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Ref.: 22046

September 8, 2022

Ms. Jennifer Hager, Planning Director
Town of Sutton
4 Uxbridge Road
Sutton, MA 01590

Reg.: 2nd Traffic Peer Review
Lackey Dam Road Logistics Center
Lackey Dam Road, Sutton and Uxbridge, MA

Dear Jennifer:

Ron Müller & Associates (RMA) is in receipt of the supplemental information submitted by the applicant for the above-referenced project in response to our June 30, 2022 initial review letter. The following additional documents were reviewed as part of our peer review services to the Town of Sutton:

- August 30, 2022 Response to Comments letter from VHB, to the Planning & Economic Development Director of the Town of Sutton.
- *Traffic Impact and Access Study; Lackey Dam Logistics Center, Lackey Dam Road, Sutton and Uxbridge, MA*; prepared by VHB; May 18, 2022, Revised August 30, 2022.
- Autoturn Exhibit, Lackey Dam Logistics Center; September 6, 2022.
- *Proposed Site Plan Documents for Lackey Dam Logistics Center, Sutton and Uxbridge, MA*; prepared by Beals and Thomas, Inc.; May 16, 2022, Revised September 6, 2022.

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

Comment 1: The traffic study focused on the following intersections:

- Gilboa Street at North Street
- Lackey Dam Road at Gas Station South Driveway
- Lackey Dam Road at Gas Station North Driveway / Pyne Driveway
- Lackey Dam Road at Route 146 Southbound Ramps
- Lackey Dam Road at Route 146 Northbound Ramps
- Lackey Dam Road at Blackstone Logistics Center Driveway
- Lackey Dam Road at proposed site driveway
- Lackey Dam Road at Oakhurst Road
- Lackey Dam Road at Prescott Road

Given the distribution of traffic expected to utilize Oakhurst Road it was recommended that the Route 146 and Main Street interchange be included in the analysis. The applicant responded that the Route 146 and Main Street interchange has been included to the study area. The intersection of Main Street and Lasell Road has also been included. Comment resolved.

Comment 4: Seasonal adjustments were made to the data based on historic MassDOT data. The data indicated that October counts were higher than annual month conditions. It wasn't noted if adjustments were made to the March 2021 data. It was recommended that the applicant confirm if a seasonal adjustment was applied to the March 2021 data. Furthermore, it was recommended that the applicant review MassDOT permanent count station data near the site to confirm the seasonal adjustments.

The applicant responded that traffic volumes from the nearest MassDOT permanent count station were reviewed to determine if the March 2021 data should be seasonally adjusted. Data from count station 310 (Route 146 at Purgatory Road), located north of the Project Site, indicates that traffic volumes in March 2021 are 92 percent of the average month and therefore the March 2021 TMCs were adjusted upward to reflect average month conditions. The only TMCs affected by this adjustment are at the intersection of Gilboa Street and North Street. The updated TIAS reflects the appropriate adjustment. RMA concurs with these adjustments. Comment resolved.

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.**

Comment 7: The traffic study included the following planned developments within the towns of Sutton, Uxbridge, Douglas and Northbridge:

- Blackstone Logistics Center (Sutton, Douglas and Uxbridge) – approximately 650,000 square feet of warehouse distribution space.
- 85 Gilmore Drive (Sutton) – approximately 140,000 square feet of industrial manufacturing space and 40,000 square feet of ancillary office space.
- Stone Hill Senior Living (Northbridge) – 104 senior housing units.
- Northbridge Dispensary (Northbridge) – 4,290 square foot marijuana dispensary.
- Proposed Retail Marijuana Dispensary (Northbridge) – 5,000 square foot marijuana dispensary.
- 502 Douglas Street (Uxbridge) – mixed use development consisting of a 3,500 square foot convenience store, a 1,500 square foot coffee shop with drive-through, a 10-position fueling station and 2-position diesel facility.
- 515 Douglas Street (Uxbridge) – a sortation warehouse of up to 520,000 square feet.

Based on review of other studies in the area, there are additional developments that could impact traffic within the study area and should be included within the background growth assumptions including:

- 30 Lackey Dam Road, Uxbridge – redevelopment of the existing gas station to include a 20-vehicle fueling position gas station with two additional truck fueling positions and a 7,398 square foot convenience store with drive-through window. The traffic study for this project was performed by RMA and will be forwarded to the applicant for information.
- Campanelli Business Park Phase 1, Uxbridge – 800,000 square feet of industrial space on Campanelli Drive.
- Campanelli Business Park Amazon Facility, Uxbridge – an Amazon sortation facility at 515 Douglas Street.
- Gilboa Street, Douglas – 1.1 million square feet of warehouse space on Gilboa Street.

The applicant responded that, where appropriate, the aforementioned background developments were added to the No-Build condition. Comment resolved.

