

19. Utility Capacity to Serve Letters

We have requested letters from the appropriate utility companies expressing their ability to serve the project, and will submit these to the City once received.

The following utilities will service the project:

<u>Utility</u>	<u>Provider</u>	<u>Location</u>
Water Service	Portland Water District	<u>Front St. / Illsley St. / West Presumpscot St.</u>
Sanitary Sewer	City of Portland	<u>Front St. / Illsley St. / West Presumpscot St.</u>
Stormdrain	City of Portland	<u>Front St. / Illsley St. / West Presumpscot St.</u>
Power	Central Maine Power	<u>Front St. / Illsley St. / West Presumpscot St.</u>

Peak Flow Based on Fixture Count

Customer	Portland Housing Development Cooperation
Street Address	63 and 37 Front Street
City	Portland
Building	1

Fixture	Fixture Value 60 psi	x	No. of Fixtures	=	Fixture Value
Bathtub	8	x	16	=	128
Bedpan Washers	10	x	0	=	0
Bidet	2	x	0	=	0
Dental Unit	2	x	0	=	0
Drinking Fountain - Public	2	x	2	=	4
Kitchen Sink	2.2	x	16	=	35.2
Lavatory	1.5	x	22	=	33
Showerhead (Shower Only)	2.5	x	0	=	0
Service Sink	4	x	1	=	4
Toilet -Flush Valve	35	x	2	=	70
-Tank Type	4	x	20	=	80
Urinal -Pedestal Flush Valve	35	x	0	=	0
-Wall Flush Valve	16	x	0	=	0
Wash Sink (Each Set of Faucets)	4	x	1	=	4
Dishwasher	2	x	0	=	0
Washing Machine	6	x	3	=	18
Hose (50 ft. Wash Down) -1/2 in.	5	x	0	=	0
-5/8 in.	9	x	0	=	0
-3/4 in.	12	x	4	=	48

Combined Fixture Value Total 424.2

Customer Peak Demand From Fig. 4-2 or 4-3

Pressure Factor From Table 4-1

No. of Irrigation Sections (Areas of 100 sq. ft.)		
Irrigation Factor (1.16-Spray Systems, 0.40-Rotary Systems)		
Hose Bibs for Irrigation:	Fixture Value	No. of Fixtures
Size		
1/2"		
5/8"		
3/4"		

Total Fixed Demand (Peak Flow) 0 gpm

Peak Flow Based on Fixture Count

Customer	Portland Housing Development Cooperation
Street Address	63 and 37 Front Street
City	Portland
Building	2

Fixture	Fixture Value 60 psi		No. of Fixtures	=	Fixture Value
Bathtub	8	x	15	=	120
Bedpan Washers	10	x	0	=	0
Bidet	2	x	0	=	0
Dental Unit	2	x	0	=	0
Drinking Fountain - Public	2	x	0	=	0
Kitchen Sink	2.2	x	13	=	28.6
Lavatory	1.5	x	18	=	27
Showerhead (Shower Only)	2.5	x	0	=	0
Service Sink	4	x	1	=	4
Toilet -Flush Valve	35	x	0	=	0
-Tank Type	4	x	18	=	72
Urinal -Pedestal Flush Valve	35	x	0	=	0
-Wall Flush Valve	16	x	0	=	0
Wash Sink (Each Set of Faucets)	4	x	1	=	4
Dishwasher	2	x	0	=	0
Washing Machine	6	x	3	=	18
Hose (50 ft. Wash Down) -1/2 in.	5	x	0	=	0
-5/8 in.	9	x	0	=	0
-3/4 in.	12	x	2	=	24

Combined Fixture Value Total 297.6

Customer Peak Demand From Fig. 4-2 or 4-3

Pressure Factor From Table 4-1

No. of Irrigation Sections (Areas of 100 sq. ft.)	<input type="text"/>	
Irrigation Factor (1.16-Spray Systems, 0.40-Rotary Systems)	<input type="text"/>	
Hose Bibs for Irrigation:		
	Fixture Value	No. of Fixtures
Size		
1/2"	<input type="text"/>	<input type="text"/>
5/8"	<input type="text"/>	<input type="text"/>
3/4"	<input type="text"/>	<input type="text"/>

Total Fixed Demand (Peak Flow) gpm

Peak Flow Based on Fixture Count

Customer	Portland Housing Development Cooperation
Street Address	63 and 37 Front Street
City	Portland
Building	3

