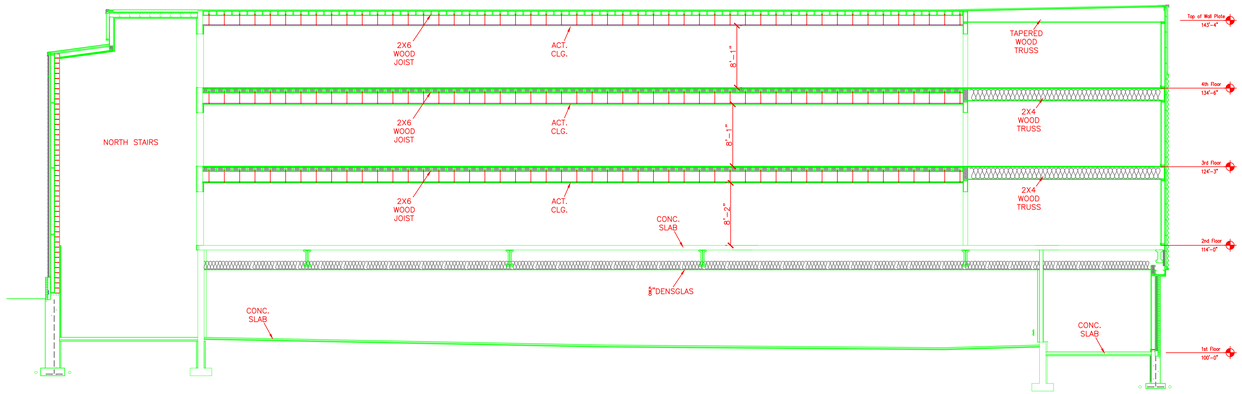
Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 05/05/16



BUILDING SECTION "A"

SCALE: "NTS"
FINISH FLOOR ELEV. 100.0'

NFPA 13R 2010 EXCLUSIONS

1. SECTION 6.6.2 Sprinklers shall not be required in bathrooms where the bathroom area does not exceed 55 ft2 (5.1 m2).
2. 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.
3. 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.
4. SECTION 6.6.5 Sprinklers shall not be required in any porches, balconies, corridors, carports, and stairs that are open and attached.
5. 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.
6. SECTION 6.6.6.1 When fuel-fired equipment is present, at least one quick-response intermediate temperature sprinkler shall be installed above the equipment.
7. 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.

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 1/2" 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.
- 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.

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 psi
System Demand
1. Water Flow Rate
@ Base/Pump 80.69 gpm
2. Residual Pressure
@ Base/Pump 69.547 psi
CUSHION = 42.11 psi

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 .05 gpm/ft²
2. Design area of discharge 4 HEADS psi
System Demand
1. Water Flow Rate
@ Base/Pump 69.70 gpm
2. Residual Pressure
@ Base/Pump 55.149 psi
CUSHION = 56.59 psi

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 .05 gpm/ft²
2. Design area of discharge 3 HEADS psi
System Demand
1. Water Flow Rate
@ Base/Pump 62.03 gpm
2. Residual Pressure
@ Base/Pump 77.191 psi
CUSHION = 34.59 psi

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 .15 gpm/ft²
2. Design area of discharge 4 HEADS psi
System Demand
1. Water Flow Rate
@ Base/Pump 80.04 gpm
2. Residual Pressure
@ Base/Pump 62.715 psi
CUSHION = 48.95 psi

WET SYSTEM

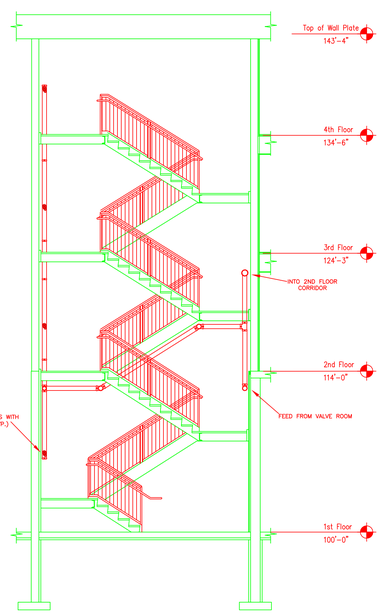
HYDRAULIC DATA NAMEPLATE
This Building is protected by a hydraulically designed Automatic Sprinkler System
Location AREA-5
No. of Sprinkler 12
Basis of design
1. Density .20 gpm/ft²
2. Design area of discharge 923 ft²
System Demand
1. Water Flow Rate
@ Base/Pump 369.60 gpm
2. Residual Pressure
@ Base/Pump 78.038 psi
CUSHION = 78.038 psi
HYDRAULICALLY MOST REMOTE

