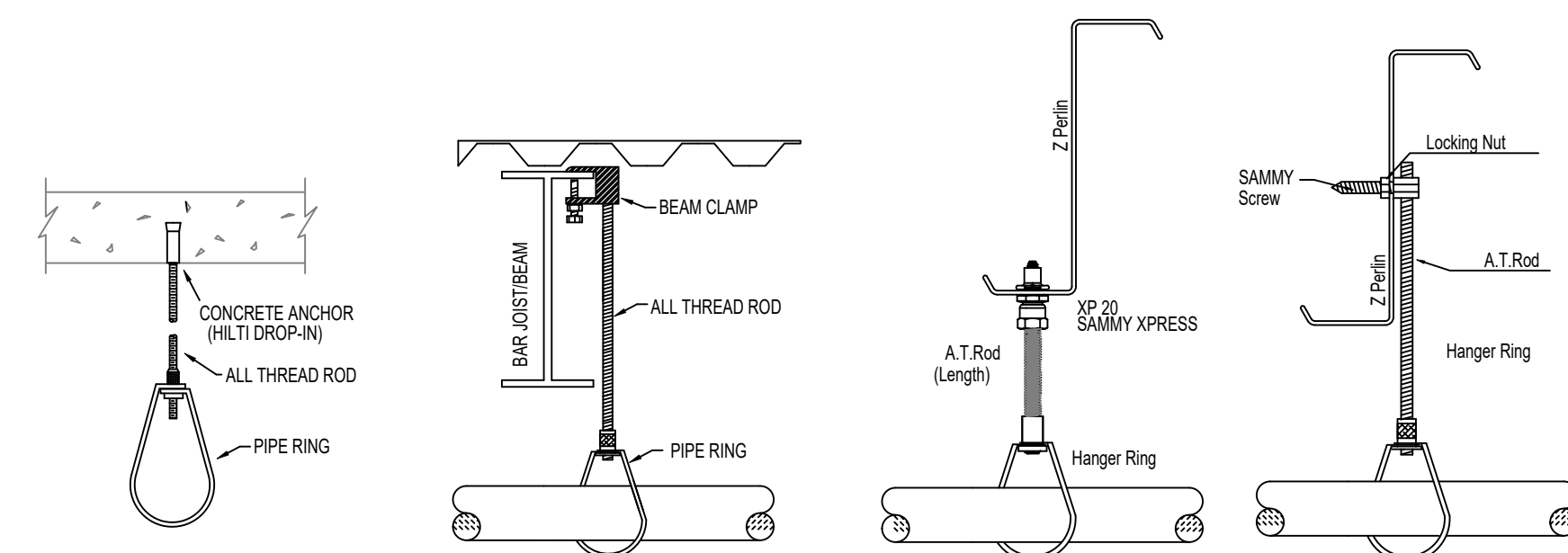


GENERAL NOTES

- INTERNATIONAL BUILDING CODE (2018)
- OCCUPANCY: STORAGE TYPE S-1: SELF STORAGE
- TYPE OF CONSTRUCTION: II-B (IIR RATED PROTECTED, COMBUSTIBLE CONSTRUCTION)
- SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
 - 1ST FLOOR = 37,175 S.F.
 - 2ND FLOOR = 37,177 S.F.
 - 3RD FLOOR = 37,177 S.F.
 - TOTAL = 111,529 S.F.
- INSTALLATION STANDARDS: SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13 (2016)
- SPRINKLER PIPE TYPES:
 - WET:
 - 2.1. 1" BRANCH LINES TO BE BLK LIGHTWALL PIPING WITH THREADED FITTINGS
 - 2.2. 1/2" BRANCH LINES TO BE BLK LIGHTWALL PIPING WITH GROOVED FITTINGS
 - 2.3. 1/2" THROUGH 6" MAIN & BRANCH LINES TO BE BLK LIGHTWALL PIPING WITH GROOVED FITTINGS
 - 2.4. MAIN & BRANCH LINES TO BE ROLL-GROOVED BLK LIGHTWALL PIPING
- DESIGN CRITERIA
 - 3.1. OFFICE AREAS, BATHROOMS, & BREAK ROOMS ARE DESIGNED TO LIGHT HAZARD
 - 3.2. MAINTENANCE, ELECTRICAL, & SPRINKLER ROOMS ARE DESIGNED TO ORDINARY HAZARD GROUP 1
 - 3.3. THE REST OF THE SELF STORAGE AREAS ARE DESIGNED TO ORDINARY HAZARD GROUP 2
 - 3.4. REMOTE AREA REDUCTIONS HAVE BEEN TAKEN WHERE APPLICABLE PER NFPA 13 SEC. 11.2.3.2.3
- 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.
- SYMBOLS USED ON DRAWINGS:
 - 10' PIPE ELEVATION A.F.F.
 - 12' PIPE ELEVATION BELOW B.O.D.
 - OHM ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD UNLESS NOTED)
 - HYDRAULIC CALCULATION JUNCTION POINT
 - 8'-0" CEILING HEIGHT
- SCOPE OF WORK:
 - 6.1. WE WILL BE INSTALLING A WET SYSTEM IN THE NEW METRO SELF STORAGE BUILDING. THE WET SYSTEM WILL CONSIST OF 1 ZONE. THE CONTROL VALVE WILL BE LOCATED IN THE MAIN FLOOR SPRINKLER ROOM.
 - 6.2. ALL AREAS OF THE BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13 (2016)



