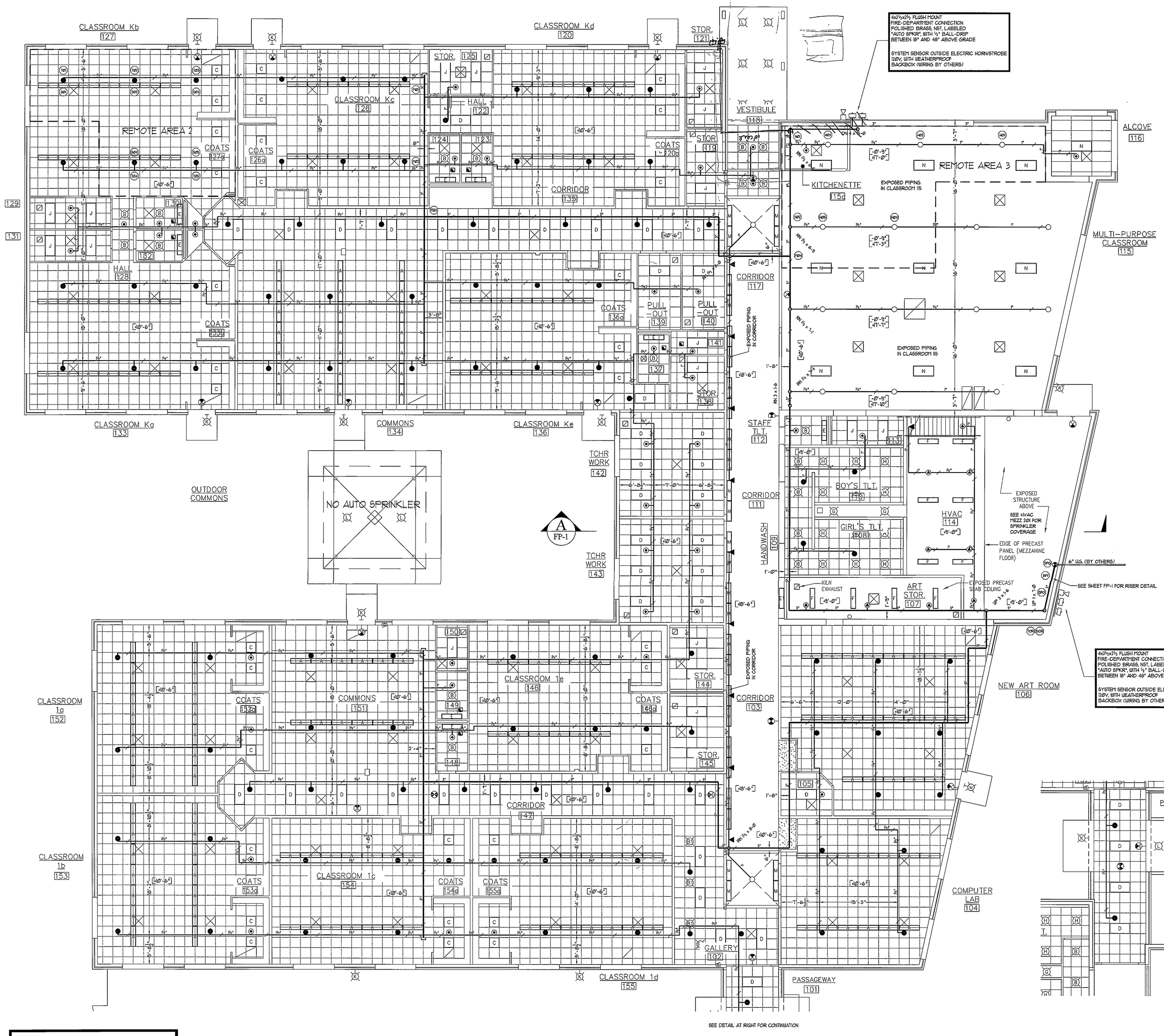

4x3½x2½ FLUSH MOUNT FIRE-DEPARTMENT CONNECTION POLISHED BRASS, NST, LABELED "AUTO SPKR", WITH ½" BALL-DRIP BETWEEN 18" AND 48" ABOVE GRADE

SYSTEM SENSOR OUTSIDE ELECTRIC HORN/STROBE DPV, WITH WEATHERPROOF BACKBOX (WIRING BY OTHERS)

4x3½x3½ FLUSH MOUNT FIRE-DEPARTMENT CONNECTION POLISHED BRASS, NST, LABELED "AUTO SPKR", WITH ½" BALL-DRIP BETWEEN 18" AND 48" ABOVE GRADE

