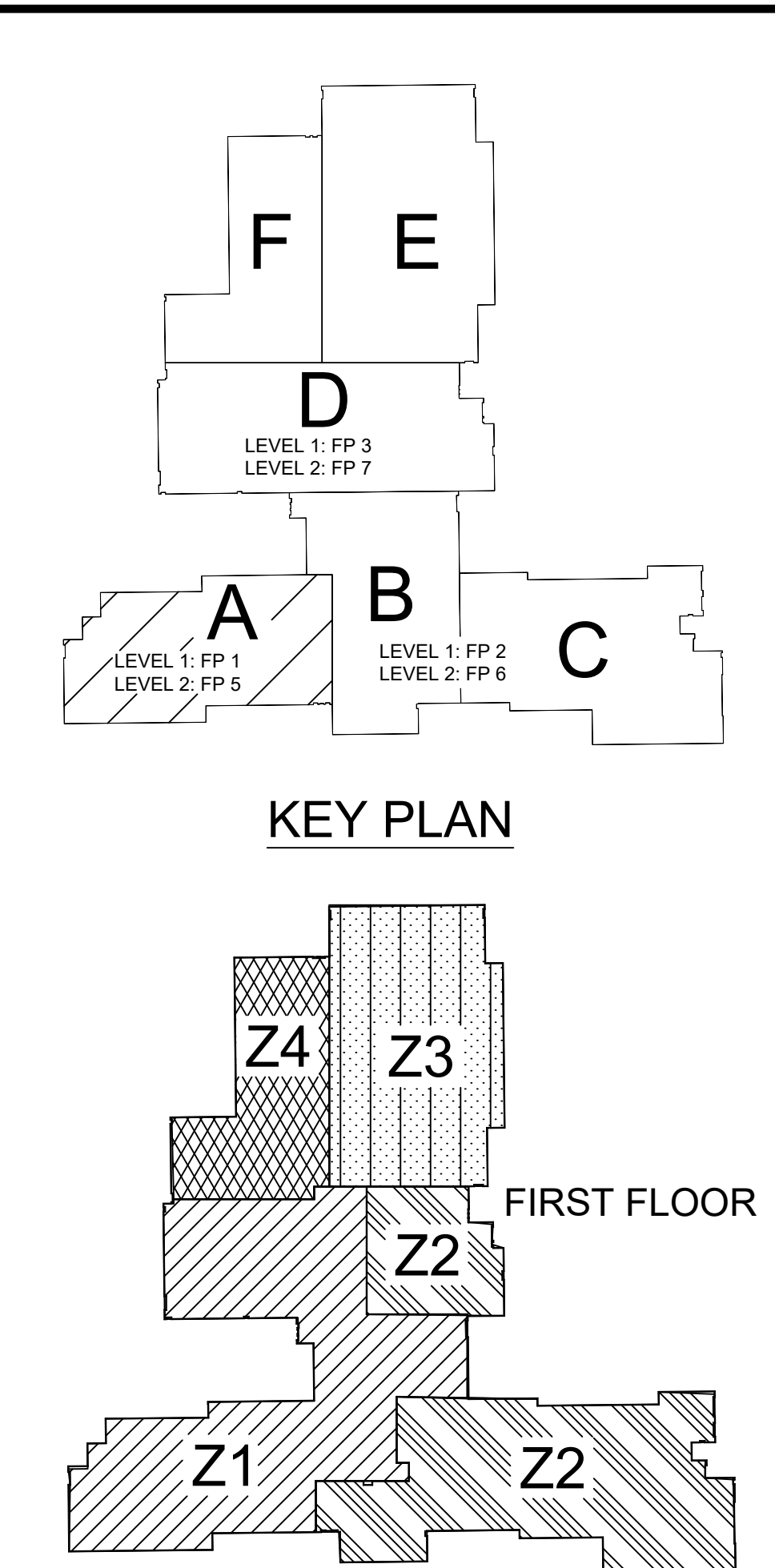
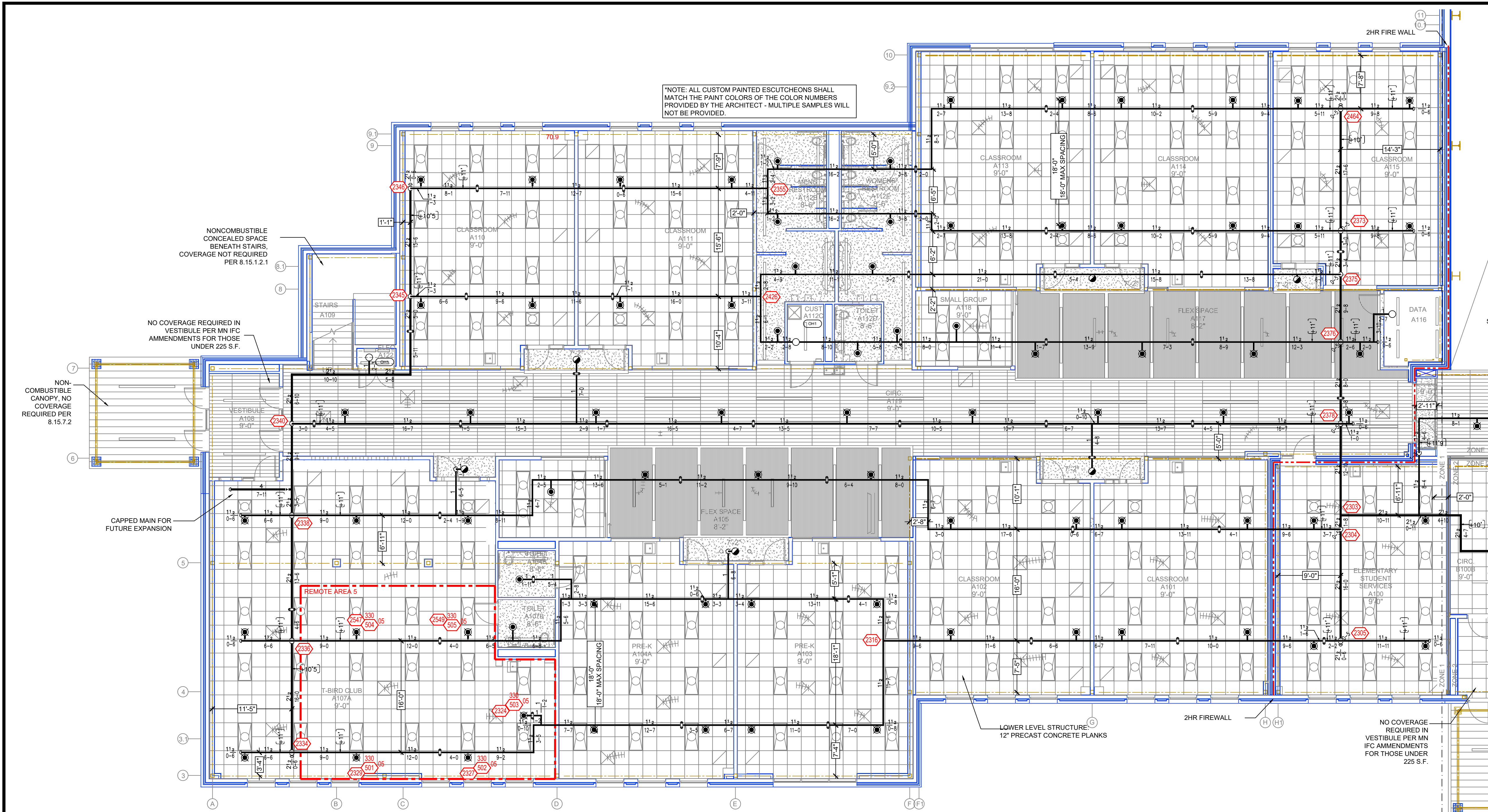




- GENERAL NOTES**
- MSBC 2020 / IBC 2018
 - OCCUPANCY: MIXED GROUPS A-1, A-2, A-3, A-4, A-5, B, E
 - TYPE OF CONSTRUCTION: II-B
 - SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
 - ZONE 1**
MAIN LEVEL = 21,100 S.F.
UPPER LEVEL = 34,757 S.F.
 - ZONE 2**
MAIN LEVEL = 28,775 S.F.
UPPER LEVEL = 28,039 S.F.
 - ZONE 3** = 23,434 S.F.
 - ZONE 4** = 14,535 S.F.
 - INSTALLATION STANDARDS:
SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13, NFPA-20 (2016)
 - SPRINKLER PIPE TYPES:
2.1.1 1" BRANCH LINES TO BE BLK SCHEDULE 40 PIPING WITH THREADED FITTINGS
2.2 1/2" THROUGH 3" MAIN & BRANCH LINES TO BE BLK SCHEDULE 10 PIPING WITH GROOVED FITTINGS
2.3 MAINS & BRANCH LINES TO BE ROLL-GROOVED BLK SCHEDULE 10 PIPING
2.4 BRANCH LINES 1-1/2" OR SMALLER IN LOCKER ROOM TO BE GALVANIZED SCHEDULE 40
2.5 BRANCH LINES 1-1/2" OR SMALLER IN GYM TO BE BLK SCHEDULE 40
 - DESIGN CRITERIA
3.1 LIGHT HAZARD AREAS (CLASSROOMS, BATHROOMS, CIRCULATIONS, ETC. UNO) DESIGNED TO DELIVER 0.10 GPM/SF OVER THE MOST DEMANDING 1500 S.F.
3.2 ORDINARY HAZARD GROUP 1 AREAS (STORAGE, KITCHEN, ELECTRICAL ET. AS NOTED) DESIGNED TO DELIVER 0.15 GPM/SF OVER THE MOST DEMANDING 1500 S.F.
3.3 ORDINARY HAZARD GROUP 2 AREAS (SCIENCE LABS, WOODS/CONSTRUCTION SHOP, METAL SHOP, STAGE, ETC. AS NOTED) DESIGNED TO DELIVER 0.20 GPM/SF 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:
-10" PIPE ELEVATION A.F.F.
OHM ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD UNLESS NOTED)
ED HYDRAULIC CALCULATION JUNCTION POINT
9'-0" CEILING HEIGHT
SPRINKLER HEAD CAGE
 - SCOPE OF WORK:
6.1 PROVIDE AND INSTALL NEW 4 ZONE WET FIRE SPRINKLER SYSTEM WITH FIRE PUMP
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)

ZONE MAP

SYM	CON	POSITION	FINISH	TEMP	K	NPT	SIN	MF/G	MODEL#	ESCUTCHEON	MAX SPACING U.N.O.
342	PENDENT	WHITE	165	11.20	3/4"	R7146	RELIABLE	GA-XLO	CONCEALED		18 X 18
223	UPRIGHT	BRASS	200	5.60	1/2"	V2704	VICTAULIC	FL-QR	N/A		130 S.F. (OH) / 225 S.F. (LH)
229	PENDENT	WHITE	200	5.60	1/2"	V5606	VICTAULIC	FL-QR/C	CONCEALED		225 S.F.
28	UPRIGHT	BRASS	200	11.20	3/4"	TY5137	TYCO	EC-11	N/A		18 X 18
35	PENDENT	PAINTED*	200	5.6	1/2"	V5606	VICTAULIC	FL-QR/C	CONCEALED		130 S.F. (OH) / 225 S.F. (LH)
51	PENDENT	BRASS	200	5.60	1/2"	V2708	VICTAULIC	FL-QR	N/A		130 S.F. (OH) / 225 S.F. (LH)
23	UPR ON 1" SPRNG	BRASS	200	5.60	1/2"	V2704	VICTAULIC	FL-QR	STANDARD		130 S.F. (OH) / 225 S.F. (LH)
5	PENDENT	CHROME	200	5.60	1"	V3614	VICTAULIC	FL-ORDRY	N/A		18 X 18
54	UPR ON 1" SPRNG	BRASS	200	11.20	3/4"	TY5137	TYCO	EC-11	N/A		18 X 18
67	UPRIGHT	BRASS	286	8.00	3/4"	V3401	VICTAULIC	FL-SR	N/A		130 S.F.
14	SIDEWALL	BRASS	286	5.60	1/2"	V2709	VICTAULIC	FL-SRWS	N/A		10 X 10
3	SIDEWALL	BRASS	200	5.60	1/2"	V2709	VICTAULIC	FL-SRWS	N/A		14 X 14
2	PENDENT	WHITE	286	5.60	1/2"	V5606	VICTAULIC	FL-QR/C	CONCEALED		225 S.F.
5	PENDENT	PAINTED	165	11.20	3/4"	R7146	RELIABLE	GA-XLO	CONCEALED		18 X 18
1	PENDENT	BRASS	286	5.6	1/2"	V2708	VICTAULIC	FL-QR	N/A		130 S.F. (OH) / 225 S.F. (LH)
2	PENDENT	BRASS	200	8.00	3/4"	V3406	VICTAULIC	FL-QR	N/A		80 S.F. (EH)
3	SIDEWALL	BRASS	200	8.00	1"	V3612	VICTAULIC	FL-ORDRY/SW	N/A		12 X 12
1,084	TOTAL										

