

REVISIONS

NO.	DATE	JOB NO.	DESCRIPTION
0	-	-	RELEASED FOR APPROVAL

SPRINKLER LEGEND

SYMBOL	MANUF.	MODEL	SN	THREAD	K-FACTOR	TEMP.	FINISH	ESCU/COLORED	TYPE	QTY.	QTY. BY
RELIABLE	FTR58	RA1425	1/2"	5.60	200	BRASS	NONE	NONE	UPRIGHT	113	2
RELIABLE	OS	RA3415	1/2"	5.60	212	WHITE	WHITE	CONCEALED	PENDENT	345	2
W/ING	W630	W630	3/4"	8.00	175	WHITE	WHITE	G-1 TYPE	SIDEWALL	149	2
RELIABLE	212	RA1205	3/4"	11.20	200	BRASS	NONE	NONE	UPRIGHT/SPRNG	14	2
RELIABLE	RA-1425	RT415	3/4"	11.20	165	BRASS	NONE	NONE	PENDENT	176	2
RELIABLE	FTR58	RA1425	1/2"	5.60	200	BRASS	NONE	NONE	UPRIGHT/SPRNG	20	2
RELIABLE	FTR58	RA1425	1/2"	5.60	200	BRASS	WHITE	WHITE	SIDEWALL	11	2

OWNER TO SUPPLY ADEQUATE HEAT IN ALL AREAS WHERE SPRINKLER PIPING MAY FREEZE.

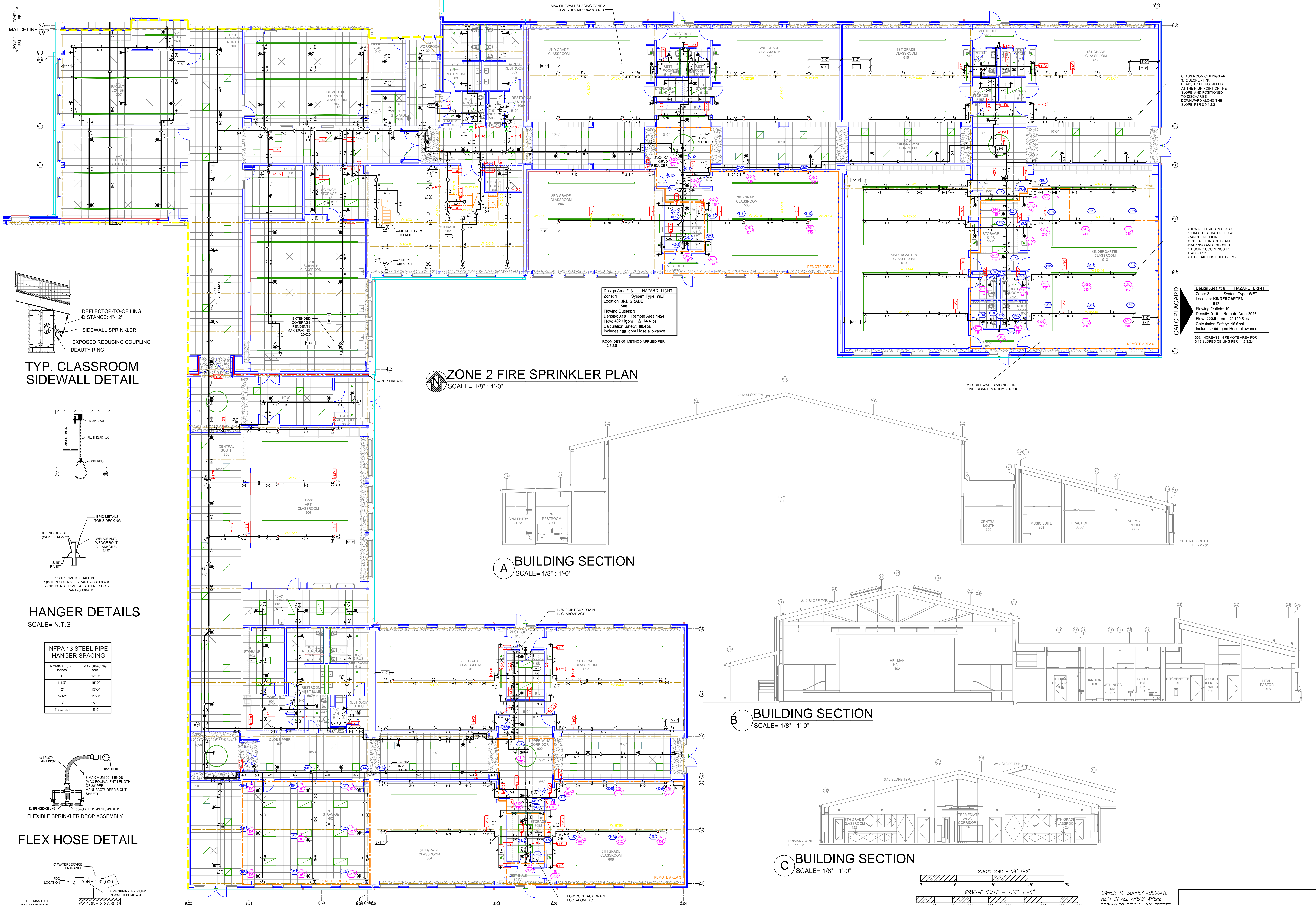
SCALE: 1/8" = 1'-0"

