



Ref.: 13052

August 12, 2013

Mr. Alan Peterson
Art of Building, LLC
7 Fairfield Street
Medford, Massachusetts 02140

RE: 97 Prospect Street Somerville, MA. - Parking Memorandum

Dear Mr. Peterson:

Based on information contained in the permit application and information provided by the architect (Reisen Design), for the above referenced project, Ron Müller & Associates offers the following for your use.

Existing Conditions and Project Understanding

Art of Building, LLC wishes to redevelop a parcel located at 97 Prospect Street in Somerville, Massachusetts. The property is located on the west side of Prospect Street. It is located on the southern edge of Union Square, less than 500 feet south of the intersection of Prospect Street and Webster Avenue (Figure 1). The surrounding neighborhood contains a mix of residential and non-residential uses.

There is one existing single-story building on the lot. Art of Building, LLC proposes to construct a three-story residential building to house seven (7) residential units. According to the special permit/variance application, the Somerville Zoning Ordinance (SZO)

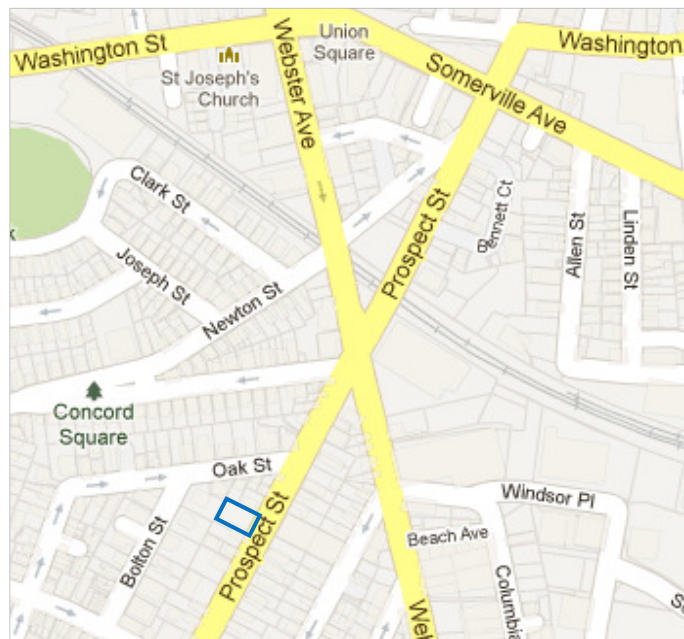


Figure 1 – Site Location

requires additional off-street parking spaces for the seven residential units. Based on the proposed number of bedrooms per unit, the proposed project may require as many as 14 off-street parking spaces.

The existing parking layout provided for 28 parking spaces accessed via a Prospect Street curb cut. In fact, the property stored up to 41 total vehicles because vehicles were routinely parked tandem and/or perpendicular to one another. The proposed parking lot layout provides for 8 sub-surface, off-street parking spaces in the basement of the property; a shortfall of up to 6 parking spaces. The project also provides for 10 bicycle parking spaces. This traffic memorandum has been prepared to assist the City staff in determining whether the proposed parking layout will be sufficient to accommodate the proposed demand.

This parking memorandum demonstrates that the proposed project provides an adequate amount of parking to meet the proposed demand and that the project will not have an adverse impact on the surrounding neighborhood's on-street parking supply. The following factors contribute to the justification for a special permit for the proposed residential redevelopment project:

- Proposed Off-Street Parking Supply,
- Mode Choice,
- Vehicles Per Household,
- Proximity to Public Transit,
- On-Street Parking Utilization, and
- Union Square Parking Ratio Comparison

Proposed Off-street Parking

The proposed sub-surface parking lot is accessed via a new Prospect Street curb cut. The proposed Site Plan, provided by Reisen Design, provides for 8 parking spaces in the basement level (Figure 2). The lot consists of eight (8) standard sized parking spaces (9'x18'). All eight parking spaces are oriented perpendicular to the drive aisle. Based on the proposed layout, drivers should be able to exit in a forward direction, as required for lots containing 6 or more parking spaces.

