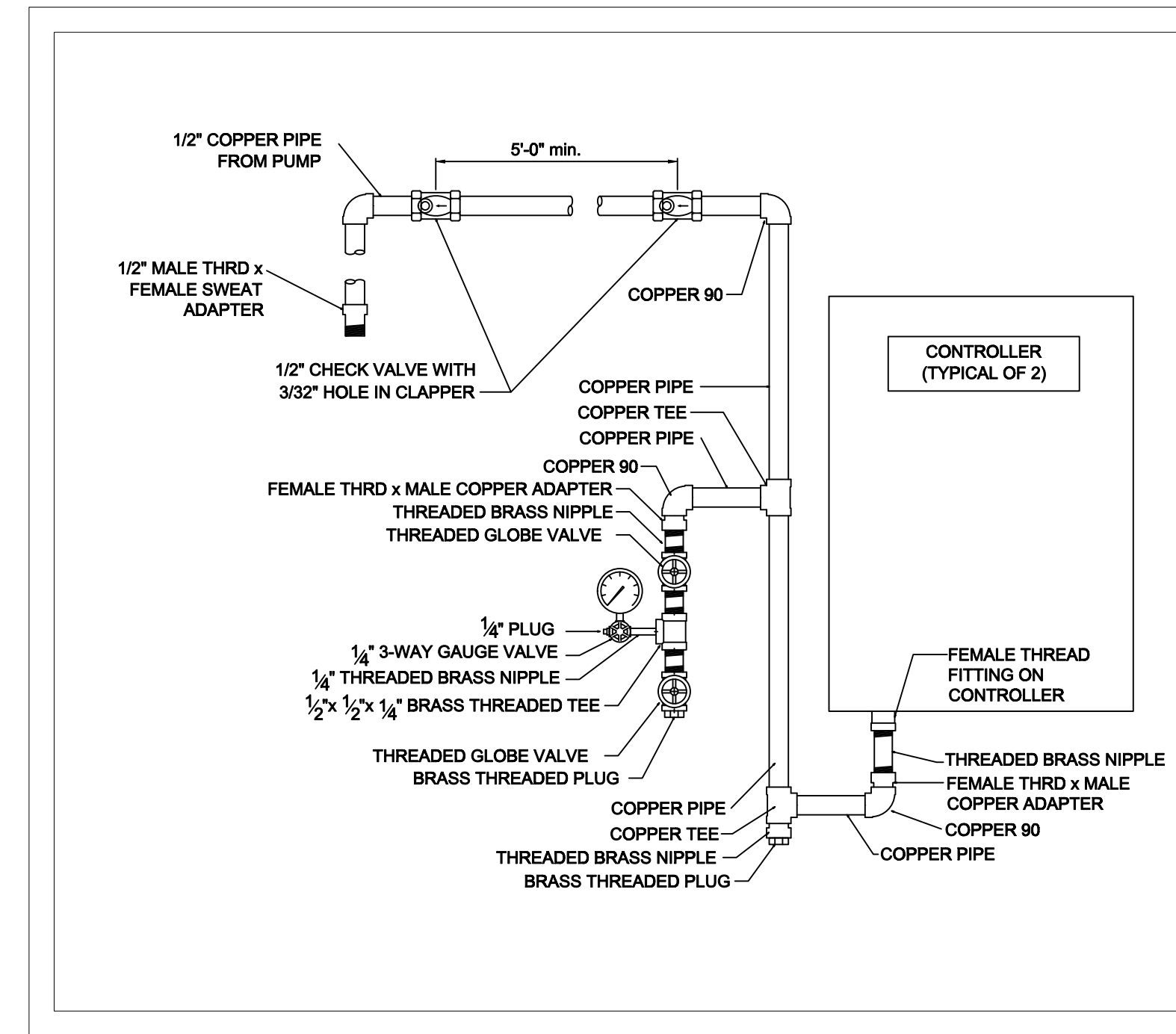


**A BUILDING SECTION**  
SCALE = 1/8" = 1'-0"



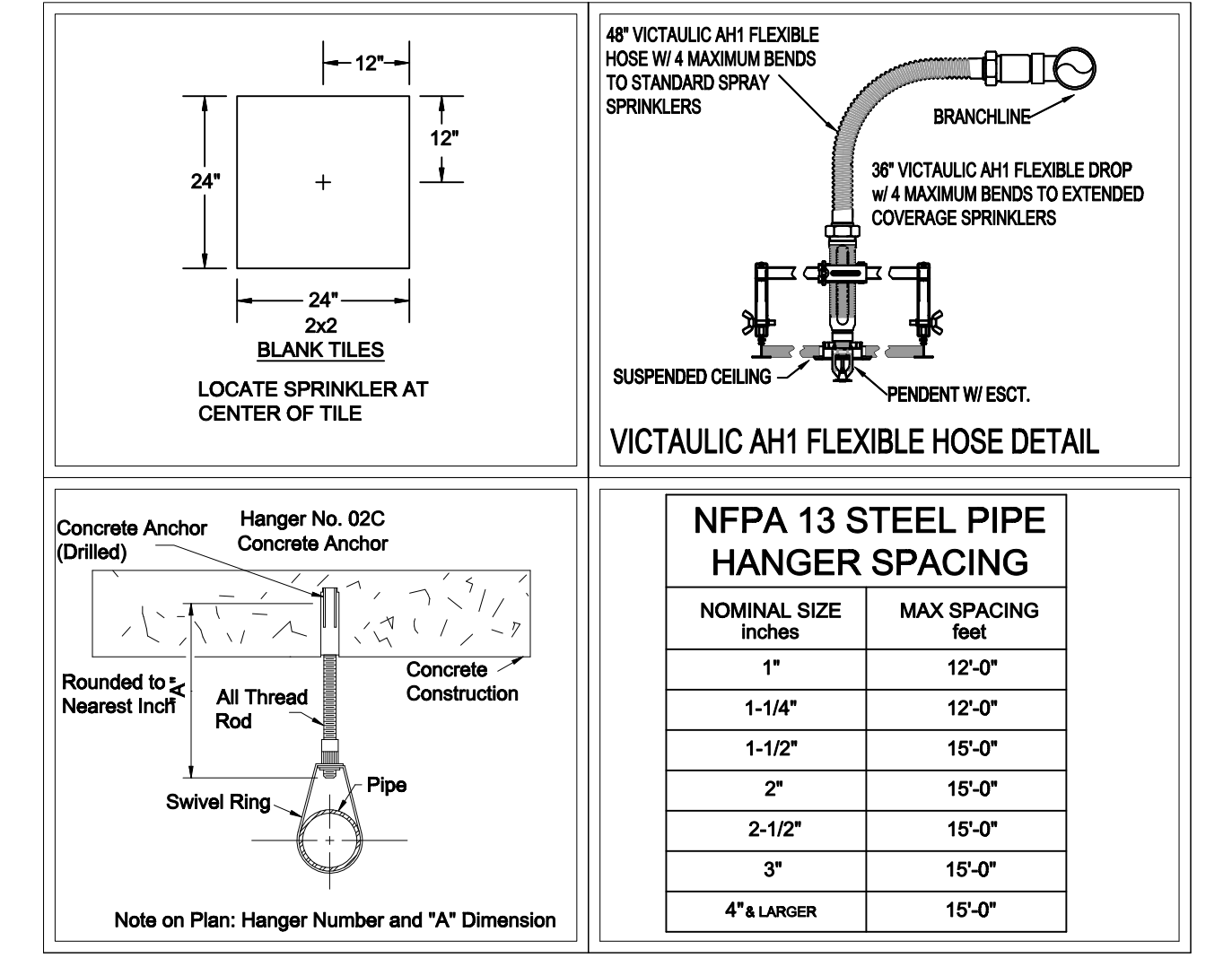
**SENSING LINE DETAIL**

- GENERAL NOTES**
- MINNESOTA BUILDING CODE (2020)
    - OCCUPANCY: GROUP A, B, & S
    - TYPE OF CONSTRUCTION: I-B
    - SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
 

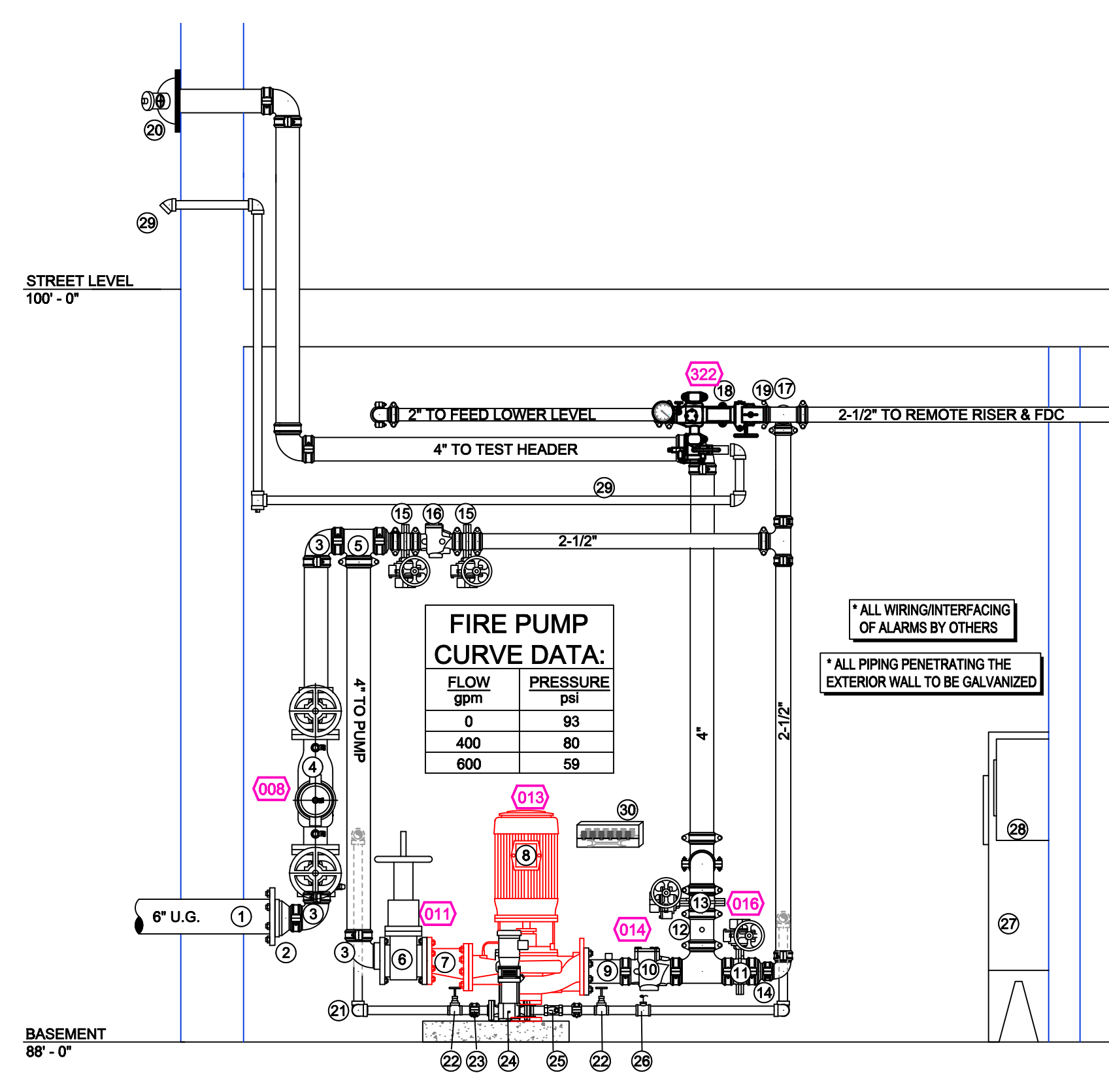
LOWER LEVEL	= 4,064 S.F. (ZONE 1)
LEVEL 1	= 3,886 S.F. (ZONE 2)
LEVEL 2	= 3,876 S.F. (ZONE 3)
LEVEL 3	= 3,878 S.F. (ZONE 4)
TOTAL	= 15,691 S.F.
  - INSTALLATION STANDARDS: SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13 (2016), NFPA-20 (2016)
    - SPRINKLER PIPE TYPES:
      - WET:
        - 1" BRANCH LINES TO BE BLK SCHEDULE 40 PIPING WITH THREADED FITTINGS
        - 1-1/4" BRANCH LINES TO BE BLK SCHEDULE 10 PIPING WITH GROOVED FITTINGS
        - 2" TO 2-1/2" MAIN LINES TO BE BLK SCHEDULE 10 PIPING WITH GROOVED FITTINGS
        - ALL SPRIGS TO BE OFF OF 1" PIPE
