



November 28, 2022

Mr. Jeremy Johnson
Chief
Traffic Department, San Bernardino County
825 East Third Street
San Bernardino, California 92415

Subject: Stewart Almond Warehouse Project Traffic Memorandum (LSA Project No. LC12204)

Dear Mr. Johnson:

LSA Associates, Inc. (LSA) has prepared this Traffic Memorandum (Memo) for the proposed Stewart Almond Warehouse Project (project) in the unincorporated county of San Bernardino (County). The project will consist of one industrial building totaling 41,000 square-foot (sf). The project site is located at 8531 Almond Avenue in the County of San Bernardino. Figure 1 (all figures and tables attached) illustrates the regional and project location. Figure 2 illustrates the conceptual site plan for the project.

The objectives of this Memo are as follows:

- To estimate the trip generation for the proposed project and determine whether a Transportation Impact Study (TIS) will be required for the project
- To determine whether a VMT analysis will be required for the proposed project
- To perform an active transportation and public transit analysis and determine whether the project will have impacts on public transit, bicycle, and pedestrian facilities

TRIP GENERATION ANALYSIS

Trip generation for the project was developed using rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition) for Land Use 150 – “Warehousing”. Project trips were converted to trucks and passenger vehicles based on the South Coast Air Quality Management District (SCAQMD) recommendations for warehousing projects. As such, 31 percent of project traffic will be trucks. Based on Vehicle Mix from the SCAQMD, Warehouse Truck Trip Study Data Results and Usage, dated December 2014, the truck mix was considered as 18.7% 4-axle, 5.5% 3-axle, and 6.8% 2-axle trucks. All truck trips were converted to passenger car equivalents (PCEs) using a 1.5 PCE factor for 2-axle trucks, 2 for 3-axle trucks, and 3.0 for 4- and more axle trucks.

Table A summarizes the project trip generation and shows that the proposed project is anticipated to generate 8 PCE trips in the a.m. peak hour, 8 PCE trips in the p.m. peak hour, and 107 daily PCE trips.

The *San Bernardino County Transportation Impact Study Guidelines* (TIS Guidelines), dated July 2019, was followed to determine whether a TIS would be required for the project. As per the

County's TIS Guidelines, a TIS shall not be required for a project if it generates less than 100 peak hour trips without consideration of pass-by trips. Since the anticipated number of peak hour trips generated by the proposed project is lower than the 100-trip threshold established by the County's TIS Guidelines, a TIS or a detailed Levels of Service (LOS) study may not be required for this project.

VEHICLE MILES TRAVELED ANALYSIS

On December 28, 2018, the California Office of Administrative Law cleared the revised California Environmental Quality Act (CEQA) Guidelines for use. Among the changes to the guidelines was the removal of vehicle delay and level of service as the sole basis of determining CEQA impacts. With the implementation of the adopted guidelines, transportation impacts are to be evaluated based on a project's effect on VMT.

Pursuant to the County's TIS Guidelines Section 4.1 Analysis Methodology, projects estimated to generate less than 110 daily trips, including up to 63,000 sf warehousing projects, can be considered as a low VMT generator and are therefore presumed to have a less than significant impact on VMT. As shown in Table A, the project is anticipated to generate 70 total daily trips, which is lower compared to the County's daily trip threshold of 110 daily trips. Therefore, based on the TIS Guidelines, the project could be potentially screened out from a detailed VMT analysis and is anticipated to have a less than significant VMT impact.

ACTIVE TRANSPORTATION AND PUBLIC TRANSIT ANALYSIS

According to the County's TIS Guidelines, a significant impact occurs when a project conflicts with adopted plans, policies, or programs regarding active transportation or public transit facilities, or otherwise decreases the performance or safety of such facilities.

Currently, there are no existing bicycle facilities within the project vicinity. Based on San Bernardino County Transportation Authority's Bicycle Plan, proposed Class II bicycle lanes will be added along both directions of Arrow Route and Cherry Avenue. Class I bike facility (San Sevaine Trail) is present in the project vicinity. These existing and proposed bicycle facilities will connect to the residential neighborhoods north and south of the project site and to an extensive proposed bicycle network. As such, the project will not decrease the performance or safety of any existing or proposed bicycle facilities.

