

APPENDIX G

Noise Data



INTRODUCTION

This report discusses the existing and projected future noise environments in the Sutter Point Specific Plan (SPSP) Area, and evaluates potential noise and vibration impacts and mitigation measures due to and upon development within the project area. The SPSP Area is shown by **Figure 1**. **Figure 2** shows the proposed Land Use Plan.

ENVIRONMENTAL SETTING

Background and Terminology

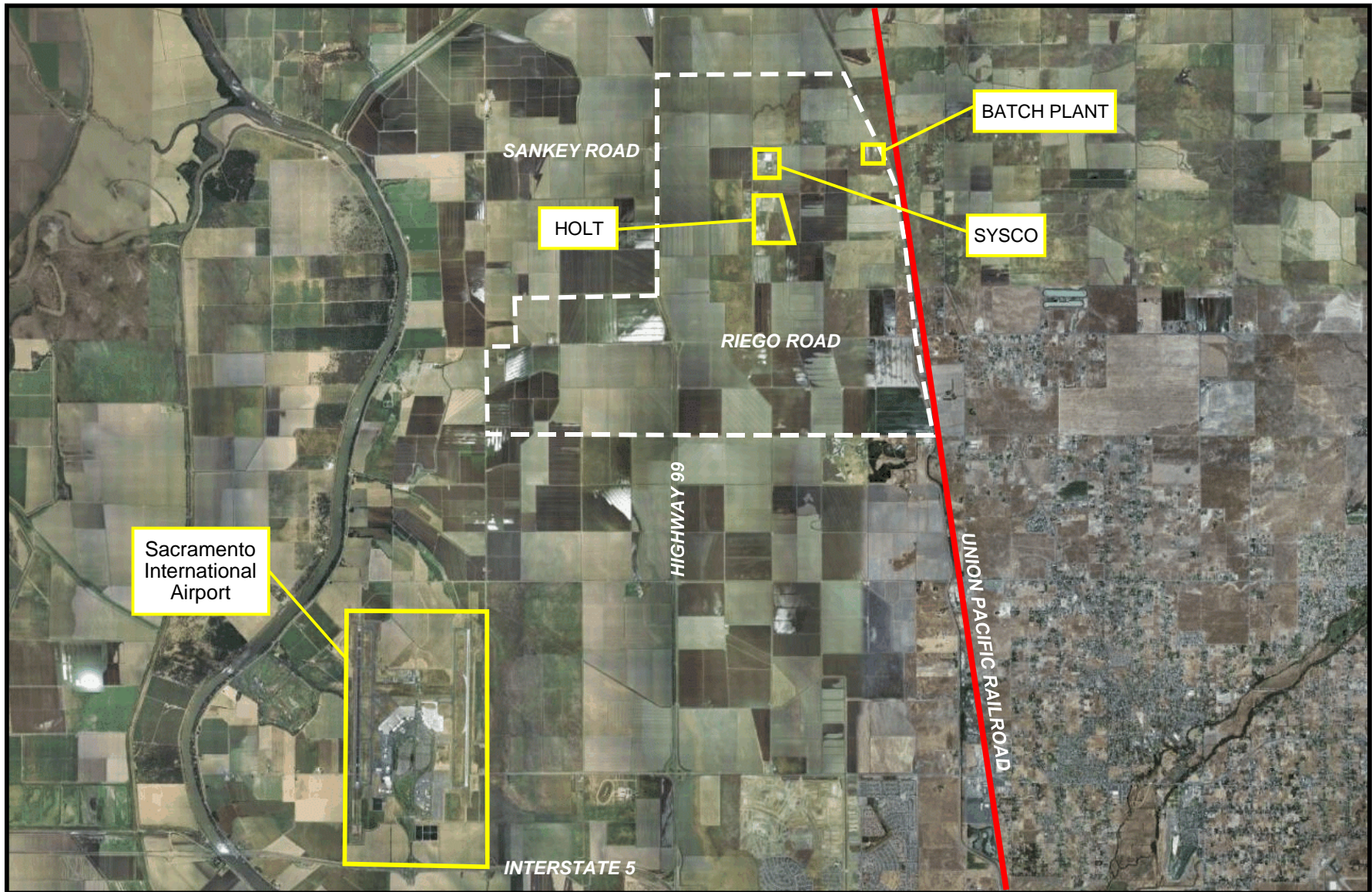
Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and hence are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second, called Hertz (Hz).

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals of pressure), as a point of reference, defined as 0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in levels (dB) correspond closely to human perception of relative loudness. Definitions of acoustical terminology are provided in Appendix A.

Effects of Noise on People

The perceived loudness of sounds and corresponding reactions to noise is dependent upon many factors, including sound pressure level, duration of intrusive sound, frequency of occurrence, time of occurrence, and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by weighing the frequency response of a sound level meter by means of the standardized A-weighting network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels in decibels. **Table 1** shows examples of noise levels for several common noise sources and environments.

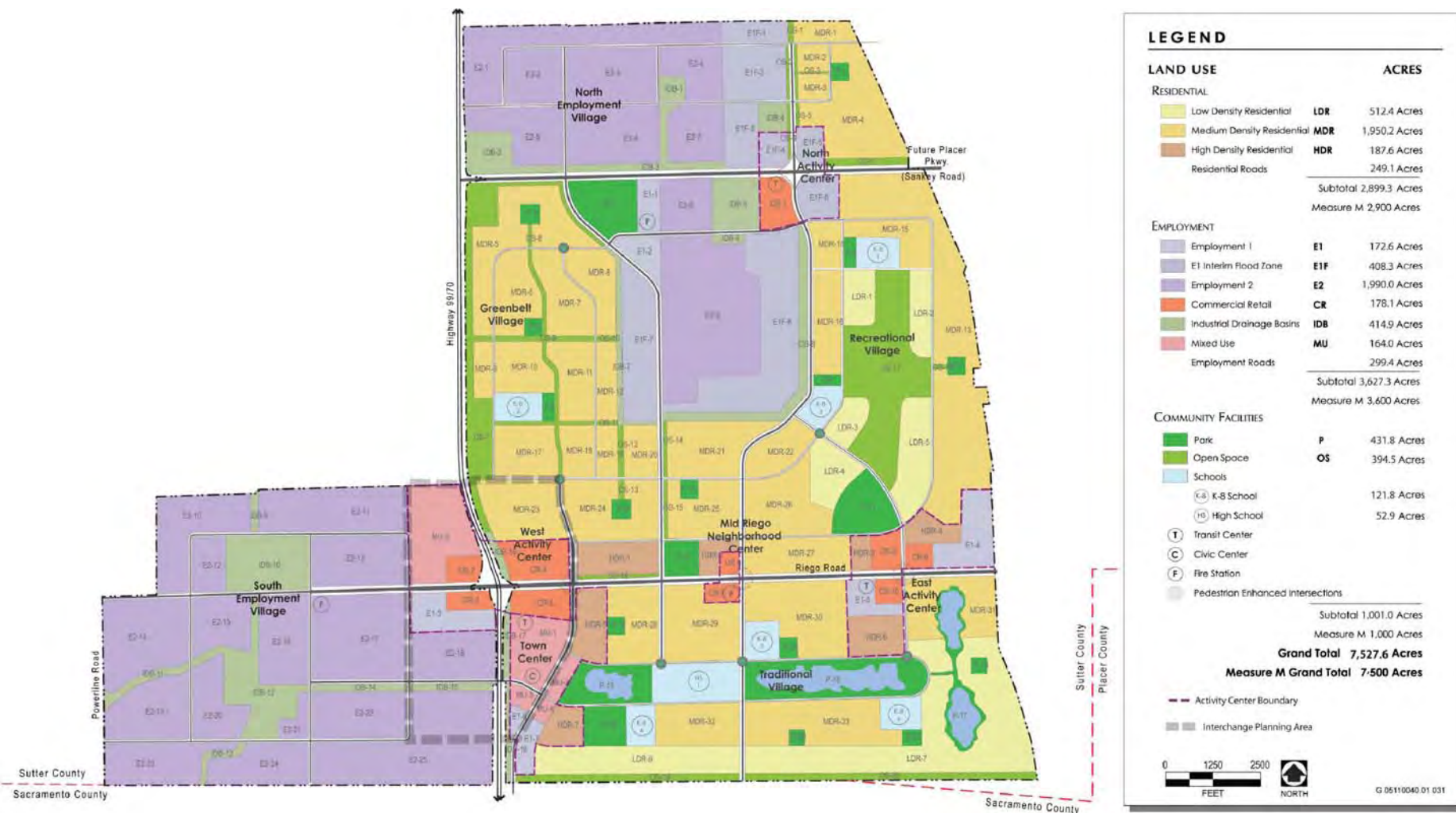
Figure 1
Sutter Point Specific Plan Location – Sutter County, California



 **BOLLARD**
Acoustical Consultants

--- : Approximate Project Site Border

Figure 2
Sutter Point Specific Plan Area – Sutter County, California



LEGEND		
LAND USE		ACRES
RESIDENTIAL		
	Low Density Residential LDR	512.4 Acres
	Medium Density Residential MDR	1,950.2 Acres
	High Density Residential HDR	187.6 Acres
	Residential Roads	249.1 Acres
	Subtotal	2,899.3 Acres
	Measure M	2,900 Acres
EMPLOYMENT		
	Employment 1 E1	172.6 Acres
	E1 Interim Flood Zone E1F	408.3 Acres
	Employment 2 E2	1,990.0 Acres
	Commercial Retail CR	178.1 Acres
	Industrial Drainage Basins IDB	414.9 Acres
	Mixed Use MU	164.0 Acres
	Employment Roads	299.4 Acres
	Subtotal	3,627.3 Acres
	Measure M	3,600 Acres
COMMUNITY FACILITIES		
	Park P	431.8 Acres
	Open Space OS	394.5 Acres
	Schools	
	K-8 School	121.8 Acres
	High School	52.9 Acres
	Transit Center	
	Civic Center	
	Fire Station	
	Pedestrian Enhanced Intersections	
	Subtotal	1,001.0 Acres
	Measure M	1,000 Acres
	Grand Total	7,527.6 Acres
	Measure M Grand Total	7,500 Acres
	Activity Center Boundary	
	Interchange Planning Area	
	0 1250 2500 FEET	
	NORTH	
	G 05110040 01 031	

Community noise is commonly described in terms of the "ambient" noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (Leq), which corresponds to a steady-state A-weighted sound level containing the same total energy as a time-varying signal over a given time period (usually one hour). The Leq is the foundation of the composite noise descriptor, Ldn, and shows very good correlation with community response to noise.

Table 1
Typical A-Weighted Sound Levels of Common Noise Sources

Decibels	Description
130	Threshold of pain
120	Jet aircraft take-off at 100 feet
110	Riveting machine at operators position
100	Shotgun at 200 feet
90	Bulldozer at 50 feet
80	Diesel locomotive at 300 feet
70	Commercial jet aircraft interior during flight
60	Normal conversation speech at 5 - 10 feet
50	Open office background level
40	Background level within a residence
30	Soft whisper at 2 feet
20	Interior of recording studio

Source: Egan, Architectural Acoustics

The Day-night Average Level (Ldn) is based upon the average noise level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because Ldn represents a 24-hour average, it tends to disguise short-term variations in the noise environment. Where short-term noise sources are an issue, noise impacts may be assessed in terms of maximum noise levels, hourly averages, or other statistical descriptors.

Effects of Vibration on People and Structures

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities. For this project, vibration is a concern during the passage of trains on the nearby tracks. A detailed analysis of railroad-related vibration levels is contained within this report.

Existing Noise Sources Affecting the Project Area

The existing ambient noise environment in the Project vicinity is defined primarily by traffic on State Route 99 and local roadways, frequent Union Pacific Railroad (UPRR) operations, seasonal agricultural activities, local industry and aircraft operations associated with Sacramento International Airport.

A combination of visual and noise level measurement surveys, use of existing acoustical literature, and application of accepted noise prediction methodologies were used to quantify the existing ambient noise environment in the project study area resulting from the identified major noise sources. A separate discussion of the effects of each of these major noise sources on the Plan Area follows.

Existing Roadway Traffic Noise Levels

To describe noise levels due to traffic, the Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used. The FHWA model is based upon the Calveno reference noise 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.

Average daily traffic (ADT) volumes were obtained from the traffic study prepared for this project. The FHWA Model inputs and detailed results are contained in Appendices B-D. **Table 2** shows the predicted existing traffic noise levels at a reference distance of 100 feet from the roadway centerlines, as well as the distances to the Ldn contours. It should be noted that the **Table 2** data do not include any shielding which may be present from existing structures or topography. Nor does the **Table 2** data include adjustment for atmospheric absorption of sound or excess ground attenuation which, when combined, generally provide an additional noise reduction of 1.5 dB per thousand feet from the roadway.

Table 2
Predicted Existing Traffic Noise Levels
South Sutter County Project – Sutter County, California

Segment	Roadway	Segment Description		Ldn @ 100'	Distance to Ldn Contour (feet)		
		From	To		70	65	60
1	Sankey Road	Powerline Road	SR 99	47	3	6	14
2	Sankey Road	SR 99	Pacific Avenue	56	11	24	51
3	Sankey Road	Pacific Avenue	Road C	55	9	20	44
4	Sankey Road	Road C	Pleasant Grove Road (N)	n/a	n/a	n/a	n/a
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	56	12	25	54
6	Riego Road	Powerline Road	Road U	53	8	16	35
7	Riego Road	Road U	Road R	n/a	n/a	n/a	n/a
8	Riego Road	Road R	Road S	n/a	n/a	n/a	n/a
9	Riego Road	Road S	SR 99	n/a	n/a	n/a	n/a
10	Riego Road	SR 99	Road A	64	40	86	185
11	Riego Road	Road A	Pacific Avenue	n/a	n/a	n/a	n/a
12	Riego Road	Pacific Avenue	Road C	63	36	77	165
13	Riego Road	Road C	Road D	n/a	n/a	n/a	n/a
14	Riego Road	Road D	Pleasant Grove Road (N)	n/a	n/a	n/a	n/a
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	64	43	92	199
16	Riego Road	Pleasant Grove Road (S)	Locust Road	64	43	92	198
17	Base Line Road	Locust Road	Brewer Road	65	46	100	216
18	Base Line Road	Brewer Road	Watt Avenue	65	44	95	205
19	Base Line Road	Watt Avenue	Fiddymment Drive	65	48	103	222
20	Elverta Road	Powerline Road	SR 99	54	9	19	41
21	Elverta Road	SR 99	East Levee Road	62	29	63	137
22	Elverta Road	East Levee Road	Sorento Road	63	35	75	162
23	Elverta Road	Sorento Road	16th Street	64	37	80	173
24	Elverta Road	16th Street	Watt Avenue	66	55	118	253
25	Powerline Road	Sankey Road	Riego Road	50	5	10	22
26	Powerline Road	Riego Road	Sacramento County Line	49	4	9	18
27	Powerline Road	Sacramento County Line	Elverta Road	49	4	9	18
28	Powerline Road	Elverta Road	Elkhorn Boulevard	50	5	10	22
29	Road H	Road O	Sankey Road	n/a	n/a	n/a	n/a
30	Pacific Avenue	Sankey Road	Road K	54	8	18	38
31	Pacific Avenue	Road K	Road J	n/a	n/a	n/a	n/a
32	Pacific Avenue	Road J	Riego Road	n/a	n/a	n/a	n/a
33	Pacific Avenue	Riego Road	Road B	n/a	n/a	n/a	n/a
34	Natomas Road	Sankey Road	Riego Road	50	5	10	22
35	Natomas Road	Riego Road	Sacramento County Line	53	7	15	32
36	East Levee Road	Sacramento County Line	Elverta Road	53	7	15	32
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	56	13	27	58
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	57	13	28	61
39	Sorento Road	Sacramento County Line	Elverta Road	57	13	28	61
40	Locust Road	Sankey Road	Baseline Road	56	12	25	54
41	Brewer Road	Phillip Road	Baseline Road	52	6	14	29

Table 2
Predicted Existing Traffic Noise Levels
South Sutter County Project – Sutter County, California

Segment	Roadway	Segment Description		Ldn @ 100'	Distance to Ldn Contour (feet)		
		From	To		70	65	60
42	Palladay Road	Baseline Road	Sacramento County Line	47	3	6	14
43	Palladay Road	Sacramento County Line	Elverta Road	47	3	6	14
44	16th Street	Kasser Road	Elverta Road	52	6	14	29
45	Watt Avenue	Baseline Road	PFE Road	63	33	70	151
46	Watt Avenue	PFE Road	Elverta Road	64	41	89	191
47	Walerga Road	Baseline Road	PFE Road	66	53	115	248
48	Elkhorn Boulevard	SR 99	Northborough Drive	66	51	110	237
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	65	46	99	212
50	Elkhorn Boulevard	Natomas Boulevard	Sageview Drive	66	52	113	243
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	66	53	114	246
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	73	162	350	753
53	SR 99	Sankey Road	Riego Road	73	162	350	753
54	SR 99	Riego Road	Sacramento County Line	74	189	406	875
55	SR 99	Sacramento County Line	Elverta Road	74	189	406	875
56	SR 99	Elverta Road	Elkhorn Boulevard	75	210	452	973
57	SR 99	Elkhorn Boulevard	I-5	76	236	509	1096
58	I-5	SR 99	Del Paso Road	79	420	905	1951
59	I-5	Del Paso Road	Arena Boulevard	80	483	1041	2243
60	I-5	Arena Boulevard	I-80	80	461	993	2140

Source: FHWA-RD-77-108 with inputs from, Caltrans, Fehr and Peers & Bollard Acoustical Consultants.

Existing Railroad Noise Levels

The Union Pacific Railroad tracks form the eastern boundary of much of the project site, as shown by **Figure 1**. To quantify railroad noise levels on the project site, Bollard Acoustical Consultants, Inc. conducted noise level measurements near the project site between June 6-8, 2005 and August 29, 2007. Warning horn noise at the Riego Road grade crossing was included in the continuous (24-hour) June 6-8, 2005 measurements. The August 29, 2007 measurements were short-term and sufficiently removed from an at grade crossing so as to exclude noise from the warning horn portion of the train passages.

The sound level meter was programmed to collect single event noise level data during train passbys for both measurement dates. The single event noise level data indicated that the typical train operation resulted in an average sound exposure level (SEL) of 104 dB and 99 dB, with and without horn noise, respectively, at a distance of 150 feet from the railroad track centerline.

During the 42-hour continuous railroad noise measurement survey, a total of 38 apparent railroad events were logged. This equates to approximately 22 train passages per day. In the Riego Road Conceptual Improvement Study (Dowling Associates, January 2007), it was reported that there are approximately 24 daily freight operations on this line, and two Amtrak operations. Due to normal fluctuations in rail activity, the level of activity recorded by BAC during the noise survey is generally consistent with that reported by Dowling. For a conservative estimate of railroad noise exposure within the project area, noise levels in terms of L_{dn} were calculated assuming 26 daily operations. The predicted railroad noise levels are provided in **Table 3**, with distances to the 60, 65 and 70 dB L_{dn} contours also provided.

Table 3
Existing Union Pacific Railroad Noise Levels
Sutter Point Specific Plan – Sutter County, California

Affected by Horns?	Distance to Noise Contours (feet)*			Predicted L _{dn} at 150 feet
	60 dB L _{dn}	65 dB L _{dn}	70 dB L _{dn}	
Yes	1,200	600	300	75 dB
No	600	300	150	70 dB

*Predicted distances to noise level contours are from the railroad track centerline. Distances to contours were predicted assuming a 4.5 dB decrease for each doubling of distance and an additional attenuation rate of 1.5 dB per thousand feet for atmospheric absorption and excess ground attenuation. Source: Bollard Acoustical Consultants, Inc.

**Locations within 1/4 mile of grade crossings are considered affected by horn noise.

Existing Railroad Vibration Levels

The only identified source of potentially significant vibration levels at the project site was the UPRR tracks located east of the project site. To quantify railroad vibration levels, Bollard Acoustical Consultants, Inc. conducted vibration measurements of 5 train passages at the project site on August 29, 2007.

The vibration measurements consisted of peak particle velocity sampling at a distance of approximately 110 feet from the railroad tracks. The train passages consisted of five freight trains. The trains ranged from 2 to 5 locomotives and from 34 to 84 cars.

The measurements were conducted using a Larson-Davis Laboratories Model HVM-100 Vibration Analyzer with a PCB Electronics Model 353B51 ICP Vibration Transducer. The test system is a Type I instrument designed for use in assessing vibration as perceived by human beings, and meets the full requirements of ISO 8041:1990(E). Atmospheric conditions present during the tests were within the operating parameters of the instrument. The results of the vibration measurements are shown in **Table 4**.

Table 4
Railroad Vibration Measurement Results
110 feet from UPRR Tracks – August 29, 2007

Time	Event Duration	# Engines	# Cars	Peak Vibration (in./sec.)
8:09	1:18	3	60	0.015
10:01	1:28	2	80	0.012
10:13	1:38	2	84	0.009
10:29	1:31	5	80	0.013
10:45	:53	2	34	0.014

Source: Bollard Acoustical Consultants, Inc.

Aircraft Noise

Sacramento International Airport is located southwest of the plan area near Interstate 5 and the Sacramento River. The runways for the airport run almost north south (16/34), with the main approach and departure corridors for aircraft in close proximity to the airport tracking with those runways. As a result, the noise exposure contours for Sacramento international Airport generally extend northerly and southerly away from the runways, as indicated in the attached **Figure 3**.

As indicated on **Figure 3**, portions of the Plan Area are located within the modeled 60 dB CNEL noise level contours under both the existing master plan conditions as well as under the theoretical capacity predicted with the inclusion of the northerly runway extension.

Although the majority of the Plan Area is unaffected by the aircraft noise contours shown on **Figure 3**, BAC conducted single-event aircraft noise measurements at 4 locations within the Plan Area for subsequent analysis of potential impacts associated with speech interference and sleep disturbance. The noise measurement locations are shown on **Figure 3**, and the results of the single-event noise testing are provided in **Table 5**.

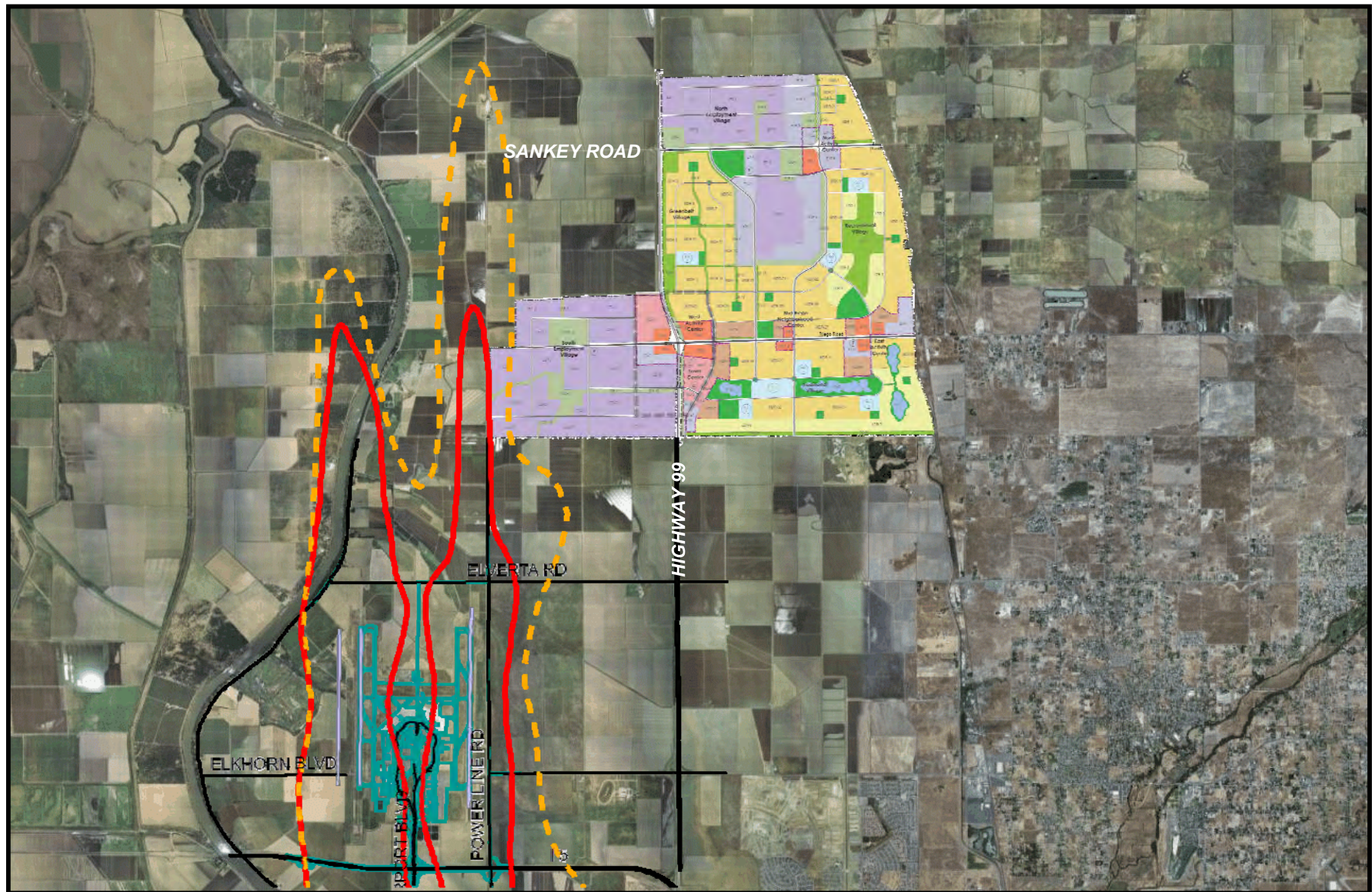
Table 5
Sacramento International Airport Measurement Results
South Sutter County Project – August 22, 2007

Site	Time of Day	Number of Aircraft Measured	Average SEL, dB	Measured Lmax, dB
1	9:00	6	84	77
2	10:00	6	83	78
3	11:00	6	66	58
4	13:00	n/a*	n/a*	n/a*

* Highway 99 traffic was dominant noise source. Could not measure SEL.

Source: Bollard Acoustical Consultants, Inc.

