

HYDRAULIC-SYSTEM
THIS BUILDING IS PROTECTED BY A HYDRAULICALLY DESIGNED AUTOMATIC SPRINKLER SYSTEM.

LOCATION: THIRD FLOOR

No. OF SPRINKLERS: 4
(CALCULATED)

BASIS OF DESIGN:
1. DENSITY (GPM/SQ. FT.) 1.6GPM
2. DESIGNED AREA OF DISCHARGE (SQ. FT.) 4 HEADS

SYSTEM DEMAND:
1. WATER FLOW RATE 71.12 GPM
2. RESIDUAL PRESSURE AT 49.134 PSI

BASE OF SYSTEM RISER

HYDRAULIC DATA NAMEPLATE

TO BE MOUNTED AT SYSTEM RISER

HYDRAULIC-SYSTEM
THIS BUILDING IS PROTECTED BY A HYDRAULICALLY DESIGNED AUTOMATIC SPRINKLER SYSTEM.

LOCATION: ATTIC

No. OF SPRINKLERS: 33
(CALCULATED)

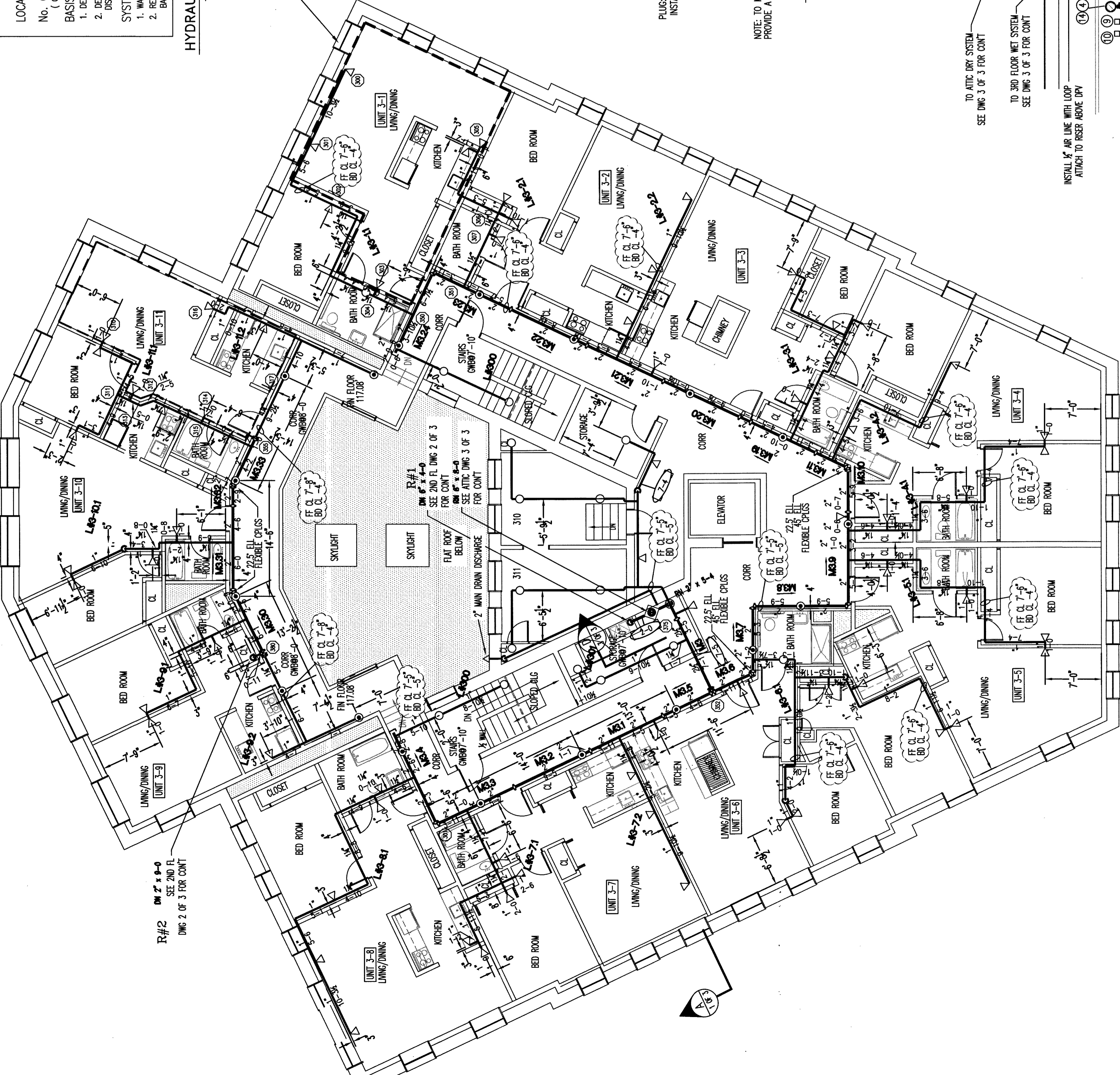
BASIS OF DESIGN:
1. DENSITY (GPM/SQ. FT.) .15
2. DESIGNED AREA OF DISCHARGE (SQ. FT.) 2535