Fixture	Fixture Value 60 psi		No. of Fixtures	=	Fixture Value
Bathtub	8	x	25	=	200
Bedpan Washers	10	x	0	=	0
Bidet	2	x	0	=	0
Dental Unit	2	x	0	=	0
Drinking Fountain - Public	2	x	0	=	0
Kitchen Sink	2.2	x	19	=	41.8
Lavatory	1.5	x	28	=	42
Showerhead (Shower Only)	2.5	x	0	=	0
Service Sink	4	x	1	=	4
Toilet -Flush Valve	35	x	0	=	0
-Tank Type	4	x	28	=	112
Urinal -Pedestal Flush Valve	35	x	0	=	0
-Wall Flush Valve	16	x	0	=	0
Wash Sink (Each Set of Faucets)	4	x	1	=	4
Dishwasher	2	x	0	=	0
Washing Machine	6	x	5	=	30
Hose (50 ft. Wash Down) -1/2 in.	5	x	0	=	0
-5/8 in.	9	x	0	=	0
-3/4 in.	12	x	4	=	48

Combined Fixture Value Total 481.8

Customer Peak Demand From Fig. 4-2 or 4-3

Pressure Factor From Table 4-1

No. of Irrigation Sections (Areas of 100 sq. ft.)		
Irrigation Factor (1.16-Spray Systems, 0.40-Rotary Systems)		
Hose Bibs for Irrigation:		
Size	Fixture Value	No. of Fixtures
1/2"		
5/8"		
3/4"		

Total Fixed Demand (Peak Flow) **0 gpm**

Peak Flow Based on Fixture Count

Customer	Portland Housing Development Cooperation
Street Address	63 and 37 Front Street
City	Portland
Building	4

Fixture	Fixture Value 60 psi	x	No. of Fixtures	=	Fixture Value
Bathtub	8	x	15	=	120
Bedpan Washers	10	x	0	=	0
Bidet	2	x	0	=	0
Dental Unit	2	x	0	=	0
Drinking Fountain - Public	2	x	0	=	0
Kitchen Sink	2.2	x	13	=	28.6
Lavatory	1.5	x	18	=	27
Showerhead (Shower Only)	2.5	x	0	=	0
Service Sink	4	x	1	=	4
Toilet -Flush Valve	35	x	0	=	0
-Tank Type	4	x	18	=	72
Urinal -Pedestal Flush Valve	35	x	0	=	0
-Wall Flush Valve	16	x	0	=	0
Wash Sink (Each Set of Faucets)	4	x	1	=	4
Dishwasher	2	x	0	=	0
Washing Machine	6	x	3	=	18
Hose (50 ft. Wash Down) -1/2 in.	5	x	0	=	0
-5/8 in.	9	x	0	=	0
-3/4 in.	12	x	2	=	24

Combined Fixture Value Total 297.6

Customer Peak Demand From Fig. 4-2 or 4-3

Pressure Factor From Table 4-1

No. of Irrigation Sections (Areas of 100 sq. ft.)		
Irrigation Factor	(1.16-Spray Systems, 0.40-Rotary Systems)	
Hose Bibs for Irrigation:		
Size	Fixture Value	No. of Fixtures
1/2"		
5/8"		
3/4"		

Total Fixed Demand (Peak Flow) 0 gpm

Peak Flow Based on Fixture Count

Customer	Portland Housing Development Cooperation
Street Address	63 and 37 Front Street
City	Portland
Building	5

Fixture	Fixture Value 60 psi	x	No. of Fixtures	=	Fixture Value
Bathtub	8	x	24	=	192
Bedpan Washers	10	x	0	=	0
Bidet	2	x	0	=	0
Dental Unit	2	x	0	=	0
Drinking Fountain - Public	2	x	0	=	0
Kitchen Sink	2.2	x	19	=	41.8
Lavatory	1.5	x	26	=	39
Showerhead (Shower Only)	2.5	x	0	=	0
Service Sink	4	x	1	=	4
Toilet -Flush Valve	35	x	0	=	0
-Tank Type	4	x	26	=	104
Urinal -Pedestal Flush Valve	35	x	0	=	0
-Wall Flush Valve	16	x	0	=	0
Wash Sink (Each Set of Faucets)	4	x	1	=	4
Dishwasher	2	x	0	=	0
Washing Machine	6	x	5	=	30
Hose (50 ft. Wash Down) -1/2 in.	5	x	0	=	0
-5/8 in.	9	x	0	=	0
-3/4 in.	12	x	4	=	48

Combined Fixture Value Total 462.8

Customer Peak Demand From Fig. 4-2 or 4-3

Pressure Factor From Table 4-1

No. of Irrigation Sections (Areas of 100 sq. ft.)		
Irrigation Factor	(1.16-Spray Systems, 0.40-Rotary Systems)	
Hose Bibs for Irrigation:		
Size	Fixture Value	No. of Fixtures
1/2"		
5/8"		
3/4"		

Total Fixed Demand (Peak Flow) 0 gpm

Peak Flow Based on Fixture Count

Customer	Portland Housing Development Cooperation
Street Address	63 and 37 Front Street
City	Portland
Building	6

