APPENDIX D

Environmental Noise Assessment

Environmental Noise Assessment

Rocklin 60 Residential Development

Rocklin, California

BAC Job # 2005-694

Prepared For:

Rocklin 60, LLC

3600 American River Pkwy., Ste. 105
Sacramento, CA 95864

Prepared By:

Bollard Acoustical Consultants, Inc.

Paul Bollard

Paul Bollard, President

Revised December 4, 2006

BOLLARD
Acoustical Consultants

1293 Lincoln Way, Suite A ► Auburn, CA 95603 ► Phone: (530) 745-0550 ► Fax: (530) 745-0551 ► BACNOISE.COM

INTRODUCTION

The proposed Rocklin 60 Residential Development Project is located east of the intersection of the intersection of Interstate 80 (I-80) and Sierra College Boulevard in the City of Rocklin, California. The project consists of the construction of approximately 177 single-family residential homes. Traffic on Interstate 80 and the commercial activities associated with the proposed Rocklin Crossings commercial project are considered to be potentially significant noise sources which may affect the project design. As a result, this analysis of potential noise impacts associated with traffic and commercial activities at the proposed project site has been prepared. Figure 1 shows the project tentative site plan.

CRITERIA FOR ACCEPTABLE NOISE EXPOSURE

The City of Rocklin General Plan Noise Element establishes a 60 dB L_{dn}[1] exterior noise level criterion as being acceptable for new residential uses affected by traffic noise sources. The exterior noise level standard is applied at the outdoor activity areas of the residences. Where it is not possible to reduce noise in the outdoor activity area to 60 dB Ldn/CNEL or less using a practical application of the best-available noise reductions measures, an exterior noise level of up to 65 dB Ldn/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with the City's 45 dB L_{dn} interior noise level standard.

Recommended State Model Noise Ordinance Standards:

In cases where local jurisdictions do not have quantitative noise level limits which would be applicable to noise-sensitive receptors affected by non-transportation noise sources (such as the noise sources associated with the proposed commercial uses), the State of California Model Community Noise Control Ordinance can provide guidance.

The State of California Office of Noise Control (ONC) developed the Model Community Noise Control Ordinance to assist cities and counties in the development of appropriate noise standards for their jurisdictions. The ONC standards are recommended in terms of hourly levels, and include adjustments for the rural versus urban nature of the community, the time of day the noise occurs, the duration of the intrusive sound, the ambient conditions, and the characteristics of the noise (impulsive, tonal, speech or music, etc.). The ONC recommended standards which could be considered most applicable to this project are shown in Table 1.

[1] Please refer to Appendix "A" for definitions of acoustic terminology.

Table 1
State of California Model Noise Ordinance Recommended Standards
(Suburban Land Uses)

Receiving Land Use	Duration of Intrusive Sound	Daytime Standard (7 a.m. - 10 p.m.)	Nighttime Standard (10 p.m. - 7 a.m.)
One & Two Family	30 - 60 minutes per hour	55	45
Residential	15 - 30 minutes per hour	60	50
	5 - 15 minutes per hour	65	55
	1 - 5 minutes per hour	70	60
	Less than 1 minute per hour	75	65

If the offensive noise contains a steady, audible tone such as a whine, screech, or hum, or is a repetitive noise such as hammering, or riveting, or contains music or speech, the standard limits shown shall be reduced by 5 dB.

EXISTING LAND USES AND NOISE ENVIRONMENT IN THE PROJECT VICINITY

Existing land uses in the project vicinity consist of mostly rural residences to the east The project site is bordered to the north by Interstate 80 and to the east and south by existing rural residences. The property just west of the project site is currently vacant, however, a large commercial center is has been proposed for the property (Rocklin Crossings).

The existing ambient noise environment in the immediate project vicinity is dominated by traffic noise from Interstate 80. To quantify existing noise levels in the project vicinity, a noise measurement survey was conducted on and near the project site. The following section describes the measurement procedure and results.

General Ambient Noise Level Survey:

A 24-hour ambient noise survey was conducted on the project site on January 19, 2006. The 24-hour ambient noise measurement site is shown on Figure 1. A Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meter was used for the ambient noise level measurement survey. The meter was calibrated before and after use with an LDL Model CA200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

The noise level meter was programmed to record the maximum and average hourly noise levels during the survey. The maximum value, denoted L_{max}, represents the highest noise level measured. The average value, denoted L_{eq}, represents the energy average of all of the noise received by the sound level meter microphone during the monitoring period. The hourly noise level data was used to calculate the average day/night noise level (L_{dn}). The noise level measurement results are provided in Table 2.

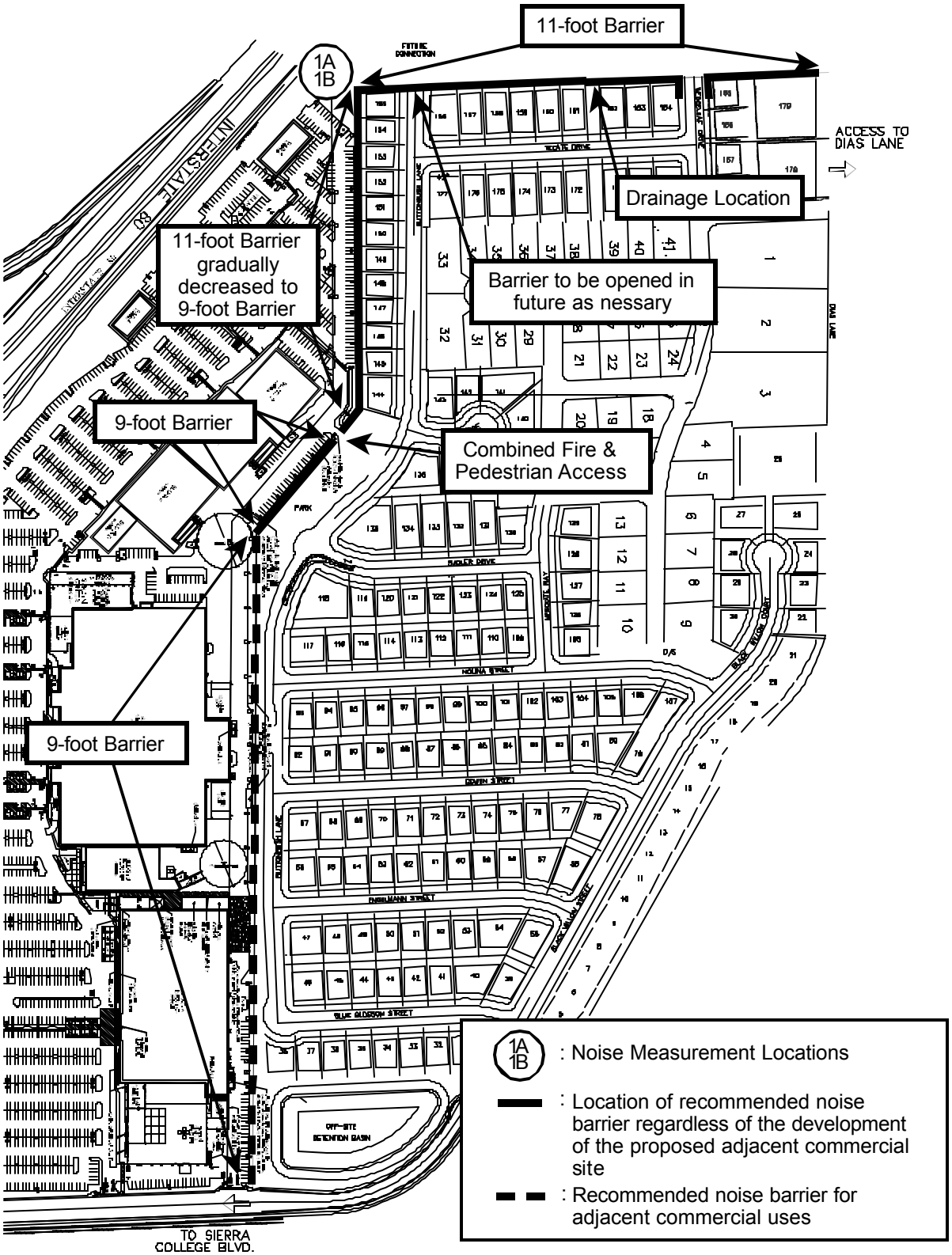
Table 2
Ambient Noise Monitoring Results
Rocklin 60 Residential Development - January 19, 2006

		Measured Sound Level, dBA		
Site	Location	Day/Night (L_{dn})	Average Range (L_{eq})	Maximum (L_{max})
1	Northern Project Border at Proposed Lot #156	76	63-74	83

Source: Bollard Acoustical Consultants, Inc.

The ambient noise survey results indicate that the measured daytime ambient noise levels at the project site are elevated well above City of Rocklin noise level standards, as would be expected of areas immediately adjacent to the I-80 corridor.

Figure 1
Rocklin 60 Residential Development
Rocklin, California



BOLLARD
Acoustical Consultants

EVALUATION OF FUTURE TRAFFIC NOISE LEVELS AT THE PROJECT SITE

Traffic Noise Prediction Methodology:

Bollard Acoustical Consultants, Inc. employs the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA RD-77-108) for the prediction of traffic noise levels. The model is based upon the CALVENO noise emission factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site.

On January 18, 2006, Bollard Acoustical Consultants, Inc. conducted noise level measurements and concurrent counts of Interstate 80 traffic on the project site. The purpose of the short-term traffic noise level measurements was to determine the accuracy of the FHWA model in describing the existing noise environment on the project site, accounting for shielding from existing intervening structures, actual travel speeds, and roadway grade. Noise measurement results were compared to the FHWA model results by entering the observed traffic volume, speed and distance as inputs to the FHWA model. See Figure 1 for noise measurement locations.

Instrumentation used for the measurement was a Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meter which was calibrated in the field before use with an LDL CA-200 acoustical calibrator. The noise measurement sites were selected to represent the back yards/first floor building facades and second floor building facades of the proposed residential lots adjacent to Interstate 80. Table 3 shows the results of the traffic noise calibration.

Table 3
Comparison of FHWA Model to Measured Interstate 80 Traffic Noise Levels

	Vehicles/Hr.			Speed	Dist.	Measured	Modeled	Difference
Site[1]	Autos	Med. Trk.	Hvy.Trk.	(mph)	(Feet)[2]	L_{eq}, dB	L_{eq}, dB[3]	
1A	878	23	31	70	225	66.4	70.6	4.2 dB
1B						73.0	70.6	-2.4 dB

1. Site 1A was located at grade with the roadway (1st floor) and Site 1B was elevated above the roadway (2nd floor).
2. The noise measurement distance is from the roadway centerline.
3. Acoustically "soft" site assumed
4. A complete listing of the calibration results are shown in Appendix C.

