LSA ASSOCIATES, INC.
1500 IOWA AVENUE, SUITE 200
RIVERSIDE, CALIFORNIA 92507
951.781.9310 TEL
951.781.4277 FAX
BERKELEY
CARLSBAD
FRESNO
IRVINE
PALM SPRINGS
PT. RICHMOND
ROCKLIN
SAN LUIS OBISPO

June 14, 2016

Mr. Marc Berg, Vice President – Regional Director
The Rockefeller Group Development Corp.
4 Park Plaza, Suite 840
Irvine, California 92614

Subject: Tri City Industrial Complex Trip Generation Letter (LSA Project No. RGD1601)

Dear Mr. Berg:

LSA Associates, Inc. (LSA) is under contract to prepare a trip generation analysis for the proposed Tri City Industrial Complex. The proposed project will replace an existing 212,300-square foot (sf) warehouse with a 347,559 sf high-cube warehouse and an 82,614 sf warehouse. The subject site is located on the southeast corner of Tippecanoe Avenue/San Bernardino Avenue in City of San Bernardino. The existing warehouse building is used for the storage and distribution of medical records, supplies, and equipment. Currently, the northern parking area of the subject site is fenced while the area to the east is leased to a trucking company.

Figure 1 (all figures attached) illustrates the regional and project location. Figure 2 illustrates a conceptual site plan of the proposed project.

LSA conducted a trip generation analysis to show the change in trips resulting from the replacement of the existing 212,300 sf warehouse with the proposed 347,559 sf high-cube warehouse and an 82,614 sf warehouse. A scoping letter was submitted to the City on May 19, 2016, and was prepared to satisfy the requirements of the City of San Bernardino *Traffic Impact Study (TIS) Guidelines*, dated June 3, 2015. On May 24, 2016, City staff approved the scoping letter and confirmed that a traffic study would not be required for the proposed project. A copy of the approved scoping agreement is attached.

The results of the trip generation analysis are summarized below.

EXISTING LAND USE TRIP GENERATION

Daily, a.m. and p.m. peak hour trips resulting from the existing land use were documented using 24-hour tube counts collected by National Data and Surveying at the existing driveways on April 12, 2016. In addition, at the request of City staff, trips resulting from the existing land use were also estimated using rates from the Institute of Transportation Engineers (ITE) *Trip Generation* 9th Edition for Land Use 150 – "Warehousing."

As shown on Table A (all tables attached), based on existing counts, the existing land use generates 984 daily trips with 66 trips occurring during the a.m. peak hour and 70 trips occurring during the p.m. peak hour. All trips were converted to car and truck trips using the vehicle mix included in the Fontana Truck Trip Generation Study. Truck trips were converted to Passenger Car Equivalents (PCEs) using the PCE factors included in the City's TIS Guidelines. A 2.0 PCE factor was used for 2-axle trucks, 2.5 for 3-axle trucks, and 3.0 for 4- and more axle trucks was used. After accounting for truck PCEs, the existing land use currently generates 1,767 daily total PCE trips, with 97 PCE trips occurring during the a.m. peak hour and 102 PCE trips occurring during the p.m. peak hour.

As previously discussed, existing trips were also estimated using rates from the ITE *Trip Generation* Manual for Land Use 150 – "Warehousing." The results of this analysis are summarized in Table B, which shows the existing land use is estimated to generate 755 daily trips with 64 trips occurring during the a.m. peak hour and 67 trips occurring during the p.m. peak hour. After accounting for truck PCEs (using the previously discussed methodologies), the existing land use is estimated to generate 1,020 daily total PCE trips, with 87 PCE trips occurring during the a.m. peak hour and 90 PCE trips occurring during the p.m. peak hour.

PROPOSED LAND USE TRIP GENERATION

The trip generation for the proposed project was developed using rates from the ITE *Trip Generation* 9th Edition for Land Use 152 – "High Cube Warehouse" and Land Use 150 – "Warehousing." High Cube Warehouse rates were applied to the 347,559 sf high cube warehouse building while rates for Land Use 150 – "Warehousing" were used for the 82,614 sf warehouse. Table C summarizes the daily, a.m., and p.m. peak hour project trip generation and shows the proposed project is expected to generate 878 daily trips with 64 trips occurring during the a.m. peak hour and 67 trips occurring during the p.m. peak hour. After accounting for truck PCEs (using the previously discussed methodologies), the proposed project is expected to generate 1,186 daily total PCE trips, with 88 PCE trips occurring during the a.m. peak hour and 91 PCE trips occurring during the p.m. peak hour.

