

Appendix J-1 – Traffic Impact Analysis

August 31, 2021

Birkin Construction, LLC
C/o Mr. Robert Ritner
100 North Barranca Street - Suite 950
West Covina, CA 91791

LLG Reference: 2.20.4311.1

Subject: **Traffic Impact Assessment for the Proposed
Temple Campus Facility Project**
County of Riverside, California

Dear Mr. Ritner:

Linscott, Law & Greenspan, Engineers (LLG) is pleased to submit this Traffic Impact Assessment for the proposed Temple Campus Facility Project (herein referred to as “Project”). The project site is generally located east of Cole Avenue between Landin Lane and Markham Street in the County of Riverside, California. Specifically, the Temple Campus will be located on the northeast quadrant of Cole Avenue and Markham Street. *Figure 1* presents a Vicinity Map, which illustrates the general location of the project site and depicts the surrounding street system and *Figure 2* presents an existing site aerial. This letter report will outline the traffic generation forecast potential for the proposed Project (temple operations and special events) and assess whether the proposed Project will create any potential traffic impacts on the surrounding transportation system.

PROJECT DESCRIPTION

Figure 3 presents the proposed overall site plan for the Project, prepared by Creative Design Associates. *Figure 4* presents a zoomed in proposed site plan focusing on the Temple Campus buildings. As shown in the figures, the proposed Temple Campus will consist of offices, meeting rooms, exhibition rooms, a large auditorium, a main prayer hall, a Sunday school building, a library and a dining-kitchen-laundry building with a total campus building square-footage of 53,466 square-feet (SF). A total of 247 parking spaces will be provided (160 spaces and 87 overflow spaces). The following bullets provide a breakdown of the proposed Temple Campus uses and sizes.

Engineers & Planners
Traffic
Transportation
Parking

**Linscott, Law &
Greenspan, Engineers**
2 Executive Circle
Suite 250
Irvine, CA 92614
949.825.6175 T
949.825.6173 F
www.llgengineers.com

Pasadena
Irvine
San Diego
Woodland Hills

Philip M. Linscott, PE (1924-2000)
Jack M. Greenspan, PE (Ret.)
William A. Law, PE (Ret.)
Paul W. Wilkinson, PE
John P. Keating, PE
David S. Shender, PE
John A. Boarman, PE
Clare M. Look-Jaeger, PE
Richard E. Barretto, PE
Keil D. Maberry, PE

- Office = 3,515 SF
- Meeting Room #1 = 2,298 SF
- Meeting Room #2 = 2,298 SF
- Auditorium = 11,918 SF (1st floor = 3,613 SF and 2nd floor = 8,305 SF)
- Exhibition #1 = 2,283 SF
- Exhibition #2 = 2,283 SF
- Main Prayer Hall = 5,448 SF
- Sunday School = 9,792 SF
- Ensuite = 3,216 SF
- Main Dining = 5,448 SF
- Small Dining = 1,023 SF
- Kitchen = 1,220 SF
- Library = 1,854 SF
- Restrooms = 550 SF
- Laundry = 320 SF
- **Total = 53,466 SF**

In addition to the aforementioned development totals, the project site, north of the Temple Campus buildings will contain residential lots for the development of a maximum of five (5) single family homes that will be associated with the Temple Campus Facility.

Access for the proposed Project will be provided via one full access driveway along Cole Avenue, located directly opposite Ontario Avenue, and via one additional right-turn in/right-turn out only access driveway along Cole Avenue (i.e. located between Ontario Avenue and Markham Street). An additional access point serving the proposed single family homes will be provided along Cole Avenue, located directly opposite Ray Avenue.

PROJECT TRAFFIC GENERATION FORECAST

Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Generation equations and/or rates used in the traffic forecasting procedure are typically found in the 10th Edition of *Trip Generation*, published by the Institute of Transportation Engineers (ITE) [Washington D.C., 2017] or are based on the operational characteristics of a proposed Project. In order to provide a conservative assessment of the trip generation potential of the Project, this letter report summarizes the trip generation potential of the proposed Project based on both ITE trip generation rates and the proposed operations, as provided by the applicant.

