



# MEMORANDUM

**DATE:** May 1, 2024  
**TO:** City of Camas, Anita Ashton  
**FROM:** Dana Beckwith, PE



**SUBJECT: NE 13th Street Gas Station Traffic Analysis Report Review**

P24-017

This memorandum summarizes the traffic analysis report review for the proposed NE 13<sup>th</sup> Street Gas Station Development located on the southwest corner of the NE 13<sup>th</sup> Street and NW Friberg-Strunk Street intersection within the City of Camas, Washington. The traffic analysis report reviewed is dated September 2023.

1. The applicant needs to provide a site circulation plan with an explanation of ingress / egress at the site entrance and the unloading sequence.
  - a. Based on the circulation plan provided the entrance of the site will be blocked while the double trailer semi-tanker is positioning itself to unload fuel. Once positioned, the truck impacts smaller unit trucks (SU-30) entering the site. Both issues create the potential for vehicles wanting to access the site to queue onto NE 13<sup>th</sup> Street.
  - b. What is the purpose of using a WB-67 as the design vehicle? An SU-30, WB-40 and a double trailer semi-tanker would be anticipated on site.
  - c. As part of the circulation plan, the path of the double trailer semi-tanker will need to use the right turn and through lane to exit. Is there sufficient distance to the NE 13<sup>th</sup> Street / NW Friberg-Strunk St intersection for the truck to be positioned to turn onto NW Friberg-Strunk Street and not extend into the northbound left turn lane?
2. The access to the site falls below the City's access spacing of 660ft. This creates several safety concerns near the site access and at the NE 13<sup>th</sup> Street / NW Friberg-Strunk St intersection. Based on review of the traffic study, the following needs to be provided:
  - a. The *Summary and Recommendations* section of the report indicates a left turn is not warranted at 35 mph but is marginally warranted at 40 mph. Due to the sub-standard access spacing, an evaluation using the 85<sup>th</sup> percentile speed present on the roadway needs to be used for turn lane and sight distance evaluations.
  - b. Queuing analysis should be provided using Simtraffic or Poison's distributions. This will typically provide a more conservative estimate of average and 85<sup>th</sup> percentile queues.
  - c. Due to school traffic being predominant along study roadways, traffic counts need to be conducted during the school year to capture the heavy vehicle (bus traffic) presence at the intersection and distribution of that traffic. An actual traffic count will better define the local site and peaking characteristics of traffic. The AM peak is of particular concern for school related traffic. Developing school traffic estimates from the *ITE Trip Generation Manual* does not capture those characteristics in this case.
  - d. A westbound left turn lane or restriction of the westbound left turn movement into the site from NE 13<sup>th</sup> Street needs to be provided due to the sub-standard

distance between the site access and the NE 13<sup>th</sup> Street / NW Friberg-Strunk St intersection.

- i. There is a high probability of eastbound traffic obscuring a vehicle waiting to turn left into the site from motorists turning left from NW Friberg-Strunk Street.