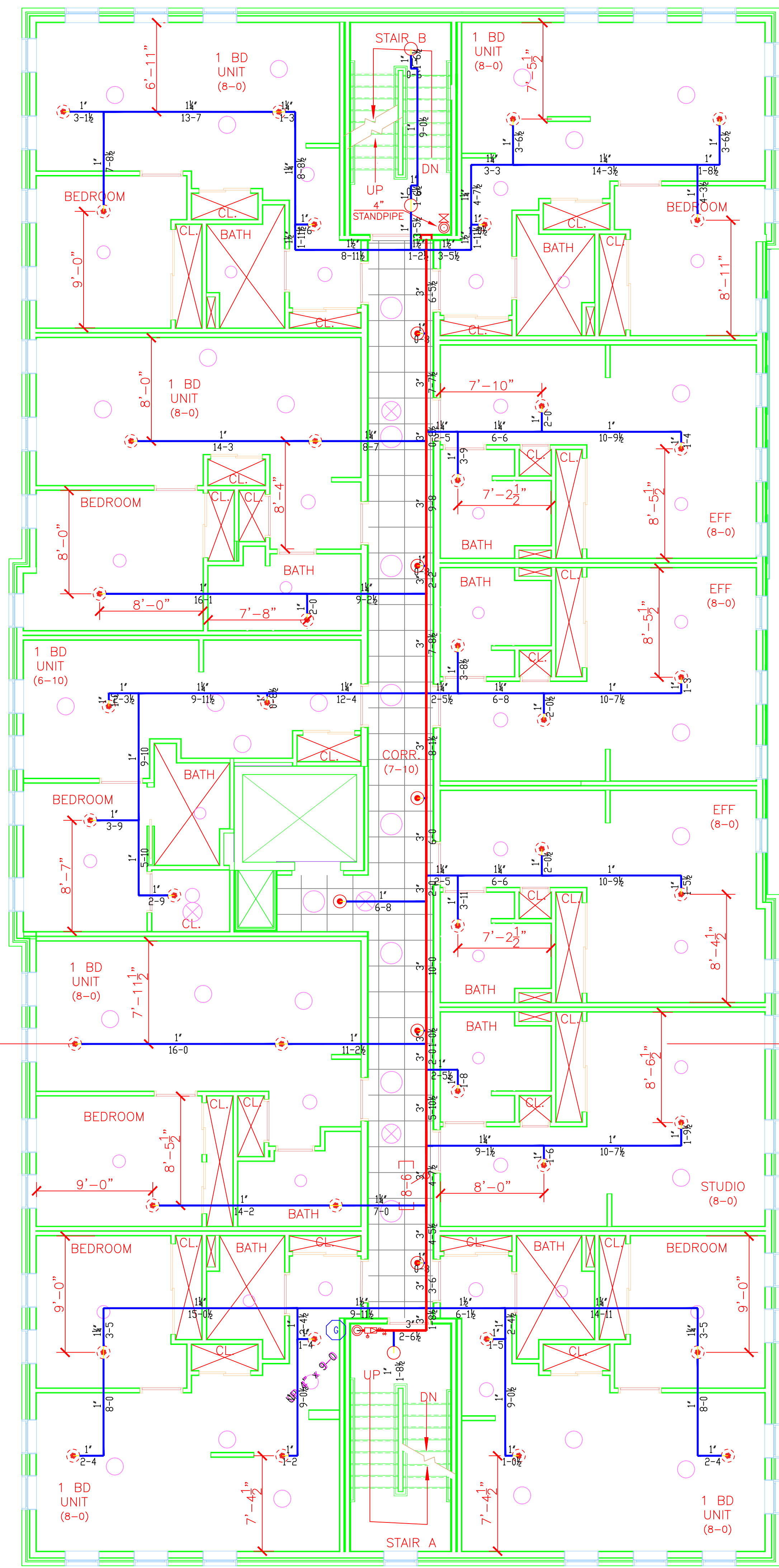
17 CARLETON ST.
17 CARLETON STREET
PORTLAND, ME 04101

CONTRACT WITH BENCHMARK

SYSTEM TYPE	NO.	DATE	DESCRIPTION
WET			
DRY			
DELUGE			
PREACTION			
ME LIFE			
HYDRO-PRO			

AS NOTED
