

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



# CITY OF PORTLAND

# BUILDING PERMIT

This is to certify that  
EASTERN FIRE SERVICES  
PO Box 1390  
AUBURN, ME 04211

For installation at  
86 BALLPARK DR  
SINGLE-FAMILY HOME

Job ID: 2012-04-3809-SF

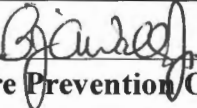
CBL: 371- A-039-001

has permission to install NFPA 13D sprinkler system

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statutes 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](mailto: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](http://www.portlandmaine.gov)*

Director of Planning and Urban Development  
Jeff Levine

Job ID: 2012-04-3809-SF  
install NFPA 13D sprinkler system

For installation at:  
86 BALLPARK DR  
SINGLE-FAMILY HOME

CBL: 371- A-039-001

## **Conditions of Approval:**

### **Fire**

1. The sprinkler system shall be installed in accordance with NFPA 13D. A compliance letter is required.
2. 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.
3. 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: 2012-04-3809-SF 2012-46138-FAFS	Date Applied: 7/19/2012	CBL: 371- A-039-001	
Location of Construction: 86 BALLPARK DR	Owner Name: MICHAEL & SARA DELAHANTY	Owner Address: 544 WALNUT HILL RD NORTH YARMOUTH, ME 04097	Phone:
Business Name:	Contractor Name: Eastern Fire Protection	Contractor Address: PO BOX 1390 AUBURN MAINE 04210	Phone: (207) 784-1507
Lessee/Buyer's Name:	Phone:	Permit Type: FAFS	Zone: R-2
Past Use:  New single family dwelling under construction	Proposed Use:  Same: single family dwelling - to install fire suppression system	Cost of Work: \$8,000.00	CEO District:
		Fire Dept: 8/2/12 Signature: <i>[Signature]</i> (58)	Inspection: Use Group: Type:  Signature:
Proposed Project Description: New 3 bed/2.5 bath, 2 story Colonial w/garage		Pedestrian Activities District (P.A.D.)	

Permit Taken By: Brad	<b>Zoning Approval</b>		
<p>1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.</p> <p>2. Building Permits do not include plumbing, septic or electrical work.</p> <p>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.</p>	<b>Special Zone or Reviews</b> <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 checked="" type="checkbox"/> MM Date: <i>[Signature]</i> 7/25/12	<b>Zoning Appeal</b> <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:	<b>Historic Preservation</b> <input checked="" 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  Date: <i>[Signature]</i>
	<b>CERTIFICATION</b>		

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



# Water-Based Fire Suppression System 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.

Entire 7/19/12 (R-2)  
child 2012-46138

Installation address: 86 BOLLIVAN DRIVE CBL: 371 A039

Exact location: (within structure) GATEWAY HOUSE

Type of occupancy(s) (NFPA & ICC): NFPA 130 ROSE CONTEAL

Building owner: DOLOREAN MICHAEL & SARA DELAHANTY - 544 WALTON HILL #1 NORTH YARMOUTH

Managing Supervisor (RMS): WILLIAM FLYNT License No: 368

Supervisor phone: 784-1507 E-mail: FLYNTW@CITYOFPORTLAND.ME

Installing contractor: GASTON PENN BNO License No: 101

Contractor phone: 784-1507 E-mail: FLYNTW@CITYOFPORTLAND.ME

The suppression work to be done will be: New:  Renovation:  Addition to existing system:

This is an amendment to an existing permit: Yes:  NO  Permit no: \_\_\_\_\_

NFPA Standard this system is designed to: 130 Edition: 2010

\*Non-NFPA systems are not approved for use within the City of Portland.

Download a new copy of this document from [www.portlandmaine.gov/fire](http://www.portlandmaine.gov/fire) for every submittal. Attach all working documents and complete approved submittals as may be required by the State Fire Marshal's Office on electronic PDF's in addition to full sized plans.

Contractor shall verify location and type of all FDCs shall be approved in writing by the Fire Prevention Bureau.

COST OF WORK: <u>\$ 8000.00</u>
PERMIT FEE: <u>\$ 100.00</u>
( <small>\$10 PER \$1,000 + \$30 FOR THE FIRST \$1,000</small> )

RECEIVED  
JUL 19 2012  
Dept. of Building Inspections  
City of Portland, Maine

Submit all information to the Building Inspections Department, 389 Congress Street, Room 315, Portland, Maine 04101.

Prior to acceptance of any fire protection system, a complete commissioning and acceptance test must be coordinated with all fire system contractors and the Fire Department, and proper documentation of such test(s) provided.

All installation(s) must comply with NFPA and the Fire Department Technical Standard(s).