OWNER TO SUPPLY ADEQUATE HEAT IN ALL AREAS WHERE SPRINKLER PIPING MAY FREEZE.

PROJECT TOTAL: 898

BRYN ATHYNN
 800 TOMLINSON RD
 BRYN ATHYNN, PA 19009

SCALE: 1/8" = 1'-0"
 DRAWN BY: AMM
 DATE: 04/01/2024
 JOB NUMBER: ZONE 1
 SHEET NO.: FP- 1 of 3



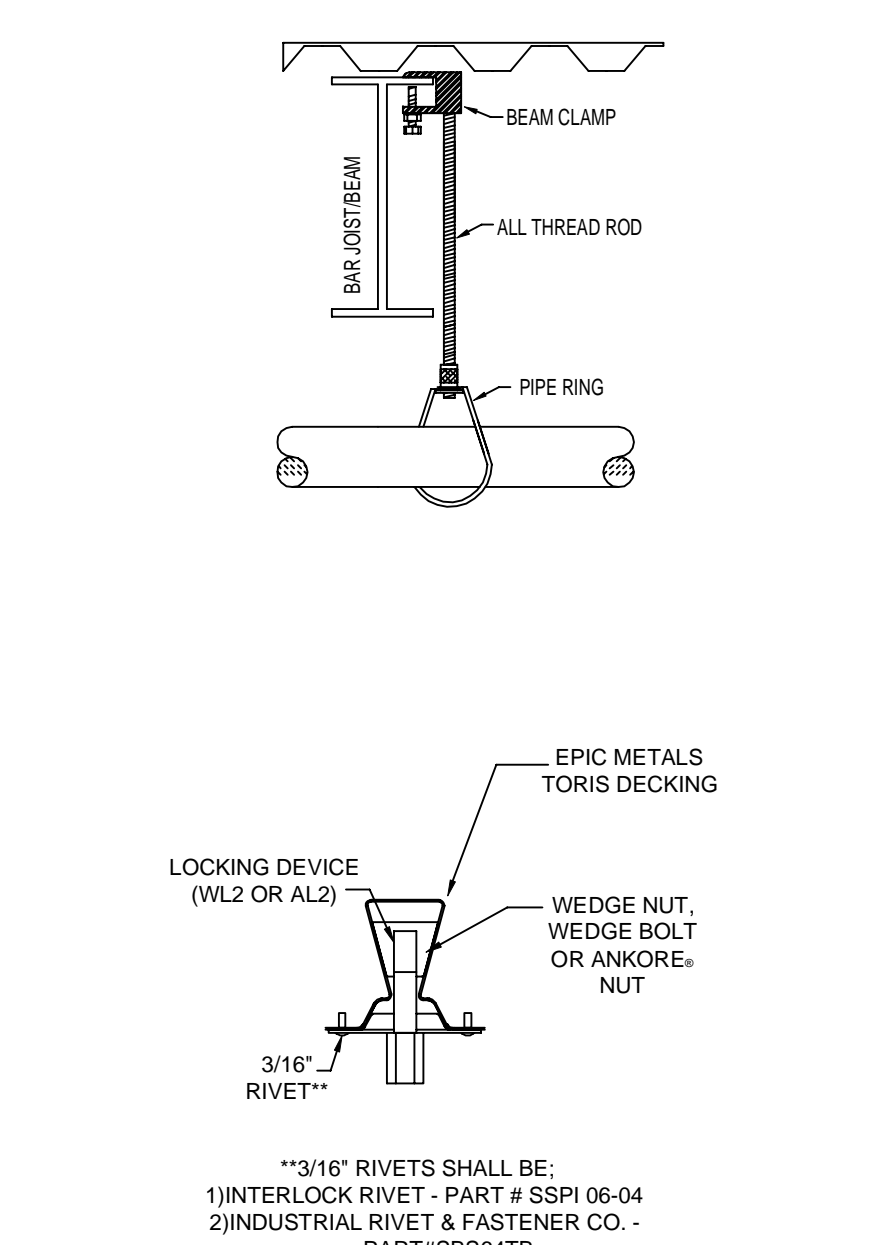
ZONE 2 FIRE SPRINKLER PLAN
SCALE= 1/8" = 1'-0"