CONCLUSION

The City of San Bernardino *Traffic Impact Study (TIS) Guidelines*, dated June 3, 2015, provides guidance for when a TIS is required. As stated in the TIS guidelines, the requirement for a traffic study as part of the project review process is required when any project is likely to add 500 or more daily two-way trips, and/or likely to add 50 or more a.m. or p.m. peak hour two-way trips to the existing circulation system. As shown in Table D, when compared to the existing land use, the project would generate at worst-case 199 net new daily PCE trips with 1 net new PCE trip during the a.m. and p.m. peak hour. This comparison is based on trip generations developed using ITE rates for both the existing and proposed uses. Because the project would not add 50 net new peak period PCE trips or more than 500 daily two-way trips, a TIS for the proposed Tri-City Industrial Project is not required. As previously discussed, the results and conclusions of this analysis have been reviewed and approved by City staff.

Sincerely,

LSA ASSOCIATES, INC.

Joseph Urzua
Senior Transportation Planner

Attachments: Approved City Scoping Agreement
Figures 1 and 2
Tables A through D

Scope of Study Form

To be completed by applicant and approved by Development Services prior to start of study

Project Name: Tri City Industrial Complex
Project Address: Southeast corner of Tippecanoe Ave./San Bernardino Ave.
Project Description: 347, 559 s.f of High-Cube Warehouse & 82,614 s.f Warehouse
Developer's Name: Marc Berg, Rockefeller Group Development
Address: 14 Park Plaza Suite 840, Irvine CA 92614
Telephone No. 949-468-1814 Fax Number:
Email Address:

Trip Generation Rates From: ITE 9th Ed. Other: Existing Counts @ Drivways (See Attached Table A)

Trip Generation For:

Land Use (1)	Existing Warehouse - See Attached Table B	Land Use (2)	Warehouse/High Cube -See Attached Table C
ITE Land Use Code	150 - Warehouse	ITE Land Use Code	150- Warehouse/152-High Cube Warehouse
Daily Trips	1020 PCEs	Daily Trips	1186 PCEs
AM Peak Hour Trips		AM Peak Hour Trips	
Inbound	68 PCEs	Inbound	64 PCEs
Outbound	19 PCEs	Outbound	24 PCEs
Total	87 PCEs	Total	88 PCEs
PM Peak Hour Trips		PM Peak Hour Trips	
Inbound	24 PCEs	Inbound	28 PCEs
Outbound	66 PCEs	Outbound	63 PCEs
Total	90 PCEs	Total	91 PCEs

(Use Additional Sheet(s), if necessary)

Pass-by Trips (%), if applicable: _____ %

Land Use (1)		Land Use (2)	
ITE Land Use Code		ITE Land Use Code	
Daily Trips		Daily Trips	
AM Peak Hour Trips		AM Peak Hour Trips	
Inbound		Inbound	
Outbound		Outbound	
Total		Total	
PM Peak Hour Trips:		PM Peak Hour Trips:	
Inbound		Inbound	
Outbound		Outbound	
Total		Total	

Project Opening Year: 2017 **Build-out Year**: 2035

Study Intersections:

1	N/A a TS is not recommended	6	
2		7	
3		8	
4		9	
5		10	

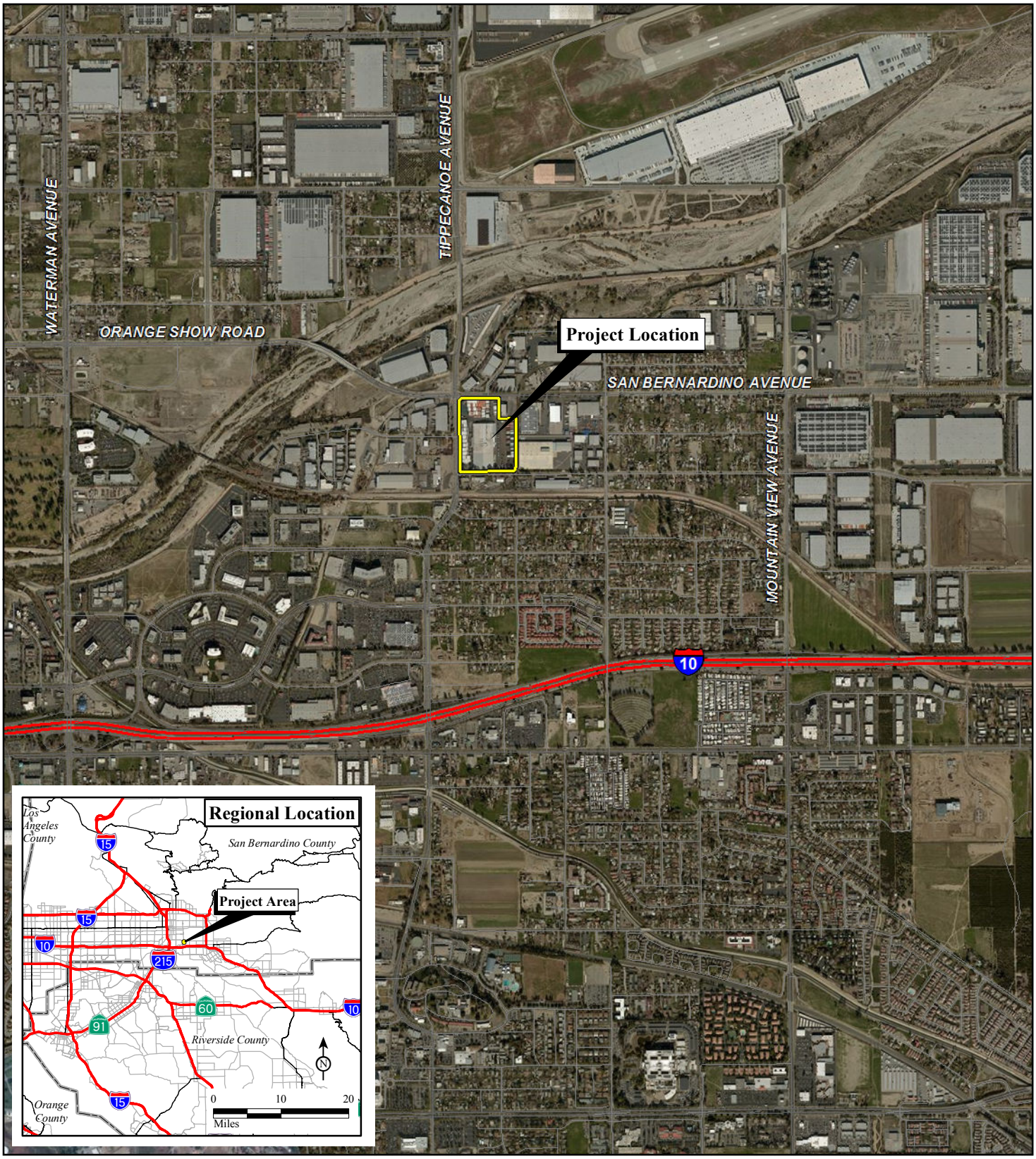
(Use Additional Sheet(s) and Map, if necessary)

Ambient Growth Rate: 3.0 %

Trip Distribution: East % West % North % South %

Preparer's Name: Joe Urzua
Address: 1500 Iowa Avenue
Telephone No. 951-781-9310 Fax Number:
Email Address: Joe.urzua@lsa-assoc.com
Signature: Date: 5/23/16

Approved By (Development Services Department):
Signature: Date:
Name: Title:



LSA

FIGURE 1

N

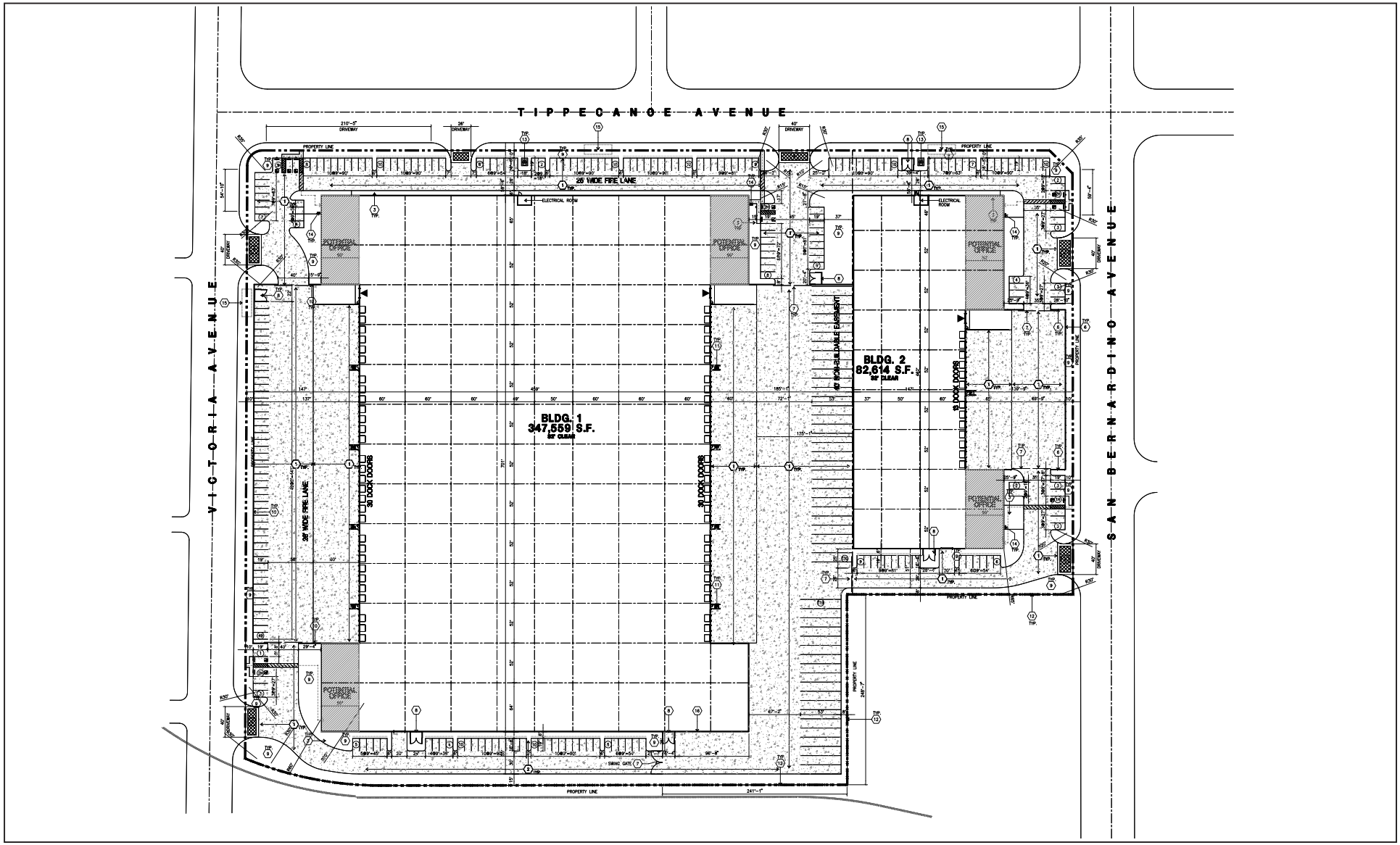
0 1000 2000
FEET

SOURCE: Bing Aerial, 2015, CA; ESRI Streetmap, 2013

Tri-City Industrial Complex
Trip Generation Analysis

Regional and Project Location

I:\RGD1601\Reports\Traffic\TripGen\fig1_RegLoc_aerial.mxd (6/14/2016)



LSA

FIGURE 2

0 90 180
FEET

SOURCE: HPA Architecture, 2016

Tri-City Industrial Complex
Trip Generation Analysis

Conceptual Site Plan

I:\RGD1601\Reports\Traffic\TripGen\fig2_SitePlan.cdr (06/14/2016)

