



DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND

BUILDING PERMIT

This is to certify that Louise Murphy/ Freedom Fire Protect., Inc Located At 91 EMERY ST.

has permission to Install Water Based Suppression 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 procured prior to occupancy.

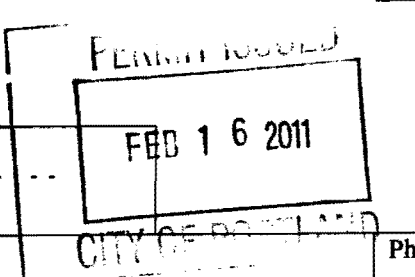
Fire Prevention Officer

Code Enforcement Officer / Plan Reviewer

THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY.

PENALTY FOR REMOVING THIS CARD.

City of Portland, Maine - Building or Use Permit Application
 389 Congress Street, 04101 Tel: (207) 874-8703, FAX: (207) 8716



Job No: 2011-01-220-FAFS	Date Applied: 1/5/2011	CBL: 056 - - G - 003 - 001 - - -	
Location of Construction: 91 EMERY ST	Owner Name: OTTER EMERY LLC SEA	Owner Address: 39 COVESIDE LN YARMOUTH, ME - MAINE 04096	Phone:
Business Name:	Contractor Name: Wales, William	Contractor Address:	Phone:
Lessee/Buyer's Name:	Phone:	Permit Type: FIRE SYS WB - Fire Suppression Water Based	Zone: R-6
Past Use: Legal 4 residential dwelling units (1 on 1 st floor - 2 on 2 nd flr & 1 on 3 rd floor	Proposed Use: Same: 4 residential dwelling units - adding sprinkler system	Cost of Work: 13000.00	CEO District:
		Fire Dept: <input checked="" type="checkbox"/> Approved w/ conditions <input type="checkbox"/> Denied <input type="checkbox"/> N/A	Inspection: Use Group: Type: SB, 2009 Signature: <i>[Signature]</i>
Proposed Project Description: 91 Emery Install Water Based Suppression		Pedestrian Activities District (P.A.D.)	

Permit Taken By: _____ **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 <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetlands <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan _ Maj _ Min _ MM Date: <i>ok with conditions</i> <i>9/1/24/11</i>	Zoning Appeal <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: _____	Historic Preservation <i>within</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> 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	PHON

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.**

1. Close In Elec/Plmb/Framing
2. Final Inspection

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 OCCU0PIED.



PORTLAND MAINE

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

Director of Planning and Urban Development
Penny St. Louis Littell

Job ID: 2011-01-220-FAFS

Located At: 91 EMERY

CBL056 - - G - 003 - 001 - - - -

Conditions of Approval:

Zoning

1. ANY exterior work requires a separate review and approval thru Historic Preservation. This property is located within an Historic District.
2. This property shall remain a four (4) family dwelling. Any change of use shall require a separate permit application for review and approval.
3. This is NOT an approval for an additional dwelling unit. You SHALL NOT add any additional kitchen equipment including, but not limited to items such as stoves, microwaves, refrigerators, or kitchen sinks, etc. Without special approvals.

Fire

1. This sprinkler is a required system due to single means of egress from a dwelling.
2. The sprinkler system shall be installed in accordance with NFPA 13.
3. The Fire Department will require Knox locking caps on all Fire Department Connections on the exterior of the building.
4. Installation of a sprinkler or fire alarm system requires a Knox Box to be installed per city ordinance.
5. The sprinkler system shall be supervised for all supervisory and water flow signals.
6. A separate Fire Alarm Permit is required
7. The fire alarm system shall comply with the City of Portland Standard for Signaling Systems for the Protection of Life and Property. All fire alarm installation and servicing companies shall have a Certificate of Fitness from the Fire Department.
8. System acceptance and commissioning must be coordinated with alarm and suppression system contractors and the Fire Department. Call 874-8703 to schedule.

Building

1. Sprinkler systems to be designed and installed per IBC 2009 standards Sec. 903.3.1
2. Application approval based upon information provided by applicant. Any deviation from approved plans requires separate review and approval prior to work.
3. Separate permits are required for any electrical, plumbing, fire alarm HVAC systems, heating appliances, including pellet/wood stoves, commercial hood exhaust systems and fuel tanks. Separate plans may need to be submitted for approval as a part of this process.

Freedom Fire Protection, Inc.

