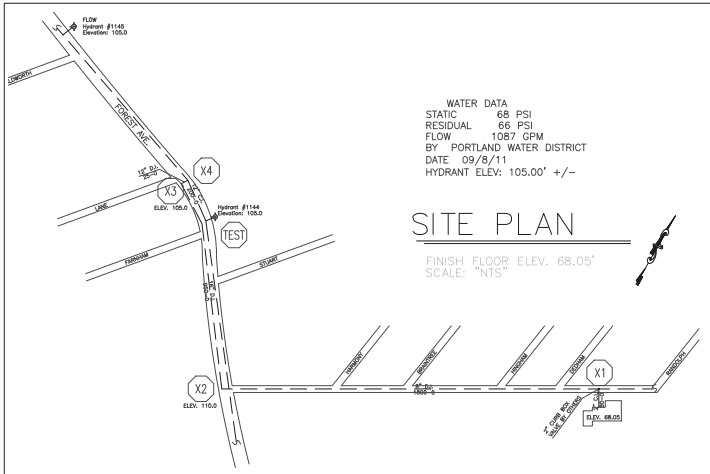
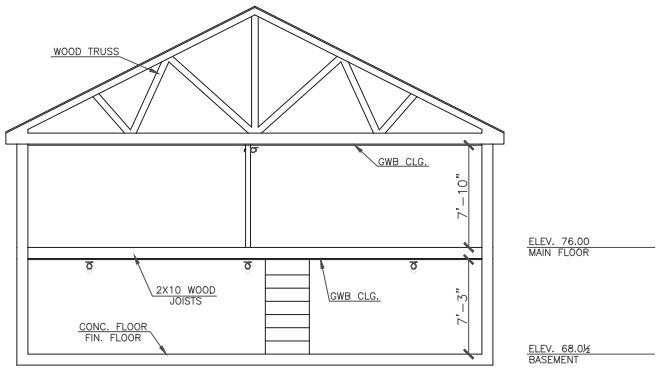


WATER DATA
STATIC 68 PSI
RESIDUAL 66 PSI
FLOW 1087 GPM
BY PORTLAND WATER DISTRICT
DATE 09/8/11
HYDRANT ELEV: 105.00' +/-

SITE PLAN

FINISH FLOOR ELEV. 68.05'
SCALE: "NTS"



BUILDING SECTION "A"

SCALE: "NTS"

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 1¼" AND SMALLER SHALL BE SCHEDULE 40 STEEL WITH MALLEABLE IRON FITTINGS.
- ALL PIPE 2" 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)
- 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.

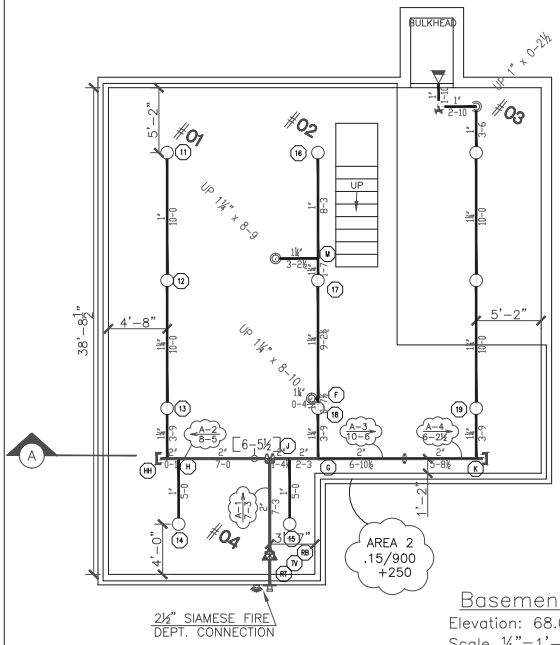
EXCEPTION NO. 1: SPRINKLERS SHALL NOT BE REQUIRED IN BATHROOMS WHERE THE AREA DOES NOT EXCEED 55 FEET SQUARED AND THE WALLS AND CEILING, INCLUDING WALLS AND CEILING BEHIND FIXTURES, ARE NON-COMBUSTIBLE OF LIMITED COMBUSTIBLE MATERIALS PROVIDING A 15 MINUTE THERMAL BARRIER. THE AREA OCCUPIED BY A NON-COMBUSTIBLE, FULL HEIGHT, SHOWER/BATHTUB ENCLOSURE SHALL NOT BE REQUIRED TO BE ADDED TO THE FLOOR ARE 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.

