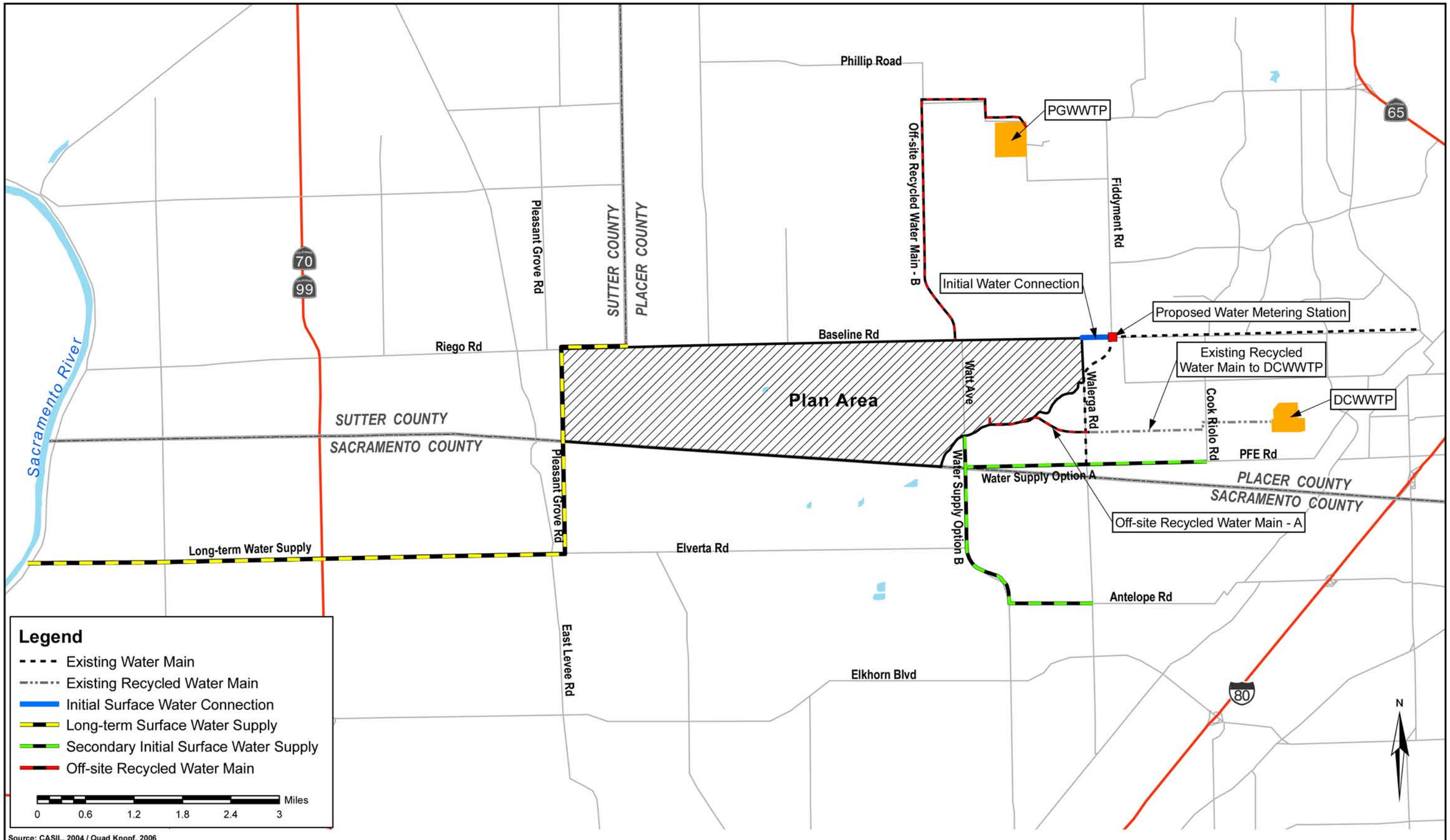


Source: CASIL, 2004 / Quad Knopf, 2006

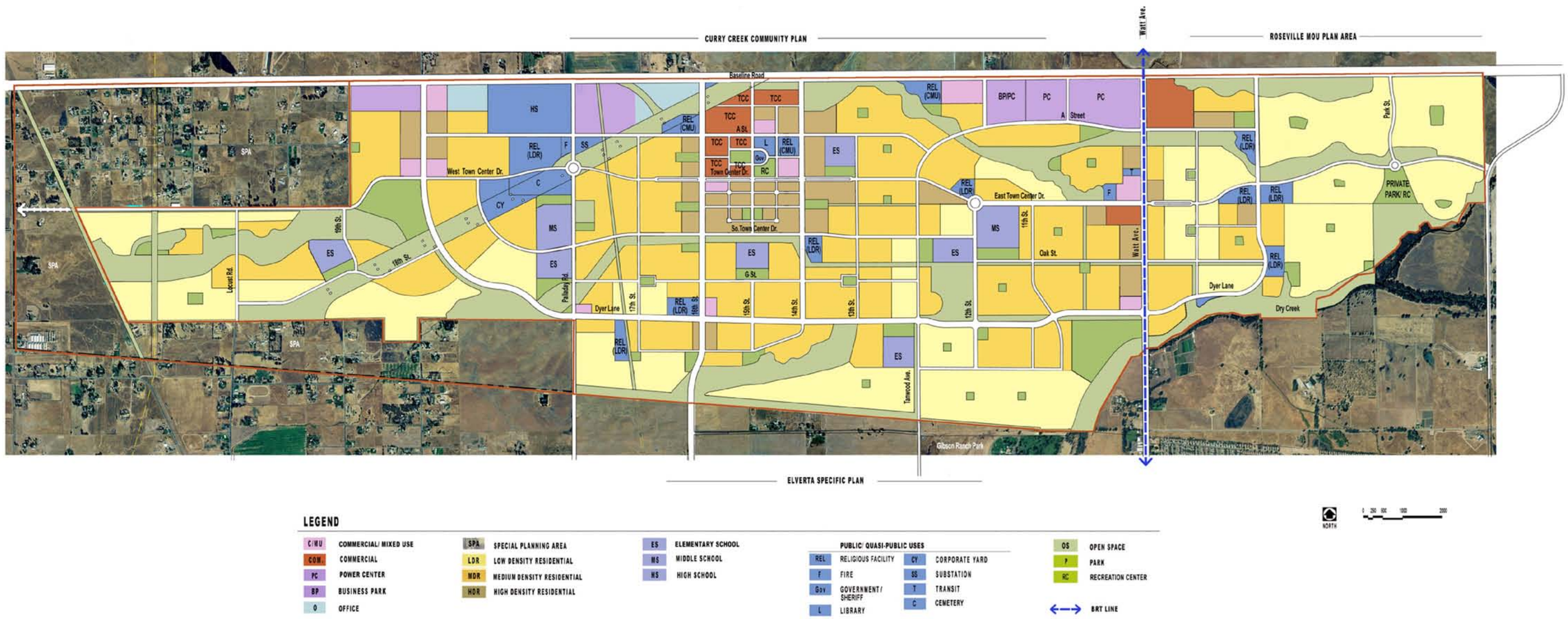
Quad Knopf

PLACER VINEYARDS SPECIFIC PLAN

OFF-SITE INFRASTRUCTURE - WATER CONNECTIONS (REVISED)

