

To: Michael Foley
MF Development LLC
5448 Apex Peakway
Apex, North Carolina 27502

Date: September 3, 2019

Memorandum

Project #: 38930.01

From: Andrew Topp, PE, PTOE Re: The Collection – Trip Generation Memorandum

MF Development LLC requested VHB perform a trip generation calculation for a new housing development at 614 Keith Street in Knightdale, NC. Based on the sketch plan prepared by McAdams dated August 2, 2019, the proposed development is expected to consist of 57 single-family homes and 32 townhomes. The *ITE Trip Generation Manual*, 10th Edition was utilized to calculate the expected weekday trips during the AM and PM peak hours. The trip generation results for the proposed housing development are located in Table 1.

Table 1: Trip Generation Results

Land Use	Land Use	Unit	ADT	AM Peak Hour			PM Peak Hour		
Code ¹				Enter	Exit	Total	Enter	Exit	Total
Total Site Trips ²									
210	Single-Family Detached Housing	57 du	620	11	34	45	37	22	59
220	Multifamily Housing (Low-Rise)	32 du	201	4	12	16	13	8	21
Development Total			821	15	46	61	50	30	80

Notes:

As shown in Table 1, the development is expected to generate 821 daily trips with 61 trips (15 entering, 46 exiting) occurring during the AM peak hour, and 80 trips (50 entering, 30 exiting) occurring during the PM peak hour.

The Town of Knightdale requires a Traffic Impact Analysis (TIA) for any development that is expected to generate at least 150 trips during one peak hour. This development will generate a maximum of 80 trips during a single peak hour. Therefore, since the maximum number of generated peak hour site trips is less than 150, a TIA is not required for this development.

^{1.} Land Use Code and trip generation rates are determined based on ITE Trip Generation, 10th Edition

^{2.} Total site trips are determined based on the suggested method in the NCDOT Rate Vs Equation Spreadsheet