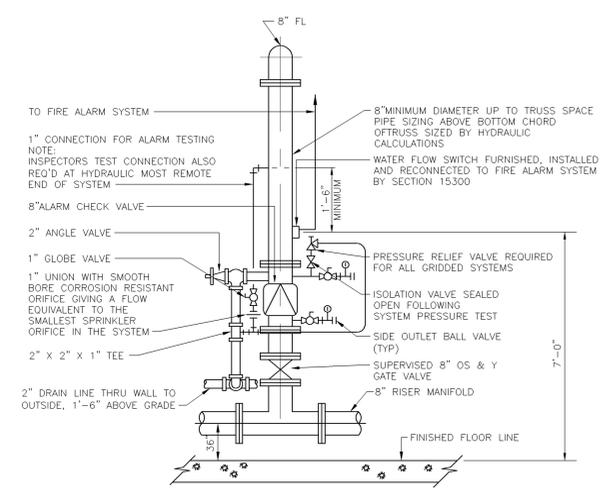
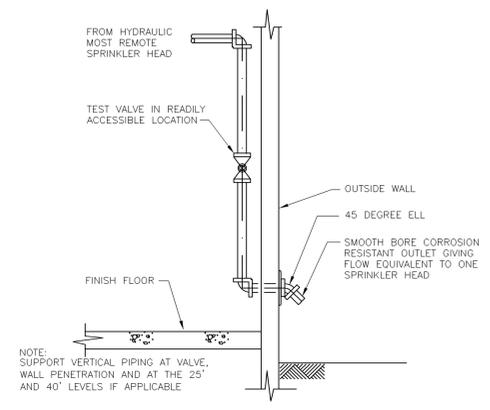


Date (mm dd yyyy)	Issued For	Rev.
09-21-2007	TITLE 1 60% REVIEW	A
10-24-2007	TITLE 1 100% COMPLETE	B
12-07-2007	TITLE II DESIGN 30% REVIEW SUBMITTAL	C
03-28-2008	TITLE II DESIGN 60% REVIEW SUBMITTAL	D
07-31-2008	TITLE II DESIGN 90% REVIEW SUBMITTAL	E
08-25-2008	TITLE II DESIGN 100% OWNER REVIEW	F
02-19-2009	TITLE II CONSTRUCTION BID ISSUE	G



