

Appendix D

Trip Generation Study



January 14, 2015

Mr. Matt Hamilton
LB El Dorado Park 3655, LLC
4100 MacArthur Boulevard, Suite 330
Newport Beach, CA 92660

**Subject: 3655 North Norwalk Boulevard Trip Generation Study,
City of Long Beach**

Dear Mr. Hamilton:

Introduction

RK ENGINEERING GROUP, INC. (RK) is pleased to provide this trip generation analysis for the 3655 North Norwalk Boulevard Project in the City of Long Beach. A location map is provided in Exhibit A.

The proposed project would convert the existing 27,709 square foot church/school into a residential development. The development would include 40 single family residential units. A site plan for the existing land use is included in Exhibit B-1. A site plan for the proposed project is provided in Exhibit B-2.

The existing site is currently zoned for Institutional use which allows for R-1 housing. The existing site contains a 17,709 square foot church and a 10,000 square foot preschool. These uses are currently in full operation.

The purpose of this trip generation analysis is to determine the project's AM/PM peak hour and daily trips as it compares to the existing land uses.

Trip Generation

Trip generation represents the amount of trips that are produced and attracted by a development. Trip generation rates are developed by the ITE (Institution of Transportation Engineers) in their *Trip Generation Manual*, 9th Edition, 2012. This analysis compares the proposed project to the existing land use.

The trip generation rates for this project are shown in Table 1. The existing land use is a church and preschool. These types of uses correspond to ITE Trip Codes 560 and 565, respectively. The proposed project will consist of 40 single family residential dwelling units. This type of use corresponds to ITE Trip Code 210.

The project's trip generation calculations are included in Table 2. The existing land use generates 902 trip ends per day, with 132 vehicles per hour during the AM peak hour and 133 vehicles per hour during the PM peak hour.

The proposed project will generate 381 trip ends per day, with 31 vehicles per hour during the AM peak hour and 40 vehicles per hour during the PM peak hour. Table 3 provides a comparison of the proposed land use to the previous land use and the existing land use.

The comparison to the existing land use shows that the proposed project will generate 521 less trip ends per day, with 101 less trips generated in the AM peak hour and 93 less trips generated in the PM peak hour.

Conclusions

RK has completed a trip generation analysis for the proposed 3655 North Norwalk Project. The proposed project would consist of 40 single family dwelling units.

In comparison with the existing land use, the proposed project will generate 521 less trip ends per day, with 101 less vehicles per hour during the AM peak hour and 93 less vehicles per hour during the PM peak hour.

RK concludes that the proposed project will generate less traffic than the existing land uses; therefore, would provide less impact to the adjoining roadways and can be accommodated.

RK Engineering Group, Inc. appreciates this opportunity to work with LB El Dorado Park 3655, LLC. on this project. If you have any questions regarding this study, please do not hesitate to call us at (949) 474-0809.

Sincerely,
RK ENGINEERING GROUP, INC.