  - DESIGN CRITERIA
    - HALLWAYS, CHECK STAND, BUSINESS SPACE AND OFFICE AREAS DESIGNED TO LIGHT HAZARD
    - MECH ROOMS, RISER ROOM, PUMP ROOM, STORAGE ROOMS, AND SIMILAR AREAS DESIGNED TO ORDINARY HAZARD GROUP 1
  - NOTES:
    - ALL MATERIAL TO BE NEW AND MEET U.L. STANDARDS
    - HANGERS TO BE INSTALLED IN ACCORDANCE WITH NFPA-13 (2016) - SEE PLAN FOR HANGING REQUIREMENTS
  - SYMBOLS USED ON DRAWINGS:
    - 12" PIPE ELEVATION A.F.F.
    - 12" PIPE ELEVATION BELOW B.O.D.
    - ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD UNLESS NOTED)
    - HYDRAULIC CALCULATION JUNCTION POINT
    - CEILING HEIGHT
  - SCOPE OF WORK:
    - TO INSTALL A NEW 4 ZONE WET SPRINKLER SYSTEM IN PREMIER BANK BUILDING. ZONE CONTROL FOR THE LOWER LEVEL LOCATED IN THE RISER ROOM. LEVELS 1,2,3 TO BE LOCATED IN THE STAIRWELL. A NEW 400 GPM PUMP RATED AT 80 PSI TO BE INSTALLED
    - ALL AREAS OF THE BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA-13