30 Years of Fire Protection Experience

209 Quaker Ridge Road

Casco, Maine 04015

Phone (207) 627-4109 Fax (207) 627-7340

December 6, 2010

Portland City Hall
Third Floor Room #315
Portland, Maine 04101

Attention: Captain Keith Gautreau

Ref: 91 Emery Street
Portland, Maine 04102

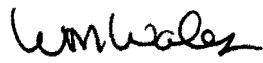
Subject: Fire Sprinkler Plan Review

Enclosed please find for your review and comment the following sprinkler information.

- Fire Suppression System Permit
- Permit Fee check
- Freedom Fire Protections drawings FP1, FP2
- 1 set of 8-1/2 x 11 PDF sprinkler plans.
- Hydraulic Calculations Area #1 third floor.
- Copy of the State Fire Marshall's sprinkler permit.

Please get in touch with me to discuss any questions or if you need additional information.

Regards,



William Wales

(O) 207-627-4109

(F) 207-627-7340

(C) 207-671-8639

E-mail wwales@maine.rr.com



State of Maine
Department of Public Safety
Fire Sprinkler System Permit



9317

91 EMERY STREET

Located at: 91 EMERY STREET
 In the Town of: Portland
 Occupancy/Use: APARTMENTS
 Type of System: NFPA 13R

Permission is hereby given to:

Freedom Fire Protection, Inc.
 209 Quaker Ridge Road
 Casco, ME 04015
 Contractor License # 295

according to plans submittal filed with the Licensing and Inspections Unit and are now approved. This application form/plans are filed under log # 2101427, and no departure from application form/plans shall be made without prior approval in writing. This permit is issued under the provisions of Title 32, Chapter 20, Section 12004-I. Nothing herein shall excuse the holder of this permit for failure to comply with local ordinances, zoning laws, or other pertinent legal restrictions. Each permit issued shall be displayed/available at the site of construction.

This permit was issued on 12/7/2010 for a fee paid of \$100.00
 This permit will expire at midnight on Sunday, June 05, 2011



Anne H. Jordan
 Commissioner

Fire Department Connection Location/Type per Local Fire Department

Within 30 days of the completion of a new fire sprinkler system or an addition to an existing fire sprinkler system, a fire sprinkler system contractor shall provide to the Licensing and Inspections Unit a copy of this permit signed and dated by the certified responsible managing supervisor representing that the fire sprinkler system has been installed according to specifications of the approved plan to the best of the supervisor's knowledge, information, and belief. This requirement is part of the sprinkler law, and neglect of this duty is grounds to not renew the contractor's license to do work in the State of Maine. All sprinkler licenses expire June 30th every year.

Job completed, tested and verified on date of _____

RMS for this job: Vess Timothy L.

RMS Signature: _____



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: 91 Emery Street CBL: 56-6-3

Exact location: (within structure) Basement, 1st floor, 2nd floor, 3rd floor

Type of occupancy(s) (NFPA & ICC): Residential Apartments (NFPA 13R)

Building owner: Louise Murphy (Sea Otter LLC)

Managing Supervisor (RMS): Timothy Vess License No: 348

Supervisor phone: (207)627-4109 E-mail: wwales@maine.rr.com

Installing contractor: Freedom Fire Protection, Inc. License No: 295

Contractor phone: (207)671-8639 E-mail: wwales@maine.rr.com

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: 13R Edition: 2007

*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 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>\$12,728.00</u>
PERMIT FEE: <u>\$150.00</u>
(\$10 PER \$1,000 + \$30 FOR THE FIRST \$1,000)

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: William W. Wales Date: December 6, 2010

Job Summary Report
Job ID: 2011-01-220-FAFS

Report generated on Jan 5, 2011 3:34:56 PM

Job Type:	Fire Alarm / Suppression	Job Description:	91 Emery Install Water Based Suppression	Job Year:	2010
Building Job Status Code:	Pending Verification	Pin Value:	382	Tenant Name:	
Job Application Date:		Public Building Flag:	N	Tenant Number:	
Estimated Value:	13,000	Square Footage:			
Related Parties:		OTTER EMERY SEA		<i>Property Owner</i>	
		Freedom Fire Protection - William Wales		<i>FIRE ALARM INSTALLER</i>	

Job Charges

Fee Code Description	Charge Amount	Permit Charge Adjustment	Net Charge Amount	Payment Date	Receipt Number	Payment Amount	Payment Adjustment Amount	Net Payment Amount	Outstanding Balance
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Location ID: 8906

Location Details

Alternate Id	Parcel Number	Census Tract	GIS X	GIS Y	GIS Z	GIS Reference	Longitude	Latitude
B30082	056 G 003 001		M				-70.268857	43.647984

