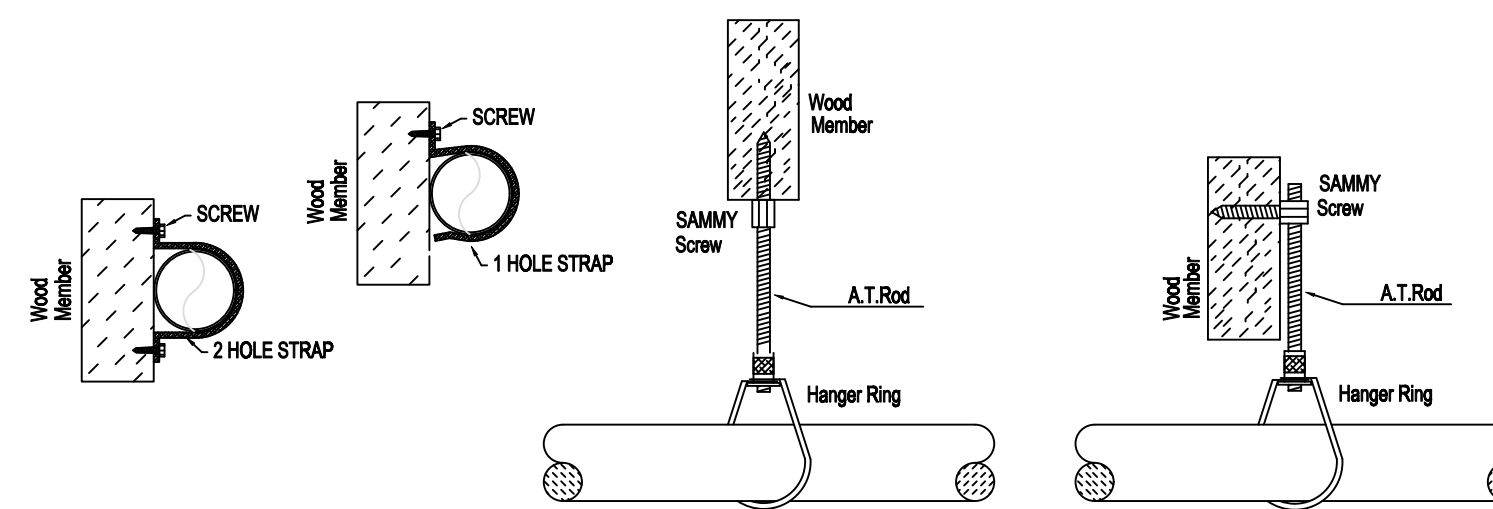




NFWA 13 STEEL PIPE HANGER SPACING (EXCEPT LIGHT WALL THIN WALL)		NFWA 13 CPVC PIPE HANGER SPACING	
NOMINAL SIZE Inches	MAX SPACING feet	NOMINAL SIZE Inches	MAX SPACING feet
1"	12'-0"	3/4"	5'-6"
1-1/4"	12'-0"	1"	6'-0"
1-1/2"	15'-0"	1-1/4"	6'-6"
2"	15'-0"	1-1/2"	7'-0"
2-1/2"	15'-0"	2"	8'-0"
3"	15'-0"	2-1/2"	9'-0"
4" & LARGER	15'-0"	3"	10'-0"

