



225 East Robinson Street, Suite 355
Orlando, FL 32801
P 407.540.0555

Technical Memorandum

June 13, 2025

To: Holland Drake
Drake Construction Services
302 SE Broadway Street, Unit 100
Ocala, FL 34471

From: Kok Wan Mah, PE; Carrigan Allison

RE: KAI Project #32012: Drake Ranch Traffic Statement

TRAFFIC STATEMENT

Kittelison and Associates is pleased to provide this Traffic Statement for the Drake Ranch residential development located on the south side of SR 200 in southwest Marion County, Florida. The parcel ID for the site is 40866-000-00. Per Sec. 6.11.3 of the County's Code of Ordinances, a Traffic Statement is required for projects generating fewer than 50 peak-hour trips. Analysis includes a review of site access and access management to support the special use permit being requested by the County.

Trip Generation

The site is planned to include 45 single-family homes. Drake Ranch also offers a range of amenities, including a boat ramp, nature park, club manor entertainment area, RV/boat storage, and an equestrian area. These areas are private for the residents and do not generate external trips on their own. The site features a variety of natural elements, such as walking and biking trails, fish ponds, prairies, and springs. Please refer to the attached site plan for further details.

Table 1 below presents the estimated trip generation. The number of trips is based on data from the ITE Trip Generation Manual, 11th Edition, using traffic code 210 (Single-Family Detached). This calculation uses dwelling units as the independent variable. Single-family dwelling units were chosen as the most appropriate option due to future homesteads on the site and observed patterns of daily trip generation and movement.

Table 1: Trip Generation

Land Use	ITE Code	Intensity	Daily Trip Ends	AM Peak Period			PM Peak Period		
				In Trips	Out Trips	Total	In Trips	Out Trips	Total
Single-Family Detached	210	45 DUs	484	9	27	36	30	17	47
Total			484	9	27	36	30	17	47

Source: Institute of Transportation Engineers (ITE) Trip Generation Manual 11th Edition

June 13, 2025

Drake Ranch Traffic Statement #32012

As shown in **Table 1**, the development is expected to generate 484 daily trip ends. The AM and PM peak periods are fewer than 50 peak-hour trips which fulfills the County's requirement for generation.

As shown in **Table 2**, the projected number of left-turn movements are the proposed Drake Ranch access point meets the threshold for a dedicated left-turn lane, as outlined in Figure 2.5 of the NCHRP Report 745. The recommendation is based on expected turn volumes and prevailing traffic conditions along SR 200. Utilizing data from FDOT's Transportation Data and Analytics Office, the closest Portable Traffic Monitoring Site (Site ID 360222) reports an Annual Average Daily Traffic (AADT) volume of 18,100 vehicles. With a K-factor of 9.5% and a directional distribution (D-factor) of 56.1%, this translates to an estimated peak-hour advancing volume of 965 vehicles and an opposing volume of 755 vehicles.

Assuming that 80% of site-bound traffic will originate from the northeast along SR 200—due to the concentration of employment centers, commercial destinations, and schools in that direction the need for a left-turn lane is warranted.

June 13, 2025

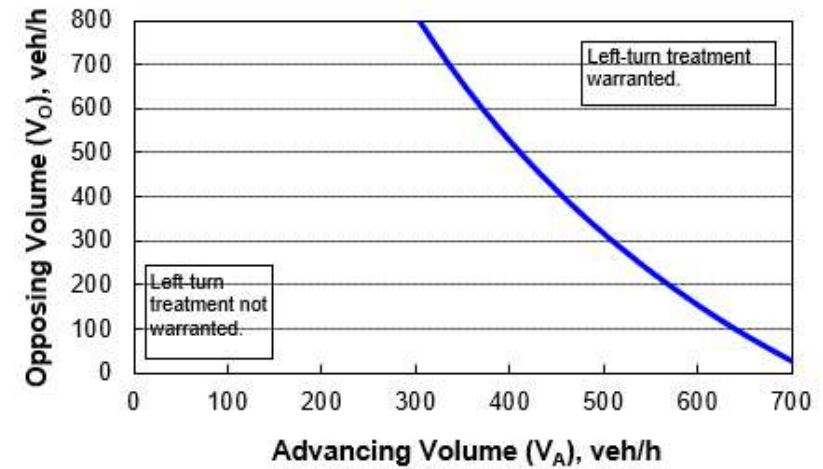
Drake Ranch Traffic Statement #32012

Table 2: Turn Lane Analysis**2-lane roadway (English)****INPUT**

Variable	Value
85 th percentile speed, mph:	60
Percent of left-turns in advancing volume (V_A), %:	3%
Advancing volume (V_A), veh/h:	965
Opposing volume (V_O), veh/h:	755

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	319
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment warranted.	

**CALIBRATION CONSTANTS**

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Site Plan

The site plan is being reviewed to provide recommendations to the County related to site access, circulation, and access management. The comments are as follows:

- Access to the site is proposed to be a full access connection provided via SR 200, approximately 1,100 feet west of SW 30th Avenue.
- SR 200 is a two-lane, undivided highway with a posted speed limit of 55 miles per hour. While projected traffic volumes generated by the site are expected to be low, further evaluation is recommended to determine whether a dedicated left-turn lane may be warranted at the site entrance, particularly in consideration of NCHRP and FDOT guidelines.

Conclusion

The site is planned to include 45 single-family homes. Drake Ranch also offers a range of amenities, including a boat ramp, nature park, club manor entertainment area, RV/boat storage, and an equestrian area. These areas are private for the residents and do not generate external trips on their own. The development is expected to generate 484 daily trip ends. The AM and PM peak periods are fewer than 50 peak-hour trips which fulfills the County's requirement for a Traffic Statement.

Regarding these findings, we would appreciate the County's consideration to waive the requirement for a full Traffic Impact Analysis for the proposed Drake Ranch.

Should you have any questions, please let us know.