Project Trip Generation Forecast – ITE Trip Generation 10th Edition

Table 1, located at the rear of this letter report following the figures, summarizes the trip generation rates and associated forecast for the Project for a typical weekday. As shown in the upper portion of *Table 1*, the trip generation potential of the proposed Project was estimated based on ITE Land Use 210: Single Family Detached Housing trip rates and ITE Land Use 460: Church trip rates. Review of the bottom of *Table 1* indicates that the proposed Project is forecast to generate 419 daily trips, with 22 trips (12 inbound, 10 outbound) produced in the AM peak hour and 31 trips (15 inbound, 16 outbound) produced in the PM peak hour on a “typical” weekday.

Project Trip Generation Forecast – Proposed Operations

The following bullets summarize the proposed weekday operations for the proposed Project, as provided by the project applicant. These bullets include the program type, the schedule/hours of operation, the anticipated number of people and other assumptions utilized to forecast the weekday daily, AM peak hour and PM peak hour trip generation for the proposed Project. Information relative to the religious ceremony special events, which only occur up to four times per year are also listed.

Temple Operations

- Clergy residing at the facility = 5 people (24 hours per day)
- Administrative staff = 6 people (7:00 AM to 4:00 PM)
- Maintenance staff = 2 people (7:00 AM to 4:00 PM)

Regular Worship Services and Classes

- Cooking, language and/or religious study classes = 10 to 50 people (10:00 AM to 12:00 PM and 2:00 PM to 4:00 PM). Assumes a maximum of 50 people and an average vehicle occupancy of 1.25, resulting in 40 vehicles.
- Informal counseling hours = 4 to 6 people (4:00 PM to 6:00 PM). Assumes 3 people from 4:00 PM to 5:00 PM and 3 people from 5:00 PM to 6:00 PM.

Special Events – Religious Ceremonies

- Religious ceremonies to mark significant religious or cultural dates (up to 4 times per year on a Saturday and Sunday) = 150 to 250 people (9:00 AM to 4:00 PM). Assumes a maximum of 250 people and an average vehicle occupancy of 1.25, resulting in 200 vehicles.
- Extended religious study, meditation and contemplation retreats (up to 4 times per year, multi-day events Tuesday through Sunday) = 150 to 250 people (9:00 AM

to 4:00 PM). Assumes a maximum of 250 people and an average vehicle occupancy of 1.25, resulting in 200 vehicles.

Appendix A presents the detailed Temple Campus Program Summary, which also summarizes the non-typical weekday operations, special events and summer school program. It should be noted that only one religious ceremony special event will occur on the site at a time; no concurrent special events will be provided.

Utilizing the aforementioned operational information (i.e. temple operations and regular worship services and classes), *Table 2* summarizes the results of the weekday trip generation analysis for the Project. The upper portion of *Table 2* presents the forecast weekday project trips on a half-hourly basis between 7:00 AM and 7:00 PM. The lower portion of *Table 2* summarizes the weekday daily, AM peak hour and PM peak hour trip generation forecast for the Project (Temple Campus buildings). As shown, the proposed Project (Temple Campus buildings) is forecast to generate 198 daily trips, with 8 trips (8 inbound, 0 outbound) produced in the AM peak hour and 51 trips (3 inbound, 48 outbound) produced in the PM peak hour on a “typical” weekday. With the five (5) single family homes, the proposed Project is forecast to generate 245 daily trips, with 12 trips (9 inbound, 3 outbound) produced in the AM peak hour and 56 trips (6 inbound, 50 outbound) produced in the PM peak hour on a “typical” weekday.

Utilizing the special events – religious ceremonies operational information, *Table 3* summarizes the results of the trip generation analysis for the Project special events. The upper portion of *Table 3* presents the forecast special events project trips on a half-hourly basis between 7:00 AM and 7:00 PM. The lower portion of *Table 3* summarizes the daily, morning peak hour and afternoon peak hour trip generation forecast for the Special Events – Religious Ceremonies. As shown, the Special Events – Religious Ceremonies is forecast to generate 426 daily trips, with 200 trips (200 inbound, 0 outbound) produced in the morning peak hour and 208 trips (0 inbound, 208 outbound) produced in the afternoon peak hour. As stated previously, these events may occur up to four (4) times per year and only one religious ceremony special event will occur on the site at a time; no concurrent special events will be provided.