500A AUTOMATIC SPRINKLER RISER DETAIL WITH ALARM CHECK VALVE  
M-500 NO SCALE



500B INSPECTOR'S TEST CONNECTION (WET)  
M-500 NO SCALE

**FIRE PROTECTION NOTES:**

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR A COMPLETE IN PLACE OPERATING SPRINKLER SYSTEM. WORK SHALL INCLUDE ENGINEERING, DESIGN, COORDINATION WITH OTHER TRADES, AND PAINTING. THE INSTALLATION SHALL MEET THE REQUIREMENTS OF BUILDING CODE OF NEW YORK STATE, DEPARTMENT OF ENERGY (DOE), LOCAL AUTHORITY HAVING JURISDICTION, REQUIREMENTS OF FM GLOBAL PROPERTY LOSS PREVENTION DATA SHEETS AND NFPA.
- PROVIDE AUTOMATIC SPRINKLERS BELOW ALL INTERFERENCES GREATER THAN 48" WIDE, INCLUDING STAIRWAYS FROM ELEVATED STRUCTURES.
- HYDRAULIC CALCULATIONS SHALL BE BASED ON THE FOLLOWING WATER SUPPLY AT THE POINT OF CONNECTION TO THE EXISTING 10 INCH WATER MAIN WITH A 10 PSI CUSHION.  
STATIC PRESSURE = 65 PSI  
RESIDUAL PRESSURE = 20 PSI  
FLOW = 3445 GPM.
- FURNISH & INSTALL FIRE EXTINGUISHERS FE-1 THROUGHOUT PIPE TUNNEL AND OPERATING FLOOR LEVEL. FIRE EXTINGUISHER LOCATIONS SHALL BE COORDINATED WITH THE PROCESS LAYOUT AND THE OWNER'S REPRESENTATIVE. FIRE EXTINGUISHERS SHALL BE:  
10-POUND ABC MULTI-PURPOSE DRY CHEMICAL, UL RATED 4A:60B:C, 75-FT TRAVEL DISTANCE, AMEREX MODEL B441 WITH METAL HEAD
- FURNISH AND INSTALL FIRE EXTINGUISHERS FE-2 THROUGHOUT ELECTRICAL MEZZANINE. FIRE EXTINGUISHER LOCATIONS SHALL BE COORDINATED WITH THE ELECTRICAL EQUIPMENT LAYOUT AND OWNER'S REPRESENTATIVE. FIRE EXTINGUISHERS SHALL BE 15-POUND CO2, UL RATED 10B, C, 75-FT TRAVEL DISTANCE, A METES MODEL 331 SEE DRAWING MH-102.
- PROVIDE A HYDRAULICALLY DESIGNED WET PIPE AUTOMATIC SPRINKLER SYSTEM THROUGHOUT BASED ON ORDINARY HAZARD OCCUPANCY, GROUP 1 DENSITY 0.15 GPM PER SQ FT, 2500 SQ FT AREA OF APPLICATION, STANDARD COVERAGE UPRIGHT AND STANDARD RECESSED SPRINKLER K-5.6, PROTECTION AREA 130 SQ FT, MAXIMUM SPACING 15 FT, MINIMUM SPACING 8 FT, TEMPERATURE RATING 165F. PROVIDE A HOSE STREAM ALLOWANCE OF 250 GPM FOR A DURATION OF 2 HOURS.
- LOCATION OF FIRE HOSE OUTLETS SHOWN FOR BIDDING PURPOSES ONLY. THE HOSE OUTLETS MAY BE RELOCATED DURING CONSTRUCTION TO SUIT FINALIZED PROCESS LAYOUT. THE CONTRACTOR SHALL CONSIDER THIS IN HIS BID PROPOSAL AND PROVIDE UNIT PRICES FOR RELOCATING ADDITIONAL OR DELETION OF THE FIRE HOSE STATIONS DURING CONSTRUCTION.
- OFFSET SPRINKLER PIPING BELOW AIR HANDLING UNIT OPENINGS, PLENUMS AND PROVIDE AUTOMATIC SPRINKLERS BELOW PLENUMS. REFER TO HVAC DRAWINGS FOR LOCATIONS.

This drawing has been prepared solely for the use of Brookhaven National Laboratory and there are no representations of any kind made by Giffels, Partnership to any party with whom Giffels Partnership has not entered into a contract.

This drawing shall not be used for construction purposes until the seal and signature of the responsible registrant appears on the drawing and proper permit forms and related fees are transmitted by the Owner, Owner's Agent or Contractor to the Authority Having Jurisdiction.

JOB NO. SHEET NO. REVISION		DATE	DWG.	APPRO. (IA)
UNDER CONTRACT WITH <b>UNITED STATES DEPARTMENT OF ENERGY</b> PLANT ENGINEERING DIVISION UPTON, NEW YORK 11973				
JOB TITLE		DWG. TITLE		
CENTRAL CHILLED WATER FACILITY PHASE II		FIRE PROTECTION DETAILS		
DATE	ACCT. NO.	SHEET OF		
SCALE	DWN. BY	REV'D BY	JOB NO.	DWG. NO.
AS NOTED	EP	BN	11705	
ESHD RISK LEVEL	APP. BY	BLDG. NO.	FP-500	
	W HARRISON	600		
PATH:				

Approved By: B NEWMAN  
Project Manager: G. KAPLAN  
Project Engineer/Architect: E. PRIENDEL  
Project No.: SF070003

Giffels, Partnership  
25200 Telegraph Road, Suite 200  
Southfield, Michigan 48033 USA  
Tel: 248-936-8000  
Fax: 248-936-8111