Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 08/01/13

2nd Floor Fire Sprinkler Plan
1/8" = 1'-0"

Area B3 Hydraulic Calculation - 2nd Floor Laundry

1. Criteria: .15/18 gpm per square foot over the most remote 900 square feet with a hose allowance 250 gpm added. Area reduced for QR Sprinklers and 8'-6" Ceiling Height.
2. (22) sprinklers operating.
3. System demand at flow test: 46824 GPM @ 75.6 PSI. This includes 250 GPM Hose Allowance. A Safety Factor of 27.53 PSI is available.

Standpipe Hydraulic Calculation

1. Criteria: 250 GPM @ 100 PSI at Most Remote F.D. Valve and 250 GPM at next F.D. Valve on remote standpipe and 250 GPM added at the connection to the next standpipe. Calcs run to F.D.C. where Fire Department will provide 750 GPM @ 150 PSI from the pumper truck.
2. (3) valves operating.
3. System demand at Fire Department Connection 750 GPM @ 142.85 PSI. A Safety Factor of 7.75 PSI is available.

Stair "A" Standpipe Detail
1/4" = 1'-0"

Sprinkler Head Schedule

Symbol	Count	Thread	K-Factor	Description	Note
◉	80	1/2"	5.6	RELIABLE F1FR-56, 155° WHITE RECESSED PENDENT	RA1414
⊗	25	3/4"	8.0	RELIABLE F1FR WHITE QR EXTENDED COVERAGE RECESSED PENDENT	R4842
◆	50	1/2"	4.2	RELIABLE F1FR WHITE QR RECESSED PENDENT	RA1413
○	1	1/2"	5.6	RELIABLE F1FR-56, 155° BRASS UPRIGHT	RA1425
◁	1	1/2"	5.6	RELIABLE G STD RESP HSW 212°	R1235
157 = Total Number of Heads this floor					

Hampshire FIRE PROTECTION
8 NORTH WENTWORTH AVENUE LONDONDERRY, NH 03053
PH:(603) 432-8221 FAX: (603) 434-3194
WEBSITE: HAMPSHIREFIRE.COM
MASS LIC# 003841 MAINE LIC# 238
VERMONT CERTIFIED

WATER SUPPLY DATA		
Static pressure	108	psi
Residual pressure	102	psi
Flow	1537	gpm
Location	Corner of Commercial & Maple	
Elevation	0'-0"	
Date	May 11 2013	Time 6:00 AM
Information By	Portland Water	

SPRINKLERS

Total This Sheet	Total This Job
Symbol	Description

Drawing Title: 2nd Floor Fire Sprinkler Plan

Contract No: 4398CME

Drawn By: EVW

Scale: As Noted

Date: 05-25-13

Approval By: Portland ME

Revisions:	Date:
1	
2	
3	
4	
5	
6	
7	

Project:
Marriott Courtyard Hotel
321 Commercial Street
Portland ME 04101

Contract with:
Opechee Construction
11 Corporate Drive
Belmont NH 03220

FIRE PROTECTION ENGINEER STAMP

FP3 OF 8