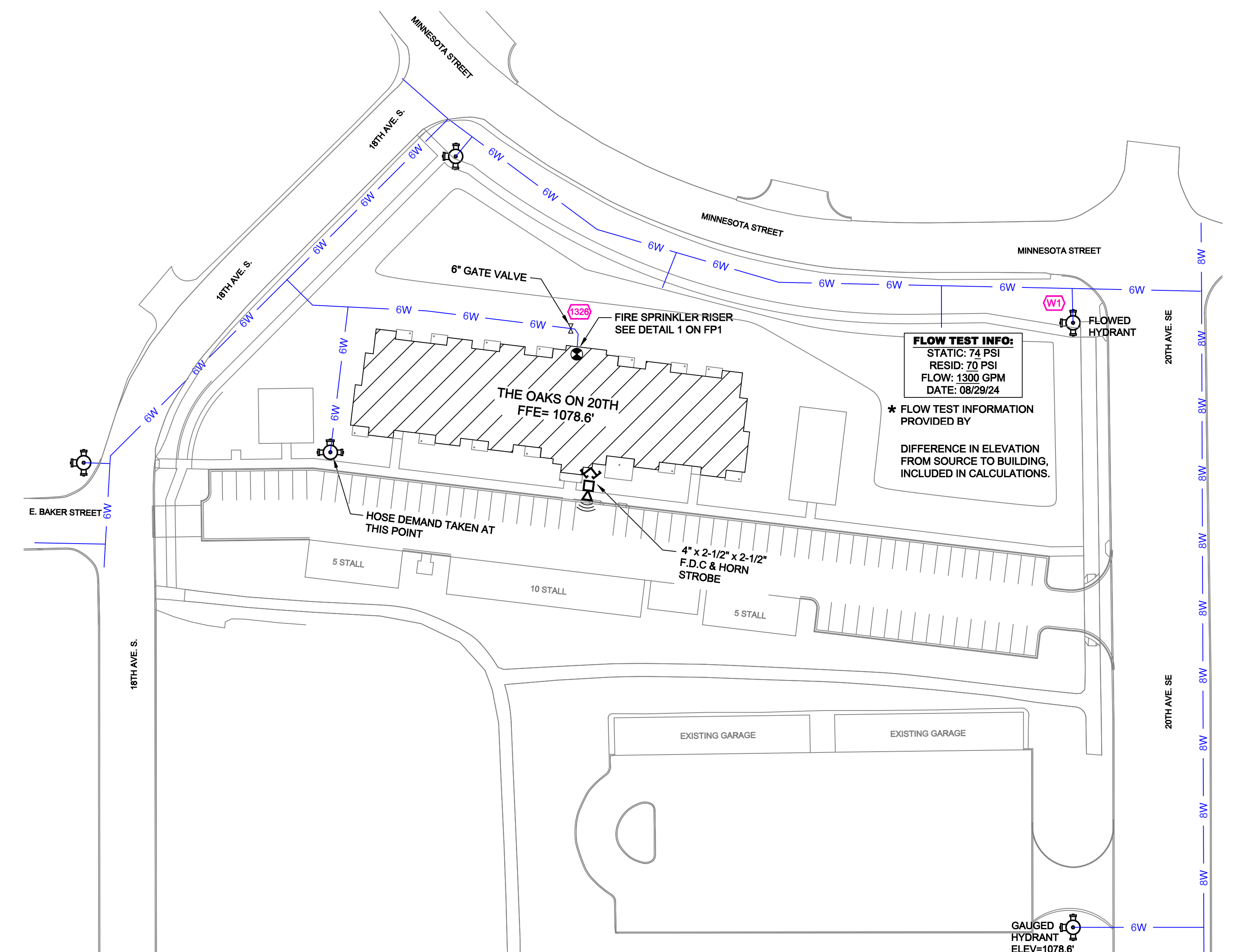


The diagram illustrates a dry system alarm installation. Key components include an air compressor (17), an alarm bell (15), and various piping and valves. Callouts indicate specific galvanizing requirements:

- * ALL PIPING PENETRATING THE EXTERIOR WALL TO BE GALVANIZED** (Callouts 1317, 1318, 1319, 1321)
- * ALL WIRING/INTERFACING OF ALARMS BY OTHERS** (Callout 1322)
- DRY SYSTEM 971 GAL.** (Callout 1323)