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

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

C BUILDING SECTION
SCALE= 1/8" = 1'-0"

TYP. CLASSROOM SIDEWALL DETAIL

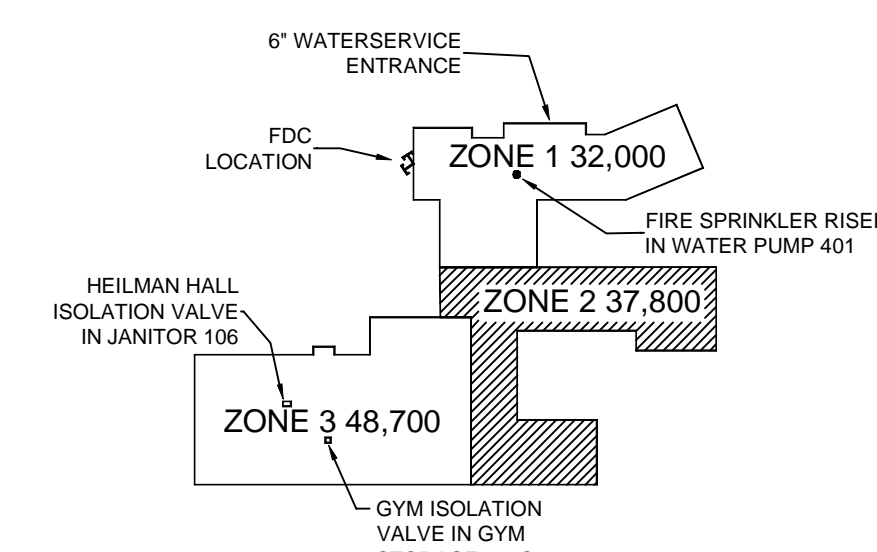


HANGER DETAILS
SCALE= N.T.S.

NFPA 13 STEEL PIPE HANGER SPACING

NOMINAL SIZE INCHES	MAX SPACING FEET
1"	12'-0"
1-1/2"	15'-0"
2"	15'-0"
2-1/2"	15'-0"
3"	15'-0"
4" & LARGER	15'-0"

FLEX HOSE DETAIL



KEY PLAN

Design Area # 6 HAZARD: LIGHT
Zone 1 System Type: WET
Location: 3RD GRADE 509
Flowing Outlets: 9
Density: 0.10 Remote Area: 1424
Flow: 402.18 gpm @ 64.6 psi
Calculation Safety: 80.4 psi
Includes 100 gpm Hose allowance
ROOM DESIGN METHOD APPLIED PER 11.2.3.3.5

Design Area # 4 HAZARD: OH-1
Zone 2 System Type: WET
Location: STORAGE 602
Flowing Outlets: 9
Density: 0.15 Remote Area: 1022
Flow: 691.7 gpm @ 127.4 psi
Calculation Safety: 113.3 psi
Includes 250 gpm Hose allowance
40% AREA REDUCTION OF REMOTE AREA PER 11.2.3.3.1

