APPENDICES

APPENDIX A – AIR QUALITY REPORT

Buena Vista

San Benito County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	103.00	Dwelling Unit	10.00	185,400.00	295

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	50
Climate Zone	4			**Operational Year**	2016
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	445	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2012 CO2 Intensity Factor applied

Land Use - Project site = 10 acres

Demolition -

Grading - Project site = 10 acres

Architectural Coating - MBUAPCD Rule 426

Vehicle Trips - Trip generation per Traffic Impact Analysis

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblGrading	AcresOfGrading	50.00	10.00
tblLandUse	LotAcreage	33.44	10.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	445
tblProjectCharacteristics	OperationalYear	2014	2016
tblVehicleTrips	ST_TR	10.08	9.52
tblVehicleTrips	SU_TR	8.77	9.52
tblVehicleTrips	WD_TR	9.57	9.52

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	7.0929	79.1694	52.1525	0.0637	18.2141	3.8035	21.3036	9.9699	3.4992	12.8122	0.0000	6,653.4034	6,653.4034	1.9470	0.0000	6,694.2899
2016	116.4776	29.7621	22.2125	0.0330	0.3763	1.9878	2.3641	0.1012	1.8672	1.9684	0.0000	3,226.8231	3,226.8231	0.7058	0.0000	3,241.6453
Total	**123.5705**	**108.9315**	**74.3651**	**0.0967**	**18.5904**	**5.7913**	**23.6677**	**10.0711**	**5.3664**	**14.7806**	**0.0000**	**9,880.2265**	**9,880.2265**	**2.6528**	**0.0000**	**9,935.9353**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	7.0867	79.0969	52.1059	0.0636	18.2141	3.8000	21.3008	9.9699	3.4960	12.8096	0.0000	6,647.4526	6,647.4526	1.9452	0.0000	6,688.3019
2016	116.4772	29.7359	22.1956	0.0330	0.3763	1.9860	2.3623	0.1012	1.8655	1.9667	0.0000	3,224.3742	3,224.3742	0.7052	0.0000	3,239.1830
Total	**123.5639**	**108.8328**	**74.3014**	**0.0966**	**18.5904**	**5.7860**	**23.6630**	**10.0711**	**5.3615**	**14.7763**	**0.0000**	**9,871.8268**	**9,871.8268**	**2.6504**	**0.0000**	**9,927.4848**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**5.3087e-003**	**0.0906**	**0.0856**	**0.0827**	**0.0000**	**0.0915**	**0.0196**	**0.0000**	**0.0915**	**0.0291**	**0.0000**	**0.0850**	**0.0850**	**0.0912**	**0.0000**	**0.0850**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	163.4588	2.2394	202.8001	0.0763		27.3282	27.3282		27.3274	27.3274	2,860.4883	1,214.9480	4,075.4362	2.6554	0.2250	4,200.9482
Energy	0.1074	0.9176	0.3905	5.8600e-003		0.0742	0.0742		0.0742	0.0742		1,171.3602	1,171.3602	0.0225	0.0215	1,178.4889
Mobile	15.4634	26.3193	73.1240	0.1185	6.0925	0.3582	6.4507	1.6333	0.3294	1.9627		10,938.0767	10,938.0767	0.3602		10,945.6407
Total	**179.0296**	**29.4763**	**276.3146**	**0.2006**	**6.0925**	**27.7606**	**33.8531**	**1.6333**	**27.7310**	**29.3643**	**2,860.4883**	**13,324.3848**	**16,184.8730**	**3.0380**	**0.2465**	**16,325.0777**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.0080	0.1008	8.6259	4.5000e-004		0.1708	0.1708		0.1695	0.1695	0.0000	1,978.3597	1,978.3597	0.0532	0.0360	1,990.6340
Energy	0.1074	0.9176	0.3905	5.8600e-003		0.0742	0.0742		0.0742	0.0742		1,171.3602	1,171.3602	0.0225	0.0215	1,178.4889
Mobile	15.4634	26.3193	73.1240	0.1185	6.0925	0.3582	6.4507	1.6333	0.3294	1.9627		10,938.0767	10,938.0767	0.3602		10,945.6407
Total	**21.5788**	**27.3377**	**82.1403**	**0.1248**	**6.0925**	**0.6032**	**6.6957**	**1.6333**	**0.5731**	**2.2064**	**0.0000**	**14,087.7965**	**14,087.7965**	**0.4359**	**0.0575**	**14,114.7635**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**87.9468**	**7.2554**	**70.2729**	**37.8078**	**0.0000**	**97.8272**	**80.2213**	**0.0000**	**97.9334**	**92.4861**	**100.0000**	**-5.7294**	**12.9570**	**85.6530**	**76.6868**	**13.5394**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/28/2015	5	20	
2	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
3	Grading	Grading	2/12/2015	3/11/2015	5	20	
4	Building Construction	Building Construction	3/12/2015	1/27/2016	5	230	
5	Paving	Paving	1/28/2016	2/24/2016	5	20	
6	Architectural Coating	Architectural Coating	2/25/2016	3/23/2016	5	20	

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	30.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	37.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2015

Unmitigated Construction On-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3285	0.0000	0.3285	0.0497	0.0000	0.0497			0.0000			0.0000
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886
Total	**4.5083**	**48.3629**	**36.0738**	**0.0399**	**0.3285**	**2.4508**	**2.7793**	**0.0497**	**2.2858**	**2.3355**		**4,127.1934**	**4,127.1934**	**1.1188**		**4,150.6886**

3.2 Demolition - 2015

Unmitigated Construction Off-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1496	0.4556	0.3686	1.1300e-003	0.0262	7.7900e-003	0.0340	7.1700e-003	7.1700e-003	0.0143		114.8169	114.8169	9.2000e-004		114.8363
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2383	0.0921	0.9844	1.4600e-003	0.1232	1.0000e-003	0.1242	0.0327	9.1000e-004	0.0336		125.3701	125.3701	7.9200e-003		125.5365
Total	**0.3880**	**0.5476**	**1.3530**	**2.5900e-003**	**0.1494**	**8.7900e-003**	**0.1582**	**0.0399**	**8.0800e-003**	**0.0479**		**240.1870**	**240.1870**	**8.8400e-003**		**240.3727**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3285	0.0000	0.3285	0.0497	0.0000	0.0497			0.0000			0.0000
Off-Road	4.5041	48.3186	36.0407	0.0399		2.4486	2.4486		2.2837	2.2837	0.0000	4,123.4069	4,123.4069	1.1178		4,146.8806
Total	**4.5041**	**48.3186**	**36.0407**	**0.0399**	**0.3285**	**2.4486**	**2.7771**	**0.0497**	**2.2837**	**2.3334**	**0.0000**	**4,123.4069**	**4,123.4069**	**1.1178**		**4,146.8806**

3.2 Demolition - 2015

Mitigated Construction Off-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1496	0.4556	0.3686	1.1300e-003	0.4030	7.7900e-003	0.4108	0.0997	7.1700e-003	0.1068		114.8169	114.8169	9.2000e-004		114.8363
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2383	0.0921	0.9844	1.4600e-003	0.1232	1.0000e-003	0.1242	0.0327	9.1000e-004	0.0336		125.3701	125.3701	7.9200e-003		125.5365
Total	**0.3880**	**0.5476**	**1.3530**	**2.5900e-003**	**0.5262**	**8.7900e-003**	**0.5350**	**0.1323**	**8.0800e-003**	**0.1404**		**240.1870**	**240.1870**	**8.8400e-003**		**240.3727**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

Acres of Grading: 10

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.7444	4,111.7444	1.2275		4,137.5225
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**18.0663**	**3.0883**	**21.1545**	**9.9307**	**2.8412**	**12.7719**		**4,111.7444**	**4,111.7444**	**1.2275**		**4,137.5225**

3.3 Site Preparation - 2015

Unmitigated Construction Off-Site

Acres of Grading: 10

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2860	0.1105	1.1813	1.7500e-003	0.1479	1.2000e-003	0.1491	0.0392	1.0900e-003	0.0403		150.4441	150.4441	9.5100e-003		150.6437
Total	**0.2860**	**0.1105**	**1.1813**	**1.7500e-003**	**0.1479**	**1.2000e-003**	**0.1491**	**0.0392**	**1.0900e-003**	**0.0403**		**150.4441**	**150.4441**	**9.5100e-003**		**150.6437**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2561	56.8375	42.5927	0.0391		3.0855	3.0855		2.8386	2.8386	0.0000	4,107.9721	4,107.9721	1.2264		4,133.7265
Total	**5.2561**	**56.8375**	**42.5927**	**0.0391**	**18.0663**	**3.0855**	**21.1517**	**9.9307**	**2.8386**	**12.7693**	**0.0000**	**4,107.9721**	**4,107.9721**	**1.2264**		**4,133.7265**

3.3 Site Preparation - 2015

Mitigated Construction Off-Site

Acres of Grading: 10

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2860	0.1105	1.1813	1.7500e-003	0.1479	1.2000e-003	0.1491	0.0392	1.0900e-003	0.0403		150.4441	150.4441	9.5100e-003		150.6437
Total	**0.2860**	**0.1105**	**1.1813**	**1.7500e-003**	**0.1479**	**1.2000e-003**	**0.1491**	**0.0392**	**1.0900e-003**	**0.0403**		**150.4441**	**150.4441**	**9.5100e-003**		**150.6437**

3.4 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	6.7751	79.0467	50.8400	0.0618		3.8022	3.8022		3.4980	3.4980		6,486.2433	6,486.2433	1.9364		6,526.9080
Total	**6.7751**	**79.0467**	**50.8400**	**0.0618**	**6.5523**	**3.8022**	**10.3545**	**3.3675**	**3.4980**	**6.8655**		**6,486.2433**	**6,486.2433**	**1.9364**		**6,526.9080**

3.4 Grading - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3178	0.1227	1.3126	1.9500e-003	0.1643	1.3300e-003	0.1656	0.0436	1.2100e-003	0.0448		167.1601	167.1601	0.0106		167.3819
Total	**0.3178**	**0.1227**	**1.3126**	**1.9500e-003**	**0.1643**	**1.3300e-003**	**0.1656**	**0.0436**	**1.2100e-003**	**0.0448**		**167.1601**	**167.1601**	**0.0106**		**167.3819**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	6.7689	78.9742	50.7933	0.0617		3.7987	3.7987		3.4948	3.4948	0.0000	6,480.2925	6,480.2925	1.9346		6,520.9199
Total	**6.7689**	**78.9742**	**50.7933**	**0.0617**	**6.5523**	**3.7987**	**10.3510**	**3.3675**	**3.4948**	**6.8623**	**0.0000**	**6,480.2925**	**6,480.2925**	**1.9346**		**6,520.9199**

3.4 Grading - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3178	0.1227	1.3126	1.9500e-003	0.1643	1.3300e-003	0.1656	0.0436	1.2100e-003	0.0448		167.1601	167.1601	0.0106		167.3819
Total	**0.3178**	**0.1227**	**1.3126**	**1.9500e-003**	**0.1643**	**1.3300e-003**	**0.1656**	**0.0436**	**1.2100e-003**	**0.0448**		**167.1601**	**167.1601**	**0.0106**		**167.3819**

3.5 Building Construction - 2015

Unmitigated Construction On-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**		**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

3.5 Building Construction - 2015

Unmitigated Construction Off-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3608	1.2100	1.6446	2.6000e-003	0.0723	0.0216	0.0939	0.0205	0.0199	0.0404		262.1349	262.1349	2.3900e-003		262.1852
Worker	0.5879	0.2271	2.4282	3.6100e-003	0.3040	2.4700e-003	0.3064	0.0806	2.2400e-003	0.0829		309.2462	309.2462	0.0195		309.6566
Total	**0.9487**	**1.4370**	**4.0728**	**6.2100e-003**	**0.3762**	**0.0241**	**0.4003**	**0.1011**	**0.0221**	**0.1233**		**571.3811**	**571.3811**	**0.0219**		**571.8418**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6557	30.0024	18.7274	0.0268		2.1148	2.1148		1.9886	1.9886	0.0000	2,687.1096	2,687.1096	0.6742		2,701.2678
Total	**3.6557**	**30.0024**	**18.7274**	**0.0268**		**2.1148**	**2.1148**		**1.9886**	**1.9886**	**0.0000**	**2,687.1096**	**2,687.1096**	**0.6742**		**2,701.2678**

3.5 Building Construction - 2015

Mitigated Construction Off-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3608	1.2100	1.6446	2.6000e-003	0.0723	0.0216	0.0939	0.0205	0.0199	0.0404		262.1349	262.1349	2.3900e-003		262.1852
Worker	0.5879	0.2271	2.4282	3.6100e-003	0.3040	2.4700e-003	0.3064	0.0806	2.2400e-003	0.0829		309.2462	309.2462	0.0195		309.6566
Total	**0.9487**	**1.4370**	**4.0728**	**6.2100e-003**	**0.3762**	**0.0241**	**0.4003**	**0.1011**	**0.0221**	**0.1233**		**571.3811**	**571.3811**	**0.0219**		**571.8418**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

3.5 Building Construction - 2016

Unmitigated Construction Off-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3116	1.0551	1.5644	2.5900e-003	0.0723	0.0181	0.0904	0.0205	0.0167	0.0372		259.2675	259.2675	2.1500e-003		259.3126
Worker	0.5269	0.2006	2.1415	3.6000e-003	0.3040	2.3000e-003	0.3063	0.0806	2.1000e-003	0.0827		298.2692	298.2692	0.0176		298.6379
Total	**0.8384**	**1.2557**	**3.7059**	**6.1900e-003**	**0.3763**	**0.0204**	**0.3967**	**0.1012**	**0.0188**	**0.1199**		**557.5368**	**557.5368**	**0.0197**		**557.9506**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4031	28.4802	18.4897	0.0268		1.9656	1.9656		1.8468	1.8468	0.0000	2,666.8375	2,666.8375	0.6614		2,680.7273
Total	**3.4031**	**28.4802**	**18.4897**	**0.0268**		**1.9656**	**1.9656**		**1.8468**	**1.8468**	**0.0000**	**2,666.8375**	**2,666.8375**	**0.6614**		**2,680.7273**

3.5 Building Construction - 2016

Mitigated Construction Off-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3116	1.0551	1.5644	2.5900e-003	0.0723	0.0181	0.0904	0.0205	0.0167	0.0372		259.2675	259.2675	2.1500e-003		259.3126
Worker	0.5269	0.2006	2.1415	3.6000e-003	0.3040	2.3000e-003	0.3063	0.0806	2.1000e-003	0.0827		298.2692	298.2692	0.0176		298.6379
Total	**0.8384**	**1.2557**	**3.7059**	**6.1900e-003**	**0.3763**	**0.0204**	**0.3967**	**0.1012**	**0.0188**	**0.1199**		**557.5368**	**557.5368**	**0.0197**		**557.9506**

3.6 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0898**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**		**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

3.6 Paving - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2136	0.0813	0.8682	1.4600e-003	0.1232	9.3000e-004	0.1242	0.0327	8.5000e-004	0.0335		120.9200	120.9200	7.1200e-003		121.0694
Total	**0.2136**	**0.0813**	**0.8682**	**1.4600e-003**	**0.1232**	**9.3000e-004**	**0.1242**	**0.0327**	**8.5000e-004**	**0.0335**		**120.9200**	**120.9200**	**7.1200e-003**		**121.0694**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0879	22.3654	14.8040	0.0223		1.2598	1.2598		1.1590	1.1590	0.0000	2,314.2516	2,314.2516	0.6981		2,328.9109
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0879**	**22.3654**	**14.8040**	**0.0223**		**1.2598**	**1.2598**		**1.1590**	**1.1590**	**0.0000**	**2,314.2516**	**2,314.2516**	**0.6981**		**2,328.9109**

3.6 Paving - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2136	0.0813	0.8682	1.4600e-003	0.1232	9.3000e-004	0.1242	0.0327	8.5000e-004	0.0335		120.9200	120.9200	7.1200e-003		121.0694
Total	**0.2136**	**0.0813**	**0.8682**	**1.4600e-003**	**0.1232**	**9.3000e-004**	**0.1242**	**0.0327**	**8.5000e-004**	**0.0335**		**120.9200**	**120.9200**	**7.1200e-003**		**121.0694**

3.7 Architectural Coating - 2016

Unmitigated Construction On-Site

Residential Indoor: 375,435; Residential Outdoor: 125,145; Non-Residential Indoor: 0; Non-Residential Outdoor: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	116.0094					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**116.3779**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

3.7 Architectural Coating - 2016

Unmitigated Construction Off-Site

Residential Indoor: 375,435; Residential Outdoor: 125,145; Non-Residential Indoor: 0; Non-Residential Outdoor: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0997	0.0380	0.4052	6.8000e-004	0.0575	4.4000e-004	0.0579	0.0153	4.0000e-004	0.0157		56.4293	56.4293	3.3200e-003		56.4991
Total	**0.0997**	**0.0380**	**0.4052**	**6.8000e-004**	**0.0575**	**4.4000e-004**	**0.0579**	**0.0153**	**4.0000e-004**	**0.0157**		**56.4293**	**56.4293**	**3.3200e-003**		**56.4991**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	116.0094					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3681	2.3701	1.8822	2.9700e-003		0.1964	0.1964		0.1964	0.1964	0.0000	281.1898	281.1898	0.0332		281.8860
Total	**116.3776**	**2.3701**	**1.8822**	**2.9700e-003**		**0.1964**	**0.1964**		**0.1964**	**0.1964**	**0.0000**	**281.1898**	**281.1898**	**0.0332**		**281.8860**

3.7 Architectural Coating - 2016

Mitigated Construction Off-Site

Residential Indoor: 375,435; Residential Outdoor: 125,145; Non-Residential Indoor: 0; Non-Residential Outdoor: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0997	0.0380	0.4052	6.8000e-004	0.0575	4.4000e-004	0.0579	0.0153	4.0000e-004	0.0157		56.4293	56.4293	3.3200e-003		56.4991
Total	**0.0997**	**0.0380**	**0.4052**	**6.8000e-004**	**0.0575**	**4.4000e-004**	**0.0579**	**0.0153**	**4.0000e-004**	**0.0157**		**56.4293**	**56.4293**	**3.3200e-003**		**56.4991**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	15.4634	26.3193	73.1240	0.1185	6.0925	0.3582	6.4507	1.6333	0.3294	1.9627		10,938.0767	10,938.0767	0.3602		10,945.6407
Unmitigated	15.4634	26.3193	73.1240	0.1185	6.0925	0.3582	6.4507	1.6333	0.3294	1.9627		10,938.0767	10,938.0767	0.3602		10,945.6407

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	980.56	980.56	980.56	2,824,884	2,824,884
Total	980.56	980.56	980.56	2,824,884	2,824,884

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	7.30	7.50	44.00	18.80	37.20	86	11	3

4.4 Fleet Mix

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.354914	0.035817	0.187410	0.165315	0.060117	0.008874	0.012483	0.160358	0.001394	0.001236	0.008635	0.000543	0.002905

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1074	0.9176	0.3905	5.8600e-003		0.0742	0.0742		0.0742	0.0742		1,171.3602	1,171.3602	0.0225	0.0215	1,178.4889
NaturalGas Unmitigated	0.1074	0.9176	0.3905	5.8600e-003		0.0742	0.0742		0.0742	0.0742		1,171.3602	1,171.3602	0.0225	0.0215	1,178.4889

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	9956.56	0.1074	0.9176	0.3905	5.8600e-003		0.0742	0.0742		0.0742	0.0742		1,171.3602	1,171.3602	0.0225	0.0215	1,178.4889
Total		**0.1074**	**0.9176**	**0.3905**	**5.8600e-003**		**0.0742**	**0.0742**		**0.0742**	**0.0742**		**1,171.3602**	**1,171.3602**	**0.0225**	**0.0215**	**1,178.4889**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	9.95656	0.1074	0.9176	0.3905	5.8600e-003		0.0742	0.0742		0.0742	0.0742		1,171.3602	1,171.3602	0.0225	0.0215	1,178.4889
Total		**0.1074**	**0.9176**	**0.3905**	**5.8600e-003**		**0.0742**	**0.0742**		**0.0742**	**0.0742**		**1,171.3602**	**1,171.3602**	**0.0225**	**0.0215**	**1,178.4889**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.0080	0.1008	8.6259	4.5000e-004		0.1708	0.1708		0.1695	0.1695	0.0000	1,978.3597	1,978.3597	0.0532	0.0360	1,990.6340
Unmitigated	163.4588	2.2394	202.8001	0.0763		27.3282	27.3282		27.3274	27.3274	2,860.4883	1,214.9480	4,075.4362	2.6554	0.2250	4,200.9482

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5892					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.9676					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	157.6307	2.1386	194.1841	0.0759		27.2817	27.2817		27.2809	27.2809	2,860.4883	1,199.6471	4,060.1353	2.6398	0.2250	4,185.3199
Landscaping	0.2713	0.1008	8.6160	4.5000e-004		0.0465	0.0465		0.0465	0.0465		15.3009	15.3009	0.0156		15.6283
Total	**163.4588**	**2.2394**	**202.8001**	**0.0763**		**27.3282**	**27.3282**		**27.3274**	**27.3274**	**2,860.4883**	**1,214.9480**	**4,075.4362**	**2.6554**	**0.2250**	**4,200.9482**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Consumer Products	3.9676					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1800	1.0000e-005	9.8200e-003	0.0000		0.1243	0.1243		0.1230	0.1230	0.0000	1,963.0588	1,963.0588	0.0376	0.0360	1,975.0057
Landscaping	0.2713	0.1008	8.6160	4.5000e-004		0.0465	0.0465		0.0465	0.0465		15.3009	15.3009	0.0156		15.6283
Architectural Coating	1.5892					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**6.0080**	**0.1008**	**8.6259**	**4.5000e-004**		**0.1708**	**0.1708**		**0.1695**	**0.1695**	**0.0000**	**1,978.3597**	**1,978.3597**	**0.0532**	**0.0360**	**1,990.6340**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Buena Vista

San Benito County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	103.00	Dwelling Unit	10.00	185,400.00	295

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	50
Climate Zone	4			**Operational Year**	2016
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	445	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2012 CO2 Intensity Factor applied

Land Use - Project site = 10 acres

Demolition -

Grading - Project site = 10 acres

Architectural Coating - MBUAPCD Rule 426

Vehicle Trips - Trip generation per Traffic Impact Analysis

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblGrading	AcresOfGrading	50.00	10.00
tblLandUse	LotAcreage	33.44	10.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	445
tblProjectCharacteristics	OperationalYear	2014	2016
tblVehicleTrips	ST_TR	10.08	9.52
tblVehicleTrips	SU_TR	8.77	9.52
tblVehicleTrips	WD_TR	9.57	9.52

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	7.1613	79.2024	52.2323	0.0636	18.2141	3.8035	21.3036	9.9699	3.4992	12.8122	0.0000	6,641.3150	6,641.3150	1.9470	0.0000	6,682.2016
2016	116.4991	29.8684	24.1623	0.0328	0.3763	1.9881	2.3643	0.1012	1.8675	1.9686	0.0000	3,203.2158	3,203.2158	0.7058	0.0000	3,218.0380
Total	**123.6604**	**109.0708**	**76.3947**	**0.0963**	**18.5904**	**5.7916**	**23.6680**	**10.0711**	**5.3667**	**14.7808**	**0.0000**	**9,844.5308**	**9,844.5308**	**2.6528**	**0.0000**	**9,900.2396**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	7.1551	79.1299	52.1857	0.0635	18.2141	3.8000	21.3008	9.9699	3.4960	12.8096	0.0000	6,635.3643	6,635.3643	1.9452	0.0000	6,676.2135
2016	116.4988	29.8422	24.1454	0.0327	0.3763	1.9863	2.3625	0.1012	1.8658	1.9669	0.0000	3,200.7668	3,200.7668	0.7052	0.0000	3,215.5756
Total	**123.6539**	**108.9722**	**76.3311**	**0.0962**	**18.5904**	**5.7863**	**23.6633**	**10.0711**	**5.3618**	**14.7765**	**0.0000**	**9,836.1311**	**9,836.1311**	**2.6504**	**0.0000**	**9,891.7891**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**5.2968e-003**	**0.0905**	**0.0833**	**0.0831**	**0.0000**	**0.0913**	**0.0196**	**0.0000**	**0.0915**	**0.0291**	**0.0000**	**0.0853**	**0.0853**	**0.0912**	**0.0000**	**0.0854**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	163.4588	2.2394	202.8001	0.0763		27.3282	27.3282		27.3274	27.3274	2,860.4883	1,214.9480	4,075.4362	2.6554	0.2250	4,200.9482
Energy	0.1074	0.9176	0.3905	5.8600e-003		0.0742	0.0742		0.0742	0.0742		1,171.3602	1,171.3602	0.0225	0.0215	1,178.4889
Mobile	19.0879	28.5707	122.6646	0.1148	6.0925	0.3609	6.4534	1.6333	0.3319	1.9652		10,555.1802	10,555.1802	0.3614		10,562.7699
Total	**182.6540**	**31.7277**	**325.8551**	**0.1970**	**6.0925**	**27.7633**	**33.8558**	**1.6333**	**27.7335**	**29.3668**	**2,860.4883**	**12,941.4883**	**15,801.9766**	**3.0392**	**0.2465**	**15,942.2070**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.0080	0.1008	8.6259	4.5000e-004		0.1708	0.1708		0.1695	0.1695	0.0000	1,978.3597	1,978.3597	0.0532	0.0360	1,990.6340
Energy	0.1074	0.9176	0.3905	5.8600e-003		0.0742	0.0742		0.0742	0.0742		1,171.3602	1,171.3602	0.0225	0.0215	1,178.4889
Mobile	19.0879	28.5707	122.6646	0.1148	6.0925	0.3609	6.4534	1.6333	0.3319	1.9652		10,555.1802	10,555.1802	0.3614		10,562.7699
Total	**25.2033**	**29.5891**	**131.6809**	**0.1211**	**6.0925**	**0.6059**	**6.6984**	**1.6333**	**0.5756**	**2.2089**	**0.0000**	**13,704.9001**	**13,704.9001**	**0.4371**	**0.0575**	**13,731.8928**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**86.2016**	**6.7405**	**59.5891**	**38.5064**	**0.0000**	**97.8175**	**80.2148**	**0.0000**	**97.9245**	**92.4782**	**100.0000**	**-5.8989**	**13.2710**	**85.6183**	**76.6868**	**13.8645**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/28/2015	5	20	
2	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
3	Grading	Grading	2/12/2015	3/11/2015	5	20	
4	Building Construction	Building Construction	3/12/2015	1/27/2016	5	230	
5	Paving	Paving	1/28/2016	2/24/2016	5	20	
6	Architectural Coating	Architectural Coating	2/25/2016	3/23/2016	5	20	

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	30.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	37.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2015

Unmitigated Construction On-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3285	0.0000	0.3285	0.0497	0.0000	0.0497			0.0000			0.0000
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886
Total	**4.5083**	**48.3629**	**36.0738**	**0.0399**	**0.3285**	**2.4508**	**2.7793**	**0.0497**	**2.2858**	**2.3355**		**4,127.1934**	**4,127.1934**	**1.1188**		**4,150.6886**

3.2 Demolition - 2015

Unmitigated Construction Off-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1772	0.4796	0.8108	1.1300e-003	0.0262	7.8200e-003	0.0340	7.1700e-003	7.2000e-003	0.0144		114.5496	114.5496	9.4000e-004		114.5692
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2897	0.1168	1.0443	1.3600e-003	0.1232	1.0000e-003	0.1242	0.0327	9.1000e-004	0.0336		116.3038	116.3038	7.9200e-003		116.4702
Total	**0.4668**	**0.5964**	**1.8551**	**2.4900e-003**	**0.1494**	**8.8200e-003**	**0.1582**	**0.0399**	**8.1100e-003**	**0.0480**		**230.8534**	**230.8534**	**8.8600e-003**		**231.0394**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3285	0.0000	0.3285	0.0497	0.0000	0.0497			0.0000			0.0000
Off-Road	4.5041	48.3186	36.0407	0.0399		2.4486	2.4486		2.2837	2.2837	0.0000	4,123.4069	4,123.4069	1.1178		4,146.8806
Total	**4.5041**	**48.3186**	**36.0407**	**0.0399**	**0.3285**	**2.4486**	**2.7771**	**0.0497**	**2.2837**	**2.3334**	**0.0000**	**4,123.4069**	**4,123.4069**	**1.1178**		**4,146.8806**

3.2 Demolition - 2015

Mitigated Construction Off-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1772	0.4796	0.8108	1.1300e-003	0.4030	7.8200e-003	0.4108	0.0997	7.2000e-003	0.1069		114.5496	114.5496	9.4000e-004		114.5692
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2897	0.1168	1.0443	1.3600e-003	0.1232	1.0000e-003	0.1242	0.0327	9.1000e-004	0.0336		116.3038	116.3038	7.9200e-003		116.4702
Total	**0.4668**	**0.5964**	**1.8551**	**2.4900e-003**	**0.5262**	**8.8200e-003**	**0.5350**	**0.1323**	**8.1100e-003**	**0.1405**		**230.8534**	**230.8534**	**8.8600e-003**		**231.0394**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

Acres of Grading: 10

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.7444	4,111.7444	1.2275		4,137.5225
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**18.0663**	**3.0883**	**21.1545**	**9.9307**	**2.8412**	**12.7719**		**4,111.7444**	**4,111.7444**	**1.2275**		**4,137.5225**

3.3 Site Preparation - 2015

Unmitigated Construction Off-Site

Acres of Grading: 10

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3476	0.1402	1.2531	1.6300e-003	0.1479	1.2000e-003	0.1491	0.0392	1.0900e-003	0.0403		139.5646	139.5646	9.5100e-003		139.7642
Total	**0.3476**	**0.1402**	**1.2531**	**1.6300e-003**	**0.1479**	**1.2000e-003**	**0.1491**	**0.0392**	**1.0900e-003**	**0.0403**		**139.5646**	**139.5646**	**9.5100e-003**		**139.7642**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2561	56.8375	42.5927	0.0391		3.0855	3.0855		2.8386	2.8386	0.0000	4,107.9721	4,107.9721	1.2264		4,133.7265
Total	**5.2561**	**56.8375**	**42.5927**	**0.0391**	**18.0663**	**3.0855**	**21.1517**	**9.9307**	**2.8386**	**12.7693**	**0.0000**	**4,107.9721**	**4,107.9721**	**1.2264**		**4,133.7265**

3.3 Site Preparation - 2015

Mitigated Construction Off-Site

Acres of Grading: 10

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3476	0.1402	1.2531	1.6300e-003	0.1479	1.2000e-003	0.1491	0.0392	1.0900e-003	0.0403		139.5646	139.5646	9.5100e-003		139.7642
Total	**0.3476**	**0.1402**	**1.2531**	**1.6300e-003**	**0.1479**	**1.2000e-003**	**0.1491**	**0.0392**	**1.0900e-003**	**0.0403**		**139.5646**	**139.5646**	**9.5100e-003**		**139.7642**

3.4 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	6.7751	79.0467	50.8400	0.0618		3.8022	3.8022		3.4980	3.4980		6,486.2433	6,486.2433	1.9364		6,526.9080
Total	**6.7751**	**79.0467**	**50.8400**	**0.0618**	**6.5523**	**3.8022**	**10.3545**	**3.3675**	**3.4980**	**6.8655**		**6,486.2433**	**6,486.2433**	**1.9364**		**6,526.9080**

3.4 Grading - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3862	0.1558	1.3924	1.8100e-003	0.1643	1.3300e-003	0.1656	0.0436	1.2100e-003	0.0448		155.0717	155.0717	0.0106		155.2936
Total	**0.3862**	**0.1558**	**1.3924**	**1.8100e-003**	**0.1643**	**1.3300e-003**	**0.1656**	**0.0436**	**1.2100e-003**	**0.0448**		**155.0717**	**155.0717**	**0.0106**		**155.2936**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	6.7689	78.9742	50.7933	0.0617		3.7987	3.7987		3.4948	3.4948	0.0000	6,480.2925	6,480.2925	1.9346		6,520.9199
Total	**6.7689**	**78.9742**	**50.7933**	**0.0617**	**6.5523**	**3.7987**	**10.3510**	**3.3675**	**3.4948**	**6.8623**	**0.0000**	**6,480.2925**	**6,480.2925**	**1.9346**		**6,520.9199**

3.4 Grading - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3862	0.1558	1.3924	1.8100e-003	0.1643	1.3300e-003	0.1656	0.0436	1.2100e-003	0.0448		155.0717	155.0717	0.0106		155.2936
Total	**0.3862**	**0.1558**	**1.3924**	**1.8100e-003**	**0.1643**	**1.3300e-003**	**0.1656**	**0.0436**	**1.2100e-003**	**0.0448**		**155.0717**	**155.0717**	**0.0106**		**155.2936**

3.5 Building Construction - 2015

Unmitigated Construction On-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**		**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

3.5 Building Construction - 2015

Unmitigated Construction Off-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4539	1.2702	3.5595	2.6100e-003	0.0723	0.0220	0.0943	0.0205	0.0202	0.0407		260.1228	260.1228	2.4500e-003		260.1743
Worker	0.7145	0.2882	2.5759	3.3500e-003	0.3040	2.4700e-003	0.3064	0.0806	2.2400e-003	0.0829		286.8827	286.8827	0.0195		287.2931
Total	**1.1684**	**1.5583**	**6.1354**	**5.9600e-003**	**0.3762**	**0.0244**	**0.4007**	**0.1011**	**0.0225**	**0.1236**		**547.0055**	**547.0055**	**0.0220**		**547.4674**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6557	30.0024	18.7274	0.0268		2.1148	2.1148		1.9886	1.9886	0.0000	2,687.1096	2,687.1096	0.6742		2,701.2678
Total	**3.6557**	**30.0024**	**18.7274**	**0.0268**		**2.1148**	**2.1148**		**1.9886**	**1.9886**	**0.0000**	**2,687.1096**	**2,687.1096**	**0.6742**		**2,701.2678**

3.5 Building Construction - 2015

Mitigated Construction Off-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4539	1.2702	3.5595	2.6100e-003	0.0723	0.0220	0.0943	0.0205	0.0202	0.0407		260.1228	260.1228	2.4500e-003		260.1743
Worker	0.7145	0.2882	2.5759	3.3500e-003	0.3040	2.4700e-003	0.3064	0.0806	2.2400e-003	0.0829		286.8827	286.8827	0.0195		287.2931
Total	**1.1684**	**1.5583**	**6.1354**	**5.9600e-003**	**0.3762**	**0.0244**	**0.4007**	**0.1011**	**0.0225**	**0.1236**		**547.0055**	**547.0055**	**0.0220**		**547.4674**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

3.5 Building Construction - 2016

Unmitigated Construction Off-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3949	1.1074	3.4019	2.6000e-003	0.0723	0.0184	0.0907	0.0205	0.0169	0.0374		257.2675	257.2675	2.2000e-003		257.3138
Worker	0.6409	0.2547	2.2538	3.3400e-003	0.3040	2.3000e-003	0.3063	0.0806	2.1000e-003	0.0827		276.6619	276.6619	0.0176		277.0306
Total	**1.0357**	**1.3621**	**5.6557**	**5.9400e-003**	**0.3763**	**0.0207**	**0.3970**	**0.1012**	**0.0190**	**0.1202**		**533.9294**	**533.9294**	**0.0198**		**534.3444**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4031	28.4802	18.4897	0.0268		1.9656	1.9656		1.8468	1.8468	0.0000	2,666.8375	2,666.8375	0.6614		2,680.7273
Total	**3.4031**	**28.4802**	**18.4897**	**0.0268**		**1.9656**	**1.9656**		**1.8468**	**1.8468**	**0.0000**	**2,666.8375**	**2,666.8375**	**0.6614**		**2,680.7273**

3.5 Building Construction - 2016

Mitigated Construction Off-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3949	1.1074	3.4019	2.6000e-003	0.0723	0.0184	0.0907	0.0205	0.0169	0.0374		257.2675	257.2675	2.2000e-003		257.3138
Worker	0.6409	0.2547	2.2538	3.3400e-003	0.3040	2.3000e-003	0.3063	0.0806	2.1000e-003	0.0827		276.6619	276.6619	0.0176		277.0306
Total	**1.0357**	**1.3621**	**5.6557**	**5.9400e-003**	**0.3763**	**0.0207**	**0.3970**	**0.1012**	**0.0190**	**0.1202**		**533.9294**	**533.9294**	**0.0198**		**534.3444**

3.6 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0898**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**		**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

3.6 Paving - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2598	0.1033	0.9137	1.3600e-003	0.1232	9.3000e-004	0.1242	0.0327	8.5000e-004	0.0335		112.1602	112.1602	7.1200e-003		112.3097
Total	**0.2598**	**0.1033**	**0.9137**	**1.3600e-003**	**0.1232**	**9.3000e-004**	**0.1242**	**0.0327**	**8.5000e-004**	**0.0335**		**112.1602**	**112.1602**	**7.1200e-003**		**112.3097**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0879	22.3654	14.8040	0.0223		1.2598	1.2598		1.1590	1.1590	0.0000	2,314.2516	2,314.2516	0.6981		2,328.9109
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0879**	**22.3654**	**14.8040**	**0.0223**		**1.2598**	**1.2598**		**1.1590**	**1.1590**	**0.0000**	**2,314.2516**	**2,314.2516**	**0.6981**		**2,328.9109**

3.6 Paving - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2598	0.1033	0.9137	1.3600e-003	0.1232	9.3000e-004	0.1242	0.0327	8.5000e-004	0.0335		112.1602	112.1602	7.1200e-003		112.3097
Total	**0.2598**	**0.1033**	**0.9137**	**1.3600e-003**	**0.1232**	**9.3000e-004**	**0.1242**	**0.0327**	**8.5000e-004**	**0.0335**		**112.1602**	**112.1602**	**7.1200e-003**		**112.3097**

3.7 Architectural Coating - 2016

Unmitigated Construction On-Site

Residential Indoor: 375,435; Residential Outdoor: 125,145; Non-Residential Indoor: 0; Non-Residential Outdoor: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	116.0094					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**116.3779**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

3.7 Architectural Coating - 2016

Unmitigated Construction Off-Site

Residential Indoor: 375,435; Residential Outdoor: 125,145; Non-Residential Indoor: 0; Non-Residential Outdoor: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1212	0.0482	0.4264	6.3000e-004	0.0575	4.4000e-004	0.0579	0.0153	4.0000e-004	0.0157		52.3414	52.3414	3.3200e-003		52.4112
Total	**0.1212**	**0.0482**	**0.4264**	**6.3000e-004**	**0.0575**	**4.4000e-004**	**0.0579**	**0.0153**	**4.0000e-004**	**0.0157**		**52.3414**	**52.3414**	**3.3200e-003**		**52.4112**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	116.0094					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3681	2.3701	1.8822	2.9700e-003		0.1964	0.1964		0.1964	0.1964	0.0000	281.1898	281.1898	0.0332		281.8860
Total	**116.3776**	**2.3701**	**1.8822**	**2.9700e-003**		**0.1964**	**0.1964**		**0.1964**	**0.1964**	**0.0000**	**281.1898**	**281.1898**	**0.0332**		**281.8860**

3.7 Architectural Coating - 2016

Mitigated Construction Off-Site

Residential Indoor: 375,435; Residential Outdoor: 125,145; Non-Residential Indoor: 0; Non-Residential Outdoor: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1212	0.0482	0.4264	6.3000e-004	0.0575	4.4000e-004	0.0579	0.0153	4.0000e-004	0.0157		52.3414	52.3414	3.3200e-003		52.4112
Total	**0.1212**	**0.0482**	**0.4264**	**6.3000e-004**	**0.0575**	**4.4000e-004**	**0.0579**	**0.0153**	**4.0000e-004**	**0.0157**		**52.3414**	**52.3414**	**3.3200e-003**		**52.4112**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	19.0879	28.5707	122.6646	0.1148	6.0925	0.3609	6.4534	1.6333	0.3319	1.9652		10,555.1802	10,555.1802	0.3614		10,562.7699
Unmitigated	19.0879	28.5707	122.6646	0.1148	6.0925	0.3609	6.4534	1.6333	0.3319	1.9652		10,555.1802	10,555.1802	0.3614		10,562.7699

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	980.56	980.56	980.56	2,824,884	2,824,884
Total	980.56	980.56	980.56	2,824,884	2,824,884

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	7.30	7.50	44.00	18.80	37.20	86	11	3

4.4 Fleet Mix

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.354914	0.035817	0.187410	0.165315	0.060117	0.008874	0.012483	0.160358	0.001394	0.001236	0.008635	0.000543	0.002905

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1074	0.9176	0.3905	5.8600e-003		0.0742	0.0742		0.0742	0.0742		1,171.3602	1,171.3602	0.0225	0.0215	1,178.4889
NaturalGas Unmitigated	0.1074	0.9176	0.3905	5.8600e-003		0.0742	0.0742		0.0742	0.0742		1,171.3602	1,171.3602	0.0225	0.0215	1,178.4889

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	9956.56	0.1074	0.9176	0.3905	5.8600e-003		0.0742	0.0742		0.0742	0.0742		1,171.3602	1,171.3602	0.0225	0.0215	1,178.4889
Total		**0.1074**	**0.9176**	**0.3905**	**5.8600e-003**		**0.0742**	**0.0742**		**0.0742**	**0.0742**		**1,171.3602**	**1,171.3602**	**0.0225**	**0.0215**	**1,178.4889**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	9.95656	0.1074	0.9176	0.3905	5.8600e-003		0.0742	0.0742		0.0742	0.0742		1,171.3602	1,171.3602	0.0225	0.0215	1,178.4889
Total		**0.1074**	**0.9176**	**0.3905**	**5.8600e-003**		**0.0742**	**0.0742**		**0.0742**	**0.0742**		**1,171.3602**	**1,171.3602**	**0.0225**	**0.0215**	**1,178.4889**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.0080	0.1008	8.6259	4.5000e-004		0.1708	0.1708		0.1695	0.1695	0.0000	1,978.3597	1,978.3597	0.0532	0.0360	1,990.6340
Unmitigated	163.4588	2.2394	202.8001	0.0763		27.3282	27.3282		27.3274	27.3274	2,860.4883	1,214.9480	4,075.4362	2.6554	0.2250	4,200.9482

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5892					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.9676					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	157.6307	2.1386	194.1841	0.0759		27.2817	27.2817		27.2809	27.2809	2,860.4883	1,199.6471	4,060.1353	2.6398	0.2250	4,185.3199
Landscaping	0.2713	0.1008	8.6160	4.5000e-004		0.0465	0.0465		0.0465	0.0465		15.3009	15.3009	0.0156		15.6283
Total	**163.4588**	**2.2394**	**202.8001**	**0.0763**		**27.3282**	**27.3282**		**27.3274**	**27.3274**	**2,860.4883**	**1,214.9480**	**4,075.4362**	**2.6554**	**0.2250**	**4,200.9482**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Consumer Products	3.9676					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1800	1.0000e-005	9.8200e-003	0.0000		0.1243	0.1243		0.1230	0.1230	0.0000	1,963.0588	1,963.0588	0.0376	0.0360	1,975.0057
Landscaping	0.2713	0.1008	8.6160	4.5000e-004		0.0465	0.0465		0.0465	0.0465		15.3009	15.3009	0.0156		15.6283
Architectural Coating	1.5892					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**6.0080**	**0.1008**	**8.6259**	**4.5000e-004**		**0.1708**	**0.1708**		**0.1695**	**0.1695**	**0.0000**	**1,978.3597**	**1,978.3597**	**0.0532**	**0.0360**	**1,990.6340**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

APPENDIX B – BIOLOGICAL SURVEY

4.	**BIOLOGICAL RESOURCES.** Would the project:				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☒	☐	☐
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☐	☐	☒
c)	Have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal wetlands, etc.), through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f)	Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

EXISTING SETTING

A PMC biologist conducted an evaluation of the project to characterize the biological baseline on and adjacent to the proposed project. The evaluation involved a reconnaissance-level survey as well as a query of available data and literature from local, state, federal, and non-governmental agencies.

Database queries were performed on the following websites:

- US Fish and Wildlife Service's (USFWS) Information, Planning, and Conservation (IPaC) System (USFWS 2014a).
- USFWS's Critical Habitat Portal (USFWS 2014b).

- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB; CDFW 2014).

- California Native Plant Society's (CNPS) Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2014).

A search of the USFWS's Critical Habitat Portal and IPaC System was performed for the project area to identify federally protected species and their habitats that may be affected by the proposed project. In addition, a query of the CNDDB database was conducted to identify known processed and unprocessed occurrences for special-status species within the *Hollister, California* USGS 7.5 minute quadrangle (quad) and all adjacent quads (*Paicines, Natividad, Tres Pinos, San Juan Bautista, Three Sisters, San Felipe, Chittenden,* and *Mt. Harlan*). Lastly, the CNPS database was queried to identify special-status plant species with the potential to occur within the aforementioned quads. Raw data from the database queries can be found in **Appendix X**.

A PMC biologist conducted a reconnaissance-level survey on August 21, 2014. The objective of the visit was to characterize the existing biological resources conditions on the site and evaluate potential presence of special-status species, wetlands, or other sensitive resources. The project site has relatively flat topography and is approximately 277 feet above mean sea level. At the time of the field survey, the project site consisted of undeveloped agricultural land that had been freshly tilled and was therefore, mostly barren. Remnant vegetation consisted of weedy annual species. The site was previously used as an orchard but was cleared of trees in 2009. Agricultural fields occur to the north of the site. The site is in a developing residential area of Hollister and is surrounded on all sides by a mix of agricultural and residential uses.

Special-Status Species

Candidate, sensitive, or special-status species are commonly characterized as species that are at potential risk, or actual risk to their persistence in a given area, or across their range. These species have been identified and assigned a status ranking by governmental agencies such as CDFW, USFWS, and non-governmental organizations such as CNPS. The degree to which a species is at risk of extinction is the determining factor in the assignment of a status ranking. Some common threats to a species or population's persistence include habitat loss, degradation, and fragmentation, as well as human conflict and intrusion. For the purposes of this biological review, special-status species are defined by the following codes:

1. Listed, proposed, or candidates for listing under the federal Endangered Species Act (50 Code of Federal Regulations [CFR] 17.11 – listed; 61 Federal Register [FR] 7591, February 28, 1996 candidates).

2. Listed or proposed for listing under the California Endangered Species Act (Fish and Game Code [FGC] 1992 §2050 et seq.; 14 California Code of Regulations [CCR] §670.1 et seq.).

3. Designated as Species of Special Concern by the CDFW.

4. Designated as Fully Protected by the CDFW (FGC §3511, §4700, §5050, §5515).

5. Species that meet the definition of rare or endangered under the California Environmental Quality Act (CEQA) (14 CCR §15380) including CNPS List Rank 1B and 2.

The query of the USFWS, CNPS and CNDDB databases revealed several special-status species with the potential to occur in the project vicinity. **Appendix X** summarizes each species identified in the database results, a description of the habitat requirements for each species, and conclusions regarding the potential for each species to be impacted by the proposed project. **Figure X-1** depicts the locations of special-status species recorded within a one-mile radius of the project site.

Locally occurring wildlife presence on the site is expected to be negligible. Due to the active agricultural use, the urban development in the vicinity of the site, the lack of natural habitats in proximity to the site, and the disturbed nature of the site, most of the species discussed in **Appendix X** would not be expected to utilize the site regularly or for extended periods. Common rodents, reptiles, and other animals commonly found in agricultural fields could, however, be found on the site.

Discussion of Impacts

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?

Based on the results of database queries and historic records, as well as known regional occurrences, burrowing owl is the only special-status species with the potential to occur on the project site. Given the heavily disturbed nature of the site, no special-status plants or other special-status animals were determined to have the potential to occur in the project site.

A site visit was conducted on August 21, 2014, by a PMC biologist. No sign of special-status species were encountered. Though no sign of burrowing owls or suitable burrows was found during the site visit, project implementation may result in the loss of this species through destruction of active nesting sites and/or incidental burial of adults, young, and eggs, should they become established onsite. Potential nest abandonment and mortality to burrowing owl individuals would be considered a **potentially significant** impact to protected species; however, implementation of mitigation measure **MM 4-1** will reduce those impacts to a **less than significant** level.

Mitigation Measures

MM 4-1 **Burrowing Owl.** If clearing and construction activities will occur during the nesting period for burrowing owls (February 1 – August 31), then a qualified biologist shall conduct focused surveys for burrowing owls on and adjacent to the project site. Surveys shall be conducted in accordance with the CDFW's *Staff Report on Burrowing Owl Mitigation (Staff Report)*, published March 7, 2012. Surveys shall be done within 14 days prior to construction activities and will be repeated if project activities are suspended or delayed for more than 15 days, during nesting season.

If no burrowing owls are detected, then no further mitigation is required. If active burrowing owls are detected, the Project proponent will implement the avoidance, minimization, and mitigation methodologies outlined in CDFW's *Staff Report* prior to initiating project related activities that may impact burrowing owls.

Timing/Implementation: *Prior to construction activities*

Enforcement/Monitoring: *City of Hollister Planning Department*

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFW or USFWS?

Sensitive habitats include (a) areas of special concern to resource agencies; (b) areas protected under CEQA; (c) areas designated as sensitive natural communities by the CDFW; (d) areas outlined in Section 1600 of the FGC; (e) areas regulated under Section 404 of the federal Clean Water Act; and (f) areas protected under local regulations and policies. No riparian habitat or other sensitive natural communities occur within the project boundaries; therefore**, no impact** will occur as a result of the project and no mitigation is proposed.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No wetlands or other jurisdictional waters were observed to occur on the site during the reconnaissance-level survey in August 2014. There are no tributaries or water bodies on the property that meet the technical criteria for a wetland. The closest water body, San Benito Creek, is over 0.5 mile from the project site. Aerials of the site, dating to the 1990s (Google Earth 2014), were also reviewed; no evidence of wetland signatures was apparent. Based on the reconnaissance-level survey and historical aerials reviewed, jurisdictional waters appear to be absent from the site. Therefore, the project will have **no impact** to federally protected wetlands.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Wildlife corridors refer to established migration routes commonly used by resident and migratory species for passage from one geographic location to another. Movement corridors may provide favorable locations for wildlife to travel between different habitat areas, such as foraging sites, breeding sites, cover areas, and preferred summer and winter range locations. They may also function as dispersal corridors allowing animals to move between various locations within their range. The project site consisted of croplands and exists currently as a ruderal habitat that is isolated by development and agriculture from other areas of natural habitats occurring on all sides. The conversion of approximately 10 acres of such habitat would not significantly impact wildlife. Therefore, impacts to wildlife habitat and movement would be considered **less than significant**.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The proposed project would not conflict with the Hollister Municipal Code, nor would it conflict with any of the policies described in the Hollister General Plan. The project would not conflict with any local policies or ordinances protecting biological resources. As such, **no conflict** is anticipated, and no mitigation measures are proposed.

f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?

There are currently no other adopted or proposed Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans that affect the proposed project. Therefore, **no conflict** will occur, and no mitigation is proposed.

REFERENCES

California Department of Fish and Wildlife (CDFW). 2012. *Staff Report on Burrowing Owl*. CDFW; Sacramento, CA.

———. 2014. California Natural Diversity Database QuickView Tool in BIOS 5. Sacramento: CDFW Biogeographic Data Branch. Accessed August 7. https://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp.

California Native Plant Society (CNPS). 2014. *Inventory of Rare and Endangered Plants (online edition, v8-01a)*. California Native Plant Society; Sacramento, CA. Accessed on August 7. Available online at: http://www.rareplants.cnps.org/

Google Earth. 2014.

US Fish and Wildlife Service (USFWS). 2014a. Information, Planning, and Conservation (IPaC) System. USFWS; Sacramento, CA. Accessed on August 7. Available online at: http://ecos.fws.gov/ipac/.

———. 2014b. *Critical Habitat Portal* (online edition). Accessed on August 7. Available online at: http://criticalhabitat.fws.gov/crithab.

Species Summary for Buena Vista

Scientific Name	Common Name	Federal Status	State Status	CNPS Rare Plant Rank	Habitat	Habitat Present/ Absent
Plants						
Arctostaphylos gabilanensis	Gabilan Mountains manzanita	-	-	1B.2	Granitic substrate in chaparral and cismontane woodland. Elev: 984-2,297 ft. (300-700 m.) Blooms: Jan (CNPS 2014).	A
Arctostaphylos pajaroensis	Pajaro manzanita	-	-	1B.1	Sandy soils in chaparral. Elev: 98-2,493 ft. (30-760 m.) Blooms: Dec-Mar (CNPS 2014).	A
Arenaria paludicola	marsh sandwort	FE	SE	1B.1	Sandy openings in freshwater or brackish marshes and swamps. Elev: 10-558 ft. (3-170 m.) Blooms: May-Aug (CNPS 2014).	A
Astragalus tener var. tener	alkali milk-vetch	-	-	1B.2	Alkaline soils. Playas, valley & foothill grassland (adobe clay), and vernal pools. Elev: 3-197 ft. (1-60 m.) Blooms: Mar-June (CNPS 2014).	A
Atriplex joaquiniana	San Joaquin spearscale	-	-	1B.2	Alkaline chenopod scrub, meadows, seeps, playas, and valley and foothill grasslands. Elev: 3-2,739 ft. (1-835 m.) Blooms: Apr-Oct (CNPS 2014).	A
California macrophylla	round-leaved filaree	-	-	1B.1	Clay soils in cismontane woodland and valley and foothill grasslands. Elev: 49-3,937 ft. (15-1,200 m.) Blooms: Mar-May (CNPS 2014).	A
Castilleja rubicundula var. rubicundula	pink creamsacs	-	-	1B.1	Serpentinite soils of chaparral opening, cismontane woodlands, meadows, seeps, and valley and foothill grasslands. Elev: 66-2,986 ft. (20-910 m.) Blooms: Apr-June (CNPS 2014).	A
Centromadia parryi ssp. congdonii	Congdon's tarplant	-	-	1B.1	Alkaline valley and foothill grasslands. Elev: 0-755 ft. (0-230 m.) Blooms: May-Nov (CNPS 2014).	A
Chorizanthe biloba var. immemora	Hernandez spineflower	-	-	1B.2	Chaparral and cismontane woodland. Elev: 1,969-2,625 ft. (600-800 m.) Blooms: May-Sep (CNPS 2014).	A
Chorizanthe pungens var. pungens	Monterey spineflower	FT	-	1B.2	Sandy soils in maritime chaparral, cismontane woodland, coastal dunes, coastal scrub, and valley/foothill grasslands. Elev: 10-1,476 ft. (3-450 m.) Blooms: Apr-Aug (CNPS 2014).	A

Species Summary for Orchard Park

Eriogonum nortonii	Pinnacles buckwheat	-	-	1B.3	Sandy soils, often on recent burns, in chaparral, and valley and foothill grasslands. Elev: 984-3,199 ft. (300-975 m.) Blooms: Apr-Sep (CNPS 2014).	A
Eryngium aristulatum var. hooveri	Hoover's button-celery	-	-	1B.1	Vernal pools. Elev: 10-148 ft. (3-45 m.) Blooms: July-Aug (CNPS 2014).	A
Fritillaria liliaceae	fragrant fritillary	-	-	1B.2	Serpentinite soils in cismontane woodland, coastal prairie, coastal scrub, valley & foothill grassland. Elev: 10-1,345 ft. (3-410 m.) Blooms: Feb-Apr (CNPS 2014).	A
Hoita strobalina	Loma Prieta hoita	-	-	1B.1	Usually serpentinite, mesic soil in chaparral, cismontane woodland, riparian woodland. Elev: 98-2,822 ft. (30-860 m.) Blooms: May-Oct (CNPS 2014).	A
Malacothamnus aboriginum	Indian Valley bush-mallow	-	-	1B.2	Rocky, granitic substrates, often in burned areas, in chaparral and cismontane woodland. Elev: 492-5,577 ft. (150-1,700 m.) Blooms: Apr-Oct (CNPS 2014).	A
Navarretia prostrata	prostrate vernal pool navarretia	-	-	1B.1	Mesic areas in coastal scrub, meadows and seeps, vernal pools, and alkaline valley and foothill grasslands. Elev: 49-3,970 ft. (15-1,210 m.) Blooms: Apr-July (CNPS 2014).	A
Plagiobothrys glaber	hairless popcorn-flower	-	-	1A	Alkaline meadows and seeps, and coastal salt marshes and swamps. Elev: 49-591 ft. (15-180 m.) Blooms: Mar-May (CNPS 2014).	A
Streptanthus albidus ssp. peramoenus	most beautiful jewel-flower	-	-	1B.2	Serpentinite soil in chaparral, cismontane woodland, valley & foothill grassland. Elev: 312-3,281 ft. (95-1,000 m.) Blooms: Mar-Oct (CNPS 2014).	A
Trifolium hydrophilum	saline clover	-	-	1B.2	Marshes & swamps, valley & foothill grassland (mesic, alkaline), and vernal pools. Elev: 0-984 ft (0-300m) Blooms: Apr-June (CNPS 2014).	A
Invertebrates						
Branchinecta lynchi	vernal pool fairy shrimp	FT	-		Found in vernal pools and ephemeral wetlands. Distributed throughout the Central Valley, including Sacramento County (USFWS 2005).	A
Fish						

Species Summary for Orchard Park

Oncorhynchus mykiss irideus	steelhead, central California coast	FT	-		Spawning habitat = gravel-bottomed, fast-flowing, well-oxygenated rivers and streams. Non-spawning = estuarine, marine waters (Busby 1996).	A
	steelhead, south/central California coast	FT	SSC			A
Amphibians						
Ambystoma californiense	California tiger salamander, central population	FT	ST		Occurs in grasslands of the Central Valley and oak savannah communities in the Central valley, the Sierra Nevada and Coast ranges, and the San Francisco Bay area. Needs seasonal or semi-permanent wetlands to reproduce, and terrestrial habitat with active ground squirrel or gopher burrows (Bolster 2010).	A
Rana draytonii	California red-legged frog	FT	SSC		Found mainly near ponds in humid forests, woodlands, grasslands, coastal scrub, and streamsides with plant cover. Most common in lowlands or foothills. Frequently found in woods adjacent to streams. Breeding habitat is in permanent or ephemeral water sources; lakes, ponds, reservoirs, slow streams, marshes, bogs, and swamps. Ephemeral wetland habitats require animal burrows or other moist refuges for estivation when the wetlands are dry. From sea level to 5,000 ft. (1,525 m.) (Nafis 2014).	A
Spea hammondii	western spadefoot	-	SSC		Open areas with sandy/gravelly soils. Variable habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rainpools which do not contain bullfrogs, fish, or crayfish are necessary for breeding (Nafis 2014).	A

Species Summary for Orchard Park

Taricha torosa	Coast Range newt	-	SSC		Found in wet forests, oak forests, chaparral and rolling grasslands. In southern California, drier chaparral, oak woodland and grassland are used (Nafis 2014).	A
				Reptiles		
Anniella pulchra pulchra	silvery legless lizard	-	SSC		Occurs in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodland, desert scrub, sandy washes, and stream terraces (Nafis 2014).	A
Emys marmorata	western pond turtle	-	SSC		Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, and either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking. May enter brackish water and even seawater. Found at elevations from sea level to over 5,900 ft (1,800 m). (Nafis 2014).	A
Gambelia sila	blunt-nosed leopard lizard	FE	SE		Semiarid grasslands, alkali flats, and washes. Flat areas with open space for running, avoids densely vegetated areas. Uses mammal dens and burrows for cover and shelter. The number of available burrows will determine the size of this lizard's population in an area (Nafis 2014).	A
Masticophis flagellum ruddocki	San Joaquin whipsnake	-	SSC		Occurs in open, dry, treeless areas, including grassland and saltbush scrub. Takes refuge in rodent burrows, under shaded vegetation, and under surface objects (Nafis 2014).	A
Phrynosoma blainvilli	coast horned lizard	-	SSC		Occurs in valley-foothill hardwood, conifer and riparian habitats, as well as in pine-cypress, juniper and annual grassland habitats. Ranges up to 4,000 ft (1,219 m) in the Sierra Nevada foothills, and up to 6,000 ft (1,800 m in the mountains of southern California (CDFW 2014b).	A

Species Summary for Orchard Park

Birds						
Agelaius tricolor	tricolored blackbird	-	SSC		Nest in wetlands or in dense vegetation near open water. Dominant nesting substrates: cattails, bulrushes, blackberry, agricultural silage. Nesting substrate must either be flooded, spinous, or in some way defended against predators (Hamilton 2004).	A
Aquila chrysaetos	golden eagle	-	FP		Uncommon resident and migrant throughout California, except center of Central Valley. Habitat typically rolling foothills, mountain areas, sage-juniper flats, desert (CDFW 2014b).	A
Athene cunicularia	burrowing owl	-	SSC		Open, flat expanses with short, sparse vegetation and few shrubs, level to gentle topography and well-drained soils. Requires underground burrows or cavities for nesting and roosting. Can use rock cavities, debris piles, pipes and culverts if burrows unavailable. Habitats include grassland, shrub steppe, desert, agricultural land, vacant lots and pastures (CDFW 2014b).	P
Buteo swainsoni	Swainson's hawk	-	ST		Nests in stands with few trees in riparian areas, juniper-sage flats, and oak savannah in the Central Valley. Forages in adjacent grasslands, agricultural fields and pastures (CDFW 2014b).	A
Charadrius montanus	mountain plover	-	SSC		Frequents open plains with low, herbaceous or scattered shrub vegetation below 3,200 ft (1,000 m.) (CDFW 2014b).	A
Coccyzus americanus occidentalis	western yellow-billed cuckoo	PT	SE		Requires large, dense tracts of riparian woodland with well-developed understories. Occurs in deciduous trees or shrubs. Prefers willow, but will also nest in orchards adjacent to streams in Sacramento Valley. Restricted to moist habitats along slow-moving waterways during breeding season (CDFW 2014b).	A
Dendroica petechia brewsteri	yellow warbler	-	SSC		Riparian vegetation along streams and in wet meadows. Willow cover and Oregon ash important predictors of abundance in northern California (CDFW 2014b).	A

Species Summary for Orchard Park

Elanus leucurus	white-tailed kite	-	FP		Typically nest in the upper third of trees that may be 10–160 ft. (33-525 m.) tall. These can be open-country trees growing in isolation, or at the edge of or within a forest (Cornell 2013).	A
Empidonax traillii extimus	southwestern willow flycatcher	FE	SE		Dense riparian forest and scrub habitats associated with rivers, swamps, wetlands, lakes and reservoirs (USFWS 2002).	A
Gymnogyps californianus	California condor	FE	SE		Chaparral, coniferous forest and oak savannah in southern and central California. Nest in cliff cavities, large rock outcrops, or large trees. Roost on large liffs or trees near feeding areas (USFWS 1996).	A
Haliaeetus leucocephalus	bald eagle	FD	SE/FP		Nests in large, old-growth, or dominant live tree with open branchwork, especially ponderosa pine. Requires large bodies of water or rivers with abundant fish, and adjacent snags (CDFW 2014b).	A
Icteria virens	yellow-breasted chat	-	SSC		Nest in early-successional riparian habitats with a well-developed shrub layer and an open canopy. Restricted to narrow border of streams, creeks, sloughs and rivers. Often nest in dense thicket plants such as blackberry and willow (Shuford 2008).	A
Lanius ludovicianus	loggerhead shrike	-	SSC		Breed in shrublands or open woodlands with a fair amount of grass cover and areas of bare ground (Shuford 2008).	A
Riparia riparia	bank swallow	-	ST		Riparian areas with sandy, vertical bluffs or riverbanks. Also nest in earthen banks and bluffs, as well as sand and gravel pits (CDFW 2014b).	A
Vireo bellii pusillus	least Bell's vireo	FE	SE		Obligate riparian breeder. Cottonwood willow, oak woodlands, and mule fat scrub along watercourses (Kus 2002).	A
Mammals						
Antrozous pallidus	pallid bat	-	SSC		Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings (CDFW 2014b).	A

Species Summary for Orchard Park

Corynorhinus townsendii	Townsend's big-eared bat	-	SCT/SCC		Cave-dwelling, also roosts in old mine-workings, occasionally found in buildings. Population concentrations in areas with cavity-forming rock and in old mining districts (Bolster 1998).	A
Eumops perotis californicus	western mastiff bat	-	SSC		Open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban areas. Roosts in crevices on vertical cliff faces, high buildings, trees, and tunnels (CDFW 2014b).	A
Lasiurus blossevillii	western red bat	-	SSC		Roosting habitat includes forests and woodlands, often in edge habitats adjacent to streams, fields, or urban areas (CDFW 2014b).	A
Neotoma fuscipes annectens	San Francisco dusky-footed woodrat	-	SSC		Found in grassland, scrub and wooded areas with evergreen or live oaks and other thick-leaved trees and shrubs (Kelly 1990).	A
Taxidea taxus	American badger	-	SSC		Open shrub, forest and herbaceous habitats with friable soils. Associated with treeless regions, prairies, park lands and cold desert areas. Range includes most of California, except the North Coast (CDFW 2014b). Found on uncultivated lands (CDFW 2014c).	P
Vulpes macrotis mutica	San Joaquin kit fox	FE	ST		Occur in desert-like habitats characterized by sparse or absent shrub cover, sparse ground cover, and short vegetative structure. Areas having open, level, sandy ground (USFWS 2010b).	P

Sources: CDFW 2014a, CNPS 2014, USFWS 2014

Key
Federal & State Status
(FC) Federal Candidate
(FD) Federally Delisted
(FE) Federal Endangered
(FP) Fully Protected
(FT) Federal Threatened

Species Summary for Orchard Park

(PT) Proposed Threatened
(SCE) State Candidate Endangered
(SCT) State Candidate Threatened
(SE) State Endangered
(SR) State Rare
(SSC) State Species of Special Concern
(ST) State Threatened
(X) Federally Designated Critical Habitat
CNPS Rare Plant Rank
Rareness Ranks
(1A) Presumed Extinct in California
(1B) Rare, Threatened, or Endangered in California and Elsewhere
(2B) Rare, Threatened, or Endangered in California, But More Common Elsewhere
Threat Ranks
(0.1) Seriously threatened in California
(0.2) Fairly threatened in California
(0.3) Not very threatened in California

References

Bolster, B.C. 2010. A Status Review of the California Tiger Salamander (Ambystoma californiense). Nongame Wildlife Program Report 210-4; Sac

Species Summary for Orchard Park

Busby, P.J., T.C. Wainwright, G.J. Bryant, L.J. Lierheimer, R.S. Waples, F.W. Waknitz, and I.V. Lagomarsino. 1996. Status review of west coast ste NOAA Technical Memorandum NMFS-NWFSC-27. Seattle, WA.

California Department of Fish and Wildlife (CDFW). 2014a. California Natural Diversity Database – August 2014 update. CDFW Biogeographic Da

———. 2014b. California Wildlife Habitat Relationships System Life History Accounts and Range Maps (online edition). CDFW Biogeographic Da at: http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx.

———. 2014c. Rarefind 5. CDFW Biogeographic Data Branch; Sacramento, CA. Accessed October 2014.

California Fish Website (CalFish). 2014. Hardhead (Mylopharodon conocephalus). UC Davis Division of Agriculture and Natural Resources; Davis, http://calfish.ucdavis.edu/species/?uid=37&ds=241#

California Native Plant Society (CNPS). 2014. Inventory of Rare and Endangered Plants (online edition, v8-02). CNPS; Sacramento, CA. Accessed M

Hamilton, W. J. 2004. Tricolored Blackbird (Agelaius tricolor). In The Riparian Bird Conservation Plan:a strategy for reversing the decline of riparia

Kus, B. 2002. Least Bell's Vireo (Vireo bellii pusillus). In The Riparian Bird Conservation Plan: a strategy for reversing the decline of riparian-assoc

Moyle, P.B., R.M. Yoshiyama, J.E. Williams, and E.D. Wikramamayake. 1995. Fish Species of Special Concern in California, 2nd Ed. CDFG and U

Myers, J.M, R.G. Kope, G.J. Bryant, D. Teel, L.J. Lierheimer, T.C Wainwright, W.S. Grant, F.W. Waknitz, K. Neely, S.T. Lindley, and R.S. Waples Idaho, Oregon, and California. NOAA Technical Memorandum NMFS-NWFSC-35.

Nafis, Gary. 2014. California Herps: A Guide to Reptiles and Amphibians of California. Accessed August 2014. Available at: http://www.californiah

National Marine Fisheries Service (NMFS). 2005. Green Sturgeon (Acipenser medirostris) status review update. NMFS Southwest Fish Science Cer

Natural Resources Conservation Service (NRCS). 2014. United States Department of Agriculture Web Soil Survey 2.3 (online edition). Accessed Au

Shuford, W.D. and Gardali, T., editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct p Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

Sierra Nevada Arborists. 2013. Initial Arborist Report and Tree Inventory Summary 8423 Elk Grove Boulevard, City of Elk Grove, California. Prepa

US Fish and Wildlife Service (USFWS). 1996. California Condor Recovery Plan, Third Revision. USFWS; Portland, OR.

———. 1999. Conservation Guidelines for the Valley Elderberry Longhorn Beetle. USFWS; Sacramento, CA.

———. 2005. Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon. USFWS; Portland, OR.

———. 2006. California Least Tern 5-Year Review. USFWS; Carlsbad, CA.

———. 2012. Giant Garter Snake (Thamnophis gigas) 5-Year Review: Summary and Evaluation. USFWS; Sacramento, CA.

———. 2014. Sacramento Fish & Wildlife Office Species Lists. Accessed May 2014. Available at: http://www.fws.gov/sacramento/es_species/Lists

Species Summary for Orchard Park

Impact Potential
No effect. Suitable habitat not present.
No effect. Suitable habitat not present.
No effect. Known from only two natural occurrences in Black Lake Canyon and at Oso Flaco lake (CNPS 2014).
No effect. Suitable habitat not present. Elevation of project site does not overlap with species elevation range.
No effect. Suitable habitat not present.
No effect. Suitable habitat not present.
No effect. Suitable habitat/soils not present.
No effect. Suitable habitat not present.
No effect. Suitable habitat not present. Elevation of project site does not overlap with species elevation range.
No effect. Suitable habitat not present.

Species Summary for Orchard Park

No effect. Suitable habitat not present. Elevation of project site does not overlap with species elevation range.
No effect. Suitable habitat not present. Elevation of project site does not overlap with species elevation range.
No effect. Suitable habitat/soils not present.
No effect. Suitable habitat/soils not present.
No effect. Suitable habitat not present. Elevation of project site does not overlap with species elevation range.
No effect. Suitable habitat not present.
No effect. Suitable habitat not present.
No effect. Suitable habitat/soils not present.
No effect. Suitable habitat not present.
No effect. Suitable habitat not present.

Species Summary for Orchard Park

No effect. Suitable habitat not present.
No effect. Project site not located within Critical Habitat Unit.
No effect. Suitable habitat not present.
No effect. Suitable habitat not present.
No effect. Breeding habitat absent. History of disturbance precludes the presence of this species.

Species Summary for Orchard Park

No effect. Suitable habitat not present.
No effect. Suitable habitat not present.
No effect. Suitable habitat not present.
No effect. Suitable habitat not present. Outside species range-does not overlap with CDFW Range Map for the species (CDFW 2014b).
No effect. Suitable habitat not present.
No effect. Suitable habitat not present. No nearby occurrences.

Species Summary for Orchard Park

No effect. Suitable habitat not present.
No effect. Suitable habitat not present.
May affect. Suitable habitat present. Species not previously documented onsite; however, presence of suitable habitat (open areas with friable soils) results in potential for future colonization. CNDDB occurrence approximately 2.5 miles east of project site.
No effect. Suitable habitat not present.
No effect. Suitable habitat not present.
No effect. Suitable habitat not present.
No effect. Suitable habitat not present.

Species Summary for Orchard Park

No effect. Suitable habitat not present.	
No effect. Suitable habitat not present.	USFWS. 2002b. Final Recovery Plan Southwestern Willow Flycatcher (Empinodax traillii extimus).
No effect. Suitable habitat not present.	
No effect. Suitable habitat not present.	
No effect. Suitable habitat not present.	
No effect. Suitable habitat not present.	
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No effect. Suitable habitat not present.	
No effect. Suitable habitat not present.	
No effect. Suitable habitat not present.	

Species Summary for Orchard Park

No effect. Suitable habitat not present.	Bolster, B.C., editor. 1998. Terrestrial Mammal Species of Special Concern in California. Draft Fina
No effect. Suitable habitat not present.	
No effect. Suitable habitat not present.	
No effect. Suitable habitat not present.	Kelly. P.A. 1990. Population ecology and social organization of dusky-footed woodrats, Neotoma f
Not likely to effect. Suitable habitat may be present; however, requires uncultivated lands for burrowing. No previous nearby occurrences are in agricultural lands.	
Not likely to effect. Suitable habitat may be present; however, most CNDDB occurrences are in the hills east of Hollister. There is one occurrence from 1992 within a mile of the project site; however, it is in undeveloped/undisturbed lands. No previous nearby occurrences are in agricultural lands.	USFWS. 2010b. San Joaquin Kit Fox 5-Year Review. USFWS; Sacramento, CA.

Species Summary for Orchard Park

ramento, CA.

Species Summary for Orchard Park

el head from Washington, Idaho, Oregon, and California.

ıta Branch; Sacramento, CA.
ıta Branch; Sacramento, CA. Accessed August 2014. Available

CA. Available at:

May 2014. Available at: http://www.rareplants.cnps.org/
ın-associated birds in California. California Partners in Flight.
iated birds in California. California Partners in Flight.
C Davis; Sacramento, CA.
. 1998. Status review of Chinook salmon from Washington,

ıerps.com/
ıter; Santa Cruz, CA.
ıgust 2014.
opulations of birds of immediate conservation in California.

ıred by Edwin Stirtz; Placerville, CA.

/es_species_lists-form.cfm

Species Summary for Orchard Park

Species Summary for Orchard Park

Species Summary for Orchard Park

Species Summary for Orchard Park

Species Summary for Orchard Park

Species Summary for Orchard Park

USFWS; Albuquerque, NM.

Species Summary for Orchard Park

al Report prepared by P.V. Brylski, P.W. Collins, E.D. Pierson, W.E. Rainey and T.E. Kucera. Report submitted to California Department of Fish

fuscipes. Ph. D. dissertation, Univ. of California Berkeley, 191 pp

Species Summary for Orchard Park

Species Summary for Orchard Park

Species Summary for Orchard Park

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Species Summary for Orchard Park

and Game Wildlife Management Division, Nongame Bird and Mammal Conservation Program for Contract No.FG3146WM

APPENDIX C – CULTURAL RESOURCES STUDY

Archaeological Records Search and Surface Reconnaissance
1261, 1271, and 1601 Buena Vista Road
County of San Benito, California

By

John Schlagheck, M.A., RPA

September 2014

Report Completed for

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Introduction and Project Summary

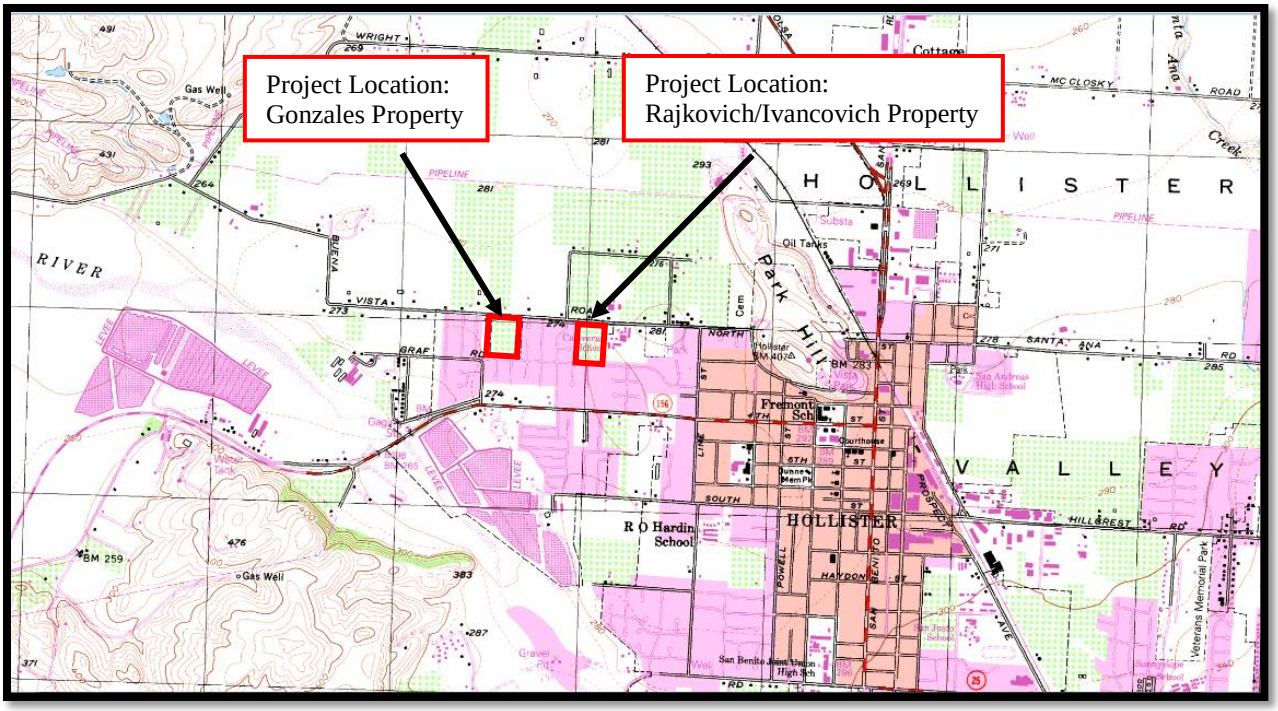
In September 2014, Holman & Associates (H&A) completed archival research and a pedestrian reconnaissance of two project areas planned for residential development on Buena Vista Road in San Benito County, California. This research was conducted for Pacific Municipal Consultants (PMC) in support of environmental documents authorized by the City of Hollister.

