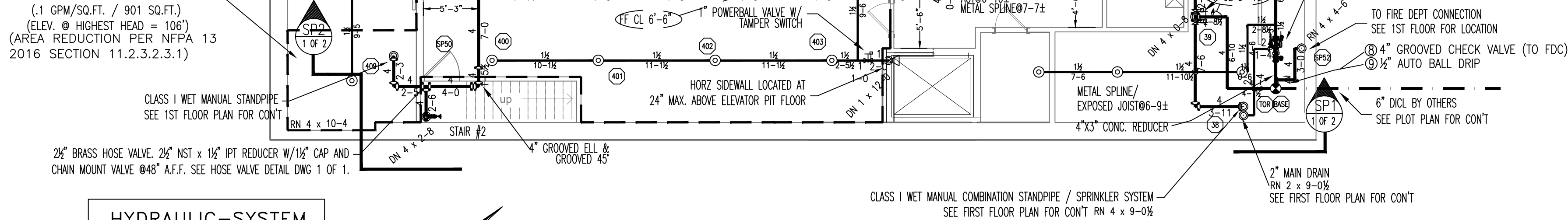


**(BASEMENT)  
HYDRAULICALLY MOST  
REMOTE AREA**



**HYDRAULIC-SYSTEM**

THIS BUILDING IS PROTECTED BY A HYDRAULICALLY DESIGNED AUTOMATIC SPRINKLER SYSTEM. 24 PREBLE ST. LOCATION: BASEMENT

NO. OF SPRINKLERS: 9 (CALCULATED)

BASIS OF DESIGN:

|  |     |
|--|-----|
| 1. DENSITY (GPM/SQ.FT.)                | .15 |
| 2. DESIGNED AREA OF DISCHARGE (SQ.FT.) | 901 |

SYSTEM DEMAND:

|   |        |
|---|--------|
| 1. WATER FLOW RATE (GPM)                            | 204.96 |
| 2. RESIDUAL PRESSURE AT THE BASE OF THE RISER (PSI) | 62.583 |

