

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

# CITY OF PORTLAND

Please Read Application And Notes, If Any, Attached

PERMIT ISSUED

AUG 19 2005

CITY OF PORTLAND

This is to certify that \_\_\_\_\_

has permission to \_\_\_\_\_

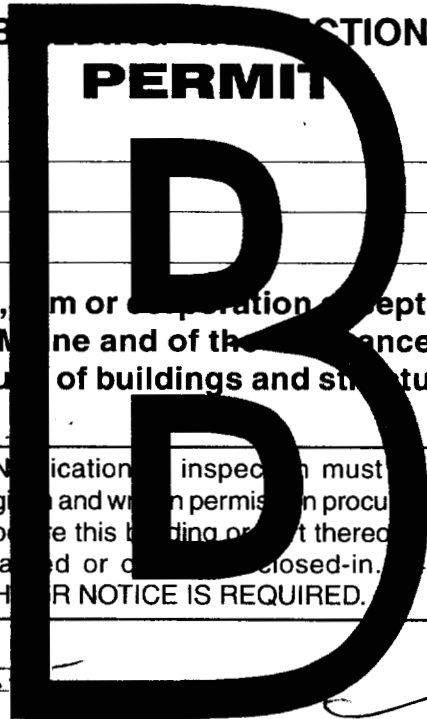
AT \_\_\_\_\_

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 buildings and structures, and of the application on file in this department.

Apply to Public Works for street line and grade if nature of work requires such information.

Notification of inspection must be given and written permission procured before this building or part thereof is altered or closed-in. HEAR NOTICE IS REQUIRED.

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.



### OTHER REQUIRED APPROVALS

Fire Dept. Capt. Greg Cass 8-15

Health Dept. \_\_\_\_\_

Appeal Board \_\_\_\_\_

Other \_\_\_\_\_

Department Name \_\_\_\_\_

8/18/05

Director - Building & Inspection Services

PENALTY FOR REMOVING THIS CARD

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

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

Permit No: 05-1116	Issue Date: AUG 19 2005	CDL: 038 B001001
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<b>Location of Construction:</b> 1 Portland Sq	<b>Owner Name:</b> Bcia New England Holdings Llc	<b>Owner Address:</b> One Boston Pl Suite 2100	<b>Phone:</b> 2078426440
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<b>Business Name:</b>	<b>Contractor Name:</b> Simplex / Grinnell	<b>Contractor Address:</b> 20 Thomas Drive Westbrook	<b>Phone:</b> 2078426440
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<b>Lessee/Buyer's Name</b>	<b>Phone:</b>	<b>Permit Type:</b> Fire Suppression on System	<b>Zone:</b> B-3
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<b>Past Use:</b> commercial building	<b>Proposed Use:</b> commercial building with fire suppression system on 5th floor	<b>Permit Fee:</b> \$102.00	<b>Cost of Work:</b> \$8,600.00	<b>CEO District:</b> I
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<b>FIRE DEPT:</b> <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied	<b>INSPECTION:</b> Use Group: U Type: Fir BC 2003 A
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**Proposed Project Description:**  
install fire suppression system in computer equipment room on 5th floor of commercial building

Signature: *Carl Cues* Signature: \_\_\_\_\_

**PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)**

Action:  Approved  Approved w/Conditions  Denied

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

<b>Permit Taken By:</b> jharris	<b>Date Applied For:</b> 08/12/2005	<b>Zoning Approval</b>
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Special Zone or Reviews	Zoning Appeal	Historic Preservation
<input type="checkbox"/> Shoreland	<input type="checkbox"/> Variance	<input checked="" type="checkbox"/> Not in District or Landmark
<input type="checkbox"/> Wetland	<input type="checkbox"/> Miscellaneous	<input type="checkbox"/> Does Not Require Review
<input type="checkbox"/> Flood Zone	<input type="checkbox"/> Conditional Use	<input type="checkbox"/> Requires Review
<input type="checkbox"/> Subdivision	<input type="checkbox"/> Interpretation	<input type="checkbox"/> Approved
<input type="checkbox"/> Site Plan	<input type="checkbox"/> Approved	<input type="checkbox"/> Approved w/Conditions
Maj <input type="checkbox"/> Minor <input type="checkbox"/> MM <input type="checkbox"/>	<input type="checkbox"/> Denied	<input type="checkbox"/> Denied
late: _____	late: _____	Date: _____

