#### DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



# CITY OF PORTLAND BUILDING PERMIT



This is to certify that EASTERN FIRE PROTECTION of PO Box 1390, Acturn, Maine 64211

Job ID: 2011-11-2783-FAFS

For installation at 162 CANCO RD CMP

CBL: 148- A-006-001

has permission to extend sprinkler system into truck bay addition

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



# 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: 2011-11-2783-FAFS extend sprinkler system into truck bay addition

For installation at: 162 CANCO RD CMP CBL: 148- A-006-001

**Conditions of Approval:** 

#### Fire

The sprinkler system shall be installed in accordance with NFPA 13.

A separate sprinkler permit is required from the State Fire Marshal's Office.

Sprinkler supervision shall be provided in accordance with NFPA 101, *Life Safety Code*, and NFPA 72, *National Fire Alarm and Signaling Code*.

Sprinkler protection shall be maintained. Where the system is to be shut down for maintenance or repair, the system shall be checked at the end of each day to insure the system has been placed back in service.

The Fire Department will require Knox locking caps on all Fire Department Connections on the exterior of the building.

System acceptance and commissioning must be coordinated with alarm and suppression system contractors and the Fire Department. Call 874-8703 to schedule.

A Knox Box is required.

# City of Portland, Maine - Building or Use Permit Application

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

·						
Job No: 2011-11-2783-FAFS	Date Applied: 11/16/2011		CBL: 148- A-006-001			
Location of Construction: 162 CANCO RD	Owner Name: CENTRAL MAINE POW	VER	Owner Address: 83 EDISON DR AUGUSTA, ME 04		Phone:	
Business Name:	Contractor Name: Eastern Fire Protection C	Co.,Inc,	Contractor Address 1390 AU	Phone: (207) 942-8014		
Lessee/Buyer's Name:	Phone:		Permit Type: FIRE ALARM			Zone: I-M
Past Use:	Proposed Use:		Cost of Work: \$5,000.00			CEO District
Utility Company	Same: Utility Compa install fire suppressi- by truck dock	-	Fire Dept:	Inspection: Use Group: Type: Signature:		
Proposed Project Descriptio			Pedestrian Activ	ities Districe (P.A.D.)		1
Permit Taken By: Lannie				Zoning Approva	al	
		Special Ze	reservation			
Federal Rules.  2. Building Permits do not septic or electrial work.  3. Building permits are vo within six (6) months of False informatin may in permit and stop all work	ing applicable State and t include plumbing, oid if work is not started f the date of issuance. avalidate a building k.	Shoreland Wetland Flood Zo Subdivis Site Plan Maj Date:	one  ion  Min _Min  2 9 11  ICATION	Variance Miscellaneous Conditional Use Interpretation Approved Denied Date:	Does no Requires Approve Approve Denied Date:	ed w/Conditions
hereby certify that I am the owner of the owner to make this application as the application is issued, I certify that to the enforce the provision of the code(s)	his authorized agent and I agree the code official's authorized re	e to conform to	all applicable laws of t	his jurisdiction. In additio	n, if a permit for w	ork described in
					<del></del>	<del> </del>



