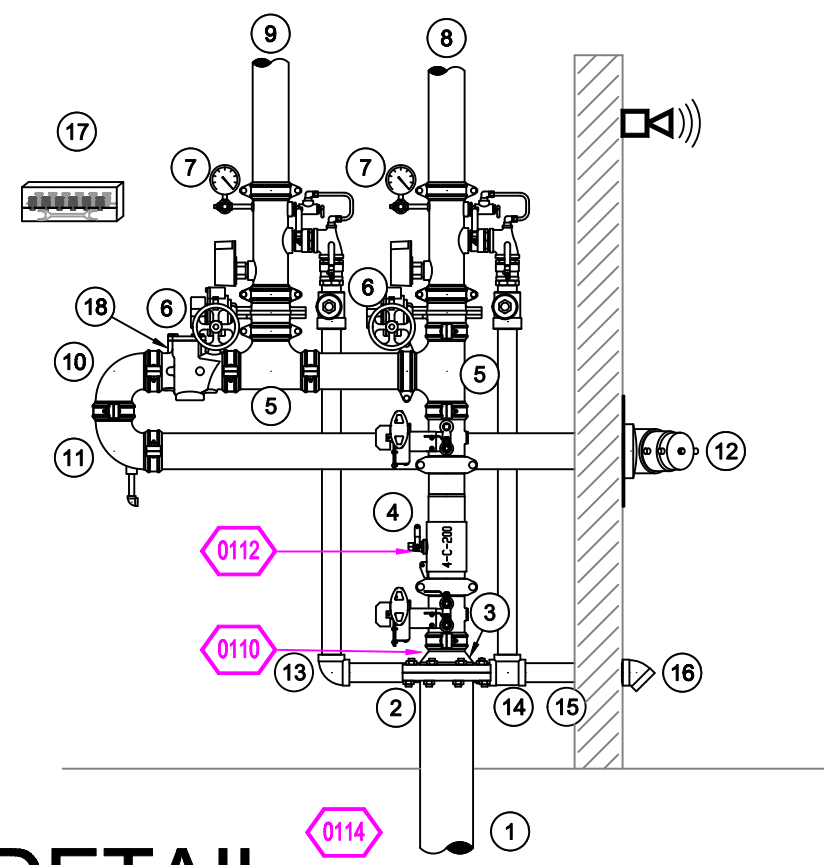


RISER DETAIL

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



RISER LEGEND

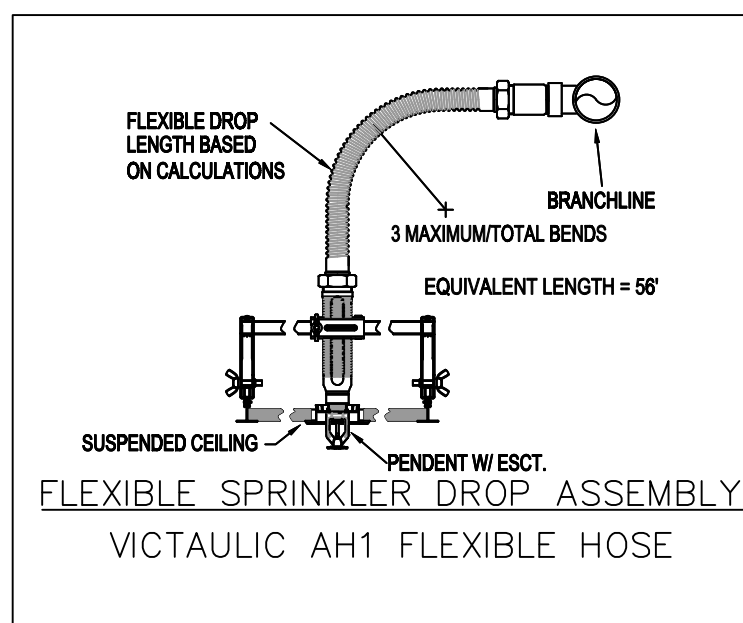
- 6" UNDERGROUND WATER SERVICE (BY OTHERS) (FLUSHING & TESTING OF THE UNDERGROUND SHALL BE COMPLETED PRIOR TO THE SPRINKLER SYSTEM HOOKUP. UNDERGROUND PAPERS ARE TO BE SUPPLIED TO THE "FP" CONTRACTOR BY THE G.C.)
 - 6" FLANGED GROOVED ADAPTER
 - 6" x 4" GROOVED CONCENTRIC REDUCER
 - 4" AMES C200V BACKFLOW G&G BFW
 - GROOVED TEE
 - GROOVED BUTTERFLY VALVE
 - GROOVED COMMERCIAL RISER MANIFOLD w/ FLOW SWITCH, PRESSURE GAUGE, & TEST AND DRAIN w/ PRV
 - 4" TO WET SYSTEM ZONE 1
 - 4" TO WET SYSTEM ZONE 2
 - GROOVED 90° ELBOW
 - GROOVED DRAIN 90° w/ BALL DRIP
 - 4" x 2-1/2" 1/2-1/2" FIRE DEPARTMENT CONNECTION
 - GROOVED 90° ELBOW
 - 2" GROOVED TEE
 - 2" MAIN DRAIN PIPED TO OUTSIDE
 - 2" GALVANIZED 45°
 - SPARE HEAD BOX
 - GROOVED CHECK VALVE
- * ALL WIRING/INTERFACING OF ALARMS BY OTHERS
- * ALL PIPING PENETRATING THE EXTERIOR WALL TO BE GALVANIZED

