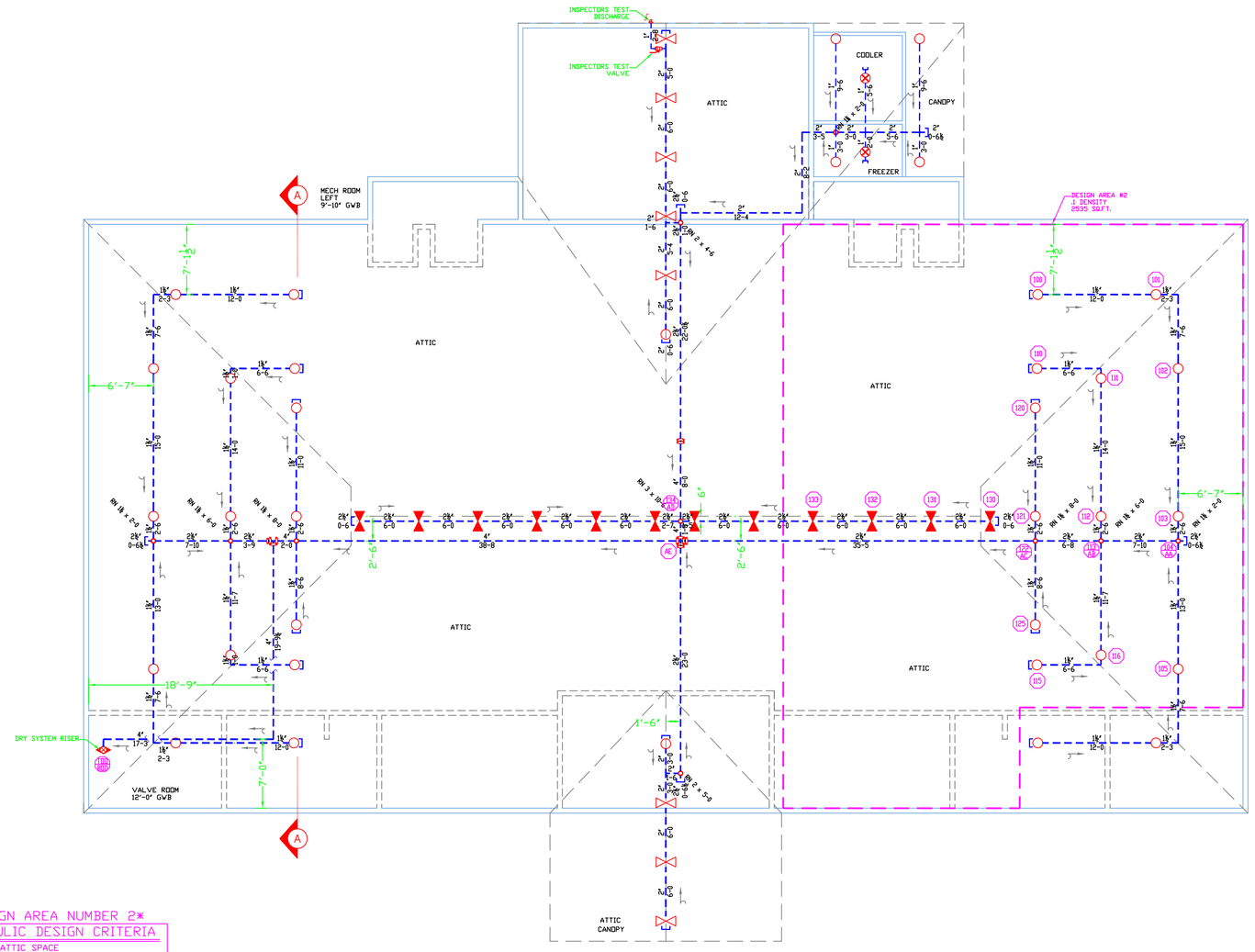


1.1 ATTIC (DRY)
TOTAL PROTECTED AREA: 7,600 SQ.FT.
SCALE 1/8" = 1'-0"

DESIGN AREA NUMBER 2

HYDRAULIC DESIGN CRITERIA

LOCATION= ATTIC SPACE
TYPE OF SYSTEM=NFPA 13 DRY
AREA OF OPERATION= 2535-SQ.FT.
NUMBER OF SPRINKLERS=17
DENSITY:.2 W/ HOSE DEMAND OF 100 GPM
HAZARD CLASS=LIGHT HAZARD

HEAD SPACING= 120 SQ.FT. & 360 SQ.FT.

