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MEMORANDUM TO: Dan Olson

Watermark Engineering

FROM: Andrew Bowen

Consultant

Luay R. Aboona, PE, PTOE

Principal

DATE: August 23, 2019

SUBJECT: Parking Study Addendum

Proposed McDonalds Redevelopment

Arlington Heights, Illinois

This memorandum is an addendum to the traffic and parking study report prepared by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) dated June 11, 2019 for the proposed McDonald's remodel. The existing McDonald's restaurant is located at 45 E. Golf Road in Arlington Heights, Illinois. As part of the report, parking occupancy surveys were conducted at the restaurant on Friday, June 7th and Saturday, June 8th, 2019 in order to determine the existing parking demand. The surveys of the existing parking lot providing 37 spaces, of which two spaces are occupied by trash receptacles, were conducted in 15-minute intervals from 7:00 A.M. to 7:00 P.M.

Per the request of the Village of Arlington Heights, KLOA, Inc. conducted additional parking occupancy surveys on Saturday, Tuesday, Wednesday, and Thursday (August 18, 21, 22, and 23, 2019, respectively). The peak occupancy of the parking lot for each day, including the original survey dates, is shown in **Table 1.** The 15-minute interval occupancies are summarized in **Tables 2** through **4**.

As indicated in the report, the proposed remodel will require the reconfiguration of the parking lot to provide dual drive-through lanes. The resulting parking lot configuration will provide a total of 30 parking spaces. As can be seen in Table 1, the observed peak parking demand does not exceed 27 vehicles, which can be accommodated by the proposed 30-space parking lot.

Table 1
DAILY PEAK PARKING OCCUPANCY

| | Friday, June 8 | Saturday, June 9 | Saturday, August 18th | Tuesday, August 21 st | Wednesday August 22 nd | Thursday, August 23rd |
|---------------------------|-------------------|---------------------|--------------------------|-------------------------------------|--------------------------------------|--------------------------|
| Peak Occupancy Volume | 25 | 23 | 21 | 25 | 27 | 21 |
| Percent Peak Occupancy | 71% | 66% | 60% | 71% | 77% | 60% |
| Time of Peak Occupancy | 1:45 P.M. | 1:30 P.M | 12:15 P.M. | 1 :15 P.M. | 12:15 P.M. | 12:30 P.M. |

