

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND BUILDING PERMIT

This is to certify that
FREEDOM FIRE PROTECTION
209 QUAKER RIDGE RD
CASCO, ME 04015

For installation at
191 PINE ST
CARRIAGE HOUSE

Job ID: 2012-07-4448-ALTCOMM

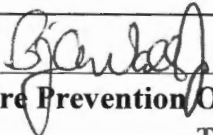
CBL: 063- E-007-001

has permission to install NFPA 13D sprinkler in carriage house

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statues of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of the buildings and structures, and of the application on file in the department.

Notification of inspection and written permission procured before this building or part thereof is lathed or otherwise closed-in. 48 HOUR NOTICE IS REQUIRED.

A final inspection must be completed by owner before this building or part thereof is occupied. If a certificate of occupancy is required, it must be


Fire Prevention Officer

58

Code Enforcement Officer / Plan Reviewer

THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY
PENALTY FOR REMOVING THIS CARD

BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 (ONLY)

or email: buildinginspections@portlandmaine.gov

With the issuance of this permit, the owner, builder or their designee is required to provide adequate notice to the city of Portland Inspections Services for the following inspections. Appointments must be requested 48 to 72 hours in advance of the required inspection. The inspection date will need to be confirmed by this office.

- **Please read the conditions of approval that is attached to this permit!! Contact this office if you have any questions.**
- **Permits expire in 6 months. If the project is not started or ceases for 6 months.**
- **If the inspection requirements are not followed as stated below additional fees may be incurred due to the issuance of a "Stop Work Order" and subsequent release to continue.**

Final Fire

The project cannot move to the next phase prior to the required inspection and approval to continue, REGARDLESS OF THE NOTICE OF CIRCUMSTANCES.

IF THE PERMIT REQUIRES A CERTIFICATE OF OCCUPANCY, IT MUST BE PAID FOR AND ISSUED TO THE OWNER OR DESIGNEE BEFORE THE SPACE MAY BE OCCUPIED.



PORTLAND MAINE

Strengthening a Remarkable City, Building a Community for Life • www.portlandmaine.gov

Director of Planning and Urban Development
Jeff Levine

Job ID: 2012-07-4448-ALTCOMM
install NFPA 13D sprinkler in carriage
house

For installation at:
191 PINE ST
CARRIAGE HOUSE

CBL: 063- E-007-001

Conditions of Approval:

Fire

1. This permit covers only the carriage house sprinkler installation. Refer to permit 2012-09-4970-FAFS for the main house sprinkler system.
2. The sprinkler system shall be installed in accordance with NFPA 13D. A compliance letter is required.
3. All control valves shall be supervised in accordance with NFPA 13D. Pad locks shall only be installed on valves designed to be secured in the open position by pad lock.
4. Application requires State Fire Marshal approval.

City of Portland, Maine - Building or Use Permit Application

389 Congress Street, 04101 Tel: (207) 874-8703, FAX: (207) 8716

Job No: 2012-07-4448-ALTCOMM #2012-48264 FAFS	Date Applied: 9/17/2012	CBL: 063- E-007-001	
Location of Construction: 191 PINE ST	Owner Name: VICKERY PINE LLC	Owner Address:; 255 WESTERN PROMENADE PORTLAND, 04101 ME - MAINE	Phone:
Business Name:	Contractor Name: Freedom Fire Protection, Inc.	Contractor Address: 209 QUAKER RIDGE ROAD, CASCO, MAINE 04105	Phone: (207) -627-4109
Lessee/Buyer's Name:	Phone:	Permit Type: FIRE SUPPRESSION	Zone: R-4
Past Use: Seven Residential Dwelling Units	Proposed Use: Same: Seven Residential Dwelling units total – to install fire suppression system in the one dwelling unit within the old carriage house	Cost of Work: \$5,000.00	CEO District:
		Fire Dept: 9/20/12 <input checked="" type="checkbox"/> Approved w/ conditions <input type="checkbox"/> Denied <input type="checkbox"/> N/A	Inspection: Use Group: Type:
		Signature: <i>Bjorn...</i> (58)	Signature:
Proposed Project Description: renovations of main building		Pedestrian Activities District (P.A.D.)	
Permit Taken By: Lannie		Zoning Approval	

1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.
2. Building Permits do not include plumbing, septic or electrical work.
3. Building permits are void if work is not started within six (6) months of the date of issuance. False informatin may invalidate a building permit and stop all work.