DRAWN BY RDO
CHECKED BY CDS
DATE 3/31/2017
TOTAL SPKRS ON JOB 208
SHEET# 2 of 3
JOB# 16149

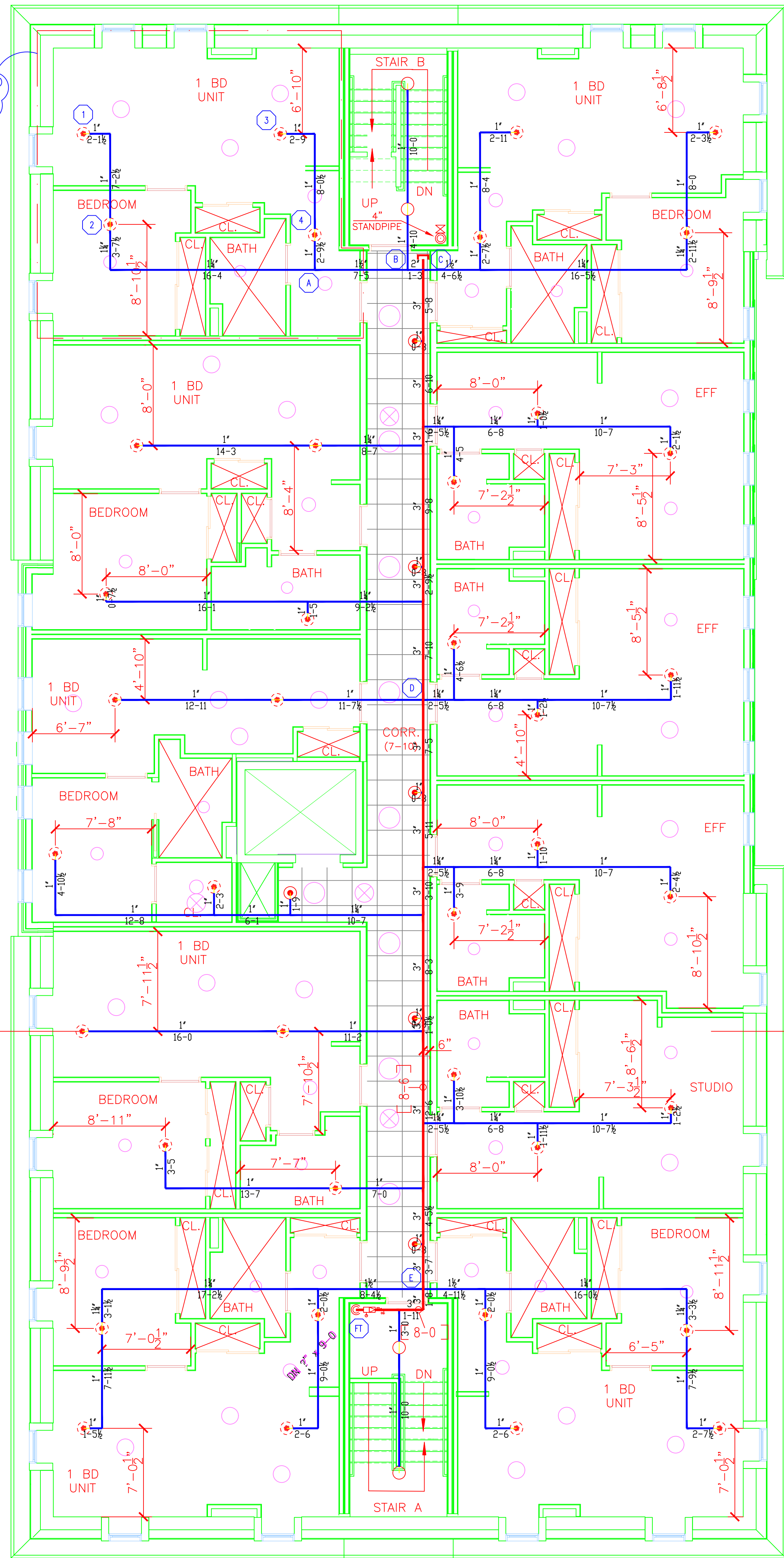
SUBMITTAL COPY



THIRD FLOOR SPRINKLER PLAN

SCALE: 3/16" = 1'-0"
FINISH FLOOR ELEV. 121.5'

