



February 7, 2020

Mr. Mark Sater  
BEYOND FOOD MART  
4300 Edison Avenue  
Chino, California 91710

**RE: Boron Beyond Food Mart Noise Evaluation**  
19223

Dear Mr. Sater:

The firm of Ganddini Group, Inc. is pleased to provide the below information for the County's Acoustical Information Form for the Boron Beyond Food Mart Project. The proposed development consists of a 7,250 square foot convenience market with drive-through window and gasoline fuel station with 28 vehicle fueling positions. The 2.82-acre project site is located at the northwest corner of Highway 395 and State Route 58 in unincorporated San Bernardino County (see Figure 1). Figure 2 illustrates the project site plan.

Although this is a technical letter, effort has been made to write the report clearly and concisely. To assist the reader with those terms unique to noise analysis, a list of acronyms and a glossary of terms have been provided in Appendix A and Appendix B of this report, respectively.

## **PROJECT DESCRIPTION AND NOISE SOURCES**

**1. Describe the project with emphasis on all aspects of the project that may generate noise, including potential noise sources, times of day noises may occur, duration, if noises are restricted to indoor or outdoor areas and if there are plans to change the size or intensity of operations.**

The Boron Beyond Food Mart is proposed to consist of a 7,250 square foot convenience market with drive-through window and gasoline fuel station with 28 vehicle fueling positions. The project is to be operational 24 hours a day with three employee shifts. There would be three to four employees per shift. No size or intensity changes to the project are proposed.

Exterior noise sources associated with the project would include rooftop air conditioning units, a drive-thru speakerphone, a drive-through queue line, gasoline service station activities, loading/unloading of delivery vehicles, and typical parking lot noise.

With the exception of HVAC, these typical commercial and parking lot noise sources are expected to occur for less than a minute at a time. The HVAC is expected to be in operation during business hours.

Noise associated with parking lots includes, but is not limited to idling cars/trucks, trucks diesel engines, exhaust systems, trailer coupling, air brakes, warning signal, doors closing, and starting engine noise. The proposed project includes 38 parking spaces (this includes 28 parking spaces within the gas station canopy and one loading/unloading space).

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The gasoline service station activities include those associated with the 28 position fueling canopy such as conversation, vehicles coming and going, amplified music, and other general fueling activities. The gasoline fueling canopy is located at the east of the project site adjacent to Highway 395.

Noise sources associated with the drive-through include the drive-through speaker and vehicles waiting in the queue line. The drive-through speaker is located along the western side of the proposed building. Noise associated with drive-thru speakers vary as they are adjustable and can be set to be just above the ambient noise levels. Furthermore, vehicles waiting in the drive-through queue line would include noise sources such as conversation and amplified music.

Indoor activities associated with the proposed project would not be readily audible outside or at nearby receptors.

The proposed development is projected to generate approximately 5,431 daily vehicle trips, with 253 trips during the morning peak hour and 211 trips during the evening peak hour, on weekdays and 5,075 daily vehicle trips, with 463 Saturday mid-day peak hour trips, on the weekend. The project site includes previous existing uses such as 11,825 square feet of industrial uses, one single-family dwelling unit, an automobile care center, gasoline service station, and fast-food restaurant with drive-through. Therefore, with incorporation of the trips generated by these previous uses, the proposed project is to have a net increase from existing of 3,926 daily vehicle trips during the weekday and 2,009 daily vehicle trips on the weekend<sup>1</sup>. As stated previously, the roadways adjacent to the project site include that of Highway 395 and Highway 58; therefore, off-site project generated vehicle noise would not be anticipated to substantially increase ambient noise levels.

## ZONING AND CURRENT LAND USES

### **2. Zoning and current land uses of the properties to the north, south, east and west.**

Please see Figure 3 Existing Zoning for the current County of San Bernardino Zoning Map for the project area (San Bernardino County Land Use Plan EH04A Kramer Junction).

#### *Zoning North of the Project Site*

The land to the north of the project area is zoned Rural Commercial (RC). The project site has an existing commercial use, antique shop, in the northern portion that is to remain. To the north of this existing commercial use is the State Route 58 Kramer Junction Expressway. The land north of the Expressway is currently vacant.