WET SYSTEM

HYDRAULIC DATA NAMEPLATE
This Building is protected by a hydraulically designed Automatic Sprinkler System
Location AREA-6
No. of Sprinkler 4
Basis of design
1. Density .05 gpm/ft²
2. Design area of discharge 4 HEADS psi
System Demand
1. Water Flow Rate
@ Base/Pump 75.86 gpm
2. Residual Pressure
@ Base/Pump 67.031 psi
CUSHION = 44.66 psi

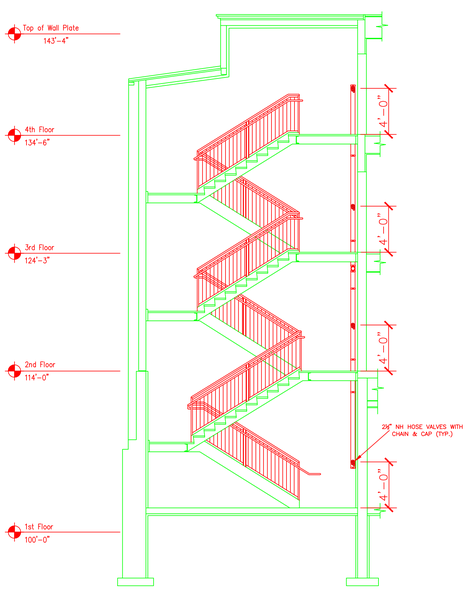
DRY SYSTEM

HYDRAULIC DATA NAMEPLATE
This Building is protected by a hydraulically designed Automatic Sprinkler System
Location AREA-1
No. of Sprinkler 20
Basis of design
1. Density .15 gpm/ft²
2. Design area of discharge 1950 ft²
System Demand
1. Water Flow Rate
@ Base/Pump 483.64 gpm
2. Residual Pressure
@ Base/Pump 79.236 psi
CUSHION = 22.24 psi
HYDRAULICALLY MOST REMOTE



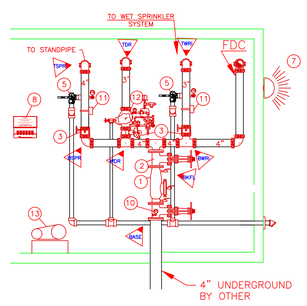
SOUTH STAIRS STANDPIPE DETAIL

SCALE: 3/16" = 1'-0"
FINISH FLOOR ELEV. 100.0'



NORTH STAIRS STANDPIPE DETAIL

SCALE: 3/16" = 1'-0"
FINISH FLOOR ELEV. 100.0'

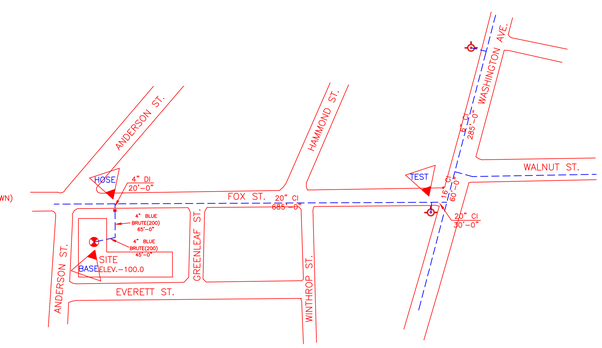


RISER DETAIL & LEGEND

NOT TO SCALE

13. 1 HP AIR COMPRESSOR JENNY
12. 3" RELIABLE EX DRY VALVE
11. FLOW SWITCH
10. ¾" THREE WAY VALVE WITH PRESSURE GAUGE
9. ¾" BALL DRIP VALVE (NOT SHOWN)
8. SPARE HEAD AND WRENCH BOX
7. ELECTRIC ALARM BELL POTTER
6. (3) 2½" FIRE DEPARTMENT CONNECTION ON A SINGLE BACK PLATE (NOT SHOWN)
5. TEST AND DRAIN VALVE
4. 4" SWING CHECK VALVE VICTAULIC MODEL 717 (NOT SHOWN)
3. GROOVED BUTTERFLY VALVE-TAMPERED
2. 4" OS&Y VALVE WITH TAMPER SWITCH
1. 4" DERINGER 20 DOUBLE CHECK BACK FLOW