SPRINKLER HEAD LEGEND

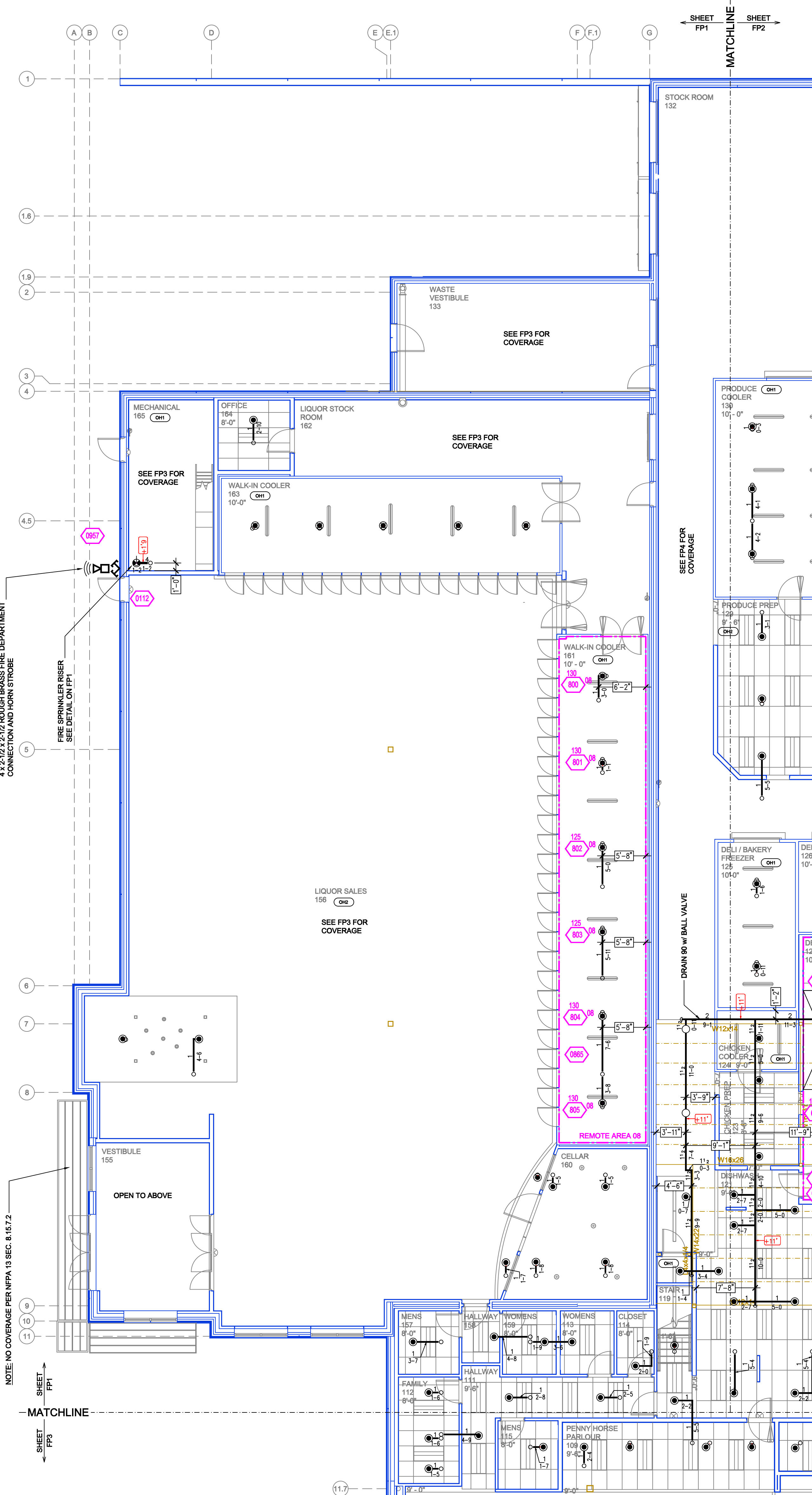
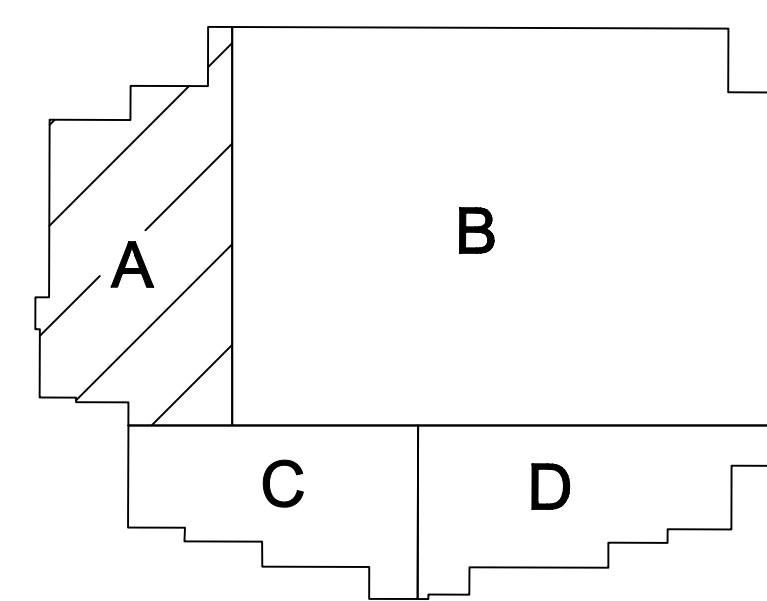
SYM	QTY	POSITION	FINISH	TEMP	K	NPT	SIN	MPS	MODEL#	ESCUTCHION	MAX SPACING
○	564	UPRIGHT	BRASS	200	8.00	3/4"	V3401	VICTAULIC	FL-SR	NONE	130 SF
●	164	PENDENT	WHITE	200	5.60	1/2"	V2708	VICTAULIC	FL-QR	SEMI-RECESSED	OH: 130 SF, LH: 225 SF
●	50	DRY PENDENT	WHITE	200	5.60	1"	R5714	RELIABLE	F3QR	401	130 SF