Design Area # 3 HAZARD: LIGHT
Zone 2 System Type: WET
Location: 8TH GRADE CLASSROOM 606
Flowing Outlets: 11
Density: 0.10 Remote Area: 903
Flow: 407.8 gpm @ 77.8 psi
Calculation Safety: 69.2 psi
Includes 100 gpm Hose allowance
ROOM DESIGN METHOD APPLIED PER 11.2.3.3.5

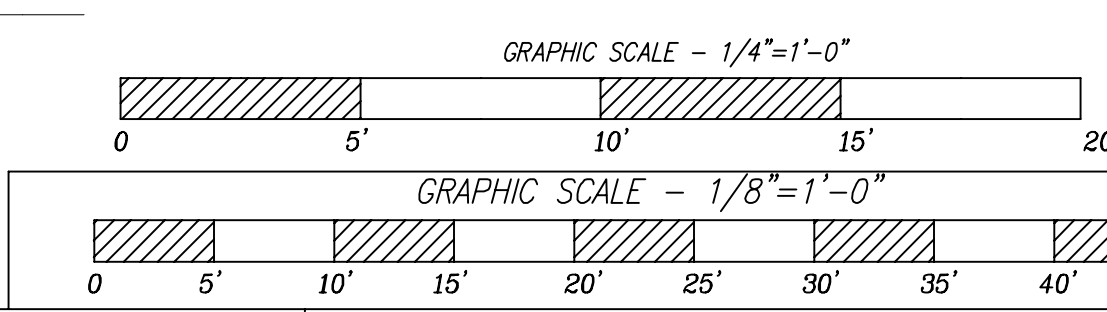
LINE TYPE LEGEND

- 2 HOUR FIREWALL
- 2 HOUR FIREWALL
- SPRINKLER SYSTEM ZONE BORDER
- HYDRAULIC CALCULATED REMOTE AREA
- SPRINKLER SYSTEM PIPE

CLASS ROOM CEILINGS ARE 3:12 SLOPE TYP. HEADS TO BE INSTALLED AT THE HIGH POINT OF THE SLOPE AND POSITIONED TO DISCHARGE DOWNWARD ALONG THE SLOPE PER 8.5.4.2.2

SIDEWALL HEADS IN CLASS ROOMS TO BE INSTALLED w/ BRANCHLINE PIPING CONCEALED INSIDE BEAM WRAPPING AND EXPOSED REDUCING COUPLINGS TO HEAD - TYP SEE DETAIL THIS SHEET (FP1)

Design Area # 5 HAZARD: LIGHT
Zone 2 System Type: WET
Location: KINDERGARTEN 512
Flowing Outlets: 19
Density: 0.10 Remote Area: 2026
Flow: 555.6 gpm @ 129.5 psi
Calculation Safety: 16.6 psi
Includes 100 gpm Hose allowance
30% INCREASE IN REMOTE AREA FOR 3:12 SLOPED CEILING PER 11.2.3.2.4



OWNER TO SUPPLY ADEQUATE HEAT IN ALL AREAS WHERE SPRINKLER PIPING MAY FREEZE.