Location Type	Subdivision Code	Subdivision Sub Code	Related Persons	Address(es)
1				91 EMERY STREET WEST

Location Use Code	Variance Code	Use Zone Code	Fire Zone Code	Inside Outside Code	District Code	General Location Code	Inspection Area Code	Jurisdiction Code
FOUR FAMILY		NOT APPLICABLE R-6			Historic District		DISTRICT 3	WEST END

Structure Details

Structure: 4 Unit Residential - legal 4 res du - (1 on 1st floor - 2 on 2nd floor & 1 on 3rd floor)

Occupancy Type Code:

Structure Type Code	Structure Status Type	Square Footage	Estimated Value	Address
Three - Four Family Building	0			91 EMERY STREET WEST

Longitude	Latitude	GIS X	GIS Y	GIS Z	GIS Reference	User Defined Property Value

Permit #: FIRE SYS WB-617

Permit Data

Location Id	Structure Description	Permit Status	Permit Description	Issue Date	Reissue Date	Expiration Date
8906	4 Unit Residential	Initialized	Install Water Based System			

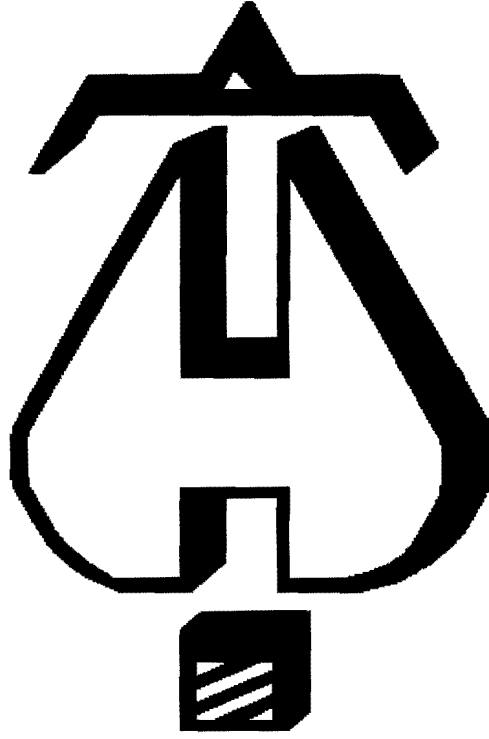
Job Summary Report
Job ID: 2011-01-220-FAFS

Report generated on Jan 5, 2011 3:34:56 PM

Inspection Details								
Inspection Id	Inspection Type	Inspection Result Status	Inspection Status Date	Scheduled Start Timestamp	Result Status Date	Final Inspection Flag		
Fees Details								
Fee Code	Charge Amount	Permit Charge Adjustment	Permit Charge Adj Remark	Payment Date	Receipt Number	Payment Amount	Payment Adjustment Amount	Payment Adj Comment
Job Valuation Fees	\$150.00							

91 Emery St - Zoning Reg.

1. ANY exterior work requires a separate review and approval thru Historic Preservation. This property is located within an Historic District.
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... Fire Protection by Computer Design

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

Job Name : 91 EMERY STREET
Building : 91 EMERY STREET
Location : PORTLAND, MAINE 04102
System : #1 AREA #1
Contract :
Data File : 91 EMERY STREET HC.WXF

HYDRAULIC DESIGN INFORMATION SHEET

Name - 91 EMERY STREET Date - 12/2/10
Location - PORTLAND, MAINE 04102
Building - 91 EMERY STREET System No. - #1 AREA #1
Contractor - FREEDOM FIRE PROTECTION Contract No. -
Calculated By - MICHAEL NOBLIT Drawing No. - FP-2
Construction: (X) Combustible () Non-Combustible Ceiling Height 8'-3"
OCCUPANCY - APARTMENTS

S Type of Calculation: (X)NFPA 13 Residential (X)NFPA 13R ()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 - 14 Gpm System Type
Listed Pres. at Start Point - 11.1 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 LFII
I Elevation at Highest Outlet - 37.083Feet Size 1/2" K-Factor 4.2
G Note: Temperature Rating 155
N

Calculation Gpm Required 28.216 Psi Required 43.414 At Test
Summary C-Factor Used: Overhead 120 Underground 150

W Water Flow Test: Pump Data: Tank or Reservoir:
A Date of Test - 7/19/2006 Rated Cap. Cap.
T Time of Test - @ Psi Elev.
E Static (Psi) - 50 Elev.
R Residual (Psi) - 43 Other Well
Flow (Gpm) - 750 Proof Flow Gpm
S Elevation -