Figure 3
Sutter Point Specific Plan Aircraft Noise Contours – Sutter County, California

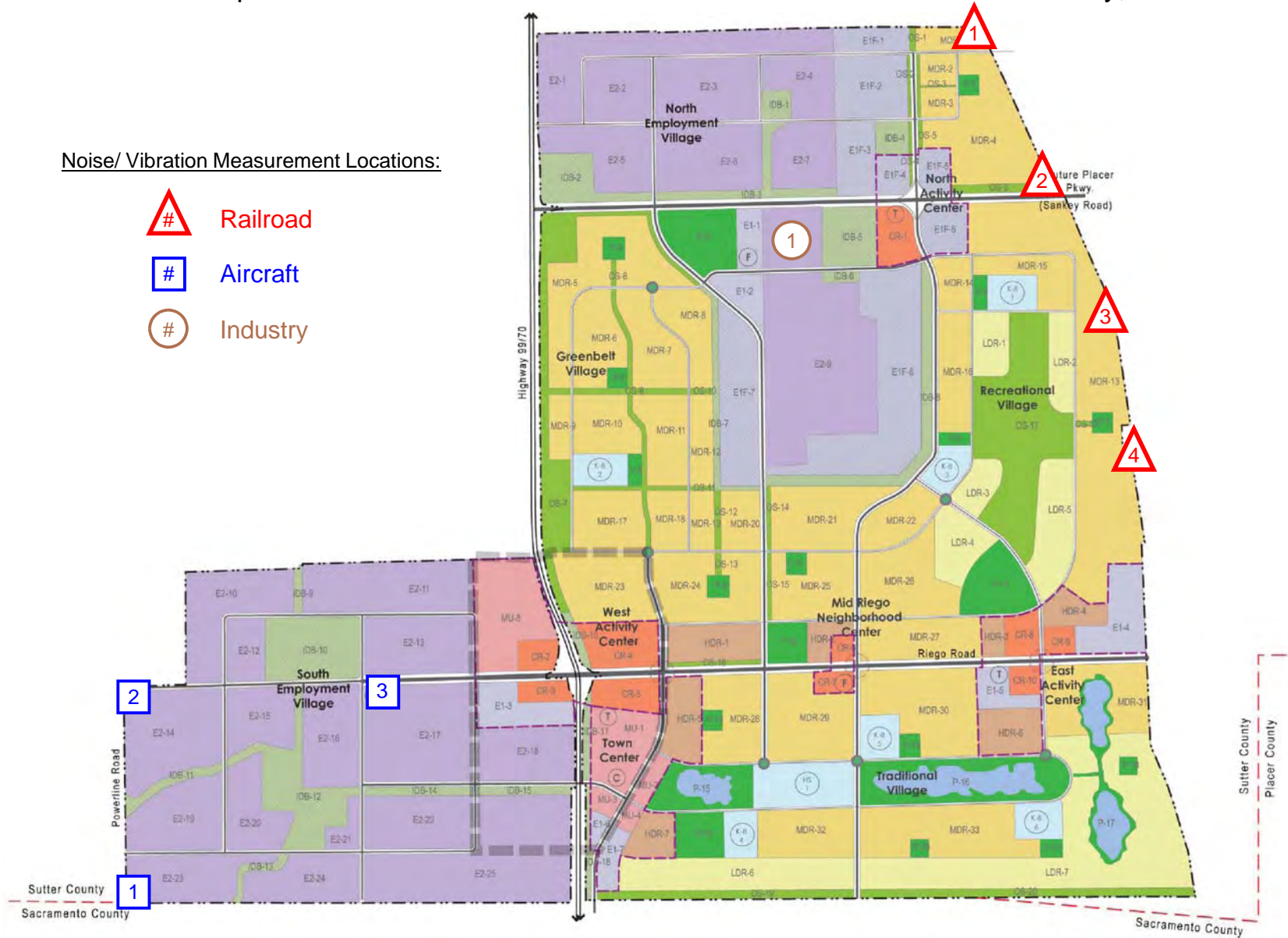


Noise Contours: — SMF_MP_60CNEL_INM 6.2
- - - SMF_TC_60CNEL_wNorthRwyExt

Figure 4
 Sutter Point Specific Plan Noise/Vibration Measurement Locations – Sutter County, California

Noise/ Vibration Measurement Locations:

-  Railroad
-  Aircraft
-  Industry



Industrial Noise

Agricultural Operations

Existing land uses in the SPSP Area are primarily agricultural in nature. However, the Plan proposes conversion of the agriculturally designated areas into residential, employment, and community facility uses. As a result, noise generated by on-site agricultural uses would ultimately be phased out. However, agricultural activities will likely continue to occur on neighboring properties as well as on-site properties not involved in the current phase of development.

Due to the wide array of equipment types and conditions under which equipment is used in the agriculture industry, noise generated by agricultural processes varies substantially. Maximum noise levels generated by farm-related tractors typically range from 77 to 85 dB at a distance of 50 feet from the tractor, depending on the horsepower of the tractor and the operating conditions. Noise generated by crop-dusting activities similarly varies, but can be expected to generate brief periods of localized elevated noise during dusting activities, depending on the type of aircraft used and the proximity of the receiver to the operating aircraft.

Due to the seasonal nature of the agricultural industry, there are often extended periods of time when no noise is generated on properties which are actively being farmed, followed by short-term periods of intensive mechanical equipment usage and corresponding noise generation. Due to this high degree of variability of agricultural activities, it is not feasible to reliably quantify the noise generation of agricultural uses in terms of noise standards commonly utilized to assess impacts of other noise sources. However, these uses generate short-term periods of elevated noise during all hours of the day and night and possess the potential to generate adverse public reaction during intensive farm-related activities.

Industry Along Pacific Avenue

Existing industrial uses located along Pacific Avenue include the Sysco Food Distribution operation at the corner of Pacific Avenue and Sankey Road, the Holt Equipment Company on the east side of Pacific Avenue, south of the Sysco facility and other smaller industrial/warehousing operations along Pacific Avenue. Industrial uses are also proposed along Pacific Avenue, immediately East of the Holt Facility.

Sysco Distribution Facility

A short-term noise measurement survey was conducted at the Sysco Distribution Facility during peak hours of operation on Thursday June 2, 2005. Bollard Acoustical Consultants, Inc. measured an average noise level of 60 dB L_{eq} at the nearest property line along the truck yard. Facility noise levels in the northerly and westerly directions were greatly diminished due to shielding provided by the facility buildings. Based on the short-term noise measurement results and information provided

by Sysco Management, Bollard Acoustical Consultants, Inc. (BAC) predict that the future increase in operations at the Sysco facility could result in a 3 dB increase in truck yard noise levels over existing levels. Therefore, estimated future noise levels associated with Sysco's truck yard operations at the nearest property line could potentially be as high as 63 dB Leq. From this level, it was determined that the location of the facility's 50 dB Leq noise contour would be approximately 1,100 feet from the eastern and southern property lines.

Holt Equipment Company

Field observations conducted by BAC staff indicated that the noise generation of the Holt facility consisted primarily of on-site movement and maintenance of heavy equipment. Because there was very little equipment being moved onsite during the BAC field inspections, the noise generation of that aspect of this facility was low. However, movement of heavy earthmoving equipment typically generate a noise level of up to 75 dB Leq at a distance of 100 feet. The specific level of noise generation would depend on the number of units moving at any given time and their proximity to the project property boundary. Maintenance activities at the Holt facility occur adjacent to, or within, large buildings setback from Pacific Avenue. No appreciable maintenance activity noise levels were noted during BAC field observations, but noise from impact wrenches, grinders, pneumatic tools, etc., would be expected to generate noise levels similar to heavy equipment movement. Assuming a reference level of 75 dB Leq is generated at a distance of 100 feet, the distance to the 50 dB Leq noise contour would be approximately 1,400 feet from the noise source.

Industry on Sankey Road

There is an existing A&R Ready-Mix concrete batch plant at the southwest corner of Sankey and Natomas Roads. Due to the presence of an existing residence on the property to the south of the batch plant site, substantial noise mitigation measures were required of this industrial use. Those measures include the use of setbacks, noise barriers, and partial enclosures of the most-significant noise producing equipment. As a result, batch plant noise exposure is not anticipated to exceed 45 dB Leq at the boundary of the batch plant site. The land use diagram for the SPSP indicates that the area containing the existing batch plant is proposed for medium density residential uses, so it is unclear whether or not the batch plant will remain following completion of development within the Plan Area.

REGULATORY SETTING

Sutter County General Plan Noise Element Standards

The Sutter County General Plan standards pertaining to noise are designed to protect county residents from the harmful and annoying effects of exposure to excessive noise. The County's Noise Element outlines the goals and policies geared towards reducing noise impacts at sensitive receptor locations. The County Standards which would be applicable to this project are listed below.

Goal 8.A To protect county residents from the harmful effects of exposure to excessive noise.

Policy 8.A-1 The County shall not allow development of new noise-sensitive land uses where the noise level due to non-transportation noise sources will exceed the noise level standards shown on (Table 6) at the property line of the new noise sensitive land use unless noise mitigation measures have been incorporated into the project design to achieve the required standard.

Policy 8.A-2 The County shall require that new non-transportation noise sources be mitigated to the noise level standards shown in (Table 6).

Policy 8.A-3 The feasibility of proposed development projects with respect to existing and future transportation noise levels shall be evaluated against the noise guidelines in (Table 7).

Policy 8.A-4 New development of noise-sensitive land uses shall not be permitted in areas exposed to noise levels from transportation noise sources which exceed the levels specified in (Table 8), unless the project design includes noise mitigation to achieve the required standard.

Policy 8.A-5 Noise created by new transportation noise sources, including roadway improvement projects, should be mitigated so as not to exceed the levels specified in (Table 8).

Policy 8.A-6 Where proposed non-residential development projects are likely to produce noise levels exceeding the performance standards of (Table 6) at existing or planned noise-sensitive uses, the County shall require the submission of an acoustical analysis as part of the environmental review process so that noise mitigation may be included in the project design.

**Table 6
Noise Level Standards
New Non-Transportation Sources**

Noise Descriptor	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly Leq, dB	50	45
Maximum level, dB	70	65

Source: Table 7 of the South Sutter County General Plan Noise Element

**Table 7
Land Use Compatibility Guidelines For Development
Sutter County General Plan Noise Element**

Land Use Category		Community Noise Exposure Ldn or CNEL, dB					
		55	60	65	70	75	80
Residential, Theaters, Meeting Halls, Churches, Auditoriums	A.	■	■				
	C.A.			■	■		
	U.					■	■
Transient Lodging, Motels, Hotels	A.	■	■				
	C.A.			■	■		
	U.					■	■
Schools, Libraries, Hospitals, Child Care, Museums	A.	■	■				
	C.A.			■	■		
	U.					■	■
Playgrounds, Neighborhood Parks, Amphitheaters	A.	■	■	■			
	C.A.				■		
	U.					■	■
Office Buildings, Business, Commercial and Professional	A.	■	■				
	C.A.			■	■		
	U.					■	■
Industrial, Utilities, Manufacturing, Agriculture	A.	■	■	■			
	C.A.				■		
	U.					■	■
Golf Courses, Riding Stables, Outdoor Spectator Sports	A.	■	■	■			
	C.A.					■	
	U.					■	■

A. Acceptable C.A. Conditionally Acceptable U. Unacceptable

Source: Table 8 of the South Sutter County General Plan Noise Element

Table 8
Maximum Allowable Noise Exposure
Transportation Noise Sources

Land Use	Outdoor Activity Areas ¹	Interior Spaces	
	Ldn/ CNEL,dB	Ldn/CNEL,dB	Leq, dB ²
Residential	60 ³	45	--
Transient Lodging	60 ³	45	--
Hospitals, Nursing Homes	60 ³	45	--
Theaters, Auditoriums	---	--	35
Churches, Meeting Halls	60 ³	--	40
Office Bldgs.	---	--	45
Schools, Libraries, Museums	---	--	45
Playgrounds, Neighborhood Parks	70	--	--

Source: U.S. EPA and California Sound Transmission Control Standards

1. Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.
2. As determined for a typical worst-case hour during periods of use.
3. Where it is not possible to reduce noise in the outdoor activity areas to 60 dB Ldn/CNEL or less using a practical application of the best available noise reduction measures, an exterior noise level of up to 62.5 dB Ldn/CNEL may be allowed provided that available exterior noise reduction measures have been implemented and interior noise levels are in compliance with this table.

Source: Table 9 of the Sutter County General Plan Noise Element

Project-Related Noise Level Increase Criteria

Besides the County Noise Element standards, the significance of project-related noise level increases may be determined by comparison of no-project traffic noise levels to the expected change in noise levels which will occur because of the project. It is generally recognized that an increase of at least 3 dB of similar sources is usually required before most people will perceive a change in noise levels, and an increase of 5 dB is required before the change will be clearly noticeable. A common practice is to assume that a minimally perceptible increase of 3 dB represents a significant increase in ambient noise levels.

Table 9 is based upon recommendations made in August 1992 by the Federal Interagency Committee on Noise (FICON) to provide guidance in the assessment of changes in ambient noise levels resulting from aircraft operations. The recommendations are based upon studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these criteria have been applied to other sources of noise similarly described in terms of cumulative noise exposure metrics such as the Ldn. This metric is generally applied to transportation noise sources, and defines noise exposure in terms of average noise exposure during a 24-hour period with a penalty added to noise that occurs during the nighttime.

According to **Table 9**, an increase in traffic noise levels of 5 dB or more would be significant where the ambient level is less than 60 dB, an increase of 3 dB or more would be significant where the ambient level is between 60 and 65 dB, and 1.5 dB or more would be a significant increase where the ambient noise level exceeds 65 dB Ldn. The rationale for the **Table 9** criteria is that, as ambient noise levels increase, a smaller increase in noise resulting from a project is sufficient to cause significant annoyance.

Table 9
Significance of Changes in Cumulative Noise Exposure

Ambient Noise Level Without Project, Ldn	Significant Impact
<60 dB	+5.0 dB or more
60-65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more

Source: Federal Interagency Committee on Noise (FICON)

Vibration Standards

The Sutter County Noise Element does not contain specific policies pertaining to vibration levels. Because the project site is located adjacent to railroad tracks, the effects of railroad-induced vibration are considered in this analysis.

Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. **Table 10** indicates that the threshold for damage to structures ranges from 2 to 6 in/sec. One-half this minimum threshold, or 1 in/sec p.p.v. is considered a safe criterion that would protect against architectural or structural damage. The general threshold at which human annoyance could occur is noted as 0.1 in/sec p.p.v. (ESA, 1996).

Table 10
General Human and Structural Responses to Vibration Levels

Effects on Structures & People	Peak Vibration Threshold (in/sec PPV)
Structural damage to commercial structures	6
Structural damage to residential buildings	2
Architectural damage	1.0
General threshold of human annoyance	0.1
General threshold of human perception	0.01

Sources: *Survey of Earth-borne Vibrations due to Highway Construction and Highway Traffic*, Caltrans 1976.

Final Environmental Impact Report: Richmond Transport Project, Orion Environmental Associates, 1990.

Weekly Progress Report for Vibration Monitoring for Richmond Transport, Wilson, Ihrig & Associates, 1994.

Noise Level Standards for Single Events

The Sutter County Noise Element, like most cities and counties, does not contain noise level standards for single events. However, since a recent court case in Berkeley, California (*Berkeley keep jets over the bay*), there has been increased attention to the evaluation of single-event noise levels due to aircraft overflights in addition to the more typical evaluation of aircraft noise sources using 24-hour average descriptors such as Ldn and CNEL. Because the Berkeley case involved an *increase* in aircraft overflights in an existing residential area, and this project involves the introduction of new uses into an area where aircraft overflights already occur, the situations are considerably different.

While the Berkeley case ruling required that single-event noise be considered, it did not recommend an appropriate single event noise level standard. Extensive studies have been conducted regarding the effects of single-event noise on sleep disturbance, but due to the wide variation in test subjects reactions to noises of various levels (Some test subjects were awakened by indoor SEL values of 50 dB, whereas others slept through indoor SEL values exceeding 80 dB), no definitive consensus has been reached with respect to a universal criterion to apply. Because the recent Berkeley case drew concerns due to interior SEL values in excess of 65 dB, this analysis considers an interior SEL criteria of 65 dB for the assessment of single event noise levels within residences.

PROJECT NOISE IMPACTS AND MITIGATION MEASURES

Standards of Significance

CEQA guidelines state that implementation of the project would result in significant noise impacts if the project would result in either of the following:

1. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. The Sutter County Noise Element Policies, described above, are used as the appropriate noise level standards of significance for this project.
2. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels. As noted in **Table 10**, a threshold of 0.1 inches per second peak particle velocity represents the onset of annoyance and is, therefore, used as the significance threshold in this analysis.
3. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. The criteria for assessing the significance of project-related traffic noise level increases is provided above in **Table 9**.
4. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. Temporary increases are normally associated with construction related noise, and such activities are normally exempt provided they occur during daytime hours.
5. For a project located within an airport land use plan or, where such a plan has not be adopted, within two miles of a public airport or public use airport, where the project would expose people residing or working in the area to excessive noise levels. Because the project area is located in the vicinity of Sacramento International Airport, this condition applies and impacts associated with aircraft noise are discussed in this section.
6. For a project within the vicinity of a private airstrip, where the project would expose people residing or working in the project area to excessive noise levels. Because the project area will not be affected by private airstrips, this condition does not apply.

Aircraft Noise Impact Assessment Methodology

As mentioned in the setting section, portions of the plan area are located within the Sacramento International Airport 60 dB CNEL noise level contours. Significant noise impacts are identified for this project if aircraft noise levels in terms of CNEL would exceed the Sutter County noise level standards (See **Table 8**) at noise-sensitive land uses proposed within the SPSP Area, or if Sound Exposure Levels (SEL) associated with Single Events would exceed 65 dB inside any habitable room with windows in their closed position.

Traffic Noise Impact Assessment Methodology

Traffic noise impacts are identified where existing or future traffic noise levels with the project would significantly exceed existing or future traffic noise levels without the project. In addition, traffic noise impacts are identified if traffic on local roadways would cause noise levels to exceed the Sutter County noise level standards at exterior or interior areas of the types of uses proposed within this development (residential).

To describe future noise levels due to traffic, the Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used. The FHWA model is based upon the Calveno reference noise 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.

Average daily traffic volumes were provided by Fehr and Peers for existing and future, project and no-project conditions. To determine the relative differences between project and no-project conditions, the predicted traffic noise levels at a standardized distance of 100 feet from each roadway centerline were computed using the data in the Appendix B-D. The predicted existing traffic noise levels at a representative distance of 100 feet from the roadway centerlines are contained in **Table 11**.

Table 11
Existing Traffic Noise Levels
South Sutter County Project – Sutter County, California

Segment	Roadway	Segment Description		Ldn @ 100', dB (Change, dB)	
		From	To	With Phase 1	With Project
1	Sankey Road	Powerline Road	SR 99	47 (0)	47 (0)
2	Sankey Road	SR 99	Pacific Avenue	57 (1)	68 (12)
3	Sankey Road	Pacific Avenue	Road C	56 (1)	63 (8)
4	Sankey Road	Road C	Pleasant Grove Road (N)	56 (n/a)	62 (n/a)
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	56 (0)	59 (3)
6	Riego Road	Powerline Road	Road U	56 (3)	64 (11)
7	Riego Road	Road U	Road R	56 (n/a)	68 (n/a)
8	Riego Road	Road R	Road S	62 (n/a)	69 (n/a)
9	Riego Road	Road S	SR 99	71 (n/a)	73 (n/a)
10	Riego Road	SR 99	Road A	71 (7)	73 (9)
11	Riego Road	Road A	Pacific Avenue	70 (n/a)	72 (n/a)
12	Riego Road	Pacific Avenue	Road C	69 (6)	71 (8)
13	Riego Road	Road C	Road D	67 (n/a)	70 (n/a)
14	Riego Road	Road D	Pleasant Grove Road (N)	67 (n/a)	70 (n/a)
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	67 (3)	69 (5)
16	Riego Road	Pleasant Grove Road (S)	Locust Road	67 (3)	68 (4)
17	Base Line Road	Locust Road	Brewer Road	67 (2)	69 (4)
18	Base Line Road	Brewer Road	Watt Avenue	67 (2)	69 (4)
19	Base Line Road	Watt Avenue	Fiddymment Drive	66 (1)	67 (2)
20	Elverta Road	Powerline Road	SR 99	54 (0)	65 (11)
21	Elverta Road	SR 99	East Levee Road	63 (1)	64 (2)
22	Elverta Road	East Levee Road	Sorento Road	65 (2)	66 (3)
23	Elverta Road	Sorento Road	16th Street	65 (1)	66 (2)
24	Elverta Road	16th Street	Watt Avenue	66 (0)	67 (1)
25	Powerline Road	Sankey Road	Riego Road	50 (0)	50 (0)
26	Powerline Road	Riego Road	Sacramento County Line	54 (5)	64 (15)
27	Powerline Road	Sacramento County Line	Elverta Road	54 (5)	65 (16)
28	Powerline Road	Elverta Road	Elkhorn Boulevard	51 (1)	58 (8)
29	Road H	Road O	Sankey Road	n/a (n/a)	63 (n/a)
30	Pacific Avenue	Sankey Road	Road K	54 (0)	65 (11)
31	Pacific Avenue	Road K	Road J	54 (n/a)	66 (n/a)
32	Pacific Avenue	Road J	Riego Road	60 (n/a)	67 (n/a)
33	Pacific Avenue	Riego Road	Road B	53 (n/a)	55 (n/a)
34	Natomas Road	Sankey Road	Riego Road	50 (0)	50 (0)
35	Natomas Road	Riego Road	Sacramento County Line	56 (3)	63 (10)
36	East Levee Road	Sacramento County Line	Elverta Road	56 (3)	63 (10)
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	56 (0)	57 (1)
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	60 (3)	63 (6)
39	Sorento Road	Sacramento County Line	Elverta Road	58 (1)	61 (4)
40	Locust Road	Sankey Road	Baseline Road	56 (0)	59 (3)
41	Brewer Road	Phillip Road	Baseline Road	52 (0)	53 (1)

Table 11
Existing Traffic Noise Levels
South Sutter County Project – Sutter County, California

Segment	Roadway	Segment Description		Ldn @ 100', dB (Change, dB)	
		From	To	With Phase 1	With Project
42	Palladay Road	Baseline Road	Sacramento County Line	47 (0)	50 (3)
43	Palladay Road	Sacramento County Line	Elverta Road	47 (0)	50 (3)
44	16th Street	Kasser Road	Elverta Road	55 (3)	54 (2)
45	Watt Avenue	Baseline Road	PFE Road	64 (1)	65 (2)
46	Watt Avenue	PFE Road	Elverta Road	65 (1)	66 (2)
47	Walerga Road	Baseline Road	PFE Road	66 (0)	66 (0)
48	Elkhorn Boulevard	SR 99	Northborough Drive	66 (0)	66 (0)
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	65 (0)	65 (0)
50	Elkhorn Boulevard	Natomas Boulevard	Sageview Drive	66 (0)	66 (0)
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	66 (0)	66 (0)
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	73 (0)	73 (0)
53	SR 99	Sankey Road	Riego Road	73 (0)	75 (2)
54	SR 99	Riego Road	Sacramento County Line	77 (3)	78 (4)
55	SR 99	Sacramento County Line	Elverta Road	77 (3)	78 (4)
56	SR 99	Elverta Road	Elkhorn Boulevard	77 (2)	78 (3)
57	SR 99	Elkhorn Boulevard	I-5	77 (1)	78 (2)
58	I-5	SR 99	Del Paso Road	80 (1)	81 (2)
59	I-5	Del Paso Road	Arena Boulevard	81 (1)	81 (1)
60	I-5	Arena Boulevard	I-80	80 (0)	81 (1)
61	Road A	Road J	Riego Road	61 (n/a)	63 (n/a)
62	Road A	Riego Road	Road B	62 (n/a)	67 (n/a)
63	Road D	Road C	Riego Road	55 (n/a)	63 (n/a)
64	Road D	Riego Road	Road B	n/a (n/a)	61 (n/a)
65	Road C	Road O	Sankey Road	48 (n/a)	63 (n/a)
66	Road C	Sankey Road	Road K	n/a (n/a)	64 (n/a)
67	Road C	Road K	Road D	n/a (n/a)	64 (n/a)
68	Road C	Road D	Road J	58 (n/a)	63 (n/a)
69	Road C	Road J	Riego Road	60 (n/a)	63 (n/a)
70	Road C	Riego Road	Road B	54 (n/a)	60 (n/a)
71	Road K	Pacific Avenue	Road C	n/a (n/a)	62 (n/a)
72	Road Q	Road S	Road A	50 (n/a)	60 (n/a)

Source: FHWA-RD-77-108 with inputs from Fehr and Peers

Note that the values shown in parentheses represent the increase in traffic noise levels relative to existing no-project noise levels.

Railroad Noise Impact Assessment Methodology

Based on the existing noise level measurements discussed earlier in the setting section, railroad noise impacts are considered significant where railroad noise levels would exceed the Sutter County noise level standards shown in **Table 8**. The Table 3 data provides the distances to the critical noise contours for locations within the SPSP Area affected by railroad noise, including areas both affected by warning horn noise and those unaffected by warning horn noise.

Construction Noise Impact Assessment Methodology

During the construction phases of the 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, as indicated in **Table 11**, ranging from 85 to 90 dB at a distance of 50 feet. Noise would also be generated during the construction phase by increased truck traffic on area roadways. A significant project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from construction sites. This noise increase would be of short duration, and would likely occur primarily during daytime hours. For this project, construction noise impacts are identified if construction activities would occur in close proximity to noise-sensitive receptors during nighttime hours. During daytime hours, it is recognized that there is decreased sensitivity to noise and that construction activities are temporary.

Table 11
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.

Vibration Impact Assessment Methodology

Table 4 indicates that measured vibration levels were approximately 0.013 inch per second peak particle velocity at the vibration measurement location (110 feet from the railroad tracks). The nearest residences in the South Sutter development would be located farther away from the tracks than 110 feet, so vibration levels at those more distant locations are predicted to be lower than the 0.1 in./sec. ppv. recommended threshold of significance. Vibration impacts are identified if vibration levels are predicted to exceed 0.1 in./sec. ppv.

SPECIFIC NOISE IMPACTS AND MITIGATION MEASURES

Aircraft Noise Impacts

Impact 1: Exposure of noise-sensitive land uses to noise from Sacramento International Airport.