*NOTE: ALL CUSTOM PAINTED ESCUTCHEONS SHALL MATCH THE PAINT COLORS OF THE COLOR NUMBERS PROVIDED BY THE ARCHITECT

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

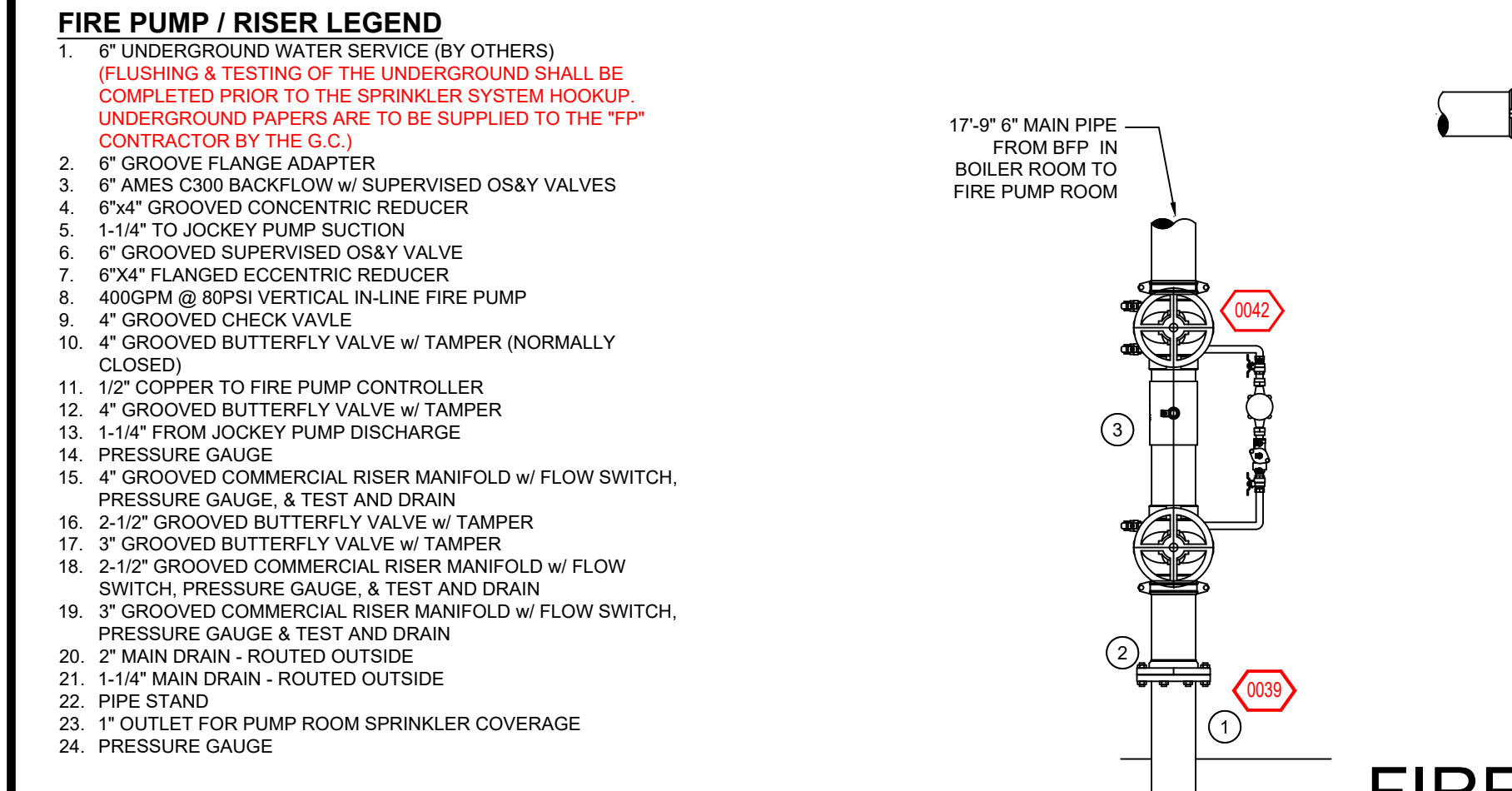
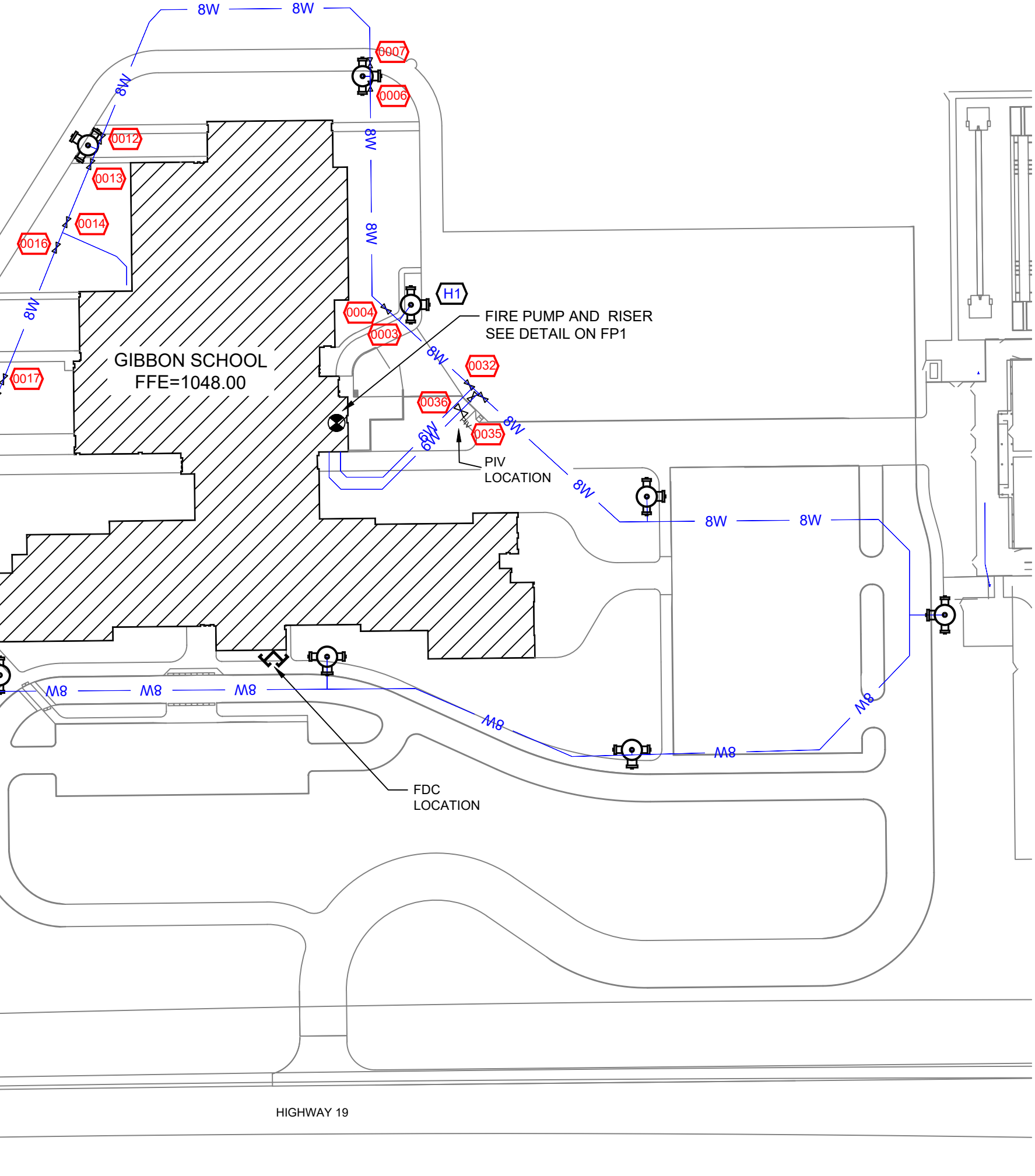
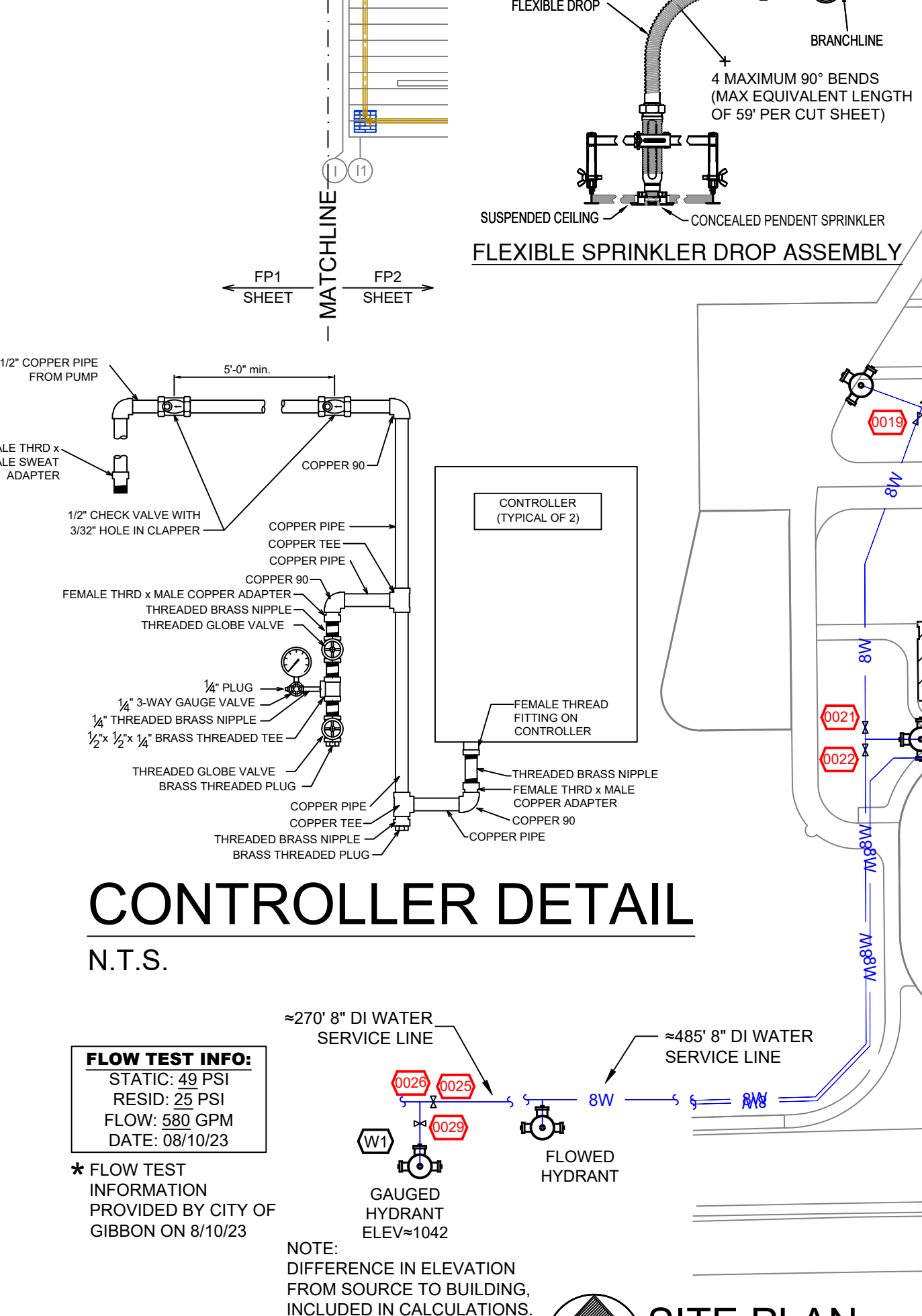
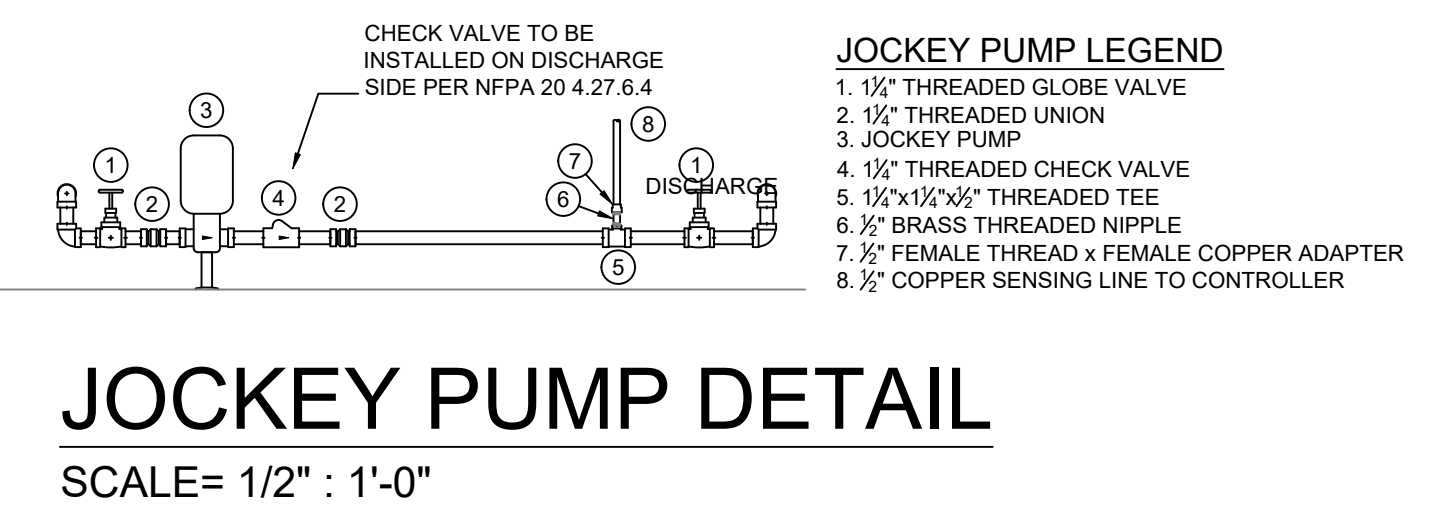
Design Area # 05: HAZARD: LIGHT
Zone: 1 System Type: WET
Location: T-BIRD CLUB A107A