# **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.

Installation address: 162 CANCO RD. PORTLAND	CBL: 148'A 6-
Exact location: (within structure) CMP TRUCK DOCK	
Type of occupancy(s) (NFPA & ICC): NFPA 13	
Building owner: CMP	
	License No: 386
	E-mail: FLYNTWA@TEAMEASTERN
Installing contractor: EASTERN FIRE PROTECTION	_License No: 259
Contractor phone: 784-1507	E-mail:
The suppression work to be done will be: New: Renov	ration: Addition to existing system:
This is an amendment to an existing permit: Yes: NO	Permit no:
NFPA Standard this system is designed to: 13	Edition: 2010
*Non-NFPA systems are not approved for use within the City of Portland.	COST OF WORK: \$5,000.00
Download a new copy of this document from	PERMIT FEE: \$70.00
www.portlandmaine.gov/fire for every submittal. Attach all working	(\$10 PER \$1,000 + \$30 FOR THE FIRST \$1,000)
documents and complete approved submittals as may be required by	I SED
the State Fire Marshal's Office on electronic PDF's in <u>addition</u> to	CELL
full sized plans.	CET 16 200 Coctions
Contractor shall verify location and type of all FDCs shall	NOV 10 TOSPECTION
be approved in writing by the Fire Prevention Bureau.	Ruiding nd Mi
Submit all information to the Building Inspections Department, 389 Con	Self-six's Poor 215 Portland Mains 04101
Prior to acceptance of any fire protection system, a complete commis	sioning and acceptance test must be coordinated with
all fire system contractors and the Fire Department, and proper document	nentation of such test(s) provided.
All installation(s) must comply with NFPA and the Fire Department	Technical Standard(s).
Applicant signature: Delvet Petros	Date:

# **EASTERN FIRE PROTECTION**

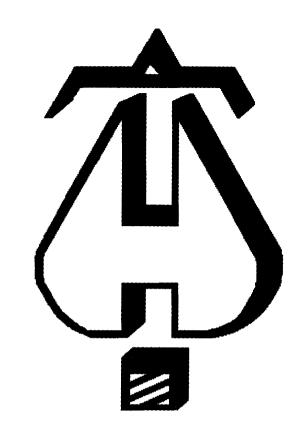


P.O. Box 1390 Kittyhawk Ave.

		Ki	O. Box 1390 Ityhawk Ave.	DATE  \/\\/\\	JOB NO. 48648
(	3	Aubi	urn, ME 04210	ATTENTION	
\	•		(207) 784-1507 (207) 782-0566	RE:	2 1/
Î	2\ ()		•	CMP Truck	Dock
10(	Julial ng	11/2	Pection Department		
			RM. 315		
<u> </u>	rHand, L	IE O	4101		
	<b>E SENDING</b> Shop drawings Copy of letter	<u> </u>		rate cover via	the following items:
QUANTITY	DRAWING NO.	DATE	DESC	CRIPTION	STATUS
3	1 of 1	ιγιιγι	Shop Drau	wings	CE
3	10+2	10/12/54	refrence d	ialings	CE
3	2012	1912/54	sefrence dia	Wing S	CE
		11/11/11	Hydro cal	c Sheets	CE
			<u>'</u>		
	Status code		A. Approved	D. Corrected & result	omitted
			B. Approved as noted Submitted for approval	E. For your files F. Refer to remarks	
	Please retu	rn	copies each indicating your a	pproval and/or comments.	
REMAR	KS				~
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COPY T	o File	· · · · · · · · · · · · · · · · · · ·			

LETTER OF TRANSMITTAL

SIGNED



... Fire Protection by Computer Design

EASTERN FIRE PROTECTION 170 KITTY HAWK AVE AUBURN, ME 04210 207-784-1507

Det .

Job Name : CMP TRUCK DOCK

Drawing : 10F1

Location : 162 CANCO RD. PORTLAND, ME

Remote Area : 1 Contract : 48646

Data File : HYDRO CALCS.WXF

# Date

#### **HYDRAULIC CALCULATIONS** for

Project name: CMP TRUCK DOCK

Location: 162 CANCO RD. PORTLAND, ME

Drawing no: 10F1 Date: 11/11/11

Design

Remote area number: 1

Remote area location: LOADING DOCK EXTENSION Occupancy classification: ORDINARY HAZARD 1

Density: .15 - Gpm/SqFt

Area of application: 7 HEADS - SqFt Coverage per sprinkler: 65 - SqFt

Type of sprinklers calculated: TY 3151 K5.6 UPRIGHT

No. of sprinklers calculated: 7 In-rack demand: 0 - GPM Hose streams: 250 - GPM

Total water required (Including hose streams): 373.56 - GPM @ 38.36 - Psi

Type of system: DRY

Volume of dry or preaction system: 0 - Gal

Water supply information

Date: 9/25/98

Location: 50'-0" FROM BUILDING Source: PORTLAND WATER DISTRICT

Name of contractor: EASTERN FIRE PROTECTION Address: 170 KITTYHAWK AVE. AUBURN, ME

