Costco Business Center Fuel Facility

Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	72.00	Space	0.74	28,800.00	0
Gasoline/Service Station	24.00	Pump	1.00	3,388.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	328.8	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity based on 5-year average (PG&E, 2015).

Land Use - Approximately 1.74-acre project site

Construction Phase - Construction of the proposed project is anticipated to begin in January 2020 and would occur over a 3 to 4 month period. Demolition activities are anticipated to occur over an approximately 1 month period and grading would occur over an approximate 5 day period. An overlap of demolition and grading activities is anticipated. Exterior work such as foundation installation, construction, and installation of pavements is expected to occur over a 2 to 3 month period.

Grading - up to 6,475 cubic yards of cut would be off-hauled

Demolition - Approximately 3,624 tons of demolition waste would be generated by the proposed project

Vehicle Trips - Assuming 20% higher trips than ITE trip rates, consistent with the project's AM peak hour trip generation estimates and internalization rate and pass-by rates.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	200.00	45.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	4.00	5.00
tblConstructionPhase	NumDays	2.00	5.00
tblGrading	AcresOfGrading	1.88	1.50
tblGrading	AcresOfGrading	2.50	1.00
tblGrading	MaterialExported	0.00	6,475.00
tblLandUse	LotAcreage	0.65	0.74
tblLandUse	LotAcreage	0.08	1.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	328.8
tblVehicleTrips	ST_TR	168.56	113.41
tblVehicleTrips	SU_TR	168.56	113.41
tblVehicleTrips	WD_TR	168.56	113.41

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					
2020	0.1170	0.9138	0.6206	1.4900e-003	0.0801	0.0396	0.1197	0.0237	0.0376	0.0612	0.0000	132.8640	132.8640	0.0211	0.0000	133.3913
Maximum	**0.1170**	**0.9138**	**0.6206**	**1.4900e-003**	**0.0801**	**0.0396**	**0.1197**	**0.0237**	**0.0376**	**0.0612**	**0.0000**	**132.8640**	**132.8640**	**0.0211**	**0.0000**	**133.3913**

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					
2020	0.1170	0.9138	0.6206	1.4900e-003	0.0801	0.0396	0.1197	0.0237	0.0376	0.0612	0.0000	132.8639	132.8639	0.0211	0.0000	133.3912
Maximum	**0.1170**	**0.9138**	**0.6206**	**1.4900e-003**	**0.0801**	**0.0396**	**0.1197**	**0.0237**	**0.0376**	**0.0612**	**0.0000**	**132.8639**	**132.8639**	**0.0211**	**0.0000**	**133.3912**

	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	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-6-2020**	**4-5-2020**	0.8839	0.8839
2	**4-6-2020**	**7-5-2020**	0.0431	0.0431
		Highest	0.8839	0.8839

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	0.0176	1.0000e-005	8.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7200e-003	1.7200e-003	0.0000	0.0000	1.8300e-003
Energy	4.5000e-004	4.1100e-003	3.4500e-003	2.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	9.7985	9.7985	5.6000e-004	1.8000e-004	9.8658
Mobile	0.5797	2.1649	4.1097	8.6500e-003	0.5838	0.0104	0.5941	0.1567	9.7400e-003	0.1665	0.0000	794.0350	794.0350	0.0494	0.0000	795.2698
Waste						0.0000	0.0000		0.0000	0.0000	2.6247	0.0000	2.6247	0.1551	0.0000	6.5025
Water						0.0000	0.0000		0.0000	0.0000	0.1011	0.3592	0.4604	0.0104	2.5000e-004	0.7959
Total	**0.5977**	**2.1691**	**4.1141**	**8.6700e-003**	**0.5838**	**0.0107**	**0.5945**	**0.1567**	**0.0101**	**0.1668**	**2.7258**	**804.1945**	**806.9203**	**0.2155**	**4.3000e-004**	**812.4358**

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	0.0176	1.0000e-005	8.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7200e-003	1.7200e-003	0.0000	0.0000	1.8300e-003
Energy	4.5000e-004	4.1100e-003	3.4500e-003	2.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	9.7985	9.7985	5.6000e-004	1.8000e-004	9.8658
Mobile	0.5797	2.1649	4.1097	8.6500e-003	0.5838	0.0104	0.5941	0.1567	9.7400e-003	0.1665	0.0000	794.0350	794.0350	0.0494	0.0000	795.2698
Waste						0.0000	0.0000		0.0000	0.0000	2.6247	0.0000	2.6247	0.1551	0.0000	6.5025
Water						0.0000	0.0000		0.0000	0.0000	0.1011	0.3592	0.4604	0.0104	2.5000e-004	0.7959
Total	**0.5977**	**2.1691**	**4.1141**	**8.6700e-003**	**0.5838**	**0.0107**	**0.5945**	**0.1567**	**0.0101**	**0.1668**	**2.7258**	**804.1945**	**806.9203**	**0.2155**	**4.3000e-004**	**812.4358**

	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	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	1/6/2020	2/7/2020	5	25	
2	Site Preparation	Site Preparation	1/27/2020	1/31/2020	5	5	
3	Grading	Grading	2/3/2020	2/7/2020	5	5	
4	Building Construction	Building Construction	2/10/2020	4/10/2020	5	45	
5	Paving	Paving	3/16/2020	3/27/2020	5	10	
6	Architectural Coating	Architectural Coating	3/30/2020	4/10/2020	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.74

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 5,082; Non-Residential Outdoor: 1,694; Striped Parking Area: 1,728 (Architectural Coating – sqft)

<u>OffRoad Equipment</u>

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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	5	13.00	0.00	358.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	809.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	13.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

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					0.0388	0.0000	0.0388	5.8700e-003	0.0000	5.8700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0266	0.2618	0.1832	3.0000e-004		0.0144	0.0144		0.0135	0.0135	0.0000	26.3346	26.3346	6.7700e-003	0.0000	26.5038
Total	**0.0266**	**0.2618**	**0.1832**	**3.0000e-004**	**0.0388**	**0.0144**	**0.0532**	**5.8700e-003**	**0.0135**	**0.0193**	**0.0000**	**26.3346**	**26.3346**	**6.7700e-003**	**0.0000**	**26.5038**

3.2 Demolition - 2020

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	1.4900e-003	0.0523	0.0105	1.4000e-004	3.0200e-003	1.7000e-004	3.1900e-003	8.3000e-004	1.6000e-004	9.9000e-004	0.0000	13.7181	13.7181	7.1000e-004	0.0000	13.7357
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	5.4000e-004	3.9000e-004	3.9900e-003	1.0000e-005	1.2800e-003	1.0000e-005	1.2900e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.1250	1.1250	3.0000e-005	0.0000	1.1256
Total	**2.0300e-003**	**0.0527**	**0.0145**	**1.5000e-004**	**4.3000e-003**	**1.8000e-004**	**4.4800e-003**	**1.1700e-003**	**1.7000e-004**	**1.3400e-003**	**0.0000**	**14.8430**	**14.8430**	**7.4000e-004**	**0.0000**	**14.8614**

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					0.0388	0.0000	0.0388	5.8700e-003	0.0000	5.8700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0266	0.2618	0.1832	3.0000e-004		0.0144	0.0144		0.0135	0.0135	0.0000	26.3346	26.3346	6.7700e-003	0.0000	26.5038
Total	**0.0266**	**0.2618**	**0.1832**	**3.0000e-004**	**0.0388**	**0.0144**	**0.0532**	**5.8700e-003**	**0.0135**	**0.0193**	**0.0000**	**26.3346**	**26.3346**	**6.7700e-003**	**0.0000**	**26.5038**

3.2 Demolition - 2020

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	1.4900e-003	0.0523	0.0105	1.4000e-004	3.0200e-003	1.7000e-004	3.1900e-003	8.3000e-004	1.6000e-004	9.9000e-004	0.0000	13.7181	13.7181	7.1000e-004	0.0000	13.7357
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	5.4000e-004	3.9000e-004	3.9900e-003	1.0000e-005	1.2800e-003	1.0000e-005	1.2900e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.1250	1.1250	3.0000e-005	0.0000	1.1256
Total	**2.0300e-003**	**0.0527**	**0.0145**	**1.5000e-004**	**4.3000e-003**	**1.8000e-004**	**4.4800e-003**	**1.1700e-003**	**1.7000e-004**	**1.3400e-003**	**0.0000**	**14.8430**	**14.8430**	**7.4000e-004**	**0.0000**	**14.8614**

3.3 Site Preparation - 2020

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					0.0137	0.0000	0.0137	7.3000e-003	0.0000	7.3000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0700e-003	0.0459	0.0193	4.0000e-005		2.0500e-003	2.0500e-003		1.8900e-003	1.8900e-003	0.0000	3.7816	3.7816	1.2200e-003	0.0000	3.8122
Total	**4.0700e-003**	**0.0459**	**0.0193**	**4.0000e-005**	**0.0137**	**2.0500e-003**	**0.0158**	**7.3000e-003**	**1.8900e-003**	**9.1900e-003**	**0.0000**	**3.7816**	**3.7816**	**1.2200e-003**	**0.0000**	**3.8122**

3.3 Site Preparation - 2020

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	7.0000e-005	5.0000e-005	4.9000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1385	0.1385	0.0000	0.0000	0.1385
Total	**7.0000e-005**	**5.0000e-005**	**4.9000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1385**	**0.1385**	**0.0000**	**0.0000**	**0.1385**

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					0.0137	0.0000	0.0137	7.3000e-003	0.0000	7.3000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0700e-003	0.0459	0.0193	4.0000e-005		2.0500e-003	2.0500e-003		1.8900e-003	1.8900e-003	0.0000	3.7816	3.7816	1.2200e-003	0.0000	3.8122
Total	**4.0700e-003**	**0.0459**	**0.0193**	**4.0000e-005**	**0.0137**	**2.0500e-003**	**0.0158**	**7.3000e-003**	**1.8900e-003**	**9.1900e-003**	**0.0000**	**3.7816**	**3.7816**	**1.2200e-003**	**0.0000**	**3.8122**

3.3 Site Preparation - 2020

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	7.0000e-005	5.0000e-005	4.9000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1385	0.1385	0.0000	0.0000	0.1385
Total	**7.0000e-005**	**5.0000e-005**	**4.9000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1385**	**0.1385**	**0.0000**	**0.0000**	**0.1385**

3.4 Grading - 2020

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					0.0125	0.0000	0.0125	6.3500e-003	0.0000	6.3500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3700e-003	0.0377	0.0161	4.0000e-005		1.7100e-003	1.7100e-003		1.5700e-003	1.5700e-003	0.0000	3.0974	3.0974	1.0000e-003	0.0000	3.1224
Total	**3.3700e-003**	**0.0377**	**0.0161**	**4.0000e-005**	**0.0125**	**1.7100e-003**	**0.0142**	**6.3500e-003**	**1.5700e-003**	**7.9200e-003**	**0.0000**	**3.0974**	**3.0974**	**1.0000e-003**	**0.0000**	**3.1224**

3.4 Grading - 2020

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	3.3800e-003	0.1183	0.0238	3.2000e-004	6.8300e-003	3.8000e-004	7.2100e-003	1.8800e-003	3.7000e-004	2.2400e-003	0.0000	30.9998	30.9998	1.6000e-003	0.0000	31.0397
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	7.0000e-005	5.0000e-005	4.9000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1385	0.1385	0.0000	0.0000	0.1385
Total	**3.4500e-003**	**0.1183**	**0.0243**	**3.2000e-004**	**6.9900e-003**	**3.8000e-004**	**7.3700e-003**	**1.9200e-003**	**3.7000e-004**	**2.2800e-003**	**0.0000**	**31.1383**	**31.1383**	**1.6000e-003**	**0.0000**	**31.1782**

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					0.0125	0.0000	0.0125	6.3500e-003	0.0000	6.3500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3700e-003	0.0377	0.0161	4.0000e-005		1.7100e-003	1.7100e-003		1.5700e-003	1.5700e-003	0.0000	3.0974	3.0974	1.0000e-003	0.0000	3.1224
Total	**3.3700e-003**	**0.0377**	**0.0161**	**4.0000e-005**	**0.0125**	**1.7100e-003**	**0.0142**	**6.3500e-003**	**1.5700e-003**	**7.9200e-003**	**0.0000**	**3.0974**	**3.0974**	**1.0000e-003**	**0.0000**	**3.1224**

3.4 Grading - 2020

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	3.3800e-003	0.1183	0.0238	3.2000e-004	6.8300e-003	3.8000e-004	7.2100e-003	1.8800e-003	3.7000e-004	2.2400e-003	0.0000	30.9998	30.9998	1.6000e-003	0.0000	31.0397
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	7.0000e-005	5.0000e-005	4.9000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1385	0.1385	0.0000	0.0000	0.1385
Total	**3.4500e-003**	**0.1183**	**0.0243**	**3.2000e-004**	**6.9900e-003**	**3.8000e-004**	**7.3700e-003**	**1.9200e-003**	**3.7000e-004**	**2.2800e-003**	**0.0000**	**31.1383**	**31.1383**	**1.6000e-003**	**0.0000**	**31.1782**

3.5 Building Construction - 2020

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	0.0457	0.3327	0.2967	5.0000e-004		0.0179	0.0179		0.0173	0.0173	0.0000	40.8470	40.8470	7.5800e-003	0.0000	41.0366
Total	**0.0457**	**0.3327**	**0.2967**	**5.0000e-004**		**0.0179**	**0.0179**		**0.0173**	**0.0173**	**0.0000**	**40.8470**	**40.8470**	**7.5800e-003**	**0.0000**	**41.0366**

3.5 Building Construction - 2020

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	4.4000e-004	0.0130	3.2600e-003	3.0000e-005	7.4000e-004	6.0000e-005	8.0000e-004	2.1000e-004	6.0000e-005	2.7000e-004	0.0000	2.9455	2.9455	1.5000e-004	0.0000	2.9493
Worker	9.7000e-004	6.9000e-004	7.1800e-003	2.0000e-005	2.3100e-003	2.0000e-005	2.3300e-003	6.1000e-004	1.0000e-005	6.3000e-004	0.0000	2.0249	2.0249	5.0000e-005	0.0000	2.0262
Total	**1.4100e-003**	**0.0137**	**0.0104**	**5.0000e-005**	**3.0500e-003**	**8.0000e-005**	**3.1300e-003**	**8.2000e-004**	**7.0000e-005**	**9.0000e-004**	**0.0000**	**4.9704**	**4.9704**	**2.0000e-004**	**0.0000**	**4.9754**

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	0.0457	0.3327	0.2967	5.0000e-004		0.0179	0.0179		0.0173	0.0173	0.0000	40.8469	40.8469	7.5800e-003	0.0000	41.0365
Total	**0.0457**	**0.3327**	**0.2967**	**5.0000e-004**		**0.0179**	**0.0179**		**0.0173**	**0.0173**	**0.0000**	**40.8469**	**40.8469**	**7.5800e-003**	**0.0000**	**41.0365**

3.5 Building Construction - 2020

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	4.4000e-004	0.0130	3.2600e-003	3.0000e-005	7.4000e-004	6.0000e-005	8.0000e-004	2.1000e-004	6.0000e-005	2.7000e-004	0.0000	2.9455	2.9455	1.5000e-004	0.0000	2.9493
Worker	9.7000e-004	6.9000e-004	7.1800e-003	2.0000e-005	2.3100e-003	2.0000e-005	2.3300e-003	6.1000e-004	1.0000e-005	6.3000e-004	0.0000	2.0249	2.0249	5.0000e-005	0.0000	2.0262
Total	**1.4100e-003**	**0.0137**	**0.0104**	**5.0000e-005**	**3.0500e-003**	**8.0000e-005**	**3.1300e-003**	**8.2000e-004**	**7.0000e-005**	**9.0000e-004**	**0.0000**	**4.9704**	**4.9704**	**2.0000e-004**	**0.0000**	**4.9754**

3.6 Paving - 2020

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	4.2000e-003	0.0423	0.0444	7.0000e-005		2.3500e-003	2.3500e-003		2.1600e-003	2.1600e-003	0.0000	5.8829	5.8829	1.8600e-003	0.0000	5.9295
Paving	9.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.1700e-003**	**0.0423**	**0.0444**	**7.0000e-005**		**2.3500e-003**	**2.3500e-003**		**2.1600e-003**	**2.1600e-003**	**0.0000**	**5.8829**	**5.8829**	**1.8600e-003**	**0.0000**	**5.9295**

3.6 Paving - 2020

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	2.2000e-004	1.5000e-004	1.6000e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4500	0.4500	1.0000e-005	0.0000	0.4503
Total	**2.2000e-004**	**1.5000e-004**	**1.6000e-003**	**0.0000**	**5.1000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4500**	**0.4500**	**1.0000e-005**	**0.0000**	**0.4503**

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	4.2000e-003	0.0423	0.0444	7.0000e-005		2.3500e-003	2.3500e-003		2.1600e-003	2.1600e-003	0.0000	5.8828	5.8828	1.8600e-003	0.0000	5.9295
Paving	9.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.1700e-003**	**0.0423**	**0.0444**	**7.0000e-005**		**2.3500e-003**	**2.3500e-003**		**2.1600e-003**	**2.1600e-003**	**0.0000**	**5.8828**	**5.8828**	**1.8600e-003**	**0.0000**	**5.9295**

3.6 Paving - 2020

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	2.2000e-004	1.5000e-004	1.6000e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4500	0.4500	1.0000e-005	0.0000	0.4503
Total	**2.2000e-004**	**1.5000e-004**	**1.6000e-003**	**0.0000**	**5.1000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4500**	**0.4500**	**1.0000e-005**	**0.0000**	**0.4503**

3.7 Architectural Coating - 2020

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					
Archit. Coating	0.0237					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2100e-003	8.4200e-003	9.1600e-003	1.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	1.2766	1.2766	1.0000e-004	0.0000	1.2791
Total	**0.0249**	**8.4200e-003**	**9.1600e-003**	**1.0000e-005**		**5.5000e-004**	**5.5000e-004**		**5.5000e-004**	**5.5000e-004**	**0.0000**	**1.2766**	**1.2766**	**1.0000e-004**	**0.0000**	**1.2791**

3.7 Architectural Coating - 2020

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	5.0000e-005	4.0000e-005	3.7000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1038	0.1038	0.0000	0.0000	0.1039
Total	**5.0000e-005**	**4.0000e-005**	**3.7000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.1038**	**0.1038**	**0.0000**	**0.0000**	**0.1039**

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	0.0237					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2100e-003	8.4200e-003	9.1600e-003	1.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	1.2766	1.2766	1.0000e-004	0.0000	1.2791
Total	**0.0249**	**8.4200e-003**	**9.1600e-003**	**1.0000e-005**		**5.5000e-004**	**5.5000e-004**		**5.5000e-004**	**5.5000e-004**	**0.0000**	**1.2766**	**1.2766**	**1.0000e-004**	**0.0000**	**1.2791**

3.7 Architectural Coating - 2020

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	5.0000e-005	4.0000e-005	3.7000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1038	0.1038	0.0000	0.0000	0.1039
Total	**5.0000e-005**	**4.0000e-005**	**3.7000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.1038**	**0.1038**	**0.0000**	**0.0000**	**0.1039**

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	0.5797	2.1649	4.1097	8.6500e-003	0.5838	0.0104	0.5941	0.1567	9.7400e-003	0.1665	0.0000	794.0350	794.0350	0.0494	0.0000	795.2698
Unmitigated	0.5797	2.1649	4.1097	8.6500e-003	0.5838	0.0104	0.5941	0.1567	9.7400e-003	0.1665	0.0000	794.0350	794.0350	0.0494	0.0000	795.2698

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Gasoline/Service Station	2,721.84	2,721.84	2721.84	1,568,238	1,568,238
Parking Lot	0.00	0.00	0.00		
Total	2,721.84	2,721.84	2,721.84	1,568,238	1,568,238

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
Gasoline/Service Station	9.50	7.30	7.30	2.00	79.00	19.00	14	27	59
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Gasoline/Service Station	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812
Parking Lot	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812

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	5.3236	5.3236	4.7000e-004	1.0000e-004	5.3643
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5.3236	5.3236	4.7000e-004	1.0000e-004	5.3643
NaturalGas Mitigated	4.5000e-004	4.1100e-003	3.4500e-003	2.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	4.4750	4.4750	9.0000e-005	8.0000e-005	4.5016
NaturalGas Unmitigated	4.5000e-004	4.1100e-003	3.4500e-003	2.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	4.4750	4.4750	9.0000e-005	8.0000e-005	4.5016

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					
Gasoline/Service Station	83857.9	4.5000e-004	4.1100e-003	3.4500e-003	2.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	4.4750	4.4750	9.0000e-005	8.0000e-005	4.5016
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**4.5000e-004**	**4.1100e-003**	**3.4500e-003**	**2.0000e-005**		**3.1000e-004**	**3.1000e-004**		**3.1000e-004**	**3.1000e-004**	**0.0000**	**4.4750**	**4.4750**	**9.0000e-005**	**8.0000e-005**	**4.5016**

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					
Gasoline/Service Station	83857.9	4.5000e-004	4.1100e-003	3.4500e-003	2.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	4.4750	4.4750	9.0000e-005	8.0000e-005	4.5016
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**4.5000e-004**	**4.1100e-003**	**3.4500e-003**	**2.0000e-005**		**3.1000e-004**	**3.1000e-004**		**3.1000e-004**	**3.1000e-004**	**0.0000**	**4.4750**	**4.4750**	**9.0000e-005**	**8.0000e-005**	**4.5016**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Gasoline/Service Station	25614.8	3.8202	3.4000e-004	7.0000e-005	3.8494
Parking Lot	10080	1.5033	1.3000e-004	3.0000e-005	1.5148
Total		**5.3236**	**4.7000e-004**	**1.0000e-004**	**5.3643**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Gasoline/Service Station	25614.8	3.8202	3.4000e-004	7.0000e-005	3.8494
Parking Lot	10080	1.5033	1.3000e-004	3.0000e-005	1.5148
Total		**5.3236**	**4.7000e-004**	**1.0000e-004**	**5.3643**

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	0.0176	1.0000e-005	8.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7200e-003	1.7200e-003	0.0000	0.0000	1.8300e-003
Unmitigated	0.0176	1.0000e-005	8.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7200e-003	1.7200e-003	0.0000	0.0000	1.8300e-003

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	2.3700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0151					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	8.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7200e-003	1.7200e-003	0.0000	0.0000	1.8300e-003
Total	**0.0175**	**1.0000e-005**	**8.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.7200e-003**	**1.7200e-003**	**0.0000**	**0.0000**	**1.8300e-003**

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	tons/yr										MT/yr					
Architectural Coating	2.3700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0151					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	8.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7200e-003	1.7200e-003	0.0000	0.0000	1.8300e-003
Total	**0.0175**	**1.0000e-005**	**8.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.7200e-003**	**1.7200e-003**	**0.0000**	**0.0000**	**1.8300e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.4604	0.0104	2.5000e-004	0.7959
Unmitigated	0.4604	0.0104	2.5000e-004	0.7959

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Gasoline/Service Station	0.318765 / 0.195372	0.4604	0.0104	2.5000e-004	0.7959
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.4604**	**0.0104**	**2.5000e-004**	**0.7959**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Gasoline/Service Station	0.318765 / 0.195372	0.4604	0.0104	2.5000e-004	0.7959
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.4604**	**0.0104**	**2.5000e-004**	**0.7959**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.6247	0.1551	0.0000	6.5025
Unmitigated	2.6247	0.1551	0.0000	6.5025

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Gasoline/Service Station	12.93	2.6247	0.1551	0.0000	6.5025
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**2.6247**	**0.1551**	**0.0000**	**6.5025**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Gasoline/Service Station	12.93	2.6247	0.1551	0.0000	6.5025
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**2.6247**	**0.1551**	**0.0000**	**6.5025**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Costco Business Center Fuel Facility

Bay Area AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	72.00	Space	0.74	28,800.00	0
Gasoline/Service Station	24.00	Pump	1.00	3,388.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	328.8	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity based on 5-year average (PG&E, 2015).

Land Use - Approximately 1.74-acre project site

Construction Phase - Construction of the proposed project is anticipated to begin in January 2020 and would occur over a 3 to 4 month period. Demolition activities are anticipated to occur over an approximately 1 month period and grading would occur over an approximate 5 day period. An overlap of demolition and grading activities is anticipated. Exterior work such as foundation installation, construction, and installation of pavements is expected to occur over a 2 to 3 month period.

Grading - up to 6,475 cubic yards of cut would be off-hauled

Demolition - Approximately 3,624 tons of demolition waste would be generated by the proposed project

Vehicle Trips - Assuming 20% higher trips than ITE trip rates, consistent with the project's AM peak hour trip generation estimates and internalization rate and pass-by rates.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	200.00	45.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	4.00	5.00
tblConstructionPhase	NumDays	2.00	5.00
tblGrading	AcresOfGrading	1.88	1.50
tblGrading	AcresOfGrading	2.50	1.00
tblGrading	MaterialExported	0.00	6,475.00
tblLandUse	LotAcreage	0.65	0.74
tblLandUse	LotAcreage	0.08	1.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	328.8
tblVehicleTrips	ST_TR	168.56	113.41
tblVehicleTrips	SU_TR	168.56	113.41
tblVehicleTrips	WD_TR	168.56	113.41

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					
2020	7.0819	86.5245	31.7013	0.1800	11.3325	2.0029	13.3353	3.8978	1.8646	5.7623	0.0000	18,844.3939	18,844.3939	1.7924	0.0000	18,889.2034
Maximum	**7.0819**	**86.5245**	**31.7013**	**0.1800**	**11.3325**	**2.0029**	**13.3353**	**3.8978**	**1.8646**	**5.7623**	**0.0000**	**18,844.3939**	**18,844.3939**	**1.7924**	**0.0000**	**18,889.2034**

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					
2020	7.0819	86.5245	31.7013	0.1800	11.3325	2.0029	13.3353	3.8978	1.8646	5.7623	0.0000	18,844.3939	18,844.3939	1.7924	0.0000	18,889.2034
Maximum	**7.0819**	**86.5245**	**31.7013**	**0.1800**	**11.3325**	**2.0029**	**13.3353**	**3.8978**	**1.8646**	**5.7623**	**0.0000**	**18,844.3939**	**18,844.3939**	**1.7924**	**0.0000**	**18,889.2034**

	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	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	0.0966	9.0000e-005	9.8600e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0210	0.0210	6.0000e-005		0.0224
Energy	2.4800e-003	0.0225	0.0189	1.4000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003		27.0292	27.0292	5.2000e-004	5.0000e-004	27.1898
Mobile	3.7706	11.7249	20.9441	0.0501	3.3323	0.0566	3.3889	0.8917	0.0531	0.9448		5,075.5680	5,075.5680	0.2864		5,082.7279
Total	**3.8697**	**11.7475**	**20.9729**	**0.0503**	**3.3323**	**0.0584**	**3.3906**	**0.8917**	**0.0548**	**0.9465**		**5,102.6181**	**5,102.6181**	**0.2870**	**5.0000e-004**	**5,109.9401**

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	0.0966	9.0000e-005	9.8600e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0210	0.0210	6.0000e-005		0.0224
Energy	2.4800e-003	0.0225	0.0189	1.4000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003		27.0292	27.0292	5.2000e-004	5.0000e-004	27.1898
Mobile	3.7706	11.7249	20.9441	0.0501	3.3323	0.0566	3.3889	0.8917	0.0531	0.9448		5,075.5680	5,075.5680	0.2864		5,082.7279
Total	**3.8697**	**11.7475**	**20.9729**	**0.0503**	**3.3323**	**0.0584**	**3.3906**	**0.8917**	**0.0548**	**0.9465**		**5,102.6181**	**5,102.6181**	**0.2870**	**5.0000e-004**	**5,109.9401**

	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	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	1/6/2020	2/7/2020	5	25	
2	Site Preparation	Site Preparation	1/27/2020	1/31/2020	5	5	
3	Grading	Grading	2/3/2020	2/7/2020	5	5	
4	Building Construction	Building Construction	2/10/2020	4/10/2020	5	45	
5	Paving	Paving	3/16/2020	3/27/2020	5	10	
6	Architectural Coating	Architectural Coating	3/30/2020	4/10/2020	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.74

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 5,082; Non-Residential Outdoor: 1,694; Striped Parking Area: 1,728 (Architectural Coating – sqft)

OffRoad Equipment

Costco Business Center Fuel Facility - Bay Area AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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	5	13.00	0.00	358.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	809.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	13.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

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					3.1020	0.0000	3.1020	0.4697	0.0000	0.4697			0.0000			0.0000
Off-Road	2.1262	20.9463	14.6573	0.0241		1.1525	1.1525		1.0761	1.0761		2,322.3127	2,322.3127	0.5970		2,337.2363
Total	**2.1262**	**20.9463**	**14.6573**	**0.0241**	**3.1020**	**1.1525**	**4.2545**	**0.4697**	**1.0761**	**1.5458**		**2,322.3127**	**2,322.3127**	**0.5970**		**2,337.2363**

3.2 Demolition - 2020

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	0.1182	4.1019	0.8152	0.0114	0.2502	0.0134	0.2636	0.0686	0.0128	0.0814		1,218.3220	1,218.3220	0.0610		1,219.8457
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	0.0452	0.0274	0.3488	1.0700e-003	0.1068	6.9000e-004	0.1075	0.0283	6.4000e-004	0.0290		106.7010	106.7010	2.5700e-003		106.7652
Total	**0.1634**	**4.1293**	**1.1640**	**0.0125**	**0.3570**	**0.0141**	**0.3711**	**0.0969**	**0.0135**	**0.1103**		**1,325.0230**	**1,325.0230**	**0.0635**		**1,326.6109**

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					3.1020	0.0000	3.1020	0.4697	0.0000	0.4697			0.0000			0.0000
Off-Road	2.1262	20.9463	14.6573	0.0241		1.1525	1.1525		1.0761	1.0761	0.0000	2,322.3127	2,322.3127	0.5970		2,337.2363
Total	**2.1262**	**20.9463**	**14.6573**	**0.0241**	**3.1020**	**1.1525**	**4.2545**	**0.4697**	**1.0761**	**1.5458**	**0.0000**	**2,322.3127**	**2,322.3127**	**0.5970**		**2,337.2363**

3.2 Demolition - 2020

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	0.1182	4.1019	0.8152	0.0114	0.2502	0.0134	0.2636	0.0686	0.0128	0.0814		1,218.3220	1,218.3220	0.0610		1,219.8457
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	0.0452	0.0274	0.3488	1.0700e-003	0.1068	6.9000e-004	0.1075	0.0283	6.4000e-004	0.0290		106.7010	106.7010	2.5700e-003		106.7652
Total	**0.1634**	**4.1293**	**1.1640**	**0.0125**	**0.3570**	**0.0141**	**0.3711**	**0.0969**	**0.0135**	**0.1103**		**1,325.0230**	**1,325.0230**	**0.0635**		**1,326.6109**

3.3 Site Preparation - 2020

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					5.4814	0.0000	5.4814	2.9194	0.0000	2.9194			0.0000			0.0000
Off-Road	1.6299	18.3464	7.7093	0.0172		0.8210	0.8210		0.7553	0.7553		1,667.4119	1,667.4119	0.5393		1,680.8937
Total	**1.6299**	**18.3464**	**7.7093**	**0.0172**	**5.4814**	**0.8210**	**6.3024**	**2.9194**	**0.7553**	**3.6746**		**1,667.4119**	**1,667.4119**	**0.5393**		**1,680.8937**

3.3 Site Preparation - 2020

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	0.0278	0.0168	0.2146	6.6000e-004	0.0657	4.3000e-004	0.0661	0.0174	3.9000e-004	0.0178		65.6621	65.6621	1.5800e-003		65.7017
Total	**0.0278**	**0.0168**	**0.2146**	**6.6000e-004**	**0.0657**	**4.3000e-004**	**0.0661**	**0.0174**	**3.9000e-004**	**0.0178**		**65.6621**	**65.6621**	**1.5800e-003**		**65.7017**

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					5.4814	0.0000	5.4814	2.9194	0.0000	2.9194			0.0000			0.0000
Off-Road	1.6299	18.3464	7.7093	0.0172		0.8210	0.8210		0.7553	0.7553	0.0000	1,667.4119	1,667.4119	0.5393		1,680.8937
Total	**1.6299**	**18.3464**	**7.7093**	**0.0172**	**5.4814**	**0.8210**	**6.3024**	**2.9194**	**0.7553**	**3.6746**	**0.0000**	**1,667.4119**	**1,667.4119**	**0.5393**		**1,680.8937**

3.3 Site Preparation - 2020

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	0.0278	0.0168	0.2146	6.6000e-004	0.0657	4.3000e-004	0.0661	0.0174	3.9000e-004	0.0178		65.6621	65.6621	1.5800e-003		65.7017
Total	**0.0278**	**0.0168**	**0.2146**	**6.6000e-004**	**0.0657**	**4.3000e-004**	**0.0661**	**0.0174**	**3.9000e-004**	**0.0178**		**65.6621**	**65.6621**	**1.5800e-003**		**65.7017**

3.4 Grading - 2020

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					4.9812	0.0000	4.9812	2.5392	0.0000	2.5392			0.0000			0.0000
Off-Road	1.3498	15.0854	6.4543	0.0141		0.6844	0.6844		0.6296	0.6296		1,365.7183	1,365.7183	0.4417		1,376.7609
Total	**1.3498**	**15.0854**	**6.4543**	**0.0141**	**4.9812**	**0.6844**	**5.6656**	**2.5392**	**0.6296**	**3.1688**		**1,365.7183**	**1,365.7183**	**0.4417**		**1,376.7609**

3.4 Grading - 2020

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	1.3351	46.3468	9.2111	0.1287	2.8266	0.1515	2.9781	0.7746	0.1449	0.9195		13,765.6778	13,765.6778	0.6886		13,782.8936
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	0.0278	0.0168	0.2146	6.6000e-004	0.0657	4.3000e-004	0.0661	0.0174	3.9000e-004	0.0178		65.6621	65.6621	1.5800e-003		65.7017
Total	**1.3629**	**46.3636**	**9.4258**	**0.1294**	**2.8923**	**0.1519**	**3.0442**	**0.7920**	**0.1453**	**0.9374**		**13,831.3399**	**13,831.3399**	**0.6902**		**13,848.5953**

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					4.9812	0.0000	4.9812	2.5392	0.0000	2.5392			0.0000			0.0000
Off-Road	1.3498	15.0854	6.4543	0.0141		0.6844	0.6844		0.6296	0.6296	0.0000	1,365.7183	1,365.7183	0.4417		1,376.7609
Total	**1.3498**	**15.0854**	**6.4543**	**0.0141**	**4.9812**	**0.6844**	**5.6656**	**2.5392**	**0.6296**	**3.1688**	**0.0000**	**1,365.7183**	**1,365.7183**	**0.4417**		**1,376.7609**

3.4 Grading - 2020

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	1.3351	46.3468	9.2111	0.1287	2.8266	0.1515	2.9781	0.7746	0.1449	0.9195		13,765.6778	13,765.6778	0.6886		13,782.8936
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	0.0278	0.0168	0.2146	6.6000e-004	0.0657	4.3000e-004	0.0661	0.0174	3.9000e-004	0.0178		65.6621	65.6621	1.5800e-003		65.7017
Total	**1.3629**	**46.3636**	**9.4258**	**0.1294**	**2.8923**	**0.1519**	**3.0442**	**0.7920**	**0.1453**	**0.9374**		**13,831.3399**	**13,831.3399**	**0.6902**		**13,848.5953**

3.5 Building Construction - 2020

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	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688		2,001.1595	2,001.1595	0.3715		2,010.4467
Total	**2.0305**	**14.7882**	**13.1881**	**0.0220**		**0.7960**	**0.7960**		**0.7688**	**0.7688**		**2,001.1595**	**2,001.1595**	**0.3715**		**2,010.4467**

3.5 Building Construction - 2020

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	0.0190	0.5698	0.1359	1.3800e-003	0.0338	2.7900e-003	0.0366	9.7400e-003	2.6700e-003	0.0124		145.8540	145.8540	7.1800e-003		146.0336
Worker	0.0452	0.0274	0.3488	1.0700e-003	0.1068	6.9000e-004	0.1075	0.0283	6.4000e-004	0.0290		106.7010	106.7010	2.5700e-003		106.7652
Total	**0.0642**	**0.5972**	**0.4847**	**2.4500e-003**	**0.1406**	**3.4800e-003**	**0.1441**	**0.0381**	**3.3100e-003**	**0.0414**		**252.5550**	**252.5550**	**9.7500e-003**		**252.7988**

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	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688	0.0000	2,001.1595	2,001.1595	0.3715		2,010.4467
Total	**2.0305**	**14.7882**	**13.1881**	**0.0220**		**0.7960**	**0.7960**		**0.7688**	**0.7688**	**0.0000**	**2,001.1595**	**2,001.1595**	**0.3715**		**2,010.4467**

3.5 Building Construction - 2020

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	0.0190	0.5698	0.1359	1.3800e-003	0.0338	2.7900e-003	0.0366	9.7400e-003	2.6700e-003	0.0124		145.8540	145.8540	7.1800e-003		146.0336
Worker	0.0452	0.0274	0.3488	1.0700e-003	0.1068	6.9000e-004	0.1075	0.0283	6.4000e-004	0.0290		106.7010	106.7010	2.5700e-003		106.7652
Total	**0.0642**	**0.5972**	**0.4847**	**2.4500e-003**	**0.1406**	**3.4800e-003**	**0.1441**	**0.0381**	**3.3100e-003**	**0.0414**		**252.5550**	**252.5550**	**9.7500e-003**		**252.7988**

3.6 Paving - 2020

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	0.8402	8.4514	8.8758	0.0135		0.4695	0.4695		0.4328	0.4328		1,296.9461	1,296.9461	0.4111		1,307.2246
Paving	0.1939					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0340**	**8.4514**	**8.8758**	**0.0135**		**0.4695**	**0.4695**		**0.4328**	**0.4328**		**1,296.9461**	**1,296.9461**	**0.4111**		**1,307.2246**

3.6 Paving - 2020

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	0.0452	0.0274	0.3488	1.0700e-003	0.1068	6.9000e-004	0.1075	0.0283	6.4000e-004	0.0290		106.7010	106.7010	2.5700e-003		106.7652
Total	**0.0452**	**0.0274**	**0.3488**	**1.0700e-003**	**0.1068**	**6.9000e-004**	**0.1075**	**0.0283**	**6.4000e-004**	**0.0290**		**106.7010**	**106.7010**	**2.5700e-003**		**106.7652**

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	0.8402	8.4514	8.8758	0.0135		0.4695	0.4695		0.4328	0.4328	0.0000	1,296.9461	1,296.9461	0.4111		1,307.2246
Paving	0.1939					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0340**	**8.4514**	**8.8758**	**0.0135**		**0.4695**	**0.4695**		**0.4328**	**0.4328**	**0.0000**	**1,296.9461**	**1,296.9461**	**0.4111**		**1,307.2246**

3.6 Paving - 2020

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	0.0452	0.0274	0.3488	1.0700e-003	0.1068	6.9000e-004	0.1075	0.0283	6.4000e-004	0.0290		106.7010	106.7010	2.5700e-003		106.7652
Total	**0.0452**	**0.0274**	**0.3488**	**1.0700e-003**	**0.1068**	**6.9000e-004**	**0.1075**	**0.0283**	**6.4000e-004**	**0.0290**		**106.7010**	**106.7010**	**2.5700e-003**		**106.7652**

3.7 Architectural Coating - 2020

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					
Archit. Coating	4.7347					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**4.9768**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

3.7 Architectural Coating - 2020

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	0.0104	6.3100e-003	0.0805	2.5000e-004	0.0246	1.6000e-004	0.0248	6.5400e-003	1.5000e-004	6.6800e-003		24.6233	24.6233	5.9000e-004		24.6381
Total	**0.0104**	**6.3100e-003**	**0.0805**	**2.5000e-004**	**0.0246**	**1.6000e-004**	**0.0248**	**6.5400e-003**	**1.5000e-004**	**6.6800e-003**		**24.6233**	**24.6233**	**5.9000e-004**		**24.6381**

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	4.7347					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**4.9768**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

3.7 Architectural Coating - 2020

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	0.0104	6.3100e-003	0.0805	2.5000e-004	0.0246	1.6000e-004	0.0248	6.5400e-003	1.5000e-004	6.6800e-003		24.6233	24.6233	5.9000e-004		24.6381
Total	**0.0104**	**6.3100e-003**	**0.0805**	**2.5000e-004**	**0.0246**	**1.6000e-004**	**0.0248**	**6.5400e-003**	**1.5000e-004**	**6.6800e-003**		**24.6233**	**24.6233**	**5.9000e-004**		**24.6381**

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	3.7706	11.7249	20.9441	0.0501	3.3323	0.0566	3.3889	0.8917	0.0531	0.9448		5,075.5680	5,075.5680	0.2864		5,082.7279
Unmitigated	3.7706	11.7249	20.9441	0.0501	3.3323	0.0566	3.3889	0.8917	0.0531	0.9448		5,075.5680	5,075.5680	0.2864		5,082.7279

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Gasoline/Service Station	2,721.84	2,721.84	2721.84	1,568,238	1,568,238
Parking Lot	0.00	0.00	0.00		
Total	2,721.84	2,721.84	2,721.84	1,568,238	1,568,238

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
Gasoline/Service Station	9.50	7.30	7.30	2.00	79.00	19.00	14	27	59
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Gasoline/Service Station	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812
Parking Lot	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812

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	2.4800e-003	0.0225	0.0189	1.4000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003		27.0292	27.0292	5.2000e-004	5.0000e-004	27.1898
NaturalGas Unmitigated	2.4800e-003	0.0225	0.0189	1.4000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003		27.0292	27.0292	5.2000e-004	5.0000e-004	27.1898

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					
Gasoline/Service Station	229.748	2.4800e-003	0.0225	0.0189	1.4000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003		27.0292	27.0292	5.2000e-004	5.0000e-004	27.1898
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.4800e-003**	**0.0225**	**0.0189**	**1.4000e-004**		**1.7100e-003**	**1.7100e-003**		**1.7100e-003**	**1.7100e-003**		**27.0292**	**27.0292**	**5.2000e-004**	**5.0000e-004**	**27.1898**

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					
Gasoline/Service Station	0.229748	2.4800e-003	0.0225	0.0189	1.4000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003		27.0292	27.0292	5.2000e-004	5.0000e-004	27.1898
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.4800e-003**	**0.0225**	**0.0189**	**1.4000e-004**		**1.7100e-003**	**1.7100e-003**		**1.7100e-003**	**1.7100e-003**		**27.0292**	**27.0292**	**5.2000e-004**	**5.0000e-004**	**27.1898**

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	lb/day										lb/day					
Mitigated	0.0966	9.0000e-005	9.8600e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0210	0.0210	6.0000e-005		0.0224
Unmitigated	0.0966	9.0000e-005	9.8600e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0210	0.0210	6.0000e-005		0.0224

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	0.0130					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0827					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.3000e-004	9.0000e-005	9.8600e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0210	0.0210	6.0000e-005		0.0224
Total	**0.0966**	**9.0000e-005**	**9.8600e-003**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0210**	**0.0210**	**6.0000e-005**		**0.0224**

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					
Architectural Coating	0.0130					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0827					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.3000e-004	9.0000e-005	9.8600e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0210	0.0210	6.0000e-005		0.0224
Total	**0.0966**	**9.0000e-005**	**9.8600e-003**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0210**	**0.0210**	**6.0000e-005**		**0.0224**

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 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Costco Business Center Fuel Facility

Bay Area AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	72.00	Space	0.74	28,800.00	0
Gasoline/Service Station	24.00	Pump	1.00	3,388.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	328.8	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity based on 5-year average (PG&E, 2015).

Land Use - Approximately 1.74-acre project site

Construction Phase - Construction of the proposed project is anticipated to begin in January 2020 and would occur over a 3 to 4 month period. Demolition activities are anticipated to occur over an approximately 1 month period and grading would occur over an approximate 5 day period. An overlap of demolition and grading activities is anticipated. Exterior work such as foundation installation, construction, and installation of pavements is expected to occur over a 2 to 3 month period.

Grading - up to 6,475 cubic yards of cut would be off-hauled

Demolition - Approximately 3,624 tons of demolition waste would be generated by the proposed project

Vehicle Trips - Assuming 20% higher trips than ITE trip rates, consistent with the project's AM peak hour trip generation estimates and internalization rate and pass-by rates.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	200.00	45.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	4.00	5.00
tblConstructionPhase	NumDays	2.00	5.00
tblGrading	AcresOfGrading	1.88	1.50
tblGrading	AcresOfGrading	2.50	1.00
tblGrading	MaterialExported	0.00	6,475.00
tblLandUse	LotAcreage	0.65	0.74
tblLandUse	LotAcreage	0.08	1.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	328.8
tblVehicleTrips	ST_TR	168.56	113.41
tblVehicleTrips	SU_TR	168.56	113.41
tblVehicleTrips	WD_TR	168.56	113.41

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					
2020	7.0861	87.7729	32.4346	0.1776	11.3325	2.0058	13.3382	3.8978	1.8673	5.7651	0.0000	18,579.1296	18,579.1296	1.8298	0.0000	18,624.8743
Maximum	**7.0861**	**87.7729**	**32.4346**	**0.1776**	**11.3325**	**2.0058**	**13.3382**	**3.8978**	**1.8673**	**5.7651**	**0.0000**	**18,579.1296**	**18,579.1296**	**1.8298**	**0.0000**	**18,624.8743**

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					
2020	7.0861	87.7729	32.4346	0.1776	11.3325	2.0058	13.3382	3.8978	1.8673	5.7651	0.0000	18,579.1296	18,579.1296	1.8298	0.0000	18,624.8743
Maximum	**7.0861**	**87.7729**	**32.4346**	**0.1776**	**11.3325**	**2.0058**	**13.3382**	**3.8978**	**1.8673**	**5.7651**	**0.0000**	**18,579.1296**	**18,579.1296**	**1.8298**	**0.0000**	**18,624.8743**

	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	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	0.0966	9.0000e-005	9.8600e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0210	0.0210	6.0000e-005		0.0224
Energy	2.4800e-003	0.0225	0.0189	1.4000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003		27.0292	27.0292	5.2000e-004	5.0000e-004	27.1898
Mobile	3.1565	11.9598	24.9144	0.0468	3.3323	0.0579	3.3901	0.8917	0.0543	0.9460		4,730.7596	4,730.7596	0.3168		4,738.6795
Total	**3.2556**	**11.9824**	**24.9432**	**0.0470**	**3.3323**	**0.0596**	**3.3919**	**0.8917**	**0.0560**	**0.9477**		**4,757.8098**	**4,757.8098**	**0.3174**	**5.0000e-004**	**4,765.8917**

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	0.0966	9.0000e-005	9.8600e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0210	0.0210	6.0000e-005		0.0224
Energy	2.4800e-003	0.0225	0.0189	1.4000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003		27.0292	27.0292	5.2000e-004	5.0000e-004	27.1898
Mobile	3.1565	11.9598	24.9144	0.0468	3.3323	0.0579	3.3901	0.8917	0.0543	0.9460		4,730.7596	4,730.7596	0.3168		4,738.6795
Total	**3.2556**	**11.9824**	**24.9432**	**0.0470**	**3.3323**	**0.0596**	**3.3919**	**0.8917**	**0.0560**	**0.9477**		**4,757.8098**	**4,757.8098**	**0.3174**	**5.0000e-004**	**4,765.8917**

	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	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	1/6/2020	2/7/2020	5	25	
2	Site Preparation	Site Preparation	1/27/2020	1/31/2020	5	5	
3	Grading	Grading	2/3/2020	2/7/2020	5	5	
4	Building Construction	Building Construction	2/10/2020	4/10/2020	5	45	
5	Paving	Paving	3/16/2020	3/27/2020	5	10	
6	Architectural Coating	Architectural Coating	3/30/2020	4/10/2020	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.74

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 5,082; Non-Residential Outdoor: 1,694; Striped Parking Area: 1,728 (Architectural Coating – sqft)

OffRoad Equipment

Costco Business Center Fuel Facility - Bay Area AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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	5	13.00	0.00	358.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	809.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	13.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

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					3.1020	0.0000	3.1020	0.4697	0.0000	0.4697			0.0000			0.0000
Off-Road	2.1262	20.9463	14.6573	0.0241		1.1525	1.1525		1.0761	1.0761		2,322.3127	2,322.3127	0.5970		2,337.2363
Total	**2.1262**	**20.9463**	**14.6573**	**0.0241**	**3.1020**	**1.1525**	**4.2545**	**0.4697**	**1.0761**	**1.5458**		**2,322.3127**	**2,322.3127**	**0.5970**		**2,337.2363**

3.2 Demolition - 2020

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	0.1214	4.2026	0.8776	0.0112	0.2502	0.0136	0.2638	0.0686	0.0131	0.0816		1,197.8588	1,197.8588	0.0640		1,199.4591
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	0.0478	0.0338	0.3276	9.9000e-004	0.1068	6.9000e-004	0.1075	0.0283	6.4000e-004	0.0290		98.2885	98.2885	2.4000e-003		98.3486
Total	**0.1692**	**4.2364**	**1.2052**	**0.0122**	**0.3570**	**0.0143**	**0.3713**	**0.0969**	**0.0137**	**0.1106**		**1,296.1473**	**1,296.1473**	**0.0664**		**1,297.8077**

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					3.1020	0.0000	3.1020	0.4697	0.0000	0.4697			0.0000			0.0000
Off-Road	2.1262	20.9463	14.6573	0.0241		1.1525	1.1525		1.0761	1.0761	0.0000	2,322.3127	2,322.3127	0.5970		2,337.2363
Total	**2.1262**	**20.9463**	**14.6573**	**0.0241**	**3.1020**	**1.1525**	**4.2545**	**0.4697**	**1.0761**	**1.5458**	**0.0000**	**2,322.3127**	**2,322.3127**	**0.5970**		**2,337.2363**

3.2 Demolition - 2020

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	0.1214	4.2026	0.8776	0.0112	0.2502	0.0136	0.2638	0.0686	0.0131	0.0816		1,197.8588	1,197.8588	0.0640		1,199.4591
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	0.0478	0.0338	0.3276	9.9000e-004	0.1068	6.9000e-004	0.1075	0.0283	6.4000e-004	0.0290		98.2885	98.2885	2.4000e-003		98.3486
Total	**0.1692**	**4.2364**	**1.2052**	**0.0122**	**0.3570**	**0.0143**	**0.3713**	**0.0969**	**0.0137**	**0.1106**		**1,296.1473**	**1,296.1473**	**0.0664**		**1,297.8077**

3.3 Site Preparation - 2020

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					5.4814	0.0000	5.4814	2.9194	0.0000	2.9194			0.0000			0.0000
Off-Road	1.6299	18.3464	7.7093	0.0172		0.8210	0.8210		0.7553	0.7553		1,667.4119	1,667.4119	0.5393		1,680.8937
Total	**1.6299**	**18.3464**	**7.7093**	**0.0172**	**5.4814**	**0.8210**	**6.3024**	**2.9194**	**0.7553**	**3.6746**		**1,667.4119**	**1,667.4119**	**0.5393**		**1,680.8937**

3.3 Site Preparation - 2020

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	0.0294	0.0208	0.2016	6.1000e-004	0.0657	4.3000e-004	0.0661	0.0174	3.9000e-004	0.0178		60.4852	60.4852	1.4800e-003		60.5222
Total	**0.0294**	**0.0208**	**0.2016**	**6.1000e-004**	**0.0657**	**4.3000e-004**	**0.0661**	**0.0174**	**3.9000e-004**	**0.0178**		**60.4852**	**60.4852**	**1.4800e-003**		**60.5222**

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					5.4814	0.0000	5.4814	2.9194	0.0000	2.9194			0.0000			0.0000
Off-Road	1.6299	18.3464	7.7093	0.0172		0.8210	0.8210		0.7553	0.7553	0.0000	1,667.4119	1,667.4119	0.5393		1,680.8937
Total	**1.6299**	**18.3464**	**7.7093**	**0.0172**	**5.4814**	**0.8210**	**6.3024**	**2.9194**	**0.7553**	**3.6746**	**0.0000**	**1,667.4119**	**1,667.4119**	**0.5393**		**1,680.8937**

3.3 Site Preparation - 2020

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	0.0294	0.0208	0.2016	6.1000e-004	0.0657	4.3000e-004	0.0661	0.0174	3.9000e-004	0.0178		60.4852	60.4852	1.4800e-003		60.5222
Total	**0.0294**	**0.0208**	**0.2016**	**6.1000e-004**	**0.0657**	**4.3000e-004**	**0.0661**	**0.0174**	**3.9000e-004**	**0.0178**		**60.4852**	**60.4852**	**1.4800e-003**		**60.5222**

3.4 Grading - 2020

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					4.9812	0.0000	4.9812	2.5392	0.0000	2.5392			0.0000			0.0000
Off-Road	1.3498	15.0854	6.4543	0.0141		0.6844	0.6844		0.6296	0.6296		1,365.7183	1,365.7183	0.4417		1,376.7609
Total	**1.3498**	**15.0854**	**6.4543**	**0.0141**	**4.9812**	**0.6844**	**5.6656**	**2.5392**	**0.6296**	**3.1688**		**1,365.7183**	**1,365.7183**	**0.4417**		**1,376.7609**

3.4 Grading - 2020

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	1.3716	47.4841	9.9162	0.1266	2.8266	0.1541	2.9807	0.7746	0.1475	0.9221		13,534.4660	13,534.4660	0.7233		13,552.5472
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	0.0294	0.0208	0.2016	6.1000e-004	0.0657	4.3000e-004	0.0661	0.0174	3.9000e-004	0.0178		60.4852	60.4852	1.4800e-003		60.5222
Total	**1.4011**	**47.5049**	**10.1178**	**0.1272**	**2.8923**	**0.1546**	**3.0469**	**0.7920**	**0.1479**	**0.9399**		**13,594.9513**	**13,594.9513**	**0.7247**		**13,613.0694**

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					
Fugitive Dust					4.9812	0.0000	4.9812	2.5392	0.0000	2.5392			0.0000			0.0000
Off-Road	1.3498	15.0854	6.4543	0.0141		0.6844	0.6844		0.6296	0.6296	0.0000	1,365.7183	1,365.7183	0.4417		1,376.7609
Total	**1.3498**	**15.0854**	**6.4543**	**0.0141**	**4.9812**	**0.6844**	**5.6656**	**2.5392**	**0.6296**	**3.1688**	**0.0000**	**1,365.7183**	**1,365.7183**	**0.4417**		**1,376.7609**

3.4 Grading - 2020

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	1.3716	47.4841	9.9162	0.1266	2.8266	0.1541	2.9807	0.7746	0.1475	0.9221		13,534.4660	13,534.4660	0.7233		13,552.5472
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	0.0294	0.0208	0.2016	6.1000e-004	0.0657	4.3000e-004	0.0661	0.0174	3.9000e-004	0.0178		60.4852	60.4852	1.4800e-003		60.5222
Total	**1.4011**	**47.5049**	**10.1178**	**0.1272**	**2.8923**	**0.1546**	**3.0469**	**0.7920**	**0.1479**	**0.9399**		**13,594.9513**	**13,594.9513**	**0.7247**		**13,613.0694**

3.5 Building Construction - 2020

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	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688		2,001.1595	2,001.1595	0.3715		2,010.4467
Total	**2.0305**	**14.7882**	**13.1881**	**0.0220**		**0.7960**	**0.7960**		**0.7688**	**0.7688**		**2,001.1595**	**2,001.1595**	**0.3715**		**2,010.4467**

3.5 Building Construction - 2020

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	0.0200	0.5762	0.1555	1.3400e-003	0.0338	2.8400e-003	0.0367	9.7400e-003	2.7200e-003	0.0125		142.1636	142.1636	7.7700e-003		142.3579
Worker	0.0478	0.0338	0.3276	9.9000e-004	0.1068	6.9000e-004	0.1075	0.0283	6.4000e-004	0.0290		98.2885	98.2885	2.4000e-003		98.3486
Total	**0.0677**	**0.6100**	**0.4831**	**2.3300e-003**	**0.1406**	**3.5300e-003**	**0.1442**	**0.0381**	**3.3600e-003**	**0.0414**		**240.4521**	**240.4521**	**0.0102**		**240.7065**

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	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688	0.0000	2,001.1595	2,001.1595	0.3715		2,010.4467
Total	**2.0305**	**14.7882**	**13.1881**	**0.0220**		**0.7960**	**0.7960**		**0.7688**	**0.7688**	**0.0000**	**2,001.1595**	**2,001.1595**	**0.3715**		**2,010.4467**

3.5 Building Construction - 2020

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	0.0200	0.5762	0.1555	1.3400e-003	0.0338	2.8400e-003	0.0367	9.7400e-003	2.7200e-003	0.0125		142.1636	142.1636	7.7700e-003		142.3579
Worker	0.0478	0.0338	0.3276	9.9000e-004	0.1068	6.9000e-004	0.1075	0.0283	6.4000e-004	0.0290		98.2885	98.2885	2.4000e-003		98.3486
Total	**0.0677**	**0.6100**	**0.4831**	**2.3300e-003**	**0.1406**	**3.5300e-003**	**0.1442**	**0.0381**	**3.3600e-003**	**0.0414**		**240.4521**	**240.4521**	**0.0102**		**240.7065**

3.6 Paving - 2020

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	0.8402	8.4514	8.8758	0.0135		0.4695	0.4695		0.4328	0.4328		1,296.9461	1,296.9461	0.4111		1,307.2246
Paving	0.1939					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0340**	**8.4514**	**8.8758**	**0.0135**		**0.4695**	**0.4695**		**0.4328**	**0.4328**		**1,296.9461**	**1,296.9461**	**0.4111**		**1,307.2246**

3.6 Paving - 2020

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	0.0478	0.0338	0.3276	9.9000e-004	0.1068	6.9000e-004	0.1075	0.0283	6.4000e-004	0.0290		98.2885	98.2885	2.4000e-003		98.3486
Total	**0.0478**	**0.0338**	**0.3276**	**9.9000e-004**	**0.1068**	**6.9000e-004**	**0.1075**	**0.0283**	**6.4000e-004**	**0.0290**		**98.2885**	**98.2885**	**2.4000e-003**		**98.3486**

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	0.8402	8.4514	8.8758	0.0135		0.4695	0.4695		0.4328	0.4328	0.0000	1,296.9461	1,296.9461	0.4111		1,307.2246
Paving	0.1939					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0340**	**8.4514**	**8.8758**	**0.0135**		**0.4695**	**0.4695**		**0.4328**	**0.4328**	**0.0000**	**1,296.9461**	**1,296.9461**	**0.4111**		**1,307.2246**

3.6 Paving - 2020

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	0.0478	0.0338	0.3276	9.9000e-004	0.1068	6.9000e-004	0.1075	0.0283	6.4000e-004	0.0290		98.2885	98.2885	2.4000e-003		98.3486
Total	**0.0478**	**0.0338**	**0.3276**	**9.9000e-004**	**0.1068**	**6.9000e-004**	**0.1075**	**0.0283**	**6.4000e-004**	**0.0290**		**98.2885**	**98.2885**	**2.4000e-003**		**98.3486**

3.7 Architectural Coating - 2020

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					
Archit. Coating	4.7347					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**4.9768**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

3.7 Architectural Coating - 2020

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	0.0110	7.8000e-003	0.0756	2.3000e-004	0.0246	1.6000e-004	0.0248	6.5400e-003	1.5000e-004	6.6800e-003		22.6820	22.6820	5.5000e-004		22.6958
Total	**0.0110**	**7.8000e-003**	**0.0756**	**2.3000e-004**	**0.0246**	**1.6000e-004**	**0.0248**	**6.5400e-003**	**1.5000e-004**	**6.6800e-003**		**22.6820**	**22.6820**	**5.5000e-004**		**22.6958**

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	4.7347					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**4.9768**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

3.7 Architectural Coating - 2020

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	0.0110	7.8000e-003	0.0756	2.3000e-004	0.0246	1.6000e-004	0.0248	6.5400e-003	1.5000e-004	6.6800e-003		22.6820	22.6820	5.5000e-004		22.6958
Total	**0.0110**	**7.8000e-003**	**0.0756**	**2.3000e-004**	**0.0246**	**1.6000e-004**	**0.0248**	**6.5400e-003**	**1.5000e-004**	**6.6800e-003**		**22.6820**	**22.6820**	**5.5000e-004**		**22.6958**

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	3.1565	11.9598	24.9144	0.0468	3.3323	0.0579	3.3901	0.8917	0.0543	0.9460		4,730.7596	4,730.7596	0.3168		4,738.6795
Unmitigated	3.1565	11.9598	24.9144	0.0468	3.3323	0.0579	3.3901	0.8917	0.0543	0.9460		4,730.7596	4,730.7596	0.3168		4,738.6795

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Gasoline/Service Station	2,721.84	2,721.84	2721.84	1,568,238	1,568,238
Parking Lot	0.00	0.00	0.00		
Total	2,721.84	2,721.84	2,721.84	1,568,238	1,568,238

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
Gasoline/Service Station	9.50	7.30	7.30	2.00	79.00	19.00	14	27	59
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Gasoline/Service Station	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812
Parking Lot	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812

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	2.4800e-003	0.0225	0.0189	1.4000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003		27.0292	27.0292	5.2000e-004	5.0000e-004	27.1898
NaturalGas Unmitigated	2.4800e-003	0.0225	0.0189	1.4000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003		27.0292	27.0292	5.2000e-004	5.0000e-004	27.1898

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					
Gasoline/Service Station	229.748	2.4800e-003	0.0225	0.0189	1.4000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003		27.0292	27.0292	5.2000e-004	5.0000e-004	27.1898
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.4800e-003**	**0.0225**	**0.0189**	**1.4000e-004**		**1.7100e-003**	**1.7100e-003**		**1.7100e-003**	**1.7100e-003**		**27.0292**	**27.0292**	**5.2000e-004**	**5.0000e-004**	**27.1898**

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					
Gasoline/Service Station	0.229748	2.4800e-003	0.0225	0.0189	1.4000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003		27.0292	27.0292	5.2000e-004	5.0000e-004	27.1898
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.4800e-003**	**0.0225**	**0.0189**	**1.4000e-004**		**1.7100e-003**	**1.7100e-003**		**1.7100e-003**	**1.7100e-003**		**27.0292**	**27.0292**	**5.2000e-004**	**5.0000e-004**	**27.1898**

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	lb/day										lb/day					
Mitigated	0.0966	9.0000e-005	9.8600e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0210	0.0210	6.0000e-005		0.0224
Unmitigated	0.0966	9.0000e-005	9.8600e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0210	0.0210	6.0000e-005		0.0224

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	0.0130					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0827					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.3000e-004	9.0000e-005	9.8600e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0210	0.0210	6.0000e-005		0.0224
Total	**0.0966**	**9.0000e-005**	**9.8600e-003**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0210**	**0.0210**	**6.0000e-005**		**0.0224**

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					
Architectural Coating	0.0130					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0827					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.3000e-004	9.0000e-005	9.8600e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0210	0.0210	6.0000e-005		0.0224
Total	**0.0966**	**9.0000e-005**	**9.8600e-003**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0210**	**0.0210**	**6.0000e-005**		**0.0224**

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 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Arborist Report & Tree Appraisal

Costco Business Center #823

22330 Hathaway Avenue
Hayward, CA

Prepared for:
Barghausen Consulting Engineers
18215 72nd Avenue South
Kent, WA 98302

Prepared by:
Dustie Rushing, Arborwell, Inc.
ISA Certified Arborist # WE-10084A
Arborwell, Inc.
2337 American Avenue
Hayward, CA 94545

Initial Report Dated: May 23, 2018
Update Revision:
October 1, 2018

Arborwell
professional tree management

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PLANNING DIVISION

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    - Attachment – Tree Inventory/Condition Table
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    - Attachment – Tree Location Map

Summary

This arborist report and tree appraisal was prepared at the request of Barghausen Consulting Engineers, located in Kent, WA for the Costco Business Center #823 development, located in Hayward, CA. The site is currently occupied by Costco Business Center #823 and used for customer parking as well as driveway access for customers and delivery trucks. Arborwell, Inc. has been contracted by Barghausen Consulting Engineers to provide this report and appraisal for review by the City of Hayward Planning Department.

Report Update Revision:

Initial arborist report, dated May 23, 2018; included tree ID numbers one (1) through sixteen (1). This report has been amended, per Incomplete Project Application letter from the City of Hayward to Barghausen Consulting Engineers, dated July 12, 2018 – Reference Project No. 201706217.

Listed under the Development Services – Landscape section of the letter, the arborist report has been amended to address the following items:

1. *"Arborist report shall expand the area of coverage..."*
   Tree ID numbers seventeen (17) through seventy-six (76) have been added to this report.

2. *"Species rating shall be revised to reflect the average rating for Fraxinus oxycarpa 'Raywood' for being 40-60%..."*
   The species rating for the Raywood Ash is listed as a number 4 for this area, using the No Cal – Coastal Influence column ratings, according to the *Species Classification and Group Assignment*, (2004) an Official Publication of the Western Chapter of the International Society of Arboriculture.
   This line item also mentions correcting the Sycamore species rating, *"...Platanus hispanica for being 40-60%."*
   There was an error on the arborist report, dated May 23, 2018, listing this tree with a 30% Species rating. This has been corrected, per the No Cal-Coastal Influence rating for Platanus acerifolia (Common name London Plane Tree) and is listed as a number 2, which equals 70%

5. *"Tree Mitigation: The cost difference between required and upsized tree could be applied for mitigation. Required size is 15-gallon minimum.*
   This appraisal was conducted using the Replacement Cost Method, as described in the *Guide for Plant Appraisal* (9th Edition, 2000). This method of tree appraisal includes removal and cleanup cost, as well as replacement tree cost.
   Appraised value calculations have been provided for replacement with 24" Box tree sizes, based on the City of Hayward conditions of approval.

Project Assignment

This report was prepared to appraise and evaluate sixteen (16) trees, located in the northeast portion of the parking lot at 22330 Hathaway Avenue, Hayward, CA. This area is based as outlined on the Preliminary Tree Removal Plan map provided by Barghausen Consulting Engineers, dated April 28, 2017; as prepared by Barghausen Consulting Engineers.

Subject Property: **Costco Business Center #823**
22330 Hathaway Avenue
Hayward, CA

The purpose of this appraisal is to comply with the City of Hayward TREE PRUNING & REMOVAL PERMIT APPLICATION SUBMITTAL GUIDELINES, per the City of Hayward web site:

"WHAT ARE THE STEPS FOR OBTAINING A TREE REMOVAL/PRUNING PERMIT?

1. If removal or pruning of a tree is associated with construction of a building, structure, or other site improvements, all trees shall be shown on the proposed site and grading plans. Clearly indicate the size, species, and health of the tree and whether the trees will be removed or preserved. Sites with over three trees or with large mature trees must have an arborist report. The report will be evaluated as part of the City's review process for the project. A tree removal/pruning permit will be issued when a grading or building permit is processed for the project."

Tree values have been determined, using the Replacement Cost Method, as outlined in the *Guide for Plant Appraisal* (9th Edition, 2000) authored by the Council of Tree & Landscape Appraisers, in addition to the *Species Classification and Group Assignment*, (2004) an Official Publication of the Western Chapter of the International Society of Arboriculture.

Data Analysis to include the following information:

1. An evaluation of ~~sixteen (16) trees~~ seventy-six (76) trees growing within the proposed development area, slated for removal.
2. An inventory of all ~~sixteen (16) trees~~ seventy-six (76) trees growing within the proposed development area.
3. The appraised value of all ~~sixteen (16) trees~~ seventy-six (76) trees growing within the proposed development area.
4. ~~Exclusions: There are sixteen (16) other trees within the proposed development area in parking lot islands. These trees were not requested for condition assessment, or evaluation by Barghausen Consulting Engineers, as they are not slated for removal, so they are not included in this report. There are also several trees along the perimeter of the parking lot, which is adjacent to, but not included within the proposed development area that have also been excluded from this report.~~
5. September, 2018 Revision: Per City of Hayward letter, dated July 12, 2018, "Arborist report shall expand the area of coverage to include all trees located within the limits of the proposed work and the adjacent area where may be impacted by the construction activities and storage.

Appraisal Procedures

Site evaluation was conducted on May 21, 2018 to include all trees slated for removal, located within the proposed development area.

Report Update Revision, site evaluation was started on September 5th and completed on September 6th, 2018 to expand the area of coverage, per City of Hayward requirements.

This evaluation includes all trees that are currently slated for removal, shown on the *revised & updated* site map provided. ~~excluding trees that will remain in the parking lot islands of the proposed development area and all trees along the perimeter of the parking lot adjacent to, but not within the proposed development area.~~

The field analysis was conducted to document the following:

1. Tree species identification
2. DBH Measurement of the trunk diameter at breast height, as defined by the City of Hayward tree ordinance to be 54" Above ground level
3. Approximate Tree Spread (Canopy Diameter in feet): Visual measurement of dripline, using standard tape measure at ground level;
4. Approximate Tree Height: Visual measurement of tree height, using standard tape measure and surrounding, solid landscape elements (i.e. telephone poles) as reference
5. Individual tree identification number assigned, based on map provided. *Approximate location of trees, assigned identification number and species provided on GIS Map*
6. Tree health / condition evaluation.

Diagnostic Procedures – Overall Health Determination

During the site visits, conducted in May, 2018 with revision update site visits on September 5th-6th 2018; a visual inspection of the Roots, with minimal root crown excavation; Trunk, Scaffold (Large) Branches, Small Branches & Twigs as well as Foliage & Buds was conducted using the following health determinations:

Scoring System: 1-4 Points = **Total 1-4 (1) Poor... (4) Excellent**

1. **Extreme Problems:** Tree dead with no visible growth
2. **Major Problems:** Extreme problems, decay and/or structural defects present, potential for future removal
3. **Minor Problems:** Minor to Major problems present; Problems treatable and/or correctable
4. **Excellent:** No apparent problems, tree is in overall good health and vigor

Tree Health Condition Evaluation *Based on five (5) Main Factors*:

- Roots: Condition rating
  Structure 1-4 Points + **Health** 1-4 Points = **Total 2-8 [(1) Extreme Problems... (8) Excellent]**
- Trunk: Condition Rating
  Structure 1-4 Points + **Health** 1-4 Points = **Total 2-8 [(1) Extreme Problems ... (8) Excellent]**
- Large Branches: Condition Rating
  Structure 1-4 Points + **Health** 1-4 Points = **Total 2-8 [(1) Extreme Problems ... (8) Excellent]**
- Small Branches: Condition Rating
  Health 1-4 Points = **Total 1-4 [(1) Extreme Problems ... (4) Excellent]**
- Foliage/Buds: Condition Rating
  Health 1-4 Points = **Total 1-4 [(1) Extreme Problems ... (4) Excellent]**

Description of Site

The site location is currently used as a customer parking lot and loading dock for Costco Business Center product deliveries. All of the assessed trees area within parking lot islands within the parking lot.

The site map provided by Barghausen Consulting Engineers, dated April 28, 2017 was used as the basis for this tree location map of the parking lot. Each tree is identified by species and tree identification number, which corresponds with the inventory descriptions and assessments herein.

Description of Trees

This assessment includes ~~sixteen (16) trees~~ seventy-six (76) trees, located in the northeast portion of the parking lot at 22330 Hathaway Avenue, Hayward, CA that are outlined on the site map provided by Barghausen Consulting Engineers, which is understood to be the development area.

These ~~sixteen (16) trees~~ seventy-six (76) trees represent ~~five (5) tree species~~, four (4) different genus, Eucalyptus (Gum), Fraxinus (Ash), Pyrus (Pear) and Platanus (Sycamore). There are three (3) different species of Pear (Pyrus), two (2) different species of Ash (Fraxinus) one species of Sycamore (Platanus) and Eucalyptus.

See attachments for further specific details on individual trees.

Certification

I, Dustie Rushing, CERTIFY to the best of my knowledge and belief:

1. That the statements of fact contained in this plant appraisal are true and correct.
2. That the appraisal analysis, opinions and conclusions are limited only by the reported assumptions and limiting conditions, and that they are my personal, unbiased professional analysis, opinions and conclusions.
3. That I have no present or prospective interest in the plants that are the subject of this appraisal and that I have no personal interest or bias with respect to the parties involved.
4. That my compensation is not contingent upon a predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event.
5. That my analysis, opinions, and conclusions were developed, and this appraisal has been prepared in conformity with the *Guide for Plant Appraisal* (9th Edition, 2000) authored by the Council of Tree & Landscape Appraisers.
6. That method(s) found in this appraisal are based on a request to determine the value of plant(s) considering reasonable factors of plant appraisal.
7. That my appraisal is based on the information known to me at this time. If more information is disclosed, I may have further opinions.

Appraiser's Credentials

Dustie Rushing, ISA Certified Arborist #WE-10084A

June, 2018 ISA Tree Risk Assessment Qualified

2005 Awarded AS Degree in Horticulture in 2005, Las Positas College, Livermore, CA

References

Guide for Plant Appraisal (9th Edition, 2000) authored by the Council of Tree & Landscape Appraisers

Species Classification and Group Assignment, (2004) an Official Publication of the Western Chapter of the International Society of Arboriculture.

City of Hayward web site: https://www.hayward-ca.gov/sites/default/files/documents/Tree_Removal_Permit_Application_Instruction_Sheet.pdf 5.22.2018

Attachments

1. Attachment – Tree Appraisal Table (15 Gallon Replacement)
2. Attachment – Tree Appraisal Table (36" Box Replacement)
3. Attachment – Tree Inventory/Condition Table
4. Attachment – Detailed Description of Trees – Photos & Notes
5. Attachment – Tree Location Map - 11 x 17" Enlargement: Tree Location Map, prepared by Dustie Rushing, ISA Certified Arborist WE-10084A, Arborwell, Inc. Based on Preliminary Tree Removal Plan-Costco Wholesale Fuel Facility site plan, as prepared by Barghausen Consulting Engineers, dated April 28, 2017.

Costco Business Center

Fuel Facility Project - City of Hayward Project No. 201706217

Arborist Report Attachment - Tree Appraisal Table/24" Box Replacements

Arborwell

Tree ID #	#1 Botanical Name	Common Name	#2 Condition %	#4 Location %	#5 Removal + Cleanup	#6 Species Rating %	#8 Replacement Plant Cost - 24" BOX TREE	#9 Installation Cost	#11 Plant + Install Cost (#8 + #9)	#12 Adj Cost = Installed Cost (#11) X Species % (#6) X Condition% (#2) X Location # (#4)	#13 Add Removal & Cleanup (#5) if plant is replaced	#14 APPRAISED VALUE (#12 or #13, if replaced)	#15 APPRAISED VALUE If $5000 +, round to nearest $100/If less, round to Nearest $10
1	Pyrus calleryana 'Bradford'	Bradford Pear	63%	80%	$ 870.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 106.60	$ 976.60	$ 976.60	$980.00
2	Ash Species	Unknown/*Ash Root Stock*	50%	80%	$ 225.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 84.60	$ 309.60	$ 309.60	$310.00
3	Fraxinus oxycarpa 'Raywood'	Raywood Ash	53%	80%	$ 645.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 89.68	$ 734.68	$ 734.68	$730.00
4	Fraxinus oxycarpa 'Raywood'	Raywood Ash	69%	80%	$ 540.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 116.75	$ 656.75	$ 656.75	$660.00
5	Fraxinus oxycarpa 'Raywood'	Raywood Ash	50%	80%	$ 645.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 84.60	$ 729.60	$ 729.60	$730.00
6	Fraxinus oxycarpa 'Raywood'	Raywood Ash	50%	80%	$ 645.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 84.60	$ 729.60	$ 729.60	$730.00
7	Fraxinus oxycarpa 'Raywood'	Raywood Ash	47%	80%	$ 435.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 79.52	$ 514.52	$ 514.52	$510.00
8	Fraxinus oxycarpa 'Raywood'	Raywood Ash	38%	80%	$ 870.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 64.30	$ 934.30	$ 934.30	$930.00
9	Fraxinus oxycarpa 'Raywood'	Raywood Ash	69%	80%	$ 870.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 116.75	$ 986.75	$ 986.75	$990.00
10	Fraxinus oxycarpa 'Raywood'	Raywood Ash	72%	80%	$ 870.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 121.82	$ 991.82	$ 991.82	$990.00
11	Fraxinus oxycarpa 'Raywood'	Raywood Ash	69%	80%	$ 645.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 116.75	$ 761.75	$ 761.75	$760.00
12	Fraxinus oxycarpa 'Raywood'	Raywood Ash	69%	90%	$ 645.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 131.34	$ 776.34	$ 776.34	$780.00
13	Fraxinus oxycarpa 'Raywood'	Raywood Ash	47%	80%	$ 435.00	50%	$ 235.00	$ 470.00	$ 705.00	$ 132.54	$ 567.54	$ 567.54	$670.00
14	Pyrus kawakamii	Evergreen Pear	69%	80%	$ 870.00	70%	$ 258.00	$ 516.00	$ 774.00	$ 299.07	$ 1,169.07	$ 1,169.07	$1,170.00
15	Platanus acerifolia	London Plane Tree	63%	80%	$ 645.00	70%	$ 235.00	$ 470.00	$ 705.00	$ 248.72	$ 893.72	$ 893.72	$890.00
16	Fraxinus oxycarpa 'Raywood'	Raywood Ash	63%	80%	$ 1,050.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 106.60	$ 1,156.60	$ 1,156.60	$1,160.00
17	Fraxinus oxycarpa 'Raywood'	Raywood Ash	53%	80%	$ 435.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 89.68	$ 524.68	$ 524.68	$520.00
18	Fraxinus oxycarpa 'Raywood'	Raywood Ash	75%	80%	$ 645.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 126.90	$ 771.90	$ 771.90	$770.00
19	Fraxinus oxycarpa 'Raywood'	Raywood Ash	50%	80%	$ 645.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 84.60	$ 729.60	$ 729.60	$730.00
20	Fraxinus oxycarpa 'Raywood'	Raywood Ash	50%	80%	$ 435.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 84.60	$ 519.60	$ 519.60	$520.00
21	Fraxinus oxycarpa 'Raywood'	Raywood Ash	53%	80%	$ 435.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 89.68	$ 524.68	$ 524.68	$520.00
22	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	81%	80%	$ 1,050.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 137.05	$ 1,187.05	$ 1,187.05	$1,190.00
23	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	66%	80%	$ 645.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 111.67	$ 756.67	$ 756.67	$760.00
24	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	66%	80%	$ 225.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 111.67	$ 336.67	$ 336.67	$340.00
25	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	72%	80%	$ 870.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 121.82	$ 991.82	$ 991.82	$990.00
26	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	25%	80%	$ 645.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 42.30	$ 687.30	$ 687.30	$690.00
27	Platanus acerifolia	London Plane Tree	75%	90%	$ 1,620.00	70%	$ 235.00	$ 470.00	$ 705.00	$ 333.11	$ 1,953.11	$ 1,953.11	$1,950.00
28	Platanus acerifolia	London Plane Tree	75%	90%	$ 1,620.00	70%	$ 235.00	$ 470.00	$ 705.00	$ 333.11	$ 1,953.11	$ 1,953.11	$1,950.00
29	Fraxinus oxycarpa 'Raywood'	Raywood Ash	56%	80%	$ 645.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 94.75	$ 739.75	$ 739.75	$740.00
30	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	78%	80%	$ 870.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 131.98	$ 1,001.98	$ 1,001.98	$1,000.00
31	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	59%	80%	$ 645.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 99.83	$ 744.83	$ 744.83	$740.00
32	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	72%	80%	$ 1,230.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 121.82	$ 1,351.82	$ 1,351.82	$1,350.00
33	Platanus acerifolia	London Plane Tree	78%	90%	$ 1,620.00	70%	$ 235.00	$ 470.00	$ 705.00	$ 346.44	$ 1,966.44	$ 1,966.44	$1,970.00
34	Platanus acerifolia	London Plane Tree	69%	90%	$ 1,050.00	70%	$ 792.00	$ 1,584.00	$ 2,376.00	$ 1,032.85	$ 2,082.85	$ 2,082.85	$2,080.00

Costco Business Center

Fuel Facility Project - City of Hayward Project No. 201706217

Arborist Report Attachment - Tree Appraisal Table/24" Box Replacements

Arborwell

Tree ID #	#1 Botanical Name	Common Name	#2 Condition %	#4 Location %	#5 Removal + Cleanup	#6 Species Rating %	#8 Replacement Plant Cost - 24" BOX TREE	#9 Installation Cost	#11 Plant + Install Cost (#8 + #9)	#12 Adj Cost = Installed Cost (#11) X Species % (#6) X Condition% (#2) X Location # (#4)	#13 Add Removal & Cleanup (#5) if plant is replaced	#14 APPRAISED VALUE (#12 or #13, if replaced)	#15 APPRAISED VALUE If $5000 +, round to nearest $100/If less, round to Nearest $10
35	Platanus acerifolia	London Plane Tree	72%	90%	$ 1,620.00	70%	$ 235.00	$ 470.00	$ 705.00	$ 319.79	$ 1,939.79	$ 1,939.79	$1,940.00
36	Pyrus calleryana 'Bradford'	Bradford Pear	78%	80%	$ 645.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 131.98	$ 776.98	$ 776.98	$780.00
37	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	75%	80%	$ 435.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 126.90	$ 561.90	$ 561.90	$560.00
38	Pyrus calleryana 'Bradford'	Bradford Pear	66%	80%	$ 645.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 111.67	$ 756.67	$ 756.67	$760.00
39	Pyrus calleryana 'Bradford'	Bradford Pear	56%	80%	$ 1,230.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 94.75	$ 1,324.75	$ 1,324.75	$1,320.00
40	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	81%	80%	$ 645.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 137.05	$ 782.05	$ 782.05	$780.00
41	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	81%	80%	$ 645.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 137.05	$ 782.05	$ 782.05	$780.00
42	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	81%	80%	$ 435.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 137.05	$ 572.05	$ 572.05	$570.00
43	Pyrus calleryana 'Bradford'	Bradford Pear	66%	80%	$ 645.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 111.67	$ 756.67	$ 756.67	$760.00
44	Pyrus kawakamii	Evergreen Pear	63%	80%	$ 435.00	30%	$ 258.00	$ 516.00	$ 774.00	$ 117.03	$ 552.03	$ 552.03	$550.00
45	Pyrus kawakamii	Evergreen Pear	75%	80%	$ 435.00	30%	$ 258.00	$ 516.00	$ 774.00	$ 139.32	$ 574.32	$ 574.32	$570.00
46	Fraxinus oxycarpa 'Raywood'	Raywood Ash	44%	80%	$ 645.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 74.45	$ 719.45	$ 719.45	$720.00
47	Fraxinus oxycarpa 'Raywood'	Raywood Ash	72%	80%	$ 960.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 121.82	$ 1,081.82	$ 1,081.82	$1,080.00
48	Fraxinus oxycarpa 'Raywood'	Raywood Ash	84%	80%	$ 1,230.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 142.13	$ 1,372.13	$ 1,372.13	$1,380.00
49	Platanus acerifolia	London Plane Tree	69%	80%	$ 1,050.00	70%	$ 235.00	$ 470.00	$ 705.00	$ 272.41	$ 1,322.41	$ 1,322.41	$1,320.00
50	Fraxinus oxycarpa 'Raywood'	Raywood Ash	53%	80%	$ 1,050.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 89.68	$ 1,139.68	$ 1,139.68	$1,140.00
51	Fraxinus oxycarpa 'Raywood'	Raywood Ash	56%	80%	$ 1,530.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 94.75	$ 1,624.75	$ 1,624.75	$1,620.00
52	Pyrus calleryana 'Bradford'	Bradford Pear	59%	80%	$ 1,050.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 99.83	$ 1,149.83	$ 1,149.83	$1,150.00
53	Pyrus calleryana 'Bradford'	Bradford Pear	59%	80%	$ 1,050.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 99.83	$ 1,149.83	$ 1,149.83	$1,150.00
54	Fraxinus oxycarpa 'Raywood'	Raywood Ash	50%	80%	$ 870.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 84.60	$ 954.60	$ 954.60	$950.00
55	Pyrus calleryana 'Bradford'	Bradford Pear	44%	80%	$ 435.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 74.45	$ 509.45	$ 509.45	$510.00
56	Pyrus calleryana 'Bradford'	Bradford Pear	53%	80%	$ 1,050.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 89.68	$ 1,139.68	$ 1,139.68	$1,140.00
57	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	41%	80%	$ 210.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 69.37	$ 279.37	$ 279.37	$280.00
58	Pyrus calleryana 'Bradford'	Bradford Pear	44%	80%	$ 870.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 74.45	$ 944.45	$ 944.45	$940.00
59	Fraxinus oxycarpa 'Raywood'	Raywood Ash	78%	90%	$ 870.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 148.47	$ 1,018.47	$ 1,018.47	$1,020.00
60	Eucalyptus nicholii	Peppermint Gum	63%	80%	$ 1,530.00	70%	$ 235.00	$ 470.00	$ 705.00	$ 248.72	$ 1,778.72	$ 1,778.72	$1,780.00
61	Eucalyptus nicholii	Peppermint Gum	44%	80%	$ 1,230.00	70%	$ 235.00	$ 470.00	$ 705.00	$ 173.71	$ 1,403.71	$ 1,403.71	$1,400.00
62	Eucalyptus nicholii	Peppermint Gum	66%	90%	$ 2,025.00	70%	$ 235.00	$ 470.00	$ 705.00	$ 293.14	$ 2,318.14	$ 2,318.14	$2,320.00
63	Eucalyptus nicholii	Peppermint Gum	59%	90%	$ 2,025.00	70%	$ 235.00	$ 470.00	$ 705.00	$ 262.05	$ 2,287.05	$ 2,287.05	$2,290.00
64	Eucalyptus nicholii	Peppermint Gum	66%	90%	$ 1,815.00	70%	$ 235.00	$ 470.00	$ 705.00	$ 293.14	$ 2,108.14	$ 2,108.14	$2,110.00
65	Pyrus calleryana 'Bradford'	Bradford Pear	63%	90%	$ 1,230.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 119.92	$ 1,349.92	$ 1,349.92	$1,350.00
66	Eucalyptus nicholii	Peppermint Gum	78%	90%	$ 1,815.00	70%	$ 235.00	$ 470.00	$ 705.00	$ 346.44	$ 2,161.44	$ 2,161.44	$2,160.00
67	Eucalyptus nicholii	Peppermint Gum	69%	90%	$ 1,815.00	70%	$ 235.00	$ 470.00	$ 705.00	$ 306.46	$ 2,121.46	$ 2,121.46	$2,120.00
68	Eucalyptus nicholii	Peppermint Gum	63%	80%	$ 1,815.00	70%	$ 235.00	$ 470.00	$ 705.00	$ 248.72	$ 2,063.72	$ 2,063.72	$2,060.00
69	Eucalyptus nicholii	Peppermint Gum	44%	80%	$ 1,530.00	70%	$ 235.00	$ 470.00	$ 705.00	$ 173.71	$ 1,703.71	$ 1,703.71	$1,700.00

Costco Business Center

Fuel Facility Project - City of Hayward Project No. 201706217

Arborist Report Attachment - Tree Appraisal Table/24" Box Replacements

Arborwell

Tree ID #	#1 Botanical Name	Common Name	#2 Condition %	#4 Location %	#5 Removal + Cleanup	#6 Species Rating %	#8 Replacement Plant Cost - 24" BOX TREE	#9 Installation Cost	#11 Plant + Install Cost (#8 + #9)	#12 Adj Cost = Installed Cost (#11) X Species % (#6) X Condition% (#2) X Location # (#4)	#13 Add Removal & Cleanup (#5) if plant is replaced	#14 APPRAISED VALUE (#12 or #13, if replaced)	#15 APPRAISED VALUE If $5000 +, round to nearest $100/If less, round to Nearest $10
70	Pyrus calleryana 'Bradford'	Bradford Pear	50%	80%	$ 1,320.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 84.60	$ 1,404.60	$ 1,404.60	$1,560.00
71	Eucalyptus nicholii	Peppermint Gum	50%	80%	$ 1,815.00	70%	$ 235.00	$ 470.00	$ 705.00	$ 197.40	$ 2,012.40	$ 2,012.40	$2,010.00
72	Pyrus calleryana 'Bradford'	Bradford Pear	50%	80%	$ 1,230.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 84.60	$ 1,314.60	$ 1,314.60	$1,310.00
73	Eucalyptus nicholii	Peppermint Gum	41%	80%	$ 1,230.00	70%	$ 235.00	$ 470.00	$ 705.00	$ 161.87	$ 1,391.87	$ 1,391.87	$1,390.00
74	Eucalyptus nicholii	Peppermint Gum	38%	80%	$ 1,620.00	70%	$ 235.00	$ 470.00	$ 705.00	$ 150.02	$ 1,770.02	$ 1,770.02	$1,770.00
75	Eucalyptus nicholii	Peppermint Gum	53%	80%	$ 1,620.00	70%	$ 235.00	$ 470.00	$ 705.00	$ 209.24	$ 1,829.24	$ 1,829.24	$1,830.00
76	Fraxinus oxycarpa 'Raywood'	Raywood Ash	50%	80%	$ 645.00	30%	$ 235.00	$ 470.00	$ 705.00	$ 84.60	$ 729.60	$ 729.60	$730.00

Total Appraised Value - 24" Box Replacements: $85,460.00

Costco Business Center

Fuel Facility Project - City of Hayward Project No. 201706217

Arborist Report Attachment - Tree Condition Table

Arborwell

Tree ID #	Botanical Name	Common Name	Condition Rating (1-8 pts/each - 1 Poor ... 8 Excellent) (Foliage/Buds 1-4 pts/each - 1 Poor ... 4 Excellent) Roots (8)	Trunk (8)	Large Branches (8)	Small Branches (4)	Foliage / Buds (4)	Condition %	Location %	Species Rating %	DBH (in inches)	Approx. Height (in feet)	Approx. Spread (in feet)	Appraised Value* *based on "Guide for Plant Appraisal" 9th edition- 24" Box Replacements	Remove / Preserve	Notes / Observations:
1	Pyrus calleryana 'Bradford'	Bradford Pear	6	5	5	2	2	63%	80%	30%	10.5	15.0	35.0	$ 980.00	Preserve	Severe Aphid infestation, trunk girdled by stake tie.
2	Ash Species	Unknown/*Ash Root Stock	4	3	4	3	2	50%	80%	30%	1.5	5.0	6.0	$ 310.00	Remove	Bark damage on trunk, tip burn on leaves. *NOTE: Used Raywood Ash Species Ratin, likely from root stock
3	Fraxinus oxycarpa 'Raywood'	Raywood Ash	5	4	4	2	2	53%	80%	30%	4.0	25.0	25.0	$ 730.00	Remove	Some lean, crown dieback and bark damage.
4	Fraxinus oxycarpa 'Raywood'	Raywood Ash	6	5	5	3	3	69%	80%	30%	3.5	13.0	25.0	$ 660.00	Preserve	Bark damage on trunk.
5	Fraxinus oxycarpa 'Raywood'	Raywood Ash	3	5	4	2	2	50%	80%	30%	7.5	13.0	25.0	$ 730.00	Remove	Severe dieback in upper canopy, tree is overgrown by shrubs.
6	Fraxinus oxycarpa 'Raywood'	Raywood Ash	3	5	4	2	2	50%	80%	30%	7.0	13.0	25.0	$ 730.00	Remove	Severe dieback in upper canopy, tree is overgrown by shrubs.
7	Fraxinus oxycarpa 'Raywood'	Raywood Ash	3	4	4	2	2	47%	80%	30%	4.0	13.0	13.0	$ 510.00	Remove	Severe dieback in upper canopy, tree is overgrown by shrubs.
8	Fraxinus oxycarpa 'Raywood'	Raywood Ash	2	3	3	2	2	38%	80%	30%	12.0	30.0	30.0	$ 930.00	Remove	Severe dieback in upper canopy, tree is overgrown by shrubs.
9	Fraxinus oxycarpa 'Raywood'	Raywood Ash	4	6	6	3	3	69%	80%	30%	5.5	15.0	25.0	$ 990.00	Preserve	Girdled roots, some deadwood in upper canopy.
10	Fraxinus oxycarpa 'Raywood'	Raywood Ash	5	6	6	3	3	72%	80%	30%	5.0	15.0	25.0	$ 990.00	Preserve	Aphid and scale infestation.
11	Fraxinus oxycarpa 'Raywood'	Raywood Ash	4	6	6	3	3	69%	80%	30%	4.5	12.0	18.0	$ 760.00	Preserve	Overall healthy tree, some bark damage on trunk.
12	Fraxinus oxycarpa 'Raywood'	Raywood Ash	4	6	6	3	3	69%	90%	30%	4.5	12.0	18.0	$ 780.00	Preserve	Overall healthy, young tree.
13	Fraxinus oxycarpa 'Raywood'	Raywood Ash	4	3	4	2	2	47%	80%	50%	2.5	6.0	15.0	$ 670.00	Remove	Some lean, crown dieback and bark damage.
14	Pyrus kawakamii	Evergreen Pear	5	5	6	3	3	69%	80%	70%	6.5	18.0	18.0	$ 1,170.00	Preserve	Black spot fungus on foliage.

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Arborist Report Attachment - Tree Condition Table

Arborwell

Tree ID #	Botanical Name	Common Name	Condition Rating (1-8 pts/each - 1 Poor ... 8 Excellent) (Foliage/Buds 1-4 pts/each - 1 Poor ... 4 Excellent) Roots (8)	Trunk (8)	Large Branches (8)	Small Branches (4)	Foliage / Buds (4)	Condition %	Location %	Species Rating %	DBH (in inches)	Approx. Height (in feet)	Approx. Spread (in feet)	Appraised Value* *based on "Guide for Plant Appraisal" 9th edition- 24" Box Replacements	Remove / Preserve	Notes / Observations:
15	Platanus acerifolia	London Plane Tree	4	5	5	3	3	63%	80%	30%	4.0	15.0	15.0	$ 890.00	Remove	Leaning, canopy out of balance, previously topped with poor structure.
16	Fraxinus oxycarpa 'Raywood'	Raywood Ash	4	5	5	3	3	63%	80%	30%	8.0	25.0	40.0	$ 1,160.00	Remove	Roots lifting curb, overall healthy tree.
17	Fraxinus oxycarpa 'Raywood'	Raywood Ash	4	4	5	2	2	53%	80%	30%	4.0	13.0	5.0	$ 520.00	Remove	Leaning, with sunscald on trunk.
18	Fraxinus oxycarpa 'Raywood'	Raywood Ash	6	6	6	3	3	75%	80%	30%	4.0	15.0	5.0	$ 770.00	Preserve	Leaning, dieback in canopy.
19	Fraxinus oxycarpa 'Raywood'	Raywood Ash	4	4	4	2	2	50%	80%	30%	4.0	13.0	6.0	$ 730.00	Remove	Leaning, dieback in canopy.
20	Fraxinus oxycarpa 'Raywood'	Raywood Ash	4	4	4	2	2	50%	80%	30%	3.0	13.0	6.0	$ 520.00	Remove	Leaning, dieback in canopy.
21	Fraxinus oxycarpa 'Raywood'	Raywood Ash	4	4	5	2	2	53%	80%	30%	2.5	13.0	5.0	$ 520.00	Remove	Bark damage, dieback in canopy.
22	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	7	7	6	3	3	81%	80%	30%	8.0	20.0	18.0	$ 1,190.00	Preserve	Fire blight.
23	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	6	6	5	2	2	66%	80%	30%	3.0	12.0	18.0	$ 760.00	Remove	Fire blight, dieback in canopy.
24	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	6	6	5	2	2	66%	80%	30%	1.5	7.0	2.0	$ 340.00	Remove	Young tree, not establishing well.
25	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	5	6	6	3	3	72%	80%	30%	7.0	20.0	18.0	$ 990.00	Preserve	Fire blight.
26	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	2	2	2	1	1	25%	80%	30%	4.0	20.0	18.0	$ 690.00	Remove	Dead.
27	Platanus acerifolia	London Plane Tree	6	6	6	3	3	75%	90%	70%	14.0	40.0	35.0	$ 1,950.00	Preserve	Street tree, overall healthy, would benefit from Anthracnose treatments.
28	Platanus acerifolia	London Plane Tree	6	6	6	3	3	75%	90%	70%	12.0	45.0	35.0	$ 1,950.00	Preserve	Street tree, overall healthy, would benefit from Anthracnose treatments.
29	Fraxinus oxycarpa 'Raywood'	Raywood Ash	5	5	4	2	2	56%	80%	30%	3.5	15.0	6.0	$ 740.00	Remove	Bark damage,sunscald & dieback in canopy.

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Arborist Report Attachment - Tree Condition Table

Arborwell

Tree ID #	Botanical Name	Common Name	Condition Rating (1-8 pts/each - 1 Poor ... 8 Excellent) (Foliage/Buds 1-4 pts/each - 1 Poor ... 4 Excellent) Roots (8)	Trunk (8)	Large Branches (8)	Small Branches (4)	Foliage / Buds (4)	Condition %	Location %	Species Rating %	DBH (in inches)	Approx. Height (in feet)	Approx. Spread (in feet)	Appraised Value* *based on "Guide for Plant Appraisal" 9th edition- 24" Box Replacements	Remove / Preserve	Notes / Observations:
30	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	6	7	6	3	3	78%	80%	30%	7.0	15.0	12.0	$ 1,000.00	Preserve	Fire blight.
31	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	5	5	5	2	2	59%	80%	30%	4.0	12.0	6.0	$ 740.00	Remove	Fire blight, poor structure.
32	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	6	5	6	3	3	72%	80%	30%	8.0	25.0	25.0	$ 1,350.00	Preserve	Fire blight, some lean.
33	Platanus acerifolia	London Plane Tree	6	7	6	3	3	78%	90%	70%	13.0	30.0	30.0	$ 1,970.00	Preserve	Street tree, overall healthy, would benefit from Anthracnose treatments.
34	Platanus acerifolia	London Plane Tree	6	6	5	2	3	69%	90%	70%	7.0	25.0	20.0	$ 2,080.00	Preserve	Street tree, overall healthy, would benefit from Anthracnose treatments, growing into light pole.
35	Platanus acerifolia	London Plane Tree	6	6	5	3	3	72%	90%	70%	15.0	35.0	40.0	$ 1,940.00	Preserve	Street tree, overall healthy, would benefit from Anthracnose treatments.
36	Pyrus calleryana 'Bradford'	Bradford Pear	6	6	6	4	3	78%	80%	30%	4.0	13.0	6.0	$ 780.00	Preserve	Fire blight.
37	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	7	6	5	3	3	75%	80%	30%	2.5	12.0	5.0	$ 560.00	Preserve	Overall healthy, young tree, fire blight.
38	Pyrus calleryana 'Bradford'	Bradford Pear	7	6	4	2	2	66%	80%	30%	5.0	12.0	8.0	$ 760.00	Remove	Fire blight, dieback in canopy.
39	Pyrus calleryana 'Bradford'	Bradford Pear	5	5	4	2	2	56%	80%	30%	8.0	25.0	20.0	$ 1,320.00	Remove	Very distressed, dieback in canopy
40	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	6	6	7	4	3	81%	80%	30%	5.0	15.0	10.0	$ 780.00	Preserve	Fire blight.
41	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	6	6	7	4	3	81%	80%	30%	5.0	15.0	10.0	$ 780.00	Preserve	Fire blight.
42	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	6	6	7	4	3	81%	80%	30%	2.5	10.0	3.0	$ 570.00	Preserve	Overall healthy, young tree.
43	Pyrus calleryana 'Bradford'	Bradford Pear	8	4	5	2	2	66%	80%	30%	4.5	12.0	6.0	$ 760.00	Remove	Fire blight, aphid infestation and dieback in canopy.
44	Pyrus kawakamii	Evergreen Pear	7	4	5	2	2	63%	80%	30%	4.5	12.0	8.0	$ 550.00	Remove	Fire blight, black spot and dieback in canopy.
45	Pyrus kawakamii	Evergreen Pear	8	6	5	3	2	75%	80%	30%	4.5	12.0	8.0	$ 570.00	Preserve	Fire blight, black spot.
46	Fraxinus oxycarpa 'Raywood'	Raywood Ash	3	3	4	2	2	44%	80%	30%	3.0	15.0	8.0	$ 720.00	Remove	Severe bark damage, sunscald and dieback in canopy.

Costco Business Center

Fuel Facility Project - City of Hayward Project No. 201706217

Arborist Report Attachment - Tree Condition Table

Arborwell

Tree ID #	Botanical Name	Common Name	Condition Rating (1-8 pts/each - 1 Poor ... 8 Excellent) (Foliage/Buds 1-4 pts/each - 1 Poor ... 4 Excellent) Roots (8)	Trunk (8)	Large Branches (8)	Small Branches (4)	Foliage / Buds (4)	Condition %	Location %	Species Rating %	DBH (in inches)	Approx. Height (in feet)	Approx. Spread (in feet)	Appraised Value* *based on "Guide for Plant Appraisal" 9th edition- 24" Box Replacements	Remove / Preserve	Notes / Observations:
47	Fraxinus oxycarpa 'Raywood'	Raywood Ash	6	5	6	3	3	72%	80%	30%	4.0	12.0	10.0	$ 1,080.00	Remove	Leaning into parked cars, some dieback in canopy.
48	Fraxinus oxycarpa 'Raywood'	Raywood Ash	7	6	7	4	3	84%	80%	30%	6.5	20.0	12.0	$ 1,380.00	Preserve	Aphid infestation, near fire hydrant.
49	Platanus acerifolia	London Plane Tree	5	6	5	3	3	69%	80%	70%	8.0	25.0	20.0	$ 1,320.00	Preserve	Would benefit from Anthracnose treatments, dieback in canopy, near light pole.
50	Fraxinus oxycarpa 'Raywood'	Raywood Ash	4	5	4	2	2	53%	80%	30%	8.0	20.0	15.0	$ 1,140.00	Remove	Dieback in canopy, outgrown given space, bark damage.
51	Fraxinus oxycarpa 'Raywood'	Raywood Ash	5	5	4	2	2	56%	80%	30%	14.0	20.0	40.0	$ 1,620.00	Remove	Severe dieback in canopy, outgrown given space.
52	Pyrus calleryana 'Bradford'	Bradford Pear	6	6	4	2	1	59%	80%	30%	5.0	16.0	8.0	$ 1,150.00	Preserve	Aphid infestation, fire blight.
53	Pyrus calleryana 'Bradford'	Bradford Pear	6	6	4	2	1	59%	80%	30%	5.0	16.0	8.0	$ 1,150.00	Preserve	Aphid infestation, fire blight.
54	Fraxinus oxycarpa 'Raywood'	Raywood Ash	4	4	3	3	2	50%	80%	30%	6.0	16.0	8.0	$ 950.00	Remove	Severe dieback in canopy, bark damage.
55	Pyrus calleryana 'Bradford'	Bradford Pear	4	4	3	2	1	44%	80%	30%	4.0	12.0	5.0	$ 510.00	Remove	Aphid infestation, poor stucture, dieback in canopy.
56	Pyrus calleryana 'Bradford'	Bradford Pear	6	4	4	2	1	53%	80%	30%	5.0	16.0	8.0	$ 1,140.00	Preserve	Aphid infestation, fire blight.
57	Pyrus calleryana 'Aristocrat'	Aristocrat Pear	4	4	3	1	1	41%	80%	30%	2.0	12.0	3.0	$ 280.00	Remove	Young tree, not establishing well, nearly dead.
58	Pyrus calleryana 'Bradford'	Bradford Pear	4	4	3	2	1	44%	80%	30%	7.0	18.0	8.0	$ 940.00	Remove	Poor structure, dieback in canopy, Aphid infrestation.
59	Fraxinus oxycarpa 'Raywood'	Raywood Ash	7	7	6	3	2	78%	90%	30%	5.0	40.0	12.0	$ 1,020.00	Preserve	Aphid infestation.
60	Eucalyptus nicholii	Peppermint Gum	6	4	5	2	3	63%	80%	70%	14.0	45.0	50.0	$ 1,780.00	Remove	Leaning, poor structure.
61	Eucalyptus nicholii	Peppermint Gum	3	3	4	2	2	44%	80%	70%	12.0	40.0	40.0	$ 1,400.00	Remove	Severe trunk damage into main stem, limb failures in canopy.

Costco Business Center

Fuel Facility Project - City of Hayward Project No. 201706217

Arborist Report Attachment - Tree Condition Table

Arborwell

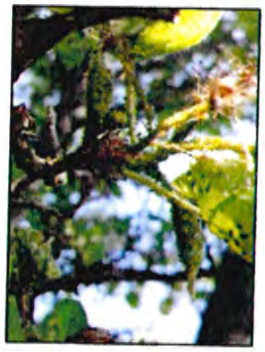
Tree ID #	Botanical Name	Common Name	Condition Rating (1-8 pts/each - 1 Poor ... 8 Excellent) (Foliage/Buds 1-4 pts/each - 1 Poor ... 4 Excellent) Roots (8)	Trunk (8)	Large Branches (8)	Small Branches (4)	Foliage / Buds (4)	Condition %	Location %	Species Rating %	DBH (in inches)	Approx. Height (in feet)	Approx. Spread (in feet)	Appraised Value* *based on "Guide for Plant Appraisal" 9th edition- 24" Box Replacements	Remove / Preserve	Notes / Observations:
62	Eucalyptus nicholii	Peppermint Gum	6	5	4	3	3	66%	90%	70%	24.0	50.0	60.0	$ 2,320.00	Preserve	Some lean, previous limb failures in canopy.
63	Eucalyptus nicholii	Peppermint Gum	6	5	4	2	2	59%	90%	70%	18.0	50.0	60.0	$ 2,290.00	Preserve	Some lean, previous limb failures in canopy, sparse foliage
64	Eucalyptus nicholii	Peppermint Gum	6	5	4	3	3	66%	90%	70%	17.0	50.0	40.0	$ 2,110.00	Preserve	Some lean, previous limb failures in canopy.
65	Pyrus calleryana 'Bradford'	Bradford Pear	6	6	4	2	2	63%	90%	30%	8.0	35.0	35.0	$ 1,350.00	Preserve	Fire blight, poor structure.
66	Eucalyptus nicholii	Peppermint Gum	7	7	5	3	3	78%	90%	70%	15.0	50.0	40.0	$ 2,160.00	Preserve	Previous limb failures in canopy, deadwood.
67	Eucalyptus nicholii	Peppermint Gum	6	6	4	3	3	69%	90%	70%	15.0	50.0	45.0	$ 2,120.00	Remove	Previous limb failures in canopy, deadwood.
68	Eucalyptus nicholii	Peppermint Gum	6	5	4	2	3	63%	80%	70%	16.0	50.0	50.0	$ 2,060.00	Remove	Previous limb failures in canopy, very limited growing space, close to fence.
69	Eucalyptus nicholii	Peppermint Gum	4	3	4	2	1	44%	80%	70%	16.0	40.0	30.0	$ 1,700.00	Remove	Previous limb failures in canopy, very limited growing space, close to fence.
70	Pyrus calleryana 'Bradford'	Bradford Pear	5	3	4	2	2	50%	80%	30%	12.0	35.0	35.0	$ 1,560.00	Remove	Previous limb failures in canopy, very limited growing space, close to fence.
71	Eucalyptus nicholii	Peppermint Gum	5	3	4	2	2	50%	80%	70%	16.0	50.0	35.0	$ 2,010.00	Remove	Previous limb failures in canopy, very limited growing space, close to fence.
72	Pyrus calleryana 'Bradford'	Bradford Pear	5	3	4	2	2	50%	80%	30%	8.0	35.0	35.0	$ 1,310.00	Remove	Previous limb failures in canopy, dieback, fire blight. Very poor structure.
73	Eucalyptus nicholii	Peppermint Gum	4	4	2	1	2	41%	80%	70%	7.0	35.0	20.0	$ 1,390.00	Remove	Previous limb failures in canopy, very limited growing space, close to fence.
74	Eucalyptus nicholii	Peppermint Gum	3	2	3	2	2	38%	80%	70%	15.0	50.0	40.0	$ 1,770.00	Remove	Nearly dead.
75	Eucalyptus nicholii	Peppermint Gum	4	4	4	2	3	53%	80%	70%	13.0	45.0	35.0	$ 1,830.00	Remove	Very large limb failures, trunk damage and poor structure.
76	Fraxinus oxycarpa 'Raywood'	Raywood Ash	4	4	4	2	2	50%	80%	30%	4.0	15.0	8.0	$ 730.00	Remove	Leaning, dieback in canopy, nearly dead.
													Total Appraised Value:	**$ 85,460.00** 24" Box		

Tree #:1

Field Observations: Severe Aphid infestation, trunk girdled by stake tie.

Remove or Preserve? Preserve

1. Species: Pyrus calleryana 'Bradford', Bradford Pear
2. Condition Percentage: 63 %
3. Trunk Circumference/DBH (in inches): 10.5
4. Approximate Height (in feet): 15
5. Approximate Canopy Diameter (in feet): 35
6. Species Rating Percentage : 30 %



Tree #:2

Field Observations: Bark damage on trunk, tip burn on leaves. *NOTE: Used Raywood Ash Species Rating, likely from root stock

Remove or Preserve? Remove

1. Species: Ash Species, Unknown/*Ash Root Stock
2. Condition Percentage: 50 %
3. Trunk Circumference/DBH (in inches): 1.5
4. Approximate Height (in feet): 5
5. Approximate Canopy Diameter (in feet): 6
6. Species Rating Percentage : 30 %

Tree #:3

Field Observations: Some lean, crown dieback and bark damage.

Remove or Preserve? Remove

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 53 %
3. Trunk Circumference/DBH (in inches): 6.5
4. Approximate Height (in feet): 25
5. Approximate Canopy Diameter (in feet): 25
6. Species Rating Percentage : 30 %

Tree #:4

Field Observations: Bark damage on trunk.

Remove or Preserve? Preserve

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 69 %
3. Trunk Circumference/DBH (in inches): 3.5
4. Approximate Height (in feet): 13
5. Approximate Canopy Diameter (in feet): 25
6. Species Rating Percentage : 30 %

Tree #:5

Field Observations: Severe dieback in upper canopy, tree is overgrown by shrubs.

Remove or Preserve? Remove

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 50 %
3. Trunk Circumference/DBH (in inches): 7.5
4. Approximate Height (in feet): 13
5. Approximate Canopy Diameter (in feet): 25
6. Species Rating Percentage : 30 %

Tree #:6

Field Observations: Severe dieback in upper canopy, tree is overgrown by shrubs.

Remove or Preserve? Remove

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 50 %
3. Trunk Circumference/DBH (in inches): 7
4. Approximate Height (in feet): 13
5. Approximate Canopy Diameter (in feet): 25
6. Species Rating Percentage : 30 %

Tree #:7

Field Observations: Severe dieback in upper canopy, tree is overgrown by shrubs.

Remove or Preserve? Remove

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 47 %
3. Trunk Circumference/DBH (in inches): 4
4. Approximate Height (in feet): 13
5. Approximate Canopy Diameter (in feet): 13
6. Species Rating Percentage : 30 %

Tree #:8

Field Observations: Severe dieback in upper canopy, tree is overgrown by shrubs.

Remove or Preserve? Remove

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 38 %
3. Trunk Circumference/DBH (in inches): 12
4. Approximate Height (in feet): 30
5. Approximate Canopy Diameter (in feet): 30
6. Species Rating Percentage : 30 %

Tree #:9

Field Observations: Girdled roots, some deadwood in upper canopy.

Remove or Preserve? Preserve

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 69 %
3. Trunk Circumference/DBH (in inches): 5.5
4. Approximate Height (in feet): 15
5. Approximate Canopy Diameter (in feet): 25
6. Species Rating Percentage : 30 %

Tree #:10

Field Observations: Aphid and scale infestation.

Remove or Preserve? Preserve

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 72 %
3. Trunk Circumference/DBH (in inches): 5
4. Approximate Height (in feet): 15
5. Approximate Canopy Diameter (in feet): 25
6. Species Rating Percentage : 30 %

Tree #:11

Field Observations: Overall healthy tree, some bark damage on trunk.

Remove or Preserve? Preserve

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 69 %
3. Trunk Circumference/DBH (in inches): 4.5
4. Approximate Height (in feet): 12
5. Approximate Canopy Diameter (in feet): 18
6. Species Rating Percentage : 30 %

Tree #:12

Field Observations: Overall healthy, young tree.

Remove or Preserve? Preserve

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 69 %
3. Trunk Circumference/DBH (in inches): 4.5
4. Approximate Height (in feet): 12
5. Approximate Canopy Diameter (in feet): 18
6. Species Rating Percentage : 30 %

Tree #:13

Field Observations: Some lean, crown dieback and bark damage.

Remove or Preserve? Remove

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 47 %
3. Trunk Circumference/DBH (in inches): 2.5
4. Approximate Height (in feet): 6
5. Approximate Canopy Diameter (in feet): 15
6. Species Rating Percentage : 50 %

Tree #:14

Field Observations: Black spot fungus on foliage.

Remove or Preserve? Preserve

1. Species: Pyrus kawakamii, Evergreen Pear
2. Condition Percentage: 69 %
3. Trunk Circumference/DBH (in inches): 6.5
4. Approximate Height (in feet): 18
5. Approximate Canopy Diameter (in feet): 18
6. Species Rating Percentage : 70 %

Tree #:15

Field Observations: Leaning, canopy out of balance, previously topped with poor structure.

Remove or Preserve? Remove

1. Species: Platanus acerifolia, London Plane Tree
2. Condition Percentage: 63 %
3. Trunk Circumference/DBH (in inches): 4
4. Approximate Height (in feet): 15
5. Approximate Canopy Diameter (in feet): 15
6. Species Rating Percentage : 30 %

Tree #:16

Field Observations: Roots lifting curb, overall healthy tree.

Remove or Preserve? Remove

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 63 %
3. Trunk Circumference/DBH (in inches): 8
4. Approximate Height (in feet): 25
5. Approximate Canopy Diameter (in feet): 40
6. Species Rating Percentage : 30 %

Tree #:17

Field Observations: Leaning, with sunscald on trunk.

Remove or Preserve? Remove

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 53 %
3. Trunk Circumference/DBH (in inches): 4
4. Approximate Height (in feet): 13
5. Approximate Canopy Diameter (in feet): 5
6. Species Rating Percentage : 30 %

Tree #:18

Field Observations: Leaning, dieback in canopy.

Remove or Preserve? Preserve

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 75 %
3. Trunk Circumference/DBH (in inches): 4
4. Approximate Height (in feet): 15
5. Approximate Canopy Diameter (in feet): 5
6. Species Rating Percentage : 30 %

Tree #:19

Field Observations: Leaning, dieback in canopy.

Remove or Preserve? Remove

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 50 %
3. Trunk Circumference/DBH (in inches): 4
4. Approximate Height (in feet): 13
5. Approximate Canopy Diameter (in feet): 6
6. Species Rating Percentage : 30 %

Tree #:20

Field Observations: Leaning, dieback in canopy.

Remove or Preserve? Remove

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 50 %
3. Trunk Circumference/DBH (in inches): 3
4. Approximate Height (in feet): 13
5. Approximate Canopy Diameter (in feet): 6
6. Species Rating Percentage : 30 %

Tree #:21

Field Observations: Bark damage, dieback in canopy.

Remove or Preserve? Remove

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 53 %
3. Trunk Circumference/DBH (in inches): 2.5
4. Approximate Height (in feet): 13
5. Approximate Canopy Diameter (in feet): 5
6. Species Rating Percentage : 30 %

Tree #:22

Field Observations: Fire blight.

Remove or Preserve? Preserve

1. Species: Pyrus calleryana 'Aristocrat', Aristocrat Pear
2. Condition Percentage: 81 %
3. Trunk Circumference/DBH (in inches): 8
4. Approximate Height (in feet): 20
5. Approximate Canopy Diameter (in feet): 18
6. Species Rating Percentage : 30 %

Tree #:23

Field Observations: Fire blight, dieback in canopy.

Remove or Preserve? Remove

1. Species: Pyrus calleryana 'Aristocrat', Aristocrat Pear
2. Condition Percentage: 66 %
3. Trunk Circumference/DBH (in inches): 3
4. Approximate Height (in feet): 12
5. Approximate Canopy Diameter (in feet): 18
6. Species Rating Percentage : 30 %

Tree #:24

Field Observations: Young tree, not establishing well.

Remove or Preserve? Remove

1. Species: Pyrus calleryana 'Aristocrat', Aristocrat Pear
2. Condition Percentage: 66 %
3. Trunk Circumference/DBH (in inches): 1.5
4. Approximate Height (in feet): 7
5. Approximate Canopy Diameter (in feet): 2
6. Species Rating Percentage : 30 %

Tree #:25

Field Observations: Fire blight.

Remove or Preserve? Preserve

1. 3Species: Pyrus calleryana 'Aristocrat', Aristocrat Pear
2. Condition Percentage: 72 %
3. Trunk Circumference/DBH (in inches): 7
4. Approximate Height (in feet): 20
5. Approximate Canopy Diameter (in feet): 18
6. Species Rating Percentage : 30 %

Tree #:26

Field Observations: Dead.

Remove or Preserve? Remove

1. Species: Pyrus calleryana 'Aristocrat', Aristocrat Pear
2. Condition Percentage: 25 %
3. Trunk Circumference/DBH (in inches): 4
4. Approximate Height (in feet): 20
5. Approximate Canopy Diameter (in feet): 18
6. Species Rating Percentage : 30 %

Tree #:27

Field Observations: Street tree, overall healthy, would benefit from Anthracnose treatments.

Remove or Preserve? Preserve

1. Species: Platanus acerifolia, London Plane Tree
2. Condition Percentage: 75 %
3. Trunk Circumference/DBH (in inches): 14
4. Approximate Height (in feet): 40
5. Approximate Canopy Diameter (in feet): 35
6. Species Rating Percentage : 70 %

Tree #:28

Field Observations: Street tree, overall healthy, would benefit from Anthracnose treatments.

Remove or Preserve? Preserve

1. Species: Platanus acerifolia, London Plane Tree
2. Condition Percentage: 75 %
3. Trunk Circumference/DBH (in inches): 12
4. Approximate Height (in feet): 45
5. Approximate Canopy Diameter (in feet): 35
6. Species Rating Percentage : 70 %

Tree #:29

Field Observations: Bark damage,sunscald & dieback in canopy.

Remove or Preserve? Remove

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 56 %
3. Trunk Circumference/DBH (in inches): 3.5
4. Approximate Height (in feet): 15
5. Approximate Canopy Diameter (in feet): 6
6. Species Rating Percentage : 30 %

Tree #:30

Field Observations: Fire blight.

Remove or Preserve? Preserve

1. Species: Pyrus calleryana 'Aristocrat', Aristocrat Pear
2. Condition Percentage: 78 %
3. Trunk Circumference/DBH (in inches): 7
4. Approximate Height (in feet): 15
5. Approximate Canopy Diameter (in feet): 12
6. Species Rating Percentage : 30 %

Tree #:31

Field Observations: Fire blight, poor structure.

Remove or Preserve? Remove

1. Species: Pyrus calleryana 'Aristocrat', Aristocrat Pear
2. Condition Percentage: 59 %
3. Trunk Circumference/DBH (in inches): 4
4. Approximate Height (in feet): 12
5. Approximate Canopy Diameter (in feet): 6
6. Species Rating Percentage : 30 %

Tree #:32

Field Observations: Fire blight, some lean.

Remove or Preserve? Preserve

1. Species: Pyrus calleryana 'Aristocrat', Aristocrat Pear
2. Condition Percentage: 72 %
3. Trunk Circumference/DBH (in inches): 8
4. Approximate Height (in feet): 25
5. Approximate Canopy Diameter (in feet): 25
6. Species Rating Percentage : 30 %

Tree #:33

Field Observations: Street tree, overall healthy, would benefit from Anthracnose treatments.

Remove or Preserve? Preserve

1. Species: Platanus acerifolia, London Plane Tree
2. Condition Percentage: 78 %
3. Trunk Circumference/DBH (in inches): 13
4. Approximate Height (in feet): 30
5. Approximate Canopy Diameter (in feet): 30
6. Species Rating Percentage : 70 %

Tree #:34

Field Observations: Street tree, overall healthy, would benefit from Anthracnose treatments, growing into light pole.

Remove or Preserve? Preserve

1. Species: Platanus acerifolia, London Plane Tree
2. Condition Percentage: 69 %
3. Trunk Circumference/DBH (in inches): 7
4. Approximate Height (in feet): 25
5. Approximate Canopy Diameter (in feet): 20
6. Species Rating Percentage : 70 %

Tree #:35

Field Observations: Street tree, overall healthy, would benefit from Anthracnose treatments.

Remove or Preserve? Preserve

1. Species: Platanus acerifolia, London Plane Tree
2. Condition Percentage: 72 %
3. Trunk Circumference/DBH (in inches): 15
4. Approximate Height (in feet): 35
5. Approximate Canopy Diameter (in feet): 40
6. Species Rating Percentage : 70 %

Tree #:36

Field Observations: Fire blight.

Remove or Preserve? Preserve

1. Species: Pyrus calleryana 'Bradford', Bradford Pear
2. Condition Percentage: 78 %
3. Trunk Circumference/DBH (in inches): 4
4. Approximate Height (in feet): 13
5. Approximate Canopy Diameter (in feet): 6
6. Species Rating Percentage : 30 %

Tree #:37

Field Observations: Overall healthy, young tree, fire blight.

Remove or Preserve? Preserve

1. Species: Pyrus calleryana 'Aristocrat', Aristocrat Pear
2. Condition Percentage: 75 %
3. Trunk Circumference/DBH (in inches): 2.5
4. Approximate Height (in feet): 12
5. Approximate Canopy Diameter (in feet): 5
6. Species Rating Percentage : 30 %

Tree #:38

Field Observations: Fire blight, dieback in canopy.

Remove or Preserve? Remove

1. Species: Pyrus calleryana 'Bradford', Bradford Pear
2. Condition Percentage: 66 %
3. Trunk Circumference/DBH (in inches): 5
4. Approximate Height (in feet): 12
5. Approximate Canopy Diameter (in feet): 8
6. Species Rating Percentage : 30 %

Tree #:39

Field Observations: Very distressed, dieback in canopy

Remove or Preserve? Remove

1. Species: Pyrus calleryana 'Bradford', Bradford Pear
2. Condition Percentage: 56 %
3. Trunk Circumference/DBH (in inches): 8
4. Approximate Height (in feet): 25
5. Approximate Canopy Diameter (in feet): 20
6. Species Rating Percentage : 30 %

Tree #:40

Field Observations: Fire blight.

Remove or Preserve? Preserve

1. Species: Pyrus calleryana 'Aristocrat', Aristocrat Pear
2. Condition Percentage: 81 %
3. Trunk Circumference/DBH (in inches): 5
4. Approximate Height (in feet): 15
5. Approximate Canopy Diameter (in feet): 10
6. Species Rating Percentage : 30 %

Tree #:41

Field Observations: Fire blight.

Remove or Preserve? Preserve

1. Species: Pyrus calleryana 'Aristocrat', Aristocrat Pear
2. Condition Percentage: 81 %
3. Trunk Circumference/DBH (in inches): 5
4. Approximate Height (in feet): 15
5. Approximate Canopy Diameter (in feet): 10
6. Species Rating Percentage : 30 %

Tree #:42

Field Observations: Overall healthy, young tree.

Remove or Preserve? Preserve

1. Species: Pyrus calleryana 'Aristocrat', Aristocrat Pear
2. Condition Percentage: 81 %
3. Trunk Circumference/DBH (in inches): 2.5
4. Approximate Height (in feet): 10
5. Approximate Canopy Diameter (in feet): 3
6. Species Rating Percentage : 30 %

Tree #:43

Field Observations: Fire blight, aphid infestation and dieback in canopy.

Remove or Preserve? Remove

1. Species: Pyrus calleryana 'Bradford', Bradford Pear
2. Condition Percentage: 66 %
3. Trunk Circumference/DBH (in inches): 4.5
4. Approximate Height (in feet): 12
5. Approximate Canopy Diameter (in feet): 6
6. Species Rating Percentage : 30 %

Tree #:44

Field Observations: Fire blight, black spot and dieback in canopy.

Remove or Preserve? Remove

1. Species: Pyrus kawakamii, Evergreen Pear
2. Condition Percentage: 63 %
3. Trunk Circumference/DBH (in inches): 4.5
4. Approximate Height (in feet): 12
5. Approximate Canopy Diameter (in feet): 8
6. Species Rating Percentage : 30 %

Tree #:45

Field Observations: Fire blight, black spot.

Remove or Preserve? Preserve

1. Species: Pyrus kawakamii, Evergreen Pear
2. Condition Percentage: 75 %
3. Trunk Circumference/DBH (in inches): 4.5
4. Approximate Height (in feet): 12
5. Approximate Canopy Diameter (in feet): 8
6. Species Rating Percentage : 30 %

Tree #:46

Field Observations: Severe bark damage, sunscald and dieback in canopy.

Remove or Preserve? Remove

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 44 %
3. Trunk Circumference/DBH (in inches): 3
4. Approximate Height (in feet): 15
5. Approximate Canopy Diameter (in feet): 8
6. Species Rating Percentage : 30 %

Tree #:47

Field Observations: Leaning into parked cars, some dieback in canopy.

Remove or Preserve? Remove

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 72 %
3. Trunk Circumference/DBH (in inches): 4
4. Approximate Height (in feet): 12
5. Approximate Canopy Diameter (in feet): 10
6. Species Rating Percentage : 30 %

Tree #:48

Field Observations: Aphid infestation, near fire hydrant.

Remove or Preserve? Preserve

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 84 %
3. Trunk Circumference/DBH (in inches): 6.5
4. Approximate Height (in feet): 20
5. Approximate Canopy Diameter (in feet): 12
6. Species Rating Percentage : 30 %

Tree #:49

Field Observations: Would benefit from Anthracnose treatments, dieback in canopy, near light pole.

Remove or Preserve? Preserve

1. Species: Platanus acerifolia, London Plane Tree
2. Condition Percentage: 69 %
3. Trunk Circumference/DBH (in inches): 8
4. Approximate Height (in feet): 25
5. Approximate Canopy Diameter (in feet): 20
6. Species Rating Percentage : 70 %

Tree #:50

Field Observations: Dieback in canopy, outgrown given space, bark damage.

Remove or Preserve? Remove

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 53 %
3. Trunk Circumference/DBH (in inches): 8
4. Approximate Height (in feet): 20
5. Approximate Canopy Diameter (in feet): 15
6. Species Rating Percentage : 30 %

Tree #:51

Field Observations: Severe dieback in canopy, outgrown given space.

Remove or Preserve? Remove

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 56 %
3. Trunk Circumference/DBH (in inches): 14
4. Approximate Height (in feet): 20
5. Approximate Canopy Diameter (in feet): 40
6. Species Rating Percentage : 30 %

Tree #:52

Field Observations: Aphid infestation, fire blight.

Remove or Preserve? Preserve

1. Species: Pyrus calleryana 'Bradford', Bradford Pear
2. Condition Percentage: 59 %
3. Trunk Circumference/DBH (in inches): 5
4. Approximate Height (in feet): 16
5. Approximate Canopy Diameter (in feet): 8
6. Species Rating Percentage : 30 %

Tree #:53

Field Observations: Aphid infestation, fire blight.

Remove or Preserve? Preserve

1. Species: Pyrus calleryana 'Bradford', Bradford Pear
2. Condition Percentage: 59 %
3. Trunk Circumference/DBH (in inches): 5
4. Approximate Height (in feet): 16
5. Approximate Canopy Diameter (in feet): 8
6. Species Rating Percentage : 30 %

Tree #:54

Field Observations: Severe dieback in canopy, bark damage.

Remove or Preserve? Remove

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 50 %
3. Trunk Circumference/DBH (in inches): 6
4. Approximate Height (in feet): 16
5. Approximate Canopy Diameter (in feet): 8
6. Species Rating Percentage : 30 %

Tree #:55

Field Observations: Aphid infestation, poor stucture, dieback in canopy.

Remove or Preserve? Remove

1. Species: Pyrus calleryana 'Bradford', Bradford Pear
2. Condition Percentage: 44 %
3. Trunk Circumference/DBH (in inches): 4
4. Approximate Height (in feet): 12
5. Approximate Canopy Diameter (in feet): 5
6. Species Rating Percentage : 30 %

Tree #:56

Field Observations: Aphid infestation, fire blight.

Remove or Preserve? Preserve

1. Species: Pyrus calleryana 'Bradford', Bradford Pear
2. Condition Percentage: 53 %
3. Trunk Circumference/DBH (in inches): 5
4. Approximate Height (in feet): 16
5. Approximate Canopy Diameter (in feet): 8
6. Species Rating Percentage : 30 %

Tree #:57

Field Observations: Young tree, not establishing well, nearly dead.

Remove or Preserve? Remove

1. Species: Pyrus calleryana 'Aristocrat', Aristocrat Pear
2. Condition Percentage: 41 %
3. Trunk Circumference/DBH (in inches): 2
4. Approximate Height (in feet): 12
5. Approximate Canopy Diameter (in feet): 3
6. Species Rating Percentage : 30 %

Tree #:58

Field Observations: Poor structure, dieback in canopy, Aphid infrestation.

Remove or Preserve? Remove

1. Species: Pyrus calleryana 'Bradford', Bradford Pear
2. Condition Percentage: 44 %
3. Trunk Circumference/DBH (in inches): 7
4. Approximate Height (in feet): 18
5. Approximate Canopy Diameter (in feet): 8
6. Species Rating Percentage : 30 %

Tree #:59

Field Observations: Aphid infestation.

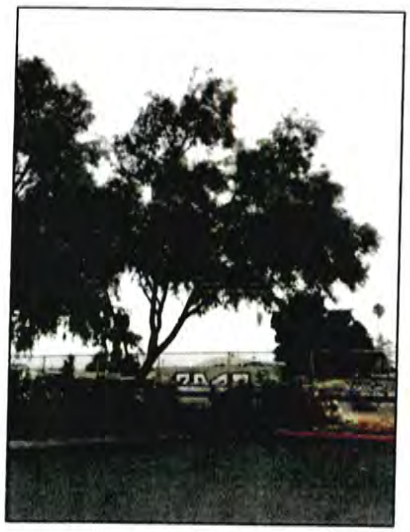
Remove or Preserve? Preserve

1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 78 %
3. Trunk Circumference/DBH (in inches): 5
4. Approximate Height (in feet): 40
5. Approximate Canopy Diameter (in feet): 12
6. Species Rating Percentage : 30 %

Tree #:60

Field Observations: Leaning, poor structure.

Remove or Preserve? Remove



1. Species: Eucalyptus nicholii, Peppermint Gum
2. Condition Percentage: 63 %
3. Trunk Circumference/DBH (in inches): 14
4. Approximate Height (in feet): 45
5. Approximate Canopy Diameter (in feet): 50
6. Species Rating Percentage : 70 %

Tree #:61

Field Observations: Severe trunk damage into main stem, limb failures in canopy.

Remove or Preserve? Remove

1. Species: Eucalyptus nicholii, Peppermint Gum
2. Condition Percentage: 44 %
3. Trunk Circumference/DBH (in inches): 12
4. Approximate Height (in feet): 40
5. Approximate Canopy Diameter (in feet): 40
6. Species Rating Percentage : 70 %

Tree #:62

Field Observations: Some lean, previous limb failures in canopy.

Remove or Preserve? Preserve

1. Species: Eucalyptus nicholii, Peppermint Gum
2. Condition Percentage: 66 %
3. Trunk Circumference/DBH (in inches): 24
4. Approximate Height (in feet): 50
5. Approximate Canopy Diameter (in feet): 60
6. Species Rating Percentage : 70 %

Tree #:63

Field Observations: Some lean, previous limb failures in canopy, sparse foliage

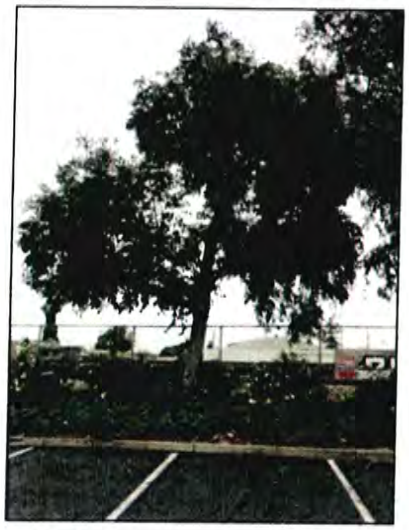
Remove or Preserve? Preserve

1. Species: Eucalyptus nicholii, Peppermint Gum
2. Condition Percentage: 59 %
3. Trunk Circumference/DBH (in inches): 18
4. Approximate Height (in feet): 50
5. Approximate Canopy Diameter (in feet): 60
6. Species Rating Percentage : 70 %

Tree #:64

Field Observations: Some lean, previous limb failures in canopy.

Remove or Preserve? Preserve



1. Species: Eucalyptus nicholii, Peppermint Gum
2. Condition Percentage: 66 %
3. Trunk Circumference/DBH (in inches): 17
4. Approximate Height (in feet): 50
5. Approximate Canopy Diameter (in feet): 40
6. Species Rating Percentage : 70 %

Tree #:65

Field Observations: Fire blight, poor structure.

Remove or Preserve? Preserve

1. Species: Pyrus calleryana 'Bradford', Bradford Pear
2. Condition Percentage: 63 %
3. Trunk Circumference/DBH (in inches): 8
4. Approximate Height (in feet): 35
5. Approximate Canopy Diameter (in feet): 35
6. Species Rating Percentage : 30 %

Tree #:66

Field Observations: Previous limb failures in canopy, deadwood.

Remove or Preserve? Preserve

1. Species: Eucalyptus nicholii, Peppermint Gum
2. Condition Percentage: 78 %
3. Trunk Circumference/DBH (in inches): 15
4. Approximate Height (in feet): 50
5. Approximate Canopy Diameter (in feet): 40
6. Species Rating Percentage : 70 %

Tree #:67

Field Observations: Previous limb failures in canopy, deadwood.

Remove or Preserve? Remove

1. Species: Eucalyptus nicholii, Peppermint Gum
2. Condition Percentage: 69 %
3. Trunk Circumference/DBH (in inches): 15
4. Approximate Height (in feet): 50
5. Approximate Canopy Diameter (in feet): 45
6. Species Rating Percentage : 70 %

Tree #:68

Field Observations: Previous limb failures in canopy, very limited growing space, close to fence.

Remove or Preserve? Remove

1. Species: Eucalyptus nicholii, Peppermint Gum
2. Condition Percentage: 63 %
3. Trunk Circumference/DBH (in inches): 16
4. Approximate Height (in feet): 50
5. Approximate Canopy Diameter (in feet): 50
6. Species Rating Percentage : 70 %

Tree #:69

Field Observations: Previous limb failures in canopy, very limited growing space, close to fence.

Remove or Preserve? Remove

1. Species: Eucalyptus nicholii, Peppermint Gum
2. Condition Percentage: 44 %
3. Trunk Circumference/DBH (in inches): 16
4. Approximate Height (in feet): 40
5. Approximate Canopy Diameter (in feet): 30
6. Species Rating Percentage : 70 %

Tree #:70

Field Observations: Previous limb failures in canopy, very limited growing space, close to fence.

Remove or Preserve? Remove

1. Species: Pyrus calleryana 'Bradford', Bradford Pear
2. Condition Percentage: 50 %
3. Trunk Circumference/DBH (in inches): 12
4. Approximate Height (in feet): 35
5. Approximate Canopy Diameter (in feet): 35
6. Species Rating Percentage : 30 %

Tree #:71

Field Observations: Previous limb failures in canopy, very limited growing space, close to fence.

Remove or Preserve? Remove

1. Species: Eucalyptus nicholii, Peppermint Gum
2. Condition Percentage: 50 %
3. Trunk Circumference/DBH (in inches): 16
4. Approximate Height (in feet): 50
5. Approximate Canopy Diameter (in feet): 35
6. Species Rating Percentage : 70 %

Tree #:72

Field Observations: Previous limb failures in canopy, dieback, fire blight. Very poor structure.

Remove or Preserve? Remove

1. Species: Pyrus calleryana 'Bradford', Bradford Pear
2. Condition Percentage: 50 %
3. Trunk Circumference/DBH (in inches): 8
4. Approximate Height (in feet): 35
5. Approximate Canopy Diameter (in feet): 35
6. Species Rating Percentage : 30 %

Tree #:73

Field Observations: Previous limb failures in canopy, very limited growing space, close to fence.

Remove or Preserve? Remove

1. Species: Eucalyptus nicholii, Peppermint Gum
2. Condition Percentage: 41 %
3. Trunk Circumference/DBH (in inches): 7
4. Approximate Height (in feet): 35
5. Approximate Canopy Diameter (in feet): 20
6. Species Rating Percentage : 70 %

Tree #:74

Field Observations: Nearly dead.

Remove or Preserve? Remove

1. Species: Eucalyptus nicholii, Peppermint Gum
2. Condition Percentage: 38 %
3. Trunk Circumference/DBH (in inches): 15
4. Approximate Height (in feet): 50
5. Approximate Canopy Diameter (in feet): 40
6. Species Rating Percentage : 70 %

Tree #:75

Field Observations: Very large limb failures, trunk damage and poor structure.

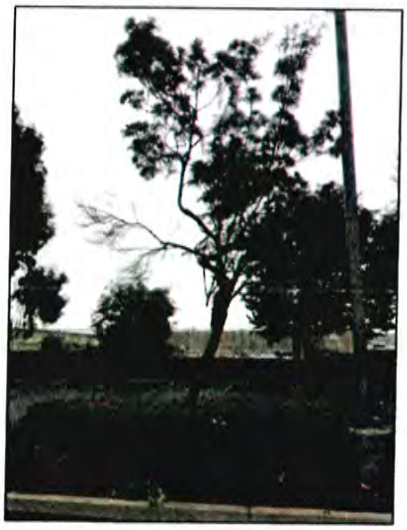
Remove or Preserve? Remove

1. Species: Eucalyptus nicholii, Peppermint Gum
2. Condition Percentage: 53 %
3. Trunk Circumference/DBH (in inches): 13
4. Approximate Height (in feet): 45
5. Approximate Canopy Diameter (in feet): 35
6. Species Rating Percentage : 70 %

Tree #:76

Field Observations: Leaning, dieback in canopy, nearly dead.

Remove or Preserve? Remove



1. Species: Fraxinus oxycarpa 'Raywood', Raywood Ash
2. Condition Percentage: 50 %
3. Trunk Circumference/DBH (in inches): 4
4. Approximate Height (in feet): 15
5. Approximate Canopy Diameter (in feet): 8
6. Species Rating Percentage : 30 %

Costco Business Center #823 - Fuel Facility Project

22330 Hathaway Avenue, Hayward, CA

Arborwell
professional tree management

Prepared by: Dustie Rushing, ISA Certified Arborist #WE-10084A May, 2018 - Updated September, 2018

KLEINFELDER
Bright People. Right Solutions.

May 23, 2016
Kleinfelder Project No. 20170042.001A

Costco Wholesale Corporation
9 Corporate Park, Suite 230
Irvine, California 92606

Attention: Ms. Kim Katz
Director of Real Estate Development

SUBJECT: Phase I Environmental Site Assessment
Proposed Costco Fuel Facility
Costco Wholesale Business Center No. 823
22330 Hathaway Avenue
Hayward, California
CW#: 13-0040

Dear Ms. Katz:

Enclosed is the Phase I Environmental Site Assessment report for the above-referenced property. Kleinfelder trusts the information presented in this report meets your needs at this time.

An executive summary is provided. However, Kleinfelder recommends that the report be read in its entirety for a comprehensive understanding of the items contained therein.

Kleinfelder appreciates the opportunity to provide these services to Costco Wholesale Corporation. Should you require additional information, or have questions regarding this report, please contact Paolo Dizon at 949.585.3144.

Sincerely,

KLEINFELDER

Paolo M. Dizon
Project Manager

Lizanne Simmons, PG
Principal Geologist

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PHASE I ENVIRONMENTAL SITE ASSESSMENT PROPOSED COSTCO FUEL FACILITY COSTCO WHOLESALE BUSINESS CENTER NO. 823 22330 HATHAWAY AVENUE HAYWARD, CALIFORNIA CW #: 13-0040 KLEINFELDER PROJECT NO. 20170042.001A

MAY 23, 2016

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ONLY THE CLIENT OR ITS DESIGNATED REPRESENTATIVES MAY USE THIS DOCUMENT AND ONLY FOR THE SPECIFIC PROJECT FOR WHICH THIS REPORT WAS PREPARED.

A Report Prepared for:

Ms. Kim Katz
Director of Real Estate Development
Costco Wholesale Corporation
9 Corporate Park, Suite 230
Irvine, California 92606

PHASE I ENVIRONMENTAL SITE ASSESSMENT
PROPOSED COSTCO FUEL FACILITY
COSTCO WHOLESALE BUSINESS CENTER NO. 823
22330 HATHWAY AVENUE
HAYWARD, CALIFORNIA
CW #: 13-0040

Prepared by:

Lindsey Dandridge-Perry
Project Professional

Reviewed by:

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May 23, 2016
Kleinfelder Project No. 20170042.001A

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1 EXECUTIVE SUMMARY

This report documents a Phase I Environmental Site Assessment (ESA) performed by Kleinfelder, Inc. (Kleinfelder) for Costco Wholesale Corporation (Costco / Client), of the proposed location for a new Costco fuel facility. The proposed location of this new Costco fuel facility (referred to henceforth as the "Site") is in the west portion of the existing Costco Wholesale Business Center No. 823 parking lot. The existing Costco Wholesale Warehouse is located at 22330 Hathaway Avenue in Hayward, California (see Figure 1). Costco plans to construct a fuel facility with four underground storage tanks (USTs) and three dispenser islands. Costco provided to Kleinfelder the Site boundaries on a January 12, 2016 *Preliminary Site Plan* prepared by MG2.

This report was prepared using the ASTM International (ASTM, formerly known as the American Society for Testing and Materials) Designation E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (the "Standard Practice"), the All Appropriate Inquiry (AAI) section of the Small Business Liability Relief and Revitalization Act (the Federal Brownfields Law), and Costco's Development Requirements, Version 2014, revised June 13, 2014. The Phase I ESA findings include the following:

- The Site consists of a portion of the western third of a larger 11.19 acre parcel of land identified as Alameda County Assessor's Parcel Number (APN) 429-008-200-300.
- The Site is currently developed as a parking lot for the existing Costco Wholesale Business Center. The warehouse for the Costco facility is located east-southeast of the Site. No obvious significant staining was observed on the asphalt-paved surface, though the paving was observed to be cracked and worn.
- Kleinfelder's review of available historical information indicates the Site was occupied by a portion of an auto and horse shed in 1923, a warehouse-type building and parking lot associated with a bottling plant from at least 1939 through 1982, and by a parking lot from at least 1993 through the present.
- The Site is located within the boundaries of the Hayward Cannery Brownfields area. During construction of the existing Costco warehouse building in 1991, three underground storage tanks (USTs) were encountered along with contaminated soil. Contaminated soils were excavated during UST removal. What was described as a "goo" was encountered between 24 and 34 feet below ground surface (bgs) over an area of approximately 240 by 240 feet, partially beneath the warehouse building footprint. Impacted soil was excavated,

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and nine wells were installed in 1992. Case closure was issued by the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) in 1994 for site assessment and by the California Department of Toxic Substances Control (DTSC) in 1996 for remediation. This is considered a historical REC (HREC).

This assessment has revealed no evidence of RECs or controlled RECs (CRECs) in connection with the Site.

Deviations from the Standard Practice (if any) are discussed in Section 7.3 of this report. This report is subject to the limitations in Section 2.5.

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2 INTRODUCTION

This report is a summary of work performed using the guidelines set forth in ASTM Designation E 1527-13, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" (the Standard Practice), and as set forth in Costco's Development Requirements, Version 2014, revised June 13, 2014. This report also generally conforms to the Standard Practice's suggested table of contents. Minor format modifications have been made to the Standard Practice's suggested table of contents to assist in better reading and understanding the report findings.

2.1 PURPOSE

The purpose of this Phase I ESA is to identify, to the extent feasible pursuant to the scope of services defined in Kleinfelder's Proposal No. 136717/IRV13P0486, dated September 30, 2013, and limitations discussed in this report, RECs related to the Site. As defined in the Standard Practice, a REC is:

> *The presence or likely presence of any hazardous substances or petroleum products in, on or at a property: (1) due to a release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.*

As defined in the Standard Practice, a de minimis condition is:

> *A condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.*

The 2013 Standard Practice also introduced the designation of CREC. As defined in the Standard Practice, a CREC is:

> *"... a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further*

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action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

The 2013 Standard Practice defines a HREC as:

> *...a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to environmental controls.*

The final decision regarding whether a past release is an HREC rests with the environmental professional (EP), and will be influenced by the current impact (if any) of the past release to the Site.

This report describes Kleinfelder's assessment methodology and documents its findings, subject to the limitations presented in Section 2.5 of this report.

2.2 DETAILED SCOPE-OF-SERVICES

The following sections describe Kleinfelder's work scope:

- Section 2, Introduction, includes a discussion of the purpose/reason for performing the Phase I ESA, additional services requested by the Client (e.g., an evaluation of business environmental risk factors associated with the Site), significant assumptions (e.g., property boundaries if not marked in the field), limitations, exceptions, special terms and conditions (e.g., contractual), and user reliance parameters.
- Section 3, Site Description, is a compilation of information concerning the Site location, legal description (if provided by the Client), current and proposed use of the Site, a description of structures and improvements on the Site at the time of Kleinfelder's assessment, and adjoining property use.
- Section 4, Records Review, is a compilation of Kleinfelder's review of several databases available from Federal, State, and local regulatory agencies regarding hazardous substance use, storage, or disposal at the Site; and for off Site facilities within the search

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distances specified in the Standard Practice. Records provided by the Client are summarized and copies of relevant documents are included in the appendices of this report. Physical setting sources (including topography and soil and groundwater conditions) and typical Client-provided information (e.g., title records, environmental liens, specialized knowledge, valuation reduction for environmental issues, and owner, property manager, and occupant information) are also summarized in this section. Other interviews with people knowledgeable about the Site (including the Client) are included in Section 7.

- Section 5, History of the Site, summarizes the history of the Site and adjoining properties. This Site history is based on various sources, which may include a review of historical aerial photographs, Sanborn Fire Insurance Maps, city or suburban directories, historical topographic maps, building department records, and results of previous Site assessments (if any and reasonably ascertainable).
- Section 6, Site Reconnaissance, describes Kleinfelder's observations during the Site reconnaissance. The methodology used and limiting conditions, are described.
- Section 7, Interviews, is a summary of telephone and personal interviews performed with "Key Site Managers" that may include the Site owner/manager, occupants/tenants, local government officials, and the Client. Additional interview sources may be contacted if Key Site Managers were not available prior to production of this report, and may include adjoining landowners and people with historical knowledge of the area.
- Section 8, Evaluation, is a presentation of Kleinfelder's findings and opinions regarding the information in Sections 3 through 7, and presents conclusions regarding the presence of RECs, HRECs, CRECs, and de minimis conditions connected with the Site, and recommendations.
- Section 9, References, is a summary of some of the resources used to compile this report.

A statement of qualifications of the signatories of this report is provided in Appendix A, and pertinent documentation regarding the Site is included in Appendices B through D.

2.3 ADDITIONAL SERVICES

The Site was developed and in use for commercial/industrial purposes from at least the early 1900s. Thus, Kleinfelder's scope of services did not include Standard Practice non-scope evaluations of cultural, historic, and archaeological resources; environmental regulatory compliance; wetlands and surface water; and threatened, endangered, and other protected

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species that may be required for a Phase I ESA pursuant to Costco's Development Requirements publication (revised June 13, 2014). In addition, the Phase I ESA did not include an assessment for asbestos containing building materials, radon, lead-based paints, lead in drinking water, molds and mildews, indoor air quality, industrial hygiene, health and safety, and other Standard Practice non scope considerations not described herein. No additional services were provided by Kleinfelder for this Phase I ESA.

2.4 SIGNIFICANT ASSUMPTIONS

Kleinfelder does not guarantee the accuracy of information supplied by its sources, but reserves the right to rely on this information in forming a professional opinion regarding the potential for contamination at the Site. Kleinfelder also assumes the Client provided all its applicable and available environmental records and specialized knowledge regarding the Site. Kleinfelder has not made other significant assumptions during the performance of this Phase I ESA.

2.5 LIMITATIONS AND EXCEPTIONS

Phase I ESAs are non-comprehensive by nature and may not identify all environmental problems, and will not eliminate all risk. This report is a qualitative assessment. Kleinfelder offers a range of investigative and engineering services to suit the needs of its clients, including more quantitative investigations. Although risk can never be eliminated, more detailed and extensive investigations yield more information, which may help the Client understand and better manage risks. Since such detailed services involve greater expense, Kleinfelder asks its clients to participate in identifying the level of service, which will provide them with an acceptable level of risk. Please contact the signatories of this report if you would like to discuss this issue of risk further.

Kleinfelder performed this Phase I ESA in general accordance with the guidelines set forth in the Standard Practice; Costco's Development Requirements, Version 2014, revised June 13, 2014; and the proposed scope subsequently approved by Costco. No other warranty, either express or implied, is made. Environmental issues not specifically addressed in this report were beyond the scope of Kleinfelder's services and not included in the evaluation.

This report may be used only by Costco and only for the purposes stated within a reasonable time from its issuance, but in no event later than 1 year from the date of the report. Land or facility use, on- and off-Site conditions, regulations, or other factors may change over time, and additional

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work may be required with the passage of time. Since Site activities and regulations beyond Kleinfelder's control could change at any time after the completion of this report, its observations, findings, and opinions can be considered valid only as of the date of the Site visit. Pursuant to the Standard Practice's Section 4.6, this report should not be relied upon after 180 days from the date of its oldest component. Any party other than the Client who wishes to use this report shall notify Kleinfelder of such intended use. Based on the intended use of the report, Kleinfelder may require that additional work be performed and that an updated report be issued. Non-compliance with any of these requirements by the Client or anyone else will release Kleinfelder from any liability resulting from the use of this report by any unauthorized party, but only to the extent of any such non-compliance by the Client.

2.6 SPECIAL TERMS AND CONDITIONS

No special terms and conditions were agreed to by the Client and Kleinfelder.

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3 SITE DESCRIPTION

The Site description is presented in this section and describes the condition of the Site at the time of the Phase I ESA. The Site location is shown on Figure 1. Tables 3-1 through 3-4 summarize the physical characteristics of the Site and adjoining properties.

3.1 LOCATION AND LEGAL DESCRIPTION

The information presented in Table 3-1 describes the physical location and legal description of the Site. This information was obtained from review of various maps (such as topographic maps and tax assessor maps), aerial photographs, public records at City and/or County offices, interviews, and/or information provided by the Client.

TABLE 3-1
Location and Legal Description

PARAMETER	INFORMATION/COMMENTS
Location	The Site is situated in the western portion of the Costco parking lot of the Costco Wholesale Warehouse located at 22330 Hathaway Avenue, Hayward, California (see Figures 1 and 2).
Assessor's Parcel Number (APN)	Alameda County APN 429-008-200-300 is assigned to the larger property of which the Site is a portion.
Legal Description	The legal description of the Site is included in the EDR Environmental Lien and AUL Search report (EDR, 2016a) provided in Appendix C.
Address(es)	The Site is part of a larger property with address 22330 Hathaway Avenue, Hayward, California
Section, Township, and Range	Township 03 South, Range 02 West, Section 6.

3.2 CURRENT / PROPOSED USE OF THE PROPERTY

At the time of Kleinfelder's assessment, the Site was being used as a Costco parking lot and the surrounding land use was commercial. Current and proposed Site uses are described in Table 3-2.

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TABLE 3-2

Current / Proposed Uses

PARAMETER	GENERAL OBSERVATIONS
Current Use	The Site is presently a Costco parking lot.
Proposed Use	Costco fuel facility.

3.3 DESCRIPTION OF STRUCTURES / IMPROVEMENTS

Structures and/or improvements observed on the Site at the time of Kleinfelder's Site reconnaissance are described in Table 3-3.

TABLE 3-3

Structures / Improvements

PARAMETER	GENERAL OBSERVATIONS
Structures	No structures were observed on the Site.
Improvements	The Site is developed as a parking lot with landscape areas equipped with irrigation piping and lighting.

3.4 CURRENT USES OF ADJOINING PROPERTIES

Kleinfelder performed a brief drive-by survey of the properties immediately adjoining to the Site on April 28, 2016. A summary description of the surrounding properties is presented in Table 3-4 and the properties are shown on Figure 2.

TABLE 3-4

Adjoining Properties

DIRECTION	LAND USE DESCRIPTION
North	Parking Lot, commercial/industrial buildings to the north-northwest (International, American Polyfoam, AMB Hathaway). The Costco Tire Center is located to the northeast.
East	Parking lot and the Costco Wholesale Warehouse
South	Parking Lot to the southeast, Hathaway Avenue to the southwest.
West	Hathaway Avenue, beyond which are commercial buildings.

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There were no visual indications observed during the drive-by survey that conditions on immediately adjoining properties have adversely affected environmental conditions at the Site.

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4 RECORDS REVIEW

4.1 STANDARD ENVIRONMENTAL RECORD SOURCES

The purpose of the records review is to obtain and review records that would help to evaluate RECs in connection with the Site and bordering properties. Federal, state, and local regulatory agencies publish databases or "lists" of businesses and properties that handle hazardous materials or hazardous waste, or are the known location of a release of hazardous substances to soil and/or groundwater. These databases are available for review and/or purchase at the regulatory agencies, or the information may be obtained through a commercial database service. Kleinfelder contracted a commercial database service, EDR, of Shelton, Connecticut, to perform the government database search for listings within the appropriate Standard Practice minimum search distance of the Site. Kleinfelder provided EDR with a Site map to incorporate the search distances from the Site boundary. Included in the EDR Radius Map™ Report with GeoCheck® is a listing of specific databases outlined by the Standard Practice. If required, the search distances included an extended radius from those specified by the Standard Practice. A listing of the search distances, databases evaluated, dates the databases were last updated, and types of information contained in each database are included in the regulatory database search provided as Appendix B to this report.

EDR utilizes a geographical information system to plot the locations of reported spills, leaks, incidents, etc. Kleinfelder reviews this information to help establish if the Site or nearby properties are listed in the databases and lists. Each of the listings was reviewed to assess whether the corresponding property details included in the EDR report revealed a potential environmental impact to the Site. A number of listings on the EDR database were found not to have the potential to impact the Site based on the following, or a combination thereof:

- The listed property was located at a distance where the facility would be unlikely to impact the Site based on Kleinfelder's evaluation of the relevant data in the EDR report and knowledge of the Site vicinity.
- The listed property was located in a down-gradient or cross-gradient direction from the Site, based on the anticipated direction of groundwater flow at the property being evaluated, and is located at a distance that would be unlikely to impact the Site. Note that groundwater flow direction (estimated to flow in a west-northwest direction following surface topography) may be variable in the vicinity of the Site and determinations as to

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down- or cross-gradient direction were made only when groundwater flow direction was available for a specific property.

- The listed property was identified in the UST or Small Quantity Generator [SQG] databases and were not on or immediately adjoining the Site. The property was not listed in other databases that reported a release of a hazardous substance or petroleum product and/or was not listed as having environmental violations. The listing of a facility on these databases alone is not indicative of an unauthorized release.
- The listing for the facility suggested a short-term release had occurred (i.e., from incidental traffic accidents, or chemicals from illegal drug labs found at residences) with associated response actions completed.
- The quantity of the hazardous substances or petroleum product released from an off-site facility was not considered to have resulted in contamination above the most stringent criteria that would require regulatory action. Therefore, no impact to the Site is anticipated.
- The listed property record indicates that the property was characterized, the reported release affected soil only, the listed property was not on or adjacent to the Site, and the release was not recognized as indicative of area-wide conditions or was characterized as a soil removal action only.
- The listed property record indicates that contamination on the property is limited to relatively non-mobile contaminants, including polyaromatic hydrocarbons (PAHs) and metals, in soil only, on a non-adjacent property.
- The listed property record indicates that the case has been closed to the satisfaction of the designated lead regulatory agency and residual contamination, if present, is not considered likely to affect the Site based on one or more of the criteria mentioned in the bulleted items above (referred in the Standard Practice as an HREC).

Based on these criteria indicating no material threat of a release that affected the Site and/or no release that could require future regulatory agency oversight, these listings were not evaluated further and are not discussed in the following sections.

4.2 RESULTS OF DATABASE SEARCH

The remaining property listings were reviewed to assess whether these properties had environmental releases, which may have resulted in RECs in relation to the Site. If the listed properties had a reported release which may have resulted in a REC, the property was further

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assessed by performing a review of agency files available through the State Water Resources Control Board's (SWRCB's) GeoTracker™ website (http://geotracker.waterboards.ca.gov/) and other relevant regulatory agency websites, to evaluate whether the listed release represents a potential impact to the Site.

4.2.1 Site Listings

The Site address of 22330 Hathaway Avenue was listed by EDR in several databases. Although the address is the same as that for the Site, it appears that the listings are associated with the Costco Warehouse and Tire Center to the east-southeast and north-northeast, respectively. A summary of Site listings follows:

- "Costco (Store #823)/Costco Wholesale Bus" is listed in the RCRA small quantity generator (RCRA-SQG), Facility Index System (FINDS), California Facility and Manifest Data (HAZNET), EMI, and ECHO databases. According to the RCRA-SQG listing information, the Site is a small quantity generator with no violations listed. According to the HAZNET listing information, 0.35-ton of "off-specification, aged or surplus organics" were disposed of in 2008, 0.0805 tons of alkaline solution was disposed on in 2014, 0.0175-ton of "off-specification, aged or surplus organics" were disposed of in 2014, 0.029-ton of "other organic solids" were disposed of in 2014, 0.012 tons of alkaline solution was disposed on in 2014, and 0.0445-ton of "off-specification, aged or surplus organics" were disposed of in 2014. The EMI database indicates that the Costco Business Center has been listed in the EMI database since 2005 as producing emissions of total organic hydrocarbon gases, reactive organic gases, carbon monoxide emissions, oxides of nitrogen, oxides of sulfur, and particulate matter to the air basin. In Kleinfelder's opinion, these listings do not represent a REC likely to impact soil, soil vapor or groundwater beneath the Site.
- "Replanet, LLC" is listed in the SWRCY and EMI Databases. In Kleinfelder's opinion, these listings do not represent a REC likely to impact soil, soil vapor or groundwater beneath the Site.
- *Price Club* – This listing is located at 22300 Hathaway Avenue and was mapped by EDR as off-Site, however, Price Club was the previous owner of the Costco Wholesale Business Center property, and therefore this listing is actually for the Site. This facility is listed under the Leaking underground storage tank (LUST), HIST CORTESE, RCRA-SQG, CA FID UST, FINDS, and ECHO databases. The LUST case for this facility

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was closed as of October 20, 1994. The LUST case was for a used oil tank leak detected on January 10, 1991. This LUST case and other USTs formerly on the overall larger parcel are further discussed under the Fire Department records review section. This facility was listed as a RCRA-SQG in 1987 with no violations listed. This facility was also listed in the SWEEPS UST as having a 44,000 gallon petroleum UST. Based on the LUST case having been closed by the SFBRWQCB, these listings do not represent a REC likely to impact soil, soil vapor or groundwater beneath the Site.

4.2.2 Off-Site Listings

Off-Site properties were listed in standard Federal, State, and local lists within the Standard Practice search distances and the distances set forth in Costco's Development Requirements, Version 2014, revised June 13, 2014. Kleinfelder reviewed the listing information to assess the potential for impacts to soil, soil vapor, and groundwater beneath the Site. The following is a summary of facilities that were considered potential concerns to the Site:

- *Hayward Cannery Area – Hayward 2: United Cannery* – This is a US Brownfields facility located at multiple addresses over an area of 115 acres. Phase I and (for some) Phase II environmental site assessments were indicated as having been performed for the following areas: the Hayward Cannery Area- Hayward 1: Owens Brockway Glass, Hayward Cannery Area – Hayward 3: Claire Street, Hayward Cannery Area – Hayward 3: Grand Street, Hayward Cannery Area – Hayward 2: Amtrak Station, Hayward Cannery Area – Hayward 2: Railroad Right-of-way, Hayward Cannery Area – Hayward 2: Vacant Land, Hayward Cannery Area – Hayward 2: Residential Lot, Hayward Cannery Area – Hayward 2: Residential Areas, Hayward Cannery Area – Hayward 2: Select Foods, Hayward Cannery Area – Hayward 3: C Street, Hayward Cannery Area – Hayward 1: Warehouse, Hayward Cannery Area – Hayward 2: Foster Farms Dairy, Hayward Cannery Area – Hayward 2: Burbank School, Hayward Cannery Area – Hayward 2: Centennial Park, Hayward Cannery Area – Hayward 3: Alice Street, Hayward Cannery Area – Hayward 2: Cannery Park, Hayward Cannery Area – Hayward 2: United Can, Hayward Cannery Area – Hayward 1: Costco Retail, and Hayward Cannery Area – Hayward 2: GSC Logistics Warehouse. Based on review of the United States Environmental Protection Agency (USEPA) website, https://iaspub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110015334440, the Site is within the Hayward Cannery Area – Hayward 2: Filbert Warehouse

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area. No further information was available for the Site, although the Costco facility to the east was flagged as a Small Quantity Generator.

- *Hayward Cannery Area – Hayward 2: Filbert Warehouse* – This appears to be the same as the above listing.
- *Owens Brockway Glass Container Inc Plant 52 / Diamond Bathurst* – These two listings are for the same facility located at 22302 Hathaway Avenue, and also appear to be associated with the previous two listings. This facility is located northwest of the Site. This facility is listed in the FINDS database. The FINDS database indicates that this facility is listed as having hazardous air pollution. This facility is also listed in the ECHO, RCRA-SQG, and US AIRS databases. The RCRA-SQG listing includes multiple violations in areas of "generators-general", "used-oil-generators", and "LDR-general". Under the "Diamond Bathurst" name, this facility is listed in the LUST, SLIC, EMI, HAZNET, HIST CORTESE, and HWP databases. The LUST case for this facility was for gasoline impacting groundwater, however, this case was closed as of April 2, 2002. The SLIC case remains open under remediation. The SLIC case was for diesel released from underground piping transporting diesel from above-ground storage tanks (ASTs) to the Owens-Brockway glass plant generator. Based on the most recent available groundwater plume maps on Geotracker™ (CKG Environmental, Inc, 2015), the impacted area is located on the northern portion of this facility, approximately 1,100 feet northwest of the Site. The groundwater flow direction varies due to extraction from remediation wells, but is generally to the west and is encountered at depths between 26 and 29 feet bgs. Based on this information, due to the distance and location of the impacted area cross-gradient to the Site, it is not likely that impacted groundwater has migrated to the Site. In Kleinfelder's opinion, this facility is not considered a REC likely to have impacted soil, soil vapor or groundwater beneath the Site.

4.2.3 Orphan List

Facilities not plotted by EDR due to poor or inadequate address information are referred to as orphan facilities. No orphan facilities were listed in the EDR report.

4.3 OTHER RECORDS REVIEWED / AGENCIES CONTACTED

The following additional sources of environmental records were reviewed during this Phase I ESA for the purposes of meeting the Standard Practice. Local regulatory agencies were contacted for

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reasonably ascertainable and practically reviewable documentation regarding RECs present at the Site and at adjoining facilities. If performed, summaries of interviews with local regulatory agency representatives are included in Section 7 of this report (with interview documentation included in Appendix C). The following agencies (if marked with an "X") were contacted for documentation:

- ☐ DOGGR
- ☐ Pipeline and Hazardous Materials Safety Administration (PHMSA), National Pipeline Mapping System (NPMS)
- ☒ State Water Resources Control Board (SWRCB) GeoTracker™ / San Francisco Bay Regional Water Quality Control Board (SFBRWQCB)
- ☒ California Department of Toxic Substances Control (DTSC), EnviroStor
- ☒ Bay Area Air Quality Management District (BAAQMD)
- ☒ City of Hayward Building and Safety (SMBS)
- ☒ City of Hayward, Fire Department (HFD)

Information from these agencies is presented below.

4.3.1 State of California, Division of Oil, Gas, and Geothermal Resources

The DOGGR was not contacted for this Phase I ESA due to information concerning oil and gas fields being available from DOGGR's Well Finder database (http://maps.conservation.ca.gov/doggr/index.html). Kleinfelder researched oil well information on the DOGGR website on April 5, 2016 for the Site and Site vicinity. Based on our review, no oil or gas wells appear to be located on the Site, or immediately adjoining to the Site. A copy of the Well Finder search results is provided in Appendix C.

4.3.2 Pipeline and Hazardous Materials Safety Administration, National Pipeline Mapping System

According to the California State Fire Marshal, pipeline information is available at the PHMSA's online NPMS (https://www.npms.phmsa.dot.gov). Kleinfelder researched pipeline information on the NPMS on April 5, 2016 for the Site and vicinity. Based on the review findings, there are no pipelines on the Site or in the immediate Site vicinity. The NPMS map and pipeline information is included in Appendix C.

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4.3.3 State Water Resources Control Board / San Francisco Bay Regional Water Quality Control Board

The SFBWRQCB was contacted on April 7, 2016 for information concerning available files for the Site. Ms. Melinda Wong of the SFBRWQCB responded via telephone on April 14, 2016 that they had no files available for address 22330 Hathaway Avenue. The SFBWRCB's GeoTracker™ website (http://geotracker.waterboards.ca.gov/) was reviewed on April 5, 2016 by Kleinfelder for information pertaining to the Site and nearby properties. The "Price Club", which formerly owned the Costco property, was listed on Geotracker™ as having a closed LUST case with potential waste oil contamination to groundwater. This case was closed as of October 20, 1994, and involves the larger area of the property east of the Site. Additional information is presented in a discussion of Fire Department records in Section 4.3.7. Based on the closed case status, this listing is considered to be an HREC to the Site. No other listings pertained to the Site. The following listings for nearby properties were reviewed as potential concerns to the Site:

"Diamond Bathurst" (22302 Hathaway Avenue)

This listing was a LUST case with potential gasoline contamination to groundwater, 1,100 feet north-northwest of the Site. This case was closed as of April 2, 2002. Based on the closed case status, and distance/direction from the Site, this listing is not considered a REC to the Site.

"Owens Brockway Glass Containers" (22302 Hathaway Avenue)

This listing is an open SLIC case with diesel contamination to soil and groundwater. This facility operated as a glass container manufacturing plant from 1948 until 2003. Three separate fuel releases are reported from underground piping connecting two above-ground storage tanks to plant's generator building. Remediation has been performed three times with the most recent remediation still in process. Depth to groundwater is reported to be between approximately 26 and 29 feet below ground surface. The impacted groundwater plume appears to be present in the northwestern portion of this facility, approximately 1,100 feet north-northwest of the Site (CKI Environmental 201). Groundwater is reported to flow generally to the west. Based on the distance of the impacted area, and groundwater flow direction being generally cross-gradient to the Site, this listing is not considered a REC to the Site.

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"Berglin Corporation" (22313 Meekland)

This listing was a SLIC case, located approximately 650 feet east of the Site, listed as opened and closed on January 13, 1997. Based on the nature of the listing, and the closed case status, this listing is not considered a REC to the Site.

"Buettner & Hoyt" (22117 Meekland)

This listing was a LUST case with potential waste oil contamination to groundwater, located approximately 850 feet northeast of the Site. This case was closed as of May 28, 1993. Based on the closed case status, medium affected and distance/direction from the Site, this listing is not considered a REC to the Site.

A copy of the GeoTracker™ search results and pertinent information is included in Appendix C.

4.3.4 State Department of Toxic Substances Control

The DTSC EnviroStor™ website (http://www.envirostor.dtsc.ca.gov/) was reviewed on April 5, 2016 by Kleinfelder for information pertaining to the Site and nearby properties. The Site was not listed in this database and one facility in the Site vicinity was listed. This facility, Owens Brockway Glass Containers located at 22302 Hathaway Avenue, was listed as a closed DTSC case. This facility was discussed in the previous section under the State Water Quality Control Board. Based on the closed case status, this listing is notconsidered to be a REC to the Site. Copies of the EnviroStor search results and DTSC response letter are included in Appendix C.

4.3.5 Bay Area Air Quality Management District

The BAAQMD was contacted on April 5, 2016 for information concerning air permits. The BAAQMD responded on April 7, 2016 in an email with copies of records available for the Site address. The BAAQMD records include a list of approved emissions from the Costco Wholesale Warehouse. The emission sources are fuel combustion from a backup generator. A copy of the BAAQMD response is provided in Appendix C.

4.3.6 City of Hayward Department of Building and Safety

Kleinfelder submitted a written request to the City of Hayward on April 5, 2016 to review available building or planning permit information for the Site. The City of Hayward responded on April 7, 2016 indicating that the building department files can be accessed at the building department

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service desk hours. Kleinfelder visited the City of Hayward building department on April 28, 2016 and reviewed the available files. The majority of the available permits applied to the Costco Warehouse building. One permit dated September 11, 2012, was issued to Diesel-Direct West, for "mobile on-site fueling service" at the Costco Store #823 – Hathaway Street. This permit would allow mobile fueling via a fuel truck for Costco vehicles in area east-northeast of the Costco Warehouse building (between the warehouse and the railroad tracks). Based on the location, these fueling activities are not considered a REC likely to have impacted soil, soil vapor, or groundwater beneath the Site. A copy of this permits is included in Appendix C.

Additionally, EDR provided Kleinfelder summary information concerning available City of Hayward Building Department permits (EDR, 2016b). Kleinfelder reviewed the EDR report for building permits associated with the Site. The majority of the building permits summarized in the EDR report were associated with the Costco Wholesale. The EDR report and documents from the building department file review are included in Appendix C. A summary of the EDR permit information for the Site follows:

TABLE 4-2

Building Permit Information Summary

DATE	PERMIT / CASE NUMBER	DESCRIPTION
1/2/2002	PL-2002-0002	PL Zone Change – construction of a gasoline pumping station to be used by members.
1/2/2002	PL-2002-0003	PL Site Plan Review of a new gasoline pumping station for members only

4.3.7 City of Hayward, Fire Department

Kleinfelder submitted a written request to the City of Hayward, Fire Department, Hazardous Materials Division, on April 5, 2016 for information pertaining to the Site. On April 7, 2016, Mr. Hugh Murphy of the City of Hayward Fire Department indicated that files were available for the Site location. Mr. Murphy stated that the Site had been a former bottling plant and that when the Price Club building (current Costco Warehouse) was under construction, sumps and vats were encountered. Kleinfelder visited the City of Hayward Fire Department on April 28, 2016 and performed a review of the available files. The following documents were reviewed.

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Clayton Environmental Consultants (Clayton), 1990, Phase I Environmental Assessment at The Price Company, 22300 Hathaway Avenue in Hayward, California. June 18.

This Phase I ESA was performed by Clayton for the Price Company for a proposed new Price Club warehouse location (current Costco Warehouse location) southeast of the Price Company Building at 22300 Hathaway Avenue. Clayton spoke with an employee of the former property occupant, United Can. The employee, Mr. Gary Suza, stated that United Can had operated on the property from 1923 through the early to mid-1980s. Mr. Suza indicated that there were several vacant warehouses present on this property prior to the construction of the current warehouse in 1984.

Clayton reviewed and summarized a *Soil Contamination Evaluation Report* by Nordmo Associated, Inc. (Nordmo), dated February 6, 1984, and City of Hayward Fire Department files that indicated two gasoline USTs and one fuel oil UST existed at the Price Company prior to 1984. The gasoline USTs were reportedly removed and the fuel oil UST was abandoned in place by being filled with concrete slurry in February 1984. The Nordmo report documented the collection of soil samples from 7 feet bgs, beneath the removed gasoline USTs, and that there were no visual signs of contamination. Analytical results were not reported. A Fire department permit indicated a UST, labeled "corrosive" was removed prior to 1984. Clayton was not able to find further information regarding these USTs, including their locations. No visual sign of the presence of USTs were observed by Clayton during their site reconnaissance.

Clayton did not observe any polychlorinated biphenyl (PCB) containing equipment, or hazardous materials, or asbestos containing equipment. Clayton noted that fire department files indicate the former property occupant, United Can, used substances such as lead solder, lacquers for coating cans, thinners, chlorinated solvents, and corrosives. Clayton relayed that Mr. Murphy from the City of Hayward fire department indicated that the former United Can facility used to use trenches in the groundwater to capture spent or spilled fluid.

Included in attachments were the UST removal permit dated February 2, 1984, obtained by Price Club to "dig out 2 gas tanks, pump out fuel oil tanks, fill with sand and destroy". Also attached was a copy of the Nordmo "Soil Contamination Evaluation Report" dated February 6, 1984.

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Clayton identified seven "leak" facilities within 0.5-mile of the property, however, only one facility was located upgradient and it was unknown whether groundwater had been impacted. Clayton recommended periodic review of this facility in the event that groundwater has been impacted.

Nordmo Associated, Inc., 1984, Soil Contamination Evaluation Report, dated February 6.
This letter summarizes soil sampling performed after removal of USTs. The soil samples are identified as the west concrete tank, the main automobile service tank, and the east concrete tank. The maximum tank depth was 7 feet bgs. Soil samples were collected from below the USTs and were reported to be odorless and exhibited no visual signs of contamination. Waste manifests were attached. No further information was available.

Clayton, 1990, Subsurface Investigation at The Price Company, 22300 Hathaway Avenue in Hayward, California. July 24.
This report summarizes soil sampling activities performed by Clayton. Soil samples were collected at 7 and 14 feet bgs from four soil bores and analyzed for petroleum hydrocarbons and lead. Petroleum hydrocarbon concentrations were not detected in soil sample analytical results.

Four areas of concern were identified in this report: an abandoned in place fuel oil tank, a former electrical substation, former aboveground brine and caustic tanks, and former five large vinegar aboveground storage tanks. Clayton concluded that no evidence of petroleum contamination was observed or detected in soil samples, lead detected in soil samples was low to average in concentration, and that any risk of leakage from the caustic and brine tanks is low as the health effects of salt are minimal. Clayton also concluded the risk from the vinegar tanks was also minimal.

City of Hayward Fire Department, Letter to The Price Company dated September 30, 1991.
Letter is regarding hazardous material permit requirements for the one-hour photo lab.

City of Hayward Fire Department – Price Club – dated August 1, 1991.
This document summarizes the discovery of three USTs during excavation of the Price Club building foundation. Cleanup of soil around two tanks was performed by excavation. During excavation around the third tank, what was described as a "goo" was encountered. The "goo" was described as oil based and was encountered in an area of approximately 240 feet by 240 feet at approximate depths of 24 to 34 feet. The "goo" area was partially under the building footprint.

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City of Hayward Fire Department – Modification of Zone Change dated July 23, 1992
This document concerns the renovation of the old Price Club building located at 22300 Hathaway Avenue for use as a distribution warehouse.

Riedel Environmental Services, Inc (RES), 1992, Groundwater Investigation, The Price Club, 22300 Hathaway Avenue, Hayward, CA, July 29.
This letter clarifies the soil sampling plan for the well installation. The letter also indicated that impacted soil was excavated to a depth of approximately 32 feet and backfilled with clean fill. Four of the nine proposed wells will be in the areas that did not undergo remedial action to evaluate soil and groundwater conditions in those areas.

RES, 1992, Status of Monitoring Well Installation, The Price Club, 22300 Hathaway Avenue, Hayward, CA, August 31.
This letter documents the installation of nine groundwater wells in September 1992.

California Regional Water Quality Control Board, 1994, Underground Storage Tank (UST) Case Closure, 1-77,870 Gallon Fuel Oil, 1- 56,164 gallon Fuel Oil, and 1-30,378 Gallon Tank Removed,

Price Costco, 22300 Hathaway Ave., Hayward, CA, October 20.
This letter confirms no further action required and completion of site investigation and remediation action of the USTs formerly located at the Price Club property.

Department of Toxic Substances Control, 1996, Price Club #113/The Price Co, May 10.
This letter documents DTSC closure approval.

Based on Kleinfelder's review of these reports, although specific information regarding monitoring and excavation was not available, the soil contamination from the former USTs encountered during the existing off-Site warehouse construction is considered an HREC to the Site, since both SFBRWQCB and DTSC have issued case closure confirming completion of site investigation and remediation activities.

4.4 PHYSICAL SETTING SOURCE(S)

Table 4-1 presents information concerning the physical setting of the Site. This information was obtained from published maps and previous Site investigations.

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TABLE 4-1

Physical Setting

DATA	GENERAL INFORMATION
USGS Topographic Quadrangle	The Site is located on the United States Geological Survey (USGS) Hayward Quadrangle 7.5-Minute Series (Topographic) Map, dated 1986. Based on Kleinfelder's review of the map and information presented in the EDR database search report, the Site elevation is approximately 67 feet above mean sea level (msl). The Site has a slight topographical slope to the west.
Soil Type	According to the United States Department of Agriculture, Soil Conservation Service, National Cooperative Soil Survey's Database, as cited by EDR (EDR, 2016b), the dominant soil composition in the general area of the Site has been classified as Danville silty clay loam, Botella loam, and Yolo silt loam.
Oil and Gas Wells	Based on Kleinfelder review of DOGGR's Well Finder online database, no oil and gas wells are located on the Site or in the Site vicinity. A copy of the Well Finder search results and DOGGR well records is provided in Appendix C.

Information about the regional geology is presented in Table 4-2. This information was obtained by Kleinfelder from published data and maps, interviews with public agencies, and/or previous investigations performed by Kleinfelder in the Site vicinity.

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TABLE 4-2
Geology and Hydrogeology

PHYSICAL PARAMETER	INFORMATION/COMMENTS
Regional and Site Physiography and Geology	The Site is located in the Coast Ranges geomorphic province, which is characterized by roughly north-west trending mountain ranges and valleys subparallel to the San Andreas Fault (California Department of Conservation, California Geological Survey, 2002). The Site is located on Holocene alluvium in the San Francisco Basin, approximately 1 to 2 miles west of the Hayward fault (USGS, 2006). The San Francisco Basin is a synform trough formed between the San Andreas Fault zone to the west and the Hayward fault zone to the east. The Site is located in the San Lorenzo sub-area of the San Francisco Basin. The San Lorenzo sub-area is characterized by estuarine mud and alluvial fan deposits (the Yerba Buena Mud and the Alameda formation) (Norfleet Consultants, 1998).
Regional and Site Hydrogeology	The Site is located in the East Bay Plain Subbasin of the Santa Clara Valley Groundwater Basin (California Department of Water Resources (CDWR), 2004). Groundwater aquifers beneath the San Lorenzo sub-area include the Newark Aquifer, Centerville Aquifer, and Fremont Aquifer which extend south into the Niles Cone groundwater subbasin (Norfleet Consultants, 1998).
Groundwater Depth and Direction of Groundwater Flow	Based on review of EDR's physical setting source map findings, multiple wells are located in the Site vicinity. Listed groundwater depths range between 1 and 43 feet below ground surface with varying flow directions. Based on review of groundwater data available from a nearby Site listed on Geotracker, groundwater is encountered between 26 and 29 feet bgs and flows predominantly to the west (CKG Environmental, Inc., 2015).
Water Supply	Water for the Site is supplied by public sources. The well search performed by EDR (2016b) identified no Federal or State public supply wells located on the Site or in the Site vicinity.
Flood Zone Designation	The Site is reported to be located within a 500-year flood zone (EDR, 2016b).

[1] Groundwater flow direction is based on regional information sources. Site-specific conditions may vary due to a variety of factors including geologic anomalies, utilities, nearby pumping wells (if present), and other factors.

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4.5 USER PROVIDED INFORMATION

According to the Client, the purpose for performing this Phase I ESA is to evaluate the potential for RECs at the Site for the purpose of acquiring the Site. Information regarding the current owners/occupants of the Site is summarized in Table 4-3.

TABLE 4-3
Owner / Occupant Information

ENTITY	NAME
Owner	According to the EDR Environmental Lien and AUL Search report (EDR, 2016a), the current legal owners of the Site are "Costco Wholesale Corporation, a Washington profit corporation."
Occupant(s)	Costco

Summaries of interviews of key individuals with knowledge of the Site ("Key Site Managers") are provided in Section 7. The following sections present a discussion of information provided to Kleinfelder by the Client.

4.5.1 Title Records

A chain-of-title report was not provided by the Client, however, EDR's Environmental Lien Search Report (EDR, 2016b) did include some title record information. Costco received title for the existing Costco property (including the Site) in 2002 from The Price Company. The Price Company received title for this property in two deeds; on in 1985 from the Container General Corporation and one in 1983 from Hunt-Wesson Foods, Inc. A complete chain-of-title report was not reviewed as part of this Phase I ESA.

4.5.2 Environmental Liens and Usage Limitations

According to information provided in EDR's regulatory agency database search report (EDR, 2016b), there are no liens pertaining to the Site listed in the Federal Superfund Liens List maintained by US EPA, and no known recorded land-use environmental deed restrictions pertaining to the Site listed in the State Liens Database.

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Kleinfelder's review of the EDR Environmental Lien and AUL Search report (EDR, 2016a) for the Site indicates there are no environmental liens or activity and use limitations (AULs) associated with the Site.

4.5.3 Value Reduction

As part of the Standard Practice process, information is to be gathered regarding the prospective purchase price of the Property relative to its fair market value. If there appears to be a value reduction, that reduction must be identified with respect to whether the difference could be attributed to environmental degradation of the property. The Property is not subject of a purchase agreement; therefore, the prospective purchase price for the Property is not applicable to this Phase I ESA.

4.5.4 Other Information/Documents Provided

No other information/documents were reviewed.

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5 HISTORY OF THE SITE

The history of the Site was researched by Kleinfelder to identify obvious uses. Historical land use was researched to the first developed use, or back to at least 1899, whichever was earlier or readily available. Table 5-1 summarizes the availability of information reviewed during this assessment.

TABLE 5-1
Historical Information Sources

SOURCE	YEARS REVIEWED	SOURCE / AVAILABILITY
Sanborn Fire Insurance Maps	1907, 1923, 1948, 1950, 1953, 1956, 1957, 1966	EDR, 2016c
Aerial Photographs	1939, 1946, 1958, 1968, 1974, 1982, 1993, 2005, 2006, 2009, 2010, and 2012	EDR, 2016d
City Directories	1920 through 2013 (select years)	EDR, 2016e
Historical Topographic Map Report	1899, 1915, 1947, 1950, 1959, 1968, 1973, 1980, 1996, 2012	EDR, 2016f
Building Permits	2000 through 2015	EDR, 2016g

5.1 SANBORN FIRE INSURANCE MAPS

Sanborn Fire Insurance Maps provide historical land use information for some metropolitan areas and small, established towns. Kleinfelder requested EDR to search its library of Sanborn Fire Insurance Maps for maps of the Site. A copy of the Sanborn Fire Insurance Map report provided by EDR (EDR, 2016c) is included in Appendix D and a summary of the maps is provided below.

5.1.1 Site

The Site is not shown on the 1903 and 1907 Sanborn Maps.

On the 1923 Sanborn Map the Site appears to be vacant, with the exception of a portion of a building marked as an auto and horse shed. From 1948 through 1966, the southwestern portion of the Site is covered by a warehouse building. In 1966, the warehouse building is labeled as a "Cherry Processing & bbl Stage". From 1948 through 1956, a 40 gallon chemical hand cart and a

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"Hyd" hose are present in the northeast portion of the Site with a water line extending off the Site to the east-southeast.