Based upon the calibration results, the FHWA Model was found to over predict traffic noise levels at the ground floor measurement location and under predict traffic noise levels at the second floor measurement location. In order to conservatively assess future traffic noise levels at the project site, no correction was made to the FHWA Model for predicted future traffic noise levels at ground floor locations and a +2 dB offset was applied to the predicted future traffic noise levels at second floor locations.

Predicted Exterior Traffic Noise Levels:

In order to determine future traffic noise levels from Interstate 80 on the project site, Bollard Acoustical Consultants, Inc. once again employed the FHWA model. The future traffic volume for Interstate 80 was obtained from the *Traffic Operations Analysis* conducted by Omni-Means for the Sierra College Boulevard/Interstate 80 Interchange Improvement Project (January 8, 2003). Table 4 shows the results of the traffic noise modeling.

Table 4
Predicted Future Interstate 80 Traffic Noise Levels

Location	Distance (Feet)[1]	Predicted Noise Level (L_{dn})	Distance to Noise Contours[1]	
			60 dB L_{dn}	65 dB L_{dn}
Lot 145	660	68 dB	2433 feet	1130 feet
Lot 156 - First Floor Location	225	76 dB		
Lot 156 - Second Floor Location	225	78 dB		
Lot 167	760	68 dB		

1. Distances are from the roadway centerline.

Note: A complete listing of FHWA Model inputs and results is provided in Appendix D.

Based upon the analysis, the predicted exterior noise levels will exceed the City of Rocklin 60 dB L_{dn} exterior noise level criterion. Bollard Acoustical Consultants, Inc. used the FHWA noise barrier performance analysis methodology to determine the insertion loss and resulting noise level provided by different barrier heights at lots affected by Interstate 80 traffic noise. Table 5 shows the results of the barrier analysis

Table 5
Predicted Traffic Noise Levels at Representative Residential Lots
With Varying Barrier Heights at the Property Lines

Barrier Location	Traffic Noise Level Without Barrier, L_{dn}	Barrier Height	Traffic Noise Level With Barrier, L_{dn}
Property Line of Lot 145	68 dB	8'	61 dB
		9'	60 dB
		10'	59 dB
Property Line of Lot 156	76 dB	8'	68 dB
		9'	67 dB
		10'	65 dB
		11'	65 dB
		12'	64 dB
Property Line of Lot 167	68 dB	7'	61 dB
		8'	60 dB
		9'	59 dB

Note: A complete listing of FHWA Model inputs and results is provided in Appendix E.

Based upon the Table 5 data, in order to reduce I-80 traffic noise levels at the nearest lots to comply with the City's 60 dB Ldn/CNEL exterior noise level standards a property line barrier height of approximately 18 feet would be required. A noise barrier of this magnitude is generally not a feasible means of noise mitigation. Furthermore, it is most likely not consistent with the City Planning Department's aesthetic guidelines. However, a property line noise barrier ranging in height from 9 to 11 feet at the locations shown in Figure 1 could be constructed to achieve future traffic noise levels of 60-65 dB Ldn within this project site.

Barriers should be constructed of concrete or masonry block, or precast concrete. Wood is not recommended due to eventual warping and shrinking of materials which results in openings and cracks which compromise the barrier longevity. Barriers on top of earthen berms are also acceptable. Other prefabricated barriers may be used. However, they should be reviewed by an acoustical consultant.

As indicated by Figure 1, the recommended noise barrier should traverse across the northern end of Buttonbush Lane, to be opened later to allow future access to other developments to the north should such developments be approved. It would not be feasible to achieve the required noise attenuation for this project without closing this gap with the noise barrier, as the opening would create a substantial acoustic "leak" into the development. Near the middle of the noise barrier is a drainage at the bottom of the barrier located between lots 161 and 162, and poses no threat due to the distance and angle of construction to I-80. The opening at Wedgeleaf Drive with the recommended noise barrier design wrap, indicated in Figure1, also poses no threat due to the distance and angle of construction to I-80. A combined Fire and Pedestrian Access opening is to located behind Building G of the retail center. With the combination of distance from the Fire and Pedestrian Access opening to the nearest homes and the additional shielding provided by the retail center the traffic noise from I-80 will comply with City's Standards. Also, delivery trucks activities will primally be to the south end of the retail center.

Predicted Traffic Noise Levels at Interior Areas:

Following barrier construction, worst case exterior traffic noise levels at the residences nearest to Interstate 80 are predicted to be 65 dB Ldn or less at first floor facades. Second floor facades would not be affected by the recommended noise barrier and are typically exposed to traffic noise levels approximately 2 dB higher than first floor facades due to the loss of excess ground attenuation. Therefore, the second floor facades of residences nearest to Interstate 80 would be exposed to future traffic noise levels of 78 dB L_{dn}. Therefore, building facade noise level reductions of 20 dB and 33 dB will be required to reduce interior traffic noise levels to a state of compliance with the City of Rocklin 45 dB L_{dn} interior noise level standard at first and second floor building facades, respectively.

Standard residential construction (wood siding or one-coat stucco siding, STC-27 windows, door weatherstripping, exterior wall insulation, composition plywood roof, etc.), results in an exterior to interior noise reduction of about 25 dB with windows closed, and approximately 15 dB with windows open.

Based upon a 25 dB building facade noise reduction provided by standard residential construction, interior traffic noise levels at first floor receivers are predicted to satisfy the City of Rocklin 45 dB Ldn interior noise level standard, but that standard would be exceeded at elevated second floor locations with standard construction. In order to achieve compliance with the 45 dB ldn interior noise level standard at elevated second floor facades, exterior wall and window upgrades will be required of this development. It is likely that window ratings will need to be upgraded to at least STC 35 ratings at the exposed windows nearest to Interstate 80, but an analysis of project construction plans should be conducted when such plans are available to ensure that sufficient sound insulation has been incorporated into the project design.

Noise From the Proposed Rocklin Crossing Commercial Development:

A separate noise analysis was prepared for the proposed Rocklin Crossings Commercial Development (Bollard Acoustical Consultants, March, 2006), in which noise impacts of that project upon the Rocklin 60 residential development were identified and noise mitigation measures developed. The following discussion was inserted from that analysis:

A combination of use of existing literature, and application of accepted noise prediction and sound propagation algorithms, were used to predict noise levels resulting from the Rocklin Crossings Retail Center project. Specific noise sources evaluated in this section include project construction, truck circulation and unloading activities, and mechanical equipment. Potential noise impacts of each of these major noise sources are described below.

Construction Noise from Rocklin Crossings Commercial Development

During the construction phases of the proposed Rocklin Crossings Commercial Development project, noise from construction activities would add to the noise environment in the immediate project vicinity. Activities involved in construction would generate maximum noise levels ranging from 85 to 90 dB at a distance of 50 feet, as indicated in Table 6. Noise would also be generated during the construction phase by increased truck traffic on area roadways. Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours.

Table 6
Construction Equipment Noise

Type of Equipment	Maximum Level, dB at 50 feet
Bulldozers	87
Heavy Trucks	88
Backhoe	85
Pneumatic Tools	85

Source: Environmental Noise Pollution, Patrick R. Cunniff, 1977.

Truck Delivery Noise from Rocklin Crossings Commercial Deveopment

The proposed home improvement store, large retail/grocery store, and commercial buildings E, F & G, will all have truck deliveries in the rear of these stores. As a result, trucks will arrive, pass, stop, start, couple and decouple trailers, back into loading docks, be unloaded, and depart the site. The trailers will consist of enclosed trailers with food (some refrigerated) and merchandise for each of the commercial buildings, and flatbeds carrying lumber to the home improvement store.

According to project representatives, worst case daily truck activity at these stores will conservatively consist of approximately 15 semi-trailer trucks per day and approximately 3 semi dual trailer flatbed trucks per day for delivery of materials at the home improvement store. In addition, 6 semi-trailer trucks delivering dry grocery goods and general merchandise per day and 3 refrigerated semi-trailer truck deliveries per day at the grocery store. Small vender trucks will also make deliveries to these stores. Therefore, for this analysis, it was assumed that up to 27 truck deliveries could occur in a given day.

Based on evaluation of the project site plan, delivery trucks will likely enter the site from the roadway proposed along the southern edge of the project site and traverse north behind the stores along the project's eastern border and then make their way the project's western site exit. The trucks will be closest to the noise-sensitive receivers during passages directly behind the stores. Specifically, truck pass-bys will be approximately 150 feet from the approximate center of the nearest residential backyards proposed to the east.

Truck pass-bys en route to the loading dock areas are expected to be relatively brief, and are estimated to produce an average Sound Exposure Level (SEL) of approximately 87 dB at a distance of 50 feet. The typical Lmax level due to a truck pass-by has been measured to be approximately 75 dB at a distance of 50 feet.

Primary noise sources associated with loading dock operations at the proposed large retail/grocery store, will most likely be heavy trucks stopping (air brakes), backing into the loading docks (back-up alarms), and pulling out of the loading docks (revving engines). In addition, if the heavy truck engines idle and/or trailer refrigeration unit's cycle on and off while the trucks are being unloaded, then these would be additional sources of noise at this location. Once the trucks have backed into the loading dock, they are unloaded from the inside of the store using a fork lift or hand cart, and most of that unloading noise is contained within the building and truck trailer.

Not all trucks are unloaded at loading docks, as beverage, bread, potato chip, and other venders often utilize hand carts to unload their products through rear doors (as opposed to depressed dock areas). Flatbed lumber trailers will be unloaded using forklifts in the area behind the home improvement store. Noise from these operations also contributes to the overall truck delivery noise environment.

Due to the fairly intensive truck unloading operations which will occur adjacent to the eastern site boundary, it is not feasible to assess the noise of different operations (i.e. lumber unloading, loading docks, truck pass-by's, refrigeration trucks, etc.), independently. As a result, the noise generation of each of these sources was combined to arrive at a cumulative assessment of truck delivery noise. The results of this assessment indicate that a typical busy hour of overall truck activity along the eastern site boundary would generate median (L_{50}) and maximum (L_{max}) noise levels of 60 dB and 80 dB, respectively, at a reference distance of 50 feet from the effective noise center of the truck unloading activities. An exception to these levels is made for refrigeration trucks, in which median noise levels would be approximately 5 dB higher, or 65 dB L_{50}. Maximum noise levels associated with refrigeration trucks were not found to be higher than maximum noise levels for non-refrigeration trucks.