CONCLUSION

According to *Appendix B – Traffic Analysis Exemptions from the County of Riverside Transportation Analysis Guidelines for Level of Service Vehicle Miles Traveled*, dated December 2020, a project is exempt from Traffic Impact Analysis requirements

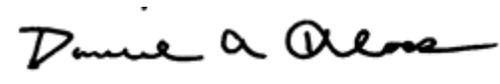
if any use which can demonstrate, based on the most recent edition of the Trip Generation Report published by the Institute of Transportation Engineers (ITE) or other approved trip generation data, trip generation of less than 100 vehicle trips during the peak hours (bullet #10). In addition, the guidelines also state that churches are generally exempt (bullet #6).

Based on application of either ITE *Trip Generation 10th Edition* (resulting in 419 daily trips, 22 AM peak hour trips and 31 PM peak hour trips) or the proposed Project operations (resulting in 245 daily trips, 12 AM peak hour trips and 56 PM peak hour trips), the proposed Project will generate less than 100 vehicle trips during the weekday AM and PM peak hours. In addition, the proposed Project is church-related. Therefore, we conclude that the proposed Project meets the County exemption requirements and will not require the preparation of a traffic impact analysis report and that the trips associated with the proposed Project will not significantly impact the existing surrounding transportation network.

For the Special Events – Religious Ceremonies that may occur up to four (4) times per year, Temple Campus staff will implement traffic management measures/strategies to help manage traffic flow in and out of the site in order to minimize traffic impacts to Cole Avenue. These traffic management measures/strategies may include placement of Temple Campus staff at the project driveways along Cole Avenue to help manage traffic queues and facilitate patrons into the on-site parking spaces. Traffic cones and/or delineators may also be utilized to help manage traffic flows on site. It should be noted that these traffic management measures/strategies will be subject to the approval of County of Riverside staff.

We appreciate the opportunity to provide this Traffic Impact Assessment. Should you need further assistance, or have any questions regarding this analysis, please call us at (949) 825-6175.