#### *Zoning South of the Project Site*

The southern boundary of the project site abuts a BNSF railroad line. The land uses to the south of the project site are zoned Rural Commercial (RC). Just south of the BNSF railroad line is a small commercial use at the northwest corner of Twenty Mule Road (Old State Route 58) and Highway 395. In addition, a gas station is located at the northeast corner of Twenty Mule Road (Old State Route 58) and Highway 395. Other than these two commercial uses, the land just south of the BNSF railroad line is vacant. Commercial uses are also located further south, on the southern side of Twenty Mule Road (Old State Route 58). The commercial uses on the southern side of Twenty Mule Road (Old State Route 58) include gas station, retail, restaurant, and motel uses.

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<sup>1</sup> Source: [Boron Beyond Food Mart Scope for Traffic Study](#), Ganddini Group, Inc. (January 28, 2020).

*Zoning East of the Project Site*

The eastern boundary of the project site abuts Highway 395. Land east of Highway 395 is zoned Rural Commercial (RC). There is a vacant motel use to the east of Highway 395 as well as the on/off ramps for State Route 58 Kramer Junction Expressway.

*Zoning West of the Project Site*

Land west of the project site is zoned Resource Conservation (RC) with the Jurisdictional Control of the Military and is currently vacant.

**3. Distances to the adjacent property lines from the adjacent or onsite noise sources.**

Distances to nearby land uses from on-site noise sources are shown on Figure 4.

**4. Is the noise a fixed source (business, machinery, etc.) or a mobile source (roadway, rail line, etc.)?**

The proposed project is a commercial building and therefore is considered to be a fixed/stationary noise source.

**5. Are there any structures or other obstacles that may aid in reducing the noise exposure?**

The proposed building will shield land uses to the east from noise associated with the drive-through speaker. Furthermore, the distance from the project site to the commercial uses to the south will aid in reducing noise exposure. This is due to, like discussed in response to question 2 above, the BNSF railroad line and Twenty Mule Road (Old State Route 58) being located in between the project site and the majority of the commercial uses to the south. No other structures or obstacles are identified that will reduce noise exposure from the project site.

**6. Provide an area map (copy of Thomas Guide page or other map noting the location of the facility).**

Figure 1 shows the project location.

**7. Provide a facility map (hand drawn is adequate) noting the information in questions 2, 3, 4 and 5.**

The proposed site plan is provided on Figure 2. The surrounding existing zoning and land uses, proposed noise sources, and distances from the proposed noise sources to adjacent properties are provided on Figure 4.

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## CONCLUSION

It has been a pleasure to service your needs on the proposed Boron Beyond Food Mart Project. Should you have any questions or if we can be of further assistance, please do not hesitate to call at (714) 795-3100 x 203.