DRY SYSTEM VOLUME = 176 GALLONS



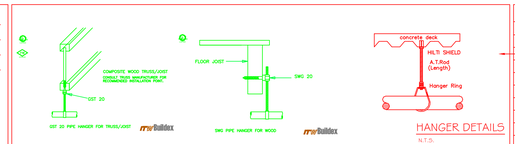
SITE PLAN

NOT TO SCALE

WATER DATA
STATIC 86 PSI
RESIDUAL 78 PSI
FLOW 1299 GPM
BY PORTLAND WATER DISTRICT
DATE 5/23/15
HYDRANT ELEV: 160.00' +/-

SUBMITTAL COPY

1. Type of Hazard OH2,LIGHT,RESIDENTIAL 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/NFPA 13R
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 Joiste
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	F1FR 56	RA1425	BRONZE	UPRIGHT	200° F	1/2"	1/2"	5.6	97
	RELIABLE	F1FR 56	RA1414	WHITE	SEMI-REC PENDENT	155° F	1/2"	1/2"	5.6	47
	RELIABLE	F1RES 49	R3516	WHITE	SEMI REC PENDENT	155° F	1/2"	7/16"	4.9	260
	RELIABLE	F1RES 44	R3531	WHITE	HORIZ SIDEWALL	155° F	1/2"	7/16"	4.4	84
	RELIABLE	F1FR 56	RA1435	BRONZE	HORIZ SIDEWALL	200° F	1/2"	1/2"	5.6	2
									TOTAL →	490

SUBMITTALS		
SENT TO		
DATE 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.# 442
PERMIT # ????