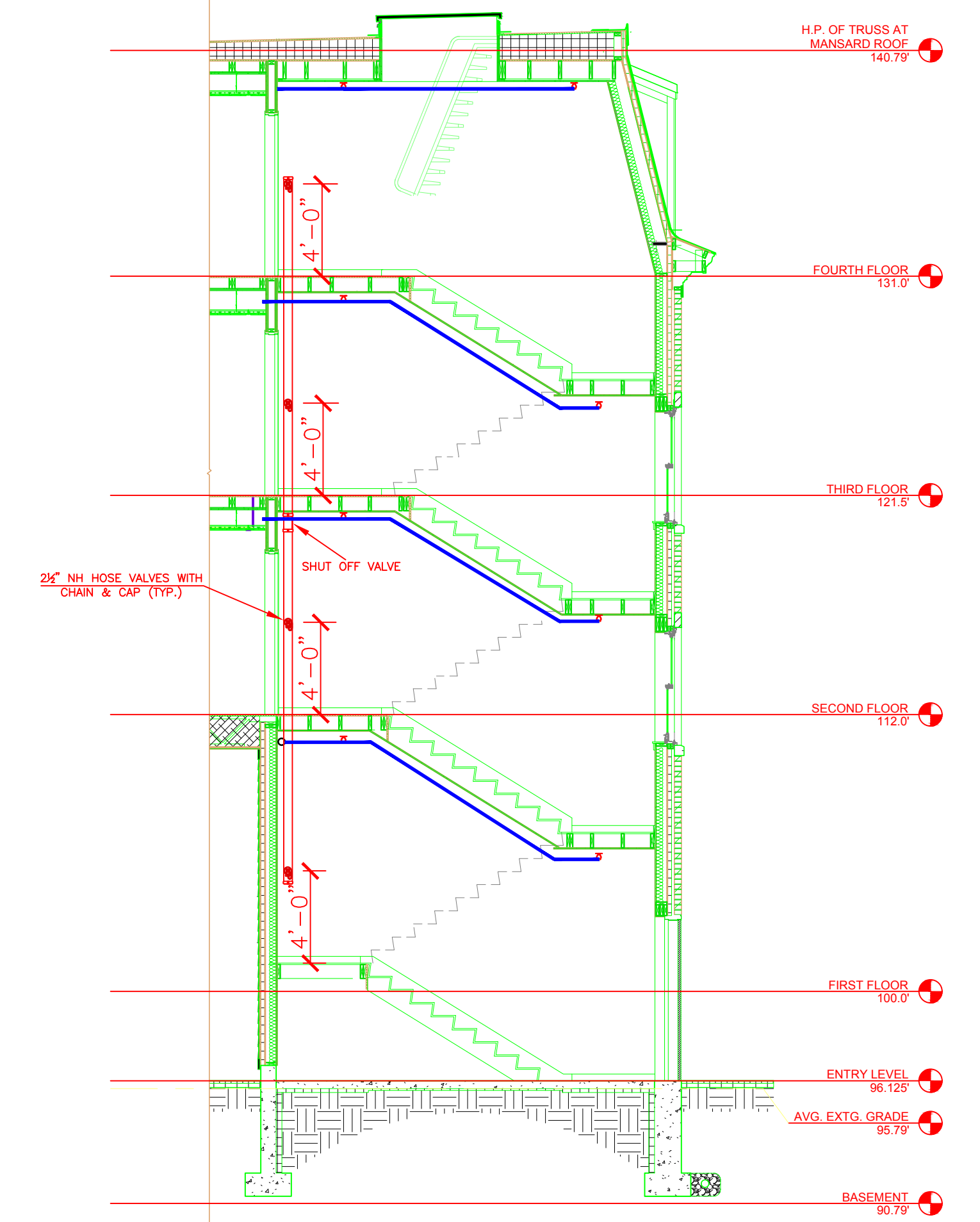
- LINES @ 8'-6" A.F.F.
- MAINS @ 8'-6" A.F.F.