HANGER DETAILS

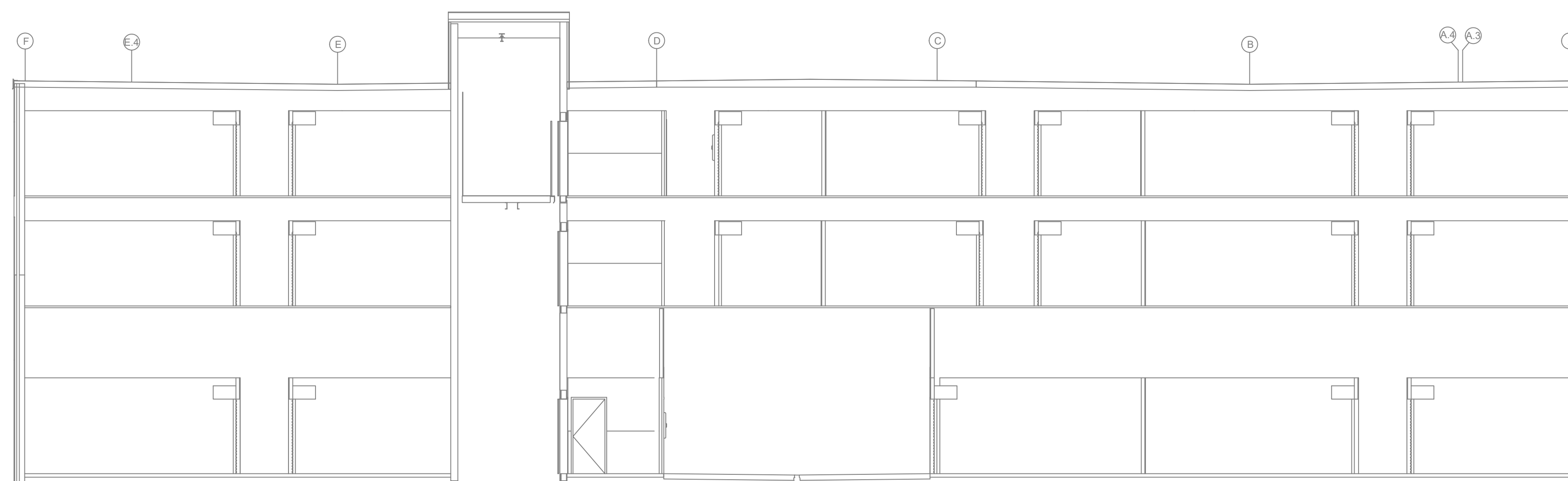
NFPA 13 STEEL PIPE HANGER SPACING
(EXCEPT LIGHT WALL THRU PIPING)

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"



SPRINKLER HEAD LEGEND

SYM	CONT	POSITION	FINISH	TEMP	K	RP#	SIN	MPFS	MODEL#	ESCU/CHC/CON	HEAD BOX
⊙	P	PENDENT	WHITE	200	5.60	1/2"	TY3331	TYCO	KR11	CONCEALED	2
⊙	U	UPRIGHT	BRASS	200	14.00	3/4"	TY8137	TYCO	EC-14	N/A	2
⊙	U	UPRIGHT	BRASS	200	8.00	3/4"	TY4131	TYCO	TY-FRB	N/A	2
⊙	P	PENDENT	CHROME	200	8.00	3/4"	TY4231	TYCO	TY-FRB	N/A	2
⊙	P	PENDENT	CHROME	286	14.00	3/4"	TY6237	TYCO	EC-14	N/A	2
853	TOTAL										

