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September 9, 2022

Mr. Richard Williams, Sr., Supervisor
Town of Patterson
Planning Board
1141 Route 311
Patterson, NY 12563

Brewster Yards - Traffic Review
Town of Patterson, Putnam County, NY
Colliers Engineering & Design Project No. 22010220A

Dear Supervisor Williams,

As requested, we have reviewed the Traffic Impact Study prepared by DTS Provident Design Engineering, LLP, dated November 22, 2021 as well as the Transportation portion of the DEIS for the above referenced development. The proposed project consists of a commercial recreation complex for baseball and other sports consisting of five full size baseball fields, four Little League baseball fields, one multi-sports field, a recreation building, and related accessory facilities (i.e., food concession stands and pro shop). The proposed project is located along Pugsley Road (and Fields Corner Road to the north) in the Town of Southeast, Putnam County, New York. The site comprises two parcels of land separated by land owned by the Town of Southeast (labelled as Zimmer Road on site plan). Our review has focused on the methodology utilized, appropriateness of data and analysis results, as well as the adequacy of recommended mitigation outlined in the DEIS Traffic Study for the project. We have also reviewed the proposed mitigation/improvements and inspected the site to assist with the completion of our review. The following outlines the various areas reviewed.

General

Overall, the traffic study was prepared in accordance with the standard procedures and methodology required by NYSDOT and the Institute of Transportation Engineers (ITE) in evaluating and assessing development proposals. The specific components of the study which we reviewed included each of the following:

Existing Traffic Conditions

Based on the traffic data included in the Traffic Study, the intersections evaluated as well as the time periods and existing peak hours identified appear to be appropriate. The description of the area

roadways covers key factors and identifies the roadway system adequately. In establishing the existing traffic volumes, the intersection turning movement counts, which were based on the Northeast Interstate Logistics Center (NILC) data were also reviewed and appear reasonable based on comparison with other available historical data.

Future Conditions Without the Proposed Development

The study accounted for a background growth rate of 1 percent per year although historical NYSDOT data indicates that traffic volumes have not increased significantly in recent years. The use of this growth factor to project the background volumes was used, but a design year of 2023 seems to be optimistic and it should be at least extended to 2025 or 2026. Additionally, future traffic conditions also account for the proposed Ace Endico Expansion and Terravest Senior Housing and NILC developments. **If other developments in the Town of Southeast, Town of Kent, or Town Patterson are expected to occur in this time frame, they should also be accounted for.**

Accident Evaluation

Accident data was obtained and evaluated in the Traffic Impact Study relative to the surrounding intersections. Over the most recent three-year period there has been 110 accidents on the roadways within the study area. **The accident data should be summarized in a table including the type of accident to identify any common trends in the study area including those for the Fair Street and Fields Corner Road intersection.**

Traffic Generation Estimates

The site traffic generation estimates were computed based on existing traffic measurements from a similarly sized soccer/baseball sports complex in North Branford, CT. Traffic counts for this location were obtained from data provided by StreetLight during Covid-19. **Based on our initial calculations the trip generation estimates appear reasonable. However, we recommend that any other similar source data be identified and that a new manual traffic count at the physical site in Connecticut should be performed to account for any discrepancies in the GPS based data provided by StreetLight since in many cases it has been somewhat unreliable and to provide more specific details on entry and exit volumes.**

Sight Distance Considerations

The area access connections and intersections need to be evaluated in terms of the sight distances provided and compared to ITE, AASHTO, and NYSDOT Standards. The sight distance evaluation should include a review of Stopping Sight Distance (SSD) and Intersection Sight Distance (ISD) for the intersection of Fair Street and Fields Corner Road.

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Arrival/Departure Distributions

The traffic study provides arrival and departure distributions for the proposed facility and as indicated on Figures No. 4 and 5, show over 98% of the traffic arriving to and from the south on Pugsley Road. **Based on a review the roadway network and in consideration of the current and potential future peak hour congestion at the NYS Route 312 and I-84 EB On-Off Ramp/Independent Way intersection, it is likely that a significant portion of traffic may decide to use Fields Corner Road to access the site (see further discussion below).**

Intersection Evaluations

Each of the intersections were analyzed using the proper procedures outlined in the *2016 Highway Capacity Manual*. **The capacity analysis results contained in the study utilize the HCM summaries as required by NYSDOT. The analysis results identify certain traffic signal modifications; however, it is unclear what improvements are accounted for at the NYS Route 312/Pugsley Road intersection and along Pugsley Road itself between NYS Route 312 and the site. Furthermore, based on the comments on distributions, the intersection of Fields Corner Road and Fair Street should be reanalyzed. Also, the intersection NYS Route 311 and Fair Street should also be evaluated. Input from NYSDOT should also be obtained to ensure that the improvements are being coordinated with them and that they are in conceptual agreement with such. The study should identify clearly what improvements and the timing of the installation of such that are being planned either by the NILC or by this project for Pugsley Road to accommodate the additional traffic generation.**

While the traffic report indicates that the Applicant proposes to restrict right turns out of the site onto Fields Corner Road we have concerns as to how this restriction will be enforced. Additionally, the potential for left turns entering the site does not appear to be restricted. **Based on the shorter distance and potential travel time savings associated with the use of Fields Corner Road to the north, we recommend that a separate sensitivity analysis be conducted to further account for this travel route and to identify any additional mitigation requirements.**

Summary and Recommendations

Overall, the methodology of the DTS Provident Design Engineering, LLP study follows industry standards. However, we believe that the Applicant should supplement their work with additional traffic counts and a detailed analysis of alternative travel routes via Fields Corner Road to account for travel times and the likelihood variations with the distributions for a development such as the one proposed.

Sincerely,

Colliers Engineering & Design CT, P.C.
(DBA Maser Consulting Engineering & Land Surveying)

Philip Grealy, Ph.D., P.E.
Geographic Discipline Leader

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