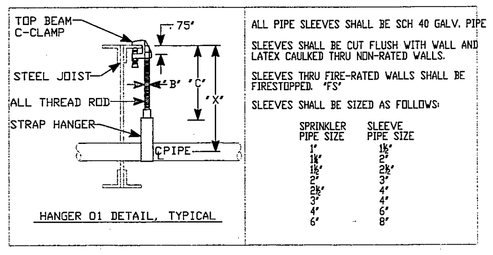
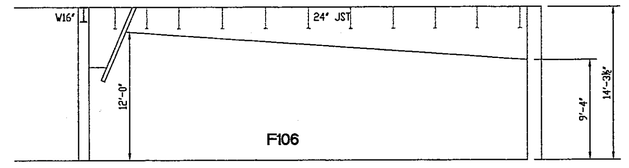
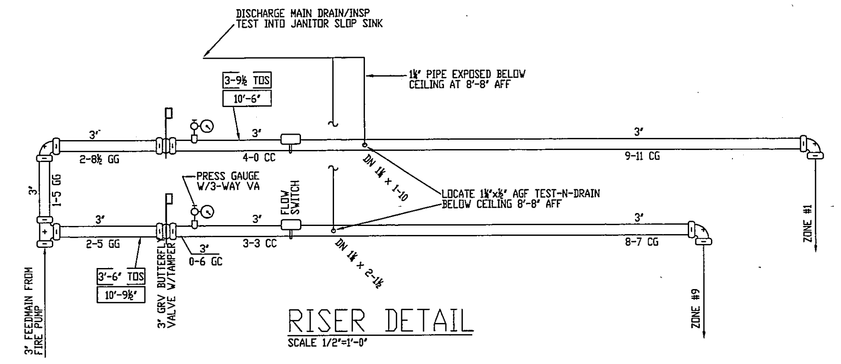