The reference noise levels cited above are propagated to the nearest proposed residences to the east assuming standard spherical spreading treating the noise source as a stationary point. This standard assumption leads to a 6 dB decrease in noise levels for each doubling of distance. For example, the reference level of 60 dB L_{50} at 50 feet from the source would decrease to 54 dB L_{50} at a distance of 100 feet, and to 48 dB L_{50} at a distance of 200 feet.

The distances from the approximate noise center of the truck delivery areas to the nearest proposed residences in the Rocklin 60 development to the east vary. For example, Lot 38 is located closer to than lots 46-47, 66-67, and 92-93. Lots 145 and 146 are located even closer to the eastern site boundary still. Table 7 shows the approximate distances from the effective noise centers of the truck delivery areas to the nearest proposed residences to the east, and the corresponding noise levels associated with the combined truck delivery operations.

Table 7
Predicted Truck Delivery Noise Levels at Nearest Proposed Residences
Rocklin Crossing Project

Lot(s)	Distance	Predicted L_{50} Without / With Refrigeration Trucks	Predicted L_{max}
38	70	57 / 62	77
46-47, 66-67, 92-93, 117-118	120	52 / 57	72
145-146	70	57 / 62	77

Notes:

1. Lot locations are shown on Figure 1
2. Distances shown are from approximately noise center of truck activity areas to backyards of nearest residences.
3. Predicted L_{50} values based on a reference level of 60 dB at 50 feet.
4. Predicted L_{max} values based on a reference level of 80 dB at 50 feet.

The Table 7 data indicate that predicted median and maximum noise levels associated with truck deliveries would exceed both the recommended median and maximum noise level criteria shown in Table 2. As a result, a noise barrier analysis was preformed for this project. The barrier analysis took into account the relative elevations of the commercial truck activity areas as well as the elevations of the proposed residences to the east. It should be noted that a noise barrier is proposed by the project applicant, and that the barrier is to be located relative to the elevation of the commercial site. This is important in that the proposed residential area will be at a lower elevation than the commercial site, thereby improving the efficiency of the noise barrier constructed at the commercial site. The results of the barrier analysis are summarized in Table 8, with the detailed results shown in Appendix F.

Table 8
Barrier Heights Required to Satisfy Exterior noise standards at Nearest Residences
Rocklin Crossings Retail Center, Rocklin, California

	Noise Barrier Height to Achieve:	
	45 dB L50 Without / With Refrigeration Trucks	65 / 75 dB L_{max}
Lot 38	7 / 16	7 / 6
Lots 46-47	6 / 11	6 / 0
Lots 66-67	6 / 11	6 / 0
Lots 92-93	6 / 11	6 / 0
Lots 117-118	6 / 13	6 / 0
Lots 145-146	9 / 16	9 / 6

1. Source, residential building pads, and barrier elevations are given in Appendix F.
2. Cumulative commercial noise levels do not include refrigerated trailer unit noise.

The results of the noise barrier analysis indicate that, without refrigeration trucks present, noise barriers ranging in height from 6 to 9 feet along the eastern site boundary would could be utilized to reduce truck unloading activity noise to a state of compliance with the recommended 45 dB L_{50} and 65 dB L_{max} nighttime noise level criteria shown in Table 2.

To fully mitigate all truck unloading activity noise during day and nighttime hours, it is recommended that a solid property line noise barrier 9 feet in height (relative to commercial site elevation) be constructed at the locations show in Figure 1. I addition, barrier walls should be constructed along the sides of the Large Grocery cold food loading dock, and refrigeration trucks required to park in those shielded areas while idling on site.

Mechanical Equipment Noise from the Rocklin Crossings Commercial Development

The HVAC system for maintaining comfortable shopping temperatures within the store will consist of packaged rooftop air conditioning systems. The units will be relatively evenly distributed across the roof of the building, starting about 30 feet in from the edges of the roof. These HVAC units, which typically stand about 4-5 feet tall, would be shielded from view by the project building parapets. Such rooftop HVAC units typically generate noise levels of approximately 50 dB L_{50} at a reference distance of 100 feet from the building, including shielding by the building. During nighttime hours, the air conditioning requirements of the facilities decrease significantly, with reference levels being reduced to less than 45 dB L50. Given the distance between the rooftop HVAC units and the nearest proposed residences in the Rocklin 60 development to the east, and the shielding provided by the rooftop parapet, no additional HVAC equipment noise mitigation measures appear to be warranted for this project.

To quantify the noise emissions from food cold storage refrigeration equipment, noise level measurements conducted at a similar large grocery store were utilized. At a distance of 50 feet from the food cold storage equipment, a noise level of 66 dB L_{50} was recorded. This equipment is proposed to be located on the roof of the large retail/grocery store, approximately 300 feet west of the nearest proposed residences. At this distance, the food cold storage equipment is predicted to generate noise levels of 50 dB L_{50}, not including shielding by the rooftop and parapet. After consideration of this shielding, cold storage equipment noise levels are predicted to be below the recommended 45 dB L_{50} nighttime noise criteria. As a result, no additional noise mitigation measures appear to be warranted for the food cold storage equipment associated with the large retail/grocery store.

Other Noise Sources from the Rocklin Crossings Commercial Development

Other noise sources located behind the commercial center could include cardboard baling and trash compaction machinery, and garbage collection. These noise sources are predicted to be less intensive than the truck delivery activities, and the noise barrier recommended for those operations would provide similar noise reduction from these ancillary noise sources.

CONCLUSIONS & RECOMMENDATIONS

Due to the proposed developments of both the Rocklin 60 Residential Development and the Rocklin Crossings Retail Development, BAC has provided conclusions and recommendations under two scenarios. The first scenario addresses noise impacts while considering the development of the Rocklin 60 Residential Development without the development of the Rocklin Crossings Retail Project. The second scenario addresses noise impacts while considering the development of both projects.

Scenario 1: No development of the adjacent Rocklin Crossings Commercial Project

If the Rocklin Crossings Commercial Project is not developed, the proposed Rocklin 60 Residential Development would be predicted to comply with the City of Rocklin exterior and interior noise level standards provided that:

1. A solid property line noise barrier is constructed along the northern and western project property lines as indicated on Figure 1A. Based upon the Table 5 data, an 11-foot tall property line noise barrier along the northern property line and a noise barrier that decreases in height from 11-feet to 9-feet along the northern portion of western project property line would be required to reduce future I-80 traffic noise levels to 65 dB Ldn or less within this development.

2. The floor plans and exterior wall and window construction details should be reviewed by an acoustical consultant when such plans are available to ensure that appropriate sound insulation features are included in the project design. Mechanical ventilation would be required of all residences to allow occupants to close windows and doors as desired to achieve additional acoustical isolation.

Scenario 2: Development of the adjacent Rocklin Crossings Commercial Project

If the Rocklin Crossings Commercial Project is developed, mechanical equipment and truck deliveries associated with that project will generate substantial noise levels which could affect the proposed Rocklin 60 residential development. However, the proposed Rocklin 60 residential development would be predicted to comply with the City of Rocklin exterior and interior noise level standards provided that:

a) The Rocklin 60 residential development include the following mitigation measures:

1. A solid property line noise barrier constructed along the northern and western project property lines as indicated on Figure 1. Based upon the Table 5 data, an 11-foot tall property line noise barrier along the northern property line and a noise barrier that decreases in height from 11-feet to 9 feet along the northern portion of the western property line would be required to reduce future I-80 traffic noise levels to 65 dB Ldn or less within this development.

2. The floor plans and exterior wall and window construction details should be reviewed by an acoustical consultant when such plans are available to ensure that appropriate sound insulation features are included in the project design. Mechanical ventilation would be required of all residences to allow occupants to close windows and doors as desired to achieve additional acoustical isolation.

3. All potential residents of the Rocklin 60 residential development within 150 feet of the commercial development should be provided disclosure statements notifying them of the proposed adjacent commercial uses, and to the fact that truck deliveries and related commercial activities will be audible within this development despite satisfaction with the City's noise standards.

B) The Rocklin Crossings retail development include the following mitigation measures:

1. A 9-foot tall (relative to the pad elevations of the nearest commercial buildings) solid noise barrier constructed at the locations shown on Figure 1.

2. Solid noise barriers should extend along the cold food unloading area of the large retail/grocery store loading dock to further shield refrigeration trucks while being unloaded. Refrigeration trucks should be required to park within those shielded loading dock areas while on site.

3. All rooftop mechanical equipment should be completely screened from view of existing or proposed residences by the proposed parapet.

4. Construction activities should be limited to daytime hours to eliminate the potential for adverse noise impacts associated with nighttime construction.

These conclusions are based on the project site plans shown on Figure 1, on the traffic assumptions and computation cited herein, and on noise reduction data for standard residential dwellings and for typical STC rated window data. Bollard Acoustical Consultants, Inc. is not responsible for degradation in acoustic performance of the residential construction due to poor construction practices, failure to comply with applicable building code requirements, or for failure to adhere to the minimum building practices cited in this report.

Appendix A

Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.
L_{dn}	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
L_{eq}	Equivalent or energy-averaged sound level.
L_{max}	The highest root-mean-square (RMS) sound level measured over a given period of time.
Loudness	A subjective term for the sensation of the magnitude of sound.
Masking	The amount (or the process) by which the threshold of audibility is for one sound is raised by the presence of another (masking) sound.
Noise	Unwanted sound.
Peak Noise	The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the "Maximum" level, which is the highest RMS level.
RT_{60}	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 sabin.
SEL	A rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy of the event into a 1-s time period.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.

