DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND BUILDING PERMIT



This is to certify that

DEAN & ALLYN, INC.

PO BOX 709 - 116 LEWISTON RD

GRAY, ME 04039

Job ID: 2011-08-2037-SF

For installation at 4 STEPPING STONE LN SINGLE-FAMILY HOME

CBL: 406- F-060-001

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 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

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 Penny St. Louis

Job ID: <u>2011-08-2037-SF</u> install NFPA 13D sprinkler system For installation at:

4 STEPPING STONE LN
SINGLE-FAMILY HOME

CBL: 406- F-060-001

Conditions of Approval:

Fire

The sprinkler system shall be installed in accordance with NFPA 13D. A compliance letter is required.

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.

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: 2011-08-2037-SF 2012-41576 FAFS	Date Applied: 3/08/2012		CBL: 406- F-060-001			
Location of Construction: 4 STEPPING STONE LN -lot #9	Owner Name: KING CONSTRUCTION	N CORP.	Owner Address: 198 SACO AVE OLD ORCHARD	Phone:		
Business Name:	Contractor Name: DEAN & ALLYN INC.		Contractor Addi	Phone: 657-5646		
Lessee/Buyer's Name:	Phone:		Permit Type: FIRE SYS WB	Zone: R-3		
Past Use: Single Family Dwelling	Proposed Use: Same: Single Family	Dwelling	Cost of Work: \$7,000.00	CEO District:		
(under construction)	- to install fire suppresses	_	Fire Dept:	Inspection: Use Group: Type: Signature:		
Proposed Project Description: New 2,048 sq. ft. single family home			Pedestrian Activ	vities District (P.A	.D.)	
Permit Taken By: Gayle				Zoning Appr	oval	
 This permit application do Applicant(s) from meeting Federal Rules. Building Permits do not in septic or electrial work. Building permits are void within six (6) months of the False informatin may invarage permit and stop all work. 	g applicable State and nelude plumbing, if work is not started the date of issuance.	Special Zo Shoreland Wetland Flood Zo Subdivis Site Plan Maj Date: CERTIF	s one sion	Zoning Appeal Variance Miscellaneous Conditional Us Interpretation Approved Denied Date:	Not in Dis	
hereby certify that I am the owner of re- te owner to make this application as his e application is issued, I certify that the enforce the provision of the code(s) ap	authorized agent and I agree code official's authorized rep	to conform to	all applicable laws of t	this jurisdiction. In add	dition, if a permit for wo	rk described in

406 F 060

2011-08-20366

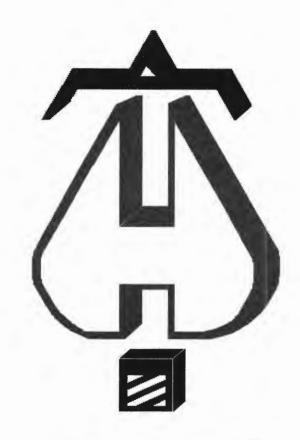
One- or Two-family Fire Sprinkler Permit

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.

,	2012-4
Installation address: Lot #9 Stepp	ing Stone Lane
Building owner: King Weinstein	Phone: 332 7544
Installer: Dean + Allyn INC	Phone: 657 5646
Total sq/ft of building floor space per unit: $\int_{-\infty}^{\infty}$	
Sq/ft of sprinklered floor space per unit:	Two-family home
Is this a multipurpose piping system? Y $/$ $\binom{N}{N}$	Sprinkler piping uses Pex? Y / N
Water supply: Municipal Water Well pump	Stored water Other
Include electronic copy of approved State Sprin	nkler 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): $A=$
Attach cost breakdown: A City plum	abing permit has been pulled:
RECEIVED	COST OF WORK: 6500 (A times number of units)
MAR 0 8 2012	NO FEE REQUIRED
Dept. of Building Inspections Ony of Program Maine	