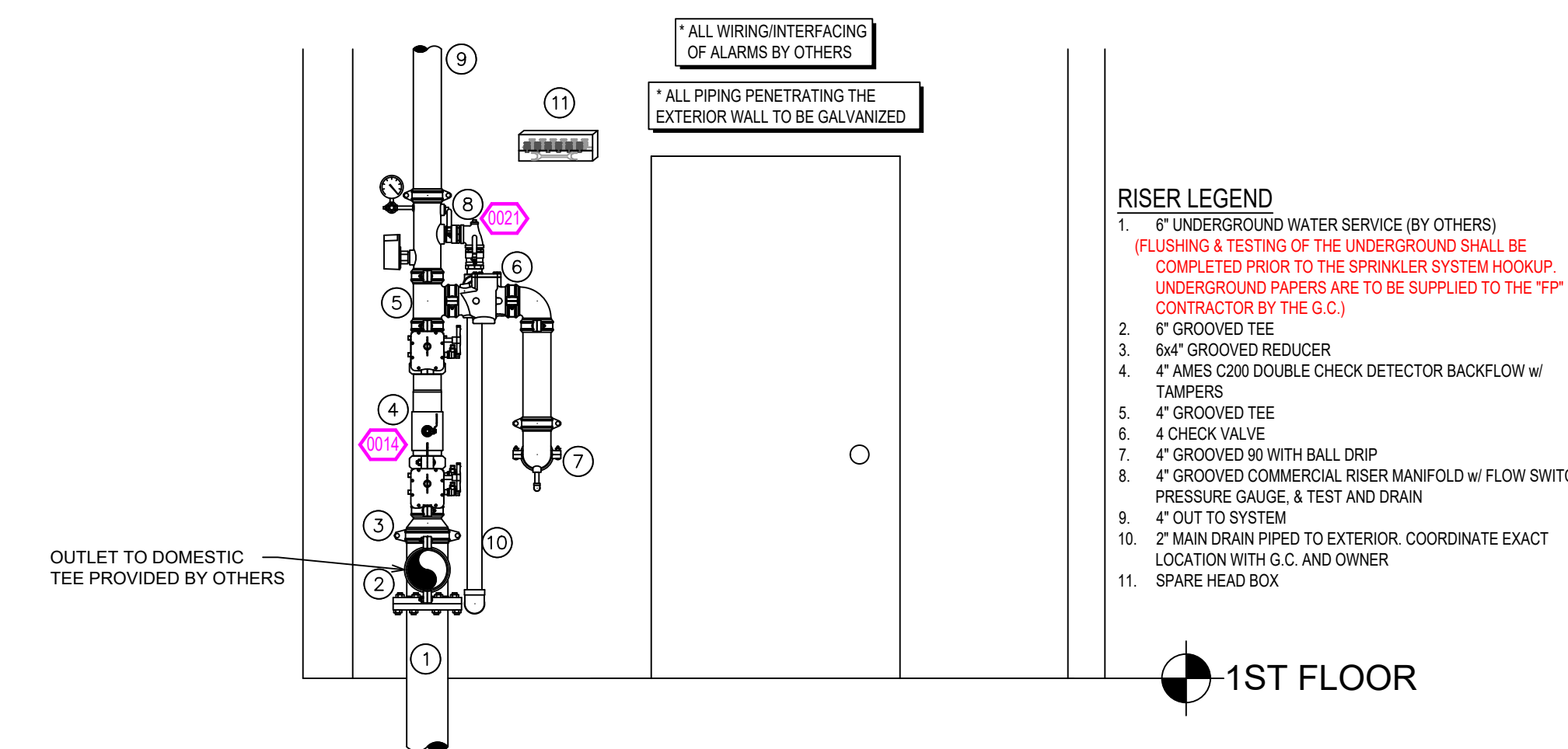


A BUILDING SECTION
SCALE= 1/8" : 1'-0"