**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

# All Purpose Building Permit Application

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

Location/Address of Construction: <u>ONE PORTLAND SQUARE (5<sup>TH</sup> FLOOR)</u>		
Total Square Footage of Proposed Structure	Square Footage of Lot	
Tax Assessor's Chart, Block & Lot Chart#                  Block#                  Lot# <u>038                      B                      001</u>	Owner:	Telephone:
Lessee/Buyer's Name (If Applicable) <u>JM FAYSON</u>	Applicant name, address & telephone:	cost Of Work: \$ <u>8600.00</u>  Fee: \$ <u>102.00</u>
Current use: <u>OFFICE / COMPUTER EQUIPM.</u>		
If the location is currently vacant, what was prior use: _____		
Approximately how long has it been vacant: _____		
Proposed use: <u>COMPUTER EQUIPMENT ROOM</u>		
Project description: <u>INSTALLATION OF NEW FIRE SUPPRESSION SYSTEM (5<sup>TH</sup> FL)</u>		
Contractor's name, address & telephone: <u>SIMPLEX GRINNELL</u>		
Who should we contact when the permit is ready: <u>MR. BRIAN HOFFMANN</u>		
Mailing address:		
We will contact you by phone when the permit is ready. You must come in and pick up the permit and review the requirements before starting any work, with a Plan Reviewer. A stop work order will be issued and a \$100.00 fee if any work starts before the permit is picked up.      PHONE: <u>842-6440 X 215</u>		

IF THE REQUIRED INFORMATION IS NOT INCLUDED IN THE SUBMISSIONS THE PERMIT WILL BE AUTOMATICALLY DENIED AT THE DISCRETION OF THE BUILDING/PLANNING DEPARTMENT, WE MAY REQUIRE ADDITIONAL INFORMATION IN ORDER TO APPROVE THIS PERMIT.

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

Signature of applicant: <u>Rogay A Tolivas</u>	Date: <u>BAU 6 05</u>
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This is NOT a permit, you may not commence ANY work until the permit is issued. If you are in a Historic District you may be subject to additional permitting and fees with the Planning Department on the 4<sup>th</sup> floor of City Hall

**H.M PAYSON & CO.****FM-200 SYSTEM****5<sup>TH</sup> FLOOR I.T. ROOM**

Owner: H.M. Payson & Co.  
Location: One Portland Square Portland, Maine  
Protected Spaces: I.T. room; 1346 **cu-ft.**  
System Type: Total flooding, automatic 24VDC electric per NFPA 2001 & 72  
**Manufacturer:** Pyro-Chem, Inc.  
System Design: Temperature: controlled, @ 66-72 degrees F.  
Minimum design concentration: 7.17%  
Actual design concentration: 7.23%  
Pyro-Chem FM-200 Flow calculation PYCM3.02, software (UL:  
EX-4986 **AND** FMRC approved).

Enclosure Integrity: AC unit is re-circulating and does not introduce outside **air**. All present or future cable penetrations must be sealed to maintain enclosure integrity.

**Alarms:** System includes 3 local horn-strobe alarm indicators

Parts:

1	570005 – 32 liter- <b>FM-200</b> Cylinder
48	#s <b>FM-200</b>
2	570085 - Container Bracket
1	570209 - Electric Solenoid
1	570162 – 3/4” - 7 Port-Nozzle 4.8mm
1	570192 – Warning <b>sign</b>
1	570228 – PCR- 100 Control Panel
1	<b>4</b> 17881 – Zone relay module
2	570240 – PCR- 100 install manuals
1	430024 – Ionization Detector
1	430023 – Photoelectric Detector
2	430025 – B110LP detector <b>base</b>
3	429694 – Horn/strobe, 15CD
1	76495 – Abort switch
2	<b>55</b> 1167- Dual action pull station
1	76499 – <b>Maintenance</b> Switch