FOURTH FLOOR SPRINKLER PLAN

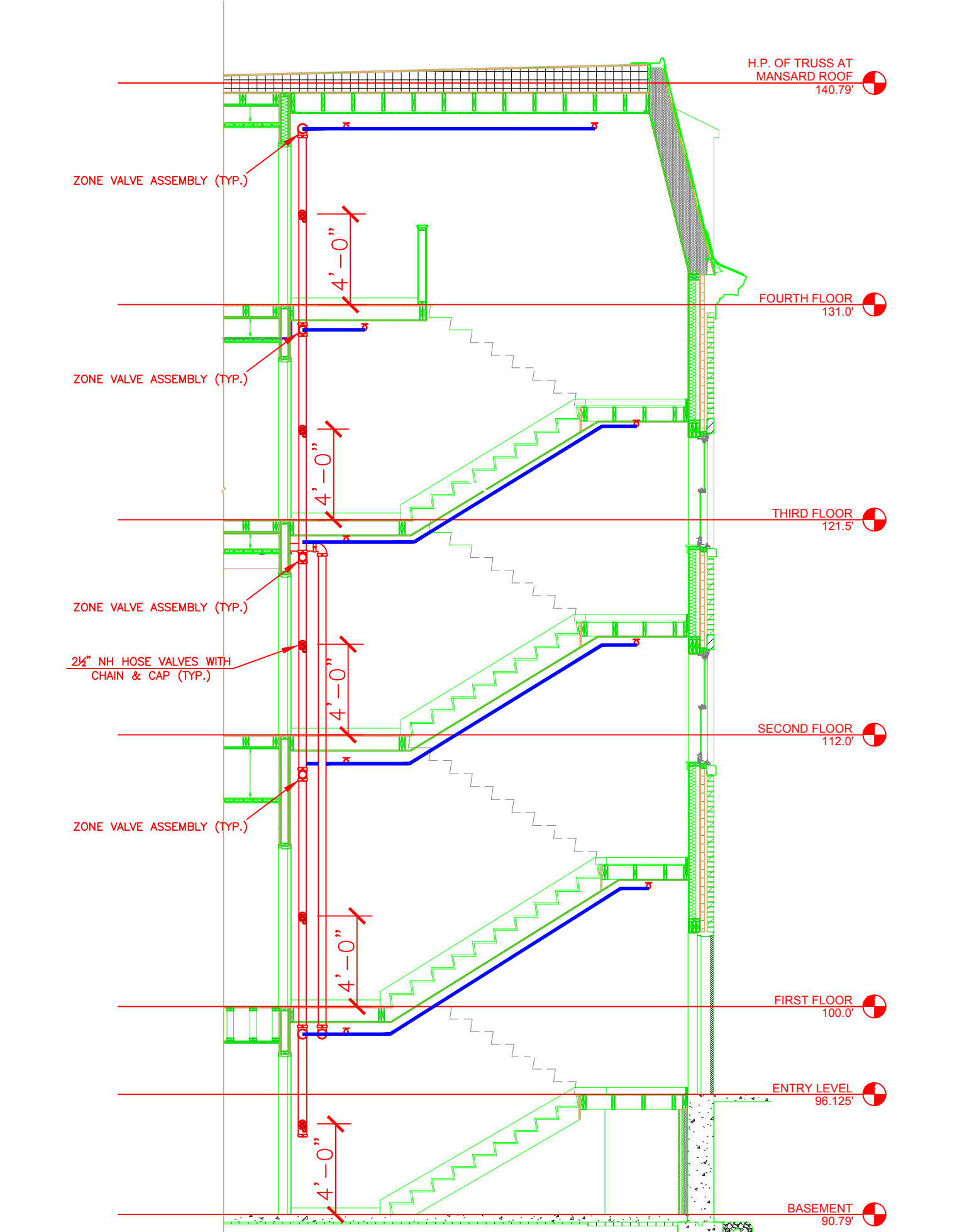
SCALE: 3/16" = 1'-0"
FINISH FLOOR ELEV. 131.0'

- LINES @ 8'-6" A.F.F.
- MAINS @ 8'-6" A.F.F.



STAIR B SPRINKLER PLAN

SCALE: 3/16" = 1'-0"
FINISH FLOOR ELEV. 100.0'



STAIR A SPRINKLER PLAN

SCALE: 3/16" = 1'-0"
FINISH FLOOR ELEV. 100.0'



SPRINKLER HEAD LEGEND										
SYMBOL	MAKE	MODEL	SIN	FINISH	TYPE	TEMP	NPT	ORIFICE	K-FACTOR	TOTAL
	RELIABLE	GS 80	RA3412	WHITE	CONCEAL	165° F	3/4"	17/32"	8.0	12
	RELIABLE	F1FR LO	R3622	BRONZE	UPRIGHT	200° F	3/4"	17/32"	8.0	6
	RELIABLE	F1FR 49	R3516	WHITE	SEMI REC PENDANT	155° F	1/2"	7/16"	4.9	24
	RELIABLE	F1FR 56	RA1414	BRONZE	UPRIGHT	155° F	1/2"	7/16"	5.6	13
	RELIABLE	RF49	RA0616	WHITE	CONCEAL	165° F	1/2"	7/16"	4.9	146
	RELIABLE	F1FR LO	R3622	BRONZE	UPRIGHT	155° F	3/4"	17/32"	8.0	7
TOTAL										208

LICENSE# 093
R.M.S.# 442

SPRINKLER SYSTEMS INC.

P.O. BOX 1285
LEWISTON MAINE
04243-1285

17 CARLETON ST. 17 CARLETON STREET PORTLAND, ME 04101		CONTRACT WITH BENCHMARK	
CONTRACT WITH	BENCHMARK	NO.	DATE
SYSTEM TYPE	REVISIONS	DESCRIPTION	
WET	<input type="checkbox"/>		
DRY	<input type="checkbox"/>		
DELUGE	<input type="checkbox"/>		
PREACTION	<input type="checkbox"/>		
ME LIFE	<input type="checkbox"/>		
HYDRO-PRO	<input type="checkbox"/>		

SCALE AS NOTED	DRAWN BY RDO
CHECKED BY CDS	DATE 3/31/2017
TOTAL SPKRS ON JOB 208	SHEET# 3 of 3
JOB# 16149	

SUBMITTAL COPY