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

89 ANDERSON ST.
89 ANDERSON ST.
PORTLAND, ME 04101

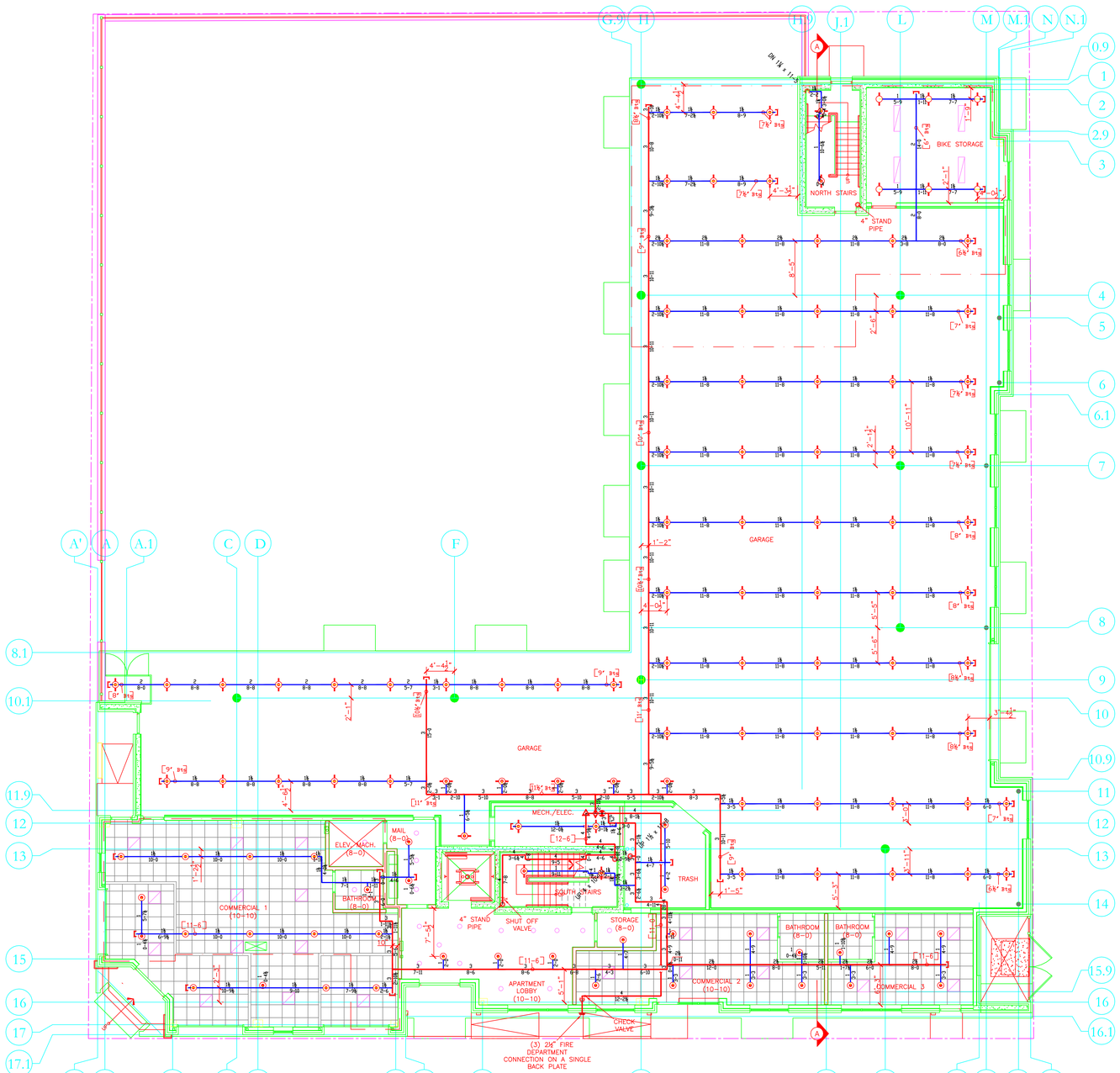
CONTRACT WITH ALLIED COOK

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

SCALE	AS NOTED
DRAWN BY	RDO
CHECKED BY	CDS
DATE	3/30/2016
TOTAL SPKRS ON JOB	490
SHEET#	1 of 5
JOB#	15126

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 05/05/16



FIRST FLOOR SPRINKLER PLAN

SCALE: 1/8" = 1'-0"
FINISH FLOOR ELEV. 100.0'

SUBMITTAL COPY

SPRINKLER HEAD LEGEND

SYMBOL	MAKE	MODEL	SIN	FINISH	TYPE	TEMP	NPT	ORIFICE	K-FACTOR	TOTAL
	RELIABLE	F1FR 56	RA1425	BRONZE	UPRIGHT	200° F	1/2"	1/2"	5.6	97
	RELIABLE	F1FR 56	RA1414	WHITE	SEMI-REC PENDENT	155° F	1/2"	1/2"	5.6	47
	RELIABLE	F1RES 49	R3516	WHITE	SEMI-REC PENDENT	155° F	1/2"	7/16"	4.9	260
	RELIABLE	F1RES 44	R3531	WHITE	HORIZ SIDEWALL	155° F	1/2"	7/16"	4.4	84
	RELIABLE	F1FR 56	RA1435	BRONZE	HORIZ SIDEWALL	200° F	1/2"	1/2"	5.6	2
									TOTAL →	490

LICENSE# 093
R.M.S.# 442

PERMIT # ????