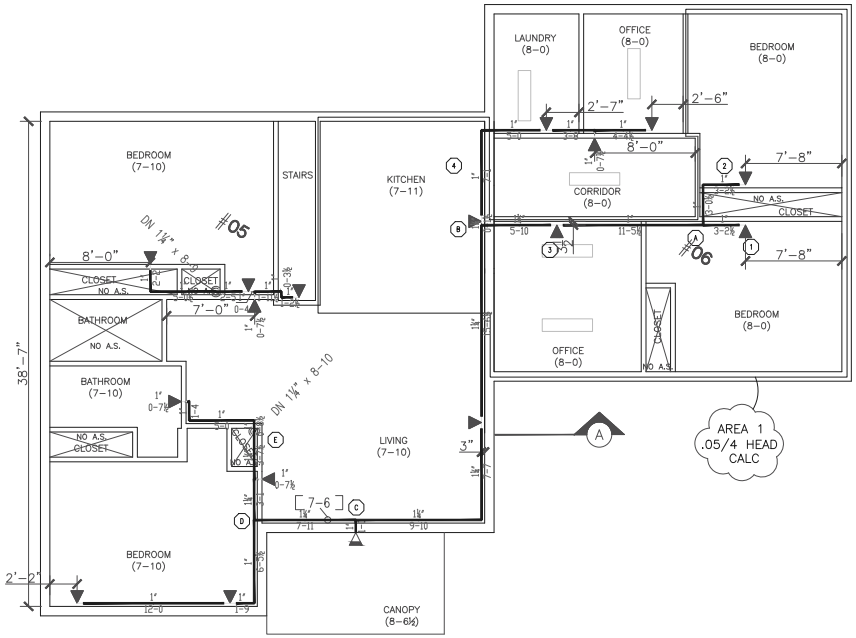
EXCEPTION NO. 4: SPRINKLERS SHALL NOT BE REQUIRED IN ATTICS, PENTHOUSE EQUIPMENT ROOMS, CRAWL SPACES, FLOOR/CEILING SPACES, ELEVATOR SHAFTS, AND OTHER CONCEALED SPACES THAT ARE NOT USED OR INTENDED FOR LIVING PURPOSES OR STORAGE.

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.



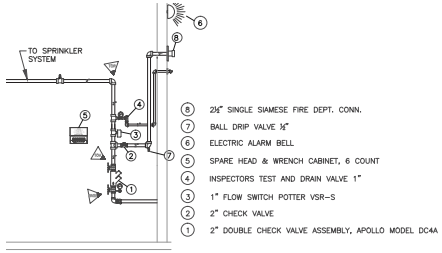
Basement

Elevation: 68.0½
Scale ¼"=1'-0"



Main Level

Elevation: 76.0
Scale ¼"=1'-0"



(8)	2½" SINGLE SIAMESE FIRE DEPT. CONN.
(7)	BALL DRIP VALVE ½"
(6)	ELECTRIC ALARM BELL
(5)	SPARE HEAD & WRENCH CABINET, 6 COUNT
(4)	INSPECTORS TEST AND DRAIN VALVE 1"
(3)	1" FLOW SWITCH POTTER VSR-S
(2)	2" CHECK VALVE
(1)	2" DOUBLE CHECK VALVE ASSEMBLY, APOLLO MODEL DC4A

