

## WHERE EXPERIENCE AND PASSION MEET

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To: City of Norwalk Planning Department  
From: Alex J. Garber; Sina Salehipour, EPD Solutions Inc  
Date: 8/28/2024  
Site: 14830 Carmenita Road, City of Norwalk  
Subject: Vehicle Miles Traveled (VMT) Screening Analysis

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This technical memorandum provides an evaluation of the proposed industrial warehouse building (Project) located at 14830 Carmenita Road, in the City of Norwalk. The purpose of this analysis is to determine whether a Vehicle Miles Traveled (VMT) would be required for the Project. The Project site comprises of a single parcel encompassing approximately 7.03 acres. The parcel is identified as Assessor's Parcel Number 8069-002-085. The site is currently developed with two existing multi-tenant industrial warehouse buildings that total 89,870 square feet (SF). An updated site plan for the Project reflects a reduced proposed square footage of 138,972 SF. The proposed Project would demolish the existing building and redevelop the site with approximately 138,972 (SF) speculative general light industrial (GLI) and warehouse with a single tenant operation. This includes 3,715 SF of ground floor office space, and 3,030 SF of mezzanine space. The Project would provide the total of 141 stalls for auto parking, including 110 standard stalls, 6 accessible stalls, and 25 electric and future electric vehicle stalls. For this analysis, the previously provided site plan of 144,901 SF will be utilized, providing a conservative analysis for the assessment. The Project site plan is shown in Figure 1.

Since the City of Norwalk has not formally adopted VMT guidelines, this memo will evaluate the Project using the County of Los Angeles Traffic Impact Analysis Guidelines – (July 2020) for Vehicle Miles Traveled Assessment.

### Project Trip Generation

The Project trip generation was prepared using trip rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11th Edition (2021). The existing industrial warehouse was analyzed using Warehousing (ITE Land Use Code 150). Of the proposed Project, 80% is designated for warehousing (ITE Land Use Code 150), and the remaining 20% is allocated for GLI (ITE Land Use Code 110). ITE collaborated with the South Coast Air Quality Management District (SCAQMD) to analyze High Cube warehouses. Given that the warehouse functionality in terms of vehicle splits is similar to the type of uses analyzed in their study, the vehicle splits from SCAQMD were deemed most appropriate for this analysis. The vehicle splits<sup>1</sup> data released in 2014 was utilized and is provided in Attachment A. This data was subsequently incorporated into the High-Cube Warehouse Vehicle Trip Generation Analysis study prepared by ITE in October 2016<sup>2</sup>.

The SCAQMD vehicle splits without cold storage were applied to both the existing warehouse and GLI portion of the proposed Project. The SCAQMD with cold storage vehicle splits were applied to the warehouse portion of the proposed Project, as the Project proposes 20% cold storage.

GLI has a higher trip rate than manufacturing (Land Use Code 140); however, is less truck intensive based on the ITE passenger vehicle/truck split. As this analysis utilized the SCAQMD vehicle splits instead of the ITE

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<sup>1</sup> South Coast Air Quality Management District (SCAQMD) Warehouse Truck Trip Data Study (2014). Referenced at <https://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/finalswg071714.pdf?sfvrsn=2>

<sup>2</sup> High-Cube Warehouse Vehicle Trip Generation Analysis (2016). Referenced at <http://newpromisefarms.com/files/2018/07/HighCube-Warehouse-Oct-2016-Study-ITE.pdf>

vehicle splits, the GLI portion of the building would allow for light industrial uses and heavy industrial uses, such as manufacturing.

As shown in Table 1, the existing site generates a total of 154 daily trips (17 in the AM peak hour and 17 in the PM peak hour). The proposed Project would generate a total of 339 daily trips (42 in the AM peak hour, 40 PM in the PM peak hour). The net total trips with the proposed Project would be 185 daily trips (26 in the AM peak hour and 23 in the PM peak hour). Regarding passenger vehicles, the existing site generates 112 daily trips, and the proposed Project is anticipated to produce 211 daily trips. The net daily trips with the Project would be 99.

### **Onsite Circulation**

The Project includes two driveways: one located on Excelsior Drive and another on Carmenita Road. Both driveways are designated for use by both autos and trucks, providing full access. The majority of daily trips are expected to use the driveway on Excelsior Drive, accounting for 95% of the traffic, shown in Figure 2.