Table A - Existing Driveway Count Summary (Existing Land Use)

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
Warehousing[1]	212.3 TSF							
Trips/Unit (Cars)		35	11	46	18	34	52	529
Trips/Unit (2-Axle Trucks)		3	4	7	0	0	0	48
Trips/Unit (3-Axle Trucks)		1	4	5	7	3	10	158
Trips/Unit (4+ Axle Trucks)		2	6	8	6	2	8	249
Trips/Unit (Total)		41	25	66	31	39	70	984
Trip Generation (Cars)		**35**	**11**	**46**	**18**	**34**	**52**	**529**
PCE Trip Generation (2-Axle Trucks)		**6**	**8**	**14**	**0**	**0**	**0**	**96**
PCE Trip Generation (3-Axle Trucks)		**3**	**10**	**13**	**18**	**8**	**26**	**395**
PCE Trip Generation (4+ Axle Trucks)		**6**	**18**	**24**	**18**	**6**	**24**	**747**
PCE Trip Generation (Total)		**50**	**47**	**97**	**54**	**48**	**102**	**1767**

Notes:

TSF= Thousand Square Feet.

[1] The trip generation is based on 24 hour tube counts collected at the existing driveways of the subject site. Counts were collected by National Data and Surveying Services on April 12, 2016. Truck trips were converted to PCEs using PCE factors included in the City's TIA Guidelines, dated June 2015. A 2.0 PCE factor was used for 2-axle trucks, 2.5 for 3-axle trucks and 3.0 for 4- and more axle trucks was used.

Table B - ITE Trip Generation (Existing Land Use)

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
Warehousing[1]	212.3 TSF							
Trips/Unit (Cars)		0.192	0.047	0.239	0.063	0.192	0.255	2.833
Trips/Unit (2-Axle Trucks)		0.008	0.002	0.010	0.003	0.008	0.011	0.123
Trips/Unit (3-Axle Trucks)		0.011	0.003	0.014	0.004	0.011	0.015	0.165
Trips/Unit (4+ Axle Trucks)		0.029	0.008	0.037	0.010	0.029	0.039	0.439
Trips/Unit (Total)		0.240	0.060	0.300	0.080	0.240	0.320	3.560
Trip Generation (Cars)		41	10	51	13	41	54	601
Trip Generation (2-Axle Trucks)		2	0	2	1	1	2	26
Trip Generation (3-Axle Trucks)		2	1	3	1	2	3	35
Trip Generation (4+ Axle Trucks)		6	2	8	2	6	8	93
Trip Generation (Total)		51	13	64	17	50	67	755
Trip Generation (Cars)		**41**	**10**	**51**	**13**	**41**	**54**	**601**
PCE Trip Generation (2-Axle Trucks)		**4**	**0**	**4**	**2**	**2**	**4**	**52**
PCE Trip Generation (3-Axle Trucks)		**5**	**3**	**8**	**3**	**5**	**8**	**88**
PCE Trip Generation (4+ Axle Trucks)		**18**	**6**	**24**	**6**	**18**	**24**	**279**
PCE Trip Generation (Total)		**68**	**19**	**87**	**24**	**66**	**90**	**1020**

Notes:

TSF= Thousand Square Feet.

[1] The trip generation is based on rates for Land Use 150 - "Warehousing" from the ITE *Trip Generation*, 9th Edition. All trips were converted to car and truck trips using the vehicle mix included in the Fontana Truck Trip Generation Study. Truck trips were converted to PCEs using PCE factors included in the City's TIA Guidelines, dated June 2015. A 2.0 PCE factor was used for 2-axle trucks, 2.5 for 3-axle trucks and 3.0 for 4- and more axle trucks was used.