5.1.2 Surrounding Areas

The 1903 and 1907 Sanborn Maps depict the property located east-southeast of the Site where the current Costco warehouse is located, as occupied by "Pacific Vinegar & Pickle Works". This facility housed tanks east of the Site in 1907.

The remaining Sanborn Fire Insurance Maps depicted the Site and adjacent property to the south, east, southeast, and northeast of the Site as occupied by "California Conserving Vinegar & Pickle Works" in 1923, "Hunt Foods Inc" in 1948 through 1956, and "Hunt-Wesson Foods" in 1966. Hathaway Avenue is present southwest of the Site on the 1923 through 1966 Sanborn maps.

In 1923, an auto and horse shed was located to the south-southeast and a Box Shed was located northeast of the Site. Past the Box Shed to the east, were the "California Conserving Vinegar & Pickle Works" facility machine shop and boiler rooms with their associated oil tanks. A 40,000 gallon in ground oil tank was indicated along with a transformer and a 30,000 gallon in ground concrete sump adjoining a "Boiler Ho." equipped with air compressors. Southwest of the Boiler is a structure labeled "Oil Ho." Additionally, east of the Site, was a 600-feet deep 12-inch water well.

From 1948 through 1966, warehouse-type buildings were located the northwest, northeast, and southeast of the Site. The warehouse building to the southeast was labeled as a "Salt house" from 1948 through 1953, and as "Canned Goods" in 1956 through 1966. The warehouse to the northeast was labeled as "Carton" warehouse in 1956 through 1966. The machine shop and boiler room are still present to the east, along with some new storage rooms and a dryer. In 1948 the water well is no longer present and the Sanborn map notes indicate the facility is supplied by City water.

5.2 AERIAL PHOTOGRAPHS

A review of historical aerial photography may reveal indications of past activities at a property that may not be documented by other means or observed during a reconnaissance visit. The effectiveness of this technique depends on the scale and quality of the photographs and the available coverage. Aerial photographs were obtained from several historical photograph

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collections through EDR (2016d), and span a period of 73 years. A tabulation of the aerial photographs reviewed by Kleinfelder is presented in Table 5-2. Copies of the aerial photographs provided by EDR are included in Appendix D.

TABLE 5-2

Historical Aerial Photographs Reviewed

DATE	APPROXIMATE SCALE	TYPE	SOURCE	QUALITY
1939	1" = 500'	Black and White Monoscopic	USGS	Good
1946	1" = 500'	Black and White Monoscopic	USGS	Good
1958	1" = 500'	Black and White Monoscopic	USGS	Fair
1968	1" = 500'	Black and White Monoscopic	USGS	Good
1974	1" = 500'	Color	USGS	Good
1982	1" = 500'	Color	USGS	Fair
1993	1" = 500'	Black and White Monoscopic	USGS/DOQQ	Fair
1998	1" = 500'	Black and White Monoscopic	USGS	Poor
2005	1" = 500'	Color	USDA/NAIP	Good
2006	1" = 500'	Color	USDA/NAIP	Fair
2009	1" = 500'	Color	USDA/NAIP	Good
2010	1" = 500'	Color	USDA/NAIP	Good
2012	1" = 500'	Color	USDA/NAIP	Good

Note: Aerial photographs only provide information concerning indications of land use, and no conclusions regarding the release of hazardous substances or petroleum products can be drawn from the review of aerial photographs alone.

5.2.1 Site

The Site has been developed with an industrial building covering the southwestern half of the Site and parking lot covering the northeastern portion of the Site since at least 1939 through 1982. From 1993 to the present, the Site appears to be a parking lot associated with a large warehouse-type building (the current Costco Wholesale Warehouse) located to the southeast.

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5.2.2 Surrounding Areas

From 1939 through 1982, the Site appears to have been part of a larger facility with industrial buildings adjoining the Site to the northwest, northeast, and southeast. Hathaway Avenue has adjoined the Site since at least 1939. The area north of the Site appears to be parking lot with some structures. The Site vicinity beyond the industrial-type buildings immediately surrounding the Site appear to be a mix of agricultural and residential community. By 1993, the Site and immediate Site Vicinity have been redeveloped with a large warehouse-type building located to the southeast and parking lot to the north, northeast, northwest, and southwest. A smaller building is located north of the Site past the adjoining parking lot from 1993 through to the present. By 2010, the Site vicinity appears to match existing conditions.

5.3 CITY DIRECTORIES

City directories provide information regarding property occupants by address. EDR provided a city directory image report, included in Appendix D, for the period between 1920 and 2013 (EDR, 2016e). Table 5-3 summarizes city directory listings of apparent Site occupants. The listings indicate commercial Site use.

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TABLE 5-3

Summary of Site City Directory Listings

YEAR(S)	SITE LISTING(S)
22330 Hathaway Avenue	
2002	Costco Business Center
2008	Costco
2013	Costco Wholesale

In general, the Site was located within the larger property listed under the address of 22330 Hathaway Avenue. The city directory listings were also reviewed for listings of nearby properties. Table 5-4 summarizes listings of facilities that appear to adjoin the Site, or are considered to adjoin the Site pursuant to the Standard Practice.

TABLE 5-4

Summary of Off-Site City Directory Listings

YEAR(S)	ADDRESS	OFF-SITE LISTING(S)
Northwest Adjoining		
1992	*22300 Hathaway Avenue*	Price Club
2002	*22300 Hathaway Avenue*	Ryder Integrated, Logistics, Shurgarstorage
2008	*22300 Hathaway Avenue*	SMI Logistic, American Poly Foam Co LTD, Ryder Integrated Logistics, Shurgard Storage Centers LLC, Mariner Trading Co Inc
2013	*22300 Hathaway Avenue*	American Polyfoam Company Inc, M S International

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TABLE 5-4 (Continued)
Summary of Off-Site City Directory Listings

North-northwest Adjoining		
1951	22308 Hathaway Avenue	Tonini A
1960	22302 Hathaway Avenue	Hunt Foods Inc
1965	22302 Hathaway Avenue	Hunt Foods & Industries Inc
1970	22302 Hathaway Avenue	1las Containers Corp Div Hunt
1980	22302 Hathaway Avenue	Field Dept, Personal
1992	22302 Hathaway Avenue	Anchor Glass Container
2002	22302 Hathaway Avenue	Glass Container CRP, Owens Brockway
2002	22308 Hathaway Avenue	Co Inc, A American Poly Foam
2008	22302 Hathaway Avenue	SMI Logistics, Owens Brockway Glass Cont Inc
2013	22302 Hathaway Avenue	Eighteen Trucking
Northeast-east-southeast-south Adjoining		
1955	*22298 Hathaway Avenue*	Hunt Food Annex
1973	22340 Hathaway Avenue	Glass Containers Corporation
1975	22340 Hathaway Avenue	Glass Containers Corporation
1976	22340 Hathaway Avenue	Glass Containers Corp Div Hunt, Wesson Foods mfrs
1976	22349 Hathaway Avenue	Glass Containers Corporation
1979	22340 Hathaway Avenue	Glass Containers Corporation
1982	22340 Hathaway Avenue	Glass Containers Corporation Hayward
2002	22330 Hathaway Avenue	Costco Business Center
2008	22330 Hathaway Avenue	Costco
2013	22330 Hathaway Avenue	Costco Business Center
West Adjoining		
1951 through 2002	Various	Residential properties
2008	22221 Hathaway Avenue	Als Deli Factory Store & DL
2013	22221 Hathaway Avenue	Locksmith

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5.4 HISTORICAL TOPOGRAPHIC MAP REVIEW

Kleinfelder obtained information regarding historical topographic maps of the Site vicinity from EDR (2016f). The topographic maps reviewed for this assessment are listed in Table 5-5, and color copies of the topographic maps are included in Appendix D.

TABLE 5-5
Historical Topographic Maps Reviewed

YEAR	QUADRANGLE	SERIES	SCALE
1899	Haywards	15 minute	1:62,500
1915	Haywards	15 minute	1:62,500
1915	Hayward	15 minute	1:62,500
1947	San Leandro	7.5 minute	1:24,000
1947	Hayward	7.5 minute	1:24,000
1950	Hayward	7.5 minute	1:24,000
1959	San Leandro	7.5 minute	1:24,000
1959	Hayward	7.5 minute	1:24,000
1968	San Leandro	7.5 minute	1:24,000
1968	Hayward	7.5 minute	1:24,000
1973	San Leandro	7.5 minute	1:24,000
1973	Hayward	7.5 minute	1:24,000
1980	San Leandro	7.5 minute	1:24,000
1980	Hayward	7.5 minute	1:24,000
1996	San Leandro	7.5 minute	1:24,000
1996	Hayward	7.5 minute	1:24,000
2012	San Leandro	7.5 minute	1:24,000
2012	Hayward	7.5 minute	1:24,000

5.4.1 Site

No structures were depicted in topographic maps from 1899 through 1915. A structure appears to be present on the southwest half of the Site from 1947 through 1980. This structure appears to

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extend beyond the extent of the Site to the northwest and southeast. The 1996 and 2012 topographic maps do not show structures.

5.4.2 Surrounding Areas

On the 1899 and 1915 topographic maps, the surrounding area shows a railroad extending northwest to southeast to the east of the Site, Hathaway Avenue extending along the western boundary of the Site, and West A Street extending east to west further to the south of the Site. Sparse buildings are shown on the maps with the closest located northwest of the intersection of the railroad and West A Street southeast of the Site.

On the 1947 through 1980 topographic maps, the surrounding area has been developed with numerous roads extending throughout. The immediate Site vicinity has been developed with commercial buildings to the northwest, northeast, east, and southeast of the Site. An additional building appears north of the Site in 1968. The area west of the Site across Hathaway Avenue, appears to be zoned for residential properties, however, no structures are depicted. The 1996 and 2012 topographic maps do not show structures; however, the surrounding streets are shown and appear generally unchanged with the exception that the railroad which is not depicted on the 2012 topographic map.

5.5 BUILDING PERMITS

Kleinfelder reviewed building permits for the Site provided by EDR on April 7, 2016. A summary of pertinent information obtained is provided in Section 4.3.6.

5.6 PREVIOUS ASSESSMENTS

Previous assessment reports were found in regulatory agency records searched and are summarized under the Fire department records review section.

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6 SITE RECONNAISSANCE

Kleinfelder's Phase I ESA activities included a Site reconnaissance. This section summarizes the findings from the Site reconnaissance.

6.1 METHODOLOGY AND LIMITING CONDITIONS

Mr. Brandon Connelly of Kleinfelder performed a Site reconnaissance on April 28, 2016. The Site reconnaissance included a visual inspection of the Site to assist in identifying the presence or likely presence of hazardous substances or petroleum hydrocarbons under conditions that indicate an existing release, a past release, or threat of release into structures, soil, groundwater, or surface water at the Site (i.e., RECs). Observations of readily-apparent environmental conditions are summarized in Table 6-1, and color photographs of the Site are presented on Figures 3 through 6. The approximate Site boundaries are shown on Figure 2.

6.2 GENERAL SITE SETTING

The Site is located in the northwest portion of the Costco Business Center No. 823 parking lot, which is located northeast of the intersection of West A Street and Hathaway Avenue in the City of Hayward. The Site is presently Costco parking lot. The Site is generally surrounded by more parking lot the east, north, and south. The Costco Warehouse is located to the east-southeast and the Costco Tire Center is located to the north-northeast. Commercial-type buildings are located to the northeast and to north past the parking lot. Hathaway Avenue is located to the west of the Site.

6.3 SITE OBSERVATIONS

Kleinfelder's Site observations are summarized in Table 6-1.

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TABLE 6-1

Site Observations

GENERAL OBSERVATIONS	REMARKS	OBSERVED	NOT OBSERVED
Current use	Presently a parking lot.	X	
Current use likely to indicate RECs			X
Past use			X
Past use likely to indicate RECs			X
Structures			X
Roads	The Site is a parking lot		X
Topography of Site and surrounding area	The Site is flat.	X	
Aboveground storage tanks (ASTs)			X
Asbestos and lead			X
Below grade vaults			X
Burned or buried debris			X
Chemical storage			X
Chemical mixing areas			X
Discolored soil or water			X
Ditches, streams			X
Drains and piping			X
Drums			X
Electrical or hydraulic equipment (polychlorinated biphenyls [PCBs])			X

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TABLE 6-1 (Continued)
Site Observations

GENERAL OBSERVATIONS	REMARKS	OBSERVED	NOT OBSERVED
Interior and exterior observations or environmental conditions that may involve the use, storage, disposal or generation of hazardous substances or petroleum products.		**Observed**	**Not Observed**
Fill dirt from an unknown source			X
Fill dirt from a known source			X
Hazardous chemical and petroleum products in connection with known use			X
Hazardous chemical and petroleum products in connection with unknown use			X
Non-hazardous containers with contents			X
Hazardous waste storage			X
Heating and cooling system and fuel source			X
Industrial waste treatment equipment			X
Loading and unloading areas			X
Odors			X
Pits, ponds, or lagoons			X
Pools of liquid			X
Process waste water			X
Sanitary sewer system			X
Septic system (e.g. tank and leach fields)			X
Soil piles			X
Solid waste/evidence of unauthorized dumping			X

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TABLE 6-1 (Continued)

Site Observations

GENERAL OBSERVATIONS	REMARKS	OBSERVED	NOT OBSERVED
Interior and exterior observations or environmental conditions that may involve the use, storage, disposal or generation of hazardous substances or petroleum products (continued).		**Observed**	**Not Observed**
Stained pavement, soil or concrete	Cracked asphalt observed at the Site.		X
Stains or corrosion (interior, non-water)			X
Storm drains/catch basins			X
Stressed vegetation			X
Sumps and clarifiers			X
Surface water			X
USTs (including heating oil tanks)			X
Unidentified features			X
Unidentified substance containers			X
Waste water discharge			X
Water supplies (potable and process)			X
Wells (irrigation, monitoring, or domestic)			X
Wells (dry)			X
Wells (oil and gas)			X

6.4 RESULTS OF SITE RECONNAISSANCE

The Site is currently in use as a parking lot for the Costco Warehouse. Hathaway Avenue forms the western border of the Site, additional parking lot area extends to the north, east, and south. The Costco Warehouse is located to the southeast of the Site. The Site was generally covered in asphalt that showed wear in the form of cracks. Landscaped areas with associated irrigation and lighting was also present. A water utility line extended through the Site.

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7 INTERVIEWS

Key Site Managers are contacted to obtain current and historical environmental information concerning the Site. The following sections highlight information revealed during the interviews.

7.1 INTERVIEW WITH CLIENT/OWNER/MANAGER

Kleinfelder spoke with the Costco warehouse manager, Mr. Eddie Bello, on May 17, 2016. The Costco warehouse manager indicated the following:

- Costco is not aware of environmental cleanup liens against the property that are filed or recorded under Federal, tribal, State, or local law.
- Costco is not aware of AULs, such as engineering controls, land use restrictions, or institutional controls, that are in place at the Site and/or have been filed or recorded in a registry under Federal, tribal, State, or local law.
- Costco is not aware of obvious indicators that point to the presence or likely presence of contamination at the Site.

7.2 INTERVIEW WITH OCCUPANTS

Kleinfelder spoke with the Costco warehouse manager, Mr. Eddie Bello, on May 17, 2016. Mr. Bello has been the Costco Warehouse manager since February 8, 2016, but has been familiar with the Site for approximately 8 years. The Site has always been parking lot as far he knows. Mr. Bello is unaware of any environmental releases, reports, or issues involving the Site. Mr. Bello stated that they have spill kits that they use throughout the Costco facility, but they haven't had any incidents in the parking lot. Costco's hazardous waste is stored in a Hazmat area, and disposed of off-site. The Costco facility is supplied by public water and there are no wells (oil of water) on the property. There are also no septic tanks, underground storage tanks, or transformers on the Site.

7.3 INTERVIEWS WITH LOCAL GOVERNMENT OFFICIALS

On April 7, 2016, Kleinfelder spoke with Mr. Hugh Murphy, of the City of Hayward Fire Department, regarding the Site. Mr. Murphy indicated that the Site had been a former bottling plant and that when the Price Club building (current Costco Warehouse) was under construction, sumps and vats were encountered and clean up was performed. Mr. Murphy indicated that the SFBRWQCB handled the case.

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8 EVALUATION

Kleinfelder performed this Phase I ESA of the Site consistent with the scope and limitations of the Standard Practice, and in accordance with Costco Wholesale Development Requirements, Version 2014, revised June 13, 2014. The following sections describe Kleinfelder's findings and provide general background information about the Site. Findings address RECs, HRECs, CRECs, and notation of de minimis quantities, as applicable to the Site. In summary, Kleinfelder's assessment revealed the following information concerning the Site:

8.1 BACKGROUND

The following is a summary of Site background information:

- The Site consists of a portion of the western third of a larger 11.19 acre parcel of land identified as Alameda County APN 429-008-200-300. The Site is presently being used as a Costco parking lot. The Costco Tire Center is located north-northeast of the Site, the Costco Warehouse and additional parking areas are located east-southeast of the Site, additional parking areas and commercial/industrial buildings are located north-northwest of the Site, and Hathaway Avenue and a commercial-type building is located west-southwest of the Site.
- Costco intends to install a fuel facility on Site.
- Depth to groundwater in the Site vicinity is reportedly between 26 and 30 feet bgs and generally flows west.
- The Site is located within the boundaries of the Hayward Cannery Brownfields area. Based on Kleinfelder's historical document review, the Site and adjacent property was occupied by "California Conserving Vinegar & Pickle Works" in 1923, "Hunt Foods Inc" in 1948 through 1956, and "Hunt-Wesson Foods" in 1966. A portion of an auto and horse shed was located on the Site in 1923. The Site was occupied by a warehouse-type building from at least 1939 through 1982. Industrial buildings, including a boiler room, machine room, sumps, and oil tanks, were located east-southeast of the Site along with additional warehouse-type buildings. In 1984, two USTs were reportedly removed and one UST was abandoned in place. Soils sampled during UST removal were reported to be visually clean, however, no analytical data was available. The Price Company purchased the Site and surrounding property in two deeds; one in 1985 from the Container General Corporation and one in 1983 from Hunt-Wesson Foods, Inc. During construction of the existing

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warehouse (located east and southeast of the Site) in 1991 for Price Company, three USTs were encountered and removed, and contaminated soil was excavated. During removal of one of the USTs and subsequent excavation of contaminated soil, what was described as an oil-type "goo" was encountered. This substance was found to extend over an approximate area of 240 feet by 240 feet at depths between 24 and 34 feet bgs. This area extended partially beneath the building footprint. Nine groundwater wells were installed in 1992, and case closure was issued by the SFBRWQCB in 1994 and by DTSC in 1996. Costco received title for the existing Costco property (including the Site) in 2002 from The Price Company. The Site has been covered by parking lot from at least 1993 through the present.

8.2 FINDINGS AND OPINIONS

The following is a summary of the findings and opinions of this Phase I ESA:

- The Site is currently developed as a parking lot for the existing Costco Wholesale Business Center. The Costco warehouse is located east-southeast of the Site. No obvious significant staining was observed on the asphalt-paved surface, though the paving was observed to be cracked and worn.
- A LUST case associated with the former "Price Company" was opened when three USTs were encountered during construction of its warehouse (which is the existing adjacent Costco Warehouse located east-southeast of the Site) in 1991. Following remedial excavation and monitoring, case closure was issued by the SFBRWQCB and the DTSC for site investigation and remediation in 1994 and 1996, respectively. Based on the no further action status issued by the SFBRWQCB and DTSC for this adjacent facility, the former USTs and associated contamination represent an HREC to the Site.

8.3 DEVIATIONS AND ADDITIONAL SERVICES

The Site was developed and in use for commercial/industrial purposes from at least the early 1900s. Thus, Kleinfelder's scope of services did not include Standard Practice non-scope evaluations of cultural, historic, and archaeological resources; environmental regulatory compliance; wetlands and surface water; and threatened, endangered, and other protected species that may be required for a Phase I ESA pursuant to Costco's Development Requirements publication (revised June 13, 2014). In addition, the Phase I ESA did not include an assessment

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for asbestos containing building materials, radon, lead-based paints, lead in drinking water, molds and mildews, indoor air quality, industrial hygiene, health and safety, and other Standard Practice non-scope considerations not described herein. No additional services were provided by Kleinfelder for this Phase I ESA.

8.4 CONCLUSIONS

Kleinfelder has performed a Phase I ESA in conformance with the scope and limitations of the Standard Practice of the proposed fuel facility at Costco Warehouse No. 823, 22330 Hathaway Avenue, in Hayward, California. Any exceptions to, or deletions from, this practice are described in Section 8.3 of this report. This assessment has revealed no evidence of RECs or CRECs in connection with the Site.

8.5 RECOMMENDATIONS

If Costco wishes to obtain a greater certainty of the potential for impacts to the subsurface as a result of historical petroleum usage of adjoining properties, Kleinfelder recommends Costco consider performance of subsurface sampling for a baseline assessment prior to installation of the fueling facility. Furthermore, soil or groundwater waste generated during construction activities at the Site should be characterized to assess appropriateness for reuse and/or establish an analytical waste profile for off-Site transportation and disposal.

8.6 OTHER ENVIRONMENTAL CONDITIONS

Site investigation and remedial activities were performed at the locations of three USTs encountered during construction of the existing Costco Warehouse building located east-southeast (upgradient) of the Site. The regulatory cases for these USTs were closed and no further action letters were issued. The subsurface contamination associated with these USTs appear to have been adequately assessed and remediated, with closure from SFBRWQCB and DTSC. Therefore, Kleinfelder considers the subsurface contamination associated with these USTs to represent an HREC.

8.7 DATA GAPS

Although Kleinfelder attempted to obtain reasonably ascertainable information regarding the Site, some information was either not received or not readily available at the time of preparation of this report. This includes the lack of specific information and reporting related to the investigation and

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remedial activities associated with the construction of the existing Costco Warehouse building located east-southeast (upgradient to crossgradient) of the Site.

However, based on other information obtained, including no further action letters from both SFBRWQCB and DTSC, respectively, in Kleinfelder's opinion the lack of this information does not represent a significant data failure. Should information subsequently provided to Kleinfelder alter our conclusions and recommendations, the Client will be notified.

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FIGURES

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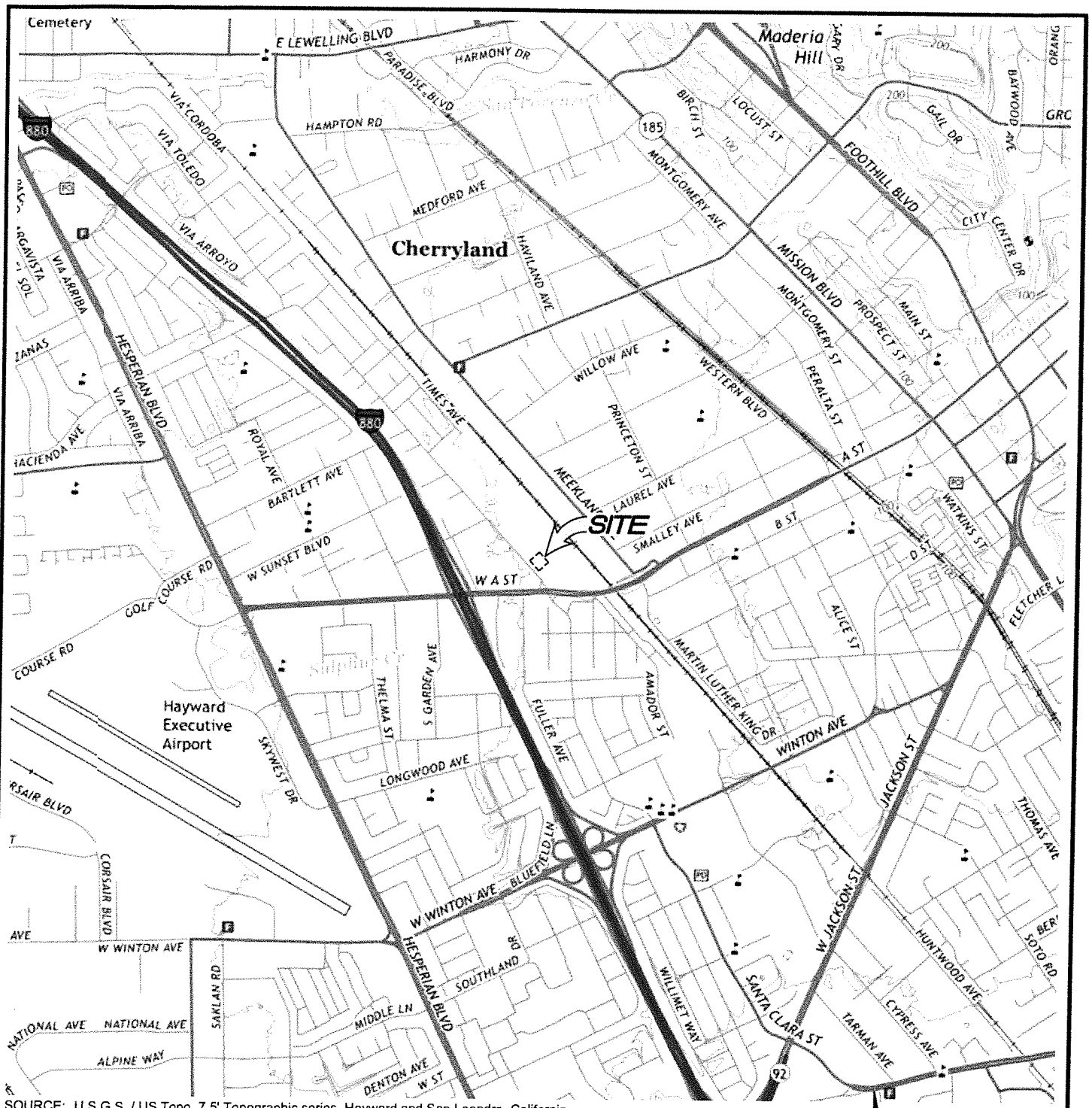

SOURCE: U.S.G.S. / US Topo, 7.5' Topographic series, Hayward and San Leandro, California Quadrangle 2015.

EXPLANATION

--------- APPROXIMATE SITE LOCATION

N

2,000 1,000 0 2,000

APPROXIMATE SCALE (feet)

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PROJECT NO.	20170042
DRAWN:	5/2016
DRAWN BY:	MRG
CHECKED BY:	LDP
FILE NAME:	20170042-fig1_SLM.dwg

SITE LOCATION MAP

PHASE I ENVIRONMENTAL SITE ASSESSMENT
COSTCO WHOLESALE BUSINESS CENTER NO. 823
22330 HATHAWAY AVENUE
HAYWARD, CALIFORNIA

FIGURE

1

CAD FILE: \L:CADD\2016\20170042\Costco_Hayward-CA_PhI-ESA_ _16\ LAYOUT: 1
PLOTTED: 20 May 2016, 8:11am, MGriffin
IRVINE, CA

SOURCE: U.S.G.S. AERIAL, HAYWARD, CALIFORNIA, DATED 6-2014.

N

200 100 0 200

APPROXIMATE SCALE (feet)

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EXPLANATION

--------- APPROXIMATE SITE LOCATION

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PROJECT NO.	20170042
DRAWN:	5/2016
DRAWN BY:	MRG
CHECKED BY:	SK
FILE NAME:	20170042-fig2_SVAP.dwg

SITE VICINITY AERIAL PHOTOGRAPH

PHASE I ENVIRONMENTAL SITE ASSESSMENT
COSTCO WHOLESALE BUSINESS CENTER NO. 823
22330 HATHAWAY AVENUE
HAYWARD, CALIFORNIA

FIGURE
2

ATTACHED IMAGES: Images: USGS_Aerial_1400_6-2014_Hayward-CA_No2.4.PNG
ATTACHED XREFS:
IRVINE, CA
CAD FILE: L:\CADD\2016\20170042\Costco_Hayward-CA_PhI-ESA_5-2016\ LAYOUT: 2
PLOTTED: 20 May 2016, 8:14am, MGriffin

Photo 1. Parking area, southwest corner facing northeast. Some cracking and wear and tear on the asphalt.

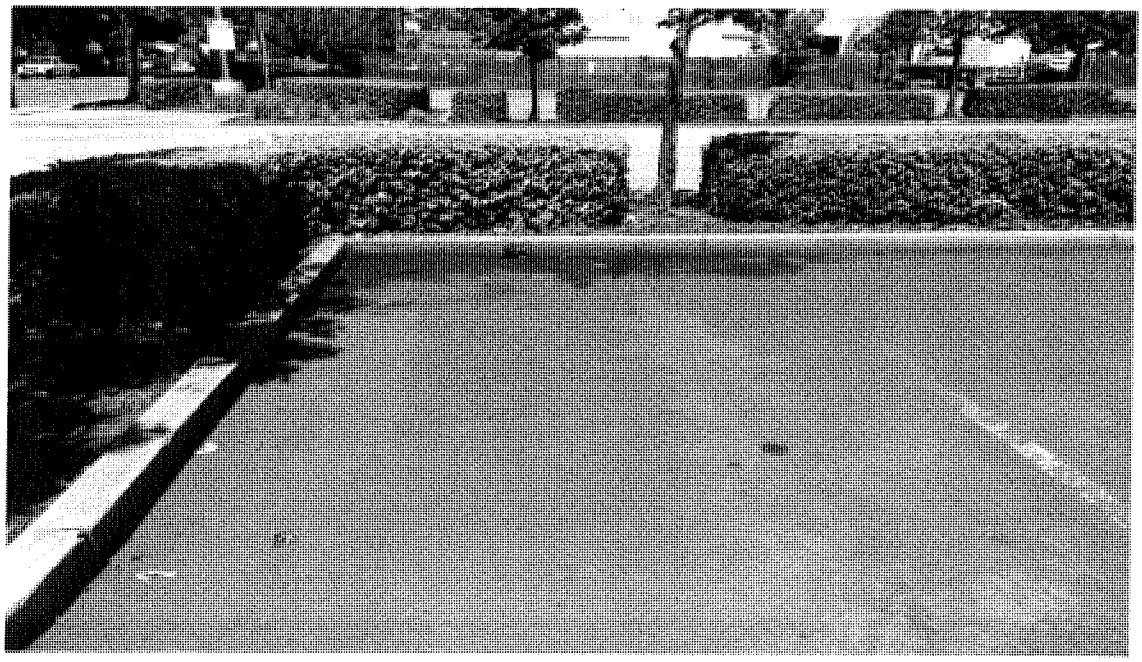

Photo 2: Southwest corner of parking area facing northwest. Some dirt/residue collects in this corner of the lot.

KLEINFELDER	**Site Photographs**		
	PHASE I ENVIRONMENTAL SITE ASSESSMENT COSTCO WHOLESALE NO. 823 22330 HATHAWAY AVENUE HAYWARD, CALIFORNIA		FIGURE **3**
Drawn by: LDP	Checked by:	Date: 5/20/16	PROJECT NO.: 20170042.001A

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Photo 3. Photo from northwest entrance facing northeast. Some cracking and repair of asphalt in areas.

Photo 4: Photo taken from northeast side of future gas island. Asphalt shows signs of a repaired section.

KLEINFELDER			**Site Photographs**	
			PHASE I ENVIRONMENTAL SITE ASSESSMENT COSTCO WHOLESALE NO. 823 22330 HATHAWAY AVENUE HAYWARD, CALIFORNIA	FIGURE **4**
Drawn by: LDP	Checked by:	Date: 5/20/16	PROJECT NO.: 20170042.001A	

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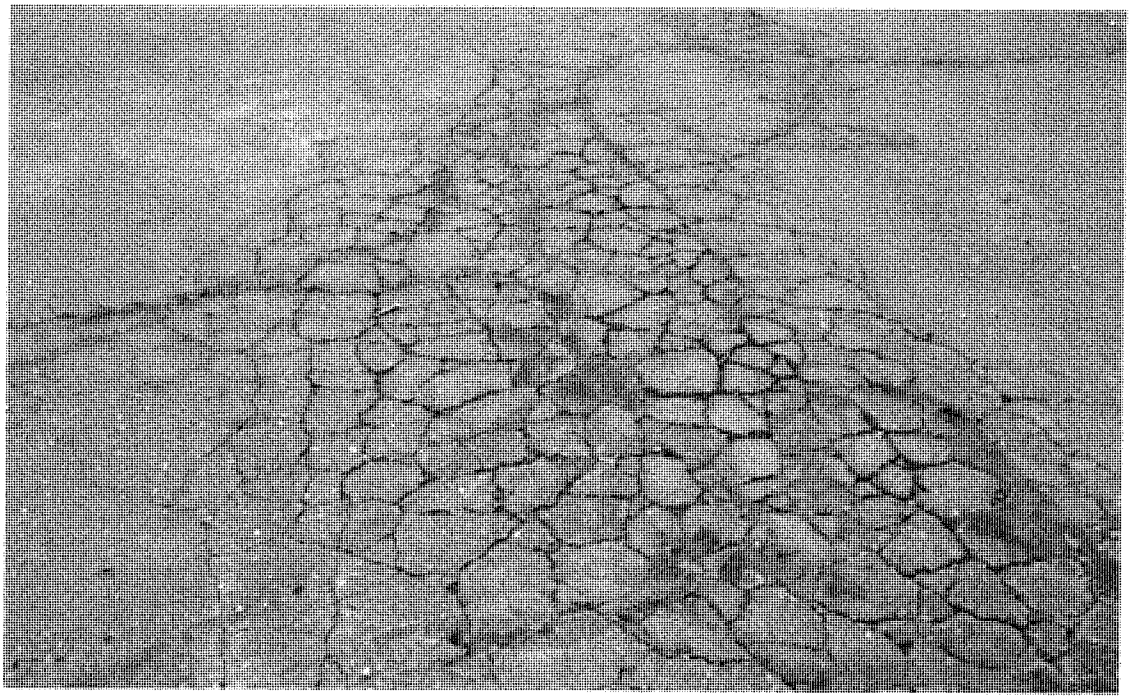

Photo 5: Cracked/damaged section of asphalt in area of future gas island.

Photo 6: Irrigation system is present for plants and trees around parking area perimeter.

KLEINFELDER			**Site Photographs**	
			PHASE I ENVIRONMENTAL SITE ASSESSMENT COSTCO WHOLESALE NO. 823 22330 HATHAWAY AVENUE HAYWARD, CALIFORNIA	FIGURE **5**
Drawn by: LDP	Checked by:	Date: 5/20/16	PROJECT NO.: 20170042.001A	

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Photo 7: Fencing around neighboring businesses to the northwest.

Photo 8: Parking lot and tire center.

KLEINFELDER			**Site Photographs**	
			PHASE I ENVIRONMENTAL SITE ASSESSMENT COSTCO WHOLESALE NO. 823 22330 HATHAWAY AVENUE HAYWARD, CALIFORNIA	FIGURE **6**
Drawn by: LDP	Checked by:	Date: 5/20/16	PROJECT NO.: 20170042.001A	

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APPENDIX A
STATEMENT OF QUALIFICATIONS

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STATEMENT OF QUALIFICATIONS

We declare that to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR 312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all-appropriate inquiries in conformance with the standards and practices set forth in CFR Part 312.

Brandon Connelly
Environmental Professional

Lindsey Dandridge-Perry
Environmental Professional

Lizanne Simmons, PG No. 7431
Principal Geologist

The resumes of above-listed environmental professionals performing this Phase I ESA are on file at the Kleinfelder office and are available on request.

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APPENDIX B
REGULATORY AGENCY DATABASE REPORT

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Costco Hayward
22330 Hathaway Avenue
Hayward, CA 94541

Inquiry Number: 4583200.2s
April 05, 2016

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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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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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 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

22330 HATHAWAY AVENUE
HAYWARD, CA 94541

COORDINATES

Latitude (North):	37.6684300 - 37' 40' 6.34"
Longitude (West):	122.1030410 - 122' 6' 10.94"
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	579106.6
UTM Y (Meters):	4169201.2
Elevation:	67 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5640616 HAYWARD, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20120520
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
2330 HATHAWAY AVENUE
HAYWARD, CA 94541

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	COSTCO (STORE #823)	22330 HATHAWAY AVE	HAZNET		TP
A2	COSTCO WHOLESALE BUS	22330 HATHAWAY AVE	RCRA-SQG, HAZNET		TP
A3	COSTCO WHOLESALE	22330 HATHAWAY AVE	ECHO		TP
A4	COSTCO WHOLESALE	22330 HATHAWAY AVE	FINDS		TP
A5	COSTCO WHOLESALE BUS	22330 HATHAWAY AVE	FINDS, ECHO		TP
A6	COSTCO BUSINESS CENT	22330 HATHAWAY AVE	EMI		TP
A7	REPLANET LLC	22330 HATHAWAY AVE	SWRCY, EMI		TP
A8	HAYWARD CANNERY AREA	MULTIPLE ADDRESSES	US BROWNFIELDS	Lower	131, 0.025, Soutl
A9	HAYWARD CANNERY AREA	MULTIPLE ADDRESSES	FINDS, ECHO	Lower	131, 0.025, Soutl
A10	HAYWARD CANNERY AREA	MULTIPLE ADDRESSES	US BROWNFIELDS	Lower	131, 0.025, Soutl
B11	BERGLIN CORPORATION	22313 MEEKLAND	SLIC, Alameda County CS	Higher	378, 0.072, ENE
B12	TERRYS T T AUTO BODY	22301 MEEKLAND AVE	RCRA NonGen / NLR	Higher	380, 0.072, NE
B13		22301 MEEKLAND AVE	EDR Hist Auto	Higher	380, 0.072, NE
B14	TERRYS BODY SHOP	22301 MEEKLAND AVE	FINDS, EMI, ECHO	Higher	380, 0.072, NE
C15		22215 MEEKLAND AVE	EDR Hist Auto	Higher	393, 0.074, NNE
C16	MAIER RACING ENTERPR	22215 MEEKLAND AVE	FINDS, ECHO	Higher	393, 0.074, NNE
B	UNITED PRO PAINTING,	22345 MEEKLAND AVE	FINDS, ECHO	Higher	411, 0.078, East
B18	COLLINS BODY SHOP	22240 MEEKLAND AVE	EDR Hist Auto	Higher	422, 0.080, NNE
D19	PENSKE TRUCK LEASING	22320 HATHAWAY AVE	FINDS, ECHO	Lower	427, 0.081, SW
B20		22336 MEEKLAND AVE	EDR Hist Auto	Higher	430, 0.081, ENE
D21	OWENS-BROCKWAY GLASS	22302 HATHAWAY AVE.	FINDS, ECHO	Lower	448, 0.085, WSW
D22	DIAMOND BATHURST	22302 HATHAWAY AVE	LUST, SLIC, EMI, ENF, HAZNET, HIST CORTESE, HWP	Lower	448, 0.085, WSW
D23	OWENS-BROCKWAY GLASS	22302 HATHAWAY	RCRA-SQG, US AIRS	Lower	448, 0.085, WSW
E24	MEEKLAND AUTO SERVIC	22359 MEEKLAND AVE	RCRA-SQG, FINDS, EMI, HAZNET, ECHO	Higher	459, 0.087, East
E25	V&V AUTOMOTIVE	22359 MEEKLAND AVE,	FINDS, ECHO	Higher	462, 0.087, East
E26		22359 MEEKLAND AVE	EDR Hist Auto	Higher	462, 0.087, East
D27	DIAMOND CONTAINER GE	22303 HATHAWAY	HIST UST	Lower	503, 0.095, SW
D28	OWENS BROCKWAY GLASS	22301 HATHAWAY AVE	FINDS, ECHO	Lower	503, 0.095, SW
C29	BUETTNER & HOYT	22117 MEEKLAND AVE	LUST, Alameda County CS, HIST CORTESE	Lower	508, 0.096, North
E30		22369 MEEKLAND AVE	EDR Hist Auto	Higher	508, 0.096, East
C31	EMPIRE TRACTOR AND E	22117 MACKLAND AVE	HIST UST, CA FID UST	Lower	531, 0.101, North
C32	ACOUSTIC SPRAY CEILI	22102 MEEKLAND AVE	RCRA NonGen / NLR, FINDS, ECHO	Lower	560, 0.106, North
E33		22383 MEEKLAND AVE	EDR Hist Auto	Higher	581, 0.110, East
E34	TOMMYS AUTO BODY	22383 MEEKLAND AVE	RCRA-SQG, LUST, Alameda County CS, FINDS, EMI,...	Higher	581, 0.110, East
F35	BELL LAUNDERETT & CL	208 WEST A	EDR Hist Cleaner	Higher	629, 0.119, SSE
G36		263 W A ST	EDR Hist Auto	Lower	632, 0.120, SSW
G[illegible]	GEORGE S RICHFIELD S	263 WEST A ST	EDR Hist Auto	Lower	632, 0.120, SSW
G38	GEORGE S RICHFIELD S	263 WEST A	EDR Hist Auto	Lower	632, 0.120, SSW
G39	SUNSET GARAGE & BRAK	271 WEST A ST	EDR Hist Auto	Lower	648, 0.123, SSW

MAPPED SITES SUMMARY

Target Property Address:
2330 HATHAWAY AVENUE
HAYWARD, CA 94541

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
H40	PRICE CLUB	22300 HATHAWAY AVE	LUST, HIST CORTESE	Lower	676, 0.128, West
H41	PRICE CLUB	22300 HATHAWAY AVE	RCRA-SQG, LUST, CA FID UST, FINDS, ECHO	Lower	676, 0.128, West
H42	PRICE CLUB	22300 HATHWAY AVE	SWEEPS UST	Lower	676, 0.128, West
G43		280 W A ST	EDR Hist Cleaner	Lower	682, 0.129, SSW
I44	MARTIN S KEN AUTOMOT	22035 MEEKLAND AVE	EDR Hist Auto	Lower	703, 0.133, North
H45	WOOD AM SUPPORT SERV	22051 HATHAWAY ST.	FINDS, ECHO	Lower	704, 0.133, West
H46		22051 HATHAWAY AVE	ERNS	Lower	704, 0.133, West
F47	HELMUT MOTORS	82 W A ST	Alameda County CS	Higher	715, 0.135, SSE
G48		311 W A ST	EDR Hist Auto	Lower	736, 0.139, SSW
G49	RAYBERN FOODS	311 W A ST	SWEEPS UST, NPDES	Lower	736, 0.139, SSW
J50		22433 MEEKLAND AVE	ERNS	Higher	752, 0.142, ESE
I51		22018 MEEKLAND AVE	EDR Hist Auto	Lower	760, 0.144, North
I52	VARGAS TURBO AND DIE	22018 MEEKLAND AVE	FINDS, ECHO	Lower	760, 0.144, North
I53	KD CEDAR	22008 MEEKLAND	LUST, Alameda County CS, HIST CORTESE	Lower	783, 0.148, North
I54	RAINBOW AUTO BODY	22008 MEEKLAND AVE	FINDS, ECHO	Lower	783, 0.148, North
I55		22008 MEEKLAND AVE	EDR Hist Auto	Lower	783, 0.148, North
5		22500 AMADOR ST.	ERNS	Higher	817, 0.155, SE
J57	RUE S SERVICE STATIO	2 A ST	EDR Hist Auto	Higher	833, 0.158, ESE
J58	WHEELER MORTON L	2 A AT S P TRACKS	EDR Hist Auto	Higher	833, 0.158, ESE
G59	PAUL S FLYING A SERV	310 WEST A	EDR Hist Auto	Lower	839, 0.159, SSW
G60	WEST A FLYING A SERV	310 WEST A ST	EDR Hist Auto	Lower	839, 0.159, SSW
I61		21980 MEEKLAND AVE	EDR Hist Auto	Lower	852, 0.161, North
J62		30 A ST	EDR Hist Auto	Higher	866, 0.164, ESE
J63	PEPES AUTO BODY	30 A STREET	RCRA-SQG, FINDS, EMI, HAZNET, ECHO	Higher	866, 0.164, ESE
K64	BRITISH PARTS AND SE	335 W A ST	RCRA-SQG, FINDS, ECHO	Lower	871, 0.165, SW
J65		44 A ST	EDR Hist Auto	Higher	885, 0.168, ESE
66	S-M BODY WORKS	159 SMALLEY AVE	EDR Hist Auto	Higher	901, 0.171, East
J67	HELMUT MOTORS	82 A	LUST	Higher	944, 0.179, ESE
J68		82 A ST	EDR Hist Auto	Higher	944, 0.179, ESE
J69	PIOPAO PROPERTY	100 A	HIST CORTESE	Higher	981, 0.186, ESE
J70	DOILIS FLYING A SERV	100 A ST	EDR Hist Auto	Higher	981, 0.186, ESE
K71		352 W A ST	EDR Hist Auto	Lower	1013, 0.192, SW
K72	A STREET DOUGLAS SER	352 WEST A ST	EDR Hist Auto	Lower	1013, 0.192, SW
L73	PRICE RITE CLEANERS	112 A ST	EDR Hist Cleaner	Higher	1052, 0.199, ESE
74		22457 SONOMA ST	EDR Hist Auto	Lower	1054, 0.200, Sou
M75	NEW RAJA 76 CIRCLE K	391 A ST WEST	UST	Lower	1068, 0.202, WS'
M[illegible]	UNION OIL SS 3791	391 WEST A ST	HIST UST, HAZNET	Lower	1068, 0.202, WS'
M77	UNOCAL #3791	391 W A ST	Alameda County CS	Lower	1068, 0.202, WS'
M78	ROSE UNION SERVICE	391 WEST A ST	EDR Hist Auto	Lower	1068, 0.202, WS'

MAPPED SITES SUMMARY

Target Property Address:
2330 HATHAWAY AVENUE
HAYWARD, CA 94541

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
M79		391 W A ST	EDR Hist Auto	Lower	1068, 0.202, WS'
M80	WOODARD UNION SERVIC	391 WEST A	EDR Hist Auto	Lower	1068, 0.202, WS'
M81	UNOCAL SERVICE STATI	391 W A ST	SWEEPS UST, CA FID UST	Lower	1068, 0.202, WS'
M82	TOSCO - FACILITY #37	391 A ST W	LUST, HIST CORTESE	Lower	1068, 0.202, WS'
K83	FREEWAY GARAGE	373 WEST A ST	EDR Hist Auto	Lower	1077, 0.204, SW
L84	BOB S SHELL SERVICE	109 A ST	EDR Hist Auto	Higher	1164, 0.220, ESE
N85	SELECT FOODS	22600 AMADOR ST	LUST, Alameda County CS, CHMIRS	Higher	1445, 0.274, SE
N86	SELECT-SYSCO FOODS,	22678 AMADOR ST	SLIC, HIST UST, CA FID UST	Higher	1456, 0.276, SE
O87	THRIFTY OIL STN. #06	207 A ST	LUST, SWEEPS UST, CA FID UST, HIST CORTESE	Higher	1554, 0.294, Eas
O88	TESORO (USA) 63062	207 A ST	UST	Higher	1554, 0.294, Eas
P89	SUNSET HIGH SCHOOL	22100 PRINCETON ST	SWEEPS UST, HIST UST, CA FID UST	Higher	1640, 0.311, NE
P90	SUNSET HIGH SCHOOL	22100 PRINCETON	LUST	Higher	1640, 0.311, NE
P91	SUNSET HIGH SCHOOL	22100 PRINCETON	HIST CORTESE	Higher	1640, 0.311, NE
92	VIC HUBBARD AUTO SUP	411 W A ST	SWEEPS UST, CA FID UST	Lower	1746, 0.331, WS'
93	SELECT FOODS	22885 AMADOR ST	RCRA-SQG, SLIC, BROWNFIELDS, SWEEPS UST, CHMIRS,...	Higher	1848, 0.350, SE
94	BURBANK ELEMENTARY	B STREET AND FILBERT	ENVIROSTOR, VCP	Higher	2089, 0.396, Eas
C	RAS-CO MANUFACTURING	413 WEST SUNSET BLVD	LUST	Lower	2156, 0.408, WN'
Q96	RAS-CO MANUFACTURING	413 W SUNSET BLVD	Alameda County CS, SWEEPS UST	Lower	2156, 0.408, WN'
R97	KB VALERO (CUPA)	525 W A ST	UST	Lower	2199, 0.416, WS'
R98	EZ SERVE #100877	525 W A ST	Alameda County CS	Lower	2199, 0.416, WS'
R99	EZ SERVE #100877	525 A STREET	LUST, HIST CORTESE	Lower	2199, 0.416, WS'
R100	RESTRUCTURE PETROLEU	525 WEST A ST	HIST UST, HAZNET	Lower	2199, 0.416, WS'
R101	FILL-EM'-FAST 171-04	525 W A ST	CA FID UST	Lower	2199, 0.416, WS'
102	BURBANK E.S./HAYWARD	222 BURBANK STREET	ENVIROSTOR, SCH	Higher	2238, 0.424, ESE
S103	BECK ROOFING	21123 MEEKLAND AVE	LUST	Lower	2382, 0.451, NN\
S104	BECK ROOFING	21123 MEEKLAND AVE	LUST, Alameda County CS, HIST CORTESE	Lower	2382, 0.451, NN\
T105	BEATRICE HUNT WESSON	199 C ST	LUST, SLIC, BROWNFIELDS, SWEEPS UST, CA FID UST,...	Higher	2487, 0.471, ESE
T106	UNITED CAN COMPANY	199 C STREET	HIST UST, EMI	Higher	2487, 0.471, ESE
107	RAS CO MANUFACTURING	413 SUNSET	HIST CORTESE	Higher	2511, 0.476, NE
108	VIC HUBBARD	411 A	HIST CORTESE	Higher	2550, 0.483, Eas
109	LIBITZKY PROPERTY	199 FILBERT STREET A	ENVIROSTOR, VCP	Higher	2736, 0.518, ESE
110	DURHAM TRANSPORTATIO	19984 MEEKLAND AVE	LUST, Alameda County CS, Notify 65	Lower	3432, 0.650, NN\
U111	SUMMERHILL DEVELOPME	85 WEST WINTON AVE.	Notify 65	Higher	4069, 0.771, SE
U112	ALAMEDA NEWSPAPER GR	116 W. WINTON AVENUE	ENVIROSTOR	Higher	4113, 0.779, SE
113	EX CLEAN	54 MORAN	LUST, SLIC, Alameda County CS, SWEEPS UST, HIST...	Higher	4251, 0.805, SE
114	MONTGOMERY STREET PR	21659 MISSION BOULEV	ENVIROSTOR	Higher	4796, 0.908, NE
11	GRAND PLACE, LLC	22815 SUTRO STREET	ENVIROSTOR, VCP, DEED, HAZNET	Higher	5142, 0.974, Eas
116	ASPI - HAYWARD	B & WATKINS	ENF	Higher	5151, 0.976, ENE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
COSTCO (STORE #823) 22330 HATHAWAY AVE HAYWARD, CA 94541	HAZNET GEPAID: CAC002187886	N/A
COSTCO WHOLESALE BUS 22330 HATHAWAY AVE HAYWARD, CA 94541	RCRA-SQG EPA ID:: CAR000210997 HAZNET GEPAID: CAR000210997	CAR000210997
COSTCO WHOLESALE 22330 HATHAWAY AVE HAYWARD, CA 94541	ECHO	N/A
COSTCO WHOLESALE 22330 HATHAWAY AVE HAYWARD, CA 94541	FINDS Registry ID:: 110038005262	N/A
COSTCO WHOLESALE BUS 22330 HATHAWAY AVE HAYWARD, CA 94541	FINDS Registry ID:: 110042171930 ECHO	N/A
COSTCO BUSINESS CENT 22330 HATHAWAY AVE HAYWARD, CA 94541	EMI Facility Id: 16607	N/A
REPLANET LLC 22330 HATHAWAY AVE HAYWARD, CA 94541	SWRCY Cert Id: RC217900.001 EMI Facility Id: 16607	N/A

EXECUTIVE SUMMARY

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
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

FEDERAL FACILITY..... Federal Facility Site Information listing
SEMS..... Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

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-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

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

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

EXECUTIVE SUMMARY

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing
AST..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

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

Local Lists of Hazardous waste / Contaminated Sites

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

Local Land Records

LIENS..... Environmental Liens Listing
LIENS 2..... CERCLA Lien Information
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

FUDS..... Formerly Used Defense Sites
DOD..... Department of Defense Sites
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR..... Financial Assurance Information

EXECUTIVE SUMMARY

EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
CA BOND EXP. PLAN	Bond Expenditure Plan
Cortese	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings	CUPA Resources List
DRYCLEANERS	Cleaner Facilities
Financial Assurance	Financial Assurance Information Listing
HWT	Registered Hazardous Waste Transporter Database
MINES	Mines Site Location Listing
MWMP	Medical Waste Management Program Listing
NPDES	NPDES Permits Listing
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database
UIC	UIC Listing
WASTEWATER PITS	Oil Wastewater Pits Listing
WDS	Waste Discharge System
WIP	Well Investigation Program Case List
FUELS PROGRAM	EPA Fuels Program Registered Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF	Recovered Government Archive Solid Waste Facilities List

EXECUTIVE SUMMARY

RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

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

Federal RCRA generators list

RCRA-SQG: 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.

A review of the RCRA-SQG list, as provided by EDR, and dated 06/09/2015 has revealed that there are 6 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MEEKLAND AUTO SERVIC	***22359 MEEKLAND AVE***	***E 0 - 1/8 (0.087 mi.)***	***E24***	***136***
TOMMYS AUTO BODY	***22383 MEEKLAND AVE***	***E 0 - 1/8 (0.110 mi.)***	***E34***	***151***
PEPES AUTO BODY	***30 A STREET***	***ESE 1/8 - 1/4 (0.164 mi.)***	***J63***	***176***

Lower Elevation	Address	Direction / Distance	Map ID	Page
OWENS-BROCKWAY GLASS	***22302 HATHAWAY***	***WSW 0 - 1/8 (0.085 mi.)***	***D23***	***131***
PRICE CLUB	***22300 HATHAWAY AVE***	***W 1/8 - 1/4 (0.128 mi.)***	***H41***	***163***
BRITISH PARTS AND SE	***335 W A ST***	***SW 1/8 - 1/4 (0.165 mi.)***	***K64***	***185***

Federal ERNS list

ERNS: The Emergency Response Notification System records and stores information on reported releases of oil and hazardous substances. The source of this database is the U.S. EPA.

A review of the ERNS list, as provided by EDR, and dated 06/22/2015 has revealed that there are 3 ERNS sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	22433 MEEKLAND AVE	ESE 1/8 - 1/4 (0.142 mi.)	J50	170
Not reported	22500 AMADOR ST.	SE 1/8 - 1/4 (0.155 mi.)	56	174

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	22051 HATHAWAY AVE	W 1/8 - 1/4 (0.133 mi.)	H46	166

EXECUTIVE SUMMARY

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 02/01/2016 has revealed that there are 6 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BURBANK ELEMENTARY Facility Id: 60001840 Status: No Further Action	***B STREET AND FILBERT***	***E 1/4 - 1/2 (0.396 mi.)***	***94***	***219***
BURBANK E.S./HAYWARD Facility Id: 1760048 Status: Certified / Operation & Maintenance	***222 BURBANK STREET***	***ESE 1/4 - 1/2 (0.424 mi.)***	***102***	***236***
LIBITZKY PROPERTY Facility Id: 60001934 Status: No Further Action	***199 FILBERT STREET A***	***ESE 1/2 - 1 (0.518 mi.)***	***109***	***248***
ALAMEDA NEWSPAPER GR Facility Id: 71002831 Status: Inactive - Needs Evaluation	116 W. WINTON AVENUE	SE 1/2 - 1 (0.779 mi.)	U112	254
MONTGOMERY STREET PR Facility Id: 60000807 Status: Inactive - Needs Evaluation	21659 MISSION BOULEV	NE 1/2 - 1 (0.908 mi.)	114	258
GRAND PLACE, LLC Facility Id: 1010007 Status: Active	***22815 SUTRO STREET***	***E 1/2 - 1 (0.974 mi.)***	***115***	***259***

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 12/14/2015 has revealed that there are 16 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TOMMYS AUTO BODY Status: Completed - Case Closed Facility Id: 01-0639	***22383 MEEKLAND AVE***	***E 0 - 1/8 (0.110 mi.)***	***E34***	***151***

Facility Status: Case Closed Global Id: T0600100589 date9: 4/16/1993				
HELMUT MOTORS Status: Completed - Case Closed Facility Id: 01-0752 Facility Status: Case Closed Global Id: T0600191687 date9: 4/19/1993	82 A	ESE 1/8 - 1/4 (0.179 mi.)	J67	188
SELECT FOODS Status: Completed - Case Closed Facility Id: 01-2468 Facility Status: Leak being confirmed Global Id: T0600102276	***22600 AMADOR ST***	***SE 1/4 - 1/2 (0.274 mi.)***	***N85***	***201***
THRIFTY OIL STN. #06 Status: Completed - Case Closed Facility Id: 01-1475 Facility Status: Case Closed Global Id: T0600101362 date9: 3/22/2001	***207 A ST***	***E 1/4 - 1/2 (0.294 mi.)***	***O87***	***205***
SUNSET HIGH SCHOOL Facility Id: 01-1440 Facility Status: Leak being confirmed	22100 PRINCETON	NE 1/4 - 1/2 (0.311 mi.)	P90	210
BEATRICE HUNT WESSON Status: Completed - Case Closed Facility Id: 01-0432 Facility Status: Case Closed Global Id: T0600100392 date9: 1/22/1997	***199 C ST***	***ESE 1/4 - 1/2 (0.471 mi.)***	***T105***	***240***

Lower Elevation	Address	Direction / Distance	Map ID	Page
DIAMOND BATHURST Status: Completed - Case Closed Facility Id: 01-0489 Facility Status: Case Closed Global Id: T0600100445 date9: 4/2/2002	***22302 HATHAWAY AVE***	***WSW 0 - 1/8 (0.085 mi.)***	***D22***	***123***
BUETTNER & HOYT Status: Completed - Case Closed Facility Id: 01-0782 Facility Status: Case Closed Global Id: T0600100719 date9: 5/28/1993	***22117 MEEKLAND AVE***	***N 0 - 1/8 (0.096 mi.)***	***C29***	***146***
PRICE CLUB Status: Completed - Case Closed Global Id: T0600101111	***22300 HATHAWAY AVE***	***W 1/8 - 1/4 (0.128 mi.)***	***H40***	***161***
PRICE CLUB Facility Id: 01-1208 Facility Status: Case Closed date9: 10/20/1994	***22300 HATHAWAY AVE***	***W 1/8 - 1/4 (0.128 mi.)***	***H41***	***163***
KD CEDAR	***22008 MEEKLAND***	***N 1/8 - 1/4 (0.148 mi.)***	***I53***	***171***

Status: Completed - Case Closed
Facility Id: 01-0837
Facility Status: Case Closed
Global Id: T0600100771
date9: 1/11/1995

TOSCO - FACILITY #37	***391 A ST W***	***WSW 1/8 - 1/4 (0.202 mi.)***	***M82***	***197***
Status: Completed - Case Closed Facility Id: 01-1595 Facility Status: Remediation Plan Global Id: T0600101470				
RAS-CO MANUFACTURING	413 WEST SUNSET BLVD	WNW 1/4 - 1/2 (0.408 mi.)	Q95	221
Status: Completed - Case Closed Facility Id: 01-2121 Facility Status: Preliminary site assessment underway Global Id: T0600101947				
EZ SERVE #100877	***525 A STREET***	***WSW 1/4 - 1/2 (0.416 mi.)***	***R99***	***228***
Status: Open - Site Assessment Facility Id: 01-0529 Facility Status: Pollution Characterization Global Id: T0600100483				
BECK ROOFING	21123 MEEKLAND AVE	NNW 1/4 - 1/2 (0.451 mi.)	S103	238
Facility Id: 01-0176 Facility Status: Preliminary site assessment underway				
BECK ROOFING	***21123 MEEKLAND AVE***	***NNW 1/4 - 1/2 (0.451 mi.)***	***S104***	***239***
Status: Completed - Case Closed Global Id: T0600100163				

SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the SLIC list, as provided by EDR, and dated 12/14/2015 has revealed that there are 5 SLIC sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BERGLIN CORPORATION Facility Status: Completed - Case Closed Global Id: T06019775228	***22313 MEEKLAND***	***ENE 0 - 1/8 (0.072 mi.)***	***B11***	***111***
SELECT-SYSCO FOODS, Facility Status: Completed - Case Closed Global Id: T0600101211	***22678 AMADOR ST***	***SE 1/4 - 1/2 (0.276 mi.)***	***N86***	***204***
SELECT FOODS Facility Status: Completed - Case Closed Global Id: T0600137550	***22885 AMADOR ST***	***SE 1/4 - 1/2 (0.350 mi.)***	***93***	***212***
BEATRICE HUNT WESSON Facility Status: Completed - Case Closed Global Id: T0600196700	***199 C ST***	***ESE 1/4 - 1/2 (0.471 mi.)***	***T105***	***240***

Lower Elevation	Address	Direction / Distance	Map ID	Page
DIAMOND BATHURST Facility Status: Open - Remediation	***22302 HATHAWAY AVE***	***WSW 0 - 1/8 (0.085 mi.)***	***D22***	***123***

EXECUTIVE SUMMARY

Global Id: SL600192808

Alameda County CS: 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).

A review of the Alameda County CS list, as provided by EDR, and dated 01/11/2016 has revealed that there are 10 Alameda County CS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BERGLIN CORPORATION Status: Case Closed Record Id: RO0002694	***22313 MEEKLAND***	***ENE 0 - 1/8 (0.072 mi.)***	***B11***	***111***
TOMMYS AUTO BODY Status: Case Closed Record Id: RO0001167	***22383 MEEKLAND AVE***	***E 0 - 1/8 (0.110 mi.)***	***E34***	***151***
HELMUT MOTORS Status: Leak Confirmation Status: Case Closed Record Id: RO0002454	82 W A ST	SSE 1/8 - 1/4 (0.135 mi.)	F47	166
SELECT FOODS Record Id: RO0000165	***22600 AMADOR ST***	***SE 1/4 - 1/2 (0.274 mi.)***	***N85***	***201***

Lower Elevation	Address	Direction / Distance	Map ID	Page
BUETTNER & HOYT Status: Case Closed Record Id: RO0001119	***22117 MEEKLAND AVE***	***N 0 - 1/8 (0.096 mi.)***	***C29***	***146***
KD CEDAR Status: Case Closed Record Id: RO0000518	***22008 MEEKLAND***	***N 1/8 - 1/4 (0.148 mi.)***	***I53***	***171***
UNOCAL #3791 Record Id: RO0002552	391 W A ST	WSW 1/8 - 1/4 (0.202 mi.)	M77	194
RAS-CO MANUFACTURING Status: Pollution Characterization Status: Case Closed Record Id: RO0000164	***413 W SUNSET BLVD***	***WNW 1/4 - 1/2 (0.408 mi.)***	***Q96***	***226***
EZ SERVE #100877 Status: Pollution Characterization Record Id: RO0000023	525 W A ST	WSW 1/4 - 1/2 (0.416 mi.)	R98	228
BECK ROOFING Status: Case Closed Record Id: RO0000224	***21123 MEEKLAND AVE***	***NNW 1/4 - 1/2 (0.451 mi.)***	***S104***	***239***

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 12/14/2015 has revealed that there are 3 UST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TESORO (USA) 63062 Facility Id: 01-003-080302	207 A ST	E 1/4 - 1/2 (0.294 mi.)	O88	208

Lower Elevation	Address	Direction / Distance	Map ID	Page
NEW RAJA 76 CIRCLE K Facility Id: 01-003-001105	391 A ST WEST	WSW 1/8 - 1/4 (0.202 mi.)	M75	193
KB VALERO (CUPA) Facility Id: FA0304218 Facility Status: 01	525 W A ST	WSW 1/4 - 1/2 (0.416 mi.)	R97	227

State and tribal voluntary cleanup sites

VCP: 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.

A review of the VCP list, as provided by EDR, and dated 02/01/2016 has revealed that there is 1 VCP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BURBANK ELEMENTARY Status: No Further Action Facility Id: 60001840	***B STREET AND FILBERT***	***E 1/4 - 1/2 (0.396 mi.)***	***94***	***219***

State and tribal Brownfields sites

BROWNFIELDS: A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

A review of the BROWNFIELDS list, as provided by EDR, and dated 12/04/2015 has revealed that there are 2 BROWNFIELDS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SELECT FOODS	***22885 AMADOR ST***	***SE 1/4 - 1/2 (0.350 mi.)***	***93***	***212***
BEATRICE HUNT WESSON	***199 C ST***	***ESE 1/4 - 1/2 (0.471 mi.)***	***T105***	***240***

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: The EPA's listing of Brownfields properties from the Cleanups in My Community program, which provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

A review of the US BROWNFIELDS list, as provided by EDR, and dated 12/22/2015 has revealed that there are 2 US BROWNFIELDS sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
HAYWARD CANNERY AREA	MULTIPLE ADDRESSES	S 0 - 1/8 (0.025 mi.)	A8	16
HAYWARD CANNERY AREA	MULTIPLE ADDRESSES	S 0 - 1/8 (0.025 mi.)	A10	106

Local Lists of Registered Storage Tanks

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 9 SWEEPS UST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
THRIFTY OIL STN. #06 Status: A Tank Status: A Comp Number: 4708	***207 A ST***	***E 1/4 - 1/2 (0.294 mi.)***	***O87***	***205***
SUNSET HIGH SCHOOL Comp Number: 42697	***22100 PRINCETON ST***	***NE 1/4 - 1/2 (0.311 mi.)***	***P89***	***209***
SELECT FOODS Status: A Tank Status: A Comp Number: 2761	***22885 AMADOR ST***	***SE 1/4 - 1/2 (0.350 mi.)***	***93***	***212***
BEATRICE HUNT WESSON Status: A Tank Status: A Comp Number: 14510	***199 C ST***	***ESE 1/4 - 1/2 (0.471 mi.)***	***T105***	***240***

Lower Elevation	Address	Direction / Distance	Map ID	Page
PRICE CLUB Comp Number: 2230	22300 HATHWAY AVE	W 1/8 - 1/4 (0.128 mi.)	H42	165
RAYBERN FOODS Comp Number: 304578	***311 W A ST***	***SSW 1/8 - 1/4 (0.139 mi.)***	***G49***	***167***
UNOCAL SERVICE STATI Status: A	***391 W A ST***	***WSW 1/8 - 1/4 (0.202 mi.)***	***M81***	***196***

Tank Status: A Comp Number: 31666				
VIC HUBBARD AUTO SUP Comp Number: 12	***411 W A ST***	***WSW 1/4 - 1/2 (0.331 mi.)***	***92***	***211***
RAS-CO MANUFACTURING Status: A Tank Status: A Comp Number: 304118	***413 W SUNSET BLVD***	***WNW 1/4 - 1/2 (0.408 mi.)***	***Q96***	***226***

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 7 HIST UST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SELECT-SYSCO FOODS,	***22678 AMADOR ST***	***SE 1/4 - 1/2 (0.276 mi.)***	***N86***	***204***
SUNSET HIGH SCHOOL	***22100 PRINCETON ST***	***NE 1/4 - 1/2 (0.311 mi.)***	***P89***	***209***
UNITED CAN COMPANY Facility Id: 00000014510	***199 C STREET***	***ESE 1/4 - 1/2 (0.471 mi.)***	***T106***	***245***

Lower Elevation	Address	Direction / Distance	Map ID	Page
DIAMOND CONTAINER GE Facility Id: 00000009757	22303 HATHAWAY	SW 0 - 1/8 (0.095 mi.)	D27	145
EMPIRE TRACTOR AND E	***22117 MACKLAND AVE***	***N 0 - 1/8 (0.101 mi.)***	***C31***	***147***
UNION OIL SS 3791	***391 WEST A ST***	***WSW 1/8 - 1/4 (0.202 mi.)***	***M76***	***193***
RESTRUCTURE PETROLEU	***525 WEST A ST***	***WSW 1/4 - 1/2 (0.416 mi.)***	***R100***	***235***

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 9 CA FID UST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SELECT-SYSCO FOODS, Facility Id: 01002862 Status: A	***22678 AMADOR ST***	***SE 1/4 - 1/2 (0.276 mi.)***	***N86***	***204***
THRIFTY OIL STN. #06 Facility Id: 01001594 Status: A	***207 A ST***	***E 1/4 - 1/2 (0.294 mi.)***	***O87***	***205***
SUNSET HIGH SCHOOL Facility Id: 01001553 Status: I	***22100 PRINCETON ST***	***NE 1/4 - 1/2 (0.311 mi.)***	***P89***	***209***
BEATRICE HUNT WESSON Facility Id: 01000295 Status: A	***199 C ST***	***ESE 1/4 - 1/2 (0.471 mi.)***	***T105***	***240***

Lower Elevation	Address	Direction / Distance	Map ID	Page
EMPIRE TRACTOR AND E	***22117 MACKLAND AVE***	***N 0 - 1/8 (0.101 mi.)***	***C31***	***147***

Facility Id: 01002919 Status: A				
PRICE CLUB Facility Id: 01001325 Status: I	***22300 HATHAWAY AVE***	***W 1/8 - 1/4 (0.128 mi.)***	***H41***	***163***
UNOCAL SERVICE STATI Facility Id: 01001703 Status: A	***391 W A ST***	***WSW 1/8 - 1/4 (0.202 mi.)***	***M81***	***196***
VIC HUBBARD AUTO SUP Facility Id: 01001753 Status: I	***411 W A ST***	***WSW 1/4 - 1/2 (0.331 mi.)***	***92***	***211***
FILL-EM'-FAST 171-04 Facility Id: 01000657 Status: A	525 W A ST	WSW 1/4 - 1/2 (0.416 mi.)	R101	236

Other Ascertainable Records

RCRA NonGen / NLR: 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.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 06/09/2015 has revealed that there are 2 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TERRYS T T AUTO BODY	22301 MEEKLAND AVE	NE 0 - 1/8 (0.072 mi.)	B12	111

Lower Elevation	Address	Direction / Distance	Map ID	Page
ACOUSTIC SPRAY CEILI	***22102 MEEKLAND AVE***	***N 0 - 1/8 (0.106 mi.)***	***C32***	***148***

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 07/20/2015 has revealed that there are 17 FINDS sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TERRYS BODY SHOP	***22301 MEEKLAND AVE***	***NE 0 - 1/8 (0.072 mi.)***	***B14***	***113***
MAIER RACING ENTERPR	***22215 MEEKLAND AVE***	***NNE 0 - 1/8 (0.074 mi.)***	***C16***	***120***
UNITED PRO PAINTING,	***22345 MEEKLAND AVE***	***E 0 - 1/8 (0.078 mi.)***	***B17***	***121***
MEEKLAND AUTO SERVIC	***22359 MEEKLAND AVE***	***E 0 - 1/8 (0.087 mi.)***	***E24***	***136***
V&V AUTOMOTIVE	***22359 MEEKLAND AVE,***	***E 0 - 1/8 (0.087 mi.)***	***E25***	***144***

EXECUTIVE SUMMARY

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TOMMYS AUTO BODY	*22383 MEEKLAND AVE*	*E 0 - 1/8 (0.110 mi.)*	*E34*	*151*
PEPES AUTO BODY	*30 A STREET*	*ESE 1/8 - 1/4 (0.164 mi.)*	*J63*	*176*

Lower Elevation	Address	Direction / Distance	Map ID	Page
HAYWARD CANNERY AREA	*MULTIPLE ADDRESSES*	*S 0 - 1/8 (0.025 mi.)*	*A9*	*106*
PENSKE TRUCK LEASING	*22320 HATHAWAY AVE*	*SW 0 - 1/8 (0.081 mi.)*	*D19*	*121*
OWENS-BROCKWAY GLASS	*22302 HATHAWAY AVE.*	*WSW 0 - 1/8 (0.085 mi.)*	*D21*	*122*
OWENS BROCKWAY GLASS	*22301 HATHAWAY AVE*	*SW 0 - 1/8 (0.095 mi.)*	*D28*	*145*
ACOUSTIC SPRAY CEILI	*22102 MEEKLAND AVE*	*N 0 - 1/8 (0.106 mi.)*	*C32*	*148*
PRICE CLUB	*22300 HATHAWAY AVE*	*W 1/8 - 1/4 (0.128 mi.)*	*H41*	*163*
WOOD AM SUPPORT SERV	*22051 HATHAWAY ST.*	*W 1/8 - 1/4 (0.133 mi.)*	*H45*	*166*
VARGAS TURBO AND DIE	*22018 MEEKLAND AVE*	*N 1/8 - 1/4 (0.144 mi.)*	*I52*	*171*
RAINBOW AUTO BODY	*22008 MEEKLAND AVE*	*N 1/8 - 1/4 (0.148 mi.)*	*I54*	*173*
BRITISH PARTS AND SE	*335 W A ST*	*SW 1/8 - 1/4 (0.165 mi.)*	*K64*	*185*

ENF: A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

A review of the ENF list, as provided by EDR, and dated 01/26/2016 has revealed that there are 2 ENF sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ASPI - HAYWARD Status: Historical Status: Never Active Facility Id: 206576	B & WATKINS	ENE 1/2 - 1 (0.976 mi.)	116	263

Lower Elevation	Address	Direction / Distance	Map ID	Page
DIAMOND BATHURST Status: Active Status: Withdrawn Status: Never Active Facility Id: 275122	*22302 HATHAWAY AVE*	*WSW 0 - 1/8 (0.085 mi.)*	*D22*	*123*

HIST CORTESE: 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.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 15 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TOMMYS AUTO BODY Reg Id: 01-0639	*22383 MEEKLAND AVE*	*E 0 - 1/8 (0.110 mi.)*	*E34*	*151*
PIOPAO PROPERTY Reg Id: 01-1181	100 A	ESE 1/8 - 1/4 (0.186 mi.)	J69	191
THRIFTY OIL STN. #06	*207 A ST*	*E 1/4 - 1/2 (0.294 mi.)*	*O87*	*205*

Reg Id: 01-1475 Reg Id: 2733				
SUNSET HIGH SCHOOL Reg Id: 01-1440	22100 PRINCETON	NE 1/4 - 1/2 (0.311 mi.)	P91	211
SELECT FOODS Reg Id: 01-1316	***22885 AMADOR ST***	***SE 1/4 - 1/2 (0.350 mi.)***	***93***	***212***
BEATRICE HUNT WESSON Reg Id: 01-0432	***199 C ST***	***ESE 1/4 - 1/2 (0.471 mi.)***	***T105***	***240***
RAS CO MANUFACTURING Reg Id: 01-2121	413 SUNSET	NE 1/4 - 1/2 (0.476 mi.)	107	248
VIC HUBBARD Reg Id: 01-1635	411 A	E 1/4 - 1/2 (0.483 mi.)	108	248

Lower Elevation	Address	Direction / Distance	Map ID	Page
DIAMOND BATHURST Reg Id: 01-0489	***22302 HATHAWAY AVE***	***WSW 0 - 1/8 (0.085 mi.)***	***D22***	***123***
BUETTNER & HOYT Reg Id: 01-0782	***22117 MEEKLAND AVE***	***N 0 - 1/8 (0.096 mi.)***	***C29***	***146***
PRICE CLUB Reg Id: 01-1208	***22300 HATHAWAY AVE***	***W 1/8 - 1/4 (0.128 mi.)***	***H40***	***161***
KD CEDAR Reg Id: 01-0837	***22008 MEEKLAND***	***N 1/8 - 1/4 (0.148 mi.)***	***I53***	***171***
TOSCO - FACILITY #37 Reg Id: 01-1595	***391 A ST W***	***WSW 1/8 - 1/4 (0.202 mi.)***	***M82***	***197***
EZ SERVE #100877 Reg Id: 01-0529	***525 A STREET***	***WSW 1/4 - 1/2 (0.416 mi.)***	***R99***	***228***
BECK ROOFING Reg Id: 01-0176	***21123 MEEKLAND AVE***	***NNW 1/4 - 1/2 (0.451 mi.)***	***S104***	***239***

HWP: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

A review of the HWP list, as provided by EDR, and dated 02/22/2016 has revealed that there is 1 HWP site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
DIAMOND BATHURST EPA Id: CAD051903847 Cleanup Status: CLOSED	***22302 HATHAWAY AVE***	***WSW 0 - 1/8 (0.085 mi.)***	***D22***	***123***

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 09/10/2015 has revealed that there are

EXECUTIVE SUMMARY

3 Notify 65 sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SUMMERHILL DEVELOPME	85 WEST WINTON AVE.	SE 1/2 - 1 (0.771 mi.)	U111	254
EX CLEAN	***54 MORAN***	***SE 1/2 - 1 (0.805 mi.)***	***113***	***255***

Lower Elevation	Address	Direction / Distance	Map ID	Page
DURHAM TRANSPORTATIO	***19984 MEEKLAND AVE***	***NNW 1/2 - 1 (0.650 mi.)***	***110***	***252***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: 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 Hist Auto list, as provided by EDR, has revealed that there are 33 EDR Hist Auto sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	22301 MEEKLAND AVE	NE 0 - 1/8 (0.072 mi.)	B13	112
Not reported	22215 MEEKLAND AVE	NNE 0 - 1/8 (0.074 mi.)	C15	120
COLLINS BODY SHOP	22240 MEEKLAND AVE	NNE 0 - 1/8 (0.080 mi.)	B18	121
Not reported	22336 MEEKLAND AVE	ENE 0 - 1/8 (0.081 mi.)	B20	122
Not reported	22359 MEEKLAND AVE	E 0 - 1/8 (0.087 mi.)	E26	144
Not reported	22369 MEEKLAND AVE	E 0 - 1/8 (0.096 mi.)	E30	147
Not reported	22383 MEEKLAND AVE	E 0 - 1/8 (0.110 mi.)	E33	150
RUE S SERVICE STATIO	2 A ST	ESE 1/8 - 1/4 (0.158 mi.)	J57	174
WHEELER MORTON L	2 A AT S P TRACKS	ESE 1/8 - 1/4 (0.158 mi.)	J58	174
Not reported	30 A ST	ESE 1/8 - 1/4 (0.164 mi.)	J62	175
Not reported	44 A ST	ESE 1/8 - 1/4 (0.168 mi.)	J65	187
S-M BODY WORKS	159 SMALLEY AVE	E 1/8 - 1/4 (0.171 mi.)	66	188
Not reported	82 A ST	ESE 1/8 - 1/4 (0.179 mi.)	J68	190
DOILIS FLYING A SERV	100 A ST	ESE 1/8 - 1/4 (0.186 mi.)	J70	191
BOB S SHELL SERVICE	109 A ST	ESE 1/8 - 1/4 (0.220 mi.)	L84	200

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	263 W A ST	SSW 0 - 1/8 (0.120 mi.)	G36	160
GEORGE S RICHFIELD S	263 WEST A ST	SSW 0 - 1/8 (0.120 mi.)	G37	161
GEORGE S RICHFIELD S	263 WEST A	SSW 0 - 1/8 (0.120 mi.)	G38	161
SUNSET GARAGE & BRAK	271 WEST A ST	SSW 0 - 1/8 (0.123 mi.)	G39	161
MARTIN S KEN AUTOMOT	22035 MEEKLAND AVE	N 1/8 - 1/4 (0.133 mi.)	I44	166
Not reported	311 W A ST	SSW 1/8 - 1/4 (0.139 mi.)	G48	167
Not reported	22018 MEEKLAND AVE	N 1/8 - 1/4 (0.144 mi.)	I51	170
Not reported	22008 MEEKLAND AVE	N 1/8 - 1/4 (0.148 mi.)	I55	173

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
PAUL S FLYING A SERV	310 WEST A	SSW 1/8 - 1/4 (0.159 mi.)	G59	174
WEST A FLYING A SERV	310 WEST A ST	SSW 1/8 - 1/4 (0.159 mi.)	G60	175
Not reported	21980 MEEKLAND AVE	N 1/8 - 1/4 (0.161 mi.)	I61	175
Not reported	352 W A ST	SW 1/8 - 1/4 (0.192 mi.)	K71	192
A STREET DOUGLAS SER	352 WEST A ST	SW 1/8 - 1/4 (0.192 mi.)	K72	192
Not reported	22457 SONOMA ST	S 1/8 - 1/4 (0.200 mi.)	74	193
ROSE UNION SERVICE	391 WEST A ST	WSW 1/8 - 1/4 (0.202 mi.)	M78	195
Not reported	391 W A ST	WSW 1/8 - 1/4 (0.202 mi.)	M79	195
WOODARD UNION SERVIC	391 WEST A	WSW 1/8 - 1/4 (0.202 mi.)	M80	195
FREEWAY GARAGE	373 WEST A ST	SW 1/8 - 1/4 (0.204 mi.)	K83	200

EDR Hist Cleaner: 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.

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

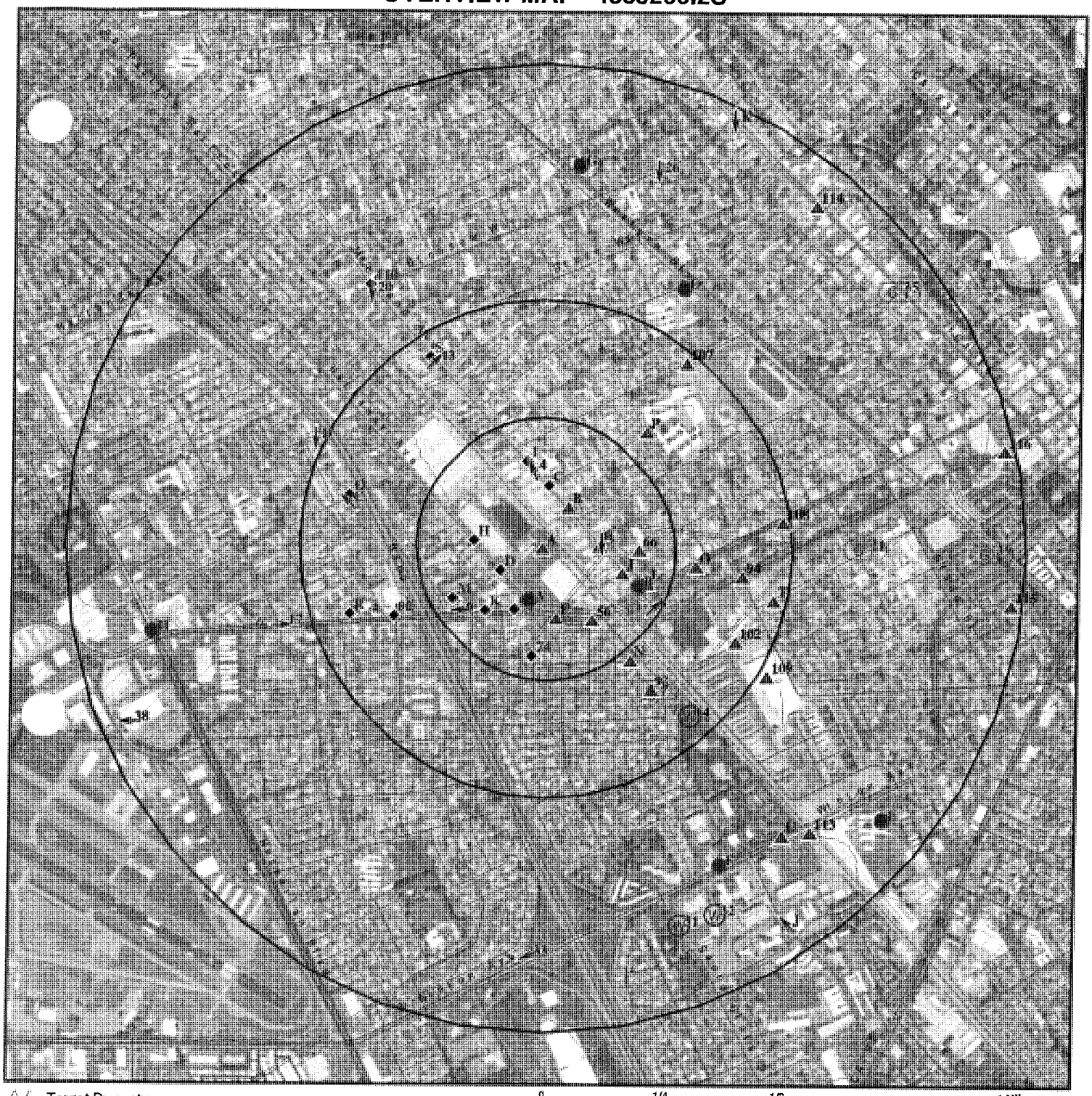
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BELL LAUNDERETT & CL	208 WEST A	SSE 0 - 1/8 (0.119 mi.)	F35	160
PRICE RITE CLEANERS	112 A ST	ESE 1/8 - 1/4 (0.199 mi.)	L73	192

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	280 W A ST	SSW 1/8 - 1/4 (0.129 mi.)	G43	165

EXECUTIVE SUMMARY

There were no unmapped sites in this report.

OVERVIEW MAP - 4583200.2S



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

Pipelines

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

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: Costco Hayward ADDRESS: 22330 Hathaway Avenue Hayward CA 94541 LAT/LONG: 37.66843 / 122.103041	CLIENT: Kleinfelder, Inc. CONTACT: Lindsey Dandridge-Perry INQUIRY #: 4583200.2s DATE: April 05, 2016 3:35 pm

DETAIL MAP - 4583200.2S

Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

Pipelines

100-year flood zone

500-year flood zone

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: Costco Hayward ADDRESS: 22330 Hathaway Avenue Hayward CA 94541 LAT/LONG: 37.66843 / 122.103041	CLIENT: Kleinfelder, Inc. CONTACT: Lindsey Dandridge-Perry INQUIRY #: 4583200.2s DATE: April 05, 2016 3:37 pm

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	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	0.500		0	0	0	NR	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	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	1.000		0	0	0	0	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250	1	3	3	NR	NR	NR	7
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	TP		NR	NR	NR	NR	NR	0
US INST CONTROL	TP		NR	NR	NR	NR	NR	0
Federal ERNS list								
ERNS	0.250		0	3	NR	NR	NR	3
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	2	4	NR	6
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	1.000		0	0	0	0	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		3	5	8	NR	NR	16

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
INDIAN LUST	0.500		0	0	0	NR	NR	0
SLIC	0.500		2	0	3	NR	NR	5
Alameda County CS	0.500		3	3	4	NR	NR	10
State and tribal registered storage tank lists								
FEMA UST	0.500		0	0	0	NR	NR	0
UST	0.500		0	1	2	NR	NR	3
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	1	NR	NR	1
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	2	NR	NR	2
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		2	0	0	NR	NR	2
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500	1	0	0	0	NR	NR	1
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	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
CDL	TP		NR	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.500		0	3	6	NR	NR	9
HIST UST	0.500		2	1	4	NR	NR	7
CA FID UST	0.500		1	2	6	NR	NR	9
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	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
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		2	0	NR	NR	NR	2
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	0.250		0	0	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	1.000		0	0	0	0	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.250	2	11	6	NR	NR	NR	19
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	TP	2	NR	NR	NR	NR	NR	2
ENF	1.000		1	0	0	1	NR	2
Financial Assurance	TP		NR	NR	NR	NR	NR	0
HAZNET	TP	2	NR	NR	NR	NR	NR	2
HIST CORTESE	0.500		3	4	8	NR	NR	15
HWP	1.000		1	0	0	0	NR	1
HWT	0.250		0	0	NR	NR	NR	0
MINES	TP		NR	NR	NR	NR	NR	0
MWMP	0.250		0	0	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
NPDES	TP		NR	NR	NR	NR	NR	0
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	3	NR	3
UIC	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
ECHO	TP	2	NR	NR	NR	NR	NR	2
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.250		11	22	NR	NR	NR	33
EDR Hist Cleaner	0.250		1	2	NR	NR	NR	3
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		10	46	55	46	8	0	165

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 Target Property **COSTCO (STORE #823)**
22330 HATHAWAY AVE
HAYWARD, CA 94541

HAZNET **S112902066**
N/A

Site 1 of 10 in cluster A

Actual: 67 ft.

HAZNET:

envid:	S112902066
Year:	2008
GEPAID:	CAC002187886
Contact:	TONY GRAHAM
Telephone:	5103776183
Mailing Name:	Not reported
Mailing Address:	22330 HATHAWAY AVE
Mailing City,St,Zip:	HAYWARD, CA 945414861
Gen County:	Not reported
TSD EPA ID:	TXD077603371
TSD County:	Not reported
Waste Category:	Off-specification, aged or surplus organics
Disposal Method:	Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.35
Cat Decode:	Off-specification, aged or surplus organics
Method Decode:	Fuel Blending Prior To Energy Recovery At Another Site
Facility County:	Alameda

A2 Target Property **COSTCO WHOLESALE BUSINESS CENTER NO 823**
22330 HATHAWAY AVE
HAYWARD, CA 94541

RCRA-SQG **1014387546**
HAZNET **CAR000210997**

Site 2 of 10 in cluster A

Actual: 67 ft.

RCRA-SQG:

Date form received by agency:	03/28/2011
Facility name:	COSTCO WHOLESALE BUSINESS CENTER NO 823
Facility address:	22330 HATHAWAY AVE HAYWARD, CA 94541
EPA ID:	CAR000210997
Mailing address:	999 LAKE DRIVE ATTN LISA SIMPSON ISSAQUAH, WA 98027
Contact:	LISA SIMPSON
Contact address:	999 LAKE DRIVE ISSAQUAH, WA 98027
Contact country:	US
Contact telephone:	425-313-6275
Contact email:	LSIMPSON@COSTCO.COM
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	GENE LAUGHERY
Owner/operator address:	Not reported Not reported
Owner/operator country:	US

COSTCO WHOLESALE BUSINESS CENTER NO 823 (Continued) **1014387546**

Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 06/01/2004
Owner/Op end date: Not reported

Owner/operator name: COSTCO WHOLESALE CORP
Owner/operator address: 999 LAKE DRIVE
ISSAQUAH, WA 98027
Owner/operator country: US
Owner/operator telephone: 425-313-8100
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 11/01/1996
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Historical Generators:
Date form received by agency: 08/04/2010
Site name: COSTCO WHOLESALE BUSINESS CENTER NO 823
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

HAZNET:
envid: 1014387546
Year: 2014
GEPAID: CAR000210997
Contact: LISA SIMPSON
Telephone: 4253136275
Mailing Name: Not reported
Mailing Address: PO BOX 35005
Mailing City,St,Zip: SEATTLE, WA 981243405
Gen County: Alameda
TSD EPA ID: INR000110197

COSTCO WHOLESALE BUSINESS CENTER NO 823 (Continued) **1014387546**

TSD County:	Not reported
Waste Category:	Alkaline solution without metals pH >= 12.5
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0805
Cat Decode:	Alkaline solution without metals pH >= 12.5
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Alameda

envid:	1014387546
Year:	2014
GEPAID:	CAR000210997
Contact:	LISA SIMPSON
Telephone:	4253136275
Mailing Name:	Not reported
Mailing Address:	PO BOX 35005
Mailing City,St,Zip:	SEATTLE, WA 981243405
Gen County:	Alameda
TSD EPA ID:	INR000110197
TSD County:	Not reported
Waste Category:	Off-specification, aged or surplus inorganics
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0175
Cat Decode:	Off-specification, aged or surplus inorganics
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Alameda

envid:	1014387546
Year:	2014
GEPAID:	CAR000210997
Contact:	LISA SIMPSON
Telephone:	4253136275
Mailing Name:	Not reported
Mailing Address:	PO BOX 35005
Mailing City,St,Zip:	SEATTLE, WA 981243405
Gen County:	Alameda
TSD EPA ID:	INR000110197
TSD County:	Not reported
Waste Category:	Other organic solids
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.029
Cat Decode:	Other organic solids
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Alameda

envid:	1014387546
Year:	2014
GEPAID:	CAR000210997
Contact:	LISA SIMPSON
Telephone:	4253136275
Mailing Name:	Not reported
Mailing Address:	PO BOX 35005

COSTCO WHOLESALE BUSINESS CENTER NO 823 (Continued) **1014387546**

Mailing City,St,Zip:	SEATTLE, WA 981243405
Gen County:	Alameda
TSD EPA ID:	NVD980895338
TSD County:	99
Waste Category:	Alkaline solution without metals pH >= 12.5
Disposal Method:	Neutralization Only
Tons:	0.012
Cat Decode:	Alkaline solution without metals pH >= 12.5
Method Decode:	Neutralization Only
Facility County:	Alameda

envid:	1014387546
Year:	2014
GEPAID:	CAR000210997
Contact:	LISA SIMPSON
Telephone:	4253136275
Mailing Name:	Not reported
Mailing Address:	PO BOX 35005
Mailing City,St,Zip:	SEATTLE, WA 981243405
Gen County:	Alameda
TSD EPA ID:	NVD980895338
TSD County:	99
Waste Category:	Off-specification, aged or surplus organics
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0445
Cat Decode:	Off-specification, aged or surplus organics
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Alameda

Click this hyperlink while viewing on your computer to access
26 additional CA_HAZNET: record(s) in the EDR Site Report.

A3 Target Property **COSTCO WHOLESALE**
22330 HATHAWAY AVE
HAYWARD, CA 94541

ECHO **1017480502**
N/A

Site 3 of 10 in cluster A

Actual: 67 ft.

ECHO:

Envid:	1017480502
Registry ID:	110038005262
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110038005262

A4 Target Property **COSTCO WHOLESALE**
22330 HATHAWAY AVE
HAYWARD, CA 94541

FINDS **1011988571**
N/A

Site 4 of 10 in cluster A

Actual: 67 ft.

FINDS:

Registry ID: 110038005262

Environmental Interest/Information System

COSTCO WHOLESALE (Continued) **1011988571**

AIR EMISSIONS CLASSIFICATION UNKNOWN

STATE MASTER

A5 Target Property **COSTCO WHOLESALE BUSINESS CENTER NO 823**
22330 HATHAWAY AVE
HAYWARD, CA 94541

FINDS 1014671283
ECHO N/A

Site 5 of 10 in cluster A

Actual: 67 ft.

FINDS:

Registry ID: 110042171930

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:

Envid:	1014671283
Registry ID:	110042171930
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110042171930

A6 Target Property **COSTCO BUSINESS CENTER**
22330 HATHAWAY AVE
HAYWARD, CA 94541

EMI S108431590
N/A

Site 6 of 10 in cluster A

Actual: 67 ft.

EMI:

Year:	2005
County Code:	1
Air Basin:	SF
Facility ID:	16607
Air District Name:	BA
SIC Code:	6512
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.008
Reactive Organic Gases Tons/Yr:	.0066936
Carbon Monoxide Emissions Tons/Yr:	.022
NOX - Oxides of Nitrogen Tons/Yr:	.1
SOX - Oxides of Sulphur Tons/Yr:	.002
Particulate Matter Tons/Yr:	.007
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.006832

Year:	2006
County Code:	1
Air Basin:	SF

COSTCO BUSINESS CENTER (Continued) **S108431590**

Facility ID:	16607
Air District Name:	BA
SIC Code:	6512
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.008
Reactive Organic Gases Tons/Yr:	.0066936
Carbon Monoxide Emissions Tons/Yr:	.022
NOX - Oxides of Nitrogen Tons/Yr:	.1
SOX - Oxides of Sulphur Tons/Yr:	.002
Particulate Matter Tons/Yr:	.007
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.006832

Year:	2007
County Code:	1
Air Basin:	SF
Facility ID:	16607
Air District Name:	BA
SIC Code:	6512
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.008
Reactive Organic Gases Tons/Yr:	.0066936
Carbon Monoxide Emissions Tons/Yr:	.022
NOX - Oxides of Nitrogen Tons/Yr:	.1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	.007
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.006832

Year:	2008
County Code:	1
Air Basin:	SF
Facility ID:	16607
Air District Name:	BA
SIC Code:	6512
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.008
Reactive Organic Gases Tons/Yr:	.0066936
Carbon Monoxide Emissions Tons/Yr:	.022
NOX - Oxides of Nitrogen Tons/Yr:	.1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	.007
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.006832

A7 Target Property **REPLANET LLC**
22330 HATHAWAY AVE
HAYWARD, CA 94541

SWRCY S113747769
EMI N/A

Site 7 of 10 in cluster A

Actual: 67 ft.

SWRCY:

Reg Id:	217900
Cert Id:	RC217900.001
Mailing Address:	800 N Haven Ave Suite 120
Mailing City:	Ontario
Mailing State:	CA
Mailing Zip Code:	91764
Website:	http://www.replanet.com
Email:	Not reported
Phone Number:	(877) 737-5263
Grand Father:	N
Rural:	N
Operation Begin Date:	11/01/2014
Aluminium:	Y
Glass:	Y
Plastic:	Y
Bimetal:	Y
Agency:	N/A
Monday Hours Of Operation:	CLOSED
Tuesday Hours Of Operation:	9:00 am - 3:30 pm; Closed 12:30 - 1:00 pm
Wednesday Hours Of Operation:	9:00 am - 3:30 pm; Closed 12:30 - 1:00 pm
Thursday Hours Of Operation:	9:00 am - 3:30 pm; Closed 12:30 - 1:00 pm
Friday Hours Of Operation:	9:00 am - 3:30 pm; Closed 12:30 - 1:00 pm
Saturday Hours Of Operation:	9:00 am - 3:30 pm; Closed 12:30 - 1:00 pm
Sunday Hours Of Operation:	CLOSED
Organization ID:	151891
Organization Name:	rePlanet LLC

EMI:

Year:	2009
County Code:	1
Air Basin:	SF
Facility ID:	16607
Air District Name:	BA
SIC Code:	6512
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0.001
NOX - Oxides of Nitrogen Tons/Yr:	4.0000000000000001E-3
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2010
County Code:	1
Air Basin:	SF
Facility ID:	16607
Air District Name:	BA
SIC Code:	6512
Air District Name:	BAY AREA AQMD

REPLANET LLC (Continued) **S113747769**

Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0.001
NOX - Oxides of Nitrogen Tons/Yr:	4.0000000000000001E-3
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2011
County Code:	1
Air Basin:	SF
Facility ID:	16607
Air District Name:	BA
SIC Code:	6512
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0.001
NOX - Oxides of Nitrogen Tons/Yr:	0.002
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2012
County Code:	1
Air Basin:	SF
Facility ID:	16607
Air District Name:	BA
SIC Code:	6512
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0.001
NOX - Oxides of Nitrogen Tons/Yr:	0.002
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2013
County Code:	1
Air Basin:	SF
Facility ID:	16607
Air District Name:	BA
SIC Code:	6512
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0.001
NOX - Oxides of Nitrogen Tons/Yr:	0.003

REPLANET LLC (Continued) **S113747769**

SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

A8 South < 1/8 0.025 mi. 131 ft. **HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN** **US BROWNFIELDS** **1007057768**
MULTIPLE ADDRESSES **N/A**
HAYWARD, CA 94541

Site 8 of 10 in cluster A

Relative: Lower

Actual: 64 ft.

US BROWNFIELDS:

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11250
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	25000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 1: OWENS BROCKWAY GLAS
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11241
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	2000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 3: CLAIRE STREET
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11242
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	2000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	n/a
Ownership entity:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 3: GRAND STREET
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11244
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	2000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: AMTRAK STATION
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11247
Start date:	Not reported
Completed date:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	25000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: RAILROAD RIGHT-OF-W
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11233
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	25000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: VACANT LAND
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11235
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	25000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: RESIDENTIAL LOT
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11238
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	2000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: SELECT FOODS
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11237
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	25000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 3: C STREET
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11240
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	25000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 1: WAREHOUSE
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11245
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	2000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: FOSTER FARMS DAIRY
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11232
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Cleanup funding source:	Not reported
Assessment funding:	2000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: BURBANK SCHOOL
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11234
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	2000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name: R9 Brownfields TBA (previously Superfund TBA)

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: CENTENNIAL PARK
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11239
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	2000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 3: ALICE STREET
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11243
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	2000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 1: WAREHOUSE
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11245
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	25000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: CANNERY PARK
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11248
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	2000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: VACANT PARCEL
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11249
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	25000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Grant type:	H
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11250
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Assessment funding:	2000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: BURBANK SCHOOL
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11234
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	25000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Property name:	HAYWARD CANNERY AREA-HAYWARD 2: SELECT FOODS
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11237
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	2000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 3: ALICE STREET
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11243
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	25000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: VACANT PARCEL
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11249
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	2000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 3: CLAIRE STREET
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11242
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	25000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 1: COSTCO RETAIL
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11230
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	25000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: CENTENNIAL PARK
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11239
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	25000

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 1: OWENS BROCKWAY GLAS
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Datum:	North American Datum of 1983
ACRES property ID:	11241
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	25000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 1: OWENS BROCKWAY WA

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11246
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	25000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 1: OWENS BROCKWAY WA
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11246
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	2000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: CANNERY PARK
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11248
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	25000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: RESIDENTIAL AREAS
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11236
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	25000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: RESIDENTIAL LOT
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11238
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	25000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase II Environmental Assessment

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 3: C STREET
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11240
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	2000
Assessment funding source:	US EPA - TBA Funding

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 3: GRAND STREET
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

ACRES property ID:	11244
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	25000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 1: COSTCO RETAIL
Property #:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11230
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	2000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: GSC LOGISTICS WAREH
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11231
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	25000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: FOSTER FARMS DAIRY
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11232
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	25000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: VACANT LAND
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11235
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	2000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: AMTRAK STATION
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11247
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	2000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	1

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: GSC LOGISTICS WAREH
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11231
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	2000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: RAILROAD RIGHT-OF-W
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11233

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	2000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: RESIDENTIAL AREAS
Property #:	Not reported
Parcel size:	115

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11236
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	2000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: UNITED CAN (Continued) **1007057768**

Unknown media cleaned up: Not reported
Past Use: Multistory Not reported

A9
South
< 1/8
0.025 mi.
131 ft.

HAYWARD CANNERY AREA-HAYWARD 2: FILBERT WAREHOUSE
MULTIPLE ADDRESSES
HAYWARD, CA 94541

FINDS **1016307033**
ECHO **N/A**

Site 9 of 10 in cluster A

Relative:
Lower

Actual:
64 ft.

FINDS:

Registry ID: 110015334440

Environmental Interest/Information System
US EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES) is an federal online database for Brownfields Grantees to electronically submit data directly to EPA.

ECHO:
Envid: 1016307033
Registry ID: 110015334440
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110015334440

A10
South
< 1/8
0.025 mi.
131 ft.

HAYWARD CANNERY AREA-HAYWARD 2: FILBERT WAREHOUSE
MULTIPLE ADDRESSES
HAYWARD, CA 94541

US BROWNFIELDS **1008377054**
N/A

Site 10 of 10 in cluster A

Relative:
Lower

Actual:
64 ft.

US BROWNFIELDS:

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: FILBERT WAREHOUSE
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11251
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	2000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA

HAYWARD CANNERY AREA-HAYWARD 2: FILBERT WAREHOUSE (Continued) **1008377054**

Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase I Environmental Assessment
Accomplishment count:	1
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: FILBERT WAREHOUSE (Continued) **1008377054**

Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

Recipient name:	R9 Brownfields TBA (previously Superfund TBA)
Grant type:	TBA
Property name:	HAYWARD CANNERY AREA-HAYWARD 2: FILBERT WAREHOUSE
Property #:	Not reported
Parcel size:	115
Property Description:	Not reported
Latitude:	37.667733
Longitude:	-122.103159
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	11251
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: FILBERT WAREHOUSE (Continued) **1008377054**

Cleanup funding source:	Not reported
Assessment funding:	25000
Assessment funding source:	US EPA - TBA Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not reported
Grant type:	H
Accomplishment type:	Phase II Environmental Assessment
Accomplishment count:	0
Cooperative agreement #:	n/a
Ownership entity:	Not reported
Current owner:	Not reported
Did owner change:	Not reported
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	U
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported

HAYWARD CANNERY AREA-HAYWARD 2: FILBERT WAREHOUSE (Continued) **1008377054**

Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

B11
ENE
< 1/8
0.072 mi.
378 ft.

BERGLIN CORPORATION
22313 MEEKLAND
HAYWARD, CA 94541

SLIC **S108245917**
Alameda County CS **N/A**

Site 1 of 7 in cluster B

Relative:
Higher

Actual:
69 ft.

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	01/13/1997
Global Id:	T06019775228
Lead Agency:	ALAMEDA COUNTY LOP
Lead Agency Case Number:	RO0002694
Latitude:	37.668828
Longitude:	-122.10192
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	NA
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affected:	Under Investigation
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

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

Alameda County CS:

Status:	Case Closed
Record Id:	RO0002694
PE:	5502
Facility Status:	Case Closed

B12
NE
< 1/8
0.072 mi.
380 ft.

TERRYS T T AUTO BODY
22301 MEEKLAND AVE
HAYWARD, CA 94541

RCRA NonGen / NLR **1015740020**
CAD981578529

Site 2 of 7 in cluster B

Relative:
Higher

Actual:
68 ft.

RCRA NonGen / NLR:

Date form received by agency:	08/09/2012
Facility name:	TERRYS T T AUTO BODY
Facility address:	22301 MEEKLAND AVE HAYWARD, CA 94541
EPA ID:	CAD981578529
Contact:	TROY THOMPSON
Contact address:	22301 MEEKLAND AVE HAYWARD, CA 94541
Contact country:	US
Contact telephone:	510-537-3010
Contact email:	TERRYAUTOBODY@GMAIL.COM
EPA Region:	09
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported

TERRYS T T AUTO BODY (Continued) **1015740020**

Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: TERRY THOMPSON
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 12/19/1986
Site name: TERRYS AUTO BODY
Classification: Small Quantity Generator

Violation Status: No violations found

B13 **EDR Hist Auto** **1015337939**
NE **22301 MEEKLAND AVE** **N/A**
< 1/8 **HAYWARD, CA 94541**
0.072 mi.
380 ft. **Site 3 of 7 in cluster B**

Relative:
Higher

Actual:
68 ft.

EDR Historical Auto Stations:
Name: R R WHEEL & BRAKE
Year: 1999
Address: 22301 MEEKLAND AVE

Name: R R WHEEL & BRAKE
Year: 2000
Address: 22301 MEEKLAND AVE

Name: RR WHEEL & BRAKE
Year: 2001
Address: 22301 MEEKLAND AVE

(Continued) **1015337939**

Name: RR WHEEL & BRAKE
Year: 2002
Address: 22301 MEEKLAND AVE

Name: RR WHEEL & BRAKE
Year: 2003
Address: 22301 MEEKLAND AVE

Name: TERRYS BODY SHOP INC
Year: 2004
Address: 22301 MEEKLAND AVE

Name: TERRYS BODY SHOP
Year: 2005
Address: 22301 MEEKLAND AVE

Name: TERRYS BODY SHOP
Year: 2006
Address: 22301 MEEKLAND AVE

Name: R R WHEEL & BRAKE
Year: 2007
Address: 22301 MEEKLAND AVE

Name: TERRYS BODY SHOP
Year: 2008
Address: 22301 MEEKLAND AVE

Name: R R WHEEL & BRAKE
Year: 2009
Address: 22301 MEEKLAND AVE

Name: TERRYS BODY SHOP
Year: 2010
Address: 22301 MEEKLAND AVE

Name: TERRYS BODY SHOP
Year: 2011
Address: 22301 MEEKLAND AVE

Name: TERRYS BODY SHOP
Year: 2012
Address: 22301 MEEKLAND AVE

B14
NE
< 1/8
0.072 mi.
380 ft.

TERRYS BODY SHOP
22301 MEEKLAND AVE
HAYWARD, CA 94541

FINDS 1000373123
EMI N/A
ECHO

Site 4 of 7 in cluster B

Relative:
Higher

Actual:
68 ft.

FINDS:

Registry ID: 110001198828

Environmental Interest/Information System
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal

TERRYS BODY SHOP (Continued) **1000373123**

facilities.

HAZARDOUS AIR POLLUTANT MAJOR

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

EMI:

Year:	1990
County Code:	1
Air Basin:	SF
Facility ID:	5573
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1995
County Code:	1
Air Basin:	SF
Facility ID:	5573
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1996
County Code:	1
Air Basin:	SF
Facility ID:	5573
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1

TERRYS BODY SHOP (Continued) **1000373123**

Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1997
County Code:	1
Air Basin:	SF
Facility ID:	5573
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1998
County Code:	1
Air Basin:	SF
Facility ID:	5573
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1999
County Code:	1
Air Basin:	SF
Facility ID:	5573
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

TERRYS BODY SHOP (Continued) **1000373123**

Year:	2000
County Code:	1
Air Basin:	SF
Facility ID:	5573
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2001
County Code:	1
Air Basin:	SF
Facility ID:	5573
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2002
County Code:	1
Air Basin:	SF
Facility ID:	5573
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2003
County Code:	1
Air Basin:	SF
Facility ID:	5573
Air District Name:	BA
SIC Code:	7532

TERRYS BODY SHOP (Continued) **1000373123**

Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2004
County Code:	1
Air Basin:	SF
Facility ID:	5573
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.264
Reactive Organic Gases Tons/Yr:	0.245861
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2005
County Code:	1
Air Basin:	SF
Facility ID:	5573
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.264
Reactive Organic Gases Tons/Yr:	.245861
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2006
County Code:	1
Air Basin:	SF
Facility ID:	5573
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.264
Reactive Organic Gases Tons/Yr:	.245861
Carbon Monoxide Emissions Tons/Yr:	0

TERRYS BODY SHOP (Continued) **1000373123**

NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2007
County Code:	1
Air Basin:	SF
Facility ID:	5573
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.264
Reactive Organic Gases Tons/Yr:	.245861
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2008
County Code:	1
Air Basin:	SF
Facility ID:	5573
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.106
Reactive Organic Gases Tons/Yr:	.0957234
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2009
County Code:	1
Air Basin:	SF
Facility ID:	5573
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.106
Reactive Organic Gases Tons/Yr:	0.0957234
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2010

TERRYS BODY SHOP (Continued) **1000373123**

County Code:	1
Air Basin:	SF
Facility ID:	5573
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.106
Reactive Organic Gases Tons/Yr:	0.0957234
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2011
County Code:	1
Air Basin:	SF
Facility ID:	5573
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.106
Reactive Organic Gases Tons/Yr:	0.0957234
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2012
County Code:	1
Air Basin:	SF
Facility ID:	5573
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.072
Reactive Organic Gases Tons/Yr:	0.070688
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2013
County Code:	1
Air Basin:	SF
Facility ID:	5573
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD

TERRYS BODY SHOP (Continued) **1000373123**

Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.072
Reactive Organic Gases Tons/Yr:	0.070688
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

ECHO:

Envid:	1000373123
Registry ID:	110001198828
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110001198828

C15 **EDR Hist Auto** **1015336904**
NNE **22215 MEEKLAND AVE** **N/A**
< 1/8 **HAYWARD, CA 94541**
0.074 mi.
393 ft. **Site 1 of 5 in cluster C**

Relative:
Higher

Actual:
67 ft.

EDR Historical Auto Stations:

Name:	CARBURETOR CENTER THE & AUTO REPAIR
Year:	1999
Address:	22215 MEEKLAND AVE
Name:	CARBURETOR CENTER THE & AUTO REPAIR
Year:	2000
Address:	22215 MEEKLAND AVE
Name:	ATOS AUTO REPAIR
Year:	2009
Address:	22215 MEEKLAND AVE
Name:	ATOS AUTO REPAIR
Year:	2010
Address:	22215 MEEKLAND AVE

C16 **MAIER RACING ENTERPRISES** **FINDS** **1008238806**
NNE **22215 MEEKLAND AVE** **ECHO** **N/A**
< 1/8 **HAYWARD, CA 94541**
0.074 mi.
393 ft. **Site 2 of 5 in cluster C**

Relative:
Higher

Actual:
67 ft.

FINDS:

Registry ID: 110021284750

Environmental Interest/Information System
AIR EMISSIONS CLASSIFICATION UNKNOWN

ECHO:

Envid:	1008238806
Registry ID:	110021284750

MAIER RACING ENTERPRISES (Continued) **1008238806**

DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110021284750

B17
East
< 1/8
0.078 mi.
411 ft.

UNITED PRO PAINTING, INC.
22345 MEEKLAND AVE
HAYWARD, CA 94541

FINDS **1016713839**
ECHO **N/A**

Site 5 of 7 in cluster B

Relative:
Higher

Actual:
70 ft.

FINDS:

Registry ID: 110057049803

Environmental Interest/Information System
STATE MASTER

ECHO:
Envid: 1016713839
Registry ID: 110057049803
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110057049803

B18
NNE
< 1/8
0.080 mi.
422 ft.

COLLINS BODY SHOP
22240 MEEKLAND AVE
HAYWARD, CA

EDR Hist Auto **1009015581**
N/A

Site 6 of 7 in cluster B

Relative:
Higher

Actual:
67 ft.

EDR Historical Auto Stations:
Name: COLLINS BODY SHOP
Year: 1976
Type: AUTOMOBILE REPAIRING

D19
SW
< 1/8
0.081 mi.
427 ft.

PENSKE TRUCK LEASING CO.,LP
22320 HATHAWAY AVE
HAYWARD, CA 94541

FINDS **1016433464**
ECHO **N/A**

Site 1 of 6 in cluster D

Relative:
Lower

Actual:
62 ft.

FINDS:

Registry ID: 110055855640

Environmental Interest/Information System
STATE MASTER

ECHO:
Envid: 1016433464
Registry ID: 110055855640
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110055855640

B20
ENE
< 1/8
0.081 mi.
430 ft.

22336 MEEKLAND AVE
HAYWARD, CA 94541

EDR Hist Auto **1015338167**
N/A

Site 7 of 7 in cluster B

Relative:
Higher

Actual:
70 ft.

EDR Historical Auto Stations:

Name: RUBE & DANS AUTOMOTIVE
Year: 2010
Address: 22336 MEEKLAND AVE

Name: RUBE & DANS AUTOMOTIVE
Year: 2011
Address: 22336 MEEKLAND AVE

Name: RUBE & DANS AUTOMOTIVE
Year: 2012
Address: 22336 MEEKLAND AVE

D21
WSW
< 1/8
0.085 mi.
448 ft.

OWENS-BROCKWAY GLASS CONTAINER INC PLANT 52
22302 HATHAWAY AVE.
HAYWARD, CA 94541

FINDS **1016115119**
ECHO **N/A**

Site 2 of 6 in cluster D

Relative:
Lower

Actual:
61 ft.

FINDS:

Registry ID: 110000483003

Environmental Interest/Information System

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS AIR POLLUTANT MAJOR

OWENS-BROCKWAY GLASS CONTAINER INC PLANT 52 (Continued) **1016115119**

HAZARDOUS WASTE BIENNIAL REPORTER

AIR MINOR

ECHO:

Envid:	1016115119
Registry ID:	110000483003
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110000483003

D22 **DIAMOND BATHURST** **LUST** **S101306512**
WSW **22302 HATHAWAY AVE** **SLIC** **N/A**
< 1/8 **HAYWARD, CA 94541** **EMI**
0.085 mi. **ENF**
448 ft. **Site 3 of 6 in cluster D** **HAZNET**
HIST CORTESE
Relative: **HWP**
Lower

Actual:
61 ft.

LUST:

Region:	STATE
Global Id:	T0600100445
Latitude:	37.6669306
Longitude:	-122.1037538
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	04/02/2002
Lead Agency:	HAYWARD, CITY OF
Case Worker:	DMG
Local Agency:	HAYWARD, CITY OF
RB Case Number:	01-0489
LOC Case Number:	01-0489
File Location:	Not reported
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

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

Contact:

Global Id:	T0600100445
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0600100445
Contact Type:	Local Agency Caseworker
Contact Name:	DANILO M. GALANG
Organization Name:	HAYWARD, CITY OF
Address:	777 B STREET
City:	HAYWARD
Email:	danny.galang@hayward-ca.gov
Phone Number:	Not reported

DIAMOND BATHURST (Continued) **S101306512**

Status History:

Global Id:	T0600100445
Status:	Completed - Case Closed
Status Date:	04/02/2002
Global Id:	T0600100445
Status:	Open - Case Begin Date
Status Date:	11/08/1985
Global Id:	T0600100445
Status:	Open - Site Assessment
Status Date:	01/30/1986

Regulatory Activities:

Global Id:	T0600100445
Action Type:	Other
Date:	11/08/1985
Action:	Leak Reported
Global Id:	T0600100445
Action Type:	ENFORCEMENT
Date:	04/02/2002
Action:	Closure/No Further Action Letter
Global Id:	T0600100445
Action Type:	Other
Date:	11/08/1985
Action:	Leak Discovery
Global Id:	T0600100445
Action Type:	Other
Date:	11/08/1985
Action:	Leak Stopped

LUST REG 2:

Region:	2
Facility Id:	01-0489
Facility Status:	Case Closed
Case Number:	01-0489
How Discovered:	Tank Closure
Leak Cause:	Structure Failure
Leak Source:	Tank
Date Leak Confirmed:	Not reported
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	1/30/1986
Pollution Characterization Began:	Not reported
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

SLIC:

Region:	STATE
Facility Status:	**Open - Remediation**

DIAMOND BATHURST (Continued) **S101306512**

Status Date:	05/27/2009
Global Id:	SL600192808
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number:	Not reported
Latitude:	37.6703309617936
Longitude:	-122.10569209787
Case Type:	Cleanup Program Site
Case Worker:	NF
Local Agency:	Not reported
RB Case Number:	01S0664
File Location:	Regional Board
Potential Media Affected:	Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern:	Diesel
Site History:	The site was an apricot orchard until 1948. From 1948 until 2003 the site was a glass container manufacturing plant. More than nine business owned and operated the facility during this period. Owens-Brockway Glass Container, Inc., the latest former owner, bought the facility in 1997 and operated it until 2003 when it was closed. The property was sold in 2005 to Gumtree, LLC, but Owens-Brockway retains responsibility for ongoing environmental assessment and remediation. Fuel releases associated with two above ground storage tanks have been documented and been remediated three times, with the most recent remediation still active. Releases were associated with underground piping that conveyed the fuel from the ASTs to the plant and to the generator building. The plume extends offsite to the west onto adjacent property owned by AMB Properties.

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

EMI:

Year:	1987
County Code:	1
Air Basin:	SF
Facility ID:	2086
Air District Name:	BA
SIC Code:	3221
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	7
NOX - Oxides of Nitrogen Tons/Yr:	296
SOX - Oxides of Sulphur Tons/Yr:	97
Particulate Matter Tons/Yr:	127
Part. Matter 10 Micrometers & Smllr Tons/Yr:	63

Year:	1990
County Code:	1
Air Basin:	SF
Facility ID:	2086
Air District Name:	BA
SIC Code:	3221
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1

DIAMOND BATHURST (Continued) **S101306512**

Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	8
NOX - Oxides of Nitrogen Tons/Yr:	324
SOX - Oxides of Sulphur Tons/Yr:	119
Particulate Matter Tons/Yr:	133
Part. Matter 10 Micrometers & Smllr Tons/Yr:	64

Year:	1993
County Code:	1
Air Basin:	SF
Facility ID:	2086
Air District Name:	BA
SIC Code:	3221
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	6
NOX - Oxides of Nitrogen Tons/Yr:	252
SOX - Oxides of Sulphur Tons/Yr:	110
Particulate Matter Tons/Yr:	129
Part. Matter 10 Micrometers & Smllr Tons/Yr:	62

Year:	1995
County Code:	1
Air Basin:	SF
Facility ID:	2086
Air District Name:	BA
SIC Code:	3221
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	7
NOX - Oxides of Nitrogen Tons/Yr:	308
SOX - Oxides of Sulphur Tons/Yr:	116
Particulate Matter Tons/Yr:	135
Part. Matter 10 Micrometers & Smllr Tons/Yr:	65

Year:	1996
County Code:	1
Air Basin:	SF
Facility ID:	2086
Air District Name:	BA
SIC Code:	3221
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	7
NOX - Oxides of Nitrogen Tons/Yr:	308
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	83
Part. Matter 10 Micrometers & Smllr Tons/Yr:	39

DIAMOND BATHURST (Continued) **S101306512**

ENF:

Region:	2
Facility Id:	275122
Agency Name:	Owens-Illinois, Incorporated
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Industrial
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	3221
SIC Desc 1:	Glass Containers
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	AGT
Program Category1:	TANKS
Program Category2:	TANKS
# Of Programs:	1
WDID:	2 01943101
Reg Measure Id:	170000
Reg Measure Type:	Unregulated
Region:	2
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Never Active
Status Date:	02/20/2013
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported

DIAMOND BATHURST (Continued) **S101306512**

WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	240174
Region:	2
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	13267 Letter
Effective Date:	02/27/2002
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Active
Title:	Enforcement - 2 01943101
Description:	13267 letter requring submittal of site history information by April 15, 2002.
Program:	AGT
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	$0.00
Initial Assessed Amount:	$0.00
Liability $ Amount:	$0.00
Project $ Amount:	$0.00
Liability $ Paid:	$0.00
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$0.00

Region:	2
Facility Id:	275122
Agency Name:	Owens-Illinois, Incorporated
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Industrial
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	3221
SIC Desc 1:	Glass Containers
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported

DIAMOND BATHURST (Continued) **S101306512**

Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	AGT
Program Category1:	TANKS
Program Category2:	TANKS
# Of Programs:	1
WDID:	2 01943101
Reg Measure Id:	170000
Reg Measure Type:	Unregulated
Region:	2
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Never Active
Status Date:	02/20/2013
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	240173
Region:	2
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	13267 Letter
Effective Date:	02/27/2002
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Withdrawn
Title:	Enforcement - 2 01943101
Description:	13267 letter requring submittal of results of subsurface investigation proposed in December 21, 2001 Workplan by April 15, 2002.
Program:	AGT
Latest Milestone Completion Date:	2002-02-22
# Of Programs1:	1
Total Assessment Amount:	$0.00

DIAMOND BATHURST (Continued) **S101306512**

Initial Assessed Amount:	$0.00
Liability $ Amount:	$0.00
Project $ Amount:	$0.00
Liability $ Paid:	$0.00
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$0.00

HAZNET:

envid:	S101306512
Year:	2013
GEPAID:	CAL000000157
Contact:	--
Telephone:	--
Mailing Name:	Not reported
Mailing Address:	22302 HATHAWAY AVE
Mailing City,St,Zip:	HAYWARD, CA 945410000
Gen County:	Alameda
TSD EPA ID:	ARD981057870
TSD County:	99
Waste Category:	Not reported
Disposal Method:	Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.0125
Cat Decode:	Not reported
Method Decode:	Fuel Blending Prior To Energy Recovery At Another Site
Facility County:	Not reported

HIST CORTESE:

Region:	CORTESE
Facility County Code:	1
Reg By:	LTNKA
Reg Id:	01-0489

HWP:

EPA Id:	CAD051903847
Cleanup Status:	CLOSED
Latitude:	37.66712
Longitude:	-122.1039
Facility Type:	Historical - Non-Operating
Facility Size:	Not reported
Team:	Not reported
Supervisor:	Not reported
Site Code:	Not reported
Assembly District:	20
Senate District:	10
Public Information Officer:	Not reported
Public Information Officer:	Not reported

Closure:

EPA Id:	CAD051903847
Facility Type:	Historical - Non-Operating
Unit Names:	BIF1
Event Description:	Closure Administrative - ISSUE CLOSURE VERIFICATION
Actual Date:	01/21/2016

Alias:

EPA Id:	CAD051903847

DIAMOND BATHURST (Continued) **S101306512**

Facility Type: Historical - Non-Operating
Alias Type: FRS
Alias: 110000483003

D23 WSW < 1/8 0.085 mi. 448 ft. **OWENS-BROCKWAY GLASS CONTAINER INC.** **RCRA-SQG 1000243852**
22302 HATHAWAY **US AIRS CAD051903847**
HAYWARD, CA 94541

Site 4 of 6 in cluster D

Relative: Lower

Actual: 61 ft.

RCRA-SQG:
Date form received by agency: 02/01/2006
Facility name: OWENS-BROCKWAY GLASS CONTAINER INC.
Facility address: 22302 HATHAWAY
HAYWARD, CA 94541
EPA ID: CAD051903847
Mailing address: 3600 ALAMEDA AVE
OAKLAND, CA 94601
Contact: ROBERT C NEAL
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: (510) 436-2174
Contact email: ROBERT.NEAL@US.0-I.COM
EPA Region: 09
Land type: Private
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: OWENS-BROCKWAY GLASS CONTAINER INC.
Owner/operator address: ONE SEAGATE
TOLEDO, OH 45666
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1997
Owner/Op end date: Not reported

Owner/operator name: OWENS-BROCKWAY GLASS CONTAINER INC.
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1997
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No

OWENS-BROCKWAY GLASS CONTAINER INC. (Continued) **1000243852**

Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency: 02/01/2006
Site name: OWENS-BROCKWAY GLASS CONTAINER INC.
Classification: Large Quantity Generator

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D010
. Waste name: SELENIUM

Date form received by agency: 05/13/2004
Site name: OWENS-BROCKWAY GLASS CONTAINER
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D039
. Waste name: TETRACHLOROETHYLENE

Date form received by agency: 02/18/2002
Site name: OWENS-BROCKWAY GLASS CONTAINER INC
Classification: Large Quantity Generator

OWENS-BROCKWAY GLASS CONTAINER INC. (Continued) **1000243852**

Date form received by agency: 10/12/2000
Site name: OWENS-BROCKWAY GLASS CONTAINER
Classification: Large Quantity Generator

Date form received by agency: 03/04/1999
Site name: OWENS-BROCKWAY GLASS CONTAINER
Classification: Large Quantity Generator

Date form received by agency: 02/20/1997
Site name: OWENS BROCKWAY GLASS CONT INC
Classification: Not a generator, verified

Date form received by agency: 02/29/1996
Site name: ANCHOR GLASS CONTAINER CORP.
Classification: Large Quantity Generator

Date form received by agency: 03/22/1994
Site name: ANCHOR GLASS CONTAINER CORP
Classification: Large Quantity Generator

Date form received by agency: 03/02/1993
Site name: OWENS BROCKWAY GLASS CONT INC
Classification: Large Quantity Generator

Date form received by agency: 02/28/1992
Site name: ANCHOR GLASS CONTAINER CORP
Classification: Large Quantity Generator

Date form received by agency: 04/04/1990
Site name: ANCHOR GLASS CONTAINER CORP
Classification: Large Quantity Generator

Facility Has Received Notices of Violations:
Regulation violated: F - 262.40-43.D
Area of violation: Generators - General
Date violation determined: 04/12/1998
Date achieved compliance: 08/17/1998
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: F - 262.30-34.C
Area of violation: Generators - General
Date violation determined: 04/12/1998
Date achieved compliance: 08/17/1998
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported

OWENS-BROCKWAY GLASS CONTAINER INC. (Continued) **1000243852**

Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: F - 279
Area of violation: Used Oil - Generators
Date violation determined: 04/12/1998
Date achieved compliance: 08/17/1998
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 268.7
Area of violation: LDR - General
Date violation determined: 03/15/1993
Date achieved compliance: 07/09/1993
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/13/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.10-12.A
Area of violation: Generators - General
Date violation determined: 03/15/1993
Date achieved compliance: 07/09/1993
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/13/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.50-60
Area of violation: Generators - General
Date violation determined: 03/15/1993
Date achieved compliance: 07/09/1993
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/13/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported

OWENS-BROCKWAY GLASS CONTAINER INC. (Continued) **1000243852**

Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.30-34.C
Area of violation: Generators - General
Date violation determined: 03/15/1993
Date achieved compliance: 07/09/1993
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/13/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.50-60
Area of violation: Generators - General
Date violation determined: 03/15/1903
Date achieved compliance: 07/09/1993
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/13/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 04/12/1998
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Used Oil - Generators
Date achieved compliance: 08/17/1998
Evaluation lead agency: EPA

Evaluation date: 04/12/1998
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 08/17/1998
Evaluation lead agency: EPA

Evaluation date: 01/04/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: LDR - General
Date achieved compliance: 07/09/1993
Evaluation lead agency: EPA

Evaluation date: 01/04/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 07/09/1993
Evaluation lead agency: EPA

US AIRS MINOR:

OWENS-BROCKWAY GLASS CONTAINER INC. (Continued) **1000243852**

Envid:	1000243852
Region Code:	09
Programmatic ID:	AIR CABAA00006001B1362
Facility Registry ID:	110000483003
D and B Number:	Not reported
Primary SIC Code:	3221
NAICS Code:	327213
Default Air Classification Code:	MIN
Facility Type of Ownership Code:	POF
Air CMS Category Code:	Not reported
HPV Status:	Not reported

E24
East
< 1/8
0.087 mi.
459 ft.

MEEKLAND AUTO SERVICE
22359 MEEKLAND AVE
HAYWARD, CA 94541

Site 1 of 6 in cluster E

RCRA-SQG **1000214799**
FINDS **CAD981654270**
EMI
HAZNET
ECHO

Relative:
Higher

Actual:
70 ft.

RCRA-SQG:

Date form received by agency:	09/18/1986
Facility name:	LASERFORM INC
Facility address:	22359 MEEKLAND AVE HAYWARD, CA 94541
EPA ID:	CAD981654270
Contact:	ENVIRONMENTAL MANAGER
Contact address:	22359 MEEKLAND AVE HAYWARD, CA 94541
Contact country:	US
Contact telephone:	(415) 537-5267
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	LABER THOMAS
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported

MEEKLAND AUTO SERVICE (Continued) **1000214799**

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

FINDS:

Registry ID: 110002739001

Environmental Interest/Information System
AIR EMISSIONS CLASSIFICATION UNKNOWN

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Registry ID: 110057124231

Environmental Interest/Information System
STATE MASTER

EMI:

Year:	1995
County Code:	1
Air Basin:	SF
Facility ID:	7244
Air District Name:	BA
SIC Code:	2499
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0

MEEKLAND AUTO SERVICE (Continued) **1000214799**

Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1996
County Code:	1
Air Basin:	SF
Facility ID:	7244
Air District Name:	BA
SIC Code:	2511
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1997
County Code:	1
Air Basin:	SF
Facility ID:	7244
Air District Name:	BA
SIC Code:	2499
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1998
County Code:	1
Air Basin:	SF
Facility ID:	7244
Air District Name:	BA
SIC Code:	2511
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1999
County Code:	1
Air Basin:	SF
Facility ID:	7244

MEEKLAND AUTO SERVICE (Continued) **1000214799**

Air District Name:	BA
SIC Code:	2511
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2000
County Code:	1
Air Basin:	SF
Facility ID:	7244
Air District Name:	BA
SIC Code:	2511
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2001
County Code:	1
Air Basin:	SF
Facility ID:	7244
Air District Name:	BA
SIC Code:	2511
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2002
County Code:	1
Air Basin:	SF
Facility ID:	7244
Air District Name:	BA
SIC Code:	2511
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0

MEEKLAND AUTO SERVICE (Continued) **1000214799**

Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2003
County Code:	1
Air Basin:	SF
Facility ID:	7244
Air District Name:	BA
SIC Code:	2511
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2004
County Code:	1
Air Basin:	SF
Facility ID:	7244
Air District Name:	BA
SIC Code:	2511
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.203
Reactive Organic Gases Tons/Yr:	0.2005437
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2005
County Code:	1
Air Basin:	SF
Facility ID:	7244
Air District Name:	BA
SIC Code:	2511
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.203
Reactive Organic Gases Tons/Yr:	.2005437
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

MEEKLAND AUTO SERVICE (Continued) **1000214799**

Year:	2006
County Code:	1
Air Basin:	SF
Facility ID:	7244
Air District Name:	BA
SIC Code:	2511
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.203
Reactive Organic Gases Tons/Yr:	.2005437
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2008
County Code:	1
Air Basin:	SF
Facility ID:	7244
Air District Name:	BA
SIC Code:	2511
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.203
Reactive Organic Gases Tons/Yr:	.2005437
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2009
County Code:	1
Air Basin:	SF
Facility ID:	7244
Air District Name:	BA
SIC Code:	2511
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.20300000000000001
Reactive Organic Gases Tons/Yr:	0.20054369999999999
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2010
County Code:	1
Air Basin:	SF
Facility ID:	7244
Air District Name:	BA
SIC Code:	2511

MEEKLAND AUTO SERVICE (Continued) **1000214799**

Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.20300000000000001
Reactive Organic Gases Tons/Yr:	0.20054369999999999
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

HAZNET:

envid:	1000214799
Year:	1998
GEPAID:	CAD981654270
Contact:	THOMAS M LABER
Telephone:	5105375267
Mailing Name:	Not reported
Mailing Address:	22359 MEEKLAND AVE
Mailing City,St,Zip:	HAYWARD, CA 945410000
Gen County:	Not reported
TSD EPA ID:	CAD028409019
TSD County:	Not reported
Waste Category:	Aqueous solution with total organic residues less than 10 percent
Disposal Method:	Transfer Station
Tons:	.9174
Cat Decode:	Aqueous solution with total organic residues less than 10 percent
Method Decode:	Transfer Station
Facility County:	1

envid:	1000214799
Year:	1996
GEPAID:	CAD981654270
Contact:	THOMAS M LABER
Telephone:	5105375267
Mailing Name:	Not reported
Mailing Address:	22359 MEEKLAND AVE
Mailing City,St,Zip:	HAYWARD, CA 945410000
Gen County:	Not reported
TSD EPA ID:	CAD008488025
TSD County:	Not reported
Waste Category:	Liquids with pH <= 2 with metals
Disposal Method:	Treatment, Tank
Tons:	.2293
Cat Decode:	Liquids with pH <= 2 with metals
Method Decode:	Treatment, Tank
Facility County:	1

envid:	1000214799
Year:	1995
GEPAID:	CAD981654270
Contact:	THOMAS M LABER
Telephone:	5105375267
Mailing Name:	Not reported
Mailing Address:	22359 MEEKLAND AVE
Mailing City,St,Zip:	HAYWARD, CA 945410000
Gen County:	Not reported

MEEKLAND AUTO SERVICE (Continued) **1000214799**

TSD EPA ID:	CAD008488025
TSD County:	Not reported
Waste Category:	Liquids with pH <= 2 with metals
Disposal Method:	Treatment, Tank
Tons:	1.2927
Cat Decode:	Liquids with pH <= 2 with metals
Method Decode:	Treatment, Tank
Facility County:	1

envid:	1000214799
Year:	1994
GEPAID:	CAD981654270
Contact:	THOMAS M LABER
Telephone:	5105375267
Mailing Name:	Not reported
Mailing Address:	22359 MEEKLAND AVE
Mailing City,St,Zip:	HAYWARD, CA 945410000
Gen County:	Not reported
TSD EPA ID:	CAD008488025
TSD County:	Not reported
Waste Category:	Liquids with pH <= 2 with metals
Disposal Method:	Recycler
Tons:	1.7722
Cat Decode:	Liquids with pH <= 2 with metals
Method Decode:	Recycler
Facility County:	1

envid:	1000214799
Year:	1994
GEPAID:	CAD981654270
Contact:	THOMAS M LABER
Telephone:	5105375267
Mailing Name:	Not reported
Mailing Address:	22359 MEEKLAND AVE
Mailing City,St,Zip:	HAYWARD, CA 945410000
Gen County:	Not reported
TSD EPA ID:	CAD070148432
TSD County:	Not reported
Waste Category:	Photochemicals/photoprocessing waste
Disposal Method:	Treatment, Incineration
Tons:	.2710
Cat Decode:	Photochemicals/photoprocessing waste
Method Decode:	Treatment, Incineration
Facility County:	1

Click this hyperlink while viewing on your computer to access
2 additional CA_HAZNET: record(s) in the EDR Site Report.

ECHO:

Envid:	1000214799
Registry ID:	110002739001
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110002739001

Envid:	1000214799
Registry ID:	110057124231
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110057124231

E25
East
< 1/8
0.087 mi.
462 ft.

V&V AUTOMOTIVE
22359 MEEKLAND AVE, UNIT C
HAYWARD, CA 94541

FINDS 1015940905
ECHO N/A

Site 2 of 6 in cluster E

Relative:
Higher

Actual:
70 ft.

FINDS:

Registry ID: 110054260312

Environmental Interest/Information System
AIR EMISSIONS CLASSIFICATION UNKNOWN

ECHO:
Envid: 1015940905
Registry ID: 110054260312
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110054260312

E26
East
< 1/8
0.087 mi.
462 ft.

22359 MEEKLAND AVE
HAYWARD, CA 94541

EDR Hist Auto 1015338314
N/A

Site 3 of 6 in cluster E

Relative:
Higher

Actual:
70 ft.

EDR Historical Auto Stations:

Name: TITOS AUTO REPAIR
Year: 2005
Address: 22359 MEEKLAND AVE

Name: OASIS AUTO REPAIR
Year: 2007
Address: 22359 MEEKLAND AVE

Name: OASIS AUTO REPAIR
Year: 2008
Address: 22359 MEEKLAND AVE

Name: OASIS AUTO REPAIR
Year: 2009
Address: 22359 MEEKLAND AVE

Name: V & V AUTOMOTIVE
Year: 2010
Address: 22359 MEEKLAND AVE

Name: LIBERTY AUTO REPAIR
Year: 2011
Address: 22359 MEEKLAND AVE

D27 SW < 1/8 0.095 mi. 503 ft. **DIAMOND CONTAINER GENERAL INC**
22303 HATHAWAY
HAYWARD, CA 37410

HIST UST **U001560142**
N/A

Site 5 of 6 in cluster D

Relative: Lower

Actual: 62 ft.

HIST UST:

File Number:	00035F0C
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00035F0C.pdf
Region:	STATE
Facility ID:	00000009757
Facility Type:	Other
Other Type:	GLASS BOTTLE MANUFAC
Contact Name:	DENNIS REEDER
Telephone:	4155815025
Owner Name:	DIAMOND CONTAINER GENERAL, INC
Owner Address:	400 W. 45TH STREET
Owner City,St,Zip:	CHATTANOOGA, TN 37410
Total Tanks:	0000
Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00008204
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

D28 SW < 1/8 0.095 mi. 503 ft. **OWENS BROCKWAY GLASS CONTAINER**
22301 HATHAWAY AVE
HAYWARD, CA 94541

FINDS **1015971233**
ECHO **N/A**

Site 6 of 6 in cluster D

Relative: Lower

Actual: 62 ft.

FINDS:

Registry ID: 110054314265

Environmental Interest/Information System
AIR EMISSIONS CLASSIFICATION UNKNOWN

ECHO:

Envid:	1015971233
Registry ID:	110054314265
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110054314265

C29 North < 1/8 0.096 mi. 508 ft. — **BUETTNER & HOYT, 22117 MEEKLAND AVE, HAYWARD, CA 94541** — **LUST, Alameda County CS, HIST CORTESE** — **S103472252, N/A**

Site 3 of 5 in cluster C

Relative: Lower

Actual: 66 ft.

LUST:

Region:	STATE
Global Id:	T0600100719
Latitude:	37.6702827
Longitude:	-122.1028316
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/28/1993
Lead Agency:	ALAMEDA COUNTY LOP
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	01-0782
LOC Case Number:	RO0001119
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

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

Contact:

Global Id:	T0600100719
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Status History:

Global Id:	T0600100719
Status:	Completed - Case Closed
Status Date:	05/28/1993
Global Id:	T0600100719
Status:	Open - Case Begin Date
Status Date:	03/15/1990

Regulatory Activities:

Global Id:	T0600100719
Action Type:	Other
Date:	03/15/1990
Action:	Leak Reported
Global Id:	T0600100719
Action Type:	REMEDIATION
Date:	09/09/9999
Action:	Excavation

LUST REG 2:

BUETTNER & HOYT (Continued) **S103472252**

Region: 2
Facility Id: 01-0782
Facility Status: Case Closed
Case Number: 3667
How Discovered: Tank Closure
Leak Cause: Structure Failure
Leak Source: Tank
Date Leak Confirmed: 3/30/1992
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: 5/28/1993
Preliminary Site Assesment Began: 4/3/1991
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

Alameda County CS:
Status: Case Closed
Record Id: RO0001119
PE: 5602
Facility Status: Case Closed

HIST CORTESE:
Region: CORTESE
Facility County Code: 1
Reg By: LTNKA
Reg Id: 01-0782

E30
East
< 1/8
0.096 mi.
508 ft.

22369 MEEKLAND AVE
HAYWARD, CA 94541

EDR Hist Auto **1015338374**
N/A

Site 4 of 6 in cluster E

Relative:
Higher

Actual:
71 ft.

EDR Historical Auto Stations:
Name: TITOS AUTO REPAIR
Year: 2005
Address: 22369 MEEKLAND AVE

Name: TITOS AUTO REPAIR
Year: 2006
Address: 22369 MEEKLAND AVE

C31
North
< 1/8
0.101 mi.
531 ft.

EMPIRE TRACTOR AND EQUIPMENT COM
22117 MACKLAND AVE
HAYWARD, CA 94541

HIST UST **S101623652**
CA FID UST **N/A**

Site 4 of 5 in cluster C

Relative:
Lower

Actual:
66 ft.

HIST UST:
File Number: 00035F64
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00035F64.pdf
Region: Not reported
Facility ID: Not reported
Facility Type: Not reported

EMPIRE TRACTOR AND EQUIPMENT COM (Continued) **S101623652**

Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported

Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

CA FID UST:

Facility ID:	01002919
Regulated By:	UTNKA
Regulated ID:	00061605
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	4155823626
Mail To:	Not reported
Mailing Address:	P O BOX
Mailing Address 2:	Not reported
Mailing City,St,Zip:	HAYWARD 94541
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

C32 **ACOUSTIC SPRAY CEILINGS INC** **RCRA NonGen / NLR** **1000427992**
North **22102 MEEKLAND AVE** **FINDS** **CAD980817605**
< 1/8 **HAYWARD, CA 94541** **ECHO**
0.106 mi.
560 ft. **Site 5 of 5 in cluster C**

Relative:
Lower

Actual:
66 ft.

RCRA NonGen / NLR:

Date form received by agency:	07/07/1983
Facility name:	ACOUSTIC SPRAY CEILINGS INC
Facility address:	22102 MEEKLAND AVE HAYWARD, CA 94541
EPA ID:	CAD980817605
Mailing address:	MEEKLAND AVE HAYWARD, CA 94541
Contact:	ENVIRONMENTAL MANAGER
Contact address:	22102 MEEKLAND AVE HAYWARD, CA 94541
Contact country:	US
Contact telephone:	(415) 886-1115

ACOUSTIC SPRAY CEILINGS INC (Continued) **1000427992**

Contact email: Not reported
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: VICTOR J ROGGENBUSCH
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: Yes
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002672536

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ACOUSTIC SPRAY CEILINGS INC (Continued) **1000427992**

ECHO:
Envid: 1000427992
Registry ID: 110002672536
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110002672536

E33
East
< 1/8
0.110 mi.
581 ft.

22383 MEEKLAND AVE
HAYWARD, CA 94541

Site 5 of 6 in cluster E

EDR Hist Auto **1009013609**
N/A

Relative:
Higher

Actual:
71 ft.

EDR Historical Auto Stations:

Name: COSTA PAINT & BODY SHOP
Year: 1959
Type: AUTOMOBILE REPAIRING

Name: TOMMYS AUTO BODY
Year: 1999
Address: 22383 MEEKLAND AVE

Name: TOMMYS AUTO BODY
Year: 2000
Address: 22383 MEEKLAND AVE

Name: TOMMYS AUTO BODY TCB ENTRPRS INC
Year: 2002
Address: 22383 MEEKLAND AVE

Name: TOMMYS AUTO BODY TCB ENTRPRS INC
Year: 2003
Address: 22383 MEEKLAND AVE

Name: TOMMYS AUTO BODY
Year: 2005
Address: 22383 MEEKLAND AVE

Name: TOMMYS AUTO BODY
Year: 2006
Address: 22383 MEEKLAND AVE

Name: TOMMYS AUTO BODY
Year: 2008
Address: 22383 MEEKLAND AVE

Name: TOMMYS AUTO BODY
Year: 2010
Address: 22383 MEEKLAND AVE

Name: TOMMYS AUTO BODY
Year: 2011
Address: 22383 MEEKLAND AVE

Name: TOMMYS AUTO BODY
Year: 2012
Address: 22383 MEEKLAND AVE

E34 East < 1/8 0.110 mi. 581 ft. | **TOMMYS AUTO BODY**
22383 MEEKLAND AVE
HAYWARD, CA 94541

Site 6 of 6 in cluster E

Relative: Higher

Actual: 71 ft.

RCRA-SQG 1001085735
LUST CAR000010595
Alameda County CS
FINDS
EMI
HIST CORTESE
ECHO

RCRA-SQG:

Date form received by agency:	07/01/2005
Facility name:	TOMMYS AUTO BODY
Facility address:	22383 MEEKLAND AVE HAYWARD, CA 94541
EPA ID:	CAR000010595
Contact:	DREW J MICKAELS
Contact address:	22383 MEEKLAND AVE HAYWARD, CA 94541
Contact country:	US
Contact telephone:	510-581-1889
Contact email:	ANADINE@AOL.COM
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	BUMPER ENTERPRISES LLC
Owner/operator address:	22383 MEEKLAND AVE HAYWARD, CA 94541
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	03/23/2005
Owner/Op end date:	Not reported

Owner/operator name:	DREW J MICKAELS
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	05/02/2005
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

TOMMYS AUTO BODY (Continued) **1001085735**

Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D018
. Waste name: BENZENE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D038
. Waste name: PYRIDINE

. Waste code: D039
. Waste name: TETRACHLOROETHYLENE

. Waste code: D040
. Waste name: TRICHLORETHYLENE

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Historical Generators:
Date form received by agency: 03/26/1996
Site name: TOMMYS AUTO BODY
Classification: Small Quantity Generator

Violation Status: No violations found

LUST:
Region: STATE
Global Id: T0600100589

TOMMYS AUTO BODY (Continued) **1001085735**

Latitude:	37.668443
Longitude:	-122.099516
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	04/16/1993
Lead Agency:	ALAMEDA COUNTY LOP
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	01-0639
LOC Case Number:	RO0001167
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

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

Contact:

Global Id:	T0600100589
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Status History:

Global Id:	T0600100589
Status:	Completed - Case Closed
Status Date:	04/16/1993
Global Id:	T0600100589
Status:	Open - Case Begin Date
Status Date:	01/29/1991

Regulatory Activities:

Global Id:	T0600100589
Action Type:	Other
Date:	01/29/1991
Action:	Leak Reported
Global Id:	T0600100589
Action Type:	REMEDIATION
Date:	09/09/9999
Action:	Not reported

LUST REG 2:

Region:	2
Facility Id:	01-0639
Facility Status:	Case Closed
Case Number:	1463
How Discovered:	Tank Closure
Leak Cause:	Structure Failure
Leak Source:	Tank

TOMMYS AUTO BODY (Continued) **1001085735**

Date Leak Confirmed: 4/10/1993
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

Alameda County CS:
Status: Case Closed
Record Id: RO0001167
PE: 5602
Facility Status: Case Closed

FINDS:

Registry ID: 110002911118

Environmental Interest/Information System
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

HAZARDOUS AIR POLLUTANT MAJOR

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

EMI:

Year:	1995
County Code:	1
Air Basin:	SF
Facility ID:	7346
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1996
County Code:	1
Air Basin:	SF

TOMMYS AUTO BODY (Continued) **1001085735**

Facility ID:	7346
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1997
County Code:	1
Air Basin:	SF
Facility ID:	7346
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1998
County Code:	1
Air Basin:	SF
Facility ID:	7346
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1999
County Code:	1
Air Basin:	SF
Facility ID:	7346
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported

TOMMYS AUTO BODY (Continued) **1001085735**

Total Organic Hydrocarbon Gases Tons/Yr:	3
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2000
County Code:	1
Air Basin:	SF
Facility ID:	7346
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2001
County Code:	1
Air Basin:	SF
Facility ID:	7346
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2002
County Code:	1
Air Basin:	SF
Facility ID:	7346
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0

TOMMYS AUTO BODY (Continued) **1001085735**

Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year:	2003
County Code:	1
Air Basin:	SF
Facility ID:	7346
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2004
County Code:	1
Air Basin:	SF
Facility ID:	16923
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2.135
Reactive Organic Gases Tons/Yr:	1.7318954
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2005
County Code:	1
Air Basin:	SF
Facility ID:	16923
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2.135
Reactive Organic Gases Tons/Yr:	1.7318954
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2006
County Code:	1
Air Basin:	SF
Facility ID:	16923

TOMMYS AUTO BODY (Continued) **1001085735**

Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2.08
Reactive Organic Gases Tons/Yr:	1.6738754
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2007
County Code:	1
Air Basin:	SF
Facility ID:	16923
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2.08
Reactive Organic Gases Tons/Yr:	1.6738754
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2008
County Code:	1
Air Basin:	SF
Facility ID:	16923
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2.08
Reactive Organic Gases Tons/Yr:	1.6738754
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2009
County Code:	1
Air Basin:	SF
Facility ID:	16923
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2.0800000000000001

TOMMYS AUTO BODY (Continued) **1001085735**

Reactive Organic Gases Tons/Yr:	1.6738754
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2010
County Code:	1
Air Basin:	SF
Facility ID:	16923
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.0700000000000001
Reactive Organic Gases Tons/Yr:	0.81494800000000001
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2011
County Code:	1
Air Basin:	SF
Facility ID:	16923
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.07
Reactive Organic Gases Tons/Yr:	0.814948
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2012
County Code:	1
Air Basin:	SF
Facility ID:	16923
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.07
Reactive Organic Gases Tons/Yr:	0.814948
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

TOMMYS AUTO BODY (Continued) **1001085735**

Year:	2013
County Code:	1
Air Basin:	SF
Facility ID:	16923
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.07
Reactive Organic Gases Tons/Yr:	0.814948
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

HIST CORTESE:

Region:	CORTESE
Facility County Code:	1
Reg By:	LTNKA
Reg Id:	01-0639

ECHO:

Envid:	1001085735
Registry ID:	110002911118
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110002911118

F35
SSE
< 1/8
0.119 mi.
629 ft.

BELL LAUNDERETT & CLEANERS **EDR Hist Cleaner** **1009140824**
208 WEST A **N/A**
HAYWARD, CA

Site 1 of 2 in cluster F

Relative:
Higher

Actual:
68 ft.

EDR Historical Cleaners:

Name:	BELL LAUNDERETT & CLEANERS
Year:	1959
Type:	LAUNDRIES-SELF SERVE

G36
SSW
< 1/8
0.120 mi.
632 ft.

EDR Hist Auto **1015374482**
N/A

263 W A ST
HAYWARD, CA 94541

Site 1 of 9 in cluster G

Relative:
Lower

Actual:
62 ft.

EDR Historical Auto Stations:

Name:	BIG O TIRE STORES
Year:	2004
Address:	263 W A ST

G37 SSW < 1/8 0.120 mi. 632 ft. — **GEORGE S RICHFIELD SERVICE**, **263 WEST A ST**, **HAYWARD, CA** — **EDR Hist Auto** — **1009011196** / **N/A**

Site 2 of 9 in cluster G

Relative: Lower **Actual: 62 ft.**

EDR Historical Auto Stations:

Name:	GEORGE S RICHFIELD SERVICE
Year:	1965
Type:	GASOLINE STATIONS

G38 SSW < 1/8 0.120 mi. 632 ft. — **GEORGE S RICHFIELD SERVICE**, **263 WEST A**, **HAYWARD, CA** — **EDR Hist Auto** — **1009011595** / **N/A**

Site 3 of 9 in cluster G

Relative: Lower **Actual: 62 ft.**

EDR Historical Auto Stations:

Name:	GEORGE S RICHFIELD SERVICE
Year:	1959
Type:	GASOLINE STATIONS

G39 SSW < 1/8 0.123 mi. 648 ft. — **SUNSET GARAGE & BRAKE SHOP**, **271 WEST A ST**, **HAYWARD, CA** — **EDR Hist Auto** — **1009011831** / **N/A**

Site 4 of 9 in cluster G

Relative: Lower **Actual: 62 ft.**

EDR Historical Auto Stations:

Name:	SUNSET GARAGE & BRAKE SHOP
Year:	1965
Type:	AUTOMOBILE REPAIRING

H40 West 1/8-1/4 0.128 mi. 676 ft. — **PRICE CLUB**, **22300 HATHAWAY AVE**, **HAYWARD, CA 94541** — **LUST** / **HIST CORTESE** — **S100871260** / **N/A**

Site 1 of 5 in cluster H

Relative: Lower **Actual: 60 ft.**

LUST:

Region:	STATE
Global Id:	T0600101111
Latitude:	37.6669306
Longitude:	-122.1037537
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	10/20/1994
Lead Agency:	HAYWARD, CITY OF
Case Worker:	DMG
Local Agency:	HAYWARD, CITY OF
RB Case Number:	01-1208
LOC Case Number:	01-1208
File Location:	Not reported
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

PRICE CLUB (Continued) **S100871260**

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

Contact:

Global Id:	T0600101111
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0600101111
Contact Type:	Local Agency Caseworker
Contact Name:	DANILO M. GALANG
Organization Name:	HAYWARD, CITY OF
Address:	777 B STREET
City:	HAYWARD
Email:	danny.galang@hayward-ca.gov
Phone Number:	Not reported

Status History:

Global Id:	T0600101111
Status:	Completed - Case Closed
Status Date:	10/20/1994

Global Id:	T0600101111
Status:	Open - Case Begin Date
Status Date:	01/10/1991

Global Id:	T0600101111
Status:	Open - Site Assessment
Status Date:	05/17/1991

Global Id:	T0600101111
Status:	Open - Site Assessment
Status Date:	07/22/1992

Global Id:	T0600101111
Status:	Open - Site Assessment
Status Date:	09/01/1992

Regulatory Activities:

Global Id:	T0600101111
Action Type:	Other
Date:	01/10/1991
Action:	Leak Reported

Global Id:	T0600101111
Action Type:	Other
Date:	01/10/1991
Action:	Leak Discovery

Global Id:	T0600101111
Action Type:	Other
Date:	01/10/1991

PRICE CLUB (Continued) **S100871260**

Action: Leak Stopped

HIST CORTESE:

Region:	CORTESE
Facility County Code:	1
Reg By:	LTNKA
Reg Id:	01-1208

H41
West
1/8-1/4
0.128 mi.
676 ft.

PRICE CLUB
22300 HATHAWAY AVE
HAYWARD, CA 94541

Site 2 of 5 in cluster H

RCRA-SQG **1000168303**
LUST **CAD981970668**
CA FID UST
FINDS
ECHO

Relative:
Lower

Actual:
60 ft.

RCRA-SQG:

Date form received by agency:	05/18/1987
Facility name:	PRICE CLUB
Facility address:	22300 HATHAWAY AVE HAYWARD, CA 94541
EPA ID:	CAD981970668
Mailing address:	HATHAWAY AVE HAYWARD, CA 94541
Contact:	ENVIRONMENTAL MANAGER
Contact address:	22300 HATHAWAY AVE HAYWARD, CA 94541
Contact country:	US
Contact telephone:	(415) 783-0716
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	SOL PRICE
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

PRICE CLUB (Continued) **1000168303**

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

LUST REG 2:

Region:	2
Facility Id:	01-1208
Facility Status:	Case Closed
Case Number:	01-1208
How Discovered:	Tank Closure
Leak Cause:	Structure Failure
Leak Source:	Tank
Date Leak Confirmed:	5/17/1991
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	7/22/1992
Preliminary Site Assesment Began:	Not reported
Pollution Characterization Began:	9/1/1992
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

CA FID UST:

Facility ID:	01001325
Regulated By:	UTNKI
Regulated ID:	Not reported
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	5107835136
Mail To:	Not reported
Mailing Address:	4649 MORENA BLVD
Mailing Address 2:	Not reported
Mailing City,St,Zip:	HAYWARD 94541
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Inactive

FINDS:

PRICE CLUB (Continued) **1000168303**

Registry ID: 110002760049

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:
Envid: 1000168303
Registry ID: 110002760049
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110002760049

H42
West
1/8-1/4
0.128 mi.
676 ft.

PRICE CLUB
22300 HATHWAY AVE
HAYWARD, CA 94541

SWEEPS UST **S106930886**
N/A

Site 3 of 5 in cluster H

Relative:
Lower

Actual:
60 ft.

SWEEPS UST:
Status: Not reported
Comp Number: 2230
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 01-003-002230-000001
Tank Status: Not reported
Capacity: 44000
Active Date: Not reported
Tank Use: PETROLEUM
STG: PRODUCT
Content: REGULAR UNLE
Number Of Tanks: 1

G43
SSW
1/8-1/4
0.129 mi.
682 ft.

280 W A ST
HAYWARD, CA 94541

EDR Hist Cleaner **1015033669**
N/A

Site 5 of 9 in cluster G

Relative:
Lower

Actual:
62 ft.

EDR Historical Cleaners:
Name: PEDROS CARPET CLEANING
Year: 2003
Address: 280 W A ST

Name: PEDROS CARPET CLEANING
Year: 2005
Address: 280 W A ST

I44
North
1/8-1/4
0.133 mi.
703 ft.

MARTIN S KEN AUTOMOTIVE CENTER
22035 MEEKLAND AVE
HAYWARD, CA

EDR Hist Auto **1009015669**
N/A

Site 1 of 7 in cluster I

Relative:
Lower

Actual:
66 ft.

EDR Historical Auto Stations:
Name: MARTIN S KEN AUTOMOTIVE CENTER
Year: 1976
Type: AUTOMOBILE REPAIRING

H45
West
1/8-1/4
0.133 mi.
704 ft.

WOOD AM SUPPORT SERVICES
22051 HATHAWAY ST.
HAYWARD, CA 94541

FINDS **1007085561**
ECHO **N/A**

Site 4 of 5 in cluster H

Relative:
Lower

Actual:
60 ft.

FINDS:

Registry ID: 110015631681

Environmental Interest/Information System
NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

ECHO:
Envid: 1007085561
Registry ID: 110015631681
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110015631681

H46
West
1/8-1/4
0.133 mi.
704 ft.

22051 HATHAWAY AVE
HAYWARD, CA

ERNS **2008871190**
N/A

Site 5 of 5 in cluster H

Relative:
Lower

Actual:
60 ft.

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

F47
SSE
1/8-1/4
0.135 mi.
715 ft.

HELMUT MOTORS
82 W A ST
HAYWARD, CA 94541

Alameda County CS **S106880550**
N/A

Site 2 of 2 in cluster F

Relative:
Higher

Actual:
72 ft.

Alameda County CS:
Status: Leak Confirmation
Record Id: RO0002454
PE: 5602
Facility Status: Leak Confirmation

Status: Case Closed
Record Id: RO0002454

HELMUT MOTORS (Continued) **S106880550**

PE: 5602
Facility Status: Case Closed

G48
SSW
1/8-1/4
0.139 mi.
736 ft.

311 W A ST
HAYWARD, CA 94541

EDR Hist Auto **1015414247**
N/A

Site 6 of 9 in cluster G

Relative:
Lower

Actual:
60 ft.

EDR Historical Auto Stations:
Name: A 1 AUTO
Year: 2010
Address: 311 W A ST

G49
SSW
1/8-1/4
0.139 mi.
736 ft.

RAYBERN FOODS
311 W A ST
HAYWARD, CA 94541

SWEEPS UST **S105725812**
NPDES **N/A**

Site 7 of 9 in cluster G

Relative:
Lower

Actual:
60 ft.

SWEEPS UST:
Status: Not reported
Comp Number: 304578
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 01-000-304578-000001
Tank Status: Not reported
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: DIESEL
Number Of Tanks: 1

NPDES:
Npdes Number: Not reported
Facility Status: Not reported
Agency Id: Not reported
Region: 2
Regulatory Measure Id: 433463
Order No: Not reported
Regulatory Measure Type: Industrial
Place Id: Not reported
WDID: 2 011023966
Program Type: Not reported
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: Not reported
Expiration Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: 8/13/2015
Discharge Name: Not reported
Discharge Address: Not reported
Discharge City: Not reported

RAYBERN FOODS (Continued) **S105725812**

Discharge State:	Not reported
Discharge Zip:	Not reported
RECEIVED DATE:	12/17/2012
PROCESSED DATE:	12/17/2012
STATUS CODE NAME:	Terminated
STATUS DATE:	8/13/2015
PLACE SIZE:	39000
PLACE SIZE UNIT:	SqFt
FACILITY CONTACT NAME:	Laura Maioriello
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	510-786-3900
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Raybern Foods
OPERATOR ADDRESS:	311 W A St
OPERATOR CITY:	Hayward
OPERATOR STATE:	California
OPERATOR ZIP:	94541
OPERATOR CONTACT NAME:	Mark Novak
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	510-786-3900
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Private Business
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	California
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Y
RECEIVING WATER NAME:	SF Bay
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	2038-Frozen Specialties, NEC
SECONDARY SIC:	Not reported

RAYBERN FOODS (Continued) **S105725812**

TERTIARY SIC:	Not reported
Npdes Number:	CAS000001
Facility Status:	Terminated
Agency Id:	0
Region:	2
Regulatory Measure Id:	433463
Order No:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	2 01I023966
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	12/17/2012
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	08/13/2015
Discharge Name:	Raybern Foods
Discharge Address:	311 W A St
Discharge City:	Hayward
Discharge State:	California
Discharge Zip:	94541
RECEIVED DATE:	Not reported
PROCESSED DATE:	Not reported
STATUS CODE NAME:	Not reported
STATUS DATE:	Not reported
PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	Not reported
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	Not reported
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Not reported
OPERATOR ADDRESS:	Not reported
OPERATOR CITY:	Not reported
OPERATOR STATE:	Not reported
OPERATOR ZIP:	Not reported
OPERATOR CONTACT NAME:	Not reported
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	Not reported
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Not reported
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	Not reported
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported

RAYBERN FOODS (Continued) **S105725812**

CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported

J50
ESE **22433 MEEKLAND AVE** **ERNS** **92291219**
1/8-1/4 **HAYWARD, CA 94541** **N/A**
0.142 mi.
752 ft. **Site 1 of 10 in cluster J**

Relative:
Higher

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

Actual:
72 ft.

I51
North **22018 MEEKLAND AVE** **EDR Hist Auto** **1009015721**
1/8-1/4 **HAYWARD, CA 94541** **N/A**
0.144 mi.
760 ft. **Site 2 of 7 in cluster I**

Relative:
Lower

Actual:
66 ft.

EDR Historical Auto Stations:

Name:	DEL RIO SERVICE
Year:	1976
Type:	AUTOMOBILE REPAIRING
Name:	VARGAS TURBO & DIESEL
Year:	2001
Address:	22018 MEEKLAND AVE
Name:	VARGAS AERO TURBO
Year:	2002
Address:	22018 MEEKLAND AVE
Name:	VARGAS TURBO INC
Year:	2005
Address:	22018 MEEKLAND AVE
Name:	VARGAS TURBO & DIESEL
Year:	2006
Address:	22018 MEEKLAND AVE

(Continued) **1009015721**

Name: VARGAS TURBO & DIESEL
Year: 2007
Address: 22018 MEEKLAND AVE

Name: FORD DIESEL & GAS SPECIALISTS
Year: 2008
Address: 22018 MEEKLAND AVE

Name: FORD DIESEL & GAS SPECIALISTS
Year: 2009
Address: 22018 MEEKLAND AVE

Name: VARGAS TURBO & DIESEL
Year: 2010
Address: 22018 MEEKLAND AVE

Name: MERCEDESBENZ DIESEL & GAS SPECIALIS
Year: 2011
Address: 22018 MEEKLAND AVE

Name: MERCEDESBENZ DIESEL & GAS SPECIALIS
Year: 2012
Address: 22018 MEEKLAND AVE

I52
North
1/8-1/4
0.144 mi.
760 ft.

VARGAS TURBO AND DIESEL
22018 MEEKLAND AVE
HAYWARD, CA 94541

FINDS 1016713841
ECHO N/A

Site 3 of 7 in cluster I

Relative:
Lower

Actual:
66 ft.

FINDS:

Registry ID: 110057049821

Environmental Interest/Information System
STATE MASTER

ECHO:
Envid: 1016713841
Registry ID: 110057049821
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110057049821

I53
North
1/8-1/4
0.148 mi.
783 ft.

KD CEDAR
22008 MEEKLAND
HAYWARD, CA 94541

LUST S102432080
Alameda County CS N/A
HIST CORTESE

Site 4 of 7 in cluster I

Relative:
Lower

Actual:
66 ft.

LUST:
Region: STATE
Global Id: T0600100771
Latitude: 37.671078
Longitude: -122.103067
Case Type: LUST Cleanup Site
Status: Completed - Case Closed

KD CEDAR (Continued) **S102432080**

Status Date:	01/11/1995
Lead Agency:	ALAMEDA COUNTY LOP
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	01-0837
LOC Case Number:	RO0000518
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

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

Contact:

Global Id:	T0600100771
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Status History:

Global Id:	T0600100771
Status:	Completed - Case Closed
Status Date:	01/11/1995
Global Id:	T0600100771
Status:	Open - Case Begin Date
Status Date:	12/07/1989

Regulatory Activities:

Global Id:	T0600100771
Action Type:	Other
Date:	12/07/1989
Action:	Leak Reported
Global Id:	T0600100771
Action Type:	REMEDIATION
Date:	09/09/9999
Action:	Not reported

LUST REG 2:

Region:	2
Facility Id:	01-0837
Facility Status:	Case Closed
Case Number:	3606
How Discovered:	Tank Closure
Leak Cause:	Structure Failure
Leak Source:	Tank
Date Leak Confirmed:	2/11/1991
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	3/12/1991
Preliminary Site Assesment Began:	6/11/1991

KD CEDAR (Continued) **S102432080**

Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

Alameda County CS:
Status: Case Closed
Record Id: RO0000518
PE: 5602
Facility Status: Case Closed

HIST CORTESE:
Region: CORTESE
Facility County Code: 1
Reg By: LTNKA
Reg Id: 01-0837

I54
North
1/8-1/4
0.148 mi.
783 ft.

RAINBOW AUTO BODY
22008 MEEKLAND AVE
HAYWARD, CA 94541

FINDS 1011987102
ECHO N/A

Site 5 of 7 in cluster I

Relative:
Lower

Actual:
66 ft.

FINDS:

Registry ID: 110037981413

Environmental Interest/Information System
AIR EMISSIONS CLASSIFICATION UNKNOWN

STATE MASTER

ECHO:
Envid: 1011987102
Registry ID: 110037981413
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110037981413

I55
North
1/8-1/4
0.148 mi.
783 ft.

22008 MEEKLAND AVE
HAYWARD, CA 94541

EDR Hist Auto 1015333407
N/A

Site 6 of 7 in cluster I

Relative:
Lower

Actual:
66 ft.

EDR Historical Auto Stations:
Name: RAINBOW AUTO BODY SHOP
Year: 2010
Address: 22008 MEEKLAND AVE

Name: RAINBOW AUTO BODY SHOP
Year: 2011
Address: 22008 MEEKLAND AVE

Name: RAINBOW AUTO BODY SHOP
Year: 2012

(Continued) **1015333407**

Address: 22008 MEEKLAND AVE

56
SE
1/8-1/4
0.155 mi.
817 ft.

22500 AMADOR ST.
HAYWARD, CA 94542

ERNS **90179319**
N/A

Relative:
Higher

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

Actual:
73 ft.

J57
ESE
1/8-1/4
0.158 mi.
833 ft.

RUE S SERVICE STATION
2 A ST
HAYWARD, CA

EDR Hist Auto **1009013276**
N/A

Site 2 of 10 in cluster J

Relative:
Higher

Actual:
73 ft.

EDR Historical Auto Stations:
Name: RUE S SERVICE STATION
Year: 1932
Type: GASOLINE AND OIL SERVICE STATIONS

J58
ESE
1/8-1/4
0.158 mi.
833 ft.

WHEELER MORTON L
2 A AT S P TRACKS
HAYWARD, CA

EDR Hist Auto **1009014128**
N/A

Site 3 of 10 in cluster J

Relative:
Higher

Actual:
73 ft.

EDR Historical Auto Stations:
Name: WHEELER MORTON L
Year: 1932
Type: AUTOMOBILE REPAIRING

G59
SSW
1/8-1/4
0.159 mi.
839 ft.

PAUL S FLYING A SERVICE
310 WEST A
HAYWARD, CA

EDR Hist Auto **1009011708**
N/A

Site 8 of 9 in cluster G

Relative:
Lower

Actual:
60 ft.

EDR Historical Auto Stations:
Name: PAUL S FLYING A SERVICE
Year: 1959
Type: GASOLINE STATIONS

G60
SSW
1/8-1/4
0.159 mi.
839 ft.

WEST A FLYING A SERVICE
310 WEST A ST
HAYWARD, CA

EDR Hist Auto **1009015162**
N/A

Site 9 of 9 in cluster G

Relative:
Lower

Actual:
60 ft.

EDR Historical Auto Stations:

Name: WEST A FLYING A SERVICE
Year: 1965
Type: GASOLINE STATIONS

Name: LESLE S SEASIDE SERVICE
Year: 1970
Type: GASOLINE STATIONS

I61
North
1/8-1/4
0.161 mi.
852 ft.

21980 MEEKLAND AVE
HAYWARD, CA 94541

EDR Hist Auto **1015331696**
N/A

Site 7 of 7 in cluster I

Relative:
Lower

Actual:
66 ft.

EDR Historical Auto Stations:

Name: S & J AUTO CARE
Year: 2007
Address: 21980 MEEKLAND AVE

Name: MA AUTO & TIRES
Year: 2011
Address: 21980 MEEKLAND AVE

Name: MA AUTO & TIRES
Year: 2012
Address: 21980 MEEKLAND AVE

J62
ESE
1/8-1/4
0.164 mi.
866 ft.

30 A ST
HAYWARD, CA 94541

EDR Hist Auto **1015398672**
N/A

Site 4 of 10 in cluster J

Relative:
Higher

Actual:
73 ft.

EDR Historical Auto Stations:

Name: PEPES AUTO BODY
Year: 1999
Address: 30 A ST

Name: PEPES AUTO BODY
Year: 2000
Address: 30 A ST

Name: PEPES AUTO BODY
Year: 2001
Address: 30 A ST

Name: PEPES AUTO BODY
Year: 2003
Address: 30 A ST

Name: PEPES AUTO BODY

(Continued) **1015398672**

Year: 2004
Address: 30 A ST

Name: PEPES AUTO BODY
Year: 2005
Address: 30 A ST

Name: PEPES AUTO BODY
Year: 2006
Address: 30 A ST

Name: PEPES AUTO BODY
Year: 2007
Address: 30 A ST

Name: PEPES AUTO BODY
Year: 2008
Address: 30 A ST

Name: PEPES AUTO BODY
Year: 2009
Address: 30 A ST

Name: PEPES AUTO BODY
Year: 2010
Address: 30 A ST

Name: PEPES AUTO BODY
Year: 2011
Address: 30 A ST

Name: PEPES AUTO BODY
Year: 2012
Address: 30 A ST

J63
ESE
1/8-1/4
0.164 mi.
866 ft.

PEPES AUTO BODY
30 A STREET
HAYWARD, CA 94541

Site 5 of 10 in cluster J

RCRA-SQG **1000109847**
FINDS **CAD982368565**
EMI
HAZNET
ECHO

Relative:
Higher

Actual:
73 ft.

RCRA-SQG:
Date form received by agency: 04/11/1988
Facility name: D & D BODY SHOP
Facility address: 30 A STREET
HAYWARD, CA 94541
EPA ID: CAD982368565
Mailing address: A STREET
HAYWARD, CA 94541
Contact: ENVIRONMENTAL MANAGER
Contact address: 30 A STREET
HAYWARD, CA 94541
Contact country: US
Contact telephone: (415) 582-7557
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous

PEPES AUTO BODY (Continued) **1000109847**

waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	MOITOZO DENNIS
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

FINDS:

Registry ID: 110001164882

Environmental Interest/Information System

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of

PEPES AUTO BODY (Continued) **1000109847**

events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS AIR POLLUTANT MAJOR

EMI:

Year:	1990
County Code:	1
Air Basin:	SF
Facility ID:	6204
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1996
County Code:	1
Air Basin:	SF
Facility ID:	6204
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1997
County Code:	1
Air Basin:	SF
Facility ID:	6204
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0

PEPES AUTO BODY (Continued) **1000109847**

Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1998
County Code:	1
Air Basin:	SF
Facility ID:	6204
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1999
County Code:	1
Air Basin:	SF
Facility ID:	6204
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2000
County Code:	1
Air Basin:	SF
Facility ID:	6204
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2001
County Code:	1
Air Basin:	SF

PEPES AUTO BODY (Continued) **1000109847**

Facility ID:	6204
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2002
County Code:	1
Air Basin:	SF
Facility ID:	6204
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2003
County Code:	1
Air Basin:	SF
Facility ID:	6204
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2004
County Code:	1
Air Basin:	SF
Facility ID:	6204
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported

PEPES AUTO BODY (Continued) **1000109847**

Total Organic Hydrocarbon Gases Tons/Yr:	0.342
Reactive Organic Gases Tons/Yr:	0.3303348
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2005
County Code:	1
Air Basin:	SF
Facility ID:	6204
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.342
Reactive Organic Gases Tons/Yr:	.3303348
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2006
County Code:	1
Air Basin:	SF
Facility ID:	6204
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.342
Reactive Organic Gases Tons/Yr:	.3303348
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2007
County Code:	1
Air Basin:	SF
Facility ID:	6204
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.246
Reactive Organic Gases Tons/Yr:	.2377618
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0

PEPES AUTO BODY (Continued) **1000109847**

Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 2008
County Code: 1
Air Basin: SF
Facility ID: 6204
Air District Name: BA
SIC Code: 7532
Air District Name: BAY AREA AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: .246
Reactive Organic Gases Tons/Yr: .2377618
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 2009
County Code: 1
Air Basin: SF
Facility ID: 6204
Air District Name: BA
SIC Code: 7532
Air District Name: BAY AREA AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.246
Reactive Organic Gases Tons/Yr: 0.2377618
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 2010
County Code: 1
Air Basin: SF
Facility ID: 6204
Air District Name: BA
SIC Code: 7532
Air District Name: BAY AREA AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.246
Reactive Organic Gases Tons/Yr: 0.2377618
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 2011
County Code: 1
Air Basin: SF
Facility ID: 6204

PEPES AUTO BODY (Continued) **1000109847**

Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.112
Reactive Organic Gases Tons/Yr:	0.1075408
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2012
County Code:	1
Air Basin:	SF
Facility ID:	6204
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.112
Reactive Organic Gases Tons/Yr:	0.1075408
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2013
County Code:	1
Air Basin:	SF
Facility ID:	6204
Air District Name:	BA
SIC Code:	7532
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.112
Reactive Organic Gases Tons/Yr:	0.1075408
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

HAZNET:

envid:	1000109847
Year:	2009
GEPAID:	CAD982368565
Contact:	JOSE LUIS HERNANDEZ OWNER
Telephone:	5105827557
Mailing Name:	Not reported
Mailing Address:	30 A ST
Mailing City,St,Zip:	HAYWARD, CA 945410000
Gen County:	Not reported

PEPES AUTO BODY (Continued) **1000109847**

TSD EPA ID:	CAD008252405
TSD County:	Not reported
Waste Category:	Unspecified solvent mixture
Disposal Method:	Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.144
Cat Decode:	Unspecified solvent mixture
Method Decode:	Fuel Blending Prior To Energy Recovery At Another Site
Facility County:	Alameda

envid:	1000109847
Year:	2009
GEPAID:	CAD982368565
Contact:	JOSE LUIS HERNANDEZ OWNER
Telephone:	5105827557
Mailing Name:	Not reported
Mailing Address:	30 A ST
Mailing City,St,Zip:	HAYWARD, CA 945410000
Gen County:	Not reported
TSD EPA ID:	CAD008252405
TSD County:	Not reported
Waste Category:	Unspecified solvent mixture
Disposal Method:	Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.144
Cat Decode:	Unspecified solvent mixture
Method Decode:	Fuel Blending Prior To Energy Recovery At Another Site
Facility County:	Alameda

envid:	1000109847
Year:	2008
GEPAID:	CAD982368565
Contact:	JOSE LUIS HERNANDEZ OWNER
Telephone:	5105827557
Mailing Name:	Not reported
Mailing Address:	30 A ST
Mailing City,St,Zip:	HAYWARD, CA 945410000
Gen County:	Not reported
TSD EPA ID:	CAD008252405
TSD County:	Not reported
Waste Category:	Unspecified solvent mixture
Disposal Method:	Solvents Recovery
Tons:	0.198
Cat Decode:	Unspecified solvent mixture
Method Decode:	Solvents Recovery
Facility County:	Alameda

envid:	1000109847
Year:	2008
GEPAID:	CAD982368565
Contact:	JOSE LUIS HERNANDEZ OWNER
Telephone:	5105827557
Mailing Name:	Not reported
Mailing Address:	30 A ST
Mailing City,St,Zip:	HAYWARD, CA 945410000
Gen County:	Not reported
TSD EPA ID:	CAD008252405
TSD County:	Not reported
Waste Category:	Unspecified solvent mixture

PEPES AUTO BODY (Continued) **1000109847**

Disposal Method:	Solvents Recovery
Tons:	0.198
Cat Decode:	Unspecified solvent mixture
Method Decode:	Solvents Recovery
Facility County:	Alameda

envid:	1000109847
Year:	2006
GEPAID:	CAD982368565
Contact:	JOSE LUIS HERNANDEZ OWNER
Telephone:	5105827557
Mailing Name:	Not reported
Mailing Address:	30 A ST
Mailing City,St,Zip:	HAYWARD, CA 945410000
Gen County:	Not reported
TSD EPA ID:	CAD009452657
TSD County:	Not reported
Waste Category:	Unspecified solvent mixture
Disposal Method:	Recycler
Tons:	0.18
Cat Decode:	Unspecified solvent mixture
Method Decode:	Recycler
Facility County:	Alameda

Click this hyperlink while viewing on your computer to access
17 additional CA_HAZNET: record(s) in the EDR Site Report.

ECHO:

Envid:	1000109847
Registry ID:	110001164882
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110001164882

K64
SW
1/8-1/4
0.165 mi.
871 ft.

BRITISH PARTS AND SERVICE
335 W A ST
HAYWARD, CA 94545

RCRA-SQG 1000820127
FINDS CAD983661539
ECHO

Site 1 of 4 in cluster K

Relative:
Lower

Actual:
59 ft.

RCRA-SQG:

Date form received by agency:	03/10/1993
Facility name:	BRITISH PARTS AND SERVICE
Facility address:	335 W A ST HAYWARD, CA 94545
EPA ID:	CAD983661539
Mailing address:	W A ST HAYWARD, CA 94545
Contact:	DORENE CARLSON
Contact address:	335 W A ST HAYWARD, CA 94545
Contact country:	US
Contact telephone:	(510) 783-6487
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous

BRITISH PARTS AND SERVICE (Continued) **1000820127**

waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	DORENE CARLSON
Owner/operator address:	335 W A ST HAYWARD, CA 94545
Owner/operator country:	Not reported
Owner/operator telephone:	(510) 783-6487
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

FINDS:

Registry ID: 110002894244

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:

Envid:	1000820127
Registry ID:	110002894244
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110002894244

J65
ESE
1/8-1/4
0.168 mi.
885 ft.

44 A ST
HAYWARD, CA 94541

Site 6 of 10 in cluster J

EDR Hist Auto **1009013678**
N/A

Relative:
Higher

Actual:
73 ft.

EDR Historical Auto Stations:

Name: HAYWARD BRAKE SHOP
Year: 1959
Type: AUTOMOBILE REPAIRING

Name: UNIQUE ENGINES & AUTO REPAIR
Year: 1999
Address: 44 A ST

Name: UNIQUE ENGINES & AUTO REPAIR
Year: 2000
Address: 44 A ST

Name: UNIQUE ENGINES & AUTO REPAIR
Year: 2001
Address: 44 A ST

Name: UNIQUE ENGINES & AUTO REPAIR
Year: 2002
Address: 44 A ST

Name: UNIQUE ENGINES & AUTO REPAIR
Year: 2003
Address: 44 A ST

Name: UNIQUE ENGINES & AUTO REPAIR
Year: 2004
Address: 44 A ST

Name: UNIQUE ENGINES & AUTO REPAIR
Year: 2005
Address: 44 A ST

Name: UNIQUE ENGINES & AUTO REPAIR
Year: 2006
Address: 44 A ST

Name: UNIQUE ENGINES & AUTO REPAIR
Year: 2007
Address: 44 A ST

Name: UNIQUE ENGINES & AUTO REPAIR
Year: 2008
Address: 44 A ST

Name: UNIQUE ENGINES & AUTO REPAIR
Year: 2009
Address: 44 A ST

Name: UNIQUE ENGINES & AUTO REPAIR
Year: 2010
Address: 44 A ST

(Continued) **1009013678**

Name: UNIQUE ENGINES & AUTO REPAIR
Year: 2011
Address: 44 A ST

Name: UNIQUE ENGINES & AUTO REPAIR
Year: 2012
Address: 44 A ST

66
East
1/8-1/4
0.171 mi.
901 ft.

S-M BODY WORKS
159 SMALLEY AVE
HAYWARD, CA

EDR Hist Auto **1009014207**
N/A

Relative:
Higher

Actual:
74 ft.

EDR Historical Auto Stations:
Name: S-M BODY WORKS
Year: 1946
Type: AUTOMOBILE REPAIRING

J67
ESE
1/8-1/4
0.179 mi.
944 ft.

HELMUT MOTORS
82 A
HAYWARD, CA 94541

LUST **S105194654**
N/A

Site 7 of 10 in cluster J

Relative:
Higher

Actual:
73 ft.

LUST:
Region: STATE
Global Id: T0600191687
Latitude: 37.6667
Longitude: -122.09983
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 04/19/1993
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: Not reported
Local Agency: Not reported
RB Case Number: 01-0752
LOC Case Number: RO0002454
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect: Under Investigation
Potential Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating
Site History: Not reported

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

Contact:
Global Id: T0600191687
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Status History:

HELMUT MOTORS (Continued) **S105194654**

Global Id: T0600191687
Status: Completed - Case Closed
Status Date: 04/19/1993

Global Id: T0600191687
Status: Open - Case Begin Date
Status Date: 10/01/1990

Global Id: T0600191687
Status: Open - Site Assessment
Status Date: 12/01/1990

Regulatory Activities:
Global Id: T0600191687
Action Type: Other
Date: 12/01/1990
Action: Leak Reported

Global Id: T0600191687
Action Type: ENFORCEMENT
Date: 04/19/1993
Action: Closure/No Further Action Letter - #19930419

Global Id: T0600191687
Action Type: Other
Date: 10/01/1990
Action: Leak Discovery

Global Id: T0600191687
Action Type: ENFORCEMENT
Date: 07/03/2008
Action: Technical Correspondence / Assistance / Other - #20080703

Global Id: T0600191687
Action Type: ENFORCEMENT
Date: 10/31/2008
Action: Technical Correspondence / Assistance / Other - #20081031

Global Id: T0600191687
Action Type: Other
Date: 10/01/1990
Action: Leak Stopped

LUST REG 2:
Region: 2
Facility Id: 01-0752
Facility Status: Case Closed
Case Number: 01-0752
How Discovered: Tank Closure
Leak Cause: UNK
Leak Source: UNK
Date Leak Confirmed: 4/1/1993
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported

HELMUT MOTORS (Continued) **S105194654**

Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

J68
ESE **82 A ST** **EDR Hist Auto** **1009011794**
1/8-1/4 **HAYWARD, CA 94541** **N/A**
0.179 mi.
944 ft. **Site 8 of 10 in cluster J**

Relative:
Higher

Actual:
73 ft.