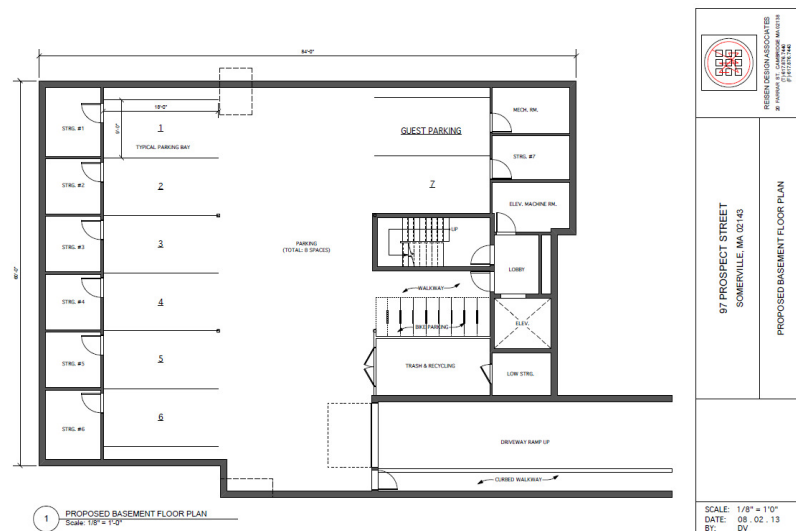


Figure 2 - Proposed Site Plan

Proximity to Transit

While the proposed project is not within 1,000 feet of an existing transit station, it is located roughly one mile from four stations: Harvard Square, Central Square, Lechmere, and Sullivan Square (Figure 3). The project location has good access to public transportation via several MBTA bus routes.

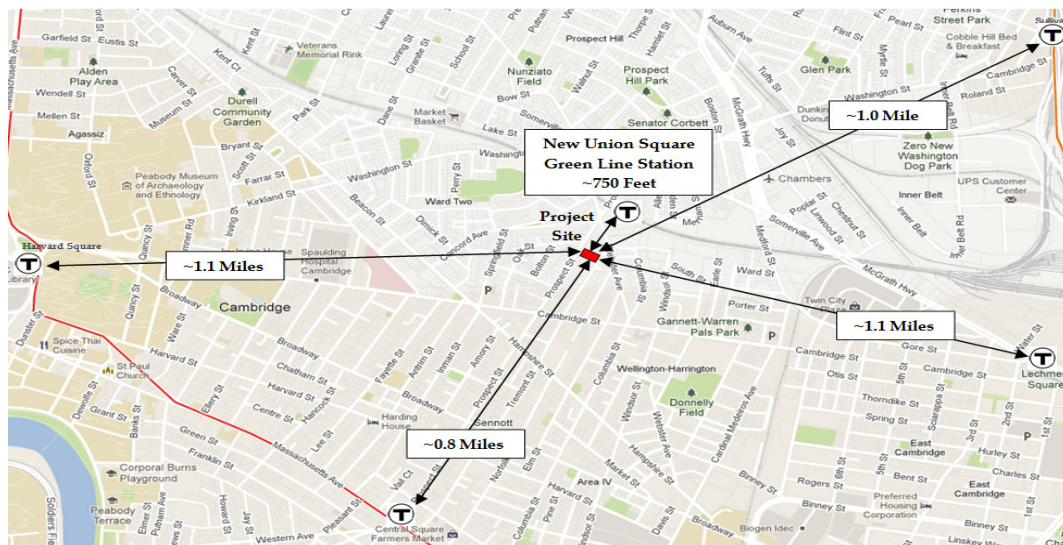


Figure 3 – Proximity to Transit Stations

Most of the bus routes listed below travel within ¼ of a mile of the project site; three routes travel within 500 feet (or a 2-minute walk) of the proposed project.

