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Ref.: 22057

September 8, 2022

Mr. Peter Matchak, Director of Planning
Town of Ashland
101 Main Street
Ashland, MA 01721

Reg.: Traffic Peer Review
Residential/Commercial Development
10-50 Main Street, Ashland, MA

Dear Peter:

Ron Müller & Associates (RMA) has initiated an independent peer review of the traffic impact and access study and site plan prepared for the proposed mixed-use development to be constructed at 10-50 Main Street in Ashland, Massachusetts.

The submitted traffic impact study and site plan were reviewed with respect to traffic impacts and site access and compared with state guidelines and standard traffic engineering practice. Based on a review of the submitted materials, we have several recommendations that require further action by the applicant. As a general comment, the applicant should submit a full Traffic Impact and Access Study prepared by a licensed traffic engineer in conformance with the Massachusetts Department of Transportation *Traffic Impact Assessment Guidelines* to be able to verify the project's traffic impacts and any potential mitigation requirements. The following lists the documents reviewed as part of the independent peer review:

- *Site Traffic – Vehicle Trip Analysis; Proposed 10-50 Main Street Redevelopment, Ashland, MA;* prepared by Bristol Traffic & Transportation Consulting LLC; January 31, 2020.

- *Site Plan for 10-50 Main Street, Ashland, MA;* prepared by Connerstone Engineering Inc.; dated July 18, 2022.

The following are our initial comments based on the submitted information that should be incorporated in a full study.

TRAFFIC COMMENTS

1. Based on a review of the submitted study, the counts used were obtained from analysis performed by the BSC Group for the Main Street improvement project. These counts were collected in 2012 and grown to 2017. The applicant should collect new traffic counts at the existing site driveways as well as at the intersections listed below. Due to the residential and commercial nature of the project, these counts should be conducted during the weekday AM peak period (7:00 to 9:00 AM), the weekday PM peak period (4:00 to 6:00 PM), and the Saturday midday peak period (11:00 AM to 2:00 PM).

2. The study area for the Traffic Impact and Access Study should focus at a minimum on the following intersections:

    - Main Street at the existing/proposed site driveways
    - Myrtle Street at the existing/proposed site driveway
    - Main Street at Pleasant Street
    - Main Street at Front Street
    - Main Street at Homer Avenue and Summer Street

3. As described above, traffic counts should be collected at these locations during the recommended time periods, seasonal and Covid adjustment factors applied as necessary, and traffic projections made to a 7-year design horizon with and without the redevelopment project. Traffic flow networks should be developed for Existing, No-Build, Site Generated, and Build traffic conditions. Capacity analyses should be conducted during the weekday AM, PM, and Saturday midday peak hours and level of service (LOS) summary tables should be included to be able to assess the traffic impacts associated with redevelopment of the site. Summary tables should include volume-to-capacity ratios, delays, LOS, and queue lengths by movement.

4. The submitted traffic study assumes a variety of land uses on site, yet specific tenants have not been identified. The applicant should be aware that the development will be restricted to these retail and restaurant categories and sizes, unless higher traffic generating uses are assumed in the traffic study. Since the end users of the site are not known, it is recommended that the applicant use Land Use Code 820 (Shopping Center) to estimate traffic for the commercial portion of the site.

5. The trip estimates for the project should be based on the most recent (11^{th}) edition of the Institute of Transportation Engineers (ITE) *Trip Generation Manual*. These estimates should be based on the square footages of the uses proposed, with the exception of the residential component, which should be based on the number of units. A table showing the total trip generation of the site, broken out by residential and commercial uses, should be included in the study.

6. The trip generation of the residential portion of the development was estimated using Land Use Code (LUC) 221, Multifamily Housing Mid-Rise for the proposed three-story building. The 11th Edition of the ITE *Trip Generation Manual* identifies LUC 221 as having between four and 10 floors. Accordingly, it is recommended that LUC 220 be used instead.

7. The Executive Summary section of the study states 222 apartment units are proposed on site, while the Planning Board application states 200 apartment units. It is recommended that the study clarify the correct number of apartment units.

8. The distribution of site traffic should be developed separately for the residential and commercial components of the site. The residential distribution should be based on Journey-to-Work data obtained from the U.S. Census for persons residing in the Town of Ashland.

9. The traffic study should include a detailed assessment of available sight distances at the proposed driveways. The sight distance requirements should be based on the 85th percentile speeds recorded along Main Street and Myrtle Street.

SITE PLAN COMMENTS

10. Although difficult to discern, the site plan appears to show a driveway on Main Street just to the north of the Pleasant Street intersection leading to a series of parallel parking spaces and another driveway on Main Street opposite Water Street. The applicant should clarify if these driveways are proposed to allow one-way operation. Furthermore, the drive-aisle width between parallel parking spaces appears very narrow and may not actually allow a vehicle to pass between parked vehicles. The applicant should show dimensions on the plan and, if necessary, correct this issue.

11. The site plan should show all proposed signs and pavement markings, including necessary traffic control measures at the site driveways, internal intersections, and one-way driveways/drive aisles.

12. The site plan should show how pedestrian connections to each of the buildings will be made from the sidewalk along Main Street.

13. The site plan should show the sight triangles at all proposed exit driveways based on the findings in Comment 9. Sight line plans and profiles should be prepared for the Myrtle Street driveway and the driveway opposite Water Street (assuming this is an exit-only driveway).

14. The site plan shows what appears to be an 18-foot-wide driveway at the site's southern property line. Is this driveway proposed to be one way? If so, in which direction?

15. The site plan shows dead-end parking in the two rows of parking between buildings. The last three parking spaces in each row do not allow a vehicle to back out of these spaces as the drive-aisle width gets very narrow in these areas. The applicant should reconfigure or eliminate these spaces or alter the building footprint to allow accessibility.

16. The applicant should show how delivery vehicles to the commercial uses will access and circulate the site and identify proposed loading areas. We recommend an AutoTurn (or similar) analysis to demonstrate this.

17. The applicant should provide a swept path analysis to demonstrate how the Town of Ashland's Tower One fire truck will access and circulate the site. Furthermore, the applicant should work with the Ashland Fire Department to assess the potential need for accessibility to all sides of the building.

Once a full Traffic Impact and Access Study has been prepared and the site plan revised incorporating the above comments, we will be able to continue our independent traffic peer review of the proposed mixed-use project. Please feel free to contact me if you have any questions regarding this review.

Sincerely,

Ron Müller & Associates

Kirsten Braun, P.E.
Associate