Pyro-Chem FM-200 Flow Calculation - PYCM3.01  
UL: EX4986 FM: 1Y6A5.AF  
Project: H.M. PAYSON SERVER ROOM  
File Name: HM Payson.FLC

## **Consolidated Report Customer Information**

**Company Name: H.M. PAYSON & CO.**  
**Address: ONE PORTLAND SQUARE**  
**PORTLAND MAINE 04101**

**Phone: 772-3761**  
**Contact: SHELLY PYLE**  
**Title: BUSINESS MANAGER**

## **Project Data**

**Project Name: H.M. PAYSON SERVER ROOM**  
**Designer: BH**  
**Number: S04-60 REV.A**  
**Account:**  
**Location: 5TH FLR.**  
**Description: FM-200 CLEAN AGENT SYSTEM**

**Consolidated Report  
Enclosure Information**

Elevation: 0 ft (relative to sea level)  
Atmospheric Correction Factor: 1

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Enclosure Number: 1  
Name: I.T. Room 5th Floor  
Enclosure Temperature...  
Minimum: 66 F  
Maximum: 72 F  
Maximum Concentration: 7.324 %  
Design Concentration...  
Adjusted: 7.230 %  
Minimum: 7.170 %  
Minimum Agent Required: 47.6 lbs  
Width: 0.0 ft  
Length: 0.0 ft  
Height: 0.0 ft

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Volume: 0.0 cubic ft  
Non-permeable: 0.0 cubic ft

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Total Volume: 1346.0 cubic ft  
Adjusted Agent Required: 48.0 lbs  
Number of Nozzles: 1

**Consolidated Report  
Agent Information**

Agent: FM-200/ Propellant N2  
(FM-200 is a Trademark of Great Lakes Chemical Corp.)

Adjusted Agent Required: 48.0 lbs  
 Cylinder Name: 32 Liter DOT Cylinder  
 Cylinder Part Number: 570005  
 Number of Main Cylinders: 1  
 Number of Reserve Cylinders: 0  
 Manifold: No Manifold

Pipe Take Off Direction: Horizontal  
 Agent Per Cylinder: 48.0 lbs  
 Fill Density: 40.3 lbs / cubic ft  
 Cylinder Empty Weight: 57.5 lbs  
 Weight, All Cylinders + Agent: 105.5 lbs  
 Floor Area Per Cylinder: 0.55 square ft  
 Floor Loading Per Cylinder: 194 lbs / square ft

**Pipe Network**

<b>Part 1 - Pipe</b>			<b>Pipe</b>			
Description	Start	End	Type	Diameter	Length	Elevation
Main Cyl. X 1	0	1		1 in	2.73 ft	2.73 ft
Pipe	1	2	US40B TS	3/4 in	0.50 ft	0.00 R
Pipe	2	3	US40B TS	3/4 in	6.00 ft	6.00 ft
Pipe	3	4	US40B TS	3/4 in	6.00 R	0.00 ft
Pipe	4	5	US40B TS	3/4 in	1.00 ft	0.00ft
Pipe/E1-N1	5	6	US40B TS	3/4 in	0.33 ft	-0.33 ft

**Part 2 - Equivalent Length**

Start	End	90	45	Thru	Side	Union	Other	Added	Total
0	1	0	0	0	0	0		0.00ft	20.0ft
1	2	0	0	0	0	0		0.00ft	0.5 ft
2	3	1	0	0	0	0		0.00 ft	8.2 ft
3	4	1	0	0	0	0		0.00 ft	8.2 ft
4	5	1	0	0	0	0		0.00 ft	3.2ft
5	6	1	0	0	0	0		0.00 ft	2.5 ft

**Part 3 - Nozzles**

Start	End	Flow	Name	Size	Type	NozzleArea
0	1	48.0 lbs				
1	2	48.0 lbs				
2	3	48.0 lbs				
3	4	48.0 lbs				
4	5	48.0 lbs				
5	6	48.0 lbs	E1-N1	3/4 in	7 Port-BR	0.1963 square in