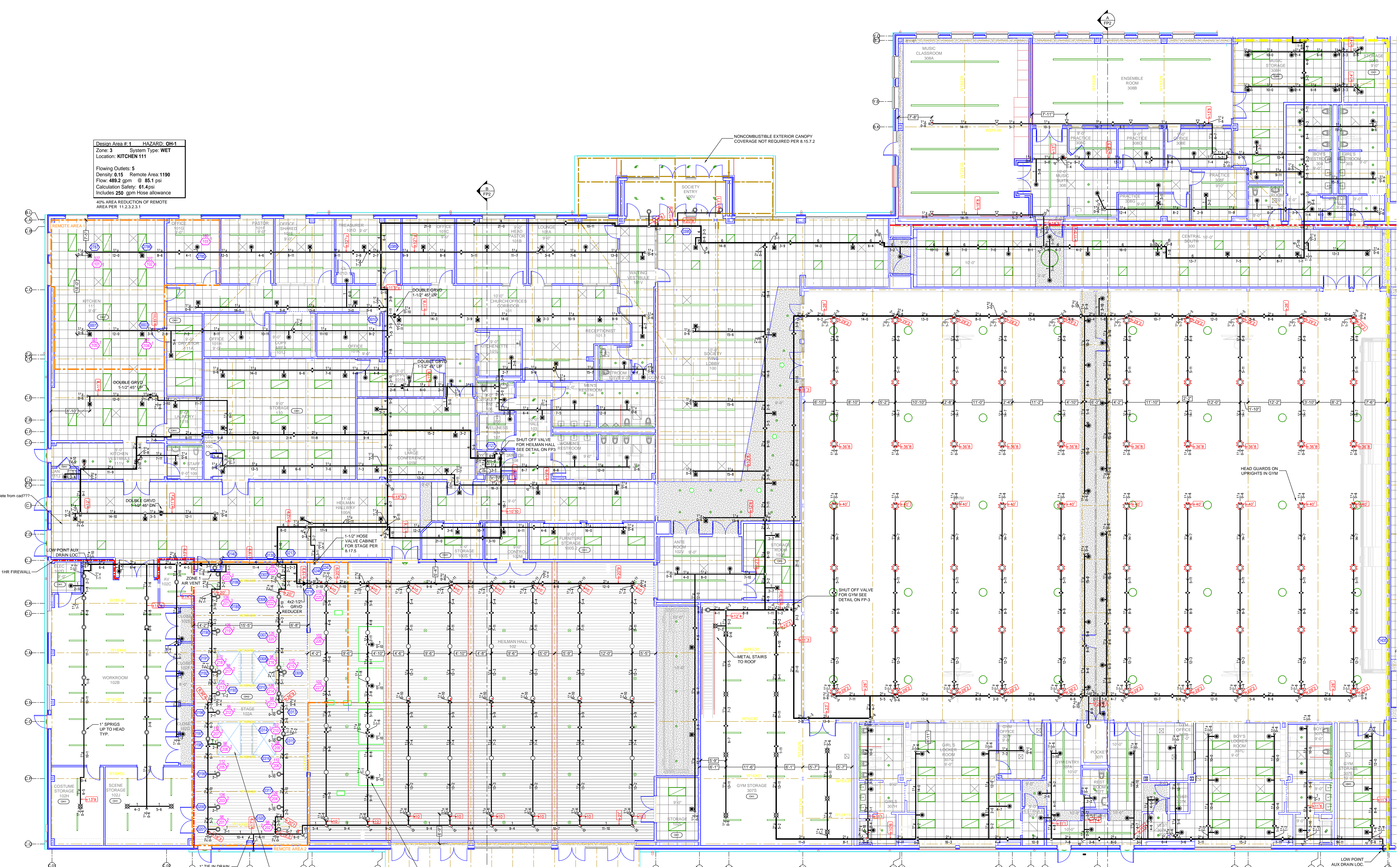
NO.		DATE		JOB NO.		REVISIONS		SYMBOL		MANUF.		MODEL		SIN		THREAD		K-FACT.		TEMP.		FINISH		ES/OUTEON.		TYPE		QTY.		DTC IN HEAD SIZE	
0	-	-	-	-	-	-	RELEASED FOR APPROVAL	○	RELIABLE	CS	RA3415	1/2"	5.60	200	BRASS	NONE	UPRIGHT	113	2												
○	RELIABLE	CS	RA4125	1/2"	5.60	200	BRASS	NONE	UPRIGHT	113	2																				
○	RELIABLE	W630	W630	3/4"	8.00	175	WHITE	WHITE G-1 TYPE	SIDEWALL	149	2																				
○	RELIABLE	J12	RA7328	3/4"	11.20	200	BRASS	NONE	UPROUT/SPRNG	14	2																				
○	RELIABLE	04-KLO	R7146	3/4"	11.20	165	BRASS	NONE	PENDENT	176	2																				
○	RELIABLE	FYR56	RA1425	1/2"	5.60	200	BRASS	NONE	UPROUT/SPRNG	90	2																				
○	RELIABLE	FYR56	RA1425	1/2"	5.60	200	BRASS	WHITE	SIDEWALL	11	2																				

