Appendix D
Trip Generation Study
LETTER OF TRANSMITTAL

TO: LB El Dorado Park 3655, LLC.
4100 MacArthur Boulevard, Suite 330
Newport Beach, CA 92660

DATE: January 14, 2015

JOB NO.: 2416-2015-01

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

ATTN: Mr. Matt Hamilton

WE ARE FORWARDING: By Messenger
By Blueprinter
X By E-Mail

X By FedEx

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Approval
Signature
X Use
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STATUS
Preliminary
Revised
Approved
Released

PLEASE NOTE
Revisions
Additions
Omissions
Corrections

REMARKS:
Attached is the 3655 North Norwalk Boulevard Long Beach Trip Generation Study, City of Long Beach.
Please call me at (949) 474-0809 extension 211 if you have any questions.

BY: 
Robert Kahn
President

COPIES TO:

j:/rkttables/RK10825TB.xls
JN: 2416-2015-01
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, P.E.
Principal

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

Attachments
### TABLE 1
Trip Generation Rates\(^1\)

<table>
<thead>
<tr>
<th>Land Use</th>
<th>ITE Code</th>
<th>Units(^2)</th>
<th>AM</th>
<th>PM</th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>In</td>
<td>Out</td>
<td>Total</td>
</tr>
<tr>
<td>Single Family Homes</td>
<td>210</td>
<td>DU</td>
<td>0.19</td>
<td>0.56</td>
<td>0.75</td>
</tr>
<tr>
<td>Church</td>
<td>560</td>
<td>TSF</td>
<td>0.35</td>
<td>0.21</td>
<td>0.56</td>
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<tr>
<td>Daycare Center</td>
<td>565</td>
<td>TSF</td>
<td>6.46</td>
<td>5.72</td>
<td>12.18</td>
</tr>
</tbody>
</table>

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

\(^2\) DU = Dwelling Units
    TSF = Thousand Square Feet
TABLE 2
Project Trip Generation

<table>
<thead>
<tr>
<th>Existing Land Use</th>
<th>ITE Code</th>
<th>Quantity</th>
<th>Units¹</th>
<th>Peak Hour</th>
<th>AM</th>
<th>PM</th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>In</td>
<td>Out</td>
<td>Total</td>
<td>In</td>
</tr>
<tr>
<td>Church</td>
<td>560</td>
<td>17.709</td>
<td>TSF</td>
<td>6</td>
<td>4</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Daycare Center</td>
<td>565</td>
<td>10.000</td>
<td>TSF</td>
<td>65</td>
<td>57</td>
<td>122</td>
<td>58</td>
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<tr>
<td><strong>Existing Land Use Total</strong></td>
<td></td>
<td></td>
<td></td>
<td>71</td>
<td>61</td>
<td>132</td>
<td>63</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proposed Land Use</th>
<th>ITE Code</th>
<th>Quantity</th>
<th>Units¹</th>
<th>Peak Hour</th>
<th>AM</th>
<th>PM</th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>In</td>
<td>Out</td>
<td>Total</td>
<td>In</td>
</tr>
<tr>
<td>Single Family Residential</td>
<td>210</td>
<td>40</td>
<td>DU</td>
<td>8</td>
<td>23</td>
<td>31</td>
<td>25</td>
</tr>
</tbody>
</table>

¹ DU = Dwelling Units
TSF = Thousand Square Feet
TABLE 3
Project Trip Generation Comparison

<table>
<thead>
<tr>
<th>Comparison: Existing Land Use vs. Proposed Land Use</th>
<th>Peak Hour</th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>AM</td>
<td>PM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>In</td>
<td>Out</td>
<td>Total</td>
<td>In</td>
<td>Out</td>
</tr>
<tr>
<td>Existing Land Use (Church &amp; Preschool)</td>
<td>71</td>
<td>61</td>
<td>132</td>
<td>63</td>
<td>70</td>
</tr>
<tr>
<td>Proposed Land Use (Single Family Residential)</td>
<td>8</td>
<td>23</td>
<td>31</td>
<td>25</td>
<td>15</td>
</tr>
<tr>
<td>Difference</td>
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<td>-38</td>
<td>-101</td>
<td>-38</td>
<td>-55</td>
</tr>
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