

MEMORANDUM TO: Anthony DeAngelis
Inter Continental Real Estate & Development Corp.

FROM: Javier Millan
Principal

Andrew Bowen
Consultant

DATE: September 22, 2023

SUBJECT: Traffic Study Addendum
Crossroads of Orland Park
Orland Park, Illinois

This memorandum is an addendum to the traffic study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) dated September, 2023, for the Crossroads or Orland Park retail/commercial development to be located in Orland Park, Illinois. The purpose of the addendum is to evaluate the adequacy of the on-stacking for the proposed restaurants with drive-throughs.

Lot 1 Drive-through Circulation and Stacking

Lot 1, which is located in the southwest corner of the development site, is proposed to consist of an approximately 4,000 square-foot restaurant with a drive-through lane. The restaurant will provide a one-lane drive-through on the north side of the building with a bypass lane. The pick-up window for the drive-through will be located on the north side of the building with the order board located east of the building. Vehicles will enter the drive-through lane near the northeast corner of the lot and travel west along the north border of the lot.

A review of the site plan indicates that approximately seven vehicles can stack from the pick-up window to the end of the drive-through lane and approximately eight vehicles can along the north-south drive aisle within the lot before reaching an internal site access road. It is important to note that these additional drive-through queues will not block vehicles from exiting the drive-through lane or the lot. In addition, additional vehicles could queue within the site before reaching area roadways.

Lot 3 Drive-through Circulation and Stacking

Lot 3, which is located in the northwest corner of the development site, is proposed to consist of an approximately 4,000 square-foot restaurant with a drive-through lane. The restaurant will provide a one-lane drive-through on the west and north sides of the building with a bypass lane.

The pick-up window for the drive-through will be located on the west side of the building with the order board on the north side of the building. Vehicles will enter the drive-through lane near the northeast corner of the building and travel west and then east.

A review of the site plan indicates that approximately eight vehicles can stack from the pick-up window to the end of the drive-through lane and approximately eight vehicles can along the drive aisles within the lot before reaching an internal site access road. It is important to note that these additional drive-through queues will not block vehicles from exiting the drive-through lane or the lot. In addition, additional vehicles could queue within the site before reaching area roadways.

Projected Queueing of Potential Uses

The exact uses that will occupy these buildings have not yet been determined. In order to provide an evaluation of the potential queueing, the provided stacking was compared to queueing data for uses that may occupy these buildings. This data comes from surveys conducted at locations throughout the Chicago area and information provided by operators. **Table 1** summarizes the survey data.

The proposed restaurants will provide stacking for seven to eight spaces within their drive through lanes and total stacking of 15 to 16 spaces within the lots. Comparing the stacking to the values in Table 1, the average drive-through queues at these restaurants can likely be accommodated within the proposed drive-through lanes and the peak drive-through queues at these restaurants can likely be accommodated within the restaurant lots. However, if the restaurants are specific high-traffic generators, such as Chick-fil-a, additional mitigation such as dual ordering boards should be considered. Vehicles queues from neither restaurant will impact traffic on area roadways.

Table 1
SUMMARY OF RESTAURNT QUEUE SURVEY RESULTS

Restaurant (Survey Locations)	Average Queue ¹	Peak Queue
Chick-fil-a² (Aurora, Wheaton)	12	13
Chipotle (National Operator Information)	2	10
Culver's (Buffalo Grove, Lincolnshire, Mundelein)	5	10
Panera (Naperville)	6	9
Starbuck's (Lisle)	6	11

1 – Average Queue during the surveyed peak periods.
2 - Chick-fil-a restaurants typically have dual ordering boards.

Conclusion

Based on the preceding, the following conclusions have been made:

- Lot 1 will contain an approximately 4,000 square-foot restaurant with a drive-through lane. The drive through lane will be able to accommodate seven vehicles with space for eight additional vehicles to queue within the lot.
- Lot 3 will contain an approximately 4,000 square-foot restaurant with a drive-through lane. The drive through lane will be able to accommodate eight vehicles with space for eight additional vehicles to queue within the lot.
- The proposed drive-through stacking will likely be able to accommodate average and peak queues for future restaurant uses.
- Vehicles queues from neither restaurant will impact traffic on area roadways.