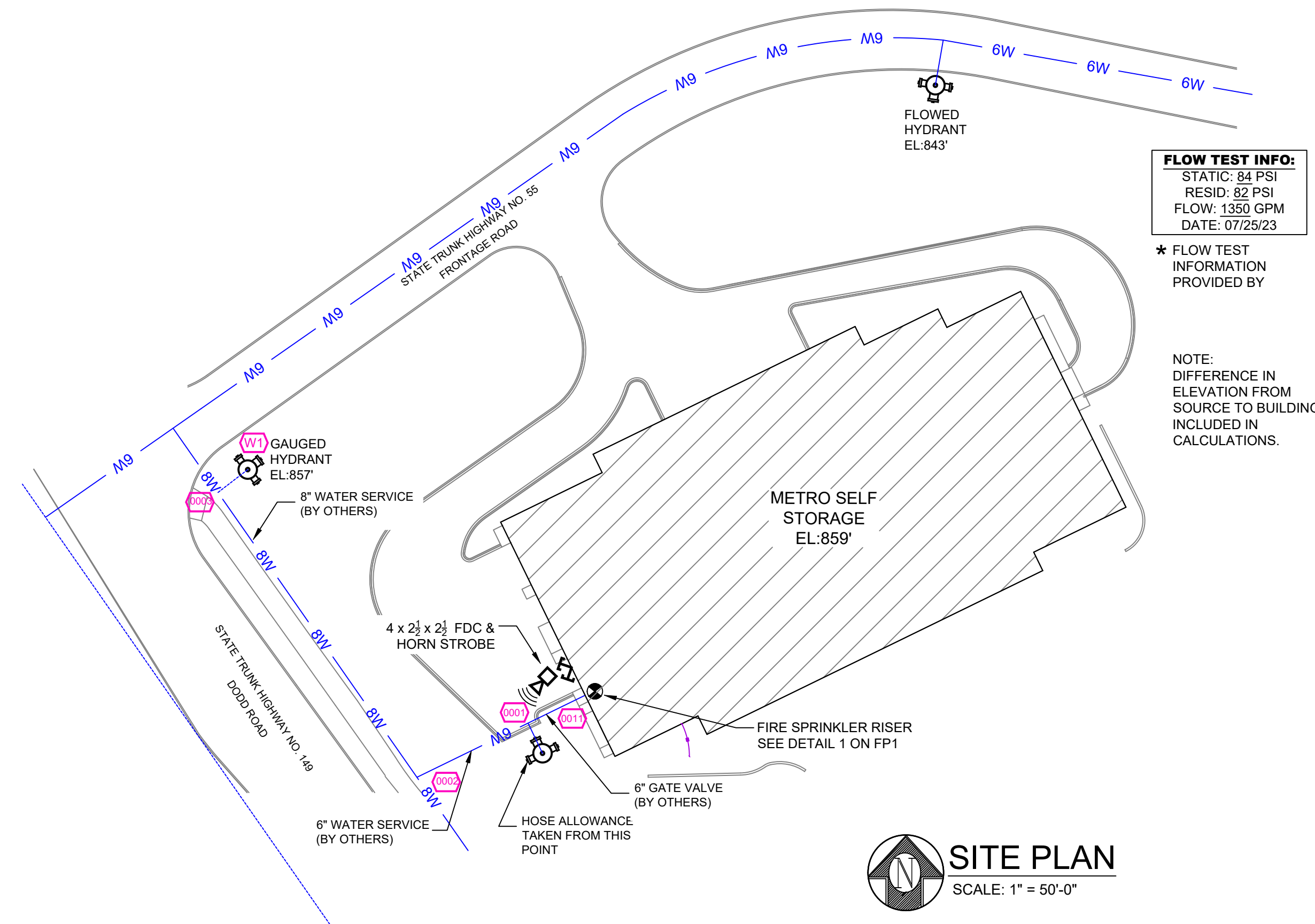


B BUILDING SECTION
SCALE= 1/8" : 1'-0"

NO COVERAGE REQUIRED UNDER NON COMBUSTIBLE METAL CANOPY ACCORDING TO NFPA 13 SEC. 9.2.2.1 (TYP)



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



FLOW TEST INFO:
STATIC: 84 PSI
RESID: 82 PSI
FLOW: 1359 GPM
DATE: 07/25/23

* FLOW TEST INFORMATION PROVIDED BY

NOTE: DIFFERENCE IN ELEVATION FROM SOURCE TO BUILDING, INCLUDED IN CALCULATIONS.

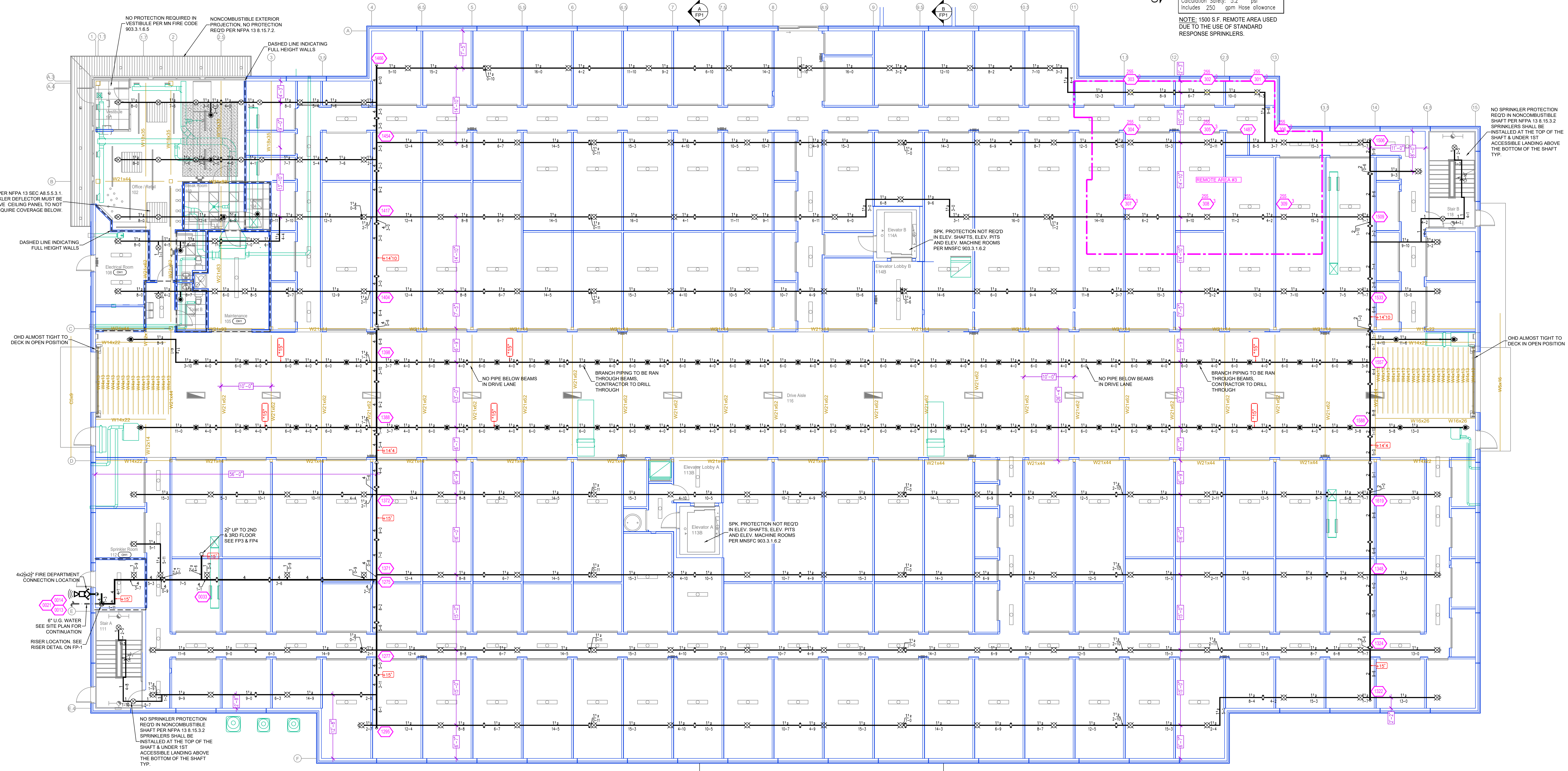
SITE PLAN
SCALE: 1" = 50'-0"

