

CITY OF LOS ANGELES

INTER-DEPARTMENTAL CORRESPONDENCE

15134 S Vermont Ave DOT Case No. HRB19-108453

Date:

July 21, 2020

To:

Luciralia Ibarra, Senior City Planner

Department of City Planning

From:

Hamed Sandoghdar, Transportation Engineer

Department of Transportation

Subject:

REVISED TRANSPORTATION IMPACT ASSESSMENT FOR THE PROPOSED INDUSTRIAL

USE PROJECT AT 15134 SOUTH VERMONT AVENUE

On August 2, 2017, the Department of Transportation (DOT) issued a traffic assessment report to the Department of City Planning for the high cube warehouse at 15134 South Vermont Avenue, which was subject to a transportation analysis dated May 8, 2017 prepared by Kunzman Associates, Inc. On January 19, 2018, DOT issued a revised assessment letter for several alternative scenarios for the same development project. However, subsequent to the releasing of these reports, on July 30, 2019, pursuant to Senate Bill (SB) 743 and the recent changes to Section 15064.3 of the State's California Environmental Quality Act (CEQA) Guidelines, the City of Los Angeles adopted vehicle miles traveled (VMT) as the criteria by which to determine transportation impacts under CEQA. Therefore, in response to this action subsequent revisions to the analysis methodology, the applicant submitted a VMT analysis, prepared by Linscott, Law & Greenspan, Engineers (LLG) dated May 14, 2020. Please replace both previous DOT assessment letters dated August 2, 2017 and January 19, 2018, in their entirety, with this report which addresses the totality of the transportation analysis. A copy of both previous assessment letters are attached for your information.

The DOT has reviewed the transportation analysis prepared by LLG, dated May 14, 2020, with a subsequent revision on July 2, 2020 for the proposed project located at 15134 South Vermont Avenue. In compliance with SB 743 and the CEQA, a VMT analysis is required to identify the project's ability to promote the reduction of green-house gas emissions, access to diverse land uses, and the development of multi-modal networks. The significance of a project's impact in this regard is measured against the VMT thresholds established in DOT's Transportation Assessment Guidelines (TAG), as described below. The study also includes a voluntary LOS analysis for informational purposes only.

DISCUSSION AND FINDINGS

A. Project Description

The project proposes to construct a single story structure to provide a total of 340,298 square feet of industrial space located at 15134 Vermont Avenue. The existing site is currently vacant and is generally bounded by Redondo Beach Boulevard to the south, Orchard Avenue to the east, railroad tracks to the north and Vermont Avenue to the west. Access to the site will be provided via a driveway on Vermont Avenue, a driveway on Redondo Beach Boulevard and two driveways on Orchard Avenue as illustrated in (Figure 2-2) Attachment A. The project is expected to be completed by 2022.

B. CEQA Screening Threshold

Prior to accounting for trip reductions resulting from the application of Transportation Demand Management (TDM) Strategies, a trip generation analysis was conducted to determine if the project would exceed 250 daily vehicle trips screening threshold. Using the City of Los Angeles VMT Calculator tool, which draws upon trip rate estimates published in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition as well as applying trip generation adjustments when applicable, based on sociodemographic data and the built environment factors of the project's surroundings, it was determined that the project does exceed the net 250 daily vehicle trips threshold. The VMT calculator version 1.2 was the latest VMT calculator available at the time the May 14, 2020 analysis was submitted and accepted by DOT. A copy of the VMT calculator screening page, with the corresponding net daily trips estimate, is provided as Attachment B to this report.

C. Transportation Impacts

On July 30, 2019, pursuant to SB 743 and the recent changes to Section 15064.3 of the State's CEQA Guidelines, the City of Los Angeles adopted VMT as a criteria in determining transportation impacts under CEQA. The new DOT TAG provide instructions on preparing transportation assessments for land use proposals and defines the significant impact thresholds.

The DOT VMT Calculator tool measures project impact in terms of Household VMT per Capita, and Work VMT per Employee. DOT identified distinct thresholds for significant VMT impacts for each of the seven Area Planning Commission (APC) areas in the City. For the Harbor APC area, in which the project is located, the following thresholds have been established:

Household VMT per Capita: 9.2
 Work VMT per Employee: 12.3

As cited in the VMT Analysis report, prepared by LLG, the proposed project is projected to have a Household VMT per capita of 0.0 since the project does not have a residential component and a Work VMT per employee of 9.7. Therefore, it is concluded that implementation of the Project would not result in a significant Household or Work VMT impact. A copy of the VMT Calculator summary reports is provided as **Attachment C** that to this report.

D. Access and Circulation

During the preparation of the new CEQA guidelines, the State's Office of Planning and Research stressed that lead agencies can continue to apply traditional operational analysis requirements to inform land use decisions provided that such analyses were outside of the CEQA process. The authority for requiring non-CEQA transportation analysis and requiring improvements to address potential circulation deficiencies, lies in the City of Los Angeles' Site Plan Review authority as established in Section 16.05 of the Los Angeles Municipal Code (LAMC). Therefore, DOT continues to require and review a project's site access, circulation, and operational plan to determine if any access enhancements, transit amenities, intersection improvements, traffic signal upgrades, neighborhood traffic calming, or other improvements are needed. In accordance with this authority, the project has completed a circulation analysis using a "level of service" screening methodology that indicates that the trips generated by the proposed development will likely result in adverse circulation conditions at several locations. DOT has reviewed this analysis and determined that it

adequately discloses operational concerns. A copy of the circulation analysis table that summarizes these potential deficiencies is provided as (Table 8-1) **Attachment D** to this report.

PROJECT REQUIREMENTS

A. Corrective Measures (Non-CEQA Analysis)

In the transportation analysis dated May 14, 2020 by LLG, the analysis included a review of current and potential future operational deficiencies that may result from the project. To address these deficiencies, the applicant should be required to implement the following corrective measures.

1. Transportation Demand Management (TDM) Plan

DOT recommends that the project prepare and submit a draft TDM program to DOT for review <u>prior</u> to the issuance of the first building permit for this project and a final TDM program approved by DOT is required <u>prior</u> to the issuance of the first certificate of occupancy for the project. As recommended by the May 14, 2020 transportation analysis, the TDM program could include, but is not limited to the following:

- An on-site Transportation Information Center (TIC) where employees, and visitors
 can obtain information regarding public transit, ridesharing, vanpool providers,
 bicycle facilities, and bicycle safety;
- A Transportation Coordinator responsible for implementing, maintaining, and monitoring the TDM Program;
- Carpool/Rideshare Matching Program which would provide rideshare matching services and preferential parking for commercial employees commuting to work in employer-registered carpools;
- Transportation Subsidy which would offer discount transit passes to employees who do not purchase monthly automobile parking at the project site;
- Unbundled parking from the commercial leasing cost;
- Convenient and secure bicycle storage within a bicycle locker, an attended cage, or a secure parking room;
- On-site lockers for employees who bicycle or use another active means of getting to work;
- Make a one-time fixed-fee contribution of \$50,000 prior to the issuance of the first certificate of occupancy for the project to the City's Bicycle Plan Trust Fund to implement bicycle improvements in the proposed project area;
- In order to support LADOT's Mobility Hub Program, the developer shall make a
 onetime contribution of \$50,000 prior to the issuance of the first certificate of
 occupancy.
- A Covenant and Agreement to ensure that the TDM program will be maintained.