**HYDRAULIC DATA NAMEPLATE**

TO BE MOUNTED AT SYSTEM RISER

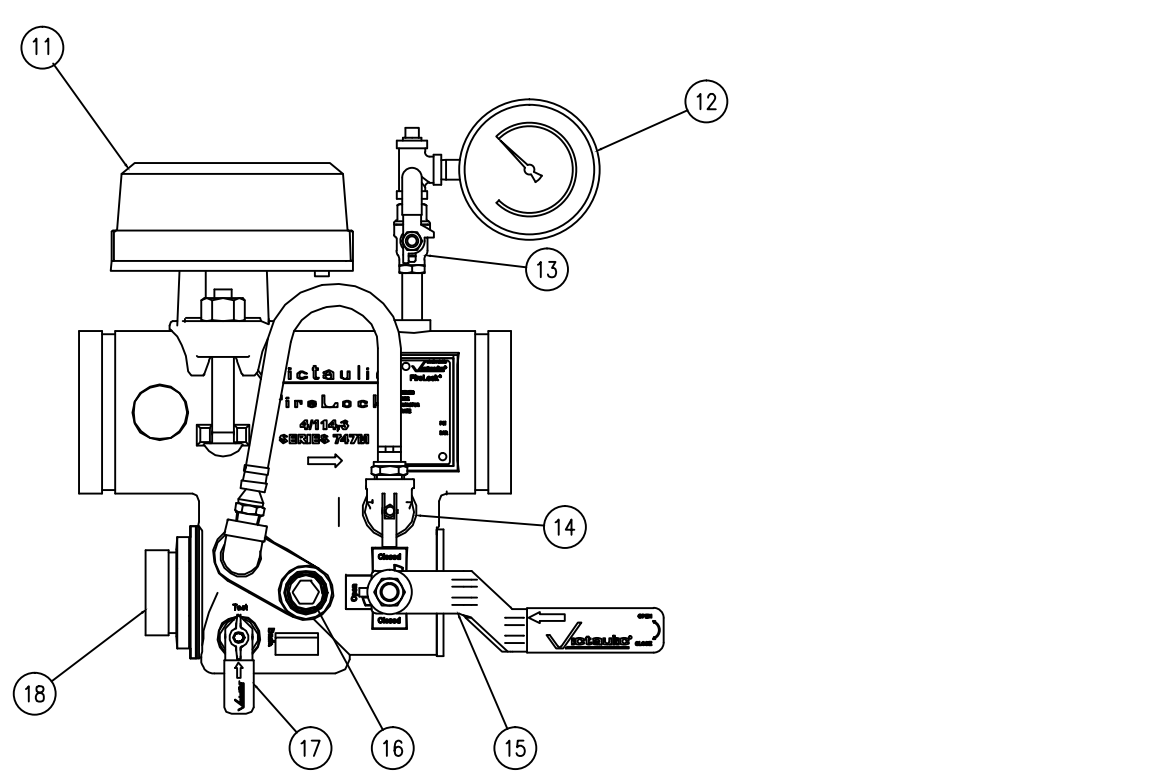
**FIRE SPRINKLER PLAN - BASEMENT**

SCALE: 1/8"=1'-0"  
AREA PROTECTED: 1,650 SQ.FT.  
FINISH FLOOR ELEVATION: 100.00'  
COLOR CODE:

**Basement Sprinkler Head Schedule**

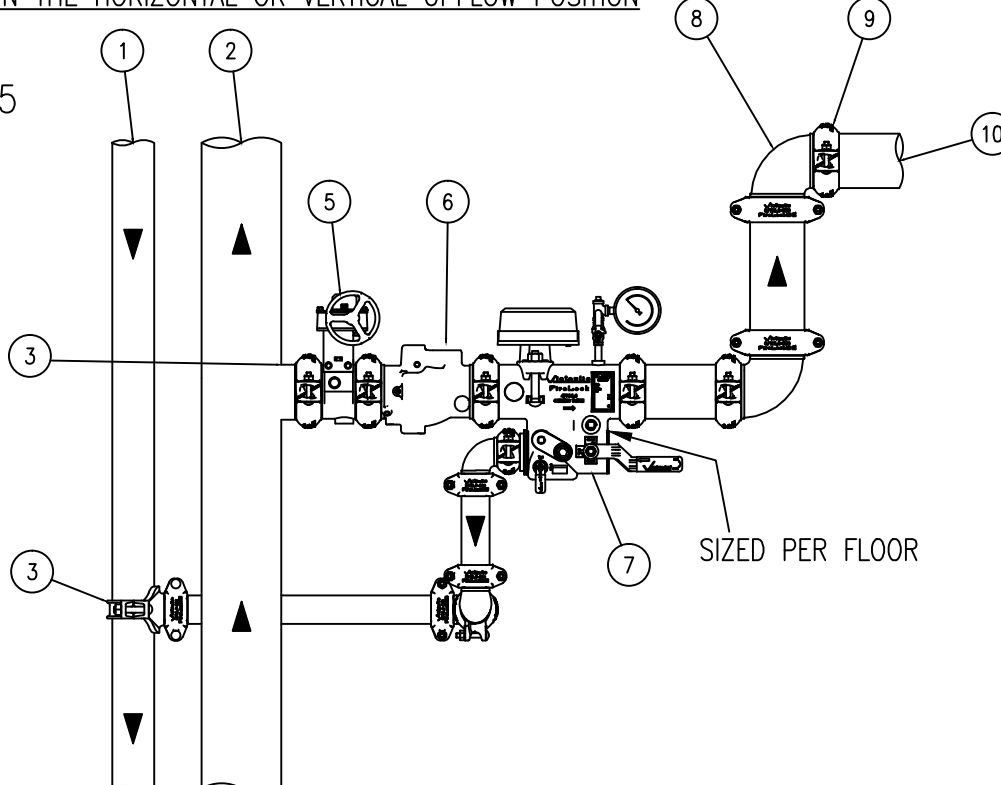
| Symbol | Count | Thread | K-Factor | Description  | Note     |
|--------|-------|--------|----------|--|----------|
| ⊙      | 31    | 1/2"   | 5.6      | RELIABLE F1FR56 SIN #R1425 QUICK RESPONSE 200" BRASS UPRIGHT       | on Sprig |
| ◁      | 1     | 1/2"   | 5.6      | RELIABLE F1FR56 SIN #R1435 QUICK RESPONSE 200" HORIZONTAL SIDEWALL | On Line  |