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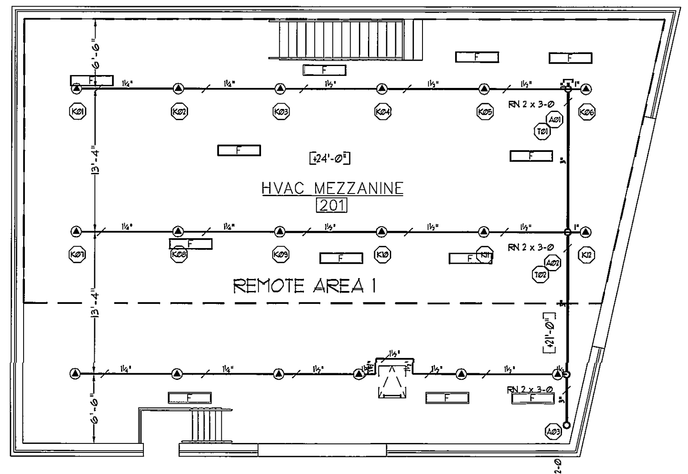
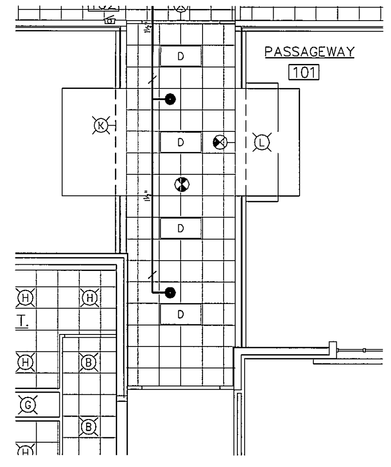




HYDRAULIC SYSTEM

This building is protected by a Hydraulically Designed Automatic Sprinkler System

JOB NO.	20003
BUILDING	LIBERTY ELEMENTARY SCHOOL
AREA	MECHANICAL RM 201 (AREA 1)
FLOW TEST	53 PSI STATIC 32 PSI RES. @ 950 GPM
BASIS OF DESIGN	NFPA 13, 1999 ED.
1. OCCUPANCY	MECHANICAL EQUIPMENT
2. COMMODITY CLASSIFICATION	ORDINARY GR I
3. MAX. STORAGE HT.	8 FT.
4. DENSITY GPM/SQ. FT.	.15 GPM/SQFT.
5. DESIGN AREA OF DISCHARGE SQ. FT.	1500 SQ. FT.
6. NO. OF FLOWING HEADS	12
SYSTEM DEMAND	
1. SYSTEM DISCHARGE	2525.1 GPM
2. RESIDUAL PRESSURE AT BOR	36.26 PSI
3. HOSE ALLOWANCE	250 GPM

F. E. MORAN Inc.
FIRE PROTECTION OF NORTHERN ILLINOIS
2128 SHERWOOD ROAD SUITE 10
NORTHBROOK, ILLINOIS 60062
ILLINOIS FIRE SPRINKLER CONTRACTOR LICENSE #FSC 0080 PHONE (847) 428-4870

FILE: 20003 Liberty Mech Rm Up.DXF

HYDRAULIC SYSTEM

This building is protected by a Hydraulically Designed Automatic Sprinkler System

JOB NO.	20003
BUILDING	LIBERTY ELEMENTARY SCHOOL
AREA	CLASS RM kb 127 (AREA 2)
FLOW TEST	53 PSI STATIC 32 PSI RES. @ 950 GPM
BASIS OF DESIGN	NFPA 13, 1999 ED.
1. OCCUPANCY	CLASSROOM
2. COMMODITY CLASSIFICATION	LIGHT HAZARD
3. MAX. STORAGE HT.	N/A
4. DENSITY GPM/SQ. FT.	.10 GPM/SQFT.
5. DESIGN AREA OF DISCHARGE SQ. FT.	1500 SQ. FT. **
6. NO. OF FLOWING HEADS	5
SYSTEM DEMAND	
1. SYSTEM DISCHARGE	1455 GPM
2. RESIDUAL PRESSURE AT BOR	38.51 PSI
3. HOSE ALLOWANCE	100 GPM

F. E. MORAN Inc.
FIRE PROTECTION OF NORTHERN ILLINOIS
2128 SHERWOOD ROAD SUITE 10
NORTHBROOK, ILLINOIS 60062
ILLINOIS FIRE SPRINKLER CONTRACTOR LICENSE #FSC 0080 PHONE (847) 428-4870

FILE: 20003 Liberty Ext Cov Up.DXF
** REMOTE AREA HAS BEEN REDUCED TO 1500 SQ. FT DUE TO THE USE OF QUICK RESPONSE SPRINKLERS

