

MEMORANDUM TO: Mari Rodriguez
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FROM: Elise Purguette
Consultant

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Principal

DATE: January 16, 2019

SUBJECT: Parking Study
Medical Office Building
Naperville, Illinois

This memorandum presents the findings and recommendations of a parking study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for the existing office building located at 1331 West 75th Street in Naperville, Illinois. The building is approximately 72,294 square feet in size and contains approximately 57,195 square feet of medical uses, approximately 7,282 square feet of office uses, and approximately 7,817 square feet of vacant space. Additionally, the site provides 312 parking spaces. A site plan is included in the Appendix.

The purpose of this study was to assess the adequacy of the parking supply in accommodating the increase in parking demand by allowing the building to be fully occupied by medical uses. In order to do that, the following tasks were undertaken:

- Parking occupancy surveys were conducted by KLOA, Inc. at the office building on a Wednesday, Thursday, and Saturday in January 2019.
- Projected parking demand was generated for the proposed medical uses to occupy the existing office uses and the vacant space within the office building.
- The adequacy of the available parking within the parking lot of the office building was evaluated to assess its ability to accommodate the increase in parking demand.

Figure 1 shows an aerial view of the site.



Aerial View of Site

Figure 1

Parking Occupancy Surveys

In order to determine the existing parking demand, parking occupancy surveys were conducted at the existing office building on Saturday, January 5, 2019; Wednesday, January 9, 2019; and Thursday, January 10, 2019. The counts were conducted in half-hour intervals from 7:00 A.M. to 6:00 P.M. and the parking fields were counted by rows. The parking occupancy surveys are summarized in **Tables 1A** and **1B**, located in the Appendix, for Wednesday, Thursday, and Saturday. The results of the parking occupancy surveys indicated the following:

- The parking lot has approximately 312 parking spaces.
- Peak occupancy on Wednesday was 199 vehicles (64 percent) occurring at 11:30 A.M., resulting in a surplus of 113 parking spaces
- Peak occupancy on Thursday was 203 vehicles (65 percent) occurring at 10:30 A.M., resulting in a surplus of 109 parking spaces.
- Peak occupancy on Saturday was 56 vehicles (18 percent) occurring at 9:00 A.M. and 9:30 A.M., resulting in a surplus of 256 parking spaces.

Projected Parking Demand of Additional Offices with Medical Uses

As previously indicated, approximately 15,099 square feet of existing office and vacant space will be repurposed to accommodate additional medical uses.

In order to determine the total projected parking demand of the office building fully occupied by medical uses, the parking demand was estimated based on City of Naperville Zoning Code and the rates published in the Institute of Transportation Engineers' (ITE) *Parking Generation Manual*, 4th Edition for Land-Use Code 720 (Medical-Dental Office Building). Based on the two methodologies, the parking demand for the additional 15,099 square feet of medical uses will be as follows:

- City of Naperville Zoning Code:
 - 75 parking spaces (five spaces per 1,000 square feet for office/clinic, medical or dental uses)
- ITE *Trip Generation Manual*:
 - Weekday: 48 spaces (ratio of 3.2 spaces per 1,000 square feet)
 - Saturday: 39 spaces (ratio of 2.6 spaces per 1,000 square feet)

Parking Evaluation

In order to determine the adequacy of the parking supply, the projected peak parking demand for the additional medical uses was added to the observed peak parking demand. As previously indicated, the parking lot contains 312 parking spaces. The projected peak parking demand based on the two methodologies is as follows:

City of Naperville Zoning Code

- Peak occupancy on Wednesday will be 274 vehicles (88 percent) occurring at 11:30 A.M., resulting in a surplus of 38 parking spaces.
- Peak occupancy on Thursday will be 278 vehicles (89 percent) occurring at 10:30 A.M. and 11:00 A.M., resulting in a surplus of 34 parking spaces.
- Peak occupancy on Saturday will be 131 vehicles (42 percent) occurring at 9:00 A.M. and 9:30 A.M., resulting in a surplus of 181 parking spaces.

ITE *Parking Generation Manual*

- Peak occupancy on Wednesday will be 247 vehicles (79 percent) occurring at 11:30 A.M., resulting in a surplus of 65 parking spaces.
- Peak occupancy on Thursday will be 251 vehicles (80 percent) occurring at 10:30 A.M., resulting in a surplus of 61 parking spaces.
- Peak occupancy on Saturday will be 95 vehicles (30 percent) occurring at 9:00 A.M. and 9:30 A.M., resulting in a surplus of 217 parking spaces.

It should be noted that the above calculations are conservative since they include the parking demand currently generated by the approximately 7,282 square feet of office uses that will be converted to medical uses.

Conclusion

The proposed parking supply of 312 parking spaces will continue to be adequate in accommodating the projected peak parking demand of the medical office building. This was based on the City of Naperville parking requirements, which show a maximum occupancy of 89 percent, and the parking rates published in the *ITE Parking Generation Manual*, which show a maximum occupancy of 80 percent. These peak demands included the parking demand of the office uses that will be converted to medical uses.

Appendix

Table 1A

PARKING OCCUPANCY SURVEYS – NUMBER OF PARKING SPACES OCCUPIED

Time	Wednesday	Thursday	Saturday
7:00 AM	48	32	4
7:30 AM	80	66	18
8:00 AM	106	103	37
8:30 AM	144	134	49
9:00 AM	170	163	56
9:30 AM	186	189	56
10:00 AM	189	198	55
10:30 AM	194	203	54
11:00 AM	196	197	48
11:30 AM	199	182	52
12:00 AM	197	164	47
12:30 AM	176	167	30
1:00 PM	182	166	25
1:30 PM	176	165	14
2:00 PM	178	174	13
2:30 PM	180	172	11
3:00 PM	182	167	6
3:30 PM	181	167	--
4:00 PM	161	153	--
4:30 PM	131	150	--
5:00 PM	104	114	--
5:30 PM	87	92	--
6:00 PM	73	64	--
Inventory	312	312	312

Table 1B

PARKING OCCUPANCY SURVEYS - PERCENTAGE OF PARKING SPACES OCCUPIED

Time	Wednesday	Thursday	Saturday
7:00 AM	15%	10%	1%
7:30 AM	26%	21%	6%
8:00 AM	34%	33%	12%
8:30 AM	46%	43%	16%
9:00 AM	54%	52%	18%
9:30 AM	60%	61%	18%
10:00 AM	61%	63%	18%
10:30 AM	62%	65%	17%
11:00 AM	63%	63%	15%
11:30 AM	64%	58%	17%
12:00 AM	63%	53%	15%
12:30 AM	56%	54%	10%
1:00 PM	58%	53%	8%
1:30 PM	56%	53%	4%
2:00 PM	57%	56%	4%
2:30 PM	58%	55%	4%
3:00 PM	58%	54%	2%
3:30 PM	58%	54%	--
4:00 PM	52%	49%	--
4:30 PM	42%	48%	--
5:00 PM	33%	37%	--
5:30 PM	28%	29%	--
6:00 PM	23%	21%	--
Inventory	312	312	312