**Parts Information**

Total Agent Required: 48.0 lbs  
 Cylinder Name: 32 Liter DOT Cylinder (Part: 570005)  
 Number Of Cylinders: 1

Nozzle	Type	Diameter	Nozzle Area	Part Number
E1-N1	7 Port-BR	3/4 in	0.1963 square in	570158

Nozzle	Drill Diameter	Drill Size
E1-N1	0.1890 inches	4.8 mm

Pipe:	Type	Diameter	Length
	US40BTS	3/4 in	13.83 ft

List of 90 degree elbows:



**Consolidated Report**

**System Acceptance**

System Discharge Time: 9.9 seconds  
Percent Agent In Pipe: 12.4%  
Percent Agent Before First Tee: 0.0%

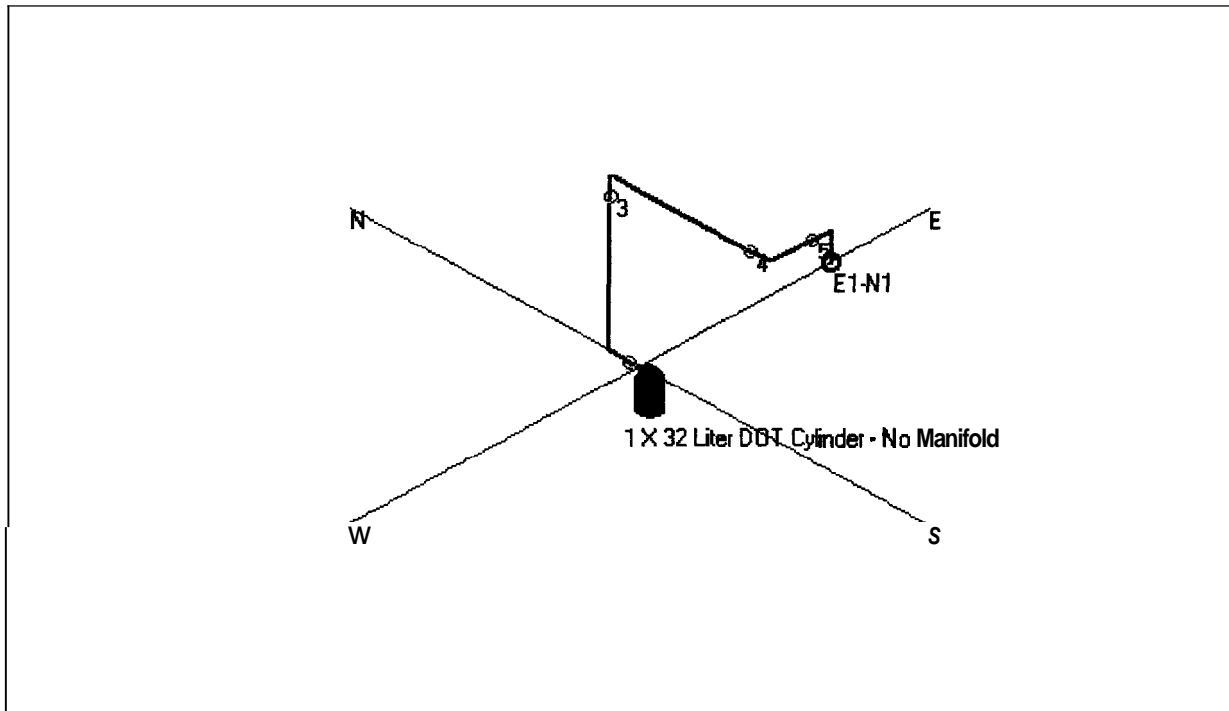
Enclosure Number: 1  
Enclosure Name: I.T. Room 5th Floor

Minimum Design Concentration: 7.170%  
Adjusted Design Concentration: 7.230%  
Predicted Concentration: 7.240%