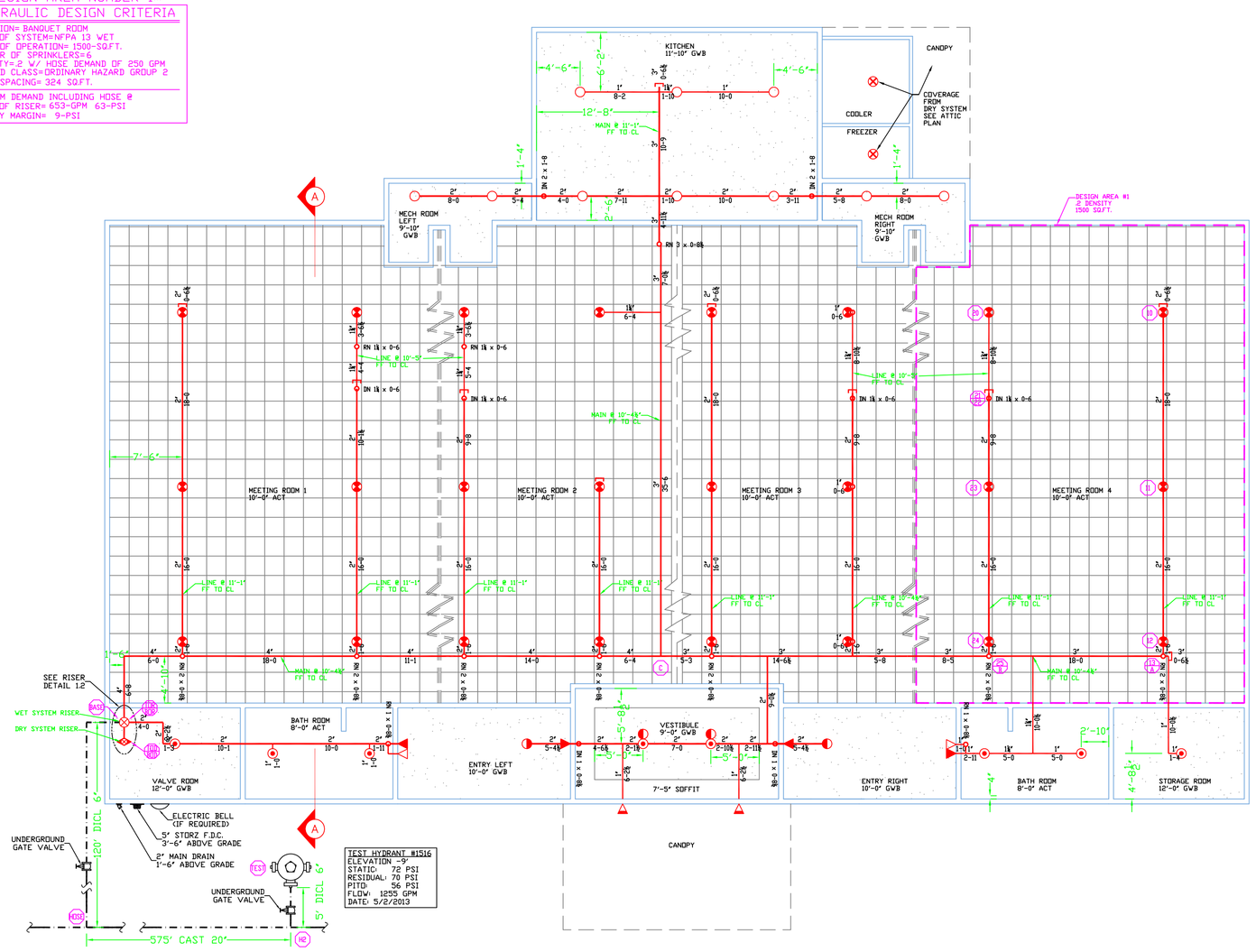
SYSTEM DEMAND INCLUDING HOSE @
BASE OF RISER= 517-GPM 57-PSI
SAFETY MARGIN= 15-PSI