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

89 ANDERSON ST.
89 ANDERSON ST.
PORTLAND, ME 04101

CONTRACT WITH: ALLIED COOK

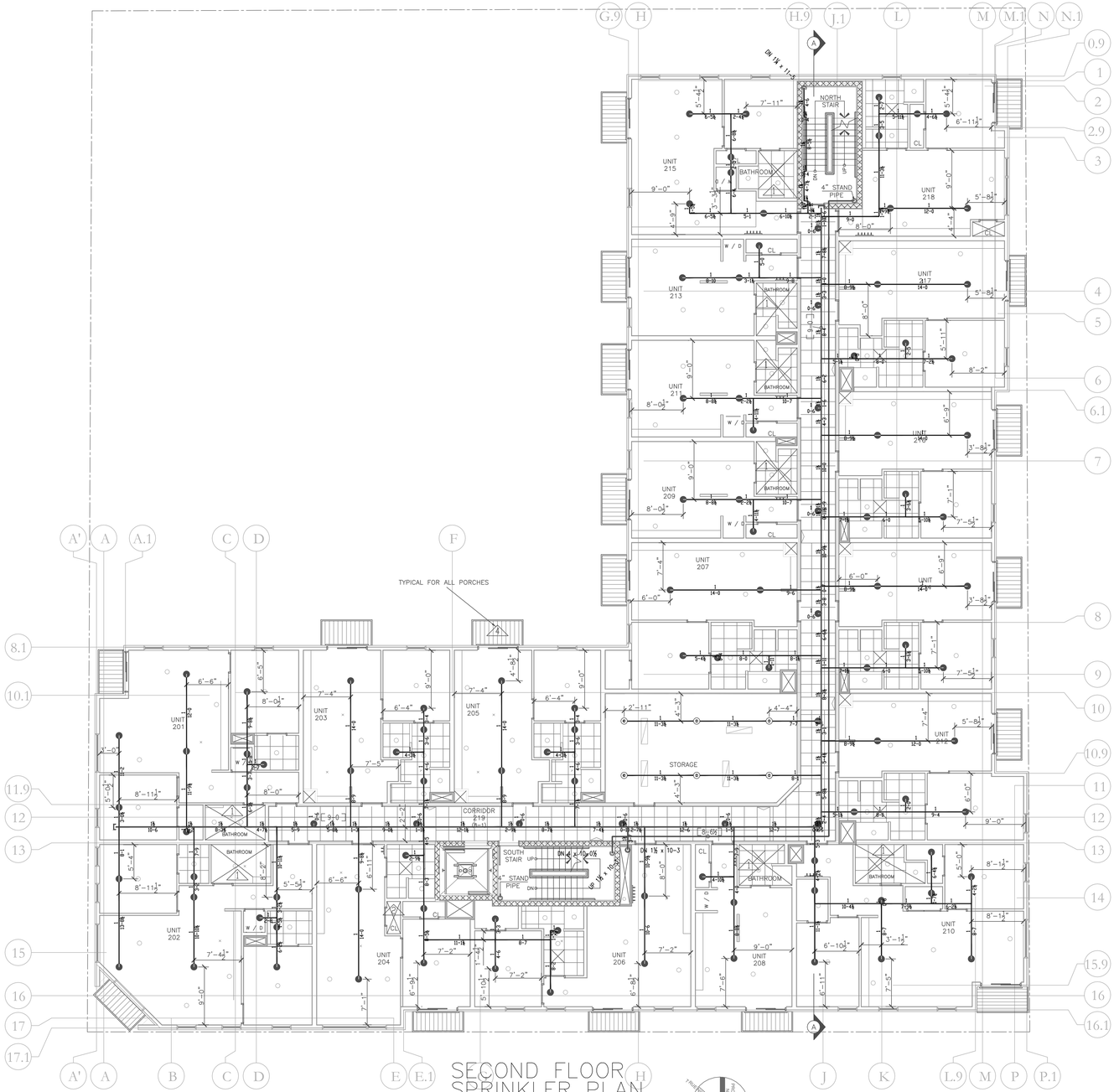
SYSTEM TYPE	
WET	■
DRY	■
DELUGE	□
PREACTION	□
ME. LIFE	□
HYDRO-PRO	□

REVISIONS		
NO.	DATE	DESCRIPTION

SCALE	AS NOTED
DRAWN BY	RDO
CHECKED BY	CDS
DATE	3/30/2016
TOTAL SPKRS ON JOB	490
SHEET#	2 of 5
JOB#	15126

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 05/05/16



SECOND FLOOR SPRINKLER PLAN

SCALE: 1/8"= 1'-0"
FINISH FLOOR ELEV. 114.0'

– ALL UNIT CEILING HEIGHTS ARE 8'-7" (Unless Otherwise Noted)
– ALL ACT. CEILING HEIGHTS ARE 8'-0" (Unless Otherwise Noted)

SUBMITTAL COPY

SPRINKLER HEAD LEGEND

SYMBOL	MAKE	MODEL	SIN	FINISH	TYPE	TEMP	NPT	ORIFICE	K-FACTOR	TOTAL
	RELIABLE	F1FR 56	RA1425	BRONZE	UPRIGHT	200° F	1/2"	1/2"	5.6	97
	RELIABLE	F1FR 56	RA1414	WHITE	SEMI-RECPENDENT	155° F	1/2"	1/2"	5.6	47
	RELIABLE	F1RES 49	R3516	WHITE	SEMI RECPENDENT	155° F	1/2"	7/16"	4.9	260
	RELIABLE	F1RES 44	R3531	WHITE	HORIZ SIDEWALL	155° F	1/2"	7/16"	4.4	84
	RELIABLE	F1FR 56	RA1435	BRONZE	HORIZ SIDEWALL	200° F	1/2"	1/2"	5.6	2
									TOTAL →	490

LICENSE# 093
R.M.S.# 442

PERMIT # ????