The present work entailed three steps. The first was a search of relevant records and maps maintained by the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS) at Sonoma State University. As the second step, H&A staff conducted a surface reconnaissance of the two project areas. This report and the recommendations below are the third step of this research regarding the subject properties.

The archival research showed very limited surveys had been conducted in the area of the project, and that no significant resources have been recorded in the immediate area. The pedestrian survey found no indication of prehistoric cultural resources on the subject properties and the possibility of discovering prehistoric archeological resources in the project areas can be considered very low.

One historical period improvement, a single family dwelling and related outbuildings at1261 Buena Vista Road, warrants additional evaluative research to determine if it should be considered a significant historic resource in the context of the California Environmental Quality Act (CEQA).

A copy of this report will be submitted to the NWIC as required by the State of California.



Map 1: Buena Vista Road Project Area Locations
(USGS "Hollister" 7.5 minute topographic quadrangle, 1998)

Location and Legal Description

The two project areas are rectangular and located on the south side of Buena Vista Road about one mile northwest of downtown Hollister and one half mile northeast of the San Benito River. The two areas are separated east to west by 1000 feet and front Central Avenue on the south.

The west area, hereinafter referred to as the "Gonzales" property, is 11.48 acres in size and is bounded by property developed with residential land uses on the east and west. The property contains one single-family home (1601 Buena Vista Road) and the remnants of a walnut orchard. This property is designated by San Benito County Assessor's Parcel Number (APN) 019-250-001

The east area, hereinafter referred to as the "Rajkovich/Ivancovich" property, is about 10 acres in size in two parcels that are bounded by residential land uses on the west and the Calaveras School on the east. The larger (about 9 acres) of the two parcels (APN 052-230-002) contains two single-family homes (1261 and 1271 Buena Vista Road) and is otherwise in active agricultural cultivation. The smaller (1 acre) parcel (APN 019-250-004) is situated in the northeast corner of the combined parcels.

Both project areas are contained on the U.S. Geological Survey "Hollister" 7.5 minute topographic quadrangle, a portion of which is reproduced here as Map 1. The properties are not surveyed into the township and range system as they were part of the *Rancho San Justo* Mexican-era land Grant of 1839.

Brief Cultural History

The project areas lay within the southeast portion of the currently recognized ethnographic territory of the Ohlone, also called Costanoan—from the Spanish "costanos" for coast-dwellers. General discussions of this group and their territorial boundaries can be found in Kroeber (1925), Margolin (1978), and other sources. Moratto (1984) suggest the Ohlone arrived in the San Francisco and Monterey Bay area about 500 C.E., perhaps from the lower Sacramento Valley/Delta. At the time of Spanish contact the Ohlone were organized into tribes or tribelets, independent multifamily groups that shared a common dialect and identified with a specific territory. Milliken (1995) associates the area around Hollister with the Ausaima Tribe of the Ohlone, with their core area east of the San Felipe sink on Pecheco Creek, about 5 miles north of the project areas.

In aboriginal times the tribes of the Ohlone would have followed a general "foraging" or "hunting and gathering" subsistence pattern with some dependence on the naturally abundant acorn. Habitation is considered to have been semi-sedentary and occupation sites can be expected most often near perennial steams, standing bodies of water, and in the vicinity of springs. Temporary camps for hunting and gathering people can also be found along ridges and other travel corridors. Coastal locations were also used as temporary sites for gathering and processing, and groups may have traveled annually to the coast or traded for marine resources with or through other groups closer to the ocean.

Some California Indian groups may have become "collectors" by the time of Spanish contact. According to Bindord (1980) collectors use an increased logistical approach to subsistence by storage of food for seasonal use and the deployment of "task groups". Task groups are small parties of skilled people with specific resource collection goals that make it possible for the main residential base to be located near productive areas while still exploiting other areas for specific materials. Residential moves by collectors are less frequent owing to the use of task groups to increase resource exploitation in a single location, however, winter and summer accommodations still make sense given the annual cycles of major plant and animal communities and seasonal climate variation.

After regular contact with the Spanish was established in the 1770s, life changed for the Ohlone in many ways. The construction and operation of the Franciscan mission system (1769-1833) was the main catalyst of change, as tribal culture was replaced by mission sponsored agriculture and ranching. Effects from European diseases and direct confrontations with Spanish soldiers depleted and scattered the Native populations. The Ausaima people in the Hollister area were influence most directly by Mission San Juan Bautista , founded in 1797, where 276 Ausaima people were baptized from 1797 to 1806 (Milliken 1995).

Currently, the State of California acknowledges the Indian Canyon Mutsun Band of Coastanoan as the Tribal leadership group for Native American consultation in the Hollister area (Governor's Office of the Tribal Advisor 2014).

Following secularization of the missions in 1833, the project areas became part of the 34,620 acre Ranch San Justo Mexican era land grand. William Hollister purchased the land and founded the City of Hollister in 1868, originally as part of Monterey County. The City of Hollister and the western portion of San Benito County were separated from Monterey County in 1874 (McMahon and Sonne 2012). Agriculture remains the predominant industry in the Hollister area, which has a rich history in the production of fruits and nuts as well as ranching.

Historical Resources Records Search Results

Holman & Associates conducted an historical resource records search on September 16, 2014 (NWIC file No. 14-0331) at the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS) at Sonoma State University. For CEQA purposes the records search was limited to within 250 m of the project areas.

The records search showed that the Gonzales property has not been previously surveyed, but that the Rajkovich/Ivancovich property was survey along with several other properties by Dietz in 1978 as part of a cultural assessment of proposed school districts sites. Dietz found no evidence of prehistoric cultural materials on the property but did note the house at 1261 Buena Vista as likely dating to the turn of the century. According to Dietz, the possible historical significance of the house was diminished because "it appears that the fabric of its outside surfaces has been altered from the original coverings (asphalt shingled roof, possible metal siding)" (Dietz 1978, 4). No further investigation regarding this house was recommended at the time. A four acre parcel just east of Calaveras School about 250 meters east of the Rajkovich/Ivancovich property was also included in the Dietz survey. Survey results for this parcel were negative.

Relative to more urban areas, very little archaeological work has been done in the Salinas Valley and San Benito County (Moratto 1994). There are no prehistoric sites within a mile of the radius of the project areas. The nearest known site is CA-SBN-14 near the intersection of 5th Street and Monterey Street in downtown Hollister.

The author conducted additional research at the County of San Benito pertaining to improvements in the project areas. The County Assessor's office staff provided the information below, however, the staff cautioned that information prior to the about 1960 was in some cases based on incomplete information or estimates:

<u>1261 Buena Vista Road</u>: Assessor's records show an estimated date of construction as 1895 for the main structure, a 26 X 26 foot one-story wood frame house. The house was renovated in 1952 with an upgraded concrete pile foundation on its perimeter. It has a 10 X 10 foot basement. Outbuildings include a wash house, cutting shed, and garage (all extant) that date to the 1940s and 1950s. The house and property are associated with the production of apricots according to the County records.

<u>1276 Buena Vista Road</u>: This one-story ranch house was built in 1969. No outbuildings are listed in the records.

1601 Buena Vista Road: Assessor's records show an estimated date of construction as 1933 for the main structure, a 40 X 26 foot one-story wood frame house. Several outbuildings dating to the early 19th century are shown on the Assessor's record including a tank and tower, barn, and wood shed. These building were not observed during the survey and their removal may have not yet been noted by the Assessor's Office.

The County has a list and associated map of historic and cultural resources within its jurisdiction. (County of San Benito General Plan 1994, 75). According to County of San Benito Planning Department staff this is for the most part a cumulative list. The list also appears to have been augmented by increased inventory activity in 1992 and 1993 resulting from damage associated with the Loma Prieta earthquake, as many of the properties on the list are located in downtown Hollister in the Monterey Street Historic District and the Downtown Hollister Historic District, both of which were created at that time. None of the structures in the project area locations are named as historic or cultural resources on the County's list.

Reconnaissance Methods

On September 16, 2014 H&A staff conducted a pedestrian survey on all accessible areas within both project areas. The author and other staff completed a general surface reconnaissance of the project areas (see King, Moratto, and Leonard 1973), carefully inspecting the properties for cultural materials, topographic indicators, and vegetation and soil characteristics that might indicate surface or subsurface cultural material.

Surface visibility over the project areas was highly variable. On the Gonzales property thick brush, vines, and other vegetation along the east and south boundary reduced visual access to the soil to less than 10 percent. Rodent barrows, foot paths, and two-tract roads did permit some inspection of the underlying soil. Recent mowing in the central and western portion of the property increased soil visibility to about 50 percent, permitting adequate access to the ground. Various locations throughout the property were covered with wood and brush piles that completely obscured the ground. Similarly, rock and gravel surrounding the house and outbuilding in the northwest corner of the property permitted no view of the soil. The small fenced yard around the house was not accessible to survey.

By contrast the Rajcovich/Ivancovich property was quite open to visual inspection as more than 95 percent of the land had recently been disked. This situation provided 100 percent visibility over all but the extreme northwest area where the two houses and outbuildings are located. Around these structures driveways and lawn reduced access to the soil to less than 5 percent.

The surveyors used two person transects to complete the survey with a person to person interval of two to eight meters depending on the density of ground cover. Ten north/south transects were used to cover the Rajkovich/Ivancovich property and 13 were used to cover the Gonzales property. These transects were linear to the extent possible given encumbrances such as brush piles, large trees, and thick vegetation. Trowel scraping was employed at various intervals to dislodge duff in order to improve visual access to the ground. A photo record was made of all improvements and other items of interest throughout the survey area.

Figure 1: Single family dwelling at 1261 Buena Vista Road.

Reconnaissance Results

The survey found no indication of prehistoric Native American use of the project areas. The soil in both areas was medium gray alluvial silty clay know to be native to the area. While raw materials for prehistoric tool manufacture were observed in the soil, such as chert for projectile points and knifes and hard metamorphic rocks for hammer stones, none of this material was noted as having been culturally modified. Surveyors found no concentrations of animal bone, marine shell, charcoal, or other typical indicators of prehistoric use of the land.

The survey did find that the single family dwelling and outbuildings at 1261 Buena Vista Road are in relatively good condition and may be minimally altered from their original design and construction (See Figures 1 and 2). While the design of the house is very simple, the sunrise accent over the front door may indicated a cultural variant of the otherwise vernacular design. It should also be considered that the home is old enough to predate the use of internal sanitary facilities and that privies and wells containing historic deposits may be situated to the rear of the dwelling. Trash pits and burn piles associated with the house may also be in the immediate area. As indicated by the assessor's records, this house is associated with the production of apricots, an important industry in the area from the 19th century.

The survey found a small brick structure behind 1271 Buena Vista. This structure has iron ash clean out and an exhaust vent and may be an agricultural tool use to blanch fruits or nuts for preservation. The condition is very poor, as the brick and mortar walls have begun to fail.

Field conditions and survey findings are noted graphically on Figures 3 and 4 at the end of this report.

Figure 2: Outbuilding behind the single family dwelling at 1261 Buena Vista Road

Recommendations

Regarding prehistoric cultural resources, the results of the records search and pedestrian survey strongly suggest that the potential for encountering significant prehistoric cultural materials during future construction is very low. No further archaeological investigation regarding the discovery of prehistoric cultural resources on the property is warranted.

While the potential for encountering prehistoric materials on the subject properties is very low, there is always some possibility of finding buried cultural material including human remains. Therefore, permit conditions for the project should include that if archaeological materials or human remains are unexpectedly discovered during construction, work shall be halted within 50 feet of the find until it can be evaluated by a qualified professional archaeologist. If the find is determined to be significant, appropriate mitigation measures shall be formulated and implemented as the responsibility of the Lead Agency.

Regarding historical period cultural resources, additional evaluative research should be undertaken for the single family dwelling and outbuildings at 1261 Buena Vista Road. The purpose of the research should be to determine the structures' California Register eligibility under the California Environmental Quality Act (CEQA).

Goals of the research should be to assess the integrity and condition of the buildings, establish more precisely the dates of construction, evaluate the architectural style of the buildings and determine if they represent a unique architectural style or are a rare example of a certain style within Hollister. The research should also determine if the buildings can be associated with important people or events in the history of Hollister.

If the results of the research show the buildings are not significant, a summary report should state the reasons for that determination. If the results show that the buildings are significant, the summary report should address project impacts and possible mitigation alternatives.

Figure 3: Survey Conditions-Rajkovich/Ivancovich property (Source: Google Maps)

Location: 1261 and 1271 Buena Vista Road, Hollister, County of San Benito, California
Date of Survey: 9/16/14

Figure 4: Survey Conditions-Gonzales Property

Location: 1601 Buena Vista Road, Hollister, County of San Benito, California
Date of Survey: 9/16/14

References

Binford, Lewis
1980 *Willow Smoke and Dogs' Tails: Hunter-Gatherer Settlement Systems and Archaeological Site Formation*. American Antiquity 45(1):4-20.

Clark, Matthew
2012 *Archaeological Reconnaissance of the San Benito River Restoration and Management Plan Project Area, Hollister, San Benito County, CA*. On file, NWIC S-39123.

County of San Benito, California
1994 *General Plan-Environmental Resources and Constraints Inventory*. On file, County of San Benito Planning and Building Department.

Deitz, Stephen A.
1987 *Cultural Resources Assessment: Three Proposed School Sites and One District Office Site in Hollister, San Benito County, California*. On file. NWIC S-9141.

Governor's Office of the Tribal Advisor
2014 Geographic Area Tribal Maps—Central http://www.tribalgovtaffairs.ca.gov/pdf/CA_Tribal_Central_Region.pdf. Accessed September 17, 2014.

King, Thomas F., Michael J. Moratto, and Nelson N. Leonard III
1973 *Recommended Procedures for Archaeological Impact Evaluation*. Report prepared for the Society of California Archaeology and University of California at Los Angeles Archaeological Survey. Los Angeles.

Kreober, A. L.
1925 *Handbook of the Indians of California*. Bureau of American Ethnology Bulliten 78.

Margolin, M.
1978 *The Olhone Way*. Heyday Books, Berkeley.

McMahon, Joseph M. and Peter Sonne
2012 Hollister. Arcadia Publishing, Charleston, SC.

Milliken, Randall T.
1995 *A Time of Little Choice: The Disintegration of Tribal Culture in the San Francisco Bay Area 1769-1810*. Ballena Press, Menlo Park, CA.

Moratto, Michael J.
1984 *California Archaeology*. Coyote Press, Salinas, CA.

United States Department of Interior, Geological Survey (USGS)
1998 Hollister CA. [Quadrangle]. Topographic Map, 7.5-minute series.

Historical Evaluation of 1261 Buena Vista Road, Hollister

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December 5, 2014

Evaluation of 1261 Buena Vista Road, Hollister

This report is a historical evaluation of the house at 1261 Buena Vista Road to determine its eligibility the California Register of Historical Resources.

Qualifications

This review was conducted by Richard Brandi who holds an M.A. in Historic Preservation from Goucher College, Maryland and a B.A. from U.C. Berkeley. He is listed as a qualified historian by the San Francisco Planning Department and the California Historical Resources Information System. With more than 10 years of professional experience in architectural history and historic preservation, Mr. Brandi meets the requirements of a Qualified Professional as set forth by the Secretary of the Interior. He has extensive experience throughout California and has also worked in Arizona, Mississippi, Montana, and New Mexico. He conducts historic resource evaluations; historic context statements; architectural surveys; CEQA, NEPA and Section 106 reviews; HABS/HAER documentation; National Register nominations; and design reviews using the Secretary of the Interior's Standards for the Treatment of Historic Properties. Mr. Brandi has evaluated railroad roundhouses, train stations, airports, golf course clubhouses, log cabins, theaters, courthouses, warehouses, farmsteads, public housing complexes, hospitals, stores, churches, and schools, as well as many types of houses. He previously worked at Atkins/PBS&J, PMC, Page & Turnbull Architecture, and Carey & Co. Architecture. His evaluations have been accepted by the Library of Congress, National Park Service, U.S. Forest Service, U.S. Housing and Urban Development, California State Office of Historic Preservation, Mississippi SHPO, San Francisco Historic Preservation Commission, and many cities and counties. He is president and board member of the Northern California Chapter of the Society of Architectural Historians, board member of the Northern California Chapter of docomomo, and vice president and board member of the Western Neighborhoods Project, which received the State of California Governor's Award for Historic Preservation.

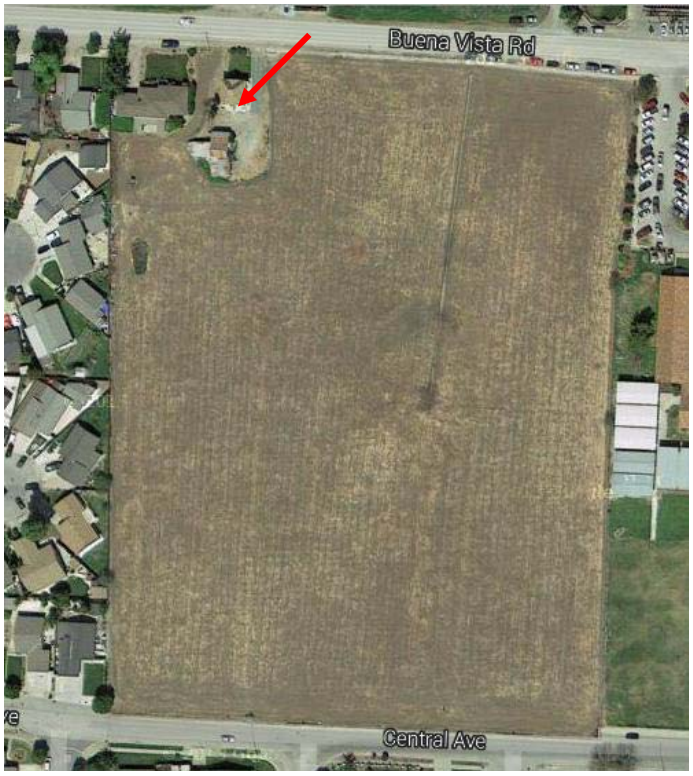
Methods

The research consisted of a site visit, photos, visual inspection of the building, a review of previous cultural resources reports, and research conducted at the San Benito County Free Library in Hollister. Unless otherwise indicated, photos were taken by Richard Brandi on December 4, 2014. The cultural research reports that were consulted are *Archaeological Records Search and Surface Reconnaissance, 1261, 1271, and 1601 Buena Vista Road, County of San Benito, California* by Holman & Associates and *Cultural Resources Assessment: Three Proposed School Sites and One District Office Site in Hollister, San Benito County, California* by Stephen A. Deitz. The County has a list and associated map of historic and cultural resources within its jurisdiction. The subject property is not on the list.[1]

This report evaluates the architectural style of the building, determines if it represents a unique architectural style or is a rare example of a certain style within Hollister, and assesses its historic integrity.

Description and History

The house at 1261 Buena Vista Road is bounded by residential land uses on the west and the Calaveras School on the east. It sits on a parcel (APN 052-230-002) that contains two single-family homes (1261 and 1271 Buena Vista Road). The site is used for agriculture.



Arrow points to 1261 Buena Vista Road.[2]

According to Holman & Associates,

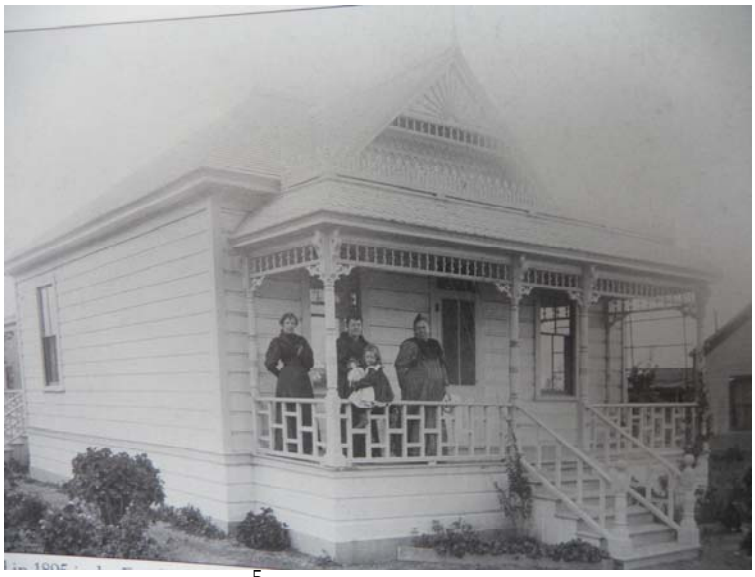
> Assessor's records show an estimated date of construction as 1895 for the main structure, a 26 x 26 foot one-story wood frame house. The house was renovated in 1952 with an upgraded concrete pile foundation on its perimeter. It has a 10 x 10 foot basement. Outbuildings include a wash house, cutting shed, and garage (all extant) that date to the 1940s and 1950s. The house and property are associated with the production of apricots according to the County records….
>
> Dietz found no evidence of prehistoric cultural materials on the property but did note the house at 1261 Buena Vista as likely dating to the turn of the century. According to Dietz, the possible historical significance of the house was diminished because "it appears that the fabric of its outside surfaces has been altered from the original coverings (asphalt shingled roof, possible metal siding).[3]

A copy of the Dietz report was obtained and it contains no further information about 1261 Buena Vista Road.[4]

The subject house is one-story, wood-framed, symmetrical, and square-in-plan. It sits on a concrete foundation. The hipped roof has a cross gable over the entrance door with a sunburst in the gable end. The centered entrance door is glazed and is covered with a screen door. Windows are located on all three visible façades. On the main facade facing north there is wood, fixed, four-light window in the left bay and a double-hung vinyl window in the right bay. The two windows on the east façade are wood, double-hung and covered by screens. On the west façade, a vinyl slider window is located toward the front of the house and a wood, double-hung window is located toward the rear. The rear of the house cannot be viewed from the public right of way but looking through an open door, it appears that there are two windows on the rear façade. The house is clad in asbestos shingles. The roof is clad in composition shingles. Closer inspection shows that the front window in the right bay was reduced in size and replaced with a vinyl window. A window on the west façade was also replaced with a smaller-sized vinyl window. (See Appendix for photos.)

The window and door surrounds are simple, flat wood casings that are crudely affixed. There is a simple, flat cornice and corner boards. The sunburst is crudely made of flat wood blanks. In a house dating from 1895, the cladding would be expected to be clapboards or horizontal wood siding and feature some level of detailing, even for a modest farm house. It was also common for such houses to have a front porch. It is not clear if the house was of very simple, even crude, construction or whether it had more detailing that was lost over the years. The designer or architect is not known.

A house with a similar plan, size, roof design, and fenestration pattern was the Frank Muder house in nearby Tres Pinos. A photograph was taken in 1895 of the Muder house suggests what 1261 Buena Vista might have looked like.



Muder house 1895.[5]

1261 Buena Vista Road.

The Muder house is a simple Queen Anne, a style popular from 1880-1910. Rural farmhouses are usually simpler versions of the prevailing architectural style. Queen Anne houses usually covered the walls surfaces with shingles and other decorative details.[6]

The original appearance and design of 1261 Buena Vista Road is not known. However, two windows have been replaced, asbestos shingles cover the original siding, and if there was detailing, and it has been stripped away. The house has no recognizable style.

Ownership

The Holman & Associates report refers to the house as the Rajkovich/Ivancovich property. Internet searches, archival research and consultation with the reference librarian at the San Benito Free Library in Hollister revealed no information about these names.

Historical Significance

California Register Significance Evaluation

The California Register of Historical Resources (CRHR) evaluates a resource's historic significance based on the following four criteria:

> Criterion 1 (Event): Resources associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.
>
> Criterion 2 (Person): Resources associated with the lives of persons important to local, California, or national history.

> Criterion 3 (Design/Construction): Resources that embody the distinctive characteristics of a type, period, region, or method of construction, or that represent the work of a master or possess high artistic values.
>
> Criterion 4 (Information Potential): Resources that have yielded or have the potential to yield information important to the prehistory or history of the local area, California, or the nation.

In addition to meeting one of the four criteria, a resource must be more than 50 years old, unless it can be demonstrated that sufficient time has passed to understand the building's historical importance. The estimated age of the building is 119 years, making it potentially eligible for listing.

Under Criterion 1 (Event), the house is associated with agricultural use, specifically apricots, in Hollister. Agriculture is an important business in Hollister but this is one of many houses associated with the activity. Archival research did not establish that the house is associated in an important way with agriculture in Hollister.

Under Criterion 2 (Person), archival research did not reveal that the building is associated with the lives of persons important to local, California, or national history.

Under Criterion 3 (Design/Construction), the building has no recognizable style and the designer is unknown. It does not embody the distinctive characteristics of a type, period, region, or method of construction and does not represent the work of a master.

This report does not evaluate the house under Criterion 4 (Information Potential).

Integrity

The evaluation of historic significance is a two-step process. First, the historic significance of the property must be established. If the property appears to possess historic significance, then a determination is made of its physical integrity: that is, its authenticity as evidenced by the survival of characteristics that existed during the resource's period of significance. There are seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association.

Although the house does not appear to possess historic significance, its historic integrity was evaluated. While its location and design have not changed, the setting, feeling and association has changed from a rural, agricultural character to a suburban, residential one. Furthermore, the building's materials and workmanship have been lost due to the changes to the size and type of windows and asbestos cladding. For these reason, the building lacks historic integrity.

Conclusion

The building is not eligible for listing on the California Register of Historical Resources.

[1] *Archaeological Records Search and Surface Reconnaissance 1261, 1271, and 1601 Buena Vista Road County of San Benito, California*, Holman & Associates Archaeological Consultants, September 2014.

[2] *Archaeological Records Search and Surface Reconnaissance 1261, 1271, and 1601 Buena Vista Road County of San Benito, California*, Holman & Associates Archaeological Consultants, September 2014.

[3] *Archaeological Records Search and Surface Reconnaissance 1261, 1271, and 1601 Buena Vista Road County of San Benito, California*, Holman & Associates Archaeological Consultants, September 2014.

[4] Stephen A. Deitz, 1987 *Cultural Resources Assessment: Three Proposed School Sites and One District Office Site in Hollister, San Benito County, California*. NWIC S-9141.

[5] Joseph M. McMahon, Peter Sonne, *Images of America, Hollister* (Charleston, SC: Arcadia Publishing, 2012), 42.

[6] Virginia and Lee McAlester, *A Field Guide to American Houses* (New York: Alfred A.Knopf, 2005), 263.

APPENDIX D – GEOTECHNICAL REPORT

GEOTECHNICAL INVESTIGATION
On
Proposed Residential Development

ORCHARD PARK
For

KT Properties

By

T. Makdissy Consulting, Inc.

Project E112-1

May 4, 2010

T. MAKDISSY CONSULTING, INC.
Geotechnical Consultants

Project No. E112-1
May 4, 2010

Mr. Bill Silveira
KT Properties
21710 Stevens Creek Blvd.
Cupertino, CA 95014

Subject: Proposed Residential Development
Orchard Park
1261 Buena Vista Road
Hollister, CA
GEOTECHNICAL INVESTIGATION

Dear Mr. Silviera:

In accordance with your authorization, ***T .Makdissy Inc.*** has performed a geotechnical investigation on the subject site located at 1261 Buena Vista Road in Hollister, California.

The accompanying report presents our conclusions and recommendations based on our investigation. Our findings indicate that the site is suitable, from a geotechnical standpoint, for the proposed development provided the recommendations of this report are carefully followed and are incorporated into the project plans and specifications.

Should you have any questions relating to the contents of this report or should your require additional information, please do not hesitate to contact our office at your convenience.

Very truly yours,
T. Makdissy Consulting, Inc

Tom Makdissy PE, GE
Principal Engineer

REGISTERED PROFESSIONAL ENGINEER
TOM S. MAKDISSY
556
Exp. 3/31/12
GEOTECHNICAL
STATE OF CALIFORNIA

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GEOTECHNICAL INVESTIGATIONS

Purpose and Scope

The purpose of our investigation for the proposed residential development (APN 052-230-002) located at 1261 Buena Vista Road in Hollister, California was to determine the surface and subsurface soil conditions at the subject site. Based on the results of the investigation, criteria were established for grading the site, and to design foundations for the proposed structures and the construction of related facilities on the property.

Our investigation included the following:

a. Surface reconnaissance by the Soil Engineer
b. Drilling and sampling of the subsurface soils
c. Laboratory testing of the samples obtained
d. Engineering analysis of the data and formulation of conclusions and recommendations
e. Preparation of this written report

Proposed Development

The proposed development will consist of constructing 91 building pads for single-family residential wood frame structures with associated roadways. Based on the tentative site plan provided, and based on the nature of the site, it is anticipated that grading operations will probably consist of cut for streets and fill on the building pads to achieve final design grades.

Site Description and Location

The rectangular shaped, relatively flat site consists of approximately 8.9 acres in aerial extent. Until recently the site was used as an orchard. The trees have now been grubbed, however, there is evidence of some remnants on the property. Heavy growth of weeks covers the entire property except for the northwestern corner where two residential structures are currently occupied. A portion of the rectangular area at the southeastern corner, referred to as APN 19-250-004 is not a part of the development. Access to the site will be from Buena Vista Road. The site is bounded by Buena Vista Road to the north, by Central Avenue to the south, a housing development to the west and Hollister School District to the east.

The Soil Engineer bases the site description and location on a reconnaissance and a vesting tentative map prepared by Ruggeri-Jensen-Azar Civil Engineers.

Subsurface Condition

The subsurface soil conditions encountered at the locations the test borings were made indicate that the soil profile is uniform throughout and consists of a shallow 12 to 18 inches of dark brown soft silty sandy clay underlain by light brown olive color sandy silty clay to the depth explored. The material at and near the surface was wet and soft due to recent rain; it then becomes stiff and moist with depth.

A more thorough description of the soils encountered is presented on the respective logs of test borings in Appendix A.

Seismic Considerations

The Orchard Park site is not within the Alquist-Priola Special Studies Zone. Because of its proximity to the San Andreas and Calaveras Fault system, the general area is considered to be one of the most seismically active regions in the Unite States.

Seismic Hazards

Seismic hazards can be divided into two broad classifications:

1. Primary hazards such as seismic shaking and damage produced directly from fault surface ruptures, and

2. Secondary hazards produced by seismic shaking including landslides, lurching, floods, subsidence, and liquefaction.

Primary Hazards

The project site is not within the boundaries of the Alquist-Priolo Special Studies Zone, however, based on historical evidence it is likely that at least one significant earthquake will product strong ground motions at this site during the design life of the proposed structures. Structural considerations for construction on this site should include the design parameters listed below under 2007 CBC Design Criteria. The likelihood of a fault surface rupture occurring on this site in considered low.

Secondary Hazards

The distance of the subject site from rivers and other bodies of water makes secondary earthquake hazards from flooding (tsunamis, seiches, and dam failures) or lateral spreading highly improbable.

Liquefaction Potential

Liquefaction is a phenomenon wherein loose granular soils lose their supportive strength and become prone to rapid settlement and loss of bearing capacity. Liquefaction occurs during earthquake conditions in saturated, relatively loose, sandy soils located near the ground surface.

The data used for evaluating liquefaction potential on this site consisted of the penetration resistance encountered during soil sampling (N-counts), the soil type and percentage of fines, the relative density of the materials, and the groundwater level.

The material encountered is uniform as indicated from the test borings made. No ground water was observed during the drilling operation at a depth of 30 feet. No granular soil was detected in any of the borings.

Based on the data obtained the liquefaction potential on this site is considered low.

Seismic Conclusions

The mot significant seismic hazard is that of shaking. The structural designs for the proposed development should anticipate repeatable horizontal ground accelerations. Prudent structural designs should incorporate the current state of practice for seismic loads.

2007 CBC Design Criteria

The 2007 California Building Code Chapter 16 Section, 1613, Earthquake Loads, requires that structures be designed using certain earthquake design criteria. The criteria are based in part of the seismic ground motion values and site soil properties. Based on the Geotechnical data in the referenced report and the selection of criteria of the 2007 CBC, a summary of the earthquake design criteria of the proposed structures is as follows:

Latitude: 36-8560 N **Longitude:** 121-4193°W	**2007 CBC Table/Figure/Equation**	**Factor/Coefficient/ Type**	**Value***
Short-Period MCE at 0.2s	Figure 1613.5(3)	S_s	1.791
1.0s Period MCE	Figure 1613.5(4)	S_1	0.783
Site Class	Table 1613.5.2		D
Site Coefficient	Table 1613.5.3(1)	F_a	1.00
Site Coefficient	Table 1613.5.3(2)	F_v	1.50
Adjusted MCE Spectral	Equation 16-37	S_{MS}	1.791
Response Parameters	Equation 16-38	S_{M1}	1.174
Design Spectral	Equation 16-39	S_{DS}	1.194
Acceleration Parameters	Equation 16-40	S_{D1}	0.783
Seismic Design Category	Table 1613.5.6(1)	Occupancy I, II, III	E
Seismic Design Category	Table 1613.5.6(2)	Occupancy IV	F

DICUSSION, CONCLUSIONS AND RECCOMENDATIONS

General

1. From a geotechnical viewpoint, the site is suitable for the construction of the proposed residential development provided the recommendations presented in this report are incorporated into the project plans and specifications.

2. The proposed residential structures may be supported on a structural mat, a post tensioned slab foundation system or a spread footing foundation system. Specific recommendations for each foundation system are provided in the "foundation" section herein.

3. The most prominent geotechnical feature of the site is the presence of an abundance of vegetation and organic sandy clay in the upper 12 to 18 inches of surface material. This material has the propensity to swell when wet and shrink when dry. The recommendations presented herein will address the needed requirements.

Grading

4. Based on the proposed pad grade as shown on sheet 4 prepared by RJA Civil Engineers, minor grading on the site is anticipated which may consist of cutting in the streets and fill on the pads to achieve rough grade. Grading requirements presented herein are an integral part of the grading specifications presented in Appendix C of this report and should be considered as such.

5. Grading under wet conditions is not recommended due to the fact that proper compaction cannot be achieved and major delays will be anticipated.

6. Heavy weed growth covers the site. The weeds should be cut and hauled off site or harvested for cattle feed.

7. After the weeds are cut then stripping, if needed, will depend on site conditions encountered at the commencement of grading operations. It is also desirable to mix the material generated from the cuts in the upper 12 inches with the less expansive soil in order to mitigate problems associated with this type of soil.

8. All areas to receive fill must be properly moisture conditioned and compacted to a minimum relative compaction of 90% as determined by ASTM D1557-98 Laboratory Test Procedure. After re-compacting the sub-grade, the site may be brought to the desired finished grades by placing engineered fill in lifts of 8 inches in uncompacted thickness and compacting it to the relative compaction as determined by ASTM D1557-98. All soils encountered during our investigation would be suitable for use as engineered fill when placed and compacted at the recommended moisture content.

9. Should select import material be used to establish the proper grading for the proposed development, the import material should be approved by the Soil Engineer before it is brought to the site. Import material should be predominately granular and meet the following requirements:

a. Have an R-Value of not less than 15,
b. Have a Plasticity Index not higher than 12,
c. Not more than 15% passing the No. 200 sieve,
d. No rocks larger than 6 inches in maximum size.

Import material meeting the requirements above should be compacted to a minimum relative compaction to 90% as determined by ASTM D1557-98 laboratory Test Procedure. All engineered fill should be placed in lifts not exceeding 8 inches in uncompacted thickness.

10. Should any building pad encompass a cut/fill condition, the cut area should be over-excavated to provide a minimum of two feet of uniform fill below the foundations. Over-excavation is necessary to minimize the effects of differential movement.

Foundations

11. Three alternate foundations are presented herein as indicated earlier in this report. All three types will perform adequately if the recommendations contained hereafter are implemented.

Post-Tensioned Slab Foundation

12. Post-Tensioned slabs should be a minimum 10 inches in thickness and designed using the following criteria which is based on the design method of the 1997 Uniform Building Code, Chapter 18, Division III, Sections 1816 and 1817, Design of Post-Tensioned Slabs on Ground.

Plasticity Index	=	15
Allowable Bearing Capacity	=	1,500 p.s.f.
Depth of Constant Moisture	=	5 feet
Percent Passing # 200	=	30%
Edge Moisture Variation Distance		
Edge Lift	=	3.0 feet
Center Lift	=	5.0 feet
Differential Swell:		
Ym (Edge Lift)	=	0.11 inches
Ym (Center Lft)	=	1.5 inches

Structural Mat

13. Structural mats slabs should be a minimum of 10 inches in thickness and designed using the method presented in the 1997 Uniform building Code, Chapter 18, Division III, and Section 1815, Design of Slab-on-Grade Foundations.

14. Based on the above, it is recommended that the structural mat foundation be designed based on an effective Plasticity Index of 15. The maximum allowable bearing pressure at the base of the mat and for localized thickened footings should not exceed 1,500 p.s.f. for dead plus sustained live loads.

15. The use of structural mat, or post-tensioned slab foundation system is contingent upon adequate surface drainage being constructed as recommended in this report and as designed by the project structural engineer.

16. Structural mats and post-tensioned slabs should be designed for low to moderately expansive soil conditions as described below. Additionally, the mats or post-tensioned slabs must be designed to accommodate differential settlements of up to 0.5 inch in a span of 25 feet.

17. Slabs may be constructed at pad grade. The perimeter of the slab should be thickened at the edge to bear on the prepared building pad and to contain the sand.

18. A 10-mil Visqueen-type membrane should be placed between the prepared sub grade and the slab to provide an effective vapor barrier, and to minimize moisture condensation under the floor covering. The vapor brrier membrane shall be lapped adequately to provide a continuous vapor proof barrier under the entire slab. Care must be taken to assure that the membrane does not become torn and entangled with the reinforcing. The Soil Engineer must observe the sub-grade preparation prior to placement of the Visqueen. Two inches of sand must be placed on top of the vapor barrier to ensure that the Visqueen is protected and also to assist in the proper curing of concrete.

Spread Footings

19. The proposed single-family wood frame structures may be supported on conventional spread footings used in conjunction with poured concrete slab-on-grade construction. For this type of foundation it is imperative that the expansive soil present be mitigated as previously mentioned in this report.

20. Spread footings for each individual pad should extend a minimum of 24 inches into competent material. The depth of the embedment should be measured from the lowest adjacent pad elevation. The width of spread footings (B) should not exceed 12 inches. An allowable bearing capacity of 2500 p.s.f. may be considered in the design. The value may be increased by one third for seismic forces.

21. To accommodate lateral loads, the passive resistance of the foundations soil can be assumed to act against the front face of the footings below a depth of one foot. For design purposes, a passive pressure equivalent to that imposed by a fluid weighing 225 p.c.f. may be used. An allowable coefficient of friction 0.30 may be used at the base of the footings.

22. Prudent structures design should consider differential settlements of 0.5 inch in 25 feet for conventional spread footings.

Concrete Flatwork

23. To reduce the potential cracking of the concrete, it is recommended that concrete slabs in the patios, driveways and other concrete sidewalks be underlain by a minimum of 4 inches of gravel or clean crushed rock material placed between the finished subgrade and the slabs to serve as a cushion. This also applies to concrete slabs on grade in conjunction with spread footing foundations. See the "Guide Specifications For Rock Under Floor Slabs", Appendix C.

24. The slab should be adequately reinforced as determined by the project Structural Engineer. The reinforcement shall be placed in the center of the slab unless otherwise designated by the design engineer.

25. All flatwork slabs should be poured structurally independent of the foundations. A 30-pound felt strip, expansive joint material, or other positive separator should be provided around the edge of the floating slabs to prevent bond to the structure's foundations.

Pavement Areas

26. After underground facilities have been placed in the areas to receive pavement and removal of excess material has been completed, the upper 6 inches of the sub-grade soil shall be scarified, moisture conditioned, and compacted to a minimum relative compaction of 95% in accordance with the grading recommendations specified in this report.

27. All aggregate base material placed subsequently should also be compacted to a minimum relative compaction of 95% based on the ASTM Test Procedure of D1557-98. The construction of the pavement in the parking and traffic areas should conform to the requirements set forth by the latest Standard Specifications of the Department of Transportation of the State of California and/or City of Hollister, Department of Public Works. Based on an R- Value of 10 the following pavement section is recommended:

Traffic Index	AC (inches)	Class II[1] AB (inches)
4.5	2.5	8.0
5.0	3.0	9.0
5.5	3.0	10.0

Notes: [1]Minimum R-Value = 78
R-value = Resistance Value
All Layers in compacted thickness to Cal-Trans Standard Specifications

Utility Trenches

28. Applicable safety standards require that trenches in excess of 5 feet must be properly shored so that the walls of the trench slope back to provide safety for installation of lines. If trench wall sloping is performed, the inclination should vary with the soil type. The underground contractor should request an opinion from the Soil Engineer as to the type of soil and the resulting inclination.

29. With respect to state-of-the-art construction or local requirements, utility lines are generally bedded with granular materials. These materials can convey surface or subsurface water beneath the structures. It is, therefore, recommended that all utility trenches which possess the potential to transport water, i.e., backfilled with granular material, be sealed with a compacted impervious cohesive solid material or lean concrete where the trench enters/exits the building perimeter.

30. Utility trenches extending underneath all traffic areas must be backfilled with native or approved import material and compacted to a relative compaction of 90% to within 6 inches of the sub-grade surface. The upper 6 inches should be compacted to 95% relative compaction in accordance with Laboratory test Procedure ASTM D1557-98. Backfilling and compaction of these trenches must meet the requirements set forth by the City of Hollister, Department of Public Works. Utility trenches within landscape areas may be compacted to a relative compaction of 85%.

General Construction Requirements

31. Liberal lot gradients sloping downward and away from the structures must be provided by the project civil engineer to remove all storm water from the pads and to prevent storm and irrigation water from migrating beneath the structures. Soil used to achieve surface gradients adjacent to structures must be compacted to a minimum relative compaction of 90%. Additionally, no ponding of water is allowed on any location on this site. Should surface water be allowed to seep under the structures, foundation movement resulting in structural cracking and wet conditions resulting in dampness of the floor covering, and possibly mold will occur. Surface drainage must be provided as designed by the project civil engineer and maintained by the property owners at all times.

32. Roof gutters and downspouts are recommended. Downspouts from the gutters should be provided with closed pipe conduits to carry storm water away from the structures and graded areas and, thus, reduce the possibility of soil saturation adjacent to the foundation, pavements, or flatwork. If proper positive grade away from the foundations is maintained, then splash blocks may be used to discharge water from the downspouts.

33. Flower beds or planters are not preferred adjacent to the foundations because of the possibility of irrigation water affecting the foundations. Should planters be constructed, foliage requiring little irrigation should be planted. It is preferred that irrigation adjacent to the building foundations consists of a drip system. Sprinkler systems may be used, however, it is preferred that sprinkler heads do not water closer than 3 feet from the building foundations. If sprinklers are used within 3 feet, then excessive watering should not be allowed; and good surface drainage in the planter area must be provided. In any case, it is recommended that area surface drains be incorporated into the landscaping to discharge any excessive irrigation or rainwater that may accumulate in the planter area. These surface drains must be constructed in a manner that easy flow of surface water runoff is allowed to the designate drainage swales.

Project Review and Construction Monitoring

34. All grading and foundation plans for the development must be reviewed by the Soil Engineer prior to contract bidding or submittal to governmental agencies so that plans are reconciled with soil conditions and sufficient time is allowed for suitable mitigative measures to be incorporated into the final grading specifications.

35. ***T. Makdissy Consulting, Inc.*** should be notified at least two working days prior to site clearing, grading, and/or foundation operations on the property. This will give the Soil Engineer ample time to discuss the problems that may be encountered in the field and coordinate the work with the contractor.

36. Field observation and testing during the grading and/or foundation operations must be provided by representatives of ***T. Makdissy Consulting, Inc*** to enable them to form an opinion regarding the adequacy of the site preparation, the acceptability of fill materials, and the extent to which the earthwork construction and the degree of compaction comply with the specification requirements. Any work related to the grading and/or foundation operations performed without the full knowledge and under direct observation of the Soil Engineer will render the recommendations of this report invalid. The degree of observation and frequency of testing services would depend on the construction methods and schedule, and the items of work.

37. Should another geotechnical consultant be engaged to perform project review and/or construction monitoring, then ***T. Makdissy Consulting, Inc.*** must receive a letter of indemnification releasing us of any responsibility on the project.

GUIDELINES FOR REUIRED SERVICES

The following lists of services are the services required and must be provided by ***T. Makdissy Consulting, Inc.*** during the project development. These services are presented in check list format as a convenience to those entrusted with their implementation.

The items listed are included in the body of the report in detail. This list is intended only as an outline of the required services and does not replace specific recommendations and, therefore, must be used with reference to the total report. This does not imply full-time observation. The degree of observation and frequency of testing services would depend on the construction methods and schedule, and the item of work.

The importance of careful adherence to the report recommendations cannot be overemphasized. It should be noted, however, that this report is issued with the understanding that each step of the project development will be performed under the direct observation of ***T. Makdissy Consulting, Inc.*** The use of this report by others presumes that they have verified all information and assume full responsibility for the total project.

	Item Description	Required	Not Required	Not Anticipated
1.	Provide foundation design parameters	X		
2.	Review grading plans and specifications	X		
3.	Review foundation plans and specifications	X		
4.	Observe and provide recommendations regarding demolition			X
5.	Observe and provide recommendations regarding site stripping	X		
6.	Observe and provide recommendations on moisture conditioning, removal, and/or compaction of unsuitable existing soils	X		
7.	Observe and provide recommendations on the installation of subdrain facilities(if necessary)			X
8.	Observe and provide testing services on fill areas and/or imported fill materials	X		
9.	Review as-graded conditions and provide additional foundation recommendations, if necessary	X		
10.	Observe and provide compaction tests on sanitary sewers, storm drain, water lines and PG&E trenches	X		
11.	Observe foundation excavations and provide supplemental recommendations, if necessary prior to placing concrete	X		
12.	Observe and provide moisture conditioning recommendations for foundation areas prior to placing concrete	X		
13.	Provide design parameters for retaining walls	X		
14.	Provide geologic observations and recommendations for keyway excavations and cutslopes during grading			X
15.	Excavate and recompact all trenches and/or test pits			X
16.	Observe installation of subdrain behind retaining walls	X		

LIMITATIONS AND UNIFORMITY OF CONDITIONS

1. This Geotechnical Investigation was prepared specifically for you and for the specific project and location described in the body of this report. This report and the recommendations included herein should be utilized for this specific project and location exclusively. This Geotechnical Investigation should not be applied to nor utilized on any other project or project site. Please refer to the ASFE "Important Information about Your Geotechnical Investigation Report" attached with this report.

2. The recommendations of this report are based upon the assumption that the soil conditions do not deviate from those disclosed in the borings. If any variations or undesirable conditions are encountered during construction, or if the proposed construction will differ from the planned at the time, our firm should be notified so that supplemental recommendations can be provided.

3. This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information and recommendations contained herein are brought to the attention of the Architect and Engineer for the project and incorporated into the plans and the necessary steps are taken to see that the Contractor and Subcontractors carry out such recommendations in the field.

4. The findings of this report are valid as of the present date. However, changes in the conditions of a property can occur with the passage of time, whether they are due to natural process of the works of man, on this or adjacent properties. In addition, changes in applicable or appropriate standards occur, whether legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or partially, by changes outside of our control. This report should therefore, be reviewed in light of future planned construction and then current applicable codes. This report should not be considered valid after a period of two (2) years without our review.

5. This report was prepared upon your request for our services in accordance with currently accepted standards of professional geotechnical engineering practice. No warranty as to the contents of this report is intended, and none shall be inferred from the statements or opinions expressed.

6. The scope of our services mutually agreed upon for this project did not include any environmental assessment or study for the presence of hazardous or toxic materials in the soil, surface water, groundwater, or air on or below or around this site.

APPENDIX A

Field Investigation

Vicinity Map

Site Plan

Logs of Test Borings

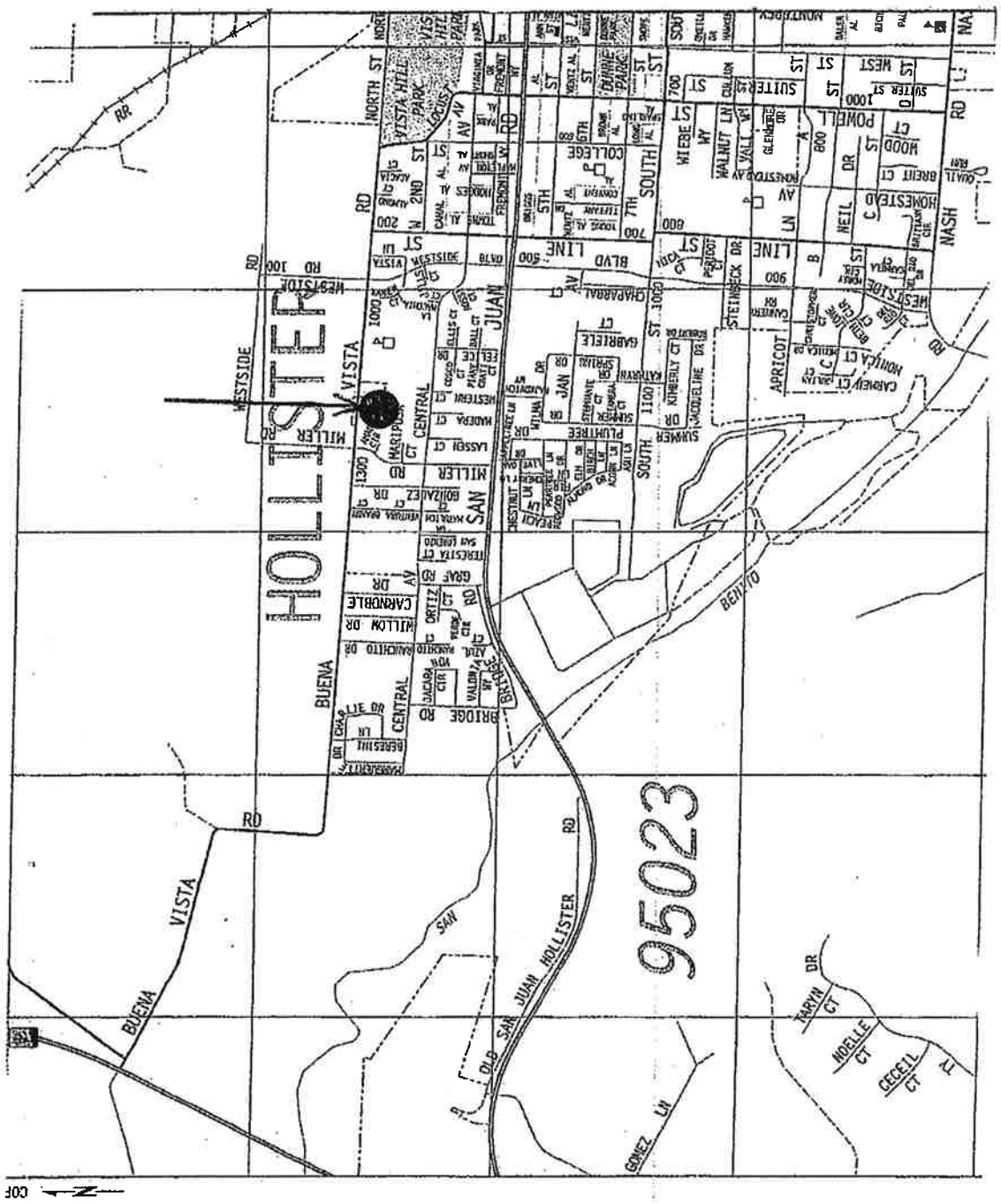
FIELD INVESTIGATION

The field investigation was performed on April 16, 2010 and included a reconnaissance of the site and the drilling of four (4) exploratory test borings at the approximate locations shown on Figure 1, "Site Plan".

The Borings were drilled to a depth of ranging between 15 and 30 feet below the existing ground surface using a B3500, truck mounted drill rig equipped with 6" diameter solid flight augers. As the drilling proceeded, undisturbed core samples were obtained by means of a 2-1/2 inch O.D., split-tube sampler. The sampler was driven into the in-situ soils under the impact of a 140-pound hammer having a free fall of 30 inches. The number of blows required to advance the sampler 12 inches into the soil were adjusted to the standard penetration resistance (N-Value) by means of a divisor of 1.3.

The samples were sealed and delivered to the laboratory for testing. Classifications made in the field were verified in the laboratory after further examination and testing.

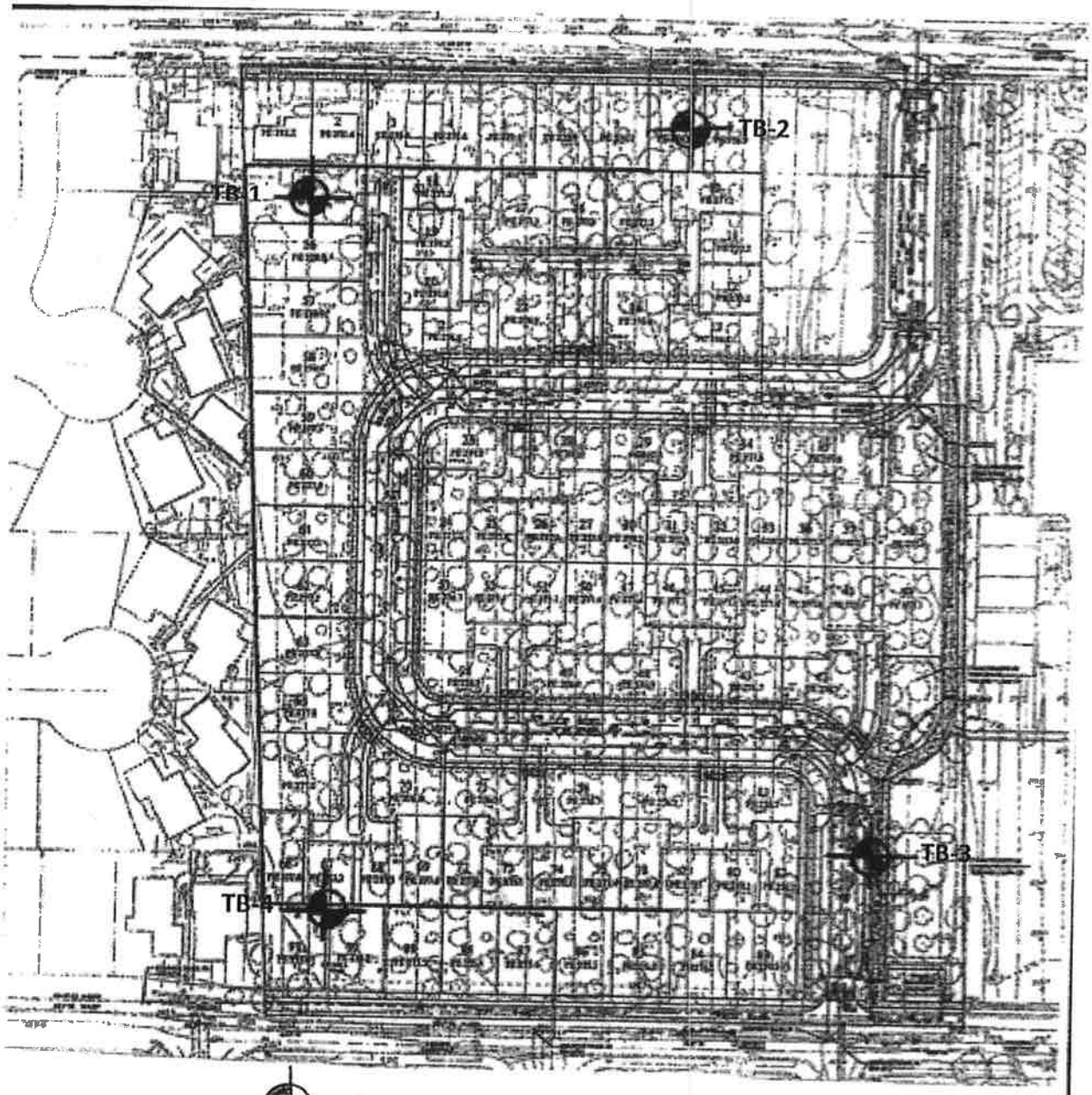
The stratification of the soils, descriptions, location of undisturbed soil samples and standard penetration resistance are shown on the respective "Logs of Test Borings" contained within this appendix.



VICINITY MAP

T. MAKDISSY CONSULTING, INC.
18228 Seebree Lane
Monte Sereno, California 95030
Geotechnical Consultants

Orchard Park 1261 Buena Vista Rd Hollister, CA	Project No. E112-1	Drawn by:	Figure No.
	Scale:	Date: 5/4/10	1



Approximate Location of Test Borings

SITE PLAN

T. MAKDISSY CONSULTING, INC.
18228 Seebree Lane
Monte Sereno, California 95030
Geotechnical Consultants

Orchard Park **1261 Buena Vista Rd** **Hollister, CA**	**Project No.** E112-1	**Drawn by:**	**Figure No.** **2**
	Scale: NTS	**Date:** 5/4/10	

BOREHOLE LOG

88LOCATION: North West Corner
DATE DRILLED: April 16, 2010
DRILL RIG: Track Mounted
HAMMER: 140 lbs.
BORING BACKFILL METHOD: Backfill with Tailings

Logged By: TSM
Drilling Method: Flight Auger
Drilling Contractor: Britton Exploration, Inc.
Total Depth of Boring: 20 feet

BORING No.: 1
Sheet 1 of 1

DRILLING DETAILS	DEPTH	SAMPLER NO.	BLOW COUNT	GRAPHIC LOG	MATERIAL DESCRIPTION	LAB TESTS: DRY DENSITY	LAB TESTS: MOISTURE CONTENT	OTHER NOTES REMARKS
				CH	Dark brown, sandy, silty clay – soft, wet			Atterberg Limits
		1-1	4		Light brown sandy, silty clay, medium stiff, very moist	89.4	28.6	LL=44.7% PI =15.5%
	5	1-2	8			89.7	26.4	
	10	1-3	16		Same for full depth of boring	96.2	28.3	
	15				Gain in stiffness with depth			
	20				Boring terminated at 20 feet. No groundwater			
	25							
	30							
	35							
	40							

T. MAKDISSY CONSULTING, INC.
Geotechnical Consultants

Project Name: ORCHARD PARK			Figure No. 3
Date: May 4, 2010	Drawn by: TSM	Project No. E112-1	Reviewed by: TSM

BOREHOLE LOG

LOCATION: Northeast Corner
DATE DRILLED: April 16, 2010
DRILL RIG: Track Mounted
HAMMER: 140 lbs.
BORING BACKFILL METHOD

Logged By: TSM
Drilling Method: Flight Auger
Drilling Contractor: Britton Exploration, Inc.
Total Depth of Boring: 20 feet

BORING No.: 2
Sheet 1 of 1

DRILLING DETAILS	DEPTH	SAMPLER NO.	BLOW COUNT	GRAPHIC LOG	MATERIAL DESCRIPTION	LAB TESTS: DRY DENSITY	LAB TESTS: MOISTURE CONTENT	OTHER NOTES REMARKS
				CH	Dark brown silty clay, wet, soft			
		2-1	6		Light brown to olive color, sandy, silty clay, clayey silt	86.2	28.3	Direct shear ∅ = 15° c = 930 psf
	5	2-2	10		Uniform to full depth	93.8	23.4	
	10				Becomes stiffer with depth			
	15	2-3	12			89.7	28.3	
	20							
	25				Boring terminated at 25 feet. No ground water			
	30							
	35							
	40							

T. MAKDISSY CONSULTING, INC.
Geotechnical Consultants

Project Name: ORCHARD PARK

Figure No. 4

Date: May 4, 2010	Drawn by: TSM	Project No. E112-1	Reviewed by: TSM

BOREHOLE LOG

LOCATION: Southeast Corner
DATE DRILLED: April 16, 2010
DRILL RIG: Track Mounted
HAMMER: 140 lbs.
BORING BACKFILL METHOD

Logged By: TSM
Drilling Method: Flight Auger
Drilling Contractor: Britton Exploration, Inc.
Total Depth of Boring: 20 feet

BORING No.: 3
Sheet 1 of 1

DRILLING DETAILS	DEPTH	SAMPLER NO.	BLOW COUNT	GRAPHIC LOG	MATERIAL DESCRIPTION	LAB TESTS: DRY DENSITY	LAB TESTS: MOISTURE CONTENT	OTHER NOTES REMARKS
				CH	Dark brown sandy to silty clay, wet, soft			
		3-1	4		Color change to light brown	74.3	34.9	
	5				Sandy clay silt/silty clay Moist, medium stiff	87.7	10.8	
		3-2	8					
	10							
	15				Becomes stiffer with depth			
	20	3-3	12			86.2	15.6	
	25							
	30				Boring terminated at 30 feet. No ground water			
	35							
	40							

T. MAKDISSY CONSULTING, INC.
Geotechnical Consultants

Project Name: ORCHARD PARK			Figure No. 5
Date: May 4, 2010	Drawn by: TSM	Project No. E112-1	Reviewed by: TSM

BOREHOLE LOG

LOCATION: Southwest Corner
DATE DRILLED: April 16, 2010
DRILL RIG: Track Mounted
HAMMER: 140 lbs.
BORING BACKFILL METHOD TAILINGS

Logged By: TSM
Drilling Method: Flight Auger
Drilling Contractor: Britton Exploration, Inc.
Total Depth of Boring: 20 feet

BORING No. 4
Sheet 1 of 1

DRILLING DETAILS	DEPTH	SAMPLER NO.	BLOW COUNT	GRAPHIC LOG	MATERIAL DESCRIPTION	LAB TESTS: DRY DENSITY	LAB TESTS: MOISTURE CONTENT	OTHER NOTES REMARKS
				CH	Dark brown sandy to silty clay, wet, soft			Atterberg Limits
	5	4-1	6		Light brown, silty clay/clayey silt; slightly sandy. Medium stiff—very moist	93.1	27.9	LL = 60.2% PI = 28.2%
	10							
	15	4-2	12		Same to bottom of boring	84.5	23.6	
	20							
	25	4.3	8			89.7	21.2	
	30				Boring terminated at 27 feet. No ground water			
	35							

T. MAKDISSY CONSULTING, INC.
Geotechnical Consultants

Project Name: ORCHARD PARK

Figure No. 6

Date: May 4, 2010	Drawn by: TSM	Project No. E112-1	Reviewed by: TSM

APPENDIX B

Laboratory Investigation

Summary of Laboratory Test

LABORATORY INVESTIGATION

The laboratory testing program was directed towards providing sufficient information for the determination of the engineering characteristics of the site soils so that the recommendations outlined in this report could be formulated.

Moisture content and dry unit weight tests were performed on undisturbed soil samples in order to determine the consistency of the soil and moisture variation throughout the explored soil profile and estimate the compressibility of the underlying soils.

Atterberg limits tests were performed in accordance ASTM Test D4318.

The strength parameters of the foundation soils were determined by direct shear test performed on a selected undisturbed soil sample and on the number of blow counts during drilling.

A summary of all laboratory test results is presented on TABLE 1 of this appendix and on the respective "Logs of Test Borings", Appendix A.

TABLE I

SUMMARY OF LABORATORY TEST RESULTS

Sample No.	Depth (ft.)	Dry Density (p.c.f.)	Moisture Content (% Dry Wt.)	*LL	*PI	Direct Shear Test	Sieve Analysis Passing 200 Sieve %
1-1	2	89.4	28.6	44.7	15.5		
1-2	5	89.7	26.4				
1-3	10	96.2	28.3				
2-1	3	86.2	28.3				
2-2	7	93.8	23.4				
2-3	15	89.7	28.3			ϕ=15° c = 930psf	
3-1	2	74.3	34.9				
3-2	7	87.7	10.8				
3-3	20	86.2	15.6				
4-0	0.75			60.2	28.2		
4-1	5	93.1	27.9				
4-2	15	84.5	23.6				
4-3	25	89.7	21.2				

*Atterberg Limits

APPENDIX C

The Grading Specifications

Guide Specifications for Rock Under Floor Slabs

THE GRADING SPECIFICATIONS
on
ORCHARD PARK
Proposed Residential Development

1. General Description

1.1 These specifications have been prepared for the grading and site development of the subject project. ***T. Makdissy Consulting, Inc.***, hereinafter described as the Soil Engineer, should be consulted prior to any site work connected with site development to ensure compliance with these specifications.

1.2 The Soil Engineer should be notified at lest two working days prior to any site clearing or grading operations on the property in order to observe the stripping of organically contaminated material and to coordinate the work with the grading contractor in the field.

1.3 This item shall consist of all clearing or grubbing, preparation of land to be filled, filling of the land, spreading, compaction and control of fill, and all subsidiary work necessary to complete the grading of the filled areas to conform with the lines, grades, and slopes as shown on the accepted plans. The Soil Engineer is not responsible for determining line, grade elevations, or slope gradients. The property owner, or his representative, shall designate the person or organizations that will be responsible for these items of work.

1.4 The contents of these specifications shall be integrated with the soil report of which they are a part; therefore, they shall not be used as a self-contained document.

2. Tests

2.1 The standard test used to define maximum densities of all compaction work shall be the ASTM D1557-98 Laboratory Test Procedure. All densities shall be expressed as a relative compaction in terms of the maximum dry density obtained in the laboratory by the foregoing standard procedure.

3. Clearing, Grubbing, and Preparing Areas to be Filled

3.1 All vegetable mater, trees, root systems, shrubs, debris, and organic topsoil shall be removed from all structural areas and areas to receive fill.

3.2 Any soil deemed soft or unsuitable by the Soil Engineer shall be removed. Any existing debris or excessively wet soils shall be excavated and removed as required by the Soil Engineer during grading.

3.3 All underground structures shall be removed from the site such as old foundations, abandoned pipelines, septic tanks, and leach fields.

3.4 The final stripped excavation shall be approved by the Soil Engineer during construction and before further grading is started.

3.5 After the site has been cleared, stripped, excavated to the surface designated to receive fill, and scarified, it shall be disked or bladed until it is uniform and free from large clods. The native sub grade soils shall be moisture conditioned and compacted to the requirements as specified in the grading section of this report. Fill can then be placed to provide the desired finished grades. The contractor shall obtain the Soil Engineer's approval of sub grade compaction before any fill is placed.

4. Materials

4.1 All fill material shall be approved by the Soil Engineer. The material shall be a soil or soil-rock mixture that is free from organic matter or other deleterious substances. The fill material shall not contain rocks or lumps over 6 inches in greatest dimension and not more than 15% larger than 2-1/2 inches. Materials from the site below the stripping depth are suitable for use in fills provided the above requirements are met.

4.2 Materials existing on the site are suitable for use as compacted engineered fill after the removal of all debris and organic material. The Soil Engineer in the field shall approve all fill soils.

4.3 Should import material be required, it must meet the requirements as specified in the body of this report prior to transporting it to the project.

5. Placing, Spreading, and Compacting Fill Material

5.1 The fill materials shall be placed in uniform lifts of not more than 8 inches in uncompacted thickness. Each layer shall be spread evenly and shall be thoroughly blade mixed during the spreading to obtain uniformity of material in each layer. Before compaction begins, the fill shall be brought to a water content that will permit proper compaction by either (a) aerating the material if it is too wet, or (b) spraying the material with water if it is too dry.

5.2 After each layer has been placed, mixed, and spread evenly, either import material or native material shall be compacted to a relative compaction of 90% at 2% to 3% above optimum moisture content as determined by ASTM D1557-98 Laboratory Test Procedure.

5.3 Compaction shall be by footed rollers or other types of acceptable compacting rollers. Rollers shall be of such design that they will be able to compact the fill to the specified density. Rolling shall be accomplished while the fill material is within the specified moisture content range. Rolling of each layer shall be continuous over its entire area and the roller shall make sufficient trips to ensure that the required density has been obtained. No ponding or jetting shall be permitted.

The Soil Engineer in accordance with Laboratory Test Procedure ASTM 3017 or D2922-98 shall make 5.4 Moisture and density tests in each compacted layer. When footed rollers are used for compaction, the density tests shall be taken in the compacted material below the surface disturbed by the roller. When these tests indicate that the compaction requirements on any layer of fill or portion thereof, has not been met, the particular layer, or portion thereof, shall be reworked until the compaction requirements have been met.

5.5 No soil shall be placed or compacted during periods of rain nor on ground that contains free water. Soil that has been soaked and wetted by rain or any other cause shall not be compacted until completely drained and until the moisture content is within the limits hereinbefore described or approved by the Soil Engineer. Approval by the Soil Engineer shall be obtained prior to continuing the grading operations.

6. Pavement

6.1 The proposed sub grade under pavement sections, native soil, and/or fill shall be compacted to a minimum relative compaction of 95% at 2% to 3% above optimum moisture content for a depth of 6 inches.

6.2 All aggregate base material placed subsequently should also be compacted to a minimum relative compaction of 95% based on the ASTM Test Procedure D1557-98. The construction of the pavement in the parking and traffic areas should conform to the requirements set forth by the latest Standard Specifications of the Department of Transportation of the State of California and/or City of Santa Clara, Department of Public Works.

6.3 It is recommended that soils at the proposed sub grade level be tested for a pavement design after the preliminary grading is completed and the soils at the site design sub grade levels are known.

7. Utility Trench Backfill

7.1 The utility trenches extending under concrete slabs-on-grade shall be backfilled with native on-site soils or approved import materials and compacted to the requirements pertaining to the adjacent soils. No ponding or jetting will be permitted.

7.2 Utility trenches extending under all pavement areas shall be backfilled with native or approved import material and properly compacted to meet the requirements set forth by City of Santa Clara, Department of Public Works. *

***NOTE:** Requirements of City to be added.

7.3 Where any opening is made under or through the perimeter foundations for such items as utility lines and trenches, the openings must be resealed so that they are watertight to prevent the possible entrance of outside irrigation or rain water into the underneath portion of the structures.

8. Subsurface Line Removal

8.1 The methods of removal will be designated by the Soil Engineer in the field depending on the depth and location of the line. One of the following methods will be used.

8.2 Remove the pipe and fill and compact the soil in the trench according to the applicable portions of sections pertaining to compaction and utility backfill.

8.3 The pipe shall be crushed in the trench. The trench shall then be filled and compacted according to the applicable portions of Section 6.

8.4 Cap the ends of the line with concrete to prevent entrance of water. The length of the cap shall not be less than 5 feet. The concrete mix shall have a minimum shrinkage.

9. Unusual Conditions

9.1 In the event that any unusual conditions not covered by the special provisions are encountered during the grading operations, the Soil Engineer shall be immediately notified for additional recommendations.

10. General Requirements

10.1 Dust Control: The contractor shall conduct all grading operations in such a manner as to preclude wind blown dirt and dust and related damage to neighboring properties. The means of dust control shall be left to the discretion of the contractor and he shall assume liability for claims related to windblown material.

GUIDE SPECIFICATIONS FOR ROCK UNDER FLOOR SLABS

Definition

Graded gravel or crushed rock for use under slabs-on-grade shall consist of a minimum thickness of mineral aggregate placed in accordance with these specifications and in conformance with the dimensions shown on the plans. The minimum thickness is specified in the accompanying report.

Material

The mineral aggregate shall consist of broken stone, crushed or uncrushed gravel, quarry waste, or a combination thereof. The aggregate shall be free from deleterious substances. It shall be of such quality that the absorption of water in a saturated dry conditioned does not exceed 3% of the oven dry weight of the sample.

Gradation

The mineral aggregate shall be of such size that the percentage compositions by dry weight, as determined by laboratory sieves (U.S. Sieves) will conform to the following gradation:

Sieve Size	Percentage Passing
3/4"	90-100
No. 4	25-60
No. 8	18-45
No. 200	0-3

Placing

Sub grade, upon which gravel or crushed rock is to be placed, shall be prepared as outlined in the accompanying soil report.