P Location:

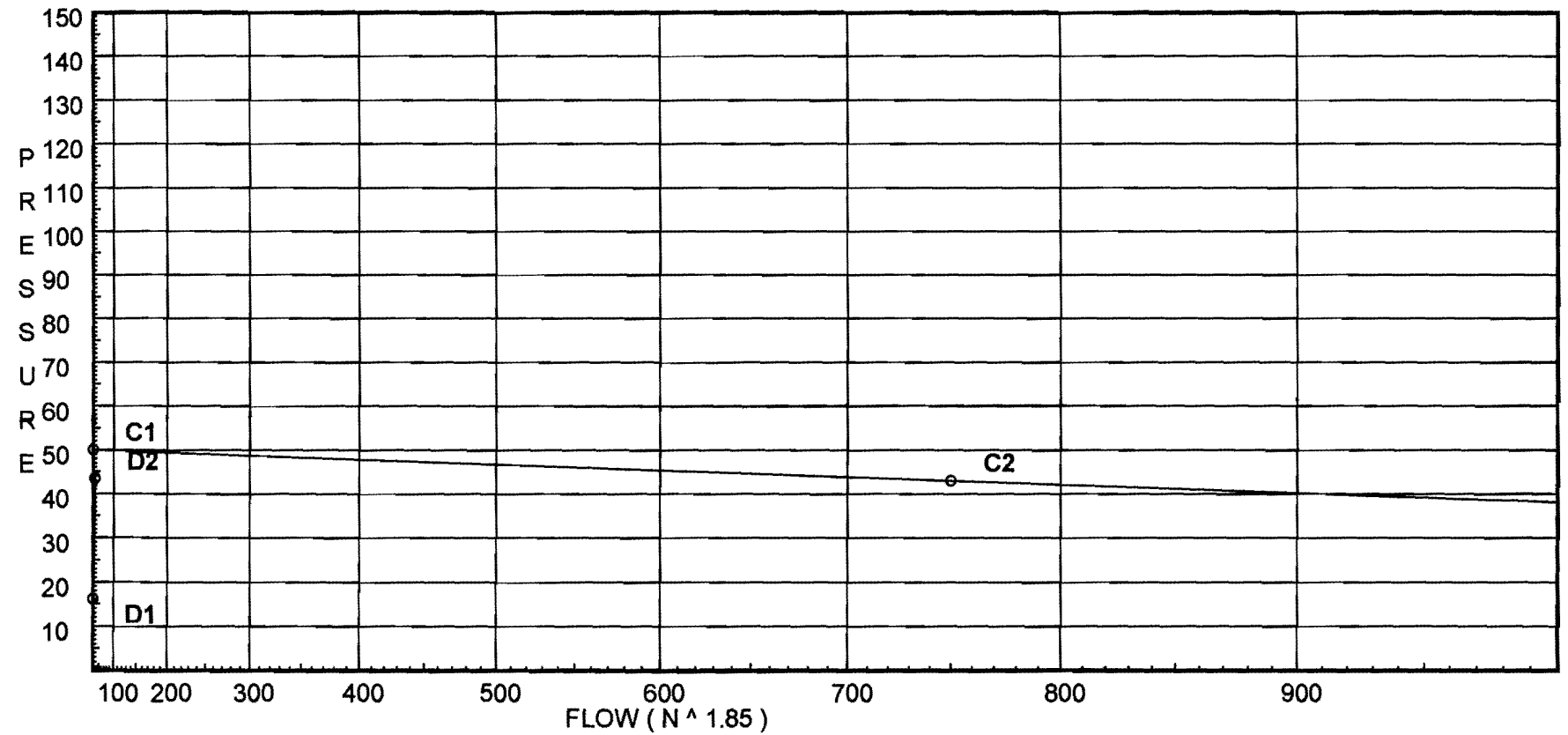
L Source of Information: PORTLAND WATER DISTRICT
Y

Water Supply Curve (C)

FREEDOM FIRE PROTECTION INC.
91 EMERY STREET

City Water Supply:
C1 - Static Pressure : 50
C2 - Residual Pressure: 43
C2 - Residual Flow : 750

Demand:
D1 - Elevation : 16.061
D2 - System Flow : 28.2164
D2 - System Pressure : 43.414
Hose (Adj City) : _____
Hose (Demand) : _____
D3 - System Demand : 28.2164
Safety Margin : 6.570



