



Approved for Code Compliance  
Inspection Division  
Approved with Conditions  
Date: 01/04/14

278 HARRIS RD  
MINOT, ME 04258  
PHONE: 207-393-7422

HOWE OWNER:

DIVERSIFIED PROPERTIES  
P.O. BOX 10127  
PORTLAND, ME 04104

CONTRACTOR:

RICHARD MARTIN  
PLUMBING & HEATING  
24 NORTH LEDGE TERRACE  
FALMOUTH, ME 04105  
PHONE: 207-518-1622

CONTRACTOR # 895

LEGEND:

- RN PIPE RISER UP
- DN PIPE RISER DOWN
- CPVC PIPE (WET)
- ⊗ HYDRAULIC CALC. POINT
- ⊗ SYSTEM RISER
- - - HYDRAULIC DESIGN AREA

DESIGN NOTES:

- \* POSITION, LOCATION, SPACING, AND USE OF SPRINKLERS AND HANGERS SHALL BE IN ACCORDANCE WITH NFPA 13D 2010 ed.
- \* HYDRAULIC CALCULATION PROCEDURES HAVE BEEN DONE IN ACCORDANCE WITH NFPA 13D 2010 ed. (SEE PLANS FOR LOCATION OF REMOTE AREAS, HYDRAULIC REFERENCE POINTS, AND SYSTEM DEMANDS)
- \* ALL ELECTRICAL WORK TO BE DONE BY OTHERS.
- \* DIMENSIONS AND LOCATIONS GIVEN FOR SPRINKLER HEADS AND PIPE MAY VARY TO ACCOMMODATE ACTUAL FIELD CONDITIONS.
- \* OWNER TO PROVIDE SUFFICIENT HEAT TO PREVENT FREEZING IN WATER FILLED SPRINKLER PIPE AND EQUIPMENT.
- \* OTHER TRADES TO COORDINATE THEIR WORK WITH SPRINKLER CONTRACTOR.
- \* REFER TO SPEARS CPVC PLASTIC PIPE INSTALLATION MANUAL FOR GLUE CURING TIME AND HANGER SPACING.

SPRINKLER HEAD DESCRIPTION:

- RELIABLE RFC-49  
WHITE CONCEALED PENDENT  
16" X 16" SPACING MAX  
8" MAX FROM HEAD TO WALL

- RELIABLE F1-RES 44  
WHITE HORIZONTAL SIDEWALL  
14" X 14" SPACING MAX  
7" MAX FROM HEAD TO WALL

- RELIABLE F1-RES-49  
WHITE PENDENT  
16" X 16" SPACING MAX  
8" MAX FROM HEAD TO WALL

TOTAL HEADS ON SHEET: 22

SCALE: 1/4"=1'-0"

