

November 23, 2024



Mr. John Ewasutyn
Town of Newburgh Planning Board
21 Hudson Valley Professional Plaza
Newburgh, NY 12550

Mr. Darrin Scalzo
Town of Newburgh Zoning Board

**RE: Review Comments for QuickChek, 2 Lakeside Road, Town of Newburgh, NY;
CM Project #123-001.15, Town Project #24-01; NYSDOT SEQR #23-215**

Dear Mr. Ewasutyn, Mr. Scalzo:

We have received the following as it relates to the subject application that is before both the Planning Board and Zoning Board:

- June 20, 2024, comment response letter to NYSDOT and CM from Stonefield Engineering
- June 20, 2024, revised traffic study by Stonefield Engineering
- June 5, 2024, traffic signal modification plan by Stonefield Engineering
- June 19, 2024, site plan by Stonefield Engineering
- July 11, 2024, memo to the Zoning Board by Stonefield Engineering
- November 14, 2024, letter to the Zoning Board by Michael Maris Associates (MMA)

Based on our review of the enclosed, we offer the following comments:

Traffic Impact Study Comments:

1. The revised traffic analysis updates the trip generation estimates to address NYSDOT comments on pass-by trips, analyzing conditions that assume a higher proportion of "new trips." This results in several mitigations proposed including:
 - a. Adding a second left turn lane on Lakeside Road
 - b. Change the PILOT driveway approach from an exclusive left shared thru/right to a shared left/thru and exclusive right lane.
 - c. Add a right turn overlap arrow to the Pilot driveway.
 - d. Lengthen the EB left turn lane on Route 17K at Lakeside Road.
 - e. Reconstruct the NE corner (the corner of the project) with a paved radius for right turn traffic.
 - f. Upgrade vehicle detection, other signal modifications, and timing/phasing updates related to the above improvements.
2. The results of the project impacts and operations with the proposed improvements are summarized in TIS tables 5 through 23.
 - a. Overall, delays at the Rt 17K/Lakeside/Pilot intersection will increase significantly with the project but without mitigation but will increase by only 4 to 7 seconds on average with the proposed mitigation. With the mitigation proposed, some movements will improve to better than No-Build conditions, while others will be worse. Specifically, the shared left/through movement exiting Pilot will worsen with the lane arrangement change in favor of improving the right turn (5 to 20

- vph in the left/thru vs 60 to 80 vph in the right lane with 30 to 70% trucks). Regardless, we believe this change will offer an overall improvement.
- b. The levels of service generally remain similar at the other signalized intersections in the corridor, recognizing that existing congestion and lane spillage at intersections with the interchange will continue.
 - c. The Rt 17K/Rock Cut Road intersection can expect some increases in delays on the SB approach during the AM peak hour (+12 seconds) and on the WB approach in the PM peak hour (+10 seconds). The applicant should analyze what reduction in delays can be achieved with a WB right turn lane and optimized signal timings.
 - d. No significant changes are expected at the Lakeside Road/Patton Road intersection, which is projected to operate at LOS A/B. We expect similar results for other business and private driveways along Lakeside Road.
 - e. The site driveway(s) are expected to operate adequately at LOS A/B/C. The study conservatively assumed all traffic would exit a single driveway and traffic from Route 17K entering the southern driveway while traffic from Patton Road is using the central driveway. In practice, we expect traffic to be divided between all the driveways subject to any local turn restrictions or one-way arrangements once the site plan is finalized.
3. The trip distribution conservatively assumes that pass-by traffic will all arrive from I-84 and Route 17K. We expect some drivers commuting along Lakeside Road to use the proposed facility, thereby reducing the volume coming to/from the highway or Route 17K.
 4. The queuing analysis indicates that on Lakeside Road, queues in the left turn lane averaged 118 feet in the AM peak hour (~5 vehicles) to 87 feet in the PM peak hour (~4 vehicles), while the through/right lane averaged <10 feet (1 vehicle). The left turn lane was projected to increase significantly without mitigation but average about 160 feet during the AM peak hour (~6 vehicles) and 100 feet in the PM peak hour (~4 vehicles) with the proposed mitigation. The central driveway as proposed is just about 300 feet from the stop bar; therefore, except in extreme conditions, we expect the typical queues on the southbound Lakeside Road approach to not block the central driveway with the proposed mitigation.
 5. Crashes are noted at the study area intersections over the course of 4.5 years. The reporting of the findings (write up in the study) is very limited with no summary of the predominate types, location, frequency, contributing factors, etc.; however, no fatalities were reported in this time frame. Additional analysis should be provided and may include the traditional approach of calculating crash rates and comparing to the latest available statewide averages, or the new Safe Systems Approach documented in NYSDOT's "Red"/"Yellow" Books – 2023.