DESIGN AREA NUMBER 1

HYDRAULIC DESIGN CRITERIA

LOCATION= BANQUET ROOM
TYPE OF SYSTEM=NFPA 13 WET
AREA OF OPERATION= 1500-SQFT.
NUMBER OF SPRINKLERS=6
DENSITY=.2 W/ HOSE DEMAND OF 250 GPM
HAZARD CLASS=ORDINARY HAZARD GROUP 2
HEAD SPACING= 324 SQFT.

SYSTEM DEMAND INCLUDING HOSE @
BASE OF RISER= 653-GPM 63-PSI
SAFETY MARGIN= 9-PSI



1 GROUND FLOOR (WET)
TOTAL PROTECTED AREA: 7,600 SQ.FT.
SCALE 1/8" = 1'-0"

PROJECT DESCRIPTION

BUILDING CONST:

THE BUILDING IS 1 LEVELS + ATTIC.
CONSTRUCTED OF WOOD FRAMING, FIBERGLASS INSULATION, AND GYP BOARD CONSTRUCTION.
STEEL SPRINKLER PIPING AS SHOWN ON PLAN.

BUILDING OCCUPANCY:

THE BUILDING WAS BUILT & DESIGNED FOR BANQUET USAGE. UNOCCUPIED ATTIC SPACE

SPRINKLER SYSTEM DESIGN:

THERE IS A WET SYSTEM FOR THE HEATED AREAS IN ACCORDANCE WITH NFPA 13 2010ed.

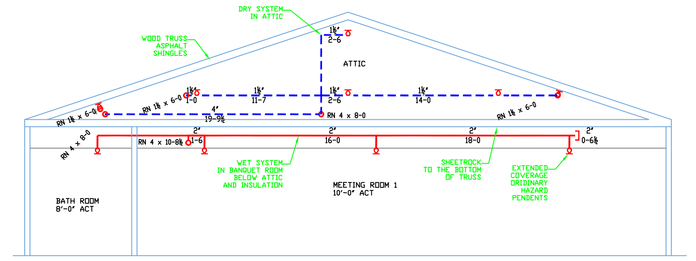
THERE IS A DRY SYSTEM FOR THE UNHEATED AREAS IN ACCORDANCE WITH NFPA 13 2010ed.

BANQUET ROOMS DESIGNED AS ORDINARY HAZARD GROUP 2.
KITCHEN, MECH RM, & COOLERS ARE ORDINARY HAZARD GROUP 1.
BATHROOMS AND VESTIBULES ARE LIGHT HAZARD.

GC TO PROPERLY INSULATE AROUND SPRINKLER PIPING TO PREVENT WATER FILLED PIPE FROM FREEZING.

THE SPRINKLER SYSTEM WAS DESIGNED TO MEET ALL APPLICABLE CODES REGARDING NFPA 13 2010ed. SYSTEM.

P PLOT PLAN
SCALE: N.T.S.



1.4 SECTION 'A'
SCALE 1/8" = 1'-0"

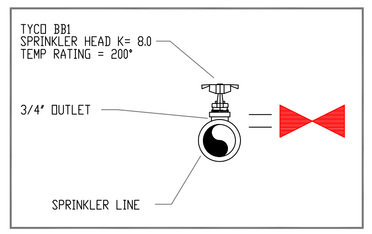
GLOBE*
MODEL GL5635
2 /155°
K=5.6
1/2" DRY PENDENT
WHITE SLEEVE AND SKIRT ESC.