- Route CT2, Sullivan Sq. - Ruggles Sta.
- Route 69, Harvard Sq. - Lechmere Sta.
- Route 83, Rindge Ave. - Central Sq.
- Route 85, Spring Hill - Kendall Sq.
- Route 86, Sullivan Sq. - Cleveland Cir.
- Route 87, Arlington Center - Lechmere Sta.
- Route 91, Sullivan Sq. - Central Sq.

These routes provide valuable connections to area transit stations. This already extensive public transportation network provides Union Square residents access to job centers without the use of a car. However, since Union Square is likely the most traversed square in the City (in terms of vehicles), the City of Somerville successfully advocated for the Green Line to be extended to Union Square.

The Green Line Extension Project (GLX) will provide for two stations located relatively close to the proposed project; the Gilman Square Station will be located approximately one mile from the

project and the Union Square Station will be even closer, only 750 feet away (Figure 4, above). Based on information provided on the MBTA's website, the construction phase that includes the Union Sq. station is anticipated to be completed in late 2016 and begin testing in early 2017 (the schedule assumes two key FTA approvals). With good access to public transportation improving with the addition of a transit station, it is not unreasonable to expect that vehicle ownership rates for this project may be less than typical vehicle ownership rates for Somerville residents.

Mode Choice

Based on information provided by the project team, the project will be marketed to the type of person(s) who is open to non-vehicular modes of transportation. Examples of non-vehicular modes of transportation are bicycling, walking, buses, heavy rail, light rail, and even telecommuting. In fact, more than half of existing Somerville residents travel to work via something other than a single occupant vehicle (Figure 4). Approximately 29% used public transportation to travel to work, 12% cycled or walked to work, 10% carpooled, and 2% worked from home.

The remaining percentage chose another means of travel. The percentage of Somerville residents choosing public transportation will likely increase once the Green Line Extension (GLX) and the Assembly Square Orange Line Station projects are complete and operational. The GLX project will add 5 new transit stations in Somerville including one in Union Square, with an entrance ~750 feet from the proposed redevelopment project.

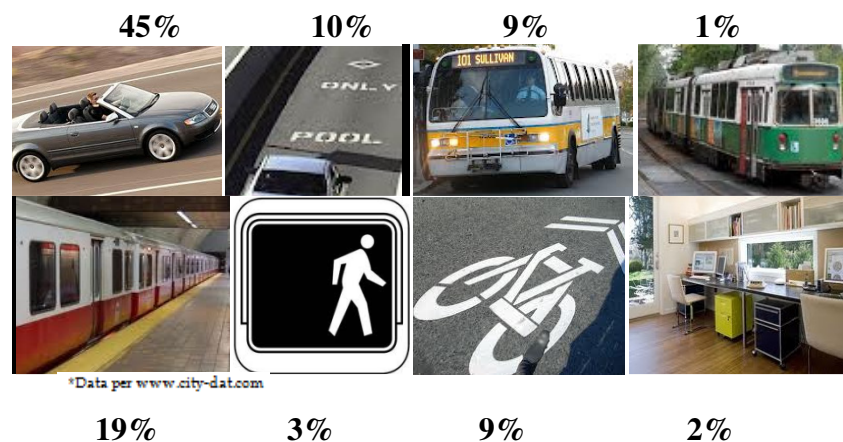


Figure 4 –Mode Choice (Somerville)

Vehicles Per Household

Greater than 55% of the owner-occupied houses and condos in Somerville have one vehicle or less. Although this data corresponds to households versus number of bedrooms, it clearly indicates that Somerville residents are more likely to have fewer than two cars (Figure 5). This is likely due to the excellent access to public transportation that Somerville provides (see Mode Choice).

In fact, many households have a rapid transit station located less than a mile away; the remaining households will likely have the similar transit access once the 6 new transit stations are in place.

