PROJECT INFORMATION:
SCOPE:
The fire protection project consists of installing a wet sprinkler system in this home at 107 Monument St.

WATER SUPPLY:
This is a wet sprinkler system supplied by a GT-20 pump with a 300 gallon water storage tank.

CONSTRUCTION TYPE:
Construction type is "wood construction with gypsum wall board"

CODE REFERENCES:
***NFPA 13D 2010 ed.**

SPRINKLER SYSTEM NOTES
* **DESIGN AND INSTALLATION SHALL CONFORM TO N.F.P.A. # 13D (2010), LOCAL FIRE AND BLDG. DEPTS.**
* **HANGER INSTALLATION AND SPACING SHALL BE IN ACCORDANCE WITH N.F.P.A. #13**
* **ALL EQUIPMENT TO BE UL LISTED FOR FIRE PROTECTION USE.**
* **FIELD FOREMAN TO VERIFY LOCATION OF HIGH TEMPERATURE SPRINKLERS AND INSTALL HIGH TEMPERATURE SPRINKLERS IN ACCORDANCE WITH N.F.P.A. #13**
* **OWNER SHALL PROVIDE ADEQUATE HEAT IN ALL AREAS ENCLOSING WET TYPE SPRINKLER PIPING TO PREVENT FREEZING AND FAILURE OF AUTOMATIC SPRINKLER SYSTEM.**

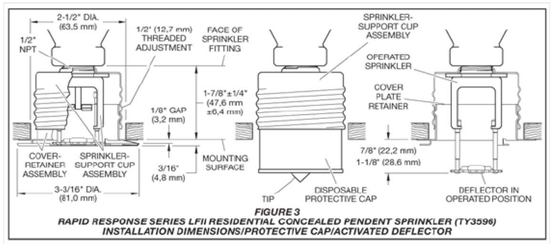


FIGURE 3
RAPID RESPONSE SERIES LFII RESIDENTIAL CONCEALED PENDENT SPRINKLER (TY3596)
INSTALLATION DIMENSIONS/PROTECTIVE CAP/ACTIVATED DEFLECTOR

TYCO CONCEALED DETAIL
SCALE: N.T.S.

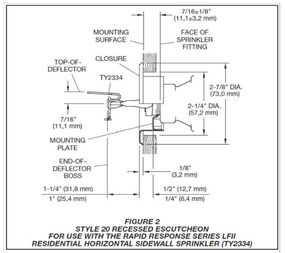
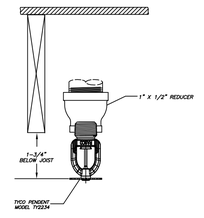
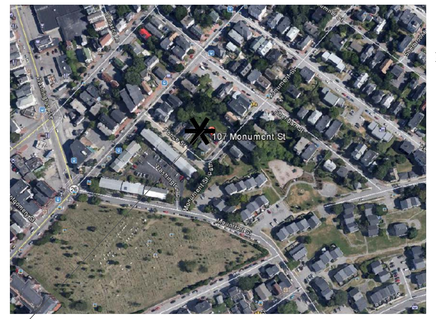


FIGURE 2
STYLE 20 RECESSED ESCUTCHEON
FOR USE WITH THE RAPID RESPONSE SERIES LFII
RESIDENTIAL HORIZONTAL SIDEWALL SPRINKLER (TY2334)

TYCO SIDE WALL DETAIL
SCALE: N.T.S.



TYCO PENDENT DETAIL
SCALE: N.T.S.



SITE PLAN
SCALE: N.T.S

NOTES FOR AN NFPA 13D SYSTEM

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

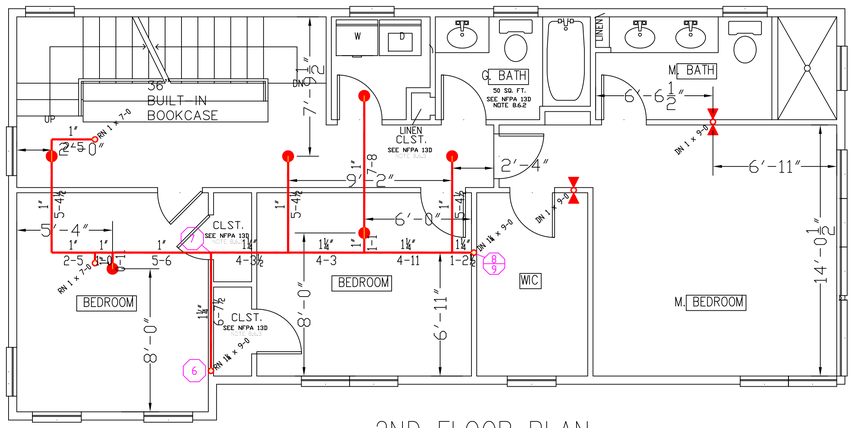
(13D) 8.6.3 CLOSETS
SPRINKLERS SHALL NOT BE REQUIRED IN CLOTHES CLOSETS, LINEN CLOSETS, AND PANTRIES THAT MEET ALL OF THE FOLLOWING CONDITIONS:
(1) THE AREA OF THE SPACE DOES NOT EXCEED 24 SQ. FT.
(2) THE LEAST DIMENSION DOES NOT EXCEED 3 FT.
(3) THE WALLS AND CEILINGS ARE SURFACED WITH NON-COMBUSTIBLE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