**SPRINKLER HEAD LEGEND**

SYM	CNT	POSITION	FINISH	TEMP	K	NPT	SIN	MFG.	MODEL#	ES/OUT/CHON	MAX SPACING
⊙	46	PENDENT	WHITE	200	5.60	1/2"	V5608	VICTAULIC	FL-GRV	CONCEALED	225 s.f. LH & 130 s.f. OH1
⊙	19	PENDENT	WHITE	200	11.25	3/4"	V1108	VICTAULIC	FL-EGLHC	CONCEALED	18x16"
⊙	18	UPRIGHT	BRASS	200	5.60	1/2"	V2704	VICTAULIC	FL-QR	N/A	130 s.f. OH1
⊙	46	UPRIGHT	BRASS	200	5.60	1/2"	V2704	VICTAULIC	FL-QR	N/A	225 s.f. LH & 130 s.f. OH1
⊙	129	TOTAL HEADS									

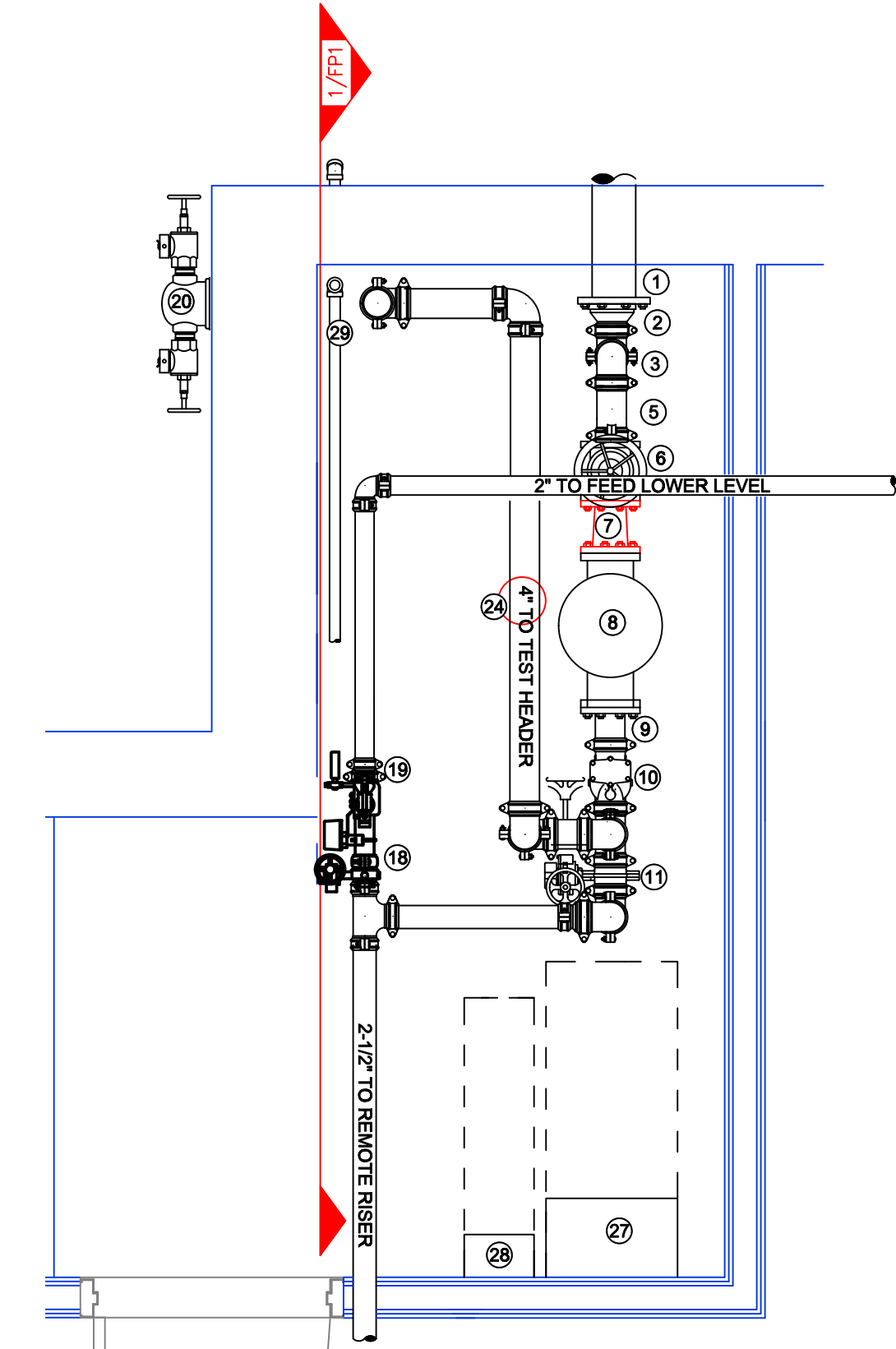


**INSTALLATION DETAILS**

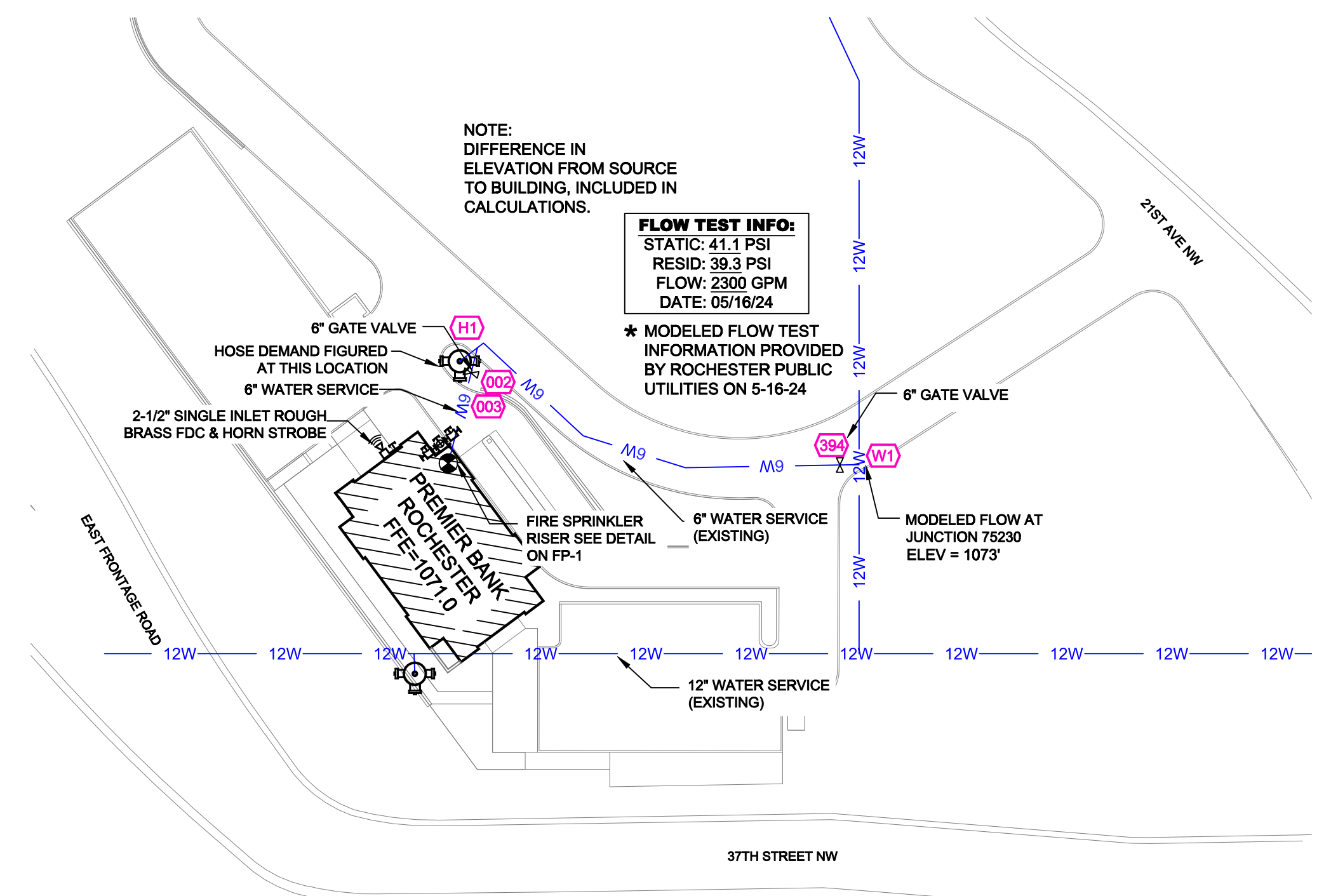


**1 RISER & PUMP DETAIL**  
SCALE: 1/2" = 1'-0"

- FIRE PUMP ROOM RISER LEGEND**
- 6" UNDERGROUND WATER SERVICE (BY OTHERS) (FLUSHING & TESTING OF THE UNDERGROUND SHALL BE COMPLETED PRIOR TO THE SPRINKLER SYSTEM FROCKUP. UNDERGROUND PAPERS ARE TO BE SUPPLIED TO THE "FP" CONTRACTOR BY THE S.C.)
  - 6"x4" GROOVED CONCENTRIC REDUCER
  - 4" GROOVED SHORT RADIUS 90
  - 4" AMES 2000SS BACKFLOW GxG GATE VALVES w/ TAMPERS