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600 TOMLINSON RD
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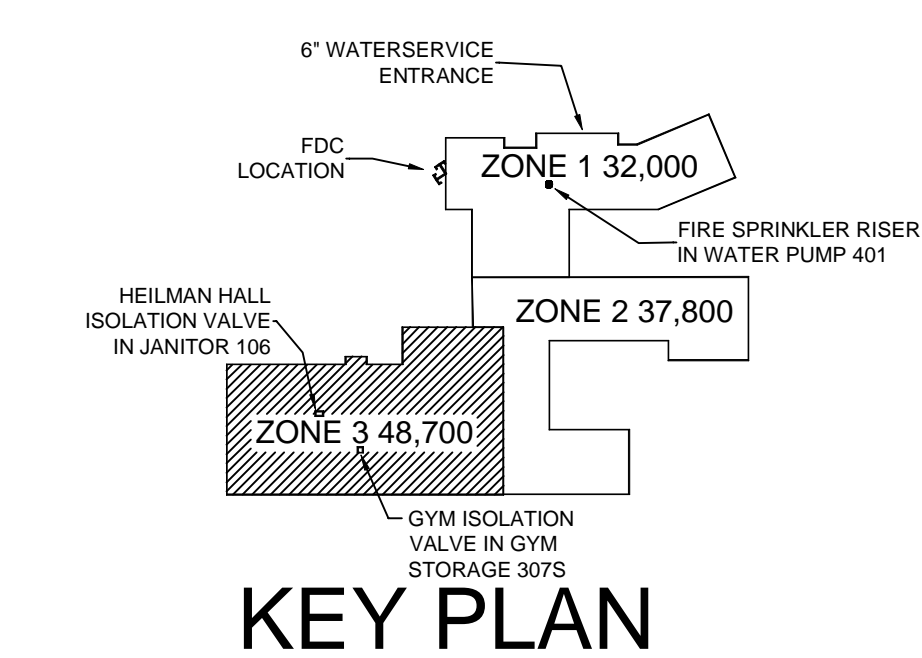
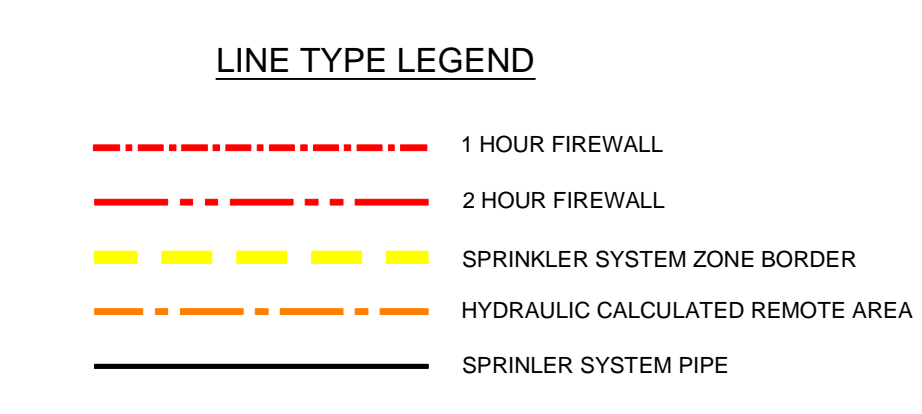
SCALE: 1/8" = 1'-0"
DATE: 04/01/2024
JOB NUMBER: ZONE 2
SHEET NO: FP- 2 of 3

Design Area #1 HAZARD: OH-1
 Zone: 3 System Type: WET
 Location: KITCHEN 111
 Flowing Outlets: 5
 Density: 0.15 Remote Area: 1190
 Flow: 489.2 gpm @ 85.1 psi
 Calculation Safety: 61.4 psi
 Includes 250 gpm hose allowance
 40% AREA REDUCTION OF REMOTE AREA PER 11.2.3.2.3.1

Design Area #2 HAZARD: OH-2
 Zone: 3 System Type: WET
 Location: STAGE 102A
 Flowing Outlets: 27
 Density: 0.20 Remote Area: 2020
 Flow: 999.1 gpm @ 132.4 psi
 Calculation Safety: 10 psi
 Includes 250 gpm hose allowance
 10% INCREASE IN REMOTE AREA FOR 3/12 SLOPED CEILING PER 11.2.3.2.4



ZONE 3 FIRE SPRINKLER PLAN
 SCALE = 1/8" = 1'-0"



