

SUMMARY MEMORANDUM

TO: Mr. Patrick J. Carroll
Principal
Carroll Associates
217 Commercial Street, Suite 200
Portland, ME 04101

DATE: August 30, 2016

RE: Shared Parking Analysis for 23 Ocean Avenue, Portland

This is written to respond to provide additional information regarding parking requirements for the proposed development at 23 Ocean Avenue in Portland. The existing site provides 1,580 square feet (S.F.) of office space. The proposed additional building will provide 2,389 additional S.F. of office space in the basement and first floor levels with four residential apartments on the second floor

Parking needs were first determined using the Institute of Transportation Engineers (ITE) "Parking Generation, 4th Edition", published in 2010, and land use codes 221 "Low/Mid-Rise Apartment" and 701 "Office Building". The 85th percentile parking needs, the typical figure used for transportation design purposes, are outlined below for the overall project:

Existing Office Space and Proposed Office Spaces

1,580 S.F. plus 2,389 S.F. = 3,969 S.F. X 2.98 per 1,000 S.F. = 11.83 = 12 spaces

Proposed Apartments " 1.61 vehicles per dwelling unit X 4 = 6.44 = 7

Additionally, parking needs were analyzed on the basis of the City of Portland requirements. The City parking code specifies one (1) parking space for every 400 S.F. of office space and two (2) parking spaces for every dwelling unit. The parking needs based upon the City requirements are outlined below for the overall project:

Existing Office Space and Proposed Office Spaces

1,580 S.F. plus 2,389 S.F. = 3,969 S.F. X 1 per 400 S.F. = 9.92 = 10 spaces

Proposed Apartments " 2.00 vehicles per dwelling unit X 4 = 8 spaces

As seen above, based upon the ITE 85th percentile rates, the proposed development would require 19 parking spaces. Based upon the City of Portland requirements, a similar 18 spaces are necessary. The proposed uses are ideal for consideration of shared parking. Parking for the residential units peaks from 10:00 PM until 5:00 AM. During this overnight period the residential apartments will require 7 " 8 spaces while the office spaces will require none.

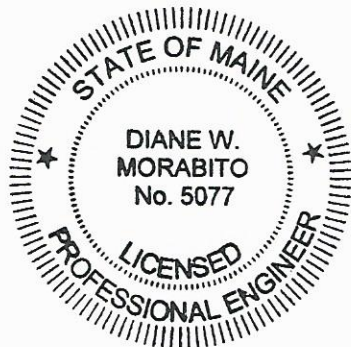
The peak parking demand for office space occurs from 10:00 AM until 2:00 PM. During the 10:00 AM to 2:00 PM period little parking is generally needed by residential units. ITE residential data suggests the percent of residential demand during the 10:00 AM to 2:00 PM period is 30 to 33 %, which reduces the daytime parking apartment requirement to 2 spaces.

To summarize the shared parking results, the overnight requirement is expected to be 7 – 8 spaces for the apartments. The peak daytime demand is expected to be 10 – 12 for the office spaces and two for the apartments for a total of 12 -14 spaces.

The proposed site plan provides ten (10) parking spaces. This meets the nighttime requirement of 7 – 8 spaces. Based upon the shared parking analysis, the on-site parking is deficient by two (2) spaces to four (4) spaces during the daytime office peak, dependent upon which parking standard is applied, ITE or City code.

Possible means to address this projected shortage would be to restrict parking for the residential units to nighttime use through their leases (i.e. no on-site residential parking allowed from 9:00 AM to 4:00 PM) to assure all ten spaces are available for the office uses during the daytime office peak. Another option would be to encourage transportation demand management (TDM) actions. Since the site is located on a Metro route bus use will be encouraged. In addition, the building will provide interior bike lockers for both resident and office uses to encourage bicycle commuting. In addition, a shower facility will be provided for the offices to further encourage commuting by bike or walking. The offices are also expected to promote the use of carpooling and ridesharing amongst employees. All of these actions should reduce vehicular trips to the site and the associated daytime parking requirements.

As always, please do not hesitate to contact me if you or the City of Portland have any questions or concerns regarding this parking analysis.



Sincerely,

A handwritten signature in black ink that reads "Diane W. Morabito".

Diane W. Morabito, P.E. PTOE
President