EDR Historical Auto Stations:

Name: THOMPSON F E
Year: 1940
Type: GASOLINE AND OIL SERVICE STATIONS

Name: SMITH C L
Year: 1946
Type: GASOLINE AND OIL SERVICE STATIONS

Name: SMITH C L
Year: 1951
Type: GASOLINE STATIONS

Name: TEXACO SERVICE STATION
Year: 1959
Type: GASOLINE STATIONS

Name: HARDEN TEXACO
Year: 1965
Type: GASOLINE STATIONS

Name: INDEPENDENT VOLKSWAGEN REPAIR
Year: 1976
Type: AUTOMOBILE REPAIRING

Name: LEXUS AUTO INDEPENDENT REPAIR S G AUTOWORKS
Year: 1999
Address: 82 A ST

Name: CAR TECH MEEKLAND
Year: 2001
Address: 82 A ST

Name: CAR TECH AUTO REPAIR
Year: 2002
Address: 82 A ST

Name: MIKES FOREIGN AUTOHAUS
Year: 2003
Address: 82 A ST

Name: CAR TECH AUTO REPAIR
Year: 2005
Address: 82 A ST

Name: CAR TECH AUTO REPAIR
Year: 2006

(Continued) **1009011794**

Address: 82 A ST

Name: CAR TECH AUTO REPAIR
Year: 2007
Address: 82 A ST

Name: MIKES AUTO HOUSE
Year: 2008
Address: 82 A ST

Name: MIKES AUTO HOUSE
Year: 2009
Address: 82 A ST

Name: AONE AUTO CARE
Year: 2010
Address: 82 A ST

Name: AONE AUTO CARE
Year: 2011
Address: 82 A ST

Name: A ONE AUTO CARE
Year: 2012
Address: 82 A ST

J69 **PIOPAO PROPERTY** **HIST CORTESE** **S100226462**
ESE **100 A** **N/A**
1/8-1/4 **HAYWARD, CA**
0.186 mi.
981 ft. **Site 9 of 10 in cluster J**

Relative:
Higher

Actual:
73 ft.

HIST CORTESE:
Region: CORTESE
Facility County Code: 1
Reg By: LTNKA
Reg Id: 01-1181

J70 **DOILIS FLYING A SERVICE** **EDR Hist Auto** **1009011704**
ESE **100 A ST** **N/A**
1/8-1/4 **HAYWARD, CA**
0.186 mi.
981 ft. **Site 10 of 10 in cluster J**

Relative:
Higher

Actual:
73 ft.

EDR Historical Auto Stations:
Name: SOUZA LOUIS
Year: 1940
Type: GASOLINE AND OIL SERVICE STATIONS

Name: IRWIN A D
Year: 1946
Type: GASOLINE AND OIL SERVICE STATIONS

Name: MEEKLAND ASSOCIATED SERVICE
Year: 1951
Type: GASOLINE STATIONS

DOILIS FLYING A SERVICE (Continued) **1009011704**

Name: MERL FLYING A SERVICE
Year: 1959
Type: GASOLINE STATIONS

Name: DOILIS FLYING A SERVICE
Year: 1965
Type: GASOLINE STATIONS

K71
SW
1/8-1/4
0.192 mi.
1013 ft.

352 W A ST
HAYWARD, CA 94541

EDR Hist Auto **1015444284**
N/A

Site 2 of 4 in cluster K

Relative:
Lower

Actual:
58 ft.

EDR Historical Auto Stations:
Name: LUBE BOYS 10 MINUTE OIL CHANGE
Year: 2012
Address: 352 W A ST

K72
SW
1/8-1/4
0.192 mi.
1013 ft.

A STREET DOUGLAS SERVICE STATION
352 WEST A ST
HAYWARD, CA

EDR Hist Auto **1009013711**
N/A

Site 3 of 4 in cluster K

Relative:
Lower

Actual:
58 ft.

EDR Historical Auto Stations:
Name: A STREET DOUGLAS SERVICE STATION
Year: 1970
Type: GASOLINE STATIONS

L73
ESE
1/8-1/4
0.199 mi.
1052 ft.

PRICE RITE CLEANERS
112 A ST
HAYWARD, CA

EDR Hist Cleaner **1009139741**
N/A

Site 1 of 2 in cluster L

Relative:
Higher

Actual:
74 ft.

EDR Historical Cleaners:
Name: PRICE RITE CLEANERS
Year: 1959
Type: CLEANERS AND DYERS

Name: PRICE RITE CLEANERS
Year: 1970
Type: CLEANERS AND DYERS

74
South
1/8-1/4
0.200 mi.
1054 ft.

22457 SONOMA ST
HAYWARD, CA 94541

EDR Hist Auto **1015339332**
N/A

Relative:
Lower

Actual:
65 ft.

EDR Historical Auto Stations:

Name:	H & H AUTOMOTIVE
Year:	2009
Address:	22457 SONOMA ST

M75
WSW
1/8-1/4
0.202 mi.
1068 ft.

NEW RAJA 76 CIRCLE K #253791
391 A ST WEST
HAYWARD, CA 94541

Site 1 of 8 in cluster M

UST **U004048921**
N/A

Relative:
Lower

Actual:
58 ft.

UST:

Facility ID:	01-003-001105
Permitting Agency:	HAYWARD, CITY OF
Latitude:	37.6682206
Longitude:	-122.105199

M76
WSW
1/8-1/4
0.202 mi.
1068 ft.

UNION OIL SS 3791
391 WEST A ST
HAYWARD, CA 94541

Site 2 of 8 in cluster M

HIST UST **S113024580**
HAZNET **N/A**

Relative:
Lower

Actual:
58 ft.

HIST UST:

File Number:	00036459
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00036459.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported

UNION OIL SS 3791 (Continued) **S113024580**

Container Construction Thickness: Not reported
Leak Detection: Not reported

Click here for Geo Tracker PDF:

HAZNET:

envid:	S113024580
Year:	2011
GEPAID:	CAL000008511
Contact:	UNDELIVERABLE 1/95 SURVEY HN
Telephone:	--
Mailing Name:	Not reported
Mailing Address:	391 WEST A ST
Mailing City,St,Zip:	HAYWARD, CA 945410000
Gen County:	Not reported
TSD EPA ID:	ORD089452353
TSD County:	Not reported
Waste Category:	Other inorganic solid waste
Disposal Method:	Stabilization Or Chemical Fixation Prior To Disposal At Another Site
Tons:	23.075
Cat Decode:	Other inorganic solid waste
Method Decode:	Stabilization Or Chemical Fixation Prior To Disposal At Another Site
Facility County:	Alameda

envid:	S113024580
Year:	2011
GEPAID:	CAL000008511
Contact:	UNDELIVERABLE 1/95 SURVEY HN
Telephone:	--
Mailing Name:	Not reported
Mailing Address:	391 WEST A ST
Mailing City,St,Zip:	HAYWARD, CA 945410000
Gen County:	Not reported
TSD EPA ID:	ORD089452353
TSD County:	Not reported
Waste Category:	Other inorganic solid waste
Disposal Method:	Stabilization Or Chemical Fixation Prior To Disposal At Another Site
Tons:	23.075
Cat Decode:	Other inorganic solid waste
Method Decode:	Stabilization Or Chemical Fixation Prior To Disposal At Another Site
Facility County:	Alameda

M77 **UNOCAL #3791** **Alameda County CS** **U001597018**
WSW **391 W A ST** **N/A**
1/8-1/4 **HAYWARD, CA 94541**
0.202 mi.
1068 ft. **Site 3 of 8 in cluster M**

Relative:
Lower

Actual:
58 ft.

Alameda County CS:

Status:	11
Record Id:	RO0002552
PE:	5602
Facility Status:	Not reported

M78
WSW
1/8-1/4
0.202 mi.
1068 ft.

ROSE UNION SERVICE
391 WEST A ST
HAYWARD, CA

EDR Hist Auto **1009013407**
N/A

Site 4 of 8 in cluster M

Relative:
Lower

Actual:
58 ft.

EDR Historical Auto Stations:

Name: WOODARD & ROSE UNION SERVICE
Year: 1965
Type: GASOLINE STATIONS

Name: ROSE & COZZO UNION SERVICE
Year: 1970
Type: GASOLINE STATIONS

Name: ROSE UNION SERVICE
Year: 1976
Type: GASOLINE STATIONS

M79
WSW
1/8-1/4
0.202 mi.
1068 ft.

391 W A ST
HAYWARD, CA 94541

EDR Hist Auto **1015463739**
N/A

Site 5 of 8 in cluster M

Relative:
Lower

Actual:
58 ft.

EDR Historical Auto Stations:

Name: 76 GAS STATION
Year: 2005
Address: 391 W A ST

Name: 76 GAS STATION
Year: 2006
Address: 391 W A ST

Name: 76 GAS STATION
Year: 2007
Address: 391 W A ST

Name: 76 GAS STATION
Year: 2008
Address: 391 W A ST

Name: 76 GAS STATION
Year: 2009
Address: 391 W A ST

M80
WSW
1/8-1/4
0.202 mi.
1068 ft.

WOODARD UNION SERVICE
391 WEST A
HAYWARD, CA

EDR Hist Auto **1009011803**
N/A

Site 6 of 8 in cluster M

Relative:
Lower

Actual:
58 ft.

EDR Historical Auto Stations:

Name: WOODARD UNION SERVICE
Year: 1959
Type: GASOLINE STATIONS

M81 WSW 1/8-1/4 0.202 mi. 1068 ft. | **UNOCAL SERVICE STATION #3791**
391 W A ST
HAYWARD, CA 94541 | **SWEEPS UST** **S101580186**
CA FID UST **N/A**

Site 7 of 8 in cluster M

Relative: Lower

Actual: 58 ft.

SWEEPS UST:

Status:	Active
Comp Number:	31666
Number:	1
Board Of Equalization:	44-001059
Referral Date:	07-08-93
Action Date:	04-15-94
Created Date:	02-29-88
Owner Tank Id:	3791-33
SWRCB Tank Id:	01-003-031666-000001
Tank Status:	A
Capacity:	10000
Active Date:	11-03-92
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	3

Status:	Active
Comp Number:	31666
Number:	1
Board Of Equalization:	44-001059
Referral Date:	07-08-93
Action Date:	04-15-94
Created Date:	02-29-88
Owner Tank Id:	3791-22
SWRCB Tank Id:	01-003-031666-000002
Tank Status:	A
Capacity:	10000
Active Date:	11-03-92
Tank Use:	M.V. FUEL
STG:	P
Content:	PRM UNLEADED
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	31666
Number:	1
Board Of Equalization:	44-001059
Referral Date:	07-08-93
Action Date:	04-15-94
Created Date:	02-29-88
Owner Tank Id:	3791-11
SWRCB Tank Id:	01-003-031666-000003
Tank Status:	A
Capacity:	10000
Active Date:	11-03-92
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not reported

Status:	Not reported

UNOCAL SERVICE STATION #3791 (Continued) **S101580186**

Comp Number:	31666
Number:	Not reported
Board Of Equalization:	44-001059
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	01-003-031666-000004
Tank Status:	Not reported
Capacity:	500
Active Date:	Not reported
Tank Use:	OIL
STG:	WASTE
Content:	WASTE OIL
Number Of Tanks:	1

CA FID UST:

Facility ID:	01001703
Regulated By:	UTNKA
Regulated ID:	982055048
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	5107851616
Mail To:	Not reported
Mailing Address:	911 WILSHIRE BLVD
Mailing Address 2:	Not reported
Mailing City,St,Zip:	HAYWARD 94541
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

M82 **TOSCO - FACILITY #3791** **LUST** **S104660352**
WSW **391 A ST W** **HIST CORTESE** **N/A**
1/8-1/4 **HAYWARD, CA 94541**
0.202 mi.
1068 ft. **Site 8 of 8 in cluster M**

Relative:
Lower

Actual:
58 ft.

LUST:

Region:	STATE
Global Id:	T0600101470
Latitude:	37.666674699
Longitude:	-122.106546
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	12/06/2013
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Case Worker:	UUU
Local Agency:	HAYWARD, CITY OF
RB Case Number:	01-1595
LOC Case Number:	TT01-1595
File Location:	Not reported
Potential Media Affect:	Other Groundwater (uses other than drinking water), Soil Vapor
Potential Contaminants of Concern:	Gasoline

TOSCO - FACILITY #3791 (Continued) **S104660352**

Site History: Not reported

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

Contact:

Global Id:	T0600101470
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0600101470
Contact Type:	Local Agency Caseworker
Contact Name:	DANILO M. GALANG
Organization Name:	HAYWARD, CITY OF
Address:	777 B STREET
City:	HAYWARD
Email:	danny.galang@hayward-ca.gov
Phone Number:	Not reported

Status History:

Global Id:	T0600101470
Status:	Completed - Case Closed
Status Date:	12/06/2013

Global Id:	T0600101470
Status:	Completed - Case Closed
Status Date:	12/06/2013

Global Id:	T0600101470
Status:	Open - Assessment & Interim Remedial Action
Status Date:	08/12/2009

Global Id:	T0600101470
Status:	Open - Case Begin Date
Status Date:	01/15/1987

Global Id:	T0600101470
Status:	Open - Eligible for Closure
Status Date:	02/19/2013

Global Id:	T0600101470
Status:	Open - Remediation
Status Date:	01/01/1995

Global Id:	T0600101470
Status:	Open - Site Assessment
Status Date:	01/15/1987

Global Id:	T0600101470
Status:	Open - Site Assessment
Status Date:	10/20/1989

Global Id:	T0600101470

TOSCO - FACILITY #3791 (Continued) **S104660352**

Status: Open - Site Assessment
Status Date: 02/12/1990

Regulatory Activities:

Global Id: T0600101470
Action Type: RESPONSE
Date: 01/21/2003
Action: Other Report / Document

Global Id: T0600101470
Action Type: ENFORCEMENT
Date: 06/11/2014
Action: Clean Up Fund - Letter to RP

Global Id: T0600101470
Action Type: Other
Date: 12/13/1988
Action: Leak Reported

Global Id: T0600101470
Action Type: RESPONSE
Date: 12/03/1990
Action: Tank Removal Workplan

Global Id: T0600101470
Action Type: RESPONSE
Date: 05/02/1991
Action: Tank Removal Report / UST Sampling Report

Global Id: T0600101470
Action Type: Other
Date: 12/13/1988
Action: Leak Discovery

Global Id: T0600101470
Action Type: ENFORCEMENT
Date: 12/06/2013
Action: Closure/No Further Action Letter

Global Id: T0600101470
Action Type: ENFORCEMENT
Date: 04/12/2012
Action: Technical Correspondence / Assistance / Other

Global Id: T0600101470
Action Type: Other
Date: 12/13/1988
Action: Leak Stopped

LUST REG 2:

Region: 2
Facility Id: 01-1595
Facility Status: Remediation Plan
Case Number: 01-1595
How Discovered: Tank Closure

TOSCO - FACILITY #3791 (Continued) **S104660352**

Leak Cause: Structure Failure
Leak Source: Tank
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: 1/15/1987
Preliminary Site Assesment Began: 10/20/1989
Pollution Characterization Began: 2/12/1990
Pollution Remediation Plan Submitted: 1/1/1995
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

HIST CORTESE:
Region: CORTESE
Facility County Code: 1
Reg By: LTNKA
Reg Id: 01-1595

K83
SW
1/8-1/4
0.204 mi.
1077 ft.

FREEWAY GARAGE
373 WEST A ST
HAYWARD, CA

EDR Hist Auto **1009015214**
N/A

Site 4 of 4 in cluster K

Relative:
Lower

Actual:
58 ft.

EDR Historical Auto Stations:
Name: FREEWAY GARAGE
Year: 1965
Type: AUTOMOBILE REPAIRING

Name: FREEWAY GARAGE
Year: 1970
Type: AUTOMOBILE REPAIRING

Name: SHUCK S TRANSMISSION SERVICE
Year: 1976
Type: AUTOMOBILE REPAIRING

L84
ESE
1/8-1/4
0.220 mi.
1164 ft.

BOB S SHELL SERVICE
109 A ST
HAYWARD, CA

EDR Hist Auto **1009011844**
N/A

Site 2 of 2 in cluster L

Relative:
Higher

Actual:
74 ft.

EDR Historical Auto Stations:
Name: BOB S SHELL SERVICE
Year: 1965
Type: GASOLINE STATIONS

Name: BOB S SHELL SERVICE
Year: 1970
Type: GASOLINE STATIONS

Name: REGO S BOB SHELL SERVICE
Year: 1976
Type: GASOLINE STATIONS

N85
SE
1/4-1/2
0.274 mi.
1445 ft.

SELECT FOODS
22600 AMADOR ST
HAYWARD, CA 94541

LUST **S106059400**
Alameda County CS **N/A**
CHMIRS

Site 1 of 2 in cluster N

Relative:
Higher

Actual:
74 ft.

LUST:

Region:	STATE
Global Id:	T0600102276
Latitude:	37.6659
Longitude:	-122.1005
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	10/05/2005
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Case Worker:	UUU
Local Agency:	HAYWARD, CITY OF
RB Case Number:	01-2468
LOC Case Number:	01-2468
File Location:	Local Agency
Potential Media Affect:	Under Investigation
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

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

Contact:

Global Id:	T0600102276
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0600102276
Contact Type:	Local Agency Caseworker
Contact Name:	DANILO M. GALANG
Organization Name:	HAYWARD, CITY OF
Address:	777 B STREET
City:	HAYWARD
Email:	danny.galang@hayward-ca.gov
Phone Number:	Not reported

Status History:

Global Id:	T0600102276
Status:	Completed - Case Closed
Status Date:	10/05/2005

Global Id:	T0600102276
Status:	Open - Case Begin Date
Status Date:	04/27/1999

Global Id:	T0600102276
Status:	Open - Site Assessment
Status Date:	04/27/1999

SELECT FOODS (Continued) **S106059400**

Regulatory Activities:

Global Id:	T0600102276
Action Type:	RESPONSE
Date:	10/05/2005
Action:	Other Report / Document
Global Id:	T0600102276
Action Type:	Other
Date:	04/27/1999
Action:	Leak Reported
Global Id:	T0600102276
Action Type:	Other
Date:	04/27/1999
Action:	Leak Discovery
Global Id:	T0600102276
Action Type:	Other
Date:	04/27/1999
Action:	Leak Stopped

LUST REG 2:

Region:	2
Facility Id:	01-2468
Facility Status:	Leak being confirmed
Case Number:	01-2468
How Discovered:	Tank Closure
Leak Cause:	UNK
Leak Source:	UNK
Date Leak Confirmed:	4/27/1999
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	Not reported
Pollution Characterization Began:	Not reported
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

Alameda County CS:

Status:	11
Record Id:	RO0000165
PE:	5602
Facility Status:	Not reported

CHMIRS:

OES Incident Number:	3-3435
OES notification:	07/08/2003
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported

SELECT FOODS (Continued) **S106059400**

Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Not reported
Cleanup By:	Unknown
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	2003
Agency:	Hayward Fire Dept
Incident Date:	7/8/200312:00:00 AM
Admin Agency:	Hayward Fire Department
Amount:	Not reported
Contained:	Yes
Site Type:	Industrial Plant
E Date:	Not reported
Substance:	Ammonia Gas
Gallons:	0.000000
Pounds:	10
Unknown:	0
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	23
Number of Injuries:	0
Number of Fatalities:	0
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported

SELECT FOODS (Continued) **S106059400**

Description: Substance was released at a refrigeration Plant From a refrigeration unit. 3 people where evacuated from the plant and an unknown number of individuals (Possibly 20) who where setting up for a ball game

---

N86
SE
1/4-1/2
0.276 mi.
1456 ft.

SELECT-SYSCO FOODS, INC.
22678 AMADOR ST
HAYWARD, CA 94541

SLIC S101623662
HIST UST N/A
CA FID UST

Site 2 of 2 in cluster N

Relative:
Higher

Actual:
74 ft.

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	08/15/1996
Global Id:	T0600101211
Lead Agency:	HAYWARD, CITY OF
Lead Agency Case Number:	01-1316
Latitude:	37.664034
Longitude:	-122.097427
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	01-1316
File Location:	Not reported
Potential Media Affected:	Soil
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

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

HIST UST:

File Number:	00036310
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00036310.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

SELECT-SYSCO FOODS, INC. (Continued) **S101623662**

Click here for Geo Tracker PDF:

CA FID UST:

Facility ID:	01002862
Regulated By:	UTNKA
Regulated ID:	00002761
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	4157851000
Mail To:	Not reported
Mailing Address:	P O BOX
Mailing Address 2:	Not reported
Mailing City,St,Zip:	HAYWARD 94541
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

O87 **THRIFTY OIL STN. #062** **LUST** **S101623666**
East **207 A ST** **SWEEPS UST** **N/A**
1/4-1/2 **HAYWARD, CA 94541** **CA FID UST**
0.294 mi. **HIST CORTESE**
1554 ft. **Site 1 of 2 in cluster O**

Relative:
Higher

Actual:
78 ft.

LUST:

Region:	STATE
Global Id:	T0600101362
Latitude:	37.6679019
Longitude:	-122.0970428
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	03/22/2001
Lead Agency:	HAYWARD, CITY OF
Case Worker:	DMG
Local Agency:	HAYWARD, CITY OF
RB Case Number:	01-1475
LOC Case Number:	01-1475
File Location:	Not reported
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

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

Contact:

Global Id:	T0600101362
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id: T0600101362

THRIFTY OIL STN. #062 (Continued) **S101623666**

Contact Type:	Local Agency Caseworker
Contact Name:	DANILO M. GALANG
Organization Name:	HAYWARD, CITY OF
Address:	777 B STREET
City:	HAYWARD
Email:	danny.galang@hayward-ca.gov
Phone Number:	Not reported

Status History:

Global Id:	T0600101362
Status:	Completed - Case Closed
Status Date:	03/22/2001
Global Id:	T0600101362
Status:	Open - Case Begin Date
Status Date:	08/20/1986
Global Id:	T0600101362
Status:	Open - Site Assessment
Status Date:	02/28/1987

Regulatory Activities:

Global Id:	T0600101362
Action Type:	Other
Date:	08/20/1986
Action:	Leak Reported
Global Id:	T0600101362
Action Type:	RESPONSE
Date:	03/07/2001
Action:	Request for Closure
Global Id:	T0600101362
Action Type:	RESPONSE
Date:	10/29/2001
Action:	Well Destruction Report
Global Id:	T0600101362
Action Type:	Other
Date:	08/20/1986
Action:	Leak Discovery
Global Id:	T0600101362
Action Type:	ENFORCEMENT
Date:	03/21/2001
Action:	Closure/No Further Action Letter
Global Id:	T0600101362
Action Type:	Other
Date:	08/20/1986
Action:	Leak Stopped

LUST REG 2:

Region:	2
Facility Id:	01-1475

THRIFTY OIL STN. #062 (Continued) **S101623666**

Facility Status:	Case Closed
Case Number:	01-1475
How Discovered:	Tank Closure
Leak Cause:	Structure Failure
Leak Source:	Tank
Date Leak Confirmed:	Not reported
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	Not reported
Pollution Characterization Began:	2/28/1987
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

SWEEPS UST:

Status:	Active
Comp Number:	4708
Number:	1
Board Of Equalization:	44-026503
Referral Date:	07-08-93
Action Date:	07-08-93
Created Date:	02-29-88
Owner Tank Id:	62101
SWRCB Tank Id:	01-003-004708-000001
Tank Status:	A
Capacity:	11891
Active Date:	04-07-93
Tank Use:	M.V.FUEL
STG:	P
Content:	LEADED
Number Of Tanks:	3

Status:	Active
Comp Number:	4708
Number:	1
Board Of Equalization:	44-026503
Referral Date:	07-08-93
Action Date:	07-08-93
Created Date:	02-29-88
Owner Tank Id:	62202
SWRCB Tank Id:	01-003-004708-000002
Tank Status:	A
Capacity:	11891
Active Date:	04-07-93
Tank Use:	M.V.FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	4708
Number:	1
Board Of Equalization:	44-026503
Referral Date:	07-08-93
Action Date:	07-08-93
Created Date:	02-29-88
Owner Tank Id:	62303

THRIFTY OIL STN. #062 (Continued) **S101623666**

SWRCB Tank Id:	01-003-004708-000003
Tank Status:	A
Capacity:	11891
Active Date:	04-07-93
Tank Use:	M.V.FUEL
STG:	P
Content:	PRM UNLEADED
Number Of Tanks:	Not reported

CA FID UST:

Facility ID:	01001594
Regulated By:	UTNKA
Regulated ID:	00004708
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	2139239876
Mail To:	Not reported
Mailing Address:	10000 LAKEWOOD BLVD
Mailing Address 2:	Not reported
Mailing City,St,Zip:	HAYWARD 94541
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

HIST CORTESE:

Region:	CORTESE
Facility County Code:	1
Reg By:	LTNKA
Reg Id:	01-1475

Region:	CORTESE
Facility County Code:	1
Reg By:	LTNKA
Reg Id:	2733

O88 **TESORO (USA) 63062** **UST** **U003776497**
East **207 A ST** **N/A**
1/4-1/2 **HAYWARD, CA 94541**
0.294 mi.
1554 ft. **Site 2 of 2 in cluster O**

Relative:
Higher

Actual:
78 ft.

UST:

Facility ID:	01-003-080302
Permitting Agency:	HAYWARD, CITY OF
Latitude:	37.66909
Longitude:	-122.095396

P89
NE
1/4-1/2
0.311 mi.
1640 ft.

SUNSET HIGH SCHOOL
22100 PRINCETON ST
HAYWARD, CA 94541

SWEEPS UST **S101623664**
HIST UST **N/A**
CA FID UST

Site 1 of 3 in cluster P

Relative:
Higher

Actual:
74 ft.

SWEEPS UST:

Status:	Not reported
Comp Number:	42697
Number:	Not reported
Board Of Equalization:	44-000896
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	01-003-042697-000001
Tank Status:	Not reported
Capacity:	5000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	DIESEL
Number Of Tanks:	2

Status:	Not reported
Comp Number:	42697
Number:	Not reported
Board Of Equalization:	44-000896
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	01-003-042697-000002
Tank Status:	Not reported
Capacity:	100
Active Date:	Not reported
Tank Use:	OIL
STG:	WASTE
Content:	WASTE OIL
Number Of Tanks:	Not reported

HIST UST:

File Number:	00036024
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00036024.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported

Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported

SUNSET HIGH SCHOOL (Continued) **S101623664**

Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

CA FID UST:

Facility ID:	01001553
Regulated By:	UTNKI
Regulated ID:	00042697
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	4155820575
Mail To:	Not reported
Mailing Address:	22100 PRINCETON ST
Mailing Address 2:	Not reported
Mailing City,St,Zip:	HAYWARD 94541
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Inactive

P90 **SUNSET HIGH SCHOOL** **LUST** **S105035070**
NE **22100 PRINCETON** **N/A**
1/4-1/2 **HAYWARD, CA 94541**
0.311 mi.
1640 ft. **Site 2 of 3 in cluster P**

Relative:
Higher

Actual:
74 ft.

LUST REG 2:

Region:	2
Facility Id:	01-1440
Facility Status:	Leak being confirmed
Case Number:	01-1440
How Discovered:	Tank Closure
Leak Cause:	Structure Failure
Leak Source:	Tank
Date Leak Confirmed:	2/5/1987
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	Not reported
Pollution Characterization Began:	Not reported
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

P91
NE
1/4-1/2
0.311 mi.
1640 ft.

SUNSET HIGH SCHOOL
22100 PRINCETON
HAYWARD, CA

HIST CORTESE **U001597007**
N/A

Site 3 of 3 in cluster P

Relative:
Higher

Actual:
74 ft.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	1
Reg By:	LTNKA
Reg Id:	01-1440

92
WSW
1/4-1/2
0.331 mi.
1746 ft.

VIC HUBBARD AUTO SUPPLY, INC
411 W A ST
HAYWARD, CA 94541

SWEEPS UST **S101580197**
CA FID UST **N/A**

Relative:
Lower

Actual:
53 ft.

SWEEPS UST:

Status:	Not reported
Comp Number:	12
Number:	Not reported
Board Of Equalization:	44-033758
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	01-003-000012-000001
Tank Status:	Not reported
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	REG UNLEADED
Number Of Tanks:	2

Status:	Not reported
Comp Number:	12
Number:	Not reported
Board Of Equalization:	44-033758
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	01-003-000012-000002
Tank Status:	Not reported
Capacity:	1000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	REG UNLEADED
Number Of Tanks:	Not reported

CA FID UST:

Facility ID:	01001753
Regulated By:	UTNKI
Regulated ID:	831672
Cortese Code:	Not reported
SIC Code:	Not reported

VIC HUBBARD AUTO SUPPLY, INC (Continued) **S101580197**

Facility Phone:	5107860510
Mail To:	Not reported
Mailing Address:	P.O. BOX 4658
Mailing Address 2:	Not reported
Mailing City,St,Zip:	HAYWARD 94541
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Inactive

93
SE
1/4-1/2
0.350 mi.
1848 ft.

Relative:
Higher

Actual:
73 ft.

SELECT FOODS
22885 AMADOR ST
HAYWARD, CA 94541

RCRA-SQG **1000598104**
SLIC **CAD983621467**
BROWNFIELDS
SWEEPS UST
CHMIRS
FINDS
HAZNET
HIST CORTESE
ECHO

RCRA-SQG:

Date form received by agency:	03/11/1992
Facility name:	SELECT FOODS
Facility address:	22885 AMADOR ST HAYWARD, CA 94541
EPA ID:	CAD983621467
Contact:	WAYNE MCCLAY
Contact address:	22885 AMADOR ST HAYWARD, CA 94541
Contact country:	US
Contact telephone:	(510) 392-3382
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	SELECT FOODS
Owner/operator address:	22885 AMADOR ST HAYWARD, CA 94541
Owner/operator country:	Not reported
Owner/operator telephone:	(510) 785-1000
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No

SELECT FOODS (Continued) **1000598104**

Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	05/02/2008
Global Id:	T0600137550
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number:	2020172
Latitude:	37.6610398
Longitude:	-122.097302
Case Type:	Cleanup Program Site
Case Worker:	MS
Local Agency:	Not reported
RB Case Number:	01S0638
File Location:	Not reported
Potential Media Affected:	Soil
Potential Contaminants of Concern:	Diesel, Gasoline, Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

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

BROWNFIELDS:

Global ID: T0600137550

SWEEPS UST:

Status:	Active
Comp Number:	2761
Number:	9
Board Of Equalization:	44-000793
Referral Date:	07-08-93
Action Date:	03-24-94
Created Date:	02-29-88
Owner Tank Id:	1
SWRCB Tank Id:	01-003-002761-000001
Tank Status:	A
Capacity:	8000
Active Date:	07-01-93
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	3

SELECT FOODS (Continued) **1000598104**

Status:	Active
Comp Number:	2761
Number:	9
Board Of Equalization:	44-000793
Referral Date:	07-08-93
Action Date:	03-24-94
Created Date:	02-29-88
Owner Tank Id:	2
SWRCB Tank Id:	01-003-002761-000002
Tank Status:	A
Capacity:	10000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	2761
Number:	9
Board Of Equalization:	44-000793
Referral Date:	07-08-93
Action Date:	03-24-94
Created Date:	02-29-88
Owner Tank Id:	3
SWRCB Tank Id:	01-003-002761-000003
Tank Status:	A
Capacity:	10000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not reported

Status:	Not reported
Comp Number:	2761
Number:	Not reported
Board Of Equalization:	44-000793
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	01-003-002761-000005
Tank Status:	Not reported
Capacity:	750
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	Not reported
Comp Number:	2761
Number:	Not reported
Board Of Equalization:	44-000793
Referral Date:	Not reported
Action Date:	Not reported

SELECT FOODS (Continued) **1000598104**

Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	01-003-002761-000006
Tank Status:	Not reported
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	Not reported
Comp Number:	2761
Number:	Not reported
Board Of Equalization:	44-000793
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	01-003-002761-000004
Tank Status:	Not reported
Capacity:	10000
Active Date:	Not reported
Tank Use:	UNKNOWN
STG:	WASTE
Content:	Not reported
Number Of Tanks:	3

CHMIRS:

OES Incident Number:	13013
OES notification:	Not reported
OES Date:	3/30/1996
OES Time:	11:26:25 PM
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported

SELECT FOODS (Continued) **1000598104**

Facility Telephone:	Not reported
Waterway Involved:	NO
Waterway:	Not reported
Spill Site:	Not reported
Cleanup By:	not appropriate
Containment:	Not reported
What Happened:	Not reported
Type:	VAPOR
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	1996
Agency:	select foods
Incident Date:	2030 3/30/96
Admin Agency:	Not reported
Amount:	90 #
Contained:	NO
Site Type:	IND PLT
E Date:	Not reported
Substance:	ammonia (vaporous)
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	NO
Number of Injuries:	NO
Number of Fatalities:	NO
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported
Description:	pressure relief valve activation

FINDS:

Registry ID: 110002870705

Environmental Interest/Information System

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

SELECT FOODS (Continued) **1000598104**

HAZNET:

envid:	1000598104
Year:	2006
GEPAID:	CAD983621467
Contact:	BILL RASNICK
Telephone:	5107851000
Mailing Name:	Not reported
Mailing Address:	22600 AMADOR STREET
Mailing City,St,Zip:	HAYWARD, CA 945410000
Gen County:	Not reported
TSD EPA ID:	CAD028409019
TSD County:	Not reported
Waste Category:	Oil/water separation sludge
Disposal Method:	Transfer Station
Tons:	0.37
Cat Decode:	Oil/water separation sludge
Method Decode:	Transfer Station
Facility County:	Alameda

envid:	1000598104
Year:	2005
GEPAID:	CAD983621467
Contact:	BILL RASNICK
Telephone:	5107851000
Mailing Name:	Not reported
Mailing Address:	22600 AMADOR STREET
Mailing City,St,Zip:	HAYWARD, CA 945410000
Gen County:	Not reported
TSD EPA ID:	CAD982042475
TSD County:	Not reported
Waste Category:	Asbestos containing waste
Disposal Method:	Disposal, Land Fill
Tons:	58.99
Cat Decode:	Asbestos containing waste
Method Decode:	Disposal, Land Fill
Facility County:	Alameda

envid:	1000598104
Year:	2005
GEPAID:	CAD983621467
Contact:	BILL RASNICK
Telephone:	5107851000
Mailing Name:	Not reported
Mailing Address:	22600 AMADOR STREET
Mailing City,St,Zip:	HAYWARD, CA 945410000
Gen County:	Not reported
TSD EPA ID:	CAD980675276
TSD County:	Not reported
Waste Category:	Contaminated soil from site clean-up
Disposal Method:	Disposal, Land Fill
Tons:	429.82
Cat Decode:	Contaminated soil from site clean-up
Method Decode:	Disposal, Land Fill
Facility County:	Alameda

envid:	1000598104
Year:	2003

SELECT FOODS (Continued) **1000598104**

GEPAID:	CAD983621467
Contact:	BILL RASNICK
Telephone:	5107851000
Mailing Name:	Not reported
Mailing Address:	22600 AMADOR STREET
Mailing City,St,Zip:	HAYWARD, CA 945410000
Gen County:	Not reported
TSD EPA ID:	CAT080033681
TSD County:	Not reported
Waste Category:	Unspecified aqueous solution
Disposal Method:	Recycler
Tons:	2.75
Cat Decode:	Unspecified aqueous solution
Method Decode:	Recycler
Facility County:	Alameda

envid:	1000598104
Year:	1999
GEPAID:	CAD983621467
Contact:	SELECT FOODS
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	22600 AMADOR STREET
Mailing City,St,Zip:	HAYWARD, CA 945410000
Gen County:	Not reported
TSD EPA ID:	CAD009466392
TSD County:	Not reported
Waste Category:	Other empty containers 30 gallons or more
Disposal Method:	Disposal, Other
Tons:	2.5000
Cat Decode:	Other empty containers 30 gallons or more
Method Decode:	Disposal, Other
Facility County:	1

Click this hyperlink while viewing on your computer to access
6 additional CA_HAZNET: record(s) in the EDR Site Report.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	1
Reg By:	LTNKA
Reg Id:	01-1316

ECHO:

Envid:	1000598104
Registry ID:	110002870705
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110002870705

94
East
1/4-1/2
0.396 mi.
2089 ft.

BURBANK ELEMENTARY
B STREET AND FILBERT STREET
HAYWARD, CA 94541

ENVIROSTOR **S113186459**
VCP **N/A**

Relative:
Higher

Actual:
80 ft.

ENVIROSTOR:

Facility ID:	60001840
Status:	No Further Action
Status Date:	05/20/2013
Site Code:	201957
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	3.85
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Karen Toth
Division Branch:	Cleanup Berkeley
Assembly:	18
Senate:	10
Special Program:	Voluntary Cleanup Program
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	37.66758
Longitude:	-122.0952
APN:	431 011000700
Past Use:	SCHOOL - ELEMENTARY
Potential COC:	Arsenic Chlordane Lead
Confirmed COC:	Arsenic Chlordane Lead
Potential Description:	SOIL
Alias Name:	431 011000700
Alias Type:	APN
Alias Name:	201957
Alias Type:	Project Code (Site Code)
Alias Name:	60001840
Alias Type:	Envirostor ID Number
Alias Name:	60001840
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Voluntary Cleanup Agreement
Completed Date:	01/23/2013
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	05/13/2013
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Phase 1
Completed Date:	10/06/2005
Comments:	Results indicated the presence of pesticides, lead and arsenic

BURBANK ELEMENTARY (Continued) **S113186459**

exceeding the CHHSL for residential soil. Further investigation was recommended by the consultant.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	05/14/2013
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	No Further Action Letter
Completed Date:	05/21/2013
Comments:	Not reported

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

VCP:

Facility ID:	60001840
Site Type:	Voluntary Cleanup
Site Type Detail:	Voluntary Cleanup
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	3.85
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Not reported
Supervisor:	Karen Toth
Division Branch:	Cleanup Berkeley
Site Code:	201957
Assembly:	18
Senate:	10
Special Programs Code:	Voluntary Cleanup Program
Status:	No Further Action
Status Date:	05/20/2013
Restricted Use:	NO
Funding:	Responsible Party
Lat/Long:	37.66758 / -122.0952
APN:	431 011000700
Past Use:	SCHOOL - ELEMENTARY
Potential COC:	30001, 30004, 30013
Confirmed COC:	30001,30004,30013
Potential Description:	SOIL
Alias Name:	431 011000700
Alias Type:	APN
Alias Name:	201957
Alias Type:	Project Code (Site Code)
Alias Name:	60001840

BURBANK ELEMENTARY (Continued) **S113186459**

Alias Type: Envirostor ID Number
Alias Name: 60001840
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 01/23/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 05/13/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 10/06/2005
Comments: Results indicated the presence of pesticides, lead and arsenic exceeding the CHHSL for residential soil. Further investigation was recommended by the consultant.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 05/14/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: No Further Action Letter
Completed Date: 05/21/2013
Comments: Not reported

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

Q95
WNW
1/4-1/2
0.408 mi.
2156 ft.

RAS-CO MANUFACTURING COMPANY
413 WEST SUNSET BLVD
HAYWARD, CA 94541

LUST **S103472259**
N/A

Site 1 of 2 in cluster Q

Relative:
Lower

Actual:
57 ft.

LUST:
Region: STATE
Global Id: T0600101947
Latitude: 37.6704567896487
Longitude: -122.110609710217

RAS-CO MANUFACTURING COMPANY (Continued) **S103472259**

Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	12/26/2013
Lead Agency:	ALAMEDA COUNTY LOP
Case Worker:	MD
Local Agency:	ALAMEDA COUNTY LOP
RB Case Number:	01-2121
LOC Case Number:	RO0000164
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not all historic documents for the fuel leak case may be available on GeoTracker. A complete case file for this site is located on the Alameda County Environmental Health website at: http://ehgis.acgov.org/dehpublic/dehpublic.jsp. Two gasoline USTs (one 550- and one 250-gallon) were removed in November 1994; limited overexcavation was conducted at that time. Two phases of overexcavation of 150 and 80 cubic yards of soil were conducted in March 1995 and October 1995, and a grab groundwater pit sample was collected. Soil was stockpiled and treated in with a hydrogen peroxide solution and appears to have been used as backfill thereafter. One well was installed in June 1999 and sampled once. An onsite agricultural well was also sampled. In the first sampling event it contained significant MTBE; a second sampling event found a non-detectable concentration. Three additional downgradient residential yard wells have been identified as potential receptors. These are reported to be unused; however, at least one is tested yearly for non target compounds but has not been tested for petroleum compounds. Not all historic documents for the fuel leak case may be available on GeoTracker. A complete case file for this site is located on the Alameda County Environmental Health website at: http://ehgis.acgov.org/dehpublic/dehpublic.jsp.

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

Contact:

Global Id:	T0600101947
Contact Type:	Local Agency Caseworker
Contact Name:	MARK DETTERMAN
Organization Name:	ALAMEDA COUNTY LOP
Address:	1131 HARBOR BAY PARKWAY
City:	ALAMEDA
Email:	mark.detterman@acgov.org
Phone Number:	5105676876

Global Id:	T0600101947
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Status History:

Global Id:	T0600101947
Status:	Completed - Case Closed

RAS-CO MANUFACTURING COMPANY (Continued) **S103472259**

Status Date: 12/26/2013

Global Id: T0600101947
Status: Open - Assessment & Interim Remedial Action
Status Date: 03/27/1995

Global Id: T0600101947
Status: Open - Case Begin Date
Status Date: 11/10/1994

Global Id: T0600101947
Status: Open - Eligible for Closure
Status Date: 03/29/2013

Global Id: T0600101947
Status: Open - Site Assessment
Status Date: 02/29/1996

Global Id: T0600101947
Status: Open - Verification Monitoring
Status Date: 12/16/2010

Regulatory Activities:
Global Id: T0600101947
Action Type: RESPONSE
Date: 01/15/2011
Action: Monitoring Report - Quarterly

Global Id: T0600101947
Action Type: RESPONSE
Date: 08/26/2010
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0600101947
Action Type: ENFORCEMENT
Date: 07/03/2008
Action: Staff Letter - #20080703

Global Id: T0600101947
Action Type: Other
Date: 11/22/1994
Action: Leak Reported

Global Id: T0600101947
Action Type: ENFORCEMENT
Date: 01/08/2009
Action: Staff Letter - #20090108

Global Id: T0600101947
Action Type: ENFORCEMENT
Date: 10/15/2010
Action: Notice to Comply

Global Id: T0600101947
Action Type: RESPONSE
Date: 11/12/2011
Action: Clean Up Fund - 5-Year Review Summary

RAS-CO MANUFACTURING COMPANY (Continued) **S103472259**

Global Id: T0600101947
Action Type: ENFORCEMENT
Date: 08/23/1995
Action: Notice of Violation - #UNK

Global Id: T0600101947
Action Type: ENFORCEMENT
Date: 12/26/2013
Action: State Water Board Closure Order

Global Id: T0600101947
Action Type: ENFORCEMENT
Date: 12/19/2011
Action: Staff Letter - #20111219

Global Id: T0600101947
Action Type: RESPONSE
Date: 03/02/2012
Action: Other Report / Document

Global Id: T0600101947
Action Type: RESPONSE
Date: 01/20/2012
Action: Correspondence

Global Id: T0600101947
Action Type: RESPONSE
Date: 12/16/2013
Action: Request for Closure - Regulator Responded

Global Id: T0600101947
Action Type: ENFORCEMENT
Date: 07/24/2009
Action: Notice of Violation - #20090724

Global Id: T0600101947
Action Type: ENFORCEMENT
Date: 05/24/2012
Action: Staff Letter - #20120524

Global Id: T0600101947
Action Type: RESPONSE
Date: 04/28/1995
Action: Other Report / Document

Global Id: T0600101947
Action Type: RESPONSE
Date: 07/14/2012
Action: Sensitive Receptor Survey Report

Global Id: T0600101947
Action Type: RESPONSE
Date: 08/05/1999
Action: Well Installation Report

Global Id: T0600101947
Action Type: RESPONSE

RAS-CO MANUFACTURING COMPANY (Continued) **S103472259**

Date: 04/28/1995
Action: Other Report / Document

Global Id: T0600101947
Action Type: RESPONSE
Date: 02/08/1996
Action: Soil and Water Investigation Report

Global Id: T0600101947
Action Type: RESPONSE
Date: 08/01/1994
Action: Correspondence

Global Id: T0600101947
Action Type: RESPONSE
Date: 03/12/1996
Action: Monitoring Report - Quarterly

Global Id: T0600101947
Action Type: RESPONSE
Date: 12/16/1994
Action: Tank Removal Report / UST Sampling Report

Global Id: T0600101947
Action Type: ENFORCEMENT
Date: 08/01/2014
Action: Technical Correspondence / Assistance / Other - #2014/08/01

Global Id: T0600101947
Action Type: ENFORCEMENT
Date: 06/04/1990
Action: Staff Letter

Global Id: T0600101947
Action Type: ENFORCEMENT
Date: 02/25/2013
Action: Clean Up Fund - Letter to RP

Global Id: T0600101947
Action Type: ENFORCEMENT
Date: 02/25/2013
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0600101947
Action Type: Other
Date: 11/10/1994
Action: Leak Discovery

Global Id: T0600101947
Action Type: REMEDIATION
Date: 03/27/1995
Action: Excavation

Global Id: T0600101947
Action Type: ENFORCEMENT
Date: 01/27/2012
Action: Staff Letter - #20120127

RAS-CO MANUFACTURING COMPANY (Continued) **S103472259**

Global Id: T0600101947
Action Type: ENFORCEMENT
Date: 07/24/2009
Action: Staff Letter - #20090724

Global Id: T0600101947
Action Type: ENFORCEMENT
Date: 08/01/2014
Action: Technical Correspondence / Assistance / Other - #08/01/2014

Global Id: T0600101947
Action Type: ENFORCEMENT
Date: 04/23/2013
Action: Staff Letter - #20130423

Global Id: T0600101947
Action Type: ENFORCEMENT
Date: 05/13/2013
Action: State Water Board Closure Order

Global Id: T0600101947
Action Type: Other
Date: 11/10/1994
Action: Leak Stopped

LUST REG 2:
Region: 2
Facility Id: 01-2121
Facility Status: Preliminary site assessment underway
Case Number: 4118
How Discovered: OM
Leak Cause: UNK
Leak Source: UNK
Date Leak Confirmed: 10/6/1995
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 1/2/1965
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

Q96 **RAS-CO MANUFACTURING COMPANY** **Alameda County CS** **S106880532**
WNW **413 W SUNSET BLVD** **SWEEPS UST** **N/A**
1/4-1/2 **HAYWARD, CA 94541**
0.408 mi.
2156 ft. **Site 2 of 2 in cluster Q**

Relative:
Lower

Actual:
57 ft.

Alameda County CS:
Status: Pollution Characterization
Record Id: RO0000164
PE: 5602
Facility Status: Pollution Charaterization

Status: Case Closed
Record Id: RO0000164

RAS-CO MANUFACTURING COMPANY (Continued) **S106880532**

PE: 5602
Facility Status: Case Closed

SWEEPS UST:

Status:	Active
Comp Number:	304118
Number:	1
Board Of Equalization:	Not reported
Referral Date:	06-23-92
Action Date:	04-08-94
Created Date:	04-08-94
Owner Tank Id:	Not reported
SWRCB Tank Id:	01-000-304118-000001
Tank Status:	A
Capacity:	250
Active Date:	06-23-92
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	2

Status:	Active
Comp Number:	304118
Number:	1
Board Of Equalization:	Not reported
Referral Date:	06-23-92
Action Date:	04-08-94
Created Date:	04-08-94
Owner Tank Id:	Not reported
SWRCB Tank Id:	01-000-304118-000002
Tank Status:	A
Capacity:	500
Active Date:	06-23-92
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

R97 **KB VALERO (CUPA)** **UST** **U004061669**
WSW **525 W A ST** **N/A**
1/4-1/2 **HAYWARD, CA**
0.416 mi.
2199 ft. **Site 1 of 5 in cluster R**

Relative:
Lower

Actual:
50 ft.

ALAMEDA CO. UST:

Facility ID:	FA0304218
Facility Status:	Active
Program Element:	4104
Description:	UNDERGROUND STORAGE TANK 4 CONTAINERS
Inspection Date:	10/27/2016
Closed:	Not reported
Owner Name:	Himalaya Trading Company
Owner ID:	OW0308618
Fstatus Decode:	Open

R98
WSW
1/4-1/2
0.416 mi.
2199 ft.

EZ SERVE #100877
525 W A ST
HAYWARD, CA 94541

Alameda County CS **U001596986**
N/A

Site 2 of 5 in cluster R

Relative:
Lower

Actual:
50 ft.

Alameda County CS:

Status:	11
Record Id:	RO0000023
PE:	5602
Facility Status:	Not reported

Status:	Pollution Characterization
Record Id:	RO0000023
PE:	5602
Facility Status:	Pollution Charaterization

R99
WSW
1/4-1/2
0.416 mi.
2199 ft.

EZ SERVE #100877
525 A STREET
HAYWARD, CA 94541

LUST **S102628245**
HIST CORTESE **N/A**

Site 3 of 5 in cluster R

Relative:
Lower

Actual:
50 ft.

LUST:

Region:	STATE
Global Id:	T0600100483
Latitude:	37.6664334584656
Longitude:	-122.110529243946
Case Type:	LUST Cleanup Site
Status:	Open - Site Assessment
Status Date:	02/10/1995
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Case Worker:	JMJ
Local Agency:	Not reported
RB Case Number:	01-0529
LOC Case Number:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not all historic documents for the fuel leak case may be available on GeoTracker. A more complete historic case file for this site is located on the Alameda County Environmental Health website at: http://ehgis.acgov.org/dehpublic/dehpublic.jsp. The subject site is co-mingled with a downgradient fuel release case currently overseen by the Hayward Fire Department. Two unregistered backyard residential wells downgradient of that site are impacted with fuel hydrocarbons. The wells are reported to be actively used by their owners. The subject site is making very limited progress, and multiple deliverables are late. Additional deliverables are due in the very near future. In December 1986 wells B1 to B3 were installed at the site due to an inventory discrepancy in November 1986. In September 1987 wells B-4 to B-6 were installed and all were renamed as monitoring wells (MW-1 to MW-6). In June 1990 three 10,000-gallon gasoline USTs and one 10,000-gallon diesel UST, and associated product lines, were removed. Due to the UST removal activities several wells were lost (or destroyed) or damaged. In October 1991 damaged well MW-1 was repaired and redesignated MW-1a, wells MW-2 and MW-4 were decommissioned, while wells MW-3, MW-5, and MW-6 had been lost or destroyed during the removal activities. In January 1992 new wells MW-1 to MW-6 were installed. In June 1993 offsite wells MW-7 to

EZ SERVE #100877 (Continued) **S102628245**

MW-10 were installed. In February 1995 hydropunch bores HP-1 to HP-17 were installed offsite to help delineate the lateral extent, and wells MW-11 to MW-14 were subsequently installed offsite later in February 1995. Vapor extraction air sparging wells VEAS-1 to VEAS-3 and extraction well EX-1 were installed in June 2002. Soil bores SB-1 to SB-6 were installed in September 2009 to help delineate the downgradient extent of soil and groundwater impacts.

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

Contact:

Global Id:	T0600100483
Contact Type:	Regional Board Caseworker
Contact Name:	JOHN JANG
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY STREET, SUITE 1400
City:	OAKLAND
Email:	jjang@waterboards.ca.gov
Phone Number:	Not reported

Status History:

Global Id:	T0600100483
Status:	Open - Case Begin Date
Status Date:	11/17/1986
Global Id:	T0600100483
Status:	Open - Site Assessment
Status Date:	02/10/1995

Regulatory Activities:

Global Id:	T0600100483
Action Type:	RESPONSE
Date:	08/25/2015
Action:	Clean Up Fund - 5-Year Review Summary
Global Id:	T0600100483
Action Type:	ENFORCEMENT
Date:	12/18/2014
Action:	Meeting
Global Id:	T0600100483
Action Type:	ENFORCEMENT
Date:	12/05/2007
Action:	Staff Letter - #20071205
Global Id:	T0600100483
Action Type:	ENFORCEMENT
Date:	09/26/2008
Action:	Notice to Comply - #20080926
Global Id:	T0600100483
Action Type:	ENFORCEMENT
Date:	01/09/2009
Action:	Staff Letter - #20090109
Global Id:	T0600100483
Action Type:	ENFORCEMENT

EZ SERVE #100877 (Continued) **S102628245**

Date:	05/08/2009
Action:	Staff Letter - #20090508
Global Id:	T0600100483
Action Type:	Other
Date:	12/26/1986
Action:	Leak Reported
Global Id:	T0600100483
Action Type:	RESPONSE
Date:	11/30/2013
Action:	Monitoring Report - Semi-Annually
Global Id:	T0600100483
Action Type:	RESPONSE
Date:	11/30/2014
Action:	Monitoring Report - Semi-Annually
Global Id:	T0600100483
Action Type:	RESPONSE
Date:	10/18/2010
Action:	Soil and Water Investigation Workplan - Addendum
Global Id:	T0600100483
Action Type:	RESPONSE
Date:	11/01/2010
Action:	Sensitive Receptor Survey Report
Global Id:	T0600100483
Action Type:	RESPONSE
Date:	04/22/2011
Action:	Monitoring Report - Semi-Annually
Global Id:	T0600100483
Action Type:	ENFORCEMENT
Date:	08/16/2010
Action:	Staff Letter - #20100816
Global Id:	T0600100483
Action Type:	ENFORCEMENT
Date:	03/22/2006
Action:	Staff Letter - #20060322
Global Id:	T0600100483
Action Type:	RESPONSE
Date:	11/30/2012
Action:	Monitoring Report - Semi-Annually - Regulator Responded
Global Id:	T0600100483
Action Type:	ENFORCEMENT
Date:	12/09/2010
Action:	Staff Letter - #20101209
Global Id:	T0600100483
Action Type:	RESPONSE
Date:	10/30/2015
Action:	Monitoring Report - Semi-Annually

EZ SERVE #100877 (Continued) **S102628245**

Global Id: T0600100483
Action Type: RESPONSE
Date: 05/30/2014
Action: Monitoring Report - Semi-Annually - Regulator Responded

Global Id: T0600100483
Action Type: ENFORCEMENT
Date: 09/30/2015
Action: 13267 Requirement

Global Id: T0600100483
Action Type: ENFORCEMENT
Date: 07/24/2009
Action: Staff Letter - #20090724

Global Id: T0600100483
Action Type: ENFORCEMENT
Date: 06/14/2012
Action: Referral to Regional Board - #20120614

Global Id: T0600100483
Action Type: RESPONSE
Date: 05/18/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0600100483
Action Type: RESPONSE
Date: 05/18/2012
Action: Electronic Reporting Submittal Due

Global Id: T0600100483
Action Type: RESPONSE
Date: 03/22/2006
Action: Correspondence

Global Id: T0600100483
Action Type: RESPONSE
Date: 09/04/2002
Action: CAP/RAP - Feasibility Study Report

Global Id: T0600100483
Action Type: RESPONSE
Date: 11/21/2008
Action: Interim Remedial Action Report

Global Id: T0600100483
Action Type: RESPONSE
Date: 02/08/1993
Action: Other Report / Document

Global Id: T0600100483
Action Type: RESPONSE
Date: 07/20/1993
Action: Soil and Water Investigation Report

Global Id: T0600100483
Action Type: RESPONSE

EZ SERVE #100877 (Continued) **S102628245**

Date:	08/14/2002
Action:	Soil and Water Investigation Report
Global Id:	T0600100483
Action Type:	RESPONSE
Date:	03/13/1987
Action:	Soil and Water Investigation Report
Global Id:	T0600100483
Action Type:	RESPONSE
Date:	03/02/1992
Action:	Soil and Water Investigation Report
Global Id:	T0600100483
Action Type:	RESPONSE
Date:	04/28/2006
Action:	Well Destruction Report
Global Id:	T0600100483
Action Type:	RESPONSE
Date:	04/05/2007
Action:	Other Report / Document
Global Id:	T0600100483
Action Type:	RESPONSE
Date:	10/13/1992
Action:	Monitoring Report - Quarterly
Global Id:	T0600100483
Action Type:	RESPONSE
Date:	04/27/2009
Action:	Interim Remedial Action Report
Global Id:	T0600100483
Action Type:	RESPONSE
Date:	11/11/2005
Action:	Soil and Water Investigation Report
Global Id:	T0600100483
Action Type:	RESPONSE
Date:	03/23/1995
Action:	Soil and Water Investigation Report
Global Id:	T0600100483
Action Type:	RESPONSE
Date:	03/01/1994
Action:	CAP/RAP - Feasibility Study Report
Global Id:	T0600100483
Action Type:	RESPONSE
Date:	06/20/1988
Action:	Soil and Water Investigation Report
Global Id:	T0600100483
Action Type:	RESPONSE
Date:	06/01/2012
Action:	Other Report / Document

EZ SERVE #100877 (Continued) **S102628245**

Global Id: T0600100483
Action Type: RESPONSE
Date: 06/29/2012
Action: Soil and Water Investigation Workplan

Global Id: T0600100483
Action Type: RESPONSE
Date: 11/07/2002
Action: Other Report / Document

Global Id: T0600100483
Action Type: RESPONSE
Date: 07/07/1994
Action: Other Report / Document

Global Id: T0600100483
Action Type: RESPONSE
Date: 08/14/2002
Action: Soil and Water Investigation Report

Global Id: T0600100483
Action Type: ENFORCEMENT
Date: 04/25/2012
Action: Staff Letter - #20120425

Global Id: T0600100483
Action Type: ENFORCEMENT
Date: 02/14/2013
Action: File Review - Closure

Global Id: T0600100483
Action Type: Other
Date: 11/17/1986
Action: Leak Discovery

Global Id: T0600100483
Action Type: ENFORCEMENT
Date: 06/02/2015
Action: 13267 Requirement

Global Id: T0600100483
Action Type: RESPONSE
Date: 08/03/2015
Action: Soil and Water Investigation Workplan - Regulator Responded

Global Id: T0600100483
Action Type: ENFORCEMENT
Date: 12/11/2007
Action: Notice of Responsibility - #20071211

Global Id: T0600100483
Action Type: ENFORCEMENT
Date: 12/04/2007
Action: Notice of Responsibility - #20071204

Global Id: T0600100483
Action Type: ENFORCEMENT

EZ SERVE #100877 (Continued) **S102628245**

Date:	11/18/1991
Action:	Notice of Responsibility - #19911118
Global Id:	T0600100483
Action Type:	ENFORCEMENT
Date:	07/06/2015
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600100483
Action Type:	RESPONSE
Date:	04/30/2016
Action:	Monitoring Report - Semi-Annually
Global Id:	T0600100483
Action Type:	RESPONSE
Date:	10/30/2016
Action:	Monitoring Report - Semi-Annually
Global Id:	T0600100483
Action Type:	RESPONSE
Date:	12/30/2015
Action:	Soil and Water Investigation Report

LUST REG 2:

Region:	2
Facility Id:	01-0529
Facility Status:	Pollution Characterization
Case Number:	3580
How Discovered:	Tank Closure
Leak Cause:	Structure Failure
Leak Source:	Tank
Date Leak Confirmed:	11/18/1991
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	12/16/1986
Pollution Characterization Began:	2/5/1992
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

HIST CORTESE:

Region:	CORTESE
Facility County Code:	1
Reg By:	LTNKA
Reg Id:	01-0529

R100 WSW 1/4-1/2 0.416 mi. 2199 ft. | **RESTRUCTURE PETROLEUM MARKETING SVS, INC**
525 WEST A ST
HAYWARD, CA 94541
Site 4 of 5 in cluster R

HIST UST **S113009465**
HAZNET **N/A**

Relative: Lower

Actual: 50 ft.

HIST UST:

File Number:	00035D54
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00035D54.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

HAZNET:

envid:	S113009465
Year:	1993
GEPAID:	CAD981659428
Contact:	RESTRUCTURE PETROLEUM MKTG
Telephone:	8136368111
Mailing Name:	Not reported
Mailing Address:	205 SOUTH HOOVER ST, STE 101
Mailing City,St,Zip:	TAMPA, FL 336090000
Gen County:	Not reported
TSD EPA ID:	CAD004771168
TSD County:	Not reported
Waste Category:	Aqueous solution with total organic residues less than 10 percent
Disposal Method:	Not reported
Tons:	2.29349999999
Cat Decode:	Aqueous solution with total organic residues less than 10 percent
Method Decode:	Not reported
Facility County:	1

R101
WSW
1/4-1/2
0.416 mi.
2199 ft.

FILL-EM'-FAST 171-04
525 W A ST
HAYWARD, CA 94541

Site 5 of 5 in cluster R

CA FID UST **S101623654**
N/A

Relative:
Lower

Actual:
50 ft.

CA FID UST:

Facility ID:	01000657
Regulated By:	UTNKA
Regulated ID:	00020283
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	5122232631
Mail To:	Not reported
Mailing Address:	P O BOX
Mailing Address 2:	Not reported
Mailing City,St,Zip:	HAYWARD 94541
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

102
ESE
1/4-1/2
0.424 mi.
2238 ft.

BURBANK E.S./HAYWARD JOINT USE PARK
222 BURBANK STREET
HAYWARD, CA 94541

ENVIROSTOR **S109548210**
SCH **N/A**

Relative:
Higher

Actual:
77 ft.

ENVIROSTOR:

Facility ID:	1760048
Status:	Certified / Operation & Maintenance
Status Date:	09/18/2007
Site Code:	204151
Site Type:	School Cleanup
Site Type Detailed:	School
Acres:	14.25
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Jose Salcedo
Supervisor:	Jose Salcedo
Division Branch:	Northern California Schools & Santa Susana
Assembly:	20
Senate:	10
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	School District
Latitude:	37.66615
Longitude:	-122.0953
APN:	431 011000800, 431-111-008
Past Use:	DEGREASING FACILITY, FUEL - VEHICLE STORAGE/ REFUELING, MACHINE SHOP, MANUFACTURING - OTHER, METAL FINISHING, METAL PLATING - OTHER, RAILROAD RIGHT OF WAY, RESIDENTIAL AREA, SCHOOL - ELEMENTARY, VEHICLE MAINTENANCE, TRANSPORTATION - WAREHOUSING, MANUFACTURING - OTHER
Potential COC:	Arsenic Chlordane DDT Lead Polychlorinated biphenyls (PCBs Polynuclear aromatic hydrocarbons (PAHs Toxaphene TPH-gas Dieldrin

BURBANK E.S./HAYWARD JOINT USE PARK (Continued) **S109548210**

Tetrachloroethylene (PCE Trichloroethylene (TCE 1,1-Dichloroethane
1,1-Dichloroethylene
Confirmed COC: Polychlorinated biphenyls (PCBs Polynuclear aromatic hydrocarbons (PAHs 30023-NO TPH-gas Dieldrin Arsenic Chlordane DDT Lead Tetrachloroethylene (PCE Trichloroethylene (TCE 1,1-Dichloroethane
1,1-Dichloroethylene
Potential Description: SOIL, OTH
Alias Name: Not reported
Alias Type: Not reported

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

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

SCH:

Facility ID: 1760048
Site Type: School Cleanup
Site Type Detail: School
Site Mgmt. Req.: NONE SPECIFIED
Acres: 14.25
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Jose Salcedo
Supervisor: Jose Salcedo
Division Branch: Northern California Schools & Santa Susana
Site Code: 204151
Assembly: 20
Senate: 10
Special Program Status: Not reported
Status: Certified / Operation & Maintenance
Status Date: 09/18/2007
Restricted Use: NO
Funding: School District
Latitude: 37.66615
Longitude: -122.0953
APN: 431 011000800, 431-111-008
Past Use: DEGREASING FACILITY, FUEL - VEHICLE STORAGE/ REFUELING, MACHINE SHOP, MANUFACTURING - OTHER, METAL FINISHING, METAL PLATING - OTHER, RAILROAD RIGHT OF WAY, RESIDENTIAL AREA, SCHOOL - ELEMENTARY, VEHICLE MAINTENANCE, TRANSPORTATION - WAREHOUSING, MANUFACTURING - OTHER
Potential COC: Arsenic, Chlordane, DDT, Lead, Polychlorinated biphenyls (PCBs,

BURBANK E.S./HAYWARD JOINT USE PARK (Continued) **S109548210**

	Polynuclear aromatic hydrocarbons (PAHs, Toxaphene, TPH-gas, Dieldrin, Tetrachloroethylene (PCE, Trichloroethylene (TCE, 1,1-Dichloroethane, 1,1-Dichloroethylene
Confirmed COC:	Polychlorinated biphenyls (PCBs, Polynuclear aromatic hydrocarbons (PAHs, 30023-NO, TPH-gas, Dieldrin, Arsenic, Chlordane, DDT, Lead, , Tetrachloroethylene (PCE, Tetrachloroethylene (PCE, Trichloroethylene (TCE, 1,1-Dichloroethane, 1,1-Dichloroethylene
Potential Description:	SOIL, OTH
Alias Name:	Not reported
Alias Type:	Not reported

Completed Info:

Completed Area Name:	Not reported
Completed Sub Area Name:	Not reported
Completed Document Type:	Not reported
Completed Date:	Not reported
Comments:	Not reported
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

S103 **BECK ROOFING** **LUST** **U003713654**
NNW **21123 MEEKLAND AVE** **N/A**
1/4-1/2 **HAYWARD, CA 94541**
0.451 mi.
2382 ft. **Site 1 of 2 in cluster S**

Relative:
Lower

Actual:
62 ft.

LUST REG 2:

Region:	2
Facility Id:	01-0176
Facility Status:	Preliminary site assessment underway
Case Number:	3030
How Discovered:	Tank Closure
Leak Cause:	Structure Failure
Leak Source:	Tank
Date Leak Confirmed:	1/29/1992
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	11/4/1991
Preliminary Site Assesment Began:	1/2/1965
Pollution Characterization Began:	Not reported
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

S104 NNW 1/4-1/2 0.451 mi. 2382 ft. | **BECK ROOFING 21123 MEEKLAND AVE HAYWARD, CA 94541** | **LUST Alameda County CS HIST CORTESE** | **S104576516 N/A**

Site 2 of 2 in cluster S

Relative: Lower

Actual: 62 ft.

LUST:

Region:	STATE
Global Id:	T0600100163
Latitude:	37.6740039
Longitude:	-122.107885
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	01/22/2003
Lead Agency:	ALAMEDA COUNTY LOP
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	01-0176
LOC Case Number:	RO0000224
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

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

Contact:

Global Id:	T0600100163
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Status History:

Global Id:	T0600100163
Status:	Completed - Case Closed
Status Date:	01/22/2003
Global Id:	T0600100163
Status:	Open - Case Begin Date
Status Date:	05/20/1991

Regulatory Activities:

Global Id:	T0600100163
Action Type:	RESPONSE
Date:	10/06/1997
Action:	Monitoring Report - Other
Global Id:	T0600100163
Action Type:	Other
Date:	05/20/1991
Action:	Leak Reported
Global Id:	T0600100163
Action Type:	REMEDIATION
Date:	09/09/9999

BECK ROOFING (Continued) **S104576516**

Action: Not reported

Alameda County CS:
Status: Case Closed
Record Id: RO0000224
PE: 5602
Facility Status: Case Closed

HIST CORTESE:
Region: CORTESE
Facility County Code: 1
Reg By: LTNKA
Reg Id: 01-0176

T105
ESE
1/4-1/2
0.471 mi.
2487 ft.

BEATRICE HUNT WESSON CONTAINER
199 C ST
HAYWARD, CA 94540

Site 1 of 2 in cluster T

Relative:
Higher

Actual:
82 ft.

LUST **S101579965**
SLIC **N/A**
BROWNFIELDS
SWEEPS UST
CA FID UST
HIST CORTESE

LUST:
Region: STATE
Global Id: T0600100392
Latitude: 37.665338434
Longitude: -122.095925
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 01/22/1997
Lead Agency: HAYWARD, CITY OF
Case Worker: DMG
Local Agency: HAYWARD, CITY OF
RB Case Number: Not reported
LOC Case Number: 01-0432
File Location: Not reported
Potential Media Affect: Under Investigation
Potential Contaminants of Concern: Diesel
Site History: Not reported

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

Contact:
Global Id: T0600100392
Contact Type: Regional Board Caseworker
Contact Name: MAX SHAHBAZIAN
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY STREET, SUITE 1400
City: OAKLAND
Email: mshahbazian@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0600100392
Contact Type: Local Agency Caseworker
Contact Name: DANILO M. GALANG
Organization Name: HAYWARD, CITY OF
Address: 777 B STREET

BEATRICE HUNT WESSON CONTAINER (Continued) **S101579965**

City: HAYWARD
Email: danny.galang@hayward-ca.gov
Phone Number: Not reported

Status History:
Global Id: T0600100392
Status: Completed - Case Closed
Status Date: 01/22/1997

Global Id: T0600100392
Status: Open - Case Begin Date
Status Date: 07/12/1990

Global Id: T0600100392
Status: Open - Remediation
Status Date: 06/16/1994

Global Id: T0600100392
Status: Open - Site Assessment
Status Date: 03/22/1993

Regulatory Activities:
Global Id: T0600100392
Action Type: RESPONSE
Date: 02/25/2003
Action: Other Report / Document

Global Id: T0600100392
Action Type: Other
Date: 07/16/1990
Action: Leak Reported

Global Id: T0600100392
Action Type: Other
Date: 07/12/1990
Action: Leak Discovery

Global Id: T0600100392
Action Type: ENFORCEMENT
Date: 01/22/1997
Action: Closure/No Further Action Letter

Global Id: T0600100392
Action Type: Other
Date: 07/12/1990
Action: Leak Stopped

LUST REG 2:
Region: 2
Facility Id: 01-0432
Facility Status: Case Closed
Case Number: 01-0432
How Discovered: Tank Closure
Leak Cause: Other Cause
Leak Source: Tank

BEATRICE HUNT WESSON CONTAINER (Continued) **S101579965**

Date Leak Confirmed: 3/22/1993
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: 6/16/1994
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	12/16/2009
Global Id:	T0600196700
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number:	2020187
Latitude:	37.66641
Longitude:	-122.09558
Case Type:	Cleanup Program Site
Case Worker:	MS
Local Agency:	HAYWARD, CITY OF
RB Case Number:	01S0647
File Location:	Regional Board
Potential Media Affected:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Diesel, * Solvents, Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Summary: The San Francisco Bay Regional Water Quality Control Board (Water Board) announces that the former Hunt Foods/United Can property will be re-developed into the proposed Cannery Place residential development. The Cannery Place development is scheduled to be completed in two phases, one of which is located within the boundaries of the 199 C Street property. The development plans for 199 C Street contemplate the construction of 279 townhouse-style condominium units, along with a network of new public and private parks and open space. Based on the findings of multiple Phase I and Phase II Environmental Site Assessments (ESAs), no significant chemicals were identified in the surface and subsurface soil and groundwater. Therefore, no cleanup of the site is recommended by the Water Board. Background: The 18.13-acre site is located at 199 C Street, in the City of Hayward, just north of Winton Avenue and west of Myrtle and Filbert Streets (see Site Location Map). The site was formerly utilized as a cannery by Hunt Foods and United Can from 1948 to 1978, which included one large brick warehouse. During the can making process, a number of underground storage tanks (USTs) were used to store fuel and waste oil. The USTs were removed from the site prior to SCS Development Company (dba Citation Homes) acquiring the property. Citation Homes demolished the large brick warehouse building in late November 2006. The City of Hayward recently rezoned the site from industrial to residential and approved the Citation Homes redevelopment plans for the site. Site Investigations: In the 1990s, multiple surface and subsurface investigations were conducted at the site after discovery of petroleum hydrocarbon USTs and volatile organic compound (VOC) releases to groundwater. In 2004, Citation Homes purchased the property. Since then Citation Homes has conducted one Phase I Environmental Site Assessment (ESA) and four Phase II ESAs to evaluate the subsurface soil, soil-gas and groundwater for the presence of petroleum hydrocarbons and VOCs. In addition, Citation Homes evaluated the surface soil for the presence

BEATRICE HUNT WESSON CONTAINER (Continued) **S101579965**

of petroleum hydrocarbons, metals and PCBs. No significant concentrations of petroleum hydrocarbons, VOCs, metals or PCBs were detected in the surface or subsurface soil. Moderate concentrations of diesel and motor oil were detected in the groundwater from the central and northern portion of the site from a known off-site source. Similarly, VOCs were detected in groundwater on the northern and central portions of the property, which are from an off-site source according to the Water Board. Furthermore, VOCs were detected in soil-gas at concentrations below Water Board environmental screening levels.

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

BROWNFIELDS:
Global ID: T0600196700

SWEEPS UST:
Status: Active
Comp Number: 14510
Number: 1
Board Of Equalization: Not reported
Referral Date: 07-08-93
Action Date: 03-24-94
Created Date: 02-29-88
Owner Tank Id: 6
SWRCB Tank Id: 01-003-014510-000003
Tank Status: A
Capacity: 6000
Active Date: 01-13-93
Tank Use: HAZARDOUS
STG: P
Content: BUTYL CELLOS
Number Of Tanks: 1

Status: Not reported
Comp Number: 14510
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 01-003-014510-000001
Tank Status: Not reported
Capacity: 30000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: DIESEL
Number Of Tanks: 4

Status: Not reported
Comp Number: 14510
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported

BEATRICE HUNT WESSON CONTAINER (Continued) **S101579965**

Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	01-003-014510-000002
Tank Status:	Not reported
Capacity:	300
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	LEADED
Number Of Tanks:	Not reported

Status:	Not reported
Comp Number:	14510
Number:	Not reported
Board Of Equalization:	Not reported
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	01-003-014510-000004
Tank Status:	Not reported
Capacity:	200
Active Date:	Not reported
Tank Use:	UNKNOWN
STG:	WASTE
Content:	Not reported
Number Of Tanks:	Not reported

Status:	Not reported
Comp Number:	14510
Number:	Not reported
Board Of Equalization:	Not reported
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	01-003-014510-000005
Tank Status:	Not reported
Capacity:	550
Active Date:	Not reported
Tank Use:	UNKNOWN
STG:	WASTE
Content:	Not reported
Number Of Tanks:	Not reported

CA FID UST:

Facility ID:	01000295
Regulated By:	UTNKA
Regulated ID:	CAD041842
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	4158814500
Mail To:	Not reported
Mailing Address:	1645 W VALENCIA AVE
Mailing Address 2:	Not reported
Mailing City,St,Zip:	HAYWARD 94540

BEATRICE HUNT WESSON CONTAINER (Continued) **S101579965**

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

HIST CORTESE:

Region:	CORTESE
Facility County Code:	1
Reg By:	LTNKA
Reg Id:	01-0432

T106 **UNITED CAN COMPANY** **HIST UST** **U001597020**
ESE **199 C STREET** **EMI** **N/A**
1/4-1/2 **HAYWARD, CA 94541**
0.471 mi.
2487 ft. **Site 2 of 2 in cluster T**

Relative:
Higher

Actual:
82 ft.

HIST UST:

File Number:	000364A0
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000364A0.pdf
Region:	STATE
Facility ID:	00000014510
Facility Type:	Other
Other Type:	CONTAINER MFG.
Contact Name:	H. GOLDHAMMER
Telephone:	4158814500
Owner Name:	UNITED CAN COMPANY
Owner Address:	199 C STREET
Owner City,St,Zip:	HAYWARD, CA 94541
Total Tanks:	0004
Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00000550
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	10
Tank Num:	002
Container Num:	4
Year Installed:	Not reported
Tank Capacity:	00000300
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	10
Tank Num:	003
Container Num:	5
Year Installed:	1962
Tank Capacity:	00000200
Tank Used for:	WASTE

UNITED CAN COMPANY (Continued) **U001597020**

Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	10

Tank Num:	004
Container Num:	6
Year Installed:	Not reported
Tank Capacity:	00006000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	None

Click here for Geo Tracker PDF:

EMI:

Year:	1995
County Code:	1
Air Basin:	SF
Facility ID:	218
Air District Name:	BA
SIC Code:	3411
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	225
Reactive Organic Gases Tons/Yr:	218
Carbon Monoxide Emissions Tons/Yr:	3
NOX - Oxides of Nitrogen Tons/Yr:	10
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1996
County Code:	1
Air Basin:	SF
Facility ID:	218
Air District Name:	BA
SIC Code:	3411
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	72
Reactive Organic Gases Tons/Yr:	66
Carbon Monoxide Emissions Tons/Yr:	2
NOX - Oxides of Nitrogen Tons/Yr:	8
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1997
County Code:	1
Air Basin:	SF
Facility ID:	218
Air District Name:	BA
SIC Code:	3411
Air District Name:	BAY AREA AQMD

UNITED CAN COMPANY (Continued) **U001597020**

Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	60
Reactive Organic Gases Tons/Yr:	58
Carbon Monoxide Emissions Tons/Yr:	2
NOX - Oxides of Nitrogen Tons/Yr:	8
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1998
County Code:	1
Air Basin:	SF
Facility ID:	218
Air District Name:	BA
SIC Code:	3411
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	38
Reactive Organic Gases Tons/Yr:	36
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	6
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1999
County Code:	1
Air Basin:	SF
Facility ID:	218
Air District Name:	BA
SIC Code:	3411
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	30
Reactive Organic Gases Tons/Yr:	27
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	5
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2000
County Code:	1
Air Basin:	SF
Facility ID:	218
Air District Name:	BA
SIC Code:	3411
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	30
Reactive Organic Gases Tons/Yr:	27
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	5

UNITED CAN COMPANY (Continued) **U001597020**

SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

107
NE
1/4-1/2
0.476 mi.
2511 ft.

RAS CO MANUFACTURING COMP
413 SUNSET
HAYWARD, CA 94541

HIST CORTESE **S102435695**
N/A

Relative:
Higher

Actual:
77 ft.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	1
Reg By:	LTNKA
Reg Id:	01-2121

108
East
1/4-1/2
0.483 mi.
2550 ft.

VIC HUBBARD
411 A
HAYWARD, CA

HIST CORTESE **S101306466**
N/A

Relative:
Higher

Actual:
84 ft.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	1
Reg By:	LTNKA
Reg Id:	01-1635

109
ESE
1/2-1
0.518 mi.
2736 ft.

LIBITZKY PROPERTY
199 FILBERT STREET AND 201 C STREET
HAYWARD, CA 94541

ENVIROSTOR **S114002224**
VCP **N/A**

Relative:
Higher

Actual:
79 ft.

ENVIROSTOR:

Facility ID:	60001934
Status:	No Further Action
Status Date:	03/26/2014
Site Code:	201987
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	8.87
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Tom Price
Supervisor:	Karen Toth
Division Branch:	Cleanup Berkeley
Assembly:	18
Senate:	10
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	37.66450

LIBITZKY PROPERTY (Continued) **S114002224**

Longitude: -122.0941
APN: NONE SPECIFIED
Past Use: RAILROAD RIGHT OF WAY
Potential COC: Arsenic
Confirmed COC: 30001-NO
Potential Description: SOIL, UE
Alias Name: 201987
Alias Type: Project Code (Site Code)
Alias Name: 60001934
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Application
Completed Date: 09/30/2013
Comments: Application to the Voluntary Cleanup Program.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 08/01/2013
Comments: This report was not prepared under DTSC oversight. The site characterization report identified arsenic as possibly needing additional characterization at the site. A railroad spur is identified in the report which may have contaminants associated with it. Groundwater at 35-40 feet below ground surface has chlorinated solvents from an uknown upgradient source.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 05/30/2013
Comments: This report was prepared prior to DTSC's involvement with the project. Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 04/21/2006
Comments: Report was completed prior to DTSC's involvement with the project.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 06/08/2006
Comments: This report was completed prior to DTSC's involvement with the project.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 08/10/2005
Comments: This report was prepared prior to DTSC's involvement with the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report

LIBITZKY PROPERTY (Continued) **S114002224**

Completed Date:	03/26/2014
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Voluntary Cleanup Agreement
Completed Date:	01/28/2014
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	01/23/2014
Comments:	General correspondence from January 1 - December 31, 2013.

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

VCP:

Facility ID:	60001934
Site Type:	Voluntary Cleanup
Site Type Detail:	Voluntary Cleanup
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	8.87
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Tom Price
Supervisor:	Karen Toth
Division Branch:	Cleanup Berkeley
Site Code:	201987
Assembly:	18
Senate:	10
Special Programs Code:	Not reported
Status:	No Further Action
Status Date:	03/26/2014
Restricted Use:	NO
Funding:	Responsible Party
Lat/Long:	37.66450 / -122.0941
APN:	NONE SPECIFIED
Past Use:	RAILROAD RIGHT OF WAY
Potential COC:	30001
Confirmed COC:	30001-NO
Potential Description:	SOIL, UE
Alias Name:	201987
Alias Type:	Project Code (Site Code)
Alias Name:	60001934
Alias Type:	Envirostor ID Number

LIBITZKY PROPERTY (Continued) **S114002224**

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Application
Completed Date:	09/30/2013
Comments:	Application to the Voluntary Cleanup Program.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Characterization Report
Completed Date:	08/01/2013
Comments:	This report was not prepared under DTSC oversight. The site characterization report identified arsenic as possibly needing additional characterization at the site. A railroad spur is identified in the report which may have contaminants associated with it. Groundwater at 35-40 feet below ground surface has chlorinated solvents from an uknown upgradient source.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Phase 1
Completed Date:	05/30/2013
Comments:	This report was prepared prior to DTSC's involvement with the project. Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Phase 1
Completed Date:	04/21/2006
Comments:	Report was completed prior to DTSC's involvement with the project.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Characterization Report
Completed Date:	06/08/2006
Comments:	This report was completed prior to DTSC's involvement with the project.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Characterization Report
Completed Date:	08/10/2005
Comments:	This report was prepared prior to DTSC's involvement with the site.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	03/26/2014
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Voluntary Cleanup Agreement
Completed Date:	01/28/2014
Comments:	Not reported

Completed Area Name:	PROJECT WIDE

LIBITZKY PROPERTY (Continued) **S114002224**

Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 01/23/2014
Comments: General correspondence from January 1 - December 31, 2013.

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

110
NNW
1/2-1
0.650 mi.
3432 ft.

DURHAM TRANSPORTATION
19984 MEEKLAND AVE
HAYWARD, CA 94541

LUST **S100179370**
Alameda County CS **N/A**
Notify 65

Relative:
Lower

Actual:
59 ft.

LUST:
Region: STATE
Global Id: T0600100475
Latitude: 37.676668417
Longitude: -122.109791348
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 05/17/2006
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: JTW
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: 01-0521
LOC Case Number: RO0000047
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

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

Contact:
Global Id: T0600100475
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Global Id: T0600100475
Contact Type: Local Agency Caseworker
Contact Name: Jerry Wickham
Organization Name: ALAMEDA COUNTY LOP
Address: 1131 Harbor Bay Parkway
City: Alameda
Email: jerry.wickham@acgov.org

DURHAM TRANSPORTATION (Continued) **S100179370**

Phone Number: 5105676791

Status History:
Global Id: T0600100475
Status: Completed - Case Closed
Status Date: 05/17/2006

Global Id: T0600100475
Status: Open - Case Begin Date
Status Date: 06/01/1986

Regulatory Activities:
Global Id: T0600100475
Action Type: Other
Date: 06/01/1986
Action: Leak Reported

Global Id: T0600100475
Action Type: ENFORCEMENT
Date: 03/03/1992
Action: Notice of Responsibility - #O

Global Id: T0600100475
Action Type: REMEDIATION
Date: 01/10/2002
Action: Excavation

Global Id: T0600100475
Action Type: ENFORCEMENT
Date: 05/17/2006
Action: Closure/No Further Action Letter - #20060517

Alameda County CS:
Status: Case Closed
Record Id: RO0000047
PE: 5602
Facility Status: Case Closed

NOTIFY 65:
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

U111
SE
1/2-1
0.771 mi.
4069 ft.

SUMMERHILL DEVELOPMENT PROPERT
85 WEST WINTON AVE.
HAYWARD, CA 92508

Site 1 of 2 in cluster U

Notify 65 **S100179534**
N/A

Relative:
Higher

Actual:
79 ft.

NOTIFY 65:

Date Reported:	Not reported
Staff Initials:	Not reported
Board File Number:	Not reported
Facility Type:	Not reported
Discharge Date:	Not reported
Issue Date:	Not reported
Incident Description:	Not reported

U112
SE
1/2-1
0.779 mi.
4113 ft.

ALAMEDA NEWSPAPER GRP.
116 W. WINTON AVENUE
HAYWARD, CA 94544

Site 2 of 2 in cluster U

ENVIROSTOR **U001597106**
N/A

Relative:
Higher

Actual:
78 ft.

ENVIROSTOR:

Facility ID:	71002831
Status:	Inactive - Needs Evaluation
Status Date:	Not reported
Site Code:	Not reported
Site Type:	Tiered Permit
Site Type Detailed:	Tiered Permit
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Not reported
Division Branch:	Cleanup Berkeley
Assembly:	20
Senate:	10
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	37.65897
Longitude:	-122.0946
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CAD981420961
Alias Type:	EPA Identification Number
Alias Name:	71002831
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	Not reported
Completed Sub Area Name:	Not reported
Completed Document Type:	Not reported
Completed Date:	Not reported
Comments:	Not reported

ALAMEDA NEWSPAPER GRP. (Continued) **U001597106**

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

113
SE
1/2-1
0.805 mi.
4251 ft.

Relative:
Higher

Actual:
80 ft.

EX CLEAN
54 MORAN
HAYWARD, CA 92508

LUST **S100226541**
SLIC **N/A**
Alameda County CS
SWEEPS UST
HIST CORTESE
Notify 65

LUST:

Region:	STATE
Global Id:	T0600100480
Latitude:	37.6607774
Longitude:	-122.0931939
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	07/12/2000
Lead Agency:	ALAMEDA COUNTY LOP
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	01-0526
LOC Case Number:	RO0000170
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

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

Contact:

Global Id:	T0600100480
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Status History:

Global Id:	T0600100480
Status:	Completed - Case Closed
Status Date:	07/12/2000

Global Id:	T0600100480
Status:	Open - Case Begin Date
Status Date:	07/29/1988

Regulatory Activities:

EX CLEAN (Continued) **S100226541**

Global Id:	T0600100480
Action Type:	Other
Date:	07/29/1988
Action:	Leak Reported

Global Id:	T0600100480
Action Type:	REMEDIATION
Date:	09/09/9999
Action:	Excavation

LUST REG 2:

Region:	2
Facility Id:	01-0526
Facility Status:	Case Closed
Case Number:	01-0526
How Discovered:	Tank Closure
Leak Cause:	Structure Failure
Leak Source:	Tank
Date Leak Confirmed:	8/30/1996
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	Not reported
Pollution Characterization Began:	Not reported
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

SLIC:

Region:	STATE
Facility Status:	**Open - Inactive**
Status Date:	06/02/2009
Global Id:	T0600191502
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number:	Not reported
Latitude:	37.659487
Longitude:	-122.092827
Case Type:	Cleanup Program Site
Case Worker:	UUU
Local Agency:	Not reported
RB Case Number:	01S0144
File Location:	Not reported
Potential Media Affected:	Under Investigation
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

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

SLIC REG 2:

Region:	2
Facility ID:	01S0144
Facility Status:	Leak being confirmed
Date Closed:	Not reported
Local Case #:	Not reported
How Discovered:	Tank Closure
Leak Cause:	UNK

EX CLEAN (Continued) **S100226541**

Leak Source: UNK
Date Confirmed: 2/13/1989
Date Prelim Site Assmnt Workplan Submitted: Not reported
Date Preliminary Site Assessment Began: Not reported
Date Pollution Characterization Began: Not reported
Date Remediation Plan Submitted: Not reported
Date Remedial Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

Alameda County CS:
Status: Case Closed
Record Id: RO0000170
PE: 5602
Facility Status: Case Closed

SWEEPS UST:
Status: Not reported
Comp Number: 371
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 01-003-000371-000001
Tank Status: Not reported
Capacity: 10000
Active Date: Not reported
Tank Use: CHEMICAL
STG: PRODUCT
Content: SOLVENT
Number Of Tanks: 2

Status: Not reported
Comp Number: 371
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 01-003-000371-000002
Tank Status: Not reported
Capacity: 10000
Active Date: Not reported
Tank Use: CHEMICAL
STG: PRODUCT
Content: WASTE SOLVEN
Number Of Tanks: Not reported

HIST CORTESE:
Region: CORTESE
Facility County Code: 1
Reg By: LTNKA
Reg Id: 01-0526

EX CLEAN (Continued) **S100226541**

NOTIFY 65:

Date Reported:	Not reported
Staff Initials:	Not reported
Board File Number:	Not reported
Facility Type:	Not reported
Discharge Date:	Not reported
Issue Date:	Not reported
Incident Description:	Not reported

114
NE
1/2-1
0.908 mi.
4796 ft.

MONTGOMERY STREET PROJECT
21659 MISSION BOULEVARD
HAYWARD, CA 94541

ENVIROSTOR **S109929444**
N/A

Relative:
Higher

Actual:
88 ft.

ENVIROSTOR:

Facility ID:	60000807
Status:	Inactive - Needs Evaluation
Status Date:	08/11/2008
Site Code:	Not reported
Site Type:	Evaluation
Site Type Detailed:	Evaluation
Acres:	0.72
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Karen Toth
Division Branch:	Cleanup Berkeley
Assembly:	20
Senate:	10
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	37.67883
Longitude:	-122.0932
APN:	428-6-58-1
Past Use:	VEHICLE MAINTENANCE
Potential COC:	Polychlorinated biphenyls (PCBs Tetrachloroethylene (PCE TPH-gas TPH-MOTOR OIL Trichloroethylene (TCE Dieldrin
Confirmed COC:	Dieldrin Tetrachloroethylene (PCE TPH-gas TPH-MOTOR OIL Polychlorinated biphenyls (PCBs Trichloroethylene (TCE
Potential Description:	AQUI, SOIL, SV
Alias Name:	428-6-58-1
Alias Type:	APN
Alias Name:	60000807
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Phase 1
Completed Date:	03/08/2007
Comments:	Phase I investigation report submitted to DTSC with request for oversight application. This document was not prepared under DTSC oversight.

MONTGOMERY STREET PROJECT (Continued) **S109929444**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 06/20/2007
Comments: Soil and groundwater contamination were detected at the Site. Much of the groundwater contamination appeared to be from an offsite source. This document was not prepared under DTSC oversight.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 12/27/2007
Comments: Elevated concentrations of PCE detected in soil gas at the Site. The report recommended submittal of a "Request for Agency Oversight" application. This document was not prepared under DTSC oversight.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 03/05/2008
Comments: A waste oil UST and other subsurface anomalies were identified at the site. This document was not prepared under DTSC oversight.

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

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115 East 1/2-1 0.974 mi. 5142 ft.

GRAND PLACE, LLC
22815 SUTRO STREET
HAYWARD, CA 94541

ENVIROSTOR **S113091183**
VCP **N/A**
DEED
HAZNET

Relative: Higher

Actual: 97 ft.

ENVIROSTOR:
Facility ID: 1010007
Status: Active
Status Date: 08/29/2000
Site Code: 201323
Site Type: Voluntary Cleanup
Site Type Detailed: Voluntary Cleanup
Acres: 6.7
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Jacinto Soto
Supervisor: Karen Toth
Division Branch: Cleanup Berkeley
Assembly: 20
Senate: 10
Special Program: Voluntary Cleanup Program
Restricted Use: YES
Site Mgmt Req: GW

GRAND PLACE, LLC (Continued) **S113091183**

Funding:	Responsible Party
Latitude:	37.66722
Longitude:	-122.0847
APN:	431-0044-026, 431-0044-027-02, 431-0044-028, 431-0044-029-02, 431-0044-029-04, 431-0044-045, 431-0044-045, 431-0048-001, 431-0048-002, 431-0048-020-02
Past Use:	MANUFACTURING - OTHER
Potential COC:	Trichloroethylene (TCE
Confirmed COC:	Trichloroethylene (TCE
Potential Description:	OTH
Alias Name:	Not reported
Alias Type:	Not reported

Completed Info:

Completed Area Name:	Not reported
Completed Sub Area Name:	Not reported
Completed Document Type:	Not reported
Completed Date:	Not reported
Comments:	Not reported
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

VCP:

Facility ID:	1010007
Site Type:	Voluntary Cleanup
Site Type Detail:	Voluntary Cleanup
Site Mgmt. Req.:	GW
Acres:	6.7
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Jacinto Soto
Supervisor:	Karen Toth
Division Branch:	Cleanup Berkeley
Site Code:	201323
Assembly:	20
Senate:	10
Special Programs Code:	Voluntary Cleanup Program
Status:	Active
Status Date:	08/29/2000
Restricted Use:	YES
Funding:	Responsible Party
Lat/Long:	37.66722 / -122.0847
APN:	431-0044-026, 431-0044-027-02, 431-0044-028, 431-0044-029-02, 431-0044-029-04, 431-0044-045, 431-0044-045, 431-0048-001, 431-0048-002, 431-0048-020-02
Past Use:	MANUFACTURING - OTHER
Potential COC:	30027

GRAND PLACE, LLC (Continued) **S113091183**

Confirmed COC: 30027
Potential Description: OTH
Alias Name: Not reported
Alias Type: Not reported

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

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

DEED:
Envirostor ID: 1010007
Area: PROJECT WIDE
Sub Area: Not reported
Site Type: VOLUNTARY CLEANUP
Status: ACTIVE
Agency: Not reported
Covenant Uploaded: Not reported
Deed Date(s): 09/12/2002

HAZNET:
envid: S113091183
Year: 1999
GEPAID: CAL000173420
Contact: JOHN TRUJILLO
Telephone: 5105383304
Mailing Name: Not reported
Mailing Address: PO BOX 3711
Mailing City,St,Zip: HAYWARD, CA 945403711
Gen County: Not reported
TSD EPA ID: CAD980887418
TSD County: Not reported
Waste Category: Waste oil and mixed oil
Disposal Method: Recycler
Tons: 1.2509
Cat Decode: Waste oil and mixed oil
Method Decode: Recycler
Facility County: 1

envid: S113091183
Year: 1998
GEPAID: CAL000173420
Contact: JOHN TRUJILLO
Telephone: 5105383304
Mailing Name: Not reported

GRAND PLACE, LLC (Continued) **S113091183**

Mailing Address:	PO BOX 3711
Mailing City,St,Zip:	HAYWARD, CA 945403711
Gen County:	Not reported
TSD EPA ID:	CAD980887418
TSD County:	Not reported
Waste Category:	Waste oil and mixed oil
Disposal Method:	Recycler
Tons:	2.2935
Cat Decode:	Waste oil and mixed oil
Method Decode:	Recycler
Facility County:	1

envid:	S113091183
Year:	1997
GEPAID:	CAL000173420
Contact:	JOHN TRUJILLO
Telephone:	5105383304
Mailing Name:	Not reported
Mailing Address:	PO BOX 3711
Mailing City,St,Zip:	HAYWARD, CA 945403711
Gen County:	Not reported
TSD EPA ID:	CAD980887418
TSD County:	Not reported
Waste Category:	Waste oil and mixed oil
Disposal Method:	Recycler
Tons:	3.1483
Cat Decode:	Waste oil and mixed oil
Method Decode:	Recycler
Facility County:	1

envid:	S113091183
Year:	1996
GEPAID:	CAL000173420
Contact:	JOHN TRUJILLO
Telephone:	5105383304
Mailing Name:	Not reported
Mailing Address:	PO BOX 3711
Mailing City,St,Zip:	HAYWARD, CA 945403711
Gen County:	Not reported
TSD EPA ID:	CAD980887418
TSD County:	Not reported
Waste Category:	Waste oil and mixed oil
Disposal Method:	Recycler
Tons:	2.4186
Cat Decode:	Waste oil and mixed oil
Method Decode:	Recycler
Facility County:	1

envid:	S113091183
Year:	1995
GEPAID:	CAL000173420
Contact:	JOHN TRUJILLO
Telephone:	5105383304
Mailing Name:	Not reported
Mailing Address:	PO BOX 3711
Mailing City,St,Zip:	HAYWARD, CA 945403711
Gen County:	Not reported

GRAND PLACE, LLC (Continued) **S113091183**

TSD EPA ID:	CAD980887418
TSD County:	Not reported
Waste Category:	Waste oil and mixed oil
Disposal Method:	Recycler
Tons:	.7506
Cat Decode:	Waste oil and mixed oil
Method Decode:	Recycler
Facility County:	1

Click this hyperlink while viewing on your computer to access
1 additional CA_HAZNET: record(s) in the EDR Site Report.

116
ENE
1/2-1
0.976 mi.
5151 ft.

ASPI - HAYWARD
B & WATKINS
HAYWARD, CA 94541

ENF **S111211707**
N/A

Relative:
Higher

Actual:
102 ft.

ENF:

Region:	2
Facility Id:	206576
Agency Name:	Albertsons Inc
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Industrial
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	UNREGS
Program Category1:	UNREGS
Program Category2:	UNREGS
# Of Programs:	1
WDID:	2 01S0528
Reg Measure Id:	170093
Reg Measure Type:	Unregulated

ASPI - HAYWARD (Continued) **S111211707**

Region:	2
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Never Active
Status Date:	02/21/2013
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	246792
Region:	2
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Staff Enforcement Letter
Effective Date:	11/13/2002
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 2 01S0528
Description:	Approval of offsite groundwater monitoring plan.
Program:	UNREGS
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	$0.00
Initial Assessed Amount:	$0.00
Liability $ Amount:	$0.00
Project $ Amount:	$0.00
Liability $ Paid:	$0.00
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$0.00

Count: 0 s.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
		NO SITES FOUND			

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: 10/30/2015
Date Data Arrived at EDR: 11/07/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 58

Source: EPA
Telephone: N/A
Last EDR Contact: 01/26/2016
Next Scheduled EDR Contact: 04/18/2016
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 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

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: 10/30/2015
Date Data Arrived at EDR: 11/07/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 58

Source: EPA
Telephone: N/A
Last EDR Contact: 01/26/2016
Next Scheduled EDR Contact: 04/18/2016
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: 10/30/2015
Date Data Arrived at EDR: 11/07/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 58

Source: EPA
Telephone: N/A
Last EDR Contact: 01/26/2016
Next Scheduled EDR Contact: 04/18/2016
Data Release Frequency: Quarterly

Federal CERCLIS list

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: 03/26/2015
Date Data Arrived at EDR: 04/08/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 01/06/2016
Next Scheduled EDR Contact: 04/18/2016
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list 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). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/11/2016
Date Data Arrived at EDR: 01/22/2016
Date Made Active in Reports: 03/18/2016
Number of Days to Update: 56

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 02/19/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS 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 the 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. The 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 potential NPL site.

Date of Government Version: 01/11/2016
Date Data Arrived at EDR: 01/22/2016
Date Made Active in Reports: 03/18/2016
Number of Days to Update: 56

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 02/19/2016
Next Scheduled EDR Contact: 06/06/2016
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: 06/09/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/16/2015
Number of Days to Update: 82

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
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: 06/09/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/16/2015
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
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: 06/09/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/16/2015
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
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: 06/09/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/16/2015
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
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: 06/09/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/16/2015
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

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: 05/28/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 13

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/16/2016
Next Scheduled EDR Contact: 05/30/2016
Data Release Frequency: Varies

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: 09/10/2015
Date Data Arrived at EDR: 09/11/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 53

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/29/2016
Next Scheduled EDR Contact: 06/13/2016
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: 09/10/2015
Date Data Arrived at EDR: 09/11/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 53

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/29/2016
Next Scheduled EDR Contact: 06/13/2016
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: 06/22/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/16/2015
Number of Days to Update: 82

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
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: 02/01/2016
Date Data Arrived at EDR: 02/03/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 48

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/03/2016
Next Scheduled EDR Contact: 05/16/2016
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: 02/01/2016
Date Data Arrived at EDR: 02/03/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 48

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/03/2016
Next Scheduled EDR Contact: 05/16/2016
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: 02/15/2016
Date Data Arrived at EDR: 02/17/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 44

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 02/17/2016
Next Scheduled EDR Contact: 05/30/2016
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

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: 12/14/2015
Date Data Arrived at EDR: 12/14/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 56

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 03/16/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Quarterly

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 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 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

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 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

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: Quarterly

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: 01/08/2015
Date Data Arrived at EDR: 01/08/2015
Date Made Active in Reports: 02/09/2015
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/27/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: Quarterly

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: 10/13/2015
Date Data Arrived at EDR: 10/23/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 118

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/30/2015
Date Data Arrived at EDR: 04/28/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 55

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 08/20/2015
Date Data Arrived at EDR: 10/30/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 111

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
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: 11/24/2015
Date Data Arrived at EDR: 12/01/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 34

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: Semi-Annually

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: 10/27/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 11/04/2015
Date Data Arrived at EDR: 11/13/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 52

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: Varies

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: 12/14/2015
Date Data Arrived at EDR: 12/14/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 56

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/16/2016
Next Scheduled EDR Contact: 06/27/2016
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

State and tribal registered storage tank lists

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: 01/08/2016
Next Scheduled EDR Contact: 04/25/2016
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/14/2015
Date Data Arrived at EDR: 12/14/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 56

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/16/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

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: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/11/2016
Next Scheduled EDR Contact: 07/11/2016
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: 12/14/2014
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 28

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/27/2016
Next Scheduled EDR Contact: 05/09/2016
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: 10/13/2015
Date Data Arrived at EDR: 10/23/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 118

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
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: 09/23/2014
Date Data Arrived at EDR: 11/25/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 65

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
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: 08/20/2015
Date Data Arrived at EDR: 10/30/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 111

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
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: 10/20/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 05/09/2016
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: 11/24/2015
Date Data Arrived at EDR: 12/01/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 34

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
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: 11/05/2015
Date Data Arrived at EDR: 11/13/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 52

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: Varies

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: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

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: 02/01/2016
Date Data Arrived at EDR: 02/03/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 48

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/03/2016
Next Scheduled EDR Contact: 05/16/2016
Data Release Frequency: Quarterly

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

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: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 04/01/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 12/04/2015
Date Data Arrived at EDR: 12/08/2015
Date Made Active in Reports: 01/21/2016
Number of Days to Update: 44

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/07/2016
Next Scheduled EDR Contact: 06/20/2016
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: 12/22/2015
Date Data Arrived at EDR: 12/23/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/22/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

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: 02/08/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 12/14/2015
Date Data Arrived at EDR: 12/17/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 53

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/16/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 11/23/2015
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 01/21/2016
Number of Days to Update: 58

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 02/14/2016
Next Scheduled EDR Contact: 05/30/2016
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: 02/01/2016
Next Scheduled EDR Contact: 05/16/2016
Data Release Frequency: Varies

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: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: No Update Planned

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

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 09/17/2015
Date Data Arrived at EDR: 12/04/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 76

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/01/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: No Update Planned

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: 02/01/2016
Date Data Arrived at EDR: 02/03/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 48

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/03/2016
Next Scheduled EDR Contact: 05/16/2016
Data Release Frequency: Quarterly

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: 09/30/2015
Date Data Arrived at EDR: 01/19/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 63

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 01/11/2016
Next Scheduled EDR Contact: 04/25/2016
Data Release Frequency: Varies

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

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: 09/17/2015
Date Data Arrived at EDR: 12/04/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 76

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/01/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

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

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 11/25/2015
Date Data Arrived at EDR: 12/01/2015
Date Made Active in Reports: 12/17/2015
Number of Days to Update: 16

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 03/28/2016
Next Scheduled EDR Contact: 06/13/2016
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

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

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 12/17/2015
Date Data Arrived at EDR: 12/22/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 48

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/07/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Varies

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: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 03/11/2016
Next Scheduled EDR Contact: 05/09/2016
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: 12/07/2015
Date Data Arrived at EDR: 12/08/2015
Date Made Active in Reports: 01/21/2016
Number of Days to Update: 44

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 03/08/2016
Next Scheduled EDR Contact: 06/20/2016
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: 06/24/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/02/2015
Number of Days to Update: 68

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
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: 12/16/2015
Date Data Arrived at EDR: 01/27/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 55

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 01/27/2016
Next Scheduled EDR Contact: 05/09/2016
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: 12/14/2015
Date Data Arrived at EDR: 12/14/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 56

Source: State Water Quality Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/16/2016
Next Scheduled EDR Contact: 06/27/2016
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: 12/14/2015
Date Data Arrived at EDR: 12/14/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 56

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/16/2016
Next Scheduled EDR Contact: 06/27/2016
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 / No Longer Regulated

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: 06/09/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/16/2015
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

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: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 03/11/2016
Next Scheduled EDR Contact: 06/20/2016
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: 01/15/2016
Next Scheduled EDR Contact: 04/25/2016
Data Release Frequency: Semi-Annually

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: 01/15/2016
Next Scheduled EDR Contact: 04/25/2016
Data Release Frequency: N/A

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: 02/19/2016
Next Scheduled EDR Contact: 05/30/2016
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: 09/01/2015
Date Data Arrived at EDR: 09/03/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 02/16/2016
Next Scheduled EDR Contact: 05/30/2016
Data Release Frequency: Quarterly

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: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/09/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: Quarterly

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: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/12/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: Varies

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: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/24/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Every 4 Years

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: 12/31/2013
Date Data Arrived at EDR: 02/12/2015
Date Made Active in Reports: 06/02/2015
Number of Days to Update: 110

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/24/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Annually

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: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: Annually

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: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 03/08/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Annually

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: 08/01/2015
Date Data Arrived at EDR: 08/26/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 69

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: Varies

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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 02/12/2016
Next Scheduled EDR Contact: 05/23/2016
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: 07/01/2014
Date Data Arrived at EDR: 10/15/2014
Date Made Active in Reports: 11/17/2014
Number of Days to Update: 33

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 01/12/2016
Next Scheduled EDR Contact: 04/25/2016
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: 01/23/2015
Date Data Arrived at EDR: 02/06/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 01/08/2016
Next Scheduled EDR Contact: 04/25/2016
Data Release Frequency: Quarterly

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: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
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: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Quarterly

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: 06/26/2015
Date Data Arrived at EDR: 07/10/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 95

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 02/08/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant 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: 01/13/2016
Next Scheduled EDR Contact: 04/25/2016
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: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 03/11/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Varies

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: 01/29/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: Varies

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: 07/07/2015
Date Data Arrived at EDR: 07/09/2015
Date Made Active in Reports: 09/16/2015
Number of Days to Update: 69

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 01/07/2016
Next Scheduled EDR Contact: 04/18/2016
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

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: 02/03/2016
Next Scheduled EDR Contact: 05/16/2016
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: 12/31/2014
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/02/2015
Number of Days to Update: 46

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/24/2016
Next Scheduled EDR Contact: 07/11/2016
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: 12/31/2013
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 09/30/2015
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 02/26/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Biennially

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: 01/15/2016
Next Scheduled EDR Contact: 04/25/2016
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program
DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 11/23/2015
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 86

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 02/08/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: Varies

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: 03/28/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014
Date Data Arrived at EDR: 11/26/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 01/26/2016
Next Scheduled EDR Contact: 04/18/2016
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

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: 10/20/2015
Date Data Arrived at EDR: 10/27/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 69

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/24/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/27/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 69

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/24/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Annually

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: 08/18/2015
Date Data Arrived at EDR: 09/01/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 125

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 03/02/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing
This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 03/04/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing
Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 03/04/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Varies

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: 07/20/2015
Date Data Arrived at EDR: 09/09/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 55

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 03/08/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Quarterly

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

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: 12/28/2015
Date Data Arrived at EDR: 12/29/2015
Date Made Active in Reports: 01/21/2016
Number of Days to Update: 23

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

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: 02/08/2016
Date Data Arrived at EDR: 02/24/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 37

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 02/05/2016
Next Scheduled EDR Contact: 06/20/2016
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: 12/31/2013
Date Data Arrived at EDR: 09/25/2015
Date Made Active in Reports: 11/05/2015
Number of Days to Update: 41

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/22/2016
Next Scheduled EDR Contact: 07/04/2016
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: 01/26/2016
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 53

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 01/28/2016
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 53

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: Varies

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: 02/17/2016
Date Data Arrived at EDR: 02/23/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 38

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 02/16/2016
Next Scheduled EDR Contact: 05/30/2016
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. This database begins with calendar year 1993.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 10/14/2015
Date Made Active in Reports: 12/11/2015
Number of Days to Update: 58

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 01/11/2016
Next Scheduled EDR Contact: 04/25/2016
Data Release Frequency: Annually

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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/22/2016
Date Data Arrived at EDR: 02/24/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 37

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/24/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Quarterly

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: 01/11/2016
Date Data Arrived at EDR: 01/13/2016
Date Made Active in Reports: 02/22/2016
Number of Days to Update: 40

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 01/13/2016
Next Scheduled EDR Contact: 04/25/2016
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/14/2015
Date Data Arrived at EDR: 12/17/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 53

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 03/16/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Varies

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: 11/10/2015
Date Data Arrived at EDR: 12/08/2015
Date Made Active in Reports: 01/21/2016
Number of Days to Update: 44

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 03/08/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 02/16/2016
Date Data Arrived at EDR: 02/17/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 44

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/17/2016
Next Scheduled EDR Contact: 05/30/2016
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 12/07/2015
Date Data Arrived at EDR: 12/08/2015
Date Made Active in Reports: 01/21/2016
Number of Days to Update: 44

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 03/08/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 12/14/2015
Date Data Arrived at EDR: 12/17/2015
Date Made Active in Reports: 03/01/2016
Number of Days to Update: 75

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/16/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Quarterly

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: 09/10/2015
Date Data Arrived at EDR: 01/05/2016
Date Made Active in Reports: 02/12/2016
Number of Days to Update: 38

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 04/04/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 07/23/2015
Date Data Arrived at EDR: 09/15/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 28

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/16/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water board?s review found that more than one-third of the region?s active disposal pits are operating without permission.

Date of Government Version: 04/15/2015
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/23/2015
Number of Days to Update: 67

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 01/15/2016
Next Scheduled EDR Contact: 04/25/2016
Data Release Frequency: Varies

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: 02/19/2016
Next Scheduled EDR Contact: 06/16/2016
Data Release Frequency: Quarterly

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: 03/28/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information
ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/20/2015
Date Data Arrived at EDR: 09/23/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 103

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 03/23/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/23/2015
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 86

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/24/2016
Next Scheduled EDR Contact: 06/06/2016
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 Hist Auto: 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 Hist Cleaner: 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 RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List
The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank
The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

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: 01/11/2016
Date Data Arrived at EDR: 01/12/2016
Date Made Active in Reports: 02/22/2016
Number of Days to Update: 41

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 01/11/2016
Next Scheduled EDR Contact: 04/25/2016
Data Release Frequency: Semi-Annually

Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 01/11/2016
Date Data Arrived at EDR: 01/14/2016
Date Made Active in Reports: 03/01/2016
Number of Days to Update: 47

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 01/11/2016
Next Scheduled EDR Contact: 04/25/2016
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List
Cupa Facility List

Date of Government Version: 11/16/2015
Date Data Arrived at EDR: 12/10/2015
Date Made Active in Reports: 01/21/2016
Number of Days to Update: 42

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 03/21/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing
Cupa facility list.

Date of Government Version: 02/19/2016
Date Data Arrived at EDR: 02/23/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 38

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 02/19/2016
Next Scheduled EDR Contact: 04/25/2016
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 02/02/2016
Date Data Arrived at EDR: 02/04/2016
Date Made Active in Reports: 02/22/2016
Number of Days to Update: 18

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/28/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 02/22/2016
Date Data Arrived at EDR: 02/24/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 37

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 05/23/2016
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: 02/24/2016
Date Data Arrived at EDR: 02/26/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 35

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 02/01/2016
Next Scheduled EDR Contact: 05/16/2016
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 01/22/2016
Date Data Arrived at EDR: 02/05/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 31

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 02/01/2016
Next Scheduled EDR Contact: 05/16/2016
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/22/2016
Date Data Arrived at EDR: 02/24/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 37

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 02/01/2016
Next Scheduled EDR Contact: 05/16/2016
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: 01/05/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/22/2016
Number of Days to Update: 45

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 04/04/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 12/02/2015
Date Data Arrived at EDR: 12/04/2015
Date Made Active in Reports: 01/21/2016
Number of Days to Update: 48

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 01/25/2016
Date Data Arrived at EDR: 01/27/2016
Date Made Active in Reports: 02/22/2016
Number of Days to Update: 26

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 33

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 05/19/2015
Date Data Arrived at EDR: 06/18/2015
Date Made Active in Reports: 07/22/2015
Number of Days to Update: 34

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 05/23/2016
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: 02/23/2016
Date Data Arrived at EDR: 02/25/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 36

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 02/09/2016
Date Data Arrived at EDR: 02/12/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 49

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 01/19/2016
Next Scheduled EDR Contact: 05/02/2016
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: 03/21/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 11/24/2014
Date Data Arrived at EDR: 01/30/2015
Date Made Active in Reports: 03/04/2015
Number of Days to Update: 33

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 01/08/2016
Next Scheduled EDR Contact: 04/25/2016
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/19/2016
Date Data Arrived at EDR: 01/20/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 62

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 01/20/2016
Next Scheduled EDR Contact: 05/02/2016
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2016
Date Data Arrived at EDR: 01/26/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 56

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 01/19/2016
Next Scheduled EDR Contact: 05/02/2016
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/15/2015
Date Data Arrived at EDR: 01/29/2015
Date Made Active in Reports: 03/10/2015
Number of Days to Update: 40

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 03/28/2016
Next Scheduled EDR Contact: 05/02/2016
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 03/30/2015
Date Data Arrived at EDR: 04/02/2015
Date Made Active in Reports: 04/13/2015
Number of Days to Update: 11

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 02/16/2016
Next Scheduled EDR Contact: 05/02/2016
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: 11/04/2015
Date Data Arrived at EDR: 11/13/2015
Date Made Active in Reports: 12/17/2015
Number of Days to Update: 34

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 01/12/2016
Date Data Arrived at EDR: 01/15/2016
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 24

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 01/11/2016
Next Scheduled EDR Contact: 04/25/2016
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: 12/11/2015
Date Data Arrived at EDR: 12/14/2015
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 84

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 10/05/2015
Date Data Arrived at EDR: 10/08/2015
Date Made Active in Reports: 10/15/2015
Number of Days to Update: 7

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 04/04/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 12/14/2015
Date Data Arrived at EDR: 12/18/2015
Date Made Active in Reports: 01/21/2016
Number of Days to Update: 34

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List
CUPA Facility List

Date of Government Version: 11/24/2015
Date Data Arrived at EDR: 12/01/2015
Date Made Active in Reports: 01/21/2016
Number of Days to Update: 51

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 02/29/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 12/10/2015
Date Data Arrived at EDR: 12/14/2015
Date Made Active in Reports: 02/12/2016
Number of Days to Update: 60

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
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: 02/29/2016
Next Scheduled EDR Contact: 06/13/2016
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: 02/29/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 01/27/2016
Date Data Arrived at EDR: 02/04/2016
Date Made Active in Reports: 02/22/2016
Number of Days to Update: 18

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 02/01/2016
Next Scheduled EDR Contact: 05/16/2016
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 02/01/2016
Date Data Arrived at EDR: 02/12/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 49

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/09/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 02/01/2016
Date Data Arrived at EDR: 02/12/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 49

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/09/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/01/2016
Date Data Arrived at EDR: 02/10/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 51

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/10/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: Quarterly

PLACER COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 12/11/2015
Date Made Active in Reports: 01/21/2016
Number of Days to Update: 41

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 03/07/2016
Next Scheduled EDR Contact: 06/20/2016
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: 01/20/2016
Date Data Arrived at EDR: 01/22/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 60

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/21/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 01/20/2016
Date Data Arrived at EDR: 01/22/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 60

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/21/2016
Next Scheduled EDR Contact: 07/04/2016
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: 11/02/2015
Date Data Arrived at EDR: 01/05/2016
Date Made Active in Reports: 02/12/2016
Number of Days to Update: 38

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 01/05/2016
Next Scheduled EDR Contact: 04/18/2016
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: 11/02/2015
Date Data Arrived at EDR: 01/05/2016
Date Made Active in Reports: 02/12/2016
Number of Days to Update: 38

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 01/05/2016
Next Scheduled EDR Contact: 04/18/2016
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: 12/14/2015
Date Data Arrived at EDR: 12/18/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 52

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 02/08/2016
Next Scheduled EDR Contact: 05/23/2016
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: 09/23/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 23

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 03/07/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2015
Date Data Arrived at EDR: 11/07/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 58

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
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: 03/03/2016
Next Scheduled EDR Contact: 06/20/2016
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: 02/08/2016
Next Scheduled EDR Contact: 05/23/2016
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: 02/08/2016
Next Scheduled EDR Contact: 05/23/2016
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: 12/18/2015
Date Data Arrived at EDR: 12/22/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 48

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 04/04/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 02/22/2016
Date Data Arrived at EDR: 02/24/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 37

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/21/2016
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: 10/14/2015
Date Data Arrived at EDR: 10/15/2015
Date Made Active in Reports: 11/16/2015
Number of Days to Update: 32

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/28/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 12/14/2015
Date Data Arrived at EDR: 12/17/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 53

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/14/2016
Next Scheduled EDR Contact: 06/27/2016
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: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 11/18/2015
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 12/11/2015
Number of Days to Update: 17

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
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: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 02/29/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Annually

Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 02/05/2016
Date Data Arrived at EDR: 02/10/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 51

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 02/08/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List

CUPA facility listing.

Date of Government Version: 11/18/2015
Date Data Arrived at EDR: 11/23/2015
Date Made Active in Reports: 12/11/2015
Number of Days to Update: 18

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List

Cupa Facility List.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 12/10/2015
Date Made Active in Reports: 01/21/2016
Number of Days to Update: 42

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
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: 10/30/2015
Date Data Arrived at EDR: 12/14/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 56

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/14/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 10/30/2015
Date Data Arrived at EDR: 12/14/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 56

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/14/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 01/11/2016
Date Data Arrived at EDR: 01/14/2016
Date Made Active in Reports: 02/22/2016
Number of Days to Update: 39

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/28/2016
Next Scheduled EDR Contact: 07/11/2016
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: 01/05/2016
Date Data Arrived at EDR: 01/07/2016
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 32

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/28/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 12/07/2015
Date Data Arrived at EDR: 12/08/2015
Date Made Active in Reports: 12/17/2015
Number of Days to Update: 9

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 03/07/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Semi-Annually

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 10/29/2015
Date Data Arrived at EDR: 10/30/2015
Date Made Active in Reports: 12/11/2015
Number of Days to Update: 42

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 03/04/2016
Next Scheduled EDR Contact: 05/09/2016
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: 12/28/2015
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 53

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
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: 04/04/2016
Next Scheduled EDR Contact: 07/18/2016
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: 02/14/2016
Next Scheduled EDR Contact: 05/30/2016
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: 12/28/2015
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 53

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
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: 11/30/2015
Date Data Arrived at EDR: 12/17/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 53

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/17/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 02/01/2016
Date Data Arrived at EDR: 02/05/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 46

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 04/04/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 02/01/2016
Date Data Arrived at EDR: 02/05/2016
Date Made Active in Reports: 02/22/2016
Number of Days to Update: 17

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 02/01/2016
Next Scheduled EDR Contact: 05/16/2016
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: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/18/2016
Next Scheduled EDR Contact: 05/30/2016
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 07/17/2015
Date Made Active in Reports: 08/12/2015
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 01/15/2016
Next Scheduled EDR Contact: 04/25/2016
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: 02/01/2016
Date Data Arrived at EDR: 02/03/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 48

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 02/03/2016
Next Scheduled EDR Contact: 05/16/2016
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/24/2015
Date Made Active in Reports: 08/18/2015
Number of Days to Update: 25

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 01/19/2016
Next Scheduled EDR Contact: 05/02/2016
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 03/21/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 03/19/2015
Date Made Active in Reports: 04/07/2015
Number of Days to Update: 19

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/14/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: PennWell Corporation
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
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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, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

COSTCO HAYWARD
22330 HATHAWAY AVENUE
HAYWARD, CA 94541

TARGET PROPERTY COORDINATES

Latitude (North):	37.66843 - 37˚ 40' 6.35"
Longitude (West):	122.103041 - 122˚ 6' 10.95"
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	579106.6
UTM Y (Meters):	4169201.2
Elevation:	67 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5640616 HAYWARD, CA
Version Date:	2012

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).

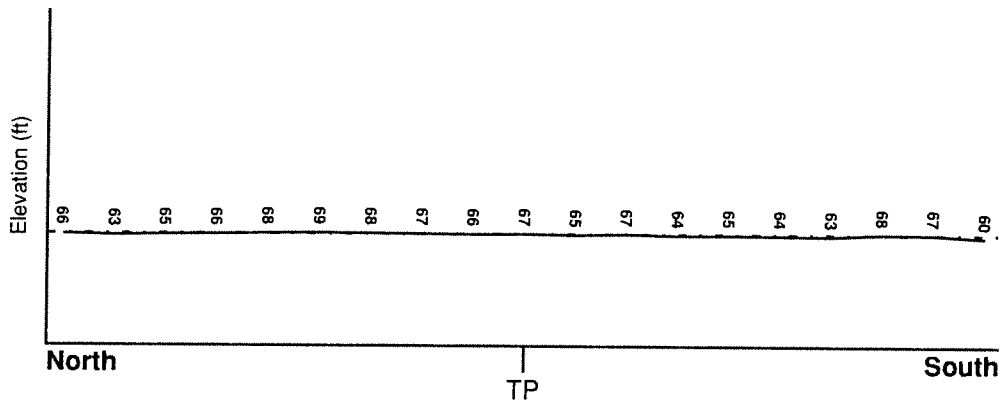
TOPOGRAPHIC INFORMATION

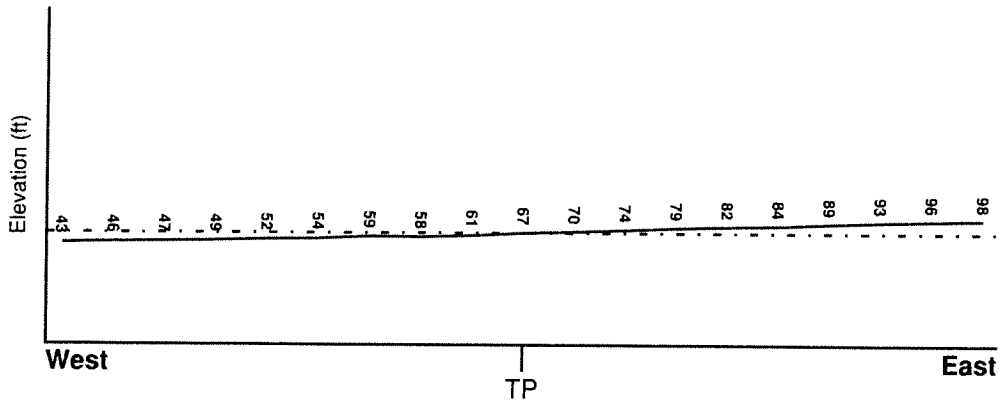
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General West

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 67 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
ALAMEDA, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 06001C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
HAYWARD	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
A1	0 - 1/8 Mile SSW	SW, NW, Vary
A2	0 - 1/8 Mile South	W
3	1/8 - 1/4 Mile East	S
4	1/8 - 1/4 Mile North	NNW
B5	1/8 - 1/4 Mile ESE	NE
6	1/8 - 1/4 Mile SW	W
B7	1/4 - 1/2 Mile ESE	E
8	1/4 - 1/2 Mile ESE	NE
9	1/4 - 1/2 Mile SE	N, W, Varies

* ©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

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
C10	1/4 - 1/2 Mile WNW	NW
C11	1/4 - 1/2 Mile WNW	NW
C12	1/4 - 1/2 Mile WNW	NW
13	1/4 - 1/2 Mile NNW	NE
D15	1/2 - 1 Mile WNW	S
D16	1/2 - 1 Mile WNW	S
17	1/2 - 1 Mile WSW	E
E18	1/2 - 1 Mile NNE	SW
20	1/2 - 1 Mile NW	S
21	1/2 - 1 Mile East	SW,W,Varies
F22	1/2 - 1 Mile SSE	SW
F23	1/2 - 1 Mile SSE	WSW
26	1/2 - 1 Mile NNE	S
H27	1/2 - 1 Mile WSW	WNW
H28	1/2 - 1 Mile WSW	NW
H29	1/2 - 1 Mile WSW	NW
H30	1/2 - 1 Mile WSW	NW
33	1/2 - 1 Mile South	WSW
35	1/2 - 1 Mile NE	SW, W, Varie
J37	1/2 - 1 Mile SE	NW
38	1/2 - 1 Mile WSW	W
39	1/2 - 1 Mile East	S,SW,Varies
J40	1/2 - 1 Mile SE	NW
K41	1/2 - 1 Mile NNE	S
K42	1/2 - 1 Mile NNE	S
K43	1/2 - 1 Mile NNE	S

For additional site information, refer to Physical Setting Source Map Findings.

GE ECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW Y INFORMATION

Groundwater flow veloci nation for a particular site is best determined by a qualified environmental professional using site specific geolo soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources nation, including geologic age identification, rock stratigraphic unit and soil characteristics data colle nearby properties and regional soil information. In general, contaminant plumes move more quickly throu dy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATIO NERAL AREA OF TARGET PROPERTY

Geologic information car d by the environmental professional in forming an opinion about the relative speed at which contaminant mi may be occurring.

ROCK STRATIGRAPHIC U

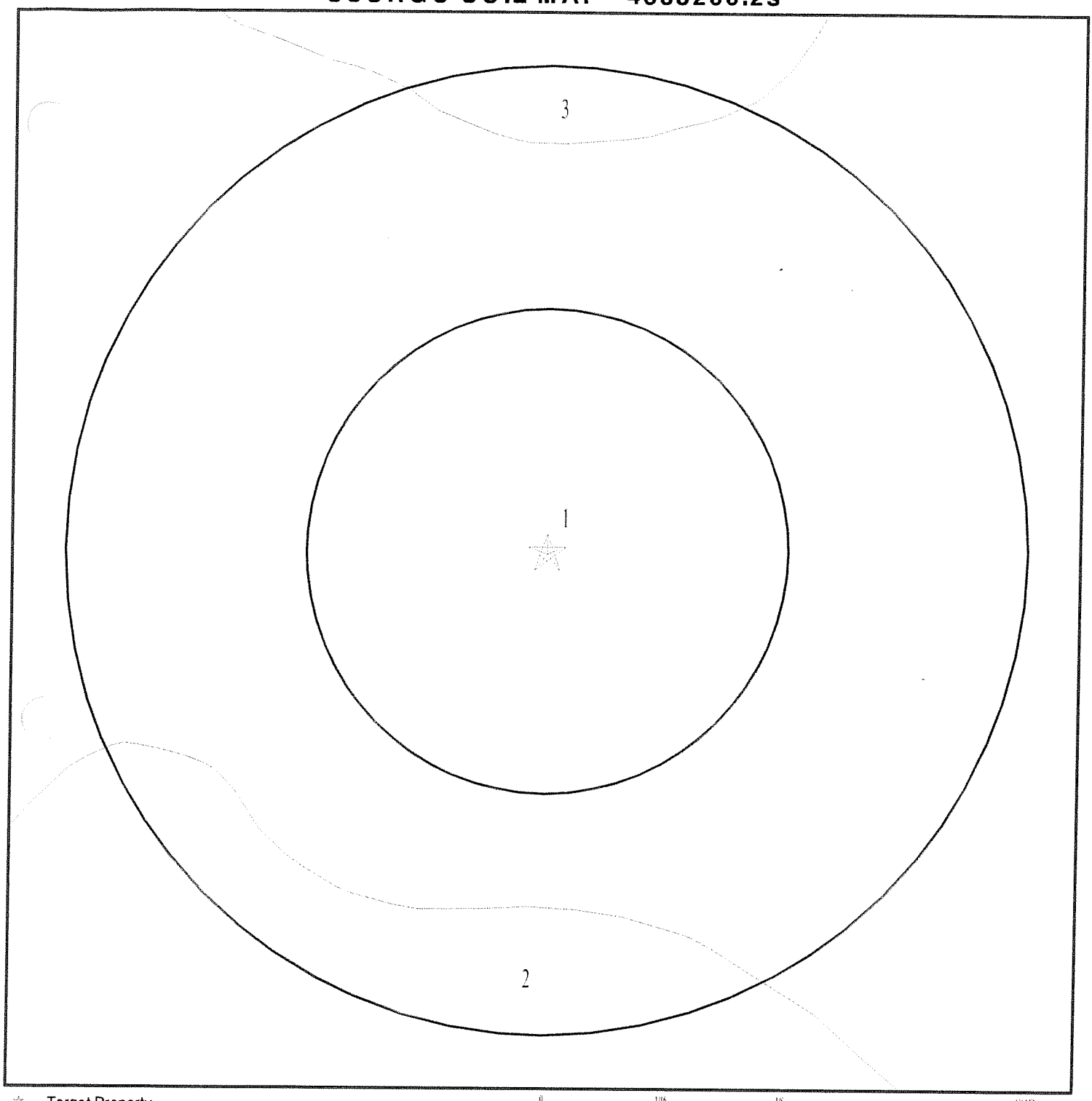
GEOLOGIC AGE IDENTIFICATION

Era: ozoic
System: ternary
Series: ternary
Code: *(decoded above as Era, System & Series)*

Category: Stratifed Sequence

Geologic Age and Rock aphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S 500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data DS - 11 (1994).

SSURGO SOIL MAP - 4583200.2s



Target Property

SSURGO Soil

Water

0 1/16 1/8 1/4 Miles

SITE NAME: Costco Hayward ADDRESS: 22330 Hathaway Avenue Hayward CA 94541 LAT/LONG: 37.66843 / 122.103041	CLIENT: Kleinfelder, Inc. CONTACT: Lindsey Dandridge-Perry INQUIRY #: 4583200.2s DATE: April 05, 2016 3:38 pm

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: Danville

Soil Surface Texture: silty clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

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	20 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: 7.3 Min: 6.1
2	20 inches	53 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 7.3 Min: 6.1
3	53 inches	79 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: 6.6

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 2

Soil Component Name: Botella

Soil Surface Texture: 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	9 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 7.8 Min: 6.6
2	9 inches	33 inches	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: 7.8 Min: 6.6
3	33 inches	59 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	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4

Soil Map ID: 3

Soil Component Name: Yolo

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: 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	7 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 7.3 Min: 6.1
2	7 inches	59 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 8.4 Min: 6.1

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 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
14	USGS40000184586	1/4 - 1/2 Mile SE
G24	USGS40000184785	1/2 - 1 Mile North
31	USGS40000184542	1/2 - 1 Mile SSE
I36	USGS40000184557	1/2 - 1 Mile SE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

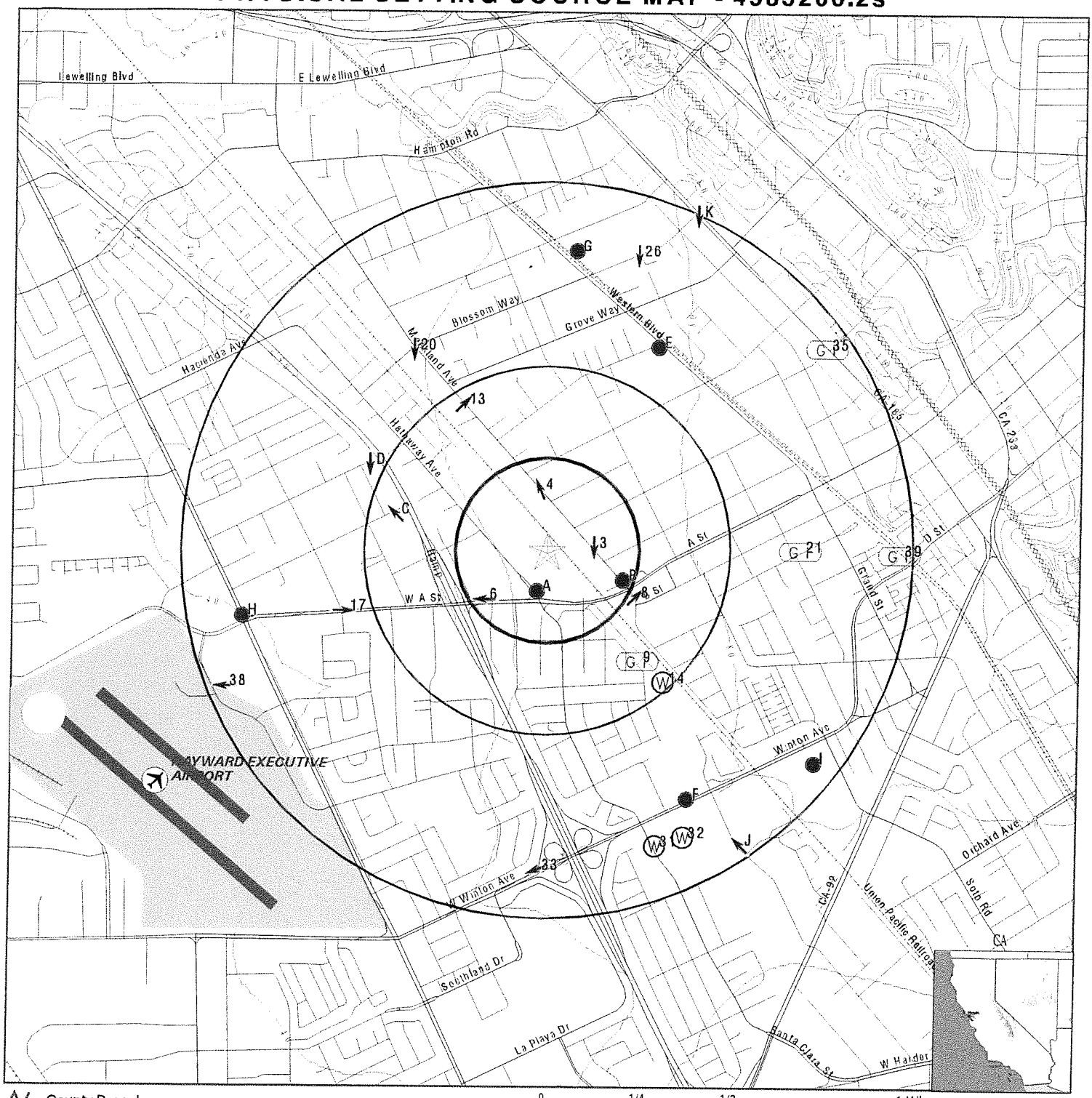
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
G25	CADW60000017347	1/2 - 1 Mile North
32	23	1/2 - 1 Mile SSE
I34	CADW60000017348	1/2 - 1 Mile SE

PHYSICAL SETTING SOURCE MAP - 4583200.2s



County Boundary
Major Roads
Contour Lines
Earthquake Fault Lines
Airports
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: Costco Hayward ADDRESS: 22330 Hathaway Avenue Hayward CA 94541 LAT/LONG: 37.66843 / 122.103041	CLIENT: Kleinfelder, Inc. CONTACT: Lindsey Dandridge-Perry INQUIRY #: 4583200.2s DATE: April 05, 2016 3:38 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
A1 **SSW** **0 - 1/8 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1208 SW, NW, Vary 30 36 Not Reported 11/04/1993	**AQUIFLOW**	**55624**
A2 **South** **0 - 1/8 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0489 W 10 30 Not Reported 05/1996	**AQUIFLOW**	**55617**
3 **East** **1/8 - 1/4 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1269 S Not Reported Not Reported 23-30 03/03/1995	**AQUIFLOW**	**50287**
4 **North** **1/8 - 1/4 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0837 NNW 36.38 36.54 Not Reported 10/31/1991	**AQUIFLOW**	**69304**
B5 **ESE** **1/8 - 1/4 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0176 NE 7.5 8.0 Not Reported 05/20/1991	**AQUIFLOW**	**53513**
6 **SW** **1/8 - 1/4 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1595 W Not Reported Not Reported 27 08/20/1990	**AQUIFLOW**	**64031**
B7 **ESE** **1/4 - 1/2 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0782 E 12.5' 18.00 Not Reported 02/28/1990	**AQUIFLOW**	**69306**

GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
8 **ESE** **1/4 - 1/2 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0639 NE 6.0' 6.6' Not Reported 01/29/1992	**AQUIFLOW**	**69227**
9 **SE** **1/4 - 1/2 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1316 N, W, Varies 40 43 Not Reported 07/26/1996	**AQUIFLOW**	**55729**
C10 **WNW** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2121 NW 6.5 7.5 Not Reported 12/16/1994	**AQUIFLOW**	**53500**
C11 **WNW** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2121 NW 2.0 20.0 Not Reported 02/08/1996	**AQUIFLOW**	**53501**
C12 **WNW** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2121 NW Not Reported Not Reported Not Reported 01/01/1991	**AQUIFLOW**	**53502**
13 **NNW** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0176 NE 20.0 30.0 Not Reported 06/25/1999	**AQUIFLOW**	**53514**
14 **SE** **1/4 - 1/2 Mile** **Higher**			**FED USGS**	**USGS40000184586**

GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-373948122054601		
Monloc name:	003S002W21D003M		
Monloc type:	Well		
Monloc desc:	TALK TO MAINTENCE PERSON HERB KARST 881-6750		
Huc code:	18050004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.6632651
Longitude:	-122.0971858	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:	70
Vert measure units:	feet	Vertacc measure val:	20
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:	197805	Welldepth:	220
Welldepth units:	ft	Wellholedepth:	220
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1978-05	36	

D15
WNW
1/2 - 1 Mile
Lower

Site ID:	01-0081	**AQUIFLOW**	**50298**
Groundwater Flow:	S		
Shallow Water Depth:	19.44		
Deep Water Depth:	23.13		
Average Water Depth:	Not Reported		
Date:	05/14/1993		

D16
WNW
1/2 - 1 Mile
Lower

Site ID:	01-0081	**AQUIFLOW**	**50299**
Groundwater Flow:	S		
Shallow Water Depth:	3.5		
Deep Water Depth:	13.0		
Average Water Depth:	Not Reported		
Date:	02/25/1991		

17
WSW
1/2 - 1 Mile
Lower

Site ID:	01-1480	**AQUIFLOW**	**50076**
Groundwater Flow:	E		
Shallow Water Depth:	14.22		
Deep Water Depth:	15.95		
Average Water Depth:	Not Reported		
Date:	04/17/1996		

E18
NNE
1/2 - 1 Mile
Higher

Site ID:	01-0431	**AQUIFLOW**	**52523**
Groundwater Flow:	SW		
Shallow Water Depth:	18.66		
Deep Water Depth:	25.27		
Average Water Depth:	Not Reported		
Date:	09/27/1996		

GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
E19 **NNE** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0431 Not Reported Not Reported Not Reported 7 12/22/1994	**AQUIFLOW**	**52522**
20 **NW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1269 S Not Reported Not Reported 3-6 04/25/1993	**AQUIFLOW**	**50288**
21 **East** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1677 SW,W,Varies Not Reported Not Reported Not Reported 08/14/1996	**AQUIFLOW**	**50067**
F22 **SSE** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1856 SW Not Reported Not Reported 40 06/12/1991	**AQUIFLOW**	**55621**
F23 **SSE** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1056 WSW Not Reported Not Reported 40 02/22/1989	**AQUIFLOW**	**55655**

G24
North
1/2 - 1 Mile
Higher

FED USGS **USGS40000184785**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-374048122060601		
Monloc name:	003S002W08R005M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	Not Reported	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.6801667
Longitude:	-122.1017778	Sourcemap scale:	24000

Horiz Acc measure:	.5	Horiz Acc measure units:	seconds
Horiz Collection method:	Global positioning system (GPS), uncorrected		
Horiz coord refsys:	NAD83	Vert measure val:	64
Vert measure units:	feet	Vertacc measure val:	2.5
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:	85
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
2002-11-13	28.55	

G25
North
1/2 - 1 Mile
Higher

CA WELLS **CADW60000017347**

Objectid:	17347
Latitude:	37.6803
Longitude:	-122.1017
Site code:	376803N1221017W001
State well numbe:	03S02W08R005M
Local well name:	"
Well use id:	4
Well use descrip:	Residential
County id:	1
County name:	Alameda
Basin code:	'2-9.04'
Basin desc:	East Bay Plain
Dwr region id:	80236
Dwr region:	North Central Region Office
Site id:	CADW60000017347

26
NNE
1/2 - 1 Mile
Higher

AQUIFLOW **50312**

Site ID:	01-0749
Groundwater Flow:	S
Shallow Water Depth:	24.5
Deep Water Depth:	35.75
Average Water Depth:	Not Reported
Date:	07/20/1993

H27
WSW
1/2 - 1 Mile
Lower

AQUIFLOW **38252**

Site ID:	01-1454
Groundwater Flow:	WNW
Shallow Water Depth:	7.28
Deep Water Depth:	13.23
Average Water Depth:	Not Reported
Date:	09/27/1996

GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
H28 **WSW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0247 NW Not Reported Not Reported 13.0 10/06/1994	**AQUIFLOW**	**52967**
H29 **WSW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0247 NW Not Reported Not Reported 5-20 05/06/1996	**AQUIFLOW**	**52968**
H30 **WSW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0247 NW 6.70 12.46 Not Reported 07/02/1996	**AQUIFLOW**	**52969**

31
SSE
1/2 - 1 Mile
Higher

FED USGS **USGS40000184542**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-373930122054701		
Monloc name:	003S002W21E013M		
Monloc type:	Well		
Monloc desc:	EAST BAY MUD QW TRANSECT		
Huc code:	18050004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.6568056
Longitude:	-122.0974722	Sourcemap scale:	24000
Horiz Acc measure:	.5	Horiz Acc measure units:	seconds
Horiz Collection method:	Global positioning system (GPS), uncorrected		
Horiz coord refsys:	NAD83	Vert measure val:	66.9
Vert measure units:	feet	Vertacc measure val:	.2
Vert accmeasure units:	feet		
Vertcollection method:	Differential Global Positioning System (GPS)r		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19890721	Welldepth:	550
Welldepth units:	ft	Wellholedepth:	550
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 3

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2003-09-25	55.78		2002-11-21	75.2	
2002-03-07	54.66				

32
SSE
1/2 - 1 Mile
Higher

CA WELLS **23**

Water System Information:

Prime Station Code:	0110006-003	User ID:	ENG
FRDS Number:	0110006003	County:	Alameda
District Number:	04	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Standby Raw
Source Lat/Long:	373926.0 1220542.0	Precision:	100 Feet (one Second)
Source Name:	WELL A - POLICE STATION-EMERGENCY STANBY		
System Number:	0110006		
System Name:	CITY OF HAYWARD		
Organization That Operates System:	25151 CLAWITER ROAD HAYWARD, CA 94541		
Pop Served:	125000	Connections:	28615
Area Served:	HAYWARD		
Sample Collected:	04-APR-06	Findings:	1.3 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		

33
South
1/2 - 1 Mile
Higher

AQUIFLOW **50070**

Site ID:	01-0399
Groundwater Flow:	WSW
Shallow Water Depth:	25
Deep Water Depth:	40
Average Water Depth:	Not Reported
Date:	01/07/1999

I34
SE
1/2 - 1 Mile
Higher

CA WELLS **CADW60000017348**

Objectid:	17348
Latitude:	37.6602
Longitude:	-122.0898
Site code:	376602N1220898W001
State well numbe:	03S02W21G004M
Local well name:	'03S02W21G004M'
Well use id:	3
Well use descrip:	Irrigation
County id:	1
County name:	Alameda
Basin code:	'2-9.04'
Basin desc:	East Bay Plain
Dwr region id:	80236
Dwr region:	North Central Region Office
Site id:	CADW60000017348

GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
35 **NE** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1886 SW, W, Varie 42.18 42.56 Not Reported 11/12/1998	**AQUIFLOW**	**55663**

I36
SE
1/2 - 1 Mile
Higher

FED USGS **USGS40000184557**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-373936122052201		
Monloc name:	003S002W21G004M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	Not Reported	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.66
Longitude:	-122.0894444	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:	80
Vert measure units:	feet	Vertacc measure val:	2.5
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:	135
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
2002-11-13	44.62	

J37 **SE** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported NW Not Reported Not Reported 36 06/29/1998	**AQUIFLOW**	**55583**
38 **WSW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2101 W 5.69 8.33 Not Reported 11/05/1998	**AQUIFLOW**	**38193**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
39 **East** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1878 S,SW,Varies Not Reported Not Reported 60 02/26/1997	**AQUIFLOW**	**50073**
J40 **SE** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0748 NW Not Reported Not Reported 36 06/29/1998	**AQUIFLOW**	**55582**
K41 **NNE** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1794 S Not Reported Not Reported Not Reported 12/14/1992	**AQUIFLOW**	**50295**
K42 **NNE** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1794 S Not Reported Not Reported 6.5 08/10/1990	**AQUIFLOW**	**50297**
K43 **NNE** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1794 S Not Reported Not Reported 7.5 05/27/1992	**AQUIFLOW**	**50296**

GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
94541	16	0

Federal EPA Radon Zone for ALAMEDA 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: 94541

Number of sites tested: 3

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.033 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.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

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, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

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 Service (NRCS)
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 Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, 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 Public Health
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 C
USER PROVIDED AND REGULATORY AGENCY DOCUMENTATION

Copyright 2016 Kleinfelder

Costco Hayward
22330 Hathaway Avenue
Hayward, CA 94541

Inquiry Number: 4583200.6
April 05, 2016

The EDR Property Tax Map Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Property Tax Map Report

Environmental Data Resources, Inc.'s EDR Property Tax Map Report is designed to assist environmental professionals in evaluating potential environmental conditions on a target property by understanding property boundaries and other characteristics. The report includes a search of available property tax maps, which include information on boundaries for the target property and neighboring properties, addresses, parcel identification numbers, as well as other data typically used in property location and identification.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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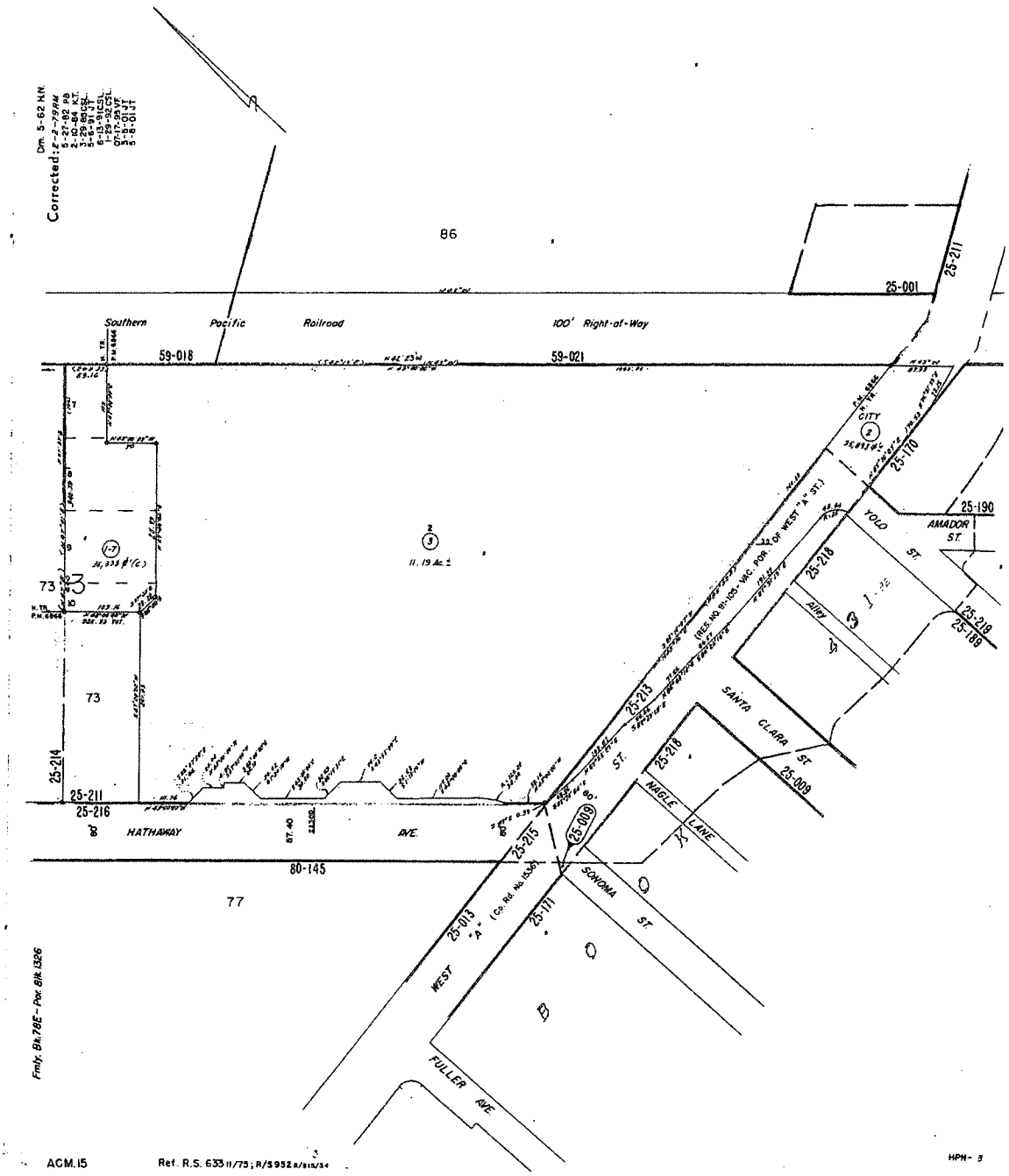
ASSESSOR'S MAP 429

Code Area Nos. 25-211
25-213

82

Scale: 1" = 100'

HATHAWAY TRACT (Bk.7 Pg.14)
P.M. 6866 218/48



ACM.15 Ref. R.S. 633 11/75; R/5952 8/515/34

HPM-3

Costco Hayward
22330 Hathaway Avenue
Hayward, CA 94541

Inquiry Number: 4583200.7S
April 8, 2016

The EDR Environmental LienSearch™

EDR® Environmental Data Resources Inc

6 Armstrong Road,
Fourth Floor
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Environmental LienSearch™ Report

The EDR Environmental LienSearch Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EDR Environmental LienSearch™ Report

TARGET PROPERTY INFORMATION

ADDRESS

COSTCO HAYWARD
22330 HATHAWAY AVENUE
HAYWARD, CA 94541

RESEARCH SOURCE

Source 1: Alameda Assessor
Alameda County, California

Source 2: Alameda Recorder
Alameda County, California

PROPERTY INFORMATION

Deed 1:

Type of Deed: Corporation Grant Deed

Title is vested in: The Price Company, a California corporation

Title received from: Hunt-Wesson Foods, Inc.

Deed Dated: 08/31/1983

Deed Recorded: 09/06/1983

Instrument: 83-165359

Deed 2:

Type of Deed: Warranty Deed

Title is vested in: The Price Company, a California corporation

Title received from: Container General Corporation, a Nevada corporation, successor by merger to Glass Containers Corporation

Deed Dated: 01/21/1985

Deed Recorded: 02/08/1985

Instrument: 85-030273

Deed 3:

Type of Deed: Certificate of Articles of Merger of Costco Wholesale Corporation and The Price Company

Title is vested in: Costco Wholesale Corporation, a Washington profit corporation

Title received from: The Price Company, a California profit corporation

Deed Dated: 01/03/2002

Deed Recorded: 03/11/2002

Instrument: 2002110766

Legal Description: All that certain piece or parcel of land being Parcel 2 of Parcel Map No. 6866, filed 06/22/1995 in Book 218 of Parcel Maps, Pages 48 through 50, situate and lying in the County of Alameda, State of California.

Legal Current Owner: Costco Wholesale Corporation, a Washington profit corporation

Property Identifiers: 429-008-200-300

EDR Environmental LienSearch™ Report

ENVIRONMENTAL LIEN

Environmental Lien: Found ☐ Not Found ☒

If found:

1st Party:

2nd Party:

Dated:

Recorded:

Book:

Page:

Docket:

Volume:

Instrument:

Comments:

Miscellaneous:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AUL's: Found ☐ Not Found ☒

If found:

1st Party:

2nd Party:

Dated:

Recorded:

Book:

Page:

Docket:

Volume:

Instrument:

Comments:

Miscellaneous:

EDR Environmental LienSearch™ Report

DEED EXHIBIT

Order No.
Escrow No.
Loan No.

WHEN RECORDED MAIL TO.

THE PRICE COMPANY
2657 Ariane Drive
San Diego, California 92117

RECORDED IN OFFICIAL RECORDS
OF ALAMEDA COUNTY, CALIF.
RENE C. DAVIDSON, County Recorder

SEP -8 1983

AM PM

TRANSFER
TAX
ALAMEDA COU

600

SPACE ABOVE THIS LINE FOR RECORDER'S USE

MAIL TAX STATEMENTS TO:

**SAME AS ABOVE

DOCUMENTARY TRANSFER TAX $

..... Computed on the consideration or value of property conve
..... Computed on the consideration or value less liens or encum
remaining at time of sale.

Signature of Declarant or Agent determining tax - Firm N

CORPORATION GRANT DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

HUNT-WESSON FOODS, INC.

a corporation organized under the laws of the State of Delaware, does

GRANT to

THE PRICE COMPANY, a California corporation

the real property in the City of Hayward
County of Alameda, State of California, desc

FOR LEGAL DESCRIPTION SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

Dated August 31, 1983

HUNT-WESSON FOODS, INC.,
a Delaware corporation
Exec. Vice President

STATE OF CALIFORNIA
COUNTY OF Alameda ss.

-16535

STATE OF CALIFORNIA)
COUNTY OF ALAMEDA) ss.

On the 31ST day of AUGUST, 1983, before me, the undersigned, a Notary Public in and for said State, personally appeared GARY STETZEL, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person who executed the within instrument on behalf of JOHN F. STOLLSTEINER, Executive Vice President of HUNT-WESSON FOODS, INC., the corporation that executed and whose name is subscribed to the within instrument as attorney-in-fact, and acknowledged to me that he subscribed the name of JOHN F. STOLLSTEINER, Executive Vice President of HUNT-WESSON FOODS, INC., thereto as principal and his own name as Attorney-in-Fact.

WITNESS my hand and official seal.

Magda Uriarte

MAGDA URIARTE
NOTARY PUBLIC
ALAMEDA COUNTY, CALIFORNIA
My commission expires Aug. 22, 1986

EXHIBIT A

REAL PROPERTY in the City of Hayward, County of Alameda, State of California, described as follows:

A PORTION of the land shown on the map entitled "Map of Hathaway Tract, San Lorenzo", etc., filed September 20, 1875 in Book 7 of Maps, at Page 14, in the office of the County Recorder of Alameda County and more particularly described as follows:

BEGINNING at the intersection of the northeastern line of Hathaway Avenue with the northern line of West "A" Street, formerly Hayward Avenue and running thence along said line of Hathaway Avenue North 42°23' West 1496.55 feet (the bearing of said line of Hathaway Avenue being taken as North 42°23' West for the purpose of making this description); thence leaving said line of Hathaway Avenue North 47°37' East 237.94 feet; thence South 42°23' East 11.71 feet; thence North 47° 37' East 23.09 feet; thence South 42°23' East 926.53 feet; thence South 87°23' East 28.28 feet; thence North 47°37' East 211.79 feet; thence South 42°23' East 272.00 feet; thence ~~North 47°37' East 109.00 feet to the southwestern line of Southern~~ Pacific Company's right of way ~~(100 feet wide)~~; thence along said southwestern line South 42°23' East 741.03 feet to the northern line of said West "A" Street; thence along said northern line South 85°53' West 766.52 feet to the POINT OF BEGINNING.

SUBJECT to all easements of record.

Assessor's Parcel Nos. 429-82-1-1 and 429-73-2
Portion Assessors Parcel Nos. 429-73-1-3, 1-1 and 429-82-1-2

Order No.
Escrow No. 151061
Loan No.

WHEN RECORDED MAIL TO:

THE PRICE COMPANY
2550 Fifth Avenue, suite 629
San Diego, Ca. 92103

85-0302

TRANSFER TAX PAID
ALAMEDA COUNTY

RECORDED at REQUEST OF
First American Title Co.
At 10:30 A.M.
FEB - 8 1985
OFFICIAL RECORDS OF
ALAMEDA COUNTY, CALIFORNIA
RENE C. DAVIDSON
COUNTY RECORDER

11/8

SPACE ABOVE THIS LINE FOR RECORDER'S USE

MAIL TAX STATEMENTS TO:

same as above

CITY TRANSFER TAX $ -0-
DOCUMENTARY TRANSFER TAX $ 165.00
SURVEY MONUMENT PRESERVATION FUND $
XX. Computed on the consideration or value of property conve
..... Computed on the consideration or value less liens or encu
remaining at time of sale.

Signature of Declarant or Agent determining tax – Firm N
First American Title Guaranty Company

A.P. No. 429-82-1-3

WARRANTY DEED

In consideration of the sum of Ten Dollars ($10.00), cash in hand paid, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the undersigned Grantor, Container General Corporation, a Nevada corporation, successor by merger to Glass Containers Corporation, of 400 West 45th Street, Chattanooga, Tennessee 37410, does hereby sell, convey and warrant unto Grantee, The Price Company, a California corporation, of 2550 Fifth Avenue, Suite 629, San Diego, California 92103, the following described real estate, located in the City of Hayward, Alameda County, California, to-wit:

A portion of the land shown on the map entitled "Map of Hathaway Tract, San Lorenzo", etc., filed September 20, 1875 in Book 7 of Maps, at Page 14, in the office of the County Recorder of Alameda County and more particularly described as follows:

COMMENCING at the intersection of the northeastern line of Hathaway Avenue with the northern line of West "A" Street, formerly Hayward Avenue and running thence along said line of Hathaway Avenue

thence leaving said southwestern line South 47° 37' West 109.00 feet; thence North 42° 23' West 272.00 feet to the TRUE POINT OF BEGINNING.

Portion Assessor's Parcel No. 429-82-1-3

The conveyance of the above real estate is subject to the following exceptions:

(1) Municipal and zoning ordinances;

(2) Recorded easements for public utilities;

(3) Recorded building and use restrictions and covenants;

(4) General taxes levied against the property for the 1984-1985 tax year;

(5) Any claims based upon lack of access to the real estate; and

(6) Any other exceptions listed in the First American Title Guaranty Company Policy No. _____, dated as of _____.

IN WITNESS WHEREOF, the Grantor has executed this Warranty Deed on January 21, 1985.

WITNESSES:

CONTAINER GENERAL CORPORATION

By: Thomas E. Judge, Senior Vice President

Attest:

[CORPORATE SEAL]

STATE OF TENNESSEE)
) SS.
HAMILTON COUNTY)

Personally came and appeared before me, the undersigned authority in and for the aforesaid jurisdiction, the above named Thomas E. Judge and Charles F. Casey, who, after having been first duly sworn on oath, stated that they are the duly qualified Senior Vice President and Chairman of Container General Corporation and that in such capacities they did execute, seal and deliver the above Warranty Deed for and on behalf of said Corporation, after being first duly authorized to do so, on the day and in the year first above written.

Given under my hand and official seal of office, this 21st day of January, 1985.

Carolyn G. Stringer, Notary Public

My commission expires:
January 7, 1987

This Instrument was drafted by:

Richard E. Braun
2100 Marine Plaza
Milwaukee, WI 53202-4894

EXHIBIT "A"

85-03027

State of DELAWARE

Office of SECRETARY OF STATE

I, Glenn C. Kenton, Secretary of State of the State of Delaware, do hereby certify that the attached is a true and correct copy of Certificate of Ownership filed in this office on April 30, 1984.

Glenn C. Kenton, Secretary of State

BY: B. Akers

DATE: June 7, 1984

Form 130

8401210066

85-C3027

FILED

APR 30 1984

SECRETARY OF STATE

CERTIFICATE OF OWNERSHIP AND MERGER
MERGING
GLASS CONTAINERS CORPORATION
INTO
CONTAINER GENERAL CORPORATION

CONTAINER GENERAL CORPORATION, a Nevada corporation, does hereby certify, in accordance with Section 78.486 of the Nevada General Corporation Law and Section 253 of the Delaware General Corporation Law, as follows:

FIRST: Container General Corporation owns all of the issued and outstanding capital stock of GLASS CONTAINERS CORPORATION, a Delaware corporation.

SECOND: Container General Corporation, by the following resolutions of its Board of Directors, duly adopted on the 18th day of April, 1984, determined to merger into itself the said GLASS CONTAINERS CORPORATION, as set forth as follows:

> "RESOLVED, that this Board hereby determines it to be in the best interests of this Corporation and Glass Containers Corporation ("GC"), insofar as this Corporation is the owner of all of the issued and outstanding stock of GC, that GC be merged with and into this Corporation under and pursuant to the laws of the States of Delaware and Nevada, with this Corporation being the surviving corporation in such merger and assuming all of the liabilities and obligations of GC;
>
> "FURTHER RESOLVED, that in order to effect such merger, the President or any Vice President and Secretary or any Assistant Secretary of this Corporation be and they hereby are authorized and directed to execute on behalf of this Corporation a Certificate of Ownership and Merger pursuant to which GC shall be merged with and

into this Corporation, and cause the same to be filed in the appropriate records of the Secretaries of States of Delaware and Nevada, as required by the laws of such States, and to execute and deliver or file on behalf of this Corporation any and all such other documents or instruments as may be necessary or appropriate to accomplish such merger."

IN WITNESS WHEREOF, CONTAINER GENERAL CORPORATION has executed this Certificate, by the undersigned officers, duly authorized, on this 24 day of April, 1984.

CONTAINER GENERAL CORPORATION

By: Joseph M. Wright
Joseph M. Wright, Sr. Vice President

Attest: Edwin H Holt
Edwin H. Holt, Assistant Secretary

85-030273

AGREEMENT UNDER
DELAWARE GENERAL CORPORATION LAW §252(d)

WHEREAS, CONTAINER GENERAL CORPORATION, a Nevada corporation ("CGC") has executed and filed a Certificate of Ownership and Merger, merging into itself GLASS CONTAINERS CORPORATION, a Delaware corporation ("GC"); and

WHEREAS, CGC, the Surviving Corporation in such merger, is organized under and governed by the laws of the State of Nevada;

NOW THEREFORE, pursuant to the Delaware General Corporation Law §252(d), CGC hereby:

1. Agrees that CGC may be served with process in the State of Delaware in any proceeding for enforcement of any obligation of GC or CGC, as well as for enforcement of any obligation of CGC arising from the merger, including any suit or other proceeding for the enforcement of the rights of any shareholders as determined in appraisal proceedings pursuant to the Delaware General Corporation Law;

2. Irrevocably appoints the Secretary of State of Delaware as its agent to accept service of process in any action or proceeding described in the preceding paragraph 1., and specifies the following address as the address to which a copy of such process shall be mailed by the Secretary of State:

Container General Corporation
400 West 45th Street
Chattanooga, TN 37410
Attn: Thomas E. Judge

IN WITNESS WHEREOF, CGC has executed this Agreement, as of the 24 day of April, 1984.

CONTAINER GENERAL CORPORATION

By: _____
Joseph M. Wright, Sr. Vice President

[Seal]

Attest: _____
Edwin H. Holt, Assistant Secretary

PLEASE COMPLETE THIS INFORMATION

RECORDING REQUESTED BY:

DAVID B. FRANKLIN

WHEN RECORDED MAIL TO:

DAVID B. FRANKLIN
BERG & PARKER LLP
4 Embarcadero Center, Suite 1400
San Francisco, CA 94111

2002110766 03/11/2002 02:35 PM
OFFICIAL RECORDS OF RECORDING FEE: 10.00
ALAMEDA COUNTY
PATRICK O'CONNELL

2 PGS

B18

THIS SPACE FOR RECORDER'S USE ONLY

CERTIFICATE OF ARTICLES OF MERGER OF COSTCO WHOLESALE CORPORATION AND THE PRICE COMPANY

TITLE OF DOCUMENT

THIS PAGE ADDED TO PROVIDE ADEQUATE SPACE FOR RECORDING INFORMATION
(Govt. Code 27361.6)
(Additional recording fee applies)

275-204

STATE of WASHINGTON

SECRETARY of STATE

I, SAM REED, Secretary of State of the State of Washington and custodian of its seal,

hereby issue this certificate that according to records on file in this office,

Articles of Merger between

COSTCO WHOLESALE CORPORATION

a Washington profit corporation, and

THE PRICE COMPANY

a California profit corporation, whereby

COSTCO WHOLESALE CORPORATION

is the surviving corporation, under the name of

COSTCO WHOLESALE CORPORATION

were received and filed in this office on August 15, 2001.

Date: January 3, 2002

Given under my hand and the Seal of the State of Washington at Olympia, the State Capital

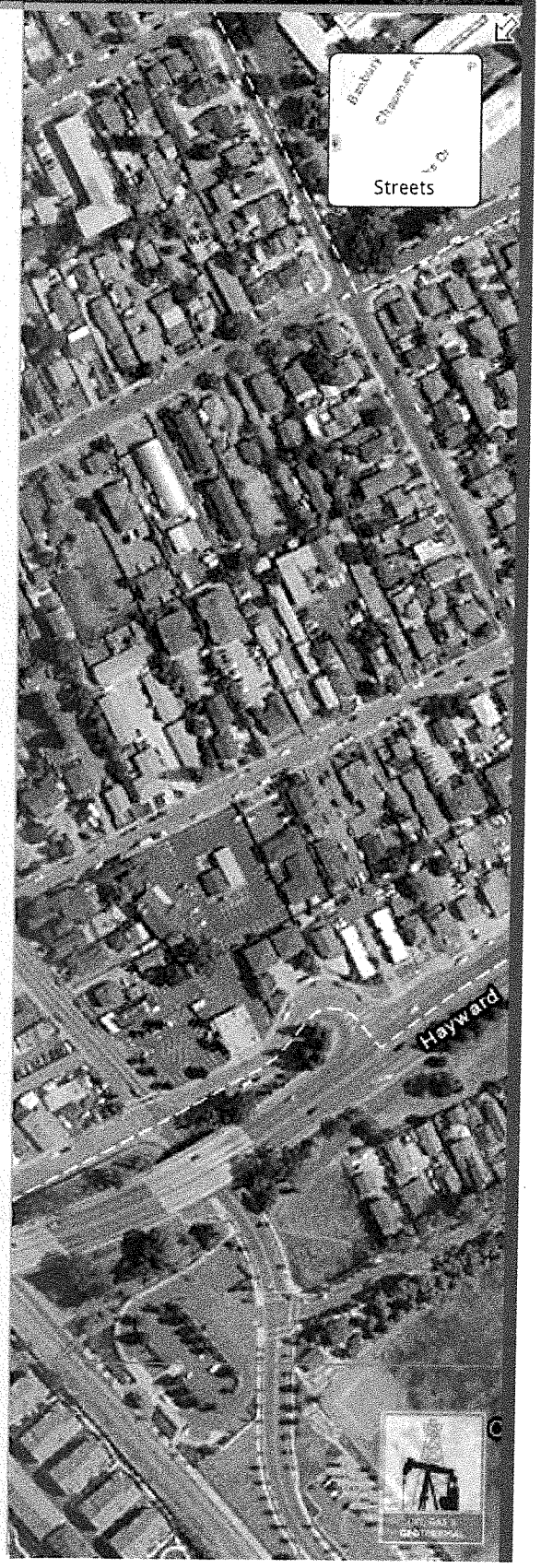
SM

Sam Reed, Secretary of State

CA.GOV
Accessibility | Disclaimer | About

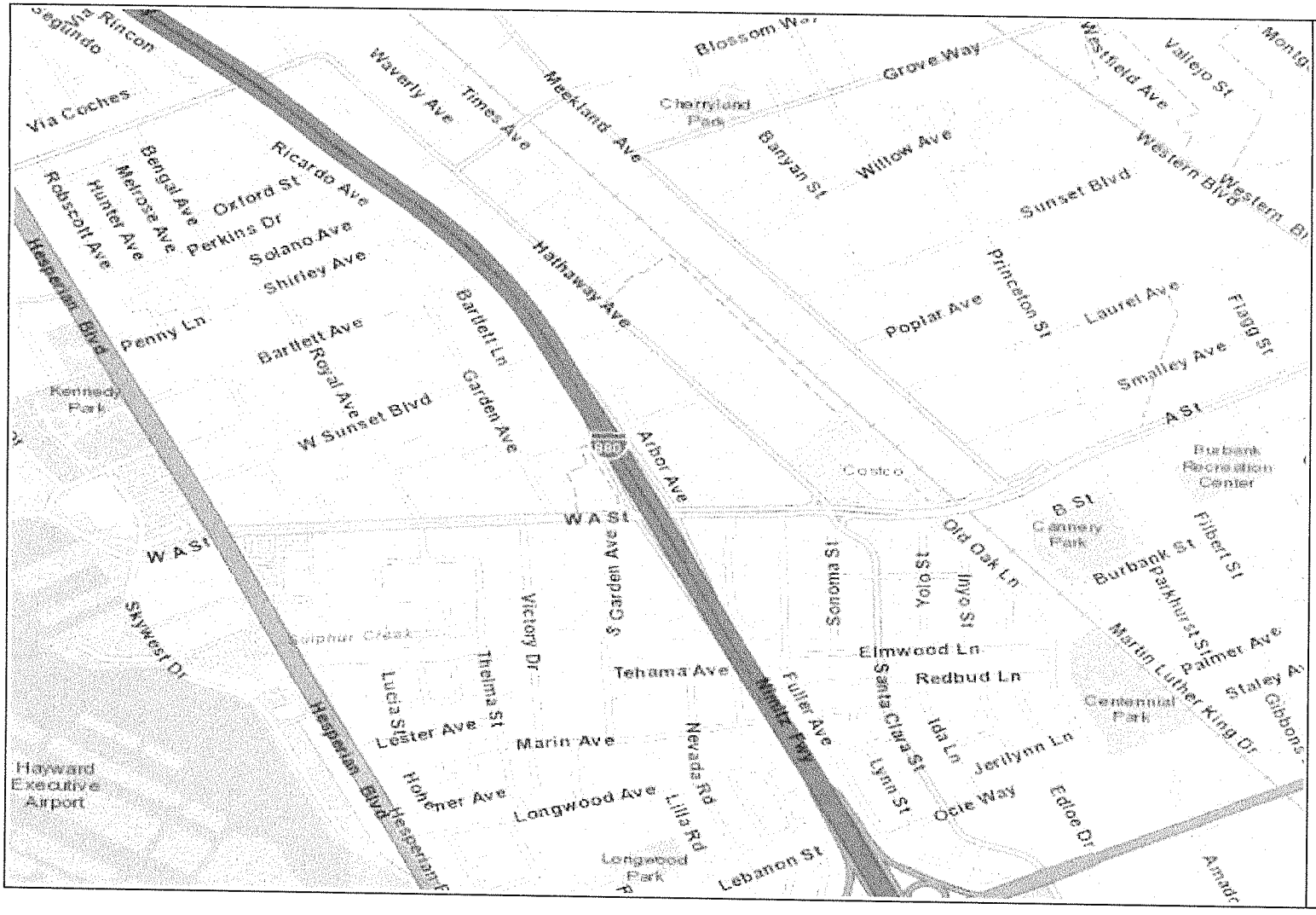
Lat: 37.66782, Long: -122.10189

Division of Oil, Gas & Geo



Pipeline and Hazardous Materials Safety Administration

NATIONAL PIPELINE MAPPING SYSTEM



Legend

Gas Transmission Pipelines

Hazardous Liquid Pipelines

0 0.1 Miles

Pipelines depicted on this map represent gas transmission and hazardous liquid lines only. Gas gathering and gas distribution systems are not represented.

This map should never be used as a substitute for contacting a one-call center prior to excavation activities. Please call 811 before any digging occurs.

Questions regarding this map or its contents can be directed to npms-nr@mbakercorp.com.

Projection: Geographic

Datum: NAD83

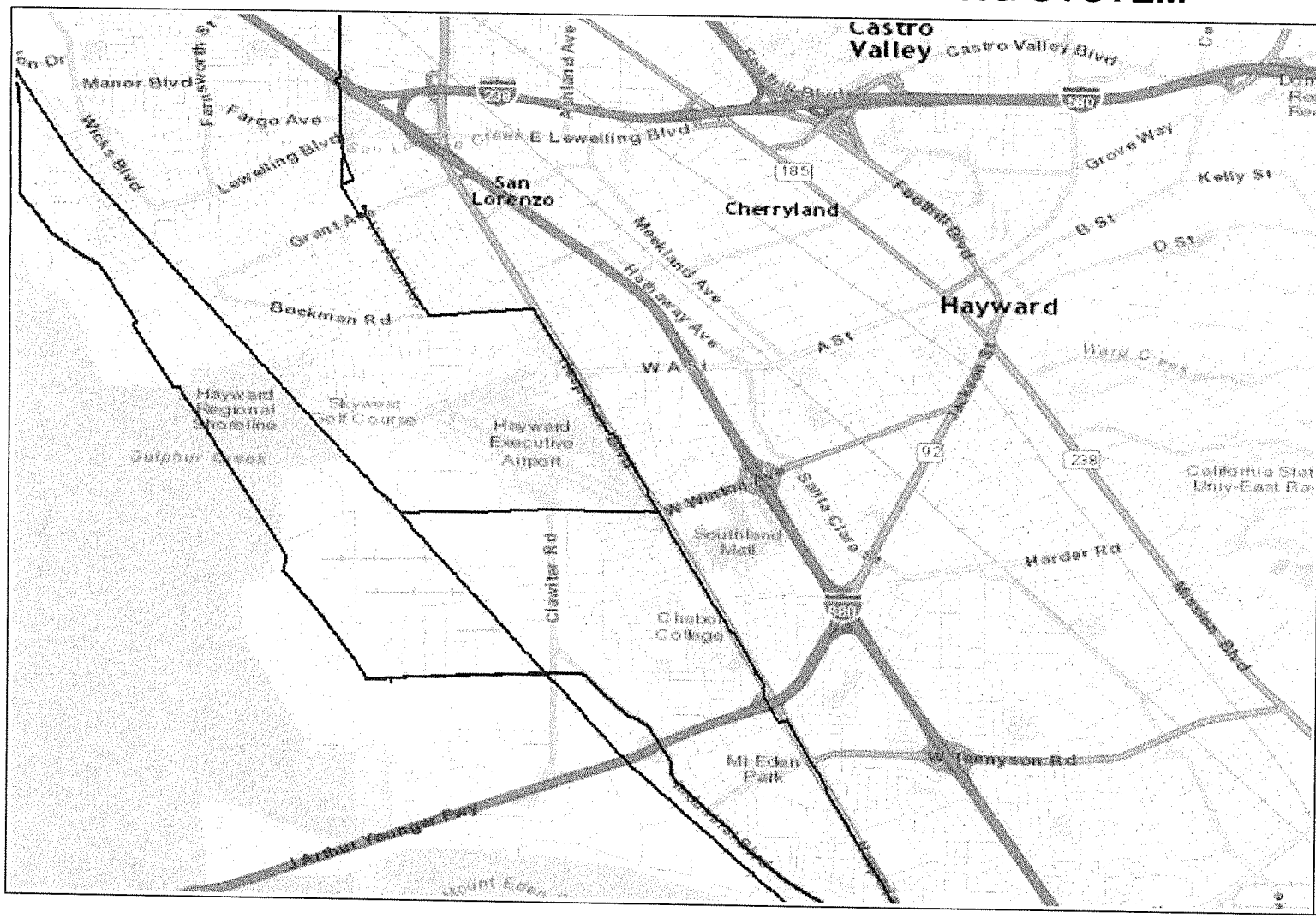
Map produced by the NPMS Public Viewer at www.npms.phmsa.dot.gov

Date Printed: Apr 05, 2016

811 Know what's below. Call before you dig

Pipeline and Hazardous Materials Safety Administration

NATIONAL PIPELINE MAPPING SYSTEM



Legend

Gas Transmission Pipelines

Hazardous Liquid Pipelines

0 0.4 Miles

Pipelines depicted on this map represent gas transmission and hazardous liquid lines only. Gas gathering and gas distribution systems are not represented.

This map should never be used as a substitute for contacting a one-call center prior to excavation activities. Please call 811 before any digging occurs.

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Projection: Geographic

Datum: NAD83

Map produced by the NPMS Public Viewer at www.npms.phmsa.dot.gov

Date Printed: Apr 05, 2016

811 Know what's below. Call before you dig

GEOTRACKER

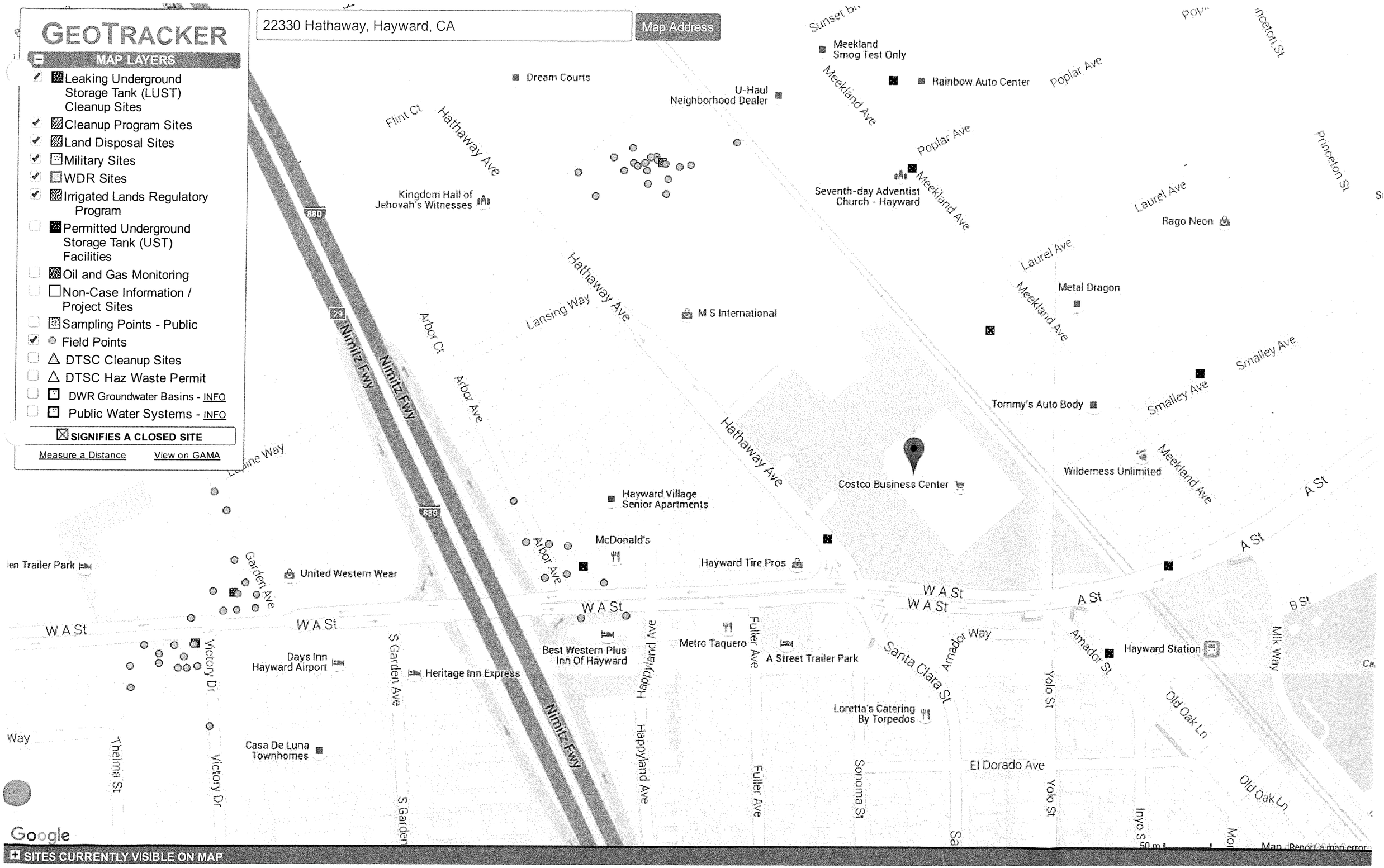
MAP LAYERS

- ✔ Leaking Underground Storage Tank (LUST) Cleanup Sites
- ✔ Cleanup Program Sites
- ✔ Land Disposal Sites
- ✔ Military Sites
- ✔ WDR Sites
- ✔ Irrigated Lands Regulatory Program
- ☐ Permitted Underground Storage Tank (UST) Facilities
- ☐ Oil and Gas Monitoring
- ☐ Non-Case Information / Project Sites
- ☐ Sampling Points - Public
- ✔ Field Points
- ☐ DTSC Cleanup Sites
- ☐ DTSC Haz Waste Permit
- ☐ DWR Groundwater Basins - INFO
- ☐ Public Water Systems - INFO

☒ SIGNIFIES A CLOSED SITE

Measure a Distance View on GAMA

22330 Hathaway, Hayward, CA Map Address



SITES CURRENTLY VISIBLE ON MAP

MAP AN ADDRESS: 22330 Hathaway, Hayward, CA Go!

SHOW SITES WITHIN 1000 FEET OF THE FOLLOWING ADDRESS: Go

SITES CURRENTLY VISIBLE ON MAP

4 SITES LISTED

EXPORT THIS LIST TO EXCEL

PROJECT NAME	STATUS	PROJECT TYPE	ADDRESS	CITY
BURBANK E.S./HAYWARD JOINT USE PARK	CERTIFIED / OPERATION & MAINTENANCE	SCHOOL CLEANUP	222 BURBANK STREET	HAYWARD
BURBANK ELEMENTARY	NO FURTHER ACTION	VOLUNTARY CLEANUP	B STREET AND FILBERT STREET	HAYWARD
LIBITZKY PROPERTY	NO FURTHER ACTION	VOLUNTARY CLEANUP	199 FILBERT STREET AND 201 C STREET	HAYWARD
OWENS BROCKWAY GLASS CONTAINER INC	CLOSED	NON-OPERATING	22302 HATHAWAY AVE	HAYWARD

Lindsey Dandridge-Perry

om: Rochelle Reed <publicrecords@baaqmd.gov>
ent: Thursday, April 07, 2016 8:19 AM
To: Lindsey Dandridge-Perry
Subject: Public Record Request No. 2016-04-0024
Attachments: 22330 Hathaway Avenue, Hayward.pdf

Hello,

Enclosed are the records you requested. If you have any questions or concerns, please call or e-mail me. Thank you.

Sincerely,

Rochelle Reed
Public Records Section
BAAQMD
415-749-4784

```
Plant number ........... 16607   B6607
Business name .......... Costco  Wholesale
Location address ....... 22330 Hathaway Ave    (can't receive mail)
   City ................ Hayward, CA  94541
   Telephone ...........
Mailing address ........ 999 Lake Dr, ATTN: LICENSING
   City ................ Issaquah, WA  98027
SIC .................... 6512
NAICS .................. 531120
Contact ................ Tony Graham, Skilled Maintenance
   Address ............. 999 Lake Dr, ATTN: LICENSING
   City ................ Issaquah, WA  98027
   Telephone ........... (510) 259-6588
Permit engr, Current ... Ariana Husain (1526)
             Former .... Sheryl L Wallace (438)
Renewal period, months . 24
Ownership type ......... Private
Plant centroid, UTM .... 579.065 Horizontal, 4169.229 Vertical

Approved Emissions ..... 25Feb16   (latest renewal PO issuance date)

Particulate ............      .00  tons/year            .00  lbs/day
Organics ...............      .00  tons/year            .00  lbs/day
Nitrogen Oxides ........      .00  tons/year            .02  lbs/day
Sulfur Dioxide .........      .00  tons/year            .00  lbs/day
Carbon Monoxide ........      .00  tons/year            .00  lbs/day

Sources by Type

Abatement devices ...... 0
Fuel combustion ........ 1
General source ......... 0
Loading/handling ....... 0
Surface coaters ........ 0
Organic solvent ........ 0
Tankage ................ 0

Total sources .......... 1


List Detail & Inventory for PLANT# >>
```

Plant #: 16607
Company name: Costco Wholesale
Location: 22330 Hathaway Ave, Hayward, CA 94541

Application #: 11191
Project title: Backup Generator
Engineer: Roy Lo [1202]
Received: 11/04/04
Final disposition: Waived A/C, 11/15/04

Costco Hayward
22330 Hathaway Avenue
Hayward, CA 94541

Inquiry Number: 4583200.8
April 05, 2016

EDR Building Permit Report

Target Property and Adjoining Properties

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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SECTION

About This Report

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Glossary

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

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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EDR BUILDING PERMIT REPORT

About This Report

The EDR Building Permit Report provides a practical and efficient method to search building department records for indications of environmental conditions. Generated via a search of municipal building permit records gathered from more than 1,600 cities nationwide, this report will assist you in meeting 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 1527-13), or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

Building permit data can be used to identify current and/or former operations and structures/features of environmental concern. The data can provide information on a target property and adjoining properties such as the presence of underground storage tanks, pump islands, sumps, drywells, etc., as well as information regarding water, sewer, natural gas, electrical connection dates, and current/former septic tanks.