HEILMAN HALL ISOLATION VALVE LEGEND

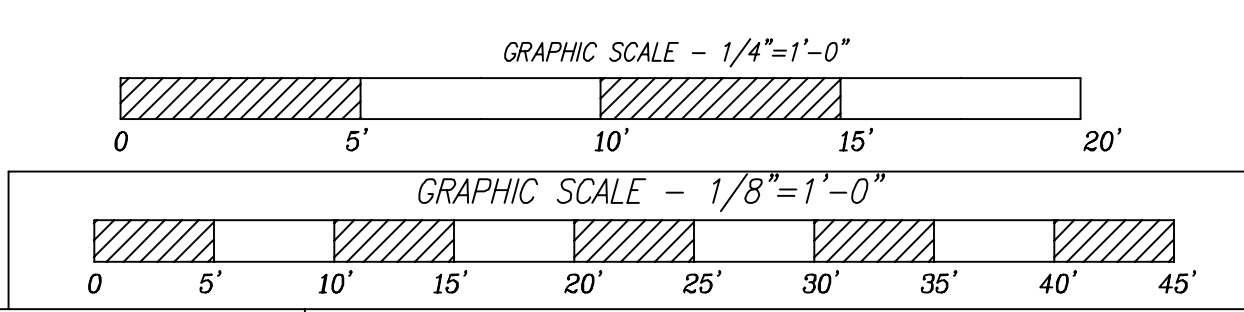
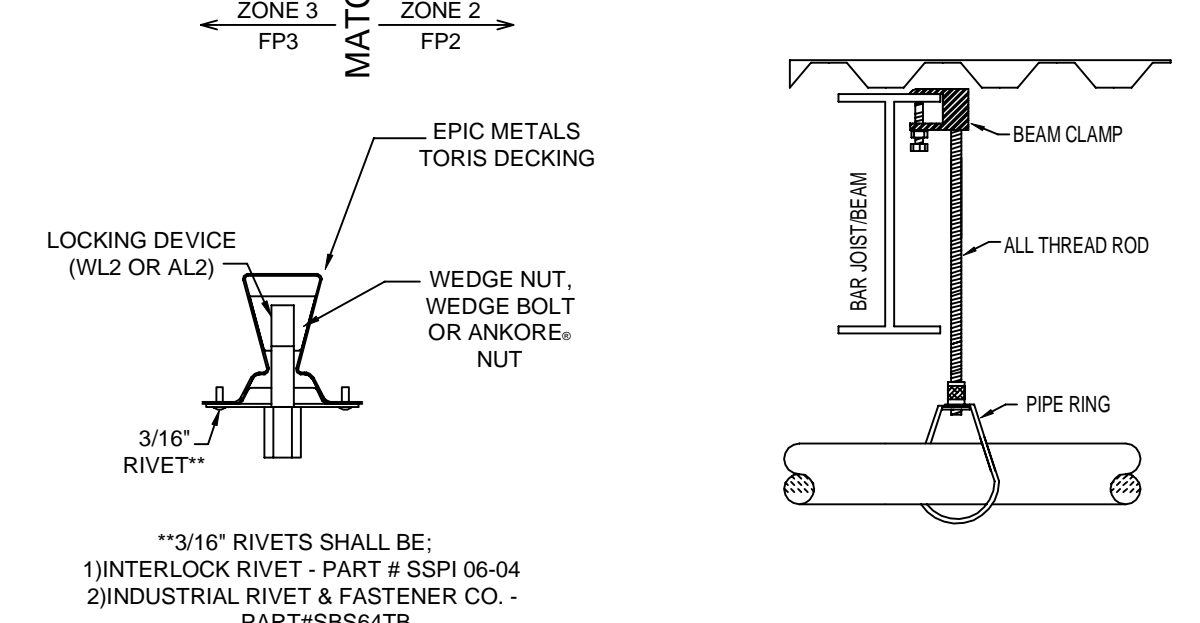
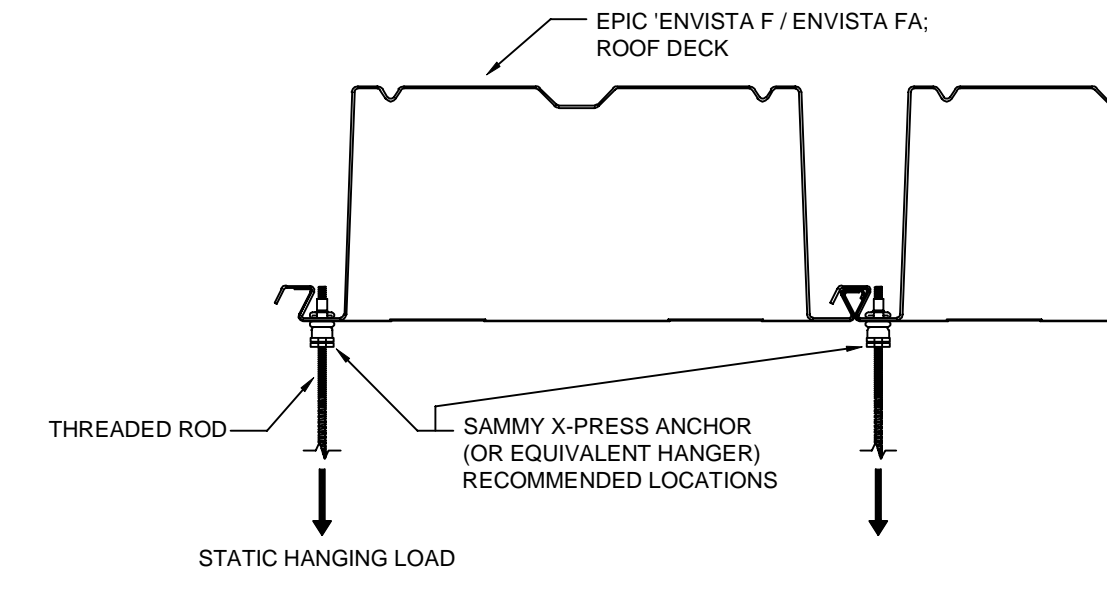
- 4" GROOVED SCHED 40 PIPE FROM ZONE 1
- 2-1/2" GROOVED DRINK 90 W/ DRAIN VALVE
- 2-1/2" GROOVED BUTTERFLY VALVE W/ TAMPER
- 4" GROOVED SCHED 10 PIPE TO HEILMAN HALL & STAGE