  - 4" GROOVED TEE
  - 4" FLANGED GATE VALVE w/ TAMPER
  - 4"x3" FLANGED ECCENTRIC INCREASER
  - AURORA FIRE PUMP 400GPM @ 80PSI
  - 4" x 8" SPOOL PIPE w/ 3/4" OUTLET TO RELIEF VALVE
  - 4" GRVD CHECK VALVE
  - 4" GRVD BUTTERFLY VALVE w/ TAMPER (NORMALLY OPEN)
  - 4" 80" PIPE w/ 1/2" OUTLET TO SENSING LINES
  - 4" GROOVED BUTTERFLY VALVE w/ TAMPER (NORMALLY CLOSED)
  - 4"x2-1/2" GROOVED CONCENTRIC REDUCER
  - 2-1/2" GRVD BUTTERFLY VALVE w/ TAMPER (NORMALLY OPEN)
  - 2-1/2" GRVD CHECK VALVE
  - 2-1/2" GRVD TEE
  - 2" ZONE CONTROL ASSEMBLY
  - 2-1/2" x 2" GRVD REDUCING COUPLING
  - FIRE PUMP TEST HEADER
  - 1-1/4" INLET PIPING TO JOCKEY PUMP
  - 1-1/4" GLOBE VALVE
  - 1-1/4" GROOVED COUPLING
  - PENTAIR JOCKEY PUMP 1.50HP 3 PHASE 200V-208V 10GPM @ 110PSI
  - 1-1/4" CHECK VALVE
  - 1-1/4" X1-1/4"x1/2" REDUCING TEE TO SENSING LINE
  - FIRE PUMP CONTROLLER
  - JOCKEY PUMP CONTROLLER
  - 1-1/4" DRAIN TO OUTSIDE
  - HEADBOX w/ WRENCH AND EXTRA SPRINKLERS