●	3	SPRG	BRASS	200	8.00	3/4"	V3401	VICTAULIC	FL-SR	NONE	130 SF
●	771	TOTAL SPK.									

PIPE LEGEND

BLACK STEEL FIRE SPRINKLER PIPING

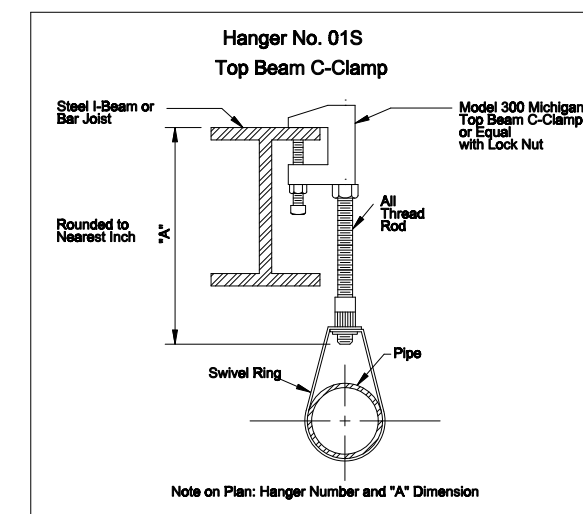


KEY PLAN



LOWER LEVEL A FIRE SPRINKLER PLAN

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



NFPA 13 STEEL PIPE HANGER SPACING

NOMINAL SIZE	MAX SPACING
INCHES	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"

