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December 3, 2024

Katie Halloran, AICP,
Planning Director
City of Key West
1300 White Street
Key West, FL 33040

Dear Ms. Halloran,

Reference: Review of Traffic Study for Somerset Island Prep Charter School (dated September 2024)

This letter provides our independent traffic engineering review of the project document referenced above. Included in this letter is a summary and detailed comments. We expect the applicant to provide responses and an updated document to address the comments. This letter will serve as the comment tracking document and will be updated in subsequent reviews.

SUMMARY

The traffic study includes trip generation estimates of the proposed site, intersection traffic analysis, and a description of traffic circulation. The major concerns that have not been addressed are the following:

- Queueing assessment for drop-off/pick-up periods and locations along Flagler Avenue and Dennis Street
- Transportation Management Plan for student drop-off and pick-up periods (queueing assessment could be included in this plan)
- Parking capacity and needs assessment

The trip generation assessment requires documentation from the school/property owners in order to justify the trip reduction percentages. The intersection analysis indicates that the intersections will operate at an acceptable Level of Service (LOS) during the drop-off/pick-up time periods. No major concerns were identified from this intersection analysis; however, the future traffic volumes may need to be modified depending on updates to the trip generation. The traffic circulation plan includes operational aspects that would be beneficial to the traffic operations during the school drop-off/pick-up time periods; however, as detailed in the comments, more information and school commitments are needed to identify concerns, if any, and mitigation measures.

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COMMENTS

1. General comment, queueing (12/3/2024): Provide queueing analysis of both drop-off/pick-up areas (Flagler Avenue and Dennis Street) to determine potential queue spillback into the public right of way. Estimate the number of trips that will utilize the drop-off/pick-up modes based on input from the school/property owners (see comment #5). If needed, identify queue spillback mitigation measures such as a Transportation Management Plan (see comment #8). The analysis should describe how the school will ensure that the drop-off/pick-up space is being used effectively and drivers are guided into the next best available position.
 - Status: Open
2. General comment, parking (12/3/2024): The project proposes expansion of the school; however, the existing parking lot site will be maintained. The study must document the existing parking lot demand utilization and estimate the parking needs for the proposed site. Number of parking spaces should be consistent with the City Land Development Regulations. Estimated parking deficiencies will need to be brought into conformity concurrently with the enlargement of use according to City of Key West Land Development Regulation Section 108-575. Mitigation measures that address the deficiencies may be documented in a Transportation Management Plan (see comment #8).
 - Status: Open
3. Page 1, Project Description and Access (12/3/2024): Include the number of staff in the existing school and estimate the staff needs for the proposed school. Include the number of classrooms at the existing school and the proposed school.
 - Status: Open
4. Page 1, Project Description and Access (12/3/2024): Include the year that the existing building was open for school.
 - Status: Open
5. Page 2, Project Description and Access(12/3/2024): Provide documentation from the school/property owners that describes the existing school traffic operational characteristics for students, staff, and visitors. This should include the typical students and staff modes of transportation options and proportion of each, drop-off/pick-up areas, parking lot usage, parking lot overflow options, description of existing operational concerns, and current transportation management approach (i.e., school crossing guards and off-duty police).
 - Status: Open
6. Page 2, Project Description and Access(12/3/2024): Verify there are no committed developments in the vicinity of the project.

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- Status: Open
7. Page 3, Table 1, Trip Generation Summary (12/3/2024): Provide justification for % off campus and non-auto trip reductions.
 - Status: Open
 8. Page 5, Traffic Circulation Plan (12/3/2024): Prepare a Transportation Management Plan that clearly defines traffic control strategies and mitigation measures during school drop-off and pick-up periods. A queueing assessment may be incorporated into this plan. Strategies may consist of commitments to separate school opening times compared to Key West High School, staggering school opening times by grade-level, and traffic control activities like an off-duty police officer, and commitments by school/property owners.
 - Status: Open
 9. Figure 4, New Project Traffic Assignment (12/3/2024): The project driveway is showing up to 46 vehicles leaving. This is not possible since the parking area has an approximate capacity of 8 vehicles. The trip generation estimates include trips that are drop-off/pick-up trips at the proposed locations as well as trips by staff parking on site. This percent split should be determined based on the school/property owners documentation of existing school traffic operations (see comment #5).
 - Status: Open
 10. Figure 6 (12/3/2024): Figure is missing but referenced in the report.
 - Status: Open
 11. Figure 7b, Traffic Circulation Plan diagram (12/3/2024): Along the Flagler Avenue drop-off/pick-up area, verify sight triangles are clear from the proposed landscaping near the corner of Flagler Avenue and Bertha Street.
 - Status: Open
 12. Attachment B, Turning Movement Counts (12/3/2024): The PM peak hour summary page is missing for the intersection of Dennis Street & Venetia Street. Please verify that summary peak hour data is provided for all intersections.
 - Status: Open
 13. Attachment C, Trend Analysis (12/3/2024): The R squared values are below 75% for all of the locations; however, a conservative growth rate of 1% was applied to the future traffic forecasting. No further action is required; however, in the future it is suggested to remove more potential outlier years of data to increase the R squared value.

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- Status: Closed
14. Attachment E, Synchro Analysis (12/3/2024): For the results of the signalized intersection at Bertha Street/First Street & Flagler Avenue, include HCM 6th Edition or 7th Edition. Consider adjusting the phase number for the northbound approach to #8 so that the intersection complies with NEMA phasing. This adjustment will not alter the models operations.
- Status: Open
15. Attachment E, Synchro Analysis, Driveway & Dennis Street (12/3/2024): The driveway in and out trips should include both existing and proposed for future conditions. Include driveway analysis of background conditions (existing only). Adjust traffic volume as necessary based on comment #9.
- Status: Open
16. Proposed landscape plan, LA2.0 (12/3/2024): Verify that the proposed landscaping will not impact driver sight distance at the northbound Dennis Street approach to Flagler Avenue. Include a design sheet that shows the clear sight triangles from the street approaches with the proposed landscaping and vertical features.
- Status: Open

CLOSING

Please feel free to contact me if you have any questions or require clarification.

Sincerely,

Stantec Consulting Services Inc.


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