



MEMORANDUM

To: Chad Williams, P.E.
Columbia County Engineer

From: Vincent Spahr, P.E.
Kimley-Horn and Associates, Inc.

Date: April 4, 2023

Subject: Tennis Forever Development Traffic Study

Kimley-Horn has completed a review of the Tennis Forever Development on the behalf of Columbia County. The Tennis Forever Development is proposed to include 60 multi-family dwelling units and a six tennis courts located on the north side of SW Bascom Norris Drive next to the Southside Sports Complex. Access for the multi-family units is proposed via two full access connections to SW Bascom Norris Drive. Access to the tennis courts is proposed via one full access connection aligned with SW Tomoka Terrace. Build is planned by year 2026. The following summarizes Kimley-Horn's review of the Traffic Study.

PROJECT TRAFFIC

1. The trip generation calculations (67 AM peak hour trips and 72 PM peak hour trips) are consistent with the latest Institute of Transportation Engineers *Trip Generation Manual*.
2. The trip distribution and trip assignment were developed based on existing travel patterns in the area. The approach seems reasonable and justifiable.
3. Data collection for the PM Peak hour was conducted on a non-typical weekday (Monday). Based on additional data made available by the County, the traffic volumes collected do not vary significantly from typical weekday PM peak hour traffic volumes. No action necessary.

ANALYSIS

4. Turn Lane Evaluation
 - a. SW Bascom Norris Drive and SW Tomoka Terrace/Tennis Facility Driveway
 - i. The turn lane evaluation presented in the Traffic Study indicates that an ingress eastbound left-turn lane is warranted under buildout conditions. **The left-turn lane warrant presented in Figure 15 is based on a left-turn percentage of 5%, when actual left-turn percentages are expected to be 1-2%. An eastbound left-turn lane is not warranted at this intersection.**

- ii. The turn lane evaluation presented in the Traffic Study indicates that a westbound left-turn lane is warranted under buildout conditions. **The left-turn lane warrant presented in Figure 16 is based on a left-turn percentage of 5%, when actual left-turn percentages are expected to be 1-2%. A westbound left-turn lane is not warranted at this intersection.**
 - b. SW Bascom Norris Drive and SW McFarlane Avenue
 - i. The turn lane evaluation presented in the Traffic Study indicates that a westbound right-turn lane is warranted under existing conditions. **The applicant can construct a westbound right-turn lane at the intersection of SW Bascom Norris Drive and SW McFarlane Avenue if they would like, but otherwise the intersection is expected to operate acceptably through project buildout without it.**
 - ii. The turn lane evaluation presented in the Traffic Study indicates that an eastbound left-turn lane is warranted under buildout conditions. **The applicant can construct an eastbound left-turn lane at the intersection of SW Bascom Norris Drive and SW McFarlane Avenue if they would like, but otherwise the intersection is expected to operate acceptably through project buildout without it.**
- 5. Unsignalized Intersection Capacity Analysis: The analysis does not indicate any operational deficiencies upon project buildout.
- 6. Signalized Intersection Capacity Analysis: The analysis does not indicate any operational deficiencies upon project buildout.

CONCLUSIONS/RECOMMENDATIONS

- 7. Access Management
 - a. The County is amenable to the proposed two driveway connections serving the residential portion of the proposed Tennis Forever development. **However, please note that any future development on the property in the space between the tennis court facilities and the residential units will require interconnectivity with the currently proposed development. No additional access connections to SW Bascom Norris Drive will be permitted within the subject property.**