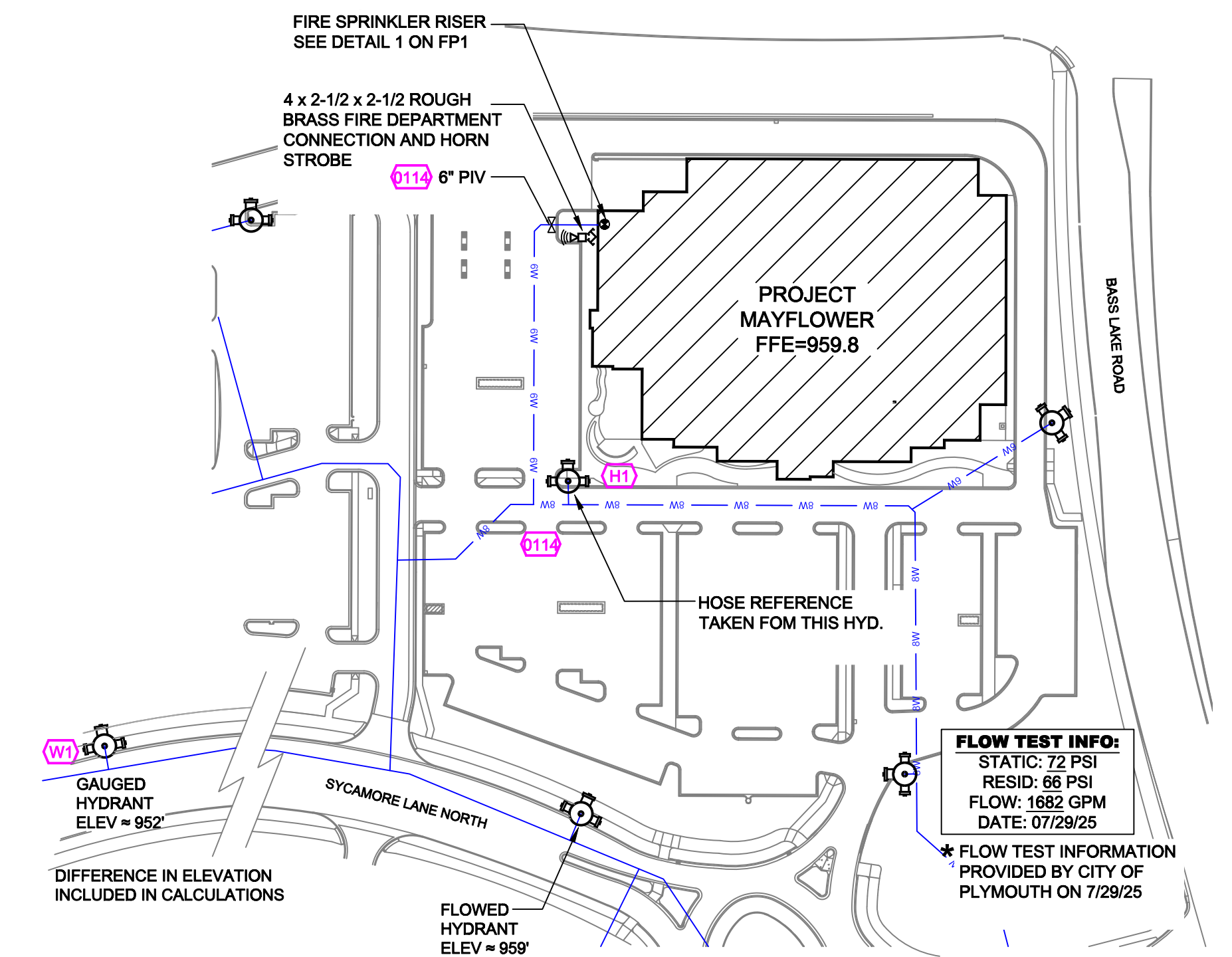
HANGER DETAILS

Design Area # 8 HAZARD: OH I
Zone: 2 System Type: WET
Location: LIQUOR WALK IN COOLER
161
Flowing Outlets: 6
Density: 0.2 Remote Area: 756
Flow: 379.5 gpm @ 34.6 psi
Calculation Safety: 37 psi
Includes 250 gpm Hose allowance
NOTE: DESIGN AREA REDUCED PER NFPA 13 SEC. 11.2.3.3.4

