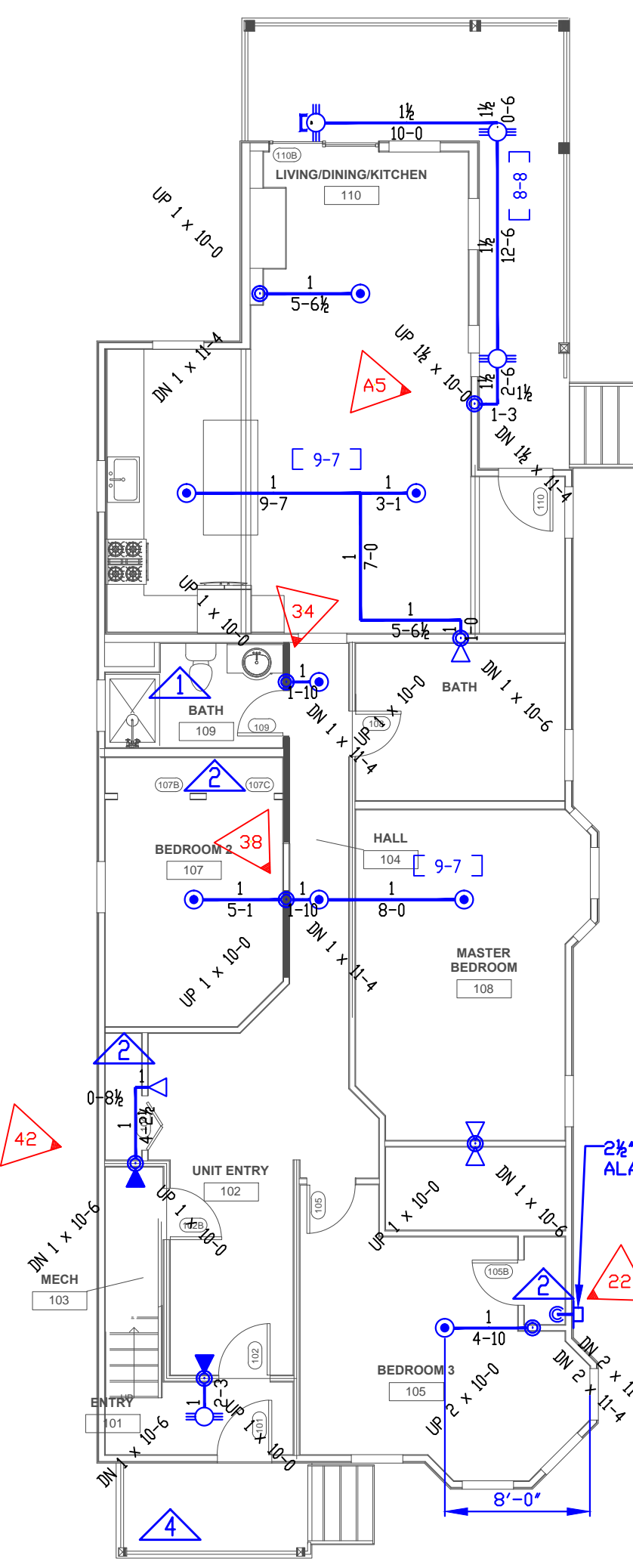


HYDRAULIC DATA NAMEPLATE
 This Building is protected by a hydraulically designed Automatic Sprinkler System
 Location AREA-4
 No. of Sprinkler 4
 Basis of design
 1. Density 0.15 gpm/ft²
 2. Design area of discharge 4 HEADS
 System Demand
 1. Water Flow Rate @ Base 78.76 gpm
 2. Residual Pressure @ Base 32.435 psi
 Cushion: 30.29 psi
 NOT MOST REMOTE AREA
 GROSS AREA SQ.FT. 7,900