Very truly yours,
Linscott, Law & Greenspan, Engineers



Daniel A. Kloos, P.E.
Associate Principal





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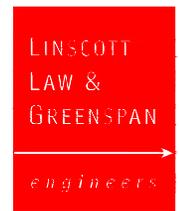
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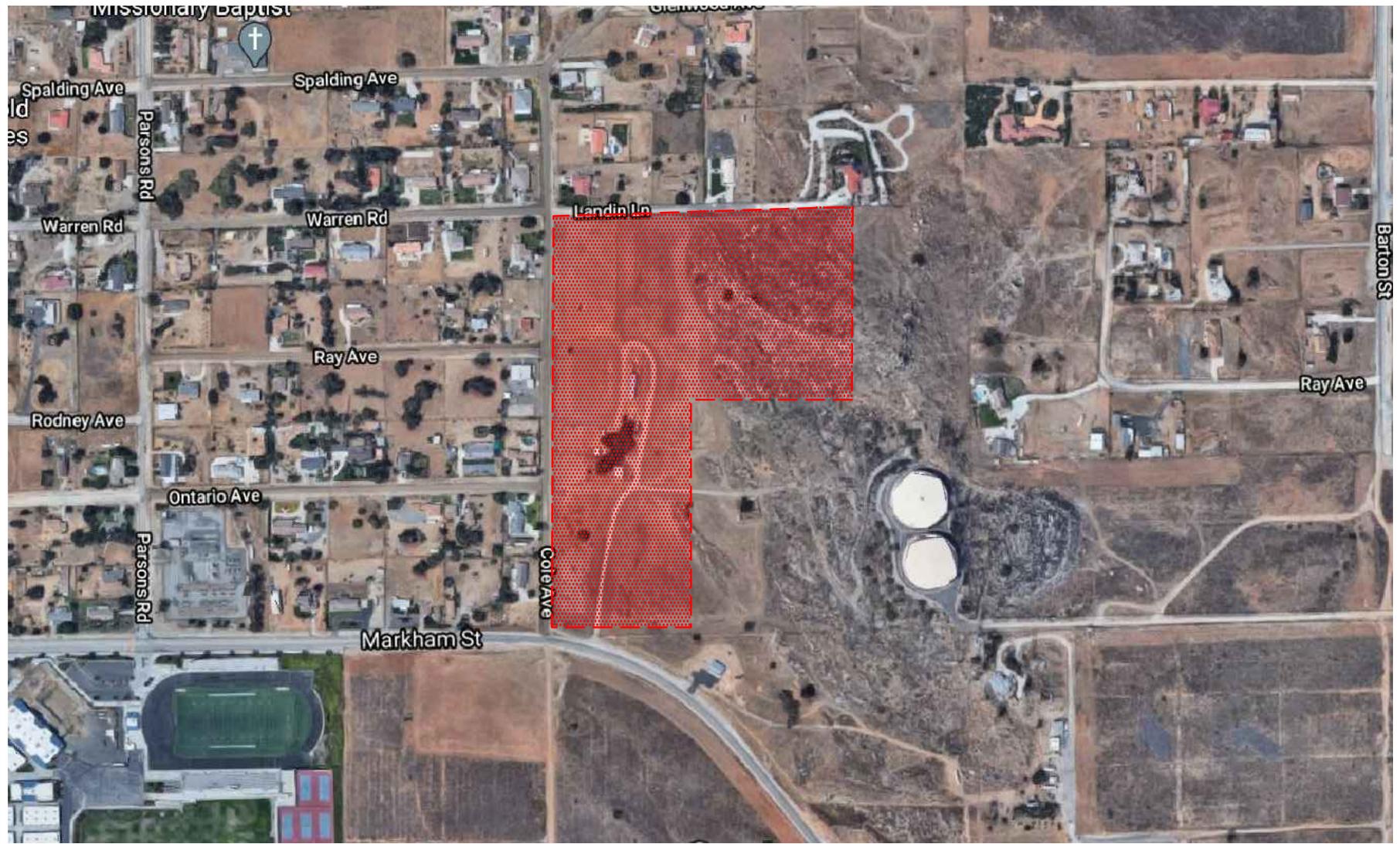
 = PROJECT SITE

