

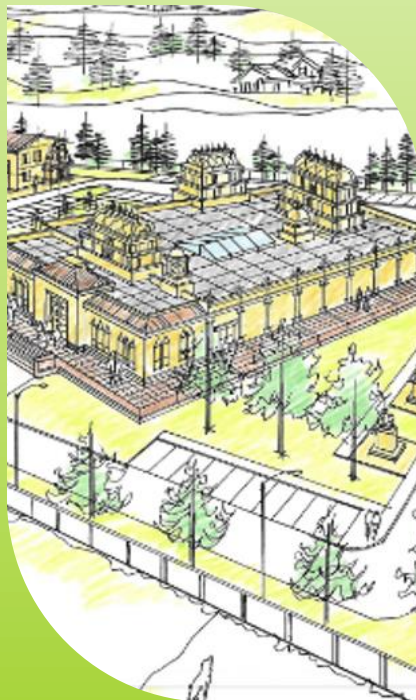
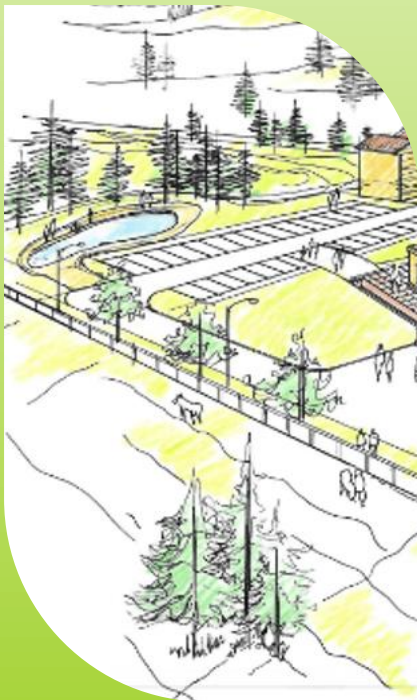
City of Ottawa

Upgrading of the Existing Ottawa Sivan Temple Infrastructure on 2104 Roger
Stevens Drive

Z0016000



TRAFFIC BRIEF



CIMA+ file number: Z0016000
June 12, 2025

CIMA+



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1. Project Overview

2104 Roger Stevens Drive is known for currently housing the Ottawa Sivan Temple in the City of Ottawa. This site is set on Roger Stevens Drive, which is characterized by a posted speed limit of 80 km/h. The area is relatively quiet for most of the year, with low traffic volumes visiting the temple, except during special events and festivals. The surrounding region features a mix of residential and Agriculture characteristics. The temple at this location is currently undergoing an upgrade, with a gross floor area of 2,013 m², which includes improvements to its infrastructure and additional on-site parking spaces to better accommodate visitors.

