



MEMORANDUM

TO: Elizabeth Nijkamp, Engineer Review Manager, El Paso County

FROM: Paul Brown, PE, PTOE, Felsburg Holt & Ullevig

DATE: November 28, 2022

SUBJECT: On-Call Contract #17-067H-1; PO # 8115428
Traffic Impact Study Reviews
TO #10: Owl Place Commercial Traffic Impact Study (CR221)
Second Review

This memorandum includes a list of comments on the September 2022 Owl Place Commercial Traffic Impact Study (TIS) (revised from June 2022) prepared by SM Rocha, LLC for First Cup. Our comments are based on requirements provided in the County's Engineering Criteria Manual (ECM), Appendix B.

Comments

Comments on the TIS are divided into general requirements to conform to ECM TIA report requirements and technical and report specific comments that request further clarification or missing information.

General Comments

The following general requirements need to be addressed in the Owl Place Commercial TIS to meet ECM requirements:

1. The TIS adequately describes the site and proposed access points, existing conditions, anticipated site trip generation, and street classifications.
2. Background forecasts for two future years, 2024 and 2040, are provided. The traffic assignment appropriately accounts for pass-by traffic, and the LOS analyses of existing, background, and total traffic conditions generally follow industry standard methods. Synchro HCM output for signalized intersection analyses have been added since the June submittal.
3. The TIS now includes a brief review of pedestrian and bicycle facilities but does not address the following evaluation elements per ECM Section B2.4.2B (Full TIS):
 - a. Sight distance evaluation
 - b. Recommended taper/deceleration/storage lengths for turn lane improvements
 - c. Safety and accident analysis
 - d. Neighborhood/public input
4. Although signal coordination data has been added to the TIS, the signal progression bandwidth requirements in ECM Section B4.1.B are not discussed. Also, the signal offsets shown in Appendix C (Capacity Worksheets) do not reflect the offsets in Appendix A (Signal Timing Information) despite the text on page 7 stating a desire to "remain consistent with existing signal coordination plans." The progression analysis should be updated and results documented in the TIS.
5. The TIS does not include pedestrian and bicycle LOS results per ECM Section B4.1.C.
6. A Recommended Improvements Summary Table and related improvement responsibilities have been incorporated since the June submittal.

7. The Engineer's Statement and Developer's Statement have been provided on the certification page, but they have not been executed.

Technical Report Comments

Specific concerns with the technical report are as follows:

1. Figure 2, the Site Plan, shows that three driveways along the north-south spine roadway are anticipated. This is likely an improvement when compared to the site plan presented in the previous TIS. However, these accesses have not been analyzed for traffic volumes, LOS, or queuing. Potential queuing into the northernmost driveway from Lot 1 or Lot 2 could impact traffic operations at the access road intersection at Owl Place (Access A).
2. The year 2040 LOS analyses identify unacceptable projected operational levels at Meridian Road/Woodmen Road (signalized). On pages 15 (background conditions) and 25 (total traffic conditions) it is suggested that widening of Woodmen Road and/or future network connectivity may help mitigate congestion at these intersections. The MTCP does identify conversion of Woodmen Road to an expressway in the study area, but with a 4-lane cross-section (not 6 lanes as assumed in the TIS). The TIS puts the onus of monitoring conditions and determining any future improvements on County staff. This report should evaluate and identify potential mitigation and make appropriate recommendations for this intersection.
3. The year 2040 LOS analyses identify unacceptable projected operational levels at Meridian Road/Eastonville Road (signalized) under total traffic conditions (page 25). This is attributable to the project, as acceptable operations are identified under background conditions (page 15). The text describes several options to address these shortfalls. This report should evaluate the various options and make appropriate recommendations for this intersection.

Conclusions

Based on the previous comments, the subject report should be revised and resubmitted to address the comments and concerns.