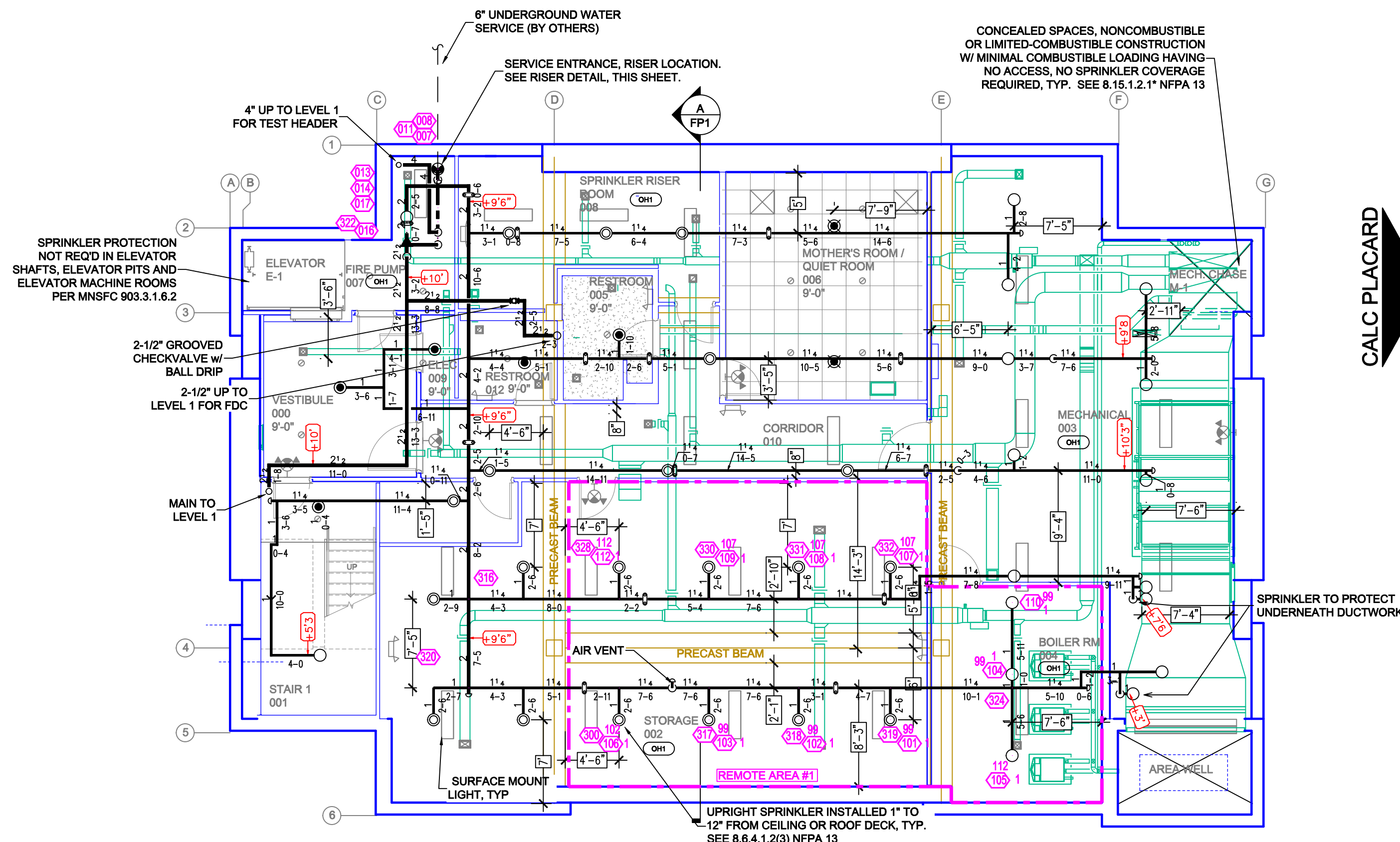


**PUMP ROOM PLAN VIEW**  
SCALE: 1/2" = 1'-0"



**SITE PLAN**  
SCALE: 1" = 50'-0"

	<p>GENERAL NOTES</p> <ol style="list-style-type: none"> <li>SYSTEM INSTALLED PER NFPA-13 (2016 EDITION) AND STATE FIRE MARSHAL</li> <li>ALL EQUIPMENT FOR THIS SYSTEM SHALL BE U.L. LISTED</li> <li>MINIMUM PIPE SIZE SHALL BE 1" NOMINAL PIPE</li> <li>ALL SCH-10 &amp; LIGHTWALL PIPING HAS WELDED OUTLETS &amp; GROOVED SHORT RADIUS FITTINGS</li> <li>ALL WELDING PER NFPA-514 (2)</li> <li>NO INSTALLATION OR FABRICATION TO BEGIN WITHOUT APPROVED SHOP DRAWINGS</li> <li>ALL PIPE LOCATIONS ARE TO BE FIELD MEASURED PRIOR TO FABRICATION AND INSTALLATION BY SPRINKLER CONTRACTOR</li> <li>ALL DIMENSIONS SHOWN ARE CENTER TO CENTER</li> <li>HIGH TEMPERATURE HEADS ARE TO BE FIELD LOCATED WHERE REQUIRED</li> <li>PROVIDE ON SPRINKLER HEAD CABINET W/ HEADS &amp; 1 HEAD WRENCH</li> <li>HANGERS ARE TO BE U.L. LISTED AND I.M. APPROVED</li> <li>ELECTRICAL WIRING, ALARM, DETECTION AND SUPERVISORY BY OWNER</li> <li>OWNER'S RESPONSIBILITY TO PROVIDE ADEQUATE HEATING TO PREVENT WET SYSTEM PIPING FROM FREEZING.</li> </ol>	<table border="1"> <thead> <tr> <th>NO</th> <th>REVISIONS</th> <th>DATE</th> <th>APPROVAL STAMPS</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	NO	REVISIONS	DATE	APPROVAL STAMPS													<p>Drawing Title: FIRE SPRINKLER PLAN</p> <p><b>PREMIER BANK ROCHESTER</b> 2121 37TH ST NW ROCHESTER, MN 55901</p>	<p>Contract No. C24-102</p> <p>Drawing Date: 12/26/2024</p> <p>Scale: 1/8" = 1'-0"</p> <p>Drawn By: ATM</p> <p>Approval By: STATE FIRE MARSHAL DIV.</p> <p>SHEET NO. FP 1 of 2</p>
	NO	REVISIONS	DATE	APPROVAL STAMPS																