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

1. UNDERGROUND WATER SERVICE (BY OTHERS)
2. FLUSHING & TESTING OF THE UNDERGROUND SHALL BE COMPLETED PRIOR TO THE SPRINKLER SYSTEM HOULUP.
3. UNDERGROUND PAPERS ARE TO BE SUPPLIED TO THE "PP CONTRACTOR BY THE G.C."
4. GROUNDED 1/2" AIR PRESSURE REDUCER
5. GROUNDED 90°
6. GROUNDED 1/2" A BACKFLOW GxG OSY W/ TAMPERS
7. GROUNDED TEE
8. 1/2" SUPERVISED BUTTERFLY VALVE
9. 1/2" AIR PRESSURE CONTROL RISER MANIFOLD W/ FLOW SW
10. 1/2" PRESSURE GAUGE, PRT & TEST AND DRAIN
11. 1/2" UP TO RESIDENTIAL SYSTEM
12. 1/2" UP TO STRAINDRIVE SYSTEM
13. 1/2" UP TO PDC
14. GROUNDED SUPERVISED BUTTERFLY VALVE
15. GROUNDED 90°
16. GROUNDED DPN+ DRY VALVE
17. GROUNDED 1/2" UP TO ATTIC
18. 2" MAIN DRAIN PIPED OUTSIDE
19. HEAD BOX
20. PIPE STAND
21. AIR COMPRESSOR
22. CITY SIDE VALVE
23. 1/2" AIR PRESSURE CONTROL RISER MANIFOLD W/ FLOW SW
24. 1/2" PRESSURE GAUGE, PRT & TEST AND DRAIN
25. 1/2" UP TO RESIDENTIAL SYSTEM
26. 1/2" UP TO STRAINDRIVE SYSTEM
27. 1/2" UP TO PDC
28. GROUNDED SUPERVISED BUTTERFLY VALVE
29. GROUNDED 90°
30. GROUNDED DPN+ DRY VALVE
31. GROUNDED 1/2" UP TO ATTIC
32. 2" MAIN DRAIN PIPED OUTSIDE
33. HEAD BOX
34. PIPE STAND
35. AIR COMPRESSOR
36. CITY SIDE VALVE
37. 1/2" AIR PRESSURE CONTROL RISER MANIFOLD W/ FLOW SW
38. 1/2" PRESSURE GAUGE, PRT & TEST AND DRAIN
39. 1/2" UP TO RESIDENTIAL SYSTEM
40. 1/2" UP TO STRAINDRIVE SYSTEM
41. 1/2" UP TO PDC
42. GROUNDED SUPERVISED BUTTERFLY VALVE
43. GROUNDED 90°
44. GROUNDED DPN+ DRY VALVE
45. GROUNDED 1/2" UP TO ATTIC
46. 2" MAIN DRAIN PIPED OUTSIDE
47. HEAD BOX
48. PIPE STAND
49. AIR COMPRESSOR
50. CITY SIDE VALVE
51. 1/2" AIR PRESSURE CONTROL RISER MANIFOLD W/ FLOW SW
52. 1/2" PRESSURE GAUGE, PRT & TEST AND DRAIN
53. 1/2" UP TO RESIDENTIAL SYSTEM
54. 1/2" UP TO STRAINDRIVE SYSTEM
55. 1/2" UP TO PDC
56. GROUNDED SUPERVISED BUTTERFLY VALVE
57. GROUNDED 90°
58. GROUNDED DPN+ DRY VALVE
59. GROUNDED 1/2" UP TO ATTIC
60. 2" MAIN DRAIN PIPED OUTSIDE
61. HEAD BOX
62. PIPE STAND
63. AIR COMPRESSOR
64. CITY SIDE VALVE
65. 1/2" AIR PRESSURE CONTROL RISER MANIFOLD W/ FLOW SW
66. 1/2" PRESSURE GAUGE, PRT & TEST AND DRAIN
67. 1/2" UP TO RESIDENTIAL SYSTEM
68. 1/2" UP TO STRAINDRIVE SYSTEM
69. 1/2" UP TO PDC
70. GROUNDED SUPERVISED BUTTERFLY VALVE
71. GROUNDED 90°
72. GROUNDED DPN+ DRY VALVE
73. GROUNDED 1/2" UP TO ATTIC
74. 2" MAIN DRAIN PIPED OUTSIDE
75. HEAD BOX
76. PIPE STAND
77. AIR COMPRESSOR
78. CITY SIDE VALVE
79. 1/2" AIR PRESSURE CONTROL RISER MANIFOLD W/ FLOW SW
80. 1/2" PRESSURE GAUGE, PRT & TEST AND DRAIN
81. 1/2" UP TO RESIDENTIAL SYSTEM
82. 1/2" UP TO STRAINDRIVE SYSTEM
83. 1/2" UP TO PDC
84. GROUNDED SUPERVISED BUTTERFLY VALVE
85. GROUNDED 90°
86. GROUNDED DPN+ DRY VALVE
87. GROUNDED 1/2" UP TO ATTIC
88. 2" MAIN DRAIN PIPED OUTSIDE
89. HEAD BOX
90. PIPE STAND
91. AIR COMPRESSOR
92. CITY SIDE VALVE
93. 1/2" AIR PRESSURE CONTROL RISER MANIFOLD W/ FLOW SW
94. 1/2" PRESSURE GAUGE, PRT & TEST AND DRAIN
95. 1/2" UP TO RESIDENTIAL SYSTEM
96. 1/2" UP TO STRAINDRIVE SYSTEM
97. 1/2" UP TO PDC
98. GROUNDED SUPERVISED BUTTERFLY VALVE
99. GROUNDED 90°
100. GROUNDED DPN+ DRY VALVE
101. GROUNDED 1/2" UP TO ATTIC
102. 2" MAIN DRAIN PIPED OUTSIDE
103. HEAD BOX
104. PIPE STAND
105. AIR COMPRESSOR
106. CITY SIDE VALVE
107. 1/2" AIR PRESSURE CONTROL RISER MANIFOLD W/ FLOW SW
108. 1/2" PRESSURE GAUGE, PRT & TEST AND DRAIN
109. 1/2" UP TO RESIDENTIAL SYSTEM
110. 1/2" UP TO STRAINDRIVE SYSTEM
111. 1/2" UP TO PDC
112. GROUNDED SUPERVISED BUTTERFLY VALVE
113. GROUNDED 90°
114. GROUNDED DPN+ DRY VALVE
115. GROUNDED 1/2" UP TO ATTIC
116. 2" MAIN DRAIN PIPED OUTSIDE
117. HEAD BOX
118. PIPE STAND
119. AIR COMPRESSOR
120. CITY SIDE VALVE
121. 1/2" AIR PRESSURE CONTROL RISER MANIFOLD W/ FLOW SW
122. 1/2" PRESSURE GAUGE, PRT & TEST AND DRAIN
123. 1/2" UP TO RESIDENTIAL SYSTEM
124. 1/2" UP TO STRAINDRIVE SYSTEM
125. 1/2" UP TO PDC
126. GROUNDED SUPERVISED BUTTERFLY VALVE
127. GROUNDED 90°
128. GROUNDED DPN+ DRY VALVE
129. GROUNDED 1/2" UP TO ATTIC
130. 2" MAIN DRAIN PIPED OUTSIDE
131. HEAD BOX
132. PIPE STAND
133. AIR COMPRESSOR
134. CITY SIDE VALVE
135. 1/2" AIR PRESSURE CONTROL RISER MANIFOLD W/ FLOW SW
136. 1/2" PRESSURE GAUGE, PRT & TEST AND DRAIN
137. 1/2" UP TO RESIDENTIAL SYSTEM
138. 1/2" UP TO STRAINDRIVE SYSTEM
139. 1/2" UP TO PDC
140. GROUNDED SUPERVISED BUTTERFLY VALVE
141. GROUNDED 90°
142. GROUNDED DPN+ DRY VALVE
143. GROUNDED 1/2" UP TO ATTIC
144. 2" MAIN DRAIN PIPED OUTSIDE
145. HEAD BOX
146. PIPE STAND
147. AIR COMPRESSOR
148. CITY SIDE VALVE
149. 1/2" AIR PRESSURE CONTROL RISER MANIFOLD W/ FLOW SW
150. 1/2" PRESSURE GAUGE, PRT & TEST AND DRAIN
151. 1/2" UP TO RESIDENTIAL SYSTEM
152. 1/2" UP TO STRAINDRIVE SYSTEM
153. 1/2" UP TO PDC
154. GROUNDED SUPERVISED BUTTERFLY VALVE
155. GROUNDED 90°
156. GROUNDED DPN+ DRY VALVE
157. GROUNDED 1/2" UP TO ATTIC
158. 2" MAIN DRAIN PIPED OUTSIDE
159. HEAD BOX
160. PIPE STAND
161. AIR COMPRESSOR
162. CITY SIDE VALVE
163. 1/2" AIR PRESSURE CONTROL RISER MANIFOLD W/ FLOW SW
164. 1/2" PRESSURE GAUGE, PRT & TEST AND DRAIN
165. 1/2" UP TO RESIDENTIAL SYSTEM
166. 1/2" UP TO STRAINDRIVE SYSTEM
167. 1/2" UP TO PDC
168. GROUNDED SUPERVISED BUTTERFLY VALVE
169. GROUNDED 90°
170. GROUNDED DPN+ DRY VALVE
171. GROUNDED 1/2" UP TO ATTIC
172. 2" MAIN DRAIN PIPED OUTSIDE
173. HEAD BOX
174. PIPE STAND
175. AIR COMPRESSOR
176. CITY SIDE VALVE
177. 1/2" AIR PRESSURE CONTROL RISER MANIFOLD W/ FLOW SW
178. 1/2" PRESSURE GAUGE, PRT & TEST AND DRAIN
- 179



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

1. MINNESOTA STATE BUILDING CODE (2020)

1.1. OCCUPANCY RESIDENTIAL R-2; APARTMENT

1.2. TYPE OF CONSTRUCTION V-B (1HR RATED PROTECTED, COMBUSTIBLE CONSTRUCTION)

1.3. SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)

1ST FLOOR = 15,884 S.F.