In terms of Project truck trips, 14 trips during the AM peak hour (12 inbound and 2 outbound) and 13 trips during the PM peak hour (2 inbound and 11 outbound) would use the driveway on Excelsior Drive. Additionally, 1 trip during the AM peak hour (1 inbound and 0 outbound) and 1 trip during the PM peak hour (0 inbound and 1 outbound) would use the driveway on Carmenita Road. These details are illustrated in Figure 3.

In terms of Project passenger trips, 26 trips during the AM peak hour (22 inbound and 4 outbound) and 25 trips during the PM peak hour (4 inbound and 21 outbound) would use the driveway on Excelsior Drive. Additionally, 1 trip during the AM peak hour (1 inbound and 0 trip outbound) and 1 trip during the PM peak hour (0 inbound and 1 trip outbound) would use the driveway on Carmenita Road. These details are shown in Figure 4.

A Level of Service (LOS) memo<sup>3</sup> was prepared for the Project to analyze the potential need for a Traffic Impact Analysis (TIA). A TIA would analyze and, if necessary, propose improvements necessary for the roadway network to accommodate the addition of the Project trips. While LOS is no longer an environmental impact in regard to the California Environmental Quality Act (CEQA), the emissions and physical environmental changes anticipated by the construction of improvements recommended in a TIA would be required to be analyzed in the CEQA document.

As stated in the LOS memo prepared for the Project is screened out of a full Traffic Impact Analysis (TIA) study based on the trip generation, and no major improvements are anticipated for the existing driveways. Therefore, no roadway improvements are anticipated for the proposed Project.

### **Vehicle Miles Traveled Screening**

Senate Bill (SB) 743 was signed by Governor Brown in 2013 and required the Governor's Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to LOS for evaluating Transportation impacts, aiming to promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks and a diversity of land uses. In response, Section 15064.3 - Determining the Significance of Transportation Impacts, was added to the CEQA Guidelines which states that Vehicle Miles Traveled (VMT) is the most appropriate measure of transportation impacts and shall apply statewide beginning on July 1, 2020.

As the City of Norwalk has not adopted VMT guidelines, the LA County TIA guidelines were utilized for this Project. The LA County TIA guidelines include screening thresholds to identify if a project would be considered

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<sup>3</sup> Level of Service (LOS) Screening Analysis, EPD Solutions Inc (2024)

to have a less-than significant impact on VMT and therefore could be screened out from further VMT analysis. Based on the guidelines, projects exempt from the VMT analysis are also exempt from preparing a Level of Service (LOS) analysis.

LA County TIA guidelines Section 3.1.2.1 – Non-Retail project Trip Generation Screening Criteria, as stated in the LA County TIA guidelines, would apply to this Project:

*“If the answer is no to the question below, further analysis is not required, and a less than significant determination can be made.*

- *Does the development project generate a net increase of 110 or more daily vehicle<sup>4</sup> trips?”*

*A project’s daily vehicle trip generation should be estimated using the most recent edition of the Institute of Transportation Engineers (ITE) Trip Generation Manual. If the project proposed land use is not listed in the ITE Trip Generation Manual, please submit a trip generation study to Public Works for review and approval”.*

Based on Table 1 discussed previously, the Project would generate net 99 daily passenger trips. Based on the County's threshold of 110 or more daily trips, the Project would screen out of requiring a full VMT analysis.

