Fire Service Demand (Area/Density Method): Residential Areas

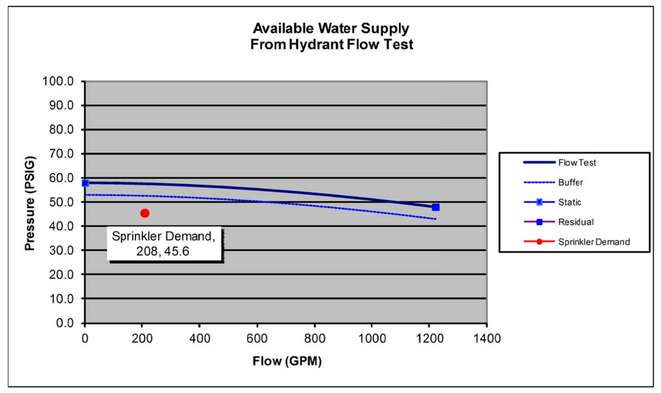
Occupancy Hazard:	Light Hazard		
Sprinkler System Type:	Wet Sprinkler		
Construction Type (NFPA 13)	Noncombustible Unobstructed		
Ceiling Height:	9	ft	
Maximum Sprinkler Coverage Area:	130	s.f.	
Actual Sprinkler Coverage Area:	120	s.f.	
Sprinkler K-factor:	5.6		
Area of Coverage:	900	s.f.	
Design Density:	0.1	gpm / s.f.	
Estimated Flow Overage:	20%		
Number of Flowing Sprinklers	8		
Flow / Sprinkler:	11.3	gpm	
Sprinkler:	7.0	psig	7.0 psig
Elevation:	24	ft	10.4 psig
Pipe Friction	8	ft/100	
Pipe Length	300	ft	10.4 psig
Fittings Multiplier	25%		2.6 psig
BFP Size	4	inch	
BFP Type	DCBFP		4.5 psig
Alarm Check	2		2 psig
Other Pressure Drop	0	psig	
Safety Factor	10%	psig	3.7 psig

Sprinkler Flow	108	gpm		
Hose Stream Allowance	100	gpm		
System Demand Point	208	gpm	@	45.6 psig

Pressure Available at Demand	52.6 psig
Fire Pump Required	No

Hydrant Flow Test Data (From Domestic Water Demand)

Static Pressure:	58	psig		0	GPM
Residual Pressure:	48	psig	@	1220	GPM
	0	psig	@	0	GPM
Desired "Buffer"	5	psig			
Elevation of Hydrant (Above Ground Floor)	0	ft			