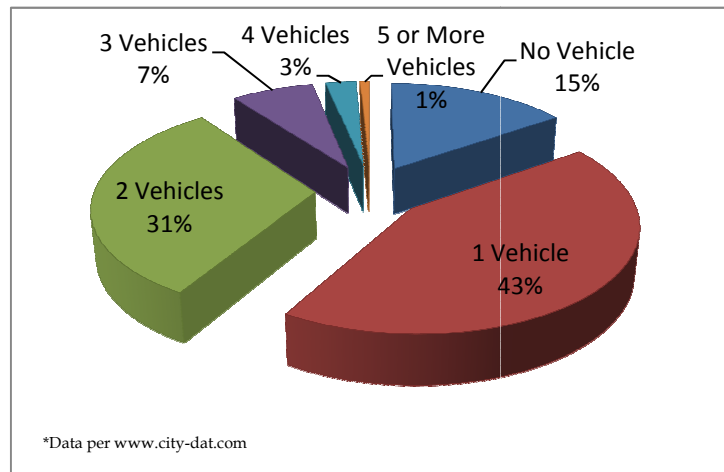


Figure 5 – Vehicles per Household

Union Square Parking Ratio Comparison

As mentioned above, the City of Somerville successfully advocated for a Green Line transit station in Union Square. Recognizing the growth potential for Union Square, the City updated the Zoning Ordinance to include several Transit Oriented Development (TOD) zoning districts. The TOD zoning districts generally require less parking than other zoning districts. Proximity to transit is likely only one of many factors contributing to reduced parking requirements. Other factors may include higher density and a mix of uses. Even though the proposed project is located within a Residence RB zoning district, it is closer to the new transit station than many TOD zoned properties are (Figure 6).

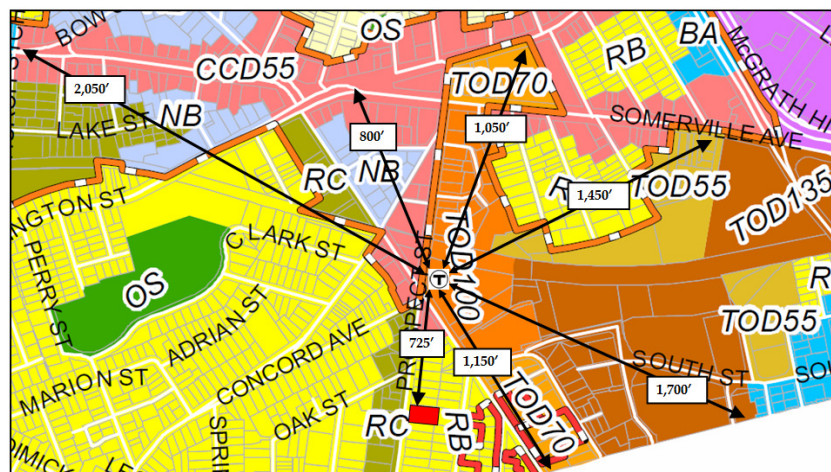


Figure 6 – Union Square Zoning Map & TOD Districts' Proximity to Transit

Although the proposed project is not a mixed-use project, residents of the project will have similar access to new office and retail uses created by the transformative re-zoning of Union Square. Therefore, it is not unreasonable to expect residents living in the proposed building to have similar parking needs as residents living in TOD zoned buildings scattered around Union Square. If so, the true parking demand for the proposed project may be comparable to the parking requirement for TOD zoning districts; one parking space per unit. The proposed project is providing for 1 parking space per unit plus one for visitors.

Parking and New Development

Many reports have been written regarding parking strategies relative to TOD. One such report is *Building Transit Oriented Development In Established Communities* by Julie Goodwill and Sara J. Hendricks (November 2002). It defines transit oriented development (TOD) as development activity located along or within walking distance to transit routes that mixes residential, retail, office, and public uses in a walkable environment, making it convenient for residents and employees to travel by transit, bicycle, or foot.

