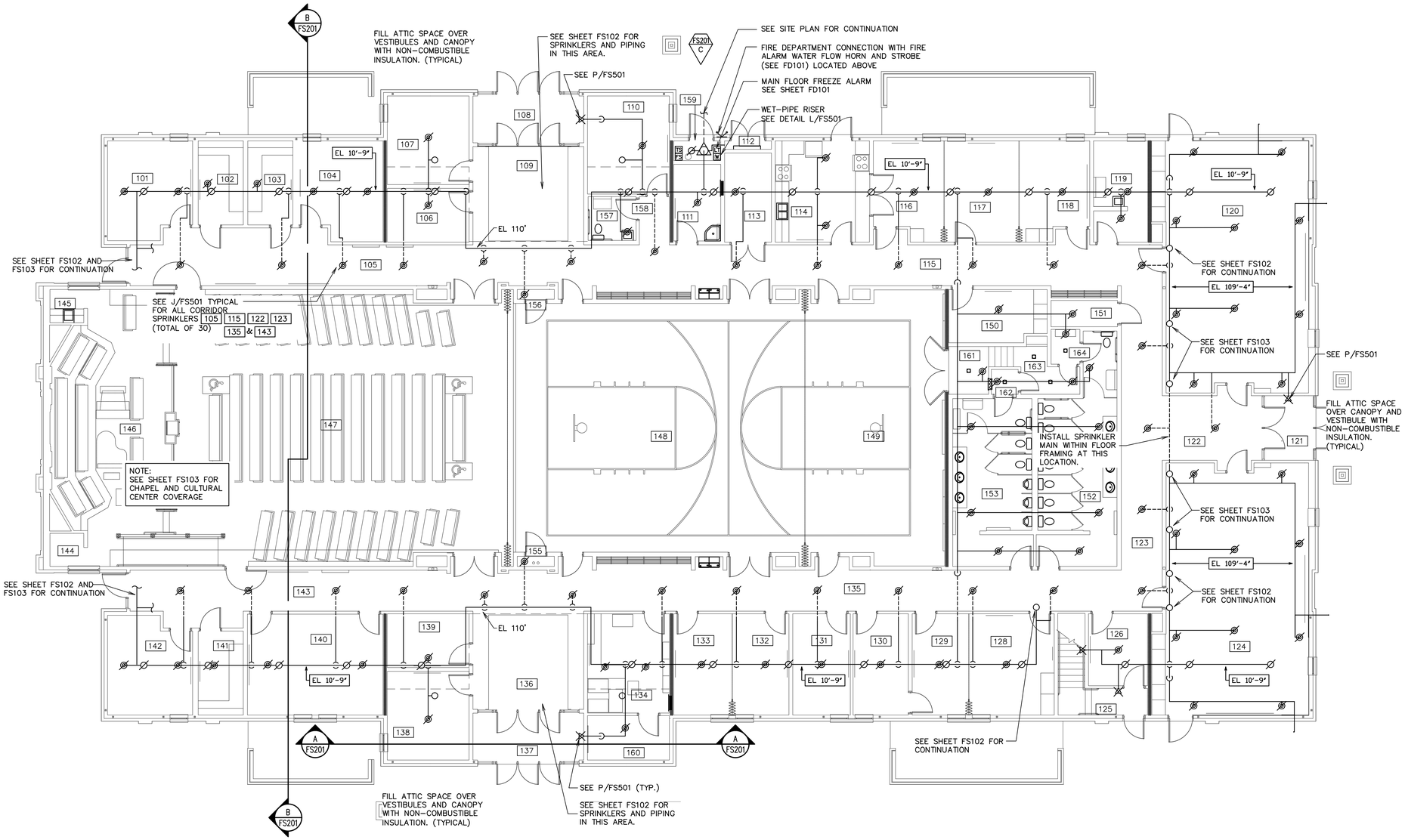

MAIN FLOOR FIRE SPRINKLER PLAN

1/8" = 1'-0" — TOP OF FLOOR = ELEVATION 100'-0"

GENERAL NOTES

1. INSTALL FIRE PROTECTION PIPING AS SHOWN, WET-PIPE SYSTEM THROUGHOUT ALL AREAS OF THE BUILDING.
2. USE DRY-BARREL TYPE SPRINKLERS IN CANOPIES AND VESTIBULES WHEN SUPPLIED FROM WET SYSTEM.
3. OBTAIN APPROVAL FOR PIPING CHANGES FROM ARCHITECT AND ENGINEER.
4. RUN PIPING LEVEL OR SLOPED TO DRAIN AS DESIGNATED IN NFPA 13.
5. THE FIRE SPRINKLER SYSTEM SHALL BE DESIGNED PER THE REQUIREMENTS OF NFPA 13, LIGHT HAZARD FOR THE MAIN LEVEL AND ATTIC WITH THE EXCEPTION OF THE SERVING AREA, MECHANICAL, ELECTRICAL AND JANITOR AREAS WHICH SHALL BE DESIGNED AS ORDINARY HAZARD GROUP 1, AND THE PLATFORM THAT WILL BE DESIGNED AS ORDINARY HAZARD GROUP 2.
6. MAXIMUM SPRINKLER HEAD SPACING: LIGHT HAZARD AREAS: 225 SQ. FT. ORDINARY HAZARD AREAS: 130 SQ. FT. ATTIC AREAS: 120 SQ. FT. PER HEAD.
7. SEE SITE PLAN FOR UTILITY CONNECTION AND LOCATION OF FIRE HYDRANTS AND POST INDICATING VALVE, IF REQUIRED.
8. DO NOT ROUTE PIPING THRU STRUCTURAL MEMBERS OR MECHANICAL DUCT WORK EXCEPT AS SHOWN ON THE DRAWINGS.
9. SEE REFLECTED CEILING PLAN FOR EXACT LOCATION OF SPRINKLER HEADS. SPRINKLER HEADS DO NOT HAVE TO BE CENTERED IN THE ONE FOOT ACOUSTICAL TILES.
10. COORDINATE WITH FRAMER FOR SHEAR-WALL PENETRATIONS.
11. ALL SPRINKLERS SHALL BE QUICK-RESPONSE TYPE.
12. ALL WET-PIPE SYSTEM COMPONENTS (EXCEPT DRY SPRINKLERS) SHALL BE INSIDE THE BUILDING INSULATION ENVELOPE.
13. ALL REQUIRED DRAINS SHALL FOLLOW NFPA 13 REQUIREMENTS. DRAIN VALVES SHALL BE LOCATED TO PREVENT PUBLIC ACCESS AND SHALL BE PIPED TO DISCHARGE OUTSIDE THE BUILDING.
14. PROVIDE FIRE SPRINKLERS UNDER CANOPIES, STAIRS, AND ROSTRUM ONLY IF REQUIRED BY THE LOCAL FIRE MARSHAL.

