

PROJECT DESCRIPTION

**BUILDING CONST:**  
THE BUILDING CONSIST OF A PARKING GARAGE BELOW WITH 2 BUILDINGS ABOVE, 4 FLOORS EACH.  
THE PARKING GARAGE STRUCTURE IS STEEL I-BEAM CONSTRUCTION WITH CONCRETE DECKING AND 2HR RATED SPRAY FIRE PROOFING. STEEL SPRINKLER PIPING AS SHOWN ON PLAN.  
THE 4 RESIDENTIAL LEVELS ARE CONSTRUCTED OF WOOD FRAMING FIBERGLASS INSULATION, AND GYP BOARD CONSTRUCTION. CPVC SPRINKLER PIPING AS SHOWN ON PLAN.

**BUILDING OCCUPANCY:**  
THE BUILDING WAS BUILT & DESIGNED FOR PARKING AND MERCANTILE USE ON THE GARAGE LEVEL.  
THE UPPER 4 FLOORS ARE BUILT FOR RESIDENTIAL USE.

**SPRINKLER SYSTEM DESIGN:**  
THERE ARE 2 DRY SYSTEMS FOR THE PARKING GARAGE AND MERCANTILE SPACE DESIGNED IN ACCORDANCE WITH NFPA 13. PARKING GARAGE IS DESIGNED FOR ORDINARY HAZARD GROUP 1. MERCANTILE AREA IS DESIGNED FOR ORDINARY HAZARD GROUP 2.

THERE ARE SEPARATE WET SYSTEM FOR EACH RESIDENTIAL FLOOR. 4 ZONES IN BUILDING 1 & 4 ZONES IN BUILDING 2. EACH FLOOR IS DESIGNED FOR LIGHT HAZARD USE.

THE RESIDENTIAL LIVING SPACE & CORRIDOR IS COVERED WITH RESIDENTIAL PENDENT SPRINKLER HEADS FED FROM CPVC PIPING ABOVE. GC TO PROPERLY INSULATE TO PREVENT WATER FILLED SPRINKLER PIPING FROM FREEZING.

THERE IS A 4" WET MANUAL STANDPIPE BEING INSTALLED IN TOWER #1 & #2 AND WILL HAVE A 2 1/2" HOSE VALVES ON ALL FLOOR STAIR LANDINGS SHOWN ON PLANS.

THE SPRINKLER SYSTEM AND STANDPIPE WERE DESIGNED TO MEET ALL APPLICABLE CODES REGARDING NFPA 13 2010ed. AND NFPA 14.

**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:  
METRIC CORPORATION 55 HENSHAW STREET BOSTON, MA 02135

**SPECIAL APPLICATIONS:**  
DRY SYSTEM IN ACCORDANCE WITH STATE OF MAINE DRY PIPE POLICY 1/2" PITCH PER 10' ON MAINS AND SPRINKLER LINES.

**LEGEND:**  
○ R/W/DV PIPE RISER UP OR DOWN  
● AUXILIARY DRAIN  
— PROPOSED WET PIPE  
- - - PROPOSED DRY PIPE  
- - - PROPOSED DRAIN PIPE  
⊕ SYSTEM RISER  
⊙ HYDRAULIC CALC. POINT

**DESIGN & SYSTEM NOTES:**  
ALL PIPING 1/2" & LARGER TO BE SCHEDULE 10 WITH GROOVED JOINTS. (R/W FITTING U.I.O.)  
ALL PIPING 1/4" & SMALLER TO BE SCHEDULE 40 WITH APPROPRIATE FITTING U.I.O.  
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 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 TR-SEA TYPE COULINGS 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 13. 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 GL5661  
176 / 200"  
K=5.6  
1/2" BRASS UPRIGHT ON SPRIGS OR LINE  
DEFLECTORS 1" TO 12" BELOW NON-COMBUSTIBLE CEILINGS
  - GLOBE\* MODEL GL8164  
27 / 200"  
K=5.6  
3/4" BRASS UPRIGHT ON SPRIGS OR LINE  
DEFLECTORS 1" TO 12" BELOW NON-COMBUSTIBLE CEILINGS
  - VIKING\* MODEL VK106  
15 / 200"  
K=5.6  
1/2" BRASS VERTICAL SIDEWALL ON SPRIGS OR LINE  
DEFLECTORS 1" TO 6" BELOW BEAMS UP TO 22" BELOW DECK
  - GLOBE\* MODEL GL5635  
9 / 200"  
K=5.6  
1/2" WHITE DRY PENDENTS SEMI-RECESSED ESC. IN CEILINGS
  - GLOBE\* MODEL GL5626  
2 / 200"  
K=5.6  
1/2" BRASS HORIZONTAL SIDEWALL WITH HEAD CAGE DEFLECTOR 18" ABOVE ELEVATOR PIT FLOOR