Orchard Avenue and Redondo Beach Boulevard

The applicant shall restripe the southbound approach of the Orchard Avenue/Redondo Beach Boulevard intersection to provide one left-turn lane and one right-turn lane.

3. <u>Traffic Signal Upgrades</u>

In order to upgrade the traffic signal systems in the project study area, the developer is

proposing to make a financial contribution of \$100,000 to the Department of Transportation ATSAC fund prior to issuance of the first certificate of occupancy. The traffic signal upgrades may include new traffic signal controllers, CCTV Cameras, roadway system loops.

B. Additional Requirements and Considerations

To comply with transportation and mobility goals and provisions of adopted City plans and ordinances, the applicant should be required to implement the following:

1. Parking Requirements

Parking for vehicles and bicycles will be provided onsite. The applicant should check with the Department of Building and Safety on the number of Code-required parking spaces needed for this project.

2. Highway Dedication and Street Widening Requirements

In order to mitigate potential access and circulation impacts, the applicant may be required to make highway dedications and improvements. The applicant shall consult the Bureau of Engineering (BOE) for any highway dedication or street widening requirements. These requirements must be guaranteed before the issuance of any building permit through the B-permit process of the BOE. They must be constructed and completed prior to the issuance of any certificate of occupancy to the satisfaction of DOT and BOE.

3. Project Access and Circulation

The proposed site plan is acceptable to DOT; however, review of the study does not constitute approval of the driveway dimensions and internal circulation schemes. Those require separate review and approval and should be coordinated with DOT's West LA/Coastal Development Review Section (7166 W Manchester Ave, @ 213-485-1062). In order to minimize potential building design changes, the applicant should contact DOT for driveway width and internal circulation requirements so that such traffic flow considerations are designed and incorporated early into the building and parking layout plans. All new driveways should be Case 2 driveways and any security gates should be a minimum 20 feet from the property line. All truck loading and unloading should take place on site with no vehicles backing into the project from public streets via any of the project driveways.

4. Worksite Traffic Control Requirements

DOT recommends that a construction work site traffic control plan be submitted to DOT's Citywide Temporary Traffic Control Section or Permit Plan Review Section for review and approval prior to the start of any construction work. Refer to http://ladot.lacity.org/what-we-do/plan-review to determine which section to coordinate review of the work site traffic control plan. The plan should show the location of any roadway or sidewalk closures, traffic detours, haul routes, hours of operation, protective devices, warning signs and access to abutting properties. DOT also recommends that all construction related truck traffic be restricted to off-peak hours to the extent feasible.

Development Review Fees

Section 19.15 of the LAMC identifies specific fees for traffic study review, condition

clearance, and permit issuance. The applicant shall comply with any applicable fees per this ordinance.

If you have any questions, please contact me or Pedro Ayala at (213) 485-1062.

Attachments

c: Jeffrey J. Khau, DCP
Jacob Haik, Aksel Palacios, Council District No. 15
Crystal Killian, DOT
Crystal Lee, BOE
Alfred Ying, Linscott, Law & Greenspan, Engineers

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-9-

SOURCE: RGA

NOT TO SCALE

FIGURE 2-2 SITE PLAN

LINSCOTT, LAW & GREENSPAN, engineers

PROLOGIS VERMONT AVENUE AND REDONDO BEACH BOULEVARD INDUSTRIAL PROJECT

CITY OF LOS ANGELES VMT CALCULATOR Version 1.2



Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?

Existing Land Use

Project: Prologis Vermont Avenue and RBB Industrial Project Scenario: Proposed Project 15116 S VERMONT AVE, 90247 Profice Coast ANAMEIM POTH 9899 25TH

If the project is replacing an existing number of residential units with a smaller number of residential units, is the proposed project located within one-half mile of a fixed-rail or fixed-guideway transit station?

AND SHAPE OF THE SHAPE	
• Yes	• No
- 163	

Land Use Type Value Unit Housing | Single Family DU Click here to add a single custom land use type (will be included in the above list) **Proposed Project Land Use** Land Use Type Unit Industrial | Light Industrial 340.298 ksf Industrial | Light Industrial 340,298 Click here to add a single custom land use type (will be included in the above list)

Project Screening Summary

Existing Land Use	Propos Proje	
0	1,97	5
Daily Vehicle Trips	Daily Vehicl	e Trips
0	12,80	00
Daily VMT	Daily VI	MT
Tier 1 Scr	reening Criteria	
Project will have less res to existing residential u mile of a fixed-rail statio	nits & is within one-h	
	kronjonski con te no jego sady sjemane se magaganje pojeme ne v za mojeje ga ga	
Tier 2 Scr	reening Criteria	
		1,975 Net Daily Trips
Tier 2 Scr The net increase in daily The net increase in daily	y trips < 250 trips	
The net increase in daily	y trips < 250 trips y VMT ≤ 0 onsists of only retail	Net Daily Trip