The existence of sidewalks provides more transportation choices for non-work trips, which can replace some auto trips, reducing growth in congestion and air pollution. Within the project vicinity, paved sidewalks are present intermittently on both sides of Arrow Route, Almond Avenue, and Cherry Avenue. The project will be adding sidewalks along the project frontage on Arrow Route and Almond Avenue. As such, the project will increase the performance or safety of the existing pedestrian facilities.

Omnitrans is the public transit agency serving the San Bernardino Valley, providing safe, reliable, affordable, friendly and environmentally responsible transportation. Omnitrans fixed bus route 66 operates within the project vicinity. Its services bus stops located on Foothill Boulevard north of the project site. Route 10 connects the Cities of San Bernardino and Fontana on weekdays (Monday to Sunday) with an average of 60-minute headways. This route also provides a connection to the

Fontana Metrolink Station. As such, the project will not decrease the performance or safety of any existing or proposed public transit facilities.

The project does not conflict with existing or proposed bicycle, pedestrian, and public transit facilities. Therefore, it can be considered to conform to all adopted policies, plans, or programs concerning these facilities and will not have a significant impact.

If you have any questions, please do not hesitate to contact me at (951) 781-9310 or Ambarish.Mukherjee@lsa.net.

Sincerely,

LSA



Ambarish Mukherjee, AICP, PE
Principal

Attachments:

Figure 1: Regional and Project Location

Figure 2: Conceptual Site Plan

Table A: Project Trip Generation

FIGURES

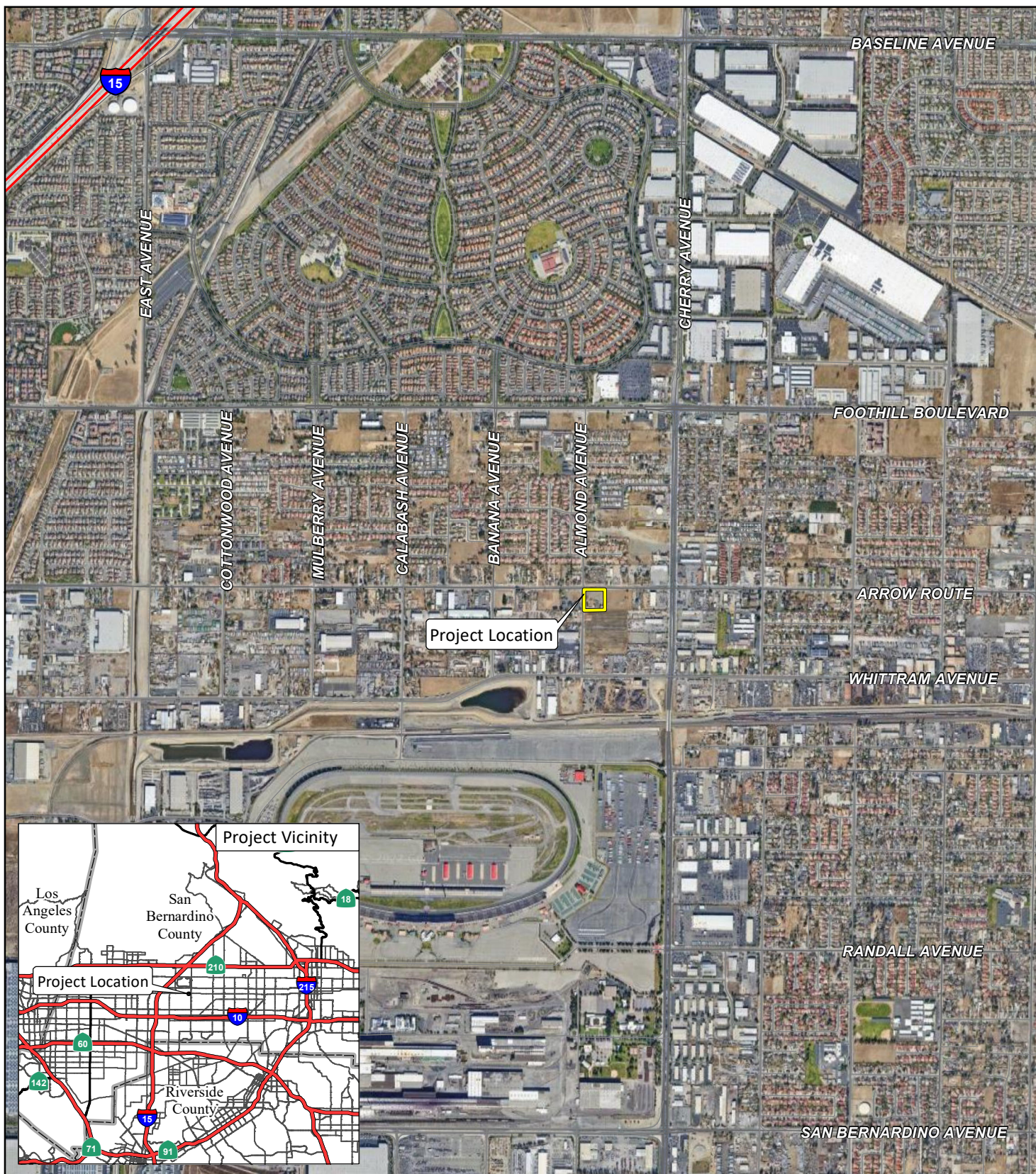
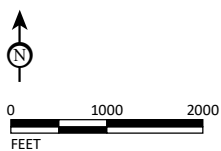