APPENDIX E – GREENHOUSE GAS EMISSIONS REPORT

Buena Vista

San Benito County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	103.00	Dwelling Unit	10.00	185,400.00	295

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	50
Climate Zone	4			**Operational Year**	2016
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	445	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2012 CO2 Intensity Factor applied

Land Use - Project site = 10 acres

Demolition -

Grading - Project site = 10 acres

Architectural Coating - MBUAPCD Rule 426

Vehicle Trips - Trip generation per Traffic Impact Analysis

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblGrading	AcresOfGrading	50.00	10.00
tblLandUse	LotAcreage	33.44	10.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	445
tblProjectCharacteristics	OperationalYear	2014	2016
tblVehicleTrips	ST_TR	10.08	9.52
tblVehicleTrips	SU_TR	8.77	9.52
tblVehicleTrips	WD_TR	9.57	9.52

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.6406	4.8940	3.6070	4.7200e-003	0.2015	0.3040	0.5054	0.0952	0.2845	0.3797	0.0000	429.1868	429.1868	0.1002	0.0000	431.2908
2016	1.2288	0.5323	0.3976	5.8000e-004	5.2200e-003	0.0335	0.0387	1.4000e-003	0.0313	0.0327	0.0000	52.7059	52.7059	0.0126	0.0000	52.9707
Total	**1.8694**	**5.4263**	**4.0046**	**5.3000e-003**	**0.2067**	**0.3374**	**0.5441**	**0.0966**	**0.3158**	**0.4124**	**0.0000**	**481.8927**	**481.8927**	**0.1128**	**0.0000**	**484.2615**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.6399	4.8884	3.6033	4.7200e-003	0.2051	0.3036	0.5087	0.0961	0.2841	0.3803	0.0000	428.7439	428.7439	0.1001	0.0000	430.8455
2016	1.2287	0.5317	0.3972	5.8000e-004	5.2200e-003	0.0334	0.0387	1.4000e-003	0.0313	0.0327	0.0000	52.6505	52.6505	0.0126	0.0000	52.9150
Total	**1.8687**	**5.4200**	**4.0005**	**5.3000e-003**	**0.2103**	**0.3370**	**0.5473**	**0.0975**	**0.3154**	**0.4129**	**0.0000**	**481.3944**	**481.3944**	**0.1127**	**0.0000**	**483.7604**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.0364**	**0.1150**	**0.1011**	**0.0000**	**-1.7613**	**0.1156**	**-0.5955**	**-0.9211**	**0.1203**	**-0.1261**	**0.0000**	**0.1034**	**0.1034**	**0.1152**	**0.0000**	**0.1035**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	7.5109	0.1003	9.0386	3.1700e-003		1.1244	1.1244		1.1243	1.1243	106.3946	46.3555	152.7501	0.1000	8.3700e-003	157.4434
Energy	0.0196	0.1675	0.0713	1.0700e-003		0.0135	0.0135		0.0135	0.0135	0.0000	340.9811	340.9811	0.0133	5.5400e-003	342.9772
Mobile	3.0074	5.0346	16.9912	0.0209	1.0769	0.0653	1.1422	0.2894	0.0601	0.3495	0.0000	1,749.4020	1,749.4020	0.0595	0.0000	1,750.6512
Waste						0.0000	0.0000		0.0000	0.0000	26.3482	0.0000	26.3482	1.5571	0.0000	59.0481
Water						0.0000	0.0000		0.0000	0.0000	2.1291	10.3185	12.4476	0.2194	5.3000e-003	18.6976
Total	**10.5379**	**5.3023**	**26.1010**	**0.0251**	**1.0769**	**1.2032**	**2.2801**	**0.2894**	**1.1979**	**1.4874**	**134.8719**	**2,147.0571**	**2,281.9290**	**1.9492**	**0.0192**	**2,328.8175**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0554	0.0126	1.0774	6.0000e-005		0.0109	0.0109		0.0109	0.0109	0.0000	74.7502	74.7502	3.1700e-003	1.3400e-003	75.2317
Energy	0.0196	0.1675	0.0713	1.0700e-003		0.0135	0.0135		0.0135	0.0135	0.0000	340.9811	340.9811	0.0133	5.5400e-003	342.9772
Mobile	3.0074	5.0346	16.9912	0.0209	1.0769	0.0653	1.1422	0.2894	0.0601	0.3495	0.0000	1,749.4020	1,749.4020	0.0595	0.0000	1,750.6512
Waste						0.0000	0.0000		0.0000	0.0000	26.3482	0.0000	26.3482	1.5571	0.0000	59.0481
Water						0.0000	0.0000		0.0000	0.0000	2.1291	10.3185	12.4476	0.2193	5.2900e-003	18.6942
Total	**4.0824**	**5.2147**	**18.1399**	**0.0220**	**1.0769**	**0.0898**	**1.1666**	**0.2894**	**0.0845**	**0.3739**	**28.4773**	**2,175.4519**	**2,203.9291**	**1.8524**	**0.0122**	**2,246.6024**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**61.2599**	**1.6536**	**30.5013**	**12.3756**	**0.0000**	**92.5392**	**48.8338**	**0.0000**	**92.9496**	**74.8633**	**78.8857**	**-1.3225**	**3.4182**	**4.9671**	**36.6476**	**3.5303**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/28/2015	5	20	
2	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
3	Grading	Grading	2/12/2015	3/11/2015	5	20	
4	Building Construction	Building Construction	3/12/2015	1/27/2016	5	230	
5	Paving	Paving	1/28/2016	2/24/2016	5	20	
6	Architectural Coating	Architectural Coating	2/25/2016	3/23/2016	5	20	

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	30.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	37.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2015

Unmitigated Construction On-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.2900e-003	0.0000	3.2900e-003	5.0000e-004	0.0000	5.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0451	0.4836	0.3607	4.0000e-004		0.0245	0.0245		0.0229	0.0229	0.0000	37.4413	37.4413	0.0102	0.0000	37.6544
Total	**0.0451**	**0.4836**	**0.3607**	**4.0000e-004**	**3.2900e-003**	**0.0245**	**0.0278**	**5.0000e-004**	**0.0229**	**0.0234**	**0.0000**	**37.4413**	**37.4413**	**0.0102**	**0.0000**	**37.6544**

3.2 Demolition - 2015

Unmitigated Construction Off-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5900e-003	4.7200e-003	5.6300e-003	1.0000e-005	2.6000e-004	8.0000e-005	3.3000e-004	7.0000e-005	7.0000e-005	1.4000e-004	0.0000	1.0406	1.0406	1.0000e-005	0.0000	1.0408
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4900e-003	1.0500e-003	9.6400e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0633	1.0633	7.0000e-005	0.0000	1.0648
Total	**4.0800e-003**	**5.7700e-003**	**0.0153**	**2.0000e-005**	**1.4600e-003**	**9.0000e-005**	**1.5400e-003**	**3.9000e-004**	**8.0000e-005**	**4.7000e-004**	**0.0000**	**2.1039**	**2.1039**	**8.0000e-005**	**0.0000**	**2.1056**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.2900e-003	0.0000	3.2900e-003	5.0000e-004	0.0000	5.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0450	0.4831	0.3603	4.0000e-004		0.0245	0.0245		0.0228	0.0228	0.0000	37.3967	37.3967	0.0101	0.0000	37.6096
Total	**0.0450**	**0.4831**	**0.3603**	**4.0000e-004**	**3.2900e-003**	**0.0245**	**0.0278**	**5.0000e-004**	**0.0228**	**0.0233**	**0.0000**	**37.3967**	**37.3967**	**0.0101**	**0.0000**	**37.6096**

3.2 Demolition - 2015

Mitigated Construction Off-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5900e-003	4.7200e-003	5.6300e-003	1.0000e-005	3.8900e-003	8.0000e-005	3.9700e-003	9.6000e-004	7.0000e-005	1.0400e-003	0.0000	1.0406	1.0406	1.0000e-005	0.0000	1.0408
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4900e-003	1.0500e-003	9.6400e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0633	1.0633	7.0000e-005	0.0000	1.0648
Total	**4.0800e-003**	**5.7700e-003**	**0.0153**	**2.0000e-005**	**5.0900e-003**	**9.0000e-005**	**5.1800e-003**	**1.2800e-003**	**8.0000e-005**	**1.3700e-003**	**0.0000**	**2.1039**	**2.1039**	**8.0000e-005**	**0.0000**	**2.1056**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

Acres of Grading: 10

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154		0.0142	0.0142	0.0000	18.6506	18.6506	5.5700e-003	0.0000	18.7675
Total	**0.0263**	**0.2845**	**0.2132**	**2.0000e-004**	**0.0903**	**0.0154**	**0.1058**	**0.0497**	**0.0142**	**0.0639**	**0.0000**	**18.6506**	**18.6506**	**5.5700e-003**	**0.0000**	**18.7675**

3.3 Site Preparation - 2015

Unmitigated Construction Off-Site

Acres of Grading: 10

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-003	6.3000e-004	5.7900e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6380	0.6380	4.0000e-005	0.0000	0.6389
Total	**1.5000e-003**	**6.3000e-004**	**5.7900e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.2000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.6380**	**0.6380**	**4.0000e-005**	**0.0000**	**0.6389**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2841	0.2129	2.0000e-004		0.0154	0.0154		0.0142	0.0142	0.0000	18.6284	18.6284	5.5600e-003	0.0000	18.7452
Total	**0.0263**	**0.2841**	**0.2129**	**2.0000e-004**	**0.0903**	**0.0154**	**0.1058**	**0.0497**	**0.0142**	**0.0638**	**0.0000**	**18.6284**	**18.6284**	**5.5600e-003**	**0.0000**	**18.7452**

3.3 Site Preparation - 2015

Mitigated Construction Off-Site

Acres of Grading: 10

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-003	6.3000e-004	5.7900e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6380	0.6380	4.0000e-005	0.0000	0.6389
Total	**1.5000e-003**	**6.3000e-004**	**5.7900e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.2000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.6380**	**0.6380**	**4.0000e-005**	**0.0000**	**0.6389**

3.4 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0678	0.7905	0.5084	6.2000e-004		0.0380	0.0380		0.0350	0.0350	0.0000	58.8422	58.8422	0.0176	0.0000	59.2111
Total	**0.0678**	**0.7905**	**0.5084**	**6.2000e-004**	**0.0655**	**0.0380**	**0.1035**	**0.0337**	**0.0350**	**0.0687**	**0.0000**	**58.8422**	**58.8422**	**0.0176**	**0.0000**	**59.2111**

3.4 Grading - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3200e-003	1.4000e-003	0.0129	2.0000e-005	1.5900e-003	1.0000e-005	1.6100e-003	4.2000e-004	1.0000e-005	4.4000e-004	0.0000	1.4178	1.4178	1.0000e-004	0.0000	1.4198
Total	**3.3200e-003**	**1.4000e-003**	**0.0129**	**2.0000e-005**	**1.5900e-003**	**1.0000e-005**	**1.6100e-003**	**4.2000e-004**	**1.0000e-005**	**4.4000e-004**	**0.0000**	**1.4178**	**1.4178**	**1.0000e-004**	**0.0000**	**1.4198**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0677	0.7895	0.5078	6.2000e-004		0.0380	0.0380		0.0349	0.0349	0.0000	58.7722	58.7722	0.0176	0.0000	59.1407
Total	**0.0677**	**0.7895**	**0.5078**	**6.2000e-004**	**0.0655**	**0.0380**	**0.1035**	**0.0337**	**0.0349**	**0.0686**	**0.0000**	**58.7722**	**58.7722**	**0.0176**	**0.0000**	**59.1407**

3.4 Grading - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3200e-003	1.4000e-003	0.0129	2.0000e-005	1.5900e-003	1.0000e-005	1.6100e-003	4.2000e-004	1.0000e-005	4.4000e-004	0.0000	1.4178	1.4178	1.0000e-004	0.0000	1.4198
Total	**3.3200e-003**	**1.4000e-003**	**0.0129**	**2.0000e-005**	**1.5900e-003**	**1.0000e-005**	**1.6100e-003**	**4.2000e-004**	**1.0000e-005**	**4.4000e-004**	**0.0000**	**1.4178**	**1.4178**	**1.0000e-004**	**0.0000**	**1.4198**

3.5 Building Construction - 2015

Unmitigated Construction On-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3860	3.1682	1.9776	2.8300e-003		0.2233	0.2233		0.2100	0.2100	0.0000	257.4140	257.4140	0.0646	0.0000	258.7703
Total	**0.3860**	**3.1682**	**1.9776**	**2.8300e-003**		**0.2233**	**0.2233**		**0.2100**	**0.2100**	**0.0000**	**257.4140**	**257.4140**	**0.0646**	**0.0000**	**258.7703**

3.5 Building Construction - 2015

Unmitigated Construction Off-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0417	0.1321	0.2623	2.7000e-004	7.4300e-003	2.3000e-003	9.7300e-003	2.1200e-003	2.1100e-003	4.2300e-003	0.0000	25.0075	25.0075	2.3000e-004	0.0000	25.0124
Worker	0.0649	0.0274	0.2509	3.6000e-004	0.0311	2.6000e-004	0.0314	8.2700e-003	2.4000e-004	8.5100e-003	0.0000	27.6715	27.6715	1.8700e-003	0.0000	27.7108
Total	**0.1065**	**0.1595**	**0.5132**	**6.3000e-004**	**0.0385**	**2.5600e-003**	**0.0411**	**0.0104**	**2.3500e-003**	**0.0127**	**0.0000**	**52.6791**	**52.6791**	**2.1000e-003**	**0.0000**	**52.7232**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3856	3.1644	1.9752	2.8300e-003		0.2231	0.2231		0.2097	0.2097	0.0000	257.1078	257.1078	0.0645	0.0000	258.4625
Total	**0.3856**	**3.1644**	**1.9752**	**2.8300e-003**		**0.2231**	**0.2231**		**0.2097**	**0.2097**	**0.0000**	**257.1078**	**257.1078**	**0.0645**	**0.0000**	**258.4625**

3.5 Building Construction - 2015

Mitigated Construction Off-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0417	0.1321	0.2623	2.7000e-004	7.4300e-003	2.3000e-003	9.7300e-003	2.1200e-003	2.1100e-003	4.2300e-003	0.0000	25.0075	25.0075	2.3000e-004	0.0000	25.0124
Worker	0.0649	0.0274	0.2509	3.6000e-004	0.0311	2.6000e-004	0.0314	8.2700e-003	2.4000e-004	8.5100e-003	0.0000	27.6715	27.6715	1.8700e-003	0.0000	27.7108
Total	**0.1065**	**0.1595**	**0.5132**	**6.3000e-004**	**0.0385**	**2.5600e-003**	**0.0411**	**0.0104**	**2.3500e-003**	**0.0127**	**0.0000**	**52.6791**	**52.6791**	**2.1000e-003**	**0.0000**	**52.7232**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0324	0.2708	0.1758	2.5000e-004		0.0187	0.0187		0.0176	0.0176	0.0000	23.0046	23.0046	5.7100e-003	0.0000	23.1244
Total	**0.0324**	**0.2708**	**0.1758**	**2.5000e-004**		**0.0187**	**0.0187**		**0.0176**	**0.0176**	**0.0000**	**23.0046**	**23.0046**	**5.7100e-003**	**0.0000**	**23.1244**

3.5 Building Construction - 2016

Unmitigated Construction Off-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.2500e-003	0.0104	0.0225	2.0000e-005	6.7000e-004	1.7000e-004	8.4000e-004	1.9000e-004	1.6000e-004	3.5000e-004	0.0000	2.2272	2.2272	2.0000e-005	0.0000	2.2276
Worker	5.2300e-003	2.1800e-003	0.0198	3.0000e-005	2.8000e-003	2.0000e-005	2.8200e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.4030	2.4030	1.5000e-004	0.0000	2.4062
Total	**8.4800e-003**	**0.0126**	**0.0424**	**5.0000e-005**	**3.4700e-003**	**1.9000e-004**	**3.6600e-003**	**9.3000e-004**	**1.8000e-004**	**1.1100e-003**	**0.0000**	**4.6302**	**4.6302**	**1.7000e-004**	**0.0000**	**4.6338**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0323	0.2705	0.1756	2.5000e-004		0.0187	0.0187		0.0175	0.0175	0.0000	22.9772	22.9772	5.7000e-003	0.0000	23.0969
Total	**0.0323**	**0.2705**	**0.1756**	**2.5000e-004**		**0.0187**	**0.0187**		**0.0175**	**0.0175**	**0.0000**	**22.9772**	**22.9772**	**5.7000e-003**	**0.0000**	**23.0969**

3.5 Building Construction - 2016

Mitigated Construction Off-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.2500e-003	0.0104	0.0225	2.0000e-005	6.7000e-004	1.7000e-004	8.4000e-004	1.9000e-004	1.6000e-004	3.5000e-004	0.0000	2.2272	2.2272	2.0000e-005	0.0000	2.2276
Worker	5.2300e-003	2.1800e-003	0.0198	3.0000e-005	2.8000e-003	2.0000e-005	2.8200e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.4030	2.4030	1.5000e-004	0.0000	2.4062
Total	**8.4800e-003**	**0.0126**	**0.0424**	**5.0000e-005**	**3.4700e-003**	**1.9000e-004**	**3.6600e-003**	**9.3000e-004**	**1.8000e-004**	**1.1100e-003**	**0.0000**	**4.6302**	**4.6302**	**1.7000e-004**	**0.0000**	**4.6338**

3.6 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0209**	**0.2239**	**0.1482**	**2.2000e-004**		**0.0126**	**0.0126**		**0.0116**	**0.0116**	**0.0000**	**21.0138**	**21.0138**	**6.3400e-003**	**0.0000**	**21.1469**

3.6 Paving - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2300e-003	9.3000e-004	8.4700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0255	1.0255	6.0000e-005	0.0000	1.0268
Total	**2.2300e-003**	**9.3000e-004**	**8.4700e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0255**	**1.0255**	**6.0000e-005**	**0.0000**	**1.0268**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0209	0.2236	0.1480	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	20.9888	20.9888	6.3300e-003	0.0000	21.1218
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0209**	**0.2236**	**0.1480**	**2.2000e-004**		**0.0126**	**0.0126**		**0.0116**	**0.0116**	**0.0000**	**20.9888**	**20.9888**	**6.3300e-003**	**0.0000**	**21.1218**

3.6 Paving - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2300e-003	9.3000e-004	8.4700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0255	1.0255	6.0000e-005	0.0000	1.0268
Total	**2.2300e-003**	**9.3000e-004**	**8.4700e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0255**	**1.0255**	**6.0000e-005**	**0.0000**	**1.0268**

3.7 Architectural Coating - 2016

Unmitigated Construction On-Site

Residential Indoor: 375,435; Residential Outdoor: 125,145; Non-Residential Indoor: 0; Non-Residential Outdoor: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1601					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6800e-003	0.0237	0.0188	3.0000e-005		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596
Total	**1.1638**	**0.0237**	**0.0188**	**3.0000e-005**		**1.9700e-003**	**1.9700e-003**		**1.9700e-003**	**1.9700e-003**	**0.0000**	**2.5533**	**2.5533**	**3.0000e-004**	**0.0000**	**2.5596**

3.7 Architectural Coating - 2016

Unmitigated Construction Off-Site

Residential Indoor: 375,435; Residential Outdoor: 125,145; Non-Residential Indoor: 0; Non-Residential Outdoor: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0400e-003	4.3000e-004	3.9500e-003	1.0000e-005	5.6000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4786	0.4786	3.0000e-005	0.0000	0.4792
Total	**1.0400e-003**	**4.3000e-004**	**3.9500e-003**	**1.0000e-005**	**5.6000e-004**	**0.0000**	**5.6000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4786**	**0.4786**	**3.0000e-005**	**0.0000**	**0.4792**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1601					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6800e-003	0.0237	0.0188	3.0000e-005		1.9600e-003	1.9600e-003		1.9600e-003	1.9600e-003	0.0000	2.5502	2.5502	3.0000e-004	0.0000	2.5565
Total	**1.1638**	**0.0237**	**0.0188**	**3.0000e-005**		**1.9600e-003**	**1.9600e-003**		**1.9600e-003**	**1.9600e-003**	**0.0000**	**2.5502**	**2.5502**	**3.0000e-004**	**0.0000**	**2.5565**

3.7 Architectural Coating - 2016

Mitigated Construction Off-Site

Residential Indoor: 375,435; Residential Outdoor: 125,145; Non-Residential Indoor: 0; Non-Residential Outdoor: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0400e-003	4.3000e-004	3.9500e-003	1.0000e-005	5.6000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4786	0.4786	3.0000e-005	0.0000	0.4792
Total	**1.0400e-003**	**4.3000e-004**	**3.9500e-003**	**1.0000e-005**	**5.6000e-004**	**0.0000**	**5.6000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4786**	**0.4786**	**3.0000e-005**	**0.0000**	**0.4792**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.0074	5.0346	16.9912	0.0209	1.0769	0.0653	1.1422	0.2894	0.0601	0.3495	0.0000	1,749.4020	1,749.4020	0.0595	0.0000	1,750.6512
Unmitigated	3.0074	5.0346	16.9912	0.0209	1.0769	0.0653	1.1422	0.2894	0.0601	0.3495	0.0000	1,749.4020	1,749.4020	0.0595	0.0000	1,750.6512

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	980.56	980.56	980.56	2,824,884	2,824,884
Total	980.56	980.56	980.56	2,824,884	2,824,884

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	7.30	7.50	44.00	18.80	37.20	86	11	3

4.4 Fleet Mix

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.354914	0.035817	0.187410	0.165315	0.060117	0.008874	0.012483	0.160358	0.001394	0.001236	0.008635	0.000543	0.002905

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	147.0493	147.0493	9.5800e-003	1.9800e-003	147.8652
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	147.0493	147.0493	9.5800e-003	1.9800e-003	147.8652
NaturalGas Mitigated	0.0196	0.1675	0.0713	1.0700e-003		0.0135	0.0135		0.0135	0.0135	0.0000	193.9318	193.9318	3.7200e-003	3.5600e-003	195.1121
NaturalGas Unmitigated	0.0196	0.1675	0.0713	1.0700e-003		0.0135	0.0135		0.0135	0.0135	0.0000	193.9318	193.9318	3.7200e-003	3.5600e-003	195.1121

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	3.63414e+006	0.0196	0.1675	0.0713	1.0700e-003		0.0135	0.0135		0.0135	0.0135	0.0000	193.9318	193.9318	3.7200e-003	3.5600e-003	195.1121
Total		**0.0196**	**0.1675**	**0.0713**	**1.0700e-003**		**0.0135**	**0.0135**		**0.0135**	**0.0135**	**0.0000**	**193.9318**	**193.9318**	**3.7200e-003**	**3.5600e-003**	**195.1121**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	3.63414e+006	0.0196	0.1675	0.0713	1.0700e-003		0.0135	0.0135		0.0135	0.0135	0.0000	193.9318	193.9318	3.7200e-003	3.5600e-003	195.1121
Total		**0.0196**	**0.1675**	**0.0713**	**1.0700e-003**		**0.0135**	**0.0135**		**0.0135**	**0.0135**	**0.0000**	**193.9318**	**193.9318**	**3.7200e-003**	**3.5600e-003**	**195.1121**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	728513	147.0493	9.5800e-003	1.9800e-003	147.8652
Total		**147.0493**	**9.5800e-003**	**1.9800e-003**	**147.8652**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	728513	147.0493	9.5800e-003	1.9800e-003	147.8652
Total		**147.0493**	**9.5800e-003**	**1.9800e-003**	**147.8652**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.0554	0.0126	1.0774	6.0000e-005		0.0109	0.0109		0.0109	0.0109	0.0000	74.7502	74.7502	3.1700e-003	1.3400e-003	75.2317
Unmitigated	7.5109	0.1003	9.0386	3.1700e-003		1.1244	1.1244		1.1243	1.1243	106.3946	46.3555	152.7501	0.1000	8.3700e-003	157.4434

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2900					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7241					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.4629	0.0877	7.9616	3.1100e-003		1.1186	1.1186		1.1185	1.1185	106.3946	44.6204	151.0150	0.0982	8.3700e-003	155.6712
Landscaping	0.0339	0.0126	1.0770	6.0000e-005		5.8100e-003	5.8100e-003		5.8100e-003	5.8100e-003	0.0000	1.7351	1.7351	1.7700e-003	0.0000	1.7722
Total	**7.5109**	**0.1003**	**9.0386**	**3.1700e-003**		**1.1244**	**1.1244**		**1.1243**	**1.1243**	**106.3946**	**46.3555**	**152.7501**	**0.1000**	**8.3700e-003**	**157.4434**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2900					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7241					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.3800e-003	0.0000	4.0000e-004	0.0000		5.1000e-003	5.1000e-003		5.0400e-003	5.0400e-003	0.0000	73.0151	73.0151	1.4000e-003	1.3400e-003	73.4595
Landscaping	0.0339	0.0126	1.0770	6.0000e-005		5.8100e-003	5.8100e-003		5.8100e-003	5.8100e-003	0.0000	1.7351	1.7351	1.7700e-003	0.0000	1.7722
Total	**1.0554**	**0.0126**	**1.0774**	**6.0000e-005**		**0.0109**	**0.0109**		**0.0109**	**0.0109**	**0.0000**	**74.7502**	**74.7502**	**3.1700e-003**	**1.3400e-003**	**75.2317**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	12.4476	0.2193	5.2900e-003	18.6942
Unmitigated	12.4476	0.2194	5.3000e-003	18.6976

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	6.71086 / 4.23076	12.4476	0.2194	5.3000e-003	18.6976
Total		**12.4476**	**0.2194**	**5.3000e-003**	**18.6976**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	6.71086 / 4.23076	12.4476	0.2193	5.2900e-003	18.6942
Total		**12.4476**	**0.2193**	**5.2900e-003**	**18.6942**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	26.3482	1.5571	0.0000	59.0481
Unmitigated	26.3482	1.5571	0.0000	59.0481

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	129.8	26.3482	1.5571	0.0000	59.0481
Total		**26.3482**	**1.5571**	**0.0000**	**59.0481**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	129.8	26.3482	1.5571	0.0000	59.0481
Total		**26.3482**	**1.5571**	**0.0000**	**59.0481**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Buena Vista - BAU

San Benito County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	103.00	Dwelling Unit	10.00	185,400.00	295

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	50
Climate Zone	4			**Operational Year**	2005
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	489	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2005 (BAU Year) PG&E CO2 Intensity Factor

Land Use - Project site = 10 acres

Construction Phase -

Grading - Project site = 10 acres

Demolition -

Architectural Coating - MBUAPCD Rule 426

Vehicle Trips - Trip generation per Traffic Impact Analysis

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblGrading	AcresOfGrading	50.00	10.00
tblLandUse	LotAcreage	33.44	10.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	489
tblProjectCharacteristics	OperationalYear	2014	2005
tblVehicleTrips	ST_TR	10.08	9.52
tblVehicleTrips	SU_TR	8.77	9.52
tblVehicleTrips	WD_TR	9.57	9.52

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2005	1.2372	6.7718	4.0677	0.0483	0.1975	0.4889	0.6865	0.0955	0.4889	0.5845	0.0000	468.4023	468.4023	0.0909	0.0000	470.3111
2006	1.3251	0.9063	0.5120	6.3000e-003	4.9500e-003	0.0659	0.0708	1.4900e-003	0.0659	0.0674	0.0000	60.1253	60.1253	0.0122	0.0000	60.3811
Total	**2.5622**	**7.6782**	**4.5797**	**0.0546**	**0.2025**	**0.5548**	**0.7573**	**0.0970**	**0.5548**	**0.6518**	**0.0000**	**528.5276**	**528.5276**	**0.1031**	**0.0000**	**530.6922**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2005	1.2359	6.7643	4.0640	0.0482	0.2012	0.4884	0.6896	0.0964	0.4884	0.5848	0.0000	467.9254	467.9254	0.0908	0.0000	469.8320
2006	1.3249	0.9053	0.5115	6.2900e-003	4.9500e-003	0.0658	0.0707	1.4900e-003	0.0658	0.0673	0.0000	60.0631	60.0631	0.0122	0.0000	60.3186
Total	**2.5608**	**7.6696**	**4.5755**	**0.0545**	**0.2061**	**0.5542**	**0.7603**	**0.0979**	**0.5542**	**0.6521**	**0.0000**	**527.9885**	**527.9885**	**0.1030**	**0.0000**	**530.1506**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.0543**	**0.1116**	**0.0930**	**0.1282**	**-1.7976**	**0.1154**	**-0.3962**	**-0.9174**	**0.1154**	**-0.0384**	**0.0000**	**0.1020**	**0.1020**	**0.1067**	**0.0000**	**0.1021**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	7.5303	0.1044	9.1935	3.1700e-003		1.1238	1.1238		1.1237	1.1237	106.3946	46.3555	152.7501	0.1010	8.3700e-003	157.4646
Energy	0.0196	0.1675	0.0713	1.0700e-003		0.0135	0.0135		0.0135	0.0135	0.0000	355.5208	355.5208	0.0133	5.5400e-003	357.5169
Mobile	5.5566	18.0541	25.9424	0.1326	0.9777	0.6605	1.6382	0.2973	0.6605	0.9578	0.0000	2,170.3946	2,170.3946	0.1764	0.0000	2,174.0979
Waste						0.0000	0.0000		0.0000	0.0000	26.3482	0.0000	26.3482	1.5571	0.0000	59.0481
Water						0.0000	0.0000		0.0000	0.0000	2.1291	11.3388	13.4678	0.2194	5.3000e-003	19.7179
Total	**13.1064**	**18.3260**	**35.2071**	**0.1368**	**0.9777**	**1.7978**	**2.7755**	**0.2973**	**1.7977**	**2.0951**	**134.8719**	**2,583.6096**	**2,718.4815**	**2.0671**	**0.0192**	**2,767.8454**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	7.5303	0.1044	9.1935	3.1700e-003		1.1238	1.1238		1.1237	1.1237	106.3946	46.3555	152.7501	0.1010	8.3700e-003	157.4646
Energy	0.0196	0.1675	0.0713	1.0700e-003		0.0135	0.0135		0.0135	0.0135	0.0000	355.5208	355.5208	0.0133	5.5400e-003	357.5169
Mobile	5.5566	18.0541	25.9424	0.1326	0.9777	0.6605	1.6382	0.2973	0.6605	0.9578	0.0000	2,170.3946	2,170.3946	0.1764	0.0000	2,174.0979
Waste						0.0000	0.0000		0.0000	0.0000	26.3482	0.0000	26.3482	1.5571	0.0000	59.0481
Water						0.0000	0.0000		0.0000	0.0000	2.1291	11.3388	13.4678	0.2193	5.2900e-003	19.7145
Total	**13.1064**	**18.3260**	**35.2071**	**0.1368**	**0.9777**	**1.7978**	**2.7755**	**0.2973**	**1.7977**	**2.0951**	**134.8719**	**2,583.6096**	**2,718.4815**	**2.0671**	**0.0192**	**2,767.8420**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.9351e-003**	**0.0521**	**1.2284e-004**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2005	1/28/2005	5	20	
2	Site Preparation	Site Preparation	1/29/2005	2/11/2005	5	10	
3	Grading	Grading	2/12/2005	3/11/2005	5	20	
4	Building Construction	Building Construction	3/12/2005	1/27/2006	5	230	
5	Paving	Paving	1/28/2006	2/24/2006	5	20	
6	Archetechural Coating	Architectural Coating	2/25/2006	3/24/2006	5	20	

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Archetechural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	162	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	162	0.38
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	30.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	37.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Archetechural Coating	1	7.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2005

Unmitigated Construction On-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.2900e-003	0.0000	3.2900e-003	5.0000e-004	0.0000	5.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0822	0.6536	0.3403	4.2800e-003		0.0361	0.0361		0.0361	0.0361	0.0000	40.7184	40.7184	6.7000e-003	0.0000	40.8591
Total	**0.0822**	**0.6536**	**0.3403**	**4.2800e-003**	**3.2900e-003**	**0.0361**	**0.0394**	**5.0000e-004**	**0.0361**	**0.0366**	**0.0000**	**40.7184**	**40.7184**	**6.7000e-003**	**0.0000**	**40.8591**

3.2 Demolition - 2005

Unmitigated Construction Off-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3000e-003	0.0146	5.2900e-003	1.1000e-004	2.3000e-004	6.1000e-004	8.4000e-004	9.0000e-005	6.1000e-004	7.0000e-004	0.0000	1.1576	1.1576	5.0000e-005	0.0000	1.1586
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5700e-003	2.6500e-003	0.0234	2.0000e-005	1.1100e-003	6.0000e-005	1.1600e-003	3.3000e-004	6.0000e-005	3.8000e-004	0.0000	1.2637	1.2637	1.7000e-004	0.0000	1.2674
Total	**6.8700e-003**	**0.0173**	**0.0287**	**1.3000e-004**	**1.3400e-003**	**6.7000e-004**	**2.0000e-003**	**4.2000e-004**	**6.7000e-004**	**1.0800e-003**	**0.0000**	**2.4213**	**2.4213**	**2.2000e-004**	**0.0000**	**2.4259**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.2900e-003	0.0000	3.2900e-003	5.0000e-004	0.0000	5.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0821	0.6528	0.3399	4.2800e-003		0.0361	0.0361		0.0361	0.0361	0.0000	40.6700	40.6700	6.6900e-003	0.0000	40.8105
Total	**0.0821**	**0.6528**	**0.3399**	**4.2800e-003**	**3.2900e-003**	**0.0361**	**0.0394**	**5.0000e-004**	**0.0361**	**0.0366**	**0.0000**	**40.6700**	**40.6700**	**6.6900e-003**	**0.0000**	**40.8105**

3.2 Demolition - 2005

Mitigated Construction Off-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3000e-003	0.0146	5.2900e-003	1.1000e-004	3.8700e-003	6.1000e-004	4.4800e-003	9.8000e-004	6.1000e-004	1.5900e-003	0.0000	1.1576	1.1576	5.0000e-005	0.0000	1.1586
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5700e-003	2.6500e-003	0.0234	2.0000e-005	1.1100e-003	6.0000e-005	1.1600e-003	3.3000e-004	6.0000e-005	3.8000e-004	0.0000	1.2637	1.2637	1.7000e-004	0.0000	1.2674
Total	**6.8700e-003**	**0.0173**	**0.0287**	**1.3000e-004**	**4.9800e-003**	**6.7000e-004**	**5.6400e-003**	**1.3100e-003**	**6.7000e-004**	**1.9700e-003**	**0.0000**	**2.4213**	**2.4213**	**2.2000e-004**	**0.0000**	**2.4259**

3.3 Site Preparation - 2005

Unmitigated Construction On-Site

Acres of Grading: 10

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0443	0.3368	0.1926	2.1100e-003		0.0204	0.0204		0.0204	0.0204	0.0000	20.4388	20.4388	3.6100e-003	0.0000	20.5145
Total	**0.0443**	**0.3368**	**0.1926**	**2.1100e-003**	**0.0903**	**0.0204**	**0.1107**	**0.0497**	**0.0204**	**0.0701**	**0.0000**	**20.4388**	**20.4388**	**3.6100e-003**	**0.0000**	**20.5145**

3.3 Site Preparation - 2005

Unmitigated Construction Off-Site

Acres of Grading: 10

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3400e-003	1.5900e-003	0.0141	1.0000e-005	6.6000e-004	3.0000e-005	7.0000e-004	2.0000e-004	3.0000e-005	2.3000e-004	0.0000	0.7582	0.7582	1.0000e-004	0.0000	0.7604
Total	**3.3400e-003**	**1.5900e-003**	**0.0141**	**1.0000e-005**	**6.6000e-004**	**3.0000e-005**	**7.0000e-004**	**2.0000e-004**	**3.0000e-005**	**2.3000e-004**	**0.0000**	**0.7582**	**0.7582**	**1.0000e-004**	**0.0000**	**0.7604**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0442	0.3364	0.1924	2.1100e-003		0.0204	0.0204		0.0204	0.0204	0.0000	20.4145	20.4145	3.6000e-003	0.0000	20.4901
Total	**0.0442**	**0.3364**	**0.1924**	**2.1100e-003**	**0.0903**	**0.0204**	**0.1107**	**0.0497**	**0.0204**	**0.0700**	**0.0000**	**20.4145**	**20.4145**	**3.6000e-003**	**0.0000**	**20.4901**

3.3 Site Preparation - 2005

Mitigated Construction Off-Site

Acres of Grading: 10

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3400e-003	1.5900e-003	0.0141	1.0000e-005	6.6000e-004	3.0000e-005	7.0000e-004	2.0000e-004	3.0000e-005	2.3000e-004	0.0000	0.7582	0.7582	1.0000e-004	0.0000	0.7604
Total	**3.3400e-003**	**1.5900e-003**	**0.0141**	**1.0000e-005**	**6.6000e-004**	**3.0000e-005**	**7.0000e-004**	**2.0000e-004**	**3.0000e-005**	**2.3000e-004**	**0.0000**	**0.7582**	**0.7582**	**1.0000e-004**	**0.0000**	**0.7604**

3.4 Grading - 2005

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1214	1.0150	0.5143	6.6700e-003		0.0531	0.0531		0.0531	0.0531	0.0000	64.9953	64.9953	9.8900e-003	0.0000	65.2029
Total	**0.1214**	**1.0150**	**0.5143**	**6.6700e-003**	**0.0655**	**0.0531**	**0.1187**	**0.0337**	**0.0531**	**0.0868**	**0.0000**	**64.9953**	**64.9953**	**9.8900e-003**	**0.0000**	**65.2029**

3.4 Grading - 2005

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4300e-003	3.5300e-003	0.0312	2.0000e-005	1.4800e-003	7.0000e-005	1.5500e-003	4.4000e-004	7.0000e-005	5.1000e-004	0.0000	1.6849	1.6849	2.3000e-004	0.0000	1.6898
Total	**7.4300e-003**	**3.5300e-003**	**0.0312**	**2.0000e-005**	**1.4800e-003**	**7.0000e-005**	**1.5500e-003**	**4.4000e-004**	**7.0000e-005**	**5.1000e-004**	**0.0000**	**1.6849**	**1.6849**	**2.3000e-004**	**0.0000**	**1.6898**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1212	1.0138	0.5137	6.6600e-003		0.0531	0.0531		0.0531	0.0531	0.0000	64.9180	64.9180	9.8700e-003	0.0000	65.1253
Total	**0.1212**	**1.0138**	**0.5137**	**6.6600e-003**	**0.0655**	**0.0531**	**0.1186**	**0.0337**	**0.0531**	**0.0867**	**0.0000**	**64.9180**	**64.9180**	**9.8700e-003**	**0.0000**	**65.1253**

3.4 Grading - 2005

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4300e-003	3.5300e-003	0.0312	2.0000e-005	1.4800e-003	7.0000e-005	1.5500e-003	4.4000e-004	7.0000e-005	5.1000e-004	0.0000	1.6849	1.6849	2.3000e-004	0.0000	1.6898
Total	**7.4300e-003**	**3.5300e-003**	**0.0312**	**2.0000e-005**	**1.4800e-003**	**7.0000e-005**	**1.5500e-003**	**4.4000e-004**	**7.0000e-005**	**5.1000e-004**	**0.0000**	**1.6849**	**1.6849**	**2.3000e-004**	**0.0000**	**1.6898**

3.5 Building Construction - 2005

Unmitigated Construction On-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.7872	4.3325	2.1352	0.0318		0.3646	0.3646		0.3646	0.3646	0.0000	274.7927	274.7927	0.0642	0.0000	276.1419
Total	**0.7872**	**4.3325**	**2.1352**	**0.0318**		**0.3646**	**0.3646**		**0.3646**	**0.3646**	**0.0000**	**274.7927**	**274.7927**	**0.0642**	**0.0000**	**276.1419**

3.5 Building Construction - 2005

Unmitigated Construction Off-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0402	0.3430	0.2047	2.8600e-003	6.2200e-003	0.0125	0.0187	2.1500e-003	0.0125	0.0147	0.0000	29.8627	29.8627	1.3900e-003	0.0000	29.8919
Worker	0.1443	0.0686	0.6067	4.2000e-004	0.0287	1.4400e-003	0.0301	8.4900e-003	1.4400e-003	9.9300e-003	0.0000	32.7300	32.7300	4.5100e-003	0.0000	32.8247
Total	**0.1845**	**0.4116**	**0.8113**	**3.2800e-003**	**0.0349**	**0.0139**	**0.0489**	**0.0106**	**0.0139**	**0.0246**	**0.0000**	**62.5927**	**62.5927**	**5.9000e-003**	**0.0000**	**62.7166**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.7862	4.3274	2.1327	0.0318		0.3641	0.3641		0.3641	0.3641	0.0000	274.4659	274.4659	0.0642	0.0000	275.8134
Total	**0.7862**	**4.3274**	**2.1327**	**0.0318**		**0.3641**	**0.3641**		**0.3641**	**0.3641**	**0.0000**	**274.4659**	**274.4659**	**0.0642**	**0.0000**	**275.8134**

3.5 Building Construction - 2005

Mitigated Construction Off-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0402	0.3430	0.2047	2.8600e-003	6.2200e-003	0.0125	0.0187	2.1500e-003	0.0125	0.0147	0.0000	29.8627	29.8627	1.3900e-003	0.0000	29.8919
Worker	0.1443	0.0686	0.6067	4.2000e-004	0.0287	1.4400e-003	0.0301	8.4900e-003	1.4400e-003	9.9300e-003	0.0000	32.7300	32.7300	4.5100e-003	0.0000	32.8247
Total	**0.1845**	**0.4116**	**0.8113**	**3.2800e-003**	**0.0349**	**0.0139**	**0.0489**	**0.0106**	**0.0139**	**0.0246**	**0.0000**	**62.5927**	**62.5927**	**5.9000e-003**	**0.0000**	**62.7166**

3.5 Building Construction - 2006

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0750	0.4126	0.2034	3.0300e-003		0.0347	0.0347		0.0347	0.0347	0.0000	26.1707	26.1707	6.1200e-003	0.0000	26.2992
Total	**0.0750**	**0.4126**	**0.2034**	**3.0300e-003**		**0.0347**	**0.0347**		**0.0347**	**0.0347**	**0.0000**	**26.1707**	**26.1707**	**6.1200e-003**	**0.0000**	**26.2992**

3.5 Building Construction - 2006

Unmitigated Construction Off-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8300e-003	0.0327	0.0195	2.7000e-004	5.9000e-004	1.1900e-003	1.7800e-003	2.1000e-004	1.1900e-003	1.4000e-003	0.0000	2.8441	2.8441	1.3000e-004	0.0000	2.8468
Worker	0.0137	6.5300e-003	0.0578	4.0000e-005	2.7300e-003	1.4000e-004	2.8700e-003	8.1000e-004	1.4000e-004	9.5000e-004	0.0000	3.1171	3.1171	4.3000e-004	0.0000	3.1262
Total	**0.0176**	**0.0392**	**0.0773**	**3.1000e-004**	**3.3200e-003**	**1.3300e-003**	**4.6500e-003**	**1.0200e-003**	**1.3300e-003**	**2.3500e-003**	**0.0000**	**5.9612**	**5.9612**	**5.6000e-004**	**0.0000**	**5.9730**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0749	0.4121	0.2031	3.0200e-003		0.0347	0.0347		0.0347	0.0347	0.0000	26.1396	26.1396	6.1100e-003	0.0000	26.2679
Total	**0.0749**	**0.4121**	**0.2031**	**3.0200e-003**		**0.0347**	**0.0347**		**0.0347**	**0.0347**	**0.0000**	**26.1396**	**26.1396**	**6.1100e-003**	**0.0000**	**26.2679**

3.5 Building Construction - 2006

Mitigated Construction Off-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8300e-003	0.0327	0.0195	2.7000e-004	5.9000e-004	1.1900e-003	1.7800e-003	2.1000e-004	1.1900e-003	1.4000e-003	0.0000	2.8441	2.8441	1.3000e-004	0.0000	2.8468
Worker	0.0137	6.5300e-003	0.0578	4.0000e-005	2.7300e-003	1.4000e-004	2.8700e-003	8.1000e-004	1.4000e-004	9.5000e-004	0.0000	3.1171	3.1171	4.3000e-004	0.0000	3.1262
Total	**0.0176**	**0.0392**	**0.0773**	**3.1000e-004**	**3.3200e-003**	**1.3300e-003**	**4.6500e-003**	**1.0200e-003**	**1.3300e-003**	**2.3500e-003**	**0.0000**	**5.9612**	**5.9612**	**5.6000e-004**	**0.0000**	**5.9730**

3.6 Paving - 2006

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0567	0.4078	0.1763	2.6400e-003		0.0259	0.0259		0.0259	0.0259	0.0000	23.5867	23.5867	4.6300e-003	0.0000	23.6839
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0567**	**0.4078**	**0.1763**	**2.6400e-003**		**0.0259**	**0.0259**		**0.0259**	**0.0259**	**0.0000**	**23.5867**	**23.5867**	**4.6300e-003**	**0.0000**	**23.6839**

3.6 Paving - 2006

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5700e-003	2.6500e-003	0.0234	2.0000e-005	1.1100e-003	6.0000e-005	1.1600e-003	3.3000e-004	6.0000e-005	3.8000e-004	0.0000	1.2637	1.2637	1.7000e-004	0.0000	1.2674
Total	**5.5700e-003**	**2.6500e-003**	**0.0234**	**2.0000e-005**	**1.1100e-003**	**6.0000e-005**	**1.1600e-003**	**3.3000e-004**	**6.0000e-005**	**3.8000e-004**	**0.0000**	**1.2637**	**1.2637**	**1.7000e-004**	**0.0000**	**1.2674**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0567	0.4073	0.1760	2.6400e-003		0.0259	0.0259		0.0259	0.0259	0.0000	23.5586	23.5586	4.6200e-003	0.0000	23.6557
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0567**	**0.4073**	**0.1760**	**2.6400e-003**		**0.0259**	**0.0259**		**0.0259**	**0.0259**	**0.0000**	**23.5586**	**23.5586**	**4.6200e-003**	**0.0000**	**23.6557**

3.6 Paving - 2006

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5700e-003	2.6500e-003	0.0234	2.0000e-005	1.1100e-003	6.0000e-005	1.1600e-003	3.3000e-004	6.0000e-005	3.8000e-004	0.0000	1.2637	1.2637	1.7000e-004	0.0000	1.2674
Total	**5.5700e-003**	**2.6500e-003**	**0.0234**	**2.0000e-005**	**1.1100e-003**	**6.0000e-005**	**1.1600e-003**	**3.3000e-004**	**6.0000e-005**	**3.8000e-004**	**0.0000**	**1.2637**	**1.2637**	**1.7000e-004**	**0.0000**	**1.2674**

3.7 Archetechural Coating - 2006

Unmitigated Construction On-Site

Residential Indoor: 375,435; Residential Outdoor: 125,145; Non-Residential Indoor: 0; Non-Residential Outdoor: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1601					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.5200e-003	0.0428	0.0208	3.0000e-004		3.8400e-003	3.8400e-003		3.8400e-003	3.8400e-003	0.0000	2.5533	2.5533	6.2000e-004	0.0000	2.5662
Total	**1.1676**	**0.0428**	**0.0208**	**3.0000e-004**		**3.8400e-003**	**3.8400e-003**		**3.8400e-003**	**3.8400e-003**	**0.0000**	**2.5533**	**2.5533**	**6.2000e-004**	**0.0000**	**2.5662**

3.7 Archetechural Coating - 2006

Unmitigated Construction Off-Site

Residential Indoor: 375,435; Residential Outdoor: 125,145; Non-Residential Indoor: 0; Non-Residential Outdoor: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-003	1.2400e-003	0.0109	1.0000e-005	5.2000e-004	3.0000e-005	5.4000e-004	1.5000e-004	3.0000e-005	1.8000e-004	0.0000	0.5897	0.5897	8.0000e-005	0.0000	0.5914
Total	**2.6000e-003**	**1.2400e-003**	**0.0109**	**1.0000e-005**	**5.2000e-004**	**3.0000e-005**	**5.4000e-004**	**1.5000e-004**	**3.0000e-005**	**1.8000e-004**	**0.0000**	**0.5897**	**0.5897**	**8.0000e-005**	**0.0000**	**0.5914**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1601					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.5100e-003	0.0428	0.0208	3.0000e-004		3.8300e-003	3.8300e-003		3.8300e-003	3.8300e-003	0.0000	2.5502	2.5502	6.1000e-004	0.0000	2.5631
Total	**1.1676**	**0.0428**	**0.0208**	**3.0000e-004**		**3.8300e-003**	**3.8300e-003**		**3.8300e-003**	**3.8300e-003**	**0.0000**	**2.5502**	**2.5502**	**6.1000e-004**	**0.0000**	**2.5631**

3.7 Archetechural Coating - 2006

Mitigated Construction Off-Site

Residential Indoor: 375,435; Residential Outdoor: 125,145; Non-Residential Indoor: 0; Non-Residential Outdoor: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-003	1.2400e-003	0.0109	1.0000e-005	5.2000e-004	3.0000e-005	5.4000e-004	1.5000e-004	3.0000e-005	1.8000e-004	0.0000	0.5897	0.5897	8.0000e-005	0.0000	0.5914
Total	**2.6000e-003**	**1.2400e-003**	**0.0109**	**1.0000e-005**	**5.2000e-004**	**3.0000e-005**	**5.4000e-004**	**1.5000e-004**	**3.0000e-005**	**1.8000e-004**	**0.0000**	**0.5897**	**0.5897**	**8.0000e-005**	**0.0000**	**0.5914**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.5566	18.0541	25.9424	0.1326	0.9777	0.6605	1.6382	0.2973	0.6605	0.9578	0.0000	2,170.3946	2,170.3946	0.1764	0.0000	2,174.0979
Unmitigated	5.5566	18.0541	25.9424	0.1326	0.9777	0.6605	1.6382	0.2973	0.6605	0.9578	0.0000	2,170.3946	2,170.3946	0.1764	0.0000	2,174.0979

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	980.56	980.56	980.56	2,824,884	2,824,884
Total	980.56	980.56	980.56	2,824,884	2,824,884

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	7.30	7.50	44.00	18.80	37.20	86	11	3

4.4 Fleet Mix

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.301969	0.163340	0.182348	0.081640	0.022861	0.009950	0.014433	0.200543	0.000757	0.001307	0.016354	0.001174	0.003324

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	161.5890	161.5890	9.5800e-003	1.9800e-003	162.4049
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	161.5890	161.5890	9.5800e-003	1.9800e-003	162.4049
NaturalGas Mitigated	0.0196	0.1675	0.0713	1.0700e-003		0.0135	0.0135		0.0135	0.0135	0.0000	193.9318	193.9318	3.7200e-003	3.5600e-003	195.1121
NaturalGas Unmitigated	0.0196	0.1675	0.0713	1.0700e-003		0.0135	0.0135		0.0135	0.0135	0.0000	193.9318	193.9318	3.7200e-003	3.5600e-003	195.1121

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	3.63414e+006	0.0196	0.1675	0.0713	1.0700e-003		0.0135	0.0135		0.0135	0.0135	0.0000	193.9318	193.9318	3.7200e-003	3.5600e-003	195.1121
Total		**0.0196**	**0.1675**	**0.0713**	**1.0700e-003**		**0.0135**	**0.0135**		**0.0135**	**0.0135**	**0.0000**	**193.9318**	**193.9318**	**3.7200e-003**	**3.5600e-003**	**195.1121**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	3.63414e+006	0.0196	0.1675	0.0713	1.0700e-003		0.0135	0.0135		0.0135	0.0135	0.0000	193.9318	193.9318	3.7200e-003	3.5600e-003	195.1121
Total		**0.0196**	**0.1675**	**0.0713**	**1.0700e-003**		**0.0135**	**0.0135**		**0.0135**	**0.0135**	**0.0000**	**193.9318**	**193.9318**	**3.7200e-003**	**3.5600e-003**	**195.1121**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	728513	161.5890	9.5800e-003	1.9800e-003	162.4049
Total		**161.5890**	**9.5800e-003**	**1.9800e-003**	**162.4049**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	728513	161.5890	9.5800e-003	1.9800e-003	162.4049
Total		**161.5890**	**9.5800e-003**	**1.9800e-003**	**162.4049**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	7.5303	0.1044	9.1935	3.1700e-003		1.1238	1.1238		1.1237	1.1237	106.3946	46.3555	152.7501	0.1010	8.3700e-003	157.4646
Unmitigated	7.5303	0.1044	9.1935	3.1700e-003		1.1238	1.1238		1.1237	1.1237	106.3946	46.3555	152.7501	0.1010	8.3700e-003	157.4646

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2900					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7241					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.4629	0.0877	7.9616	3.1100e-003		1.1186	1.1186		1.1185	1.1185	106.3946	44.6204	151.0150	0.0982	8.3700e-003	155.6712
Landscaping	0.0533	0.0168	1.2319	6.0000e-005		5.2000e-003	5.2000e-003		5.2000e-003	5.2000e-003	0.0000	1.7351	1.7351	2.7800e-003	0.0000	1.7934
Total	**7.5303**	**0.1044**	**9.1935**	**3.1700e-003**		**1.1238**	**1.1238**		**1.1237**	**1.1237**	**106.3946**	**46.3555**	**152.7501**	**0.1010**	**8.3700e-003**	**157.4646**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2900					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7241					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.4629	0.0877	7.9616	3.1100e-003		1.1186	1.1186		1.1185	1.1185	106.3946	44.6204	151.0150	0.0982	8.3700e-003	155.6712
Landscaping	0.0533	0.0168	1.2319	6.0000e-005		5.2000e-003	5.2000e-003		5.2000e-003	5.2000e-003	0.0000	1.7351	1.7351	2.7800e-003	0.0000	1.7934
Total	**7.5303**	**0.1044**	**9.1935**	**3.1700e-003**		**1.1238**	**1.1238**		**1.1237**	**1.1237**	**106.3946**	**46.3555**	**152.7501**	**0.1010**	**8.3700e-003**	**157.4646**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	13.4678	0.2193	5.2900e-003	19.7145
Unmitigated	13.4678	0.2194	5.3000e-003	19.7179

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	6.71086 / 4.23076	13.4678	0.2194	5.3000e-003	19.7179
Total		**13.4678**	**0.2194**	**5.3000e-003**	**19.7179**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	6.71086 / 4.23076	13.4678	0.2193	5.2900e-003	19.7145
Total		**13.4678**	**0.2193**	**5.2900e-003**	**19.7145**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	26.3482	1.5571	0.0000	59.0481
Unmitigated	26.3482	1.5571	0.0000	59.0481

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	129.8	26.3482	1.5571	0.0000	59.0481
Total		**26.3482**	**1.5571**	**0.0000**	**59.0481**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	129.8	26.3482	1.5571	0.0000	59.0481
Total		**26.3482**	**1.5571**	**0.0000**	**59.0481**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

APPENDIX F – PHASE I ENVIRONMENTAL SITE ASSESSMENT AND SOIL QUALITY EVALUATION

MODIFIED PHASE I ENVIRONMENTAL SITE ASSESSMENT

1601 BUENA VISTA ROAD
SAN BENITO COUNTY, CALIFORNIA

Submitted to:
Mr. Doug Ledeboer
Highland Partners Group, Inc.
PO Box 1096
Danville, CA 94526r

Prepared by:
ENGEO Incorporated

October 11, 2013

Project No:
10613.000.000

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ENGEO
Expect Excellence

GEOTECHNICAL
ENVIRONMENTAL
WATER RESOURCES
CONSTRUCTION SERVICES

Project No.
10613.000.000

October 11, 2013

Mr. Doug Ledeboer
Highland Partners Group, Inc.
P.O. Box 1096
Danville, CA 94526

Subject: 1601 Buena Vista Road
San Benito County, California

MODIFIED PHASE I ENVIRONMENTAL SITE ASSESSMENT

Dear Mr. Ledeboer:

ENGEO is pleased to present our modified phase I environmental site assessment of the subject property (Property), located in San Benito County, California. The attached report includes a description of the site assessment activities, along with ENGEO's findings, opinions, and conclusions regarding the Property.

ENGEO has the specific qualifications based on education, training, and experience to assess the nature, history, and setting of the Property, and has developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312. We declare that, to the best of our professional knowledge and belief, the responsible charge for this study meets the definition of Environmental Professional as defined in Section 312.10 of 40 CFR Part 312 and ASTM 1527-05.

We are pleased to be of service to you on this project. If you have any questions concerning the contents of our report, please contact us.

Sincerely,

ENGEO Incorporated

Greg Cubbon, PG

Brian Flaherty, CHG

Scott Johns, PE

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APPENDIX F – Environmental Site Assessment Questionnaire (1)
APPENDIX G – California Laboratory Services Data Report
APPENDIX H – Qualifications of Environmental Professional

EXECUTIVE SUMMARY

ENGEO conducted a modified phase I environmental site assessment for the property located at 1601 Buena Vista Road in San Benito County, California (Property). The Property is approximately 11.5 acres in area and is identified by Assessor's Parcel Number (APN) 019-250-001.

The Property consists of a one-story residence, septic system, two water wells for domestic and irrigation purposes, and a walnut orchard. During our site reconnaissance, miscellaneous debris and garbage was scattered throughout the Property. Review of historical aerial photographs found that the Property has contained a residence and has been used for agriculture since at least 1939.

Given that the land use has involved agricultural activities, an agrichemical impact assessment was performed that included laboratory testing of 24 near-surface soil samples collected from across the Property (Figure 4). The laboratory testing found that arsenic concentrations ranged from 4.8 milligrams per kilogram (mg/kg) to 10 mg/kg. Dichlorodiphenyldichloroethylene (DDE) and dichlorodiphenyltrichloroethane (DDT) were the only organochlorine pesticides (OCPs) detected above laboratory reporting limits. The maximum reported concentration for DDE is 190 micrograms per kilogram (µg/kg), while the maximum reported concentration for DDT is 47 µg/kg. The reported concentrations are below typical background levels or applicable environmental screening levels and should not require mitigation for residential redevelopment.

This assessment included a review of local, state, tribal, and federal environmental record sources, standard historical sources, aerial photographs, fire insurance maps and physical setting sources. A reconnaissance of the Property was conducted to review site use and current conditions to check for the storage, use, production or disposal of hazardous or potentially hazardous materials and interviews with persons knowledgeable about current and past site use.

The site reconnaissance and records review did not find documentation or physical evidence of soil or groundwater impairments associated with the use or past use of the Property. A review of regulatory databases maintained by county, state, tribal, and federal agencies found no documentation of hazardous materials violations or discharge on the Property and did not identify contaminated facilities within the appropriate American Society for Testing and Materials (ASTM) search distances that would reasonably be expected to impact the Property.

Based on the findings of this assessment, no Recognized Environmental Conditions (RECs) and no historical RECs were identified for the Property.

Based on the review of regulatory databases and site reconnaissance, we present information on features of potential environmental concern that were either contained in the databases or observed on the Property. These features were not considered to be RECs. We briefly discuss each feature below:

- Given the age of the existing structure, it is conceivable that asbestos-containing materials and lead-based paint materials may exist within the structure.

- Miscellaneous debris and abandoned garbage items are onsite. There were no obvious indications of a spill or release noted during our site reconnaissance.

- An on site septic system is in place that will need to be removed prior to future site development.

- The two water wells on site will need to be abandoned prior to future site development.

ENGEO has performed a modified phase I environmental site assessment of the Property in general conformance with the scope and limitations of ASTM E 1527-05 “Standard Practice for Environmental Site Assessments” and USEPA “Standards and Practices for All Appropriate Inquires”, 40 CFR Part 312. Based on the findings of this assessment, no further environmental studies are recommended at this time; however, the following items should be considered.

- An asbestos and lead-paint materials survey should be performed on the residential structure prior to demolition activities.

- The water wells and septic system should be properly abandoned with oversight from the appropriate agencies.

1.0 INTRODUCTION

ENGEO conducted a modified phase I environmental site assessment for the Property located at 1601 Buena Vista Road in San Benito County, California (Figure 1). The approximately 11.5-acre Property is identified as APN 019-250-001 (Figure 2) and is currently occupied by a one story residence and a walnut orchard. As depicted on Figure 1, the residence is located in the northwestern portion of the Property while the walnut orchard occupies the remainder of the site.

1.1 PURPOSE OF PHASE I ENVIRONMENTAL SITE ASSESSMENT

This assessment was performed at the request of Highland Partners Group, Inc. for the purpose of environmental due diligence during Property acquisition. The objective of this modified phase I environmental site assessment is to identify recognized environmental conditions associated with the Property. As defined in the ASTM Standard Practice E 1527-05, a REC is "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property".

1.2 DETAILED SCOPE OF SERVICES

The scope of services performed included the following:

- A review of publicly available and practically reviewable standard local, state, tribal, and federal environmental record sources.
- A review of publicly available and practically reviewable standard historical sources, aerial photographs, fire insurance maps and physical setting sources.
- A reconnaissance of the Property to review site use and current conditions. The reconnaissance was conducted to check for the storage, use, production or disposal of hazardous or potentially hazardous materials.
- An agrichemical impact assessment including the collection of near surface soil samples and laboratory analysis.
- Interviews with owners/occupants and public sector officials.
- Preparation of this report with our findings, opinions, and conclusions.

1.3 LIMITATIONS AND EXCEPTIONS OF ASSESSMENT

The professional staff at ENGEO strives to perform its services in a proper and professional manner with reasonable care and competence but is not infallible. The recommendations and

conclusions presented in this report were based on the findings of our study, which were developed solely from the contracted services. The findings of the report are based in part on contracted database research, out-of-house reports and personal communications. The opinions formed by ENGEO are based on the assumed accuracy of the relied upon data in conjunction with our relevant professional experience related to such data interpretation. ENGEO assumes no liability for the validity of the materials relied upon in the preparation of this report.

This document must not be subject to unauthorized reuse; that is, reuse without written authorization of ENGEO. Such authorization is essential because it requires ENGEO to evaluate the document's applicability given new circumstances, not the least of which is passage of time. The findings from a modified phase I environmental site assessment are valid for one year after completion of the report. Updates of portions of the assessment may be necessary after a period of 180 days after completion.

This modified phase I environmental site assessment is not intended to represent a complete soil or groundwater characterization, nor define the depth or extent of soil or groundwater contamination. It is intended to provide an evaluation of potential environmental concerns associated with the use of the Property. A more extensive assessment that would include additional subsurface exploration with laboratory testing of soil and groundwater samples could provide more definitive information concerning site-specific conditions. If additional assessment activities are considered for the Property and if other entities are retained to provide such services, ENGEO cannot be held responsible for any and all claims arising from or resulting from the performance of such services by other persons or entities. ENGEO can also not be held responsible from any and all claims arising or resulting from clarifications, adjustments, modifications, discrepancies or other changes necessary to reflect changed field or other conditions.

1.4 SPECIAL TERMS AND CONDITIONS

ENGEO has prepared this report for the exclusive use of our client, Highland Partners Group, Inc. It is recognized and agreed that ENGEO has assumed responsibility only for undertaking the study for the client. The responsibility for disclosures or reports to a third party and for remedial or mitigative action shall be solely that of the Client.

Laboratory testing of soil and groundwater samples was not within the scope of the contracted services with the exception of the limited agricultural assessment. The assessment did not include an asbestos survey, an evaluation of lead-based paint, an inspection of light ballasts for polychlorinated biphenyls (PCBs), a radon evaluation, or a mold survey.

This report is based upon field and other conditions discovered at the time of preparation of ENGEO's assessment. Visual observations referenced in this report are intended only to represent conditions at the time of the reconnaissance. ENGEO would not be aware of site contamination, such as dumping and/or accidental spillage that occurred subsequent to the reconnaissance conducted by ENGEO personnel.

2.0 PROPERTY INFORMATION

2.1 SITE LOCATION

The Property is located at 1601 Buena Vista Road, in San Benito County, California (Figure 1). The approximately 11.5-acre Property is identified as APN 019-250-001 (Figure 2).

2.2 SITE AND VICINITY CHARACTERISTICS

Review of published topographic maps found that the Property is relatively level at an elevation of approximately 270 feet above mean sea level (msl) (Figure 3). Review of geologic mapping by Wagner (2002) found that the Property is underlain by terrace deposits (Qt) on the southern portion of the site and alluvium (Qa) on the northern portion of the site.

Geocheck – The Physical Setting Source Summary of the Environmental Resources Data report (Appendix A) shows seventeen Federal United States Geological Survey (USGS) wells located within one mile of the Property. Well Number USGS40000178747 is mapped approximately 1/4 mile west-northwest of the Property at an elevation of approximately 273 feet above msl. Thirty-nine groundwater level readings recorded for this well between 1951 and 1988 indicate groundwater depths ranging from 48 feet to 108.5 feet below the ground surface.

Measurements to determine direction of groundwater flow were not available for the Property. However, review of documents available on the GeoTracker website maintained by the Regional Water Quality Control Board, indicated groundwater flow toward both the southwest and the northwest at the Victory Gas and Food Station located approximately 830 feet south of the Property at its closest point

We reviewed the Department of Water Resources On-line Water Data Library for depth to water in the vicinity of the Property. The website identified one well (designated 12S05E28J001) within 1 mile of the Property. This well, located approximately 1,400 feet east of the Property, reported groundwater levels ranging between 47 feet and 128 feet below the groundwater surface from measurements taken between 1967 and 1990.

The site-specific depth to groundwater and direction of groundwater flow was not determined as part of this assessment. Fluctuations in groundwater levels may occur seasonally and over a period of years due to variations in precipitation, temperature, irrigation and other factors.

We reviewed the Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) web site and map database to determine if any historic oil and/or gas wells were located within the Property. No wells were mapped within the Property. The nearest mapped well (designated 06900053) is located approximately 1,200 feet northwest of the Property. The well is reportedly plugged.

2.3 CURRENT USE OF PROPERTY/DESCRIPTION OF SITE IMPROVEMENTS

The Property currently consists of a single-story residence and walnut orchard. A former barn (burned down circa 2008) was located in the rear yard area of the residence. Through conversations with the Property owner, we understand a septic system is onsite near the residence. In addition, two water wells are located onsite, apparently for domestic and irrigation purposes. The wells were found during our reconnaissance and the approximate locations are shown on Figure 4.

2.4 CURRENT USE OF ADJOINING PROPERTIES

The Property is surrounded on the south, east, and west by residential developments. The northern side of the Property is bordered by Buena Vista Road and agricultural lands.

3.0 RECORDS REVIEW

3.1 PROPERTY RECORDS

3.1.1 Title Report/Ownership

The Title Report lists recorded land title detail, ownership fees, leases, land contracts, easements, liens, deficiencies, and other encumbrances attached to or recorded against a property. Laws and regulations pertaining to land trusts vary from state to state and the detail of information presented in a Title Report can vary greatly by jurisdiction. As a result, ENGEO utilizes a Title Report, when provided to us, as a supplement to other historical record sources.

A Preliminary Title Report for the Property was not provided for our review before publication of this report.

3.2 HISTORICAL RECORD SOURCES

The purpose of the historical record review is to develop a history of the previous uses or occupancies of the Property and surrounding area in order to identify those uses or occupancies that are likely to have led to recognized environmental conditions on the Property.

3.2.1 Historical Topographic Maps

Historical USGS topographic maps were reviewed to determine if discernible changes in topography or improvements pertaining to the Property had been recorded. The following maps were provided to us through an EDR Historical Topographic Map Report. (Appendix C)

TABLE 3.2.1-1
Historical Topographic Maps

Quad	Year	Series	Scale
Hollister	1921	15	1:62,500
Hollister	1955	15	1:62,500
Hollister	1955	7.5	1:24,000
Hollister	1971	7.5	1:24,000
Hollister	1987	15	1:50,000
Hollister	1993	7.5	1:24,000
Hollister	1995	7.5	1:24,000

1921 Map- A single structure appears to be located in the northwestern corner of the Property. Numerous other structures are depicted to the east and west of the Property along Buena Vista Road and to the south of the Property along San Juan Road. The areas surrounding structures appear to be open space.

1955 and 1971 Maps – Property conditions appear similar to the 1921 Map. The present day alignment of Bridge Road (south of the Property) is mapped.

1987, 1993, and 1995 Maps – Property conditions appear similar to the 1971 Map. Developed streets and structures to the south, east and west of the Property are depicted. The area north of the Property appears to remain as open space.

3.2.2 Aerial Photographs

The following aerial photographs, provided by EDR, were reviewed for information regarding past conditions and land use at the Property and in the immediate vicinity. These photographs are presented in Appendix D.

TABLE 3.2.2-1
Aerial Photographs

Flyer	Year	Scale
Fairchild	1939	1”=500’
Park	1949	1”=500’
Cartwright	1958	1”=500’
NASA	1974	1”=500’
USGS	1981	1”=500’
USGS	1987	1”=500’
EDR	1998	1”=500’
EDR	2005	1”=500’

Flyer	Year	Scale
EDR	2006	1”=500’
EDR	2009	1”=500’
EDR	2010	1”=500’
EDR	2012	1”=500’

1939, 1949, and 1958 Photographs – Two structures are visible on the northwest corner of the Property. The remainder of the Property appears to be used as an orchard. The present-day alignment of Buena Vista Road is evident along the northern Property boundary. The surrounding area is predominately used as agricultural fields.

1974 Photograph – Property use appears similar to the 1958 Photograph. The present day alignments of Carnoble Drive and Willow Drive are visible on the west side of the Property. The photograph resolution is poor, and the number of structures on the Property cannot be determined. The majority of the Property appears to be used for agricultural purposes.

1981 Photograph – The present day alignments of Ventura Court and Gonzalez Drive are visible on the east side of the Property. The photograph resolution is poor, and the number of structures on the Property cannot be determined. The majority of the Property appears to be used for agricultural purposes.

1987 Photograph – The present day alignments of Teresita Court and San Lorenzo Drive are visible on south side of the Property. The photograph resolution is poor, and the number of structures on the Property cannot be determined. The majority of the Property appears to be used for agricultural purposes.

1998, 2005, and 2006 Photographs – The structures and associated streets surrounding the Property on the south, east, and west appear to be consistent with their present day configurations. Two structures are visible on the northwest corner of the Property and appear to resemble a residence and barn. The structures within the Property appear to be in the same location as those identified in the 1939, 1949, and 1958 photographs. The majority of the Property appears to be used as an orchard.

2009 Photograph – The southernmost of the two previously mentioned structures (barn) located in the northwest corner of the Property is no longer visible. It appears that debris and miscellaneous equipment is situated in the former location of the barn.

2010 and 2012 Photographs – Property conditions appear similar to the 2009 photograph. The debris noted in the 2009 photograph is no longer evident. The remnants of what appears to be a concrete pad is now visible. The Property use on the 2012 photograph generally resembles present-day conditions.

3.2.3 Fire Insurance Maps

EDR prepared a Sanborn Fire insurance map search for the Property and surrounding properties. EDR reported that no maps were available for the Property and surrounding properties. The EDR report is included in Appendix B.

3.2.4 City Directory

City Directories, published since the 18th century for major towns and cities, list the name of the resident or business associated with each address. Polk's City Directory first recorded an address of 1601 Buena Vista Road in 1982 associated with "Buffo Elmo C." A city directory search conducted by EDR is located in Appendix E.

3.2.5 Government Agencies

The following agencies were contacted pertaining to possible past development and/or activity at the Property.

- City of Hollister Building and Planning Departments
- City of Hollister Fire Department
- San Benito County Department of Environmental Health
- San Benito County Water District
- San Benito County Building and Planning Departments
- San Benito County Assessors Office
- Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR)
- California Regional Water Quality Control Board
- Department of Toxic Substances Control

The City of Hollister Building and Planning Departments were contacted for files associated with the Property. We were informed by City staff that the Property is currently not incorporated in the City of Hollister and directed us to San Benito County.

The City of Hollister Fire Department was contacted regarding files for the Property. City Staff forwarded our inquiry to the San Benito County Department of Environmental Health.

The San Benito County Department of Environmental Health was contacted regarding files for the Property. County Staff confirmed there were no hazardous material files for the Property.

The San Benito County Water District was contacted regarding files for the Property. The Water District did not respond to our inquiry before publication of this document.

The San Benito County Building and Planning Departments were contacted for files associated with the Property. County Staff confirmed that there were no files pertaining to the Property.

The San Benito County Assessors Office was contacted to confirm the APN, acreage and address of the Property. County staff confirmed that there is only one address (1601 Buena Vista Road) associated with the Property APN.

We reviewed the Department of Conservation, Division of Oil, Gas, and Geothermal (DOGGR) web site and map database to determine if recorded oil and/or gas wells were located within the Property. As previously discussed, no wells were mapped within the Property. However, the nearest mapped well (designated 06900053) is located approximately 1200 feet northwest of the Property. The well is reportedly plugged.

We reviewed the Central Coast Water Resources Control Board (Geotracker) and the Department of Toxic Substances Control (Envirostor) online databases for nearby listed sites that could impact site soil or groundwater. The databases did not include sites that would reasonably be expected to impact the Property.

3.3 ENVIRONMENTAL RECORD SOURCES

EDR performed a search of federal, tribal, state, and local databases regarding the Property and nearby properties. Details regarding the databases searched by EDR are provided in Appendix A. A list of the facilities documented by EDR within the approximate minimum search distance of the Property is provided below:

3.3.1 Federal ASTM Standard/Supplemental Sources

3.3.1.1 Subject Property

The Property is not listed on the Federal ASTM Standard or supplemental sources.

3.3.1.2 Other Properties

No properties within appropriate ASTM search distances of the Property were identified on Federal ASTM Supplemental sources.

3.3.2 State and Tribal ASTM Standard/Supplemental Sources

3.3.2.1 Subject Property

The Property is not listed on the State and Tribal ASTM Standard or supplemental sources.

3.3.2.2 Other Properties

The following databases include facilities listed within the appropriate ASTM search distances of the Property on State and Tribal ASTM Standard or supplemental sources. Number of listed cases in parenthesis.

- ENVIROSTOR (1)
- LUST (2)
- UST (2)

3.3.3 Local and Other ASTM Supplemental Sources

3.3.3.1 Subject Property

The Property is not listed on Local or Other ASTM supplemental databases.

3.3.3.2 Other Properties

The following databases include facilities listed within the appropriate ASTM search distances of the Property on Local and Other ASTM Standard or supplemental sources. Number of listed cases in parenthesis.

- CA FID UST (5)
- HIST UST (5)
- SWEEPS UST (5)
- Notify 65 (1)
- EDR US Hist Auto Stat (3)

Based on the distances to the identified database sites, regional topographic gradient, and the EDR findings, it is unlikely that the above-stated database sites including the "Orphan Summary" pose an environmental risk to the Property.

4.0 SITE RECONNAISSANCE

4.1 METHODOLOGY

ENGEO conducted a reconnaissance of the Property on September 30, 2013. The Property was viewed for hazardous materials storage, superficial staining or discoloration, debris, stressed vegetation, or other conditions that may be indicative of potential sources of soil or groundwater contamination. The site was also checked for evidence of fill/ventilation pipes, ground subsidence, or other evidence of existing or preexisting underground storage tanks. Photographs taken during the site reconnaissance are presented in Figures 5A and 5B. Access to the onsite residence was not granted during the site reconnaissance.

4.2 GENERAL SITE SETTING

The approximately 11.5-acre Property currently consists of a one-story residence and a walnut orchard. The residence is located in the northwestern portion of the Property with walnut orchards covering the remainder of the Property.

4.3 EXTERIOR OBSERVATIONS

Structures. A single story residence was observed during the site reconnaissance. Based on discussions with the site manager and review of historical photographs, a former barn was located south of the residence before burning down circa 2008. During our reconnaissance, a concrete pad (likely associated with the former barn) was evident south of the residence.

Hazardous Substances and Petroleum Products in Connection with Identified Uses. A small number of paint cans, gasoline cans, and a car battery were observed during the site reconnaissance. No staining or evidence of a release or spill was observed during our reconnaissance.

Storage Tanks. No above-ground storage tanks or evidence of existing underground storage tanks was observed during the site reconnaissance. A septic system associated with the residence is onsite. The exact location of the system around the residence was not confirmed during the reconnaissance.

Odors. No odors indicative of hazardous materials or petroleum material impacts were noted at the time of the reconnaissance. A faint oil odor was noted emanating from one of the drums onsite. No indication of a significant spill or release was observed during the reconnaissance.

Pools of Potentially Hazardous Liquid. No pools of potentially hazardous liquid were observed within the Property at the time of our reconnaissance.

Drums. Four drums were observed on the Property at the time of the reconnaissance. As noted above, one drum exhibited a small amount of staining on the side of the drum and emitted an oil odor; however, no indications of a spill or release was evident during our reconnaissance. The contents of a second drum could not be ascertained since the top lid was sealed. The remaining two drums were full of trash and debris items.

Hazardous Substance and Petroleum Product Containers. As previously mentioned, a small number of paint cans, gasoline cans, and a car battery were observed during the site reconnaissance. No staining or indication of a release was observed during our reconnaissance.

Polychlorinated Biphenyls (PCBs). No PCB-containing materials, with the exception of overhead transformers, were observed within the Property during the reconnaissance. During our reconnaissance we did not observe obvious evidence that a significant release had occurred.

Pits, Ponds and Lagoons. No pits, ponds or lagoons were observed within the Property at the time of our reconnaissance.

Stained Soil/Pavement. No stained soil or pavement was observed within the Property at the time of our reconnaissance.

Stressed Vegetation. No signs of stressed vegetation were observed on the Property at the time of our reconnaissance.

Solid Waste/Debris. No disposal of solid waste was observed at the Property with the exception of a few discarded trash items and trimmed vegetation.

Wastewater. No wastewater conveyance systems were observed at the Property during the reconnaissance.

Wells. Two water wells were found within the Property during the reconnaissance. One well was located within the orchard area (irrigation well), while a second well was identified south of the residence (domestic well).

Septic Systems. No septic systems were found within the Property during our site reconnaissance. However, through conversations with the Property owner, it is our understanding that a septic system is in place near the residence.

4.4 ASBESTOS-CONTAINING MATERIALS AND LEAD-BASED PAINT

An asbestos and lead-based paint survey was not conducted as part of this assessment. Given the assumed age of the existing structure, it is conceivable that asbestos-containing materials and lead-based paint materials may be found within the structure.

4.5 INDOOR AIR QUALITY

An evaluation of indoor air quality, mold, or radon was not included as part of the contracted scope of services. The California Department of Health Services has conducted studies of radon risks throughout the state, sorted by zip code. Results of the studies indicate that 13 tests were conducted within the Property zip code, with no tests exceeding the current EPA action level of 4 picocuries per liter [pCi/L][1]).

In accordance with ASTM E2600-10 (Tier 1) (*Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*); there is one potential petroleum hydrocarbon source for vapor intrusion within 1/10 mile of the Property and one potential source of volatile organic compound (VOCs) within 1/3 mile of the Property.

The potential petroleum hydrocarbon source is associated with G and P Farms, Inc. (see Appendix A), located approximately 230 feet west of the Property. The source consists of four fuel storage tanks, three of which contain diesel with a maximum tank capacity of 350 gallons and one containing leaded gasoline with a maximum tank capacity of 550 gallons. However, no leaks have been reported for these tanks.

[1] California Department of Health Services – Division of Drinking Water and Environmental Management – Radon (http://www.cdph.ca.gov/HealthInfo/environhealth/Documents/Radon/CaliforniaRadonDatabase.pdf).