CITY OF LOS ANGELES VMT CALCULATOR Version 1.2



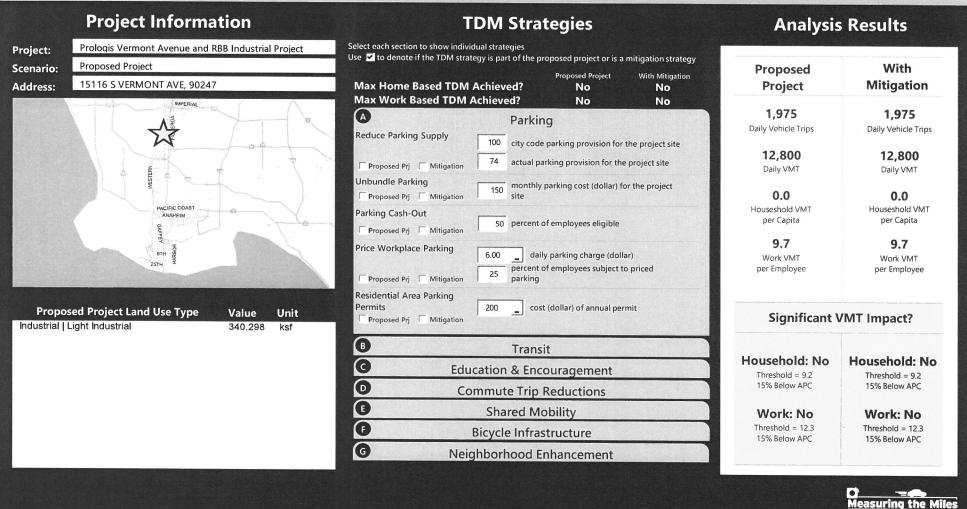


Table 8-1 CITY OF LOS ANGELES SUMMARY OF VOLUME TO CAPACITY RATIOS AND LEVELS OF SERVICE WEEKDAY AM AND PM PEAK HOURS

			[1	1	r		[2]		[3	1			[4]				[5]	
			11	,	YEAR	2019	1-1		YEAR		YEAR	2022	1		YEAR	2022	T	
		1 1	YEAR	2019	EXISTING		CHANGE	SIGNIF.	FUTUR		FUTURE		CHANGE	SIGNIF.	W/ PRO	DJECT	CHANGE	
		PEAK	EXIST		PROJ		V/C	IMPACT	PROJ		PROJ		V/C	IMPACT	MITIG	ATION	V/C	
NO.	INTERSECTION	HOUR	V/C	LOS	V/C	LOS	[(2)-(1)]	[8]	V/C	LOS	V/C	LOS	[(4)-(3)]	[a]	V/C	LOS	[(5)-(3)]	MITIGATED
		oun	110	200	1770	500	1(=/-(1)]	1-1		DOU			10707					
3	Vermont Avenue/	AM	0.713	C	0.719	С	0.006	No	0.759	C	0.765	C	0 006	No	0.765	C	0.006	
	Rosecrans Avenue	PM	0.761	c	0.767	C	0.006	No	0.808	D	0.812	D	0.004	No	0.812	D	0.004	-
			0.701		0.707		0.000	140	0,000	D	0.012		0.001					
4	Vermont Avenue/	AM	0.425	Α	0.429	Α	0.004	No	0.452	Α	0.458	A	0.006	No	0.458	Α	0.006	
	149th Street	PM	0.331	A	0.339	A	0.008	No	0.358	A	0.366	A	0.008	No	0.366	A	0.008	_
					0.357		0.000	1.0	0.550						1000			
5	Vermont Avenue/	AM	0.566	Α	0.571	Α	0.005	No	0.598	A	0.604	В	0.006	No	0,604	В	0.006	_
	Marine Avenue	PM	0.564	A	0.565	Α	0.001	No	0.592	Α	0.593	Α	0.001	No	0.593	A	0.001	-
				120								_				<u> </u>		-
6	Vermont Avenue/	AM	0.801	D	0.837	D	0.036	Yes	0.851	D	0.887	D	0.036	Yes	0.887	D	0.036	No
	Redondo Beach Boulevard	PM	0.849	D	0.867	D	810.0	No	0.919	E	0.936	E	0.017	Yes	0.936	E	0.017	No
\vdash																	-	
7	Vermont Avenue/	AM	0.645	В	0.652	В	0.007	No	0.706	С	0.713	С	0.007	No	0.713	С	0.007	
1 1	161st Street-Alondra Boulevard	PM	0.698	В	0.699	В	0.007	No	0.700	C	0.713	C	0.007	No	0.713	C	0.007	-
	TOTAL SUCCE-ALUBRIE BOURVALU	I M	0,038	ь	0,099	ь	0.001	140	0.743	C	0.747	C	0.002	NO	0.747	C	0.002	
8	Orchard Avenue/	AM	0.409	Α	0.511	A	0.102	No	0.434	Α	0.536	A	0.102	No	0.536	A	0.102	****
	Redondo Beach Boulevard	PM	0.473	A	0.621	В	0.148	No	0.507	A	0.655	В	0.148	No	0,655	В	0.148	mank)
														3755	500000000000			
9	I-110 Freeway SB Ramps/	AM	0.939	E	0.984	E	0.045	Yes	1.023	F	1.067	F	0.044	Yes	1.067	F	0.044	No
	Redondo Beach Boulevard	PM	0.850	D	0.889	D	0.039	Yes	0.965	E	1.005	F	0.040	Yes	1.005	F	0.040	No
_		-			-					-							-	
10	1-110 Freeway NB Ramps/	AM	0.798	С	0.864	D	0.066	Yes	0.895	D	0.960	Е	0.065	Yes	0,960	E	0.065	No
10	Redondo Beach Boulevard	PM	0.885	D	0.900	D	0.015	No	0.983	E	0.999	E	0.016	Yes	0.999	E		
	Ecoung Dearn Doniesare	1 100	0.003	2	0.700		0.015	110	0.763	L	0.777	L	0.010	1 03	0,999	E	0.016	No
111	Figueroa Street/	AM	0.926	E	0.934	E	0.008	No	1.045	F	1.053	F	0.008	No	1.053	F	0.008	***
1 1	Redondo Beach Boulevard	PM	0.886	D	0.894	D	0.008	No	1.015	F	1.022	F	0.007	No	1.022	F	0.007	***
	4																1	

[a] According to LADOT's "Transportation Impact Study Guidelines," December 2016, a transportation impact on an intersection shall be deemed significant in accordance with the following table:

Final v/c LOS >0.701 - 0.800 C >0.801 - 0.900 D Project Related Increase in v/e equal to or greater than 0.040 equal to or greater than 0.020

>0.901

D E/F

equal to or greater than 0.010

CITY OF LOS ANGELES

INTER-DEPARTMENTAL MEMORANDUM

15134 S. Vermont Avenue DOT Case No. HRB17-10522 4

DATE:

August 2, 2017

TO:

Karen Hoo, City Planner

Department of City Planning

FROM:

Hamed Sandoghdar, Transportation Engineer

Department of Transportation

SUBJECT:

TRAFFIC IMPACT ASSESSMENT FOR THE PROPOSED HIGH CUBE WAREHOUSE PROJECT

TO BE LOCATED AT 15134 SOUTH VERMONT AVENUE

The Department of Transportation (DOT) has completed the traffic assessment of the proposed high cube warehouse facility, to be located at 15134 South Vermont Avenue. This traffic assessment is based on the traffic impact analysis report prepared by Kunzman Associate, Inc., submitted May 8, 2017. Based on DOT's traffic impact criteria, the study included the detailed analysis of eight (8) signalized intersections. After a review of the pertinent data, DOT has determined that the traffic study adequately describes the project-related impacts of the proposed development.

PROJECT DESCRIPTION

The project proposes to construct a building consisting of 446,402 square feet of high cube warehouse on an existing 16 acre vacant site in the Harbor-Gateway area of City of Los Angeles. The project is generally bounded by Vermont Avenue to the west, West Redondo Beach Boulevard to the south, Orchard Avenue to the east and the Union Pacific Railroad line to the north. Access for the project is proposed via two new driveways located on Vermont Avenue, two new driveways on Orchard Avenue and one driveway on West Redondo Beach Boulevard. The project is anticipated to be completed by the year 2019.

