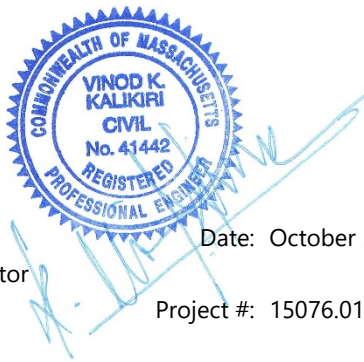




Memorandum

To: Ms. Jennifer Hager
Planning & Economic Development Director
Planning Department
Sutton Town Hall
4 Uxbridge Road
Sutton, Massachusetts 01590

Date: October 5, 2022

Project #: 15076.01

From: Vinod Kalikiri, PE, PTOE
Michael Santos, PE, PTOE

Re: Lackey Dam Road Logistics Center
Responses to Transportation Peer Review
Comments dated September 8, 2022

VHB has prepared this memorandum to summarize the response to the peer review comments prepared by Ron Müller & Associates (RMA) in their September 8, 2022 letter on the August 30, 2022 Revised Traffic Impact and Access Study (TIAS) for a proposed warehouse distribution center on Lackey Dam Road in Sutton, Massachusetts. RMA previously reviewed the original May 18, 2022 TIAS prepared for the Project, which evaluated a larger development program than what is currently proposed and issued comments in a peer review letter dated June 30, 2022. As a result of the reduced development program and the comments in the peer review letter, VHB updated the TIAS and incorporated responses to the comments where appropriate. The updated documents were both dated August 30, 2022. Additionally, revised site plans dated September 6, 2022 were also submitted to the Planning Board.

For ease of reference, this memorandum discusses responses only to the pending items from the latest peer review letter. Items that were noted as being resolved are not repeated in this memorandum. The paraphrased pending comments follow the numbering of the comments in the September 8, 2022 traffic peer review. The new responses are presented in bold italics font below.

Pending Peer Review Comments and Responses

Comment 5: Crash data were reviewed and summarized within the traffic study. The intersection of Gilboa Street at North Street has a crash rate above the district or statewide average, while the intersection of Lackey Dam Road at the Route 146 northbound ramps has a crash rate below the district average but above the statewide average. The applicant should confirm if there are any crash trends at the intersections of Gilboa Street and North Street and Lackey Dam Road at the Route 146 northbound ramps and determine if any improvements to these intersections would result in fewer crashes.

An updated discussion of the crash data is provided in the updated TIAS. It was noted that the findings for several of the study locations, including the Route 146/Lackey Dam Road interchange ramps' intersections, are consistent with the review findings of the Blackstone Logistics project traffic study that has undergone extensive review by the towns of Sutton, Uxbridge, Douglas and MassDOT. The developer of a warehouse on Gilboa Street in Douglas has offered to prepare a Road Safety Audit (RSA) at the intersection of Gilboa Street and Douglas Street which will identify any safety concerns. Crash data at the interchange of Lackey Dam Road and the Route 146 ramps was reviewed. Based on the data the Route 146 southbound ramps experienced a crash rate greater than the statewide average. A review of the crash data shows that most crashes occurred at night, indicating that there may be inadequate lighting at the intersection. **It is recommended that the applicant investigate if inadequate lighting currently exists at the intersection and if so, recommend improvements.**

Response:

VHB conducted a site visit to the Route 146/Lackey Dam Road interchange on the night of September 23, 2022 to observe any limitations posed by night time conditions. The site visit indicated that, similar to other rural interchanges along the Route 146 corridor, streetlights are currently not provided at the interchange. VHB noted that the condition of pavement markings along Lackey Dam Road and the Route 146 on and off-ramps are in relatively poor condition. Specifically, the longitudinal pavement markings (double yellow center line and white edge lines) within the interchange and edge lines along the ramps lack reflectivity and therefore may be difficult to discern from certain view angles in poor lighting conditions. The condition of the pavement markings also make the exact location of the Route 146 on-ramp curb cuts relatively difficult to identify. While the crash data does not specifically suggest the condition of the pavement markings as the cause of night time crashes, a refresh of the pavement markings could make through travel and turning movements at the interchange more comfortable to drivers.

The segment of Lackey Dam Road within the interchange and the Route 146 on and off-ramps are under MassDOT jurisdiction. Activities such as refreshing pavement markings with appropriate reflectivity, confirming signage locations for turns, etc. could be considered and implemented by MassDOT as part of routine roadway maintenance.

Additionally, a sewer project is currently planned along Lackey Dam Road that will provide sewer service for the adjacent Blackstone Logistics project from the Town of Douglas. The project is scheduled to be completed in 2023. Upon completion of the sewer project, the section of roadway that is affected by the excavation will need to be repaved and new markings installed. The Applicant will request the Town of Douglas to incorporate MassDOT approved pavement markings at the interchange as part of the sewer contract.

Comment 8:

Based on the site plan, a 212,350-foot warehouse-distribution building is proposed on site. To be conservative a building size of 220,000 square feet was used for analysis. A particular tenant has not yet been identified for the site. The trip generation of the development was estimated using the Institute of Transportation Engineers (ITE) Trip Generation Manual¹ for warehousing, Land Use Code (LUC) 150. A review of other land uses was made to determine what land use is most appropriate for the site. Both fulfillment center and parcel hub warehouse would generate far greater peak hour generation than LUC 150. Since an end user has not been determined for the site, it was recommended that the highest possible trip generating land use be used, or the town should specifically exclude the higher trip generating land uses from any approvals.

The applicant responded that while the end user of the facility has not been determined for the site, the building is not being designed to support the logistics of a fulfillment center or a parcel hub warehouse. The trip generation estimates used LUC 150 to provide the most realistic estimates for the future uses on the site. The project is expected to operate similarly to the adjacent Blackstone Logistics Center project that is currently under construction. The traffic study prepared for that project also used ITE LUC 150 for trip generation estimates.