BASEMENT FLOOR PLAN

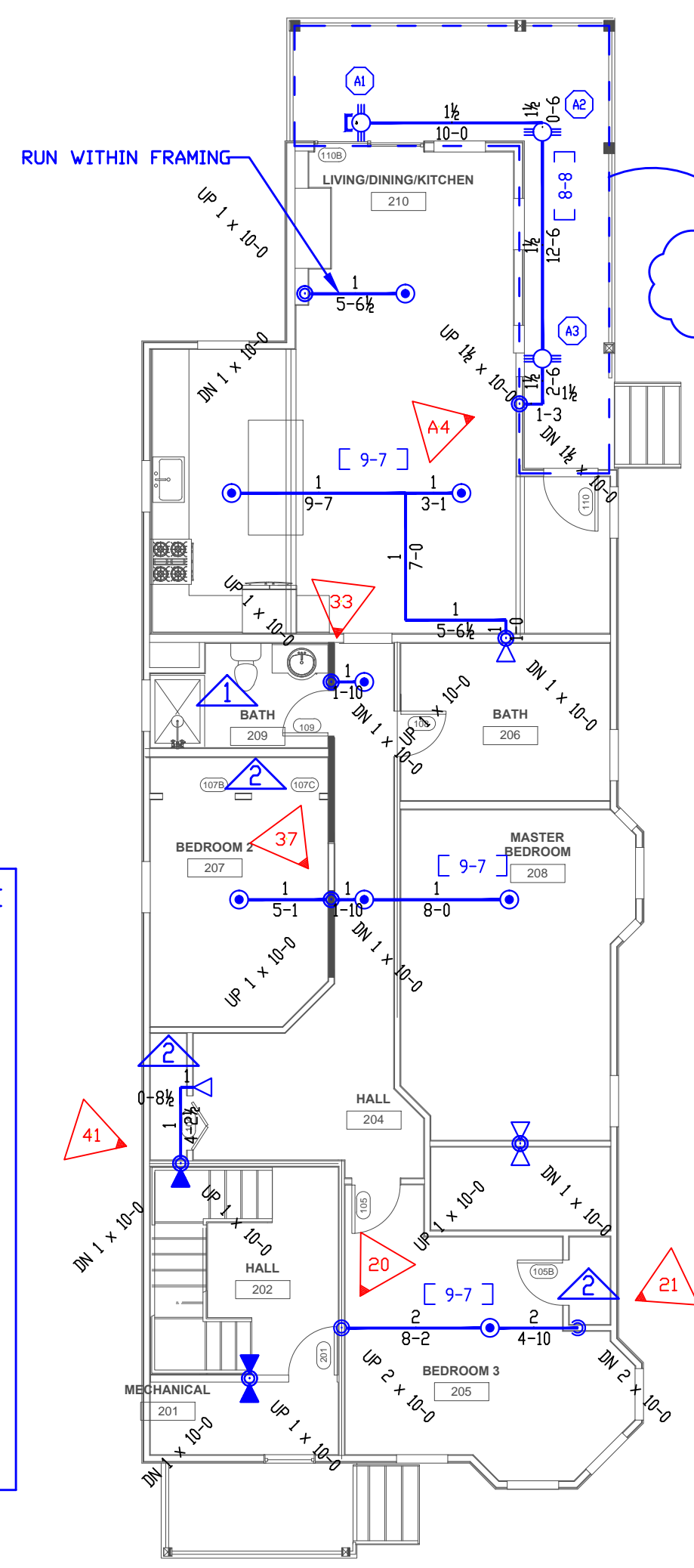
ELEVATION = 91'-6"
 SCALE: 1/8"=1'-0"



HYDRAULIC DATA NAMEPLATE
 This Building is protected by a hydraulically designed Automatic Sprinkler System
 Location AREA-3
 No. of Sprinkler 3
 Basis of design
 1. Density 1.10 gpm/ft²
 2. Design area of discharge 3 HEADS
 System Demand
 1. Water Flow Rate @ Base 51.06 gpm
 2. Residual Pressure @ Base 47.018 psi
 Cushion: 18.61 psi
 NOT MOST REMOTE AREA

FIRST FLOOR PLAN

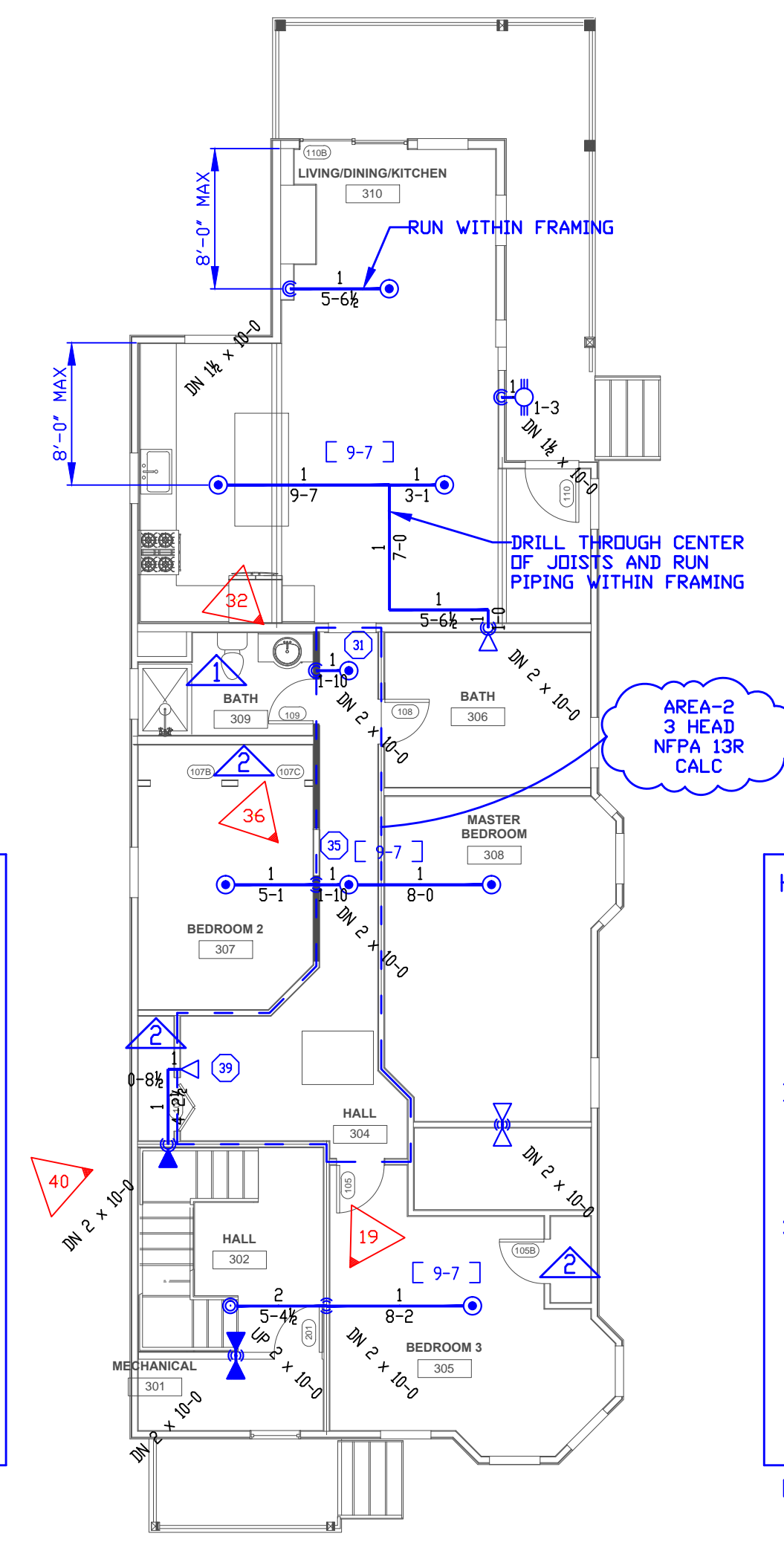
ELEVATION = 100'-0"
 SCALE: 1/8"=1'-0"