The 60 dB CNEL noise contours shown on **Figure 3** extend into a portion of the project site referred to as the “South Employment Village”. Land uses in this location would consist of a variety of industry, distribution technology, and service uses. Such uses are not normally considered to be noise sensitive, and **Figure 3** indicates that only the westernmost portion of the “South Employment Village” would be exposed to aircraft noise levels in excess of 60 dB CNEL, and only then under the extended runway scenario. As a result, no noise impacts would be anticipated at future uses within the South Employment Village unless a transient lodging facility is ultimately proposed under the “Service Use” designation. ***If transient lodging facilities are proposed within the 60 dB CNEL noise contours shown on Figure 3, this impact would be considered Potentially Significant.***

Mitigation Measures for Impact 1

MM 1: An acoustical analysis of proposed construction plans and materials shall be prepared for any transient lodging facilities located within the 60 dB CNEL noise contours for Sacramento International Airport to ensure that interior noise levels within habitable rooms do not exceed 45 dB CNEL or 65 dB SEL during individual aircraft events.

Significance after mitigation: Less than significant.

Impact 2: Exposure of residential uses developed within the SPSP to excessive single-event noise from Sacramento International Airport operations.

Table 5 indicates that the measured aircraft SEL at test location Site 3 on **Figure 4** was 66 dB. This site is approximately 2,000 feet west of the nearest residential uses within the SPSP (Mixed Use are at northwest quadrant of the Highway 99 / Riego Road interchange). It should be noted that attempts were made to quantify aircraft Single Event noise closer to that mixed use site but aircraft noise levels were too low to be measured over background Highway 99 noise levels at that location. Because standard residential construction will provide at least 25 dB noise reduction with windows closed, an exterior SEL of approximately 65 would be reduced to 40 dB within residences. This level is well below the recommended 65 dB SEL

threshold of significance for findings of noise impact due to single events. As a result, ***this impact is considered less than significant.***

Mitigation Measures for Impact 2: None Required.

Railroad Noise Impacts

Impact 3 Exposure of noise-sensitive land uses to noise from Union Pacific Railroad Operations.

The **Table 3** data indicate that the 60 dB Ldn contours for UPRR operations extend approximately 600 feet from the tracks at locations beyond 1/4 mile from grade crossings, and approximately 1,200 feet from the tracks at locations within 1/4 mile of a grade crossing. The reason for the difference is that trains are required to sound their horns when approaching at grade crossings, and the area of impact of the horns is effectively 1/4 mile. Because medium density residential uses are proposed along the eastern boundary within these impact zones, the Sutter County 60 dB Ldn noise level standard would be exceeded. ***As a result, this impact is considered significant.***

Mitigation Measures for Impact 3

MM 3: An acoustical analysis of proposed site plans, construction plans and materials shall be prepared for any residential uses proposed within the 60 dB Ldn contours shown by **Table 3** to ensure that adequate noise insulation features are included in the project design to reduce exterior noise levels to 60 dB Ldn and interior noise levels within habitable rooms to 45 dB Ldn and 65 dB SEL.

The appropriate exterior noise mitigation will depend on the type of residential product proposed (i.e. what form will the outdoor activity areas take), proximity of the outdoor space to a grade crossing, and the ultimate elevation of the outdoor spaces relative to the railroad tracks. Interior noise mitigation will also depend on proximity of the habitable room to the tracks and whether or not the residential structure is affected by horn noise. If residences are proposed as close as 150 feet from the railroad tracks near a grade crossing, approximately 30 dB of building facade noise reduction would be required. Such measures would likely take the form of upgraded window assemblies and more massive construction of walls. Such measures are feasible in noise environments up to 75 dB Ldn, but specific measures cannot be developed until site and building plans are available.

Significance after mitigation: Less than significant.

Railroad Vibration Impacts

Impact 4: Exposure of residential uses developed within the SPSP to excessive vibration levels during passage of trains on the UPRR tracks.

Table 4 indicates that the measured vibration levels during passage of freight trains at the project site were 0.015 inches per second peak particle velocity or less. The recommended threshold for acceptable vibration levels is 0.1 inches per second. Because measured levels at the project site were well below the threshold of significance, ***this impact is considered less than significant.***

Mitigation Measures for Impact 4: None Required.

Construction Noise Impacts

Impact 5 Noise Impacts Associated with Construction at the Project Site

Activities associated with construction would typically generate maximum noise levels ranging from 85 to 90 dB at a distance of 50 feet. However, because construction activities would be temporary in nature and would occur during normal daytime working hours, significant adverse public reaction to construction noise is not anticipated. Nonetheless, because construction activities could result in periods of elevated noise levels, ***this impact is considered significant.***

Mitigation Measures for Impact 5

MM 5: Construction activities should adhere to the requirements of Sutter County with respect to hours of operation, muffling of internal combustion engines, and other factors which affect construction noise generation and its effects on noise-sensitive land uses.

Agricultural Noise Impacts

Impact 6: Agricultural Noise Levels at Future Residences within the Plan Area

It is unknown at this time whether residences constructed within the SPSP Area will be affected by agricultural noise levels, and if so, to what degree. Nonetheless, due to the fact that agricultural activities can result in periods of elevated noise exposure, particularly crop dusting activities, ***this impact is considered to be potentially significant.***

Mitigation Measures for Impact 6

MM 6a: Disclosure statements should be provided to all future residences located within 500 feet of active agricultural areas informing them of the likelihood of elevated noise levels during agricultural operations, possibly including crop-dusting activities.

AND

MM 6b All residences constructed within 500 feet of active agricultural areas shall be of sufficient construction to reduce noise levels by 30 dB within bedrooms to minimize the potential for sleep disturbance during early morning agricultural operations.

Significance after mitigation: Less than significant.

Impacts Associated with New Noise Producing Land Uses within the SPSP Area

Impact 7: Exposure of noise sensitive land uses within the SPSP to noise generated by new commercial, industrial, recreation, school, and public facility uses.

Noise-producing aspects of certain land uses developed within the Plan Area such as industry, commercial loading docks, school playing fields, etc, could generate elevated noise levels in the vicinity of proposed noise-sensitive land uses. The SPSP has generally been designed with buffers between the most noise-producing and noise-sensitive types of land uses, which will greatly reduce the potential for incompatible land use with respect to noise. Nonetheless, because noise associated with these types of uses could exceed applicable Sutter County noise limits at noise-sensitive areas, ***this impact is considered potentially significant.***

Mitigation Measures for Impact 7:

MM 7: The County shall make a determination upon review of applications for new noise-producing land uses as to whether or not the proposed use would potentially impact existing or proposed noise-sensitive land uses in the vicinity of the proposed use. Where the County estimates that a project may generate significant levels of noise, a noise analysis should be required to ensure that appropriate noise mitigation is included in the project design to achieve satisfaction with the County noise standards.

Significance After Mitigation: Less than significant.

Impact 8: Exposure of noise sensitive land uses within the SPSP to noise generated by existing industrial uses within the SPSP.

Existing industrial land uses in within the SPSP Area, including Sysco Distributing, Holt Equipment, A&R Ready Mix, and other uses along Pacific Avenue, generate noise levels which will likely be audible at times at future residential land uses developed within the SPSP Area. The SPSP has been designed to recognize the noise-producing aspects of these uses and has included substantial noise buffer zones between these areas and proposed noise-sensitive areas. Nonetheless, due to the noise-generating variability of these sources, noise levels could exceed County noise standards despite the large setbacks. ***As a result, this impact is considered potentially significant.***

Mitigation for Impact 8

MM 8: When applications are filed for residential uses within 1,500 feet of an existing industrial use, an acoustical analysis of specific site, grading and construction plans shall be required to ensure that sufficient noise reduction measures are included in the project design to achieve satisfaction with Sutter County noise standards.

Significance After Mitigation: Less than significant

Traffic Noise Impacts

Impact 9: Increase in Traffic Noise Levels Due to Phase I Development of Project Site

Development on the SPSP Area will result in changes in traffic on the existing roadway network. Relative to existing traffic noise levels within the project area, the increases in traffic noise levels on project-area roadways are predicted to range from 0 to 7 dB Ldn, as shown in **Table 11**.

Pursuant to Significance Criteria "C", as defined in **Table 9**, a substantial increase in traffic noise levels is defined as 1.5 to 5 dB, depending on the pre-project traffic noise level. Due to the relatively large change in overall trip generation associated with the project, traffic noise along 8 roadway segments is predicted to exceed the standards of significance.

Specifically, Phase 1 project development is predicted to result in a significant increase in traffic noise levels along Riego Road (Highway 99 to Locust Road), Powerline Road (Riego to Elverta Roads), and on SR 99 (Riego to Elverta Roads).

Although there are no residences located along the impacted portion of Highway 99, there is one residence along the impacted portion of Powerline Road, and several along the impacted segments of Riego Road east of the project area. Therefore, the increase in traffic noise levels due to Phase 1 development is ***considered to be significant***.

Mitigation Measures for Impact 9: ***None Available.***

Development of the Phase I project will cause traffic noise levels to increase on the local roadway network. The extent by which existing land uses are affected by these increases will depend on their proximity to the roadways in question as well as their individual sensitivity to noise.

The reason no noise mitigation measures are available for this impact is that such mitigation would require modification to either the source of traffic noise, the transmission path between the road and the receivers, or the receiver.

Modification to the noise source would require the quieting of individual vehicles, which is preempted from local control by the State Motor Vehicle Code. While noise-reducing pavement materials have been shown to reduce traffic noise levels

in some areas, such materials may not provide sufficient noise reduction to reduce this impact to a level of insignificance.

Treatment of the path of sound between the roadway and receiver would require the construction of noise barriers at impacted receptors along the impacted segments. Irrespective of the cost associated with such mitigation, barriers could not be constructed at all locations or would not be effective at all locations due to engineering and safety constraints, as well as topographic and vehicular access constraints.

Finally, treatment of the receptor would essentially consist of retrofitting the buildings of noise-sensitive receptors to provide additional attenuation of traffic noise by the amount which development of the project site would cause traffic noise to increase. The costs and other constraints associated with such retrofitting would render this option infeasible.

Significance of Impact 9 after Mitigation: Significant and unavoidable.

Impact 10: Increase in Traffic Noise Levels Due to Entire Development of Project Site

Development on the SPSP Area will result in changes in traffic on the existing roadway network. Relative to existing traffic noise levels within the project area, the increases in traffic noise levels on project-area roadways are predicted to range from 0 to 16 dB Ldn, as shown in **Table 11**.

Pursuant to Significance Criteria "C", as defined in **Table 9**, a substantial increase in traffic noise levels is defined as 1.5 to 5 dB, depending on the pre-project traffic noise level. Due to the relatively large change in overall trip generation associated with the project, traffic noise along 19 roadway segments is predicted to exceed the standards of significance.

Specifically, completion of the development is predicted to result in a significant increase in traffic noise levels along Sankey, Riego, Base Line, Elverta, Powerline, Natomas, Pacific, East Levee, Pleasant Grove, and SR99.

Although there are no residences located along some of the impacted roadway sections, there are residences along many. Therefore, the increase in traffic noise levels due to development of the entire project is **considered to be significant**.

Mitigation Measures for Impact 10: *None Available.*

Development of the Entire project will cause traffic noise levels to increase on the local roadway network. The extent by which existing land uses are affected by these increases will depend on their proximity to the roadways in question as well as their individual sensitivity to noise.

The reason no noise mitigation measures are available for this impact is that such mitigation would require modification to either the source of traffic noise, the transmission path between the road and the receivers, or the receiver.

Modification to the noise source would require the quieting of individual vehicles, which is preempted from local control by the State Motor Vehicle Code. While noise-reducing pavement materials have been shown to reduce traffic noise levels in some areas, such materials may not provide sufficient noise reduction to reduce this impact to a level of insignificance.

Treatment of the path of sound between the roadway and receiver would require the construction of noise barriers at impacted receptors along the impacted segments. Irrespective of the cost associated with such mitigation, barriers could not be constructed at all locations or would not be effective at all locations due to engineering and safety constraints, as well as topographic and vehicular access constraints.

Finally, treatment of the receptor would essentially consist of retrofitting the buildings of noise-sensitive receptors to provide additional attenuation of traffic noise by the amount which development of the project site would cause traffic noise to increase. The costs and other constraints associated with such retrofitting would render this option infeasible.

Significance of Impact 10 after Mitigation: Significant and unavoidable.

Impact 11 Traffic Noise Exposure at Noise-Sensitive Uses Proposed Within the Project Area

The project proposes a mix of residential and other noise-sensitive development adjacent to significant noise-producing roadways. The distances to the critical noise contours for roadways within the SPSP are provided in Appendix D. Because residential land uses are designated adjacent to roadways for which the 60 dB Ldn contours would extend beyond the roadway right of way, **this impact is considered significant.**

Mitigation Measures for Impact 11

MM 11: When applications are filed for residential uses within the 60 dB Ldn contours shown in Appendix D, or for other noise-sensitive land uses identified in **Table 8**, an acoustical analysis of specific site, grading and construction plans shall be required to ensure that sufficient noise reduction measures are included in the project design to achieve satisfaction with Sutter County noise standards.

Significance after mitigation: Less than significant.

CUMULATIVE SETTING, IMPACTS AND MITIGATION MEASURES

Setting

The future noise environment in the project vicinity following buildout of the SPSP Area and other major projects in the region will likely continue to be influenced most heavily by surface traffic noise. Aircraft, industry and rail noise will also continue to be a major influence on the ambient noise environment, but on a more localized basis. As the region develops, it is a certainty that traffic noise levels will increase. Aircraft and industrial noise levels will increase over time as well, as will railroad noise to the extent that the existing tracks can accommodate additional activity or new tracks are constructed. The noise contours shown for Sacramento International Airport on Figure 3 represent future conditions, and future traffic noise levels for the roadway network in the immediate vicinity of the Plan Area are provided below in **Tables 12 and 13** for scenarios both with and without the Placer Parkway. It is not possible to predict future railroad noise levels increases, or reasonably accurate forecasts of future industrial noise.

Table 12
Cumulative Traffic Noise Levels Without Placer Parkway
South Sutter County Project – Sutter County, California

Segment	Roadway	Segment Description		Ldn @100', dB (Change, dB)	
		From	To	With Phase 1	With Project
1	Sankey Road	Powerline Road	SR 99	47 (0)	47 (0)
2	Sankey Road	SR 99	Pacific Avenue	59 (3)	69 (13)
3	Sankey Road	Pacific Avenue	Road C	58 (3)	64 (9)
4	Sankey Road	Road C	Pleasant Grove Road (N)	56 (n/a)	63 (n/a)
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	56 (0)	62 (6)
6	Riego Road	Powerline Road	Road U	57 (3)	63 (9)
7	Riego Road	Road U	Road R	57 (n/a)	68 (n/a)
8	Riego Road	Road R	Road S	63 (n/a)	69 (n/a)
9	Riego Road	Road S	SR 99	71 (n/a)	73 (n/a)
10	Riego Road	SR 99	Road A	72 (5)	73 (6)
11	Riego Road	Road A	Pacific Avenue	71 (n/a)	72 (n/a)
12	Riego Road	Pacific Avenue	Road C	70 (3)	72 (5)
13	Riego Road	Road C	Road D	69 (n/a)	70 (n/a)
14	Riego Road	Road D	Pleasant Grove Road (N)	69 (n/a)	71 (n/a)
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	69 (1)	70 (2)
16	Riego Road	Pleasant Grove Road (S)	Locust Road	69 (1)	70 (2)
17	Base Line Road	Locust Road	Brewer Road	69 (1)	70 (2)
18	Base Line Road	Brewer Road	Watt Avenue	71 (0)	72 (1)
19	Base Line Road	Watt Avenue	Fiddymment Drive	70 (1)	70 (1)
20	Elverta Road	Powerline Road	SR 99	61 (1)	65 (5)
21	Elverta Road	SR 99	East Levee Road	67 (1)	68 (2)
22	Elverta Road	East Levee Road	Sorento Road	68 (0)	69 (1)

Table 12
Cumulative Traffic Noise Levels Without Placer Parkway
South Sutter County Project – Sutter County, California

Segment	Roadway	Segment Description		Ldn @100', dB (Change, dB)	
		From	To	With Phase 1	With Project
23	Elverta Road	Sorento Road	16th Street	69 (0)	70 (1)
24	Elverta Road	16th Street	Watt Avenue	70 (0)	70 (0)
25	Powerline Road	Sankey Road	Riego Road	50 (0)	50 (0)
26	Powerline Road	Riego Road	Sacramento County Line	54 (5)	63 (14)
27	Powerline Road	Sacramento County Line	Elverta Road	54 (5)	65 (16)
28	Powerline Road	Elverta Road	Elkhorn Boulevard	50 (0)	50 (0)
29	Road H	Road O	Sankey Road	n/a (n/a)	64 (n/a)
30	Pacific Avenue	Sankey Road	Road K	54 (0)	65 (11)
31	Pacific Avenue	Road K	Road J	54 (n/a)	66 (n/a)
32	Pacific Avenue	Road J	Riego Road	61 (n/a)	67 (n/a)
33	Pacific Avenue	Riego Road	Road B	53 (n/a)	58 (n/a)
34	Natomas Road	Sankey Road	Riego Road	50 (0)	50 (0)
35	Natomas Road	Riego Road	Sacramento County Line	58 (5)	62 (9)
36	East Levee Road	Sacramento County Line	Elverta Road	58 (5)	62 (9)
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	59 (-1)	60 (0)
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	59 (2)	63 (6)
39	Sorento Road	Sacramento County Line	Elverta Road	58 (0)	61 (3)
40	Locust Road	Sankey Road	Baseline Road	56 (0)	62 (6)
41	Brewer Road	Phillip Road	Baseline Road	58 (1)	59 (2)
42	Palladay Road	Baseline Road	Sacramento County Line	62 (0)	62 (0)
43	Palladay Road	Sacramento County Line	Elverta Road	65 (0)	65 (0)
44	16th Street	Kasser Road	Elverta Road	67 (0)	67 (0)
45	Watt Avenue	Baseline Road	PFE Road	71 (0)	71 (0)
46	Watt Avenue	PFE Road	Elverta Road	71 (0)	71 (0)
47	Walerga Road	Baseline Road	PFE Road	70 (0)	70 (0)
48	Elkhorn Boulevard	SR 99	Northborough Drive	69 (0)	70 (1)
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	67 (0)	68 (1)
50	Elkhorn Boulevard	Natomas Boulevard	Sageview Drive	69 (-1)	70 (0)
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	69 (-1)	70 (0)
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	75 (0)	75 (0)
53	SR 99	Sankey Road	Riego Road	75 (0)	77 (2)
54	SR 99	Riego Road	Sacramento County Line	78 (2)	80 (4)
55	SR 99	Sacramento County Line	Elverta Road	78 (2)	80 (4)
56	SR 99	Elverta Road	Elkhorn Boulevard	79 (2)	80 (3)
57	SR 99	Elkhorn Boulevard	I-5	79 (1)	79 (1)
58	I-5	SR 99	Del Paso Road	82 (0)	82 (0)
59	I-5	Del Paso Road	Arena Boulevard	82 (0)	83 (1)
60	I-5	Arena Boulevard	I-80	82 (0)	82 (0)
61	Road A	Road J	Riego Road	61 (n/a)	63 (n/a)
62	Road A	Riego Road	Road B	63 (n/a)	67 (n/a)
63	Road D	Road C	Riego Road	56 (n/a)	63 (n/a)

Table 12
Cumulative Traffic Noise Levels Without Placer Parkway
South Sutter County Project – Sutter County, California

Segment	Roadway	Segment Description		Ldn @100', dB (Change, dB)	
		From	To	With Phase 1	With Project
64	Road D	Riego Road	Road B	n/a (n/a)	61 (n/a)
65	Road C	Road O	Sankey Road	49 (n/a)	64 (n/a)
66	Road C	Sankey Road	Road K	n/a (n/a)	64 (n/a)
67	Road C	Road K	Road D	n/a (n/a)	65 (n/a)
68	Road C	Road D	Road J	58 (n/a)	63 (n/a)
69	Road C	Road J	Riego Road	60 (n/a)	63 (n/a)
70	Road C	Riego Road	Road B	55 (n/a)	60 (n/a)
71	Road K	Pacific Avenue	Road C	n/a (n/a)	62 (n/a)
72	Road Q	Road S	Road A	52 (n/a)	61 (n/a)

Source: FHWA-RD-77-108 with inputs from Fehr and Peers

Table 13
Cumulative Traffic Noise Levels With Placer Parkway
South Sutter County Project – Sutter County, California

Segment	Roadway	Segment Description		Ldn @100', dB (Change, dB)
		From	To	With Project
1	Sankey Road	Powerline Road	SR 99	47 (0)
2	Sankey Road	SR 99	Pacific Avenue	70 (14)
3	Sankey Road	Pacific Avenue	Road C	70 (15)
4	Sankey Road	Road C	Pleasant Grove Road (N)	71 (n/a)
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	56 (0)
6	Riego Road	Powerline Road	Road U	63 (9)
7	Riego Road	Road U	Road R	68 (n/a)
8	Riego Road	Road R	Road S	70 (n/a)
9	Riego Road	Road S	SR 99	73 (n/a)
10	Riego Road	SR 99	Road A	74 (7)
11	Riego Road	Road A	Pacific Avenue	72 (n/a)
12	Riego Road	Pacific Avenue	Road C	71 (4)
13	Riego Road	Road C	Road D	70 (n/a)
14	Riego Road	Road D	Pleasant Grove Road (N)	70 (n/a)
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	70 (2)
16	Riego Road	Pleasant Grove Road (S)	Locust Road	69 (1)
17	Base Line Road	Locust Road	Brewer Road	69 (1)
18	Base Line Road	Brewer Road	Watt Avenue	71 (0)
19	Base Line Road	Watt Avenue	Fiddymment Drive	70 (1)
20	Elverta Road	Powerline Road	SR 99	65 (5)
21	Elverta Road	SR 99	East Levee Road	67 (1)
22	Elverta Road	East Levee Road	Sorento Road	69 (1)
23	Elverta Road	Sorento Road	16th Street	69 (0)
24	Elverta Road	16th Street	Watt Avenue	70 (0)
25	Powerline Road	Sankey Road	Riego Road	51 (1)
26	Powerline Road	Riego Road	Sacramento County Line	63 (14)
27	Powerline Road	Sacramento County Line	Elverta Road	65 (16)
28	Powerline Road	Elverta Road	Elkhorn Boulevard	50 (0)
29	Road H	Road O	Sankey Road	62 (n/a)
30	Pacific Avenue	Sankey Road	Road K	67 (13)
31	Pacific Avenue	Road K	Road J	68 (n/a)
32	Pacific Avenue	Road J	Riego Road	69 (n/a)
33	Pacific Avenue	Riego Road	Road B	59 (n/a)
34	Natomas Road	Sankey Road	Riego Road	50 (0)
35	Natomas Road	Riego Road	Sacramento County Line	62 (9)
36	East Levee Road	Sacramento County Line	Elverta Road	62 (9)
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	59 (-1)
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	63 (6)
39	Sorento Road	Sacramento County Line	Elverta Road	61 (3)
40	Locust Road	Sankey Road	Baseline Road	57 (1)
41	Brewer Road	Phillip Road	Baseline Road	59 (2)

Table 13
Cumulative Traffic Noise Levels With Placer Parkway
South Sutter County Project – Sutter County, California

Segment	Roadway	Segment Description		Ldn @100', dB (Change, dB)
		From	To	With Project
42	Palladay Road	Baseline Road	Sacramento County Line	62 (0)
43	Palladay Road	Sacramento County Line	Elverta Road	65 (0)
44	16th Street	Kasser Road	Elverta Road	68 (1)
45	Watt Avenue	Baseline Road	PFE Road	71 (0)
46	Watt Avenue	PFE Road	Elverta Road	71 (0)
47	Walerga Road	Baseline Road	PFE Road	69 (-1)
48	Elkhorn Boulevard	SR 99	Northborough Drive	70 (1)
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	68 (1)
50	Elkhorn Boulevard	Natomas Boulevard	Sageview Drive	70 (0)
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	70 (0)
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	75 (0)
53	SR 99	Sankey Road	Riego Road	77 (2)
54	SR 99	Riego Road	Sacramento County Line	80 (4)
55	SR 99	Sacramento County Line	Elverta Road	80 (4)
56	SR 99	Elverta Road	Elkhorn Boulevard	80 (3)
57	SR 99	Elkhorn Boulevard	I-5	79 (1)
58	I-5	SR 99	Del Paso Road	82 (0)
59	I-5	Del Paso Road	Arena Boulevard	83 (1)
60	I-5	Arena Boulevard	I-80	82 (0)
61	Road A	Road J	Riego Road	64 (n/a)
62	Road A	Riego Road	Road B	67 (n/a)
63	Road D	Road C	Riego Road	64 (n/a)
64	Road D	Riego Road	Road B	61 (n/a)
65	Road C	Road O	Sankey Road	65 (n/a)
66	Road C	Sankey Road	Road K	66 (n/a)
67	Road C	Road K	Road D	65 (n/a)
68	Road C	Road D	Road J	63 (n/a)
69	Road C	Road J	Riego Road	63 (n/a)
70	Road C	Riego Road	Road B	61 (n/a)
71	Road K	Pacific Avenue	Road C	63 (n/a)
72	Road Q	Road S	Road A	61 (n/a)

Source: FHWA-RD-77-108 with inputs from Fehr and Peers

Impacts and Mitigation Measures

Impact 12 Contribution of Project Traffic Noise to Cumulative Traffic Noise Environment.

Development on the SPSP Area will result in changes in traffic on the area roadway network. Relative to future traffic noise levels without the project, the increases in traffic noise levels on project-area roadways are predicted to range from 0 to 16 dB Ldn, as shown in **Tables 12 and 13**.

Pursuant to Significance Criteria "C", as defined in Table 9, a substantial increase in traffic noise levels is defined as 1.5 to 5 dB, depending on the pre-project traffic noise level. Due to the relatively large change in overall trip generation associated with the project, traffic noise along several roadway segments is predicted to exceed the standards of significance. Therefore, the project-related contribution to future traffic noise levels is considered to be cumulatively considerable. ***As a result, this impact is considered to be significant.***

Mitigation Measures for Impact 12: ***None Available.***

Development of the project will cause traffic noise levels to significantly increase on the local roadway network over future levels without the project. The extent by which noise-sensitive land uses will be affected by these increases will depend on their proximity to the roadways in question as well as their individual sensitivity to noise.