Figure 3-5

Job No.: 97218



Source: EDAW, 2006 / Quad Knopf, 2006

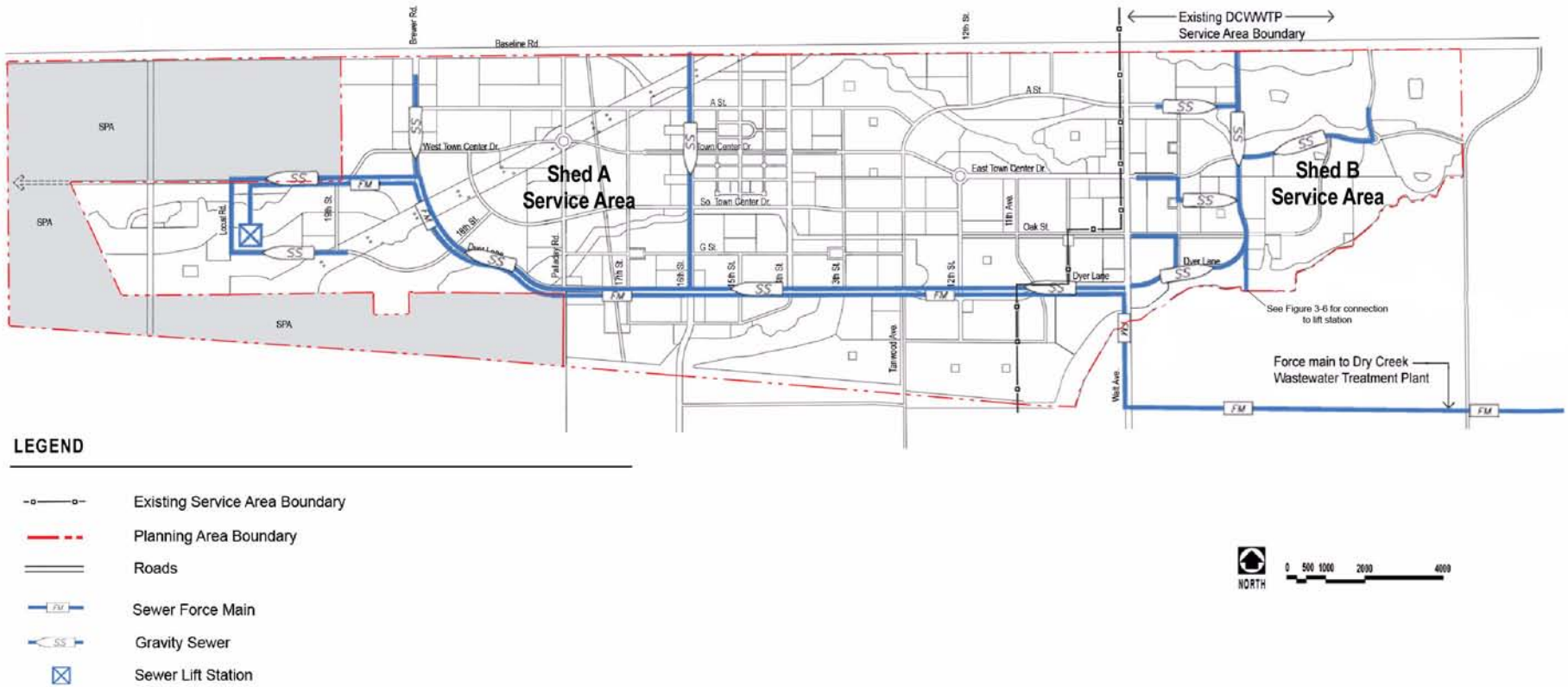
Quad Knopf

PLACER VINEYARDS SPECIFIC PLAN

PROPOSED LAND USE DIAGRAM (REVISED)

Figure 3-12

Job No.: 97218



LEGEND

- Existing Service Area Boundary
- Planning Area Boundary
- Roads
- Sewer Force Main
- Gravity Sewer
- Sewer Lift Station

Source: MacKay and Somps, 2006 / Quad Knopf, 2006

Quad Knopf

PLACER VINEYARDS SPECIFIC PLAN
BACKBONE INFRASTRUCTURE - PREFERRED SEWER DCWWTP OPTION (REVISED)

Figure 3-17A

Job No.: 97218

LEGEND

- Existing Service Area Boundary
- Planning Area Boundary
- Roads
- Sewer Force Main
- Gravity Sewer
- Wastewater Storage Facility

NORTH 0 500 1000 2000 4000

Source: MacKay and Somps, 2006 / Quad Knopf, 2006

Quad Knopf

PLACER VINEYARDS SPECIFIC PLAN
BACKBONE INFRASTRUCTURE - SEWER
SRCSD OPTION (REVISED)