HYDRAULIC DATA NAMEPLATE
 This Building is protected by a hydraulically designed Automatic Sprinkler System
 Location AREA-2
 No. of Sprinkler 3
 Basis of design
 1. Density 0.05 gpm/ft²
 2. Design area of discharge 3 HEADS
 System Demand
 1. Water Flow Rate @ Base 50.15 gpm
 2. Residual Pressure @ Base 50.643 psi
 Cushion: 15.07 psi
 NOT MOST REMOTE AREA

SECOND FLOOR PLAN

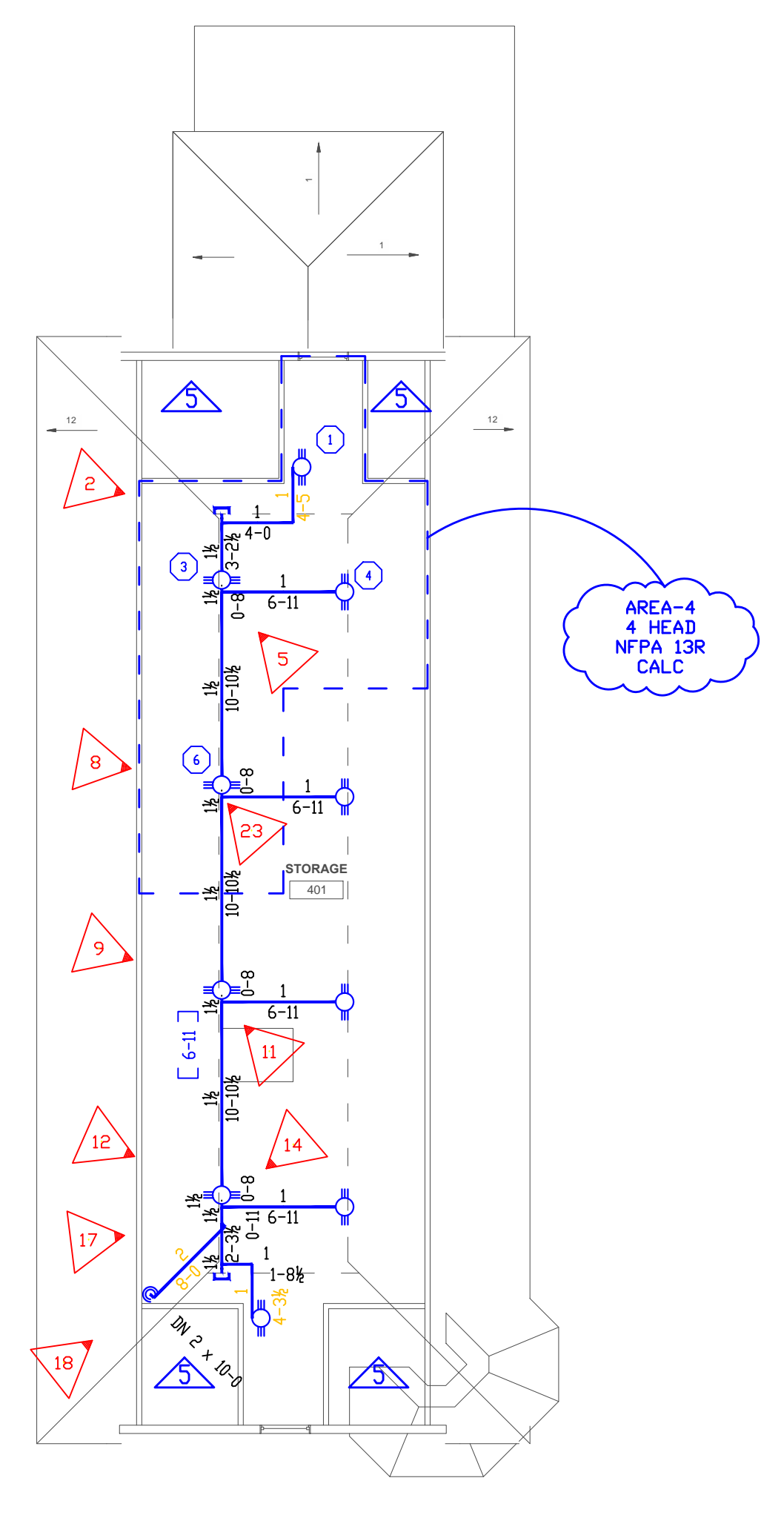
ELEVATION = 110'-0"
 SCALE: 1/8"=1'-0"