Flowing Outlets: 5
Density: 0.10 Remote Area: 900
Req'd @ Base of Riser
Flow 170.9 gpm @ 66.6 psi
Req'd @ Source
Flow 270.9 gpm @ -11.8 psi
Calculation Safety: 54.9 psi
Includes 100 gpm Hose allowance

NOTE: 40% AREA REDUCTION OF REMOTE AREA TO 900SF PER 11.2.3.2.3.1

NFPA 13 STEEL PIPE HANGER SPACING
(EXCEPT LIGHT WALL THIR PING)

NOMINAL SIZE	MAX SPACING
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"



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-13(4.2)
- 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 SPRINKLER HEAD CABINET w/8 HEADS & HEAD WRENCH
- HANGERS ARE TO BE U.L. LISTED AND 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
1	VARIOUS NOTES AND DETAILS ADDED OR AMENDED FOR REVISE AND RESUBMIT	1/27/25	

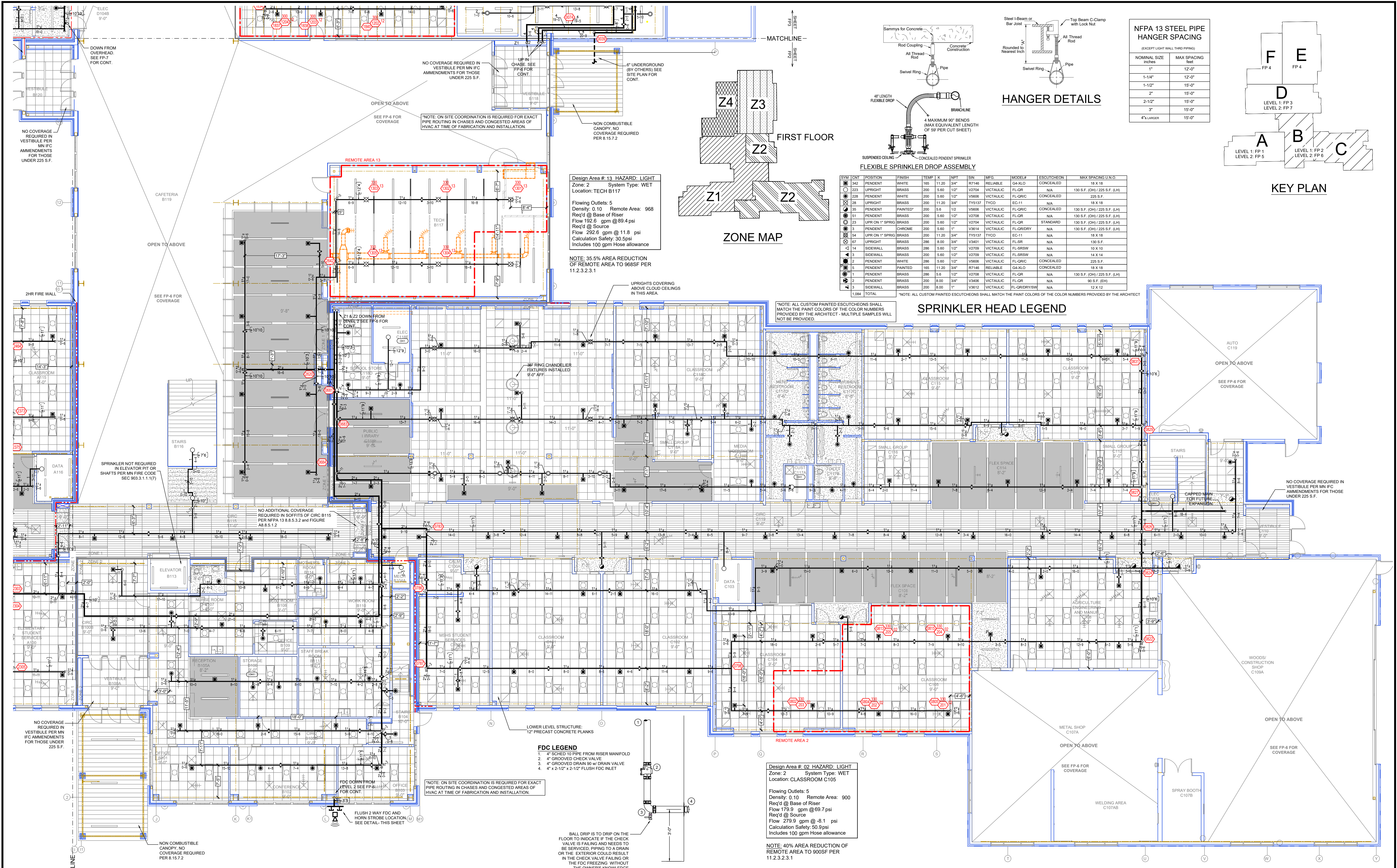
FLOW TEST INFO:
STATIC: 49 PSI
RESID: 26 PSI
FLOW: 580 GPM
DATE: 08/10/23

*FLOW TEST INFORMATION PROVIDED BY CITY OF GIBBON ON 8/10/23

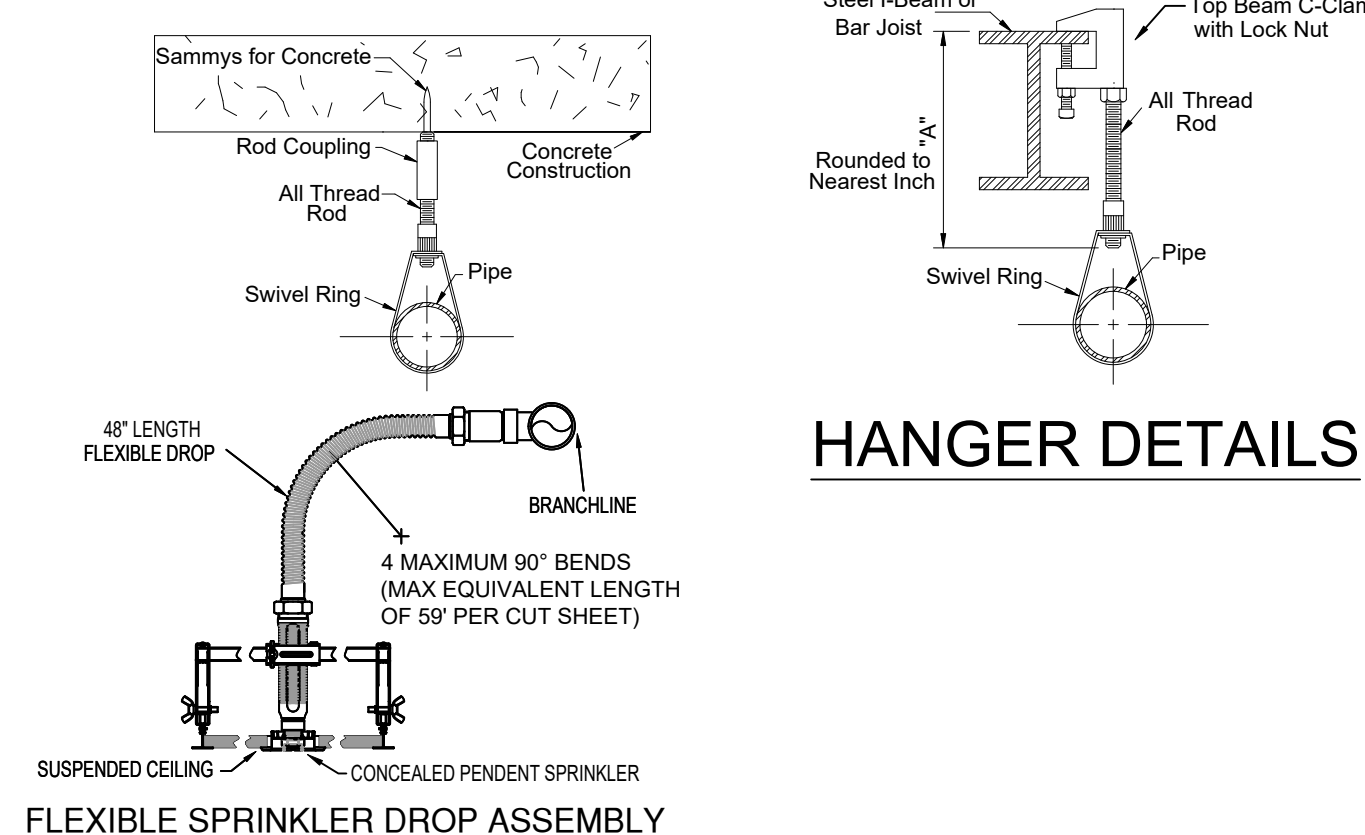
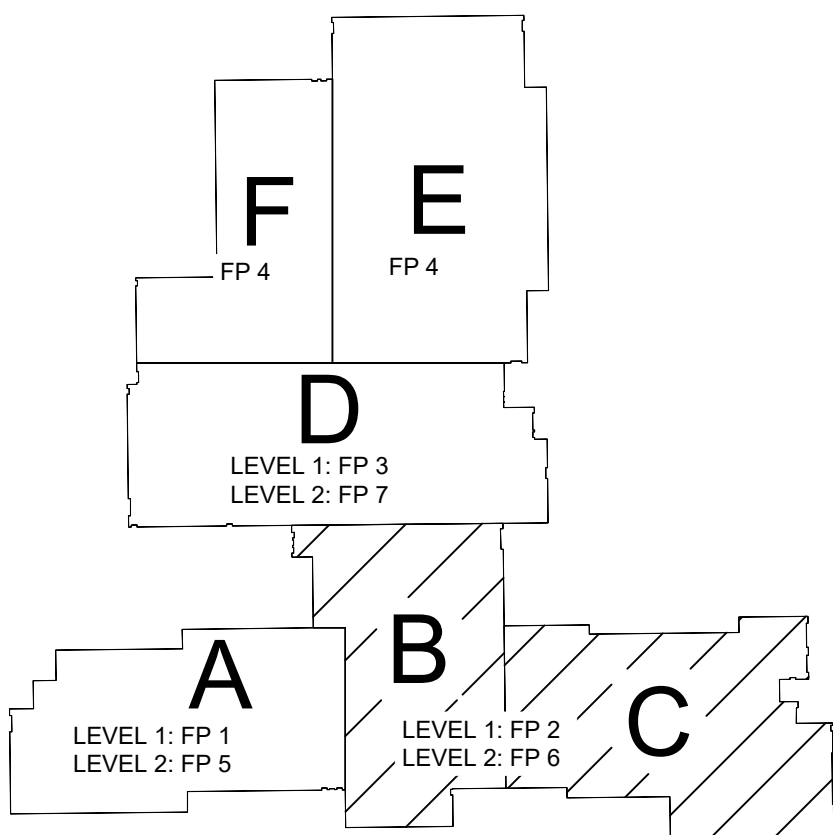
NOTE: DIFFERENCE IN ELEVATION FROM SOURCE TO BUILDING, INCLUDED IN CALCULATIONS

GIBBON SCHOOL
1157 EAST 13TH STREET
GIBBON, MN 55335

Contract No. **C24.41**
Drawing Date: 10/18/04
Scale: 1/8" = 1'-0"
Drawn By: AMM
Approval By: STATE FIRE MARSHAL DIV.
SHEET NO. **FP 1 of 7**



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"



SYM	CNT	POSITION	FINISH	TEMP	K	NPT	SIN	MFG	MODEL#	ESCUTCHEON	MAX SPACING U.O.
342	1	PENDENT	WHITE	165	11.20	3/4"	R7146	RELIABLE	GA-XLO	CONCEALED	18 X 18
223	1	UPRIGHT	BRASS	200	5.60	1/2"	V2704	VICTAULIC	FL-QR	N/A	130 S.F. (CHI) / 225 S.F. (LH)
228	1	PENDENT	WHITE	200	5.60	1/2"	V5606	VICTAULIC	FL-QRC	CONCEALED	225 S.F.
28	1	UPRIGHT	BRASS	200	11.20	3/4"	TY5137	TYCO	EC-11	N/A	18 X 18
35	1	PENDENT	PAINTED*	200	5.6	1/2"	V5606	VICTAULIC	FL-QRC	CONCEALED	130 S.F. (CHI) / 225 S.F. (LH)
51	1	PENDENT	BRASS	200	5.60	1/2"	V2708	VICTAULIC	FL-QR	N/A	130 S.F. (CHI) / 225 S.F. (LH)
23	1	UPR ON 1" SPRIG	BRASS	200	5.60	1/2"	V2704	VICTAULIC	FL-QR	STANDARD	130 S.F. (CHI) / 225 S.F. (LH)
3	1	PENDENT	CHROME	200	5.60	1"	V3614	VICTAULIC	FL-GRDARY	N/A	130 S.F. (CHI) / 225 S.F. (LH)
54	1	UPR ON 1" SPRIG	BRASS	200	11.20	3/4"	TY5137	TYCO	EC-11	N/A	18 X 18
67	1	UPRIGHT	BRASS	286	8.00	3/4"	V3401	VICTAULIC	FL-SR	N/A	130 S.F.
14	1	SIDEWALL	BRASS	286	5.60	1/2"	V2709	VICTAULIC	FL-SRWS	N/A	10 X 10
3	1	SIDEWALL	BRASS	200	5.60	1/2"	V2709	VICTAULIC	FL-SRWS	N/A	14 X 14
2	1	PENDENT	WHITE	286	5.60	1/2"	V5606	VICTAULIC	FL-QRC	CONCEALED	225 S.F.
5	1	PENDENT	PAINTED	165	11.20	3/4"	R7146	RELIABLE	GA-XLO	CONCEALED	18 X 18
1	1	PENDENT	BRASS	286	5.6	1/2"	V2708	VICTAULIC	FL-QR	N/A	130 S.F. (CHI) / 225 S.F. (LH)
2	1	PENDENT	BRASS	200	8.00	3/4"	V3406	VICTAULIC	FL-QR	N/A	90 S.F. (EH)
3	1	SIDEWALL	BRASS	200	8.00	1"	V3612	VICTAULIC	FL-GRDARYSW	N/A	12 X 12
1,084		TOTAL									

SPRINKLER HEAD LEGEND

*NOTE: ALL CUSTOM PAINTED ESCUTCHEONS SHALL MATCH THE PAINT COLORS OF THE COLOR NUMBERS PROVIDED BY THE ARCHITECT - MULTIPLE SAMPLES WILL NOT BE PROVIDED.