GYM ISOLATION VALVE LEGEND

- 2-1/2" GROOVED SCHED 10 PIPE FROM ZONE 1
- 2-1/2" GROOVED DRINK 90 W/ DRAIN VALVE
- 2-1/2" GROOVED BUTTERFLY VALVE W/ TAMPER
- 2-1/2" GROOVED TEE TO GYM

NFPA 13 STEEL PIPE HANGER SPACING

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



HANGER DETAILS

OWNER TO SUPPLY ADEQUATE HEAT IN ALL AREAS WHERE SPRINKLER PIPING MAY FREEZE.

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SPRINKLER LEGEND

SYMBOL	MANUF.	MODEL	SN	THREAD	K-FACT.	TEMP.	FINISH	ESCUTCHION	TYPE	QTY.	QTY IN BACKLOG
○	RELIABLE	FYR56	RA1425	1/2"	5.60	200	BRASS	NONE	UPRIGHT	113	2
○	RELIABLE	CS	RA3415	1/2"	5.60	212	WHITE	WHITE CONCEALED	PENDANT	345	2
○	WMK	WK30	WK30	3/4"	8.00	175	WHITE	WHITE G-1 TYPE	SIDWALL	149	2
○	RELIABLE	J12	RA7328	3/4"	11.20	200	BRASS	NONE	UPRIGHT/SPRNG	14	2
○	RELIABLE	GA-KLO	R7146	3/4"	11.20	165	BRASS	NONE	PENDANT	176	2
○	RELIABLE	FYR56	RA1425	1/2"	5.60	200	BRASS	NONE	UPRIGHT/SPRNG	90	2
○	RELIABLE	FYR56	RA1425	1/2"	5.60	200	BRASS	WHITE	SIDWALL	11	2

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 600 TOMLINSON RD
 BRYN ATHYN, PA 19009

SCALE: 1/8" = 1'-0"
 DESIGNED BY: A/M
 CHECKED BY: A/M
 DATE: 04/01/2024
 JOB NUMBER:
 SHEET NO.: FP-3 of 3