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 0.15 gpm/ft²
 2. Design area of discharge 4 HEADS
 System Demand
 1. Water Flow Rate @ Base 70.27 gpm
 2. Residual Pressure @ Base 55.222 psi
 Cushion: 8.53 psi
 MOST REMOTE AREA

THIRD FLOOR PLAN

ELEVATION = 120'-0"
 SCALE: 1/8"=1'-0"



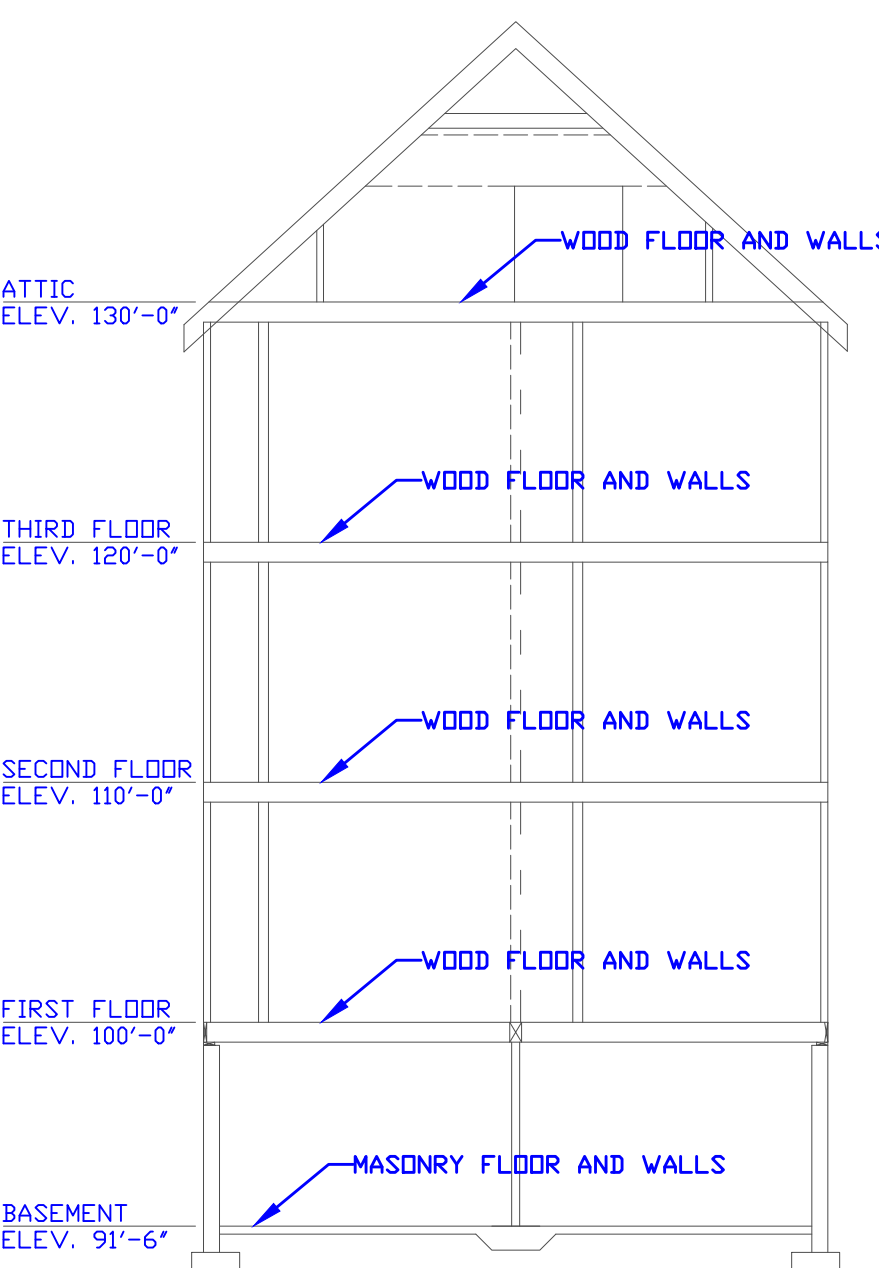
HYDRAULIC DATA NAMEPLATE
 This Building is protected by a hydraulically designed Automatic Sprinkler System
 Location AREA-4
 No. of Sprinkler 4
 Basis of design
 1. Density 0.15 gpm/ft²
 2. Design area of discharge 4 HEADS
 System Demand
 1. Water Flow Rate @ Base 70.27 gpm
 2. Residual Pressure @ Base 55.222 psi
 Cushion: 8.53 psi
 MOST REMOTE AREA

ATTIC FLOOR PLAN

ELEVATION = 130'-0"
 SCALE: 1/8"=1'-0"