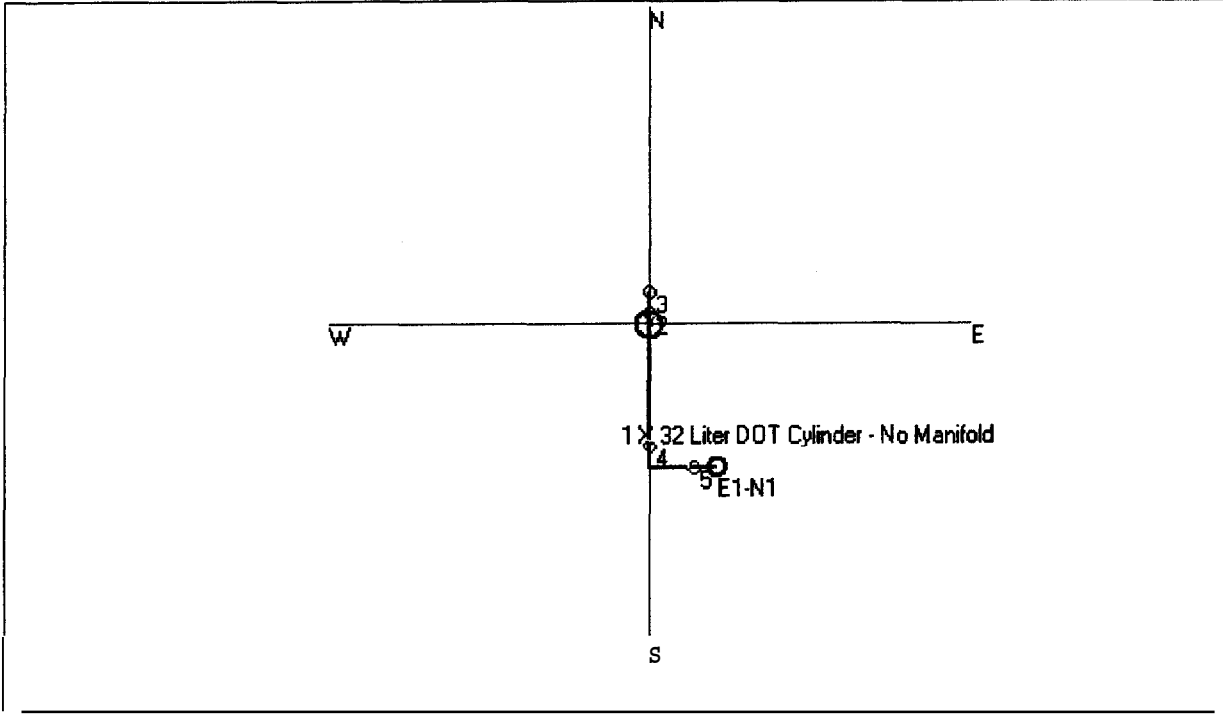
Maximum Expected Agent Concentration: 7.324% (At 72 F)

Nozzle	Minimum Agent Required	Adjusted Agent Required	Predicted Agent Delivered	Nozzle Pressure (Average)
E1-N1	47.6 lbs	48.0 lbs	48.0 lbs	189 psig