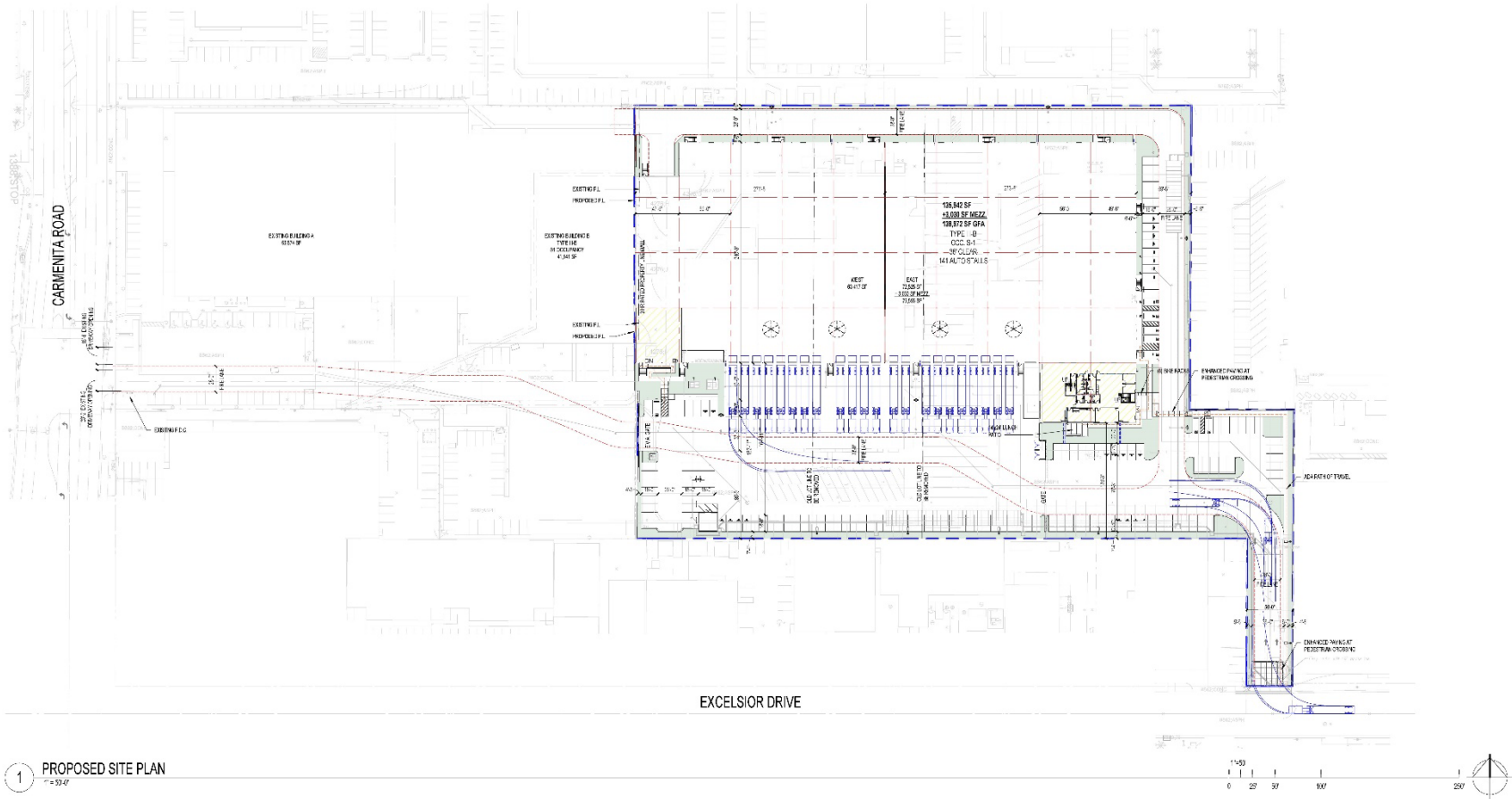
## Summary

The Project was assessed using the LA County TIA Guidelines thresholds to determine whether it would necessitate a VMT analysis. The Project is expected to generate 99 net new daily passenger trips. The Project meets the Section 3.1.2.1 – Non-Retail Project Trip Generation Screening Criteria, as the Project results in a net increase of fewer than 110 daily vehicle trips. Therefore, the Project would result in a less than significant VMT impact, and no further analysis would be required.