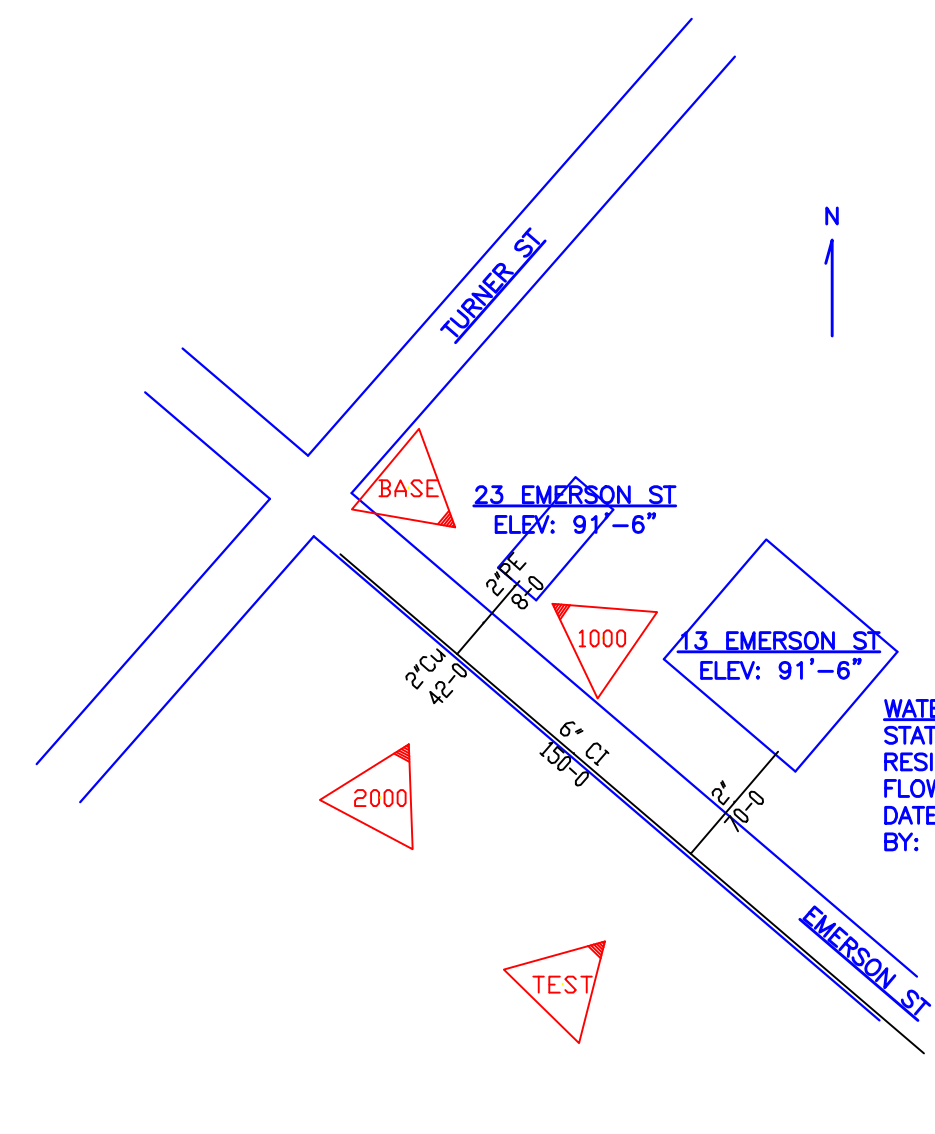
GENERAL NOTES:

- 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 IN 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 1" SHALL BE SCHEDULE 40 STEEL WITH MALLEABLE IRON FITTINGS.
- ALL PIPE 1 1/2" AND LARGER, SHALL BE SCHEDULE 10 STEEL, WITH GROoved COUPLINGS AND VICTAULIC® MECHANICAL FITTINGS OR EQUIVALENT.
- CPVC PIPE AND FITTINGS SHALL BE USED WHEREVER THE PIPING CAN BE CONCEALED WITHIN THE RESIDENTIAL OCCUPANCIES, IN SIZES FROM 1" TO 2". ALL JOINTS SHALL BE MADE WITH SOLVENT CEMENT.
- 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 NF.P.A. 13.
- ALL SPRINKLER HEADS SHALL BE LOCATED IN AN AESTHETIC, SYMMETRICAL PATTERN WHENEVER POSSIBLE.
- ALL PIPING IS TO BE PITCHED IN ACCORDANCE WITH NF.P.A. 13.
- HYDRAULIC DATA REFERENCE POINTS (25)
- CENTER LINE OF PIPE ABOVE FINISH FLOOR (12'-0") BELOW DECK (12')
- PROTECTIVE CAPS ARE TO REMAIN ON THE SPRINKLER HEADS UNTIL AFTER CEILING ARE INSTALLED.
- THE SCOPE OF WORK IS TO PROVIDE A FULL NFPA 13R SYSTEM THROUGHOUT ALL AREAS OF THE EXISTING BUILDING AND IS LIMITED TO THE WORK SHOWN ON THESE DOCUMENTS.
- GLYCERINE (ANTI-FREEZE) IS TO BE USED FOR THE EXTERIOR PORCHES.
- ANTI-FREEZE IS TO BE PRE-MIXED AND LISTED FOR USE IN SPRINKLER SYSTEMS (48% GLYCERINE).
- A PLACARD SHALL BE PLACED ON THE ANTI-FREEZE SYSTEM MAIN VALVE THAT INDICATES THE MANUFACTURER TYPE AND BRAND, THE CONCENTRATION BY VOLUME AND TOTAL GALLONS OF ANTI-FREEZE SOLUTION USED IN THE SYSTEM.
- THE FREEZING POINT OF THE ANTI-FREEZE SOLUTION IS 15°F BELOW ZERO (-15°F)
- THE OWNER IS RESPONSIBLE FOR MAINTAINING THIS LEVEL OF PROTECTION THROUGH REGULAR MAINTENANCE IN ACCORDANCE WITH THE STATE FIRE MARSHAL'S REQUIREMENTS AND NFPA 25.