32 = Total Number of Heads This Floor

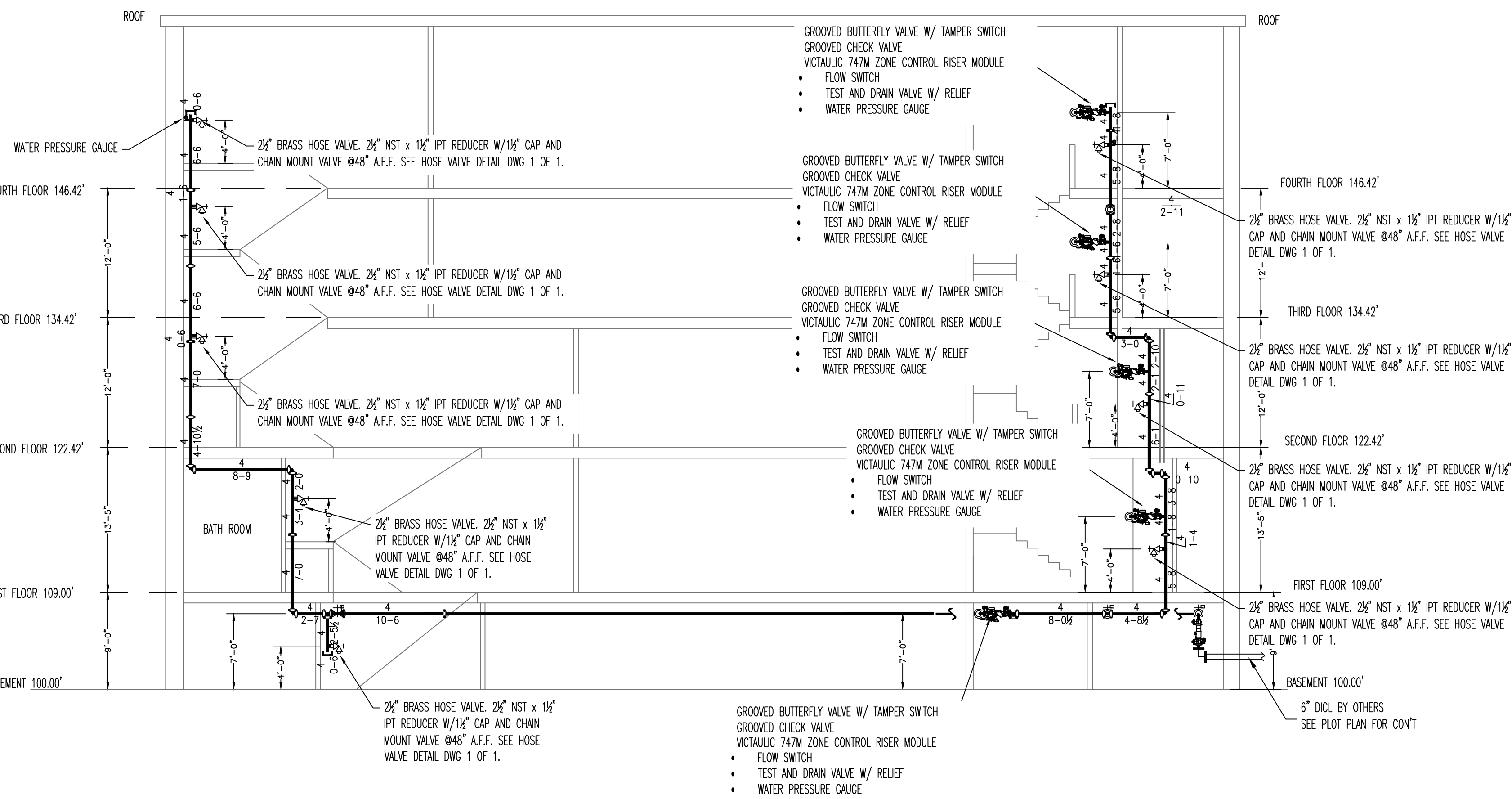


**FIRELOCK ZONE CONTROL RISER MODULE W/ PSI RELIEF**

CAN BE MOUNTED IN THE HORIZONTAL OR VERTICAL UPFLOW POSITION



**ZONE CONTROL RISER VALVE ASSEMBLY WITH ISOLATION VALVE & CHECK VALVE**



**SP2 STAIR#2**

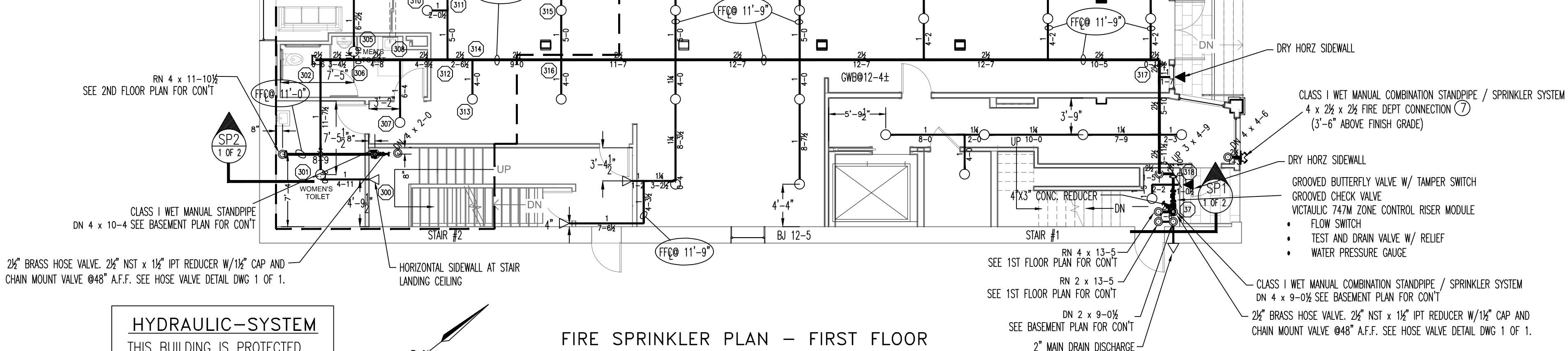
SCALE: 1/8"=1'-0"  
COLOR: YELLOW

**SP1 STAIR#1**

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

**(1ST FLOOR)  
HYDRAULICALLY MOST  
REMOTE AREA**

(1 GPM/SQ.FT. / 982 SQ.FT.)  
(ELEV. @ HIGHEST HEAD = 109.75')  
(AREA REDUCTION PER NFPA 13  
2016 SECTION 11.2.3.2.3.1)



**HYDRAULIC-SYSTEM**

THIS BUILDING IS PROTECTED BY A HYDRAULICALLY DESIGNED AUTOMATIC SPRINKLER SYSTEM. 24 PREBLE ST. 1ST FLOOR

LOCATION:

NO. OF SPRINKLERS: 10 (CALCULATED)

BASIS OF DESIGN:

|  |     |
|--|-----|
| 1. DENSITY (GPM/SQ.FT.)                | .17 |
| 2. DESIGNED AREA OF DISCHARGE (SQ.FT.) | 982 |

SYSTEM DEMAND:

|   |        |
|---|--------|