General Comments:

6. The applicant provided a response related to why three driveways to Lakeside Road are necessary. In my opinion, it's largely for the project's convenience in accommodating cars and trucks, although no truck fueling is provided and suggest additional review should be provided. Albeit a town road, NYSDOT would not allow for three driveways in a similar situation. Can the building and canopy be rotated 180 and use the south driveway as a shared ingress with all egress through the north driveway? See image below. Undoubtedly, the owner will want the "front" facing Rt 17K, but design review may reveal an alternative layout.

7. The other nine locations in Orange County do not make special provisions for trucks. What is the intended service for trucks at this location? Will overnight parking allowed? Is there a maximum parking period (15 minutes)?
8. The signal modification plan should include the appropriate lane striping (cat paws) for the Lakeside Road double left turn to Route 17K. We expect that will be part of any detailed design work. Further, the turning path of trucks will need to be checked.
9. The WB left turn lane on Route 17K is about 300 feet; enough storage for about three tractor trailers before traffic spills out into the through lane. Although not represented in the "Intersection Turning Movement Counts", the Synchro reports indicate 38% to 79% of the left turn volume being trucks. Although not directly related to the QC application, it's noted that operations in the Pilot site do affect Route 17K resulting in trucks stopped in the intersection or spilling out of the left turn lane, an effect that can extend to the I-84 ramps. See photos below. It's critical that the WB left turn movement not be impacted and any improvement in this condition will be welcomed.
10. Similarly, trucks using the Airport Diner may use the Lakeside Road driveway, located just one to two car lengths from the stop bar. We have not been present to observed trucks using this driveway, so it's unknown if they use it for ingress or egress, but the Town, NYSDOT, and respective property owner should consider turning movement restrictions, i.e. "No Lefts" from 17K/Lakeside into this driveway.

MMA Letter:

11. We reviewed the MMA letter provided to the Zoning Board. It does not indicate who retained this firm to review the project, but we found the comments to fair and unbiased, and we generally concur with most of the comments.
12. Irrespective of the traffic study, the site plan shows 60 striped spaces inclusive of ADA, air compressor, and truck parking, meeting the zoning code described in the bulk table on Sheet 1, with an additional 16 spaces at the fuel pumps for a total of 76 spaces.

If you have any questions about the above comments, please don't hesitate to contact our office (518-689-1834 or kwersted@cmellp.com).

Respectfully,
Creighton Manning Engineering, LLP



Kenneth Wersted, PE, PTOE
Associate

C: Pat Hines – MHE
Dominic Cordisco – PB Attorney
Jim Campbell – Code Enforcement
Jim Osborne- Town Engineer
Karen Arent – Landscape Architect
David Groucher - NYSDOT