**LOWER LEVEL PLAN**  
SCALE= 1/8" : 1'-0"

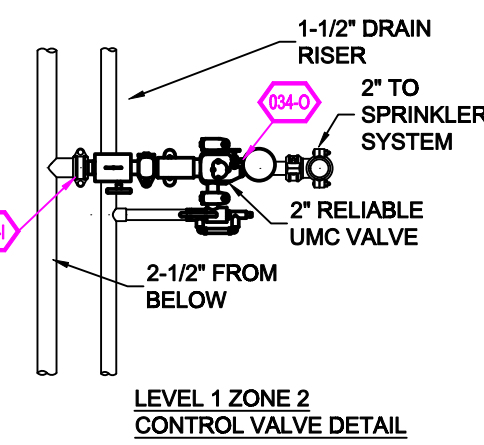
Design Area #1 HAZARD: OH1  
Zone: 1 System Type: WET  
Location: STORAGE 002  
Flowing Outlets: 11  
Density: 0.15 Remote Area: 1022  
Req'd @ Base of Riser  
Flow 237.5 gpm @ 59.5 psi  
Req'd @ Source  
Flow 487.5 gpm @ -3.6 psi  
Calculation Safety: 44.6 psi  
Includes 250 gpm Hose allowance  
NOTE: 1500ft REDUCED BY 37% TO 945ft DUE TO 12'-1" CEILING HEIGHT PER NFPA 13 FIG. 11.2.3.2.3.1

PER STATE IFC AMENDMENTS 903.3.1.6.5 SPRINKLER PROTECTION IS NOT REQUIRED IN VESTIBULES THAT MEET THE FOLLOWING:  
• 225 S.F. OR LESS  
• IS OF NONCOMBUSTIBLE OR LIMITED COMBUSTIBLE CONSTRUCTION  
• HAS GLAZING ALLOWING VISION INTO VESTIBULE  
• ONLY PURPOSE IS INGRESS AND EGRESS  
• CONTAIN NO FUELED EQUIPMENT, FLAMMABLE OR COMBUSTIBLE LIQUIDS, OR FURNITURE  
INCIDENTAL COMBUSTIBLE STORAGE IN THE VESTIBULE IS LIMITED TO FIVE CUBIC FEET OF MATERIAL.

2-1/2" ROUGH BRASS FIRE DEPARTMENT CONNECTION & HORN STROBE

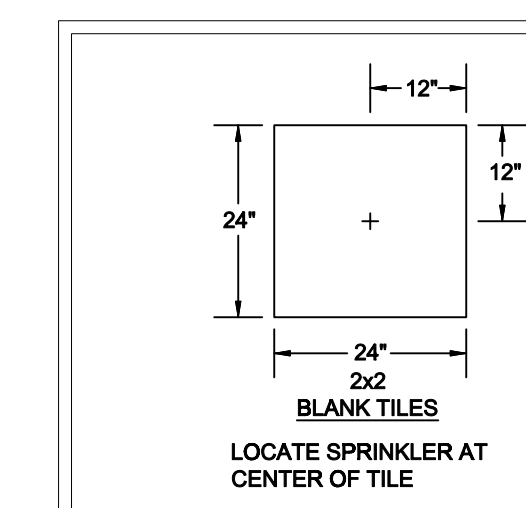
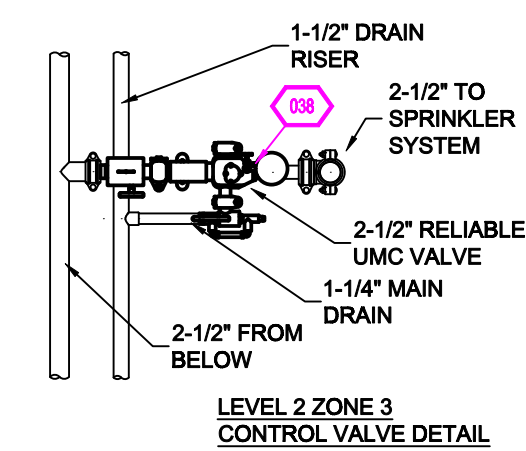
NONCOMBUSTIBLE ROOF OVERHANG SPRINKLER PROTECTION NOT REQUIRED PER NFPA 13 SEC. 8.15.7.2  
MAIN FROM LOWER LEVEL  
MAIN TO LEVEL 2  
STAIR SHAFT W/ NONCOMBUSTIBLE CONSTRUCTION SPRINKLER ONLY AT TOP OF SHAFT & UNDER THE FIRST ACCESSIBLE LANDING ABOVE THE BOTTOM OF THE SHAFT PER 8.15.2.2.1