The potential source of VOCs is associated with C and G Automotive, located approximately 0.2 miles east of the Property at 211 Madera Court. However, review of available files within Geotracker and Envirostor databases did not find reported leaks associated with C and G Automotive. Given the available data, the identified potential sources do not represent a significant threat to the Property and further we believe there is no significant vapor intrusion concern for the Property.

5.0 INTERVIEWS

Mr. Fernando Gonzalez (Property Manager) completed an environmental site assessment questionnaire pertaining to user-related applicable environmental information regarding the Property. In the questionnaire, Mr. Gonzalez did not identify potential environmentally related issues with the Property. Mr. Gonzalez confirmed that there are water wells and a residential septic system onsite. The questionnaire is presented in its entirety in Appendix F.

6.0 AGRICHEMICAL ASSESSMENT

Review of historic aerial photographs found that the Property has had continuous agricultural activities since at least 1939. It is conceivable that past practices included the application of pesticides and residual concentrations may remain in site soils. As a result, an agrichemical assessment was performed for the Property.

6.1 SAMPLING ACTIVITIES

On September 30, 2013, we collected 24 near-surface soil samples from the Property in general accordance with the Department of Toxic Substances Control *Interim Guidance for Sampling Agricultural Properties (Third Revision).* The samples were collected using typical hand-sampling equipment, were placed in a cooler and transported to a State-accredited laboratory under documented chain of custody forms. The laboratory tested for concentrations of organochlorine pesticides on six, 4-point composite samples and arsenic concentrations on six discrete samples.

6.2 ANALYTICAL RESULTS

The laboratory results were compared to applicable residential California Human Health Screening Levels (CHHSLs) developed by California Environmental Protection Agency (Cal/EPA). The CHHSLs were developed using standard exposure assumptions and chemical toxicity values published by the U.S. Environmental Protection Agency (USEPA) and Cal/EPA. Dichlorodiphenyldichloroethylene (DDE) and dichlorodiphenyltrichloroethane (DDT) were the only organochlorine pesticides (OCPs) detected above laboratory reporting limits. The maximum reported concentration for DDE is 190 micrograms per kilogram (µg/kg), while the maximum reported concentration for DDT is 47 µg/kg. The reported concentrations are well below the

applicable CHHSL of 1,600 µg/kg (applicable for both DDE and DDT). Arsenic concentrations ranged from 4.8 milligrams per kilogram (mg/kg) to 10 mg/kg, which is below the typical background level of 12 mg/kg[2].

7.0 FINDINGS

The reconnaissance and records research did not find documentation or physical evidence of soil or groundwater impairments associated with the current or past use of the Property. A review of regulatory databases maintained by county, state and federal agencies found no documentation of hazardous materials violations or discharge on the Property. No documented soil or groundwater contamination associated with abutting properties was found from the records research.

- The Property has consisted of agricultural land since at least 1939.
- An agrichemical assessment was performed to determine if past agricultural activities had impacted site soils. Review of the laboratory data did not find that the Property had been significantly impacted by past agricultural use.
- Given the assumed age of the existing structure, it is conceivable that asbestos-containing materials and lead-based paint materials may be found in the structure.
- Miscellaneous debris and garbage items were noted during our site reconnaissance.
- A septic system is present on site.

8.0 OPINIONS AND DATA GAPS

It is our opinion that the findings of this study are based on a sufficient level of information obtained during our contracted scope of services to render a conclusion as to whether additional appropriate investigation is required to identify the presence or likely presence of a REC.

The data gaps identified during this process do not affect the conclusions as to the presence or lack of presence of RECs at the Property.

- Some public agencies did not respond to our file review request for the Property before publication of this report.
- A Preliminary Title Report was not provided for our review before publication of this report.
- Access to the interior of the residence was not provided during our reconnaissance.

[2] Bradford, G.R., A.C. Chang, A.L. Page, D. Bakhtar, J.A. Frampton, and H. Wright; Background Concentrations of Trace and Major Elements in California Soils; Kearney Foundation of Soil Science, Division of Agricultural and Natural Resources, University of California; March 1996.

9.0 CONCLUSIONS

The assessment included a review of local, state, tribal, and federal environmental record sources, standard historical sources, aerial photographs, fire insurance maps and physical setting sources. A reconnaissance of the Property was conducted to review site use and current conditions to check for the storage, use, production or disposal of hazardous or potentially hazardous materials and interviews with persons knowledgeable about current and past site use.

The site reconnaissance and records review did not find documentation or physical evidence of soil or groundwater impairments associated with the use or past use of the Property. A review of regulatory databases maintained by county, state, tribal, and federal agencies found no documentation of hazardous materials violations or discharge on the Property and did not identify contaminated facilities within the appropriate American Society for Testing and Materials (ASTM) search distances that would reasonably be expected to impact the Property.

Review of historical aerial photographs found that the Property has contained a residence and has been used for agriculture since at least 1939. An agrichemical impact assessment was performed that included laboratory testing of near-surface soil samples collected from across the Property. The reported concentrations of organochlorine pesticides and arsenic are below typical background levels or applicable environmental screening levels and should not require mitigation for residential redevelopment.

Based on the findings of this assessment, no Recognized Environmental Conditions (RECs) and no historical RECs were identified for the Property.

- Given the age of the existing structure, it is conceivable that asbestos-containing materials and lead-based paint materials may be found in the structure.

- Miscellaneous debris and abandoned garbage items are onsite. There were no obvious indications of a spill or release noted during our site reconnaissance.

- An on site septic system is in place that will need to be removed prior to future site development.

- The two water wells on site will need to be abandoned prior to future site development.

ENGEO has performed a modified phase I environmental site assessment of the Property in general conformance with the scope and limitations of ASTM E 1527-05 “Standard Practice for Environmental Site Assessments” and USEPA “Standards and Practices for All Appropriate Inquires”, 40 CFR Part 312. Based on the findings of this assessment, no further environmental studies are recommended at this time; however, the following items should be considered.

- An asbestos and lead-paint materials survey be performed on the residential structure prior to demolition activities.

- The water wells and septic system should be properly abandoned with oversight from the appropriate agencies.

SELECTED REFERENCES

1. Google Maps (http://maps.google.com)

2. California Department of Water Resources (http://wdl.water.ca.gov)

3. United States Environmental Protection Agency Indoor Air Quality Website (http://ww2.cdph.ca.gov/HealthInfo/environhealth/Documents/Radon/CaliforniaRadonDatabase.pdf)

4. Wagner, D.L., et al., 2002, Geologic Map of the Monterey 30 x 60-minute Quadrangle and Adjacent Areas, California, U.S. Geological Survey.

5. USGS 7.5' Hollister Quadrangle-San Benito County Maps dated 1955, 1971, 1993, and 1995.

6. USGS 15' Hollister Quadrangle – San Benito County Maps dated 1921, 1955, and 1987.

7. Bradford, G.R., A.C. Chang, A.L. Page, D. Bakhtar, J.A. Frampton, and H. Wright; Background Concentrations of Trace and Major Elements in California Soils; Kearney Foundation of Soil Science, Division of Agricultural and Natural Resources, University of California; March 1996.

LIST OF FIGURES

Figure 1 - Vicinity Map

Figure 2 - Assessor's Parcel Map

Figure 3 - Topographic Map

Figure 4 – Site Map

Figures 5A and 5B – Site Photographs

FIGURES

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N

0 FEET 2000

0 METERS 1000

BASE MAP SOURCE: GOOGLE EARTH PRO, 2012

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VICINITY MAP

1601 BUENA VISTA ROAD

HOLLISTER, CALIFORNIA

PROJECT NO.: 10613.000.000		FIGURE NO
SCALE: AS SHOWN		1
DRAWN BY: LL	CHECKED BY: BF	

G:\Drafting\DRAFTING2_Dwg_10000 to 12999\10613\000\ESA\10613000000-ESA-1-VicMap-1013.dwg Plot Date: 10-14-13 SPATTERS

ORIGINAL FIGURE PRINTED IN COLOR

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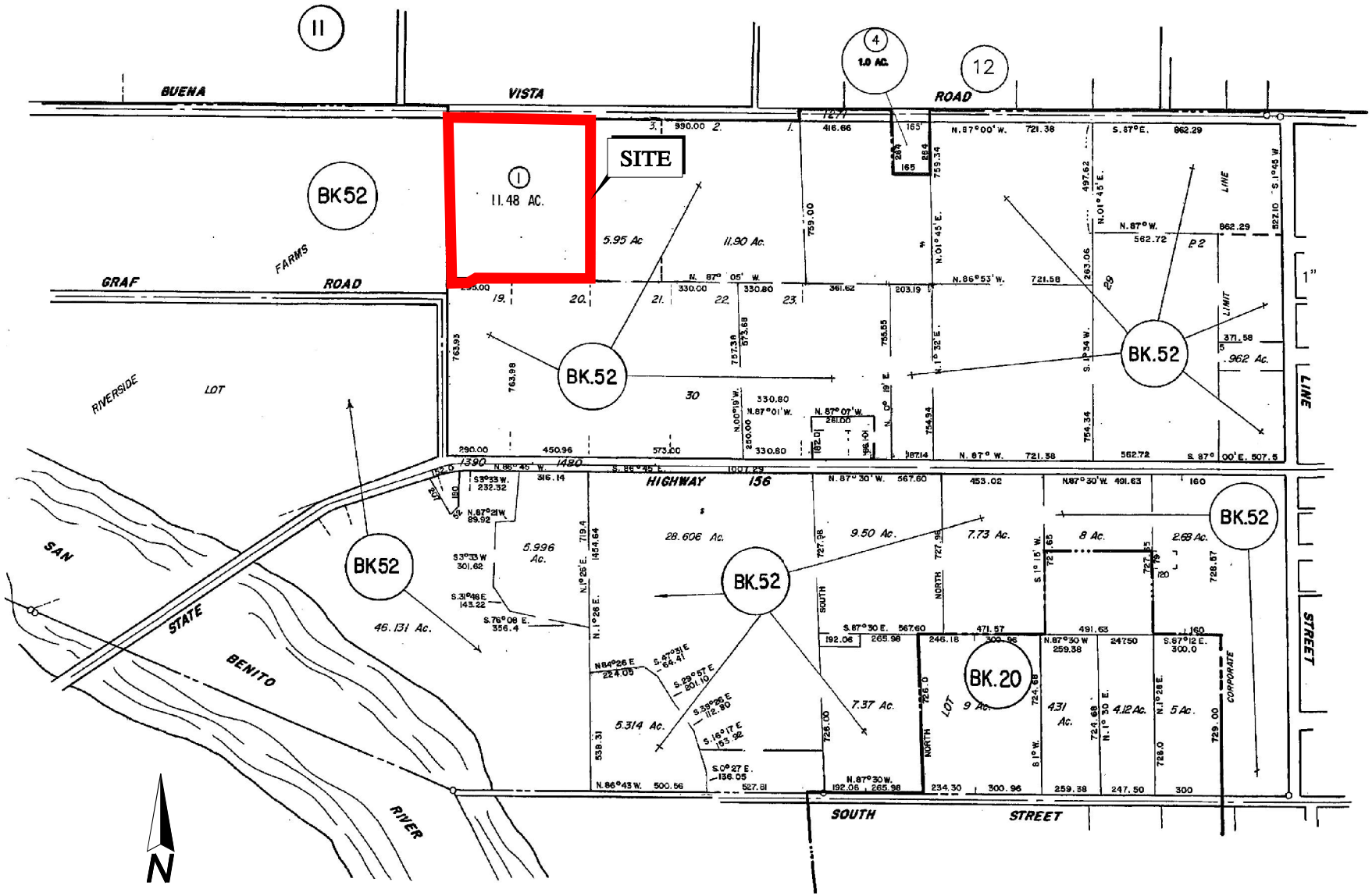

0 FEET 700
0 METERS 350

BASE MAP SOURCE: COUNTY ASSESSOR'S OFFICE

ENGEO
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ASSESSOR'S PARCEL MAP
1601 BUENA VISTA ROAD
HOLLISTER, CALIFORNIA

PROJECT NO.: 10613.000.000	FIGURE NO. 2
SCALE: AS SHOWN	
DRAWN BY: LL	CHECKED BY: BF

ORIGINAL FIGURE PRINTED IN COLOR

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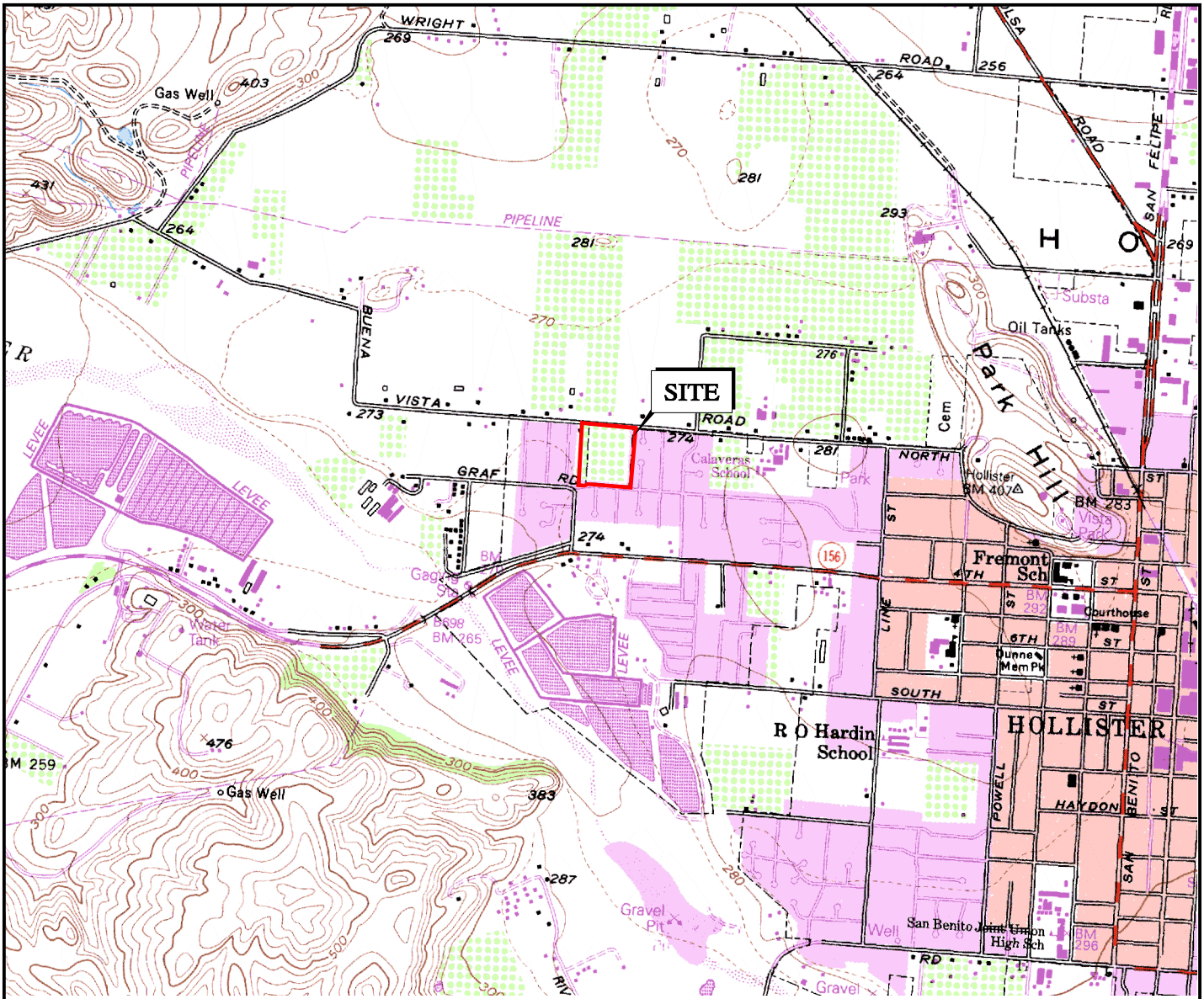

N

0 FEET 2000

0 METERS 1000

BASE MAP SOURCE: U.S.G.S., 1993

ENGEO Expect Excellence

TOPOGRAPHIC MAP

1601 BUENA VISTA ROAD

HOLLISTER, CALIFORNIA

PROJECT NO.:	10613.000.000
SCALE:	AS SHOWN
DRAWN BY: LL	CHECKED BY: BF

FIGURE NO. 3

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N

0 FEET 150

0 METERS 75

EXPLANATION

S-6

A B C D

APPROXIMATE LOCATION OF COMPOSITE SOIL SAMPLE

BASE MAP SOURCE: GOOGLE EARTH PRO, 2012

ENGEO Expect Excellence

SITE MAP

1601 BUENA VISTA ROAD

HOLLISTER, CALIFORNIA

PROJECT NO.: 10613.000.000		FIGURE NO.
SCALE: AS SHOWN		4
DRAWN BY: LL	CHECKED BY: BF	

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VIEW OF RESIDENCE FROM BUENA VISTA ROAD

VIEW OF ORCHARD FROM THE SOUTH LOOKING NORTH

REAR YARD OF RESIDENCE

VIEW OF ORCHARD FROM THE EAST LOOKING WEST

ENGEO
Expect Excellence

SITE PHOTOGRAPHS
1601 BUENA VISTA ROAD
HOLLISTER, CALIFORNIA

PROJECT NO.:	10613.000.000
SCALE:	NO SCALE
DRAWN BY: SRP	CHECKED BY: BF

FIGURE NO. 5A

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ORIGINAL FIGURE PRINTED IN COLOR

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CAR BATTERY IN REAR YARD OF RESIDENCE

DRUMS IN REAR YARD OF RESIDENCE

WELL AND TRANSFORMER IN ORCHARD

WELL IN REAR YARD OF RESIDENCE

ENGEO
Expect Excellence

SITE PHOTOGRAPHS
1601 BUENA VISTA ROAD
HOLLISTER, CALIFORNIA

PROJECT NO.: 10613.000.000		FIGURE NO.
SCALE: NO SCALE		5B
DRAWN BY: SRP	CHECKED BY: BF	

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ORIGINAL FIGURE PRINTED IN COLOR

APPENDIX A

ENVIRONMENTAL DATA RESOURCES, INC.

Radius Map Report

APPENDIX A

1601 Buena Vista Road
1601 Buena Vista Road
Hollister, CA 95023

Inquiry Number: 3740929.2s
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The EDR Radius Map™ Report with GeoCheck®

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Thank you for your business.
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with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1601 BUENA VISTA ROAD
HOLLISTER, CA 95023

COORDINATES

Latitude (North):	36.8566000 - 36˚ 51' 23.76''
Longitude (West):	121.4250000 - 121˚ 25' 30.00''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	640408.4
UTM Y (Meters):	4079919.8
Elevation:	274 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	36121-G4 HOLLISTER, CA
Most Recent Revision:	1998

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year:	2012
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL---------- National Priority List

EXECUTIVE SUMMARY

Proposed NPL ..... Proposed National Priority List Sites
NPL LIENS ..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ..... National Priority List Deletions

Federal CERCLIS list

CERCLIS ..... Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY ..... Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP ..... CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS ..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ..... RCRA - Large Quantity Generators
RCRA-SQG ..... RCRA - Small Quantity Generators
RCRA-CESQG ..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US ENG CONTROLS ..... Engineering Controls Sites List
US INST CONTROL ..... Sites with Institutional Controls
LUCIS ..... Land Use Control Information System

Federal ERNS list

ERNS ..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ..... State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ..... Solid Waste Information System

State and tribal leaking storage tank lists

SLIC ..... Statewide SLIC Cases
INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

AST ..... Aboveground Petroleum Storage Tank Facilities

EXECUTIVE SUMMARY

INDIAN UST ..... Underground Storage Tanks on Indian Land
FEMA UST ..... Underground Storage Tank Listing

State and tribal voluntary cleanup sites

VCP ..... Voluntary Cleanup Program Properties
INDIAN VCP ..... Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

ODI ..... Open Dump Inventory
DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
WMUDS/SWAT ..... Waste Management Unit Database
SWRCY ..... Recycler Database
HAULERS ..... Registered Waste Tire Haulers Listing
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL ..... Clandestine Drug Labs
HIST Cal-Sites ..... Historical Calsites Database
SCH ..... School Property Evaluation Program
Toxic Pits ..... Toxic Pits Cleanup Act Sites
CDL ..... Clandestine Drug Labs
US HIST CDL ..... National Clandestine Laboratory Register

Local Land Records

LIENS 2 ..... CERCLA Lien Information
LIENS ..... Environmental Liens Listing
DEED ..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ..... Hazardous Materials Information Reporting System
CHMIRS ..... California Hazardous Material Incident Report System
LDS ..... Land Disposal Sites Listing
MCS ..... Military Cleanup Sites Listing
SPILLS 90 ..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR ..... RCRA - Non Generators
DOT OPS ..... Incident and Accident Data
DOD ..... Department of Defense Sites
FUDS ..... Formerly Used Defense Sites
CONSENT ..... Superfund (CERCLA) Consent Decrees
ROD ..... Records Of Decision

EXECUTIVE SUMMARY

UMTRA	Uranium Mill Tailings Sites
US MINES	Mines Master Index File
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
SSTS	Section 7 Tracking Systems
ICIS	Integrated Compliance Information System
PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
RADINFO	Radiation Information Database
FINDS	Facility Index System/Facility Registry System
RAATS	RCRA Administrative Action Tracking System
RMP	Risk Management Plans
CA BOND EXP. PLAN	Bond Expenditure Plan
UIC	UIC Listing
NPDES	NPDES Permits Listing
Cortese	"Cortese" Hazardous Waste & Substances Sites List
HIST CORTESE	Hazardous Waste & Substance Site List
CUPA Listings	CUPA Resources List
DRYCLEANERS	Cleaner Facilities
WIP	Well Investigation Program Case List
ENF	Enforcement Action Listing
HAZNET	Facility and Manifest Data
EMI	Emissions Inventory Data
INDIAN RESERV	Indian Reservations
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
HWT	Registered Hazardous Waste Transporter Database
HWP	EnviroStor Permitted Facilities Listing
Financial Assurance	Financial Assurance Information Listing
LEAD SMELTERS	Lead Smelter Sites
2020 COR ACTION	2020 Corrective Action Program List
US AIRS	Aerometric Information Retrieval System Facility Subsystem
PRP	Potentially Responsible Parties
WDS	Waste Discharge System
EPA WATCH LIST	EPA WATCH LIST
US FIN ASSUR	Financial Assurance Information
PCB TRANSFORMER	PCB Transformer Registration Database
PROC	Certified Processors Database
MWMP	Medical Waste Management Program Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

EXECUTIVE SUMMARY

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 08/05/2013 has revealed that there is 1 ENVIROSTOR site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WORKINGMANS AUTO WRECKING Status: Refer: Other Agency	2450 SAN JUAN ROAD	WSW 1/2 - 1 (0.985 mi.)	18	22

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 07/26/2013 has revealed that there are 2 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FAST GAS Status: Completed - Case Closed	***1615 SAN JUAN RD***	***SSE 1/8 - 1/4 (0.141 mi.)***	***B3***	***10***
VICTORY GAS & FOOD	1615 SAN JUAN RD	SSE 1/8 - 1/4 (0.141 mi.)	B6	14

EXECUTIVE SUMMARY

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, and dated 07/26/2013 has revealed that there are 2 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PLAZA 156	1615 SAN JUAN RD	SSE 1/8 - 1/4 (0.141 mi.)	B5	13
QUICK STOP 129	1300 SAN JUAN RD	SE 1/8 - 1/4 (0.205 mi.)	E16	21

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 5 CA FID UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
G.&P. FARMS INC.	***1632 BUENA VISTA RD***	***NW 0 - 1/8 (0.044 mi.)***	***A2***	***9***
FAST GAS	***1615 SAN JUAN RD***	***SSE 1/8 - 1/4 (0.141 mi.)***	***B4***	***12***
EVA J. PERKINS	***1811 BUENA VISTA RD***	***W 1/8 - 1/4 (0.145 mi.)***	***C8***	***15***
QUIK STOP MARKET #129	***1300 SAN JUAN RD***	***SE 1/8 - 1/4 (0.205 mi.)***	***E14***	***19***

Lower Elevation	Address	Direction / Distance	Map ID	Page
DEL CURTO MEAT COMPANY, INC.	***1619 SAN JUAN RD***	***SSW 1/8 - 1/4 (0.145 mi.)***	***D11***	***17***

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 5 HIST UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
G.&P. FARMS INC.	1632 BUENA VISTA RD	NW 0 - 1/8 (0.044 mi.)	A1	8
FAST GAS	***1615 SAN JUAN RD***	***SSE 1/8 - 1/4 (0.141 mi.)***	***B3***	***10***
EVA J. PERKINS	1811 BUENA VISTA RD	W 1/8 - 1/4 (0.145 mi.)	C7	15
QUIK STOP MARKET #129	1300 SAN JUAN RD	SE 1/8 - 1/4 (0.205 mi.)	E15	21

Lower Elevation	Address	Direction / Distance	Map ID	Page
DEL CURTO MEAT COMPANY, INC.	1619 SAN JUAN RD	SSW 1/8 - 1/4 (0.145 mi.)	D10	17

EXECUTIVE SUMMARY

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 5 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
G.&P. FARMS INC.	***1632 BUENA VISTA RD***	***NW 0 - 1/8 (0.044 mi.)***	***A2***	***9***
FAST GAS	***1615 SAN JUAN RD***	***SSE 1/8 - 1/4 (0.141 mi.)***	***B4***	***12***
EVA J. PERKINS	***1811 BUENA VISTA RD***	***W 1/8 - 1/4 (0.145 mi.)***	***C8***	***15***
QUIK STOP MARKET #129	***1300 SAN JUAN RD***	***SE 1/8 - 1/4 (0.205 mi.)***	***E14***	***19***

Lower Elevation	Address	Direction / Distance	Map ID	Page
DEL CURTO MEAT COMPANY, INC.	***1619 SAN JUAN RD***	***SSW 1/8 - 1/4 (0.145 mi.)***	***D11***	***17***

Other Ascertainable Records

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 10/21/1993 has revealed that there is 1 Notify 65 site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SAN BENITO RIVER	BIRDGE ROAD AT AZUL COU	SW 1/8 - 1/4 (0.178 mi.)	13	19

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 3 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	211 MADERA CT	ESE 1/8 - 1/4 (0.232 mi.)	17	22

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	1615 SAN JUAN RD	S 1/8 - 1/4 (0.145 mi.)	D9	16

EXECUTIVE SUMMARY

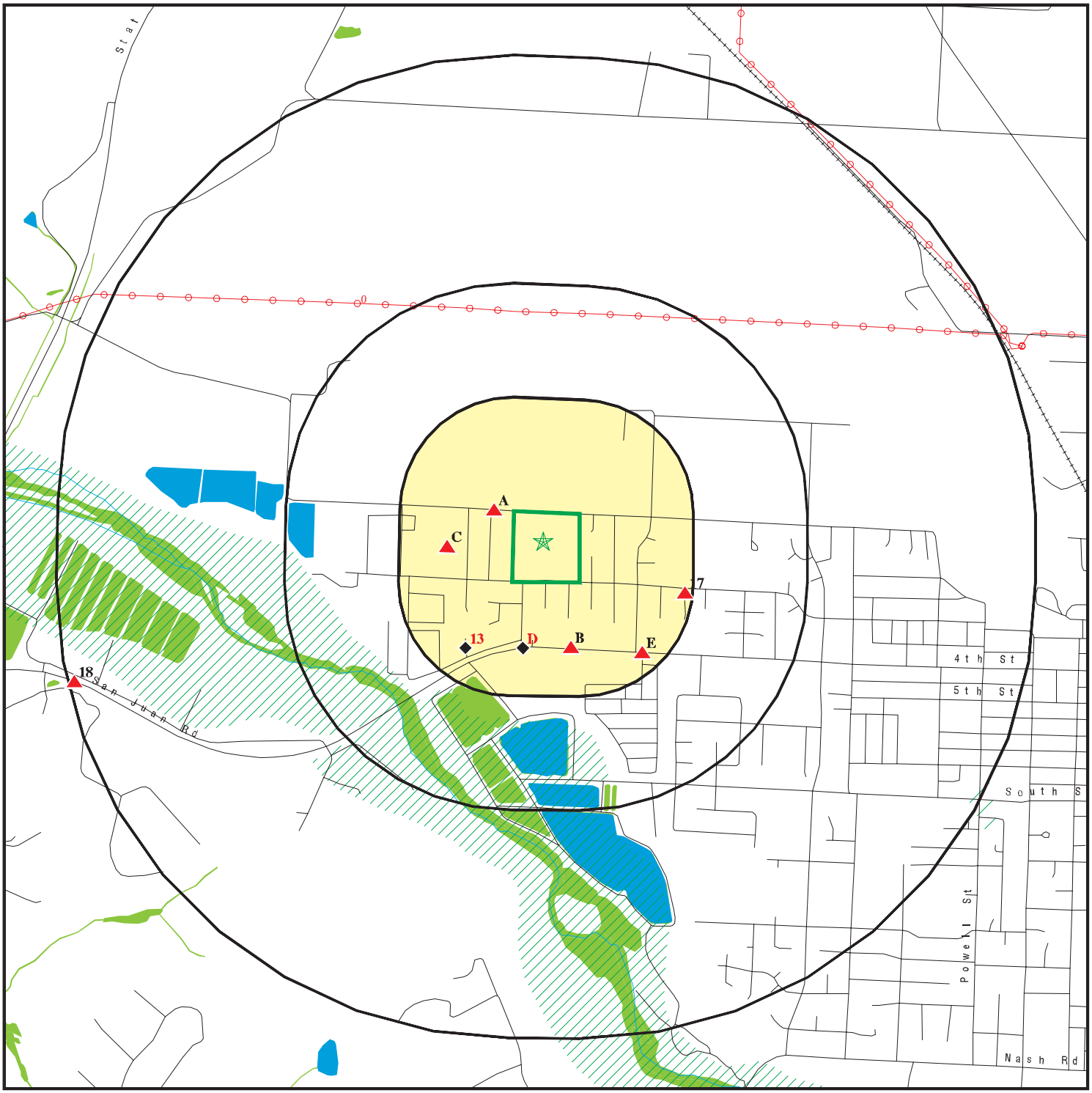
Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	1619 SAN JUAN RD	SSW 1/8 - 1/4 (0.145 mi.)	D12	18

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 37 records.

Site Name	Database(s)
HOLLISTER DOMESTIC WWTP	Cortese, ENF, WDS
E'S RANCH MILK	HIST CORTESE, LUST
GEOF LANINI TRUCKING	HWT
BLUE BARREL RD	NPDES
MINISERE	CA FID UST, SWEEPS UST
CESARE BERTERO	CA FID UST, SWEEPS UST
FREMONT PEAK COMMUNICATION FAC	HIST UST, SWEEPS UST
	CDL
	CDL
	CDL
US BUREAU OF LAND MGMT VALLECITOS	CERCLIS, FINDS
PINNACLES NATIONAL MONUMENT	CERC-NFRAP, RCRA-CESQG
INDUSTRIAL WASTE TREATMENT FACILIT	SWF/LF
SAN BENITO COUNTY RESOURCE REC. PK	SWF/LF
CESARE BERTERO	HIST UST
MAERS-CPT	HAZNET
CALTRANS DIST 4/CONSTR/EA04-0C7604	HAZNET
CLARA MELENDY	HAZNET
DENNIS BODY SHOP	HAZNET
PACIFIC GAS & ELECTRIC - HOLLISTER	HAZNET
SAN BENITO CTY/EMERG RESPONSE-97 F	HAZNET
P G & E HOLLISTER SUBSTATION	HAZNET
CALTRANS DIST 4/CONSTR/EA04-1L6105	HAZNET
HOLLISTER TRANMISSION REPAIR	HAZNET
1X SOUTH VALLEY NATIONAL BANK	HAZNET
DIAGEO CHATEAU & ESTATES WINE CO	HAZNET
GEOF LANINI TRUCKING	HAZNET
PACIFIC GAS & ELECTRIC	HAZNET
SAN JUSTO SUBSTATION	HAZNET
SAN BENITO COUNTY/CLANDESTINE DRUG	HAZNET
ELYXIR DISTRIBUTOR	HAZNET
SERVANDO CASTRO CORTEZ	RCRA NonGen / NLR
GEOF LANINI TRUCKING	RCRA NonGen / NLR
HOLLISTER AIRPORT	SLIC
PAICINES QUARRY	WDS
HILLSDALE ROCK CO.	US MINES
CAL-AGRA, INC.	SSTS

OVERVIEW MAP - 3740929.2s



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

Power transmission lines

Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone

National Wetland Inventory

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 1601 Buena Vista Road	CLIENT: Engeo
ADDRESS: 1601 Buena Vista Road Hollister CA 95023	CONTACT: Greg Cubbon INQUIRY #: 3740929.2s
LAT/LONG: 36.8566 / 121.425	DATE: September 26, 2013 2:24 pm

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DETAIL MAP - 3740929.2s

0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 1601 Buena Vista Road	CLIENT: Engeo
ADDRESS: 1601 Buena Vista Road Hollister CA 95023	CONTACT: Greg Cubbon INQUIRY #: 3740929.2s
LAT/LONG: 36.8566 / 121.425	DATE: September 26, 2013 2:26 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	1	NR	1
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	2	0	NR	NR	2

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SLIC	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		0	2	NR	NR	NR	2
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
US HIST CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
CA FID UST	0.250		1	4	NR	NR	NR	5
HIST UST	0.250		1	4	NR	NR	NR	5
SWEEPS UST	0.250		1	4	NR	NR	NR	5
Local Land Records								
LIENS 2	0.001		0	NR	NR	NR	NR	0
LIENS	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
Cortese	0.500		0	0	0	NR	NR	0
HIST CORTESE	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
Notify 65	1.000		0	1	0	0	NR	1
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
HWT	0.250		0	0	NR	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
PROC	0.500		0	0	0	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	3	NR	NR	NR	3
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 NW < 1/8 0.044 mi. 231 ft. | **G.&P. FARMS INC.**
1632 BUENA VISTA RD
HOLLISTER, CA 95023

Site 1 of 2 in cluster A

HIST UST | **U001601237**
N/A

Relative: Higher

Actual: 274 ft.

HIST UST:

Region:	STATE
Facility ID:	00000050391
Facility Type:	Other
Other Type:	FARM SUPPLY
Total Tanks:	0004
Contact Name:	JOE L. GOMES
Telephone:	4086373189
Owner Name:	G.&P. FARMS INC.
Owner Address:	1660 BUENA VISTA RD.
Owner City,St,Zip:	HOLLISTER, CA 95023
Tank Num:	001
Container Num:	1
Year Installed:	1980
Tank Capacity:	00000550
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Tank Construction:	12 gauge
Leak Detection:	Stock Inventor
Tank Num:	002
Container Num:	2
Year Installed:	Not reported
Tank Capacity:	00000250
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Tank Construction:	12 gauge
Leak Detection:	Stock Inventor
Tank Num:	003
Container Num:	3
Year Installed:	1979
Tank Capacity:	00000250
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Tank Construction:	12 gauge
Leak Detection:	Stock Inventor
Tank Num:	004
Container Num:	4
Year Installed:	1978
Tank Capacity:	00000350
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Tank Construction:	12 gauge
Leak Detection:	Not reported

A2 NW < 1/8 0.044 mi. 231 ft. | **G.&P. FARMS INC.**
1632 BUENA VISTA RD
HOLLISTER, CA 95023

Site 2 of 2 in cluster A

CA FID UST | **S101625034**
SWEEPS UST | **N/A**

Relative: Higher

Actual: 274 ft.

CA FID UST:

Facility ID:	35000444
Regulated By:	UTNKA
Regulated ID:	00050391
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	4086373189
Mail To:	Not reported
Mailing Address:	1632 BUENA VISTA RD
Mailing Address 2:	Not reported
Mailing City,St,Zip:	HOLLISTER 95023
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

SWEEPS UST:

Status:	Active
Comp Number:	50391
Number:	9
Board Of Equalization:	Not reported
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	1
Swrcb Tank Id:	35-031-050391-000001
Actv Date:	07-01-85
Capacity:	550
Tank Use:	M.V. FUEL
Stg:	P
Content:	LEADED
Number Of Tanks:	4

Status:	Active
Comp Number:	50391
Number:	9
Board Of Equalization:	Not reported
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	2
Swrcb Tank Id:	35-031-050391-000002
Actv Date:	07-01-85
Capacity:	250
Tank Use:	M.V. FUEL
Stg:	P
Content:	DIESEL
Number Of Tanks:	Not reported

G.&P. FARMS INC. (Continued) **S101625034**

Status:	Active
Comp Number:	50391
Number:	9
Board Of Equalization:	Not reported
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	3
Swrcb Tank Id:	35-031-050391-000003
Actv Date:	07-01-85
Capacity:	250
Tank Use:	M.V. FUEL
Stg:	P
Content:	DIESEL
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	50391
Number:	9
Board Of Equalization:	Not reported
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	4
Swrcb Tank Id:	35-031-050391-000004
Actv Date:	07-01-85
Capacity:	350
Tank Use:	M.V. FUEL
Stg:	P
Content:	DIESEL
Number Of Tanks:	Not reported

B3 **FAST GAS** **LUST** **U001601225**
SSE **1615 SAN JUAN RD** **HIST UST** **N/A**
1/8-1/4 **HOLLISTER, CA 95023**
0.141 mi.
746 ft. **Site 1 of 4 in cluster B**

Relative:
Higher

Actual:
276 ft.

LUST:

Region:	STATE
Global Id:	T0606900054
Latitude:	36.853067
Longitude:	-121.42514
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/28/2004
Lead Agency:	CENTRAL COAST RWQCB (REGION 3)
Case Worker:	BC
Local Agency:	HOLLISTER , CITY OF
RB Case Number:	3319
LOC Case Number:	3319
File Location:	State Records Center
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

FAST GAS (Continued) **U001601225**

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0606900054
Contact Type:	Local Agency Caseworker
Contact Name:	UST CASE WORKER
Organization Name:	HOLLISTER , CITY OF
Address:	110 FIFTH STREET
City:	HOLLISTER
Email:	Not reported
Phone Number:	4086364325

Regulatory Activities:

Global Id:	T0606900054
Action Type:	RESPONSE
Date:	05/01/2004
Action:	Unknown
Global Id:	T0606900054
Action Type:	ENFORCEMENT
Date:	05/28/2004
Action:	Closure/No Further Action Letter
Global Id:	T0606900054
Action Type:	RESPONSE
Date:	12/02/2002
Action:	CAP/RAP - Other Report
Global Id:	T0606900054
Action Type:	RESPONSE
Date:	12/02/2002
Action:	Soil and Water Investigation Report
Global Id:	T0606900054
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported
Global Id:	T0606900054
Action Type:	RESPONSE
Date:	07/20/2003
Action:	Monitoring Report - Quarterly
Global Id:	T0606900054
Action Type:	RESPONSE
Date:	10/20/2003
Action:	Monitoring Report - Quarterly
Global Id:	T0606900054
Action Type:	RESPONSE
Date:	04/20/2003
Action:	Monitoring Report - Quarterly
Global Id:	T0606900054
Action Type:	ENFORCEMENT
Date:	01/30/2003

FAST GAS (Continued) **U001601225**

Action: Staff Letter

Global Id: T0606900054
Action Type: ENFORCEMENT
Date: 04/28/2003
Action: Staff Letter

Global Id: T0606900054
Action Type: ENFORCEMENT
Date: 10/23/2003
Action: Staff Letter

HIST UST:
Region: STATE
Facility ID: 00000013893
Facility Type: Gas Station
Other Type: Not reported
Total Tanks: 0002
Contact Name: Not reported
Telephone: 4086379974
Owner Name: KAYO OIL COMPANY
Owner Address: 1221 E. MAIN STREET
Owner City,St,Zip: CHATTANOOGA, TN 37408

Tank Num: 001
Container Num: 2
Year Installed: 1970
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Visual, Stock Inventor, Pressure Test

Tank Num: 002
Container Num: 1
Year Installed: 1970
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: Not reported
Leak Detection: Visual, Stock Inventor, Pressure Test

B4 **FAST GAS** **CA FID UST** **S101630440**
SSE **1615 SAN JUAN RD** **SWEEPS UST** **N/A**
1/8-1/4 **HOLLISTER, CA 95023**
0.141 mi.
746 ft. **Site 2 of 4 in cluster B**

Relative:
Higher

Actual:
276 ft.

CA FID UST:
Facility ID: 35000336
Regulated By: UTNKA
Regulated ID: 00013893
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 4086379974
Mail To: Not reported

FAST GAS (Continued) **S101630440**

Mailing Address: 1615 SAN JUAN RD
Mailing Address 2: Not reported
Mailing City,St,Zip: HOLLISTER 95023
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

SWEEPS UST:
Status: Active
Comp Number: 13893
Number: 9
Board Of Equalization: 44-000202
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 1
Swrcb Tank Id: 35-031-013893-000001
Actv Date: 07-01-85
Capacity: 10000
Tank Use: M.V. FUEL
Stg: P
Content: REG UNLEADED
Number Of Tanks: 2

Status: Active
Comp Number: 13893
Number: 9
Board Of Equalization: 44-000202
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 1
Swrcb Tank Id: 35-031-013893-000002
Actv Date: 07-01-85
Capacity: 10000
Tank Use: M.V. FUEL
Stg: P
Content: LEADED
Number Of Tanks: Not reported

B5 **PLAZA 156** **UST** **U003779100**
SSE **1615 SAN JUAN RD** **N/A**
1/8-1/4 **HOLLISTER, CA 95023**
0.141 mi.
746 ft. **Site 3 of 4 in cluster B**

Relative:
Higher

Actual:
276 ft.

UST:
Facility ID: 35-02-24
Latitude: 36.8530461846353
Longitude: -121.42413854599

B6 SSE 1/8-1/4 0.141 mi. 746 ft. | **VICTORY GAS & FOOD**
1615 SAN JUAN RD
HOLLISTER, CA 95023

Site 4 of 4 in cluster B | **LUST** | **S103994410**
N/A

Relative: Higher

Actual: 276 ft.

LUST REG 3:

Region:	3
Regional Board:	Central Coast Region
Facility County:	San Benito
Global ID:	T0606900054
Status:	No Action
Case Number:	3319
Local Case Num:	3319
Case Type:	U
Substance:	Gasoline
Quantity:	Not reported
Abatement Method:	Not reported
Leak Source:	UNK
Leak Cause:	UNK
How Stopped:	Not reported
How Discovered:	OM
Release Date:	06/08/2001
Discovered Date:	Not reported
Enter Date:	/ /
Stop Date:	Not reported
Review Date:	06/08/2001
Enforce Date:	Not reported
Close Date:	Not reported
Enforcement Type:	LET
Responsible Party:	MARIA EIRO
RP Address:	Not reported
Contact:	Not reported
Cross Street:	Not reported
Local Agency:	Hollister, San Benito County
Lead Agency:	Regional Board
Staff Initials:	BUC
Confirm Leak:	Not reported
Workplan:	Not reported
Prelim Assess:	Not reported
Pollution Char:	/ /
Remedial Plan:	Not reported
Remedial Action:	Not reported
Monitoring:	/ /
Pilot Program:	LUST
Interim Action:	Not reported
Funding:	Not reported
MTBE Class:	A
Max MTBE Grnd Wtr:	5000
Max MTBE Soil:	Not reported
Max MTBE Data:	06/07/2002
MTBE Tested:	YES
Lat/Long:	36.853067 / -121.42514
Soil Qualifier:	Not reported
Grnd Wtr Qualifier:	>
Mtbe Concentratn:	1
Mtbe Fuel:	1
Org Name:	Not reported
Basin Plan:	Not reported

VICTORY GAS & FOOD (Continued) **S103994410**

Beneficial: Not reported
Priority: Not reported
UST Cleanup Fund ID: Not reported
Suspended: Not reported
Operator: Not reported
Water System: Not reported
Well Name: Not reported
Distance From Well: 0
Assigned Name: Not reported
Summary: Haz Mat incident report filed

C7
West
1/8-1/4
0.145 mi.
764 ft.

EVA J. PERKINS **HIST UST** **U001601223**
1811 BUENA VISTA RD **N/A**
HOLLISTER, CA 95023

Site 1 of 2 in cluster C

Relative:
Higher

Actual:
274 ft.

HIST UST:
Region: STATE
Facility ID: 00000053724
Facility Type: Other
Other Type: PRIVATE
Total Tanks: 0001
Contact Name: EVA PERKINS
Telephone: 4086372076
Owner Name: EVA J. PERKINS
Owner Address: 1811 BUENA VISTA RD.
Owner City,St,Zip: HOLLISTER, CA 95023

Tank Num: 001
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00000000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: Not reported
Leak Detection: None

C8
West
1/8-1/4
0.145 mi.
764 ft.

EVA J. PERKINS **CA FID UST** **S101625027**
1811 BUENA VISTA RD **SWEEPS UST** **N/A**
HOLLISTER, CA 95023

Site 2 of 2 in cluster C

Relative:
Higher

Actual:
274 ft.

CA FID UST:
Facility ID: 35000461
Regulated By: UTNKA
Regulated ID: 00053724
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 4086372076
Mail To: Not reported
Mailing Address: 1811 BUENA VISTA RD
Mailing Address 2: Not reported
Mailing City,St,Zip: HOLLISTER 95023
Contact: Not reported

EVA J. PERKINS (Continued) **S101625027**

Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

SWEEPS UST:
Status: Active
Comp Number: 53724
Number: 9
Board Of Equalization: 44-019705
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 1
Swrcb Tank Id: 35-031-053724-000001
Actv Date: 07-01-85
Capacity: Not reported
Tank Use: M.V. FUEL
Stg: P
Content: LEADED
Number Of Tanks: 1

D9 **EDR US Hist Auto Stat** **1015255627**
South **1615 SAN JUAN RD** **N/A**
1/8-1/4 **HOLLISTER, CA 95023**
0.145 mi.
765 ft. **Site 1 of 4 in cluster D**

Relative:
Lower

Actual:
273 ft.

EDR Historical Auto Stations:
Name: VICTORY GAS & FOOD CORP
Year: 2001
Address: 1615 SAN JUAN RD

Name: VICTORY GAS & FOOD CORP
Year: 2002
Address: 1615 SAN JUAN RD

Name: VICTORY GAS & FOOD INC
Year: 2003
Address: 1615 SAN JUAN RD

Name: B AND C ONE STOP GAS
Year: 2005
Address: 1615 SAN JUAN RD

Name: VICTOR Y GAS & FOOD CORP
Year: 2006
Address: 1615 SAN JUAN RD

Name: VICTORY GAS & FOOD INC
Year: 2007
Address: 1615 SAN JUAN RD

Name: VICTORY GAS & FOOD INC

(Continued) **1015255627**

Year: 2008
Address: 1615 SAN JUAN RD

D10 SSW 1/8-1/4 0.145 mi. 767 ft. | **DEL CURTO MEAT COMPANY, INC.** | **HIST UST** | **U001601210**
1619 SAN JUAN RD | **N/A**
HOLLISTER, CA 95023

Site 2 of 4 in cluster D

Relative: Lower

Actual: 273 ft.

HIST UST:

Region:	STATE
Facility ID:	00000051159
Facility Type:	Other
Other Type:	SLAUGHTERHOUSE
Total Tanks:	0002
Contact Name:	LAVERN BROWDER
Telephone:	4086373252
Owner Name:	DEL CURTO MEAT COMPANY, INC.
Owner Address:	1619 SAN JUAN ROAD
Owner City,St,Zip:	HOLLISTER, CA 95023
Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00000300
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Tank Construction:	Not reported
Leak Detection:	None
Tank Num:	002
Container Num:	2
Year Installed:	Not reported
Tank Capacity:	00000500
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Tank Construction:	Not reported
Leak Detection:	None

D11 SSW 1/8-1/4 0.145 mi. 767 ft. | **DEL CURTO MEAT COMPANY, INC.** | **CA FID UST** | **S101625016**
1619 SAN JUAN RD | **SWEEPS UST** | **N/A**
HOLLISTER, CA 95023

Site 3 of 4 in cluster D

Relative: Lower

Actual: 273 ft.

CA FID UST:

Facility ID:	35000445
Regulated By:	UTNKA
Regulated ID:	00051159
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	4086373252
Mail To:	Not reported
Mailing Address:	1619 SAN JUAN RD
Mailing Address 2:	Not reported
Mailing City,St,Zip:	HOLLISTER 95023

DEL CURTO MEAT COMPANY, INC. (Continued) **S101625016**

Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

SWEEPS UST:
Status: Active
Comp Number: 51159
Number: 9
Board Of Equalization: 44-019699
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 1
Swrcb Tank Id: 35-031-051159-000001
Actv Date: 07-01-85
Capacity: 300
Tank Use: M.V. FUEL
Stg: P
Content: LEADED
Number Of Tanks: 2

Status: Active
Comp Number: 51159
Number: 9
Board Of Equalization: 44-019699
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 2
Swrcb Tank Id: 35-031-051159-000002
Actv Date: 07-01-85
Capacity: 500
Tank Use: M.V. FUEL
Stg: P
Content: LEADED
Number Of Tanks: Not reported

D12 **EDR US Hist Auto Stat** **1015256191**
SSW **1619 SAN JUAN RD** **N/A**
1/8-1/4 **HOLLISTER, CA 95023**
0.145 mi.
767 ft. **Site 4 of 4 in cluster D**

Relative:
Lower

Actual:
273 ft.

EDR Historical Auto Stations:
Name: S & F TIRES & AUTO REPAIR
Year: 2004
Address: 1619 SAN JUAN RD

Name: FORKLIFT TRUCK & AUTO REPAIR
Year: 2008
Address: 1619 SAN JUAN RD

(Continued) **1015256191**

Name: FORKLIFT TRUCK & AUTO REPAIR
Year: 2009
Address: 1619 SAN JUAN RD

Name: FORKLIFT TRUCKS & AUTO REPAIR
Year: 2010
Address: 1619 SAN JUAN RD

Name: FORKLIFT TRUCKS & AUTO REPAIR
Year: 2011
Address: 1619 SAN JUAN RD

Name: FORKLIFT TRUCKS & AUTO REPAIR
Year: 2012
Address: 1619 SAN JUAN RD

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13 SW 1/8-1/4 0.178 mi. 938 ft. | **SAN BENITO RIVER BIRDGE ROAD AT AZUL COURT HOLLISTER, CA 93060** | **Notify 65** | **S100178091 N/A**

Relative: Lower

Actual: 261 ft.

Notify 65:
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Incident Description: 93060

E14 SE 1/8-1/4 0.205 mi. 1085 ft. | **QUIK STOP MARKET #129 1300 SAN JUAN RD HOLLISTER, CA 95023** | **CA FID UST SWEEPS UST** | **S101625097 N/A**

Site 1 of 3 in cluster E

Relative: Higher

Actual: 279 ft.

CA FID UST:
Facility ID: 35000074
Regulated By: UTNKA
Regulated ID: 00065249
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 4086370796
Mail To: Not reported
Mailing Address: P O BOX
Mailing Address 2: Not reported
Mailing City,St,Zip: HOLLISTER 95023
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

QUIK STOP MARKET #129 (Continued) **S101625097**

SWEEPS UST:

Status:	Active
Comp Number:	65249
Number:	9
Board Of Equalization:	44-019717
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	1
Swrcb Tank Id:	35-031-065249-000001
Actv Date:	07-01-85
Capacity:	10000
Tank Use:	M.V. FUEL
Stg:	P
Content:	LEADED
Number Of Tanks:	3

Status:	Active
Comp Number:	65249
Number:	9
Board Of Equalization:	44-019717
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	2
Swrcb Tank Id:	35-031-065249-000002
Actv Date:	07-01-85
Capacity:	10000
Tank Use:	M.V. FUEL
Stg:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	65249
Number:	9
Board Of Equalization:	44-019717
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	3
Swrcb Tank Id:	35-031-065249-000003
Actv Date:	07-01-85
Capacity:	8000
Tank Use:	M.V. FUEL
Stg:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

E15
SE
1/8-1/4
0.205 mi.
1085 ft.

QUIK STOP MARKET #129
1300 SAN JUAN RD
HOLLISTER, CA 95023

HIST UST **U001601305**
N/A

Site 2 of 3 in cluster E

Relative:
Higher

Actual:
279 ft.

HIST UST:

Region:	STATE
Facility ID:	00000065249
Facility Type:	Gas Station
Other Type:	Not reported
Total Tanks:	0003
Contact Name:	RICK WAGSTER
Telephone:	4086370796
Owner Name:	QUIK STOP MARKETS INC
Owner Address:	4567 ENTERPRISE STREET
Owner City,St,Zip:	FREMONT, CA 94538
Tank Num:	001
Container Num:	1
Year Installed:	1985
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Tank Construction:	0.35 inches
Leak Detection:	Stock Inventor, Sensor Instrument, Groundwater Monitoring Well, Pressure Test
Tank Num:	002
Container Num:	2
Year Installed:	1985
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Tank Construction:	0.35 inches
Leak Detection:	Stock Inventor, Sensor Instrument, Groundwater Monitoring Well, Pressure Test
Tank Num:	003
Container Num:	3
Year Installed:	1985
Tank Capacity:	00008000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Tank Construction:	0.35 inches
Leak Detection:	Stock Inventor, Sensor Instrument, Groundwater Monitoring Well, Pressure Test

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E16
SE
1/8-1/4
0.205 mi.
1085 ft.

QUICK STOP 129
1300 SAN JUAN RD
HOLLISTER, CA 95023

UST **U003783762**
N/A

Site 3 of 3 in cluster E

Relative:
Higher

Actual:
279 ft.

UST:

Facility ID:	35-02-18
Latitude:	36.853310171754
Longitude:	-121.421751379967

17
ESE
1/8-1/4
0.232 mi.
1226 ft.

211 MADERA CT
HOLLISTER, CA 95023

EDR US Hist Auto Stat **1015321470**
N/A

Relative:
Higher

Actual:
283 ft.

EDR Historical Auto Stations:

Name:	C & G AUTOMOTIVE
Year:	2004
Address:	211 MADERA CT

18
WSW
1/2-1
0.985 mi.
5199 ft.

WORKINGMANS AUTO WRECKING
2450 SAN JUAN ROAD
HOLLISTER, CA 95023

ENVIROSTOR **S101481906**
N/A

Relative:
Higher

Actual:
276 ft.

ENVIROSTOR:

Site Type:	Historical
Site Type Detailed:	* Historical
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Referred - Not Assigned
Division Branch:	Cleanup Berkeley
Facility ID:	35500003
Site Code:	Not reported
Assembly:	30
Senate:	12
Special Program:	* Rural County Survey Program
Status:	Refer: Other Agency
Status Date:	01/16/1996
Restricted Use:	NO
Site Mgmt. Req.:	NONE SPECIFIED
Funding:	Not reported
Latitude:	36.85268
Longitude:	-121.4384
APN:	0210200020
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED, NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	0210200020
Alias Type:	APN
Alias Name:	35500003
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	* Discovery
Completed Date:	02/03/1989
Comments:	FACILITY IDENTIFIED 1988 PHONE BOOK

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Screening
Completed Date:	01/16/1996

WORKINGMANS AUTO WRECKING (Continued) **S101481906**

Comments:	County of San Benito Environmental Health Dept. working with the current property owners to remediate site.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Screening
Completed Date:	04/27/1989
Comments:	SITE SCREENING DONE RATIONALE FOR PAM BASED ON BUS TYPE; SEND Q; OES - SAN BENITO CO LOOKING AT AUTO WRECKERS TO BRING THEM UNDER COMPLIANCE
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

Count: 37 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HOLLISTER	S112889891	MAERS-CPT	EB & SAN FELIPE RD	95023	HAZNET
HOLLISTER	S103843249	HOLLISTER AIRPORT	HWY 156		SLIC
HOLLISTER	S112954717	CALTRANS DIST 4/CONSTR/EA04-0C7604	PM 353 & RT 152	95023	HAZNET
HOLLISTER	S112872413	CLARA MELENDY	26161 AIRLINE HWY	95023	HAZNET
HOLLISTER	1012050599	CAL-AGRA, INC.	2790 BUENA VISTA RD	95023	SSTS
HOLLISTER	S113057829	DENNIS BODY SHOP	2070 BUENA VIS	95023	HAZNET
HOLLISTER	S112918462	PACIFIC GAS & ELECTRIC - HOLLISTER	SW CORNER OF SAN FELIPE & HWY	95023	HAZNET
HOLLISTER	S110653387	INDUSTRIAL WASTE TREATMENT FACILIT	END OF SOUTH ST		SWF/LF
HOLLISTER	S113179239	SAN BENITO CTY/EMERG RESPONSE-97 F	FLOOD WASTE ONLY FROM SAN BENI		HAZNET
HOLLISTER	S112886512	P G & E HOLLISTER SUBSTATION	FLORA ROAD OF HWY N	95023	HAZNET
HOLLISTER	S112949964	CALTRANS DIST 4/CONSTR/EA04-1L6105	INTERSECT 152 & RT 156	95023	HAZNET
HOLLISTER	S110731414	SAN BENITO COUNTY RESOURCE REC. PK	JOHN SMITH RD		SWF/LF
HOLLISTER	S113033249	HOLLISTER TRANMISSION REPAIR	2540 OLD SAN JUAN RD	95023	HAZNET
HOLLISTER	S112850783	1X SOUTH VALLEY NATIONAL BANK	5940 OLD PACHECO PASS HWY	95023	HAZNET
HOLLISTER	S113125290	DIAGEO CHATEAU & ESTATES WINE CO	795 OLD AIRLINE HWY	95023	HAZNET
HOLLISTER	1014465359	SERVANDO CASTRO CORTEZ	4281 A PACHACO HWY	95023	RCRA NonGen / NLR
HOLLISTER	S109437656	BLUE BARREL RD	22400 600 PACHECO PASS HWY		NPDES
HOLLISTER	S113096944	GEOF LANINI TRUCKING	4281 PACHECO HWY	95023	HAZNET
HOLLISTER	1010314102	GEOF LANINI TRUCKING	4281 PACHECO HWY	95023	RCRA NonGen / NLR
HOLLISTER	S109466599	GEOF LANINI TRUCKING	4281 PACHECO HWY	95023	HWT
HOLLISTER	S112901101	PACIFIC GAS & ELECTRIC	SAN JUSTO RD W		HAZNET
HOLLISTER	U001601203	CESARE BERTERO	SAN JUAN ROAD	95023	HIST UST
HOLLISTER	S112886511	SAN JUSTO SUBSTATION	SAN JUSTO RD W	95023	HAZNET
HOLLISTER	S101625086	MINISERE	5 SAN BENITA	95023	CA FID UST, SWEEPS UST
HOLLISTER	S101625009	CESARE BERTERO	SAN JUAN RD	95023	CA FID UST, SWEEPS UST
HOLLISTER	S102429035	E'S RANCH MILK	SAN BENITO ST	95023	HIST CORTESE, LUST
HOLLISTER	1000165220	US BUREAU OF LAND MGMT VALLECITOS	16 SE SEC 25	95023	CERCLIS, FINDS
HOLLISTER	S105254814	HOLLISTER DOMESTIC WWTP	N SIDE SAN BENITO R W	95023	Cortese, ENF, WDS
HOLLISTER	S106102203	PAICINES QUARRY	TRES PINOS CREEK S OF STATE HW	0	WDS
HOLLISTER	S113180526	SAN BENITO COUNTY/CLANDESTINE DRUG	VARIOUS LOCATIONS WITHIN SAN		HAZNET
HOLLISTER	S107541227		WILLOW SPRINGS RANCH RD	95023	CDL
HOLLISTER	S112863191	ELYXIR DISTRIBUTOR	500 YARDS FROM MILLER DR	95023	HAZNET
PAICINES	1015732591	PINNACLES NATIONAL MONUMENT	PAICINES	95023	CERC-NFRAP, RCRA-CESQG
SAN BENITO COUNTY	S107540756		SR 152 WEST OF CASA DE FRUTA	0	CDL
SAN BENITO COUNTY	S107526582		1.5 MI OFF HWY 25, 20 MI OUT O	0	CDL
SAN BENITO COUNTY	M300003157	HILLSDALE ROCK CO.	SAN JUAN PLANT		US MINES
SAN JUAN BAUTISTA	U001601234	FREMONT PEAK COMMUNICATION FAC	6 MI SE SAN JUAN BAUTI	95023	HIST UST, SWEEPS UST

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 07/12/2013
Next Scheduled EDR Contact: 10/21/2013
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 07/12/2013
Next Scheduled EDR Contact: 10/21/2013
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/26/2013	Source: EPA
Date Data Arrived at EDR: 05/09/2013	Telephone: N/A
Date Made Active in Reports: 07/10/2013	Last EDR Contact: 07/12/2013
Number of Days to Update: 62	Next Scheduled EDR Contact: 10/21/2013
	Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/26/2013	Source: EPA
Date Data Arrived at EDR: 05/29/2013	Telephone: 703-412-9810
Date Made Active in Reports: 08/09/2013	Last EDR Contact: 09/13/2013
Number of Days to Update: 72	Next Scheduled EDR Contact: 12/09/2013
	Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 07/31/2012	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/09/2012	Telephone: 703-603-8704
Date Made Active in Reports: 12/20/2012	Last EDR Contact: 07/08/2013
Number of Days to Update: 72	Next Scheduled EDR Contact: 10/21/2013
	Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 04/26/2013	Source: EPA
Date Data Arrived at EDR: 05/29/2013	Telephone: 703-412-9810
Date Made Active in Reports: 08/09/2013	Last EDR Contact: 09/13/2013
Number of Days to Update: 72	Next Scheduled EDR Contact: 12/09/2013
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 08/08/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 08/08/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 08/08/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 08/08/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 08/08/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 03/14/2013
Date Data Arrived at EDR: 03/29/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 03/14/2013
Date Data Arrived at EDR: 03/29/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005
Date Data Arrived at EDR: 12/11/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 31

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/15/2013
Next Scheduled EDR Contact: 09/02/2013
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/17/2013
Date Made Active in Reports: 02/15/2013
Number of Days to Update: 29

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 07/01/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 08/05/2013
Date Data Arrived at EDR: 08/05/2013
Date Made Active in Reports: 08/27/2013
Number of Days to Update: 22

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/05/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 08/05/2013
Date Data Arrived at EDR: 08/05/2013
Date Made Active in Reports: 08/27/2013
Number of Days to Update: 22

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/05/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/20/2013
Date Data Arrived at EDR: 05/21/2013
Date Made Active in Reports: 06/25/2013
Number of Days to Update: 35

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 08/19/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST: Geotracker's Leaking Underground Fuel Tank Report
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 07/26/2013
Date Data Arrived at EDR: 07/26/2013
Date Made Active in Reports: 08/26/2013
Number of Days to Update: 31

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 09/17/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Quarterly

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

SLIC: Statewide SLIC Cases
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 07/26/2013
Date Data Arrived at EDR: 07/26/2013
Date Made Active in Reports: 08/26/2013
Number of Days to Update: 31

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/17/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/24/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 11/01/2012
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 162

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/02/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 07/24/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 59

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 07/24/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 02/08/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 63

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 07/24/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Semi-Annually

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/24/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/01/2013
Date Data Arrived at EDR: 03/01/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 07/24/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Quarterly

State and tribal registered storage tank lists

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 07/26/2013
Date Data Arrived at EDR: 07/26/2013
Date Made Active in Reports: 08/20/2013
Number of Days to Update: 25

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 09/17/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
Registered Aboveground Storage Tanks.

Date of Government Version: 08/01/2009
Date Data Arrived at EDR: 09/10/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 916-327-5092
Last EDR Contact: 07/03/2013
Next Scheduled EDR Contact: 10/21/2013
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/24/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/21/2013
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 45

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 07/24/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 07/24/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/24/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/10/2011
Date Data Arrived at EDR: 05/11/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 34

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 07/24/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 08/02/2012
Date Data Arrived at EDR: 08/03/2012
Date Made Active in Reports: 11/05/2012
Number of Days to Update: 94

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 07/24/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 02/08/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 63

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 07/24/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 11/07/2012
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 156

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/02/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 07/19/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 08/05/2013
Date Data Arrived at EDR: 08/05/2013
Date Made Active in Reports: 08/27/2013
Number of Days to Update: 22

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/05/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 10/02/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 14

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 07/02/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/24/2013
Date Data Arrived at EDR: 06/25/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/26/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: No Update Planned

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 06/17/2013
Date Data Arrived at EDR: 06/17/2013
Date Made Active in Reports: 08/16/2013
Number of Days to Update: 60

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 04/26/2013
Date Made Active in Reports: 05/16/2013
Number of Days to Update: 20

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 07/31/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 03/04/2013
Date Data Arrived at EDR: 03/12/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 59

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 09/04/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Quarterly

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 08/05/2013
Date Data Arrived at EDR: 08/05/2013
Date Made Active in Reports: 08/27/2013
Number of Days to Update: 22

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/05/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 04/03/2013
Date Made Active in Reports: 05/14/2013
Number of Days to Update: 41

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 09/03/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

Local Lists of Registered Storage Tanks

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009
Date Data Arrived at EDR: 09/23/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 8

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 09/03/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SWEEPS UST: SWEEPS UST Listing
Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 04/25/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 07/24/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 06/14/2013
Date Data Arrived at EDR: 06/17/2013
Date Made Active in Reports: 08/21/2013
Number of Days to Update: 65

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 06/10/2013
Date Data Arrived at EDR: 06/11/2013
Date Made Active in Reports: 08/21/2013
Number of Days to Update: 71

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/11/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 55

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 07/01/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 03/12/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 06/25/2013
Number of Days to Update: 55

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 08/02/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 07/26/2013
Date Data Arrived at EDR: 07/26/2013
Date Made Active in Reports: 08/26/2013
Number of Days to Update: 31

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/17/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 07/26/2013
Date Data Arrived at EDR: 07/26/2013
Date Made Active in Reports: 08/26/2013
Number of Days to Update: 31

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/17/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 08/08/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 08/05/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/19/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 03/13/2013
Number of Days to Update: 15

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 01/15/2013
Date Made Active in Reports: 03/13/2013
Number of Days to Update: 57

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 12/18/2012
Date Data Arrived at EDR: 03/13/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 30

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/13/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/28/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Varies

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 04/18/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 22

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 09/05/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/31/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 44

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/30/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 64

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems
Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/24/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/20/2011
Date Data Arrived at EDR: 11/10/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 07/01/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/01/2012
Date Data Arrived at EDR: 01/16/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 114

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/17/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/14/2013
Date Data Arrived at EDR: 03/20/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 112

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/09/2013
Date Data Arrived at EDR: 04/11/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 29

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 07/12/2013
Next Scheduled EDR Contact: 10/21/2013
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 03/08/2013
Date Data Arrived at EDR: 03/21/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 111

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 09/11/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/08/2012
Date Data Arrived at EDR: 05/25/2012
Date Made Active in Reports: 07/10/2012
Number of Days to Update: 46

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 07/24/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 52

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 08/26/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Biennially

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 05/20/2013
Date Data Arrived at EDR: 05/21/2013
Date Made Active in Reports: 06/12/2013
Number of Days to Update: 22

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/19/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

UIC: UIC Listing

A listing of underground control injection wells.

Date of Government Version: 03/05/2013
Date Data Arrived at EDR: 03/19/2013
Date Made Active in Reports: 03/27/2013
Number of Days to Update: 8

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 09/17/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Varies

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 07/05/2013
Date Data Arrived at EDR: 07/05/2013
Date Made Active in Reports: 08/26/2013
Number of Days to Update: 52

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 07/05/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List
The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 10/21/1993
Date Data Arrived at EDR: 11/01/1993
Date Made Active in Reports: 11/19/1993
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: No Update Planned

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 12/11/2012
Date Data Arrived at EDR: 12/12/2012
Date Made Active in Reports: 01/04/2013
Number of Days to Update: 23

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/24/2012
Data Release Frequency: Annually

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 04/29/2013
Date Made Active in Reports: 05/16/2013
Number of Days to Update: 17

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/08/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/16/2013
Date Made Active in Reports: 08/26/2013
Number of Days to Update: 41

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 07/16/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 06/25/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 58

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/07/2013
Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/19/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/01/2013
Next Scheduled EDR Contact: 11/04/2013
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/04/2013
Date Data Arrived at EDR: 03/15/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 56

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 08/23/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/02/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 06/17/2013
Date Data Arrived at EDR: 06/17/2013
Date Made Active in Reports: 08/21/2013
Number of Days to Update: 65

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 05/02/2013
Date Data Arrived at EDR: 06/13/2013
Date Made Active in Reports: 07/24/2013
Number of Days to Update: 41

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 09/11/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

COAL ASH DOE: Sleam-Electric Plan Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 07/19/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010
Date Data Arrived at EDR: 01/03/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 77

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 09/13/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 07/15/2013
Date Data Arrived at EDR: 07/16/2013
Date Made Active in Reports: 08/12/2013
Number of Days to Update: 27

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 07/16/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: Quarterly

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 05/28/2013
Date Data Arrived at EDR: 05/29/2013
Date Made Active in Reports: 06/27/2013
Number of Days to Update: 29

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/27/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

Financial Assurance 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 05/21/2013
Date Data Arrived at EDR: 05/22/2013
Date Made Active in Reports: 06/27/2013
Number of Days to Update: 36

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 08/15/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 08/27/2013
Number of Days to Update: 19

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 08/26/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013
Date Data Arrived at EDR: 02/14/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 10/21/2013
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

2020 COR ACTION: 2020 Corrective Action Program List
The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011
Date Data Arrived at EDR: 05/18/2012
Date Made Active in Reports: 05/25/2012
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/16/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands
Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/19/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: N/A

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 04/15/2013
Date Data Arrived at EDR: 07/03/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 72

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 07/03/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Quarterly

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)
The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/30/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/30/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Annually

EPA WATCH LIST: EPA WATCH LIST
EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites
A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 07/25/2013
Date Data Arrived at EDR: 07/26/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 14

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 06/28/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Semi-Annually

Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 07/25/2013
Date Data Arrived at EDR: 07/26/2013
Date Made Active in Reports: 08/20/2013
Number of Days to Update: 25

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 06/28/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List
Cupa Facility List

Date of Government Version: 06/20/2013
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 08/21/2013
Number of Days to Update: 61

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing
Cupa facility list.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 20

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 07/26/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: Varies

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 07/24/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 16

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 06/20/2013
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 39

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 08/08/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 06/10/2013
Date Data Arrived at EDR: 06/11/2013
Date Made Active in Reports: 07/24/2013
Number of Days to Update: 43

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 08/05/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 01/09/2013
Date Data Arrived at EDR: 01/10/2013
Date Made Active in Reports: 02/25/2013
Number of Days to Update: 46

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 09/20/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 05/20/2013
Date Data Arrived at EDR: 05/21/2013
Date Made Active in Reports: 06/25/2013
Number of Days to Update: 35

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 08/05/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 07/16/2013
Date Made Active in Reports: 07/24/2013
Number of Days to Update: 8

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 07/15/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 08/09/2013
Date Data Arrived at EDR: 08/09/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 13

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 08/09/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 07/26/2013
Date Data Arrived at EDR: 08/09/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 13

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 08/08/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 06/26/2012
Date Data Arrived at EDR: 06/27/2012
Date Made Active in Reports: 08/17/2012
Number of Days to Update: 51

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 08/31/2010
Date Data Arrived at EDR: 09/01/2010
Date Made Active in Reports: 09/30/2010
Number of Days to Update: 29

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county?s Certified Unified Program Agency database. California?s Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 06/20/2013
Date Data Arrived at EDR: 06/24/2013
Date Made Active in Reports: 08/21/2013
Number of Days to Update: 58

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/25/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 33

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 07/18/2013
Next Scheduled EDR Contact: 11/04/2013
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 03/28/2013
Date Data Arrived at EDR: 06/17/2013
Date Made Active in Reports: 08/21/2013
Number of Days to Update: 65

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 07/15/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/22/2013
Date Data Arrived at EDR: 07/22/2013
Date Made Active in Reports: 08/26/2013
Number of Days to Update: 35

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 07/22/2013
Next Scheduled EDR Contact: 11/04/2013
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009
Date Data Arrived at EDR: 03/10/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 29

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 07/17/2013
Next Scheduled EDR Contact: 11/04/2013
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/30/2013
Date Data Arrived at EDR: 02/21/2013
Date Made Active in Reports: 03/25/2013
Number of Days to Update: 32

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 07/17/2013
Next Scheduled EDR Contact: 11/04/2013
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 07/31/2013
Date Data Arrived at EDR: 08/01/2013
Date Made Active in Reports: 08/27/2013
Number of Days to Update: 26

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 07/18/2013
Next Scheduled EDR Contact: 11/04/2013
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/28/2003
Date Data Arrived at EDR: 10/23/2003
Date Made Active in Reports: 11/26/2003
Number of Days to Update: 34

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 07/26/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 07/15/2013
Date Data Arrived at EDR: 07/18/2013
Date Made Active in Reports: 08/20/2013
Number of Days to Update: 33

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 07/15/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List
A listing of sites included in the county?s Certified Unified Program Agency database. California?s Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 04/15/2013
Date Data Arrived at EDR: 04/16/2013
Date Made Active in Reports: 05/17/2013
Number of Days to Update: 31

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 11/26/2012
Date Data Arrived at EDR: 11/28/2012
Date Made Active in Reports: 01/21/2013
Number of Days to Update: 54

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 07/18/2013
Next Scheduled EDR Contact: 10/21/2013
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 05/28/2013
Date Data Arrived at EDR: 05/29/2013
Date Made Active in Reports: 06/25/2013
Number of Days to Update: 27

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List
CUPA Facility List

Date of Government Version: 06/04/2013
Date Data Arrived at EDR: 06/05/2013
Date Made Active in Reports: 07/15/2013
Number of Days to Update: 40

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 09/03/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/21/2013
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 08/21/2013
Number of Days to Update: 61

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011
Date Data Arrived at EDR: 12/06/2011
Date Made Active in Reports: 02/07/2012
Number of Days to Update: 63

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 09/03/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 09/03/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 05/29/2013
Date Data Arrived at EDR: 05/30/2013
Date Made Active in Reports: 07/15/2013
Number of Days to Update: 46

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 08/15/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 05/01/2013
Date Data Arrived at EDR: 05/15/2013
Date Made Active in Reports: 06/12/2013
Number of Days to Update: 28

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 05/01/2013
Date Data Arrived at EDR: 05/15/2013
Date Made Active in Reports: 06/25/2013
Number of Days to Update: 41

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 05/01/2013
Date Data Arrived at EDR: 05/15/2013
Date Made Active in Reports: 06/25/2013
Number of Days to Update: 41

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 03/12/2013
Date Data Arrived at EDR: 03/13/2013
Date Made Active in Reports: 03/27/2013
Number of Days to Update: 14

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 08/20/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 07/18/2013
Date Data Arrived at EDR: 07/18/2013
Date Made Active in Reports: 07/24/2013
Number of Days to Update: 6

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 07/18/2013
Date Data Arrived at EDR: 07/18/2013
Date Made Active in Reports: 08/20/2013
Number of Days to Update: 33

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 05/03/2013
Date Data Arrived at EDR: 07/08/2013
Date Made Active in Reports: 07/24/2013
Number of Days to Update: 16

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/05/2013
Next Scheduled EDR Contact: 10/21/2013
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 05/03/2013
Date Data Arrived at EDR: 07/08/2013
Date Made Active in Reports: 08/23/2013
Number of Days to Update: 46

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/05/2013
Next Scheduled EDR Contact: 10/21/2013
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 05/30/2013
Date Data Arrived at EDR: 05/31/2013
Date Made Active in Reports: 07/15/2013
Number of Days to Update: 45

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 08/08/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 08/17/2012
Date Data Arrived at EDR: 08/20/2012
Date Made Active in Reports: 10/03/2012
Number of Days to Update: 44

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2012
Date Data Arrived at EDR: 11/06/2012
Date Made Active in Reports: 11/30/2012
Number of Days to Update: 24

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 07/24/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010
Date Data Arrived at EDR: 03/10/2011
Date Made Active in Reports: 03/15/2011
Number of Days to Update: 5

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/18/2013
Date Data Arrived at EDR: 06/24/2013
Date Made Active in Reports: 08/20/2013
Number of Days to Update: 57

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List

Cupa Facility List.