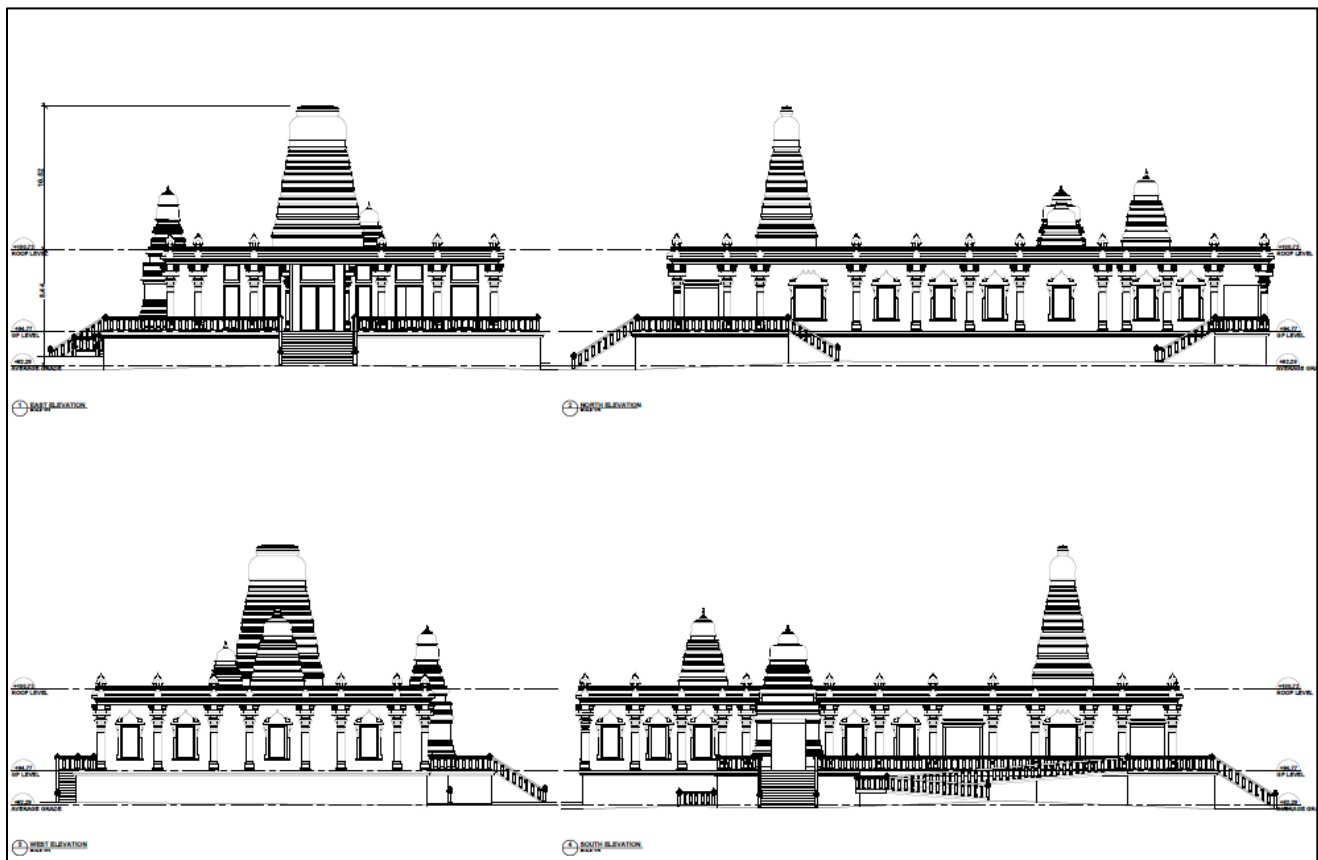


Figure 1.1: Temple Elevation

2. Correspondence with the City of Ottawa

A meeting was convened on July 10th, 2024, with representatives from CIMA, P-Squared Concepts Inc., the Temple, and the City of Ottawa in attendance. During this meeting, the City of Ottawa reviewed the anticipated traffic impact of the temple. Considering that the temple is already in operation and the current travel patterns are established, the City agreed with CIMA+'s recommendation that a full Traffic Impact Assessment (TIA) is unnecessary. Instead, they agreed that a Traffic Impact Memo would be sufficient to evaluate the existing conditions and the expected impact. This direction was based on the understanding that the temple's ongoing activities already generate the primary traffic flow, and thus, a comprehensive study is not required. This memo was developed in response to the requirement of Traffic Impact Memo.

3. Special Event Festival – Auto Trips Generated

The redesign of the temple is not anticipated to significantly increase the size of the congregation due to the fact that the people of the faith will continue to practice independent of the size of the temple. The existing temple occupancy is very small, with fewer than 10 cars visiting the temple approximately 325 days per year (89% of the year).

The temple has a maximum car occupancy between 190 and 220 cars during festival days which occur 10 days during the year (3% of year).

The festival event parking occupancy is estimated based on the 2023 and 2024 festival attendance data (i.e. number of meals served, and number of buses/shuttles arriving). The meals, which is served to every attendant when they enter the temple, provides an estimate for number of people visiting the temple during the special event. The car occupancy rate of 3 people per vehicle was utilized for the festival event, since the festival mostly attract families. A breakdown of recent festival attendance data and estimated parking occupancy required is shown in **Table 3.1**. It should be noted that portion of the visitors arrive via a private shuttlebus (~40-person occupancy). As such, the required parking estimates do not include the people arriving on a shuttlebus, which is expected to continue in the future.