Figure 3-17B

Job No.: 97218

Source: MacKay and Somps, 2006 / Brown and Caldwell, 2006 / Quad Knopf, 2006

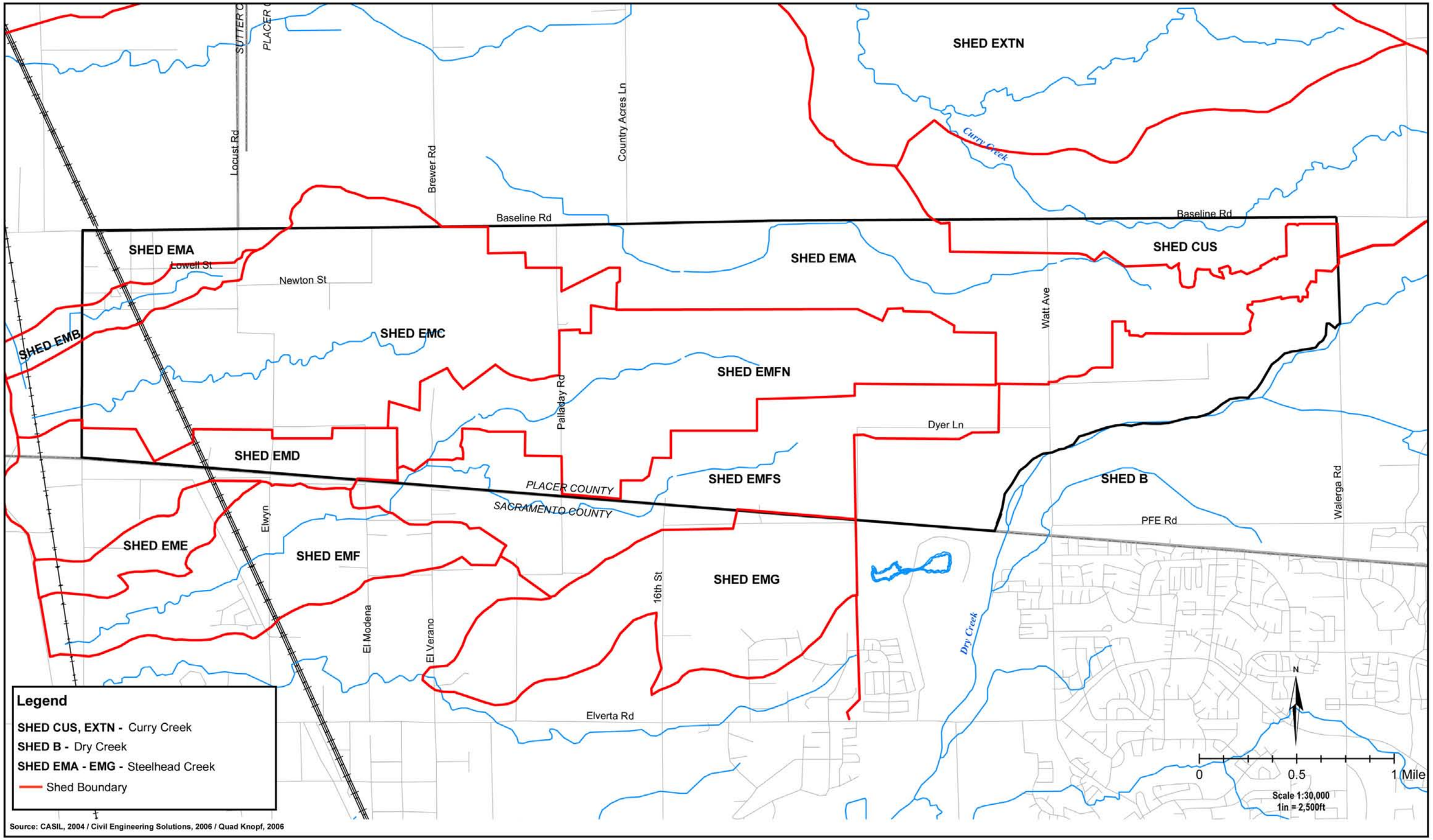
Quad Knopf

PLACER VINEYARDS SPECIFIC PLAN

BACKBONE INFRASTRUCTURE - RECYCLED WATER (REVISED)

Figure 3-18

Job No.: 97218



Source: CASIL, 2004 / Civil Engineering Solutions, 2006 / Quad Knopf, 2006

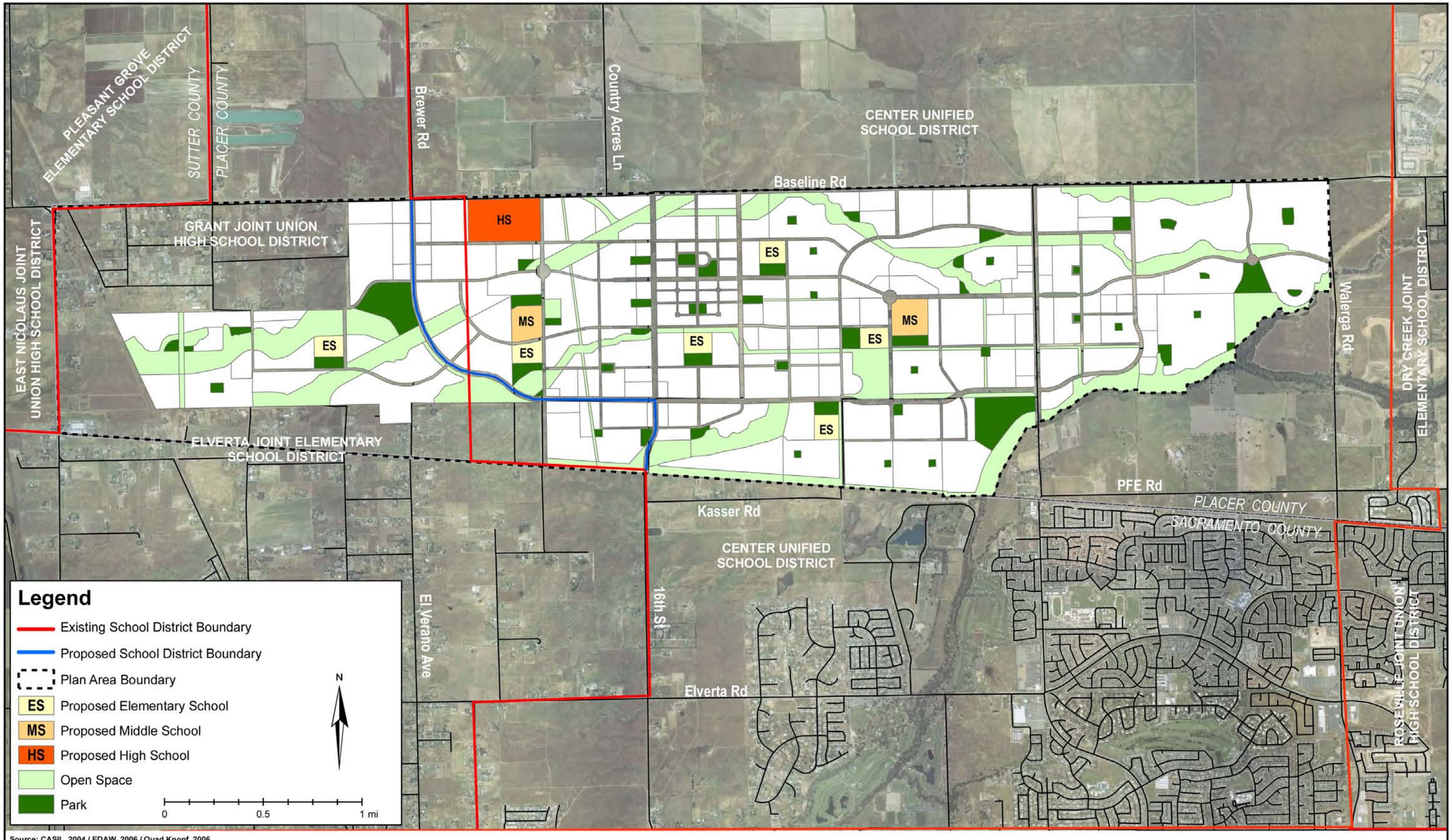
Quad Knopf

PLACER VINEYARDS SPECIFIC PLAN

DRAINAGE SHEDS AND SUB-SHEDS (REVISED)