DATE: DECEMBER 19, 2013

DESIGNER: TIM FORTIN  
RMS # 866  
NICET LEVEL III CERT. # 122193

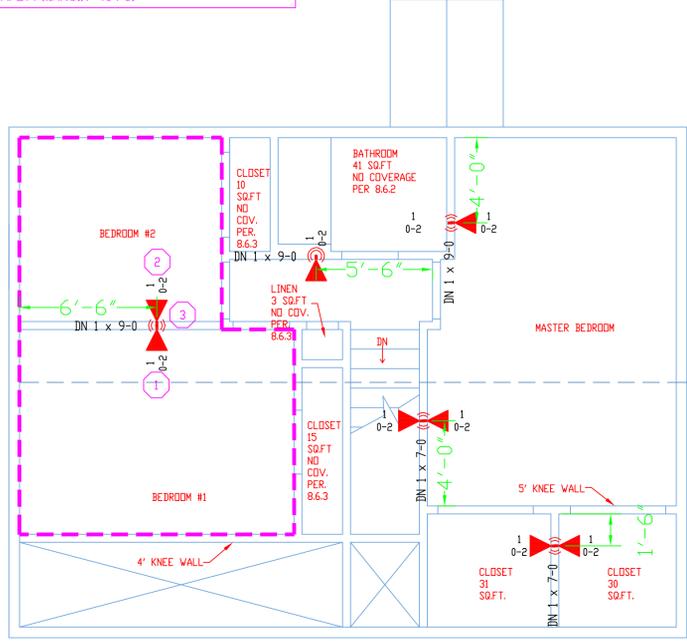
LOCATION:  
60 HUNTINGTON AVE.  
PORTLAND, ME

DRAWING TITLE:  
**60 HUNTINGTON AVE.**  
FIRE PROTECTION PLAN  
(NFPA 13D 2010 ed.)

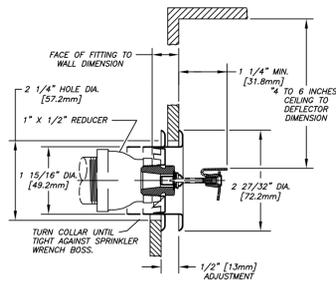
DRAWING NO.:  
**F-1**

CALC AREA #1  
**HYD. DESIGN CRITERIA**  
(NFPA 13D 2010 ed. - WET)

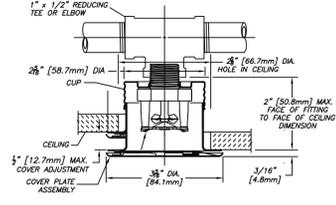
LOCATION= BEDROOM #1 & #2  
DENSITY= .05 GPM/SQ.FT.  
AREA OF OPERATION= 2 HEADS  
SYSTEM DEMAND INCLUDING 5 GPM DOMESTIC @  
BASE OF RISER= 33-GPM 73-PSI  
SAFETY MARGIN= 18-PSI



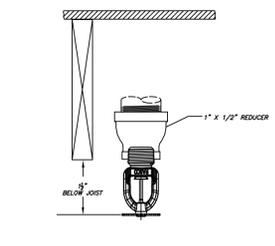
2ND FLOOR PLAN  
SCALE: 1/4" = 1'-0"  
AREA: 710 SQ. FT.



F1-RES-44 DETAIL  
SCALE: N.T.S.



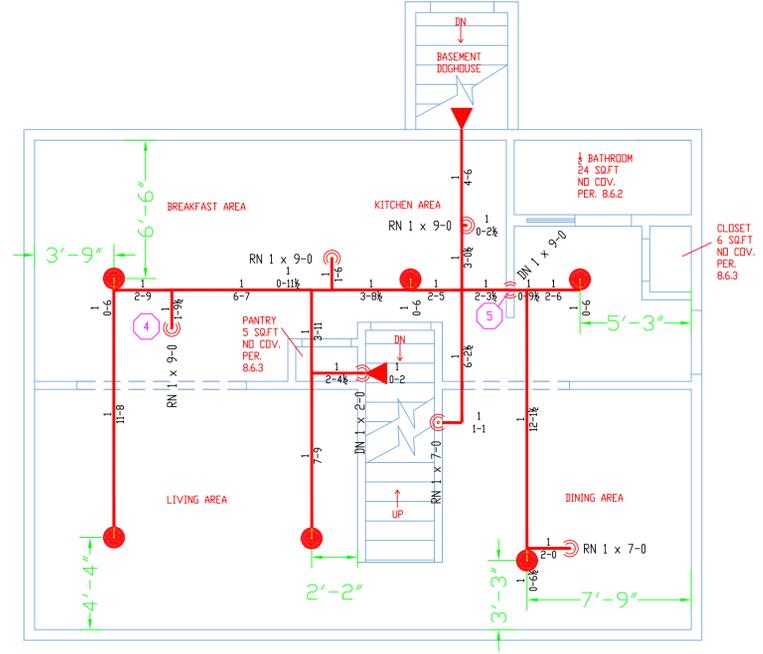
RFC-49 DETAIL  
SCALE: N.T.S.