DISCUSSION AND FINDINGS

Trip Generation

The proposed project is estimated to generate a net increase of 1238 daily trips, a net increase of 71 A.M. peak hour trips, and a net increase of 84 P.M. peak hour trips. The trip generation rates are based upon formulas published by the Institute of Transportation Engineers (ITE) Trip Generation, 9th Edition, 2012. A copy of the project study trip generation table (Table 2) is provided as **Attachment "A"** to this report.

Traffic Impacts

Based on DOT's traffic impact criteria¹, the proposed project is <u>not</u> expected to impose a significant level of impact at any of the study intersections. A copy of the project study intersections capacity and level-of-service (LOS) analysis summary tables (Tables 7) is provided as **Attachment "B"** to this report.

¹ Per the DOT Traffic Study Policies and Procedures, a significant impact is identified as an increase in the Critical Movement Analysis (CMA) value, due to project related traffic, of 0.01 or more when the final ("with project") Level of Service (LOS) is LOS E or F; an increase of 0.020 or more when the final LOS is LOS D; or an increase of 0.040 or more when the final LOS is LOS C.

Congestion Management Program (CMP)

In accordance with the state-mandated Congestion Management Program (CMP), an increase in the freeway volume by 150 vehicles per hour during the A.M. or P.M. peak hours in any direction requires further analysis. A substantial change in freeway segments is defined as an increase or decrease of 2% in the demand capacity ratio when at LOS F. For purposes of CMP intersections, an increase of 50 vehicles or more during the A.M. or P.M. peak hour requires further analysis. The intersection of I-110 Southbound Ramps and Redondo Beach Boulevard, located less than 700 feet from the project site is the nearest CMP intersection and one of the project intersections being analyzed by this study. Based on the distribution of Project trips, it is anticipated that 50 project trips during the A.M. peak and 62 project trips during the P.M. peak would likely travel through this location. A copy of the CMP impact analysis for this intersection (Table 8) is provided as **Attachment "C"** to this report. Additionally, the study indicates the maximum number of project-related trips to occur along the nearest CMP freeway segment (Freeway I-110 south of "C" Street) is well below the 150 trips threshold for potential CMP Freeway Segment impact and therefore, no further analysis is needed.

Freeway Screening Analysis

To comply with the Freeway Analysis Agreement executed between Caltrans and LADOT in October 2013, the study also included a screening analysis to determine if additional evaluation of freeway mainline and ramp segments was necessary. Exceeding one of the four screening criteria would require the applicant to work directly with Caltrans to prepare a more detailed freeway analysis. A copy of the project freeway screening analysis discussion (Table 2 of MOU) is provided as **Attachment "D"** to this report. The analysis indicates the I-110 on/off ramps at Redondo Beach Boulevard do exceed the threshold for further analysis. It is therefore, recommended that the consultant work directly with Caltrans for further detailed review.

PROJECT REQUIREMENTS

In response to the findings of the traffic study, DOT recommends that the following project requirements be adopted as conditions of project approval.

A. Highway Dedication and Physical Street Improvements

All un-improved sidewalk area adjacent to the project site shall be improved by the project. The applicant should check with the Bureau of Engineering's (BOE) Land Development Group to determine the specific highway dedication, street widening and/or sidewalk requirements for this project. These requirements must be guaranteed before issuance of any building permit through the B-permit process of the Bureau of Engineering, Department of Public Works. They must be constructed prior to issuance of any certificate of occupancy to the satisfaction of DOT and the Bureau of Engineering.

B. Parking Requirements

The applicant should check with the Department of Building and Safety on the number of Coderequired parking spaces needed for the project.

C. Construction Impacts

DOT recommends that a construction work site traffic control plan be submitted to DOT's Citywide Temporary Traffic Control Office for review and approval prior to the start of any construction work. The plan should show the location of any roadway or sidewalk closures, traffic detours, haul routes, hours of operation, protective devices, warning signs and access to

abutting properties. DOT also recommends that construction related traffic be restricted to off-peak hours.

D. Site Access and Internal Circulation

This determination does not include approval of the driveways, internal circulation and parking scheme. Adverse traffic impacts could occur due to access and circulation issues. The applicant is advised to consult with DOT for driveway locations and specifications prior to the commencement of any architectural plans, as they may affect building design. Final DOT approval shall be obtained prior to issuance of any building permits. This should be accomplished by submitting detailed site/driveway plans, at a scale of at least 1" = 40', separately to DOT's WLA/Coastal Development Review Section at 7166 West Manchester Avenue, Los Angeles 90045 as soon as possible but prior to submittal of building plans for plan check to the Department of Building and Safety. In order to minimize and prevent last minute building design changes, the applicant should contact DOT, prior to the commencement of building or parking layout design efforts, for driveway width and internal circulation requirements so that such traffic flow considerations are designed and incorporated early into the building and parking layout plans. New driveways should be dimension per the Department of Public Works Case 2 design standard with respective 30-foot and 16-foot widths for two-way and one-way operations.

E. Development Review Fees

An ordinance adding Section 19.15 to the Los Angeles Municipal Code relative to application fees paid to DOT to permit issuance activities was adopted by the Los Angeles City Council in 2009. This ordinance identifies specific fees for traffic study review, condition clearance, and permit issuance. The applicant shall comply with any applicable fees per this ordinance.

If you have any questions, please contact me at the DOT West L.A. Planning Office at (213) 485-1062.

HS:pa

Attachments

cc: David A. Robert, Fifteenth Council District
Sean Haeri, Crystal Killian, DOT
David Weintraub, DCP
Jim Burman, BOE
Giancarlo J. Ganddini, Kunzman Associates, Inc.

Table 2
Project Trip Generation

							Trip	Generatio	on Rates/Tr	ips Genera	ated	
				PCE	Vehicle	Mor	ning Peak I	Hour	Eve	ning Peak H	Hour	
Land Use	Source ¹	Quantity	Units ²	Factor ³	Percent ⁴	In	Out	Total	In	Out	Total	Daily
Trip Generation Rates												
High-Cube Warehouse	ITE 152	1.000	TSF	-	-	0.08	0.03	0.11	0.04	0.08	0.12	1.68
Cars				-	-	0.06	0.02	0.08	0.03	0.05	0.08	1.04
Trucks				-	-	0.02	0.01	0.03	0.01	0.03	0.04	0.64
Vehicle Trips Generated												
High-Cube Warehouse		466.402	TSF	1-	-	37	14	51	19	37	56	784
Cars				-	-	28	9	37	14	23	37	485
Trucks				-	-	9	5	14	5	14	19	299
PCE Trips Generated												
Cars				1.0	-	28	9	37	14	23	37	485
2-Axle Trucks				1.5	17.0%	2	1	3	1	4	5	76
3-Axle Trucks				2.0	22.7%	4	2	6	2	6	8	136
4+ Axle Trucks				3.0	60.3%	16	9	25	9	25	34	541
Trucks Subtotal				-	-	22	12	34	12	35	47	753
Total PCE Trips Generated		466.402	TSF	-	-	50	21	71	26	58	84	1,238

¹ Source: Institute of Transportation Engineers (ITE), <u>Trip Generation Manual</u>, 9th Edition, 2012.