	<p>GENERAL NOTES</p> <ol style="list-style-type: none"> 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-40 & LIGHTWALL PIPING HAS WELDED OUTLETS & GROOVED SHORT RADIUS FITTINGS ALL WELDING PER NFPA-13(2016) NO INSTALLATION OR FABRICATION TO BEGON 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 & 1 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. 	<table border="1"> <thead> <tr> <th>NO</th> <th>REVISIONS</th> <th>DATE</th> <th>APPROVAL STAMPS</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>REVISED DRIVE ISLE</td> <td>10/23/23</td> <td></td> </tr> </tbody> </table>	NO	REVISIONS	DATE	APPROVAL STAMPS	1	REVISED DRIVE ISLE	10/23/23		<p>Drawing Title: FIRE PROTECTION PLAN</p> <p>METRO SELF STORAGE</p> <p>3150 DODD ROAD EAGAN, MN 55121</p>	<p>Contract No. C23-61</p> <p>Drawing Date: 10-23-23</p> <p>Scale: 1/8" = 1'-0"</p> <p>Drawn By: BJC</p> <p>Approval By: STATE FIRE MARSHAL DIV.</p> <p>SHEET NO. FP 1 of 4</p>
	NO	REVISIONS	DATE	APPROVAL STAMPS								
1	REVISED DRIVE ISLE	10/23/23										

HAZARD: OH2
 Design Area # 3
 Zone: 1 System Type: WET
 Location: 1st floor
 Flowing Outlets: 9 Remote Area: 1528
 Density: 0.20
 Req'd @ Base of Riser
 Flow 515.6 gpm @ 59.6 psi
 Req'd @ Source
 Flow 765.6 gpm @ 78.1 psi
 Calculation Safety: 5.2 psi
 Includes 250' gpm Hose allowance

NOTE: 1600 S.F. REMOTE AREA USED DUE TO THE USE OF STANDARD RESPONSE SPRINKLERS.

CALC PLACARD



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

PIPE LEGEND

—	BLACK STEEL FIRE SPRINKLER PIPING
—	FIRE SPRINKLER FDC PIPING

SPRINKLER HEAD LEGEND

SYM	CONT	POSITION	FINISH	TEMP	K	NPT	SR	MFC	MODEL#	ESCUTCHEON	HEAD BOX
⊙	6	PENDENT	WHITE	200	5.00	1/2"	TY3331	TYCO	RFI	CONCEALED	2
⊙	142	UPRIGHT	BRASS	200	14.00	3/4"	TY8137	TYCO	EC-14	N/A	2
⊙	651	UPRIGHT	BRASS	200	8.00	3/4"	TY4131	TYCO	TY-FRB	N/A	2
⊙	48	PENDENT	CHROME	200	8.00	3/4"	TY4231	Typ	TY-FRB	N/A	2
⊙	6	PENDENT	CHROME	200	14.00	3/4"	TY6237	Typ	EC-14	N/A	2
⊙	853	TOTAL									

STORAGE AREAS ARE DESIGNED TO ORDINARY HAZARD GROUP 2 PER NFPA 13 TABLE 4.3.1.7.1.1
 • CLASS I-IV COMMODITIES UP TO 12FT SOLID-PILE ON FLOOR
 • CLASS III COMMODITIES UP TO 12FT ON RACKS
 • CLASS IV COMMODITIES UP TO 10FT ON RACKS
 • GROUP A PLASTICS UP TO 5 FT

NOTE: SPRINKLER DEFLECTOR TO BE 1" BELOW DECK TO SPRAY ABOVE WALLS U.N.O.

