



September 16, 2022

Green Trucking Solutions, LLC
Attn: Ilnaz Patric
14816 Valley Blvd.
Fontana, California 92335

Subject: GTS Cold Storage Project Trip Generation and Vehicle Miles Traveled Memorandum (LSA Project No. GTS2201)

Dear Ilnaz:

LSA Associates, Inc. (LSA) has prepared this Trip Generation and Vehicle Miles Traveled (VMT) Memorandum (Memo) for the proposed GTS Cold Storage Project (project) in the Town of Apple Valley (Town). The project will include a High-Cube Cold Storage Warehouse of a total area of 385,067 square feet (sf). The project will be located at the north-west corner of Navajo Road and Lafayette Street. Access to the project will be provided via two driveways on Navajo Road and two driveways on Lafayette Street. Figure 1 illustrates the regional and project location (All figures and tables attached). Figure 2 illustrates a conceptual site plan for the project.

The project is within the North Apple Valley Industrial Specific Plan Area (NAVISP) and is zoned as I-SP or Specific Plan Industrial, allowing for a broad range of clean manufacturing and warehousing uses, including manufacturing facilities with showrooms and offices, regional warehouse facilities, and support services for manufacturing and warehouses. As such, the proposed project is consistent with the specific plan land use designation, and therefore, consistent with the City's General Plan land use designation.

TRIP GENERATION ANALYSIS

Trip generations for the project was developed using rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition) for Land Use 157 – “High-Cube Cold Storage Warehouse”. 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, the truck mix was considered as 6.8% 2-axle trucks, 5.5% 3-axle trucks, and 18.7% 4 or more axle trucks. All truck trips were converted to Passenger Vehicle equivalents (PCEs) using a 1.5 PCE factor for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4 or more axle trucks.

Table A summarizes the project trip generation and shows that the proposed project is anticipated to generate 62 PCE trips in the a.m. peak hour, 70 PCE trips in the p.m. peak hour, and 1,196 daily PCE trips.

It is our understanding that the Town does not have their own LOS traffic study guidelines, but recommends following the requirements established within the *San Bernardino County*

Transportation Impact Study Guidelines (County's TIS Guidelines), dated July 2019. As per the County's TIS Guidelines, a LOS study shall not be required for a project if it generates less than 100 peak hour 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 detailed 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 removal of vehicle delay and level of service from consideration under CEQA. With the adopted guidelines, transportation impacts are to be evaluated using the metric of VMT.

The Town adopted its Resolution No. 2021-08 on May 11, 2021. The resolution contains the VMT analysis methodologies for non-screened development. Additionally, the Town recommended using the screening criterion from the County's TIS Guideline to determine whether a project could be screened out from a detailed VMT analysis.

It is LSA's understanding that the project is a part of the NAVISP. The specific plan was first adopted in 2006. The Town identified preparation of this specific plan as a project under California Environmental Quality Act (CEQA). An Environmental Impact Report was prepared for the specific plan before adoption in 2006. As such, land uses that are consistent with the NAVISP land uses have already been evaluated under CEQA and may not require further CEQA analysis.

As previously mentioned, the project is consistent with the land use and zoning designation of NAVISP. As such, since the project is part of an approved specific plan that went through the CEQA process, no further CEQA VMT analysis will be required.