² TSF = Thousand Square Feet

³ Passenger Car Equivalent (PCE) factors are recommended by San Bernardino Associated Governments.

⁴ Source: City of Fontana, <u>Truck Trip Generation Study</u>, August 2003.

Table 7

Project Impact Summary

	-c			Exis	ting					Cumulative	Year 2019			
	diction		Peak Hou	r V/C-LOS ²					Peak Hou	r V/C-LOS ²				i t
	risdi	Without	t Project	With F	With Project		Impact	Without	t Project	With F	Project	Project	Impact	Significar
Intersection	Jur	Morning	Evening	Morning	Morning Evening		Evening	Morning	Evening	Morning	Evening	Morning	Evening	ign
Normandie Avenue (NS) at:											-	- 0		0, _
Redondo Beach Boulevard (EW) - #1	G	0.775-C	0.795-C	0.775-C	0.796-C	0.000	+0.001	0.815-D	0.845-D	0.815-D	0.846-D	0.000	+0.001	No
Vermont Avenue (NS) at:										0.010	0.040 0	0.000	+0.001	INO
Rosecrans Avenue (EW) - #2	LA/G	0.793-C	0.849-D	0.793-C	0.849-D	0.000	0.000	0.829-D	0.881-D	0.830-D	0.881-D	+0.001	0.000	No
Redondo Beach Boulevard (EW) - #3	LA/G	0.770-C	0.812-D	0.775-C	0.817-D	+0.005	+0.005	0.817-D	0.873-D	0.822-D	0.879-D	+0.005	+0.006	No
161st Street/Alondra Boulevard (EW) - #4	LA/G	0.629-B	0.713-C	0.630-B	0.713-C	+0.001	0.000	0.663-B	0.740-C	0.664-B	0.741-C	+0.001	+0.001	No
Orchard Avenue [West Jog] (NS) at:									017 10 C	0.004 B	0.741-0	+0.001	+0.001	140
Redondo Beach Boulevard (EW) - #5	LA	0.445-A	0.503-A	0.456-A	0.535-A	+0.011	+0.032	0.501-A	0.551-A	0.520-A	0.586-A	+0.019	+0.035	No
I-110 SB Ramps (NS) at:									0.00271	O.DEO A	0.500-A	10.015	+0.033	140
Redondo Beach Boulevard (EW) - #6	Caltrans	0.745-C	0.627-B	0.754-C	0.636-B	+0.009	+0.009	0.784-C	0.688-B	0.792-C	0.695-B	+0.008	10.007	N-
I-110 NB Ramps (NS) at:							-0.003	0.704 C	0.000-0	0.732-0	0.093-6	+0.008	+0.007	No
Redondo Beach Boulevard (EW) - #7	Caltrans	0.573-A	0.702-C	0.580-A	0.707-C	+0.007	+0.005	0.627-B	0.772-C	0.635-B	0.776-C	+0.008	+0.004	Na
Figueroa Street (NS) at:								3.00.0	31772 C	5.055-6	3.770-0	70.008	₹0.004	No
Redondo Beach Boulevard (EW) - #8	LA/Co	0.697-B	0.683-B	0.698-B	0.684-B	+0.001	+0.001	0.759-C	0.767-C	0.759-C	0.767-C	0.000	0.000	No

¹ G = City of Gardena; LA = City of Los Angeles; Caltrans = California Department of Transportation; Co = County of Los Angeles

² V/C = Volume-to-Capacity ratio; LOS = Level of Service

Attachment C

Table 8

Congestion Management Program Intersection Impact Evaluation

			Exis	ting					Cumulative	Year 2019			
		Peak Hou	V/C-LOS ²					Peak Hou	r V/C-LOS ²				t
	Without	Project	With F	roject	Project	Impact	Without	t Project	With F	Project	Project	Impact	ifica act?
Intersection	Morning	Evening	With Project Morning Evening		Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening	Sign
I-110 SB Ramps (NS) at:												210111111	01 =
Redondo Beach Boulevard (EW) - #6	0.745-C	0.627-B	0.754-C	0.636-B	+0.009	+0.009	0.784-C	0.688-B	0.792-C	0.695-B	+0.008	+0.007	No

¹ Caltrans = California Department of Transportation

² V/C = Volume-to-Capacity ratio; LOS = Level of Service

Table 2
Freeway Impact Analysis Screening

							Caltrans
	Type of	Number		1% of	Peak	Project	Analysis
Location	Facility	of Lanes	Capacity ¹	Capacity	Hour	Trips	Needed?
I-110 SB, n/o Redondo Beach Boulevard	Segment	4	8000	80	Morning	17	No
1-110 3B, 11/0 Redolldo Beach Bodievard	Jeginent	4	8000	00	Evening	9	No
I-110 SB, s/o Redondo Beach Boulevard	Segment	4	8000	80	Morning	11	No
1-110 36, syo kedondo beach boulevard	Segment	4	8000	00	Evening	28	No
1 110 MD m/s Dadanda Dasah Davidayard	Cogmont	4	8000	80	Morning	7	No
I-110 NB, n/o Redondo Beach Boulevard	Segment	4	8000	80	Evening	20	No
1.110 AID a/a Dadarda Dasah Daylayard	Commont	4	8000	80	Morning	21	No
I-110 NB, s/o Redondo Beach Boulevard	Segment	4	8000	80	Evening	12	No
I-110 SB Off-Ramp at	D	1	050	9	Morning	17	Yes
Redondo Beach Boulevard	Ramp	1	850	9	Evening	9	Yes
I-110 NB Off-Ramp at	Daman	1	050	9	Morning	21	Yes
Redondo Beach Boulevard	Ramp	1	850	Э	Evening	12	Yes

¹ Capacity is equal to 2,000 vehicles per hour per lane for freeway mainline lanes and 850 vehicles per hour per lane for ramps.