Table 2 PARKING OCCUPANCY SURVEY RESULTS – JUNE 8 AND 9

| | Friday, June 8, 2019 | | | | | Saturday, June 9, 2019 | | | | |
|-----------|----------------------|-----------------|----------|---------------|-------|------------------------|-----------------|----------|---------------|-------|
| Time | Unreserved | Mobile Order | Handicap | Chase Bank | Total | Unreserved | Mobile Order | Handicap | Chase Bank | Total |
| 7:00 AM | 14 | 0 | 0 | 0 | 14 | 8 | 0 | 1 | 0 | 9 |
| 7:15 AM | 6 | 1 | 0 | 0 | 7 | 4 | 1 | 0 | 0 | 5 |
| 7:30 AM | 7 | 0 | 0 | 0 | 7 | 4 | 0 | 0 | 0 | 4 |
| 7:45 AM | 9 | 0 | 0 | 0 | 9 | 6 | 1 | 0 | 0 | 7 |
| 8:00 AM | 8 | 0 | 0 | 0 | 8 | 13 | 0 | 0 | 0 | 13 |
| 8:15 AM | 11 | 0 | 0 | 0 | 11 | 10 | 0 | 1 | 0 | 11 |
| 8:30 AM | 12 | 2 | 0 | 1 | 15 | 12 | 0 | 1 | 0 | 13 |
| 8:45 AM | 19 | 1 | 0 | 0 | 20 | 14 | 0 | 1 | 0 | 15 |
| 9:00 AM | 16 | 0 | 0 | 0 | 16 | 10 | 0 | 1 | 0 | 11 |
| 9:15 AM | 13 | 0 | 0 | 0 | 13 | 12 | 0 | 1 | 0 | 13 |
| 9:30 AM | 20 | 0 | 0 | 0 | 20 | 12 | 0 | 1 | 0 | 13 |
| 9:45 AM | 20 | 0 | 0 | 0 | 20 | 18 | 0 | 2 | 0 | 20 |
| 10:00 AM | 17 | 0 | 1 | 0 | 18 | 16 | 1 | 1 | 0 | 18 |
| 10:15 AM | 19 | 0 | 0 | 0 | 19 | 14 | 1 | 2 | 0 | 17 |
| 10:30 AM | 16 | 0 | 0 | 0 | 16 | 11 | 0 | 2 | 0 | 13 |
| 10:45 AM | 19 | 0 | 0 | 0 | 19 | 9 | 0 | 0 | 0 | 9 |
| 11:00 AM | 16 | 1 | 1 | 0 | 18 | 18 | 0 | 0 | 0 | 18 |
| 11:15 AM | 17 | 2 | 1 | 0 | 20 | 18 | 0 | 2 | 0 | 20 |
| 11:30 AM | 15 | 2 | 2 | 0 | 19 | 16 | 0 | 2 | 0 | 18 |
| 11:45 AM | 18 | 1 | 2 | 0 | 21 | 12 | 0 | 2 | 0 | 14 |
| 12:00 PM | 18 | 1 | 2 | 0 | 21 | 18 | 0 | 2 | 0 | 20 |
| 12:15 PM | 19 | 1 | 2 | 0 | 22 | 12 | 0 | 1 | 0 | 13 |
| 12:30 PM | 19 | 2 | 2 | 0 | 23 | 8 | 0 | 1 | 0 | 9 |
| 12:45 PM | 15 | 0 | 0 | 0 | 15 | 12 | 2 | 1 | 0 | 15 |
| 1:00 PM | 16 | 0 | 1 | 0 | 17 | 11 | 1 | 0 | 0 | 12 |
| 1:15 PM | 22 | 0 | 2 | 0 | 24 | 15 | 0 | 0 | 0 | 15 |
| 1:30 PM | 22 | 1 | 1 | 0 | 24 | 21 | 2 | 0 | 0 | 23 |
| 1:45 PM | 23 | 2 | 0 | 0 | 25 | 22 | 0 | 0 | 0 | 22 |
| 2:00 PM | 20 | 1 | 0 | 1 | 22 | 20 | 1 | 0 | 0 | 21 |
| 2:15 PM | 20 | 0 | 0 | 0 | 20 | 17 | 0 | 1 | 0 | 18 |
| 2:30 PM | 19 | 0 | 0 | 0 | 19 | 17 | 0 | 0 | 0 | 17 |
| 2:45 PM | 16 | 0 | 0 | 0 | 16 | 12 | 0 | 1 | 0 | 13 |
| 3:00 PM | 14 | 3 | 0 | 0 | 17 | 11 | 0 | 1 | 0 | 12 |
| 3:15 PM | 9 | 0 | 0 | 0 | 9 | 8 | 0 | 1 | 0 | 9 |
| 3:30 PM | 9 | 0 | 0 | 0 | 9 | 9 | 1 | 1 | 0 | 11 |
| 3:45 PM | 6 | 0 | 0 | 0 | 6 | 11 | 1 | 1 | 0 | 13 |
| 4:00 PM | 6 | 0 | 0 | 0 | 6 | 12 | 1 | 0 | 0 | 13 |
| 4:15 PM | 7 | 0 | 0 | 0 | 7 | 9 | 0 | 1 | 0 | 10 |
| 4:30 PM | 7 | 0 | 0 | 0 | 7 | 10 | 0 | 0 | 0 | 10 |
| 4:45 PM | 5 | 0 | 0 | 0 | 5 | 12 | 0 | 1 | 0 | 13 |
| 5:00 PM | 10 | 0 | 0 | 0 | 10 | 12 | 1 | 1 | 0 | 14 |
| 5:15 PM | 11 | 0 | 0 | 0 | 11 | 10 | 0 | 1 | 0 | 11 |
| 5:30 PM | 10 | 0 | 0 | 0 | 10 | 10 | 1 | 1 | 0 | 12 |
| 5:45 PM | 6 | 0 | 0 | 0 | 6 | 5 | 0 | 0 | 0 | 5 |
| 6:00 PM | 12 | 1 | 1 | 0 | 14 | 6 | 0 | 0 | 0 | 6 |
| 6:15 PM | 11 | 0 | 0 | 0 | 11 | 5 | 0 | 0 | 0 | 5 |
| 6:30 PM | 8 | 1 | 0 | 0 | 9 | 6 | 0 | 0 | 0 | 6 |
| 6:45 PM | 5 | 0 | 0 | 1 | 6 | 8 | 0 | 0 | 0 | 8 |
| 7:00 PM | 3 | 0 | 0 | 0 | 3 | 4 | 1 | 0 | 0 | 5 |
| Inventory | 29 | 4 | 2 | 0 | 35 | 29 | 4 | 2 | 0 | 35 |