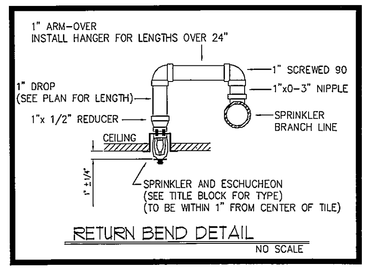
HYDRAULIC SYSTEM

This building is protected by a Hydraulically Designed Automatic Sprinkler System

JOB NO.	20003
BUILDING	LIBERTY ELEMENTARY SCHOOL
AREA	CLASSROOM 115 (AREA 3)
FLOW TEST	53 PSI STATIC 32 PSI RES. @ 950 GPM
BASIS OF DESIGN	NFPA 13, 1999 ED.
1. OCCUPANCY	CLASSROOM
2. COMMODITY CLASSIFICATION	LIGHT HAZARD
3. MAX. STORAGE HT.	8 FT.
4. DENSITY GPM/SQ. FT.	.10 GPM/SQFT.
5. DESIGN AREA OF DISCHARGE SQ. FT.	1500 SQ. FT. **
6. NO. OF FLOWING HEADS	9
SYSTEM DEMAND	
1. SYSTEM DISCHARGE	2073.0 GPM
2. RESIDUAL PRESSURE AT BOR	37.63 PSI
3. HOSE ALLOWANCE	100 GPM

F. E. MORAN Inc.
FIRE PROTECTION OF NORTHERN ILLINOIS
2128 SHERWOOD ROAD SUITE 10
NORTHBROOK, ILLINOIS 60062
ILLINOIS FIRE SPRINKLER CONTRACTOR LICENSE #FSC 0080 PHONE (847) 428-4870

FILE: 20003 Liberty Ext Cov Up.DXF
** REMOTE AREA HAS BEEN REDUCED TO 1056 SQ. FT DUE TO THE USE OF QUICK RESPONSE SPRINKLERS



RETURN BEND DETAIL
NO SCALE

FIRE SPRINKLER PIPING PLAN

SCALE 1/8"=1'-0"

INDIANA PROJECT #342662

Legend

- "XX" = BELOW DECK
- XX.XX = ABOVE FINISH FLOOR
- NEW FIRE SPRINKLER PIPING
- EXISTING PIPING
- EXPRESS RISER / STAND PIPE
- FLOOR / SYSTEM RISER
- CENTER OF TILE ■ YES ☐ NO

Revisions

	BY	DATE
1 Submittal	SCR	11-24-09

Sprinkler Legend

Heads Rated for 175 pts Working Pressures

Sym	Mfr.	Model	SIN #	Style	Position	Finish	K-=	Thread	Temp	Escut Part #	Temp.	Finish	Qty. This Sym	Qty. TOTAL
●	RELIABLE	G4A/G4AQ	R4441	CONCEALED	PENDANT	BRASS	11.2	3/4"	165-5°	N/A	135-5°	LIGHT WHITE	1021	1021
⊖	RELIABLE	G4A	R3415	CONCEALED	PENDANT	BRASS	5.6	1/2"	165-5°	N/A	135-5°	LIGHT WHITE	Ø42	Ø42
⊕	RELIABLE	F1FR	R2435	EXPOSED	UPRIGHT	BRASS	5.6	1/2"	155-5°	N/A	N/A	N/A	Ø27	Ø27
○	RELIABLE	J112	RA 1306	EXPOSED	UPRIGHT	BRASS	11.2	3/4"	155-5°	N/A	N/A	N/A	Ø16	Ø16
◀	RELIABLE	F1FR	R2635	EXPOSED	SIDEWALL	BRASS	5.6	1/2"	155-5°	N/A	N/A	N/A	Ø10	Ø10
												Total Sprinklers	196	196

FIRE SPRINKLER PLAN

Contract No.	20003
Drawn By:	G. COX
Scale:	AS NOTED
Date:	11-24-09
Checked By	R. ORANGE
Project manager	R. ORANGE
Contract with	LAKE PLUMBING

F. E. MORAN Inc.
FIRE PROTECTION OF NORTHERN INDIANA
1950 N. GRIFFITH BLVD SUITE E
GRIFFITH, IN 46319-1042
ILLINOIS FIRE SPRINKLER CONTRACTOR LICENSE #FSC 0080 PHONE (219) 923-2352

PROJECT: LIBERTY ELEMENTARY SCHOOL
50-1 W. COUNTY ROAD 900 N.
CHESTERTON IN 46304

FP-2

of 2

04-FP-02