- FDC LEGEND**
1. 4" SCHED 10 PIPE FROM RISER MANIFOLD
 2. 4" GROOVED CHECK VALVE
 3. 4" GROOVED DRAIN 90° W/ DRAIN VALVE
 4. 4" x 2-1/2" x 2-1/2" FLUSH FDC INLET

Design Area # 02 HAZARD: LIGHT
Zone: 2 System Type: WET
Location: CLASSROOM C105

Flowing Outlets: 5
Density: 0.10 Remote Area: 900
Req'd @ Base of Riser
Flow 179.9 gpm @ 69.7 psi
Req'd @ Source
Flow 279.9 gpm @ -8.1 psi
Calculation Safety: 50.9 psi
Includes 100 gpm Hose allowance

NOTE: 40% AREA REDUCTION OF REMOTE AREA TO 900SF PER 11.2.3.2.3.1

LEVEL 1 - B & C FIRE SPRINKLER PLAN

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

FDC DETAIL

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-54(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 SPRINKLER HEAD CABINET WITH HEADS & HEAD WRENCH
11. HANGERS ARE TO BE U.L. LISTED AND F.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
1	VARIOUS NOTES AND DETAILS ADDED OR AMENDED FOR REVISE AND RESUBMIT	1/27/25	

Drawing Title: FIRE PROTECTION PLAN

GIBBON SCHOOL
1157 EAST 13TH STREET
GIBBON, MN 55335

Contract No: C24.41
Drawing Date: 10/18/24
Scale: 1/8" = 1'-0"
Drawn By: AMM
Approval By: STATE FIRE MARSHAL DIV.
SHEET NO: FP 2 of 7

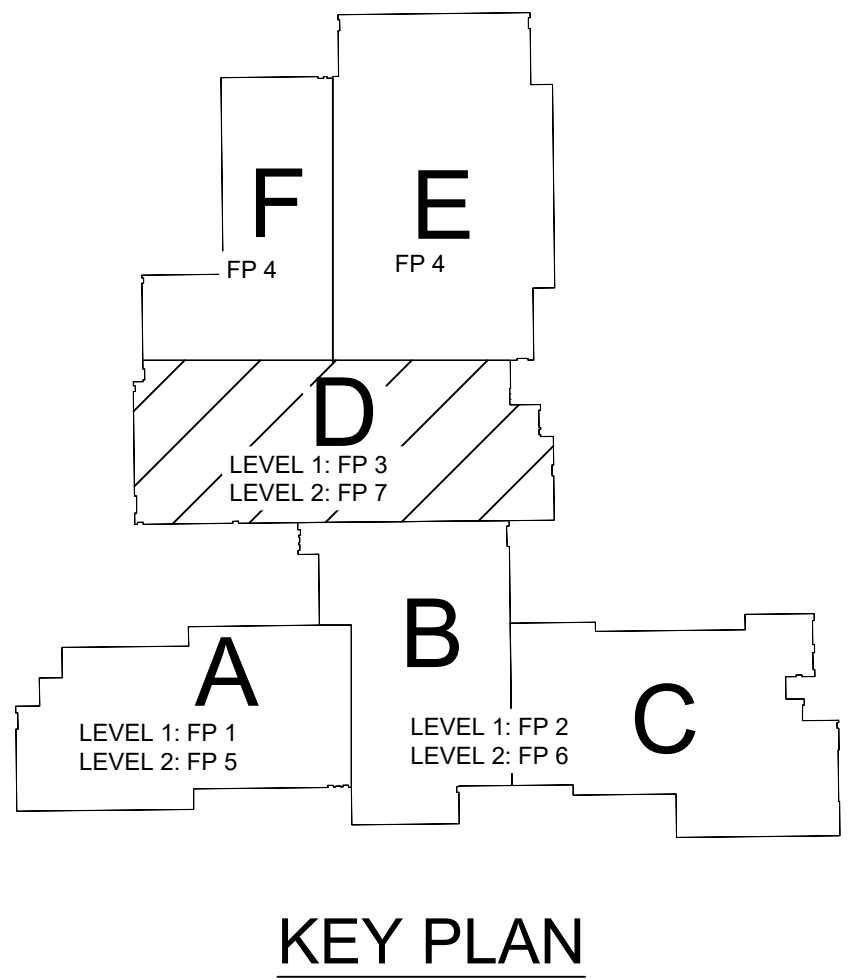
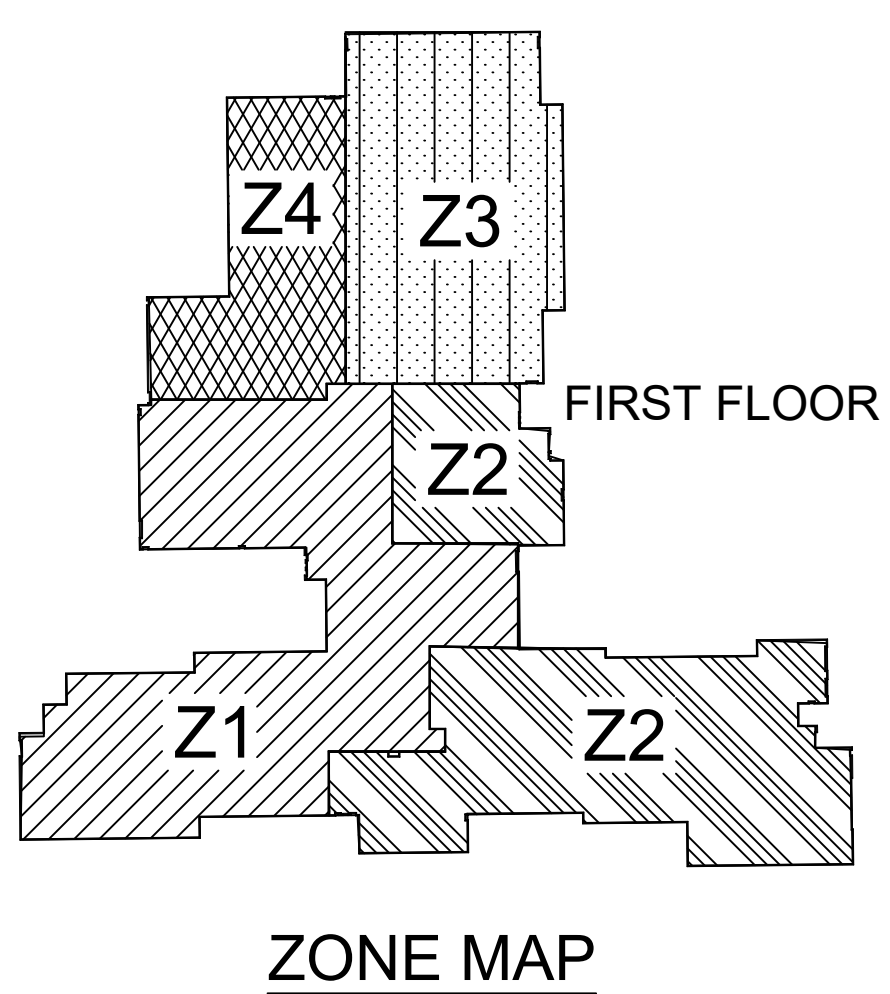


SPRINKLER HEAD LEGEND



NOTE: 40% AREA REDUCTION OF
REMOTE AREA TO 900SF PER
11.2.3.2.3.1

NFPA 13 STEEL PIPE HANGER SPACING (EXCEPT LIGHT WALL THIRD 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"



2. SYSTEM INSTALLED PER NFPA-13 (2016 EDITION) AND STATE FIRE MARSHAL
3. ALL EQUIPMENT FOR THIS SYSTEM SHALL BE U.L. LISTED
4. MINIMUM PIPE SIZE SHALL BE 2" NOMINAL PIPE
5. ALL 3/4" TO 1" LIGHTWALL PIPING SHALL WELDED OUTLETS & GROOVED SHOP DRADING FITTINGS
6. WELDING PER NFPA-13(4.2)
7. FABRICATION OR FABRICATOR TO BEGIN WITH APPROVED SHOP DRAWINGS
8. ALL PIPE LOCATIONS ARE TO BE FIELD MEASURED PRIOR TO FABRICATION AND INSTALLATION BY SPRINKLER CONTRACTOR
9. ALL DIMENSIONS SHOWN ARE CENTER TO CENTER
10. HIGH TEMPERATURE HEADS ARE TO BE FIELD LOCATED WHERE REQUIRED
11. PROVIDE ON SPINE HEAD CAPS OR END HEADS 4" MIN WRENCH
12. HANGERS ARE TO U.L. LISTED AND F.M. APPROVED
13. ELECTRICAL WIRING, ALARM, DETECTION AND SUPERVISORY BY OWNER
14. OWNERS RESPONSIBILITY TO PROVIDE ADEQUATE HEATING TO PREVENT WET PIPE SYSTEM FROM FREEZING.

Drawing Title: FIRE PROTECTION PLAN

GIBBON SCHOOL
1157 EAST 13TH STREET
GIBBON, MN 55335

Contract No.	
C24.41	
Drawing Date:	10/18/24
Scale:	1/8" = 1'-0"
Drawn By:	AMM
Approval By:	STATE FIRE MARSHAL DIV.
SHEET NO.	FP 3 of 7

Design Area #: 10 HAZARD: LIGHT
Zone: 4 System Type: WET
Location: FITNESS ROOM F122

Flowing Outlets: 6
Density: 0.10 Remote Area: 975
Req'd @ Base of Riser
Flow 138.7 gpm @ 45.8 psi
Req'd @ Source
Flow 238.7 gpm @ -32.4 psi
Calculation Safety: 76 psi
Includes 100 gpm Hose allowance

NOTE: 27.8% AREA REDUCTION
OF REMOTE AREA TO 975SF PER
11.2.3.2.3.1

CONCRETE TEE CONSTRUCTION
-7'-6" APART. HEADS CAN BE
LOCATED AT OR ABOVE A
HORIZONTAL PLANE 1" BELOW
BOTTOM STEMS OF TEE PER
8.6.4.1.2(6)

NO COVERAGE REQUIRED IN
VESTIBULE PER MIN IFC
AMENDMENTS FOR THOSE
UNDER 225 S.F.

GALVANIZED
SCHED 40 PER
SPEC.

CAPPED MAIN FOR
FUTURE EXPANSION

SCHED 40 PER
SPEC.

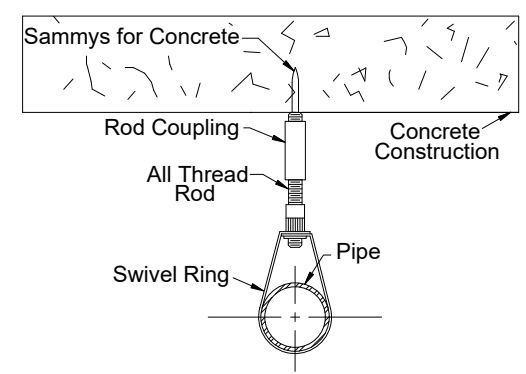
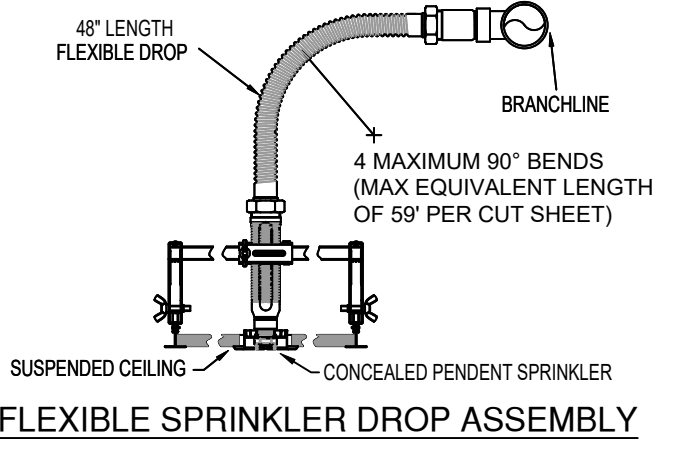
COORDINATE
DROP WITH HVAC
TO CONCEAL
ALONG WALL

ZONE MAP

KEY PLAN

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"



HANGER DETAILS

Design Area #: 08 HAZARD: LIGHT
Zone: 3 System Type: WET
Location: GYM E100

Flowing Outlets: 11
Density: 0.10 Remote Area: 1500
Req'd @ Base of Riser
Flow 199.8 gpm @ 60.4 psi
Req'd @ Source
Flow 299.8 gpm @ -13.5 psi
Calculation Safety: 55.4 psi
Includes 100 gpm Hose allowance