Fixture	Fixture Value 60 psi	x	No. of Fixtures	=	Fixture Value
Bathtub	8	x	23	=	184
Bedpan Washers	10	x	0	=	0
Bidet	2	x	0	=	0
Dental Unit	2	x	0	=	0
Drinking Fountain - Public	2	x	2	=	4
Kitchen Sink	2.2	x	20	=	44
Lavatory	1.5	x	28	=	42
Showerhead (Shower Only)	2.5	x	0	=	0
Service Sink	4	x	1	=	4
Toilet -Flush Valve	35	x	2	=	70
-Tank Type	4	x	28	=	112
Urinal -Pedestal Flush Valve	35	x	0	=	0
-Wall Flush Valve	16	x	0	=	0
Wash Sink (Each Set of Faucets)	4	x	1	=	4
Dishwasher	2	x	0	=	0
Washing Machine	6	x	5	=	30
Hose (50 ft. Wash Down) -1/2 in.	5	x	0	=	0
-5/8 in.	9	x	0	=	0
-3/4 in.	12	x	4	=	48

Combined Fixture Value Total

542

Customer Peak Demand From Fig. 4-2 or 4-3

Pressure Factor From Table 4-1

--

No. of Irrigation Sections (Areas of 100 sq. ft.)		
Irrigation Factor	(1.16-Spray Systems, 0.40-Rotary Systems)	
Hose Bibs for Irrigation:		
Size	Fixture Value	No. of Fixtures
1/2"		
5/8"		
3/4"		

Total Fixed Demand (Peak Flow)

0 gpm

October 10, 2017

Project 151.06170

MEANS Division, Portland Water District
225 Douglass Street
PO Box 3553
Portland, Maine 04104-3553

RE: Request for Capacity to Serve Determination.
Proposed 99 Unit Apartment Development
63 & 37 Front Street, Portland

To whom it may concern:

This letter is requesting a determination of whether the Portland Water District has the capacity to serve a proposed development located at 63 and 37 Front Street in Portland. The development will include six two-story buildings with a community space in Building 1. Please see the attached *Peak Flow Based on Fixture Count Spreadsheet*.

Enclosed, to assist in your review, are utility and drainage plans. It is our understanding that four (4) 4-inch water services currently serve the existing buildings. We propose to reuse these services to provide domestic water service for Buildings 1, 4, 5 and 6. New domestic services are proposed for Buildings 2 and 3 and a new fire service is proposed for each of the 6 buildings. Each service will have its own valve for independent operation; the only exception being a single fire service feeding Buildings 2 and 3.

Please let us know whether this proposed configuration is acceptable in terms of capacity and operation, and provide us with any specific service connection requirements. This development will have a sprinkler system for fire protection.

Please let me know if you have any questions or would like additional information: (207) 772-2891.

Sincerely,



John Mahoney, P.E.
Project Engineer

Enclosure: Peak Flow Based on Fixture Count Spreadsheet & Utility Plans for the Front Street Redevelopment.



Consulting
Engineers
and Scientists

October 10, 2017

Project 151.06170

Jaime Cough
Central Maine Power Company
162 Canco Road
Portland, Maine 04103

RE: Electric Service for:
Proposed 99 Unit Redevelopment
63 & 37 Front Street, Portland
Account #: 4411941586001
Work Order#: 10300401291

Dear Jaime:

We are working with Front Street Housing Redevelopment, LP on the redevelopment of Portland Housing Authority's property located at 63 and 37 Front Street in Portland. This site currently contains 50 units within 19 buildings. The proposed development will consist of 6 buildings containing 99 residential apartment units.

All of the new buildings are currently proposed as walk-ups; however we would like to preserve the potential for an elevator in Building 6. All utilities will be underground and we are proposing three transformers. Please refer to the attached utility plans for additional information. We are currently working through load calculations and CMP's Easement Information Worksheet and will forward this information as it becomes available.

Please let us know you have any comments or concerns or if this proposed electric configuration is acceptable. Also, any guidance on next steps would be most appreciated.

Please let me know if you have any questions or would like additional information: (207) 772-2891.

Sincerely,

A handwritten signature in blue ink that reads "John Mahoney". The signature is written in a cursive, flowing style.

John Mahoney, P.E.
Project Engineer

Enclosure: Utility Plans for the Front Street Redevelopment.

400 Commercial Street, Suite 404, Portland, Maine 04101, Tel (207) 772-2891, Fax (207) 772-3248
Pease International Tradeport, 112 Corporate Drive, Portsmouth, New Hampshire 03801, Tel (603) 436-1490
12 Kent Way, Suite 100, Byfield, Massachusetts 01922, Tel (978) 465-1822
2127 Hamilton Avenue, Hamilton, New Jersey 08619, Tel (609) 584-0090
60 Valley Street, Building F, Suite 106, Providence, Rhode Island 02909, Tel (401) 433-2160

www.ransomenv.com