**Phone number:** 784-1507 Name of designer: RJP

Authority having jurisdiction: SFM

Notes: (Include peaking information or gridded systems here.) REMOTE AREA PER NFPA 13, 2010 ED. SECTION 11.2.3.4.2

City Water Supply: C1 - Static Pressure : 75 Demand: D1 - Elevation : 6.496 C2 - Residual Pressure: 65 D2 - System Flow : 123.562 C2 - Residual Flow D2 - System Pressure : 34.515 Hose ( Demand ) : 250 D3 - System Demand : 373.562 Safety Margin : 40.125 150 140 130 P 120 R 110 E 100 s 90 s 80 <del>C1</del> U 70 <del>C2</del> R 60 E 50 40 D2-30 20 10 D1 300 600 900 1200 1500 1800 2100 2400 2700 FLOW ( N ^ 1.85 )

## **Fittings Used Summary**

	TERN FIRE PROTECTION TRUCK DOCK																	Pa Da	ige 3 ite	} 	
Fitting Abbre	Legend v. Name	1/2	3/4	1	11/4	1½	2	2½	3	3½	4	5	6	8	10	12	14	16	18	20	24
D	Dry Rei D										28		47								
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
F	NFPA 13 45' Elbow	1	1	1	1	2	2	3	3	3	4	5	7	9	11	13	17	19	21	24	28
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 l	90' Grvd-Vic Elbow #10	0	0	2	3	4	3.5	6	5	8	7	8.5	10	13	17	20	23	25	33	36	40
J	90'Tee-Branch Grv Vic #20	0	0	4.5	6	8	8.5	10.8	13	17	16	21	25	33	41	50	65	78	88	98	120
S	NFPA 13 Swing Check Valve	4	5	5	7	9	11	14	16	19	22	27	32	45	55	65	76	87	98	109	130
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 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.

Page 4 Date

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Node at Source	Static Pressure	Residual Pressure	Flow	Available Pressure	Total Demand	Required Pressure
TEST	75.0	65	2251.0	74.639	373.56	34.515

## **NODE ANALYSIS**

Node Tag	Elevation	Node Type	Pressure at Node	Discharge at Node	Notes	
D1	0.0	5.6	7.0	14.82		
1	117.0	5.42	7.48	14.82	K=K @ L1	
2	117.0	5.42	7.61	14.95	K=K @ L1	
3	117.0	5.42	8.11	15.43	K=K @ L1	
4	117.0	5.42	9.19	16.42	K=K @ L1	
5	117.0	5.42	11.09	18.04	K=K @ L1	
6	117.0	5.42	14.16	20.39	K=K @ L1	
7	117.0	5.42	18.83	23.51	K=K @ L1	
Α	117.0		24.09		_	
В	117.0		27.27			
С	117.0		27.5			
D	117.0		27.6			
D E	117.0		27.66			
DPV	90.0		39.57			
HDR	89.0		40.11			
BASE	89.0		40.13			
TEST	102.0		34.51	250.0		

EAST	ERN	FIRE	<b>PROT</b>	ECTION
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Page 5 Date