SPRINKLER SYSTEMS INC.

P.O. BOX 1285
LEWISTON MAINE
04243-1285

89 ANDERSON ST.
89 ANDERSON ST.
PORTLAND, ME 04101

CONTRACT WITH ALLIED COOK

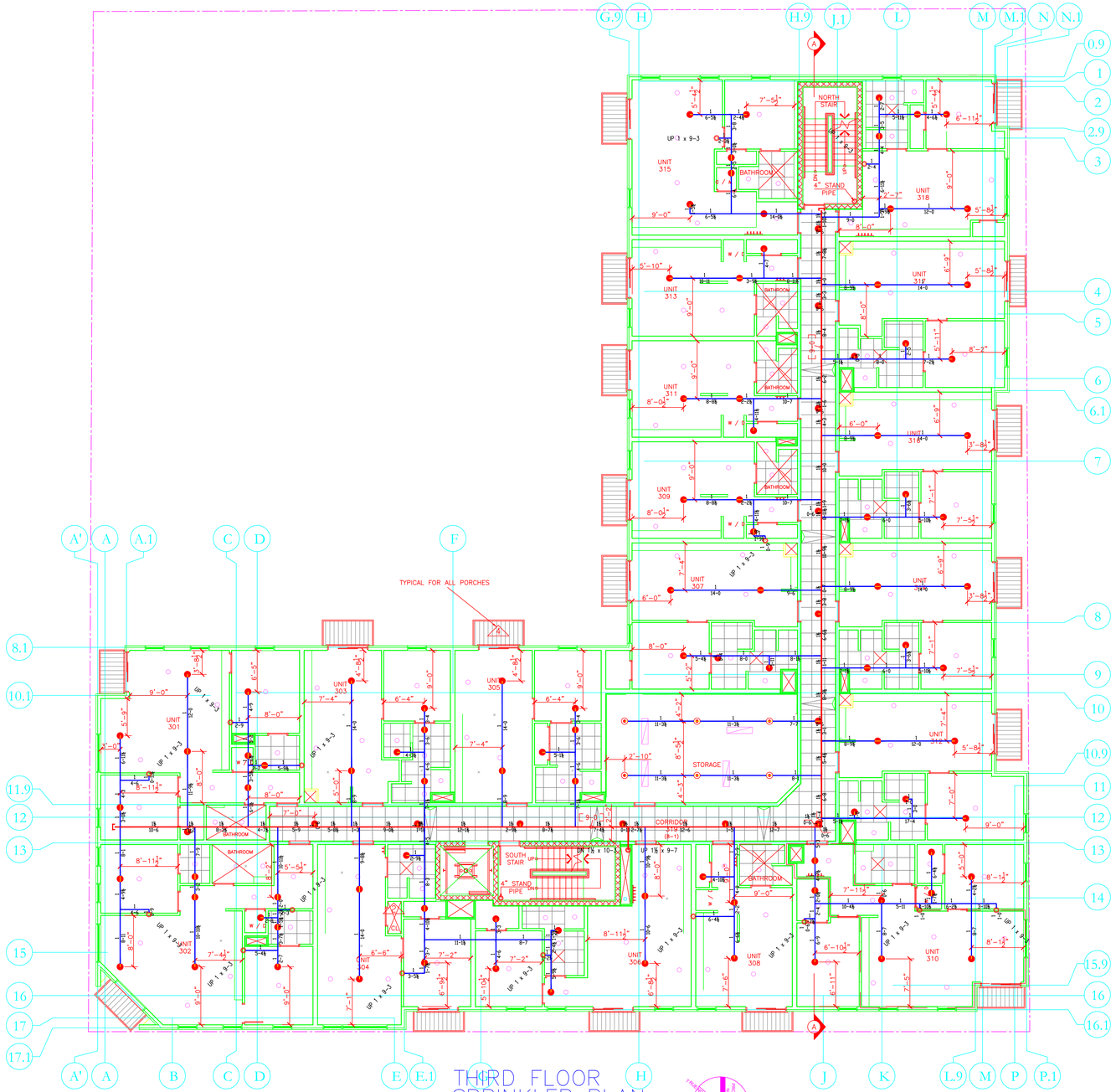
SYSTEM TYPE	
WET	■
DRY	■
DELUGE	□
PREACTION	□
ME. LIFE	□
HYDRO-PRO	□

REVISIONS		
NO.	DATE	DESCRIPTION

SCALE	AS NOTED
DRAWN BY	RDO
CHECKED BY	CDS
DATE	3/30/2016
TOTAL SPKRS ON JOB	490
SHEET#	3 of 5
JOB#	15126

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 05/05/16



THIRD FLOOR SPRINKLER PLAN

SCALE: 1/8"= 1'-0"
FINISH FLOOR ELEV. 124.25'

– ALL UNIT CEILING HEIGHTS ARE 8'-6" (Unless Otherwise Noted)
– ALL ACT. CEILING HEIGHTS ARE 8'-0" (Unless Otherwise Noted)

SUBMITTAL COPY

SPRINKLER HEAD LEGEND

SYMBOL	MAKE	MODEL	SIN	FINISH	TYPE	TEMP	NPT	ORIFICE	K-FACTOR	TOTAL
	RELIABLE	F1FR 56	RA1425	BRONZE	UPRIGHT	200° F	1/2"	1/2"	5.6	97
	RELIABLE	F1FR 56	RA1414	WHITE	SEMI-RECS PENDENT	155° F	1/2"	1/2"	5.6	47
	RELIABLE	F1RES 49	R3516	WHITE	SEMI RECS PENDENT	155° F	1/2"	7/16"	4.9	260
	RELIABLE	F1RES 44	R3531	WHITE	HORIZ SIDEWALL	155° F	1/2"	7/16"	4.4	84
	RELIABLE	F1FR 56	RA1435	BRONZE	HORIZ SIDEWALL	200° F	1/2"	1/2"	5.6	2
									TOTAL →	490