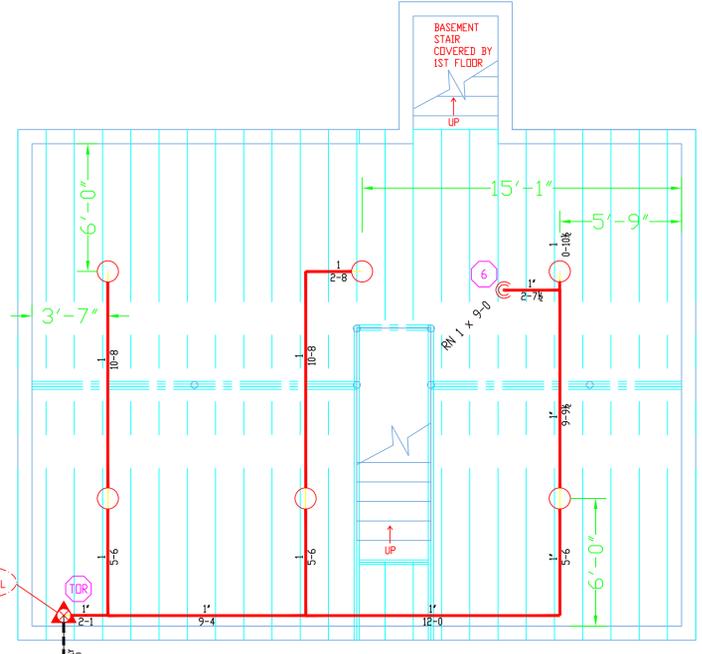
F1-RES-49 DETAIL  
SCALE: N.T.S.



SITE PLAN  
SCALE: N.T.S.



1ST FLOOR PLAN  
SCALE: 1/4" = 1'-0"  
AREA: 733 SQ. FT.



BASEMENT PLAN  
SCALE: 1/4" = 1'-0"  
AREA: 710 SQ. FT.

**NOTES FOR AN NFPA 13D SYSTEM**

(13D) 8.6.2 BATHROOMS  
SPRINKLERS SHALL NOT BE REQUIRED IN BATHROOMS OF 55 SQ. FT. AND LESS.

(13D) 8.6.3 CLOSETS  
SPRINKLERS SHALL NOT BE REQUIRED IN CLOTHES CLOSETS, LINEN CLOSETS, AND PANTRIES THAT MEET ALL OF THE FOLLOWING CONDITIONS:  
(1) THE AREA OF THE SPACE DOES NOT EXCEED 24 SQ. FT.  
(2) THE LEAST DIMENSION DOES NOT EXCEED 3 FT.  
(3) THE WALLS AND CEILINGS ARE SURFACED WITH NON-COMBUSTIBLE OR LIMITED-COMBUSTIBLE MATERIALS.

(13D) 8.6.4 GARAGES / PORCHES  
SPRINKLERS SHALL NOT BE REQUIRED IN GARAGES, OPEN ATTACHED PORCHES, CARPORTS, AND SIMILAR STRUCTURES.

(13D) 8.6.5 ATTICS / PENTHOUSES  
SPRINKLERS SHALL NOT BE REQUIRED IN ATTICS, PENTHOUSE EQUIPMENT ROOMS, ELEVATOR MACHINE ROOMS, CONCEALED SPACES DEDICATED EXCLUSIVELY TO AND CONTAINING ONLY DWELLING UNIT VENTILATION EQUIPMENT, FLOOR/CEILING SPACES, ELEVATOR SHAFTS, CRAWL SPACES, AND OTHER CONCEALED SPACES THAT ARE NOT USED OR INTENDED FOR LIVING PURPOSES AND DO NOT CONTAIN FUEL-FIRED EQUIPMENT.