GENERAL NOTES

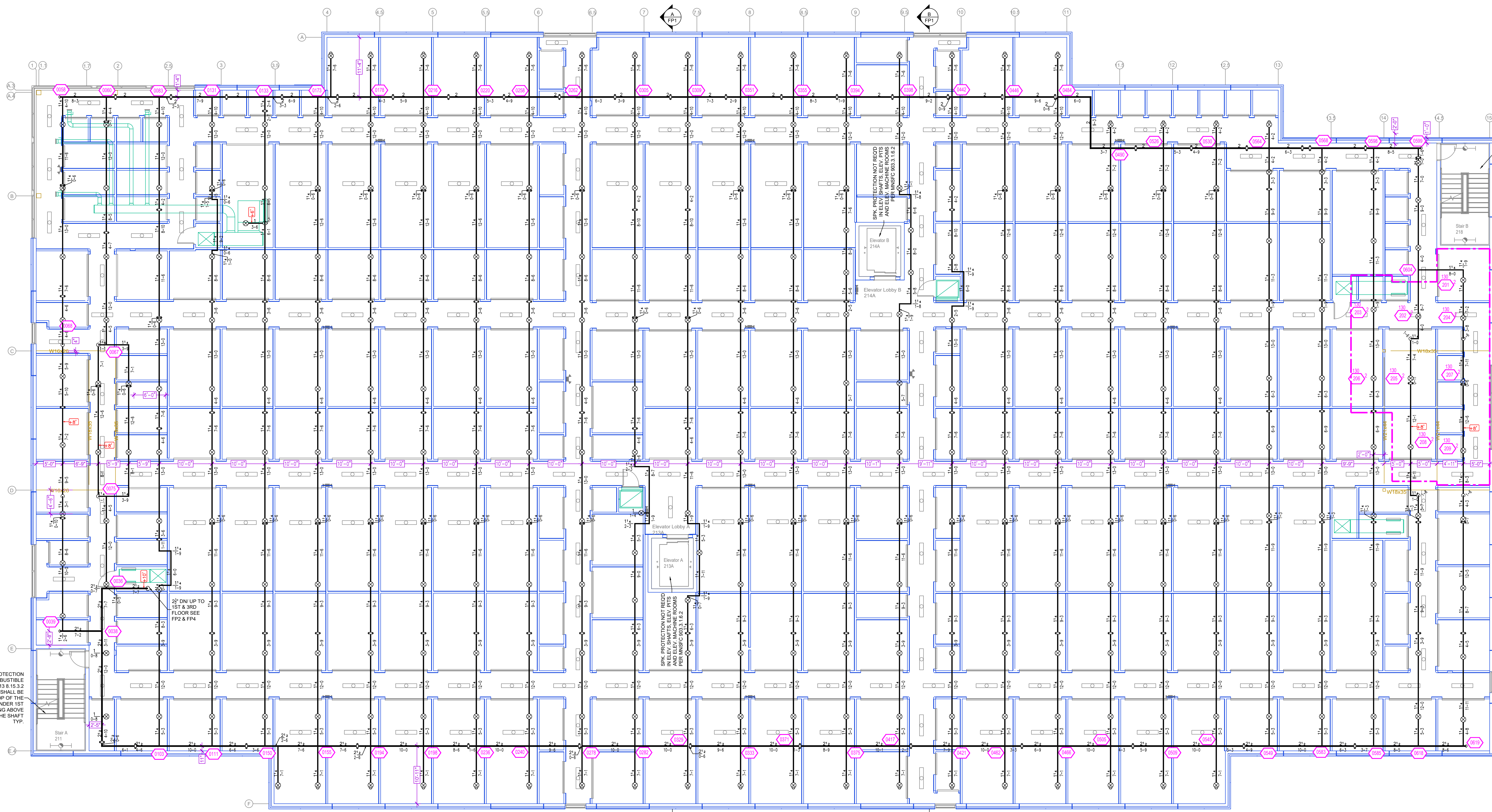
- SYSTEM INSTALLED PER NFPA-13 (2016 EDITION) AND STATE FIRE MARSHAL
- ALL EQUIPMENT FOR THIS SYSTEM SHALL BE U.L. LISTED
- MINIMUM PIPE SIZE SHALL BE 1" NOMINAL PIPE
- ALL SCH-40 & LIGHTWALL PIPING HAS WELDED OUTLETS & GROOVED SHORT RADIUS FITTINGS
- ALL WELDING PER NFPA-54(2)
- NO INSTALLATION OR FABRICATION TO BEGON 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/ 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
1	REVISED DRIVE ISLE	10/23/23	

Drawing Title: **FIRE PROTECTION PLAN**

METRO SELF STORAGE
 3150 DODD ROAD
 EAGAN, MN 55121

Contract No. **C23-61**
 Drawing Date: 10-23-23
 Scale: 1/8" = 1'-0"
 Drawn By: BCJ
 Approval By: STATE FIRE MARSHAL DIV.
 SHEET NO. **FP 2 of 4**



NO SPRINKLER PROTECTION REQUIRED IN NONCOMBUSTIBLE SHAFT PER NFPA 13.8.15.3.2 SPRINKLERS SHALL BE INSTALLED AT THE TOP OF THE SHAFT & UNDER 1ST ACCESSIBLE LANDING ABOVE THE BOTTOM OF THE SHAFT TYP.