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

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

CONTRACT WITH	ALLIED COOK
SYSTEM TYPE	
WET	■
DRY	■
DELUGE	□
PREACTION	□
ME. LIFE	□
HYDRO-PRO	□

REVISIONS

NO.	DATE	DESCRIPTION

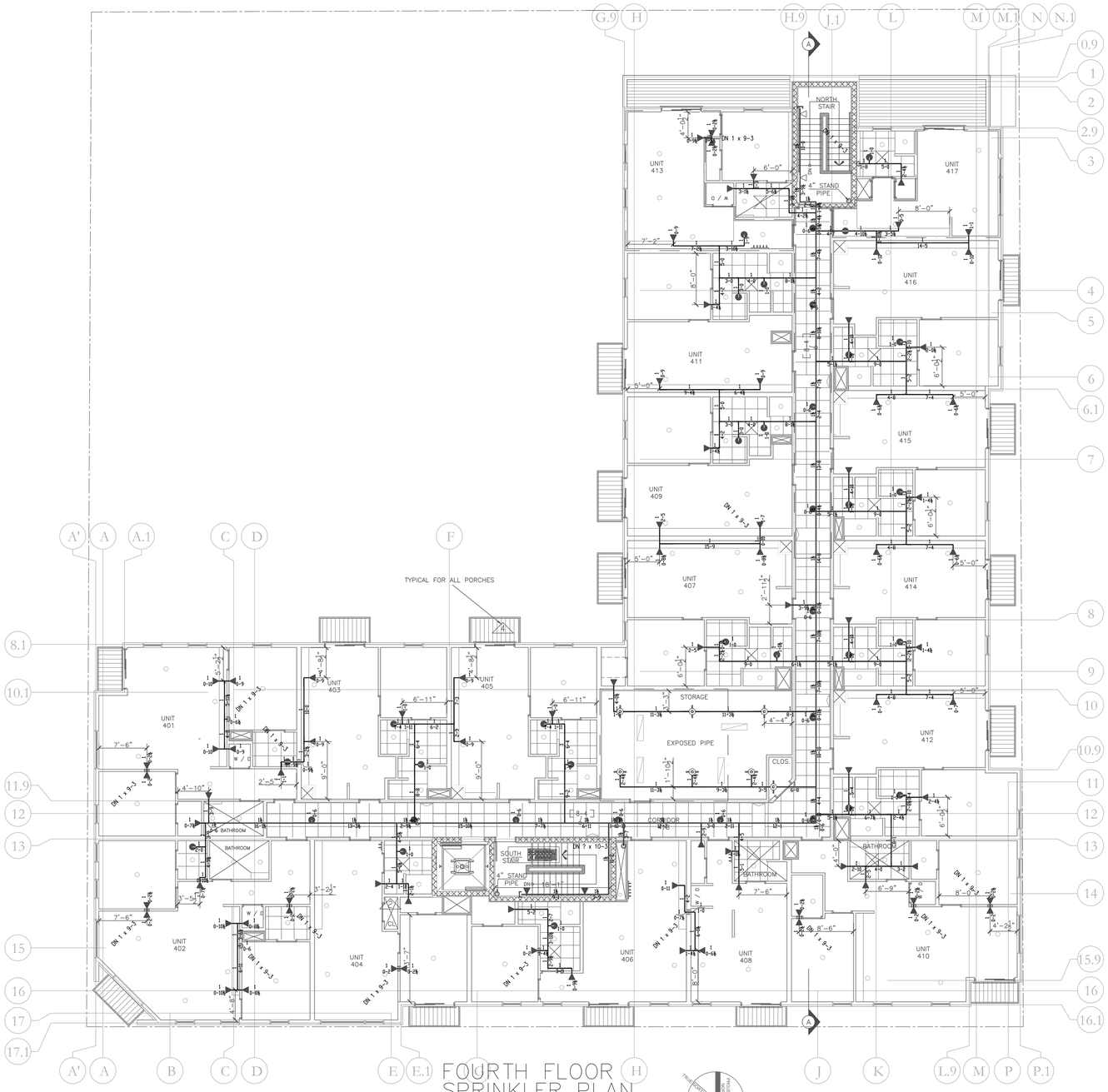
89 ANDERSON ST.

89 ANDERSON ST.
PORTLAND, ME 04101

SCALE	AS NOTED
DRAWN BY	RDO
CHECKED BY	CDS
DATE	3/30/2016
TOTAL SPKRS ON JOB	490
SHEET#	4 of 5
JOB#	15126

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 05/05/16



FOURTH FLOOR SPRINKLER PLAN

SCALE: 1/8"= 1'-0"
FINISH FLOOR ELEV. 134.5'

- ALL UNIT CEILING HEIGHTS ARE 8'-6" (Unless Otherwise Noted)
- ALL ACT. CEILING HEIGHTS ARE 7'-6" (Unless Otherwise Noted)

SUBMITTAL COPY

SPRINKLER HEAD LEGEND

SYMBOL	MAKE	MODEL	SIN	FINISH	TYPE	TEMP	NPT	ORIFICE	K-FACTOR	TOTAL
	RELIABLE	F1FR 56	RA1425	BRONZE	UPRIGHT	200° F	1/2"	1/2"	5.6	97
	RELIABLE	F1FR 56	RA1414	WHITE	SEMI-RECS PENDENT	155° F	1/2"	1/2"	5.6	47
	RELIABLE	F1RES 49	R3516	WHITE	SEM. RES. PENDENT	155° F	1/2"	7/16"	4.9	260
	RELIABLE	F1RES 44	R3531	WHITE	HORIZ SIDEWALL	155° F	1/2"	7/16"	4.4	84
	RELIABLE	F1FR 56	RA1435	BRONZE	HORIZ SIDEWALL	200° F	1/2"	1/2"	5.6	2
									TOTAL →	490

LICENSE# 093
R.M.S.# 442

PERMIT # ????

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

89 ANDERSON ST.

89 ANDERSON ST.
PORTLAND, ME 04101

CONTRACT WITH: ALLIED COOK

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

REVISIONS		
NO.	DATE	DESCRIPTION

SCALE	AS NOTED
DRAWN BY	RDO
CHECKED BY	CDS
DATE	3/30/2016
TOTAL SPKRS ON JOB	490
SHEET#	5 of 5
JOB#	15126