NOTE: GRID PEAKED

Design Area #: 09 HAZARD: OH-1
Zone: 3 System Type: WET
Location: STORAGE E101
ELEC 101B

Flowing Outlets: 7
Density: 0.15 Remote Area: 1500
Req'd @ Base of Riser
Flow 127.7 gpm @ 99.6 psi
Req'd @ Source
Flow 377.7 gpm @ 23.1 psi
Calculation Safety: 15.1 psi
Includes 250 gpm Hose allowance

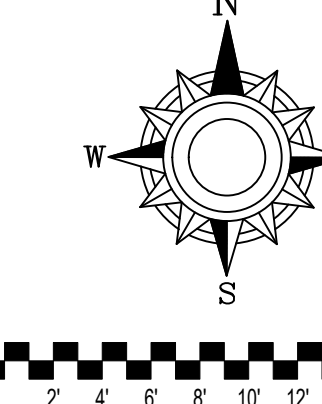
NOTE: AREA PROTECTED BY
SINGLE LINE OF SPRINKLERS. ALL
SPRINKLERS UP TO MAX OF 7
CALCULATED PER 11.2.3.4.2

SYM	ICNT	POSITION	FINISH	TEMP	K	NPT	SN	MFG.	MODEL#	ESCUICHEON	MAX SPACING U.N.O.
342	PENDENT	WHITE	165	11.20	3/4"	R7146	RELIABLE	GA-XLO	CONCEALED	18 X 18	
223	UPRIGHT	BRASS	200	5.60	1/2"	V2704	VICTAULIC	FL-GR	CONCEALED	130 S.F. (OH) / 225 S.F. (LH)	
228	PENDENT	WHITE	200	5.60	1/2"	V5606	VICTAULIC	FL-GR	CONCEALED	225 S.F.	
18	UPRIGHT	BRASS	200	11.20	3/4"	TV5197	TYCO	EC-11	N/A	18 X 18	
35	PENDENT	PAINTED	200	5.6	1/2"	V5606	VICTAULIC	FL-GR	CONCEALED	130 S.F. (OH) / 225 S.F. (LH)	
51	PENDENT	BRASS	200	5.60	1/2"	V2708	VICTAULIC	FL-GR	CONCEALED	130 S.F. (OH) / 225 S.F. (LH)	
23	UPR ON 1" SPRIG	BRASS	200	5.60	1/2"	V2704	VICTAULIC	FL-GR	STANDARD	130 S.F. (OH) / 225 S.F. (LH)	
3	PENDENT	CHROME	200	5.60	1"	V3614	VICTAULIC	FL-GR	CONCEALED	130 S.F. (OH) / 225 S.F. (LH)	
54	UPR ON 1" SPRIG	BRASS	200	11.20	3/4"	TV5197	TYCO	EC-11	N/A	18 X 18	
17	UPRIGHT	BRASS	286	8.00	3/4"	V3407	VICTAULIC	FL-GR	CONCEALED	130 S.F.	
14	SIDEWALL	BRASS	286	5.60	1/2"	V2709	VICTAULIC	FL-SRW	N/A	10 X 10	
3	SIDEWALL	BRASS	200	5.60	1/2"	V2709	VICTAULIC	FL-SRW	N/A	14 X 14	
2	PENDENT	WHITE	286	5.60	1/2"	V5606	VICTAULIC	FL-GR	CONCEALED	225 S.F.	
5	PENDENT	PAINTED	165	11.20	3/4"	R7146	RELIABLE	GA-XLO	CONCEALED	18 X 18	
1	PENDENT	BRASS	286	5.6	1/2"	V2708	VICTAULIC	FL-GR	N/A	130 S.F. (OH) / 225 S.F. (LH)	
2	PENDENT	BRASS	200	8.00	3/4"	V3406	VICTAULIC	FL-GR	N/A	60 S.F. (EH)	
4	SIDEWALL	BRASS	200	8.00	1"	V3612	VICTAULIC	FL-GR	N/A	12 X 12	
1,084	TOTAL										

SPRINKLER HEAD LEGEND

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-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 F.M. APPROVED
- ELECTRICAL WIRING, ALARM DETECTION AND SUPERVISORY BY OWNER
- OWNERS RESPONSIBILITY TO PROVIDE ADEQUATE HEATING TO PREVENT WET SYSTEM PIPING FROM FREEZING

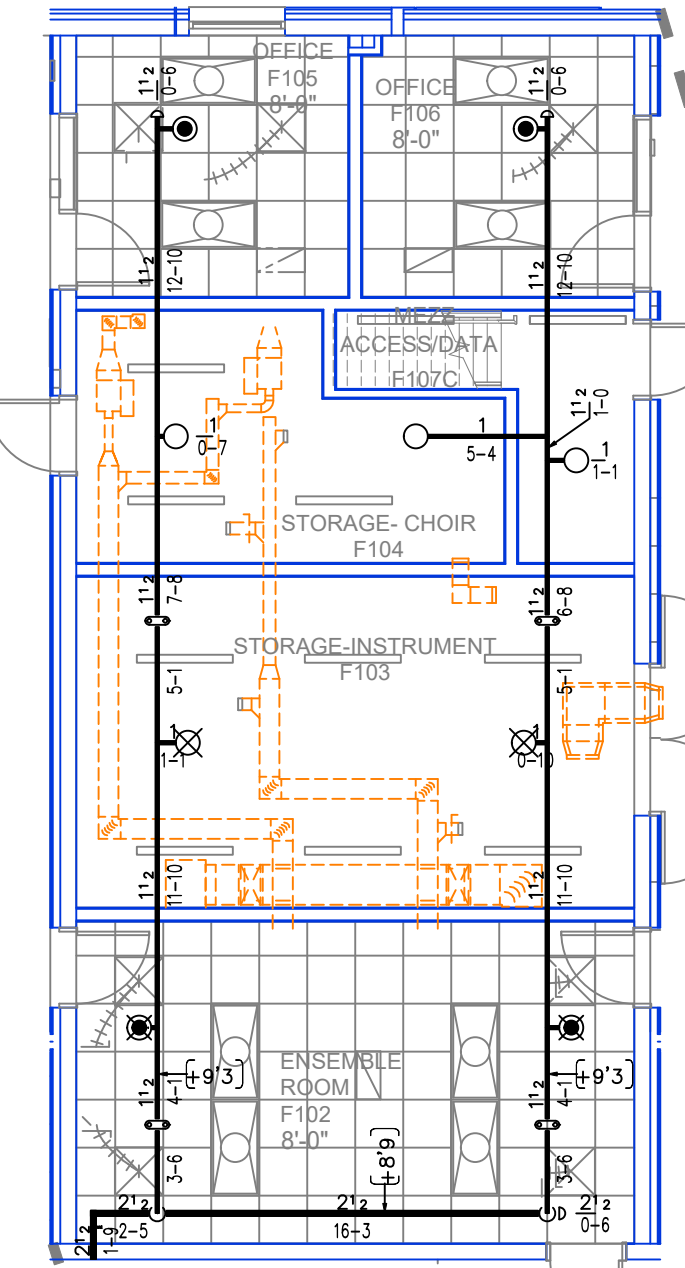


Drawing Title: FIRE PROTECTION PLAN

Contract No. C24.41

GIBBON SCHOOL
1157 EAST 13TH STREET
GIBBON, MN 55335

Drawing Date: 10/18/24
Scale: 1/8" = 1'-0"
Drawn By: AMM
Approval By: STATE FIRE MARSHAL DIV.
SHEET NO. FP 4 of 7



AREA F MEZZANINE

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

CALC PLACARD

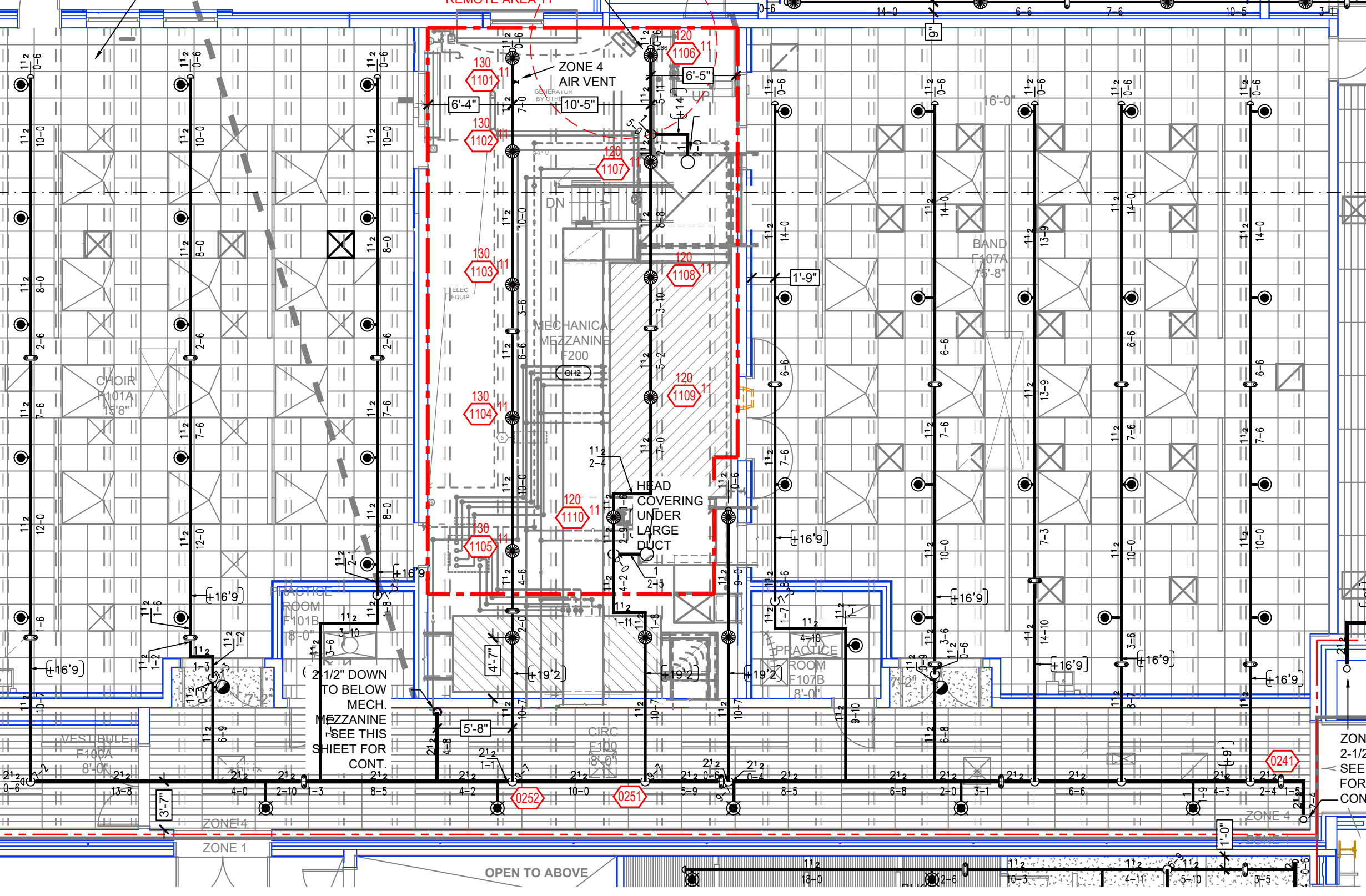
Design Area #: 11 HAZARD: OH-2
Zone: 4 System Type: WET
Location: MECH MEZZ F200

Flowing Outlets: 10
Density: 0.20 Remote Area: 1500
Req'd @ Base of Riser
Flow 264.2 gpm @ 84.4 psi
Req'd @ Source
Flow 514.2 gpm @ 14.2 psi
Calculation Safety: 15.6 psi
Includes 250 gpm Hose allowance