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

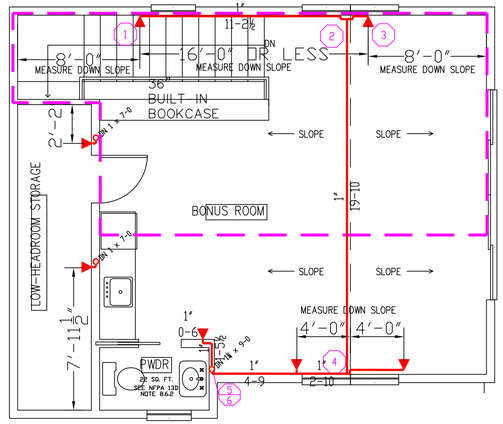
(13D) 8.6.5 ATTICS / PENTHOUSES
SPRINKLERS SHALL NOT BE REQUIRED IN ATTICS, PENTHOUSE EQUIPMENT ROOMS, ELEVATOR MACHINE ROOMS, CONCEALED SPACES DEDICATED EXCLUSIVELY TO AND CONTAINING ONLY DWELLING UNIT VENTILATION EQUIPMENT, FLOOR/CEILING SPACES, ELEVATOR SHAFTS, CRAWL SPACES, AND OTHER CONCEALED SPACES 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 SEPERATED 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.



2ND FLOOR PLAN
SCALE: 1/4" = 1'-0"
AREA: 993 SQ. FT.



3RD FLOOR PLAN
SCALE: 1/4" = 1'-0"
AREA: 590 SQ. FT.

CALC STICKER #1

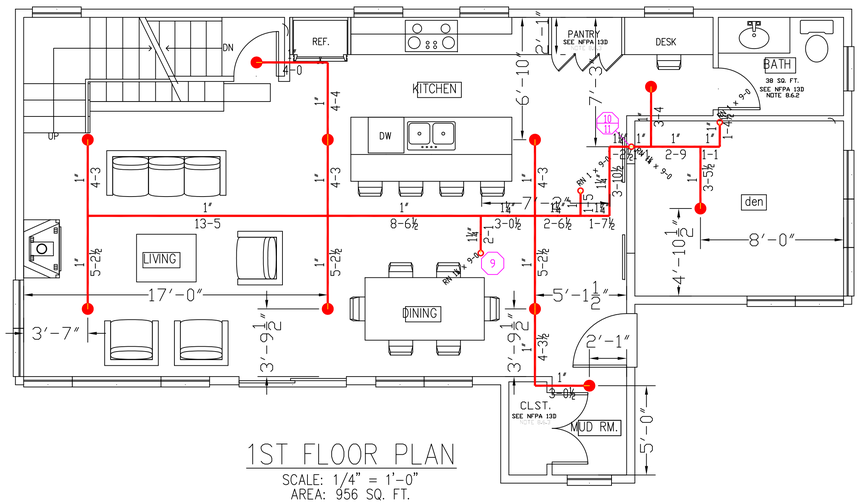
HYD. DESIGN CRITERIA
(NFPA 13D 2010 ed. - WET)

LOCATION=3RD FLOOR
HAZARD CLASSIFICATION: LIGHT
DENSITY= .05 GPM/SQ.FT.
AREA OF OPERATION= 292 SQ. FT.
HOSE DEMAND: 0 GPM
NO. OF SPRINKLERS= 2 MOST DEMANDING

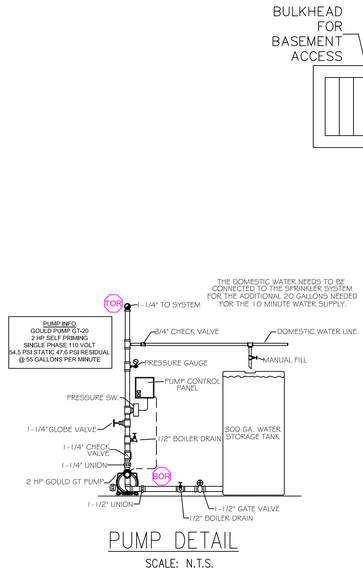
SYSTEM DEMAND (INCLUDING HOSE) @
BASE OF RISER= 32.9-GPM 51.2-PSI
SAFETY MARGIN= 0.6-PSI