Appendix B-1

Rocklin 60 Residential
24hr Continuous Noise Monitoring at Site #1
Thursday, January 19, 2006

Hour	Leq	Lmax	L50	L90
0:00	64.0	71.6	62.9	56.2
1:00	63.1	74.7	61.6	52.5
2:00	63.2	72.9	61.2	51.3
3:00	64.2	72.6	62.5	51.9
4:00	66.5	74.4	65.7	60.1
5:00	69.0	75.2	68.5	65.4
6:00	71.5	76.2	71.3	68.8
7:00	73.7	78.0	73.4	70.8
8:00	72.2	77.0	71.8	69.2
9:00	70.0	74.2	69.7	67.4
10:00	70.4	74.4	70.2	68.0
11:00	70.6	75.1	70.4	67.9
12:00	70.9	75.2	70.8	68.8
13:00	70.9	75.9	70.8	68.4
14:00	71.2	82.7	71.0	69.0
15:00	71.9	81.5	71.7	69.7
16:00	72.4	79.4	72.4	70.5
17:00	72.1	78.6	72.0	70.3
18:00	73.5	81.4	73.3	71.0
19:00	71.6	76.2	71.5	69.4
20:00	71.0	77.6	70.8	68.5
21:00	71.4	78.8	71.2	68.5
22:00	69.5	75.8	69.2	65.5
23:00	68.8	75.6	68.1	63.9

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	73.5	70.0	71.2	73.7	63.1	69.2
Lmax (Maximum)	82.7	74.2	77.7	78.0	71.6	74.7
L50 (Median)	73.3	69.7	71.3	73.4	61.2	66.5
L90 (Background)	71.0	67.4	69.0	70.8	51.3	60.6

Computed Ldn, dB	76.0
% Daytime Energy	72%
% Nighttime Energy	28%

BOLLARD
Acoustical Consultants

Appendix C-1

FHWA Traffic Noise Prediction Model (FHWA-RD-77-108)
Calibration Worksheet

Project Information:	Job Number:	2005-694
	Project Name:	Rocklin 60 Residential
	Roadway Tested:	I-80
	Test Location:	1A
	Test Date:	January 18, 2006
Weather Conditions:	Temperature (Fahrenheit):	55
	Relative Humidity:	Dry
	Wind Speed and Direction:	Light
	Cloud Cover:	Cloudy
Sound Level Meter:	Sound Level Meter:	LDL Model 820
	Calibrator:	LDL Model CA200
	Meter Calibrated:	Immediately before
	Meter Settings:	A-weighted, slow response
Microphone:	Microphone Location:	On Project Site First Floor Location
	Distance to Centerline (feet):	225
	Microphone Height:	5 feet above ground
	Intervening Ground (Hard or Soft):	**Soft**
	Elevation Relative to Road (feet):	5
Roadway Condition:	Pavement Type	Asphalt
	Pavement Condition:	Good
	Number of Lanes:	6
	Posted Maximum Speed (mph):	65
Test Parameters:	Test Time:	2:33 PM
	Test Duration (minutes):	10
	Observed Number Automobiles:	878
	Observed Number Medium Trucks:	23
	Observed Number Heavy Trucks:	31
	Observed Average Speed (mph):	70
Model Calibration:	Measured Average Level (L_{eq}):	66.4
	Level Predicted by FHWA Model:	70.6
	Difference:	***4.2 dB***

Conclusions:

BOLLARD
Acoustical Consultants

Appendix C-2

FHWA Traffic Noise Prediction Model (FHWA-RD-77-108)
Calibration Worksheet

Project Information:	Job Number:	2005-694
	Project Name:	Rocklin 60 Residentail
	Roadway Tested:	I-80
	Test Location:	1B
	Test Date:	January 18, 2006
Weather Conditions:	Temperature (Fahrenheit):	55
	Relative Humidity:	Dry
	Wind Speed and Direction:	Light
	Cloud Cover:	Cloudy
Sound Level Meter:	Sound Level Meter:	LDL Model 820
	Calibrator:	LDL Model CA200
	Meter Calibrated:	Immediately before
	Meter Settings:	A-weighted, slow response
Microphone:	Microphone Location:	On Project Site Second Floor Location
	Distance to Centerline (feet):	225
	Microphone Height:	15 feet above ground
	Intervening Ground (Hard or Soft):	**Soft**
	Elevation Relative to Road (feet):	5
Roadway Condition:	Pavement Type	Asphalt
	Pavement Condition:	Good
	Number of Lanes:	6
	Posted Maximum Speed (mph):	65
Test Parameters:	Test Time:	2:33 PM
	Test Duration (minutes):	10
	Observed Number Automobiles:	878
	Observed Number Medium Trucks:	23
	Observed Number Heavy Trucks:	31
	Observed Average Speed (mph):	70
Model Calibration:	Measured Average Level (L_{eq}):	73.0
	Level Predicted by FHWA Model:	70.6
	Difference:	***-2.4 dB***

Conclusions:

Appendix D

FHWA Traffic Noise Prediction Model (FHWA-RD-77-108)
Noise Prediction Worksheet

Project Information:

Job Number: 2005-694
Project Name: Rocklin 60 Residential
Roadway Name: I-80

Traffic Data:

Year:	2025
Average Daily Traffic Volume:	141,200
Percent Daytime Traffic:	72
Percent Nighttime Traffic:	28
Percent Medium Trucks (2 axle):	1
Percent Heavy Trucks (3+ axle):	4
Assumed Vehicle Speed (mph):	65
Intervening Ground Type (hard/soft):	**Soft**

Traffic Noise Levels:

				----------L_{dn}, dB----------			
Location:	**Description**	**Distance**	**Offset (dB)**	**Autos**	**Medium Trucks**	**Heavy Trucks**	**Total**
1	Nearest Property Line - Lot 145	660	0	67	53	63	68
2	Nearest Property Line - Lot 156	225	0	74	60	70	76
3	Nearest Property Line - Lot 167	760	0	66	52	62	68

Traffic Noise Contours (No Calibration Offset):

L_{dn} Contour, dB	Distance from Centerline, (ft)
75	243
70	524
65	1129
60	2433

Notes:

Appendix E-1

FHWA Traffic Noise Prediction Model (FHWA-RD-77-108)
Noise Barrier Effectiveness Prediction Worksheet

Project Information:

Job Number: 2005-694
Project Name: Rocklin 60 Residential
Roadway Name: I-80
Location(s): Nearest Property Line - Lot 145

Noise Level Data:

Year: 2025
Auto L_{dn}, dB: 67
Medium Truck L_{dn}, dB: 53
Heavy Truck L_{dn}, dB: 63

Site Geometry:

Receiver Description: Nearest Property Line - Lot 145
Centerline to Barrier Distance (C_1): 645
Barrier to Receiver Distance (C_2): 15
Automobile Elevation: 0
Medium Truck Elevation: 2
Heavy Truck Elevation: 8
Pad/Ground Elevation at Receiver: 0
Receiver Elevation[1]: 5
Base of Barrier Elevation: 0
Starting Barrier Height 8

Barrier Effectiveness:

Top of Barrier Elevation (ft)	Barrier Height[2] (ft)	L_{dn}, dB Autos	L_{dn}, dB Medium Trucks	L_{dn}, dB Heavy Trucks	L_{dn}, dB Total	Barrier Breaks Line of Sight to… Autos?	Medium Trucks?	Heavy Trucks?
8	8	59	46	55	**61**	Yes	Yes	Yes
9	9	58	45	54	**60**	Yes	Yes	Yes
10	10	57	44	53	**59**	Yes	Yes	Yes
11	11	56	43	52	**58**	Yes	Yes	Yes
12	12	55	42	52	**57**	Yes	Yes	Yes
13	13	55	41	51	**56**	Yes	Yes	Yes
14	14	54	40	50	**56**	Yes	Yes	Yes
15	15	53	40	49	**55**	Yes	Yes	Yes
16	16	53	39	49	**54**	Yes	Yes	Yes

Notes: 1.Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s)

BOLLARD
Acoustical Consultants

Appendix E-2

FHWA Traffic Noise Prediction Model (FHWA-RD-77-108)
Noise Barrier Effectiveness Prediction Worksheet

Project Information:

Job Number: 2005-694
Project Name: Rocklin 60 Residential
Roadway Name: I-80
Location(s): Nearest Property Line - Lot 156

Noise Level Data:

Year: 2025
Auto L_{dn}, dB: 74
Medium Truck L_{dn}, dB: 60
Heavy Truck L_{dn}, dB: 70

Site Geometry:

Receiver Description: Nearest Property Line - Lot 145
Centerline to Barrier Distance (C_1): 210
Barrier to Receiver Distance (C_2): 15
Automobile Elevation: 0
Medium Truck Elevation: 2
Heavy Truck Elevation: 8
Pad/Ground Elevation at Receiver: 0
Receiver Elevation[1]: 5
Base of Barrier Elevation: 0
Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier Elevation (ft)	Barrier Height[2] (ft)	L_{dn}, dB Autos	L_{dn}, dB Medium Trucks	L_{dn}, dB Heavy Trucks	L_{dn}, dB Total	Barrier Breaks Line of Sight to… Autos?	Medium Trucks?	Heavy Trucks?
6	6	68	55	65	**70**	Yes	Yes	Yes
7	7	67	54	64	**69**	Yes	Yes	Yes
8	8	66	53	63	**68**	Yes	Yes	Yes
9	9	65	51	61	**67**	Yes	Yes	Yes
10	10	64	50	60	**65**	Yes	Yes	Yes
11	11	63	50	59	**65**	Yes	Yes	Yes
12	12	62	49	59	**64**	Yes	Yes	Yes
13	13	61	48	58	**63**	Yes	Yes	Yes
14	14	61	47	57	**62**	Yes	Yes	Yes

Notes: 1.Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s)

Appendix E-3

FHWA Traffic Noise Prediction Model (FHWA-RD-77-108)
Noise Barrier Effectiveness Prediction Worksheet

Project Information:

Job Number: 2005-694
Project Name: Rocklin 60 Residential
Roadway Name: I-80
Location(s): Nearest Property Line - Lot 167

Noise Level Data:

Year: 2025
Auto L_{dn}, dB: 66
Medium Truck L_{dn}, dB: 52
Heavy Truck L_{dn}, dB: 62

Site Geometry:

Receiver Description: Nearest Property Line - Lot 145
Centerline to Barrier Distance (C_1): 745
Barrier to Receiver Distance (C_2): 15
Automobile Elevation: 0
Medium Truck Elevation: 2
Heavy Truck Elevation: 8
Pad/Ground Elevation at Receiver: 0
Receiver Elevation[1]: 5
Base of Barrier Elevation: 0
Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier Elevation (ft)	Barrier Height[2] (ft)	L_{dn}, dB Autos	Medium Trucks	Heavy Trucks	Total	Barrier Breaks Line of Sight to… Autos?	Medium Trucks?	Heavy Trucks?
6	6	61	47	57	**62**	Yes	Yes	Yes
7	7	60	46	56	**61**	Yes	Yes	Yes
8	8	59	45	54	**60**	Yes	Yes	Yes
9	9	57	44	53	**59**	Yes	Yes	Yes
10	10	56	43	52	**58**	Yes	Yes	Yes
11	11	56	42	51	**57**	Yes	Yes	Yes
12	12	55	41	51	**56**	Yes	Yes	Yes
13	13	54	40	50	**55**	Yes	Yes	Yes
14	14	53	39	49	**55**	Yes	Yes	Yes