Table C - ITE Trip Generation (Proposed Project)

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
High Cube Warehouse[1]	347.6 TSF							
Trips/Unit (Cars)		0.065	0.023	0.088	0.032	0.063	0.095	1.337
Trips/Unit (2-Axle Trucks)		0.003	0.001	0.004	0.001	0.003	0.004	0.058
Trips/Unit (3-Axle Trucks)		0.003	0.002	0.005	0.002	0.004	0.006	0.078
Trips/Unit (4+ Axle Trucks)		0.009	0.004	0.013	0.005	0.010	0.015	0.207
Trips/Unit (Total)		0.080	0.030	0.110	0.040	0.080	0.120	1.680
Trip Generation (Cars)		23	8	31	11	22	33	465
Trip Generation (2-Axle Trucks)		1	0	1	0	1	1	20
Trip Generation (3-Axle Trucks)		1	1	2	1	1	2	27
Trip Generation (4+ Axle Trucks)		3	2	5	2	3	5	72
Trip Generation (Total)		28	11	39	14	27	41	584
Trip Generation (Cars)		**23**	**8**	**31**	**11**	**22**	**33**	**465**
PCE Trip Generation (2-Axle Trucks)		**2**	**0**	**2**	**0**	**2**	**2**	**40**
PCE Trip Generation (3-Axle Trucks)		**3**	**3**	**6**	**3**	**3**	**6**	**68**
PCE Trip Generation (4+ Axle Trucks)		**9**	**6**	**15**	**6**	**9**	**15**	**216**
PCE Trip Generation (Total)		**37**	**17**	**54**	**20**	**36**	**56**	**789**
Warehousing[2]	82.6 TSF							
Trips/Unit (Cars)		0.192	0.047	0.239	0.063	0.192	0.255	2.833
Trips/Unit (2-Axle Trucks)		0.008	0.002	0.010	0.003	0.008	0.011	0.123
Trips/Unit (3-Axle Trucks)		0.011	0.003	0.014	0.004	0.011	0.015	0.165
Trips/Unit (4+ Axle Trucks)		0.029	0.008	0.037	0.010	0.029	0.039	0.439
Trips/Unit (Total)		0.240	0.060	0.300	0.080	0.240	0.320	3.560
Trip Generation (Cars)		16	4	20	5	16	21	234
Trip Generation (2-Axle Trucks)		1	0	1	0	1	1	10
Trip Generation (3-Axle Trucks)		1	0	1	0	1	1	14
Trip Generation (4+ Axle Trucks)		2	1	3	1	2	3	36
Trip Generation (Total)		20	5	25	6	20	26	294
Trip Generation (Cars)		**16**	**4**	**20**	**5**	**16**	**21**	**234**
PCE Trip Generation (2-Axle Trucks)		**2**	**0**	**2**	**0**	**2**	**2**	**20**
PCE Trip Generation (3-Axle Trucks)		**3**	**0**	**3**	**0**	**3**	**3**	**35**
PCE Trip Generation (4+ Axle Trucks)		**6**	**3**	**9**	**3**	**6**	**9**	**108**
PCE Trip Generation (Total)		**27**	**7**	**34**	**8**	**27**	**35**	**397**
Total Trip Generation (Car)	**430.2 TSF**	**39**	**12**	**51**	**16**	**38**	**54**	**699**
Total PCE Trip Generation (2-Axle Trucks)		**4**	**0**	**4**	**0**	**4**	**4**	**60**
Total PCE Trip Generation (3-Axle Trucks)		**6**	**3**	**9**	**3**	**6**	**9**	**103**
Total PCE Trip Generation (4-Axle Trucks)		**15**	**9**	**24**	**9**	**15**	**24**	**324**
Total PCE Trips		**64**	**24**	**88**	**28**	**63**	**91**	**1186**

Notes:

TSF= Thousand Square Feet.

[1] The trip generation is based on rates for Land Use 152 - "High Cube Warehouse" from the ITE *Trip Generation* , 9th Edition. All trip generation rates were converted to car and truck trips using the vehicle mix included in the Fontana Truck Trip Generation Study. Truck trips were converted to PCEs using PCE factors included in the City's TIA Guidelines, dated June 2015. A 2.0 PCE factor was used for 2-axle trucks, 2.5 for 3-axle trucks and 3.0 for 4- and more axle trucks was used.