Date of Government Version: 06/04/2013
Date Data Arrived at EDR: 06/05/2013
Date Made Active in Reports: 07/15/2013
Number of Days to Update: 40

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 07/02/2013
Date Data Arrived at EDR: 07/05/2013
Date Made Active in Reports: 08/23/2013
Number of Days to Update: 49

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/13/2013
Next Scheduled EDR Contact: 09/30/2013
Data Release Frequency: Annually

Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 06/17/2013
Date Data Arrived at EDR: 06/18/2013
Date Made Active in Reports: 08/21/2013
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List

Cupa facility list

Date of Government Version: 06/03/2013
Date Data Arrived at EDR: 06/04/2013
Date Made Active in Reports: 07/15/2013
Number of Days to Update: 41

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 09/03/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 06/03/2013
Date Data Arrived at EDR: 06/06/2013
Date Made Active in Reports: 07/15/2013
Number of Days to Update: 39

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 09/03/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Annually

Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 05/16/2013
Date Data Arrived at EDR: 05/17/2013
Date Made Active in Reports: 06/25/2013
Number of Days to Update: 39

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 08/08/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List
CUPA facility listing.

Date of Government Version: 05/28/2013
Date Data Arrived at EDR: 05/29/2013
Date Made Active in Reports: 06/27/2013
Number of Days to Update: 29

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/17/2013
Date Data Arrived at EDR: 06/18/2013
Date Made Active in Reports: 08/21/2013
Number of Days to Update: 64

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/17/2013
Date Data Arrived at EDR: 06/20/2013
Date Made Active in Reports: 08/12/2013
Number of Days to Update: 53

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 06/17/2013
Date Data Arrived at EDR: 06/20/2013
Date Made Active in Reports: 08/20/2013
Number of Days to Update: 61

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 07/05/2013
Date Data Arrived at EDR: 07/05/2013
Date Made Active in Reports: 08/21/2013
Number of Days to Update: 47

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 07/02/2013
Date Data Arrived at EDR: 07/05/2013
Date Made Active in Reports: 08/12/2013
Number of Days to Update: 38

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 06/10/2013
Date Data Arrived at EDR: 06/11/2013
Date Made Active in Reports: 08/19/2013
Number of Days to Update: 69

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Semi-Annually

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/14/2013
Date Data Arrived at EDR: 01/16/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 42

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 07/26/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/22/2013
Date Made Active in Reports: 06/25/2013
Number of Days to Update: 34

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/19/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 07/03/2013
Next Scheduled EDR Contact: 10/21/2013
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/19/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 05/28/2013
Date Data Arrived at EDR: 06/24/2013
Date Made Active in Reports: 08/12/2013
Number of Days to Update: 49

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 07/30/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Quarterly

Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 05/28/2013
Date Data Arrived at EDR: 06/17/2013
Date Made Active in Reports: 08/20/2013
Number of Days to Update: 64

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 06/24/2013
Date Data Arrived at EDR: 06/26/2013
Date Made Active in Reports: 08/20/2013
Number of Days to Update: 55

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/05/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 17

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 07/31/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 05/20/2013
Date Data Arrived at EDR: 05/21/2013
Date Made Active in Reports: 06/27/2013
Number of Days to Update: 37

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/19/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 08/28/2012
Number of Days to Update: 40

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 07/19/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/07/2013
Date Made Active in Reports: 09/10/2013
Number of Days to Update: 34

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/24/2013
Date Made Active in Reports: 08/19/2013
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/18/2013
Next Scheduled EDR Contact: 11/04/2013
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 08/05/2013
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/23/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 09/27/2012
Number of Days to Update: 70

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: Rextag Strategies Corp.
Telephone: (281) 769-2247
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

1601 BUENA VISTA ROAD
1601 BUENA VISTA ROAD
HOLLISTER, CA 95023

TARGET PROPERTY COORDINATES

Latitude (North):	36.8566 - 36˚ 51' 23.76''
Longitude (West):	121.425 - 121˚ 25' 30.00''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	640408.4
UTM Y (Meters):	4079919.8
Elevation:	274 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	36121-G4 HOLLISTER, CA
Most Recent Revision:	1998

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

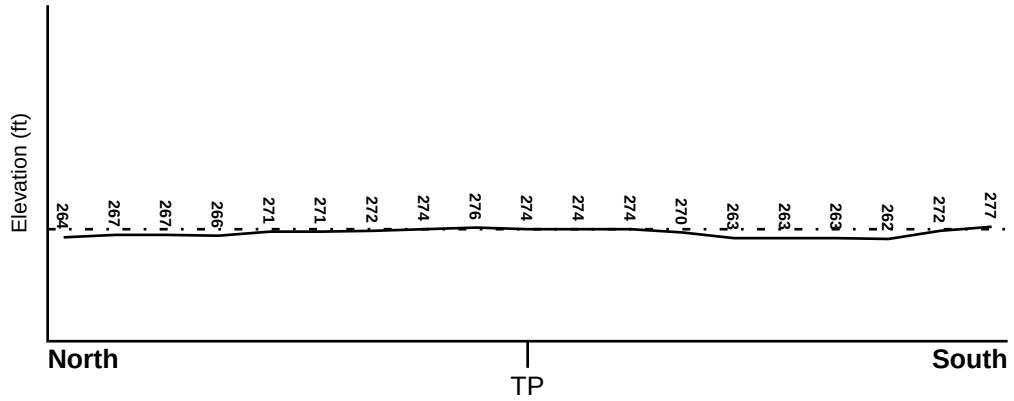
TOPOGRAPHIC INFORMATION

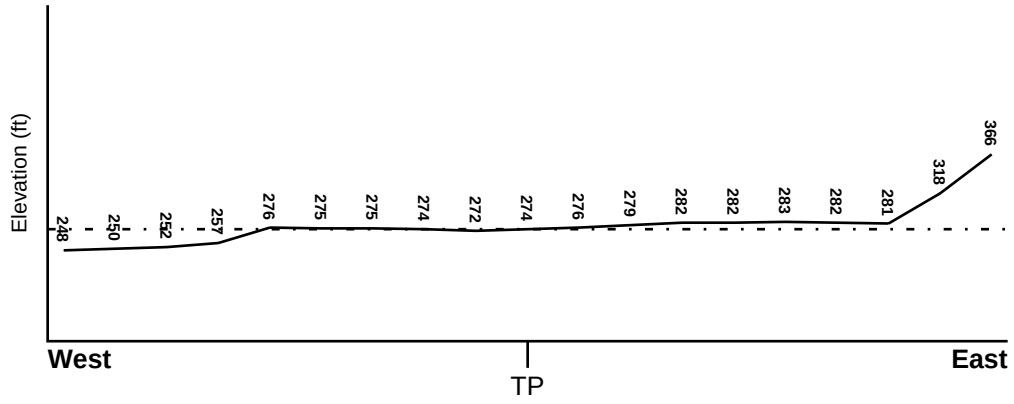
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General West

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 274 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
SAN BENITO, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 06069C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
HOLLISTER	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius: 1.25 miles
Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

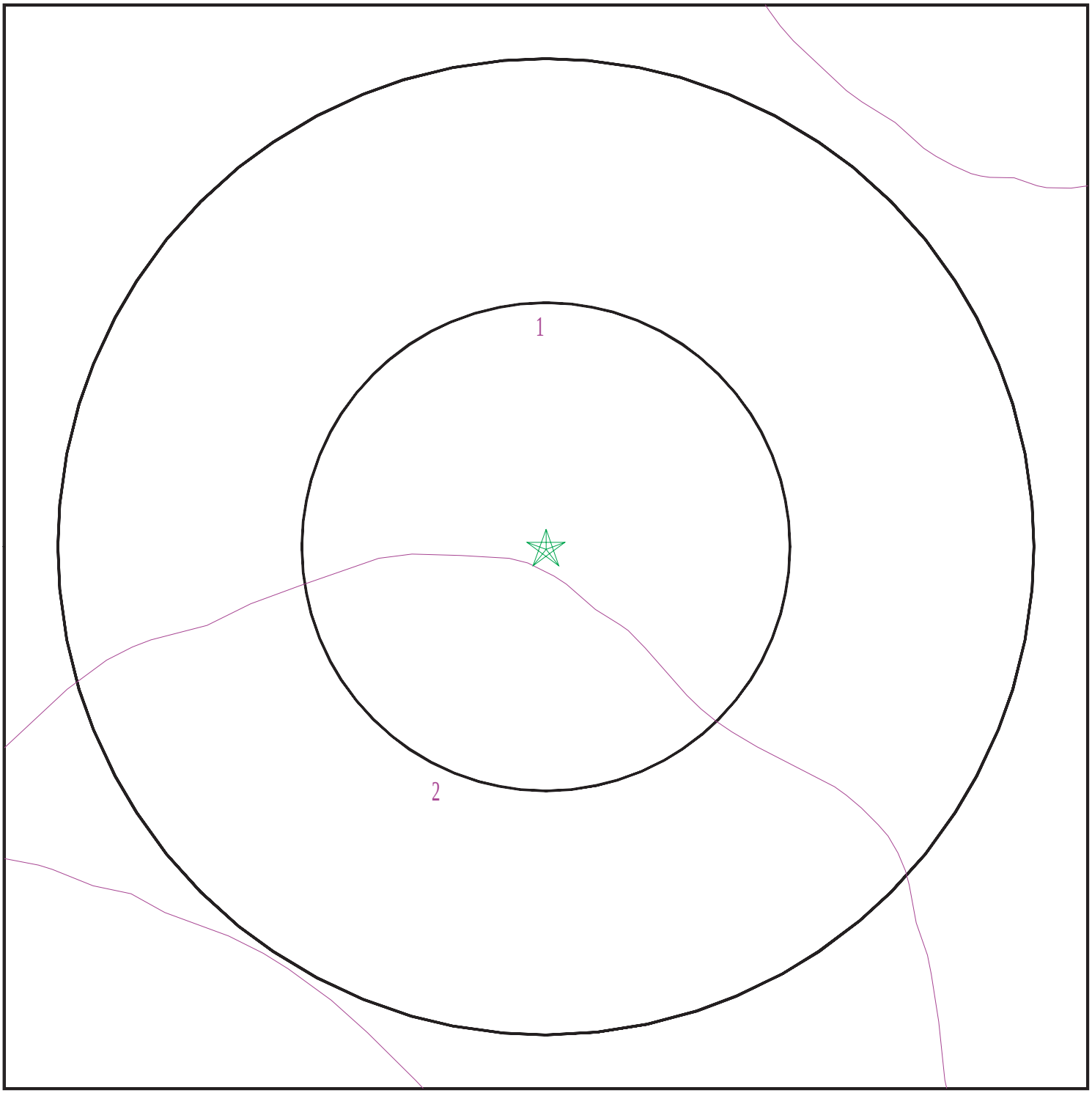
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 3740929.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	1601 Buena Vista Road	CLIENT:	Engeo
ADDRESS:	1601 Buena Vista Road Hollister CA 95023	CONTACT:	Greg Cubbon
		INQUIRY #:	3740929.2s
LAT/LONG:	36.8566 / 121.425	DATE:	September 26, 2013 2:27 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Sorrento

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4
2	18 inches	77 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4

Soil Map ID: 2

Soil Component Name: Sorrento

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 8.4 Min: 7.4
2	18 inches	77 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 8.4 Min: 7.4

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	USGS40000178747	1/8 - 1/4 Mile WNW
C4	USGS40000178693	1/4 - 1/2 Mile SE
B5	USGS40000178746	1/4 - 1/2 Mile ENE
7	USGS40000178674	1/4 - 1/2 Mile SE
D9	USGS40000178799	1/2 - 1 Mile ENE
E10	USGS40000178721	1/2 - 1 Mile West
15	USGS40000178585	1/2 - 1 Mile SW
16	USGS40000178773	1/2 - 1 Mile WNW
17	USGS40000178555	1/2 - 1 Mile SSW
G18	USGS40000178825	1/2 - 1 Mile NE
20	USGS40000178652	1/2 - 1 Mile SW
21	USGS40000178558	1/2 - 1 Mile SSE
H23	USGS40000178919	1/2 - 1 Mile North
24	USGS40000178822	1/2 - 1 Mile WNW
H25	USGS40000178928	1/2 - 1 Mile North
I26	USGS40000178929	1/2 - 1 Mile North
I27	USGS40000178930	1/2 - 1 Mile North

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	CADW50000025233	1/8 - 1/4 Mile WNW
B3	CADW50000025240	1/4 - 1/2 Mile ENE
C6	11045	1/4 - 1/2 Mile SE
D8	11044	1/4 - 1/2 Mile NE
E11	CADW50000025219	1/2 - 1 Mile West
F12	11047	1/2 - 1 Mile SE
F13	11048	1/2 - 1 Mile SE
F14	18663	1/2 - 1 Mile SE
G19	11043	1/2 - 1 Mile NE
G22	CADW50000025285	1/2 - 1 Mile NE
I28	CADW50000025365	1/2 - 1 Mile North

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

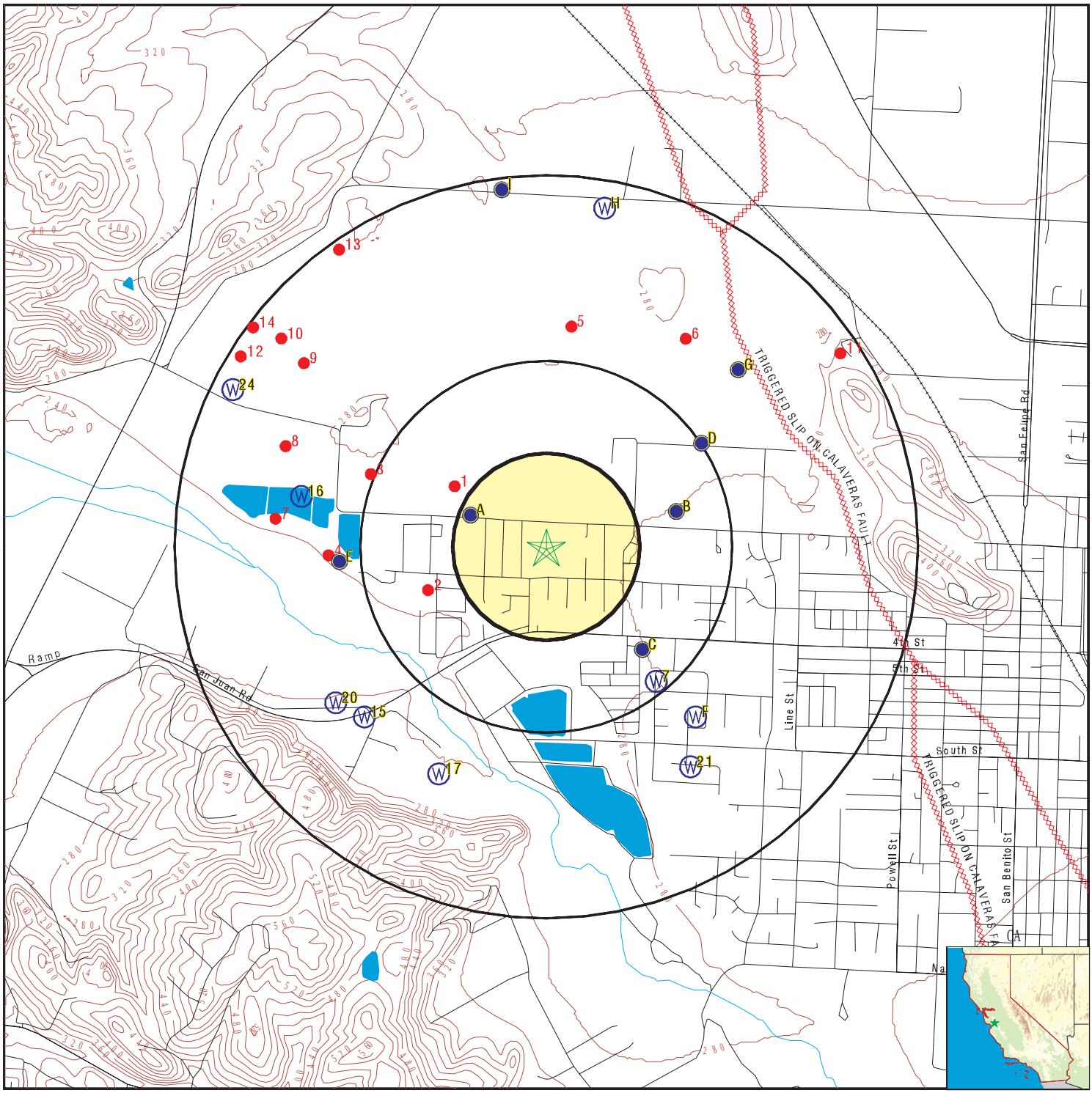
MAP ID	WELL ID	LOCATION FROM TP
1	CAOG9A000205652	1/4 - 1/2 Mile WNW
2	CAOG9A000205648	1/4 - 1/2 Mile WSW
3	CAOG9A000205653	1/2 - 1 Mile WNW
4	CAOG9A000205650	1/2 - 1 Mile West

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
5	CAOG9A000205683	1/2 - 1 Mile North
6	CAOG9A000205676	1/2 - 1 Mile NE
7	CAOG9A000205651	1/2 - 1 Mile West
8	CAOG9A000205658	1/2 - 1 Mile WNW
9	CAOG9A000205670	1/2 - 1 Mile NW
10	CAOG9A000205677	1/2 - 1 Mile NW
11	CAOG9A000205672	1/2 - 1 Mile ENE
12	CAOG9A000205671	1/2 - 1 Mile WNW
13	CAOG9A000205692	1/2 - 1 Mile NW
14	CAOG9A000205682	1/2 - 1 Mile NW

PHYSICAL SETTING SOURCE MAP - 3740929.2s



County Boundary
Major Roads
Contour Lines
Earthquake Fault Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location
Closest Hydrogeological Data
Oil, gas or related wells

SITE NAME: 1601 Buena Vista Road	CLIENT: Engeo
ADDRESS: 1601 Buena Vista Road Hollister CA 95023	CONTACT: Greg Cubbon INQUIRY #: 3740929.2s
LAT/LONG: 36.8566 / 121.425	DATE: September 26, 2013 2:27 pm

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Map ID Direction Distance Elevation	Database	EDR ID Number
A1 **WNW** **1/8 - 1/4 Mile** **Higher**	**FED USGS**	**USGS40000178747**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-365128121253901		
Monloc name:	012S005E28L001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18060002	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	36.8577321
Longitude:	-121.4285478	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	273.00
Vert measure units:	feet	Vertacc measure val:	005
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	1950	Welldepth:	425
Welldepth units:	ft	Wellholedepth:	540
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 39

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1988-10	108.5		1988-03	89	
1987-10	97		1987-03	73	
1986-10	79		1986-03-01	79	
1986-03	79		1985-10-01	69	
1985-03-01	48		1984-10-01	53	
1984-03-01	50		1983-03	57	
1982-10	84.0		1982-03	79.5	
1981-10	95.0		1981-03	70.5	
1980-10	80.5		1980-03-10	78.0	
1979-10	92.5		1979-03	79	
1978-10	86		1978-03	96	
1977-10	96.7				
1977-06	0.00				
Note: The site was being pumped.					
1977-03	0.00				
Note: The site was being pumped.					
1976-10	67.7		1976-03	62.5	
1975-10	76.3		1975-03	81.3	
1974-03	74		1973-03	80.7	
1972-10	88.3				
1972-03	0.00				
Note: The site was being pumped.					
1971-03	75.5		1970-03	91.5	
1969-03	100		1968-02-06	77	

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1967-03-02	85.4		1951-02-14	77	

A2
WNW
1/8 - 1/4 Mile
Higher

CA WELLS **CADW50000025233**

Latitude :	36.85795		
Longitude :	121.4288		
Site code:	368580N1214288W001	Casgem sta:	12S05E28L001M
Local well:	1414	Casgem s 1:	Irrigation
County id:	35		
Basin cd:	3-3.02	Basin desc:	Bolsa Area
Org unit n:	South Central Region Office	Site id:	CADW50000025233

B3
ENE
1/4 - 1/2 Mile
Higher

CA WELLS **CADW50000025240**

Latitude :	36.858233		
Longitude :	121.418817		
Site code:	368578N1214185W001	Casgem sta:	12S05E28J001M
Local well:	1396	Casgem s 1:	Irrigation
County id:	35		
Basin cd:	3-3.02	Basin desc:	Bolsa Area
Org unit n:	South Central Region Office	Site id:	CADW50000025240

C4
SE
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000178693**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-365111121250901		
Monloc name:	012S005E33A003M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18060002	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	36.8530101
Longitude:	-121.4202141	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	279.00
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19640521	Welldepth:	204
Welldepth units:	ft	Wellholedepth:	204
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 13

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1983-03	50.5		1982-10	69.5	
1982-03	68.0		1981-10	77.5	
1981-03	67.8		1980-10	77.0	
1980-03-12	66.5		1979-10	83.0	
1979-03	76.3		1978-10	85	
1978-03	88		1977-10	86.2	
1964-05-21	90.00				

B5
ENE
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000178746**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-365128121250301		
Monloc name:	012S005E28J001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18060002	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	36.8577321
Longitude:	-121.4185473	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	274.00
Vert measure units:	feet	Vertacc measure val:	010
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	1936	Welldepth:	220
Welldepth units:	ft	Wellholedepth:	220
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 39

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1988-10	105		1988-03	78	
1987-10	75		1987-03	66	
1986-10	76		1986-03-01	74	
1986-03	74		1985-10-01	74	
1985-03-01	52		1984-10-01	50	
1984-03-01	45		1983-03	34	
1982-10	76.0		1982-03	71.5	
1981-10	79.0		1981-03	67.0	
1980-10	79.0		1980-03-10	73.7	

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1979-10	87.0		1979-03	76.5	
1978-10	87.5		1978-03	82	
1977-10	70.3		1977-06	85.3	
1977-03	77.7		1976-03	65	
1975-10	78		1975-03	76.7	
1974-03	73.5		1973-03	81	
1972-10	87		1972-03	75.1	
1971-03	74.5		1970-03	72	
1969-03	86.5		1968-02-06	78.5	
1968-01-04	80.4		1967-03-01	85.00	
1967-03	85				

C6
SE **CA WELLS** **11045**
1/4 - 1/2 Mile
Higher

Water System Information:

Prime Station Code:	12S/05E-33A05 M	User ID:	HEN
FRDS Number:	3510006001	County:	San Benito
District Number:	05	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	365108.0 1212510.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	WELL 01		
System Number:	3510006		
System Name:	Mission Oaks Mobile Home Park		
Organization That Operates System:			
	1401 SAN JUAN RD		
	HOLLISTER, CA 95023		
Pop Served:	400	Connections:	239
Area Served:	Not Reported		

7
SE **FED USGS** **USGS40000178674**
1/4 - 1/2 Mile
Higher

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-365105121250701		
Monloc name:	012S005E33A002M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18060002	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	36.8513435
Longitude:	-121.4196586	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	280
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19560405	Welldepth:	224
Welldepth units:	ft	Wellholedepth:	224
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

D8
NE **CA WELLS** **11044**
1/4 - 1/2 Mile
Higher

Water System Information:

Prime Station Code:	12S/05E-28J04 M	User ID:	35C
FRDS Number:	3500572001	County:	San Benito
District Number:	65	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	365138.0 1212500.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	WELL 01		
System Number:	3500572		
System Name:	Thomas Orchards (LSWS)		
Organization That Operates System:			
	1160 WESTSIDE RD.		
	HOLLISTER, CA 95023		
Pop Served:	Unknown, Small System	Connections:	Unknown, Small System
Area Served:	Not Reported		

D9
ENE **FED USGS** **USGS40000178799**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-365139121245801		
Monloc name:	012S005E27M002M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18060002	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	36.8607875
Longitude:	-121.4171583	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	275
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19640625	Welldepth:	220
Welldepth units:	ft	Wellholedepth:	220
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

Map ID Direction Distance Elevation	Database	EDR ID Number
E10 **West** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000178721**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-365121121260201		
Monloc name:	012S005E28N001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18060002	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	36.8557878
Longitude:	-121.434937	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	260.00
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19610111	Welldepth:	408
Welldepth units:	ft	Wellholedepth:	408
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 34

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1988-10					
Note: The site was being pumped.					
1988-03	50		1987-10	51	
1987-03	37		1986-10	39	
1986-03-01	33		1986-03	33	
1985-10-01	35		1985-03-01	22	
1984-10-01	23		1984-03-01	20	
1982-10	55.5		1982-03	47.0	
1981-10	58.5		1981-03	45.0	
1980-10	48.0		1980-03-10	43.0	
1979-03	49.5		1978-03	30.7	
1977-10	63.5		1977-03	55	
1976-10	57		1976-03	50	
1975-10	40.5		1975-03	52.7	
1974-03	48.5		1973-03	50	
1972-10	51.3		1972-03	46.5	
1971-03	53		1970-03	40.5	
1969-03	50		1968-02-05	51.6	
1967-03-02	51				

E11 **West** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CADW50000025219**

Latitude :	36.856267		
Longitude :	121.435133		
Site code:	368563N1214351W001	Casgem sta:	12S05E28N001M
Local well:	1419	Casgem s 1:	Irrigation
County id:	35		
Basin cd:	3-3.02	Basin desc:	Bolsa Area
Org unit n:	South Central Region Office	Site id:	CADW50000025219

F12
SE
1/2 - 1 Mile
Higher

CA WELLS 11047

Water System Information:

Prime Station Code:	12S/05E-34F01 M	User ID:	HEN
FRDS Number:	3510001006	County:	San Benito
District Number:	05	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	365100.0 1212500.0	Precision:	Undefined
Source Name:	SOUTH STREET WELL 04		
System Number:	3510001		
System Name:	City of Hollister		
Organization That Operates System:			
	375 FIFTH ST.		
	HOLLISTER, CA 95023		
Pop Served:	20000	Connections:	4062
Area Served:	HOLLISTER		
Sample Collected:	03/30/2011	Findings:	120. MG/L
Chemical:	SODIUM		
Sample Collected:	03/30/2011	Findings:	110. MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/30/2011	Findings:	790. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/30/2011	Findings:	24. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/21/2011	Findings:	340. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	06/21/2011	Findings:	443. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	06/21/2011	Findings:	57. MG/L
Chemical:	CALCIUM		
Sample Collected:	06/21/2011	Findings:	73. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/21/2011	Findings:	110. MG/L
Chemical:	SODIUM		
Sample Collected:	06/21/2011	Findings:	0.39 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		

Sample Collected:	06/21/2011	Findings:	14. UG/L
Chemical:	CHROMIUM (TOTAL)		
Sample Collected:	06/21/2011	Findings:	6. UG/L
Chemical:	SELENIUM		
Sample Collected:	06/21/2011	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/21/2011	Findings:	0.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	09/14/2011	Findings:	1400. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/14/2011	Findings:	7.76
Chemical:	PH, LABORATORY		
Sample Collected:	09/14/2011	Findings:	350. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	09/14/2011	Findings:	430. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/14/2011	Findings:	468. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	09/14/2011	Findings:	60. MG/L
Chemical:	CALCIUM		
Sample Collected:	09/14/2011	Findings:	77. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/14/2011	Findings:	110. MG/L
Chemical:	SODIUM		
Sample Collected:	09/14/2011	Findings:	2.9 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/14/2011	Findings:	110. MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/14/2011	Findings:	850. UG/L
Chemical:	BORON		
Sample Collected:	09/14/2011	Findings:	910. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/14/2011	Findings:	23. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/16/2011	Findings:	120. MG/L
Chemical:	SODIUM		
Sample Collected:	11/16/2011	Findings:	120. MG/L
Chemical:	CHLORIDE		
Sample Collected:	11/16/2011	Findings:	870. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	11/29/2011	Findings:	26. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/29/2012	Findings:	1400. US
Chemical:	SPECIFIC CONDUCTANCE		

Sample Collected:	02/29/2012	Findings:	120. MG/L
Chemical:	SODIUM		
Sample Collected:	02/29/2012	Findings:	120. MG/L
Chemical:	CHLORIDE		
Sample Collected:	02/29/2012	Findings:	860. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	05/23/2012	Findings:	130. MG/L
Chemical:	SODIUM		
Sample Collected:	05/23/2012	Findings:	120. MG/L
Chemical:	CHLORIDE		
Sample Collected:	05/23/2012	Findings:	1600. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	05/23/2012	Findings:	33. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/14/2012	Findings:	140. MG/L
Chemical:	SODIUM		
Sample Collected:	08/14/2012	Findings:	130. MG/L
Chemical:	CHLORIDE		
Sample Collected:	08/14/2012	Findings:	980. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08/14/2012	Findings:	34. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/26/2012	Findings:	1500. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/26/2012	Findings:	7.72
Chemical:	PH, LABORATORY		
Sample Collected:	09/26/2012	Findings:	350. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	09/26/2012	Findings:	430. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/26/2012	Findings:	513. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	09/26/2012	Findings:	66. MG/L
Chemical:	CALCIUM		
Sample Collected:	09/26/2012	Findings:	84. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/26/2012	Findings:	130. MG/L
Chemical:	SODIUM		
Sample Collected:	09/26/2012	Findings:	3.1 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/26/2012	Findings:	120. MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/26/2012	Findings:	820. UG/L
Chemical:	BORON		

Sample Collected:	09/26/2012	Findings:	940. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/26/2012	Findings:	33. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/19/2012	Findings:	130. MG/L
Chemical:	SODIUM		
Sample Collected:	11/19/2012	Findings:	120. MG/L
Chemical:	CHLORIDE		
Sample Collected:	11/19/2012	Findings:	1100. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	11/19/2012	Findings:	32. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/21/2013	Findings:	130. MG/L
Chemical:	SODIUM		
Sample Collected:	02/21/2013	Findings:	120. MG/L
Chemical:	CHLORIDE		
Sample Collected:	02/21/2013	Findings:	950. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	02/21/2013	Findings:	33. MG/L
Chemical:	NITRATE (AS NO3)		

F13
SE
1/2 - 1 Mile
Higher

CA WELLS **11048**

Water System Information:

Prime Station Code:	12S/05E-34P02 M	User ID:	HEN
FRDS Number:	3510001007	County:	San Benito
District Number:	05	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	365100.0 1212500.0	Precision:	Undefined
Source Name:	NASH ROAD WELL 05		
System Number:	3510001		
System Name:	City of Hollister		
Organization That Operates System:			
	375 FIFTH ST.		
	HOLLISTER, CA 95023		
Pop Served:	20000	Connections:	4062
Area Served:	HOLLISTER		
Sample Collected:	03/30/2011	Findings:	110. MG/L
Chemical:	SODIUM		
Sample Collected:	03/30/2011	Findings:	120. MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/30/2011	Findings:	730. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/30/2011	Findings:	32. MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	06/21/2011	Findings:	300. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	06/21/2011	Findings:	465. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	06/21/2011	Findings:	59. MG/L
Chemical:	CALCIUM		
Sample Collected:	06/21/2011	Findings:	77. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/21/2011	Findings:	96. MG/L
Chemical:	SODIUM		
Sample Collected:	06/21/2011	Findings:	0.39 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/21/2011	Findings:	38. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/14/2011	Findings:	1400. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/14/2011	Findings:	7.88
Chemical:	PH, LABORATORY		
Sample Collected:	09/14/2011	Findings:	320. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	09/14/2011	Findings:	390. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/14/2011	Findings:	494. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	09/14/2011	Findings:	65. MG/L
Chemical:	CALCIUM		
Sample Collected:	09/14/2011	Findings:	81. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/14/2011	Findings:	110. MG/L
Chemical:	SODIUM		
Sample Collected:	09/14/2011	Findings:	3.1 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/14/2011	Findings:	120. MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/14/2011	Findings:	720. UG/L
Chemical:	BORON		
Sample Collected:	09/14/2011	Findings:	940. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/14/2011	Findings:	36. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/16/2011	Findings:	110. MG/L
Chemical:	SODIUM		
Sample Collected:	11/16/2011	Findings:	130. MG/L
Chemical:	CHLORIDE		

Sample Collected:	11/16/2011	Findings:	800. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	11/16/2011	Findings:	35. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/29/2012	Findings:	1300. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	02/29/2012	Findings:	120. MG/L
Chemical:	SODIUM		
Sample Collected:	02/29/2012	Findings:	120. MG/L
Chemical:	CHLORIDE		
Sample Collected:	02/29/2012	Findings:	850. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	02/29/2012	Findings:	33. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/23/2012	Findings:	110. MG/L
Chemical:	SODIUM		
Sample Collected:	05/23/2012	Findings:	120. MG/L
Chemical:	CHLORIDE		
Sample Collected:	05/23/2012	Findings:	900. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	05/23/2012	Findings:	32. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/14/2012	Findings:	120. MG/L
Chemical:	SODIUM		
Sample Collected:	08/14/2012	Findings:	120. MG/L
Chemical:	CHLORIDE		
Sample Collected:	08/14/2012	Findings:	940. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08/14/2012	Findings:	33. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/26/2012	Findings:	1500. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/26/2012	Findings:	7.74
Chemical:	PH, LABORATORY		
Sample Collected:	09/26/2012	Findings:	320. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	09/26/2012	Findings:	380. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/26/2012	Findings:	532. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	09/26/2012	Findings:	70. MG/L
Chemical:	CALCIUM		
Sample Collected:	09/26/2012	Findings:	87. MG/L
Chemical:	MAGNESIUM		

Sample Collected:	09/26/2012	Findings:	120. MG/L
Chemical:	SODIUM		
Sample Collected:	09/26/2012	Findings:	3. MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/26/2012	Findings:	120. MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/26/2012	Findings:	670. UG/L
Chemical:	BORON		
Sample Collected:	09/26/2012	Findings:	890. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/26/2012	Findings:	33. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/19/2012	Findings:	110. MG/L
Chemical:	SODIUM		
Sample Collected:	11/19/2012	Findings:	120. MG/L
Chemical:	CHLORIDE		
Sample Collected:	11/19/2012	Findings:	1100. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	11/19/2012	Findings:	33. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/21/2013	Findings:	130. MG/L
Chemical:	SODIUM		
Sample Collected:	02/21/2013	Findings:	120. MG/L
Chemical:	CHLORIDE		
Sample Collected:	02/21/2013	Findings:	950. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	02/21/2013	Findings:	32. MG/L
Chemical:	NITRATE (AS NO3)		

F14
SE
1/2 - 1 Mile
Higher

CA WELLS **18663**

Water System Information:

Prime Station Code:	3510001-009	User ID:	HEN
FRDS Number:	3510001009	County:	San Benito
District Number:	05	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	365100.0 1212500.0	Precision:	1 Mile (One Minute)
Source Name:	AIRLINE HIGHWAY WELL 06		
System Number:	3510001		
System Name:	City of Hollister		
Organization That Operates System:			
	375 FIFTH ST.		
	HOLLISTER, CA 95023		
Pop Served:	20000	Connections:	4062
Area Served:	HOLLISTER		

Sample Collected:	03/30/2011	Findings:	100. MG/L
Chemical:	SODIUM		
Sample Collected:	03/30/2011	Findings:	110. MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/30/2011	Findings:	610. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/21/2011	Findings:	260. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	06/21/2011	Findings:	286. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	06/21/2011	Findings:	48. MG/L
Chemical:	CALCIUM		
Sample Collected:	06/21/2011	Findings:	40. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/21/2011	Findings:	91. MG/L
Chemical:	SODIUM		
Sample Collected:	06/21/2011	Findings:	0.19 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/21/2011	Findings:	2.1 UG/L
Chemical:	ARSENIC		
Sample Collected:	06/21/2011	Findings:	14. UG/L
Chemical:	CHROMIUM (TOTAL)		
Sample Collected:	06/21/2011	Findings:	180. UG/L
Chemical:	IRON		
Sample Collected:	06/21/2011	Findings:	57. UG/L
Chemical:	ALUMINUM		
Sample Collected:	06/21/2011	Findings:	0.12 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	09/14/2011	Findings:	1100. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/14/2011	Findings:	7.86
Chemical:	PH, LABORATORY		
Sample Collected:	09/14/2011	Findings:	220. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	09/14/2011	Findings:	270. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/14/2011	Findings:	295. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	09/14/2011	Findings:	52. MG/L
Chemical:	CALCIUM		
Sample Collected:	09/14/2011	Findings:	40. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/14/2011	Findings:	99. MG/L
Chemical:	SODIUM		

Sample Collected:	09/14/2011	Findings:	3.3 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/14/2011	Findings:	86. MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/14/2011	Findings:	880. UG/L
Chemical:	BORON		
Sample Collected:	09/14/2011	Findings:	120. UG/L
Chemical:	IRON		
Sample Collected:	09/14/2011	Findings:	660. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/14/2011	Findings:	11. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/15/2011	Findings:	100. MG/L
Chemical:	SODIUM		
Sample Collected:	11/15/2011	Findings:	86. MG/L
Chemical:	CHLORIDE		
Sample Collected:	11/15/2011	Findings:	600. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	02/29/2012	Findings:	990. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	02/29/2012	Findings:	110. MG/L
Chemical:	SODIUM		
Sample Collected:	02/29/2012	Findings:	87. MG/L
Chemical:	CHLORIDE		
Sample Collected:	02/29/2012	Findings:	660. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/26/2012	Findings:	1.53 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	03/26/2012	Findings:	2.9 PCI/L
Chemical:	GROSS ALPHA MDA95		
Sample Collected:	05/23/2012	Findings:	110. MG/L
Chemical:	SODIUM		
Sample Collected:	05/23/2012	Findings:	83. MG/L
Chemical:	CHLORIDE		
Sample Collected:	05/23/2012	Findings:	350. UG/L
Chemical:	ALUMINUM		
Sample Collected:	05/23/2012	Findings:	640. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08/15/2012	Findings:	120. MG/L
Chemical:	SODIUM		
Sample Collected:	08/15/2012	Findings:	88. MG/L
Chemical:	CHLORIDE		
Sample Collected:	08/15/2012	Findings:	660. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		

Sample Collected:	09/26/2012	Findings:	1100. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/26/2012	Findings:	7.7
Chemical:	PH, LABORATORY		
Sample Collected:	09/26/2012	Findings:	260. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	09/26/2012	Findings:	320. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/26/2012	Findings:	326. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	09/26/2012	Findings:	55. MG/L
Chemical:	CALCIUM		
Sample Collected:	09/26/2012	Findings:	46. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/26/2012	Findings:	110. MG/L
Chemical:	SODIUM		
Sample Collected:	09/26/2012	Findings:	3.2 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/26/2012	Findings:	87. MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/26/2012	Findings:	820. UG/L
Chemical:	BORON		
Sample Collected:	09/26/2012	Findings:	650. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/26/2012	Findings:	9.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/19/2012	Findings:	100. MG/L
Chemical:	SODIUM		
Sample Collected:	11/19/2012	Findings:	84. MG/L
Chemical:	CHLORIDE		
Sample Collected:	11/19/2012	Findings:	780. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	02/21/2013	Findings:	110. MG/L
Chemical:	SODIUM		
Sample Collected:	02/21/2013	Findings:	84. MG/L
Chemical:	CHLORIDE		
Sample Collected:	02/21/2013	Findings:	680. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		

15
SW
1/2 - 1 Mile
Lower

FED USGS **USGS40000178585**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-365058121255601		
Monloc name:	012S005E33E002M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18060002	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	36.8499548
Longitude:	-121.433826	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	260.00
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19500815	Welldepth:	121
Welldepth units:	ft	Wellholedepth:	121
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 67

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1988-10	53.1		1988-03	55	
1987-10	43		1987-03	38	
1986-10	37		1986-03-01	35	
1986-03	35		1985-10-01	36	
1985-03-01	28		1984-10-01	26	
1984-03-01	28		1983-03	28	
1982-10	47.5		1982-03	45.5	
1981-10	52.5		1981-03	39.8	
1980-10	54.0		1980-03-10	42.5	
1979-10	57.5		1979-03	50.3	
1978-10	57		1978-03	67	
1977-06	60		1976-10	55.3	
1976-03	45		1975-10	46	
1975-03	43		1974-03	48	
1973-03	52		1972-10	62.7	
1972-03	31		1971-03	33	
1969-03	40.1		1968-01-12	53.3	
1967-11	53.1		1966-04-07	54.5	
1965-03	60.6		1963-03	52.4	
1962-04	50.9		1961-03	47.9	
1960-04	41.4		1959-04	36.5	
1958-11-21	33.1		1958-04-25	46.4	
1957-04-07	50.4		1956-04-16	48.6	
1955-03-25	56.3		1954-04-12	55.1	
1952-03-25	50.7		1951-11-07	64.2	
1951-07-26	62.7		1951-06-29	63.2	
1951-06-21	67.1		1951-03-01	55	
1951-02-23	55.4		1951-02-16	55.4	
1951-02-09	56.8		1951-02-01	56.2	
1951-01-25	56.4		1951-01-18	56.4	
1951-01-15	56.5		1951-01-05	57.1	

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1950-11-20	57.9		1950-10-25	60.2	
1950-10-19	60.4		1950-09-18	60.4	
1950-08-23	60.1				

16
WNW **FED USGS** **USGS40000178773**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-365131121260901		
Monloc name:	012S005E29J003M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18060002	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	36.8585655
Longitude:	-121.4368816	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	272
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19480721	Welldepth:	270
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

17
SSW **FED USGS** **USGS40000178555**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-365052121254501		
Monloc name:	012S005E33F001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18060002	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	36.8477326
Longitude:	-121.4302147	Sourcemap scale:	24000

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	260.00
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	194706	Welldepth:	136
Welldepth units:	ft	Wellholedepth:	136
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 6

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1952-03-25	51.0		1951-11-06	64.2	
1951-03-26	54.1		1950-10-25	61.6	
1950-03-28	51.8		1949-11-15	53.6	

G18
NE
1/2 - 1 Mile
Lower

FED USGS **USGS40000178825**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-365149121245401		
Monloc name:	012S005E27E001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18060002	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	36.8635651
Longitude:	-121.4160471	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	272.60
Vert measure units:	feet	Vertacc measure val:	.05
Vert accmeasure units:	feet		
Vertcollection method:	Level or other surveying method		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	1930	Welldepth:	175
Welldepth units:	ft	Wellholedepth:	175
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 91

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1988-03	78		1987-10	81	
1987-03	0		1986-10	0	
1986-03-01	56		1985-10-01	74	
1985-03-01	52		1984-10-01	53	

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel
1984-03-01	56	
1982-03	78.0	
1981-03	76.5	
1980-03-10	80.5	
1979-03	84	
1978-03	86.5	
1977-03	81	
1975-03	72.5	
1972-10	93.3	
1971-03	76.7	
1969-03	89	
1968-01-04	84.8	
1966-04-07	89.5	
1964-04	90.8	
1962-04	79.3	
1958-11-20	0.00	
1954-04-08	75.1	
1951-11-15	86.7	
1951-11-01	98	
1951-09-21	92.4	
1951-08-02	89.6	
1951-06-21	88.5	
1951-05-17	79	
1951-04-05	75.9	
1951-03-22	74.1	
1951-03-09	75.2	
1951-02-23	75.3	
1951-02-08	76.1	
1951-01-25	76.6	
1951-01-15	76.9	
1950-11-21	79.7	
1950-10-24	88.3	
1950-08-25	80.7	
1950-04-20	69.4	
1950-02-20	69.6	
1949-12-12	71.2	
1949-11-15	72.5	
1947-04	45.9	
1946-03	37.3	
1945-04	33.2	
1939-03	45.9	
1935-12	81.5	
1982-10	86.5	
1981-10	88.5	
1980-10	83.0	
1979-10	93.0	
1978-10	100.5	
1977-10	97.5	
1976-03	73	
1973-03	84	
1972-03	78.5	
1970-03	86	
1968-02-06	82.9	
1967-03-02	89	
1965-03	97	
1963-03	82.7	
1961-03	72.2	
1955-03-24	79	
1952-04-01	77.9	
1951-11-08	88.3	
1951-09-27	90.5	
1951-08-23	87.2	
1951-07-19	90.7	
1951-05-24	80.5	
1951-05-04	77.4	
1951-03-29	74.8	
1951-03-15	74.1	
1951-03-02	75.4	
1951-02-15	75.9	
1951-02-01	76.4	
1951-01-18	76.8	
1950-12-20	78.1	
1950-11-09	81	
1950-09-18	82.3	
1950-07-19	81.2	
1950-03-14	69.2	
1950-01-10	70.4	
1949-12	74.3	
1949-04	60.5	
1946-12	47.3	
1945-11	33.3	
1940-03	47.2	
1935-12-01	81.50	

G19
NE
1/2 - 1 Mile
Lower

CA WELLS 11043

Water System Information:

Prime Station Code:	12S/05E-27E05 M	User ID:	HEN
FRDS Number:	3500558001	County:	San Benito
District Number:	05	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	365148.0 1212452.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	WELL 01		

System Number: 3500558
System Name: Herbert Ranch
Organization That Operates System:
454 SAN FELIPE RD
HOLLISTER, CA 95024
Pop Served: 50 Connections: 11
Area Served: Not Reported

20
SW
1/2 - 1 Mile
Lower

FED USGS **USGS40000178652**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-365102121260301		
Monloc name:	012S005E33D004M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18060002	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	36.8505103
Longitude:	-121.4352149	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	255
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	150
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

21
SSE
1/2 - 1 Mile
Higher

FED USGS **USGS40000178558**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-365053121250101		
Monloc name:	012S005E33H003M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18060002	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	36.8480104
Longitude:	-121.4179918	Sourcemap scale:	24000

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	282
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19650713	Welldepth:	282
Welldepth units:	ft	Wellholedepth:	286
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

G22
NE
1/2 - 1 Mile
Lower

CA WELLS **CADW50000025285**

Latitude :	36.8637		
Longitude :	121.415533		
Site code:	368637N1214155W001	Casgem sta:	12S05E27E001M
Local well:	1406	Casgem s 1:	Irrigation
County id:	35		
Basin cd:	3-3.02	Basin desc:	Bolsa Area
Org unit n:	South Central Region Office	Site id:	CADW50000025285

H23
North
1/2 - 1 Mile
Higher

FED USGS **USGS40000178919**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-365210121251501		
Monloc name:	012S005E21R003M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18060002	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	36.8693982
Longitude:	-121.4218807	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	272
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19570403	Welldepth:	274
Welldepth units:	ft	Wellholedepth:	276
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

24
WNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000178822**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-365146121262101		
Monloc name:	012S005E29G004M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18060002	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	36.8627319
Longitude:	-121.440215	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	267
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

H25
North
1/2 - 1 Mile
Higher

FED USGS **USGS40000178928**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-365213121251701		
Monloc name:	012S005E21Q003M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18060002	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	36.8702315
Longitude:	-121.4224363	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	270
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19631124	Welldepth:	380
Welldepth units:	ft	Wellholedepth:	380
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

I26
North
1/2 - 1 Mile
Lower

FED USGS **USGS40000178929**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-365214121253301		
Monloc name:	012S005E21Q001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18060002	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	36.8705093
Longitude:	-121.4268809	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	258.00
Vert measure units:	feet	Vertacc measure val:	005
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	1960	Welldepth:	500
Welldepth units:	ft	Wellholedepth:	500
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 36

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1988-10	170		1988-03	168	
1987-10	170		1987-03	136	
1986-10	154		1986-03-01	135	
1986-03	135		1985-10-01	152	
1985-03-01	140		1984-10-01	158	
1984-03-01	160		1983-03	172	
1982-10	232.0		1982-03	221.0	
1981-10	248.0		1981-03	152.5	
1980-03-10	150.0		1979-10	168.0	
1979-03	149.8		1978-10	160.0	
1978-03	134		1977-10	156	
1977-03	143.7		1976-10	139	
1976-03	135.5		1975-10	127.3	
1975-03	124.5		1974-03	138	
1973-03	137.3		1972-10	147	
1972-03	139		1971-03	150.5	
1970-03	132		1969-03	114	
1968-02-05	128.4		1967-01-20	127.3	

Map ID Direction Distance Elevation	Database	EDR ID Number
I27 **North** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000178930**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-365214121253302		
Monloc name:	012S005E21P001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18060002	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	36.8705093
Longitude:	-121.4268809	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	259
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19620522	Welldepth:	603
Welldepth units:	ft	Wellholedepth:	618
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

I28 **North** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CADW50000025365**

Latitude :	36.8706		
Longitude :	121.4277		
Site code:	368706N1214277W001	Casgem sta:	12S05E21Q001M
Local well:	1402	Casgem s 1:	Irrigation
County id:	35		
Basin cd:	3-3.02	Basin desc:	Bolsa Area
Org unit n:	South Central Region Office	Site id:	CADW50000025365

Map ID Direction Distance	Database	EDR ID Number

1
WNW
1/4 - 1/2 Mile

OIL_GAS **CAOG9A000205652**

Districtnu:	5	Apinumber:	06900053
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	Y	Wellstatus:	P
Operatorna:	Petrolex, Incorporated		
Countyname:	San Benito	Fieldname:	Hollister
Areaname:	Flint Hills		
Section:	28		
Township:	12S	Range:	05E
Basemeridi:	MD	Elevation:	Not Reported
Locationde:	Fr SW cor 19751 N 18501 E		
Glat:	36.858961		
Glong:	-121.429447		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	San Blas	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	12/30/1899
Welldeptha:	Not Reported	Redrillfoo:	Not Reported
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	PDH	Site id:	CAOG9A000205652

2
WSW
1/4 - 1/2 Mile

OIL_GAS **CAOG9A000205648**

Districtnu:	5	Apinumber:	06900051
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	N	Wellstatus:	P
Operatorna:	Petrolex, Incorporated		
Countyname:	San Benito	Fieldname:	Hollister
Areaname:	Flint Hills		
Section:	28		
Township:	12S	Range:	05E
Basemeridi:	MD	Elevation:	Not Reported
Locationde:	Fr SW proj cor 600 N 1390 E		
Glat:	36.854906		
Glong:	-121.430742		
Gissourcec:	opr		
Comments:	Not Reported		
Leasename:	San Miguel	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	12/30/1899
Welldeptha:	Not Reported	Redrillfoo:	Not Reported
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	PDG	Site id:	CAOG9A000205648

3
WNW
1/2 - 1 Mile

OIL_GAS **CAOG9A000205653**

Districtnu:	5	Apinumber:	06900057
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	N	Wellstatus:	P
Operatorna:	Petrolex, Incorporated		
Countyname:	San Benito	Fieldname:	Hollister
Areaname:	Flint Hills		
Section:	28		
Township:	12S	Range:	05E
Basemeridi:	MD	Elevation:	Not Reported
Locationde:	Fr NW proj cor 3200 S 1000 E		
Glat:	36.859436		
Glong:	-121.433517		
Gissourcec:	opr		
Comments:	Not Reported		
Leasename:	San Sebastian	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	12/04/1960
Welldeptha:	3505	Redrillfoo:	Not Reported
Abandonedd:	09/28/97	Completion:	01/05/61
Gissymbol:	PDG	Site id:	CAOG9A000205653

4
West
1/2 - 1 Mile

OIL_GAS **CAOG9A000205650**

Districtnu:	5	Apinumber:	06900055
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	N	Wellstatus:	P
Operatorna:	Petrolex, Incorporated		
Countyname:	San Benito	Fieldname:	Hollister
Areaname:	Flint Hills		
Section:	28		
Township:	12S	Range:	05E
Basemeridi:	MD	Elevation:	Not Reported
Locationde:	Fr SW proj cor 1000 N 75 E		
Glat:	36.856263		
Glong:	-121.435571		
Gissourcec:	opr		
Comments:	Not Reported		
Leasename:	San Clement	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	06/08/1961
Welldeptha:	3707	Redrillfoo:	Not Reported
Abandonedd:	09/17/97	Completion:	07/11/61
Gissymbol:	PDG	Site id:	CAOG9A000205650

5
North
1/2 - 1 Mile

OIL_GAS **CAOG9A000205683**

Districtnu:	5	Apinumber:	06920055
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	Y	Wellstatus:	I
Operatorna:	Big Horn Oil & Gas Inc.		
Countyname:	San Benito	Fieldname:	Hollister
Areaname:	Flint Hills		
Section:	28		
Township:	12S	Range:	05E
Basemeridi:	MD	Elevation:	Not Reported
Locationde:	?		
Glat:	36.865192		
Glong:	-121.423777		
Gissourcec:	gps		
Comments:	Not Reported		
Leasename:	Red Cloud	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	12/30/1899
Welldeptha:	Not Reported	Redrillfoo:	Not Reported
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	ADG	Site id:	CAOG9A000205683

6
NE **OIL_GAS** **CAOG9A000205676**
1/2 - 1 Mile

Districtnu:	5	Apinumber:	06900050
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	N	Wellstatus:	P
Operatorna:	Petrolex, Incorporated		
Countyname:	San Benito	Fieldname:	Hollister
Areaname:	Flint Hills		
Section:	28		
Township:	12S	Range:	05E
Basemeridi:	MD	Elevation:	Not Reported
Locationde:	Fr NE proj cor 1510 S 10 W		
Glat:	36.86472		
Glong:	-121.418227		
Gissourcec:	opr		
Comments:	Not Reported		
Leasename:	Justo	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	10/08/1955
Welldeptha:	4331	Redrillfoo:	5602
Abandonedd:	09/29/97	Completion:	07/10/57
Gissymbol:	POG	Site id:	CAOG9A000205676

7
West **OIL_GAS** **CAOG9A000205651**
1/2 - 1 Mile

Districtnu:	5	Apinumber:	06900041
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	Y	Wellstatus:	P
Operatorna:	Petrolex, Incorporated		
Countyname:	San Benito	Fieldname:	Hollister
Areaname:	Flint Hills		
Section:	29		
Township:	12S	Range:	05E
Basemeridi:	MD	Elevation:	Not Reported
Locationde:	Fr NE proj cor 3870 S 100 W		
Glat:	36.857693		
Glong:	-121.438147		
Gissourcec:	opr		
Comments:	Not Reported		
Leasename:	Dassel	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	12/30/1899
Welldeptha:	Not Reported	Redrillfoo:	Not Reported
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	PDH	Site id:	CAOG9A000205651

8
WNW **OIL_GAS** **CAOG9A000205658**
1/2 - 1 Mile

Districtnu:	5	Apinumber:	06900039
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	N	Wellstatus:	A
Operatorna:	Big Horn Oil & Gas Inc.		
Countyname:	San Benito	Fieldname:	Hollister
Areaname:	Flint Hills		
Section:	29		
Township:	12S	Range:	05E
Basemeridi:	MD	Elevation:	Not Reported
Locationde:	Fr NE proj cor 2780 S 475 W		
Glat:	36.860527		
Glong:	-121.437656		
Gissourcec:	gps		
Comments:	Not Reported		
Leasename:	Cabrillo	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	12/03/1959
Welldeptha:	3855	Redrillfoo:	Not Reported
Abandonedd:	/ /	Completion:	12/24/59
Gissymbol:	ADG	Site id:	CAOG9A000205658

9
NW **OIL_GAS** **CAOG9A000205670**
1/2 - 1 Mile

Districtnu:	5	Apinumber:	06900040
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	Y	Wellstatus:	P
Operatorna:	Big Horn Oil & Gas Inc.		
Countyname:	San Benito	Fieldname:	Hollister
Areaname:	Flint Hills		
Section:	29		
Township:	12S	Range:	05E
Basemeridi:	MD	Elevation:	Not Reported
Locationde:	Fr SW cor lot 18 800 N 556 E		
Glat:	36.863767		
Glong:	-121.436766		
Gissourcec:	opr		
Comments:	Not Reported		
Leasename:	Cushman	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	12/30/1899
Welldeptha:	Not Reported	Redrillfoo:	Not Reported
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	PDH	Site id:	CAOG9A000205670

10
NW **OIL_GAS** **CAOG9A000205677**
1/2 - 1 Mile

Districtnu:	5	Apinumber:	06900038
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	N	Wellstatus:	I
Operatorna:	Big Horn Oil & Gas Inc.		
Countyname:	San Benito	Fieldname:	Hollister
Areaname:	Flint Hills		
Section:	29		
Township:	12S	Range:	05E
Basemeridi:	MD	Elevation:	Not Reported
Locationde:	Fr Int Wright & Buena Vista 500 N 1570 E		
Glat:	36.86473		
Glong:	-121.437863		
Gissourcec:	gps		
Comments:	Not Reported		
Leasename:	Balsa	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	12/30/1899
Welldeptha:	Not Reported	Redrillfoo:	Not Reported
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	ADG	Site id:	CAOG9A000205677

11
ENE **OIL_GAS** **CAOG9A000205672**
1/2 - 1 Mile

Districtnu:	5	Apinumber:	06900306
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	Y	Wellstatus:	P
Operatorna:	Comstock Oil Co.		
Countyname:	San Benito	Fieldname:	Any Field
Areaname:	Any Area		
Section:	27		
Township:	12S	Range:	05E
Basemeridi:	MD	Elevation:	Not Reported
Locationde:	Fr NW cor 1700 S 2000 E		
Glat:	36.864147		
Glong:	-121.410714		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Comstock	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	12/30/1899
Welldeptha:	Not Reported	Redrillfoo:	Not Reported
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	PDH	Site id:	CAOG9A000205672

12
WNW
1/2 - 1 Mile

OIL_GAS **CAOG9A000205671**

Districtnu:	5	Apinumber:	06900052
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	Y	Wellstatus:	P
Operatorna:	Petrolex, Incorporated		
Countyname:	San Benito	Fieldname:	Hollister
Areaname:	Flint Hills		
Section:	29		
Township:	12S	Range:	05E
Basemeridi:	MD	Elevation:	250 KB
Locationde:	Fr NE proj cor 1650 S 1650 W		
Glat:	36.864028		
Glong:	-121.439834		
Gissourcec:	opr		
Comments:	Not Reported		
Leasename:	Richey	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	08/29/1956
Welldeptha:	3140	Redrillfoo:	910
Abandonedd:	09/17/97	Completion:	/ /
Gissymbol:	PDH	Site id:	CAOG9A000205671

13
NW
1/2 - 1 Mile

OIL_GAS **CAOG9A000205692**

Districtnu:	5	Apinumber:	06900042
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	Y	Wellstatus:	P
Operatorna:	Petrolex, Incorporated		
Countyname:	San Benito	Fieldname:	Hollister
Areaname:	Flint Hills		
Section:	28		
Township:	12S	Range:	05E
Basemeridi:	MD	Elevation:	Not Reported
Locationde:	Fr NW proj cor 5 S 250 E		
Glat:	36.868198		
Glong:	-121.435059		
Gissourcec:	opr		
Comments:	Not Reported		
Leasename:	Felipe	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	12/30/1899
Welldeptha:	Not Reported	Redrillfoo:	Not Reported
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	PDH	Site id:	CAOG9A000205692

14
NW
1/2 - 1 Mile

OIL_GAS **CAOG9A000205682**

Districtnu:	5	Apinumber:	06900043
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	N	Wellstatus:	I
Operatorna:	Big Horn Oil & Gas Inc.		
Countyname:	San Benito	Fieldname:	Hollister
Areaname:	Flint Hills		
Section:	29		
Township:	12S	Range:	05E
Basemeridi:	MD	Elevation:	257 KB
Locationde:	Fr NE proj cor 1090 S 770 W		
Glat:	36.865162		
Glong:	-121.439234		
Gissourcec:	gps		
Comments:	Not Reported		
Leasename:	Felipe	Wellnumber:	2
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	10/02/1959
Welldeptha:	3031	Redrillfoo:	Not Reported
Abandonedd:	/ /	Completion:	10/20/59
Gissymbol:	ADG	Site id:	CAOG9A000205682

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
95023	11	0

Federal EPA Radon Zone for SAN BENITO County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 95023

Number of sites tested: 2

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.350 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Health Services
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX B

ENVIRONMENTAL DATA RESOURCES, INC.

Sanborn Map Report

APPENDIX B

1601 Buena Vista Road
1601 Buena Vista Road
Hollister, CA 95023

Inquiry Number: 3740929.3
September 26, 2013

Certified Sanborn® Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

9/26/13

Site Name:
1601 Buena Vista Road
1601 Buena Vista Road
Hollister, CA 95023

EDR Inquiry # 3740929.3

Client Name:
Engeo
6399 San Ignacio Avenue
San Jose, CA 95119

Contact: Greg Cubbon

EDR® Environmental Data Resources Inc

The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by Engeo were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

Certified Sanborn Results:

Site Name:	1601 Buena Vista Road
Address:	1601 Buena Vista Road
City, State, Zip:	Hollister, CA 95023
Cross Street:	
P.O. #	10613.000.000
Project:	1601 Buena Vista Road, Hollist
Certification #	3B1D-407E-BB7F

Sanborn® Library search results
Certification # 3B1D-407E-BB7F

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✔ Library of Congress
- ✔ University Publications of America
- ✔ EDR Private Collection

The Sanborn Library LLC Since 1866™

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APPENDIX C

ENVIRONMENTAL DATA RESOURCES, INC.

Historical Topographic Map Report

APPENDIX C

1601 Buena Vista Road
1601 Buena Vista Road
Hollister, CA 95023

Inquiry Number: 3740929.4
September 26, 2013

EDR Historical Topographic Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Historical Topographic Map Report

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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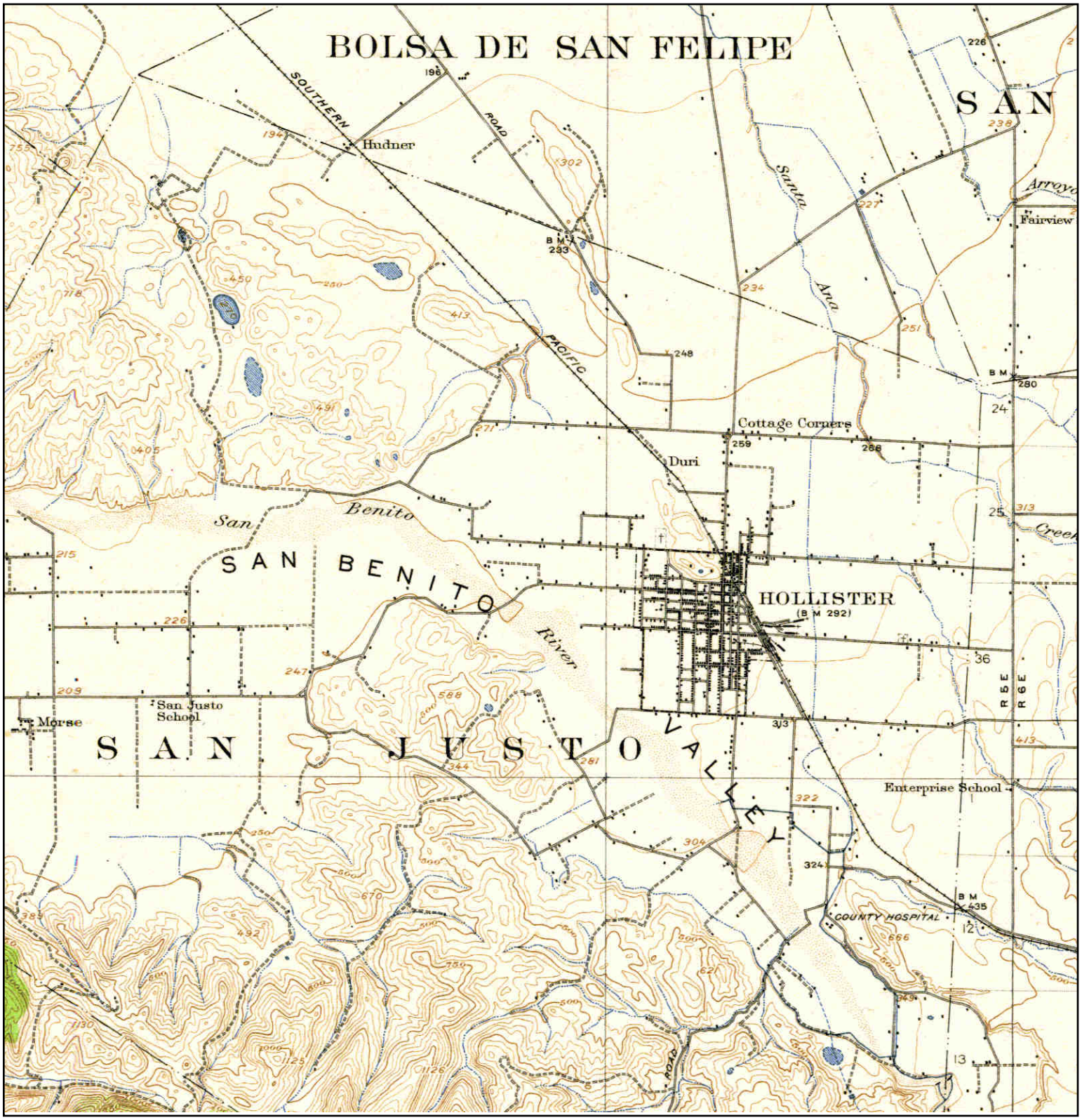
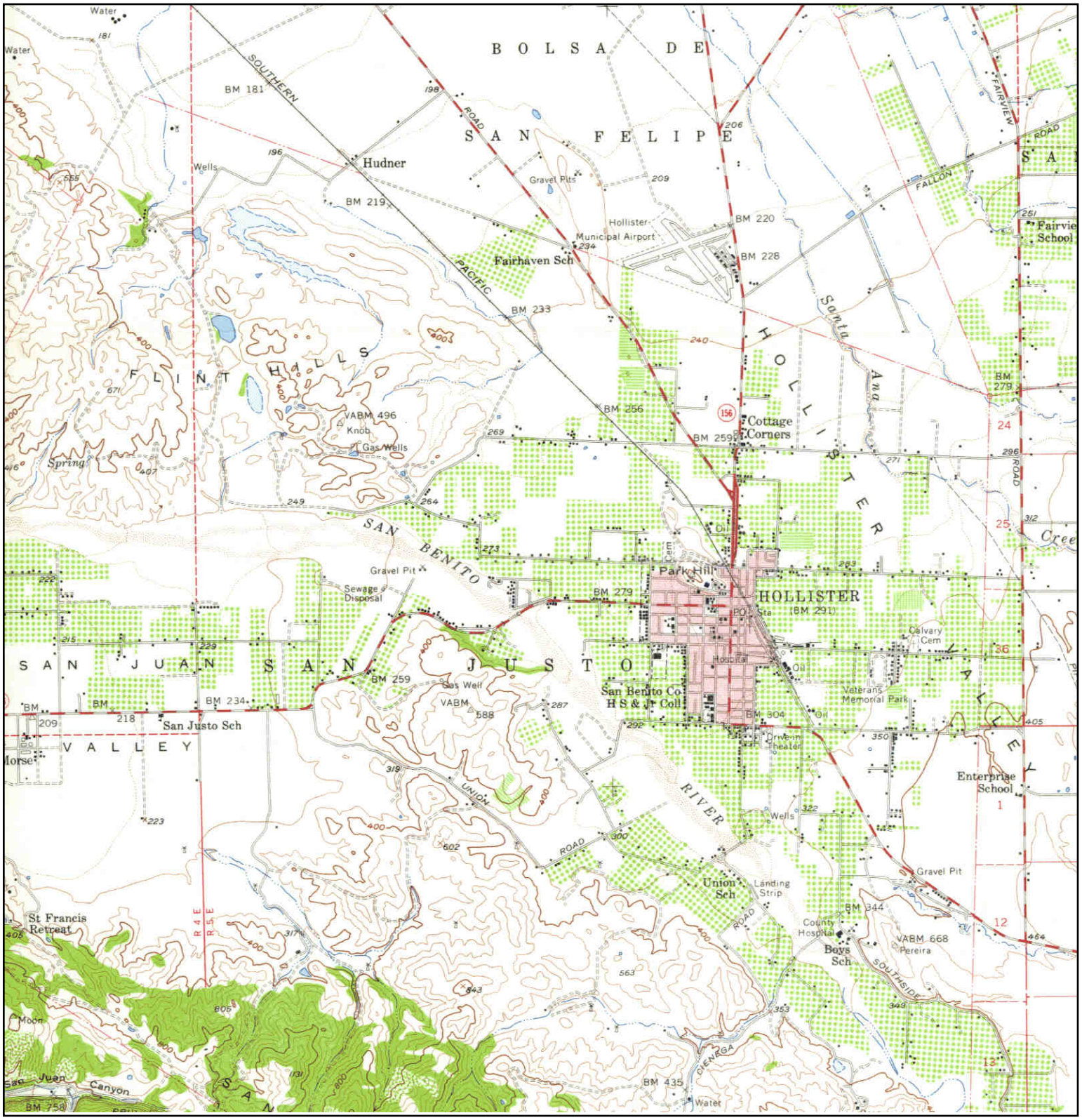
Historical Topographic Map



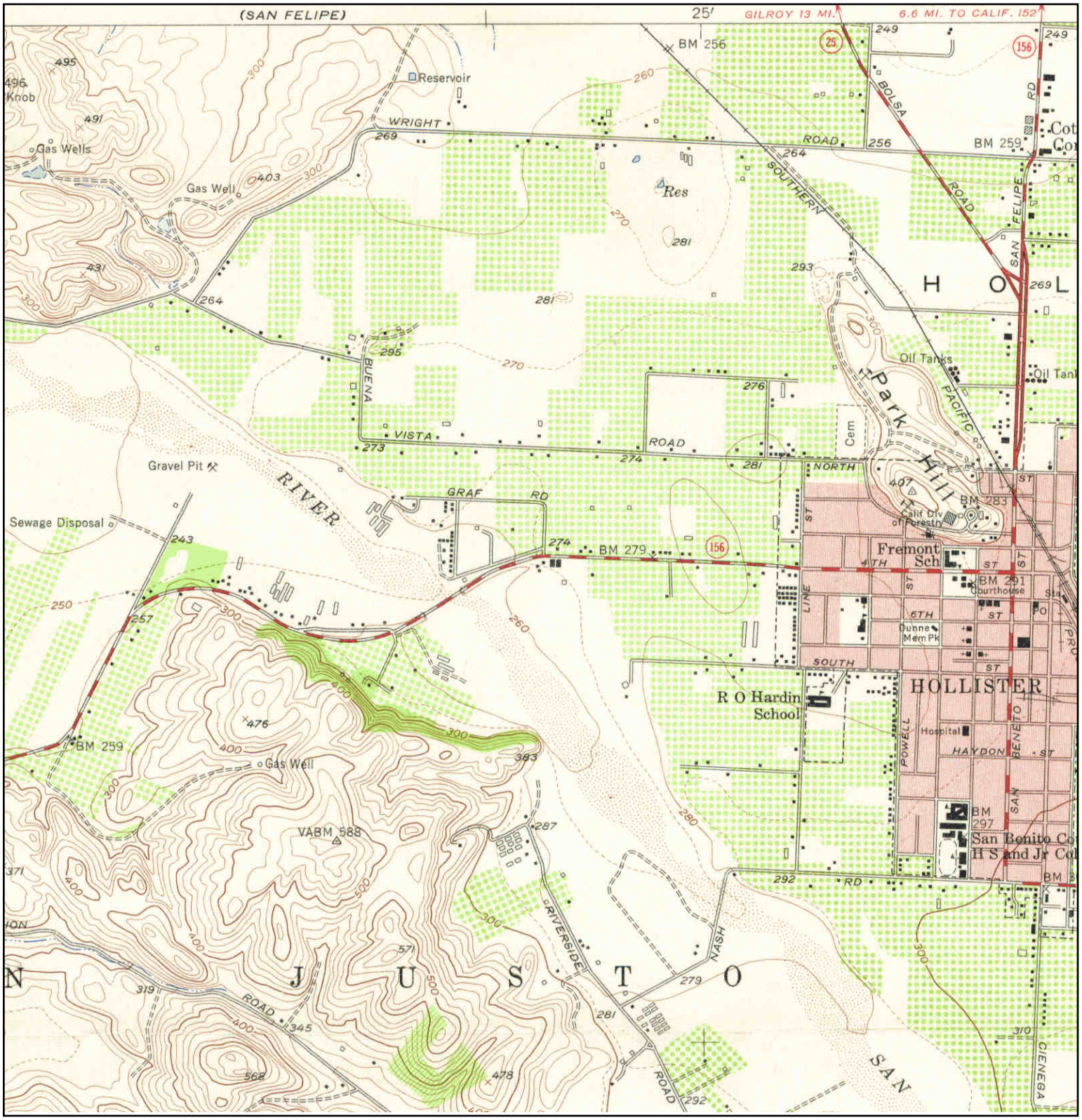
N	TARGET QUAD NAME: HOLLISTER MAP YEAR: 1921 SERIES: 15 SCALE: 1:62500	SITE NAME: 1601 Buena Vista Road ADDRESS: 1601 Buena Vista Road Hollister, CA 95023 LAT/LONG: 36.8566 / -121.425	CLIENT: Engeo CONTACT: Greg Cubbon INQUIRY#: 3740929.4 RESEARCH DATE: 09/26/2013

Historical Topographic Map



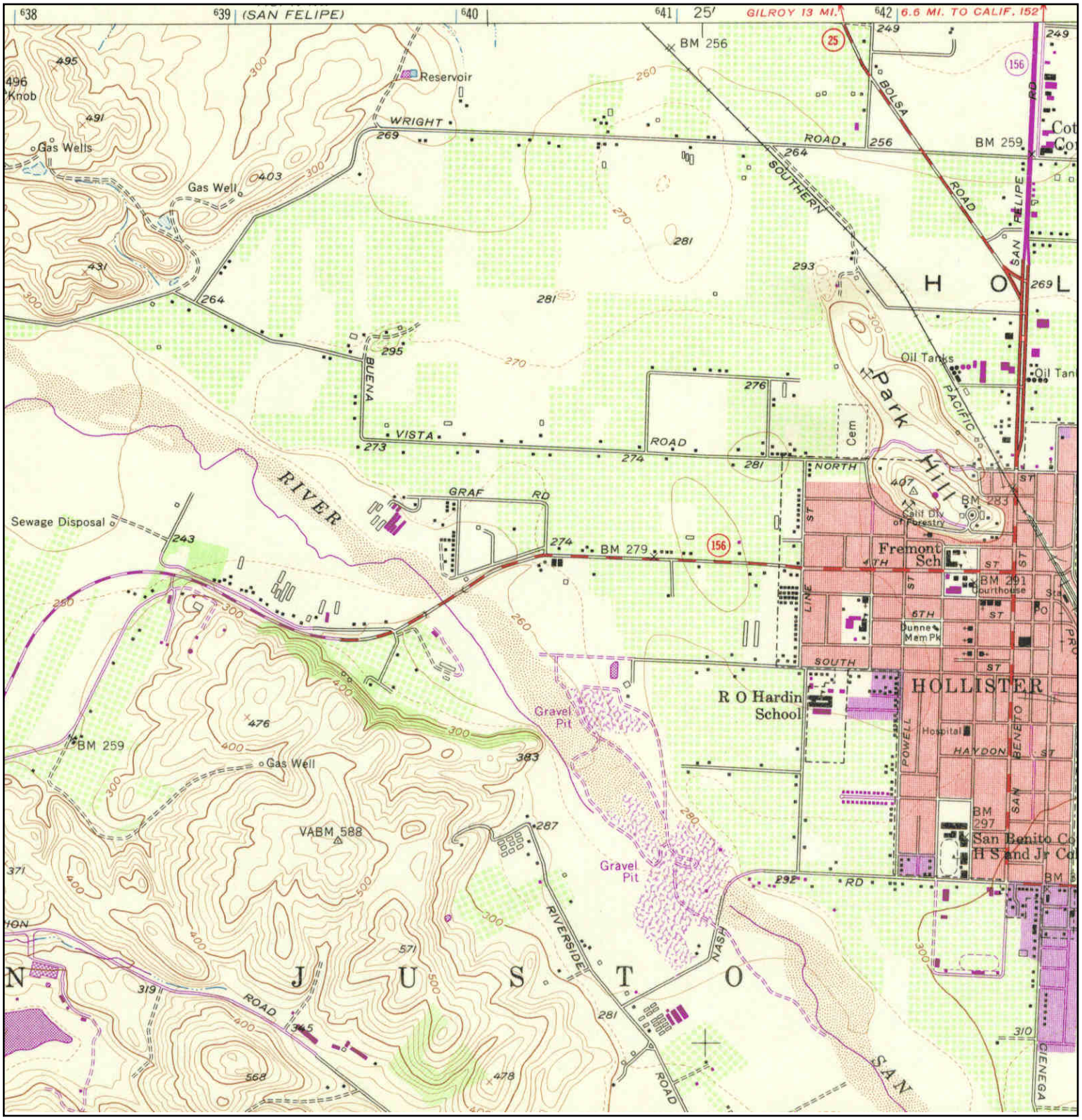
N	TARGET QUAD NAME: HOLLISTER MAP YEAR: 1955 SERIES: 15 SCALE: 1:62500	SITE NAME: 1601 Buena Vista Road ADDRESS: 1601 Buena Vista Road Hollister, CA 95023 LAT/LONG: 36.8566 / -121.425	CLIENT: Engeo CONTACT: Greg Cubbon INQUIRY#: 3740929.4 RESEARCH DATE: 09/26/2013