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

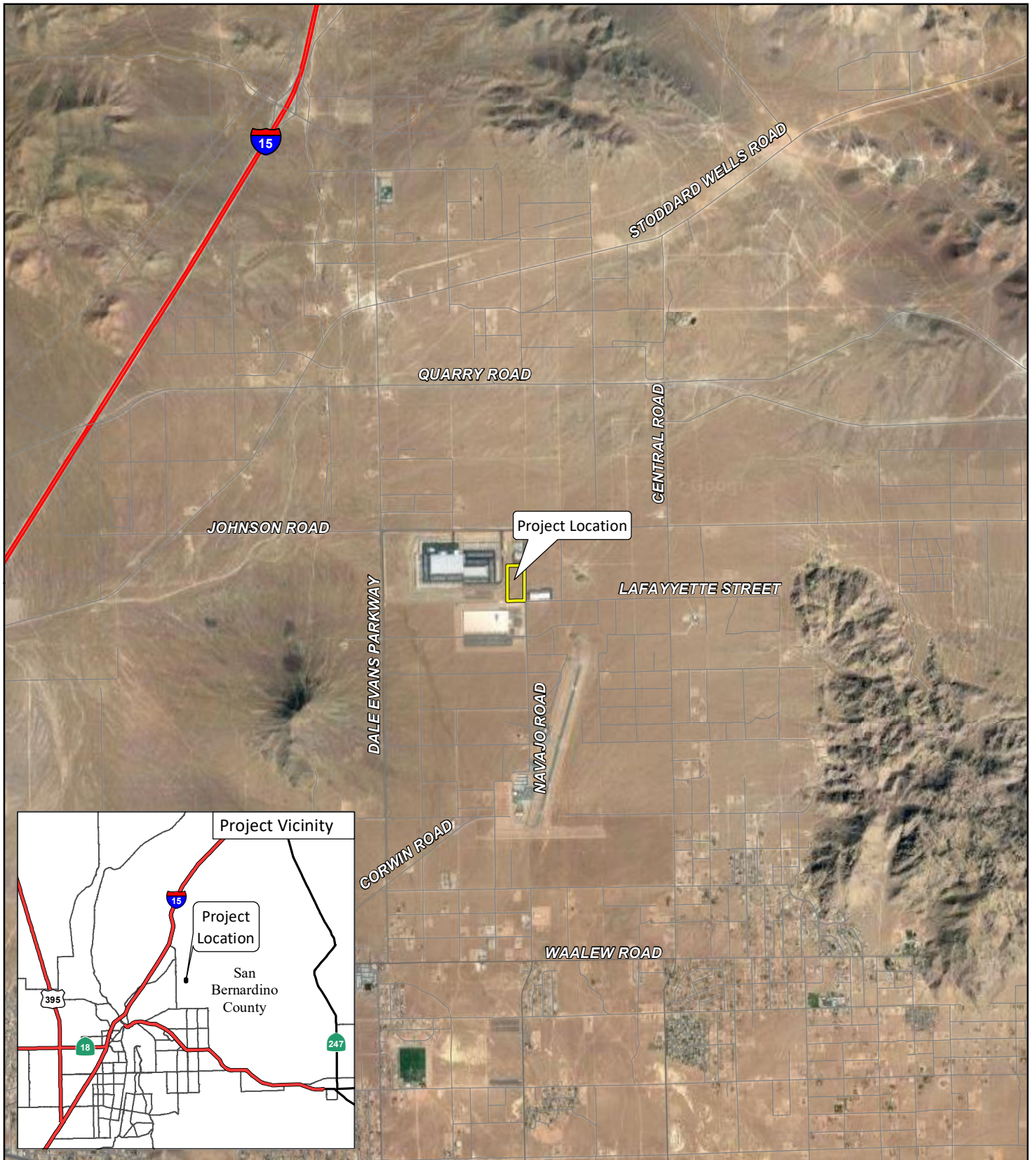
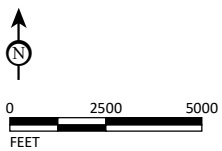
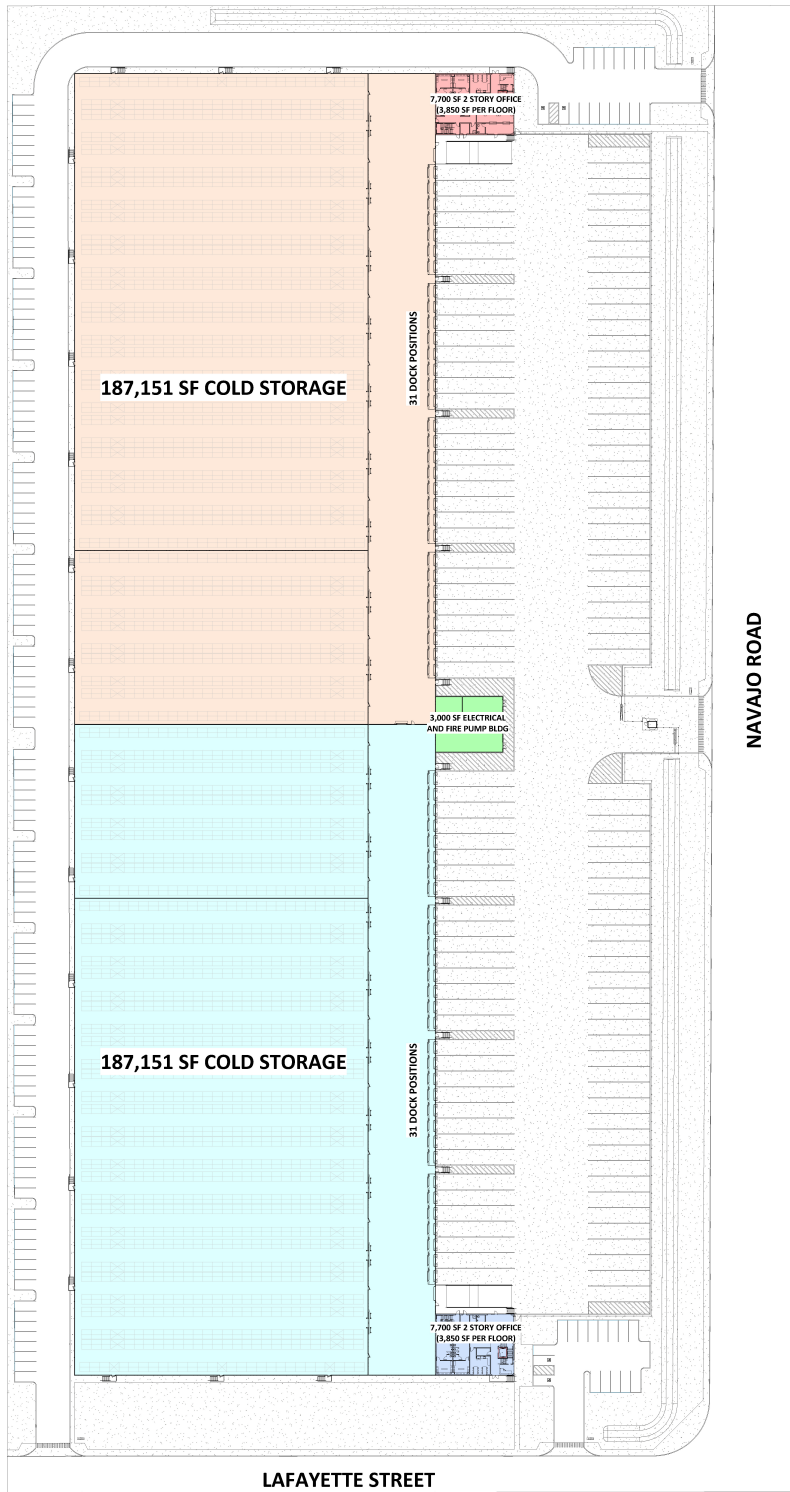