Robert Kahn

Robert Kahn, P.E.
Principal



Allison Goedecke

Allison Goedecke, M.B.A.
Senior Transportation Planner

Attachments

Exhibits

Exhibit A Location Map

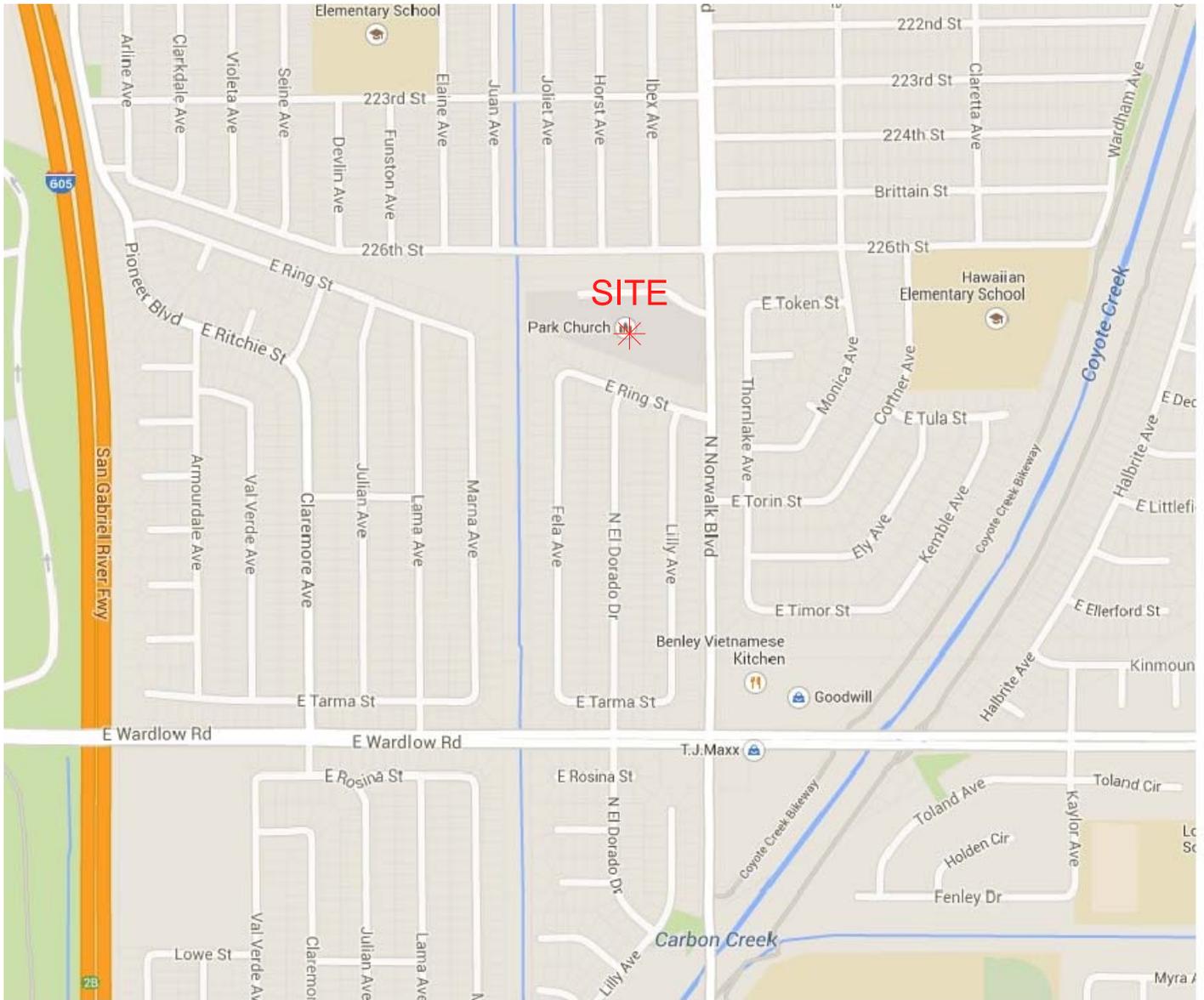
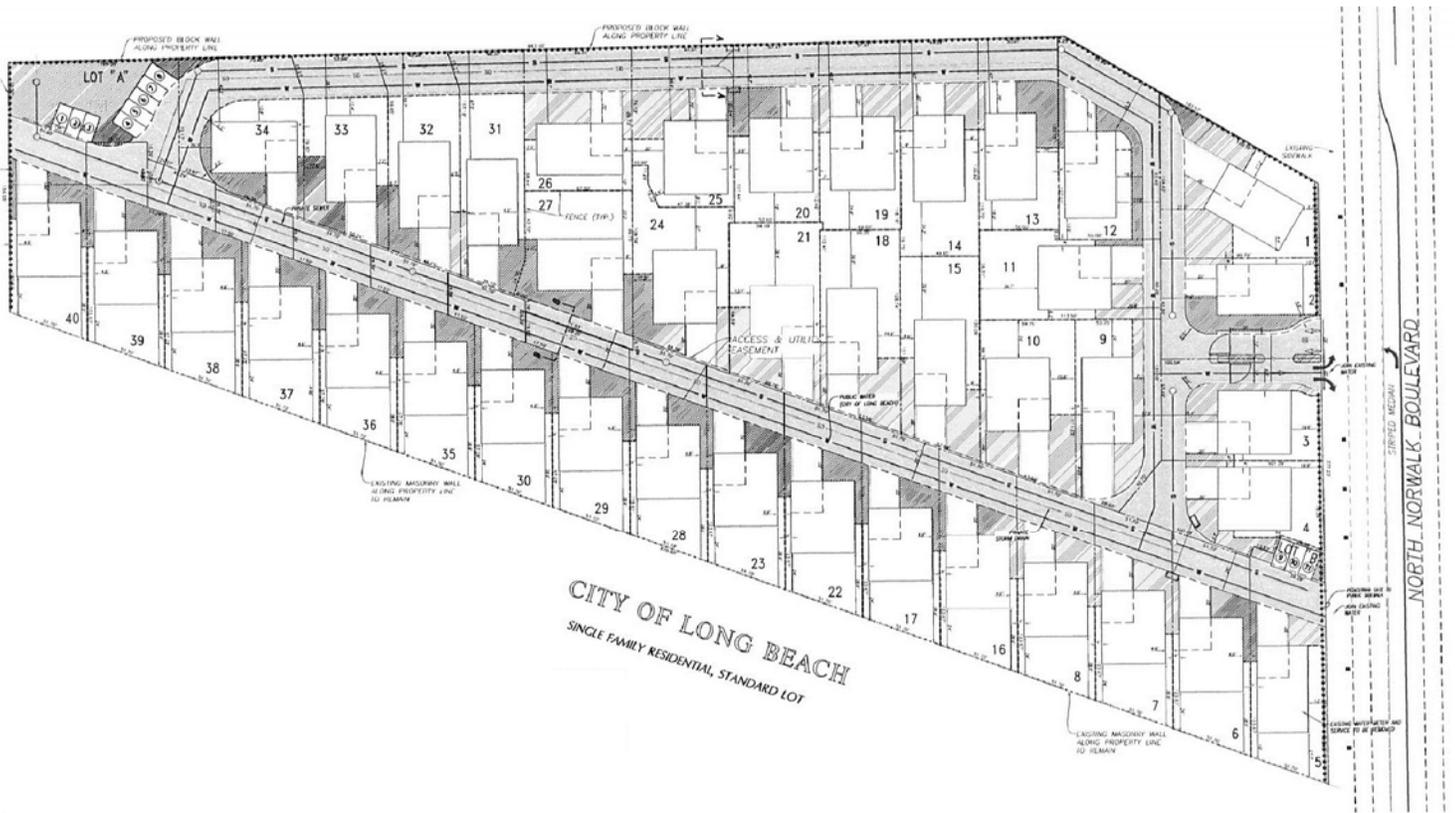