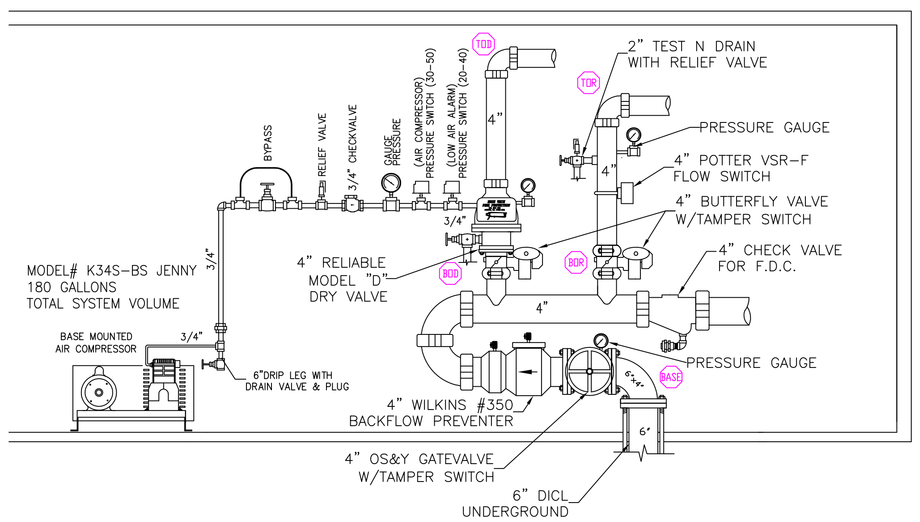
GLOBE*
MODEL GL5626
2 /155°
K=5.6
1/2" WHITE HORIZONTAL SIDEWALL SEMI REC. ESC.
DEFLECTORS 4" TO 6" BELOW NON-COMBUSTIBLE CEILINGS

TYCO*
MODEL BB1
12 /200°
K=8.0
3/4" BACK TO BACK ATTIC HEAD ON SPRIG (60' SPAN 4/12 PITCH)
DEFLECTORS 16" TO 22" BELOW PEAK

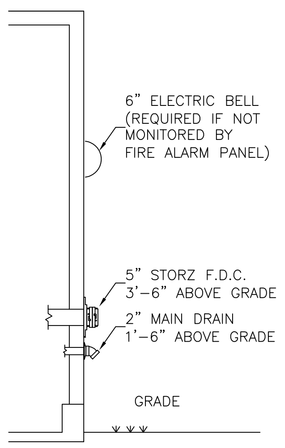
TYCO*
MODEL DS1 TY3338
2 /200°
K=5.6
1/2" WHITE EXT. COV. HORIZONTAL SIDEWALL SLEEVE & SKIRT ESC.
DEFLECTORS 4" TO 12" BELOW COMBUSTIBLE CEILINGS
16' x 16' COVERAGE

TYCO*
MODEL BB1
8 /212°
K=5.6
1/2" BACK TO BACK ATTIC HEAD ON THE LINE (40' SPAN 4/12 PITCH)
DEFLECTORS 16" TO 22" BELOW PEAK





1.2 RISER DETAIL
SCALE: N.T.S.



1.3 FDC DETAIL
SCALE: N.T.S.

HIGH TECH FIRE PROTECTION
P.O. BOX 156
MINOT, ME. 04258-0258
TEL:(207) 998-2551 FAX:(207) 998-4187
MAINE LICENSE # 102

GENERAL CONTRACTOR ON RECORD:

SPECIAL APPLICATIONS:

LEGEND:
- RN/DN PIPE RISER UP OR DOWN
- AUXILIARY DRAIN
- PROPOSED PIPE
- SYSTEM RISER
- PIPE PITCH 1/4 MAINS 1/2 LINE
- SWAY BRACING
- HYDRAULIC CALC. POINT

DESIGN & SYSTEM NOTES:

ALL PIPING 1 1/2" & LARGER TO BE SCHEDULE 10 WITH GROOVED DUCTILE IRON FITTING.