FIRE SPRINKLER LEGEND

⌀	UPRIGHT HEAD ON LINE	P	PRESSURE GAUGE
⌀	CONCEALED PENDENT HEAD	LT	LOW TEMPERATURE SENSOR PROVIDED BY DIVISION 28
⌀	CONCEALED DRY PENDENT HEAD	TS	VALVE TAMPER SWITCH
	SIDE DICHARGE ATTIC HEAD	FS	FLOW SWITCH
	DRY SIDEWALL HEAD RECESSED		FLEXIBLE COUPLING
	DRY SIDEWALL HEAD		SWAY BRACING
	SIDEWALL HEAD RECESSED		ANGLE VALVE
	SIDEWALL HEAD		PIPE SUPPORT
⌀	TYCO MODEL AP ATTIC UPRIGHT HEAD		SPRINKLER PIPING
IT	INSPECTOR'S TEST VALVE		FIRE DEP. CONNECTION
	BALL VALVE 2" & SMALLER BUTTERFLY VALVE 2 1/2" & LARGER		PIPE IN FLOOR STRUCTURE
	PIPE UP / PIPE DOWN		

HEAD COUNT

SPRINKLERS	K-FACTOR	ORIFICE	FINISH	TYPE	CANOPY	DEGREE	QUANTITY
⌀	5.6	1/2"	WHITE	WET PENDENT	CONCEALED	155	
⌀	5.6	1/2"	BRONZE	UPRIGHT	N/A	212	
⌀	5.6	1/2"	WHITE	DRY PENDENT	CONCEALED	155	
	5.6	1/2"	BRONZE	ATTIC SIDEWALL	N/A	212	
	5.6	1/2"	WHITE	DRY SIDEWALL	RECESSED	155	
E				(E=EXTENDED COVERAGE)			
	5.6	1/2"	WHITE	WET SIDEWALL	RECESSED	155	
	5.6	1/2"	BRONZE	WET SIDEWALL	N/A	212	
	5.6	1/2"	BRONZE	DRY SIDEWALL	N/A	212	
⌀	5.6	1/2"	BRONZE	ATTIC AP UPRIGHT		212	

HYDRAULIC DESIGN INFORMATION FOR OFFICE SPRINKLERS

REMOTE AREA = 10,378 SQUARE FEET
DENSITY = _____ GPM/SQUARE FEET
RISER BASE _____ GPM _____ PSI

HYDRAULIC DESIGN INFORMATION FOR UPPER LEVEL SPRINKLERS

REMOTE AREA = 2747 SQUARE FEET
DENSITY = _____ GPM/SQUARE FEET
RISER BASE _____ GPM _____ PSI

HYDRAULIC DESIGN INFORMATION FOR ATTIC SPRINKLERS

REMOTE AREA = 15,978 SQUARE FEET
DENSITY = _____ GPM/SQUARE FEET
RISER BASE _____ GPM _____ PSI

HYDRAULIC DESIGN INFORMATION FOR CHAPEL SPRINKLERS

REMOTE AREA = 2682 SQUARE FEET
DENSITY = _____ GPM/SQUARE FEET
RISER BASE _____ GPM _____ PSI

WATER FLOW TEST

TEST DATE: 7-10-2009 TEST TIME: 1:30 pm
STATIC: 108 psi PILOT PRESS: 79 psi
FLOW: 1490 LOCATION: Intersection of Trail Creek & 54th street
TEST BY: J.S. & C.K.

ORIGINAL DRAWING SIGNED BY: DWAYNE C. SUDWEEKS
DATE ORIGINAL SIGNED: Sep 01, 2016
ORIGINAL ON FILE AT ENGINEERED SYSTEMS ASSOCIATES
1355 EAST CENTER, POCATELLO, IDAHO 83201

MONTANA PROFESSIONAL ENGINEER — DWAYNE C. SUDWEEKS 15043

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Stamp:

Billings Sweet Grass Creek Heritage 98
Billings Montana Stake
2620 54th Street W.
Billings Montana 59106

Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

Mark	Date	Description

Project Number: 15047
Plan Series: HER-TRA-98-20
Property Number: 501-1850

Sheet Title: MAIN LEVEL FIRE SPRINKLER PLAN

Sheet: FS101

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