Special Zone or Reviews	Zoning Appeal	Historic Preservation
<input type="checkbox"/> Shoreland <input type="checkbox"/> Wetlands <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan <input type="checkbox"/> Maj <input type="checkbox"/> Min <input type="checkbox"/> MM Date: <i>OK 9/17/12</i>	<input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied Date:	<i>- w/ conditions</i> <input type="checkbox"/> Not in Dist or Landmark <input type="checkbox"/> Does not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied <i>Any exterior work requires a separate review & approval</i>

CERTIFICATION

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT	ADDRESS	DATE	PHONE
RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE		DATE	PHONE

07-4448
2012-~~09-4470~~
2012-48264

One- or Two-family Fire Sprinkler Permit

If you or the property owner owes real estate or property taxes or user charges on any property within the city, payment arrangements must be made before permits of any kind are accepted.

Installation address: 191 Pine Street, Carriage House 63-E-7

Building owner: Jason Vickery Phone: 207-772-7070

Installer: Freedom Fire Protection, Inc Phone: 207-627-4109

Total sq/ft of building floor space per unit: 600 Single-family home
or

Sq/ft of sprinklered floor space per unit: N/A Two-family home

Is this a multipurpose piping system? Y / N Sprinkler piping uses Pex? Y / N

Water supply: Municipal Water Well pump Stored water Other

Include electronic copy of approved State Sprinkler Permit plans:

Additional cost to the owner for the home fire sprinkler system for each dwelling unit minus costs necessary for domestic needs (See below): **A=** \$4,363.00

Attach cost breakdown: A City plumbing permit has been pulled:

RECEIVED
SEP 17 2012
Dept. of Building Inspections
City of Portland Maine

COST OF WORK: <u>\$4,363.00</u> (A times number of units)
NO FEE REQUIRED

Additional information and Frequently asked questions about home fire sprinkler systems may be found at

www.portlandmaine.gov/fireprevention.

Sprinkler system cost must deduct costs that would have been incurred if the system did not provide sprinkler service. In a well pump system it would include the difference between the well pump to be installed and the one that would have been installed if there were no sprinkler demand on the system. Includes additional piping and valves that are required only because of NFPA Standard 13D, and not already required for domestic needs. Includes cost of sprinkler heads and additional installation costs.



... Fire Protection by Computer Design

FREEDOM FIRE PROTECTION INC.
209 QUAKER RIDGE ROAD
CASCO, MAINE 04015
207-627-4109

Job Name : 191 PINE STREET CARRIAGE HOUSE HC
Building : 191 PINE STREET
Location : PORTLAND, MAINE 04104
System : #2 -AREA#1
Contract :
Data File : 191 PINE STREET HC5.WXF

HYDRAULIC DESIGN INFORMATION SHEET

Name - 191 PINE STREET CARRIAGE HOUSE Date - 9/14/12
 Location - PORTLAND, MAINE 04104
 Building - 191 PINE STREET System No. - #2 -AREA#1
 Contractor - Contract No. -
 Calculated By - MIKE NOBLIT Drawing No. - FP-5
 Construction: (X) Combustible () Non-Combustible Ceiling Height VARIES
 OCCUPANCY - LOFT APARTMENT

S Type of Calculation: (X)NFPA 13 Residential ()NFPA 13R (X)NFPA 13D
 Y Number of Sprinklers Flowing: ()1 (X)2 ()4 ()
 S ()Other
 T ()Specific Ruling Made by Date
 E
 M Listed Flow at Start Point - 13 Gpm System Type
 Listed Pres. at Start Point - 7 Psi (X) Wet () Dry
 D MAXIMUM LISTED SPACING 16' x 16' () Deluge () PreAction
 E Domestic Flow Added - Gpm Sprinkler or Nozzle
 S Additional Flow Added - Gpm Make TYCO Model LFII
 I Elevation at Highest Outlet - 14'-6"Feet Size 1/2" K-Factor 4.9
 G Note: Temperature Rating 155
 N

