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Memorandum

To: Ashley White
Assistant City Engineer, City of Smyrna, GA.
From: Abdul Amer, PE.
Date: December 08, 2020.
Subject: Traffic Impact Study –Proposed Residential Dev on Campbell Road, Smyrna, GA.

Please see below our responses to your comments on the above study:

1. Comment: We believe that more vehicles will use the Spring Road entrance to avoid the traffic signal at Campbell Road, which will be operating at LOS E in Build conditions (with an approx. 60 second delay). The trip distribution of vehicles exiting currently show 64% exiting from Campbell Road and 36% exiting from Spring Rd in the AM Peak. In the PM Peak, approx. 62.5% exiting on Campbell Road and 37.5% exiting on Spring Rd. Can you verify this distribution?

Response: Traffic headed south on Campbell Road and west on Spring Road will use the access on Campbell Road as the access on Spring Road is right-in/right-out. For traffic oriented to the east on Spring Road, 60% has been assigned to right-in/right-out driveway on Spring Road and 40% has been assigned to the driveway on Campbell Road. Your numbers probably looked at total exiting trips. Even if we change the split from 60/40 to 80/20, it will likely not make much of a difference.

2. Comment: We are concerned about queuing within the development as vehicles wait to turn right on to Spring Road, especially with the drop-off entrance to Argyle Elementary being in such close proximity. In addition, the traffic going EB on Spring Rd is 1,964 vehicles during the AM Peak, which could make it difficult for vehicles turning out of the development to find gaps in traffic. Are there any recommendations to help facilitate vehicles turning right on to Spring Rd to prevent queuing into the development?

Response: The maximum 95th percentile queue length at the right-in/right-out driveway in our models is not significant. With 20 cars turning right in 60 minutes, there will be one car turning right every three minutes. The traffic signal to the west will create frequent gaps in flow of traffic. The driveway has adequate stacking capacity to accommodate any queues. Argyle Elementary School's drop-in access is on the eastern side of school property, as western access is exit-only. This puts their entrance farther away from the proposed right-in/right-out driveway. I do not think we need any mitigation for right-outs. Other than installing those "Do Not Block" striping, there is not much that can be done.

3. Comment: The intersection of Spring and Campbell Rd continues to operate at a LOS E in the NB and SB approach. We have received several complaints about the delay traveling NB and anticipate hearing those concerns in the zoning hearing. Are there any recommended improvements for this intersection, specifically for the NB approach? Additionally, delay improves from no-build to build conditions although there are no recommended improvements.

Response: The traffic study is recommending installing an overlap phase for the northbound right turn lane. The addition of this overlap phase improves the LOS of the northbound approach from “F” to an “E”. The southbound approach is also operating at LOS “E”. The development has one driveway on Spring Road and most of the site traffic will turn right at the driveway on Spring Road resulting in minimum site traffic impact on right turns from Campbell Road onto Spring Road. The site generates very few northbound left-turn trips at this intersection.

4. Comment: The intersection of Spring Rd at Village Parkway shows a LOS F for the NB & SB approach and LOS A & C for the EB approach in existing conditions. From our observation, there is more delay on Spring Road in the AM and PM peak hour than the side streets. Can you verify that this wasn't mistakenly reversed?

Response: We have verified and found that Synchro is reporting LOS “F” for the side streets due to the long cycle length. It is reporting level of service “A” and “C” for the eastbound approach in existing conditions. Probably it is not modeling the delays caused in the eastbound direction from the congested intersections of Spring Road at Cobb Parkway and Cumberland Parkway.

5. Comment: The analysis for Woodruff Drive and Dewsbury Court are not needed. The delay at Woodruff increases from no-build to build conditions although we are no longer connecting this road (i.e. LOS goes from a C to D in base year 2022).

Response: We have deleted these two intersections from our analysis.

6. Comments: This is minor, but the existing delay for Spring at Village Pkwy in EB approach changed from the previous TIS (from 20.4s to 21.5s). Also, minor, text about land use 221 being used in place of senior living was mistakenly left in and no longer relevant to this TIS (on p. 10 under Section 5.1).

Response: The EB delay of 20.4s shown in the previous TIS was a typing error. The delay shown should have been 21.5 seconds as evidenced by the synchro reports attached to the previous TIS report. We have deleted the language about senior living from the report now.