Design Area # 2 HAZARD: CH2
 Zone: 1 System Type: WET
 Location: 2nd floor
 Flowing Outlets: 9 Remote Area: 926
 Req'd @ Base of Riser
 Flow 266.5 gpm @ 62.9 psi
 Req'd @ Source
 Flow 515.5 gpm @ 73.8 psi
 Calculation Safety: 9.8 psi
 Includes 250 gpm Hose allowance

NOTE: 1500sf REDUCED BY 40% TO 900sf DUE TO CEILING HEIGHT PER NFPA 13 FIG. 19.3.2.3.1

NO SPRINKLER PROTECTION REQUIRED IN NONCOMBUSTIBLE SHAFT PER NFPA 13.8.15.3.2 SPRINKLERS SHALL BE INSTALLED AT THE TOP OF THE SHAFT & UNDER 1ST ACCESSIBLE LANDING ABOVE THE BOTTOM OF THE SHAFT TYP.

STORAGE AREAS ARE DESIGNED TO ORDINARY HAZARD GROUP 2 PER NFPA 13 TABLE 4.3.1.1.1
 CLASS I-IV COMMODITIES UP TO 12FT SOLID-PILE ON FLOOR
 CLASS I-III COMMODITIES UP TO 12FT ON RACKS
 CLASS IV COMMODITIES UP TO 10FT ON RACKS
 GROUP A PLASTICS UP TO 5 FT

NOTE: SPRINKLER DEFLECTOR TO BE 1" BELOW DECK TO SPRAY ABOVE WALLS U.N.O.

2ND FLOOR FIRE SPRINKLER PLAN

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

PIPE LEGEND

— BLACK STEEL FIRE SPRINKLER PIPING
 — FIRE SPRINKLER FDC PIPING

SPRINKLER HEAD LEGEND

SYM	QTY	POSITION	FINISH	TEMP	K	NPT	SIN	MFG	MODEL#	ESCUTCHEON	HEAD BOX
⊙	6	PENDENT	WHITE	200	5.00	1/2"	TY3551	TYCO	RPT	CONCEALED	2
⊗	142	UPRIGHT	BRASS	200	14.00	3/4"	TY6127	TYCO	EC-14	N/A	2
⊗	651	UPRIGHT	BRASS	200	8.00	3/4"	TY4131	TYCO	TY-FRB	N/A	2
⊗	48	PENDENT	CHROME	200	8.00	3/4"	TY4231	Tyco	TY-FRB	N/A	2
⊗	6	PENDENT	CHROME	200	14.00	3/4"	TY6237	Tyco	EC-14	N/A	2
⊗	653	TOTAL									

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-40 & 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 SPINE HEAD CABINET WITH HEADS & 1 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.