Figure 4.3-2

Job No.: 97218



Source: CASIL, 2004 / EDAW, 2006 / Quad Knopf, 2006

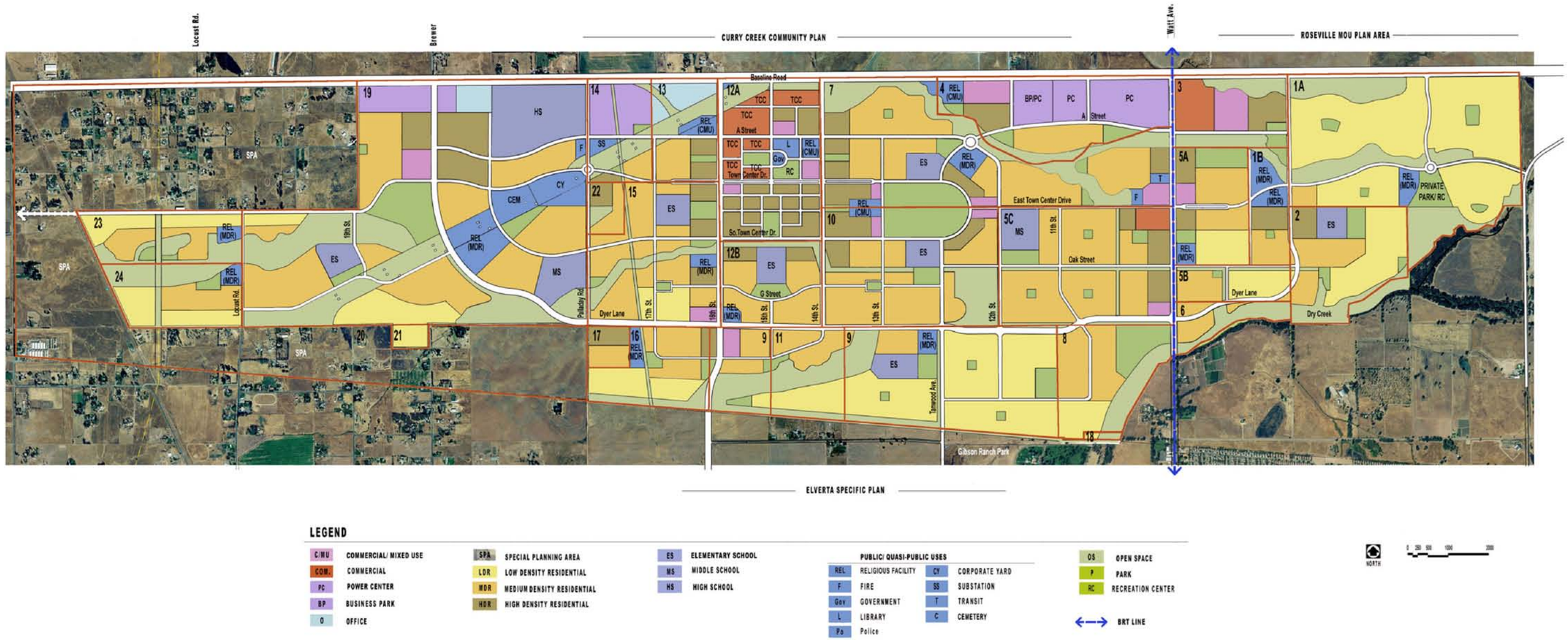
Quad Knopf

PLACER VINEYARDS SPECIFIC PLAN

SCHOOL DISTRICT BOUNDARIES AND PROPOSED SCHOOL LOCATIONS (REVISED)

Figure 4.11-2

Job No.: 97218



Source: EDAW, 2006 / Quad Knopf, 2006

Quad Knopf

PLACER VINEYARDS SPECIFIC PLAN

BLUEPRINT LAND USE PLAN (REVISED)

Figure 6-2

Job No.: 097218

Additions and Revisions to Appendix J

CALINE-4 MODELING

The CALINE-4 model is a fourth-generation line source air quality model that is based on the Gaussian diffusion equation and employs a mixing zone concept to characterize pollutant dispersion over the roadway. Given source strength, meteorology, site geometry and site characteristics, the model predicts pollutant concentrations for receptors located within 150 meters of the roadway. The CALINE-4 model allows roadways to be broken into multiple links that can vary in traffic volume, emission rates, height, width, etc.

A screening-level form of the CALINE-4 program was used to predict concentrations.[1] Normalized concentrations for each roadway size (2 lanes, 4 lanes, etc.) are adjusted for the two-way traffic volume and emission factor. Calculations were made for a receptor at a corner of the intersection, located at the curb. Emission factors were derived from the California Air Resources Board EMFAC7-2002 computer program based on a 2005, 2015 and 2025 Placer County vehicle mix.

The screening-level form of the CALINE-4 program was developed for Bay Area (coastal valley) meteorology. The assumed worst-case assumed wind speed in the model is 1.0 meters per second. To adjust for the lighter winds typically assumed for the Sacramento Valley (interior valley meteorology), the normalized concentrations were doubled based on the assumption of a 0.5 meter per second worst-case wind speed.

The screening form of the CALINE-4 model calculates the local contribution of nearby roads to the total concentration. The other contribution is the background level attributed to more distant traffic. The 1-hour background level in 2005 was taken as 3.5 PPM and the 8-hour background concentration was taken as 1.7 PPM. The 1-hour background level in 2015 and 2025 was taken as 2.6 PPM and the 8-hour background concentration was taken as 1.3 PPM. These backgrounds were estimated using isopleth maps and correction factors developed by the Sacramento Metropolitan Air Quality Management District that extend into southwestern Placer County.[2]

Eight-hour concentrations were obtained from the 1-hour output of the CALINE-4 model using a persistence factor of 0.7.

The output from the spreadsheet model that calculated estimated carbon monoxide concentrations is attached.

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[1] Bay Area Air Quality Management District, BAAQMD CEQA Guidelines, 1996 (Revised 1999).

[2] Sacramento Metropolitan Air Quality Management District, Guide to Air Quality Assessment in Sacramento County, 2004.

The EMFAC2002 program was used to generate carbon monoxide emission factors assuming winter conditions, an ambient temperature of 40 degrees Fahrenheit and 20% relative humidity.

The site is within an attainment area for carbon monoxide and currently has extremely low background concentrations so any indicated violations of the CO standard from existing traffic can be attributed to the conservative nature of the project. More importantly the standard of significance for the project is an indicated exceedance of the ambient standards, which is not predicted. Therefore, enhanced modeling of carbon monoxide concentrations is not warranted.

URBEMIS-2002

Estimates of regional emissions generated by project traffic were made using a program called URBEMIS-2002.[3] URBEMIS-2002 is a program that estimates the emissions that result from various land use development projects. Land use projects can include residential uses such as single-family dwelling units, apartments and condominiums, and nonresidential uses such as shopping centers, office buildings, and industrial parks. URBEMIS-2002 contains default values for much of the information needed to calculate emissions. However, project-specific, user-supplied information can also be used when it is available.