Applicant signature: [Signature] Date: 7/12/2012



# PORTLAND MAINE

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Receipts Details:

**Tender Information:** Check , Check Number: 107119

**Tender Amount:** 100.00

Receipt Header:

**Cashier Id:** bsaucier

**Receipt Date:** 7/19/2012

**Receipt Number:** 46139

Receipt Details:

Referance ID:	7315	Fee Type:	BP-FIRE
Receipt Number:	0	Payment Date:	
Transaction Amount:	100.00	Charge Amount:	100.00
Job ID: Job ID: 2012-04-3809-SF - New 3 bed/2.5 bath, 2 story Colonial w/garage			
Additional Comments: 86 Ballpark			

Thank You for your Payment!



# EASTERN FIRE PROTECTION

P.O. Box 1390  
Kittyhawk Ave.  
Auburn, ME 04210

PH # (207) 784-1507  
FAX # (207) 782-0566

# LETTER OF TRANSMITTAL

DATE	7/12/2012	JOB NO.	4893
ATTENTION	P.I.		
RE:	OCCUPANCY HOUSO		

TO BUILDING INSPECTORS  
399 CONGRESS ST.  
BONDUARD, ME 04101

WE ARE SENDING YOU  Attached  Under separate cover via \_\_\_\_\_ the following items:

- Shop drawings       Descriptive data       Hydraulic calculations  
 Copy of letter       Literature       \_\_\_\_\_

QUANTITY	DRAWING NO.	DATE	DESCRIPTION	STATUS
1	10P1	7/11/12	SCHEMATIC SHOP DWG	C/O
1			HYDRAULIC CALCULATION	✓
1			PERMIT APPLICATION	✓
1			PERMIT CHECK.	✓

- Status code      A. Approved      D. Corrected & resubmitted  
                          B. Approved as noted      E. For your files  
                          C. Submitted for approval      F. Refer to remarks

Please return 1 <sup>PERMIT</sup> ~~copies~~ each indicating your approval and/or comments.

REMARKS \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

COPY TO \_\_\_\_\_  
 SIGNED [Signature] [Signature]

If enclosures are not as noted, kindly notify us at once



... Fire Protection by Computer Design

EASTERN FIRE PROTECTION  
170 KITTYHAWK AVE.  
P.O. BOX 1390  
AUBURN, MAINE 04211-1390  
800-274-1507

Job Name : DELEHANTY HOUSE  
Drawing : SINGLE FAMILY DWELLING  
Location : 86 BALLPARK DRIVE, PORTLAND, MAINE  
Remote Area : WET  
Contract : 4893  
Data File : 4893 DELEHANTY SECOND FLOOR.WXF



HYDRAULIC DESIGN INFORMATION SHEET

Name - DELEHANTY HOUSE Date - 07/11/12  
Location - 86 BALLPARK DRIVE, PORTLAND, MAINE  
Building - SINGLE FAMILY DWELLING System No. - WET  
Contractor - EASTERN FIRE PROTECTION Contract No. - 4893  
Calculated By - WAF Drawing No. - 1 OF 1  
Construction: (X) Combustible ( ) Non-Combustible Ceiling Height 8'  
OCCUPANCY - RESIDENTIAL

S Type of Calculation: ( )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 Listed Flow at Start Point - 14 Gpm System Type  
Listed Pres. at Start Point - 10.1 Psi (X) Wet ( ) Dry  
D MAXIMUM LISTED SPACING 14 x 14 ( ) Deluge ( ) PreAction  
E Domestic Flow Added - 0 Gpm Sprinkler or Nozzle  
S Additional Flow Added - 0 Gpm Make TYCO Model LF II  
I Elevation at Highest Outlet - 134.75Feet Size 1/2" K-Factor 4.4  
G Note: Temperature Rating 155  
N

Calculation Gpm Required 28.6 Psi Required 58.3 At Test  
Summary C-Factor Used: Overhead 150 Underground 150