BUILDING SECTION

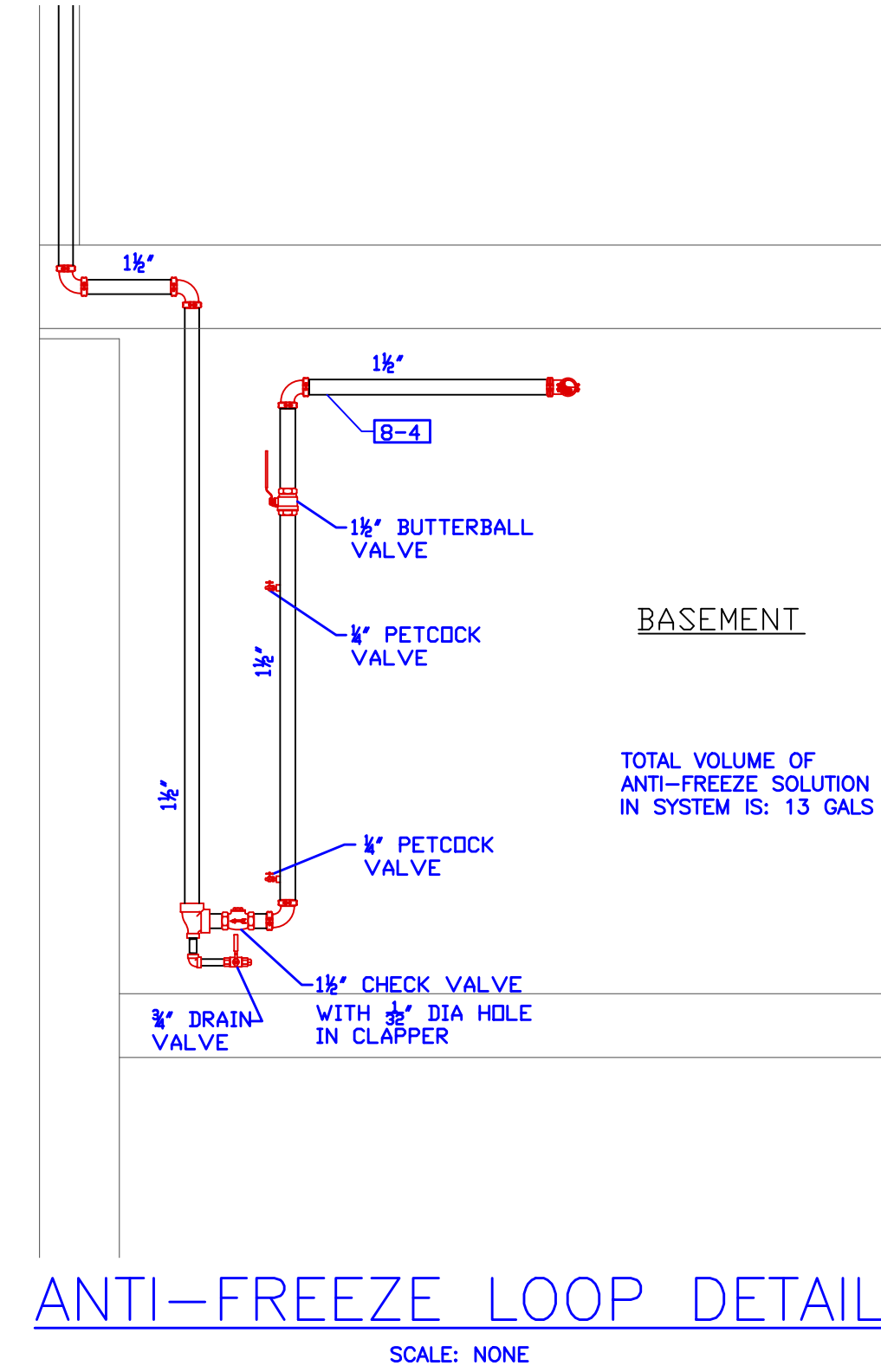
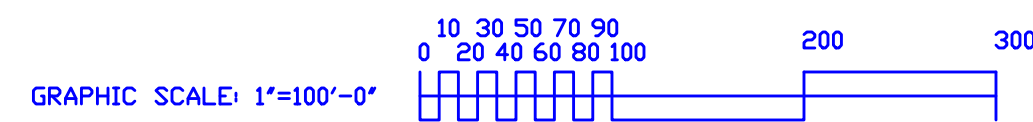
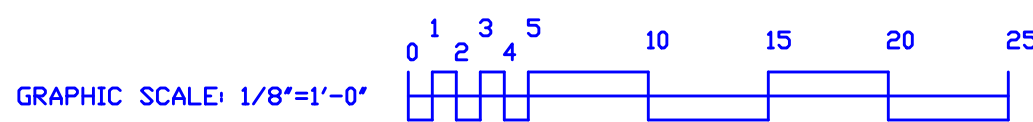
SCALE: 1/8"=1'-0"



