TECHNICAL MEMORANDUM

DATE: June 18, 2020

TO: Chris Torres, City of Lauderhill

CC: Molly Howson, City of Lauderhill

FROM: Natalia T. Lercari, P.E., LEED, McMahon Associates, Inc.

SUBJECT: **Brightstar CU -Lauderhill Traffic Evaluation Review**
     McMahon Project No. L16008.07, Task 5

McMahon Associates, Inc. (McMahon) has reviewed the Brightstar CU – Lauderhill traffic evaluation prepared by TrafTech Engineering, Inc, dated May 2020. We offer the following comments:

Comment 1: The 2022 Traffic Growth volumes on Tables 2 and 3 are overestimated based on the compound growth rate information provided in Attachment C. Please revise the volumes accordingly.

A queueing analysis was not submitted as part of the traffic study. Therefore, McMahon prepared a queue analysis for the proposed bank to determine if the expected queue storage that is being provided on-site could accommodate the expected drive-through queues. Using trip generation information obtained from the Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 10th Edition, trip generation analysis was developed for the proposed land use - Land Use 912 Drive-in Bank based on the peak hour of the generator. The highest peak hour of the generator volume was determined to be on a Saturday. The rate is as follows: $T = 26.35(x)$, where x is 1,000 square feet. The directional distribution of trips is 51 percent inbound and 49 percent outbound. Therefore, the highest inbound volume will occur on a Saturday and is expected to be 59 vehicles (26.35 * (4,386sf/1,000sf) *0.51). The queue analysis was performed based the methodology outlined in *Transportation and Land Development*, 1988, published by ITE. A processing rate of two (2) minutes was used for the analysis. Results of the analysis indicate that five (5) vehicles are expected to be queued, in addition to the vehicles being serviced. Based on the provided site plan, sufficient stacking will be available within the site to accommodate the stacking of five (5) vehicles without stacking into the drive isle within the shopping plaza.

Should you have any questions, please do not hesitate to contact me at 561-840-8650 or at nlercari@mcmahonassociates.com.