

March 1, 2023

Mr. Don Serotta, Chairman  
Town of Chester Planning Board  
1786 Kings Highway  
Chester, NY 10918

Davidson Drive Holdings, LLC  
Town of Chester, Orange County, New York  
Colliers Engineering & Design Project No. 23002650A

Dear Chairman Serotta and Members of the Planning Board:

As requested, Colliers Engineering & Design (CED) has completed a review of the revised Site Plans prepared by Arden Consulting Engineers, PLLC revision dated February 6, 2023 and revised Traffic Impact Study prepared by Creighton Manning Engineering, LLP (CM) dated September 21, 2021 and revised February 15, 2023 (Revision #2) submission for the proposed Davidson Drive Holdings, LLC development as well as the CM letter dated February 15, 2023, which provides responses to specific comments contained in our January 30, 2023 review letter. Below we have provided those items which we consider outstanding or requiring additional review by the Planning Board, all other items from our previous letter have been fully addressed by the resubmission.

### Estimates of Site Generated Traffic

10. CED Previous Comment: Finally, the EAF (Section D.2.j) indicates a total 332 parking spaces are proposed, however the Site Plan indicates 63 proposed passenger car spaces and 13 truck spaces proposed on the Site. These numbers should be confirmed and adjusted for consistency.

*CM Response: Please refer to the revised EAF.*

**CED New Comment: The EAF still refers to 332 proposed parking spaces. See Section D.2.j.iii.**

## Review of Capacity Analysis

16. CED Previous Comment: It is unclear how the intersection of NYS Rout 17M/Lehigh Avenue/Kings Highway was conducted. Based on the analysis reports it appears that this intersection was analyzed as two separate intersections rather than a clustered intersection as would be anticipated for this location. However, the Level of Service Summary Table does indicate the fact that this is a clustered intersection. This should be clarified. It would be beneficial for the Synchro analysis files to be provided to our office for review of this item.

*CM Response: The intersection was modeled as a clustered intersection. Each intersection was analyzed using HCM methodology, with the results listed in Table 3 of the revised TIS. The synchro files will be provided via zip file in an email directly to Mr. Richard D'Andrea of Colliers.*

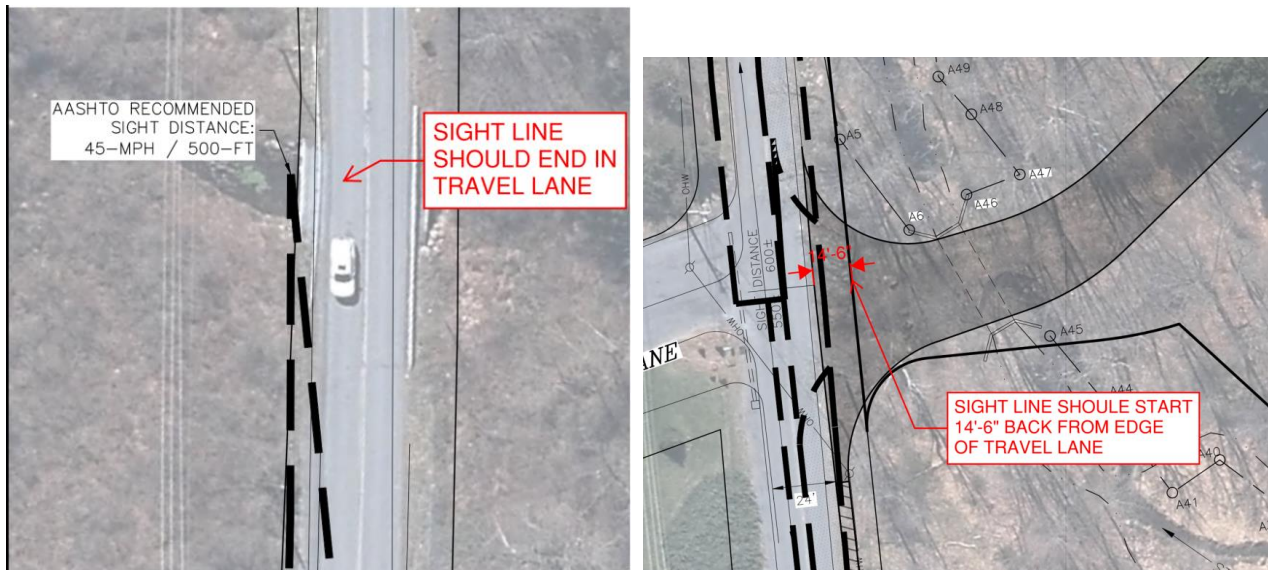
**Colliers: Will be reviewed upon receiving latest Synchro files.**

## Site Access

19. CED Previous Comment: Additional information should be provided relative to sight distance at the Site Access intersection. While it appears sufficient sight distance will be provided, sight distance triangle should be provided on the plans to identify any areas of required clearing east and west of the driveway and also the areas of maintenance of any proposed landscaping in order to maintain the required sight distances.

*CM Response: Please refer to the revised TIS Section 4.0 Site Access, Circulation, and Parking, which includes a discussion on the sight distance evaluation conducted at the site driveway based on AASHTO methodology. The Site Plan also depicts the clearing limits in order to achieve sight lines for an operating speed of 45-mph, which is well above the posted speed of Lake Station Road (30-mph).*

**CED New Comment: Sight distance triangles for the site access driveway are now shown on Sheet No. 19 of the Site Plan Set; however, it appears that the point at which the sight distance is shown from on the driveway and the points along Lake Station Road where the sight lines end does not coincide with the roadway alignment. As an example, the sight line looking to the west is shown ending well off the edge of pavement as shown in the image below taken from the plan sheet. Similarly, at the driveway, the sight lines should start at a point 14.5 feet back from the edge of travel way along Lake Station Road. This should be corrected so the true sight lines and required clearing can be assessed.**



## Recommended Mitigation Measures

21. CED Previous Comment: Considering the anticipated additional traffic at the intersection of Kings Highway & Lake Station Road as a result of the Project, the installation of stop bar and double yellow centerline striping along Lake Station Road should be considered.