CITY OF LOS ANGELES

INTER-DEPARTMENTAL MEMORANDUM

15134 S. Vermont Avenue DOT Case No. HRB17-105224

DATE:

January 19, 2018

TO:

Luciralia Ibarra, Senior City Planner

Department of City Planning

FROM:

Hamed Sandoghdar, Transportation Engineer

Department of Transportation

SUBJECT:

TRAFFIC IMPACT ASSESSMENT FOR THE PROPOSED MIXED USE

WAREHOUSING/MANUFACTURING/DISTRIBUTION CENTER TO BE LOCATED AT 15134

SOUTH VERMONT AVENUE

On August 2, 2017, the Department of Transportation (DOT) issued a traffic assessment report to the Department of City Planning on the proposed 15134 Vermont Avenue high cube warehouse project. On October 12, 2017 the developer submitted a revised memorandum to analyze three alternative use for the proposed site. Since the three alternative scenarios are different than the original proposal, please replace the previous August 8, 2017 DOT assessment letter, in its entirety, with this report.

The Department of Transportation (DOT) has completed the traffic assessment of the proposed warehousing/manufacturing/distribution mixed use, to be located at 15134 South Vermont Avenue. This traffic assessment is based on the traffic impact analysis report prepared by Kunzman Associates, Inc., submitted on October 12, 2017, with subsequent revisions on November 16, 2017. Based on DOT's traffic impact criteria, the study included the detailed analysis of eight (8) signalized intersections for three (3) alternative mixed use land use scenarios. After a review of the pertinent data, DOT has determined that the traffic study adequately describes the project-related impacts of the proposed development.

PROJECT DESCRIPTION

The project proposes to construct one of the three (3) alternative land use scenarios on the existing 16 acre vacant site in the Harbor-Gateway area of City of Los Angeles. The site is generally bounded by Vermont Avenue to the west, Redondo Beach Boulevard to the south, Orchard Avenue to the east and Union Pacific Railroad line to the north. The three (3) alternatives are as follows:

- 1. 316,402 square foot building plus 150,000 square foot mezzanine, for a total of 466,402 square feet of warehousing.
- 316,402 square foot building plus 25,000 square foot of mezzanine. The 341,402 square feet building to be occupied by 120,000 square feet of manufacturing and 221,402 square feet of warehousing.
- 3. 316,402 square foot building plus 150,000 square foot of mezzanine. The 466,402 square feet building to be occupied by 116,601 square feet of manufacturing and 349,801 square feet of high cube warehouse/distribution.

DISCUSSION AND FINDINGS

Trip Generation

The proposed alternative 2 scenario, which has the highest peak hour trips is estimated to generate a net increase of 1,614 daily trips, a net increase of 197 A.M. peak hour trips, and a net increase of 205 P.M. peak hour trips. The trip generation rates are based upon formulas published by the Institute of Transportation Engineers (ITE) Trip Generation, 9th Edition, 2012. A copy of the project study trip generation tables for all three alternatives is provided as **Attachment** "A" to this report.

Traffic Impacts

Based on DOT's traffic impact criteria¹, the proposed project is <u>not</u> expected to impose a significant level of impact at any of the study intersections. A copy of the project study intersections capacity and level-of-service (LOS) analysis summary tables (Tables B-4 for alternative 2) is provided as **Attachment "B"** to this report.

Congestion Management Program (CMP)

In accordance with the state-mandated Congestion Management Program (CMP), an increase in the freeway volume by 150 vehicles per hour during the A.M. or P.M. peak hours in any direction requires further analysis. A substantial change in freeway segments is defined as an increase or decrease of 2% in the demand capacity ratio when at LOS F. For purposes of CMP intersections, an increase of 50 vehicles or more during the A.M. or P.M. peak hour requires further analysis. The intersection of I-110 Southbound Ramps and Redondo Beach Boulevard, and I-110 Northbound Ramps and Redondo Beach Boulevard located less than 1000 feet from the project site are the nearest CMP intersections and are both included as the project intersections being analyzed by this study. Based on the analysis neither of these two intersections are being significant impacted. A copy of the CMP intersections analysis (Table B-5) is provided as "Attachment C" to this report. Additionally, the study indicates the maximum number of project-related trips to occur along the nearest CMP freeway segment (Freeway I-110 at Manchester Boulevard) is well below the 150 trips threshold for potential CMP Freeway Segment impact and therefore, no further analysis is needed.

Freeway Screening Analysis

To comply with the Freeway Analysis Agreement executed between Caltrans and LADOT in October 2013, the study also included a screening analysis to determine if additional evaluation of freeway mainline and ramp segments was necessary. Exceeding one of the four screening criteria would require the applicant to work directly with Caltrans to prepare a more detailed freeway analysis. The analysis indicates the I-110 on/off ramps at the Redondo Beach Boulevard do exceed the threshold for further analysis. It is therefore, recommended that the consultant work directly with Caltrans for further detailed review. A copy of the project freeway screening analysis discussion is provided as Attachment "D" to this report.

PROJECT REQUIREMENTS

In response to the findings of the traffic study, DOT recommends that the following project requirements be adopted as conditions of project approval.

¹ Per the DOT Traffic Study Policies and Procedures, a significant impact is identified as an increase in the Critical Movement Analysis (CMA) value, due to project related traffic, of 0.01 or more when the final ("with project") Level of Service (LOS) is LOS E or F; an increase of 0.020 or more when the final LOS is LOS D; or an increase of 0.040 or more when the final LOS is LOS C.

A. Highway Dedication and Physical Street Improvements

All un-improved sidewalk area adjacent to the project site shall be improved by the project. The applicant should check with the Bureau of Engineering's (BOE) Land Development Group to determine the specific highway dedication, street widening and/or sidewalk requirements for this project. These requirements must be guaranteed before issuance of any building permit through the B-permit process of the Bureau of Engineering, Department of Public Works. They must be constructed prior to issuance of any certificate of occupancy to the satisfaction of DOT and the Bureau of Engineering.

B. Parking Requirements

The applicant should check with the Department of Building and Safety on the number of Coderequired parking spaces needed for the project.

C. Construction Impacts

DOT recommends that a construction work site traffic control plan be submitted to DOT's Citywide Temporary Traffic Control Office for review and approval prior to the start of any construction work. The plan should show the location of any roadway or sidewalk closures, traffic detours, haul routes, hours of operation, protective devices, warning signs and access to abutting properties. DOT also recommends that construction related traffic be restricted to offpeak hours.

D. Site Access and Internal Circulation

This determination does not include approval of the driveways, internal circulation and parking scheme. Adverse traffic impacts could occur due to access and circulation issues. The applicant is advised to consult with DOT for driveway locations and specifications prior to the commencement of any architectural plans, as they may affect building design. Final DOT approval shall be obtained prior to issuance of any building permits. This should be accomplished by submitting detailed site/driveway plans, at a scale of at least 1" = 40', separately to DOT's WLA/Coastal Development Review Section at 7166 West Manchester Avenue, Los Angeles 90045 as soon as possible but prior to submittal of building plans for plan check to the Department of Building and Safety. In order to minimize and prevent last minute building design changes, the applicant should contact DOT, prior to the commencement of building or parking layout design efforts, for driveway width and internal circulation requirements so that such traffic flow considerations are designed and incorporated early into the building and parking layout plans. New driveways should be dimension per the Department of Public Works Case 2 design standard with respective 30-foot and 16-foot widths for two-way and one-way operations.