ALL PIPING 1 1/4" & SMALLER TO BE SCHEDULE 4 WITH APPROPRIATE FITTING.

POSITION, LOCATION, SPACING, AND USE OF SPRINKLERS SHALL BE IN ACCORDANCE WITH NFPA 13.

POSITION, LOCATION, SPACING, AND USE OF HANGERS SHALL BE IN ACCORDANCE WITH NFPA 13.

HYDRAULIC CALCULATION PROCEDURES HAVE BEEN DONE IN ACCORDANCE WITH NFPA 13. (SEE PLANS FOR LOCATION OF REMOTE AREAS, HYDRAULIC REFERENCE POINTS, AND SYSTEM DEMANDS.)

HIGH TECH FIRE PROTECTION IS TO BEGIN WORK AT 6" UNDERGROUND 1' AFF INSIDE OF BUILDING.

DIMENSIONS AND LOCATIONS GIVEN FOR SPRINKLER HEADS AND PIPE MAY VARY TO ACCOMMODATE ACTUAL FIELD CONDITIONS.

OWNER TO PROVIDE ADEQUATE HEAT THROUGHOUT BUILDING TO PROTECT WATER FILLED PIPING AND EQUIPMENT FROM FREEZING TEMPERATURES.

ONLY TRI-SEAL TYPE COUPLINGS TO BE INSTALLED ON DRY AND OR PRE-ACTION SYSTEMS.

OWNER IS RESPONSIBLE TO MAINTAIN THE SPRINKLER SYSTEM IN ACCORDANCE WITH THE LATEST EDITION OF NFPA 25, "INSPECTION, TESTING, & MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS" AND OR ALL APPLICABLE FEDERAL, STATE, AND/OR LOCAL LAWS, CODES AND ORDINANCES.

ALL MECHANICAL, ELECTRICAL AND PLUMBING TRADES TO COORDINATE THEIR WORK WITH SPRINKLER CONTRACTOR.

ALL ELECTRIC WORK IS TO BE DONE BY OTHERS.

HEAD LEGEND:

GLOBE*
MODEL GL5601
8 /155°
K=5.6
1/2" WHITE PENDENT SEMI-RECESSED ESC.

GLOBE*
MODEL GL5615
48 /200°
K=5.6
1/2" BRASS UPRIGHT ON SPRIGS
DEFLECTORS 1" TO 12" BELOW NON-COMBUSTIBLE CEILINGS

GLOBE*
MODEL GL5626
2 /200°
K=5.6
1/2" WHITE HORIZONTAL SIDEWALL SEMI REC. ESC.
DEFLECTORS 4" TO 6" BELOW NON-COMBUSTIBLE CEILINGS

VIKING*
MODEL VK572
24 /155°
K=14.0
3/4" WHITE PENDENT ECOH SEMI-RECESSED
18' X 18' SPACING MAX

GLOBE*
MODEL GL5601 & GL5615
4 /155°&200°
K=5.6
1/2" WHITE PENDENT SEMI-RECESSED & BRASS UPRIGHT
UPR. DEFLECTORS 1" TO 6" BELOW COMBUSTIBLE JOIST

OR APPROVED EQUAL

TOTAL HEADS ON THIS SHEET: 112

SCALE: 2 1 0 1 2
SCALE 1/8"=1'-0"

REVISIONS:
NO. DATE: DESCRIPTION:

DATE: MARCH 8, 2013
DESIGNER: ED POULIN (RMS# 515)
NICET LEVEL: IV CERT # 108534
CHECKED BY: J. FOSS

LOCATION:
178 WARREN AVE.
PORTLAND, ME

DRAWING TITLE:
KEELEY BANQUET CENTER

FIRE PROTECTION PLAN (NFPA 13 2010ed.)

DRAWING NO.:
FP-01