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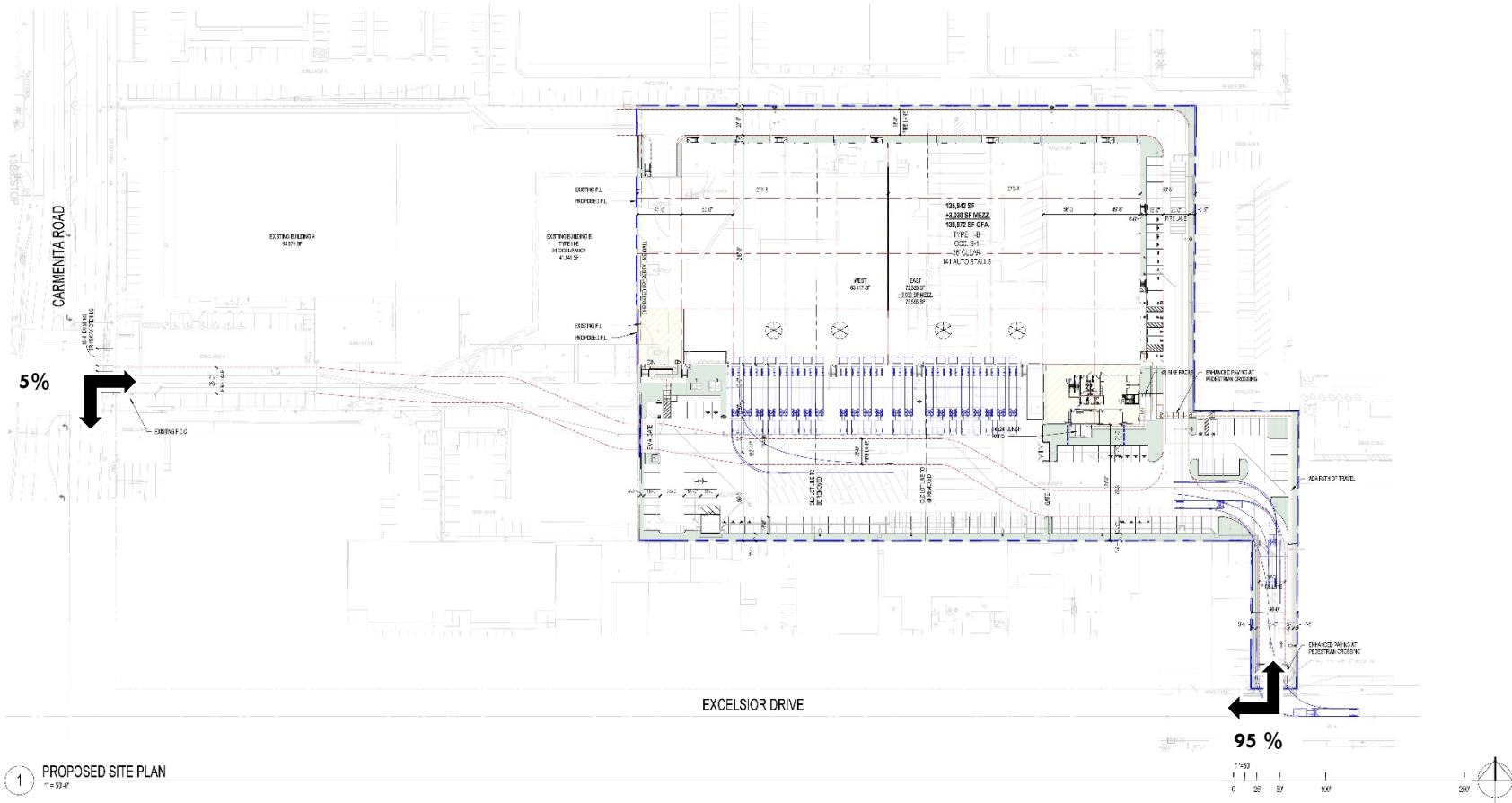
<sup>4</sup> Based on the guidelines, the term vehicle refers to on-road passenger vehicles, specifically cars and light trucks.