The reason no noise mitigation measures are available for this impact is that such mitigation would require modification to either the source of traffic noise, the transmission path between the road and the receivers, or the receiver.

Modification to the noise source would require the quieting of individual vehicles, which is preempted from local control by the State Motor Vehicle Code. While noise-reducing pavement materials have been shown to reduce traffic noise levels in some areas, such materials may not provide sufficient noise reduction to reduce this impact to a level of insignificance.

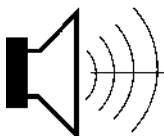
Treatment of the path of sound between the roadway and receiver would require the construction of noise barriers at impacted receptors along the impacted segments. Irrespective of the cost associated with such mitigation, barriers could not be constructed at all locations or would not be effective at all locations due to engineering and safety constraints, as well as topographic and vehicular access constraints.

Finally, treatment of the receptor would essentially consist of retrofitting the buildings of noise-sensitive receptors to provide additional attenuation of traffic noise by the amount which development of the project site would cause traffic noise to increase. The costs and other constraints associated with such retrofitting would render this option infeasible.

Significance of Impact 12 after Mitigation: Significant and unavoidable.

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.
Leq	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.
RT₆₀	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.



BOLLARD

Acoustical Consultants

Appendix B-1

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2005-522 South Sutter County EIR

Description: Existing Conditions

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
		From	To									
1	Sankey Road	Powerline Road	SR 99	200	83		17	2	1	50	100	
2	Sankey Road	SR 99	Pacific Avenue	1400	83		17	2	1	50	100	
3	Sankey Road	Pacific Avenue	Road C	1100	83		17	2	1	50	100	
4	Sankey Road	Road C	Pleasant Grove Road (N)	n/a	83		17	2	1	50	100	
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	1500	83		17	2	1	50	100	
6	Riego Road	Powerline Road	Road U	800	83		17	2	1	50	100	
7	Riego Road	Road U	Road R	n/a	83		17	2	1	50	100	
8	Riego Road	Road R	Road S	n/a	83		17	2	1	50	100	
9	Riego Road	Road S	SR 99	n/a	83		17	2	1	50	100	
10	Riego Road	SR 99	Road A	9600	83		17	2	1	50	100	
11	Riego Road	Road A	Pacific Avenue	n/a	83		17	2	1	50	100	
12	Riego Road	Pacific Avenue	Road C	8100	83		17	2	1	50	100	
13	Riego Road	Road C	Road D	n/a	83		17	2	1	50	100	
14	Riego Road	Road D	Pleasant Grove Road (N)	n/a	83		17	2	1	50	100	
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	10700	83		17	2	1	50	100	
16	Riego Road	Pleasant Grove Road (S)	Locust Road	10600	83		17	2	1	50	100	
17	Base Line Road	Locust Road	Brewer Road	12100	83		17	2	1	50	100	
18	Base Line Road	Brewer Road	Watt Avenue	11200	83		17	2	1	50	100	
19	Base Line Road	Watt Avenue	Fiddymment Drive	12600	83		17	2	1	50	100	
20	Elverta Road	Powerline Road	SR 99	1000	83		17	2	1	50	100	
21	Elverta Road	SR 99	East Levee Road	6100	83		17	2	1	50	100	
22	Elverta Road	East Levee Road	Sorento Road	7900	83		17	2	1	50	100	
23	Elverta Road	Sorento Road	16th Street	8700	83		17	2	1	50	100	
24	Elverta Road	16th Street	Watt Avenue	15400	83		17	2	1	50	100	
25	Powerline Road	Sankey Road	Riego Road	400	83		17	2	1	50	100	

Appendix B-2

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2005-522 South Sutter County EIR

Description: Existing Conditions

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		ADT	Day %	Eve %	Night %	% Med.	% Hvy.	Speed	Distance	Offset (dB)
		From	To					Trucks	Trucks			
26	Powerline Road	Riego Road	Sacramento County Line	300	83		17	2	1	50	100	
27	Powerline Road	Sacramento County Line	Elverta Road	300	83		17	2	1	50	100	
28	Powerline Road	Elverta Road	Elkhorn Boulevard	400	83		17	2	1	50	100	
29	Road H	Road O	Sankey Road	n/a	83		17	2	1	35	100	
30	Pacific Avenue	Sankey Road	Road K	900	83		17	2	1	50	100	
31	Pacific Avenue	Road K	Road J	n/a	83		17	2	1	50	100	
32	Pacific Avenue	Road J	Riego Road	n/a	83		17	2	1	50	100	
33	Pacific Avenue	Riego Road	Road B	n/a	83		17	2	1	50	100	
34	Natomas Road	Sankey Road	Riego Road	400	83		17	2	1	50	100	
35	Natomas Road	Riego Road	Sacramento County Line	700	83		17	2	1	50	100	
36	East Levee Road	Sacramento County Line	Elverta Road	700	83		17	2	1	50	100	
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	1700	83		17	2	1	50	100	
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	1800	83		17	2	1	50	100	
39	Sorento Road	Sacramento County Line	Elverta Road	1800	83		17	2	1	50	100	
40	Locust Road	Sankey Road	Baseline Road	1500	83		17	2	1	50	100	
41	Brewer Road	Phillip Road	Baseline Road	600	83		17	2	1	50	100	
42	Palladay Road	Baseline Road	Sacramento County Line	200	83		17	2	1	50	100	
43	Palladay Road	Sacramento County Line	Elverta Road	200	83		17	2	1	50	100	
44	16th Street	Kasser Road	Elverta Road	600	83		17	2	1	50	100	
45	Watt Avenue	Baseline Road	PFE Road	7100	83		17	2	1	50	100	
46	Watt Avenue	PFE Road	Elverta Road	10100	83		17	2	1	50	100	
47	Walerga Road	Baseline Road	PFE Road	14900	83		17	2	1	50	100	
48	Elkhorn Boulevard	SR 99	Northborough Drive	13900	83		17	2	1	50	100	
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	11800	83		17	2	1	50	100	
50	Elkhorn Boulevard	Natomas Boulevard	Sageview Drive	14500	83		17	2	1	50	100	

Appendix B-3

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2005-522 South Sutter County EIR

Description: Existing Conditions

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
		From	To									
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	14700	83		17	2	1	50	100	
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	29600	83		17	2	6	65	100	
53	SR 99	Sankey Road	Riego Road	29600	83		17	2	6	65	100	
54	SR 99	Riego Road	Sacramento County Line	37100	83		17	2	6	65	100	
55	SR 99	Sacramento County Line	Elverta Road	37100	83		17	2	6	65	100	
56	SR 99	Elverta Road	Elkhorn Boulevard	43500	83		17	2	6	65	100	
57	SR 99	Elkhorn Boulevard	I-5	52000	83		17	2	6	65	100	
58	I-5	SR 99	Del Paso Road	103000	83		17	4	9	65	100	
59	I-5	Del Paso Road	Arena Boulevard	127000	83		17	4	9	65	100	
60	I-5	Arena Boulevard	I-80	139000	83		17	3	6	65	100	
61	Road A	Road J	Riego Road	n/a	83		17	2	1	35	100	
62	Road A	Riego Road	Road B	n/a	83		17	2	1	35	100	
63	Road D	Road C	Riego Road	n/a	83		17	2	1	35	100	
64	Road D	Riego Road	Road B	n/a	83		17	2	1	35	100	
65	Road C	Road O	Sankey Road	n/a	83		17	2	1	35	100	
66	Road C	Sankey Road	Road K	n/a	83		17	2	1	35	100	
67	Road C	Road K	Road D	n/a	83		17	2	1	35	100	
68	Road C	Road D	Road J	n/a	83		17	2	1	35	100	
69	Road C	Road J	Riego Road	n/a	83		17	2	1	35	100	
70	Road C	Riego Road	Road B	n/a	83		17	2	1	35	100	
71	Road K	Pacific Avenue	Road C	n/a	83		17	2	1	35	100	
72	Road Q	Road S	Road A	n/a	83		17	2	1	35	100	

Appendix B-4

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2005-522 South Sutter County EIR

Description: Existing With Phase 1

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
		From	To									
1	Sankey Road	Powerline Road	SR 99	200	83		17	2	1	50	100	
2	Sankey Road	SR 99	Pacific Avenue	1800	83		17	2	1	50	100	
3	Sankey Road	Pacific Avenue	Road C	1600	83		17	2	1	50	100	
4	Sankey Road	Road C	Pleasant Grove Road (N)	1600	83		17	2	1	50	100	
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	1500	83		17	2	1	50	100	
6	Riego Road	Powerline Road	Road U	1500	83		17	2	1	50	100	
7	Riego Road	Road U	Road R	1500	83		17	2	1	50	100	
8	Riego Road	Road R	Road S	6500	83		17	2	1	50	100	
9	Riego Road	Road S	SR 99	45100	83		17	2	1	50	100	
10	Riego Road	SR 99	Road A	47600	83		17	2	1	50	100	
11	Riego Road	Road A	Pacific Avenue	34800	83		17	2	1	50	100	
12	Riego Road	Pacific Avenue	Road C	31000	83		17	2	1	50	100	
13	Riego Road	Road C	Road D	17800	83		17	2	1	50	100	
14	Riego Road	Road D	Pleasant Grove Road (N)	18900	83		17	2	1	50	100	
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	19900	83		17	2	1	50	100	
16	Riego Road	Pleasant Grove Road (S)	Locust Road	17700	83		17	2	1	50	100	
17	Base Line Road	Locust Road	Brewer Road	19200	83		17	2	1	50	100	
18	Base Line Road	Brewer Road	Watt Avenue	18200	83		17	2	1	50	100	
19	Base Line Road	Watt Avenue	Fiddymment Drive	15900	83		17	2	1	50	100	
20	Elverta Road	Powerline Road	SR 99	1000	83		17	2	1	50	100	
21	Elverta Road	SR 99	East Levee Road	8300	83		17	2	1	50	100	
22	Elverta Road	East Levee Road	Sorento Road	10800	83		17	2	1	50	100	
23	Elverta Road	Sorento Road	16th Street	10900	83		17	2	1	50	100	
24	Elverta Road	16th Street	Watt Avenue	15500	83		17	2	1	50	100	
25	Powerline Road	Sankey Road	Riego Road	400	83		17	2	1	50	100	

Appendix B-5

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2005-522 South Sutter County EIR

Description: Existing With Phase 1

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
		From	To									
26	Powerline Road	Riego Road	Sacramento County Line	1000	83		17	2	1	50	100	
27	Powerline Road	Sacramento County Line	Elverta Road	1000	83		17	2	1	50	100	
28	Powerline Road	Elverta Road	Elkhorn Boulevard	500	83		17	2	1	50	100	
29	Road H	Road O	Sankey Road	n/a	83		17	2	1	35	100	
30	Pacific Avenue	Sankey Road	Road K	900	83		17	2	1	50	100	
31	Pacific Avenue	Road K	Road J	900	83		17	2	1	50	100	
32	Pacific Avenue	Road J	Riego Road	4100	83		17	2	1	50	100	
33	Pacific Avenue	Riego Road	Road B	700	83		17	2	1	50	100	
34	Natomas Road	Sankey Road	Riego Road	400	83		17	2	1	50	100	
35	Natomas Road	Riego Road	Sacramento County Line	1700	83		17	2	1	50	100	
36	East Levee Road	Sacramento County Line	Elverta Road	1700	83		17	2	1	50	100	
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	1700	83		17	2	1	50	100	
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	3700	83		17	2	1	50	100	
39	Sorento Road	Sacramento County Line	Elverta Road	2200	83		17	2	1	50	100	
40	Locust Road	Sankey Road	Baseline Road	1500	83		17	2	1	50	100	
41	Brewer Road	Phillip Road	Baseline Road	600	83		17	2	1	50	100	
42	Palladay Road	Baseline Road	Sacramento County Line	200	83		17	2	1	50	100	
43	Palladay Road	Sacramento County Line	Elverta Road	200	83		17	2	1	50	100	
44	16th Street	Kasser Road	Elverta Road	1200	83		17	2	1	50	100	
45	Watt Avenue	Baseline Road	PFE Road	10600	83		17	2	1	50	100	
46	Watt Avenue	PFE Road	Elverta Road	12100	83		17	2	1	50	100	
47	Walerga Road	Baseline Road	PFE Road	14900	83		17	2	1	50	100	
48	Elkhorn Boulevard	SR 99	Northborough Drive	15400	83		17	2	1	50	100	
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	12000	83		17	2	1	50	100	
50	Elkhorn Boulevard	Natomas Boulevard	Sageview Drive	14500	83		17	2	1	50	100	

Appendix B-6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2005-522 South Sutter County EIR

Description: Existing With Phase 1

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
		From	To									
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	14700	83		17	2	1	50	100	
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	29600	83		17	2	6	65	100	
53	SR 99	Sankey Road	Riego Road	29600	83		17	2	6	65	100	
54	SR 99	Riego Road	Sacramento County Line	65000	83		17	2	6	65	100	
55	SR 99	Sacramento County Line	Elverta Road	65000	83		17	2	6	65	100	
56	SR 99	Elverta Road	Elkhorn Boulevard	67200	83		17	2	6	65	100	
57	SR 99	Elkhorn Boulevard	I-5	70700	83		17	2	6	65	100	
58	I-5	SR 99	Del Paso Road	117600	83		17	4	9	65	100	
59	I-5	Del Paso Road	Arena Boulevard	138200	83		17	4	9	65	100	
60	I-5	Arena Boulevard	I-80	149000	83		17	3	6	65	100	
61	Road A	Road J	Riego Road	12000	83		17	2	1	35	100	
62	Road A	Riego Road	Road B	15500	83		17	2	1	35	100	
63	Road D	Road C	Riego Road	2700	83		17	2	1	35	100	
64	Road D	Riego Road	Road B	n/a	83		17	2	1	35	100	
65	Road C	Road O	Sankey Road	600	83		17	2	1	35	100	
66	Road C	Sankey Road	Road K	n/a	83		17	2	1	35	100	
67	Road C	Road K	Road D	n/a	83		17	2	1	35	100	
68	Road C	Road D	Road J	5300	83		17	2	1	35	100	
69	Road C	Road J	Riego Road	9400	83		17	2	1	35	100	
70	Road C	Riego Road	Road B	2500	83		17	2	1	35	100	
71	Road K	Pacific Avenue	Road C	n/a	83		17	2	1	35	100	
72	Road Q	Road S	Road A	900	83		17	2	1	35	100	

Appendix B-7

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2005-522 South Sutter County EIR

Description: Existing With Project

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
		From	To									
1	Sankey Road	Powerline Road	SR 99	200	83		17	2	1	50	100	
2	Sankey Road	SR 99	Pacific Avenue	25900	83		17	2	1	50	100	
3	Sankey Road	Pacific Avenue	Road C	7300	83		17	2	1	50	100	
4	Sankey Road	Road C	Pleasant Grove Road (N)	6200	83		17	2	1	50	100	
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	3400	83		17	2	1	50	100	
6	Riego Road	Powerline Road	Road U	10600	83		17	2	1	50	100	
7	Riego Road	Road U	Road R	23900	83		17	2	1	50	100	
8	Riego Road	Road R	Road S	30500	83		17	2	1	50	100	
9	Riego Road	Road S	SR 99	73400	83		17	2	1	50	100	
10	Riego Road	SR 99	Road A	69500	83		17	2	1	50	100	
11	Riego Road	Road A	Pacific Avenue	58900	83		17	2	1	50	100	
12	Riego Road	Pacific Avenue	Road C	52200	83		17	2	1	50	100	
13	Riego Road	Road C	Road D	35900	83		17	2	1	50	100	
14	Riego Road	Road D	Pleasant Grove Road (N)	35700	83		17	2	1	50	100	
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	32000	83		17	2	1	50	100	
16	Riego Road	Pleasant Grove Road (S)	Locust Road	26000	83		17	2	1	50	100	
17	Base Line Road	Locust Road	Brewer Road	28100	83		17	2	1	50	100	
18	Base Line Road	Brewer Road	Watt Avenue	27100	83		17	2	1	50	100	
19	Base Line Road	Watt Avenue	Fiddymment Drive	20700	83		17	2	1	50	100	
20	Elverta Road	Powerline Road	SR 99	11600	83		17	2	1	50	100	
21	Elverta Road	SR 99	East Levee Road	10300	83		17	2	1	50	100	
22	Elverta Road	East Levee Road	Sorento Road	13600	83		17	2	1	50	100	
23	Elverta Road	Sorento Road	16th Street	14800	83		17	2	1	50	100	
24	Elverta Road	16th Street	Watt Avenue	17500	83		17	2	1	50	100	
25	Powerline Road	Sankey Road	Riego Road	400	83		17	2	1	50	100	

Appendix B-8

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2005-522 South Sutter County EIR

Description: Existing With Project

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
		From	To									
26	Powerline Road	Riego Road	Sacramento County Line	9400	83		17	2	1	50	100	
27	Powerline Road	Sacramento County Line	Elverta Road	12800	83		17	2	1	50	100	
28	Powerline Road	Elverta Road	Elkhorn Boulevard	2200	83		17	2	1	50	100	
29	Road H	Road O	Sankey Road	20100	83		17	2	1	35	100	
30	Pacific Avenue	Sankey Road	Road K	11100	83		17	2	1	50	100	
31	Pacific Avenue	Road K	Road J	14100	83		17	2	1	50	100	
32	Pacific Avenue	Road J	Riego Road	19100	83		17	2	1	50	100	
33	Pacific Avenue	Riego Road	Road B	1300	83		17	2	1	50	100	
34	Natomas Road	Sankey Road	Riego Road	400	83		17	2	1	50	100	
35	Natomas Road	Riego Road	Sacramento County Line	7100	83		17	2	1	50	100	
36	East Levee Road	Sacramento County Line	Elverta Road	7100	83		17	2	1	50	100	
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	2100	83		17	2	1	50	100	
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	7400	83		17	2	1	50	100	
39	Sorento Road	Sacramento County Line	Elverta Road	4300	83		17	2	1	50	100	
40	Locust Road	Sankey Road	Baseline Road	3400	83		17	2	1	50	100	
41	Brewer Road	Phillip Road	Baseline Road	700	83		17	2	1	50	100	
42	Palladay Road	Baseline Road	Sacramento County Line	400	83		17	2	1	50	100	
43	Palladay Road	Sacramento County Line	Elverta Road	400	83		17	2	1	50	100	
44	16th Street	Kasser Road	Elverta Road	1000	83		17	2	1	50	100	
45	Watt Avenue	Baseline Road	PFE Road	11900	83		17	2	1	50	100	
46	Watt Avenue	PFE Road	Elverta Road	13900	83		17	2	1	50	100	
47	Walerga Road	Baseline Road	PFE Road	14900	83		17	2	1	50	100	
48	Elkhorn Boulevard	SR 99	Northborough Drive	16800	83		17	2	1	50	100	
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	12900	83		17	2	1	50	100	
50	Elkhorn Boulevard	Natomas Boulevard	Sageview Drive	15000	83		17	2	1	50	100	

Appendix B-9

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2005-522 South Sutter County EIR

Description: Existing With Project

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
		From	To									
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	15200	83		17	2	1	50	100	
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	30100	83		17	2	6	65	100	
53	SR 99	Sankey Road	Riego Road	44000	83		17	2	6	65	100	
54	SR 99	Riego Road	Sacramento County Line	81100	83		17	2	6	65	100	
55	SR 99	Sacramento County Line	Elverta Road	81100	83		17	2	6	65	100	
56	SR 99	Elverta Road	Elkhorn Boulevard	91500	83		17	2	6	65	100	
57	SR 99	Elkhorn Boulevard	I-5	93900	83		17	2	6	65	100	
58	I-5	SR 99	Del Paso Road	139100	83		17	4	9	65	100	
59	I-5	Del Paso Road	Arena Boulevard	155900	83		17	4	9	65	100	
60	I-5	Arena Boulevard	I-80	165300	83		17	3	6	65	100	
61	Road A	Road J	Riego Road	18800	83		17	2	1	35	100	
62	Road A	Riego Road	Road B	42000	83		17	2	1	35	100	
63	Road D	Road C	Riego Road	19400	83		17	2	1	35	100	
64	Road D	Riego Road	Road B	11800	83		17	2	1	35	100	
65	Road C	Road O	Sankey Road	20200	83		17	2	1	35	100	
66	Road C	Sankey Road	Road K	21000	83		17	2	1	35	100	
67	Road C	Road K	Road D	25200	83		17	2	1	35	100	
68	Road C	Road D	Road J	16600	83		17	2	1	35	100	
69	Road C	Road J	Riego Road	17900	83		17	2	1	35	100	
70	Road C	Riego Road	Road B	9700	83		17	2	1	35	100	
71	Road K	Pacific Avenue	Road C	13400	83		17	2	1	35	100	
72	Road Q	Road S	Road A	9000	83		17	2	1	35	100	

Appendix B-10

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - No Project (Without Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
		From	To									
1	Sankey Road	Powerline Road	SR 99	200	83		17	2	1	50	100	
2	Sankey Road	SR 99	Pacific Avenue	1400	83		17	2	1	50	100	
3	Sankey Road	Pacific Avenue	Road C	1300	83		17	2	1	50	100	
4	Sankey Road	Road C	Pleasant Grove Road (N)	n/a	83		17	2	1	50	100	
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	1500	83		17	2	1	50	100	
6	Riego Road	Powerline Road	Road U	900	83		17	2	1	50	100	
7	Riego Road	Road U	Road R	n/a	83		17	2	1	50	100	
8	Riego Road	Road R	Road S	n/a	83		17	2	1	50	100	
9	Riego Road	Road S	SR 99	n/a	83		17	2	1	50	100	
10	Riego Road	SR 99	Road A	20000	83		17	2	1	50	100	
11	Riego Road	Road A	Pacific Avenue	n/a	83		17	2	1	50	100	
12	Riego Road	Pacific Avenue	Road C	19300	83		17	2	1	50	100	
13	Riego Road	Road C	Road D	n/a	83		17	2	1	50	100	
14	Riego Road	Road D	Pleasant Grove Road (N)	n/a	83		17	2	1	50	100	
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	23100	83		17	2	1	50	100	
16	Riego Road	Pleasant Grove Road (S)	Locust Road	22200	83		17	2	1	50	100	
17	Base Line Road	Locust Road	Brewer Road	23700	83		17	2	1	50	100	
18	Base Line Road	Brewer Road	Watt Avenue	44200	83		17	2	1	50	100	
19	Base Line Road	Watt Avenue	Fiddymment Drive	33300	83		17	2	1	50	100	
20	Elverta Road	Powerline Road	SR 99	3900	83		17	2	1	50	100	
21	Elverta Road	SR 99	East Levee Road	16900	83		17	2	1	50	100	
22	Elverta Road	East Levee Road	Sorento Road	23200	83		17	2	1	50	100	
23	Elverta Road	Sorento Road	16th Street	27700	83		17	2	1	50	100	
24	Elverta Road	16th Street	Watt Avenue	37200	83		17	2	1	50	100	
25	Powerline Road	Sankey Road	Riego Road	400	83		17	2	1	50	100	

Appendix B-11

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - No Project (Without Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		ADT	Day %	Eve %	Night %	% Med.	% Hvy.	Speed	Distance	Offset (dB)
		From	To					Trucks	Trucks			
26	Powerline Road	Riego Road	Sacramento County Line	300	83		17	2	1	50	100	
27	Powerline Road	Sacramento County Line	Elverta Road	300	83		17	2	1	50	100	
28	Powerline Road	Elverta Road	Elkhorn Boulevard	400	83		17	2	1	50	100	
29	Road H	Road O	Sankey Road	n/a	83		17	2	1	35	100	
30	Pacific Avenue	Sankey Road	Road K	900	83		17	2	1	50	100	
31	Pacific Avenue	Road K	Road J	n/a	83		17	2	1	50	100	
32	Pacific Avenue	Road J	Riego Road	n/a	83		17	2	1	50	100	
33	Pacific Avenue	Riego Road	Road B	n/a	83		17	2	1	50	100	
34	Natomas Road	Sankey Road	Riego Road	400	83		17	2	1	50	100	
35	Natomas Road	Riego Road	Sacramento County Line	700	83		17	2	1	50	100	
36	East Levee Road	Sacramento County Line	Elverta Road	700	83		17	2	1	50	100	
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	3600	83		17	2	1	50	100	
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	2000	83		17	2	1	50	100	
39	Sorento Road	Sacramento County Line	Elverta Road	2600	83		17	2	1	50	100	
40	Locust Road	Sankey Road	Baseline Road	1500	83		17	2	1	50	100	
41	Brewer Road	Phillip Road	Baseline Road	1800	83		17	2	1	50	100	
42	Palladay Road	Baseline Road	Sacramento County Line	5800	83		17	2	1	50	100	
43	Palladay Road	Sacramento County Line	Elverta Road	12100	83		17	2	1	50	100	
44	16th Street	Kasser Road	Elverta Road	17900	83		17	2	1	50	100	
45	Watt Avenue	Baseline Road	PFE Road	50400	83		17	2	1	50	100	
46	Watt Avenue	PFE Road	Elverta Road	51000	83		17	2	1	50	100	
47	Walerga Road	Baseline Road	PFE Road	34100	83		17	2	1	50	100	
48	Elkhorn Boulevard	SR 99	Northborough Drive	29300	83		17	2	1	50	100	
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	20900	83		17	2	1	50	100	
50	Elkhorn Boulevard	Natomas Boulevard	Sageview Drive	34100	83		17	2	1	50	100	

Appendix B-12

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2005-522 South Sutter County EIR

Description: Year 2035 - No Project (Without Placer Parkway)

