Kimley»Horn

MEMORANDUM

To: Erin Venard, AICP – City of Naperville

From: Rory Fancler, AICP, PTP – Kimley-Horn
Joe Mayer, P.E. – Kimley-Horn

Date: January 29, 2024

RE: Parking and Drive-Through Queue Summary for Taco Bell Redevelopment
1019 Ogden Avenue
Naperville, Illinois

Kimley-Horn and Associates, Inc. (Kimley-Horn) was retained by Shamrock TBC, Inc. to perform a parking and drive-through queue review for a Taco Bell restaurant proposed at 1019 Ogden Avenue (US 34) in Naperville, Illinois. This review was completed in order to define projected parking and drive-through demand and assess the proposed parking supply and drive-through operations for the proposed redevelopment.

Based on empirical data collected at two comparable Taco Bell restaurants operated by the same franchisee, the parking supply proposed for the Naperville location would exceed projected demand. Using data collected at the two existing restaurants during weekday and Saturday periods, average parking demand ranges from 2.89 to 3.75 spaces per 1,000 square feet. Peak parking demand ranges from 4.62 to 5.36 spaces per 1,000 square feet. The Naperville location proposes to provide parking at a ratio of 8.14 spaces per 1,000 square feet or 14 spaces. Therefore, parking demand spillover to the adjacent Naperville Animal Hospital or residential neighborhood is not anticipated.

Drive-through operations at the two existing Taco Bell restaurants indicate an average queue of two 2 vehicles during peak weekday and Saturday conditions. The maximum observed queue was 5 vehicles on a weekday and 8 vehicles on Saturday. The Naperville location proposes to provide stacking for 3 vehicles between the order board and pick-up window; total stacking from the pick-up window to the parking lot would be 9 vehicles. The proposed stacking would accommodate projected drive-through demand; queue spillback to the parking lot is not anticipated.

Existing and Proposed Site Development

The subject site is currently developed with two retail buildings (total 3,237 square feet), an accessory building (491 square feet), and 18 surface parking spaces. The proposed redevelopment includes a 1,719 square-foot, 14-seat restaurant with drive-through window. A total of 14 parking spaces would be provided onsite. The drive-through window would provide stacking for a total of 9 vehicles from the pick-up window to the parking lot. Stacking for 3 vehicles would be provided between (not including) the order board and the pick-up window.

City Parking and Stacking Requirements

Per Section 6-9-3 (Schedule of Off Street Parking Requirements) of the Naperville Municipal Code, a fast food establishment is required to provide 17 parking spaces per 1,000 square feet of gross floor area. Based on this ratio, a total of 29 spaces would be required for the 1,719 square-foot Taco Bell. A total of 14 spaces are proposed; and therefore, a variance is requested.

Per Section 6-9-3 (Schedule of Off Street Parking Requirements) and 6-9-6 (Supplemental Standards for Drive-Through Stacking Lanes) of the Naperville Municipal Code, a restaurant with drive-through window is required to provide a total of 12 stacking spaces with a minimum of 5 spaces between the order board and the pick-up window. The stacking lane shall not cross or pass through the parking lot. The proposed redevelopment would provide stacking for a total of 9 vehicles from the pick-up window to the parking lot with 3 spaces between (not including) the order board and pick-up window. The proposed stacking is less than the minimum Code requirement; and therefore, a variance is requested.

Existing Parking and Drive-Through Demand

To project parking and drive-through stacking demand, Kimley-Horn conducted occupancy counts at two (2) existing Taco Bell locations operated by the same franchisee. The Glendale Heights location includes an approximately 1,865 square-foot restaurant with a total of 19 parking spaces and stacking for approximately 9 vehicles from the pick-up window to the parking lot. The Hickory Hills location is approximately 1,730 square feet with 41 parking spaces and stacking for approximately 4 vehicles from the pick-up window to the parking lot. The building size and seating capacity for the Glendale Heights and Hickory Hills locations are generally similar to the proposed Naperville location.

The counts were conducted at the Glendale Heights (270 Army Trail Road) and Hickory Hills (8760 W 95th Street) locations. The counts were conducted every 15 minutes during the peak periods identified by Shamrock TBC, Inc. as summarized below:

- Saturday, December 9, 2023 – 12:00PM to 1:00PM; 7:00PM to 8:00PM
- Tuesday, December 12, 2023 – 12:00PM to 1:00PM; 5:00PM to 6:00PM

Table 1 summarizes Saturday observations at both the Glendale Heights and Hickory Hills locations.