2ND FLOOR = 15,755 S.F.

3RD FLOOR = 15,755 S.F.

ATTIC = 15,755 S.F.

TOTAL = 63,129 S.F.

1.4. INSTALLATION STANDARDS:
SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13 (2016)

2. SPRINKLER PIPE TYPES:

-WET:

2.1. 1" BRANCH LINES TO BE BLAZEMASTER CPVC PIPING WITH CEMENTED FITTINGS

2.2. 1 1/2" THROUGH 1 3/4" MAIN & BRANCH LINES TO BE BLAZEMASTER CPVC PIPING WITH CEMENTED FITTINGS

2.3. 1" THROUGH 1 1/2" BRANCH LINES TO BE THREADED BLK SCHEDULE 40 WITH THREADED FITTINGS -DRY & PRE-ACTION-

2.4. 1 1/2" THROUGH 2" BRANCH LINES TO BE THREADED BLK SCHEDULE 40 WITH THREADED FITTINGS

2.5. 1 1/2" THROUGH 4" MAIN & BRANCH LINES TO BE GROOVED BLK SCHEDULE 10 WITH GROOVED FITTINGS

3. DESIGN CRITERIA

3.1. RESIDENTIAL ROOMS, CORRIDORS, LOBBIES, AND SIMILAR AREAS DESIGNED TO LIGHT HAZARD

3.2. LAUNDRY ROOM, MECH ROOMS, STORAGE ROOMS, AND SIMILAR AREAS DESIGNED TO ORDINARY HAZARD GROUP 1

3.3. REMOTE AREA REDUCTIONS HAVE BEEN TAKEN WHERE APPLICABLE PER NFPA 13 SEC. 11.2.3.2.3

4. NOTES:

4.1. ALL MATERIAL TO BE NEW AND MEET U.L. STANDARDS

4.2. HANGERS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13 (2016) - SEE PLAN FOR HANGING REQ.

4.3. DRY SYSTEM PIPE SLOPE INSTALLATION:
SPRINKLER MAINS TO BE 1/2" PER 10 FEET
SPRINKLER BRANCH LINES TO BE 1/2" PER 10 FEET

4.4. DRY SYSTEM CAPACITY

4.4.1. 371 GAL

5. SYMBOLS USED ON DRAWINGS:

-E10- PIPE ELEVATION A.F.F

-E5- PIPE ELEVATION BELOW B.O.D

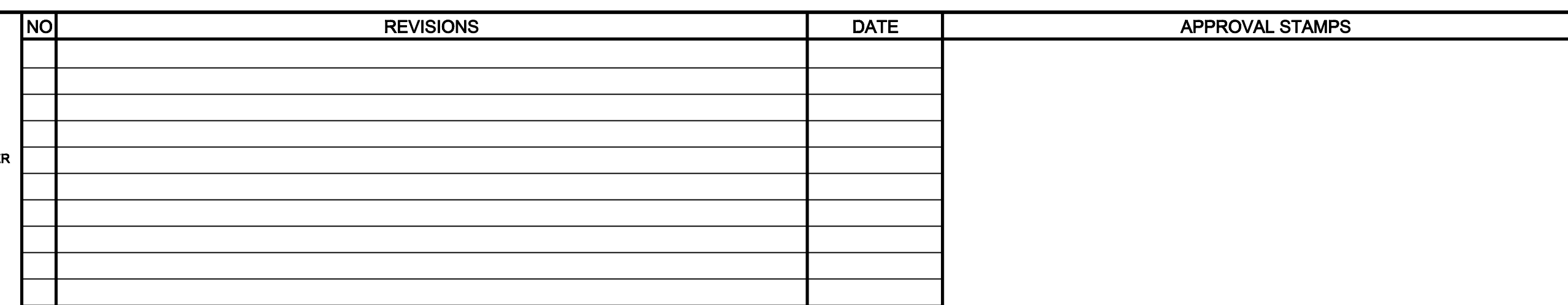
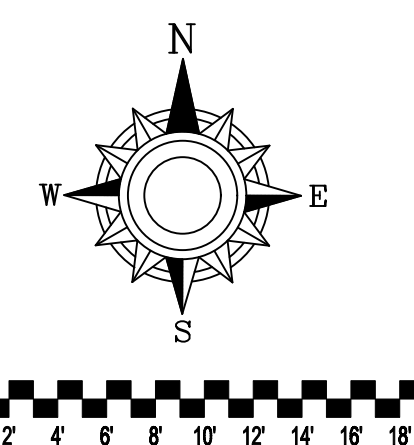
(RM) ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD UNLESS NOTED)