Exhibit B-2
Proposed Land Use Site Plan



Tables

TABLE 1
Trip Generation Rates¹

Land Use	ITE Code	Units ²	Peak Hour						Daily
			AM			PM			
			In	Out	Total	In	Out	Total	
Single Family Homes	210	DU	0.19	0.56	0.75	0.63	0.37	1.00	9.52
Church	560	TSF	0.35	0.21	0.56	0.26	0.29	0.55	9.11
Daycare Center	565	TSF	6.46	5.72	12.18	5.80	6.54	12.34	74.06

¹ Source: Institute of Transportation Engineers (ITE), *Trip Generation, 9th Edition*, 2012.

² DU = Dwelling Units
TSF= Thousand Square Feet

TABLE 2
Project Trip Generation

Existing Land Use										
Existing Land Use	ITE Code	Quantity	Units¹	Peak Hour						Daily
				AM			PM			
				In	Out	Total	In	Out	Total	
Church	560	17.709	TSF	6	4	10	5	5	10	161
Daycare Center	565	10.000	TSF	65	57	122	58	65	123	741
Existing Land Use Total				71	61	132	63	70	133	902

Proposed Land Use										
Proposed Land Use	ITE Code	Quantity	Units¹	Peak Hour						Daily
				AM			PM			
				In	Out	Total	In	Out	Total	
Single Family Residential	210	40	DU	8	23	31	25	15	40	381

¹ DU = Dwelling Units
TSF = Thousand Square Feet

TABLE 3
Project Trip Generation Comparison

Comparison: Existing Land Use vs. Proposed Land Use							
	Peak Hour						Daily
	AM			PM			
	In	Out	Total	In	Out	Total	
Existing Land Use (Church & Preschool)	71	61	132	63	70	133	902
Proposed Land Use (Single Family Residential)	8	23	31	25	15	40	381
Difference	-63	-38	-101	-38	-55	-93	-521