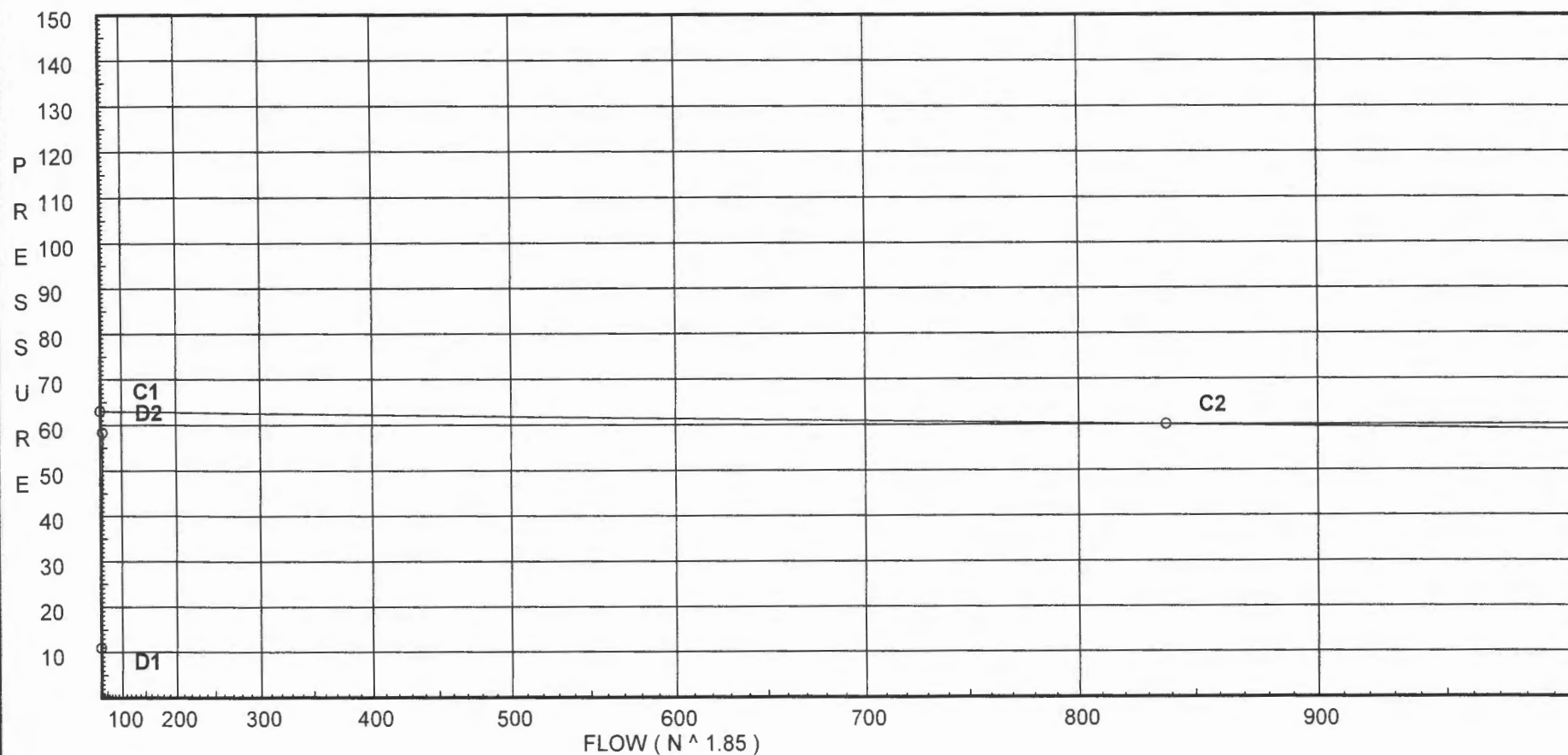
W Water Flow Test: Pump Data: Tank or Reservoir:  
A Date of Test - 01/24/2012 Rated Cap. Cap.  
T Time of Test - NA @ Psi Elev.  
E Static (Psi) - 63 Elev.  
R Residual (Psi) - 60 Other Well  
Flow (Gpm) - 838 Proof Flow Gpm  
S Elevation - 109.5

P Location: HYDRANT LOCATED ON THE CORNER OF RIVERSIDE AND WASHINGTON

L Source of Information: PORTLAND WATER DISTRICT  
Y

City Water Supply:  
 C1 - Static Pressure : 63  
 C2 - Residual Pressure: 60  
 C2 - Residual Flow : 838

Demand:  
 D1 - Elevation : 10.936  
 D2 - System Flow : 28.665  
 D2 - System Pressure : 58.267  
 Hose ( Demand ) :  
 D3 - System Demand : 28.665  
 Safety Margin : 4.727



# Fittings Used Summary

EASTERN FIRE PROTECTION  
DELEHANTY HOUSE

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Date

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	NFPA 13 90' Standard Elbow	1	2	2	3	4	5	6	7	8	10	12	14	18	22	27	35	40	45	50	61
Fsp	Flow Switch Potter VSR	Fitting generates a Fixed Loss Based on Flow																			
G	NFPA 13 Gate Valve	0	0	0	0	0	1	1	1	1	2	2	3	4	5	6	7	8	10	11	13
L	NFPA 13 Long Turn Elbow	0.5	1	2	2	3	4	5	5	6	8	9	13	16	18	24	27	30	34	40	
N*	CPVC 90'Elb Harvel-Spears		7	7	8	9	11	12	13	0	0	0	0	0	0	0	0	0	0	0	0
O*	CPVC Tee - Branch	3	3	5	6	8	10	12	15	0	0	0	0	0	0	0	0	0	0	0	0
T	NFPA 13 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																			