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
		From	To									
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	35300	83		17	2	1	50	100	
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	45000	83		17	2	6	65	100	
53	SR 99	Sankey Road	Riego Road	45400	83		17	2	6	65	100	
54	SR 99	Riego Road	Sacramento County Line	62400	83		17	2	6	65	100	
55	SR 99	Sacramento County Line	Elverta Road	62400	83		17	2	6	65	100	
56	SR 99	Elverta Road	Elkhorn Boulevard	72900	83		17	2	6	65	100	
57	SR 99	Elkhorn Boulevard	I-5	81400	83		17	2	6	65	100	
58	I-5	SR 99	Del Paso Road	171500	83		17	4	9	65	100	
59	I-5	Del Paso Road	Arena Boulevard	199100	83		17	4	9	65	100	
60	I-5	Arena Boulevard	I-80	218800	83		17	3	6	65	100	
61	Road A	Road J	Riego Road	n/a	83		17	2	1	35	100	
62	Road A	Riego Road	Road B	n/a	83		17	2	1	35	100	
63	Road D	Road C	Riego Road	n/a	83		17	2	1	35	100	
64	Road D	Riego Road	Road B	n/a	83		17	2	1	35	100	
65	Road C	Road O	Sankey Road	n/a	83		17	2	1	35	100	
66	Road C	Sankey Road	Road K	n/a	83		17	2	1	35	100	
67	Road C	Road K	Road D	n/a	83		17	2	1	35	100	
68	Road C	Road D	Road J	n/a	83		17	2	1	35	100	
69	Road C	Road J	Riego Road	n/a	83		17	2	1	35	100	
70	Road C	Riego Road	Road B	n/a	83		17	2	1	35	100	
71	Road K	Pacific Avenue	Road C	n/a	83		17	2	1	35	100	
72	Road Q	Road S	Road A	n/a	83		17	2	1	35	100	

Appendix B-13

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - With Phase 1 (Without Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		ADT	Day %	Eve %	Night %	% Med.	% Hvy.	Speed	Distance	Offset (dB)
		From	To					Trucks	Trucks			
1	Sankey Road	Powerline Road	SR 99	200	83		17	2	1	50	100	
2	Sankey Road	SR 99	Pacific Avenue	2900	83		17	2	1	50	100	
3	Sankey Road	Pacific Avenue	Road C	2500	83		17	2	1	50	100	
4	Sankey Road	Road C	Pleasant Grove Road (N)	1700	83		17	2	1	50	100	
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	1600	83		17	2	1	50	100	
6	Riego Road	Powerline Road	Road U	1900	83		17	2	1	50	100	
7	Riego Road	Road U	Road R	1900	83		17	2	1	50	100	
8	Riego Road	Road R	Road S	8300	83		17	2	1	50	100	
9	Riego Road	Road S	SR 99	49900	83		17	2	1	50	100	
10	Riego Road	SR 99	Road A	58900	83		17	2	1	50	100	
11	Riego Road	Road A	Pacific Avenue	43500	83		17	2	1	50	100	
12	Riego Road	Pacific Avenue	Road C	40000	83		17	2	1	50	100	
13	Riego Road	Road C	Road D	27700	83		17	2	1	50	100	
14	Riego Road	Road D	Pleasant Grove Road (N)	30600	83		17	2	1	50	100	
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	31100	83		17	2	1	50	100	
16	Riego Road	Pleasant Grove Road (S)	Locust Road	28800	83		17	2	1	50	100	
17	Base Line Road	Locust Road	Brewer Road	29100	83		17	2	1	50	100	
18	Base Line Road	Brewer Road	Watt Avenue	47700	83		17	2	1	50	100	
19	Base Line Road	Watt Avenue	Fiddymment Drive	34900	83		17	2	1	50	100	
20	Elverta Road	Powerline Road	SR 99	4600	83		17	2	1	50	100	
21	Elverta Road	SR 99	East Levee Road	20700	83		17	2	1	50	100	
22	Elverta Road	East Levee Road	Sorento Road	26100	83		17	2	1	50	100	
23	Elverta Road	Sorento Road	16th Street	30700	83		17	2	1	50	100	
24	Elverta Road	16th Street	Watt Avenue	38500	83		17	2	1	50	100	
25	Powerline Road	Sankey Road	Riego Road	400	83		17	2	1	50	100	

Appendix B-14

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - With Phase 1 (Without Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		ADT	Day %	Eve %	Night %	% Med.	% Hvy.	Speed	Distance	Offset (dB)
		From	To					Trucks	Trucks			
26	Powerline Road	Riego Road	Sacramento County Line	1000	83		17	2	1	50	100	
27	Powerline Road	Sacramento County Line	Elverta Road	900	83		17	2	1	50	100	
28	Powerline Road	Elverta Road	Elkhorn Boulevard	400	83		17	2	1	50	100	
29	Road H	Road O	Sankey Road	n/a	83		17	2	1	35	100	
30	Pacific Avenue	Sankey Road	Road K	900	83		17	2	1	50	100	
31	Pacific Avenue	Road K	Road J	900	83		17	2	1	50	100	
32	Pacific Avenue	Road J	Riego Road	4400	83		17	2	1	50	100	
33	Pacific Avenue	Riego Road	Road B	700	83		17	2	1	50	100	
34	Natomas Road	Sankey Road	Riego Road	400	83		17	2	1	50	100	
35	Natomas Road	Riego Road	Sacramento County Line	2300	83		17	2	1	50	100	
36	East Levee Road	Sacramento County Line	Elverta Road	2300	83		17	2	1	50	100	
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	3400	83		17	2	1	50	100	
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	3300	83		17	2	1	50	100	
39	Sorento Road	Sacramento County Line	Elverta Road	2700	83		17	2	1	50	100	
40	Locust Road	Sankey Road	Baseline Road	1700	83		17	2	1	50	100	
41	Brewer Road	Phillip Road	Baseline Road	2300	83		17	2	1	50	100	
42	Palladay Road	Baseline Road	Sacramento County Line	6300	83		17	2	1	50	100	
43	Palladay Road	Sacramento County Line	Elverta Road	12600	83		17	2	1	50	100	
44	16th Street	Kasser Road	Elverta Road	18400	83		17	2	1	50	100	
45	Watt Avenue	Baseline Road	PFE Road	51000	83		17	2	1	50	100	
46	Watt Avenue	PFE Road	Elverta Road	51200	83		17	2	1	50	100	
47	Walerga Road	Baseline Road	PFE Road	34400	83		17	2	1	50	100	
48	Elkhorn Boulevard	SR 99	Northborough Drive	30100	83		17	2	1	50	100	
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	19900	83		17	2	1	50	100	
50	Elkhorn Boulevard	Natomas Boulevard	Sageview Drive	32200	83		17	2	1	50	100	

Appendix B-15

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - With Phase 1 (Without Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
		From	To									
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	32600	83		17	2	1	50	100	
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	45100	83		17	2	6	65	100	
53	SR 99	Sankey Road	Riego Road	46000	83		17	2	6	65	100	
54	SR 99	Riego Road	Sacramento County Line	99400	83		17	2	6	65	100	
55	SR 99	Sacramento County Line	Elverta Road	99400	83		17	2	6	65	100	
56	SR 99	Elverta Road	Elkhorn Boulevard	104200	83		17	2	6	65	100	
57	SR 99	Elkhorn Boulevard	I-5	102000	83		17	2	6	65	100	
58	I-5	SR 99	Del Paso Road	184900	83		17	4	9	65	100	
59	I-5	Del Paso Road	Arena Boulevard	207500	83		17	4	9	65	100	
60	I-5	Arena Boulevard	I-80	225400	83		17	3	6	65	100	
61	Road A	Road J	Riego Road	12700	83		17	2	1	35	100	
62	Road A	Riego Road	Road B	17100	83		17	2	1	35	100	
63	Road D	Road C	Riego Road	3600	83		17	2	1	35	100	
64	Road D	Riego Road	Road B	n/a	83		17	2	1	35	100	
65	Road C	Road O	Sankey Road	800	83		17	2	1	35	100	
66	Road C	Sankey Road	Road K	n/a	83		17	2	1	35	100	
67	Road C	Road K	Road D	n/a	83		17	2	1	35	100	
68	Road C	Road D	Road J	5300	83		17	2	1	35	100	
69	Road C	Road J	Riego Road	9400	83		17	2	1	35	100	
70	Road C	Riego Road	Road B	2800	83		17	2	1	35	100	
71	Road K	Pacific Avenue	Road C	n/a	83		17	2	1	35	100	
72	Road Q	Road S	Road A	1300	83		17	2	1	35	100	

Appendix B-16

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - With Project (Without Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
		From	To									
1	Sankey Road	Powerline Road	SR 99	200	83		17	2	1	50	100	
2	Sankey Road	SR 99	Pacific Avenue	32600	83		17	2	1	50	100	
3	Sankey Road	Pacific Avenue	Road C	9500	83		17	2	1	50	100	
4	Sankey Road	Road C	Pleasant Grove Road (N)	7900	83		17	2	1	50	100	
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	5700	83		17	2	1	50	100	
6	Riego Road	Powerline Road	Road U	8000	83		17	2	1	50	100	
7	Riego Road	Road U	Road R	23000	83		17	2	1	50	100	
8	Riego Road	Road R	Road S	33800	83		17	2	1	50	100	
9	Riego Road	Road S	SR 99	82200	83		17	2	1	50	100	
10	Riego Road	SR 99	Road A	83600	83		17	2	1	50	100	
11	Riego Road	Road A	Pacific Avenue	65200	83		17	2	1	50	100	
12	Riego Road	Pacific Avenue	Road C	57800	83		17	2	1	50	100	
13	Riego Road	Road C	Road D	41100	83		17	2	1	50	100	
14	Riego Road	Road D	Pleasant Grove Road (N)	44000	83		17	2	1	50	100	
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	40700	83		17	2	1	50	100	
16	Riego Road	Pleasant Grove Road (S)	Locust Road	34900	83		17	2	1	50	100	
17	Base Line Road	Locust Road	Brewer Road	38800	83		17	2	1	50	100	
18	Base Line Road	Brewer Road	Watt Avenue	54300	83		17	2	1	50	100	
19	Base Line Road	Watt Avenue	Fiddymment Drive	37800	83		17	2	1	50	100	
20	Elverta Road	Powerline Road	SR 99	11700	83		17	2	1	50	100	
21	Elverta Road	SR 99	East Levee Road	23200	83		17	2	1	50	100	
22	Elverta Road	East Levee Road	Sorento Road	31300	83		17	2	1	50	100	
23	Elverta Road	Sorento Road	16th Street	36200	83		17	2	1	50	100	
24	Elverta Road	16th Street	Watt Avenue	41900	83		17	2	1	50	100	
25	Powerline Road	Sankey Road	Riego Road	400	83		17	2	1	50	100	

Appendix B-17

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - With Project (Without Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
		From	To									
26	Powerline Road	Riego Road	Sacramento County Line	7,200	83		17	2	1	50	100	
27	Powerline Road	Sacramento County Line	Elverta Road	11,200	83		17	2	1	50	100	
28	Powerline Road	Elverta Road	Elkhorn Boulevard	400	83		17	2	1	50	100	
29	Road H	Road O	Sankey Road	21,700	83		17	2	1	35	100	
30	Pacific Avenue	Sankey Road	Road K	12,800	83		17	2	1	50	100	
31	Pacific Avenue	Road K	Road J	14,300	83		17	2	1	50	100	
32	Pacific Avenue	Road J	Riego Road	19,000	83		17	2	1	50	100	
33	Pacific Avenue	Riego Road	Road B	2,400	83		17	2	1	50	100	
34	Natomas Road	Sankey Road	Riego Road	400	83		17	2	1	50	100	
35	Natomas Road	Riego Road	Sacramento County Line	6,400	83		17	2	1	50	100	
36	East Levee Road	Sacramento County Line	Elverta Road	6,400	83		17	2	1	50	100	
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	4,100	83		17	2	1	50	100	
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	6,800	83		17	2	1	50	100	
39	Sorento Road	Sacramento County Line	Elverta Road	4,400	83		17	2	1	50	100	
40	Locust Road	Sankey Road	Baseline Road	5,800	83		17	2	1	50	100	
41	Brewer Road	Phillip Road	Baseline Road	3,000	83		17	2	1	50	100	
42	Palladay Road	Baseline Road	Sacramento County Line	6,700	83		17	2	1	50	100	
43	Palladay Road	Sacramento County Line	Elverta Road	12,800	83		17	2	1	50	100	
44	16th Street	Kasser Road	Elverta Road	19,000	83		17	2	1	50	100	
45	Watt Avenue	Baseline Road	PFE Road	52,600	83		17	2	1	50	100	
46	Watt Avenue	PFE Road	Elverta Road	52,100	83		17	2	1	50	100	
47	Walerga Road	Baseline Road	PFE Road	34,500	83		17	2	1	50	100	
48	Elkhorn Boulevard	SR 99	Northborough Drive	36,800	83		17	2	1	50	100	
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	25,200	83		17	2	1	50	100	
50	Elkhorn Boulevard	Natomas Boulevard	Sageview Drive	37,400	83		17	2	1	50	100	

Appendix B-18

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - With Project (Without Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
		From	To									
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	36600	83		17	2	1	50	100	
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	50700	83		17	2	6	65	100	
53	SR 99	Sankey Road	Riego Road	65600	83		17	2	6	65	100	
54	SR 99	Riego Road	Sacramento County Line	128200	83		17	2	6	65	100	
55	SR 99	Sacramento County Line	Elverta Road	128200	83		17	2	6	65	100	
56	SR 99	Elverta Road	Elkhorn Boulevard	129900	83		17	2	6	65	100	
57	SR 99	Elkhorn Boulevard	I-5	122300	83		17	2	6	65	100	
58	I-5	SR 99	Del Paso Road	205200	83		17	4	9	65	100	
59	I-5	Del Paso Road	Arena Boulevard	223800	83		17	4	9	65	100	
60	I-5	Arena Boulevard	I-80	239600	83		17	3	6	65	100	
61	Road A	Road J	Riego Road	20100	83		17	2	1	35	100	
62	Road A	Riego Road	Road B	46300	83		17	2	1	35	100	
63	Road D	Road C	Riego Road	20100	83		17	2	1	35	100	
64	Road D	Riego Road	Road B	12600	83		17	2	1	35	100	
65	Road C	Road O	Sankey Road	21100	83		17	2	1	35	100	
66	Road C	Sankey Road	Road K	23200	83		17	2	1	35	100	
67	Road C	Road K	Road D	25600	83		17	2	1	35	100	
68	Road C	Road D	Road J	17000	83		17	2	1	35	100	
69	Road C	Road J	Riego Road	18800	83		17	2	1	35	100	
70	Road C	Riego Road	Road B	9800	83		17	2	1	35	100	
71	Road K	Pacific Avenue	Road C	14500	83		17	2	1	35	100	
72	Road Q	Road S	Road A	11000	83		17	2	1	35	100	

Appendix B-19

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - With Project (With Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
		From	To									
1	Sankey Road	Powerline Road	SR 99	200	83		17	2	1	50	100	
2	Sankey Road	SR 99	Pacific Avenue	40900	83		17	2	1	50	100	
3	Sankey Road	Pacific Avenue	Road C	40900	83		17	2	1	50	100	
4	Sankey Road	Road C	Pleasant Grove Road (N)	44400	83		17	2	1	50	100	
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	1500	83		17	2	1	50	100	
6	Riego Road	Powerline Road	Road U	8100	83		17	2	1	50	100	
7	Riego Road	Road U	Road R	23600	83		17	2	1	50	100	
8	Riego Road	Road R	Road S	34800	83		17	2	1	50	100	
9	Riego Road	Road S	SR 99	83600	83		17	2	1	50	100	
10	Riego Road	SR 99	Road A	87300	83		17	2	1	50	100	
11	Riego Road	Road A	Pacific Avenue	67000	83		17	2	1	50	100	
12	Riego Road	Pacific Avenue	Road C	53900	83		17	2	1	50	100	
13	Riego Road	Road C	Road D	38900	83		17	2	1	50	100	
14	Riego Road	Road D	Pleasant Grove Road (N)	41800	83		17	2	1	50	100	
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	38600	83		17	2	1	50	100	
16	Riego Road	Pleasant Grove Road (S)	Locust Road	32700	83		17	2	1	50	100	
17	Base Line Road	Locust Road	Brewer Road	32700	83		17	2	1	50	100	
18	Base Line Road	Brewer Road	Watt Avenue	48500	83		17	2	1	50	100	
19	Base Line Road	Watt Avenue	Fiddymment Drive	34600	83		17	2	1	50	100	
20	Elverta Road	Powerline Road	SR 99	11700	83		17	2	1	50	100	
21	Elverta Road	SR 99	East Levee Road	19600	83		17	2	1	50	100	
22	Elverta Road	East Levee Road	Sorento Road	27500	83		17	2	1	50	100	
23	Elverta Road	Sorento Road	16th Street	33300	83		17	2	1	50	100	
24	Elverta Road	16th Street	Watt Avenue	39900	83		17	2	1	50	100	
25	Powerline Road	Sankey Road	Riego Road	500	83		17	2	1	50	100	

Appendix B-20

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - With Project (With Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		ADT	Day %	Eve %	Night %	% Med.	% Hvy.	Speed	Distance	Offset (dB)
		From	To					Trucks	Trucks			
26	Powerline Road	Riego Road	Sacramento County Line	7300	83		17	2	1	50	100	
27	Powerline Road	Sacramento County Line	Elverta Road	11100	83		17	2	1	50	100	
28	Powerline Road	Elverta Road	Elkhorn Boulevard	400	83		17	2	1	50	100	
29	Road H	Road O	Sankey Road	14500	83		17	2	1	35	100	
30	Pacific Avenue	Sankey Road	Road K	17900	83		17	2	1	50	100	
31	Pacific Avenue	Road K	Road J	23200	83		17	2	1	50	100	
32	Pacific Avenue	Road J	Riego Road	27200	83		17	2	1	50	100	
33	Pacific Avenue	Riego Road	Road B	3000	83		17	2	1	50	100	
34	Natomas Road	Sankey Road	Riego Road	400	83		17	2	1	50	100	
35	Natomas Road	Riego Road	Sacramento County Line	6200	83		17	2	1	50	100	
36	East Levee Road	Sacramento County Line	Elverta Road	6200	83		17	2	1	50	100	
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	3400	83		17	2	1	50	100	
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	6800	83		17	2	1	50	100	
39	Sorento Road	Sacramento County Line	Elverta Road	4600	83		17	2	1	50	100	
40	Locust Road	Sankey Road	Baseline Road	2100	83		17	2	1	50	100	
41	Brewer Road	Phillip Road	Baseline Road	2800	83		17	2	1	50	100	
42	Palladay Road	Baseline Road	Sacramento County Line	6000	83		17	2	1	50	100	
43	Palladay Road	Sacramento County Line	Elverta Road	11000	83		17	2	1	50	100	
44	16th Street	Kasser Road	Elverta Road	25600	83		17	2	1	50	100	
45	Watt Avenue	Baseline Road	PFE Road	51500	83		17	2	1	50	100	
46	Watt Avenue	PFE Road	Elverta Road	50700	83		17	2	1	50	100	
47	Walerga Road	Baseline Road	PFE Road	33900	83		17	2	1	50	100	
48	Elkhorn Boulevard	SR 99	Northborough Drive	36500	83		17	2	1	50	100	
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	24800	83		17	2	1	50	100	
50	Elkhorn Boulevard	Natomas Boulevard	Sageview Drive	36900	83		17	2	1	50	100	

Appendix B-21

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - With Project (With Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
		From	To									
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	36100	83		17	2	1	50	100	
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	47300	83		17	2	6	65	100	
53	SR 99	Sankey Road	Riego Road	73000	83		17	2	6	65	100	
54	SR 99	Riego Road	Sacramento County Line	129800	83		17	2	6	65	100	
55	SR 99	Sacramento County Line	Elverta Road	129800	83		17	2	6	65	100	
56	SR 99	Elverta Road	Elkhorn Boulevard	131900	83		17	2	6	65	100	
57	SR 99	Elkhorn Boulevard	I-5	123700	83		17	2	6	65	100	
58	I-5	SR 99	Del Paso Road	204500	83		17	4	9	65	100	
59	I-5	Del Paso Road	Arena Boulevard	223200	83		17	4	9	65	100	
60	I-5	Arena Boulevard	I-80	239400	83		17	3	6	65	100	
61	Road A	Road J	Riego Road	20800	83		17	2	1	35	100	
62	Road A	Riego Road	Road B	46300	83		17	2	1	35	100	
63	Road D	Road C	Riego Road	21600	83		17	2	1	35	100	
64	Road D	Riego Road	Road B	12700	83		17	2	1	35	100	
65	Road C	Road O	Sankey Road	30100	83		17	2	1	35	100	
66	Road C	Sankey Road	Road K	34300	83		17	2	1	35	100	
67	Road C	Road K	Road D	29200	83		17	2	1	35	100	
68	Road C	Road D	Road J	18100	83		17	2	1	35	100	
69	Road C	Road J	Riego Road	19300	83		17	2	1	35	100	
70	Road C	Riego Road	Road B	10500	83		17	2	1	35	100	
71	Road K	Pacific Avenue	Road C	18900	83		17	2	1	35	100	
72	Road Q	Road S	Road A	11600	83		17	2	1	35	100	

Appendix C-1

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2005-522 South Sutter County EIR

Description: Existing Conditions

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		Autos	Medium Heavy		Total
		From	To		Trucks	Trucks	
1	Sankey Road	Powerline Road	SR 99	46.1	36.9	38.1	47
2	Sankey Road	SR 99	Pacific Avenue	54.6	45.4	46.6	56
3	Sankey Road	Pacific Avenue	Road C	53.5	44.3	45.5	55
4	Sankey Road	Road C	Pleasant Grove Road (N)	n/a	n/a	n/a	n/a
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	54.9	45.7	46.9	56
6	Riego Road	Powerline Road	Road U	52.1	42.9	44.1	53
7	Riego Road	Road U	Road R	n/a	n/a	n/a	n/a
8	Riego Road	Road R	Road S	n/a	n/a	n/a	n/a
9	Riego Road	Road S	SR 99	n/a	n/a	n/a	n/a
10	Riego Road	SR 99	Road A	62.9	53.7	54.9	64
11	Riego Road	Road A	Pacific Avenue	n/a	n/a	n/a	n/a
12	Riego Road	Pacific Avenue	Road C	62.2	53.0	54.2	63
13	Riego Road	Road C	Road D	n/a	n/a	n/a	n/a
14	Riego Road	Road D	Pleasant Grove Road (N)	n/a	n/a	n/a	n/a
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	63.4	54.2	55.4	64
16	Riego Road	Pleasant Grove Road (S)	Locust Road	63.4	54.2	55.4	64
17	Base Line Road	Locust Road	Brewer Road	63.9	54.7	55.9	65
18	Base Line Road	Brewer Road	Watt Avenue	63.6	54.4	55.6	65
19	Base Line Road	Watt Avenue	Fiddymnt Drive	64.1	54.9	56.1	65
20	Elverta Road	Powerline Road	SR 99	53.1	43.9	45.1	54
21	Elverta Road	SR 99	East Levee Road	61.0	51.8	53.0	62
22	Elverta Road	East Levee Road	Sorento Road	62.1	52.9	54.1	63
23	Elverta Road	Sorento Road	16th Street	62.5	53.3	54.5	64
24	Elverta Road	16th Street	Watt Avenue	65.0	55.8	57.0	66
25	Powerline Road	Sankey Road		49.1	39.9	41.1	50

Appendix C-2

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2005-522 South Sutter County EIR

Description: Existing Conditions

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		Autos	Medium Heavy		Total
		From	To		Trucks	Trucks	
26	Powerline Road	Riego Road	Sacramento County Line	47.9	38.7	39.9	49
27	Powerline Road	Sacramento County Line	Elverta Road	47.9	38.7	39.9	49
28	Powerline Road	Elverta Road	Elkhorn Boulevard	49.1	39.9	41.1	50
29	Road H	Road O	Sankey Road	n/a	n/a	n/a	n/a
30	Pacific Avenue	Sankey Road	Road K	52.7	43.4	44.6	54
31	Pacific Avenue	Road K	Road J	n/a	n/a	n/a	n/a
32	Pacific Avenue	Road J	Riego Road	n/a	n/a	n/a	n/a
33	Pacific Avenue	Riego Road	Road B	n/a	n/a	n/a	n/a
34	Natomas Road	Sankey Road	Riego Road	49.1	39.9	41.1	50
35	Natomas Road	Riego Road	Sacramento County Line	51.6	42.4	43.6	53
36	East Levee Road	Sacramento County Line	Elverta Road	51.6	42.4	43.6	53
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	55.4	46.2	47.4	56
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	55.7	46.5	47.7	57
39	Sorento Road	Sacramento County Line	Elverta Road	55.7	46.5	47.7	57
40	Locust Road	Sankey Road	Baseline Road	54.9	45.7	46.9	56
41	Brewer Road	Phillip Road	Baseline Road	50.9	41.7	42.9	52
42	Palladay Road	Baseline Road	Sacramento County Line	46.1	36.9	38.1	47
43	Palladay Road	Sacramento County Line	Elverta Road	46.1	36.9	38.1	47
44	16th Street	Kasser Road	Elverta Road	50.9	41.7	42.9	52
45	Watt Avenue	Baseline Road	PFE Road	61.6	52.4	53.6	63
46	Watt Avenue	PFE Road	Elverta Road	63.2	54.0	55.1	64
47	Walerga Road	Baseline Road	PFE Road	64.9	55.6	56.8	66
48	Elkhorn Boulevard	SR 99	Northborough Drive	64.5	55.3	56.5	66
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	63.8	54.6	55.8	65
50	Elkhorn Boulevard	Natomas Boulevard		64.7	55.5	56.7	66

Appendix C-3

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2005-522 South Sutter County EIR

Description: Existing Conditions

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		Autos	Medium	Heavy	Total
		From	To		Trucks	Trucks	
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	64.8	55.6	56.8	66
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	70.9	60.4	68.6	73
53	SR 99	Sankey Road	Riego Road	70.9	60.4	68.6	73
54	SR 99	Riego Road	Sacramento County Line	71.9	61.4	69.6	74
55	SR 99	Sacramento County Line	Elverta Road	71.9	61.4	69.6	74
56	SR 99	Elverta Road	Elkhorn Boulevard	72.6	62.1	70.3	75
57	SR 99	Elkhorn Boulevard	I-5	73.3	62.8	71.1	76
58	I-5	SR 99	Del Paso Road	76.1	68.8	75.8	79
59	I-5	Del Paso Road	Arena Boulevard	77.0	69.7	76.7	80
60	I-5	Arena Boulevard	I-80	77.6	68.9	75.4	80
61	Road A	Road J	Riego Road	n/a	n/a	n/a	n/a
62	Road A	Riego Road	Road B	n/a	n/a	n/a	n/a
63	Road D	Road C	Riego Road	n/a	n/a	n/a	n/a
64	Road D	Riego Road	Road B	n/a	n/a	n/a	n/a
65	Road C	Road O	Sankey Road	n/a	n/a	n/a	n/a
66	Road C	Sankey Road	Road K	n/a	n/a	n/a	n/a
67	Road C	Road K	Road D	n/a	n/a	n/a	n/a
68	Road C	Road D	Road J	n/a	n/a	n/a	n/a
69	Road C	Road J	Riego Road	n/a	n/a	n/a	n/a
70	Road C	Riego Road	Road B	n/a	n/a	n/a	n/a
71	Road K	Pacific Avenue	Road C	n/a	n/a	n/a	n/a
72	Road Q	Road S	Road A	n/a	n/a	n/a	n/a