Table 3.1 : Festival Attendance Data

Year	Total Meals Served (People)	Number of People Arriving by Car	Estimated Parking Spaces Required
2021	480	440	147
2022	500	460	153
2023	700	660	220
2024	600	560	187

Historical data indicates that the current temple receives fewer than 20 vehicles for 95%+ of the year, showing a low volume of trips on a regular basis. The planned temple upgrade is not expected to significantly increase the day-to-day traffic, as the existing people of faith who visit the temple will continue their visits.

Furthermore, car occupancy is typically comprised of families. Therefore, there are usually more than two or three people in a car, and this trend is expected to continue in the future as well. Additionally, the existing access to the temple will be utilized for the upgraded design, which allows for no major changes in traffic patterns to access the temple.

During festival events (3% of the year), the temple is expected to receive 600-700 visitors, resulting in approximately 190-220 incoming vehicle trips. Although the festival events occur once a year (over a 10-day period), the increased traffic generated can result in vehicles parking on Roger Stevens Drive and local neighbourhood. To mitigate this, a special event parking management plan is proposed, which is detailed in the next section.

4. Special Event Parking Management

The current temple parking area lacks marked parking spaces. Currently, the visitors either park along the driveway within the temple or on local streets, then walk along Roger Stevens Drive to access the temple on foot.

With the new plan, those currently parking on the street or along the driveway will have designated parking spots (61 spaces – 60 spaces for visitors and 1 space for priest's residence) at the temple. This provides visitors with parking spaces on-site and reduces the potential of pedestrian interaction with vehicles on Roger Stevens Drive.

Every year, there are festival days (<10 days a year) on which on-site parking demand is expected to be exceed the visitor parking supply of 60 spaces. Based on recent parking occupancy estimates (Section 3) and an on-site supply of 60 spaces, there is expected to be a surplus parking demand of 130 to 160 off-site parking spaces.

A special event parking management plan has been developed for visitors to the Sivan Temple to park safely with minimal disruption to the surrounding community. Mitigation measures to handle the surplus parking demand as part of the special event parking management plan include:

- An off-site parking program to provide additional parking capacity during special events. Various community centres and private businesses have been contacted and have confirmed that the Sivan Temple would be able to use their parking facilities during special events, as shown in **Table 6.1**.
- A shuttle bus service will be arranged by the Sivan Temple to operate during special events to transport visitors to and from off-site parking lots.
- A communication plan will be created ahead of special events to notify the congregation and visitors not to park on-street on Rogers Stevens Drive or in the neighbouring subdivision. The location of the off-site parking lot(s) and shuttle service details will be communicated to the potential visitors and residents in advance of the event to allow for trip planning. Furthermore, appropriate signage will be used to clearly show the shuttle service drop off/pick-up location on Temple site.
- Various safety measures as needed will be put in place during special event parking, such as arranging advance warning signage, hiring or assigning trained volunteers with safety vests to direct traffic to and from designated parking locations, and placing stop signs at the exit from the Sivan Temple.

A list of off-site parking lots near the Sivan Temple that have provided confirmation to use their facilities for the special event period is listed in **Table 4.1**. Additional potential off-site parking locations could also be made available, if additional parking spaces are required in the future for special event use, as shown in **Table 4.2**.

Table 4.1 : Off-site Parking Facilities - Confirmed

Location	Address	Capacity	Notes
Alfred Taylor Recreation Centre	2300 Community Way	~200 vehicles	Shuttle Required
Kars on the Rideau Public School	1604 Old Wellington Street S	~150 vehicles	Shuttle Required
North Gower Public School	2403 Church Street	~70 vehicles	Shuttle Required
City of Ottawa Parking Lot	2155 Roger Stevens Drive	~50 vehicles	Walking Distance
Total Confirmed Parking Capacity Available		~470 vehicles	

Table 4.2 : Off-site Parking Facilities - Additional Locations

Location	Address	Capacity	Notes
Abby Hill Farms	1490 Bankfield Road	>200 vehicles	Shuttle Required
Trailer Pros	5797 Prince of Wales Drive	~200 vehicles	Shuttle Required
Brunstad Christian Church Ottawa	1981 Century Road W	100-150 vehicles	Shuttle Required
Manderley on the Green	5920 Prince of Wales Drive	~100 vehicles	Shuttle Required
Strathmere Country Retreat, Spa and Cafe	1980 Phelan Road W	~100 vehicles	Shuttle Required
Potential for Additional Offsite Parking Capacity Available		~700-750 vehicles	

Overall, the parking capacity (up to 470 parking spaces) at the confirmed nearby parking locations can sufficiently meet the parking demand (190 to 220 vehicles) during the special event. The special event parking strategy aims to minimize the existing safety concerns from on-street parking during the special events and provide sufficient parking availability during the high-attendance festival events. As such, the off-site parking and shuttle service program is deemed to be an appropriate mitigation strategy to manage the increased parking demand during the special event.