Sincerely,

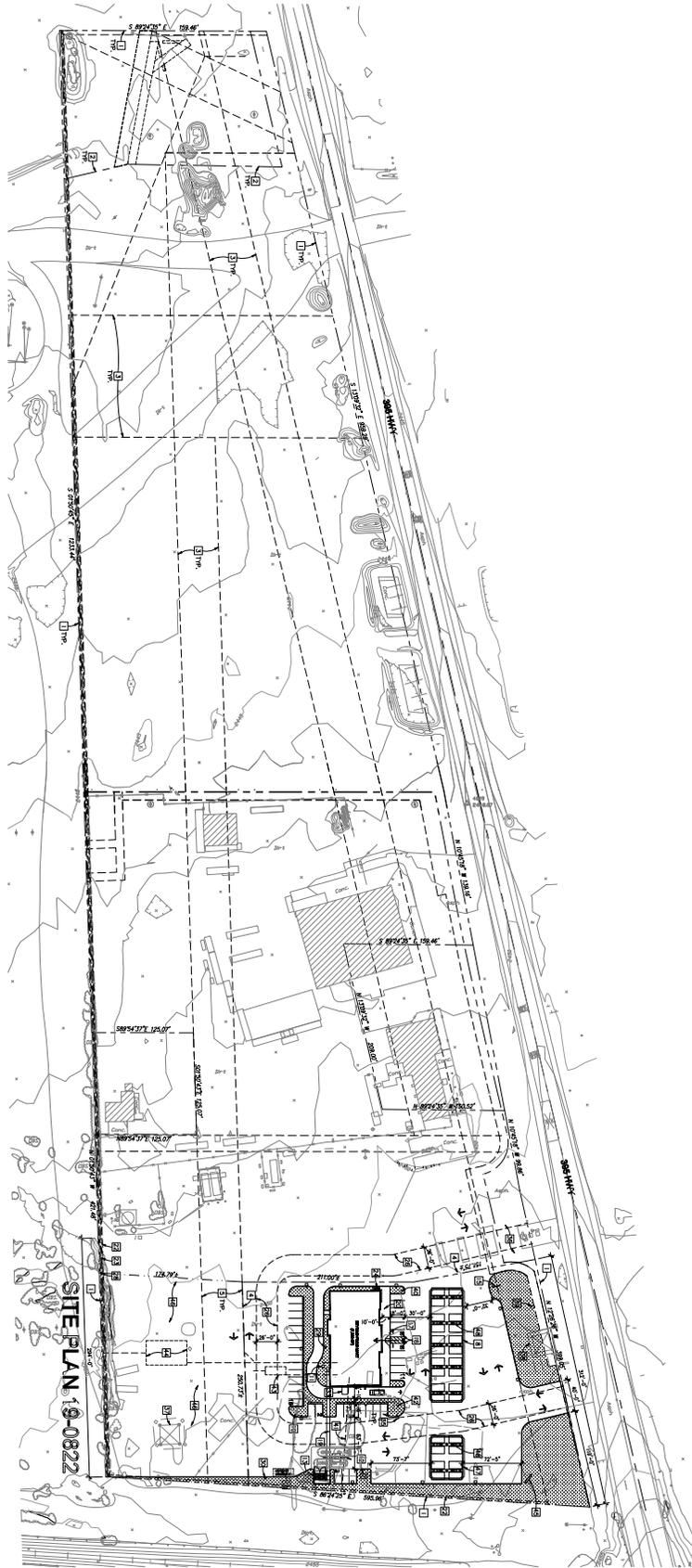
GANDDINI GROUP, INC.

A handwritten signature in black ink, appearing to read 'Catherine Howe', with a long horizontal stroke extending to the right.