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

DEAN & ALLYN, INC. PO BOX 709 116 LEWISTON ROAD GRAY, MAINE 04039 207-657-5646

Job Name : LOT 9 STEPPING STONE

Building

Location : LOT #9 STEPPING STONE LANE PORTLAND MAINE

System : ONE

Contract : C121066

Data File : STEPPING STONE .WXF

HYDRAULIC DESIGN INFORMATION SHEET

Name - LOT #9 STEPPING STONE LANE Date - 2-28-12 Location - LOT #9 STEPPING STONE LANE PORTLAND MAINE Building -System No. - ONE Contractor - DEAN AND ALLYN, INC. Contract No. - C121066 Calculated By - H. KING Donstruction: (X) Combustible () Non-Combustible Drawing No. - 1 OF 1 Ceiling Height 8' OCCUPANCY - RESIDENCE Type of Calculation: ()NFPA 13 Residential S ()NFPA 13R (X)NFPA 13D Y Number of Sprinklers Flowing: ()1 (X) 2 ()4() S ()Other \mathbf{T} () Specific Ruling Made by Date E Listed Flow at Start Point - 12 System Type M Gpm Listed Pres. at Start Point - 9 (X) Wet () Dry Psi MAXIMUM LISTED SPACING 14 x 14 D () Deluge () PreAction Sprinkler or Nozzle E Domestic Flow Added Gpm Additional Flow Added Model FREEDOM S Gpm Make VIKING I Elevation at Highest Outlet - 24' Feet Size K-Factor 4.0 Note: CUSHION 14.3 PSI G Temperature Rating 155 N Psi Required 39.4 PUMP Calculation Gpm Required 24.2 Summary C-Factor Used: Overhead 120 Underground 120 W Water Flow Test: Pump Data: Tank or Reservoir: Α Date of Test -Rated Cap. Cap. Elev. Time of Test T @ Psi E Static (Psi) - 55 Elev. Residual (Psi) - 50 Other Well R Flow (Gpm) - 50 Elevation - 0 Proof Flow Gpm S P Location: GOULDS PUMP CURVE Ρ $_{\rm L}$ Source of Information: Y

Fittings Used Summary

DEAN	& ALLYN, INC.
LOT 9	STEPPING STONE

Page 2 Date 2-28-12

Fitting I Abbrev	Legend . Name	1/2	3/4	1	11⁄4	1½	2	21/2	3	31/2	4	5	6	8	10	12	14	16	18	20	24
E	NFPA 13 90' Standard Elbow NFPA 13 Swing Check	1	2	2	3	4	5	6	7 16	8 19	10 22	12 27	14 32	18 45	22 55	27 65	35	40	45	50	61
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

Units Summary

Diameter Units Length Units Inches Feet

Flow Units
Pressure Units

US Gallons per Minute 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.

Pressure / Flow Summary - STANDARD

DEAN & ALLYN, INC. LOT 9 STEPPING STONE Page 3 Date 2-28-12

Node No.	Elevation	K-Fact	Pt Actual	Pn	Flow Actual	Density	Area	Press Req.
10	24.0	4	9.0	na	12.0	0.06	196	9.0
11	24.0	4	9.38	na	12.25	0.06	196	9.0
20	16.0		13.22	na				
21	16.0		13.63	na				
22	16.0		14.65	na				
23	16.0		16.88	na				
24	8.0		22.57	na				
TR	8.0		31.49	na				
FF	0.0		38.12	na				
PUMP	0.0		39.42	na				

The maximum velocity is 9 and it occurs in the pipe between nodes 21 and 22

DEAN & ALLYN, INC. LOT 9 STEPPING STONE Page 4 Date 2-28-12

Hyd. Ref. Point	Qa Dia. "C" Qt Pf/Ft	Fitting or Eqv. Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	****** Notes *****
10	12.00 1.049	1E 2.0	8.000	9.000		K Factor = 4.00
to	120.0	1T 5.0	7.000	3.465		
20	12.0 0.0506	0.0	15.000	0.759		Vel = 4.45
	0.0 12.00			13.224		K Factor = 3.30
11	12.25 1.049	1E 2.0	8.000	9.375		K Factor = 4.00
to	12.25 1.049	1T 5.0	7.000	3.465		1 dotor = 4.00
21	12.25 0.0525		15.000	0.788		Vel = 4.55
	0.0					
	12.25			13.628		K Factor = 3.32
20	12.00 1.049	0.0	8.000	13.224		
to	120.0	0.0	0.0	0.0		
21	12.0 0.0505	0.0	8.000	0.404		Vel = 4.45
21	12.25 1.049	1T 5.0	0.500	13.628		
to	120.0	0.0	5.000	0.0		
22	24.25 0.1858	0.0	5.500	1.022		Vel = 9.00
22	0.0 1.049	2E 4.0	8.000	14.650		
to	120.0	0.0	4.000	0.0		
23	24.25 0.1858		12.000	2.230		Vel = 9.00
23	0.0 1.049	1E 2.0	10.000	16.880		
to	120.0	0.0	2.000	3.465		V/-I - 0.00
24	24.25 0.1858		12.000	2.230		Vel = 9.00
24	0.0 1.049	2T 10.0	28.000	22.575		
to	120.0	5E 10.0	20.000	0.0		Val = 0.00
TR	24.25 0.1858		48.000	8.920		Vel = 9.00
TR	0.0 1.049	2S 10.0	7.000	31.495		
to FF	120.0 24.25 0.1858	0.0 0.0	10.000 17.000	3.465 3.159		Vel = 9.00
				38.119		VGI - 0.00
FF to	0.0 1.049 120.0	2E 4.0 0.0	3.000 4.000	0.0		
to PUMP	24.25 0.1859		7.000	1.301		Vel = 9.00
1 OlvII	0.0	0.0	7.000	1.001		701 0.00
	24.25			39.420		K Factor = 3.86

 City Water Supply:

 C1 - Static Pressure : 55
 D1 - Elevation : 10.394

 C2 - Residual Pressure: 50
 D2 - System Flow : 24.248

 C2 - Residual Flow : 50
 D2 - System Pressure : 39.420

 Hose (Demand) : D3 - System Demand : 24.248

 Safety Margin : 14.270