ASTM and EPA Requirements

ASTM E 1527-13 lists building department records as a "standard historical source," as detailed in § 8.3.4.7: "Building Department Records - The term building department records means those records of the local government in which the property is located indicating permission of the local government to construct, alter, or demolish improvements on the property." ASTM also states that "Uses in the area surrounding the property shall be identified in the report, but this task is required only to the extent that this information is revealed in the course of researching the property itself."

EPA's Standards and Practices for All Appropriate Inquires (AAI) states: "§312.24: Reviews of historical sources of information. (a) Historical documents and records must be reviewed for the purposes of achieving the objectives and performance factors of §312.20(e) and (f). Historical documents and records may include, but are not limited to, aerial photographs, fire insurance maps, building department records, chain of title documents, and land use records."

Methodology

EDR has developed the EDR Building Permit Report through our partnership with BuildFax, the nation's largest repository of building department records. BuildFax collects, updates, and manages building department records from local municipal governments. The database now includes 30 million permits, on more than 10 million properties across 1,600 cities in the United States.

The EDR Building Permit Report comprises local municipal building permit records, gathered directly from local jurisdictions, including both target property and adjoining properties. Years of coverage vary by municipality. Data reported includes (where available): date of permit, permit type, permit number, status, valuation, contractor company, contractor name, and description.

Incoming permit data is checked at seven stages in a regimented quality control process, from initial data source interview, to data preparation, through final auditing. To ensure the building department is accurate, each of the seven quality control stages contains, on average, 15 additional quality checks, resulting in a process of approximately 105 quality control "touch points."

For more information about the EDR Building Permit Report, please contact your EDR Account Executive at (800) 352-0050.

EDR® Environmental Data Resources Inc

BUILD FAX PROPERTY HISTORY

EXECUTIVE SUMMARY: SEARCH DOCUMENTATION

A search of building department records was conducted by Environmental Data Resources, Inc (EDR) on behalf of Kleinfelder, Inc. on Apr 05, 2016.

TARGET PROPERTY

22330 Hathaway Avenue
Hayward, CA 94541

SEARCH METHODS

EDR searches available lists for both the Target Property and Surrounding Properties.

RESEARCH SUMMARY

Building permits identified: **YES**

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Alameda County Unincorporated Area

Year	*Source*	*TP*	*Adjoining*
2015	Alameda County, public works, Building Inspection Dep		
2014	Alameda County, public works, Building Inspection Dep		X
2013	Alameda County, public works, Building Inspection Dep		
2012	Alameda County, public works, Building Inspection Dep		
2011	Alameda County, public works, Building Inspection Dep		X
2010	Alameda County, public works, Building Inspection Dep		
2009	Alameda County, public works, Building Inspection Dep		
2008	Alameda County, public works, Building Inspection Dep		
2007	Alameda County, public works, Building Inspection Dep		X
2006	Alameda County, public works, Building Inspection Dep		X
2005	Alameda County, public works, Building Inspection Dep		X
2004	Alameda County, public works, Building Inspection Dep		X
2003	Alameda County, public works, Building Inspection Dep		X
2002	Alameda County, public works, Building Inspection Dep		X
2001	Alameda County, public works, Building Inspection Dep		X
2000	Alameda County, public works, Building Inspection Dep		

Hayward

Year	*Source*	*TP*	*Adjoining*
2016	City of Hayward, Development Services Department		X
	City of Hayward, Development Services Department	X	
2015	City of Hayward, Development Services Department		X
	City of Hayward, Development Services Department	X	
2014	City of Hayward, Development Services Department		X
	City of Hayward, Development Services Department	X	
2013	City of Hayward, Development Services Department		X
	City of Hayward, Development Services Department	X	
2012	City of Hayward, Development Services Department		X

EXECUTIVE SUMMARY: SEARCH DOCUMENTATION

Year	Source	TP	Adjoining
2012	City of Hayward, Development Services Department	X	
2011	City of Hayward, Development Services Department		X
	City of Hayward, Development Services Department	X	
2010	City of Hayward, Development Services Department		X
	City of Hayward, Development Services Department	X	
2009	City of Hayward, Development Services Department		X
	City of Hayward, Development Services Department	X	
2008	City of Hayward, Development Services Department		X
	City of Hayward, Development Services Department	X	
2007	City of Hayward, Development Services Department		X
	City of Hayward, Development Services Department	X	
2006	City of Hayward, Development Services Department		X
	City of Hayward, Development Services Department	X	
2005	City of Hayward, Development Services Department		X
	City of Hayward, Development Services Department	X	
2004	City of Hayward, Development Services Department		X
	City of Hayward, Development Services Department	X	
2003	City of Hayward, Development Services Department		X
	City of Hayward, Development Services Department	X	
2002	City of Hayward, Development Services Department		X
	City of Hayward, Development Services Department	X	
2001	City of Hayward, Development Services Department		X
	City of Hayward, Development Services Department	X	
2000	City of Hayward, Development Services Department		

BUILDING DEPARTMENT RECORDS SEARCHED

Name: Alameda County Unincorporated Area
Years: 2000-2015
Source: Alameda County, public works, Building Inspection Department, HAYWARD, CA
Phone: (510) 670-5440

Name: Hayward
Years: 2000-2016
Source: City of Hayward, Development Services Department, HAYWARD, CA
Phone: (510) 583-4140

Name: Los Angeles County
Years: 1994-2016
Source: Los Angeles County, Building and Safety, WESTLAKE VILLAGE, CA
Phone: (626) 458-6368

Name: San Bernardino County
Years: 2002-2016
Source: San Bernardino County, Land Use, Building & Safety, FONTANA, CA
Phone: (909) 387-8311

Name: San Leandro
Years: 2013-2016
Source: City of San Leandro, Building and Safety, SAN LEANDRO, CA
Phone: (510) 577-3405

Name: Union City
Years: 2002-2015
Source: City of Union City, Economic and Community Development, UNION CITY, CA
Phone: (510) 675-5319

Name: Oakland
Years: 1968-2016
Source: City of Oakland,Building Services Division, Oakland, CA
Phone: (510) 238-3891

Name: Pleasanton
Years: 2008-2016
Source: City of Pleasanton, Building and Safety Division, PLEASANTON, CA
Phone: (925) 931-5300

TARGET PROPERTY FINDINGS

TARGET PROPERTY DETAIL

22330 Hathaway Avenue
Hayward, CA 94541

22330 HATHAWAY AVE

Date:	**1/26/2016**
Permit Type:	
Description:	**PRE-APPLICATION MEETING ON 2/3/16 @ 10 AMPD MODIFICATION TO CONSTRUCT GAS STATION AT COSTCO BUINESS**
Permit Description:	**FIRE PRE APPLICATION MEETING**
Work Class:	
Proposed Use:	
Permit Number:	201600441
Status:	ACTIVE / PENDING
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**12/17/2015**
Permit Type:	**PLANNED DEVELOPMENT**
Description:	**Install new panels to increase size of walk-in cooler.Instl new outdoor condenser unit, new pad, new fan coils**
Permit Description:	**TENANT IMPROVEMENT**
Work Class:	
Proposed Use:	
Permit Number:	201505862
Status:	ACTIVE / PENDING
Valuation:	$50,000.00
Contractor Company:	
Contractor Name:	

TARGET PROPERTY FINDINGS

Date:	**4/8/2015**
Permit Type:	**PLANNED DEVELOPMENT**
Description:	**AUP for small recycling collection facility at Costco**
Permit Description:	**ADMINISTRATIVE USE PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	201501644
Status:	COMPLETE / PROCESSED - READY FOR CLOSURE
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**12/2/2014**
Permit Type:	**PLANNED DEVELOPMENT**
Description:	**ENLARGE BREAKROOM: DEMO INTERIOR WALL/ (N)WALL/ MILLWORK/REPLACE LIGHT FIXTURES. RESTROOM REMODEL: PARTITIONS & FIXTURES**
Permit Description:	**COMMERCIAL REMODEL/REPAIR/MAIN**
Work Class:	
Proposed Use:	
Permit Number:	201400299
Status:	COMPLETE / FINALED
Valuation:	$96,000.00
Contractor Company:	
Contractor Name:	W L BUTLER INC

Date:	**12/13/2013**
Permit Type:	
Description:	**COSTCO**
Permit Description:	**EDEN HIST FIRE ANNUAL INSP**
Work Class:	
Proposed Use:	
Permit Number:	FD-2013-1224
Status:	COMPLETE / FINALED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OWNER

TARGET PROPERTY FINDINGS

Date:	**7/2/2013**
Permit Type:	
Description:	**COSTCO STORE #823 - HATHAWAY AVE**
Permit Description:	**ELECTRICAL PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	BI-2013-1990
Status:	COMPLETE / PERMIT ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	COMMERCIAL REFRIGERATION SPECIALISTS

Date:	**7/2/2013**
Permit Type:	
Description:	**COSTCO STORE #823 - HATHAWAY AVE**
Permit Description:	**MECHANICAL PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	BI-2013-1991
Status:	ACTIVE / PERMIT ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	COMMERCIAL REFRIGERATION SPECIALISTS

Date:	**7/1/2013**
Permit Type:	
Description:	**COSTCO STORE #823 - HATHAWAY AVE**
Permit Description:	**BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	BI-2013-1986
Status:	ACTIVE / PERMIT ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	COMMERCIAL REFRIGERATION SPECIALISTS

TARGET PROPERTY FINDINGS

Date:	**6/21/2013**
Permit Type:	
Description:	**COSTCO BUSINESS CENTER**
Permit Description:	**EDEN HIST FIRE PROT SYS**
Work Class:	
Proposed Use:	
Permit Number:	FD-2013-0608
Status:	COMPLETE / FINALED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	LIFEGUARD FIRE PROTECTION

Date:	**6/10/2013**
Permit Type:	
Description:	**COSTCO STORE #823 - HATHAWAY AVE**
Permit Description:	**BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	BI-2013-1759
Status:	COMPLETE / FINALED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	W.L. BUTLER

Date:	**9/26/2012**
Permit Type:	
Description:	**COSTCO**
Permit Description:	**EDEN HIST FIRE ANNUAL INSP**
Work Class:	
Proposed Use:	
Permit Number:	FD-2012-0908
Status:	COMPLETE / FINALED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OWNER

TARGET PROPERTY FINDINGS

Date:	**8/24/2012**
Permit Type:	
Description:	**COSTCO STORE #823 - HATHAWAY AVE**
Permit Description:	**EDEN HIST MOBILE FUELERS**
Work Class:	
Proposed Use:	
Permit Number:	FD-2012-0746
Status:	ACTIVE / PERMIT ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	DIESEL DIRECT WEST

Date:	**9/7/2011**
Permit Type:	**Plumbing Permit**
Description:	**TI improvements: New walk in boxes & coolers, top load, island. Remove 4 coolers, instl 2 coolers & 1 walk-in freezer; instl 1 eqpt slab; modify 1 (E) cooler by reducing size; associated PM&E trades**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2011-2597
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	COMMERCIAL REFRIGERATION SPECIALISTS

Date:	**9/7/2011**
Permit Type:	**Electrical Permit**
Description:	**TI improvements: New walk in boxes & coolers, top load, island. Remove 4 coolers, instl 2 coolers & 1 walk-in freezer; instl 1 eqpt slab; modify 1 (E) cooler by reducing size; associated PM&E trades 2**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2011-2595
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	COMMERCIAL REFRIGERATION SPECIALISTS

TARGET PROPERTY FINDINGS

Date:	**9/7/2011**
Permit Type:	**Mechanical Permit**
Description:	**TI improvements: New walk in boxes & coolers, top load, island. Remove 4 coolers, instl 2 coolers & 1 walk-in freezer; instl 1 eqpt slab; modify 1 (E) cooler by reducing size; associated PM&E trades**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2011-2596
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	COMMERCIAL REFRIGERATION SPECIALISTS

Date:	**5/10/2011**
Permit Type:	**Revision Permit**
Description:	**Revision to BI-2011-0318. Freezer slab detail.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2011-1283
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	R W CONSTRUCTION

Date:	**3/31/2011**
Permit Type:	**Commercial Remodel, Repair, Maint. (int/ext)**
Description:	**TI improvements: New walk in boxes & coolers, top load, island. Remove 4 coolers, instl 2 coolers & 1 walk-in freezer; instl 1 eqpt slab; modify 1 (E) cooler by reducing size; associated PM&E trades**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2011-0318
Status:	final
Valuation:	$890,000.00
Contractor Company:	
Contractor Name:	COMMERCIAL REFRIGERATION SPECIALISTS

TARGET PROPERTY FINDINGS

Date:	**11/10/2010**
Permit Type:	**Fire Department Annual Inspection**
Description:	**greater than 12,000**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2010-1055
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**10/28/2009**
Permit Type:	**Commercial Accessory**
Description:	**refridgerated sales area. Total of 110 lf.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2009-1199
Status:	final
Valuation:	$4,500.00
Contractor Company:	
Contractor Name:	COMMERCIAL REFRIGERATION SPECIALISTS

Date:	**10/26/2009**
Permit Type:	**Fire Department Annual Inspection**
Description:	**Fire Department Annual High Pile Storage greater than 12,000**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2009-0894
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

TARGET PROPERTY FINDINGS

Date:	**6/16/2009**
Permit Type:	**Revision Permit**
Description:	**Revision to BI-2008-3995. Addition of windows to cooler box.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2009-1240
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	COMMERCIAL REFRIGERATION SPECIALISTS

Date:	**4/15/2009**
Permit Type:	**Fire Protection Systems**
Description:	**Fire Sprinkler Alterations to Add/Relocate (30) Dry Pendant Heads for Coolers**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2009-0497
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**3/20/2009**
Permit Type:	**Commercial re-model**
Description:	**meat prep area inside (e) box structure. Refer to 2008-3995**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2009-0683
Status:	issued
Valuation:	$4,000.00
Contractor Company:	
Contractor Name:	COMMERCIAL REFRIGERATION SPECIALISTS

TARGET PROPERTY FINDINGS

Date:	**2/24/2009**
Permit Type:	**Electrical Permit**
Description:	**New cooler box and panels- 3431 sq ft**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2009-0615
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	QD ELECTRICAL SERVICES

Date:	**2/11/2009**
Permit Type:	**Mechanical Permit**
Description:	**Refrigeration remodel at Costco #823 New cooler box and panels- 3431 sq ft**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2009-0443
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	COMMERCIAL REFRIGERATION SPECIALISTS

Date:	**2/11/2009**
Permit Type:	**Plumbing Permit**
Description:	**Refrigeration remodel at Costco #823 New cooler box and panels- 3431 sq ft**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2009-0482
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JK BAKER CONSTRUCTION

TARGET PROPERTY FINDINGS

Date:	**2/6/2009**
Permit Type:	**Revision Permit**
Description:	**Refrigeration remodel revision to permit 2008-3995. Relocated compressor unit, added underground plumbing.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2009-0360
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	COMMERCIAL REFRIGERATION SPECIALISTS

Date:	**1/14/2009**
Permit Type:	**Electrical Permit**
Description:	**Relocate trash compacter with new roof and block wall including a 8" facia Spec inspection waived-GM**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2009-0140
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MISSION ELECTRIC

Date:	**1/12/2009**
Permit Type:	**Commercial re-model**
Description:	**Refrigeration remodel at Costco #823 New cooler box and panels- 3431 sq ft**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2008-3995
Status:	final
Valuation:	$500,000.00
Contractor Company:	
Contractor Name:	COMMERCIAL REFRIGERATION SPECIALISTS

TARGET PROPERTY FINDINGS

Date:	**1/8/2009**
Permit Type:	**Fire Protection Systems**
Description:	**Fire Sprinkler Alteration To An (E) NFPA 13 System To Add (4) Heads In (N) Trash Compactor Canopy.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2009-0010
Status:	final
Valuation:	$3,200.00
Contractor Company:	
Contractor Name:	AQUAMATIC FIRE PROTECTION INC

Date:	**12/12/2008**
Permit Type:	**Plumbing Permit**
Description:	**Relocate trash compacter with new roof and block wall including a 8" facia Spec inspection waived-GM**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2008-4627
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	AQUA DUCT PLUMBING

Date:	**12/5/2008**
Permit Type:	**Commercial Accessory**
Description:	**Relocate trash compacter with new roof and block wall including a 8" facia Spec inspection waived-GM**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2008-3998
Status:	final
Valuation:	$68,000.00
Contractor Company:	
Contractor Name:	W.L. BUTLER

TARGET PROPERTY FINDINGS

Date:	**11/26/2008**
Permit Type:	**Fire Department Annual Inspection**
Description:	**Annual Fire Department Permit for High-Piled Combustible Stock more than 12,000 sq. ft.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2008-1137
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**7/7/2008**
Permit Type:	**PL Site Plan Review**
Description:	**construct a 10, 560 sq ft building addition and the installation of new landscaping at the front of the building.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	PL-2007-0224
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**6/17/2008**
Permit Type:	**Commercial Over the Counter**
Description:	**additional racks at go backs or RTV for Bulk storage racks in the new addition. otcsm**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2008-2173
Status:	issued
Valuation:	$1,000.00
Contractor Company:	
Contractor Name:	W L BUTLER INC

TARGET PROPERTY FINDINGS

Date:	**6/12/2008**
Permit Type:	**Mechanical Permit**
Description:	**Install (2) Roof Top Units Supplied By Owner Relating To Expansion of (e) bldg for new merchandise area.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2008-2111
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	AIR SYSTEMS, INC.

Date:	**6/9/2008**
Permit Type:	**Electrical Permit**
Description:	**new merchandise area. Racks are not a part of this permit and the racks are to be submitted separately.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2008-2037
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MISSION ELECTRIC

Date:	**4/30/2008**
Permit Type:	**Fire Protection Systems**
Description:	**Heads)**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2008-0536
Status:	final
Valuation:	$23,300.00
Contractor Company:	
Contractor Name:	AQUAMATIC FIRE PROTECTION INC

TARGET PROPERTY FINDINGS

Date:	**4/15/2008**
Permit Type:	**Fire Protection Systems**
Description:	**Fire Sprinkler System Alteration To Install 140 Additional Heads In The (N) Addition Area.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2008-0479
Status:	canceled
Valuation:	$23,300.00
Contractor Company:	
Contractor Name:	AQUAMATIC FIRE PROTECTION INC

Date:	**3/21/2008**
Permit Type:	**Underground Fire Line**
Description:	**Connection To Main and Relocation Of A (E) Hydrant.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2008-0383
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	TALUS CONSTRUCTION

Date:	**3/14/2008**
Permit Type:	**Commercial re-model**
Description:	**Bulk storage racks in the new addition.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2008-0665
Status:	final
Valuation:	$20,000.00
Contractor Company:	
Contractor Name:	W L BUTLER INC

TARGET PROPERTY FINDINGS

Date:	**2/26/2008**
Permit Type:	**Plumbing Permit**
Description:	**area. Racks are no apart of this permit and the racks are to be submitted separately.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2008-0655
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	AQUA DUCT PLUMBING

Date:	**1/18/2008**
Permit Type:	**Commerical Addition**
Description:	**Expansion of (e) bldg for new merchandise area. Racks are not a part of this permit and the racks are to be submitted separately.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2007-2670
Status:	final
Valuation:	$550,480.80
Contractor Company:	
Contractor Name:	W L BUTLER INC

Date:	**1/11/2007**
Permit Type:	**Rack Permit**
Description:	**Relocate existing racks**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2004-0026
Status:	final
Valuation:	$3,000.00
Contractor Company:	
Contractor Name:	W L BUTLER INC

TARGET PROPERTY FINDINGS

Date:	**3/14/2006**
Permit Type:	**Miscellaneous Permit (See Notes Below)**
Description:	**Restripe for HC Van Accessible spaces, transit pedestrian walkway**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2006-1054
Status:	issued
Valuation:	$20,000.00
Contractor Company:	
Contractor Name:	W.L. BUTLER

Date:	**1/10/2006**
Permit Type:	**Mechanical Permit**
Description:	**Interior demolition, relocation of toilet rooms, re-aportioned offices, breadroom**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2006-0112
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MODERN MECHANICAL CORPORATION

Date:	**11/22/2005**
Permit Type:	**Plumbing Permit**
Description:	**Interior demolition, relocation of toilet rooms, re-aportioned offices, breadroom**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2005-5061
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	W.L. BUTLER

TARGET PROPERTY FINDINGS

Date:	**11/18/2005**
Permit Type:	**Electrical Permit**
Description:	**Interior demolition, relocation of toilet rooms, re-aportioned offices, breadroom**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2005-5014
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ELECTRICAL SERVICES CO.

Date:	**11/9/2005**
Permit Type:	**Tenant Improvement Commerical**
Description:	**Interior demolition, relocation of toilet rooms, re-aportioned offices, breadroom**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2005-3850
Status:	final
Valuation:	$853,786.00
Contractor Company:	
Contractor Name:	W.L. BUTLER

Date:	**2/11/2005**
Permit Type:	**Revision Permit**
Description:	**Revision to 03-4179Revision of trash compactor relocation**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2004-4825
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	W.L. BUTLER

TARGET PROPERTY FINDINGS

Date:	**1/15/2004**
Permit Type:	**Revision Permit**
Description:	**Removal of slab, new layout of meat prep and RTV (Caged Area)**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2003-6427
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	W.L. BUTLER

Date:	**12/22/2003**
Permit Type:	**Plumbing Permit**
Description:	**Installation of shop-in produce cooler, meat coolers, and freezers.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2003-6671
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	BUCKLEY PLUMBING CO.

Date:	**12/8/2003**
Permit Type:	**Electrical Permit**
Description:	**Installation of shop-in produce cooler, meat coolers, and freezers.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2003-6393
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	WONG ELECTRIC

TARGET PROPERTY FINDINGS

Date:	**12/5/2003**
Permit Type:	**Tenant Improvement Commerical**
Description:	**Installation of shop-in produce cooler, meat coolers, and freezers.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2003-4179
Status:	final
Valuation:	$300,000.00
Contractor Company:	
Contractor Name:	W.L. BUTLER

Date:	**10/29/2003**
Permit Type:	**Fire Department Annual Inspection**
Description:	**Annual Fire Department Permit for High-Piled Combustible Stock more than**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2003-0935
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**7/15/2003**
Permit Type:	**PL Zone Change**
Description:	**Minor Modification of a PD (ZC 90-6) to allow the construction of a 5,719 sf**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	PL-2003-0255
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

TARGET PROPERTY FINDINGS

Date:	**12/20/2002**
Permit Type:	**Fire Department Annual Inspection**
Description:	**Annual Fire Department Permit for High-Piled Combustible Stock more than**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2002-1217
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**12/5/2002**
Permit Type:	**Fire Alarm/Detection Systems**
Description:	**Fire Alarm System Alterations to Add (3) Devices: (1) Horn/Strobe, (1) MPS, & (1)**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2002-1325
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	HONEYWELL

Date:	**9/11/2002**
Permit Type:	**Tenant Improvement**
Description:	**Remove roofing, remove swamp coolers, insulate roof, install new HVAC units,**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2002-2966
Status:	final
Valuation:	$834,914.00
Contractor Company:	
Contractor Name:	W.L. BUTLER

TARGET PROPERTY FINDINGS

Date:	**9/11/2002**
Permit Type:	**Plumbing Permit**
Description:	**Remove roofing, remove swamp coolers, insulate roof, install new HVAC units,**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2002-4126
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	W.L. BUTLER

Date:	**9/11/2002**
Permit Type:	**Mechanical Permit**
Description:	**Remove roofing, remove swamp coolers, insulate roof, install new HVAC units,**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2002-4127
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	W.L. BUTLER

Date:	**9/11/2002**
Permit Type:	**Electrical Permit**
Description:	**Remove roofing, remove swamp coolers, insulate roof, install new HVAC units,**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2002-4128
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	W.L. BUTLER

TARGET PROPERTY FINDINGS

Date:	**5/10/2002**
Permit Type:	**One Time Temporary Activity Permit**
Description:	**Temporary (5/17/02 - 5/18/02) Erection of (2) 10' x 10' Canopies**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2002-0459
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**2/7/2002**
Permit Type:	**Tenant Improvement**
Description:	**Truck dock expansion to existing Costco facility**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2002-0545
Status:	canceled
Valuation:	$974,000.00
Contractor Company:	
Contractor Name:	

Date:	**1/2/2002**
Permit Type:	**PL Zone Change**
Description:	**Construction and operation of a gasoline pumping station to be used by members**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	PL-2002-0002
Status:	pending
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

TARGET PROPERTY FINDINGS

Date:	**1/2/2002**
Permit Type:	**PL Site Plan Review**
Description:	**Site Plan Review of a new gasoline pumping station for members only at**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	PL-2002-0003
Status:	pending
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**12/24/2001**
Permit Type:	**Electrical Permit**
Description:	
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2001-6956
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PETER IRVING ELECTRIC INC

Date:	**12/21/2001**
Permit Type:	**Fire Department Annual Inspection**
Description:	**Annual Fire Department Permit for High-Piled Combustible Stock more than**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2001-1657
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

TARGET PROPERTY FINDINGS

Date:	**12/18/2001**
Permit Type:	**Tenant Improvement**
Description:	**Relocate existing copy center cabinets and the associated electrical for them to**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2001-5688
Status:	final
Valuation:	$19,000.00
Contractor Company:	
Contractor Name:	PACIFIC NORTHERN

Date:	**12/18/2001**
Permit Type:	**Mechanical Permit**
Description:	**two gas radinat heaters**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2001-6860
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PACIFIC NORTHERN

ADJOINING PROPERTY FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

FULLER AVE

22323 FULLER AVE

Date:	**4/14/2015**
Permit Type:	
Description:	**KITCHEN & BATH REMODEL (SAME LAYOUT),RETROFIT 7 WINDOWS,REPLACE W.H.**
Permit Description:	**MISCELLANEOUS WORK**
Work Class:	
Proposed Use:	
Permit Number:	201501783
Status:	COMPLETE / FINALED
Valuation:	$6,000.00
Contractor Company:	
Contractor Name:	V & S BUILDERS

Date:	**4/7/2004**
Permit Type:	**Plumbing Permit**
Description:	**REPLACEMENT OF WATER HEATER/ PERMIT REQUIRED PER RENTAL**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2004-1645
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

22325 FULLER AVE

Date:	**4/14/2015**
Permit Type:	
Description:	**CE150405: KITCHN/BATH REMODEL (SAME LAYOUT),DEMO CARPORT,RETROFT 7WINDWS,REPLACE W.H.,DEMO SHED TO REDUCE TO 120 SQFT**
Permit Description:	**MISCELLANEOUS WORK**
Work Class:	
Proposed Use:	
Permit Number:	201501781
Status:	COMPLETE / FINALED
Valuation:	$8,000.00
Contractor Company:	
Contractor Name:	V & S BUILDERS

Date:	**3/2/2009**
Permit Type:	**Vehicle Violation**
Description:	**INOP, WRECKED, VANDALIZED VEHICLE IN P-LOT.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	CP-2009-0319
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**9/29/2008**
Permit Type:	**Community Preservation Violations**
Description:	**Graffiti on wall and couch out in front; excessive garbage. 4/CG**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	CP-2008-1701
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**4/7/2004**
Permit Type:	**Plumbing Permit**
Description:	**REPLACEMENT OF WATER HEATER/ PERMIT REQUIRED PER RENTAL**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2004-1643
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

22327 FULLER AVE

Date:	**4/14/2015**
Permit Type:	
Description:	**KITCHEN & BATH REMODEL (SAME LAYOUT),RETROFIT 7 WINDOWS,REPLACE W.H.**
Permit Description:	**MISCELLANEOUS WORK**
Work Class:	
Proposed Use:	
Permit Number:	201501785
Status:	COMPLETE / FINALED
Valuation:	$6,000.00
Contractor Company:	
Contractor Name:	V & S BUILDERS

Date:	**4/7/2004**
Permit Type:	**Plumbing Permit**
Description:	**REPLACEMENT OF WATER HEATER/ PERMIT REQUIRED PER RENTAL**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2004-1648
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

22329 FULLER AVE

Date:	**4/14/2015**
Permit Type:	
Description:	**KITCHEN & BATH REMODEL (SAME LAYOUT),RETROFIT 7 WINDOWS,REPLACE W.H.**
Permit Description:	**MISCELLANEOUS WORK**
Work Class:	
Proposed Use:	
Permit Number:	201501787
Status:	COMPLETE / FINALED
Valuation:	$6,000.00
Contractor Company:	
Contractor Name:	V & S BUILDERS

Date:	**4/7/2004**
Permit Type:	**Plumbing Permit**
Description:	**REPLACEMENT OF WATER HEATER/ PERMIT REQUIRED PER RENTAL**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2004-1647
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

22345 FULLER AVE

Date:	**4/9/2004**
Permit Type:	**Revision Permit**
Description:	**Trusses. Master permit #01-427.**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2001-6544
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**3/10/2004**
Permit Type:	**Plumbing Permit**
Description:	**family room addition**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2004-1142
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**3/10/2004**
Permit Type:	**Mechanical Res New Sq Footage**
Description:	**family room addition**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2004-1143
Status:	final
Valuation:	$54,466.16
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**3/10/2004**
Permit Type:	**Electrical Res New Sq. Footage**
Description:	**family room addition**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2004-1144
Status:	final
Valuation:	$54,466.16
Contractor Company:	
Contractor Name:	

Date:	**7/12/2002**
Permit Type:	**PL Administrative Encroachment Permit**
Description:	**#02-273 EBmud to trench @ fuller av. to install new water service to meter**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	PL-2002-0426
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**7/2/2002**
Permit Type:	**PL Administrative Encroachment Permit**
Description:	**#02-264 Replace sewer lateral back of sidewalk to main by trenching.**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	PL-2002-0397
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**6/21/2002**
Permit Type:	**Residential Room Addition**
Description:	**family room addition**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2002-1789
Status:	final
Valuation:	$54,466.16
Contractor Company:	
Contractor Name:	

Date:	**6/20/2002**
Permit Type:	**Electrical Permit**
Description:	**BUILDING NUMBER HTE 01-441**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2002-2683
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**6/1/2002**
Permit Type:	**Weed Abatement Violations**
Description:	**WN. Weeds sup. 4/JH.CASE CLOSED 06/19/02; OWNER**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	CP-2002-0508
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date: **7/2/2001**
Permit Type: **Plumbing Permit**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: BI-2001-4082
Status: final
Valuation: $0.00
Contractor Company:
Contractor Name:

22347 FULLER AVE

Date: **11/6/2001**
Permit Type: **Fire Protection Systems**
Description: **Installation of a (N) fire sprinkler system in a (N) SFR**

Permit Description:
Work Class:
Proposed Use:
Permit Number: FD-2001-1362
Status: final
Valuation: $5,500.00
Contractor Company:
Contractor Name:

Date: **10/30/2001**
Permit Type: **Mechanical Permit**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: BI-2001-6174
Status: final
Valuation: $0.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **10/30/2001**
Permit Type: **Electrical Permit**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: BI-2001-6176
Status: final
Valuation: $0.00
Contractor Company:
Contractor Name:

22355 FULLER AVE

Date: **9/29/2008**
Permit Type: **Community Preservation Violations**
Description: **Excessive garbage. 4/CG**

Permit Description:
Work Class:
Proposed Use:
Permit Number: CP-2008-1699
Status: final
Valuation: $0.00
Contractor Company:
Contractor Name:

Date: **9/26/2001**
Permit Type: **Replace Windows**
Description: **CHANGE WINDOWS IN TWO BEDROOMS, LIVING ROOM AND**

Permit Description:
Work Class:
Proposed Use:
Permit Number: BI-2001-5591
Status: issued
Valuation: $100.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

22366 FULLER AVE

Date:	**11/20/2014**
Permit Type:	
Description:	**Overlash 1,650' to existing poles.Project ID:211139**
Permit Description:	**ENCROACHMENT - MINOR**
Work Class:	
Proposed Use:	
Permit Number:	201400168
Status:	ACTIVE / PERMIT ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	CABLECOM, INC

Date:	**9/25/2003**
Permit Type:	**One Time Temporary Activity Permit**
Description:	**Fire Department Safety Inspection (Fee Waived - Non Profit Organization)**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2003-1031
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**10/17/2002**
Permit Type:	**One Time Temporary Activity Permit**
Description:	**Erect 1-30'x 50', 1-20' x 60', 1- 10' x 20' Tent/Canopy Structures for an event to**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2002-1074
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

22393 FULLER AVE

Date:	**2/21/2008**
Permit Type:	**Community Preservation Violations**
Description:	**Hanging laundry on the fence visible from the street. 3/MF**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	CP-2008-0215
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**3/16/2006**
Permit Type:	**Electrical Permit**
Description:	**To add 5 new circuits; to add one water heater at closet (interior); to add one new**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2006-1107
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	KSYC CONSTRUCTION

Date:	**3/16/2006**
Permit Type:	**Plumbing Permit**
Description:	**To add 5 new circuits; to add one water heater at closet (interior); to add one new**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2006-1108
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	KSYC CONSTRUCTION

ADJOINING PROPERTY FINDINGS

22395 FULLER AVE

Date:	**9/12/2007**
Permit Type:	**Replace Windows**
Description:	**Install 4 new dual glaze windows, three flush vinyl retro fit windows, one single**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2007-3998
Status:	issued
Valuation:	$1,588.38
Contractor Company:	
Contractor Name:	J & G UNION CITY GLASS INC

Date:	**8/31/2006**
Permit Type:	**Mechanical Permit**
Description:	**Replace flue**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2006-4104
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	RISING STAR HEATING AND AIR

Date:	**6/1/2006**
Permit Type:	**Electrical Permit**
Description:	**Add 8 new circuits and 1 new meter**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2006-2419
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	KSYC CONSTRUCTION

ADJOINING PROPERTY FINDINGS

HAPPYLAND AVE

22322 HAPPYLAND AVE

Date:	**4/14/2008**
Permit Type:	**Residential Re-roof**
Description:	**T/O (E) roof; Install a GNC roofing system (tan cap sheet)**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2008-1295
Status:	pending
Valuation:	$13,630.00
Contractor Company:	
Contractor Name:	BECK ROOFING CO. INC.

Date:	**4/14/2008**
Permit Type:	**Commerical Re-roof**
Description:	**T/O (E) roof. Install a GNC roofing system (tan cap sheet)**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2008-1296
Status:	final
Valuation:	$13,630.00
Contractor Company:	
Contractor Name:	BECK ROOFING CO. INC.

ADJOINING PROPERTY FINDINGS

22324 HAPPYLAND AVE

Date:	**9/3/2008**
Permit Type:	**Community Preservation Violations**
Description:	**on the property behind a gate and outside of the gate, and a discarded couch on the property behind the gate. 4/CG**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	CP-2008-1595
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**2/5/2008**
Permit Type:	**Graffiti Violations**
Description:	**Graffiti on the buildings. 3/mf**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	CP-2008-0158
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

22334 HAPPYLAND AVE

Date:	**7/29/2003**
Permit Type:	**Zoning Violations**
Description:	**Operating a mechanical business. 4/JH. CASE CLOSED 02/13/04; ABATED BY**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	CP-2003-1302
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

HATHAWAY AVE

22099 HATHAWAY AVE

Date:	**12/15/2004**
Permit Type:	
Description:	**Renewal Residential Renewal permit covering BLD2002-04370 for ADDITION OF 2 BEDROOMS, 1 BATH, ENLARGE KITCHEN, RELOCATE WATER HEATER. (Original valuation $92,022.84)**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BLD2004-04489
Status:	3D EXPIRED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**12/11/2002**
Permit Type:	**Building Electrical Plumbing Mechanical**
Description:	**Addition Residential ADD 2 BEDROOMS, 1 BATH, ENLARGE KITCHEN, RELOCATE WATER HEATER.**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BLD2002-04370
Status:	3D CLOSED
Valuation:	$92,022.84
Contractor Company:	
Contractor Name:	

22123 HATHAWAY AVE

Date:	**11/2/2011**
Permit Type:	**Mechanical**
Description:	**Replace furnace (same location), 80% eff.**

Permit Description:	
Work Class:	Remodel/Repair Residential
Proposed Use:	
Permit Number:	BLD2011-02442
Status:	CLOSED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	AGBAYANI CONSTRUCTION CORPORATION

ADJOINING PROPERTY FINDINGS

Date:	**10/3/2007**
Permit Type:	
Description:	**Duplex **PLAN CHECK TO DEMO EXISTING SINGLE FAMILY DWELLING AND DETACHED GARAGE. CONSTRUCT 2 NEW 2-STORY DUPLEXES WITH ATTACHED TWO CAR GARAGES - 4 NEW UNITS TOTAL & 2 TOTAL PERMITS TO BE ISSUED. 7,420 SQ FT TOTAL HABITABLE AND 1680 SQ FT TOTAL NON-HABITABLE.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BLD2007-02897
Status:	PRS
Valuation:	$1,139,630.80
Contractor Company:	
Contractor Name:	

22147 HATHAWAY AVE

Date:	**5/8/2007**
Permit Type:	**Plumbing**
Description:	**Water Heater Residential Replace gas water heater**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BLD2007-01301
Status:	3D FINAL
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

22175 HATHAWAY AVE

Date:	**6/22/2006**
Permit Type:	
Description:	**Addition Residential **PLAN CHECK FOR SINGLE STORY ADDITION OF 931 SQ FT TO EXTEND LIVING & DINING AREA, RELOCATE KITCHEN, ADD 2 BEDROOMS, 2 1/2 BATHROOMS & LAUNDRY ROOM.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BLD2006-01829
Status:	3D CLOSED
Valuation:	$135,386.02
Contractor Company:	
Contractor Name:	

Date:	**6/3/2002**
Permit Type:	**Building**
Description:	**Completion Permit Residential COMPLETE WORK STARTED ON 2000-00226 AND RENEWAL 2000-4758. CONSTRUCT WALL ON 3 SIDES OF PROPERTY.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BLD2002-01754
Status:	3D FINAL
Valuation:	$1,650.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

22283 HATHAWAY AVE

Date:	**9/27/2002**
Permit Type:	**Building**
Description:	**Miscellaneous Residential Remove carport. Violation correction**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BLD2002-03405
Status:	3D CLOSED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

22288 HATHAWAY AVE

Date:	**3/4/2008**
Permit Type:	**Electrical Permit**
Description:	**Install electrical meter for phone pedestal**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2008-0738
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	M L ELECTRIC

ADJOINING PROPERTY FINDINGS

22290 HATHAWAY AVE

Date:	**2/11/2016**
Permit Type:	**INDUSTRIAL**
Description:	**REVISION TO 201503207: Revisions to shell. See list for rev-sions.**
Permit Description:	**REVISION PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	201600717
Status:	ACTIVE / PENDING
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**2/11/2016**
Permit Type:	**INDUSTRIAL**
Description:	**REVISION TO 201504009: Revision to tenant improvement-see list for revisions.**
Permit Description:	**REVISION PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	201600718
Status:	ACTIVE / PENDING
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**12/15/2015**
Permit Type:	**INDUSTRIAL**
Description:	**DCT Grading - 22290 Hathaway**
Permit Description:	**GRADING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	201505818
Status:	ACTIVE / PENDING
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**8/31/2015**
Permit Type:	**INDUSTRIAL**
Description:	**A 2,982 sq ft spec office, includes new acces toilet rooms,ceiling, lighting & HVAC (unit & distribution)**
Permit Description:	**TENANT IMPROVEMENT**
Work Class:	
Proposed Use:	
Permit Number:	201504009
Status:	ACTIVE / PENDING
Valuation:	$225,000.00
Contractor Company:	
Contractor Name:	

Date:	**7/20/2015**
Permit Type:	**INDUSTRIAL**
Description:	**UPGRADE AUTOMATIC FIRE SYSTEMS FOR THE ENTIRE BUILDING.**
Permit Description:	**FIRE UNDERGROUND LINE NEW**
Work Class:	
Proposed Use:	
Permit Number:	201503307
Status:	ACTIVE / PENDING
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**7/20/2015**
Permit Type:	**INDUSTRIAL**
Description:	**UPGRADE AUTOMATIC FIRE SYSTEMS FOR THE ENTIRE BUILDING.**
Permit Description:	**FIRE SPRINKLER SYSTEM EXIST 13**
Work Class:	
Proposed Use:	
Permit Number:	201503311
Status:	ACTIVE / PENDING
Valuation:	$0.00
Contractor Company:	
Contractor Name:	GENERAL UNDERGROUND FIRE PROTECTION

ADJOINING PROPERTY FINDINGS

Date:	**7/9/2015**
Permit Type:	**INDUSTRIAL**
Description:	**Remodel of existing warehouse: reduce building sq footage &add truck court. Shell bldg remodel only**
Permit Description:	**COMMERCIAL REMODEL/REPAIR/MAIN**
Work Class:	
Proposed Use:	
Permit Number:	201503207
Status:	ACTIVE / PENDING
Valuation:	$8,676,000.00
Contractor Company:	
Contractor Name:	

Date:	**3/25/2015**
Permit Type:	**INDUSTRIAL**
Description:	**Request to remodel an existing warehouse and to preapproveAdministrative Use allowed in the Industrial SD4 District**
Permit Description:	**ADMINISTRATIVE USE PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	201501415
Status:	COMPLETE / PROCESSED - FILE CLOSED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**11/17/2014**
Permit Type:	
Description:	**Pre-Application Meeting on Wed. 12/3/14**
Permit Description:	**FIRE ONE TIME PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	201400085
Status:	ACTIVE / PENDING
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**3/14/2011**
Permit Type:	**Plumbing Permit**
Description:	**Install new water service from water meter to bathroom at back of building. No plumbing work being done in bathroom or builing.**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2011-0733
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PACIFIC PLUMBING SYSTEMS

Date:	**3/7/2011**
Permit Type:	**Fire Protection Systems**
Description:	**Revision to FD-2011-0096- Add sidewall (2) sprinkler head at trash enclosure No fee permit per C.G., (2) sprinkler head at trash enclosure No fee permit per C.G.**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2011-0172
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	GP FIRE PROTECTION

Date:	**3/4/2011**
Permit Type:	**Fire Alarm/Detection Systems**
Description:	**Fire Alarm T.I.- 41 devices**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2011-0174
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	BAY ALARM COMPANY

ADJOINING PROPERTY FINDINGS

Date:	**2/17/2011**
Permit Type:	**PL Administrative Encroachment Permit**
Description:	**ORA LOMA Sewer. Street cut only., Trench at connection approx. 20' x 18". ORA LOMA Sewer. Street cut only.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	PL-2011-0057
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PLUMBING EXPRESS

Date:	**2/16/2011**
Permit Type:	**Plumbing Permit**
Description:	**install new 4" force fed sewer line from property line to back of building in parking area**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2011-0490
Status:	canceled
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PACIFIC PLUMBING SYSTEMS

ADJOINING PROPERTY FINDINGS

Date:	**2/4/2011**
Permit Type:	**Fire Protection Systems**
Description:	**sprinkler heads. (Address updated from 22302), TI work adding 5 RFII 155 concealed sprinkler heads. (Address updated from 22302)**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2011-0096
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	GP FIRE PROTECTION

Date:	**2/3/2011**
Permit Type:	**One Time Temporary Activity Permit**
Description:	**Wheelchair Basketball Western Regional Tournament- 2/5-2/6- No fee per Chief. (See attachment)**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2011-0102
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**1/31/2011**
Permit Type:	**Residential Over the Counter 2**
Description:	**new wall for entry area, to create registration area, add one pony wall in open area**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2011-0342
Status:	canceled
Valuation:	$2,550.00
Contractor Company:	
Contractor Name:	Y Z COMMERIAL & RESIDENTAL SER

ADJOINING PROPERTY FINDINGS

Date:	**1/31/2011**
Permit Type:	**Electrical Permit**
Description:	**new electrical at entry area**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2011-0343
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	Y Z COMMERIAL & RESIDENTAL SER

Date:	**1/31/2011**
Permit Type:	**Commercial Over the Counter**
Description:	**new wall for entry area to create registration area, add one pony wall in open area**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2011-0344
Status:	final
Valuation:	$2,550.00
Contractor Company:	
Contractor Name:	Y Z COMMERIAL & RESIDENTAL SER

Date:	**11/29/2010**
Permit Type:	**Commercial Remodel, Repair, Maint. (int/ext)**
Description:	**Add demising wall to create indoor sport facility. Create storage room, glazing at new storefront, and parking with striping.**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2010-3030
Status:	final
Valuation:	$44,000.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**8/24/2010**
Permit Type:	**PL Administrative Use Permit**
Description:	**Basketball Court, 2 Soccer Courts, Boxing and Karate, Community Room, Fitness & Weight room, Office, Retail, Food Service, Restroom and Parking), Proposal for recreational facility (16 Basketball Court, 2 Soccer Courts, Boxing and Karate, Community Room, Fitness & Weight room, Office, Retail, Food Service, Restroom and Parking)**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	PL-2010-0020
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

22300 HATHAWAY AVE

Date:	**1/4/2016**
Permit Type:	
Description:	**RELOCATION OF AN EXISTING FIRE WATER LINE AROUND A NEWLOADING DOCK.**
Permit Description:	**FIRE UNDERGROUND LINE NEW**
Work Class:	
Proposed Use:	
Permit Number:	201600004
Status:	ACTIVE / PENDING
Valuation:	$0.00
Contractor Company:	
Contractor Name:	GRADETEK INC

ADJOINING PROPERTY FINDINGS

Date:	**12/2/2015**
Permit Type:	
Description:	**ADDING AND RELOCATING SSP'S**
Permit Description:	**FIRE SPRINKLER SYSTEM EXIST 13**
Work Class:	
Proposed Use:	
Permit Number:	201505543
Status:	ACTIVE / PENDING
Valuation:	$0.00
Contractor Company:	
Contractor Name:	FOOTHILL FIRE PROTECTION

Date:	**9/16/2015**
Permit Type:	
Description:	**construct new truck doc on southwest side of existing build-ing**
Permit Description:	**COMMERCIAL REMODEL/REPAIR/MAIN**
Work Class:	
Proposed Use:	
Permit Number:	201504288
Status:	ACTIVE / PERMIT ISSUED
Valuation:	$80,000.00
Contractor Company:	
Contractor Name:	R C P CONSTRUCTION

Date:	**9/2/2015**
Permit Type:	
Description:	**SUITE "B": INTERIOR IMPROVEMENTS TO CREATE (N) OFFICE AREA& DEMO & REWORK MENS & WOMENS RESTROOMS**
Permit Description:	**TENANT IMPROVEMENT**
Work Class:	
Proposed Use:	
Permit Number:	201504077
Status:	ACTIVE / PERMIT ISSUED
Valuation:	$300,000.00
Contractor Company:	
Contractor Name:	STEELWAVE LLC

ADJOINING PROPERTY FINDINGS

Date:	**7/8/2015**
Permit Type:	
Description:	**INSTALLATION OF FREESTANDING OVERHEAD BRIDGE CRANE SYSTEM**
Permit Description:	**MISCELLANEOUS WORK**
Work Class:	
Proposed Use:	
Permit Number:	201503173
Status:	ACTIVE / PERMIT ISSUED
Valuation:	$275,000.00
Contractor Company:	
Contractor Name:	FACILITIES ENGINEERING

Date:	**4/6/2015**
Permit Type:	
Description:	**Remove rollup door w/storefront. Demo some partitions &rsrtrms; install new ADA rstrms & inter offices**
Permit Description:	**COMMERCIAL REMODEL/REPAIR/MAIN**
Work Class:	
Proposed Use:	
Permit Number:	201501576
Status:	WITHDRAWN / CANCELLED
Valuation:	$274,000.00
Contractor Company:	
Contractor Name:	LEGACY PARTNERS

Date:	**12/13/2013**
Permit Type:	
Description:	**MS. INTERNATIONAL**
Permit Description:	**EDEN HIST FIRE ANNUAL INSP**
Work Class:	
Proposed Use:	
Permit Number:	FD-2013-1226
Status:	COMPLETE / FINALED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OWNER

ADJOINING PROPERTY FINDINGS

Date:	**9/26/2012**
Permit Type:	
Description:	**MS. INTERNATIONAL**
Permit Description:	**EDEN HIST FIRE ANNUAL INSP**
Work Class:	
Proposed Use:	
Permit Number:	FD-2012-0907
Status:	COMPLETE / FINALED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OWNER

Date:	**1/12/2011**
Permit Type:	**Fire Department Annual Inspection**
Description:	**Pile Storage less than 12000, Fire Department Annual Permit For High Pile Storage less than 12000**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2010-1054
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**12/22/2010**
Permit Type:	**Commercial Over the Counter**
Description:	**Add new ADA ramp and parking in front of building. Finishes to match building.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2010-3481
Status:	final
Valuation:	$8,000.00
Contractor Company:	
Contractor Name:	V & M CONSTRUCTION, INC.

ADJOINING PROPERTY FINDINGS

Date:	**5/13/2010**
Permit Type:	**Storage Racks**
Description:	**Installation of high piled storage @ 398 Ln Ft.**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2010-0933
Status:	final
Valuation:	$10,000.00
Contractor Company:	
Contractor Name:	BIG JOE CALIFORNIA NORTH INC.

Date:	**2/23/2010**
Permit Type:	**Commercial Over the Counter**
Description:	**Relocate (e) warehouse wall one bay (l83degrees) for existing tenant and upgrade ADA stripping at entry.**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2010-0387
Status:	final
Valuation:	$18,000.00
Contractor Company:	
Contractor Name:	V & M CONSTRUCTION, INC.

Date:	**12/1/2009**
Permit Type:	**Fire Protection Systems**
Description:	**Fire Sprinkler alteration 38**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2009-1296
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	FLORES FIRE PROTECTION

ADJOINING PROPERTY FINDINGS

Date:	**11/4/2009**
Permit Type:	**Revision Over the Counter**
Description:	**Revise partition between office and warehouse to include plywood to 12' A.F.F.. Relocate HVAC unit by 5'. See attached letter from achitect and revised sheet S1.0 for more info.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2009-3280
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	K G DESIGN PLANNING CONSTR

Date:	**8/31/2009**
Permit Type:	**Commercial re-model**
Description:	**Add private office in existing warehouse**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2009-1648
Status:	final
Valuation:	$80,000.00
Contractor Company:	
Contractor Name:	K G DESIGN PLANNING CONSTR

Date:	**4/21/2009**
Permit Type:	**Commercial re-model**
Description:	**Install (2) new interior pit loading dock- concrete- 12 x 14, concrete- 12 x 14**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2009-0765
Status:	final
Valuation:	$20,000.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**9/18/2003**
Permit Type:	**Fire Department Annual Inspection**
Description:	**Annual Fire Department Permit for High-Piled Combustible Stock more than**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2003-0936
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**12/19/2002**
Permit Type:	**Fire Department Annual Inspection**
Description:	**Annual Fire Department Permit for High-Piled Combustible Stock more than**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2002-1416
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**5/15/2002**
Permit Type:	**Fire Department Annual Inspection**
Description:	**Annual Fire Department Permit for High-Piled Combustible Stock more than**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2001-1637
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

22302 HATHAWAY AVE

Date:	**11/18/2015**
Permit Type:	**INDUSTRIAL**
Description:	**Renewal of existing AUP (PL-2011-0025) to continue to allowmetal fabrication and related haz mat storage CE 15-2738**
Permit Description:	**ADMINISTRATIVE USE PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	201505382
Status:	ACTIVE / CLERICAL INTAKE
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**7/26/2011**
Permit Type:	**Sign Permit**
Description:	**Install (1) non-illuminated pole sign 14' in height. 24.5 sqft in size.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2011-2174
Status:	final
Valuation:	
Contractor Company:	
Contractor Name:	ARROW SIGN COMPANY, INC.

ADJOINING PROPERTY FINDINGS

Date:	**4/8/2011**
Permit Type:	**PL Administrative Use Permit**
Description:	**fabrication) in the Cannery Area Special Design District.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	PL-2011-0025
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**3/21/2011**
Permit Type:	**Electrical Permit**
Description:	**Install 100 amp meter to existing building. To be lcoated at main meter box at 22308 Hathaway.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2011-0832
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PERFORMANCE ELECTRIC

Date:	**12/29/2009**
Permit Type:	**Electrical Permit**
Description:	**Add 1 new circuit for fire alarm panel.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2009-3704
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PERFORMANCE ELECTRIC

ADJOINING PROPERTY FINDINGS

Date:	**11/5/2009**
Permit Type:	**Commercial Demolition**
Description:	**Demolition of old Owens brockway glass plant. 47,350 sq. ft. J#3G632 & 3G633.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2009-3293
Status:	final
Valuation:	$75,000.00
Contractor Company:	
Contractor Name:	COMPLETE DECON INC

Date:	**3/4/2009**
Permit Type:	**Graffiti Violations**
Description:	**Graffiti on the back of the building. MB**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	CP-2009-0331
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**10/15/2008**
Permit Type:	**Demolition Permit**
Description:	**Remove approx 20 x 60 steel canopy and approx 40 ft of 6' high cmu wall.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2008-3933
Status:	issued
Valuation:	$5,822.00
Contractor Company:	
Contractor Name:	NRC ENVIRONMENTAL SERVICES INC

ADJOINING PROPERTY FINDINGS

Date:	**5/18/2006**
Permit Type:	**Electrical Permit**
Description:	**Set power pole and install 1 20V circuit to propane tank motor, explosion proof**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2006-2193
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	UNION ELECTRIC CONST. INC.

Date:	**2/14/2006**
Permit Type:	**Tank**
Description:	**Relocate an (E) 499 gallon above ground LPG tank.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2006-0392
Status:	issued
Valuation:	$2,000.00
Contractor Company:	
Contractor Name:	

Date:	**6/17/2004**
Permit Type:	**Seismic Upgrade**
Description:	**Voluntary Seismic Retrofit**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2003-4392
Status:	issued
Valuation:	$434,500.00
Contractor Company:	
Contractor Name:	SAUNDERS CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date:	**5/12/2004**
Permit Type:	**Tank**
Description:	**Replace (e) 1700 gallon tank for a 499 gallon LPG tank for dispensing .**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2004-2015
Status:	final
Valuation:	$1,400.00
Contractor Company:	
Contractor Name:	SUBURBAN PROPANE

Date:	**7/1/2003**
Permit Type:	**PL Administrative Use Permit**
Description:	**To install a Liquid Oxygen Station**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	PL-2003-0393
Status:	pending
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**6/26/2003**
Permit Type:	**Plumbing Permit**
Description:	

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2003-3086
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	LILJA INDUSTRIAL CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date:	**6/20/2003**
Permit Type:	**Tenant Improvement Industrial**
Description:	**Shoring for building support damaged by a fire.**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2003-2830
Status:	issued
Valuation:	$25,000.00
Contractor Company:	
Contractor Name:	LILJA INDUSTRIAL CONSTRUCTION

Date:	**3/11/2003**
Permit Type:	**Electrical Permit**
Description:	

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2003-1150
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	LILJA INDUSTRIAL CONSTRUCTION

Date:	**8/15/2002**
Permit Type:	**Reroof Permit Commerical**
Description:	**ISSUED STOP WORK/CHARGED DOUBLE FEES: A PORTIAN OF THE**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2002-3639
Status:	final
Valuation:	$71,801.00
Contractor Company:	
Contractor Name:	CENTIMARK CORP

ADJOINING PROPERTY FINDINGS

Date:	**8/15/2002**
Permit Type:	**Reroof Permit Commerical**
Description:	**BLDG #27 ISSUED STOP WORK ORDER/CHARGED DOUBLE FEES PER**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2002-3640
Status:	final
Valuation:	$145,479.00
Contractor Company:	
Contractor Name:	CENTIMARK CORP

22304 HATHAWAY AVE

Date:	**4/12/2011**
Permit Type:	**Miscellaneous Permit**
Description:	**Site electrical work only - 4- 400w fitxtures on 4 poles/ 1- 400w wall pack fixtures/ 1-1000w wall pack fixture**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2011-0886
Status:	final
Valuation:	$15,000.00
Contractor Company:	
Contractor Name:	PERFORMANCE ELECTRIC

ADJOINING PROPERTY FINDINGS

Date:	**4/12/2011**
Permit Type:	**Electrical Permit**
Description:	**Site electrical work only - 4- 400w fitxtures on 4 poles/ 1- 400w wall pack fixtures/ 1- 1000w wall pack fixture**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2011-1078
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PERFORMANCE ELECTRIC

Date:	**3/21/2011**
Permit Type:	**Electrical Permit**
Description:	**Add house meter to existing panel, 200 amps. New address created.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2011-0844
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PERFORMANCE ELECTRIC

ADJOINING PROPERTY FINDINGS

22308 HATHAWAY AVE

Date:	**5/13/2014**
Permit Type:	
Description:	**MARELICH MECHANICAL**
Permit Description:	**EDEN HIST FIRE ANNUAL INSP**
Work Class:	
Proposed Use:	
Permit Number:	FD-2014-0446
Status:	ACTIVE / PERMIT ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OWNER

Date:	**8/8/2013**
Permit Type:	
Description:	**MARELICH MECHANICAL**
Permit Description:	**EDEN HIST FIRE ANNUAL INSP**
Work Class:	
Proposed Use:	
Permit Number:	FD-2013-0768
Status:	COMPLETE / FINALED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OWNER

Date:	**9/28/2012**
Permit Type:	
Description:	**LIBERTY DUCT LLC**
Permit Description:	**EDEN HIST 1-TIME PERMITS**
Work Class:	
Proposed Use:	
Permit Number:	FD-2012-0930
Status:	COMPLETE / FINALED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OWNER

ADJOINING PROPERTY FINDINGS

Date:	**9/28/2012**
Permit Type:	
Description:	**LIBERTY DUCT LLC**
Permit Description:	**EDEN HIST FIRE ANNUAL INSP**
Work Class:	
Proposed Use:	
Permit Number:	FD-2012-0932
Status:	COMPLETE / FINALED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OWNER

Date:	**6/12/2012**
Permit Type:	
Description:	**MARELICH MECHANICAL**
Permit Description:	**EDEN HIST FIRE ANNUAL INSP**
Work Class:	
Proposed Use:	
Permit Number:	FD-2012-0483
Status:	COMPLETE / FINALED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OWNER

Date:	**6/22/2011**
Permit Type:	**Storage Racks**
Description:	**Install pallet racking, 160 linear feet total, over 8 feet high**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2011-1492
Status:	issued
Valuation:	$4,000.00
Contractor Company:	
Contractor Name:	MARELICH MECHANICAL INC.

ADJOINING PROPERTY FINDINGS

Date:	**6/15/2011**
Permit Type:	**Fire Alarm/Detection Systems**
Description:	**New Sprinkler monitering system 7 devices PRIORITY PLAN CHECK**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2011-0618
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SECURITY SIGNAL

Date:	**5/24/2011**
Permit Type:	**Commercial Remodel, Repair, Maint. (int/ext)**
Description:	**Relocate fabrication equipment (36); install compressed air lines; install rooftop exhaust fans; install overhead crane (1)**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2011-1119
Status:	final
Valuation:	$175,000.00
Contractor Company:	
Contractor Name:	MARELICH MECHANICAL INC.

Date:	**5/10/2011**
Permit Type:	**Fire Protection Systems**
Description:	**(4) Sprinkler Heads**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2011-0432
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	INCOM MECHANICAL

ADJOINING PROPERTY FINDINGS

Date:	**4/14/2011**
Permit Type:	**Commercial Remodel, Repair, Maint. (int/ext)**
Description:	**Voluntary accessible restrooms upgrade for (E) warehouse. Reconfiguring 1 existing bathroom to create 2 separate bathrooms.This upgrade is for future use of the building/tenant. Warehouse space is to**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2011-0755
Status:	final
Valuation:	$75,000.00
Contractor Company:	
Contractor Name:	STEVENS HEMINGWAY STEVENS, INC

Date:	**4/14/2011**
Permit Type:	**Commercial Remodel, Repair, Maint. (int/ext)**
Description:	**Power distribution, panels, transformers, etc. to relocated equipment. Equipment to be submitted under separate permit by Marelilch Mechanical.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2011-0860
Status:	issued
Valuation:	$220,028.00
Contractor Company:	
Contractor Name:	PERFORMANCE ELECTRIC

ADJOINING PROPERTY FINDINGS

Date:	**4/14/2011**
Permit Type:	**Electrical Permit**
Description:	**Power distribution, panels, transformers, etc. to relocated equipment. Equipment to be submitted under separate permit by Marelilch Mechanical.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2011-1112
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PERFORMANCE ELECTRIC

Date:	**2/9/2011**
Permit Type:	**Commercial Over the Counter**
Description:	**Interior restroom demolition to include removal of non-bearing wood frame partition, toilets, urinals, lockers, toilet partitions**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2011-0432
Status:	final
Valuation:	$5,000.00
Contractor Company:	
Contractor Name:	COMPLETE DECON INC

ADJOINING PROPERTY FINDINGS

Date:	**3/17/2010**
Permit Type:	**Electrical Permit**
Description:	**New electrical service 800 amp - 480 volt with 1 meter. No previous meter at this location. 1 new 200 amp feeder to existing panel.**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2010-0613
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PERFORMANCE ELECTRIC

SANTA CLARA ST

22423 SANTA CLARA ST

Date:	**6/5/2006**
Permit Type:	**Mechanical Permit**
Description:	**furnace**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2006-2438
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**6/5/2006**
Permit Type:	**Revision Permit**
Description:	**Revision to 2005-2942Revision to trusses**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2006-2435
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**12/12/2005**
Permit Type:	**Electrical Permit**
Description:	**Move the subpanel to new garage with 200 amps, new circuits**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2005-5355
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**8/16/2005**
Permit Type:	**Residential Room Addition w/Subs**
Description:	**Add bedroom with master bathroom.Reference 2005-0048/3383**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2005-2942
Status:	final
Valuation:	$26,079.24
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date: **1/26/2005**
Permit Type: **Residential Interior Improvement**
Description: **Convert portion of existing garage to bedroom, move garage forward, add new**

Permit Description:
Work Class:
Proposed Use:
Permit Number: BI-2005-0048
Status: final
Valuation: $21,993.48
Contractor Company:
Contractor Name:

Date: **1/26/2005**
Permit Type: **Mechanical Res New Sq Footage**
Description: **Convert portion of existing garage to bedroom, move garage forward, add new**

Permit Description:
Work Class:
Proposed Use:
Permit Number: BI-2005-0151
Status: final
Valuation: $21,993.48
Contractor Company:
Contractor Name:

Date: **1/26/2005**
Permit Type: **Electrical Res New Sq. Footage**
Description: **Convert portion of existing garage to bedroom, move garage forward, add new**

Permit Description:
Work Class:
Proposed Use:
Permit Number: BI-2005-0150
Status: final
Valuation: $21,993.48
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **8/31/2004**
Permit Type: **Residential Room Addition**
Description: **Add kitchen, family room, dining room and bedroom, change kitchen to**

Permit Description:
Work Class:
Proposed Use:
Permit Number: BI-2004-3383
Status: final
Valuation: $99,345.83
Contractor Company:
Contractor Name:

Date: **8/31/2004**
Permit Type: **Electrical Res New Sq. Footage**
Description: **Add kitchen, family room, dining room and bedroom, change kitchen to**

Permit Description:
Work Class:
Proposed Use:
Permit Number: BI-2004-4407
Status: issued
Valuation: $99,345.83
Contractor Company:
Contractor Name:

Date: **8/31/2004**
Permit Type: **Mechanical Res New Sq Footage**
Description: **Add kitchen, family room, dining room and bedroom, change kitchen to**

Permit Description:
Work Class:
Proposed Use:
Permit Number: BI-2004-4408
Status: issued
Valuation: $99,345.83
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date:	**8/31/2004**
Permit Type:	**Plumbing Permit**
Description:	**Add kitchen, family room, dining room and bedroom, change kitchen to**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2004-4409
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

22435 SANTA CLARA ST

Date:	**5/23/2007**
Permit Type:	**Miscellaneous Permit (See Notes Below)**
Description:	**Relocate water heater to exterior w/ shelter**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2007-2288
Status:	final
Valuation:	$1,500.00
Contractor Company:	
Contractor Name:	

Date:	**5/23/2007**
Permit Type:	**Plumbing Permit**
Description:	**Relocate water heater to exterior w/ shelter**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2007-2290
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

SONOMA ST

22385 SONOMA ST

Date:	**7/11/2006**
Permit Type:	**Single Family Dwelling with Subs**
Description:	**New manufactured home, state approved bldg and foundation. 1335 square feet**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2006-3088
Status:	pending
Valuation:	$138,547.30
Contractor Company:	
Contractor Name:	

Date:	**7/11/2006**
Permit Type:	**Detached Garage/Carport**
Description:	**Detached gargage (Manufactured home 2006-3088)**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2006-3089
Status:	pending
Valuation:	$13,445.00
Contractor Company:	
Contractor Name:	TC CONDE

ADJOINING PROPERTY FINDINGS

Date:	**3/7/2003**
Permit Type:	**Demolition Permit**
Description:	**Demolish home. Approximately 800 square feet. J#: 1T482**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2003-1077
Status:	issued
Valuation:	$18,000.00
Contractor Company:	
Contractor Name:	

Date:	**9/21/2001**
Permit Type:	**Plumbing Permit**
Description:	**REMOVE/REPLACE GAS WATER HEATER**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2001-5496
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	FAST WATER HEATER COMPANY

22386 SONOMA ST

Date:	**7/1/2009**
Permit Type:	**Graffiti Violations**
Description:	**graffiti that faces Santa Clara 4/cg**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	CP-2009-1039
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**3/15/2007**
Permit Type:	**Reroof Permit Residential**
Description:	**Tear off existing roof. Install a new 30 year comp roof with an underlayment of**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2007-1085
Status:	final
Valuation:	$3,700.00
Contractor Company:	
Contractor Name:	A-N-T ROOFING

W A ST

258 W A ST

Date:	**3/25/2014**
Permit Type:	
Description:	**SOUTH COUNTY HOMELESS**
Permit Description:	**EDEN HIST FIRE ANNUAL INSP**
Work Class:	
Proposed Use:	
Permit Number:	FD-2014-0221
Status:	COMPLETE / FINALED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OWNER

ADJOINING PROPERTY FINDINGS

Date:	**8/21/2013**
Permit Type:	
Description:	**SOUTH COUNTY HOMELESS**
Permit Description:	**EDEN HIST FIRE ANNUAL INSP**
Work Class:	
Proposed Use:	
Permit Number:	FD-2013-0813
Status:	COMPLETE / FINALED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OWNER

Date:	**2/28/2012**
Permit Type:	
Description:	**SOUTH COUNTY HOMELESS**
Permit Description:	**EDEN HIST FIRE ANNUAL INSP**
Work Class:	
Proposed Use:	
Permit Number:	FD-2012-0147
Status:	COMPLETE / FINALED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OWNER

Date:	**6/10/2011**
Permit Type:	**Fire Department Annual Inspection**
Description:	**Care Facility. 24 occupants**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2011-0218
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**11/5/2010**
Permit Type:	**Fire Department Annual Inspection**
Description:	**Annual Fire Department Permit for 24-Hour Care Facility. Fire safety inspection.**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2010-0226
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**5/12/2009**
Permit Type:	**Fire Department Annual Inspection**
Description:	**Annual Fire Department Permit for 24-Hour Care Facility (Non-Profit Organization)**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2009-0174
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**4/9/2008**
Permit Type:	**Fire Department Annual Inspection**
Description:	**Care Facility (Non-Profit Organization)**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2008-0357
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**11/25/2003**
Permit Type:	**Fire Department Annual Inspection**
Description:	**Annual Fire Department Permit for 24-Hour Care Facility (Non-Profit**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2003-1382
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**2/28/2002**
Permit Type:	**Building**
Description:	**Demolition Residential DEMOLISH EXIST HOUSE. (#260 A ST SFD AND GARAGE TO REMAIN.)**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BLD2002-00649
Status:	3D CLOSED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

263 W A ST

Date:	**6/2/2014**
Permit Type:	**Building Electrical**
Description:	**To install a new 6'x2' illuminated wall sign, "Continental". For Hayward Tire Pros.**

Permit Description:	
Work Class:	Sign
Proposed Use:	
Permit Number:	BLD2014-01249
Status:	ISSUED
Valuation:	$2,500.00
Contractor Company:	
Contractor Name:	INTEGRATED SIGN

Date:	**7/31/2007**
Permit Type:	**Re-roofing**
Description:	**Remodel/Repair Commercial RE-ROOF. TEAR OFF EXISTING ROOFING. INSTALL NEW TAR & GRAVEL SYSTEM (CLASS A SYSTEM). 54 SQUARES.**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BLD2007-02155
Status:	3D FINAL
Valuation:	$13,500.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

280 W A ST

Date:	**3/21/2013**
Permit Type:	
Description:	**A STREET TRAILER PARK**
Permit Description:	**EDEN HIST 1-TIME PERMITS**
Work Class:	
Proposed Use:	
Permit Number:	FD-2013-0291
Status:	ACTIVE / PENDING
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OWNER

Date:	**7/10/2002**
Permit Type:	**Community Preservation Violations**
Description:	**Debris outside many units. 4/JH**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	CP-2002-0910
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

287 W A ST

Date:	**12/16/2004**
Permit Type:	**Plumbing**
Description:	**Remodel/Repair Commercial MINOR T.I. TO CONVERT EXISTING VACANT OFFICE SPACE INTO BEAUTY SALON. ONLY ALTERATION IS NEW HOT/COLD PIPING SYSTEM FOR NEW SINKS.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BLD2004-04497
Status:	3D CLOSED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

295 W A ST

Date:	**9/25/2003**
Permit Type:	**Plumbing**
Description:	**Remodel/Repair Commercial INSTALL (N) PLUMBING LINES FOR 3 (N) SINKS IN KITCHEN.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BLD2003-03376
Status:	3D CLOSED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**3/27/2003**
Permit Type:	**Building Electrical**
Description:	**Sign INSTALL SIGN CABINET 29&" X 10 X 8&" DEPTH WITH FLOOR LAMPS INSTALLED AGAINST WALL (FLAT). VINYL LETTERS/ACRYLIC FACE.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BLD2003-00918
Status:	3D CLOSED
Valuation:	$900.00
Contractor Company:	
Contractor Name:	

Date:	**11/27/2001**
Permit Type:	
Description:	**Renewal Residential RENEW 2000-4512, FIRE DAMAGE REPAIRS. ORIG VAL $80,000**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BLD2001-04902
Status:	3D FINAL
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

310 W A ST

Date:	**8/13/2003**
Permit Type:	**Revision Permit**
Description:	**Installation of manufactured awnings**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2003-3593
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	BAY AREA CANVAS INC

Date:	**6/26/2003**
Permit Type:	**PL Administrative Sign Permit**
Description:	**New logo signs for El Acapulco Tequeria**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	PL-2003-0377
Status:	pending
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**6/26/2003**
Permit Type:	**Electrical Permit**
Description:	

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2003-3081
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	CALIFORNIA SIGN INSTALLATION

ADJOINING PROPERTY FINDINGS

Date:	**6/11/2003**
Permit Type:	**PL Sign Permit**
Description:	**Awning - 1dome, 5 traditional**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	PL-2003-0346
Status:	pending
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**5/2/2003**
Permit Type:	**Revision Permit**
Description:	**Modify interior lighting in dining area**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2003-2127
Status:	canceled
Valuation:	$0.00
Contractor Company:	
Contractor Name:	RAYMUNDO F. REYES

Date:	**5/1/2003**
Permit Type:	**Revision Permit**
Description:	**Raise 2' more height for parapet screen wall on top of roof.**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2003-2102
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	RAYMUNDO F. REYES

ADJOINING PROPERTY FINDINGS

Date:	**4/4/2003**
Permit Type:	**Tenant Improvement Commerical**
Description:	**Face lift, site improvement and landscape around a (E) building for**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2003-0314
Status:	issued
Valuation:	$40,000.00
Contractor Company:	
Contractor Name:	RAYMUNDO F. REYES

Date:	**3/4/2003**
Permit Type:	**Community Preservation Violations**
Description:	**Debris garbage and graffiti. 4/JH. CASE CLOSED 03/31/03; ABATED BY**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	CP-2003-0277
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**2/26/2003**
Permit Type:	**Fire Protection Systems**
Description:	**Installation of a (Wet Chemical) Hood and Duct Fire Suppression System**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2003-0170
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SAN FRANCISCO FIRE PROTECTION

ADJOINING PROPERTY FINDINGS

Date:	**1/23/2003**
Permit Type:	**Fire Protection Systems**
Description:	**Installation of a Fire Suppression System**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2003-0042
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SAN FRANCISCO FIRE PROTECTION

Date:	**12/19/2002**
Permit Type:	**Electrical Permit**
Description:	

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2002-5883
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	RAYMUNDO F. REYES

Date:	**11/7/2002**
Permit Type:	**Tenant Improvement**
Description:	**Remodeling of existing restaurant with addition of new kitchen area and ext.**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2002-2014
Status:	final
Valuation:	$45,000.00
Contractor Company:	
Contractor Name:	RAYMOND F. REYES

ADJOINING PROPERTY FINDINGS

Date:	**11/7/2002**
Permit Type:	**Mechanical Permit**
Description:	**Remodeling of existing restaurant with addition of new kitchen area and ext.**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2002-5117
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	RAYMOND F. REYES

Date:	**11/7/2002**
Permit Type:	**Plumbing Permit**
Description:	**Remodeling of existing restaurant with addition of new kitchen area and ext.**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2002-5118
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	RAYMOND F. REYES

ADJOINING PROPERTY FINDINGS

311 W A ST

Date:	**11/13/2007**
Permit Type:	**Electrical**
Description:	**Remodel/Repair Commercial SUPPLEMENTAL TO 2006-01933. RELOCATE EXISTING 300 AMP 480/277 VOLT 3 PHASE ELECTRICAL SERVICE. NEW SUBFEEDER CIRCUIT AND JUNTION BOX AT ORIGINAL SSERVICE LOCATION.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BLD2007-03331
Status:	3D EXPIRED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**8/2/2007**
Permit Type:	**Building Electrical Mechanical**
Description:	**Remodel/Repair Commercial SUPPLEMENTAL TO BLD2004-03814, 2006-01491, AND 2007-01977. MECHANICAL EQUIPMENT (COMPRESSORS, TANKS, ETC) CANOPY & FOUNDATION PER PLANS FOR EXISTING MEAT PROCESSING FACILITY PER PLANS. FOR RAYBERN QUALITY FOODS.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BLD2006-01933
Status:	3D EXPIRED
Valuation:	$150,000.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**8/2/2007**
Permit Type:	**Electrical Plumbing Mechanical**
Description:	**Remodel/Repair Commercial Supplemental permit covering BLD2007-01977, 2006-01491, and 2004-03814 for Raybern Quality Foods within the area of remodel in the building. Covering electrical, plumbing, and mechanical.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BLD2007-02197
Status:	3D EXPIRED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**7/16/2007**
Permit Type:	**Building**
Description:	**Completion Permit Commercial COMPLETION TO 2006-01491, WHICH WAS A RENEWAL TO BLD2004-03814 for a Remodel interior portion of existing meat processing facility; Approx 9800 sq. ft. Install metal insulated ceiling and wall panels (Report # ESR-1143). Install new equipment (ovens and associated meat processing equipment) as shown on plans. Install 2 new access complying bathrooms. (Original valuation $190,000).**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BLD2007-01977
Status:	3D EXPIRED
Valuation:	$19,000.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**3/28/2007**
Permit Type:	**Re-roofing**
Description:	**Remodel/Repair Commercial Reroof: Tear off, Apply base, 2 ply and cool cap (title 24) 200sqs**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BLD2007-00798
Status:	3D CLOSED
Valuation:	$70,000.00
Contractor Company:	
Contractor Name:	

Date:	**10/2/2006**
Permit Type:	**Electrical Plumbing Mechanical**
Description:	**Miscellaneous Commercial SUPPLEMENTAL PERMIT TO BLD2004-03814. Relocate 4 bread ovens per plans. Ovens associated with wholesale meat/food processing facility. [Any use of thes ovens for retail food will require prior written approval of the Alameda County Dept of Environmental Health prior to such use].**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BLD2006-03058
Status:	3D FINAL
Valuation:	$35,000.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**5/25/2006**
Permit Type:	
Description:	**Renewal Commercial Renewal permit covering BLD2004-03814 for a Remodel interior portion of existing meat processing facility; Approx 9800 sq. ft. Install metal insulated ceiling and wall panels (Report # ESR-1143). Install new equipment (ovens and associated meat processing equipment) as shown on plans. Install 2 new access complying bathrooms. (Original valuation $190,000).**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BLD2006-01491
Status:	3D CLOSED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**6/24/2005**
Permit Type:	**Plumbing**
Description:	**Remodel/Repair Commercial SUPPLEMENTAL TO 2004-03814. REPLACE HOT & COLD WATER LINES,**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BLD2005-02028
Status:	3D CLOSED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**3/29/2005**
Permit Type:	**Plumbing**
Description:	**Remodel/Repair Commercial Underground plumbing associated with building interior remodel for BLD2004-03814 application. Separate permit(s) required for all other work associated with proposed building interior remodel. For Raybern Foods (meat processing facility).**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BLD2005-00931
Status:	3D FINAL
Valuation:	$22,000.00
Contractor Company:	
Contractor Name:	

Date:	**10/20/2004**
Permit Type:	**Building**
Description:	**Miscellaneous Commercial Remodel interior portion of existing meat processing facility; Approx 9800 sq. ft. Install metal insulated ceiling and wall panels (Report # ESR-1143). Install new equipment (ovens and associated meat processing equipment) as shown on plans. Install 2 new access complying bathrooms.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BLD2004-03814
Status:	3D CLOSED
Valuation:	$190,000.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

352 W A ST

Date:	**12/15/2008**
Permit Type:	**Community Preservation Violations**
Description:	**and ads, graffiti. 4/CG, Trash, litter and debris, election posters and ads, graffiti. 4/CG**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	CP-2008-2106
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**6/26/2008**
Permit Type:	**Graffiti Violations**
Description:	**GRAFFITI ON VACANT BUILDING 3/MF**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	CP-2008-1108
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date: **4/29/2008**
Permit Type: **Graffiti Violations**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: CP-2008-0541
Status: final
Valuation: $0.00
Contractor Company:
Contractor Name:

Date: **1/29/2008**
Permit Type: **Graffiti Violations**
Description: **the building 3/MF, vacant building with graffiti on the rear of the building 3/MF**

Permit Description:
Work Class:
Proposed Use:
Permit Number: CP-2008-0106
Status: final
Valuation: $0.00
Contractor Company:
Contractor Name:

Date: **8/2/2002**
Permit Type: **PL Variance**
Description: **Variance to have less than the required 10 feet of landscaping along W. A Street.**

Permit Description:
Work Class:
Proposed Use:
Permit Number: PL-2002-0459
Status: pending
Valuation: $0.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **7/8/2002**
Permit Type: **Graffiti Violations**
Description: **Graffiti on building. 4/JH. BILLED $226 ON 07/24/02. CASE CLOSED**

Permit Description:
Work Class:
Proposed Use:
Permit Number: CP-2002-0763
Status: issued
Valuation: $0.00
Contractor Company:
Contractor Name:

Date: **2/5/2001**
Permit Type: **Archive - Code Enforcement**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: CP-2001-0186
Status: final
Valuation: $0.00
Contractor Company:
Contractor Name:

360 W A ST

Date: **7/17/2014**
Permit Type:
Description:

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: BI-2014-2215
Status: COMPLETE / FINALED
Valuation: $0.00
Contractor Company:
Contractor Name: CBA SITE SERVICES

ADJOINING PROPERTY FINDINGS

Date:	**6/10/2014**
Permit Type:	
Description:	**BEST WESTERN**
Permit Description:	**EDEN HIST FIRE ANNUAL INSP**
Work Class:	
Proposed Use:	
Permit Number:	FD-2014-0566
Status:	COMPLETE / FINALED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OWNER

Date:	**8/21/2013**
Permit Type:	
Description:	**BEST WESTERN**
Permit Description:	**EDEN HIST FIRE ANNUAL INSP**
Work Class:	
Proposed Use:	
Permit Number:	FD-2013-0832
Status:	COMPLETE / FINALED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OWNER

Date:	**8/2/2012**
Permit Type:	
Description:	**BEST WESTERN**
Permit Description:	**EDEN HIST FIRE ANNUAL INSP**
Work Class:	
Proposed Use:	
Permit Number:	FD-2012-0643
Status:	COMPLETE / FINALED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OWNER

ADJOINING PROPERTY FINDINGS

Date:	**9/19/2011**
Permit Type:	**Electrical Permit**
Description:	**Cell site modification to add equipment and increase concrete pad inside leased area. (3) antennas, (6) RET's, (6) RRU's, (3) cabinets, and (1) GPS antenna. ELECTRICAL: (2) 2-pole 40A breaker. (1)**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2011-2699
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	C B A SITE SERVICES

Date:	**7/27/2011**
Permit Type:	**Miscellaneous Permit**
Description:	**Cell site modification to add equipment and increase concrete pad inside leased area. (3) antennas, (6) RET's, (6) RRU's, (3) cabinets, and (1) GPS antenna.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2011-1571
Status:	final
Valuation:	$15,000.00
Contractor Company:	
Contractor Name:	C B A SITE SERVICES

ADJOINING PROPERTY FINDINGS

Date:	**5/5/2011**
Permit Type:	**PL Administrative Site Plan Review**
Description:	**Add three facia mounted antennas where to a structure where six antennas exist.**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	PL-2010-0299
Status:	issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**5/6/2010**
Permit Type:	**Fire Department Annual Inspection**
Description:	**Assembley Inspection completed 12/22/09-S.M.**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	FD-2010-0008
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**7/3/2008**
Permit Type:	**Community Preservation Violations**
Description:	**on corner. (At Best Western Inn) 3/MF BASH**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	CP-2008-1169
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**10/19/2005**
Permit Type:	**Electrical Permit**
Description:	**Installation of cellular telephone facility. Six antennas located on roof . Three**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2005-4546
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	HEP ELECTRIC, INC.

Date:	**10/11/2005**
Permit Type:	**Miscellaneous Permit (See Notes Below)**
Description:	**Installation of cellular telephone facility. Six antennas located on roof . Three**

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2005-3483
Status:	final
Valuation:	$35,000.00
Contractor Company:	
Contractor Name:	BUCHANAN GENERAL CONTRACTING

Date:	**7/31/2001**
Permit Type:	**Electrical Permit**
Description:	

Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	BI-2001-4563
Status:	final
Valuation:	$0.00
Contractor Company:	
Contractor Name:	R.A.N. ELECTRIC

GLOSSARY

General Building Department concepts

- **ICC:** The International Code Council. The governing body for the building/development codes used by all jurisdictions who've adopted the ICC guidelines. MOST of the US has done this. Canada, Mexico, and other countries use ICC codes books and guides as well. There are a few states who have added guidelines to the ICC codes to better fit their needs. For example, California has added seismic retrofit requirements for most commercial structures.

- **Building Department (Permitting Authority, Building Codes, Inspections Department, Building and Inspections):** This is the department in a jurisdiction where an owner or contractor goes to obtain permits and inspections for building, tearing down, remodeling, adding to, re-roofing, moving or otherwise making changes to any structure, Residential or Commercial.

- **Jurisdiction:** This is the geographic area representing the properties over which a Permitting Authority has responsibility.

- **GC:** General Contractor. Usually the primary contractor hired for any Residential or Commercial construction work.

- **Sub:** Subordinate contracting companies or subcontractors. Usually a "trades" contractor working for the GC. These contractors generally have an area of expertise in which they are licensed like Plumbing, Electrical, Heating and Air systems, Gas Systems, Pools etc. (called "trades").

- **Journeymen:** Sub contractors who have their own personal licenses in one or more trades and work for different contracting companies, wherever they are needed or there is work.

- **HVAC (Mechanical, Heating & Air companies):** HVAC = Heating, Ventilation, and Air Conditioning.

- **ELEC (Electrical, TempPole, TPole, TPower, Temporary Power, Panel, AMP Change, Power Release):** Electrical permits can be pulled for many reasons. The most common reason is to increase the AMPs of power in an electrical power panel. This requires a permit in almost every jurisdiction. Other commons reason for Electrical permits is to insert a temporary power pole at a new construction site. Construction requires electricity, and in a new development, power has yet to be run to the lot. The temporary power pole is usually the very first permit pulled for new development. The power is released to the home owner when construction is complete and this sometimes takes the form of a Power Release permit or inspection.

- **"Pull" a permit:** To obtain and pay for a building permit.

- **CBO:** Chief Building Official

- **Planning Department:** The department in the development process where the building /structural plans are reviewed for their completeness and compliance with building codes

- **Zoning Department:** The department in the development process where the site plans are reviewed for their compliance with the regulations associated with the zoning district in which they are situated.

- **Zoning District:** A pre-determined geographic boundary within a jurisdiction where certain types of structures are permitted / prohibited. Examples are Residential structure, Commercial/Retail structures, Industrial/Manufacturing structures etc. Each zoning district has regulations associated with it like the sizes of the lots, the density of the structures on the lots, the number of parking spaces required for certain types of structures on the lots etc.

- **PIN (TMS, GIS ID, Parcel#):** Property Identification Number and Tax Map System number.

- **State Card (Business license):** A license card issued to a contractor to conduct business.

- **Building Inspector (Inspector):** The inspector is a building department employee that inspects building construction for compliance to codes.

- **C.O.:** Certificate of Occupancy. This is the end of the construction process and designates that the owners now have permission to occupy a structure after its building is complete. Sometimes also referred to as a Certificate of Compliance.

GLOSSARY

Permit Content Definitions

- Permit Number: The alphanumerical designation assigned to a permit for tracking within the building department system. Sometimes the permit number gives clues to its role, e.g. a "PL" prefix may designate a plumbing permit.
- Description: A field on the permit form that allows the building department to give a brief description of the work being done. More often than not, this is the most important field for EP's to find clues to the prior use(s) of the property.
- Permit Type: Generally a brief designation of the type of job being done. For example BLDG-RES, BLDG-COM, ELEC, MECH etc.

Sample Building Permit Data

Date: Nov 09, 2000
Permit Type: Bldg -
New Permit Number: 101000000405
Status: Valuation: $1,000,000.00
Contractor Company: OWNER-BUILDER
Contractor Name:

Description: New one store retail (SAV-ON) with drive-thru pharmacy. Certificate of Occupancy.

FIRE DEPT. COPY

HAYWARD FIRE DEPARTMENT

Office of the Fire Marshal
777 B Street, Hayward, CA 94541-5007

PERMIT

Fire Dept. Permit No.: FD-2012-0746

Issue Date: 9/11/2012

Expiration Date: 8/24/2013

☐ **Urban Wildland Interface**

☐ **Fairview Fire Protection**

Permit Type: Mobile on-site fueling service

Project: COSTCO STORE #823 - HATHAWAY AVE

Job Address: 22330 HATHAWAY AVE
HAYWARD, CA 94541-4861

Contractor: DIESEL DIRECT WEST

Applicant: DIESEL DIRECT WEST
(916) 857-1000

Valuation: $ 0

Description of Proposed Work: Mobile Fueling

Type of Improvement:

Type of Fire Protection System:

Number of Heads:

Number of Devices:

Type of Annual Permit:

Type of One-Time Permit:

Type of Outside Agency Permit:

Fee		Amount	
Fee for Haz Mat Project	$	142.00	100-1922-4428
0502 FPO fee - Haz Mat Project	$	210.00	100-1923-4842
TOTAL:	$	352.00	

TEL (510) 583-4900 ~ FAX (510) 583-3641 ~ TDD (510) 247-3340

This permit does not become valid until signed by the Fire Marshal or his/her designated representative, all fees are paid and receipt is acknowledged in the space provided.

Fire Marshal Signature: NM

RECEIPT - MACHINE VALIDATION

PAID Ck #1332/7406

SEP 12 2012

HAYWARD FIRE DEPARTMENT

OFFICE OF THE FIRE MARSHAL

Final Approval Requirements

Building Permit Number: NA

Fire Permit Number: **FD 2012-0746**

Tenant: Costco (Mobile Fleet Fueler – Diesel Direct West)

Job Address: 22330 Hathaway Street

Reviewed By: Hugh Murphy

Date: September 5, 2012

Proposed Work: Mobile Fleet Fueling

This plan check is not to be construed as an approval for any code items not noted, or commented on. It is the contractor's responsibility to conform to the provisions of all relevant laws, codes, ordinances, rules and regulations.

PROJECT DESCRIPTION

Diesel Direct West is proposing to provide mobile diesel fueling via a fuel truck for fleet vehicles for Costco at 22330 Hathaway Street, Hayward.

CONDITIONS OF APPROVAL

Hazardous Materials

In accordance with the provisions of applicable local, state, and/or federal statutes, ordinances, rules, codes, and regulations, the mobile fueling business named herein (Permittee) is hereby granted a permit to engage in the operation described and at the site specified subject to the following terms and conditions:

1. The permittee shall comply with all applicable provisions and requirements of the 2010 California Fire Code Section 3406 (Special Operations), the Unified Program for hazardous materials and hazardous waste management (CUPA) program, and the City of Hayward's Stormwater Management and Urban Runoff Control Program.

2. The transport and handling of any diesel fuel, including any waste fuel, shall not cause an unauthorized release of hazardous materials/hazardous waste or pose a significant risk of such unauthorized release.

3. Upon request, Permittee shall file with the Hayward Fire Department a written description of its operation and how it meets or exceeds the prescribed fire protection requirements.

4. Permittee shall notify the Hayward Fire Department of substantial changes in the quantity of diesel fuel delivered into the site specified by the Operational Address in this permit (Operational Site), of substantial modification or repair of the holding, dispensing, and

handling equipment, and/or of substantial changes in the operations and ownership of Permittee which may require a new permit and/or other additional permits or licenses.

5. Permittee shall take all necessary steps to ensure discovery, containment, and cleanup of any confirmed or unconfirmed unauthorized release of any diesel fuel and shall notify the Hayward Fire Department of such unauthorized release.

6. Permittee shall arrange with owners or operators of the Operational Site to authorize representatives of the Hayward Fire Department to enter the Operational Site for inspection purposes to ascertain compliance with and cause correction of any violation of these permit conditions, or of any applicable ordinances, codes, laws, statutes, rules, or regulations.

7. In case of an ownership change, the Permit may be transferred to new owners of Permittee under terms and conditions imposed by, and subject to the approval of the Hayward Fire Department.

8. This Permit/ may be subjected to remedial action arising from the acts or omissions of Permittee.

9. Thirty (30) days prior to the expiration date indicated on this Permit/to Operate, a request for inspection must be submitted in writing to the Hayward Fire Department.

10. This Permit shall not become effective until it has been signed and accepted by Permittee or by a person having the legal authority to sign for Permittee.

11. This Permit does not take the place of any other permit or license required by law.

12. Permittee shall notify the Hayward Fire Department of the termination of any agreement between Permittee and the owners or operators of the Operational Site at least thirty (30) days prior to a final operation of Permittee at the Operational Site.

General Requirements

1. **Work Commence** – Fueling shall not commence without approved plans or verification field inspection unless specifically allowed by the Fire Chief or his/her designatee.
2. **Emergency Access** – The parking of fueling vehicles or vehicles waiting to be fueled shall not impede the emergency access for the Hayward Fire Department.
3. **Annual Permit** – An annual permit shall be required to be maintained for the mobile fueling operation at this address.
4. **Additional Fire/Hazardous Materials Inspection Fee(s)** – Additional fee(s) will be imposed for any additional fire/hazardous materials inspections that are requested and/or required.
5. **Final Hazardous Materials Inspection Required** – A final inspection is required to verify that requirements of this permit have been met. Please contact the Hazardous Materials Office at (510) 583-4910 at least 48 hours before the desired final inspection appointment.

HAYWARD FIRE DEPARTMENT
HAZARDOUS MATERIALS OFFICE
777 B STREET
HAYWARD, CA 94541
TELEPHONE (510) 583-4040

This plan check shall [illegible]
to be an approval for [illegible]
of the provisions of [illegible]
Code or other ordinances [illegible]
Ordinance
Approval of plans and specifications [illegible]

Reviewed by _____

Date _____

COSTCO
parks in designated
parking spots - number 0
perimeter

Drivers can have
no access of 80' PK
on hose out.
(8 gal of Fuel)

Hayward Fire Department
Permit Application

Contractor

☒ I hereby affirm that I am licensed under provisions of Chapter 9 (commencing with Sec. 7000 of div. 3 of the Business and professions Code, B&P c) and my license is in full force and effect.

Owner/Builder

☐ I hereby affirm that I am exempt from the Contractor's License Law for the following reason: Sec. 703.5 B&PC. Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance also requires the applicant for such permit to file a signed statement that applicant is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 commencing with Sec. 7000 of Div. 2 of the B&PC) or is exempt there from and the basis for the alleged exemption. Any violation of Section 7031.5 by an applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars. ($500.00)

☐ I, as owner of the property, or my employees with wages as sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, B&PC). The Contractor's License Law does not apply to an owner of property who builds or improves thereon and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of providing that he did not build or improve for the purpose of sale.

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project in conformance with Sec. 7044, B&PC. Subject to certain limitations, the Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for each project with a contractor(s) licensed pursuant to the Contractor's License Law.

☐ I am exempt under Sec. ____B&PC for this reason:

Worker's Compensation

☐ I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Workers' Compensation Insurance, or a certified copy thereof (Sec. 38000, Labor Code).
INSURANCE COMPANY
POLICY NUMBER

☐ Copy is filed with the City.

☐ Certified copy is hereby furnished.

Certificate of Exemption from Workers' Compensation Insurance

This section need not be completed if the permit is for one hundred dollars ($100.00) or less.

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Fire Permit No.: FD-2012-0746
Bldg. Permit No.:
Project: Costco
Job Address: 22330 Hathaway Apt/Suite
City: Hayward State: CA Zip Code: 94541
Fee: $ $352

Description of Proposed Work:
Mobile Fueling

Property Owner: SAME AS ABOVE
Address: Apt/Suite
City: State: Zip Code:

Is Owner Applicant? ☐ YES ☐ NO

Applicant: Diesel Direct West
Address: 4412 Harlin Dr Apt/Suite
City: Sacramento State: CA Zip Code: 95826
Phone: 916-857-1000 FAX:

Contractor's Name:
Address Apt/Suite
City: State: Zip Code:
California License No. / Class:
Hayward Business License No.: 147785

I certify that I have read this application and state that all information provided is correct. I agree to comply will all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of the City of Hayward to enter upon the job location for inspection purposes

SIGNATURE OF APPLICANT **DATE** 8/21/12

Fire Prevention - Hazardous Materials
777 B. Street, Hayward, California 94541, 510-583-4900 FAX 510-583-3641

Western Operations

1252 Quarry Lane
Pleasanton, CA 94566
(415) 426-2600
Fax (415) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

June 18, 1990

Clayton Project No. 29486.00

Mr. Hugh Murphy
City of Hayward
Fire Services/Hazardous Materials
22300 Foothill Blvd., 5th Floor

Re: Phase Environmental Assessment at The Price Company
22300 Hathaway Avenue in Hayward, California

Dear Mr. Murphy:

Clayton Environmental Consultants is pleased to provide you with a copy of our Phase I Environmental Assessment at The Price Company, 22300 Hathaway Avenue in Hayward, California. The assessment is targeted at Price Company's proposed site for the construction of a new warehouse and is not aimed at the existing structures at the same address.

Please contact us should you have any questions concerning this report and it's contents.

Sincerely,

Shri Nandan, P.E.
Vice President and Director
Environmental Engineering Services

SN/mj
Enclosure

Western Operations

1252 Quarry Lane
Pleasanton, CA 94566
(415) 426-2600
Fax (415) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

Phase I Environmental Assessment
at
22300 Hathaway Avenue
Hayward, California
for
The Price Company

Clayton Project No. 29486.00

June 18, 1990

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1 Location and Topographic Map

2 Diagrammatic Location/Vicinity Map

Executive Summary

The Price Company retained Clayton Environmental Consultants, Inc. to conduct a Phase I environmental assessment (assessment) of the property located at 22300 Hathaway Avenue in Hayward, California. The area included in this assessment is defined by the dashed lines in Figure 2 and labeled "Proposed Warehouse Site." This property is the proposed location of a Price Company warehouse. The assessment was authorized by Ms. Kathy Nishihira, Manager of Real Estate Development for the Price Company, on June 11, 1990 by accepting Clayton's Proposal No. 90-B-135 of May 15, 1990 and its accompanying Terms and Conditions.

This assessment was performed to provide an independent, professional opinion of the environmental conditions and potential environmental liabilities, if any, associated with the site.

Mr. Michael Johnson, Clayton geologist, inspected the site on Wednesday, June 13, 1990. The assessment also included a search for available documents pertaining to the site and its local area. The investigation did not include any physical sampling at the site.

Our findings are as follows:

- No indications (fill ports, vent pipes, dispensing pumps) of USTs were observed on the subject site during the walkthrough.
- No electrical transformers were observed onsite.
- No suspect asbestos-containing structural materials were observed onsite since there are no buildings or structures at the site.
- The site is located within a 1/2 mile of seven "leak" sites. Six of these sites are hydraulically crossgradient to the subject site ,and therefore, should not pose a threat to soil or groundwater conditions at the Price Company site. Sunset High School, located at 22100 Princeton in Hayward, California is the only site upgradient from the Price Company. However, this site poses a minimal threat to the subject site since the principally responsible party has been identified. Soils contaminated with waste oil may be easily remediated by excavation or biodegradation. It is not known whether groundwater has been impacted at this site. Groundwater is anticipated to be deeper than 42 feet bgs.
- Information gathered on the former practices and uses of chemicals at The United Can Company (United Can), a former occupant at this address, is insufficient to assess any impact they may have had on the subsurface.

Based on the results of this investigation, Clayton recommends that Price Company:

- Clayton recommends that a more thorough record search be conducted on the former United Can operations to better assess any environmental impacts. This includes records at the RWQCB and the County Planning Department.

- A review of RWQCB files periodically to monitor the status of cleanup activities at the seven leak sites located within a 1/2 mile radius of the site and take appropriate action, including installation of monitoring wells, in the event a "leak" case threatens to impact this site.

- Clayton is proceeding with the procurement of available information at the Regional Water Quality Control Board (RWQCB), and the County Planning Department and will provide the information when available. The files at the board were not available for inspection due to remodeling and relocation during the week of June 11, 1990.

1.0 INTRODUCTION

Ms. Kathy Nishihira retained Clayton Environmental Consultants, Inc. to conduct a Phase I environmental assessment (assessment) of the property located at 22300 Hathaway Avenue in Hayward, California. The Price Company proposes to build a warehouse on this property. The assessment was authorized by Ms. Nishihira on June 11, 1990 by accepting Clayton's Proposal No. 90-B-135 and its accompanying terms and conditions with requirements to have a report by June 18, 1990.

Mr. Michael Johnson, Clayton geologist, conducted the site walkthrough on Wednesday, June 13,1990.

1.1 PURPOSE

The purpose of this study was to assess whether the site is associated with any environmental concerns attributable to past or current operations. Appropriate industry standards were used in keeping with innocent landowner and due diligence requirements, under the Superfund Amendments and Reauthorization Act (SARA).

1.2 SCOPE OF WORK

In a Phase I environmental assessment, Clayton reviews the following:

- Possible sources of potentially hazardous or toxic materials, including polychlorinated biphenyls (PCBs), asbestos, and petroleum products
- General waste disposal practices
- Storage of potentially hazardous materials in underground and aboveground storage tanks and containers
- Past and existing operations to determine impact on the environmental status of the site

The assessment included a walkthrough of the facility and property; a review of files maintained by regulatory agencies; interviews with persons who have had prior involvement at the present site location; and a review of other information necessary and appropriate to make the statements and reach the conclusions set forth here. Because of severe time limitations to conduct this assessment, we were unable to collect information from the County Planning Department and the Regional Water Quality Control Board (RWQCB). Additionally we did not examine aerial photographs which is normally done in a Phase I assessment.

2.0 PROPERTY DESCRIPTION

The subject site is located at 22300 Hathaway Avenue in Hayward, California (Figure 1) in the northeast portion of the parcel (area within dashed lines in Figure 2). The site is owned by the Price Company under the parcel reference number 429-82-1-8 with the state of California and the city of Hayward. Located adjacent to site are two

buildings; the first, a main warehouse used for the storage of goods such as hardware, appliances, clothing, and food items for retail sales and the Price Company Auto Center (Figure 2).

This report focuses on the proposed site location for the new warehouse to be built east of the existing warehouse. A site location and topographic map is provided in Figure 1. Figure 2 presents information on the site and its immediate surroundings.

2.1 REGIONAL HYDROGEOLOGIC SETTING

Clayton contacted Mr. Hugh Murphy of the City of Hayward Fire Department (HFD) for filed information on monitoring wells near the site that would yield local groundwater data. The HFD file for United Can, located at Burbank and C street, east of the site (Figure 1), contained a December 1989 report that groundwater was expected to be at a depth of 45 feet below ground surface. In that same document it was reported that groundwater had not been reached in a borehole drilled to 42 feet.

This is the only information on depth to groundwater near the subject site that Clayton was able to obtain. In a conversation with Mr. Hugh Murphy, he indicated that the regional hydrogeologic gradient slopes toward the Nimitz freeway (Interstate 880) and W. Avenue A intersection, in a southwesterly direction from the site, and generally parallels surface topography. The local gradient beneath the site may be influenced by naturally occurring zones of higher permeability such as buried stream channels, or artificially influenced by nearby well pumping or recharge, and seems in this case to deviate from the regional gradient.

2.2 HISTORY OF LAND USE

Aerial photographs available at Pacific Aerial Surveys in Oakland, California, are customarily reviewed to evaluate past land uses at and near a site. Due to time constraints, these photographs could not be reviewed.

Clayton contacted Mr. Gary Suza, an employee of the United Can who stated that the property at 22300 Hathaway Avenue was occupied by United Can from 1923, when constructed, until it was dismantled in the early to mid 1980s. Mr. Suza also recalled several vacant warehouses on this property prior to construction of the presently existing warehouse about 1984.

3.0 ONSITE FINDINGS

This section presents our findings concerning potential onsite environmental impairments.

3.1 UNDERGROUND STORAGE TANKS, SUMPS, PONDS

The use of underground storage tanks (USTs) for storage of hazardous or toxic materials/wastes is regulated on the state and federal level. Underground storage

systems can become an environmental liability if a leak results in soil and groundwater contamination.

Clayton reviewed Nordmo Associates, Inc., Soil Contamination Evaluation Report (SCER), dated February 6, 1984, and the Hayward Fire Department tank removal permit application. These documents indicated that two underground gasoline tanks and one underground fuel oil tank existed at the subject facility before 1984. The gasoline tanks were removed and the fuel oil tank was closed in place by filling with a concrete slurry in February, 1984.

The Nordmo SCER documented that soil samples were taken beneath these tanks at 7 feet below ground surface (bgs). The soils reportedly did not have an odor, and when heated, did not emit a detectable hydrocarbon vapor. There was no documentation in the report that any further chemical or hydrocarbon analysis of the soil samples was done.

The HFD files contained a report that an underground storage tank (UST) labeled "corrosive" was removed from United Can prior to 1984. There was no indication in the file regarding the tank's contents or whether samples were taken in the vicinity of this tank.

Clayton was unable to obtain specific information regarding the location where these tanks were located. Therefore, Clayton does not know whether the former USTs were within the boundaries defined by the dashed lines in Figure 2, the area under consideration for this assessment. Clayton collected soil samples from four boreholes drilled within this area on June 4, 1990 and analyzed these samples for petroleum hydrocarbons and for various metals as part of a soil investigation for the new facility. The report of the soil investigation is pending completion of the fifth borehole. Four of the five proposed boreholes have been completed, samples, and analyzed. No indications of contamination have been detected in these samples.

No indications of USTs (ie. fill ports, vent pipes, dispensing pumps) were observed on the subject site during the site walkthrough. No sumps or ponds were observed during the walkthrough.

3.2 PCB-CONTAINING MATERIALS

During the site walkthrough, the site was inspected for the presence of liquid-cooled electrical units (transformers and capacitors). Such units are notable because they may be PCB sources. PCB units may subject the owner/operator to various regulatory requirements. The release of PCB fluids or their combustion products (in the event of a fire) is a potential environmental liability and may require costly remediation.

There were no suspect sources of PCB's at the proposed construction site observed during the site walkthrough.

3.3 CHEMICAL AND WASTE STORAGE

There were no potentially hazardous or toxic materials observed at the site during the site walkthrough. However, HFD files indicate that former operations of United Can, which may have been located on the adjacent areas west of the subject site, used substances such as lead solder, lacquers for coating cans, thinners, chlorinated solvents, and corrosives during past operations at the site vicinity. According to Mr. Murphy of the HFD the facility once used a system of trenches in the ground to collect these materials when spent or spilled. There is no file information on what may have become of these trenches.

Clayton has included the analyses of lead to be run on soil samples collected from the site on June 4, 1990 as proposed in Clayton's May 22, 1990 letter. Nevertheless, additional information is needed on United to properly assess potential environmental impact of the possible corrosive materials contained in the tank, and the management of chemicals on this site.

3.4 ASBESTOS-CONTAINING MATERIALS

During the site walkthrough, Clayton briefly inspected the facility for the presence of materials commonly known to contain asbestos. There are no structures such as floors, walls, ceilings, pipes or insulation on the subject site, and hence, no visible sources of asbestos were observed during the site walkthrough.

4.0 REGIONAL FINDINGS

Clayton reviewed information on nearby sources that could pose a potential threat to the subject site. This section presents our findings.

4.1 ADJACENT PROPERTIES

The site is in a commercially zoned area. The following describes the properties adjacent to the site:

- To the northeast are several small businesses along Meekland Avenue, across from the railroad tracks, including Tommy's Auto Body Shop, an unidentified auto body shop, and Lemasney Brothers Piano and Furniture Refinishing.
- To the southeast is the West Avenue A Overpass, and located under the overpass, Sysco Frozen foods, which appears to be a trucking/distribution facility.
- To the northwest is the Price Company Auto Repair Center and The Price Company Warehouse.
- To the northeast is an asphalt parking area and Hathaway Avenue.

4.2 REGULATORY AGENCY REVIEW

Clayton consulted the following references that have been prepared by public agencies:

- Hazardous Waste and Substances Sites List, State of California Office of Planning and Research, June 1989
- Environmental Protection Agency (EPA), National Priorities List (NPL), October 4, 1989
- Expenditure Plan for the Hazardous Substance Cleanup Bond Act of 1984 (State Superfund), California Department of Health Services (DHS), January 1989
- RWQCB, Leaking Underground Fuel Tank list, May 17, 1990
- North Bay Site Management System Milestone Reports, RWQCB, San Francisco Bay Region, September 1989

The following agencies were contacted during the course of our assessment:

- Pacific Aerial Surveys, Aerial Photography Library
- RWQCB, San Francisco Bay Region
- City of Hayward, Hazardous Materials Division
- The County of Alameda Tax Assessors Office

From the above resources, Clayton identified seven underground storage tank fuel leaks within a 1/2-mile radius of the subject site. These are:

- Sunset High School at 22100 Princeton in Hayward, California. USTs were removed from the site on 12/22/86. Contamination was found in soils in the vicinity of a waste oil tank. No clean up actions are on file to date. The school is located approximately 1/2 mile away and is upgradient.
- Anchor Glass (formerly, Diamond Bathurst) at 22302 Hathaway in Hayward, California. One gasoline and one diesel tank was removed from this facility in August, 1985. Soil and groundwater contamination has been confirmed at this site. A February 24, 1986 report revealed that groundwater at the site contained 1.4 parts per billion (ppb) toluene and 1.1 ppb xylene. This site is immediately adjacent to the Price Company warehouse to northwest and is crossgradient.
- United Can at Burbank and C Street in Hayward , California. In a January 1989 report soil contamination was found at a depth of 42 feet bgs from a UST leak. The site is approximately 1/2 mile away and is crossgradient.

- Vic Hubbard at 411 W. Ave. A in Hayward, California. Water samples have been collected from the site annually since 1987. Except for the year 1988, all samples have had non detectable levels of volatile hydrocarbons. This site is less than 1/2 mile away and is crossgradient.

- Mobil at 525 W. Ave. A in Hayward, California. Files were not found for this site. This site is within a 1/2 mile radius and is crossgradient.

- Accurate Auto Service at 580 W. Ave. A in Hayward, California. A leak report stated that soil contamination exists from a waste oil tank. This site is less than 1/2 mile away and is crossgradient.

- Thrifty Oil Company at 700 W. Ave. A in Hayward, California. The site was once a gasoline service station. Contamination has been documented in the groundwater at this site. It is located 1/2 mile away and is crossgradient.

No additional sites located within 1 mile of the subject property were listed which have documented environmental problems.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on Clayton's limited investigation, which included a site visit, review of regulatory agency records, and interviews, Clayton provides the following conclusions and recommendations:

- No indications (fill ports, vent pipes, dispensing pumps) of USTs were observed on the subject site during the walkthrough.

- No electrical transformers were observed onsite.

- No suspect asbestos-containing materials were observed onsite since there are no structures at the subject site.

- The site is located within a 1/2 mile of seven "leak" sites. Six of these sites are hydraulically crossgradient to the subject site, and therefore, should not pose a threat to soil or groundwater conditions at the Price Company site. Sunset High School, located at 22100 Princeton in Hayward, California is the only site upgradient from the Price Company. However, this site poses a minimal threat to the subject site since the principally responsible party has been identified. Soils contaminated with waste oil may be easily remediated by excavation or biodegradation. it is not known whether groundwater has been impacted at this site. Groundwater is anticipated to be deeper than 42 feet bgs.

- Information gathered on the former practices and uses of chemicals at United Can, a former occupant at this site, is insufficient to assess the effects they may have had on the environment.

Based on the results of this investigation, Clayton recommends that Price Company:

- Clayton recommends that a more thorough record search be conducted on the former United Can operations to better assess any environmental impacts. This includes records at the RWQCB and the County Planning Department.

- A review of RWQCB files periodically to monitor the status of cleanup activities at the seven leak sites located within a 1/2 mile radius of the site and take appropriate action, including installation of monitoring wells, in the event a "leak" case threatens to impact this site.

- Clayton is proceeding with the procurement of available information at the Regional Water Quality Control Board (RWQCB), and the County Planning Department and will provide the information when available. The files at the board were not available for inspection due to remodeling and relocation during the week of June 11, 1990.

6.0 DISCLAIMER

The information and opinions rendered in this report are exclusively for your use and will not be distributed or published without your consent. The information in this report is given in response to your limited assignment and should be evaluated only in light of that assignment. We accept responsibility for the competent performance of our duties in executing the assignment and preparing this report in accordance with the normal standards of our profession, but disclaim any responsibility for consequential damages.

This report prepared by:

Michael W. Johnson
Geologist

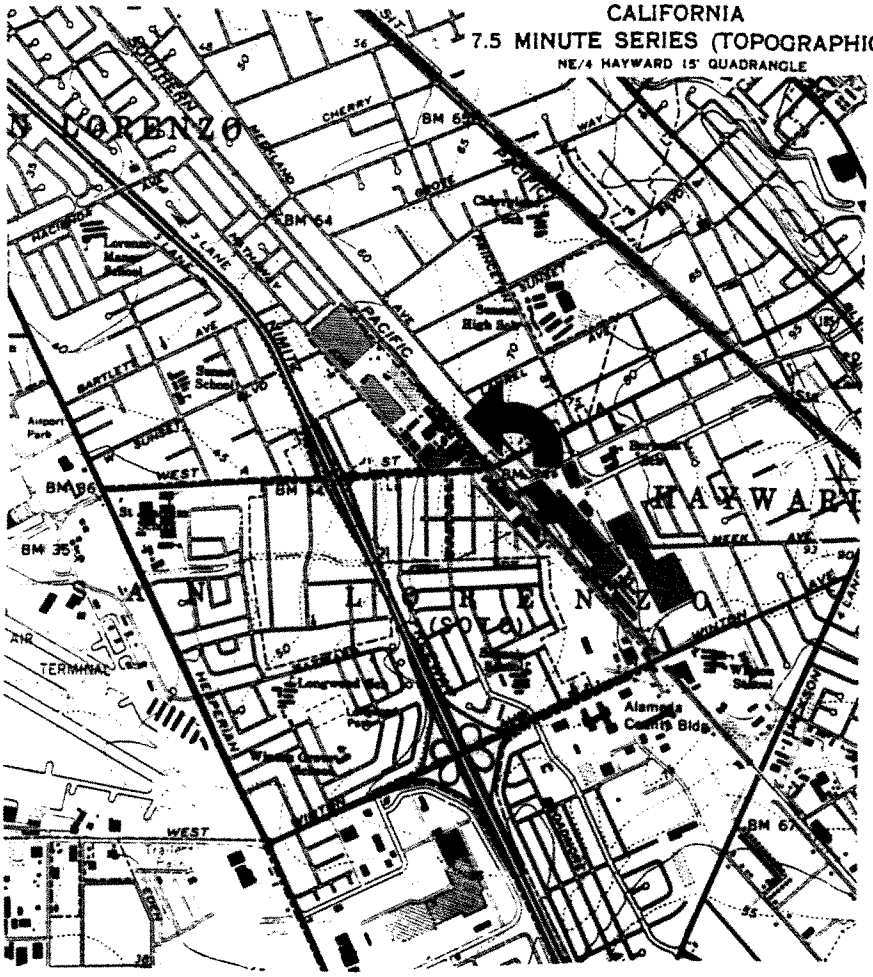
This report reviewed by:

Shri Nandan, P.E.
Vice President and Director
Environmental Engineering Services
Western Operations

June 18, 1990

FIGURES

HAYWARD QUADRANGLE
CALIFORNIA
7.5 MINUTE SERIES (TOPOGRAPHIC)
NE/4 HAYWARD 15' QUADRANGLE



SCALE 1:24 000

1 ½ 0 1 MILE

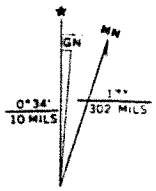
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT 5-FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

QUADRANGLE LOCATION

UTM GRID AND 1980 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

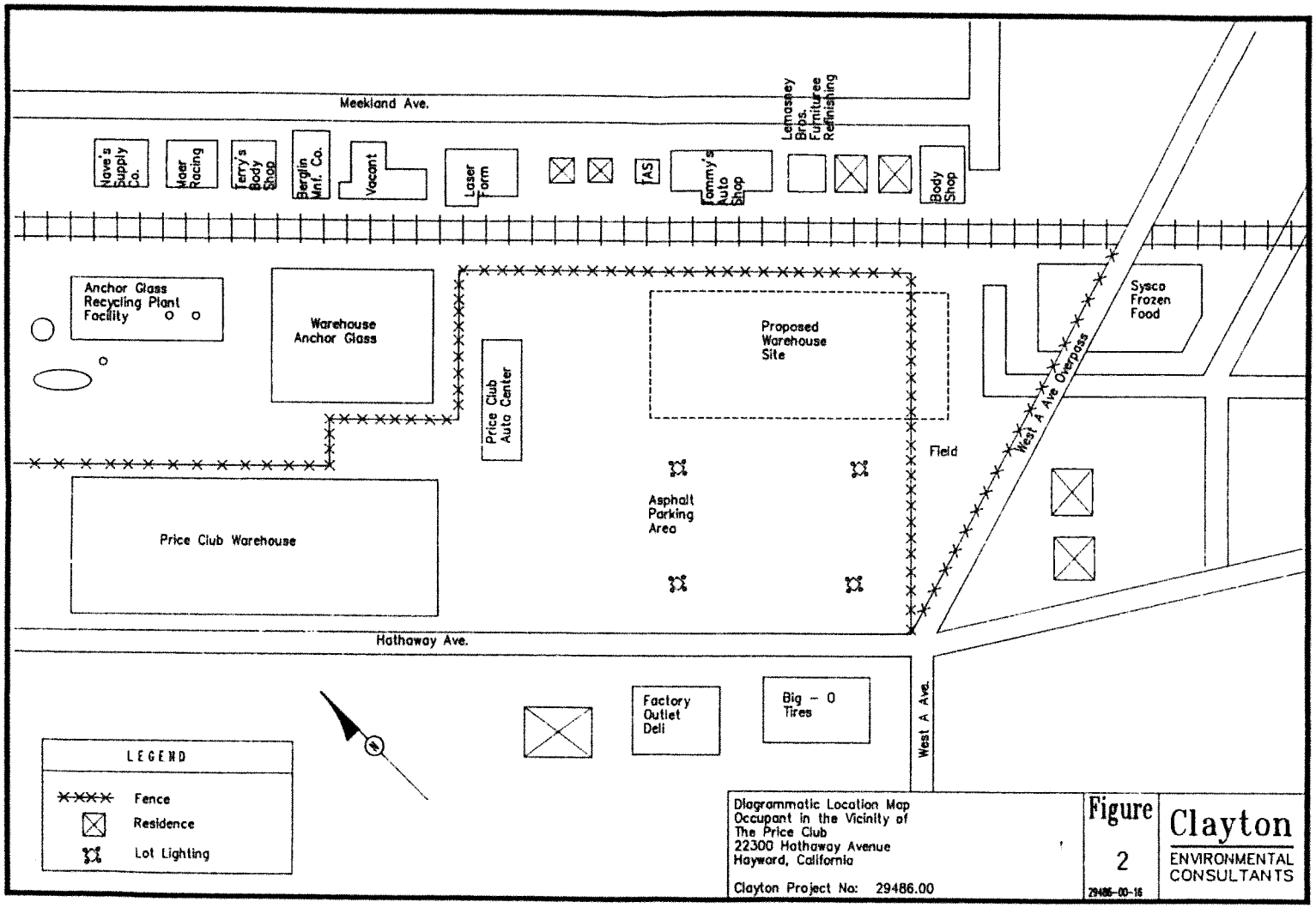


Location and Topographic Map
Price Company Warehouse
22300 Hathaway Avenue
Hayward, California

Clayton Project No: 29486.00

Figure
1

Clayton
ENVIRONMENTAL
CONSULTANTS



Diagrammatic Location Map
Occupant in the Vicinity of
The Price Club
22300 Hathaway Avenue
Hayward, California

Clayton Project No: 29486.00

Figure 2

29486-00-16

Clayton
ENVIRONMENTAL CONSULTANTS

APPLICATION FOR FIRE DEPARTMENT PERMIT

CITY OF HAYWARD FIRE DEPARTMENT - FIRE PREVENTION BUREAU

22700 MAIN STREET, HAYWARD, CALIFORNIA 94541 • 881-6927

PERMIT NUMBER
FD 000598
APPLICATION RECEIVED
DATE 2-2-84
BY

CONTRACTOR

☐ I hereby affirm that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

OWNER/BUILDER

☐ I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construction, alter, improve, demolish, or repair any structure, prior to its issuance also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 commencing with Section 7000 of Division 3 of the Business and Professions Code) or that is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by an applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden or proving that he did not build or improve for the purpose of sale).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for each projects with a contractor(s) license pursuant to the Contractor's License Law).

☐ I am exempt under Sec. _____ B.&P.C. for this reason _____

WORKERS' COMPENSATION

☐ I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Workers' Compensation Insurance, or a certified copy thereof (Sec. 3800, Labor Code).

POLICY NO. _____

COMPANY _____

☐ Copy is filed with the city.

☐ Certified copy is hereby furnished.

CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE
(This section need not be completed if the permit is for one hundred dollars ($100) or less.)

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

LENDER

☐ I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civil Code).

Lender's Name _____

Lender's Address _____

☐ I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection purposes.

Signature of Applicant or Agent _____ Date _____

JOB LOCATION

JOB ADDRESS: 22300 HAYWARD AVE. HAYWARD
LOT / TRACT / ASSESSOR'S NO.

CONDITION OF SOIL AT JOB SITE: ☒ ORIGINAL ☐ COMPACTED FULL ☐ LOOSE FILL

NO. OF EXISTING BUILDINGS ON LOT AND USE: 1 (ONE) BUILDING

CONTRACTOR

NAME: R.L.F INC.
ADDRESS: 416 SOUTH MAGNOLIA
CITY / ZIP / TELEPHONE: EL CAJON, CA. 92021 619-588-4094
STATE LICENSE / CLASS NO. / CITY LICENSE NO.

OWNER

NAME (OR NAME OF BUSINESS): PRICE CLUB
MAILING ADDRESS: 22300 HAYWARD
CITY / ZIP / TELEPHONE: HAYWARD CA

OCCUPANCY - AREA

OCCUPANCY: A B E H I M R Div.

TYPE OF CONSTRUCTION: I II IIIN., 1-Hr., H.T. IVN., 1-Hr. V

NO. OF STORIES: 1 TOTAL HEIGHT: 35FT AREA OF LOT: 6[illegible] SF

FLOOR AREA MAIN BLDG. (1st Floor): 156,000SF (2nd Floor) _____

TOTAL FLOOR AREA: 156,000 SF

_____ APP. _____ _____ APP. _____
_____ APP. _____ _____ APP. _____

PROPOSED WORK

WORK TO BE DONE: ☐ NEW ☐ ALTER ☐ MOVE ☐ ADD ☐ REPAIR ☒ DEMOLISH

DESCRIBE:
DIGOUT GAS TANKS (2)
PUMP OUT FUEL OIL TANKS-
FILL WITH SAND AND DESTROY

VALUATION —

FIRE PREVENTION

PLAN CHECKING FEE: 300.00
ACCOUNT NO.: 7073
BLDG. PERMIT NO.: 0

THIS IS YOUR RECEIPT WHEN MACHINE VALIDATED

PAID BY CK 3106

OFFICE COPY - White INSPECTOR - Goldenrod APPLICANT - Pink FINANCE - Yellow (Screened) CONTROL - Green

NORDMO ASSOCIATES, INC.
Geotechnical Consultants
2391 Zanker Road Suite 340 San Jose, CA 95131 (408) 263-7077

February 6, 1984
Project 0435-03

Mr. Donald M. Burke III
The Price Company
2657 Ariane Drive
San Diego, CA 92117

Dear Don:

Soil Contamination Evaluation
Price Club Facility Site
Hayward, California

In accordance with a request from the City of Hayward, we have examined and tested soil samples obtained from below the bottom of underground tanks removed from the pavement area of the subject site. They are identified as the west concrete tank, main automobile service tank and the east concrete tank. The maximum tank depth was seven feet. The tanks were used for storage of fuels.

All three samples are odorless and have no visual contamination. When dried at 110 degrees C, no fume was noted. The samples are similar to those obtained during our soil investigation. Overall, we are of the opinion that the soils have not been contaminated by the fuels that were in the tanks.

Respectfully submitted,

NORDMO ASSOCIATES, INC.

K. P. Nordmo, RCE 21351

KPN/sw
Copies: Addressee (2)
City of Hayward (2)

Mailing Address P.O. Box 61742 Sunnyvale, Ca. 94088

NORDMO ASSOCIATES, INC.
Geotechnical Consultants
2391 Zanker Road Suite 340 San Jose, CA 95131 (408) 263-7077

February 6, 1984
Project 0435-03

Mr. Donald M. Burke III
The Price Company
2657 Ariane Drive
San Diego, CA 92117

Dear Don:

Soil Contamination Evaluation
Price Club Facility Site
Hayward, California

In accordance with a request from the City of Hayward, we have examined and tested soil samples obtained from below the bottom of underground tanks removed from the pavement area of the subject site. They are identified as the west concrete tank, main automobile service tank and the east concrete tank. The maximum tank depth was seven feet. The tanks were used for storage of fuels.

All three samples are odorless and have no visual contamination. When dried at 110 degrees C, no fume was noted. The samples are similar to those obtained during our soil investigation. Overall, we are of the opinion that the soils have not been contaminated by the fuels that were in the tanks.

Respectfully submitted,

NORDMO ASSOCIATES, INC.

K. P. Nordmo, RCE 21351

KPN/sw
Copies: Addressee (2)
City of Hayward (2)

Mailing Address P.O. Box 61742 Sunnyvale, Ca. 94088

...Health and Welfare Agency
...JUS WASTE MANAGEMENT BRANCH
..., P Street
...mento, CA 95814

UNIFORM HAZARDOUS WASTE MANIFEST

Department of Health Services

32513

STATE ID NUMBER 83392987

...e print or type with ELITE type (12 characters per inch).

GENERATOR NAME AND MAILING ADDRESS
PRICE COMPANY
92300 HATHAWAY
HAYWARD, CALIFORNIA

AREA CODE/PHONE NUMBER

MANIFEST DOCUMENT NUMBER

EPA ID NUMBER
CA1X000061996

TRANSPORTER NO. 1
IT CORPORATION
3010 ZANKER ROAD
SAN JOSE CALIF 95035

VEH./CONTAINER NO. 4109 28 1

EPA ID NUMBER CAD000633115

TRANSPORTER NO. 2/ALTERNATE TSD FACILITY

VEH./CONTAINER NO.

EPA ID NUMBER

TREATMENT, STORAGE, OR DISPOSAL (TSD) FACILITY
IT CORPORATION
896 WATERBIRD WAY, MARTINEZ CA 94553

AREA CODE/PHONE NUMBER

EPA ID NUMBER CAD000009771

PROPER U.S. D.O.T. SHIPPING NAME AND HAZARD CLASS	UN/NA NUMBER	TOTAL QUANTITY	UNIT WT/VOL	CONTAINER NO.	CONTAINER TYPE	WASTE CAT. NO.	DISP. METH.
NOS (OIL) COMBUSTABLE LIQUID	NA1270	4862	G	001	CT	222	1

COMPONENTS	CONC. RANGE UPPER	CONC. RANGE LOWER	UNITS %	UNITS PPM
OIL	10%	1%		
WATER	99%	1%		

SPECIAL HANDLING INSTRUCTIONS

This is to certify that the above-named wastes are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable requirements of the Department of Transportation and the EPA.

Printed or typed full name and signature

MO. DAY YR.

☐ Check if continuation sheet is used. Number of continuation sheets

TRANSPORTER 1 ACKNOWLEDGEMENT OF RECEIPT OF ABOVE WASTES
FRANK ROUSE Frank Rouse
Printed or typed full name and signature

DATE REC'D & ACCEPTED MO 01 DAY 27 YR. 84

TRANSPORTER 2 ACKNOWLEDGEMENT OF RECEIPT OF ABOVE WASTES
Printed or typed full name and signature

DATE REC'D & ACCEPTED MO. DAY YR.

DISCREPANCY INDICATION SPACE

Facility owner or operator: Certification of receipt of hazardous waste covered by this manifest except as noted in the discrepancy indication space above. Note: TSDF must complete waste number. See instructions.

JOHN WILSON 1/27/84 John Wilson
Printed or typed full name and signature

EPA ID NUMBER

DATE RECEIVED & ACCEPTED MO DAY YR

...22A 11/82

ZARDOUS WASTE MANAGEMENT BRANCH
1-744-P Street
ramento, CA 95814

UNIFORM HAZARDOUS WASTE MANIFEST

ase print or type with ELITE type (12 characters per inch).

STATE ID NUMBER 83566622

TO BE FILLED IN BY GENERATOR

GENERATOR NAME AND MAILING ADDRESS
PRICE CLUB
22300 HATHAWAY AVE
HAYWARD CALIF.
AREA CODE/PHONE NUMBER 415-782-7319

MANIFEST DOCUMENT NUMBER
EPA ID NUMBER CAX000061316

TRANSPORTER NO. 1
IT TRANSPORT CORPERATION SANJOSE
3010 ZANKER RD.
SAN JOSE, CA. 95035 408-263-7250
VEH./CONTAINER NO. 143844
EPA ID NUMBER CAD009063815

TRANSPORTER NO. 2/ALTERNATE TSD FACILITY
VEH./CONTAINER NO.
EPA ID NUMBER

TREATMENT, STORAGE, OR DISPOSAL (TSD) FACILITY
IT CORPORATION MARTINEZ FACILITY (VINE HILL)
896 WATERBIRD WAY
MARTINEZ CA 94553
AREA CODE/PHONE NUMBER 415-228-5100
EPA ID NUMBER CAD009094771

PROPER U.S. D.O.T. SHIPPING NAME AND HAZARD CLASS	UN/NA NUMBER	TOTAL QUANTITY	UNIT WT/VOL	CONTAINER NO.	CONTAINER TYPE	WASTE CAT. NO	DISP. METH
HAZ. WASTE Liq. N.O.S/ORM-E	UN9189	5583	G	001	CT	2220	

COMPONENTS	CONC. RANGE UPPER	CONC. RANGE LOWER	UNITS %	UNITS PPM
OIL SLUDGE	25%		X	
WATER	75%		X	

SPECIAL HANDLING INSTRUCTIONS
GLOVES AND GOGGLES

This is to certify that the above-named wastes are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable requirements of the Department of Transportation and the EPA.

JOHN GEORGE WILLSON John George Willson
Printed or typed full name and signature

MO 2 DAY 1 YR 84

☐ Check if continuation sheet is used. Number of continuation sheets

TO BE FILLED IN BY TRANSPORTER

TRANSPORTER 1 ACKNOWLEDGEMENT OF RECEIPT OF ABOVE WASTES
HARRY GREGORY Harry Gregory TRACTOR # 136 / TRAILER # 139 DOT-E 7476 (PHG.)
Printed or typed full name and signature
DATE REC'D & ACCEPTED MO 02 DAY 01 YR 84

TRANSPORTER 2 ACKNOWLEDGEMENT OF RECEIPT OF ABOVE WASTES
Printed or typed full name and signature
DATE REC'D & ACCEPTED MO DAY YR

TO BE FILLED IN BY TSDF

DISCREPANCY INDICATION SPACE

Facility owner or operator: Certification of receipt of hazardous waste covered by this manifest except as noted in the discrepancy indication space above. Note: TSDF must complete waste number. See instructions.

EPA ID NUMBER
DATE RECEIVED & ACCEPTED MO DAY YR

Printed or typed full name and signature

D DHS 8022A 11 83

GENERATOR SENDS THIS COPY TO DOHS WITHIN 15 DAYS

83-87087

ite of California - Health and Welfare Agency)

ZARDOUS WASTE MANAGEMENT BRANCH
4-744 P Street
cramento, CA 95814

UNIFORM HAZARDOUS WASTE MANIFEST

STATE ID NUMBER 83389326

ase print or type with ELITE type (12 characters per inch)

TO BE FILLED IN BY GENERATOR

GENERATOR NAME AND MAILING ADDRESS
PRICE CLUB
22300 HATHAWAY AVE
HAYWARD, CALIFORNIA
AREA CODE/PHONE NUMBER 415-782-7319

MANIFEST DOCUMENT NUMBER
EPA ID NUMBER CA X 0 9 9 9 6 1 3 1 6 6

TRANSPORTER NO. 1
IT TRANSPORT CORPORATION SAN JOSE
3010 ZANKER RD.
SAN JOSE, CA. 95035 408-263-7250
VEH./CONTAINER NO. 4 3 8 4 4
EPA ID NUMBER CA D 9 9 6 3 3 1 1 1

TRANSPORTER NO. 2/ALTERNATE TSD FACILITY
VEH./CONTAINER NO.
EPA ID NUMBER
(JGW)
~~CA D 9 9 0 0 9 1 4 2 1 2~~

TREATMENT, STORAGE, OR DISPOSAL (TSD) FACILITY
IT CORPORATION MARTINEZ FACILITY (VINE HILL)
896 WATERBIRD WAY
MARTINEZ, CA. 94553
AREA CODE/PHONE NUMBER 415-228-5100
EPA ID NUMBER CA D 9 9 0 0 9 1 4 1 7 3 1

PROPER U.S. D.O.T. SHIPPING NAME AND HAZARD CLASS	UN/NA NUMBER	TOTAL QUANTITY	UNIT WT/VOL	CONTAINER NO.	CONTAINER TYPE	WASTE CAT. NO.	DISP. METH.
HAZ. WASTE Liq. NOS/ORM-E	UN9119	5000	G	091	CT	212	1

COMPONENTS	CONC. RANGE UPPER	CONC. RANGE LOWER	UNITS %	UNITS PPM
OIL SLUDGE	25%		X	
WATER	75%		X	

SPECIAL HANDLING INSTRUCTIONS
GLOVES & GOGGLES

This is to certify that the above-named wastes are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable requirements of the Department of Transportation and the EPA.

JOHN GEORGE WILLSON John George Willson
Printed or typed full name and signature
MO. 11 DAY 31 YR. 84

☐ Check if continuation sheet is used. Number of continuation sheets

TO BE FILLED IN BY TRANSPORTER

TRANSPORTER 1 ACKNOWLEDGEMENT OF RECEIPT OF ABOVE WASTES
HARRY GRAGAL [illegible] TRACTOR # 136 TRAILER # 135 V 846
Printed or typed full name and signature
DATE REC'D & ACCEPTED MO. 11 DAY 31 YR. 84

TRANSPORTER 2 ACKNOWLEDGEMENT OF RECEIPT OF ABOVE WASTES
Printed or typed full name and signature
DATE REC'D & ACCEPTED MO. DAY YR.

TO BE FILLED IN BY TSDF

DISCREPANCY INDICATION SPACE

Facility owner or operator: Certification of receipt of hazardous waste covered by this manifest except as noted in the discrepancy indication space above. Note: TSDF must complete waste number. See instructions.

EPA ID NUMBER

DATE RECEIVED & ACCEPTED MO. DAY YR.

Printed or typed full name and signature

D DHS 8022A 11/83

California—Health and Welfare Agency
DOUS WASTE MANAGEMENT BRANCH
P Street
ento, CA 95814

S.C. # 5474

IFORM HAZARDOUS WASTE MANIFEST

STATE ID NUMBER 83566621

Please print or type with ELITE type (12 characters per inch)

TO BE FILLED IN BY GENERATOR

GENERATOR NAME AND MAILING ADDRESS
PRICE CLUB
22200 HATHAWAY AVE
HAYWARD, CALIF.
AREA CODE/PHONE NUMBER 415-782-7319

MANIFEST DOCUMENT NUMBER
EPA ID NUMBER CAX000061139 | 66

TRANSPORTER NO. 1
IT TRANSPORT CORPORATION SAN JOSE
3010 ZANKER AVE.
SAN JOSE, CA. 95035 408-263-7250

VEH./CONTAINER NO. 143844 | EPA ID NUMBER CAD000063811115

TRANSPORTER NO. 2/ALTERNATE TSD FACILITY

VEH./CONTAINER NO. | EPA ID NUMBER

TREATMENT, STORAGE, OR DISPOSAL (TSD) FACILITY
IT CORPORATION MARTINEZ FACILITY (VINE HILL)
896 WATERBIRD WAY
MARTINEZ, CA 94553 415-228-5100

EPA ID NUMBER CAD000095477

PROPER U.S. D.O.T. SHIPPING NAME AND HAZARD CLASS	UN/NA NUMBER	TOTAL QUANTITY	UNIT WT/VOL	CONTAINER NO	CONTAINER TYPE	WASTE CAT. NO	DISP METH
HAZ. WASTE Liq. N.O.S/ORM-E	UN9189	5200	G	001	CT	2212	

COMPONENTS	CONC RANGE UPPER	CONC RANGE LOWER	UNITS %	UNITS PPM
OIL SLUDGE	25%		X	
WATER	75%		X	

SPECIAL HANDLING INSTRUCTIONS
GLOVES AND GOGGLES

This is to certify that the above-named wastes are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable requirements of the Department of Transportation and the EPA

JOHN GEORGE WILSON John George Wilson — MO 2 DAY 12 YR 84

Printed or typed full name and signature

☐ Check if continuation sheet is used. Number of continuation sheets

TO BE FILLED IN BY TRANSPORTER

TRANSPORTER 1 ACKNOWLEDGEMENT OF RECEIPT OF ABOVE WASTES (PH G)
HARRY GREGORY Harry Gregory TRACTOR# 136/TRAILER# 1354 DOT-E 7476
Printed or typed full name and signature
DATE REC'D & ACCEPTED MO 02 DAY 02 YR 84

TRANSPORTER 2 ACKNOWLEDGEMENT OF RECEIPT OF ABOVE WASTES
Printed or typed full name and signature
DATE REC'D & ACCEPTED MO DAY YR

TO BE FILLED IN BY TSDF

DISCREPANCY INDICATION SPACE

Facility owner or operator: Certification of receipt of hazardous waste covered by this manifest except as noted in the discrepancy indication space above. Note: TSDF must complete waste number. See instructions.

EPA ID NUMBER | DATE RECEIVED & ACCEPTED MO DAY YR

Printed or typed full name and signature

GENERATOR SENDS THIS COPY TO DOHS WITHIN 15 DAYS

83-8739

Western Operations

1252 Quarry Lane
Pleasanton, CA 94566
(415) 426-2600
Fax (415) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

Subsurface Investigation
at
The Price Company
22300 Hathaway Avenue
Hayward, California

Clayton Project No. 29486.00

July 24, 1990

Tank (removed) in 1983

Executive Summary

Clayton Environmental Consultants, Inc., was retained by The Price Company to perform a subsurface environmental investigation at their site located at 22300 Hathaway Avenue in San Jose, California. This study was authorized by Ms. Kathy Nishihira, manager of real estate development for The Price Company. This work was performed simultaneously with a geotechnical study (done by others) in preparation for the construction of a new Price Club facility.

Four boreholes were installed in the site area proposed for the construction of a new Price Club warehouse. Clayton collected two soil samples from each of the four boreholes at approximately 7 and 14 feet below ground surface (bgs). The samples were analyzed for petroleum hydrocarbons because former underground petroleum storage tanks existed on The Price Club site.

Our findings and conclusions are as follows:

- The petroleum hydrocarbons benzene, toluene, ethylbenzene, and xylene (BTEX) were not detected in any of the soil samples collected.
- Total petroleum hydrocarbons as diesel and gasoline were not found in any of the samples collected.
- Total lead concentrations found in the samples are low to normal concentrations compared to "background" lead concentrations in soil.

  As reported in our June 18, 1990 Phase I environmental assessment, file information available from the Hayward Building Department and Fire Prevention Office indicates that United Can Company, a former occupant at the Price Club site, previously used hazardous materials onsite. Past operations at United Can may have included the use of materials such as lead solder, lacquers, thinners, chlorinated solvents, and corrosive materials.

  Four areas of concern should be noted:

  - an underground fuel oil tank was abandoned inplace on the project site
  - an electrical substation was removed from the facility
  - aboveground brine and caustic tanks were removed from the site
  - five large vinegar aboveground storage tanks were removed from the site

Based on the results of our investigation, we recommend that The Price Company:

- Locate the abandoned inplace underground storage tank, presumed to be in close proximity to the north corner of the proposed building site for the Price Club facility. Sample soils in close proximity of the tank for diesel. Note that it may be necessary to remove the tank if it interferes with the proposed building foundation.

- Collect a soil sample within the boundaries of the former substation and analyze for oil, grease, and PCBs.
- Analyze the borehole soil samples already collected near the brine, caustic, and vinegar tanks for pH (in progress).

retail sale. The second building houses The Price Company Auto Center (Figure 2).

This study focuses on the proposed site location of the new warehouse, east of the existing warehouse. A site location and topographic map is provided in Figure 1. Figure 2 presents information on the site and its immediate surroundings.

2.2 REGIONAL HYDROGEOLOGIC SETTING

Clayton contacted Mr. Hugh Murphy of the City of Hayward Fire Department (HFD) for information on monitoring wells near the site that would yield local groundwater data. The HFD file for United Can, located east of the site at Burbank and C Streets, contained a December 1989 report which stated that groundwater was expected to be at a depth of 45 feet below ground surface (bgs). This document also indicated that groundwater had not been reached in a borehole drilled to 42 feet bgs.

From topographic maps of the area, we determined that the regional hydrogeologic gradient slopes toward the San Francisco Bay in a southwesterly direction.

3.0 SUBSURFACE INVESTIGATION

Clayton performed soil sampling activities on June 4, 1990, concurrent with geotechnical soil boring studies of the new Price Club warehouse facility site.

Mr. Muhammad Ayas, a Harlan Tate engineer, supervised drilling activities conducted by Ensco Environmental Services (Ensco). Clayton collected soil samples using Ensco's drill rig, and analyzed these samples for suspect chemical constituents.

3.1 BOREHOLE INSTALLATION AND SAMPLING

Field work was conducted onsite on June 4, 1990. Ensco Environmental Services, Inc. (Ensco), of Fremont, California, installed the boreholes with a truck-mounted drill rig (Mobile B-34) using a continuous flight solid-stem auger. All augers, drill rods, and split-barrel sampling equipment were steam cleaned before work began, between boreholes, and before equipment left the site. Each borehole was drilled from the ground surface to a depth of approximately 20 feet. During drilling, Mr. Ayas collected soil samples for soil strength and integrity, while Mr. Michael Johnson, Clayton geologist, collected soil samples for analysis for petroleum hydrocarbon constituents.

Clayton Proposal No. 90-B-135, dated May 22, 1990, stipulated that five boreholes were to be drilled and sampled for contaminants. Only four of the boreholes were sampled, however, due to the subsurface refusal in a fifth

borehole in the northwest corner of the building site. Ensco was unable to drill this borehole despite several attempts. This drilling refusal may be due to the subsurface abandoned inplace oil tank that is only approximately located as being just outside the proposed building site to the north.

Clayton collected two soil samples from each of the four boreholes at approximately 7 and 14 feet bgs using a split-barrel sampler (split spoon). Each soil sample was classified and recorded on a borehole log (Appendix A). The soil samples were collected in precleaned brass tubes for the purpose of lithologic logging. To aid in contamination detection, Clayton screened the soil cuttings and samples using a photoionization detector (PID). The brass tubes were sealed with aluminum foil and plastic caps, taped for air tightness, and immediately placed into an iced cooler for shipment to Clayton's state-certified laboratory in Pleasanton, California, for analysis. Legal chain-of-custody procedures were followed when handling the soil samples.

The samples were analyzed for the following chemical constituents which would probably be present if the former underground petroleum storage tanks known to exist somewhere on the Price Club facility had leaked in this area:

- EPA Method 5030/8015 for total petroleum hydrocarbons (TPH) as gasoline, and benzene, toluene, ethylbenzene, and xylene (BTEX)
- EPA Method 3550/8015 for TPH as diesel
- Inductively coupled argon plasma emission spectrometry (ICAP) for metals as lead

4.0 INTERPRETATION OF RESULTS

The following discussion of our findings incorporates field observations and laboratory results.

4.1 SOIL SAMPLE ANALYTICAL RESULTS

The soil samples collected from each borehole had less than 5 ppm (below the limits of detection) of the volatile hydrocarbons benzene, toluene, ethylbenzene and xylene (BTEX). No gasoline or diesel petroleum hydrocarbons were detected in the samples collected.

The soil samples were analyzed for total lead. From 3 to 9 ppm of total lead was found in the samples collected. The concentrations of lead detected in these samples are low to average compared to concentrations found in soil samples taken throughout the United States and reported in an EPA reference article written by Hansford Shacklette and Josephine Boerngen.

5.0 CONCLUSIONS AND RECOMMENDATIONS

No evidence of gasoline or diesel was found in the soil samples collected. The samples contained levels of total lead in low to average concentrations.

However, based on information gathered in our Phase I assessment, and new information gathered on July 13, 1990, there is the possibility that other constituents may be present in soils in the vicinity of the proposed warehouse site. Clayton recommends that a more thorough subsurface investigation be conducted by reanalyzing the soil boring samples collected in close proximity to the brine, caustic, and vinegar tanks. This laboratory analysis was only recently authorized by Ms. Nishihira of the Price Club because of the new information made available from Mr. Murphy. The laboratory analytical work is currently in progress and will be made available at a later date as an addendum to this report.

The risk from any prior leakage from the caustic and brine tanks is deemed low, as the health effects of salt in the soil are minimal. Additionally, several ~~months~~ years have elapsed since the time tanks were removed and rain or surface waters may have washed or neutralized salts in the soil to some degree.

The risk from the vinegar tank is also minimal as vinegar is biodegradable and is not a strong acid.

Prior to construction of the facility, utilize a backhoe or similar earth moving equipment, to more accurately locate the abandoned inplace oil tank. Although Nordmo gave their ~~option~~ advice that the soil was not contaminated in close proximity to the oil tank, their field screening technique is questionable. A laboratory analysis was not run on samples collected.

This report prepared by: Michael W. Johnson
Michael W. Johnson
Geologist

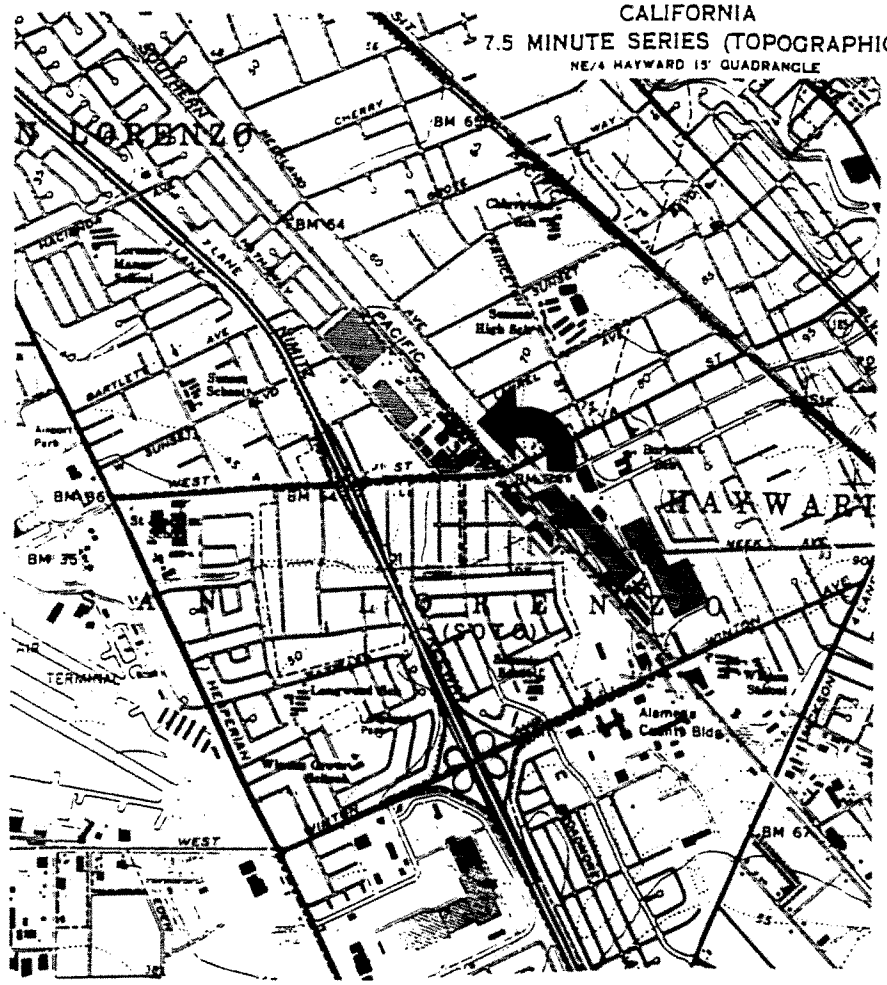
This report reviewed by: Alan Van Dan, for
Alan D. Gibbs, R.G.
Supervisor, Geology

July 24, 1990

29486-02.rep

FIGURES

HAYWARD QUADRANGLE
CALIFORNIA
7.5 MINUTE SERIES (TOPOGRAPHIC)
NE/4 HAYWARD 15' QUADRANGLE



SCALE 1:24 000

1 0 1 MILE

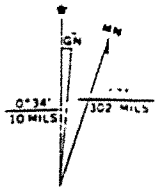
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT 5-FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

QUADRANGLE LOCATION

UTM GRID AND 1980 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

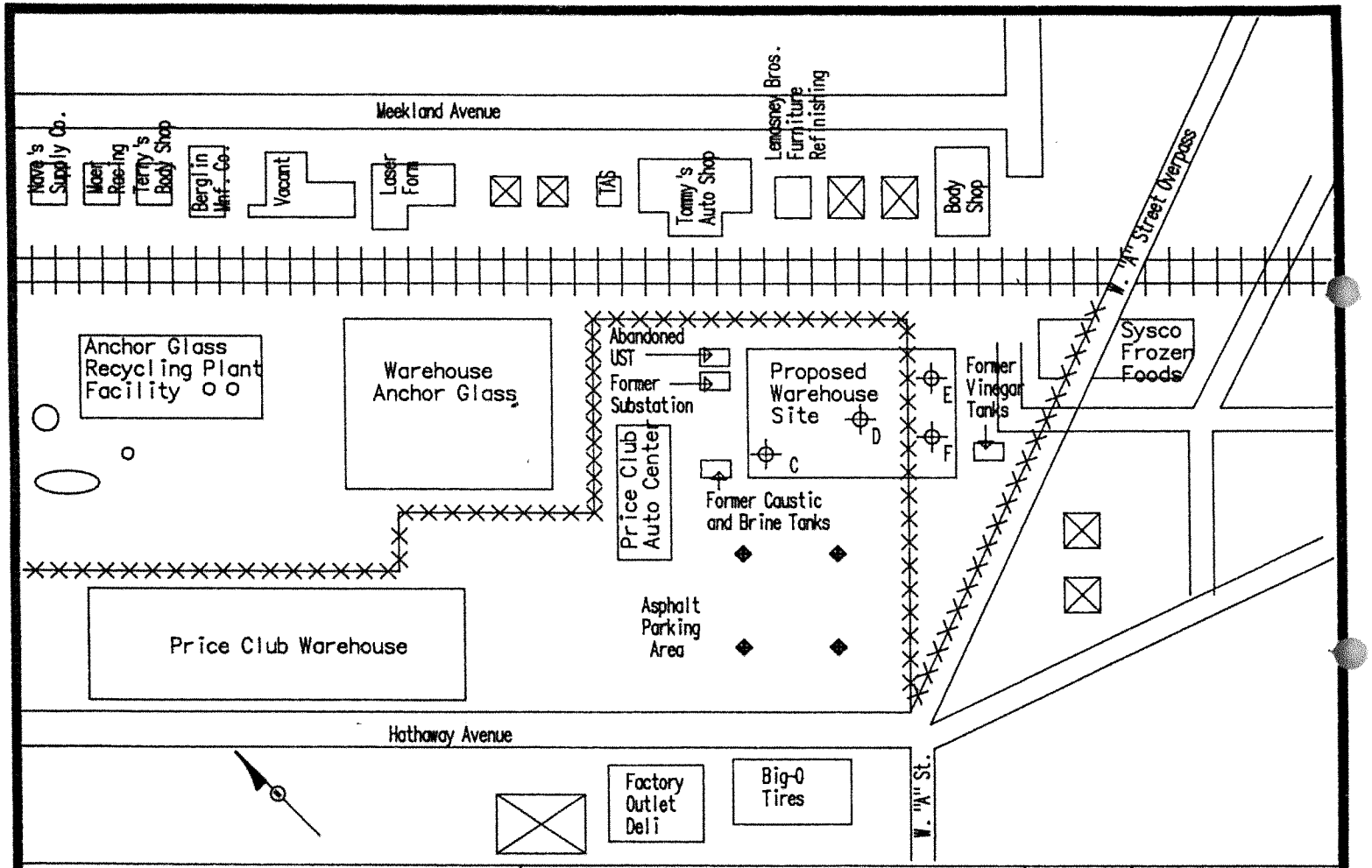


Location and Topographic Map
Price Company Warehouse
22300 Hathaway Avenue
Hayward, California

Clayton Project No: 29486.00

Figure
1

Clayton
ENVIRONMENTAL
CONSULTANTS



LEGEND

- Fence
- Lot Lighting
- Residence
- Borehole/Sample Locations

(not to scale)

Diagrammatic Location Map
Occupant in the Vicinity of
The Price Club
22300 Hathaway Avenue
Hayward, California
Clayton Project No: 29486.00

Figure 2

29486-01-16

Clayton
ENVIRONMENTAL CONSULTANTS

STATE OF CALIFORNIA—CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

PETE WILSON, Governor

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

400 P STREET, 4TH FLOOR
P.O. BOX 806
SACRAMENTO, CA 95812-0806
(916) 323-5871

To Leroy - U/M.

SITE # 4690

May 10, 1996

EPA ID: CAL923564165

PRICE CLUB #113/THE PRICE CO
PAUL LATHAM
4649 MORENA BLVD
SAN DIEGO, CA 94541

For facility located at:
22330 HATHAWAY
HAYWARD, CA 94541

Dear Onsite Treatment Facility:

The Department of Toxic Substances Control (DTSC) has received your letter notifying DTSC of your closure request to operate under permit by rule, and/or conditional authorization, and/or conditional exemption. We have reviewed your letter and have approved your closure.

DTSC considers your treatment activities to be closed as of 04/25/96 and no longer subject to the conditions of Permit by Rule, Conditional Authorization or Conditional Exemption.

DTSC has revised its database records to reflect your new status and has notified the Board of Equalization of the change.

If you have any questions or need further information, please contact the appropriate regional office or the Tiered Permitting Compliance Section at the letterhead address or phone number.

Sincerely,

Sangat Kals, Chief
Tiered Permitting Compliance Section
State Regulatory Program Division
Hazardous Waste Management Program

cc: LARRY WONG
DTSC REGION 2
SURVEILLANCE & ENFORCEMENT BR.
700 HEINZ AVE.,BLDG.F, 2ND FL.
BERKELEY, CA 94710

MR JUN MAKISHIMA
ALAMEDA COUNTY
DEPT OF ENVIRONMENTAL HEALTH
1131 HARBOR BAY PKWY #250
ALAMEDA, CA 94502-6577

STATE BOARD OF EQUALIZATION
STEPHEN R. RUDD, ADMINISTRATOR
ENVIRONMENTAL FEES DIVISION
P.O. BOX 942879
SACRAMENTO, CA 94279-0001

Printed on Recycled Paper

STATE OF CALIFORNIA - CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY PETE WILSON, Governor

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION
2101 WEBSTER STREET, Suite 500
OAKLAND, CA 94612
Tel: (510) 286-1255
FAX: (510) 286-1380
BBS: (510) 286-0404

October 20, 1994
File No. 2198.17 (KLG)
UST No. 01-1208

Lois Miller
Price Cosco
4649 Morena Blvd.
San Diego, CA 92117

Subject: Underground Storage Tank(UST) Case Closure
1-77,870 Gallon Fuel Oil, 1-56,164 Gallon Fuel Oil, and 1-30,378 Gallon Tank Removed
Price Cosco
22300 Hathaway Ave., Hayward, CA

Dear Ms. Miller:

This letter confirms the completion of site investigation and remedial action for the underground storage tank(s) formerly located at the above described location.

Based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, Division 3, Chapter 16, Section 27219(e) of the California Code of Regulations.

Please contact Kevin Graves at (510) 286-0435 if you have any questions regarding this matter.

Sincerely,

Steven R. Ritchie
Executive Officer

Stephen I. Morse
Chief, Toxics Division

cc:
Hugh Murphy, City of Hayward

Leonard Niles
Riedel Environmental Services
4138 Lakeside Dr.
Richmond, CA 94806

PRICECOSCO.CLS

"Imagineering A Better World"

RIEDEL ENVIRONMENTAL SERVICES INC.

California/Western Region:
4138 Lakeside Drive
Richmond, California 94806
(510) 222-7810
FAX: (510) 222-6868

RECEIVED BY
HAZARDOUS MATERIALS OFFICE
SEP 01 1992
HAYWARD FIRE DEPARTMENT

August 31, 1992

Mr. Hugh Murphy
City of Hayward
Hazardous Materials Division
25151 Clawiter Road
Hayward, California 94545-2731

Subject: Status of Monitoring Well Installation
The Price Club. 22300 Hathaway Avenue, Hayward, CA
RES Project No. 4014-9008

Dear Mr. Murphy:

Riedel Environmental Services, Inc. (RES) is forwarded this letter as an update to the activities taken to date at the Price Club in Hayward, California. RES has just completed the installation of the nine (9) monitoring wells, with development and sampling having taken place. RES anticipates the results of the analytical to be completed during the week of September 7, 1992, with a Final Report being completed during the week of September 21, 1992.

Should you have any questions please call me at (510)222-7810.

Sincerely,

RIEDEL ENVIRONMENTAL SERVICES, INC.

Gary B. Colbert, REA
Compliance & Assessment Manager

cc: Mr. Keith Thompson; Price Company
Mr. Ed So; RWQCB

CITY OF HAYWARD
FIRE DEPARTMENT

July 23, 1992

TO: SHELDON MCCLELLAN, SENIOR PLANNER

FROM: JOHN HUTCHINS, FIRE MARSHAL

SUBJECT: MODIFICATION OF ZONE CHANGE 92-14

This zone change modification, concerning the renovation of the old Price Club building at 22300 Hathaway Avenue to be used for a distribution center, will involve the following fire department requirements:

1. The automatic fire sprinkler system shall be maintained or modified, as necessary, to provide the required fire protection for this building's use.

2. High-piled stock and use of racks for storage of product will be done only with required fire department permits. Sprinklers may be required in the racks. Draft curtains and smoke vents may be required.

3. The freezer area will require fire sprinkler protection.

4. The applicant shall meet with the Environmental Specialist to review the proposed refrigeration system for environmental concerns.

5. Central station monitoring of the sprinkler/alarm systems is required.

6. Storage of hazardous materials shall be reviewed with the fire department/hazardous materials plan checkers with special interest regarding aerosols and incompatible materials being stored per the Uniform Fire Code. Secondary containment of hazardous materials may be required per Uniform Fire Code Article 80.

7. Fire extinguishers and fire hose racks will be required per the Uniform Fire Code.

8. Exiting shall conform to the Uniform Building Code.

JOHN F. HUTCHINS, DEPUTY FIRE CHIEF
FIRE MARSHAL

JFH:vs

cc: File
John Berg, Fire Inspector
Hugh Murphy, Environmental Specialist

"Imagineering A Better World"

RIEDEL ENVIRONMENTAL
SERVICES INC.

California/Western Region:
4138 Lakeside Drive
Richmond, California 94806
(510) 222-7810
FAX: (510) 222-6868

July 29, 1992

RECEIVED BY
HAZARDOUS MATERIALS OFFICE
JUL 30 1992
HAYWARD FIRE DEPARTMENT

Mr. Hugh Murphy
City of Hayward
Hazardous Materials Division
25151 Clawiter Road
Hayward, California 94545-2731

Hm 8/3/92

Re: Groundwater Investigation
The Price Club, 22300 Hathaway Avenue, Hayward, CA
RES Job No. 4014-9008

Dear Mr. Murphy:

Per our conversation on July 16, 1992, Riedel Environmental Services, Inc. (RES) is submitting this letter to clarify the sampling of the soil during the placement of the proposed monitoring wells (MW). As discussed, RES will sample MW4, MW5, MW6, MW7, and MW8 at 30 and 35 feet below grade (bg). This is due to the fact that past excavations of soil with residual hydrocarbons was conducted in this area to 32 feet bg. The area was backfilled with clean-imported material. Areas that have not been under past remedial activities will be sampled ever five (5) feet and analyzed for the constituents defined in the Work Plan (specifically MW1, MW2, MW3, and MW9).

RES has scheduled the work to begin during the week of August 10, 1992.

Should you have any question or require any further information please call me at (510)222-7810.

Sincerely,

RIEDEL ENVIRONMENTAL SERVICES, INC.

Gary B. Colbert, REA
Compliance & Assessment Manager

cc: Mr. Keith Thompson; The Price Company
Mr. Ed So; RWQCB

CITY OF HAYWARD

Fire Department

September 30,.1991

Mr. Tim Ackroyd
The Price Company
22300 Hathaway Avenue
Hayward, CA 94541

Dear Mr. Ackroyd:

Thank you for the information you provided on your proposed one-hour photo lab. Based on the quantities you listed, you will not need a Hazardous Materials Storage Permit from the Fire Department. However, we are enclosing our "Secondary Containment" guidelines to request you to look into the possibility of providing containment for the minilab processors. Catch pans or drip pans under containers of processing solutions and wastes or total containment for the entire equipment might be a good investment. This will ensure that leaks, spills, and other unauthorized discharges due to accidents, overspills, or overfills will be properly contained and more easily managed.

As for other related City requirements, you might want to contact Gail Ziegler of the Water Pollution Control Facility (293-5393) for restrictions on discharging into the sanitary sewer. She can also tell you of the City's hazardous waste reduction program.

Also, enclosed is a blank form for hazardous substance registration as required by the State's Health and Safety Code. Kindly complete this form based on the attached list of acutely hazardous materials and your proposed processes and return it to our office promptly.

If you have any questions, call us at 293-5451.

Very truly yours,

DANNY GALANG
HAZARDOUS MATERIALS INVESTIGATOR

DG:vs

25151 Clawiter Road, Hayward, CA 94545-2731 • (415) 293-8690 • FAX (415) 293-8691 • TDD (415) 537-7593

Printed on recycled paper

CITY OF HAYWARD
FIRE DEPARTMENT

AUGUST 1, 1991

TO: MIKE BRADLEY, FIRE CHIEF

FROM: JOHN HUTCHINS, DEPUTY FIRE CHIEF

27300 Hallaway

SUBJECT: Price Club

The present situation as known to Hugh Murphy is:

- During excavation for the building foundation, previously unknown underground storage tanks were exposed. First one; and then during further excavation, eventually a total of three.
- Clean up of soil contamination around tanks #1 and 2 was done by excavation.
- During attempts to excavate contaminated soil from around tank #3, a large quantity of what Hugh describes as "goo" was identified.
- The "Goo" is of an oil base, either mineral or petroleum in nature, and is of unknown type or origin at this point.
- The "Goo" has been identified in an area approximately 240' x 240', starting about 24' under the soil running 10' thick to the 34' level, which is also the water table level.
- The "Goo is under a portion of where the proposed building will be erected.
- The consultants for the Price Club have yet to identify the product, source, cleanup plan or full extent of the area of contamination.

I have requested Hugh to contact the Regional Water Quality Control Board to determine what options are available.

- Remediation in place.
- Removal of soil under proposed building, install soil barrier, build and remediate soil around building at a later date.
- Remediation plans require what time frame, 1 year-20 years, longer?
- What would R.W.Q.C.B. require if we stepped aside?

More to follow.

JOHN F. HUTCHINS
DEPUTY FIRE CHIEF

JH:ms

cc: Hugh Murphy, Environmental Specialist
John Boykin, Haz Mat Coordinator

APPENDIX D
HISTORICAL RESEARCH DOCUMENTATION

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Costco Hayward
22330 Hathaway Avenue
Hayward, CA 94541

Inquiry Number: 4583200.3
April 06, 2016

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

04/06/16

Site Name:	Client Name:
Costco Hayward 22330 Hathaway Avenue Hayward, CA 94541 EDR Inquiry # 4583200.3	Kleinfelder, Inc. 2 Ada, Suite 250 Irvine, CA 92618-0000 Contact: Lindsey Dandridge-Perry

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The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # FC42-4467-8D77

PO # NA

Project Costco Hayward

Maps Provided:

1966	1903
1957	
1956	
1953	
1950	
1948	
1923	
1907	

Sanborn® Library search results

Certification #: FC42-4467-8D77

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others 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

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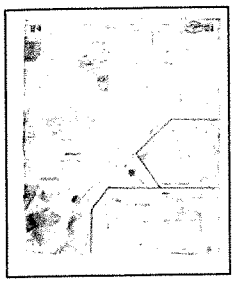
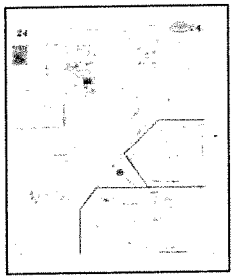
1966 Source Sheets



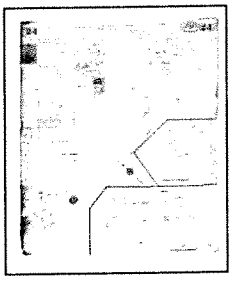
Volume 1, Sheet 24
1966

1957 Source Sheets



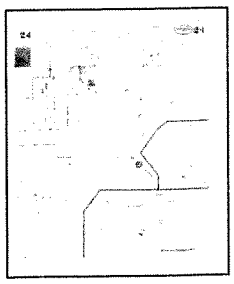
Volume 1, Sheet 24
1957

1956 Source Sheets



Volume 1, Sheet 24
1956

1953 Source Sheets



Volume 1, Sheet 24
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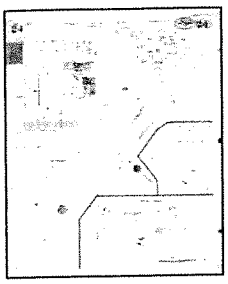
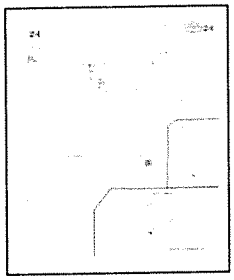


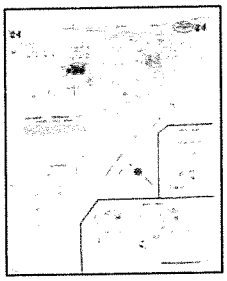
Volume 1, Sheet 24
1950

1948 Source Sheets



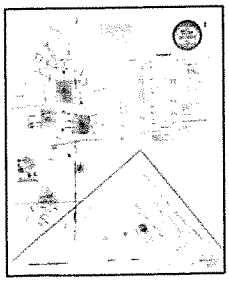
Volume 1, Sheet 24
1948

1923 Source Sheets



Volume 1, Sheet 24
1923

1907 Source Sheets



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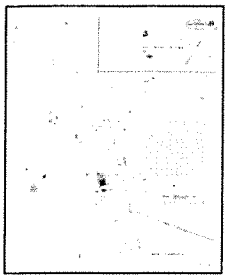

Volume 1, Sheet 8
1903

Certified Sanborn® Map

1966

Site Name: Costco Hayward
Address: 22330 Hathaway Avenue
City, ST, ZIP Hayward, CA 94541
Client: Kleinfelder, Inc.
EDR Inquiry: 4583200.3
Order 1/06/2016
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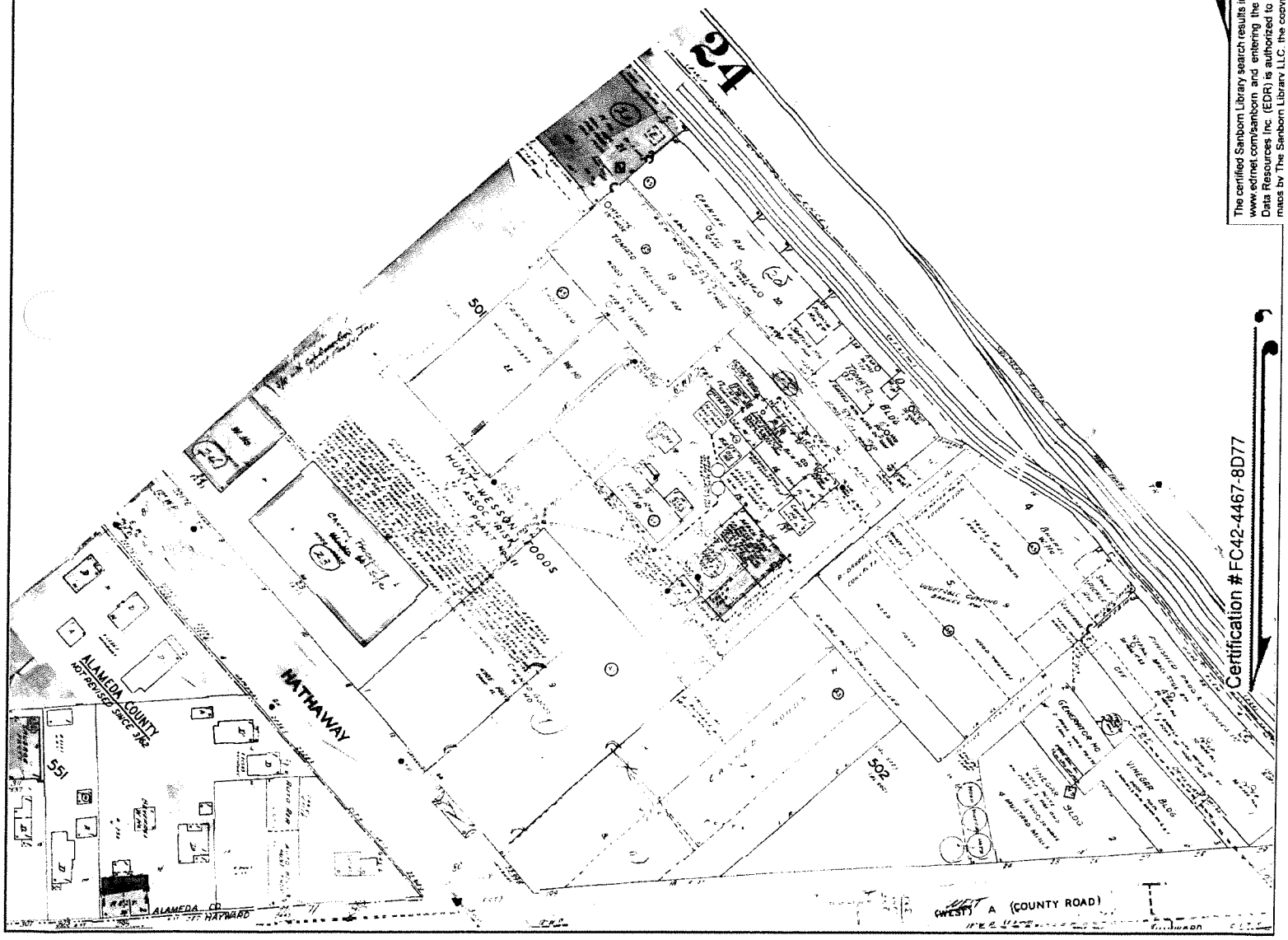
Copyright 1966



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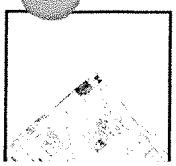

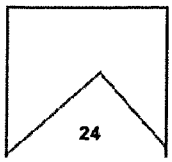

Volume 1, Sheet 24

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1957

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ST, ZIP: Hayward, CA 94541
nt: Kleinfelder, Inc.
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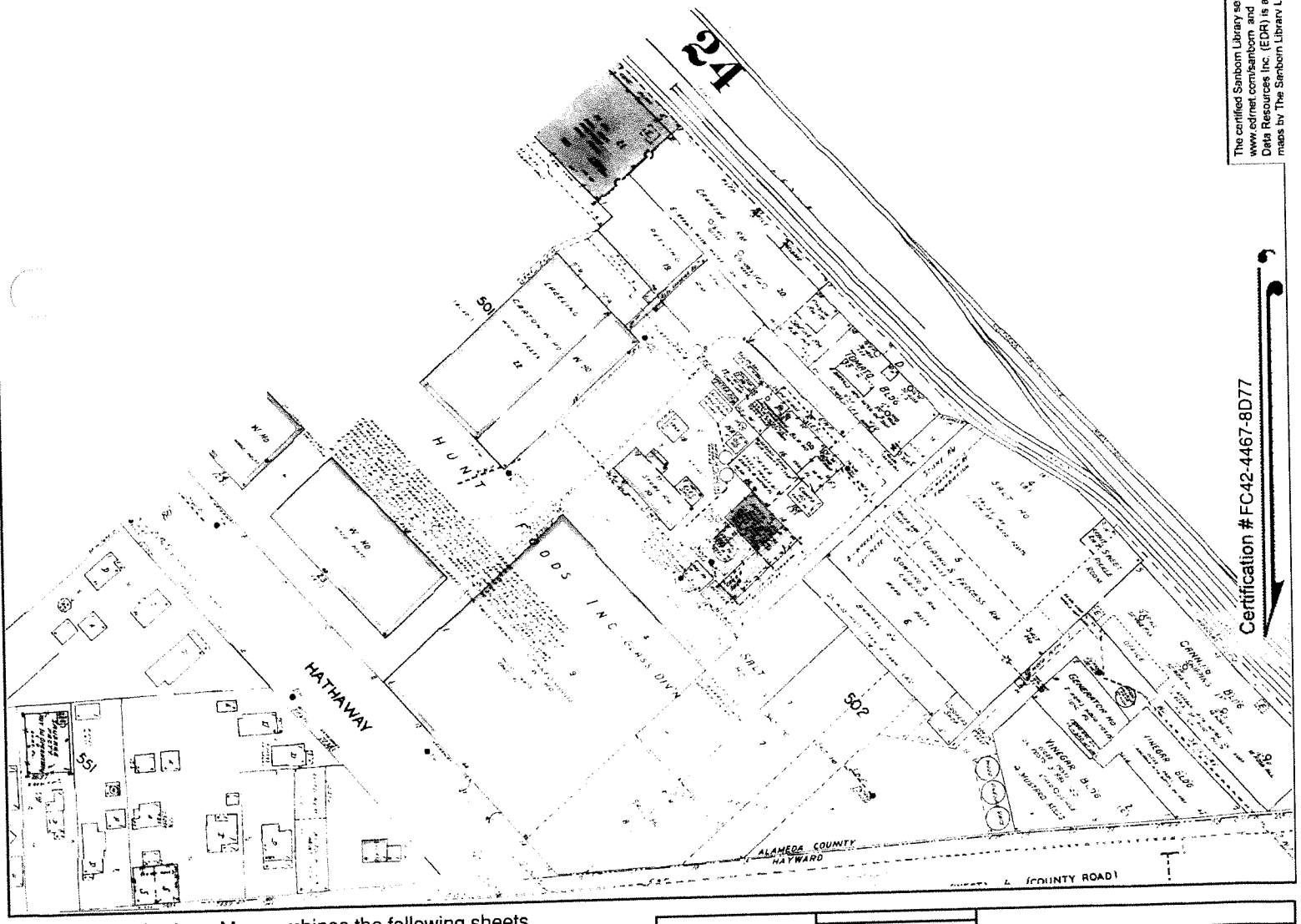

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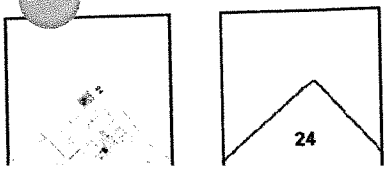

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1956

te Name: Costco Hayward
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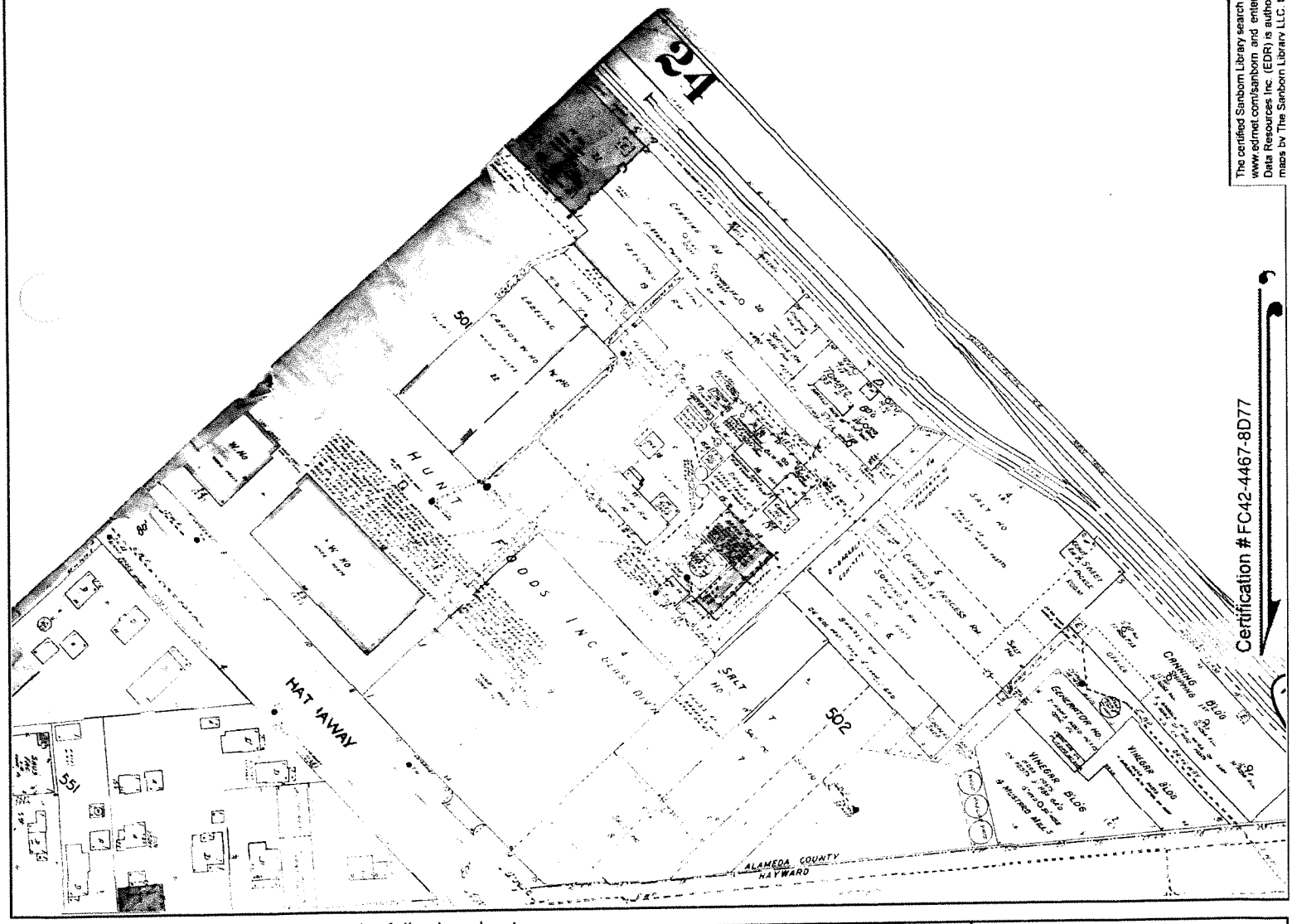

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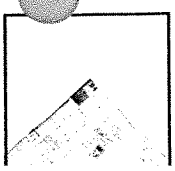

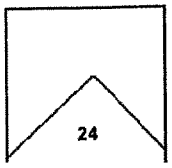

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1953

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Order: 7/06/2015
Certif: 42-4467-8D77
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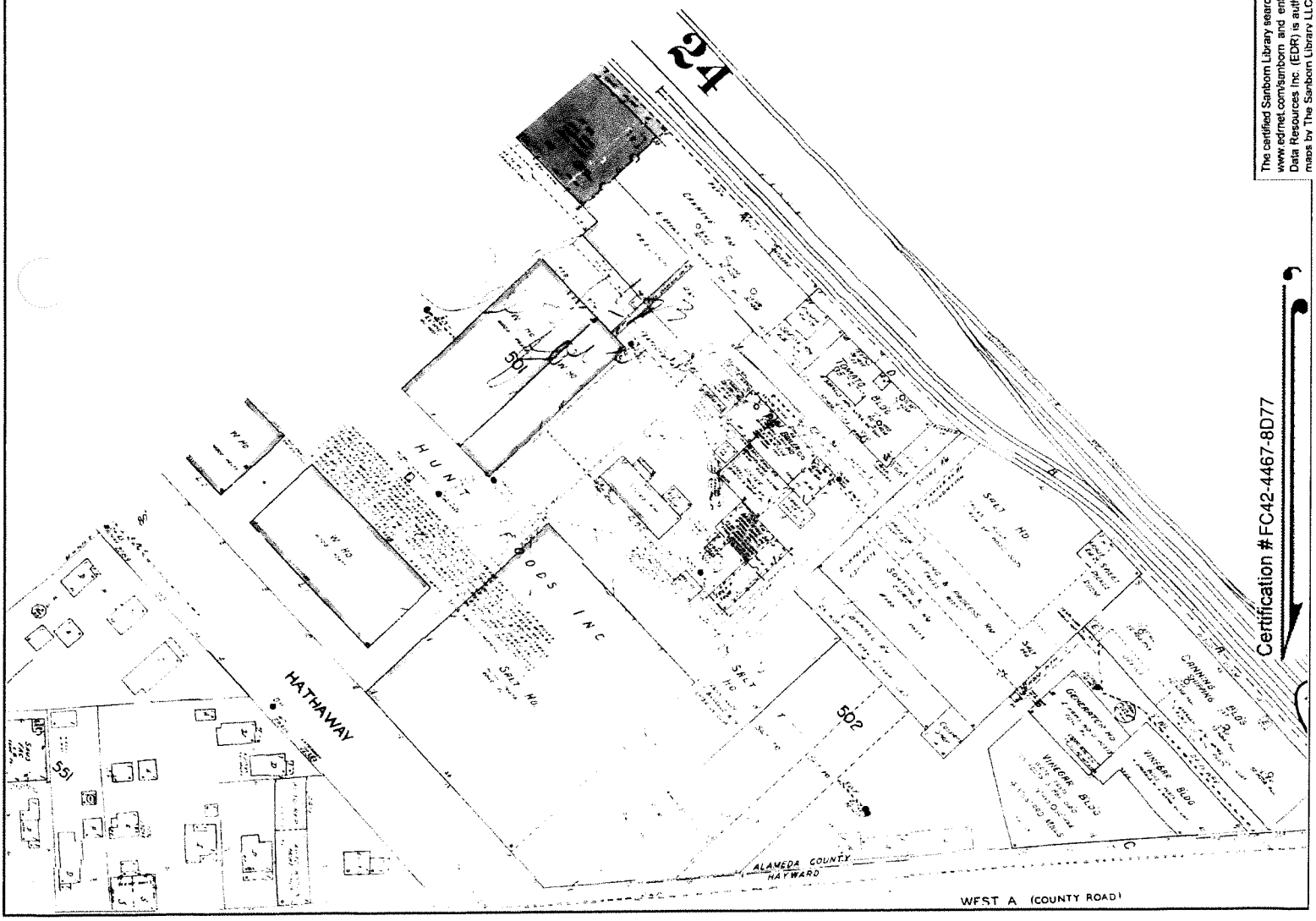

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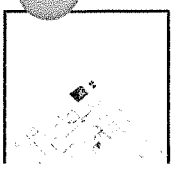

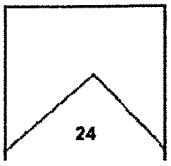

Volume 1, Sheet 24

N

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1950

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Address: 22330 Hathaway Avenue
City, ST, ZIP: Hayward, CA 94541
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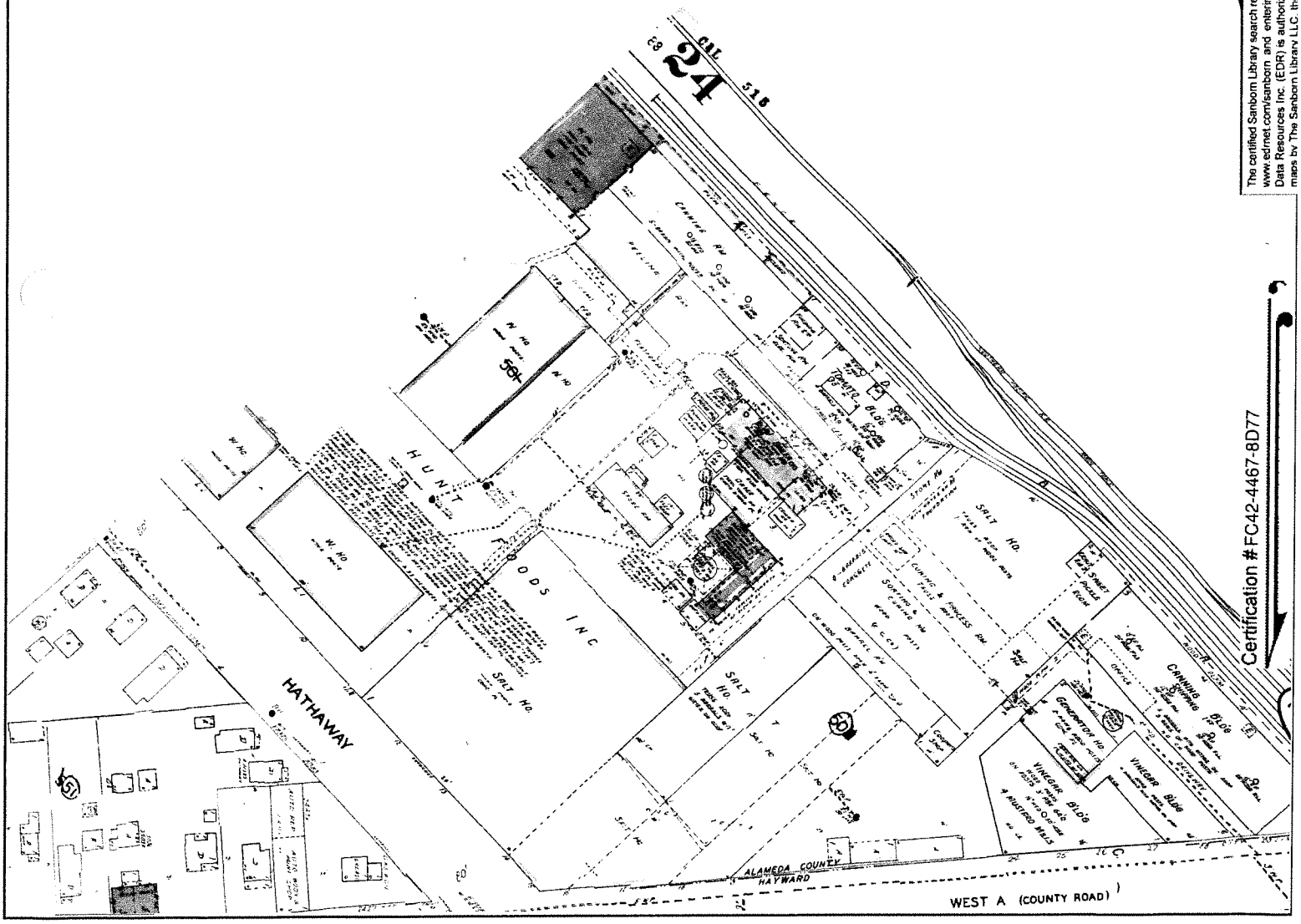
EDR Inquiry: 4583200.3
Order: 1/06/2016
Certif: 42-4467-8D77
Copyright: 1950



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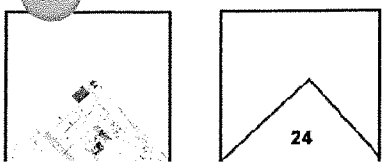

Volume 1, Sheet 24

N

Certified Sanborn® Map

1948

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Address: 22330 Hathaway Avenue
City, ST, ZIP: Hayward, CA 94541
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EDR Inquiry: 4583200.3
Order: /06/2016
Certif: 42-4467-8D77
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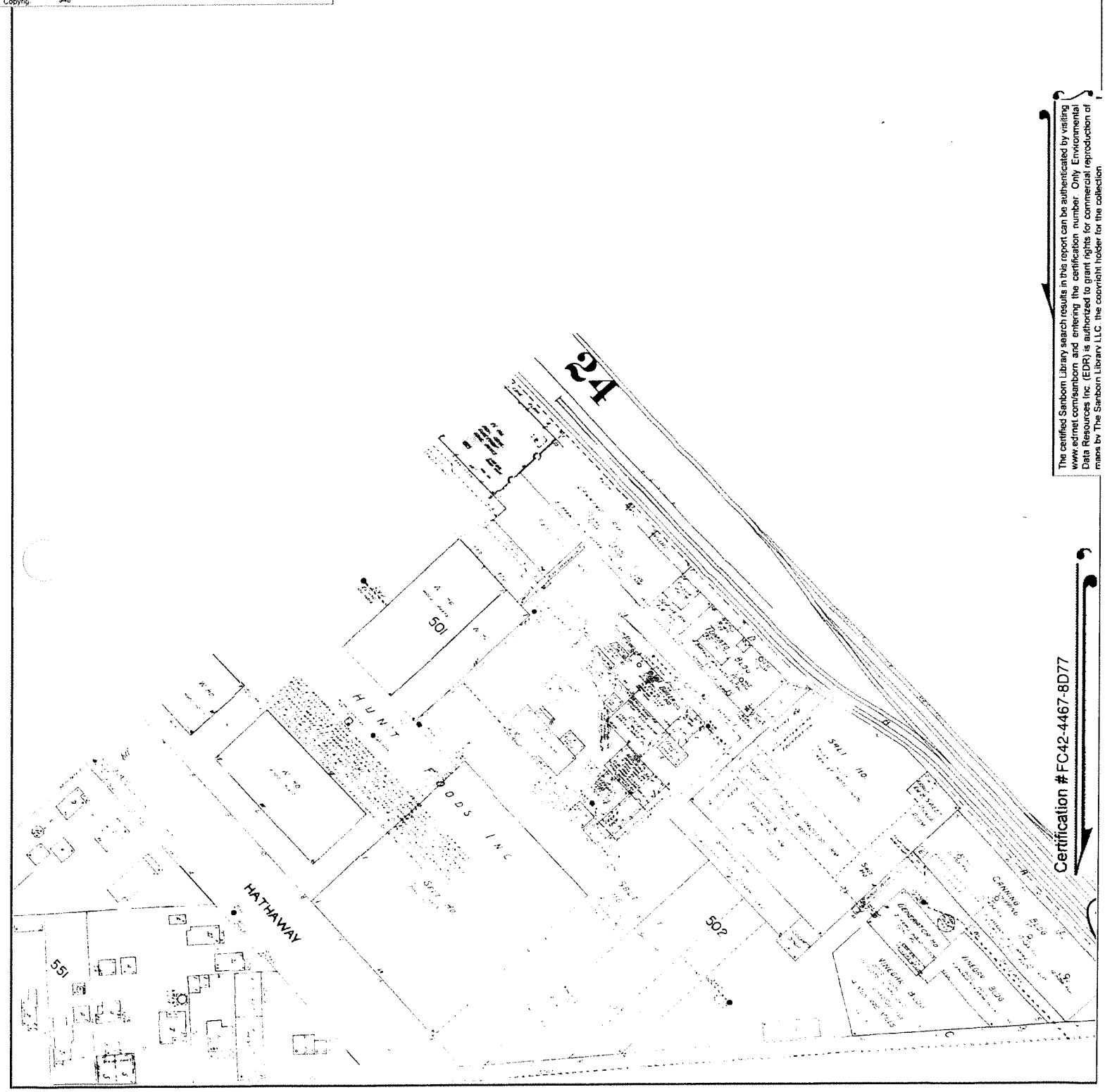

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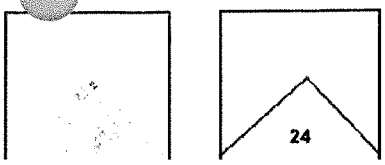

N

Certified Sanborn® Map

1923

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Address: 22330 Hathaway Avenue
City, ST, ZIP Hayward, CA 94541
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EDR Inquiry: 4583200.3
Order 1/06/2016
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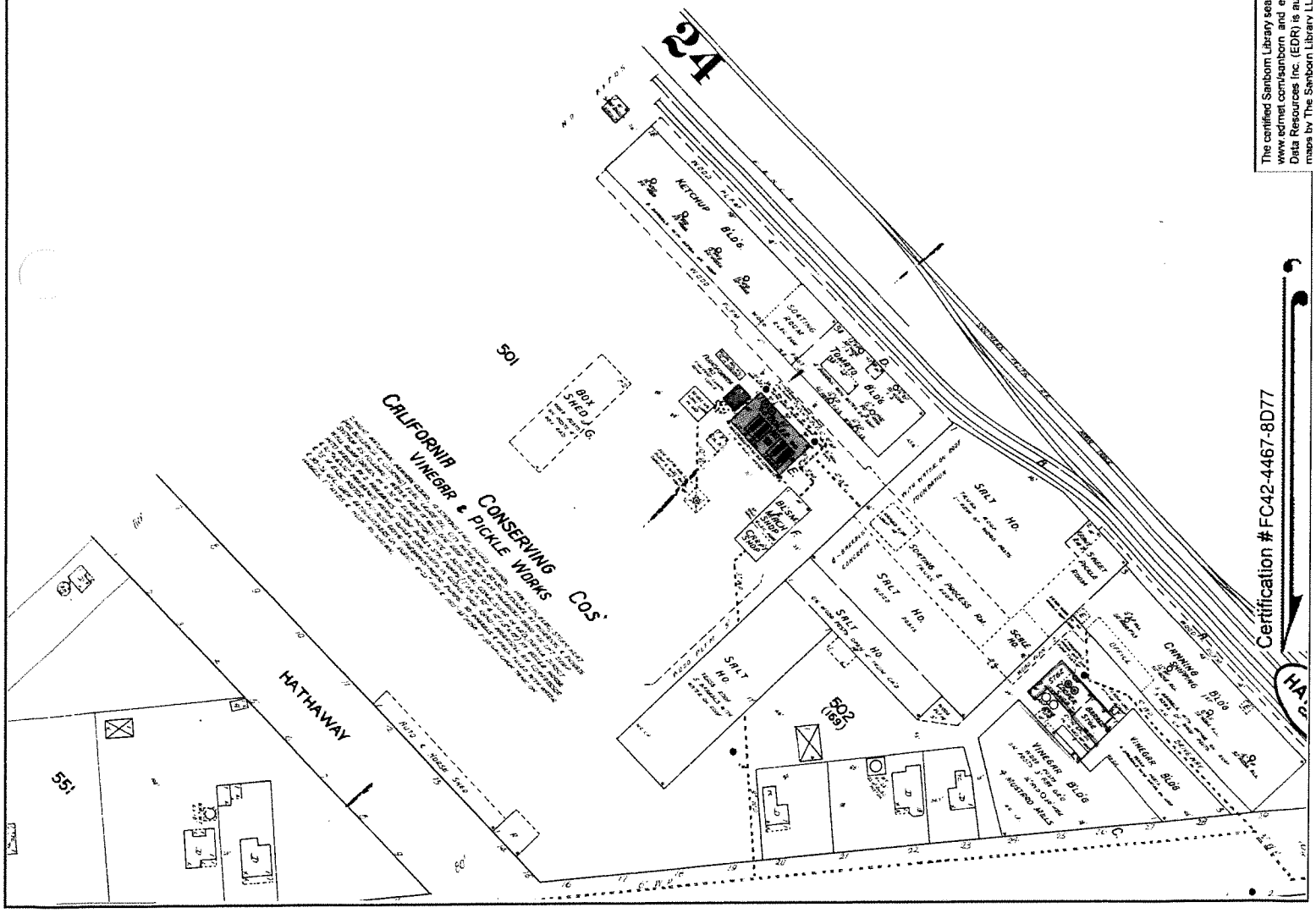

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Certification # FC42-4467-8D77

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0 Feet 150 300 600

Volume 1, Sheet 24

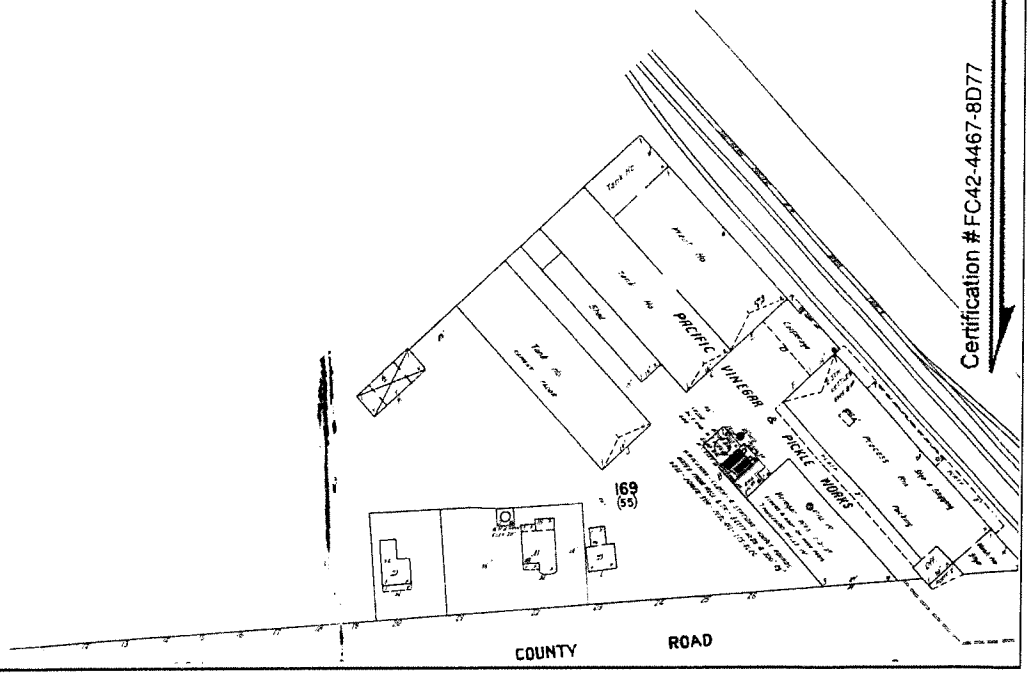
24

N

Certified Sanborn® Map

1907

Site Name: Costco Hayward
Address: 22330 Hathaway Avenue
City, ST, ZIP: Hayward, CA 94541
Client: Kleinfelder, Inc.
EDR Inquiry: 4583200.3
Order F[illegible] /06/2016
Certi[illegible] 12-4467-8D77
Copyri[illegible] 07



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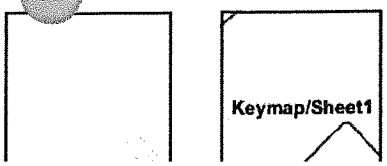
Certification # FC42-4467-8D77

This Certified Sanborn Map combines the following sheets.
O[illegible]ed areas indicate map sheets within the collection.