Notes: 1.Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s)

Appendix F-1

Barrier Insertion Loss Calculation

Project Information:

Job Number: 2006-004
Project Name: Rocklin Crossings Retail Center
Location(s): Lot 38

Noise Level Data:

Source Description: Cumulative Truck and Loading Dock Sources
Source Noise Level, dBA: 57
Source Frequency (Hz): 500
Source Height (ft): 345

Site Geometry:

Receiver Description: Backyard Area
Source to Barrier Distance (C_1): 40
Barrier to Receiver Distance (C_2): 30

Pad/Ground Elevation at Receiver: 330
Receiver Elevation[1]: 335
Base of Barrier Elevation: 341
Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier Elevation (ft)	Barrier Height (ft)	Insertion Loss, dB	Noise Level, dB	Barrier Breaks Line of Site to Source?
347	6	-11.1	45.9	Yes
348	7	-11.9	45.1	Yes
349	8	-12.8	44.2	Yes
350	9	-13.3	43.7	Yes
351	10	-13.9	43.1	Yes
352	11	-14.4	42.6	Yes
353	12	-14.6	42.4	Yes
354	13	-15.3	41.7	Yes
355	14	-15.3	41.7	Yes
356	15	-15.9	41.1	Yes
357	16	-16.3	40.7	Yes

Notes: 1.Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s)

Appendix F-2

Barrier Insertion Loss Calculation

Project Information:

Job Number: 2006-004
Project Name: Rocklin Crossings Retail Center
Location(s): Lots 46-47

Noise Level Data:

Source Description: Cumulative Truck and Loading Dock Sources
Source Noise Level, dBA: 52
Source Frequency (Hz): 500
Source Height (ft): 346

Site Geometry:

Receiver Description: Backyard Area
Source to Barrier Distance (C_1): 50
Barrier to Receiver Distance (C_2): 70

Pad/Ground Elevation at Receiver: 331
Receiver Elevation[1]: 336
Base of Barrier Elevation: 342
Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier Elevation (ft)	Barrier Height (ft)	Insertion Loss, dB	Noise Level, dB	Barrier Breaks Line of Site to Source?
348	6	-8.8	43.2	Yes
349	7	-9.6	42.4	Yes
350	8	-10.3	41.7	Yes
351	9	-10.7	41.3	Yes
352	10	-11.3	40.7	Yes
353	11	-11.9	40.1	Yes
354	12	-12.6	39.4	Yes
355	13	-13.0	39.0	Yes
356	14	-13.6	38.4	Yes
357	15	-14.0	38.0	Yes
358	16	-14.4	37.6	Yes

Notes: 1.Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s)

Appendix F-3

Barrier Insertion Loss Calculation

Project Information:

Job Number: 2006-004
Project Name: Rocklin Crossings Retail Center
Location(s): Lots 66-67

Noise Level Data:

Source Description: Cumulative Truck and Loading Dock Sources
Source Noise Level, dBA: 52
Source Frequency (Hz): 500
Source Height (ft): 348

Site Geometry:

Receiver Description: Backyard Area
Source to Barrier Distance (C_1): 50
Barrier to Receiver Distance (C_2): 70

Pad/Ground Elevation at Receiver: 334
Receiver Elevation[1]: 339
Base of Barrier Elevation: 344
Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier Elevation (ft)	Barrier Height (ft)	Insertion Loss, dB	Noise Level, dB	Barrier Breaks Line of Site to Source?
350	6	-8.4	43.6	Yes
351	7	-9.2	42.8	Yes
352	8	-10.0	42.0	Yes
353	9	-10.5	41.5	Yes
354	10	-11.1	40.9	Yes
355	11	-11.7	40.3	Yes
356	12	-12.3	39.7	Yes
357	13	-12.9	39.1	Yes
358	14	-13.4	38.6	Yes
359	15	-13.8	38.2	Yes
360	16	-14.3	37.7	Yes

Notes: 1.Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s)

Appendix F-4

Barrier Insertion Loss Calculation

Project Information:

Job Number: 2006-004
Project Name: Rocklin Crossings Retail Center
Location(s): Lots 92-93

Noise Level Data:

Source Description: Cumulative Truck and Loading Dock Sources
Source Noise Level, dBA: 52
Source Frequency (Hz): 500
Source Height (ft): 348

Site Geometry:

Receiver Description: Backyard Area
Source to Barrier Distance (C_1): 50
Barrier to Receiver Distance (C_2): 70

Pad/Ground Elevation at Receiver: 335
Receiver Elevation[1]: 340
Base of Barrier Elevation: 344
Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier Elevation (ft)	Barrier Height (ft)	Insertion Loss, dB	Noise Level, dB	Barrier Breaks Line of Site to Source?
350	6	-8.1	43.9	Yes
351	7	-9.0	43.0	Yes
352	8	-9.7	42.3	Yes
353	9	-10.3	41.7	Yes
354	10	-10.9	41.1	Yes
355	11	-11.5	40.5	Yes
356	12	-12.1	39.9	Yes
357	13	-12.6	39.4	Yes
358	14	-13.2	38.8	Yes
359	15	-13.6	38.4	Yes
360	16	-14.1	37.9	Yes

Notes: 1.Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s)

Appendix F-5

Barrier Insertion Loss Calculation

Project Information:

Job Number: 2006-004
Project Name: Rocklin Crossings Retail Center
Location(s): Lots 117-118

Noise Level Data:

Source Description: Cumulative Truck and Loading Dock Sources
Source Noise Level, dBA: 52
Source Frequency (Hz): 500
Source Height (ft): 348

Site Geometry:

Receiver Description: Backyard Area
Source to Barrier Distance (C_1): 50
Barrier to Receiver Distance (C_2): 70

Pad/Ground Elevation at Receiver: 338
Receiver Elevation[1]: 343
Base of Barrier Elevation: 344
Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier Elevation (ft)	Barrier Height (ft)	Insertion Loss, dB	Noise Level, dB	Barrier Breaks Line of Site to Source?
350	6	-7.1	44.9	Yes
351	7	-7.9	44.1	Yes
352	8	-8.8	43.2	Yes
353	9	-9.5	42.5	Yes
354	10	-10.2	41.8	Yes
355	11	-10.7	41.3	Yes
356	12	-11.3	40.7	Yes
357	13	-11.9	40.1	Yes
358	14	-12.6	39.4	Yes
359	15	-13.0	39.0	Yes
360	16	-13.5	38.5	Yes

Notes: 1.Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s)

Appendix F-6

Barrier Insertion Loss Calculation

Project Information:

Job Number: 2006-004
Project Name: Rocklin Crossings Retail Center
Location(s): Lots 145-146

Noise Level Data:

Source Description: Cumulative Truck and Loading Dock Sources
Source Noise Level, dBA: 56
Source Frequency (Hz): 500
Source Height (ft): 352

Site Geometry:

Receiver Description: Backyard Area
Source to Barrier Distance (C_1): 50
Barrier to Receiver Distance (C_2): 20

Pad/Ground Elevation at Receiver: 345
Receiver Elevation[1]: 350
Base of Barrier Elevation: 348
Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier Elevation (ft)	Barrier Height (ft)	Insertion Loss, dB	Noise Level, dB	Barrier Breaks Line of Site to Source?
354	6	-7.8	48.2	Yes
355	7	-9.0	47.0	Yes
356	8	-9.9	46.1	Yes
357	9	-10.7	45.3	Yes
358	10	-11.5	44.5	Yes
359	11	-12.5	43.5	Yes
360	12	-13.2	42.8	Yes
361	13	-13.8	42.2	Yes
362	14	-14.4	41.6	Yes
363	15	-14.6	41.4	Yes
364	16	-15.3	40.7	Yes

Notes: 1.Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s)

BOLLARD
Acoustical Consultants

FHWA OUTPUT – EXISTING NO PROJECT YEAR 2006

```
      TRAFFIC DISTRIBUTION PERCENTAGES
      DAY        EVENING     NIGHT
      ---        -------     -----
AUTOS
      68.62      11.20       8.49
M-TRUCKS
       7.30      1.19        0.90
H-TRUCKS
       1.79      0.29        0.22

  RUN NAME: TAYLOR RD BETW KING & HORSESHOE BAR       RUN DATE: 022807

ADT:  17060     SPEED:  35     ACTIVE HALF WIDTH (FT):  6
SITE CHARACTERISTICS: SOFT     GRADE (PERCENT):  .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE =  69.82
* *  DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL  65 CNEL   60 CNEL   55 CNEL
-------  -------   -------   -------
  54.5     116.8     251.3     541.2

  RUN NAME: TAYLOR RD BETW HORSESHOE BAR & SIERRA COLLEGE       RUN DATE: 022807

ADT:  10673     SPEED:  35     ACTIVE HALF WIDTH (FT):  6
SITE CHARACTERISTICS: SOFT     GRADE (PERCENT):  .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE =  67.78
* *  DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL  65 CNEL   60 CNEL   55 CNEL
-------  -------   -------   -------
   0.0      85.6     183.9     396.0

  RUN NAME: PACIFIC ST BETW SIERRA COLLEGE & DOMINGUEZ        RUN DATE: 022807

ADT:  11578     SPEED:  35     ACTIVE HALF WIDTH (FT):  18
SITE CHARACTERISTICS: SOFT     GRADE (PERCENT):  .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE =  67.06
* *  DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL  65 CNEL   60 CNEL   55 CNEL
-------  -------   -------   -------
   0.0      91.8     194.7     417.9

  RUN NAME: PACIFIC ST BETW DOMINGUEZ & ROCKLIN       RUN DATE: 022807

ADT:  15889     SPEED:  35     ACTIVE HALF WIDTH (FT):  18
SITE CHARACTERISTICS: SOFT     GRADE (PERCENT):  .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE =  68.44
* *  DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL  65 CNEL   60 CNEL   55 CNEL
-------  -------   -------   -------
  54.6     112.5     240.0     515.8

  RUN NAME: ROCKLIN RD BETW PACIFIC & GRANITE        RUN DATE: 022807

ADT:  21211     SPEED:  35     ACTIVE HALF WIDTH (FT):  18
```

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 69.69
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
65.1 135.9 290.7 625.2