(DH) HYDRAULIC CALCULATION JUNCTION POINT

0'-0" CEILING HEIGHT

6. SCOPE OF WORK:

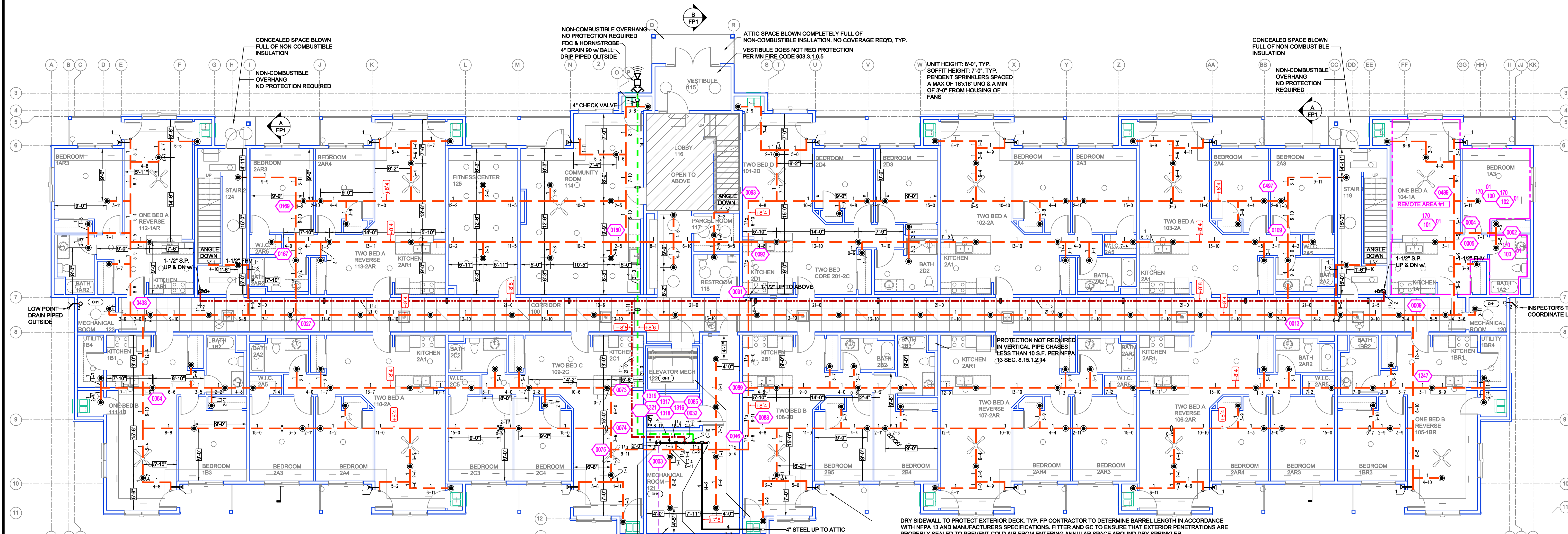
6.1.



1. SYSTEM INSTALLED PER NFPA-13 (2016 EDITION) AND STATE FIRE MARSHAL
2. ALL EQUIPMENT FOR THIS SYSTEM SHALL BE U.L. LISTED
3. MINIMUM PIPE SIZE SHALL BE 1" NOMINAL PIPE
4. ALL SCH-40 LIGHTWALL PIPING SHALL BE INSTALLED WITH 90° ELBOWS, 45° ELBOWS & APPROVED SHORT RADIUS FITTINGS
5. ALL WELDING PER NFPA-13(4-6.2)
6. NO INSTALLATION OR FABRICATION TO BE FIELD WELDED PRIOR TO APPROVED SHOP DRAWINGS
7. PIPE LOCATIONS ARE TO BE DETERMINED PRIOR TO FABRICATION AND INSTALLATION BY SPRINKLER CONTRACTOR
8. ALL DIMENSIONS SHOWN ARE CENTER TO CENTER
9. HIGH TEMPERATURE HEADS ARE TO BE FIELD LOCATED & WELDED
10. PROVIDE TO SPARE HEAD CABINET WE HEADS & HEAD WRENCH
11. HANGERS ARE TO BE U.L. LISTED HANGERS WITH 1/2" MINIMUM HANGING ARM
12. ELECTRICAL WIRING, ALARM, DETECTION AND SUPERVISORY BY OWNER
13. OWNERS RESPONSIBILITY TO PROVIDE ADEQUATE HEATING TO PREVENT WET SYSTEM PIPING FROM FREEZING

THE OAKS ON 20TH
BUILDING 3
109 20TH AVE
ST. JOSEPH, MN

Contract No.	
C25-99	
Drawing Date:	04/27/26
Scale:	1/8" = 1'-0"
Drawn By:	JF
Approval By:	STATE FIRE MARSHAL DIV.
SHEET NO.	FP 1 of 3



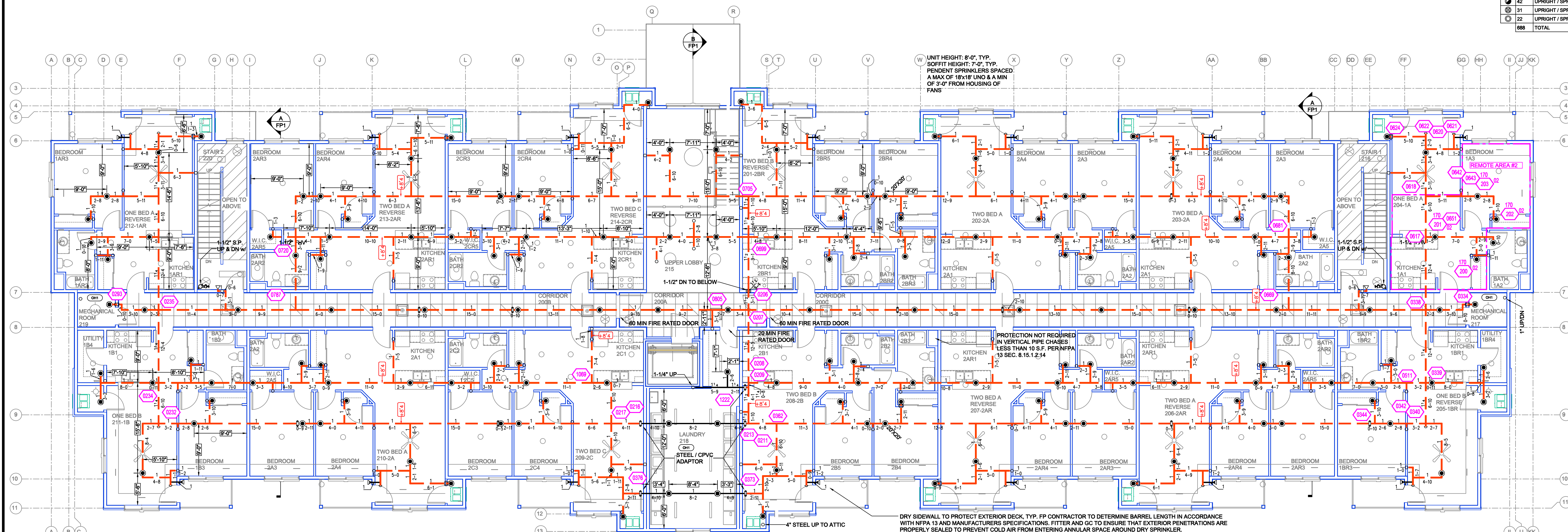
LEVEL 1 FIRE SPRINKLER PLAN
SCALE = 1/8" = 1'-0"

