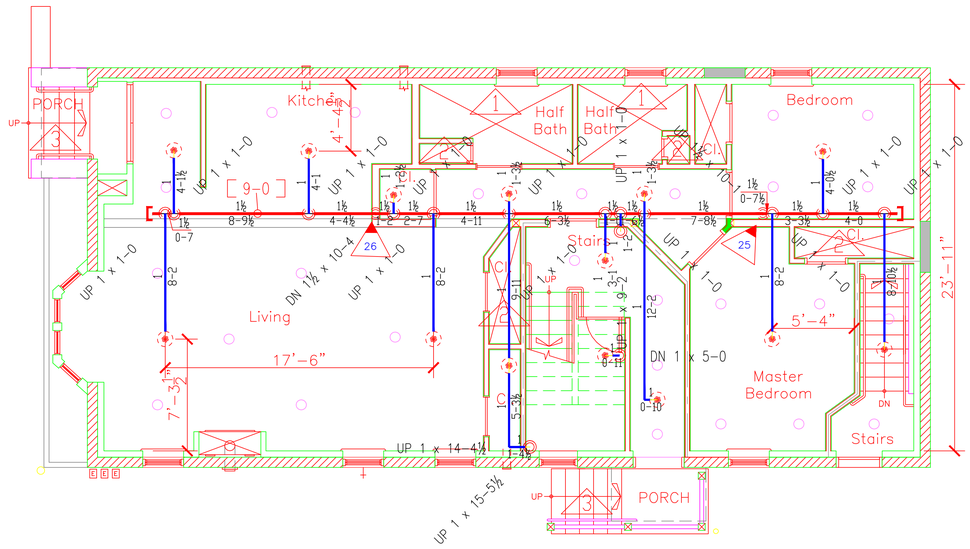
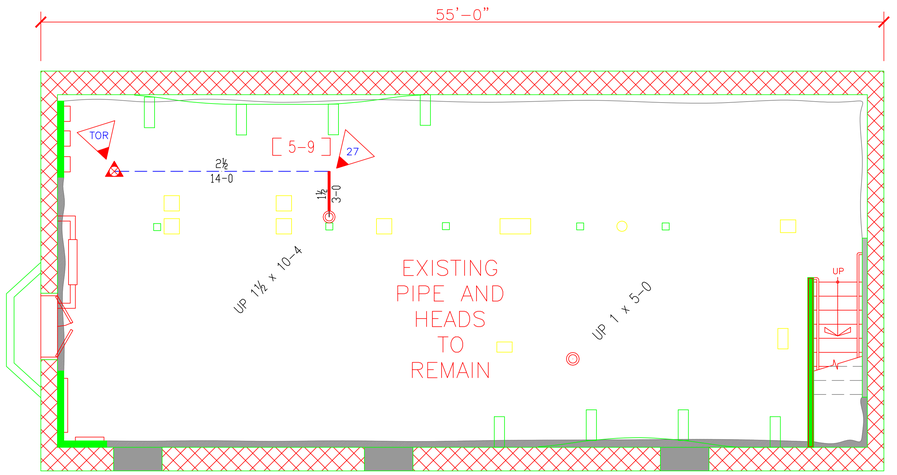
Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 06/10/16




# FIRST FLOOR SPRINKLER PLAN

SCALE: 1/4"= 1'-0"
FINISH FLOOR ELEV. 107.0'




# BASEMENT SPRINKLER PLAN

SCALE: 1/4"= 1'-0"
FINISH FLOOR ELEV. 100.0'

## NFPA 13R EXCEPTIONS

- SPRINKLERS SHALL BE INSTALLED IN ALL AREAS.

1. 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.

2. 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.

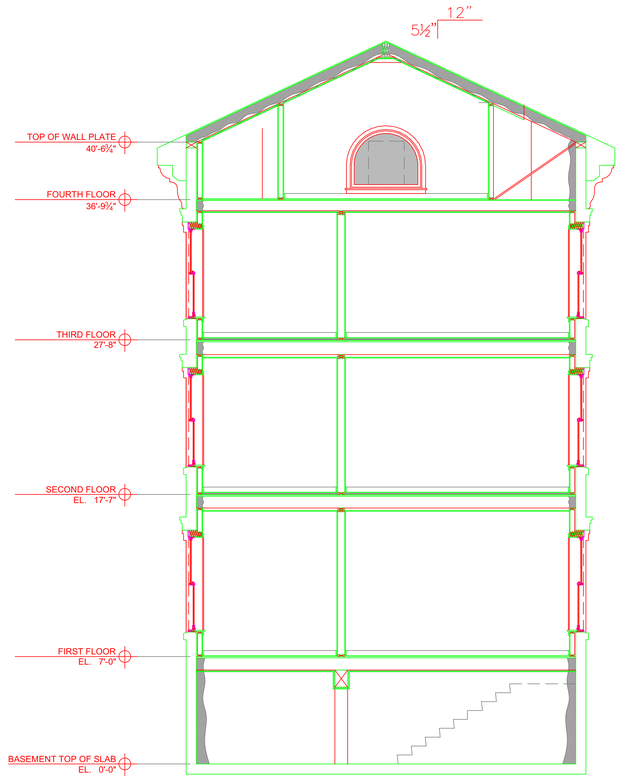
3. EXCEPTION NO. 3: SPRINKLERS SHALL NOT BE REQUIRED IN ANY PORCHES, BALCONIES, CORRIDORS, AND STAIRS THAT ARE OPEN TO ATTACHED.