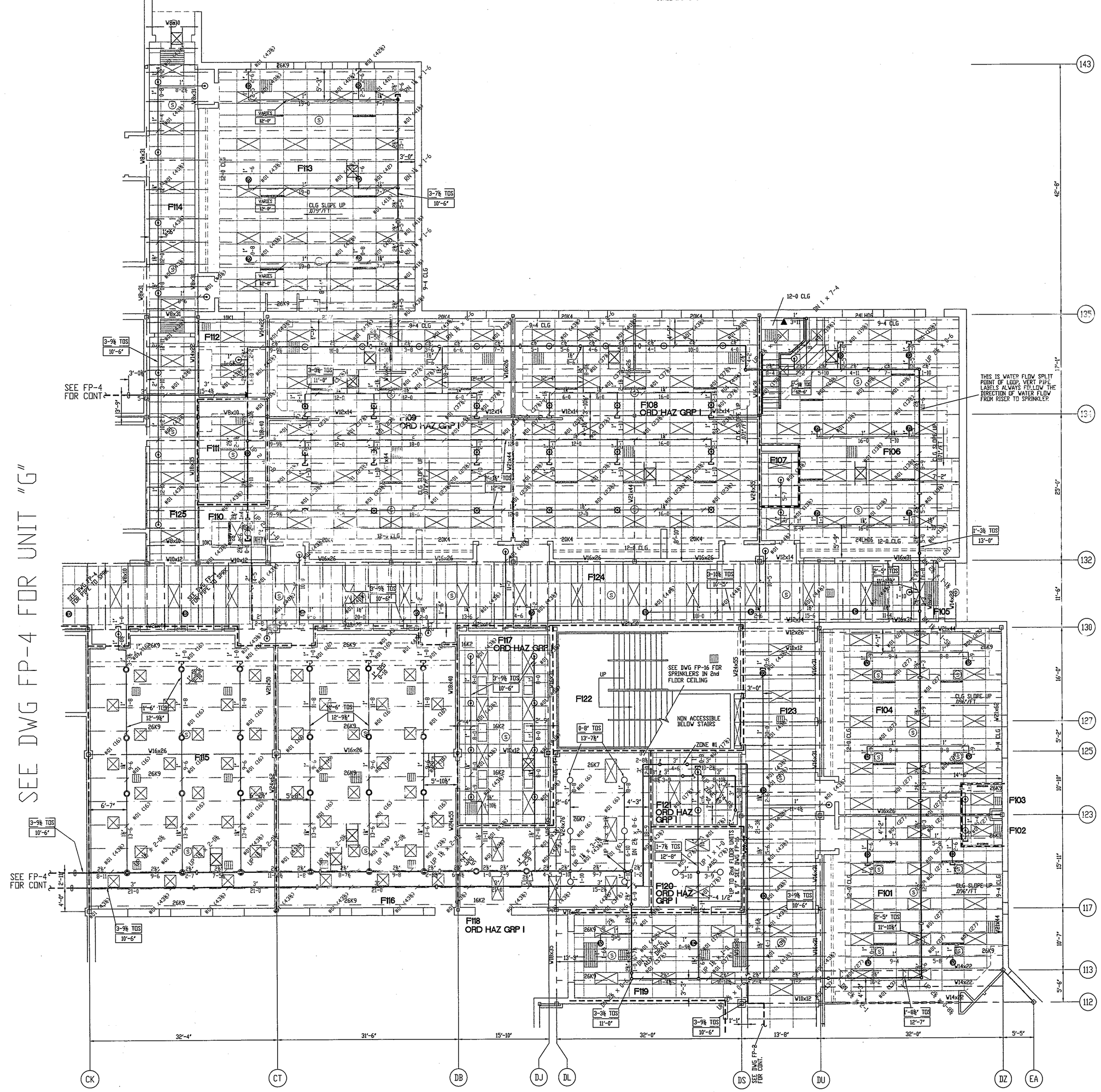
TYPICAL CLASSROOM SECTION

SCALE 1/8"=1'-0"



RISER DETAIL

SCALE 1/2"=1'-0"



STANDARD UPRIGHT AND PENDENT SPRINKLERS SPACING GUIDELINES

Maximum sprinkler protection areas shall be spaced in accordance with N.F.P.A.13, 4-2.

LIGHT HAZARD

Standard coverage sprinklers

Sprinkler spacing shall not exceed 225 square feet for calculated systems under unobstructed construction and non-combustible obstructed construction.

The maximum distance between sprinklers in light hazard occupancies shall be 15 feet. The distance from sprinklers to walls shall not exceed 1/2 of the allowable distance between sprinklers. Sprinklers shall be at least 4 inches from a wall.

Within Small Rooms (rooms of light hazard occupancy classification having unobstructed construction and floor areas not exceeding 800 square feet), sprinklers are permitted to be located not more than 9'-0" from any single wall.

Extended coverage sprinklers

Listed extended coverage sprinklers are utilized using either 16'x16', 18'x18', or 20'x20' coverage areas.

Sprinklers are designed so that partial coverage is rounded to the next higher coverage area (i.e. 17'x17' = 18'x18').

Extended coverage sprinklers shall be located as shown on the drawings so that proper coverage areas are maintained.

ORDINARY HAZARD

Standard coverage sprinklers

Sprinkler spacing shall not exceed 130 square feet under any type of construction.

The maximum distance between sprinklers in ordinary hazard occupancies shall be 15 feet. The distance from sprinklers to walls shall not exceed 1/2 of the allowable distance between sprinklers. Sprinklers shall be at least 4 inches from a wall.

Extended coverage sprinklers

Listed extended coverage sprinklers are utilized using either 16'x16', 18'x18', or 20'x20' coverage areas.

Sprinklers are designed so that partial coverage is rounded to the next higher coverage area (i.e. 17'x17' = 18'x18').

Extended coverage sprinklers shall be located as shown on the drawings so that proper coverage areas are maintained.

GENERAL NOTES, PER STATE OF INDIANA FOR THIS ENTIRE PROJECT

This building will be used as a high school for Duneland School Corp.

System design is per NFPA #13, Standard for the Installation of Sprinkler Systems, 1989 Edition.

This building is classified at Light Hazard unless noted otherwise. Density/Area=.10 gpm/1500 sq ft.

