

# **Technical Memorandum**

To:	Tony Shahrasebi	Date:	2022-04-08
Cc:	Bria Aird RPP MCIP, Matt McElligot RPP MCIP		-
From:	Andrew Harte P.Eng., Yu-Chu Chen, B.Eng.	Project Number:	2021-145

### Re: TKS 154 O'Connor Street Temporary Zoning

### 1 Introduction

This memo has been prepared to support the additional use of 154 O'Connor Street as a surface parking lot in conjunction with the existing restaurant use. The site currently includes an approximately 85 metre<sup>2</sup> restaurant, an attendant's hut for the adjacent surface parking lot, and a surface parking lot with 16 parking spaces. Of these parking spaces, 5 are reserved for the restaurant use and the remaining are proposed to be used in conjunction with the neighbouring property parking lot. Two existing accesses will be remained at the existing location including one left-in/left-out access on Gloucester Street and one right-in/right-out access on O'Connor Street. The screening form has been completed and no TIA is required as there are no proposed changes to the site.

#### 2 Area Context

The site is in the Residential Fifth Density zone, and it is within the Central Area Community Design plan area and Centretown Secondary plan area. Boundary streets are Gloucester Street and O'Connor Street. A two-way cycletrack is provided on the east side of O'Connor Street, serving as a spine route and a cross-town bikeway. Sidewalks are present along boundary streets. The site is approximately 500-metre walking/cycling distance to Parliament LRT station, and local transits are provided along Bank Street, Slater Street, and Elgin Street within 400-metre from the site. Gloucester

## 3 Collision Analysis

Collision data have been acquired from the City of Ottawa open data website (data.ottawa.ca) for five years prior to the commencement of this TIA for the surrounding study are road network. From 2015 to 2019, there is a total of eight collisions at the intersection of Gloucester Street and O'Connor Street, seven collisions along the segment of Gloucester Street between Bank Street and O'Connor Street, and two collisions along the segment of O'Connor Street between Gloucester Street and Nepean Street. These collisions are low and do not indicate any road issues with the existing accesses. This is further illustrated that 10 of the 17 involve single motor vehicles, likely a factor of the on-street parking on both sides of Gloucester Street. No fatalities were noted at these locations and three pedestrian collisions occurred at the intersection. The site does not influence collisions at the signal.

### 4 Trip Generation

As the site currently has the restaurant use and is proposed to add a temporary parking use, a comparison of the expected trips from these uses was generated and compared to a similar permitted use of a coffee shop for discussion purposes. Both a restaurant and a coffee shop were used as comparison types for the permitted uses, and the trip rates selected from the ITE Trip Generation Manual 10<sup>th</sup> Edition (2017) using the City-prescribed conversion factor of 1.28. The temporary parking use trips are based on the existing parking stalls, with the restaurant use spaces removed. Table 1 summarizes the total potential trip generation of the difference uses and Table 2 summarizes the auto modes for each use based on the TRANS Ottawa Inner auto mode share.

Table 1: Total Trip Generation

Land Use	Units / GFA	AM Peak Hour			PM Peak Hour		
Land Ose		In	Out	Total	In	Out	Total
High-Turnover (Sit-Down) Restaurant	85 sq m	6	5	11	7	4	11
Parking Lot (proposed)	10 spaces	10	0	10	2	10	12
Coffee Shop without Drive-Through Window	85 sq m	56	53	109	19	19	38

Table 2: Auto Trip Generation

Landilla	Auto Mode	AM Peak Hour			PM Peak Hour		
Land Use		In	Out	Total	In	Out	Total
High-Turnover (Sit-Down) Restaurant	39%/22%	2	2	4	2	1	3
Parking Lot (proposed)	100%	10	0	10	2	10	12
Coffee Shop without Drive-Through Window	39%/22%	22	21	43	4	4	8

The trip generation illustrates that the restaurant and temporary parking use will generate significantly less trips that a permitted coffee shop during the AM peak and higher volumes for the PM peak. The increase during the PM peak is estimated to be 7 total trips and if a low traffic generator overall. The outbound volume is the maximum during a peak hour and given the variety of government and private businesses downtown that have differing day end times, this volume could see a decrease of up to 50% as vehicles leave between 3pm and 6pm, and not only during the peak hour which has historically been 4:30-5:30pm.

Overall, the temporary parking use is not expected to generate traffic above and beyond permitted uses and can be used in conjunction with the existing restaurant use.

## 5 Site Access Design

Due to the frontage along two streets, the site is permitted a two-way access on each of Gloucester Street and O'Connor Street. Both accesses are less than 9 metres wide and have the appropriate offsets from the property line and adjacent accesses, per the Private Approach By-Law. The accesses are also compliant with TAC for driveways on the departure side of an intersection, requiring 5.0 metres along Gloucester Street and 10.0 metres along O'Connor Street, measured from the end of the corner radius. Therefore, the existing site is compliant with access design and location requirements.

#### 6 Conclusions

As no change to the current site is being proposed, no TIA is required for the continuation of the temporary zoning. A review of the adjacent roadways did not identify any safety or collision concerns, and the access are designed and located per TAC and the Private Approach By-Law. A high-level trip comparison of the restaurant and temporary parking use to comparable permitted land use of a coffee shop notes significantly less AM peak traffic



and a possible increase of auto trips during the PM peak. Overall, the PM peak auto trips are low and the increase can be accommodated by the access and road network.

Therefore, there are no transportation related issues related to the temporary parking use in conjunction with the existing restaurant use.

Prepared By:

Yu-Chu Chen, EIT

Transportation Engineering Intern

Reviewed By:

Andrew Harte, P.Eng.

Senior Transportation Engineer