STORM SHELTER IS 36" DEEP PRECAST
DOUBLE TEES AND 8" PRECAST PLANK W/
4" STRUCTURAL TOPPING

HIGH TEMP HEAD
REQUIRED NEAR
UNIT HEATER

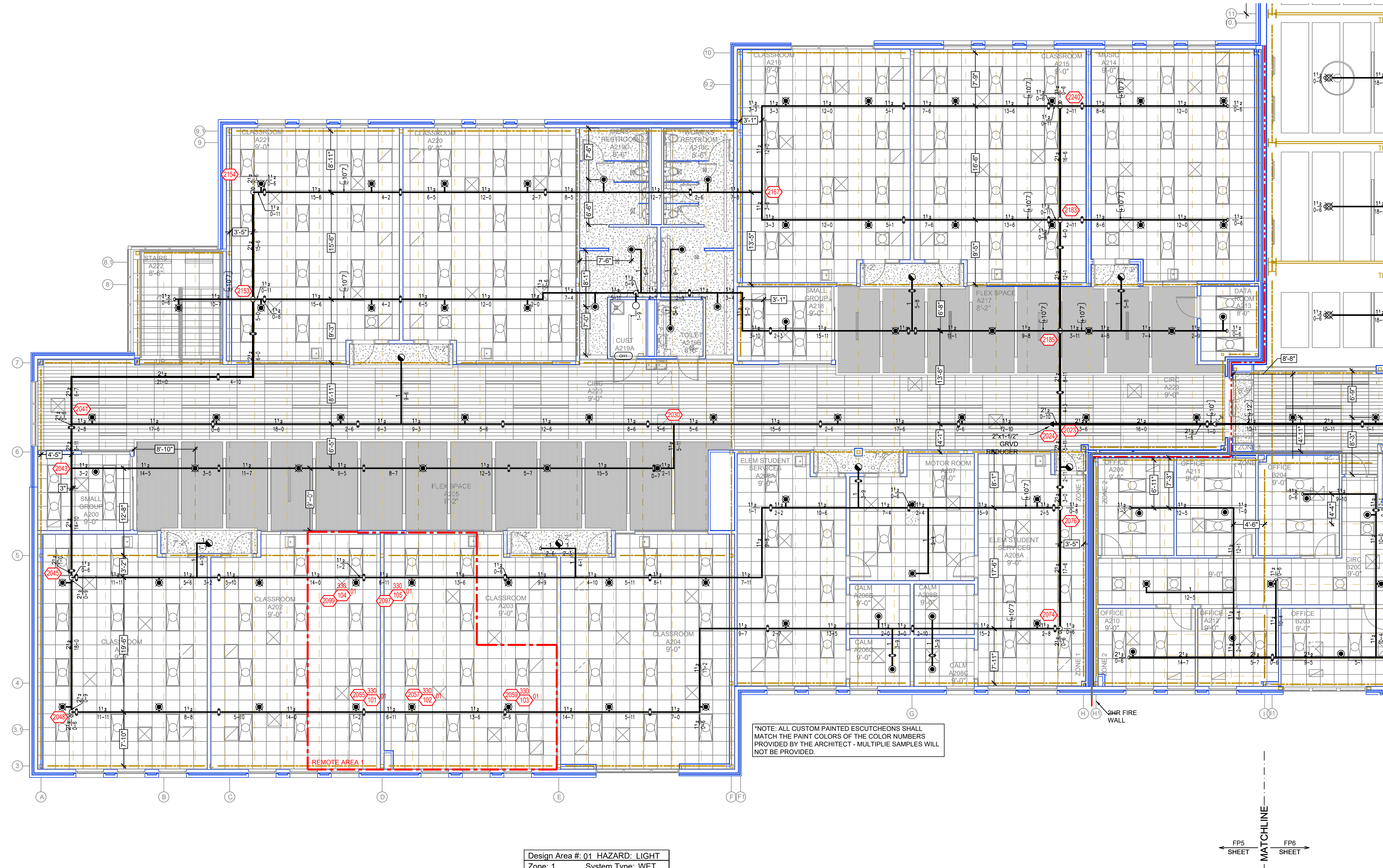
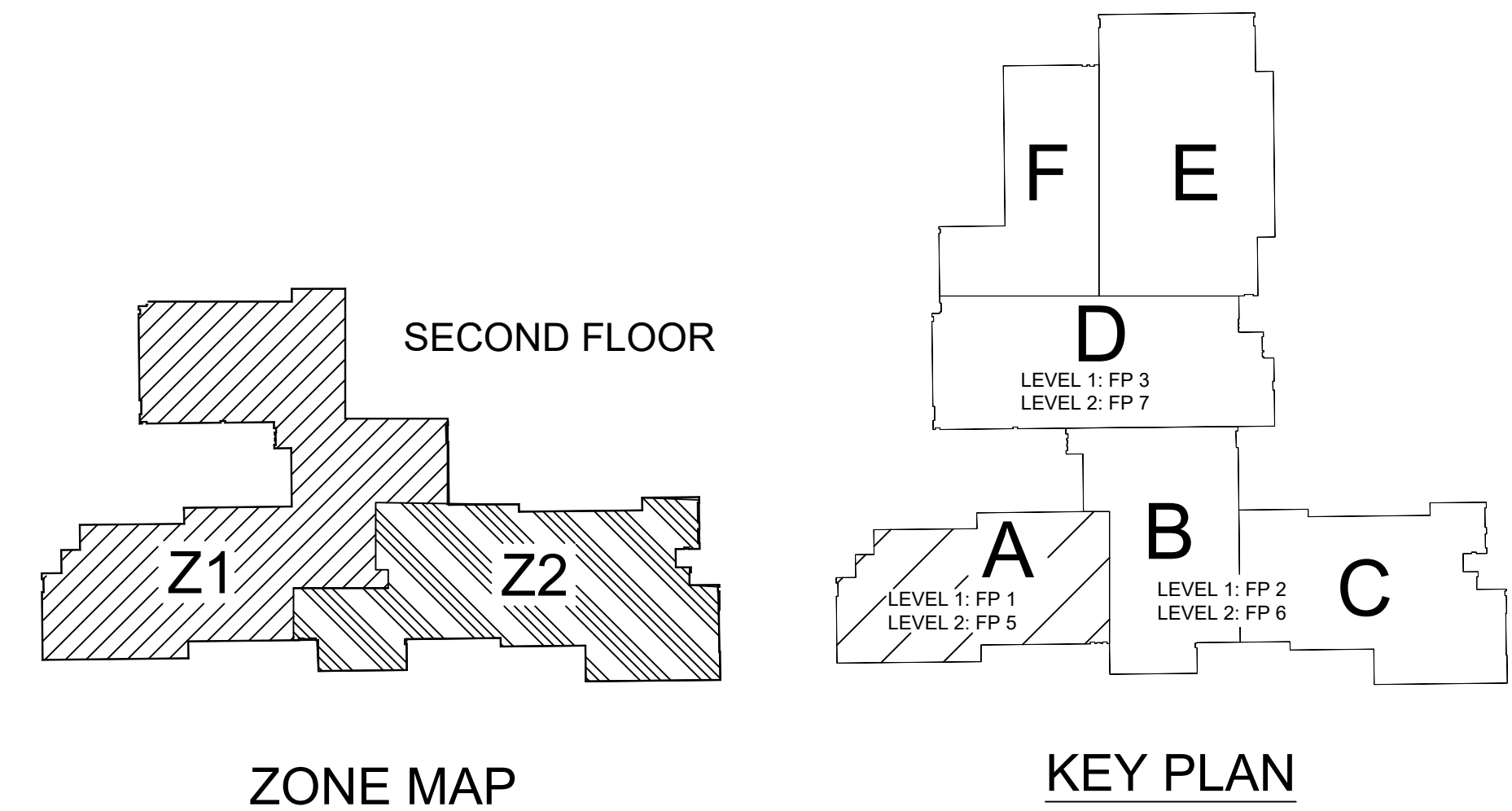
REMOTE AREA 11



LEVEL 1 - E & F FIRE SPRINKLER PLAN

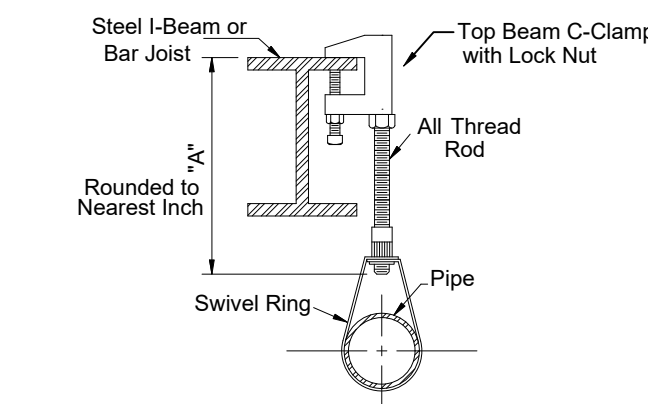
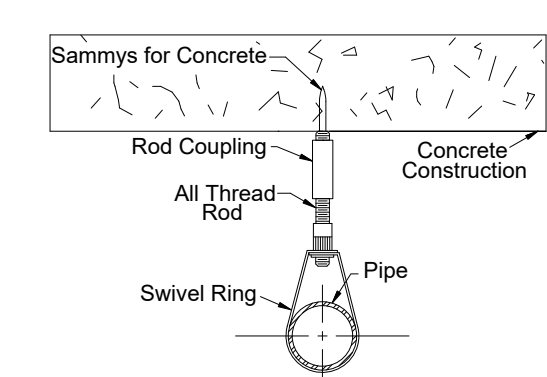
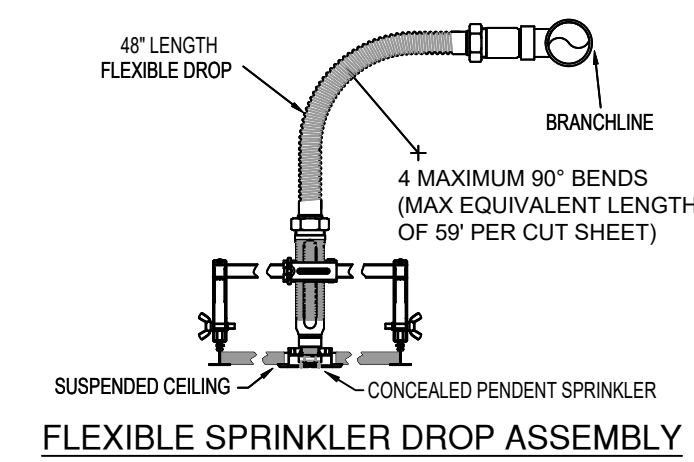
SCALE= 1/8" : 1'-0"

NO	REVISIONS	DATE
1	CHANGED PENETRATION LOCATIONS FOR ZONE 4 MAINS	1/27/25
2	VARIOUS NOTES AND DETAILS ADDED OR AMENDED FOR REVISE AND RESUBMIT	



NFPA 13 STEEL PIPE HANGER SPACING

NOMINAL SIZE	MAX SPACING
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

LEVEL 2-A FIRE SPRINKLER PLAN

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

Design Area # 01 HAZARD: LIGHT
Zone: 1 System Type: WET
Location: CLASSROOM A202/A203

Flowing Outlets: 5
Density: 0.10 Remote Area: 900
Req'd @ Base of Riser
Flow 168.2 gpm @ 62.8 psi
Req'd @ Source
Flow 268.2 gpm @ -15.7 psi
Calculation Safety: 58.9 psi
Includes 100 gpm Hose allowance

NOTE: 40% AREA REDUCTION OF
REMOTE AREA TO 900SF PER
11.2.3.2.3.1

SYM	QTY	POSITION	FINISH	TEMP	K	NPT	SIN	MFG	MODEL#	ESCUICHEON	MAX SPACING U.N.O.
342	1	PENDENT	WHITE	165	11.20	3/4"	R7146	RELIABLE	G4-XLO	CONCEALED	18 X 18
223	1	UPRIGHT	BRASS	200	5.60	1/2"	V2704	VICTAULIC	FL-QR	N/A	130 S.F. (CH) / 225 S.F. (LH)
228	1	PENDENT	WHITE	200	5.60	1/2"	V5606	VICTAULIC	FL-QRC	CONCEALED	225 S.F.
28	1	UPRIGHT	BRASS	200	11.20	3/4"	TY5137	TYCO	EC-11	N/A	18 X 18
55	1	PENDENT	PAINTED*	200	5.6	1/2	V5606	VICTAULIC	FL-QRC	CONCEALED	130 S.F. (CH) / 225 S.F. (LH)
51	1	PENDENT	BRASS	200	5.60	1/2"	V2708	VICTAULIC	FL-QR	N/A	130 S.F. (CH) / 225 S.F. (LH)
23	1	UPR ON 1" SPRIG	BRASS	200	5.60	1/2"	V2704	VICTAULIC	FL-QR	STANDARD	130 S.F. (CH) / 225 S.F. (LH)
1	1	PENDENT	CHROME	200	5.60	1"	V5814	VICTAULIC	FL-QRDYR	N/A	130 S.F. (CH) / 225 S.F. (LH)
14	1	UPR ON 1" SPRIG	BRASS	200	11.20	3/4"	TY5137	TYCO	EC-11	N/A	18 X 18
67	1	UPRIGHT	BRASS	286	8.00	3/4"	V3401	VICTAULIC	FL-SR	N/A	130 S.F.
14	1	SIDEWALL	BRASS	286	5.60	1/2"	V2709	VICTAULIC	FL-SRWS	N/A	10 X 10
13	1	SIDEWALL	BRASS	200	5.60	1/2"	V2708	VICTAULIC	FL-SRWS	N/A	14 X 14
2	1	PENDENT	WHITE	286	5.60	1/2"	V5606	VICTAULIC	FL-QRC	CONCEALED	225 S.F.
15	1	PENDENT	PAINTED	165	11.20	3/4"	R7146	RELIABLE	G4-XLO	CONCEALED	18 X 18
1	1	PENDENT	BRASS	286	5.6	1/2"	V2708	VICTAULIC	FL-QR	N/A	130 S.F. (CH) / 225 S.F. (LH)
2	1	PENDENT	BRASS	200	8.00	3/4"	V3406	VICTAULIC	FL-QR	N/A	90 S.F. (EH)
13	1	SIDEWALL	BRASS	200	8.00	1"	V3612	VICTAULIC	FL-QRDYR/SW	N/A	12 X 12
1,084	1	TOTAL									

SPRINKLER HEAD LEGEND

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-554.2
- 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/6 HEADS & 1 HEAD WRENCH
- HANGERS ARE TO BE U.L. LISTED AND F.M. APPROVED
- ELECTRICAL WIRING, ALARM, DETECTION AND SUPERVISORY BY OWNER
- OWNER'S RESPONSIBILITY TO PROVIDE ADEQUATE HEATING TO PREVENT WET SYSTEM PIPING FROM FREEZING.