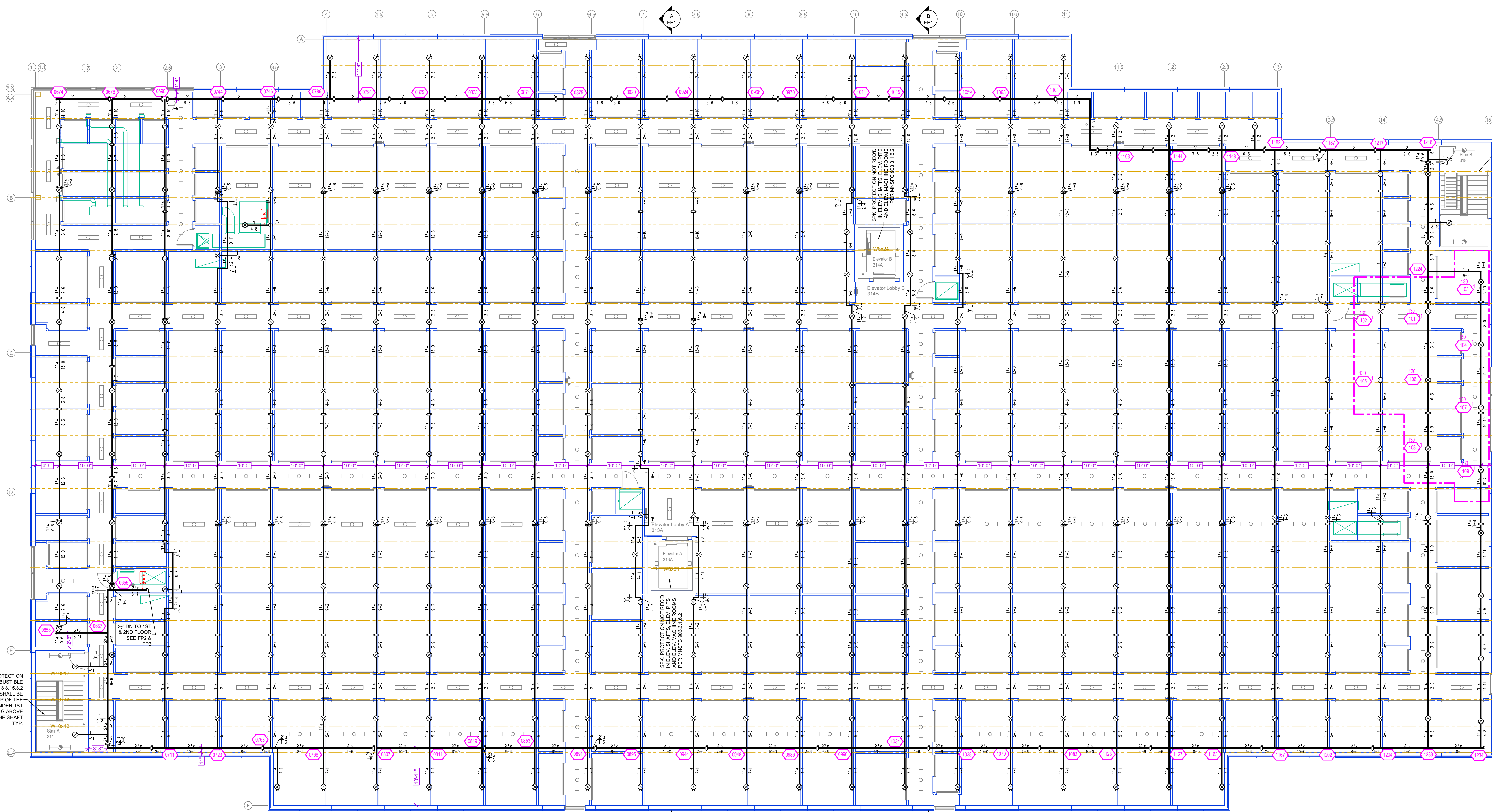
NO	REVISIONS	DATE	APPROVAL STAMPS
1	REVISED DRIVE ISLE	10/23/23	

Drawing Title: FIRE PROTECTION PLAN

METRO SELF STORAGE

3150 DODD ROAD
EAGAN, MN 55121

Contract No: C23-61
 Drawing Date: 10-23-23
 Scale: 1/8" = 1'-0"
 Drawn By: BCJ
 Approval By: STATE FIRE MARSHAL DIV.
 SHEET NO: FP 3 of 4



NO SPRINKLER PROTECTION REQUIRED IN NONCOMBUSTIBLE SHAFT PER NFPA 13.8.15.3.2 SPRINKLERS SHALL BE INSTALLED AT THE TOP OF THE SHAFT & UNDER 1ST ACCESSIBLE LANDING ABOVE THE BOTTOM OF THE SHAFT TYP.

Design Area #: 1 HAZARD: OH2
 Zone: 1 System Type: WET
 Location: 3rd floor
 Flowing Outlets: 9 Remote Area: 926
 Density: 0.20
 Req'd @ Base of Rise: Flow 260 gpm @ 63.8 psi
 Req'd @ Source: Flow 510 gpm @ 74.6 psi
 Calculation Safety: 9.0 psi
 Includes 250 gpm Hose allowance

NOTE: 1500gpm REDUCED BY 40% TO 900gpm DUE TO CEILING HEIGHT PER NFPA 13 FIG. 19.3.3.2.3.1

STORAGE AREAS ARE DESIGNED TO ORDINARY HAZARD GROUP 2 PER NFPA 13 TABLE 4.3.1.7.1.1
 CLASS I-IV COMMODITIES UP TO 12FT SOLID-PILE ON FLOOR
 CLASS I-III COMMODITIES UP TO 12FT ON RACKS
 CLASS IV COMMODITIES UP TO 10FT ON RACKS
 GROUP A PLASTICS UP TO 5 FT

NOTE: SPRINKLER DEFLECTOR TO BE 1" BELOW DECK TO SPRAY ABOVE WALLS U.N.O.

3RD FLOOR FIRE SPRINKLER PLAN

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

PIPE LEGEND	
	BLACK STEEL FIRE SPRINKLER PIPING
	FIRE SPRINKLER FDC PIPING

SPRINKLER HEAD LEGEND

SYM	CNT	POSITION	FINISH	TEMP	K	NPT	SIN	MFG	MODEL#	ESCU/CHCON	HEAD BOX
⊙	5	PENDENT	WHITE	200	5.80	1/2"	TY6331	TYCO	WH	CONCEALED	2
⊙	142	UPRIGHT	BRASS	200	14.00	3/4"	TY6137	TYCO	EC-14	NA	2
⊙	651	UPRIGHT	BRASS	200	8.00	3/4"	TY4131	TYCO	TY-FRB	NA	2
⊙	48	PENDENT	CHROME	200	8.00	3/4"	TY4231	TYCO	TY-FRB	NA	2
⊙	5	PENDENT	CHROME	200	14.00	3/4"	TY6237	TYCO	EC-14	NA	2
	853	TOTAL									

- 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-40 & LIGHTWALL PIPING HAS WELDED OUTLETS & GROOVED SHORT RADIUS FITTINGS
 - ALL WELDING PER NFPA-514(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 SPINE 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
 - OWNER'S RESPONSIBILITY TO PROVIDE ADEQUATE HEATING TO PREVENT WET SYSTEM PIPING FROM FREEZING.

NO	REVISIONS	DATE	APPROVAL STAMPS
1	REVISED DRIVE ISLE	10/23/23	

Drawing Title: FIRE PROTECTION PLAN

METRO SELF STORAGE

3150 DODD ROAD
EAGAN, MN 55121

Contract No: C23-61
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