Table 1. Observed Parking Occupancy – Saturday, December 9, 2023

Time of Day	Glendale Heights		Hickory Hills	
	Occupied Parking Spaces	Vehicles in Drive-Through Lane	Occupied Parking Spaces	Vehicles in Drive-Through Lane
12:00PM	6	3	8	2
12:15PM	9	4	4	0
12:30PM	7	2	3	1
12:45PM	6	1	4	1
1:00PM	6	2	2	3
7:00PM	7	3	5	5
7:15PM	6	0	6	2
7:30PM	7	4	5	2
7:45PM	7	1	3	1
8:00PM	6	1	5	3
Average	7	2	5	2
Maximum	9	4	8	5

On Saturday, peak parking demand at the Glendale Heights location occurred at 12:15PM with 9 occupied spaces. Peak parking demand at the Hickory Hills location occurred at 12:00PM with 8 occupied spaces. Therefore, the empirical peak parking demand rates for a typical Saturday are estimated to be 4.83 and 4.62 spaces per 1,000 square feet for Glendale Heights and Hickory Hills, respectively.

For Saturday, the maximum queue observed in the drive-through at Glendale Heights was 4 vehicles at 7:30PM. At the Hickory Hills location, the maximum queue in the drive-through was 5 vehicles at 7:00PM. Based on observed peak drive-through activity, the proposed stacking for the Naperville location (9 vehicles) would be sufficient to accommodate demand; queue spillback to the parking lot is not anticipated.

Table 2 summarizes weekday observations at both the Glendale Heights and Hickory Hills locations.

Table 2. Observed Parking Occupancy – Tuesday, December 12, 2023

Time of Day	Glendale Heights		Hickory Hills	
	Occupied Parking Spaces	Vehicles in Drive-Through Lane	Occupied Parking Spaces	Vehicles in Drive-Through Lane
12:00PM	10	2	3	0
12:15PM	7	1	4	3
12:30PM	7	0	6	3
12:45PM	9	0	4	3
1:00PM	6	4	1	4
7:00PM	5	0	5	7
7:15PM	5	2	8	5
7:30PM	6	0	5	3
7:45PM	5	0	6	8
8:00PM	6	0	6	4
Average	7	1	5	4
Maximum	10	4	8	8

At the Glendale Heights location, peak parking demand occurred at 12:00PM with 10 occupied spaces. At the Hickory Hills location, the peak parking demand occurred at 5:15PM with 8 occupied spaces. Therefore, the empirical peak parking demand rates for a typical weekday are estimated to be 5.36 and 4.62 spaces per 1,000 square feet for Glendale Heights and Hickory Hills, respectively.

On a typical weekday, the maximum queue observed in the drive-through lane was 4 vehicles at the Glendale Heights location and 8 vehicles at the Hickory Hills location. Consistent with the queues observed on Saturday, the drive-through lane stacking proposed for the Naperville location would accommodate projected queues. The drive-through lane is not expected to negatively impact access to the parking lot or the Ogden Avenue driveway.

Conclusion

Based on observations conducted at two Taco Bell restaurants of comparable size and operated by the same franchisee, the weekday peak parking demand ranges from 4.62 to 5.36 spaces per 1,000 square feet. On Saturday, the peak parking demand ranges from 4.62 to 4.83 spaces per 1,000 square feet. The proposed Naperville location would provide 8.14 spaces per 1,000 square feet or 14 spaces. Although the proposed parking supply is lower than the Naperville Municipal Code requirement, it is expected to sufficiently accommodate projected demand. Spillover parking to the adjacent Naperville Animal Hospital or residential neighborhood is not anticipated.

Drive-through operations at the two existing Taco Bell restaurants indicate an average queue of 2 vehicles during peak weekday and Saturday conditions. The maximum observed queue was 5 vehicles on a weekday and 8 vehicles on Saturday. The Naperville location proposes to provide stacking for 9 vehicles from the pick-up window to the parking lot with stacking for 3 vehicles between (not including) the order board and pick-up window. Based on the empirical data, the proposed stacking would accommodate projected drive-through demand; queue spillback to the parking lot is not anticipated.