



September 24, 2021

House Properties
35 Corte Madera Avenue
Mill Valley, CA 94941
c/o Mr. Randy Figueiredo, AIA

Focused Traffic Analysis for the 3111 Santa Rosa Avenue Project

Dear Mr. Figueiredo;

As requested, W-Trans has prepared a focused traffic analysis for the proposed mixed-use project to be located at 3111 Santa Rosa Avenue in the City of Santa Rosa. The purpose of this letter is to address the project's anticipated trip generation and the resulting proportional share of the cost of signaling the intersection of Santa Rosa Avenue/Bellevue Avenue as well as to ensure that the planned improvements at this corner will accommodate the signal equipment that would need to be located there.

Existing Conditions

The study area consists of Santa Rosa Avenue, which north-south along the project frontage, where it has two 11-foot travel lanes in each direction and a center two-way left-turn lane. Traffic counts obtained on February 19, 2019, indicate that the roadway is carrying about 27,500 vehicles per day.

Project Description

The proposed project includes 48 units of multifamily housing and an approximately 85,000 square foot self-storage facility.

Trip Generation

The anticipated trip generation for the proposed project was estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, 10th Edition, 2017 for "Multifamily Housing (Mid-Rise)" (ITE LU 221) and "Mini-Warehouse" (ITE LU151). Because the site is currently occupied by an automobile and RV storage and the number of vehicle trips generated is negligible, no trips were deducted for the existing use.

Total Project Trip Generation

The expected trip generation potential for the proposed project is indicated in Table 1. The proposed project is expected to generate an average of 390 trips per day, including 26 trips during the a.m. peak hour and 36 during the p.m. peak hour; these new trips represent the increase in traffic associated with the project compared to existing volumes.

Table 1 – Trip Generation Summary

Land Use	Units	Daily		AM Peak Hour				PM Peak Hour			
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
Proposed											
Mini-Warehouse	85.5 ksf	1.51	129	0.10	9	5	4	0.17	15	7	8
Multifamily Housing (Mid-Rise)	48 du	5.44	261	0.36	17	4	13	0.44	21	13	8
Total			390		26	9	17		36	20	16

Note: ksf = 1,000 square feet; du = dwelling unit

Proportional Share

The City has identified a need for a traffic signal at the intersection of Santa Rosa Avenue/Bellevue Avenue. Due to the proximity of the project to the intersection, the project should pay a proportional share toward the planned signalization project.

Turning movements counts were not available for the intersection of Santa Rosa Avenue/Bellevue Avenue, therefore it was conservatively assumed that no future development would occur that would contribute new trips to the Bellevue Avenue approaches. Existing and future volumes for northbound and southbound Santa Rosa Avenue were taken from the Sonoma County Transportation Authority's (SCTA) model and used in the proportional share calculation. Project trips were assumed to be distributed such that 60 percent would be to and from the north, thereby adding to volumes at the signal. These 16 a.m. peak hour and 22 p.m. peak hour trips were considered the project's contribution to the intersection's future volumes.

To offset the project's effect at Santa Rosa Avenue/Bellevue Avenue the project should make a proportional share contribution of 2.28 percent of the cost of signalizing the intersection, estimated as \$15,960 for an assumed cost for the signal of \$700,000. The calculation for the proportional share is enclosed.

Site Review

The site plan, including right-of-way (ROW) at the southwest corner of Santa Rosa Avenue/Bellevue Avenue, was reviewed for adequacy to accommodate the planned future traffic signal installation. With the planned update to the project's frontage along Santa Rosa Avenue, the ROW lines should be modified to be consistent with the back of the sidewalk. The project should also include the restriping of the crosswalk on the west leg of the intersection as shown in the enclosure as part of reconstructing the southwest corner. With the ROW set at the back of the sidewalk there would be adequate space for the installation of the traffic signal equipment. Potential pole locations are also shown in the enclosure.

Conclusions and Recommendations

- The proposed project is expected to generate an average of 390 trips per day, including 26 trips during the a.m. peak hour and 36 during the p.m. peak hour.
- The project should make a proportional share contribution of 2.28 percent towards the cost of a traffic signal installation at Santa Rosa Avenue/Bellevue Avenue.
- The crosswalk on the west leg of Santa Rosa Avenue/Bellevue Avenue should be restriped with the construction of the new curb ramp.

Thank you for giving W-Trans the opportunity to provide these services. Please call if you have any questions.

Sincerely,

Allison Jaromin, EIT
Associate Engineer

Dalene J. Whitlock, PE, PTOE
Senior Principal

DJW/acj/SRO581.L1

Enclosures: Proportional Share Calculation, Future Traffic Signal Pole and Crosswalk Locations

**Equitable Share Calculations
3111 Santa Rosa Avenue**

	AM	PM
<i>Project Trips (T)</i>	16	22

Total Volume Entering the Intersection of		
Santa Rosa Ave/Bellevue Ave		
	AM	PM
Existing	1104	1389
Future Year	1786	2379

Description of Project Improvement:

Install a traffic signal.