Historical Topographic Map



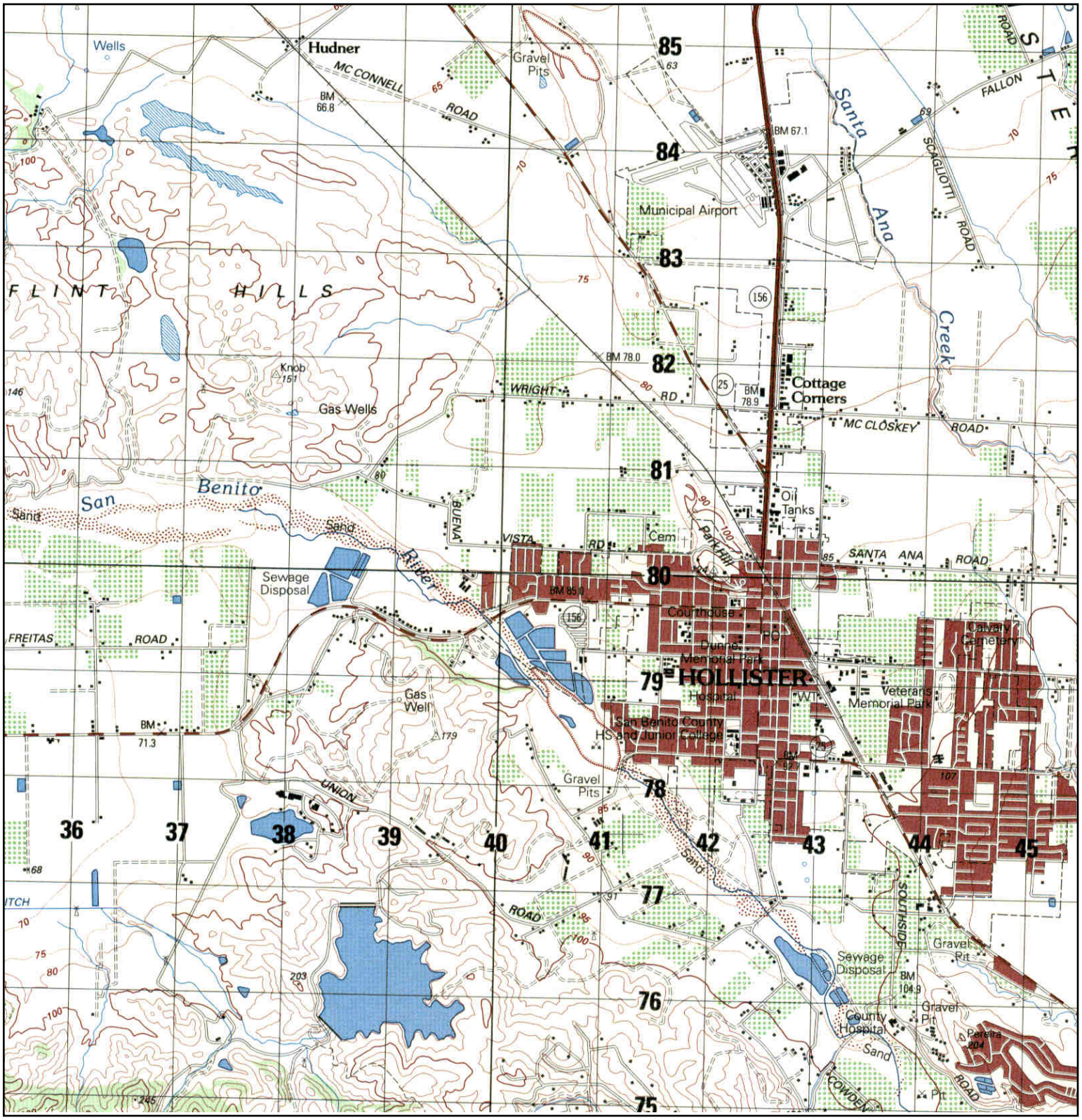
N	TARGET QUAD NAME: HOLLISTER MAP YEAR: 1955 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 1601 Buena Vista Road ADDRESS: 1601 Buena Vista Road Hollister, CA 95023 LAT/LONG: 36.8566 / -121.425	CLIENT: Engeo CONTACT: Greg Cubbon INQUIRY#: 3740929.4 RESEARCH DATE: 09/26/2013

Historical Topographic Map



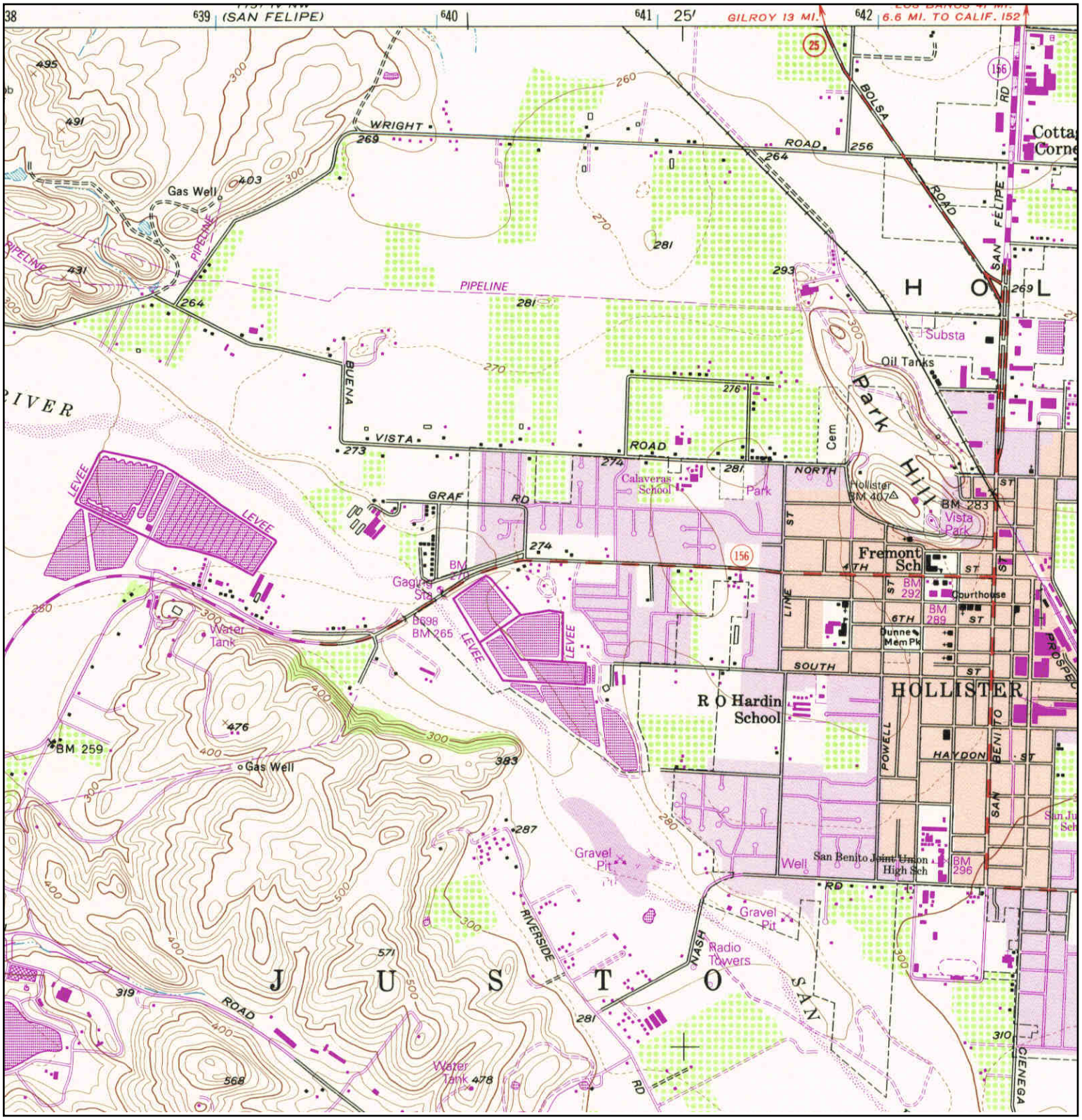
N	TARGET QUAD NAME: HOLLISTER MAP YEAR: 1971 PHOTOREVISED FROM :1955 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 1601 Buena Vista Road ADDRESS: 1601 Buena Vista Road Hollister, CA 95023 LAT/LONG: 36.8566 / -121.425	CLIENT: Engeo CONTACT: Greg Cubbon INQUIRY#: 3740929.4 RESEARCH DATE: 09/26/2013

Historical Topographic Map



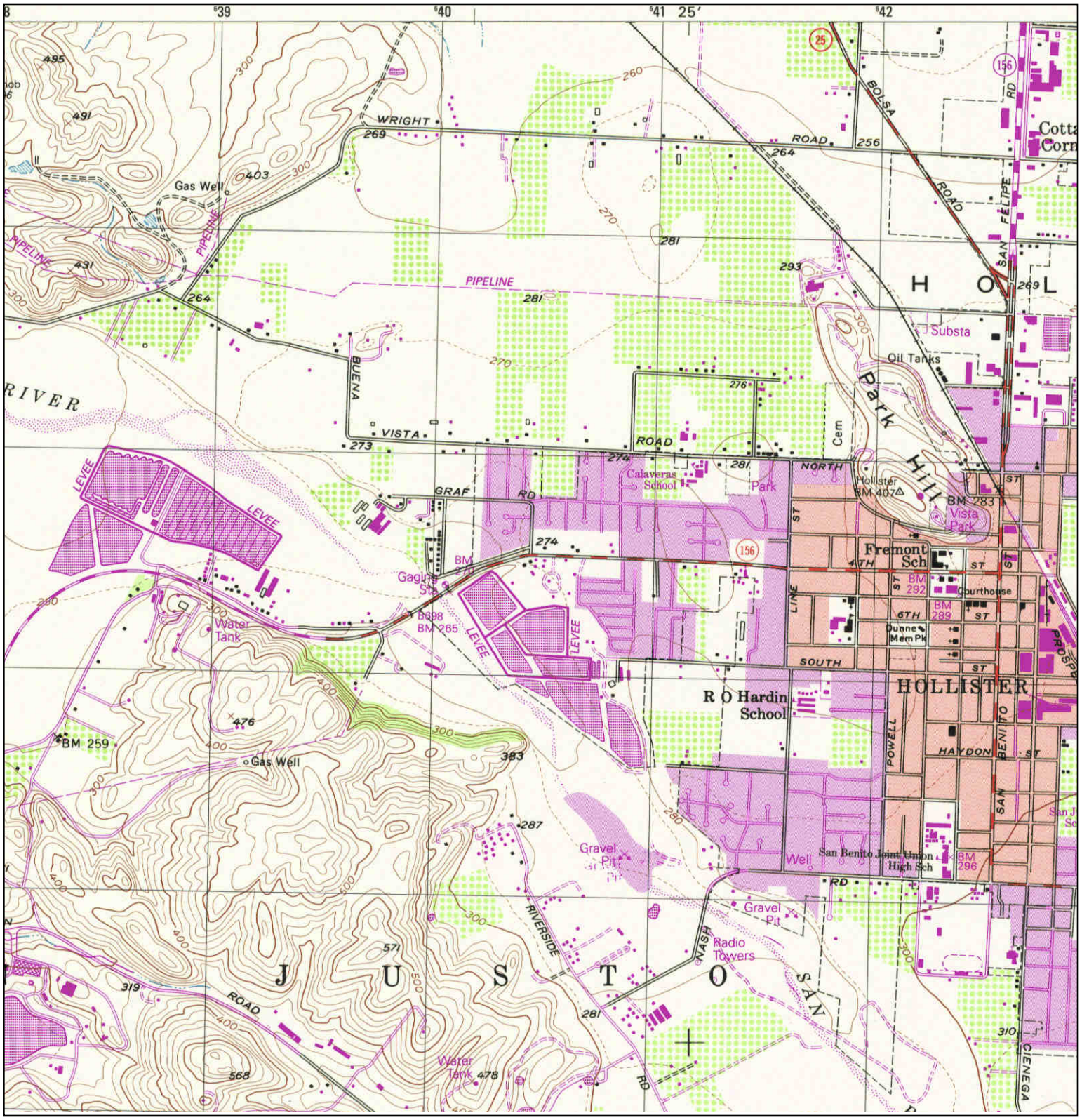
N	TARGET QUAD NAME: HOLLISTER MAP YEAR: 1987 SERIES: 15 SCALE: 1:50000	SITE NAME: 1601 Buena Vista Road ADDRESS: 1601 Buena Vista Road Hollister, CA 95023 LAT/LONG: 36.8566 / -121.425	CLIENT: Engeo CONTACT: Greg Cubbon INQUIRY#: 3740929.4 RESEARCH DATE: 09/26/2013

Historical Topographic Map



N	TARGET QUAD NAME: HOLLISTER MAP YEAR: 1993 REVISED FROM :1955 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 1601 Buena Vista Road ADDRESS: 1601 Buena Vista Road Hollister, CA 95023 LAT/LONG: 36.8566 / -121.425	CLIENT: Engeo CONTACT: Greg Cubbon INQUIRY#: 3740929.4 RESEARCH DATE: 09/26/2013

Historical Topographic Map



N	TARGET QUAD NAME: HOLLISTER MAP YEAR: 1995 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 1601 Buena Vista Road ADDRESS: 1601 Buena Vista Road Hollister, CA 95023 LAT/LONG: 36.8566 / -121.425	CLIENT: Engeo CONTACT: Greg Cubbon INQUIRY#: 3740929.4 RESEARCH DATE: 09/26/2013

APPENDIX D

ENVIRONMENTAL DATA RESOURCES, INC.

Aerial Photo Decade Package

APPENDIX D

1601 Buena Vista Road
1601 Buena Vista Road
Hollister, CA 95023

Inquiry Number: 3740929.5
September 27, 2013

The EDR Aerial Photo Decade Package

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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Date EDR Searched Historical Sources:

Aerial Photography September 27, 2013

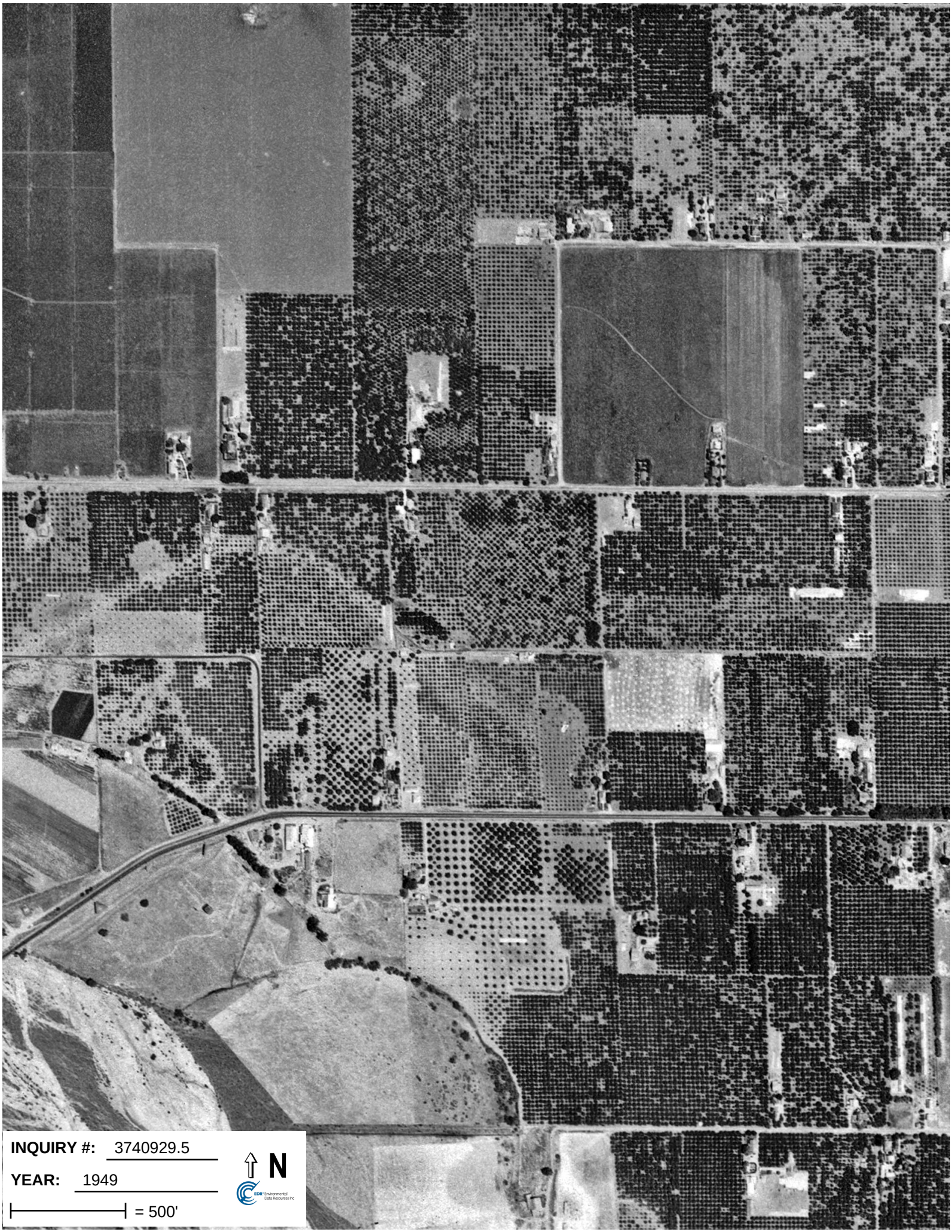
Target Property:

1601 Buena Vista Road

Hollister, CA 95023

Year	***Scale***	***Details***	***Source***
1939	Aerial Photograph. Scale: 1"=500'	Flight Year: 1939	Fairchild
1949	Aerial Photograph. Scale: 1"=500'	Flight Year: 1949	Park
1958	Aerial Photograph. Scale: 1"=500'	Flight Year: 1958	Cartwright
1974	Aerial Photograph. Scale: 1"=500'	Flight Year: 1974	NASA
1981	Aerial Photograph. Scale: 1"=500'	Flight Year: 1981	USGS
1987	Aerial Photograph. Scale: 1"=500'	Flight Year: 1987	USGS
1998	Aerial Photograph. Scale: 1"=500'	/DOQQ - acquisition dates: 1998	EDR
2005	Aerial Photograph. Scale: 1"=500'	Flight Year: 2005	EDR
2006	Aerial Photograph. Scale: 1"=500'	Flight Year: 2006	EDR
2009	Aerial Photograph. Scale: 1"=500'	Flight Year: 2009	EDR
2010	Aerial Photograph. Scale: 1"=500'	Flight Year: 2010	EDR
2012	Aerial Photograph. Scale: 1"=500'	Flight Year: 2012	EDR

INQUIRY #: 3740929.5
YEAR: 1939
= 500'
N
EDR Environmental Data Resources Inc


INQUIRY #: 3740929.5
YEAR: 1949
= 500'
N
EDR Environmental Data Resources Inc

INQUIRY #: 3740929.5
YEAR: 1958
= 500'
N
EDR Environmental Data Resources Inc

INQUIRY #: 3740929.5
YEAR: 1974
= 500'
N

INQUIRY #: 3740929.5
YEAR: 1981
= 500'
N

INQUIRY #: 3740929.5
YEAR: 1987
= 500'
N

INQUIRY #: 3740929.5
YEAR: 1998
= 500'
N

INQUIRY #: 3740929.5
YEAR: 2005
= 500'
N

INQUIRY #: 3740929.5
YEAR: 2006
= 500'
N

INQUIRY #: 3740929.5
YEAR: 2009
= 500'
N

INQUIRY #: 3740929.5
YEAR: 2010
= 500'
N

INQUIRY #: 3740929.5
YEAR: 2012
= 500'
N

APPENDIX E

ENVIRONMENTAL DATA RESOURCES, INC.

City Directory

APPENDIX E

1601 Buena Vista Road
1601 Buena Vista Road
Hollister, CA 95023

Inquiry Number: 3740929.6
September 30, 2013

The EDR-City Directory Image Report

Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

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Executive Summary

Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction orforecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	*Target Street*	*Cross Street*	*Source*
1997	☑	☐	Polk's City Directory
1987	☑	☐	Polk's City Directory
1982	☑	☐	Polk's City Directory
1976	☑	☐	Polk's City Directory
1970	☑	☐	Polk's City Directory
1964	☐	☐	Polk's City Directory

RECORD SOURCES

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FINDINGS

TARGET PROPERTY STREET

1601 Buena Vista Road
Hollister, CA 95023

Year	*CD Image*	*Source*	
Buena Vista Road			
1997	pg A1	Polk's City Directory	
1987	pg A2	Polk's City Directory	
1987	pg A3	Polk's City Directory	
1982	pg A4	Polk's City Directory	
1976	pg A5	Polk's City Directory	
1970	pg A6	Polk's City Directory	
1964	-	Polk's City Directory	Street not listed in Source

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

Target Street	Cross Street	Source
✓	-	Polk's City Directory

Buena Vista Road 1997

HOUSEHOLDS 10

BUENA VISTA RD *(H)* **95023**

915	Bianchad Nobral	-3315	C004	638-1369
940	Barajas Florence	-3307	C004	637-8080
955	Cooper Adam	-3350	C004	635-9775
	Cooper Kerry	-3350	C004	635-9775
	Rojas Joe	-3350	C004	636-8810
970	Maroney Irene	-3307	C004	637-2706
990	Judd Leroy	-3331	C004	638-0704
1081	Scattini Robert D.	-3306	C004	637-7763
1151	CALAVERAS SCHOOL	-3329	C004	636-4460
1190	GIBSON FARMS INC	-3305	C004	637-3512
	Gibson Mark	-3305	C004	637-7840
1291	Toledo Nemecio	-3310	C004	636-1385
1311	Cabrera Robert	-3309	C004	637-6099
1660	Gomes Joe L	-3227	C004	637-3189
1730	Nicodemus Mark I	-3225	C004	637-9311
1850	Cordova Raymond	-9301	R007	637-2016
1871	DON BERESINI INSURANCE	-9301	R007	636-1131
	Beresini Don	-9301	R007	637-2154
1930	Smith Verda M	-9301	R007	637-5189
2021	Renteria Modesta	-9301	R007	636-7763
2070	DENNIS'S BODY			

Target Street	Cross Street	Source
✓	-	Polk's City Directory

Buena Vista Road 1987

1291 Toledo Nemecio ◎ 637-1290
MILLER RD INTERSECTS
1301 No Return
1311 Cabrera Robert ◎ 637-5055
1321 No Return
1340★Mc Clure Susan 637-7068
1341 No Return
GONZALEZ DR INTERSECTS
1470 Kirkpatrick Joe D cement contr 637-8647
1601 Buffo Elmo C ◎ 637-1143
1620 No Return
1631 Roger Perry N 637-0106
CARNOBLE DR INTERSECTS
1632 Pereira Manuel 637-1220
WILLOW DR INTERSECTS
1651 No Return

Target Street	Cross Street	Source
✓	-	Polk's City Directory

Buena Vista Road 1987

17

BUENA VISTA RD–Contd

1660 Gomes Joe L 637-3189

1690 No Return

1730 Seaholm Donald C 637-8628

RANCHITO DR INTERSECTS

1750 No Return

8

BUNDESON DR –FROM 1630 CUSHMAN ST WEST

ZIP CODE 95023

10 Horn James H ◎ 637-2736

11 No Return

Target Street	Cross Street	Source
✓	-	Polk's City Directory

Buena Vista Road 1982

1

BUENA VISTA RD —FROM LINE ST WEST 3 NORTH OF 4TH ST

ZIP CODE 95023

890 Ostoja Frank M Jr 637-7370
910 Ostoja Frank J ◎ 637-5229
922 Jones Geo W 637-3490
930 Cashion Richd A ◎ 637-4349
940★Barajas Florencio ◎ 637-8080
950 Rogers Geo M ◎ 637-2588
960 Ochoa Manuel M Rev 637-6145
970 Maroney Harold W ◎ 637-2706
990 Gospodnetich Jack ◎ 637-3818
1070★Gospodnetich Nick 637-3970
1081 Paterson Thos H ◎ 637-2989
1190 Gibson Mark 637-3512
1260★Lobeck David 637-6586
1261★Futrell Vernon W 637-4625
1271 Matulich Tony A ◎ 637-2050
1281★Dominges Jose L ◎ 637-6576
1291★Toledo Nemecio ◎ 637-1290
1301★Lopez M L ◎
1311★Cabrera Robert ◎ 637-5055
1321★Barrientos Cipiano ◎
1340 Lopez Robt 637-1528
1341★Gomez Mercedes 637-6849
1470 Solorio Joseph 637-2741
1471★Irish Seth H Jr 637-8545
1601 Buffo Elmo C ◎ 637-1143

8

BUNDESON DR —FROM 1630 CUSHMAN ST WEST

Target Street	Cross Street	Source
✓	-	Polk's City Directory

Buena Vista Road 1976

11

970 Maroney Harold W ◎
637-2706
990 Gospodnetich Jack ◎ 637-3818
1070 Matulich Lucy F Mrs ◎
637-3970
1081 Paterson Thos H ◎ 637-2989
1190 Land Charles E ◎ 637-5209
1260 Gabriele Peter Mrs ◎
637-2747
1261 Snyder Walter J 637-7919
1271 Matulich Tony A ◎ 637-2050
1340 Lopez Robt 637-1528

8

BUNDESON DR —FROM 1630 CUSHMAN ST WEST

ZIP CODE 95023
10 Horn James H ◎ 637-2736

Target Street	Cross Street	Source
✓	-	Polk's City Directory

Buena Vista Road 1970

BROWN AL

ZIP CODE 95023

1

BUENA VISTA RD —FROM LINE ST WEST 3 NORTH OF 4TH ST

ZIP CODE 95023

890 Ostoja Frances J Mrs ◎ 637-2017
910 Ostoja Frank J ◎ 637-5229
922 Jones Geo W 637-3490
930 Cashion Richd A ◎ 637-4349
940 Arzie O S ◎ 637-2967
950 Orabuena Carmen
960 Ochoa Manuel M Rev ◎ 637-3359
970 Maroney Harold W ◎ 637-2706
990 Gospodnetich Jack ◎ 637-3818
1070 Matulich Lucy F Mrs ◎ 637-3970
1081 Paterson Tom H ◎ 637-2989
1190 Land Charles E 637-5209
1260 Destefanis Genevieve K Mrs 637-4196
1271 Matulich Tony A ◎ 637-2050
1340 No Return

8

BUNDESON DR —FROM 1630 CUSHMAN ST WEST

ZIP CODE 95023

10 Horn Jim H ◎ 637-2726

APPENDIX F

Environmental Site Assessment Questionnaire (1)

APPENDIX F

Project Name: 1601 Buena Vista Road
Project No. P2013.001.000

ENGEO
Expect Excellence

☐ 2010 Crow Canyon Place • Suite 250 • San Ramon, CA 94583 (925) 866-9000 • Fax (888) 279-2698
☐ 2213 Plaza Drive • Rocklin, CA 95765 (916) 786-8883 • Fax (888) 279-2698
☐ 332 Pine Street • Suite 300 • San Francisco, CA 94104 (415) 284-9900 • Fax (888) 279-2698
☐ 6399 San Ignacio Avenue • Suite 150 • San Jose, CA 95119 (408) 574-4900 • Fax (888) 279-2698
☐ 580 N. Wilma Avenue • Suite A • Ripon, CA 95366 (209) 835-0610 • Fax (888) 279-2698
☐ 17675 Sierra Highway • Santa Clarita, CA 91351 (661) 257-4004 • Fax (888) 279-2698
☐ 13211 Pusan Way • Suite 16 • Irvine, CA 92618 (949) 529-3479 • Fax (888) 279-2698

ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE FOR "KEY SITE MANAGER"

To evaluate the potential for possible environmentally related impacts and site contamination the following information is requested. This questionnaire is to be preferably completed by the current property owner, or owner representative, leasing agent, or other person having good knowledge of the uses and physical characteristics of the property (Key Site Manager).

PART I

1. Property Address/Location and Assessor's Parcel Number (APN):
   1601 Buena Vista RD, Hollister, CA 95023
   APN # 019-250-001

2. Current property owner (name, address, voice/fax number):
   Fernando Gonzalez
   1260 San Juan RD
   Hollister, CA 95023
   831-637-2260 phone
   831-637-9349 FAX
   coastgonzalez@netscape.net

3. Date current property owner assumed title of property:
   8-12-2008

4. Current property development/improvements:
   Ranch House with walnut trees

5. Past property use, development/improvements:
   Farming walnut and apricot trees

6. Neighboring property uses:
   North Farm Land
   South Housing
   East Housing
   west Housing

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PART II - The following questions should be answered to the best of your knowledge.

1.	Is/has the *property* or any adjoining property used/been used for industrial purposes?	☐ Yes	☑ No
2.	Has the *property* or any adjoining property been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?	☐ Yes	☑ No
3.	Are there currently, or have there been previously, any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of greater than 5 gal in volume or 50 gal in the aggregate, stored on or used at the *property* or at the facility?	☐ Yes	☑ No
4.	Has undocumented soil been brought onto the property at any time? If yes, estimated quantity is _____ cubic yards.	☐ Yes	☑ No
5.	Has soil been brought onto the property that originated from a contaminated site or that is of an unknown origin?	☐ Yes	☑ No
6.	Are there currently, or have there been previously, any pits, ponds, or lagoons located on the *property* in connection with waste treatment or waste disposal?	☐ Yes	☑ No
7.	Is there currently, or has there been previously, any stained soil on the *property*?	☐ Yes	☑ No
8.	Are there currently, or have there been previously, any registered or unregistered storage tanks (above or underground) located on the *property*?	☐ Yes	☑ No
9.	Are there currently, or have there been previously, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the *property* or adjacent to any structure located on the *property*?	☐ Yes	☑ No
10.	Are there currently, or have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water or are emitting foul odors?	☐ Yes	☑ No
11.	Are there any domestic, irrigation or monitoring wells on the property?	☑ Yes	☐ No
12.	If the *property* is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated as contaminated by any government environmental/health agency?	☐ Yes	☑ No
13.	Have you been informed of the past or current existence of *hazardous substances* or *petroleum products* or environmental violations with respect to the *property* or any facility located on the *property*?	☐ Yes	☑ No
14.	Have there been any *environmental site assessments* of the *property* or facility that indicated the presence of *hazardous substances* or *petroleum products* on, or contamination of, the *property* or recommended further assessment of the *property*?	☐ Yes	☑ No
15.	Have there been any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any *hazardous substance* or *petroleum products* involving the *property*?	☐ Yes	☑ No
16.	Has there been any past agricultural use of the *property*, such as orchards or seed crop cultivation?	☑ Yes	☐ No
17.	Have any *hazardous substances* or *petroleum products*, unidentified waste materials, tires, automotive or industrial batteries or any other waste materials been dumped above grade, buried and/or burned on the *property*?	☐ Yes	☑ No
18.	Is there a transformer, capacitor, or any hydraulic equipment for which there are any records indicating the presence of PCBs?	☐ Yes	☑ No

ENGEO
Expect Excellence

If a "Yes" response was provided to any of the above questions, please provide details below:

11 There is a domestic well located to the rear of the HOUSE

16 There are walnut trees located on the property.

I certify that the information herein is true and correct to the best of my knowledge as of the date signed below.

Name (Printed/Typed): Fernando Gonzalez

Signature: Fernando Gonzalez Date: 8-30-13

APPENDIX G

California Laboratory Services Report Data Report

APPENDIX G

CALIFORNIA LABORATORY SERVICES

3249 Fitzgerald Road Rancho Cordova, CA 95742

October 08, 2013

CLS Work Order #: CWJ0041
COC #: 2 COCs

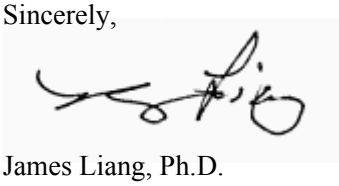
Scott Johns
Engeo-San Jose
6399 San Ignacio Ave, Suite 150
San Jose, CA 95119

Project Name: 1601 Buena Vista

Enclosed are the results of analyses for samples received by the laboratory on 10/01/13 15:20. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,



James Liang, Ph.D.
Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233

CALIFORNIA LABORATORY SERVICES

 10/08/13 12:56

Engeo-San Jose	Project: 1601 Buena Vista	
6399 San Ignacio Ave, Suite 150	Project Number: 10613.000.000	**CLS Work Order #: CWJ0041**
San Jose, CA 95119	Project Manager: Scott Johns	COC #: 2 COCs

CWJ0041 PG. 1 of 2

CHAIN OF CUSTODY RECORD

PROJECT NUMBER: 10613.000.000
PROJECT NAME: 1601 Buena Vista
SAMPLED BY (SIGNATURE/PRINT): (Gregory J. Cubbon)
PROJECT MANAGER: Scott Johns
ROUTING E-MAIL: sjohns@engeo.com / gcubbon@engeo.com Hard Copy: N/A

SAMPLE NUMBER	DATE	TIME	MATRIX	NUMBER OF CONTAINERS	CONTAINER SIZE	PRESERVATIVE	OCP Pesticides	Arsenic	REMARKS REQUIRED DETECTION LIMITS
S1A	9/30	9:20	Soil	1	Jar	Ice	X		
S1B	9/30	11:13	Soil				X		
S1C	9/30	11:30	Soil				X		
S1D	9/30	13:14	Soil				X	X	
S2A		9:30					X		
S2B		11:05					X	X	
S2C		11:42					X		
S2D		13:10					X		
S3A		9:40					X	X	
S3B		10:56					X		
S3C		11:50					X		
S3D		13:04					X		
S4A		9:54					X		
S4B		10:47					X	X	
S4C		11:59					X		
S4D		12:56					X		
S5A		10:07					X		
S5B		10:36					X		
S5C		12:13					X		
S5D		12:40					X	X	
S6A		10:19					X		4 Pt Composite with S6A to S6D

RELINQUISHED BY (SIGNATURE)	DATE/TIME	RECEIVED BY (SIGNATURE)	RELINQUISHED BY (SIGNATURE)	DATE/TIME	RECEIVED BY (SIGNATURE)
J GRAY	10/1/13 1220H	CLS	CLS	10/1/13 1520H	
RELINQUISHED BY (SIGNATURE)	DATE/TIME	RECEIVED FOR LABORATORY BY (SIGNATURE)	DATE/TIME	REMARKS	
			10/1/13 1520	Standard 5 Day TAT Composite for OCP A through D Discrete for Arsenic.	

ENGEO INCORPORATED
6399 SAN IGNACIO AVENUE, SUITE 150
SAN JOSE, CALIFORNIA 95119
(408) 574-4900 FAX (888) 279-2698
WWW.ENGEO.COM

DISTRIBUTION: ORIGINAL ACCOMPANIES SHIPMENT, COPY TO PROJECT FIELD FILES

CALIFORNIA LABORATORY SERVICES

 10/08/13 12:56

Engeo-San Jose	Project: 1601 Buena Vista	
6399 San Ignacio Ave, Suite 150	Project Number: 10613.000.000	**CLS Work Order #: CWJ0041**
San Jose, CA 95119	Project Manager: Scott Johns	COC #: 2 COCs

Pg. 2 of 2

CWJ0041

CHAIN OF CUSTODY RECORD

PROJECT NUMBER: 10613.000.000
PROJECT NAME: 1601 Buena Vista
SAMPLED BY (SIGNATURE/PRINT): (Gregory J. Cubbon)
PROJECT MANAGER: Scott Johns
ROUTING: E-MAIL: sjohns@engeo.com / gcubbon@engeo.com Hard Copy: N/A

SAMPLE NUMBER	DATE	TIME	MATRIX	NUMBER OF CONTAINERS	CONTAINER SIZE	PRESERVATIVE	OCP Pesticides	Arsenic	REMARKS REQUIRED DETECTION LIMITS
S6B	9/30	10:27	Soil	1	Jar	Ice	X	X	4 pt. Composite with S6A to S6D
S6C	↓	12:23	↓	↓	↓	↓			↓
S6D	↓	12:29	↓	↓	↓	↓			↓

RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)	RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)
RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)	RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)
J GRAY	10/1/13 1220			10/1/13 1520	
RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE/TIME	REMARKS	
			10/1/13 1520	Standard 5 Day TAT Composite for OCP A through D Discrete for Arsenic	

ENGEO INCORPORATED
6399 SAN IGNACIO AVENUE, SUITE 150
SAN JOSE, CALIFORNIA 95119
(408) 574-4900 FAX (888) 279-2698
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CALIFORNIA LABORATORY SERVICES

10/08/13 12:56

Engeo-San Jose	Project: 1601 Buena Vista	
6399 San Ignacio Ave, Suite 150	Project Number: 10613.000.000	**CLS Work Order #: CWJ0041**
San Jose, CA 95119	Project Manager: Scott Johns	COC #: 2 COCs

Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S1D (CWJ0041-04) Soil Sampled: 09/30/13 13:14 Received: 10/01/13 15:20									
Arsenic	**10**	1.0	mg/kg	10	CW06548	10/02/13	10/02/13	EPA 6020	
S2B (CWJ0041-07) Soil Sampled: 09/30/13 11:05 Received: 10/01/13 15:20									
Arsenic	**8.8**	1.0	mg/kg	10	CW06548	10/02/13	10/02/13	EPA 6020	
S3A (CWJ0041-11) Soil Sampled: 09/30/13 09:40 Received: 10/01/13 15:20									
Arsenic	**4.8**	1.0	mg/kg	10	CW06548	10/02/13	10/02/13	EPA 6020	
S4B (CWJ0041-17) Soil Sampled: 09/30/13 10:47 Received: 10/01/13 15:20									
Arsenic	**6.9**	1.0	mg/kg	10	CW06548	10/02/13	10/02/13	EPA 6020	
S5D (CWJ0041-24) Soil Sampled: 09/30/13 12:40 Received: 10/01/13 15:20									
Arsenic	**8.1**	1.0	mg/kg	10	CW06548	10/02/13	10/02/13	EPA 6020	
S6B (CWJ0041-27) Soil Sampled: 09/30/13 10:27 Received: 10/01/13 15:20									
Arsenic	**6.6**	1.0	mg/kg	10	CW06548	10/02/13	10/02/13	EPA 6020	

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Engeo-San Jose	Project: 1601 Buena Vista	
6399 San Ignacio Ave, Suite 150	Project Number: 10613.000.000	**CLS Work Order #: CWJ0041**
San Jose, CA 95119	Project Manager: Scott Johns	COC #: 2 COCs

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Composite S1A,B,C,D (CWJ0041-05) Soil Sampled: 09/30/13 09:20 Received: 10/01/13 15:20									
Aldrin	ND	2.0	µg/kg	2	CW06622	10/04/13	10/08/13	EPA 8081A	
alpha-BHC	ND	4.0	"	"	"	"	"	"	
beta-BHC	ND	20	"	"	"	"	"	"	
delta-BHC	ND	20	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	20	"	"	"	"	"	"	
Chlordane-technical	ND	40	"	"	"	"	"	"	
4,4´-DDD	ND	30	"	"	"	"	"	"	
4,4´-DDE	**170**	150	"	10	"	"	"	"	
4,4´-DDT	**44**	30	"	2	"	"	"	"	
Dieldrin	ND	2.0	"	"	"	"	"	"	
Endosulfan I	ND	30	"	"	"	"	"	"	
Endosulfan II	ND	30	"	"	"	"	"	"	
Endosulfan sulfate	ND	30	"	"	"	"	"	"	
Endrin	ND	30	"	"	"	"	"	"	
Endrin aldehyde	ND	30	"	"	"	"	"	"	
Heptachlor	ND	10	"	"	"	"	"	"	
Heptachlor epoxide	ND	4.0	"	"	"	"	"	"	
Methoxychlor	ND	30	"	"	"	"	"	"	
Mirex	ND	20	"	"	"	"	"	"	
Toxaphene	ND	40	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*81 %*	*46-139*		*"*	*"*	*"*	*"*	
Surrogate: Decachlorobiphenyl		*93 %*	*52-141*		*"*	*"*	*"*	*"*	
Composite S2A,B,C,D (CWJ0041-10) Soil Sampled: 09/30/13 09:30 Received: 10/01/13 15:20									
Aldrin	ND	2.0	µg/kg	2	CW06622	10/04/13	10/08/13	EPA 8081A	
alpha-BHC	ND	4.0	"	"	"	"	"	"	
beta-BHC	ND	20	"	"	"	"	"	"	
delta-BHC	ND	20	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	20	"	"	"	"	"	"	
Chlordane-technical	ND	40	"	"	"	"	"	"	

Engeo-San Jose	Project: 1601 Buena Vista	
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San Jose, CA 95119	Project Manager: Scott Johns	COC #: 2 COCs

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Composite S2A,B,C,D (CWJ0041-10) Soil Sampled: 09/30/13 09:30 Received: 10/01/13 15:20									
4,4´-DDD	ND	30	µg/kg	2	CW06622	"	10/08/13	EPA 8081A	
4,4´-DDE	**190**	150	"	10	"	"	"	"	
4,4´-DDT	**47**	30	"	2	"	"	"	"	
Dieldrin	ND	2.0	"	"	"	"	"	"	
Endosulfan I	ND	30	"	"	"	"	"	"	
Endosulfan II	ND	30	"	"	"	"	"	"	
Endosulfan sulfate	ND	30	"	"	"	"	"	"	
Endrin	ND	30	"	"	"	"	"	"	
Endrin aldehyde	ND	30	"	"	"	"	"	"	
Heptachlor	ND	10	"	"	"	"	"	"	
Heptachlor epoxide	ND	4.0	"	"	"	"	"	"	
Methoxychlor	ND	30	"	"	"	"	"	"	
Mirex	ND	20	"	"	"	"	"	"	
Toxaphene	ND	40	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*76 %*	*46-139*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*89 %*	*52-141*		"	"	"	"	
Composite S3A,B,C,D (CWJ0041-15) Soil Sampled: 09/30/13 09:40 Received: 10/01/13 15:20									
Aldrin	ND	2.0	µg/kg	2	CW06622	10/04/13	10/08/13	EPA 8081A	
alpha-BHC	ND	4.0	"	"	"	"	"	"	
beta-BHC	ND	20	"	"	"	"	"	"	
delta-BHC	ND	20	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	20	"	"	"	"	"	"	
Chlordane-technical	ND	40	"	"	"	"	"	"	
4,4´-DDD	ND	30	"	"	"	"	"	"	
4,4´-DDE	**110**	75	"	5	"	"	"	"	
4,4´-DDT	ND	30	"	2	"	"	"	"	
Dieldrin	ND	2.0	"	"	"	"	"	"	
Endosulfan I	ND	30	"	"	"	"	"	"	
Endosulfan II	ND	30	"	"	"	"	"	"	

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Engeo-San Jose	Project: 1601 Buena Vista	
6399 San Ignacio Ave, Suite 150	Project Number: 10613.000.000	**CLS Work Order #: CWJ0041**
San Jose, CA 95119	Project Manager: Scott Johns	COC #: 2 COCs

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Composite S3A,B,C,D (CWJ0041-15) Soil Sampled: 09/30/13 09:40 Received: 10/01/13 15:20									
Endosulfan sulfate	ND	30	µg/kg	2	CW06622	"	10/08/13	EPA 8081A	
Endrin	ND	30	"	"	"	"	"	"	
Endrin aldehyde	ND	30	"	"	"	"	"	"	
Heptachlor	ND	10	"	"	"	"	"	"	
Heptachlor epoxide	ND	4.0	"	"	"	"	"	"	
Methoxychlor	ND	30	"	"	"	"	"	"	
Mirex	ND	20	"	"	"	"	"	"	
Toxaphene	ND	40	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*78 %*	*46-139*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*92 %*	*52-141*		"	"	"	"	
Composite S4A,B,C,D (CWJ0041-20) Soil Sampled: 09/30/13 09:54 Received: 10/01/13 15:20									
Aldrin	ND	2.0	µg/kg	2	CW06622	10/04/13	10/08/13	EPA 8081A	
alpha-BHC	ND	4.0	"	"	"	"	"	"	
beta-BHC	ND	20	"	"	"	"	"	"	
delta-BHC	ND	20	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	20	"	"	"	"	"	"	
Chlordane-technical	ND	40	"	"	"	"	"	"	
4,4´-DDD	ND	30	"	"	"	"	"	"	
4,4´-DDE	**100**	75	"	5	"	"	"	"	
4,4´-DDT	ND	30	"	2	"	"	"	"	
Dieldrin	ND	2.0	"	"	"	"	"	"	
Endosulfan I	ND	30	"	"	"	"	"	"	
Endosulfan II	ND	30	"	"	"	"	"	"	
Endosulfan sulfate	ND	30	"	"	"	"	"	"	
Endrin	ND	30	"	"	"	"	"	"	
Endrin aldehyde	ND	30	"	"	"	"	"	"	
Heptachlor	ND	10	"	"	"	"	"	"	
Heptachlor epoxide	ND	4.0	"	"	"	"	"	"	
Methoxychlor	ND	30	"	"	"	"	"	"	

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Engeo-San Jose	Project: 1601 Buena Vista	
6399 San Ignacio Ave, Suite 150	Project Number: 10613.000.000	**CLS Work Order #: CWJ0041**
San Jose, CA 95119	Project Manager: Scott Johns	COC #: 2 COCs

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Composite S4A,B,C,D (CWJ0041-20) Soil Sampled: 09/30/13 09:54 Received: 10/01/13 15:20									
Mirex	ND	20	µg/kg	2	CW06622	"	10/08/13	EPA 8081A	
Toxaphene	ND	40	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*68 %*	*46-139*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*84 %*	*52-141*		"	"	"	"	
Composite S5A,B,C,D (CWJ0041-25) Soil Sampled: 09/30/13 10:07 Received: 10/01/13 15:20									
Aldrin	ND	2.0	µg/kg	2	CW06622	10/04/13	10/08/13	EPA 8081A	
alpha-BHC	ND	4.0	"	"	"	"	"	"	
beta-BHC	ND	20	"	"	"	"	"	"	
delta-BHC	ND	20	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	20	"	"	"	"	"	"	
Chlordane-technical	ND	40	"	"	"	"	"	"	
4,4´-DDD	ND	30	"	"	"	"	"	"	
4,4´-DDE	**56**	30	"	"	"	"	"	"	
4,4´-DDT	ND	30	"	"	"	"	"	"	
Dieldrin	ND	2.0	"	"	"	"	"	"	
Endosulfan I	ND	30	"	"	"	"	"	"	
Endosulfan II	ND	30	"	"	"	"	"	"	
Endosulfan sulfate	ND	30	"	"	"	"	"	"	
Endrin	ND	30	"	"	"	"	"	"	
Endrin aldehyde	ND	30	"	"	"	"	"	"	
Heptachlor	ND	10	"	"	"	"	"	"	
Heptachlor epoxide	ND	4.0	"	"	"	"	"	"	
Methoxychlor	ND	30	"	"	"	"	"	"	
Mirex	ND	20	"	"	"	"	"	"	
Toxaphene	ND	40	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*75 %*	*46-139*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*90 %*	*52-141*		"	"	"	"	

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Engeo-San Jose	Project: 1601 Buena Vista	
6399 San Ignacio Ave, Suite 150	Project Number: 10613.000.000	**CLS Work Order #: CWJ0041**
San Jose, CA 95119	Project Manager: Scott Johns	COC #: 2 COCs

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Composite S6A,B,C,D (CWJ0041-30) Soil Sampled: 09/30/13 10:19 Received: 10/01/13 15:20									
Aldrin	ND	2.0	µg/kg	2	CW06622	10/04/13	10/08/13	EPA 8081A	
alpha-BHC	ND	4.0	"	"	"	"	"	"	
beta-BHC	ND	20	"	"	"	"	"	"	
delta-BHC	ND	20	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	20	"	"	"	"	"	"	
Chlordane-technical	ND	40	"	"	"	"	"	"	
4,4´-DDD	ND	30	"	"	"	"	"	"	
4,4´-DDE	**41**	30	"	"	"	"	"	"	
4,4´-DDT	ND	30	"	"	"	"	"	"	
Dieldrin	ND	2.0	"	"	"	"	"	"	
Endosulfan I	ND	30	"	"	"	"	"	"	
Endosulfan II	ND	30	"	"	"	"	"	"	
Endosulfan sulfate	ND	30	"	"	"	"	"	"	
Endrin	ND	30	"	"	"	"	"	"	
Endrin aldehyde	ND	30	"	"	"	"	"	"	
Heptachlor	ND	10	"	"	"	"	"	"	
Heptachlor epoxide	ND	4.0	"	"	"	"	"	"	
Methoxychlor	ND	30	"	"	"	"	"	"	
Mirex	ND	20	"	"	"	"	"	"	
Toxaphene	ND	40	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*76 %*	*46-139*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*88 %*	*52-141*		"	"	"	"	

Engeo-San Jose	Project: 1601 Buena Vista	
6399 San Ignacio Ave, Suite 150	Project Number: 10613.000.000	**CLS Work Order #: CWJ0041**
San Jose, CA 95119	Project Manager: Scott Johns	COC #: 2 COCs

Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CW06548 - EPA 3050B										
Blank (CW06548-BLK1)				Prepared & Analyzed: 10/02/13						
Arsenic	ND	0.10	mg/kg							
LCS (CW06548-BS1)				Prepared & Analyzed: 10/02/13						
Arsenic	4.51	0.10	mg/kg	5.00		90	75-125			
Matrix Spike (CW06548-MS1)		**Source: CWJ0048-01**		Prepared & Analyzed: 10/02/13						
Arsenic	9.62	1.0	mg/kg	5.00	5.55	81	75-125			
Matrix Spike Dup (CW06548-MSD1)		**Source: CWJ0048-01**		Prepared & Analyzed: 10/02/13						
Arsenic	9.45	1.0	mg/kg	5.00	5.55	78	75-125	2	30	

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Engeo-San Jose	Project: 1601 Buena Vista	
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San Jose, CA 95119	Project Manager: Scott Johns	COC #: 2 COCs

Organochlorine Pesticides by EPA Method 8081A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CW06622 - LUFT-DHS GCNV										
Blank (CW06622-BLK1)				Prepared: 10/04/13 Analyzed: 10/08/13						
Aldrin	ND	1.0	µg/kg							
alpha-BHC	ND	2.0	"							
beta-BHC	ND	10	"							
delta-BHC	ND	10	"							
gamma-BHC (Lindane)	ND	10	"							
Chlordane-technical	ND	20	"							
4,4´-DDD	ND	15	"							
4,4´-DDE	ND	15	"							
4,4´-DDT	ND	15	"							
Dieldrin	ND	1.0	"							
Endosulfan I	ND	15	"							
Endosulfan II	ND	15	"							
Endosulfan sulfate	ND	15	"							
Endrin	ND	15	"							
Endrin aldehyde	ND	15	"							
Heptachlor	ND	5.0	"							
Heptachlor epoxide	ND	2.0	"							
Methoxychlor	ND	15	"							
Mirex	ND	10	"							
Toxaphene	ND	20	"							
Surrogate: Tetrachloro-meta-xylene	*8.59*		*"*	*8.33*		*103*	*46-139*			
Surrogate: Decachlorobiphenyl	*9.40*		*"*	*8.33*		*113*	*52-141*			
LCS (CW06622-BS1)				Prepared: 10/04/13 Analyzed: 10/08/13						
Aldrin	16.3	1.0	µg/kg	16.7		98	47-132			
gamma-BHC (Lindane)	15.1	10	"	16.7		91	56-133			
4,4´-DDT	14.3	15	"	16.7		86	46-137			
Dieldrin	16.3	1.0	"	16.7		98	44-143			
Endrin	11.2	15	"	16.7		67	30-147			
Heptachlor	13.7	5.0	"	16.7		82	33-148			
Surrogate: Tetrachloro-meta-xylene	*9.02*		*"*	*8.33*		*108*	*46-139*			

Engeo-San Jose	Project: 1601 Buena Vista	
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Organochlorine Pesticides by EPA Method 8081A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CW06622 - LUFT-DHS GCNV										
LCS (CW06622-BS1)				Prepared: 10/04/13 Analyzed: 10/08/13						
Surrogate: Decachlorobiphenyl	*9.61*		*µg/kg*	*8.33*		*115*	*52-141*			
LCS Dup (CW06622-BSD1)				Prepared: 10/04/13 Analyzed: 10/08/13						
Aldrin	12.8	1.0	µg/kg	16.7		77	47-132	24	30	
gamma-BHC (Lindane)	12.0	10	"	16.7		72	56-133	23	30	
4,4´-DDT	12.0	15	"	16.7		72	46-137	18	30	
Dieldrin	12.9	1.0	"	16.7		78	44-143	23	30	
Endrin	9.42	15	"	16.7		57	30-147	17	30	
Heptachlor	10.9	5.0	"	16.7		66	33-148	23	30	
Surrogate: Tetrachloro-meta-xylene	*8.51*		*"*	*8.33*		*102*	*46-139*			
Surrogate: Decachlorobiphenyl	*9.17*		*"*	*8.33*		*110*	*52-141*			
Matrix Spike (CW06622-MS1)		**Source: CWJ0210-13**		Prepared: 10/04/13 Analyzed: 10/08/13						
Aldrin	15.0	10	µg/kg	16.7	ND	90	47-138			
gamma-BHC (Lindane)	14.4	100	"	16.7	ND	86	38-144			
4,4´-DDT	18.9	150	"	16.7	ND	114	41-157			
Dieldrin	17.4	10	"	16.7	ND	104	46-155			
Endrin	14.2	150	"	16.7	ND	85	34-149			
Heptachlor	15.6	50	"	16.7	ND	94	36-155			
Surrogate: Tetrachloro-meta-xylene	*15.3*		*"*	*20.8*		*74*	*46-139*			
Surrogate: Decachlorobiphenyl	*19.1*		*"*	*20.8*		*92*	*52-141*			
Matrix Spike Dup (CW06622-MSD1)		**Source: CWJ0210-13**		Prepared: 10/04/13 Analyzed: 10/08/13						
Aldrin	14.5	10	µg/kg	16.7	ND	87	47-138	4	35	
gamma-BHC (Lindane)	13.7	100	"	16.7	ND	82	38-144	5	35	
4,4´-DDT	17.6	150	"	16.7	ND	106	41-157	7	35	
Dieldrin	16.5	10	"	16.7	ND	99	46-155	5	35	
Endrin	13.4	150	"	16.7	ND	81	34-149	6	35	
Heptachlor	14.7	50	"	16.7	ND	88	36-155	6	35	
Surrogate: Tetrachloro-meta-xylene	*14.5*		*"*	*20.8*		*70*	*46-139*			
Surrogate: Decachlorobiphenyl	*18.8*		*"*	*20.8*		*90*	*52-141*			

Engeo-San Jose	Project: 1601 Buena Vista	
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San Jose, CA 95119	Project Manager: Scott Johns	COC #: 2 COCs

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

APPENDIX H

Qualifications of Environmental Professional

APPENDIX H

BRIAN FLAHERTY, CEG, CHG, REA I
PRINCIPAL GEOLOGIST

EDUCATION

BS, Geology, University of Massachusetts, Amherst, 1975

MS, Geology, California State University, Hayward, 1988

EXPERIENCE

Years with ENGEO: 32
Years with Other Firms: 3

REGISTRATIONS & CERTIFICATIONS

Certified Engineering Geologist, CA, 1256
Certified Hydrogeologist, CA, 460
Registered Environmental Assessor, CA, 923
Professional Geologist, CA, 4030

SPECIALIZATIONS

- Environmental Assessments and Remediation
- Geologic Hazard Evaluation
- Hillside Grading
- Landslide Investigations and Repairs
- Water Wells/Hydrogeology

AFFILIATIONS

OBA - Oakland Builders Alliance

San Francisco Housing Action Coalition

SPUR

Mr. Flaherty has more than 30 years of diverse experience in the fields of engineering geology, geologic hazard evaluation and mitigation, and hydrogeology. During that time he has also managed and completed numerous soil and ground water characterization studies, environmental assessments, and the design and implementation of soil and ground water remediation systems. During his professional career he has worked on small to large residential developments, commercial developments, industrial business parks, military base re-use projects, water storage facilities, transportation projects and educational facilities throughout California.

Mr. Flaherty's geologic project experience includes geotechnical, geologic and earthquake hazard evaluation for projects throughout the San Francisco Bay Area. His work as a geologist has included landslide hazard mapping and assessment, slope stability evaluation, structural and rock mechanic analysis of bedrock slopes, earthquake fault hazard explorations, and preparation of Geologic Hazard Abatement District (GHAD) plans of control and monitoring.

Select Project Experience

Phelan Loop Development—San Francisco, CA
Project Manager. Mr. Flaherty provided project management and principal review for during preparation of a phase I and phase II environmental site assessment for the Phelan Loop project site is located at the site of a MUNI bus turnaround, near the intersection of Phelan Avenue and Ocean Avenue, in San Francisco, California. The Phelan Loop project site is located at the site of a MUNI bus turnaround, near the intersection of Phelan Avenue and Ocean Avenue, in San Francisco, California. The proposed housing development will create approximately 60 units of supportive housing for low-income families and transitional aged youth (TAY).

11th Street Four Story Mixed Use Development—San Francisco, CA
Project Manager. Mr. Flaherty's duties included phase one and two environmental assessment, development and implementation of a geotechnical exploration using both conventional auger drilling and cone penetration testing. ENGEO is the geotechnical and environmental consultant for a proposed multi-use building at 340-350 11th Street. T his 4-

level wood-framed residential development will include 16 townhouse units with 2-level townhouses above 2-level townhouses. The structure will be set on a concrete podium containing ground floor commercial space above one level of underground parking. Geotechnical constraints included a high water table, liquefiable soil, building constraints and environmental soil and groundwater contamination.

Docktown Marina—Redwood City, CA
Project Manager. Mr. Flaherty managed the phase II environmental assessment to identify possible recognized environmental conditions associated with past property use as a vehicle and boat maintenance areas and as a former tannery facility. The Docktown Marina study involved two land use plans under consideration; four-story over two-story podium structures located around the perimeter of the site or two four-story residential buildings wrapped around two four-story parking structures.

1150 Ocean Avenue—San Francisco, CA
Project Manager. Mr. Flaherty prepared the geotechnical exploration and a phase II environmental site assessment for this mixed use project. Site concerns include possible soil and groundwater contamination from hydraulic lifts and the impact of a high groundwater table on the planned underground parking structure. A four-level wood-framed mixed-use residential development is planned with about 150 apartment units. The structure will be set on a concrete podium with about 30,000 square feet of retail commercial space above one level of underground parking.

Terminal One, Brickyard Cove—Richmond, CA
Principal in Charge. Mr. Flaherty provided expert environmental review of the Remedial Investigation Report and the Feasibility Study including consultation with the Regional Water Control Board (RWQCB). The purpose was to evaluate the findings and recommendations of an environmental consultant's reports to determine if the property could be developed for a multi family residential use. The Terminal One property includes approximately 12 acres of Bay margin land south of Brickyard Cove Road in Point Richmond, California. The site was previously used by both public and private entities primarily for the processing, transferring, and storage of bulk liquids.

The current project development concept included a high-density residential constructions with a large, central multi-unit "podium structure" and approximately 5 smaller multi-unit podium structures totaling approximately 272 housing units.

Redwood Road, Chevron—Oakland, CA
Project Manager. Mr. Flaherty reviewed the site history and prepared a work plan for regulatory agency approval to characterize reported soil contamination beneath a former fueling station ENGEO provided environmental services to remove the former LUST designated facility from the county's list of contaminated properties

Marina District Various PG&E Sites—San Francisco, CA
Project Manager. Mr. Flaherty managed the compilation and review of historic maps and air photographs, consultants reports, and archival records to help establish the histroy of development and filling in the Marina District of San Francisco. Efforts included the

development of a fill sequence timeline in the neighborhood and a graphic video showing three dimensional views of the various sequences of fill. ENGEO undertook an extensive review of public and private documents and photographs to develop a timeline for the placement of fill in the Marina District of San Francisco

Monarch Village - Senior Housing—Daly City, CA
Project Manager. Mr. Flaherty led the geotechnical and environmental review of the site conditions during the project design phase actively working with the owner and contractor. He also oversaw the site grading providing guidance for the characterization and disposal of contaminated soils Attached senior housing complex with construction of a three-story building over two levels of garage, two retail buildings, and related landscape and hardscape improvements with on-grade paved parking.

Tidewater Avenue—San Francisco, CA
Project Manager. Mr. Flaherty provided geotechnical and environmental consultation services to a group of industrial property owners located within the boundaries of the City of Oakland's Central Estuary Plan area. Mr. Flaherty has reviewed geotechnical engineering reports, geohazards (liquefaction analysis) reports and phase I and II environmental site assessment reports for the various property owners. He has provided input to the owners with regard to the various redevelopment plans considered by the City of Oakland and responded to requests by the owners to clarify City directives and requests made to the owners regarding access and use of their parcels by City of Oakland environmental consultants. ENGEO provided as-needed geotechnical and environmental consultation services to a group of industrial property owners located within the City of Oakland's Central Estuary Plan area.

Ashby Arts Mixed Use Development—Berkeley, CA
Project Manager. Mr. Flaherty managed and completed the project geotechnical exploration and provided environmental consultation to the design team. The Ashby Arts development consists of a five-story mixed-used podium structure. The ground level will contain retail and parking spaces while the 2nd to 5th floors will be 1-to-2 bedroom residential units along with common areas for the residents' use.

Hunters Point Shipyard Redevelopment, 'Parcel A'—San Francisco, CA
Principal Geologist. Mr. Flaherty was Principal in Charge for the geotechnical, geologic, and hydrologic design for the development of Parcel A at the Hunters Point Shipyard. He managed the production of the project geotechnical exploration report and the analysis and development of the project corrective grading plans and storm water management plan. He managed the mapping of the project bedrock and the implementation of a bedrock screening and sampling program to test for naturally-occurring asbestos in the site bedrock. The 70-acre project includes 1,800 residential units, approximately 25 acres of parks and open space, limited retail, and supporting infrastructure and roadways. Site preparation included construction of terraced soil nail walls and mechanically stabilized earth walls, geotechnical remediation of 13 landslides totaling over 500,000 cubic yards of soil, and project grading totaling nearly 1.5 million cubic yards.

APPENDIX G – NOISE ASSESSMENT

General Information

Serial Number	03788
Model	SoundExpert™ LxT
Firmware Version	2.206
Filename	ORLAND__.006
User	PMC User
Job Description	Noise Study
Location	Buena Vista/Gonzales_1

Measurement Description	
Start Time	Friday, 2014 October 31 11:06:11
Stop Time	Friday, 2014 October 31 11:21:11
Duration	00:15:00.0
Run Time	00:00:00.8
Pause	00:14:59.2
Pre Calibration	Friday, 2014 October 31 10:59:46
Post Calibration	None
Calibration Deviation	---

Note

Traffic on Buena Vista. Farm work to the north

Overall Data

LASeq		46.0	dB
LASmax	2014 Oct 31 11:06:11	46.2	dB
LZpeak (max)	2014 Oct 31 11:06:11	-99.9	dB
LASmin	2014 Oct 31 11:06:12	45.8	dB
LCSeq		63.6	dB
LASeq		46.0	dB
LCSeq - LASeq		17.6	dB
LAIeq		47.2	dB
LAeq		45.8	dB
LAIeq - LAeq		1.3	dB
Ldn		46.0	dB
LDay 07:00-23:00		46.0	dB
LNight 23:00-07:00		---	dB
Lden		46.0	dB
LDay 07:00-19:00		46.0	dB
LEvening 19:00-23:00		---	dB
LNight 23:00-07:00		---	dB
LASE		45.1	dB
# Overloads		0	
Overload Duration		0.0	s
# OBA Overloads		0	
OBA Overload Duration		0.0	s

Statistics

LAS5.00	46.2	dBA
LAS10.00	46.1	dBA
LAS33.30	46.1	dBA
LAS50.00	46.1	dBA
LAS66.60	46.0	dBA
LAS90.00	45.8	dBA

LAS > 85.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LAS > 115.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 135.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 137.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 140.0 dB (Exceedence Counts / Duration)	0 / 0.0	s

Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamp	PRMLxT1L
Microphone Correction	Off
Integration Method	Exponential
OBA Range	Normal
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	Z Weighting
OBA Max Spectrum	At Lmax

Under Range Limit	25.9	dB
Under Range Peak	79.8	dB
Noise Floor	16.2	dB
Overload	121.5	dB

1/1 Spectra

Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k
LZSeq	51.1	55.2	54.6	60.0	61.4	44.0	37.0	34.8	33.1	33.5	25.9	23.9
LZSmax	52.3	55.7	54.9	60.3	62.0	44.2	37.1	35.0	33.6	34.3	26.4	23.9
LZSmin	48.8	54.1	54.1	59.7	60.8	43.8	36.9	34.6	32.1	32.0	24.9	23.9

1/3 Spectra

Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LZSeq	48.1	47.5	44.7	53.7	48.4	47.0	49.5	48.5	51.5	51.8	55.2	55.9
LZSmax	49.1	48.2	45.2	53.9	49.6	47.7	49.9	48.7	51.8	52.1	56.0	56.4
LZSmin	44.9	47.0	42.9	53.3	47.1	45.7	48.7	47.8	50.3	51.5	54.5	55.5

Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LZSeq	59.0	57.5	45.3	38.8	39.3	39.2	33.4	31.3	30.4	31.1	29.1	29.2
LZSmax	59.3	58.1	45.5	39.0	39.4	39.5	33.7	31.4	30.7	31.4	29.3	29.4
LZSmin	58.7	56.9	44.6	38.4	39.1	38.9	33.1	31.1	30.2	31.0	28.9	28.8

Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LZSeq	29.1	27.9	27.6	29.8	30.0	25.1	23.8	20.0	17.3	15.8	16.7	22.4
LZSmax	29.6	28.3	28.3	30.7	30.8	25.8	24.4	20.4	17.5	15.9	16.7	22.4
LZSmin	28.4	26.9	26.0	27.6	28.8	24.3	22.6	19.1	16.9	15.8	16.6	22.3

Calibration History

Preamp	Date	dB re. 1V/Pa
Direct	01 Jul 2014 09:45:44	-27.0
PRMLxT1L	31 Oct 2014 10:59:41	-27.8
PRMLxT1L	15 Oct 2014 13:40:29	-27.8
PRMLxT1L	08 Oct 2014 08:57:55	-27.8
PRMLxT1L	08 Jul 2014 13:30:19	-27.7
PRMLxT1L	08 Jul 2014 09:22:52	-27.7
PRMLxT1L	25 Jun 2014 11:41:42	-27.8
PRMLxT1L	16 Jun 2014 23:15:06	-27.9
PRMLxT1L	15 Jun 2014 21:43:57	-27.9
PRMLxT1L	14 Jun 2014 19:34:17	-27.8
PRMLxT1L	12 Jun 2014 15:55:40	-27.9
PRMLxT1L	11 Jun 2014 14:34:51	-27.9

General Information

Serial Number	03788
Model	SoundExpert™ LxT
Firmware Version	2.206
Filename	ORLAND__.007
User	PMC User
Job Description	Noise Study
Location	Buena Vista/Gonzales 2

Measurement Description	
Start Time	Friday, 2014 October 31 11:24:49
Stop Time	Friday, 2014 October 31 11:39:49
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre Calibration	Friday, 2014 October 31 10:59:41
Post Calibration	None
Calibration Deviation	---

Note

Traffic on Buena Vista

Overall Data

LASeq		57.1	dB
LASmax	2014 Oct 31 11:31:51	72.5	dB
LZpeak (max)	2014 Oct 31 11:34:10	97.7	dB
LASmin	2014 Oct 31 11:26:29	36.1	dB
LCSeq		68.8	dB
LASeq		57.1	dB
LCSeq - LASeq		11.7	dB
LAIeq		59.7	dB
LAeq		57.1	dB
LAIeq - LAeq		2.6	dB
Ldn		57.1	dB
LDay 07:00-23:00		57.1	dB
LNight 23:00-07:00		---	dB
Lden		57.1	dB
LDay 07:00-19:00		57.1	dB
LEvening 19:00-23:00		---	dB
LNight 23:00-07:00		---	dB
LASE		86.7	dB
# Overloads		0	
Overload Duration		0.0	s
# OBA Overloads		0	
OBA Overload Duration		0.0	s

Statistics

LAS5.00	65.2	dBA
LAS10.00	59.8	dBA
LAS33.30	50.0	dBA
LAS50.00	46.7	dBA
LAS66.60	44.3	dBA
LAS90.00	39.4	dBA

LAS > 85.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LAS > 115.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 135.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 137.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 140.0 dB (Exceedence Counts / Duration)	0 / 0.0	s

Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamp	PRMLxT1L
Microphone Correction	Off
Integration Method	Exponential
OBA Range	Normal
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	Z Weighting
OBA Max Spectrum	At Lmax

Under Range Limit	25.9	dB
Under Range Peak	79.8	dB
Noise Floor	16.2	dB
Overload	121.5	dB

1/1 Spectra

Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k
LZSeq	58.4	55.0	55.0	61.6	67.3	58.3	51.5	52.8	47.8	38.9	31.3	29.4
LZSmax	61.3	67.9	66.9	68.7	72.4	64.3	66.4	70.0	65.2	57.1	49.3	37.9
LZSmin	39.1	46.4	43.0	40.2	37.5	32.0	30.7	31.1	26.9	23.3	19.8	22.3

1/3 Spectra

Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LZSeq	55.7	52.9	51.1	52.2	49.5	48.2	51.1	49.2	50.6	53.7	58.3	57.2
LZSmax	53.7	51.9	58.3	66.6	59.5	60.2	65.7	60.6	59.5	66.5	62.3	57.9
LZSmin	33.3	31.9	33.3	42.9	39.0	37.4	35.9	37.5	37.6	30.5	34.3	32.8

Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LZSeq	65.9	61.0	55.2	56.2	52.8	48.7	46.7	46.7	46.9	48.4	48.7	46.6
LZSmax	68.8	69.4	60.6	59.1	61.6	56.7	59.0	60.9	64.2	66.5	65.7	63.5
LZSmin	32.9	33.2	29.9	28.8	24.5	24.3	25.2	25.1	24.7	26.4	25.6	24.2

Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LZSeq	45.4	42.6	38.9	36.4	33.7	30.4	29.0	25.7	22.4	19.9	26.4	25.6
LZSmax	63.5	59.3	55.9	54.2	51.9	49.6	47.2	43.9	38.7	35.8	31.8	28.8
LZSmin	23.9	22.2	19.1	19.9	18.2	15.2	14.4	14.4	15.7	15.4	15.4	20.1

Calibration History

Preamp	Date	dB re. 1V/Pa
Direct	01 Jul 2014 09:45:44	-27.0
PRMLxT1L	31 Oct 2014 10:59:41	-27.8
PRMLxT1L	15 Oct 2014 13:40:29	-27.8
PRMLxT1L	08 Oct 2014 08:57:55	-27.8
PRMLxT1L	08 Jul 2014 13:30:19	-27.7
PRMLxT1L	08 Jul 2014 09:22:52	-27.7
PRMLxT1L	25 Jun 2014 11:41:42	-27.8
PRMLxT1L	16 Jun 2014 23:15:06	-27.9
PRMLxT1L	15 Jun 2014 21:43:57	-27.9
PRMLxT1L	14 Jun 2014 19:34:17	-27.8
PRMLxT1L	12 Jun 2014 15:55:40	-27.9
PRMLxT1L	11 Jun 2014 14:34:51	-27.9

General Information

Serial Number	03788
Model	SoundExpert™ LxT
Firmware Version	2.206
Filename	ORLAND__.008
User	PMC User
Job Description	Noise Study
Location	Buena Vista/Gonzales 3

Measurement Description	
Start Time	Friday, 2014 October 31 11:43:08
Stop Time	Friday, 2014 October 31 11:58:08
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre Calibration	Friday, 2014 October 31 10:59:41
Post Calibration	None
Calibration Deviation	---

Note

Traffic on Central, Schoolyard Noise

Overall Data

LASeq		52.4	dB
LASmax	2014 Oct 31 11:45:40	68.0	dB
LZpeak (max)	2014 Oct 31 11:55:18	92.3	dB
LASmin	2014 Oct 31 11:52:22	36.6	dB
LCSeq		62.0	dB
LASeq		52.4	dB
LCSeq - LASeq		9.6	dB
LAIeq		56.0	dB
LAeq		52.4	dB
LAIeq - LAeq		3.5	dB
Ldn		52.4	dB
LDay 07:00-23:00		52.4	dB
LNight 23:00-07:00		---	dB
Lden		52.4	dB
LDay 07:00-19:00		52.4	dB
LEvening 19:00-23:00		---	dB
LNight 23:00-07:00		---	dB
LASE		82.0	dB
# Overloads		0	
Overload Duration		0.0	s
# OBA Overloads		0	
OBA Overload Duration		0.0	s

Statistics

LAS5.00	59.1	dBA
LAS10.00	55.2	dBA
LAS33.30	47.3	dBA
LAS50.00	44.6	dBA
LAS66.60	42.8	dBA
LAS90.00	40.4	dBA

LAS > 85.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LAS > 115.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 135.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 137.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 140.0 dB (Exceedence Counts / Duration)	0 / 0.0	s

Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamp	PRMLxT1L
Microphone Correction	Off
Integration Method	Exponential
OBA Range	Normal
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	Z Weighting
OBA Max Spectrum	At Lmax

Under Range Limit	25.9	dB
Under Range Peak	79.8	dB
Noise Floor	16.2	dB
Overload	121.5	dB

1/1 Spectra

Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k
LZSeq	60.4	54.7	55.5	57.4	58.1	50.6	47.4	48.4	44.8	38.8	27.5	24.4
LZSmax	68.3	59.5	56.6	67.4	60.2	61.0	61.9	65.2	61.4	52.0	42.2	30.6
LZSmin	44.2	47.9	43.2	44.6	40.2	32.0	29.2	29.2	27.1	26.3	20.2	23.6

1/3 Spectra

Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LZSeq	57.7	54.9	52.7	51.2	49.4	48.7	49.7	51.5	50.7	53.3	52.9	51.5
LZSmax	68.1	63.0	58.6	60.5	54.1	53.4	52.5	51.2	51.3	52.7	67.1	55.2
LZSmin	38.1	38.3	38.2	42.3	35.4	41.8	27.2	35.8	39.3	38.6	39.5	35.9

Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LZSeq	54.4	54.3	50.6	48.3	44.7	43.1	42.4	42.5	43.0	44.0	43.9	43.4
LZSmax	55.5	57.3	53.4	56.6	57.3	55.7	54.6	57.5	58.4	59.3	60.2	61.7
LZSmin	36.8	34.4	30.1	29.1	26.5	24.7	25.0	23.7	24.4	24.0	24.2	23.4

Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LZSeq	42.1	39.4	37.1	34.5	34.9	32.3	25.0	21.4	19.1	17.3	17.2	22.5
LZSmax	58.9	56.4	53.3	49.4	46.4	44.4	39.7	37.0	33.5	28.2	23.4	23.9
LZSmin	24.1	21.4	20.6	22.3	16.7	18.4	14.9	14.3	15.6	15.7	16.5	21.1

Calibration History

Preamp	Date	dB re. 1V/Pa
Direct	01 Jul 2014 09:45:44	-27.0
PRMLxT1L	31 Oct 2014 10:59:41	-27.8
PRMLxT1L	15 Oct 2014 13:40:29	-27.8
PRMLxT1L	08 Oct 2014 08:57:55	-27.8
PRMLxT1L	08 Jul 2014 13:30:19	-27.7
PRMLxT1L	08 Jul 2014 09:22:52	-27.7
PRMLxT1L	25 Jun 2014 11:41:42	-27.8
PRMLxT1L	16 Jun 2014 23:15:06	-27.9
PRMLxT1L	15 Jun 2014 21:43:57	-27.9
PRMLxT1L	14 Jun 2014 19:34:17	-27.8
PRMLxT1L	12 Jun 2014 15:55:40	-27.9
PRMLxT1L	11 Jun 2014 14:34:51	-27.9

General Information

Serial Number	03788
Model	SoundExpert™ LxT
Firmware Version	2.206
Filename	ORLAND__.009
User	PMC User
Job Description	Noise Study
Location	Buena Vista/Gonzales 4

Measurement Description	
Start Time	Friday, 2014 October 31 12:01:06
Stop Time	Friday, 2014 October 31 12:16:06
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre Calibration	Friday, 2014 October 31 10:59:41
Post Calibration	None
Calibration Deviation	---

Note

Traffic on Central, yard work

Overall Data

LASeq		59.5	dB
LASmax	2014 Oct 31 12:02:22	80.5	dB
LZpeak (max)	2014 Oct 31 12:02:22	105.1	dB
LASmin	2014 Oct 31 12:06:07	36.5	dB
LCSeq		70.1	dB
LASeq		59.5	dB
LCSeq - LASeq		10.7	dB
LAIeq		62.6	dB
LAeq		59.5	dB
LAIeq - LAeq		3.2	dB
Ldn		59.5	dB
LDay 07:00-23:00		59.5	dB
LNight 23:00-07:00		---	dB
Lden		59.5	dB
LDay 07:00-19:00		59.5	dB
LEvening 19:00-23:00		---	dB
LNight 23:00-07:00		---	dB
LASE		89.0	dB
# Overloads		0	
Overload Duration		0.0	s
# OBA Overloads		0	
OBA Overload Duration		0.0	s

Statistics

LAS5.00	65.4	dBA
LAS10.00	62.7	dBA
LAS33.30	55.1	dBA
LAS50.00	50.9	dBA
LAS66.60	47.7	dBA
LAS90.00	43.7	dBA

LAS > 85.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LAS > 115.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 135.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 137.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 140.0 dB (Exceedence Counts / Duration)	0 / 0.0	s

Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamp	PRMLxT1L
Microphone Correction	Off
Integration Method	Exponential
OBA Range	Normal
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	Z Weighting
OBA Max Spectrum	At Lmax

Under Range Limit	25.9	dB
Under Range Peak	79.8	dB
Noise Floor	16.2	dB
Overload	121.5	dB

1/1 Spectra

Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k
LZSeq	61.2	56.4	57.8	65.8	67.1	59.6	55.5	55.2	49.7	43.1	36.3	40.6
LZSmax	63.5	63.4	70.6	88.8	86.0	83.9	77.9	73.6	69.3	66.3	59.1	52.5
LZSmin	42.3	43.4	44.3	44.0	40.1	34.5	32.8	31.8	25.1	19.8	19.1	22.8

1/3 Spectra

Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LZSeq	58.7	56.1	53.4	53.6	50.9	49.8	51.3	52.9	54.3	58.9	60.3	63.1
LZSmax	70.0	66.3	54.5	60.4	58.7	58.2	64.0	65.9	67.5	71.0	84.0	87.9
LZSmin	31.2	34.9	36.7	39.2	35.9	36.1	38.1	38.0	36.6	37.9	35.7	37.1

Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LZSeq	65.0	60.5	59.9	55.8	55.5	51.1	51.2	50.7	50.2	51.0	51.1	49.3
LZSmax	73.9	67.9	85.8	77.4	81.4	72.8	74.8	72.8	70.8	68.0	70.4	68.5
LZSmin	34.0	32.7	32.0	30.4	28.4	27.5	27.7	28.7	26.1	27.3	27.1	25.1

Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LZSeq	47.0	44.3	42.1	39.9	38.3	35.7	33.9	31.1	28.0	27.1	40.3	23.7
LZSmax	64.9	64.2	64.3	63.2	61.1	58.8	56.6	53.8	50.4	51.7	44.3	39.4
LZSmin	23.1	18.8	15.7	15.8	14.0	13.1	13.4	13.9	14.7	15.7	16.5	20.4

Calibration History

Preamp	Date	dB re. 1V/Pa
Direct	01 Jul 2014 09:45:44	-27.0
PRMLxT1L	31 Oct 2014 10:59:41	-27.8
PRMLxT1L	15 Oct 2014 13:40:29	-27.8
PRMLxT1L	08 Oct 2014 08:57:55	-27.8
PRMLxT1L	08 Jul 2014 13:30:19	-27.7
PRMLxT1L	08 Jul 2014 09:22:52	-27.7
PRMLxT1L	25 Jun 2014 11:41:42	-27.8
PRMLxT1L	16 Jun 2014 23:15:06	-27.9
PRMLxT1L	15 Jun 2014 21:43:57	-27.9
PRMLxT1L	14 Jun 2014 19:34:17	-27.8
PRMLxT1L	12 Jun 2014 15:55:40	-27.9
PRMLxT1L	11 Jun 2014 14:34:51	-27.9

TRAFFIC NOISE LEVELS

Project Number: 12-0092-004
Project Name: Buena Vista

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Analysis Scenario(s): Existing No Project
Source of Traffic Volumes: Hexagon
Community Noise Descriptor: L_{dn}: x CNEL: _____

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Traffic Noise Levels

Analysis Condition Roadway Segment	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor[1]	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	Peak Hou dB(A) L_{eq}	24-Hour dB(A) Ldn
Buena Vista Road - SR 156 to Miller R	Residential	2	0	0	3,000	30	75	0	0	1.8%	0.7%	0.0	56.1
Buena Vista Road - Miller Road to We	Residential	2	0	0	2,510	30	75	0	0	1.8%	0.7%	0.0	55.3
Miller Road - Buena Vista Road to Cer	Residential	2	0	0	1,470	30	75	0	0	1.8%	0.7%	0.0	53.0
Central Ave - Miller Road toFelice Dr	Residential	2	0	0	1,620	30	75	0	0	1.8%	0.7%	0.0	53.4
Central Ave - Miller Road west	Residential	2	0	0	2,080	30	75	0	0	1.8%	0.7%	0.0	54.5

[1] Distance is from the centerline of the roadway segment to the receptor location.