Figure 1: Project Site Plan



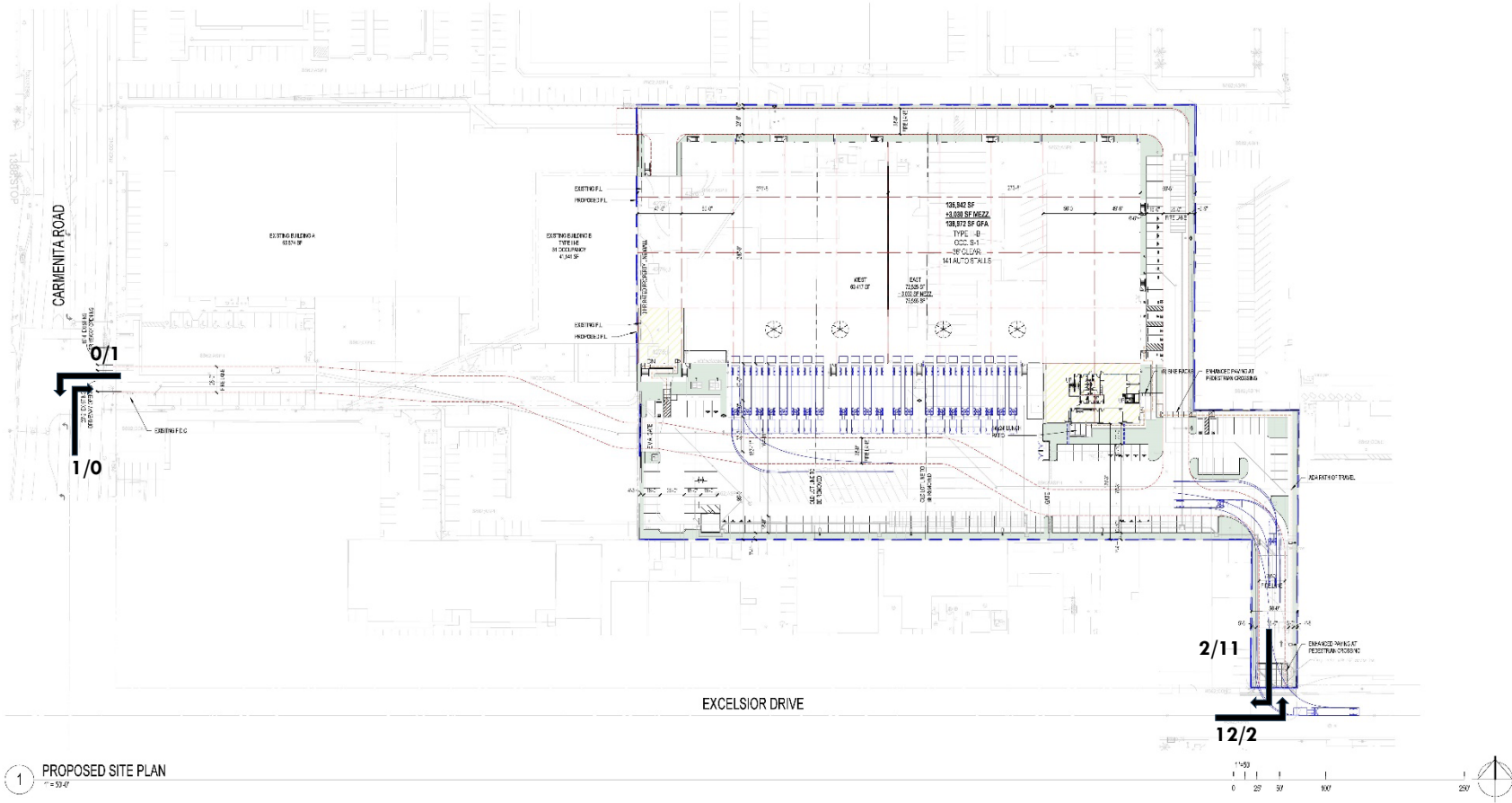
Source: RGA

Figure 2: Project Site Plan (Trip Distribution)



