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November 27, 2023

Mr. Curtis Hefner
Proposed LBJ Middle School – Traffic Impact Analysis
3030 LBJ Freeway, Suite 1660
Dallas, Texas 75234

Re: Proposed LBJ Middle School – Traffic Impact Analysis

Mr. Hefner,

Quiddity has performed a review of the TIA dated November 9, 2023, referenced above, on behalf of the City of Johnson City. The proposed development includes a 350-student middle school, located on Pecan Drive at Avenue L, and analyzed full capacity in 2025. Quiddity has no objections with the findings and recommendations within the TIA.

Excerpts from the TIA including site plan and conclusions are attached for reference.

Feel free to contact me if you have any questions.

Sincerely,

Odalys C. Johnson, P.E., C.F.M.

Engineering Review Quiddity Engineering





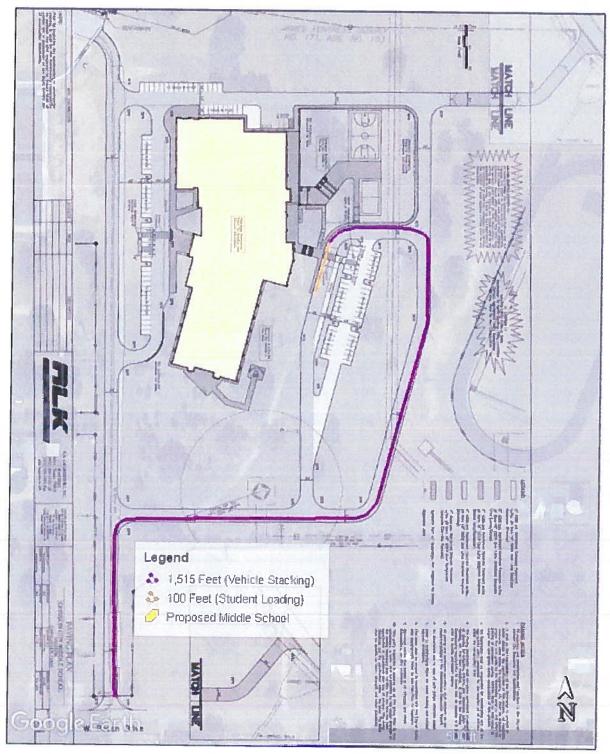


Figure 16: Proposed On-site Stacking

### **CONCLUSIONS**

The LBJ middle school on Pecan Drive in Johnson City, Texas will have capacity for 350 new students. The middle school is planned to open in 2025. For this study, Buildout (full capacity) is assumed to occur in 2025. The development is predicted to generate 736 daily trips with 319 trips in the AM peak hour and 145 trips in the school PM peak hour.

#### Access Management Analysis

- The projected right turn volume on US 290 at Avenue L exceeds TxDOT's threshold for consideration of a right turn deceleration lane.
  - Because the threshold of 60 vph is only exceeded by 4 vph, and because this
    projection is based on 350 students (while 200 students are expected for opening
    day), a right turn deceleration lane is not recommended at this time.
  - o It is recommended that right turn volumes be monitored for future consideration of a turn lane.
- Based on estimated buildout volumes along W Pecan Drive, installation of a left turn lane at Avenue L is not warranted.
- The field investigation of existing conditions indicates that the amount of available sight
  distance is predicted to exceed the required (stopping) and desirable (intersection) sight
  distances at the proposed site driveway. It is recommended that vegetation be regularly
  trimmed or cleared to maintain unobstructed sight lines, especially at intersection corners.

#### Intersection Capacity Analysis

- Approach LOS are A or B indicating low-delay operation during both peak hours.
- All-way stop-control has been modeled in the buildout year at the intersection of Avenue L at W Pecan Street. This intersection is predicted to operate with LOS A during both AM and PM peak hours.

# Multiway STOP Control of Avenue L at W Pecan Street

 Installation of a multi-way STOP is recommended at the intersection of Avenue L at W Pecan Street in coordination with the opening of LBJ Middle School.

## Queue Storage & Site Circulation

 Including the student loading zone (100 feet) and the stacking space (1,515 feet), the proposed site plan includes more than enough space for queueing.