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 Manual*¹ 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

¹ *Trip Generation Manual, 11th Edition*; Institute of Transportation Engineers; Washington, DC; 2021.

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.**

Comment 9: The truck and vehicle trip generation were broken out separately for the proposed uses based on information obtained from the Blackstone Logistics Center traffic study. It was recommended that the truck trip generation assumptions obtained from the Blackstone Logistics Center traffic study be included in the Appendix. It was also recommended that the applicant provide a trip generation comparison between the Blackstone Logistics Center and LUC 150.

The applicant included the truck trip generation assumptions in the Appendix of the report. Comment resolved.

Comment 10: The traffic study describes that the trip distribution methodology for employees was based on Journey-to-Work data obtained from the U.S. Census Bureau for persons employed in the Town of Sutton. Based on these data, the study assumes 19 percent of the new site traffic will be to/from the west on Lackey Dam Road/Gilboa Street, 8 percent will be to/from the east on Lackey Dam Road/Douglas Road, 52 percent will be to/from the north on Route 146 via Oakhurst Road and 21 percent will be to/from the south on Route 146 via Lackey Dam Road. RMA concurs with these assumptions. As mentioned in Comment 1, given that 52 percent of site traffic is expected to travel on Oakhurst Road north to the Route 146 interchange, it was recommended that the Route 146 and Main Street interchange be included in the analysis. As noted in Comment 1, the study area was expanded to include the Route 146 and Main Street interchange. Comment resolved.

Comment 11: All truck traffic will be directed to utilize Route 146 by way of Lackey Dam Road. Therefore, all truck traffic was distributed on Lackey Dam Road with 65 percent of the truck traffic to/from the north on Route 146 and 35 percent of the truck traffic to/from the south on Route 146. To ensure that all truck traffic utilizes these routes, it was recommended that signage be installed on the driveway exit ensuring that trucks do not turn left. This signage should be shown on the site plan.

The applicant responded that the Site Plans will include appropriate signage along the site driveway to direct trailer trucks to only turn right while exiting the Site. The signage will also prohibit trailer trucks from turning right into the site (i.e., not travel via Oakhurst Road to arrive at the site). Based on a review of the updated plans, comment resolved.

Comment 12: Figures 7 and 8 show site generated traffic volumes on the study area roadways. Upon review, the traffic volumes entering and exiting the site driveway are higher than the traffic volumes shown in Table 4. It was recommended that the figures be updated to match the correct trip generation. Site generated volumes should balance between intersections. Furthermore, any changes to the site generated networks should be reflected in the Build networks.

The applicant responded that the figures in the study have been updated to reflect the latest, reduced development program. Comment resolved.

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.**

Comment 16: Based on the findings of Comment 11, analysis may need to be rerun under the Build condition if the resulting volumes at particular intersections are higher than currently analyzed.

The updated study reflects the revised traffic operations analyses for the expanded study area. Comment resolved.

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.**

Comment 20: Available sight distances from the proposed site driveway intersection with Lackey Dam Road were not measured or compared with minimum requirements. It is recommended that the applicant measure sight distances at the proposed site driveway intersection with Lackey Dam Road and compare the findings with the minimum requirements as established by the American Association of State Highway and Transportation Officials (AASHTO) based on observed 85th percentile speeds on Lackey Dam Road.

The applicant responded that the traffic study has been updated to provide a sight distance evaluation at the site driveway intersection with Lackey Dam Road as well as at the intersection of Lackey Dam Road and Oakhurst Road. Based on a review of the sight distance summary in the report, ample sight distance exists to allow for safe operation. RMA concurs with these findings, comment resolved.

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.**

Comment 22: It was recommended that tractor trailer truck (WB-67) turning movements be shown at the site driveway intersection with Lackey Dam Road to verify if the corner radii shown are adequate. As discussed in Comment 10, it was recommended that signage be installed on the driveway exit to ensure tractor trailers do not turn left out of the site driveway. This sign should be included in the sign summary.

Proposed signage and truck turning movement plans were included in the updated submittal. Comment resolved.

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.**

Comment 24: Truck circulation should be shown on the site plans showing how trucks will access the loading bays or parking area. It is recommended that AutoTurn (or a similar program) be used to show tractor trailer truck (WB-67) circulation through the site. The applicant should also consider including truck wayfinding signage through the site to ensure that the trucks do not access areas designated for passenger vehicles.

Proposed wayfinding signage and truck turning movement plans were included in the updated submittal. Comment resolved.

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.**

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.

As noted in Comment 13, it is still recommended that the town confirm that the number of parking spaces provided is adequate to accommodate demand.

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

Sincerely,

Ron Müller & Associates

A handwritten signature in dark ink, appearing to read "Kirsten Braun". The signature is fluid and cursive, with the first name "Kirsten" written in a larger, more prominent script than the last name "Braun".

Kirsten Braun, P.E.
Associate