RUN NAME: ROCKLIN RD BETW I-80 & SIERRA COLLEGE RUN DATE: 022807

ADT: 9989 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 66.42
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 83.5 176.6 378.8

RUN NAME: ROCKLIN RD BETW SIERRA COLLEGE & BARTON RUN DATE: 022807

ADT: 5176 SPEED: 35 ACTIVE HALF WIDTH (FT): 12
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 64.06
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 54.0 114.0 244.5

RUN NAME: BARTON RD BETW ROCKLIN & BRACE RUN DATE: 022807

ADT: 3354 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 62.76
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 0.0 85.2 183.2

RUN NAME: HORSESHOE BAR RD BETW I-80 & BRACE RUN DATE: 022807

ADT: 6101 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 65.36
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 59.1 126.8 272.8

RUN NAME: BRACE RD BETW I-80 & BARTON RUN DATE: 022807

ADT: 4006 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 63.53
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *

70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
  0.0 0.0 95.9 206.2

RUN NAME: BRACE RD BETW I-80 & SIERRA COLLEGE RUN DATE: 022807

ADT: 3408 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 62.83
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
  0.0 0.0 86.1 185.1

RUN NAME: SIERRA COLLEGE BLVD BETW ENGLISH COLONY & KING RUN DATE: 022807

ADT: 9600 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.32
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
  0.0 79.7 171.4 369.0

RUN NAME: SIERRA COLLEGE BLVD BETW KING & TAYLOR RUN DATE: 022807

ADT: 10560 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.74
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
  0.0 85.0 182.6 393.2

RUN NAME: SIERRA COLLEGE BLVD BETW TAYLOR & I-80 RUN DATE: 022807

ADT: 17566 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 69.95
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
 55.5 119.1 256.3 551.9

RUN NAME: SIERRA COLLEGE BLVD BETW I-80 & DOMINGUEZ RUN DATE: 022807

ADT: 13275 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.73
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
  0.0 98.9 212.7 458.0

RUN NAME: SIERRA COLLEGE BLVD BETW DOMINGUEZ & ROCKLIN RUN DATE: 022807

ADT: 13275 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.73
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 98.9 212.7 458.0

RUN NAME: GRANITE DR BETW DOMINGUEZ & SIERRA COLLEGE RUN DATE: 022807

ADT: 6178 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 64.34
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 61.9 128.8 275.3

RUN NAME: GRANITE DR BETW DOMINGUEZ & ROCKLIN RUN DATE: 022807

ADT: 8258 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 65.60
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 74.1 155.8 333.8

RUN NAME: DOMINGUEZ RD BETW TAYLOR & GRANITE RUN DATE: 022807

ADT: 2382 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 61.27
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 0.0 67.9 145.8

RUN NAME: KING RD BETW SIERRA COLLEGE & TAYLOR RUN DATE: 022807

ADT: 5610 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 64.99
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 55.9 119.9 258.0

FHWA OUTPUT – BASELINE NO PROJECT YEAR 2010

```
   TRAFFIC DISTRIBUTION PERCENTAGES
     DAY        EVENING     NIGHT
     ---        -------     -----
AUTOS
     68.15      11.12       8.43
M-TRUCKS
      7.69      1.26        0.95
H-TRUCKS
      1.87      0.30        0.23

  RUN NAME: TAYLOR RD BETW KING & HORSESHOE BAR        RUN DATE: 030107

ADT:  17150     SPEED:  35     ACTIVE HALF WIDTH (FT):  6
SITE CHARACTERISTICS: SOFT     GRADE (PERCENT):  .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE =  69.99
* *  DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL  65 CNEL   60 CNEL   55 CNEL
-------  -------   -------   -------
  55.9     119.9     258.0     555.7

  RUN NAME: TAYLOR RD BETW HORSESHOE BAR & SIERRA COLLEGE        RUN DATE: 030107

ADT:  10973     SPEED:  35     ACTIVE HALF WIDTH (FT):  6
SITE CHARACTERISTICS: SOFT     GRADE (PERCENT):  .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE =  68.05
* *  DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL  65 CNEL   60 CNEL   55 CNEL
-------  -------   -------   -------
   0.0      89.1     191.7     412.7

  RUN NAME: PACIFIC ST BETW SIERRA COLLEGE & DOMINGUEZ        RUN DATE: 030107

ADT:  11868     SPEED:  35     ACTIVE HALF WIDTH (FT):  18
SITE CHARACTERISTICS: SOFT     GRADE (PERCENT):  .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE =  67.32
* *  DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL  65 CNEL   60 CNEL   55 CNEL
-------  -------   -------   -------
   0.0      95.3     202.4     434.6

  RUN NAME: PACIFIC ST BETW DOMINGUEZ & ROCKLIN        RUN DATE: 030107

ADT:  19459     SPEED:  35     ACTIVE HALF WIDTH (FT):  18
SITE CHARACTERISTICS: SOFT     GRADE (PERCENT):  .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE =  69.47
* *  DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL  65 CNEL   60 CNEL   55 CNEL
-------  -------   -------   -------
  63.0     131.4     280.8     604.0

  RUN NAME: ROCKLIN RD BETW PACIFIC & GRANITE        RUN DATE: 030107
```

ADT: 25371 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 70.62
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
74.3 156.3 335.0 720.7

RUN NAME: ROCKLIN RD BETW I-80 & SIERRA COLLEGE RUN DATE: 030107

ADT: 14599 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.22
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 108.9 232.1 498.9

RUN NAME: ROCKLIN RD BETW SIERRA COLLEGE & BARTON RUN DATE: 030107

ADT: 6646 SPEED: 35 ACTIVE HALF WIDTH (FT): 12
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 65.29
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 64.7 137.6 295.5

RUN NAME: BARTON RD BETW ROCKLIN & BRACE RUN DATE: 030107

ADT: 3514 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 63.11
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 0.0 89.9 193.3

RUN NAME: HORSESHOE BAR RD BETW I-80 & BRACE RUN DATE: 030107

ADT: 6141 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 65.53
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 60.7 130.2 280.3

RUN NAME: BRACE RD BETW I-80 & BARTON RUN DATE: 030107

ADT: 4046 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 63.72
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 0.0 98.7 212.3

RUN NAME: BRACE RD BETW I-80 & SIERRA COLLEGE RUN DATE: 030107

ADT: 3408 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 62.98
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 0.0 88.1 189.4

RUN NAME: SIERRA COLLEGE BLVD BETW ENGLISH COLONY & KING RUN DATE: 030107

ADT: 10430 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.83
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 86.2 185.3 399.0

RUN NAME: SIERRA COLLEGE BLVD BETW KING & TAYLOR RUN DATE: 030107

ADT: 11250 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.16
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 90.6 194.9 419.6

RUN NAME: SIERRA COLLEGE BLVD BETW TAYLOR & I-80 RUN DATE: 030107

ADT: 18296 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 70.27
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
58.4 125.2 269.4 580.2

RUN NAME: SIERRA COLLEGE BLVD I-80 & DOMINGUEZ RUN DATE: 030107

ADT: 14105 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.07
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *

70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
  0.0 106.5 226.9 487.6

RUN NAME: SIERRA COLLEGE BLVD BETW DOMINGUEZ & ROCKLIN RUN DATE: 030107

ADT: 14745 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 69.34
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
  50.6 108.5 233.3 502.4

RUN NAME: GRANITE DR BETW DOMINGUEZ & SIERRA COLLEGE RUN DATE: 030107

ADT: 6328 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 64.59
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
  0.0 64.1 133.8 286.1

RUN NAME: GRANITE DR BETW DOMINGUEZ & ROCKLIN RUN DATE: 030107

ADT: 8458 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 65.85
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
  0.0 76.8 161.9 346.9

RUN NAME: DOMINGUEZ RD BETW TAYLOR & GRANITE RUN DATE: 030107

ADT: 2422 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 61.49
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
  0.0 0.0 70.2 150.9

RUN NAME: KING RD BETW SIERRA COLLEGE & TALYOR RUN DATE: 030107

ADT: 5610 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 65.14
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
  0.0 57.2 122.6 263.9

FHWA OUTPUT – BASELINE + PROJECT (ROCKLIN 60) YEAR 2010

```
   TRAFFIC DISTRIBUTION PERCENTAGES
     DAY        EVENING     NIGHT
     ---        -------     -----
AUTOS
     68.15      11.12       8.43
M-TRUCKS
      7.69       1.26       0.95
H-TRUCKS
      1.87       0.30       0.23

  RUN NAME: TAYLOR RD BETW KING & HORSESHOE BAR        RUN DATE: 030107

ADT:  17200     SPEED:  35     ACTIVE HALF WIDTH (FT):  6
SITE CHARACTERISTICS: SOFT     GRADE (PERCENT):  .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE =  70.01
* *  DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL  65 CNEL   60 CNEL   55 CNEL
-------  -------   -------   -------
  56.0     120.1     258.5     556.8

  RUN NAME: TAYLOR RD BETW HORSESHOE BAR & SIERRA COLLEGE        RUN DATE: 030107

ADT:  11023     SPEED:  35     ACTIVE HALF WIDTH (FT):  6
SITE CHARACTERISTICS: SOFT     GRADE (PERCENT):  .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE =  68.07
* *  DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL  65 CNEL   60 CNEL   55 CNEL
-------  -------   -------   -------
   0.0      89.4     192.3     414.0

  RUN NAME: PACIFIC ST BETW SIERRA COLLEGE & DOMINGUEZ        RUN DATE: 030107

ADT:  11898     SPEED:  35     ACTIVE HALF WIDTH (FT):  18
SITE CHARACTERISTICS: SOFT     GRADE (PERCENT):  .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE =  67.33
* *  DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL  65 CNEL   60 CNEL   55 CNEL
-------  -------   -------   -------
   0.0      95.5     202.7     435.4

  RUN NAME: PACIFIC ST BETW DOMINGUEZ & ROCKLIN        RUN DATE: 030107

ADT:  19479     SPEED:  35     ACTIVE HALF WIDTH (FT):  18
SITE CHARACTERISTICS: SOFT     GRADE (PERCENT):  .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE =  69.47
* *  DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL  65 CNEL   60 CNEL   55 CNEL
-------  -------   -------   -------
  63.1     131.4     281.0     604.4

  RUN NAME: ROCKLIN RD BETW PACIFIC & GRANITE        RUN DATE: 030107
```

ADT: 25401 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 70.62
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
74.4 156.4 335.2 721.3

RUN NAME: ROCKLIN RD BETW I-80 & SIERRA COLLEGE RUN DATE: 030107

ADT: 14639 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.23
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 109.1 232.6 499.8