NOTE: PIPING DROPS TO PENDENTS TO END 1" ABOVE CEILING FLEX HOSES TO BE USED TO CONNECT PENDENT SPRINKLER HEADS TO PIPE

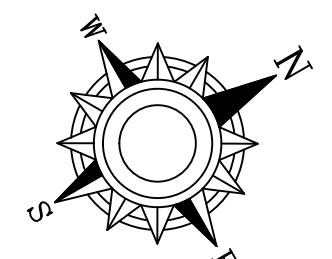
GENERAL NOTES

- 2020 MINNESOTA BUILDING CODE
- OCCUPANCY: MERCANTILE (M); RETAIL/WHOLESALE STORE
- TYPE OF CONSTRUCTION: II-B (1HR RATED PROTECTED, COMBUSTIBLE CONSTRUCTION)
- SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
 - LOWER LEVEL = 66457 S.F.
 - MEZZANINE LEVEL = 3137 S.F.
 - TOTAL = 69594 S.F.
- INSTALLATION STANDARDS: SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13 (2016)
- SPRINKLER PIPE TYPES:
 - 1" BRANCH LINES TO BE BLK LIGHTWALL PIPING WITH THREADED FITTINGS
 - 1 1/2" THROUGH 6" MAIN & BRANCH LINES TO BE BLK LIGHTWALL PIPING WITH GROOVED FITTINGS
- DESIGN CRITERIA
 - 3.1. LIGHT HAZARD AREAS (OCCUPANCIES WHERE THE QUANTITY AND/OR COMBUSTIBILITY OF CONTENTS IS LOW & FIRES WITH RELATIVELY LOW RATES OF HEAT RELEASE ARE EXPECTED) DESIGNED TO DELIVER 0.10 GPM/S.F. OVER THE MOST DEMANDING 1500 S.F.
 - 3.2. ORDINARY HAZARD GROUP 1 AREAS (OCCUPANCIES WHERE COMBUSTIBILITY IS LOW, QUANTITY OF COMBUSTIBLES IS MODERATE, STOCKPILES OF COMBUSTIBLES DO NOT EXCEED 8 FT. AND FIRES WITH MODERATE RATES OF HEAT RELEASE ARE EXPECTED) DESIGNED TO DELIVER 0.15 GPM/S.F. OVER THE MOST DEMANDING 1500 S.F.
 - 3.3. ORDINARY HAZARD GROUP 2 AREAS (OCCUPANCIES WHERE QUANTITY & COMBUSTIBILITY OF CONTENTS ARE MODERATE TO HIGH, STOCKPILES OF CONTENTS WITH MODERATE RATES HEAT RELEASE DO NOT EXCEED 12 FT. AND FIRES WITH HIGH RATES OF HEAT RELEASE DO NOT EXCEED 8 FT.) DESIGNED TO DELIVER 0.20 GPM/S.F. OVER THE MOST DEMANDING 1500 S.F.
 - 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:
 - PIPE ELEVATION A.F.F.
 - 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:
 - 6.1. TO INSTALL A COMPLETE WET FIRE SPRINKLER SYSTEM TO COVER ALL AREAS OF THE BUILDING IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13 (2016)



SITE PLAN

SCALE: 1" = 100'-0"