0 Feet 150 300 600



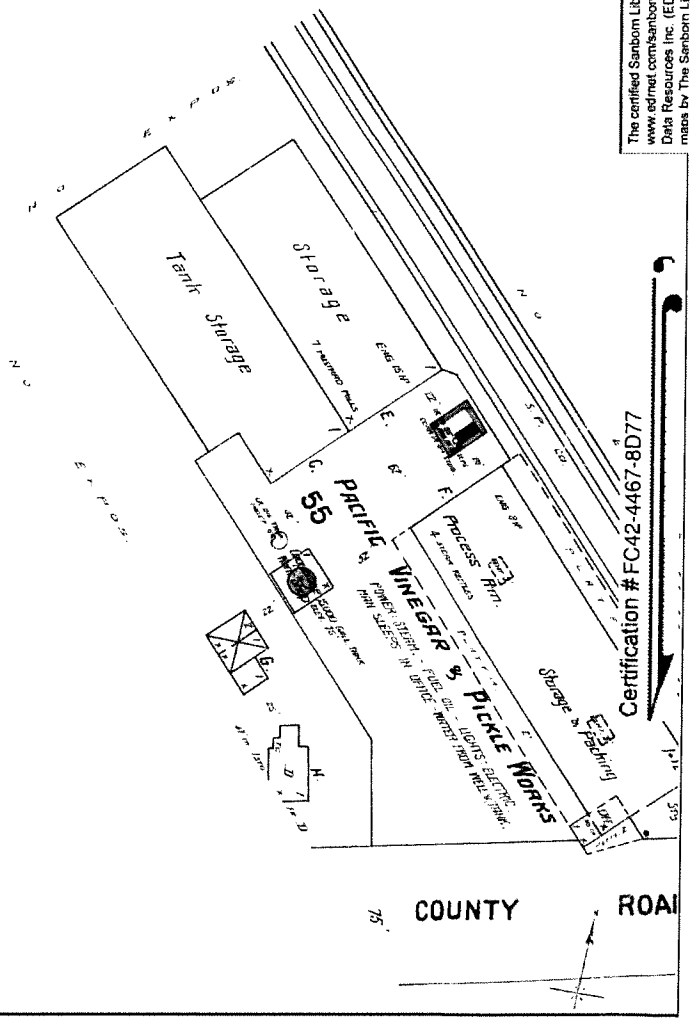
Volume 1, Sheet Keymap/Sheet1

N

Certified Sanborn® Map

1903

Site Name: Costco Hayward
Address: 22330 Hathaway Avenue
City, ST, ZIP: Hayward, CA 94541
Client: Kleinfelder, Inc.
EDR Inquiry: 4583200.3
Order: 1/06/2016
Certification: 42-4467-8D77
Copyright: 1903



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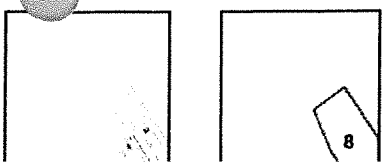
Certification #FC42-4467-8D77

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.



Volume 1, Sheet 8

0 Feet 150 300 600

N

Costco Hayward
22330 Hathaway Avenue
Hayward, CA 94541

Inquiry Number: 4583200.12
April 08, 2016

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

04/08/16

Site Name:

Costco Hayward
22330 Hathaway Avenue
Hayward, CA 94541
EDR Inquiry # 4583200.12

Client Name:

Kleinfelder, Inc.
2 Ada, Suite 250
Irvine, CA 92618-0000
Contact: Lindsey Dandridge-Perry

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.

Search Results:

Year	Scale	Details	Source
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1998	1"=500'	Flight Date: January, 01 1998	USGS
1993	1"=500'	Acquisition Date: July, 10 1993	USGS/DOQQ
1982	1"=500'	Flight Date: July, 05 1982	USGS
1974	1"=500'	Flight Date: October, 14 1974	USGS
1968	1"=500'	Flight Date: April, 22 1968	USGS
1958	1"=500'	Flight Date: July, 21 1958	USGS
1946	1"=500'	Flight Date: July, 29 1946	USGS
1939	1"=500'	Flight Date: July, 26 1939	USGS

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INQUIRY #: 4583200.12
YEAR: 2012
= 500'
N
EDR

INQUIRY #: 4583200.12

YEAR: 2010

N

EDR

INQUIRY #: 4583200.12

YEAR: 2009

N

EDR

INQUIRY #: 4583200.12

YEAR: 2006

N

EDR

INQUIRY #: 4583200.12
YEAR: 2005
= 500'
N
EDR

INQUIRY #: 4583200.12
YEAR: 1998
= 500'
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EDR

INQUIRY #: 4583200.12
YEAR: 1993
= 500'
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EDR

INQUIRY #: 4583200.12
YEAR: 1982
= 500'
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EDR

INQUIRY #: 4583200.12
YEAR: 1974
= 500'
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EDR

INQUIRY #: 4583200.12

YEAR: 1968

= 500'

N

EDR

INQUIRY #: 4583200.12
YEAR: 1958
= 500'
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EDR

INQUIRY #: 4563200.12
YEAR: 1946
= 500'
N
EDR

INQUIRY #: 4583200.12

YEAR: 1939

= 500'

N

EDR

Costco Hayward
22330 Hathaway Avenue
Hayward, CA 94541

Inquiry Number: 4583200.5
April 11, 2016

The EDR-City Directory Abstract

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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SECTION

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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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract 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 Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1920 through 2013. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 660 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	Source	TP	Adjoining	Text Abstract	Source Image
2013	Cole Information Services	X	X	X	-
2008	Cole Information Services	X	X	X	-
2006	Haines Company, Inc.	-	-	-	-
2002	Haines	X	X	X	-
	R. L. Polk & Co.	X	X	X	-
2000	Pacific Bell	-	-	-	-
1996	PACIFIC BELL DIRECTORY	-	-	-	-
1993	Pacific Bell	-	-	-	-
1992	PACIFIC BELL DIRECTORY	-	X	X	-
1991	PACIFIC BELL WHITE PAGES	-	-	-	-
1986	PACIFIC BELL WHITE PAGES	-	X	X	-
1984	Pacific Bell	-	-	-	-
1982	Pacific Telephone	-	X	X	-
1980	Pacific Telephone	-	X	X	-
1979	Pacific Telephone	-	X	X	-
1976	R. L. Polk & Co.	-	X	X	-
1975	Pacific Telephone	-	X	X	-
1973	Pacific Telephone	-	X	X	-
1970	R. L. Polk & Co.	-	X	X	-
1967	R. L. Polk Co.	-	-	-	-
1965	R. L. Polk & Co.	-	X	X	-
1962	Pacific Telephone	-	-	-	-
1960	Pacific Telephone	-	X	X	-
1959	R. L. Polk & Co.	-	X	X	-
1956	Pacific Telephone	-	-	-	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1955	R. L. Polk & Co.	-	X	X	-
1954	R. L. Polk & Co. of California	-	-	-	-
1951	R. L. Polk & Co.	-	X	X	-
1950	The Pacific Telephone & Telegraph Co.	-	-	-	-
1946	R. L. Polk & Co.	-	-	-	-
1945	The Pacific Telephone & Telegraph Co.	-	-	-	-
1943	R. L. Polk & Co.	-	-	-	-
1940	R. L. Polk & Co.	-	-	-	-
1938	Pacific Telephone	-	-	-	-
1933	R. L. Polk & Co. of California	-	-	-	-
1932	R. L. Polk & Co. of California	-	-	-	-
1928	R. L. Polk & Co. of California	-	-	-	-
1926	R. L. Polk & Co.	-	-	-	-
1925	The Pacific Telephone & Telegraph Co.	-	-	-	-
1920	R. L. Polk & Co. of California	-	-	-	-

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

22330 Hathaway Avenue
Hayward, CA 94541

FINDINGS DETAIL

Target Property research detail.

HATHAWAY AVE

22330 HATHAWAY AVE

Year	*Uses*	*Source*
2013	COSTCO WHOLESALE	Cole Information Services
2008	COSTCO	Cole Information Services
2002	CENTER	Haines
	COSTCOBUSINESS	Haines
	CENTER	R. L. Polk & Co.
	COSCOBUSIM SS	R. L. Polk & Co.

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

A W

258 A W

Year	Uses	Source
1992	SOUTH COUNTY HOMELESS PROJECT	PACIFIC BELL DIRECTORY

263 A W

Year	Uses	Source
1992	Welch Kevin M	PACIFIC BELL DIRECTORY
	Fierros Arturo	PACIFIC BELL DIRECTORY
	Cardoza Marty	PACIFIC BELL DIRECTORY
	Garcia Pauline	PACIFIC BELL DIRECTORY
	Sivret Richard	PACIFIC BELL DIRECTORY
	A STREET TRAILER PARK	PACIFIC BELL DIRECTORY
	Pinkler Harry	PACIFIC BELL DIRECTORY
	Perschonok Tedd	PACIFIC BELL DIRECTORY
	Bee James	PACIFIC BELL DIRECTORY
	BIG O TIRE STORES	PACIFIC BELL DIRECTORY
	Horton Elwyn	PACIFIC BELL DIRECTORY

295 A W

Year	Uses	Source
1992	CAROLINAS LIQUOR STORE	PACIFIC BELL DIRECTORY

311 A W

Year	Uses	Source
1992	ALS DELI	PACIFIC BELL DIRECTORY

335 A W

Year	Uses	Source
1992	BRITISH PARTS LOCATING SERVICE	PACIFIC BELL DIRECTORY

341 A W

Year	Uses	Source
1992	Lai Giapia	PACIFIC BELL DIRECTORY
	WOON S PLUMBING & FIRE PROTECTION CO	PACIFIC BELL DIRECTORY

FINDINGS

352 A W

Year	Uses	Source
1992	OIL CHANGERS	PACIFIC BELL DIRECTORY

360 A W

Year	Uses	Source
1992	BEST WESTERN INN OF HAYWARD	PACIFIC BELL DIRECTORY
	Sagar Dinyar N	PACIFIC BELL DIRECTORY

373 A W

Year	Uses	Source
1992	SCHUCKS TRANSMISSION SERVICE	PACIFIC BELL DIRECTORY

A ST W

208 A ST W

Year	Uses	Source
1965	VACANT	R. L. Polk & Co.

210 A ST W

Year	Uses	Source
1965	DAN S BARBER SHOP	R. L. Polk & Co.

216 A ST W

Year	Uses	Source
1965	JIMINEZ LOUIS	R. L. Polk & Co.

224 A ST W

Year	Uses	Source
1965	JIMINEZ TV REPAIR & SALES	R. L. Polk & Co.

232 A ST W

Year	Uses	Source
1965	CORBETT JAMES	R. L. Polk & Co.

240 A ST W

Year	Uses	Source
1965	PIMENTEL S MARKET GROS	R. L. Polk & Co.

256 A ST W

Year	Uses	Source
1965	TOP TEN MARKETS INC GROS	R. L. Polk & Co.

FINDINGS

263 A ST W

Year	Uses	Source
1965	GEORGE S RICHFIELD SERVICE	R. L. Polk & Co.

269 A ST W

Year	Uses	Source
1965	SUNSET BODY PAINT SHOP	R. L. Polk & Co.

271 A ST W

Year	Uses	Source
1965	SUNSET GARAGE & BRAKE SHOP	R. L. Polk & Co.
	WILSON ROBERT	R. L. Polk & Co.
	280 A STREET TRAILER PARK	R. L. Polk & Co.
	AUTO REPR	R. L. Polk & Co.

287 A ST W

Year	Uses	Source
1965	LESH MICHL C	R. L. Polk & Co.

303 A ST W

Year	Uses	Source
1965	CARDEIRO ISADORE P	R. L. Polk & Co.

310 A ST W

Year	Uses	Source
1965	WEST A FLYING A SERVICE GAS	R. L. Polk & Co.

311 A ST W

Year	Uses	Source
1965	MILANNS SMOKE MEAT	R. L. Polk & Co.

315 A ST W

Year	Uses	Source
1965	BALZELL WINIFRED MRS	R. L. Polk & Co.

317 A ST W

Year	Uses	Source
1965	AUSTIN BRAD	R. L. Polk & Co.

319 A ST W

Year	Uses	Source
1965	TIMM HENRY	R. L. Polk & Co.

FINDINGS

321 A ST W

Year	Uses	Source
1965	GERARD LYDIA E MRS	R. L. Polk & Co.

323 A ST W

Year	Uses	Source
1965	DOOSON JAMES S	R. L. Polk & Co.

327 A ST W

Year	Uses	Source
1965	NO RETURN	R. L. Polk & Co.

330 A ST W

Year	Uses	Source
1965	SAFFELL GERALD E	R. L. Polk & Co.

335 A ST W

Year	Uses	Source
1965	DOMINGUEZ JUAN F	R. L. Polk & Co.

341 A ST W

Year	Uses	Source
1965	CULVER KENNETH M JR	R. L. Polk & Co.

347 A ST W

Year	Uses	Source
1965	MONTEZ MANUEL S	R. L. Polk & Co.

351 A ST W

Year	Uses	Source
1965	STATION	R. L. Polk & Co.
	352 A STREET DOUGLAS SERVICE	R. L. Polk & Co.
	VACANT	R. L. Polk & Co.

359 A ST W

Year	Uses	Source
1965	SILVA JOSEPH A	R. L. Polk & Co.

360 A ST W

Year	Uses	Source
1965	SEKERA FRED S	R. L. Polk & Co.

FINDINGS

368 A ST W

Year	Uses	Source
1965	TURRUBIARTES DOMINGO	R. L. Polk & Co.

373 A ST W

Year	Uses	Source
1965	FREEWAY GARAGE AUTO REPR	R. L. Polk & Co.

375 A ST W

Year	Uses	Source
1965	WALKER VERNON	R. L. Polk & Co.

384 A ST W

Year	Uses	Source
1965	JONES TOM L	R. L. Polk & Co.

FULLER AVE

22309 FULLER AVE

Year	Uses	Source
1970	Vacant	R. L. Polk & Co.
1965	BELEN EMETERIO C	R. L. Polk & Co.
1959	Perkins Jas	R. L. Polk & Co.

22311 FULLER AVE

Year	Uses	Source
1965	VACANT	R. L. Polk & Co.
1959	Bailey Roblt	R. L. Polk & Co.

22313 FULLER AVE

Year	Uses	Source
1965	VACANT	R. L. Polk & Co.
1959	Dollins Mabel Mrs	R. L. Polk & Co.

22323 FULLER AVE

Year	Uses	Source
2002	XXXX	Haines
1976	Anastia John	R. L. Polk & Co.
1970	Vallejo Flora Mrs	R. L. Polk & Co.
1965	GALE ARTH R	R. L. Polk & Co.
1960	VERT EARL R	Pacific Telephone
1959	Vert Earl R je	R. L. Polk & Co.

FINDINGS

22325 FULLER AVE

Year	Uses	Source
2002	CUELLARReno	Haines
1976	Torres Ricardo	R. L. Polk & Co.
1970	Reyes Henry	R. L. Polk & Co.
1965	VACANT	R. L. Polk & Co.

22327 FULLER AVE

Year	Uses	Source
1976	Maldonaldo Geo	R. L. Polk & Co.
1970	Flores Rafael	R. L. Polk & Co.
1965	FIELDS DANL G	R. L. Polk & Co.
1959	Vacant	R. L. Polk & Co.

22329 FULLER AVE

Year	Uses	Source
2002	RAMIREZJuan Lara	Haines
1982	GONZALEZ JOSE HAYWARD	Pacific Telephone
1979	GONZALEZ JOSE	Pacific Telephone
1976	Maldonaldo George	R. L. Polk & Co.
	MADRIGAL MIGUCL	R. L. Polk & Co.
1970	Colon Hector M	R. L. Polk & Co.
1965	HOFF TIMOTHY J	R. L. Polk & Co.
1960	ROGERS BILLY G	Pacific Telephone
1959	Rodage Billy G	R. L. Polk & Co.

22331 FULLER AVE

Year	Uses	Source
1965	CHARMAN DELBERT A D	R. L. Polk & Co.
1959	Vacant	R. L. Polk & Co.

22333 FULLER AVE

Year	Uses	Source
1965	HARDWICH RAY	R. L. Polk & Co.
1959	Mc Donald L A	R. L. Polk & Co.

22335 FULLER AVE

Year	Uses	Source
1965	NOBRIGA LOIGA	R. L. Polk & Co.
1959	Vacant	R. L. Polk & Co.

FINDINGS

22337 FULLER AVE

Year	Uses	Source
1979	GONZALEZ JOSEC	Pacific Telephone
1976	Trujillo Benito G	R. L. Polk & Co.
1970	Trujillo Benito G	R. L. Polk & Co.
1965	AGUILAR EMETERIO G	R. L. Polk & Co.
1959	Ford Horace D je	R. L. Polk & Co.
	Gurule Willie	R. L. Polk & Co.

22339 FULLER AVE

Year	Uses	Source
1965	VACANT	R. L. Polk & Co.
1959	Vacant	R. L. Polk & Co.

22345 FULLER AVE

Year	Uses	Source
2002	CAMACHOConrado	Haines
1976	Moreno Anna	R. L. Polk & Co.
1970	Me Donnell Rodney	R. L. Polk & Co.
1965	BROWN WESLEYM	R. L. Polk & Co.
	BROWN LESLIE M	R. L. Polk & Co.
1960	LAREZ DELIA S	Pacific Telephone
1959	Larez Delia Mrs lu	R. L. Polk & Co.

22347 FULLER AVE

Year	Uses	Source
1959	Vacant	R. L. Polk & Co.

22355 FULLER AVE

Year	Uses	Source
2002	PADILL	Haines
	WALKER Thomas	Haines
1976	Cruz Manuel P	R. L. Polk & Co.
1970	Cruz Manuel P	R. L. Polk & Co.
1965	MICHEL JOSEPH R I	R. L. Polk & Co.
1959	Walker Raymond	R. L. Polk & Co.

22365 FULLER AVE

Year	Uses	Source
2002	GARCIAJose	Haines
1992	Castillo Phylis	PACIFIC BELL DIRECTORY

FINDINGS

Year	Uses	Source
1982	CASTILLO PHYLIS HAYWARD	Pacific Telephone
1979	CASTILLO PHYLIS	Pacific Telephone
1976	Castillo Richd	R. L. Polk & Co.
1973	CASTILLO PHYLIS	Pacific Telephone
1970	Castillo Richd	R. L. Polk & Co.
1965	VACANT	R. L. Polk & Co.
1960	CASTILLO RICHARD	Pacific Telephone
1959	Castillo Richd R i A LTJ	R. L. Polk & Co.

22366 FULLER AVE

Year	Uses	Source
2013	GRUPO COMPARTIMIENTO	Cole Information Services
2008	LA FAMILIA NEIGHBORHOOD RESOURCE CEN	Cole Information Services
	GRUPO COMPARTIMIENTO	Cole Information Services
1992	YWCA SOUTH COUNTY BUSINESS OFFICE	PACIFIC BELL DIRECTORY
1976	Me Coy Auction Co Inc	R. L. Polk & Co.
	MC COY AUCTION CO	R. L. Polk & Co.
1973	MC COY AUCTION CO	Pacific Telephone
	ME COY EVERETT	Pacific Telephone
1970	Mc Coy Auction Co	R. L. Polk & Co.
	Mc Coy Everett S	R. L. Polk & Co.
1965	MC COY AUCTION CO	R. L. Polk & Co.
	MC COY EVERETT S	R. L. Polk & Co.
	MC COY AUCTION CO	R. L. Polk & Co.
	MC COY EVERETT	R. L. Polk & Co.
1960	MC COY AUCTION CO	Pacific Telephone
	MC COY EVERETT	Pacific Telephone
1959	Mc Coy Everett A LU	R. L. Polk & Co.

22375 FULLER AVE

Year	Uses	Source
1970	Vacant	R. L. Polk & Co.
1965	VACANT	R. L. Polk & Co.
1960	ALICEA EDUARDO	Pacific Telephone
1959	Alicea Eduardo	R. L. Polk & Co.

FINDINGS

22376 FULLER AVE

Year	Uses	Source
1965	VACANT	R. L. Polk & Co.
1959	Vacant	R. L. Polk & Co.

22393 FULLER AVE

Year	Uses	Source
2002	XXXX	Haines
1982	CONTRERAS JOSE L HAYWARD	Pacific Telephone
1979	BERRYR GERTRUDE MRS	Pacific Telephone
1976	BERRY GERTRUDE MRS	R. L. Polk & Co.
	Berry Gertrude	R. L. Polk & Co.
1970	Quevedo Jesus	R. L. Polk & Co.
1965	ERICSON JOE	R. L. Polk & Co.
	ERICSON JOE E	R. L. Polk & Co.

22395 FULLER AVE

Year	Uses	Source
2002	ALBIARCindy	Haines
1982	ALBIAR CINDY HAYWARD	Pacific Telephone
1976	Albiar Joseph P	R. L. Polk & Co.
1970	Albiar Joseph P	R. L. Polk & Co.
1965	ALBIAR JOSEPH P	R. L. Polk & Co.
	ALBIAR JOS P	R. L. Polk & Co.
1960	ALBIAR JOE P	Pacific Telephone
1959	Albiar Jos P je	R. L. Polk & Co.

22396 FULLER AVE

Year	Uses	Source
1965	VACANT	R. L. Polk & Co.
1959	No return	R. L. Polk & Co.

22408 FULLER AVE

Year	Uses	Source
1965	LAMOUREAUX WM W	R. L. Polk & Co.
1959	Laimoureaux Wm W	R. L. Polk & Co.

22409 FULLER AVE

Year	Uses	Source
2002	0 CHOARafael	Haines
1976	Maldanado Emma	R. L. Polk & Co.

FINDINGS

Year	Uses	Source
1970	West Joseph	R. L. Polk & Co.
1965	NO RETURN	R. L. Polk & Co.
1959	Vacant	R. L. Polk & Co.

HAPIYLAND AVE

22324 HAPIYLAND AVE

Year	Uses	Source
1976	Storage	R. L. Polk & Co.

22334 HAPIYLAND AVE

Year	Uses	Source
1976	Javier Padilla	R. L. Polk & Co.

HAPPYLAND AVE

22322 HAPPYLAND AVE

Year	Uses	Source
2002	OR 6 ELLAS RICHARD	R. L. Polk & Co.
	OR 6 ELLAS RICHARD	Haines
1992	ORNELLAS RICHARD	PACIFIC BELL DIRECTORY
1982	GOVERNO G K HAYWARD	Pacific Telephone
	GIBSON WAYNE HAYWARD	Pacific Telephone
1979	GIBSON WAYNE	Pacific Telephone
1976	GIBSON WAYNE	R. L. Polk & Co.

22324 HAPPYLAND AVE

Year	Uses	Source
2008	HERNANDEZ VICTOR UPHOLSTERY	Cole Information Services
2002	MCDONALD Hildred	Haines
	HERNANDE 2 VUPHL	Haines
	UPHOLSTERY	R. L. Polk & Co.
	VICTOR HERN	R. L. Polk & Co.
	MCDONALD Hildred	R. L. Polk & Co.
	HERNANDE 2 VUPHL	R. L. Polk & Co.
	UPHOLSTERY	Haines
	VICTOR HERN	Haines
1992	HERNANDEZ VICTOR UPHOLSTERY	PACIFIC BELL DIRECTORY
1960	COX J T	Pacific Telephone

FINDINGS

22334 HAPPYLAND AVE

Year	Uses	Source
2002	PADILLA	R. L. Polk & Co.
	PADILLA	Haines
1970	Riggo Robt	R. L. Polk & Co.
1965	DE CAMBRA ALF	R. L. Polk & Co.
1960	JONGEWAARD ALMOLI N	Pacific Telephone

HATHAWAY AVE

22077 HATHAWAY AVE

Year	Uses	Source
2002	WADLEYEdna F	Haines
1982	HIEB HANS HAYWARD	Pacific Telephone
1976	Clancy James E	R. L. Polk & Co.
1970	Clancy James E	R. L. Polk & Co.
1965	PROWSE BRAD	R. L. Polk & Co.
	PROWSE BRAD A	R. L. Polk & Co.

22079 HATHAWAY AVE

Year	Uses	Source
2002	XXXX	Haines
1976	Blaylock Irving	R. L. Polk & Co.
	BLAYLOCK IRVIN	R. L. Polk & Co.
1970	De Vaughn Ernest	R. L. Polk & Co.
1965	ANDRADE LOUIS	R. L. Polk & Co.
	ANDRADE LOUIS III	R. L. Polk & Co.

22081 HATHAWAY AVE

Year	Uses	Source
2002	841 SO Debb B	R. L. Polk & Co.
	XXXX	Haines
1976	Russell Charles N	R. L. Polk & Co.
1970	Leazer Joseph	R. L. Polk & Co.
1965	ANDRADE LOUIS	R. L. Polk & Co.

22083 HATHAWAY AVE

Year	Uses	Source
2002	VAROMiiu	R. L. Polk & Co.
	VAROMiguel M	Haines

FINDINGS

Year	Uses	Source
1982	HERNANDEZ PETE & ROYLENE HAYWARD	Pacific Telephone
1976	Alkema Michl	R. L. Polk & Co.
	ALKENMA MIKE	R. L. Polk & Co.
1970	Stoop Gary	R. L. Polk & Co.
1965	STOCKFISH CHARLES	R. L. Polk & Co.
1960	FOWLER MAUD MRS	Pacific Telephone
1959	Fowler Maud Mrs	R. L. Polk & Co.

22085 HATHAWAY AVE

Year	Uses	Source
2002	XXXX	Haines
1979	NIOBE T	Pacific Telephone
1976	Hessler Wm Jr	R. L. Polk & Co.
	HESSLER WILLIAM JR HAYWARD 78 $452	R. L. Polk & Co.
1973	DIVINE JOHN	Pacific Telephone
1970	Gomes Geo	R. L. Polk & Co.
1965	PORTER RUSS SHIRLEY	R. L. Polk & Co.
	PORTER RUSSELL L	R. L. Polk & Co.

22087 HATHAWAY AVE

Year	Uses	Source
2002	NIUChunna	Haines
	XXXX	Haines
	NIUC 1410 B	R. L. Polk & Co.
	Ni UC	Haines
	8 XX	R. L. Polk & Co.
1992	Gilliland Sarah	PACIFIC BELL DIRECTORY

22088 HATHAWAY AVE

Year	Uses	Source
2002	288 D	R. L. Polk & Co.

22089 HATHAWAY AVE

Year	Uses	Source
1976	Hernandez Magda	R. L. Polk & Co.
1970	Fontes Alf S	R. L. Polk & Co.
1965	MOLT WM	R. L. Polk & Co.

FINDINGS

22091 HATHAWAY AVE

Year	Uses	Source
2002	WILSONO	Haines
	XXXX	Haines
1992	Abaunza Victor Manuel	PACIFIC BELL DIRECTORY
1982	FERNANDEZ SAMUEL HAYWARD	Pacific Telephone
1979	FERNANDEZ SAMUEL	Pacific Telephone
1976	Fernandez Sarhul	R. L. Polk & Co.
1970	Aguaya Ruben D	R. L. Polk & Co.
1965	WIDDER GUS	R. L. Polk & Co.
1959	Widder Gus	R. L. Polk & Co.

22095 HATHAWAY AVE

Year	Uses	Source
2002	RUE 0 ASR ben	Haines
1992	Ruelas Ruben	PACIFIC BELL DIRECTORY
1982	RUELAS RUBEN HAYWARD	Pacific Telephone
1976	Moreno Javier G	R. L. Polk & Co.
1973	MORENO JAVIER	Pacific Telephone
1970	Moreno Javier	R. L. Polk & Co.
1965	MOLINA HERIBERTO A	R. L. Polk & Co.
1959	Cole Joe C je	R. L. Polk & Co.

22099 HATHAWAY AVE

Year	Uses	Source
2002	ORUELAS Benjamin	Haines
1976	Aguio Reuben	R. L. Polk & Co.
1970	Garcia Raul	R. L. Polk & Co.
1965	MC DONALD LOUISE C MRS	R. L. Polk & Co.
	MC DONALD LOUISE MRS	R. L. Polk & Co.
1960	LUCERO MANUEL R	Pacific Telephone
1959	Lucero Manuel R	R. L. Polk & Co.

22113 HATHAWAY AVE

Year	Uses	Source
2002	388 W 41 Mtt 814e	R. L. Polk & Co.

22123 HATHAWAY AVE

Year	Uses	Source
2002	WHITEMAN Aince	Haines
1976	Alvarado Pilar Mrs	R. L. Polk & Co.

FINDINGS

Year	Uses	Source
1973	FERNANDES ROBERT	Pacific Telephone
1970	Alvarado Pilar Mrs	R. L. Polk & Co.
1965	ALVARADO PILAR MRS	R. L. Polk & Co.
1959	Alvarado Loren	R. L. Polk & Co.

22147 HATHAWAY AVE

Year	Uses	Source
2008	SIROY S SCHOOL OF JUDO	Cole Information Services
2002	SIROY Steve	Haines
	SNUNESElwn	Haines
	SIROY	R. L. Polk & Co.
	NUNESElwn	R. L. Polk & Co.
1982	NUNES AL HAYWARD	Pacific Telephone
1979	NUNES AL	Pacific Telephone
1976	NUNES AL	R. L. Polk & Co.
	Nunes Elvin	R. L. Polk & Co.
1970	Barre Angele Mrs	R. L. Polk & Co.
1965	BLANEY LAWRENCE	R. L. Polk & Co.
	8 ARRE ANGELE MRS	R. L. Polk & Co.
	BARRE ANGELE	R. L. Polk & Co.
1960	BARRE ANGELE	Pacific Telephone

22155 HATHAWAY AVE

Year	Uses	Source
2002	XXXX	Haines
1979	ANDREWS STEVE	Pacific Telephone
1976	MC CRACKEN H FRANKLIN II	R. L. Polk & Co.
	Mc Cracken H Franklin II	R. L. Polk & Co.
1973	DONOFRIA RICHARD	Pacific Telephone
1970	Neal David	R. L. Polk & Co.
1965	8 ROGAN MICHL	R. L. Polk & Co.

22159 HATHAWAY AVE

Year	Uses	Source
1976	Mc Phee J	R. L. Polk & Co.
1970	Morrison Cal	R. L. Polk & Co.
1965	DEAN DENNIS	R. L. Polk & Co.
	DEAN DENNIS N	R. L. Polk & Co.

FINDINGS

22163 HATHAWAY AVE

Year	Uses	Source
2002	CANEPAL	Haines
1992	Canepa L	PACIFIC BELL DIRECTORY
1982	CANEPA L HAYWARD	Pacific Telephone
1979	CANEPA L	Pacific Telephone
1976	CANEPA L	R. L. Polk & Co.
	Canapea Len	R. L. Polk & Co.
1973	CANEPA J J	Pacific Telephone
1970	Thomas Brian J	R. L. Polk & Co.
1965	CANEPA JOHN A	R. L. Polk & Co.
	CANEPA JOHN	R. L. Polk & Co.

22175 HATHAWAY AVE

Year	Uses	Source
2002	GUTIERREZSI Si O	Haines
1992	Larsen L T	PACIFIC BELL DIRECTORY
1982	LARSEN L T HAYWARD	Pacific Telephone
1979	LARSEN LT	Pacific Telephone
1976	LARSEN L T	R. L. Polk & Co.
	Larsen Leslie T	R. L. Polk & Co.
1973	LARSEN LT	Pacific Telephone
1970	Larsen Leslie T	R. L. Polk & Co.
1965	LARSEN LESLIE T	R. L. Polk & Co.
	LARSENLT	R. L. Polk & Co.
1960	LARSEH L T	Pacific Telephone
1959	Larsen Leslie T	R. L. Polk & Co.

22203 HATHAWAY AVE

Year	Uses	Source
1955	Breese Geo C	R. L. Polk & Co.
1951	B reese G C O	R. L. Polk & Co.

22213 HATHAWAY AVE

Year	Uses	Source
1955	Olson Emil L	R. L. Polk & Co.

22221 HATHAWAY AVE

Year	Uses	Source
2013	LOCKSMITH	Cole Information Services
2008	ALS DELI FACTORY STORE & DL	Cole Information Services

FINDINGS

Year	Uses	Source
2002	Ve G 11 ANOBsmard	R. L. Polk & Co.
	ELINDIO	Haines
	ELINOIOS	R. L. Polk & Co.
	VIGGIANOBemard	Haines
1976	Vacant	R. L. Polk & Co.
1970	Bickley Danl	R. L. Polk & Co.
1965	MEDEIROS MANUEL	R. L. Polk & Co.
	MEDEIROS THERSA MRS	R. L. Polk & Co.
1959	Medeiros Manuel	R. L. Polk & Co.

22223 HATHAWAY AVE

Year	Uses	Source
1955	Combs Dave Y	R. L. Polk & Co.

22233 HATHAWAY AVE

Year	Uses	Source
2002	XXXX	R. L. Polk & Co.
	XXXX	Haines
1951	Wider Gus	R. L. Polk & Co.

22235 HATHAWAY AVE

Year	Uses	Source
1959	Davis R T	R. L. Polk & Co.
1955	Davis Elise B Mrs	R. L. Polk & Co.
1951	Davis R T	R. L. Polk & Co.

22241 HATHAWAY AVE

Year	Uses	Source
1970	Vardanega Victor	R. L. Polk & Co.
1965	VARDANREGA VIE	R. L. Polk & Co.
	VAROANEGA VICTOR	R. L. Polk & Co.
1960	VARDANEGA VIE	Pacific Telephone
1959	Vardenga Victor	R. L. Polk & Co.

22253 HATHAWAY AVE

Year	Uses	Source
2002	XXXX	Haines

FINDINGS

22255 HATHAWAY AVE

Year	Uses	Source
1955	Peters Melvin L	R. L. Polk & Co.

22263 HATHAWAY AVE

Year	Uses	Source
1979	DOTSON E	Pacific Telephone
1970	Serpa Maria C Mrs	R. L. Polk & Co.
1965	SERPA MARIA C MRS	R. L. Polk & Co.
	SERPA MARIA C	R. L. Polk & Co.
1960	SERPA MARIA C	Pacific Telephone
1959	Serpa Marie Mrs A LIY	R. L. Polk & Co.

22275 HATHAWAY AVE

Year	Uses	Source
1955	Ortiz Faustino	R. L. Polk & Co.
1951	Ortiz Faustino	R. L. Polk & Co.

22283 HATHAWAY AVE

Year	Uses	Source
2002	SRAMEK Milan	Haines
	SRA 4 EKM 4lan	R. L. Polk & Co.
1976	Lane Jorden	R. L. Polk & Co.
1970	Lane Jorden	R. L. Polk & Co.
1965	LANE JORDEAN	R. L. Polk & Co.
1960	LANE H J	Pacific Telephone
1959	Lane H J A LUJ	R. L. Polk & Co.

22285 HATHAWAY AVE

Year	Uses	Source
2002	MARTINJe SG	R. L. Polk & Co.
	KRAMM Jasn	R. L. Polk & Co.

22288 HATHAWAY AVE

Year	Uses	Source
1951	Annex	R. L. Polk & Co.
	Hunt Foods Inc	R. L. Polk & Co.

22290 HATHAWAY AVE

Year	Uses	Source
2013	CALIFORNIA BAY TRADING INC	Cole Information Services

FINDINGS

Year	Uses	Source
2013	DREAM COURTS	Cole Information Services
1955	Collins Eug C	R. L. Polk & Co.
1951	Co Uins CR	R. L. Polk & Co.

22297 HATHAWAY AVE

Year	Uses	Source
1955	Faria Frank F	R. L. Polk & Co.

22298 HATHAWAY AVE

Year	Uses	Source
1955	Hunt Food Inc Annex	R. L. Polk & Co.

22299 HATHAWAY AVE

Year	Uses	Source
1955	Chalmers Geo T	R. L. Polk & Co.

22300 HATHAWAY AVE

Year	Uses	Source
2013	AMERICAN POLYFOAM COMPANY INC	Cole Information Services
	M S INTERNATIONAL	Cole Information Services
2008	SMI LOGISTIC	Cole Information Services
	AMERICAN POLY FOAM CO LTD	Cole Information Services
	RYDER INTEGRATED LOGISTICS	Cole Information Services
	SHURGARD STORAGE CENTERS LLC	Cole Information Services
	MARINER TRADING CO INC	Cole Information Services
2002	RYDER INTEGRATED	Haines
	LOGISTICS	Haines
	SHURGARDSSTORAGE	Haines
1992	PRICE CLUB	PACIFIC BELL DIRECTORY

22302 HATHAWAY AVE

Year	Uses	Source
2013	EIGHTEEN TRUCKING	Cole Information Services
2008	SMI LOGISTICS	Cole Information Services
	OWENS BROCKWAY GLASS CONT INC	Cole Information Services
2002	GLASS CNTNR CRP	Haines
	OWENS BROCKWAY	Haines
1992	ANCHOR GLASS CONTAINER	PACIFIC BELL DIRECTORY
	ANCHOR GLASS CONTAINER	PACIFIC BELL DIRECTORY
	ANCHOR GLASS CONTAINER	PACIFIC BELL DIRECTORY

FINDINGS

Year	Uses	Source
1980	Field Dept	Pacific Telephone
	Personnel	Pacific Telephone
1970	1las Containers Corp Div Hunt	R. L. Polk & Co.
	Wesson Foods m&s	R. L. Polk & Co.
1965	HUNT FOODS & INDUSTRIES INC	R. L. Polk & Co.
1960	HUNT FOODS INC	Pacific Telephone

22305 HATHAWAY AVE

Year	Uses	Source
1955	Tonini Eli A	R. L. Polk & Co.

22308 HATHAWAY AVE

Year	Uses	Source
2002	CO INC	Haines
	A AMERICAN POLY FOAM	Haines
1951	Tonini A	R. L. Polk & Co.

22311 HATHAWAY AVE

Year	Uses	Source
1955	California Home Rabbitry	R. L. Polk & Co.
	Alasia Frank P	R. L. Polk & Co.
1951	Rabbitry	R. L. Polk & Co.
	Alasia P F	R. L. Polk & Co.
	Gallfornia Home	R. L. Polk & Co.

22317 HATHAWAY AVE

Year	Uses	Source
1955	Vacant	R. L. Polk & Co.
1951	Metke C E	R. L. Polk & Co.

22325 HATHAWAY AVE

Year	Uses	Source
1955	Fries Ottman	R. L. Polk & Co.

22328 HATHAWAY AVE

Year	Uses	Source
2002	SHUR 6 ARDS STORA 8 E	R. L. Polk & Co.

22331 HATHAWAY AVE

Year	Uses	Source
1955	Fowler Zuriel R	R. L. Polk & Co.

FINDINGS

22335 HATHAWAY AVE

Year	Uses	Source
1955	Widder Gus	R. L. Polk & Co.

22337 HATHAWAY AVE

Year	Uses	Source
1955	Cottle Jeanette Mrs	R. L. Polk & Co.

22339 HATHAWAY AVE

Year	Uses	Source
1955	Hibberd Arth E	R. L. Polk & Co.

22340 HATHAWAY AVE

Year	Uses	Source
2002	XXXX	R. L. Polk & Co.
	XXXX	Haines
1982	GLASS CONTAINERS CORPORATION HAYWARD	Pacific Telephone
1979	GLASS CONTAINERS CORPORATION	Pacific Telephone
1976	Glass Containers Corp Div Hunt	R. L. Polk & Co.
	Wesson Foods mfrs	R. L. Polk & Co.
1975	GFARSS CONTAINERS CORPORATION	Pacific Telephone
1973	GLASS CONTAINERS CORPORATION	Pacific Telephone

22343 HATHAWAY AVE

Year	Uses	Source
1955	Smith Lawrence	R. L. Polk & Co.
1951	Wandlebe R M	R. L. Polk & Co.

22347 HATHAWAY AVE

Year	Uses	Source
1955	Gonzales John	R. L. Polk & Co.
	Barre Angele Mrs	R. L. Polk & Co.
1951	Timmons A S	R. L. Polk & Co.
	jf N Francis Geo Q	R. L. Polk & Co.
	Barre Angelle	R. L. Polk & Co.
	Dineyc R oy	R. L. Polk & Co.

22349 HATHAWAY AVE

Year	Uses	Source
1976	GLASS CONTAINERS CORPORATION	R. L. Polk & Co.

FINDINGS

22359 HATHAWAY AVE

Year	Uses	Source
1955	Larsen Leslie T	R. L. Polk & Co.

22360 HATHAWAY AVE

Year	Uses	Source
2002	XXXX	Haines

22361 HATHAWAY AVE

Year	Uses	Source
1955	Medeiros Manuel	R. L. Polk & Co.

22367 HATHAWAY AVE

Year	Uses	Source
1955	Vardenga Victor	R. L. Polk & Co.
1951	Vardenega Victor	R. L. Polk & Co.

22368 HATHAWAY AVE

Year	Uses	Source
2002	By DERt 81 TE 8 RA 8 TE	R. L. Polk & Co.
	LOGIST 6 CS	R. L. Polk & Co.

22375 HATHAWAY AVE

Year	Uses	Source
1955	Serpa Serafine	R. L. Polk & Co.
1951	Payne M J	R. L. Polk & Co.

22383 HATHAWAY AVE

Year	Uses	Source
1955	Lane Jordan	R. L. Polk & Co.
1951	Lane Jorden	R. L. Polk & Co.

22571 HATHAWAY AVE

Year	Uses	Source
2002	GHRISTIANSENE	R. L. Polk & Co.

22647 HATHAWAY AVE

Year	Uses	Source
2002	MARTINIZJesas	Haines

FINDINGS

22649 HATHAWAY AVE

Year	Uses	Source
2002	CANNON Starla	Haines
	ELENESPedro	Haines

22665 HATHAWAY AVE

Year	Uses	Source
2002	RUELASR 11an	R. L. Polk & Co.

SANTA CLARA

22407 SANTA CLARA

Year	Uses	Source
1959	Lujan Martin je	R. L. Polk & Co.

22423 SANTA CLARA

Year	Uses	Source
1959	Furtado Louis J	R. L. Polk & Co.

22427 SANTA CLARA

Year	Uses	Source
1959	Arnold Everett M	R. L. Polk & Co.

22435 SANTA CLARA

Year	Uses	Source
1992	TORPEDO SUBS BY LORETTA	PACIFIC BELL DIRECTORY
1959	Coelho John A A JE	R. L. Polk & Co.

SANTA CLARA AVE

22411 SANTA CLARA AVE

Year	Uses	Source
1986	Rough Wm	PACIFIC BELL WHITE PAGES
	Roukes GN	PACIFIC BELL WHITE PAGES
	Creedon John	PACIFIC BELL WHITE PAGES

SANTA CLARA CT

22431 SANTA CLARA CT

Year	Uses	Source
1960	FURTADO JOHN C	Pacific Telephone

FINDINGS

SANTA CLARA ST

22407 SANTA CLARA ST

Year	Uses	Source
1976	Graham Connie	R. L. Polk & Co.
1970	Elliott Harold	R. L. Polk & Co.
1965	OXFORD HASCAL	R. L. Polk & Co.

22423 SANTA CLARA ST

Year	Uses	Source
1976	Taormana Joseph	R. L. Polk & Co.
1970	Taormina Joseph	R. L. Polk & Co.
1965	FURTADO LOUIS J	R. L. Polk & Co.

22427 SANTA CLARA ST

Year	Uses	Source
1976	Conn Richd	R. L. Polk & Co.
1970	Conn Richd	R. L. Polk & Co.
1965	CONN RICHD	R. L. Polk & Co.

22431 SANTA CLARA ST

Year	Uses	Source
1976	Poulson Adelaide	R. L. Polk & Co.
1970	Polson Levi	R. L. Polk & Co.
1965	FURTADO JOHN C	R. L. Polk & Co.

22435 SANTA CLARA ST

Year	Uses	Source
2013	TORPEDO SUBS BY LORETTA	Cole Information Services
	LOCKSMITH	Cole Information Services
2008	TORPEDOS BY LORETTA	Cole Information Services
1976	Vacant	R. L. Polk & Co.
1970	Bettencourt Joseph	R. L. Polk & Co.
1965	ONTIVEROS ALBERT C	R. L. Polk & Co.

SANTA CLARA WAY

22423 SANTA CLARA WAY

Year	Uses	Source
2002	OMUDALIARSagran	R. L. Polk & Co.
	OMUDALIARSagran	Haines

FINDINGS

22427 SANTA CLARA WAY

Year	Uses	Source
2002	YBAFROAMonael	R. L. Polk & Co.
	YBAFROAMonael	Haines

22431 SANTA CLARA WAY

Year	Uses	Source
2002	XXXX	Haines
	XXXX	R. L. Polk & Co.
1979	NUMIZ MARY	Pacific Telephone

22435 SANTA CLARA WAY

Year	Uses	Source
2002	TORPEDOSUBS	Haines
	LORETTAS CATERING 510 7854 SS	Haines
	TORPEDO	Haines
	CATER	Haines
	CATERINQBY	R. L. Polk & Co.
	TORPEDOSUBS	R. L. Polk & Co.
	TORPEDO LORETTAS CATERING	R. L. Polk & Co.

SONOMA

22374 SONOMA

Year	Uses	Source
2002	XXXX	R. L. Polk & Co.
1959	Valentine Robt G lu	R. L. Polk & Co.

22385 SONOMA

Year	Uses	Source
2002	XXXX	R. L. Polk & Co.
1959	Aurlio Jandoral	R. L. Polk & Co.

22386 SONOMA

Year	Uses	Source
2002	MACHETTAJe II	R. L. Polk & Co.
1992	Machetta Jeff	PACIFIC BELL DIRECTORY
1959	Vacant	R. L. Polk & Co.

FINDINGS

SONOMA ST

22374 SONOMA ST

Year	Uses	Source
2002	XXXX	Haines
1976	Bolanos Geo L	R. L. Polk & Co.

22385 SONOMA ST

Year	Uses	Source
2002	XXXX	Haines
1982	GARCIA MIGUEL HAYWARD	Pacific Telephone
1976	Sandoval Henry	R. L. Polk & Co.
1965	SANDOVAL AURELIA MRS	R. L. Polk & Co.

22386 SONOMA ST

Year	Uses	Source
2002	MACHETTAJe II	Haines
1976	Sandoval Mitchell	R. L. Polk & Co.

SONOMA WAY

22374 SONOMA WAY

Year	Uses	Source
1979	BALANOS JORGE L	Pacific Telephone
1976	BOLANOS JORGE L	R. L. Polk & Co.
1960	VALENTINE ROBT G	Pacific Telephone

22386 SONOMA WAY

Year	Uses	Source
1960	MARTINEZ JULIAN	Pacific Telephone

W A

107 W A

Year	Uses	Source
2002	CAPERSJoe 510 670 2939 i	Haines
	BRANIZKYGS	Haines
	COCHRANEJudrih	Haines
	COCHRANEJudrih	R. L. Polk & Co.
	CAPERSJoe	R. L. Polk & Co.
	BRANIZKYGS	R. L. Polk & Co.

FINDINGS

121 W A

Year	Uses	Source
2002	STENRUD Martin	Haines
	OLIVE TREE PLAZA	R. L. Polk & Co.
	MATTHEW Jaclyn	R. L. Polk & Co.
	DOOR John	R. L. Polk & Co.
	DILLMik B	R. L. Polk & Co.
	STENRUD Martin	R. L. Polk & Co.
	DILLMik B	Haines
	DOOR John	Haines
	MATTHEW Jaclyn	Haines
	OLIVE TREE PLAZA	Haines

199 W A

Year	Uses	Source
1965	CASAREZ TRINIDAD	R. L. Polk & Co.

224 W A

Year	Uses	Source
1960	JIMLNEZ T V REPAIR & SALES	Pacific Telephone

256 W A

Year	Uses	Source
2002	XXXX	Haines
	XXXX	R. L. Polk & Co.

258 W A

Year	Uses	Source
2002	HOMELESS PROJECT	R. L. Polk & Co.
	SOUTH COUNTY	Haines
	SOUTH COUNTY	R. L. Polk & Co.
	HOMELESS PROJECT	Haines

263 W A

Year	Uses	Source
2002	BIGOTIRES	R. L. Polk & Co.
	BIGOTIRES	Haines

280 W A

Year	Uses	Source
2002	HURTADOJ	R. L. Polk & Co.

FINDINGS

Year	Uses	Source
2002	JIMENEZJose Lsis	R. L. Polk & Co.
	MOREN	R. L. Polk & Co.
	OSEGUERAJose L	R. L. Polk & Co.
	VAZOUEZLeonor C	R. L. Polk & Co.
	WEARGregory	R. L. Polk & Co.
	GARCIA Raul	R. L. Polk & Co.
	CHAVARIN LUIs A	R. L. Polk & Co.
	APARTMENTS ASTREETTRAILER PK	R. L. Polk & Co.
	WEARGr	Haines
	VAZOUEZLeonor C	Haines
	OSEGUERAJose L	Haines
	MOREN	Haines
	JIMENEZJose Lsis	Haines
	HURTADOJ	Haines
	GARCIA Raul	Haines
	CHAVARIN LUIs A	Haines
	APARTMENTS	Haines
	ASTREETTRAILER PK	Haines

310 W A

Year	Uses	Source
2002	OSTAMATAKISN	R. L. Polk & Co.
	LAFAMILIATAQUARIA	R. L. Polk & Co.
	LAFAMILIATAQUARIA	Haines
	OSTAMATAKISN	Haines

311 W A

Year	Uses	Source
2002	RAYBERN QUALITY	Haines
	RAYBERN QUALITY	R. L. Polk & Co.
	FOODS	R. L. Polk & Co.
	FOODS	Haines

330 W A

Year	Uses	Source
2002	STAMATAKISN	Haines
	STAMATAKISN	R. L. Polk & Co.

FINDINGS

341 W A

Year	Uses	Source
2002	LIANGS ART GALLERY	Haines
	LIANGS ART GALLERY	R. L. Polk & Co.
	LIANGLewis	R. L. Polk & Co.
	LIANGLewis	Haines

347 W A

Year	Uses	Source
2002	XXXX	R. L. Polk & Co.
	XXXX	Haines

352 W A

Year	Uses	Source
2002	SWILLAMSVlc lor	R. L. Polk & Co.
	SWILLAMSVlc lor	Haines

355 W A

Year	Uses	Source
2002	MCDONALDS	Haines
	o 359 XXXX	Haines
	RESTAURANTS	Haines
	o 359 XXXX	R. L. Polk & Co.
	RESTAURANTS	R. L. Polk & Co.
	MCDONALDS	R. L. Polk & Co.

360 W A

Year	Uses	Source
2002	BEST WESTERN INN OF	R. L. Polk & Co.
	HAYWARD	R. L. Polk & Co.
	SAGAR Dinyar N	R. L. Polk & Co.
	BEST WESTERN INN OF	Haines
	HAYWARD	Haines
	SAGAR Dinyar N	Haines

375 W A

Year	Uses	Source
2002	XXXX	Haines
	XXXX	R. L. Polk & Co.

FINDINGS

W A ST

255 W A ST

Year	Uses	Source
2008	CHECK 2 CASH	Cole Information Services

258 W A ST

Year	Uses	Source
2013	SOUTH COUNTY HOMELESS PROJECT	Cole Information Services
2008	SOUTH COUNTY HOMELESS PROJECT	Cole Information Services
	BUILDING OPPORTUNITIES	Cole Information Services

263 W A ST

Year	Uses	Source
2013	BIG O TIRES	Cole Information Services
	HAYWARD TIRES PROS	Cole Information Services
2008	BIG O TIRES	Cole Information Services
1982	BIG-O-TIRES	Pacific Telephone

280 W A ST

Year	Uses	Source
2013	A STREET TRAILER PARK	Cole Information Services
2008	A STREET TRAILER PARK	Cole Information Services
	GARCIA LANDSCAPING	Cole Information Services
1982	RESENDEZ KENNETH HAYWARD	Pacific Telephone
	RAMIREZ PATRICIA HAYWARD	Pacific Telephone
	MORDICA JOHN JR HAYWARD	Pacific Telephone
	MELTZER CHAS HAYWARD	Pacific Telephone
	HUARD ROBERT J HAYWARD	Pacific Telephone
	SIPPLE GEORGE HAYWARD	Pacific Telephone
	GARCIA PAULINE HAYWARD	Pacific Telephone
	CARDOZA MARTY HAYWARD	Pacific Telephone
	BUHMAN HERMAN P HAYWARD	Pacific Telephone
	ALLEN STEVE HAYWARD	Pacific Telephone
	A STREET TRAILER PARK HAYWARD	Pacific Telephone
	GRIFFIN RUSSELL L HAYWARD	Pacific Telephone

287 W A ST

Year	Uses	Source
2013	PATTYS BEAUTY SALON	Cole Information Services

FINDINGS

Year	Uses	Source
2008	PATTYS BEAUTY SALON	Cole Information Services
	ALEX FLOWER SHOP	Cole Information Services

295 W A ST

Year	Uses	Source
1982	CAROLINA S MEXICAN AMERICAN RESTAURANT HAYWARD	Pacific Telephone

310 W A ST

Year	Uses	Source
2013	ACAPULCO TAQUERIA	Cole Information Services
2008	ACAPULCO TAQUERIA	Cole Information Services
1982	A & A MUFFLER HAYWARD	Pacific Telephone

311 W A ST

Year	Uses	Source
2013	A1 AUTO	Cole Information Services
	RAYBERN FOODS	Cole Information Services
2008	RAYBERN FOODS INC	Cole Information Services
	RAYBERN QUALITY FOODS	Cole Information Services
1982	MILAN S SMOKED MEATS HAYWARD	Pacific Telephone
	MILAN S ENTERPRISES INC HAYWARD	Pacific Telephone
	HAYWARD SMOKE HOUSE HAYWARD	Pacific Telephone

320 W A ST

Year	Uses	Source
2008	LA CASITA RESTAURANT	Cole Information Services

330 W A ST

Year	Uses	Source
1976	No Return	R. L. Polk & Co.

335 W A ST

Year	Uses	Source
2013	A STREET SMOG CHECK	Cole Information Services
1976	Vacant	R. L. Polk & Co.

341 W A ST

Year	Uses	Source
1982	CULVER KENNETH M LT HAYWARD	Pacific Telephone

FINDINGS

Year	Uses	Source
1982	CULVER K M APPL REPAIR HAYWARD	Pacific Telephone
1976	Culver Kenneth	R. L. Polk & Co.

347 W A ST

Year	Uses	Source
1976	Vovcenas Lin	R. L. Polk & Co.

351 W A ST

Year	Uses	Source
1976	Barrera Patric	R. L. Polk & Co.

352 W A ST

Year	Uses	Source
2013	LUBE BOYS 10 MINUTE OIL CHANGE	Cole Information Services
1976	Vacant	R. L. Polk & Co.

355 W A ST

Year	Uses	Source
2008	MCDONALDS	Cole Information Services
	MCDONALDS OF WEST A STREET	Cole Information Services

359 W A ST

Year	Uses	Source
1976	Trash & Treasures geni mdse	R. L. Polk & Co.

360 W A ST

Year	Uses	Source
2013	BEST WESTERN PLUS INN OF HAYWARD	Cole Information Services
2008	BEST WESTERN INN OF HAYWARD	Cole Information Services
	BEST WESTERN	Cole Information Services
	KHATRI INC	Cole Information Services
1976	Sekerni Fred S	R. L. Polk & Co.

368 W A ST

Year	Uses	Source
1976	Turrubiartes Domingo	R. L. Polk & Co.

FINDINGS

373 W A ST

Year	Uses	Source
1982	TRANSMISSION SERVICE SCHUCK S AUTOMATIC HAYWARD	Pacific Telephone
	SCHUCK S TRANSMISSION SERVICE HAYWARD	Pacific Telephone
	AUTOMATIC SCHUCK S TRANSMISSION	Pacific Telephone
1976	Shucks Transmission Service auto rcpr	R. L. Polk & Co.

375 W A ST

Year	Uses	Source
1976	Beaudry Robt	R. L. Polk & Co.

376 W A ST

Year	Uses	Source
1976	Simmons James ypimb	R. L. Polk & Co.

FINDINGS

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
22330 Hathaway Avenue	2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
107 W A	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
121 W A	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
199 W A	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
208 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
210 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
216 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22077 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1980, 1979, 1975, 1973, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22079 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22081 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22083 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1980, 1979, 1975, 1973, 1967, 1962, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22085 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1975, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
22087 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22088 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22089 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22091 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1991, 1986, 1984, 1980, 1975, 1973, 1967, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22095 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1991, 1986, 1984, 1980, 1979, 1975, 1967, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22099 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1967, 1962, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22113 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22123 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1967, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22147 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1980, 1975, 1973, 1967, 1962, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22147 HATHAWAY AVE	2013, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22155 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1975, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22159 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22163 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1991, 1986, 1984, 1980, 1975, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22175 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1991, 1986, 1984, 1980, 1975, 1967, 1962, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22203 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1954, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22213 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22221 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1967, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
22221 HATHAWAY AVE	2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22223 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22233 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22235 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1956, 1954, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22241 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1967, 1962, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22253 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22255 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22263 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1976, 1975, 1973, 1967, 1962, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22275 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1954, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22283 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1967, 1962, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22285 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22288 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22290 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1954, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22290 HATHAWAY AVE	2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22297 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22298 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22299 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
22300 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962,-1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22300 HATHAWAY AVE	2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22302 HATHAWAY AVE	2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22302 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1991, 1986, 1984, 1982, 1979, 1976, 1975, 1973, 1967, 1962, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22305 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22308 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22309 FULLER AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1967, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22311 FULLER AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22311 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1954, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22313 FULLER AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22317 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1954, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22322 HAPPYLAND AVE	2013, 2008, 2006, 2000, 1996, 1993, 1991, 1986, 1984, 1980, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22323 FULLER AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1967, 1962, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22324 HAPIYLAND AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22324 HAPPYLAND AVE	2013, 2008, 2006, 2000, 1996, 1993, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22324 HAPPYLAND AVE	2013, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22325 FULLER AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
22325 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22327 FULLER AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1967, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22328 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22329 FULLER AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1980, 1975, 1973, 1967, 1962, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22331 FULLER AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22331 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22333 FULLER AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22334 HAPIYLAND AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22334 HAPPYLAND AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1967, 1962, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22335 FULLER AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22335 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22337 FULLER AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1975, 1973, 1967, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22337 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22339 FULLER AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22339 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22340 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1980, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22343 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1954, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
22345 FULLER AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1967, 1962, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22347 FULLER AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22347 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1954, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22349 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22355 FULLER AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1967, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22359 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22360 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22361 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22365 FULLER AVE	2013, 2008, 2006, 2000, 1996, 1993, 1991, 1986, 1984, 1980, 1975, 1967, 1962, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22366 FULLER AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1967, 1962, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22366 FULLER AVE	2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22367 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1954, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22368 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22374 SONOMA	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22374 SONOMA ST	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22374 SONOMA WAY	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1975, 1973, 1970, 1967, 1965, 1962, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22375 FULLER AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1967, 1962, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
22375 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1954, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22376 FULLER AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22383 HATHAWAY AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1954, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22385 SONOMA	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22385 SONOMA ST	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1980, 1979, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22386 SONOMA	2013, 2008, 2006, 2000, 1996, 1993, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22386 SONOMA ST	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22386 SONOMA WAY	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22393 FULLER AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1980, 1975, 1973, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22395 FULLER AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1980, 1979, 1975, 1973, 1967, 1962, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22396 FULLER AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
224 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
224 W A	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22407 SANTA CLARA	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22407 SANTA CLARA ST	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22408 FULLER AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22409 FULLER AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1967, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920

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Address Researched	Address Not Identified in Research Source
22411 SANTA CLARA AVE	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22423 SANTA CLARA	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22423 SANTA CLARA ST	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22423 SANTA CLARA WAY	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22427 SANTA CLARA	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22427 SANTA CLARA ST	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22427 SANTA CLARA WAY	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22431 SANTA CLARA CT	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22431 SANTA CLARA ST	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22431 SANTA CLARA WAY	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22435 SANTA CLARA	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22435 SANTA CLARA ST	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22435 SANTA CLARA ST	2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22435 SANTA CLARA WAY	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22571 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22647 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
22649 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920

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Address Researched	Address Not Identified in Research Source
22665 HATHAWAY AVE	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
232 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
240 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
255 W A ST	2013, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
256 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
256 W A	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
258 A W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
258 W A	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
258 W A ST	2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
263 A W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
263 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
263 W A	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
263 W A ST	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
263 W A ST	2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
269 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
271 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
280 W A	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920

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Address Researched	Address Not Identified in Research Source
280 W A ST	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
280 W A ST	2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
287 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
287 W A ST	2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
295 A W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
295 W A ST	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
303 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
310 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
310 W A	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
310 W A ST	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
310 W A ST	2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
311 A W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
311 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
311 W A	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
311 W A ST	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
311 W A ST	2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
315 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
317 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
319 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
320 W A ST	2013, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
321 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
323 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
327 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
330 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
330 W A	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
330 W A ST	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
335 A W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
335 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
335 W A ST	2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
335 W A ST	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
341 A W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
341 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
341 W A	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
341 W A ST	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1980, 1979, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
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347 W A	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
347 W A ST	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
351 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
351 W A ST	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
352 A W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
352 W A	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
352 W A ST	2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
352 W A ST	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
355 W A	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
355 W A ST	2013, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
359 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
359 W A ST	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
360 A W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
360 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
360 W A	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
360 W A ST	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
360 W A ST	2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
368 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
368 W A ST	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
373 A W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
373 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
373 W A ST	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1980, 1979, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
375 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
375 W A	2013, 2008, 2006, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
375 W A ST	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
376 W A ST	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1975, 1973, 1970, 1967, 1965, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920
384 A ST W	2013, 2008, 2006, 2002, 2000, 1996, 1993, 1992, 1991, 1986, 1984, 1982, 1980, 1979, 1976, 1975, 1973, 1970, 1967, 1962, 1960, 1959, 1956, 1955, 1954, 1951, 1950, 1946, 1945, 1943, 1940, 1938, 1933, 1932, 1928, 1926, 1925, 1920

Costco Hayward
22330 Hathaway Avenue
Hayward, CA 94541

Inquiry Number: 4583200.4
April 05, 2016

EDR Historical Topo Map Report
with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

04/05/16

Site Name:	Client Name:
Costco Hayward	Kleinfelder, Inc.
22330 Hathaway Avenue	2 Ada, Suite 250
Hayward, CA 94541	Irvine, CA 92618-0000
EDR Inquiry # 4583200.4	Contact: Lindsey Dandridge-Perry

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Kleinfelder, Inc. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# NA

Project: Costco Hayward

Coordinates:

Latitude:	37.66843 37° 40' 6" North
Longitude:	-122.103041 -122° 6' 11" West
UTM Zone:	Zone 10 North
UTM X Meters:	579104.68
UTM Y Meters:	4169406.08
Elevation:	0.00' above sea level

Maps Provided:

2012	1915
1996	1899
1980	
1973	
1968	
1959	
1950	
1947	

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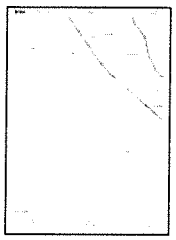
Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

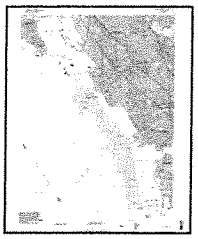
2012 Source Sheets

Hayward
2012
7.5-minute, 24000

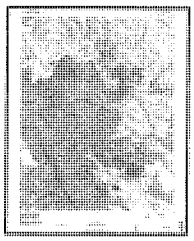


San Leandro
2012
7.5-minute, 24000

1996 Source Sheets



San Leandro
1996
7.5-minute, 24000
Aerial Photo Revised 1993
Edited 1996



Hayward
1996
7.5-minute, 24000
Aerial Photo Revised 1993
Edited 1996

1980 Source Sheets

Hayward
1980
7.5-minute, 24000
Photo Revised 1980
Aerial Photo Revised 1979

San Leandro
1980
7.5-minute, 24000
Photo Revised 1980
Aerial Photo Revised 1979

1973 Source Sheets

San Leandro
1973
7.5-minute, 24000
Photo Revised 1973
Aerial Photo Revised 1973

Hayward
1973
7.5-minute, 24000
Photo Revised 1973
Aerial Photo Revised 1973

Topo Sheet Key

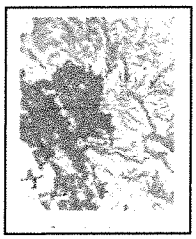
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1968 Source Sheets

San Leandro
1968
7.5-minute, 24000
Photo Revised 1968
Aerial Photo Revised 1968

Hayward
1968
7.5-minute, 24000
Photo Revised 1968
Aerial Photo Revised 1968

1959 Source Sheets



Hayward
1959
7.5-minute, 24000
Aerial Photo Revised 1958

San Leandro
1959
7.5-minute, 24000
Aerial Photo Revised 1958

1950 Source Sheets

Hayward
1950
7.5-minute, 24000
Aerial Photo Revised 1946

1947 Source Sheets

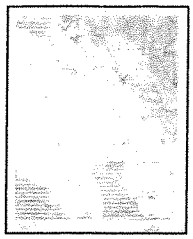
San Leandro
1947
7.5-minute, 24000

Hayward
1947
7.5-minute, 24000
Aerial Photo Revised 1946

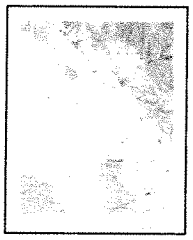
Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1915 Source Sheets

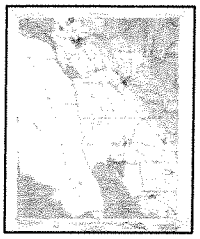


Haywards
1915
15-minute, 62500



Hayward
1915
15-minute, 62500

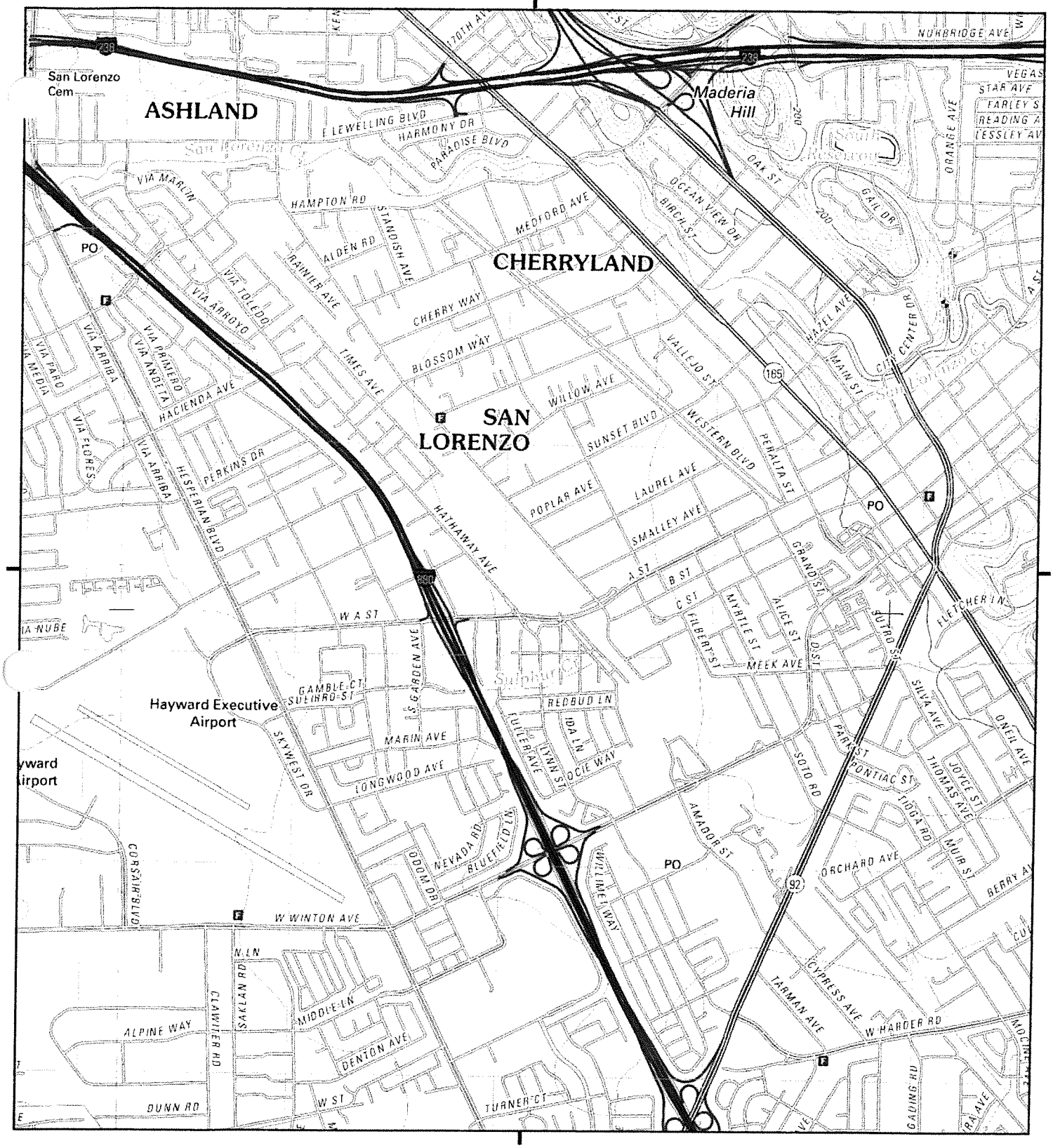
1899 Source Sheets



Haywards
1899
15-minute, 62500

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E

TP, Hayward, 2012, 7.5-minute
W, San Leandro, 2012, 7.5-minute

SITE NAME: Costco Hayward
ADDRESS: 22330 Hathaway Avenue
Hayward, CA 94541
CLIENT: Kleinfelder, Inc.

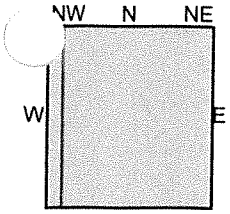
N

Historical Topo Map

1996

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5



TP, Hayward, 1996, 7.5-minute
W, San Leandro, 1996, 7.5-minute

SITE NAME: Costco Hayward
ADDRESS: 22330 Hathaway Avenue
Hayward, CA 94541
CLIENT: Kleinfelder, Inc.

N

Historical Topo Map

1980

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E

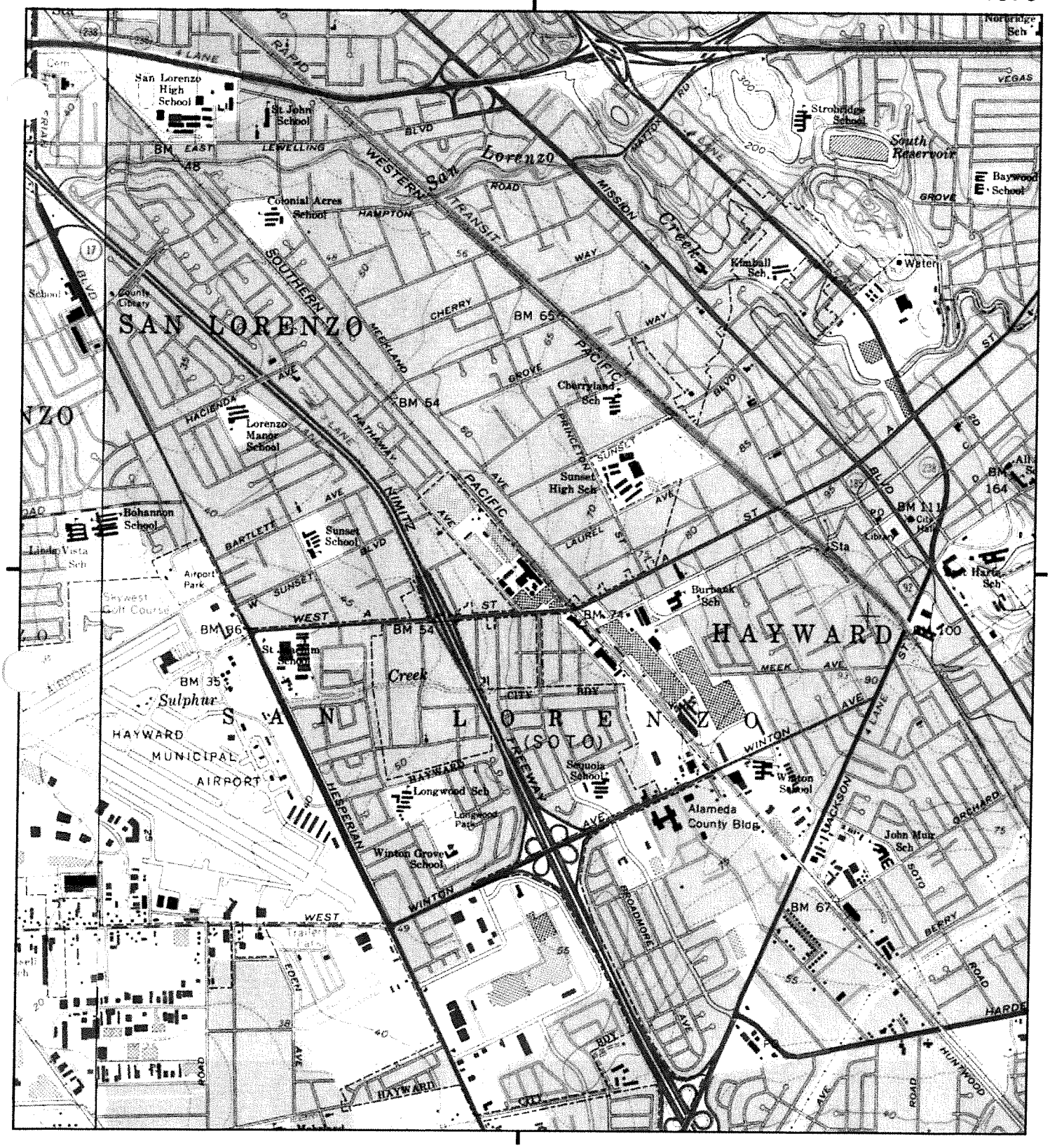
TP, Hayward, 1980, 7.5-minute
W, San Leandro, 1980, 7.5-minute

SITE NAME: Costco Hayward
ADDRESS: 22330 Hathaway Avenue
Hayward, CA 94541
CLIENT: Kleinfelder, Inc.

N

Historical Topo Map

1973



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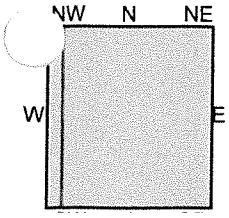


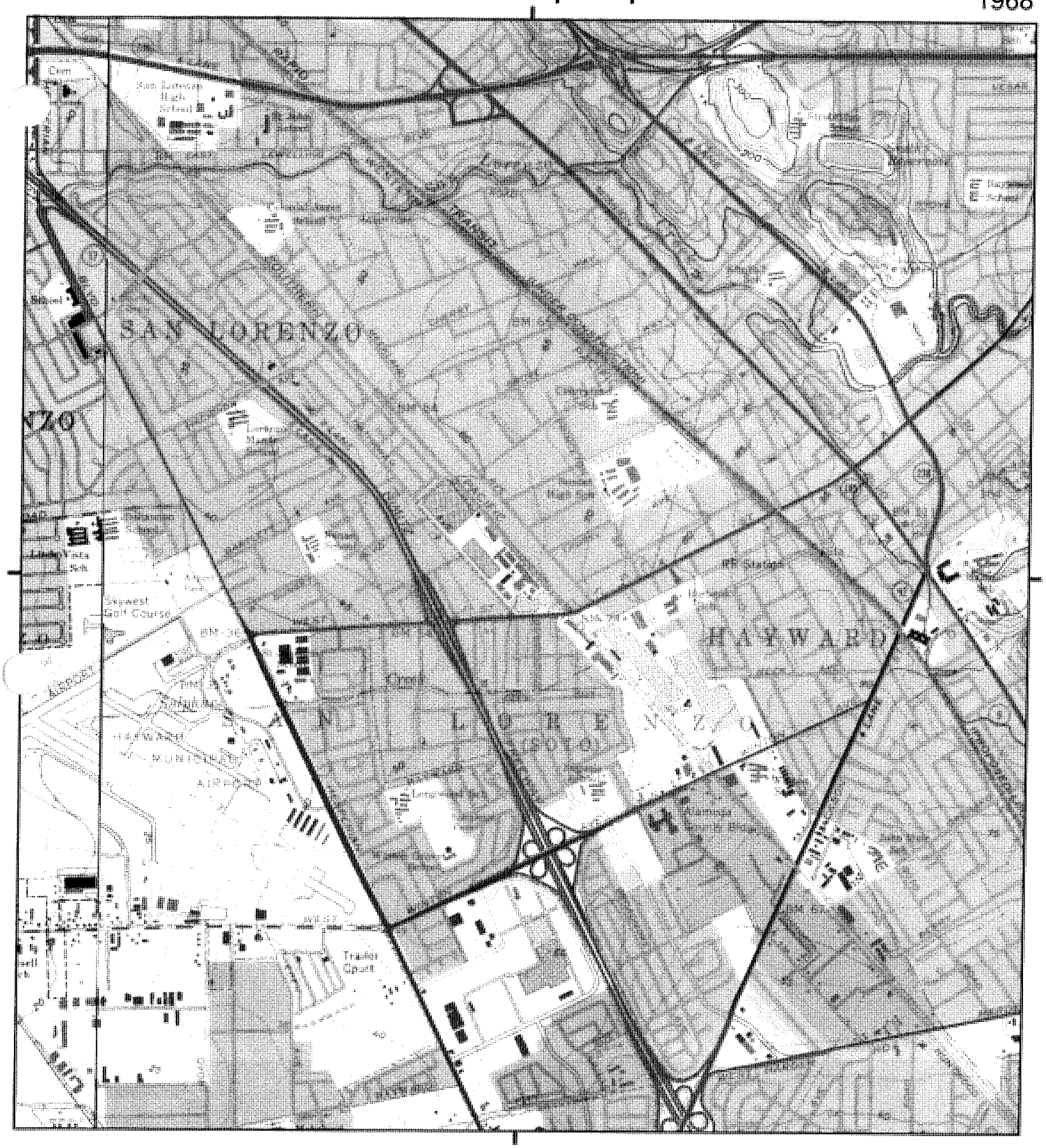
TP, Hayward, 1973, 7.5-minute
W, San Leandro, 1973, 7.5-minute

SITE NAME: Costco Hayward
ADDRESS: 22330 Hathaway Avenue
Hayward, CA 94541
CLIENT: Kleinfelder, Inc.

N

Historical Topo Map

1968



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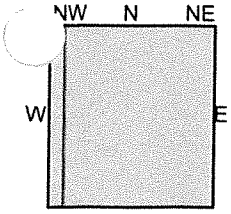


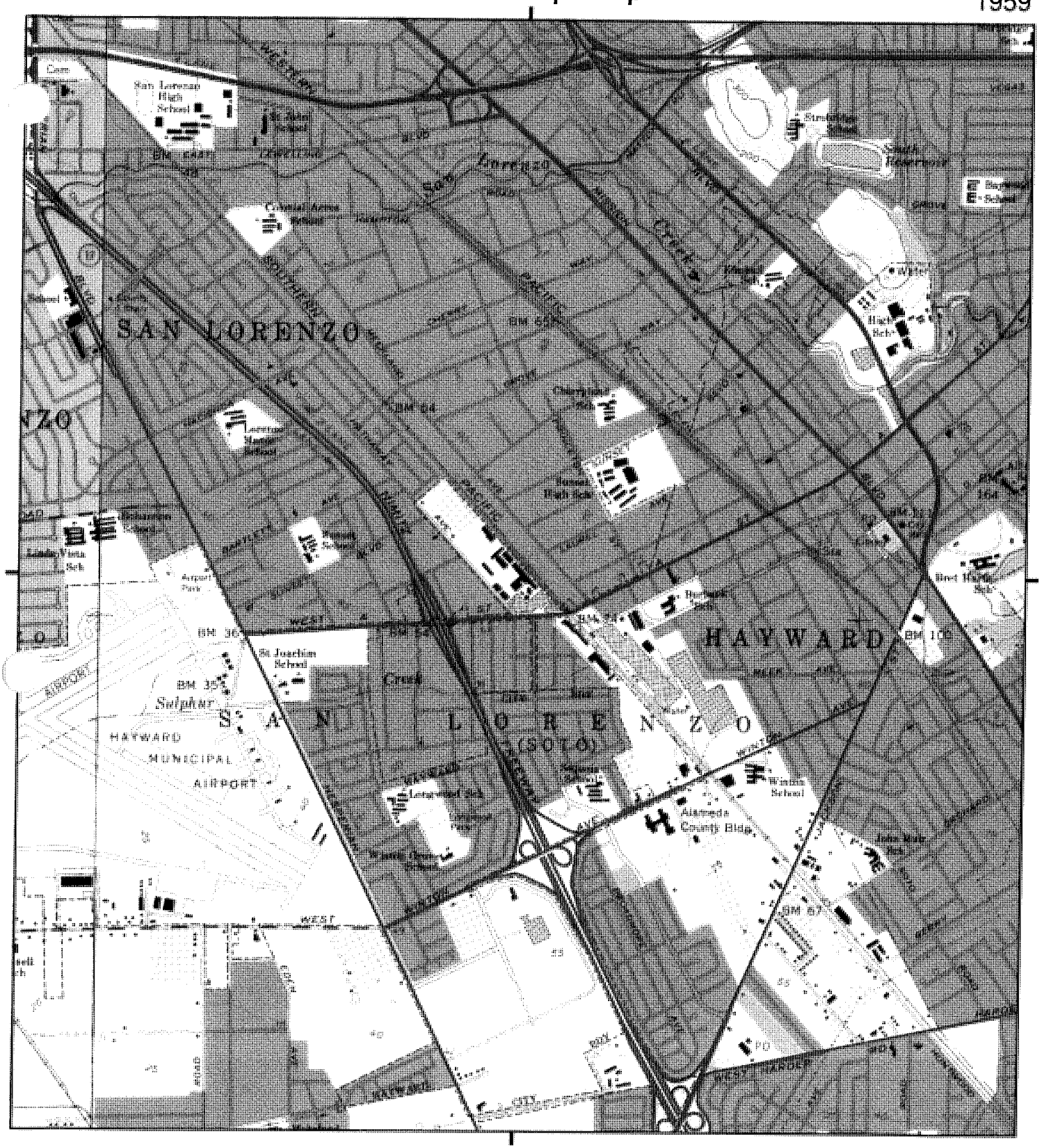
TP, Hayward, 1968, 7.5-minute
W, San Leandro, 1968, 7.5-minute

SITE NAME: Costco Hayward
ADDRESS: 22330 Hathaway Avenue
Hayward, CA 94541
CLIENT: Kleinfelder, Inc.

N

Historical Topo Map

1959



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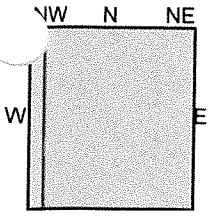


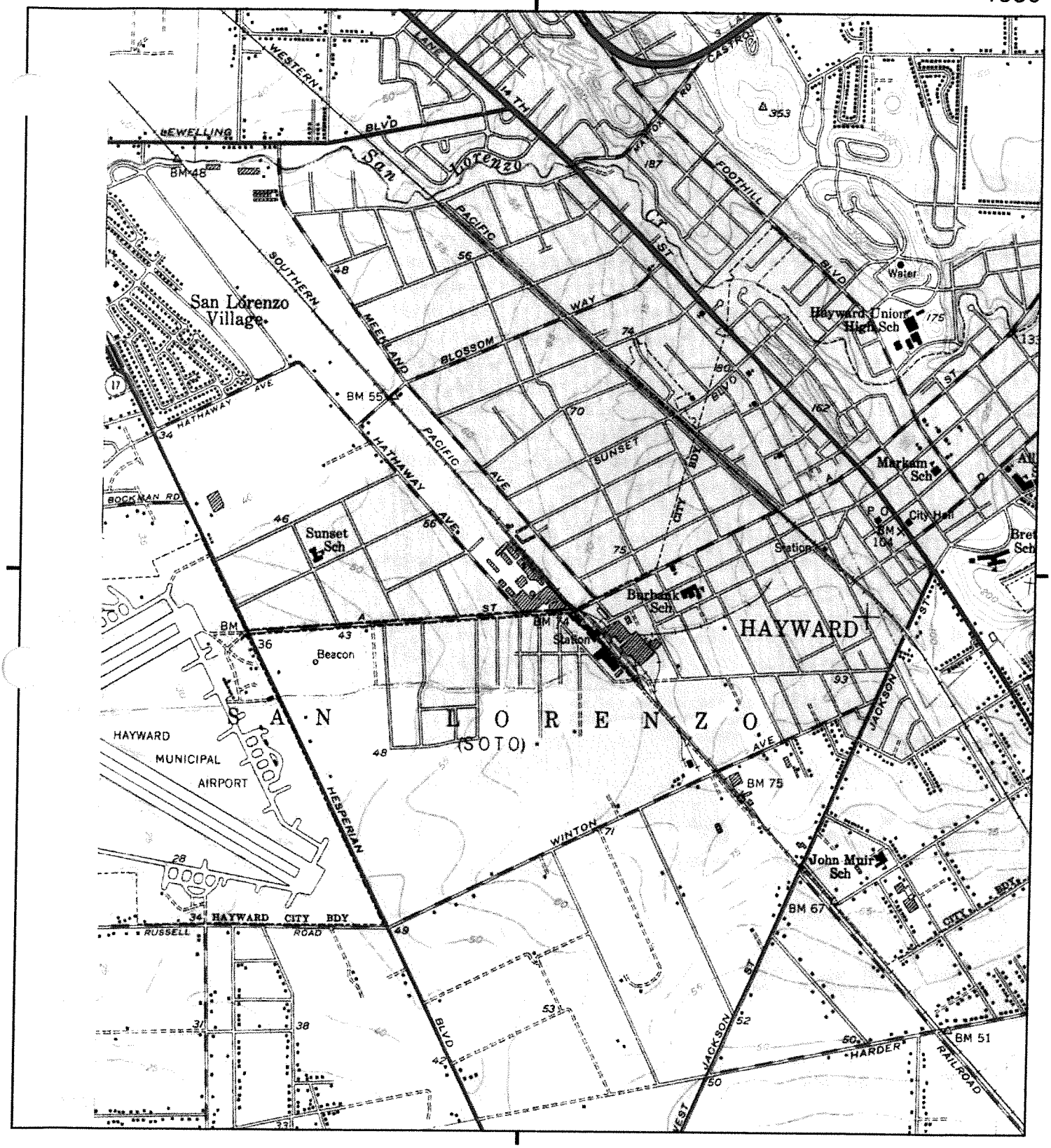
TP, Hayward, 1959, 7.5-minute
W, San Leandro, 1959, 7.5-minute

SITE NAME: Costco Hayward
ADDRESS: 22330 Hathaway Avenue
Hayward, CA 94541
CLIENT: Kleinfelder, Inc.

N

Historical Topo Map

1950



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E

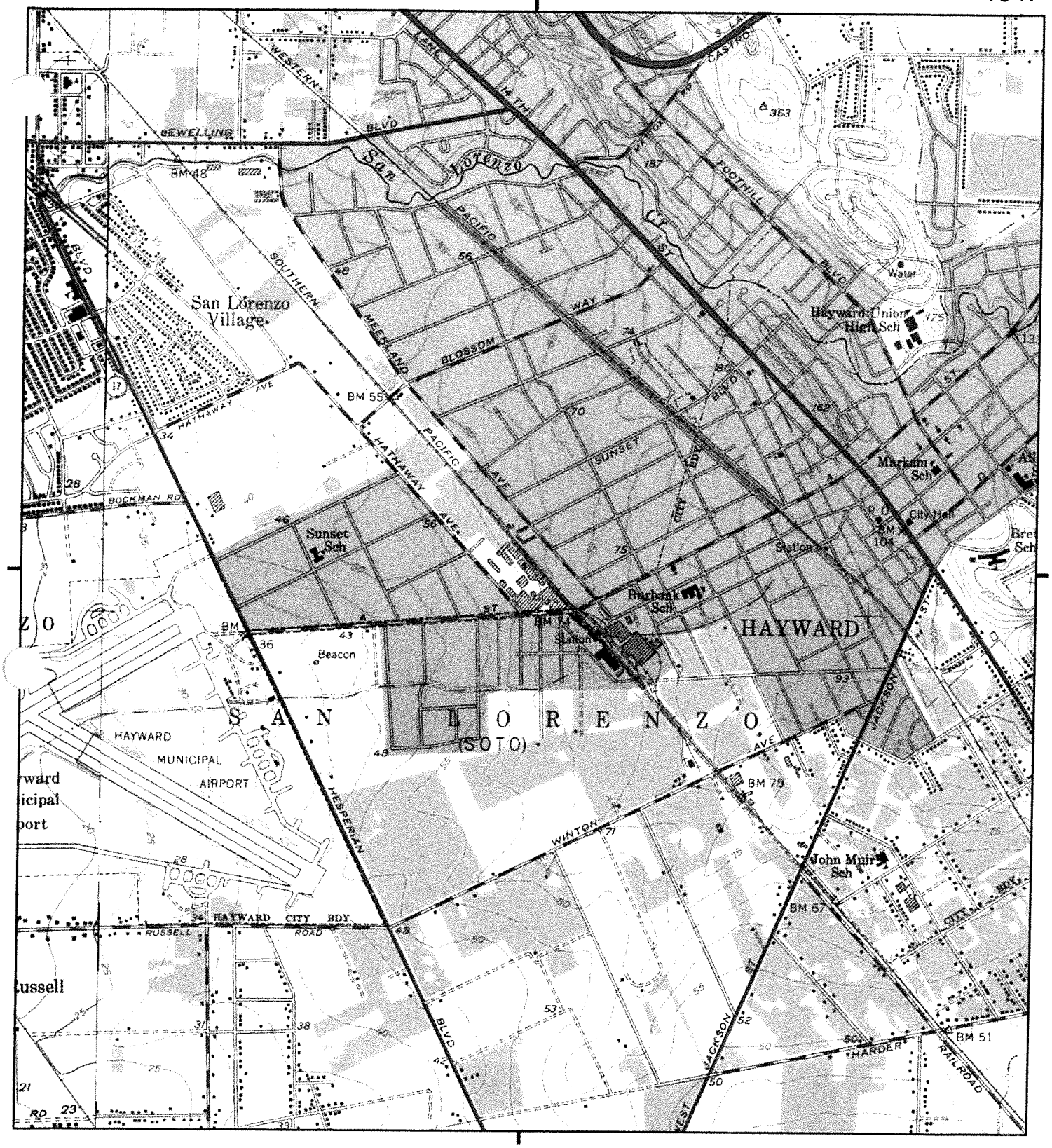
TP, Hayward, 1950, 7.5-minute

SITE NAME: Costco Hayward
ADDRESS: 22330 Hathaway Avenue
Hayward, CA 94541
CLIENT: Kleinfelder, Inc.

N

Historical Topo Map

1947



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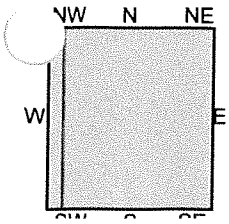


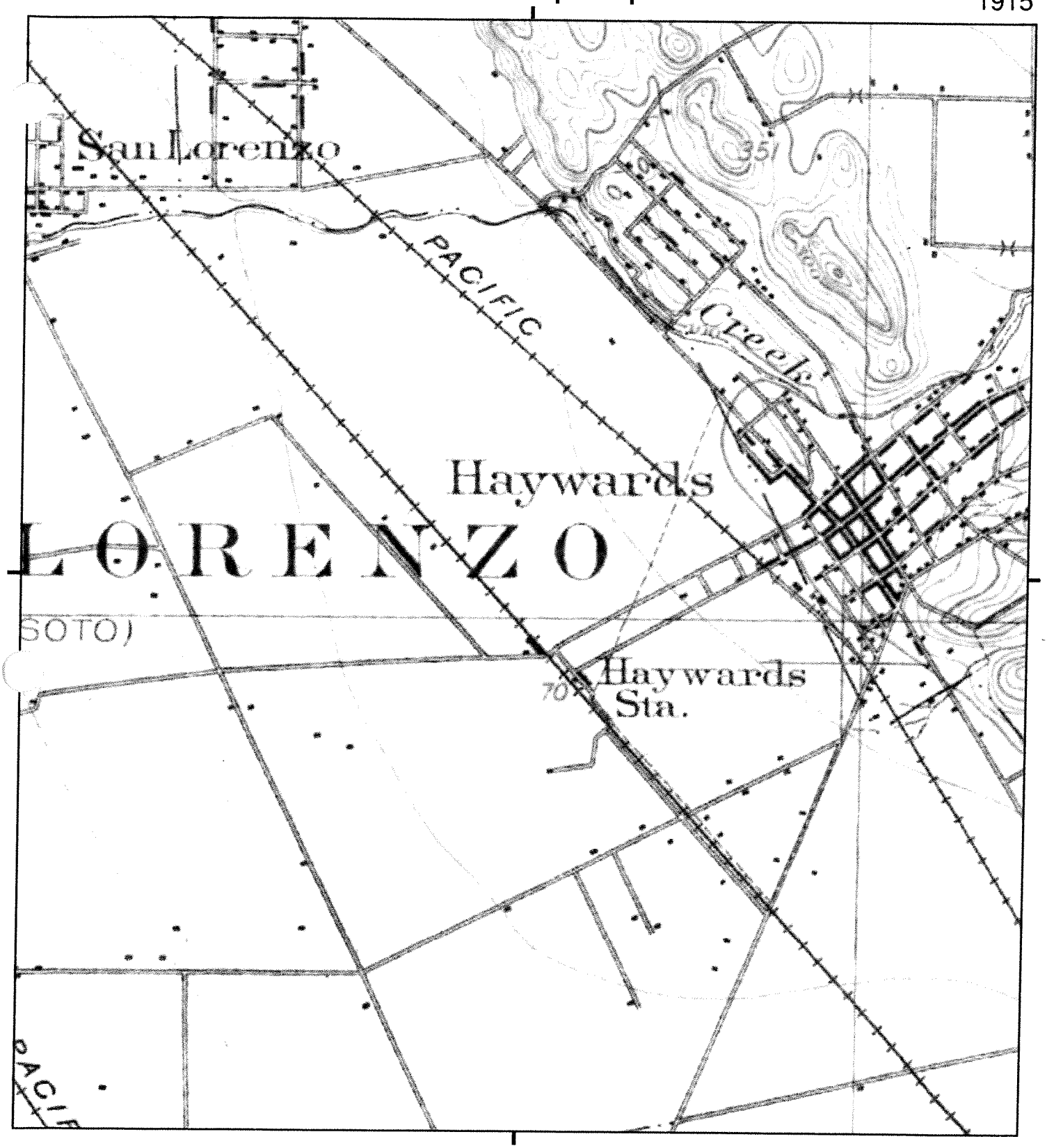
TP, Hayward, 1947, 7.5-minute
W, San Leandro, 1947, 7.5-minute

SITE NAME: Costco Hayward
ADDRESS: 22330 Hathaway Avenue
Hayward, CA 94541
CLIENT: Kleinfelder, Inc.

N

Historical Topo Map

1915



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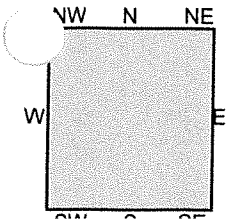


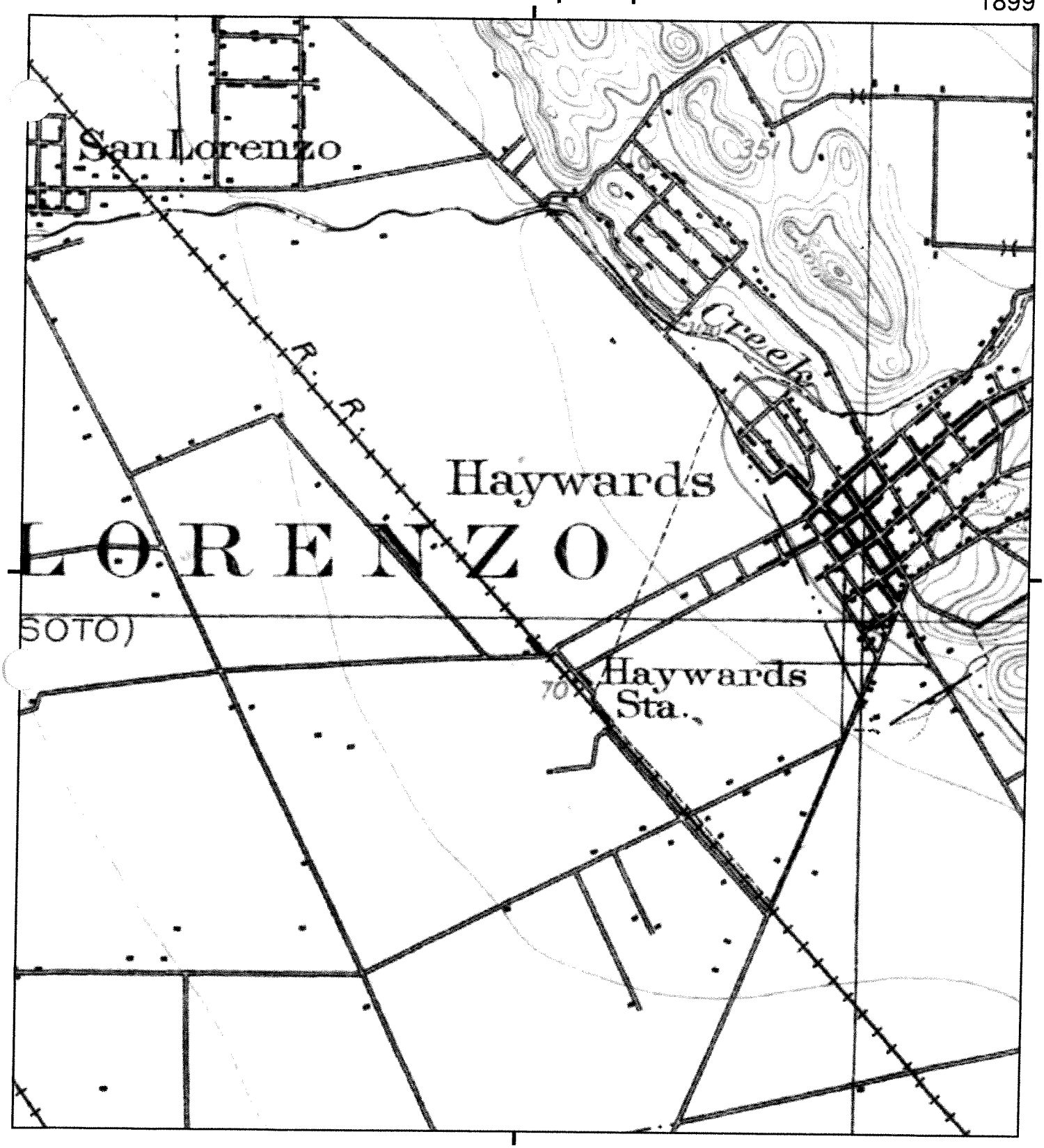
TP, Haywards, 1915, 15-minute
TP, Hayward, 1915, 15-minute

SITE NAME: Costco Hayward
ADDRESS: 22330 Hathaway Avenue
Hayward, CA 94541
CLIENT: Kleinfelder, Inc.

N

Historical Topo Map

1899



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E

TP, Haywards, 1899, 15-minute

SITE NAME: Costco Hayward
ADDRESS: 22330 Hathaway Avenue
Hayward, CA 94541
CLIENT: Kleinfelder, Inc.

N

Transportation Impact Analysis

Hayward Costco Business Center Fuel Station Addition

Hayward, California

Prepared For:
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Project No. 19451

September 2018

EXECUTIVE SUMMARY

This report presents the findings, conclusions and transportation impact analysis conducted by Kittelson & Associates for the addition of a fuel station to the Costco Business Center located on Hathaway Avenue (hereinafter referred to as "the Project"). The Project site is in the City of Hayward (City) to the northeast of the intersection of Hathaway Avenue and West A Street.

This report evaluates the Project for potential impacts and mitigations associated with the Project's interaction with the adjacent roadway network. This report considers several scenarios, including Existing, year 2020, and Cumulative 2035 conditions, all with and without the Project.

SUMMARY OF FINDINGS

The traffic generated by the Project does not result in any significant impacts at the study intersections around the Project vicinity and thus, no mitigation measures have been proposed. Therefore, based on the City of Hayward impact criteria, the Project is expected to have a less-than-significant impact at all study intersections under all analyzed scenarios. Further, the existing signalized access and the unsignalized right-in/right-out site access points on Hathaway Avenue will continue to operate acceptably. The right-in-right-out access does not meet traffic signal warrants for any scenarios analyzed.

Given the auto-oriented use of the Project (i.e., fuel station), it is not expected to generate a high number of bicycle, pedestrian and transit trips nor is it anticipated to change the demand on existing and future bicycle, pedestrian and transit facilities near the Project. Therefore, the impact to pedestrian, bicycle and transit facilities is less-than-significant.

Additional details regarding the analysis methodology, assumptions, and findings are included herein.

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1 INTRODUCTION

1.1 SETTING

As described in detail in Section 2, the Project is located in the City of Hayward, at 22330 Hathaway Avenue (Figure 1 illustrates the location of the Project site). This transportation impact analysis is therefore subject to the regulations and standards currently in place in the City of Hayward. These standards are outlined in the *City of Hayward Interim Traffic Study Guidelines* (2017), *Hayward 2040 General Plan – Mobility Element* (2014) and the Hayward Mission Boulevard Corridor Form-Based Code (2014) as summarized below.

In addition, because the Project is expected to generate more than 100 weekday PM peak hour trips, it is subject to Alameda County's Transportation Impact Analysis requirements. The County's requirements entail a segment analysis on roadways included in the San Francisco Bay Area Metropolitan Transportation System Plan (2002).

1.1.1 Significance Criteria

The following thresholds of significance were developed based on the California Environmental Quality Act (CEQA) guidelines for establishing thresholds of significance and the applicable standards and policies of the City of Hayward.

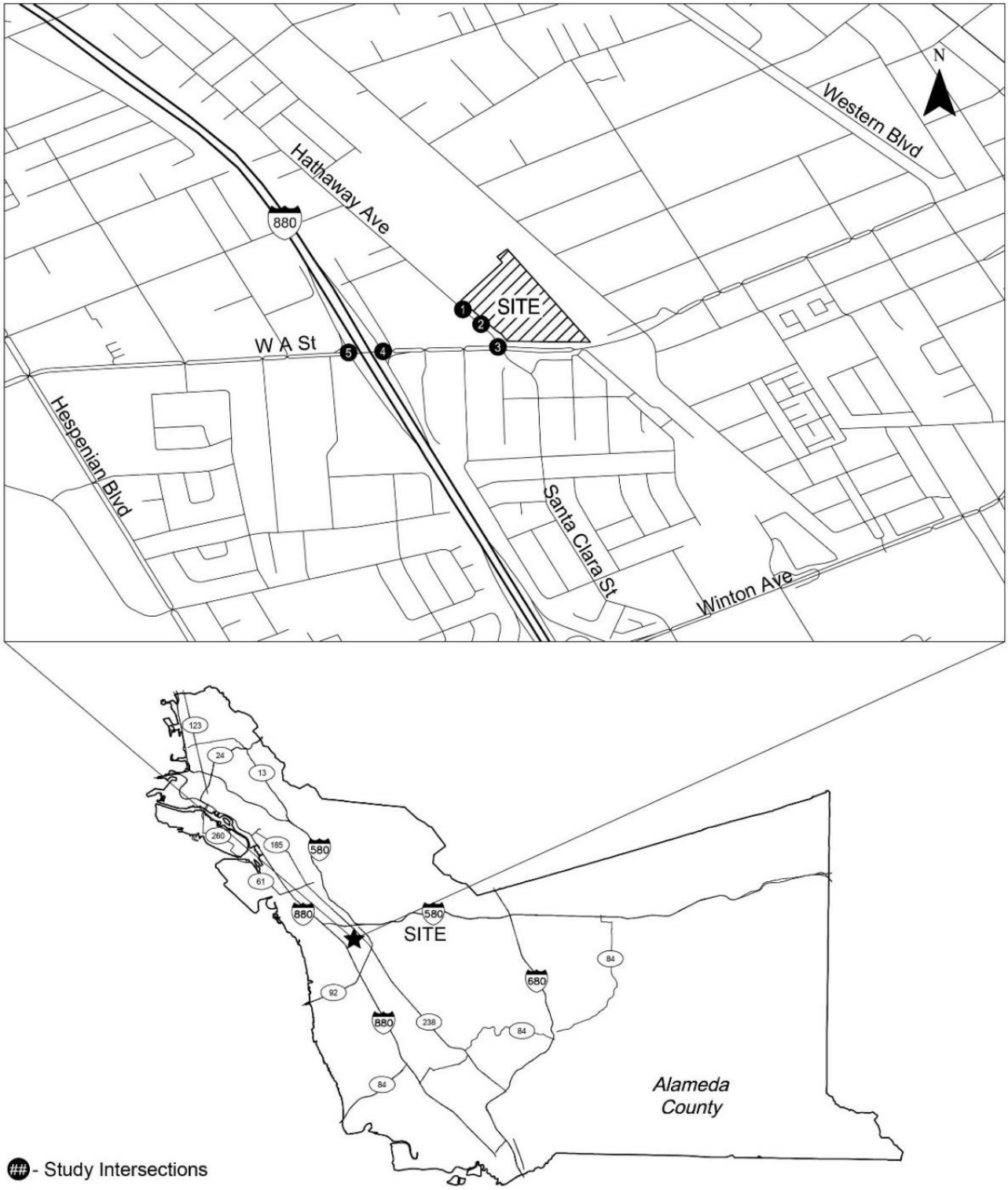
1.1.1.1 Signalized Intersections

Goal 4 Local Circulation-M-4.3 of the City of Hayward's 2040 General Plan requires intersections to maintain a peak-hour level of service of E or better for signalized locations. Per M-4.3: *"The City shall maintain a minimum Level of Service E at signalized intersections during the peak commute periods except when a LOS F may be acceptable due to costs of mitigation or when there would be other unacceptable impacts, such as right-of-way acquisition or degradation of the pedestrian environment due to increased crossing distances or unacceptable crossing delays."*

The Project would have a significant impact on traffic and circulation of signalized intersections if it would degrade the AM or PM peak hour operations from an acceptable LOS E or better under the No Project scenario to an unacceptable LOS F under the Plus Project scenario. The exception to this criterion is when LOS F is determined by the City of Hayward as acceptable due to right-of-way constraints or when there would be unacceptable impacts to other modes of travel, such as bicycle, pedestrian or transit.[1]

[1] Hayward 2040 General Plan, July 2014, Policy Document: Part 3 Mobility Element, Page 3-81

Figure 1: Project Location and Study Intersections



1.1.1.2 Unsignalized Intersections

At unsignalized intersections, the Project is evaluated based on LOS and delay, and whether any of the following are met:

- Traffic signal warrant (peak hour),
- Pedestrian signal warrant, or
- All-way stop warrant

Note that solely triggering a warrant does not constitute a significant impact, but the City of Hayward will, at its discretion, require or not require a signal be installed, where warranted.

1.1.1.3 Intersections Operating at LOS F

Regardless of intersection control, per the latest City of Hayward Interim Traffic Study Guidelines, dated March 2017, the Project would have a significant impact on traffic and circulation of an intersection operating at LOS F under an Existing or No Project scenario if the addition of Project traffic results in an increase of 5.0 seconds or more in the average control delay.

1.1.1.4 Freeway and Arterial Segments

Alameda County Transportation Commission (CTC) has not adopted a policy for determining a significant impact. For this this analysis, the threshold for a significant impact will be considered a 0.05 increase or more in volume-to-capacity ratio for facilities operating at a LOS F. A 0.05 increase can be considered a reasonably measured increase in traffic.

1.1.2 Level of Service Definitions

In this report, LOS is based on the Highway Capacity Manual (HCM) 2000 definitions. As indicated in (for signalized intersections) and (for unsignalized intersections), at intersections LOS is based on delay.

Table 1: Level of Service Criteria – Signalized Intersections

Level of Service (LOS)	Average Delay (seconds/ vehicle)	Description
A	≤ 10	LOS A represents free-flow travel with an excellent level of comfort and convenience and the freedom to maneuver.
B	> 10 and ≤ 20	LOS B has stable operating conditions, but the presence of other road users causes a noticeable, though slight, reduction in comfort, convenience, and maneuvering freedom.
C	> 20 and ≤ 35	LOS C has stable operating conditions, but the operation of individual users is substantially affected by the interaction with others in the traffic stream.
D	> 35 and ≤ 55	LOS D represents high-density, but stable flow. Users experience severe restriction in speed and freedom to maneuver, with poor levels of comfort and convenience.
E	> 55 and ≤ 80	LOS E represents operating conditions at or near capacity. Speeds are reduced to a low but relatively uniform value. Freedom to maneuver is difficult with users experiencing frustration and poor comfort and convenience. Unstable operation is frequent, and minor disturbances in traffic flow can cause breakdown conditions.

Level of Service (LOS)	Average Delay (seconds/ vehicle)	Description
F	> 80	LOS F is used to define forced or breakdown conditions. This condition exists wherever the volume of traffic exceeds the capacity of the roadway. Long queues can form behind these bottleneck points with queued traffic traveling in a stop-and-go fashion.

Source: Transportation Research Board, Highway Capacity Manual, Washington, D.C., 2000.

Table 2: Level of Service Criteria – Unsignalized Intersections

Level of Service (LOS)	Average Delay (seconds / vehicle)	Description
A	≤ 10	Little or no delay
B	> 10 and ≤ 15	Short traffic delay
C	> 15 and ≤ 25	Average traffic delays
D	> 25 and ≤ 35	Long traffic delays
E	> 35 and ≤ 50	Very long traffic delays
F	> 50	Extreme delays potentially affecting other traffic movements in the intersection

Source: Transportation Research Board, Highway Capacity Manual, Washington, D.C., 2000.

For freeway mainline segments, LOS is based on density in terms of passenger cars per mile per lane, as shown in Table 3 (for freeway mainline segments). T

Table 3: Level of Service Criteria – Freeway Mainline Segments

Level of Service (LOS)	Density (passenger vehicles per mile per lane)
A	≤ 11
B	> 11 and < 18
C	> 18 and < 26
D	> 26 and < 35
E	> 35 and < 45
F	> 45 (demand exceeds capacity)

Source: Transportation Research Board, Highway Capacity Manual, Washington, D.C., 2000.

1.1.3 Study Intersections

A total of five study intersections (listed in Table 4) were selected for the purposes of this analysis. These study intersections were identified based on direction from City staff. Signal timings at signalized study intersections were obtained from Caltrans for the I-880 Ramps and from the city for intersections on Hathaway Avenue. Signal timing sheets are included in Appendix A.

Table 4: Study Intersections

ID #	Street Name		Jurisdiction	Control[1]	LOS Standard
	North-South	East-West			
1	Hathaway Avenue	Costco Access (Signal)	Hayward	Signal	E
2	Hathaway Avenue	Costco Access (Right-in/Right-Out)	Hayward	OWSC	E
3	Hathaway Avenue	West A Street	Hayward	Signal	E
4	I-880 NB Ramps	West A Street	Hayward	Signal	E
5	I-880 SB Ramps	West A Street	Hayward	Signal	E

[1] OWSC = One-way (minor-street) stop control

1.1.4 Analysis Scenarios

In accordance with review agency requirements, weekday AM and PM peak hour traffic conditions were assessed for the following analysis scenarios:

- Existing conditions (without buildout of the proposed development)
- Existing plus project traffic conditions (with buildout of the proposed development)
- Year 2020 background conditions (without buildout of the proposed development)
- Year 2020 background plus project conditions (with buildout of the proposed development)
- Cumulative 2035 conditions (without buildout of the proposed development)
- Cumulative 2035 plus project conditions (with buildout of the proposed development)

2 EXISTING CONDITIONS

2.1 NETWORK

2.1.1 Roadways

Hathaway Avenue is a northwest-southeast two- to four-lane minor arterial located on the southwest side of the Project site. The existing Costco Business Center has a right-in/right-out only access on Hathaway Avenue as well as a full-access signal. Near the Project, Hathaway Avenue has a posted speed limit of 25 mph and shared lane markings for bicyclists. Hathaway Avenue connects the residential neighborhoods to the north with West A Street.

West A Street is an east-west four-lane principal arterial located south of the Project site. It has a median in the Project area and bridge structure over the rail line immediately east of the Project site. West A Street provides direct access between the Hayward downtown area to the east with I-880 to the west. It is posted 30 miles per hour in the site vicinity and includes striped bicycle lanes.

I-880 is a ten-lane divided freeway that runs north/south through Hayward. Two lanes are reserved for high occupancy vehicle (HOV) carpools. There is a diamond interchange at West A Street with the freeway raised over West A Street.

2.1.2 Transit Service

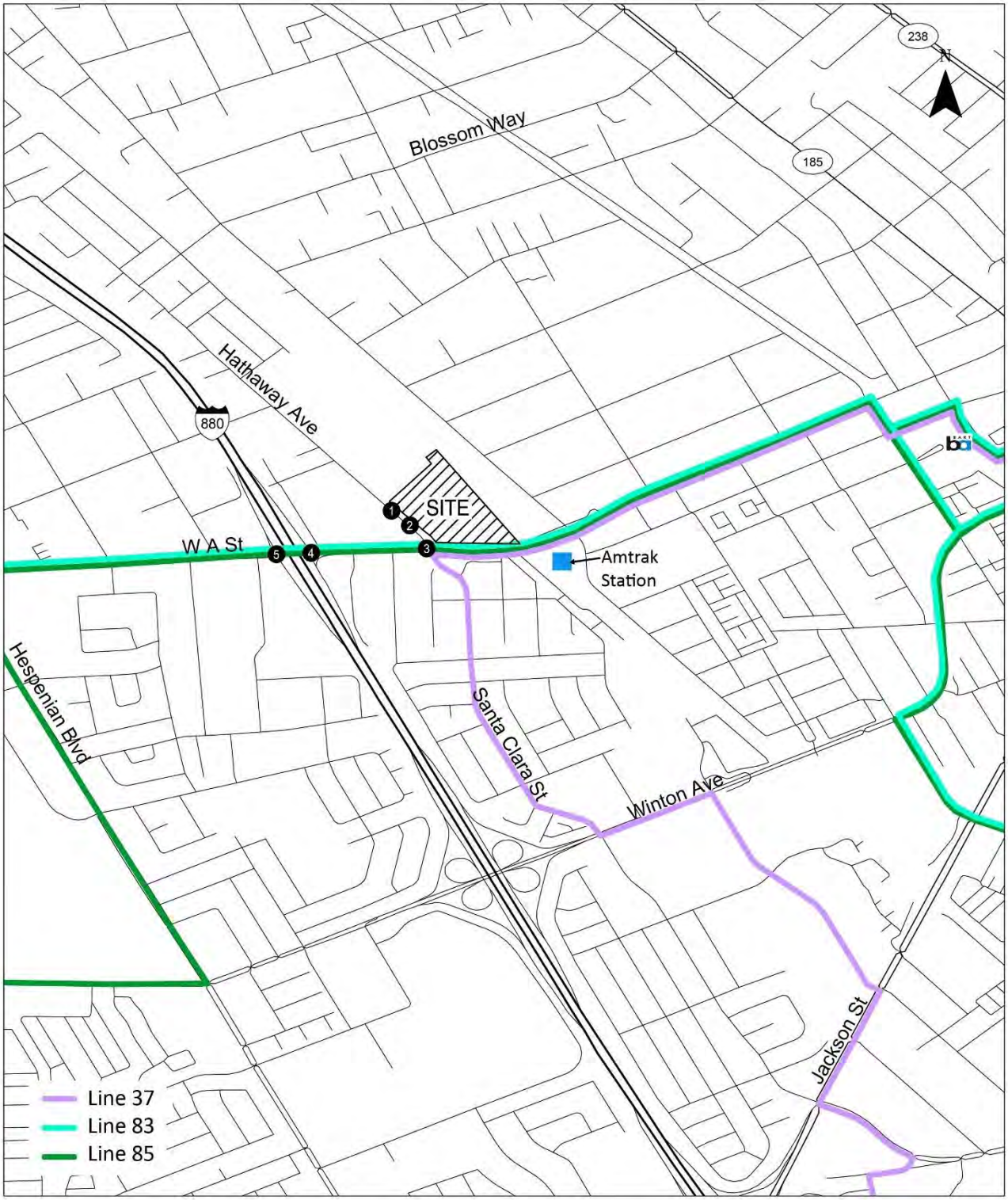
AC Transit provides local bus transit service near the Project site. AC Transit stops are located at the northeast and southeast corners of Hathaway Avenue/West A Street serving local lines 83 and 85. Stops on the southeast and southwest corners of Hathaway Avenue/West A Street serve line 37.

Line 37 is scheduled at 60-minute headways between 5:03 AM and 8:44 PM on weekdays. The route connects the Hayward BART station to the South Hayward BART station and travels along West A Street and Santa Clara Street in the study area. Line 83 is scheduled at 60-minute headways between 5:03 AM and 8:44 PM on weekdays. The route also connects the Hayward BART station to the South Hayward BART station and travels along West A Street in the study area. Line 85 is scheduled at 60-minute headways between 6:55 AM and 7:53 PM on weekdays. The route connects the San Leandro BART station to the South Hayward BART station and travels along West A Street in the study area.

In addition, the Hayward Amtrak station is located southeast of the Project site, serving the Capital Corridor route. The Capitol Corridor provides daily service between Sacramento and the Bay Area.

Figure 2 provides a map of the transit routes in the site vicinity.

Figure 2: Transit Routes

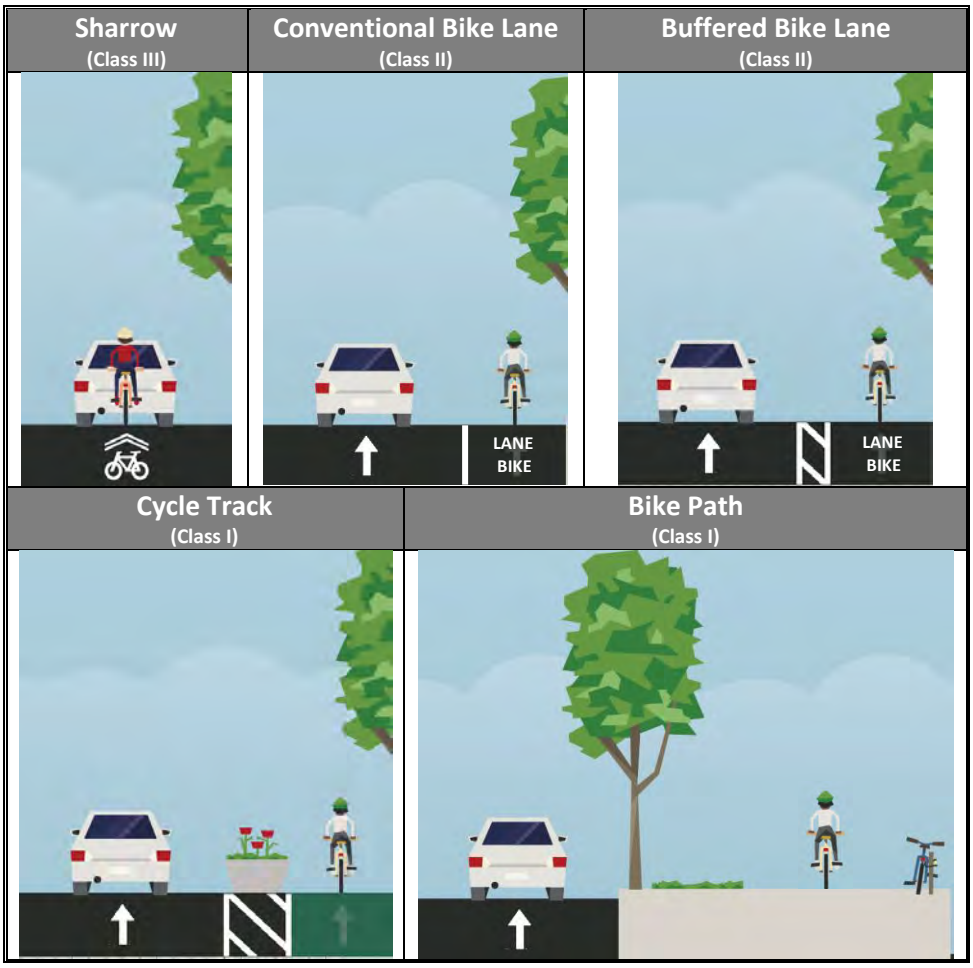


2.1.3 Pedestrian and Bicycle

Crosswalks and actuated pedestrian signals are provided at all signalized study intersections. Sidewalks are present in both directions at all study intersections. There are bike lanes along both sides of West A Street and Hathaway Avenue is marked with sharrows (shared lane markings for bicyclists) in the study area. According to the latest update to the City of Hayward General Plan, West A Street is classified as a Class I bicycle route.

Figure 3 serves as a reference for the type of bicycle facilities, by classification, planned and constructed within the City.

Figure 3: Bicycle Facilities Classification



Source: Kittelson & Associates, Inc., based on NACTO Urban Bikeway Design Guide (April 2011) and Streetmix.net graphics.

2.2 DEMAND

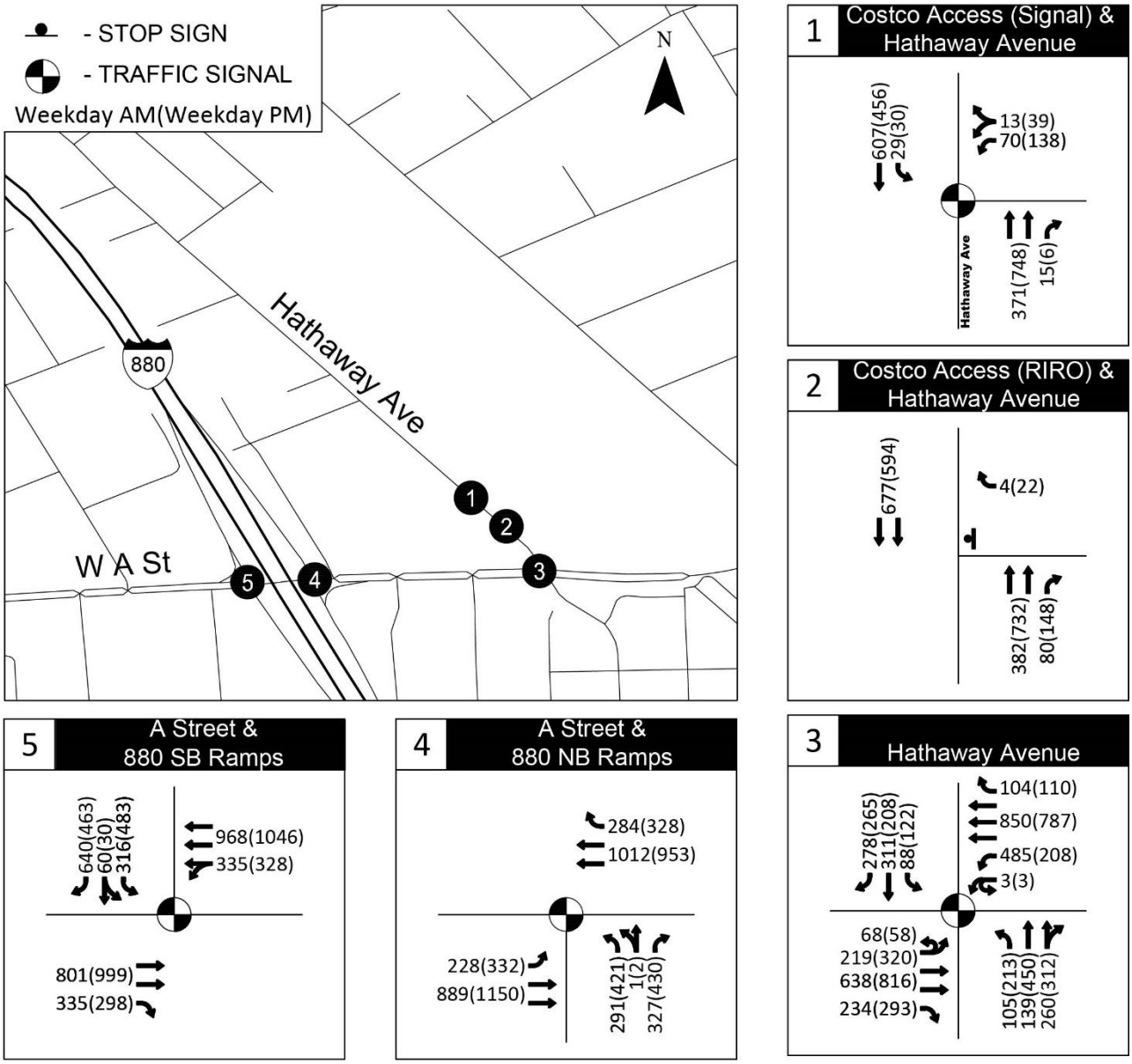
2.2.1 Automobile Traffic Volumes

Automobile turning movement counts at the study intersections were collected in the field between 7-9 AM and between 4-6 PM on Wednesday, November 29 and Wednesday, December 6, 2017[3]. The weather was clear and no rain or crashes were observed.

Figure 4 shows the existing automobile peak hour volumes at the study intersections. Intersection control (i.e., signalized or stop-controlled) and lane geometries are also shown in the figure. Appendix B contains the field-collected count sheets.

[3] Due to equipment error, the weekday AM peak hour counts at Hathaway Avenue/W A Street and the I-880 NB Ramps/W A Street were recollected on Wednesday, December 6, 2017. The counts were compared to data previously conducted at the site accesses on Hathaway Avenue in September 2015. The 2017 counts reflected higher volumes on Hathaway Avenue, suggesting that the proximity of the counts to the Thanksgiving holiday did not result in lower traffic volumes for the study. In addition, the counts collected on November 29, 2017 were compared to the adjacent intersections collected on December 6, 2017; the results showed that traffic volumes were similar on the two days of data collection.

Figure 4: Automobile Peak Hour Volumes, Existing Conditions



2.2.2 Pedestrian and Bicycle Volumes

Pedestrian and bicycle volumes were collected at the study intersections as part of the data collection effort. Table 5 and Table 6 present the pedestrian and bicycle volume data for the AM and PM peak hours, respectively. The fuel station is not anticipated to significantly increase the number of pedestrians or cyclists to or near the Project.

Table 5: Pedestrian and Bicycle Volumes, Existing Conditions, AM Peak Hour

#	Street Name		Pedestrian Crossings				Southbound Bicycles			Westbound Bicycles			Northbound Bicycles			Eastbound Bicycles		
	North-South	East-West	S	W	N	E	L	T	R	L	T	R	L	T	R	L	T	R
1	Hathaway Avenue	Costco Access (Signal)	0	3	3	8	0	2	0	0	0	1	0	1	0	0	0	0
2	Hathaway Avenue	Costco Access (OWSC)	1	5	1	7	0	3	0	0	0	0	0	0	0	0	0	0
3	Hathaway Avenue	West A Street	28	5	6	4	0	1	0	0	0	0	1	0	0	0	0	0
4	I-880 NB Ramps	West A Street	13	0	11	2	0	0	0	0	5	0	0	0	0	0	1	0
5	I-880 SB Ramps	West A Street	18	3	5	0	0	0	0	0	0	0	0	0	0	0	4	1

Data Source: Quality Counts manual turning movement counts (November and December 2017).

Table 6: Pedestrian and Bicycle Volumes, Existing Conditions, PM Peak Hour

#	Street Name		Pedestrian Crossings				Southbound Bicycles			Westbound Bicycles			Northbound Bicycles			Eastbound Bicycles		
	North-South	East-West	S	W	N	E	L	T	R	L	T	R	L	T	R	L	T	R
1	Hathaway Avenue	Costco Access (Signal)	0	0	2	5	0	0	0	1	0	0	0	0	0	0	0	0
2	Hathaway Avenue	Costco Access (OWSC)	1	0	1	6	0	1	0	0	0	0	0	0	0	0	0	0
3	Hathaway Avenue	West A Street	0	5	2	1	0	0	1	0	0	0	0	0	0	0	0	0
4	I-880 NB Ramps	West A Street	6	0	8	2	0	0	0	0	2	0	0	1	0	0	3	0
5	I-880 SB Ramps	West A Street	11	6	7	0	0	0	0	0	1	0	0	0	0	0	5	0

Data Source: Quality Counts manual turning movement counts (November and December 2017).

2.3 PERFORMANCE

2.3.1 Traffic Signal Warrants

Traffic signal warrants are standards that provide guidelines in the determination of the need for a traffic signal. A traffic signal should not be installed if no warrants are met, since the installation of traffic signals may increase delays for the majority of through traffic and may increase the potential for accidents.

As stated in the FHWA/Caltrans 2014 California Manual of Uniform Traffic Control Devices (CA-MUTCD), "An engineering study of traffic conditions, pedestrian characteristics, and physical characteristics of the location shall be performed to determine whether installation of a traffic control signal is justified at a particular location. The investigation of the need for a traffic control signal shall include an analysis of the applicable factors and other factors related to existing operation and safety at the study location.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal."

This traffic impact analysis focused on the eight-hour, four-hour, and peak hour warrants. The volume warrants were used in this study as an "indicator" of the likelihood of an existing or future unsignalized intersection warranting a traffic signal. As discussed in Section 1.1.1, the Project's unsignalized intersections are evaluated to determine whether any of the following are met:

- Traffic signal warrant (peak hour),
- Pedestrian signal warrant, or
- All-way stop warrant

Note that solely triggering a warrant does not constitute a significant impact, but the City of Hayward will at its discretion require or not require a signal be installed, where warranted.

Regardless of intersection control, per the latest City of Hayward Interim Traffic Study Guidelines, the Project would have a significant impact on traffic and circulation of an intersection operating at LOS F under an Existing or No Project scenario if the addition of Project traffic results in an increase of 5.0 seconds or more to the intersection's average control delay. Unsignalized intersections were evaluated using the Peak Hour Volume Warrant (Warrant No. 3) in the CA-MUTCD. Even if the volume warrants are met, a more detailed signal warrant study is recommended before a signal is installed. The more detailed study should consider volumes during the daily peak hours of roadway traffic, pedestrian traffic, and collision histories. Table 7 presents a summary of the traffic signal warrants under existing conditions. Appendix C contains the traffic signal warrant worksheets.

As shown in Table 7, none of the volume-based warrants are met at the right-in/right-out Costco access on Hathaway Avenue.

Table 7: Traffic Signal Volume Warrants, Existing Conditions

ID #	Intersection	Control	Existing
2	Hathaway Avenue/Costco Access	OWSC	Not Met

Based on California MUTCD (2014) Peak Hour Warrant
bold signifies that the warrant is met
Source: Kittelson & Associates, Inc. 2018

2.3.2 Automobile Level of Service

Levels of service (LOS) at the study intersections were evaluated based on the 2000 Highway Capacity Manual methodology, as implemented in the Synchro 8 software package. LOS analysis was performed for the AM and PM peak hours, using traffic counts and peak hour factors collected in the field. Table 8 provides a summary of the automobile level of service for Existing Conditions for all study intersections. Appendix D contains the LOS worksheets at all the study intersections for existing conditions.

As shown in Table 8, all intersections operate at a LOS D or better during both peak hours.

Table 8: Automobile Level of Service, Existing Conditions

ID #	Intersection	Control	Peak Hour	Existing	
				Delay (s/veh)	LOS
1	Hathaway Avenue & Costco Access (Signal)	Signalized	AM	3.9	A
			PM	5.1	A
2	Hathaway Avenue & Costco Access (OWSC)	OWSC[1]	AM	9.5 (WBR)	A
			PM	11.2 (WBR)	B
3	Hathaway Avenue & West A Street	Signalized	AM	40.8	D
			PM	46.4	D
4	I-880 NB Ramps & West A Street	Signalized	AM	17.5	B
			PM	19.0	B
5	I-880 SB Ramps & West A Street	Signalized	AM	28.9	C
			PM	22.2	C

LOS based on HCM 2000
bold signifies LOS worse than the target and/or that signal warrants are met
[1]LOS and control delays for unsignalized intersections are presented for the critical movement
Source: Kittelson & Associates, Inc. 2018

2.3.3 Queue Storage

The 95th percentile queues at the study intersections were reviewed based on Synchro 8 to identify locations where they may exceed the available storage. The 95th percentile queue lengths represent queues that have a 5-percent probability of being exceeded during the analysis time period. This measure is typically used in traffic engineering as a conservative measure of queuing; as such, the average driver would likely experience shorter queue lengths than what is being reported.

For through movements and turning movements without a dedicated lane, the available storage is assumed to be the distance from the stop bar to the departure point of the nearest upstream stop-controlled or signalized intersection. For turning movements with an exclusive turn lane, the length of the turn bay is assumed to be the available storage. Under Existing Conditions, there were several movements along West A Street at the study intersections found to queue beyond their available storage capacity at the 95th percentile demand level. These queues reflect peak hour commute patterns and don't appear to result in conflicts with adjacent signalized intersections nor in queuing that backs into the deceleration areas along the ramps. For reference purposes, the locations include:

- The eastbound left-turn, northbound left-turn, and westbound left-turn movements at the Hathaway Avenue/West A Street intersection (#3);
- The northbound and southbound through movements at the Hathaway Avenue/West A Street intersection (#3);
- The eastbound left-turn and northbound right-turn movements at the I-880 NB Ramps/West A Street intersection (#4);
- The eastbound through movement at the I-880 SB Ramps/West A Street intersection (#5); there are signs and clear pavement markings at S Garden Avenue warning drivers on West A Street not to block the intersection; and,
- The westbound left-turn and southbound right-turn movements at the I-880 SB Ramps/West A Street intersection (#5).

Appendix E contains the queuing results at all the study intersections. Appendix F tabulates 95th percentile queues at the study intersections for all study scenarios.

3 PROJECT DESCRIPTION

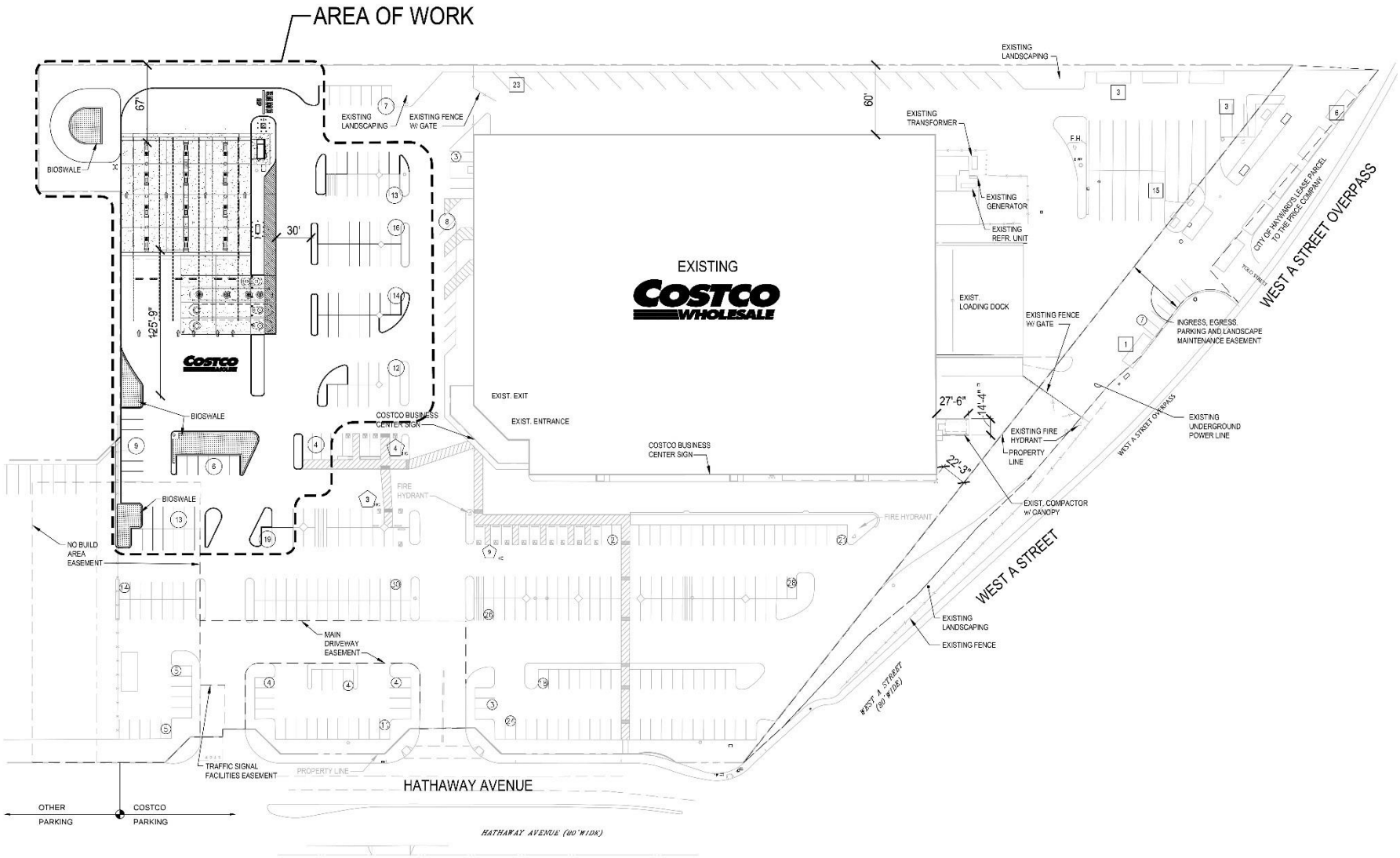
Costco Wholesale proposes to add a Fuel Station with 24 positions to the Hayward Business Center Site. In addition, the existing tire center on the west side of the Business Center will be removed, resulting in a reduction of 8,580 square feet of building area for a total of 115,707 square feet. The fuel station will be located on the northern portion of the site. Access to the existing Business Center occurs via a signalized full access driveway on Hathaway Avenue and a right-in/right-out access, both southeast of the fuel station. The Project site plan is provided in Figure 5.

3.1 TRIP GENERATION

The Project trip generation was summarized in a memorandum provided to the City in October 2017 and provided in Table 9. The memorandum was updated in June 2018 to reflect the modified site plan (which moved the fuel station from the southeast corner of the site to the northwest corner of the site). A copy of the memoranda is included in Appendix G. The Project trip generation was not impacted by the site plan change.

For reference purposes, Costco Gasoline fuel stations function as ancillary uses to the main Costco Warehouses and Business Centers. Like other Costco services, fuel can only be purchased by members. Payment can only be made with credit card and, unlike traditional gas/service station operations, there are no other automotive services (such as repairs) or other type of sales (including food or sundries) associated with the Costco Gasoline facility. While there is an existing tire center at the Costco Business Center, it will be removed with addition of the fuel station. All Costco Gasoline facilities have a minimum of one attendant working when the fuel station is open, who is responsible for expediting members' use of the dispensers, directing entering vehicles to available dispensers, and managing on-site queues from the dispenser area. Based on data collected at Costco fuel stations, the trip generation of fuel stations at Costco Business Centers is notably lower than at Costco Warehouses. This is the result of the much higher trip generation of warehouses and greater internalization between the Warehouses and fuel stations.

Figure 5: Site Plan



The trip generation for the Hayward fuel station is based on data collected at other Business Centers with fuel stations, as shown in Appendix G. For reference, the proposed trip generation based on the Costco data was compared to the trip generation based on the Institute of Transportation Engineer (ITE) Trip Generation Manual, 9th Edition, cited for use in the City's Interim Traffic Study Guidelines. The proposed trip generation is approximately 20% higher than ITE rates for the weekday AM peak hour and 5% higher for the weekday PM peak hour, as also shown in Appendix G. The internalization rate and pass-by rates applied are based on surveys from other fuel stations and are anticipated to be a conservative estimate. The resultant trip generation estimates for the Project are presented in Table 9.

Table 9: Project Automobile Trip Generation

Use	Size	Unit	Weekday AM Peak Hour Trips			Weekday PM Peak Hour Trips		
			Total	In	Out	Total	In	Out
Fuel Station	24	fueling positions	346	173	173	352	176	176
Internal (5%)[1]			*18*	*9*	*9*	*18*	*9*	*9*
Pass-by (42%)[2]			*138*	*69*	*69*	*140*	*70*	*70*
Net New			**190**	**95**	**95**	**194**	**97**	**97**

[1]Internal trips represent customers that frequent both fuel station and Costco Business Center. Therefore, these trips are already on the system. Additional data collected at the Hawthorne Costco Business Center reflected an internalization rate of 5-7% during all peak periods.

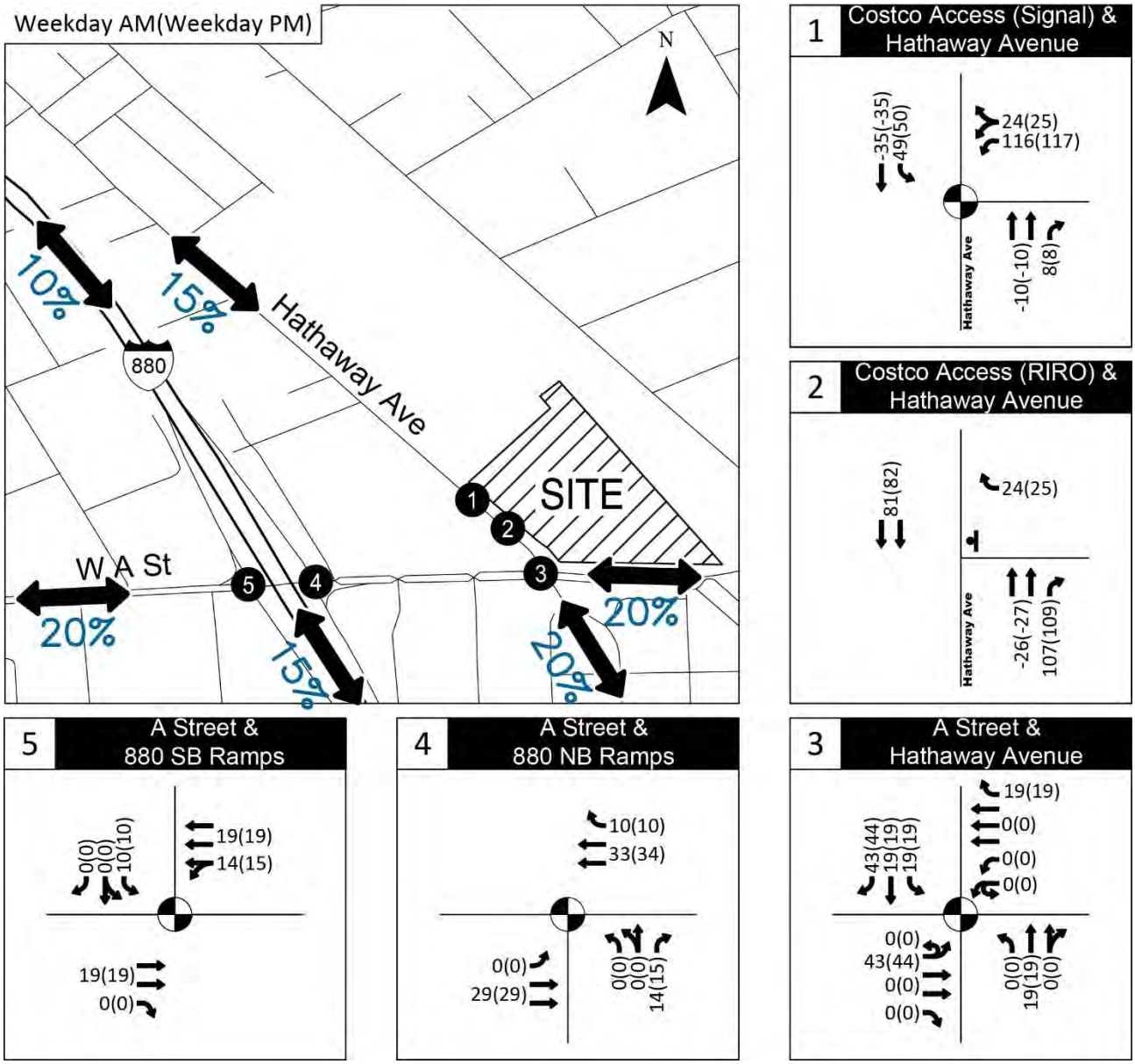
[2]Pass-by trips represent customers that are traveling by the site on adjacent roadways and stop at the site while on their way to another destination. Surveys conducted at the Costco Warehouses in Salem, Oregon and Hillsboro Oregon reflected pass-by rates ranging from 41-53%. A 42% pass-by rate was assumed to provide a conservative analysis.

3.2 TRIP DISTRIBUTION

Project trip distribution is typically developed using a travel demand model. In this case, a "select zone" analysis was performed for the Project site using the Hayward General Plan Update model. The application of the modeling data meets City impact analysis requirements. The distribution from the model was adjusted in coordination with City staff to match travel patterns from/to Project driveway locations.

Figure 6 presents the Project Only turning movement volumes derived from the trip generation and trip distribution discussed in this section.

Figure 6: Automobile Peak Hour Volumes, Project Only



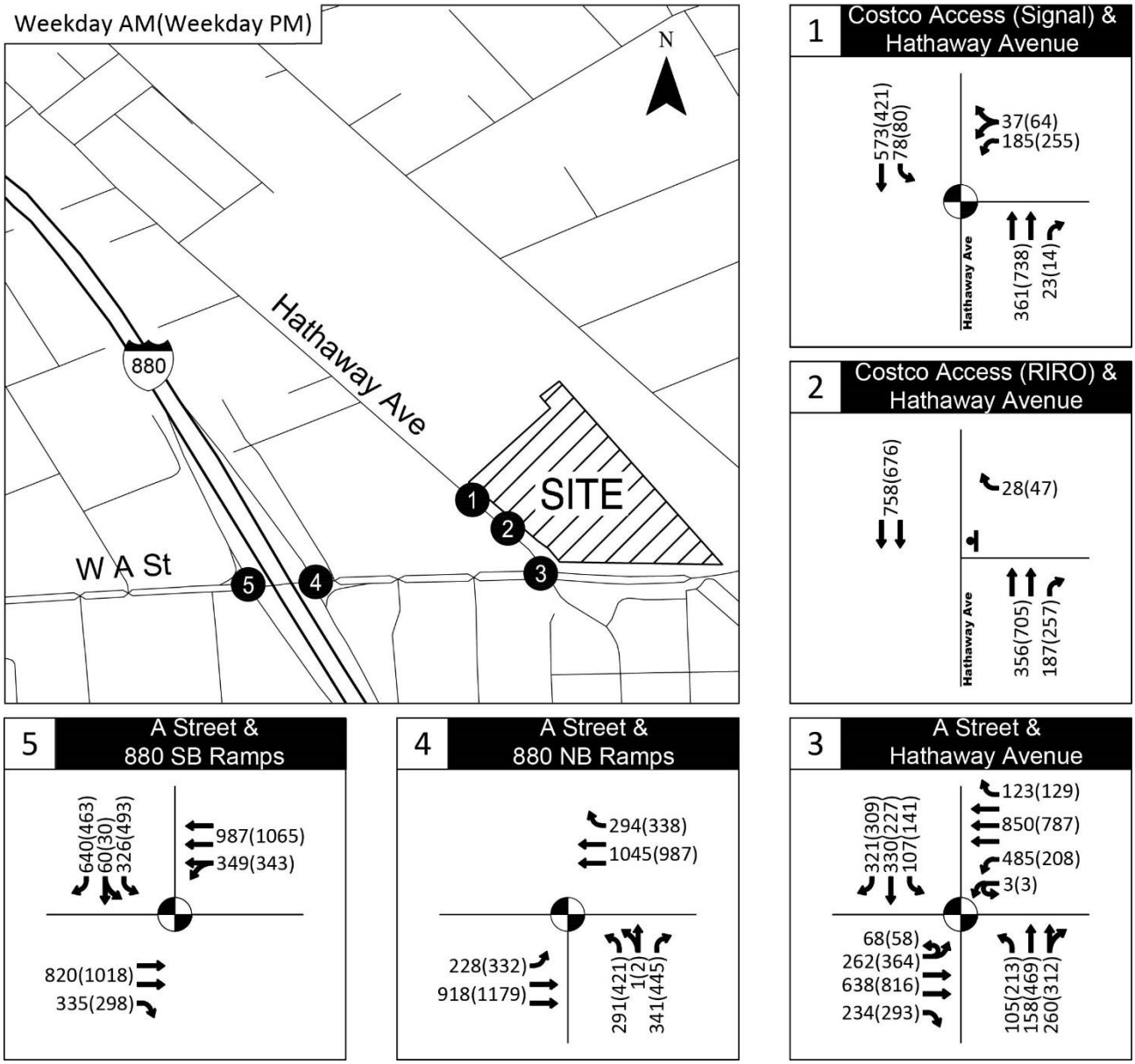
4 EXISTING PLUS PROJECT TRAFFIC CONDITIONS

4.1 DEMAND

4.1.1 Automobile Traffic Volumes

The automobile turning movement counts for the Existing Plus Project scenario were developed from the sum of the Existing Conditions turning movement counts and the Project Only turning movements described above (and displayed in Figure 6). Figure 7 presents the Existing Plus Project turning movements.

Figure 7: Automobile Peak Hour Volumes, Existing Plus Project



4.1.2 Pedestrian and Bicycle Volumes

Due to the automobile-centered nature of the Project, it is not expected to generate significant pedestrian and bicycle trips internal or external to the site.

4.2 PERFORMANCE

4.2.1 Traffic Signal Warrants

Table 10 presents a summary of the traffic signal warrants in the Existing and Existing Plus Project Conditions scenarios. Appendix C contains the peak hour signal warrant worksheets for all scenarios.

As shown in Table 10, volume-based signal warrants are not met at the right-in/right-out Costco access on Hathaway Avenue.

Table 10: Traffic Signal Volume Warrants, Existing Plus Project Conditions

ID #	Intersection	Control	Existing	Existing Plus Project
2	Hathaway Avenue/Costco Access	OWSC	Not Met	Not Met

Based on California MUTCD (2014) Peak Hour Warrant
bold signifies that the warrant is met
Source: Kittelson & Associates, Inc. 2018

4.2.2 Automobile Level of Service

Table 11 presents the Existing Conditions and Existing Plus Project delays and LOS for the study intersections. The table also compares the change in delay between the two scenarios. Appendix H contains the LOS worksheets for the Existing Plus Project condition.

As shown in Table 11, all study intersections continue to operate at LOS D or better during both peak hours with the addition of the Project traffic. The Project does not result in significant impacts at any of the study intersections for the Existing Plus Project conditions.

Table 11: Automobile Level of Service, Existing Plus Project

ID #	Intersection	Control	Peak Hour	Existing		Existing Plus Project		Delay Delta (s/veh)
				Delay (s/veh)	LOS	Delay (s/veh)	LOS	
1	Hathaway Avenue & Costco Access (Signal)	Signalized	AM	3.9	A	6.3	A	+2.4
			PM	5.1	A	6.6	A	+1.5
2	Hathaway Avenue & Costco Access (OWSC)	OWSC	AM	9.5 (WBR)	A	9.6 (WBR)	A	+0.1
			PM	11.2 (WBR)	B	11.3 (WBR)	B	+0.1
3	Hathaway Avenue & West A Street	Signalized	AM	40.8	D	43.6	D	+2.8
			PM	46.4	D	53.3	D	+6.9
4	I-880 NB Ramps & West A Street	Signalized	AM	17.5	B	19.5	B	+2.0
			PM	19.0	B	19.1	B	+0.1

ID #	Intersection	Control	Peak Hour	Existing		Existing Plus Project		Delay Delta (s/veh)
				Delay (s/veh)	LOS	Delay (s/veh)	LOS	
5	I-880 SB Ramps & West A Street	Signalized	AM	28.9	C	29.1	B	+0.2
			PM	22.2	C	22.7	B	+0.5

LOS based on HCM 2000

bold signifies LOS worse than the target and/or that signal warrants are met

[1]LOS and Control delays for unsignalized intersections are presented for the critical movement

Source: Kittelson & Associates, Inc. 2018

4.2.3 Queue Storage

The 95th percentile queues at the study intersections were reviewed based on Synchro 8 to identify locations where they may exceed the available storage. Under Existing Plus Project, the following additional movement was found to exceed available storage beyond those identified under Existing conditions.

- The westbound through movement at the I-880 SB Ramps /West A Street intersection (#4) is anticipated to spill back through the Happyland Avenue intersection but not to the signal at Hathaway Avenue during the weekday AM peak hour with the Project. There are signs and clear pavement markings at Happyland Avenue warning drivers on West A Street not to block the intersection.

Of the movements exceeding available storage under Existing conditions, the following increases in queue by more than two vehicles with the Project:

- The eastbound left-turn movement at the Hathaway Avenue/West A Street intersection (#3) increase by about three to four vehicle lengths during both the weekday AM and PM peak hours. However, the queues do not spill back to the adjacent signalized intersection at the I-880 ramps.

Appendix I contains the queuing results at all study intersections for Existing Plus Project conditions. Appendix F tabulates 95th percentile queues at the study intersections for all Existing scenarios.

4.2.4 Pedestrian, Bicycle, and Transit Service

The Project is not expected to generate a significant number of pedestrian, bicycle or transit trips given the automobile-centric use. Therefore, no adverse effects to pedestrian, bicycle or transit facilities or level of service are expected as a result of build-out of the Project and the impact to existing pedestrian, bicycle and transit facilities would be less-than-significant.

5 BACKGROUND 2022 PLUS PROJECT CONDITIONS

5.1 DEVELOPMENT OF BACKGROUND 2022NETWORK

The latest available Alameda CTC Countywide Model was reviewed to ensure that future regional roadway improvements are included as part of the Background scenario. No planned improvements were identified.

5.2 DEVELOPMENT OF BACKGROUND 2022 DEMAND

The City of Hayward does not have a 2022 scenario available as part of the General Plan, so there is no 2022 model available to forecast the background traffic for 2022. Therefore, 2035 no-project volumes were first derived using the travel model and adjusted based on the incremental or difference method described in NCHRP 255[4] methods, consistent with the methodology used for the Hayward General Plan and other citywide Specific Plans. The method compares 2035 model volumes to existing year model volumes to identify the growth increment, and then adds this increment to the existing counts, thus smoothing out any model validation error compared to existing counts. Further details on the development of 2035 volumes are provided in Section 6. The growth between existing and 2035 no-project volumes was assessed and factored down to develop background 2022 volumes. Appendix J provides the model volumes used for the assessment.

Figure 8 presents the Background 2022 No-Project volumes. Project traffic was then added to the Background 2022 No-Project volumes, and Figure 9 displays the Background 2022 Plus Project volumes.

[4] Highway Traffic Data for Urbanized Area Project Planning and Design, Transportation Research Board, 1992.

Figure 8: Background 2022 No Project Automobile Peak Hour Volumes

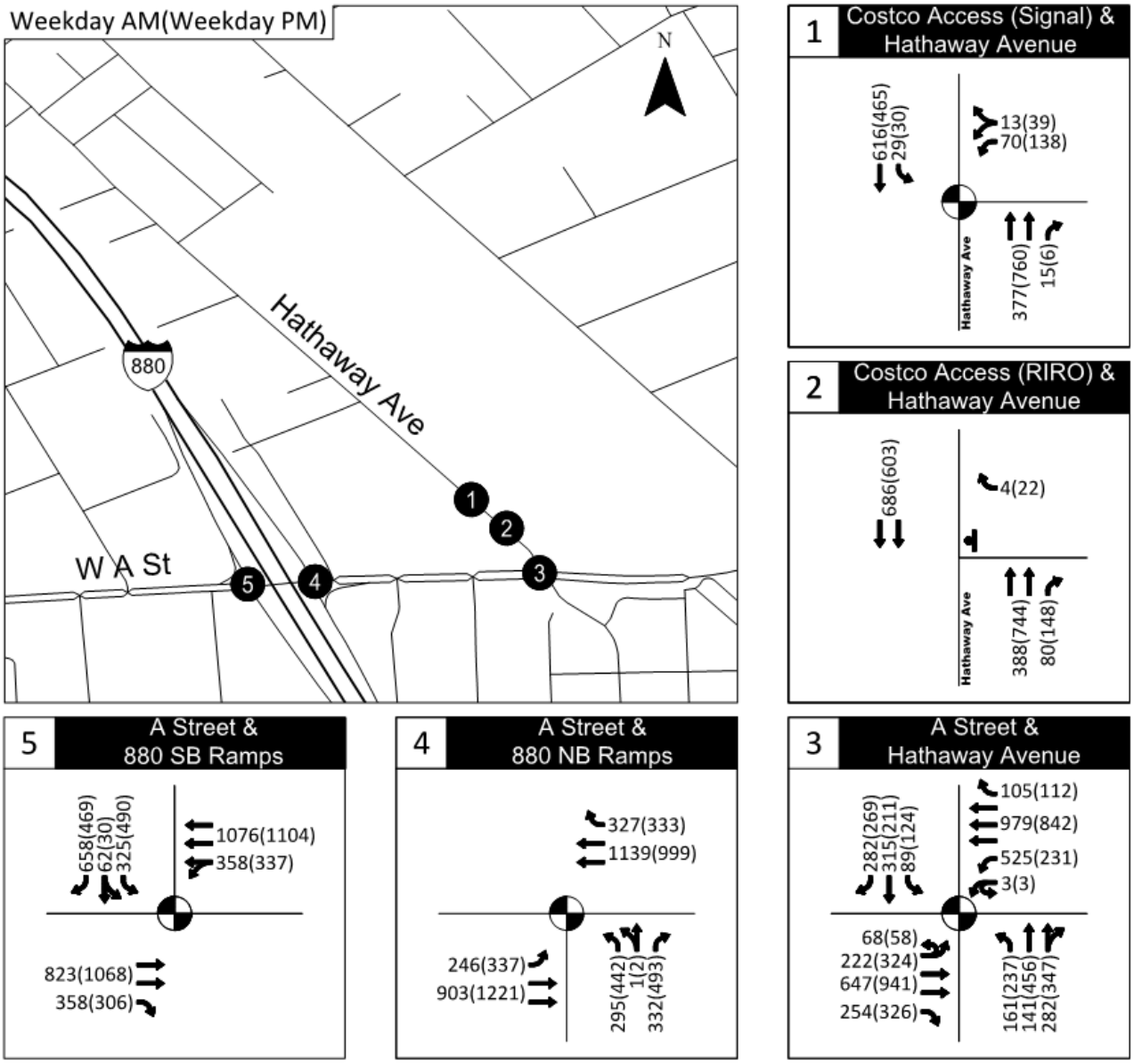
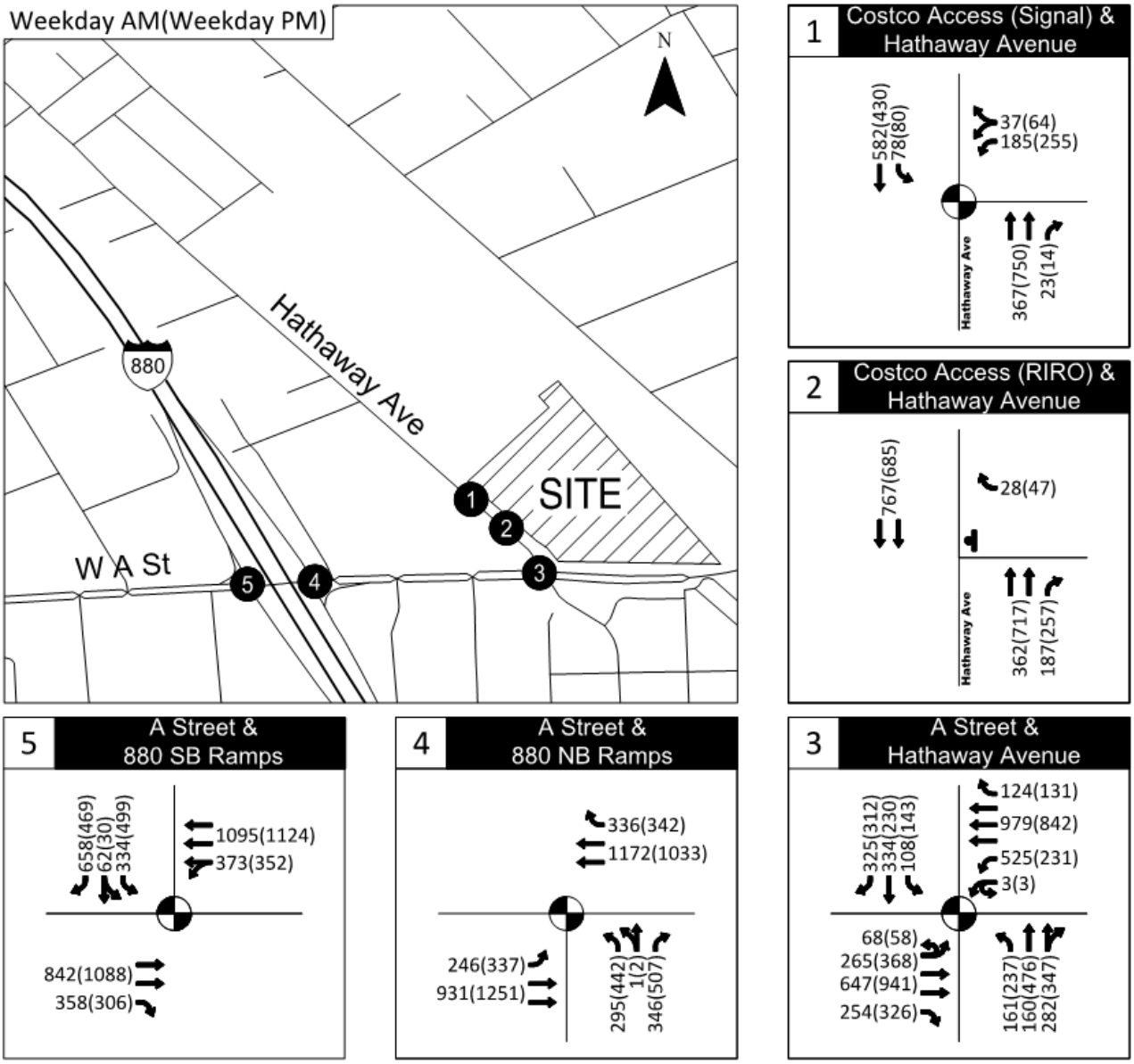


Figure 9: Background 2022 Plus Project Automobile Peak Hour Volumes



5.3 PERFORMANCE

5.3.1 Traffic Signal Warrants

Table 12 presents a summary of the traffic signal warrants in the Background 2022 Conditions scenario. Appendix C contains the traffic signal warrant worksheets.

As shown in Table 12, volume-based signal warrants are not met at the right-in/right-out Costco access on Hathaway Avenue.

Table 12: Traffic Signal Volume Warrants, 2022 Conditions

ID #	Intersection	Control	Background 2022	Background 2022 Plus Project
2	Hathaway Avenue/Costco Access	OWSC	Not Met	Not Met

Based on California MUTCD (2014) Peak Hour Warrant
bold signifies that the warrant is met
Source: Kittelson & Associates, Inc. 2018

5.3.2 Automobile Level of Service

Levels of service (LOS) at the study intersections were evaluated based on the 2000 Highway Capacity Manual methodology, as implemented in the Synchro 8 software package. LOS analysis was performed for the AM and PM peak hours, using forecast turning movement volumes. The future year analysis assumed that signal timings would be unchanged from those in Existing Conditions. Table 13 presents the Background 2022 No-Project and Plus Project delays and LOS for the study intersections. Appendix K contains the LOS worksheets for the Background 2022 No-Project and Plus Project operations.

As shown in Table 13, all study intersections continue to operate at LOS D or better during both peak hours under 2022 conditions, without or with the addition of the Project traffic. The Project does not result in significant impacts at any of the study intersections for the Background 2022 Plus Project conditions.

Table 13: Background 2022 Automobile Level of Service

ID #	Intersection	Control	Peak Hour	Background 2022		Background 2022 Plus Project		Delay Delta (s/veh)
				Delay (s/veh)	LOS	Delay (s/veh)	LOS	
1	Hathaway Avenue & Costco Access (Signal)	Signalized	AM	3.9	A	6.5	A	+2.6
			PM	5.2	A	6.6	A	+1.4
2	Hathaway Avenue & Costco Access (OWSC)	OWSC	AM	9.5 (WBR)	A	9.6 (WBR)	A	+0.1
			PM	11.2 (WBR)	B	11.4 (WBR)	B	+0.2
3	Hathaway Avenue & West A Street	Signalized	AM	46.3	D	51.1	D	+4.8
			PM	49.6	D	56.8	D	+7.2
4	I-880 NB Ramps & West A Street	Signalized	AM	19.3	B	23.3	B	+4.0
			PM	19.6	B	19.7	B	+0.1
5	I-880 SB Ramps & West A Street	Signalized	AM	32.0	C	32.4	B	+0.4
			PM	22.9	C	23.5	B	+0.6

LOS based on HCM 2000
bold signifies LOS worse than the target and/or that signal warrants are met
[1]LOS and Control delays for unsignalized intersections are presented for the critical movement
Source: Kittelson & Associates, Inc. 2018

5.3.3 Queue Storage

The 95th percentile queues at the study intersections were reviewed based on Synchro 8 to identify locations where they may exceed the available storage. The 95th percentile queues at the study

intersections were reviewed based on Synchro 8 to identify locations where they may exceed the available storage. Under the Background 2022 scenario, the following movement was found to queue beyond their available storage capacity at the 95th percentile demand level, beyond those identified under Existing Conditions:

- The eastbound through movement at the I-880 NB Ramps/West A Street intersection (#4) spills back through the adjacent intersection at the I-880 SB Ramps during the weekday PM peak hour with the project. The queue is less than a vehicle over the space between the ramps.

Appendix L contains the queuing results at all the study intersections for the Background 2020 No-Project and Plus Project scenarios. Appendix F tabulates the 95th percentile queues at the study intersections for all scenarios. As seen in Appendix F, for the most part queues are expected to increase by a few vehicle lengths or less under 2022 conditions compared to existing conditions, with the exception of:

- During the weekday AM peak hour, the westbound through movement at the I-880 NB Ramps/West A Street intersection (#4) is projected to increase by about four vehicle lengths under 2022 conditions compared to existing conditions (for both background and plus project conditions). The queue for this movement spills back through the adjacent intersection.
- During the weekday PM peak hour, the eastbound through movement at the Hathaway Avenue/West A Street intersection (#3) is projected to increase by about four vehicle lengths under 2022 conditions compared to existing conditions (for both background and plus project conditions). The queue for this movement does not spill back through the adjacent intersection.

5.3.4 Pedestrian, Bicycle, and Transit Service

As previously discussed, the Project is not expected to generate a significant number of pedestrian, bicycle or transit trips given the automobile-centric use. Therefore, no adverse effects to pedestrian, bicycle or transit facilities or level of service are expected as a result of the build-out of the Project and the impact to existing pedestrian, bicycle and transit facilities would be less-than-significant.

6 CUMULATIVE 2035 PLUS PROJECT CONDITIONS

The potential impacts to the transportation system were evaluated according to the standards and practices of the City of Hayward and ACTC using *2000 Highway Capacity Manual* methodologies. The impacts to the intersections were evaluated using projected peak hour traffic volumes derived from the Hayward General Plan Update version of the Alameda CTC Countywide Model and the Project trips described in the Project Description section.

Note that while the model version used for this study is the 2035 Citywide General Plan model with ABAG Projections 2009, the Alameda CTC countywide model has now extended out to 2040 and includes less conservative Association of Bay Area Governments (ABAG) Plan Bay Area projections. However, it was determined in coordination with City staff that the General Plan model should be used for this study since it is more conservative within Hayward given that it includes buildout of the City's General Plan. Therefore, for purposes of the traffic analysis the 2035 horizon year was assumed to be consistent with the General Plan and is sufficiently conservative for development of cumulative traffic forecasts in the study area.

6.1 DEVELOPMENT OF CUMULATIVE 2035 NETWORK

The latest available Alameda CTC Countywide Model with ABAG Projections 2009 was reviewed to ensure that future regional roadway improvements are included as part of the Cumulative 2035 condition. No network modifications were identified.

6.2 DEVELOPMENT OF CUMULATIVE 2035 DEMAND

The model includes future development throughout the region. The 2035 forecasts are consistent with regional totals for growth projected by ABAG in their Projections 2009 report. Therefore, the traffic forecasts reflect traffic from growth in Hayward as well as traffic from future developments in the region that may use the local roadways. Cumulative 2035 No-Project volumes were extracted from the travel model and adjusted based on the incremental or difference method described in NCHRP 255[5] methods, consistent with the methodology used for the Hayward General Plan and other citywide Specific Plans. The method compares 2035 model volumes to existing year model volumes to identify the growth increment, and then adds this increment to the existing counts, thus smoothing out any model validation error compared to existing counts. On some roadway links, the base model volumes are significantly lower than existing volumes, resulting in excessive growth reflected in the post-processed volumes. In these cases, the volumes were adjusted to more closely match 2035 link projections. Appendix J provides the model volumes used for the assessment and further describes the volume development process.