The URBEMIS-2002 program was used to estimate construction emissions. Estimating construction emissions for a long-term project is difficult since the rate of construction is unknown and will change over the buildout of the project. Construction emissions were based on buildout of the initial phase of the project, assumed to occur by 2015. Assumed land uses are described in Table 4.7-22 of the DEIR. For each land use category a total acreage was estimated. It was assumed that all road building and park lands would be included in this initial phase, so the total acreages for these land uses were included in the estimate of initial phase area to be graded. The resulting emissions from buildout of the initial phase were divided by nine to provide an estimate of average emissions over a nine-year period. The URBEMIS-2002 output for construction is attached with the project name “Placer Vineyards Construction”.

Construction emissions were also estimated for the Blueprint Alternative using URBEMIS-2002. It was assumed that the footprint of development for the initial project would be unchanged from that of the proposed project, but the density of development increased. Initial project land uses were increased proportionally to reflect the higher amount of development for the Blueprint Alternative. Grading phase emissions were unchanged for this alternative, but the maximum daily emissions during later phases of construction is higher than for the proposed project. The URBEMIS-200 output for construction is attached with the project name “Blueprint Construction”,

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[3] Jones and Stokes Associates, Software User’s Guide: URBEMIS2002 for Windows with Enhanced Construction Module, Version 8.7, April 2005.

Operational inputs to the URBEMIS-2002 program include trip generation rates, vehicle mix, average trip length by trip type and average speed. Trip generation rates for proposed project and Blueprint Alternative land uses were provided by the project transportation consultant. Default average speeds for the lower Sacramento Valley were used.

Trip lengths for the proposed project and Blueprint Alternative were adjusted so that the total Vehicle Miles Traveled (VMT) calculated by the URBEMIS-2002 program matched VMT as calculated by the Placer County Travel Demand Model. This was accomplished by running the URBEMIS-2002 program with default trip lengths and multiplying all trip lengths by a correction factor that results in the URBEMIS-2002 VMT equaling the Placer County Travel Demand Model.

The URBEMIS-2002 was run for both summer and winter conditions. The summer run was used to estimate ozone precursor emissions, while the winter runs was used to estimate project carbon monoxide and particulate matter emissions.

The analysis was carried out assuming a 2025 vehicle mix. The URBEMIS-2002 output is attached.

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

			1-Hour	8-Hour
Intersection:	Fiddyment/Baseline			
Case:	Existing			
Year:	2005			
Volume 1:	1952	Conc.	11.5	7.3
Volume 2:	1889			
EMF (g/mile)	13.52			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	3.5			
8-Hour Backgr.	1.7			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

			1-Hour	8-Hour
Intersection:	Fiddyment/Baseline			
Case:	Existing plus project			
Year:	2015			
Volume 1:	3494	Conc.	7.0	4.3
Volume 2:	2374			
EMF (g/mile)	4.403			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

Intersection:	Fiddyment/Baseline			
Case:	Existing plus Blueprint			
Year:	2015			
			1-Hour	8-Hour
Volume 1:	3774	Conc.	7.3	4.6
Volume 2:	2414			
EMF (g/mile)	4.403			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

			1-Hour	8-Hour
Intersection:	Fiddyment/Baseline			
Case:	Cumulative NP			
Year:	2025			
Volume 1:	5492	Conc.	5.5	3.3
Volume 2:	4757			
EMF (g/mile)	1.772			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

			1-Hour	8-Hour
Intersection:	Fiddyment/Baseline			
Case:	Cumulative Projject			
Year:	2025			
Volume 1:	5802	Conc.	5.6	3.4
Volume 2:	4834			
EMF (g/mile)	1.772			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

			1-Hour	8-Hour
Intersection:	Fiddyment/Baseline			
Case:	Cumulative Baseline			
Year:	2025			
Volume 1:	5860	Conc.	5.6	3.4
Volume 2:	4768			
EMF (g/mile)	1.772			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

Intersection:	Walerga/PFE			
Case:	Existing			
Year:	2005			
			1-Hour	8-Hour
Volume 1:	2052	Conc.	10.7	6.8
Volume 2:	719			
EMF (g/mile)	13.518			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	3.5			
8-Hour Backgr.	1.7			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

			1-Hour	8-Hour
Intersection:	Walerga/PFE			
Case:	Existing Plus Project			
Year:	2015			
Volume 1:	2174	Conc.	5.1	3.1
Volume 2:	865			
EMF (g/mile)	4.403			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

			1-Hour	8-Hour
Intersection:	Walerga/PFE			
Case:	Existing Plus Blueprint			
Year:	2015			
Volume 1:	2377	Conc.	5.4	3.3
Volume 2:	1053			
EMF (g/mile)	4.403			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

			1-Hour	8-Hour
Intersection:	Walerga/PFE			
Case:	Cumulative No Project			
Year:	2025			
Volume 1:	5000	Conc.	4.9	2.9
Volume 2:	1525			
EMF (g/mile)	1.772			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

			1-Hour	8-Hour
Intersection:	Walerga/PFE			
Case:	Cumulative Project			
Year:	2025			
Volume 1:	5574	Conc.	5.1	3.1
Volume 2:	1475			
EMF (g/mile)	1.772			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

Intersection:	Walerga/PFE			
Case:	Cumulative Blueprint			
Year:	2025			
			1-Hour	8-Hour
Volume 1:	5787	Conc.	5.2	3.1
Volume 2:	1561			
EMF (g/mile)	1.772			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

Intersection:	Watt/Roseville			
Case:	Existing			
Year:	2005			
			1-Hour	8-Hour
Volume 1:	3769	Conc.	17.5	11.5
Volume 2:	2155			
EMF (g/mile)	13.518			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	3.5			
8-Hour Backgr.	1.7			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

Intersection:	Watt/Roseville			
Case:	Existing Plus Project			
Year:	2015			
			1-Hour	8-Hour
Volume 1:	3903	Conc.	7.4	4.6
Volume 2:	2347			
EMF (g/mile)	4.403			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

Intersection:	Watt/Roseville			
Case:	Existing Plus Blueprint			
Year:	2015			
			1-Hour	8-Hour
Volume 1:	4030	Conc.	7.5	4.7
Volume 2:	2353			
EMF (g/mile)	4.403			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

			1-Hour	8-Hour
Intersection:	Watt/Roseville			
Case:	Cumulative No Project			
Year:	2025			
Volume 1:	4752	Conc.	5.0	3.0
Volume 2:	3605			
EMF (g/mile)	1.772			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

			1-Hour	8-Hour
Intersection:	Watt/Roseville			
Case:	Cumulative Project			
Year:	2025			
Volume 1:	5812	Conc.	5.5	3.3
Volume 2:	3679			
EMF (g/mile)	1.772			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