SYSTEM DEMAND:
1. WATER FLOW RATE 52.89 GPM
2. RESIDUAL PRESSURE AT 44.431 PSI

BASE OF SYSTEM RISER

HYDRAULIC DATA NAMEPLATE

TO BE MOUNTED AT SYSTEM RISER



FIRE SPRINKLER PLAN - THIRD FLOOR

SCALE: 1/8"=1'-0"
AREA PROTECTED: 10,235 SQ. FT.
FINISH FLOOR ELEVATION: 118.42'
COLOR CODE: YELLOW

Sprinkler Head Schedule

Symbol	Count	Thread	SIN#	K-FACTOR	TEMP	Description	Note
◁	69	1/2"	R3231	4.4	155°	RELIABLE FFRS 44 WHITE HORIZ. SHERWALL	ON LINE
○	18	1/2"	R40016	4.9	165°	RELIABLE RRC 49 CONCEALED PENDANT	ON DROP
○	16	1/2"	R41425	5.6	200°	RELIABLE FFRS 56 BRASS UPRIGHT	ON LINE

103 = Total Number of Heads THIRD FLOOR



FIRE SPRINKLER PLAN - ATTIC

SCALE: 1/8"=1'-0"
AREA PROTECTED: 7,865 SQ. FT.
FINISH FLOOR ELEVATION: 129.50'
COLOR CODE: GREEN

Sprinkler Head Schedule

Symbol	Count	Thread	SIN#	K-FACTOR	TEMP	Description	Note
○	92	1/2"	R41425	5.6	200°	RELIABLE FFRS 56 BRASS UPRIGHT	ON LINE
○	17	1/2"	R41425	5.6	200°	RELIABLE FFRS 56 BRASS UPRIGHT	ON LINE

109 = Total Number of Heads ATTIC

DRY INSPECTOR'S TEST DETAIL
NOT TO SCALE

NOTE: TO MINIMIZE CONSUMPTION OF WATER IN THE DROP TO THE TEST CONNECTION, PROVIDE A NIPPLE-UP OFF THE BRANCH LINE. DRY TEST CONNECTION (PER NFPA 13)



