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IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
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ROSEVILLE
SAN LUIS OBISPO

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. LCI2204)

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

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FIGURE 1

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Stewart Almond Warehouse
Trip Generation and VMT Memorandum

Regional and Project Location

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

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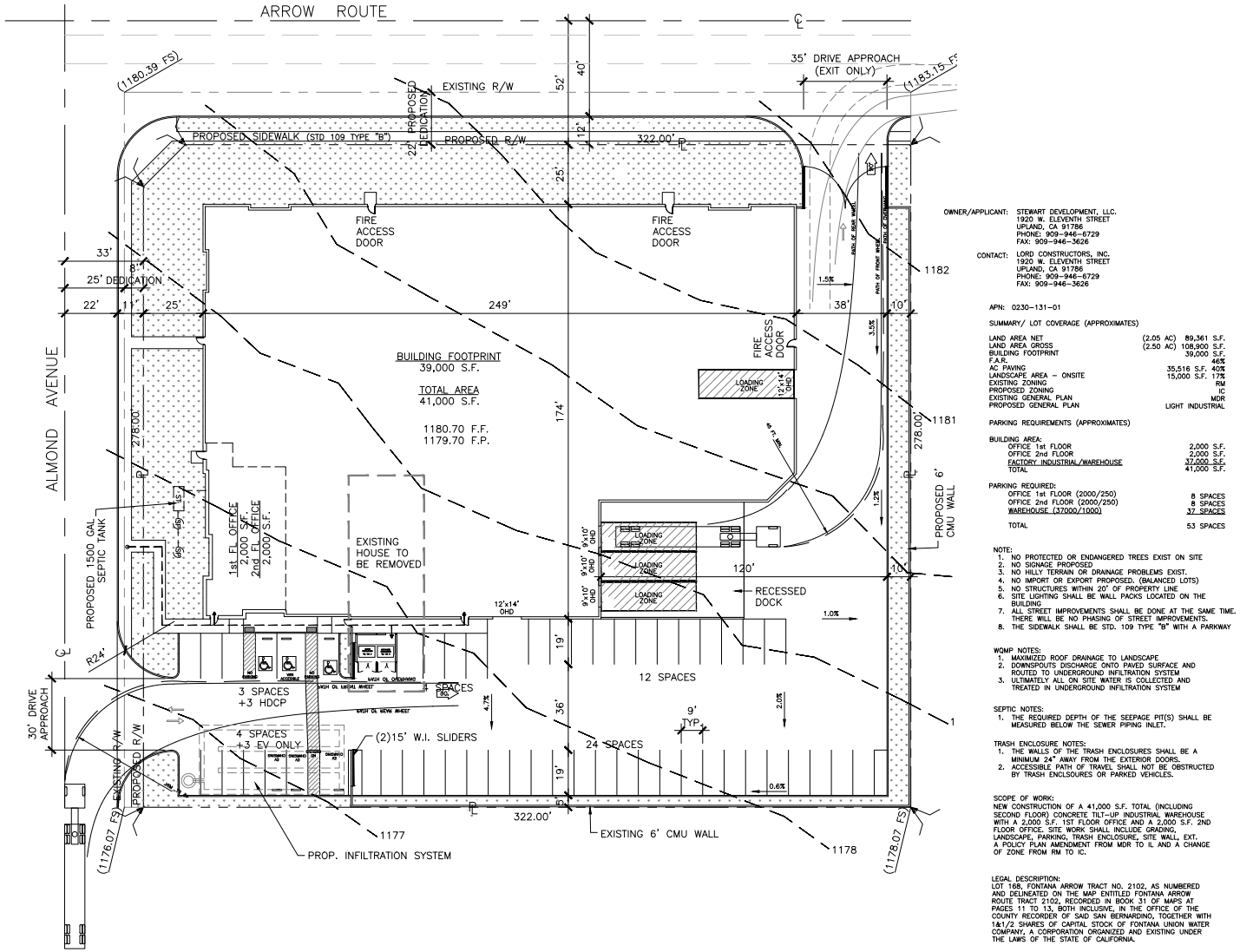

OWNER/APPLICANT: STEWART DEVELOPMENT, LLC.
1920 W. ELEVENTH STREET
UPLAND, CA 91786
PHONE: 909-946-6729
FAX: 909-946-3626

CONTACT: LORD CONSTRUCTORS, INC.
1920 W. ELEVENTH STREET
UPLAND, CA 91786
PHONE: 909-946-6729
FAX: 909-946-3626

APN: 0230-131-01

SUMMARY/ LOT COVERAGE (APPROXIMATES)