Portions of the building/occupancy are classified Ordinary Hazard Group 1, as noted on the plans. Density/Area=.15 gpm/1500 sq ft. These areas are not designed for any storage.

Portions of the building/occupancy are classified Ordinary Hazard Group 2, as noted on the plans. Density/Area=.21 gpm/1500 sq ft. These areas are not designed for any storage.

INSTALLATION

All work and material shall conform to NFPA #13, 1989, Insurance company requirements, and all local and state rules-regulations.

All materials, where applicable, shall be U.L. listed and Factory Mutual approved for use in automatic sprinkler systems.

All new piping shall be hydrostatically tested for two hours in accordance with NFPA #13, 1-1.2.1. Minimum hydrostatic test pressure shall be 200 PSI.

All pipe shall be supported from the building structure utilizing hangers, materials, and methods per NFPA #13, 3-10.

Wet system piping shall be installed level to drain back to the system riser, in accordance with NFPA #13, 3-6.1.2. Trapped sections of piping shall have auxiliary drain connections in accordance with 3-6.3.2.

Pendent sprinklers in ceilings shall be installed on straight drops with no swings (not centered in tiles). Sprinklers have been designed to be near the center or quarter points of the proposed ceiling tile layout. Exact location of sprinklers in tiles will depend upon actual installed location of the grid.

Unless noted otherwise, pipe lengths shown are center-center. Unless noted otherwise, hanger lengths shown are cut-length.

Electric alarm devices and supervisory devices for the monitoring of the sprinkler system shall be installed by Shambaugh & Son. All wiring of the devices is the responsibility of others.

PIPE

Feedman piping shall be black steel lightwall, 'Allied SuperFlo', manufactured to ASTM A 795, TYPE E, Grade A standards.

Branchline piping shall be black steel schedule 40 pipe, manufactured to ASTM-A135 standards.

Riser nipples and starter pieces shall be black steel schedule 40 pipe, manufactured to ASTM-A135 standards.

Mains shall be black steel Schedule 10 pipe, manufactured to ASTM-A135 standards.

FITTINGS

Line screwed fittings shall be Cast Iron threaded, Class 125 (standard), manufactured per ANSI B16.4, UL listed for fire protection to 175 PSI.

Outlets on mains for lines shall be welded branch outlet fittings, Merit Weld Miser Tee-Let, UL/FM approved to 300 PSI for fire protection.

Grooved couplings shall be Victaulic 'FireLock' rigid couplings, UL/FM approved to 175 PSI for fire protection service. Gaskets shall be "Grade E (Type A)" EPDM rubber compound, rated at -30°F to +230°F.

Grooved fittings shall be Victaulic 'FireLock' fittings, UL/FM approved to 175 PSI for fire protection service.

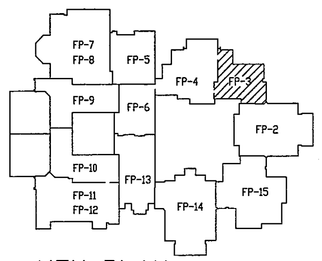
Flanged fittings, where used, shall be Cast Iron, Class 125 (standard), manufactured per ANSI B16.1 and marked 125. Flanges are faced and drilled American National Standard UL listed for fire protection to 175 PSI.

DRYWALL SOFFITS OVER DOORS ARE 8'-8" AFF U.N.O.

TOP OF STEEL 14'-3½" AFF U.N.O.

ROOM LEGEND "F1"