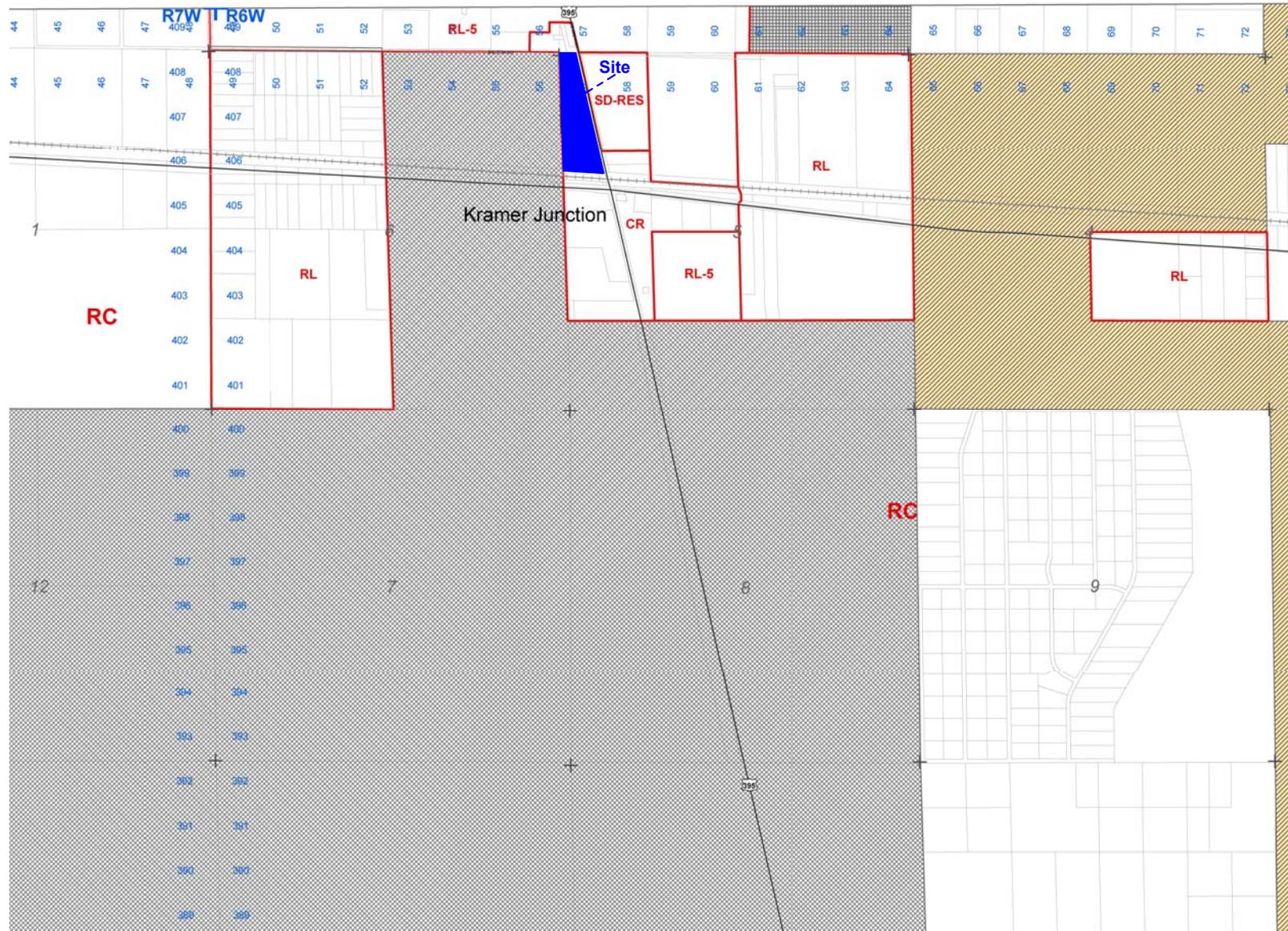
Catherine Howe, M.S.  
Noise/Air Quality Analyst



**Figure 1**  
**Project Location Map**



**Figure 2**  
**Site Plan**



**Land Use Zoning Districts**

- |                              |                           |                            |
|------------------------------|---------------------------|----------------------------|
| AG – Agriculture             | CS – Service Commercial   | RC – Resource Conservation |
| CG – General Commercial      | FW – Floodway             | RL – Rural Living          |
| CH – Highway Commercial      | IC – Community Industrial | RM – Multiple Residential  |
| CN – Neighborhood Commercial | IN – Institutional        | RS – Single Residential    |
| CO – Office Commercial       | IR – Regional Industrial  | SD – Special Development   |
| CR – Rural Commercial        | OS – Open Space           | SP – Specific Plan         |