			1-Hour	8-Hour
Intersection:	Watt/Roseville			
Case:	Cumulative Blueprint			
Year:	2025			
Volume 1:	5887	Conc.	5.5	3.3
Volume 2:	3687			
EMF (g/mile)	1.772			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

			1-Hour	8-Hour
Intersection:	Watt/Elkhorn			
Case:	Existing			
Year:	2005			
Volume 1:	3036	Conc.	15.1	9.8
Volume 2:	2022			
EMF (g/mile)	13.518			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	3.5			
8-Hour Backgr.	1.7			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

Intersection:	Watt/Elkhorn			
Case:	Existing plus project			
Year:	2015			
			1-Hour	8-Hour
Volume 1:	3712	Conc.	7.1	4.4
Volume 2:	2086			
EMF (g/mile)	4.403			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

Intersection:	Watt/Elkhorn			
Case:	Existing plus Blueprint			
Year:	2015			
			1-Hour	8-Hour
Volume 1:	3871	Conc.	7.3	4.6
Volume 2:	2187			
EMF (g/mile)	4.403			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

Intersection:	Watt/Elkhorn			
Case:	Cumulative No Project			
Year:	2025			
			1-Hour	8-Hour
Volume 1:	5396	Conc.	5.3	3.2
Volume 2:	3274			
EMF (g/mile)	1.772			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

			1-Hour	8-Hour
Intersection:	Watt/Elkhorn			
Case:	Cumulative Project			
Year:	2025			
Volume 1:	5720	Conc.	5.4	3.3
Volume 2:	3406			
EMF (g/mile)	1.772			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

			1-Hour	8-Hour
Intersection:	Watt/Elkhorn			
Case:	Cumulative Blueprint			
Year:	2025			
Volume 1:	5861	Conc.	5.5	3.3
Volume 2:	3495			
EMF (g/mile)	1.772			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

			1-Hour	8-Hour
Intersection:	Watt/Baseline			
Case:	Existing			
Year:	2005			
Volume 1:	1787	Conc.	9.9	6.2
Volume 2:	710			
EMF (g/mile)	13.518			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	3.5			
8-Hour Backgr.	1.7			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

Intersection:	Watt/Baseline			
Case:	Existing Plus Project			
Year:	2015			
			1-Hour	8-Hour
Volume 1:	3278	Conc.	6.3	3.9
Volume 2:	1014			
EMF (g/mile)	4.403			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

Intersection:	Watt/Baseline			
Case:	Existing Plus Blueprint			
Year:	2015			
			1-Hour	8-Hour
Volume 1:	3502	Conc.	6.6	4.1
Volume 2:	1072			
EMF (g/mile)	4.403			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

			1-Hour	8-Hour
Intersection:	Watt/Baseline			
Case:	Cumulative No Project			
Year:	2025			
Volume 1:	4770	Conc.	5.1	3.1
Volume 2:	4187			
EMF (g/mile)	1.772			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

			1-Hour	8-Hour
Intersection:	Watt/Baseline			
Case:	Cumulative Project			
Year:	2025			
Volume 1:	5226	Conc.	5.3	3.2
Volume 2:	3952			
EMF (g/mile)	1.772			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Slpreadsheet to Calculate CO Using BAAQMd Screening Method

Intersection:	Watt/Baseline			
Case:	Cumulative Baseline			
Year:	2025			
			1-Hour	8-Hour
Volume 1:	5246	Conc.	5.3	3.2
Volume 2:	4003			
EMF (g/mile)	1.772			
Norm. CO Road 1	23.8			
Norm. CO Road 2	6.6			
1-Hour Backgr.	2.6			
8-Hour Backgr.	1.3			

Revisions to Appendix K

Brown Buntin Associates, Inc
FHWA-RD-77-108
Calculation Sheets
October 25, 2006

Project #: 05-066
Description: Existing
Ldn/Cnel: Ldn
Site Type: Soft

Contour Levels (dB) 55 60 65 70

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	Truck % Med	Truck % Hvy	Speed mph	Dist ft	Offset dB
1	Baseline Road	East of County Line	10,100	90		10	3	2	55	75	
2	Baseline Road	East of Locust	10,100	90		10	3	2	55	75	
3	Baseline Road	East of Brewer	10,100	90		10	3	2	55	75	
4	Baseline Road	East of Palladay	10,100	90		10	3	2	55	75	
5	Baseline Road	East of 16th Street	10,400	90		10	3	2	55	75	
6	Baseline Road	East of 12th Ave	10,400	90		10	3	2	55	75	
7	Baseline Road	East of Watt Avenue	12,600	90		10	3	2	55	75	
8	Baseline Road	East of Dyer Street	12,600	90		10	3	2	55	75	
9	Walerga Road	South of Baseline Road	14,900	90		10	3	2	50	75	
10	Walerga Road	North of PFE Road	14,900	90		10	3	2	45	75	
11	Watt Avenue	South of Baseline Road	7,100	90		10	3	2	45	75	
12	Watt Avenue	South of Dyer Street	7,100	90		10	3	2	45	75	
13	PFE Road	East of Watt Avenue	4,700	90		10	3	2	45	75	
14	PFE Road	East of Walerga Road	7,200	90		10	3	2	45	75	
15	Elverta Road	East of Hwy 70/99	5000	90		10	3	2	55	75	
16	Elverta Road	East of Rio Linda Boulevard	8,000	90		10	3	2	55	75	
17	Elverta Road	East of 16th Street	10,400	90		10	3	2	55	75	
18	Elverta Road	West of Watt Avenue	19,000	90		10	3	2	55	75	
19	Watt Avenue	North of Elverta Road	19,400	90		10	3	2	45	75	
20	Watt Avenue	North of Antelope Road	28,900	90		10	3	2	45	75	-5
21	Watt Avenue	North of Elkhorn Road	37,900	90		10	3	2	45	75	-5
22	Watt Avenue	North of Don Julio Road	40,300	90		10	3	2	45	75	
23	Watt Avenue	North of Airbase	46,700	90		10	3	2	45	75	
24	Walerga Road	North of Elverta Road	24,700	90		10	3	2	45	75	-5
25	Walerga Road	North of Antelope Road	40,300	90		10	3	2	45	75	-5
26	Walerga Road	North of Elkhorn Road	31,100	90		10	3	2	45	75	
27	16th Street	North of Elverta Road	400	90		10	3	2	40	75	
28	Watt Avenue	North of Roseville Road	49200	90		10	3	2	45	75	
29	Watt Avenue	North of I-80	62600	90		10	3	2	45	75	
30	Sorento Road	North of Elverta Road	1200	90		10	3	2	45	75	
31	Elwyn Road	North of Elverta Road	1000	90		10	3	2	45	75	
32	Palladay Road	North of Elverta Road	500	90		10	3	2	45	75	
33	Locust Road	South of Baseline	1000	90		10	3	2	45	75	
34	Pleasant Grove	North of County Line	1000	90		10	3	2	45	75	
35	Locust Road	North of County Line	1000	90		10	3	2	45	75	
36	Palladay Road	North of County Line	500	90		10	3	2	45	75	
37	16th Street	South of Elverta	403	90		10	3	2	45	75	
38	Dry Creek	North of Elkhorn	8600	90		10	3	2	45	75	
39	Dry Creek	South of Elkhorn	8971	90		10	3	2	45	75	
40	Elkhorn	Watt to Walerga	25700	90		10	3	2	45	75	-5
41	Elkhorn	Walerga to Roseville	50300	90		10	3	2	45	75	-5
42	Blueoaks Blvd	Fiddyment to Woodcreek	8200	90		10	3	2	45	75	
0		Woodcreek to Foothills	27400	90		10	3	2	45	75	
0		Foothills to Industrial	38700	90		10	3	2	45	75	
1	Pleasant Grove Blvc	Fiddyment to Woodcreek	3700	90		10	3	2	45	75	
0		Woodcreek to Foothills	16300	90		10	3	2	45	75	
0		Foothills to Industrial	36000	90		10	3	2	45	75	
1	Junction Blvd	Woodcreek to Foothills	6100	90		10	3	2	45	75	
0		Foothills to Industrial	14700	90		10	3	2	45	75	
1	Baseline Road	Fiddyment to Junction	15100	90		10	3	2	45	75	
0		Junction to Woodcreek	15100	90		10	3	2	45	75	
0		Woodcreek to Country Club	15600	90		10	3	2	45	75	
0		Country Club to Foothills	19800	90		10	3	2	45	75	
0		Foothills to Industrial	8200	90		10	3	2	45	75	
1	Fiddyment Road	Baseline to Blue Oaks	19600	90		10	3	2	45	75	
2	Woodcreek Oaks	Baseline to Pleasant Grove	11900	90		10	3	2	45	75	
0		Pleasant Grove to Blue Oaks	10400	90		10	3	2	45	75	
1	Foothills Blvd	Baseline to Pleasant Grove	28400	90		10	3	2	45	75	
0		Pleasant Grove to Blue Oaks	12200	90		10	3	2	45	75	
0		North of Blue Oaks	3400	90		10	3	2	45	75	