E. Development Review Fees

An ordinance adding Section 19.15 to the Los Angeles Municipal Code relative to application fees paid to DOT to permit issuance activities was adopted by the Los Angeles City Council in 2009. This ordinance identifies specific fees for traffic study review, condition clearance, and permit issuance. The applicant shall comply with any applicable fees per this ordinance.

If you have any questions, please contact me or Pedro Ayala at the DOT West L.A. Planning Office at (213) 485-1062.

Attachments

cc: Jacob Haik, Fifteenth Council District

Sean Haeri, Crystal Killian, DOT Faisal Roble, Matthew Lum, DCP

Jim Burman, BOE

Giancarlo J. Ganddini, Kunzman Associates, Inc.

Table A-1

Alternative 1 Project Trip Generation

							Т	rip Generati	on Rates/Tri	ps Generated	d	
				PCE	Vehicle	Мо	rning Peak H	our	Eve	ening Peak Ho	our	
Land Use	Source ¹	Quantity	Units ²	Factor ³	Percent ⁴	Inbound	Outbound	Total	Inbound	Outbound	Total	Daily
<u>Warehouse</u>												
Trip Generation Rates	ITE 150	1.000	TSF	-	-	0.24	0.06	0.30	0.08	0.24	0.32	3.56
Vehicle Trips Generated		466.402	TSF	-	-	112	28	140	37	112	149	1,660
PCE Trips Generated											- 10	1,000
Cars				1.0	79.6%	89	22	111	29	89	118	1,321
2-Axle Trucks				1.5	3.5%	6	1	7	2	6	8	86
3-Axle Trucks				2.0	4.6%	10	3	13	3	10	13	154
4+ Axle Trucks				3.0	12.3%	41	10	51	14	41	55	614
Trucks Subtotal				-	20.4%	57	14	71	19	57	76	854
Warehouse Trips in PCEs		466.402	TSF	-	-	146	36	182	48	146	194	2,175

¹ Source: ITE = Institute of Transportation Engineers (ITE), <u>Trip Generation Manual</u>, 9th Edition, 2012; ### = Land Use Code.

² TSF = Thousand Square Feet

³ Passenger Car Equivalent (PCE) factors are recommended by San Bernardino Associated Governments.

⁴ Source: City of Fontana, <u>Truck Trip Generation Study</u>, August 2003.

Table B-1

Alternative 2 Project Trip Generation

								Т	rip Generati	on Rates/Tri	ps Generated	1	
					PCE	Vehicle	Мо	rning Peak H	our	Eve	ening Peak Ho	our	
Land Use	Descriptor	Source ¹	Quantity	Units ²	Factor ³	Percent ⁴	Inbound	Outbound	Total	Inbound	Outbound	Total	Daily
	Trip Generation Rates	ITE 140	1.000	TSF	-	-	0.57	0.16	0.73	0.26	0.47	0.73	3.82
	Vehicle Trips Generated		120.000	TSF	-	-	69	19	88	32	56	88	458
	PCE Trips Generated												430
MAANUSA CTUBBLE	Cars				1.0	78.6%	54	15	69	25	44	69	360
MANUFACTURING	2-Axle Trucks				1.5	8.0%	8	2	10	4	7	11	55
	3-Axle Trucks				2.0	3.9%	5	1	6	2	4	6	36
	4+ Axle Trucks				3.0	9.5%	20	5	25	9	16	25	131
	Trucks Subtotal				-	21.4%	33	8	41	15	27	42	222
	Manufacturing Trips in PCEs		120.000	TSF	-	-	87	23	110	40	71	111	582
	Trip Generation Rates	ITE 150	1.000	TSF	-	-0	0.24	0.06	0.30	0.08	0.24	0.32	3.56
	Vehicle Trips Generated		221.402	TSF	-	-	53	13	66	18	53	71	788
	PCE Trips Generated												700
WARFILO VICINIA	Cars				1.0	79.6%	42	10	52	14	42	56	627
WAREHOUSING	2-Axle Trucks				1.5	3.5%	3	1	4	1	3	4	41
	3-Axle Trucks				2.0	4.6%	5	1	6	2	5	7	73
	4+ Axle Trucks				3.0	12.3%	20	5	25	7	20	27	291
	Trucks Subtotal				-	20.4%	28	7	35	10	28	38	405
	High Cube Warehouse Trips in PCEs		221.402	TSF	-		70	17	87	24	70	94	1,032
	Total Cars						96	25	121	39	86	125	987
TOTAL	Total Trucks (in PCEs)						61	15	76	25	55	80	
	Total Trips (in PCEs)						157	40	197	64	141	205	627 1,614

¹ Source: ITE = Institute of Transportation Engineers (ITE), <u>Trip Generation Manual</u>, 9th Edition, 2012; ### = Land Use Code.

² TSF = Thousand Square Feet

³ Passenger Car Equivalent (PCE) factors are recommended by San Bernardino Associated Governments.

⁴ Source: City of Fontana, <u>Truck Trip Generation Study</u>, August 2003.

Table C-1

Alternative 3 Project Trip Generation

								Т	rip Generati	on Rates/Tri	ps Generate	d	
					PCE	Vehicle	Mo	rning Peak H	our	Eve	ening Peak H	our	
Land Use	Descriptor	Source ¹	Quantity	Units ²	Factor ³	Percent⁴	Inbound	Outbound	Total	Inbound	Outbound	Total	Daily
	Trip Generation Rates	ITE 140	1.000	TSF	-	-	0.57	0.16	0.73	0.26	0.47	0.73	3.82
	Vehicle Trips Generated		116.601	TSF	-	-	66	19	85	30	55	85	445
	PCE Trips Generated												
	Cars				1.0	78.6%	52	15	67	24	43	67	350
MANUFACTURING	2-Axle Trucks				1.5	8.0%	8	2	10	4	7	11	53
	3-Axle Trucks				2.0	3.9%	5	1	6	2	4	6	35
	4+ Axle Trucks				3.0	9.5%	19	5	24	9	16	25	127
	Trucks Subtotal				-	21.4%	32	8	40	15	27	42	215
	Manufacturing Trips in PCEs		116.601	TSF	-	-	84	23	107	39	70	109	565
	Trip Generation Rates	ITE 152	1.000	TSF	-		0.08	0.03	0.11	0.04	0.08	0.12	1.68
	Cars				-		0.06	0.02	0.08	0.03	0.05	0.12	1.04
	Trucks ⁵				-		0.02	0.01	0.03	0.03	0.03	0.08	
	Vehicle Trips Generated		349.801	TSF	-	-	28	10	38	14	28	42	0.64
HIGH-CUBE	Cars					-	21	7	28	10	17		588
WAREHOUSE/	Trucks					_	7	3	10	4		27	364
DISTRIBUTION	PCE Trips Generated							3	10	- 4	11	15	224
CENTER	Cars				1.0		21	7	28	10	17	27	25.
	2-Axle Trucks				1.5	17.0%	2	1	20	10	1/	27	364
	3-Axle Trucks				2.0	22.7%	3	1	3	1	5	4	57
	4+ Axle Trucks				3.0	60.3%	13	-	18	2	5	7	102
	Trucks Subtotal					-	18	7	25	10	20	27	405
	High-Cube Warehouse Trips in PCEs		349.801	TSF	-	-	39	14	53	10 20	28 45	38	564
	Total Cars						73	22	95	34		65	928
TOTAL	Total Trucks (in PCEs)						50	15			60	94	714
	Total Trips (in PCEs)						123	37	65 160	25 59	55 115	80 174	779 1,493