**LEVEL 1 PLAN**  
SCALE= 1/8" : 1'-0"



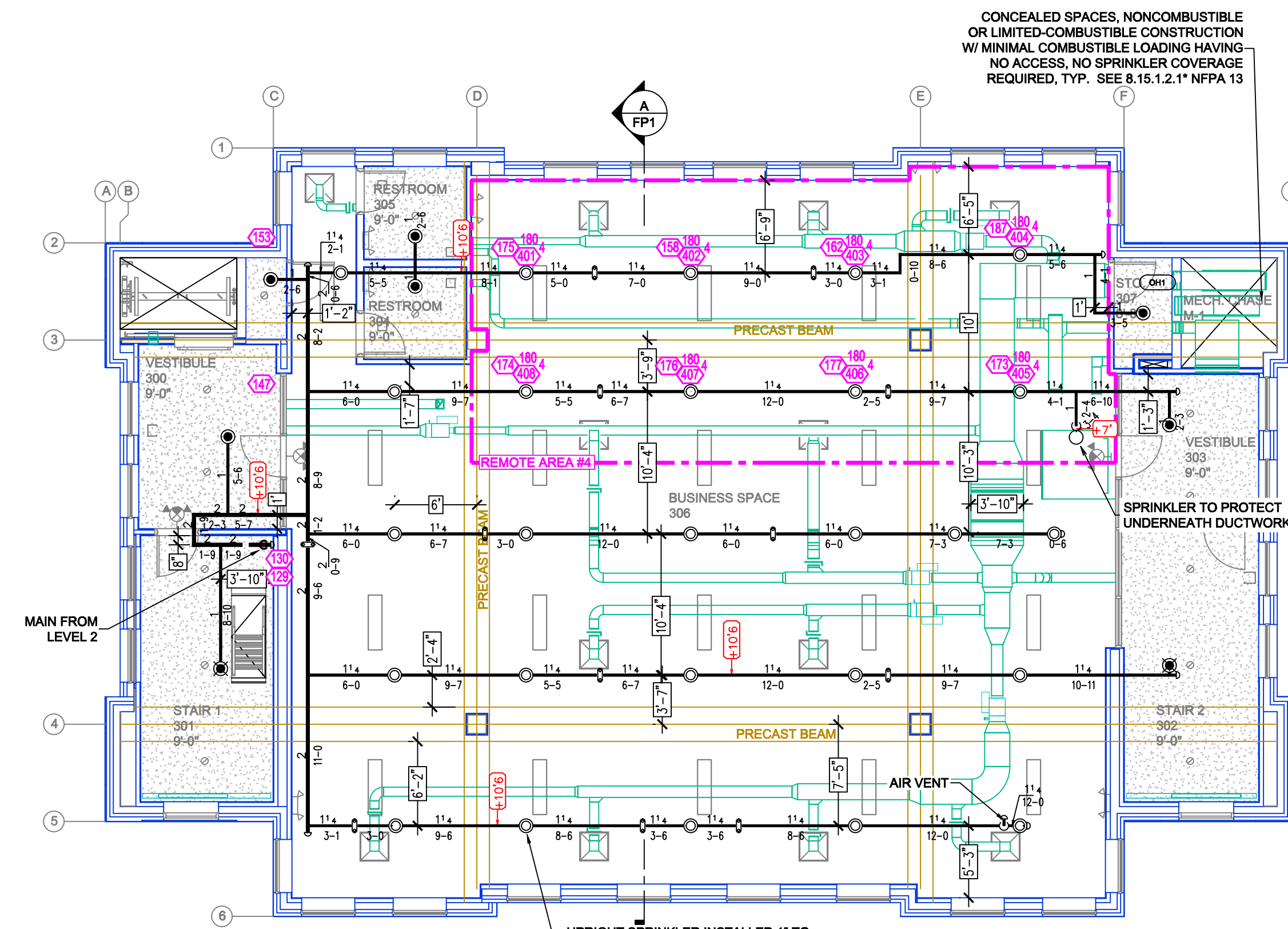
Design Area #2 HAZARD: LH  
Zone: 2 System Type: WET  
Location: FLEX 115  
Flowing Outlets: 7  
Density: 0.10 Remote Area: 1006  
Req'd @ Base of Riser  
Flow 202 gpm @ 60.9 psi  
Req'd @ Source  
Flow 302 gpm @ 6.2 psi  
Calculation Safety: 34.9 psi  
Includes 100 gpm Hose allowance  
NOTE: 1500ft REDUCED BY 37% TO 945ft DUE TO 12'-1" CEILING HEIGHT PER NFPA 13 FIG. 11.2.3.2.3.1  
NOTE: FLEXIBLE HOSES INCLUDED IN CALCULATIONS SEE DETAIL FOR LENGTHS AND MAXIMUM BENDS.

Design Area #3 HAZARD: LH  
Zone: 3 System Type: WET  
Location: OPEN OFFICE A & B  
Flowing Outlets: 11  
Density: 0.10 Remote Area: 1516  
Req'd @ Base of Riser  
Flow 310 gpm @ 48.7 psi  
Req'd @ Source  
Flow 410 gpm @ 33.3 psi  
Calculation Safety: 7.7 psi  
Includes 100 gpm Hose allowance  
NOTE: 1500ft NO REDUCTION DUE TO 20' CEILING HEIGHT PER NFPA 13 FIG. 11.2.3.2.3.1  
NOTE: FLEXIBLE HOSES INCLUDED IN CALCULATIONS SEE DETAIL FOR LENGTHS AND MAXIMUM BENDS



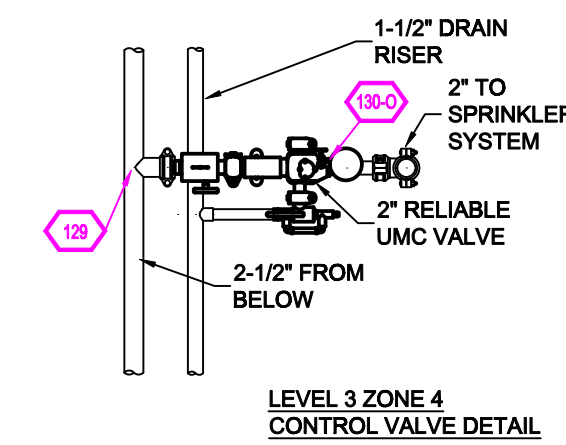
**NFPA 13 STEEL PIPE HANGER SPACING**

NOMINAL SIZE (Inches)	MAX SPACING (feet)
1"	12'-0"
1-1/4"	12'-0"
1-1/2"	15'-0"
2"	15'-0"
2-1/2"	15'-0"
3"	15'-0"
4" & LARGER	15'-0"