FIGURE 1

VICINITY MAP

TEMPLE CAMPUS FACILITY PROJECT, COUNTY OF RIVERSIDE





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engineers



NO SCALE

SOURCE: GOOGLE

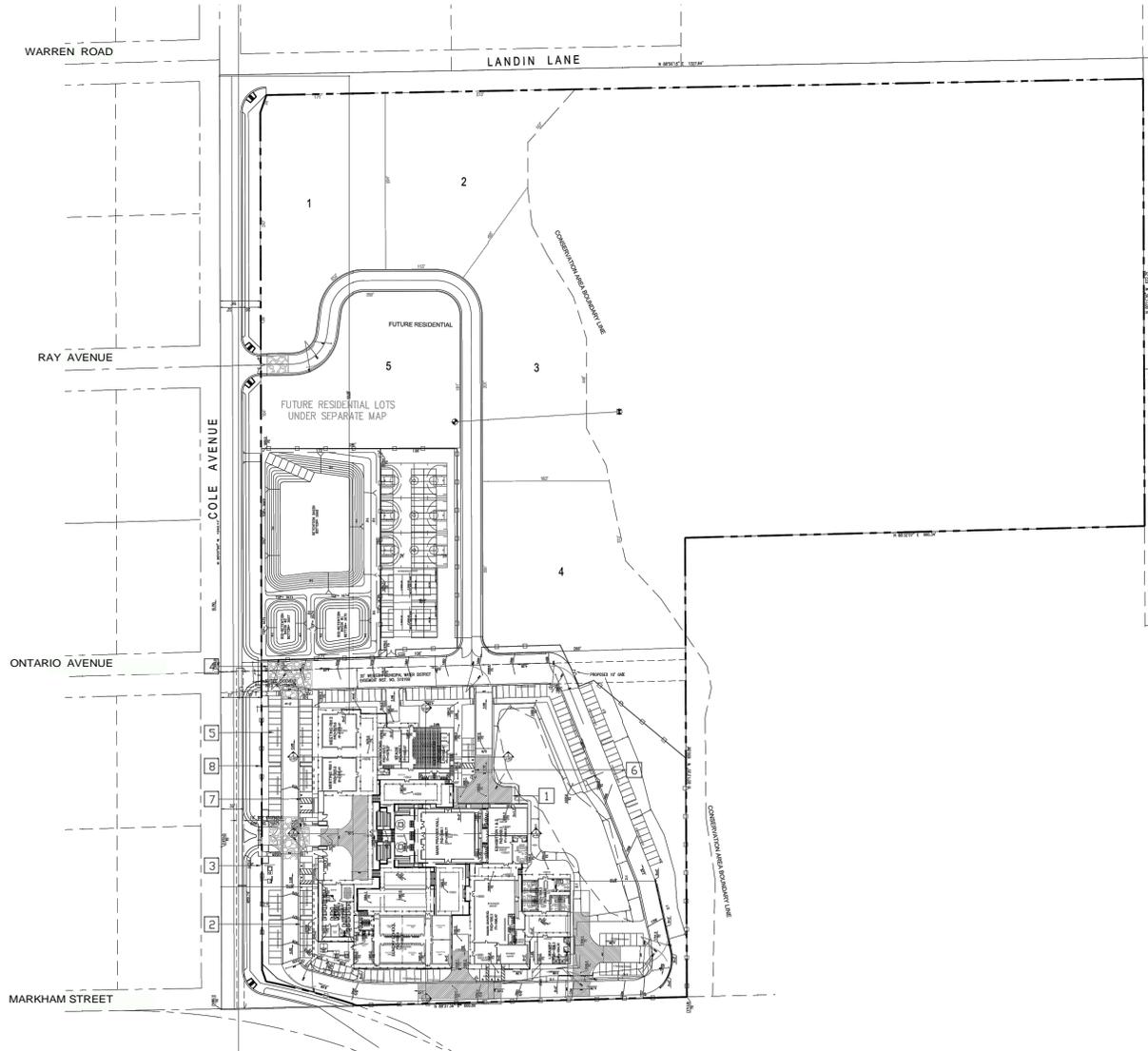
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FIGURE 2

EXISTING SITE AERIAL

TEMPLE CAMPUS FACILITY PROJECT, COUNTY OF RIVERSIDE



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SOURCE: CREATIVE DESIGN ASSOCIATES, INC.