FIGURE 1



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

C:\Users\OCampuzano\OneDrive - LSA Associates\Desktop\Working\GIS\GTS\fig1_Reg_ProjLoc.mxd (8/5/2022)



LSA

FIGURE 2



*Cold Storage Project
Trip Generation 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	
High-Cube Cold Storage Warehouse¹	385.067 TSF							
Trips/Unit (Cars)		0.072	0.004	0.076	0.030	0.053	0.083	1.463
Trips/Unit (2-Axle Trucks)		0.004	0.004	0.007	0.004	0.004	0.008	0.144
Trips/Unit (3-Axle Trucks)		0.003	0.003	0.006	0.003	0.004	0.007	0.117
Trips/Unit (4+ Axle Trucks)		0.010	0.010	0.021	0.010	0.012	0.022	0.396
Trips/Unit (Total)		0.089	0.021	0.110	0.047	0.073	0.120	2.120
Trip Generation (Cars)		28	1	29	11	21	32	563
Trip Generation (2-Axle Trucks)		1	2	3	1	2	3	56
Trip Generation (3-Axle Trucks)		1	1	2	1	2	3	45
Trip Generation (4+ Axle Trucks)		4	4	8	4	5	9	153
Trip Generation (Total)		34	8	42	17	30	47	817
Trip Generation (Cars)		28	1	29	11	21	32	563
PCE Trip Generation (2-Axle Trucks)		2	3	5	2	3	5	84
PCE Trip Generation (3-Axle Trucks)		2	2	4	2	4	6	90
PCE Trip Generation (4+ Axle Trucks)		12	12	24	12	15	27	459
PCE Trip Generation (Total)		44	18	62	27	43	70	1,196

Notes:

TSF = thousand square-feet

¹ Rates from ITE Trip Generation Manual (11th Edition) for Land Use 157 – “High-Cube Cold Storage Warehouse”, Setting/Location - “General Urban/Suburban.” The resulting trips were converted to trucks and passenger vehicles based on SCAQMD recommendations for warehousing projects. As such, 31 percent of project traffic will be trucks. Based on Vehicle Mix from the SCAQMD, the truck mix was considered as 6.8% 2-axle trucks, 5.5% 3-axle trucks, and 18.7% 4 or more axle trucks. Since peak hour inbound and outbound splits are not available for Land Use 157, inbound and outbound splits for total vehicles (passenger vehicles + trucks) and trucks for Land Use 155 - “High Cube Fulfillment Center Warehouse” have been used to determine the inbound and outbound split in the peak hours. Inbound and outbound splits for passenger vehicles have been developed by subtracting all truck inbound and outbound rates from the total vehicles inbound and outbound rates, respectively. All truck trips were converted to passenger Passenger Vehicle equivalents (PCEs) using a 1.5 PCE factor for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4 or more axle trucks.