REVISIONS

NO	REVISIONS	DATE
1	VARIOUS NOTES AND DETAILS ADDED OR AMENDED FOR REVISE AND RESUBMIT	1/27/25

APPROVAL STAMPS

NO	APPROVAL STAMPS
1	

Drawing Title: FIRE PROTECTION PLAN

GIBBON SCHOOL
1157 EAST 13TH STREET
GIBBON, MN 55335

Contract No. C24.41

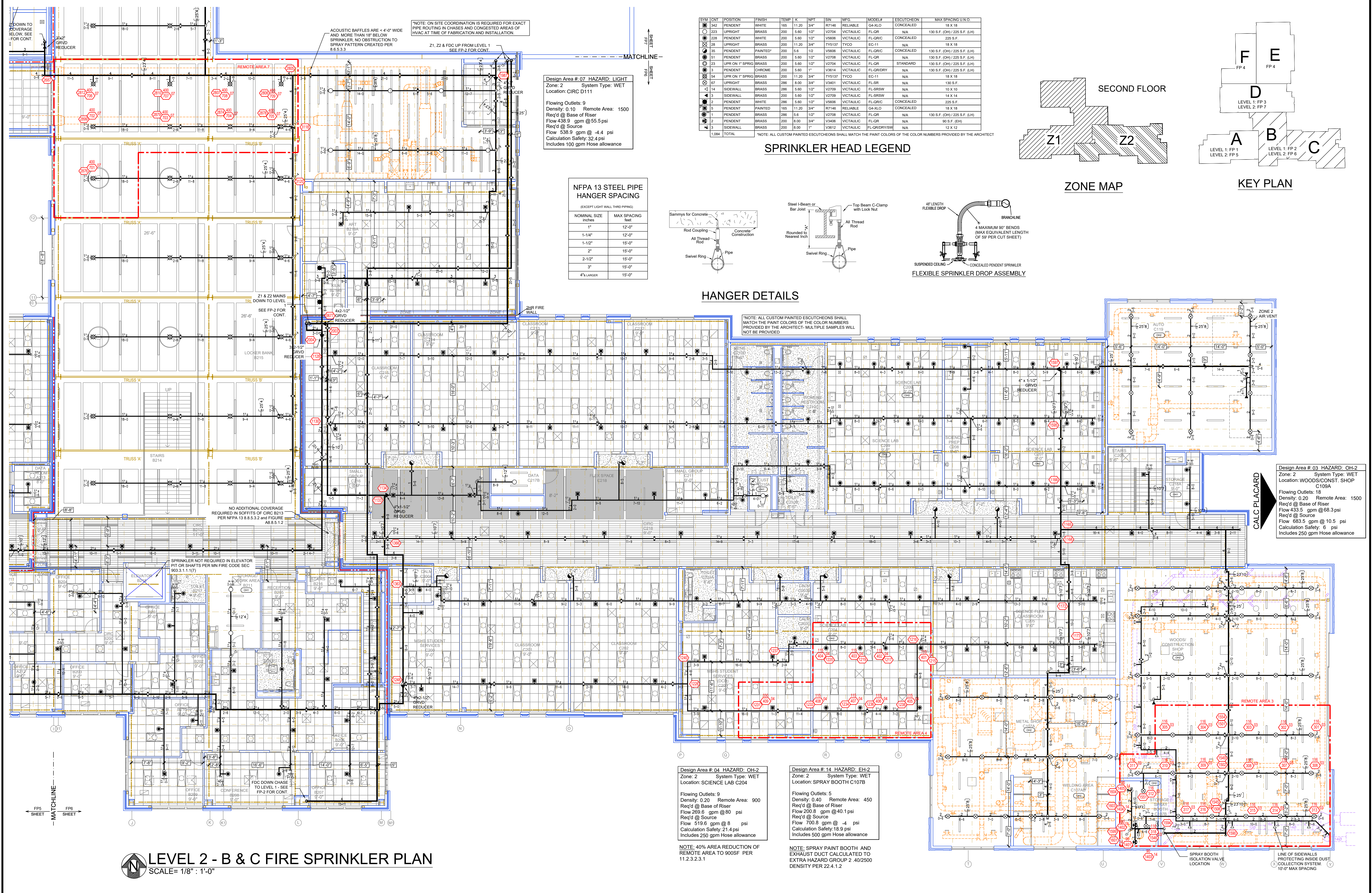
Drawing Date: 10/18/24

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

Drawn By: AMM

Approval By: STATE FIRE MARSHAL DIV.

SHEET NO. FP 5 of 7

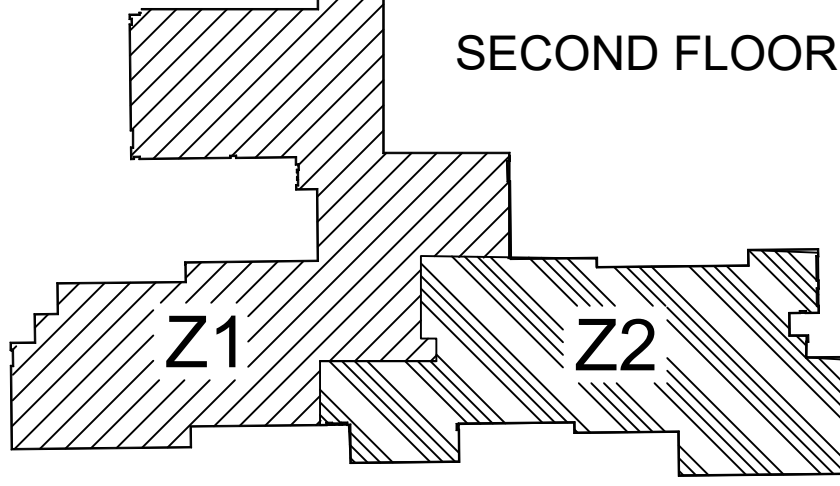


SYMBOL	CONT.	POSITION	FINISH	TEMP.	K	NPT	SN	MPG	MODEL#	ESCUTCHEON	MAX SPACING U.N.O.
228	UPRIGHT	WHITE	200	5.60	1/2"	V2704	VICTALIC	FL-QR	N/A	CONCEALED	130 S.F. (OH) / 225 S.F. (LH)
229	PENDENT	WHITE	200	5.60	1/2"	V5606	VICTALIC	FL-QRC	CONCEALED	CONCEALED	225 S.F.
230	UPRIGHT	BRASS	200	11.20	3/4"	TY5137	TYCO	EC-11	N/A	N/A	18 X 18
35	PENDENT	PAINTED	200	5.6	1/2"	V5606	VICTALIC	FL-QRC	CONCEALED	CONCEALED	130 S.F. (OH) / 225 S.F. (LH)
51	PENDENT	BRASS	200	5.60	1/2"	V2708	VICTALIC	FL-QR	N/A	N/A	130 S.F. (OH) / 225 S.F. (LH)
23	UPR ON 1" SPRIG	BRASS	200	5.60	1/2"	V2704	VICTALIC	FL-QR	STANDARD	STANDARD	130 S.F. (OH) / 225 S.F. (LH)
3	PENDENT	CHROME	200	5.60	1"	V3814	VICTALIC	FL-QRDV	N/A	N/A	130 S.F. (OH) / 225 S.F. (LH)
64	UPR ON 1" SPRIG	BRASS	200	11.20	3/4"	TY5137	TYCO	EC-11	N/A	N/A	18 X 18
67	UPRIGHT	BRASS	286	8.00	3/4"	V3401	VICTALIC	FL-SR	N/A	N/A	130 S.F.
14	SIDEWALL	BRASS	286	5.60	1/2"	V2709	VICTALIC	FL-SRWS	N/A	N/A	10 X 10
13	SIDEWALL	BRASS	200	5.60	1/2"	V2709	VICTALIC	FL-SRWS	N/A	N/A	14 X 14
2	PENDENT	WHITE	286	5.60	1/2"	V5606	VICTALIC	FL-QRC	CONCEALED	CONCEALED	225 S.F.
5	PENDENT	PAINTED	165	11.20	3/4"	R7146	RELIABLE	GA-XLD	CONCEALED	CONCEALED	18 X 18
1	PENDENT	BRASS	286	5.6	1/2"	V2708	VICTALIC	FL-QR	N/A	N/A	130 S.F. (OH) / 225 S.F. (LH)
3	SIDEWALL	BRASS	200	8.00	3/4"	V3406	VICTALIC	FL-QR	N/A	N/A	90 S.F. (EH)
2	SIDEWALL	BRASS	200	8.00	1"	V3812	VICTALIC	FL-QRDVSW	N/A	N/A	12 X 12
1.004	TOTAL										

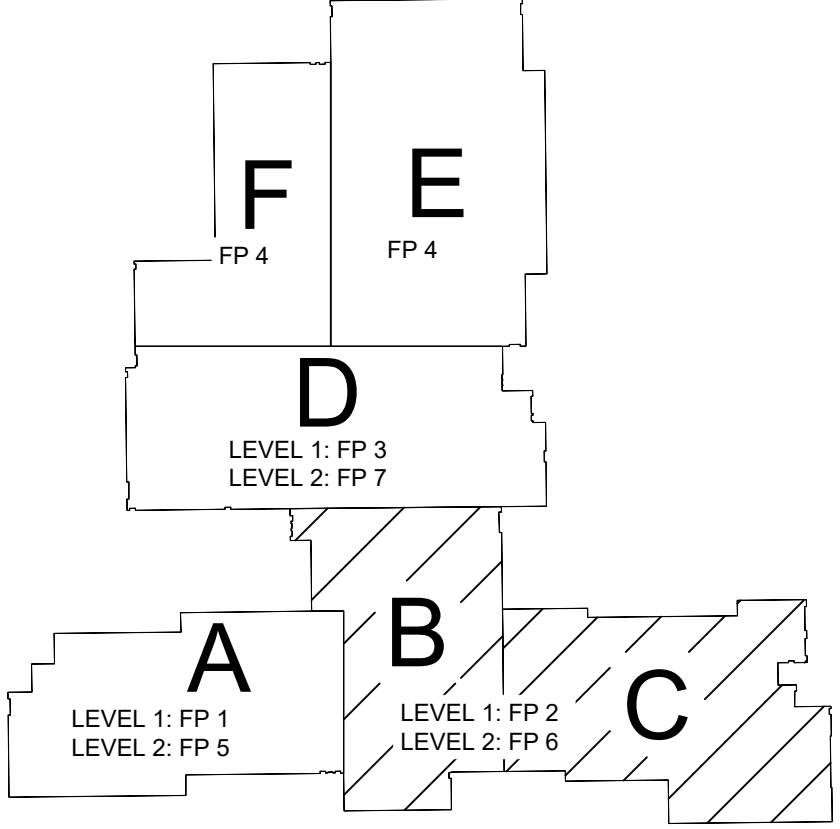
SPRINKLER HEAD LEGEND

NFPA 13 STEEL PIPE HANGER SPACING	
NOMINAL SIZE	MAX SPACING
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"

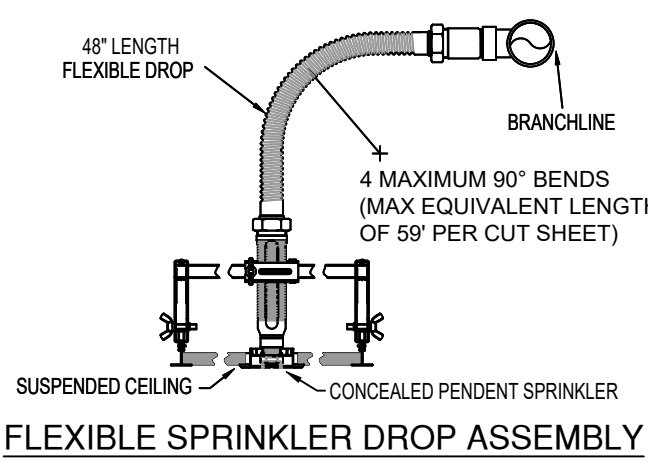
HANGER DETAILS



ZONE MAP



KEY PLAN



Design Area #03: HAZARD: OH-2
Zone: 2 System Type: WET
Location: WOODS/CONST. SHOP
C109A
Flowing Outlets: 18
Density: 0.20 Remote Area: 1500
Req'd @ Base of Riser
Flow 433.5 gpm @ 68.3 psi
Req'd @ Source
Flow 663.5 gpm @ 10.5 psi
Calculation Safety: 6 psi
Includes 250 gpm Hose allowance

CALC PLACARD

Design Area #04: HAZARD: OH-2
Zone: 2 System Type: WET
Location: SPRAY BOOTH C107B
Flowing Outlets: 9
Density: 0.20 Remote Area: 900
Req'd @ Base of Riser
Flow 269.6 gpm @ 80 psi
Req'd @ Source
Flow 519.8 gpm @ 8 psi
Calculation Safety: 21.4 psi
Includes 250 gpm Hose allowance
NOTE: 40% AREA REDUCTION OF
REMOTE AREA TO 900SF PER
11.2.3.2.3.1

Design Area #14: HAZARD: EH-2
Zone: 2 System Type: WET
Location: SPRAY BOOTH C107B
Flowing Outlets: 5
Density: 0.40 Remote Area: 450
Req'd @ Base of Riser
Flow 200.8 gpm @ 40.1 psi
Req'd @ Source
Flow 700.8 gpm @ 4 psi
Calculation Safety: 21.4 psi
Includes 500 gpm Hose allowance
NOTE: SPRAY PAINT BOOTH AND
EXHAUST DUCT CALCULATED TO
EXTRA HAZARD GROUP 2, 40/2500
DENSITY PER 22.4.1.2