TRAFFIC NOISE LEVELS

Project Number: 12-0092-004
Project Name: Buena Vista

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Analysis Scenario(s): Existing Plus Project
Source of Traffic Volumes: Hexagon
Community Noise Descriptor: L_{dn}: x CNEL: _____

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Traffic Noise Levels

Analysis Condition Roadway Segment	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor[1]	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	Peak Hou dB(A) L_{eq}	24-Hour dB(A) Ldn
Buena Vista Road - SR 156 to Miller R	Residential	2	0	0	3,340	30	75	0	0	1.8%	0.7%	0.0	56.6
Buena Vista Road - Miller Road to We	Residential	2	0	0	2,740	30	75	0	0	1.8%	0.7%	0.0	55.7
Miller Road - Buena Vista Road to Cer	Residential	2	0	0	1,540	30	75	0	0	1.8%	0.7%	0.0	53.2
Central Ave - Miller Road to Felice Dr	Residential	2	0	0	1,860	30	75	0	0	1.8%	0.7%	0.0	54.0
Central Ave - Miller Road west	Residential	2	0	0	2,380	30	75	0	0	1.8%	0.7%	0.0	55.1

[1] Distance is from the centerline of the roadway segment to the receptor location.

TRAFFIC NOISE LEVELS

Project Number: 12-0092-004
Project Name: Buena Vista

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Analysis Scenario(s): Background No Project
Source of Traffic Volumes: Hexagon
Community Noise Descriptor: L_{dn}: x CNEL: _____

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Traffic Noise Levels

Analysis Condition Roadway Segment	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor[1]	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	Peak Hou dB(A) L_{eq}	24-Hour dB(A) Ldn
Buena Vista Road - SR 156 to Miller R	Residential	2	0	0	3,630	30	75	0	0	1.8%	0.7%	0.0	56.9
Buena Vista Road - Miller Road to We	Residential	2	0	0	3,040	30	75	0	0	1.8%	0.7%	0.0	56.2
Miller Road - Buena Vista Road to Cer	Residential	2	0	0	1,470	30	75	0	0	1.8%	0.7%	0.0	53.0
Central Ave - Miller Road to Felice Dr	Residential	2	0	0	1,620	30	75	0	0	1.8%	0.7%	0.0	53.4
Central Ave - Miller Road west	Residential	2	0	0	2,080	30	75	0	0	1.8%	0.7%	0.0	54.5

[1] Distance is from the centerline of the roadway segment to the receptor location.

TRAFFIC NOISE LEVELS

Project Number: 12-0092-004
Project Name: Buena Vista

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Analysis Scenario(s): Background + Project
Source of Traffic Volumes: Hexagon
Community Noise Descriptor: L_{dn}: x CNEL: _____

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Traffic Noise Levels

Analysis Condition Roadway Segment	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor[1]	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	Peak Hou dB(A) L_{eq}	24-Hour dB(A) Ldn
Buena Vista Road - SR 156 to Miller R	Residential	2	0	0	3,970	30	75	0	0	1.8%	0.7%	0.0	57.3
Buena Vista Road - Miller Road to We	Residential	2	0	0	3,270	30	75	0	0	1.8%	0.7%	0.0	56.5
Miller Road - Buena Vista Road to Cer	Residential	2	0	0	1,500	30	75	0	0	1.8%	0.7%	0.0	53.1
Central Ave - Miller Road to Felice Dr	Residential	2	0	0	1,620	30	75	0	0	1.8%	0.7%	0.0	53.4
Central Ave - Miller Road west	Residential	2	0	0	2,080	30	75	0	0	1.8%	0.7%	0.0	54.5

[1] Distance is from the centerline of the roadway segment to the receptor location.

TRAFFIC NOISE LEVELS

Project Number: 12-0092-004
Project Name: Buena Vista

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Analysis Scenario(s): Cumulative+Project
Source of Traffic Volumes: Hexagon
Community Noise Descriptor: L_{dn}: x CNEL: _____

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Traffic Noise Levels

Analysis Condition Roadway Segment	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor[1]	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	Peak Hou dB(A) L_{eq}	24-Hour dB(A) Ldn
Buena Vista Road - SR 156 to Miller R	Residential	2	0	0	6,620	30	75	0	0	1.8%	0.7%	0.0	59.5
Buena Vista Road - Miller Road to We	Residential	2	0	0	4,245	30	75	0	0	1.8%	0.7%	0.0	57.6
Miller Road - Buena Vista Road to Cer	Residential	2	0	0	1,452	30	75	0	0	1.8%	0.7%	0.0	53.0
Central Ave - Miller Road to Felice Dr	Residential	2	0	0	1,758	30	75	0	0	1.8%	0.7%	0.0	53.8
Central Ave - Miller Road west	Residential	2	0	0	2,380	30	75	0	0	1.8%	0.7%	0.0	55.1

[1] Distance is from the centerline of the roadway segment to the receptor location.

APPENDIX H – TRAFFIC IMPACT ANALYSIS

HEXAGON TRANSPORTATION CONSULTANTS, INC.

Rajkovich/Ivancovich Property Residential

Transportation Impact Analysis

Prepared for:

PMC Planning Group

October 30, 2014

Hexagon Office: 8070 Santa Teresa Blvd, Suite 230
Gilroy, CA 95020
Hexagon Job Number: 14RD16
Phone: 408.846.7412
Client: PMC Planning Group
Staff: RD, HT, GD

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Executive Summary

This report presents the results of the traffic impact analysis conducted for the proposed Rajkovich and Ivancovich Properties Residential development in Hollister, California. The sites are adjacent to one another and are evaluated as a single 103 unit single-family development within this study. Access to the project site would be provided via a new on-site roadway with connections to Central Avenue and Buena Vista Road. A description of each of the sites is provided below.

Rajkovich Property: This parcel is a vacant 9-acre parcel that is located within the City of Hollister and is zoned for medium density residential in the City of Hollister Municipal Code and the City of Hollister General Plan. The parcel is bounded by Amador Circle and Mariposa Court homes on the west, Buena Vista Road on the north, Calaveras Park and School on the east, and Central Avenue on the south. The City of Hollister Planning Commission approved an award of 91 residential unit allocations to this property in January 2010. The applicant would like to move forward with a tentative map to subdivide the property into residential lots. The Ivancovich parcel (Parcel 2 below) is located adjacent to the northeast corner of the Rajkovich Parcel.

Ivancovich Property: This parcel is a vacant 1-acre parcel that is located within unincorporated San Benito County and is designated as medium density residential in the City of Hollister General Plan. This parcel is bounded by Buena Vista Road on the north, Calaveras Park and School on the east, and the Rajkovich parcel on the south and west. The medium density residential designation for this property would allow a maximum of 12 residential dwellings to be developed on this parcel. The applicant is requesting to prezone and annexation of this property into the City of Hollister.

This traffic impact analysis documents the impacts to the surrounding transportation system associated with developing the proposed project. The potential impacts of the project were evaluated in accordance with the standards set forth by the City of Hollister, San Benito County, and Caltrans. The study included an analysis of 3 signalized intersections, 12 unsignalized intersections, and three roadway segments.

Traffic conditions were analyzed for the weekday AM and PM peak hours. The weekday AM peak-hour of traffic generally falls within the 7:00 to 9:00 AM period and the weekday PM peak-hour is typically in the 4:00 to 6:00 PM period. It is during these times that the most congested traffic conditions occur on an average day.

The following study intersections and roadway segments were evaluated:

Study Intersections

1. SR 156 and Buena Vista Road [CT]
2. Miller Road and Buena Vista Road
3. Westside Boulevard and Buena Vista Road
4. Line Street and Buena Vista Road
5. Locust Avenue and Buena Vista Road
6. San Benito Street and North Street/Santa Ana Road
7. Locust Avenue/College Street and Second Street

8. Felice Drive and Central Avenue
9. Westside Boulevard and Central Avenue
10. Line Street and Central Avenue
11. College Street and Central Avenue
12. Locust Avenue and Central Avenue
13. San Benito Street and Third Street
14. Westside Boulevard and San Juan Road/Fourth Street
15. Miller Road and Central Avenue

Intersections denoted with the superscript "^{CT}" are under the jurisdiction of Caltrans.

Roadway Segments

1. Central Avenue, Graf Road to Miller Road
2. Central Avenue, Miller Road to Felice Drive
3. Central Avenue, Felice Drive to Westside Boulevard

Scenario 1: *Existing Conditions.* Existing conditions were represented by existing peak-hour traffic volumes on the existing roadway network. Existing traffic volumes were obtained from recent traffic counts.

Scenario 2: *Existing plus Project Conditions.* Existing plus project conditions were represented by traffic volumes, with the project, on the existing roadway network. Traffic volumes with the project were estimated by adding to existing traffic volumes the traffic generated by the proposed project. Existing plus project conditions were evaluated relative to existing conditions in order to determine potential project impacts.

Scenario 3: *Background Conditions.* Background conditions were represented by adding trips from approved development projects to existing peak-hour traffic volumes.

Scenario 4: *Background plus Project Conditions.* Background plus project conditions were represented by traffic volumes, with the project, on the existing roadway network. Traffic volumes with the project were estimated by adding the traffic generated by the project to existing traffic volumes and trips from approved developments. Background plus project conditions were evaluated relative to background conditions in order to determine potential project impacts.

Scenario 5: *Cumulative Conditions.* Cumulative conditions represent future traffic volumes on the long-range future transportation network that would result from traffic growth projected to occur due to proposed but not yet approved (pending) development projects, in addition to trips from approved project trips and the proposed project.

Evaluation of Project Conditions

The evaluation of impacts associated with the proposed project is described below.

Project Trips

The magnitude of traffic generated by the proposed project was estimated by applying to the size of the project the appropriate trip generation rates, as published by the Institute of Transportation Engineers (ITE), in *Trip Generation Manual*, *ninth edition*. The project is estimated to generate 980 daily trips, with 77 trips occurring during the AM peak-hour and 103 trips occurring during the PM peak-hour.

Intersection Level of Service and Signal Warrant Analyses

Traffic impacts at the study intersections were identified based on a level of service standard of C for all study intersections. The results of the intersection level of service analysis are summarized in Table ES1.

Existing Plus Project Conditions

The results of the intersection level of service analysis indicates that the project would result in a significant impact at the SR 156 and Buena Vista Road intersection under existing plus project conditions based on applicable significance criteria. The impact and proposed improvements to mitigate the impact are described below.

Background Plus Project Conditions

The results of the intersection level of service analysis indicates that the project would result in a significant impact at the SR 156 and Buena Vista Road intersection under background plus project conditions based on applicable significance criteria. The impact and proposed improvements to mitigate the impact are described below.

Recommended Project Mitigation Measures

Described below are the recommended mitigation measures necessary to maintain the level of service standards and intersection operations under existing plus project conditions and background plus project conditions.

1. SR 156 and Buena Vista Road (Caltrans)

Mitigation Measures. The necessary improvements to improve the intersection level of service to acceptable levels consist of the installation of a traffic signal at the intersection. The developer may be required to pay a fair-share toward improvement costs at this intersection. With implementation of this mitigation measure, this impact would be less-than-significant. However, payment of a fee alone will not guarantee the timely construction of the identified improvements to mitigate the project impact. Therefore, in the event that the developer makes a fair-share contribution in the form of fee payment rather than constructing the improvement, this impact would be considered significant and unavoidable.

Evaluation of Cumulative Conditions

The results of the intersection level of service and signal warrant analyses under cumulative conditions are summarized in Table ES1.

The results indicate that the SR 156 and Buena Vista Road intersection is projected to operate at unacceptable level of service conditions and have traffic levels that meet the thresholds that warrant signalization under cumulative conditions.

Possible Improvements under Cumulative Conditions

Described below are the recommended improvements necessary to maintain acceptable operating conditions under cumulative conditions.

1. SR 156 and Buena Vista Road. The necessary improvements to improve the intersection level of service to acceptable levels under cumulative conditions consist of the installation of a traffic signal at the intersection.

Other Transportation Issues

Bicycle and Pedestrian Circulation

Currently the project site is not served directly by any bicycle facilities. However, class II bike lanes are provided on Westside Boulevard between Buena Vista Road and Nash Road, with the exception of two short segments. The City of Hollister 2005 General Plan indicates that most bicycling within the city is

done on roadway shoulders. The 2009 *San Benito County Bikeway and Pedestrian Master Plan* indicates that class II bike lanes are planned on the following roadways:

- Buena Vista Road, within Hollister City limits
- Central Avenue, between Bridge Road and Locust Avenue
- Third Street, between Locust Avenue and Sally Street
- San Juan Road, between SR 156 and Westside Boulevard
- Line Street, between Nash Road and Buena Vista Road
- San Felipe Road, north of Santa Ana Road

In addition, the following bicycle facilities also are proposed in the project vicinity:

- Class III bike route along Buena Vista Road, between SR 156 and Hollister City limits
- Class III bike route along Fourth Street, between Westside Boulevard and SR 25
- Class III bike route along South Street, between Westside Boulevard and SR 25
- Class III bike route along Monterey Street, between Nash Road and Fourth Street
- Class I multi-use path along the San Benito River

Sidewalks are missing along all undeveloped areas on Buena Vista Road, Central Avenue, and Fourth Street. The 2009 *San Benito County Bikeway and Pedestrian Master Plan* also includes a list of priority sidewalk gap improvement projects within the City of Hollister, which include various segments on Buena Vista Road, both east and west of the project site. These improvements are not funded but can be capital projects or installed with roadway improvement projects or development/redevelopment of the adjacent properties.

The current project site plan shows new sidewalks would be installed along the project frontages on Central Avenue and Buena Vista Road. However, even with the proposed project sidewalks along the project's frontages, sidewalks would continue to be missing along some segments of Buena Vista Road and Central Avenue. Pedestrians would be forced to walk along the edge of the roadway on segments with missing sidewalks.

One of the City of Hollister General Plan Goals is to "provide a variety of pedestrian and bicycle facilities to promote safe and efficient non-motorized vehicle circulation in Downtown and throughout Hollister." (Goal C2). The General Plan policies further emphasize pedestrian connectivity by working with local businesses, private developers, and public agencies to ensure provision of safe pedestrian pathways to major public facilities, schools, and employment centers.

Recommended Bicycle and Pedestrian Improvements

Installation of Sidewalks. It is recommended that with the development of the project area, sidewalks along both sides of all new streets within the project site be built. Additionally, a sidewalk on the south side of Buena Vista Road and on the north side of Central Avenue (both project site frontages) should be built to connect to adjacent pedestrian facilities along these streets. This would provide a continuous sidewalk connection from every proposed residential unit within the project site to existing and planned pedestrian facilities within the study area, such as the nearby Calaveras Elementary School and Park and the existing bus stops along Central Avenue.

Additionally, the frontage improvements on Buena Vista Road and Central Avenue should be designed to be consistent with San Benito County and City of Hollister roadway design standards and guidelines. Project frontage improvements should be designed to accommodate the future installation of a bike lane along Buena Vista Road and Central Avenue.

Contribute to Planned Bicycle Facilities in the Project Area. It is recommended that the proposed project contribute to the completion of planned bicycle facilities along Buena Vista Road and Central Avenue, if a funding mechanism has been established for these improvements. The contribution should be determined by the City of Hollister/San Benito County and it should be based on the project's contribution to the total projected growth in the study area.

Transit Service

There are currently three County Express bus lines (Blue Line, Green Line, and Red Line) which operate within the vicinity of the project. The nearest bus stops for the Blue and Green Lines is located along Central Avenue near its intersections with Miller Road and Felice Drive.

It can be assumed that some of the new project development residents could utilize public transportation. Applying an estimated three percent transit mode share, which is probably the highest that could be expected for the project, equates to approximately 2 new transit riders during the AM peak-hour and 3 new transit riders during the PM peak-hour. Assuming the existing transit service would remain unchanged, the estimated number of new transit riders using the bus services near the project site would equate to approximately 1-2 riders per bus line during the AM and PM peak hours. Therefore, the additional transit demand generated by the project would not be great enough to justify adding additional transit services in the study area.

Recommended Transit Service Improvements

Project frontage improvements should be designed with the potential future extension of transit services onto Buena Vista Road in mind. To that end, it is recommended that project frontage improvements on Buena Vista Road be designed to City of Hollister and San Benito County roadway design standards to accommodate transit vehicles, as necessary in the future.

Site Access and On-Site Circulation

A review of the project site plan was performed to determine if adequate site access would be provided. The site plan proposes one full-access entrance on Buena Vista Road and one full-access entrance on Central Avenue. A new on-site roadway would be constructed and would extend between Buena Vista Road and Central Avenue providing access to all residential units within the site from both roadways. The connection to Buena Vista Road would be provided via a new T-intersection. The access point along Central Avenue would be provided via a new north leg of the Western Court and Central Avenue intersection.

Based on the projected traffic volumes, the proposed project access points would adequately serve projected traffic demands and the intersections would operate satisfactorily without traffic signals. The design of the access roadway and intersections with Buena Vista Road and Central Avenue should adhere to City of Hollister design guidelines and standards. The final design must be approved by the City of Hollister.

The site layout allows for continuous traffic circulation. Corner radii and street widths within the site appear to be sufficient to allow for the circulation of large design vehicles such as garbage trucks and fire trucks. With the proposed internal roadway layout and adhering to City/County roadway design standards and guidelines, emergency vehicle access and circulation within the project site should be adequate, making every proposed residential unit within the project development accessible.

Recommended Improvements

The proposed project should adhere to City/County roadway design standards and guidelines when designing roadway widths and turn radii.

On-street parking should be restricted along “knuckles” (90-degree roadway bends) in order to provide adequate turn radii for larger trucks and emergency vehicles circulation.

Pedestrian connections should be provided at intersections where on-site roadways intersect existing streets, such as Buena Vista Road and Central Avenue.

Neighborhood Traffic Issues

An evaluation of indirect traffic related issues on three surrounding roadway segments was completed. Unlike the intersection level of service analysis methodology, which has established impact thresholds,

there are no adopted analysis methodologies or impact thresholds for the evaluation of neighborhood traffic issues. Therefore, this analysis is based on approximate volume ranges for specific roadway types, as prescribed in the City of Hollister General Plan. The analysis provides an indication of operational and/or safety issues that may arise due to a traffic volume increases as a result of the proposed project.

It is projected that the proposed project would add 159 or less daily trips (representing an increase of 22% when compared to existing daily traffic volumes) to each of the study roadway segments. However, even with the addition of project traffic, traffic volumes along each of the study roadway segments would continue to be well within the acceptable daily traffic thresholds identified in the City of Hollister General Plan.

Speed surveys also were conducted along the study roadway segments. All roadway segments currently have a posted speed limit of 25 mph. The speed surveys revealed the 85th percentile speeds along all three of the study roadway segments exceed the posted speed limit by approximately 5 mph.

Recommendations for Neighborhood Street Operations

It is recommended that enforcement be increased along Central Avenue, between Graf Road and Westside Boulevard, to ensure the posted speed limit is adhered to. Central Avenue also serves as a route to Calaveras Elementary School. Enforcement can include enhanced signage, temporary (during school peak hours) signage, and/or increased police patrolling. If enforcement is deemed ineffective, the implementation of traffic calming measures can be considered for implementation by the City.

The implementation of any traffic calming measures should be evaluated as part of a comprehensive traffic calming study for the area. The primary differences between a typical traffic engineering study and a traffic calming study is that a traffic calming study generally includes (1) more neighborhood involvement and (2) considers "quality of life" issues in addition to traffic capacity and safety issues. Generally, traffic calming is considered in a residential neighborhood when (1) the volume of traffic on a neighborhood street is incompatible with the surrounding land uses and/or roadway design or (2) the speed of traffic on a neighborhood street is excessive or unsafe. The traffic calming study would need to include the evaluation of all streets within the neighborhood to ensure that the implementation of traffic calming measures on one street do not result in adverse effects on other street locations within the neighborhood. There are no established procedures for the application of traffic calming devices and criteria for device installation vary widely by jurisdiction.

Though the evaluation of the effects of project traffic on surrounding residential streets identified no direct impacts, it is evident that existing travel speeds along Central Avenue exceed the posted speed limits. As such, the project would add traffic to locations with existing speeds that exceed the posted speed limits. The project could make a fair-share contribution towards the future installation of traffic calming measures or the preparation of a neighborhood traffic calming study if deemed necessary by the City.

Conformance with Safe Routes To School Program

The City of Hollister City Council, at a regular meeting held on April 21, 2014, adopted the Safe Routes to R.O. Hardin and Calaveras Elementary Schools Implementation Plan. The Safe Routes to School program is described in the report entitled *Calaveras Elementary and R.O. Hardin Elementary Safe Routes to School Needs Assessment and Preliminary Recommendations*, dated February 2014 by Alta Planning and Design. The Safe Routes to School program is designed to create safe and convenient opportunities to access schools, other than by automobile, such as walking, biking, carpooling, and taking public transportation. The report identifies five key components to the success of the program:

1. Engineering – provide an adequate pedestrian network, which include bicycle facilities, bicycle parking, sidewalks, signage, and maintenance
2. Education – provide programs to improve safety and awareness
3. Encouragement – provide suggested routes to school maps and create events that reward current walkers/bicyclists and motivate more people to try walking/biking, such as walk/bike to school days

4. Enforcement – create programs that reinforce safe walking/biking
5. Evaluation – monitor the program

The adopted Safe Routes to School program to Calaveras and R.O. Hardin Elementary schools includes a list of recommended engineering improvements specific to each school area. Calaveras Elementary School is located on Buena Vista Road, approximately 1/3 of a mile east of the project site.

Identified Improvements in the Vicinity of Calaveras Elementary School

Various physical improvements to the roadway network and intersections providing access to Calaveras Elementary School are identified in the adopted Safe Routes to School program. Identified improvements in the immediate project area include:

- Install missing sidewalks along the south side of Buena Vista Road, west of the school.
- Stripe bike lanes all along Buena Vista Road.
- Construct curb extensions, stripe high visibility yellow crosswalks, and stripe advance stop lines at the Miller Road/Buena Vista Road and Westside Boulevard/Buena Vista Road intersections.
- Stripe high visibility yellow crosswalks and stripe advance stop lines at the Central Avenue and Felice Drive intersection.
- Conduct a stop sign warrant analysis. Possible curb extensions, pedestrian warning signage, and stripe high visibility yellow crosswalks at Westside Boulevard and Central Avenue.

Other recommended improvements include enforcement by the City of Hollister Police Department to reduce observed driver violations, such as driving over 25 mph within a school zone (specifically along Buena Vista Road), use of cell phones while driving, not coming to a complete stop at stop-controlled intersections, and not using turn signals, among others.

Project's School Access Demand

With the development of the proposed project, there will be an increase in non-vehicular travel to/from land uses surrounding the project, including Calaveras Elementary School. This will increase the need for a complete pedestrian network. Therefore, the proposed project should work with the City of Hollister to contribute to the implementation of any improvements that would help enhance pedestrian circulation in the study area, including the improvements identified in the adopted Safe to School Routes document.

Recommended Safe Route to School Improvements

The proposed project should work with the City of Hollister to contribute to the implementation of any improvements that would help enhance pedestrian circulation in the study area, including the improvements identified above and within the adopted Safe to School Routes document.

Table ES 1
Intersection Level of Service and Signal Warrant Analyses Summary

							Existing			Existing Plus Project				Background			Background Plus Project				Cumulative		
#	Intersection	Existing Int. Control	Jurisdiction	LOS Standard	Peak Hour	Count Date	Warrant Met?[4]	Delay[1]	LOS	Warrant Met?[4]	Delay[1]	LOS	Change in Delay[2]	Warrant Met?[4]	Delay[1]	LOS	Warrant Met?[4]	Delay[1]	LOS	Change in Delay[3]	Warrant Met?[4]	Delay[1]	LOS
1	SR 156 and Buena Vista Road	Two-Way Stop	Caltrans	C	AM	08/27/14	**Yes**	15.0	C	**Yes**	15.2	C	0.2	**Yes**	15.7	C	**Yes**	15.9	C	0.2	**Yes**	18.2	C
					PM	08/27/14	**Yes**	**40.5**	**E**	**Yes**	**43.6**	**E**	**3.1**	**Yes**	**48.3**	**E**	**Yes**	**53.0**	**F**	**4.7**	**Yes**	**195.4**	**F**
2	Miller Road and Buena Vista Road	Two-Way Stop	City	C	AM	08/27/14	No	10.4	B	No	10.5	B	0.1	No	10.7	B	No	10.8	B	0.1	No	12.6	B
					PM	08/27/14	No	11.0	B	No	11.2	B	0.2	No	11.5	B	No	11.7	B	0.2	No	15.0	B
3	Westside Boulevard and Buena Vista Road	Two-Way Stop	City	C	AM	03/27/13	No	11.1	B	No	11.3	B	0.2	No	11.6	B	No	11.7	B	0.1	No	18.6	C
					PM	03/27/13	No	10.0	B	No	10.1	B	0.1	No	10.2	B	No	10.4	B	0.2	No	15.0	C
4	Line Street and Buena Vista Road	One-Way Stop	City	C	AM	03/27/13	No	9.4	A	No	9.5	A	0.1	No	9.4	A	No	9.5	A	0.1	No	13.3	B
					PM	03/27/13	No	9.0	A	No	9.0	A	0.0	No	9.0	A	No	9.0	A	0.0	No	11.8	B
5	Locust Avenue and Buena Vista Road	All-Way Stop	City	C	AM	03/27/13	No	7.1	A	No	7.2	A	0.1	No	7.1	A	No	7.2	A	0.1	No	9.1	A
					PM	03/27/13	No	7.0	A	No	7.1	A	0.1	No	7.0	A	No	7.1	A	0.1	No	9.3	A
6	San Benito Street and North Street/Santa Ana Road	Signal	City	C	AM	03/27/13	--	18.0	B	--	17.9	B	-0.1	--	18.2	B	--	18.2	B	0.0	--	21.2	C
					PM	03/27/13	--	15.5	B	--	15.2	B	-0.3	--	15.6	B	--	15.5	B	-0.1	--	19.8	B
7	Locust Avenue/College Street and Second Street	All-Way Stop	City	C	AM	03/27/13	No	7.3	A	No	7.4	A	0.1	No	7.3	A	No	7.4	A	0.1	No	7.2	A
					PM	03/27/13	No	7.2	A	No	7.2	A	0.0	No	7.2	A	No	7.2	A	0.0	No	7.1	A
8	Felice Drive and Central Avenue	All-Way Stop	City	C	AM	08/27/14	No	7.4	A	No	7.4	A	0.0	No	7.4	A	No	7.4	A	0.0	No	7.5	A
					PM	08/27/14	No	7.5	A	No	7.6	A	0.1	No	7.5	A	No	7.6	A	0.1	No	7.7	A
9	Westside Boulevard and Central Avenue	Two-Way Stop	City	C	AM	08/27/14	No	12.1	B	No	12.3	B	0.2	No	12.5	B	No	12.7	B	0.2	No	13.3	B
					PM	08/27/14	No	12.0	B	No	12.4	B	0.4	No	12.7	B	No	13.2	B	0.5	No	14.8	B
10	Line Street and Central Avenue	Two-Way Stop	City	C	AM	08/27/14	No	9.4	A	No	9.5	A	0.1	No	9.4	A	No	9.5	A	0.1	No	9.6	A
					PM	08/27/14	No	9.9	A	No	10.0	B	0.1	No	9.9	A	No	10.0	B	0.1	No	10.3	B
11	College Street and Central Avenue	Two-Way Stop	City	C	AM	08/27/14	No	9.5	A	No	9.7	A	0.2	No	9.5	A	No	9.7	A	0.2	No	9.8	A
					PM	08/27/14	No	9.9	A	No	10.0	B	0.1	No	9.9	A	No	10.0	B	0.1	No	10.2	B
12	Locust Avenue and Central Avenue	Two-Way Stop	City	C	AM	03/27/13	No	11.1	B	No	11.3	B	0.2	No	11.1	B	No	11.3	B	0.2	No	10.5	B
					PM	03/27/13	No	10.4	B	No	10.6	B	0.2	No	10.4	B	No	10.6	B	0.2	No	10.2	B
13	San Benito Street and Third Street	Signal	City	C	AM	03/27/13	--	15.0	B	--	15.5	B	0.5	--	14.6	B	--	15.2	B	0.6	--	14.7	B
					PM	03/27/13	--	18.2	B	--	18.6	B	0.4	--	17.8	B	--	18.3	B	0.5	--	17.6	B
14	Westside Boulevard and San Juan Road/Fourth Street	Signal	City	C	AM	03/27/13	--	17.9	B	--	18.0	B	0.1	--	17.8	B	--	17.9	B	0.1	--	19.8	B
					PM	03/27/13	--	13.9	B	--	14.1	B	0.2	--	15.1	B	--	15.3	B	0.2	--	17.9	B
15	Miller Road and Central Avenue	All-Way Stop	City	C	AM	09/02/14	No	7.8	A	No	8.0	A	0.2	No	7.8	A	No	8.0	A	0.2	No	8.0	A
					PM	09/02/14	No	8.0	A	No	8.2	A	0.2	No	8.0	A	No	8.2	A	0.2	No	8.2	A

Notes:
[1]The reported delay and corresponding level of service for signalized and all-way stop-controlled intersections represents the average delay for all approaches at the intersection.
The reported delay and corresponding level of service for one- and two-way stop-controlled intersections are based on the stop-controlled approach with the highest delay.
[2] Change in delay measured relative to existing conditions.
[3] Change in delay measured relative to background conditions.
[4] Signal warrant analysis is not applicable to signalized intersections.
Bold indicates unacceptable LOS/signal warrant met.
Bold and boxed indicate significant impact.

1. Introduction

This report presents the results of the traffic impact analysis conducted for the proposed Rajkovich/Ivancovich Property Residential development in Hollister, California. The sites are adjacent to one another and are evaluated as a single 103 unit single-family development within this study. Access to the project site would be provided via a new on-site roadway with connections to Central Avenue and Buena Vista Road. A description of each of the sites is provided below.

Rajkovich Property: This parcel is a vacant 9-acre parcel that is located within the City of Hollister and is zoned for medium density residential in the City of Hollister Municipal Code and the City of Hollister General Plan. The parcel is bounded by Amador Circle and Mariposa Court homes on the west, Buena Vista Road on the north, Calaveras Park and School on the east, and Central Avenue on the south. The City of Hollister Planning Commission approved an award of 91 residential unit allocations to this property in January 2010. The applicant would like to move forward with a tentative map to subdivide the property into residential lots. The Ivancovich parcel (Parcel 2 below) is located adjacent to the northeast corner of the Rajkovich Parcel.

Ivancovich Property: This parcel is a vacant 1-acre parcel that is located within unincorporated San Benito County and is designated as medium density residential in the City of Hollister General Plan. This parcel is bounded by Buena Vista Road on the north, Calaveras Park and School on the east, and the Rajkovich parcel on the south and west. The medium density residential designation for this property would allow a maximum of 12 residential dwellings to be developed on this parcel. The applicant is requesting to prezone and annexation of this property into the City of Hollister.

The project site location and the surrounding study area are shown on Figure 1. The project site plans is shown on Figure 2.

Scope of Study

This traffic impact analysis documents the impacts to the surrounding transportation system associated with developing the proposed project. The potential impacts of the project were evaluated in accordance with the standards set forth by the City of Hollister, San Benito County, and Caltrans. The study included an analysis of 3 signalized intersections, 12 unsignalized intersections, and three roadway segments.

Traffic conditions were analyzed for the weekday AM and PM peak hours of traffic. The weekday AM peak-hour of traffic generally falls within the 7:00 to 9:00 AM period and the weekday PM peak-hour is typically in the 4:00 to 6:00 PM period. It is during these times that the most congested traffic conditions occur on an average day. The study intersections are listed below and shown on Figure 1.

Figure 1
Site Location and Study Intersections

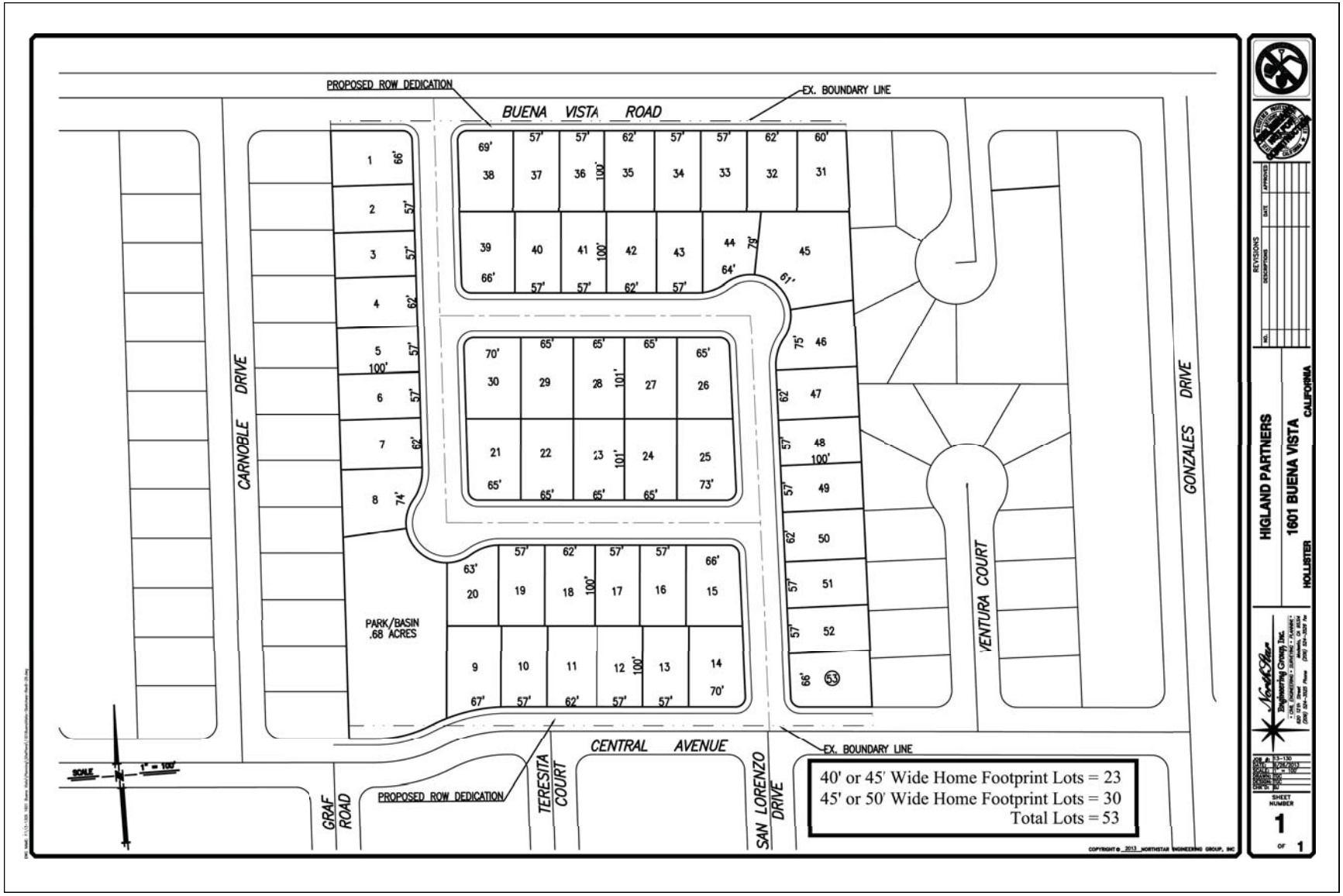


Figure 2
Project Site Plan

Study Intersections

1. SR 156 and Buena Vista Road [CT]
2. Miller Road and Buena Vista Road
3. Westside Boulevard and Buena Vista Road
4. Line Street and Buena Vista Road
5. Locust Avenue and Buena Vista Road
6. San Benito Street and North Street/Santa Ana Road
7. Locust Avenue/College Street and Second Street
8. Felice Drive and Central Avenue
9. Westside Boulevard and Central Avenue
10. Line Street and Central Avenue
11. College Street and Central Avenue
12. Locust Avenue and Central Avenue
13. San Benito Street and Third Street
14. Westside Boulevard and San Juan Road/Fourth Street
15. Miller Road and Central Avenue

Intersections denoted with the superscript "[CT]" are under the jurisdiction of Caltrans.

Roadway Segments

1. Central Avenue, Graf Road to Miller Road
2. Central Avenue, Miller Road to Felice Drive
3. Central Avenue, Felice Drive to Westside Boulevard

Traffic conditions were evaluated for the following scenarios:

Scenario 1: *Existing Conditions.* Existing conditions were represented by existing peak-hour traffic volumes on the existing roadway network. Existing traffic volumes were obtained from recent traffic counts.

Scenario 2: *Existing plus Project Conditions.* Existing plus project conditions were represented by traffic volumes, with the project, on the existing roadway network. Traffic volumes with the project were estimated by adding to existing traffic volumes the traffic generated by the proposed project. Existing plus project conditions were evaluated relative to existing conditions in order to determine potential project impacts.

Scenario 3: *Background Conditions.* Background conditions were represented by adding trips from approved development projects to existing peak-hour traffic volumes.

Scenario 4: *Background plus Project Conditions.* Background plus project conditions were represented by traffic volumes, with the project, on the existing roadway network. Traffic volumes with the project were estimated by adding the traffic generated by the project to existing traffic volumes and trips from approved developments. Background plus project conditions were evaluated relative to background conditions in order to determine potential project impacts.

Scenario 5: *Cumulative Conditions.* Cumulative conditions represent future traffic volumes on the future transportation network that would result from traffic growth projected to occur due to proposed but not yet approved (pending) development projects, in addition to trips from approved project trips and the proposed project.

Methodology

This section presents the methods used to determine the traffic conditions for each scenario described above. It includes descriptions of the data requirements, the analysis methodologies, and the applicable level of service standards.

Data Requirements

The data required for the analysis were obtained from new traffic counts, previous traffic studies, the City of Hollister, San Benito County, and field observations. The following data were collected from these sources:

- existing traffic volumes
- lane configurations and traffic control
- signal timing and phasing (for signalized intersections)
- approved and pending developments (size, use, and location)

Intersection Level of Service Standards and Analysis Methodologies

Traffic conditions at the study intersections were evaluated using level of service (LOS). *Level of Service* is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. The various levels of service are based on the average amount of delay incurred by drivers traveling through the intersection. The intersection analysis methods are described below.

The level of service standard for intersections under the jurisdictions of the City of Hollister and Caltrans is LOS C. The level of service standard for intersections under the jurisdiction of San Benito County is LOS D.

Signalized Intersections

The level of service methodology chosen for the analysis of signalized study intersections is TRAFFIX. TRAFFIX employs the *2000 Highway Capacity Manual* (HCM) methodology for the evaluation of signalized intersection level of service. TRAFFIX evaluates signalized intersection operations based on average control delay time for all vehicles at the intersection. *Control delay* is the amount of delay that is attributed to the particular traffic control device at the intersection, and includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The correlation between average delay and level of service for signalized intersections is shown in Table 1.

Unsignalized Intersections

TRAFFIX is also the methodology used to determine the level of service for unsignalized intersections, which is based on the *2000 Highway Capacity Manual* methodology for unsignalized intersection analysis. This method is applicable for both two-way and all-way stop-controlled intersections. For the analysis of stop-controlled intersections, the *2000 HCM* methodology evaluates intersection operations on the basis of average control delay time for all vehicles on the stop-controlled approaches. For the purpose of reporting level of service for one- and two-way stop-controlled intersections, the delay and corresponding level of service for the stop-controlled minor street approach with the highest delay is reported. For all-way stop-controlled intersections, the reported average delay and corresponding level of service is the average for all approaches at the intersection. The correlation between average control delay and level of service for unsignalized intersections is shown in Table 2.

Signal Warrants

The level of service analysis at unsignalized intersections is supplemented with an assessment of the need for signalization of the intersection. This assessment is made on the basis of signal warrant criteria adopted by Caltrans. For this study, the need for signalization is assessed on the basis of the peak-hour traffic signal warrant, Warrant #3, described in the *2012 California Manual on Uniform Traffic Control*

Table 1
Signalized Intersection Level of Service Definitions Based on Control Delay

Level of Service	Description	Average Control Delay Per Vehicle (Sec.)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	Up to 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.1 to 80.0
F	Operation with delays unacceptable to most drivers occurring due to oversaturation, poor progression, or very long cycle lengths.	Greater than 80.0

Source: Transportation Research Board, *Highway Capacity Manual 2000,(Washington, D.C., 2000)*

Table 2
Unsignalized Intersection Level of Service Definitions Based on Control Delay

Level of Service	Description	Average Control Delay Per Vehicle (Sec.)
A	Operations with very low delays occurring with favorable progression.	Up to 10.0
B	Operations with low delays occurring with good progression.	10.1 to 15.0
C	Operations with average delays resulting from fair progression.	15.1 to 25.0
D	Operation with longer delays due to a combination of unfavorable progression of high V/C ratios.	25.1 to 35.0
E	Operation with high delay values indicating poor progression and high V/C ratios. This is considered to be the limited of acceptable delay.	35.1 to 50.0
F	Operation with delays unacceptable to most drivers occurring due to oversaturation and poor progression.	Greater than 50.0

Source: Transportation Research Board, *2000 Highway Capacity Manual.* (Washington, D.C., 2000)

Devices (CAMUTCD). This method provides an indication of whether traffic conditions and peak-hour traffic levels are, or would be, sufficient to justify installation of a traffic signal. Other traffic signal warrants are available, however, they cannot be checked under future conditions (project and cumulative) because they rely on data for which forecasts are not available (such as accidents, pedestrian volume, and four- or eight-hour vehicle volumes).

The decision to install a traffic signal should not be based purely on the warrants alone. Instead, the installation of a signal should be considered and further analysis performed when one or more of the warrants are met. Additionally, engineering judgment is exercised on a case-by-case basis to evaluate the effect a traffic signal will have on certain types of accidents and traffic conditions at the subject intersection as well as at adjacent intersections.

Report Organization

The remainder of this report is divided into seven chapters. Chapter 2 describes existing conditions in terms of the existing roadway network, transit service, and existing bicycle and pedestrian facilities. Chapter 3 describes the method used to estimate project traffic under existing plus project conditions and its impact on the existing transportation system and describes the recommended mitigation measures. Chapter 4 presents the intersection levels of service under background conditions with the addition of traffic from approved development projects. Chapter 5 presents the intersection level of service analysis under background plus project conditions and its impact on the existing transportation system and describes the recommended mitigation measures. Chapter 6 presents the traffic conditions in the study area under cumulative conditions with traffic from the proposed project. Chapter 7 contains an evaluation of other transportation-related issues than may not be considered environmental issues, and may not be evaluated in the environmental assessment, but have been included in the traffic study to meet the requirements of the local jurisdiction. Chapter 8 presents the conclusions of the traffic impact analysis.

2. Existing Conditions

This chapter describes the existing conditions for all of the major transportation facilities in the vicinity of the site, including the roadway network, transit service, and bicycle and pedestrian facilities.

Existing Roadway Network

Regional access to the project area is provided by State Routes 25 and 156 while local access to the project area is provided by a variety of local streets in the study area. These facilities are described below and shown on Figure 1.

State Route 25 is a two-lane highway that carries regional traffic between Gilroy and Hollister. It begins at its junction with Highway 101 in Gilroy and extends southward through Hollister towards Paicines.

State Route 156 is generally a two-lane highway that carries regional traffic between Highway 101 and Highway 152. State Route 156 is a major roadway for trucks traveling between Highway 101 and Interstate 5. Between Hollister and San Juan Bautista, SR 156 is a two-lane highway. Between San Juan Bautista and US 101, SR 156 is a four-lane divided highway.

San Benito Street is a two-lane, north-south arterial roadway that makes a transition from San Felipe Road in the northern part of Hollister and extends southward through downtown Hollister to Union Road.

Line Street is a two-lane north-south collector street that begins at Nash Road and extends northward to Buena Vista Road.

Westside Boulevard is a two-lane north-south collector street that is located west of the project site and stretches from Nash Road in the south to Buena Vista Road in the north. North of Buena Vista Road, it becomes Westside Road. Westside Boulevard has class II bike facilities throughout most of its entire length. Access to the project site from Westside Boulevard is provided via Buena Vista Road and Central Avenue.

Miller Road is a two-lane north-south street that begins at Fourth Street and extends northward past Buena Vista Road where it terminates at its intersection with Westside Road.

Buena Vista Road is a two-lane east-west collector street that begins at SR 156 and extends eastward to Locust Avenue where it changes designation to North Street. With the planned North Street Extension, a continuous connection between Buena Vista Road and Santa Ana Road will be provided. In the vicinity of the project site, the posted speed limit along Buena Vista Road is 30 MPH. Buena Vista Road would provide direct access to the project site via a new intersection.

Central Avenue is an east-west arterial that extends from Graf Road eastward to Locust Avenue. Access to the project site from Central Avenue would be provided by the addition of a new north approach to its intersection with Western Court.

San Juan Road/Fourth Street is an east/west two-lane major collector street that begins to the west at its intersection with SR 156 and extends eastward transitioning into Fourth Street at Westside Boulevard. Fourth Street again changes designation to Meridian Street at its intersection with McCray Street, east of San Benito Street. San Juan Road/Fourth Street provides access to Buena Vista Road through Locust Avenue, College Street, Line Street, Westside Boulevard, and Miller Road.

North Street currently consists of a short undeveloped roadway segment between Monterey Street and San Benito Street. Construction of the two-lane extension of North Street, between Locust Avenue and Monterey Street, is a funded improvement that will be completed in conjunction with the development of the adjacent undeveloped areas. North Street changes designation west of Locust Avenue to Buena Vista Road and east of San Benito Street to Santa Ana Road. With the planned extension, a continuous roadway would be provided connecting Buena Vista Road and Santa Ana Road.

Existing Bicycle and Pedestrian Facilities

Bicycle facilities are divided into three classes of relative significance. Class I bikeways are bike paths that are physically separated from motor vehicles and offer two-way bicycle travel on a separate path. Class II bikeways are striped bike lanes on roadways that are marked by signage and pavement markings. Class III bikeways are bike routes and only have signs to help guide bicyclists on recommended routes to certain locations. Currently the project site is not served directly by any bicycle facilities. However, class II bike lanes are provided on Westside Boulevard between Buena Vista Road and Nash Road, with the exception of two short segments. The locations of existing bicycle facilities are shown on Figure 3.

The City of Hollister 2005 General Plan indicates that most bicycling within the city is done on roadway shoulders. The 2009 *San Benito County Bikeway and Pedestrian Master Plan* indicates that class II bike lanes are planned on the following roadways:

- Buena Vista Road, within Hollister City limits
- Central Avenue, between Bridge Road and Locust Avenue
- Third Street, between Locust Avenue and Sally Street
- San Juan Road, between SR 156 and Westside Boulevard
- Line Street, between Nash Road and Buena Vista Road
- San Felipe Road, north of Santa Ana Road

In addition, the following bicycle facilities also are proposed in the project vicinity:

- Class III bike route along Buena Vista Road, between SR 156 and Hollister City limits
- Class III bike route along Fourth Street, between Westside Boulevard and SR 25
- Class III bike route along South Street, between Westside Boulevard and SR 25
- Class III bike route along Monterey Street, between Nash Road and Fourth Street
- Class I multi-use path along the San Benito River

Sidewalks are found along most developed areas in the vicinity of the project site, including residential neighborhoods west, south, and east of the project site. However, sidewalks are missing along all undeveloped areas on Buena Vista Road, Central Avenue, and Fourth Street. The north side of Buena Vista Road does not have sidewalks. Both Central Avenue and Buena Vista Road have segments with no sidewalks, including the project frontages on both roads, between Westside Boulevard and the project site.

Figure 3
Existing Bicycle Facilities

Existing Transit Service

Transit service to the project area is provided by County Express Transit System. The transit services provided in the City are described below and shown on Figure 4.

Local Bus Service

County Express operates several fixed-route buses in Hollister and San Benito County. There are currently three County Express bus lines (Blue Line, Green Line, and Red Line) which operate within the vicinity of the project site. Generally, the bus lines are routed in opposing directions and circle the central portion of the City. The project site is served directly by the Blue and Green Lines on Central Avenue. The nearest bus stops for the Blue and Green Lines are located along Central Avenue, near its intersections with Miller Road and Felice Drive.

The Blue Line provides service from approximately 6:40 AM to 5:50 PM (with no service between 9:06 AM and 2:13 PM) with approximately 45-minute headways during the peak hours. The Green Line provides service from approximately 6:30 AM to 5:45 PM (with no service between 11:00 AM and 2:11 PM) with approximately 30 to 45-minute headways during the peak hours.

Dial-A-Ride Service

Areas not served by the fixed-route bus service are eligible for Dial-a-Ride service. County Express provides the Dial-a-Ride service to Northern San Benito County, including Hollister, San Juan Bautista, and Tres Pinos, on weekdays between 6 AM and 6 PM and on weekends between 9 AM and 3 PM. County Express Transit System provides two types of Dial-a-Ride service – general public and paratransit. General public Dial-a-Ride serves those persons whose trips begin or end in a location more than three-quarters of a mile from the fixed route. Paratransit service provides rides to persons who have been determined to be Americans with Disabilities Act (ADA) eligible through the Local Transit Authority application process. Appointments for Dial-a-Ride service can be made up to 14 days in advance or on the day of the ride. However, same day scheduling is subject to a $1.00 convenience fee and availability.

Inter-County Service

County Express Transit System's inter-county service includes service to the Gilroy Transit Center and Gavilan Community College. Shuttle service to the Gilroy Transit Center and Gavilan Community College (school year only) operates Monday through Friday from 6:55 AM to 6:15 PM and connects to six trains (Caltrain) per day operating between Gilroy and San Jose.

Existing Intersection Lane Configurations and Traffic Controls

The existing lane configurations and traffic controls at the study intersections were determined by observations in the field and are shown on Figure 5.

Existing Traffic Volumes

Existing weekday AM and PM peak-hour traffic volumes were obtained from new intersection turning movement counts conducted in 2013 and 2014. The existing peak-hour intersection volumes are shown on Figure 6.

Caltrans requires its intersections to be analyzed using peak 15-minute flow rates. Therefore, the peak one-hour traffic volumes used in this analysis for the Caltrans intersection were calculated by multiplying the peak 15-minute volumes within each peak-hour by four.

The traffic count data are included in Appendix A. Peak-hour intersection turning movement volumes for all intersections and study scenarios are tabulated in Appendix B.

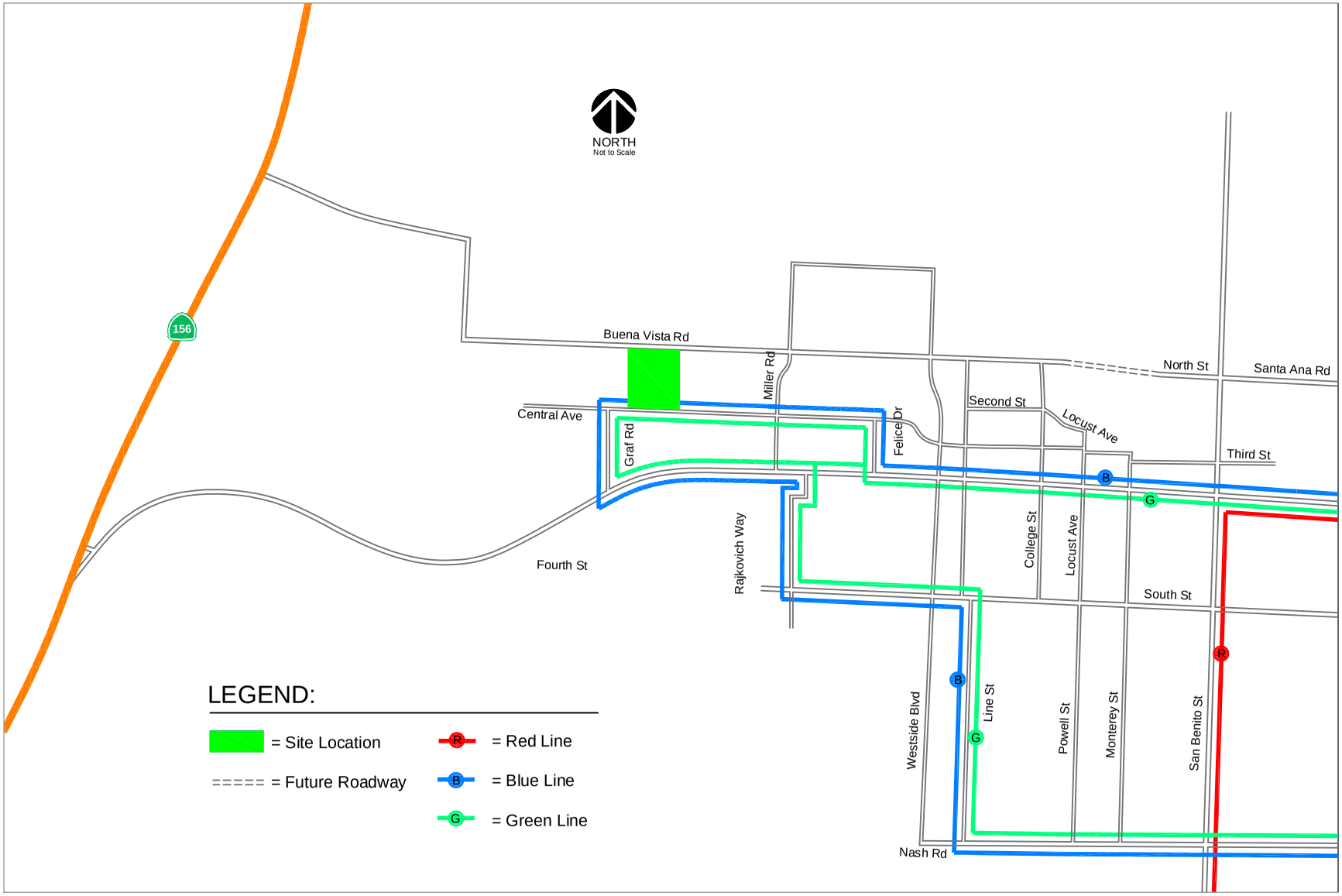


Figure 4
Existing Transit Service

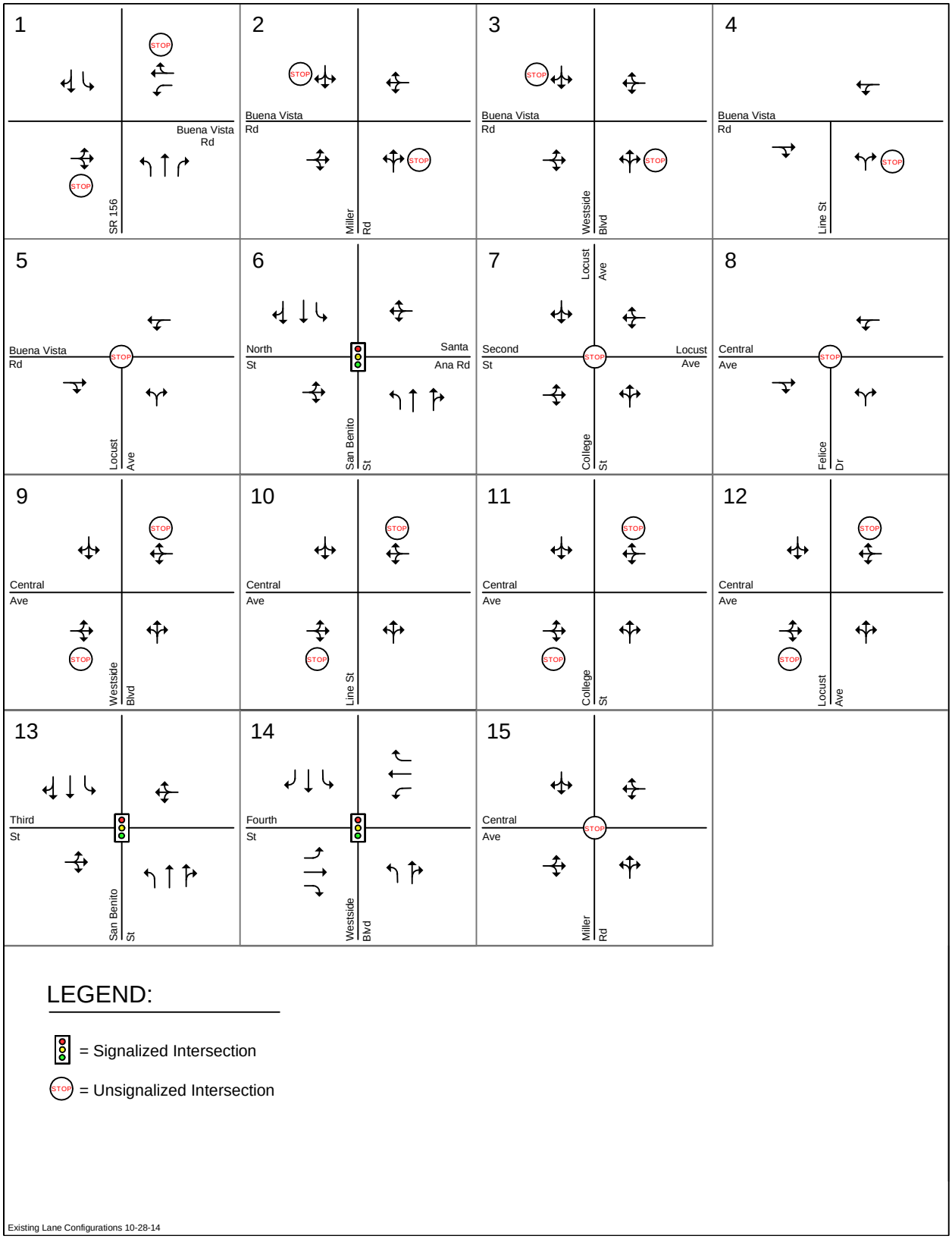


Figure 5
Existing Lane Configurations

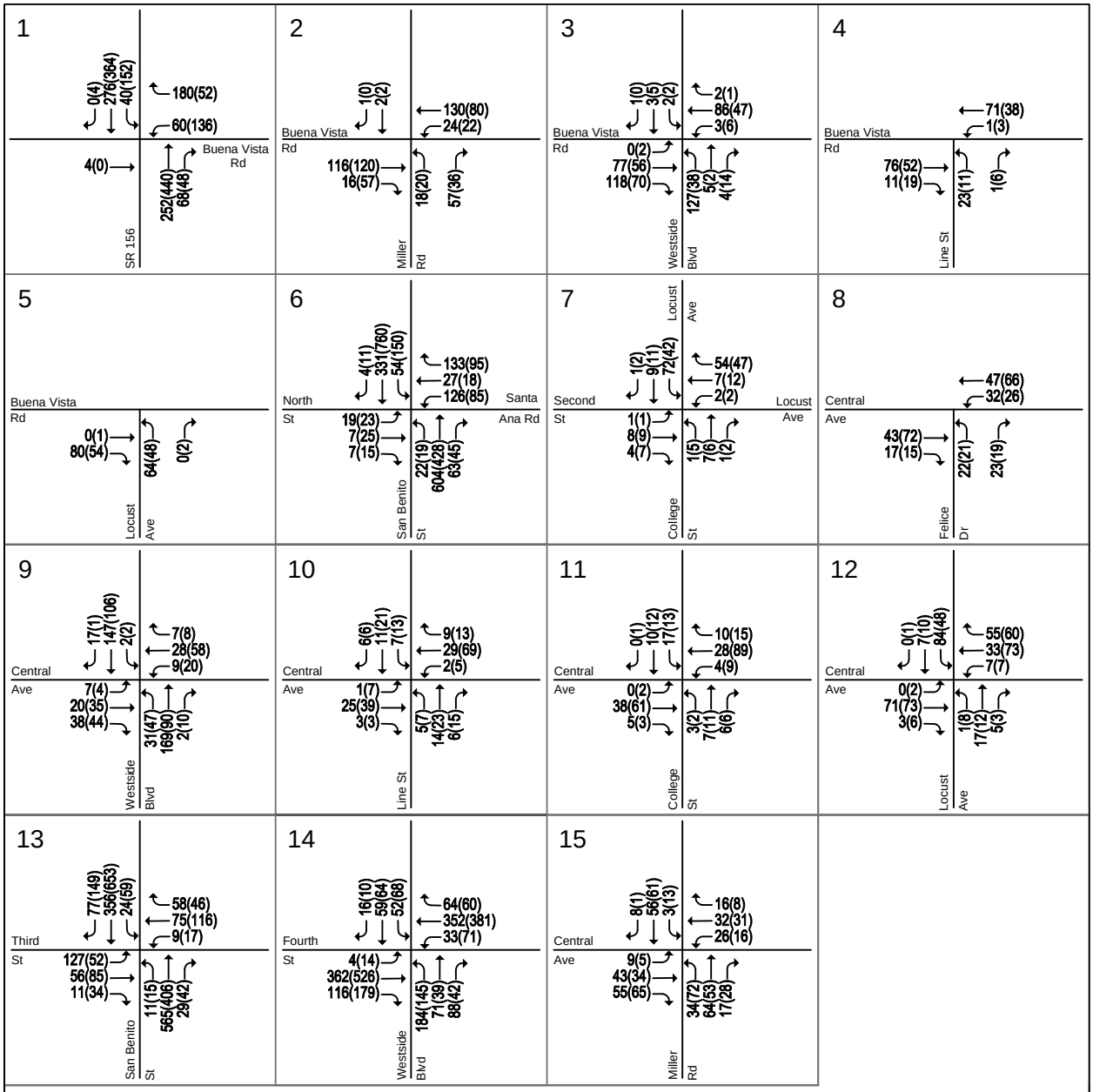


Figure 6
Existing Traffic Volumes

Existing Intersection Analyses

The results of the intersection level of service and signal warrant analyses under existing conditions are summarized in Table 3. The results indicate that the unsignalized study intersection of SR 156 and Buena Vista Road currently operates at an unacceptable LOS E during the PM peak hour and has peak hour traffic volumes that meet the thresholds that warrant signalization.

The remaining study intersections currently operate at acceptable LOS C or better conditions during both the AM and PM peak hours. All other unsignalized study intersections currently have traffic conditions that fall below the thresholds that warrant signalization. The intersection level of service calculation sheets are included in Appendix C. The peak-hour signal warrant sheets are contained in Appendix D.

Table 3
Existing Intersection Level of Service and Signal Warrant Analyses Summary

#	Intersection	Existing Int. Control	Jurisdiction	LOS Standard	Peak Hour	Count Date	Warrant Met?[2]	Delay[1]	LOS
1	SR 156 and Buena Vista Road	Two-Way Stop	Caltrans	C	AM	08/27/14	**Yes**	15.0	C
					PM	08/27/14	**Yes**	**40.5**	**E**
2	Miller Road and Buena Vista Road	Two-Way Stop	City	C	AM	08/27/14	No	10.4	B
					PM	08/27/14	No	11.0	B
3	Westside Boulevard and Buena Vista Road	Two-Way Stop	City	C	AM	03/27/13	No	11.1	B
					PM	03/27/13	No	10.0	B
4	Line Street and Buena Vista Road	One-Way Stop	City	C	AM	03/27/13	No	9.4	A
					PM	03/27/13	No	9.0	A
5	Locust Avenue and Buena Vista Road	All-Way Stop	City	C	AM	03/27/13	No	7.1	A
					PM	03/27/13	No	7.0	A
6	San Benito Street and North Street/Santa Ana Road	Signal	City	C	AM	03/27/13	--	18.0	B
					PM	03/27/13	--	15.5	B
7	Locust Avenue/College Street and Second Street	All-Way Stop	City	C	AM	03/27/13	No	7.3	A
					PM	03/27/13	No	7.2	A
8	Felice Drive and Central Avenue	All-Way Stop	City	C	AM	08/27/14	No	7.4	A
					PM	08/27/14	No	7.5	A
9	Westside Boulevard and Central Avenue	Two-Way Stop	City	C	AM	08/27/14	No	12.1	B
					PM	08/27/14	No	12.0	B
10	Line Street and Central Avenue	Two-Way Stop	City	C	AM	08/27/14	No	9.4	A
					PM	08/27/14	No	9.9	A
11	College Street and Central Avenue	Two-Way Stop	City	C	AM	08/27/14	No	9.5	A
					PM	08/27/14	No	9.9	A
12	Locust Avenue and Central Avenue	Two-Way Stop	City	C	AM	03/27/13	No	11.1	B
					PM	03/27/13	No	10.4	B
13	San Benito Street and Third Street	Signal	City	C	AM	03/27/13	--	15.0	B
					PM	03/27/13	--	18.2	B
14	Westside Boulevard and San Juan Road/Fourth Street	Signal	City	C	AM	03/27/13	--	17.9	B
					PM	03/27/13	--	13.9	B
15	Miller Road and Central Avenue	All-Way Stop	City	C	AM	09/02/14	No	7.8	A
					PM	09/02/14	No	8.0	A

Notes:
[1]The reported delay and corresponding level of service for signalized and all-way stop-controlled intersections represents the average delay for all approaches at the intersection. The reported delay and corresponding level of service for one- and two-way stop-controlled intersections are based on the stop-controlled approach with the highest delay.
[2] Signal warrant analysis is not applicable to signalized intersections.
Bold indicates unacceptable LOS/signal warrant met.

3.
Existing Plus Project Conditions

This chapter describes existing plus project traffic conditions, significant project impacts, and measures that are recommended to mitigate project impacts under existing plus project conditions. Included are descriptions of the significance criteria that define an impact, estimates of project-generated traffic, identification of any impacts, and descriptions of any mitigation measures that may be necessary. Existing plus project conditions are represented by existing traffic conditions with the addition of traffic generated by the project.

Significant Impact Criteria

Significance criteria are used to establish what constitutes an impact. The criteria for identifying impacts on intersections are described below. Project impacts on other transportation facilities, such as bicycle facilities and transit, were determined based on engineering judgment.

Definition of Significant Intersection Level of Service Impacts

Signalized Intersection Thresholds of Significance

Both the City of Hollister and Caltrans identify a level of service standard of LOS C for their respective facilities. Neither agency has specific criteria for determining project impacts at intersections. For the purpose of this traffic analysis, the project is said to create a significant adverse impact on traffic conditions at an intersection if for either peak-hour:

- The level of service at the intersection degrades from an acceptable LOS C or better under baseline (no project) conditions to an unacceptable LOS D or worse under project conditions, or
- The level of service at the intersection is an unacceptable LOS D or worse under baseline (no project) conditions and the addition of project trips causes the average intersection delay to increase by five (5) or more seconds.

Unsignalized Intersection Thresholds of Significance

For unsignalized intersections in the City of Hollister and Caltrans, the project is said to create a significant adverse impact on traffic conditions at the intersection if for any peak-hour:

- *All-way stop*: The average overall level of service at the intersection degrades from an acceptable LOS C or better under no project conditions to an unacceptable LOS D or worse under project conditions, or
- *All-way stop*: The average overall intersection level of service is already at an unacceptable LOS D or worse without the project and the addition of project traffic causes the average overall delay to increase five (5) or more seconds, or

- *One- or two-way stop*: The delay on the worst approach at a one- or two-way stop-controlled intersection degrades from an acceptable LOS C or better under no project conditions to an unacceptable LOS D or worse under project conditions and the traffic volumes at the intersection under project conditions are high enough to satisfy the peak-hour volume traffic signal warrant adopted by Caltrans, or
- *One- or two-way stop*: The delay on the worst approach at a one- or two-way stop-controlled intersection is already at an unacceptable LOS D or worse without the project and the traffic volumes at the intersection under project conditions are high enough to satisfy the peak-hour volume traffic signal warrant adopted by Caltrans, and the addition of project traffic causes the delay on the worst stop-controlled approach to increase beyond what it was without the project.

Transportation Network under Existing Plus Project Conditions

The following roadway improvements along the project frontages are assumed under existing plus project conditions:

Frontage Improvement of Buena Vista Road. Project frontage improvements along Buena Vista Road would be completed as part of the proposed project. The frontage improvements will include widening the road to match the cross-sections on Buena Vista Road to the east and west of the project site. In addition, access to the project site would be provided via a new unsignalized T-intersection along Buena Vista Road that will include a shared through/left- turn lane on the east approach, a shared through/right- turn lane on the west approach, and one shared left-right-turn lane on the south approach.

Frontage Improvement of Central Avenue. Project frontage improvements along Central Avenue would be completed as part of the proposed project. The frontage improvements will include widening the road to match the cross-sections on Central Avenue to the east and west of the project site. In addition, access to the project site would be provided via the extension of Western Court into the project site. The intersection would have stop-control on the Western Court approaches and uncontrolled Central Avenue approaches. The Central Avenue approaches would have shared left-through and right-turn lanes and the north approach would have one shared left-through-right-turn lane.

Project Traffic Estimates

The magnitude of traffic produced by a new development and the locations where that traffic would appear are estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the magnitude of traffic entering and exiting the site is estimated for the weekday AM and PM peak hours. As part of the project trip distribution step, an estimate is made of the directions to and from which the project trips would travel. In the project trip assignment step, the project trips are assigned to specific streets and intersections in the study area. These procedures are described further in the following sections.

Trip Generation

The magnitude of traffic generated by the proposed project was estimated by applying to the size of the project the appropriate trip generation rates, as published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual, 9th Edition*. The trip generation estimates for the residential project are based on ITE's trip generation rates for single-family residential units. Based on these rates, the project is estimated to generate 980 daily trips, with 77 trips occurring during the AM peak-hour and 103 trips occurring during the PM peak-hour. The trip generation analysis for the project is presented on Table 4.

Table 4
Project Trip Generation Estimates

Land Use	ITE Land Use	Size		Daily Trip Rate /a/	Daily Trips	AM Peak Hour Pk-Hr Rate /a/	AM Splits In	AM Splits Out	AM Trips In	AM Trips Out	AM Trips Total	PM Peak Hour Pk-Hr Rate /a/	PM Splits In	PM Splits Out	PM Trips In	PM Trips Out	PM Trips Total
Gonzales																	
Single Family Homes	210 - Single-Family Detached Housing	92	D.U.	9.52	876	0.75	25%	75%	17	52	69	1.00	63%	37%	58	34	92

Source: ITE Trip Generation, 9th Edition, 2012.
/a/ Based on the average trip generation rate from the ITE Trip Generation Manual.