Calculation Gpm Required 26.283 Psi Required 38.688 At Test
 Summary C-Factor Used: Overhead 120 Underground 150

W Water Flow Test: Pump Data: Tank or Reservoir:
 A Date of Test - 7/31/2012 Rated Cap. Cap.
 T Time of Test - @ Psi Elev.
 E Static (Psi) - 46 Elev.
 R Residual (Psi) - 24 Other Well
 Flow (Gpm) - 780 Proof Flow Gpm
 S Elevation -

P Location:
 P
 L Source of Information: PORTLAND WATER DISTRICT
 Y

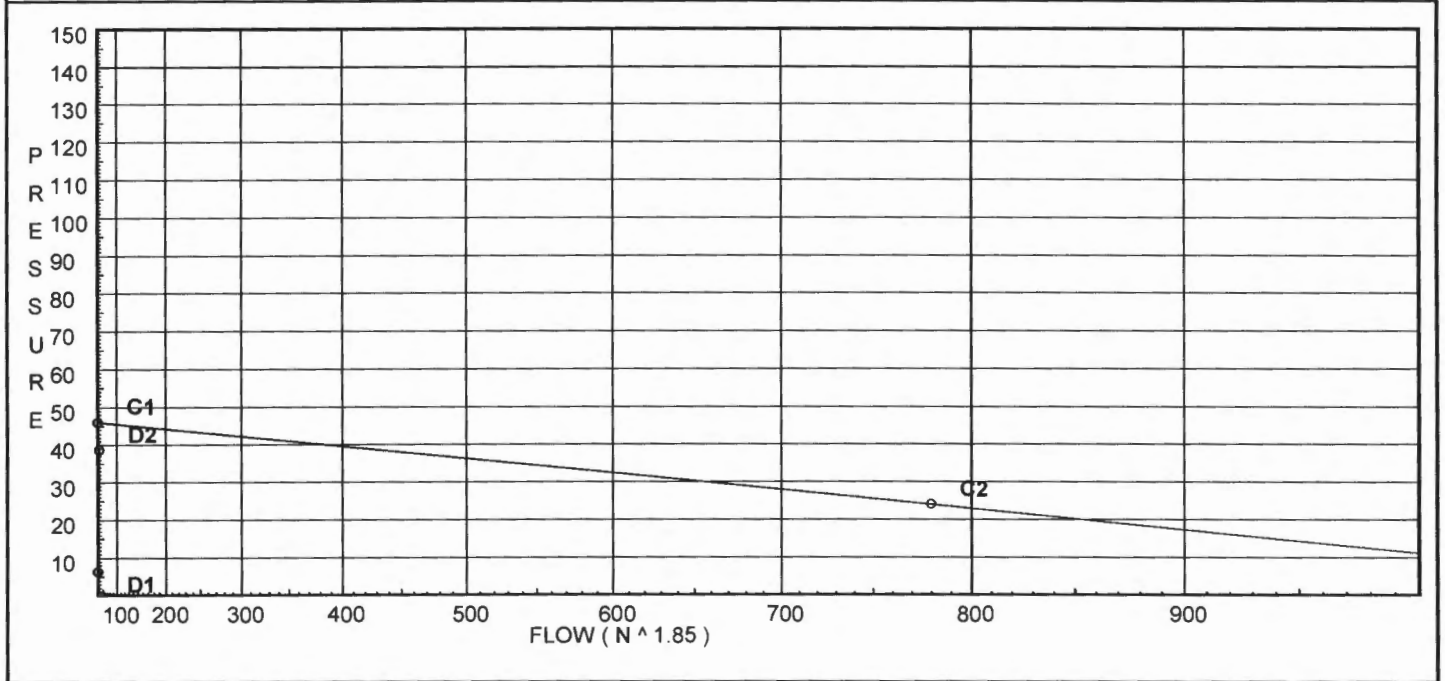
Water Supply Curve (C)

FREEDOM FIRE PROTECTION INC.
191 PINE STREET CARRIAGE HOUSE HC

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City Water Supply:
C1 - Static Pressure : 46
C2 - Residual Pressure: 24
C2 - Residual Flow : 780