5. TIA Screening Overview

A safety concern was identified in the TIA screening form regarding the 80 km/h speed limit on Roger Stevens Drive within the study area; the form can be found in Appendix A. The updated design includes 61 (60 visitor and 1 priest residence) additional on-site marked parking spaces. This will allow visitors to park on-site and access the temple without interacting with Roger Stevens Drive vehicular traffic. Currently, visitors may park on local streets and walk to the temple, a practice that will be eliminated with the new on-site parking. Hence, the upgraded design provides safer access to the constituents by allowing ample parking on-site and reducing the need for walking along Roger Stevens Drive to access the temple.

6. Site Access Review

CIMA+ reviewed the site access design to for compliance with (1) the City of Ottawa's Private Approach By-law (By-law No. 2003-447) and (2) Transportation Association of Canada's Geometric Design Guide for Canadian Roads (GDGCR 2017).

Section 11 of the City of Ottawa's By-law indicates that a private approach should have a width between 2.4 metres and 9 metres. In addition, the width of the private approaches should not exceed 50% of the frontage on which it is located. Both proposed accesses to the temple have a width of 6.7 metres, which is within the appropriate range and well below 50% of the proposed frontage of approximately 43 metres.

Section 17 of the by-law notes that any private approach should intersect the centreline of the roadway as close as possible to a right angle, with the minimum acute angle being 70 degrees. The proposed accesses intersect Roger Stevens Drive at approximately a 90-degree angle, satisfying this requirement.

Section 18 of the City's by-law requires an access impact study if there are 50 or more parking spaces on the property and if it anticipated that traffic generated by the property would adversely impact the adjacent highway. Although the temple will have over 50 parking spaces, it is not anticipated to generate large volumes of traffic at a regular basis, as shown in Section 3 of this report. As such, it is not expected that an access impact study will be required.

Finally, Section 25(a) of the by-law indicates that the maximum number of private approaches permitted for an institutional land use is two one-way or two-way approaches for a property with 35 to 45 metres of frontage. The proposed temple will have a frontage of approximately 43 metres as well as two two-way accesses. Section 25(c) of the by-law states that no two-way approach should exceed a width of 9 metres. Given that both proposed accesses have a width of 6.7 metres, the criteria are satisfied. In addition, Section 25(g) indicates that the distance between a two-way private approach and another private approach for the same property should be a minimum of 9 metres, which is met by the proposed site plan. Section 25(s) of the by-law notes that any approach serving a parking area should not have a grade exceeding 2%, which is also satisfied by the proposed site plan.

The proposed accesses were also reviewed using Chapter 8 - Access and Chapter 9 - Intersections of the GDGCR. Chapter 8 notes that spacing between driveways and intersections as well as other driveways is required to separate conflict zones. Neither of the proposed accesses is located near any other driveways, and the west access is located approximately 95 metres away from Trailwood Drive, which is the nearest intersection. This distance is sufficient to separate the proposed accesses from the intersection. Chapter 9 of the GDGCR outlines the required intersection sight distance for drivers exiting the temple looking both left and right to turn onto Roger Stevens Drive. Given a posted speed limit of 80 km/h and a design speed of 100 km/h, the required intersection sight distance to turn onto a two-lane highway with no median and a grade of 3% or less is 210 m for drivers turning left and 185 metres for drivers turning right. Since Roger Stevens Drive does not have a significant vertical or horizontal curve, both minimum sight distances are anticipated to be met.

7. Conclusions

During the June 10th, 2024, meeting with the City of Ottawa, it was agreed that a full Traffic Impact Assessment is unnecessary. Instead, a traffic memo was deemed sufficient to satisfy the requirement for evaluating the existing impact of the temple. It is anticipated that the temple's redesign is not expected to generate significant additional traffic volume in the area. The visitors, typically families, will continue to visit the temple as they do now. A review of the proposed site accesses using both the City of Ottawa's Private Approach by-law and the GDGCR indicated that the access dimensions meet all the criteria based on the City's bylaw and the GDGCR thresholds for spacing and sight distance.