Appendix C-4

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2005-522 South Sutter County EIR

Description: Existing With Phase 1

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		Autos	Medium Heavy		Total
		From	To		Trucks	Trucks	
1	Sankey Road	Powerline Road	SR 99	46.1	36.9	38.1	47
2	Sankey Road	SR 99	Pacific Avenue	55.7	46.5	47.7	57
3	Sankey Road	Pacific Avenue	Road C	55.2	45.9	47.1	56
4	Sankey Road	Road C	Pleasant Grove Road (N)	55.2	45.9	47.1	56
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	54.9	45.7	46.9	56
6	Riego Road	Powerline Road	Road U	54.9	45.7	46.9	56
7	Riego Road	Road U	Road R	54.9	45.7	46.9	56
8	Riego Road	Road R	Road S	61.2	52.0	53.2	62
9	Riego Road	Road S	SR 99	69.7	60.4	61.6	71
10	Riego Road	SR 99	Road A	69.9	60.7	61.9	71
11	Riego Road	Road A	Pacific Avenue	68.5	59.3	60.5	70
12	Riego Road	Pacific Avenue	Road C	68.0	58.8	60.0	69
13	Riego Road	Road C	Road D	65.6	56.4	57.6	67
14	Riego Road	Road D	Pleasant Grove Road (N)	65.9	56.7	57.9	67
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	66.1	56.9	58.1	67
16	Riego Road	Pleasant Grove Road (S)	Locust Road	65.6	56.4	57.6	67
17	Base Line Road	Locust Road	Brewer Road	66.0	56.7	57.9	67
18	Base Line Road	Brewer Road	Watt Avenue	65.7	56.5	57.7	67
19	Base Line Road	Watt Avenue	Fiddymnt Drive	65.1	55.9	57.1	66
20	Elverta Road	Powerline Road	SR 99	53.1	43.9	45.1	54
21	Elverta Road	SR 99	East Levee Road	62.3	53.1	54.3	63
22	Elverta Road	East Levee Road	Sorento Road	63.5	54.2	55.4	65
23	Elverta Road	Sorento Road	16th Street	63.5	54.3	55.5	65
24	Elverta Road	16th Street	Watt Avenue	65.0	55.8	57.0	66
25	Powerline Road	Sankey Road		49.1	39.9	41.1	50

Appendix C-5

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2005-522 South Sutter County EIR

Description: Existing With Phase 1

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		Autos	Medium Heavy		Total
		From	To		Trucks	Trucks	
26	Powerline Road	Riego Road	Sacramento County Line	53.1	43.9	45.1	54
27	Powerline Road	Sacramento County Line	Elverta Road	53.1	43.9	45.1	54
28	Powerline Road	Elverta Road	Elkhorn Boulevard	50.1	40.9	42.1	51
29	Road H	Road O	Sankey Road	n/a	n/a	n/a	n/a
30	Pacific Avenue	Sankey Road	Road K	52.7	43.4	44.6	54
31	Pacific Avenue	Road K	Road J	52.7	43.4	44.6	54
32	Pacific Avenue	Road J	Riego Road	59.2	50.0	51.2	60
33	Pacific Avenue	Riego Road	Road B	51.6	42.4	43.6	53
34	Natomas Road	Sankey Road	Riego Road	49.1	39.9	41.1	50
35	Natomas Road	Riego Road	Sacramento County Line	55.4	46.2	47.4	56
36	East Levee Road	Sacramento County Line	Elverta Road	55.4	46.2	47.4	56
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	55.4	46.2	47.4	56
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	58.8	49.6	50.8	60
39	Sorento Road	Sacramento County Line	Elverta Road	56.5	47.3	48.5	58
40	Locust Road	Sankey Road	Baseline Road	54.9	45.7	46.9	56
41	Brewer Road	Phillip Road	Baseline Road	50.9	41.7	42.9	52
42	Palladay Road	Baseline Road	Sacramento County Line	46.1	36.9	38.1	47
43	Palladay Road	Sacramento County Line	Elverta Road	46.1	36.9	38.1	47
44	16th Street	Kasser Road	Elverta Road	53.9	44.7	45.9	55
45	Watt Avenue	Baseline Road	PFE Road	63.4	54.2	55.4	64
46	Watt Avenue	PFE Road	Elverta Road	63.9	54.7	55.9	65
47	Walerga Road	Baseline Road	PFE Road	64.9	55.6	56.8	66
48	Elkhorn Boulevard	SR 99	Northborough Drive	65.0	55.8	57.0	66
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	63.9	54.7	55.9	65
50	Elkhorn Boulevard	Natomas Boulevard		64.7	55.5	56.7	66

Appendix C-6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2005-522 South Sutter County EIR

Description: Existing With Phase 1

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		Autos	Medium	Heavy	Total
		From	To		Trucks	Trucks	
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	64.8	55.6	56.8	66
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	70.9	60.4	68.6	73
53	SR 99	Sankey Road	Riego Road	70.9	60.4	68.6	73
54	SR 99	Riego Road	Sacramento County Line	74.3	63.8	72.1	77
55	SR 99	Sacramento County Line	Elverta Road	74.3	63.8	72.1	77
56	SR 99	Elverta Road	Elkhorn Boulevard	74.4	64.0	72.2	77
57	SR 99	Elkhorn Boulevard	I-5	74.7	64.2	72.4	77
58	I-5	SR 99	Del Paso Road	76.6	69.4	76.4	80
59	I-5	Del Paso Road	Arena Boulevard	77.3	70.1	77.1	81
60	I-5	Arena Boulevard	I-80	77.9	69.2	75.7	80
61	Road A	Road J	Riego Road	59.4	52.3	54.5	61
62	Road A	Riego Road	Road B	60.6	53.4	55.6	62
63	Road D	Road C	Riego Road	53.0	45.8	48.0	55
64	Road D	Riego Road	Road B	n/a	n/a	n/a	n/a
65	Road C	Road O	Sankey Road	46.4	39.3	41.5	48
66	Road C	Sankey Road	Road K	n/a	n/a	n/a	n/a
67	Road C	Road K	Road D	n/a	n/a	n/a	n/a
68	Road C	Road D	Road J	55.9	48.7	50.9	58
69	Road C	Road J	Riego Road	58.4	51.2	53.4	60
70	Road C	Riego Road	Road B	52.6	45.5	47.7	54
71	Road K	Pacific Avenue	Road C	n/a	n/a	n/a	n/a
72	Road Q	Road S	Road A	48.2	41.0	43.2	50

Appendix C-7

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2005-522 South Sutter County EIR

Description: Existing With Project

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		Autos	Medium Heavy		Total
		From	To		Trucks	Trucks	
1	Sankey Road	Powerline Road	SR 99	46.1	36.9	38.1	47
2	Sankey Road	SR 99	Pacific Avenue	67.3	58.0	59.2	68
3	Sankey Road	Pacific Avenue	Road C	61.8	52.5	53.7	63
4	Sankey Road	Road C	Pleasant Grove Road (N)	61.0	51.8	53.0	62
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	58.4	49.2	50.4	59
6	Riego Road	Powerline Road	Road U	63.4	54.2	55.4	64
7	Riego Road	Road U	Road R	66.9	57.7	58.9	68
8	Riego Road	Road R	Road S	68.0	58.7	59.9	69
9	Riego Road	Road S	SR 99	71.8	62.6	63.8	73
10	Riego Road	SR 99	Road A	71.5	62.3	63.5	73
11	Riego Road	Road A	Pacific Avenue	70.8	61.6	62.8	72
12	Riego Road	Pacific Avenue	Road C	70.3	61.1	62.3	71
13	Riego Road	Road C	Road D	68.7	59.5	60.7	70
14	Riego Road	Road D	Pleasant Grove Road (N)	68.6	59.4	60.6	70
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	68.2	59.0	60.2	69
16	Riego Road	Pleasant Grove Road (S)	Locust Road	67.3	58.1	59.3	68
17	Base Line Road	Locust Road	Brewer Road	67.6	58.4	59.6	69
18	Base Line Road	Brewer Road	Watt Avenue	67.4	58.2	59.4	69
19	Base Line Road	Watt Avenue	Fiddymment Drive	66.3	57.1	58.3	67
20	Elverta Road	Powerline Road	SR 99	63.8	54.6	55.7	65
21	Elverta Road	SR 99	East Levee Road	63.2	54.0	55.2	64
22	Elverta Road	East Levee Road	Sorento Road	64.5	55.2	56.4	66
23	Elverta Road	Sorento Road	16th Street	64.8	55.6	56.8	66
24	Elverta Road	16th Street	Watt Avenue	65.5	56.3	57.5	67
25	Powerline Road	Sankey Road		49.1	39.9	41.1	50

Appendix C-8

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2005-522 South Sutter County EIR

Description: Existing With Project

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		Autos	Medium Heavy		Total
		From	To		Trucks	Trucks	
26	Powerline Road	Riego Road	Sacramento County Line	62.8	53.6	54.8	64
27	Powerline Road	Sacramento County Line	Elverta Road	64.2	55.0	56.2	65
28	Powerline Road	Elverta Road	Elkhorn Boulevard	56.5	47.3	48.5	58
29	Road H	Road O	Sankey Road	61.7	54.5	56.7	63
30	Pacific Avenue	Sankey Road	Road K	63.6	54.4	55.6	65
31	Pacific Avenue	Road K	Road J	64.6	55.4	56.6	66
32	Pacific Avenue	Road J	Riego Road	65.9	56.7	57.9	67
33	Pacific Avenue	Riego Road	Road B	54.3	45.0	46.2	55
34	Natomas Road	Sankey Road	Riego Road	49.1	39.9	41.1	50
35	Natomas Road	Riego Road	Sacramento County Line	61.6	52.4	53.6	63
36	East Levee Road	Sacramento County Line	Elverta Road	61.6	52.4	53.6	63
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	56.3	47.1	48.3	57
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	61.8	52.6	53.8	63
39	Sorento Road	Sacramento County Line	Elverta Road	59.5	50.2	51.4	61
40	Locust Road	Sankey Road	Baseline Road	58.4	49.2	50.4	59
41	Brewer Road	Phillip Road	Baseline Road	51.6	42.4	43.6	53
42	Palladay Road	Baseline Road	Sacramento County Line	49.1	39.9	41.1	50
43	Palladay Road	Sacramento County Line	Elverta Road	49.1	39.9	41.1	50
44	16th Street	Kasser Road	Elverta Road	53.1	43.9	45.1	54
45	Watt Avenue	Baseline Road	PFE Road	63.9	54.7	55.9	65
46	Watt Avenue	PFE Road	Elverta Road	64.5	55.3	56.5	66
47	Walerga Road	Baseline Road	PFE Road	64.9	55.6	56.8	66
48	Elkhorn Boulevard	SR 99	Northborough Drive	65.4	56.2	57.4	66
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	64.2	55.0	56.2	65
50	Elkhorn Boulevard	Natomas Boulevard		64.9	55.7	56.9	66

Appendix C-9

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2005-522 South Sutter County EIR

Description: Existing With Project

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		Autos	Medium Heavy		Total
		From	To		Trucks	Trucks	
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	64.9	55.7	56.9	66
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	71.0	60.5	68.7	73
53	SR 99	Sankey Road	Riego Road	72.6	62.1	70.4	75
54	SR 99	Riego Road	Sacramento County Line	75.3	64.8	73.0	78
55	SR 99	Sacramento County Line	Elverta Road	75.3	64.8	73.0	78
56	SR 99	Elverta Road	Elkhorn Boulevard	75.8	65.3	73.5	78
57	SR 99	Elkhorn Boulevard	I-5	75.9	65.4	73.7	78
58	I-5	SR 99	Del Paso Road	77.4	70.1	77.1	81
59	I-5	Del Paso Road	Arena Boulevard	77.9	70.6	77.6	81
60	I-5	Arena Boulevard	I-80	78.3	69.6	76.1	81
61	Road A	Road J	Riego Road	61.4	54.2	56.4	63
62	Road A	Riego Road	Road B	64.9	57.7	59.9	67
63	Road D	Road C	Riego Road	61.5	54.4	56.6	63
64	Road D	Riego Road	Road B	59.4	52.2	54.4	61
65	Road C	Road O	Sankey Road	61.7	54.5	56.7	63
66	Road C	Sankey Road	Road K	61.9	54.7	56.9	64
67	Road C	Road K	Road D	62.7	55.5	57.7	64
68	Road C	Road D	Road J	60.9	53.7	55.9	63
69	Road C	Road J	Riego Road	61.2	54.0	56.2	63
70	Road C	Riego Road	Road B	58.5	51.4	53.5	60
71	Road K	Pacific Avenue	Road C	59.9	52.8	54.9	62
72	Road Q	Road S	Road A	58.2	51.0	53.2	60

Appendix C-10

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2005-522 South Sutter County EIR

Description: Year 2035 - No Project (Without Placer Parkway)

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		Autos	Medium Heavy		Total
		From	To		Trucks	Trucks	
1	Sankey Road	Powerline Road	SR 99	46.1	36.9	38.1	47
2	Sankey Road	SR 99	Pacific Avenue	54.6	45.4	46.6	56
3	Sankey Road	Pacific Avenue	Road C	54.3	45.0	46.2	55
4	Sankey Road	Road C	Pleasant Grove Road (N)	n/a	n/a	n/a	n/a
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	54.9	45.7	46.9	56
6	Riego Road	Powerline Road	Road U	52.7	43.4	44.6	54
7	Riego Road	Road U	Road R	n/a	n/a	n/a	n/a
8	Riego Road	Road R	Road S	n/a	n/a	n/a	n/a
9	Riego Road	Road S	SR 99	n/a	n/a	n/a	n/a
10	Riego Road	SR 99	Road A	66.1	56.9	58.1	67
11	Riego Road	Road A	Pacific Avenue	n/a	n/a	n/a	n/a
12	Riego Road	Pacific Avenue	Road C	66.0	56.8	58.0	67
13	Riego Road	Road C	Road D	n/a	n/a	n/a	n/a
14	Riego Road	Road D	Pleasant Grove Road (N)	n/a	n/a	n/a	n/a
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	66.8	57.5	58.7	68
16	Riego Road	Pleasant Grove Road (S)	Locust Road	66.6	57.4	58.6	68
17	Base Line Road	Locust Road	Brewer Road	66.9	57.7	58.8	68
18	Base Line Road	Brewer Road	Watt Avenue	69.6	60.4	61.6	71
19	Base Line Road	Watt Avenue	Fiddymment Drive	68.3	59.1	60.3	69
20	Elverta Road	Powerline Road	SR 99	59.0	49.8	51.0	60
21	Elverta Road	SR 99	East Levee Road	65.4	56.2	57.4	66
22	Elverta Road	East Levee Road	Sorento Road	66.8	57.6	58.8	68
23	Elverta Road	Sorento Road	16th Street	67.5	58.3	59.5	69
24	Elverta Road	16th Street	Watt Avenue	68.8	59.6	60.8	70
25	Powerline Road	Sankey Road		49.1	39.9	41.1	50

Appendix C-11

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - No Project (Without Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		Autos	Medium Heavy		Total
		From	To		Trucks	Trucks	
26	Powerline Road	Riego Road	Sacramento County Line	47.9	38.7	39.9	49
27	Powerline Road	Sacramento County Line	Elverta Road	47.9	38.7	39.9	49
28	Powerline Road	Elverta Road	Elkhorn Boulevard	49.1	39.9	41.1	50
29	Road H	Road O	Sankey Road	n/a	n/a	n/a	n/a
30	Pacific Avenue	Sankey Road	Road K	52.7	43.4	44.6	54
31	Pacific Avenue	Road K	Road J	n/a	n/a	n/a	n/a
32	Pacific Avenue	Road J	Riego Road	n/a	n/a	n/a	n/a
33	Pacific Avenue	Riego Road	Road B	n/a	n/a	n/a	n/a
34	Natomas Road	Sankey Road	Riego Road	49.1	39.9	41.1	50
35	Natomas Road	Riego Road	Sacramento County Line	51.6	42.4	43.6	53
36	East Levee Road	Sacramento County Line	Elverta Road	51.6	42.4	43.6	53
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	58.7	49.5	50.7	60
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	56.1	46.9	48.1	57
39	Sorento Road	Sacramento County Line	Elverta Road	57.3	48.1	49.3	58
40	Locust Road	Sankey Road	Baseline Road	54.9	45.7	46.9	56
41	Brewer Road	Phillip Road	Baseline Road	55.7	46.5	47.7	57
42	Palladay Road	Baseline Road	Sacramento County Line	60.8	51.5	52.7	62
43	Palladay Road	Sacramento County Line	Elverta Road	63.9	54.7	55.9	65
44	16th Street	Kasser Road	Elverta Road	65.6	56.4	57.6	67
45	Watt Avenue	Baseline Road	PFE Road	70.1	60.9	62.1	71
46	Watt Avenue	PFE Road	Elverta Road	70.2	61.0	62.2	71
47	Walerga Road	Baseline Road	PFE Road	68.4	59.2	60.4	70
48	Elkhorn Boulevard	SR 99	Northborough Drive	67.8	58.6	59.8	69
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	66.3	57.1	58.3	67
50	Elkhorn Boulevard	Natomas Boulevard		68.4	59.2	60.4	70

Appendix C-12

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - No Project (Without Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		Autos	Medium	Heavy	Total
		From	To		Trucks	Trucks	
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	68.6	59.4	60.6	70
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	72.7	62.2	70.5	75
53	SR 99	Sankey Road	Riego Road	72.7	62.3	70.5	75
54	SR 99	Riego Road	Sacramento County Line	74.1	63.6	71.9	76
55	SR 99	Sacramento County Line	Elverta Road	74.1	63.6	71.9	76
56	SR 99	Elverta Road	Elkhorn Boulevard	74.8	64.3	72.6	77
57	SR 99	Elkhorn Boulevard	I-5	75.3	64.8	73.0	78
58	I-5	SR 99	Del Paso Road	78.3	71.0	78.0	82
59	I-5	Del Paso Road	Arena Boulevard	78.9	71.7	78.7	82
60	I-5	Arena Boulevard	I-80	79.5	70.8	77.3	82
61	Road A	Road J	Riego Road	n/a	n/a	n/a	n/a
62	Road A	Riego Road	Road B	n/a	n/a	n/a	n/a
63	Road D	Road C	Riego Road	n/a	n/a	n/a	n/a
64	Road D	Riego Road	Road B	n/a	n/a	n/a	n/a
65	Road C	Road O	Sankey Road	n/a	n/a	n/a	n/a
66	Road C	Sankey Road	Road K	n/a	n/a	n/a	n/a
67	Road C	Road K	Road D	n/a	n/a	n/a	n/a
68	Road C	Road D	Road J	n/a	n/a	n/a	n/a
69	Road C	Road J	Riego Road	n/a	n/a	n/a	n/a
70	Road C	Riego Road	Road B	n/a	n/a	n/a	n/a
71	Road K	Pacific Avenue	Road C	n/a	n/a	n/a	n/a
72	Road Q	Road S	Road A	n/a	n/a	n/a	n/a

Appendix C-13

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2005-522 South Sutter County EIR

Description: Year 2035 - With Phase 1 (Without Placer Parkway)

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		Autos	Medium Heavy		Total
		From	To		Trucks	Trucks	
1	Sankey Road	Powerline Road	SR 99	46.1	36.9	38.1	47
2	Sankey Road	SR 99	Pacific Avenue	57.7	48.5	49.7	59
3	Sankey Road	Pacific Avenue	Road C	57.1	47.9	49.1	58
4	Sankey Road	Road C	Pleasant Grove Road (N)	55.4	46.2	47.4	56
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	55.2	45.9	47.1	56
6	Riego Road	Powerline Road	Road U	55.9	46.7	47.9	57
7	Riego Road	Road U	Road R	55.9	46.7	47.9	57
8	Riego Road	Road R	Road S	62.3	53.1	54.3	63
9	Riego Road	Road S	SR 99	70.1	60.9	62.1	71
10	Riego Road	SR 99	Road A	70.8	61.6	62.8	72
11	Riego Road	Road A	Pacific Avenue	69.5	60.3	61.5	71
12	Riego Road	Pacific Avenue	Road C	69.1	59.9	61.1	70
13	Riego Road	Road C	Road D	67.5	58.3	59.5	69
14	Riego Road	Road D	Pleasant Grove Road (N)	68.0	58.8	60.0	69
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	68.0	58.8	60.0	69
16	Riego Road	Pleasant Grove Road (S)	Locust Road	67.7	58.5	59.7	69
17	Base Line Road	Locust Road	Brewer Road	67.8	58.5	59.7	69
18	Base Line Road	Brewer Road	Watt Avenue	69.9	60.7	61.9	71
19	Base Line Road	Watt Avenue	Fiddymnt Drive	68.5	59.3	60.5	70
20	Elverta Road	Powerline Road	SR 99	59.7	50.5	51.7	61
21	Elverta Road	SR 99	East Levee Road	66.3	57.1	58.3	67
22	Elverta Road	East Levee Road	Sorento Road	67.3	58.1	59.3	68
23	Elverta Road	Sorento Road	16th Street	68.0	58.8	60.0	69
24	Elverta Road	16th Street	Watt Avenue	69.0	59.8	61.0	70
25	Powerline Road	Sankey Road		49.1	39.9	41.1	50

Appendix C-14

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - With Phase 1 (Without Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		Autos	Medium Heavy		Total
		From	To		Trucks	Trucks	
26	Powerline Road	Riego Road	Sacramento County Line	53.1	43.9	45.1	54
27	Powerline Road	Sacramento County Line	Elverta Road	52.7	43.4	44.6	54
28	Powerline Road	Elverta Road	Elkhorn Boulevard	49.1	39.9	41.1	50
29	Road H	Road O	Sankey Road	n/a	n/a	n/a	n/a
30	Pacific Avenue	Sankey Road	Road K	52.7	43.4	44.6	54
31	Pacific Avenue	Road K	Road J	52.7	43.4	44.6	54
32	Pacific Avenue	Road J	Riego Road	59.6	50.3	51.5	61
33	Pacific Avenue	Riego Road	Road B	51.6	42.4	43.6	53
34	Natomas Road	Sankey Road	Riego Road	49.1	39.9	41.1	50
35	Natomas Road	Riego Road	Sacramento County Line	56.7	47.5	48.7	58
36	East Levee Road	Sacramento County Line	Elverta Road	56.7	47.5	48.7	58
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	58.4	49.2	50.4	59
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	58.3	49.1	50.3	59
39	Sorento Road	Sacramento County Line	Elverta Road	57.4	48.2	49.4	58
40	Locust Road	Sankey Road	Baseline Road	55.4	46.2	47.4	56
41	Brewer Road	Phillip Road	Baseline Road	56.7	47.5	48.7	58
42	Palladay Road	Baseline Road	Sacramento County Line	61.1	51.9	53.1	62
43	Palladay Road	Sacramento County Line	Elverta Road	64.1	54.9	56.1	65
44	16th Street	Kasser Road	Elverta Road	65.8	56.6	57.7	67
45	Watt Avenue	Baseline Road	PFE Road	70.2	61.0	62.2	71
46	Watt Avenue	PFE Road	Elverta Road	70.2	61.0	62.2	71
47	Walerga Road	Baseline Road	PFE Road	68.5	59.3	60.5	70
48	Elkhorn Boulevard	SR 99	Northborough Drive	67.9	58.7	59.9	69
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	66.1	56.9	58.1	67
50	Elkhorn Boulevard	Natomas Boulevard		68.2	59.0	60.2	69

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - With Phase 1 (Without Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		Autos	Medium	Heavy	Total
		From	To		Trucks	Trucks	
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	68.3	59.0	60.2	69
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	72.7	62.2	70.5	75
53	SR 99	Sankey Road	Riego Road	72.8	62.3	70.6	75
54	SR 99	Riego Road	Sacramento County Line	76.1	65.7	73.9	78
55	SR 99	Sacramento County Line	Elverta Road	76.1	65.7	73.9	78
56	SR 99	Elverta Road	Elkhorn Boulevard	76.3	65.9	74.1	79
57	SR 99	Elkhorn Boulevard	I-5	76.3	65.8	74.0	79
58	I-5	SR 99	Del Paso Road	78.6	71.4	78.4	82
59	I-5	Del Paso Road	Arena Boulevard	79.1	71.9	78.9	82
60	I-5	Arena Boulevard	I-80	79.7	71.0	77.5	82
61	Road A	Road J	Riego Road	59.7	52.5	54.7	61
62	Road A	Riego Road	Road B	61.0	53.8	56.0	63
63	Road D	Road C	Riego Road	54.2	47.1	49.2	56
64	Road D	Riego Road	Road B	n/a	n/a	n/a	n/a
65	Road C	Road O	Sankey Road	47.7	40.5	42.7	49
66	Road C	Sankey Road	Road K	n/a	n/a	n/a	n/a
67	Road C	Road K	Road D	n/a	n/a	n/a	n/a
68	Road C	Road D	Road J	55.9	48.7	50.9	58
69	Road C	Road J	Riego Road	58.4	51.2	53.4	60
70	Road C	Riego Road	Road B	53.1	46.0	48.1	55
71	Road K	Pacific Avenue	Road C	n/a	n/a	n/a	n/a
72	Road Q	Road S	Road A	49.8	42.6	44.8	52

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2005-522 South Sutter County EIR

Description: Year 2035 - With Project (Without Placer Parkway)