| 1. WATER FLOW RATE (GPM)                            | 248.67 |
| 2. RESIDUAL PRESSURE AT THE BASE OF THE RISER (PSI) | 65.769 |

**HYDRAULIC DATA NAMEPLATE**

TO BE MOUNTED AT SYSTEM RISER

**FIRE SPRINKLER PLAN - FIRST FLOOR**

SCALE: 1/8"=1'-0"  
AREA PROTECTED: 1,650 SQ.FT.  
FINISH FLOOR ELEVATION: 109.00'  
COLOR CODE: BLUE

**First Floor Sprinkler Head Schedule**

| Symbol | Count | Thread | K-Factor | Description   | Note    |
|--------|-------|--------|----------|---|---------|
| ⊙      | 31    | 1/2"   | 5.6      | RELIABLE F1FR56 SIN #R1425 QUICK RESPONSE 200" BRASS UPRIGHT                      | on Line |
| ◁      | 2     | 1"     | 5.6      | RELIABLE F1FR56 SIN #R5734 200" DRY WHITE HORIZONTAL SIDEWALL                     | on Line |
| ◁      | 3     | 1/2"   | 5.6      | RELIABLE F1FR56 SIN #R1435 QUICK RESPONSE 200" WHITE RECESSED HORIZONTAL SIDEWALL | on Line |

36 = Total Number of Heads This Floor

**GENERAL NOTES**

SPRINKLER SYSTEM INSTALLATION TO COMPLY WITH NFPA 13 (2016) NFPA 14 (2003).