Fittings Used Summary

FREEDOM FIRE PROTECTION INC.
91 EMERY STREET

Page 3
Date 12/2/10

Fitting Legend

Abbrev.	Name	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	5	6	8	10	12	14	16	18	20	24
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.
91 EMERY STREET

Page 4
Date 12/2/10

Node No.	Elevation	K-Fact	Pt Actual	Pn	Flow Actual	Density	Area	Press Req.
101	37.083	4.2	11.47	na	14.22	0.05	0.001	11.1
102	37.083	4.2	11.1	na	13.99	0.05	0.001	11.1
15	37.083		11.5	na				
14	37.083		12.6	na				
13	37.083		13.2	na				
12	26.33		18.86	na				
11	26.33		20.19	na				
10	27.583		19.95	na				
9	27.583		21.62	na				
8	26.33		22.46	na				
7	26.33		23.22	na				
6	17.583		27.39	na				
5	17.583		28.53	na				
4	8.33		33.13	na				
3	8.33		34.12	na				
2	8.33		34.56	na				
1	0.0		42.92	na				
TEST	0.0		43.41	na				

The maximum velocity is 6.05 and it occurs in the pipe between nodes 15 and 14

Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv. Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	***** Notes *****
101 to 15	14.22	1.049 120 0.0680	0.0 0.0 0.0	0.500 0.0 0.500	11.469 0.0 0.034		K Factor = 4.20 Vel = 5.28
	0.0 14.22				11.503		K Factor = 4.19
102 to 15	13.99	1.049 120 0.0672	1T 5.0 0.0 0.0	1.000 5.000 6.000	11.100 0.0 0.403		K Factor = 4.20 Vel = 5.19
15 to 14	14.23	1.38 120 0.0647	1E 3.0 1T 6.0 0.0	8.000 9.000 17.000	11.503 0.0 1.100		Vel = 6.05
14 to 13	0.0	1.38 120 0.0648	1E 3.0 0.0 0.0	6.250 3.000 9.250	12.603 0.0 0.599		Vel = 6.05
13 to 12	0.0	1.38 120 0.0646	1T 6.0 0.0 0.0	9.500 6.000 15.500	13.202 4.657 1.002		Vel = 6.05
12 to 11	0.0	1.38 120 0.0647	1E 3.0 1T 6.0 0.0	11.500 9.000 20.500	18.861 0.0 1.327		Vel = 6.05
11 to 10	0.0	1.38 120 0.0646	1E 3.0 0.0 0.0	1.660 3.000 4.660	20.188 -0.543 0.301		Vel = 6.05
10 to 9	0.0	1.38 120 0.0647	3E 9.0 0.0 0.0	16.830 9.000 25.830	19.946 0.0 1.672		Vel = 6.05
9 to 8	0.0	1.38 120 0.0646	1E 3.0 0.0 0.0	1.660 3.000 4.660	21.618 0.543 0.301		Vel = 6.05
8 to 7	0.0	1.38 120 0.0647	2E 6.0 0.0 0.0	5.660 6.000 11.660	22.462 0.0 0.754		Vel = 6.05
7 to 6	0.0	1.61 120 0.0306	1E 4.0 0.0 0.0	8.750 4.000 12.750	23.216 3.788 0.390		Vel = 4.45
6 to 5	0.0	1.61 120 0.0305	2E 8.0 2T 16.0 0.0	13.330 24.000 37.330	27.394 0.0 1.140		Vel = 4.45
5 to 4	0.0	1.61 120 0.0305	1T 8.0 0.0 0.0	11.250 8.000 19.250	28.534 4.007 0.588		Vel = 4.45
4 to 3	0.0	1.61 120 0.0305	3E 12.0 0.0 0.0	20.330 12.000 32.330	33.129 0.0 0.987		Vel = 4.45

Final Calculations - Standard

FREEDOM FIRE PROTECTION INC.
91 EMERY STREET

Page 6
Date 12/2/10

Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv. Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	***** Notes *****
3	0.0	1.61	1T 8.0	6.500	34.116		
to		120	0.0	8.000	0.0		
2	28.22	0.0306	0.0	14.500	0.443		Vel = 4.45
2	0.0	1.61	1Zaa 0.0	7.330	34.559		
to		120	0.0	0.0	8.141		* Fixed loss = 4.533
1	28.22	0.0306	0.0	7.330	0.224		Vel = 4.45
1	0.0	1.653	1E 2.544	25.000	42.924		
to		150	0.0	2.544	0.0		
TEST	28.22	0.0178	0.0	27.544	0.490		Vel = 4.22
	0.0						
	28.22				43.414		K Factor = 4.28