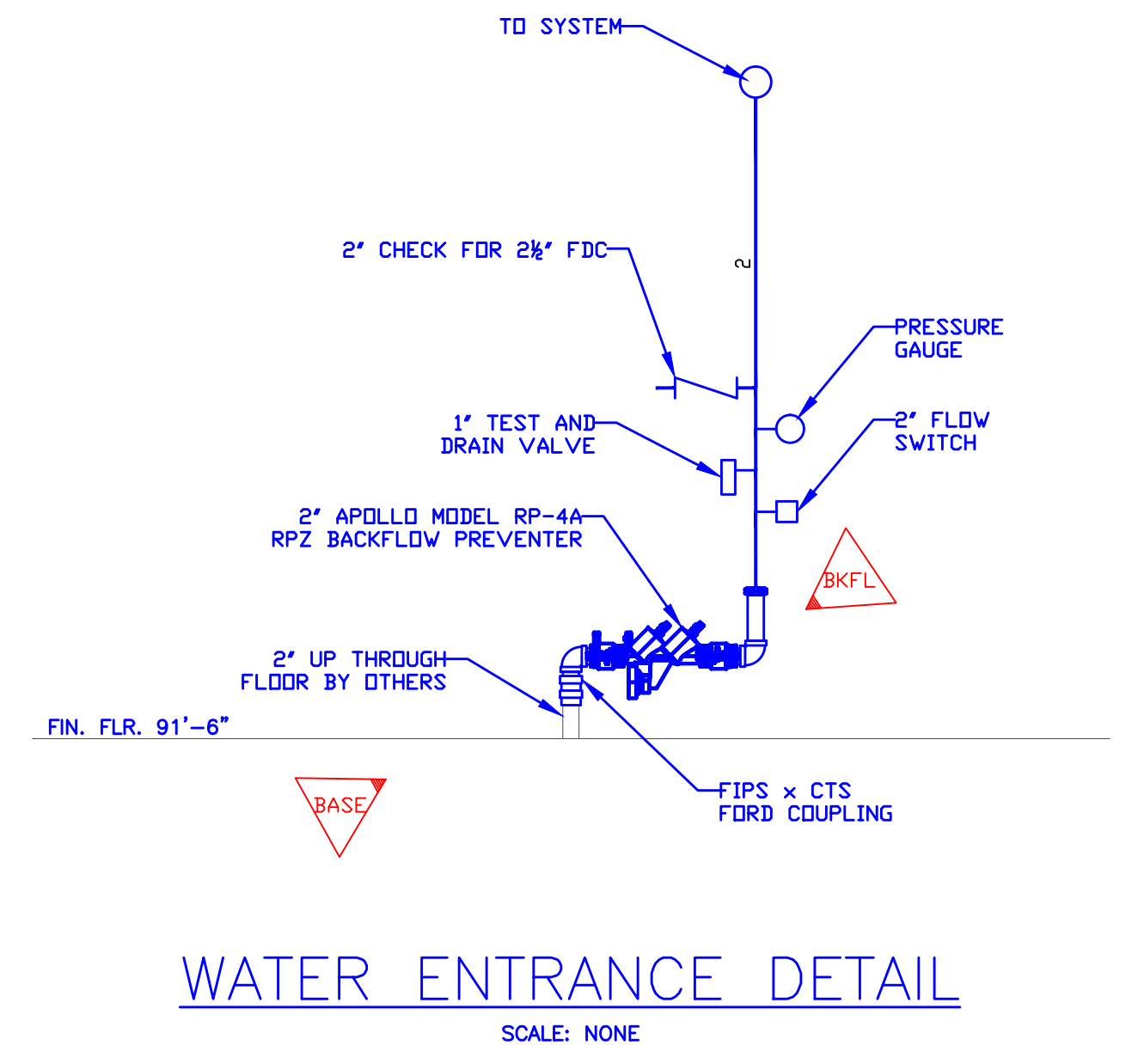
SITE PLAN

SCALE: 1"=100'-0"