\*OR APPROVED EQUAL\*  
TOTAL HEADS ON THIS SHEET: 229  
SCALE: 1/8" = 1'-0"

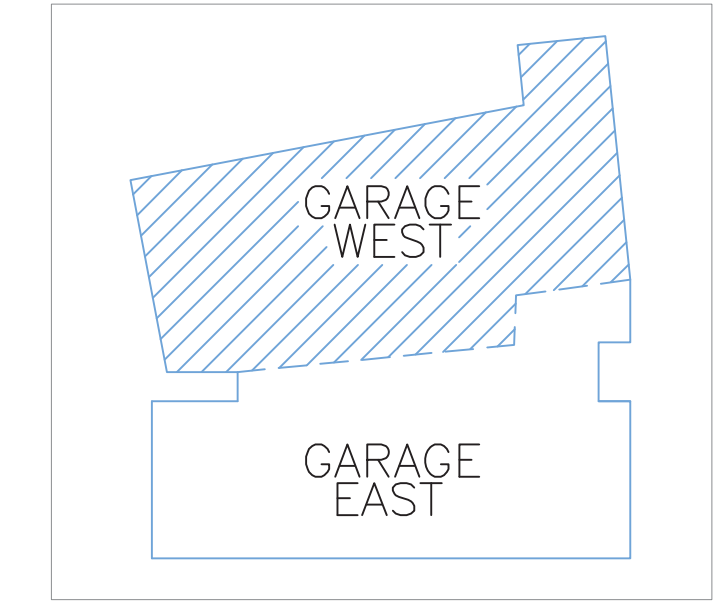
REVISIONS:  
NO. DATE: DESCRIPTION:

DATE: MARCH 1, 2013  
DESIGNER: ED PULLIN (RMS# 515)  
NICET LEVEL: IW CERT # 108534  
CHECKED BY: T. FORTIN / J. FOSS

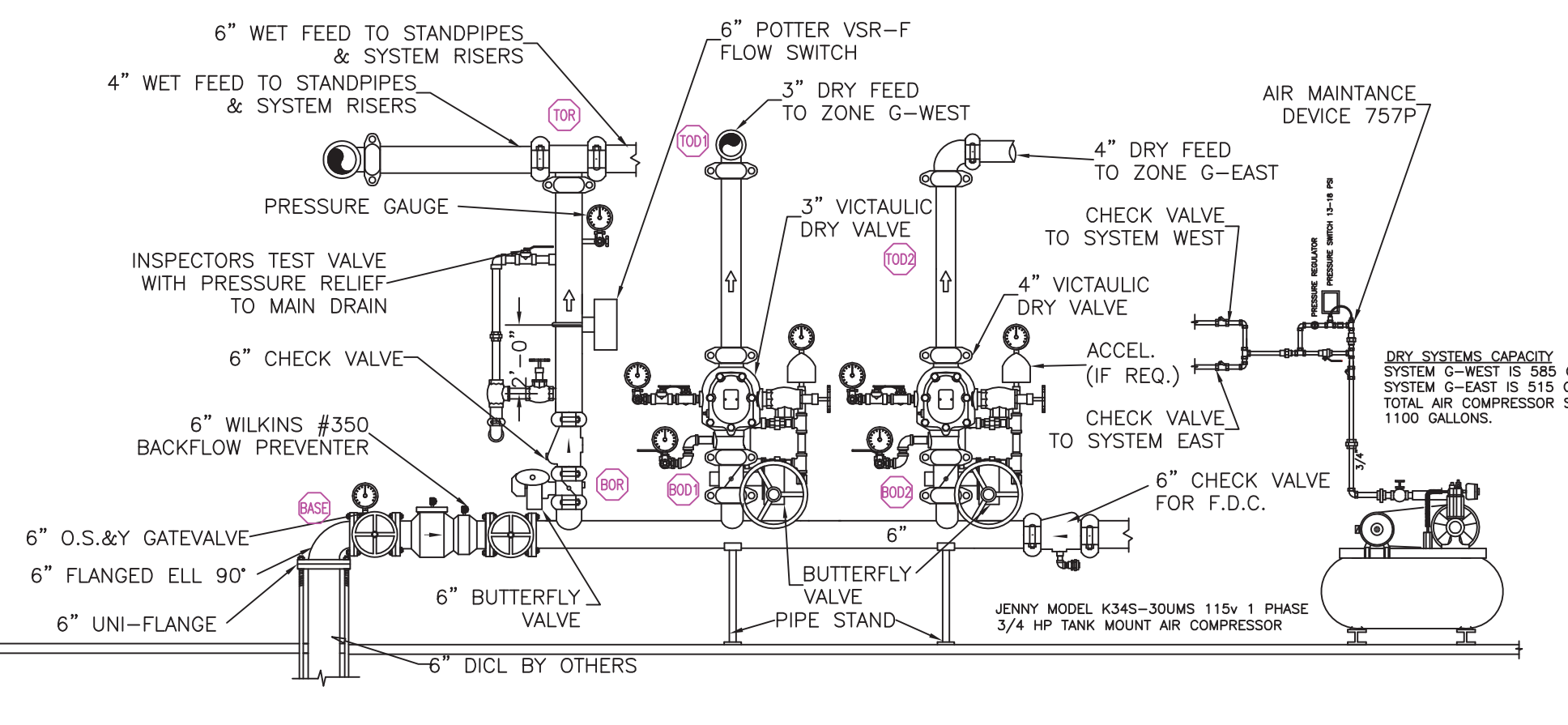
LOCATION:  
40 MIDDLE STREET  
PORTLAND, ME

DRAWING TITLE:  
THE BAY HOUSE  
LOWER LEVEL PARKING  
(WEST DRY SYSTEM)  
FIRE PROTECTION PLAN  
(NFPA 13 2010ed.)