*CM Response: Comment noted. Lake Station Road is currently improved with a double yellow centerline. A stop bar will be included on the Site Plan for the proposed driveway.*

**CED New Comment: A plan showing the existing and proposed striping should be provided showing the installation of a stop bar and double yellow centerline striping at the Kings Highway and Lake Station Road intersection.**

22. CED Previous Comment: The installation of a stop bar along Lake Station Road at Bellevale Road should also be considered.

*CM Response: Comment noted. This striping improvement can be included in a future submission along with the potential widening improvements at the intersections, once the concept is approved.*

**CED New Comment: Sheet No. 18 of the Site Plan Set now includes a detailed truck turning analysis for this intersection. It is unclear what the hatched area on the northwest corner of the intersection is referring to since it is not labeled, but we assume this is to show the proposed widening of the intersection pavement area to accommodate the truck maneuvers. If this is the case, we agree that the proposed measures will allow truck turns to be accommodated at this location. However, it appears verification of available right-of-way may be required to ensure this improvement can be completed with existing available right-of-way. Furthermore, the plan should be revised to show the installation of a stop bar and double yellow centerline striping along Lake Station Road in addition the**

potential widening improvements. The proposed intersection modifications will require review and approval by both the Town and OCDPW.

Our office has also conducted a review of the of the Video submitted to the Planning Board by Susan Miller and Edward Teller on February 17, 2023 depicting a truck of similar size to those expected to access the Site traveling the path along southbound Bellevale Road making a right turn onto Lake Station Road and mimicking a right turn maneuver entering the site driveway. It is our opinion that the proposed intersection widening at the Bellevale Road/Lake Station Road intersection will provide sufficient roadway width and turning spaces that trucks turning onto Lake Station Road will not need to cross the double yellow centerline along Bellevale Road to make the right turn maneuver. Therefore this mitigation will alleviate the concerns presented in this video relative to this intersection. See also Comment 26 relative to the Site Access intersection.

## Truck Circulation

25. Comment 25. - Plan Sheet 15 of 21 shows the WB-67 vehicle making a right turn out of the Site. The Traffic Study indicates all truck will make a left turn out of the Site. This should be clarified.

*CM Response: Comment noted. This has been corrected and the right-turn movement for a truck out of the site driveway is no longer depicted. Further, trucks will be prohibited from turning right out of the site via the applicable MUTCD sign.*

**CED New Comment: Proposed MUTCD signage for the restricted right turn movement for trucks from the site should be added to the Site Plan.**

26. CED Previous Comment: The truck maneuvers at the Site access intersection (Sheet No. 15 of 21) appear to show that a truck turning into the site will not be able to make this maneuver at the same time that another vehicle is also exiting the site. Potential improvements should be identified by the Applicant's engineers and this should be reviewed further by the Board.

*CM Response: The driveway opening and throat have been widened to allow for a truck to enter and exit with an opposing vehicle waiting to maneuver into the site. Given the low frequency of truck trips (two trips in the peak hour), overlap with trucks is unlikely. Designing the driveway to allow for simultaneous entering and exiting maneuvers would result in over-construction of impervious surface.*

**CED New Comment: We generally agree with this statement due to the low frequency of truck trips.**

It is also noted that the Video submitted to the Planning Board by Susan Miller and Edward Teller on February 17, 2023. In this video, truck maneuvers entering the site are mimicked showing that a truck entering the site will be required to make a wide turn swinging across the opposing travel lane along Lake Station Road to make a right turn entering the site. However, since the driveway does not currently exist in its proposed configuration, the video cannot fully depict the future conditions for truck maneuvers. In this case we rely on the truck turning analysis for the site access driveway shown on

**Sheets No. 15 and 16 of the Site Plan set. This analysis shows that with the final driveway configuration, trucks will be able to make the right turn maneuver into the site driveway without the need to cross the double yellow centerline along Lake Station Road. The Applicant is also proposing a shoulder widening along the north side of Lake Station Road for a distance of approximately 150 ft. immediately east of the driveway to provide additional pavement width for these maneuvers.**

**This matter should be discussed with the Planning Board to determine the final design of the Site Access.**

### Accident Evaluation

As stated in the revised TIS, a FOIL request has been submitted to obtain accident data for the latest 5 years. After this data has been summarized and evaluated to identify any high accident locations or specific patterns, we will review the findings.

### Additional Comments

- 1. During the February 1, 2023, Planning Board Meeting comments regarding additional traffic that may travel through the Route 17M intersections, specifically at its intersection with NYS Route 94, were made by the Planning Board Members. While we do not believe this Project alone will have a significant impact on the operation of the Route 17M/Route 94 intersection considering the potential use of Leone Lane as an alternate route to Route 17 Exit 126, this has not been addressed in the submitted materials. The Applicant should provide the Board with additional information regarding projected traffic through the Route 17M/Route 94 intersection, including projected truck trips, for the Board's consideration.**

Please do not hesitate to contact our office regarding any questions or comments on the above items. We will be in attendance at the Board's March 1, 2023 Meeting to discuss our review of this Project further.

Sincerely,

Colliers Engineering & Design CT, P.C.



Richard G. D'Andrea, P.E., PTOE  
Asst. Department Manager