It further suggests that the main purpose of TOD is enhancing mobility by decreasing reliance on the automobile and by encouraging use of alternate modes of transportation such as transit, walking, and biking. According to *Creating Transit Station Communities in the Central Puget Sound Region: A Transit-Oriented Development Workbook*, people living near a transit station are up to six times more likely to commute to work by transit than other people living in the same region.

Another report, *Parking for Transit-Oriented Development*, by Jeffrey Tumlin and Adam Millard-Ball (2006) suggests that reduced parking can have an important role in promoting self-selection -- encouraging households with fewer vehicles to live close to transit. This supports the idea that persons open to non-vehicular modes of travel may be attracted to the proposed development.

Existing On-Street Parking Utilization

The study area includes all public on-street parking spaces available within a reasonable walking distance of the proposed redevelopment project, excluding restricted parking spaces (Figure 7). Based on coordination with the City Traffic Engineer, the most appropriate time to collect parking utilization data for this neighborhood is during a weekday evening between 7 and 9 PM and a weekend afternoon between 12 and 2 PM. Parking utilization data was collected on Thursday May 2, 2013, Friday May 3, 2013, and Saturday May 4, 2013 during the requested time periods as part of the parking memorandum prepared by Ron Muller & Associates for the 92-96 Prospect Street re-development project.



Figure 7 - Parking Study Area

The parking study area has a total of 338 on-street parking spaces available for public use (Table 1). This area represents all parking located within a reasonable walking distance of the project; approximately a 5-minute walk. The study area does not include on-street parking located within the City of Cambridge since such on-street parking is unavailable to Somerville residents. Based on the data collected, over 30% of the area's public parking supply is available (empty) on a weeknight or a weekend afternoon which equates to over 100 parking spaces.

Table 1
Parking Utilization Data (Within a 5-Minute Walk³)

Description			# Parking Spaces Occupied (Full)							
Street	Limits	Total Number of On-street Parking Spaces	Thursday Evening ¹	Percent Occupied	Friday Evening ¹	Percent Occupied	Evening Average	Percent Occupied	Saturday Afternoon ²	Percent Occupied
Bolton Street		35	16	45.7%	24	68.6%	20	57.1%	22	62.9%
Clark Street	From Newton St. to #17-19 Clark St.	14	11	78.6%	6	42.9%	8.5	60.7%	9	64.3%
Columbia Street		14	12	85.7%	9	64.3%	10.5	75.0%	11	78.6%
Concord Avenue	Newton St. to Prospect St.	37	18	48.6%	15	40.5%	16.5	44.6%	20	54.1%
Concord Avenue	Springfield St. to Newton St.	21	15	71.4%	15	71.4%	15	71.4%	16	76.2%
Joseph Street	From Newton St. to #22 Joseph St.	18	18	100.0%	15	83.3%	16.5	91.7%	12	66.7%
Newton Street	Concord Ave. to Webster Ave.	22	18	81.8%	16	72.7%	17	77.3%	16	72.7%
Norfolk Street	Webster Ave. to City Line	19	15	78.9%	18	94.7%	16.5	86.8%	18	94.7%
Oak Street	Bolton St. to Prospect St.	23	9	39.1%	9	39.1%	9	39.1%	11	47.8%
Oak Street	From #41 Oak St. to Bolton St.	23	15	65.2%	16	69.6%	15.5	67.4%	14	60.9%
Oak Street	From Houghton St. to #43 Oak St.	15	12	80.0%	10	66.7%	11	73.3%	12	80.0%
Prospect Street	From #92-96 Prospect to Webster Ave.	17	10	58.8%	10	58.8%	10	58.8%	8	47.1%
Prospect Street*	From City Line to #98 Prospect St.*	11	11	100.0%	11	100.0%	11	100.0%	11	100.0%
Tremont Street	Webster Ave. to City Line	29	24	82.8%	23	79.3%	23.5	81.0%	21	72.4%
Webster Avenue	City Line to Norfolk St.	21	12	57.1%	21	100.0%	16.5	78.6%	16	76.2%
Webster Avenue	Norfolk St. to Tremont St.	9	7	77.8%	8	88.9%	7.5	83.3%	8	88.9%
Webster Avenue	Tremont St. to Prospect St.	10	9	90.0%	7	70.0%	8	80.0%	5	50.0%
Public Street Sub-total		338	232	68.6%	233	68.9%	232.5	68.8%	230	68.0%