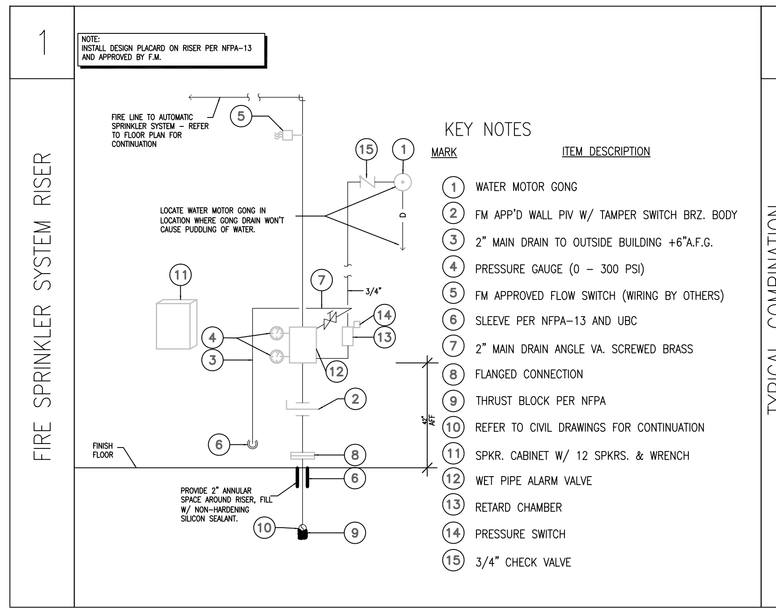
SYMBOL	DESCRIPTION
	FIRE PIPING
	SHUT-OFF VALVE
	CHECK VALVE
	TAMPER SWITCH
	FLOW SWITCH
	PRESSURE REGULATING VALVE
	STRAINER W/BLOWDOWN
	BALANCING VALVE
	UNION
	PIPE DOWN
	PIPE UP
	BRANCH - BOTTOM CONNECTION
	BRANCH - TOP CONNECTION
	BRANCH - SIDE CONNECTION
	CAP ON END OF PIPE
	FIRE DEPARTMENT CONNECTION
	DIRECTION OF FLOW
FP	ELECTRIC HEAT TRACE-ENDPOINT
FP	ELECTRIC HEAT TRACE-POWER POINT
	HOSE BIBB
I	IONIZATION SMOKE DET ABOVE FLOOR
I	IONIZATION SMOKE DET BELOW FLOOR
P	PHOTOELECT SMOKE DET ABOVE FLR
P	PHOTOELECT SMOKE DET BELOW FLR
	PRE-DISCHARGE ALARM
	COMBINATION STROBE ALARM
	UPRIGHT SPRINKLER HEAD
	PENDANT SPRINKLER HEAD
	SEMI-RECESSED SPRINKLER HEAD
	CONCEALED SPRINKLER HEAD
	SIDE WALL SPRINKLER HEAD
EC	ELECTRICAL CONTRACTOR
FP	FIRE PROTECTION
F	FIRE PROTECTION PIPING
FDV	FIRE DEPARTMENT VALVE
FDVC	FIRE DEPARTMENT VALVE CABINET
FEC	FIRE EXTINGUISHER CABINET
FH	FIRE HYDRANT
FHC	FIRE HOSE CABINET
FPC	FIRE PROTECTION CONTRACTOR
FR	FIRE RISER
GC	GENERAL CONTRACTOR
MC	MECHANICAL CONTRACTOR
SP	STANDPIPE PIPING
SPR	SPRINKLER PIPING
TS	TAMPER SWITCH
SYMBOL	DESCRIPTION

FIRE SUPPRESSION SYMBOL & ABBREVIATION LEGEND

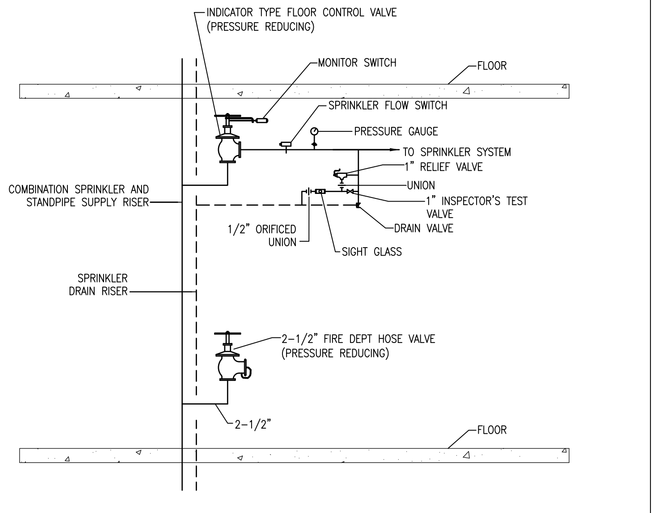
General Notes:

1. ENTIRE BUILDING SHALL HAVE A WET-PIPE SPRINKLER SYSTEM.

1 FIRE SPRINKLER SYSTEM RISER



2 TYPICAL COMBINATION STANDPIPE DETAIL



BID DOCUMENTS

FULLY SPRINKLERED

Revisions:	Date

ARCHITECT:

C.C. HODGSON ARCHITECTURAL GROUP

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ENGINEERS:

Westlake Reed Leskosky

1634 EYE ST, NW, STE 900
WASHINGTON, DC 20006

Drawing Title: FIRE PROTECTION ABBREVIATIONS, SYMBOLS AND GENERAL NOTES

Approved: Project Director

Project Title: RELOCATE DEMENTIA UNIT

Location: VAMC MARTINSBURG

Date: 08/06/2012 | Checked: SCS | Drawn: CJW

Project Number: VA PN 613-207

Building Number: 513

Drawing Number: FX-001

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Office of Construction and Facilities Management

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