Brown Buntin Associates, Inc
FHWA-RD-77-108
Calculation Sheets
October 25, 2006

Project #: 05-066
Description: Existing + Proj SP
Ldn/Cnel: Ldn
Site Type: Soft

Contour Levels (dB) 55 60 65 70

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	Truck % Med	Truck % Hvy	Speed mph	Dist ft	Offset dB
1	Baseline Road	East of County Line	14400	90		10	3	2	55	75	
2	Baseline Road	East of Locust Road	14500	90		10	3	2	55	75	
3	Baseline Road	East of Brewer Road	16200	90		10	3	2	55	75	
4	Baseline Road	East of Palladay	21500	90		10	3	2	55	75	
5	Baseline Road	East of 16th Street	22400	90		10	3	2	55	75	
6	Baseline Road	East of 12th Avenue	26800	90		10	3	2	55	75	
7	Baseline Road	East of Watt Avenue	29900	90		10	3	2	55	75	
8	Baseline Road	East of Dyer Lane	31600	90		10	3	2	55	75	
9	Walerga Road	South of Baseline Road	15600	90		10	3	2	50	75	
10	Watt Avenue	South of Baseline Road	11000	90		10	3	2	50	75	
11	Watt Avenue	South of Dyer Lane	38300	90		10	3	2	45	75	

Brown Buntin Associates, Inc
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October 18, 2006

Project #: 05-066
Description: Existing + Proj SP
Ldn/Cnel: Ldn
Site Type: Soft

			Distance to Traffic Noise Contours				
Segment	**Roadway Name**	**Segment Description**	**55.0**	**60.0**	**65.0**	**70.0**	**0.0**
1	Baseline Road	East of County Line	551	256	119	55	0
2	Baseline Road	East of Locust Road	553	257	119	55	0
3	Baseline Road	East of Brewer Road	595	276	128	60	0
4	Baseline Road	East of Palladay	719	334	155	72	0
5	Baseline Road	East of 16th Street	739	343	159	74	0
6	Baseline Road	East of 12th Avenue	833	387	179	83	0
7	Baseline Road	East of Watt Avenue	896	416	193	90	0
8	Baseline Road	East of Dyer Lane	930	431	200	93	0
9	Walerga Road	South of Baseline Roac	501	232	108	50	0
10	Watt Avenue	South of Baseline Roac	397	184	85	40	0
11	Watt Avenue	South of Dyer Lane	777	361	167	78	0

Brown Buntin Associates, Inc
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Calculation Sheets
October 25, 2006

Project #:	05-066	**Contour Levels (dB)**	55	60	65	70	
Description:	Ex NP Offsite +Roseville						
Ldn/Cnel:	Ldn						
Site Type:	Soft						

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	Truck % Med	Truck % Hvy	Speed mph	Dist ft	Offset dB
1	Baseline Road	East of County Line	10,100	90		10	3	2	55	75	0
2	Walerga Road	South of Baseline Road	14,900	90		10	3	2	50	75	
3	Walerga Road	North of PFE Road	14,900	90		10	3	2	45	75	
4	PFE Road	East of Walerga Road	7,200	90		10	3	2	45	75	
5	Watt Avenue	North of Elverta Road	19,400	90		10	3	2	45	75	
6	Watt Avenue	North of Antelope Road	28,900	90		10	3	2	45	75	-5
7	Watt Avenue	North of Elkhorn Road	37,900	90		10	3	2	45	75	-5
8	Walerga Road	North of Elverta Road	24,700	90		10	3	2	45	75	-5
9	Walerga Road	North of Antelope Road	40,300	90		10	3	2	45	75	-5
10	Walerga Road	North of Elkhorn Road	31,100	90		10	3	2	45	75	
11	16th Street	North of Elverta Road	400	90		10	3	2	40	75	
12	Watt Avenue	North of I-80	62600	90		10	3	2	45	75	
13	Sorento Road	North of Elverta Road	1200	90		10	3	2	45	75	
14	Elwyn Road	North of Elverta Road	1000	90		10	3	2	45	75	
15	Locust Road	South of Baseline	1000	90		10	3	2	45	75	
16	Pleasant Grove Blvd	North of County Line	1000	90		10	3	2	45	75	
17	Locust Road	North of County Line	1000	90		10	3	2	45	75	
18	16th Street	South of Elverta	403	90		10	3	2	45	75	
19	Dry Creek	North of Elkhorn	8600	90		10	3	2	45	75	
20	Dry Creek	South of Elkhorn	8971	90		10	3	2	45	75	
21	Elkhorn	Watt to Walerga	25700	90		10	3	2	45	75	-5
22	Elkhorn	Walerga to Roseville	50300	90		10	3	2	45	75	-5
23	Blueoaks Blvd	Fiddyment to Woodcreek	8200	90		10	3	2	45	75	
0		Woodcreek to Foothills	27400	90		10	3	2	45	75	
0		Foothills to Industrial	38700	90		10	3	2	45	75	
1	Pleasant Grove Blvd	Fiddyment to Woodcreek	3700	90		10	3	2	45	75	
0		Woodcreek to Foothills	16300	90		10	3	2	45	75	
0		Foothills to Industrial	36000	90		10	3	2	45	75	
1	Junction Blvd	Woodcreek to Foothills	6100	90		10	3	2	45	75	
0		Foothills to Industrial	14700	90		10	3	2	45	75	
1	Baseline Road	Fiddyment to Junction	15100	90		10	3	2	45	75	
0		Junction to Woodcreek	15100	90		10	3	2	45	75	
0		Woodcreek to Country Cl	15600	90		10	3	2	45	75	
0		Country Club to Foothills	19800	90		10	3	2	45	75	
0		Foothills to Industrial	8200	90		10	3	2	45	75	
1	Fiddyment Road	Baseline to Blue Oaks	19600	90		10	3	2	45	75	
2	Woodcreek Oaks	Baseline to Pleasant Grov	11900	90		10	3	2	45	75	
0		Pleasant Grove to Blue O	10400	90		10	3	2	45	75	
1	Foothills Blvd	Baseline to Pleasant Grov	28400	90		10	3	2	45	75	
0		Pleasant Grove to Blue O	12200	90		10	3	2	45	75	
0		North of Blue Oaks	3400	90		10	3	2	45	75	