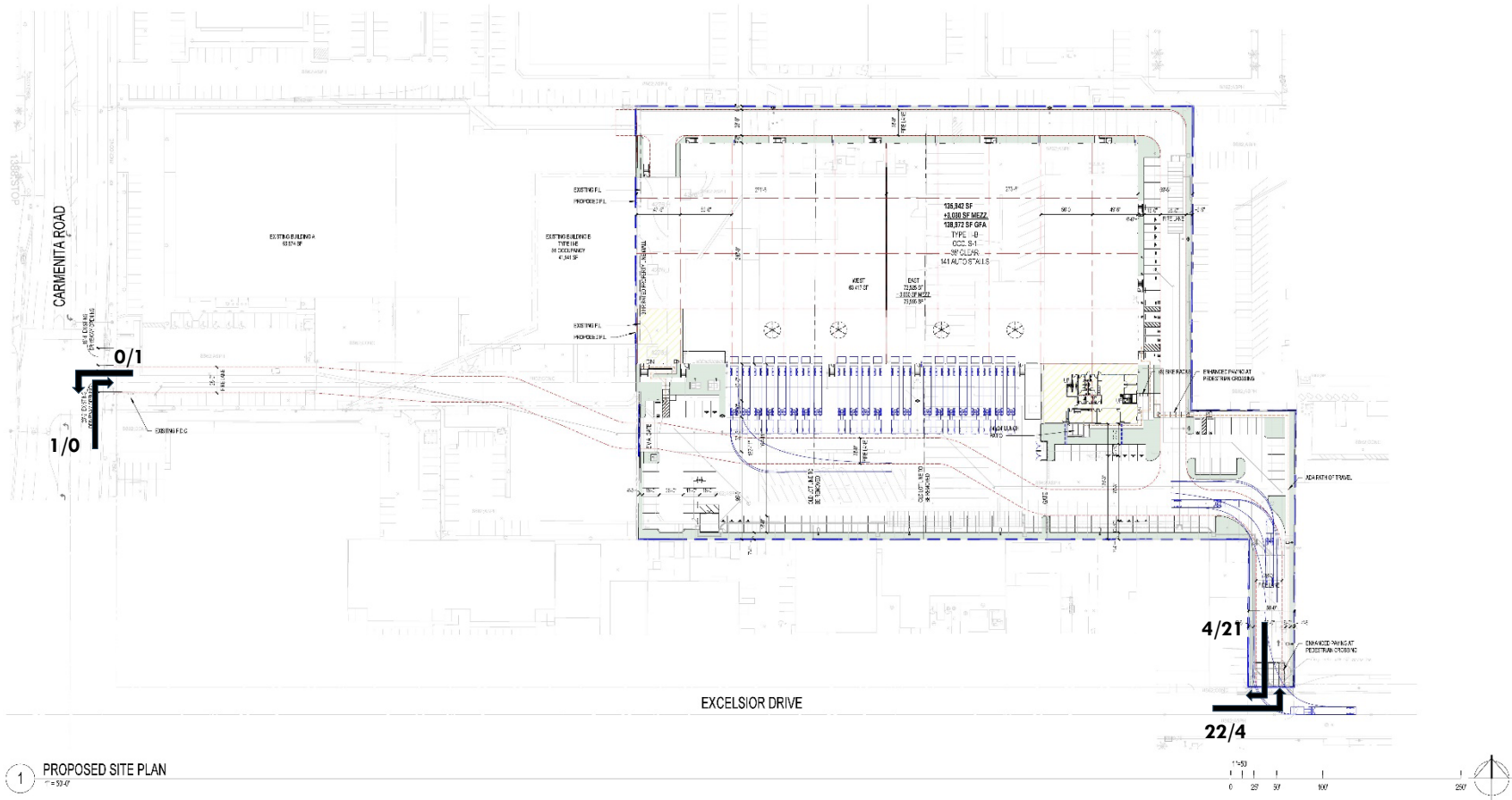
Source: RGA

Figure 3: Project Site Plan (Project Truck Trip Assignments – Peak Hour)



Source: RGA

Figure 4: Project Site Plan (Project Passenger Trip Assignments – Peak Hour)



1 PROPOSED SITE PLAN  
7-31-07

Legend:

 #AM Trips/#PM Trips

Source: RGA

**Table 1: Project Trip Generation**

Land Use	Units	Daily	AM Peak Hour			PM Peak Hour			
			In	Out	Total	In	Out	Total	
<b>Trip Rates</b>									
150 - Warehousing <sup>1</sup>	TSF	1.71	0.13	0.04	0.17	0.05	0.13	0.18	
110 - General Light Industrial <sup>2</sup>	TSF	4.87	0.65	0.09	0.74	0.09	0.56	0.65	
<b>Existing Project Trip Generation</b>									
Existing Warehousing <sup>1</sup>	89.870 TSF	154	12	4	16	5	12	17	
<b>Vehicle Mix<sup>3</sup></b>		<b>Percent</b>							
Passenger Vehicles	72.50%	112	9	3	12	4	8	12	
2-Axle Trucks	4.60%	7	1	0	1	0	1	1	
3-Axle Trucks	5.70%	9	1	0	1	0	1	1	
4+-Axle Trucks	17.20%	26	2	1	3	1	2	3	
	100%	154	13	4	17	5	12	17	
<b>Proposed Project Trip Generation</b>									
Total Building Square footage	144.901								
Proposed General Light Industrial <sup>2</sup>	28.9802 TSF	141	19	3	22	3	16	19	
<b>Vehicle Mix<sup>3</sup></b>		<b>Percent</b>							
Passenger Vehicles	72.50%	102	14	2	16	2	12	14	
2-Axle Trucks	4.60%	6	1	0	1	0	1	1	
3-Axle Trucks	5.70%	8	1	0	1	1	0	1	
4+-Axle Trucks	17.20%	24	3	1	4	0	3	3	
	1.0	140	19	3	22	3	16	19	
Proposed Warehousing <sup>1</sup>	115.921 TSF	198	15	5	20	6	15	21	
<b>Vehicle Mix<sup>4</sup></b>		<b>Percent</b>							
Passenger Vehicles	55.30%	109	8	3	11	4	8	12	
2-Axle Trucks	15.50%	31	2	1	3	1	2	3	
3-Axle Trucks	4.90%	10	1	0	1	0	1	1	
4+-Axle Trucks	24.30%	48	4	1	5	1	4	5	
	100%	198	15	5	20	6	15	21	
<b>Total New Trip Generation</b>			339	34	8	42	9	31	40
<b>Total New Passenger Trip Generation</b>			211	22	5	27	6	20	26
<b>Net New Passenger Trip Generation</b>			99	13	2	15	2	12	14
<b>Net New Trip Generation</b>			185	22	4	26	4	19	23

TSF = Thousand Square Feet

PCE = Passenger Car Equivalent

<sup>1</sup> Trip rates from the Institute of Transportation Engineers, *Trip Generation Manual, 11th Edition, 2021*. Land Use Code 150 - Warehousing.<sup>2</sup> Trip rates from the Institute of Transportation Engineers, *Trip Generation Manual, 11th Edition, 2021*. Land Use Code 110 - General Light Industrial.<sup>3</sup> Vehicle Mix from the Warehouse Truck Trip Study Data Results and Usage, July 17, 2014. Without Cold Storage<sup>4</sup> Vehicle Mix from the Warehouse Truck Trip Study Data Results and Usage, July 17, 2014. With Cold Storage



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ATTACHMENT A – WAREHOUSE TRUCK TRIP STUDY DATA (SCAQMD)

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**BACK UP SLIDES**

# **Warehouse Truck Trip Study Data Results and Usage**

Stakeholder Working Group  
July 17, 2014



*Cleaning the Air That We Breathe...*

# SCAQMD Warehouse Truck Study – Peaking Factor from Business Survey

- Business Survey Question
  - *“How much more trucking occurs at your facility during peak months compared to average months?”*
- Response
  - 30 high cube warehouse facilities responded

Statistical Measure	Percent Increase
Minimum	5%
Maximum	100%
Overall Average	27%
<b>Cold Storage Average (N=14)</b>	<b>20%</b>
<b>Non Cold Storage Average (N=16)</b>	<b>33%</b>

# SCAQMD Warehouse Truck Study Truck Fleet Mix

Grouping	All Trucks	Actual %		
		2-Axle	3-Axle	4+ Axle
SCAQMD Composite	31.0%	6.8%	5.5%	18.7%
With Cold Storage	44.7%	15.5%	4.9%	24.3%
Without Cold Storage	27.5%	4.6%	5.7%	17.2%
Fontana Study	20.4%	3.5%	4.6%	12.3%

Grouping	All Trucks	Normalized %		
		2-Axle	3-Axle	4+ Axle
SCAQMD Composite	31.0%	21.9%	17.7%	60.3%
With Cold Storage	44.7%	34.7%	11.0%	54.4%
Without Cold Storage	27.5%	16.7%	20.7%	62.5%
Fontana Study	20.4%	17.2%	22.5%	60.3%