[2] The trip generation is based on rates for Land Use 150 - "Warehousing" from the ITE *Trip Generation* , 9th Edition. All trip generation rates were converted to car and truck trips using the vehicle mix included in the Fontana Truck Trip Generation Study. Truck trips were converted to PCEs using PCE factors included in the City's TIA Guidelines, dated June 2015. A 2.0 PCE factor was used for 2-axle trucks, 2.5 for 3-axle trucks and 3.0 for 4- and more axle trucks was used.

Table D - Trip Generation Comparison (in PCEs)

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
Existing Land Use (Based on Existing Driveway Counts) [1]	212.3	TSF							
Trip Generation (Cars)			35	11	46	18	34	52	529
PCE Trip Generation (2-Axle Trucks)			6	8	14	0	0	0	96
PCE Trip Generation (3-Axle Trucks)			3	10	13	18	8	26	395
PCE Trip Generation (4+ Axle Trucks)			6	18	24	18	6	24	747
PCE Trip Generation (Total)			**50**	**47**	**97**	**54**	**48**	**102**	**1767**
Existing Land Use (Based on ITE Trip Generation Manual) [2]	212.3	TSF							
Trip Generation (Cars)			41	10	51	13	41	54	601
PCE Trip Generation (2-Axle Trucks)			4	0	4	2	2	4	52
PCE Trip Generation (3-Axle Trucks)			5	3	8	3	5	8	88
PCE Trip Generation (4+ Axle Trucks)			18	6	24	6	18	24	279
PCE Trip Generation (Total)			**68**	**19**	**87**	**24**	**66**	**90**	**1020**
Proposed Project (Based on ITE Trip Generation Manual) [3]	430.2	TSF	39	12	51	16	38	54	699
Trip Generation (Cars)			4	0	4	0	4	4	60
PCE Trip Generation (2-Axle Trucks)			6	3	9	3	6	9	103
PCE Trip Generation (3-Axle Trucks)			15	9	24	9	15	24	324
PCE Trip Generation (4+ Axle Trucks)			**64**	**24**	**88**	**28**	**63**	**91**	**1186**
PCE Trip Generation (Total)									
Net Project Trip Generation (Worst Case									
Proposed Project w/ ITE Rates (-) Existing Land Use w/ ITE Rates									
Trip Generation (Cars)			**-2**	**2**	**0**	**3**	**-3**	**0**	**98**
PCE Trip Generation (2-Axle Trucks)			**0**	**0**	**0**	**-2**	**2**	**0**	**8**
PCE Trip Generation (3-Axle Trucks)			**1**	**0**	**1**	**0**	**1**	**1**	**15**
PCE Trip Generation (4+ Axle Trucks)			**-3**	**3**	**0**	**3**	**-3**	**0**	**45**
PCE Trip Generation (Total)			**-4**	**5**	**1**	**4**	**-3**	**1**	**166**

Notes:

TSF= Thousand Square Feet.

[1] The trip generation is based on 24 hour tube counts collected at the existing driveways of the subject site. Counts were collected by National Data and Surveying Services on April 12, 2016. Truck trips were converted to PCEs using PCE factors included in the City's TIA Guidelines, dated June 2015. A 2.0 PCE factor was used for 2-axle trucks, 2.5 for 3-axle trucks and 3.0 for 4- and more axle trucks was used.

[2] The trip generation is based on rates for Land Use 150 - "Warehousing" from the ITE Trip Generation, 9th Edition. All trip generation rates were converted to car and truck trips using the vehicle mix included in the Fontana Truck Trip Generation Study. Truck trips were converted to PCEs using PCE factors included in the City's TIA Guidelines, dated June 2015. A 2.0 PCE factor was used for 2-axle trucks, 2.5 for 3-axle trucks and 3.0 for 4- and more axle trucks was used.

[3] The trip generation is based on rates for Land Uses 150 - "Warehousing" and 152-"High Cube Warehouse" from the ITE Trip Generation, 9th Edition. All trip generation rates were converted to car and truck trips using the vehicle mix included in the Fontana Truck Trip Generation Study. Truck trips were converted to PCEs using PCE factors included in the City's TIA Guidelines, dated June 2015. A 2.0 PCE factor was used for 2-axle trucks, 2.5 for 3-axle trucks and 3.0 for 4- and more axle trucks was used.