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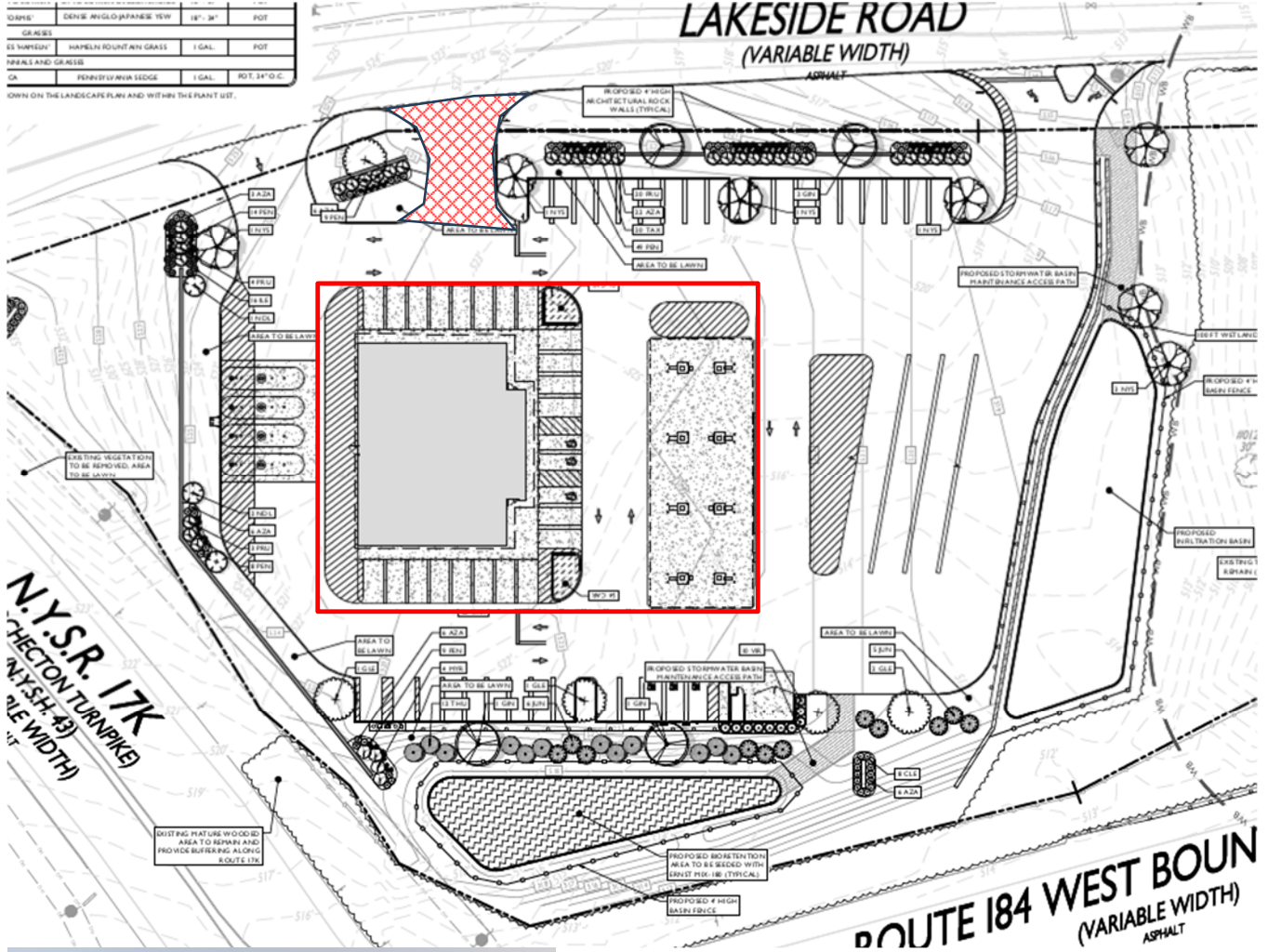


Photo 1- Truck attempting to park in west side of PILOT – took driver 10 minutes with the help of a spotter because the drive lanes on this side are too narrow.



Photo 2- 17K WB left turning truck blocked from entering due to internal PILOT congestion. Camera looking EB on 17K.