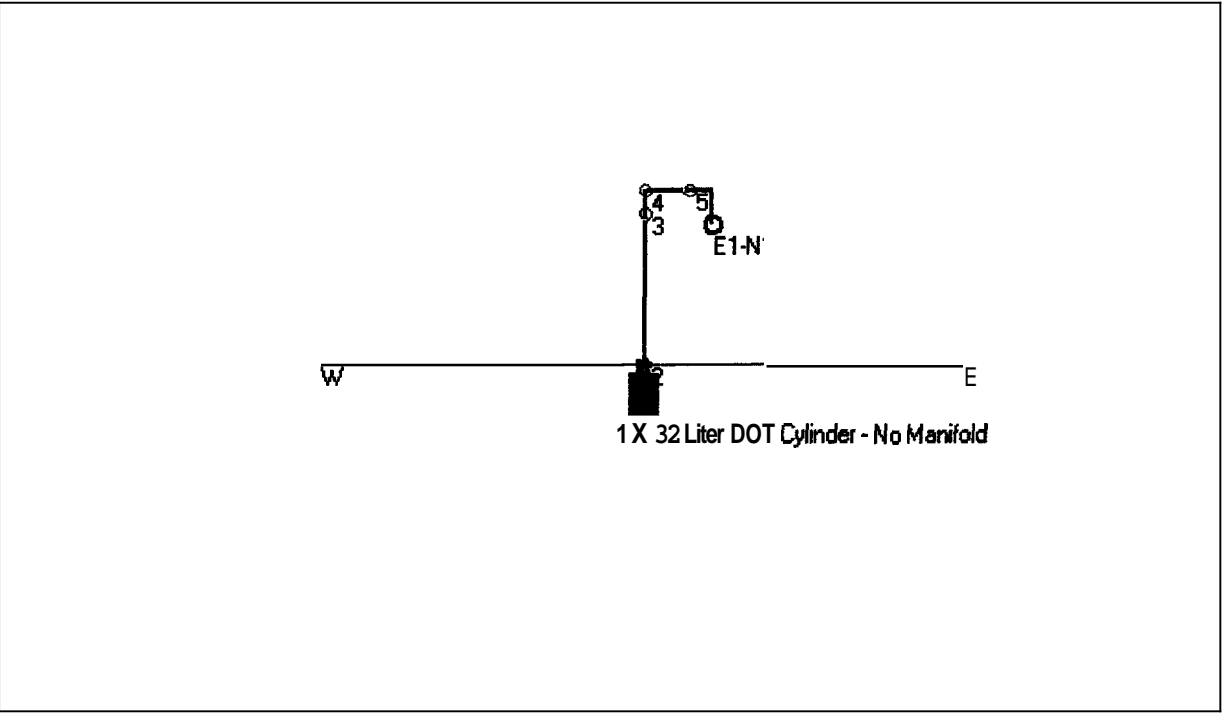
**Standard Isometric View**

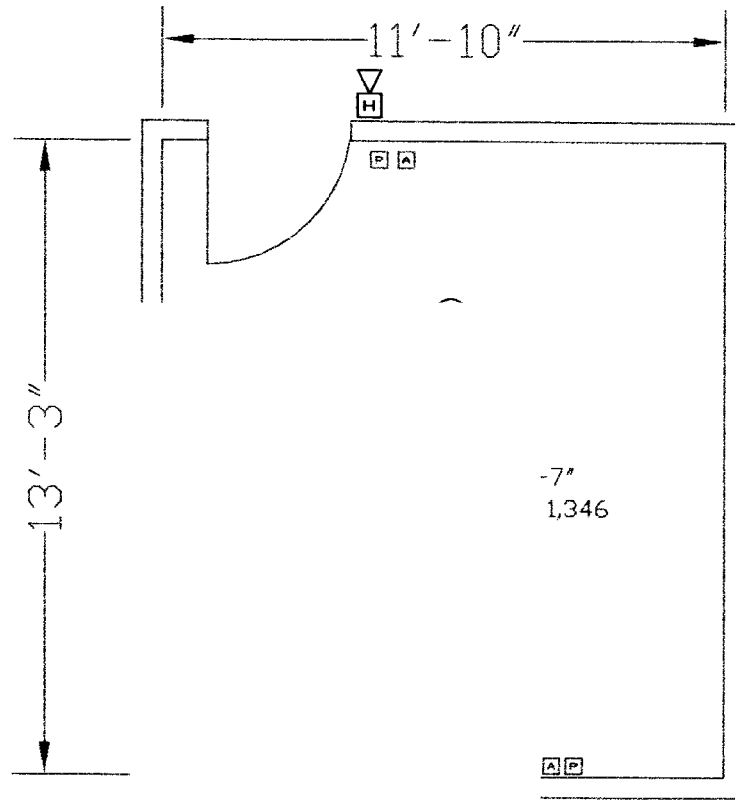


**Consolidated Report**  
**Standard Plan View**

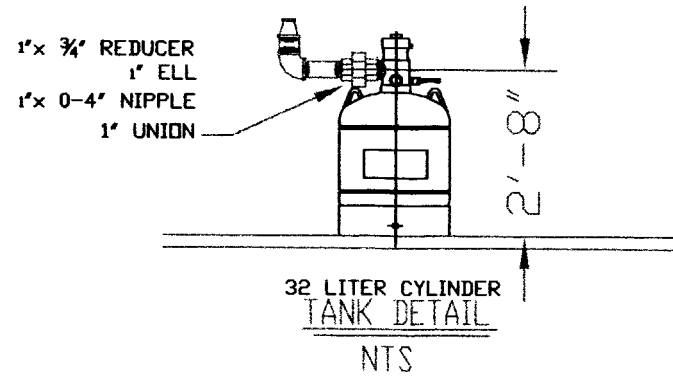


**Standard Elevation View**





I.T. ROOM  
SCALE: 1/4"=1'-0"



GENERAL NOTES

ALL PIPE WILL BE SCHD 40, A 53 SEAMLESS PIPE.

ALL PIPING @ 8'-2" FROM RAISED FLR. ALL PIPING WILL BE CONCEALED ABOVE GYPSUM BOARD.

ALL EQUIPMENT WILL BE INSIDE THE PROTECTED SPACE

DIRT TRAP LENGTHS SHOULD BE NO MORE THAN 10 TIMES NOMINAL PIPE DIAMETER.

CONNECT SYSTEM PANEL TO SHUT DOWN HVAC AND TIE PCR-100 INTO MAIN BLDG FIRE ALARM ON 1ST FLR.

ALL HANGERS SHALL BE SPLIT RINGS SECURED BY FM PLATES AND ALL THREAD ROD.

LEGEND

- PHOTOELECTRIC DETECTOR
- IONIZATION DETECTOR
- STROBE WARNING LIGHT LARM HORN
- ABORT SWITCH
- MANUAL PULL STATION
- PCR-100 CONTROL PANEL
- DISCHARGE PRESSURE SWITCH
- FM-200 NOZZLE

<b>tyco</b> Fire & Security	<b>SimplexGrinnell</b> EXECUTIVE OFFICES - HOUSTON, TEXAS, USA	SCALE: 1/4"=1'-0"	DRAWN BY: B.H.	CHECKED BY:	DATE: JUNE 2005
LOCAL OFFICE:		CONTRACT WITH: H.M. PAYSON		CONTRACT NO.:	