RUN NAME: ROCKLIN RD BETW SIERRA COLLEGE & BARTON RUN DATE: 030107

ADT: 6696 SPEED: 35 ACTIVE HALF WIDTH (FT): 12
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 65.33
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 65.1 138.3 296.9

RUN NAME: BARTON RD BETW ROCKLIN & BRACE RUN DATE: 030107

ADT: 3524 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 63.12
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 0.0 90.1 193.7

RUN NAME: HORSESHOE BAR RD BETW I-80 & BRACE RUN DATE: 030107

ADT: 6141 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 65.53
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 60.7 130.2 280.3

RUN NAME: BRACE RD BETW I-80 & BARTON RUN DATE: 030107

ADT: 4076 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 63.75
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 0.0 99.2 213.4

RUN NAME: BRACE RD BETW I-80 & SIERRA COLLEGE RUN DATE: 030107

ADT: 3408 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 62.98
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 0.0 88.1 189.4

RUN NAME: SIERRA COLLEGE BLVD BETW ENGLISH COLONY & KING RUN DATE: 030107

ADT: 10480 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.85
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 86.5 185.9 400.3

RUN NAME: SIERRA COLLEGE BLVD BETW KING & TAYLOR RUN DATE: 030107

ADT: 11410 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.22
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 91.5 196.7 423.6

RUN NAME: SIERRA COLLEGE BLVD BETW TAYLOR & I-80 RUN DATE: 030107

ADT: 18636 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 70.35
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
59.1 126.7 272.7 587.3

RUN NAME: SIERRA COLLEGE BLVD I-80 & DOMINGUEZ RUN DATE: 030107

ADT: 14655 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.24
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *

70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
  53.1   109.2   232.7   500.0

  RUN NAME: SIERRA COLLEGE BLVD BETW DOMINGUEZ & ROCKLIN RUN DATE: 030107

ADT: 14905 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 69.38
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
  51.0   109.2   235.0   506.1

  RUN NAME: GRANITE DR BETW DOMINGUEZ & SIERRA COLLEGE RUN DATE: 030107

ADT: 6338 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 64.60
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
   0.0   64.2   133.9   286.4

  RUN NAME: GRANITE DR BETW DOMINGUEZ & ROCKLIN RUN DATE: 030107

ADT: 8478 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 65.86
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
   0.0   76.9   162.1   347.5

  RUN NAME: DOMINGUEZ RD BETW TAYLOR & GRANITE RUN DATE: 030107

ADT: 2422 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 61.49
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
   0.0   0.0   70.2   150.9

  RUN NAME: KING RD BETW SIERRA COLLEGE & TALYOR RUN DATE: 030107

ADT: 5610 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 65.14
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
   0.0   57.2   122.6   263.9

FHWA OUTPUT – Cumulative No Project with Dominguez PROJECT YEAR 2025

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	67.80	11.10	8.40
M-TRUCKS	8.20	1.30	1.00
H-TRUCKS	1.70	0.30	0.20

RUN NAME: TAYLOR RD BETW KING & HORSESHOE BAR RUN DATE: 051107

ADT: 20364 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 70.68
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *

70 CNEL	65 CNEL	60 CNEL	55 CNEL
62.1	133.3	286.8	617.7

RUN NAME: TAYLOR RD BETW HORSESHOE BAR & SIERRA COLLEGE RUN DATE: 051107

ADT: 15480 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 69.49
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *

70 CNEL	65 CNEL	60 CNEL	55 CNEL
51.8	111.0	238.9	514.5

RUN NAME: PACIFIC ST BETW SIERRA COLLEGE & DOMINGUEZ RUN DATE: 051107

ADT: 16946 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.81
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *

70 CNEL	65 CNEL	60 CNEL	55 CNEL
57.5	119.0	254.0	546.0

RUN NAME: PACIFIC ST BETW DOMINGUEZ & ROCKLIN RUN DATE: 051107

ADT: 22649 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 70.07
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *

70 CNEL	65 CNEL	60 CNEL	55 CNEL
68.7	143.8	307.9	662.4

RUN NAME: ROCKLIN RD BETW PACIFIC & GRANITE RUN DATE: 051107

ADT: 37837 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 72.30
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
95.0 201.7 433.2 932.4

RUN NAME: ROCKLIN RD BETW I-80 & SIERRA COLLEGE RUN DATE: 051107

ADT: 14796 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.22
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 109.0 232.2 499.0

RUN NAME: ROCKLIN RD BETW SIERRA COLLEGE & BARTON RUN DATE: 051107

ADT: 15666 SPEED: 35 ACTIVE HALF WIDTH (FT): 12
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.96
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
53.2 112.3 240.9 518.4

RUN NAME: BARTON RD BETW ROCKLIN & BRACE RUN DATE: 051107

ADT: 6872 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 65.96
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 64.8 139.1 299.5

RUN NAME: HORSESHOE BAR RD BETW I-80 & BRACE RUN DATE: 051107

ADT: 9958 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.57
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 82.9 178.1 383.5

RUN NAME: BRACE RD BETW I-80 & BARTON RUN DATE: 051107

ADT: 9795 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.50

* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 82.0 176.2 379.3

RUN NAME: BRACE RD BETW I-80 & SIERRA COLLEGE RUN DATE: 051107

ADT: 9161 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.21
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 78.4 168.5 362.8

RUN NAME: SIERRA COLLEGE BLVD BETW ENGLISH COLONY & KING RUN DATE: 051107

ADT: 24682 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 71.52
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
70.5 151.4 326.0 702.1

RUN NAME: SIERRA COLLEGE BLVD BETW KING & TAYLOR RUN DATE: 051107

ADT: 23610 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 71.32
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
68.5 147.0 316.5 681.7

RUN NAME: SIERRA COLLEGE BLVD BETW TAYLOR & I-80 RUN DATE: 051107

ADT: 35053 SPEED: 35 ACTIVE HALF WIDTH (FT): 30
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 71.16
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
93.5 193.1 411.9 885.5

RUN NAME: SIERRA COLLEGE BLVD BETW DOMINGUEZ & I-80 RUN DATE: 051107

ADT: 33796 SPEED: 35 ACTIVE HALF WIDTH (FT): 30
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 71.00
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
91.5 188.5 402.1 864.2

RUN NAME: SIERRA COLLEGE BLVD BETW DOMINGUEZ & ROCKLIN RUN DATE: 051107

ADT: 37708 SPEED: 35 ACTIVE HALF WIDTH (FT): 30
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 71.47
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
97.7 202.5 432.4 929.6

RUN NAME: GRANITE DR BETW DOMINGUEZ & SIERRA COLLEGE RUN DATE: 051107

ADT: 9220 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 66.17
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 80.4 169.8 364.2

RUN NAME: GRANITE DR BETW DOMINGUEZ & ROCKLIN RUN DATE: 051107

ADT: 13359 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.78
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 102.0 217.0 466.2

RUN NAME: DOMINGUEZ RD BETW TAYLOR & GRANITE RUN DATE: 051107

ADT: 7378 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 66.27
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 67.9 145.9 314.0

RUN NAME: KING RD BETW SIERRA COLLEGE & TAYLOR RUN DATE: 051107

ADT: 7019 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 66.06
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 65.7 141.1 303.8

FHWA OUTPUT – Cumulative No Project without Dominguez PROJECT YEAR 2025

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	67.80	11.10	8.40
M-TRUCKS	8.20	1.30	1.00
H-TRUCKS	1.70	0.30	0.20

RUN NAME: TAYLOR RD BETW KING & HORSESHOE BAR RUN DATE: 051107

ADT: 20409 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 70.69
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *

70 CNEL	65 CNEL	60 CNEL	55 CNEL
62.2	133.5	287.2	618.6

RUN NAME: TAYLOR RD BETW HORSESHOE BAR & SIERRA COLLEGE RUN DATE: 051107

ADT: 15421 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 69.47
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *

70 CNEL	65 CNEL	60 CNEL	55 CNEL
51.7	110.8	238.3	513.2

RUN NAME: PACIFIC ST BETW SIERRA COLLEGE & DOMINGUEZ RUN DATE: 051107

ADT: 18205 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 69.12
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *

70 CNEL	65 CNEL	60 CNEL	55 CNEL
60.0	124.7	266.4	572.7

RUN NAME: PACIFIC ST BETW DOMINGUEZ & ROCKLIN RUN DATE: 051107

ADT: 22365 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 70.01
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *

70 CNEL	65 CNEL	60 CNEL	55 CNEL
68.1	142.7	305.4	656.9

RUN NAME: ROCKLIN RD BETW PACIFIC & GRANITE RUN DATE: 051107

ADT: 37834 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 72.30
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
95.0 201.7 433.2 932.4

RUN NAME: ROCKLIN RD BETW I-80 & SIERRA COLLEGE RUN DATE: 051107

ADT: 17966 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 69.06
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
59.6 123.6 264.0 567.7

RUN NAME: ROCKLIN RD BETW SIERRA COLLEGE & BARTON RUN DATE: 051107

ADT: 15451 SPEED: 35 ACTIVE HALF WIDTH (FT): 12
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.90
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
52.8 111.3 238.7 513.6

RUN NAME: BARTON RD BETW ROCKLIN & BRACE RUN DATE: 051107

ADT: 6952 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 66.01
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 65.3 140.2 301.8

RUN NAME: HORSESHOE BAR RD BETW I-80 & BRACE RUN DATE: 051107

ADT: 10033 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.61
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 83.3 179.0 385.4

RUN NAME: BRACE RD BETW I-80 & BARTON RUN DATE: 051107

ADT: 9834 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.52
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *

70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 82.2 176.6 380.3

RUN NAME: BRACE RD BETW I-80 & SIERRA COLLEGE RUN DATE: 051107

ADT: 9202 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.23
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 78.6 169.0 363.8

RUN NAME: SIERRA COLLEGE BLVD BETW ENGLISH COLONY & KING RUN DATE: 051107

ADT: 24674 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 71.52
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
70.5 151.4 325.9 702.0

RUN NAME: SIERRA COLLEGE BLVD BETW KING & TAYLOR RUN DATE: 051107

ADT: 23522 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 71.31
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
68.3 146.7 315.7 680.0

RUN NAME: SIERRA COLLEGE BLVD BETW TAYLOR & I-80 RUN DATE: 051107

ADT: 36020 SPEED: 35 ACTIVE HALF WIDTH (FT): 30
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 71.27
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
95.0 196.5 419.4 901.7

