59th+Northern Smalls Sliders

Queuing Study

Prepared for

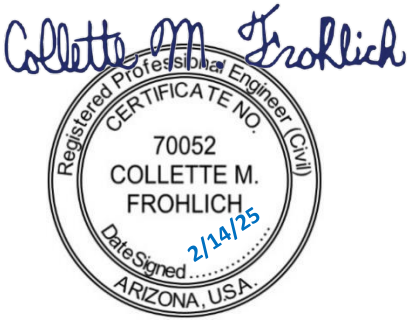
Mr. Mitchell Reynolds
Development Manager
Cole Valley Partners
3519 NE 15th Ave, Suite 251
Portland, OR 97212
mitchell.reynolds@cvpre.com

Prepared by

Greenlight Traffic Engineering

Submitted to
City of Glendale

1st Submittal
February 14, 2025



4050 N 83rd Ave, Suite 290, Peoria, AZ 85381
Contact: Collette Frohlich, P.E.| 480-788-5626 | collettef@greenlightte.com

GTE Project No.: 241101.02

1 INTRODUCTION

This queuing statement was prepared for the proposed Smalls Sliders (Project), located on the northwest corner of Northern Avenue and 59th Lane, in Glendale, AZ. The proposed Smalls Sliders will be part of commercial development with a Dutch Bros facility. This Project will include 800 square feet (SF) of Institute of Transportation Engineers (ITE) Land Use Code (LUC) LUC 934 "Fast-Food Restaurant with Drive-Through Window". The Project location is shown in Figure 1.

The purpose of this study is to estimate the potential drive-through queues associated with the Project and address any potential onsite circulation concerns. The Dutch Bros queuing analysis was already completed with the Traffic Impact Analysis (Greenlight Traffic Engineering, January 2025). This study has been completed to satisfy the City's planning-level technical report requirements for a new development.

Figure 1: Project Site Location

2 Proposed Site Conditions

2.1 Site Access, Circulation and Parking

The layout of the proposed building and parking is shown on the Site Plan in Attachment A.

Primary access to the Project is provided via one full-access driveway at Northern Avenue/59th Lane.

The drive-through entrance is located on the northeast corner of the building. Vehicles will enter the dual drive-through lane from a drive aisle on the east side of the site. The drive-through will circulate in a counterclockwise direction along the north and west sides of the building until right before the service window, where the dual drive-through lanes merge into a single drive-through lane. After the dual-lanes merge, a bypass lane is available on the south side of the building for vehicles to exit early after they have received their items. The pickup window is located on the west side of the building.

17 parking spaces are shown on the site plan, including 2 ADA-accessible spaces.

3 QUEUING DATA COLLECTION AND ANALYSIS

The Project will include a dual drive-through lane with a queue storage length of approximately 325 feet.

Vehicles will enter the dual drive-through lane near the northeast corner of the building. The dual drive-through lanes continue on the north and west sides of the building until right before the service window where it merges into a single drive-through lane on the west side of the building.

A queue analysis was performed using queuing data obtained from existing Smalls Sliders in Baton Rouge, Louisiana by Field Data of Services (FDS). The information on the queueing data collected by FDS is provided below.

- Locations:
  - 7080 Siegen Ln, Baton Rouge, LA 70809
  - 7610 Bluebonnet Blvd, Baton Rouge, LA 70810
- Data Collection Times
  - Thursday, February 6, 2025
  - Saturday, February 8, 2025
- Data Collection Times
  - 11 AM – 9 PM
- Queue Count Frequency Increment
  - 1 minute

The observed queuing data is provided in Attachment B. Scoping correspondence with the City for queueing data collection is provided in Attachment C.

The queuing data collected at similar Smalls Sliders is summarized below in Table 1.

Table 1: Queuing Data Summary

No.	Location	Thursday			Saturday		
		Max Queue	95th-Percentile	85th-Percentile	Max Queue	95th-Percentile	85th-Percentile
1	7080 Siegen Ln, Baton Rouge, LA 70809	6	3	2	5	4	3
2	7610 Bluebonnet Blvd, Baton Rouge, LA 70810	8	6	4	7	5	4
	Max	**8**	**6**	**4**	**7**	**5**	**4**
	Queue Length @ 25' per vehicle	**200'**	**150'**	**100'**	**175'**	**125'**	**100'**

The queueing data shows a maximum queue of 8 vehicles, a maximum 95th-percentile queue of 6 vehicles, and a maximum 85th-percentile queue of 4 vehicles.

With the assumption of 25 feet of queuing space per vehicle, the maximum vehicle queue length needed would be 200 feet. Based on the collected queue data and queue length calculations, the proposed queue storage of 325 feet is sufficient to accommodate the maximum queue storage length expected.

4 Conclusions

The following conclusions are made based on the findings of the Project queuing statement:

1. The queuing data collected shows a maximum queue of 8 vehicles, a maximum 95th-percentile queue of 6 vehicles, and a maximum 85th-percentile queue of 4 vehicles for the two days that were observed.
2. Using a 25-foot average vehicle length, the maximum queue length is calculated at 200 feet, the maximum 95th-percentile queue length is calculated at 150 feet, and the maximum 85th-percentile queue length is calculated at 100 feet.
3. The proposed queue storage at the proposed site of 325 feet will be able to accommodate the maximum queue expected.

5 RECOMMENDATIONS

In summary, the proposed Project is expected to have minimal impacts on the overall commercial development and adjacent roadway network. The following recommendations were developed based on the findings of the Project queuing statement:

1. Design and construction of the proposed Project improvements should conform to the City of Glendale's design standards, as applicable.

Attachments:

A – Smalls Sliders Site Plan
B – Existing Baton Rouge Queuing Data
C – Scoping Correspondence with the City