EXECUTIVE OFFICES - HOUSTON, TEXAS, USA		DESCRIPTION: PYRO-CHEM FM-200 5th FLOOR		DATE: JUNE 2005	
APPROVALS		CONTRACT NAME: H.M. PAYSON		DRAWING NO. 1 OF 1	
REVISIONS		CONTRACT WITH: H.M. PAYSON		DRAWING NO. 1 OF 1	
NO.		DESCRIPTION		DATE	
BY		REVISION DESCRIPTION		DATE	



**CITY OF PORTLAND, MAINE**  
**Department of Building Inspections**

\_\_\_\_\_ 20\_\_\_\_

Received from \_\_\_\_\_

Location of Work \_\_\_\_\_

Cost of Construction \$ \_\_\_\_\_

Permit Fee \$ \_\_\_\_\_

Building (IL)  Plumbing (I5) \_\_\_\_\_ Electrical (I2) \_\_\_\_\_ Site Plan (U2) \_\_\_\_\_

Other \_\_\_\_\_

CBL: \_\_\_\_\_

Check #: \_\_\_\_\_

**Total Collected \$** \_\_\_\_\_

# **THIS IS NOT A PERMIT**

No work is to be started until PERMIT CARD is actually posted upon the premises. Acceptance of fee is no guarantee that permit will be granted. PRESERVE THIS RECEIPT. In case permit cannot be granted the amount of the fee will be refunded upon return of the receipt less \$10.00 or 10% whichever is greater.

WHITE - Applicant's Copy  
YELLOW - Office Copy  
PINK - Permit Copy