Design Area #01 HAZARD: LH
Zone: 1 System Type: WET
Location: ONE BED A
104-1A
Flowing Outlets: 4
Density: 0.10 Remote Area: 802
Flow: 309 gpm @ 60.7 psi
Calculation Safety: 13 psi
Includes 100 gpm hose allowance
FOUR MOST DEMANDING RESIDENTIAL
SPRINKLERS CALCULATED PER NFPA 13
11.3.1.1.
138 GPM OF DOMESTIC DEMAND
ADDED TO SPRINKLER DEMAND PER
MNSFC 903.3.5.2

PIPE LEGEND
BLACK STEEL FIRE SPRINKLER PIPING
CPVC FIRE SPRINKLER PIPING
FIRE SPRINKLER STANDPIPE PIPING
FIRE SPRINKLER FDC PIPING

SPRINKLER HEAD LEGEND

SYM	CNT	POSITION	FINISH	TEMP	K	NPT	BSN	MPFS	MODEL#	ESCUTCHEON	MAX SPACING
296	1	PENDENT	WHITE	155	4.50	1/2"	V2740	VICTAULIC	FL-RES	SEMI-RECESS	18" x 18"
83	1	PENDENT	WHITE	200	5.60	1/2"	V2708	VICTAULIC	FL-GR	SEMI-RECESS	225 SF (LH) - 130 SF (CH)
42	1	SIDEWALL	WHITE	200	5.60	1"	V3810	VICTAULIC	FL-GR	401	14" x 14"
33	1	SIDEWALL	WHITE	200	5.60	1/2"	V2710	VICTAULIC	FL-GRSW	401	196 SF (LH) - 100 SF (CH)
150	1	SIDEWALL	WHITE	155	4.00	1/2"	VK488	VIKING	FREEDOM	401	18" x 18" U.N.O.
30	1	SPRING	BRASS	212	8.00	3/4"	RA602	RELIABLE	DD6-6	N/A	8" x 66" OR 8" x 70"
42	1	UPRIGHT / SPRING	BRASS	212	5.60	1/2"	RA626	RELIABLE	AH56	N/A	10" x 15"
31	1	UPRIGHT / SPRING	BRASS	200	5.60	1/2"	RA626	RELIABLE	DD56-6	N/A	8" x 40"
22	1	UPRIGHT / SPRING	BRASS	212	5.60	1/2"	V2704	VICTAULIC	FL-GR	N/A	8" x 15"
008	1	TOTAL									



LEVEL 2 FIRE SPRINKLER PLAN
SCALE = 1/8" = 1'-0"

Design Area #02 HAZARD: LH
Zone: 1 System Type: WET
Location: ONE BED A
204-1A
Flowing Outlets: 4
Density: 0.10 Remote Area: 408
Flow: 309 gpm @ 52.8 psi
Calculation Safety: 21.2 psi
Includes 100 gpm hose allowance
FOUR MOST DEMANDING RESIDENTIAL
SPRINKLERS CALCULATED PER NFPA 13
11.3.1.1.
138 GPM OF DOMESTIC DEMAND
ADDED TO SPRINKLER DEMAND PER
MNSFC 903.3.5.2

2 4 6 8 10 12 14 16 18

GENERAL NOTES

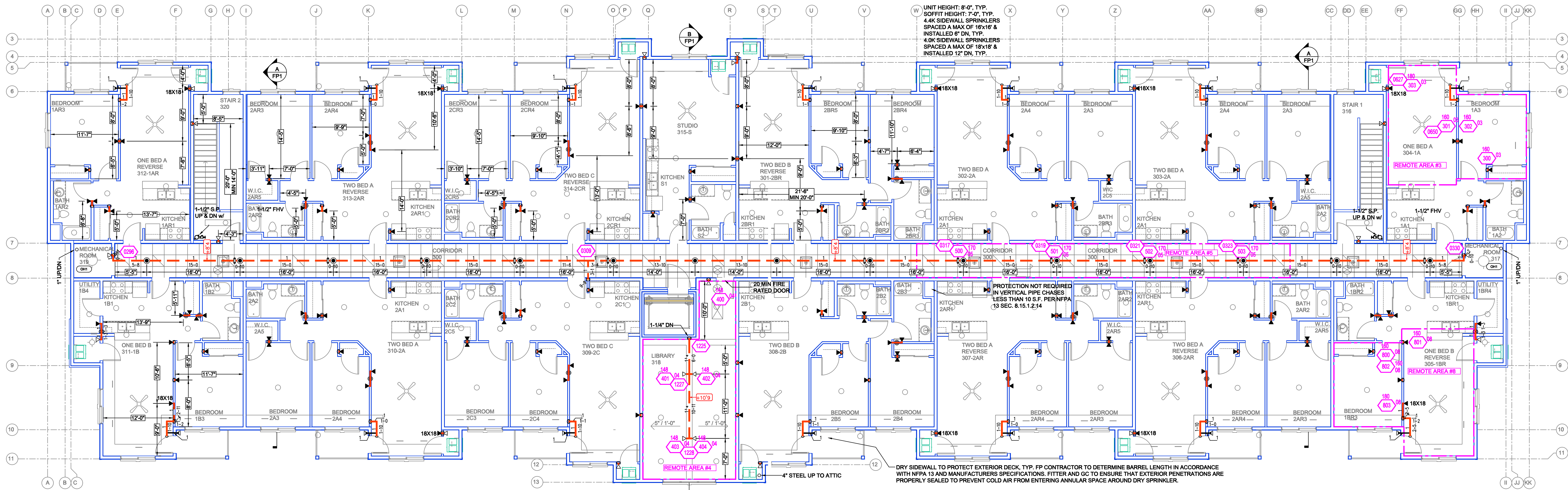
- SYSTEM INSTALLED PER NFPA-13 (2018 EDITION) AND STATE FIRE MARSHAL
- ALL EQUIPMENT FOR THIS SYSTEM SHALL BE U.L. LISTED
- MINIMUM PIPE SIZE SHALL BE 1" NOMINAL PIPE
- ALL SCH-40 & LIGHTWALL PIPING HAS WELDED OUTLETS & GROOVED SHORT RADIUS FITTINGS
- ALL WELDING PER NFPA-514 (2021)
- NO INSTALLATION OR FABRICATION TO BEGIN WITHOUT APPROVED SHOP DRAWINGS
- ALL FIELD 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 WITH HEADS & HEAD WRENCH
- HANGERS ARE TO BE U.L. LISTED AND I.M. APPROVED
- ELECTRICAL WIRING, ALARM, DETECTION AND SUPERVISORY BY OWNER
- OWNERS RESPONSIBILITY TO PROVIDE ADEQUATE HEATING TO PREVENT WET SYSTEM PIPING FROM FREEZING.