GENERAL NOTES

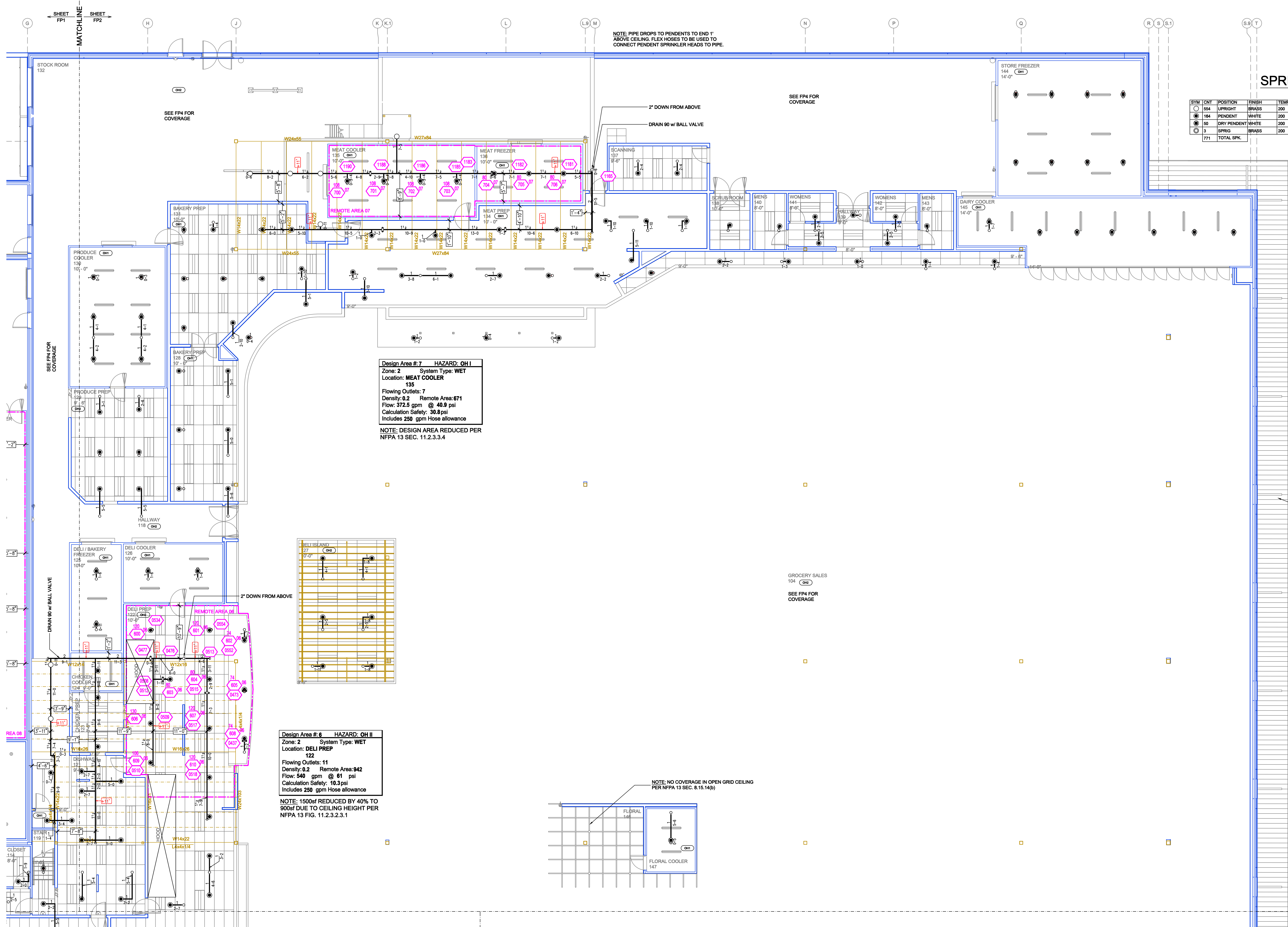
- SYSTEM INSTALLED PER NFPA-13 (2016 EDITION) AND STATE FIRE MARSHAL
- ALL EQUIPMENT FOR THIS SYSTEM SHALL BE U.L. LISTED
- MINIMUM PIPE SIZE SHALL BE 1" NOMINAL PIPE
- ALL SCH-40 & LIGHTWALL PIPING HAS WELDED OUTLETS & GROOVED SHORT RADIUS FITTINGS
- ALL WELDING PER NFPA-514 (2015)
- NO INSTALLATION 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/8 HEADS & 1 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	Contract No.	C25-40
Drawing Date:	08/15/2025	Scale:	1/8" = 1'-0"
Drawn By:	JF	Approval By:	STATE FIRE MARSHAL DIV.
SHEET NO.	FP 1 of 5		