[5] Highway Traffic Data for Urbanized Area Project Planning and Design, Transportation Research Board, 1992.

Figure 10 presents the Cumulative No-Project volumes derived from the travel demand model and the incremental adjustment process and Figure 11 presents the Cumulative Plus Project volumes.

Figure 10: Cumulative 2035 No Project Automobile Peak Hour Volumes

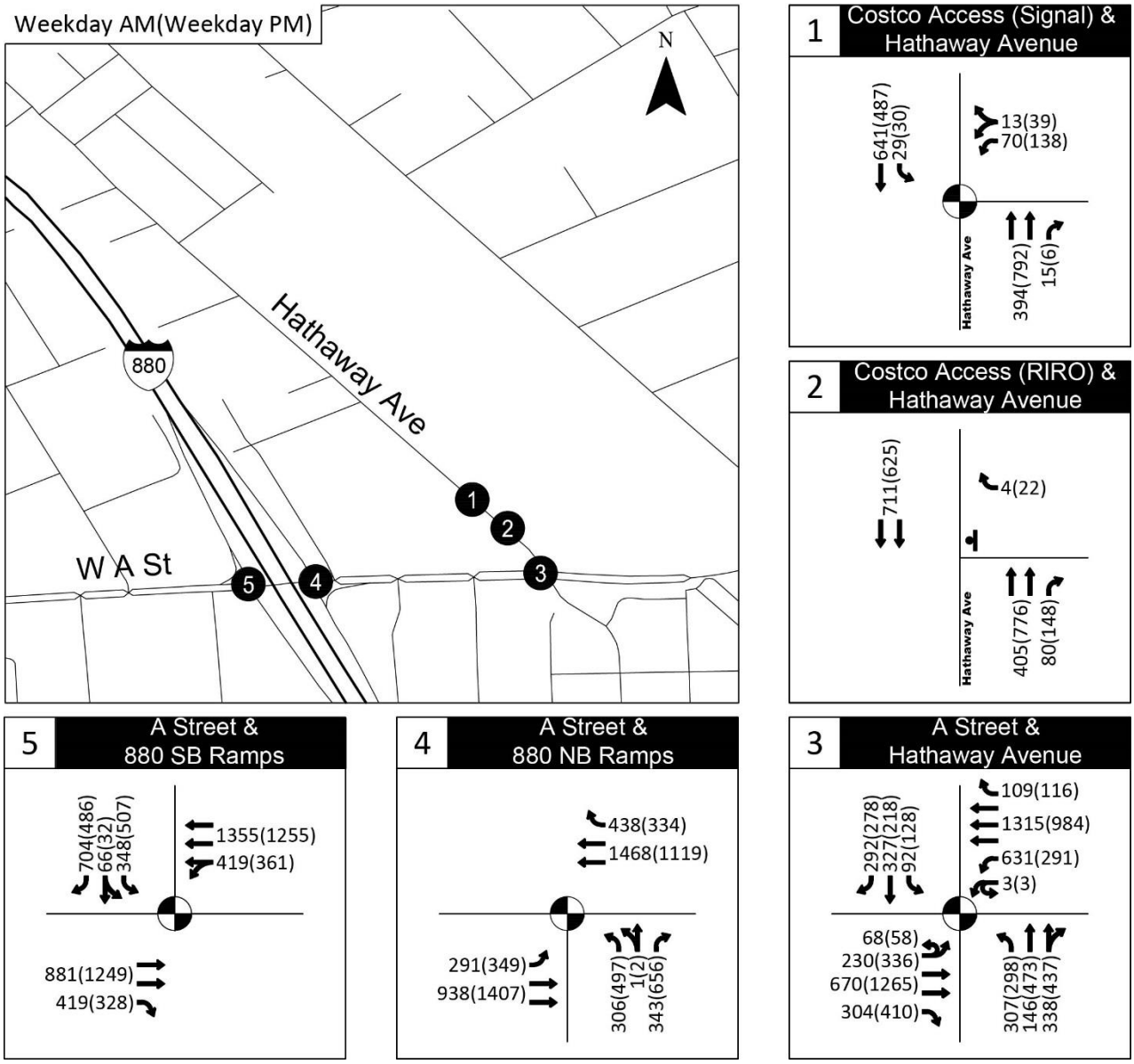
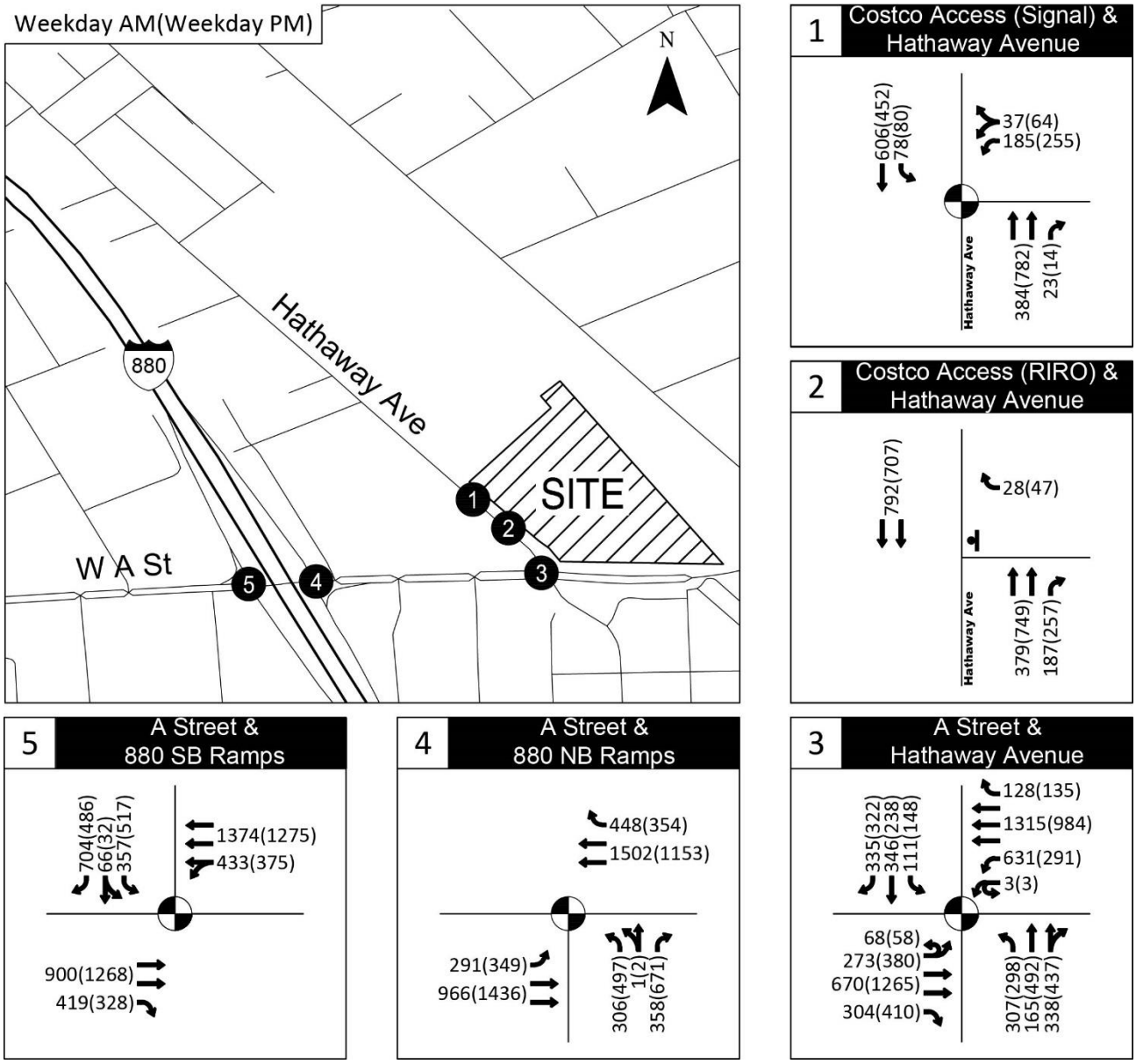


Figure 11: Cumulative 2035 Plus Project Automobile Peak Hour Volumes



6.3 PERFORMANCE

6.3.1 Traffic Signal Warrants

Table 14 presents a summary of the traffic signal warrants in the Cumulative scenario. Appendix C contains the peak hour warrant worksheets.

As shown in Table 14, volume-based signal warrants are not met at the right-in/right-out Costco access on Hathaway Avenue.

Table 14: Traffic Signal Volume Warrants, Cumulative 2035 Conditions

ID #	Intersection	Control	Cumulative 2035	Cumulative 2035 Plus Project
2	Hathaway Avenue/Costco Access	OWSC	Not Met	Not Met

Based on California MUTCD (2014) Peak Hour Warrant
bold signifies that the warrant is met
Source: Kittelson & Associates, Inc. 2018

6.3.2 Automobile Level of Service

Levels of service (LOS) at the study intersections were evaluated based on the 2000 Highway Capacity Manual methodology, as implemented in the Synchro 8 software package. LOS analysis was performed for the AM and PM peak hours, using forecast turning movement volumes. The future year analysis assumed that signal timings would be unchanged from those in Existing Conditions. Table 15 presents the Cumulative No Project and Cumulative plus Project delays and LOS for the study intersections. Appendix M contains the LOS worksheets.

As shown in Table 15, all study intersections operate at LOS E or better during both peak hours under 2035 conditions, without or with the addition of the Project traffic. The Project does not result in significant impacts at any of the study intersections for the Cumulative Plus Project conditions.

Table 15: Cumulative 2035 Automobile Level of Service

ID #	Intersection	Control	Peak Hour	Cumulative 2035		Cumulative 2035 Plus Project		Delay Delta (s/veh)
				Delay (s/veh)	LOS	Delay (s/veh)	LOS	
1	Hathaway Avenue & Costco Access (Signal)	Signalized	AM	3.9	A	6.6	A	+2.7
			PM	5.1	A	6.7	A	+1.6
2	Hathaway Avenue & Costco Access (OWSC)	OWSC	AM	9.6 (WBR)	A	9.6 (WBR)	A	-
			PM	11.4 (WBR)	A	11.5 (WBR)	B	+0.1
3	Hathaway Avenue & West A Street	Signalized	AM	69.5	E	75.8	E	+6.3
			PM	69.6	E	78.8	E	+9.2
4	I-880 NB Ramps & West A Street	Signalized	AM	45.9	D	50.1	D	+4.2
			PM	21.3	C	21.8	E	+0.5
5	I-880 SB Ramps & West A Street	Signalized	AM	42.5	D	43.6	D	+1.1
			PM	26.7	C	28.1	D	+1.4

LOS based on HCM 2000

bold signifies LOS worse than the target and/or that signal warrants are met

[1]LOS and Control delays for unsignalized intersections are presented for the critical movement

Source: Kittelson & Associates, Inc. 2018

6.3.3 Queue Storage

The 95th percentile queues at the study intersections were reviewed based on Synchro 8 to identify locations where they may exceed the available storage. Under the Cumulative 2035 scenario, the following movements were found to queue beyond their available storage capacity at the 95th percentile demand level, beyond those identified in the 2022 scenario:

- The southbound right-turn movement at the Hathaway Avenue/West A Street intersection (#3) is anticipated to spill back beyond the provided storage during the weekday AM peak hour with the Project; however, the queue does not spill back to adjacent intersections.
- The eastbound through movement at the Hathaway Avenue/West A Street (#3) intersection is anticipated to spill back through the Happyland Avenue intersection but not to the signal at the I-880 NB Ramp during the weekday PM peak hour with and without the Project. As previously noted, signage and clearly-delineated pavement markings along West A Street warn drivers in both directions not to block the Happyland Avenue intersection.

Appendix N contains the queuing results at all the study intersections for both Cumulative 2035 scenarios. Appendix F tabulates 95th percentile queues at the study intersections for all scenarios. As seen in Appendix F, for the most part queues are expected to increase by a few vehicle lengths or less under 2022 conditions compared to existing conditions, with the exception of:

- At the Hathaway Avenue/West A Street intersection (#3), several movements are projected to increase in queue length, including:
    - During the weekday PM peak hour, the eastbound through movement is projected to increase by about twelve vehicle lengths under 2035 conditions compared to

2022 conditions (for both background and plus project conditions). The queue for this movement backs up through the adjacent intersection.

- During the weekday PM peak hour, the eastbound right-turn movement is projected to increase by about four vehicle lengths under 2035 conditions compared to 2022 conditions (for both background and plus project conditions). The queue for this movement does not exceed storage.
- During the weekday AM peak hour, the westbound left-turn movement is projected to increase by about five vehicle lengths under 2035 conditions compared to 2022 conditions (for both background and plus project conditions). The queue for this movement exceeds storage.
- During the weekday AM peak hour, the westbound through movement is projected to increase by about eight vehicle lengths under 2035 conditions compared to 2022 conditions (for both background and plus project conditions). The queue for this movement does not back up to the adjacent intersection.
- The northbound left-turn movement is expected to increase by about twelve vehicle lengths during the weekday AM peak hour and six vehicle lengths under 2035 conditions compared to 2022 conditions (for both background and plus project conditions). The queue for this movement exceeds storage and backs up near El Dorado Avenue.
- During the weekday PM peak hour, the northbound through/right-turn movement is projected to increase by about five vehicle lengths under 2035 conditions compared to 2022 conditions (for both background and plus project conditions). The queue for this movement exceeds storage and backs up to El Dorado Avenue.

- During the weekday AM peak hour, the westbound through movement at the I-880 NB Ramps/West A Street intersection (#4) is projected to increase by about seven vehicle lengths under 2035 conditions compared to 2022 conditions (for both background and plus project conditions). The queue for this movement spills back through the adjacent intersection.

6.3.4 Pedestrian, Bicycle, and Transit Service

As noted previously, the Project is not expected to generate a significant number of pedestrian, bicycle or transit trips given the automobile-centric use. Therefore, no adverse effects to pedestrian, bicycle or transit facilities or level of service are expected as a result of the build-out of the Project and the impact to existing pedestrian, bicycle and transit facilities would be less-than-significant.

7 CIRCULATION AND PARKING

7.1 SITE REVIEW

This section describes access, on-site circulation, emergency vehicle access (EVA) and parking for the Project site.

7.1.1 Driveways

The fuel station will be accessed via the existing driveways for the Costco Business Center. Both existing driveways provide access for circulation for autos, loading and delivery trucks, waste vehicles and Emergency Vehicles (EVA's). No sight distance or visibility issues were identified at the driveways.

Based on the Cumulative 2035 volumes at the Costco access locations in Figure 11, neither significant delays nor queuing impacts are projected at the Project driveways.

7.1.2 Internal Circulation

The fuel station can be accessed via either of the existing driveways for the Costco Business Center. Vehicles enter the fuel station from the south side over 300 feet north of the signalized access, so that the queueing area is kept internal to the site with no potential for queues to back-up off site. Vehicles exit from the north side of the fuel station and can exit the site from either access. The current exit width is consistent with Costco's standard fuel facility exit width and allows larger vehicles, such as RVs, to exit the facility without conflict.

7.1.3 Truck Circulation

Fuel trucks will access the fuel station by taking a right-in at the signalized driveway on Hathaway Avenue. Trucks access the fuel station from the north and fill outside the queueing area. They exit the site by taking a left-out at the signal on Hathaway Boulevard.

The AutoTURN software package was used to overlay truck turning paths on the site plan to confirm the circulation path is appropriate. As shown in the AutoTURN exhibits in Appendix O, the site has been designed to provide an appropriate path for the fuel truck between Hathaway Avenue and the fuel station. The fuel station was located to allow fuel delivery trucks to circulate the site without impacting the business center delivery trucks and members entering the Business Center.

7.1.4 Emergency Vehicle Access

The Project does not alter the site access points and therefore emergency vehicle access to the overall site will be unchanged. Emergency vehicles, including fire trucks and ambulances, will be able to access the fuel station portion of the site through either of the site accesses and circulate in and around the site.

7.1.5 Pedestrian Access

Due to the automobile-centered nature of the Project, it is not expected to generate significant pedestrian and bicycle trips internal to the site or external.

7.1.6 Parking Inventory

An assessment of existing and proposed parking was provided to the City in an earlier memorandum, dated October 28, 2017. Since this time, the site plan was updated to locate the fuel station in the northwest corner instead of the southeast corner of the site. The memorandum was updated to reflect the change in site plan and is provided in Appendix G for reference. It concludes the following:

Based on the current Hayward Business Center parking demand and in reviewing the other Business Centers, the proposed parking supply of 3.44 spaces per 1,000 square feet is anticipated to meet Hayward's needs and meets the highest peak parking supply ratio measured at the other sites (i.e., 2.77 spaces per 1,000 square feet at Commerce/0.85 = 3.2). Although below the Municipal Code requirement of 4.0 spaces per 1,000 square feet, the data suggests that the proposed parking supply is sufficient to meet both existing and future parking needs at the Hayward Business Center with the Fuel Station.

8 MITIGATIONS

The traffic generated by the Project is not expected to result in any significant impacts to the study intersections nor are there any impacts to pedestrian, bicycle or transit facilities. Therefore, no mitigation measures have been identified.

9 CONGESTION MANAGEMENT PROGRAM

Alameda CTC Congestion Management Program (CMP) Land Use Analysis was performed to identify potential impacts of the Project on the Metropolitan Transportation System (MTS) roadway network. The potential impacts of the Project to pedestrians, bicyclists, and transit facilities are provided in early sections of the report. MTS roadways in the study area include I-238, I-880, W A Street, and Hesperian Boulevard. Vehicle impacts were assessed at selected roadway locations including two segments of I-880, W A Street, and Hesperian Boulevard and one segment I-238.

9.1 MTS ROADWAY SEGMENTS

Traffic forecasts for year 2020 and 2040 conditions were extracted at the selected MTS roadway segments from the latest version of the Countywide Model, dated August 2015. The forecasts differ from those applied to the Circulation System Performance analysis in that no adjustments or changes were made to the Countywide Model in accordance with the CMP guidelines. Consequently, the CMP analysis results do not account for land use developments or roadway improvements not already in the model. The Project forecasts at the roadway segments were developed by incorporating the trips associated with the Project on top of the model volumes.

9.1.1 MTS Freeway Segments

The Highway Capacity Software (HCS) tool was used to analyze freeway mainline segments according to the criteria discussed under the Level of Service Definitions section. The MTS freeway segment analysis results are presented in Table 16. Under year 2020 and 2040 conditions, all freeway segments operate within standards with or without the Project. Therefore, the impacts of the Project would be considered **less than significant.** As indicated in the Significance Criteria section, Alameda CTC has not adopted a policy for determining a significant impact. For this this analysis, the threshold for a significant impact will be considered a 0.05 increase or more in volume-to-capacity ratio for facilities operating at a LOS F. A 0.05 increase can be considered a reasonably measured increase in traffic.

Output sheets for the freeway assessment are provided in Appendix P.

Table 16: MTS Freeway LOS Results without and with Project

Freeway	Location	Year	No Project			Plus Project			
			Volume	Density[1]	LOS	Volume	Density	LOS	Change in V/C
I-238 EB	14th Street to I 580	2020	4,871	27.3	D	4,879	27.3	D	N/A
		2040	5,293	30.8	D	5,301	30.8	D	N/A
I-238 WB	14th Street to I 580	2020	3,369	17.7	B	3,377	17.8	B	N/A
		2040	3,659	19.3	C	3,667	19.4	C	N/A
I-880 NB	W A Street to Hesperian Boulevard	2020	6,745	28.6	D	6,755	28.6	D	N/A
		2040	7,069	30.6	D	7,079	30.7	D	N/A

Freeway	Location	Year	No Project			Plus Project			
			Volume	Density[1]	LOS	Volume	Density	LOS	Change in V/C
I-880 NB	W Winton Avenue to W A Street	2020	6,958	29.9	D	6,973	30	D	N/A
		2040	7,469	33.4	D	7,484	33.5	D	N/A
I-880 SB	W A Street to Hesperian Boulevard	2020	7,224	31.7	D	7,234	31.7	D	N/A
		2040	8,203	39.6	E	8,213	39.7	E	N/A
I-880 SB	W Winton Avenue to W A Street	2020	7,584	34.4	D	7,599	34.4	D	N/A
		2040	8,425	41.8	E	8,440	42	E	N/A

Source: Kittelson & Associates, Inc., 2018
[1]Density = Passenger Cars per Mile per Lane (pcpmpl)
Bold text indicates substandard operations
N/A indicates where V/C criterion is not relevant, as LOS is E or better

9.1.2 MTS Arterial Segments

Level of service analyses for designated Metropolitan Transportation System (MTS) arterial segments was performed based on the service volume table shown in Appendix Q. This table provides an estimate of LOS based on weekday PM peak hour volumes. A volume to capacity ratio was calculated using the volumes from the Alameda Countywide Model and using the LOS F service volume threshold shown in the attachment as the estimate for roadway capacity.

The MTS arterial segment analysis results are presented in Table 17. As shown in the table, the following arterial segments would operate beyond the LOS standard under year 2020 and/or 2040 during the weekday PM peak hour without the Project:

- Eastbound W A Street, east of Hathaway Avenue (2020 and 2040)
- Eastbound W A Street, west of Hathaway Avenue (2040)
- Northbound Hesperian Boulevard, north of W A Street (2020 and 2040)
- Northbound Hesperian Boulevard, south of W A Street (2040)

With the addition of proposed Project traffic, all of these segments operating beyond the LOS standard E would continue to operate beyond the standard but would not experience an increase in the V/C ratio of 0.05 or more. Therefore, the Project impacts at those locations are considered to be **less than significant**.

Analysis worksheets for the arterial assessment are provided in Appendix R.

Table 17: MTS Arterial LOS without and with Project

Segment	Metric	No Project		Plus Project	
		2020	2040	2020	2040
W A Street, east of Hathaway Avenue (eastbound)	Volume	**1,689**	**1,782**	**1,708**	**1,801**
	LOS	**F**	**F**	**F**	**F**
	V/C Change			0.011	0.011
W A Street, east of Hathaway Avenue (westbound)	Volume	1,109	1,473	1,128	1,492
	LOS	C	D	C	D
	V/C Change			0.017	0.013
W A Street, west of Hathaway Avenue (eastbound)	Volume	1,464	**1,708**	1,508	**1,752**
	LOS	D	**F**	D	**F**
	V/C Change			0.030	0.026
W A Street, west of Hathaway Avenue (westbound)	Volume	1,273	1,279	1,317	1,323
	LOS	D	D	D	D
	V/C Change			0.035	0.034
Hesperian Boulevard, north of W A Street (northbound)	Volume	**2,884**	**3,087**	**2,894**	**3,097**
	LOS	**F**	**F**	**F**	**F**
	V/C Change			0.003	0.003
Hesperian Boulevard, north of W A Street (southbound)	Volume	1,005	1,944	1,015	1,954
	LOS	C	D	C	D
	V/C Change			0.009	0.005
Hesperian Boulevard, south of W A Street (northbound)	Volume	2,240	**2,704**	2,250	**2,714**
	LOS	D	**F**	D	**F**
	V/C Change			0.004	0.004
Hesperian Boulevard, south of W A Street (southbound)	Volume	507	1,353	517	1,363
	LOS	C	C	C	C
	V/C Change			0.019	0.007

Source: Kittelson & Associates, Inc., 2018
Bold text indicates substandard operations
shaded cell indicated a significant impact

9.1.3 MTS Roadway Segment Impacts and Mitigation Measures

The assessment did not identify any significant impacts and therefore no mitigation measures are proposed.

10 FINDINGS AND RECOMMENDATIONS

This section provides a summary of the traffic analysis, highlighting findings and recommendations.

10.1 TRAFFIC ANALYSIS SCOPE

This report presents the transportation impact analysis conducted by Kittelson & Associates for the fuel station addition at the Hayward Business Center site. Access to the existing Business Center occurs via a signalized full access driveway on Hathaway Avenue and a right-in/right-out access, both southeast of the fuel station.

This report evaluates the project for potential impacts and mitigations associated with the Proposed Project's interaction with the adjacent roadway network. It includes a number of scenarios, including Existing Conditions, Interim 2022, and Cumulative 2035 conditions. Five study intersections were identified, include the two site accesses on Hathaway Avenue.

10.2 FINDINGS

- Under existing conditions, all study intersections operate at a LOS D or better during both peak hours.
- The proposed project is expected to generate approximately 190 net new vehicle trips during the weekday AM peak hour and 194 net new vehicle trips during the weekday PM peak hour.
- The Proposed Project is not expected to generate many bicycle, pedestrian or transit trips, and therefore is not expected to impact existing and future bicycle, pedestrian and transit facilities in the vicinity of the project.
- All study intersections operate at LOS D or better during both peak hours under 2020 conditions, without or with the addition of the Project traffic.
- All study intersections operate at LOS E or better during both peak hours under 2035 conditions, without or with the addition of the Project traffic.
- The proposed parking supply is sufficient to meet both existing and future parking needs at the Hayward Business Center with the Fuel Station.
- The study assessed operations on MTS freeway and arterial segments with and without the project. No significant impacts were identified.

10.3 RECOMMENDATIONS

- The traffic generated by the Project is not expected to result in any significant impacts to the study intersections nor are there any impacts to pedestrian, bicycle or transit facilities. Therefore, no mitigation measures have been identified.
- Given no significant impacts were identified through the MTS roadway segment assessment, no mitigations were identified.

Appendix A Traffic Signal Timing Sheets

Traffic Signal Timing Sheet:

Hathaway Avenue/Costco Access (Signal)

Traffic Signal Timing Sheet:

Hathaway Avenue/West A Street

Traffic Signal Timing Sheet:

I-880 Ramps/West A Street

Appendix B Traffic Counts

Appendix C Traffic Signal Warrant Worksheets

Appendix D Existing Conditions Operations Worksheets

Appendix E Existing Conditions Queue Worksheets

Appendix F 95th Percentile Queue Table

Appendix G Trip Generation and Parking Memo

Appendix H Existing Plus Project Operations Worksheets

Appendix I Existing Plus Project Queueing Worksheets

Appendix J Model Outputs

Appendix K Background 2022 No Project and Background 2022 Plus Project Operations Worksheets

Appendix L Background 2022 No Project and Background 2022 Plus Project Queueing Worksheets

Appendix M Cumulative No Project and Cumulative Plus Project Operations Worksheets

Appendix N Cumulate No Project and Cumulative Plus Project Queueing Worksheets

Appendix O AutoTURN Exhibits

Appendix P Freeway Output Sheets

Appendix Q Arterial Level of Service Tresholds

Appendix R Arterial Analysis Worksheets

Appendix A Traffic Signal Timing Sheets

Traffic Signal Timing Sheet:

Hathaway Avenue/Costco Access (Signal)

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Configuration

Controller Sequence Priority

	1	2	3	4	5	6	7	8	9	10	11	12
Ring 1 Phases . .	1	2	3	4	9	10	0	0	0	0	0	0
Ring 2 Phases . .	5	6	7	8	11	12	0	0	0	0	0	0

Phase

	1	2	3	4	5	6	7	8	9	10	11	12
In Use.	.	X	.	X	.	X	.	.	.	.	.	.
Exclusive Ped . .	.	.	.	.	.	.	.	.	.	.	.	.
Direction												

Overlap

	A	B	C	D
Direction . . .				

Load Switch Channel/Driver Group Assign (Info Only):

Load Switch (MMU) Channel	Signal Driver Phase/ Ovlap	Group Ped
1	1	.
2	2	.
3	3	.
4	4	.
5	5	.
6	6	.
7	7	.
8	8	.
9	2	X
10	4	X
11	0	.
12	0	.
13	A	.
14	B	.
15	C	.
16	D	.

Configuration Continued

Enable BIU:	1	2	3	4	5	6	7	8
Terminal/Facilities. . . .	X	X	.	.	.	.	.	.
Detector Rack.	X	.	.	.	.	.	.	.

Type 2 Runs as Type 1. . . X
MMU Disable. . . . . .
Diagnostic Enable. . . . . .
Peer-Peer Comm Enable. . . .

	1	2	3	4	5	6	7	8	9	10
Peer To Peer Addresses . .	255	255	255	255	255	255	255	255	255	255

Port 2:

Port 2 Protocol . . . . . Terminal
Port 2 Enable . . . . . YES
AB3418 Address. 0
AB3418 Group Address. 0
AB3418 Response Delay 0
AB3418 Single Flag Enable . . . NO
AB3418 Drop-Out Time. 0
AB3418 TOD SF Select. 0
Data Rate . . . . . 1200 bps
Data, Parity, Stop. 8, 0, 1

Port 3:

Port 3 Protocol . . . . . Telemetry
Port 3 Enable . . . . . YES
Telemetry Address 16
System Detector 9-16 Address. . 0
Telemetry Response Delay. . . . 8000
AB3418 Address. 0
AB3418 Group Address. 0
AB3418 Response Delay 0
AB3418 Single Flag Enable . . . NO
AB3418 Drop-Out Time. 0
AB3418 TOD SF Select. 0
Duplex. . . . . Full
Data Rate . . . . . 1200 bps
Data, Parity, Stop. 8, 0, 1

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Configuration Continued

Event Enabling		Alarm Enabling	
Critical RFE'S (MMU/TF)	X	ALARM 1	X
Non-Critical RFE'S (DET/TEST) . .	X	ALARM 2	X
Detector Errors	X	ALARM 3	X
Coordination Errors	X	ALARM 4	X
MMU Flash Faults.	X	ALARM 5	X
Local Flash Faults.	X	ALARM 6	X
Preempt	X	ALARM 7	X
Power On/Off.	X	ALARM 8	X
Low Battery	X	ALARM 9	X
		ALARM 10.	X
		ALARM 11.	X
		ALARM 12.	X
		ALARM 13.	X
		ALARM 14.	X
		ALARM 15.	X
		ALARM 16.	X

Supervisor Access Code. . . ****
Data Change Access Code . . ****

MMU Compatibility Program (Info Only)

Channel	Is Allowed to Time With Channel														
	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2
1 . . .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2 . . .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
3 . . .	.	.	.	.	.	.	.	.	.	.	.	.	.		
4 . . .	.	.	.	.	.	.	.	.	.	.	.	.			
5 . . .	.	.	.	.	.	.	.	.	.	.	.				
6 . . .	.	.	.	.	.	.	.	.	.	.					
7 . . .	.	.	.	.	.	.	.	.	.						
8 . . .	.	.	.	.	.	.	.	.							
9 . . .	.	.	.	.	.	.	.								
10. . .	.	.	.	.	.	.									
11. . .	.	.	.	.	.										
12. . .	.	.	.	.											
13. . .	.	.	.												
14. . .	.	.													
15. . .	.														

Version Info:

Software Assy.	Part No.	Version
Boot	27831	2.83
Program	45561	6.9
Application		. 3
Help	27891	5.53
Configuration	27918	C000

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By-Phase Timing Data

	Phase											
	1	2	3	4	5	6	7	8	9	10	11	12
Direction												
Minimum Green	0	6	0	4	0	6	0	0	5	5	5	5
Bike Min Green	0	0	0	0	0	0	0	0	0	0	0	0
Cond Serv Min Grn	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	7	0	0	0	0	0	10	0	10
Ped Clearance	0	9	0	13	0	12	0	12	0	16	0	16
Veh Extension	0.0	3.0	0.0	2.0	0.0	3.0	0.0	0.0	5.0	5.0	5.0	5.0
Alt Veh Exten	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Extension	0	0	0	0	0	0	0	0	0	0	0	0
Max 1	0	30	0	25	0	30	0	0	35	35	35	35
Max 2	0	30	0	25	0	30	0	0	40	40	40	40
Max 3	0	40	0	25	0	40	0	0	0	0	0	0
Det. Fail Max	0	0	0	0	0	0	0	0	0	0	0	0
Yellow Change	3.0	3.0	4.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0	3.0	3.0
Red Clearance	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act. B4 Init	0	10	0	5	0	10	0	0	0	0	0	0
Sec/Actuation	0.0	2.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	0	15	0	15	0	15	0	0	30	30	30	30
Time B4 Reduction	0	10	0	10	0	10	0	0	0	0	0	0
Cars Waiting	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	0	15	40	4	0	15	0	0	0	0	0	0
Minimum Gap	0.0	2.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0

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No-Serve Phases

Phase Cannot Serve With Phase

Phase	12	11	10	9	8	7	6	5	4	3	2
1.	.	.	.	.	.	.	.	.	.	.	.
2.	.	.	.	.	.	.	.	.	.	.	
3.	.	.	.	.	.	.	.	.	.		
4.	.	.	.	.	.	.	.	.			
5.	.	.	.	.	.	.	.				
6.	.	.	.	.	.	.					
7.	.	.	.	.	.						
8.	.	.	.	.							
9.	.	.	.								
10.	.	.									
11.	.										

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Ped Carryover

Ped Start Phase	Carry Over Phase
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0

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Vehicle/Ped Phase as Overlap

Ped Phase As Overlap
Consists of Ped Phases

Ped Ovlap Phase	1	2	3	4	5	6	7	8	9	10	11	12
1	.	.	.	.	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.	.	.	.	.	.
9	.	.	.	.	.	.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.	.

Veh Phase As Overlap
Consists of Veh Phases

Veh Ovlap Phase	1	2	3	4	5	6	7	8	9	10	11	12
1	X	.	.	.	.	.	.	.	.	.	.	.
2	.	X	.	.	.	.	.	.	.	.	.	.
3	.	.	X	.	.	.	.	.	.	.	.	.
4	.	.	.	X	.	.	.	.	.	.	.	.
5	.	.	.	.	X	.	.	.	.	.	.	.
6	.	.	.	.	.	X	.	.	.	.	.	.
7	.	.	.	.	.	.	X	.	.	.	.	.
8	.	.	.	.	.	.	.	X	.	.	.	.
9	.	.	.	.	.	.	.	.	X	.	.	.
10	.	.	.	.	.	.	.	.	.	X	.	.
11	.	.	.	.	.	.	.	.	.	.	X	.
12	.	.	.	.	.	.	.	.	.	.	.	X

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Overlap Data

Overlap A	Phase: 1	2	3	4	5	6	7	8	9	10	11	12
Standard.	.	.	.	.	.	.	.	.	.	.	.	.
Protected	.	.	.	.	.	.	.	.	.	.	.	.
Permitted	.	.	.	.	.	.	.	.	.	.	.	.
Enable Lag.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Lead	.	.	.	.	.	.	.	.	.	.	.	.
Spare	.	.	.	.	.	.	.	.	.	.	.	.

Advance Green Timer 0.0

	Green	Yellow	Red
Lag/Lead Timers	0.0	0.0	0.0

Overlap B	Phase: 1	2	3	4	5	6	7	8	9	10	11	12
Standard.	.	.	.	.	.	.	.	.	.	.	.	.
Protected	.	.	.	.	.	.	.	.	.	.	.	.
Permitted	.	.	.	.	.	.	.	.	.	.	.	.
Enable Lag.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Lead	.	.	.	.	.	.	.	.	.	.	.	.
Spare	.	.	.	.	.	.	.	.	.	.	.	.

Advance Green Timer 0.0

	Green	Yellow	Red
Lag/Lead Timers	0.0	0.0	0.0

Overlap C	Phase: 1	2	3	4	5	6	7	8	9	10	11	12
Standard.	.	.	.	.	.	.	.	.	.	.	.	.
Protected	.	.	.	.	.	.	.	.	.	.	.	.
Permitted	.	.	.	.	.	.	.	.	.	.	.	.
Enable Lag.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Lead	.	.	.	.	.	.	.	.	.	.	.	.
Spare	.	.	.	.	.	.	.	.	.	.	.	.

Advance Green Timer 0.0

	Green	Yellow	Red
Lag/Lead Timers	0.0	0.0	0.0

Overlap D	Phase: 1	2	3	4	5	6	7	8	9	10	11	12
Standard.	.	.	.	.	.	.	.	.	.	.	.	.
Protected	.	.	.	.	.	.	.	.	.	.	.	.
Permitted	.	.	.	.	.	.	.	.	.	.	.	.
Enable Lag.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Lead	.	.	.	.	.	.	.	.	.	.	.	.
Spare	.	.	.	.	.	.	.	.	.	.	.	.

Advance Green Timer 0.0

	Green	Yellow	Red
Lag/Lead Timers	0.0	0.0	0.0

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Power Start, Remote Flash

	Phase															
	1	2	3	4	5	6	7	8	9	10	11	12	Overlap			
													A	B	C	D
Power Start.	.	X	.	.	.	X	.	.	.	.	.	.				
External Start . . .	.	X	.	.	.	X	.	.	.	.	.	.				
Into Remote Flash. .	.	X	.	.	.	X	.	.	.	.	.	.				
Exit Remote Flash. .	.	X	.	.	.	X	.	.	.	.	.	.				
Remote Flash Yellow.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Flash Together . . .	.	X	.	X	.	X	.	.	.	.	.	.	.	.	.	.

Initialization Interval:
Power Start . . . . . Yellow
External Start. . . . . Yellow

Power Start All Red Time. . 4
Power Start Flash Time. . . 6

Remote Flash Options:

Out of Flash Yellow . . . . YES
Out of Flash All Red. . . . NO
Minimum Recall. . . . . NO
Alternate Flash . . . . . NO
Flash Thru Load Switches. . NO
Cycle Through Phases. . . . NO

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Option Data

	Phase 1	2	3	4	5	6	7	8	9	10	11	12
Guaranteed Passage	.	.	.	.	.	.	.	.	.	.	.	.
Call To NonActuated 1	.	.	.	.	.	.	.	.	.	.	.	.
Call To NonActuated 2	.	.	.	.	.	.	.	.	.	.	.	.
Dual Entry	.	.	.	.	.	.	.	.	.	.	.	.
Conditional Service	.	.	.	.	.	.	.	.	.	.	.	.
Conditional Reservice	.	.	.	.	.	.	.	.	.	.	.	.
Actuated Rest in Walk	.	.	.	.	.	.	.	.	.	.	.	.
Flashing Walk	.	.	.	.	.	.	.	.	.	.	.	.

Enable Programmable Options

Dual Entry	OFF	Backup Protection Group 1	OFF
Conditional Service	OFF	Backup Protection Group 2	OFF
Ped Clearance Protection	OFF	Backup Protection Group 3	OFF
Special Preempt Overlap Flash	OFF	Simultaneous Gap Group 1	OFF
Cond Service Det Cross Switch	OFF	Simultaneous Gap Group 2	OFF
Lock Detectors in Red Only	OFF	Simultaneous Gap Group 3	OFF

Five Section Left Turn Control

Phases:	5-2	7-4	1-6	3-8	11-10	9-12
Left Turn Head	.	.	.	.	.	.

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Recall Data, Dimming

	Phase											
	1	2	3	4	5	6	7	8	9	10	11	12
Locking Detector.	.	X	.	.	.	X	.	.	.	.	.	.
Vehicle Recall.	.	X	.	.	.	X	.	.	.	.	.	.
Pedestrian Recall	.	.	.	.	.	.	.	.	.	.	.	.
Recall To Max	.	.	.	.	.	.	.	.	.	.	.	.
Soft Recall	.	.	.	.	.	.	.	.	.	.	.	.
Don't Rest Here	.	.	.	.	.	.	.	.	.	.	.	.
Ped Dark if No Call . . .	.	.	.	.	.	.	.	.	.	.	.	.

Dimming:

	Load Switch															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Green/Walk. . . .	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Yellow/Ped Clear.	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Red/Don't Walk. .	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

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Detector Type/Timers

Det.	Locking Memory	Log Enable	Timers Extend	Delay	Don't Reset Extend	Type
1	NO	NO	0.0	0	.	0 - Normal
2	NO	NO	0.0	0	.	0 - Normal
3	NO	NO	0.0	0	.	0 - Normal
4	NO	NO	0.0	0	.	0 - Normal
5	NO	NO	0.0	0	.	0 - Normal
6	NO	NO	0.0	0	.	0 - Normal
7	NO	NO	0.0	0	.	0 - Normal
8	NO	NO	0.0	0	.	0 - Normal
9	NO	NO	0.0	0	.	0 - Normal
10	NO	NO	0.0	0	.	1 - Extend/Delay
11	NO	NO	0.0	0	.	0 - Normal
12	NO	NO	0.0	0	.	0 - Normal
13	NO	NO	0.0	0	.	0 - Normal
14	NO	NO	0.0	0	.	0 - Normal
15	NO	NO	0.0	0	.	0 - Normal
16	NO	NO	0.0	0	.	0 - Normal
17	NO	NO	0.0	0	.	0 - Normal
18	NO	NO	0.0	0	.	0 - Normal
19	NO	NO	0.0	6	.	1 - Extend/Delay
20	NO	NO	0.0	0	.	0 - Normal
21	NO	NO	0.0	0	.	0 - Normal
22	NO	NO	0.0	0	.	0 - Normal
23	NO	NO	0.0	0	.	0 - Normal
24	NO	NO	0.0	0	.	0 - Normal
25	NO	NO	0.0	0	.	0 - Normal
26	NO	NO	0.0	0	.	0 - Normal
27	NO	NO	0.0	0	.	0 - Normal
28	NO	NO	0.0	0	.	0 - Normal
29	NO	NO	0.0	0	.	0 - Normal
30	NO	NO	0.0	0	.	0 - Normal
31	NO	NO	0.0	0	.	0 - Normal
32	NO	NO	0.0	0	.	0 - Normal

Detector Names

Det 1: Detector 1	Det 17: Detector 17
Det 2: Detector 2	Det 18: Detector 18
Det 3: Detector 3	Det 19: Detector 19
Det 4: Detector 4	Det 20: Detector 20
Det 5: Detector 5	Det 21: Detector 21
Det 6: Detector 6	Det 22: Detector 22
Det 7: Detector 7	Det 23: Detector 23
Det 8: Detector 8	Det 24: Detector 24
Det 9: Detector 9	Det 25: Detector 25
Det 10: Detector 10	Det 26: Detector 26
Det 11: Detector 11	Det 27: Detector 27
Det 12: Detector 12	Det 28: Detector 28
Det 13: Detector 13	Det 29: Detector 29
Det 14: Detector 14	Det 30: Detector 30
Det 15: Detector 15	Det 31: Detector 31
Det 16: Detector 16	Det 32: Detector 32

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Detector Type/Timers

33	NO	NO	0.0	0	.	0 - Normal
34	NO	NO	0.0	0	.	0 - Normal
35	NO	NO	0.0	0	.	0 - Normal
36	NO	NO	0.0	0	.	0 - Normal
37	NO	NO	0.0	0	.	0 - Normal
38	NO	NO	0.0	0	.	0 - Normal
39	NO	NO	0.0	0	.	0 - Normal
40	NO	NO	0.0	0	.	0 - Normal
41	NO	NO	0.0	0	.	0 - Normal
42	NO	NO	0.0	0	.	0 - Normal
43	NO	NO	0.0	0	.	0 - Normal
44	NO	NO	0.0	0	.	0 - Normal
45	NO	NO	0.0	0	.	0 - Normal
46	NO	NO	0.0	0	.	0 - Normal
47	NO	NO	0.0	0	.	0 - Normal
48	NO	NO	0.0	0	.	0 - Normal
49	NO	NO	0.0	0	.	0 - Normal
50	NO	NO	0.0	0	.	0 - Normal
51	NO	NO	0.0	0	.	0 - Normal
52	NO	NO	0.0	0	.	0 - Normal
53	NO	NO	0.0	0	.	0 - Normal
54	NO	NO	0.0	0	.	0 - Normal
55	NO	NO	0.0	0	.	0 - Normal
56	NO	NO	0.0	0	.	0 - Normal
57	NO	NO	0.0	0	.	0 - Normal
58	NO	NO	0.0	0	.	0 - Normal
59	NO	NO	0.0	0	.	0 - Normal
60	NO	NO	0.0	0	.	0 - Normal
61	NO	NO	0.0	0	.	0 - Normal
62	NO	NO	0.0	0	.	0 - Normal
63	NO	NO	0.0	0	.	0 - Normal
64	NO	NO	0.0	0	.	0 - Normal

Detector Names

Det 33: Detector 33	Det 49: Detector 49
Det 34: Detector 34	Det 50: Detector 50
Det 35: Detector 35	Det 51: Detector 51
Det 36: Detector 36	Det 52: Detector 52
Det 37: Detector 37	Det 53: Detector 53
Det 38: Detector 38	Det 54: Detector 54
Det 39: Detector 39	Det 55: Detector 55
Det 40: Detector 40	Det 56: Detector 56
Det 41: Detector 41	Det 57: Detector 57
Det 42: Detector 42	Det 58: Detector 58
Det 43: Detector 43	Det 59: Detector 59
Det 44: Detector 44	Det 60: Detector 60
Det 45: Detector 45	Det 61: Detector 61
Det 46: Detector 46	Det 62: Detector 62
Det 47: Detector 47	Det 63: Detector 63
Det 48: Detector 48	Det 64: Detector 64

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Detector Phase Assignment

	Phase											
Det.	1	2	3	4	5	6	7	8	9	10	11	12
1	.	X	.	.	.	.	.	.	.	.	.	.
2	.	X	.	.	.	.	.	.	.	.	.	.
3	.	X	.	.	.	.	.	.	.	.	.	.
4	.	X	.	.	.	.	.	.	.	.	.	.
5	.	X	.	.	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.	.	.	.	.
7	.	.	.	X	.	.	.	.	.	.	.	.
8	.	.	.	X	.	.	.	.	.	.	.	.
9	.	.	.	.	.	.	.	.	.	.	.	.
10	.	.	.	.	.	X	.	.	.	.	.	.
11	.	.	.	.	.	X	.	.	.	.	.	.
12	.	.	.	.	.	X	.	.	.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.
14	.	.	.	.	.	.	.	.	.	.	.	.
15	.	.	.	.	.	.	.	.	.	.	.	.
16	.	.	.	.	.	.	.	.	.	.	.	.
17	.	.	.	.	.	.	.	.	.	.	.	.
18	.	.	.	.	.	.	.	.	.	.	.	.
19	.	.	.	.	.	.	.	.	.	.	.	.
20	.	.	.	.	.	.	.	.	.	.	.	.
21	.	.	.	.	.	.	.	.	.	.	.	.
22	.	.	.	.	.	.	.	.	.	.	.	.
23	.	.	.	.	.	.	.	.	.	.	.	.
24	.	.	.	.	.	.	.	.	.	.	.	.
25	.	.	.	.	.	.	.	.	.	.	.	.
26	.	.	.	.	.	.	.	.	.	.	.	.
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31	.	.	.	.	.	.	.	.	.	.	.	.
32	.	.	.	.	.	.	.	.	.	.	.	.

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Detector Cross Switching

	Phase											
Det.	1	2	3	4	5	6	7	8	9	10	11	12
1	.	.	.	.	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.	.	.	.	.	.
9	.	.	.	.	.	.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.
14	.	.	.	.	.	.	.	.	.	.	.	.
15	.	.	.	.	.	.	.	.	.	.	.	.
16	.	.	.	.	.	.	.	.	.	.	.	.
17	.	.	.	.	.	.	.	.	.	.	.	.
18	.	.	.	.	.	.	.	.	.	.	.	.
19	.	.	.	.	.	.	.	.	.	.	.	.
20	.	.	.	.	.	.	.	.	.	.	.	.
21	.	.	.	.	.	.	.	.	.	.	.	.
22	.	.	.	.	.	.	.	.	.	.	.	.
23	.	.	.	.	.	.	.	.	.	.	.	.
24	.	.	.	.	.	.	.	.	.	.	.	.
25	.	.	.	.	.	.	.	.	.	.	.	.
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29	.	.	.	.	.	.	.	.	.	.	.	.
30	.	.	.	.	.	.	.	.	.	.	.	.
31	.	.	.	.	.	.	.	.	.	.	.	.
32	.	.	.	.	.	.	.	.	.	.	.	.

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Detector Cross Switching

	Phase											
Det.	1	2	3	4	5	6	7	8	9	10	11	12
33	.	.	.	.	.	.	.	.	.	.	.	.
34	.	.	.	.	.	.	.	.	.	.	.	.
35	.	.	.	.	.	.	.	.	.	.	.	.
36	.	.	.	.	.	.	.	.	.	.	.	.
37	.	.	.	.	.	.	.	.	.	.	.	.
38	.	.	.	.	.	.	.	.	.	.	.	.
39	.	.	.	.	.	.	.	.	.	.	.	.
40	.	.	.	.	.	.	.	.	.	.	.	.
41	.	.	.	.	.	.	.	.	.	.	.	.
42	.	.	.	.	.	.	.	.	.	.	.	.
43	.	.	.	.	.	.	.	.	.	.	.	.
44	.	.	.	.	.	.	.	.	.	.	.	.
45	.	.	.	.	.	.	.	.	.	.	.	.
46	.	.	.	.	.	.	.	.	.	.	.	.
47	.	.	.	.	.	.	.	.	.	.	.	.
48	.	.	.	.	.	.	.	.	.	.	.	.
49	.	.	.	.	.	.	.	.	.	.	.	.
50	.	.	.	.	.	.	.	.	.	.	.	.
51	.	.	.	.	.	.	.	.	.	.	.	.
52	.	.	.	.	.	.	.	.	.	.	.	.
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56	.	.	.	.	.	.	.	.	.	.	.	.
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58	.	.	.	.	.	.	.	.	.	.	.	.
59	.	.	.	.	.	.	.	.	.	.	.	.
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62	.	.	.	.	.	.	.	.	.	.	.	.
63	.	.	.	.	.	.	.	.	.	.	.	.
64	.	.	.	.	.	.	.	.	.	.	.	.

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Ped/SD Local Assign,Log Interval

Phase Ped Detector

	1	2	3	4	5	6	7	8	9	10	11	12
Is Ped Detector No. . . .	1	2	3	4	5	6	7	8	9	10	11	12

*Local System Detector No.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Is Local Detector No. . .	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Detector Log Interval . . 0

*NOTE: System master designations cross referenced to local
system detector numbers are:

SDA1 = 1 & 9
SDA2 = 2 & 10
SDB1 = 3 & 11
SDB2 = 4 & 12
SDC1 = 5 & 13
SDC2 = 6 & 14
SDD1 = 7 & 15
SDD2 = 8 & 16

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Diagnostic Plans/Fail Action

Plan		Detector 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
*Fail Action		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Plan		Detector 17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
1	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
*Fail Action		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

*NOTE: 0 = No Action, 1 = Min Recall, 2 = Max Recall in Effect
3 = Detector Fail Max Tiime from By-Phase Timing Data

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Diagnostic Plans/Fail Action

Plan		Detector 33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
1	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
*Fail Action		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Plan		Detector 49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
1	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
*Fail Action		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

*NOTE: 0 = No Action, 1 = Min Recall, 2 = Max Recall in Effect
3 = Detector Fail Max Tiime from By-Phase Timing Data

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Ped Diagnostic Plans

Plan		1	2	3	4	5	6	7	8	9	10	11	12
1	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1
2	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1
3	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1
4	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1
5	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1
6	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1
7	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1
8	Diagnostic	0	0	0	0	0	0	0	0	0	0	0	0
	Scaling	1	1	1	1	1	1	1	1	1	1	1	1

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Detector Diagnostic Intervals

Diagnostic Number	*No-Activity Diagnostic Interval	*Max Presence Diagnostic Interval	Erratic Counts
1	0	0	0
2	0	0	0
3	0	0	0
4	0	0	0
5	0	0	0
6	0	0	0
7	0	0	0
8	0	0	0
9	0	0	0
10	0	0	0
11	0	0	0
12	0	0	0
13	0	0	0
14	0	0	0
15	0	0	0
16	0	0	0
17	0	0	0
18	0	0	0
19	0	0	0
20	0	0	0
21	0	0	0
22	0	0	0
23	0	0	0
24	0	0	0
25	0	0	0
26	0	0	0
27	0	0	0
28	0	0	0
29	0	0	0
30	0	0	0
31	0	0	0
32	0	0	0

*NOTE: Scaling is specified in each detector diagnostic plan.

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Speed Detectors

	Local Speed Detector							
One Detector Speed:	1	2	3	4	5	6	7	8
Local Detector Number. . . .	0	0	0	0	0	0	0	0
Vehicle Length	0	0	0	0	0	0	0	0
Loop Length.	0	0	0	0	0	0	0	0
Two Detector Speed:								
Local Detector Number. . . .	0	0	0	0	0	0	0	0
Speed Trap Length.	0	0	0	0	0	0	0	0

	Local Speed Detector							
One Detector Speed:	9	10	11	12	13	14	15	16
Local Detector Number. . . .	0	0	0	0	0	0	0	0
Vehicle Length	0	0	0	0	0	0	0	0
Loop Length.	0	0	0	0	0	0	0	0
Two Detector Speed:								
Local Detector Number. . . .	0	0	0	0	0	0	0	0
Speed Trap Length.	0	0	0	0	0	0	0	0

Units. . . . . Inches

NOTE: Speed Detector 1 = STA, Speed Detector 2 = STB

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Coordinator Manual Command and Options

Manual Enable . . . . . Pattern 0

Split Units . . . . . Percent OffsetUnits . . . . . Percent
Interconnect Format . STD Interconnect Source . TLM
Transition. . . . . SMOOTH Dwell Period. 0
Resync Count. 0

Actuated Coord Phase . . . . Actuated Walk Rest . . . .
Inhibit Max Timing . . . . . Max 2 Select . . . . . .
Floating Force Off . . . . . Multisync. . . . . .

Split Demand:	Call	Time	Cyc Count	Phase 1	2	3	4	5	6	7	8	9	10	11	12
Demand 1 . .		0	0	.	.	.	.	.	.	.	.	.	.	.	.
Demand 2 . .		0	0	.	.	.	.	.	.	.	.	.	.	.	.

	Phase 1	2	3	4	5	6	7	8	9	10	11	12
Auto Permissive Min Green .	0	0	0	0	0	0	0	0	0	0	0	0

	A	B	C	D	E	F
Free Alternate Sequence . .	.	.	.	.	.	.

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Coordination Patterns

Pattern 1
Cycle Length . . 120 COS 111
Offset 0
Vehicle Permissive . . [1] 0 [2] 0
Vehicle Perm 2 Displacement 0 Phase Reservice. . NO
Splits: Phase 1- 15 2- 40 3- 15 4- 30
Phase 5- 15 6- 40 7- 15 8- 30
Phase 9- 0 10- 0 11- 0 12- 0 Split Sum: 0
Split Extension/Ring [1] 0 [2] 0
Split Demand Pattern [1] 0 [2] 0
XRT Pattern. . . 0

Phase Number:	1	2	3	4	5	6	7	8	9	10	11	12
Coord Phases . . .	.	X	.	.	.	X	.	.	.	.	.	.
Veh Recall	.	.	.	.	.	.	.	.	.	.	.	.
Veh Max Recall . .	.	.	.	.	.	.	.	.	.	.	.	.
Ped Recall	.	.	.	.	.	.	.	.	.	.	.	.
Veh Omit	.	.	.	.	.	.	.	.	.	.	.	.

Alt Sequence . . A: . B: . C: . D: . E: . F: .

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Preemptors

Preemptor 1

Active	Det Lock.	Ped Dark . . . . .
Priority Preemption.	Yel-Red To Grn. . .	Ped Active . . . . .
Outputs Only During Hold . . .	Flash All Outputs .	Zero Ped Clr Time. .
Terminate Overlap ASAP	Terminate Phases. .	Ped Clr Thru Yel . .
Don't Override Flash	Duration Time. . .	0
Flash During Hold.	Delay Time	0
No CVM in Flash.	Inhibit Time . . .	0
Fast Flash Grn on Hold Phase. .	Min Ped Clear. . .	0
Enable Max Time.	Max Time	0
	Exit Max	0
	Min Hold Time. . .	0
	Hold Delay Time. .	0

	Green	Yellow	Red
Minimum	0	0.0	0.0
Track Clear	0	0.0	0.0
Hold.		0.0	0.0

Phase/Overlap	1	2	3	4	5	6	7	8	9	10	11	12/	A	B	C	D
Terminate Overlap																
Track Clearance Phase																
Hold Phases																
Exit Phases																
Exit Calls on Phase																

Out of Flash Color for Exit Phases . . . . Green

Preemptor 2

Active	Det Lock.	Ped Dark . . . . .
Priority Preemption.	Yel-Red To Grn. . .	Ped Active . . . . .
Outputs Only During Hold . . .	Flash All Outputs .	Zero Ped Clr Time. .
Terminate Overlap ASAP	Terminate Phases. .	Ped Clr Thru Yel . .
Don't Override Flash	Duration Time. . .	0
Flash During Hold.	Delay Time	0
No CVM in Flash.	Inhibit Time . . .	0
Fast Flash Grn on Hold Phase. .	Min Ped Clear. . .	0
Enable Max Time.	Max Time	0
	Exit Max	0
	Min Hold Time. . .	0
	Hold Delay Time. .	0

	Green	Yellow	Red
Minimum	0	0.0	0.0
Track Clear	0	0.0	0.0
Hold.		0.0	0.0

Phase/Overlap	1	2	3	4	5	6	7	8	9	10	11	12/	A	B	C	D
Terminate Overlap																
Track Clearance Phase																
Hold Phases																
Exit Phases																
Exit Calls on Phase																

Out of Flash Color for Exit Phases . . . . Green

Linked Preemptor 0

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Preemptors

Preemptor 3

Active	Det Lock.	Ped Dark . . . . .
Priority Preemption.	Yel-Red To Grn. . .	Ped Active . . . . .
Outputs Only During Hold . . .	Flash All Outputs .	Zero Ped Clr Time. .
Terminate Overlap ASAP	Terminate Phases. .	Ped Clr Thru Yel . .
Don't Override Flash	Duration Time. . . 0	
Flash During Hold.	Delay Time 0	
No CVM in Flash.	Inhibit Time . . . 0	
Fast Flash Grn on Hold Phase. .	Min Ped Clear. . . 0	
Enable Max Time.	Max Time 0	
	Exit Max 0	
	Min Hold Time. . . 0	
	Hold Delay Time. . 0	

	Green	Yellow	Red
Minimum	0	0.0	0.0
Track Clear	0	0.0	0.0
Hold.		0.0	0.0

Phase/Overlap	1	2	3	4	5	6	7	8	9	10	11	12/	A	B	C	D
Terminate Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Track Clearance Phase	.	.	.	.	.	.	.	.	.	.	.	.				
Hold Phases	.	.	.	.	.	.	.	.	.	.	.	.				
Exit Phases	.	.	.	.	.	.	.	.	.	.	.	.				
Exit Calls on Phase	.	.	.	.	.	.	.	.	.	.	.	.				

Out of Flash Color for Exit Phases . . . . Green

Linked Preemptor 0

Preemptor 4

Active	Det Lock.	Ped Dark . . . . .
Priority Preemption.	Yel-Red To Grn. . .	Ped Active . . . . .
Outputs Only During Hold . . .	Flash All Outputs .	Zero Ped Clr Time. .
Terminate Overlap ASAP	Terminate Phases. .	Ped Clr Thru Yel . .
Don't Override Flash	Duration Time. . . 0	
Flash During Hold.	Delay Time 0	
No CVM in Flash.	Inhibit Time . . . 0	
Fast Flash Grn on Hold Phase. .	Min Ped Clear. . . 0	
Enable Max Time.	Max Time 0	
	Exit Max 0	
	Min Hold Time. . . 0	
	Hold Delay Time. . 0	

	Green	Yellow	Red
Minimum	0	0.0	0.0
Track Clear	0	0.0	0.0
Hold.		0.0	0.0

Phase/Overlap	1	2	3	4	5	6	7	8	9	10	11	12/	A	B	C	D
Terminate Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Track Clearance Phase	.	.	.	.	.	.	.	.	.	.	.	.				
Hold Phases	.	.	.	.	.	.	.	.	.	.	.	.				
Exit Phases	.	.	.	.	.	.	.	.	.	.	.	.				
Exit Calls on Phase	.	.	.	.	.	.	.	.	.	.	.	.				

Out of Flash Color for Exit Phases . . . . Green

Linked Preemptor 0

Preemptors

Preemptor 5

Active	Det Lock.	Ped Dark	
Priority Preemption.	Yel-Red To Grn. . .	Ped Active	
Outputs Only During Hold . . .	Flash All Outputs .	Zero Ped Clr Time. .	
Terminate Overlap ASAP	Terminate Phases. .	Ped Clr Thru Yel . .	
Don't Override Flash	Duration Time. . .	0	
Flash During Hold.	Delay Time	0	
No CVM in Flash.	Inhibit Time . . .	0	
Fast Flash Grn on Hold Phase. .	Min Ped Clear. . .	0	
Enable Max Time.	Max Time	0	
	Exit Max	0	
	Min Hold Time. . .	0	
	Hold Delay Time. .	0	

	Green	Yellow	Red
Minimum	0	0.0	0.0
Track Clear	0	0.0	0.0
Hold.		0.0	0.0

Phase/Overlap	1	2	3	4	5	6	7	8	9	10	11	12/ A	B	C	D
Terminate Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Track Clearance Phase	.	.	.	.	.	.	.	.	.	.	.	.			
Hold Phases	.	.	.	.	.	.	.	.	.	.	.	.			
Exit Phases	.	.	.	.	.	.	.	.	.	.	.	.			
Exit Calls on Phase	.	.	.	.	.	.	.	.	.	.	.	.			

Out of Flash Color for Exit Phases . . . . Green

Linked Preemptor 0

Preemptor 6

Active	Det Lock.	Ped Dark	
Priority Preemption.	Yel-Red To Grn. . .	Ped Active	
Outputs Only During Hold . . .	Flash All Outputs .	Zero Ped Clr Time. .	
Terminate Overlap ASAP	Terminate Phases. .	Ped Clr Thru Yel . .	
Don't Override Flash	Duration Time. . .	0	
Flash During Hold.	Delay Time	0	
No CVM in Flash.	Inhibit Time . . .	0	
Fast Flash Grn on Hold Phase. .	Min Ped Clear. . .	0	
Enable Max Time.	Max Time	0	
	Exit Max	0	
	Min Hold Time. . .	0	
	Hold Delay Time. .	0	

	Green	Yellow	Red
Minimum	0	0.0	0.0
Track Clear	0	0.0	0.0
Hold.		0.0	0.0

Phase/Overlap	1	2	3	4	5	6	7	8	9	10	11	12/ A	B	C	D
Terminate Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Track Clearance Phase	.	.	.	.	.	.	.	.	.	.	.	.			
Hold Phases	.	.	.	.	.	.	.	.	.	.	.	.			
Exit Phases	.	.	.	.	.	.	.	.	.	.	.	.			
Exit Calls on Phase	.	.	.	.	.	.	.	.	.	.	.	.			

Out of Flash Color for Exit Phases . . . . Green

Linked Preemptor 0

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Bus Preemptors

	Bus Preemptor 1	2	3	4
Preemptor Active.	.	.	.	.
Detector Lock	.	.	.	.
Maximum Time.	0	0	0	0
Reservice Time.	0	0	0	0
Delay Time.	0	0	0	0
Inhibit Time.	0	0	0	0
Entrance Green.	0	0	0	0
Entrance Ped Clearance.	0	0	0	0
Entrance Yellow	0.0	0.0	0.0	0.0
Entrance Red.	0.0	0.0	0.0	0.0
Minimum Hold Time	0	0	0	0

	Hold Phases 1	2	3	4	5	6	7	8	9	10	11	12
Preemptor 1	.	.	.	.	.	.	.	.	.	.	.	.
Preemptor 2	.	.	.	.	.	.	.	.	.	.	.	.
Preemptor 3	.	.	.	.	.	.	.	.	.	.	.	.
Preemptor 4	.	.	.	.	.	.	.	.	.	.	.	.

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NIC/TOD Clock/Calendar

Manual NIC Program Step 0

Manual TOD Program Step 0

NIC Resync Time 0300

Sync Reference is . . . . . Last Event

Week 1 Begins on 1st Sunday . . . . . NO If NO, then week containing Jan. 1

Disable Daylight Savings Time . . . . . NO

Daylight Savings
Begins Last Sunday in March . . . . . NO If NO, then Second Sunday as per 2007 DST Law

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TOD Weekly/Yearly

Weekly Program Numbers

	1	2	3	4	5	6	7	8	9	10	
Sunday . . .	2	1	1	1	1	1	1	1	1	1	Program No.
Monday . . .	1	1	1	1	1	1	1	1	1	1	Program No.
Tuesday. . .	1	1	1	1	1	1	1	1	1	1	Program No.
Wednesday. .	1	1	1	1	1	1	1	1	1	1	Program No.
Thursday . .	1	1	1	1	1	1	1	1	1	1	Program No.
Friday . . .	1	1	1	1	1	1	1	1	1	1	Program No.
Saturday . .	2	1	1	1	1	1	1	1	1	1	Program No.

Week of Year

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Prog	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Prog	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
Prog	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

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Holiday Programs

Holiday	Type	Month	Day of Week/ Day of Month	Week of Year/ Year	Program
1	Fixed	0	0	0	0
2	Fixed	0	0	0	0
3	Fixed	0	0	0	0
4	Fixed	0	0	0	0
5	Fixed	0	0	0	0
6	Fixed	0	0	0	0
7	Fixed	0	0	0	0
8	Fixed	0	0	0	0
9	Fixed	0	0	0	0
10	Fixed	0	0	0	0
11	Fixed	0	0	0	0
12	Fixed	0	0	0	0
13	Fixed	0	0	0	0
14	Fixed	0	0	0	0
15	Fixed	0	0	0	0
16	Fixed	0	0	0	0
17	Fixed	0	0	0	0
18	Fixed	0	0	0	0
19	Fixed	0	0	0	0
20	Fixed	0	0	0	0
21	Fixed	0	0	0	0
22	Fixed	0	0	0	0
23	Fixed	0	0	0	0
24	Fixed	0	0	0	0
25	Fixed	0	0	0	0
26	Fixed	0	0	0	0
27	Fixed	0	0	0	0
28	Fixed	0	0	0	0
29	Fixed	0	0	0	0
30	Fixed	0	0	0	0
31	Fixed	0	0	0	0
32	Fixed	0	0	0	0
33	Fixed	0	0	0	0
34	Fixed	0	0	0	0
35	Fixed	0	0	0	0
36	Fixed	0	0	0	0

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NIC Program Steps

Step	Program	Step Begins	Pattern	Override

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TOD Program Steps

Traffic Signal Timing Sheet:

Hathaway Avenue/West A Street

	1	2	3	4	5	6	7	8
	6	6	6	6	6	6	6	6
	2	4	2	3	2	4	2	3
	25	40	25	30	25	40	25	30
	30	45	50	35	50	45	50	35
	3	4	3	4	3	4	3	4
e	1	1	1	1	1	1	1	1
		7		7		7		
e		16		20		16		7
	2	2	2	2	2	2	2	2
		2				2		
		15				15		
ct		10				10		
t								
e		10				10		
		1.5				1.5		

	1	2	3	4	5	6	7	8
	1	1		1	1	1		1
		1				1		
		1				1		
		1		1		1		1

	1	2	3	4	5	6	7	8

& Hathaway (ID 50) (Standard File)

##

Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq
1	0	0		1	13	0	0		1	25	0	0		1	37	0	0		1
2	0	0		1	14	0	0		1	26	0	0		1	38	0	0		1
3	0	0		1	15	0	0		1	27	0	0		1	39	0	0		1
4	0	0		1	16	0	0		1	28	0	0		1	40	0	0		1
5	0	0		1	17	0	0		1	29	0	0		1	41	0	0		1
6	0	0		1	18	0	0		1	30	0	0		1	42	0	0		1
7	0	0		1	19	0	0		1	31	0	0		1	43	0	0		1
8	0	0		1	20	0	0		1	32	0	0		1	44	0	0		1
9	0	0		1	21	0	0		1	33	0	0		1	45	0	0		1
10	0	0		1	22	0	0		1	34	0	0		1	46	0	0		1
11	0	0		1	23	0	0		1	35	0	0		1	47	0	0		1
12	0	0		1	24	0	0		1	36	0	0		1	48	0	0		1

Split		1	2	3	4	5	6	7	8	Split		1	2	3	4	5	6	7	8
1	Coord									17	Coord								
2	Coord									18	Coord								
3	Coord									19	Coord								
4	Coord									20	Coord								
5	Coord									21	Coord								
6	Coord									22	Coord								
7	Coord									23	Coord								
8	Coord									24	Coord								

Split		1	2	3	4	5	6	7	8	Split		1	2	3	4	5	6	7	8
9	Coord									25	Coord								
10	Coord									26	Coord								
11	Coord									27	Coord								
12	Coord									28	Coord								
13	Coord									29	Coord								
14	Coord									30	Coord								
15	Coord									31	Coord								
16	Coord									32	Coord								

STD8

Ring/Startup [1.1.4]

Phs	Ring	Start	Enab
1	1	RED	1
2	1	YELLOV	1
3	1	RED	0
4	1	RED	1
5	2	RED	1
6	2	YELLOV	1
7	2	RED	0
8	2	RED	1

Coord Modes [2.1]

Test OpMode	0
Correction	LONG
Maximum	MAX 1
Force-Off	FIXED
Closed Loop	OFF
Stop-in-Walk	OFF
Auto Reset	OFF
Ped Recycle	NO_RECYCLE
Before	TIMED
After	TIMED

Auto Flash [1.4.1]

Auto Flash	CHANNEL
Flash Yel	3.5
Flash Red	1.5

Unit Params [1.2.1]

Phase Mode	STD8
IO Mode	AUTO
Loc Flsh Start	OFF
Start Flash(s)	6
Start AllRed(s)	4
Yellow < 3"	OFF
Display Time	10
Red Revert	3
Feature Profile	0
Free Ring Seq	1
SDLC RetryTm	0
TS2 Det Faults	ON
Auto Ped Clear	OFF

09/22/

<- Mode NON is Bla

STD8

Times [1.1.1]	1	2	3	4	5	6	7	8
Min Green	6	6		6	6	6		6
Gap, Ext	2	4		3	2	4		3
Max 1	25	40		30	25	40		30
Max 2	30	45		35	50	45		35
Yel Clearance	3	4	3	4	3	4	3	4
Red Clearance	1	1	1	1	1	1	1	1
Walk		7		7		7		
Ped Clearance		16		20		16		7
Red Revert	2	2	2	2	2	2	2	2
Add Initial		2				2		
Max Initial		15				15		
Time B4 Reduct		10				10		
Cars B4 Reduct								
Time To Reduce		10				10		
Reduce By								
Min Gap		1.5				1.5		
DyMaxLim								
Max Step								

Options [1.1.2]	1	2	3	4	5	6	7	8
Enable	1	1		1	1	1		1
Min Recall		1				1		
Max Recall								
Ped Recall								
Soft Recall								
Lock Calls		1				1		
Auto Flash Entry								
Auto Flash Exit								
Dual Entry		1		1		1		1
Enable Simul Gap								
Gaurantee Passag								
Rest In Walk								
Conditon Service								
Non-Actuated 1								
Non-Actuated 2								
Add Init Calc								

Options+ [1.1.3]	1	2	3	4	5	6	7	8
Reservice								
PedClr Thru Yel								
Skip Red No Call								
Red Rest								
Max II								
Conflicting Phase								
Conflicting Phase								
Omit Yellow								
Ped Delay								
Grn/Ped Delay								

A St. @ Santa Clara & Hathaway (ID 50) (Standard File)

##																				
Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq
1	0	0		1	13	0	0		1	25	0	0		1	37	0	0		1
2	0	0		1	14	0	0		1	26	0	0		1	38	0	0		1
3	0	0		1	15	0	0		1	27	0	0		1	39	0	0		1
4	0	0		1	16	0	0		1	28	0	0		1	40	0	0		1
5	0	0		1	17	0	0		1	29	0	0		1	41	0	0		1
6	0	0		1	18	0	0		1	30	0	0		1	42	0	0		1
7	0	0		1	19	0	0		1	31	0	0		1	43	0	0		1
8	0	0		1	20	0	0		1	32	0	0		1	44	0	0		1
9	0	0		1	21	0	0		1	33	0	0		1	45	0	0		1
10	0	0		1	22	0	0		1	34	0	0		1	46	0	0		1
11	0	0		1	23	0	0		1	35	0	0		1	47	0	0		1
12	0	0		1	24	0	0		1	36	0	0		1	48	0	0		1

Split		1	2	3	4	5	6	7	8	Split		1	2	3	4	5	6	7	8
1	Coord									17	Coord								
2	Coord									18	Coord								
3	Coord									19	Coord								
4	Coord									20	Coord								
5	Coord									21	Coord								
6	Coord									22	Coord								
7	Coord									23	Coord								
8	Coord									24	Coord								

Split		1	2	3	4	5	6	7	8	Split		1	2	3	4	5	6	7	8
9	Coord									25	Coord								
10	Coord									26	Coord								
11	Coord									27	Coord								
12	Coord									28	Coord								
13	Coord									29	Coord								
14	Coord									30	Coord								
15	Coord									31	Coord								
16	Coord									32	Coord								

Ring/Startup [1.1.4]			
Phs	Ring	Start	Enable
1	1	RED	1
2	1	YELLOV	1
3	1	RED	0
4	1	RED	1
5	2	RED	1
6	2	YELLOV	1
7	2	RED	0
8	2	RED	1

Coord Modes [2.1]	
Test OpMode	0
Correction	LONG
Maximum	MAX 1
Force-Off	FIXED
Closed Loop	OFF
Stop-in-Walk	OFF
Auto Reset	OFF
Ped Recycle	NO_RECYCLE
Before	TIMED
After	TIMED
Auto Flash [1.4.1]	
Auto Flash	CHANNEL
Flash Yel	3.5
Flash Red	1.5
Unit Params [1.2.1]	
Phase Mode	STD8
IO Mode	AUTO
Loc Flsh Start	OFF
Start Flash(s)	6
Start AllRed(s)	4
Yellow < 3"	OFF
Display Time	10
Red Revert	3
Feature Profile	0
Free Ring Seq	1
SDLC RetryTm	0
TS2 Det Faults	ON
Auto Ped Clear	OFF
	09/22/14
<- Mode NON is Blank	

Times [1.1.1]	1	2	3	4	5	6	7	8
Min Green	6	6		6	6	6		6
Gap, Ext	2	4		3	2	4		3
Max 1	25	40		30	25	40		30
Max 2	30	45		35	50	45		35
Yel Clearance	3	4	3	4	3	4	3	4
Red Clearance	1	1	1	1	1	1	1	1
Walk		7		7		7		
Ped Clearance		16		20		16		7
Red Revert	2	2	2	2	2	2	2	2
Add Initial		2				2		
Max Initial		15				15		
Time B4 Reduct		10				10		
Cars B4 Reduct								
Time To Reduce		10				10		
Reduce By								
Min Gap		1.5				1.5		
DyMaxLim								
Max Step								
Options [1.1.2]	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Enable	1	1		1	1	1		1
Min Recall		1				1		
Max Recall								
Ped Recall								
Soft Recall								
Lock Calls		1				1		
Auto Flash Entry								
Auto Flash Exit								
Dual Entry		1		1		1		1
Enable Simul Gap								
Gaurantee Passag								
Rest In Walk								
Conditon Service								
Non-Actuated 1								
Non-Actuated 2								
Add Init Calc								
Options+ [1.1.3]	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Reservice								
PedClr Thru Yel								
Skip Red No Call								
Red Rest								
Max II								
Conflicting Phase								
Conflicting Phase								
Omit Yellow								
Ped Delay								
Grn/Ped Delay								

A St. @ Santa Clara & Hathaway (ID 50) (Standard File)

Standard Pattern Table (Splits <= 255")

Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq
1	0	0	0	1	13	0	0	0	1	25	0	0	0	1	37	0	0	0	1
2	0	0	0	1	14	0	0	0	1	26	0	0	0	1	38	0	0	0	1
3	0	0	0	1	15	0	0	0	1	27	0	0	0	1	39	0	0	0	1
4	0	0	0	1	16	0	0	0	1	28	0	0	0	1	40	0	0	0	1
5	0	0	0	1	17	0	0	0	1	29	0	0	0	1	41	0	0	0	1
6	0	0	0	1	18	0	0	0	1	30	0	0	0	1	42	0	0	0	1
7	0	0	0	1	19	0	0	0	1	31	0	0	0	1	43	0	0	0	1
8	0	0	0	1	20	0	0	0	1	32	0	0	0	1	44	0	0	0	1
9	0	0	0	1	21	0	0	0	1	33	0	0	0	1	45	0	0	0	1
10	0	0	0	1	22	0	0	0	1	34	0	0	0	1	46	0	0	0	1
11	0	0	0	1	23	0	0	0	1	35	0	0	0	1	47	0	0	0	1
12	0	0	0	1	24	0	0	0	1	36	0	0	0	1	48	0	0	0	1

Split		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Coord																
2	Coord																
3	Coord																
4	Coord																
5	Coord																
6	Coord																
7	Coord																
8	Coord																
Split		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
9	Coord																
10	Coord																
11	Coord																
12	Coord																
13	Coord																
14	Coord																
15	Coord																
16	Coord																

User Phase Mode

Phase > 8 or Rings > 2

Coord Modes [2.1]	
Test OpMode	0
Correction	LONG
Maximum	MAX 1
Force-Off	FIXED
Closed Loop	OFF
Stop-in-Walk	OFF
Auto Reset	OFF
Ped Recycle	NO_RECYCLE
Before	TIMED
After	TIMED
Auto Flash [1.4.1]	
Auto Flash	CHANNEL
Flash Yel	3.5
Flash Red	1.5
Unit Params [1.2.1]	
Phase Mode	STD8
IO Mode	AUTO
Loc Flsh Start	OFF
Start Flash(s)	6
Start AllRed(s)	4
Yellow < 3"	OFF
Display Time	10
Red Revert	3
Feature Profile	0
Free Ring Seq	1
SDLC RetryTm	0
TS2 Det Faults	ON
Auto Ped Clear	OFF
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<- Mode NON is Blank	

Times [1.1.1]	9	10	11	12	13	14	15	16
Min Green	5	5	5	5	5	5	5	5
Gap, Ext	1	1	1	1	1	1	1	1
Max 1	25	25	25	25	25	25	25	25
Max 2	50	50	50	50	50	50	50	50
Yel Clearance	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clearance	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Walk								
Ped Clearance								
Red Revert								
Add Initial								
Max Initial								
Time B4 Reduct								
Cars B4 Reduct								
Time To Reduce								
Reduce By								
Min Gap								
DyMaxLim								
Max Step								

Options [1.1.2]	9	10	11	12	13	14	15	16
Enable								
Min Recall								
Max Recall								
Ped Recall								
Soft Recall								
Lock Calls	1	1	1	1	1	1	1	1
Auto Flash Entry								
Auto Flash Exit								
Dual Entry								
Enable Simul Gap	1	1	1	1	1	1	1	1
Gaurantee Passag								
Rest In Walk								
Conditon Service								
Non-Actuated 1								
Non-Actuated 2								
Add Init Calc								

Options+ [1.1.3]	9	10	11	12	13	14	15	16
Reservice								
Walk Thru Yel								
Skip Red No Call								
Red Rest								
Max II								
Conflicting Phase								
Conflicting Phase								
Omit Yellow								
Ped Delay								
Grn/Ped Delay								

Standard Pattern Table (Splits <= 255")

Split		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
17	Coord																
18	Coord																
19	Coord																
20	Coord																
21	Coord																
22	Coord																
23	Coord																
24	Coord																
25	Coord																
26	Coord																
27	Coord																
28	Coord																
29	Coord																
30	Coord																
31	Coord																
32	Coord																

Ring/Startup [1.1.4]

Phs	Ring	Start
1	1	RED
2	1	YELLOW
3	1	RED
4	1	RED
5	2	RED
6	2	YELLOW
7	2	RED
8	2	RED
9		RED
10		RED
11		RED
12		RED
13		RED
14		RED
15		RED
16		RED

<-Mode NON
<- is Blank

Concurrency [1.1.4]

Phs	Concurrent Phases											Concurrent Phases								
1	5	6	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0
2	5	6	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0
3	7	8	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0
4	7	8	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0
5	1	2	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0
6	1	2	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0
7	3	4	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0
8	3	4	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0

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Overlap 1-8 Program Parms & Parm+ [1.5.2.1] [1.5.2.2]

1	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3.5
A	Conflict Olap									Red	1.5
	Conflict Ped									LG	
2	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3.5
B	Conflict Olap									Red	1.5
	Conflict Ped									LG	
3	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3.5
C	Conflict Olap									Red	1.5
	Conflict Ped									LG	
4	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3.5
D	Conflict Olap									Red	1.5
	Conflict Ped									LG	
5	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3.5
E	Conflict Olap									Red	1.5
	Conflict Ped									LG	
6	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3.5
F	Conflict Olap									Red	1.5
	Conflict Ped									LG	
7	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3.5
G	Conflict Olap									Red	1.5
	Conflict Ped									LG	
8	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3.5
H	Conflict Olap									Red	1.5
	Conflict Ped									LG	

Overlap 1-8 Program Parms & Parm+ [1.5.2.1] [1.5.2.2]

9	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3.5
I	Conflict Olap									Red	1.5
	Conflict Ped									LG	
10	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3.5
J	Conflict Olap									Red	1.5
	Conflict Ped									LG	
11	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3.5
K	Conflict Olap									Red	1.5
	Conflict Ped									LG	
12	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3.5
L	Conflict Olap									Red	1.5
	Conflict Ped									LG	
13	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3.5
M	Conflict Olap									Red	1.5
	Conflict Ped									LG	
14	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3.5
N	Conflict Olap									Red	1.5
	Conflict Ped									LG	
15	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3.5
O	Conflict Olap									Red	1.5
	Conflict Ped									LG	
16	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3.5
P	Conflict Olap									Red	1.5
	Conflict Ped									LG	

Coord Transition, CoorPhs - [2.5]; Alt Tables+ [2.6]

Pat#	Short	Long	Dwel	No Shortway Ø	EYld	Offset	Ret Hld	Min Perm Veh	Min Perm Ped
1		17				BegGRN			
2		17				BegGRN			
3		17				BegGRN			
4		17				BegGRN			
5		17				BegGRN			
6		17				BegGRN			
7		17				BegGRN			
8		17				BegGRN			
9		17				BegGRN			
10		17				BegGRN			
11	0	17				BegGRN	0		
12	0	17				BegGRN	0		
13	0	17				BegGRN	0		
14	0	17				BegGRN	0		
15	0	17				BegGRN	0		
16	0	17				BegGRN	0		
17	0	17				BegGRN	0		
18	0	17				BegGRN	0		
19	0	17				BegGRN	0		
20	0	17				BegGRN	0		
21		17				BegGRN			
22		17				BegGRN			
23		17				BegGRN			
24		17				BegGRN			
25		17				BegGRN			
26		17				BegGRN			
27		17				BegGRN			
28		17				BegGRN			
29		17				BegGRN			
30		17				BegGRN			
31	0	17				BegGRN	0		
32	0	17				BegGRN	0		
33	0	17				BegGRN	0		
34	0	17				BegGRN	0		
35	0	17				BegGRN	0		
36	0	17				BegGRN	0		
37	0	17				BegGRN	0		
38	0	17				BegGRN	0		
39	0	17				BegGRN	0		
40	0	17				BegGRN	0		
41		17				BegGRN			
42		17				BegGRN			
43		17				BegGRN			
44		17				BegGRN			
45		17				BegGRN			
46		17				BegGRN			
47		17				BegGRN			
48		17				BegGRN			

Channel Settings [1.8.1]

Channel ->>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Phase / Olap #	1	2	3	4	5	6	7	8	1	2	3	4	2	4	6	8	1	3	5	7				
Channel Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED	PED	PED	PED	PED	VEH	VEH	VEH	VEH
Channel Flash	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Alt Hz																								

Channel Params [1.8.3]

C1 IO Mode	AUTO	Single BIU Map	ON

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Veh Par 1-64 [5.1]

Det #	Call Ø	Swi Ø	Dlay	Ext	Que	No Act	Max Pres	Err Cnt	Fail Time
1	1								2
2	2								2
3	6								2
4	8								2
5	5								2
6	6								2
7	8								2
8	2								2
9	4								2
10	1								2
11									2
12									2
13									2
14									2
15									2
16									2
17									2
18									2
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									

Veh Par 1-64 [5.1]

Det #	Call Ø	Swi Ø	Dlay	Ext	Que	No Act	Max Pres	Err Cnt	Fail Time
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									
46									
47									
48									
49									
50									
51									
52									
53									
54									
55									
56									
57									
58									
59									
60									
61									
62									
63									
64									

Vehicle Options 1-64 [5.2]

Det #	Call	Ext	Que	Add Init	Red Lock	Yell Lock	occ	vol
1	1	1		1				
2	1	1		1				
3	1	1		1				
4	1	1		1				
5	1	1		1				
6	1	1		1				
7	1	1		1				
8	1	1		1				
9	1	1		1				
10	1	1		1				
11	1	1		1				
12	1	1		1				
13	1	1		1				
14	1	1		1				
15	1	1		1				
16	1	1		1				
17	1	1		1				
18	1	1		1				
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								

Vehicle Options 1-64 [5.2]

Det #	Call	Ext	Que	Add AddIn	Red Lock	Yell Lock	occ	vol
33								
34								
35								
36								
37								
38								
39								
40								
41								
42								
43								
44								
45								
46								
47								
48								
49								
50								
51								
52								
53								
54								
55								
56								
57								
58								
59								
60								
61								
62								
63								
64								

Parameters+ 1-64 [5.3]

Det #	oc G	oc Y	oc R	Dlay 1	Dlay 2	Type	Src
1						NORM	
2						NORM	
3						NORM	
4						NORM	
5						NORM	
6						NORM	
7						NORM	
8						NORM	
9						NORM	
10						NORM	
11						NORM	
12						NORM	
13						NORM	
14						NORM	
15						NORM	
16						NORM	
17						NORM	
18						NORM	
19						NORM	
20						NORM	
21						NORM	
22						NORM	
23						NORM	
24						NORM	
25						NORM	
26						NORM	
27						NORM	
28						NORM	
29						NORM	
30						NORM	
31						NORM	
32						NORM	

Parameters+ 1-64 [5.3]

Det #	occ Grn	occ Yell	occ Red	Dlay 1	Dlay 2	Type	Src	Det #	occ Grn	occ Yell	occ Red	Dlay 1	Dlay 2	Type	Src	Det #	occ Grn	occ Yell	occ Red	Dlay 1	Dlay 2	Type	Src
33						NORM		44						NORM		55						NORM	
34						NORM		45						NORM		56						NORM	
35						NORM		46						NORM		57						NORM	
36						NORM		47						NORM		58						NORM	
37						NORM		48						NORM		59						NORM	
38						NORM		49						NORM		60						NORM	
39						NORM		50						NORM		61						NORM	
40						NORM		51						NORM		62						NORM	
41						NORM		52						NORM		63						NORM	
42						NORM		53						NORM		64						NORM	
43						NORM		54						NORM									

Ped Det Parms [5.4]

Det #	Call Ø	No Act	Max Pres	Err Cnt
1	1	0	0	0
2	2	0	0	0
3	3	0	0	0
4	4	0	0	0
5	5	0	0	0
6	6	0	0	0
7	7	0	0	0
8	8	0	0	0

Unit Paramters [1.2.1]

TS2 Det Faults	ON

Vol/Occ Report Parm [1.5.8]

Vol/Occ Period Minutes	0
Vol/Occ Period Minutes	15

A St. @ Santa Clara & Hathaway (ID 50) (Standard File)

09/22/14

Preemption Times [3.1], Options+ [3.6]

Pre #	Enable	Type	Output	Delay	MinDura
1	OFF	EMERG	TS2		
2	OFF	EMERG	TS2		
3	ON	EMERG	TS2		10
4	ON	EMERG	TS2		10
5	ON	EMERG	TS2		10
6	ON	EMERG	TS2		10

Pre #	MaxPres	MinGrn	MinWlk	PedClr	Co+Pre
1					OFF
2					OFF
3					OFF
4					OFF
5					OFF
6					OFF

Pre #	Track Grn	Min Dwell	Ext Dwell	PedClr	Yel
1					
2					
3					
4					
5					
6					

Pre #	Red	Pattern	Skip
1			OFF
2			OFF
3			OFF
4			OFF
5			OFF
6			OFF

Low Priority Preempts

Pre #	Type	Min	Max		
7	OFF	0	0		
8	OFF	0	0		
9	OFF	0	0		
10	OFF	0	0		

Unit Parameters [1.2.1]

Stop Timer Over Preempt	#N/A
Preempt or Ext Output	EXT
Max Seek Track Time	0
Max Seek Dwell Time	0

Channel Parameters [1.8.3]

D Conn Mappings	40DETECT
Pre Invert Rail Input	

Track Clear Phases [3.2], Track Clear Overlaps+ [3.5]

Pre #	Phases				Overlaps											
1																
2																
3																
4																
5																
6																

Dwell Phases [3.2] and Overlaps+ [3.5]

Pre #															
1	Phases														
	Overlaps														
	Peds														
2	Phases														
	Overlaps														
	Peds														
3	Phases	2	6												
	Overlaps														
	Peds	2	6												
4	Phases	4													
	Overlaps														
	Peds	4													
5	Phases	1	6												
	Overlaps														
	Peds	1	6												
6	Phases	8													
	Overlaps														
	Peds	8													

Exit Phases [3.2]

Pre #	Exit Phase			
1				
2				
3				
4				
5				
6				

Preemption 1, Options+ [3.6]

Pre #	Lock	Override Auto Flsh	Override Higher	Flsh Dwel	Link
1	OFF	OFF	OFF	OFF	
2	OFF	OFF	OFF	OFF	
3	OFF	OFF	OFF	OFF	
4	OFF	OFF	OFF	OFF	
5	OFF	OFF	OFF	OFF	
6	OFF	OFF	OFF	OFF	

Com Parameters [6.1]

Station ID	~~50~~ 83
Group ID	NTCIP
Master ID	0
Backup Time	0

PortA/SysUp Modem[6.2]

Enable Modem	OFF
Modem Time	3
Dial Time	0
Message Time	3.0
Tel:	0-000-000-0000
Alt:	0-000-000-0000

Alt# 1 Times Table [1.6.1]

Column#..... ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 2 Times Table [1.6.1]

Column#..... ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 3 Times Table [1.6.1]

Column#..... ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 1 Options Table [1.6.1]

Column # ->	1	2	3	4	5	6	7	8
Assign Ø								
Lock Calls	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Soft Recall								
Dual Enrty								
Enabl SimGap	1	1	1	1	1	1	1	1
Gaur Passage								
Rest In Walk								
Cond Service								
Reservice								
Non-Act 1								
Red Rest	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Max2	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Ped Delay								
Conflicting Ø1								

A St. @ Santa Clara & Hathaway (ID 50) (Standard File)

Annual Schedule [4.3] Month of Year Day of Week Date A St. @ Santa Clara & Hathaway (ID 50) (Standard File)

	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Day Plan	Link To
1																																																				1	
2																																																				1	
3																																																				1	
4																																																				1	
5																																																				1	
6																																																				1	
7																																																				1	
8																																																				1	
9																																																				1	
10																																																				1	
11																																																				1	
12																																																				1	
13																																																				1	
14																																																				1	
15																																																				1	
16																																																				1	
17																																																				1	
18																																																				1	
19																																																				1	
20																																																				1	
21																																																				1	
22																																																				1	
23																																																				1	
24																																																				1	

Day Plan 1						
	Hour	Min	Act		Hour	Min	Act
1				9			
2				10			
3				11			
4				12			
5				13			
6				14			
7				15			
8				16			

Day Plan 2						
	Hour	Min	Act		Hour	Min	Act
1				9			
2				10			
3				11			
4				12			
5				13			
6				14			
7				15			
8				16			

Day Plan 3						
	Hour	Min	Act		Hour	Min	Act
1				9			
2				10			
3				11			
4				12			
5				13			
6				14			
7				15			
8				16			

Day Plan 4						
	Hour	Min	Act		Hour	Min	Act
1				9			
2				10			
3				11			
4				12			
5				13			
6				14			
7				15			
8				16			

Day Plan 5						
	Hour	Min	Act		Hour	Min	Act
1				9			
2				10			
3				11			
4				12			
5				13			
6				14			
7				15			
8				16			

Day Plan 6						
	Hour	Min	Act		Hour	Min	Act
1				9			
2				10			
3				11			
4				12			
5				13			
6				14			
7				15			
8				16			

Day Plan 7						
	Hour	Min	Act		Hour	Min	Act
1				9			
2				10			
3				11			
4				12			
5				13			
6				14			
7				15			
8				16			

Day Plan 8						
	Hour	Min	Act		Hour	Min	Act
1				9			
2				10			
3				11			
4				12			
5				13			
6				14			
7				15			
8				16			

Day Plan 9						
	Hour	Min	Act		Hour	Min	Act
1				9			
2				10			
3				11			
4				12			
5				13			
6				14			
7				15			
8				16			

Day Plan 10						
	Hour	Min	Act		Hour	Min	Act
1				9			
2				10			
3				11			
4				12			
5				13			
6				14			
7				15			
8				16			

Day Plan 11						
	Hour	Min	Act		Hour	Min	Act
1				9			
2				10			
3				11			
4				12			
5				13			
6				14			
7				15			
8				16			

Day Plan 12						
	Hour	Min	Act		Hour	Min	Act
1				9			
2				10			
3				11			
4				12			
5				13			
6				14			
7				15			
8				16			

Day Plan 13						
	Hour	Min	Act		Hour	Min	Act
1				9			
2				10			
3				11			
4				12			
5				13			
6				14			
7				15			
8				16			

Day Plan 14						
	Hour	Min	Act		Hour	Min	Act
1				9			
2				10			
3				11			
4				12			
5				13			
6				14			
7				15			
8				16			

Day Plan 15						
	Hour	Min	Act		Hour	Min	Act
1				9			
2				10			
3				11			
4				12			
5				13			
6				14			
7				15			
8				16			

Action Table [4.5]

Act#	Pat#	A1	A2	A3	S1	S2	S3	S4	S5	S6	S7	S8
1	0											
2	0											
3	0											
4	0											
5	0											
6	0											
7	0											
8	0											
9	0											
10	0											
11	0											
12	0											
13	0											
14	0											
15	0											
16	0											
17	0											
18	0											
19	0											
20	0											
21	0											
22	0											
23	0											
24	0											
25	0											
26	0											
27	0											
28	0											
29	0											
30	0											
31	0											
32	0											
33	0											
34	0											
35	0											
36	0											
37	0											
38	0											
39	0											
40	0											
48	0											
98	0											
99	0											
100	0											

Alternate Tables - Pat+ [2.6]

Pat#	ØOpt	ØTime	DetG	CIR	CIC	Max2
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						
48						

09/22/14

A St. @ Santa Clara & Hathaway (ID 50) (Standard I

A#	Alarm	Ev	Alr
1	Power Up Alarm.	##	##
2	Stop Timing	##	##
3	Cabinet Door Activation	##	##
4	Coordination Failure	##	##
5	External Alarm # 1	##	##
6	External Alarm # 2	##	##
7	External Alarm # 3	##	##
8	External Alarm # 4	##	##
9	Closed Loop Disabled	##	##
10	External Alarm # 5	##	##
11	External Alarm # 6	##	##
12	Manual Control Enable	##	##
13	Coord Free Input	##	##
14	Local Flash Input	##	##
15	MMU Flash	##	##
16	CMU Flash	##	##
17	Cycle Fault	##	##
18	Cycle Failure	##	##
19	Coordination Fault	##	##
20	Controller Fault	##	##
21	Detector SDLC Failure	##	##
22	MMU SDLC Failure	##	##
23	Critical SDLC Failure	##	##
24	Reserved	##	##
25	EEPROM CRC Fault	##	##
26	Detector Diagnostic Failur	##	##
27	BIU Detector Failure	##	##
28	Queue detector alarm	##	##
29	Ped Fault	##	##
41	TempAlert Probe Ch. A	##	##
42	TempAlert Probe Ch. B	##	##
43	Pattern Error	##	##
44	Keyboard Activity	##	##
45	Reserved	##	##
49	Preempt 1 Input	##	##
50	Preempt 2 Input	##	##
51	Preempt 3 Input	##	##
52	Preempt 4 Input	##	##
53	Preempt 5 Input	##	##
54	Preempt 6 Input	##	##
55	Preempt 7 Input	##	##
56	Preempt 8 Input	##	##
57	Preempt 9 Input	##	##
58	Preempt 10 Input	##	##
61	Out of Sync	##	##
81	FIO Status Alarm	##	##

Call Phases[1.1.5]

Ø	Phases Called By Ø
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Redirect Phases[1.1.5]

	From	To	From	To	From	To	From	To
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								

Inhibit Phases[1.1.5]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																

Alt Call & Redirect # 1 [1.1.6.3]

Col	Ø	Phases Called By Ø
1		
2		
3		
4		
5		
6		
7		
8		

	From	To	From	To	From	To	From	To
1								
2								
3								
4								
5								
6								
7								
8								

Alt Inhibit Phases # 1 [1.1.6.3]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1																
2																
3																
4																
5																
6																
7																
8																

Alt Call & Redirect # 2 [1.1.6.3]

Col	Ø	Phases Called By Ø
1		
2		
3		
4		
5		
6		
7		
8		

	From	To	From	To	From	To	From	To
1								
2								
3								
4								
5								
6								
7								
8								

Alt Inhibit Phases # 2 [1.1.6.3]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1																
2																
3																
4																
5																
6																
7																
8																

Coord, CIC Plans [2.3]

CIC	CoØ	Grow	1	2	3	4	5	6	7	8
1	OFF									
2	OFF									
3	OFF									
4	OFF									

Auto Flash Phase/Olap Settings [1.4.2]

Yel Ø	
Yel (olaps)	

Unit Parameters [1.2.1]

Allow Skip Yellow	OFF	Max Cycle Time	0
TOD Dim Enable	OFF	Cycle Fault Action	ALARM
Tone Disable	OFF		
Diamond Mode	4Ph		
Backup Time (s)	0		
Disable Init Ped	OFF		
Cycle Fault Action	ALARM		
Enable Run Timer	OFF		

A St. @ Santa Clara & Hathaway (ID 50) (Standard File)

09/22/14

Traffic Signal Timing Sheet:

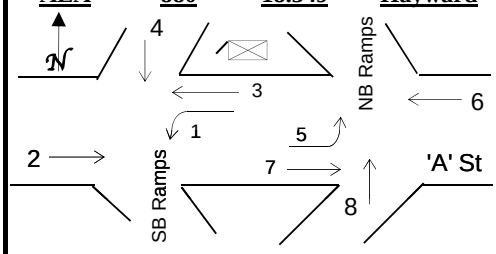
I-880 Ramps/West A Street

INTERVAL	TIMING FUNCTION	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
0	WALK	1	7	7	7	1	7	7	7
1	FLASHING DON'T WALK	1	12	12	15	1	13	8	15
2	MINIMUM INITIAL	4	10	10	4	4	10	10	4
3			16				16		
4	ADDED SEC./ACTUATION	0	0	0	0	0	0	0	0
5	PASSAGE	2	3.9	2.9	2	2	3.9	2.9	2
6	MAXIMUM GAP	2.6	4.5	3.5	3	2.6	4.5	3.5	3
7	MINIMUM GAP	1	2.9	1.9	1	1	2.9	1.9	1
8	MAXIMUM EXTENSION I	30	50	55	15	30	50	55	15
9	MAXIMUM EXTENSION II	110	110	110	110	110	110	110	110
A	MAXIMUM EXTENSION III								
B									
C	SEC. OF GAP REDUCED	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
D	PER SEC. OF INTERVAL	1.5	1.3	2.8	1.0	1.5	1.3	2.8	1.0
E	YELLOW	3	3.6	3.2	3	3	3.2	3.6	3
F	RED CLEARANCE	0.5	1	1	1	0.5	1	1	1

TURN ON	TIMING CHANGE BY:	REMARKS	FILE
1530 TJW/KO	PJ	ALL RED FLASH	

DATE	DATE	Print Date	By	FILENAME	E#	OPERATION
06/30/97	03/07/12	Mar 18,'13	PJ	ALA-880-18.349 A ST.xls		DIAMOND

COUNTY	ROUTE	PM	CITY	INTERSECTION	PROGRAM
ALA	**880**	**18.349**	**Hayward**	**Rte 880 Ramps and 'A' St**	**D5.7 1357**



NOTE: **To Initialize Controller:** 1) Enter E-0-0-D-0-0-E
2) Enter Flag and Timing 3)Turn off controller to lock in Permitted Phases 4) Turn on

******SET REAL TIME CLOCK TO TELEPHONE TIME******

4/6/10 - Change yellow time, 3/7/12 - Updated DST chip

INTERVAL	FLAG FUNCTION	DISPLAY	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
0	PERMITTED PHASES	OBSERVE ON CALL LITES ONLY	ON	ON	ON	ON	ON	ON	ON	ON
1	RED DETECTOR LOCK					ON				
2	YELLOW DET. LOCK									
3	VEHICLE RECALL		ON	ON	ON		ON	ON	ON	
4	PEDESTRIAN RECALL									
5	PEDESTRIAN PHASES			ON	ON	ON		ON	ON	ON
6										
7										
8	DOUBLE ENTRY			ON	ON	ON		ON	ON	ON
9	MAX EXT. II									
A	LAG PHASES		FOR OBSERVATION ONLY (SET LAG PHASES AT C-F-O TO C-F-9)							
B	RED REST									
C	NON ACTUATED									
D	MAXIMUM EXT. III									
E	STARTUP YELLOW									
F										

EPROM BOARD - 412C

03/02/04

CHIP	PROGRAM	NUMBER	CHECKSUM	CHIP	PROGRAM	NUMBER	CHECKSUM
U1	D5.7	E# 165	E025	U2			

LOCATION (1=ON)	1	2	3	4	5	6	7	8
SWITCH (0=OFF)	0	0	0	0	0	0	0	0

FEATURE (1=ON)	1	2	3	4	5	6	7	8
SWITCH (0=OFF)	0	0	0	0	0	0	0	0

CODE	FUNCTION	ENTER	DISPLAY LAMPS	DISPLAY TIMING
F-0-E	MAXIMUM VARIABLE INITIAL	20 E		F 020
F-0-F	RED REVERT	20 E		F 02.0
*F-9-9	YEAR	* E		
*F-9-A	MONTH	* E		
*F-9-B	DAY	* E		
*F-9-C	DAY OF WEEK (SUN=2, MON=4, TUE=8, WED=16,	* E		
	THU=32, FRI=64, SAT=128)			
*F-9-D	HOUR	* E		
*F-9-E	MINUTE	* E		
*F-9-F	SECOND	* E		
*Must Enter according to Current Date & Time				
C-F-0	LAG FAZES "FREE"	234678	234678	
C-F-1	LAG FAZES "PATTERN 1"	234678	234678	
C-F-2	LAG FAZES "PATTERN 2"	234678	234678	
C-F-3	LAG FAZES "PATTERN 3"	234678	234678	
C-F-4	LAG FAZES "PATTERN 4"	234678	234678	
C-F-5	LAG FAZES "PATTERN 5"	234678	234678	
C-F-6	LAG FAZES "PATTERN 6"	234678	234678	
C-F-7	LAG FAZES "PATTERN 7"	234678	234678	
C-F-8	LAG FAZES "PATTERN 8"	234678	234678	
C-F-9	LAG FAZES "PATTERN 9"	234678	234678	
C-F-A	COORD MAX RECALL	2 6	2 6	
C-F-B	COORD MIN RECALL			
C-F-C	COORD FAZES	1357	1357	

CODE	FUNCTION	ENTER	DISPLAY LAMPS	DISPLAY TIMING
D-4-2	STRETCH 6J2U	5 E		D005
D-4-3	STRETCH 6J3U	5 E		D005
F-E-3	EVA HOLD TIME (2,3,5 &7)	7 E		F007
F-E-5	EVB HOLD TIME (4,5 &7)	7 E		F007
F-E-7	EVC HOLD TIME (6,7,1&3)	7 E		F007
F-E-9	EVD HOLD TIME (8,1 &3)	7 E		F007
C-1-0	CYCLE LENGTH "PATTERN 1"	60		C060
C-2-0	CYCLE LENGTH "PATTERN 2"	60		C060
C-3-0	CYCLE LENGTH "PATTERN 3"	70		C070
C-4-0	CYCLE LENGTH "PATTERN 4"	70		C070
C-5-0	CYCLE LENGTH "PATTERN 5"	80		C080
C-6-0	CYCLE LENGTH "PATTERN 6"	90		C090
C-7-0	CYCLE LENGTH "PATTERN7"	100		C100
C-8-0	CYCLE LENGTH "PATTERN 8"	110		C110
C-9-0	CYCLE LENGTH "PATTERN 9"			

ALA	880	18.349	Hayward	Rte 880 Ramps and 'A' St
County	Route	PM	City	Location

PLAN 1			
CODE	FUNCTION	ENTER	DISPLAY
C-1-0	CYC. LENG.	60 E	C 060
C-1-1	ϕ 1 SPLIT	E	C
C-1-2	ϕ 2 SPLIT	17 E	C 017
C-1-3	ϕ 3 SPLIT	E	C
C-1-4	ϕ 4 SPLIT	12 E	C 012
C-1-5	ϕ 5 SPLIT	E	C
C-1-6	ϕ 6 SPLIT	19 E	C 019
C-1-7	ϕ 7 SPLIT	E	C
C-1-8	ϕ 8 SPLIT	12 E	C 012
C-1-A	OFFSET A	30 E	C 030

PLAN 2			
CODE	FUNCTION	ENTER	DISPLAY
C-2-0	CYC. LENG.	60 E	C 060
C-2-1	ϕ 1 SPLIT	E	C
C-2-2	ϕ 2 SPLIT	17 E	C 017
C-2-3	ϕ 3 SPLIT	E	C
C-2-4	ϕ 4 SPLIT	12 E	C 012
C-2-5	ϕ 5 SPLIT	E	C
C-2-6	ϕ 6 SPLIT	16 E	C 016
C-2-7	ϕ 7 SPLIT	E	C
C-2-8	ϕ 8 SPLIT	15 E	C 015
C-2-A	OFFSET A	30 E	C 030

PLAN 3			
CODE	FUNCTION	ENTER	DISPLAY
C-3-0	CYC. LENG.	70 E	C 070
C-3-1	ϕ 1 SPLIT	E	C
C-3-2	ϕ 2 SPLIT	25 E	C 025
C-3-3	ϕ 3 SPLIT	E	C
C-3-4	ϕ 4 SPLIT	15 E	C 015
C-3-5	ϕ 5 SPLIT	E	C
C-3-6	ϕ 6 SPLIT	25 E	C 025
C-3-7	ϕ 7 SPLIT	E	C
C-3-8	ϕ 8 SPLIT	15 E	C 015
C-3-A	OFFSET A	35 E	C 035

PLAN 4			
CODE	FUNCTION	ENTER	DISPLAY
C-4-0	CYC. LENG.	70 E	C 070
C-4-1	ϕ 1 SPLIT	E	C
C-4-2	ϕ 2 SPLIT	25 E	C 025
C-4-3	ϕ 3 SPLIT	E	C
C-4-4	ϕ 4 SPLIT	12 E	C 012
C-4-5	ϕ 5 SPLIT	E	C
C-4-6	ϕ 6 SPLIT	25 E	C 025
C-4-7	ϕ 7 SPLIT	E	C
C-4-8	ϕ 8 SPLIT	15 E	C 015
C-4-A	OFFSET A	35 E	C 035

PLAN 5			
CODE	FUNCTION	ENTER	DISPLAY
C-5-0	CYC. LENG.	80 E	C 080
C-5-1	ϕ 1 SPLIT	E	C
C-5-2	ϕ 2 SPLIT	29 E	C 029
C-5-3	ϕ 3 SPLIT	E	C
C-5-4	ϕ 4 SPLIT	23 E	C 023
C-5-5	ϕ 5 SPLIT	E	C
C-5-6	ϕ 6 SPLIT	28 E	C 028
C-5-7	ϕ 7 SPLIT	E	C
C-5-8	ϕ 8 SPLIT	15 E	C 015
C-5-A	OFFSET A	44 E	C 044

PLAN 6			
CODE	FUNCTION	ENTER	DISPLAY
C-6-0	CYC. LENG.	90 E	C 090
C-6-1	ϕ 1 SPLIT	E	C
C-6-2	ϕ 2 SPLIT	40 E	C 040
C-6-3	ϕ 3 SPLIT	E	C
C-6-4	ϕ 4 SPLIT	18 E	C 018
C-6-5	ϕ 5 SPLIT	E	C
C-6-6	ϕ 6 SPLIT	40 E	C 040
C-6-7	ϕ 7 SPLIT	E	C
C-6-8	ϕ 8 SPLIT	18 E	C 018
C-6-A	OFFSET A	45 E	C 045

PLAN 7			
CODE	FUNCTION	ENTER	DISPLAY
C-7-0	CYC. LENG.	100 E	C 100
C-7-1	ϕ 1 SPLIT	E	C
C-7-2	ϕ 2 SPLIT	48 E	C 048
C-7-3	ϕ 3 SPLIT	E	C
C-7-4	ϕ 4 SPLIT	17 E	C 017
C-7-5	ϕ 5 SPLIT	E	C
C-7-6	ϕ 6 SPLIT	48 E	C 048
C-7-7	ϕ 7 SPLIT	E	C
C-7-8	ϕ 8 SPLIT	18 E	C 018
C-7-A	OFFSET A	50 E	C 050

PLAN 8			
CODE	FUNCTION	ENTER	DISPLAY
C-8-0	CYC. LENG.	110 E	C 110
C-8-1	ϕ 1 SPLIT	E	C
C-8-2	ϕ 2 SPLIT	53 E	C 053
C-8-3	ϕ 3 SPLIT	E	C
C-8-4	ϕ 4 SPLIT	17 E	C 017
C-8-5	ϕ 5 SPLIT	E	C
C-8-6	ϕ 6 SPLIT	53 E	C 053
C-8-7	ϕ 7 SPLIT	E	C
C-8-8	ϕ 8 SPLIT	20 E	C 020
C-8-A	OFFSET A	55 E	C 055

PLAN 9			
CODE	FUNCTION	ENTER	DISPLAY
C-9-0	CYC. LENG.	E	C
C-9-1	ϕ 1 SPLIT	E	C
C-9-2	ϕ 2 SPLIT	E	C
C-9-3	ϕ 3 SPLIT	E	C
C-9-4	ϕ 4 SPLIT	E	C
C-9-5	ϕ 5 SPLIT	E	C
C-9-6	ϕ 6 SPLIT	E	C
C-9-7	ϕ 7 SPLIT	E	C
C-9-8	ϕ 8 SPLIT	E	C
C-9-A	OFFSET A	E	C 000

03/18/13

ALA	880	18.349	Hayward	Rte 880 Ramps and 'A' St
County	Route	PM	City	Location

CONTROL CODE "9"												
TIME OF DAY SELECTION FOR COORDINATED CONTROL PLANS												
KEY STROKES 9 + EVENT # + HOUR + MIN + Control Plan + "E" + DOW LTS												
DATE	BY	EVENT #	TIME	CONTROL PLAN	DEPRESS "E"	DAY OF THE WEEK SET DISPLAY LIGHTS 1-7						
						SUN	MON	TUE	WED	THUR	FRI	SAT
						2	4	8	16	32	64	128
		0	**0700**	**3**	E	X	X	X	X	X	X	X
		1	**1900**	**1**	E	X						X
		2	**2000**	**2**	E	X	X	X	X	X	X	X
		3			E							
		4			E							
		5			E							
		6			E							
		7			E							
		8			E							
		9			E							
		A			E							
		B			E							
		C			E							
		D			E							
		E			E							
		F			E							

3/18/2013

ALA	880	18.349	Hayward	Rte 880 Ramps and 'A' St
County	Route	PM	City	Location

INPUT FILE - 332 CABINET

3/18/2013

1	2	3	4	5	6	7	8	9	10	11	12	13	14
1I1U EX,CT 1I10U TB2 1,2 F-C1/56 D E	**S1**	**2I3U** EX,CT 2I13U TB2 9,10 F-C1/63 D E	**2I4U** CL 2I15U TB4 1,2 F-C1/47 D E	**3I5U** EX,CT 3I16U TB4 5,6 F-C1/58 D E	**S3**	**4I7U** EX,CT 4I19U TB6 1,2 F-C1/65 D E	**4I8U** CL 4I1BU TB6 5,6 F-C1/49 D E	**S6** TB6 9,10 F-C1/60 D E	F D E	**MANUAL** TB8 1,3 F-C1/80 D E	**2-PPB** 2I1E TB8 4,6 F-C1-67 D E	**6-PPB** 6I2E TB8 7,9 F-C1/68 D E	**FLASH SENSE** TB8 10,12 F-C1/81 D E
1I1L EX,CT 1I10L TB2 3,4 W-C1/56 J K	**2I2L** EX,CT 2I12L TB2 7,8 W-C1/43 J K	**2I3L** EX 2I14L TB2 11,12 W-C1/76 J K	**2I4L** CL 2I15L TB4 3,4 W-C1/47 J K	**3I5L** EX,CT 3I16L TB4 7,8 W-C1/58 J K	**4I6L** EX,CT 4I18L TB4 11,12 W-C1/45 J K	**4I7L** EX 4I1AL TB6 3,4 W-C1/78 J K	**4I8L** CL 4I1BL TB6 7,8 W-C1/49 J K	**Q8** TB6 11,12 W-C1/62 J K	W J K	**SPARE 1** TB8 2,3 W-C1/53 J K	**4-PPB** 4I1F TB8 5,6 W-C1/69 J K	**8-PPB** 8I2F TB8 8,9 W-C1/70 J K	**STOP TIME** TB8 11,12 W-C1/82 J K
5J1U EX,CT 5J20U TB3 1,2 F-C1/55 D E	**S2**	**6J3U** EX,CT 6J23U TB3 9,10 F-C1/64 D E	**6J4U** CL 6J25U TB5 1,2 F-C1/48 D E	**7J5U** EX,CT 7J26U TB5 5,6 F-C1/57 D E	**S4**	**8J7U** EX,CT 8J29U TB7 1,2 F-C1/66 D E	**8J8U** CL 8J2BU TB7 5,6 F-C1/50 D E	**S5** TB7 9,10 F-C1/59 D E	F D E	**SPARE 2** TB9 1,3 F-C1/54 D E	**EVA PREMT Ø2 & Ø5** TB9 4,2,6 D-Yellow E-Orange K-Blu+Shl	**EVB PREMT Ø4 & Ø7** TB9 7,3,9 D-Yellow E-Orange K-Blu+Shl	**3-PPB** TB9 10,12 F-C1/51 D E
5J1L EX,CT 5J20L TB3 3,4 W-C1/55 J K	**6J2L** EX,CT 6J22L TB3 7,8 W-C1/44 J K	**6J3L** EX 6J24L TB3 11,12 W-C1/77 J K	**6J4L** CL 6J25L TB5 3,4 W-C1/48 J K	**7J5L** EX,CT 7J26L TB5 7,8 W-C1/57 J K	**8J6L** EX,CT 8J28L TB5 11,12 W-C1/46 J K	**8J7L** EX 8J2AL TB7 3,4 W-C1/79 J K	**8J8L** CL 8J2BL TB7 7,8 W-C1/50 J K	**Q7** TB7 11,12 W-C1/61 J K	W J K	**SPARE 3** TB9 2,3 W-C1/75 J K	**EVC PREMT Ø6 & Ø1** TB9 5,2,6 J-Yellow E-Orange K-Blu+Shl	**EVD PREMT Ø8 & Ø3** TB9 8,3,9 J-Yellow E-Orange K-Blu+Shl	**7-PPB** TB9 11,12 W-C1/52 J K

OUTPUT FILE

Ø3P W

Ø3P D'W

Ø1	Ø2	Ø2P	Ø3	Ø4	Ø4P
R-125 C1/16	R-128 C1/12	R-113 C1/10	R-116 C1/7	R-101 C1/4	R-104 C1/2
Y-126 C1/17	Y-129 C1/13	Y-114 C1/35	Y-117 C1/8	Y-102 C1/5	Y-105 C1/37
G-127 C1/18	G-130 C1/15	G-115 C1/11	G-118 C1/9	G-103 C1/6	G-106 C1/3
Ø5	**Ø6**	**Ø6P**	**Ø7**	**Ø8**	**Ø8P**
R-131 C1/32	R-134 C1/29	R-119 C1/27	R-122 C1/24	R-107 C1/21	R-110 C1/19
Y-132 C1/33	Y-135 C1/30	Y-120 C1/36	Y-123 C1/25	Y-108 C1/22	Y-111 C1/38
G-133 C1/34	G-136 C1/31	G-121 C1/28	G-124 C1/26	G-109 C1/23	G-112 C1/20

Ø7P W

Ø7P D'W

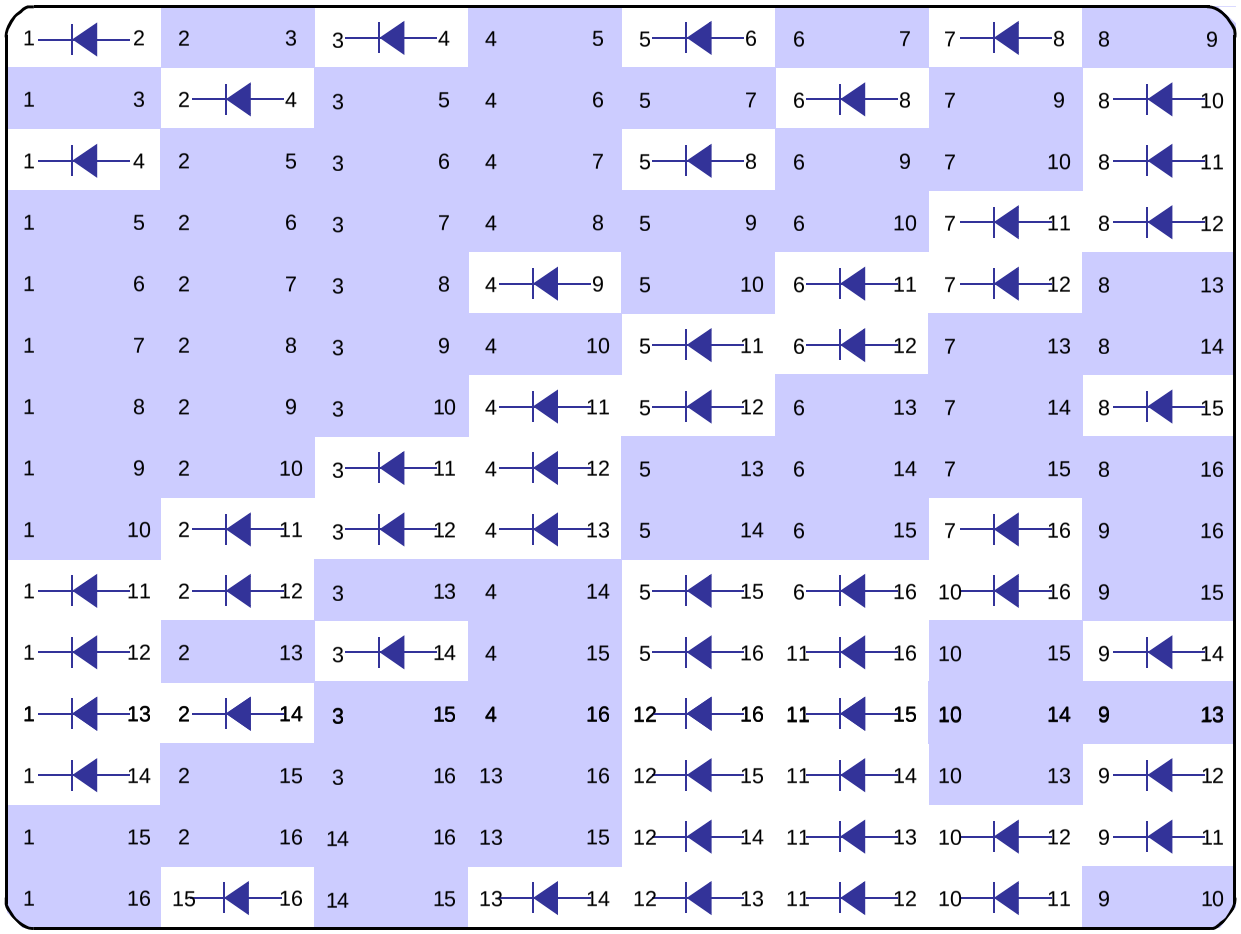
AUXILIARY

A1	A2	A3	A4	A5	A6
R-A121 FREE	R-A124 OS-3	R-A111 OS-1	R-A114	R-A101	R-A104
Y-A122 FLSH	Y-A125 D-2	Y-A112	Y-A115	Y-A102	Y-A105
G-A123	G-A126 D-3	G-A113 OS-2	G-A116	G-A103	G-A106

ALA	880	18.349	Hayward	Rte 880 Ramps and 'A' St
County	Route	PM	City	Location

DIODE CARD

03/18/13



	CHANNEL	PIN	LOAD SWITCH ASSIGNMENT		PIN
	1	9	Ø1 Y	Ø1 G	J
	2	1	Ø2 G	Ø2 Y	A
	3	12	Ø3 Y	Ø3 G	M
	4	4	Ø4 G	Ø4 Y	D
	5	7	Ø5 G	Ø5 Y	H
	6	3	Ø6 Y	Ø6 G	B
	7	10	Ø7 G	Ø7 Y	L
	8	6	Ø8 Y	Ø8 G	E
3P-W	9G	13	Ø2P Y		
3P-D'W	9Y	16	Ø4P Y		
7P-W	10G			Ø6P Y	R
7P-D'W	10Y			Ø8P Y	U
	11G			N/U	S
	11Y	15	N/U		
	12G			N/U	V
	12Y	18	N/U		
	13G	2	Ø2P G		
	13Y	8	N/U		
	14G	5	Ø4P G		
	14Y	11	N/U		
	15G			Ø6P G	C
	15Y			N/U	K
	16G			Ø8P G	F
	16Y			N/U	N

ALA	880	18.349	Hayward	Rte 880 Ramps and 'A' St
County	Route	PM	City	Location

FIELD INPUT/OUTPUT TERMINALS

FIELD INPUT TERMINALS

03/18/13

TB-2	loops
1 & 2	1I1U
3 & 4	1I1L
5 & 6	S1
7 & 8	2I2L
9 & 10	2I3U
11 & 12	2I3L

TB-3	loops
1 & 2	5J1U
3 & 4	5J1L
5 & 6	S2
7 & 8	6J2L
9 & 10	6J3U
11 & 12	6J3L

TB-8	peds
1	MANUAL
2	SP1
3	COM
4	2-PPB
5	4-PPB
6	2-PPB & 4-PPB COM
7	6-PPB
8	8-PPB
9	6-PPB & 8-PPB COM

TB-4	loops
1 & 2	2I4U
3 & 4	2I4L
5 & 6	3I5U
7 & 8	3I5L
9 & 10	S3
11 & 12	4I6L

TB-5	loops
1 & 2	6J4U
3 & 4	6J4L
5 & 6	7J5U
7 & 8	7J5L
9 & 10	S4
11 & 12	8J6L

TB-6	loops
1 & 2	4I7U
3 & 4	4I7L
5 & 6	4I8U
7 & 8	4I8L
9 & 10	S6
11 & 12	Q8

TB-7	loops
1 & 2	8J7U
3 & 4	8J7L
5 & 6	8J8U
7 & 8	8J8L
9 & 10	S5
11 & 12	Q7

	TB-9	emergency pre-emp.
	1-SP2	
** SP3	2-EV A & C PWR.	→ ORN Wires to EV A & C
** COM	3-EV B & D Pwr.	→ ORN Wires to EV B & D
	4-EVA Actuation	→ YEL Wire to EV A
	5-EVC Actuation	→ YEL Wire to EV C
	6-EV A & C COM	→ Blu+shields to EV A & C
	7-EVB Actuation	→ YEL Wire to EV B
	8-EVD Actuation	→ YEL Wire to EV D
	9-EV B & D COM	→ Blu+shields to EV B & D
	3-PPB	
	7-PPB	
	3-PPB & 7-PPB	COM

**J11-J to J12-E / J11-K to J13-E for opto probe pwr.

FIELD OUTPUT TERMINALS

101	Ø4	- RED	113	Ø2P	- DON'T WALK	125	Ø1	- RED
102	Ø4	- YELLOW	114	Ø3P	- WALK	126	Ø1	- YELLOW
103	Ø4	- GREEN	115	Ø2P	- WALK	127	Ø1	- GREEN
104	Ø4P	- DON'T WALK	116	Ø3	- RED	128	Ø2	- RED
105	Ø3P	- DON'T WALK	117	Ø3	- YELLOW	129	Ø2	- YELLOW
106	Ø4P	- WALK	118	Ø3	- GREEN	130	Ø2	- GREEN
107	Ø8	- RED	119	Ø6P	- DON'T WALK	131	Ø5	- RED
108	Ø8	- YELLOW	120	Ø7P	- WALK	132	Ø5	- YELLOW
109	Ø8	- GREEN	121	Ø6P	- WALK	133	Ø5	- GREEN
110	Ø8P	- DON'T WALK	122	Ø7	- RED	134	Ø6	- RED
111	Ø7P	- DON'T WALK	123	Ø7	- YELLOW	135	Ø6	- YELLOW
112	Ø8P	- WALK	124	Ø7	- GREEN	136	Ø6	- GREEN

TB8

AUX. FIELD OUTPUT TERMINALS

A101	A5	- RED	A111	A3	- RED (OS-1)	A121	A1	- RED (FREE)
A102	A5	- YELLOW	A112	A3	- YELLOW	A122	A1	- YELLOW (FLASH)
A103	A5	- GREEN	A113	A3	- GREEN (OS-2)	A123	A1	- GREEN
A104	A6	- RED	A114	A4	- RED	A124	A2	- RED (OS-3)
A105	A6	- YELLOW	A115	A4	- YELLOW	A125	A2	- YELLOW (D-2)
A106	A6	- GREEN	A116	A4	- GREEN	A126	A2	- GREEN (D-3)

TB8

ALA	880	18.349	Hayward	Rte 880 Ramps and 'A' St
County	Route	PM	City	Location

Appendix B Traffic Counts

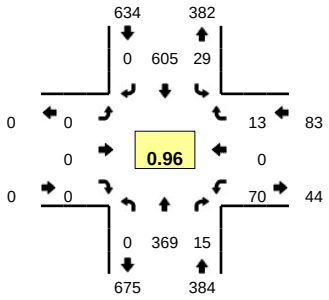
Type of peak hour being reported: Intersection Peak

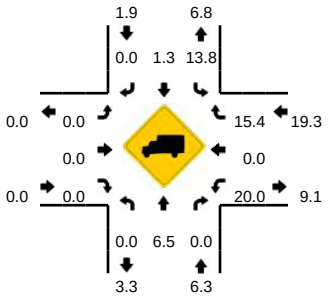
Method for determining peak hour: Total Entering Volume

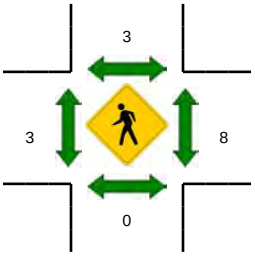
LOCATION: Hathaway Ave -- Costco access (signal)
CITY/STATE: Hayward, CA

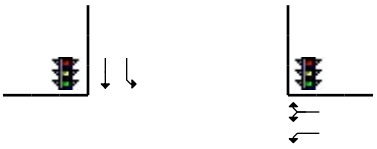
QC JOB #: 14568405
DATE: Wed, Nov 29 2017

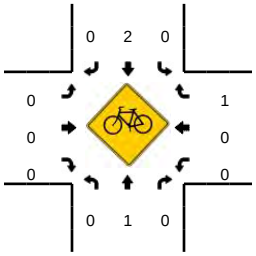
Peak-Hour: 7:35 AM -- 8:35 AM
Peak 15-Min: 7:35 AM -- 7:50 AM

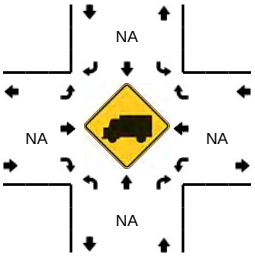


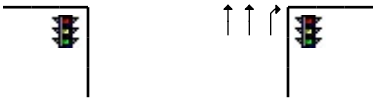


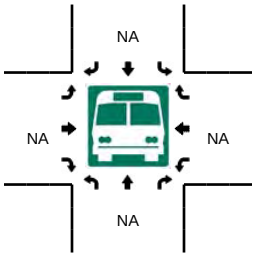












5-Min Count Period Beginning At	Hathaway Ave (Northbound)				Hathaway Ave (Southbound)				Costco access (signal) (Eastbound)				Costco access (signal) (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	16	0	0	1	50	0	0	0	0	0	0	4	0	0	0	71	
7:05 AM	0	12	0	0	1	45	0	0	0	0	0	0	7	0	2	0	67	
7:10 AM	0	15	0	0	1	40	0	0	0	0	0	0	5	0	0	0	61	
7:15 AM	0	8	1	0	1	72	0	0	0	0	0	0	0	0	1	0	83	
7:20 AM	0	24	1	0	1	51	0	0	0	0	0	0	7	0	2	0	86	
7:25 AM	0	26	1	0	0	46	0	0	0	0	0	0	5	0	0	0	78	
7:30 AM	0	21	0	0	5	48	0	0	0	0	0	0	5	0	1	0	80	
7:35 AM	0	39	0	0	2	57	0	0	0	0	0	0	5	0	1	0	104	
7:40 AM	0	25	3	0	2	48	0	0	0	0	0	0	9	0	1	0	88	
7:45 AM	0	30	2	0	3	57	0	0	0	0	0	0	2	0	1	0	95	
7:50 AM	0	22	2	0	2	62	0	0	0	0	0	0	0	0	0	0	88	
7:55 AM	0	26	0	0	3	40	0	0	0	0	0	0	9	0	0	0	78	979
8:00 AM	0	34	0	0	1	57	0	0	0	0	0	0	7	0	1	0	100	1008
8:05 AM	0	23	2	0	3	54	0	0	0	0	0	0	9	0	3	0	94	1035
8:10 AM	0	35	3	0	1	47	0	0	0	0	0	0	4	0	0	0	90	1064
8:15 AM	0	37	0	0	3	48	0	0	0	0	0	0	6	0	1	0	95	1076
8:20 AM	0	29	2	0	3	47	0	0	0	0	0	0	5	0	0	0	86	1076
8:25 AM	0	35	1	0	2	45	0	0	0	0	0	0	5	0	3	0	91	1089
8:30 AM	0	34	0	0	4	43	0	0	0	0	0	0	9	0	2	0	92	1101
8:35 AM	0	21	2	0	1	40	0	0	0	0	0	0	2	0	1	0	67	1064
8:40 AM	0	22	1	0	2	34	0	0	0	0	0	0	8	0	3	0	70	1046
8:45 AM	0	20	2	0	2	26	0	0	0	0	0	0	8	0	4	0	62	1013
8:50 AM	0	23	2	0	0	39	0	0	0	0	0	0	8	0	2	0	74	999
8:55 AM	0	23	2	0	2	32	0	0	0	0	0	0	5	0	1	0	65	986

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	376	20	0	28	648	0	0	0	0	0	0	64	0	12	0	1148
Heavy Trucks	0	12	0		4	8	0		0	0	0		16	0	4		44
Pedestrians		0				4				4				16			24
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 12/8/2017 9:52 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

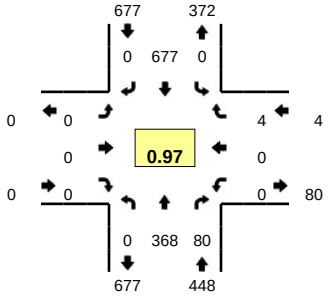
LOCATION: Hathaway Ave -- Costco access

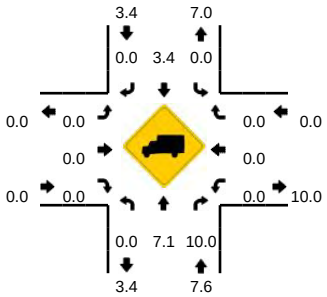
CITY/STATE: Hayward, CA

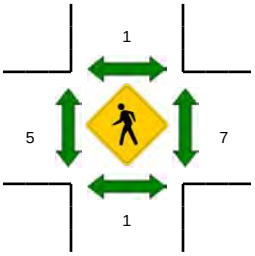
QC JOB #: 14568403

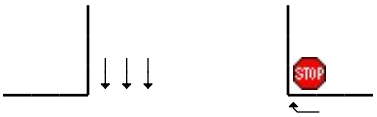
DATE: Wed, Nov 29 2017

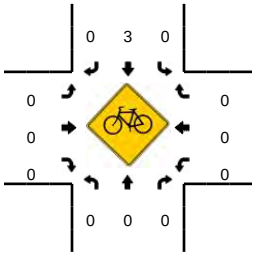
Peak-Hour: 7:35 AM -- 8:35 AM
Peak 15-Min: 8:00 AM -- 8:15 AM

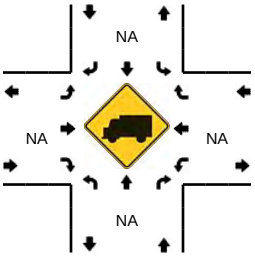


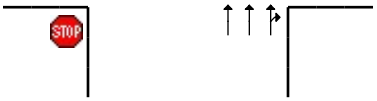


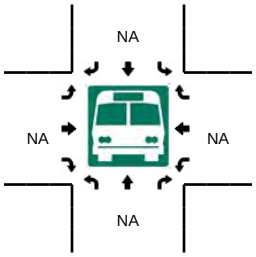












5-Min Count Period Beginning At	Hathaway Ave (Northbound)				Hathaway Ave (Southbound)				Costco access (Eastbound)				Costco access (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	16	6	0	0	54	0	0	0	0	0	0	0	0	0	0	76	
7:05 AM	0	12	4	0	0	49	0	0	0	0	0	0	0	0	0	0	65	
7:10 AM	0	16	8	0	0	45	0	0	0	0	0	0	0	0	0	0	69	
7:15 AM	0	10	4	0	0	74	0	0	0	0	0	0	0	0	0	0	88	
7:20 AM	0	22	4	0	0	56	0	0	0	0	0	0	0	0	0	0	82	
7:25 AM	0	28	0	0	0	53	0	0	0	0	0	0	0	0	0	0	81	
7:30 AM	0	23	6	0	0	56	0	0	0	0	0	0	0	0	1	0	86	
7:35 AM	0	35	1	0	0	60	0	0	0	0	0	0	0	0	1	0	97	
7:40 AM	0	26	7	0	0	59	0	0	0	0	0	0	0	0	0	0	92	
7:45 AM	0	32	5	0	0	58	0	0	0	0	0	0	0	0	0	0	95	
7:50 AM	0	23	2	0	0	61	0	0	0	0	0	0	0	0	0	0	86	
7:55 AM	0	28	9	0	0	49	0	0	0	0	0	0	0	0	0	0	86	1003
8:00 AM	0	32	8	0	0	68	0	0	0	0	0	0	0	0	0	0	108	1035
8:05 AM	0	23	4	0	0	60	0	0	0	0	0	0	0	0	1	0	88	1058
8:10 AM	0	35	9	0	0	51	0	0	0	0	0	0	0	0	1	0	96	1085
8:15 AM	0	34	3	0	0	56	0	0	0	0	0	0	0	0	0	0	93	1090
8:20 AM	0	32	6	0	0	55	0	0	0	0	0	0	0	0	0	0	93	1101
8:25 AM	0	40	10	0	0	50	0	0	0	0	0	0	0	0	0	0	100	1120
8:30 AM	0	28	16	0	0	50	0	0	0	0	0	0	0	0	1	0	95	1129
8:35 AM	0	24	10	0	0	41	0	0	0	0	0	0	0	0	0	0	75	1107
8:40 AM	0	19	9	0	0	43	0	0	0	0	0	0	0	0	1	0	72	1087
8:45 AM	0	25	9	0	0	34	0	0	0	0	0	0	0	0	0	0	68	1060
8:50 AM	0	24	4	0	0	48	0	0	0	0	0	0	0	0	1	0	77	1051
8:55 AM	0	25	8	0	0	40	0	0	0	0	0	0	0	0	0	0	73	1038

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	360	84	0	0	716	0	0	0	0	0	0	0	0	8	0	1168
Heavy Trucks	0	44	12		0	24	0		0	0	0		0	0	0		80
Pedestrians		4				0				4				12			20
Bicycles	0	0	0		0	1	0		0	0	0		0	0	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 12/8/2017 9:52 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

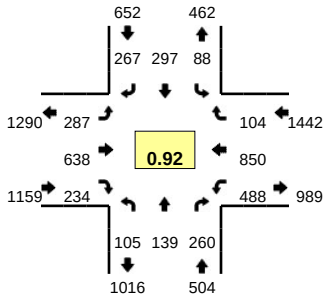
LOCATION: Hathaway Ave -- W A St

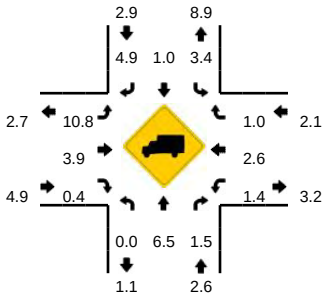
CITY/STATE: Hayward, CA

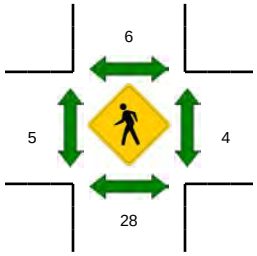
QC JOB #: 14568401

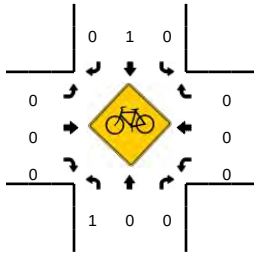
DATE: Wed, Dec 06 2017

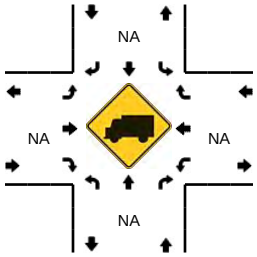
Peak-Hour: 7:35 AM -- 8:35 AM
Peak 15-Min: 7:50 AM -- 8:05 AM

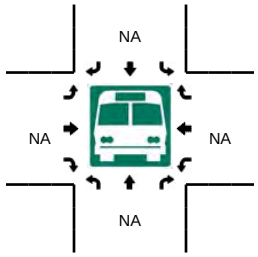












5-Min Count Period Beginning At	Hathaway Ave (Northbound)				Hathaway Ave (Southbound)				W A St (Eastbound)				W A St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	6	6	14	0	0	18	21	0	15	30	13	1	21	58	1	0	204	
7:05 AM	6	10	11	0	7	29	27	0	15	23	9	4	27	47	3	0	218	
7:10 AM	6	3	8	0	0	30	27	0	9	30	18	5	35	78	5	0	254	
7:15 AM	10	10	7	0	6	34	24	0	8	26	14	3	30	58	8	0	238	
7:20 AM	5	12	9	0	1	28	21	0	12	32	22	8	35	70	4	0	259	
7:25 AM	16	14	7	0	6	34	32	0	8	27	20	0	26	41	8	0	239	
7:30 AM	16	15	12	0	8	22	9	0	14	38	22	5	32	75	3	0	271	
7:35 AM	8	7	12	0	8	12	24	0	20	33	18	8	40	69	5	0	264	
7:40 AM	11	13	16	0	9	30	21	0	15	44	15	5	35	45	8	0	267	
7:45 AM	11	8	15	0	8	27	28	0	19	53	16	8	31	73	5	0	302	
7:50 AM	11	18	28	0	12	37	28	0	12	44	15	5	45	92	11	1	359	
7:55 AM	8	8	20	0	7	26	25	0	20	54	22	4	45	92	8	0	339	3214
8:00 AM	11	13	36	0	9	19	24	0	15	61	22	2	40	61	7	0	320	3330
8:05 AM	5	12	39	0	7	17	19	0	18	56	21	7	36	71	13	0	321	3433
8:10 AM	9	8	27	0	6	35	22	0	17	50	28	5	31	53	7	1	299	3478
8:15 AM	3	15	26	0	5	25	17	0	20	63	22	6	52	56	7	0	317	3557
8:20 AM	8	16	13	0	3	28	20	0	22	61	21	5	40	81	10	0	328	3626
8:25 AM	11	11	16	0	6	17	25	0	20	61	22	7	47	91	11	1	346	3733
8:30 AM	9	10	12	0	8	24	14	0	21	58	12	6	43	66	12	0	295	3757
8:35 AM	8	7	11	0	6	18	15	0	17	46	18	6	21	73	13	0	259	3752
8:40 AM	10	6	13	0	6	24	19	0	25	46	17	6	16	47	9	0	244	3729
8:45 AM	8	5	13	0	9	22	13	0	21	40	11	1	38	61	10	0	252	3679
8:50 AM	4	12	3	0	6	16	18	0	16	47	12	8	29	55	8	0	234	3554
8:55 AM	14	9	7	0	3	17	25	0	21	40	14	2	13	43	13	0	221	3436

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	120	156	336	0	112	328	308	0	188	636	236	44	520	980	104	4	4072
Heavy Trucks	0	16	4		4	4	20		24	24	0		4	16	0		116
Pedestrians		40				8				4				12			64
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 12/13/2017 4:37 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

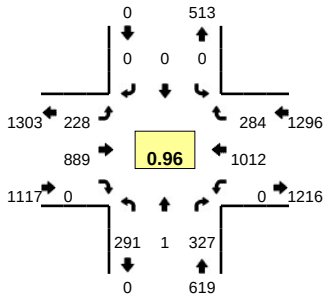
LOCATION: I-880 NB Ramps -- W A St

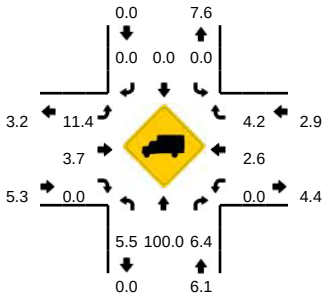
CITY/STATE: Hayward, CA

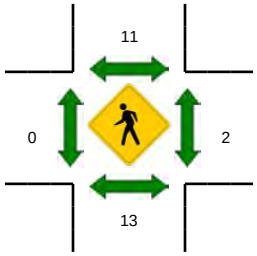
QC JOB #: 14568407

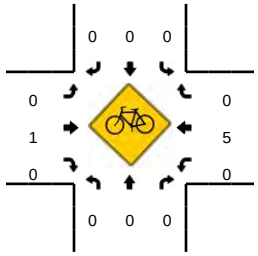
DATE: Wed, Dec 06 2017

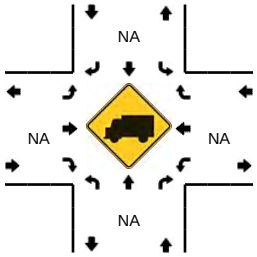
Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 8:05 AM -- 8:20 AM

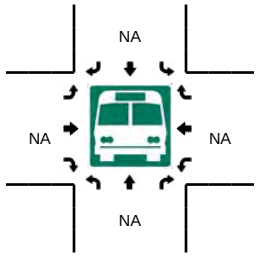












5-Min Count Period Beginning At	I-880 NB Ramps (Northbound)				I-880 NB Ramps (Southbound)				W A St (Eastbound)				W A St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	26	0	26	0	0	0	0	0	29	30	0	0	0	47	40	0	198	
7:05 AM	17	0	19	0	0	0	0	0	33	36	0	0	0	57	32	0	194	
7:10 AM	14	1	11	0	0	0	0	0	31	51	0	0	0	79	32	0	219	
7:15 AM	12	1	17	0	0	0	0	0	27	44	0	0	0	68	35	0	204	
7:20 AM	12	0	15	0	0	0	0	0	21	39	0	0	0	64	32	0	183	
7:25 AM	20	0	21	0	0	0	0	0	25	52	0	0	0	66	20	0	204	
7:30 AM	10	0	19	0	0	0	0	0	31	50	0	0	0	77	38	0	225	
7:35 AM	20	0	22	0	0	0	0	0	22	53	0	0	0	69	33	0	219	
7:40 AM	20	0	15	0	0	0	0	0	25	59	0	0	0	59	22	0	200	
7:45 AM	21	0	27	0	0	0	0	0	10	82	0	0	0	89	36	0	265	
7:50 AM	23	0	20	0	0	0	0	0	20	62	0	0	0	97	29	0	251	
7:55 AM	29	0	28	0	0	0	0	0	22	67	0	0	0	84	25	0	255	2617
8:00 AM	21	1	19	0	0	0	0	0	8	80	0	0	0	89	14	0	232	2651
8:05 AM	29	0	27	0	0	0	0	0	18	94	0	0	0	97	32	0	297	2754
8:10 AM	37	0	35	0	0	0	0	0	18	73	0	0	0	67	22	0	252	2787
8:15 AM	11	0	28	0	0	0	0	0	23	97	0	0	0	66	19	0	244	2827
8:20 AM	30	0	47	0	0	0	0	0	29	80	0	0	0	80	29	0	295	2939
8:25 AM	35	0	18	0	0	0	0	0	23	64	0	0	0	94	20	0	254	2989
8:30 AM	15	0	33	0	0	0	0	0	19	62	0	0	0	82	17	0	228	2992
8:35 AM	24	0	21	0	0	0	0	0	20	69	0	0	0	83	20	0	237	3010
8:40 AM	16	0	24	0	0	0	0	0	18	59	0	0	0	84	21	0	222	3032
8:45 AM	21	0	25	0	0	0	0	0	15	60	0	0	0	53	21	0	195	2962
8:50 AM	26	0	27	0	0	0	0	0	22	77	0	0	0	56	16	0	224	2935
8:55 AM	16	0	31	0	0	0	0	0	17	52	0	0	0	65	24	0	205	2885

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	308	0	360	0	0	0	0	0	236	1056	0	0	0	920	292	0	3172
Heavy Trucks	12	0	20		0	0	0		32	44	0		0	36	8		152
Pedestrians		20				0				0				0			20
Bicycles	0	0	0		0	0	0		0	0	0		0	3	0		3
Railroad																	
Stopped Buses																	

Comments:

Report generated on 12/13/2017 4:37 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

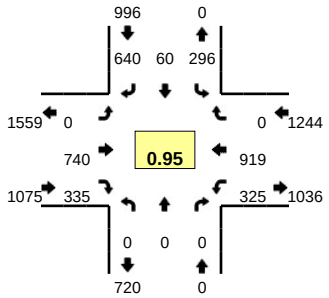
Type of peak hour being reported: Intersection Peak

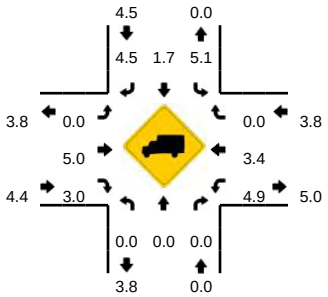
Method for determining peak hour: Total Entering Volume

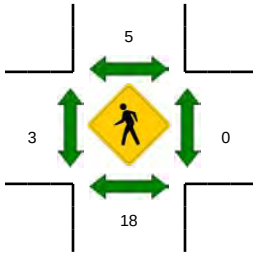
LOCATION: I-880 SB Ramps -- W A St
CITY/STATE: Hayward, CA

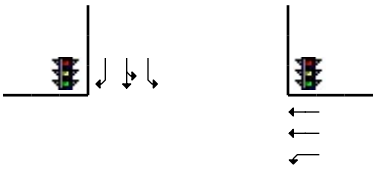
QC JOB #: 14568409
DATE: Wed, Nov 29 2017

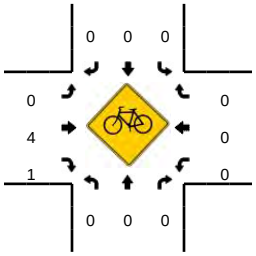
Peak-Hour: 7:35 AM -- 8:35 AM
Peak 15-Min: 7:50 AM -- 8:05 AM

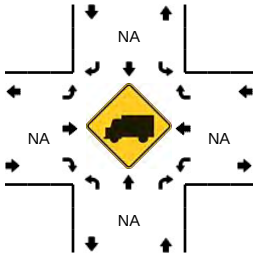


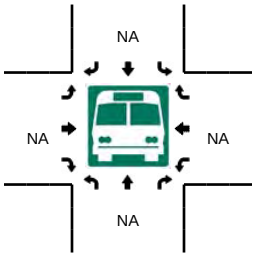












5-Min Count Period Beginning At	I-880 SB Ramps (Northbound)				I-880 SB Ramps (Southbound)				W A St (Eastbound)				W A St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	17	11	61	0	0	47	22	0	25	48	0	0	231	
7:05 AM	0	0	0	0	31	4	65	0	0	54	12	0	35	44	0	0	245	
7:10 AM	0	0	0	0	20	5	55	0	0	63	33	0	29	48	0	0	253	
7:15 AM	0	0	0	0	20	4	50	0	0	43	22	0	23	40	0	0	202	
7:20 AM	0	0	0	0	20	3	41	0	0	47	35	0	26	63	0	0	235	
7:25 AM	0	0	0	0	24	4	45	0	0	50	23	0	28	57	0	0	231	
7:30 AM	0	0	0	0	23	5	59	0	0	54	24	0	23	61	0	0	249	
7:35 AM	0	0	0	0	18	6	53	0	0	62	37	0	27	62	0	0	265	
7:40 AM	0	0	0	0	29	4	69	0	0	49	35	0	30	64	0	0	280	
7:45 AM	0	0	0	0	23	1	49	0	0	57	37	0	32	59	0	0	258	
7:50 AM	0	0	0	0	25	3	58	0	0	66	27	0	31	74	0	0	284	
7:55 AM	0	0	0	0	33	6	59	0	0	56	38	0	24	82	0	0	298	3031
8:00 AM	0	0	0	0	19	6	49	0	0	60	22	0	26	112	0	0	294	3094
8:05 AM	0	0	0	0	27	8	60	0	0	69	20	0	27	70	0	0	281	3130
8:10 AM	0	0	0	0	25	7	62	0	0	60	29	0	27	74	0	0	284	3161
8:15 AM	0	0	0	0	20	10	31	0	0	73	24	0	28	71	0	0	257	3216
8:20 AM	0	0	0	0	23	1	65	0	0	85	26	0	20	83	0	0	303	3284
8:25 AM	0	0	0	0	27	5	32	0	0	53	15	0	25	80	0	0	237	3290
8:30 AM	0	0	0	0	27	3	53	0	0	50	25	0	28	88	0	0	274	3315
8:35 AM	0	0	0	0	22	4	44	0	0	63	19	0	27	78	0	0	257	3307
8:40 AM	0	0	0	0	16	1	37	0	0	65	21	0	36	70	0	0	246	3273
8:45 AM	0	0	0	0	25	3	40	0	0	56	29	0	21	66	0	0	240	3255
8:50 AM	0	0	0	0	29	3	31	0	0	50	16	0	35	60	0	0	224	3195
8:55 AM	0	0	0	0	23	3	43	0	0	54	27	0	29	57	0	0	236	3133

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	308	60	664	0	0	728	348	0	324	1072	0	0	3504
Heavy Trucks	0	0	0		12	0	32		0	28	8		12	36	0		128
Pedestrians		40				4				4				0			48
Bicycles	0	0	0		0	0	0		0	2	0		0	0	0		2
Railroad																	
Stopped Buses																	

Comments:

Report generated on 12/8/2017 9:52 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

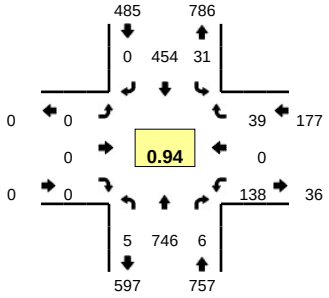
Type of peak hour being reported: User-Defined

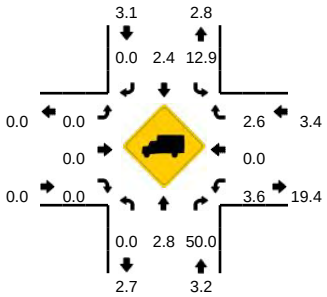
Method for determining peak hour: Total Entering Volume

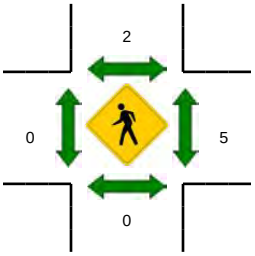
LOCATION: Hathaway Ave -- Costco access (signal)
CITY/STATE: Hayward, CA

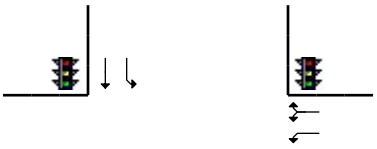
QC JOB #: 14568406
DATE: Wed, Nov 29 2017

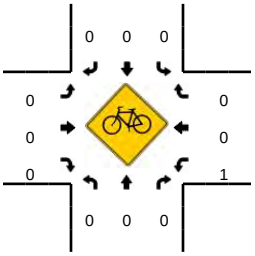
Peak-Hour: 4:50 PM -- 5:50 PM
Peak 15-Min: 5:35 PM -- 5:50 PM

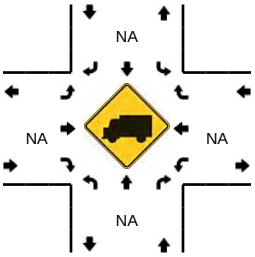


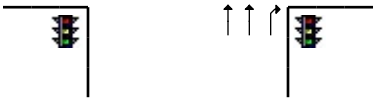


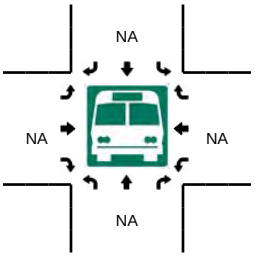












5-Min Count Period Beginning At	Hathaway Ave (Northbound)				Hathaway Ave (Southbound)				Costco access (signal) (Eastbound)				Costco access (signal) (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	50	0	1	2	26	0	0	0	0	0	0	7	0	7	0	93	
4:05 PM	0	59	0	1	5	29	0	0	0	0	0	0	13	0	5	0	112	
4:10 PM	0	59	0	1	1	27	0	0	0	0	0	0	13	0	8	0	109	
4:15 PM	0	44	0	0	0	31	0	0	0	0	0	0	13	0	4	0	92	
4:20 PM	0	57	0	1	2	44	0	0	0	0	0	0	9	0	4	0	117	
4:25 PM	0	52	0	0	5	28	0	0	0	0	0	0	17	0	5	0	107	
4:30 PM	0	54	0	2	4	50	0	0	0	0	0	0	11	0	6	0	127	
4:35 PM	0	68	1	0	4	29	0	0	0	0	0	0	10	0	4	0	116	
4:40 PM	0	71	0	0	6	28	0	0	0	0	0	0	9	0	2	0	116	
4:45 PM	0	72	0	1	2	44	0	0	0	0	0	0	17	0	6	0	142	
4:50 PM	0	58	0	2	2	46	0	0	0	0	0	0	6	0	4	0	118	
4:55 PM	0	53	0	0	2	35	0	0	0	0	0	0	14	0	2	0	106	1355
5:00 PM	0	58	0	0	2	46	0	0	0	0	0	0	17	0	4	0	127	1389
5:05 PM	0	49	3	0	2	40	0	0	0	0	0	0	13	0	8	0	115	1392
5:10 PM	0	66	1	0	0	36	0	0	0	0	0	0	6	0	3	0	112	1395
5:15 PM	0	72	0	1	2	35	0	0	0	0	0	0	9	0	2	0	121	1424
5:20 PM	0	62	1	0	3	43	0	0	0	0	0	0	10	0	6	0	125	1432
5:25 PM	0	67	1	0	3	33	0	0	0	0	0	0	16	0	5	0	125	1450
5:30 PM	0	64	0	1	1	19	0	0	0	0	0	0	6	0	1	0	92	1415
5:35 PM	0	49	0	0	3	47	0	0	0	0	0	0	15	0	1	0	115	1414
5:40 PM	0	75	0	0	7	44	0	0	0	0	0	0	16	0	1	0	143	1441
5:45 PM	0	73	0	1	3	30	0	1	0	0	0	0	10	0	2	0	120	1419
5:50 PM	0	45	1	0	3	44	0	0	0	0	0	0	13	0	3	0	109	1410
5:55 PM	0	71	0	1	1	26	0	0	0	0	0	0	8	0	3	0	110	1414

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	788	0	4	52	484	0	4	0	0	0	0	164	0	16	0	1512
Heavy Trucks	0	48	0		4	8	0		0	0	0		12	0	0		72
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 1/29/2018 5:29 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

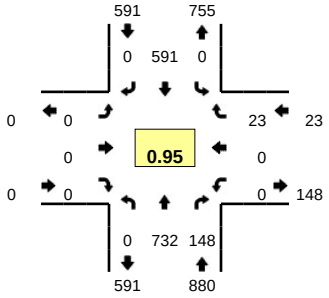
Type of peak hour being reported: User-Defined

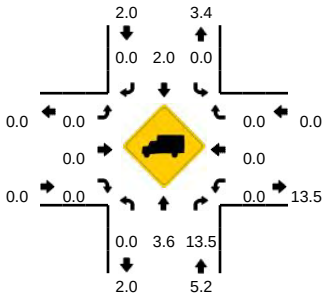
Method for determining peak hour: Total Entering Volume

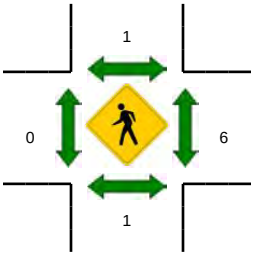
LOCATION: Hathaway Ave -- Costco access
CITY/STATE: Hayward, CA

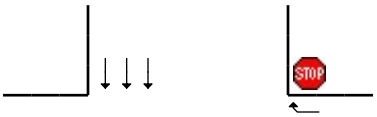
QC JOB #: 14568404
DATE: Wed, Nov 29 2017

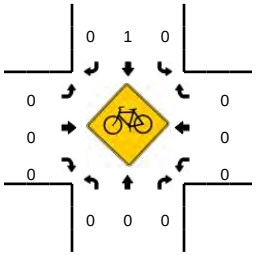
Peak-Hour: 4:50 PM -- 5:50 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

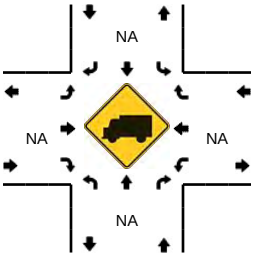


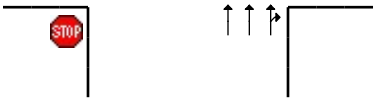


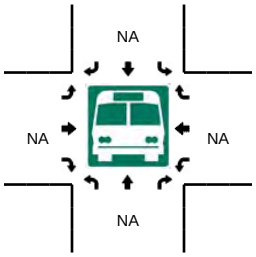












5-Min Count Period Beginning At	Hathaway Ave (Northbound)				Hathaway Ave (Southbound)				Costco access (Eastbound)				Costco access (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	47	10	0	0	32	0	0	0	0	0	0	0	0	1	0	90	
4:05 PM	0	58	18	0	0	44	0	0	0	0	0	0	0	0	3	0	123	
4:10 PM	0	63	16	0	0	41	0	0	0	0	0	0	0	0	1	0	121	
4:15 PM	0	48	11	0	0	50	0	0	0	0	0	0	0	0	0	0	109	
4:20 PM	0	40	15	0	0	48	0	0	0	0	0	0	0	0	6	0	109	
4:25 PM	0	53	17	0	0	45	0	0	0	0	0	0	0	0	2	0	117	
4:30 PM	0	55	7	0	0	59	0	0	0	0	0	0	0	0	2	0	123	
4:35 PM	0	72	14	0	0	40	0	0	0	0	0	0	0	0	4	0	130	
4:40 PM	0	75	14	0	0	35	0	0	0	0	0	0	0	0	1	0	125	
4:45 PM	0	60	11	0	0	65	0	0	0	0	0	0	0	0	4	0	140	
4:50 PM	0	62	7	0	0	53	0	0	0	0	0	0	0	0	5	0	127	
4:55 PM	0	58	10	0	0	46	0	0	0	0	0	0	0	0	0	0	114	1428
5:00 PM	0	45	13	0	0	66	0	0	0	0	0	0	0	0	3	0	127	1465
5:05 PM	0	55	13	0	0	49	0	0	0	0	0	0	0	0	0	0	117	1459
5:10 PM	0	58	11	0	0	43	0	0	0	0	0	0	0	0	3	0	115	1453
5:15 PM	0	71	13	0	0	45	0	0	0	0	0	0	0	0	2	0	131	1475
5:20 PM	0	79	13	0	0	49	0	0	0	0	0	0	0	0	2	0	143	1509
5:25 PM	0	50	19	0	0	51	0	0	0	0	0	0	0	0	1	0	121	1513
5:30 PM	0	69	17	0	0	27	0	0	0	0	0	0	0	0	0	0	113	1503
5:35 PM	0	54	13	0	0	62	0	0	0	0	0	0	0	0	1	0	130	1503
5:40 PM	0	62	13	0	0	56	0	0	0	0	0	0	0	0	4	0	135	1513
5:45 PM	0	69	6	0	0	44	0	0	0	0	0	0	0	0	2	0	121	1494
5:50 PM	0	55	6	0	0	56	0	0	0	0	0	0	0	0	1	0	118	1485
5:55 PM	0	63	9	0	0	36	0	0	0	0	0	0	0	0	1	0	109	1480

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	800	180	0	0	580	0	0	0	0	0	0	0	0	20	0	1580
Heavy Trucks	0	16	36		0	4	0		0	0	0		0	0	0		56
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 1/29/2018 5:29 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

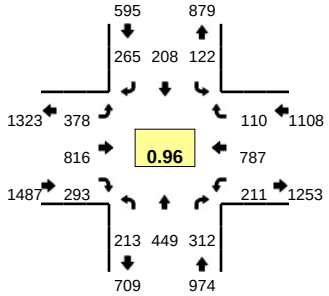
LOCATION: Hathaway Ave -- W A St

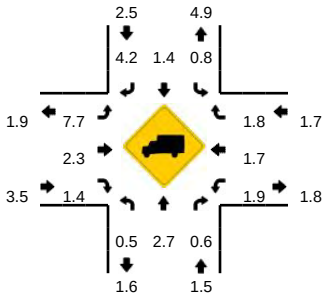
CITY/STATE: Hayward, CA

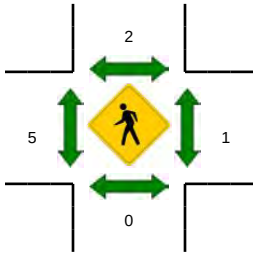
QC JOB #: 14568402

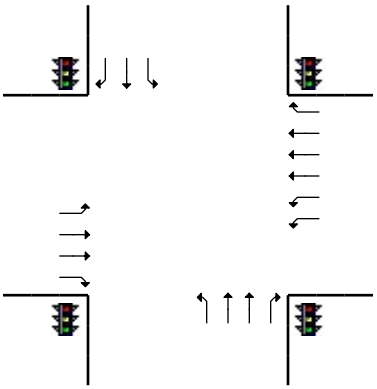
DATE: Wed, Nov 29 2017

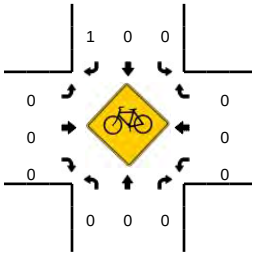
Peak-Hour: 4:50 PM -- 5:50 PM
Peak 15-Min: 5:10 PM -- 5:25 PM

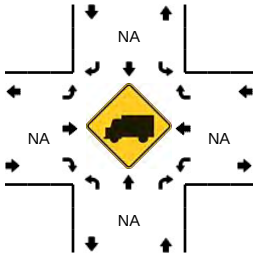


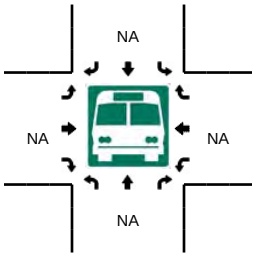












5-Min Count Period Beginning At	Hathaway Ave (Northbound)				Hathaway Ave (Southbound)				W A St (Eastbound)				W A St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	15	30	19	0	6	16	16	0	17	56	19	5	13	46	10	1	269	
4:05 PM	10	43	24	0	11	14	16	0	22	66	10	4	12	48	6	0	286	
4:10 PM	11	32	30	0	8	6	24	0	29	65	22	6	11	68	11	0	323	
4:15 PM	24	29	25	0	6	14	23	0	16	52	16	4	9	42	11	0	271	
4:20 PM	10	32	22	0	4	15	26	0	23	72	21	6	13	55	5	0	304	
4:25 PM	17	32	23	0	5	14	25	0	26	45	16	2	24	61	7	0	297	
4:30 PM	19	43	17	0	11	25	26	0	13	52	18	7	9	58	5	0	303	
4:35 PM	14	38	18	0	3	12	24	0	31	71	21	5	9	77	9	0	332	
4:40 PM	18	48	29	0	4	12	18	0	30	73	25	6	14	68	7	0	352	
4:45 PM	17	44	24	0	6	24	29	0	30	45	17	6	9	55	5	0	311	
4:50 PM	24	31	28	0	17	12	25	0	32	83	22	8	11	67	7	0	367	
4:55 PM	16	26	19	0	9	18	26	0	22	64	25	4	16	55	13	0	313	3728
5:00 PM	16	41	31	0	7	20	25	0	22	57	22	8	18	72	5	0	344	3803
5:05 PM	16	30	24	0	10	21	25	0	26	68	22	2	16	75	9	0	344	3861
5:10 PM	22	36	23	0	7	19	19	0	26	66	19	3	24	73	10	1	348	3886
5:15 PM	16	44	32	0	9	15	21	0	26	68	24	5	22	62	10	0	354	3969
5:20 PM	16	53	21	0	12	20	24	0	20	69	25	6	17	83	12	1	379	4044
5:25 PM	15	24	34	0	7	11	16	0	40	67	29	6	21	57	7	1	335	4082
5:30 PM	25	50	30	0	9	14	15	0	27	57	29	3	10	51	7	0	327	4106
5:35 PM	12	39	17	0	18	19	21	0	20	82	26	6	23	53	9	0	345	4119
5:40 PM	13	37	27	0	11	21	24	0	36	67	18	5	16	55	9	0	339	4106
5:45 PM	22	38	26	0	6	18	24	0	23	68	32	2	14	84	12	0	369	4164
5:50 PM	20	12	21	0	7	14	23	0	32	70	22	8	22	53	7	0	311	4108
5:55 PM	17	35	17	0	0	23	17	0	29	67	30	1	18	61	12	1	328	4123

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	216	532	304	0	112	216	256	0	288	812	272	56	252	872	128	8	4324
Heavy Trucks	4	8	0		0	0	4		20	12	8		8	12	0		76
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 12/8/2017 9:52 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

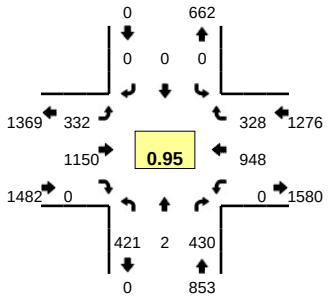
Type of peak hour being reported: User-Defined

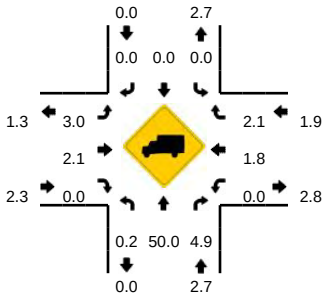
Method for determining peak hour: Total Entering Volume

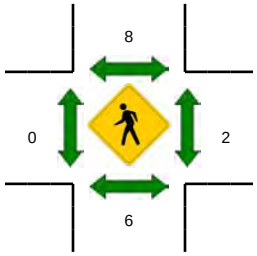
LOCATION: I-880 NB Ramps -- W A St
CITY/STATE: Hayward, CA

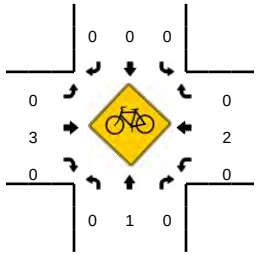
QC JOB #: 14568408
DATE: Wed, Nov 29 2017

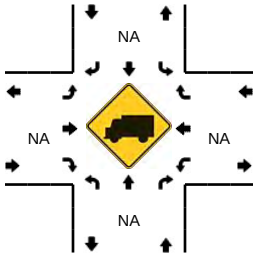
Peak-Hour: 4:50 PM -- 5:50 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

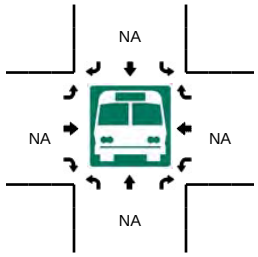












5-Min Count Period Beginning At	I-880 NB Ramps (Northbound)				I-880 NB Ramps (Southbound)				W A St (Eastbound)				W A St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	22	0	28	0	0	0	0	0	20	87	0	0	0	64	14	0	235	
4:05 PM	21	0	31	0	0	0	0	0	23	93	0	0	0	64	20	0	252	
4:10 PM	42	0	34	0	0	0	0	0	22	69	0	0	0	83	21	1	272	
4:15 PM	28	0	24	0	0	0	0	0	35	92	0	0	0	73	21	0	273	
4:20 PM	37	0	32	0	0	0	0	0	21	87	0	0	0	81	22	0	280	
4:25 PM	30	0	27	0	0	0	0	0	23	82	0	0	0	79	34	0	275	
4:30 PM	39	0	26	0	0	0	0	0	33	86	0	0	0	70	29	0	283	
4:35 PM	35	0	39	0	0	0	0	0	36	97	0	0	0	68	28	0	303	
4:40 PM	30	0	38	0	0	0	0	0	31	83	0	0	0	93	24	0	299	
4:45 PM	38	0	38	0	0	0	0	0	32	70	0	0	0	80	31	1	290	
4:50 PM	33	0	31	0	0	0	0	0	38	98	0	0	0	67	27	0	294	
4:55 PM	31	0	28	0	0	0	0	0	33	89	0	0	0	81	26	0	288	3344
5:00 PM	32	0	31	0	0	0	0	0	26	84	0	0	0	89	37	0	299	3408
5:05 PM	48	0	33	0	0	0	0	0	22	98	0	0	0	79	26	0	306	3462
5:10 PM	27	1	44	0	0	0	0	0	33	97	0	0	0	75	32	0	309	3499
5:15 PM	40	0	39	0	0	0	0	0	21	102	0	0	0	95	31	0	328	3554
5:20 PM	43	0	30	0	0	0	0	0	25	91	0	0	0	88	26	0	303	3577
5:25 PM	33	1	36	0	0	0	0	0	31	107	0	0	0	80	30	0	318	3620
5:30 PM	32	0	27	0	0	0	0	0	28	112	0	0	0	67	25	0	291	3628
5:35 PM	35	0	45	0	0	0	0	0	20	91	0	0	0	85	24	0	300	3625
5:40 PM	38	0	42	0	0	0	0	0	21	83	0	0	0	62	18	0	264	3590
5:45 PM	29	0	44	0	0	0	0	0	34	98	0	0	0	80	26	0	311	3611
5:50 PM	40	0	40	0	0	0	0	0	17	105	0	0	0	81	28	0	311	3628
5:55 PM	31	1	32	0	0	0	0	0	18	84	0	0	0	75	24	0	265	3605

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	464	4	420	0	0	0	0	0	308	1200	0	0	0	1052	348	0	3796
Heavy Trucks	4	0	20		0	0	0		12	28	0		0	12	8		84
Pedestrians		0				4				0				4			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 1/29/2018 5:29 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

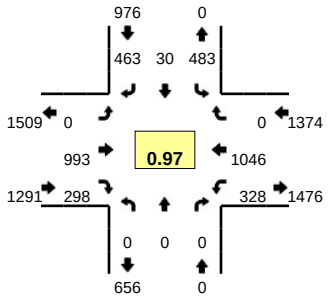
Type of peak hour being reported: Intersection Peak

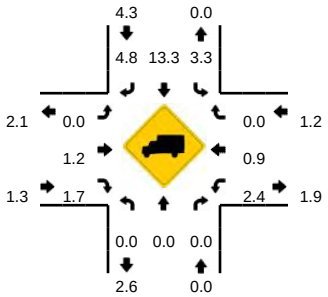
Method for determining peak hour: Total Entering Volume

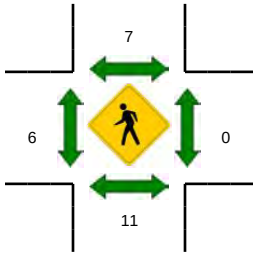
LOCATION: I-880 SB Ramps -- W A St
CITY/STATE: Hayward, CA

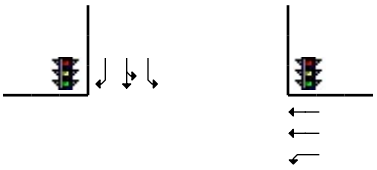
QC JOB #: 14568410
DATE: Wed, Nov 29 2017

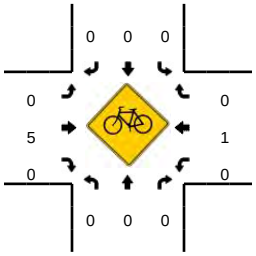
Peak-Hour: 4:50 PM -- 5:50 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

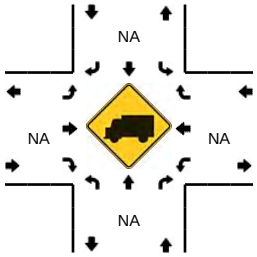


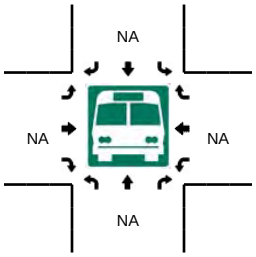












5-Min Count Period Beginning At	I-880 SB Ramps (Northbound)				I-880 SB Ramps (Southbound)				W A St (Eastbound)				W A St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	35	0	54	0	0	69	15	0	24	67	0	0	264	
4:05 PM	0	0	0	0	43	6	28	0	0	73	18	0	19	64	0	0	251	
4:10 PM	0	0	0	0	30	0	36	0	0	63	22	0	27	82	0	0	260	
4:15 PM	0	0	0	0	38	0	32	0	0	91	33	0	28	90	0	0	312	
4:20 PM	0	0	0	0	51	0	37	0	0	58	24	0	24	82	0	0	276	
4:25 PM	0	0	0	0	40	1	45	0	0	69	25	0	25	66	0	0	271	
4:30 PM	0	0	0	0	29	2	34	0	0	84	26	0	30	98	0	0	303	
4:35 PM	0	0	0	0	39	1	42	0	0	89	26	0	31	71	0	0	299	
4:40 PM	0	0	0	0	43	1	29	0	0	72	29	0	28	83	0	0	285	
4:45 PM	0	0	0	0	32	2	34	0	0	74	30	0	29	98	0	0	299	
4:50 PM	0	0	0	0	41	2	38	0	0	93	29	0	24	78	0	0	305	
4:55 PM	0	0	0	0	45	2	43	0	0	82	28	0	27	75	0	0	302	3427
5:00 PM	0	0	0	0	36	2	43	0	0	73	24	0	34	84	0	0	296	3459
5:05 PM	0	0	0	0	34	1	33	0	0	91	19	0	32	99	0	0	309	3517
5:10 PM	0	0	0	0	46	1	44	0	0	80	22	0	23	86	0	0	302	3559
5:15 PM	0	0	0	0	45	4	38	0	0	74	29	0	32	88	0	0	310	3557
5:20 PM	0	0	0	0	35	3	34	0	0	74	24	0	37	103	0	0	310	3591
5:25 PM	0	0	0	0	40	6	36	0	0	97	19	0	22	96	0	0	316	3636
5:30 PM	0	0	0	0	55	2	32	0	0	83	28	0	23	77	0	0	300	3633
5:35 PM	0	0	0	0	33	5	38	0	0	83	15	0	30	77	0	0	281	3615
5:40 PM	0	0	0	0	29	1	33	0	0	78	33	0	22	88	0	0	284	3614
5:45 PM	0	0	0	0	44	1	51	0	0	85	28	0	22	95	0	0	326	3641
5:50 PM	0	0	0	0	47	4	51	0	0	70	27	1	27	76	0	0	303	3639
5:55 PM	0	0	0	0	40	0	33	0	0	64	19	0	32	80	0	0	268	3605

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	480	52	432	0	0	980	288	0	364	1148	0	0	3744
Heavy Trucks	0	0	0		16	4	8		0	8	4		0	8	0		48
Pedestrians		12				0				0				0			12
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 12/8/2017 9:52 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Appendix C Traffic Signal Warrant Worksheets

KITTELSON & ASSOCIATES, INC.
610 SW Alder, Suite 700
Portland, Oregon 97205
(503) 228-5230

Project #: 19451
Project Name: Hayward Costco Business Center Fuel Station
Analyst: KML
Date: 9/25/2018
File: \\kittelson.com\ts\H_Projects\19\19451 - Hayward Costco BC Gas Expansion\signal warrants\[19451_Signal Warrant Analysis Int 2 Ex-PM.xls]Data Input
Intersection: Hathaway Avenue/Costco RIRO Access
Scenario: existing

Analysis Traffic Volumes

Hour		Major Street		Minor Street	
Begin	End	NB	SB	EB	WB
4:50 PM	5:50 PM	806	594	0	22
2nd	Highest Hour	763	562	0	22
3rd	Highest Hour	752	554	0	22
4th	Highest Hour	720	531	0	22
5th	Highest Hour	709	523	0	22
6th	Highest Hour	709	523	0	21
7th	Highest Hour	677	499	0	21
8th	Highest Hour	666	491	0	21
9th	Highest Hour	107	79	0	21
10th	Highest Hour	602	444	0	21
11th	Highest Hour	580	428	0	21
12th	Highest Hour	570	420	0	21
13th	Highest Hour	548	404	0	20
14th	Highest Hour	473	348	0	19
15th	Highest Hour	376	277	0	4
16th	Highest Hour	355	261	0	2
17th	Highest Hour	247	182	0	0
18th	Highest Hour	204	150	0	0
19th	Highest Hour	107	79	0	0
20th	Highest Hour	75	55	0	0
21st	Highest Hour	64	48	0	0
22nd	Highest Hour	43	32	0	0
23rd	Highest Hour	21	16	0	0
24th	Highest Hour	21	16	0	0

Warrant Summary

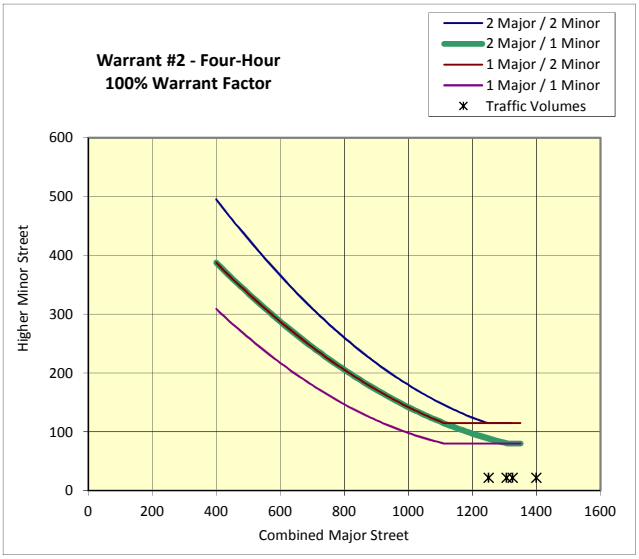
Warrant	Name	Analyzed?	Met?
#1	Eight-Hour Vehicular Volume	Yes	No
#2	Four-Hour Vehicular volume	Yes	No
#3	Peak Hour	Yes	No
#4	Pedestrian Volume	No	-
#5	School Crossing	No	-
#6	Coordinated Signal System	No	-
#7	Crash Experience	No	-
#8	Roadway Network	No	-

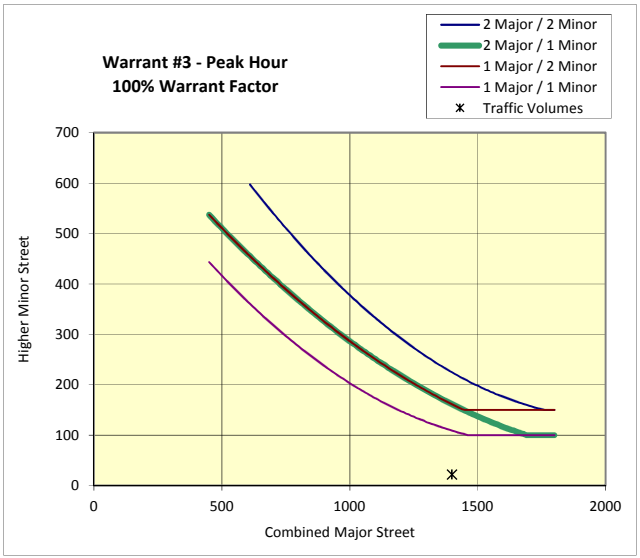
Input Parameters

Volume Adjustment Factor =	1.0
North-South Approach =	Major
East-West Approach =	Minor
Major Street Thru Lanes =	2
Minor Street Thru Lanes =	1
Speed > 40 mph?	No
Population < 10,000?	No
Warrant Factor	100%
Peak Hour or Daily Count?	Peak Hour
Major Street: 4th-Highest Hour / Peak Hour	89%
Major Street: 8th-Highest Hour / Peak Hour	83%
Minor Street: 4th-Highest Hour / Peak Hour	98%
Minor Street: 8th-Highest Hour / Peak Hour	97%

Warrant #1 - Eight Hour

Warrant Factor	Condition	Major Street Requirement	Minor Street Requirement	Hours That Condition Is Met	Condition for Warrant Factor Met?	Signal Warrant Met?
100%	A	600	150	0	No	**No**
	B	900	75	0	No	
80%	A	480	120	0	No	**No**
	B	720	60	0	No	
70%	A	420	105	0	No	**No**
	B	630	53	0	No	





KITTELSON & ASSOCIATES, INC.
610 SW Alder, Suite 700
Portland, Oregon 97205
(503) 228-5230

Project #: 19451
Project Name: Hayward Costco Business Center Fuel Station
Analyst: KML
Date: 9/25/2018
File: \\kittelson.com\ts\H_Projects\19\19451 - Hayward Costco BC Gas Expansion\signal warrants\[19451_Signal Warrant Analysis Int 2 Ex-PM.xls]Data Input
Intersection: Hathaway Avenue/Costco RIRO Access
Scenario: Existing + Project

Analysis Traffic Volumes

Hour		Major Street		Minor Street	
Begin	End	NB	SB	EB	WB
4:50 PM	5:50 PM	834	676	0	47
2nd	Highest Hour	789	640	0	47
3rd	Highest Hour	778	631	0	46
4th	Highest Hour	745	604	0	46
5th	Highest Hour	733	595	0	46
6th	Highest Hour	733	595	0	46
7th	Highest Hour	700	568	0	45
8th	Highest Hour	689	559	0	45
9th	Highest Hour	111	90	0	45
10th	Highest Hour	622	505	0	45
11th	Highest Hour	600	487	0	44
12th	Highest Hour	589	478	0	44
13th	Highest Hour	567	460	0	44
14th	Highest Hour	489	397	0	41
15th	Highest Hour	389	315	0	8
16th	Highest Hour	367	297	0	4
17th	Highest Hour	256	207	0	0
18th	Highest Hour	211	171	0	0
19th	Highest Hour	111	90	0	0
20th	Highest Hour	78	63	0	0
21st	Highest Hour	67	54	0	0
22nd	Highest Hour	44	36	0	0
23rd	Highest Hour	22	18	0	0
24th	Highest Hour	22	18	0	0