Table 3 PARKING OCCUPANCY SURVEY RESULTS – AUGUST 17 AND 20

| | Saturday, August 17, 2019 | | | | | Tuesday August 20, 2019 | | | | |
|-----------|---------------------------|-----------------|----------|---------------|-------|-------------------------|-----------------|----------|---------------|-------|
| Time | Unreserved | Mobile Order | Handicap | Chase Bank | Total | Unreserved | Mobile Order | Handicap | Chase Bank | Total |
| 7:00 AM | 7 | 0 | 0 | 0 | 7 | 6 | 0 | 0 | 0 | 6 |
| 7:15 AM | 2 | 0 | 0 | 0 | 2 | 7 | 0 | 0 | 0 | 7 |
| 7:30 AM | 4 | 0 | 0 | 0 | 4 | 10 | 0 | 0 | 0 | 10 |
| 7:45 AM | 5 | 0 | 0 | 0 | 5 | 14 | 0 | 0 | 0 | 14 |
| 8:00 AM | 4 | 0 | 0 | 0 | 4 | 9 | 0 | 0 | 0 | 9 |
| 8:15 AM | 9 | 0 | 0 | 0 | 9 | 9 | 0 | 0 | 0 | 9 |
| 8:30 AM | 14 | 0 | 0 | 0 | 14 | 13 | 0 | 0 | 0 | 13 |
| 8:45 AM | 11 | 1 | 0 | 0 | 12 | 11 | 0 | 0 | 0 | 11 |
| 9:00 AM | 15 | 0 | 0 | 0 | 15 | 15 | 0 | 0 | 0 | 15 |
| 9:15 AM | 11 | 0 | 0 | 0 | 11 | 17 | 1 | 1 | 0 | 19 |
| 9:30 AM | 13 | 2 | 0 | 0 | 15 | 13 | 0 | 1 | 0 | 14 |
| 9:45 AM | 13 | 0 | 0 | 0 | 13 | 15 | 0 | 1 | 0 | 16 |
| 10:00 AM | 13 | 0 | 0 | 0 | 13 | 13 | 0 | 0 | 0 | 13 |
| 10:15 AM | 10 | 0 | 0 | 0 | 10 | 15 | 0 | 0 | 0 | 15 |
| 10:30 AM | 11 | 1 | 0 | 0 | 12 | 16 | 0 | 0 | 0 | 16 |
| 10:45 AM | 15 | 1 | 1 | 0 | 17 | 15 | 0 | 0 | 0 | 15 |
| 11:00 AM | 14 | 0 | 0 | 0 | 14 | 15 | 0 | 0 | 0 | 15 |
| 11:15 AM | 13 | 0 | 0 | 0 | 13 | 19 | 0 | 1 | 0 | 20 |
| 11:30 AM | 14 | 1 | 1 | 0 | 16 | 16 | 0 | 1 | 0 | 17 |
| 11:45 AM | 11 | 0 | 1 | 0 | 12 | 18 | 1 | 0 | 0 | 19 |
| 12:00 PM | 18 | 1 | 0 | 0 | 19 | 15 | 1 | 1 | 0 | 17 |
| 12:15 PM | 19 | 2 | 0 | 0 | 21 | 20 | 1 | 1 | 0 | 22 |
| 12:30 PM | 12 | 0 | 1 | 0 | 13 | 17 | 1 | 1 | 0 | 19 |
| 12:45 PM | 14 | 2 | 0 | 0 | 16 | 16 | 0 | 1 | 0 | 17 |
| 1:00 PM | 14 | 0 | 0 | 0 | 14 | 20 | 0 | 2 | 0 | 22 |
| 1:15 PM | 12 | 0 | 0 | 0 | 12 | 20 | 3 | 2 | 0 | 25 |
| 1:30 PM | 13 | 0 | 0 | 0 | 13 | 12 | 1 | 1 | 0 | 14 |
| 1:45 PM | 15 | 0 | 0 | 0 | 15 | 10 | 0 | 0 | 0 | 10 |
| 2:00 PM | 10 | 0 | 0 | 0 | 10 | 9 | 0 | 0 | 0 | 9 |
| 2:15 PM | 8 | 2 | 0 | 0 | 10 | 9 | 0 | 1 | 0 | 10 |
| 2:30 PM | 7 | 2 | 1 | 1 | 11 | 6 | 2 | 1 | 0 | 9 |
| 2:45 PM | 9 | 0 | 1 | 0 | 10 | 8 | 1 | 1 | 0 | 10 |
| 3:00 PM | 11 | 0 | 1 | 0 | 12 | 9 | 0 | 0 | 0 | 9 |
| 3:15 PM | 13 | 0 | 0 | 0 | 13 | 1 | 0 | 1 | 0 | 2 |
| 3:30 PM | 9 | 0 | 0 | 0 | 9 | 1 | 0 | 1 | 0 | 2 |
| 3:45 PM | 7 | 0 | 0 | 0 | 7 | 11 | 0 | 1 | 0 | 12 |
| 4:00 PM | 4 | 0 | 0 | 0 | 4 | 8 | 0 | 0 | 0 | 8 |
| 4:15 PM | 8 | 0 | 0 | 0 | 8 | 13 | 1 | 1 | 0 | 15 |
| 4:30 PM | 10 | 0 | 0 | 0 | 10 | 15 | 0 | 0 | 0 | 15 |
| 4:45 PM | 8 | 1 | 0 | 0 | 9 | 10 | 1 | 0 | 0 | 11 |
| 5:00 PM | 4 | 0 | 0 | 0 | 4 | 8 | 0 | 0 | 0 | 8 |
| 5:15 PM | 7 | 0 | 0 | 0 | 7 | 9 | 0 | 0 | 0 | 9 |
| 5:30 PM | 10 | 1 | 0 | 0 | 11 | 7 | 0 | 0 | 0 | 7 |
| 5:45 PM | 12 | 1 | 0 | 0 | 13 | 6 | 0 | 0 | 0 | 6 |
| 6:00 PM | 8 | 2 | 1 | 0 | 11 | 4 | 0 | 0 | 0 | 4 |
| 6:15 PM | 7 | 0 | 0 | 0 | 7 | 6 | 0 | 0 | 0 | 6 |
| 6:30 PM | 8 | 0 | 0 | 0 | 8 | 9 | 0 | 0 | 0 | 9 |
| 6:45 PM | 14 | 2 | 0 | 0 | 16 | 6 | 0 | 0 | 0 | 6 |
| 7:00 PM | 11 | 2 | 0 | 0 | 13 | 6 | 0 | 0 | 0 | 6 |
| Inventory | 29 | 4 | 2 | 0 | 35 | 29 | 4 | 2 | 0 | 35 |