(13D) 8.6.6 CANOPIES  
SPRINKLERS SHALL NOT BE REQUIRED IN COVERED UNHEATED PROJECTIONS OF THE BUILDING AT ENTRANCES / EXITS AS LONG AS THERE IS ANOTHER MEANS OF EGRESS FROM THE DWELLING UNIT.

(13D) 8.6.7 CEILING POCKETS  
SPRINKLERS SHALL NOT BE REQUIRED FOR CEILING POCKETS THAT MEET THE FOLLOWING CONDITIONS:  
(1) THE TOTAL VOLUME OF UNPROTECTED CEILING POCKET DOES NOT EXCEED 100 CU. FT.  
(2) THE ENTIRE FLOOR UNDER THE UNPROTECTED CEILING POCKET IS PROTECTED BY THE SPRINKLERS AT THE LOWER CEILING ELEVATION.  
(3) EACH UNPROTECTED CEILING POCKET IS SEPARATED FROM ANY ADJACENT UNPROTECTED CEILING POCKET BY A MINIMUM OF 10 FT. HORIZONTAL DISTANCE.  
(4) THE INTERIOR FINISH OF THE UNPROTECTED CEILING POCKET IS NONCOMBUSTIBLE OR LIMITED-COMBUSTIBLE MATERIAL.  
(5) SKYLIGHTS NOT EXCEEDING 32 SQ. FT. SHALL BE PERMITTED TO HAVE A PLASTIC COVER.

FOR TFP-400, TFP-500  
VICTAULIC #899 & FS-5

CURE TIMES WITH ONE STEP SOLVENT CEMENT  
200 PSI (MAXIMUM) TEST PRESSURE

PIPE SIZE (INCHES)	AMBIENT TEMPERATURE DURING CURE PERIOD		
	60F TO 120F	40F TO 59F	0F TO 39F
3/4"	45 MIN.	1.5 HR.	24 HR.
1"	45 MIN.	1.5 HR.	24 HR.
1-1/4"	1.5 HR.	16 HR.	120 HR.
1-1/2"	1.5 HR.	16 HR.	120 HR.
2"	6 HR.	36 HR.	SEE NOTE 1
2-1/2"	8 HR.	72 HR.	SEE NOTE 1
3"	8 HR.	72 HR.	SEE NOTE 1

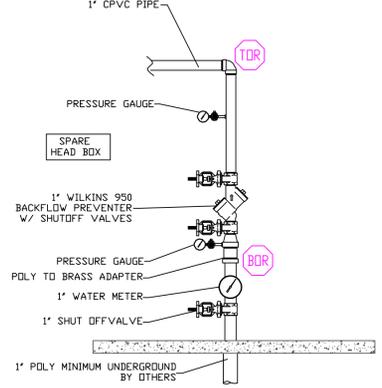
NOTE 1: FOR THESE SIZES, THE SOLVENT CEMENT CAN BE APPLIED AT TEMPERATURES BELOW 32F, HOWEVER, THE SPRINKLER SYSTEM TEMPERATURE MUST BE RAISED TO A TEMPERATURE OF 32F OR ABOVE AND ALLOWED TO CURE PER THE ABOVE RECOMMENDATIONS PRIOR TO PRESSURE TESTING.

CPVC CURING TIMES  
SCALE: N.T.S.

PIPE SIZE	CPVC MAXIMUM SUPPORT SPACING (FT.)				
	3/4"	1"	1-1/4"	1-1/2"	2"
HANGER SPACING	5-1/2'	6'	6-1/2'	7'	8'

CPVC HANGER DISTANCES  
SCALE: N.T.S.

PIPE SIZE	NOMINAL PIPE SIZE				
	3/4"	1"	1-1/4"	1-1/2"	2"
HANGER SPACING	5-1/2'	6'	6-1/2'	7'	8'



RISER DETAIL  
SCALE: N.T.S.