Warrant Summary

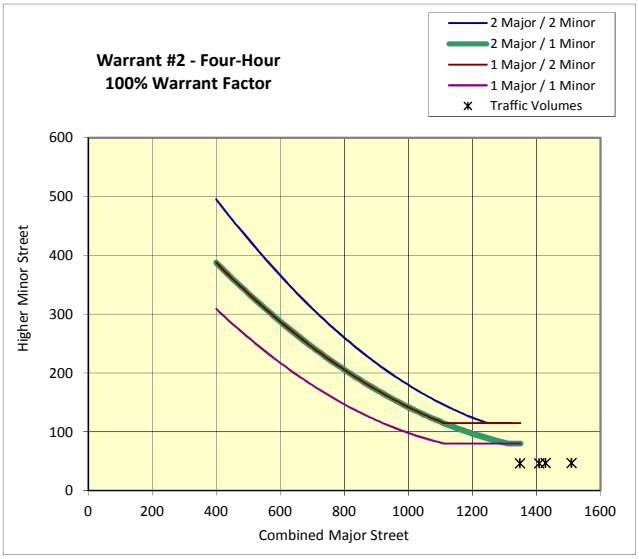
Warrant	Name	Analyzed?	Met?
#1	Eight-Hour Vehicular Volume	Yes	No
#2	Four-Hour Vehicular volume	Yes	No
#3	Peak Hour	Yes	No
#4	Pedestrian Volume	No	-
#5	School Crossing	No	-
#6	Coordinated Signal System	No	-
#7	Crash Experience	No	-
#8	Roadway Network	No	-

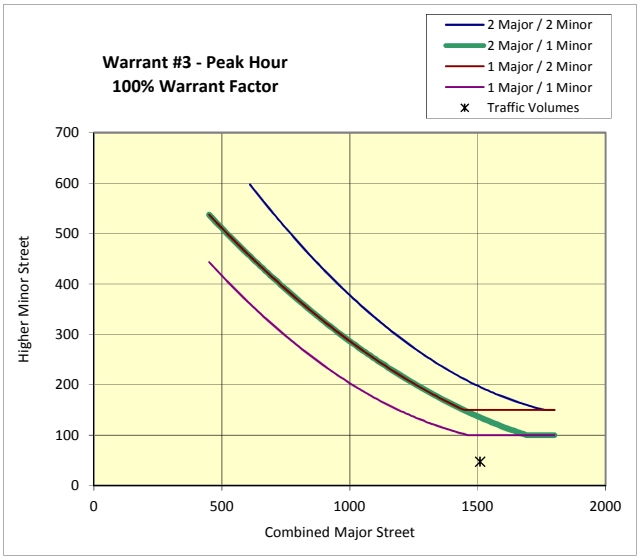
Input Parameters

Volume Adjustment Factor =	1.0
North-South Approach =	Major
East-West Approach =	Minor
Major Street Thru Lanes =	2
Minor Street Thru Lanes =	1
Speed > 40 mph?	No
Population < 10,000?	No
Warrant Factor	100%
Peak Hour or Daily Count?	Peak Hour
Major Street: 4th-Highest Hour / Peak Hour	89%
Major Street: 8th-Highest Hour / Peak Hour	83%
Minor Street: 4th-Highest Hour / Peak Hour	98%
Minor Street: 8th-Highest Hour / Peak Hour	97%

Warrant #1 - Eight Hour

Warrant Factor	Condition	Major Street Requirement	Minor Street Requirement	Hours That Condition Is Met	Condition for Warrant Factor Met?	Signal Warrant Met?
100%	A	600	150	0	No	**No**
	B	900	75	0	No	
80%	A	480	120	0	No	**No**
	B	720	60	0	No	
70%	A	420	105	0	No	**No**
	B	630	53	0	No	





KITTELSON & ASSOCIATES, INC.
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Project Name: Hayward Costco Business Center Fuel Station
Analyst: KML
Date: 9/25/2018
File: \\kittelson.com\ts\H_Projects\19\19451 - Hayward Costco BC Gas Expansion\signal warrants\[19451_Signal Warrant Analysis Int 2 Ex-PM.xls]Data Input
Intersection: Hathaway Avenue/Costco RIRO Access
Scenario: 2020 Background

Analysis Traffic Volumes

Hour		Major Street		Minor Street	
Begin	End	NB	SB	EB	WB
7:35 AM	8:35 AM	818	603	0	22
2nd	Highest Hour	774	571	0	22
3rd	Highest Hour	763	563	0	22
4th	Highest Hour	731	539	0	22
5th	Highest Hour	720	531	0	22
6th	Highest Hour	720	531	0	21
7th	Highest Hour	687	507	0	21
8th	Highest Hour	676	498	0	21
9th	Highest Hour	109	80	0	21
10th	Highest Hour	611	450	0	21
11th	Highest Hour	589	434	0	21
12th	Highest Hour	578	426	0	21
13th	Highest Hour	556	410	0	20
14th	Highest Hour	480	354	0	19
15th	Highest Hour	382	281	0	4
16th	Highest Hour	360	265	0	2
17th	Highest Hour	251	185	0	0
18th	Highest Hour	207	153	0	0
19th	Highest Hour	109	80	0	0
20th	Highest Hour	76	56	0	0
21st	Highest Hour	65	48	0	0
22nd	Highest Hour	44	32	0	0
23rd	Highest Hour	22	16	0	0
24th	Highest Hour	22	16	0	0

Warrant Summary

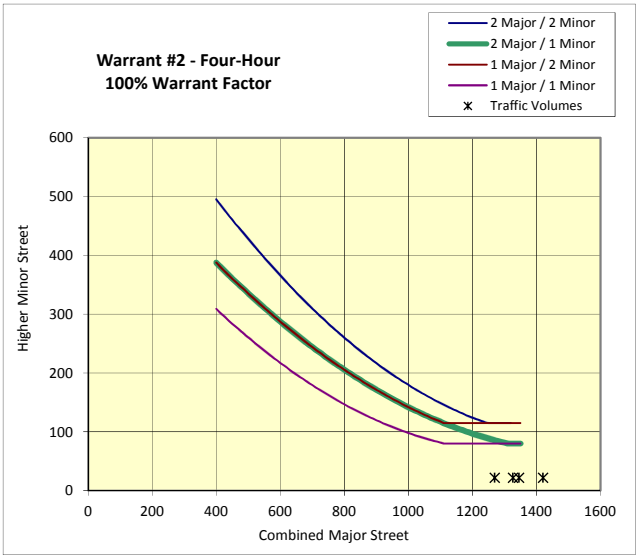
Warrant	Name	Analyzed?	Met?
#1	Eight-Hour Vehicular Volume	Yes	No
#2	Four-Hour Vehicular volume	Yes	No
#3	Peak Hour	Yes	No
#4	Pedestrian Volume	No	-
#5	School Crossing	No	-
#6	Coordinated Signal System	No	-
#7	Crash Experience	No	-
#8	Roadway Network	No	-

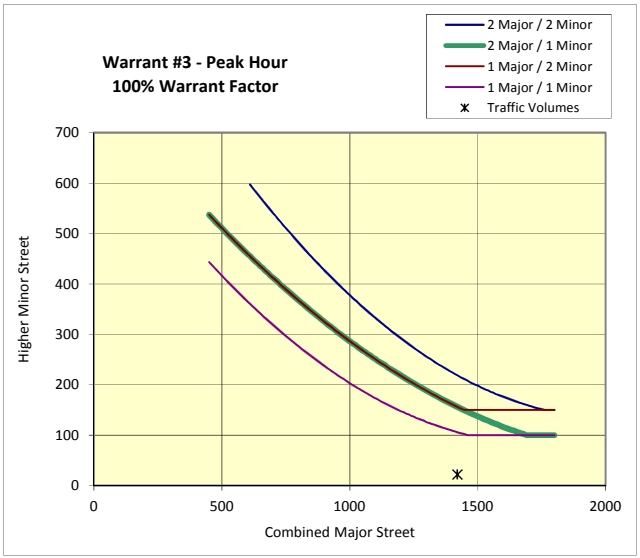
Input Parameters

Volume Adjustment Factor =	1.0
North-South Approach =	Major
East-West Approach =	Minor
Major Street Thru Lanes =	2
Minor Street Thru Lanes =	1
Speed > 40 mph?	No
Population < 10,000?	No
Warrant Factor	100%
Peak Hour or Daily Count?	Peak Hour
Major Street: 4th-Highest Hour / Peak Hour	89%
Major Street: 8th-Highest Hour / Peak Hour	83%
Minor Street: 4th-Highest Hour / Peak Hour	98%
Minor Street: 8th-Highest Hour / Peak Hour	97%

Warrant #1 - Eight Hour

Warrant Factor	Condition	Major Street Requirement	Minor Street Requirement	Hours That Condition Is Met	Condition for Warrant Factor Met?	Signal Warrant Met?
100%	A	600	150	0	No	**No**
	B	900	75	0	No	
80%	A	480	120	0	No	**No**
	B	720	60	0	No	
70%	A	420	105	0	No	**No**
	B	630	53	0	No	





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Intersection: Hathaway Avenue/Costco RIRO Access
Scenario: 2020 + Project

Analysis Traffic Volumes

Hour		Major Street		Minor Street	
Begin	End	NB	SB	EB	WB
7:35 AM	8:35 AM	846	685	0	47
2nd	Highest Hour	800	648	0	47
3rd	Highest Hour	789	639	0	46
4th	Highest Hour	755	612	0	46
5th	Highest Hour	744	603	0	46
6th	Highest Hour	744	603	0	46
7th	Highest Hour	710	575	0	45
8th	Highest Hour	699	566	0	45
9th	Highest Hour	113	91	0	45
10th	Highest Hour	631	511	0	45
11th	Highest Hour	609	493	0	44
12th	Highest Hour	597	484	0	44
13th	Highest Hour	575	466	0	44
14th	Highest Hour	496	402	0	41
15th	Highest Hour	395	320	0	8
16th	Highest Hour	372	301	0	4
17th	Highest Hour	259	210	0	0
18th	Highest Hour	214	174	0	0
19th	Highest Hour	113	91	0	0
20th	Highest Hour	79	64	0	0
21st	Highest Hour	68	55	0	0
22nd	Highest Hour	45	37	0	0
23rd	Highest Hour	23	18	0	0
24th	Highest Hour	23	18	0	0

Warrant Summary

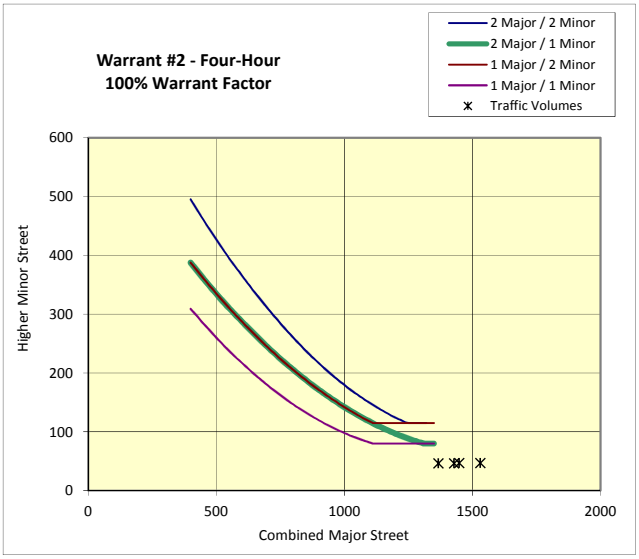
Warrant	Name	Analyzed?	Met?
#1	Eight-Hour Vehicular Volume	Yes	No
#2	Four-Hour Vehicular volume	Yes	No
#3	Peak Hour	Yes	No
#4	Pedestrian Volume	No	-
#5	School Crossing	No	-
#6	Coordinated Signal System	No	-
#7	Crash Experience	No	-
#8	Roadway Network	No	-

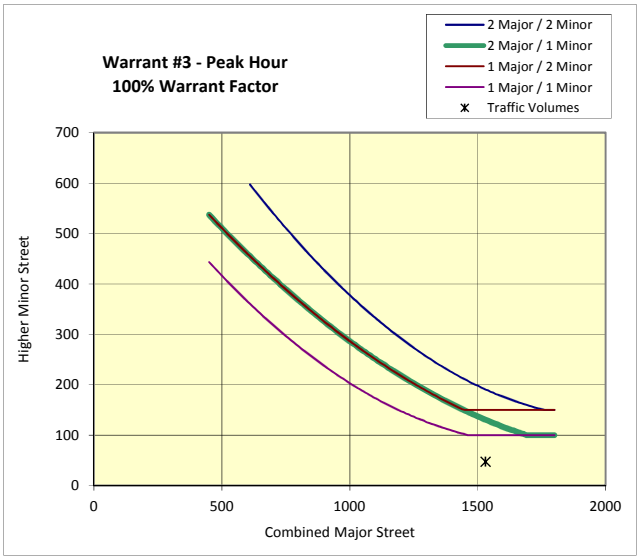
Input Parameters

Volume Adjustment Factor =	1.0
North-South Approach =	Major
East-West Approach =	Minor
Major Street Thru Lanes =	2
Minor Street Thru Lanes =	1
Speed > 40 mph?	No
Population < 10,000?	No
Warrant Factor	100%
Peak Hour or Daily Count?	Peak Hour
Major Street: 4th-Highest Hour / Peak Hour	89%
Major Street: 8th-Highest Hour / Peak Hour	83%
Minor Street: 4th-Highest Hour / Peak Hour	98%
Minor Street: 8th-Highest Hour / Peak Hour	97%

Warrant #1 - Eight Hour

Warrant Factor	Condition	Major Street Requirement	Minor Street Requirement	Hours That Condition Is Met	Condition for Warrant Factor Met?	Signal Warrant Met?
100%	A	600	150	0	No	**No**
	B	900	75	0	No	
80%	A	480	120	0	No	**No**
	B	720	60	0	No	
70%	A	420	105	0	No	**No**
	B	630	53	0	No	





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Intersection: Hathaway Avenue/Costco RIRO Access
Scenario: 2035

Analysis Traffic Volumes

Hour		Major Street		Minor Street	
Begin	End	NB	SB	EB	WB
7:35 AM	8:35 AM	850	625	0	22
2nd	Highest Hour	805	592	0	22
3rd	Highest Hour	793	583	0	22
4th	Highest Hour	759	558	0	22
5th	Highest Hour	748	550	0	22
6th	Highest Hour	748	550	0	21
7th	Highest Hour	714	525	0	21
8th	Highest Hour	703	517	0	21
9th	Highest Hour	113	83	0	21
10th	Highest Hour	635	467	0	21
11th	Highest Hour	612	450	0	21
12th	Highest Hour	601	442	0	21
13th	Highest Hour	578	425	0	20
14th	Highest Hour	499	367	0	19
15th	Highest Hour	397	292	0	4
16th	Highest Hour	374	275	0	2
17th	Highest Hour	261	192	0	0
18th	Highest Hour	215	158	0	0
19th	Highest Hour	113	83	0	0
20th	Highest Hour	79	58	0	0
21st	Highest Hour	68	50	0	0
22nd	Highest Hour	45	33	0	0
23rd	Highest Hour	23	17	0	0
24th	Highest Hour	23	17	0	0

Warrant Summary

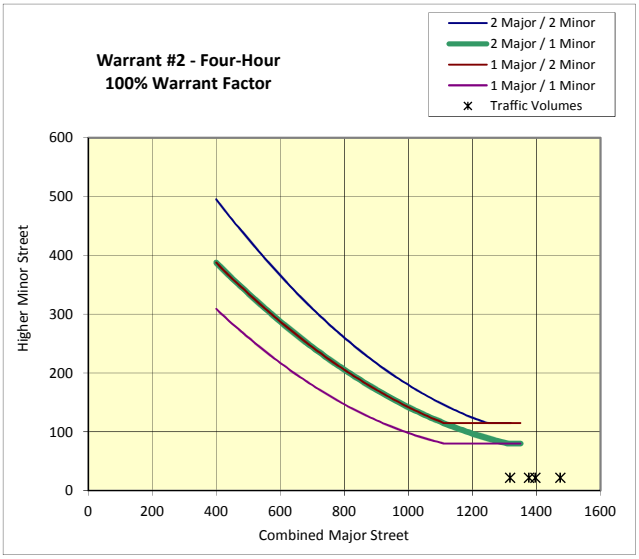
Warrant	Name	Analyzed?	Met?
#1	Eight-Hour Vehicular Volume	Yes	No
#2	Four-Hour Vehicular volume	Yes	No
#3	Peak Hour	Yes	No
#4	Pedestrian Volume	No	-
#5	School Crossing	No	-
#6	Coordinated Signal System	No	-
#7	Crash Experience	No	-
#8	Roadway Network	No	-

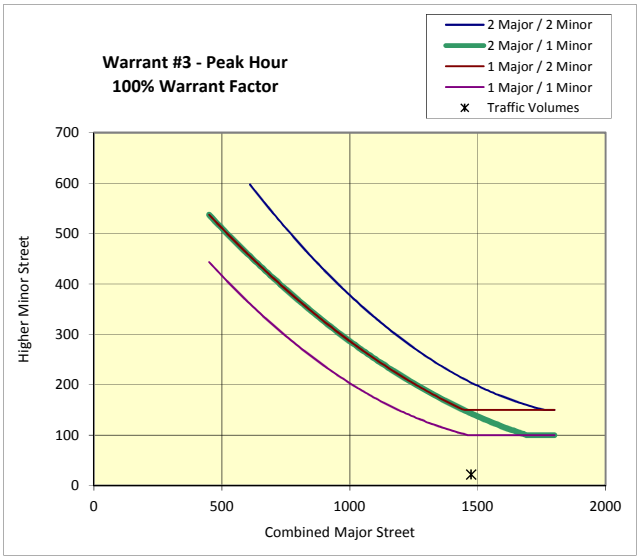
Input Parameters

Volume Adjustment Factor =	1.0
North-South Approach =	Major
East-West Approach =	Minor
Major Street Thru Lanes =	2
Minor Street Thru Lanes =	1
Speed > 40 mph?	No
Population < 10,000?	No
Warrant Factor	100%
Peak Hour or Daily Count?	Peak Hour
Major Street: 4th-Highest Hour / Peak Hour	89%
Major Street: 8th-Highest Hour / Peak Hour	83%
Minor Street: 4th-Highest Hour / Peak Hour	98%
Minor Street: 8th-Highest Hour / Peak Hour	97%

Warrant #1 - Eight Hour

Warrant Factor	Condition	Major Street Requirement	Minor Street Requirement	Hours That Condition Is Met	Condition for Warrant Factor Met?	Signal Warrant Met?
100%	A	600	150	0	No	**No**
	B	900	75	0	No	
80%	A	480	120	0	No	**No**
	B	720	60	0	No	
70%	A	420	105	0	No	**No**
	B	630	53	0	No	





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Intersection: Hathaway Avenue/Costco RIRO Access
Scenario: 2035 + Project

Analysis Traffic Volumes

Hour		Major Street		Minor Street	
Begin	End	NB	SB	EB	WB
7:35 AM	8:35 AM	878	707	0	47
2nd	Highest Hour	831	669	0	47
3rd	Highest Hour	819	660	0	46
4th	Highest Hour	784	632	0	46
5th	Highest Hour	772	622	0	46
6th	Highest Hour	772	622	0	46
7th	Highest Hour	737	594	0	45
8th	Highest Hour	725	584	0	45
9th	Highest Hour	117	94	0	45
10th	Highest Hour	655	528	0	45
11th	Highest Hour	632	509	0	44
12th	Highest Hour	620	500	0	44
13th	Highest Hour	597	481	0	44
14th	Highest Hour	515	415	0	41
15th	Highest Hour	410	330	0	8
16th	Highest Hour	386	311	0	4
17th	Highest Hour	269	217	0	0
18th	Highest Hour	222	179	0	0
19th	Highest Hour	117	94	0	0
20th	Highest Hour	82	66	0	0
21st	Highest Hour	70	57	0	0
22nd	Highest Hour	47	38	0	0
23rd	Highest Hour	23	19	0	0
24th	Highest Hour	23	19	0	0

Warrant Summary

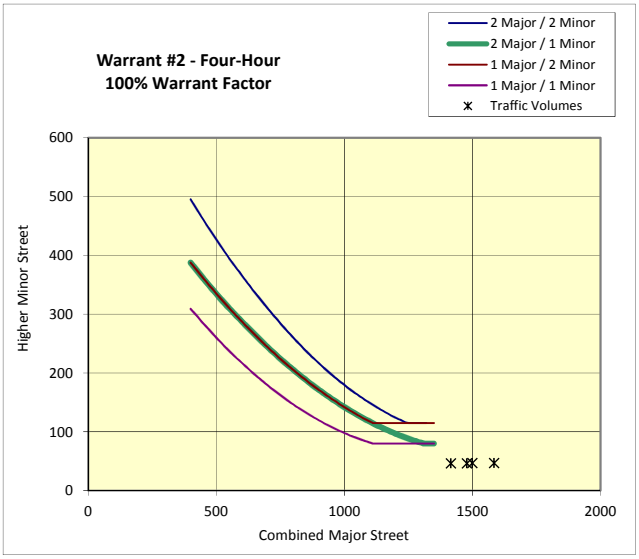
Warrant	Name	Analyzed?	Met?
#1	Eight-Hour Vehicular Volume	Yes	No
#2	Four-Hour Vehicular volume	Yes	No
#3	Peak Hour	Yes	No
#4	Pedestrian Volume	No	-
#5	School Crossing	No	-
#6	Coordinated Signal System	No	-
#7	Crash Experience	No	-
#8	Roadway Network	No	-

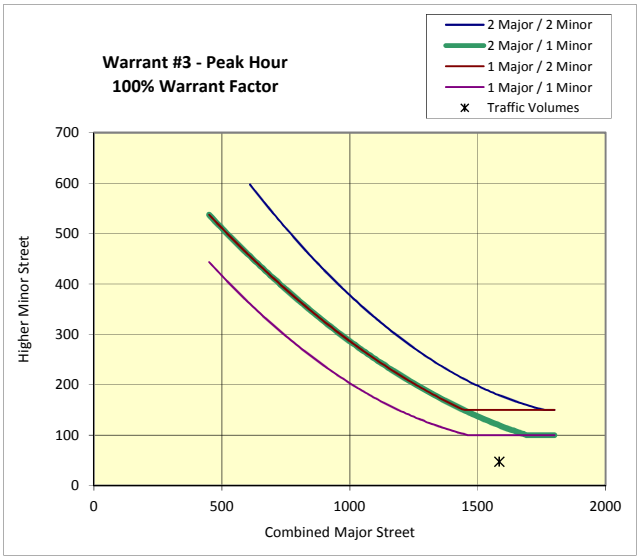
Input Parameters

Volume Adjustment Factor =	1.0
North-South Approach =	Major
East-West Approach =	Minor
Major Street Thru Lanes =	2
Minor Street Thru Lanes =	1
Speed > 40 mph?	No
Population < 10,000?	No
Warrant Factor	100%
Peak Hour or Daily Count?	Peak Hour
Major Street: 4th-Highest Hour / Peak Hour	89%
Major Street: 8th-Highest Hour / Peak Hour	83%
Minor Street: 4th-Highest Hour / Peak Hour	98%
Minor Street: 8th-Highest Hour / Peak Hour	97%

Warrant #1 - Eight Hour

Warrant Factor	Condition	Major Street Requirement	Minor Street Requirement	Hours That Condition Is Met	Condition for Warrant Factor Met?	Signal Warrant Met?
100%	A	600	150	0	No	**No**
	B	900	75	0	No	
80%	A	480	120	0	No	**No**
	B	720	60	0	No	
70%	A	420	105	0	No	**No**
	B	630	53	0	No	





Appendix D Existing Conditions Operations Worksheets

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	70	13	371	15	29	607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.97		0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00		1.00	0.97	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	0.99	1.00
Frt	0.98		1.00	0.85	1.00	1.00
Flt Protected	0.96		1.00	1.00	0.95	1.00
Satd. Flow (prot)	2885		3374	1568	1575	1881
Flt Permitted	0.96		1.00	1.00	0.52	1.00
Satd. Flow (perm)	2885		3374	1568	868	1881
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	73	14	386	16	30	632
RTOR Reduction (vph)	12	0	0	5	0	0
Lane Group Flow (vph)	75	0	386	11	30	632
Confl. Peds. (#/hr)		3		8	8	
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	20%	15%	7%	0%	14%	1%
Turn Type	Prot		NA	Perm	Perm	NA
Protected Phases	4		6			2
Permitted Phases				6	2	
Actuated Green, G (s)	4.9		29.1	29.1	29.1	29.1
Effective Green, g (s)	4.9		29.1	29.1	29.1	29.1
Actuated g/C Ratio	0.12		0.69	0.69	0.69	0.69
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	2.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	336		2337	1086	601	1303
v/s Ratio Prot	c0.03		0.11			c0.34
v/s Ratio Perm				0.01	0.03	
v/c Ratio	0.22		0.17	0.01	0.05	0.49
Uniform Delay, d1	16.8		2.2	2.0	2.1	3.0
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1		0.0	0.0	0.0	0.3
Delay (s)	16.9		2.3	2.0	2.1	3.3
Level of Service	B		A	A	A	A
Approach Delay (s)	16.9		2.3			3.2
Approach LOS	B		A			A

Intersection Summary			
HCM 2000 Control Delay	3.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	42.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	4	382	80	0	677
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	0	4	394	82	0	698
Pedestrians	7		1			1
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	1		0			0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			293			189
pX, platoon unblocked						
vC, conflicting volume	751	205			483	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	751	205			483	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			100	
cM capacity (veh/h)	348	802			1083	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	4	197	197	82	349	349
Volume Left	0	0	0	0	0	0
Volume Right	4	0	0	82	0	0
cSH	802	1700	1700	1700	1700	1700
Volume to Capacity	0.01	0.12	0.12	0.05	0.21	0.21
Queue Length 95th (ft)	0	0	0	0	0	0
Control Delay (s)	9.5	0.0	0.0	0.0	0.0	0.0
Lane LOS	A					
Approach Delay (s)	9.5	0.0			0.0	
Approach LOS	A					

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	29.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	68	219	638	234	3	485	850	104	105	139	260	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%				-2%			0%		
Total Lost time (s)		4.0	5.0	5.0		4.0	5.0	5.0	4.5	5.0		4.5
Lane Util. Factor		1.00	0.95	1.00		0.97	0.91	1.00	1.00	0.95		1.00
Frpb, ped/bikes		1.00	1.00	0.95		1.00	1.00	0.98	1.00	0.99		1.00
Flpb, ped/bikes		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Frt		1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.90		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (prot)		1658	3471	1531		3502	5086	1582	1805	3115		1752
Flt Permitted		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (perm)		1658	3471	1531		3502	5086	1582	1805	3115		1752
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	74	238	693	254	3	527	924	113	114	151	283	96
RTOR Reduction (vph)	0	0	0	177	0	0	0	61	0	216	0	0
Lane Group Flow (vph)	0	312	693	77	0	530	924	52	114	218	0	96
Confl. Peds. (#/hr)		6		28		28		6	5		4	4
Confl. Bikes (#/hr)												
Heavy Vehicles (%)	2%	11%	4%	0%	2%	1%	3%	1%	0%	6%	2%	3%
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Perm	Prot	NA		Prot
Protected Phases	5	5	2		1	1	6		3	8		7
Permitted Phases				2				6				
Actuated Green, G (s)		25.5	33.6	33.6		21.1	29.2	29.2	12.7	26.5		11.8
Effective Green, g (s)		25.5	33.6	33.6		21.1	29.2	29.2	12.7	26.5		11.8
Actuated g/C Ratio		0.23	0.30	0.30		0.19	0.26	0.26	0.11	0.24		0.11
Clearance Time (s)		4.0	5.0	5.0		4.0	5.0	5.0	4.5	5.0		4.5
Vehicle Extension (s)		2.0	4.0	4.0		2.0	4.0	4.0	3.0	3.0		3.0
Lane Grp Cap (vph)		379	1045	461		662	1331	414	205	740		185
v/s Ratio Prot		c0.19	c0.20			0.15	0.18		c0.06	0.07		0.05
v/s Ratio Perm				0.05				0.03				
v/c Ratio		0.82	0.66	0.17		0.80	0.69	0.12	0.56	0.29		0.52
Uniform Delay, d1		40.9	34.0	28.6		43.2	37.1	31.4	46.7	34.8		47.2
Progression Factor		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2		12.9	1.8	0.2		6.5	1.7	0.2	3.2	0.2		2.4
Delay (s)		53.7	35.8	28.9		49.7	38.8	31.6	50.0	35.1		49.6
Level of Service		D	D	C		D	D	C	D	D		D
Approach Delay (s)			38.8				42.0			38.2		
Approach LOS			D				D			D		

Intersection Summary			
HCM 2000 Control Delay	40.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	111.5	Sum of lost time (s)	18.5
Intersection Capacity Utilization	72.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBT	SBR
Lane Configurations		
Volume (vph)	311	278
Ideal Flow (vphpl)	1900	1900
Grade (%)	0%	
Total Lost time (s)	5.0	5.0
Lane Util. Factor	1.00	1.00
Frpb, ped/bikes	1.00	0.98
Flpb, ped/bikes	1.00	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	1881	1509
Flt Permitted	1.00	1.00
Satd. Flow (perm)	1881	1509
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	338	302
RTOR Reduction (vph)	0	233
Lane Group Flow (vph)	338	69
Confl. Peds. (#/hr)		5
Confl. Bikes (#/hr)		1
Heavy Vehicles (%)	1%	5%
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Actuated Green, G (s)	25.6	25.6
Effective Green, g (s)	25.6	25.6
Actuated g/C Ratio	0.23	0.23
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	431	346
v/s Ratio Prot	c0.18	
v/s Ratio Perm		0.05
v/c Ratio	0.78	0.20
Uniform Delay, d1	40.4	34.7
Progression Factor	1.00	1.00
Incremental Delay, d2	9.1	0.3
Delay (s)	49.4	35.0
Level of Service	D	C
Approach Delay (s)	43.5	
Approach LOS	D	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	228	889	0	0	1012	284	291	1	327	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			-2%			0%	
Total Lost time (s)	3.5	4.6			4.2	4.2	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.96	1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	1626	3471			3505	1486	1649	1644	1517			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	1626	3471			3505	1486	1649	1644	1517			
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	238	926	0	0	1054	296	303	1	341	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	175	0	0	252	0	0	0
Lane Group Flow (vph)	238	926	0	0	1054	121	151	153	89	0	0	0
Confl. Peds. (#/hr)	11		13	13		11			2	2		
Confl. Bikes (#/hr)			1			5						
Heavy Vehicles (%)	11%	4%	0%	0%	3%	4%	5%	100%	6%	0%	0%	0%
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	7			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	13.6	45.4			28.7	28.7	16.0	16.0	16.0			
Effective Green, g (s)	13.6	45.4			28.7	28.7	16.0	16.0	16.0			
Actuated g/C Ratio	0.19	0.65			0.41	0.41	0.23	0.23	0.23			
Clearance Time (s)	3.5	4.6			4.2	4.2	4.0	4.0	4.0			
Vehicle Extension (s)	2.0	2.9			3.9	3.9	2.0	2.0	2.0			
Lane Grp Cap (vph)	315	2251			1437	609	376	375	346			
v/s Ratio Prot	c0.15	c0.27			c0.30		0.09	c0.09				
v/s Ratio Perm						0.08			0.06			
v/c Ratio	0.76	0.41			0.73	0.20	0.40	0.41	0.26			
Uniform Delay, d1	26.6	5.9			17.4	13.3	22.9	23.0	22.1			
Progression Factor	1.24	0.91			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	7.0	0.1			3.4	0.7	0.3	0.3	0.1			
Delay (s)	40.1	5.4			20.8	14.0	23.2	23.2	22.3			
Level of Service	D	A			C	B	C	C	C			
Approach Delay (s)		12.5			19.3			22.7			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay	17.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	801	335	335	968	0	0	0	0	316	60	640
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-2%	
Total Lost time (s)		4.6	4.6	3.5	4.2					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.95					0.95	0.95	1.00
Frpb, ped/bikes		1.00	0.94	1.00	1.00					1.00	1.00	0.99
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		3438	1480	1719	3505					1649	1694	1530
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (perm)		3438	1480	1719	3505					1649	1694	1530
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	843	353	353	1019	0	0	0	0	333	63	674
RTOR Reduction (vph)	0	0	222	0	0	0	0	0	0	0	0	332
Lane Group Flow (vph)	0	843	131	353	1019	0	0	0	0	196	200	342
Confl. Peds. (#/hr)	5		18	18		5	3					3
Confl. Bikes (#/hr)			4									
Heavy Vehicles (%)	0%	5%	3%	5%	3%	0%	0%	0%	0%	5%	2%	5%
Turn Type		NA	Perm	Prot	NA					Split	NA	Perm
Protected Phases		2		1	3					4	4	
Permitted Phases			2									4
Actuated Green, G (s)		26.0	26.0	15.9	45.8					16.0	16.0	16.0
Effective Green, g (s)		26.0	26.0	15.9	45.8					16.0	16.0	16.0
Actuated g/C Ratio		0.37	0.37	0.23	0.65					0.23	0.23	0.23
Clearance Time (s)		4.6	4.6	3.5	4.2					4.0	4.0	4.0
Vehicle Extension (s)		3.9	3.9	2.0	2.9					2.0	2.0	2.0
Lane Grp Cap (vph)		1276	549	390	2293					376	387	349
v/s Ratio Prot		c0.25		c0.21	c0.29					0.12	0.12	
v/s Ratio Perm			0.09									c0.22
v/c Ratio		0.66	0.24	0.91	0.44					0.52	0.52	0.98
Uniform Delay, d1		18.3	15.2	26.3	5.9					23.6	23.6	26.8
Progression Factor		1.00	1.00	1.37	0.98					1.00	1.00	1.00
Incremental Delay, d2		2.7	1.0	18.8	0.1					0.6	0.5	42.7
Delay (s)		21.0	16.2	54.8	5.9					24.2	24.1	69.6
Level of Service		C	B	D	A					C	C	E
Approach Delay (s)		19.6			18.5			0.0			52.8	
Approach LOS		B			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	28.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	138	39	748	6	30	456
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.97		0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00		1.00	0.98	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.97		1.00	0.85	1.00	1.00
Flt Protected	0.96		1.00	1.00	0.95	1.00
Satd. Flow (prot)	3291		3505	1050	1595	1863
Flt Permitted	0.96		1.00	1.00	0.34	1.00
Satd. Flow (perm)	3291		3505	1050	577	1863
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	147	41	796	6	32	485
RTOR Reduction (vph)	33	0	0	2	0	0
Lane Group Flow (vph)	155	0	796	4	32	485
Confl. Peds. (#/hr)		2		5	5	
Heavy Vehicles (%)	4%	3%	3%	50%	13%	2%
Turn Type	Prot		NA	Perm	Perm	NA
Protected Phases	4		6			2
Permitted Phases				6	2	
Actuated Green, G (s)	6.6		20.9	20.9	20.9	20.9
Effective Green, g (s)	6.6		20.9	20.9	20.9	20.9
Actuated g/C Ratio	0.19		0.59	0.59	0.59	0.59
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	2.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	611		2063	618	339	1096
v/s Ratio Prot	c0.05		0.23			c0.26
v/s Ratio Perm				0.00	0.06	
v/c Ratio	0.25		0.39	0.01	0.09	0.44
Uniform Delay, d1	12.3		3.9	3.0	3.2	4.1
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1		0.1	0.0	0.1	0.3
Delay (s)	12.4		4.0	3.0	3.3	4.3
Level of Service	B		A	A	A	A
Approach Delay (s)	12.4		4.0			4.3
Approach LOS	B		A			A

Intersection Summary			
HCM 2000 Control Delay	5.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	35.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	37.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	22	732	148	0	594
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	23	771	156	0	625
Pedestrians	6		1			1
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	1		0			0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			293			189
pX, platoon unblocked						
vC, conflicting volume	1090	392			932	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1090	392			932	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	211	608			738	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	23	385	385	156	313	313
Volume Left	0	0	0	0	0	0
Volume Right	23	0	0	156	0	0
cSH	608	1700	1700	1700	1700	1700
Volume to Capacity	0.04	0.23	0.23	0.09	0.18	0.18
Queue Length 95th (ft)	3	0	0	0	0	0
Control Delay (s)	11.2	0.0	0.0	0.0	0.0	0.0
Lane LOS	B					
Approach Delay (s)	11.2	0.0			0.0	
Approach LOS	B					

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	30.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	58	320	816	293	3	208	787	110	213	450	312	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%				-2%			0%		
Total Lost time (s)		4.0	5.0	5.0		4.0	5.0	5.0	4.5	5.0		4.5
Lane Util. Factor		1.00	0.95	1.00		0.97	0.91	1.00	1.00	0.95		1.00
Frpb, ped/bikes		1.00	1.00	1.00		1.00	1.00	0.99	1.00	0.99		1.00
Flpb, ped/bikes		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Frt		1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.94		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (prot)		1686	3539	1599		3467	5136	1575	1805	3298		1787
Flt Permitted		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (perm)		1686	3539	1599		3467	5136	1575	1805	3298		1787
Peak-hour factor, PHF	0.92	0.96	0.96	0.96	0.92	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	63	333	850	305	3	217	820	115	222	469	325	127
RTOR Reduction (vph)	0	0	0	181	0	0	0	64	0	85	0	0
Lane Group Flow (vph)	0	396	850	124	0	220	820	51	222	709	0	127
Confl. Peds. (#/hr)		2						2	5		1	1
Heavy Vehicles (%)	2%	8%	2%	1%	2%	2%	2%	2%	0%	3%	1%	1%
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Perm	Prot	NA		Prot
Protected Phases	5	5	2		1	1	6		3	8		7
Permitted Phases				2				6				
Actuated Green, G (s)		25.2	39.2	39.2		11.7	25.7	25.7	18.6	30.4		13.5
Effective Green, g (s)		25.2	39.2	39.2		11.7	25.7	25.7	18.6	30.4		13.5
Actuated g/C Ratio		0.22	0.35	0.35		0.10	0.23	0.23	0.16	0.27		0.12
Clearance Time (s)		4.0	5.0	5.0		4.0	5.0	5.0	4.5	5.0		4.5
Vehicle Extension (s)		2.0	4.0	4.0		2.0	4.0	4.0	3.0	3.0		3.0
Lane Grp Cap (vph)		374	1224	553		358	1165	357	296	884		212
v/s Ratio Prot		c0.23	c0.24			0.06	0.16		c0.12	c0.22		0.07
v/s Ratio Perm				0.08				0.03				
v/c Ratio		1.06	0.69	0.23		0.61	0.70	0.14	0.75	0.80		0.60
Uniform Delay, d1		44.0	31.9	26.3		48.6	40.3	35.0	45.1	38.6		47.3
Progression Factor		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2		62.9	1.9	0.3		2.2	2.1	0.3	10.2	5.3		4.5
Delay (s)		107.0	33.8	26.6		50.8	42.4	35.2	55.3	43.9		51.8
Level of Service		F	C	C		D	D	D	E	D		D
Approach Delay (s)			51.0				43.3			46.4		
Approach LOS			D				D			D		

Intersection Summary			
HCM 2000 Control Delay	46.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	113.3	Sum of lost time (s)	18.5
Intersection Capacity Utilization	81.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Volume (vph)	208	265
Ideal Flow (vphpl)	1900	1900
Grade (%)	0%	
Total Lost time (s)	5.0	5.0
Lane Util. Factor	1.00	1.00
Frpb, ped/bikes	1.00	0.98
Flpb, ped/bikes	1.00	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	1881	1525
Flt Permitted	1.00	1.00
Satd. Flow (perm)	1881	1525
Peak-hour factor, PHF	0.96	0.96
Adj. Flow (vph)	217	276
RTOR Reduction (vph)	0	200
Lane Group Flow (vph)	217	76
Confl. Peds. (#/hr)		5
Heavy Vehicles (%)	1%	4%
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Actuated Green, G (s)	25.3	25.3
Effective Green, g (s)	25.3	25.3
Actuated g/C Ratio	0.22	0.22
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	420	340
v/s Ratio Prot	0.12	
v/s Ratio Perm		0.05
v/c Ratio	0.52	0.22
Uniform Delay, d1	38.6	36.0
Progression Factor	1.00	1.00
Incremental Delay, d2	1.1	0.3
Delay (s)	39.7	36.3
Level of Service	D	D
Approach Delay (s)	40.7	
Approach LOS	D	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	332	1150	0	0	953	328	421	2	430	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			-2%			0%	
Total Lost time (s)	3.5	4.6			4.2	4.2	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.96	1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	1752	3539			3539	1527	1732	1729	1530			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	1752	3539			3539	1527	1732	1729	1530			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	349	1211	0	0	1003	345	443	2	453	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	205	0	0	343	0	0	0
Lane Group Flow (vph)	349	1211	0	0	1003	140	221	224	110	0	0	0
Confl. Peds. (#/hr)	8		6	6		8			2	2		
Confl. Bikes (#/hr)			3			2			1			
Heavy Vehicles (%)	3%	2%	0%	0%	2%	2%	0%	50%	5%	0%	0%	0%
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	7			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	15.8	47.3			28.4	28.4	14.1	14.1	14.1			
Effective Green, g (s)	15.8	47.3			28.4	28.4	14.1	14.1	14.1			
Actuated g/C Ratio	0.23	0.68			0.41	0.41	0.20	0.20	0.20			
Clearance Time (s)	3.5	4.6			4.2	4.2	4.0	4.0	4.0			
Vehicle Extension (s)	2.0	2.9			3.9	3.9	2.0	2.0	2.0			
Lane Grp Cap (vph)	395	2391			1435	619	348	348	308			
v/s Ratio Prot	c0.20	c0.34			c0.28		0.13	c0.13				
v/s Ratio Perm						0.09			0.07			
v/c Ratio	0.88	0.51			0.70	0.23	0.64	0.64	0.36			
Uniform Delay, d1	26.2	5.6			17.3	13.6	25.6	25.6	24.0			
Progression Factor	1.20	1.05			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	15.0	0.1			2.9	0.8	2.8	3.0	0.3			
Delay (s)	46.4	6.0			20.1	14.5	28.4	28.7	24.3			
Level of Service	D	A			C	B	C	C	C			
Approach Delay (s)		15.1			18.7			26.4			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay	19.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	113.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	999	298	328	1046	0	0	0	0	483	30	463
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-2%	
Total Lost time (s)		4.6	4.6	3.5	4.2					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.91					0.95	0.95	1.00
Frpb, ped/bikes		1.00	0.96	1.00	1.00					1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		3574	1513	1770	5136					1681	1676	1526
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		3574	1513	1770	5136					1681	1676	1526
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	1030	307	338	1078	0	0	0	0	498	31	477
RTOR Reduction (vph)	0	0	183	0	0	0	0	0	0	0	0	240
Lane Group Flow (vph)	0	1030	124	338	1078	0	0	0	0	264	265	237
Confl. Peds. (#/hr)	7		11	11		7	6					6
Confl. Bikes (#/hr)			5			1						
Heavy Vehicles (%)	0%	1%	2%	2%	1%	0%	0%	0%	0%	3%	13%	5%
Turn Type		NA	Perm	Prot	NA					Split	NA	Perm
Protected Phases		2		1	3					4	4	
Permitted Phases			2									4
Actuated Green, G (s)		28.3	28.3	15.5	47.7					14.1	14.1	14.1
Effective Green, g (s)		28.3	28.3	15.5	47.7					14.1	14.1	14.1
Actuated g/C Ratio		0.40	0.40	0.22	0.68					0.20	0.20	0.20
Clearance Time (s)		4.6	4.6	3.5	4.2					4.0	4.0	4.0
Vehicle Extension (s)		3.9	3.9	2.0	2.9					2.0	2.0	2.0
Lane Grp Cap (vph)		1444	611	391	3499					338	337	307
v/s Ratio Prot		c0.29		c0.19	c0.21					0.16	c0.16	
v/s Ratio Perm			0.08									0.16
v/c Ratio		0.71	0.20	0.86	0.31					0.78	0.79	0.77
Uniform Delay, d1		17.5	13.5	26.2	4.5					26.5	26.5	26.4
Progression Factor		1.00	1.00	1.22	1.12					1.00	1.00	1.00
Incremental Delay, d2		3.0	0.7	13.4	0.0					10.3	10.6	10.5
Delay (s)		20.5	14.3	45.4	5.1					36.8	37.1	37.0
Level of Service		C	B	D	A					D	D	D
Approach Delay (s)		19.1			14.7			0.0			37.0	
Approach LOS		B			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	22.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	113.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Appendix E Existing Conditions Queue Worksheets

101: Hathaway Ave & Costco access sig

Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	87	386	16	30	632
v/c Ratio	0.16	0.15	0.01	0.04	0.43
Control Delay	13.8	3.7	2.9	4.8	6.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	13.8	3.7	2.9	4.8	6.0
Queue Length 50th (ft)	8	12	0	2	52
Queue Length 95th (ft)	23	55	7	15	239
Internal Link Dist (ft)	228	109			164
Turn Bay Length (ft)				75	
Base Capacity (vph)	1963	2664	1235	683	1485
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.04	0.14	0.01	0.04	0.43

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	312	693	254	530	924	113	114	434	96	338	302
v/c Ratio	0.83	0.66	0.40	0.80	0.70	0.24	0.56	0.46	0.52	0.79	0.52
Control Delay	62.8	39.5	6.1	54.9	40.7	13.0	60.2	14.6	60.7	55.9	8.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.8	39.5	6.1	54.9	40.7	13.0	60.2	14.6	60.7	55.9	8.0
Queue Length 50th (ft)	220	242	0	190	227	17	80	45	67	225	0
Queue Length 95th (ft)	#465	341	63	291	295	65	154	105	135	#414	78
Internal Link Dist (ft)		990			529			491		213	
Turn Bay Length (ft)	160			240		65	90		225		225
Base Capacity (vph)	378	1267	714	799	1857	629	403	1068	391	515	632
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.55	0.36	0.66	0.50	0.18	0.28	0.41	0.25	0.66	0.48

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	238	926	1054	296	151	153	341
v/c Ratio	0.75	0.41	0.73	0.38	0.40	0.41	0.57
Control Delay	44.9	5.9	22.2	3.8	26.7	26.9	7.8
Queue Delay	0.0	0.3	0.0	0.0	0.6	0.6	0.0
Total Delay	44.9	6.2	22.2	3.8	27.4	27.5	7.8
Queue Length 50th (ft)	116	81	199	0	57	58	5
Queue Length 95th (ft)	m178	118	#286	45	111	112	67
Internal Link Dist (ft)		205	990			412	
Turn Bay Length (ft)	75				215		60
Base Capacity (vph)	383	2251	1435	783	376	376	599
Starvation Cap Reductn	0	700	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	61	61	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.60	0.73	0.38	0.48	0.49	0.57

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	843	353	353	1019	196	200	674
v/c Ratio	0.66	0.46	0.91	0.44	0.52	0.52	0.99
Control Delay	21.6	4.2	59.3	6.4	29.5	29.2	44.8
Queue Delay	0.0	0.0	0.0	0.4	0.0	0.0	0.0
Total Delay	21.6	4.2	59.3	6.8	29.5	29.2	44.8
Queue Length 50th (ft)	157	0	171	75	77	80	113
Queue Length 95th (ft)	218	50	m#278	134	142	144	#341
Internal Link Dist (ft)	342			205		389	
Turn Bay Length (ft)			75		225		225
Base Capacity (vph)	1276	771	405	2293	376	387	681
Starvation Cap Reductn	0	0	0	699	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.46	0.87	0.64	0.52	0.52	0.99

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

101: Hathaway Ave & Costco access (signal)

Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	188	796	6	32	485
v/c Ratio	0.25	0.36	0.01	0.09	0.42
Control Delay	9.5	5.9	4.2	6.6	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	9.5	5.9	4.2	6.6	7.3
Queue Length 50th (ft)	9	30	0	2	36
Queue Length 95th (ft)	31	122	5	18	173
Internal Link Dist (ft)	228	109			164
Turn Bay Length (ft)				75	
Base Capacity (vph)	2503	3107	928	511	1651
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.08	0.26	0.01	0.06	0.29

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	396	850	305	220	820	115	222	794	127	217	276
v/c Ratio	1.06	0.70	0.42	0.61	0.70	0.27	0.75	0.82	0.60	0.52	0.51
Control Delay	106.4	36.6	6.9	57.5	44.2	14.6	62.4	42.2	60.6	45.7	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	106.4	36.6	6.9	57.5	44.2	14.6	62.4	42.2	60.6	45.7	10.1
Queue Length 50th (ft)	~315	275	14	79	201	18	154	246	88	140	10
Queue Length 95th (ft)	#612	411	86	132	271	70	265	#386	165	247	92
Internal Link Dist (ft)		990			529			491		213	
Turn Bay Length (ft)	160			240		65	90		225		225
Base Capacity (vph)	374	1272	751	770	1826	613	393	978	389	501	595
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.06	0.67	0.41	0.29	0.45	0.19	0.56	0.81	0.33	0.43	0.46

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	349	1211	1003	345	221	224	453
v/c Ratio	0.88	0.51	0.70	0.42	0.63	0.64	0.70
Control Delay	51.1	7.0	21.4	3.8	33.9	34.3	9.8
Queue Delay	0.2	0.6	0.0	0.0	0.5	0.5	0.0
Total Delay	51.3	7.6	21.4	3.8	34.3	34.8	9.8
Queue Length 50th (ft)	169	120	195	0	88	90	8
Queue Length 95th (ft)	m#281	186	266	48	156	160	86
Internal Link Dist (ft)		205	990			412	
Turn Bay Length (ft)	75				215		60
Base Capacity (vph)	414	2390	1432	823	395	395	681
Starvation Cap Reductn	2	715	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	28	28	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.85	0.72	0.70	0.42	0.60	0.61	0.67

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	1030	307	338	1078	264	265	477
v/c Ratio	0.71	0.39	0.86	0.31	0.78	0.78	0.87
Control Delay	22.0	3.8	50.2	5.6	43.1	43.6	28.6
Queue Delay	0.0	0.0	0.4	0.2	2.0	2.1	0.0
Total Delay	22.0	3.8	50.5	5.8	45.1	45.7	28.6
Queue Length 50th (ft)	204	0	164	68	109	110	68
Queue Length 95th (ft)	277	47	m#272	111	#210	#211	#231
Internal Link Dist (ft)	342			205		389	
Turn Bay Length (ft)			75		225		225
Base Capacity (vph)	1443	793	417	3498	384	383	580
Starvation Cap Reductn	0	0	5	1402	0	0	0
Spillback Cap Reductn	0	0	0	0	41	41	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.39	0.82	0.51	0.77	0.77	0.82

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Appendix F 95th Percentile Queue Table

Appendix F. 95th Percentile Queues

					Weekday AM Peak Hour						Weekday PM Peak Hour					
			Storage	Distance to adj int	Existing	Existing + Project	2022 Background	2022 + Project	2035 Background	2035 + Project	Existing	Existing + Project	2022 Background	2022 + Project	2035 Background	2035 + Project
1	Hathaway Avenue & Costco Access (Signal)	WBL/R	200	NA	23	42	23	45	23	45	31	52	32	53	34	56
		NBT	130	130	55	54	56	55	58	57	122	120	124	122	130	128
		NBR	130	130	7	9	7	9	7	9	5	7	5	7	4	7
		SBL	75	>700	15	32	15	34	15	34	18	44	18	44	18	44
		SBT	>700	>700	239	226	245	229	260	243	173	157	177	161	187	170
2	Hathaway Avenue & Costco Access (RIRO)	WBR	200	NA	0	3	0	3	0	3	3	6	3	6	3	6
		NBR	120	200	0	0	0	0	0	0	0	0	0	0	0	0
3	Hathaway Avenue & W A Street	EBL	160	590	465	544	499	596	517	615	612	714	638	732	695	787
		EBT	590	590	341	341	368	368	384	384	411	419	502	508	878	878
		EBR	590	590	63	63	68	68	75	75	86	89	131	133	254	254
		WBL	240	>700	291	291	365	365	481	481	132	134	147	148	184	184
		WBT	>700	>700	295	295	369	369	569	569	271	275	293	296	352	352
		WBR	65	>700	65	82	69	90	72	93	70	90	72	91	75	95
		NBL	90	310	154	154	224	224	519	519	265	269	318	321	469	469
		NBT/R	250	310	105	120	106	123	117	141	386	433	443	481	565	608
		SBL	220	340	135	154	141	163	145	167	165	187	170	192	180	202
		SBT	340	340	414	451	452	496	480	522	247	268	254	277	272	296
		SBR	220	340	78	124	138	197	214	278	92	143	109	162	147	203
4	I-880 NB Ramps & W A Street	EBL	75	190	178	174	184	181	223	219	281	267	263	250	217	206
		EBT	190	190	118	124	124	131	138	146	186	190	192	196	197	197
		WBT	300	300	286	310	380	397	552	571	266	279	284	305	373	391
		WBR	300	300	45	46	48	49	55	55	48	49	49	50	49	50
		NBL	215	>700	111	111	112	112	116	116	156	156	166	166	193	193
		NBT	>700	>700	112	112	114	114	117	117	160	160	167	167	205	205
		NBR	60	>700	67	70	69	71	70	72	86	87	114	121	189	193
5	I-880 SB Ramps & W A Street	EBT	85	85	218	224	226	232	246	253	277	284	335	345	430	440
		EBR	85	85	50	50	51	51	73	75	47	47	47	47	49	49
		WBL	75	190	278	248	259	237	223	229	272	280	266	274	255	261
		WBT	190	190	134	132	141	129	130	129	111	113	117	118	131	128
		SBL	235	>700	142	145	146	150	155	161	210	215	214	220	226	231
		SBT	>700	>700	144	146	147	150	157	160	211	218	215	221	228	234
		SBR	210	>700	341	341	362	362	411	411	231	231	238	238	256	256

95th percentile queue exceeds storage

Appendix G Trip Generation and Parking Memo

KITTELSON & ASSOCIATES
610 SW ALDER STREET, SUITE 700
PORTLAND, OR 97205
P 503.228.5230 F 503.273.8169

MEMORANDUM

Date: October 18, 2017 Project #: 19451

To: Marcus Martinez and Steven Chang, City of Hayward
Cc: David Rogers, Costco Wholesale
Julie Anderson, Barghausen Consulting Engineers

From: Julia Kuhn and Kelly Laustsen
Project: Hayward Costco Business Center Fuel Station Addition
Subject: Transportation Assessment

Kittelson & Associates, Inc. (KAI) has prepared a transportation assessment for the proposed addition of a fuel station to the Costco Business Center located on Hathaway Avenue. To assist with the City's review of the proposed fuel station, this memo provides the estimated trip generation, a queuing assessment, a review of parking utilization on site, and responds to other comments provided by the City during the pre-application meeting on June 7, 2017.

BACKGROUND INFORMATION ON COSTCO BUSINESS CENTER CHARACTERISTICS

Although no changes are proposed to the existing Business Center operations, we have provided information about the operational characteristics to assist in the city's review and understanding of how these Centers differ from other large-format retailers and from traditional Costco Warehouses. Some of the operational characteristics of a Business Center that influence the trip generation and parking demand are described below.

- The Costco Business Center is a members-only distributor for small to medium-size businesses. Member businesses can either visit the Costco Business Center and purchase products, or can place orders on-line or via phone to be delivered to their place of business in lieu of having to travel to the Costco Business Center. Typical Business Center members include doctor offices, law offices, real estate offices, convenience store operators, restaurants, coffee cart operators, and janitorial service providers.
- From a transportation perspective, the Business Center differs from a traditional Costco Warehouse primarily in regards to the delivery service. On average, 45 to 50 percent of the sales at a Costco Business Center are ordered and delivered to the customer's site. This eliminates many of the trips that would otherwise be made to the Business Center (i.e., only delivery trucks travel to/from the Business Center rather than individual member trips). This reduces both parking needs as well as transportation impacts.

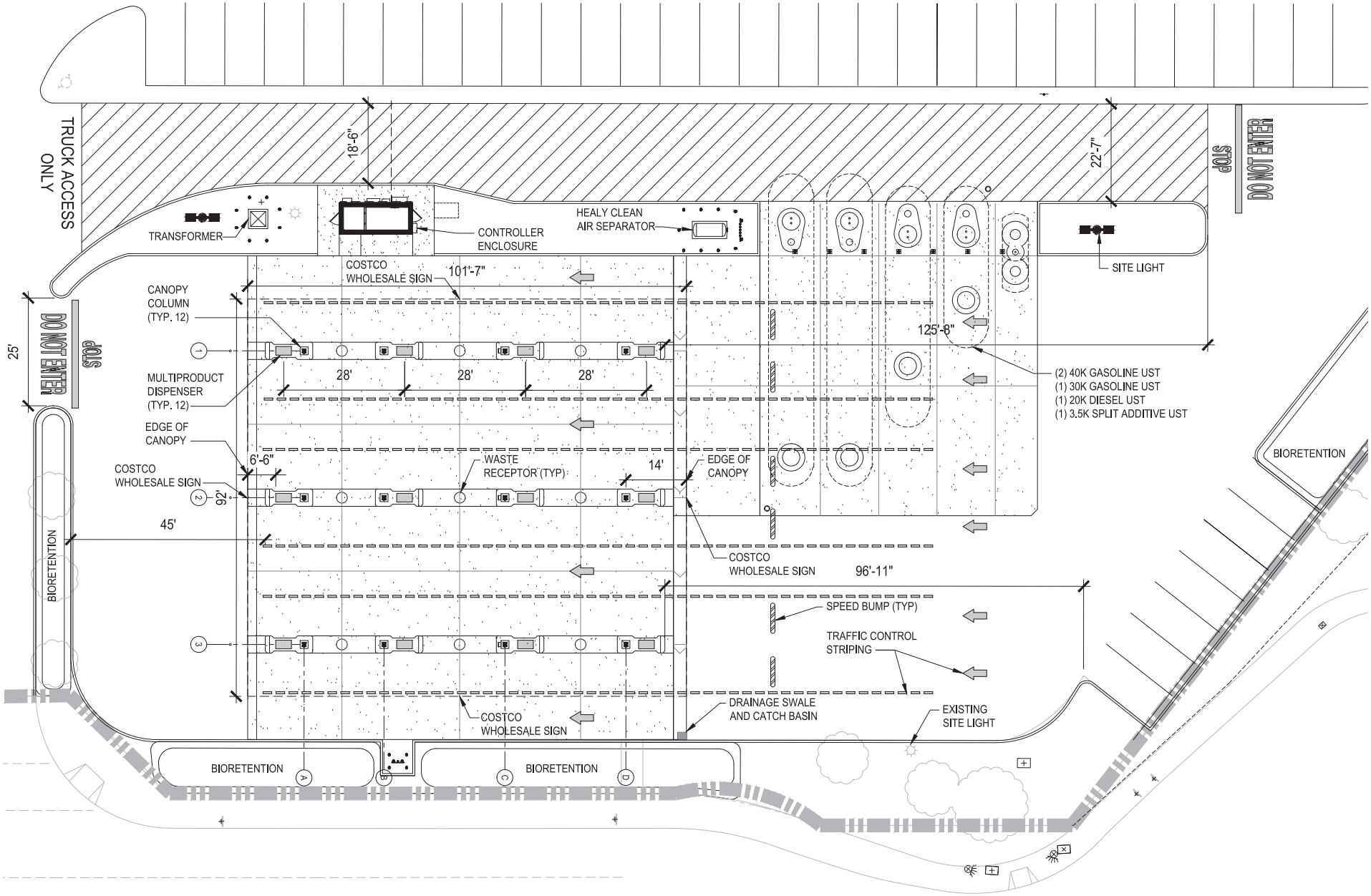
- Typical operating hours for a Costco Business Center differ from those of traditional Costco warehouses and other large-scale retailers to cater to member needs:
  - Monday to Friday: 7:00 AM (or 8:00 AM) to 6:00 PM
  - Saturday: 7:00 AM to 4:00 PM
  - Sunday: Closed
- Members can order via phone or on-line Monday – Friday from 8 AM to 3 PM, with deliveries occurring from Monday – Friday from 8 AM to 5 PM. No deliveries are made to members on the weekends.
- When a Costco fuel station is co-located with a Business Center, members can purchase fuel during the following hours:
  - Monday to Friday: 5:00 AM to 10:00 PM
  - Saturday: 5:00 AM to 8:00 PM
  - Sunday: Closed
- The type of goods provided at Costco Business Centers is tailored towards corporate and small business center needs as opposed to typical retail customers or general Costco Warehouse members. As such, Costco Business Centers focus on providing large quantity packaging of business goods and food services for small companies and restaurants. A large portion of the merchandise stocked at the Business Centers is office paper, business computers and electronics, office furniture, and restaurant supplies.

The combined effect of all of these operational characteristics is that Costco Business Centers exhibit significantly lower trip generation and parking demand than is found at traditional Costco Warehouses.

PROPOSED FUEL STATION ADDITION

Costco Wholesale proposes to add a Fuel Station with 24 positions to the Hayward Business Center Site. The fuel station will be located on the southeast portion of the site, adjacent to Hathaway Avenue. Access to the existing Business Center occurs via a signalized full access driveway on Hathaway Avenue, west of the proposed fuel station location, and a right-in/right-out access south of the proposed fuel station. The conceptual site plan is provided in Figure 1. Further, as shown in Exhibit 1, space for approximately 32 vehicles to queue while waiting to fuel is proposed.

Today, 477 parking spaces are supplied on-site, including 44 truck stalls. This equates to a parking ratio of 3.84 spaces per 1,000 square feet (i.e., 477 parking spaces/124,287 square feet Business Center). With the fuel station addition, 67 spaces will be removed resulting in a supply of 410 spaces (i.e., 3.30 spaces per 1,000 square feet). Although neither the existing nor the proposed parking supply meet City of Hayward Municipal Code standard of 4 spaces per 1,000 square feet, both the existing and proposed supply meet the operational needs of the site as well as the parking ratio measured at other Costco Business Centers.



COSTCO WHOLESALE

HAYWARD, CA
#823

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94-0360-20
OCTOBER 16, 2017
PRELIMINARY SITE PLAN

P11-25A

COSTCO WHOLESALE

HAYWARD, CALIFORNIA

PRELIMINARY SITE PLAN

OCTOBER 16, 2017

PROJECTED TRIP GENERATION

Costco Gasoline fuel stations all function as ancillary uses to the main Costco Warehouses and Business Centers. Like other Costco services, fuel can only be purchased by members. Payment can only be made with credit card and, unlike traditional gas/service station operations, there are no other automotive services (such as repairs) or other type of sales (including food or sundries) associated with the Costco Gasoline facility. All Costco Gasoline facilities have a minimum of one attendant working at all times who is responsible for expediting members' use of the fuel pumps, directing entering vehicles to available pump locations, and managing on-site queues from the pumps.

Based on a review of other Business Centers with fuel stations, we collected trip generation data and other transportation information at the Hawthorne and Commerce Business Centers and fuel stations. The trip generation data for both sites is shown in Table 1.

Table 1. Trip Generation at Costco Fuel Stations

Business Center/Fuel Station Location	Fueling Positions	Fuel Station Trip Generation		
		Weekday AM Peak Hour	Weekday PM Peak Hour	Saturday Midday Peak Hour
Hawthorne, California[1]	12	270	276	316
Commerce, California	16	422	426	444
	Average	*346*	*351*	*380*

[1]Additional data collected at the Hawthorne site shows an "internalization" of trips between the fuel station and Business Center of 5-7% during all peak periods.

As seen in the table, the two locations display a range of trip generation, likely due to a variety of factors such as traffic volumes on adjacent roadways, Costco membership in the area, surrounding land uses, and activity at the Costco Business Center on-site. The Hayward fuel station is anticipated to result in a trip generation rate that is similar to the range shown in Table 1. Based on this data, we propose to use the average trip generation observed in the traffic study conducted for the site.

QUEUEING ASSESSMENT

As shown in Exhibit 1, the Hayward fuel station will have queue storage for approximately 32 vehicles. The fuel station location is located in the southeast portion of the site with the entrance located away from the site access locations. This ensures that on-site operations at the fuel station will not impact adjacent roadways.

Exhibit 1. Proposed Queue Storage

To provide an assessment of the queue storage sufficiency, queue data was collected at the Hawthorne and Commerce fuel stations. As shown in Table 1, the proposed Hayward fuel station is larger than the Hawthorne and Commerce Fuel Stations (i.e., 24 positions proposed versus 12 or 16), which can assist with better queue management and operations. As a basis of comparison, the average and maximum queues observed at the other two sites are shown in Table 2.

Table 2. Fuel Station Observed Queues

Business Center/Fuel Station Location	Weekday Queues			Saturday Queues		
	Average	95th %ile	Maximum	Average	95th %ile	Maximum
Hawthorne, California	2 vehicles	8 vehicles	15 vehicles	2 vehicles	10 vehicles	17 vehicles
Commerce, California	14 vehicles	33 vehicles	45 vehicles	22 vehicles	42 vehicles	50 vehicles

With an on-site area for 32 vehicles to queue while waiting to fuel at Hayward, the maximum 17 vehicle queues that were measured at Hawthorne can be easily contained and managed. While the queues at the Commerce fuel station were measured to include up to 50 vehicles, this site includes two-thirds of the fueling positions proposed at the Hayward site and is currently being expanded to provide an additional eight fueling positions (for a total of 24 positions) to better manage on-site queuing.

The Hayward fuel station has been designed to maximize capacity given the constraints of the site. While 18 fueling positions were originally proposed at the site, the proposal has been expanded to 24 positions to better serve customers and manage queues. In addition, the fuel station is located in order to orient the queue storage away from the site access locations, preventing any conflict with operations on Hathaway Avenue.

PARKING ASSESSMENT

Today, there is no on-street parking available adjacent to the Business Center. Instead, all parking occurs on-site. Further, no other adjacent land uses share the parking supply provided on the site. As shown in Exhibit 2, a total of 477 parking spaces are available on site.

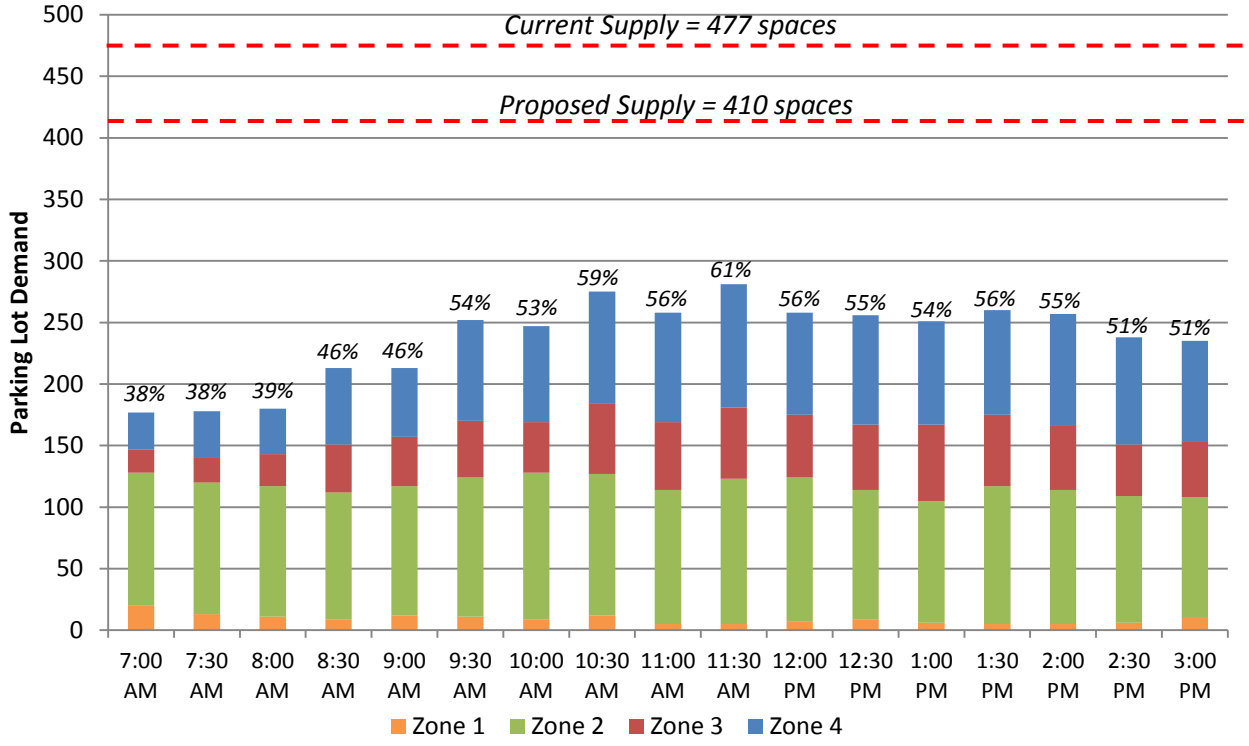
Exhibit 2. Existing Parking Inventory

Existing Parking Utilization

Parking utilization measures the level of occupancy of the parking supply during a given time period. It is typically expressed in terms of the parking demand divided by the parking supply. To evaluate existing parking utilization rates at the Hayward Business Center, parking demand was measured in June 2017 on a typical weekday and Saturday. The weekday (7:00 AM to 3:00 PM) and Saturday (9:00 AM to 3:00 PM) periods were counted at half-hour intervals. These periods were identified for evaluation based on the measured trip generation characteristics at Costco Business Centers and previous parking studies collected at the Hayward Business Center. Further, to understand the potential parking impacts associated with the proposed fuel station location, we summarized parking demand in each of the four zones shown in Exhibit 2.

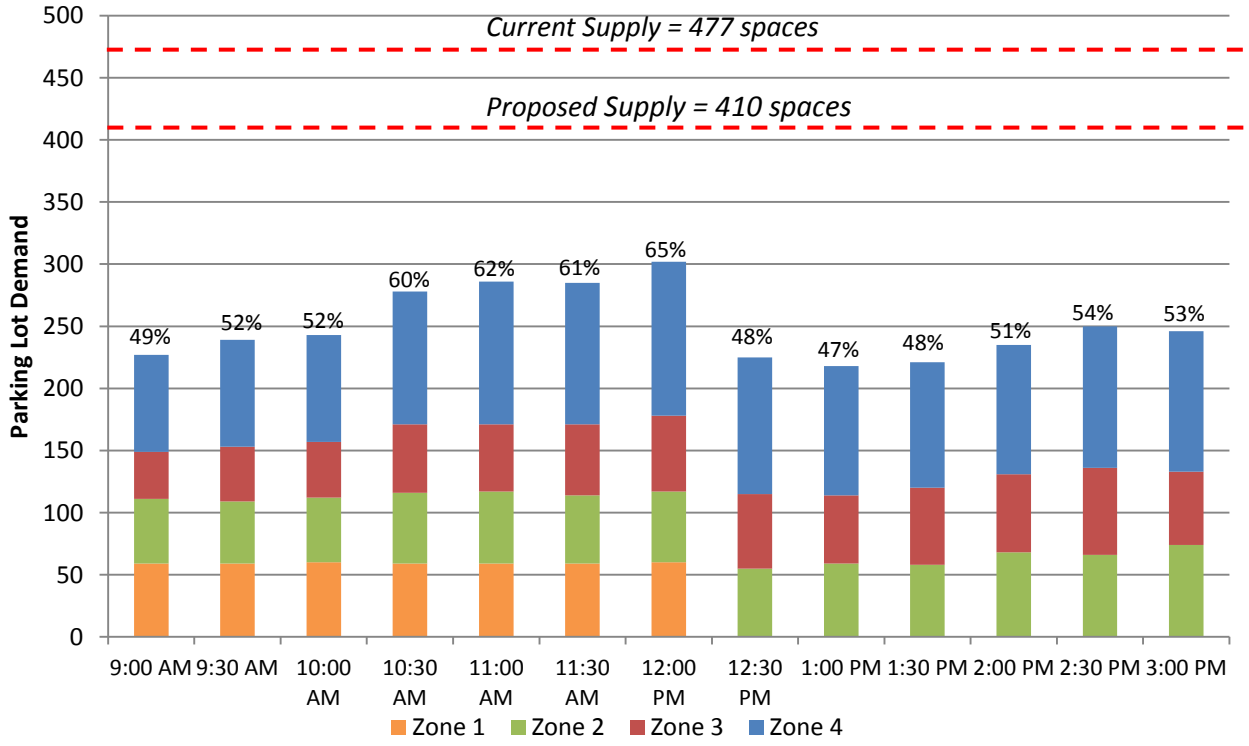
Detailed information about the data collected is provided as *Appendix A.* Graphs showing the parking lot demand and utilization during the weekday and Saturday are provided in Exhibit 3 and Exhibit 4, respectively.

Exhibit 3. Current Parking Lot Demand and Utilization – Weekday



Note: Utilization percentages reflect parking demand compared to existing supply (477 spaces)

Exhibit 4. Current Parking Lot Demand and Utilization – Saturday



Note: Utilization percentages reflect parking demand compared to existing supply (477 spaces). The gate to zone 1 was closed at 12:30 PM, so these spaces were not utilized at all in the later part of the afternoon.

As seen in the exhibits, the peak period of parking demand on the weekday occurred between 11:30 AM and noon, with 281 parking spaces used. On Saturday, the peak period of parking demand occurred between noon and 12:30 PM, with 302 spaces used. Further, during the peak parking demand period (as measured on Saturday), only 63 percent of the spaces are utilized. With the proposed parking supply of 410 spaces, the parking utilization would only be 74 percent, which provides ample "reserve capacity" for parking on-site. This is shown in Table 4.

Comparing Exhibit 3 and Exhibit 4, Zone 2 (where the fuel station is proposed) is more heavily used during the weekday than Saturday. Based on discussions with the Business Center manager, Zone 2 is most heavily used by employees, rather than by members.

Table 3. Parking Demand and Supply

Existing parking supply	477 spaces
Peak parking demand (Noon on Saturday)	302
Peak parking utilization	63% (302/477)
Proposed parking supply	410
Peak parking demand (negligible change anticipated)	302
Resulting peak utilization	74% (302/410)
Peak parking demand ratio	2.43 spaces per 1,000 square feet (302 spaces/124,287 square feet)
85 percent full standard parking supply	356 spaces (302 spaces/0.85)
Provided parking supply ratio	3.30 spaces per 1,000 square feet (410 spaces/124,287 square feet)
85 percent full parking supply ratio	2.86 spaces per 1,000 square feet (356 spaces/124,287 square feet)

As part of site planning for retail uses, an 85 – 90 percent "full standard" is typically applied to eliminate any unnecessary circling of the parking lot by members to find available parking and to minimize any off-site parking impacts. As shown in Table 4, applying an 85 percent full standard, the recommended supply for the existing Hayward site would translate to 356 spaces (i.e., 2.86 spaces per 1,000 square feet).

Parking Demand at Comparable Business Centers

We measured parking demand at the Hawthorne and Commerce Business Center as well to provide a comparison to the proposed supply at Hayward. The parking data is summarized in Table 4.

Table 4. Measured Costco Business Center Parking Demand Rates (measured in April 2015)

Location	Building Size (SF)	Average Weekday Demand (Spaces)	Weekday Peak Demand (spaces)	Weekday Peak Demand Ratio (spaces/1,000 SF)	Average Saturday Demand (Spaces)	Saturday Peak Demand (spaces)	Saturday Peak Demand Ratio (spaces/1,000 SF)
Hawthorne, CA	123,093	105	127	1.02	107	134	1.08
Commerce, CA	129,972	262	341	2.62	282	360	2.77
	Average	*184*	*234*	*1.82*	*194.5*	*247*	*1.93*

If one were to apply an 85 percent full standard to the average peak parking demand measured at the two other California Business Center sites, a recommended parking supply would be 2.27 spaces per 1,000 square feet (i.e., 1.93/0.85). As shown in Table 4, the peak parking demand ratio varied between 1.08 spaces per 1,000 square feet and 2.77 spaces per 1,000 square feet whereas the Hayward Business Center peak parking ratio was 2.43 spaces per 1,000 square feet.

Based on the current Hayward Business Center parking demand and in reviewing the other Business Centers, the proposed parking supply of 3.30 spaces per 1,000 square feet is anticipated to meet Hayward's needs and meets the highest peak parking supply ratio measured at the other sites (i.e., 2.77 spaces per 1,000 square feet at Commerce/0.85 = 3.2). Although below the Municipal Code requirement of 4.0 spaces per 1,000 square feet, the data suggests that the proposed parking supply is sufficient to meet both existing and future parking needs at the Hayward Business Center with the Fuel Station.

ADDITIONAL TRANSPORTATION ITEMS

This section provides responses to the additional transportation comments provided by City staff at the June 7, 2017 pre-application meeting and in subsequent correspondence. The City's comments are provided below with our responses in *italics.*

Comment #2 (Planning): Provide a parking analysis in your entitlement package submittal showing the current demand of the Costco Business Center parking lot. Staff recommends analyzing the current site conditions at the project site, as well as providing data of similar Costco site with a fuel facility showing the impact on parking and regular business operations. A queueing study will also be required to ensure that there is an adequate and timely flow of patrons at the gas pumps. Explore a possible indication system (signage or illumination) to notify waiting patrons of available gas stations to maximize efficiency and queueing of vehicle, and minimize wait times and potential congestion.

Response: As discussed above, the proposed parking supply of 3.30 spaces per 1,000 square feet of Business Center is anticipated to meet the needs of the site upon addition of the Fuel Station. In addition, on-site queues measured at other Business Center demonstrate that the proposed queuing storage area for 32 vehicles waiting to fuel is anticipated to meet the demands at the Fuel Station. Lastly, Costco typically utilizes on-site parking attendants to manage queues and direct members to available fuel positions. In response to City comments, Costco is exploring an indication system to supplement the on-site attendants' roles and will assess its potential application at Hayward.

Comment #5 (Planning): Explore additional alternatives and locations for the 12 proposed parking spaces that will be located adjacent to the entrance of the fuel facility area. If congestion arises and vehicle traffic becomes backed up, these parking spaces will be rendered useless due to the difficulty of backing up safely. In addition, please clarify – once cars do back up, are they required to wait in line to exit the fueling area?

Response: Note: the updated site plan proposes 7 parking spaces adjacent to the entrance of the fuel facility area. These 7 spaces will be designated for employee parking only. We agree that these may be difficult for access by members during peak fueling times. Further, as demonstrated in the parking utilization study, there is more than sufficient parking provided on-site (even without including for these spaces).

Comment #1 (Public Works): Provide a trip generation memorandum within your entitlement package submittal to the Planning Division. The memorandum will assist in determining the level of analysis that will be required for the traffic study with respect to the California Environmental Quality Act (CEQA).

Response: The first part of this memorandum provides a trip generation estimate. We look forward to further discussing and confirming the scope of our traffic study.

The following comments were received after the pre-application meeting.

Comment: Considering turning the "Truck Only" lane adjacent to the facility into a "Truck and Gas Users Only" lane.

Response: We appreciate the suggestion but our review suggests that member vehicles would have a difficult time maneuvering around the fuel truck when it is on-site if this change were made. Based on experiences at other site, the Truck Only lane needs to be kept clear for efficient use by the fuel truck and not co-mingled with member traffic.

Further, a member vehicle from this lane would have to make a 180 degree turn into the fuel facility, as opposed to the wider turn from the parking aisle adjacent to the Business Center.

Comment: Considering reducing the width of the exit access from the fuel facility to 35'.

Response: Based on a review of operations at other Business Centers with Fuel Stations as well as the proposed parking layout at Hayward, the exit width proposed is 37 feet to allow vehicles from all fuel positions to exit the fuel station and turn left or right with a reasonable turning radius. Channelization is provided within the fuel station to direct vehicles towards the exit.

NEXT STEPS

We look forward to continuing to working with City staff as part of the review of the proposed Fuel Station.

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PORTLAND, OR 97204
P 503.228.5230 F 503.273.8169

MEMORANDUM

Date: September 27, 2018 Project #: 19451

To: Marcus Martinez and Steven Chang, City of Hayward
Cc: Kim Katz, Costco Wholesale
Julie Anderson, Barghausen Consulting Engineers

From: Julia Kuhn and Kelly Laustsen
Project: Hayward Costco Business Center Fuel Station Addition
Subject: Transportation Assessment

Kittelson & Associates, Inc. (KAI) has prepared a transportation assessment for the addition of a fuel station (project) to the Costco Business Center located on Hathaway Avenue. To assist with the City's review of the project, this memo provides the estimated trip generation, a queuing assessment, a review of parking utilization on site, and responds to other comments provided by the City during the pre-application meeting on June 7, 2017.

BACKGROUND INFORMATION ON COSTCO BUSINESS CENTER CHARACTERISTICS

Although the project does not include any changes to the existing Business Center operations, we have provided information about the operational characteristics to assist in the city's review and understanding of how these Centers differ from other large-format retailers and from traditional Costco Warehouses. Some of the operational characteristics of a Business Center that influence the trip generation and parking demand are described below.

- The Costco Business Center is a members-only distributor for small to medium-size businesses. Member businesses can either visit the Costco Business Center and purchase products or can place orders on-line or via phone to be delivered to their place of business in lieu of having to travel to the Costco Business Center. Members can order via phone or on-line during the week, with deliveries occurring during the week.
- The target industries are convenience stores, offices, and food service.
- The type of goods provided at Costco Business Centers is tailored towards corporate and small business center needs as opposed to typical retail customers or general Costco Warehouse members. Costco Business Centers do not provide the typical accessory departments found within Costco Warehouses, such as pharmacy, optical, deli, bakery, and photo departments. The type of goods provided at Costco Business Centers are larger bulk

items tailored towards corporate and small business needs as opposed to typical retail customers or general Costco Warehouse members.

- From a transportation perspective, the Business Center differs from a traditional Costco Warehouse primarily in regard to the delivery service. On-line shopping is encouraged at Costco Business Centers and a large portion of the Business Center's sales are made on-line for delivery to the member's business. This eliminates many of the trips that would otherwise be made to the Business Center (i.e., only delivery trucks travel to/from the Business Center rather than individual member trips). This reduces both parking needs as well as transportation impacts.
- Typical operating hours for a Costco Business Center differ from those of traditional Costco warehouses and other large-scale retailers to cater to member needs. Costco Business Centers are typically not open on Sundays.

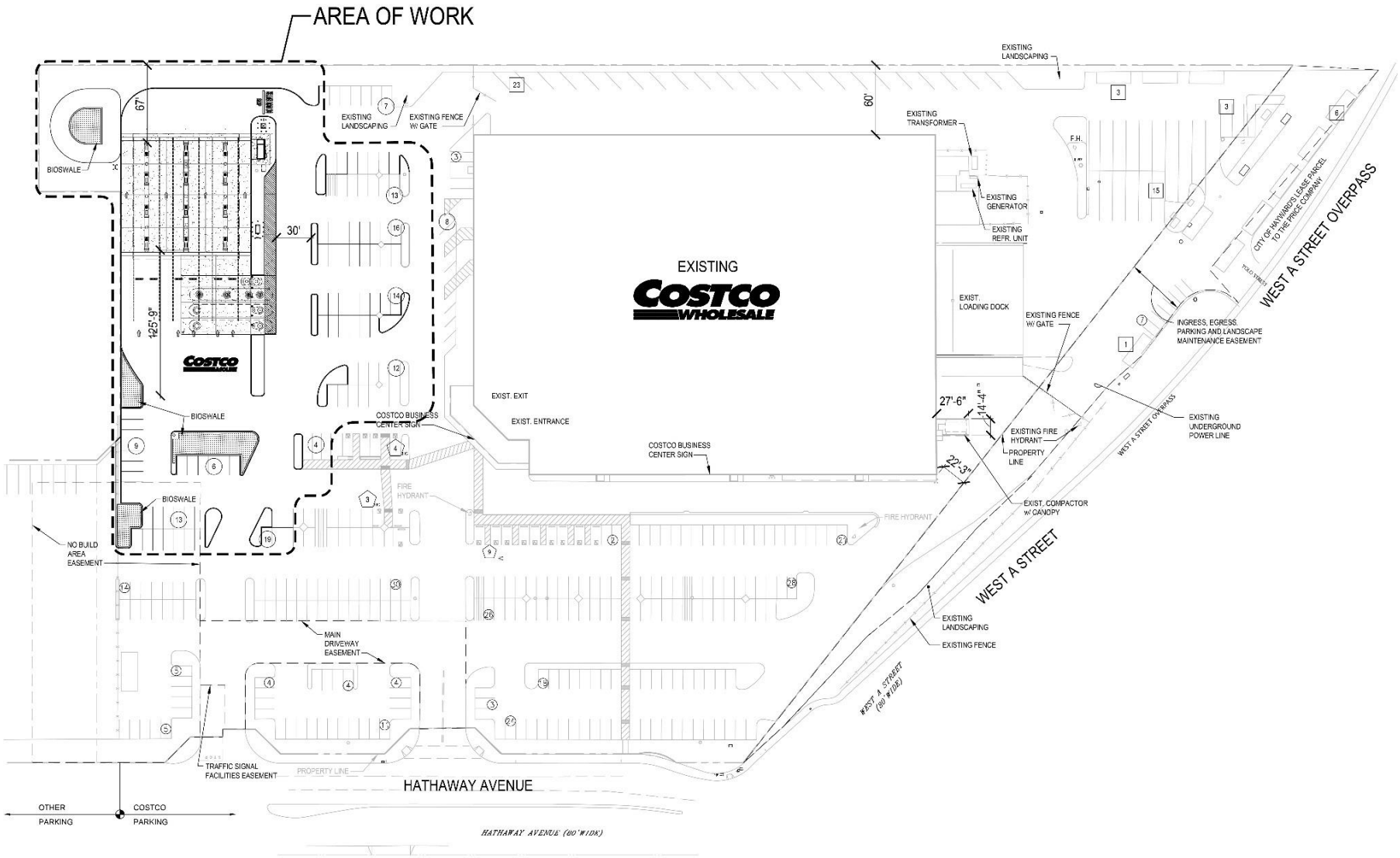
The combined effect of all of these operational characteristics is that Costco Business Centers exhibit significantly lower trip generation and parking demand than is found at traditional Costco Warehouses.

FUEL STATION ADDITION

The project includes a new Fuel Station with 24 positions to the Hayward Business Center Site. The fuel station will be located on the northern portion of the site. Access to the existing Business Center occurs via a signalized full access driveway on Hathaway Avenue, south of the proposed fuel station location, and a right-in/right-out access southeast of the proposed fuel station. The conceptual site plan is provided in Figure 1. Space for approximately 35 vehicles to queue while waiting to fuel is proposed.

Today the site includes a 115,707 square foot warehouse and a 8,580 square foot detached tire center, for a total building amount of 124,287 square feet. The existing tire center will be removed with the addition of the fuel station. The site currently provides 503 parking spaces, including 52 truck stalls. This equates to a parking ratio of 4.05 spaces per 1,000 square feet given the existing building size (i.e., 503 parking spaces/124,287 square feet Business Center) and 4.35 spaces per 1,000 square feet considering the removal of the tire center (i.e. 503 parking spaces/115,707 square feet). A net of 105 spaces will be removed resulting in a supply of 398 spaces and 3.44 spaces per 1,000 square feet (i.e. 398 parking spaces/115,707 square feet). Although neither the before or after project parking supply meet City of Hayward Municipal Code standard of 4 spaces per 1,000 square feet, both meet the operational needs of the site as well as the parking ratio measured at other Costco Business Centers.

Figure 1. Site Plan



PROJECTED TRIP GENERATION

Costco Gasoline fuel stations all function as ancillary uses to the main Costco Warehouses and Business Centers. Like other Costco services, fuel can only be purchased by members. Payment can only be made with credit card and, unlike traditional gas/service station operations, there are no other automotive services (such as repairs) or other type of sales (including food or sundries) associated with the Costco Gasoline facility. All Costco Gasoline facilities have a minimum of one attendant working at all times who is responsible for expediting members' use of the dispensers, directing entering vehicles to available dispenser locations, and managing on-site queues from the dispenser area.

Based on a review of other Business Centers with fuel stations, we collected trip generation data and other transportation information at the Hawthorne and Commerce Business Centers and fuel stations. The trip generation data for both sites is shown in Table 1.

Table 1. Trip Generation at Costco Fuel Stations

Business Center/Fuel Station Location	Fueling Positions	Fuel Station Trip Generation		
		Weekday AM Peak Hour	Weekday PM Peak Hour	Saturday Midday Peak Hour
Hawthorne, California[1]	12	270	276	316
Commerce, California	16	422	426	444
	Average	*346*	*351*	*380*

[1]Additional data collected at the Hawthorne site shows an "internalization" of trips between the fuel station and Business Center of 5-7% during all peak periods.

As seen in the table, the two locations display a range of trip generation, likely due to a variety of factors such as traffic volumes on adjacent roadways, Costco membership in the area, surrounding land uses, and activity at the Costco Business Center on-site. The Hayward fuel station is anticipated to result in a trip generation that is similar to the range shown in Table 1, given it is also proposed at a Business Center. Based on this data, we propose to use the average trip generation observed at the two sites for the traffic study conducted for the fuel station addition.

QUEUEING ASSESSMENT

As shown in Exhibit 1, the Hayward fuel station will have queue storage for approximately 35 vehicles. The fuel station location is located in the northern portion of the site with the entrance located over 300 feet away from the site access locations. This ensures that on-site operations at the fuel station will not impact adjacent roadways.

Exhibit 1. Proposed Queue Storage

To provide an assessment of the queue storage sufficiency, queue data was collected at the Hawthorne and Commerce fuel stations. As shown in Table 1, the proposed Hayward fuel station is larger than the Hawthorne and Commerce Fuel Stations (i.e., 24 positions proposed versus 12 or 16), which can assist with better queue management and operations. As a basis of comparison, the average and maximum queues observed at the other two sites are shown in Table 2.

Table 2. Fuel Station Observed Queues

Business Center/Fuel Station Location	Weekday Queues			Saturday Queues		
	Average	95th %ile	Maximum	Average	95th %ile	Maximum
Hawthorne, California	2 vehicles	8 vehicles	15 vehicles	2 vehicles	10 vehicles	17 vehicles
Commerce, California	14 vehicles	33 vehicles	45 vehicles	22 vehicles	42 vehicles	50 vehicles

With an on-site area for 35 vehicles to queue while waiting to fuel at Hayward, the maximum 17 vehicle queues that were measured at Hawthorne can be easily contained and managed. While the queues at the Commerce fuel station were measured to include up to 50 vehicles, this site includes two-thirds of the fueling positions proposed at the Hayward site and is currently being expanded to provide an additional eight fueling positions (for a total of 24 positions) to better manage on-site queuing.

The Hayward fuel station has been designed to maximize capacity given the constraints of the site. While 18 fueling positions were originally proposed at the site, the proposal has been expanded to 24 positions to better serve customers and manage queues. In addition, the fuel station is located in order to orient

the queue storage away from the site access locations, preventing any conflict with operations on Hathaway Avenue.

PARKING ASSESSMENT

Today, there is no on-street parking available adjacent to the Business Center. Instead, all parking occurs on-site. Further, no other adjacent land uses share the parking supply provided on the site. As shown in Exhibit 2, a total of 503 parking spaces are available on site.

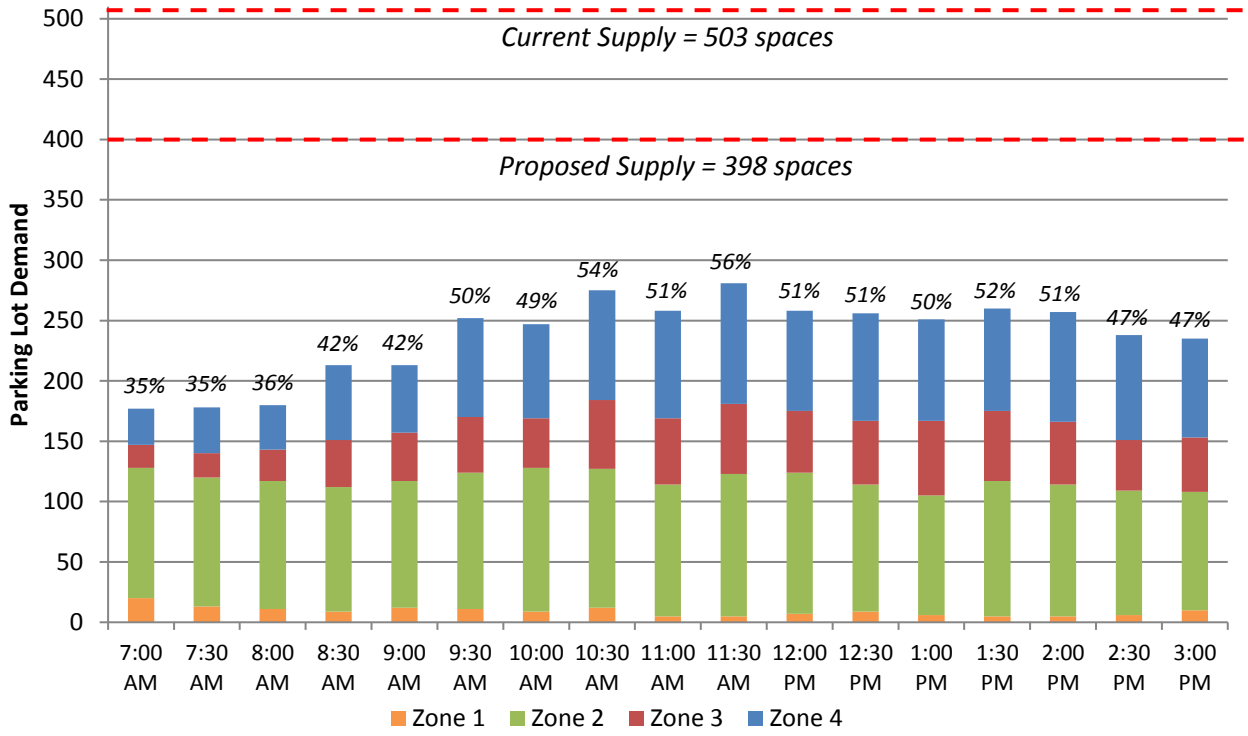
Exhibit 2. Existing Parking Inventory

Existing Parking Utilization

Parking utilization measures the level of occupancy of the parking supply during a given time period. It is typically expressed in terms of the parking demand divided by the parking supply. To evaluate existing parking utilization rates at the Hayward Business Center, parking demand was measured in June 2017 on a typical weekday and Saturday. The weekday (7:00 AM to 3:00 PM) and Saturday (9:00 AM to 3:00 PM) periods were counted at half-hour intervals. These periods were identified for evaluation based on the measured trip generation characteristics at Costco Business Centers and previous parking studies collected at the Hayward Business Center. Further, to understand the potential parking impacts associated with the proposed fuel station location, we summarized parking demand in each of the four zones shown in Exhibit 2.

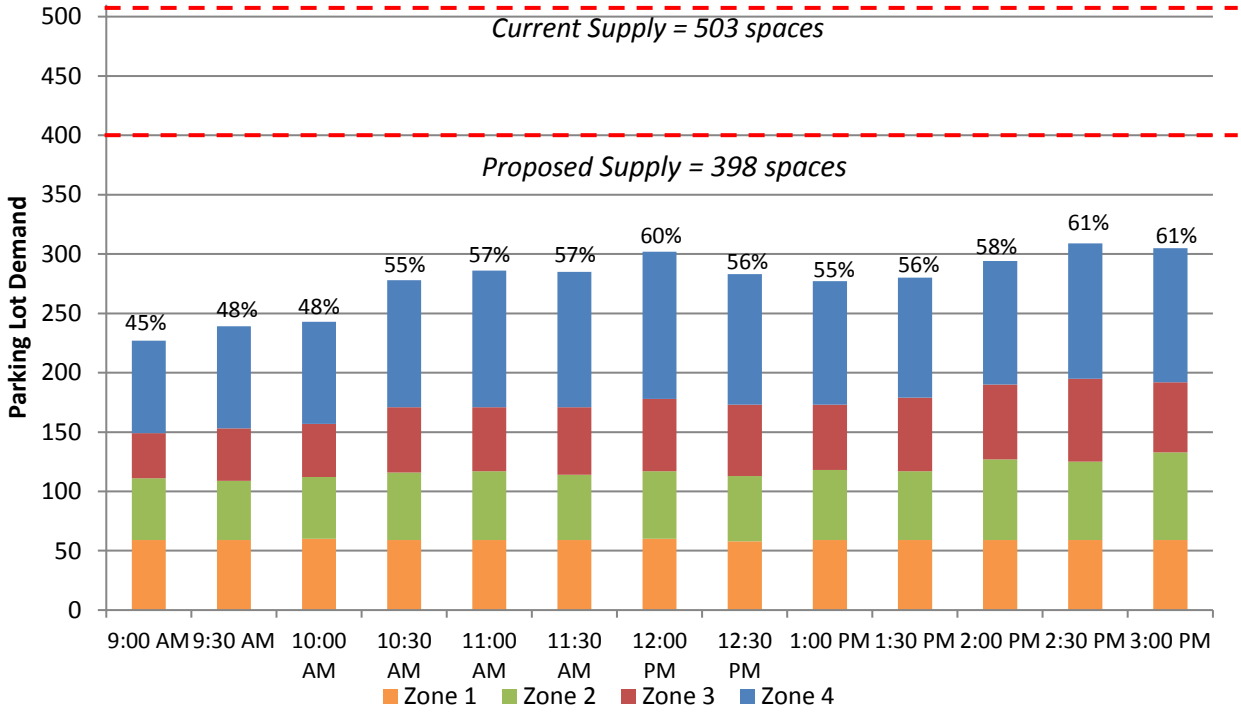
Graphs showing the parking lot demand and utilization during the weekday and Saturday are provided in Exhibit 3 and Exhibit 4, respectively.

Exhibit 3. Current Parking Lot Demand and Utilization – Weekday



Note: Utilization percentages reflect parking demand compared to existing supply (503 spaces)

Exhibit 4. Current Parking Lot Demand and Utilization – Saturday



Note: Utilization percentages reflect parking demand compared to existing supply (503 spaces). The gate to zone 1 was closed at 12:30 PM, so these spaces were not utilized at all in the later part of the afternoon.

As seen in the exhibits, the peak period of parking demand on the weekday occurred between 11:30 AM and noon, with 281 parking spaces used. On Saturday, the peak period of parking demand occurred between noon and 12:30 PM, with 302 spaces used. Further, during the peak parking demand period (as measured on Saturday), only 60 percent of the spaces are utilized. With the proposed parking supply of 398 spaces, the parking utilization would only be 76 percent, which provides ample "reserve capacity" for parking on-site. This is shown in Table 4.

Table 3. Parking Demand and Supply

Existing parking supply	503 spaces
Peak parking demand (Noon on Saturday)	302
Peak parking utilization	60% (302/503)
Proposed parking supply	398
Peak parking demand (negligible change anticipated)	302
Resulting peak utilization	76% (302/398)
Peak parking demand ratio	2.43 spaces per 1,000 square feet (302 spaces/124,287 square feet)
85 percent full standard parking supply	356 spaces (302 spaces/0.85)
Provided parking supply ratio	3.44 spaces per 1,000 square feet (398 spaces/115,707 square feet)
85 percent full parking supply ratio	3.08 spaces per 1,000 square feet (356 spaces/115,707 square feet)

As part of site planning for retail uses, an 85 – 90 percent "full standard" is typically applied to eliminate any unnecessary circling of the parking lot by members to find available parking and to minimize any off-site parking impacts. As shown in Table 4, applying an 85 percent full standard, the recommended supply for the existing Hayward site would translate to 356 spaces (i.e., 3.08 spaces per 1,000 square feet).

Parking Demand at Comparable Business Centers

We measured parking demand at the Hawthorne and Commerce Business Center as well to provide a comparison to the proposed supply at Hayward. The parking data is summarized in Table 4.

Table 4. Measured Costco Business Center Parking Demand Rates (measured in April 2015)

Location	Building Size (SF)	Average Weekday Demand (Spaces)	Weekday Peak Demand (spaces)	Weekday Peak Demand Ratio (spaces/1,000 SF)	Average Saturday Demand (Spaces)	Saturday Peak Demand (spaces)	Saturday Peak Demand Ratio (spaces/1,000 SF)
Hawthorne, CA	123,093	105	127	1.02	107	134	1.08
Commerce, CA	129,972	262	341	2.62	282	360	2.77
	Average	*184*	*234*	*1.82*	*195*	*247*	*1.93*

If one were to apply an 85 percent full standard to the average peak parking demand measured at the two other California Business Center sites, a recommended parking supply would be 2.27 spaces per 1,000 square feet (i.e., 1.93/0.85). As shown in Table 4, the peak parking demand ratio varied between 1.08 spaces per 1,000 square feet and 2.77 spaces per 1,000 square feet whereas the Hayward Business Center peak parking ratio was 2.43 spaces per 1,000 square feet.

Based on the current Hayward Business Center parking demand and in reviewing the other Business Centers, the proposed parking supply of 3.44 spaces per 1,000 square feet is anticipated to meet Hayward's needs and meets the highest peak parking supply ratio measured at the other sites (i.e., 2.77 spaces per 1,000 square feet at Commerce/0.85 = 3.2). Although below the Municipal Code requirement of 4.0 spaces per 1,000 square feet, the data suggests that the proposed parking supply is sufficient to meet both existing and future parking needs at the Hayward Business Center with the Fuel Station.

ADDITIONAL TRANSPORTATION ITEMS

This section provides responses to the additional transportation comments provided by City staff at the June 7, 2017 pre-application meeting and in subsequent correspondence. The City's comments are provided below with our responses in *italics.*

Comment #2 (Planning): Provide a parking analysis in your entitlement package submittal showing the current demand of the Costco Business Center parking lot. Staff recommends analyzing the current site conditions at the project site, as well as providing data of similar Costco site with a fuel facility showing the impact on parking and regular business operations. A queueing study will also be required to ensure that there is an adequate and timely flow of patrons at the gas pumps. Explore a possible indication system (signage or illumination) to notify waiting patrons of available gas stations to maximize efficiency and queueing of vehicle, and minimize wait times and potential congestion.

Response: As discussed above, the proposed parking supply of 3.42 spaces per 1,000 square feet of Business Center is anticipated to meet the needs of the site upon addition of the Fuel Station. In addition, on-site queues measured at other Business Center demonstrate that the proposed queuing storage area for 35 vehicles waiting to fuel is anticipated to meet the demands at the Fuel Station. Lastly, Costco typically utilizes on-site parking attendants to manage queues and direct members to available fuel positions. In response to City comments, Costco is exploring an indication system to supplement the on-site attendants' roles and will assess its potential application at Hayward.

Comment #5 (Planning): Explore additional alternatives and locations for the 12 proposed parking spaces that will be located adjacent to the entrance of the fuel facility area. If congestion arises and vehicle traffic becomes backed up, these parking spaces will be rendered useless due to the difficulty of backing up safely. In addition, please clarify – once cars do back up, are they required to wait in line to exit the fueling area?

Response: The site plan had been updated to relocate the fuel station. This comment no longer applies.

Comment #1 (Public Works): Provide a trip generation memorandum within your entitlement package submittal to the Planning Division. The memorandum will assist in determining the level of analysis that will be required for the traffic study with respect to the California Environmental Quality Act (CEQA).

Response: The first part of this memorandum provides a trip generation estimate which is applied in the accompanying traffic study for the site.

The following comments were received after the pre-application meeting.

Comment: Considering turning the "Truck Only" lane adjacent to the facility into a "Truck and Gas Users Only" lane.

Response: The site plan had been updated to relocate the fuel station. This comment no longer applies.

Comment: Considering reducing the width of the exit access from the fuel facility to 35'.

Response: The site plan had been updated to relocate the fuel station. This comment no longer applies.

NEXT STEPS

We look forward to continuing to work with City staff as part of the review of the proposed Fuel Station.

Appendix G. Trip Generation Compared to ITE

Proposed based on Costco Data:

Use	Size	Unit	Weekday AM			Weekday PM		
			Total	In	Out	Total	In	Out
Fuel Station	24	pumps	346	173	173	352	176	176
		Internal (5%)	*18*	*9*	*9*	*18*	*9*	*9*
		Pass-by (42%)	*138*	*69*	*69*	*140*	*70*	*70*
		Net New	**190**	**95**	**95**	**194**	**97**	**97**

ITE (9th Edition):

Use	Size	Unit	Weekday AM			Weekday PM		
			Total	In	Out	Total	In	Out
Fuel Station	24	pumps	292	146	146	333	166	166
		Internal (5%)	*14*	*7*	*7*	*17*	*8*	*8*
		Pass-by (42%)	*118*	*58*	*58*	*133*	*66*	*66*
		Net New	**160**	**80**	**80**	**183**	**92**	**92**

Appendix H Existing Plus Project Operations Worksheets

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	170	34	362	22	71	578
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.97		0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00		1.00	0.97	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.98		1.00	0.85	1.00	1.00
Flt Protected	0.96		1.00	1.00	0.95	1.00
Satd. Flow (prot)	2885		3374	1569	1576	1881
Flt Permitted	0.96		1.00	1.00	0.53	1.00
Satd. Flow (perm)	2885		3374	1569	876	1881
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	177	35	377	23	74	602
RTOR Reduction (vph)	27	0	0	10	0	0
Lane Group Flow (vph)	185	0	377	13	74	602
Confl. Peds. (#/hr)		3		8	8	
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	20%	15%	7%	0%	14%	1%
Turn Type	Prot		NA	Perm	Perm	NA
Protected Phases	4		6			2
Permitted Phases				6	2	
Actuated Green, G (s)	8.6		21.7	21.7	21.7	21.7
Effective Green, g (s)	8.6		21.7	21.7	21.7	21.7
Actuated g/C Ratio	0.22		0.57	0.57	0.57	0.57
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	2.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	647		1911	888	496	1065
v/s Ratio Prot	c0.06		0.11			c0.32
v/s Ratio Perm				0.01	0.08	
v/c Ratio	0.29		0.20	0.01	0.15	0.57
Uniform Delay, d1	12.3		4.1	3.6	3.9	5.3
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1		0.1	0.0	0.1	0.7
Delay (s)	12.4		4.1	3.6	4.1	6.0
Level of Service	B		A	A	A	A
Approach Delay (s)	12.4		4.1			5.8
Approach LOS	B		A			A

Intersection Summary			
HCM 2000 Control Delay	6.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	38.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	25	360	173	0	748
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	0	26	371	178	0	771
Pedestrians	7		1			1
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	1		0			0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			293			189
pX, platoon unblocked						
vC, conflicting volume	765	194			556	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	765	194			556	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	97			100	
cM capacity (veh/h)	341	815			1017	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	26	186	186	178	386	386
Volume Left	0	0	0	0	0	0
Volume Right	26	0	0	178	0	0
cSH	815	1700	1700	1700	1700	1700
Volume to Capacity	0.03	0.11	0.11	0.10	0.23	0.23
Queue Length 95th (ft)	2	0	0	0	0	0
Control Delay (s)	9.6	0.0	0.0	0.0	0.0	0.0
Lane LOS	A					
Approach Delay (s)	9.6	0.0			0.0	
Approach LOS	A					

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	31.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	68	256	638	234	3	485	850	121	105	156	260	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%				-2%			0%		
Total Lost time (s)		4.0	5.0	5.0		4.0	5.0	5.0	4.5	5.0		4.5
Lane Util. Factor		1.00	0.95	1.00		0.97	0.91	1.00	1.00	0.95		1.00
Frpb, ped/bikes		1.00	1.00	0.95		1.00	1.00	0.98	1.00	0.99		1.00
Flpb, ped/bikes		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Frt		1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.91		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (prot)		1654	3471	1530		3502	5086	1582	1805	3128		1752
Flt Permitted		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (perm)		1654	3471	1530		3502	5086	1582	1805	3128		1752
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	74	278	693	254	3	527	924	132	114	170	283	114
RTOR Reduction (vph)	0	0	0	179	0	0	0	61	0	211	0	0
Lane Group Flow (vph)	0	352	693	75	0	530	924	71	114	242	0	114
Confl. Peds. (#/hr)		6		28		28		6	5		4	4
Confl. Bikes (#/hr)												
Heavy Vehicles (%)	2%	11%	4%	0%	2%	1%	3%	1%	0%	6%	2%	3%
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Perm	Prot	NA		Prot
Protected Phases	5	5	2		1	1	6		3	8		7
Permitted Phases				2				6				
Actuated Green, G (s)		25.4	33.6	33.6		21.2	29.4	29.4	12.7	26.9		13.0
Effective Green, g (s)		25.4	33.6	33.6		21.2	29.4	29.4	12.7	26.9		13.0
Actuated g/C Ratio		0.22	0.30	0.30		0.19	0.26	0.26	0.11	0.24		0.11
Clearance Time (s)		4.0	5.0	5.0		4.0	5.0	5.0	4.5	5.0		4.5
Vehicle Extension (s)		2.0	4.0	4.0		2.0	4.0	4.0	3.0	3.0		3.0
Lane Grp Cap (vph)		371	1030	454		655	1320	410	202	743		201
v/s Ratio Prot		c0.21	c0.20			0.15	0.18		0.06	0.08		c0.07
v/s Ratio Perm				0.05				0.04				
v/c Ratio		0.95	0.67	0.17		0.81	0.70	0.17	0.56	0.33		0.57
Uniform Delay, d1		43.3	35.0	29.4		44.1	37.9	32.5	47.6	35.7		47.4
Progression Factor		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2		33.0	1.9	0.2		6.9	1.8	0.3	3.6	0.3		3.6
Delay (s)		76.2	36.9	29.7		51.0	39.7	32.7	51.2	35.9		51.1
Level of Service		E	D	C		D	D	C	D	D		D
Approach Delay (s)			46.1				42.9			39.0		
Approach LOS			D				D			D		

Intersection Summary			
HCM 2000 Control Delay	43.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	113.2	Sum of lost time (s)	18.5
Intersection Capacity Utilization	76.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBT	SBR
Lane Configurations		
Volume (vph)	328	315
Ideal Flow (vphpl)	1900	1900
Grade (%)	0%	
Total Lost time (s)	5.0	5.0
Lane Util. Factor	1.00	1.00
Frpb, ped/bikes	1.00	0.98
Flpb, ped/bikes	1.00	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	1881	1509
Flt Permitted	1.00	1.00
Satd. Flow (perm)	1881	1509
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	357	342
RTOR Reduction (vph)	0	229
Lane Group Flow (vph)	357	113
Confl. Peds. (#/hr)		5
Confl. Bikes (#/hr)		1
Heavy Vehicles (%)	1%	5%
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Actuated Green, G (s)	27.2	27.2
Effective Green, g (s)	27.2	27.2
Actuated g/C Ratio	0.24	0.24
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	451	362
v/s Ratio Prot	c0.19	
v/s Ratio Perm		0.07
v/c Ratio	0.79	0.31
Uniform Delay, d1	40.3	35.3
Progression Factor	1.00	1.00
Incremental Delay, d2	9.2	0.5
Delay (s)	49.5	35.8
Level of Service	D	D
Approach Delay (s)	44.0	
Approach LOS	D	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	228	914	0	0	1041	292	291	1	339	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			-2%			0%	
Total Lost time (s)	3.5	4.6			4.2	4.2	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.96	1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	1626	3471			3505	1485	1649	1644	1517			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	1626	3471			3505	1485	1649	1644	1517			
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	238	952	0	0	1084	304	303	1	353	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	192	0	0	262	0	0	0
Lane Group Flow (vph)	238	952	0	0	1084	112	151	153	91	0	0	0
Confl. Peds. (#/hr)	11		13	13		11			2	2		
Confl. Bikes (#/hr)			1			5						
Heavy Vehicles (%)	11%	4%	0%	0%	3%	4%	5%	100%	6%	0%	0%	0%
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	7			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	16.5	45.4			25.8	25.8	16.0	16.0	16.0			
Effective Green, g (s)	16.5	45.4			25.8	25.8	16.0	16.0	16.0			
Actuated g/C Ratio	0.24	0.65			0.37	0.37	0.23	0.23	0.23			
Clearance Time (s)	3.5	4.6			4.2	4.2	4.0	4.0	4.0			
Vehicle Extension (s)	2.0	2.9			3.9	3.9	2.0	2.0	2.0			
Lane Grp Cap (vph)	383	2251			1291	547	376	375	346			
v/s Ratio Prot	c0.15	c0.27			c0.31		0.09	c0.09				
v/s Ratio Perm						0.08			0.06			
v/c Ratio	0.62	0.42			0.84	0.20	0.40	0.41	0.26			
Uniform Delay, d1	24.0	6.0			20.2	15.1	22.9	23.0	22.2			
Progression Factor	1.31	0.91			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	5.7	0.1			6.7	0.8	0.3	0.3	0.1			
Delay (s)	37.1	5.5			26.9	15.9	23.2	23.2	22.3			
Level of Service	D	A			C	B	C	C	C			
Approach Delay (s)		11.8			24.5			22.7			0.0	
Approach LOS		B			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	19.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	818	335	347	985	0	0	0	0	324	60	640
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-2%	
Total Lost time (s)		4.6	4.6	3.5	4.2					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.95					0.95	0.95	1.00
Frpb, ped/bikes		1.00	0.94	1.00	1.00					1.00	1.00	0.99
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		3438	1480	1719	3505					1649	1693	1530
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (perm)		3438	1480	1719	3505					1649	1693	1530
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	861	353	365	1037	0	0	0	0	341	63	674
RTOR Reduction (vph)	0	0	223	0	0	0	0	0	0	0	0	332
Lane Group Flow (vph)	0	861	130	365	1037	0	0	0	0	201	203	342
Confl. Peds. (#/hr)	5		18	18		5	3					3
Confl. Bikes (#/hr)			4									
Heavy Vehicles (%)	0%	5%	3%	5%	3%	0%	0%	0%	0%	5%	2%	5%
Turn Type		NA	Perm	Prot	NA					Split	NA	Perm
Protected Phases		2		1	3					4	4	
Permitted Phases			2									4
Actuated Green, G (s)		25.8	25.8	16.1	45.8					16.0	16.0	16.0
Effective Green, g (s)		25.8	25.8	16.1	45.8					16.0	16.0	16.0
Actuated g/C Ratio		0.37	0.37	0.23	0.65					0.23	0.23	0.23
Clearance Time (s)		4.6	4.6	3.5	4.2					4.0	4.0	4.0
Vehicle Extension (s)		3.9	3.9	2.0	2.9					2.0	2.0	2.0
Lane Grp Cap (vph)		1267	545	395	2293					376	386	349
v/s Ratio Prot		c0.25		c0.21	c0.30					0.12	0.12	
v/s Ratio Perm			0.09									c0.22
v/c Ratio		0.68	0.24	0.92	0.45					0.53	0.53	0.98
Uniform Delay, d1		18.6	15.3	26.4	5.9					23.7	23.7	26.8
Progression Factor		1.00	1.00	1.32	1.00					1.00	1.00	1.00
Incremental Delay, d2		3.0	1.0	19.8	0.4					0.7	0.6	42.7
Delay (s)		21.6	16.3	54.7	6.3					24.5	24.3	69.6
Level of Service		C	B	D	A					C	C	E
Approach Delay (s)		20.0			18.9			0.0			52.6	
Approach LOS		C			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	29.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	255	64	738	14	80	421
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.97		0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00		1.00	0.98	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.97		1.00	0.85	1.00	1.00
Flt Protected	0.96		1.00	1.00	0.95	1.00
Satd. Flow (prot)	3297		3505	1051	1595	1863
Flt Permitted	0.96		1.00	1.00	0.33	1.00
Satd. Flow (perm)	3297		3505	1051	559	1863
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	271	68	785	15	85	448
RTOR Reduction (vph)	44	0	0	8	0	0
Lane Group Flow (vph)	295	0	785	7	85	448
Confl. Peds. (#/hr)		2		5	5	
Heavy Vehicles (%)	4%	3%	3%	50%	13%	2%
Turn Type	Prot		NA	Perm	Perm	NA
Protected Phases	4		6			2
Permitted Phases				6	2	
Actuated Green, G (s)	8.8		16.4	16.4	16.4	16.4
Effective Green, g (s)	8.8		16.4	16.4	16.4	16.4
Actuated g/C Ratio	0.27		0.49	0.49	0.49	0.49
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	2.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	873		1731	519	276	920
v/s Ratio Prot	c0.09		0.22			c0.24
v/s Ratio Perm				0.01	0.15	
v/c Ratio	0.34		0.45	0.01	0.31	0.49
Uniform Delay, d1	9.8		5.5	4.3	5.0	5.6
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1		0.2	0.0	0.6	0.4
Delay (s)	9.9		5.7	4.3	5.7	6.0
Level of Service	A		A	A	A	A
Approach Delay (s)	9.9		5.6			5.9
Approach LOS	A		A			A

Intersection Summary			
HCM 2000 Control Delay	6.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	33.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	47	705	257	0	676
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	49	742	271	0	712
Pedestrians	6		1			1
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	1		0			0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			293			189
pX, platoon unblocked						
vC, conflicting volume	1105	378			1019	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1105	378			1019	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	92			100	
cM capacity (veh/h)	207	621			685	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	49	371	371	271	356	356
Volume Left	0	0	0	0	0	0
Volume Right	49	0	0	271	0	0
cSH	621	1700	1700	1700	1700	1700
Volume to Capacity	0.08	0.22	0.22	0.16	0.21	0.21
Queue Length 95th (ft)	6	0	0	0	0	0
Control Delay (s)	11.3	0.0	0.0	0.0	0.0	0.0
Lane LOS	B					
Approach Delay (s)	11.3	0.0			0.0	
Approach LOS	B					

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	29.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	58	364	816	293	3	208	787	129	213	469	312	141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%				-2%			0%		
Total Lost time (s)		4.0	5.0	5.0		4.0	5.0	5.0	4.5	5.0		4.5
Lane Util. Factor		1.00	0.95	1.00		0.97	0.91	1.00	1.00	0.95		1.00
Frpb, ped/bikes		1.00	1.00	1.00		1.00	1.00	0.99	1.00	0.99		1.00
Flpb, ped/bikes		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Frt		1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.94		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (prot)		1685	3539	1599		3467	5136	1575	1805	3303		1787
Flt Permitted		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (perm)		1685	3539	1599		3467	5136	1575	1805	3303		1787
Peak-hour factor, PHF	0.92	0.96	0.96	0.96	0.92	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	63	379	850	305	3	217	820	134	222	489	325	147
RTOR Reduction (vph)	0	0	0	182	0	0	0	64	0	77	0	0
Lane Group Flow (vph)	0	442	850	123	0	220	820	70	222	737	0	147
Confl. Peds. (#/hr)		2						2	5		1	1
Heavy Vehicles (%)	2%	8%	2%	1%	2%	2%	2%	2%	0%	3%	1%	1%
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Perm	Prot	NA		Prot
Protected Phases	5	5	2		1	1	6		3	8		7
Permitted Phases				2				6				
Actuated Green, G (s)		25.2	39.4	39.4		11.8	26.0	26.0	18.8	30.7		14.9
Effective Green, g (s)		25.2	39.4	39.4		11.8	26.0	26.0	18.8	30.7		14.9
Actuated g/C Ratio		0.22	0.34	0.34		0.10	0.23	0.23	0.16	0.27		0.13
Clearance Time (s)		4.0	5.0	5.0		4.0	5.0	5.0	4.5	5.0		4.5
Vehicle Extension (s)		2.0	4.0	4.0		2.0	4.0	4.0	3.0	3.0		3.0
Lane Grp Cap (vph)		368	1209	546		354	1158	355	294	879		230
v/s Ratio Prot		c0.26	c0.24			0.06	0.16		c0.12	c0.22		0.08
v/s Ratio Perm				0.08				0.04				
v/c Ratio		1.20	0.70	0.23		0.62	0.71	0.20	0.76	0.84		0.64
Uniform Delay, d1		45.0	32.9	27.1		49.6	41.2	36.2	46.1	40.0		47.6
Progression Factor		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2		113.7	2.0	0.3		2.4	2.2	0.4	10.5	7.1		5.7
Delay (s)		158.8	34.9	27.4		52.0	43.3	36.6	56.6	47.0		53.4
Level of Service		F	C	C		D	D	D	E	D		D
Approach Delay (s)			67.7				44.2			49.1		
Approach LOS			E				D			D		

Intersection Summary			
HCM 2000 Control Delay	53.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	115.3	Sum of lost time (s)	18.5
Intersection Capacity Utilization	86.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Volume (vph)	227	309
Ideal Flow (vphpl)	1900	1900
Grade (%)	0%	
Total Lost time (s)	5.0	5.0
Lane Util. Factor	1.00	1.00
Frpb, ped/bikes	1.00	0.98
Flpb, ped/bikes	1.00	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	1881	1525
Flt Permitted	1.00	1.00
Satd. Flow (perm)	1881	1525
Peak-hour factor, PHF	0.96	0.96
Adj. Flow (vph)	236	322
RTOR Reduction (vph)	0	198
Lane Group Flow (vph)	236	124
Confl. Peds. (#/hr)		5
Heavy Vehicles (%)	1%	4%
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Actuated Green, G (s)	26.8	26.8
Effective Green, g (s)	26.8	26.8
Actuated g/C Ratio	0.23	0.23
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	437	354
v/s Ratio Prot	0.13	
v/s Ratio Perm		0.08
v/c Ratio	0.54	0.35
Uniform Delay, d1	38.8	37.0
Progression Factor	1.00	1.00
Incremental Delay, d2	1.4	0.6
Delay (s)	40.2	37.6
Level of Service	D	D
Approach Delay (s)	41.8	
Approach LOS	D	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	332	1179	0	0	987	338	421	2	445	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			-2%			0%	
Total Lost time (s)	3.5	4.6			4.2	4.2	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.96	1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	1752	3539			3539	1527	1732	1729	1530			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	1752	3539			3539	1527	1732	1729	1530			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	349	1241	0	0	1039	356	443	2	468	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	212	0	0	355	0	0	0
Lane Group Flow (vph)	349	1241	0	0	1039	144	221	224	113	0	0	0
Confl. Peds. (#/hr)	8		6	6		8			2	2		
Confl. Bikes (#/hr)			3			2			1			
Heavy Vehicles (%)	3%	2%	0%	0%	2%	2%	0%	50%	5%	0%	0%	0%
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	7			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	15.8	47.2			28.3	28.3	14.2	14.2	14.2			
Effective Green, g (s)	15.8	47.2			28.3	28.3	14.2	14.2	14.2			
Actuated g/C Ratio	0.23	0.67			0.40	0.40	0.20	0.20	0.20			
Clearance Time (s)	3.5	4.6			4.2	4.2	4.0	4.0	4.0			
Vehicle Extension (s)	2.0	2.9			3.9	3.9	2.0	2.0	2.0			
Lane Grp Cap (vph)	395	2386			1430	617	351	350	310			
v/s Ratio Prot	c0.20	c0.35			c0.29		0.13	c0.13				
v/s Ratio Perm						0.09			0.07			
v/c Ratio	0.88	0.52			0.73	0.23	0.63	0.64	0.37			
Uniform Delay, d1	26.2	5.7			17.6	13.7	25.5	25.6	24.0			
Progression Factor	1.19	1.06			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	14.6	0.1			3.3	0.9	2.5	3.0	0.3			
Delay (s)	45.8	6.2			20.8	14.6	28.0	28.5	24.3			
Level of Service	D	A			C	B	C	C	C			
Approach Delay (s)		14.9			19.3			26.2			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay	19.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	115.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1018	298	343	1065	0	0	0	0	493	30	463
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-2%	
Total Lost time (s)		4.6	4.6	3.5	4.2					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.91					0.95	0.95	1.00
Frpb, ped/bikes		1.00	0.96	1.00	1.00					1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		3574	1513	1770	5136					1681	1676	1526
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		3574	1513	1770	5136					1681	1676	1526
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	1049	307	354	1098	0	0	0	0	508	31	477
RTOR Reduction (vph)	0	0	185	0	0	0	0	0	0	0	0	239
Lane Group Flow (vph)	0	1049	122	354	1098	0	0	0	0	269	270	238
Confl. Peds. (#/hr)	7		11	11		7	6					6
Confl. Bikes (#/hr)			5			1						
Heavy Vehicles (%)	0%	1%	2%	2%	1%	0%	0%	0%	0%	3%	13%	5%
Turn Type		NA	Perm	Prot	NA					Split	NA	Perm
Protected Phases		2		1	3					4	4	
Permitted Phases			2									4
Actuated Green, G (s)		27.8	27.8	15.9	47.6					14.2	14.2	14.2
Effective Green, g (s)		27.8	27.8	15.9	47.6					14.2	14.2	14.2
Actuated g/C Ratio		0.40	0.40	0.23	0.68					0.20	0.20	0.20
Clearance Time (s)		4.6	4.6	3.5	4.2					4.0	4.0	4.0
Vehicle Extension (s)		3.9	3.9	2.0	2.9					2.0	2.0	2.0
Lane Grp Cap (vph)		1419	600	402	3492					341	339	309
v/s Ratio Prot		c0.29		c0.20	c0.21					0.16	c0.16	
v/s Ratio Perm			0.08									0.16
v/c Ratio		0.74	0.20	0.88	0.31					0.79	0.80	0.77
Uniform Delay, d1		18.0	13.8	26.1	4.6					26.5	26.5	26.4
Progression Factor		1.00	1.00	1.23	1.14					1.00	1.00	1.00
Incremental Delay, d2		3.5	0.8	14.7	0.0					10.6	11.5	10.0
Delay (s)		21.5	14.6	47.0	5.2					37.1	38.0	36.3
Level of Service		C	B	D	A					D	D	D
Approach Delay (s)		19.9			15.4			0.0			37.0	
Approach LOS		B			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	22.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	115.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Appendix I Existing Plus Project Queueing Worksheets

101: Hathaway Ave & Costco access sig

Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	212	377	23	74	602
v/c Ratio	0.32	0.20	0.03	0.15	0.57
Control Delay	11.3	5.3	3.1	6.4	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	11.3	5.3	3.1	6.4	9.2
Queue Length 50th (ft)	12	13	0	5	54
Queue Length 95th (ft)	42	54	9	32	226
Internal Link Dist (ft)	228	109			164
Turn Bay Length (ft)				75	
Base Capacity (vph)	1969	2750	1276	711	1533
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.11	0.14	0.02	0.10	0.39

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	352	693	254	530	924	132	114	453	114	357	342
v/c Ratio	0.95	0.67	0.41	0.81	0.70	0.28	0.56	0.48	0.57	0.80	0.58
Control Delay	81.9	40.4	6.1	55.9	41.5	15.9	61.0	16.4	61.3	56.0	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.9	40.4	6.1	55.9	41.5	15.9	61.0	16.4	61.3	56.0	11.5
Queue Length 50th (ft)	260	245	0	192	230	28	81	53	81	241	22
Queue Length 95th (ft)	#544	341	63	291	295	82	154	120	154	#451	124
Internal Link Dist (ft)		990			529			491		213	
Turn Bay Length (ft)	160			240		65	90		225		225
Base Capacity (vph)	370	1244	706	784	1822	618	395	1042	384	505	625
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.95	0.56	0.36	0.68	0.51	0.21	0.29	0.43	0.30	0.71	0.55

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	238	952	1084	304	151	153	353
v/c Ratio	0.62	0.42	0.84	0.41	0.40	0.41	0.58
Control Delay	38.1	6.0	27.8	4.0	26.7	26.9	7.9
Queue Delay	0.0	0.4	0.1	0.0	0.6	0.6	0.0
Total Delay	38.1	6.4	27.8	4.0	27.4	27.5	7.9
Queue Length 50th (ft)	116	83	219	0	57	58	5
Queue Length 95th (ft)	m174	124	#310	46	111	112	70
Internal Link Dist (ft)		205	990			412	
Turn Bay Length (ft)	75				215		60
Base Capacity (vph)	383	2251	1291	739	376	376	608
Starvation Cap Reductn	0	696	0	0	0	0	0
Spillback Cap Reductn	0	0	5	0	62	62	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.61	0.84	0.41	0.48	0.49	0.58

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	861	353	365	1037	201	203	674
v/c Ratio	0.68	0.46	0.92	0.45	0.53	0.52	0.99
Control Delay	22.1	4.2	58.6	6.5	29.8	29.4	44.8
Queue Delay	0.0	0.0	0.0	0.5	0.0	0.0	0.0
Total Delay	22.1	4.2	58.6	7.0	29.8	29.4	44.8
Queue Length 50th (ft)	162	0	177	77	80	81	113
Queue Length 95th (ft)	224	50	m#248	m132	145	146	#341
Internal Link Dist (ft)	342			205		389	
Turn Bay Length (ft)			75		225		225
Base Capacity (vph)	1266	767	405	2293	376	387	681
Starvation Cap Reductn	0	0	0	751	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.46	0.90	0.67	0.53	0.52	0.99

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

101: Hathaway Ave & Costco access (signal)

Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	339	785	15	85	448
v/c Ratio	0.38	0.46	0.03	0.31	0.49
Control Delay	9.7	7.4	3.9	10.4	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	9.7	7.4	3.9	10.4	9.0
Queue Length 50th (ft)	17	33	0	6	37
Queue Length 95th (ft)	52	120	7	44	157
Internal Link Dist (ft)	228	109			164
Turn Bay Length (ft)				75	
Base Capacity (vph)	2713	3129	935	499	1663
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.12	0.25	0.02	0.17	0.27

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	442	850	305	220	820	134	222	814	147	236	322
v/c Ratio	1.20	0.70	0.42	0.62	0.71	0.32	0.76	0.85	0.64	0.54	0.58
Control Delay	154.4	37.7	7.0	58.7	45.2	18.1	63.9	45.7	61.7	46.0	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	154.4	37.7	7.0	58.7	45.2	18.1	63.9	45.7	61.7	46.0	14.5
Queue Length 50th (ft)	~394	281	14	80	204	30	157	265	104	155	38
Queue Length 95th (ft)	#714	419	89	134	275	90	269	#433	187	268	143
Internal Link Dist (ft)		990			529			491		213	
Turn Bay Length (ft)	160			240		65	90		225		225
Base Capacity (vph)	367	1252	744	756	1794	603	386	956	382	492	589
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.20	0.68	0.41	0.29	0.46	0.22	0.58	0.85	0.38	0.48	0.55

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	349	1241	1039	356	221	224	468
v/c Ratio	0.88	0.52	0.73	0.43	0.63	0.64	0.70
Control Delay	50.4	7.1	22.2	3.8	33.7	34.0	9.9
Queue Delay	0.2	0.7	0.0	0.0	0.4	0.4	0.0
Total Delay	50.6	7.8	22.2	3.8	34.1	34.5	9.9
Queue Length 50th (ft)	169	123	205	0	88	90	8
Queue Length 95th (ft)	m#267	190	279	49	156	160	87
Internal Link Dist (ft)		205	990			412	
Turn Bay Length (ft)	75				215		60
Base Capacity (vph)	414	2386	1428	828	395	395	693
Starvation Cap Reductn	2	711	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	24	24	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.85	0.74	0.73	0.43	0.60	0.60	0.68

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	1049	307	354	1098	269	270	477
v/c Ratio	0.74	0.39	0.88	0.31	0.79	0.79	0.87
Control Delay	22.9	3.8	52.0	5.7	44.0	44.4	28.3
Queue Delay	0.0	0.0	0.5	0.2	2.1	2.2	0.0
Total Delay	22.9	3.8	52.5	5.9	46.1	46.7	28.3
Queue Length 50th (ft)	209	0	172	68	112	112	68
Queue Length 95th (ft)	284	47	m#280	113	#215	#218	#231
Internal Link Dist (ft)	342			205		389	
Turn Bay Length (ft)					225		225
Base Capacity (vph)	1420	785	419	3492	384	383	580
Starvation Cap Reductn	0	0	5	1406	0	0	0
Spillback Cap Reductn	0	0	0	0	40	40	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.39	0.86	0.53	0.78	0.79	0.82

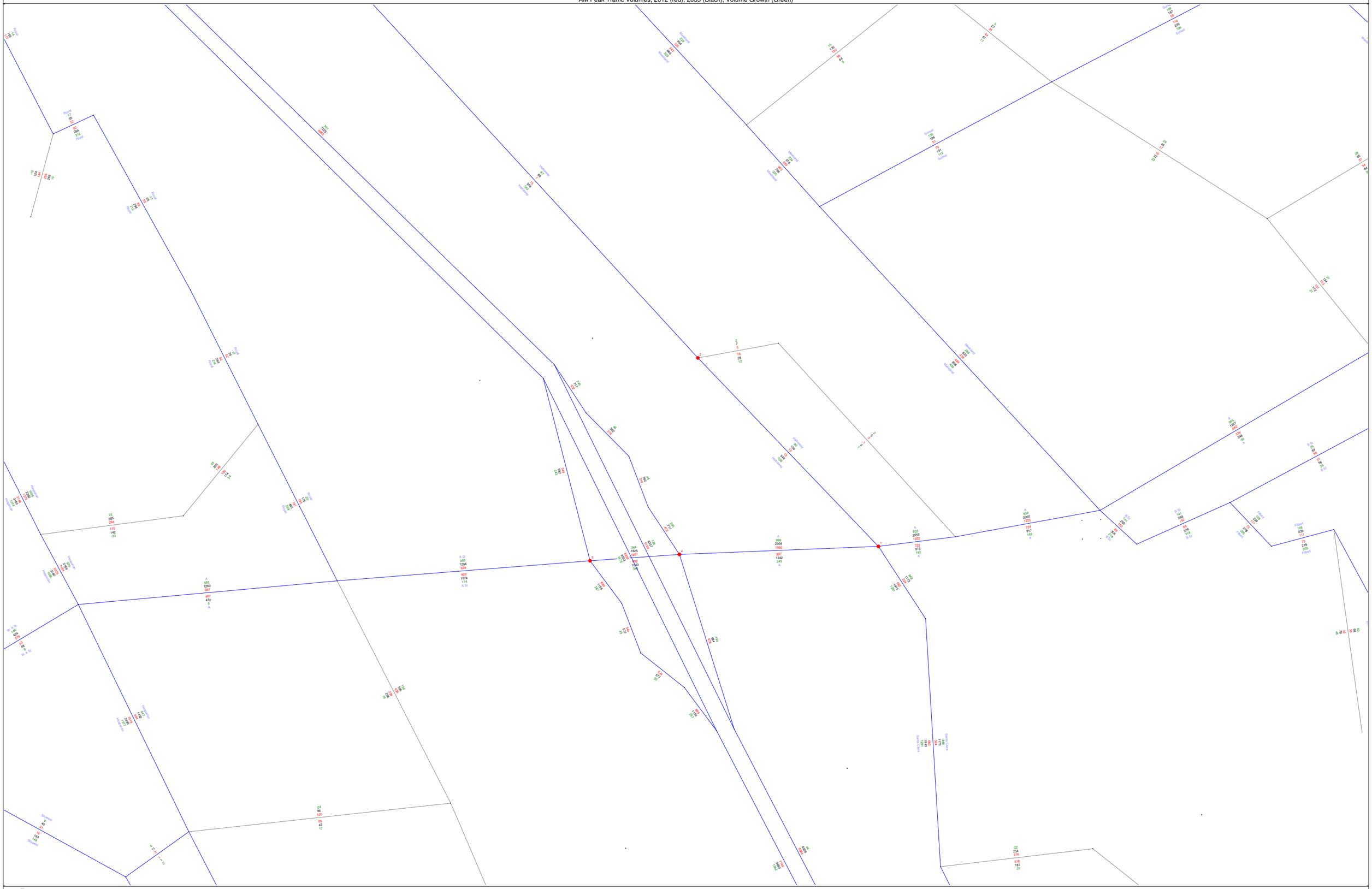
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Appendix J Model Outputs

City of Hayward GP Model
AM Peak Traffic Volumes, 2012 (red), 2035 (Black), Volume Growth (Green)



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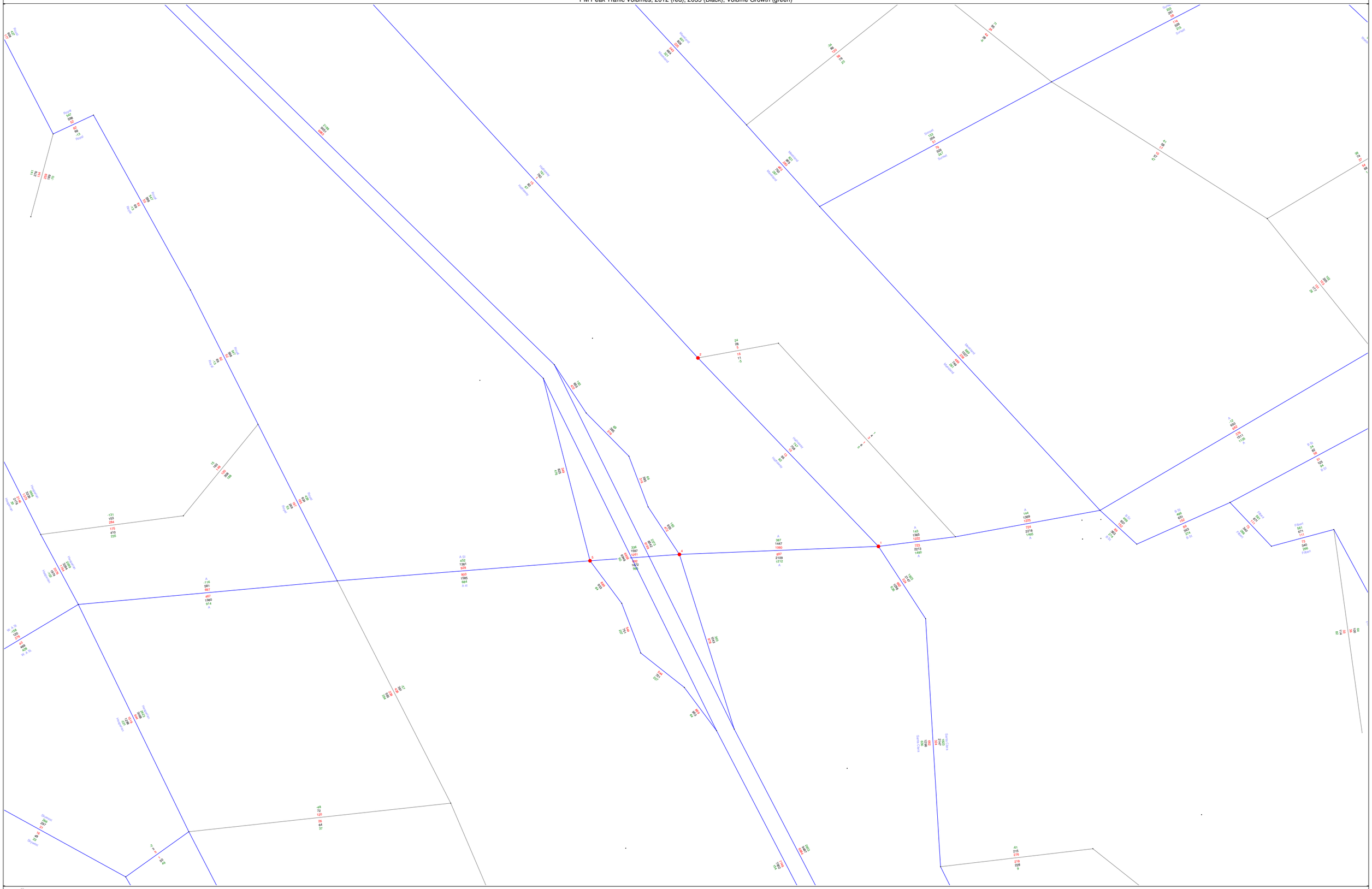
City of Hayward GP Model
PM Peak Traffic Volumes, 2012 (red), 2035 (Black), Volume Growth (green)



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Weekday AM Peak Hour Future Volume Development

Inputs: 2017 turning movement counts, 2012 model link volumes, 2035 model link volumes

Methodology: incremental or difference method described in NCHRP 255

Notes:

The volumes for the Costco access points on Hathaway Avenue were extrapolated from the volumes at Hathaway Avenue/W A Street, since this intersection is immedaiately south of the site.

The NCHRP 255 methodology compares the 2035 model volumes to existing year model volumes to identify the growth increment, and then adds this increment to the existing counts, thus smoothing out any model validation error compared to existing counts.

The process is iterative, and therefore the spreadsheet to carry it out is very large. Key values are shown below, with a note made where columns are hidden.

ID	NS	EW	2017 Turning Movements												2017 Approach/Departure								Model 2012 Approach/Departure Flow										
			NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	NB In	NB Out	SB In	SB Out	EB In	EB Out	WB In	WB Out	NB In	NB Out	SB In	SB Out	EB In	EB Out	WB In	WB Out	In	Out	Δ
3	Hathaway Ave	W A St	105	139	260	88	311	278	219	638	234	485	850	104	504	462	677	1,030	1,091	986	1,439	1,233	324	10	13	662	897	723	1,222	1,060	2,456	2,455	1
4	I-880 NB Ramps	W A St	291	1	327	0	0	0	228	889	0	0	1,012	284	619	513	0	0	1,117	1,216	1,296	1,303	878	472	0	0	692	897	1,060	1,261	2,630	2,630	0
5	I-880 SB Ramps	W A St	0	0	0	316	60	640	0	801	335	335	968	0	0	0	1,016	730	1,136	1,117	1,303	1,608	0	0	349	889	900	692	1,261	929	2,510	2,510	0

ID	NS	EW	Model 2035 Approach/Departure Flow											Model 2017 Approach/Departure Flow											Model 2035 Approach/Departure Flow										
			NB In	NB Out	SB In	SB Out	EB In	EB Out	WB In	WB Out	In	Out	Δ	NB In	NB Out	SB In	SB Out	EB In	EB Out	WB In	WB Out	In	Out	Δ	NB In	NB Out	SB In	SB Out	EB In	EB Out	WB In	WB Out	In	Out	Δ
3	Hathaway Ave	W A St	1,173	100	548	1,943	1,242	915	2,055	2,059	5,018	5,017	1	509	30	129	940	972	765	1403	1277	3013	3012	1	1,173	100	548	1,943	1,242	915	2,055	2,059	5,018	5,017	1
4	I-880 NB Ramps	W A St	684	717	0	0	1,040	1,242	2,059	1,825	3,783	3,784	-1	836	525	0	0	768	972	1277	1384	2881	2881	0	684	717	0	0	1,040	1,242	2,059	1,825	3,783	3,784	-1
5	I-880 SB Ramps	W A St	0	0	592	1,156	1,074	1,294	1,825	1,040	3,491	3,490	1	0	0	402	947	938	823	1384	953	2723	2723	0	0	0	592	1,156	1,074	1,294	1,825	1,040	3,491	3,490	1

Note: columns hidden that calculate 2017 model flows

Using Ratio instead of Delta

ID	NS	EW	Model Growth Ratio (2017 - 2035)								Ratio or Delta	Model Growth Δ (2017 - 2035)								Forecasted 2035 Approach/Departure										1
			NB In	NB Out	SB In	SB Out	EB In	EB Out	WB In	WB Out		NB In	NB Out	SB In	SB Out	EB In	EB Out	WB In	WB Out	NB In	NB Out	SB In	SB Out	EB In	EB Out	WB In	WB Out	In	Out	Δ
3	Hathaway Ave	W A St	2.31	3.38	4.24	2.07	1.28	1.20	1.46	1.61	4.24	664	70	419	1003	270	150	652	782	1,162	1,563	2,869	2,128	1,394	1,180	2,108	1,988	7,533	6,858	675
4	I-880 NB Ramps	W A St	0.82	1.37	0.00	0.00	1.35	1.28	1.61	1.32	1.61	0	192	0	0	272	270	782	441	507	700	0	0	1,513	1,554	2,089	1,719	4,109	3,973	136
5	I-880 SB Ramps	W A St	0.00	0.00	1.47	1.22	1.15	1.57	1.32	1.09	1.57	0	0	190	209	136	471	441	87	0	0	1,497	891	1,301	1,757	1,719	1,755	4,516	4,402	114

Using Delta instead of Ratio

Final If Ratio>2, use Delta, else use Ratio

ID	NS	EW	Forecasted 2035 Approach/Departure										1	Forecasted 2035 Approach/Departure										1	Forecasted 2035 Turning Movements (Furness)											
			NB In	NB Out	SB In	SB Out	EB In	EB Out	WB In	WB Out	In	Out	Δ	NB In	NB Out	SB In	SB Out	EB In	EB Out	WB In	WB Out	In	Out	Δ	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
3	Hathaway Ave	W A St	1,168	532	1,096	2,033	1,361	1,136	2,091	2,015	5,716	5,716	0	1,168	532	1,096	2,033	1,361	1,136	2,091	2,015	5,716	5,716	0	307	270	511	88	614	437	212	627	467	876	1215	91
4	I-880 NB Ramps	W A St	619	705	0	0	1,389	1,486	2,078	1,744	4,086	3,935	151	507	700	0	0	1,513	1,554	2,089	1,719	4,109	3,973	136	234	1	288	0	0	0	291	1234	0	0	1555	438
5	I-880 SB Ramps	W A St	0	0	1,206	939	1,272	1,588	1,744	1,695	4,223	4,222	1	0	0	1,497	891	1,301	1,757	1,719	1,755	4,516	4,402	114	0	0	0	598	87	768	0	1066	334	475	1130	0

Note: columns hidden showing ratio and delta approaches to forecasting 2035 volumes as well as the percent change from existing counts.

Floor to 2017 Counts

Counts used in analysis

ID	NS	EW	Forecasted 2035 Turning Movements % Δ												Forecasted 2035 Turning Movements (Floor)												Forecasted 2035 Turning Movements (Floor)											
			NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
3	Hathaway Ave	W A St	192%	94%	97%	0%	98%	57%	-3%	-2%	100%	81%	43%	-12%	307	270	511	88	614	437	219	638	467	876	1215	104	307	146	338	92	327	292	230	670	304	631	1315	109
4	I-880 NB Ramps	W A St	-20%	-19%	-12%	0%	0%	0%	28%	39%	0%	0%	54%	54%	291	1	327	0	0	0	291	1234	0	0	1555	438	306	1	343	0	0	0	291	938	0	0	1468	438
5	I-880 SB Ramps	W A St	0%	0%	0%	89%	46%	20%	0%	33%	0%	42%	17%	0%	0	0	0	598	87	768	0	1066	335	475	1130	0	0	0	0	348	66	704	0	881	419	419	1355	0

Note: on some roadway links, the base model volumes are significantly lower than existing volumes, resulting in excessive growth reflected in the post-processed volumes. In these cases, the volumes were adjusted to more closely match 2035 link projections.

balanced through volumes
Added 100 vehicles for balancing
used a 5% growth rate reflected in model link volumes
used a 10% growth rate reflected in model link volumes
used a 25% growth rate reflected in model link volumes
used a 30% growth rate reflected in model link volumes
used a 40 % growth rate reflected in model link volumes

Weekday PM Peak Hour Future Volume Development

Inputs: 2017 turning movement counts, 2012 model link volumes, 2035 model link volumes

Methodology: incremental or difference method described in NCHRP 255

Notes:

The volumes for the Costco access points on Hathaway Avenue were extrapolated from the volumes at Hathaway Avenue/W A Street, since this intersection is immedaiately south of the site.

The NCHRP 255 methodology compares the 2035 model volumes to existing year model volumes to identify the growth increment, and then adds this increment to the existing counts, thus smoothing out any model validation error compared to existing counts.

The process is iterative, and therefore the spreadsheet to carry it out is very large. Key values are shown below, with a note made where columns are hidden.

ID	NS	EW	2017 Turning Movements												2017 Approach/Departure								Model 2012 Approach/Departure Flow										
			NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	NB In	NB Out	SB In	SB Out	EB In	EB Out	WB In	WB Out	NB In	NB Out	SB In	SB Out	EB In	EB Out	WB In	WB Out	In	Out	Δ
3	Hathaway Ave	W A St	213	450	312	122	208	265	320	816	293	208	787	110	975	880	595	709	1,429	1,250	1,105	1,265	324	10	13	662	897	723	1,222	1,060	2,456	2,455	1
4	I-880 NB Ramps	W A St	421	2	430	0	0	0	332	1,150	0	0	953	328	853	662	0	0	1,482	1,580	1,281	1,374	878	472	0	0	692	897	1,060	1,261	2,630	2,630	0
5	I-880 SB Ramps	W A St	0	0	0	483	30	463	0	999	298	328	1,046	0	0	0	976	656	1,297	1,482	1,374	1,509	0	0	349	889	900	692	1,261	929	2,510	2,510	0

ID	NS	EW	Model 2035 Approach/Departure Flow											Model 2017 Approach/Departure Flow											Model 2035 Approach/Departure Flow										
			NB In	NB Out	SB In	SB Out	EB In	EB Out	WB In	WB Out	In	Out	Δ	NB In	NB Out	SB In	SB Out	EB In	EB Out	WB In	WB Out	In	Out	Δ	NB In	NB Out	SB In	SB Out	EB In	EB Out	WB In	WB Out	In	Out	Δ
3	Hathaway Ave	W A St	2,147	758	95	1,298	2,109	2,213	1,365	1,447	5,716	5,716	0	720	173	31	800	1160	1047	1253	1144	3165	3164	1	2,147	758	95	1,298	2,109	2,213	1,365	1,447	5,716	5,716	0
4	I-880 NB Ramps	W A St	1,243	656	0	0	1,672	2,109	1,447	1,597	4,362	4,362	0	957	512	0	0	905	1160	1144	1334	3007	3007	0	1,243	656	0	0	1,672	2,109	1,447	1,597	4,362	4,362	0
5	I-880 SB Ramps	W A St	0	0	825	953	1,585	1,672	1,597	1,381	4,007	4,006	1	0	0	452	903	1049	905	1334	1027	2835	2835	0	0	0	825	953	1,585	1,672	1,597	1,381	4,007	4,006	1

Note: columns hidden that calculate 2017 model flows

Using Ratio instead of Delta

ID	NS	EW	Model Growth Ratio (2017 - 2035)								Ratio or Delta	Model Growth Δ (2017 - 2035)								Forecasted 2035 Approach/Departure										1
			NB In	NB Out	SB In	SB Out	EB In	EB Out	WB In	WB Out		NB In	NB Out	SB In	SB Out	EB In	EB Out	WB In	WB Out	NB In	NB Out	SB In	SB Out	EB In	EB Out	WB In	WB Out	In	Out	Δ
3	Hathaway Ave	W A St	2.98	4.39	3.08	1.62	1.82	2.11	1.09	1.26	4.39	1427	585	64	498	949	1166	112	303	2,906	3,864	1,834	1,150	2,597	2,642	1,204	1,600	8,541	9,257	-716
4	I-880 NB Ramps	W A St	1.30	1.28	0.00	0.00	1.85	1.82	1.26	1.20	1.85	286	144	0	0	767	949	303	263	1,108	848	0	0	2,738	2,871	1,620	1,645	5,466	5,364	101
5	I-880 SB Ramps	W A St	0.00	0.00	1.82	1.06	1.51	1.85	1.20	1.34	1.85	0	0	373	50	536	767	263	354	0	0	1,780	692	1,960	2,738	1,645	2,029	5,384	5,459	-75

Using Delta instead of Ratio **Final** **If Ratio>2, use Delta, else use Ratio**

ID	NS	EW	Forecasted 2035 Approach/Departure										1	Forecasted 2035 Approach/Departure										1	Forecasted 2035 Turning Movements (Furness)											
			NB In	NB Out	SB In	SB Out	EB In	EB Out	WB In	WB Out	In	Out	Δ	NB In	NB Out	SB In	SB Out	EB In	EB Out	WB In	WB Out	In	Out	Δ	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
3	Hathaway Ave	W A St	2,402	1,465	659	1,207	2,378	2,416	1,217	1,568	6,655	6,656	-1	2,402	1,465	659	1,207	2,378	2,416	1,217	1,568	6,655	6,656	-1	468	985	838	158	286	257	443	1423	545	308	824	120
4	I-880 NB Ramps	W A St	1,139	806	0	0	2,249	2,529	1,584	1,637	4,971	4,971	0	1,108	848	0	0	2,738	2,871	1,620	1,645	5,466	5,364	101	497	2	656	0	0	0	505	2188	0	0	1165	401
5	I-880 SB Ramps	W A St	0	0	1,349	706	1,833	2,249	1,637	1,863	4,819	4,818	1	0	0	1,780	692	1,960	2,738	1,645	2,029	5,384	5,459	-75	0	0	0	975	41	757	0	1691	332	332	1294	0

Note: columns hidden showing ratio and delta approaches to forecasting 2035 volumes as well as the percent change from existing counts.

Floor to 2017 Counts **Counts used in analysis**

ID	NS	EW	Forecasted 2035 Turning Movements % Δ												Forecasted 2035 Turning Movements (Floor)												Forecasted 2035 Turning Movements (Floor)											
			NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
3	Hathaway Ave	W A St	120%	119%	169%	30%	37%	-3%	38%	74%	86%	48%	5%	9%	468	985	838	158	286	265	443	1423	545	308	824	120	298	473	437	128	218	278	336	1265	410	291	984	116
4	I-880 NB Ramps	W A St	18%	18%	53%	0%	0%	0%	52%	90%	0%	0%	22%	22%	497	2	656	0	0	0	505	2188	0	0	1165	401	492	2	656	0	0	0	349	1407	0	0	1119	344
5	I-880 SB Ramps	W A St	0%	0%	0%	102%	38%	64%	0%	69%	12%	1%	24%	0%	0	0	0	975	41	757	0	1691	332	332	1294	0	0	0	0	507	32	486	0	1249	328	361	1255	0

Note: on some roadway links, the base model volumes are significantly lower than existing volumes, resulting in excessive growth reflected in the post-processed volumes. In these cases, the volumes were adjusted to more closely match 2035 link projections.

balanced through volumes
used a 5% growth rate reflected in model link volumes
used a 10% growth rate reflected in model link volumes
used a 20% growth rate reflected in model link volumes
used a 25% growth rate reflected in model link volumes
used a 40% growth rate reflected in model link volumes
used a 50 % growth rate reflected in model link volumes

Appendix K Background 2022 No Project and Background 2022 Plus Project Operations Worksheets

HCM Signalized Intersection Capacity Analysis
101: Hathaway Ave & Costco access sig

09/24/2018

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	70	13	377	15	29	616
Future Volume (vph)	70	13	377	15	29	616
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.97		0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00		1.00	0.97	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	0.99	1.00
Frt	0.98		1.00	0.85	1.00	1.00
Flt Protected	0.96		1.00	1.00	0.95	1.00
Satd. Flow (prot)	2885		3374	1568	1575	1881
Flt Permitted	0.96		1.00	1.00	0.52	1.00
Satd. Flow (perm)	2885		3374	1568	862	1881
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	73	14	393	16	30	642
RTOR Reduction (vph)	12	0	0	5	0	0
Lane Group Flow (vph)	75	0	393	11	30	642
Confl. Peds. (#/hr)		3		8	8	
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	20%	15%	7%	0%	14%	1%
Turn Type	Prot		NA	Perm	Perm	NA
Protected Phases	4		6			2
Permitted Phases				6	2	
Actuated Green, G (s)	4.9		29.3	29.3	29.3	29.3
Effective Green, g (s)	4.9		29.3	29.3	29.3	29.3
Actuated g/C Ratio	0.12		0.69	0.69	0.69	0.69
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	2.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	334		2342	1088	598	1306
v/s Ratio Prot	c0.03		0.12			c0.34
v/s Ratio Perm				0.01	0.03	
v/c Ratio	0.22		0.17	0.01	0.05	0.49
Uniform Delay, d1	16.9		2.2	2.0	2.0	3.0
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1		0.0	0.0	0.0	0.3
Delay (s)	17.0		2.3	2.0	2.1	3.3
Level of Service	B		A	A	A	A
Approach Delay (s)	17.0		2.3			3.2
Approach LOS	B		A			A

Intersection Summary			
HCM 2000 Control Delay	3.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	42.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	4	388	80	0	686
Future Volume (Veh/h)	0	4	388	80	0	686
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	0	4	400	82	0	707
Pedestrians	7		1			1
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	1		0			0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			293			189
pX, platoon unblocked						
vC, conflicting volume	762	208			489	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	762	208			489	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			100	
cM capacity (veh/h)	343	798			1077	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	4	200	200	82	354	354
Volume Left	0	0	0	0	0	0
Volume Right	4	0	0	82	0	0
cSH	798	1700	1700	1700	1700	1700
Volume to Capacity	0.01	0.12	0.12	0.05	0.21	0.21
Queue Length 95th (ft)	0	0	0	0	0	0
Control Delay (s)	9.5	0.0	0.0	0.0	0.0	0.0
Lane LOS	A					
Approach Delay (s)	9.5	0.0			0.0	
Approach LOS	A					

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	29.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	68	222	647	254	3	525	979	105	161	141	282	89
Future Volume (vph)	68	222	647	254	3	525	979	105	161	141	282	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%				-2%			0%		
Total Lost time (s)		4.0	5.0	5.0		4.0	5.0	5.0	4.5	5.0		4.5
Lane Util. Factor		1.00	0.95	1.00		0.97	0.91	1.00	1.00	0.95		1.00
Frpb, ped/bikes		1.00	1.00	0.94		1.00	1.00	0.98	1.00	0.99		1.00
Flpb, ped/bikes		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Frt		1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.90		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (prot)		1658	3471	1526		3502	5086	1581	1805	3108		1752
Flt Permitted		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (perm)		1658	3471	1526		3502	5086	1581	1805	3108		1752
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	74	241	703	276	3	571	1064	114	175	153	307	97
RTOR Reduction (vph)	0	0	0	195	0	0	0	60	0	227	0	0
Lane Group Flow (vph)	0	315	703	81	0	574	1064	54	175	233	0	97
Confl. Peds. (#/hr)		6		28		28		6	5		4	4
Confl. Bikes (#/hr)												
Heavy Vehicles (%)	2%	11%	4%	0%	2%	1%	3%	1%	0%	6%	2%	3%
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Perm	Prot	NA		Prot
Protected Phases	5	5	2		1	1	6		3	8		7
Permitted Phases				2				6				
Actuated Green, G (s)		25.5	35.4	35.4		23.0	32.9	32.9	17.1	31.3		12.2
Effective Green, g (s)		25.5	35.4	35.4		23.0	32.9	32.9	17.1	31.3		12.2
Actuated g/C Ratio		0.21	0.29	0.29		0.19	0.27	0.27	0.14	0.26		0.10
Clearance Time (s)		4.0	5.0	5.0		4.0	5.0	5.0	4.5	5.0		4.5
Vehicle Extension (s)		2.0	4.0	4.0		2.0	4.0	4.0	3.0	3.0		3.0
Lane Grp Cap (vph)		351	1020	448		668	1389	432	256	807		177
v/s Ratio Prot		c0.19	0.20			0.16	c0.21		c0.10	0.07		0.06
v/s Ratio Perm				0.05				0.03				
v/c Ratio		0.90	0.69	0.18		0.86	0.77	0.12	0.68	0.29		0.55
Uniform Delay, d1		46.2	37.6	31.7		47.1	40.2	32.9	49.1	35.6		51.5
Progression Factor		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2		23.8	2.1	0.3		10.3	2.7	0.2	7.3	0.2		3.4
Delay (s)		69.9	39.8	32.0		57.5	43.0	33.1	56.4	35.8		54.9
Level of Service		E	D	C		E	D	C	E	D		D
Approach Delay (s)			45.4				47.1			41.5		
Approach LOS			D				D			D		

Intersection Summary			
HCM 2000 Control Delay	46.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	120.4	Sum of lost time (s)	18.5
Intersection Capacity Utilization	78.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	315	282
Future Volume (vph)	315	282
Ideal Flow (vphpl)	1900	1900
Grade (%)	0%	
Total Lost time (s)	5.0	5.0
Lane Util. Factor	1.00	1.00
Frpb, ped/bikes	1.00	0.98
Flpb, ped/bikes	1.00	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	1881	1508
Flt Permitted	1.00	1.00
Satd. Flow (perm)	1881	1508
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	342	307
RTOR Reduction (vph)	0	197
Lane Group Flow (vph)	342	110
Confl. Peds. (#/hr)		5
Confl. Bikes (#/hr)		1
Heavy Vehicles (%)	1%	5%
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Actuated Green, G (s)	26.4	26.4
Effective Green, g (s)	26.4	26.4
Actuated g/C Ratio	0.22	0.22
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	412	330
v/s Ratio Prot	c0.18	
v/s Ratio Perm		0.07
v/c Ratio	0.83	0.33
Uniform Delay, d1	44.9	39.6
Progression Factor	1.00	1.00
Incremental Delay, d2	13.2	0.6
Delay (s)	58.1	40.2
Level of Service	E	D
Approach Delay (s)	50.3	
Approach LOS	D	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	246	903	0	0	1139	327	295	1	332	0	0	0
Future Volume (vph)	246	903	0	0	1139	327	295	1	332	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			-2%			0%	
Total Lost time (s)	3.5	4.6			4.2	4.2	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.96	1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	1626	3471			3505	1486	1649	1644	1517			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	1626	3471			3505	1486	1649	1644	1517			
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	256	941	0	0	1186	341	307	1	346	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	204	0	0	255	0	0	0
Lane Group Flow (vph)	256	941	0	0	1186	137	153	155	91	0	0	0
Confl. Peds. (#/hr)	11		13	13		11			2	2		
Confl. Bikes (#/hr)			1			5						
Heavy Vehicles (%)	11%	4%	0%	0%	3%	4%	5%	100%	6%	0%	0%	0%
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	7			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	14.1	45.4			28.2	28.2	16.0	16.0	16.0			
Effective Green, g (s)	14.1	45.4			28.2	28.2	16.0	16.0	16.0			
Actuated g/C Ratio	0.20	0.65			0.40	0.40	0.23	0.23	0.23			
Clearance Time (s)	3.5	4.6			4.2	4.2	4.0	4.0	4.0			
Vehicle Extension (s)	2.0	2.9			3.9	3.9	2.0	2.0	2.0			
Lane Grp Cap (vph)	327	2251			1412	598	376	375	346			
v/s Ratio Prot	c0.16	c0.27			c0.34		0.09	c0.09				
v/s Ratio Perm						0.09			0.06			
v/c Ratio	0.78	0.42			0.84	0.23	0.41	0.41	0.26			
Uniform Delay, d1	26.5	5.9			18.9	13.8	23.0	23.0	22.2			
Progression Factor	1.24	0.92			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	8.3	0.1			6.2	0.9	0.3	0.3	0.1			
Delay (s)	41.3	5.5			25.0	14.6	23.2	23.3	22.3			
Level of Service	D	A			C	B	C	C	C			
Approach Delay (s)		13.2			22.7			22.8			0.0	
Approach LOS		B			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	19.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	77.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	823	358	358	1076	0	0	0	0	325	62	658
Future Volume (vph)	0	823	358	358	1076	0	0	0	0	325	62	658
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-2%	
Total Lost time (s)		4.6	4.6	3.5	4.2					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.95					0.95	0.95	1.00
Frpb, ped/bikes		1.00	0.94	1.00	1.00					1.00	1.00	0.99
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		3438	1480	1719	3505					1649	1694	1530
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (perm)		3438	1480	1719	3505					1649	1694	1530
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	866	377	377	1133	0	0	0	0	342	65	693
RTOR Reduction (vph)	0	0	239	0	0	0	0	0	0	0	0	332
Lane Group Flow (vph)	0	866	138	377	1133	0	0	0	0	202	205	361
Confl. Peds. (#/hr)	5		18	18		5	3					3
Confl. Bikes (#/hr)			4									
Heavy Vehicles (%)	0%	5%	3%	5%	3%	0%	0%	0%	0%	5%	2%	5%
Turn Type		NA	Perm	Prot	NA					Split	NA	Perm
Protected Phases		2		1	3					4	4	
Permitted Phases			2									4
Actuated Green, G (s)		25.6	25.6	16.3	45.8					16.0	16.0	16.0
Effective Green, g (s)		25.6	25.6	16.3	45.8					16.0	16.0	16.0
Actuated g/C Ratio		0.37	0.37	0.23	0.65					0.23	0.23	0.23
Clearance Time (s)		4.6	4.6	3.5	4.2					4.0	4.0	4.0
Vehicle Extension (s)		3.9	3.9	2.0	2.9					2.0	2.0	2.0
Lane Grp Cap (vph)		1257	541	400	2293					376	387	349
v/s Ratio Prot		c0.25		c0.22	c0.32					0.12	0.12	
v/s Ratio Perm			0.09									c0.24
v/c Ratio		0.69	0.25	0.94	0.49					0.54	0.53	1.04
Uniform Delay, d1		18.8	15.5	26.4	6.2					23.7	23.7	27.0
Progression Factor		1.00	1.00	1.36	1.01					1.00	1.00	1.00
Incremental Delay, d2		3.1	1.1	22.7	0.1					0.7	0.6	57.6
Delay (s)		21.9	16.7	58.7	6.4					24.5	24.3	84.6
Level of Service		C	B	E	A					C	C	F
Approach Delay (s)		20.3			19.4			0.0			62.3	
Approach LOS		C			B			A			E	

Intersection Summary			
HCM 2000 Control Delay	32.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	77.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
101: Hathaway Ave & Costco access (signal)

09/24/2018

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	138	39	760	6	30	465
Future Volume (vph)	138	39	760	6	30	465
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.97		0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00		1.00	0.98	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.97		1.00	0.85	1.00	1.00
Flt Protected	0.96		1.00	1.00	0.95	1.00
Satd. Flow (prot)	3291		3505	1050	1595	1863
Flt Permitted	0.96		1.00	1.00	0.34	1.00
Satd. Flow (perm)	3291		3505	1050	567	1863
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	147	41	809	6	32	495
RTOR Reduction (vph)	33	0	0	2	0	0
Lane Group Flow (vph)	155	0	809	4	32	495
Confl. Peds. (#/hr)		2		5	5	
Heavy Vehicles (%)	4%	3%	3%	50%	13%	2%
Turn Type	Prot		NA	Perm	Perm	NA
Protected Phases	4		6			2
Permitted Phases				6	2	
Actuated Green, G (s)	6.6		21.0	21.0	21.0	21.0
Effective Green, g (s)	6.6		21.0	21.0	21.0	21.0
Actuated g/C Ratio	0.19		0.59	0.59	0.59	0.59
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	2.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	610		2067	619	334	1098
v/s Ratio Prot	c0.05		0.23			c0.27
v/s Ratio Perm				0.00	0.06	
v/c Ratio	0.25		0.39	0.01	0.10	0.45
Uniform Delay, d1	12.4		3.9	3.0	3.2	4.1
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1		0.1	0.0	0.1	0.3
Delay (s)	12.5		4.0	3.0	3.3	4.4
Level of Service	B		A	A	A	A
Approach Delay (s)	12.5		4.0			4.3
Approach LOS	B		A			A

Intersection Summary			
HCM 2000 Control Delay	5.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	35.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	37.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	22	744	148	0	603
Future Volume (Veh/h)	0	22	744	148	0	603
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	23	783	156	0	635
Pedestrians	6		1			1
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	1		0			0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			293			189
pX, platoon unblocked						
vC, conflicting volume	1108	398			945	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1108	398			945	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	206	603			730	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	23	392	392	156	318	318
Volume Left	0	0	0	0	0	0
Volume Right	23	0	0	156	0	0
cSH	603	1700	1700	1700	1700	1700
Volume to Capacity	0.04	0.23	0.23	0.09	0.19	0.19
Queue Length 95th (ft)	3	0	0	0	0	0
Control Delay (s)	11.2	0.0	0.0	0.0	0.0	0.0
Lane LOS	B					
Approach Delay (s)	11.2	0.0			0.0	
Approach LOS	B					

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	30.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	58	324	941	326	3	231	842	112	237	456	347	124
Future Volume (vph)	58	324	941	326	3	231	842	112	237	456	347	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%				-2%			0%		
Total Lost time (s)		4.0	5.0	5.0		4.0	5.0	5.0	4.5	5.0		4.5
Lane Util. Factor		1.00	0.95	1.00		0.97	0.91	1.00	1.00	0.95		1.00
Frpb, ped/bikes		1.00	1.00	1.00		1.00	1.00	0.99	1.00	0.99		1.00
Flpb, ped/bikes		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Frt		1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.94		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (prot)		1686	3539	1599		3467	5136	1575	1805	3287		1787
Flt Permitted		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (perm)		1686	3539	1599		3467	5136	1575	1805	3287		1787
Peak-hour factor, PHF	0.92	0.96	0.96	0.96	0.92	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	63	338	980	340	3	241	877	117	247	475	361	129
RTOR Reduction (vph)	0	0	0	174	0	0	0	63	0	93	0	0
Lane Group Flow (vph)	0	401	980	166	0	244	877	54	247	743	0	129
Confl. Peds. (#/hr)		2						2	5		1	1
Heavy Vehicles (%)	2%	8%	2%	1%	2%	2%	2%	2%	0%	3%	1%	1%
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Perm	Prot	NA		Prot
Protected Phases	5	5	2		1	1	6		3	8		7
Permitted Phases				2				6				
Actuated Green, G (s)		25.2	40.0	40.0		12.7	27.5	27.5	20.4	31.0		13.8
Effective Green, g (s)		25.2	40.0	40.0		12.7	27.5	27.5	20.4	31.0		13.8
Actuated g/C Ratio		0.22	0.34	0.34		0.11	0.24	0.24	0.18	0.27		0.12
Clearance Time (s)		4.0	5.0	5.0		4.0	5.0	5.0	4.5	5.0		4.5
Vehicle Extension (s)		2.0	4.0	4.0		2.0	4.0	4.0	3.0	3.0		3.0
Lane Grp Cap (vph)		366	1220	551		379	1217	373	317	878		212
v/s Ratio Prot		c0.24	c0.28			0.07	0.17		c0.14	c0.23		0.07
v/s Ratio Perm				0.10				0.03				
v/c Ratio		1.10	0.80	0.30		0.64	0.72	0.14	0.78	0.85		0.61
Uniform Delay, d1		45.4	34.4	27.8		49.5	40.7	35.0	45.6	40.2		48.5
Progression Factor		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2		75.3	4.1	0.4		2.8	2.3	0.2	11.5	7.6		4.9
Delay (s)		120.7	38.6	28.2		52.3	43.0	35.2	57.1	47.8		53.4
Level of Service		F	D	C		D	D	D	E	D		D
Approach Delay (s)			55.7				44.1			49.9		
Approach LOS			E				D			D		

Intersection Summary			
HCM 2000 Control Delay	49.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	18.5
Intersection Capacity Utilization	84.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	211	269
Future Volume (vph)	211	269
Ideal Flow (vphpl)	1900	1900
Grade (%)	0%	
Total Lost time (s)	5.0	5.0
Lane Util. Factor	1.00	1.00
Frpb, ped/bikes	1.00	0.98
Flpb, ped/bikes	1.00	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	1881	1524
Flt Permitted	1.00	1.00
Satd. Flow (perm)	1881	1524
Peak-hour factor, PHF	0.96	0.96
Adj. Flow (vph)	220	280
RTOR Reduction (vph)	0	194
Lane Group Flow (vph)	220	86
Confl. Peds. (#/hr)		5
Heavy Vehicles (%)	1%	4%
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Actuated Green, G (s)	24.4	24.4
Effective Green, g (s)	24.4	24.4
Actuated g/C Ratio	0.21	0.21
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	395	320
v/s Ratio Prot	0.12	
v/s Ratio Perm		0.06
v/c Ratio	0.56	0.27
Uniform Delay, d1	41.0	38.3
Progression Factor	1.00	1.00
Incremental Delay, d2	1.7	0.5
Delay (s)	42.7	38.8
Level of Service	D	D
Approach Delay (s)	43.1	
Approach LOS	D	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	337	1221	0	0	999	333	442	2	493	0	0	0
Future Volume (vph)	337	1221	0	0	999	333	442	2	493	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			-2%			0%	
Total Lost time (s)	3.5	4.6			4.2	4.2	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.96	1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	1752	3539			3539	1527	1732	1730	1530			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	1752	3539			3539	1527	1732	1730	1530			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	355	1285	0	0	1052	351	465	2	519	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	210	0	0	373	0	0	0
Lane Group Flow (vph)	355	1285	0	0	1052	141	232	235	146	0	0	0
Confl. Peds. (#/hr)	8		6	6		8			2	2		
Confl. Bikes (#/hr)			3			2			1			
Heavy Vehicles (%)	3%	2%	0%	0%	2%	2%	0%	50%	5%	0%	0%	0%
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	7			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	16.0	47.2			28.1	28.1	14.2	14.2	14.2			
Effective Green, g (s)	16.0	47.2			28.1	28.1	14.2	14.2	14.2			
Actuated g/C Ratio	0.23	0.67			0.40	0.40	0.20	0.20	0.20			
Clearance Time (s)	3.5	4.6			4.2	4.2	4.0	4.0	4.0			
Vehicle Extension (s)	2.0	2.9			3.9	3.9	2.0	2.0	2.0			
Lane Grp Cap (vph)	400	2386			1420	612	351	350	310			
v/s Ratio Prot	c0.20	c0.36			c0.30		0.13	c0.14				
v/s Ratio Perm						0.09			0.10			
v/c Ratio	0.89	0.54			0.74	0.23	0.66	0.67	0.47			
Uniform Delay, d1	26.1	5.8			17.8	13.8	25.7	25.7	24.6			
Progression Factor	1.20	1.08			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	14.4	0.1			3.5	0.9	3.6	4.0	0.4			
Delay (s)	45.8	6.4			21.4	14.7	29.3	29.7	25.0			
Level of Service	D	A			C	B	C	C	C			
Approach Delay (s)		15.0			19.7			27.1			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay	19.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	120.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1068	306	337	1104	0	0	0	0	490	30	469
Future Volume (vph)	0	1068	306	337	1104	0	0	0	0	490	30	469
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-2%	
Total Lost time (s)		4.6	4.6	3.5	4.2					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.91					0.95	0.95	1.00
Frpb, ped/bikes		1.00	0.96	1.00	1.00					1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		3574	1513	1770	5136					1681	1676	1526
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		3574	1513	1770	5136					1681	1676	1526
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	1101	315	347	1138	0	0	0	0	505	31	484
RTOR Reduction (vph)	0	0	189	0	0	0	0	0	0	0	0	239
Lane Group Flow (vph)	0	1101	126	347	1138	0	0	0	0	268	268	245
Confl. Peds. (#/hr)	7		11	11		7	6					6
Confl. Bikes (#/hr)			5			1						
Heavy Vehicles (%)	0%	1%	2%	2%	1%	0%	0%	0%	0%	3%	13%	5%
Turn Type		NA	Perm	Prot	NA					Split	NA	Perm
Protected Phases		2		1	3					4	4	
Permitted Phases			2									4
Actuated Green, G (s)		28.0	28.0	15.7	47.6					14.2	14.2	14.2
Effective Green, g (s)		28.0	28.0	15.7	47.6					14.2	14.2	14.2
Actuated g/C Ratio		0.40	0.40	0.22	0.68					0.20	0.20	0.20
Clearance Time (s)		4.6	4.6	3.5	4.2					4.0	4.0	4.0
Vehicle Extension (s)		3.9	3.9	2.0	2.9					2.0	2.0	2.0
Lane Grp Cap (vph)		1429	605	396	3492					341	339	309
v/s Ratio Prot		c0.31		c0.20	c0.22					0.16	0.16	
v/s Ratio Perm			0.08									c0.16
v/c Ratio		0.77	0.21	0.88	0.33					0.79	0.79	0.79
Uniform Delay, d1		18.2	13.7	26.2	4.6					26.5	26.5	26.5
Progression Factor		1.00	1.00	1.21	1.14					1.00	1.00	1.00
Incremental Delay, d2		4.1	0.8	14.0	0.0					10.5	11.1	12.2
Delay (s)		22.3	14.5	45.8	5.3					36.9	37.6	38.7
Level of Service		C	B	D	A					D	D	D
Approach Delay (s)		20.6			14.8			0.0			37.9	
Approach LOS		C			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	22.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	120.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
101: Hathaway Ave & Costco access sig

09/24/2018

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	185	37	367	23	78	582
Future Volume (vph)	185	37	367	23	78	582
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.97		0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00		1.00	0.97	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.97		1.00	0.85	1.00	1.00
Flt Protected	0.96		1.00	1.00	0.95	1.00
Satd. Flow (prot)	2884		3374	1569	1576	1881
Flt Permitted	0.96		1.00	1.00	0.53	1.00
Satd. Flow (perm)	2884		3374	1569	872	1881
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	193	39	382	24	81	606
RTOR Reduction (vph)	30	0	0	11	0	0
Lane Group Flow (vph)	202	0	382	13	81	606
Confl. Peds. (#/hr)		3		8	8	
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	20%	15%	7%	0%	14%	1%
Turn Type	Prot		NA	Perm	Perm	NA
Protected Phases	4		6			2
Permitted Phases				6	2	
Actuated Green, G (s)	8.8		21.2	21.2	21.2	21.2
Effective Green, g (s)	8.8		21.2	21.2	21.2	21.2
Actuated g/C Ratio	0.23		0.56	0.56	0.56	0.56
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	2.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	667		1882	875	486	1049
v/s Ratio Prot	c0.07		0.11			c0.32
v/s Ratio Perm				0.01	0.09	
v/c Ratio	0.30		0.20	0.02	0.17	0.58
Uniform Delay, d1	12.1		4.2	3.7	4.1	5.5
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1		0.1	0.0	0.2	0.8
Delay (s)	12.2		4.2	3.8	4.3	6.3
Level of Service	B		A	A	A	A
Approach Delay (s)	12.2		4.2			6.0
Approach LOS	B		A			A

Intersection Summary			
HCM 2000 Control Delay	6.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	38.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	28	362	187	0	767
Future Volume (Veh/h)	0	28	362	187	0	767
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	0	29	373	193	0	791
Pedestrians	7		1			1
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	1		0			0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			293			189
pX, platoon unblocked						
vC, conflicting volume	776	194			573	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	776	194			573	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	335	814			1003	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	29	186	186	193	396	396
Volume Left	0	0	0	0	0	0
Volume Right	29	0	0	193	0	0
cSH	814	1700	1700	1700	1700	1700
Volume to Capacity	0.04	0.11	0.11	0.11	0.23	0.23
Queue Length 95th (ft)	3	0	0	0	0	0
Control Delay (s)	9.6	0.0	0.0	0.0	0.0	0.0
Lane LOS	A					
Approach Delay (s)	9.6	0.0			0.0	
Approach LOS	A					

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	31.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	68	265	647	254	3	525	979	124	161	160	282	108
Future Volume (vph)	68	265	647	254	3	525	979	124	161	160	282	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%				-2%			0%		
Total Lost time (s)		4.0	5.0	5.0		4.0	5.0	5.0	4.5	5.0		4.5
Lane Util. Factor		1.00	0.95	1.00		0.97	0.91	1.00	1.00	0.95		1.00
Frpb, ped/bikes		1.00	1.00	0.94		1.00	1.00	0.98	1.00	0.99		1.00
Flpb, ped/bikes		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Frt		1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.90		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (prot)		1654	3471	1525		3502	5086	1580	1805	3121		1752
Flt Permitted		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (perm)		1654	3471	1525		3502	5086	1580	1805	3121		1752
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	74	288	703	276	3	571	1064	135	175	174	307	117
RTOR Reduction (vph)	0	0	0	196	0	0	0	60	0	224	0	0
Lane Group Flow (vph)	0	362	703	80	0	574	1064	75	175	257	0	117
Confl. Peds. (#/hr)		6		28		28		6	5		4	4
Confl. Bikes (#/hr)												
Heavy Vehicles (%)	2%	11%	4%	0%	2%	1%	3%	1%	0%	6%	2%	3%
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Perm	Prot	NA		Prot
Protected Phases	5	5	2		1	1	6		3	8		7
Permitted Phases				2				6				
Actuated Green, G (s)		25.3	35.6	35.6		23.1	33.4	33.4	17.2	31.5		13.7
Effective Green, g (s)		25.3	35.6	35.6		23.1	33.4	33.4	17.2	31.5		13.7
Actuated g/C Ratio		0.21	0.29	0.29		0.19	0.27	0.27	0.14	0.26		0.11
Clearance Time (s)		4.0	5.0	5.0		4.0	5.0	5.0	4.5	5.0		4.5
Vehicle Extension (s)		2.0	4.0	4.0		2.0	4.0	4.0	3.0	3.0		3.0
Lane Grp Cap (vph)		341	1009	443		660	1387	431	253	803		196
v/s Ratio Prot		c0.22	0.20			0.16	c0.21		c0.10	c0.08		0.07
v/s Ratio Perm				0.05				0.05				
v/c Ratio		1.06	0.70	0.18		0.87	0.77	0.17	0.69	0.32		0.60
Uniform Delay, d1		48.6	38.6	32.5		48.2	40.9	34.0	50.1	36.8		51.7
Progression Factor		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2		65.9	2.3	0.3		11.4	2.8	0.3	7.9	0.2		4.8
Delay (s)		114.5	40.9	32.8		59.6	43.7	34.2	58.0	37.0		56.5
Level of Service		F	D	C		E	D	C	E	D		E
Approach Delay (s)			59.1				48.1			42.6		
Approach LOS			E				D			D		