¹ Source: ITE = Institute of Transportation Engineers (ITE), Trip Generation Manual, 9th Edition, 2012; ### = Land Use Code.

² TSF = Thousand Square Feet

 $^{^{3}}$ Passenger Car Equivalent (PCE) factors are recommended by San Bernardino Associated Governments.

⁴ Source: City of Fontana, <u>Truck Trip Generation Study</u>, August 2003.

 $^{^{5}}$ Truck trip generation rates obtained from ITE $\underline{\text{Trip Generation Manual}}$ (ITE 152).

Table B-4

Alternative 2 Project Impact Summary

	c			Exis	iting					Cumulative	Year 2019			
	Jurisdiction		Peak Hou	r V/C-LOS ²					Peak Hou	r V/C-LOS ²				ant
	risdi	Without	Project	With I	With Project		Impact	Without	Project	With F	roject	Project	Impact	Significant Impact?
Intersection	Jul	Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening	ngis m p
Normandie Avenue (NS) at:														0/ =
Redondo Beach Boulevard (EW) - #1	G	0.775-C	0.795-C	0.776-C	0.797-C	+0.001	+0.002	0.815-D	0.845-D	0.816-D	0.847-D	+0.001	+0.002	No
Vermont Avenue (NS) at:											0.0 17 2	10.001	10.002	140
Rosecrans Avenue (EW) - #2	LA/G	0.793-C	0.849-D	0.793-C	0.852-D	0.000	+0.003	0.829-D	0.881-D	0.830-D	0.884-D	+0.001	+0.003	No
Redondo Beach Boulevard (EW) - #3	LA/G	0.770-C	0.812-D	0.783-C	0.827-D	+0.013	+0.015	0.817-D	0.873-D	0.831-D	0.888-D	+0.014	+0.015	No
161st Street/Alondra Boulevard (EW) - #4	LA/G	0.629-B	0.713-C	0.633-B	0.714-C	+0.004	+0.001	0.663-В	0.740-C	0.667-B	0.741-C	+0.004	+0.001	No
Orchard Avenue [West Jog] (NS) at:										0.007 5	0.741 C	10.004	+0.001	140
Redondo Beach Boulevard (EW) - #5	LA	0.445-A	0.503-A	0.464-A	0.571-A	+0.019	+0.068	0.501-A	0.551-A	0.545-A	0.627-B	+0.044	+0.076	No
I-110 SB Ramps (NS) at:										0.0 1.0 /1	0.027 8	10.044	+0.076	NO
Redondo Beach Boulevard (EW) - #6	Caltrans	0.745-C	0.627-B	0.764-C	0.648-B	+0.019	+0.021	0.784-C	0.688-B	0.803-D	0.708-C	+0.019	+0.020	No
I-110 NB Ramps (NS) at:								0.7010	0.000 0	0.003-0	0.708-0	+0.013	+0.020	140
Redondo Beach Boulevard (EW) - #7	Caltrans	0.573-A	0.702-C	0.595-A	0.713-C	+0.022	+0.011	0.627-B	0.772-C	0.649-B	0.783-C	+0.022	+0.011	No
Figueroa Street (NS) at:									3.7.2.0	3.045 0	3.703-0	70.022	70.011	IVO
Redondo Beach Boulevard (EW) - #8	LA/Co	0.697-B	0.683-B	0.700-В	0.684-B	+0.003	+0.001	0.759-C	0.767-C	0.761-C	0.767-C	+0.002	0.000	No

¹ G = City of Gardena; LA = City of Los Angeles; Caltrans = California Department of Transportation; Co = County of Los Angeles

² V/C = Volume-to-Capacity ratio; LOS = Level of Service

Table B-5

Alternative 2 Congestion Management Program Intersection Impact Evaluation

			Exis	ting					Cumulative	Year 2019			
		Peak Hou	r V/C-LOS ²					Peak Hou	r V/C-LOS ²				벋
	Without Project With Project Morning Evening Morning Evening				Project	Impact	Without	t Project	With F	roject	Project	Impact	ifica act?
	Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening	Sign
I-110 SB Ramps (NS) at:										-	9	210111118	0) _
Redondo Beach Boulevard (EW) - #6	0.745-C	0.627-B	0.764-C	0.648-B	+0.019	+0.021	0.784-C	0.688-B	0.803-D	0.708-C	+0.019	+0.020	No
I-110 NB Ramps (NS) at:											101025	10.020	110
Redondo Beach Boulevard (EW) - #7	0.573-A	0.702-C	0.595-A	0.713-C	+0.022	+0.011	0.627-B	0.772-C	0.649-B	0.783-C	+0.022	+0.011	No

¹ Caltrans = California Department of Transportation

² V/C = Volume-to-Capacity ratio; LOS = Level of Service

Attachment D

Table B-2

Alternative 2 Freeway Impact Analysis Screening

							Caltrans
	Type of	Number		1% of	Peak	Project	Analysis
Location	Facility	of Lanes	Capacity ¹	Capacity	Hour	Trips	Needed?
I-110 SB, n/o Redondo Beach Boulevard	Segment	4	8000	80	Morning	43	No
					Evening	17	No
I-110 SB, s/o Redondo Beach Boulevard	Segment	4	8000	80	Morning	13	No
					Evening	51	No
I-110 NB, n/o Redondo Beach Boulevard	Segment	4	8000	80	Morning	11	No
					Evening	39	No
I-110 NB, s/o Redondo Beach Boulevard	Segment	4	8000	80	Morning	58	No
					Evening	24	No
10 SB Off-Ramp at	Ramp	1	850	9	Morning	43	Yes
Redondo Beach Boulevard	Manip				Evening	17	Yes
I-110 NB Off-Ramp at	Ramp	1	850	9	Morning	58	Yes
Redondo Beach Boulevard					Evening	24	Yes