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		Autos	Medium Heavy		Total
		From	To		Trucks	Trucks	
1	Sankey Road	Powerline Road	SR 99	46.1	36.9	38.1	47
2	Sankey Road	SR 99	Pacific Avenue	68.3	59.0	60.2	69
3	Sankey Road	Pacific Avenue	Road C	62.9	53.7	54.9	64
4	Sankey Road	Road C	Pleasant Grove Road (N)	62.1	52.9	54.1	63
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	60.7	51.5	52.7	62
6	Riego Road	Powerline Road	Road U	62.1	52.9	54.1	63
7	Riego Road	Road U	Road R	66.7	57.5	58.7	68
8	Riego Road	Road R	Road S	68.4	59.2	60.4	69
9	Riego Road	Road S	SR 99	72.3	63.1	64.2	73
10	Riego Road	SR 99	Road A	72.3	63.1	64.3	73
11	Riego Road	Road A	Pacific Avenue	71.3	62.0	63.2	72
12	Riego Road	Pacific Avenue	Road C	70.7	61.5	62.7	72
13	Riego Road	Road C	Road D	69.3	60.0	61.2	70
14	Riego Road	Road D	Pleasant Grove Road (N)	69.6	60.3	61.5	71
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	69.2	60.0	61.2	70
16	Riego Road	Pleasant Grove Road (S)	Locust Road	68.5	59.3	60.5	70
17	Base Line Road	Locust Road	Brewer Road	69.0	59.8	61.0	70
18	Base Line Road	Brewer Road	Watt Avenue	70.5	61.3	62.4	72
19	Base Line Road	Watt Avenue	Fiddymment Drive	68.9	59.7	60.9	70
20	Elverta Road	Powerline Road	SR 99	63.8	54.6	55.8	65
21	Elverta Road	SR 99	East Levee Road	66.8	57.6	58.8	68
22	Elverta Road	East Levee Road	Sorento Road	68.1	58.9	60.1	69
23	Elverta Road	Sorento Road	16th Street	68.7	59.5	60.7	70
24	Elverta Road	16th Street	Watt Avenue	69.3	60.1	61.3	70
25	Powerline Road	Sankey Road		49.1	39.9	41.1	50

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - With Project (Without Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		Autos	Medium Heavy		Total
		From	To		Trucks	Trucks	
26	Powerline Road	Riego Road	Sacramento County Line	61.7	52.5	53.7	63
27	Powerline Road	Sacramento County Line	Elverta Road	63.6	54.4	55.6	65
28	Powerline Road	Elverta Road	Elkhorn Boulevard	49.1	39.9	41.1	50
29	Road H	Road O	Sankey Road	62.0	54.9	57.0	64
30	Pacific Avenue	Sankey Road	Road K	64.2	55.0	56.2	65
31	Pacific Avenue	Road K	Road J	64.7	55.5	56.7	66
32	Pacific Avenue	Road J	Riego Road	65.9	56.7	57.9	67
33	Pacific Avenue	Riego Road	Road B	56.9	47.7	48.9	58
34	Natomas Road	Sankey Road	Riego Road	49.1	39.9	41.1	50
35	Natomas Road	Riego Road	Sacramento County Line	61.2	52.0	53.2	62
36	East Levee Road	Sacramento County Line	Elverta Road	61.2	52.0	53.2	62
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	59.2	50.0	51.2	60
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	61.4	52.2	53.4	63
39	Sorento Road	Sacramento County Line	Elverta Road	59.6	50.3	51.5	61
40	Locust Road	Sankey Road	Baseline Road	60.8	51.5	52.7	62
41	Brewer Road	Phillip Road	Baseline Road	57.9	48.7	49.9	59
42	Palladay Road	Baseline Road	Sacramento County Line	61.4	52.2	53.4	62
43	Palladay Road	Sacramento County Line	Elverta Road	64.2	55.0	56.2	65
44	16th Street	Kasser Road	Elverta Road	65.9	56.7	57.9	67
45	Watt Avenue	Baseline Road	PFE Road	70.3	61.1	62.3	71
46	Watt Avenue	PFE Road	Elverta Road	70.3	61.1	62.3	71
47	Walerga Road	Baseline Road	PFE Road	68.5	59.3	60.5	70
48	Elkhorn Boulevard	SR 99	Northborough Drive	68.8	59.6	60.8	70
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	67.1	57.9	59.1	68
50	Elkhorn Boulevard	Natomas Boulevard		68.8	59.6	60.8	70

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - With Project (Without Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		Autos	Medium	Heavy	Total
		From	To		Trucks	Trucks	
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	68.8	59.5	60.7	70
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	73.2	62.7	71.0	75
53	SR 99	Sankey Road	Riego Road	74.3	63.9	72.1	77
54	SR 99	Riego Road	Sacramento County Line	77.2	66.8	75.0	80
55	SR 99	Sacramento County Line	Elverta Road	77.2	66.8	75.0	80
56	SR 99	Elverta Road	Elkhorn Boulevard	77.3	66.8	75.1	80
57	SR 99	Elkhorn Boulevard	I-5	77.0	66.6	74.8	79
58	I-5	SR 99	Del Paso Road	79.0	71.8	78.8	82
59	I-5	Del Paso Road	Arena Boulevard	79.4	72.2	79.2	83
60	I-5	Arena Boulevard	I-80	79.9	71.2	77.7	82
61	Road A	Road J	Riego Road	61.7	54.5	56.7	63
62	Road A	Riego Road	Road B	65.3	58.1	60.3	67
63	Road D	Road C	Riego Road	61.7	54.5	56.7	63
64	Road D	Riego Road	Road B	59.7	52.5	54.7	61
65	Road C	Road O	Sankey Road	61.9	54.7	56.9	64
66	Road C	Sankey Road	Road K	62.3	55.1	57.3	64
67	Road C	Road K	Road D	62.7	55.6	57.8	65
68	Road C	Road D	Road J	61.0	53.8	56.0	63
69	Road C	Road J	Riego Road	61.4	54.2	56.4	63
70	Road C	Riego Road	Road B	58.6	51.4	53.6	60
71	Road K	Pacific Avenue	Road C	60.3	53.1	55.3	62
72	Road Q	Road S	Road A	59.1	51.9	54.1	61

Appendix C-19

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2005-522 South Sutter County EIR

Description: Year 2035 - With Project (With Placer Parkway)

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		Autos	Medium Heavy		Total
		From	To		Trucks	Trucks	
1	Sankey Road	Powerline Road	SR 99	46.1	36.9	38.1	47
2	Sankey Road	SR 99	Pacific Avenue	69.2	60.0	61.2	70
3	Sankey Road	Pacific Avenue	Road C	69.2	60.0	61.2	70
4	Sankey Road	Road C	Pleasant Grove Road (N)	69.6	60.4	61.6	71
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	54.9	45.7	46.9	56
6	Riego Road	Powerline Road	Road U	62.2	53.0	54.2	63
7	Riego Road	Road U	Road R	66.8	57.6	58.8	68
8	Riego Road	Road R	Road S	68.5	59.3	60.5	70
9	Riego Road	Road S	SR 99	72.3	63.1	64.3	73
10	Riego Road	SR 99	Road A	72.5	63.3	64.5	74
11	Riego Road	Road A	Pacific Avenue	71.4	62.2	63.4	72
12	Riego Road	Pacific Avenue	Road C	70.4	61.2	62.4	71
13	Riego Road	Road C	Road D	69.0	59.8	61.0	70
14	Riego Road	Road D	Pleasant Grove Road (N)	69.3	60.1	61.3	70
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	69.0	59.8	61.0	70
16	Riego Road	Pleasant Grove Road (S)	Locust Road	68.3	59.1	60.2	69
17	Base Line Road	Locust Road	Brewer Road	68.3	59.1	60.2	69
18	Base Line Road	Brewer Road	Watt Avenue	70.0	60.8	62.0	71
19	Base Line Road	Watt Avenue	Fiddymment Drive	68.5	59.3	60.5	70
20	Elverta Road	Powerline Road	SR 99	63.8	54.6	55.8	65
21	Elverta Road	SR 99	East Levee Road	66.0	56.8	58.0	67
22	Elverta Road	East Levee Road	Sorento Road	67.5	58.3	59.5	69
23	Elverta Road	Sorento Road	16th Street	68.3	59.1	60.3	69
24	Elverta Road	16th Street	Watt Avenue	69.1	59.9	61.1	70
25	Powerline Road	Sankey Road		50.1	40.9	42.1	51

Appendix C-20

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - With Project (With Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		Autos	Medium	Heavy	Total
		From	To		Trucks	Trucks	
26	Powerline Road	Riego Road	Sacramento County Line	61.8	52.5	53.7	63
27	Powerline Road	Sacramento County Line	Elverta Road	63.6	54.4	55.6	65
28	Powerline Road	Elverta Road	Elkhorn Boulevard	49.1	39.9	41.1	50
29	Road H	Road O	Sankey Road	60.3	53.1	55.3	62
30	Pacific Avenue	Sankey Road	Road K	65.6	56.4	57.6	67
31	Pacific Avenue	Road K	Road J	66.8	57.6	58.8	68
32	Pacific Avenue	Road J	Riego Road	67.5	58.3	59.4	69
33	Pacific Avenue	Riego Road	Road B	57.9	48.7	49.9	59
34	Natomas Road	Sankey Road	Riego Road	49.1	39.9	41.1	50
35	Natomas Road	Riego Road	Sacramento County Line	61.0	51.8	53.0	62
36	East Levee Road	Sacramento County Line	Elverta Road	61.0	51.8	53.0	62
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	58.4	49.2	50.4	59
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	61.4	52.2	53.4	63
39	Sorento Road	Sacramento County Line	Elverta Road	59.7	50.5	51.7	61
40	Locust Road	Sankey Road	Baseline Road	56.3	47.1	48.3	57
41	Brewer Road	Phillip Road	Baseline Road	57.6	48.4	49.6	59
42	Palladay Road	Baseline Road	Sacramento County Line	60.9	51.7	52.9	62
43	Palladay Road	Sacramento County Line	Elverta Road	63.5	54.3	55.5	65
44	16th Street	Kasser Road	Elverta Road	67.2	58.0	59.2	68
45	Watt Avenue	Baseline Road	PFE Road	70.2	61.0	62.2	71
46	Watt Avenue	PFE Road	Elverta Road	70.2	61.0	62.2	71
47	Walerga Road	Baseline Road	PFE Road	68.4	59.2	60.4	69
48	Elkhorn Boulevard	SR 99	Northborough Drive	68.7	59.5	60.7	70
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	67.1	57.9	59.0	68
50	Elkhorn Boulevard	Natomas Boulevard		68.8	59.6	60.8	70

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Predicted Levels

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - With Project (With Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		Autos	Medium	Heavy	Total
		From	To		Trucks	Trucks	
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	68.7	59.5	60.7	70
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	72.9	62.4	70.7	75
53	SR 99	Sankey Road	Riego Road	74.8	64.3	72.6	77
54	SR 99	Riego Road	Sacramento County Line	77.3	66.8	75.1	80
55	SR 99	Sacramento County Line	Elverta Road	77.3	66.8	75.1	80
56	SR 99	Elverta Road	Elkhorn Boulevard	77.4	66.9	75.1	80
57	SR 99	Elkhorn Boulevard	I-5	77.1	66.6	74.9	79
58	I-5	SR 99	Del Paso Road	79.0	71.8	78.8	82
59	I-5	Del Paso Road	Arena Boulevard	79.4	72.2	79.2	83
60	I-5	Arena Boulevard	I-80	79.9	71.2	77.7	82
61	Road A	Road J	Riego Road	61.8	54.7	56.9	64
62	Road A	Riego Road	Road B	65.3	58.1	60.3	67
63	Road D	Road C	Riego Road	62.0	54.8	57.0	64
64	Road D	Riego Road	Road B	59.7	52.5	54.7	61
65	Road C	Road O	Sankey Road	63.4	56.3	58.5	65
66	Road C	Sankey Road	Road K	64.0	56.8	59.0	66
67	Road C	Road K	Road D	63.3	56.1	58.3	65
68	Road C	Road D	Road J	61.2	54.1	56.3	63
69	Road C	Road J	Riego Road	61.5	54.3	56.5	63
70	Road C	Riego Road	Road B	58.9	51.7	53.9	61
71	Road K	Pacific Avenue	Road C	61.4	54.3	56.4	63
72	Road Q	Road S	Road A	59.3	52.1	54.3	61

Appendix D-1

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2005-522 South Sutter County EIR

Description: Existing Conditions

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		----- Distances to Traffic Noise Contours -----				
		From	To	75	70	65	60	55
1	Sankey Road	Powerline Road	SR 99	1	3	6	14	30
2	Sankey Road	SR 99	Pacific Avenue	5	11	24	51	110
3	Sankey Road	Pacific Avenue	Road C	4	9	20	44	94
4	Sankey Road	Road C	Pleasant Grove Road (N)	n/a	n/a	n/a	n/a	n/a
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	5	12	25	54	116
6	Riego Road	Powerline Road	Road U	4	8	16	35	76
7	Riego Road	Road U	Road R	n/a	n/a	n/a	n/a	n/a
8	Riego Road	Road R	Road S	n/a	n/a	n/a	n/a	n/a
9	Riego Road	Road S	SR 99	n/a	n/a	n/a	n/a	n/a
10	Riego Road	SR 99	Road A	18	40	86	185	398
11	Riego Road	Road A	Pacific Avenue	n/a	n/a	n/a	n/a	n/a
12	Riego Road	Pacific Avenue	Road C	17	36	77	165	356
13	Riego Road	Road C	Road D	n/a	n/a	n/a	n/a	n/a
14	Riego Road	Road D	Pleasant Grove Road (N)	n/a	n/a	n/a	n/a	n/a
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	20	43	92	199	428
16	Riego Road	Pleasant Grove Road (S)	Locust Road	20	43	92	198	426
17	Base Line Road	Locust Road	Brewer Road	22	46	100	216	465
18	Base Line Road	Brewer Road	Watt Avenue	20	44	95	205	442
19	Base Line Road	Watt Avenue	Fiddymment Drive	22	48	103	222	478
20	Elverta Road	Powerline Road	SR 99	4	9	19	41	88
21	Elverta Road	SR 99	East Levee Road	14	29	63	137	294
22	Elverta Road	East Levee Road	Sorento Road	16	35	75	162	350
23	Elverta Road	Sorento Road	16th Street	17	37	80	173	373
24	Elverta Road	16th Street	Watt Avenue	25	55	118	253	546
25	Powerline Road	Sankey Road		2	5	10	22	48

Appendix D-2

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2005-522 South Sutter County EIR

Description: Existing Conditions

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		----- Distances to Traffic Noise Contours -----				
		From	To	75	70	65	60	55
26	Powerline Road	Riego Road	Sacramento County Line	2	4	9	18	40
27	Powerline Road	Sacramento County Line	Elverta Road	2	4	9	18	40
28	Powerline Road	Elverta Road	Elkhorn Boulevard	2	5	10	22	48
29	Road H	Road O	Sankey Road	n/a	n/a	n/a	n/a	n/a
30	Pacific Avenue	Sankey Road	Road K	4	8	18	38	82
31	Pacific Avenue	Road K	Road J	n/a	n/a	n/a	n/a	n/a
32	Pacific Avenue	Road J	Riego Road	n/a	n/a	n/a	n/a	n/a
33	Pacific Avenue	Riego Road	Road B	n/a	n/a	n/a	n/a	n/a
34	Natomas Road	Sankey Road	Riego Road	2	5	10	22	48
35	Natomas Road	Riego Road	Sacramento County Line	3	7	15	32	70
36	East Levee Road	Sacramento County Line	Elverta Road	3	7	15	32	70
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	6	13	27	58	126
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	6	13	28	61	131
39	Sorento Road	Sacramento County Line	Elverta Road	6	13	28	61	131
40	Locust Road	Sankey Road	Baseline Road	5	12	25	54	116
41	Brewer Road	Phillip Road	Baseline Road	3	6	14	29	63
42	Palladay Road	Baseline Road	Sacramento County Line	1	3	6	14	30
43	Palladay Road	Sacramento County Line	Elverta Road	1	3	6	14	30
44	16th Street	Kasser Road	Elverta Road	3	6	14	29	63
45	Watt Avenue	Baseline Road	PFE Road	15	33	70	151	326
46	Watt Avenue	PFE Road	Elverta Road	19	41	89	191	412
47	Walerga Road	Baseline Road	PFE Road	25	53	115	248	534
48	Elkhorn Boulevard	SR 99	Northborough Drive	24	51	110	237	510
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	21	46	99	212	457
50	Elkhorn Boulevard	Natomas Boulevard		24	52	113	243	525

Appendix D-3

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2005-522 South Sutter County EIR

Description: Existing Conditions

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		----- Distances to Traffic Noise Contours -----				
		From	To	75	70	65	60	55
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	25	53	114	246	529
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	75	162	350	753	1623
53	SR 99	Sankey Road	Riego Road	75	162	350	753	1623
54	SR 99	Riego Road	Sacramento County Line	88	189	406	875	1886
55	SR 99	Sacramento County Line	Elverta Road	88	189	406	875	1886
56	SR 99	Elverta Road	Elkhorn Boulevard	97	210	452	973	2097
57	SR 99	Elkhorn Boulevard	I-5	110	236	509	1096	2362
58	I-5	SR 99	Del Paso Road	195	420	905	1951	4202
59	I-5	Del Paso Road	Arena Boulevard	224	483	1041	2243	4832
60	I-5	Arena Boulevard	I-80	214	461	993	2140	4611
61	Road A	Road J	Riego Road	n/a	n/a	n/a	n/a	n/a
62	Road A	Riego Road	Road B	n/a	n/a	n/a	n/a	n/a
63	Road D	Road C	Riego Road	n/a	n/a	n/a	n/a	n/a
64	Road D	Riego Road	Road B	n/a	n/a	n/a	n/a	n/a
65	Road C	Road O	Sankey Road	n/a	n/a	n/a	n/a	n/a
66	Road C	Sankey Road	Road K	n/a	n/a	n/a	n/a	n/a
67	Road C	Road K	Road D	n/a	n/a	n/a	n/a	n/a
68	Road C	Road D	Road J	n/a	n/a	n/a	n/a	n/a
69	Road C	Road J	Riego Road	n/a	n/a	n/a	n/a	n/a
70	Road C	Riego Road	Road B	n/a	n/a	n/a	n/a	n/a
71	Road K	Pacific Avenue	Road C	n/a	n/a	n/a	n/a	n/a
72	Road Q	Road S	Road A	n/a	n/a	n/a	n/a	n/a

Appendix D-4

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2005-522 South Sutter County EIR

Description: Existing With Phase 1

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		----- Distances to Traffic Noise Contours -----				
		From	To	75	70	65	60	55
1	Sankey Road	Powerline Road	SR 99	1	3	6	14	30
2	Sankey Road	SR 99	Pacific Avenue	6	13	28	61	131
3	Sankey Road	Pacific Avenue	Road C	6	12	26	56	121
4	Sankey Road	Road C	Pleasant Grove Road (N)	6	12	26	56	121
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	5	12	25	54	116
6	Riego Road	Powerline Road	Road U	5	12	25	54	116
7	Riego Road	Road U	Road R	5	12	25	54	116
8	Riego Road	Road R	Road S	14	31	66	143	307
9	Riego Road	Road S	SR 99	52	112	241	519	1118
10	Riego Road	SR 99	Road A	54	116	250	538	1159
11	Riego Road	Road A	Pacific Avenue	44	94	203	436	940
12	Riego Road	Pacific Avenue	Road C	40	87	188	404	870
13	Riego Road	Road C	Road D	28	60	130	279	601
14	Riego Road	Road D	Pleasant Grove Road (N)	29	63	135	291	626
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	30	65	140	301	648
16	Riego Road	Pleasant Grove Road (S)	Locust Road	28	60	129	278	599
17	Base Line Road	Locust Road	Brewer Road	29	63	136	294	632
18	Base Line Road	Brewer Road	Watt Avenue	28	61	131	283	610
19	Base Line Road	Watt Avenue	Fiddymment Drive	26	56	120	259	558
20	Elverta Road	Powerline Road	SR 99	4	9	19	41	88
21	Elverta Road	SR 99	East Levee Road	17	36	78	168	362
22	Elverta Road	East Levee Road	Sorento Road	20	43	93	200	431
23	Elverta Road	Sorento Road	16th Street	20	43	93	201	434
24	Elverta Road	16th Street	Watt Avenue	25	55	118	255	548
25	Powerline Road	Sankey Road		2	5	10	22	48

Appendix D-5

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2005-522 South Sutter County EIR

Description: Existing With Phase 1

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		----- Distances to Traffic Noise Contours -----				
		From	To	75	70	65	60	55
26	Powerline Road	Riego Road	Sacramento County Line	4	9	19	41	88
27	Powerline Road	Sacramento County Line	Elverta Road	4	9	19	41	88
28	Powerline Road	Elverta Road	Elkhorn Boulevard	3	6	12	26	56
29	Road H	Road O	Sankey Road	n/a	n/a	n/a	n/a	n/a
30	Pacific Avenue	Sankey Road	Road K	4	8	18	38	82
31	Pacific Avenue	Road K	Road J	4	8	18	38	82
32	Pacific Avenue	Road J	Riego Road	10	23	49	105	226
33	Pacific Avenue	Riego Road	Road B	3	7	15	32	70
34	Natomas Road	Sankey Road	Riego Road	2	5	10	22	48
35	Natomas Road	Riego Road	Sacramento County Line	6	13	27	58	126
36	East Levee Road	Sacramento County Line	Elverta Road	6	13	27	58	126
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	6	13	27	58	126
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	10	21	45	98	211
39	Sorento Road	Sacramento County Line	Elverta Road	7	15	32	69	149
40	Locust Road	Sankey Road	Baseline Road	5	12	25	54	116
41	Brewer Road	Phillip Road	Baseline Road	3	6	14	29	63
42	Palladay Road	Baseline Road	Sacramento County Line	1	3	6	14	30
43	Palladay Road	Sacramento County Line	Elverta Road	1	3	6	14	30
44	16th Street	Kasser Road	Elverta Road	5	10	21	46	100
45	Watt Avenue	Baseline Road	PFE Road	20	43	92	198	426
46	Watt Avenue	PFE Road	Elverta Road	22	46	100	216	465
47	Walerga Road	Baseline Road	PFE Road	25	53	115	248	534
48	Elkhorn Boulevard	SR 99	Northborough Drive	25	55	118	253	546
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	21	46	100	215	462
50	Elkhorn Boulevard	Natomas Boulevard		24	52	113	243	525

Appendix D-6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2005-522 South Sutter County EIR

Description: Existing With Phase 1

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		----- Distances to Traffic Noise Contours -----				
		From	To	75	70	65	60	55
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	25	53	114	246	529
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	75	162	350	753	1623
53	SR 99	Sankey Road	Riego Road	75	162	350	753	1623
54	SR 99	Riego Road	Sacramento County Line	127	274	591	1272	2741
55	SR 99	Sacramento County Line	Elverta Road	127	274	591	1272	2741
56	SR 99	Elverta Road	Elkhorn Boulevard	130	280	604	1301	2803
57	SR 99	Elkhorn Boulevard	I-5	135	290	625	1346	2899
58	I-5	SR 99	Del Paso Road	213	459	989	2131	4591
59	I-5	Del Paso Road	Arena Boulevard	237	511	1101	2373	5112
60	I-5	Arena Boulevard	I-80	224	483	1040	2242	4829
61	Road A	Road J	Riego Road	12	26	56	121	261
62	Road A	Riego Road	Road B	14	31	67	143	309
63	Road D	Road C	Riego Road	4	10	21	45	96
64	Road D	Riego Road	Road B	n/a	n/a	n/a	n/a	n/a
65	Road C	Road O	Sankey Road	2	4	8	16	35
66	Road C	Sankey Road	Road K	n/a	n/a	n/a	n/a	n/a
67	Road C	Road K	Road D	n/a	n/a	n/a	n/a	n/a
68	Road C	Road D	Road J	7	15	33	70	151
69	Road C	Road J	Riego Road	10	22	48	103	221
70	Road C	Riego Road	Road B	4	9	20	42	92
71	Road K	Pacific Avenue	Road C	n/a	n/a	n/a	n/a	n/a
72	Road Q	Road S	Road A	2	5	10	22	46

Appendix D-7

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2005-522 South Sutter County EIR

Description: Existing With Project

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		----- Distances to Traffic Noise Contours -----				
		From	To	75	70	65	60	55
1	Sankey Road	Powerline Road	SR 99	1	3	6	14	30
2	Sankey Road	SR 99	Pacific Avenue	36	77	166	358	772
3	Sankey Road	Pacific Avenue	Road C	15	33	72	154	332
4	Sankey Road	Road C	Pleasant Grove Road (N)	14	30	64	138	298
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	9	20	43	93	199
6	Riego Road	Powerline Road	Road U	20	43	92	198	426
7	Riego Road	Road U	Road R	34	73	158	340	732
8	Riego Road	Road R	Road S	40	86	186	400	861
9	Riego Road	Road S	SR 99	72	155	333	718	1546
10	Riego Road	SR 99	Road A	69	149	321	692	1491
11	Riego Road	Road A	Pacific Avenue	62	134	288	620	1335
12	Riego Road	Pacific Avenue	Road C	57	123	265	572	1232
13	Riego Road	Road C	Road D	45	96	207	446	960
14	Riego Road	Road D	Pleasant Grove Road (N)	44	96	206	444	956
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	41	89	192	413	889
16	Riego Road	Pleasant Grove Road (S)	Locust Road	36	77	167	359	774
17	Base Line Road	Locust Road	Brewer Road	38	82	176	378	815
18	Base Line Road	Brewer Road	Watt Avenue	37	80	171	369	796
19	Base Line Road	Watt Avenue	Fiddymment Drive	31	67	143	309	665
20	Elverta Road	Powerline Road	SR 99	21	45	97	210	452
21	Elverta Road	SR 99	East Levee Road	19	42	90	194	418
22	Elverta Road	East Levee Road	Sorento Road	23	50	108	233	503
23	Elverta Road	Sorento Road	16th Street	25	53	115	247	532
24	Elverta Road	16th Street	Watt Avenue	28	59	128	276	595
25	Powerline Road	Sankey Road		2	5	10	22	48

Appendix D-8

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2005-522 South Sutter County EIR