NO	REVISIONS	DATE	APPROVAL STAMPS

Drawing Title: FIRE PROTECTION PLAN

THE OAKS ON 20TH
BUILDING 3
109 20TH AVE
ST. JOSEPH, MN

Contract No: C25-99
Drawing Date: 04/27/26
Scale: 1/8" = 1'-0"
Drawn By: JF
Approval By: STATE FIRE MARSHAL DIV.
SHEET NO: FP 2 of 3



LEVEL 3 FIRE SPRINKLER PLAN

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

Design Area # 04 HAZARD: LH
 Zone: 1 System Type: WET
 Location: LIBRARY
 Flowing Outlets: 4
 Density: 0.10 Remote Area: 444
 Flow: 321 gpm @ 68.2 psi
 Calculation Safety: 20.5 psi
 Includes 100 gpm Hose allowance
 CALCULATED TO ROOM DESIGN
 METHOD PER NFPA 13 SEC.
 11.2.3.3.5(1)
 115 GPM OF DOMESTIC DEMAND
 ADDED TO SPRINKLER DEMAND PER
 MNSFC 903.3.5.2

Design Area # 05 HAZARD: LH
 Zone: 1 System Type: WET
 Location: CORRIDOR
 300
 Flowing Outlets: 4
 Density: 0.10 Remote Area: 371
 Flow: 307 gpm @ 68.8 psi
 Calculation Safety: 13 psi
 Includes 100 gpm Hose allowance
 FOUR MOST DEMANDING RESIDENTIAL
 SPRINKLERS CALCULATED PER NFPA 13
 11.3.1.1.
 138 GPM OF DOMESTIC DEMAND
 ADDED TO SPRINKLER DEMAND PER
 MNSFC 903.3.5.2

Design Area # 06 HAZARD: LH
 Zone: 2 System Type: DRY
 Location: ATTIC PEAK
 Flowing Outlets: 7
 Density: 0.10 Remote Area: 2512
 Flow: 551 gpm @ 67.8 psi
 Calculation Safety: 5.3 psi
 Includes 100 gpm Hose allowance
 7 DD AND 2 AH SPRINKLERS
 CALCULATED PER
 MANUFACTURER'S CUT SHEET
 138 GPM OF DOMESTIC DEMAND
 ADDED TO SPRINKLER DEMAND PER
 MNSFC 903.3.5.2

Design Area # 03 HAZARD: LH
 Zone: 1 System Type: WET
 Location: ONE BED A
 304-1A
 Flowing Outlets: 4
 Density: 0.10 Remote Area: 412
 Flow: 308 gpm @ 62.4 psi
 Calculation Safety: 10.2 psi
 Includes 100 gpm Hose allowance
 FOUR MOST DEMANDING RESIDENTIAL
 SPRINKLERS CALCULATED PER NFPA 13
 11.3.1.1.
 138 GPM OF DOMESTIC DEMAND
 ADDED TO SPRINKLER DEMAND PER
 MNSFC 903.3.5.2

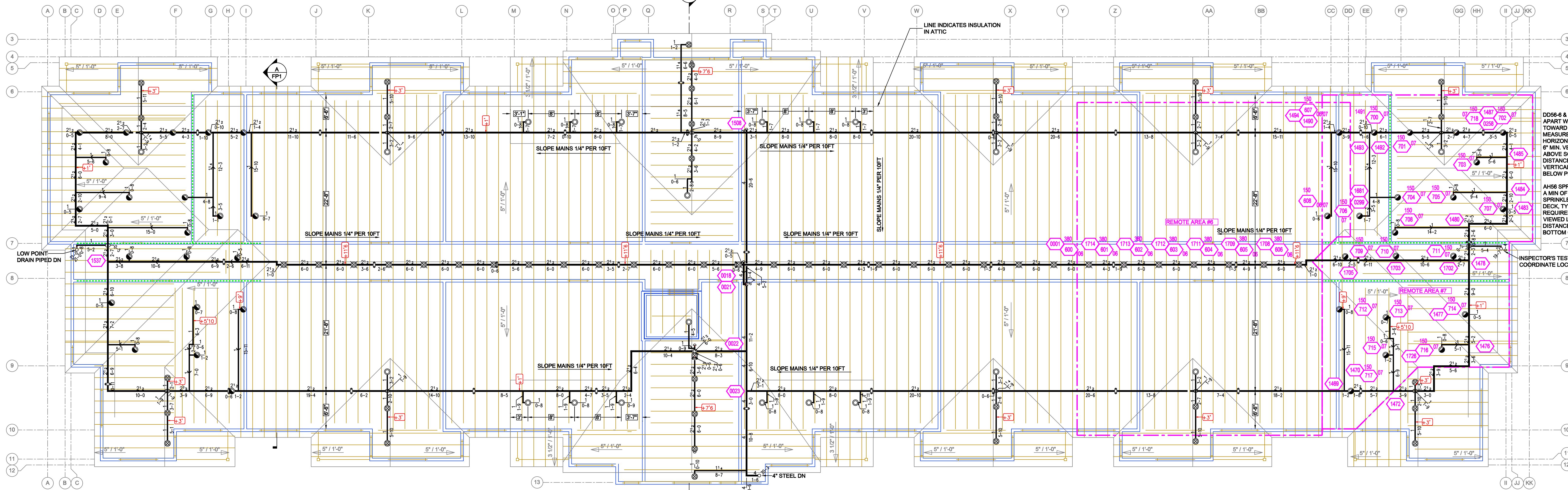
Design Area # 08 HAZARD: LH
 Zone: 1 System Type: WET
 Location: ONE BED B REVERSE
 305-1BR
 Flowing Outlets: 4
 Density: 0.10 Remote Area: 435
 Flow: 318 gpm @ 64.9 psi
 Calculation Safety: 8.8 psi
 Includes 100 gpm Hose allowance
 FOUR MOST DEMANDING RESIDENTIAL
 SPRINKLERS CALCULATED PER NFPA 13
 11.3.1.1.
 138 GPM OF DOMESTIC DEMAND
 ADDED TO SPRINKLER DEMAND PER
 MNSFC 903.3.5.2