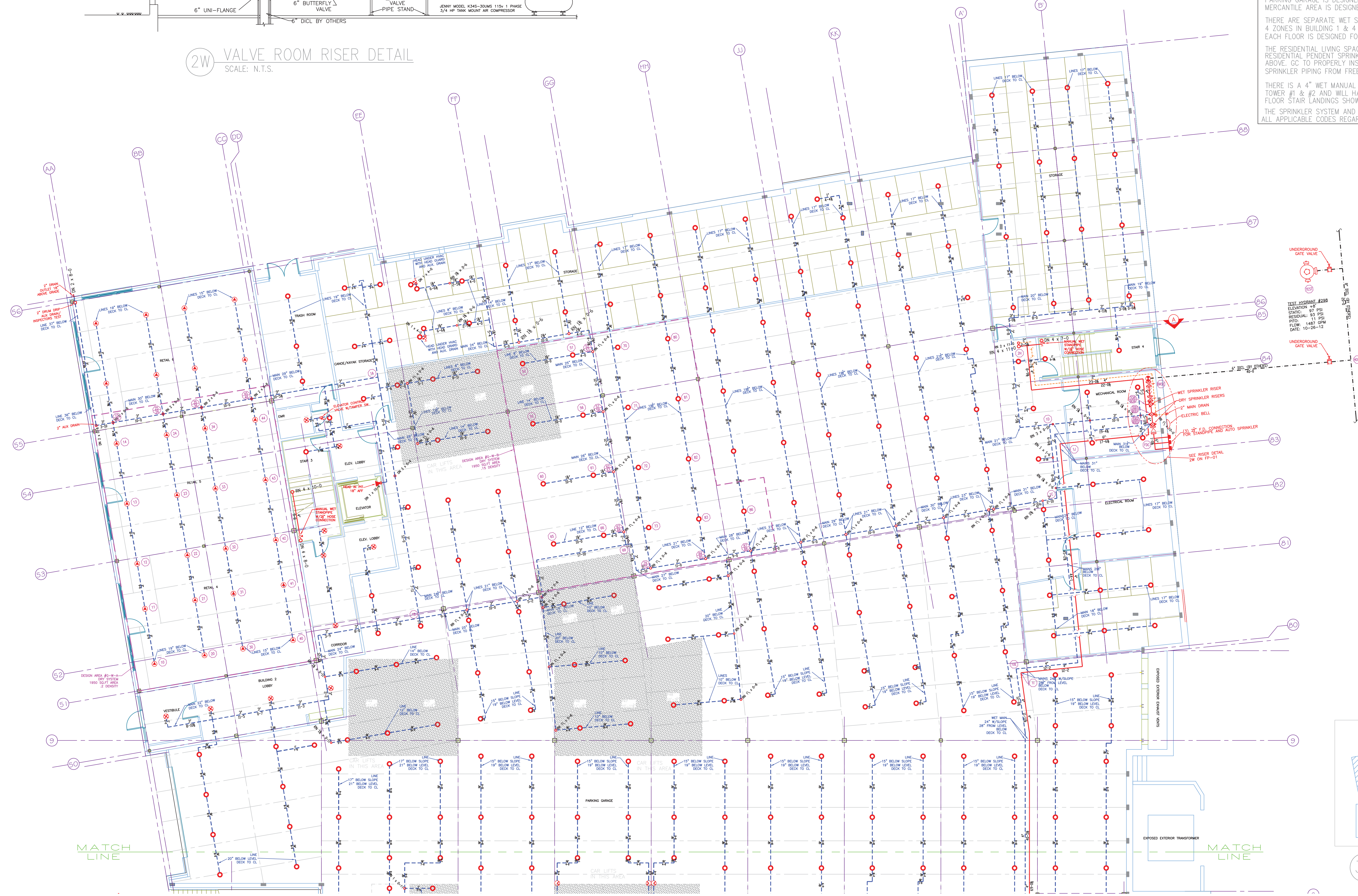
DRAWING NO.:  
FP-01



3W KEY PLAN  
SCALE: N.T.S.



2W VALVE ROOM RISER DETAIL  
SCALE: N.T.S.



1W LOWER LEVEL PARKING (WEST DRY SYSTEM)  
TOTAL PROTECTED AREA 22,800 SQ.FT.  
SCALE 1/8" = 1'-0"

\*DESIGN AREA NUMBER G-W-A\*  
HYDRAULIC DESIGN CRITERIA  
LOCATION= FUTURE TENANT SPACE WEST SIDE  
TYPE OF SYSTEM= NFPA 13 DRY  
AREA OF OPERATION= 1950-50.FT.  
NUMBER OF SPRINKLERS= 20  
DENSITY= 2 W/ HOSE DEMAND OF 250 GPM  
HAZARD CLASS= ORDINARY HAZARD GROUP 2  
HEAD SPACING= 120 SQ.FT. MAX  
SYSTEM DEMAND INCLUDING HOSE @  
BASE OF RISER= 633-GPM @8-PSI  
SAFETY MARGIN= 8-PSI

\*DESIGN AREA NUMBER G-W-B\*  
HYDRAULIC DESIGN CRITERIA  
LOCATION= AUTO PARKING WEST SIDE  
TYPE OF SYSTEM= NFPA 13 DRY  
AREA OF OPERATION= 1950-50.FT.  
NUMBER OF SPRINKLERS= 17  
DENSITY= 1.5 W/ HOSE DEMAND OF 250 GPM  
HAZARD CLASS= ORDINARY HAZARD GROUP 1  
HEAD SPACING= 130 SQ.FT. MAX  
SYSTEM DEMAND INCLUDING HOSE @  
BASE OF RISER= 529-GPM @8-PSI  
SAFETY MARGIN= 49-PSI