WATER FLOW DATA
 STATIC: 68 PSI
 RESIDUAL: 65 PSI
 FLOW: 150 GPM
 DATE: 25 NOV 2015
 BY: PORTLAND WATER DISTRICT



ANTI-FREEZE LOOP DETAIL
 SCALE: NONE



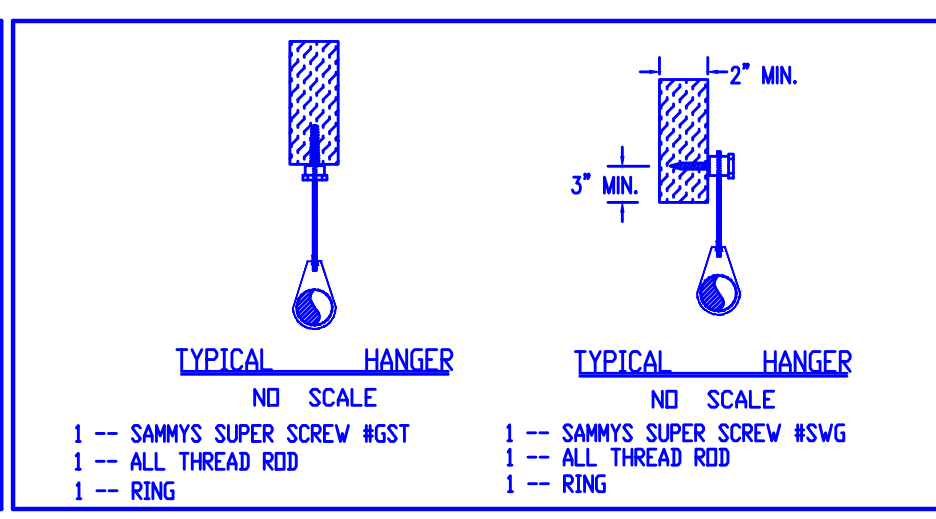
WATER ENTRANCE DETAIL
 SCALE: NONE

NFPA 13R 2010 EXCLUSIONS

- SECTION 6.6.2 Sprinklers shall not be required in bathrooms where the bathroom area does not exceed 55 ft² (5.1 m²).
- SECTION 6.6.3 Except where specified in 6.6.4, sprinklers shall not be required in clothes closets, linen closets, and pantries within dwelling units that meet all of the following conditions:
 - (1) The area of the space does not exceed 24 ft² (2.2 m²).
 - (2) The least dimension does not exceed 3 ft (0.91 m).
 - (3) The walls and ceilings are surfaced with noncombustible or limited-combustible materials as defined by NFPA 220.
- SECTION 6.6.4 Sprinklers shall be installed in any closet used for heating and air-conditioning equipment except as permitted by 6.6.7.
- SECTION 6.6.5 Sprinklers shall not be required in any porches, balconies, corridors, carports, and stairs that are open and attached.
- SECTION 6.6.6 Sprinklers shall not be required in penthouse equipment rooms, elevator machine rooms, concealed spaces dedicated exclusively to and containing only dwelling unit ventilation equipment, crawl spaces, floor/ceiling spaces, noncombustible elevator shafts where the elevator cars comply with ANSI A17.1, Safety Code for Elevators and Escalators, and other concealed spaces that are not used or intended for living purposes or storage and do not contain fuel-fired equipment.
- SECTION 6.6.1 When fuel-fired equipment is present at least one quick-response intermediate temperature sprinkler shall be installed above the equipment.
- SECTION 6.6.7 Sprinklers shall not be required in closets (regardless of size) on exterior balconies and exterior breezeways/corridors, regardless of size, as long as the closet does not have doors or unprotected penetrations directly into the dwelling unit.

NORTH

- Type of Hazard DRB / LIGHT 2. Deflector Distance
- Pipe Type Used 10/40 BLK 4. Sprinkler Area XX/XXX SQ FT
- Type of Construction NON COMBUSTIBLE
- Maximum Spacing Allowed LIGHT=225 SQ FT/HD & DRD=130 SQ FT/HD
- PIPE SIZING METHOD: PIPE SCHEDULE □ HYDRAULICALLY CALCULATED ■
- ALL HANGERS AND LOCATIONS TO BE IN ACCORDANCE WITH NF.P.A. PAMPHLET NO. 13
- HIGH DEGREE TEMPERATURE SPRINKLER HEADS TO BE INSTALLED IN ACCORDANCE WITH NF.P.A. PAMPHLET NO. 13



HANGERS

AS SHOWN

ABBREVIATIONS

B Bottom of Beam
 D Bottom of Deck
 P Bottom of Pipe
 N.A.C. Nipple and Cap
 NTS Not to Scale
 O.A. Open Air Sides
 P.V. Pressure Red Valve
 R.M. Roof Mounted
 S.P. Standpipe
 T.O.B. Top of Beam
 T.O.P. Top of Pipe
 U.O.L. Unless Otherwise Noted
 C.L. Centerline
 N.C.S. No Automatic Sprinklers
 O.T.A. Open to Above

CONTRACT RESPONSIBILITIES

ITEM	FFC	OTHERS
STREET CONN	●	●
LEG. MAN	●	●
EXCAVATION	●	●
FLUSHING	●	●
WIRING	●	●
PAINTING	●	●
FRAMES STUDIES	●	●
FLOW STUDIES	●	●
STREET CONN	●	●

SPRINKLER HEAD LEGEND

SYMBOL	MAKE	MODEL	SIN	FINISH	TYPE	TEMP	NPT	ORIFICE	K-FACTOR	TOTAL	
1	RELIABLE	RFC49	R4662	WHITE	COVERED PENDENT	155 F	1/2"	7/16"	4.9	24	
2	RELIABLE	FRS44	R3531	WHITE	ACCESS SIDEWALL	155 F	1/2"	3/8"	4.4	12	
3	RELIABLE	FIFR56	R4425	WHITE	UPRIGHT	200 F	1/2"	1/2"	5.6	31	
4	RELIABLE	FIFR-HSV	R4425	WHITE	HORIZONTAL SIDEWALL	200 F	1/2"	1/2"	5.6	9	
TYPE 1: MAXIMUM AREA OF COVERAGE IS 18' x 18'											
TYPE 2: MAXIMUM AREA OF COVERAGE IS 16' x 16'											
TYPE 3: PROVIDE HEAD CAGES FOR ALL LOCATIONS											
										TOTAL	76

SUBMITTALS

DATE SENT TO	DATE RECEIVED
I S D	
F I M	
L M	
I R I	
L A	
STATE FIRE	
LOCAL FIRE	
LOCAL WATER	
G. C.	

LICENSE # FSC93 442 **PERMIT # FSPXXXX**

P.O. BOX 1285
 LEWISTON, MAINE
 04243-1285

EMERSON STREET RENOVATION
 23 EMERSON STREET
 PORTLAND, MAINE

PLANS, DETAILS AND NOTES

CONTRACT WITH VALCOURT PROPERTY MANAGEMENT

SYSTEM TYPE	NO.	DATE	REVISIONS	DESCRIPTION
WET	<input type="checkbox"/>			
DRY	<input type="checkbox"/>			
DELUGE	<input type="checkbox"/>			
REACTION	<input type="checkbox"/>			
M.L. LIFE	<input type="checkbox"/>			

CHECKED BY CDS
 NICET III #78833

DATE: 30 DEC 2015

TOTAL SPRKS DN JOB: 76

SHEET # FP-1
 1 OF 1

JUB# 15-157