MEMORANDUM

To: Jerry Jensen, P.E., Town of Cary
From: Travis Fluitt, P.E., Kimley-Horn
Date: February 21, 2019
Subject: 19-TAR-440 (Alston Avenue Apartments) Improvements

The following is a summary of the off-site roadway improvements that the applicant for the Alston Avenue development is and is not offering based on our review of the consultant’s TAR for the proposed development.

**NC 55 at O’Kelly Chapel Road – Provide Additional WB Left-Turn Lane and Modify Traffic Signal**

Site traffic is expected to account for approximately 2% of the traffic at this intersection. The intersection is expected to operate at LOS E in the PM peak hour with or without this development in place with only minimal increases in intersection delay. Therefore, the applicant is not offering to perform this improvement.

**Green Level Church Road at O’Kelly Chapel Road – Construct Exclusive EB & WB Right-Turn Lanes**

Site traffic is expected to account for less than 2% of the traffic at this intersection. The intersection is expected to operate at LOS F in the PM peak hour with or without the development in place. Furthermore, the eastbound right-turn lane was previously committed to by the development planned for the southwest quadrant of the intersection, and there is no (ROW) available to construct the westbound right-turn lane. Therefore, the applicant is not offering to perform these improvements.

**Green Level Church Road at McCrimmon Parkway – Construct Additional SB Through Lane, Restripe WB Approach, and Modify Traffic Signal**

Site traffic is expected to account for less than 1% of the traffic at this intersection. The intersection is expected to operate at LOS F in the PM with or without this development in place, and the increase in delay due to site traffic is projected to be less than ½ second. It should be noted that the additional through lane on southbound Green Level Church Road is being constructed with 100’ of storage by the Amberly Place development. This lane will be extended whenever the properties on the northwest quadrant of this intersection develop. Therefore, the applicant is not offering to perform these improvements.
O’Kelly Chapel Road at Alston Avenue – Construct Exclusive NB Left-Turn Lane and Install Traffic Signal

The applicant is offering to construct the northbound left-turn lane on Alston Avenue but is not offering to install a traffic signal at this intersection. Based on the build-out traffic volumes from the TAR, the PM peak hour volumes do not meet the thresholds for any of the 8-hour, 4-hour, or peak hour volume warrants. Therefore, it is extremely unlikely that a traffic signal will be warranted at this location.

Green Level Church Road at Stonewater Glen Lane – Install Traffic Signal

Site traffic is expected to account for less than 2% of the traffic at this intersection. The westbound approach of this intersection is expected to operate at a LOS F with or without the development in place. As the proposed development is only adding traffic to the through movements at this intersection, which are already high enough to meet warrant thresholds, whether this intersection meets signal warrants or not will not be impacted by this development. Therefore, the applicant is not offering to perform this improvement.

Green Level Church Road at Horton’s Creek Road – Construct Exclusive WB Left-Turn Lane

Site traffic is expected to account for less than 1% of the traffic at this intersection. The site is projected to add only 17 new trips in the AM peak hour and 19 new trips in the PM peak hour and all to the through movements. The westbound approach to this intersection is expected to operate at LOS F in both the AM and PM peak hours with or without the development in place. Therefore, the applicant is not offering to perform this improvement.

Green Level Church Road at Weycroft Avenue – Install Traffic Signal

Site traffic is expected to account for less than 1% of the traffic at this intersection. The westbound approach to this intersection is expected to operate at LOS F in both the AM and PM peak hours with or without the development in place. It is also extremely unlikely that a traffic signal will be warranted at this location. Based on the build-out traffic volumes from the TAR, the PM peak hour volumes do not meet the thresholds for any of the 8-hour, 4-hour, or peak hour volume warrants. As the proposed development is only adding traffic to the through movements at this intersection, which are already high enough to meet warrant thresholds, whether this intersection meets signal warrants or not will not be impacted by this development. Therefore, the applicant is not offering to perform this improvement.
Alston Avenue at Access #1 – Construct Exclusive SB Left-Turn Lane

At build-out, Alston Avenue is projected to carry less than 3,000 vehicles per day, the vast majority of which will be site traffic from this development. While the left-turn volume of 89 vehicles turning into the site driveway could trigger the need for a left-turn lane on a busier road, the TAR projects this movement will be opposed by less than 25 vehicles with only 30 behind them. Alston Avenue is being designed as a low-speed 2-lane roadway with parallel parking on both sides. Adding turn lanes will only encourage higher speeds, which is not in keeping with the proposed character of this roadway. Therefore, the applicant is not offering to perform this improvement.