RUN NAME: SIERRA COLLEGE BLVD BETW DOMINGUEZ & I-80 RUN DATE: 051107

ADT: 34944 SPEED: 35 ACTIVE HALF WIDTH (FT): 30
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 71.14
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
93.3 192.7 411.1 883.6

RUN NAME: SIERRA COLLEGE BLVD BETW DOMINGUEZ & ROCKLIN RUN DATE: 051107

ADT: 36188 SPEED: 35 ACTIVE HALF WIDTH (FT): 30
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 71.30
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
95.3 197.1 420.7 904.5

RUN NAME: GRANITE DR BETW DOMINGUEZ & SIERRA COLLEGE RUN DATE: 051107

ADT: 11377 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.08
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 92.0 195.1 418.9

RUN NAME: GRANITE DR BETW DOMINGUEZ & ROCKLIN RUN DATE: 051107

ADT: 14048 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.99
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 105.4 224.3 482.0

RUN NAME: DOMINGUEZ RD BETW TAYLOR & GRANITE RUN DATE: 051107

ADT: 5042 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 64.62
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 52.8 113.2 243.7

RUN NAME: KING RD BETW SIERRA COLLEGE & TAYLOR RUN DATE: 051107

ADT: 7037 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 66.07
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 65.8 141.4 304.3

FHWA OUTPUT – Cumulative + Project (Rocklin 60) with Dominguez Rd. PROJECT YEAR 2025

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	67.80	11.10	8.40
M-TRUCKS	8.20	1.30	1.00
H-TRUCKS	1.70	0.30	0.20

RUN NAME: TAYLOR RD BETW KING & HORSESHOE BAR RUN DATE: 030507

ADT: 20414 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 70.69
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *

70 CNEL	65 CNEL	60 CNEL	55 CNEL
62.2	133.5	287.3	618.7

RUN NAME: TAYLOR RD BETW HORSESHOE BAR & SIERRA COLLEGE RUN DATE: 030507

ADT: 15530 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 69.50
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *

70 CNEL	65 CNEL	60 CNEL	55 CNEL
51.9	111.3	239.4	515.6

RUN NAME: PACIFIC ST BETW SIERRA COLLEGE & DOMINGUEZ RUN DATE: 030507

ADT: 16976 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.82
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *

70 CNEL	65 CNEL	60 CNEL	55 CNEL
57.6	119.1	254.3	546.7

RUN NAME: PACIFIC ST BETW DOMINGUEZ & ROCKLIN RUN DATE: 030507

ADT: 22669 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 70.07
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *

70 CNEL	65 CNEL	60 CNEL	55 CNEL
68.7	143.9	308.1	662.8

RUN NAME: ROCKLIN RD BETW PACIFIC & GRANITE RUN DATE: 030507

ADT: 37867 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 72.30
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
95.1 201.8 433.4 932.9

RUN NAME: ROCKLIN RD BETW I-80 & SIERRA COLLEGE RUN DATE: 030507

ADT: 14836 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.23
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 109.2 232.6 499.9

RUN NAME: ROCKLIN RD BETW SIERRA COLLEGE & BARTON RUN DATE: 030507

ADT: 15716 SPEED: 35 ACTIVE HALF WIDTH (FT): 12
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.98
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
53.3 112.6 241.4 519.5

RUN NAME: BARTON RD BETW ROCKLIN & BRACE RUN DATE: 030507

ADT: 6882 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 65.97
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 64.9 139.3 299.8

RUN NAME: HORSESHOE BAR RD BETW I-80 & BRACE RUN DATE: 030507

ADT: 9958 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.57
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------

0.0 82.9 178.1 383.5

RUN NAME: BRACE RD BETW I-80 & BARTON RUN DATE: 030507

ADT: 9825 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.52
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 82.1 176.5 380.1

RUN NAME: BRACE RD BETW I-80 & SIERRA COLLEGE RUN DATE: 030507

ADT: 9161 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.21
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 78.4 168.5 362.8

RUN NAME: SIERRA COLLEGE BLVD BETW ENGLISH COLONY & KING RUN DATE: 030507

ADT: 24732 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 71.53
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
70.6 151.7 326.5 703.1

RUN NAME: SIERRA COLLEGE BLVD BETW KING & TAYLOR RUN DATE: 030507

ADT: 23770 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 71.35
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
68.8 147.7 317.9 684.7

RUN NAME: SIERRA COLLEGE BLVD BETW TAYLOR & I-80 RUN DATE: 030507

ADT: 35393 SPEED: 35 ACTIVE HALF WIDTH (FT): 30
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 71.20
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------

94.0 194.3 414.6 891.2

RUN NAME: SIERRA COLLEGE BLVD BETW DOMINGUEZ & I-80 RUN DATE: 030507

ADT: 34346 SPEED: 35 ACTIVE HALF WIDTH (FT): 30
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 71.07
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
92.4 190.5 406.4 873.5

RUN NAME: SIERRA COLLEGE BLVD BETW DOMINGUEZ & ROCKLIN RUN DATE: 030507

ADT: 37868 SPEED: 35 ACTIVE HALF WIDTH (FT): 30
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 71.49
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
97.9 203.0 433.6 932.2

RUN NAME: GRANITE DR BETW DOMINGUEZ & SIERRA COLLEGE RUN DATE: 030507

ADT: 9230 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 66.17
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 80.5 170.0 364.5

RUN NAME: GRANITE DR BETW DOMINGUEZ & ROCKLIN RUN DATE: 030507

ADT: 13379 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.78
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 102.1 217.2 466.6

RUN NAME: DOMINGUEZ RD BETW TAYLOR & GRANITE RUN DATE: 030507

ADT: 7378 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 66.27
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------

0.0 67.9 145.9 314.0

RUN NAME: KING RD BETW SIERRA COLLEGE & TAYLOR RUN DATE: 030507

ADT: 7019 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 66.06
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 65.7 141.1 303.8

FHWA OUTPUT – Cumulative + Project (Rocklin 60) without Dominguez PROJECT YEAR 2025

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	67.80	11.10	8.40
M-TRUCKS	8.20	1.30	1.00
H-TRUCKS	1.70	0.30	0.20

RUN NAME: TAYLOR RD BETW KING & HORSESHOE BAR RUN DATE: 030507

ADT: 20459 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 70.70
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *

70 CNEL	65 CNEL	60 CNEL	55 CNEL
62.3	133.7	287.7	619.6

RUN NAME: TAYLOR RD BETW HORSESHOE BAR & SIERRA COLLEGE RUN DATE: 030507

ADT: 15471 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 69.49
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *

70 CNEL	65 CNEL	60 CNEL	55 CNEL
51.8	111.0	238.8	514.3

RUN NAME: PACIFIC ST BETW SIERRA COLLEGE & DOMINGUEZ RUN DATE: 030507

ADT: 18235 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 69.13
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *

70 CNEL	65 CNEL	60 CNEL	55 CNEL
60.1	124.8	266.7	573.3

RUN NAME: PACIFIC ST BETW DOMINGUEZ & ROCKLIN RUN DATE: 030507

ADT: 22385 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 70.02
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *

70 CNEL	65 CNEL	60 CNEL	55 CNEL
68.2	142.7	305.5	657.2

RUN NAME: ROCKLIN RD BETW PACIFIC & GRANITE RUN DATE: 030507

ADT: 37864 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 72.30
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
95.0 201.8 433.4 932.9

RUN NAME: ROCKLIN RD BETW I-80 & SIERRA COLLEGE RUN DATE: 030507

ADT: 18006 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 69.07
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
59.6 123.8 264.4 568.5

RUN NAME: ROCKLIN RD BETW SIERRA COLLEGE & BARTON RUN DATE: 030507

ADT: 15501 SPEED: 35 ACTIVE HALF WIDTH (FT): 12
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.92
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
52.9 111.6 239.2 514.7

RUN NAME: BARTON RD BETW ROCKLIN & BRACE RUN DATE: 030507

ADT: 6962 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 66.02
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 65.4 140.4 302.1

RUN NAME: HORSESHOE BAR RD BETW I-80 & BRACE RUN DATE: 030507

ADT: 10033 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.61
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 83.3 179.0 385.4

RUN NAME: BRACE RD BETW I-80 & BARTON RUN DATE: 030507

ADT: 9864 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.53

* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 82.3 177.0 381.1

RUN NAME: BRACE RD BETW I-80 & SIERRA COLLEGE RUN DATE: 030507

ADT: 9202 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.23
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 78.6 169.0 363.8

RUN NAME: SIERRA COLLEGE BLVD BETW ENGLISH COLONY & KING RUN DATE: 030507

ADT: 24724 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 71.52
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
70.6 151.6 326.4 702.9

RUN NAME: SIERRA COLLEGE BLVD BETW KING & TAYLOR RUN DATE: 030507

ADT: 23682 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 71.34
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
68.6 147.3 317.2 683.0

RUN NAME: SIERRA COLLEGE BLVD BETW TAYLOR & I-80 RUN DATE: 030507

ADT: 36360 SPEED: 35 ACTIVE HALF WIDTH (FT): 30
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 71.32
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
95.6 197.7 422.1 907.3

RUN NAME: SIERRA COLLEGE BLVD BETW DOMINGUEZ & I-80 RUN DATE: 030507

ADT: 35494 SPEED: 35 ACTIVE HALF WIDTH (FT): 30
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 71.21
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
94.2 194.7 415.4 892.9

RUN NAME: SIERRA COLLEGE BLVD BETW DOMINGUEZ & ROCKLIN RUN DATE: 030507

ADT: 36348 SPEED: 35 ACTIVE HALF WIDTH (FT): 30
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 71.31
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
95.5 197.7 422.0 907.1

RUN NAME: GRANITE DR BETW DOMINGUEZ & SIERRA COLLEGE RUN DATE: 030507

ADT: 11387 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.08
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 92.0 195.2 419.1

RUN NAME: GRANITE DR BETW DOMINGUEZ & ROCKLIN RUN DATE: 030507

ADT: 14068 SPEED: 35 ACTIVE HALF WIDTH (FT): 18
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.00
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 105.5 224.6 482.5

RUN NAME: DOMINGUEZ RD BETW TAYLOR & GRANITE RUN DATE: 030507

ADT: 5042 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 64.62
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 52.8 113.2 243.7

RUN NAME: KING RD BETW SIERRA COLLEGE & TAYLOR RUN DATE: 030507

ADT: 7037 SPEED: 35 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 66.07
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 65.8 141.4 304.3