SCOPE OF WORK:  
INSTALL (1) NEW CLASS I WET MANUAL COMBINATION STANDPIPE / SPRINKLER SYSTEM THROUGHOUT THE BASEMENTS, FIRST, SECOND, THIRD, FOURTH, E.F.P. TO BEGIN WORK AT 6" FLANGED OUTLET INSIDE THE BUILDING (INSTALLED BY OTHERS)

OCCUPANCY HAZARD AND CLASSIFICATION:  
LIGHT HAZARD = OFFICE, STAIRS, BATHROOMS, AND BAR.

ORDINARY HAZARD GROUP I = BASEMENT STORAGE, AND KITCHEN.

ALL DIMENSIONS ARE SHOWN FOR GENERAL LOCATION OF SPRINKLER HEADS ; PIPING MAY VARY TO SUIT ACTUAL FIELD CONDITIONS.

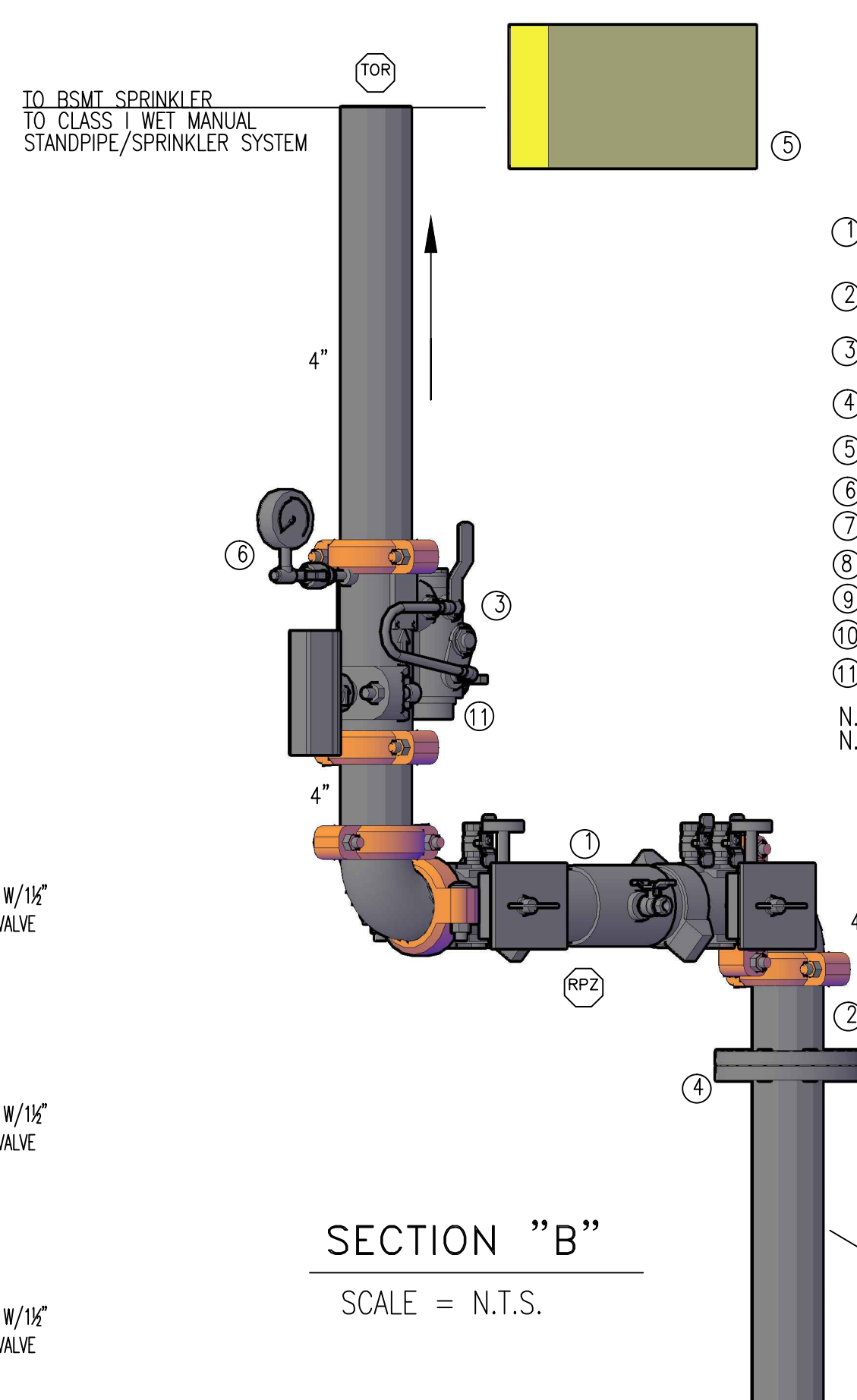
STORAGE OF MATERIAL SHALL NOT EXCEED 8'-0" IN HEIGHT.