LAND AREA NET	(2.05 AC)	89,361 S.F.
LAND AREA GROSS	(2.50 AC)	108,900 S.F.
BUILDING FOOTPRINT		39,000 S.F.
F.A.R.		46%
AC PAVING		35,516 S.F. 40%
LANDSCAPE AREA – ONSITE		15,000 S.F. 17%
EXISTING ZONING		RM
PROPOSED ZONING		IC
EXISTING GENERAL PLAN		MDR
PROPOSED GENERAL PLAN		LIGHT INDUSTRIAL

PARKING REQUIREMENTS (APPROXIMATES)

BUILDING AREA:

OFFICE 1st FLOOR	2,000 S.F.
OFFICE 2nd FLOOR	2,000 S.F.
FACTORY/ INDUSTRIAL/WAREHOUSE	37,000 S.F.
TOTAL	41,000 S.F.

PARKING REQUIRED:

OFFICE 1st FLOOR (2000/250)	8 SPACES
OFFICE 2nd FLOOR (2000/250)	8 SPACES
WAREHOUSE (37000/1000)	37 SPACES
TOTAL	53 SPACES

NOTE:
1. NO PROTECTED OR ENDANGERED TREES EXIST ON SITE
2. NO SIGNAGE PROPOSED
3. NO HILLY TERRAIN OR DRAINAGE PROBLEMS EXIST.
4. NO IMPORT OR EXPORT PROPOSED. (BALANCED LOTS)
5. NO STRUCTURES WITHIN 20' OF PROPERTY LINE
6. SITE LIGHTING SHALL BE WALL PACKS LOCATED ON THE BUILDING
7. ALL STREET IMPROVEMENTS SHALL BE DONE AT THE SAME TIME. THERE WILL BE NO PHASING OF STREET IMPROVEMENTS.
8. THE SIDEWALK SHALL BE STD. 109 TYPE "B" WITH A PARKWAY

WQMP NOTES:
1. MAXIMIZED ROOF DRAINAGE TO LANDSCAPE
2. DOWNSPOUTS DISCHARGE ONTO PAVED SURFACE AND ROUTED TO UNDERGROUND INFILTRATION SYSTEM
3. ULTIMATELY ALL ON SITE WATER IS COLLECTED AND TREATED IN UNDERGROUND INFILTRATION SYSTEM

SEPTIC NOTES:
1. THE REQUIRED DEPTH OF THE SEEPAGE PIT(S) SHALL BE MEASURED BELOW THE SEWER PIPING INLET.

TRASH ENCLOSURE NOTES:
1. THE WALLS OF THE TRASH ENCLOSURES SHALL BE A MINIMUM 24" AWAY FROM THE EXTERIOR DOORS.
2. ACCESSIBLE PATH OF TRAVEL SHALL NOT BE OBSTRUCTED BY TRASH ENCLSOURES OR PARKED VEHICLES.

SCOPE OF WORK:
NEW CONSTRUCTION OF A 41,000 S.F. TOTAL (INCLUDING SECOND FLOOR) CONCRETE TILT-UP INDUSTRIAL WAREHOUSE WITH A 2,000 S.F. 1ST FLOOR OFFICE AND A 2,000 S.F. 2ND FLOOR OFFICE. SITE WORK SHALL INCLUDE GRADING, LANDSCAPE, PARKING, TRASH ENCLOSURE, SITE WALL, EXT. A POLICY PLAN AMENDMENT FROM MDR TO IL AND A CHANGE OF ZONE FROM RM TO IC.

LEGAL DESCRIPTION:
LOT 168, FONTANA ARROW TRACT NO. 2102, AS NUMBERED AND DELINEATED ON THE MAP ENTITLED FONTANA ARROW ROUTE TRACT 2102, RECORDED IN BOOK 31 OF MAPS AT PAGES 11 TO 13, BOTH INCLUSIVE, IN THE OFFICE OF THE COUNTY RECORDER OF SAID SAN BERNARDINO, TOGETHER WITH 1&1/2 SHARES OF CAPITAL STOCK OF FONTANA UNION WATER COMPANY, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF CALIFORNIA.

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FIGURE 2

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SOURCE: Van Dam Engineering

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Stewart Almond Warehouse
Trip Generation and VMT Memorandum
Conceptual Site Plan

TABLES

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Table A - Project Trip Generation

Land Uses	Units	A.M. Peak Hour In	A.M. Peak Hour Out	A.M. Peak Hour Total	P.M. Peak Hour In	P.M. Peak Hour Out	P.M. Peak Hour Total	Daily
Warehouse[1]								
	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.