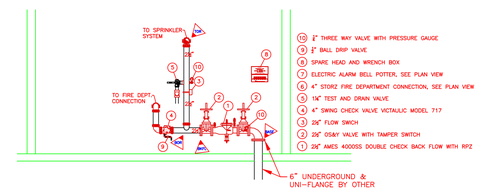
4. EXCEPTION NO. 4: SPRINKLERS SHALL NOT BE REQUIRED IN ATTICS, PENTHOUSE EQUIPMENT ROOMS, CRAWL SPACES, FLOOR/CEILING SPACES, ELEVATOR SHAFTS, AND OTHER CONCEALED SPACES THAT ARE NOT USED OR INTENDED FOR LIVING PURPOSES OR STORAGE.

5. 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.

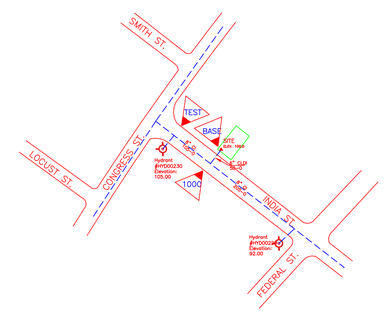
## GENERAL NOTES:

- 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 1" SHALL BE SCHEDULE 40 STEEL WITH MALLEABLE IRON FITTINGS.
- ALL PIPE 1 1/4" 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.
- STORAGE PLACED ON TOP OF FREEZER/COOLERS MUST BE A MINIMUM OF 18" BELOW SPRINKLER DEFLECTORS.
- NO STORAGE ABOVE 12'-0"
- 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 13.




EXISTING RISER DETAIL & LEGEND
NOT TO SCALE




# SITE PLAN

SCALE: "NTS"
FINISH FLOOR ELEV. 100.0'

**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 .05 GPM/FT²
2. Design area of discharge 4 HEADS FT²
System Demand
1. Water Flow Rate @ Base/Pump 73.56 GPM
2. Residual Pressure @ Base/Pump 71.366 PSI
CUSHION = 9.55 psi

NOT MOST REMOTE

**HYDRAULIC DATA NAMEPLATE**

This Building is protected by a hydraulically designed Automatic Sprinkler System

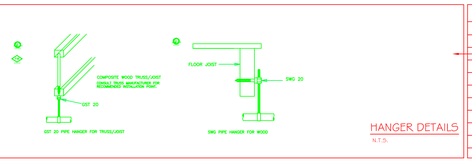
Location AREA-2
No. of Sprinkler 4
Basis of design
1. Density .15 GPM/FT²
2. Design area of discharge 4 HEADS FT²
System Demand
1. Water Flow Rate @ Base/Pump 63.41 GPM
2. Residual Pressure @ Base/Pump 71.571 PSI
CUSHION = 9.36 psi

MOST REMOTE

WATER DATA
STATIC 81 PSI
RESIDUAL 71 PSI
FLOW 1255 GPM
BY PORTLAND WATER DISTRICT
DATE 5/5/16
HYDRANT ELEV: 100.00' +/-

SUBMITTAL COPY

1. Type of Hazard OH2
2. Deflector Distance PER SPEC
2. Pipe Type Used BLK SCH 10/40
4. Sprinkler Area PER SPEC
5. Type of Construction NON-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




HANGER DETAILS
N.T.S.

| HANGERS | |
|---|---|
| AS SHOWN IN DETAIL | |

ABBREVIATIONS

| | |
|---|---|
| B | Bottom of Beam |
| D | Bottom of Deck |
| P | Bottom of Pipe |
| HV | Hose Valve |
| N & C | Nipple and Cap |
| NIC | Not in Contract |
| NTS | Not to Scale |
| OBJ | Open Bar Joists |
| PRV | Pressure Red Valve |
| RM | Roof Manifold |
| SP | Standpipe |
| TOB | Top of Beam |
| TOP | Top of Pipe |
| TOS | Top of Steel |
| 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 | RFC49 | RA0616 | WHITE | CONCEAL | 165° F | 1/2" | 7/16" | 4.9 | 37 |
| | RELIABLE | F1FR 56 | RA1425 | BRONZE | UPRIGHT | 200° F | 1/2" | 1/2" | 5.6 | 7 |
| | RELIABLE | F1RES 44 | R3531 | WHITE | HORIZ SIDEWALL | 155° F | 1/2" | 7/16" | 4.4 | 5 |
| | RELIABLE | F1FR 56 | RA1435 | BRONZE | HORIZ SIDEWALL | 155° F | 1/2" | 1/2" | 5.6 | 4 |
| | | | | | | | | | TOTAL → | 53 |

SUBMITTALS

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

LICENSE# 093
R.M.S.# 442
PERMIT # ????

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

107 India Street
107 India Street
Portland, ME 04101

CONTRACT WITH Mr. OOB Rentals

SYSTEM TYPE
WET ■
DRY ☐
DELUGE ☐
PREACTION ☐
ME. LIFE ☐
HYDRO-PRO ☐

REVISIONS

| NO. | DATE | DESCRIPTION |
|---|---|---|
| | | |

SCALE AS NOTED
DRAWN BY RDO
CHECKED BY CDS
DATE 5/12/2016
TOTAL SPKRS ON JOB 53
SHEET# 1 of 1
JOB# 16025