## Units Summary

Diameter Units	Inches
Length Units	Feet
Flow Units	US Gallons per Minute
Pressure Units	Pounds per Square Inch

Note: Fitting Legend provides equivalent pipe lengths for fittings types of various diameters. Equivalent lengths shown are standard for actual diameters of Sched 40 pipe and CFactors of 120 except as noted with \*. The fittings marked with a \* show equivalent lengths values supplied by manufacturers based on specific pipe diameters and CFactors and they require no adjustment. All values for fittings not marked with a \* will be adjusted in the calculation for CFactors of other than 120 and diameters other than Sched 40 per NFPA.

**SUPPLY ANALYSIS**

<i>Node at Source</i>	<i>Static Pressure</i>	<i>Residual Pressure</i>	<i>Flow</i>	<i>Available Pressure</i>	<i>Total Demand</i>	<i>Required Pressure</i>
TEST	63.0	60	838.0	62.994	28.67	58.267

**NODE ANALYSIS**

<i>Node Tag</i>	<i>Elevation</i>	<i>Node Type</i>	<i>Pressure at Node</i>	<i>Discharge at Node</i>	<i>Notes</i>
1	134.75	4.4	10.1	13.98	
2	127.0		14.22		
1A	134.75	4.4	11.13	14.68	
3	127.0		15.07		
4	117.5		19.88		
5	117.5		20.58		
TOR	117.5		21.28		
BFP	114.0		25.96		
DOM	111.0		31.99		
BASE	111.0		33.02		
T1	111.0		57.61		
TEST	109.5		58.27		

Final Calculations - Hazen-Williams - 2007

EASTERN FIRE PROTECTION  
DELEHANTY HOUSE

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Date

Node1 to Node2	Elev1 Elev2	K Fact	Qa Qt	Nom Act	Fitting or Eqv.	Ln.	Pipe Ftng's Total	CFact Pf/Ft	Pt Pe Pf	*****	Notes	*****
1 to 2	134.750 127	4.40	13.98 13.98	1 1.101	1N 1O	7.0 5.0 0.0	9.790 12.000 21.790	150 0.0351	10.100 3.357 0.764		Vel = 4.71	
2 to 3	127 127		0.0 13.98	1.25 1.394	3O 1N	18.0 8.0 0.0	50.000 26.000 76.000	150 0.0111	14.221 0.0 0.845		Vel = 2.94	
3			0.0 13.98						15.066		K Factor = 3.60	
1A to 3	134.750 127	4.40	14.68 14.68	1 1.101	1N	7.0 0.0 0.0	8.000 7.000 15.000	150 0.0383	11.134 3.357 0.575		Vel = 4.95	
3 to 4	127 117.500		13.99 28.67	1.25 1.394	1N	8.0 0.0 0.0	8.750 8.000 16.750	150 0.0420	15.066 4.114 0.704		Vel = 6.03	
4 to 5	117.500 117.500		0.0 28.67	1.25 1.38	1E 1T	3.0 6.0 0.0	1.500 9.000 10.500	120 0.0666	19.884 0.0 0.699		Vel = 6.15	
5 to TOR	117.500 117.500		0.0 28.67	1.5 1.61	1E	4.0 0.0 0.0	18.290 4.000 22.290	120 0.0314	20.583 0.0 0.701		Vel = 4.52	
TOR to BFP	117.500 114		0.0 28.67	1.5 1.61	1Fsp	0.0 0.0 0.0	5.000 0.0 5.000	120 0.0314	21.284 4.516 0.157		* Fixed loss = 3 Vel = 4.52	
BFP to DOM	114 111		0.0 28.67	1.5 1.61	1E 1Zaa	4.0 0.0 0.0	2.000 4.000 6.000	120 0.0315	25.957 5.847 0.189		* Fixed loss = 4.548 Vel = 4.52	
DOM to BASE	111 111		0.0 28.67	1.5 1.505		0.0 0.0 0.0	1.000 0.0 1.000	150 0.0290	31.993 1.000 0.029		* Fixed loss = 1 Vel = 5.17	
BASE to T1	111 111		0.0 28.67	1 0.911	1T	3.801 0.0 0.0	70.000 3.801 73.801	150 0.3331	33.022 0.0 24.586		Vel = 14.11	
T1 to TEST	111 109.500		0.0 28.67	8 8.27	1G 2L 2T	6.326 41.12 110.709	1000.000 158.155 1158.155	140 0	57.608 0.650 0.009		Vel = 0.17	
TEST			0.0 28.67						58.267		K Factor = 3.76	