PROJECT MAYFLOWER

6130 SYCAMORE LANE
PLYMOUTH, MN 55442



SPRINKLER HEAD LEGEND

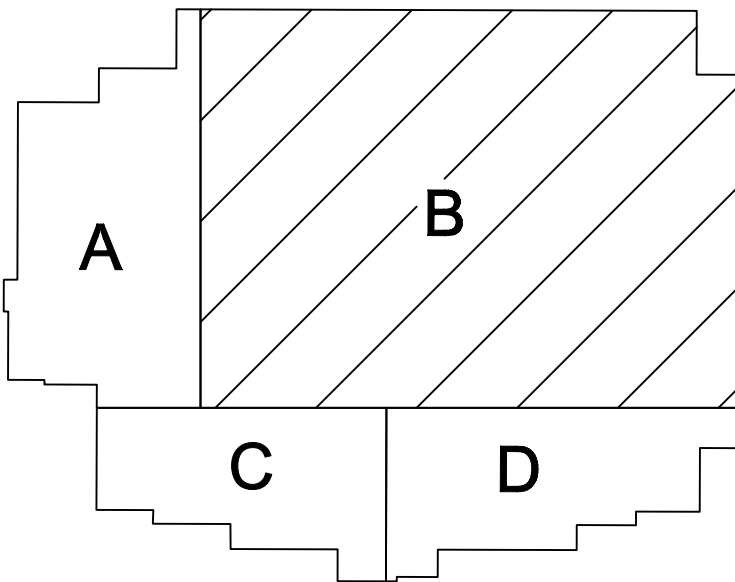
SYM	QTY	POSITION	FINISH	TEMP	K	NPT	SN	MPG	MODEL#	ESCUTCHION	MAX SPACING
○	154	UPRIGHT	BRASS	200	8.00	3/4"	V2708	VICTAULIC	FL-SR	NONE	130 SF
●	164	PENDENT	WHITE	200	5.60	1/2"	V2708	VICTAULIC	FL-QR	SEMI-RECESS	CH: 130 SF, LH: 225 SF
●	50	DRY PENDENT	WHITE	200	5.60	1"	R5714	RELIABLE	F3QR	401	130 SF
○	3	SPRIG	BRASS	200	8.00	3/4"	V2401	VICTAULIC	FL-SR	NONE	130 SF
	771	TOTAL SPRK									

Design Area # 7 HAZARD: OH I
Zone: 2 System Type: WET
Location: MEAT COOLER
135
Flowing Outlets: 7
Density: 0.2 Remote Area: 671
Flow: 372.5 gpm @ 40.9 psi
Calculation Safety: 30.8 psi
Includes 250 gpm Hose allowance
NOTE: DESIGN AREA REDUCED PER
NFPA 13 SEC. 11.2.3.3.4

Design Area # 6 HAZARD: OH II
Zone: 2 System Type: WET
Location: DELI PREP
122
Flowing Outlets: 11
Density: 0.2 Remote Area: 942
Flow: 540 gpm @ 61 psi
Calculation Safety: 10.3 psi
Includes 250 gpm Hose allowance
NOTE: 1500sf REDUCED BY 40% TO
900sf DUE TO CEILING HEIGHT PER
NFPA 13 FIG. 11.2.3.2.3.1

NOTE: NO COVERAGE IN OPEN GRID CEILING
PER NFPA 13 SEC. 8.15.14(b)

KEY PLAN



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

GENERAL NOTES

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 HAS WELDED OUTLETS & GROOVED SHORT RADIUS FITTINGS
5. ALL WELDING PER NFPA-514(2)
6. NO INSTALLATION OR FABRICATION TO BEGIN WITHOUT APPROVED SHOP DRAWINGS
7. ALL PIPE LOCATIONS ARE TO BE FIELD MEASURED 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 WHERE REQUIRED
10. PROVIDE ON SPARE HEAD CABINET W/8 HEADS & 1 HEAD WRENCH
11. HANGERS ARE TO BE U.L. LISTED AND I.M. APPROVED
12. ELECTRICAL WIRING, ALARM, DETECTION AND SUPERVISORY BY OWNER
13. OWNERS RESPONSIBILITY TO PROVIDE ADEQUATE HEATING TO PREVENT WET SYSTEM PIPING FROM FREEZING.

NO

REVISIONS

DATE

APPROVAL STAMPS

Drawing Title: FIRE PROTECTION PLAN

PROJECT MAYFLOWER

6130 SYCAMORE LANE
PLYMOUTH, MN 55442

Contract No.

C25-40

Drawing Date: 08/15/2025

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

Drawn By: JF

Approval By: STATE FIRE MARSHAL DIV.

SHEET NO. FP 2 of 5