Table 4
PARKING OCCUPANCY SURVEY RESULTS – AUGUST 21 AND 22

| | Wednesday August 21, 2019 | | | | | Thursday August 22, 2019 | | | | | |
|-----------|---------------------------|-----------------|----------|---------------|-------|--------------------------|-----------------|----------|---------------|-------|--|
| Time | Unreserved | Mobile Order | Handicap | Chase Bank | Total | Unreserved | Mobile Order | Handicap | Chase Bank | Total | |
| 7:00 AM | 8 | 0 | 0 | 0 | 8 | 7 | 0 | 0 | 0 | 7 | |
| 7:15 AM | 1 | 0 | 0 | 0 | 1 | 6 | 0 | 0 | 0 | 6 | |
| 7:30 AM | 7 | 0 | 0 | 0 | 7 | 9 | 0 | 0 | 0 | 9 | |
| 7:45 AM | 11 | 0 | 0 | 0 | 11 | 7 | 0 | 0 | 0 | 7 | |
| 8:00 AM | 9 | 0 | 0 | 0 | 9 | 11 | 1 | 0 | 0 | 12 | |
| 8:15 AM | 12 | 0 | 0 | 0 | 12 | 10 | 1 | 0 | 0 | 11 | |
| 8:30 AM | 11 | 1 | 0 | 0 | 12 | 10 | 0 | 1 | 0 | 11 | |
| 8:45 AM | 7 | 2 | 0 | 0 | 9 | 10 | 2 | 2 | 0 | 14 | |
| 9:00 AM | 10 | 0 | 0 | 1 | 11 | 14 | 0 | 1 | 0 | 15 | |
| 9:15 AM | 13 | 0 | 1 | 0 | 14 | 14 | 0 | 0 | 0 | 14 | |
| 9:30 AM | 13 | 0 | 1 | 0 | 14 | 13 | 0 | 1 | 0 | 14 | |
| 9:45 AM | 10 | 0 | 1 | 0 | 11 | 14 | 0 | 2 | 0 | 16 | |
| 10:00 AM | 11 | 1 | 0 | 0 | 12 | 14 | 0 | 1 | 0 | 15 | |
| 10:15 AM | 11 | 0 | 0 | 0 | 11 | 13 | 0 | 1 | 0 | 14 | |
| 10:30 AM | 11 | 0 | 0 | 0 | 11 | 13 | 0 | 1 | 0 | 14 | |
| 10:45 AM | 9 | 1 | 1 | 0 | 11 | 10 | 0 | 1 | 0 | 11 | |
| 11:00 AM | 13 | 0 | 1 | 0 | 14 | 9 | 0 | 0 | 0 | 9 | |
| 11:15 AM | 13 | 0 | 0 | 0 | 13 | 8 | 0 | 1 | 0 | 9 | |
| 11:30 AM | 14 | 1 | 1 | 0 | 16 | 9 | 0 | 0 | 0 | 9 | |
| 11:45 AM | 18 | 2 | 0 | 0 | 20 | 9 | 0 | 0 | 0 | 9 | |
| 12:00 PM | 19 | 1 | 0 | 0 | 20 | 12 | 1 | 0 | 0 | 13 | |
