

June 1, 2016

Consulting Engineers and Scientists

Project 161.06035

Heather Smith Asset Management Technician MEANS Division, Portland Water District 225 Douglass Street PO Box 3553 Portland, Maine 04104-3553

RE: Request for Capacity to Serve Determination. Proposed Development with 4 Apartments and Office Space 65 Munjoy Street, Portland

Dear Heather:

This letter is requesting a determination of whether the Portland Water District has the capacity to serve a proposed development located at 23 Ocean Avenue in Portland. The development will be comprised of four (4) two-bedroom apartments on the second and third floors with office space on the first floor and in the basement. We estimate that there will be 11 office employees. The offices will not have showers.

As you have suggested, we are submitting the project's demand calculations using the District's *Peak Flow Based on Fixture Count Spreadsheet*, see attached.

Enclosed, to assist in your review, is utility plan. We propose to construct a new 4" ductile iron service from the main to the proposed building. The 4" water service will be used for fire protection. A 2" domestic service will be tapped off of the 4" service. Both services will have valves in the esplanade area for independent operation. 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.

We plan to present the purposed development to the Portland Planning Board on June 28. If you able to provide us with a determination ahead of that date it would be greatly appreciated. Please let me know if you have any questions or would like additional information. Please feel free to call me at (207) 772-2891.

Sincerely,

John Mahorey

John Mahoney, P.E. Project Engineer

Enclosure: Peak Flow Based on Fixture Count Spreadsheet, Utility Plan for 23 Ocean Avenue

**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

## Peak Flow Based on Fixture Count

Customer Street Address City

23 Ocean Avenue Portland

Fixture	Fixture Value 60 psi	No. of Fixtures	Fixtu Valu	
Bathtub	_	x 4	= 32	
Bedpan Washers		x <del>·</del>	= 0	
Bidet	_	x	= 0	
Dental Unit	_	x	= 0	
Drinking Fountain - Public	_	x	= 0	
Kitchen Sink		x 5	= 11	
Lavatory		x 12	= 18	
Showerhead (Shower Only)	2.5	x 4	= 10	
Service Sink	4	x 1	= 4	
Toilet -Flush Valve	35	x	= 0	
-Tank Type	4	x 12	= 48	
Urinal -Pedestal Flush Valve	35	x	= 0	
-Wall Flush Valve	16	x	= 0	
Wash Sink (Each Set of Faucets)	4	х	= 0	
Dishwasher	2	x <u>5</u>	= 10	
Washing Machine	6	x 4	= 24	
Hose (50 ft. Wash Down) -1/2 in.	5	х	= 0	
-5/8 in.	9	x <u>2</u>	= 18	
-3/4 in.	12	x	= 0	
Combined Fixture Value Total			175	; >
Customer Peak Demand From Fig. 4-2 or 4-3				
Pressure Factor From Table 4-1				
No. of Incidentian Constitution (Arrange of 400 per (t))				
No. of Irrigation Sections (Areas of 100 sq. ft.)				
Irrigation Factor (1.16-Spray Systems,				
0.40-Rotary Systems)				
Hose Bibs for Irrigation: Fixtu	re No. of			
Size Valu				
1/2"	e Fixtures			
5/8"				
3/4"				
J/4				

Total Fixed Demand (Peak Flow)

0 gpm