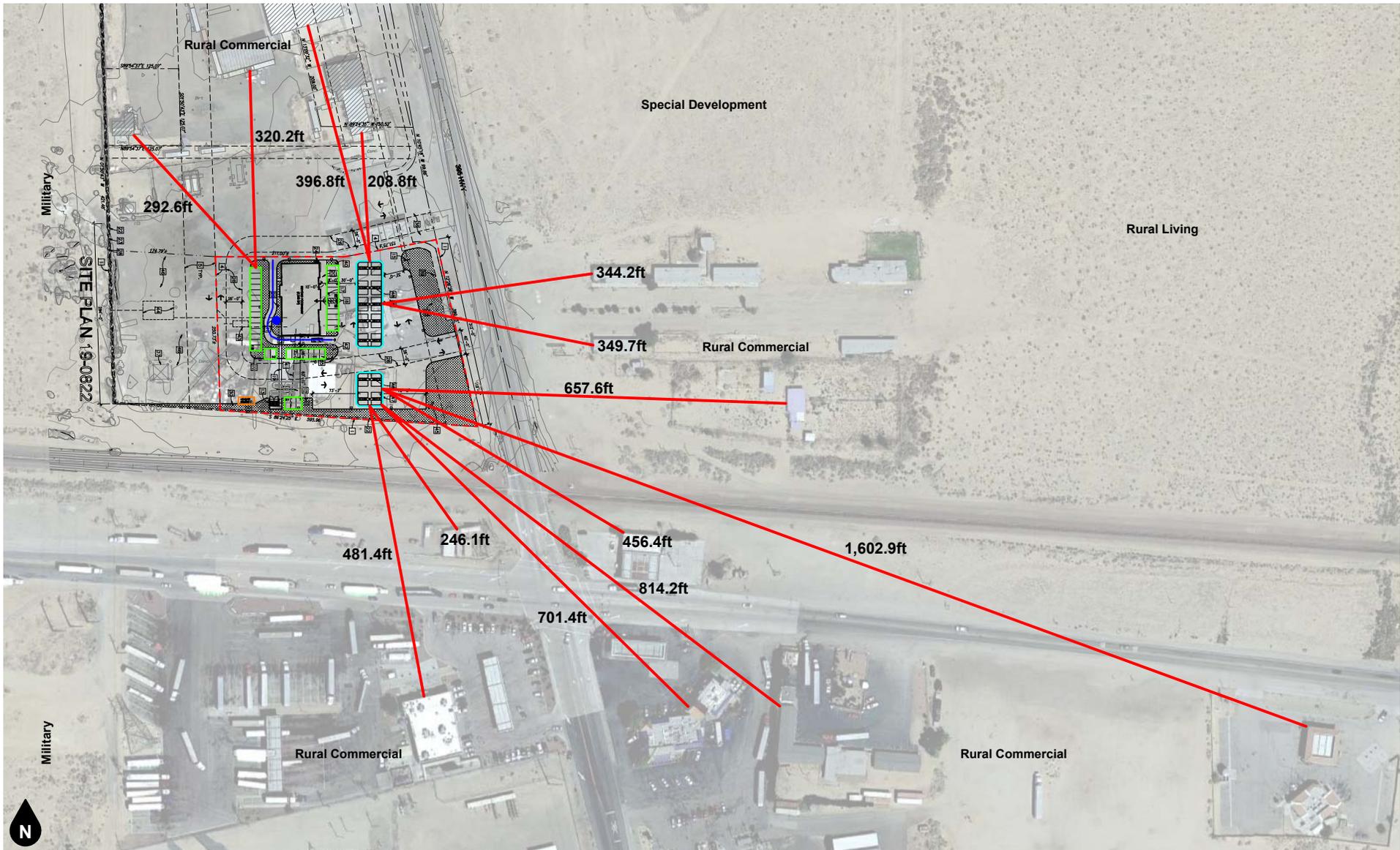
**Jurisdictional Control**

- |                 |                          |                        |
|-----------------|--------------------------|------------------------|
| BLM             | State                    | Private Unincorporated |
| National Park   | Indian Land              | RDA                    |
| National Forest | Other Federal Government |                        |
| Military        | County                   |                        |

**Figure 3**  
**Existing Zoning**

Source: San Bernardino County Land Use Plan





**Legend**

- Project Boundary
- Gas Canopy
- Drive-Thru Queue
- Drive-Thru Speaker
- Parking
- Loading/Unloading

**Figure 4**  
**Existing and Proposed Noise Source Locations**

**APPENDIX A**  
**LIST OF ACRONYMS**

## TERMS

ADT  
ANSI  
APN  
Caltrans  
Calveno  
CEQA  
CFR  
CNEL  
D/E/N  
dB  
dBA or dB(A)  
EIR  
EPA  
FAA  
FHWA  
FTA  
Hz  
INCE  
L<sub>02</sub>, L<sub>08</sub>, L<sub>50</sub>, L<sub>90</sub>  
  
