

MEMORANDUM TO: Murad Fazal
NMR, LLC

FROM: Luay R. Aboona, PE, PTOE
Principal

DATE: August 2, 2023

SUBJECT: Access Evaluation
Central Avenue and 98th Street Coffee Shop
Albuquerque, New Mexico

As requested, Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) has reviewed the traffic study prepared by Lee Engineering dated May 2022 and the June 7, 2023 review letter by the City of Albuquerque for the proposed coffee shop to be located in the southeast corner of the intersection of Central Avenue with 98th Street in Albuquerque, New Mexico. The purpose of the review is to determine the appropriate access that should be provided to ensure the most efficient flow of customer traffic in and out of the site.

Brief Overview

The traffic study prepared by Lee Engineering called for a right-in/right-out access drive off 98th Street and a right-in/right-out access drive off Central Avenue. The results of the capacity analyses indicated that the exiting movements from both driveways will operate at acceptable Levels of Service (LOS) C or better during both peak hours.

The review completed by the City of Albuquerque Development Review Services called for restricting the access drive off 98th Street to right-out only and for the provision of a right-turn lane on Central Avenue at the right-in/right-out access drive. The letter also called for the provision of an eastbound left-turn lane at the intersection of Central Avenue with Westland Road to accommodate the increase in left-turn movements as a result of the projected U-turns.

Evaluation

In evaluating the two access schemes and the impact of further restrictions to the access drive off 98th Street, I recommend maintaining the proposed access as analyzed in the traffic study for the following reasons:

- Traffic generated by drive-through coffee shops are primarily diverted from existing traffic on the adjacent roadway system. Providing access that is convenient is paramount to the success and viability of these establishments.
- The site is currently served by an existing access drive off 98th Street that allows both right-in and right-out movements.

- Given that the northbound traffic on 98th Street, especially in the morning peak hour, is significantly higher than the two-way traffic on Central Avenue, a direct right-in access will provide convenient entry into the site without the traffic having to travel onto Central Avenue.
- This will in turn reduce the traffic load at the intersection of 98th Street with Central Avenue by eliminating the additional right-turn movements that will occur (northbound and westbound right turns).
- Having all right turns enter off Central Avenue will double the amount of traffic entering from the west (148 in the morning and 97 in the evening). This will have the potential to back up traffic onto Central Avenue and create undue on-site circulation and congestion.
- A northbound right-turn lane currently exists on 98th Street, which can also serve as a deceleration lane for the proposed access drive.
- An eastbound right-turn lane should be provided on Central Avenue in order to accommodate the traffic projected to enter the site.
- It should be noted that providing a left-turn lane on Central Avenue at Westland Road as requested by the City is not necessary for the following reasons:
 - Left-turn movements are currently occurring at this location.
 - The majority of traffic exiting to travel northbound on 98th Street will utilize the access drive off 98th Street
 - Traffic desiring to travel east on I-40 will utilize the Unser Boulevard SW interchange
 - Only traffic desiring to travel west on Central Avenue and south on 98th Street will need to make the U-turn at this intersection. This amounts to 25 percent in the morning (37 vehicles) and 50 percent in the evening (45 vehicles)
 - This amount of traffic can be accommodated by the median opening that currently exists, which can accommodate up to two vehicles without blocking eastbound traffic. It is recommended that the median “nose” be modified similar to the intersection of Central Avenue with 94th Street, where the median opening accommodates left-turn movements/U-turns without left-turn lanes.

Conclusion

Based on the above evaluation, in order to provide the most efficient access to ensure that customers have convenient and direct access in and out of the site, right-in/right-out access drives should be provided on both 98th Street and Central Avenue. This access system will also minimize the impact on the intersection of 98th Street with Central Avenue and will reduce the traffic load on Central Avenue.