



Ref.: 22054

November 14, 2022

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

Reg.: 2nd Traffic Peer Review
Proposed Coffee Shop with Drive-Through Window
399 Union Street, Ashland, MA

Dear Peter:

Ron Müller & Associates (RMA) is in receipt of the supplemental information submitted by the applicant for the above-referenced project in response to our August 24, 2022 initial review letter. The following additional documents were reviewed as part of our peer review services to the Town of Ashland:

- September 19, 2022 Response to Comments letter from McMahon Associates to Greg Salvatore of Salvatore Capital.
- *Traffic Impact Study; Proposed Coffee Shop with Drive-Through Window, 399 Union Street (Route 135), Ashland, MA*; prepared by McMahon Associates; dated July 2022 and revised November 2022.
- *Updated Site Plan for 399 Union Street Proposed Coffee Shop, Ashland, MA*; prepared by J.K. Holmgren Engineering; last revised October 27, 2022.

For ease of reading, this letter paraphrases our initial comments where additional information was requested (numbered to correspond with our original comments), the applicant's responses, and any additional comments we have at this time (in bold).

- Comment 1: Given the retail and commercial nature of the surrounding uses, we recommended that the Saturday peak hour also be evaluated. The applicant collected additional traffic data through an automatic traffic recorder count on Union Street. The data show that both daily and peak hour volumes on weekdays are higher than on Saturdays and the applicant therefore reasoned that Saturday analyses would not produce meaningful information as they already evaluated the critical peak hours. RMA concurs with this conclusion. **Comment resolved.**
- Comment 3: We commented that the applicant should review historic traffic data to determine if a Covid adjustment should be applied to the collected traffic volumes. The applicant responded that traffic counts collected after March 1, 2022 are no longer subject to Covid adjustment factors based on new MassDOT guidelines issued on May 31, 2022. RMA concurs. **Comment resolved.**
- Comment 7: We requested that the traffic data used to establish the annual traffic growth rate be included in the Appendix to the report. The applicant supplied the requested information. **Comment resolved.**
- Comment 8: We requested that the applicant contact the Town of Hopkinton to determine if there are any development projects of significant size that could impact traffic within the study area. The applicant contacted the town and confirmed that while there are three developments projects in Hopkinton near the Ashland Town Line (83 East Main Street, Laborers' Training Center, and further build-out of Legacy Farms), the increase in traffic from these developments in Ashland will be relatively small and is accounted for in the annual traffic growth rate applied to all volumes. RMA concurs. **Comment resolved.**
- Comment 9: We recommended that the trip generation table be updated to also include Saturday peak hour generation. The applicant supplied the requested information. **Comment resolved.**
- Comment 10: We recommended that the trip comparison table be updated to also include the comparison between the existing pharmacy and the proposed coffee shop during the Saturday peak hour. The applicant supplied the requested information. **Comment resolved.**
- Comment 12: We recommended that the applicant include information regarding the distribution of pass-by traffic and also show pass-by trips on the site generated networks. The applicant supplied the requested information and we concur with the assumptions. **Comment resolved.**

Comment 13: We noted that the total volume of entering and exiting site traffic does not equal the total site generated trips and requested that the networks be updated to reflect the correct volume of trips into and out of the site. The applicant responded that the existing pharmacy trips were not removed from the traffic flow networks and that the volumes shown entering and exiting the site represent both existing pharmacy trips and proposed coffee shop trips. We concur that this methodology presents a very conservative analytical scenario. **Comment resolved.**

Comment 14: We requested that Saturday peak hour conditions also be evaluated. As described in Comment 1, we concur that Saturday analysis is not necessary as it does not represent the critical peak hour. **Comment resolved.**

Comment 15: We commented that the original site plan accommodates only 12 vehicles in queue at the drive-through lane, yet our own observations have revealed queues of 13 vehicles at these types of coffee shops. The site plan has been updated to provide a total of 13 cars in queue within the marked drive-through lane. Beyond the marked drive-through lane, an additional three to four cars could be queued on site without affecting site access, although several parking spaces would be blocked as well as access to the exit-only driveways on Union Street. The proposed design is acceptable. **Comment resolved.**

Comment 16: We recommended that vehicle speed data be collected on Union Street to ensure that sight lines for vehicles exiting the easterly driveway will exceed minimum requirements based on the observed 85th percentile speeds. The applicant collected speed data on Union Street and presented an updated sight distance table based on 85th percentile speeds of 34 mph eastbound and 33 mph westbound. However, our review of the automatic traffic recorder used to collect the speeds shows 85th percentile speeds of 39 mph eastbound and 41 mph westbound during times that the proposed Starbucks is likely to be open for business. The measured sight lines, however, would still exceed the minimum requirement based on these speeds. **The applicant notes that removal of existing vegetation is necessary to achieve the minimum sight distance requirements. This should be made a condition of any approval of the project. See also Comment 29.**

Comment 17: We requested that a swept path analysis be done of the Ashland firetruck not only accessing the site, but also circulating around the proposed building. The requested plan has been provided. **The Planning Board should request written confirmation from the Ashland Fire Department that they are satisfied with accessibility to the site and the building.**

Comment 18: We commented on the original site plan that the proposed easterly Union Street driveway could create turning movement conflicts by allowing both entering and exiting vehicles and the close proximity of the drive-through lane. The site plan

has been revised to eliminate traffic from entering the site from Union Street.
Comment resolved.