ROOM NO.	ROOM NAME	AREA S.F.	CEILING HEIGHT	
F101	CLASSROOM	923	VARIES	FOR.LANG.
F102	RECORDING	33	9'-4"	
F103	RECORDING	33	9'-4"	
F104	CLASSROOM	935	VARIES	FOR.LANG.
F105	VESTIBULE	80	9'-4"	
F106	CHILD DEVELOPEMENT	1334	VARIES	
F107	TOILET	57	9'-4"	
F108	FOOD LAB	1685	VARIES	
F109	FOOD LAB	1685	VARIES	
F110	PANTRY	104	9'-4"	
F111	OFFICE	196	9'-4"	HOME EC
F112	STORAGE	151	9'-4"	
F113	CLOTHES LAB	1496	VARIES	
F114	CORRIDOR	397	10'-0"	
F115	COMMERCIAL LAB	1447	----	
F116	PHOTOGRAPHY	1409	----	
F117	DARKROOM	509	9'-4"	
F118	YARD STORAGE	658	----	
F119	CORRIDOR	420	10'-0"	
F120	ELECTRICAL	202	----	
F121	JANITOR	185	9'-4"	
F122	STAIR	515	----	
F123	CORRIDOR	820	10'-0"	
F124	CORRIDOR	1448	10'-0"	
F125	CORRIDOR	313	10'-0"	



KEY PLAN

NO SCALE

UNIT "G" = 26,664 SQ FT
UNIT "F" = 18,892 SQ FT
TOTAL ZONE 2 = 45,556 SQ FT

S&S
FIRE PROTECTION DIVISION
SHAMBAUGH & SON, INC.
CONTRACTORS – ENGINEERS
7614 OPPORTUNITY DRIVE, FORT WAYNE INDIANA 46825
PHONE (219) 482-7777 FAX 482-7801
70 YEARS OF EXCELLENCE

SPRINKLERS

SYMBOL	VIKING STD RESP	VIKING STD RESP	VIKING STD RESP
NAME	VIKING STD COV	VIKING STD COV	VIKING STD PEND
MODEL	HF SSS WH PEND	HF SSS WH PEND	RECESS WHT PEND
TYPE	RECESS WHT	RECESS WHT	1/2"
SIZE	1/2"	1/2"	155° F
K TEMP.	155° F	155° F	8
QTY.	42	8	

SYMBOL	VIKING STD RESP	VIKING STD RESP	VIKING STD RESP
NAME	VIKING STD RESP	VIKING STD PEND	VIKING STD PEND
MODEL	HF SSS WH PEND	RECESS WHT PEND	RECESS WHT PEND
TYPE	RECESS WHT PEND	1/2"	5/8"
SIZE	17/32"	155° F	155° F
K TEMP.	155° F	8	
QTY.	32		18

WATER DEMAND

FSY	SEE PLAN
GPM	SEE PLAN
PT	SEE PLAN

PIPE SCHEDULE

LIGHT HAZ	
SCHED.	10
ORDINARY GP. 1	
SCHEDULE	40

DESIGN ☒ HYD. CALC. ☐ PIPE SCHEDULE

DENSITY .10 HAZARD CLASS LIGHT HAZ
AREA 1500 OCCUPANCY SCHOOL
DENSITY .15 HAZARD CLASS ORDINARY GP. 1
AREA 1500 OCCUPANCY SCHOOL
HOSE 100 GPM HOSE ALLOW. 0 HOSE 100 GPM RACK ALLOW. 0

BUILDING CONSTRUCTION TYPE
☒ NON-COMBUSTIBLE
☐ COMBUSTIBLE
TOTAL SQ. FT. 514,059
BLDG. HGT. 32'

☐-2 ☐ 6" PIPE BELOW DECK
☐-6 ☐ 6" PIPE ABOVE FLOOR
HANGER W/ROD LENGTH
TRAPEZE LOCATION
HYDRAULIC REF POINT

Chesterton High School

2125 South Eleventh St.
Chesterton, IN 46304

PROJECT NAME:

NO.	DATE	REVISION	BY
6	-	-	-
5	-	-	-
4	-	-	-
3	-	-	-
2	-	-	-
1	051800	RECORD DRAWING	AZ

FIRE PROTECTION:

ZONE #2
AREA F1
FIRE PROTECTION

DRAWN BY Alan Zimmerman	CHECKED BY
SCALE 1/8"=1'-0"	DATE 10-1-97
SPKRS. THIS SHEET 100	TOTAL SPKRS. THIS JOB
STATE PROJECT NUMBER 240902	
APPROVAL AGENCIES ISFM, LOCAL FM, ARCHITECT	
JOB NO. 231893	
SHEET NO FP-3	

CAD DWG 231893-3.DWG

97-FP-03