Calculation of Project Share

$$P = T / (TB - TE)$$

where:

P = Equitable Share

T = Project trips during the affected peak hour

TB = Build-out volumes

TE = Existing volumes

T	16	22
TB	1786	2379
TE	1104	1389
P	2.3%	2.2%

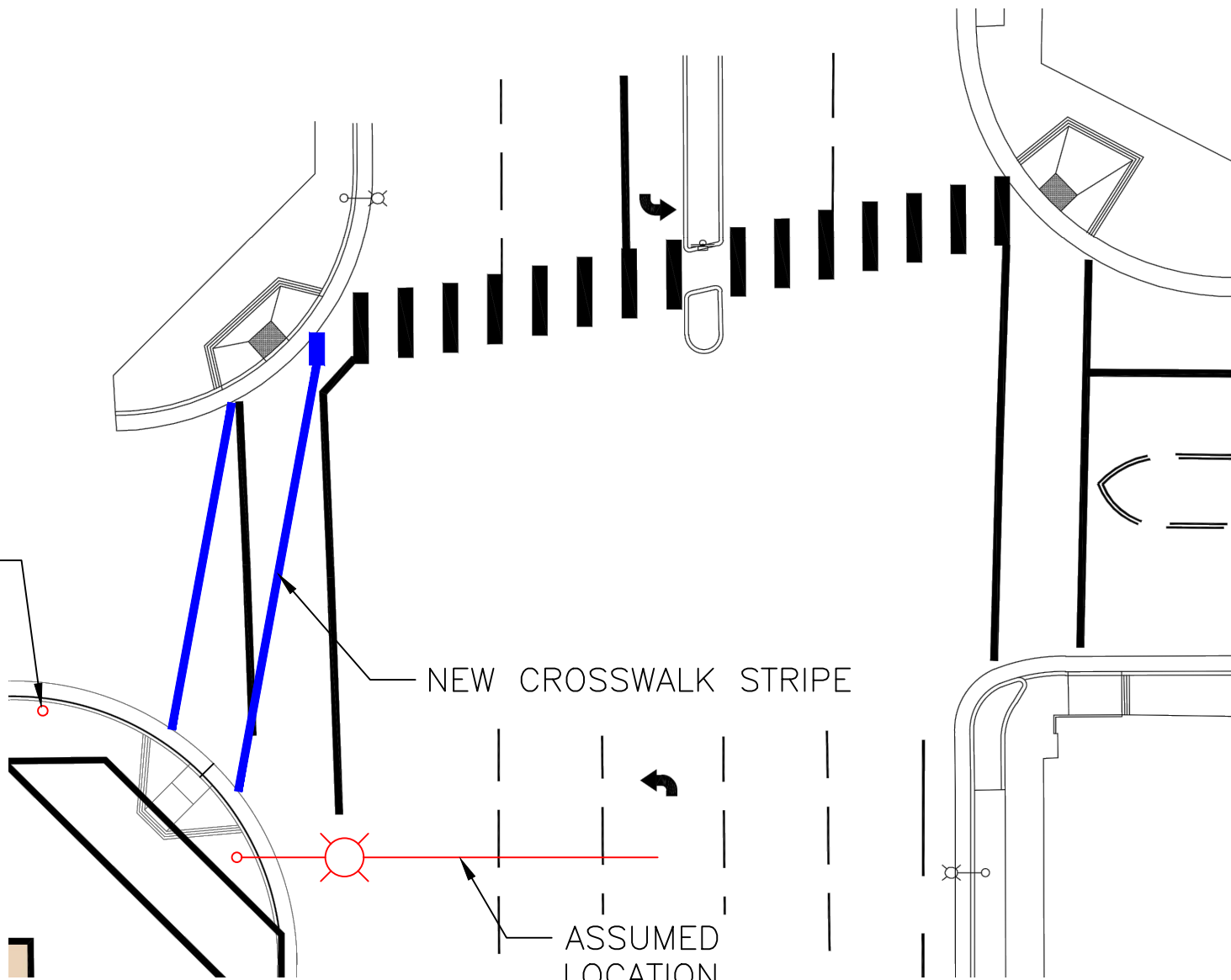
**Average
2.28%**

Total Estimated Cost of Improvements \$700,000

Equitable Share Contribution **\$15,960**

Equitable Share (per Caltrans "Guide for the Preparation of Traffic Impact Studies")

ASSUMED
LOCATION
OF FUTURE
TYPE IB
POLE



NEW CROSSWALK STRIPE

ASSUMED
LOCATION
OF FUTURE
MAST ARM
POLE



FUTURE TRAFFIC SIGNAL POLE AND CROSSWALK LOCATIONS