**LEVEL 2 PLAN**  
SCALE= 1/8" : 1'-0"

Design Area #4 HAZARD: LH  
Zone: 4 System Type: WET  
Location: BUSINESS SPACE 306  
Flowing Outlets: 8  
Density: 0.10 Remote Area: 959  
Req'd @ Base of Riser  
Flow 190.2 gpm @ 31.9 psi  
Req'd @ Source  
Flow 290.2 gpm @ -6.8 psi  
Calculation Safety: 47.9 psi  
Includes 100 gpm Hose allowance  
NOTE: 1500ft REDUCED BY 37% TO 945ft DUE TO 12'-1" CEILING HEIGHT PER NFPA 13 FIG. 11.2.3.2.3.1

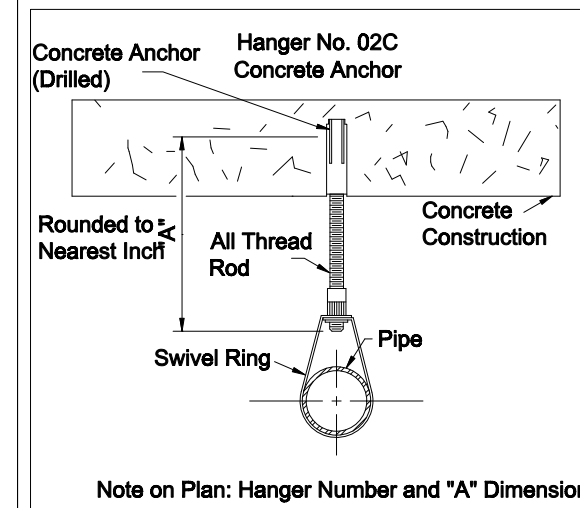


**LEVEL 3 PLAN**  
SCALE= 1/8" : 1'-0"

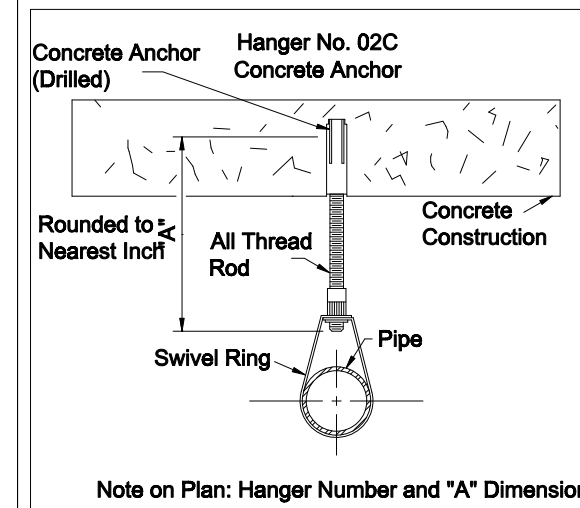
**SPRINKLER HEAD LEGEND**

SYM	CNT	POSITION	FINISH	TEMP	K	NPT	SIN	MFG.	MODEL#	ESCUTCHEON	MAX SPACING
48	PENDENT	WHITE	200	5.80	12"	V9500	VICTAULIC	FL-GR	CONCEALED	225 s.f. LH & 130 s.f. OH1	
18	PENDENT	WHITE	200	11.20	3/4"	V1100	VICTAULIC	FL-GR	CONCEALED	180 s.f.	
18	UPRIGHT	BRASS	200	5.80	12"	V2700	VICTAULIC	FL-GR	N/A	130 s.f. OH1	
48	UPRIGHT	BRASS	200	5.80	12"	V2700	VICTAULIC	FL-GR	N/A	225 s.f. LH & 130 s.f. OH1	
129	TOTAL HEADS										

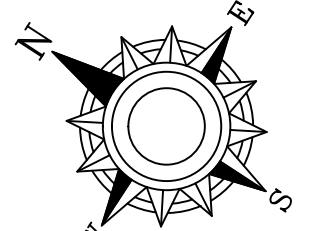
**INSTALLATION DETAILS**



LOCATE SPRINKLER AT CENTER OF TILE



UPRIGHT SPRINKLER INSTALLED 1" TO 1-1/2" FROM CEILING OR ROOF DECK, TYP. SEE 8.6.4.1.2(3) NFPA 13



**GENERAL NOTES**

- SYSTEM INSTALLED PER NFPA-13 (2016 EDITION) AND STATE FIRE MARSHAL
- ALL EQUIPMENT FOR THIS SYSTEM SHALL BE U.L. LISTED
- MINIMUM PIPE SIZE SHALL BE 1" NOMINAL PIPE
- ALL SCH-80 & LIGHTWALL PIPING HAS WELDED OUTLETS & GROOVED SHORT RADIUS FITTINGS
- ALL WELDING PER NFPA-54(2)
- NO INSTALLATION OR FABRICATION TO BEGIN WITHOUT APPROVED SHOP DRAWINGS
- ALL PIPE LOCATIONS ARE TO BE FIELD MEASURED PRIOR TO FABRICATION AND INSTALLATION BY SPRINKLER CONTRACTOR
- ALL DIMENSIONS SHOWN ARE CENTER TO CENTER
- HIGH TEMPERATURE HEADS ARE TO BE FIELD LOCATED WHERE REQUIRED
- PROVIDE ON SPARE HEAD CABINET W/ HEADS & HEAD WRENCH
- HANGERS ARE TO BE U.L. LISTED AND I.M. APPROVED
- ELECTRICAL WIRING, ALARM, DETECTION AND SUPERVISORY BY OWNER
- OWNER'S RESPONSIBILITY TO PROVIDE ADEQUATE HEATING TO PREVENT WET SYSTEM PIPING FROM FREEZING.

NO	REVISIONS	DATE	APPROVAL STAMPS

Drawing Title: **FIRE SPRINKLER PLAN**

**PREMIER BANK ROCHESTER**  
2121 37TH ST NW  
ROCHESTER, MN 55901

Contract No. **C24-102**  
Drawing Date: 12/26/2024  
Scale: 1/8" = 1'-0"  
Drawn By: ATM  
Approval By: STATE FIRE MARSHAL DIV.  
SHEET NO. **FP 2 of 2**