AMBIT ENGINEERING, INC. CIVIL ENGINEERS AND LAND SURVEYORS

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Proposed Parking Demand
Site Improvement
111 State Street
Portsmouth, NH

The purpose of this calculation is to identify the existing and proposed parking demand expected to be generated by the site improvements at 111 State Street. Currently the lot has a three story building which has restaurant use with one residential unit. The proposed plan is to convert some of the restaurant use to residential use, for less restaurant space and five proposed residential units. This comparison is for the converted / added space only.

In developing the expected Parking Demand Ambit Engineering considered the standard Parking Demand rates and equations published in the Institute of Transportation Engineers (ITE) Parking Generation Manual, 5th Edition. The land use category that best correlates with the proposed uses are Multifamily Housing (Low Rise) (ITE Land Use Code 220) and Quality Restaurant (ITE Land Use Code 931). Please note that the ITE Rates are for non-overlapping peak periods of demand; the residential being 10:00 PM to 6:00 AM and the restaurant 7:00 to 8:00 PM. This makes the total numbers more conservative. The parking demand, based upon the number of dwelling units in the building and GFA of the restaurant is summarized below for the **Average Peak Period of Parking Demand**:

Parking Demand Summary - EXISTING

Peak Period of Demand	
Multifamily Housing (Low Rise) (1.21 vehicles per unit)	1.21 x 1 units = 1.2 vehicles
Quality Restaurant (16.41 vehicles per 1,000 SF GFA)	16.41 x 3.486 KSF = 57.2 vehicles
Total Parking Spaces required	58 vehicles

Parking Demand Summary - PROPOSED

Peak Period of Demand	
Multifamily Housing (Low Rise) (1.21 vehicles per unit)	1.21 x 5 units = 6.0 vehicles
Quality Restaurant (16.41 vehicles per 1,000 SF GFA)	16.41 x 2.827 KSF = 46.4 vehicles
Total Parking Spaces required	52 vehicles

Based on the calculation there is an anticipated reduction in parking demand of 6 vehicles with this project.

Please feel free to call if you have any questions or comments.

Sincerely,

John Chagnon

John R. Chagnon, Project Manager