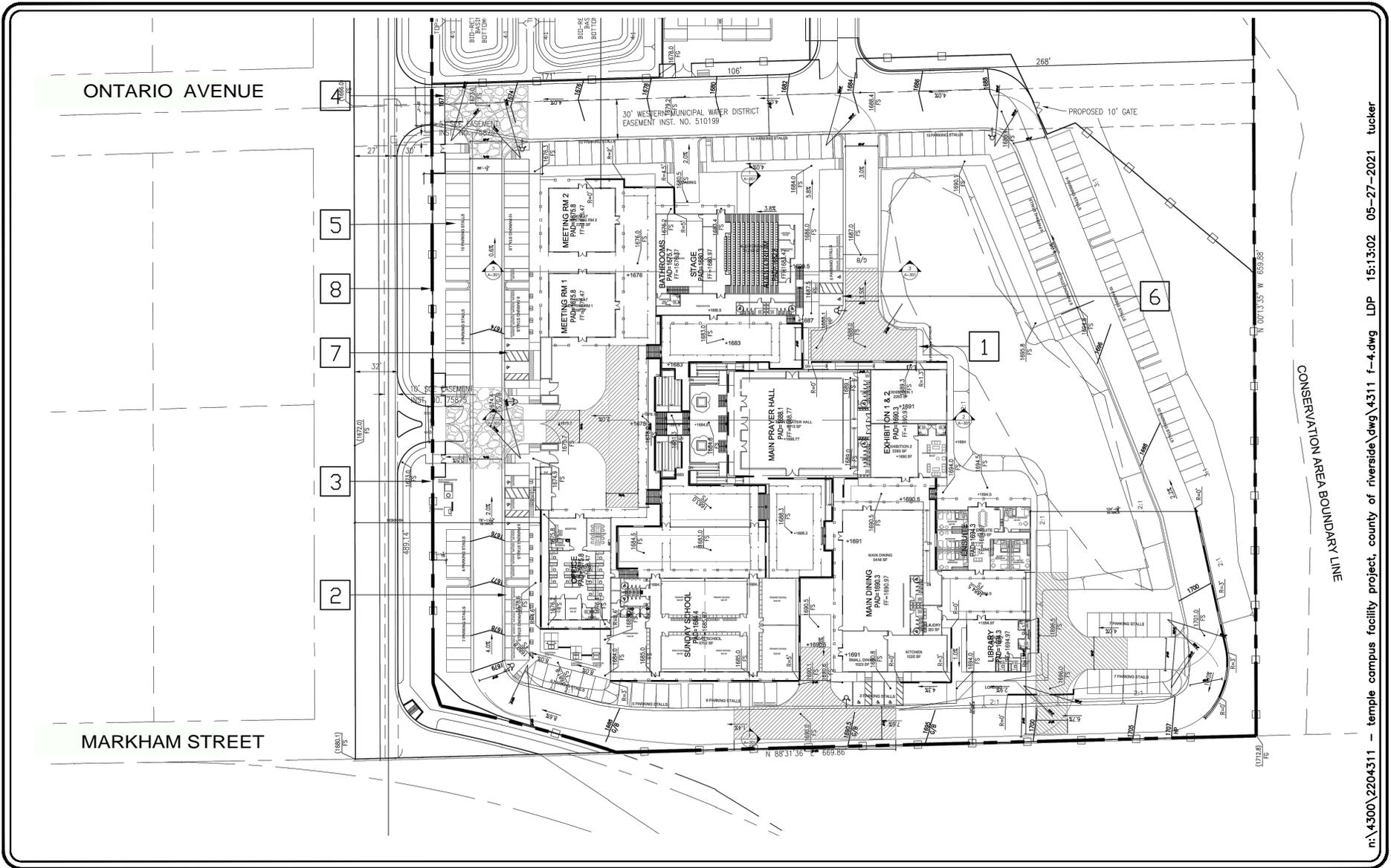
FIGURE 3

PROPOSED OVERALL SITE PLAN

TEMPLE CAMPUS FACILITY PROJECT, COUNTY OF RIVERSIDE




 NO SCALE



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SOURCE: CREATIVE DESIGN ASSOCIATES, INC.

FIGURE 4

PROPOSED TEMPLE CAMPUS SITE PLAN TEMPLE CAMPUS FACILITY PROJECT, COUNTY OF RIVERSIDE

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engineers



NO SCALE

TABLE 1
WEEKDAY PROJECT TRAFFIC GENERATION FORECAST – ITE 10TH EDITION¹
TEMPLE CAMPUS FACILITY PROJECT, COUNTY OF RIVERSIDE

ITE Land Use Code / Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
<u>Trip Generation Rates:</u>							
▪ 210: Single Family Detached Housing (TE/DU)	9.44	25%	75%	0.74	63%	37%	0.99
▪ 560: Church (TE/1,000 SF)	6.95	60%	40%	0.33	45%	55%	0.49
<u>Proposed Project Trip Generation Forecast:</u>							
▪ Temple Campus Buildings (53,466 SF)	372	11	7	18	12	14	26
▪ Single Family Homes (5 DU)	47	1	3	4	3	2	5
Total Trip Generation Forecast	419	12	10	22	15	16	31

Notes:

- TE/1,000 SF = trip end per 1,000 SF of development
- TE/DU = trip end per dwelling unit

¹ Source: *Trip Generation*, 10th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2017).

**TABLE 2
WEEKDAY PROJECT TRAFFIC GENERATION FORECAST – PROPOSED OPERATIONS²
TEMPLE CAMPUS FACILITY PROJECT, COUNTY OF RIVERSIDE**

Time of Day	Temple Operations		Regular Worship Services and Classes		Total Weekday Vehicle Trips		
	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound	Total
7:00 AM	8	0	0	0	8	0	8
7:30 AM	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0
9:30 AM	0	0	40	0	40	0	40
10:00 AM	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0
12:00 PM	0	0	0	40	0	40	40
12:30 PM	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0
1:30 PM	0	0	40	0	40	0	40
2:00 PM	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0
4:00 PM	0	8	3	40	3	48	51
4:30 PM	0	0	0	0	0	0	0
5:00 PM	0	0	3	3	3	3	6
5:30 PM	0	0	0	0	0	0	0
6:00 PM	0	0	0	3	0	3	3
6:30 PM	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0
Temple Campus Facility Project Trip Generation Forecast			Daily		198³		
			AM Peak Hour		8	0	8
			PM Peak Hour		3	48	51
Temple Campus Facility Project Trip Generation Forecast With The Proposed 5 Single Family Homes			Daily		245		
			AM Peak Hour		9	3	12
			PM Peak Hour		6	50	56

² Source: based on the proposed operations provided by the project applicant.