ITE LUC 154 for Transload & Short-Term Warehouse was also reviewed in the updated traffic study at the town's request. This land use would result in fewer peak hour trips than LUC 150. As such, the applicant suggests that LUC 150 is appropriate for analysis purposes. The applicant has also committed to a post-construction Traffic Monitoring Program (TMP) that will include a comparison of traffic counts at the site driveways when the project is in operation with the trip generation estimates presented in the updated TIAS. **It is suggested that this TMP be included as a condition in the Decision. It is further recommended that the higher trip generating land uses including fulfillment center and parcel hub warehouses be specifically excluded from any approvals.**

Response: ***The Applicant expects that the Planning Board will impose a post-construction TMP requirement, as well as types of tenant operations that would be prohibited on the Site as conditions of approval. The Applicant is willing to coordinate with the Planning Department regarding the wording of the conditions of approval related to these items.***

Comment 13: A total of 157 parking spaces are supplied on site. Of these 157 parking spaces 48 are tractor trailer spaces and 109 are automobile spaces. An additional 71 land banked automobile parking spaces are provided on site. The study mentions that this would result in 221 total automobile parking spaces, however 109 automobile spaces and 71 land banked automobile spaces would actually result in 180 automobile spaces. For LUC 150, the ITE suggests up to 431 parking spaces be provided on site. Sutton zoning requirements require 1 space per 2,000 square feet of warehouse/distribution space and 1 space per 250 square feet of office space. Assuming a building size of 220,000 square feet, of which 10,000 square feet will be dedicated to office, 145 parking spaces would be required based on zoning requirements. It was recommended that the Town confirm the number of parking spaces proposed are adequate to accommodate demand.

The applicant responded that the proposed parking supply is consistent with the proponent's experience with tenant needs for such facilities. **It is still recommended that the town confirm that the number of parking spaces provided is adequate to accommodate demand.**

Response: ***The reduction in the size of the project, and revisions to the site layout resulted in changes to the proposed parking supply. Based on the latest design, the Project will provide a total of 135 standard parking spaces and 44 trailers spaces on the Site. There will be no land banked spaces. Based on the Zoning Bylaws, a total of 125 spaces are required (85 spaces for the warehouse uses at 1 space per 2,000 sf and 40 spaces for the office use at 1 space per 250 sf). i.e., the revised site design will result in a parking supply that will exceed the requirements of the Zoning Bylaws.***

Comment 19: A Transportation Monitoring Program (TMP) will be performed after full occupancy of the site. An automatic traffic recorder (ATR) count on the site driveway will be performed over a 24-hour period. Additionally, a travel survey of employees and visitors at the site will be performed. Weekday AM and PM turning movement counts (TMCs) will be collected at the study area intersections and analysis will be rerun. These analysis results will be compared to the Build analysis results included in this study. Lastly, a summary of the effectiveness of the TDM measures will be included in the TMP. RMA concurs with this TMP. **It is suggested that this TMP be included as a condition in the Decision.**

Response: ***See the Response to Comment 8.***

Comment 21: The site plan proposes to construct a new site driveway connecting to Lackey Dam Road. An additional gated emergency access driveway is proposed on Oakhurst Road. Each driveway proposes one single lane exit from the site. It was recommended that the STOP signs (R1-1) be placed adjacent to the stop lines on both exits. The stop line should extend the whole length of the lane from the double yellow centerline to the curb. Furthermore, the applicant should check the location of the stop line on the Lackey Dam Road driveway as it appears to be located too far from the road.

Based on a review of the updated site plans, stop lines and STOP signs have been placed on the driveway exits. **It is recommended that the stop line be placed parallel to the mainline travel way.**

Response: ***The stop lines have been modified to be parallel to the mainline travel ways. The revised site plans reflect this change.***

Comment 23: The fire department's largest vehicle should be able to traverse the site. It was recommended that AutoTurn (or a similar program) be used to show a swept-path analysis of the largest fire truck to be used around the site. It is also recommended that the proponent coordinate with the Sutton and Uxbridge Fire Departments regarding accessibility to all sides of the building.

A swept path analysis of a fire truck was included in the updated submittal. The fire truck that was used is labeled as the Westborough B+T fire truck. It is recommended that the applicant confirm that the fire truck used represents the largest fire truck to be used around the site. **It should be confirmed with the Sutton Fire Department that the fire department has adequate accessibility to all sides of each building.**

Response: ***The Project design team has coordinated with the Sutton Fire Department to obtain the dimensions of their largest fire truck. The related exhibits have been updated and it was confirmed that the Sutton Fire Department will be able to access all sides of the building.***

Comment 25: It is recommended that sightlines at the proposed site driveway intersection with Lackey Dam Road be included on the site plans. It is further recommended that any proposed landscaping, fences, walls or signs in the vicinity of the site driveways be kept low (maximum 2 feet in height from street level) or set back outside of the sight triangles so as not to impede the available sight distances.

It appears that north of the site driveway there are some areas of vegetation called out for removal, however the sight line is not shown looking north or south of the site driveway. **It is recommended that the sight lines be shown on the site plan to ensure no existing or proposed landscaping or signs impede sight distances.**

Response: ***The required sight lines and associated limits of vegetation clearing are depicted on the revised site plans.***

Comment 26: The site plan states that 180 parking spaces are provided on site while the traffic study states that 157 parking spaces are provided. It is recommended that the applicant confirm the number of parking spaces provided on site. **Furthermore, the town should determine if the number of parking spaces proposed is adequate for the site.**

Response: ***See the Response to Comment 13.***