DNL  
L<sub>eq(x)</sub>  
L<sub>max</sub>  
L<sub>min</sub>  
LOS C  
MPH  
NEPA  
OPR  
Peak Hour L<sub>eq</sub>  
PPV  
RCNM  
RMS  
SEL  
SPL  
STC  
VdB

## DEFINITIONS

Average Daily Traffic volume  
American National Standard Institute  
Assessor's Parcel Number  
California Department of Transportation  
California Vehicle Noise  
California Environmental Quality Act  
Code of Federal Regulations  
Community Noise Equivalent Level  
Day/Evening/Night  
Decibel  
Decibel "A-Weighted"  
Environmental Impact Report  
Environmental Protection Agency  
Federal Aviation Administration  
Federal Highway Administration  
Federal Transit Administration  
Hertz  
Institute of Noise Control Engineering  
A-weighted Noise Levels at 2 percent, 8 percent, 50 percent, and 90 percent, respectively, of the time period  
Day-Night Average Noise Level  
Equivalent Noise Level for "x" period of Time  
Maximum Level of Noise (measured using a sound level meter)  
Minimum Level of Noise (measured using a sound level meter)  
Level of Service C  
Miles Per Hour  
National Environmental Policy Act  
California Governor's Office of Planning and Research  
Peak Hour Equivalent Sound Level  
Peak Particle Velocity  
Road Construction Noise Model  
Root Mean Square  
Single Event Level or Sound Exposure Level  
Sound Pressure Level  
Sound Transmission Class  
Vibration Velocity Decibels

## **APPENDIX B**

### **DEFINITIONS OF ACOUSTICAL TERMS**

Term	Definition
Ambient Noise Level	The all-encompassing noise environment associated with a given environment, at a specified time, usually a composite of sound from many sources, at many directions, near and far, in which usually no particular sound is dominant.
A-Weighted Sound Level, dBA	The sound level obtained by use of A-weighting. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear.
CNEL	Community Noise Equivalent Level. CNEL is a weighted 24-hour noise level that is obtained by adding five decibels to sound levels in the evening (7:00 PM to 10:00 PM), and by adding ten decibels to sound levels at night (10:00 PM to 7:00 AM). This weighting accounts for the increased human sensitivity to noise during the evening and nighttime hours.
Decibel, dB	A logarithmic unit of noise level measurement that relates the energy of a noise source to that of a constant reference level; the number of decibels is 10 times the logarithm (to the base 10) of this ratio.
DNL, Ldn	Day Night Level. The DNL, or Ldn is a weighted 24-hour noise level that is obtained by adding ten decibels to sound levels at night (10:00 PM to 7:00 AM). This weighting accounts for the increased human sensitivity to noise during the nighttime hours.
Equivalent Continuous Noise Level, $L_{eq}$	A level of steady state sound that in a stated time period, and a stated location, has the same A-weighted sound energy as the time-varying sound.
Fast/Slow Meter Response	The fast and slow meter responses are different settings on a sound level meter. The fast response setting takes a measurement every 100 milliseconds, while a slow setting takes one every second.
Frequency, Hertz	In a function periodic in time, the number of times that the quantity repeats itself in one second (i.e., the number of cycles per second).
$L_{02}$ , $L_{08}$ , $L_{50}$ , $L_{90}$	The A-weighted noise levels that are equaled or exceeded by a fluctuating sound level, 2 percent, 8 percent, 50 percent, and 90 percent of a stated time period, respectively.
$L_{max}$ , $L_{min}$	$L_{max}$ is the RMS (root mean squared) maximum level of a noise source or environment measured on a sound level meter, during a designated time interval, using fast meter response. $L_{min}$ is the minimum level.
Offensive/ Offending/ Intrusive Noise	The noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of sound depends on its amplitude, duration, frequency, and time of occurrence, and tonal information content as well as the prevailing ambient noise level.
Root Mean Square (RMS)	A measure of the magnitude of a varying noise source quantity. The name derives from the calculation of the square root of the mean of the squares of the values. It can be calculated from either a series of lone values or a continuous varying function.