Brown Buntin Associates, Inc
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Calculation Sheets

October 25, 2006

Project #: 05-066 **Contour Levels (dB)** 55 60 65 70
Descriptio: E+P Offsite
Ldn/Cnel: Ldn
Site Type: Soft

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	Truck % Med	Truck % Hvy	Speed mph	Dist ft	Offset dB
1	Baseline Road	East of County Line	14,400	90		10	3	2	55	75	0
2	Walerga Road	South of Baseline Road	15,600	90		10	3	2	50	75	
3	Walerga Road	North of PFE Road	15,100	90		10	3	2	45	75	
4	PFE Road	East of Walerga Road	9,100	90		10	3	2	45	75	
5	Watt Avenue	North of Elverta Road	47,000	90		10	3	2	45	75	
6	Watt Avenue	North of Antelope Road	38,200	90		10	3	2	45	75	-5
7	Watt Avenue	North of Elkhorn Road	48,400	90		10	3	2	45	75	-5
8	Walerga Road	North of Elverta Road	21,800	90		10	3	2	45	75	-5
9	Walerga Road	North of Antelope Road	41,100	90		10	3	2	45	75	-5
10	Walerga Road	North of Elkhorn Road	32,900	90		10	3	2	45	75	
11	16th Street	North of Elverta Road	12000	90		10	3	2	40	75	
12	Watt Avenue	North of I-80	61100	90		10	3	2	45	75	
13	Sorento Road	North of Elverta Road	2400	90		10	3	2	45	75	
14	Elwyn Road	North of Elverta Road	5700	90		10	3	2	45	75	
15	Locust Road	South of Baseline	1000	90		10	3	2	45	75	
16	Pleasant Grove Blvd	North of County Line	2100	90		10	3	2	45	75	
17	Locust Road	North of County Line	5700	90		10	3	2	45	75	
18	16th Street	South of Elverta	2600	90		10	3	2	45	75	
19	Dry Creek	North of Elkhorn	9100	90		10	3	2	45	75	
20	Dry Creek	South of Elkhorn	10700	90		10	3	2	45	75	
21	Elkhorn	Watt to Walerga	27100	90		10	3	2	45	75	-5
22	Elkhorn	Walerga to Roseville	52100	90		10	3	2	45	75	-5
23	Blueoaks Blvd	Fiddyment to Woodcreek	8900	90		10	3	2	45	75	
0		Woodcreek to Foothills	28600	90		10	3	2	45	75	
0		Foothills to Industrial	40000	90		10	3	2	45	75	
1	Pleasant Grove Blvc	Fiddyment to Woodcreek	6600	90		10	3	2	45	75	
0		Woodcreek to Foothills	21800	90		10	3	2	45	75	
0		Foothills to Industrial	39900	90		10	3	2	45	75	
1	Junction Blvd	Woodcreek to Foothills	6300	90		10	3	2	45	75	
0		Foothills to Industrial	14900	90		10	3	2	45	75	
1	Baseline Road	Fiddyment to Junction	28800	90		10	3	2	45	75	
0		Junction to Woodcreek	23700	90		10	3	2	45	75	
0		Woodcreek to Country Club	24100	90		10	3	2	45	75	
0		Country Club to Foothills	27100	90		10	3	2	45	75	
0		Foothills to Industrial	10900	90		10	3	2	45	75	
1	Fiddyment Road	Baseline to Blue Oaks	24200	90		10	3	2	45	75	
2	Woodcreek Oaks	Baseline to Pleasant Grove	12100	90		10	3	2	45	75	
0		Pleasant Grove to Blue Oaks	10500	90		10	3	2	45	75	
1	Foothills Blvd	Baseline to Pleasant Grove	28200	90		10	3	2	45	75	
0		Pleasant Grove to Blue Oaks	12100	90		10	3	2	45	75	
0		North of Blue Oaks	3400	90		10	3	2	45	75	

Brown Buntin Associates, Inc
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Calculation Sheets
October 25, 2006

Project #:	05-066	**Contour Levels (dB)**	55	60	65	70	
Description:	Future + Project SP						
Ldn/Cnel:	Ldn						
Site Type:	Soft						

Segment	**Roadway Name**	**Segment Description**	**ADT**	**Day %**	**Eve %**	**Night %**	**Truck % Med**	**Truck % Hvy**	**Speed mph**	**Dist ft**	**Offset dB**
1	Baseline Road	East of County Line	45,000	90		10	3	2	55	75	
2	Baseline Road	East of Locust Road	45,100	90		10	3	2	55	75	
3	Baseline Road	East of Brewer Road	45,500	90		10	3	2	55	75	
4	Baseline Road	East of Palladay	50,200	90		10	3	2	55	75	
5	Baseline Road	East of 16th Street	49,500	90		10	3	2	55	75	
6	Baseline Road	East of 12th Avenue	56,000	90		10	3	2	55	75	
7	Baseline Road	East of Watt Avenue	47,200	90		10	3	2	55	75	
8	Baseline Road	East of Dyer Lane	50,200	90		10	3	2	55	75	
9	Walerga Road	South of Baseline Road	38,600	90		10	3	2	50	75	
10	Watt Avenue	South of Baseline Road	42,000	90		10	3	2	50	75	
11	Watt Avenue	South of Dyer Lane	62,900	90		10	3	2	45	75	
0						0					