FIGURE 1



SOURCE: ESRI Streetmap, 2021; Google Earth, 2018.

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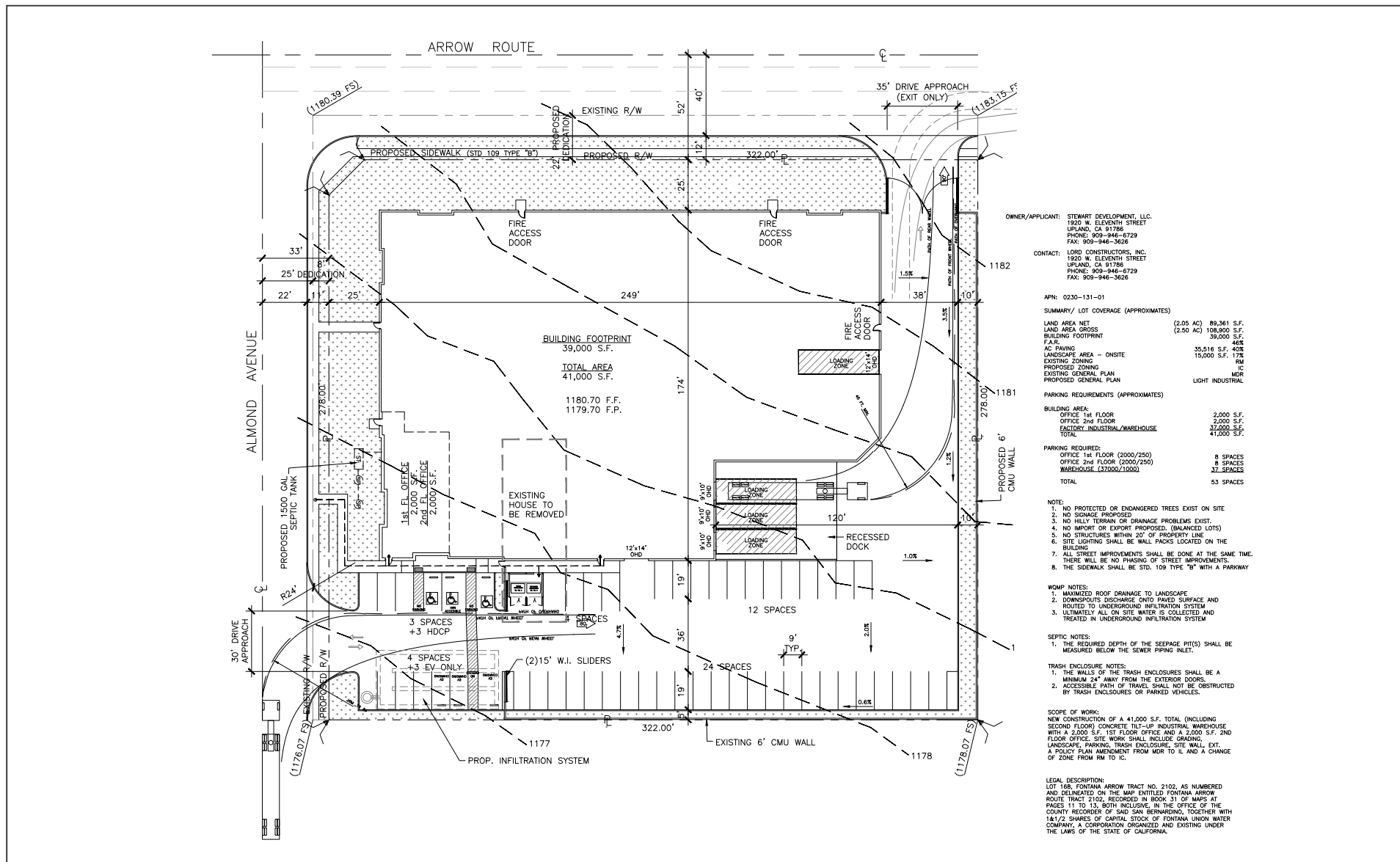