PIPE LEGEND

—	BLACK STEEL FIRE SPRINKLER PIPING
—	CPVC FIRE SPRINKLER PIPING
—	FIRE SPRINKLER STANDPIPE PIPING
—	FIRE SPRINKLER FDC PIPING

SPRINKLER HEAD LEGEND

SYM	QNT	POSITION	FINISH	TEMP	K	NPT	SS	WGS	MODEL#	DESCRIPTION	MAX SPACING
25	PENDING	WHITE	155	4.90	1/2"	V2740	VICTAULIC	FL-RES	SEM-RECESS	18" x 18"	
83	PENDING	WHITE	200	5.60	1/2"	V2708	VICTAULIC	FL-OR	SEM-RECESS	225 SF (LH) - 130 SF (OH)	
42	SIDEWALL	WHITE	200	5.60	1"	V3810	VICTAULIC	FL-OR	401	14" x 14"	
33	SIDEWALL	WHITE	200	5.60	1/2"	V2710	VICTAULIC	FL-ORSW	401	198 SF (LH) - 100 SF (OH)	
150	SIDEWALL	WHITE	155	4.00	1/2"	VK486	VIKING	FREEDOM	401	16" x 16" U.N.O.	
30	SPRIG	BRASS	212	6.00	3/4"	RA5622	RELIABLE	DD56-6	N/A	6" x 6" OR 6" x 7"	
42	UPRIGHT / SPRIG	BRASS	212	5.60	1/2"	RA5628	RELIABLE	AH56	N/A	10" x 10"	
31	UPRIGHT / SPRIG	BRASS	200	5.60	1/2"	RA5624	RELIABLE	DD56-6	N/A	6" x 4"	
22	UPRIGHT / SPRIG	BRASS	212	5.60	1/2"	V2720	VICTAULIC	FL-OR	N/A	8" x 15"	
888	TOTAL										



ATTIC FIRE SPRINKLER PLAN

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

DD56-6 & DD56-6 SPRINKLERS INSTALLED 4'-6" APART W/ A MIN OF 26" DOWN THE SLOPE TOWARD EAVE TO NEAREST SPRINKLER MEASURED PARALLEL TO ROOF DECK. HORIZONTAL DISTANCE FROM FACE OF TRUSS: 6" MIN. VERTICAL DISTANCE OF DEFLECTOR ABOVE ROOF TRUSS: MIN 15". HORIZONTAL DISTANCE FROM CENTERLINE OF RIDGE: MAX 6" VERTICAL DISTANCE OF TOP OF DEFLECTOR BELOW PEAK, RIDGE, OR DECK: 17'-21", TYP.

AH56 SPRINKLERS INSTALLED 6'-10" APART W/ A MIN OF 12" DOWN THE SLOPE TO NEAREST SPRINKLER MEASURED PARALLEL TO ROOF DECK. TYP. A MIN 2" LATERAL OFFSET IS REQUIRED BETWEEN SPRINKLERS WHEN VIEWED LOOKING UP THE ROOF SLOPE. DISTANCE FROM TOP OF DEFLECTOR TO BOTTOM OF TRUSS TOP CORD: 1'-3", TYP.

INSPECTOR'S TEST/AUXILIARY DRAIN. COORDINATE LOCATION W/ G.C. & OWNER

Design Area # 07 HAZARD: LH
 Zone: 2 System Type: DRY
 Location: ATTIC WEST HIP
 Flowing Outlets: 21
 Density: 0.10 Remote Area: 1574
 Flow: 665 gpm @ 60 psi
 Calculation Safety: 12.8 psi
 Includes 100 gpm Hose allowance
 UP TO 1950 SF CALCULATION PER
 MANUFACTURER'S CUT SHEET
 138 GPM OF DOMESTIC DEMAND
 ADDED TO SPRINKLER DEMAND PER
 MNSFC 903.3.5.2

GENERAL NOTES

- SYSTEM INSTALLED PER NFPA-13 (2018 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-40 & LIGHTWALL PIPING HAS WELDED OUTLETS & GROOVED SHORT RADIUS FITTINGS
- ALL WELDING PER NFPA-514 (2022)
- 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 SPRINKLER HEAD CABINET W/ 8 HEADS & 1 HEAD WRENCH
- MANIFOLD 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 PROTECTION PLAN

THE OAKS ON 20TH
BUILDING 3
 109 20TH AVE
 ST. JOSEPH, MN

Contract No. C25-99

Drawing Date: 04/27/26

Scale: 1/8" = 1'-0"

Drawn By: JF

Approval By: STATE FIRE MARSHAL DIV.

SHEET NO. FP 3 of 3