| 12:15 PM | 26 | 1 | 0 | 0 | 27 | 14 | 1 | 0 | 0 | 15 | |
| 12:30 PM | 22 | 2 | 1 | 1 | 26 | 19 | 1 | 1 | 0 | 21 | |
| 12:45 PM | 23 | 1 | 2 | 0 | 26 | 15 | 3 | 1 | 0 | 19 | |
| 1:00 PM | 21 | 0 | 2 | 0 | 23 | 18 | 1 | 1 | 0 | 20 | |
| 1:15 PM | 20 | 0 | 2 | 0 | 22 | 15 | 0 | 0 | 0 | 15 | |
| 1:30 PM | 20 | 2 | 1 | 0 | 23 | 12 | 1 | 1 | 0 | 14 | |
| 1:45 PM | 21 | 3 | 1 | 0 | 25 | 9 | 0 | 2 | 0 | 11 | |
| 2:00 PM | 13 | 0 | 1 | 0 | 14 | 8 | 0 | 1 | 0 | 9 | |
| 2:15 PM | 9 | 0 | 0 | 0 | 9 | 7 | 0 | 0 | 0 | 7 | |
| 2:30 PM | 6 | 0 | 0 | 0 | 6 | 7 | 0 | 0 | 0 | 7 | |
| 2:45 PM | 8 | 0 | 0 | 0 | 8 | 11 | 1 | 1 | 0 | 13 | |
| 3:00 PM | 9 | 0 | 0 | 0 | 9 | 9 | 0 | 1 | 0 | 10 | |
| 3:15 PM | 8 | 0 | 0 | 0 | 8 | 8 | 0 | 1 | 0 | 9 | |
| 3:30 PM | 7 | 0 | 0 | 0 | 7 | 6 | 0 | 0 | 0 | 6 | |
| 3:45 PM | 8 | 0 | 0 | 0 | 8 | 7 | 0 | 0 | 0 | 7 | |
| 4:00 PM | 4 | 1 | 0 | 0 | 5 | 7 | 0 | 0 | 0 | 7 | |
| 4:15 PM | 7 | 0 | 0 | 0 | 7 | 8 | 1 | 0 | 0 | 9 | |
| 4:30 PM | 3 | 0 | 0 | 0 | 3 | 6 | 0 | 1 | 0 | 7 | |
| 4:45 PM | 5 | 0 | 0 | 0 | 5 | 7 | 0 | 1 | 0 | 8 | |
| 5:00 PM | 4 | 0 | 0 | 0 | 4 | 9 | 0 | 0 | 0 | 9 | |
| 5:15 PM | 8 | 0 | 0 | 0 | 8 | 9 | 1 | 0 | 0 | 10 | |
| 5:30 PM | 9 | 2 | 0 | 0 | 11 | 8 | 0 | 0 | 0 | 8 | |
| 5:45 PM | 7 | 0 | 0 | 0 | 7 | 8 | 0 | 0 | 0 | 8 | |
| 6:00 PM | 7 | 0 | 0 | 0 | 7 | 6 | 0 | 1 | 0 | 7 | |
| 6:15 PM | 7 | 0 | 0 | 0 | 7 | 5 | 0 | 1 | 0 | 6 | |
| 6:30 PM | 7 | 0 | 0 | 0 | 7 | 7 | 0 | 0 | 0 | 7 | |
| 6:45 PM | 6 | 1 | 0 | 0 | 7 | 6 | 0 | 0 | 0 | 6 | |
| 7:00 PM | 7 | 0 | 0 | 0 | 7 | 7 | 0 | 1 | 0 | 8 | |
| Inventory | 29 | 4 | 2 | 0 | 35 | 29 | 4 | 2 | 0 | 35 | |