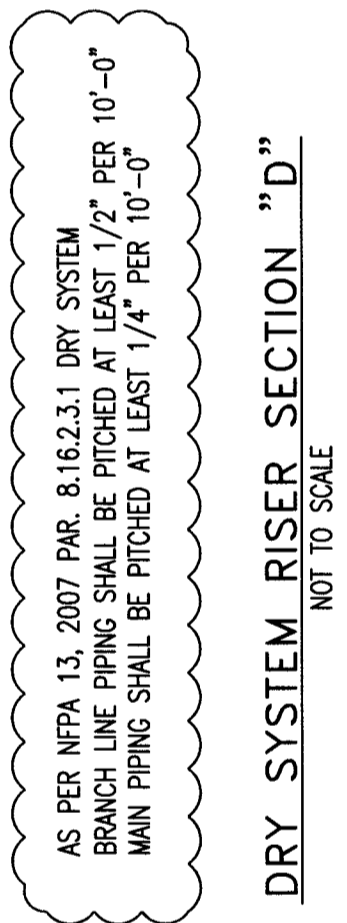
LEGEND

- ① 6" TYOD BPA-N GROOVED BUTTERFLY VALVE (N.O.) W/ TAMPER SWITCH
- ② 6" TYOD BPA-1 DRY PIPE VALVE GAG W/ AGC-1 ACCELERATOR
- ③ WATER PRESSURE GAUGE (0-300 PSI)
- ④ 1/4" 3-WAY VALVE
- ⑤ AIR DRAIN
- ⑥ LENOX AIR COMPRESSOR MODEL EX-65-RS
- ⑦ 3/4" HP, 115/230V SINGLE PHASE
- ⑧ 2" MAIN DRAIN VALVE (N.C.)
- ⑨ PIPE STAND
- ⑩ FURNAS AIR COMPRESSOR AUTOMATIC ON-OFF SWITCH MODEL 69W4B (CUT IN 20PSI CUT OUT 29PSI)
- ⑪ POTTER LOW AIR PRESSURE SWITCH PS40-2 (SET TO 15 PSI)
- ⑫ DRY PIPE VALVE AIR LINE BY-PASS W/ LOAD GENE
- ⑬ 3/4" DRIP LEG W/ VALVE
- ⑭ AIR PRESSURE GAUGE
- ⑮ AIR PRESSURE SWITCH
- N.C. = NORMALLY CLOSED
- N.O. = NORMALLY OPEN
- ALL WIRING BY OTHERS.

GENERAL NFPA #13R NOTES

- 1. SPRINKLERS ARE NOT REQUIRED IN THE FOLLOWING AREAS:
 - A. BATHROOMS NOT EXCEEDING 50 SQ. FT.
 - B. SMALL CLOSETS WITHIN THE LEAST DIMENSION NOT EXCEEDING 3'0" SQ. FT. IN AREA WITH THE LEAST DIMENSION NOT EXCEEDING 3'0"
 - C. OPEN STAGES, PORCHES, BALCONIES, CORRIDORS AND STAIRS
 - D. CRAWL SPACES, ATTICS, PENHOUSE EQUIPMENT & ELEVATOR MACHINE ROOMS, FLOOR/CEILING SPACES AND ELEVATOR SHAFTS AND OTHER CONCEALED SPACES THAT ARE NOT INTENDED FOR LIVING PURPOSES AND DO NOT CONTAIN FUEL-FIRED EQUIPMENT.
 - E. CLOSETS ON EXTERIOR BALCONIES W/NO DIRECT ACCESS FROM THE DWELLING UNIT.

DRY SYSTEM RISER SECTION "D"
NOT TO SCALE



DRY SYSTEM CAPACITY = 335 GALLONS

AS PER NFPA 13, 2007 PAR. 8.16.2.3.1 DRY SYSTEM MAIN PIPING SHALL BE FITTED AT LEAST 1/4" PER 10'-0"

BUTLER SCHOOL APARTMENTS
77 PINE STREET, PORTLAND, ME

CONTRACT WITH: HERBERT CONSTRUCTION

EASTERN FIRE PROTECTION
AUBURN/LEWISTON INDUSTRIAL AIRPARK, AUBURN, MAINE 04270

REQUIRED APPROVALS

OWNER / ARCHITECT	STATE FIRE MARSHAL
DESIGNED BY	PORTLAND FIRE DEPARTMENT
DRAWN BY	GRD
CHECKED BY	WAF
CONTRACTOR LICENSE #	101
CONTRACTOR REG #	368

REVISIONS

DATE	REVISIONS

FIRE SPRINKLER PLANS & DETAILS

DWG. NO. 3 OF 3

JOB NUMBER AU-5305-15

SCALE AS NOTED

DATE 06/20/15