The current temple setup lacks marked parking spaces, which results in visitors potentially parking along the driveway or on the adjacent local streets and walking along Roger Stevens Drive to reach the temple. The new plan will provide designated on-site parking spots (60 visitor parking spaces and 1 priest residence), eliminating the need for on-street parking and reducing pedestrian interactions with vehicular traffic on Roger Stevens Drive. This improvement will enhance the safety of the temple visitors by mitigating the previous safety concerns associated with the posted speed limit.

A Special Event Parking management plan has been developed to allow visitors to the Sivan Temple during festival days to park safely with minimal disruption to the surrounding community. The plan includes utilizing available off-site parking locations, providing a shuttle service to off-site lots, communicating with the community, and implementing various safety measures as needed.

A

Appendix A TIA Screening Form

City of Ottawa 2017 Transportation Impact Assessment (TIA) Guidelines Screening Form

1. Description of Proposed Development

Municipal Address	2104 Roger Stevens Dr., Ottawa, ON, K0A 2T0
Description of Location	Rural transect – Village
Land Use Classification	Place of Worship
Development Size (units)	n/a
Development Size (m ²)	approx. 1,116 m ² (GFA)
Number of Accesses and Locations	One access
Phase of Development	2 phases
Buildout Year	2026

If available, please attach a sketch of the development or site plan to this form.

2. Trip Generation Trigger

Considering the Development's Land Use type and Size (as filled out in the previous section), please refer to the Trip Generation Trigger checks below.

Table notes:

1. Table 2, Table 3 & Table 4 TRANS Trip Generation Manual
2. Institute of Transportation Engineers (ITE) Trip Generation Manual 11.1 Ed.

Land Use Type	Minimum Development Size
Single-family homes	60 units
Multi-Use Family (Low-Rise) ¹	90 units
Multi-Use Family (High-Rise) ¹	150 units
Office ²	1,400 m ²
Industrial ²	7,000 m ²
Fast-food restaurant or coffee shop ²	110 m ²
Destination retail ²	1,800 m ²
Gas station or convenience market ²	90 m ²

If the proposed development size is greater than the sizes identified above, the Trip Generation Trigger is satisfied.

¹ Hubs are identified in Schedules B1 to B8 of the City of Ottawa Official Plan. PMTSAs are identified in Schedule C1 of the Official Plan. DPAs are identified in Schedule C7A and C7B of the Official. See Chapter 4 for a list of City of Ottawa Planning and Engineering documents that support the completion of TIA.

3. Location Triggers

	Yes	No
Does the development propose a new driveway to a boundary street that is designated as part of the City's Transit Priority Network, Rapid Transit network or Cross-Town Bikeways?		X
Is the development in a Hub, a Protected Major Transit Station Area (PMTSA), or a Design Priority Area (DPA)? ¹		X

If any of the above questions were answered with 'Yes,' the Location Trigger is satisfied.

4. Safety Triggers

	Yes	No
Are posted speed limits on a boundary street 80 km/hr or greater?	X	
Are there any horizontal/vertical curvatures on a boundary street limits sight lines at a proposed driveway?		X
Is the proposed driveway within the area of influence of an adjacent traffic signal or roundabout (i.e. within 300 m of intersection in rural conditions, or within 150 m of intersection in urban/ suburban conditions)?		X
Is the proposed driveway within auxiliary lanes of an intersection?		X
Does the proposed driveway make use of an existing median break that serves an existing site?		X
Is there is a documented history of traffic operations or safety concerns on the boundary streets within 500 m of the development?		X
Does the development include a drive-thru facility?		X

If any of the above questions were answered with 'Yes,' the Safety Trigger is satisfied.

5. Summary

	Yes	No
Does the development satisfy the Trip Generation Trigger?		X
Does the development satisfy the Location Trigger?		X
Does the development satisfy the Safety Trigger?	X	

If none of the triggers are satisfied, the TIA Study is complete. If one or more of the triggers is satisfied, the TIA Study must continue into the next stage (Screening and Scoping).