

August 10, 2016

N-S Project No. 13194.004

Mr. Carl Baughman, P.E.
Traffic/Transportation Engineer
City of Franklin
109 3rd Avenue South
Franklin, TN 37065-0305

**Subject: Follow-up Review of Traffic Impact Analysis – Updated August 2016
Avenida Senior Housing Development**

Dear Carl:

Please accept this correspondence as documentation of our review of the updated traffic impact analysis (TIA) report, dated August 2016, for the referenced proposed development. Per city engineering and Neel-Schaffer review comments, the applicant updated its original study to reflect feedback received as a result of the initial DRT review. This memorandum serves to document our follow-up review of the revised TIA.

In general, the updated TIA provides the requested additional analysis and clarifications. The following highlights key points addressed in the updated TIA:

- As requested, the revised TIA provides additional information and analysis in coordination with the Ironhorse multi-family project being separately considered. The Avenida and Ironhorse projects share a common signalized intersection within their study areas: Franklin Road at Mallory Station Road. For this reason, review comments requested that the Avenida TIA prepare its analysis referencing input data and proposed recommendations resulting from the Ironhorse TIA. The Avenida TIA now specifically references and includes forecasted traffic from the proposed Ironhorse project. Further, the Avenida TIA provides capacity analysis and evaluation including the additional Ironhorse background traffic.
- Also, the updated TIA provides specific analysis results of various lane configurations proposed for the Franklin Road at Mallory Station Road intersection. Primarily, this reflects the additional scenarios that account for the proposed right-turn lane improvements in the northbound and westbound approaches.
- Based on feedback from the initial review, the applicant updated the signal timing parameters used in the capacity analysis of the Franklin Road at Mallory Station Road signalized intersection. The updated analysis now more closely reflects the City's actual traffic signal timings. This provides analysis that is more representative of actual field conditions. The TIA report made similar adjustments for the signalized capacity analysis for the intersections of Mallory Station Road at General George Patton Drive, Duke Drive and Seaboard Lane.
- Regarding the capacity analysis of the signalized intersection of Mallory Station Road and Seaboard Lane, the updated evaluation confirmed that the southbound right turn operates at a Level-of-Service "E" under existing, background and proposed scenarios with existing geometry. Future improvements to the intersection should include consideration of adding a dedicated southbound right-turn lane.

Our review also noted the study's recommendations for mitigating impacts to the surrounding transportation network. The following highlights the improvements identified by the TIA report. We concur with these recommendations and recommend that these measures be required for implementation of the project:

- Dedicate and reserve right-of-way along the frontage of the proposed property to provide for future widening of Mallory Station Road.
- Provide construction of new sidewalk infrastructure along its frontage of Mallory Station Road.
- Coordinate with city of Franklin engineering staff and contribute to the implementation of modified traffic signal phasing for the westbound approach of Mallory Station Road at Franklin Road. The modification should provide new westbound right-turn overlap signal phasing, and associated required hardware.
- Provide multiple driveway access points to Mallory Station Road including the joint east driveway with adjacent existing commercial driveway.

In addition to the noted recommendations made by the TIA report, we submit the following items as related considerations:

- We recommend that the signal timings of the signalized intersections within the study area (Mallory Station Road's intersections with Franklin Road, Gen. George Patton Drive/Duke Drive and Seaboard Lane) be updated and optimized in conjunction with the project.
- During site design phase, we recommend project planners review and confirm that appropriate intersection sight distance will be provided at the development's proposed driveway intersections with Mallory Station Road.
- The separation distance between the proposed western driveway and the proposed shared joint-access drive should be maximized.

Thank you for the opportunity to contribute to the review of this project. Please let us know if you need any additional information or have any questions.

Sincerely,
NEEL-SCHAFFER, INC.



Gregory Judy, P.E., PTOE
Engineer Manager