Description: Existing With Project

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		----- Distances to Traffic Noise Contours -----				
		From	To	75	70	65	60	55
26	Powerline Road	Riego Road	Sacramento County Line	18	39	85	182	393
27	Powerline Road	Sacramento County Line	Elverta Road	22	48	104	224	483
28	Powerline Road	Elverta Road	Elkhorn Boulevard	7	15	32	69	149
29	Road H	Road O	Sankey Road	17	37	79	171	367
30	Pacific Avenue	Sankey Road	Road K	20	44	95	204	439
31	Pacific Avenue	Road K	Road J	24	51	111	239	515
32	Pacific Avenue	Road J	Riego Road	29	63	136	293	630
33	Pacific Avenue	Riego Road	Road B	5	11	23	49	105
34	Natomas Road	Sankey Road	Riego Road	2	5	10	22	48
35	Natomas Road	Riego Road	Sacramento County Line	15	33	70	151	326
36	East Levee Road	Sacramento County Line	Elverta Road	15	33	70	151	326
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	7	14	31	67	145
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	16	33	72	155	335
39	Sorento Road	Sacramento County Line	Elverta Road	11	23	50	108	233
40	Locust Road	Sankey Road	Baseline Road	9	20	43	93	199
41	Brewer Road	Phillip Road	Baseline Road	3	7	15	32	70
42	Palladay Road	Baseline Road	Sacramento County Line	2	5	10	22	48
43	Palladay Road	Sacramento County Line	Elverta Road	2	5	10	22	48
44	16th Street	Kasser Road	Elverta Road	4	9	19	41	88
45	Watt Avenue	Baseline Road	PFE Road	21	46	99	213	460
46	Watt Avenue	PFE Road	Elverta Road	24	51	110	237	510
47	Walerga Road	Baseline Road	PFE Road	25	53	115	248	534
48	Elkhorn Boulevard	SR 99	Northborough Drive	27	58	125	269	579
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	23	49	105	225	485
50	Elkhorn Boulevard	Natomas Boulevard		25	54	116	249	537

Appendix D-9

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2005-522 South Sutter County EIR

Description: Existing With Project

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		----- Distances to Traffic Noise Contours -----				
		From	To	75	70	65	60	55
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	25	54	117	251	541
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	76	164	353	762	1641
53	SR 99	Sankey Road	Riego Road	98	211	455	981	2113
54	SR 99	Riego Road	Sacramento County Line	147	318	684	1475	3177
55	SR 99	Sacramento County Line	Elverta Road	147	318	684	1475	3177
56	SR 99	Elverta Road	Elkhorn Boulevard	160	344	742	1598	3443
57	SR 99	Elkhorn Boulevard	I-5	163	350	755	1626	3503
58	I-5	SR 99	Del Paso Road	238	513	1106	2383	5134
59	I-5	Del Paso Road	Arena Boulevard	257	554	1193	2571	5540
60	I-5	Arena Boulevard	I-80	240	518	1115	2402	5175
61	Road A	Road J	Riego Road	16	35	76	163	351
62	Road A	Riego Road	Road B	28	60	129	279	601
63	Road D	Road C	Riego Road	17	36	77	167	359
64	Road D	Riego Road	Road B	12	26	56	120	258
65	Road C	Road O	Sankey Road	17	37	79	171	369
66	Road C	Sankey Road	Road K	18	38	82	176	378
67	Road C	Road K	Road D	20	43	92	198	427
68	Road C	Road D	Road J	15	32	70	150	323
69	Road C	Road J	Riego Road	16	34	73	158	340
70	Road C	Riego Road	Road B	10	23	49	105	226
71	Road K	Pacific Avenue	Road C	13	28	60	130	280
72	Road Q	Road S	Road A	10	22	46	100	215

Appendix D-10

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - No Project (Without Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		----- Distances to Traffic Noise Contours -----				
		From	To	75	70	65	60	55
1	Sankey Road	Powerline Road	SR 99	1	3	6	14	30
2	Sankey Road	SR 99	Pacific Avenue	5	11	24	51	110
3	Sankey Road	Pacific Avenue	Road C	5	11	23	49	105
4	Sankey Road	Road C	Pleasant Grove Road (N)	n/a	n/a	n/a	n/a	n/a
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	5	12	25	54	116
6	Riego Road	Powerline Road	Road U	4	8	18	38	82
7	Riego Road	Road U	Road R	n/a	n/a	n/a	n/a	n/a
8	Riego Road	Road R	Road S	n/a	n/a	n/a	n/a	n/a
9	Riego Road	Road S	SR 99	n/a	n/a	n/a	n/a	n/a
10	Riego Road	SR 99	Road A	30	65	140	302	650
11	Riego Road	Road A	Pacific Avenue	n/a	n/a	n/a	n/a	n/a
12	Riego Road	Pacific Avenue	Road C	29	63	137	295	635
13	Riego Road	Road C	Road D	n/a	n/a	n/a	n/a	n/a
14	Riego Road	Road D	Pleasant Grove Road (N)	n/a	n/a	n/a	n/a	n/a
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	33	72	154	332	715
16	Riego Road	Pleasant Grove Road (S)	Locust Road	32	70	150	323	697
17	Base Line Road	Locust Road	Brewer Road	34	73	157	338	728
18	Base Line Road	Brewer Road	Watt Avenue	51	110	238	512	1103
19	Base Line Road	Watt Avenue	Fiddymment Drive	42	91	197	424	913
20	Elverta Road	Powerline Road	SR 99	10	22	47	101	219
21	Elverta Road	SR 99	East Levee Road	27	58	125	270	581
22	Elverta Road	East Levee Road	Sorento Road	33	72	155	333	718
23	Elverta Road	Sorento Road	16th Street	37	81	174	375	808
24	Elverta Road	16th Street	Watt Avenue	46	98	212	456	983
25	Powerline Road	Sankey Road		2	5	10	22	48

Appendix D-11

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - No Project (Without Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		----- Distances to Traffic Noise Contours -----				
		From	To	75	70	65	60	55
26	Powerline Road	Riego Road	Sacramento County Line	2	4	9	18	40
27	Powerline Road	Sacramento County Line	Elverta Road	2	4	9	18	40
28	Powerline Road	Elverta Road	Elkhorn Boulevard	2	5	10	22	48
29	Road H	Road O	Sankey Road	n/a	n/a	n/a	n/a	n/a
30	Pacific Avenue	Sankey Road	Road K	4	8	18	38	82
31	Pacific Avenue	Road K	Road J	n/a	n/a	n/a	n/a	n/a
32	Pacific Avenue	Road J	Riego Road	n/a	n/a	n/a	n/a	n/a
33	Pacific Avenue	Riego Road	Road B	n/a	n/a	n/a	n/a	n/a
34	Natomas Road	Sankey Road	Riego Road	2	5	10	22	48
35	Natomas Road	Riego Road	Sacramento County Line	3	7	15	32	70
36	East Levee Road	Sacramento County Line	Elverta Road	3	7	15	32	70
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	10	21	45	96	207
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	6	14	30	65	140
39	Sorento Road	Sacramento County Line	Elverta Road	8	17	36	77	167
40	Locust Road	Sankey Road	Baseline Road	5	12	25	54	116
41	Brewer Road	Phillip Road	Baseline Road	6	13	28	61	131
42	Palladay Road	Baseline Road	Sacramento County Line	13	28	61	132	285
43	Palladay Road	Sacramento County Line	Elverta Road	22	46	100	216	465
44	16th Street	Kasser Road	Elverta Road	28	60	130	280	604
45	Watt Avenue	Baseline Road	PFE Road	56	120	259	559	1204
46	Watt Avenue	PFE Road	Elverta Road	56	121	261	563	1213
47	Walerga Road	Baseline Road	PFE Road	43	93	200	431	928
48	Elkhorn Boulevard	SR 99	Northborough Drive	39	84	181	389	838
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	31	67	144	311	669
50	Elkhorn Boulevard	Natomas Boulevard		43	93	200	431	928

Appendix D-12

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - No Project (Without Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		----- Distances to Traffic Noise Contours -----				
		From	To	75	70	65	60	55
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	44	95	205	441	949
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	100	215	462	996	2145
53	SR 99	Sankey Road	Riego Road	100	216	465	1002	2158
54	SR 99	Riego Road	Sacramento County Line	124	267	575	1238	2668
55	SR 99	Sacramento County Line	Elverta Road	124	267	575	1238	2668
56	SR 99	Elverta Road	Elkhorn Boulevard	137	296	638	1373	2959
57	SR 99	Elkhorn Boulevard	I-5	148	318	686	1478	3185
58	I-5	SR 99	Del Paso Road	274	590	1272	2740	5903
59	I-5	Del Paso Road	Arena Boulevard	303	652	1405	3027	6521
60	I-5	Arena Boulevard	I-80	290	624	1344	2896	6239
61	Road A	Road J	Riego Road	n/a	n/a	n/a	n/a	n/a
62	Road A	Riego Road	Road B	n/a	n/a	n/a	n/a	n/a
63	Road D	Road C	Riego Road	n/a	n/a	n/a	n/a	n/a
64	Road D	Riego Road	Road B	n/a	n/a	n/a	n/a	n/a
65	Road C	Road O	Sankey Road	n/a	n/a	n/a	n/a	n/a
66	Road C	Sankey Road	Road K	n/a	n/a	n/a	n/a	n/a
67	Road C	Road K	Road D	n/a	n/a	n/a	n/a	n/a
68	Road C	Road D	Road J	n/a	n/a	n/a	n/a	n/a
69	Road C	Road J	Riego Road	n/a	n/a	n/a	n/a	n/a
70	Road C	Riego Road	Road B	n/a	n/a	n/a	n/a	n/a
71	Road K	Pacific Avenue	Road C	n/a	n/a	n/a	n/a	n/a
72	Road Q	Road S	Road A	n/a	n/a	n/a	n/a	n/a

Appendix D-13

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - With Phase 1 (Without Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		----- Distances to Traffic Noise Contours -----				
		From	To	75	70	65	60	55
1	Sankey Road	Powerline Road	SR 99	1	3	6	14	30
2	Sankey Road	SR 99	Pacific Avenue	8	18	39	83	179
3	Sankey Road	Pacific Avenue	Road C	8	16	35	75	162
4	Sankey Road	Road C	Pleasant Grove Road (N)	6	13	27	58	126
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	6	12	26	56	121
6	Riego Road	Powerline Road	Road U	6	14	29	63	135
7	Riego Road	Road U	Road R	6	14	29	63	135
8	Riego Road	Road R	Road S	17	36	78	168	362
9	Riego Road	Road S	SR 99	55	120	258	555	1196
10	Riego Road	SR 99	Road A	62	134	288	620	1335
11	Riego Road	Road A	Pacific Avenue	51	109	235	506	1091
12	Riego Road	Pacific Avenue	Road C	48	103	222	479	1032
13	Riego Road	Road C	Road D	37	81	174	375	808
14	Riego Road	Road D	Pleasant Grove Road (N)	40	86	186	401	863
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	40	87	188	405	872
16	Riego Road	Pleasant Grove Road (S)	Locust Road	38	83	179	385	829
17	Base Line Road	Locust Road	Brewer Road	39	83	180	387	835
18	Base Line Road	Brewer Road	Watt Avenue	54	116	250	539	1160
19	Base Line Road	Watt Avenue	Fiddymment Drive	44	94	203	437	942
20	Elverta Road	Powerline Road	SR 99	11	24	53	113	244
21	Elverta Road	SR 99	East Levee Road	31	67	143	309	665
22	Elverta Road	East Levee Road	Sorento Road	36	78	167	360	776
23	Elverta Road	Sorento Road	16th Street	40	86	186	401	865
24	Elverta Road	16th Street	Watt Avenue	47	101	217	467	1006
25	Powerline Road	Sankey Road		2	5	10	22	48

Appendix D-14

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - With Phase 1 (Without Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		----- Distances to Traffic Noise Contours -----				
		From	To	75	70	65	60	55
26	Powerline Road	Riego Road	Sacramento County Line	4	9	19	41	88
27	Powerline Road	Sacramento County Line	Elverta Road	4	8	18	38	82
28	Powerline Road	Elverta Road	Elkhorn Boulevard	2	5	10	22	48
29	Road H	Road O	Sankey Road	n/a	n/a	n/a	n/a	n/a
30	Pacific Avenue	Sankey Road	Road K	4	8	18	38	82
31	Pacific Avenue	Road K	Road J	4	8	18	38	82
32	Pacific Avenue	Road J	Riego Road	11	24	51	110	237
33	Pacific Avenue	Riego Road	Road B	3	7	15	32	70
34	Natomas Road	Sankey Road	Riego Road	2	5	10	22	48
35	Natomas Road	Riego Road	Sacramento County Line	7	15	33	71	154
36	East Levee Road	Sacramento County Line	Elverta Road	7	15	33	71	154
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	9	20	43	93	199
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	9	20	42	91	196
39	Sorento Road	Sacramento County Line	Elverta Road	8	17	37	79	171
40	Locust Road	Sankey Road	Baseline Road	6	13	27	58	126
41	Brewer Road	Phillip Road	Baseline Road	7	15	33	71	154
42	Palladay Road	Baseline Road	Sacramento County Line	14	30	65	140	301
43	Palladay Road	Sacramento County Line	Elverta Road	22	48	103	222	478
44	16th Street	Kasser Road	Elverta Road	29	61	132	285	615
45	Watt Avenue	Baseline Road	PFE Road	56	121	261	563	1213
46	Watt Avenue	PFE Road	Elverta Road	56	122	262	565	1216
47	Walerga Road	Baseline Road	PFE Road	43	93	201	433	933
48	Elkhorn Boulevard	SR 99	Northborough Drive	40	85	184	396	854
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	30	65	140	301	648
50	Elkhorn Boulevard	Natomas Boulevard		41	89	192	414	893

Appendix D-15

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2005-522 South Sutter County EIR

Description: Year 2035 - With Phase 1 (Without Placer Parkway)

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description		----- Distances to Traffic Noise Contours -----				
		From	To	75	70	65	60	55
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	42	90	194	418	900
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	100	215	463	997	2148
53	SR 99	Sankey Road	Riego Road	101	218	469	1010	2177
54	SR 99	Riego Road	Sacramento County Line	169	364	784	1689	3639
55	SR 99	Sacramento County Line	Elverta Road	169	364	784	1689	3639
56	SR 99	Elverta Road	Elkhorn Boulevard	174	375	809	1743	3755
57	SR 99	Elkhorn Boulevard	I-5	172	370	798	1718	3702
58	I-5	SR 99	Del Paso Road	288	621	1337	2881	6207
59	I-5	Del Paso Road	Arena Boulevard	311	670	1444	3111	6703
60	I-5	Arena Boulevard	I-80	295	636	1371	2954	6364
61	Road A	Road J	Riego Road	13	27	58	126	271
62	Road A	Riego Road	Road B	15	33	71	153	330
63	Road D	Road C	Riego Road	5	12	25	54	117
64	Road D	Riego Road	Road B	n/a	n/a	n/a	n/a	n/a
65	Road C	Road O	Sankey Road	2	4	9	20	43
66	Road C	Sankey Road	Road K	n/a	n/a	n/a	n/a	n/a
67	Road C	Road K	Road D	n/a	n/a	n/a	n/a	n/a
68	Road C	Road D	Road J	7	15	33	70	151
69	Road C	Road J	Riego Road	10	22	48	103	221
70	Road C	Riego Road	Road B	5	10	21	46	99
71	Road K	Pacific Avenue	Road C	n/a	n/a	n/a	n/a	n/a
72	Road Q	Road S	Road A	3	6	13	27	59

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - With Project (Without Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		----- Distances to Traffic Noise Contours -----				
		From	To	75	70	65	60	55
1	Sankey Road	Powerline Road	SR 99	1	3	6	14	30
2	Sankey Road	SR 99	Pacific Avenue	42	90	194	418	900
3	Sankey Road	Pacific Avenue	Road C	18	40	85	184	396
4	Sankey Road	Road C	Pleasant Grove Road (N)	16	35	75	162	350
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	13	28	61	131	281
6	Riego Road	Powerline Road	Road U	16	35	76	164	353
7	Riego Road	Road U	Road R	33	71	154	331	713
8	Riego Road	Road R	Road S	43	92	199	428	922
9	Riego Road	Road S	SR 99	77	167	359	774	1668
10	Riego Road	SR 99	Road A	78	169	363	783	1687
11	Riego Road	Road A	Pacific Avenue	66	143	308	663	1429
12	Riego Road	Pacific Avenue	Road C	61	132	284	612	1319
13	Riego Road	Road C	Road D	49	105	226	488	1051
14	Riego Road	Road D	Pleasant Grove Road (N)	51	110	237	510	1099
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	48	104	225	484	1044
16	Riego Road	Pleasant Grove Road (S)	Locust Road	44	94	203	437	942
17	Base Line Road	Locust Road	Brewer Road	47	101	218	469	1011
18	Base Line Road	Brewer Road	Watt Avenue	59	126	273	587	1265
19	Base Line Road	Watt Avenue	Fiddymment Drive	46	99	214	461	994
20	Elverta Road	Powerline Road	SR 99	21	45	98	211	455
21	Elverta Road	SR 99	East Levee Road	33	72	155	333	718
22	Elverta Road	East Levee Road	Sorento Road	41	88	189	407	876
23	Elverta Road	Sorento Road	16th Street	45	97	208	448	965
24	Elverta Road	16th Street	Watt Avenue	49	106	229	494	1064
25	Powerline Road	Sankey Road		2	5	10	22	48

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - With Project (Without Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		----- Distances to Traffic Noise Contours -----				
		From	To	75	70	65	60	55
26	Powerline Road	Riego Road	Sacramento County Line	15	33	71	153	329
27	Powerline Road	Sacramento County Line	Elverta Road	20	44	95	205	442
28	Powerline Road	Elverta Road	Elkhorn Boulevard	2	5	10	22	48
29	Road H	Road O	Sankey Road	18	39	83	179	387
30	Pacific Avenue	Sankey Road	Road K	22	48	104	224	483
31	Pacific Avenue	Road K	Road J	24	52	112	241	520
32	Pacific Avenue	Road J	Riego Road	29	63	135	292	628
33	Pacific Avenue	Riego Road	Road B	7	16	34	73	158
34	Natomas Road	Sankey Road	Riego Road	2	5	10	22	48
35	Natomas Road	Riego Road	Sacramento County Line	14	30	66	141	304
36	East Levee Road	Sacramento County Line	Elverta Road	14	30	66	141	304
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	10	23	49	105	226
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	15	32	68	147	317
39	Sorento Road	Sacramento County Line	Elverta Road	11	24	51	110	237
40	Locust Road	Sankey Road	Baseline Road	13	28	61	132	285
41	Brewer Road	Phillip Road	Baseline Road	9	18	40	85	183
42	Palladay Road	Baseline Road	Sacramento County Line	15	31	68	146	314
43	Palladay Road	Sacramento County Line	Elverta Road	22	48	104	224	483
44	16th Street	Kasser Road	Elverta Road	29	63	135	292	628
45	Watt Avenue	Baseline Road	PFE Road	57	124	267	575	1238
46	Watt Avenue	PFE Road	Elverta Road	57	123	265	571	1231
47	Walerga Road	Baseline Road	PFE Road	43	93	201	434	935
48	Elkhorn Boulevard	SR 99	Northborough Drive	45	98	210	453	976
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	35	76	163	352	758
50	Elkhorn Boulevard	Natomas Boulevard		46	99	213	458	987

Appendix D-18

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - With Project (Without Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		----- Distances to Traffic Noise Contours -----				
		From	To	75	70	65	60	55
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	45	97	209	451	972
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	108	232	500	1078	2323
53	SR 99	Sankey Road	Riego Road	128	276	594	1280	2758
54	SR 99	Riego Road	Sacramento County Line	200	431	929	2001	4311
55	SR 99	Sacramento County Line	Elverta Road	200	431	929	2001	4311
56	SR 99	Elverta Road	Elkhorn Boulevard	202	435	937	2019	4349
57	SR 99	Elkhorn Boulevard	I-5	194	418	900	1939	4178
58	I-5	SR 99	Del Paso Road	309	665	1433	3088	6653
59	I-5	Del Paso Road	Arena Boulevard	327	705	1519	3272	7050
60	I-5	Arena Boulevard	I-80	308	663	1428	3077	6628
61	Road A	Road J	Riego Road	17	37	79	171	367
62	Road A	Riego Road	Road B	30	64	138	297	641
63	Road D	Road C	Riego Road	17	37	79	171	367
64	Road D	Riego Road	Road B	12	27	58	125	269
65	Road C	Road O	Sankey Road	18	38	82	176	380
66	Road C	Sankey Road	Road K	19	40	87	188	404
67	Road C	Road K	Road D	20	43	93	200	432
68	Road C	Road D	Road J	15	33	71	153	329
69	Road C	Road J	Riego Road	16	35	76	163	351
70	Road C	Riego Road	Road B	11	23	49	106	228
71	Road K	Pacific Avenue	Road C	14	30	64	137	296
72	Road Q	Road S	Road A	11	25	53	114	246

Appendix D-19

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - With Project (With Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		----- Distances to Traffic Noise Contours -----				
		From	To	75	70	65	60	55
1	Sankey Road	Powerline Road	SR 99	1	3	6	14	30
2	Sankey Road	SR 99	Pacific Avenue	49	105	226	486	1047
3	Sankey Road	Pacific Avenue	Road C	49	105	226	486	1047
4	Sankey Road	Road C	Pleasant Grove Road (N)	51	111	238	513	1106
5	Sankey Road	Pleasant Grove Road (N)	Locust Road	5	12	25	54	116
6	Riego Road	Powerline Road	Road U	17	36	77	165	356
7	Riego Road	Road U	Road R	34	73	156	337	726
8	Riego Road	Road R	Road S	44	94	203	436	940
9	Riego Road	Road S	SR 99	78	169	363	783	1687
10	Riego Road	SR 99	Road A	81	174	374	806	1736
11	Riego Road	Road A	Pacific Avenue	68	146	314	675	1455
12	Riego Road	Pacific Avenue	Road C	58	126	271	584	1259
13	Riego Road	Road C	Road D	47	101	218	470	1013
14	Riego Road	Road D	Pleasant Grove Road (N)	49	106	229	493	1062
15	Riego Road	Pleasant Grove Road (N)	Pleasant Grove Road (S)	47	101	217	468	1008
16	Riego Road	Pleasant Grove Road (S)	Locust Road	42	90	194	419	902
17	Base Line Road	Locust Road	Brewer Road	42	90	194	419	902
18	Base Line Road	Brewer Road	Watt Avenue	54	117	253	545	1173
19	Base Line Road	Watt Avenue	Fiddymment Drive	43	94	202	435	937
20	Elverta Road	Powerline Road	SR 99	21	45	98	211	455
21	Elverta Road	SR 99	East Levee Road	30	64	138	298	641
22	Elverta Road	East Levee Road	Sorento Road	37	80	173	373	804
23	Elverta Road	Sorento Road	16th Street	42	91	197	424	913
24	Elverta Road	16th Street	Watt Avenue	48	103	222	478	1030
25	Powerline Road	Sankey Road		3	6	12	26	56

Appendix D-20

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - With Project (With Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		----- Distances to Traffic Noise Contours -----				
		From	To	75	70	65	60	55
26	Powerline Road	Riego Road	Sacramento County Line	15	33	72	154	332
27	Powerline Road	Sacramento County Line	Elverta Road	20	44	95	204	439
28	Powerline Road	Elverta Road	Elkhorn Boulevard	2	5	10	22	48
29	Road H	Road O	Sankey Road	14	30	64	137	296
30	Pacific Avenue	Sankey Road	Road K	28	60	130	280	604
31	Pacific Avenue	Road K	Road J	33	72	155	333	718
32	Pacific Avenue	Road J	Riego Road	37	80	172	370	798
33	Pacific Avenue	Riego Road	Road B	9	18	40	85	183
34	Natomas Road	Sankey Road	Riego Road	2	5	10	22	48
35	Natomas Road	Riego Road	Sacramento County Line	14	30	64	138	298
36	East Levee Road	Sacramento County Line	Elverta Road	14	30	64	138	298
37	Pleasant Grove Road (N)	Sankey Road	Riego Road	9	20	43	93	199
38	Pleasant Grove Road (S)	Riego Road	Sacramento County Line	15	32	68	147	317
39	Sorento Road	Sacramento County Line	Elverta Road	11	24	53	113	244
40	Locust Road	Sankey Road	Baseline Road	7	14	31	67	145
41	Brewer Road	Phillip Road	Baseline Road	8	18	38	81	175
42	Palladay Road	Baseline Road	Sacramento County Line	14	29	63	135	291
43	Palladay Road	Sacramento County Line	Elverta Road	20	44	94	203	436
44	16th Street	Kasser Road	Elverta Road	36	77	165	356	766
45	Watt Avenue	Baseline Road	PFE Road	57	122	263	567	1221
46	Watt Avenue	PFE Road	Elverta Road	56	121	260	561	1208
47	Walerga Road	Baseline Road	PFE Road	43	92	199	429	924
48	Elkhorn Boulevard	SR 99	Northborough Drive	45	97	209	451	971
49	Elkhorn Boulevard	Northborough Drive	Natomas Boulevard	35	75	162	348	750
50	Elkhorn Boulevard	Natomas Boulevard		45	98	211	454	978

Appendix D-21

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2005-522 South Sutter County EIR
 Description: Year 2035 - With Project (With Placer Parkway)
 Ldn/CNEL: Ldn
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description		----- Distances to Traffic Noise Contours -----				
		From	To	75	70	65	60	55
51	Elkhorn Boulevard	Sageview Drive	East Levee Road	45	96	208	447	964
52	SR 99	SR 99/SR 70 Interchange	Sankey Road	103	222	478	1029	2218
53	SR 99	Sankey Road	Riego Road	137	296	638	1375	2962
54	SR 99	Riego Road	Sacramento County Line	202	435	937	2018	4347
55	SR 99	Sacramento County Line	Elverta Road	202	435	937	2018	4347
56	SR 99	Elverta Road	Elkhorn Boulevard	204	439	947	2039	4394
57	SR 99	Elkhorn Boulevard	I-5	195	421	907	1954	4210
58	I-5	SR 99	Del Paso Road	308	664	1430	3081	6638
59	I-5	Del Paso Road	Arena Boulevard	327	704	1516	3266	7037
60	I-5	Arena Boulevard	I-80	307	662	1427	3075	6625
61	Road A	Road J	Riego Road	17	38	81	174	376
62	Road A	Riego Road	Road B	30	64	138	297	641
63	Road D	Road C	Riego Road	18	39	83	179	385
64	Road D	Riego Road	Road B	13	27	58	126	271
65	Road C	Road O	Sankey Road	22	48	104	223	481
66	Road C	Sankey Road	Road K	24	52	113	244	525
67	Road C	Road K	Road D	22	47	102	219	471
68	Road C	Road D	Road J	16	34	74	159	343
69	Road C	Road J	Riego Road	17	36	77	166	358
70	Road C	Riego Road	Road B	11	24	51	111	238
71	Road K	Pacific Avenue	Road C	16	35	76	164	353
72	Road Q	Road S	Road A	12	25	55	118	255