

March 26, 2018

RECEIVED

Mr. Tim Crockett, PE Crockett Engineering 1000 W Nifong Boulevard, Bldg. 1 Columbia, Missouri 65203

MAR - 6 2019

**Development Services** 

RE:

Trip Generation Assessment – Proposed Storage Mart 3920 South State Route 291

Lee's Summit, Missouri CBB Job No. 25-18

## Dear Mr. Crockett:

As requested, CBB has prepared a Trip Generation Assessment related to the proposed Storage Mart expansion in Lee's Summit, Missouri. The existing Storage Mart is located off the State Route 291 Outer Road (SW Raintree Drive), south of Missouri Highway 150. The location of the Storage Mart relative to the surrounding area is depicted in **Figure 1**.



Figure 1: Project Location Map



It should be noted that this Trip Generation Assessment does not represent a traffic impact study, but rather an estimate of the anticipated traffic levels associated with the proposed expansion of the existing Storage Mart. No specific evaluations of operational levels of service are included in this assessment.

The existing Storage Mart facility has 731 garage door type outdoor units with a total of 137,070 square feet. The existing facility has gated access accessible by customers with keypad access. Based on the site plan provided by Crockett Engineering Consultants, the proposed expansion would consist of approximately 35,130 square feet with 42 exterior units and 152 interior storage units of various sizes. The storage building with the interior units will be climate controlled and customers will have the ability to drive inside the building to load and unload their items. Access to the site is proposed to remain via the existing main entrance on State Route 291 Outer Road (SW Raintree Drive). The existing curb cut just south of the main entrance is proposed to be removed. A schematic of the site plan for the proposed Storage Mart expansion is shown in **Figure 2**.

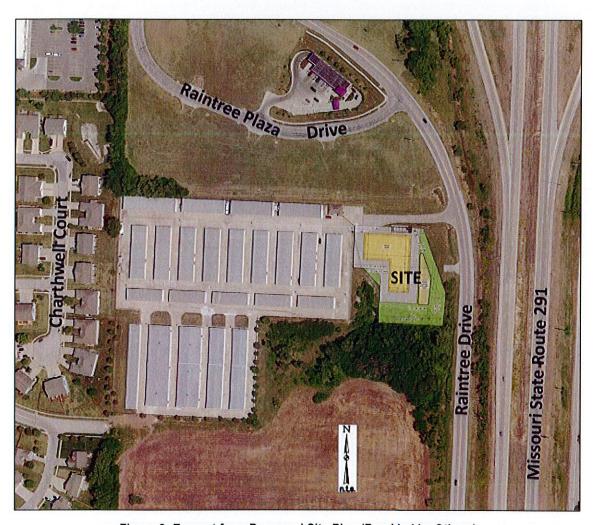


Figure 2: Excerpt from Proposed Site Plan (Provided by Others)



Forecasts were prepared to estimate the amount of traffic that the proposed self-storage facility would generate during the weekday AM and PM commuter peak periods. These forecasts were based upon information provided in the 10<sup>th</sup> Edition of the *Trip Generation Manual*, published by the Institute of Transportation Engineers (ITE). This manual, which is a standard resource for transportation engineers, is based on a compilation of nationwide studies documenting the characteristics of various land uses. Estimates for the proposed development were based upon Land Use: 151 – mini-warehouse. The data provided for Peak Hour of the Adjacent Street was used for the traditional weekday AM and PM peak hour forecasts. The trip generation estimates for the proposed expansion of the self-storage facility based on the approximate square footage and the number of units are summarized in **Table 1**.

Weekday AM Weekday PM **Peak Hour Peak Hour Land Use** Size **Daily Trips** In Out Total In Out **Total** Self-Storage 35,130 ft<sup>2</sup> 53 2 2 4 3 3 6 2 2 Self-Storage 194 Units 35 3 2 4

**Table 1: Trip Generation Estimate** 

As shown in the table, the estimates derived from the ITE Trip Generation Manual based on the square footage resulted in slightly more trips than the trip generation based on the number of units. However, whether generating 3 to 4 trips during the AM peak hour or 4 to 6 trips during the PM peak hour, the estimated trip generation for the proposed self-storage is inconsequential.

It is worth mentioning that most agencies, including MoDOT, typically do not require a Traffic Study unless a proposed development generates at least 100 trips during the peak hour. As such, given the very little traffic generated by the proposed self-storage a traffic impact study is not necessary. It is our belief that the additional traffic would not have a noticeable impact upon current traffic conditions on the adjacent roadways.

We trust that this trip generation assessment is useful in evaluating the proposed Storage Mart expansion in Lee's Summit, Missouri. Should there be any questions regarding this information, please contact me at 314-449-9572 or <a href="mailto:swhite@cbbtraffic.com">swhite@cbbtraffic.com</a>.

Sincerely,

Shawn perai White, P.E., PTOE Associate - Senior Traffic Engineer

have With