Node1 to	Elev1	K	Qa	Nom	Fitting or		Pipe Ftng's	CFact	Pt Pe	****** Notes ****
Node2	Elev2	Fact	Qt	Act	Eqv.	Ln.	Total	Pf/Ft	Pf	
D1	0	5.60	14.82	1	1T	3.568	1.000	100	7.000	
)		5.00			11	0.0	3.568		0.0	
<u>L1</u>	0		14.82	1.049		0.0	4.568	0.1046	0.478	Vel = 5.50
L1			0.0 14.82						7.478	K Factor = 5.42
1	117	5.42	14.82	1.5		0.0	13.000	100	7.478	K=K@L1
o 2	117		14.82	1.682		0.0 0.0	0.0 13.000	0.0105	0.0 0.137	Vel = 2.14
2	117	5.42	14.95	1.5		0.0	13.000	100	7.615	K=K@L1
0						0.0	0.0		0.0	_
3 3	117		29.77	1.682		0.0	13.000	0.0382	0.496	Vel = 4.30
3 o	117	5.42	15.43	1.5		0.0 0.0	13.000 0.0	100	8.111 0.0	K = K @ L1
4	117		45.2	1.682		0.0	13.000	0.0827	1.075	Vel = 6.53
4	117	5.42	16.42	1.5		0.0	13.000	100	9.186	K = K @ L1
5 	117		61.62	1.682		0.0 0.0	0.0 13.000	0.1466	0.0 1.906	Vel = 8.90
5 5	117	5.42	18.04	1.5		0.0	13.000	100	11.092	K = K @ L1
)		· · · -				0.0	0.0		0.0	_
6 6	117		79.66	1.682		0.0	13.000	0.2359	3.067	Vel = 11.50
	117	5.42	20.39	1.5		0.0 0.0	13.000 0.0	100	14.159 0.0	K = K @ L1
) 7	117		100.05	1.682		0.0	13.000	0.3595	4.674	Vel = 14.45
7	117	5.42	23.51	1.5	1T	7.065	2.830	100	18.833	K = K @ L1
) ^	117		123.56	1.682		0.0 0.0	7.066 9.896	0.5313	0.0 5.258	Vel = 17.84
A A	117	·····	0.0	2.5	21	11,758	30.900	100	24.091	VOI = 17.04
)					1J	10.582	22.339		0.0	
В	117		123.56	2.635		0.0	53.239	0.0597	3.178	Vel = 7.27
B	117		0.0	4	1E 1T	7.137 14.274	9.290 21.411	100	27.269 0.0	
Ċ	117		123.56	4.026		0.0	30.701	0.0076	0.232	Vel = 3.11
С	117		0.0	5	2T	35.685	2.880	100	27.501	
)	117		123.56	5.047		0.0 0.0	35.685 38.565	0.0025	0.0 0.097	Vel = 1.98
D D	117		0.0	5.047	1T	17.842	8.420	100	27.598	70, 1.00
)						0.0	17.842		0.0	
E	117		123.56	5.047		0.0	26.262	0.0026	0.067	Vel = 1.98
E	117		0.0	6	3E 4F	29.975 19.984	160.000 49.959	100	27.665 11.694	
DPV	90		123.56	6.065	TI	0.0	209.959	0.0010	0.216	Vel = 1.37
DPV	90		0.0	6	2E	28.0	4.000	120	39.575	
)	00		122 EG	6.065	1T 1G	30.0 3.0	140.000 144.000	0.0007	0.433 0.106	Vel = 1.37
HDR	89		123.56	0.000	1S	32.0	177.000	0.0001	0.100	VGI 1.07
					1D	47.0		· · · · · · · · · · · · · · · · · · ·		
HDR	89		0.0	8	2E	36.0	30.000	120	40.114	
)						0.0	36.000		0.0	Vel = 0.79

# - Hazen-Williams - 2007

EASTER CMP TR		PROTEC CK	TION	Page 6 Date								
Node1 to Node2	Elev1	K Fact	Qa Qt	Nom Act	Fitting or Eqv.	Ln.	Pipe Ftng's Total	CFact Pf/Ft	Pt Pe Pf	***	Notes	****
				_								
BASE to	89		0.0	8	1G 1T	3.395 29.704	50.000 33.099	100	40.126 -5.630			
TEST	102		123.56	8.27	• •	0.0	83.099	0.0002	0.019	Vel =	0.74	
			250.00							Qa =		
TEST	·		373.56						34.515	K Facto	or = 63.59	