³ The daily trip generation forecast includes 10 trips associated with the 5 clergy members residing at the temple facility (i.e. assumes 2 trips per day per clergy member).

**TABLE 3
SPECIAL EVENT PROJECT TRAFFIC GENERATION FORECAST – RELIGIOUS CEREMONIES⁴
TEMPLE CAMPUS FACILITY PROJECT, COUNTY OF RIVERSIDE**

Time of Day	Temple Operations		Religious Ceremonies Special Event		Total Special Event Vehicle Trips		
	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound	Total
7:00 AM	8	0	0	0	8	0	8
7:30 AM	0	0	0	0	0	0	0
8:00 AM	0	0	50	0	50	0	50
8:30 AM	0	0	150	0	150	0	150
9:00 AM	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0
4:00 PM	0	0	0	150	0	150	150
4:30 PM	0	8	0	50	0	58	58
5:00 PM	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0
Temple Campus Facility Project Special Event Trip Generation Forecast			Daily		426⁵		
			8:00 AM – 9:00 AM		200	0	200
			4:00 PM – 5:00 PM		0	208	208

⁴ Source: based on the proposed special event operations of the religious ceremonies provided by the project applicant.

⁵ The daily trip generation forecast includes 10 trips associated with the 5 clergy members residing at the temple facility (i.e. assumes 2 trips per day per clergy member).

APPENDIX A
TEMPLE CAMPUS FACILITY PROJECT
PROGRAM SUMMARY

IKT Temple Campus Program Summary

1/2/2020

Days	Description	Hours on Site	# of Persons
	Temple Operations		
7 Days / Week	Clergy Residing at Temple Facility	24-Hrs / Day	5
Mon-Fri	Paid and/or Volunteer Administrative Staff	7AM - 4PM	6
7 Days / Week	Paid and/or Volunteer Maintenance Staff	7AM - 4PM	2
	Regular Worship Services and Classes		
Mon-Fri	Various Chinese Cooking Classes, Chinese Language Classes and Religious Study Classes. Number quoted is the maximum number of students on site at any time.	10AM - Noon and 2PM - 4PM	10 to 50
Mon-Fri	Informal Counseling Hours	4PM - 6PM	4 to 6
Every Saturday	Various Chinese Cooking Classes, Chinese Language Classes and Religious Study Classes. Number quoted is the maximum number of students on site per day (1/2 in morning session and 1/2 in afternoon session)	10AM - Noon and 2PM - 4PM	Up to 60
Every Saturday	Informal Counseling Hours	4PM-6PM	4 to 6
Every Sunday	Worship Services (Single Service)	8:30 AM - 11:45AM	100 to 150
Every Sunday	Sunday School	8:30 AM - 11:45AM	Up to 80
Every Sunday	Lunch Served on-site	Noon - 1PM	Up to 200
Every Sunday	Various Chinese Language Classes and Religious Study Classes. Number of persons includes teachers and students	1:30PM - 4:00 PM	30 to 60
	Religious Ceremonies		
Up to 4 Times/Year on Saturday and Sunday	Religious Ceremonies to mark significant religious or cultural dates and may include foreign visitors from the Temple's international facilities. Lunch is served on site.	9AM - 4PM	150 to 250
Up to 4 times per year multi-day events Tues-Sun	Extended Religious Study, Medetation and Contemplation Retreats with lunch served on site	9AM - 4PM	150 to 250
	Summer School Program		
Mon-Fri from Mid-June to Mid-August	Extension of the Sunday School program, but providing more extensive religious study to primary and secondary age children during the summer break. Number of persons includes teachers.	9AM-4PM	80-100