FIGURE 2

LSA



0 35 70

FEET

SOURCE: Van Dam Engineering

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Stewart Almond Warehouse
Trip Generation and VMT Memorandum
Conceptual Site Plan

TABLES

Table A - Project Trip Generation

Land Uses	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Warehouse¹	41.000 TSF							
Trips/Unit (Cars)		0.089	0.028	0.117	0.034	0.090	0.124	1.180
Trips/Unit (2-Axle Trucks)		0.009	0.003	0.012	0.003	0.009	0.012	0.116
Trips/Unit (3-Axle Trucks)		0.007	0.002	0.009	0.003	0.007	0.010	0.094
Trips/Unit (4+ Axle Trucks)		0.025	0.007	0.032	0.010	0.024	0.034	0.320
Trips/Unit (Total)		0.130	0.040	0.170	0.050	0.130	0.180	1.710
 Trip Generation (Cars)		4	1	5	1	4	5	48
Trip Generation (2-Axle Trucks)		0	0	0	0	0	0	5
Trip Generation (3-Axle Trucks)		0	0	0	0	0	0	4
Trip Generation (4+ Axle Trucks)		1	0	1	0	1	1	13
Trip Generation (Total)		5	1	6	1	5	6	70
 Trip Generation (Cars)		4	1	5	1	4	5	48
PCE Trip Generation (2-Axle Trucks)		0	0	0	0	0	0	10
PCE Trip Generation (3-Axle Trucks)		0	0	0	0	0	0	10
PCE Trip Generation (4+ Axle Trucks)		3	0	3	0	3	3	39
PCE Trip Generation (Total)		7	1	8	1	7	8	107

Notes:

TSF = thousand square-feet

¹ The trip generation was developed based on the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th edition) rates for Land Use 150 – “Warehousing.” The resulting trips were converted to trucks and passenger vehicles based on the South Coast Air Quality Management District (SCAQMD) recommendations for warehousing projects. As such, 31 percent of project traffic will be trucks. Based on Vehicle Mix from the SCAQMD, *Warehouse Truck Trip Study Data Results and Usage*, dated December 2014, the truck mix was considered as 18.7% 4-axle, 5.5% 3-axle, and 6.8% 2-axle trucks. All truck trips were converted to passenger car equivalents (PCEs) using a 1.5 PCE factor for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4- and more axle trucks.