RISER DETAIL & LEGEND

NOT TO SCALE

DESIGN AREA #1

HYDRAULIC DATA NAMEPLATE
This Building is protected by a hydraulically designed Automatic Sprinkler System
Location BEDROOM
No. of Sprinkler 4
Basis of design
1. Density .05 gpm/ft²
2. Design area of discharge 4 HEAD CALCS
System Demand
1. Water Flow Rate
@ Base/Pump 71.26 gpm
2. Residual Pressure
@ Base/Pump 67.568 psi
CUSHION = 12.04 psi
HYDRAULICALLY MOST REMOTE

DESIGN AREA #2

HYDRAULIC DATA NAMEPLATE
This Building is protected by a hydraulically designed Automatic Sprinkler System
Location BASEMENT
No. of Sprinkler 9
Basis of design
1. Density .15 gpm/ft²
2. Design area of discharge 900 ft²
System Demand
1. Water Flow Rate
@ Base/Pump 185.803gpm
2. Residual Pressure
@ Base/Pump 42.757 psi
CUSHION = 12.69 psi

SUBMITTAL COPY

1. Type of Hazard LIGHT/ORDINARY
2. Pipe Type Used BLK SCH 10/40
5. Type of Construction COMBUSTIBLE
6. Maximum Spacing Allowed PER NFPA 13
7. PIPE SIZING METHOD: PIPE SCHEDULE ☐ HYDRAULICALLY CALCULATED ■
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
2. Deflector Distance PER SPEC
4. Sprinkler Area PER SPEC

TYPICAL HANGER
NO SCALE
1 -- SIMMONS SUPER SCREW #GST
1 -- ALL THREAD ROD
1 -- RING

HANGERS
AS SHOWN IN DETAIL

HANGER DETAILS
N.T.S.

ABBREVIATIONS
B Bottom of Beam
D Bottom of Deck
P Bottom of Pipe
HV Hose Valve
C & C Cap & Cap
NC Not In Contract
NTS Not In Scale
OBJ Open Bar Joists
PRV Pressure Red Valve
RM Roof Manhole
SP Standpipe
TOB Top of Beam
TOP Top of Pipe
UN Unit Heater
UON Unless Otherwise Noted
CL Centerline
NAS No Automatic Sprinklers
OTA Open to Above

CONTRACT RESPONSIBILITIES

ITEM	FPC	OTHERS
STREET CONN		●
UGD MAIN		●
EXCAVATION		●
FLUSHING		●
WIRING		●
PAINTING		●
TAMPER SWITCHES	●	
FLOW SWITCHES	●	
STREET CONN		●

SPRINKLER HEAD LEGEND

SYMBOL	MAKE	MODEL	SIN	FINISH	TYPE	TEMP	NPT	ORIFICE	K-FACTOR	TOTAL
	RELIABLE	F1FR 56	RA1414	BRONZE	UPRIGHT	155° F	1/2"	1/2"	5.6	11
	RELIABLE	F1RES 44	R3531	WHITE	HORIZ SIDEWALL	155° F	1/2"	3/8"	4.4	16
	RELIABLE	F3QR	R5734	WHITE	DRY SIDEWALL	200° F	1"	1/2"	5.6	2
									TOTAL →	29

SUBMITTALS

SENT TO	SENT 03/30/12	DATE RECEIVED
I S O		
F M		
L M		
I R I		
L A		
STATE FIRE	●	
LOCAL FIRE	●	
LOCAL WATER		
OWNER	●	

LICENSE# 093
R.M.S.# 278
PERMIT # ????

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

GOODWILL
137 NEWTON STREET
PORTLAND, MAINE 04103

CONTRACT WITH OWNER

SYSTEM TYPE		NO.	DATE	DESCRIPTION
WET	■			
DRY	☐			
DELUGE	☐			
PREACTION	☐			
WE. LIFE	☐			
HYDRO-PRO	☐			

REVISIONS

SCALE AS NOTED
DRAWN BY RDO
CHECKED BY SEG
DATE 11/21/2013
TOTAL SPRKS ON JOB 29
SHEET# 1 of 1
JOB# 13094