SYM	CNT	POSITION	FINISH	TEMP	K	NPY	SIN	MFG.	MODEL#	ESCUTCHEON	MAX SPACING U.N.O.
342	PENDENT	WHITE	165	11.20	3/4"	R7146	RELIABLE	GA-XLO	CONCEALED		18 X 18
223	UPRIGHT	BRASS	200	5.60	1/2"	V2704	VICTAULIC	FL-QR	N/A		130 S.F. (OH) / 225 S.F. (LH)
228	PENDENT	WHITE	200	5.60	1/2"	V5606	VICTAULIC	FL-QRVC	CONCEALED		225 S.F.
28	UPRIGHT	BRASS	200	11.20	3/4"	TY5137	TYCO	EC-11	N/A		18 X 18
35	PENDENT	PAINTED*	200	5.6	1/2"	V5606	VICTAULIC	FL-QRVC	CONCEALED		130 S.F. (OH) / 225 S.F. (LH)
51	PENDENT	BRASS	200	5.60	1/2"	V2708	VICTAULIC	FL-QR	N/A		130 S.F. (OH) / 225 S.F. (LH)
23	UPR ON 1" SPRIG	BRASS	200	5.60	1/2"	V2704	VICTAULIC	FL-QR	STANDARD		130 S.F. (OH) / 225 S.F. (LH)
3	PENDENT	CHROME	200	5.60	1"	V3614	VICTAULIC	FL-QRDRY	N/A		130 S.F. (OH) / 225 S.F. (LH)
54	UPR ON 1" SPRIG	BRASS	200	11.20	3/4"	TY5137	TYCO	EC-11	N/A		18 X 18
67	UPRIGHT	BRASS	286	8.00	3/4"	V3401	VICTAULIC	FL-SR	N/A		130 S.F.
14	SIDEWALL	BRASS	286	5.60	1/2"	V2709	VICTAULIC	FL-SRSW	N/A		10 X 10
3	SIDEWALL	BRASS	200	5.60	1/2"	V2709	VICTAULIC	FL-SRSW	N/A		14 X 14
2	PENDENT	WHITE	286	5.60	1/2"	V5606	VICTAULIC	FL-QRVC	CONCEALED		225 S.F.
5	PENDENT	PAINTED	165	11.20	3/4"	R7146	RELIABLE	GA-XLO	CONCEALED		18 X 18
1	PENDENT	BRASS	286	5.6	1/2"	V2708	VICTAULIC	FL-QR	N/A		130 S.F. (OH) / 225 S.F. (LH)
2	PENDENT	BRASS	200	8.00	3/4"	V3406	VICTAULIC	FL-QR	N/A		80 S.F. (EH)
3	SIDEWALL	BRASS	200	8.00	1"	V3612	VICTAULIC	FL-QRDRY/SW	N/A		12 X 12
1,084	TOTAL										

*NOTE: ALL CUSTOM PAINTED ESCUTCHEONS SHALL MATCH THE PAINT COLORS OF THE COLOR NUMBERS PROVIDED BY THE ARCHITECT.

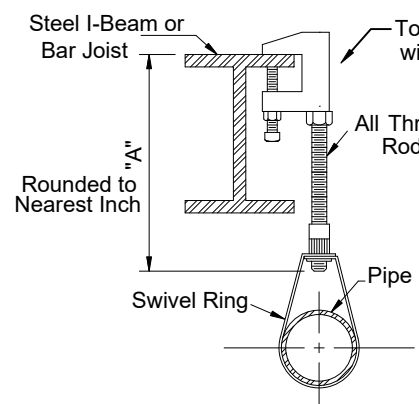
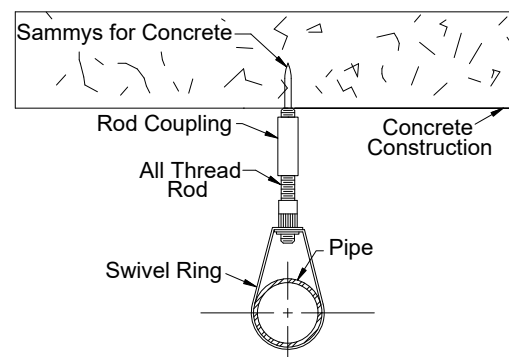
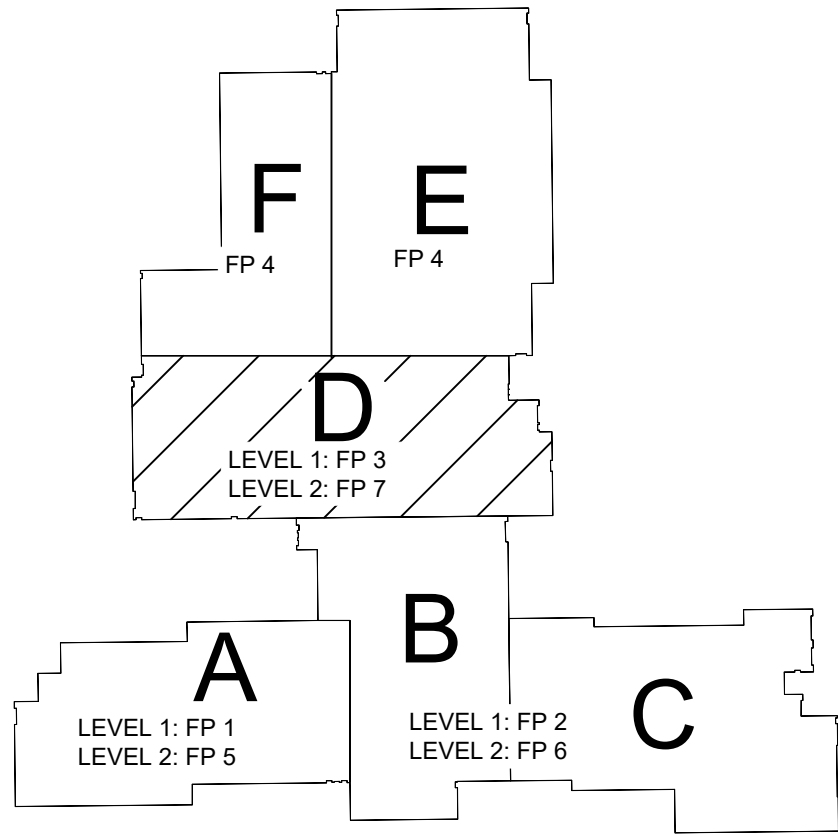
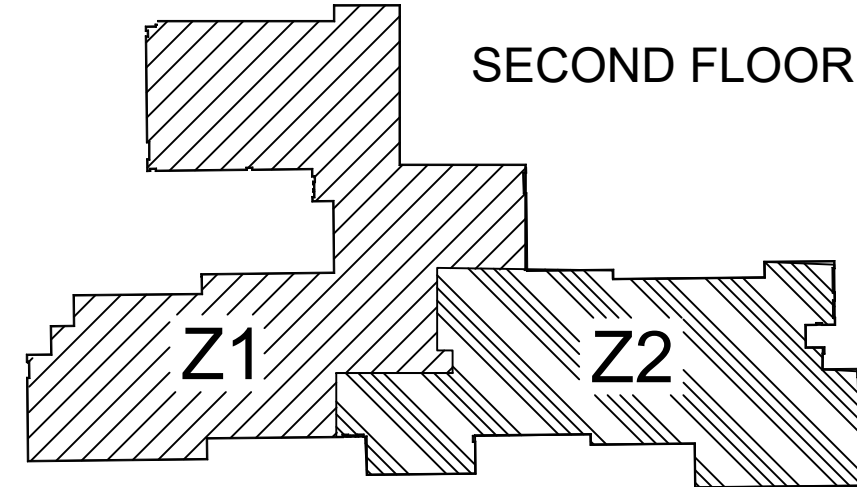
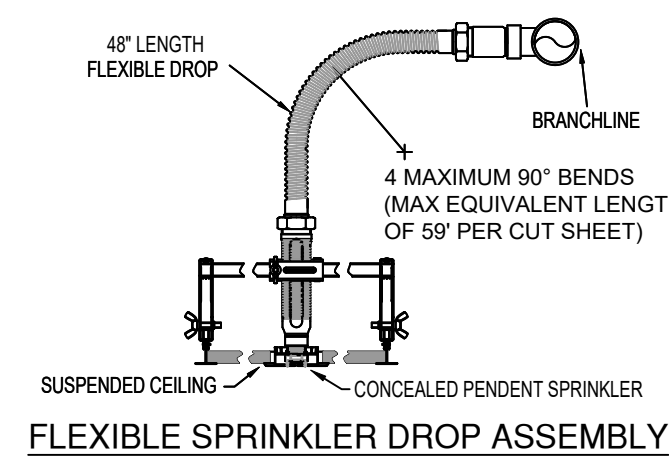
SPRINKLER HEAD LEGEND

CALC PLACARD

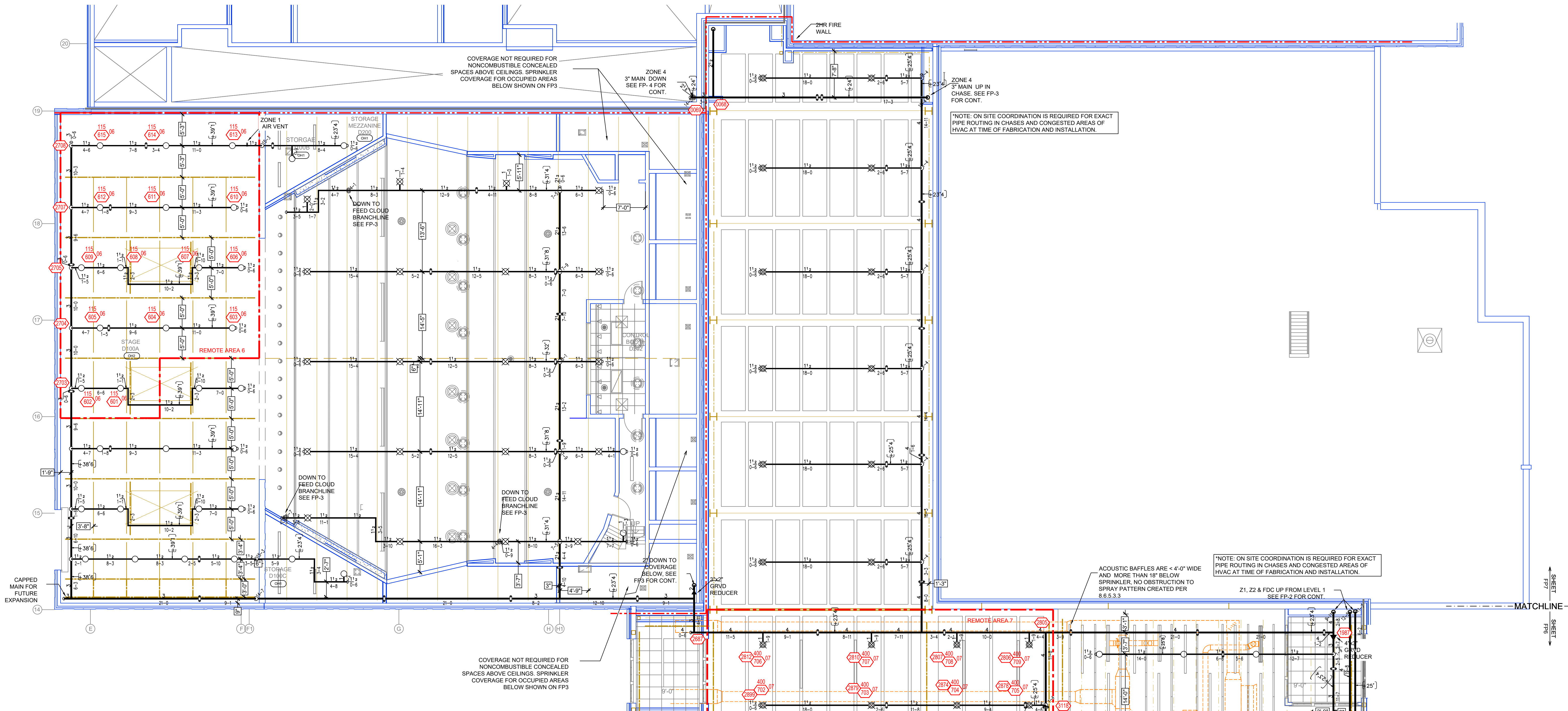
Design Area #: 06 HAZARD: OH-2
Zone: 1 System Type: WET
Location: STAGE D100A

Flowing Outlets: 15
Density: 0.20 Remote Area: 1500
Req'd @ Base of Riser
Flow 410.4 gpm @ 72.8 psi
Req'd @ Source
Flow 659.6 gpm @ 11.5 psi
Calculation Safety: 7 psi
Includes 250 gpm Hose allowance

NFPA 13 STEEL PIPE HANGER SPACING	
(EXCEPT LIGHT WALL THRO 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"



HANGER DETAILS



LEVEL 2-D FIRE SPRINKLER PLAN

SCALE = 1/8" = 1'-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-514.2.1
- 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 WITH HEADS & 1 HEAD WRENCH
- HANGERS ARE TO BE U.L. LISTED AND F.M. APPROVED
- ELECTRICAL WIRING, ALARM, DETECTION AND SUPERVISORY BY OWNER
- OWNERS RESPONSIBILITY TO PROVIDE ADEQUATE HEATING TO PREVENT WET SYSTEM PIPING FROM FREEZING

NO

1 VARIOUS NOTES AND DETAILS ADDED OR AMENDED FOR REVISE AND RESUBMIT

DATE

1/27/25

APPROVAL STAMPS

Drawing

FIRE PROTECTION PLAN

Contract No.

C24.41

Drawing Date: 10/18/24

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

Drawn By: AMM

Approval By: STATE FIRE MARSHAL DIV.

SHEET NO. FP 7 of 7

GIBBON SCHOOL
1157 EAST 13TH STREET
GIBBON, MN 55335