Demand:
D1 - Elevation : 6.316
D2 - System Flow : 26.2834
D2 - System Pressure : 38.688
Hose (Adj City) : _____
Hose (Demand) : _____
D3 - System Demand : 26.2834
Safety Margin : 7.270



Fittings Used Summary

FREEDOM FIRE PROTECTION INC.
191 PINE STREET CARRIAGE HOUSE HC

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Fitting Legend		½	¾	1	1¼	1½	2	2½	3	3½	4	5	6	8	10	12	14	16	18	20	24	
Abbrev.	Name																					
E	90' Standard Elbow	2	2	2	3	4	5	6	7	8	10	12	14	18	22	27	35	40	45	50	61	
T	90' Flow Thru Tee	3	4	5	6	8	10	12	15	17	20	25	30	35	50	60	71	81	91	101	121	
Zaa	Ames 2000B	Fitting generates a Fixed Loss Based on Flow																				

Pressure / Flow Summary - STANDARD

FREEDOM FIRE PROTECTION INC.
 191 PINE STREET CARRIAGE HOUSE HC

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Node No.	Elevation	K-Fact	Pt Actual	Pn	Flow Actual	Density	Area	Press Req.
502	14.583	4.9	7.0	na	12.96	0.05	256	7.0
501	14.583	4.9	7.39	na	13.32	0.05	256	7.0
59	14.583		7.93	na				
58	14.583		11.27	na				
57	12.083		13.99	na				
56	12.083		14.67	na				
55	6.458		18.75	na				
54	6.458		23.41	na				
53	6.458		25.12	na				
52	6.458		26.63	na				
51	0.0		34.82	na				
50	0.0		38.68	na				
TEST	0.0		38.69	na				

The maximum velocity is 9.76 and it occurs in the pipe between nodes 501 and 59

Final Calculations - Hazen-Williams

FREEDOM FIRE PROTECTION INC.
191 PINE STREET CARRIAGE HOUSE HC

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Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv. Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	***** Notes *****
502	12.96	1.049		6.660	7.000		K Factor = 4.90
to		120		0.0	0.0		
501	12.96	0.0584		6.660	0.389		Vel = 4.81
501	13.32	1.049	1E 2.0	0.500	7.389		K Factor = 4.90
to		120		2.000	0.0		
59	26.28	0.2156		2.500	0.539		Vel = 9.76
59	0.0	1.049	2E 4.0	11.500	7.928		
to		120		4.000	0.0		
58	26.28	0.2157		15.500	3.344		Vel = 9.76
58	0.0	1.049	1E 2.0	5.583	11.272		
to		120		2.000	1.083		
57	26.28	0.2156		7.583	1.635		Vel = 9.76
57	0.0	1.049	1E 2.0	1.166	13.990		
to		120		2.000	0.0		
56	26.28	0.2157		3.166	0.683		Vel = 9.76
56	0.0	1.049	1E 2.0	5.625	14.673		
to		120		2.000	2.436		
55	26.28	0.2157		7.625	1.645		Vel = 9.76
55	0.0	1.049	1T 5.0	16.583	18.754		
to		120		5.000	0.0		
54	26.28	0.2157		21.583	4.656		Vel = 9.76
54	0.0	1.049	1E 2.0	5.916	23.410		
to		120		2.000	0.0		
53	26.28	0.2158		7.916	1.708		Vel = 9.76
53	0.0	1.049	1E 2.0	5.000	25.118		
to		120		2.000	0.0		
52	26.28	0.2157		7.000	1.510		Vel = 9.76
52	0.0	1.049	1Zaa 0.0	6.458	26.628		
to		120		0.0	6.797		* Fixed loss = 4
51	26.28	0.2157		6.458	1.393		Vel = 9.76
51	0.0	1.653	1E 2.544	48.000	34.818		
to		150	1T 5.088	7.632	3.000		* Fixed loss = 3
50	26.28	0.0156		55.632	0.867		Vel = 3.93
50	0.0	8.27	1T 55.354	400.000	38.685		
to		140		0.0	0.0		
TEST	26.28	0.0		455.354	0.003		Vel = 0.16
	0.0						
	26.28				38.688		K Factor = 4.23