ALL WIRING TO BE DONE BY OTHERS.

ALL PAINTING BY OTHERS.

FOR SPRINKLER HEAD + HANGER DETAILS SEE SHEET 2 OF 2

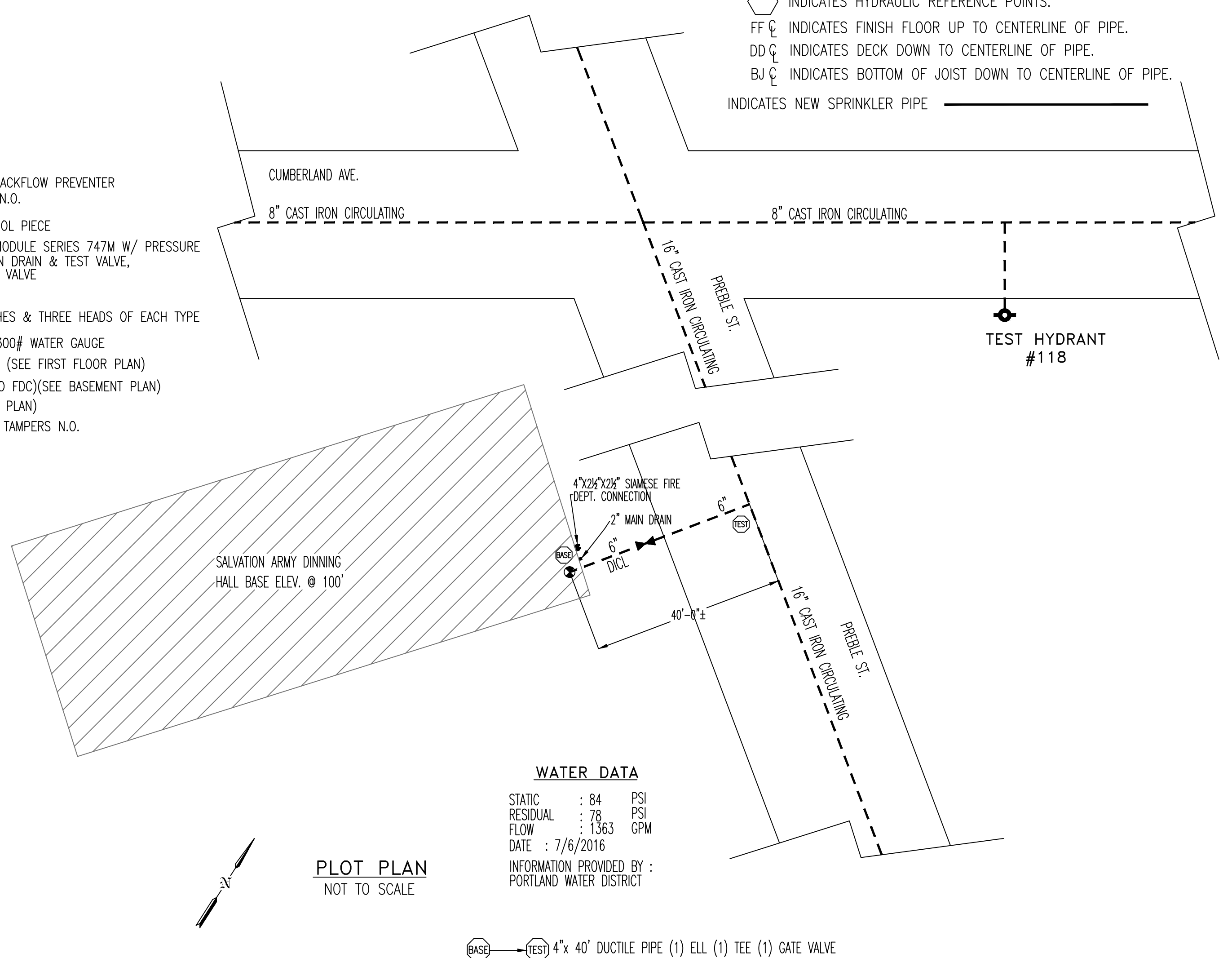
⊙ INDICATES HYDRAULIC REFERENCE POINTS.  
FF ⊕ INDICATES FINISH FLOOR UP TO CENTERLINE OF PIPE.  
DD ⊕ INDICATES DECK DOWN TO CENTERLINE OF PIPE.  
BJ ⊕ INDICATES BOTTOM OF JOIST DOWN TO CENTERLINE OF PIPE.  
INDICATES NEW SPRINKLER PIPE