CPVC MAXIMUM SUPPORT SPACING (FT.)							
	NOMINAL PIPE SIZE						
PIPE SIZE	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
HANGER SPACING	5-1/2'	6'	6-1/2'	7'	8'	9'	10'

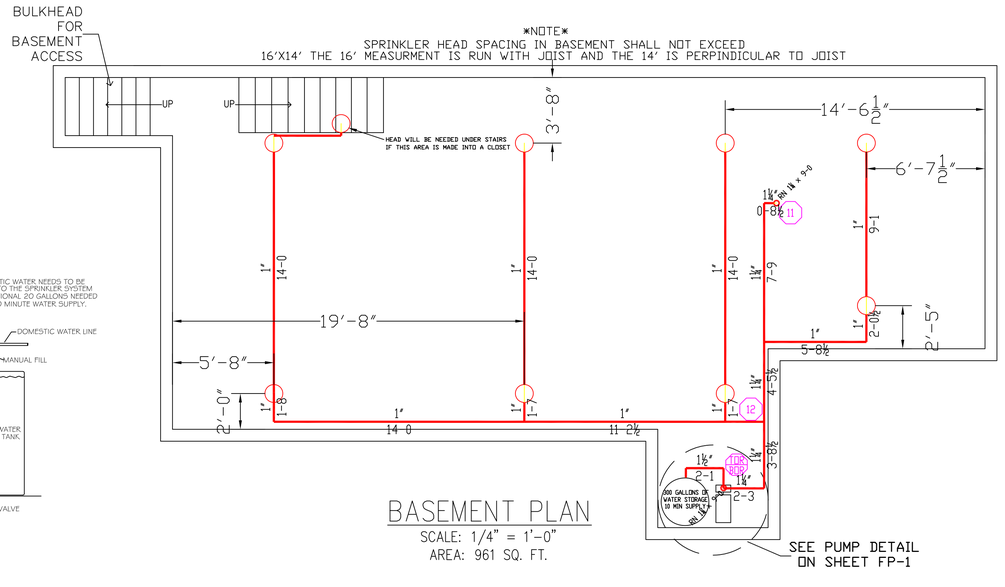
CPVC HANGER SPACING
SCALE: N.T.S.



1ST FLOOR PLAN
SCALE: 1/4" = 1'-0"
AREA: 956 SQ. FT.



PUMP DETAIL
SCALE: N.T.S.



BASEMENT PLAN
SCALE: 1/4" = 1'-0"
AREA: 961 SQ. FT.

NOTES:

NO.	DESCRIPTION:

LEGEND:
- RN PIPE RISER UP
- DN PIPE RISER DOWN
- CPVC PIPE (WET)
- (A) 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 ACCOMODATE 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:

TYCO TY3596
WHITE CONCEALED PENDENT
16' X 16' SPACING MAX
8' MAX FROM HEAD TO WALL

QTY.	TEMP	K-FACT
16	160°	4.9

TYCO TY2334
WHITE HORIZONTAL SIDEWALL
16' X 16' SPACING MAX
8' MAX FROM HEAD TO WALL

QTY.	TEMP	K-FACT
11	155°	4.4

TYCO TY2234
WHITE PENDENT
16' X 14' SPACING MAX
7' MAX FROM HEAD TO WALL

QTY.	TEMP	K-FACT
9	155°	4.9

TOTAL HEADS ON SHEET:36

CONTRACTOR:
GUY DEROSIER
PLUMBING & HEATING
10 BRACKETT ST.
BIDDEFORD, ME 04005
207-590-4749

SPRINKLER LICENSE # LSC796

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

DATE: NOV 6, 2015

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

LOCATION:
107 MONUMENT ST.
PORTLAND, ME

DRAWING TITLE:
JUDKINS RESIDENCE
FIRE PROTECTION PLAN
(NFPA 13D 2010 ed.)

DRAWING NO.:
FP-1

NOTE: USE OF THESE PLANS BY THE INSTALLING CONTRACTOR SHALL INDICATE ACCEPTANCE OF ALL THE INFORMATION PROVIDED ON THESE PLANS AND SHALL TRANSFER FINAL RESPONSIBILITY OF THE CORRECTNESS OF THE SYSTEM TO THE INSTALLING CONTRACTOR. ANY DESIGN ERRORS SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
NOTE: ADDITIONAL SPRINKLER HEADS OVER AND ABOVE THOSE SPECIFICALLY NOTED ON THESE DRAWINGS MAYBE REQUIRED DEPENDING ON THE REQUIRED ROUTING AROUND TRUSSES, HVAC DUCTWORK, HOODS AND OTHER SIMILAR OBSTRUCTIONS. FIELD VERIFY EXISTING CONDITIONS DURING CONSTRUCTION AND PROVIDE ANY AND ALL ADDITIONAL HEADS AS REQUIRED FOR FULL COVERAGE AND A COMPLETE, CODE COMPLIANT SYSTEM.