Trip Distribution

The trip distribution pattern for project-generated traffic was estimated based on traffic patterns in the study area and on the locations of complementary land uses. The project trip distribution pattern is shown graphically on Figure 7.

Trip Assignment

The peak-hour vehicle trips associated with the proposed project were added to the transportation network in accordance with the project trip distribution pattern discussed above. The assignment of project trips is presented graphically on Figure 8. A tabular summary of project traffic at each study intersection is contained in Appendix B.

Existing plus Project Traffic Volumes

Project trips, as represented in the above project trip assignment, were added to existing traffic volumes to obtain existing plus project traffic volumes. The traffic volumes under existing plus project conditions are shown in Figure 9.

Existing plus Project Intersection Analyses

The results of the intersection level of service and signal warrant analyses under existing plus project conditions are summarized in Table 5. The results of the intersection level of service analysis indicates that the unsignalized study intersection of SR 156 and Buena Vista Road, which was found to operate at unacceptable levels under existing conditions, would continue to operate at an unacceptable level of service during the PM peak hour under existing plus project conditions. In addition, the traffic volumes at the intersection under existing and existing plus project conditions are large enough to satisfy the peak-hour volume traffic signal warrant. The addition of project traffic at the SR 156 and Buena Vista Road intersection would cause the delay at the intersection to increase. Therefore, the project will result in a significant impact at the SR 156 and Buena Vista Road intersection based on applicable significance criteria. The impact and proposed improvements to mitigate the impact are described below.

The remaining study intersections would continue to operate at an acceptable LOS C or better conditions during both the AM and PM peak hours under existing plus project conditions. All other unsignalized study intersections are projected to have traffic conditions that fall below the thresholds that warrant signalization.

The intersection level of service calculation sheets are included in Appendix C. The peak-hour signal warrant sheets are contained in Appendix D.

Project Impacts and Recommended Mitigation Measures

Described below are the intersection impact under existing plus project conditions and recommended mitigation measures necessary to maintain the level of service standards and intersection operations.

1. SR 156 and Buena Vista Road (Caltrans)

Impact: The intersection level of service is currently an unacceptable LOS E under existing conditions and the addition of project traffic would cause the delay at the intersection to increase during the PM peak hour and the intersection would have traffic volumes that meet peak-hour signal warrants. This constitutes a significant impact by Caltrans standards.

Mitigation Measures. The necessary improvements to improve the intersection level of service to acceptable levels consist of the installation of a traffic signal at the intersection. The developer may be

Figure 7
Project Trip Distribution Pattern

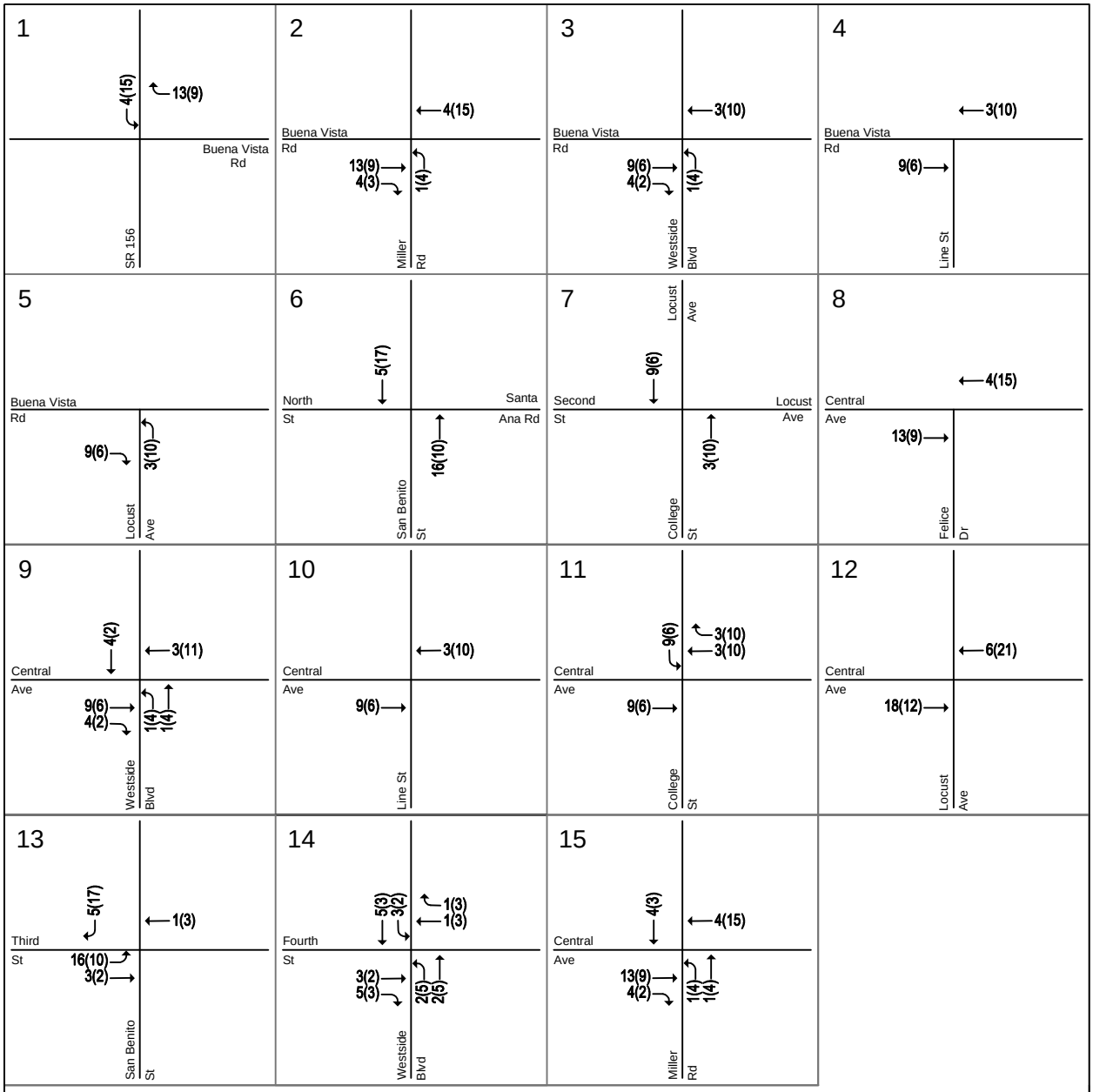
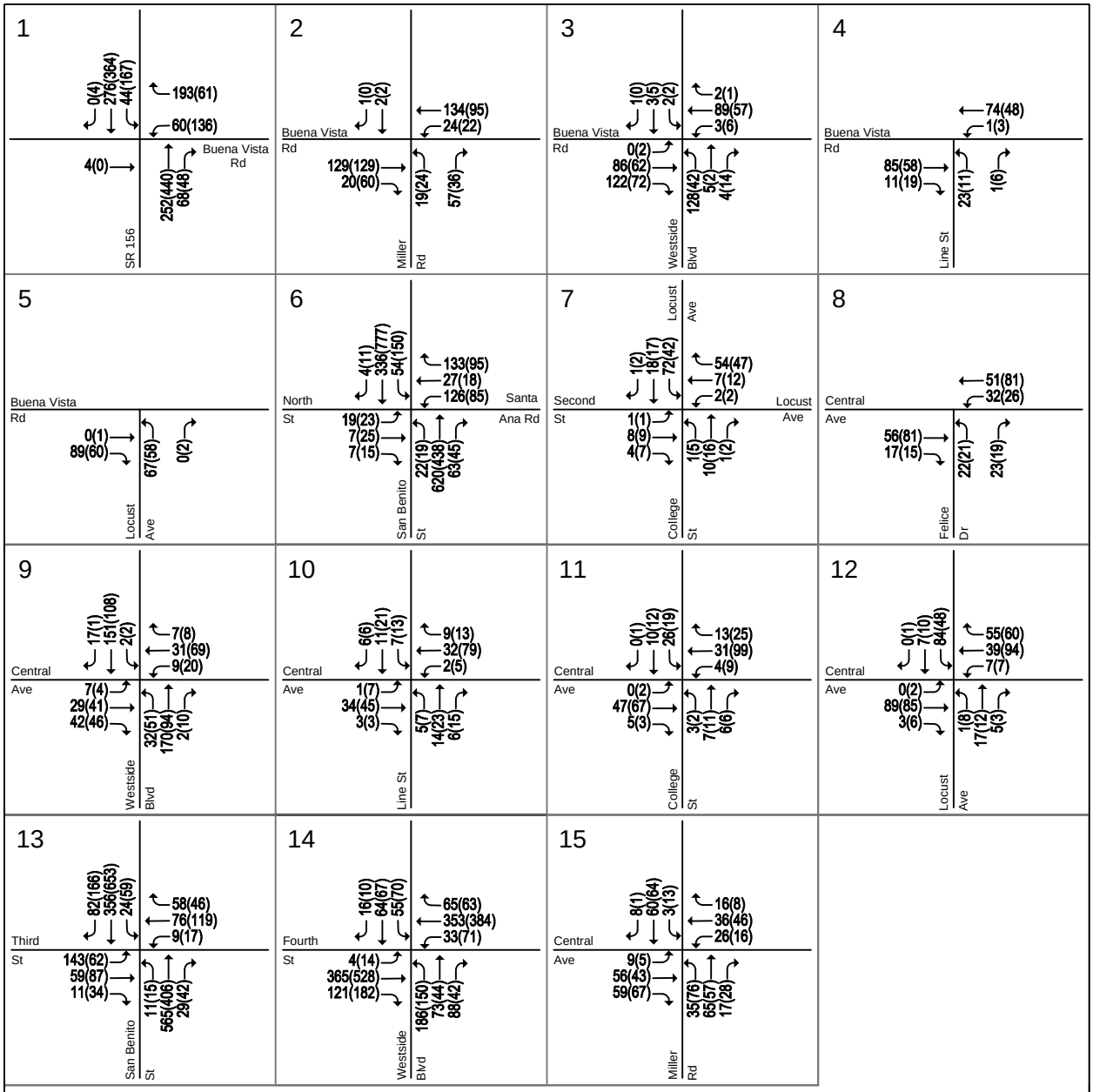


Figure 8
Project Trip Assignment



LEGEND:

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Existing Plus Project Traffic Volumes 10-28-14

Figure 9
Existing Plus Project Traffic Volumes

Table 5
Existing Plus Project Intersection Level of Service and Signal Warrant Analyses Summary

						Existing			Existing Plus Project			
#	Intersection	Existing Int. Control	Jurisdiction	LOS Standard	Peak Hour	Warrant Met?[3]	Delay[1]	LOS	Warrant Met?[3]	Delay[1]	LOS	Change in Delay[2]
1	SR 156 and Buena Vista Road	Two-Way Stop	Caltrans	C	AM	**Yes**	15.0	C	**Yes**	15.2	C	0.2
					PM	**Yes**	**40.5**	**E**	**Yes**	**43.6**	**E**	**3.1**
2	Miller Road and Buena Vista Road	Two-Way Stop	City	C	AM	No	10.4	B	No	10.5	B	0.1
					PM	No	11.0	B	No	11.2	B	0.2
3	Westside Boulevard and Buena Vista Road	Two-Way Stop	City	C	AM	No	11.1	B	No	11.3	B	0.2
					PM	No	10.0	B	No	10.1	B	0.1
4	Line Street and Buena Vista Road	One-Way Stop	City	C	AM	No	9.4	A	No	9.5	A	0.1
					PM	No	9.0	A	No	9.0	A	0.0
5	Locust Avenue and Buena Vista Road	All-Way Stop	City	C	AM	No	7.1	A	No	7.2	A	0.1
					PM	No	7.0	A	No	7.1	A	0.1
6	San Benito Street and North Street/Santa Ana Road	Signal	City	C	AM	--	18.0	B	--	17.9	B	-0.1
					PM	--	15.5	B	--	15.2	B	-0.3
7	Locust Avenue/College Street and Second Street	All-Way Stop	City	C	AM	No	7.3	A	No	7.4	A	0.1
					PM	No	7.2	A	No	7.2	A	0.0
8	Felice Drive and Central Avenue	All-Way Stop	City	C	AM	No	7.4	A	No	7.4	A	0.0
					PM	No	7.5	A	No	7.6	A	0.1
9	Westside Boulevard and Central Avenue	Two-Way Stop	City	C	AM	No	12.1	B	No	12.3	B	0.2
					PM	No	12.0	B	No	12.4	B	0.4
10	Line Street and Central Avenue	Two-Way Stop	City	C	AM	No	9.4	A	No	9.5	A	0.1
					PM	No	9.9	A	No	10.0	B	0.1
11	College Street and Central Avenue	Two-Way Stop	City	C	AM	No	9.5	A	No	9.7	A	0.2
					PM	No	9.9	A	No	10.0	B	0.1
12	Locust Avenue and Central Avenue	Two-Way Stop	City	C	AM	No	11.1	B	No	11.3	B	0.2
					PM	No	10.4	B	No	10.6	B	0.2
13	San Benito Street and Third Street	Signal	City	C	AM	--	15.0	B	--	15.5	B	0.5
					PM	--	18.2	B	--	18.6	B	0.4
14	Westside Boulevard and San Juan Road/Fourth Street	Signal	City	C	AM	--	17.9	B	--	18.0	B	0.1
					PM	--	13.9	B	--	14.1	B	0.2
15	Miller Road and Central Avenue	All-Way Stop	City	C	AM	No	7.8	A	No	8.0	A	0.2
					PM	No	8.0	A	No	8.2	A	0.2

Notes:
[1]The reported delay and corresponding level of service for signalized and all-way stop-controlled intersections represents the average delay for all approaches at the intersection. The reported delay and corresponding level of service for one- and two-way stop-controlled intersections are based on the stop-controlled approach with the highest delay.
[2] Change in delay measured relative to existing conditions.
[3] Signal warrant analysis is not applicable to signalized intersections.
Bold indicates unacceptable LOS/signal warrant met.
Bold and boxed indicate significant impact.

required to pay a fair-share contribution toward improvement costs at this intersection. With implementation of this mitigation measure, this impact would be less-than-significant. However, payment of a fee alone will not guarantee the timely construction of the identified improvements to mitigate the project impact. Therefore, in the event that the developer makes a fair-share contribution in the form of fee payment rather than constructing the improvement, this impact would be considered significant and unavoidable.

4. Background Conditions

This chapter describes background traffic conditions. Background conditions are defined as conditions just prior to completion of the proposed project. Traffic volumes for background conditions comprise volumes from the existing traffic counts plus traffic generated by approved developments in the vicinity of the site, which would add traffic to the study intersections. Background conditions represent the baseline conditions to which background plus project conditions will be compared for the purpose of determining project impacts. This chapter describes the procedure used to determine background traffic volumes and the resulting traffic conditions.

Background Roadway Network

There are no roadway improvement projects in the study area that are expected to be completed in the near future. Thus, it is assumed in the analysis that the transportation network under background conditions would be the same as described under existing conditions.

Approved Developments

Table 6 lists the approved but not-yet-completed developments in the City of Hollister, which would add traffic to the roadway network under background conditions. The traffic associated with these developments is discussed below. Lists of approved projects were received from the City of Hollister and San Benito County Planning Departments. The traffic generated by projects that are either very small or remotely located from the study intersections was assumed to be insignificant for the purpose of this traffic analysis.

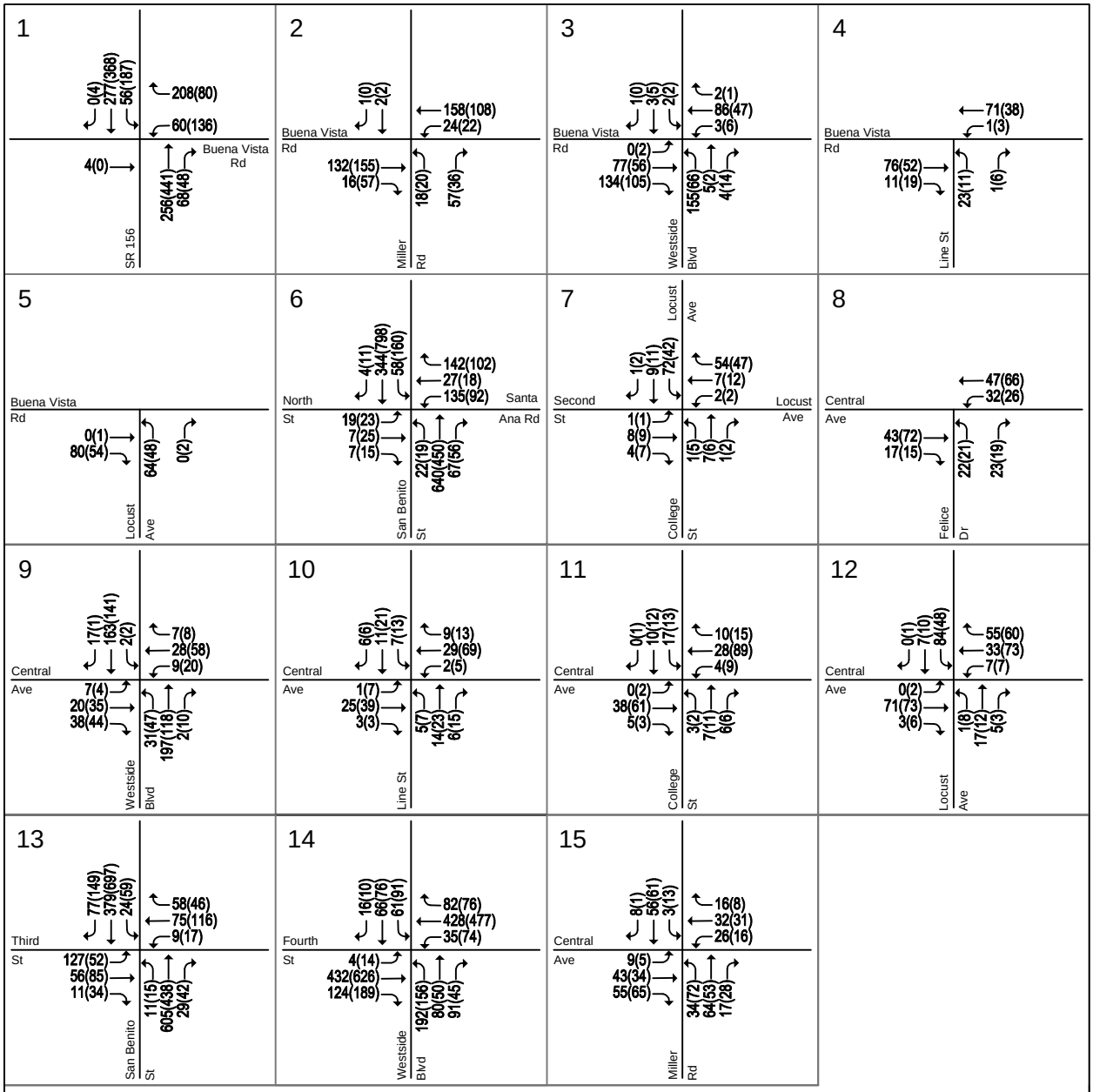
Background Traffic Volumes

Background peak-hour traffic volumes were calculated by adding to existing volumes the estimated traffic from approved but not yet constructed developments. The traffic added to the study intersections from approved but not yet constructed developments was estimated by distributing and assigning trips generated by these developments to the roadway network. The process of trip generation, distribution, and assignment is described in the previous chapter. Background traffic volumes are shown on Figure 10.

Table 6
Approved Development Projects

Applicant/Owner/Project Name	Address/Location	Proposed Project Description
Fairfield Inn & Suites Marriot Hotel	380 Gateway Drive	81-room hotel
Community Food Bank of San Benito County	172 McCloskey Road	3,072 s.f. office, 10,560 s.f. warehouse
1980 Airway Drive	1980 Airway Drive	15,000 s.f. industrial building, 6,250 s.f. mechanical shop/office building
North Florida Development (Ladd Lane)	W/o Ladd Ln, across from Hillock Dr	12,420 s.f. medical office/retail building, 20,500 s.f. retail, 63 apartments, 25 courtyard units, 13 single-family homes.
Airport Business Park	Flynn Rd, between SR 25 and San Felipe Rd	12,100 s.f. industrial building
Hollister Business Park	Fallon Rd	49,569 s.f. warehouse
Legacy Guerra (Lowes Project - 190 Hillcrest Rd)	W/o Hwy 25 bypass between Meridian St and Hillcrest Rd	150 ksf home impr store, 100.48 ksf general commercial, 120 apts
Cerrato Estates	Between Meridian St and Hillcrest Rd, W/o Memorial Dr	241 homes
Villages Brigantino	North of Brigantino Dr	154 homes
CSDC	Westside Blvd between 4th St and South St	15 Apartments
PacificWest Communities	NE corner of Miller Rd/San Juan Rd	57 Apartments
Valles	E/o Cushman St, S/o Nash Rd	50 apartments
Silver Oaks	W/o Valley View, s/o Hazel Hawkins Hospital, e/o Airline Hwy, n/o Valle Way	170 senior apartments
Braer	N/w of San Benito St/South St	6 Apartments
Eden West	Between Apricot Ln, Line St, Steinbeck Dr, and Cannery Row	55 homes
Rajkovich	E/o San Benito St and Cienega Rd	81 homes, 100 Apartments
Coria	W/o Westside Blvd at Jan Ave	7 homes
Hillview 2	Buena Vista Rd, W/o Ranchito Dr	30 homes
Award Homes	W/o Fairview, s/o St. Benedict's Church, e/o Calistoga Dr,	567 homes, 100 apartments
Gibson/Sunnyslope	between SR 25 and Black Forest	29 homes
Las Brisas 7	N/o Sunnyslope, E and W of Clearview along Marilyn Ct and McDonald Ct	23 homes (3 remaining)
Las Brisas 8	N/o Sunnyslope, E and W of Clearview along Marilyn Ct and McDonald Ct	23 homes (11 remaining)
Santana Ranch	E/o Fairview Rd from Hillcrest to Sunnyslope	1,092 residential units, 800-student elementary schook, and 65,000 s.f. of commercial space
Fairview Corners Residential	N/E Corners of Fairview Rd and Airline Hwy	220 single family homes
Creekside 5 & 6	Los Altos Dr, South of Hillcrest	14 lots
Humboldt West	Southside/Airline	16 lots
Eade	Southside/Airline	5 lots
Marcus, Don	Santa Ana Valley Road	4 lots
VLM/Mendonsa	Santa Ana Valley Road	3 lots
Chamber's Equestrian Center	Hwy 25 and Shore Rd	Horse Show

Source: City of Hollister and San Benito County Planning Departments (August 2014)



LEGEND:

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Background Traffic Volumes 10-28-14

Figure 10
Background Traffic Volumes

Background Intersection Analyses

The results of the intersection level of service and signal warrant analyses under background conditions are summarized in Table 7. The results of the intersection level of service analysis indicates that the unsignalized study intersection of SR 156 and Buena Vista Road, which was found to operate at unacceptable levels under existing conditions, would continue to operate at an unacceptable level of service during the PM peak hour under background conditions. In addition, the traffic volumes at the intersection under existing and background conditions are large enough to satisfy the peak-hour volume traffic signal warrant.

The remaining study intersections would continue to operate at an acceptable LOS C or better conditions during both the AM and PM peak hours under background conditions. All other unsignalized study intersections are projected to have traffic conditions that fall below the thresholds that warrant signalization.

The intersection level of service calculation sheets are included in Appendix C. The peak-hour signal warrant sheets are contained in Appendix D.

Table 7
Background Intersection Level of Service and Signal Warrant Analyses Summary

						Existing			Background		
#	Intersection	Existing Int. Control	Jurisdiction	LOS Standard	Peak Hour	Warrant Met?[2]	Delay[1]	LOS	Warrant Met?[2]	Delay[1]	LOS
1	SR 156 and Buena Vista Road	Two-Way Stop	Caltrans	C	AM	**Yes**	15.0	C	**Yes**	15.7	C
					PM	**Yes**	**40.5**	**E**	**Yes**	**48.3**	**E**
2	Miller Road and Buena Vista Road	Two-Way Stop	City	C	AM	No	10.4	B	No	10.7	B
					PM	No	11.0	B	No	11.5	B
3	Westside Boulevard and Buena Vista Road	Two-Way Stop	City	C	AM	No	11.1	B	No	11.6	B
					PM	No	10.0	B	No	10.2	B
4	Line Street and Buena Vista Road	One-Way Stop	City	C	AM	No	9.4	A	No	9.4	A
					PM	No	9.0	A	No	9.0	A
5	Locust Avenue and Buena Vista Road	All-Way Stop	City	C	AM	No	7.1	A	No	7.1	A
					PM	No	7.0	A	No	7.0	A
6	San Benito Street and North Street/Santa Ana Road	Signal	City	C	AM	--	18.0	B	--	18.2	B
					PM	--	15.5	B	--	15.6	B
7	Locust Avenue/College Street and Second Street	All-Way Stop	City	C	AM	No	7.3	A	No	7.3	A
					PM	No	7.2	A	No	7.2	A
8	Felice Drive and Central Avenue	All-Way Stop	City	C	AM	No	7.4	A	No	7.4	A
					PM	No	7.5	A	No	7.5	A
9	Westside Boulevard and Central Avenue	Two-Way Stop	City	C	AM	No	12.1	B	No	12.5	B
					PM	No	12.0	B	No	12.7	B
10	Line Street and Central Avenue	Two-Way Stop	City	C	AM	No	9.4	A	No	9.4	A
					PM	No	9.9	A	No	9.9	A
11	College Street and Central Avenue	Two-Way Stop	City	C	AM	No	9.5	A	No	9.5	A
					PM	No	9.9	A	No	9.9	A
12	Locust Avenue and Central Avenue	Two-Way Stop	City	C	AM	No	11.1	B	No	11.1	B
					PM	No	10.4	B	No	10.4	B
13	San Benito Street and Third Street	Signal	City	C	AM	--	15.0	B	--	14.6	B
					PM	--	18.2	B	--	17.8	B
14	Westside Boulevard and San Juan Road/Fourth Street	Signal	City	C	AM	--	17.9	B	--	17.8	B
					PM	--	13.9	B	--	15.1	B
15	Miller Road and Central Avenue	All-Way Stop	City	C	AM	No	7.8	A	No	7.8	A
					PM	No	8.0	A	No	8.0	A

Notes:
[1]The reported delay and corresponding level of service for signalized and all-way stop-controlled intersections represents the average delay for all approaches at the intersection. The reported delay and corresponding level of service for one- and two-way stop-controlled intersections are based on the stop-controlled approach with the highest delay.
[2] Signal warrant analysis is not applicable to signalized intersections.
Bold indicates unacceptable LOS/signal warrant met.

5. Background Plus Project Conditions

This chapter describes project traffic conditions, significant project impacts, and measures that are recommended to mitigate project impacts under project conditions. Included are descriptions of the significance criteria that define an impact, estimates of project-generated traffic, identification of any impacts, and descriptions of any mitigation measures that may be necessary. Background plus project conditions are represented by background traffic conditions with the addition of traffic generated by the project.

Although some of the information provided below has already been described in Chapter 3 – Existing Plus Project Conditions, it is presented again within this chapter for the reader's convenience.

Significant Impact Criteria

Significance criteria are used to establish what constitutes an impact. The criteria for identifying impacts on intersections are described below. Project impacts on other transportation facilities, such as bicycle facilities and transit, were determined based on engineering judgment.

Definition of Significant Intersection Level of Service Impacts

Signalized Intersection Thresholds of Significance

Both the City of Hollister and Caltrans identify a level of service standard of LOS C for their respective facilities. Neither agency has specific criteria for determining project impacts. For the purpose of this traffic analysis, the project is said to create a significant adverse impact on traffic conditions at an intersection if for either peak-hour:

- The level of service at the intersection degrades from an acceptable LOS C or better under baseline (no project) conditions to an unacceptable LOS D or worse under project conditions, or
- The level of service at the intersection is an unacceptable LOS D or worse under baseline (no project) conditions and the addition of project trips causes the average intersection delay to increase by five (5) or more seconds.

Unsignalized Intersection Thresholds of Significance

For unsignalized intersections in the City of Hollister and Caltrans, the project is said to create a significant adverse impact on traffic conditions at the intersection if for any peak-hour:

- *All-way stop*: The average overall level of service at the intersection degrades from an acceptable LOS C or better under no project conditions to an unacceptable LOS D or worse under project conditions, or

- *All-way stop*: The average overall intersection level of service is already at an unacceptable LOS D or worse without the project and the addition of project traffic causes the average overall delay to increase five (5) or more seconds, or
- *One- or two-way stop*: The delay on the worst approach at a one- or two-way stop-controlled intersection degrades from an acceptable LOS C or better under no project conditions to an unacceptable LOS D or worse under project conditions and the traffic volumes at the intersection under project conditions are high enough to satisfy the peak-hour volume traffic signal warrant adopted by Caltrans, or
- *One- or two-way stop*: The delay on the worst approach at a one- or two-way stop-controlled intersection is already at an unacceptable LOS D or worse without the project and the traffic volumes at the intersection under project conditions are high enough to satisfy the peak-hour volume traffic signal warrant adopted by Caltrans, and the addition of project traffic causes the delay on the worst stop-controlled approach to increase beyond what it was without the project.

Transportation Network under Background Plus Project Conditions

The following roadway improvements along the project frontage are assumed under background plus project conditions:

Frontage Improvement of Buena Vista Road. Project frontage improvements along Buena Vista Road would be completed as part of the proposed project. The frontage improvements will include widening the road to match the cross-sections on Buena Vista Road to the east and west of the project site. In addition, access to the project site would be provided via a new unsignalized T-intersection along Buena Vista Road that will include a shared through/left- turn lane on the east approach, a shared through/right- turn lane on the west approach, and one shared left-right-turn lane on the south approach.

Frontage Improvement of Central Avenue. Project frontage improvements along Central Avenue would be completed as part of the proposed project. The frontage improvements will include widening the road to match the cross-sections on Central Avenue to the east and west of the project site. In addition, access to the project site would be provided via the extension of Western Court into the project site. The intersection would have stop-control on the Western Court approaches and uncontrolled Central Avenue approaches. The Central Avenue approaches would have shared left-through and right-turn lanes and the north approach would have one shared left-through-right-turn lane.

Project Traffic Estimates

The magnitude of traffic produced by a new development and the locations where that traffic would appear are estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. These procedures are described in detailed in Chapter 3 – Existing Plus Project Conditions, and briefly summarized below.

Trip Generation

Based on ITE's trip generation rates for single-family residential units, the project is estimated to generate 980 daily trips, with 77 trips occurring during the AM peak-hour and 103 trips occurring during the PM peak-hour. The trip generation analysis for the project is presented in Chapter 3, Table 4.

Trip Distribution and Assignment

The trip distribution pattern for project-generated traffic was estimated based on existing travel patterns in

the study area and on the locations of complementary land uses. The peak-hour vehicle trips associated with the proposed project were added to the transportation network in accordance with the project trip distribution pattern. The project trip distribution pattern and assignment of project trips are shown graphically on Figures 7 and 8 in Chapter 3. A tabular summary of project traffic at each study intersection is contained in Appendix B.

Background plus Project Traffic Volumes

Project trips, as presented in the project trip assignment described in Chapter 3 – Existing Plus Project Conditions, were added to background traffic volumes to obtain background plus project traffic volumes. The traffic volumes under background plus project conditions are shown in Figure 11.

Background plus Project Intersection Analyses

The results of the intersection level of service and signal warrant analyses under background plus project conditions are summarized in Table 8. The results of the intersection level of service analysis indicates that the unsignalized study intersection of SR 156 and Buena Vista Road, which was found to operate at unacceptable levels under background conditions, would continue to operate at an unacceptable level of service during the PM peak hour under background plus project conditions. In addition, the traffic volumes at the intersection under background and background plus project conditions are large enough to satisfy the peak-hour volume traffic signal warrant. The addition of project traffic at the SR 156 and Buena Vista Road intersection would cause the delay at the intersection to increase. Therefore, the project will result in a significant impact at the SR 156 and Buena Vista Road intersection based on applicable significance criteria. The impact and proposed improvements to mitigate the impact are described below.

The remaining study intersections would continue to operate at an acceptable LOS C or better conditions during both the AM and PM peak hours under background plus project conditions. All other unsignalized study intersections are projected to have traffic conditions that fall below the thresholds that warrant signalization.

The intersection level of service calculation sheets are included in Appendix C. The peak-hour signal warrant sheets are contained in Appendix D.

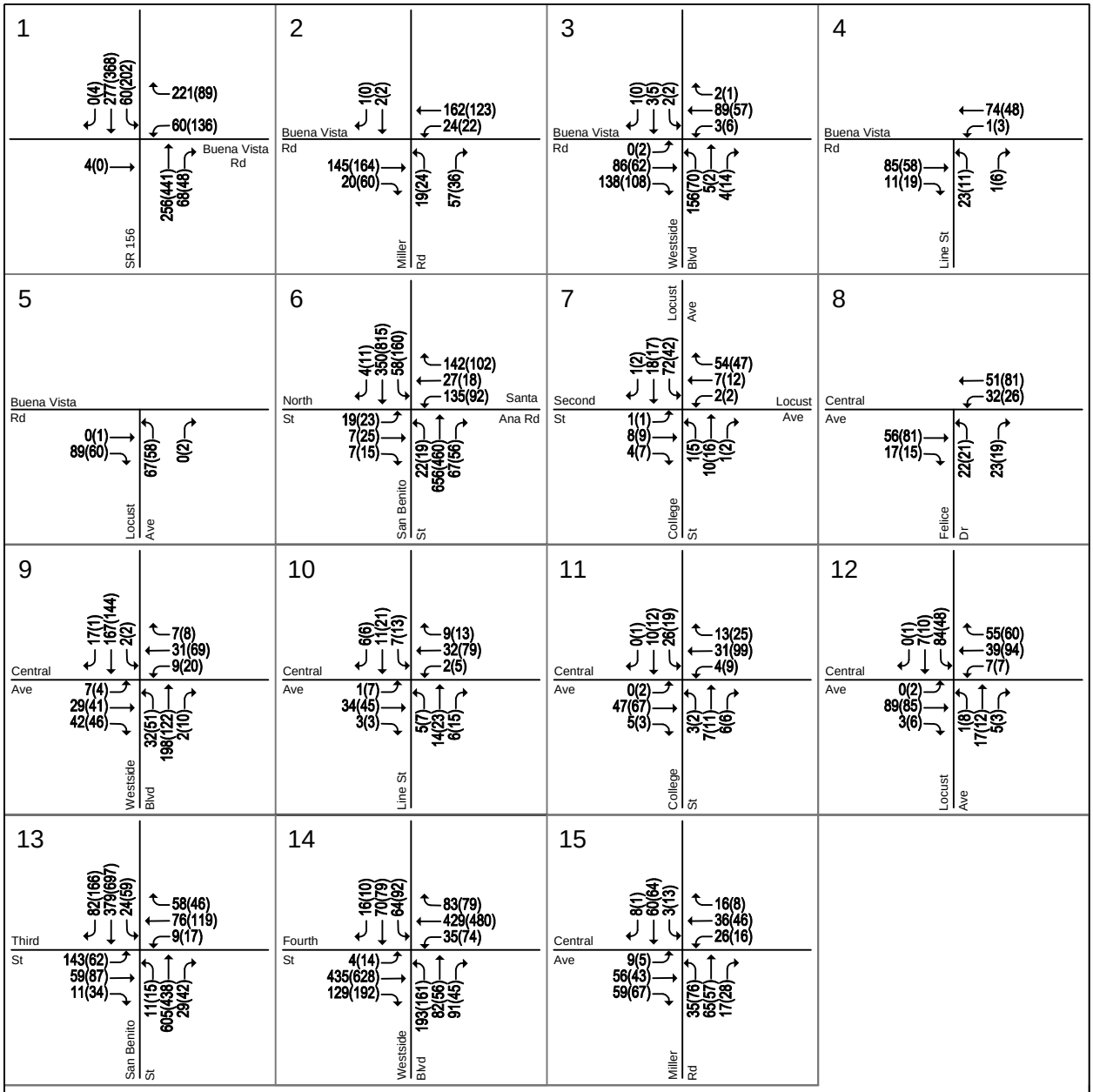
Project Impacts and Recommended Mitigation Measures

Described below are the intersection impact under background plus project conditions and recommended mitigation measures necessary to maintain the level of service standards and intersection operations.

1. SR 156 and Buena Vista Road (Caltrans)

Impact: The intersection level of service would be an unacceptable LOS E during the PM peak hour under background conditions and the addition of project traffic would cause the level of service to degrade to an unacceptable LOS F during the PM peak hour and the intersection would have traffic volumes that meet peak-hour signal warrants. This constitutes a significant impact by Caltrans standards.

Mitigation Measures. The necessary improvements to improve the intersection level of service to acceptable levels consist of the installation of a traffic signal at the intersection. The developer may be required to pay a fair-share contribution toward improvement costs at this intersection. With implementation of this mitigation measure, this impact would be less-than-significant. However, payment of a fee alone will not guarantee the timely construction of the identified improvements to mitigate the project impact. Therefore, in the event that the developer makes a fair-share contribution in the form of fee payment rather than constructing the improvement, this impact would be considered significant and unavoidable.



LEGEND:

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Background Plus Project Traffic Volumes 10-28-14

Figure 11
Background Plus Project Traffic Volumes

Table 8
Background Plus Project Intersection Level of Service and Signal Warrant Analyses Summary

#	Intersection	Existing Int. Control	Jurisdiction	LOS Standard	Peak Hour	Background Warrant Met?[3]	Background Delay[1]	Background LOS	Background Plus Project Warrant Met?[3]	Background Plus Project Delay[1]	Background Plus Project LOS	Change in Delay[2]
1	SR 156 and Buena Vista Road	Two-Way Stop	Caltrans	C	AM	**Yes**	15.7	C	**Yes**	15.9	C	0.2
					PM	**Yes**	**48.3**	**E**	**Yes**	**53.0**	**F**	**4.7**
2	Miller Road and Buena Vista Road	Two-Way Stop	City	C	AM	No	10.7	B	No	10.8	B	0.1
					PM	No	11.5	B	No	11.7	B	0.2
3	Westside Boulevard and Buena Vista Road	Two-Way Stop	City	C	AM	No	11.6	B	No	11.7	B	0.1
					PM	No	10.2	B	No	10.4	B	0.2
4	Line Street and Buena Vista Road	One-Way Stop	City	C	AM	No	9.4	A	No	9.5	A	0.1
					PM	No	9.0	A	No	9.0	A	0.0
5	Locust Avenue and Buena Vista Road	All-Way Stop	City	C	AM	No	7.1	A	No	7.2	A	0.1
					PM	No	7.0	A	No	7.1	A	0.1
6	San Benito Street and North Street/Santa Ana Road	Signal	City	C	AM	--	18.2	B	--	18.2	B	0.0
					PM	--	15.6	B	--	15.5	B	-0.1
7	Locust Avenue/College Street and Second Street	All-Way Stop	City	C	AM	No	7.3	A	No	7.4	A	0.1
					PM	No	7.2	A	No	7.2	A	0.0
8	Felice Drive and Central Avenue	All-Way Stop	City	C	AM	No	7.4	A	No	7.4	A	0.0
					PM	No	7.5	A	No	7.6	A	0.1
9	Westside Boulevard and Central Avenue	Two-Way Stop	City	C	AM	No	12.5	B	No	12.7	B	0.2
					PM	No	12.7	B	No	13.2	B	0.5
10	Line Street and Central Avenue	Two-Way Stop	City	C	AM	No	9.4	A	No	9.5	A	0.1
					PM	No	9.9	A	No	10.0	B	0.1
11	College Street and Central Avenue	Two-Way Stop	City	C	AM	No	9.5	A	No	9.7	A	0.2
					PM	No	9.9	A	No	10.0	B	0.1
12	Locust Avenue and Central Avenue	Two-Way Stop	City	C	AM	No	11.1	B	No	11.3	B	0.2
					PM	No	10.4	B	No	10.6	B	0.2
13	San Benito Street and Third Street	Signal	City	C	AM	--	14.6	B	--	15.2	B	0.6
					PM	--	17.8	B	--	18.3	B	0.5
14	Westside Boulevard and San Juan Road/Fourth Street	Signal	City	C	AM	--	17.8	B	--	17.9	B	0.1
					PM	--	15.1	B	--	15.3	B	0.2
15	Miller Road and Central Avenue	All-Way Stop	City	C	AM	No	7.8	A	No	8.0	A	0.2
					PM	No	8.0	A	No	8.2	A	0.2

Notes:
[1]The reported delay and corresponding level of service for signalized and all-way stop-controlled intersections represents the average delay for all approaches at the intersection. The reported delay and corresponding level of service for one- and two-way stop-controlled intersections are based on the stop-controlled approach with the highest delay.
[2] Change in delay measured relative to background conditions.
[3] Signal warrant analysis is not applicable to signalized intersections.
Bold indicates unacceptable LOS/signal warrant met.
Bold and boxed indicate significant impact.

6. Cumulative Conditions

This chapter presents a summary of the traffic conditions that would occur under cumulative conditions. This chapter describes the intersection and roadway improvements expected to be in place under cumulative conditions, the procedure used to determine cumulative traffic volumes, and the resulting traffic conditions.

Transportation Network under Cumulative Conditions

The roadway network under cumulative conditions would be the same as the existing and background roadway network with the proposed project improvements, as described under existing plus project and background plus project conditions.

Pending Developments

Table 9 lists the proposed but not yet approved (pending) development projects in the City of Hollister, which would add traffic to the roadway network under cumulative conditions. The traffic associated with these developments is discussed below. Lists of pending projects were received from the City of Hollister and San Benito County Planning Departments for this task. The traffic generated by projects that are either very small or remotely located from the study intersections was assumed to be insignificant for the purpose of this traffic analysis.

Cumulative Traffic Volumes

Cumulative peak-hour traffic volumes were calculated by adding to background plus project volumes the estimated traffic from the proposed but not yet approved (pending) development projects. The traffic added to the study intersections from pending developments was estimated by distributing and assigning trips generated by these developments to the roadway network. The process of trip generation, distribution, and assignment is described in Chapter 3. Cumulative traffic volumes are shown on Figure 12.

Table 9
Pending Development Projects

Applicant/Owner/Project Name	Address/Location	Proposed Project Description
Chaney	S/o Union Rd at Calistoga Dr	46 multi-family homes
West Gateway Mixed-Use	Gateway Dr	19,163 s.f. commercial building
Buena Vista Apartments	Buena Vista Rd between Westside Blvd and Locust St	80 Apartments
Apricot Ln	W/o Westside Blvd between Steinbeck Dr and Apricot Ln	173 homes
Rajkovich/Ivancovich	W/o Buena Vista Rd/Miller Rd	103 homes
Gonzales	W/o Buena Vista Rd/Miller Rd	92 homes
King	Memorial Dr, South of Sunset Dr	8 homes
KT Orchard Park	Between Buena Vista Rd and Central Av, E/o Miller Rd	91 small lots
Roberts Ranch	N/e of Enterprise/Airline	206 residential lots
Ladd Ranch	E/o San Benito St and Cienega Rd	82 homes
Pivetti	Valley View Rd between Sunnyslope Rd and Sunset Dr	24 Apartments
Saroyan/Howard	San Juan Rd, between Graf Rd and Miller Rd	97 Condos
Sywak	SW corner of Westside Bl/South St	8 homes
Dike	SW corner of Westside Bl/South St	39 homes
Thorning	S/o 4th Street, between Westside Bl and Rajkovich Wy	10 row houses, 74 apartments

Source: City of Hollister and San Benito County Planning Departments (August 2014)

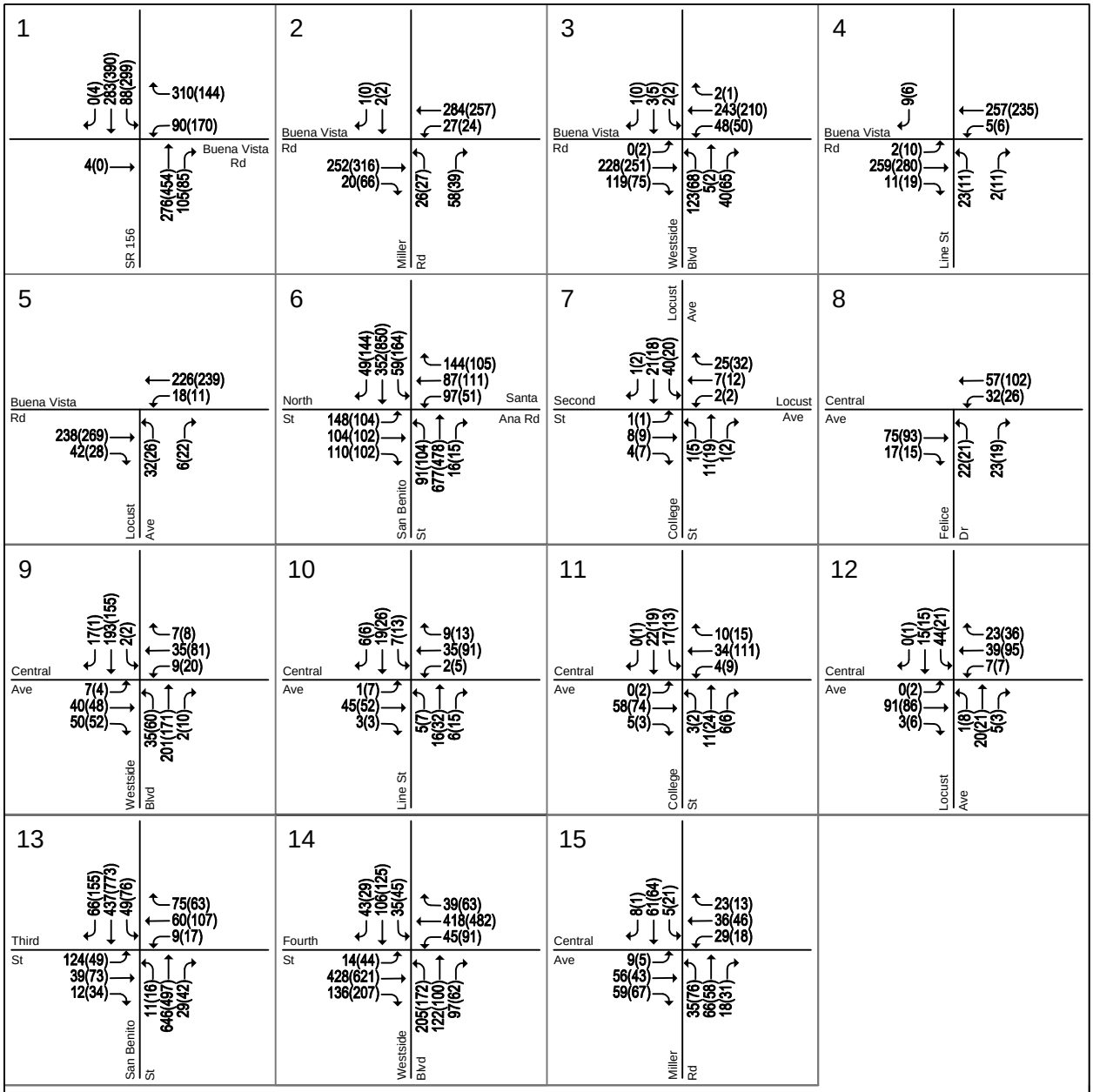


Figure 12
Cumulative Traffic Volumes

Cumulative Intersection Analyses

The results of the intersection level of service and signal warrant analyses under cumulative conditions are summarized in Table 10.

The results of the intersection level of service analysis indicates that the unsignalized study intersection of SR 156 and Buena Vista Road, which was found to operate at unacceptable levels under background conditions, would continue to operate at an unacceptable level of service during the PM peak hour under cumulative conditions. In addition, the traffic volumes at the intersection under background and cumulative conditions are large enough to satisfy the peak-hour volume traffic signal warrant.

The remaining study intersections would continue to operate at an acceptable LOS C or better conditions during both the AM and PM peak hours under cumulative conditions. All other unsignalized study intersections are projected to have traffic conditions that fall below the thresholds that warrant signalization.

The intersection level of service calculation sheets are included in Appendix C. The peak-hour signal warrant sheets are contained in Appendix D.

Possible Improvements under Cumulative Conditions

Described below are the recommended improvements necessary to maintain acceptable operating conditions under cumulative conditions.

1. SR 156 and Buena Vista Road. The necessary improvements to improve the intersection level of service to acceptable levels under cumulative conditions consist of the installation of a traffic signal at the intersection.

Table 10
Cumulative Intersection Level of Service and Signal Warrants Analyses Summary

#	Intersection	Existing Int. Control	Jurisdiction	LOS Standard	Peak Hour	Warrant Met?[2]	Delay[1]	LOS
1	SR 156 and Buena Vista Road	Two-Way Stop	Caltrans	C	AM	**Yes**	18.2	C
					PM	**Yes**	**195.4**	**F**
2	Miller Road and Buena Vista Road	Two-Way Stop	City	C	AM	No	12.6	B
					PM	No	15.0	B
3	Westside Boulevard and Buena Vista Road	Two-Way Stop	City	C	AM	No	18.6	C
					PM	No	15.0	C
4	Line Street and Buena Vista Road	One-Way Stop	City	C	AM	No	13.3	B
					PM	No	11.8	B
5	Locust Avenue and Buena Vista Road	All-Way Stop	City	C	AM	No	9.1	A
					PM	No	9.3	A
6	San Benito Street and North Street/Santa Ana Road	Signal	City	C	AM	--	21.2	C
					PM	--	19.8	B
7	Locust Avenue/College Street and Second Street	All-Way Stop	City	C	AM	No	7.2	A
					PM	No	7.1	A
8	Felice Drive and Central Avenue	All-Way Stop	City	C	AM	No	7.5	A
					PM	No	7.7	A
9	Westside Boulevard and Central Avenue	Two-Way Stop	City	C	AM	No	13.3	B
					PM	No	14.8	B
10	Line Street and Central Avenue	Two-Way Stop	City	C	AM	No	9.6	A
					PM	No	10.3	B
11	College Street and Central Avenue	Two-Way Stop	City	C	AM	No	9.8	A
					PM	No	10.2	B
12	Locust Avenue and Central Avenue	Two-Way Stop	City	C	AM	No	10.5	B
					PM	No	10.2	B
13	San Benito Street and Third Street	Signal	City	C	AM	--	14.7	B
					PM	--	17.6	B
14	Westside Boulevard and San Juan Road/Fourth Street	Signal	City	C	AM	--	19.8	B
					PM	--	17.9	B
15	Miller Road and Central Avenue	All-Way Stop	City	C	AM	No	8.0	A
					PM	No	8.2	A

Notes:
[1]The reported delay and corresponding level of service for signalized and all-way stop-controlled intersections represents the average delay for all approaches at the intersection. The reported delay and corresponding level of service for one- and two-way stop-controlled intersections are based on the stop-controlled approach with the highest delay.
[2] Signal warrant analysis is not applicable to signalized intersections.
Bold indicates unacceptable LOS/signal warrant met.

7. Other Transportation Issues

This chapter presents an analysis of other transportation issues associated with the project site, including:

- Potential impacts to transit, bicycle, and pedestrian facilities
- Site access and circulation
- Neighborhood traffic issues
- Safe Routes to School program

These other transportation issues were evaluated to determine if any deficiencies would exist under project conditions that may not be specifically linked to environmental impact reporting. These may not be considered environmental issues, and may not be evaluated in an environmental assessment, but have been included in the traffic study to meet the requirements of the local jurisdiction. Unlike the level of service impact methodology, which is adopted by the City Council, the analyses in this chapter are based on professional judgment in accordance with the standards and methods employed by the traffic engineering community.

Bicycle and Pedestrian Circulation

Currently the project site is not served directly by any bicycle facilities. However, class II bike lanes are provided on Westside Boulevard between Buena Vista Road and Nash Road, with the exception of two short segments. The City of Hollister 2005 General Plan indicates that most bicycling within the city is done on roadway shoulders. The 2009 *San Benito County Bikeway and Pedestrian Master Plan* indicates that class II bike lanes are planned on the following roadways:

- Buena Vista Road, within Hollister City limits
- Central Avenue, between Bridge Road and Locust Avenue
- Third Street, between Locust Avenue and Sally Street
- San Juan Road, between SR 156 and Westside Boulevard
- Line Street, between Nash Road and Buena Vista Road
- San Felipe Road, north of Santa Ana Road

In addition, the following bicycle facilities also are proposed in the project vicinity:

- Class III bike route along Buena Vista Road, between SR 156 and Hollister City limits
- Class III bike route along Fourth Street, between Westside Boulevard and SR 25
- Class III bike route along South Street, between Westside Boulevard and SR 25
- Class III bike route along Monterey Street, between Nash Road and Fourth Street
- Class I multi-use path along the San Benito River.

Sidewalks are missing along all undeveloped areas on Buena Vista Road, Central Avenue, and Fourth Street. The north side of Buena Vista Road does not have sidewalks. Both Central Avenue and Buena Vista Road have segments with no sidewalks, including the project frontages on both roads, between Westside Boulevard and the project site. The 2009 *San Benito County Bikeway and Pedestrian Master Plan* also includes a list of priority sidewalk gap improvement projects within the City of Hollister, which include various segments on Buena Vista Road, both east and west of the project site. These improvements are not funded but can be capital projects or installed with roadway improvement projects or development/redevelopment of the adjacent properties.

The existing transportation network in the study area currently includes many areas with undeveloped roadway frontages, which result in missing sidewalk segments and lack of pedestrian connectivity. The sidewalk gaps in the area create a discontinuous pedestrian network which does not support pedestrian travel between the project site and other pedestrian destinations, such as schools and transit stops.

The current project site plan shows new sidewalks would be installed along the project frontages on Central Avenue and Buena Vista Road. However, even with the proposed project sidewalks along the project's frontages, sidewalks would continue to be missing along some segments of Buena Vista Road and Central Avenue. Pedestrians would be forced to walk along the edge of the roadway on segments with missing sidewalks.

One of the City of Hollister General Plan Goals is to "provide a variety of pedestrian and bicycle facilities to promote safe and efficient non-motorized vehicle circulation in Downtown and throughout Hollister." (Goal C2). The General Plan policies further emphasize pedestrian connectivity by working with local businesses, private developers, and public agencies to ensure provision of safe pedestrian pathways to major public facilities, schools, and employment centers.

Recommended Bicycle and Pedestrian Improvements

Installation of Sidewalks. It is recommended that with the development of the project area, sidewalks along both sides of all new streets within the project site be built. Additionally, a sidewalk on the south side of Buena Vista Road and on the north side of Central Avenue (both project site frontages) should be built to connect to adjacent pedestrian facilities along these streets. This would provide a continuous sidewalk connection from every proposed residential unit within the project site to existing and planned pedestrian facilities within the study area, such as the nearby Calaveras Elementary School and Park and the existing bus stops along Central Avenue.

Additionally, the frontage improvements on Buena Vista Road and Central Avenue should be designed to be consistent with San Benito County and City of Hollister roadway design standards and guidelines. Project frontage improvements should be designed to accommodate the future installation of a bike lane along Buena Vista Road and Central Avenue.

Contribute to Planned Bicycle Facilities in the Project Area. It is recommended that the proposed project contribute to the completion of planned bicycle facilities along Buena Vista Road and Central Avenue, if a funding mechanism has been established for these improvements. The contribution should be determined by the City of Hollister/San Benito County and it should be based on the project's contribution to the total projected growth in the study area.

Transit Service

There are currently three County Express bus lines (Blue Line, Green Line, and Red Line) which operate within the vicinity of the project. The nearest bus stops for the Blue and Green Lines are located along Central Avenue near its intersections with Miller Road and Felice Drive.

Although no reduction to the project trip generation estimates was applied due to transit services, it can be assumed that some of the new project development residents could utilize public transportation. Applying an estimated three percent transit mode share, which is probably the highest that could be expected for the project, equates to approximately 2 new transit riders during the AM peak-hour and 3 new transit riders during the PM peak-hour. Assuming the existing transit service would remain

unchanged, the estimated number of new transit riders using the bus services near the project site would equate to approximately 1-2 riders per bus line during the AM and PM peak hours. Therefore, the additional transit demand generated by the project would not be great enough to justify adding additional transit services in the study area.

However, the existing transportation network in the study area currently includes many areas with undeveloped roadway frontages, which result in missing sidewalk segments and lack of pedestrian connectivity between residential neighborhoods and transit stops.

Recommended Transit Service Improvements

Project frontage improvements should be designed with the potential future extension of transit services onto Buena Vista Road in mind. To that end, it is recommended that project frontage improvements on Buena Vista Road be designed to City of Hollister and San Benito County roadway design standards to accommodate transit vehicles, as necessary in the future.

Site Access and On-Site Circulation

Site Access

A review of the project site plan was performed to determine if adequate site access would be provided. The site plan proposes one full-access entrance on Buena Vista Road and one full-access entrance on Central Avenue. A new on-site roadway would be constructed and would extend between Buena Vista Road and Central Avenue providing access to all residential units within the site from both roadways. The connection to Buena Vista Road would be provided via a new T-intersection. The access point along Central Avenue would be provided via a new north leg of the Western Court and Central Avenue intersection.

Project condition traffic volumes at each of the project access points along Buena Vista Road and Central Avenue are shown in Figure 13. The estimated distribution of project traffic to each of the site access points is based on the proximity of the residential units to each of the access points and assumes that each of the access points would serve 50% of all project traffic. Based on the projected traffic volumes, the proposed project access points would adequately serve projected traffic demands and the intersections would operate satisfactorily without traffic signals.

The design of the access roadway and intersections with Buena Vista Road and Central Avenue should adhere to City of Hollister design guidelines and standards. The final design must be approved by the City of Hollister.

Site Circulation

The site layout allows for continuous traffic circulation. Corner radii and street widths within the site appear to be sufficient to allow for the circulation of large design vehicles such as garbage trucks and fire trucks. With the proposed internal roadway layout and adhering to City/County roadway design standards and guidelines, emergency vehicle access and circulation within the project site should be adequate, making every proposed residential unit within the project development accessible.

Recommended Improvements

The proposed project should adhere to City/County roadway design standards and guidelines when designing roadway widths and turn radii.

On-street parking should be restricted along “knuckles” (90-degree roadway bends) in order to provide adequate turn radii for larger trucks and emergency vehicles circulation.

Pedestrian connections should be provided at intersections where on-site roadways intersect existing streets, such as Buena Vista Road and Central Avenue.

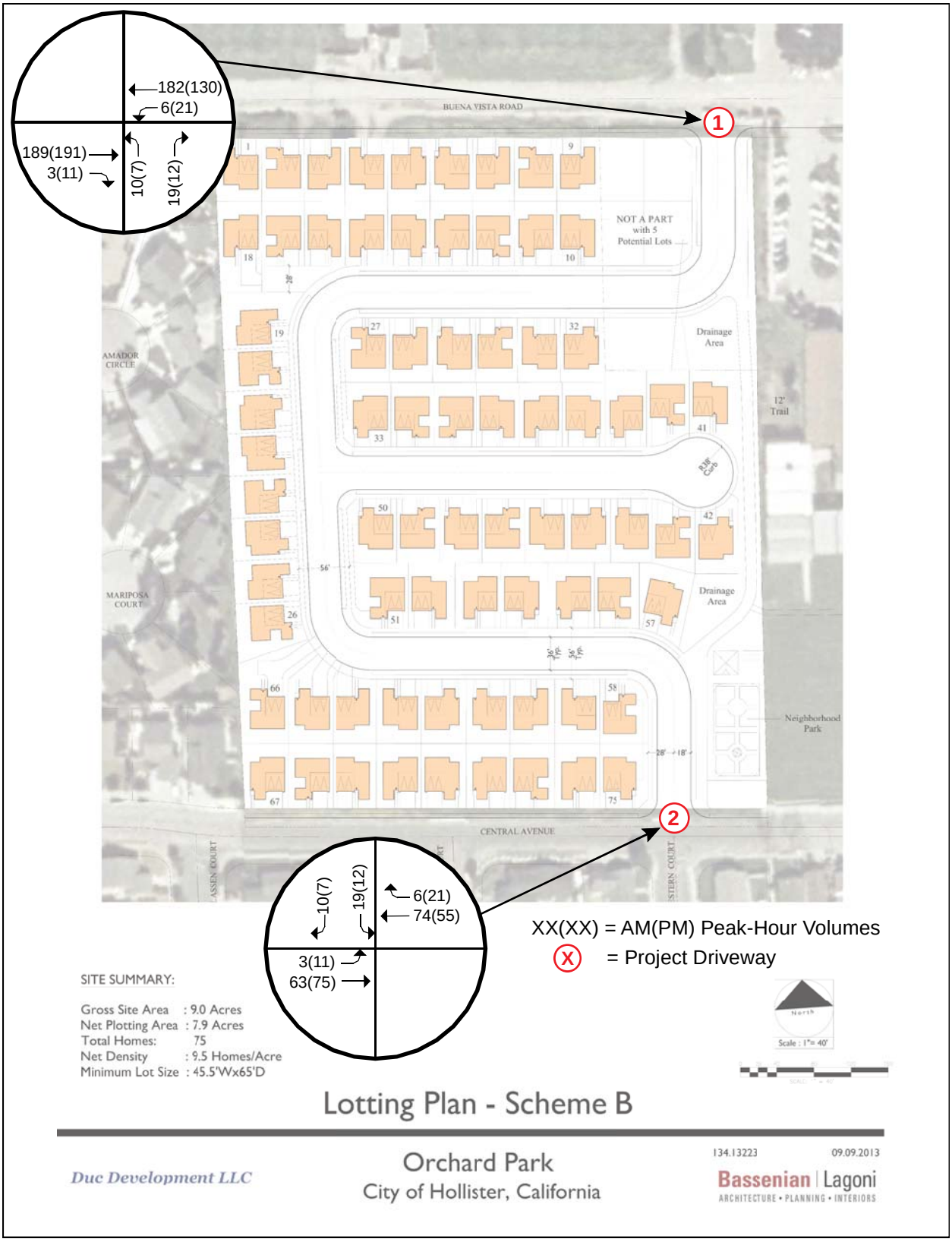


Figure 13
Site Access Project Condition Volumes

Neighborhood Traffic Issues

Residential areas are especially sensitive to traffic increases because traffic can impact the livability of the street. To that end, the addition of project trips to surrounding residential streets may affect the neighborhood. Therefore, an evaluation of indirect traffic related issues on three surrounding roadway segments was completed. The evaluation consists of a roadway segment analysis to quantify the potential change in traffic volumes along the study roadway segments as a result of the proposed project. For the evaluation, the existing and projected daily traffic volumes with the project along the study roadway segments were compared to acceptable volume thresholds for each roadway segment to determine if the projected change in traffic volume would be significant.

Unlike the intersection level of service analysis methodology, which has established impact thresholds, there are no adopted analysis methodologies or impact thresholds for the evaluation of neighborhood traffic issues. Therefore, this analysis is based on approximate volume ranges for specific roadway types, as prescribed in the City of Hollister General Plan. The analysis provides an indication of operational and/or safety issues that may arise due to a traffic volume increases as a result of the proposed project. The study roadway segments include:

1. Central Avenue, Graf Road to Miller Road
2. Central Avenue, Miller Road to Felice Drive
3. Central Avenue, Felice Drive to Westside Boulevard

Existing Surrounding Roadway Characteristics

Based on the street classification described in the City of Hollister General Plan, Central Avenue is classified as a residential street. According to the description of residential streets presented in the City of Hollister General Plan, the primary function of a residential street is to provide direct access from collector streets to residential properties. Its secondary function is to provide access to alternative collectors during high traffic periods. The General Plan further describes residential facilities as having posted speed limits generally ranging between 25 and 30 miles per hour (mph), with traffic volumes generally less than 5,000 vehicles per day (also referred to as average daily traffic (ADT) volumes) but can vary depending on available right-of-way and the adjacent land uses. Central Avenue primarily serves adjacent residential land uses. In addition, Calaveras Elementary School is located along the north side of Central Avenue, just west of Westside Boulevard.

Existing Neighborhood Traffic Volumes

Twenty-four-hour tube counts conducted in August 2014 revealed that all study roadway segments currently carry no more than 1,739 daily vehicles (both directions combined). Based on City of Hollister traffic volume thresholds for residential streets, the daily traffic volumes along the study roadway segments are well within the acceptable roadway capacity ranges.

Speed surveys also were conducted along the study roadway segments. All roadway segments currently have a posted speed limit of 25 mph. The speed surveys revealed the 85th percentile speeds along all three of the study roadway segments exceed the posted speed limit by approximately 5 mph. Existing ADT volumes and 85th percentile speeds along the study roadway segments are summarized in Table 11.

Project Neighborhood Traffic Volumes

Project traffic is expected to be added to each of the studied roadways. The effects of project traffic on each of the surrounding study roadway segments were evaluated based on the collected traffic volume and speed data and projections of the additional project generated traffic. Table 11 presents a summary of existing and projected traffic volumes along each of the studied streets.

Table 11
Roadway Segment Volume and Speed

Roadway Segment	Count Date	Speed Limit (mph)	Direction	85th % Speed (mph)	ADT Existing	ADT Project Trips	ADT Existing Plus Project	ADT % Volume Increase
Central Avenue, between Graf Road and Miller Road	08/27/14	25	EB	34.0	922	142	1,064	15%
			WB	33.8	817	142	959	17%
			Both		1,739	284	2,023	16%
Central Avenue, between Miller Road and Felice Drive	08/27/14	25	EB	32.7	762	111	873	15%
			WB	33.8	706	111	817	16%
			Both		1,468	222	1,690	15%
Central Avenue, between Felice Drive and Westside Boulvard	08/27/14	25	EB	29.3	790	111	901	14%
			WB	28.4	669	111	780	17%
			Both		1,459	222	1,681	15%

Notes:
☐ - Exceeds speed limit by 5 mph or more.
ADT = Average Daily Traffic Volumes
mph = miles per hour

It is projected that the proposed project would add 159 or less daily trips (representing an increase of 22% when compared to existing daily traffic volumes) to each of the study roadway segments. However, even with the addition of project traffic, traffic volumes along each of the study roadway segments would continue to be well within the acceptable daily traffic thresholds identified in the City of Hollister General Plan.

Recommendations for Neighborhood Street Operations

It is recommended that enforcement be increased along Central Avenue, between Graf Road and Westside Boulevard, to ensure the posted speed limit is adhered to. Central Avenue also serves as a route to the nearby Calaveras Elementary School. Enforcement can include enhanced signage, temporary (during school peak hours) signage, and/or increased police patrolling. If enforcement is deemed ineffective, the implementation of traffic calming measures can be considered for implementation by the City.

The implementation of any traffic calming measures should be evaluated as part of a comprehensive traffic calming study for the area. The primary differences between a typical traffic engineering study and a traffic calming study is that a traffic calming study generally includes (1) more neighborhood involvement and (2) considers "quality of life" issues in addition to traffic capacity and safety issues. Generally, traffic calming is considered in a residential neighborhood when (1) the volume of traffic on a neighborhood street is incompatible with the surrounding land uses and/or roadway design or (2) the speed of traffic on a neighborhood street is excessive or unsafe. The traffic calming study would need to include the evaluation of all streets within the neighborhood to ensure that the implementation of traffic calming measures on one street do not result in adverse effects on other street locations within the neighborhood. There are no established procedures for the application of traffic calming devices and criteria for device installation vary widely by jurisdiction.

Though the evaluation of the effects of project traffic on surrounding residential streets identified no direct impacts, it is evident that existing travel speeds along Central Avenue exceed the posted speed limits. As such, the project would add traffic to locations with existing speeds that exceed the posted speed limits. The project could make a fair-share contribution towards the future installation of traffic calming measures or the preparation of a neighborhood traffic calming study if deemed necessary by the City.

Conformance with Safe Routes To School Program

The City of Hollister City Council, at a regular meeting held on April 21, 2014, adopted the Safe Routes to R.O. Hardin and Calaveras Elementary Schools Implementation Plan. The Safe Routes to School program is described in the report entitled *Calaveras Elementary and R.O. Hardin Elementary Safe Routes to School Needs Assessment and Preliminary Recommendations*, dated February 2014 by Alta Planning and Design. The Safe Routes to School program is designed to create safe and convenient opportunities to access schools, other than by automobile, such as walking, biking, carpooling, and taking public transportation. The report identifies five key components to the success of the program:

6. Engineering – provide an adequate pedestrian network, which include bicycle facilities, bicycle parking, sidewalks, signage, and maintenance
7. Education – provide programs to improve safety and awareness
8. Encouragement – provide suggested routes to school maps and create events that reward current walkers/bicyclists and motivate more people to try walking/biking, such as walk/bike to school days
9. Enforcement – create programs that reinforce safe walking/biking
10. Evaluation – monitor the program

The adopted Safe Routes to School program to Calaveras and R.O. Hardin Elementary schools includes a list of recommended engineering improvements specific to each school area. Calaveras Elementary School is located on Buena Vista Road, approximately 1/3 of a mile east of the project site.

Identified Improvements in the Vicinity of Calaveras Elementary School

Various physical improvements to the roadway network and intersections providing access to Calaveras Elementary School are identified in the adopted Safe Routes to School program. Identified improvements in the immediate project area include:

- Install missing sidewalks along the south side of Buena Vista Road, west of the school.
- Stripe bike lanes all along Buena Vista Road.
- Construct curb extensions, stripe high visibility yellow crosswalks, and stripe advance stop lines at the Miller Road/Buena Vista Road and Westside Boulevard/Buena Vista Road intersections.
- Stripe high visibility yellow crosswalks and stripe advance stop lines at the Central Avenue and Felice Drive intersection.
- Conduct a stop sign warrant analysis. Possible curb extensions, pedestrian warning signage, and stripe high visibility yellow crosswalks at Westside Boulevard and Central Avenue.

Other recommended improvements include enforcement by the City of Hollister Police Department to reduce observed driver violations, such as driving over 25 mph within a school zone (specifically along Buena Vista Road), use of cell phones while driving, not coming to a complete stop at stop-controlled intersections, and not using turn signals, among others.

Project's School Access Demand

With the development of the proposed project, there will be an increase in non-vehicular travel to/from land uses surrounding the project, including Calaveras Elementary School. This will increase the need for a complete pedestrian network. Therefore, the proposed project should work with the City of Hollister to contribute to the implementation of any improvements that would help enhance pedestrian circulation in the study area, including the improvements identified in the adopted Safe to School Routes document.

Recommended Safe Route to School Improvements

The proposed project should work with the City of Hollister to contribute to the implementation of any improvements that would help enhance pedestrian circulation in the study area, including the improvements identified above and within the adopted Safe to School Routes document.

8. Conclusions

The potential impacts of the project were evaluated in accordance with the standards set forth by the City of Hollister, San Benito County, and Caltrans. The study included an analysis of AM and PM peak-hour traffic conditions for 3 signalized intersections, 12 unsignalized intersections, and three roadway segments.

Evaluation of Project Conditions

The evaluation of impacts associated with the proposed project is described below.

Intersection Level of Service and Signal Warrant Analyses

Traffic impacts at the study intersections were identified based on a level of service standard of C for all study intersections.

Existing Plus Project Conditions

The results of the intersection level of service analysis indicates that the project would result in a significant impact at the SR 156 and Buena Vista Road intersection under existing plus project conditions based on applicable significance criteria. The impact and proposed improvements to mitigate the impact are described below.

Background Plus Project Conditions

The results of the intersection level of service analysis indicates that the project would result in a significant impact at the SR 156 and Buena Vista Road intersection under background plus project conditions based on applicable significance criteria. The impact and proposed improvements to mitigate the impact are described below.

Recommended Project Mitigation Measures

Described below are the recommended mitigation measures necessary to maintain the level of service standards and intersection operations under existing plus project conditions and background plus project conditions.

1. SR 156 and Buena Vista Road (Caltrans)

Mitigation Measures. The necessary improvements to improve the intersection level of service to acceptable levels consist of the installation of a traffic signal at the intersection. The developer may be required to pay a fair-share toward improvement costs at this intersection. With implementation of this mitigation measure, this impact would be less-than-significant. However, payment of a fee alone will not

guarantee the timely construction of the identified improvements to mitigate the project impact. Therefore, in the event that the developer makes a fair-share contribution in the form of fee payment rather than constructing the improvement, this impact would be considered significant and unavoidable.

Evaluation of Cumulative Conditions

The results indicate that the SR 156 and Buena Vista Road intersection is projected to operate at unacceptable level of service conditions and have traffic levels that meet the thresholds that warrant signalization under cumulative conditions.

Possible Improvements under Cumulative Conditions

Described below are the recommended improvements necessary to maintain acceptable operating conditions under cumulative conditions.

1. SR 156 and Buena Vista Road. The necessary improvements to improve the intersection level of service to acceptable levels under cumulative conditions consist of the installation of a traffic signal at the intersection.

Other Transportation Issues

Recommended Bicycle and Pedestrian Improvements

Installation of Sidewalks. It is recommended that with the development of the project area, sidewalks along both sides of all new streets within the project site be built. Additionally, a sidewalk on the south side of Buena Vista Road and on the north side of Central Avenue (both project site frontages) should be built to connect to adjacent pedestrian facilities along these streets. This would provide a continuous sidewalk connection from every proposed residential unit within the project site to existing and planned pedestrian facilities within the study area, such as the nearby Calaveras Elementary School and Park and the existing bus stops along Central Avenue.

Additionally, the frontage improvements on Buena Vista Road and Central Avenue should be designed to be consistent with San Benito County and City of Hollister roadway design standards and guidelines. Project frontage improvements should be designed to accommodate the future installation of a bike lane along Buena Vista Road and Central Avenue.

Contribute to Planned Bicycle Facilities in the Project Area. It is recommended that the proposed project contribute to the completion of planned bicycle facilities along Buena Vista Road and Central Avenue, if a funding mechanism has been established for these improvements. The contribution should be determined by the City of Hollister/San Benito County and it should be based on the project's contribution to the total projected growth in the study area.

Recommended Transit Service Improvements

Project frontage improvements should be designed with the potential future extension of transit services onto Buena Vista Road in mind. To that end, it is recommended that project frontage improvements on Buena Vista Road be designed to City of Hollister and San Benito County roadway design standards to accommodate transit vehicles, as necessary in the future.

Recommended Site Access and On-Site Circulation Improvements

The proposed project should adhere to City/County roadway design standards and guidelines when designing roadway widths and turn radii.

On-street parking should be restricted along "knuckles" (90-degree roadway bends) in order to provide adequate turn radii for larger trucks and emergency vehicles circulation.

Pedestrian connections should be provided at intersections where on-site roadways intersect existing streets, such as Buena Vista Road and Central Avenue.

Recommendations for Neighborhood Street Operations

It is recommended that enforcement be increased along Central Avenue between Graf Road and Westside Boulevard, to ensure the posted speed limit is adhered to. Central Avenue also serves as a route to the nearby Calaveras Elementary School. Enforcement can include enhanced signage, temporary (during school peak hours) signage, and/or increased police patrolling. If enforcement is deemed ineffective, the implementation of traffic calming measures can be considered for implementation by the City.

The implementation of any traffic calming measures should be evaluated as part of a comprehensive traffic calming study for the area. The primary differences between a typical traffic engineering study and a traffic calming study is that a traffic calming study generally includes (1) more neighborhood involvement and (2) considers "quality of life" issues in addition to traffic capacity and safety issues. Generally, traffic calming is considered in a residential neighborhood when (1) the volume of traffic on a neighborhood street is incompatible with the surrounding land uses and/or roadway design or (2) the speed of traffic on a neighborhood street is excessive or unsafe. The traffic calming study would need to include the evaluation of all streets within the neighborhood to ensure that the implementation of traffic calming measures on one street do not result in adverse effects on other street locations within the neighborhood. There are no established procedures for the application of traffic calming devices and criteria for device installation vary widely by jurisdiction.

Though the evaluation of the effects of project traffic on surrounding residential streets identified no direct impacts, it is evident that existing travel speeds along Central Avenue exceed the posted speed limits. As such, the project would add traffic to locations with existing speeds that exceed the posted speed limits. The project could make a fair-share contribution towards the future installation of traffic calming measures or the preparation of a neighborhood traffic calming study if deemed necessary by the City.

Recommended Safe Route to School Improvements

The proposed project should work with the City of Hollister to contribute to the implementation of any improvements that would help enhance pedestrian circulation in the study area, including the improvements identified above and within the adopted Safe to School Routes document.