**SECTION "B"**

SCALE = N.T.S.

- LEGEND**
- ① 4" 6x6 DRINGER DOUBLE CHECK BACKFLOW PREVENTER W/ BUTTERFLY VALVES & TAMPERS N.O.
  - ② 6" X 4" FLANGED X GROOVED SPOOL PIECE
  - ③ FIRELOCK ZONE CONTROL RISER MODULE SERIES 747M W/ PRESSURE RELIEF KIT CONSISTING OF: 2" MAIN DRAIN & TEST VALVE, AND WATER GAUGE W/ 1/4" 3-WAY VALVE
  - ④ 6" UNI-FLANGE BY OTHERS
  - ⑤ SPARE HEAD BOX W/ HEAD WRENCHES & THREE HEADS OF EACH TYPE
  - ⑥ 3/4" THREE-WAY GLOBE VALVE WITH 300# WATER GAUGE
  - ⑦ 4"x2 1/2"x2 1/2" FIRE DEPT. CONNECTION (SEE FIRST FLOOR PLAN)
  - ⑧ 4" GROOVED 300B CHECK VALVE (TO FDC)(SEE BASEMENT PLAN)
  - ⑨ 1/2" AUTO BALL DRIP (SEE BASEMENT PLAN)
  - ⑩ 4" GROOVED BUTTERFLY VALVES W/ TAMPERS N.O.
  - ⑪ 2" DRAIN PIPED TO EXTERIOR
- N.O. = NORMALLY OPEN  
N.C. = NORMALLY CLOSED



**WATER DATA**

STATIC : 84 PSI  
RESIDUAL : 78 PSI  
FLOW : 1363 GPM  
DATE : 7/6/2016  
INFORMATION PROVIDED BY : PORTLAND WATER DISTRICT

**PLOT PLAN**

NOT TO SCALE

| GENERAL NOTES  | DATE | REVISIONS | REQUIRED APPROVALS   | FIRE SPRINKLER PLANS & DETAILS   |
|--|------|-----------|--|--|
| SPRINKLER SYSTEM INSTALLATION TO COMPLY WITH NFPA PAMPHLET # 13 (2016)<br>BRANCH LINE PIPING TO BE BLACK SCHEDULE 40 JOINED BY THREADED DUCTILE IRON FITTINGS<br>MAIN PIPING TO BE SCHEDULE # 10 BLACK WITH GROOVED ENDS & WELDED OUTLETS JOINED BY MECHANICAL COUPLINGS<br>OWNER TO PROVIDE SUFFICIENT HEAT THROUGHOUT BUILDING TO PREVENT FREEZING OF WATER FILLED SPRINKLER PIPING AND EQUIPMENT. ( MIN. 40° F) |      |           | OWNER<br>STATE FIRE MARSHAL<br>PORTLAND FIRE DEPARTMENT  | 24 PREBLE ST.<br>PORTLAND, ME.<br>DWG. NO. 1 OF 2<br>JOB NUMBER 1-05602-SP-17<br>SCALE AS SHOWN<br>DATE 8/11/17                  |
|  |      |           | DRAWN BY EWM<br>NICET LEVEL GRD<br>CERT.# 090388<br>CHECKED BY GRD<br>NICET LEVEL III<br>CERT.# 090388<br>CONTRACTOR LICENSE # 101<br>CONTRACTOR RMS # 291 | CONTRACT WITH: LANDMARC CONC. CORP.<br><b>EASTERN FIRE PROTECTION</b><br>AUBURN/LEWISTON INDUSTRIAL AIRPARK, AUBURN, MAINE 04210 |