¹ Evening data was collected between 7 and 9 PM on Thursday May 2, 2013 and Friday May 3, 2013

² Weekend afternoon data was collected between 12 and 2 PM on Saturday May 4, 2013

³ Walking distance assumes a distance of ~1,200 feet and a walking speed of ~4 feet per sec

*Assumed 100% occupancy

Furthermore, there are a total of 99 on-street parking spaces located within a 2-minute walking distance of the proposed project (Table 2). Based on the data collected, approximately 30% of the parking supply located within a 2-minute walk of the proposed project is available on a weeknight or a weekend afternoon which equates to over 29 parking spaces.

Table 2
Parking Utilization Data (Within a 2-Minute Walk³)

Description			# Parking Spaces Occupied (Full)							
Street	Limits	Total Number of On-street Parking Spaces	Thursday Evening ¹	Percent Occupied	Friday Evening ¹	Percent Occupied	Evening Average	Percent Occupied	Saturday Afternoon ²	Percent Occupied
Oak Street	Bolton St. to Prospect St.	23	9	39.1%	9	39.1%	9	39.1%	11	47.8%
Prospect Street	From #92-96 Prospect to Webster Ave.	17	10	58.8%	10	58.8%	10	58.8%	8	47.1%
Prospect Street*	From City Line to #98 Prospect St.*	11	11	100.0%	11	100.0%	11	100.0%	11	100.0%
Tremont Street	Webster Ave. to City Line	29	24	82.8%	23	79.3%	23.5	81.0%	21	72.4%
Webster Avenue	Norfolk St. to Tremont St.	9	7	77.8%	8	88.9%	7.5	83.3%	8	88.9%
Webster Avenue	Tremont St. to Prospect St.	10	9	90.0%	7	70.0%	8	80.0%	5	50.0%
Public Street Sub-total		99	70	70.7%	68	68.7%	69	69.7%	64	64.6%

¹ Evening data was collected between 7 and 9 PM on Thursday May 2, 2013 and Friday May 3, 2013

² Weekend afternoon data was collected between 12 and 2 PM on Saturday May 4, 2013

³ Walking distance assumes a distance of ~450 feet and a walking speed of ~4 feet per sec

*Assumed 100% occupancy

Of the 99 parking spaces within a 2-minute walk, 57 are located on Prospect Street and Tremont Street. According to the data, at least 20% of those spaces are empty on a typical night or weekend afternoon which equates to approximately 11 parking spaces. Therefore, it is not unreasonable to suggest that the 100 empty parking spaces located within a 5 minute walk, the 29 empty parking spaces located within a 2 minute walk, or most importantly, the 11 empty parking spaces located on Prospect Street and Tremont Street could accommodate the net shortfall of five parking spaces (8 minus the 3 new on-street spaces).

Conclusion

This traffic memorandum has demonstrated that the proposed project will likely have a negligible impact on the surrounding neighborhood's public parking supply. The eight (8) off-street, sub-surface parking spaces being provided, the proximity to existing and future public transportation, the mode choice data, the low vehicle ownership rates, the Union Square parking ratio comparison, the parking studies relative to TOD areas, and the surplus of on-street public parking are all factors that support a parking variance for the proposed project. Collectively, this information suggests that the surrounding neighborhood's transportation infrastructure in conjunction with the on-site parking is more than adequate to meet the demands of this project.

Should you have any questions regarding this memorandum, please do not hesitate to contact me directly.

Sincerely,

Ron Müller & Associates

A handwritten signature in black ink, appearing to read "Ronald Müller", written in a cursive style.

Ronald Müller, P.E.
Principal