Comment 19: Since site traffic destined to the east on Union Street will need to use the bypass lane to access the east site driveway, we recommended that the width of the bypass lane be a minimum of 12 feet. The revised site plan shows a combined width of 23 feet for the drive-through lane and bypass lane with Note X indicating the bypass lane to be a minimum of 11 feet in width. **Note X should be revised to say 12 foot minimum width for the bypass lane.**

Comment 20: We requested that the reverse-curve alignment of the drive-through/bypass lane along the Union Street frontage be straightened out to eliminate the potential for sideswipe accidents. The alignment of the drive-through/bypass lane has been straightened out on the updated site plan. **Comment resolved.**

Comment 21: We commented on the original site plan that all traffic entering from Union Street would need to use the bypass lane to circulate around the building to access the parking area or the drive-through lane. This requires all of that traffic to pass directly in front of the Summer Street driveway where entering site vehicles may have limited view of this conflicting traffic. The updated site plan eliminates entering traffic at the easterly Union Street driveway and a stop sign and stop line are now proposed for traffic exiting the drive-through lane. Our concerns regarding turning movement conflicts have been resolved with these changes.

However, the easterly Union Street driveway is proposed to be narrowed by creating a landscaped area adjacent to the property line and surrounded by a cape cod berm to allow emergency vehicles to cross over this island. **The DO NOT ENTER sign proposed within this landscaped area will need to be relocated to allow emergency vehicles' use of this area. The area identified as landscaped should not contain any trees or shrubs and should be constructed of grass-covered porous pavement (such as GrassPave or similar) to assure that emergency vehicles can travel over this area. Finally, the Town should consider requiring sloped granite edging around this area as opposed to cape cod berm for durability.**

Comment 22: We recommended that signing and striping be added to the plan to eliminate the potential for wrong-way movements by customers entering the east site driveway on Union Street. The updated site plan eliminates entering site traffic at this driveway. **Comment resolved.**

Comment 23: Under existing conditions, vehicles make illegal left turns from the right out only driveway on Union Street. We recommended that this right-out driveway be modified to prevent illegal left turns and that consideration should be given to

extending the Union Street median island to prevent these turns. The applicant responded that additional signing and striping have been added to the updated site plan to enforce the no-left-turn restriction. **The Town should consider requiring the applicant to extend the raised median on Union Street past this driveway to physically prohibit left-turn movements. If implemented, the median should be mountable (or flush serrated concrete) to assure that emergency vehicles can still access/egress the site as necessary and should be reviewed with the Ashland Fire Department.**

Comment 24: We requested that Do Not Enter (R5-1) signs be placed on both sides of the drive-through/bypass exit lanes facing into the parking lot. The updated site plan shows the requested signs. **Comment resolved.**

Comment 25: We questioned why one-way drive aisles and angled parking were proposed on the original site plan. The updated site plan now shows two-way traffic in all parking lot drive aisles and 90-degree parking. **Comment resolved.**

Comment 26: We recommended that all proposed sidewalks provide ADA-compliant wheelchair ramps. The applicant responded that a crosswalk is now proposed across Summer Street connecting the Starbucks with the KidSpot Playground and Stone Park area. The updated site plan provides details for two types of wheelchair ramp configurations, but the tactile warning panel locations on one of these details is incorrect. **The crosswalk detail should be corrected to show the tactile warning panels within the level landing area of the ramp. A detail should also be provided showing the sidewalk and wheelchair ramp configuration for the easterly Union Street driveway where a mountable curb is proposed to narrow this driveway to exiting movements only while still allowing a fire truck to navigate this driveway. In addition, it is recommended that rectangular rapid flashing beacons (RRFB) be installed at the Summer Street crosswalk.**

Comment 27: We recommended that the drive-through lane be clearly marked through signing and striping including DRIVE THRU pavement markings with pavement arrows. The updated site plan shows pavement markings to indicate the drive-through lane, but no signs are proposed to direct customers to the drive-through. **The applicant should consider installing a sign on the landscaped island opposite the Summer Street entrance directing customers to the right toward the drive-through.**

Comment 28: We questioned how deliveries would be made to the store and with what size trucks. The applicant responded that deliveries would be made in trucks smaller than the Ashland firetruck and since the fire truck is shown to be able to navigate the site, so will delivery vehicles. In addition, a loading space has been added to the site plan in the northeast corner of the site. **The Planning Board should consider limiting deliveries to the site to box trucks as the fire truck circulation plan**

provided is not representative of tractor trailer trucks. If tractor trailer trucks are proposed for delivery, then an AutoTurn plan (or similar) should be provided showing how deliveries will be made.

Comment 29: We recommended that the sight lines be shown on the site plan to clearly identify the areas of vegetation clearing necessary to achieve minimum sight distance requirements. The applicant submitted a sight line exhibit using aerial imagery, however the exhibit shows a 500-foot line of sight to the east of the easterly Union Street driveway that, if implemented, would require clearing of vegetation on private property. **It is recommended that the sight line plan for the driveways be updated showing the minimum required sight lines based on the observed 85th percentile speeds of 39 mph eastbound and 41 mph westbound and that these lines be shown on the site plan, not on an aerial image to be able to ascertain whether any existing or proposed signs and landscaping would impact the available sight lines.**

Please feel free to contact me if you have any questions regarding this review.

Sincerely,

Ron Müller & Associates



Kirsten Braun, P.E.
Associate