Intersection Summary			
HCM 2000 Control Delay	51.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	122.4	Sum of lost time (s)	18.5
Intersection Capacity Utilization	82.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	334	325
Future Volume (vph)	334	325
Ideal Flow (vphpl)	1900	1900
Grade (%)	0%	
Total Lost time (s)	5.0	5.0
Lane Util. Factor	1.00	1.00
Frpb, ped/bikes	1.00	0.98
Flpb, ped/bikes	1.00	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	1881	1508
Flt Permitted	1.00	1.00
Satd. Flow (perm)	1881	1508
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	363	353
RTOR Reduction (vph)	0	194
Lane Group Flow (vph)	363	159
Confl. Peds. (#/hr)		5
Confl. Bikes (#/hr)		1
Heavy Vehicles (%)	1%	5%
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Actuated Green, G (s)	28.0	28.0
Effective Green, g (s)	28.0	28.0
Actuated g/C Ratio	0.23	0.23
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	430	344
v/s Ratio Prot	c0.19	
v/s Ratio Perm		0.11
v/c Ratio	0.84	0.46
Uniform Delay, d1	45.1	40.7
Progression Factor	1.00	1.00
Incremental Delay, d2	14.1	1.0
Delay (s)	59.2	41.7
Level of Service	E	D
Approach Delay (s)	51.4	
Approach LOS	D	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	246	931	0	0	1172	336	295	1	346	0	0	0
Future Volume (vph)	246	931	0	0	1172	336	295	1	346	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			-2%			0%	
Total Lost time (s)	3.5	4.6			4.2	4.2	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.96	1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	1626	3471			3505	1485	1649	1644	1517			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	1626	3471			3505	1485	1649	1644	1517			
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	256	970	0	0	1221	350	307	1	360	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	221	0	0	265	0	0	0
Lane Group Flow (vph)	256	970	0	0	1221	129	153	155	95	0	0	0
Confl. Peds. (#/hr)	11		13	13		11			2	2		
Confl. Bikes (#/hr)			1			5						
Heavy Vehicles (%)	11%	4%	0%	0%	3%	4%	5%	100%	6%	0%	0%	0%
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	7			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	16.5	45.4			25.8	25.8	16.0	16.0	16.0			
Effective Green, g (s)	16.5	45.4			25.8	25.8	16.0	16.0	16.0			
Actuated g/C Ratio	0.24	0.65			0.37	0.37	0.23	0.23	0.23			
Clearance Time (s)	3.5	4.6			4.2	4.2	4.0	4.0	4.0			
Vehicle Extension (s)	2.0	2.9			3.9	3.9	2.0	2.0	2.0			
Lane Grp Cap (vph)	383	2251			1291	547	376	375	346			
v/s Ratio Prot	c0.16	0.28			c0.35		0.09	c0.09				
v/s Ratio Perm						0.09			0.06			
v/c Ratio	0.67	0.43			0.95	0.24	0.41	0.41	0.27			
Uniform Delay, d1	24.3	6.0			21.4	15.3	23.0	23.0	22.2			
Progression Factor	1.30	0.93			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	6.7	0.1			15.0	1.0	0.3	0.3	0.2			
Delay (s)	38.3	5.7			36.5	16.3	23.2	23.3	22.4			
Level of Service	D	A			D	B	C	C	C			
Approach Delay (s)		12.5			32.0			22.8			0.0	
Approach LOS		B			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	78.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	842	358	373	1095	0	0	0	0	334	62	658
Future Volume (vph)	0	842	358	373	1095	0	0	0	0	334	62	658
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-2%	
Total Lost time (s)		4.6	4.6	3.5	4.2					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.95					0.95	0.95	1.00
Frpb, ped/bikes		1.00	0.94	1.00	1.00					1.00	1.00	0.99
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		3438	1479	1719	3505					1649	1693	1530
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (perm)		3438	1479	1719	3505					1649	1693	1530
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	886	377	393	1153	0	0	0	0	352	65	693
RTOR Reduction (vph)	0	0	240	0	0	0	0	0	0	0	0	332
Lane Group Flow (vph)	0	886	137	393	1153	0	0	0	0	208	209	361
Confl. Peds. (#/hr)	5		18	18		5	3					3
Confl. Bikes (#/hr)			4									
Heavy Vehicles (%)	0%	5%	3%	5%	3%	0%	0%	0%	0%	5%	2%	5%
Turn Type		NA	Perm	Prot	NA					Split	NA	Perm
Protected Phases		2		1	3					4	4	
Permitted Phases			2									4
Actuated Green, G (s)		25.4	25.4	16.5	45.8					16.0	16.0	16.0
Effective Green, g (s)		25.4	25.4	16.5	45.8					16.0	16.0	16.0
Actuated g/C Ratio		0.36	0.36	0.24	0.65					0.23	0.23	0.23
Clearance Time (s)		4.6	4.6	3.5	4.2					4.0	4.0	4.0
Vehicle Extension (s)		3.9	3.9	2.0	2.9					2.0	2.0	2.0
Lane Grp Cap (vph)		1247	536	405	2293					376	386	349
v/s Ratio Prot		c0.26		c0.23	0.33					0.13	0.12	
v/s Ratio Perm			0.09									c0.24
v/c Ratio		0.71	0.26	0.97	0.50					0.55	0.54	1.04
Uniform Delay, d1		19.1	15.7	26.5	6.2					23.8	23.8	27.0
Progression Factor		1.00	1.00	1.32	1.06					1.00	1.00	1.00
Incremental Delay, d2		3.5	1.1	25.3	0.4					1.0	0.8	57.6
Delay (s)		22.6	16.8	60.4	7.0					24.8	24.6	84.6
Level of Service		C	B	E	A					C	C	F
Approach Delay (s)		20.9			20.6			0.0			62.1	
Approach LOS		C			C			A			E	

Intersection Summary			
HCM 2000 Control Delay	32.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	78.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
101: Hathaway Ave & Costco access (signal)

09/24/2018

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	255	64	750	14	80	430
Future Volume (vph)	255	64	750	14	80	430
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.97		0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00		1.00	0.98	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.97		1.00	0.85	1.00	1.00
Flt Protected	0.96		1.00	1.00	0.95	1.00
Satd. Flow (prot)	3297		3505	1050	1595	1863
Flt Permitted	0.96		1.00	1.00	0.33	1.00
Satd. Flow (perm)	3297		3505	1050	548	1863
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	271	68	798	15	85	457
RTOR Reduction (vph)	44	0	0	8	0	0
Lane Group Flow (vph)	295	0	798	7	85	457
Confl. Peds. (#/hr)		2		5	5	
Heavy Vehicles (%)	4%	3%	3%	50%	13%	2%
Turn Type	Prot		NA	Perm	Perm	NA
Protected Phases	4		6			2
Permitted Phases				6	2	
Actuated Green, G (s)	8.8		16.6	16.6	16.6	16.6
Effective Green, g (s)	8.8		16.6	16.6	16.6	16.6
Actuated g/C Ratio	0.26		0.50	0.50	0.50	0.50
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	2.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	868		1742	521	272	925
v/s Ratio Prot	c0.09		0.23			c0.25
v/s Ratio Perm				0.01	0.16	
v/c Ratio	0.34		0.46	0.01	0.31	0.49
Uniform Delay, d1	9.9		5.5	4.3	5.0	5.6
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1		0.2	0.0	0.7	0.4
Delay (s)	10.0		5.7	4.3	5.7	6.0
Level of Service	B		A	A	A	A
Approach Delay (s)	10.0		5.6			6.0
Approach LOS	B		A			A

Intersection Summary			
HCM 2000 Control Delay	6.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	33.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	47	717	257	0	685
Future Volume (Veh/h)	0	47	717	257	0	685
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	49	755	271	0	721
Pedestrians	6		1			1
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	1		0			0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			293			189
pX, platoon unblocked						
vC, conflicting volume	1122	384			1032	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1122	384			1032	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	92			100	
cM capacity (veh/h)	201	615			677	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	49	378	378	271	360	360
Volume Left	0	0	0	0	0	0
Volume Right	49	0	0	271	0	0
cSH	615	1700	1700	1700	1700	1700
Volume to Capacity	0.08	0.22	0.22	0.16	0.21	0.21
Queue Length 95th (ft)	6	0	0	0	0	0
Control Delay (s)	11.4	0.0	0.0	0.0	0.0	0.0
Lane LOS	B					
Approach Delay (s)	11.4	0.0			0.0	
Approach LOS	B					

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	30.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	58	368	941	326	3	231	842	131	237	476	347	143
Future Volume (vph)	58	368	941	326	3	231	842	131	237	476	347	143
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%				-2%			0%		
Total Lost time (s)		4.0	5.0	5.0		4.0	5.0	5.0	4.5	5.0		4.5
Lane Util. Factor		1.00	0.95	1.00		0.97	0.91	1.00	1.00	0.95		1.00
Frpb, ped/bikes		1.00	1.00	1.00		1.00	1.00	0.98	1.00	0.99		1.00
Flpb, ped/bikes		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Frt		1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.94		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (prot)		1685	3539	1599		3467	5136	1575	1805	3292		1787
Flt Permitted		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (perm)		1685	3539	1599		3467	5136	1575	1805	3292		1787
Peak-hour factor, PHF	0.92	0.96	0.96	0.96	0.92	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	63	383	980	340	3	241	877	136	247	496	361	149
RTOR Reduction (vph)	0	0	0	175	0	0	0	63	0	90	0	0
Lane Group Flow (vph)	0	446	980	165	0	244	877	73	247	767	0	149
Confl. Peds. (#/hr)		2						2	5		1	1
Heavy Vehicles (%)	2%	8%	2%	1%	2%	2%	2%	2%	0%	3%	1%	1%
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Perm	Prot	NA		Prot
Protected Phases	5	5	2		1	1	6		3	8		7
Permitted Phases				2				6				
Actuated Green, G (s)		25.2	40.4	40.4		12.8	28.0	28.0	20.5	31.1		15.2
Effective Green, g (s)		25.2	40.4	40.4		12.8	28.0	28.0	20.5	31.1		15.2
Actuated g/C Ratio		0.21	0.34	0.34		0.11	0.24	0.24	0.17	0.26		0.13
Clearance Time (s)		4.0	5.0	5.0		4.0	5.0	5.0	4.5	5.0		4.5
Vehicle Extension (s)		2.0	4.0	4.0		2.0	4.0	4.0	3.0	3.0		3.0
Lane Grp Cap (vph)		359	1211	547		376	1218	373	313	867		230
v/s Ratio Prot		c0.26	c0.28			0.07	0.17		c0.14	c0.23		0.08
v/s Ratio Perm				0.10				0.05				
v/c Ratio		1.24	0.81	0.30		0.65	0.72	0.19	0.79	0.88		0.65
Uniform Delay, d1		46.4	35.3	28.5		50.4	41.4	36.0	46.7	41.7		48.9
Progression Factor		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2		130.5	4.3	0.4		2.9	2.3	0.4	12.4	10.7		6.2
Delay (s)		176.9	39.6	28.9		53.3	43.7	36.3	59.1	52.4		55.0
Level of Service		F	D	C		D	D	D	E	D		E
Approach Delay (s)			72.2				44.7			53.9		
Approach LOS			E				D			D		

Intersection Summary			
HCM 2000 Control Delay	56.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	118.0	Sum of lost time (s)	18.5
Intersection Capacity Utilization	88.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	230	312
Future Volume (vph)	230	312
Ideal Flow (vphpl)	1900	1900
Grade (%)	0%	
Total Lost time (s)	5.0	5.0
Lane Util. Factor	1.00	1.00
Frpb, ped/bikes	1.00	0.98
Flpb, ped/bikes	1.00	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	1881	1524
Flt Permitted	1.00	1.00
Satd. Flow (perm)	1881	1524
Peak-hour factor, PHF	0.96	0.96
Adj. Flow (vph)	240	325
RTOR Reduction (vph)	0	192
Lane Group Flow (vph)	240	133
Confl. Peds. (#/hr)		5
Heavy Vehicles (%)	1%	4%
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Actuated Green, G (s)	25.8	25.8
Effective Green, g (s)	25.8	25.8
Actuated g/C Ratio	0.22	0.22
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	411	333
v/s Ratio Prot	0.13	
v/s Ratio Perm		0.09
v/c Ratio	0.58	0.40
Uniform Delay, d1	41.3	39.5
Progression Factor	1.00	1.00
Incremental Delay, d2	2.1	0.8
Delay (s)	43.4	40.2
Level of Service	D	D
Approach Delay (s)	44.4	
Approach LOS	D	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	337	1251	0	0	1033	342	442	2	507	0	0	0
Future Volume (vph)	337	1251	0	0	1033	342	442	2	507	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			-2%			0%	
Total Lost time (s)	3.5	4.6			4.2	4.2	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.96	1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	1752	3539			3539	1527	1732	1730	1530			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	1752	3539			3539	1527	1732	1730	1530			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	355	1317	0	0	1087	360	465	2	534	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	216	0	0	384	0	0	0
Lane Group Flow (vph)	355	1317	0	0	1087	144	232	235	150	0	0	0
Confl. Peds. (#/hr)	8		6	6		8			2	2		
Confl. Bikes (#/hr)			3			2			1			
Heavy Vehicles (%)	3%	2%	0%	0%	2%	2%	0%	50%	5%	0%	0%	0%
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	7			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	16.0	47.1			28.0	28.0	14.3	14.3	14.3			
Effective Green, g (s)	16.0	47.1			28.0	28.0	14.3	14.3	14.3			
Actuated g/C Ratio	0.23	0.67			0.40	0.40	0.20	0.20	0.20			
Clearance Time (s)	3.5	4.6			4.2	4.2	4.0	4.0	4.0			
Vehicle Extension (s)	2.0	2.9			3.9	3.9	2.0	2.0	2.0			
Lane Grp Cap (vph)	400	2381			1415	610	353	353	312			
v/s Ratio Prot	c0.20	c0.37			c0.31		0.13	c0.14				
v/s Ratio Perm						0.09			0.10			
v/c Ratio	0.89	0.55			0.77	0.24	0.66	0.67	0.48			
Uniform Delay, d1	26.1	6.0			18.2	13.9	25.6	25.6	24.6			
Progression Factor	1.20	1.09			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	13.9	0.2			4.1	0.9	3.3	3.6	0.4			
Delay (s)	45.2	6.7			22.2	14.8	28.9	29.3	25.0			
Level of Service	D	A			C	B	C	C	C			
Approach Delay (s)		14.8			20.4			26.9			0.0	
Approach LOS		B			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	19.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	123.1%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1088	306	352	1124	0	0	0	0	499	30	469
Future Volume (vph)	0	1088	306	352	1124	0	0	0	0	499	30	469
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-2%	
Total Lost time (s)		4.6	4.6	3.5	4.2					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.91					0.95	0.95	1.00
Frpb, ped/bikes		1.00	0.96	1.00	1.00					1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		3574	1513	1770	5136					1681	1676	1526
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		3574	1513	1770	5136					1681	1676	1526
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	1122	315	363	1159	0	0	0	0	514	31	484
RTOR Reduction (vph)	0	0	191	0	0	0	0	0	0	0	0	239
Lane Group Flow (vph)	0	1122	124	363	1159	0	0	0	0	272	273	245
Confl. Peds. (#/hr)	7		11	11		7	6					6
Confl. Bikes (#/hr)			5			1						
Heavy Vehicles (%)	0%	1%	2%	2%	1%	0%	0%	0%	0%	3%	13%	5%
Turn Type		NA	Perm	Prot	NA					Split	NA	Perm
Protected Phases		2		1	3					4	4	
Permitted Phases			2									4
Actuated Green, G (s)		27.5	27.5	16.1	47.5					14.3	14.3	14.3
Effective Green, g (s)		27.5	27.5	16.1	47.5					14.3	14.3	14.3
Actuated g/C Ratio		0.39	0.39	0.23	0.68					0.20	0.20	0.20
Clearance Time (s)		4.6	4.6	3.5	4.2					4.0	4.0	4.0
Vehicle Extension (s)		3.9	3.9	2.0	2.9					2.0	2.0	2.0
Lane Grp Cap (vph)		1404	594	407	3485					343	342	311
v/s Ratio Prot		c0.31		c0.21	c0.23					0.16	c0.16	
v/s Ratio Perm			0.08									0.16
v/c Ratio		0.80	0.21	0.89	0.33					0.79	0.80	0.79
Uniform Delay, d1		18.8	14.1	26.1	4.7					26.4	26.5	26.4
Progression Factor		1.00	1.00	1.23	1.16					1.00	1.00	1.00
Incremental Delay, d2		4.8	0.8	15.3	0.0					11.1	11.5	11.6
Delay (s)		23.6	14.8	47.3	5.4					37.6	37.9	38.0
Level of Service		C	B	D	A					D	D	D
Approach Delay (s)		21.7			15.4			0.0			37.9	
Approach LOS		C			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	23.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	123.1%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Appendix L Background 2022 No Project and Background 2022 Plus Project Queueing Worksheets

Queues
101: Hathaway Ave & Costco access sig

09/24/2018

Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	87	393	16	30	642
v/c Ratio	0.16	0.15	0.01	0.04	0.44
Control Delay	13.9	3.7	2.9	4.8	6.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	13.9	3.7	2.9	4.8	6.0
Queue Length 50th (ft)	8	12	0	2	53
Queue Length 95th (ft)	23	56	7	15	245
Internal Link Dist (ft)	228	109			164
Turn Bay Length (ft)				75	
Base Capacity (vph)	1956	2662	1234	678	1484
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.04	0.15	0.01	0.04	0.43

Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	4	388	80	0	686
Future Volume (Veh/h)	0	4	388	80	0	686
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	0	4	400	82	0	707
Pedestrians	7		1			1
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	1		0			0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			293			189
pX, platoon unblocked						
vC, conflicting volume	762	208			489	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	762	208			489	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			100	
cM capacity (veh/h)	343	798			1077	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	4	200	200	82	354	354
Volume Left	0	0	0	0	0	0
Volume Right	4	0	0	82	0	0
cSH	798	1700	1700	1700	1700	1700
Volume to Capacity	0.01	0.12	0.12	0.05	0.21	0.21
Queue Length 95th (ft)	0	0	0	0	0	0
Control Delay (s)	9.5	0.0	0.0	0.0	0.0	0.0
Lane LOS	A					
Approach Delay (s)	9.5	0.0			0.0	
Approach LOS	A					

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	29.3%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	315	703	276	574	1064	114	175	460	97	342	307
v/c Ratio	0.90	0.69	0.43	0.86	0.77	0.23	0.68	0.45	0.55	0.83	0.58
Control Delay	77.9	43.4	6.3	62.5	45.1	13.6	64.9	13.9	66.3	64.5	14.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	77.9	43.4	6.3	62.5	45.1	13.6	64.9	13.9	66.3	64.5	14.6
Queue Length 50th (ft)	255	274	0	231	290	19	137	49	76	259	35
Queue Length 95th (ft)	#499	368	68	#365	369	69	224	106	141	#452	138
Internal Link Dist (ft)		990			529			491		213	
Turn Bay Length (ft)	160			240		65	90		225		225
Base Capacity (vph)	349	1171	694	738	1716	587	372	1090	362	476	569
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.90	0.60	0.40	0.78	0.62	0.19	0.47	0.42	0.27	0.72	0.54

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	256	941	1186	341	153	155	346
v/c Ratio	0.78	0.42	0.84	0.43	0.41	0.41	0.58
Control Delay	46.2	6.0	27.1	3.9	26.9	27.0	8.0
Queue Delay	0.0	0.4	0.1	0.0	0.6	0.7	0.0
Total Delay	46.2	6.4	27.3	3.9	27.5	27.6	8.0
Queue Length 50th (ft)	124	82	243	0	58	60	5
Queue Length 95th (ft)	m184	124	#380	48	112	114	69
Internal Link Dist (ft)		205	990			412	
Turn Bay Length (ft)	75				215		60
Base Capacity (vph)	383	2251	1410	801	376	376	601
Starvation Cap Reductn	0	707	0	0	0	0	0
Spillback Cap Reductn	0	0	14	0	62	62	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.61	0.85	0.43	0.49	0.49	0.58

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	866	377	377	1133	202	205	693
v/c Ratio	0.69	0.48	0.94	0.49	0.54	0.53	1.02
Control Delay	22.4	4.3	62.0	6.9	29.9	29.5	52.4
Queue Delay	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Total Delay	22.4	4.3	62.0	7.5	29.9	29.5	52.4
Queue Length 50th (ft)	163	0	183	90	81	82	~138
Queue Length 95th (ft)	226	51	m#259	m141	146	147	#362
Internal Link Dist (ft)	342			205		389	
Turn Bay Length (ft)			75		225		225
Base Capacity (vph)	1255	779	405	2293	376	387	681
Starvation Cap Reductn	0	0	0	713	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.48	0.93	0.72	0.54	0.53	1.02

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues
101: Hathaway Ave & Costco access (signal)

09/24/2018

Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	188	809	6	32	495
v/c Ratio	0.25	0.37	0.01	0.09	0.42
Control Delay	9.6	5.9	4.2	6.5	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	9.6	5.9	4.2	6.5	7.3
Queue Length 50th (ft)	9	30	0	2	37
Queue Length 95th (ft)	32	124	5	18	177
Internal Link Dist (ft)	228	109			164
Turn Bay Length (ft)				75	
Base Capacity (vph)	2496	3098	925	501	1646
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.08	0.26	0.01	0.06	0.30

Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	22	744	148	0	603
Future Volume (Veh/h)	0	22	744	148	0	603
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	23	783	156	0	635
Pedestrians	6		1			1
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	1		0			0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			293			189
pX, platoon unblocked						
vC, conflicting volume	1108	398			945	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1108	398			945	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	206	603			730	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	23	392	392	156	318	318
Volume Left	0	0	0	0	0	0
Volume Right	23	0	0	156	0	0
cSH	603	1700	1700	1700	1700	1700
Volume to Capacity	0.04	0.23	0.23	0.09	0.19	0.19
Queue Length 95th (ft)	3	0	0	0	0	0
Control Delay (s)	11.2	0.0	0.0	0.0	0.0	0.0
Lane LOS	B					
Approach Delay (s)	11.2	0.0			0.0	
Approach LOS	B					

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	30.9%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	401	980	340	244	877	117	247	836	129	220	280
v/c Ratio	1.10	0.80	0.47	0.65	0.72	0.27	0.78	0.86	0.61	0.56	0.54
Control Delay	119.5	41.5	9.9	58.9	44.7	14.7	64.4	45.5	62.3	48.9	12.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	119.5	41.5	9.9	58.9	44.7	14.7	64.4	45.5	62.3	48.9	12.4
Queue Length 50th (ft)	~335	341	37	90	218	20	174	270	92	150	21
Queue Length 95th (ft)	#638	502	131	147	293	72	#318	#443	170	254	109
Internal Link Dist (ft)		990			529			491		213	
Turn Bay Length (ft)	160			240		65	90		225		225
Base Capacity (vph)	365	1249	736	751	1781	600	383	970	379	489	578
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.10	0.78	0.46	0.32	0.49	0.20	0.64	0.86	0.34	0.45	0.48

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	355	1285	1052	351	232	235	519
v/c Ratio	0.89	0.54	0.74	0.43	0.66	0.67	0.76
Control Delay	50.8	7.4	22.7	3.8	35.1	35.5	12.4
Queue Delay	0.2	0.8	0.0	0.0	0.6	0.6	0.0
Total Delay	51.1	8.2	22.7	3.8	35.7	36.2	12.4
Queue Length 50th (ft)	172	131	208	0	93	95	18
Queue Length 95th (ft)	m#263	192	284	49	166	167	114
Internal Link Dist (ft)		205	990			412	
Turn Bay Length (ft)	75				215		60
Base Capacity (vph)	416	2388	1422	823	395	395	710
Starvation Cap Reductn	2	707	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	30	30	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.86	0.76	0.74	0.43	0.64	0.64	0.73

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	1101	315	347	1138	268	268	484
v/c Ratio	0.77	0.40	0.87	0.33	0.79	0.79	0.88
Control Delay	24.0	3.8	50.4	5.8	43.9	44.2	30.0
Queue Delay	0.0	0.0	0.5	0.2	2.4	2.5	0.0
Total Delay	24.0	3.8	50.9	6.0	46.4	46.6	30.0
Queue Length 50th (ft)	224	0	169	72	111	111	72
Queue Length 95th (ft)	#335	47	m#266	117	#214	#215	#238
Internal Link Dist (ft)	342			205		389	
Turn Bay Length (ft)			75		225		225
Base Capacity (vph)	1431	794	417	3495	384	383	580
Starvation Cap Reductn	0	0	5	1397	0	0	0
Spillback Cap Reductn	0	0	0	0	44	44	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.40	0.84	0.54	0.79	0.79	0.83

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues
101: Hathaway Ave & Costco access sig

09/24/2018

Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	232	382	24	81	606
v/c Ratio	0.34	0.20	0.03	0.17	0.58
Control Delay	11.3	5.4	3.0	6.7	9.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	11.3	5.4	3.0	6.7	9.5
Queue Length 50th (ft)	13	14	0	6	55
Queue Length 95th (ft)	45	55	9	34	229
Internal Link Dist (ft)	228	109			164
Turn Bay Length (ft)				75	
Base Capacity (vph)	1990	2778	1288	714	1549
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.12	0.14	0.02	0.11	0.39

Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	28	362	187	0	767
Future Volume (Veh/h)	0	28	362	187	0	767
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	0	29	373	193	0	791
Pedestrians	7		1			1
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	1		0			0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			293			189
pX, platoon unblocked						
vC, conflicting volume	776	194			573	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	776	194			573	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	335	814			1003	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	29	186	186	193	396	396
Volume Left	0	0	0	0	0	0
Volume Right	29	0	0	193	0	0
cSH	814	1700	1700	1700	1700	1700
Volume to Capacity	0.04	0.11	0.11	0.11	0.23	0.23
Queue Length 95th (ft)	3	0	0	0	0	0
Control Delay (s)	9.6	0.0	0.0	0.0	0.0	0.0
Lane LOS	A					
Approach Delay (s)	9.6	0.0			0.0	
Approach LOS	A					

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	31.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	362	703	276	574	1064	135	175	481	117	363	353
v/c Ratio	1.06	0.70	0.43	0.87	0.77	0.28	0.69	0.47	0.60	0.85	0.66
Control Delay	113.3	44.3	6.4	64.0	45.7	16.9	66.0	16.0	66.8	65.5	19.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	113.3	44.3	6.4	64.0	45.7	16.9	66.0	16.0	66.8	65.5	19.9
Queue Length 50th (ft)	~332	274	0	231	290	32	137	60	92	279	68
Queue Length 95th (ft)	#596	368	68	#365	369	90	224	123	163	#496	197
Internal Link Dist (ft)		990			529			491		213	
Turn Bay Length (ft)	160			240		65	90		225		225
Base Capacity (vph)	341	1146	685	722	1679	577	364	1060	354	465	562
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.06	0.61	0.40	0.80	0.63	0.23	0.48	0.45	0.33	0.78	0.63

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	256	970	1221	350	153	155	360
v/c Ratio	0.67	0.43	0.95	0.46	0.41	0.41	0.59
Control Delay	39.5	6.1	38.1	4.2	26.9	27.0	8.0
Queue Delay	0.0	0.4	1.5	0.0	0.6	0.7	0.0
Total Delay	39.5	6.5	39.7	4.2	27.5	27.6	8.0
Queue Length 50th (ft)	124	85	261	0	58	60	5
Queue Length 95th (ft)	m181	131	#397	49	112	114	71
Internal Link Dist (ft)		205	990			412	
Turn Bay Length (ft)	75				215		60
Base Capacity (vph)	383	2251	1291	768	376	376	612
Starvation Cap Reductn	0	703	0	0	0	0	0
Spillback Cap Reductn	0	0	21	0	62	62	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.63	0.96	0.46	0.49	0.49	0.59

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	886	377	393	1153	208	209	693
v/c Ratio	0.71	0.49	0.97	0.50	0.55	0.54	1.02
Control Delay	23.0	4.4	63.6	7.2	30.3	29.8	52.4
Queue Delay	0.0	0.0	0.0	0.8	0.0	0.0	0.0
Total Delay	23.0	4.4	63.6	8.0	30.3	29.8	52.4
Queue Length 50th (ft)	168	0	191	108	83	84	~138
Queue Length 95th (ft)	232	51	m#237	m129	150	150	#362
Internal Link Dist (ft)	342			205		389	
Turn Bay Length (ft)			75		225		225
Base Capacity (vph)	1247	776	405	2293	376	387	681
Starvation Cap Reductn	0	0	0	744	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.49	0.97	0.74	0.55	0.54	1.02

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues
101: Hathaway Ave & Costco access (signal)

09/24/2018

Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	339	798	15	85	457
v/c Ratio	0.38	0.47	0.03	0.32	0.50
Control Delay	9.8	7.4	3.8	10.5	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	9.8	7.4	3.8	10.5	9.0
Queue Length 50th (ft)	17	34	0	6	39
Queue Length 95th (ft)	53	122	7	44	161
Internal Link Dist (ft)	228	109			164
Turn Bay Length (ft)				75	
Base Capacity (vph)	2606	3121	933	489	1659
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.13	0.26	0.02	0.17	0.28

Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	47	717	257	0	685
Future Volume (Veh/h)	0	47	717	257	0	685
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	49	755	271	0	721
Pedestrians	6		1			1
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	1		0			0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			293			189
pX, platoon unblocked						
vC, conflicting volume	1122	384			1032	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1122	384			1032	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	92			100	
cM capacity (veh/h)	201	615			677	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	49	378	378	271	360	360
Volume Left	0	0	0	0	0	0
Volume Right	49	0	0	271	0	0
cSH	615	1700	1700	1700	1700	1700
Volume to Capacity	0.08	0.22	0.22	0.16	0.21	0.21
Queue Length 95th (ft)	6	0	0	0	0	0
Control Delay (s)	11.4	0.0	0.0	0.0	0.0	0.0
Lane LOS	B					
Approach Delay (s)	11.4	0.0			0.0	
Approach LOS	B					

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	30.1%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	446	980	340	244	877	136	247	857	149	240	325
v/c Ratio	1.24	0.81	0.47	0.65	0.72	0.31	0.79	0.90	0.65	0.59	0.62
Control Delay	170.0	42.6	10.2	60.0	45.4	18.0	66.3	50.1	63.2	49.6	17.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	170.0	42.6	10.2	60.0	45.4	18.0	66.3	50.1	63.2	49.6	17.4
Queue Length 50th (ft)	~413	348	38	91	222	31	176	287	108	166	50
Queue Length 95th (ft)	#732	508	133	148	296	91	#321	#481	192	277	162
Internal Link Dist (ft)		990			529			491		213	
Turn Bay Length (ft)	160			240		65	90		225		225
Base Capacity (vph)	359	1235	731	739	1753	591	377	954	373	481	573
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.24	0.79	0.47	0.33	0.50	0.23	0.66	0.90	0.40	0.50	0.57

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	355	1317	1087	360	232	235	534
v/c Ratio	0.89	0.55	0.77	0.44	0.66	0.67	0.77
Control Delay	50.0	7.6	23.7	3.8	34.8	35.2	12.6
Queue Delay	0.2	0.9	0.0	0.0	0.8	0.8	0.0
Total Delay	50.3	8.5	23.7	3.8	35.6	36.0	12.6
Queue Length 50th (ft)	172	138	218	0	93	95	18
Queue Length 95th (ft)	m#250	196	#305	50	166	167	#121
Internal Link Dist (ft)		205	990			412	
Turn Bay Length (ft)	75				215		60
Base Capacity (vph)	416	2383	1417	827	395	395	721
Starvation Cap Reductn	2	703	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	35	35	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.86	0.78	0.77	0.44	0.64	0.65	0.74

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	1122	315	363	1159	272	273	484
v/c Ratio	0.80	0.40	0.89	0.33	0.80	0.80	0.88
Control Delay	25.3	3.9	52.3	5.9	44.4	44.9	29.7
Queue Delay	0.0	0.0	0.6	0.2	2.6	2.7	0.0
Total Delay	25.3	3.9	52.9	6.2	47.0	47.7	29.7
Queue Length 50th (ft)	231	0	177	73	113	114	72
Queue Length 95th (ft)	#345	47	m#274	118	#220	#221	#238
Internal Link Dist (ft)	342			205		389	
Turn Bay Length (ft)			75		225		225
Base Capacity (vph)	1406	786	421	3488	384	383	580
Starvation Cap Reductn	0	0	5	1400	0	0	0
Spillback Cap Reductn	0	0	0	0	44	44	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.40	0.87	0.56	0.80	0.81	0.83

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Appendix M Cumulative No Project and Cumulative Plus Project Operations Worksheets

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	70	13	394	15	29	641
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.97		0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00		1.00	0.97	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	0.99	1.00
Frt	0.98		1.00	0.85	1.00	1.00
Flt Protected	0.96		1.00	1.00	0.95	1.00
Satd. Flow (prot)	2885		3374	1568	1575	1881
Flt Permitted	0.96		1.00	1.00	0.51	1.00
Satd. Flow (perm)	2885		3374	1568	848	1881
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	73	14	410	16	30	668
RTOR Reduction (vph)	12	0	0	5	0	0
Lane Group Flow (vph)	75	0	410	11	30	668
Confl. Peds. (#/hr)		3		8	8	
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	20%	15%	7%	0%	14%	1%
Turn Type	Prot		NA	Perm	Perm	NA
Protected Phases	4		6			2
Permitted Phases				6	2	
Actuated Green, G (s)	4.9		29.8	29.8	29.8	29.8
Effective Green, g (s)	4.9		29.8	29.8	29.8	29.8
Actuated g/C Ratio	0.11		0.70	0.70	0.70	0.70
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	2.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	331		2354	1094	591	1312
v/s Ratio Prot	c0.03		0.12			c0.36
v/s Ratio Perm				0.01	0.04	
v/c Ratio	0.23		0.17	0.01	0.05	0.51
Uniform Delay, d1	17.2		2.2	2.0	2.0	3.0
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1		0.0	0.0	0.0	0.3
Delay (s)	17.3		2.3	2.0	2.1	3.3
Level of Service	B		A	A	A	A
Approach Delay (s)	17.3		2.2			3.3
Approach LOS	B		A			A

Intersection Summary			
HCM 2000 Control Delay	3.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	42.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	4	405	80	0	711
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	0	4	418	82	0	733
Pedestrians	7		1			1
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	1		0			0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			293			189
pX, platoon unblocked						
vC, conflicting volume	792	217			507	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	792	217			507	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			100	
cM capacity (veh/h)	328	788			1061	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	4	209	209	82	366	366
Volume Left	0	0	0	0	0	0
Volume Right	4	0	0	82	0	0
cSH	788	1700	1700	1700	1700	1700
Volume to Capacity	0.01	0.12	0.12	0.05	0.22	0.22
Queue Length 95th (ft)	0	0	0	0	0	0
Control Delay (s)	9.6	0.0	0.0	0.0	0.0	0.0
Lane LOS	A					
Approach Delay (s)	9.6	0.0			0.0	
Approach LOS	A					

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	30.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	68	230	670	304	3	631	1315	109	307	146	338	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%				-2%			0%		
Total Lost time (s)		4.0	5.0	5.0		4.0	5.0	5.0	4.5	5.0		4.5
Lane Util. Factor		1.00	0.95	1.00		0.97	0.91	1.00	1.00	0.95		1.00
Frpb, ped/bikes		1.00	1.00	0.94		1.00	1.00	0.98	1.00	0.99		1.00
Flpb, ped/bikes		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Frt		1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.90		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (prot)		1657	3471	1517		3502	5086	1579	1805	3092		1752
Flt Permitted		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (perm)		1657	3471	1517		3502	5086	1579	1805	3092		1752
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	74	250	728	330	3	686	1429	118	334	159	367	100
RTOR Reduction (vph)	0	0	0	233	0	0	0	59	0	253	0	0
Lane Group Flow (vph)	0	324	728	97	0	689	1429	59	334	273	0	100
Confl. Peds. (#/hr)		6		28		28		6	5		4	4
Confl. Bikes (#/hr)												
Heavy Vehicles (%)	2%	11%	4%	0%	2%	1%	3%	1%	0%	6%	2%	3%
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Perm	Prot	NA		Prot
Protected Phases	5	5	2		1	1	6		3	8		7
Permitted Phases				2				6				
Actuated Green, G (s)		25.0	40.0	40.0		25.0	40.0	40.0	24.5	39.9		13.1
Effective Green, g (s)		25.0	40.0	40.0		25.0	40.0	40.0	24.5	39.9		13.1
Actuated g/C Ratio		0.18	0.29	0.29		0.18	0.29	0.29	0.18	0.29		0.10
Clearance Time (s)		4.0	5.0	5.0		4.0	5.0	5.0	4.5	5.0		4.5
Vehicle Extension (s)		2.0	4.0	4.0		2.0	4.0	4.0	3.0	3.0		3.0
Lane Grp Cap (vph)		303	1017	444		641	1490	462	323	903		168
v/s Ratio Prot		0.20	0.21			c0.20	c0.28		c0.19	0.09		0.06
v/s Ratio Perm				0.06				0.04				
v/c Ratio		1.07	0.72	0.22		1.07	0.96	0.13	1.03	0.30		0.60
Uniform Delay, d1		55.8	43.2	36.4		55.8	47.4	35.4	56.0	37.5		59.2
Progression Factor		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2		71.3	2.6	0.3		57.4	14.7	0.2	59.2	0.2		5.6
Delay (s)		127.0	45.8	36.8		113.1	62.1	35.6	115.2	37.7		64.7
Level of Service		F	D	D		F	E	D	F	D		E
Approach Delay (s)			62.7				76.4			67.8		
Approach LOS			E				E			E		

Intersection Summary			
HCM 2000 Control Delay	69.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	136.5	Sum of lost time (s)	18.5
Intersection Capacity Utilization	93.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBT	SBR
Lane Configurations		
Volume (vph)	327	292
Ideal Flow (vphpl)	1900	1900
Grade (%)	0%	
Total Lost time (s)	5.0	5.0
Lane Util. Factor	1.00	1.00
Frpb, ped/bikes	1.00	0.98
Flpb, ped/bikes	1.00	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	1881	1507
Flt Permitted	1.00	1.00
Satd. Flow (perm)	1881	1507
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	355	317
RTOR Reduction (vph)	0	151
Lane Group Flow (vph)	355	166
Confl. Peds. (#/hr)		5
Confl. Bikes (#/hr)		1
Heavy Vehicles (%)	1%	5%
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Actuated Green, G (s)	28.5	28.5
Effective Green, g (s)	28.5	28.5
Actuated g/C Ratio	0.21	0.21
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	392	314
v/s Ratio Prot	c0.19	
v/s Ratio Perm		0.11
v/c Ratio	0.91	0.53
Uniform Delay, d1	52.7	48.0
Progression Factor	1.00	1.00
Incremental Delay, d2	23.7	1.6
Delay (s)	76.4	49.6
Level of Service	E	D
Approach Delay (s)	63.9	
Approach LOS	E	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	291	938	0	0	1468	438	306	1	343	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			-2%			0%	
Total Lost time (s)	3.5	4.6			4.2	4.2	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.96	1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	1626	3471			3505	1485	1649	1645	1517			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	1626	3471			3505	1485	1649	1645	1517			
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	303	977	0	0	1529	456	319	1	357	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	280	0	0	265	0	0	0
Lane Group Flow (vph)	303	977	0	0	1529	176	159	161	92	0	0	0
Confl. Peds. (#/hr)	11		13	13		11			2	2		
Confl. Bikes (#/hr)			1			5						
Heavy Vehicles (%)	11%	4%	0%	0%	3%	4%	5%	100%	6%	0%	0%	0%
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	7			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	15.3	45.4			27.0	27.0	16.0	16.0	16.0			
Effective Green, g (s)	15.3	45.4			27.0	27.0	16.0	16.0	16.0			
Actuated g/C Ratio	0.22	0.65			0.39	0.39	0.23	0.23	0.23			
Clearance Time (s)	3.5	4.6			4.2	4.2	4.0	4.0	4.0			
Vehicle Extension (s)	2.0	2.9			3.9	3.9	2.0	2.0	2.0			
Lane Grp Cap (vph)	355	2251			1351	572	376	376	346			
v/s Ratio Prot	c0.19	c0.28			c0.44		0.10	c0.10				
v/s Ratio Perm						0.12			0.06			
v/c Ratio	0.85	0.43			1.13	0.31	0.42	0.43	0.27			
Uniform Delay, d1	26.3	6.0			21.5	15.0	23.1	23.1	22.2			
Progression Factor	1.26	0.96			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	12.8	0.1			69.1	1.4	0.3	0.3	0.2			
Delay (s)	45.9	5.9			90.6	16.4	23.3	23.4	22.3			
Level of Service	D	A			F	B	C	C	C			
Approach Delay (s)		15.3			73.6			22.8			0.0	
Approach LOS		B			E			C			A	

Intersection Summary			
HCM 2000 Control Delay	45.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	88.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	881	419	419	1355	0	0	0	0	348	66	704
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-2%	
Total Lost time (s)		4.6	4.6	3.5	4.2					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.95					0.95	0.95	1.00
Frpb, ped/bikes		1.00	0.94	1.00	1.00					1.00	1.00	0.99
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		3438	1479	1719	3505					1649	1694	1530
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (perm)		3438	1479	1719	3505					1649	1694	1530
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	927	441	441	1426	0	0	0	0	366	69	741
RTOR Reduction (vph)	0	0	255	0	0	0	0	0	0	0	0	332
Lane Group Flow (vph)	0	927	186	441	1426	0	0	0	0	216	219	409
Confl. Peds. (#/hr)	5		18	18		5	3					3
Confl. Bikes (#/hr)			4									
Heavy Vehicles (%)	0%	5%	3%	5%	3%	0%	0%	0%	0%	5%	2%	5%
Turn Type		NA	Perm	Prot	NA					Split	NA	Perm
Protected Phases		2		1	3					4	4	
Permitted Phases			2									4
Actuated Green, G (s)		25.4	25.4	16.5	45.8					16.0	16.0	16.0
Effective Green, g (s)		25.4	25.4	16.5	45.8					16.0	16.0	16.0
Actuated g/C Ratio		0.36	0.36	0.24	0.65					0.23	0.23	0.23
Clearance Time (s)		4.6	4.6	3.5	4.2					4.0	4.0	4.0
Vehicle Extension (s)		3.9	3.9	2.0	2.9					2.0	2.0	2.0
Lane Grp Cap (vph)		1247	536	405	2293					376	387	349
v/s Ratio Prot		c0.27		c0.26	c0.41					0.13	0.13	
v/s Ratio Perm			0.13									c0.27
v/c Ratio		0.74	0.35	1.09	0.62					0.57	0.57	1.17
Uniform Delay, d1		19.5	16.3	26.8	7.1					24.0	23.9	27.0
Progression Factor		1.00	1.00	1.35	1.15					1.00	1.00	1.00
Incremental Delay, d2		4.0	1.8	50.0	0.1					1.3	1.1	103.9
Delay (s)		23.5	18.0	86.0	8.2					25.3	25.1	130.9
Level of Service		C	B	F	A					C	C	F
Approach Delay (s)		21.7			26.6			0.0			91.8	
Approach LOS		C			C			A			F	

Intersection Summary			
HCM 2000 Control Delay	42.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	88.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	138	39	792	6	30	487
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.97		0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00		1.00	0.98	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.97		1.00	0.85	1.00	1.00
Flt Protected	0.96		1.00	1.00	0.95	1.00
Satd. Flow (prot)	3291		3505	1050	1595	1863
Flt Permitted	0.96		1.00	1.00	0.32	1.00
Satd. Flow (perm)	3291		3505	1050	542	1863
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	147	41	843	6	32	518
RTOR Reduction (vph)	34	0	0	2	0	0
Lane Group Flow (vph)	154	0	843	4	32	518
Confl. Peds. (#/hr)		2		5	5	
Heavy Vehicles (%)	4%	3%	3%	50%	13%	2%
Turn Type	Prot		NA	Perm	Perm	NA
Protected Phases	4		6			2
Permitted Phases				6	2	
Actuated Green, G (s)	6.6		21.9	21.9	21.9	21.9
Effective Green, g (s)	6.6		21.9	21.9	21.9	21.9
Actuated g/C Ratio	0.18		0.60	0.60	0.60	0.60
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	2.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	595		2103	630	325	1117
v/s Ratio Prot	c0.05		0.24			c0.28
v/s Ratio Perm				0.00	0.06	
v/c Ratio	0.26		0.40	0.01	0.10	0.46
Uniform Delay, d1	12.8		3.8	2.9	3.1	4.0
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1		0.1	0.0	0.1	0.3
Delay (s)	12.9		4.0	2.9	3.2	4.4
Level of Service	B		A	A	A	A
Approach Delay (s)	12.9		4.0			4.3
Approach LOS	B		A			A

Intersection Summary			
HCM 2000 Control Delay	5.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	36.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	38.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	22	776	148	0	625
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	23	817	156	0	658
Pedestrians	6		1			1
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	1		0			0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			293			189
pX, platoon unblocked						
vC, conflicting volume	1153	415			979	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1153	415			979	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	193	588			709	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	23	408	408	156	329	329
Volume Left	0	0	0	0	0	0
Volume Right	23	0	0	156	0	0
cSH	588	1700	1700	1700	1700	1700
Volume to Capacity	0.04	0.24	0.24	0.09	0.19	0.19
Queue Length 95th (ft)	3	0	0	0	0	0
Control Delay (s)	11.4	0.0	0.0	0.0	0.0	0.0
Lane LOS	B					
Approach Delay (s)	11.4	0.0			0.0	
Approach LOS	B					

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	31.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	58	336	1265	410	3	291	984	116	298	473	437	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%				-2%			0%		
Total Lost time (s)		4.0	5.0	5.0		4.0	5.0	5.0	4.5	5.0		4.5
Lane Util. Factor		1.00	0.95	1.00		0.97	0.91	1.00	1.00	0.95		1.00
Frpb, ped/bikes		1.00	1.00	1.00		1.00	1.00	0.98	1.00	0.99		1.00
Flpb, ped/bikes		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Frt		1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.93		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (prot)		1686	3539	1599		3467	5136	1575	1805	3262		1787
Flt Permitted		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (perm)		1686	3539	1599		3467	5136	1575	1805	3262		1787
Peak-hour factor, PHF	0.92	0.96	0.96	0.96	0.92	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	63	350	1318	427	3	303	1025	121	310	493	455	133
RTOR Reduction (vph)	0	0	0	163	0	0	0	61	0	115	0	0
Lane Group Flow (vph)	0	413	1318	264	0	306	1025	60	310	833	0	133
Confl. Peds. (#/hr)		2						2	5		1	1
Heavy Vehicles (%)	2%	8%	2%	1%	2%	2%	2%	2%	0%	3%	1%	1%
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Perm	Prot	NA		Prot
Protected Phases	5	5	2		1	1	6		3	8		7
Permitted Phases				2				6				
Actuated Green, G (s)		25.2	42.2	42.2		15.2	32.2	32.2	24.2	31.5		14.5
Effective Green, g (s)		25.2	42.2	42.2		15.2	32.2	32.2	24.2	31.5		14.5
Actuated g/C Ratio		0.21	0.35	0.35		0.12	0.26	0.26	0.20	0.26		0.12
Clearance Time (s)		4.0	5.0	5.0		4.0	5.0	5.0	4.5	5.0		4.5
Vehicle Extension (s)		2.0	4.0	4.0		2.0	4.0	4.0	3.0	3.0		3.0
Lane Grp Cap (vph)		348	1225	553		432	1356	416	358	842		212
v/s Ratio Prot		c0.25	c0.37			0.09	0.20		c0.17	c0.26		0.07
v/s Ratio Perm				0.17				0.04				
v/c Ratio		1.19	1.08	0.48		0.71	0.76	0.14	0.87	0.99		0.63
Uniform Delay, d1		48.4	39.9	31.2		51.2	41.2	34.3	47.3	45.0		51.1
Progression Factor		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2		109.3	48.8	0.9		4.3	2.6	0.2	19.1	28.1		5.7
Delay (s)		157.7	88.6	32.1		55.5	43.8	34.5	66.4	73.1		56.8
Level of Service		F	F	C		E	D	C	E	E		E
Approach Delay (s)			90.6				45.5			71.4		
Approach LOS			F				D			E		

Intersection Summary			
HCM 2000 Control Delay	69.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	121.9	Sum of lost time (s)	18.5
Intersection Capacity Utilization	93.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Volume (vph)	218	278
Ideal Flow (vphpl)	1900	1900
Grade (%)	0%	
Total Lost time (s)	5.0	5.0
Lane Util. Factor	1.00	1.00
Frpb, ped/bikes	1.00	0.98
Flpb, ped/bikes	1.00	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	1881	1524
Flt Permitted	1.00	1.00
Satd. Flow (perm)	1881	1524
Peak-hour factor, PHF	0.96	0.96
Adj. Flow (vph)	227	290
RTOR Reduction (vph)	0	183
Lane Group Flow (vph)	227	107
Confl. Peds. (#/hr)		5
Heavy Vehicles (%)	1%	4%
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Actuated Green, G (s)	21.8	21.8
Effective Green, g (s)	21.8	21.8
Actuated g/C Ratio	0.18	0.18
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	336	272
v/s Ratio Prot	0.12	
v/s Ratio Perm		0.07
v/c Ratio	0.68	0.39
Uniform Delay, d1	46.7	44.2
Progression Factor	1.00	1.00
Incremental Delay, d2	5.3	0.9
Delay (s)	52.0	45.1
Level of Service	D	D
Approach Delay (s)	49.9	
Approach LOS	D	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	349	1407	0	0	1119	344	497	2	656	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			-2%			0%	
Total Lost time (s)	3.5	4.6			4.2	4.2	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.96	1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	1752	3539			3539	1527	1732	1730	1530			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	1752	3539			3539	1527	1732	1730	1530			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	367	1481	0	0	1178	362	523	2	691	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	220	0	0	521	0	0	0
Lane Group Flow (vph)	367	1481	0	0	1178	142	261	264	170	0	0	0
Confl. Peds. (#/hr)	8		6	6		8			2	2		
Confl. Bikes (#/hr)			3			2			1			
Heavy Vehicles (%)	3%	2%	0%	0%	2%	2%	0%	50%	5%	0%	0%	0%
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	7			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	16.4	47.0			27.5	27.5	14.4	14.4	14.4			
Effective Green, g (s)	16.4	47.0			27.5	27.5	14.4	14.4	14.4			
Actuated g/C Ratio	0.23	0.67			0.39	0.39	0.21	0.21	0.21			
Clearance Time (s)	3.5	4.6			4.2	4.2	4.0	4.0	4.0			
Vehicle Extension (s)	2.0	2.9			3.9	3.9	2.0	2.0	2.0			
Lane Grp Cap (vph)	410	2376			1390	599	356	355	314			
v/s Ratio Prot	c0.21	0.42			c0.33		0.15	c0.15				
v/s Ratio Perm						0.09			0.11			
v/c Ratio	0.90	0.62			0.85	0.24	0.73	0.74	0.54			
Uniform Delay, d1	26.0	6.5			19.3	14.2	26.0	26.1	24.8			
Progression Factor	1.21	1.12			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	11.8	0.2			6.6	0.9	6.6	7.2	1.0			
Delay (s)	43.2	7.5			25.9	15.2	32.6	33.3	25.9			
Level of Service	D	A			C	B	C	C	C			
Approach Delay (s)		14.6			23.4			28.9			0.0	
Approach LOS		B			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	21.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	140.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1249	328	361	1255	0	0	0	0	507	32	486
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-2%	
Total Lost time (s)		4.6	4.6	3.5	4.2					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.91					0.95	0.95	1.00
Frpb, ped/bikes		1.00	0.96	1.00	1.00					1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		3574	1513	1770	5136					1681	1676	1526
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		3574	1513	1770	5136					1681	1676	1526
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	1288	338	372	1294	0	0	0	0	523	33	501
RTOR Reduction (vph)	0	0	207	0	0	0	0	0	0	0	0	238
Lane Group Flow (vph)	0	1288	131	372	1294	0	0	0	0	277	279	263
Confl. Peds. (#/hr)	7		11	11		7	6					6
Confl. Bikes (#/hr)			5			1						
Heavy Vehicles (%)	0%	1%	2%	2%	1%	0%	0%	0%	0%	3%	13%	5%
Turn Type		NA	Perm	Prot	NA					Split	NA	Perm
Protected Phases		2		1	3					4	4	
Permitted Phases			2									4
Actuated Green, G (s)		27.1	27.1	16.4	47.4					14.4	14.4	14.4
Effective Green, g (s)		27.1	27.1	16.4	47.4					14.4	14.4	14.4
Actuated g/C Ratio		0.39	0.39	0.23	0.68					0.21	0.21	0.21
Clearance Time (s)		4.6	4.6	3.5	4.2					4.0	4.0	4.0
Vehicle Extension (s)		3.9	3.9	2.0	2.9					2.0	2.0	2.0
Lane Grp Cap (vph)		1383	585	414	3477					345	344	313
v/s Ratio Prot		c0.36		c0.21	0.25					0.16	0.17	
v/s Ratio Perm			0.09									c0.17
v/c Ratio		0.93	0.22	0.90	0.37					0.80	0.81	0.84
Uniform Delay, d1		20.6	14.4	26.0	4.9					26.4	26.5	26.7
Progression Factor		1.00	1.00	1.20	1.23					1.00	1.00	1.00
Incremental Delay, d2		12.6	0.9	13.9	0.0					12.0	12.8	16.9
Delay (s)		33.1	15.3	45.2	6.1					38.4	39.3	43.6
Level of Service		C	B	D	A					D	D	D
Approach Delay (s)		29.4			14.8			0.0			41.1	
Approach LOS		C			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	26.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	140.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	185	37	384	23	78	606
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.97		0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00		1.00	0.97	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.97		1.00	0.85	1.00	1.00
Flt Protected	0.96		1.00	1.00	0.95	1.00
Satd. Flow (prot)	2884		3374	1569	1576	1881
Flt Permitted	0.96		1.00	1.00	0.52	1.00
Satd. Flow (perm)	2884		3374	1569	857	1881
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	193	39	400	24	81	631
RTOR Reduction (vph)	30	0	0	11	0	0
Lane Group Flow (vph)	202	0	400	14	81	631
Confl. Peds. (#/hr)		3		8	8	
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	20%	15%	7%	0%	14%	1%
Turn Type	Prot		NA	Perm	Perm	NA
Protected Phases	4		6			2
Permitted Phases				6	2	
Actuated Green, G (s)	8.8		21.6	21.6	21.6	21.6
Effective Green, g (s)	8.8		21.6	21.6	21.6	21.6
Actuated g/C Ratio	0.23		0.56	0.56	0.56	0.56
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	2.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	660		1897	882	482	1058
v/s Ratio Prot	c0.07		0.12			c0.34
v/s Ratio Perm				0.01	0.09	
v/c Ratio	0.31		0.21	0.02	0.17	0.60
Uniform Delay, d1	12.3		4.2	3.7	4.1	5.5
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1		0.1	0.0	0.2	0.9
Delay (s)	12.4		4.2	3.7	4.2	6.4
Level of Service	B		A	A	A	A
Approach Delay (s)	12.4		4.2			6.2
Approach LOS	B		A			A

Intersection Summary			
HCM 2000 Control Delay	6.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	38.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	28	379	187	0	792
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	0	29	391	193	0	816
Pedestrians	7		1			1
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	1		0			0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			293			189
pX, platoon unblocked						
vC, conflicting volume	807	203			591	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	807	203			591	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	321	804			988	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	29	195	195	193	408	408
Volume Left	0	0	0	0	0	0
Volume Right	29	0	0	193	0	0
cSH	804	1700	1700	1700	1700	1700
Volume to Capacity	0.04	0.11	0.11	0.11	0.24	0.24
Queue Length 95th (ft)	3	0	0	0	0	0
Control Delay (s)	9.6	0.0	0.0	0.0	0.0	0.0
Lane LOS	A					
Approach Delay (s)	9.6	0.0			0.0	
Approach LOS	A					

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	32.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	68	273	670	304	3	631	1315	128	307	165	338	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%				-2%			0%		
Total Lost time (s)		4.0	5.0	5.0		4.0	5.0	5.0	4.5	5.0		4.5
Lane Util. Factor		1.00	0.95	1.00		0.97	0.91	1.00	1.00	0.95		1.00
Frpb, ped/bikes		1.00	1.00	0.94		1.00	1.00	0.98	1.00	0.99		1.00
Flpb, ped/bikes		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Frt		1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.90		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (prot)		1653	3471	1516		3502	5086	1579	1805	3104		1752
Flt Permitted		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (perm)		1653	3471	1516		3502	5086	1579	1805	3104		1752
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	74	297	728	330	3	686	1429	139	334	179	367	121
RTOR Reduction (vph)	0	0	0	234	0	0	0	59	0	241	0	0
Lane Group Flow (vph)	0	371	728	96	0	689	1429	80	334	305	0	121
Confl. Peds. (#/hr)		6		28		28		6	5		4	4
Confl. Bikes (#/hr)												
Heavy Vehicles (%)	2%	11%	4%	0%	2%	1%	3%	1%	0%	6%	2%	3%
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Perm	Prot	NA		Prot
Protected Phases	5	5	2		1	1	6		3	8		7
Permitted Phases				2				6				
Actuated Green, G (s)		25.0	40.0	40.0		25.0	40.0	40.0	24.5	39.1		14.8
Effective Green, g (s)		25.0	40.0	40.0		25.0	40.0	40.0	24.5	39.1		14.8
Actuated g/C Ratio		0.18	0.29	0.29		0.18	0.29	0.29	0.18	0.28		0.11
Clearance Time (s)		4.0	5.0	5.0		4.0	5.0	5.0	4.5	5.0		4.5
Vehicle Extension (s)		2.0	4.0	4.0		2.0	4.0	4.0	3.0	3.0		3.0
Lane Grp Cap (vph)		300	1010	441		637	1480	459	321	883		188
v/s Ratio Prot		c0.22	0.21			0.20	c0.28		c0.19	0.10		0.07
v/s Ratio Perm				0.06				0.05				
v/c Ratio		1.24	0.72	0.22		1.08	0.97	0.17	1.04	0.35		0.64
Uniform Delay, d1		56.2	43.7	36.9		56.2	48.0	36.4	56.5	39.0		58.8
Progression Factor		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2		131.8	2.7	0.3		59.8	15.9	0.2	61.2	0.2		7.3
Delay (s)		188.0	46.4	37.2		116.0	63.9	36.6	117.6	39.2		66.1
Level of Service		F	D	D		F	E	D	F	D		E
Approach Delay (s)			81.1				78.1			69.0		
Approach LOS			F				E			E		

Intersection Summary			
HCM 2000 Control Delay	75.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	137.4	Sum of lost time (s)	18.5
Intersection Capacity Utilization	98.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBT	SBR
Lane Configurations		
Volume (vph)	346	335
Ideal Flow (vphpl)	1900	1900
Grade (%)	0%	
Total Lost time (s)	5.0	5.0
Lane Util. Factor	1.00	1.00
Frpb, ped/bikes	1.00	0.98
Flpb, ped/bikes	1.00	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	1881	1507
Flt Permitted	1.00	1.00
Satd. Flow (perm)	1881	1507
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	376	364
RTOR Reduction (vph)	0	150
Lane Group Flow (vph)	376	214
Confl. Peds. (#/hr)		5
Confl. Bikes (#/hr)		1
Heavy Vehicles (%)	1%	5%
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Actuated Green, G (s)	29.4	29.4
Effective Green, g (s)	29.4	29.4
Actuated g/C Ratio	0.21	0.21
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	402	322
v/s Ratio Prot	c0.20	
v/s Ratio Perm		0.14
v/c Ratio	0.94	0.66
Uniform Delay, d1	53.1	49.5
Progression Factor	1.00	1.00
Incremental Delay, d2	28.9	5.1
Delay (s)	81.9	54.6
Level of Service	F	D
Approach Delay (s)	68.1	
Approach LOS	E	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	291	966	0	0	1502	448	306	1	358	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			-2%			0%	
Total Lost time (s)	3.5	4.6			4.2	4.2	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.96	1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	1626	3471			3505	1485	1649	1645	1517			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	1626	3471			3505	1485	1649	1645	1517			
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	303	1006	0	0	1565	467	319	1	373	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	287	0	0	276	0	0	0
Lane Group Flow (vph)	303	1006	0	0	1565	180	159	161	97	0	0	0
Confl. Peds. (#/hr)	11		13	13		11			2	2		
Confl. Bikes (#/hr)			1			5						
Heavy Vehicles (%)	11%	4%	0%	0%	3%	4%	5%	100%	6%	0%	0%	0%
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	7			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	15.3	45.4			27.0	27.0	16.0	16.0	16.0			
Effective Green, g (s)	15.3	45.4			27.0	27.0	16.0	16.0	16.0			
Actuated g/C Ratio	0.22	0.65			0.39	0.39	0.23	0.23	0.23			
Clearance Time (s)	3.5	4.6			4.2	4.2	4.0	4.0	4.0			
Vehicle Extension (s)	2.0	2.9			3.9	3.9	2.0	2.0	2.0			
Lane Grp Cap (vph)	355	2251			1351	572	376	376	346			
v/s Ratio Prot	c0.19	c0.29			c0.45		0.10	c0.10				
v/s Ratio Perm						0.12			0.06			
v/c Ratio	0.85	0.45			1.16	0.31	0.42	0.43	0.28			
Uniform Delay, d1	26.3	6.1			21.5	15.0	23.1	23.1	22.3			
Progression Factor	1.25	0.98			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	12.5	0.1			80.0	1.4	0.3	0.3	0.2			
Delay (s)	45.5	6.0			101.5	16.5	23.3	23.4	22.4			
Level of Service	D	A			F	B	C	C	C			
Approach Delay (s)		15.2			81.9			22.8			0.0	
Approach LOS		B			F			C			A	

Intersection Summary			
HCM 2000 Control Delay	50.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	88.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	900	419	433	1374	0	0	0	0	357	66	704
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-2%	
Total Lost time (s)		4.6	4.6	3.5	4.2					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.95					0.95	0.95	1.00
Frpb, ped/bikes		1.00	0.94	1.00	1.00					1.00	1.00	0.99
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		3438	1479	1719	3505					1649	1693	1530
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (perm)		3438	1479	1719	3505					1649	1693	1530
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	947	441	456	1446	0	0	0	0	376	69	741
RTOR Reduction (vph)	0	0	252	0	0	0	0	0	0	0	0	332
Lane Group Flow (vph)	0	947	189	456	1446	0	0	0	0	222	223	409
Confl. Peds. (#/hr)	5		18	18		5	3					3
Confl. Bikes (#/hr)			4									
Heavy Vehicles (%)	0%	5%	3%	5%	3%	0%	0%	0%	0%	5%	2%	5%
Turn Type		NA	Perm	Prot	NA					Split	NA	Perm
Protected Phases		2		1	3					4	4	
Permitted Phases			2									4
Actuated Green, G (s)		25.4	25.4	16.5	45.8					16.0	16.0	16.0
Effective Green, g (s)		25.4	25.4	16.5	45.8					16.0	16.0	16.0
Actuated g/C Ratio		0.36	0.36	0.24	0.65					0.23	0.23	0.23
Clearance Time (s)		4.6	4.6	3.5	4.2					4.0	4.0	4.0
Vehicle Extension (s)		3.9	3.9	2.0	2.9					2.0	2.0	2.0
Lane Grp Cap (vph)		1247	536	405	2293					376	386	349
v/s Ratio Prot		c0.28		c0.27	c0.41					0.13	0.13	
v/s Ratio Perm			0.13									c0.27
v/c Ratio		0.76	0.35	1.13	0.63					0.59	0.58	1.17
Uniform Delay, d1		19.6	16.3	26.8	7.1					24.1	24.0	27.0
Progression Factor		1.00	1.00	1.35	1.16					1.00	1.00	1.00
Incremental Delay, d2		4.4	1.8	60.0	0.1					1.7	1.3	103.9
Delay (s)		24.0	18.1	96.1	8.3					25.7	25.3	130.9
Level of Service		C	B	F	A					C	C	F
Approach Delay (s)		22.1			29.4			0.0			91.4	
Approach LOS		C			C			A			F	

Intersection Summary			
HCM 2000 Control Delay	43.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	88.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	255	64	782	14	80	452
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.97		0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00		1.00	0.98	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.97		1.00	0.85	1.00	1.00
Flt Protected	0.96		1.00	1.00	0.95	1.00
Satd. Flow (prot)	3297		3505	1050	1595	1863
Flt Permitted	0.96		1.00	1.00	0.31	1.00
Satd. Flow (perm)	3297		3505	1050	522	1863
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	271	68	832	15	85	481
RTOR Reduction (vph)	45	0	0	7	0	0
Lane Group Flow (vph)	294	0	832	8	85	481
Confl. Peds. (#/hr)		2		5	5	
Heavy Vehicles (%)	4%	3%	3%	50%	13%	2%
Turn Type	Prot		NA	Perm	Perm	NA
Protected Phases	4		6			2
Permitted Phases				6	2	
Actuated Green, G (s)	8.9		17.6	17.6	17.6	17.6
Effective Green, g (s)	8.9		17.6	17.6	17.6	17.6
Actuated g/C Ratio	0.26		0.51	0.51	0.51	0.51
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	2.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	850		1788	535	266	950
v/s Ratio Prot	c0.09		0.24			c0.26
v/s Ratio Perm				0.01	0.16	
v/c Ratio	0.35		0.47	0.01	0.32	0.51
Uniform Delay, d1	10.4		5.4	4.2	4.9	5.6
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1		0.2	0.0	0.7	0.4
Delay (s)	10.5		5.6	4.2	5.6	6.0
Level of Service	B		A	A	A	A
Approach Delay (s)	10.5		5.6			6.0
Approach LOS	B		A			A

Intersection Summary			
HCM 2000 Control Delay	6.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	34.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	47	749	257	0	707
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	49	788	271	0	744
Pedestrians	6		1			1
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	1		0			0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			293			189
pX, platoon unblocked						
vC, conflicting volume	1168	401			1065	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1168	401			1065	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	92			100	
cM capacity (veh/h)	188	600			658	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	49	394	394	271	372	372
Volume Left	0	0	0	0	0	0
Volume Right	49	0	0	271	0	0
cSH	600	1700	1700	1700	1700	1700
Volume to Capacity	0.08	0.23	0.23	0.16	0.22	0.22
Queue Length 95th (ft)	7	0	0	0	0	0
Control Delay (s)	11.5	0.0	0.0	0.0	0.0	0.0
Lane LOS	B					
Approach Delay (s)	11.5	0.0			0.0	
Approach LOS	B					

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	31.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	58	380	1265	410	3	291	984	135	298	492	437	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%				-2%			0%		
Total Lost time (s)		4.0	5.0	5.0		4.0	5.0	5.0	4.5	5.0		4.5
Lane Util. Factor		1.00	0.95	1.00		0.97	0.91	1.00	1.00	0.95		1.00
Frpb, ped/bikes		1.00	1.00	1.00		1.00	1.00	0.98	1.00	0.99		1.00
Flpb, ped/bikes		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Frt		1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.93		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (prot)		1684	3539	1599		3467	5136	1575	1805	3267		1787
Flt Permitted		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (perm)		1684	3539	1599		3467	5136	1575	1805	3267		1787
Peak-hour factor, PHF	0.92	0.96	0.96	0.96	0.92	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	63	396	1318	427	3	303	1025	141	310	512	455	154
RTOR Reduction (vph)	0	0	0	163	0	0	0	61	0	111	0	0
Lane Group Flow (vph)	0	459	1318	264	0	306	1025	80	310	856	0	154
Confl. Peds. (#/hr)		2						2	5		1	1
Heavy Vehicles (%)	2%	8%	2%	1%	2%	2%	2%	2%	0%	3%	1%	1%
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Perm	Prot	NA		Prot
Protected Phases	5	5	2		1	1	6		3	8		7
Permitted Phases				2				6				
Actuated Green, G (s)		25.2	42.4	42.4		15.3	32.5	32.5	24.3	31.2		16.0
Effective Green, g (s)		25.2	42.4	42.4		15.3	32.5	32.5	24.3	31.2		16.0
Actuated g/C Ratio		0.20	0.34	0.34		0.12	0.26	0.26	0.20	0.25		0.13
Clearance Time (s)		4.0	5.0	5.0		4.0	5.0	5.0	4.5	5.0		4.5
Vehicle Extension (s)		2.0	4.0	4.0		2.0	4.0	4.0	3.0	3.0		3.0
Lane Grp Cap (vph)		343	1215	549		429	1352	414	355	826		231
v/s Ratio Prot		c0.27	c0.37			0.09	0.20		c0.17	c0.26		0.09
v/s Ratio Perm				0.16				0.05				
v/c Ratio		1.34	1.08	0.48		0.71	0.76	0.19	0.87	1.04		0.67
Uniform Delay, d1		49.1	40.5	31.8		51.9	41.8	35.3	48.1	46.1		51.2
Progression Factor		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2		170.7	52.0	0.9		4.6	2.6	0.3	20.4	41.0		7.1
Delay (s)		219.8	92.5	32.7		56.6	44.5	35.6	68.4	87.1		58.2
Level of Service		F	F	C		E	D	D	E	F		E
Approach Delay (s)			107.5				46.1			82.5		
Approach LOS			F				D			F		

Intersection Summary			
HCM 2000 Control Delay	78.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	123.4	Sum of lost time (s)	18.5
Intersection Capacity Utilization	96.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Volume (vph)	238	322
Ideal Flow (vphpl)	1900	1900
Grade (%)	0%	
Total Lost time (s)	5.0	5.0
Lane Util. Factor	1.00	1.00
Frpb, ped/bikes	1.00	0.98
Flpb, ped/bikes	1.00	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	1881	1524
Flt Permitted	1.00	1.00
Satd. Flow (perm)	1881	1524
Peak-hour factor, PHF	0.96	0.96
Adj. Flow (vph)	248	335
RTOR Reduction (vph)	0	182
Lane Group Flow (vph)	248	153
Confl. Peds. (#/hr)		5
Heavy Vehicles (%)	1%	4%
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Actuated Green, G (s)	22.9	22.9
Effective Green, g (s)	22.9	22.9
Actuated g/C Ratio	0.19	0.19
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	349	282
v/s Ratio Prot	0.13	
v/s Ratio Perm		0.10
v/c Ratio	0.71	0.54
Uniform Delay, d1	47.1	45.5
Progression Factor	1.00	1.00
Incremental Delay, d2	6.7	2.1
Delay (s)	53.8	47.7
Level of Service	D	D
Approach Delay (s)	51.9	
Approach LOS	D	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	349	1436	0	0	1153	354	497	2	671	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			-2%			0%	
Total Lost time (s)	3.5	4.6			4.2	4.2	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.96	1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	1752	3539			3539	1527	1732	1730	1530			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	1752	3539			3539	1527	1732	1730	1530			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	367	1512	0	0	1214	373	523	2	706	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	227	0	0	531	0	0	0
Lane Group Flow (vph)	367	1512	0	0	1214	146	261	264	175	0	0	0
Confl. Peds. (#/hr)	8		6	6		8			2	2		
Confl. Bikes (#/hr)			3			2			1			
Heavy Vehicles (%)	3%	2%	0%	0%	2%	2%	0%	50%	5%	0%	0%	0%
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	7			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	16.3	46.8			27.4	27.4	14.6	14.6	14.6			
Effective Green, g (s)	16.3	46.8			27.4	27.4	14.6	14.6	14.6			
Actuated g/C Ratio	0.23	0.67			0.39	0.39	0.21	0.21	0.21			
Clearance Time (s)	3.5	4.6			4.2	4.2	4.0	4.0	4.0			
Vehicle Extension (s)	2.0	2.9			3.9	3.9	2.0	2.0	2.0			
Lane Grp Cap (vph)	407	2366			1385	597	361	360	319			
v/s Ratio Prot	c0.21	c0.43			c0.34		0.15	c0.15				
v/s Ratio Perm						0.10			0.11			
v/c Ratio	0.90	0.64			0.88	0.24	0.72	0.73	0.55			
Uniform Delay, d1	26.1	6.7			19.7	14.3	25.8	25.9	24.8			
Progression Factor	1.20	1.14			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	11.9	0.3			8.1	1.0	6.0	6.5	1.0			
Delay (s)	43.2	7.9			27.8	15.3	31.8	32.4	25.8			
Level of Service	D	A			C	B	C	C	C			
Approach Delay (s)		14.8			24.9			28.5			0.0	
Approach LOS		B			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	21.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	142.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1268	328	375	1275	0	0	0	0	517	32	486
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-2%	
Total Lost time (s)		4.6	4.6	3.5	4.2					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.91					0.95	0.95	1.00
Frpb, ped/bikes		1.00	0.96	1.00	1.00					1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		3574	1513	1770	5136					1681	1676	1526
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		3574	1513	1770	5136					1681	1676	1526
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	1307	338	387	1314	0	0	0	0	533	33	501
RTOR Reduction (vph)	0	0	209	0	0	0	0	0	0	0	0	237
Lane Group Flow (vph)	0	1307	129	387	1314	0	0	0	0	282	284	264
Confl. Peds. (#/hr)	7		11	11		7	6					6
Confl. Bikes (#/hr)			5			1						
Heavy Vehicles (%)	0%	1%	2%	2%	1%	0%	0%	0%	0%	3%	13%	5%
Turn Type		NA	Perm	Prot	NA					Split	NA	Perm
Protected Phases		2		1	3					4	4	
Permitted Phases			2									4
Actuated Green, G (s)		26.7	26.7	16.6	47.2					14.6	14.6	14.6
Effective Green, g (s)		26.7	26.7	16.6	47.2					14.6	14.6	14.6
Actuated g/C Ratio		0.38	0.38	0.24	0.67					0.21	0.21	0.21
Clearance Time (s)		4.6	4.6	3.5	4.2					4.0	4.0	4.0
Vehicle Extension (s)		3.9	3.9	2.0	2.9					2.0	2.0	2.0
Lane Grp Cap (vph)		1363	577	419	3463					350	349	318
v/s Ratio Prot		c0.37		c0.22	c0.26					0.17	0.17	
v/s Ratio Perm			0.09									c0.17
v/c Ratio		0.96	0.22	0.92	0.38					0.81	0.81	0.83
Uniform Delay, d1		21.1	14.6	26.1	5.0					26.4	26.4	26.5
Progression Factor		1.00	1.00	1.22	1.24					1.00	1.00	1.00
Incremental Delay, d2		16.4	0.9	16.6	0.0					12.0	12.9	15.4
Delay (s)		37.5	15.5	48.3	6.2					38.4	39.3	41.9
Level of Service		D	B	D	A					D	D	D
Approach Delay (s)		33.0			15.8			0.0			40.3	
Approach LOS		C			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	28.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	142.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Appendix N Cumulate No Project and Cumulative Plus Project Queueing Worksheets

101: Hathaway Ave & Costco access sig

Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	87	410	16	30	668
v/c Ratio	0.16	0.16	0.01	0.05	0.45
Control Delay	14.1	3.7	2.9	4.8	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	14.1	3.7	2.9	4.8	6.2
Queue Length 50th (ft)	8	13	0	2	56
Queue Length 95th (ft)	23	58	7	15	260
Internal Link Dist (ft)	228	109			164
Turn Bay Length (ft)				75	
Base Capacity (vph)	1929	2655	1231	665	1480
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.05	0.15	0.01	0.05	0.45

Intersection Summary

103: Hathaway Ave & W A St

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	324	728	330	689	1429	118	334	526	100	355	317
v/c Ratio	1.07	0.72	0.49	1.07	0.96	0.23	1.03	0.46	0.60	0.91	0.68
Control Delay	123.3	48.1	6.4	109.3	62.9	14.2	112.7	13.6	73.4	79.9	27.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	123.3	48.1	6.4	109.3	62.9	14.2	112.7	13.6	73.4	79.9	27.3
Queue Length 50th (ft)	~324	310	0	~356	465	23	~324	58	88	310	103
Queue Length 95th (ft)	#517	384	75	#481	#569	72	#519	117	145	#480	214
Internal Link Dist (ft)		990			529			491		213	
Turn Bay Length (ft)	160			240		65	90		225		225
Base Capacity (vph)	303	1017	677	641	1491	521	324	1156	314	413	480
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.07	0.72	0.49	1.07	0.96	0.23	1.03	0.46	0.32	0.86	0.66

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

104: I-880 NB Ramps & W A St

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	303	977	1529	456	159	161	357
v/c Ratio	0.86	0.43	1.13	0.53	0.42	0.43	0.58
Control Delay	51.2	6.3	92.5	4.4	27.2	27.3	7.9
Queue Delay	0.0	0.4	0.1	0.0	4.8	5.0	0.0
Total Delay	51.2	6.8	92.7	4.4	32.0	32.3	7.9
Queue Length 50th (ft)	147	85	~426	0	62	63	5
Queue Length 95th (ft)	m#223	138	#552	55	116	117	70
Internal Link Dist (ft)		205	990			412	
Turn Bay Length (ft)	75				215		60
Base Capacity (vph)	383	2251	1353	853	376	376	611
Starvation Cap Reductn	0	728	0	0	0	0	0
Spillback Cap Reductn	0	0	45	0	154	154	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.64	1.17	0.53	0.72	0.73	0.58

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	927	441	441	1426	216	219	741
v/c Ratio	0.74	0.56	1.09	0.62	0.57	0.57	1.09
Control Delay	23.9	5.9	86.2	8.6	31.0	30.5	75.5
Queue Delay	0.0	0.0	0.0	2.8	0.6	0.5	0.0
Total Delay	23.9	5.9	86.2	11.5	31.5	31.1	75.5
Queue Length 50th (ft)	178	11	~232	139	87	88	~208
Queue Length 95th (ft)	246	73	m#223	m130	155	157	#411
Internal Link Dist (ft)	342			205		389	
Turn Bay Length (ft)			75		225		225
Base Capacity (vph)	1247	791	405	2293	376	387	681
Starvation Cap Reductn	0	0	0	726	0	0	0
Spillback Cap Reductn	0	0	0	0	27	28	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.56	1.09	0.91	0.62	0.61	1.09

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

101: Hathaway Ave & Costco access (signal)

Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	188	843	6	32	518
v/c Ratio	0.25	0.38	0.01	0.09	0.44
Control Delay	10.0	5.9	4.0	6.5	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	10.0	5.9	4.0	6.5	7.3
Queue Length 50th (ft)	10	32	0	2	40
Queue Length 95th (ft)	34	130	4	18	187
Internal Link Dist (ft)	228	109			164
Turn Bay Length (ft)				75	
Base Capacity (vph)	2436	3023	903	467	1607
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.08	0.28	0.01	0.07	0.32

Intersection Summary

103: Hathaway Ave & W A St

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	413	1318	427	306	1025	121	310	948	133	227	290
v/c Ratio	1.19	1.08	0.60	0.71	0.76	0.25	0.87	0.99	0.63	0.68	0.64
Control Delay	152.4	88.0	17.9	61.6	45.6	14.8	72.5	65.3	65.8	58.3	19.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	152.4	88.0	17.9	61.6	45.6	14.8	72.5	65.3	65.8	58.3	19.0
Queue Length 50th (ft)	~390	~602	109	120	269	22	236	340	101	169	46
Queue Length 95th (ft)	#695	#878	254	184	352	75	#469	#565	180	272	147
Internal Link Dist (ft)		990			529			491		213	
Turn Bay Length (ft)	160			240		65	90		225		225
Base Capacity (vph)	348	1223	715	716	1697	575	365	957	361	466	545
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.19	1.08	0.60	0.43	0.60	0.21	0.85	0.99	0.37	0.49	0.53

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

104: I-880 NB Ramps & W A St

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	367	1481	1178	362	261	264	691
v/c Ratio	0.90	0.62	0.85	0.44	0.74	0.74	0.83
Control Delay	48.0	8.5	27.6	3.9	39.0	39.6	13.3
Queue Delay	0.3	1.8	0.0	0.0	1.2	1.3	0.0
Total Delay	48.3	10.3	27.6	3.9	40.3	40.9	13.3
Queue Length 50th (ft)	178	177	246	0	108	109	12
Queue Length 95th (ft)	m#217	m197	#373	49	#193	#205	#189
Internal Link Dist (ft)		205	990			412	
Turn Bay Length (ft)	75				215		60
Base Capacity (vph)	420	2377	1393	820	395	395	855
Starvation Cap Reductn	2	688	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	35	35	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.88	0.88	0.85	0.44	0.72	0.73	0.81

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	1288	338	372	1294	277	279	501
v/c Ratio	0.93	0.43	0.90	0.37	0.80	0.81	0.91
Control Delay	35.6	4.0	50.1	6.6	45.0	45.9	33.7
Queue Delay	0.0	0.0	0.7	0.3	4.0	4.4	0.0
Total Delay	35.6	4.0	50.8	6.9	49.1	50.3	33.7
Queue Length 50th (ft)	284	0	181	97	116	117	81
Queue Length 95th (ft)	#430	49	m#255	m131	#226	#228	#256
Internal Link Dist (ft)	342			205		389	
Turn Bay Length (ft)			75		225		225
Base Capacity (vph)	1385	792	425	3479	384	383	580
Starvation Cap Reductn	0	0	5	1387	0	0	0
Spillback Cap Reductn	0	0	0	0	53	53	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.93	0.43	0.89	0.62	0.84	0.85	0.86

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

101: Hathaway Ave & Costco access sig

Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	232	400	24	81	631
v/c Ratio	0.34	0.21	0.03	0.17	0.60
Control Delay	11.4	5.5	3.0	6.7	9.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	11.4	5.5	3.0	6.7	9.8
Queue Length 50th (ft)	13	14	0	6	59
Queue Length 95th (ft)	45	57	9	34	243
Internal Link Dist (ft)	228	109			164
Turn Bay Length (ft)				75	
Base Capacity (vph)	1962	2739	1270	693	1526
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.12	0.15	0.02	0.12	0.41

Intersection Summary

103: Hathaway Ave & W A St

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	371	728	330	689	1429	139	334	546	121	376	364
v/c Ratio	1.24	0.72	0.49	1.08	0.96	0.27	1.04	0.49	0.64	0.94	0.77
Control Delay	177.1	48.6	6.4	111.7	64.4	17.4	114.7	17.0	73.9	84.7	35.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	177.1	48.6	6.4	111.7	64.4	17.4	114.7	17.0	73.9	84.7	35.6
Queue Length 50th (ft)	~412	310	0	~356	465	37	~324	76	106	333	151
Queue Length 95th (ft)	#615	384	75	#481	#569	93	#519	141	167	#522	278
Internal Link Dist (ft)		990			529			491		213	
Turn Bay Length (ft)	160			240		65	90		225		225
Base Capacity (vph)	300	1011	675	637	1481	518	322	1123	312	410	478
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.24	0.72	0.49	1.08	0.96	0.27	1.04	0.49	0.39	0.92	0.76

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

104: I-880 NB Ramps & W A St

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	303	1006	1565	467	159	161	373
v/c Ratio	0.86	0.45	1.16	0.54	0.42	0.43	0.60
Control Delay	50.7	6.5	103.3	4.5	27.2	27.3	8.1
Queue Delay	0.0	0.5	0.1	0.0	6.3	6.4	0.0
Total Delay	50.7	7.0	103.5	4.5	33.5	33.7	8.1
Queue Length 50th (ft)	147	88	~443	0	62	63	5
Queue Length 95th (ft)	m#219	146	#571	55	116	117	72
Internal Link Dist (ft)		205	990			412	
Turn Bay Length (ft)	75				215		60
Base Capacity (vph)	383	2251	1353	860	376	376	622
Starvation Cap Reductn	0	724	0	0	0	0	0
Spillback Cap Reductn	0	0	50	0	165	164	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.66	1.20	0.54	0.75	0.76	0.60

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

105: I-880 SB Ramps & W A St

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	947	441	456	1446	222	223	741
v/c Ratio	0.76	0.56	1.13	0.63	0.59	0.58	1.09
Control Delay	24.4	6.0	95.6	8.7	31.5	30.8	75.5
Queue Delay	0.0	0.0	0.0	3.4	0.6	0.5	0.0
Total Delay	24.4	6.0	95.6	12.1	32.1	31.4	75.5
Queue Length 50th (ft)	184	12	~247	140	90	90	~208
Queue Length 95th (ft)	253	75	m#229	m129	161	160	#411
Internal Link Dist (ft)	342			205		389	
Turn Bay Length (ft)			75		225		225
Base Capacity (vph)	1247	788	405	2293	376	387	681
Starvation Cap Reductn	0	0	0	729	0	0	0
Spillback Cap Reductn	0	0	0	0	27	27	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.56	1.13	0.92	0.64	0.62	1.09

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

101: Hathaway Ave & Costco access (signal)

Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	339	832	15	85	481
v/c Ratio	0.38	0.47	0.03	0.33	0.51
Control Delay	10.3	7.3	3.6	10.6	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	10.3	7.3	3.6	10.6	9.0
Queue Length 50th (ft)	19	36	0	7	42
Queue Length 95th (ft)	56	128	7	44	170
Internal Link Dist (ft)	228	109			164
Turn Bay Length (ft)				75	
Base Capacity (vph)	2532	3087	923	459	1641
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.13	0.27	0.02	0.19	0.29

Intersection Summary

103: Hathaway Ave & W A St

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	459	1318	427	306	1025	141	310	967	154	248	335
v/c Ratio	1.34	1.09	0.60	0.71	0.76	0.30	0.88	1.03	0.67	0.71	0.72
Control Delay	209.1	91.7	18.2	62.3	46.2	17.9	74.5	77.3	66.4	59.9	25.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	209.1	91.7	18.2	62.3	46.2	17.9	74.5	77.3	66.4	59.9	25.8
Queue Length 50th (ft)	~477	~617	112	122	275	35	241	~387	118	188	83
Queue Length 95th (ft)	#787	#878	254	184	352	95	#469	#608	202	296	203
Internal Link Dist (ft)		990			529			491		213	
Turn Bay Length (ft)	160			240		65	90		225		225
Base Capacity (vph)	343	1213	711	707	1676	569	360	935	357	460	541
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.34	1.09	0.60	0.43	0.61	0.25	0.86	1.03	0.43	0.54	0.62

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

104: I-880 NB Ramps & W A St

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	367	1512	1214	373	261	264	706
v/c Ratio	0.90	0.64	0.88	0.45	0.72	0.73	0.83
Control Delay	47.7	8.9	29.9	3.9	38.0	38.5	13.3
Queue Delay	0.3	2.3	0.0	0.0	1.5	1.5	0.0
Total Delay	48.0	11.3	29.9	3.9	39.4	40.1	13.3
Queue Length 50th (ft)	178	182	257	0	108	109	12
Queue Length 95th (ft)	m#206	m197	#391	50	#193	#205	#193
Internal Link Dist (ft)		205	990			412	
Turn Bay Length (ft)	75				215		60
Base Capacity (vph)	418	2364	1385	824	395	395	867
Starvation Cap Reductn	2	684	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	40	40	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.88	0.90	0.88	0.45	0.74	0.74	0.81

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	1307	338	387	1314	282	284	501
v/c Ratio	0.96	0.43	0.93	0.38	0.80	0.81	0.90
Control Delay	40.2	4.0	53.0	6.7	44.8	45.6	32.6
Queue Delay	0.0	0.0	1.2	0.4	4.4	4.8	0.0
Total Delay	40.2	4.0	54.2	7.1	49.2	50.4	32.6
Queue Length 50th (ft)	~294	0	188	101	118	120	81
Queue Length 95th (ft)	#440	49	m#261	m128	#231	#234	#256
Internal Link Dist (ft)	342			205		389	
Turn Bay Length (ft)			75		225		225
Base Capacity (vph)	1362	785	423	3460	384	383	580
Starvation Cap Reductn	0	0	5	1391	0	0	0
Spillback Cap Reductn	0	0	0	0	52	52	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.96	0.43	0.93	0.64	0.85	0.86	0.86

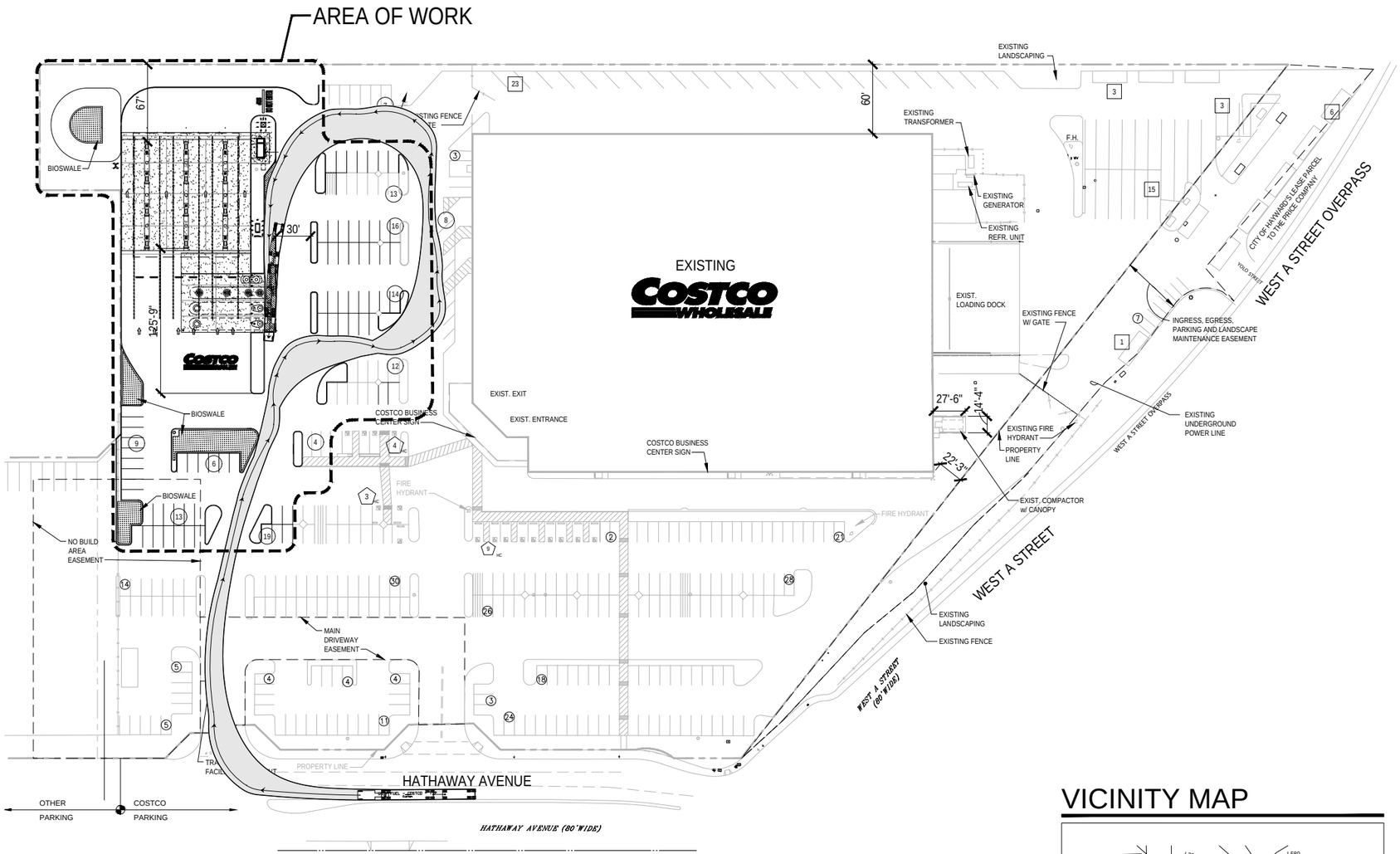
Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Appendix O AutoTURN Exhibits



PROJECT DATA

CLIENT:	COSTCO WHOLESALE 999 LAKE DRIVE ISSAQUAH, WA 98027
PROJECT ADDRESS:	22330 HATHAWAY AVE. HAYWARD, CA 94541
SITE AREA:	10.87 ACRES (473,566 S.F.)
BOUNDARIES INFORMATION:	THIS PLAN HAS BEEN PREPARED BY USING MULVANNY ARCHITECTS SITE PLAN DATED 2/95.

BUILDING DATA:

TOTAL EXIST. BUILDING	124,287 S.F.
DEMOLISH DETACHED TIRE CENTER	8,580 S.F.
REVISED BUILDING TOTAL	115,707 S.F.
INCLUDING:	
EXIST. UTILITY ROOMS	420 S.F.
EXIST. MECHANICAL ROOM	261 S.F.
EXIST. BALER/COMPACTOR ROOM	972 S.F.
EXIST. ENCLOSED CANOPY	1,831 S.F.
EXIST. MEZZANINE	2,427 S.F.

EXIST. PARKING DATA:

EXISTING PARKING PROVIDED:

# STANDARD STALLS	435 STALLS
⬠ HANDICAP STALLS (2 VAN STALL)	16 STALLS
# TRUCK STALLS	52 STALLS
TOTAL PARKING	503 STALLS
NO. OF STALLS PER 1000 S.F. OF BUILDING AREA:	4.35 STALLS
(*) PARKING NEEDED TO MAINTAIN 4.00 / 1000 S.F.:	463 STALLS

(*) 1.0 SPACE / 250 S.F. PER CITY OF HAYWARD MUNICIPAL CODE SECTION 10-2.330.

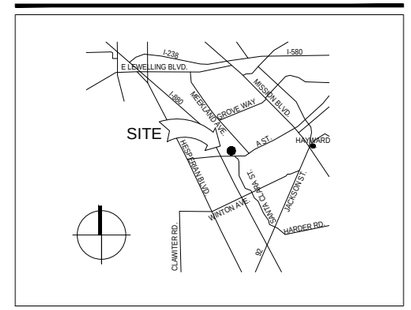
PROPOSED PARKING:

# STANDARD STALLS	330 STALLS
⬠ HANDICAP STALLS (2 VAN STALL)	16 STALLS
# TRUCK STALLS	52 STALLS
TOTAL PARKING	398 STALLS
NO. OF STALLS PER 1000 S.F. OF BUILDING AREA:	2.92 STALLS
TOTAL PARKING LOST	115 STALLS

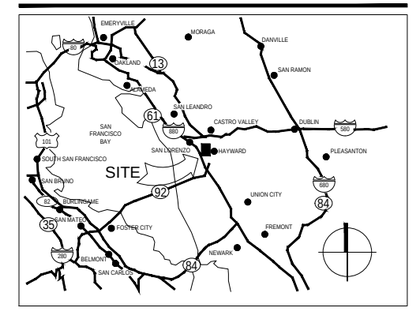
FUEL FACILITY DATA:

OCCUPANCY GROUP:	M (MERCANTILE)
CONSTRUCTION TYPE:	II B
FUEL CANOPY AREA:	9,346 SF
FUEL CANOPY HEIGHT:	17'-6" TO TOP OF CANOPY

VICINITY MAP



REGIONAL MAP



0 20' 40' 80'
1" = 40'-0"

HAYWARD, CA
#823

22330 HATHAWAY AVE.
HAYWARD, CA 94541

94-0360-20
SEPTEMBER 21, 2018

CONCEPT SITE PLAN

DD11-16

COSTCO WHOLESALE

HAYWARD, CALIFORNIA

CONCEPT SITE PLAN

SEPTEMBER 21, 2018

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Appendix P Freeway Output Sheets

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	KML
Agency or Company:	
Date Performed:	1/26/2018
Analysis Time Period:	PM
Freeway/Direction:	I 238 EB
From/To:	14th to 580
Jurisdiction:	
Analysis Year:	2020
Description:	Hayward Costco Business Center

Flow Inputs and Adjustments

Volume, V	4871	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1295	v
Trucks and buses	8	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.962	
Driver population factor, fp	1.00	
Flow rate, vp	1796	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1796	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	65.9	mi/h
Number of lanes, N	3	
Density, D	27.3	pc/mi/ln
Level of service, LOS	D	

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	KML
Agency or Company:	
Date Performed:	1/26/2018
Analysis Time Period:	PM
Freeway/Direction:	I 238 EB
From/To:	14th to 580
Jurisdiction:	
Analysis Year:	2020+project
Description:	Hayward Costco Business Center

Flow Inputs and Adjustments

Volume, V	4879	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1298	v
Trucks and buses	8	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.962	
Driver population factor, fp	1.00	
Flow rate, vp	1799	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1799	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	65.8	mi/h
Number of lanes, N	3	
Density, D	27.3	pc/mi/ln
Level of service, LOS	D	

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	KML
Agency or Company:	
Date Performed:	1/26/2018
Analysis Time Period:	PM
Freeway/Direction:	I 238 EB
From/To:	14th to 580
Jurisdiction:	
Analysis Year:	2040
Description:	Hayward Costco Business Center

Flow Inputs and Adjustments

Volume, V	5293	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1408	v
Trucks and buses	8	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.962	
Driver population factor, fp	1.00	
Flow rate, vp	1952	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1952	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	63.4	mi/h
Number of lanes, N	3	
Density, D	30.8	pc/mi/ln
Level of service, LOS	D	

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	KML
Agency or Company:	
Date Performed:	1/26/2018
Analysis Time Period:	PM
Freeway/Direction:	I 238 EB
From/To:	14th to 580
Jurisdiction:	
Analysis Year:	2040+project
Description:	Hayward Costco Business Center

Flow Inputs and Adjustments

Volume, V	5300	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1410	v
Trucks and buses	8	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.962	
Driver population factor, fp	1.00	
Flow rate, vp	1955	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1955	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	63.4	mi/h
Number of lanes, N	3	
Density, D	30.8	pc/mi/ln
Level of service, LOS	D	

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	KML
Agency or Company:	
Date Performed:	1/26/2018
Analysis Time Period:	PM
Freeway/Direction:	I 238 WB
From/To:	14th to 580
Jurisdiction:	
Analysis Year:	2020
Description:	Hayward Costco Business Center

Flow Inputs and Adjustments

Volume, V	3369	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	896	v
Trucks and buses	8	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.962	
Driver population factor, fp	1.00	
Flow rate, vp	1242	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1242	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	3	
Density, D	17.7	pc/mi/ln
Level of service, LOS	B	

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	KML
Agency or Company:	
Date Performed:	1/26/2018
Analysis Time Period:	PM
Freeway/Direction:	I 238 WB
From/To:	14th to 580
Jurisdiction:	
Analysis Year:	2020+project
Description:	Hayward Costco Business Center

Flow Inputs and Adjustments

Volume, V	3377	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	898	v
Trucks and buses	8	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.962	
Driver population factor, fp	1.00	
Flow rate, vp	1245	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1245	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	3	
Density, D	17.8	pc/mi/ln
Level of service, LOS	B	

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	KML
Agency or Company:	
Date Performed:	1/26/2018
Analysis Time Period:	PM
Freeway/Direction:	I 238 WB
From/To:	14th to 580
Jurisdiction:	
Analysis Year:	2040
Description:	Hayward Costco Business Center

Flow Inputs and Adjustments

Volume, V	3659	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	973	v
Trucks and buses	8	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.962	
Driver population factor, fp	1.00	
Flow rate, vp	1349	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1349	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	69.7	mi/h
Number of lanes, N	3	
Density, D	19.3	pc/mi/ln
Level of service, LOS	C	

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	KML
Agency or Company:	
Date Performed:	1/26/2018
Analysis Time Period:	PM
Freeway/Direction:	I 238 WB
From/To:	14th to 580
Jurisdiction:	
Analysis Year:	2040+project
Description:	Hayward Costco Business Center

Flow Inputs and Adjustments

Volume, V	3666	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	975	v
Trucks and buses	8	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.962	
Driver population factor, fp	1.00	
Flow rate, vp	1352	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1352	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	69.7	mi/h
Number of lanes, N	3	
Density, D	19.4	pc/mi/ln
Level of service, LOS	C	

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	KML
Agency or Company:	
Date Performed:	1/26/2018
Analysis Time Period:	PM
Freeway/Direction:	I 880 NB
From/To:	W A St to Hesperian Blvd
Jurisdiction:	
Analysis Year:	2020
Description:	Hayward Costco Business Center

Flow Inputs and Adjustments

Volume, V	6745	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1794	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1857	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1857	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	65.0	mi/h
Number of lanes, N	4	
Density, D	28.6	pc/mi/ln
Level of service, LOS	D	

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	KML
Agency or Company:	
Date Performed:	1/26/2018
Analysis Time Period:	PM
Freeway/Direction:	I 880 NB
From/To:	W A St to Hesperian Blvd
Jurisdiction:	
Analysis Year:	2020+Project
Description:	Hayward Costco Business Center

Flow Inputs and Adjustments

Volume, V	6755	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1797	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1859	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1859	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	65.0	mi/h
Number of lanes, N	4	
Density, D	28.6	pc/mi/ln
Level of service, LOS	D	

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	KML
Agency or Company:	
Date Performed:	1/26/2018
Analysis Time Period:	PM
Freeway/Direction:	I 880 NB
From/To:	W A St to Hesperian Blvd
Jurisdiction:	
Analysis Year:	2040
Description:	Hayward Costco Business Center

Flow Inputs and Adjustments

Volume, V	7069	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1880	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1946	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1946	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	63.5	mi/h
Number of lanes, N	4	
Density, D	30.6	pc/mi/ln
Level of service, LOS	D	

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	KML
Agency or Company:	
Date Performed:	1/26/2018
Analysis Time Period:	PM
Freeway/Direction:	I 880 NB
From/To:	W A St to Hesperian Blvd
Jurisdiction:	
Analysis Year:	2040+Project
Description:	Hayward Costco Business Center

Flow Inputs and Adjustments

Volume, V	7079	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1883	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1949	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1949	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	63.5	mi/h
Number of lanes, N	4	
Density, D	30.7	pc/mi/ln
Level of service, LOS	D	

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	KML
Agency or Company:	
Date Performed:	1/26/2018
Analysis Time Period:	PM
Freeway/Direction:	I 880 NB
From/To:	Winton to W A St
Jurisdiction:	
Analysis Year:	2020
Description:	Hayward Costco Business Center

Flow Inputs and Adjustments

Volume, V	6958	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1851	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1915	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1915	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	64.1	mi/h
Number of lanes, N	4	
Density, D	29.9	pc/mi/ln
Level of service, LOS	D	

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	KML
Agency or Company:	
Date Performed:	1/26/2018
Analysis Time Period:	PM
Freeway/Direction:	I 880 NB
From/To:	Winton to W A St
Jurisdiction:	
Analysis Year:	2020+proj
Description:	Hayward Costco Business Center

Flow Inputs and Adjustments

Volume, V	6973	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1855	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1919	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1919	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	64.0	mi/h
Number of lanes, N	4	
Density, D	30.0	pc/mi/ln
Level of service, LOS	D	

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	KML
Agency or Company:	
Date Performed:	1/26/2018
Analysis Time Period:	PM
Freeway/Direction:	I 880 NB
From/To:	Winton to W A St
Jurisdiction:	
Analysis Year:	2040
Description:	Hayward Costco Business Center

Flow Inputs and Adjustments

Volume, V	7469	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1986	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2056	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	2056	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	61.5	mi/h
Number of lanes, N	4	
Density, D	33.4	pc/mi/ln
Level of service, LOS	D	

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	KML
Agency or Company:	
Date Performed:	1/26/2018
Analysis Time Period:	PM
Freeway/Direction:	I 880 NB
From/To:	Winton to W A St
Jurisdiction:	
Analysis Year:	2040+proj
Description:	Hayward Costco Business Center

Flow Inputs and Adjustments

Volume, V	7484	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1990	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2060	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	2060	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	61.4	mi/h
Number of lanes, N	4	
Density, D	33.5	pc/mi/ln
Level of service, LOS	D	

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	KML
Agency or Company:	
Date Performed:	1/26/2018
Analysis Time Period:	PM
Freeway/Direction:	I 880 SB
From/To:	W A St to Hesperian Blvd
Jurisdiction:	
Analysis Year:	2020
Description:	Hayward Costco Business Center

Flow Inputs and Adjustments

Volume, V	7224	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1921	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1989	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1989	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	62.8	mi/h
Number of lanes, N	4	
Density, D	31.7	pc/mi/ln
Level of service, LOS	D	

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	KML
Agency or Company:	
Date Performed:	1/26/2018
Analysis Time Period:	PM
Freeway/Direction:	I 880 SB
From/To:	W A St to Hesperian Blvd
Jurisdiction:	
Analysis Year:	2020+project
Description:	Hayward Costco Business Center

Flow Inputs and Adjustments

Volume, V	7234	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1924	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1991	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1991	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	62.7	mi/h
Number of lanes, N	4	
Density, D	31.7	pc/mi/ln
Level of service, LOS	D	

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	KML
Agency or Company:	
Date Performed:	1/26/2018
Analysis Time Period:	PM
Freeway/Direction:	I 880 SB
From/To:	W A St to Hesperian Blvd
Jurisdiction:	
Analysis Year:	2040
Description:	Hayward Costco Business Center

Flow Inputs and Adjustments

Volume, V	8203	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	2182	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2258	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	2258	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	57.0	mi/h
Number of lanes, N	4	
Density, D	39.6	pc/mi/ln
Level of service, LOS	E	

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	KML
Agency or Company:	
Date Performed:	1/26/2018
Analysis Time Period:	PM
Freeway/Direction:	I 880 SB
From/To:	W A St to Hesperian Blvd
Jurisdiction:	
Analysis Year:	2040+project
Description:	Hayward Costco Business Center

Flow Inputs and Adjustments

Volume, V	8213	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	2184	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2261	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	2261	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	56.9	mi/h
Number of lanes, N	4	
Density, D	39.7	pc/mi/ln
Level of service, LOS	E	

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	KML
Agency or Company:	
Date Performed:	1/26/2018
Analysis Time Period:	PM
Freeway/Direction:	I 880 SB
From/To:	Winton to W A St
Jurisdiction:	
Analysis Year:	2020
Description:	Hayward Costco Business Center

Flow Inputs and Adjustments

Volume, V	7584	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	2017	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2088	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	2088	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	60.9	mi/h
Number of lanes, N	4	
Density, D	34.3	pc/mi/ln
Level of service, LOS	D	

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	KML
Agency or Company:	
Date Performed:	1/26/2018
Analysis Time Period:	PM
Freeway/Direction:	I 880 SB
From/To:	Winton to W A St
Jurisdiction:	
Analysis Year:	2020+project
Description:	Hayward Costco Business Center

Flow Inputs and Adjustments

Volume, V	7599	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	2021	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2092	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	2092	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	60.8	mi/h
Number of lanes, N	4	
Density, D	34.4	pc/mi/ln
Level of service, LOS	D	

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	KML
Agency or Company:	
Date Performed:	1/26/2018
Analysis Time Period:	PM
Freeway/Direction:	I 880 SB
From/To:	Winton to W A St
Jurisdiction:	
Analysis Year:	2040
Description:	Hayward Costco Business Center

Flow Inputs and Adjustments

Volume, V	8425	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	2241	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2319	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	2319	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	55.5	mi/h
Number of lanes, N	4	
Density, D	41.8	pc/mi/ln
Level of service, LOS	E	

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	KML
Agency or Company:	
Date Performed:	1/26/2018
Analysis Time Period:	PM
Freeway/Direction:	I 880 SB
From/To:	Winton to W A St
Jurisdiction:	
Analysis Year:	2040+project
Description:	Hayward Costco Business Center

Flow Inputs and Adjustments

Volume, V	8440	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	2245	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2323	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	2323	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	55.4	mi/h
Number of lanes, N	4	
Density, D	42.0	pc/mi/ln
Level of service, LOS	E	

Appendix Q Arterial Level of Service Tresholds

Generalized Peak Hour Two-Way Volumes for Urbanized Areas

Principal (1 signal per half mile)

Lanes	Median	B	C	D	E
1	Undivided	*	200	690	930
2	Divided	50	1,350	1,790	1,870
3	Divided	80	2,040	2,690	2,820

Minor (1 signal per quarter mile)

Lanes	Median	B	C	D	E
1	Undivided	*	*	210	710
2	Divided	*	470	1,390	1,840
3	Divided	*	880	2,190	2,780

Non-State Signalized Roadway Adjustments

-10% 0.9

Median & Turn Lane Adjustments

Lanes	Median	Exlusive Left Lanes	Exclusive Right Lanes	Adjustment Factors	Input
1	Divided	Yes	No	5%	1.05
1	Undivided	No	No	-20%	0.8
Multi	Undivided	Yes	No	-5%	0.95
Multi	Undivided	No	No	-25%	0.75
-	-	-	Yes	5%	1.05

* Cannot be achieved using table input value defaults.

Source: Florida Department of Transportation Systems Planning Office

Appendix R Arterial Analysis Worksheets

Arterial Analysis

Segment		No Project		Plus Project	
		2020	2040	2020	2040
W A Street, east of Hathaway Avenue (eastbound)	Volume	**1,689**	**1,782**	**1,708**	**1,801**
	LOS	**F**	**F**	**F**	**F**
	V/C change			0.011	**0.011**
W A Street, east of Hathaway Avenue (westbound)	Volume	1,109	1,473	1,128	1,492
	LOS	C	D	C	D
	V/C change			0.017	0.013
W A Street, west of Hathaway Avenue (eastbound)	Volume	1,464	1,708	1,508	1,752
	LOS	D	**F**	D	F
	V/C change			0.030	0.026
W A Street, west of Hathaway Avenue (westbound)	Volume	1,273	1,279	1,317	1,323
	LOS	D	D	D	D
	V/C change			0.035	0.034
Hesperian Boulevard, north of W A Street (northbound)	Volume	**2,884**	**3,087**	**2,894**	**3,097**
	LOS	**F**	**F**	**F**	**F**
	V/C change			0.003	0.003
Hesperian Boulevard, north of W A Street (southbound)	Volume	1,005	1,944	1,015	1,954
	LOS	C	D	C	D
	V/C change			0.009	**0.005**
Hesperian Boulevard, south of W A Street (northbound)	Volume	2,240	**2,704**	2,250	**2,714**
	LOS	D	**F**	D	**F**
	V/C change			0.004	0.004
Hesperian Boulevard, south of W A Street (southbound)	Volume	507	1,353	517	1,363
	LOS	C	C	C	C
	V/C change			0.019	0.007

Bold indicates exceeding LOS threshold

Shaded indicates significant impact

The LOS standard for CMP is LOS E.

If already at LOS F, then V/C ratio increase by 0.05 or more at a freeway segment or arterial segment = significant impact

W A Street, east of Hathaway Avenue

Original HCM 2010 Table **Principal (1 signal per half mile)**					
Lanes	Median	B	C	D	E
1	Undivided	*	200	690	930
2	Divided	50	1,350	1,790	1,870
3	Divided	80	2,040	2,690	2,820

Information
4-lane facility
left turn lanes
right turn lanes
median

Non-State Roadway -10% Adjustment Applied 0.9

Adjusted HCM 2010 Table					
Lanes	Median	B	C	D	E
1	Undivided		180	621	837
2	Divided	45	1215	1611	1683
3	Divided	72	1836	2421	2538

A St west of Hathaway	2022	2040
Northbound		
Eastbound	1,689	1,782
LOS	**F**	**F**
Southbound		
Westbound	1,109	1,473
LOS	**C**	**D**

threshold used in LOS calculation

W A Street, west of Hathaway Avenue

Original HCM 2010 Table **Principal (1 signal per half mile)**					
Lanes	Median	B	C	D	E
1	Undivided	*	200	690	930
2	Divided	50	1,350	1,790	1,870
3	Divided	80	2,040	2,690	2,820

Information
4-lane facility
left turn lanes
right turn lanes
median

Non-State Roadway -10% Adjustment Applied 0.9

Adjusted HCM 2010 Table					
Lanes	Median	B	C	D	E
1	Undivided		180	621	837
2	Divided	45	1215	1611	1683
3	Divided	72	1836	2421	2538

A St west of Hathaway	2020	2040
Northbound		
Eastbound	1,464	1,708
LOS	**D**	**F**
Southbound		
Westbound	1,273	1,279
LOS	**D**	**D**

threshold used in LOS calculation

Hesperian Boulevard, north of W A Street

Original HCM 2010 Table **Principal (1 signal per half mile)**					
Lanes	Median	B	C	D	E
1	Undivided	*	200	690	930
2	Divided	50	1,350	1,790	1,870
3	Divided	80	2,040	2,690	2,820

Information
6-lane facility
left turn lanes
right turn lanes
median

Non-State Roadway -10% Adjustment Applied 0.9

Adjusted HCM 2010 Table					
Lanes	Median	B	C	D	E
1	Undivided		180	621	837
2	Divided	45	1,215	1,611	1,683
3	Divided	72	1,836	2,421	2,538

threshold used in LOS calculation

Hesperian Boulevard North of A Street		
	2020	2040
Northbound		
Volume	2,884	3,087
LOS	**F**	**F**
Southbound		
Volume	1,005	1,944
LOS	**C**	**D**

Hesperian Boulevard, south of W A Street

Original HCM 2010 Table **Principal (1 signal per half mile)**					
Lanes	Median	B	C	D	E
1	Undivided	*	200	690	930
2	Divided	50	1,350	1,790	1,870
3	Divided	80	2,040	2,690	2,820

Information
6-lane facility
left turn lanes
right turn lanes
median

Non-State Roadway -10% Adjustment Applied 0.9

Adjusted HCM 2010 Table					
Lanes	Median	B	C	D	E
1	Undivided		180	621	837
2	Divided	45	1,215	1,611	1,683
3	Divided	72	1,836	2,421	2,538

threshold used in LOS calculation

Hesperian Boulevard North of A Street		
	2020	2040
Northbound		
Volume	2,240	2,704
LOS	**D**	**F**
Southbound		
Volume	507	1,353
LOS	**C**	**C**

W A Street, east of Hathaway Avenue + project

Original HCM 2010 Table **Principal (1 signal per half mile)**					
Lanes	Median	B	C	D	E
1	Undivided	*	200	690	930
2	Divided	50	1,350	1,790	1,870
3	Divided	80	2,040	2,690	2,820

Information
4-lane facility
left turn lanes
right turn lanes
median

Non-State Roadway -10% Adjustment Applied 0.9

Adjusted HCM 2010 Table					
Lanes	Median	B	C	D	E
1	Undivided		180	621	837
2	Divided	45	1215	1611	1683
3	Divided	72	1836	2421	2538

A St west of Hathaway	2020	2040
Northbound		
Eastbound	1,708	1,801
LOS	**F**	**F**
Southbound		
Westbound	1,128	1,492
LOS	**C**	**D**

threshold used in LOS calculation

W A Street, west of Hathaway Avenue + project

Original HCM 2010 Table **Principal (1 signal per half mile)**					
Lanes	Median	B	C	D	E
1	Undivided	*	200	690	930
2	Divided	50	1,350	1,790	1,870
3	Divided	80	2,040	2,690	2,820

Information
4-lane facility
left turn lanes
right turn lanes
median

Non-State Roadway -10% Adjustment Applied 0.9

Adjusted HCM 2010 Table					
Lanes	Median	B	C	D	E
1	Undivided		180	621	837
2	Divided	45	1215	1611	1683
3	Divided	72	1836	2421	2538

A St west of Hathaway	2020	2040
Northbound		
Eastbound	1,508	1,752
LOS	**D**	**F**
Southbound		
Westbound	1,317	1,323
LOS	**D**	**D**

threshold used in LOS calculation

Hesperian Boulevard, north of W A Street + project

Original HCM 2010 Table **Principal (1 signal per half mile)**					
Lanes	Median	B	C	D	E
1	Undivided	*	200	690	930
2	Divided	50	1,350	1,790	1,870
3	Divided	80	2,040	2,690	2,820

Information
6-lane facility
left turn lanes
right turn lanes
median

Non-State Roadway -10% Adjustment Applied 0.9

Adjusted HCM 2010 Table					
Lanes	Median	B	C	D	E
1	Undivided		180	621	837
2	Divided	45	1,215	1,611	1,683
3	Divided	72	1,836	2,421	2,538

threshold used in LOS calculation

Hesperian Boulevard North of A Street		
	2020	2040
Northbound		
Volume	2,894	3,097
LOS	**F**	**F**
Southbound		
Volume	1,015	1,954
LOS	**C**	**D**

Hesperian Boulevard, south of W A Street + project

Original HCM 2010 Table **Principal (1 signal per half mile)**					
Lanes	Median	B	C	D	E
1	Undivided	*	200	690	930
2	Divided	50	1,350	1,790	1,870
3	Divided	80	2,040	2,690	2,820

Information
6-lane facility
left turn lanes
right turn lanes
median

Non-State Roadway -10% Adjustment Applied 0.9

Adjusted HCM 2010 Table					
Lanes	Median	B	C	D	E
1	Undivided		180	621	837
2	Divided	45	1,215	1,611	1,683
3	Divided	72	1,836	2,421	2,538

threshold used in LOS calculation

Hesperian Boulevard North of A Street		
	2020	2040
Northbound		
Volume	2,250	2,714
LOS	**D**	**F**
Southbound		
Volume	517	1,363
LOS	**C**	**C**

KITTELSON & ASSOCIATES

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PORTLAND, OR 97204
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RECEIVED
OCT 02 2018
PLANNING DIVISION

MEMORANDUM

Date:	September 27, 2018	Project #: 19451
To:	Marcus Martinez and Steven Chang, City of Hayward	
Cc:	Kim Katz, Costco Wholesale Julie Anderson, Barghausen Consulting Engineers	
From:	Julia Kuhn and Kelly Laustsen	
Project:	Hayward Costco Business Center Fuel Station Addition	
Subject:	Transportation Assessment	

Kittelson & Associates, Inc. (KAI) has prepared a transportation assessment for the addition of a fuel station (project) to the Costco Business Center located on Hathaway Avenue. To assist with the City's review of the project, this memo provides the estimated trip generation, a queuing assessment, a review of parking utilization on site, and responds to other comments provided by the City during the pre-application meeting on June 7, 2017.

BACKGROUND INFORMATION ON COSTCO BUSINESS CENTER CHARACTERISTICS

Although the project does not include any changes to the existing Business Center operations, we have provided information about the operational characteristics to assist in the city's review and understanding of how these Centers differ from other large-format retailers and from traditional Costco Warehouses. Some of the operational characteristics of a Business Center that influence the trip generation and parking demand are described below.

- The Costco Business Center is a members-only distributor for small to medium-size businesses. Member businesses can either visit the Costco Business Center and purchase products or can place orders on-line or via phone to be delivered to their place of business in lieu of having to travel to the Costco Business Center. Members can order via phone or on-line during the week, with deliveries occurring during the week.
- The target industries are convenience stores, offices, and food service.
- The type of goods provided at Costco Business Centers is tailored towards corporate and small business center needs as opposed to typical retail customers or general Costco Warehouse members. Costco Business Centers do not provide the typical accessory departments found within Costco Warehouses, such as pharmacy, optical, deli, bakery, and photo departments. The type of goods provided at Costco Business Centers are larger bulk

items tailored towards corporate and small business needs as opposed to typical retail customers or general Costco Warehouse members.

- From a transportation perspective, the Business Center differs from a traditional Costco Warehouse primarily in regard to the delivery service. On-line shopping is encouraged at Costco Business Centers and a large portion of the Business Center's sales are made on-line for delivery to the member's business. This eliminates many of the trips that would otherwise be made to the Business Center (i.e., only delivery trucks travel to/from the Business Center rather than individual member trips). This reduces both parking needs as well as transportation impacts.
- Typical operating hours for a Costco Business Center differ from those of traditional Costco warehouses and other large-scale retailers to cater to member needs. Costco Business Centers are typically not open on Sundays.

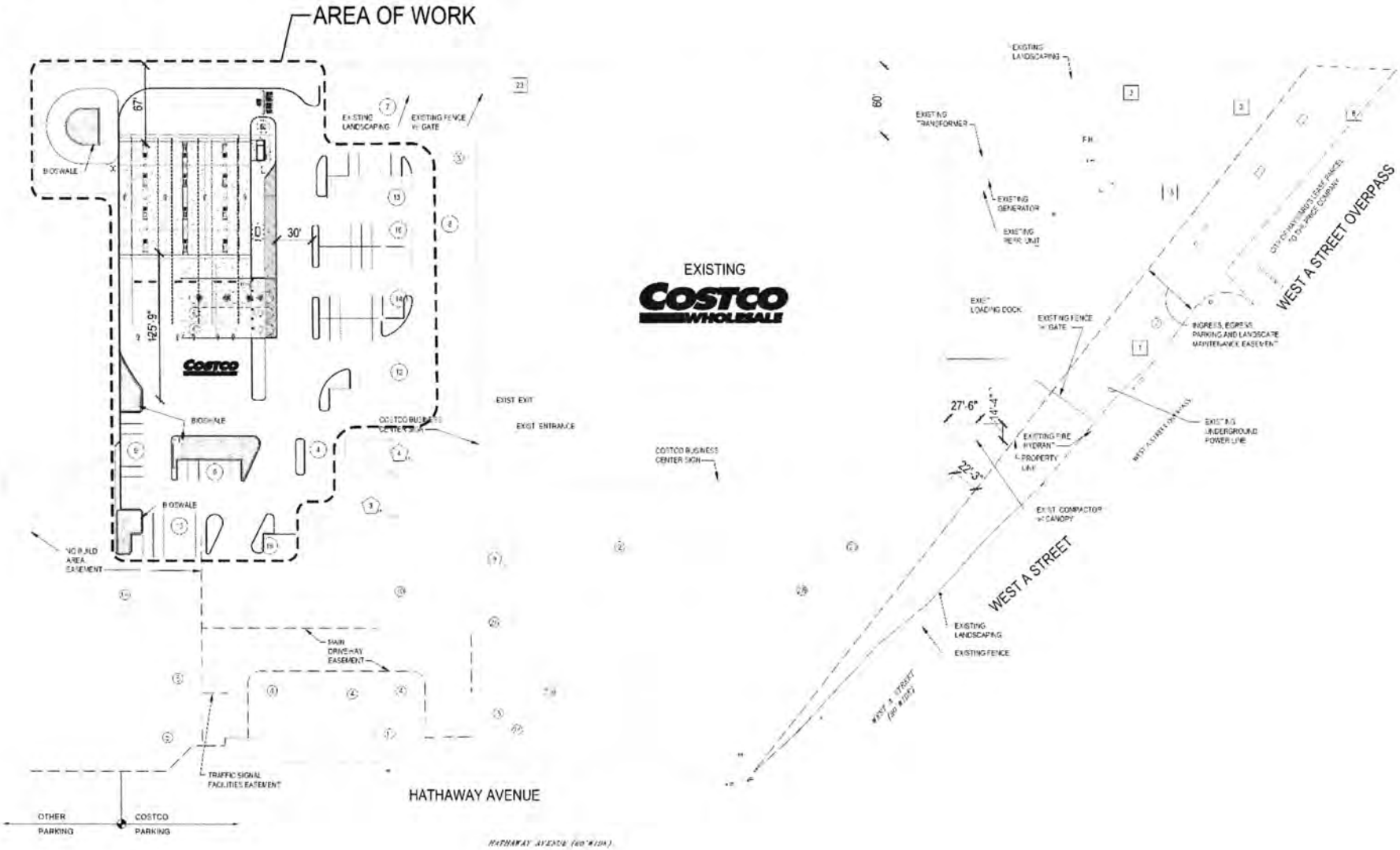
The combined effect of all of these operational characteristics is that Costco Business Centers exhibit significantly lower trip generation and parking demand than is found at traditional Costco Warehouses.

FUEL STATION ADDITION

The project includes a new Fuel Station with 24 positions to the Hayward Business Center Site. The fuel station will be located on the northern portion of the site. Access to the existing Business Center occurs via a signalized full access driveway on Hathaway Avenue, south of the proposed fuel station location, and a right-in/right-out access southeast of the proposed fuel station. The conceptual site plan is provided in Figure 1. Space for approximately 35 vehicles to queue while waiting to fuel is proposed.

Today the site includes a 115,707 square foot warehouse and a 8,580 square foot detached tire center, for a total building amount of 124,287 square feet. The existing tire center will be removed with the addition of the fuel station. The site currently provides 503 parking spaces, including 52 truck stalls. This equates to a parking ratio of 4.05 spaces per 1,000 square feet given the existing building size (i.e., 503 parking spaces/124,287 square feet Business Center) and 4.35 spaces per 1,000 square feet considering the removal of the tire center (i.e. 503 parking spaces/115,707 square feet). A net of 105 spaces will be removed resulting in a supply of 398 spaces and 3.44 spaces per 1,000 square feet (i.e. 398 parking spaces/115,707 square feet). Although neither the before or after project parking supply meet City of Hayward Municipal Code standard of 4 spaces per 1,000 square feet, both meet the operational needs of the site as well as the parking ratio measured at other Costco Business Centers.

Figure 1. Site Plan



PROJECTED TRIP GENERATION

Costco Gasoline fuel stations all function as ancillary uses to the main Costco Warehouses and Business Centers. Like other Costco services, fuel can only be purchased by members. Payment can only be made with credit card and, unlike traditional gas/service station operations, there are no other automotive services (such as repairs) or other type of sales (including food or sundries) associated with the Costco Gasoline facility. All Costco Gasoline facilities have a minimum of one attendant working at all times who is responsible for expediting members' use of the dispensers, directing entering vehicles to available dispenser locations, and managing on-site queues from the dispenser area.

Based on a review of other Business Centers with fuel stations, we collected trip generation data and other transportation information at the Hawthorne and Commerce Business Centers and fuel stations. The trip generation data for both sites is shown in Table 1.

Table 1. Trip Generation at Costco Fuel Stations

Business Center/Fuel Station Location	Fueling Positions	Fuel Station Trip Generation		
		Weekday AM Peak Hour	Weekday PM Peak Hour	Saturday Midday Peak Hour
Hawthorne, California[1]	12	270	276	316
Commerce, California	16	422	426	444
	Average	*346*	*351*	*380*

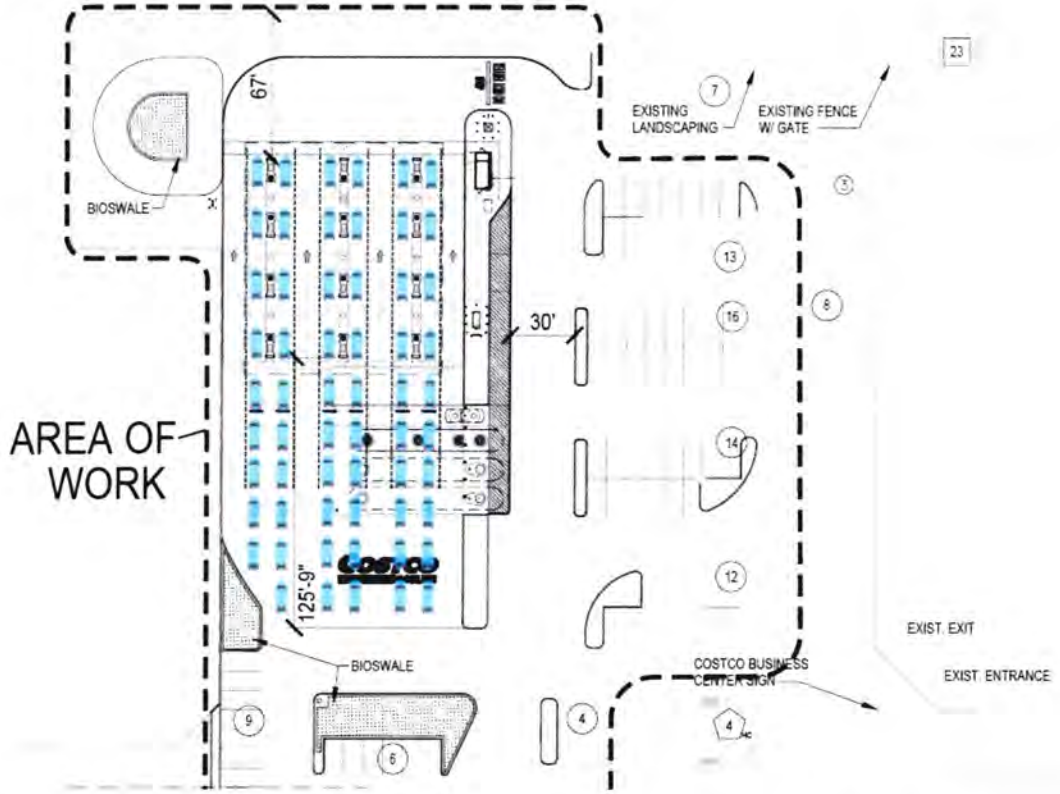
[1]Additional data collected at the Hawthorne site shows an "internalization" of trips between the fuel station and Business Center of 5-7% during all peak periods.

As seen in the table, the two locations display a range of trip generation, likely due to a variety of factors such as traffic volumes on adjacent roadways, Costco membership in the area, surrounding land uses, and activity at the Costco Business Center on-site. The Hayward fuel station is anticipated to result in a trip generation that is similar to the range shown in Table 1, given it is also proposed at a Business Center. Based on this data, we propose to use the average trip generation observed at the two sites for the traffic study conducted for the fuel station addition.

QUEUEING ASSESSMENT

As shown in Exhibit 1, the Hayward fuel station will have queue storage for approximately 35 vehicles. The fuel station location is located in the northern portion of the site with the entrance located over 300 feet away from the site access locations. This ensures that on-site operations at the fuel station will not impact adjacent roadways.

Exhibit 1. Proposed Queue Storage



To provide an assessment of the queue storage sufficiency, queue data was collected at the Hawthorne and Commerce fuel stations. As shown in Table 1, the proposed Hayward fuel station is larger than the Hawthorne and Commerce Fuel Stations (i.e., 24 positions proposed versus 12 or 16), which can assist with better queue management and operations. As a basis of comparison, the average and maximum queues observed at the other two sites are shown in Table 2.

Table 2. Fuel Station Observed Queues

Business Center/Fuel Station Location	Weekday Queues			Saturday Queues		
	Average	95th %ile	Maximum	Average	95th %ile	Maximum
Hawthorne, California	2 vehicles	8 vehicles	15 vehicles	2 vehicles	10 vehicles	17 vehicles
Commerce, California	14 vehicles	33 vehicles	45 vehicles	22 vehicles	42 vehicles	50 vehicles

With an on-site area for 35 vehicles to queue while waiting to fuel at Hayward, the maximum 17 vehicle queues that were measured at Hawthorne can be easily contained and managed. While the queues at the Commerce fuel station were measured to include up to 50 vehicles, this site includes two-thirds of the fueling positions proposed at the Hayward site and is currently being expanded to provide an additional eight fueling positions (for a total of 24 positions) to better manage on-site queuing.

The Hayward fuel station has been designed to maximize capacity given the constraints of the site. While 18 fueling positions were originally proposed at the site, the proposal has been expanded to 24 positions to better serve customers and manage queues. In addition, the fuel station is located in order to orient

the queue storage away from the site access locations, preventing any conflict with operations on Hathaway Avenue.

PARKING ASSESSMENT

Today, there is no on-street parking available adjacent to the Business Center. Instead, all parking occurs on-site. Further, no other adjacent land uses share the parking supply provided on the site. As shown in Exhibit 2, a total of 503 parking spaces are available on site.

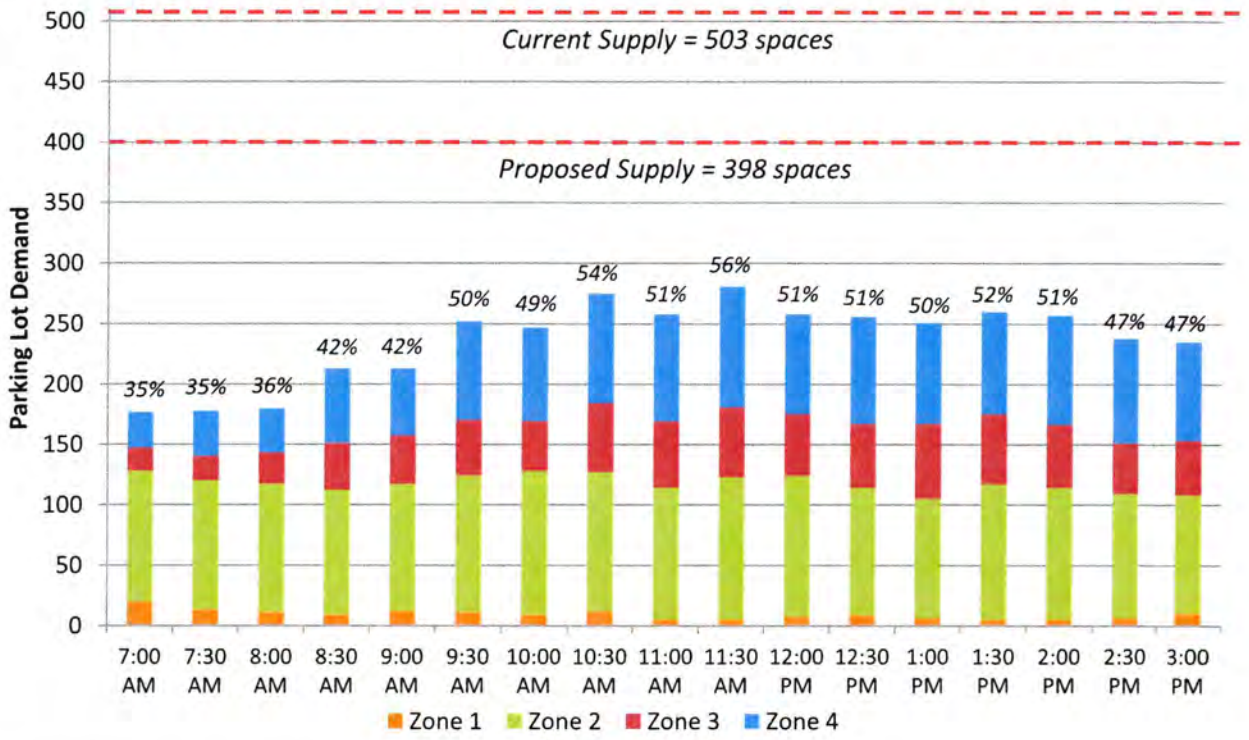
Exhibit 2. Existing Parking Inventory

Existing Parking Utilization

Parking utilization measures the level of occupancy of the parking supply during a given time period. It is typically expressed in terms of the parking demand divided by the parking supply. To evaluate existing parking utilization rates at the Hayward Business Center, parking demand was measured in June 2017 on a typical weekday and Saturday. The weekday (7:00 AM to 3:00 PM) and Saturday (9:00 AM to 3:00 PM) periods were counted at half-hour intervals. These periods were identified for evaluation based on the measured trip generation characteristics at Costco Business Centers and previous parking studies collected at the Hayward Business Center. Further, to understand the potential parking impacts associated with the proposed fuel station location, we summarized parking demand in each of the four zones shown in Exhibit 2.

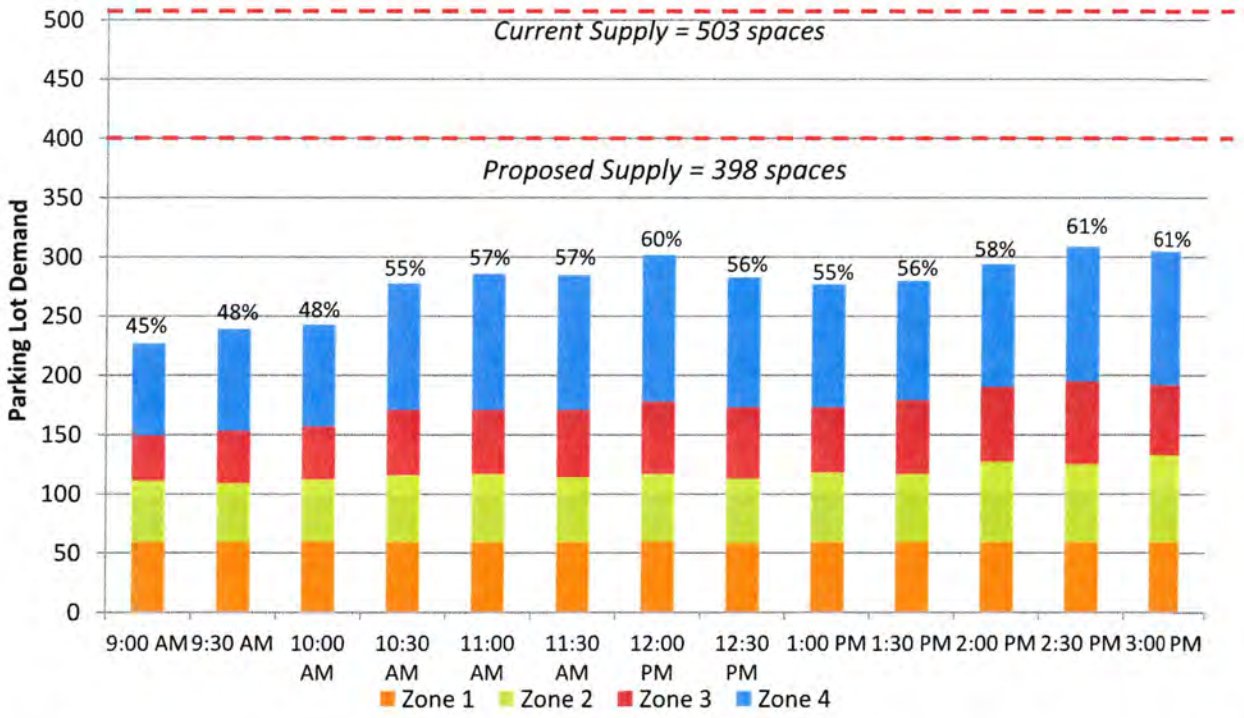
Graphs showing the parking lot demand and utilization during the weekday and Saturday are provided in Exhibit 3 and Exhibit 4, respectively.

Exhibit 3. Current Parking Lot Demand and Utilization – Weekday



Note: Utilization percentages reflect parking demand compared to existing supply (503 spaces)

Exhibit 4. Current Parking Lot Demand and Utilization – Saturday



Note: Utilization percentages reflect parking demand compared to existing supply (503 spaces). The gate to zone 1 was closed at 12:30 PM, so these spaces were not utilized at all in the later part of the afternoon.

As seen in the exhibits, the peak period of parking demand on the weekday occurred between 11:30 AM and noon, with 281 parking spaces used. On Saturday, the peak period of parking demand occurred between noon and 12:30 PM, with 302 spaces used. Further, during the peak parking demand period (as measured on Saturday), only 60 percent of the spaces are utilized. With the proposed parking supply of 398 spaces, the parking utilization would only be 76 percent, which provides ample "reserve capacity" for parking on-site. This is shown in Table 4.

Table 3. Parking Demand and Supply

Existing parking supply	503 spaces
Peak parking demand (Noon on Saturday)	302
Peak parking utilization	60% (302/503)
Proposed parking supply	398
Peak parking demand (negligible change anticipated)	302
Resulting peak utilization	76% (302/398)
Peak parking demand ratio	2.43 spaces per 1,000 square feet (302 spaces/124,287 square feet)
85 percent full standard parking supply	356 spaces (302 spaces/0.85)
Provided parking supply ratio	3.44 spaces per 1,000 square feet (398 spaces/115,707 square feet)
85 percent full parking supply ratio	3.08 spaces per 1,000 square feet (356 spaces/115,707 square feet)

As part of site planning for retail uses, an 85 – 90 percent "full standard" is typically applied to eliminate any unnecessary circling of the parking lot by members to find available parking and to minimize any off-site parking impacts. As shown in Table 4, applying an 85 percent full standard, the recommended supply for the existing Hayward site would translate to 356 spaces (i.e., 3.08 spaces per 1,000 square feet).

Parking Demand at Comparable Business Centers

We measured parking demand at the Hawthorne and Commerce Business Center as well to provide a comparison to the proposed supply at Hayward. The parking data is summarized in Table 4.

Table 4. Measured Costco Business Center Parking Demand Rates (measured in April 2015)

Location	Building Size (SF)	Average Weekday Demand (Spaces)	Weekday Peak Demand (spaces)	Weekday Peak Demand Ratio (spaces/1,000 SF)	Average Saturday Demand (Spaces)	Saturday Peak Demand (spaces)	Saturday Peak Demand Ratio (spaces/1,000 SF)
Hawthorne, CA	123,093	105	127	1.02	107	134	1.08
Commerce, CA	129,972	262	341	2.62	282	360	2.77
	Average	*184*	*234*	*1.82*	*195*	*247*	*1.93*

If one were to apply an 85 percent full standard to the average peak parking demand measured at the two other California Business Center sites, a recommended parking supply would be 2.27 spaces per 1,000 square feet (i.e., 1.93/0.85). As shown in Table 4, the peak parking demand ratio varied between 1.08 spaces per 1,000 square feet and 2.77 spaces per 1,000 square feet whereas the Hayward Business Center peak parking ratio was 2.43 spaces per 1,000 square feet.

Based on the current Hayward Business Center parking demand and in reviewing the other Business Centers, the proposed parking supply of 3.44 spaces per 1,000 square feet is anticipated to meet Hayward's needs and meets the highest peak parking supply ratio measured at the other sites (i.e., 2.77 spaces per 1,000 square feet at Commerce/0.85 = 3.2). Although below the Municipal Code requirement of 4.0 spaces per 1,000 square feet, the data suggests that the proposed parking supply is sufficient to meet both existing and future parking needs at the Hayward Business Center with the Fuel Station.

ADDITIONAL TRANSPORTATION ITEMS

This section provides responses to the additional transportation comments provided by City staff at the June 7, 2017 pre-application meeting and in subsequent correspondence. The City's comments are provided below with our responses in *italics.*

Comment #2 (Planning): Provide a parking analysis in your entitlement package submittal showing the current demand of the Costco Business Center parking lot. Staff recommends analyzing the current site conditions at the project site, as well as providing data of similar Costco site with a fuel facility showing the impact on parking and regular business operations. A queueing study will also be required to ensure that there is an adequate and timely flow of patrons at the gas pumps. Explore a possible indication system (signage or illumination) to notify waiting patrons of available gas stations to maximize efficiency and queueing of vehicle, and minimize wait times and potential congestion.

Response: As discussed above, the proposed parking supply of 3.42 spaces per 1,000 square feet of Business Center is anticipated to meet the needs of the site upon addition of the Fuel Station. In addition, on-site queues measured at other Business Center demonstrate that the proposed queuing storage area for 35 vehicles waiting to fuel is anticipated to meet the demands at the Fuel Station. Lastly, Costco typically utilizes on-site parking attendants to manage queues and direct members to available fuel positions. In response to City comments, Costco is exploring an indication system to supplement the on-site attendants' roles and will assess its potential application at Hayward.

Comment #5 (Planning): Explore additional alternatives and locations for the 12 proposed parking spaces that will be located adjacent to the entrance of the fuel facility area. If congestion arises and vehicle traffic becomes backed up, these parking spaces will be rendered useless due to the difficulty of backing up safely. In addition, please clarify – once cars do back up, are they required to wait in line to exit the fueling area?

Response: The site plan had been updated to relocate the fuel station. This comment no longer applies.

Comment #1 (Public Works): Provide a trip generation memorandum within your entitlement package submittal to the Planning Division. The memorandum will assist in determining the level of analysis that will be required for the traffic study with respect to the California Environmental Quality Act (CEQA).

Response: The first part of this memorandum provides a trip generation estimate which is applied in the accompanying traffic study for the site.

The following comments were received after the pre-application meeting.

Comment: Considering turning the "Truck Only" lane adjacent to the facility into a "Truck and Gas Users Only" lane.

Response: The site plan had been updated to relocate the fuel station. This comment no longer applies.

Comment: Considering reducing the width of the exit access from the fuel facility to 35'.

Response: The site plan had been updated to relocate the fuel station. This comment no longer applies.

NEXT STEPS

We look forward to continuing to work with City staff as part of the review of the proposed Fuel Station.

KITTELSON & ASSOCIATES
851 SW 6th AVENUE, SUITE 600
PORTLAND, OR 97204
P 503.228.5230 F 503.273.8169

MEMORANDUM

Date:	June 7, 2019	Project #: 19451
To:	John Ellingsen, Ellingsen & Company, Inc. Julie Anderson, Barghausen Consulting Engineers, Inc.	
From:	Julia Kuhn & Chris Brehmer	
Project:	Hayward Costco Business Center	
Subject:	Response to Agency Comments	

Per your request, we have reviewed the May 13, 2019 memo from LSA to the City of Hayward regarding the Transportation Impact Analysis Peer Review performed for the *Hayward Costco Business Center Fuel Station Addition Project*. As outlined below, the peer review did not identify any material changes needed to the analyses nor to the findings/recommendations associated with our Traffic Impact Analysis (TIA) submitted to the City in September 2018; however, we have provided supplemental information to aid in the City's review. A summary of the comments received, our response to those comments, and the supplemental information is provided below.

Trip Generation

Per the May LSA memo, no changes to the trip generation are recommended. As such, no updates to our TIA are required.

Queuing

Per the May LSA memo, no changes to the site plan are recommended to accommodate vehicle queues or preserve parking. As such, no updates to our TIA are required.

Parking Assessment

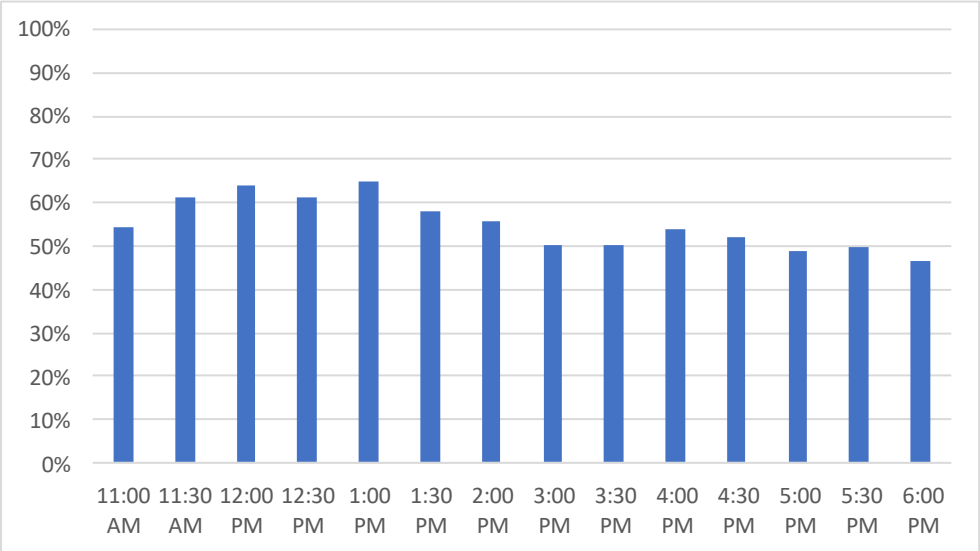
The LSA memo requested clarification on four aspects of the parking assessment. These are addressed individually below.

Hours of Data Collection

The LSA memo seeks clarification on why the parking assessment was conducted from 7 AM – 3 PM on a weekday and 9 AM to 3 PM on Saturday given the Business Center is open until 6 PM on weekdays and 4 PM on Saturdays. Our response is two-fold:

- The Saturday 3 PM time period reflects users parked on-site between 3 PM and 4 PM. Collecting data again beginning at 4 PM would reflect the hour after the warehouse closed.
- The 7 AM – 3 PM (essentially reflecting operations from 7 AM – 4 PM) time period on the weekday was selected based on parking assessments at both Hayward as well as at other Business Centers in California that demonstrated that the peak weekday demand occurs in the mid-day, and that the hours between 4 and 6 PM reflect approximately 15 – 25 percent lower demand than the mid-day peak. Exhibit 1 below illustrates the utilization measured on a mid-week day in September 2015 at the Hayward Business Center. At that time, 476 parking spaces were provided on-site to serve members, employees and warehouse operational needs. As shown, the hours between 3 and 6 PM reflect less than 54 percent utilization of on-site spaces whereas the hours between 11:30 and 1 PM reflect 60 – 65 percent utilization. This trend was also shown in the 2017 data reported in our TIA. As such, we conclude that the data reported in the TIA accurately captures the peak demand and no changes to the analysis are needed.

Exhibit 1. 2015 Hayward Business Center Parking Utilization – Mid-week



- The LSA memo questions why the utilization rates reflected in Exhibit 3 of the September 2018 and the October 2018 memo that superseded September are different. As shown at the top of each exhibit, the total supply was shown to be 503 in the September 2018 version but re-measured again to reflect 477 spaces in the October 2018 version. The 477 spaces is the correct supply and consistent with the September 2015 data collected as well. The parking demand remains the same in both cases and no changes are needed to the conclusions.

- The LSA memo suggests that the parking supply and utilization in Zone 1 (i.e., back of the warehouse) should be removed from the study as no members should be parking in this area. This area is used for truck and employee parking and both Exhibits 3 and 4 of our October 2018 parking memo show the usage by zone. To address LSA's question, we removed the Zone 1 parking and have provided Exhibits 2 and 3 below to reflect utilization without Zone 1 included.

Exhibit 2. 2017 Weekday Parking Utilization – Zone 1 demand omitted

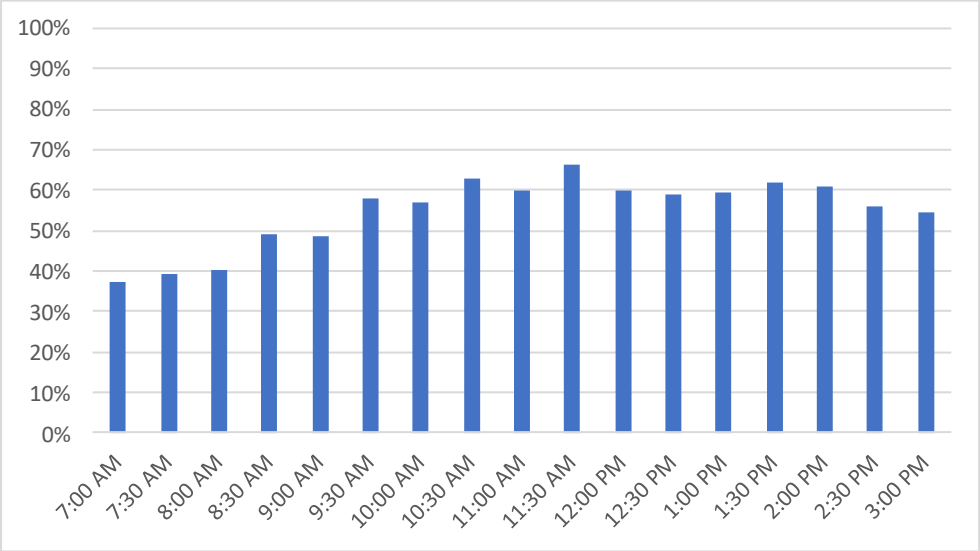
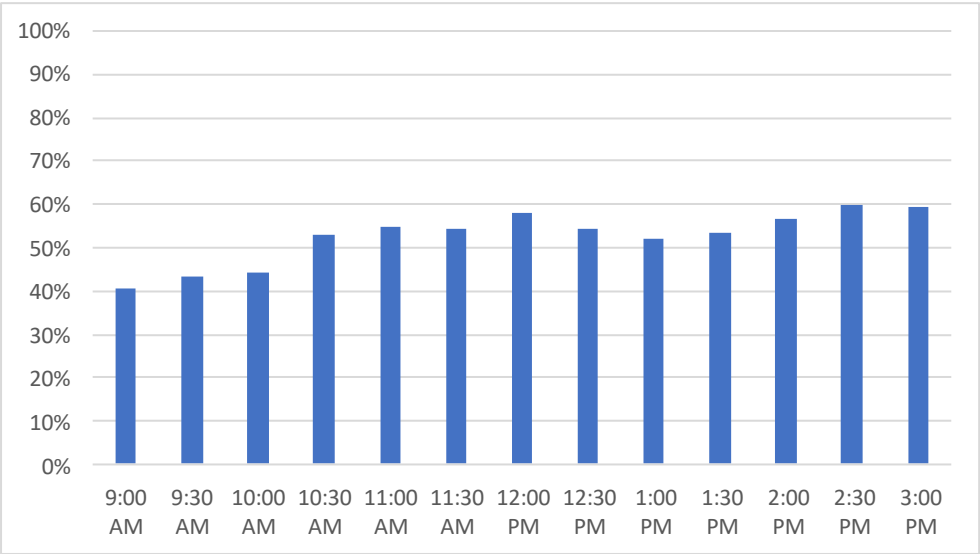


Exhibit 3. 2017 Saturday Parking Utilization – Zone 1 demand omitted

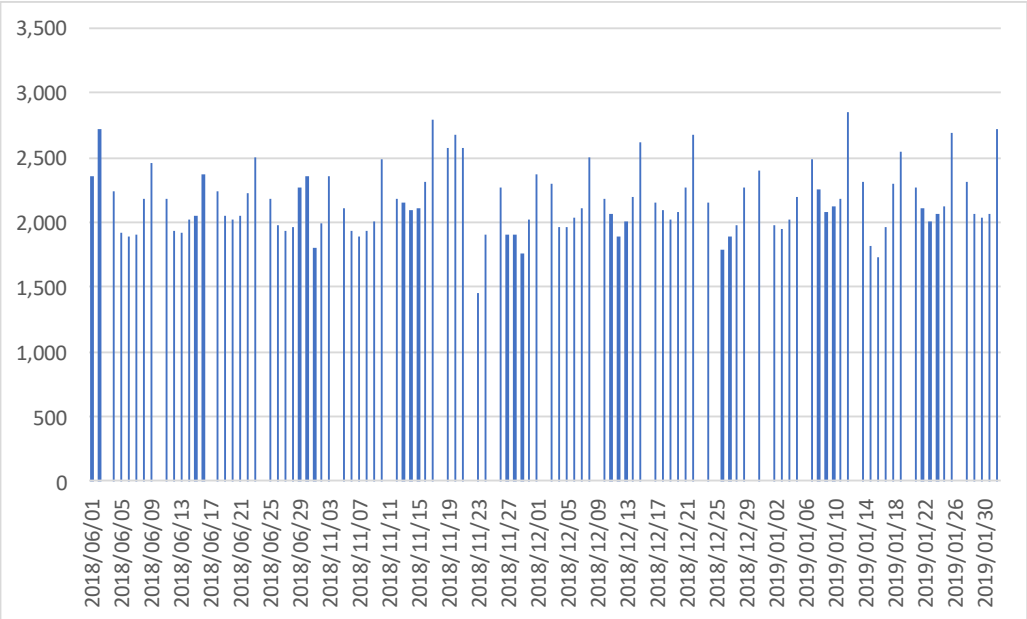


- As shown above, removal of Zone 1 demand results in a peak demand occurring mid-week and not on Saturday. During the mid-week, the peak demand occurred at 11:30 AM reflective of 274 of the 413 available spaces utilized in Zones 2 – 4. Using the same calculations presented in Table 3 of the TIA, the omission of Zone 1 results in a peak parking demand ratio of 2.20 spaces per 1,000 square feet (i.e., 274 spaces utilized/124,287 square

foot building) or an 85% effective capacity supply ratio of 2.59 spaces per 1,000 square feet to plan for peak events (i.e., non-typical days). This would result in an overall supply needed of 322 spaces in Zones 2 – 4 to account for non-typical days of the year whereas a total of 344 spaces are provided on-site in these zones, which exceeds the effective capacity supply needed.

- As noted above, the proposed parking supply (with and without the inclusion of Zone 1) is higher than what is considered the effective capacity supply needed to serve atypical days at the Costco Business Center. To address LSA's further questions about atypical days, Costco provided the number of members entering the Hayward Business Center each day in the months of June, November, and December 2018, January 2019 and the Saturday of Superbowl weekend in 2019. The days that experienced the highest member counts were as follows:
    - First Saturday in June 2018 measured at 2,718 total members;
    - Saturday prior to Thanksgiving 2018 measured at 2,789 total members;
    - Saturday prior to Christmas 2018 measured at 2,679 total members;
    - Second Saturday in January 2019 (not MLK weekend) measured at 2,850 total members;
    - Saturday prior to Superbowl 2019 measured at 2,695 total members; and,
    - Saturday of Superbowl 2019 weekend measured at 2,721.
- Further, Exhibit 4 below reflects the overall member counts during each of the four months. As shown, each month reflects variations and June (in which the parking data was collected) also shows significant member activity and peak days similar to that measured near the holidays and Superbowl. Therefore, we continue to conclude that the parking supply is appropriate.

Exhibit 4. Daily Member Counts



- For further reference, the 2015 parking survey referenced earlier in this memo was conducted in November on the Saturday prior to Thanksgiving. At that time, 476 spaces were measured on-site, of which 412 were measured to be in Zones 2 – 4. On the Saturday prior to Thanksgiving 2015, the peak non-Zone 1 demand occurred at 11 AM and again at 2:20 PM in which 63 percent of Zone 2 – 4 spaces utilized (i.e., 261 of 412 spaces used). This demand of 261 spaces is slightly lower than that measured in June 2017, thereby further demonstrating that the proposed parking supply is adequate.

Traffic Scope of Work

The LSA memo notes that the elements required by the City's guidelines are addressed for the project. As such, no changes are needed.

Traffic Methodology

The LSA memo notes that the methodology is consistent with City guidelines and as such no changes are needed.

Overall Conclusions from LSA Memo

The LSA memo notes that the TIA was prepared "consistent with the City's guidelines and industry standards and is a sufficient analysis of the project's potential traffic impacts" and that "additional detail regarding existing parking demand should be provided in order to ensure sufficient parking supply will be available after the project is complete." Given these conclusions and the clarifications provided above regarding parking, we conclude no changes to our findings or recommendations are needed.

Please let us know if you need additional clarification as part of the City's review.

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851 SW 6th AVENUE, SUITE 600
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P 503.228.5230 F 503.273.8169

MEMORANDUM

Date: September 18, 2019 Project #: 19451

To: John Ellingsen, Ellingsen & Company, Inc.
Julie Anderson, Barghausen Consulting Engineers, Inc.

From: Julia Kuhn & Chris Brehmer

Project: Hayward Costco Business Center

Subject: Response to Agency Comments regarding Trip Generation

Per your request, this memorandum provides additional documentation related to the trip generation calculations for the fuel station project at the Hayward Costco Business Center. LSA previously provided a peer review on behalf of the City of the overall study methodology. As noted in their May 2019 memorandum, LSA found the trip generation used in our study to be reasonable. To provide additional clarification on the trip generation, we offer the following points below.

Like most cities, Hayward's Traffic Study guidelines call for using the *Trip Generation Manual* (as published by the Institute of Transportation Engineers) in estimating the trips generated by a new land use. The ITE *Trip Generation Handbook* provides further guidance for users on how to determine the applicability of the data to the context of where it is being applied, such as the similarity in a project land use type to that described in the *Trip Generation Manual* and the number of data points with similar characteristics to the project site. In the case of fuel stations, there is a plethora of data that could be used to estimate the trips associated with a 24-fueling position gas station. However, if we had applied this data, it would have yielded a lower trip generation number than analyzed in our TIA.

On behalf of Costco (and consistent with the ITE handbook methodology when the national data doesn't apply), we have been collecting trip generation data at Costco Warehouses with and without fuel stations as well as Business Centers with and without fuel stations. We have collected more data related to Warehouses than for Business Centers due to the fact that there are far more Warehouses than Business Centers. What we've found is that Warehouses have a higher percentage of Costco members who shop and get gas at the same time than occurs at a Business Center. This is intuitive because a Costco member could get gas at a Business Center but may not necessarily shop there. Further, the hours of operation of a Business Center are also more limited than the standard Costco Warehouses.

At the time we scoped TIA with the City of Hayward, there were a limited number of operational Business Centers in California with constructed fuel stations. We picked the two sites and averaged them (as called

for in the ITE methodology) to develop a trip generation rate for use in the study. It was not appropriate to use a fuel station rate comparable to a Costco Warehouse location as it too would have yielded a lower trip generation number and less a conservative analysis of off-site impacts.

Finally, our data has shown that there is not a linear relationship between fuel positions and trip generation, rather it is a function of the number of members in the market.

Please let us know if you need additional information as part of the City's review.

CARLSBAD
FRESNO
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: May 13, 2019

TO: Marcus Martinez, City of Hayward

FROM: Theresa Wallace, AICP, Principal
Arthur Black, Associate/Transportation Planner

SUBJECT: Hayward Costco Business Center Fuel Station Addition Project – Transportation Impact Analysis Peer Review

LSA has reviewed the *Hayward Costco Business Center Fuel Station Addition Transportation Assessment* (Kittelson & Associates, September 2018) and the *Hayward Costco Business Center Fuel Station Addition Transportation Impact Analysis* (Kittelson & Associates, September 2018) in relation to the Traffic Study Guidelines (March 2017) of the City of Hayward (City) and industry standards.

The project proposes to add a fuel station with 24 positions to an existing Costco Business Center in north Hayward. The Costco Warehouse in south Hayward already provides a fuel station. Although Costco Business Centers provide a different format and serve a different customer base than Costco Warehouse stores, all members of Costco may shop at a Costco Business Center and may use fuel stations at a Costco Business Center.

The *Hayward Costco Business Center Fuel Station Addition Transportation Assessment* provides details on the trip generation estimate, queuing assessment, and parking utilization. The *Hayward Costco Business Center Fuel Station Addition Transportation Impact Analysis* applies the trip generation estimate and analyzes the project's potential traffic impacts.

LSA's comments are provided below.

Trip Generation

The net new trip generation is calculated based on three factors: the number of vehicles attracted to the fuel station, the percent of those vehicles that are already accounted for in the retail trip generation (i.e., internal trips), and the percent of vehicles already traveling on an adjacent roadway that divert to the fuel station (i.e., pass-by trips). This is standard industry practice. To avoid double counting, only new trips not already present in the study area should be added to existing traffic volumes.

The trip generation estimate is referenced from two fuel stations at Costco Business Center locations (both of which are in Southern California). Previous Costco fuel station traffic studies have

stated that the trip generation for Costco gas stations was the same regardless of the number of pumps. Because all Costco members can use any fuel station (even those at Costco Business Centers), it is unclear why the proposed fuel station at a Costco Business Center would have a different trip generation than any other Costco fuel station.

The trip generation estimate also applies a different pass-by percentage. However, the combined effect of these differences results in an analyzed trip generation that is higher than had standard rates been applied. The surveyed internal capture was lower at the Costco Business Center than at Costco Wholesale, and this lower internal rate was applied to the project's trip generation. As presented, the analysis is more conservative than had average trip rates and pass-by rates for all Costco fuel stations been applied.

Figure 6: Automobile Peak Hour Volumes, Project Only reflects the project's trip generation minus internal trips and illustrates the effect of pass-by trip diversion consistent with industry standards.

In summary, no changes to the trip generation estimates are recommended.

Queuing

The Transportation Assessment references comments made by City staff at the June 7, 2017 pre-application meeting. The Transportation Assessment further indicates that the site plan was changed in response to the City's concern that fuel station queueing would block some parking spaces, thereby further reducing parking supply.

As currently proposed, the site plan appears to provide a primary drive aisle from the traffic signal on Hathaway Avenue through the center of the parking lot. The site has space for 35 vehicles to queue behind the fuel positions before any vehicles would queue into the primary drive aisle. When more than 35 vehicles are queued, drivers may have an inclination to travel left, through a group of parking spaces to queue for the fuel positions on the left. This will not necessarily cause the parking spaces to be underutilized as some patrons may choose to park in these spaces, visit the store, then proceed through the fuel station and exit. Alternatively, employees could be directed to use these parking spaces to reduce turnover and limit potential conflicts with fuel station queueing. In a worst case, if the parking spaces are underutilized, Costco can manage internal traffic flow by placing cones and preventing access between the parking spaces and the fuel queue, which would result in vehicles accessing the fuel station from the primary drive aisle.

The Transportation Assessment speculates that the additional fuel positions proposed with the project will result in shorter queues than observed at the sited Commerce, California site. It should be noted that expanded data at other sites could show an average service rate per fuel position, which could quantitatively calculate the anticipated queue at the proposed project. However, the fuel station is placed far enough back that even the maximum observed queue of 50 vehicles could be accommodated without interfering with traffic on Hathaway Avenue.

In summary, no changes to the site plan are recommended to accommodate vehicle queues or preserve parking access.

Parking Assessment

The project will reduce the total number of parking spaces from 503 to 398, a reduction of 105 parking spaces. All of these parking spaces are reduced in areas accessible to customers.

Parking demand data was collected between 7:00 a.m. and 3:00 p.m. on a typical weekday and 9:00 a.m. to 3:00 p.m. on a typical Saturday. The Transportation Assessment does not indicate how these times were chosen in light of the fact that the Costco Business Center is open until 6:00 p.m. on weekdays and 4:00 p.m. on Saturdays.

The Transportation Assessment states in Table 3 that peak parking demand occurs at noon on Saturday, but this is not consistent with Exhibit 4. The October 2017 version of the Transportation Assessment did show peak parking demand at noon on Saturday, but it is not clear why the September 2018 version is different if the underlying data are the same. The data collection sheets were not attached to the report that LSA was provided for review; therefore, LSA could not verify the correct peak parking demand.

The parking assessment would benefit from separating parking demand in Zone 1 from the other three zones. Customers cannot park in Zone 1. Grouping parking supply and comparing it to total parking demand could inadvertently depend on available parking in Zone 1 to satisfy customer parking demand.

It should be noted that the analysis appears to show parking demand of approximately 2.6 spaces per 1,000 square feet for the Hayward Costco Business Center on a typical weekend. This is a similar rate to the Commerce Costco Business Center (2.77 spaces per 1,000 square feet). While the proposed ratio of 3.44 spaces per 1,000 square feet appears to satisfy typical peak parking demand, the study should also comment on whether Costco Business Centers experience higher holiday parking demand observed at Costco Wholesale stores (the Saturday before an NFL championship game, the weekend before Thanksgiving, etc.) and whether the projected parking buffer on typical weekdays and weekends is sufficient to accommodate periods of atypical parking demand.

Traffic Scope of Work

The City's guidelines outline several elements that are to be included in a traffic study. The project's traffic study provides most of these elements. The existing and proposed pedestrian and bicycle facilities are described qualitatively in the project's traffic study. This is probably adequate given that trips to the proposed project (a fuel station) would be vehicle trips. Pedestrians and bicycles do not need to use a fuel station.

In summary, the elements required by the City's guidelines are addressed for the project.

Traffic Methodology

LSA examined whether the project trip assignment would require expanding the study area. Based on the added traffic volume at the study intersections, it does not appear that additional intersections would need to be analyzed to capture the project's potential impacts.

Existing traffic volumes were collected on Wednesdays during non-holiday weeks as required by the City's guidelines. LSA examined the methodology of traffic volume development and found it to be consistent with the City's guidelines.

While *Highway Capacity Manual 2000* methodology is used to analyze intersection impacts rather than the latest 6th edition, this is consistent with the City's practices. The traffic study appropriately applies the City's significance thresholds.

In addition to the analysis of City facilities, the traffic study includes analysis of Congestion Management Program facilities.

Conclusion

In summary, the traffic study has been prepared consistent with the City's guidelines and industry standards and is a sufficient analysis of the project's potential traffic impacts for use in the environmental document. LSA believes additional detail regarding existing parking demand should be provided in order to ensure sufficient parking supply will be available after the project is complete.

June 11, 2019

The Ohlone Indian Tribe
Andrew Galvan
P.O. Box 3388
Fremont, CA 94539

SUBJECT: Assembly Bill 52 Consultation Notification for the Costco Business Center Fuel Facility Project, Hayward, Alameda County

Mr. Galvan:

The City of Hayward ("City") is the Lead Agency for an Initial Study that will be prepared for the proposed Costco Business Center Fuel Facility Project ("project"), consistent with the requirements of the California Environmental Quality Act (CEQA). The project would result in the demolition of an existing tire service building and construction of a new fuel station with 12 dispensers (24 fueling positions). The attached figures show the proposed project location.

Assembly Bill 52 (AB 52) requires that, as part of the CEQA review process, public agencies provide early notice of a project to California Native American tribes, and, if formally requested in writing by a tribe, consult with tribes regarding the project. Via this letter, the City is hereby notifying the Ohlone Indian Tribe of its opportunity to consult with the City for the project, pursuant to Public Resources Code 21080.3.1. To request consultation under AB 52 for the project, or to request additional information regarding the proposed project, please contact me via email at marcus.martinez@hayward-ca.gov, by telephone at (510) 583-4236, or via a letter sent to my attention to the address below within 30 days of receipt of this letter. Failure to respond within this timeframe means that the City is not required to consult with you on this matter. I look forward to hearing from you.

If you have any questions or concerns regarding this project, please feel free to contact me at (510) 583-4236 or via email at marcus.martinez@hayward-ca.gov.

Sincerely,

Marcus Martinez
Assistant Planner

Attachment: Project Location Map and Aerial Photograph

Development Services Department
Planning Division
777 B Street, Hayward, CA 94541
T: 510.583.4200
F: 510.583.3649
TTD: 510.247.3340
www.hayward-ca.gov

HAYWARD

LSA

LEGEND

Project Site

FIGURE 1-1

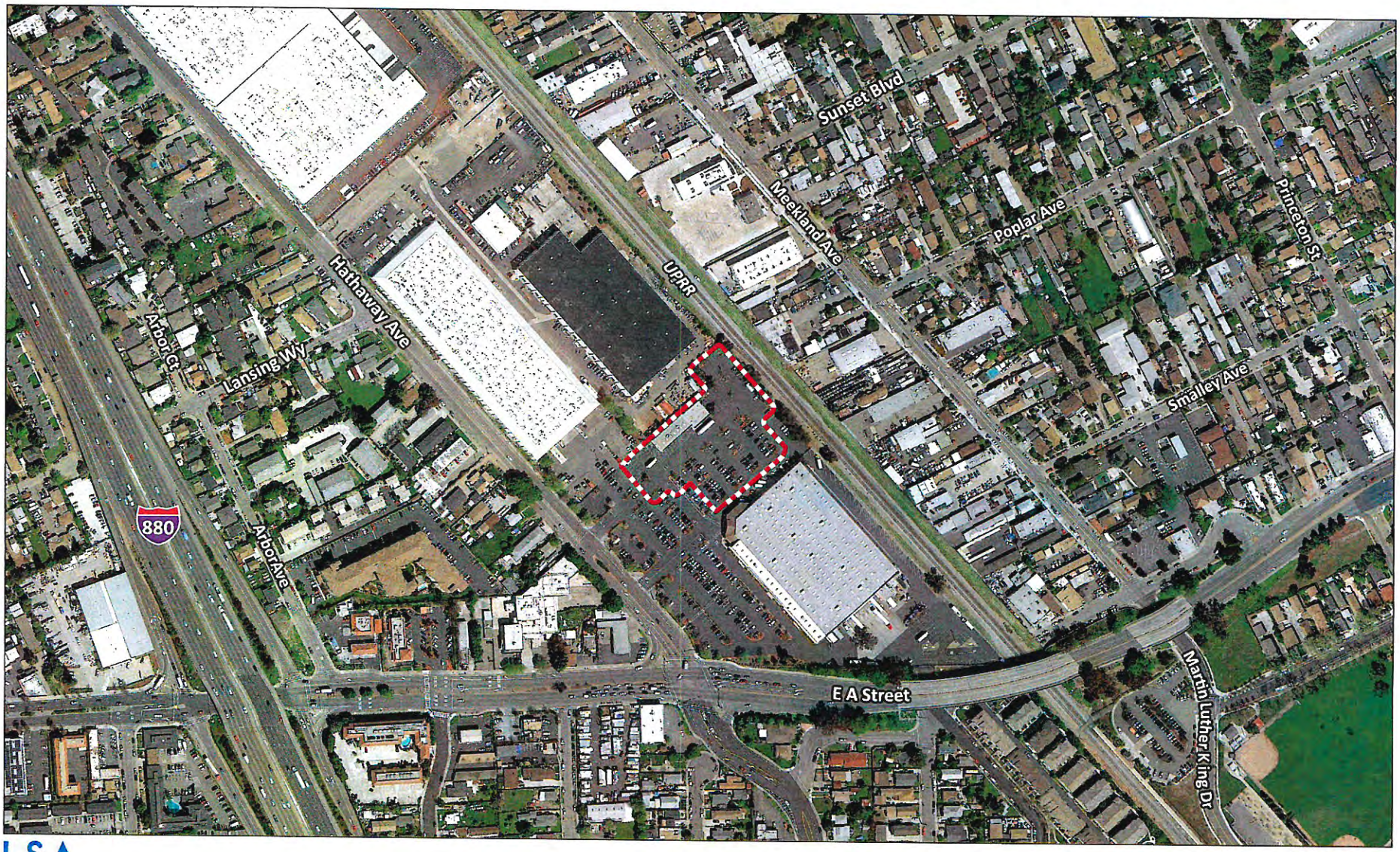
0 200 400
FEET

SOURCE: ESRI, USGS (04/19).

Costco Business Center Fuel Facility Project IS/MND

Project Location and Regional Vicinity Map

P:\HAY1701.05 Hayward Costco Gas\Graphics\Figures\Fig_1-1.ai (4/8/19)



LSA

FIGURE 1-2

0 150 300
FEET

N

Project Site

SOURCES: GOOGLE EARTH, 4/2/18; LSA, 2019.

P:\HAY1701.05 Hayward Costco Gas\Graphics\Figures\Fig_1-2.ai (4/5/19)

Costco Business Center Fuel Facility Project IS/MND

Aerial Photograph of Project Site and Surrounding Land Uses

June 11, 2019

Amah Mutsun Tribal Band
Valentin Lopez, Chairperson
P.O. Box 5272
Galt, CA 95632

SUBJECT: Assembly Bill 52 Consultation Notification for the Costco Business Center Fuel Facility Project, Hayward, Alameda County

Chairperson Lopez:

The City of Hayward ("City") is the Lead Agency for an Initial Study that will be prepared for the proposed Costco Business Center Fuel Facility Project ("project"), consistent with the requirements of the California Environmental Quality Act (CEQA). The project would result in the demolition of an existing tire service building and construction of a new fuel station with 12 dispensers (24 fueling positions). The attached figures show the proposed project location.

Assembly Bill 52 (AB 52) requires that, as part of the CEQA review process, public agencies provide early notice of a project to California Native American tribes, and, if formally requested in writing by a tribe, consult with tribes regarding the project. Via this letter, the City is hereby notifying the Amah Mutsun Tribal Band of its opportunity to consult with the City for the project, pursuant to Public Resources Code 21080.3.1. To request consultation under AB 52 for the project, or to request additional information regarding the proposed project, please contact me via email at marcus.martinez@hayward-ca.gov, by telephone at (510) 583-4236, or via a letter sent to my attention to the address below within 30 days of receipt of this letter. Failure to respond within this timeframe means that the City is not required to consult with you on this matter. I look forward to hearing from you.

If you have any questions or concerns regarding this project, please feel free to contact me at (510) 583-4236 or via email at marcus.martinez@hayward-ca.gov.

Sincerely,

Marcus Martinez
Assistant Planner

Attachment: Project Location Map and Aerial Photograph

Development Services Department
Planning Division
777 B Street, Hayward, CA 94541
T: 510.583.4200
F: 510.583.3649
TTD: 510.247.3340
www.hayward-ca.gov
HAYWARD

LSA

LEGEND

Project Site

FIGURE 1-1

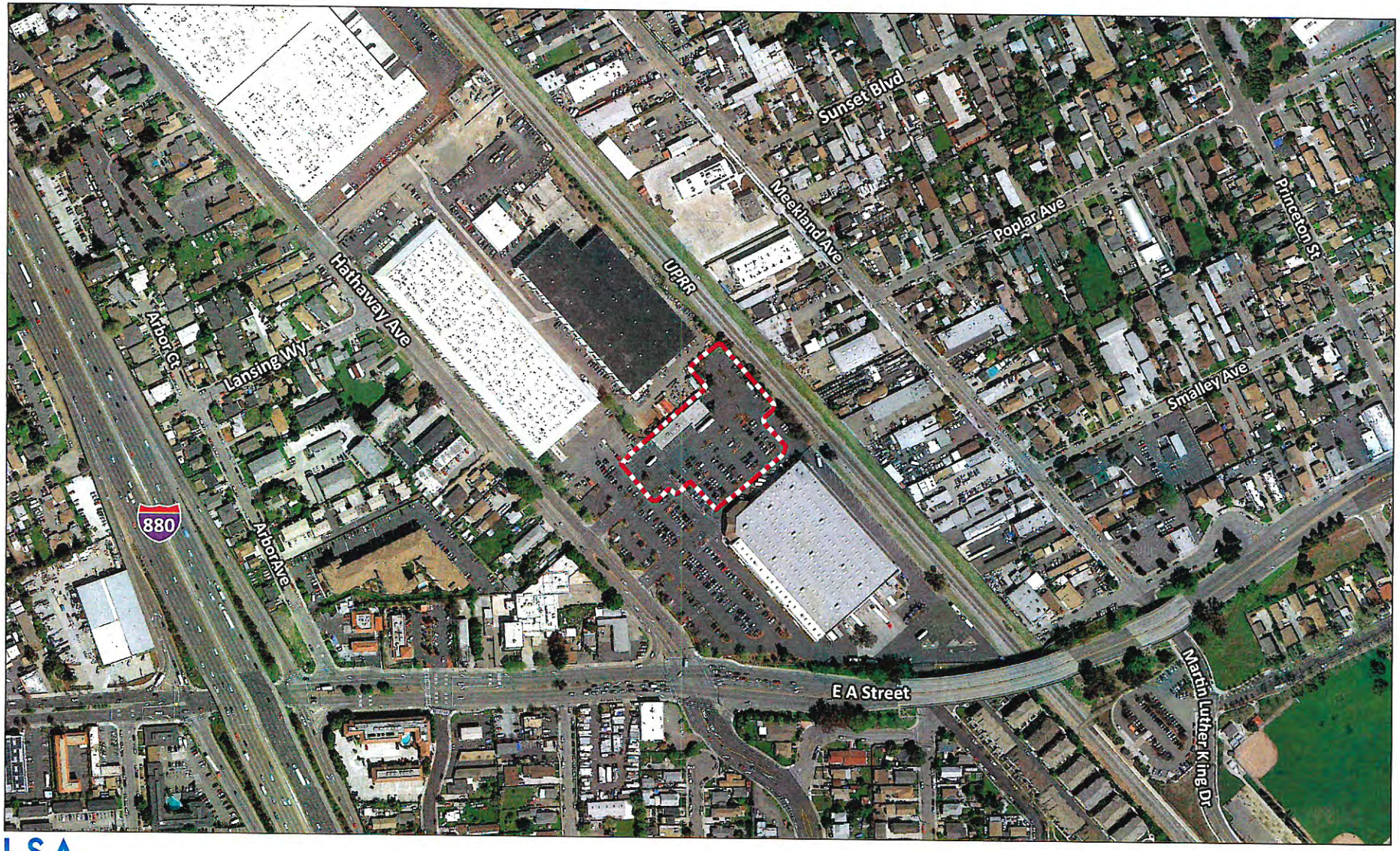
0 200 400
FEET

SOURCE: ESRI, USGS (04/19).

Costco Business Center Fuel Facility Project IS/MND

Project Location and Regional Vicinity Map

P:\HAY1701.05 Hayward Costco Gas\Graphics\Figures\Fig_1-1.ai (4/8/19)



LSA

FIGURE 1-2

0 150 300
FEET

N

Project Site

SOURCES: GOOGLE EARTH, 4/2/18; LSA, 2019.

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Costco Business Center Fuel Facility Project IS/MND

Aerial Photograph of Project Site and Surrounding Land Uses

June 11, 2019

Muwekma Ohlone Indian Tribe of the SF Bay Area
Charlene Nijmeh, Chairperson
20885 Redwood Road, Suite 232
Castro Valley, CA 94546

SUBJECT: Assembly Bill 52 Consultation Notification for the Costco Business Center Fuel Facility Project, Hayward, Alameda County

Chairperson Nijmeh:

The City of Hayward ("City") is the Lead Agency for an Initial Study that will be prepared for the proposed Costco Business Center Fuel Facility Project ("project"), consistent with the requirements of the California Environmental Quality Act (CEQA). The project would result in the demolition of an existing tire service building and construction of a new fuel station with 12 dispensers (24 fueling positions). The attached figures show the proposed project location.

Assembly Bill 52 (AB 52) requires that, as part of the CEQA review process, public agencies provide early notice of a project to California Native American tribes, and, if formally requested in writing by a tribe, consult with tribes regarding the project. Via this letter, the City is hereby notifying the North Valley Yokuts Tribe of its opportunity to consult with the City for the project, pursuant to Public Resources Code 21080.3.1. To request consultation under AB 52 for the project, or to request additional information regarding the proposed project, please contact me via email at marcus.martinez@hayward-ca.gov, by telephone at (510) 583-4236, or via a letter sent to my attention to the address below within 30 days of receipt of this letter. Failure to respond within this timeframe means that the City is not required to consult with you on this matter. I look forward to hearing from you.

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Marcus Martinez
Assistant Planner

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Project Site

FIGURE 1-1

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SOURCE: ESRI, USGS (04/19).

Costco Business Center Fuel Facility Project IS/MND

Project Location and Regional Vicinity Map

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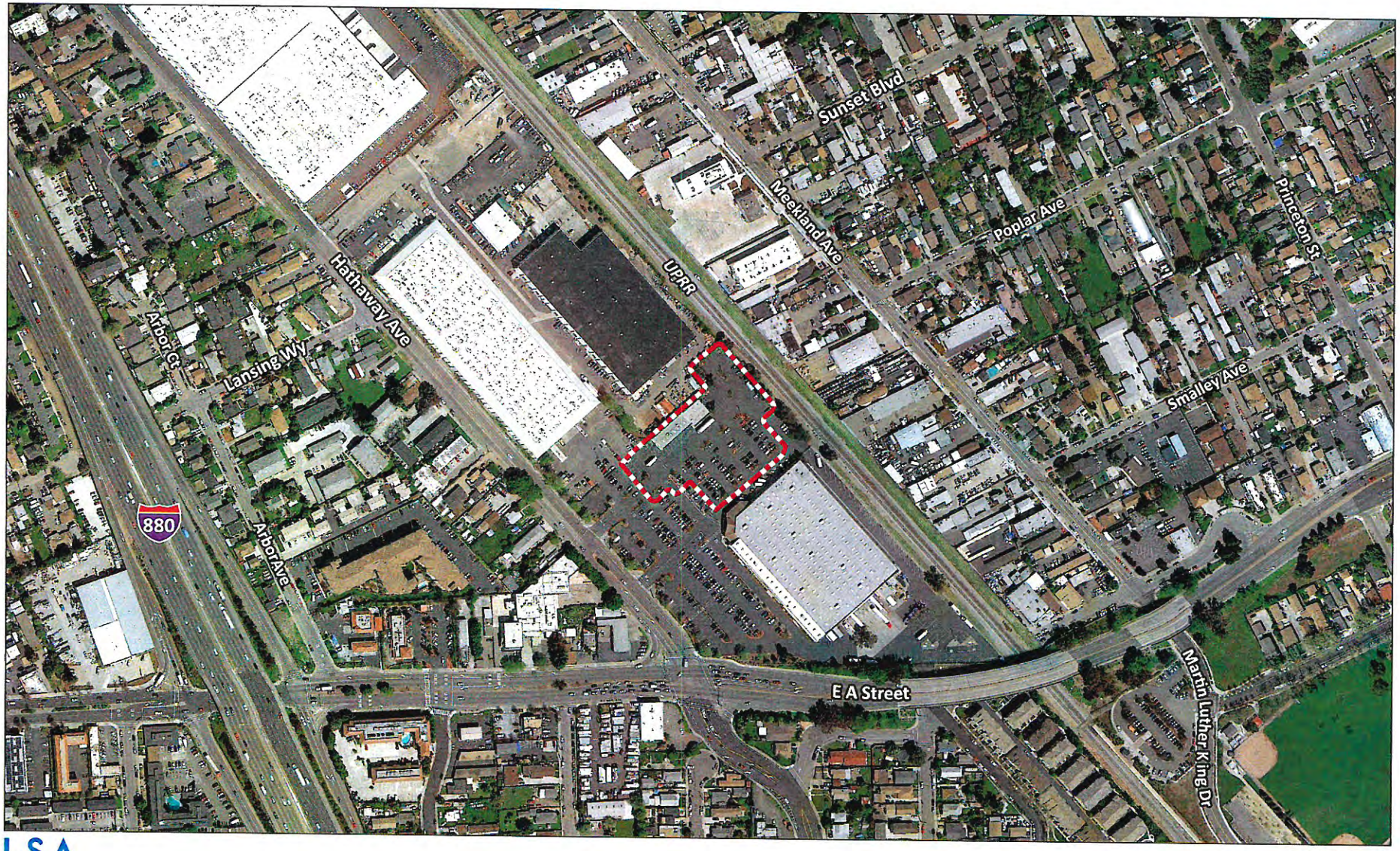

LSA

FIGURE 1-2

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FEET

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Project Site

SOURCES: GOOGLE EARTH, 4/2/18; LSA, 2019.

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Costco Business Center Fuel Facility Project IS/MND

Aerial Photograph of Project Site and Surrounding Land Uses

June 11, 2019

North Valley Yokuts Tribe
Katherine Erolinda Perez, Chairperson
P.O. Box 717
Linden, CA 95236

SUBJECT: Assembly Bill 52 Consultation Notification for the Costco Business Center Fuel Facility Project, Hayward, Alameda County

Chairperson Perez:

The City of Hayward ("City") is the Lead Agency for an Initial Study that will be prepared for the proposed Costco Business Center Fuel Facility Project ("project"), consistent with the requirements of the California Environmental Quality Act (CEQA). The project would result in the demolition of an existing tire service building and construction of a new fuel station with 12 dispensers (24 fueling positions). The attached figures show the proposed project location.

Assembly Bill 52 (AB 52) requires that, as part of the CEQA review process, public agencies provide early notice of a project to California Native American tribes, and, if formally requested in writing by a tribe, consult with tribes regarding the project. Via this letter, the City is hereby notifying the North Valley Yokuts Tribe of its opportunity to consult with the City for the project, pursuant to Public Resources Code 21080.3.1. To request consultation under AB 52 for the project, or to request additional information regarding the proposed project, please contact me via email at marcus.martinez@hayward-ca.gov, by telephone at (510) 583-4236, or via a letter sent to my attention to the address below within 30 days of receipt of this letter. Failure to respond within this timeframe means that the City is not required to consult with you on this matter. I look forward to hearing from you.

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Sincerely,

Marcus Martinez
Assistant Planner

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Project Site

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SOURCE: ESRI, USGS (04/19).

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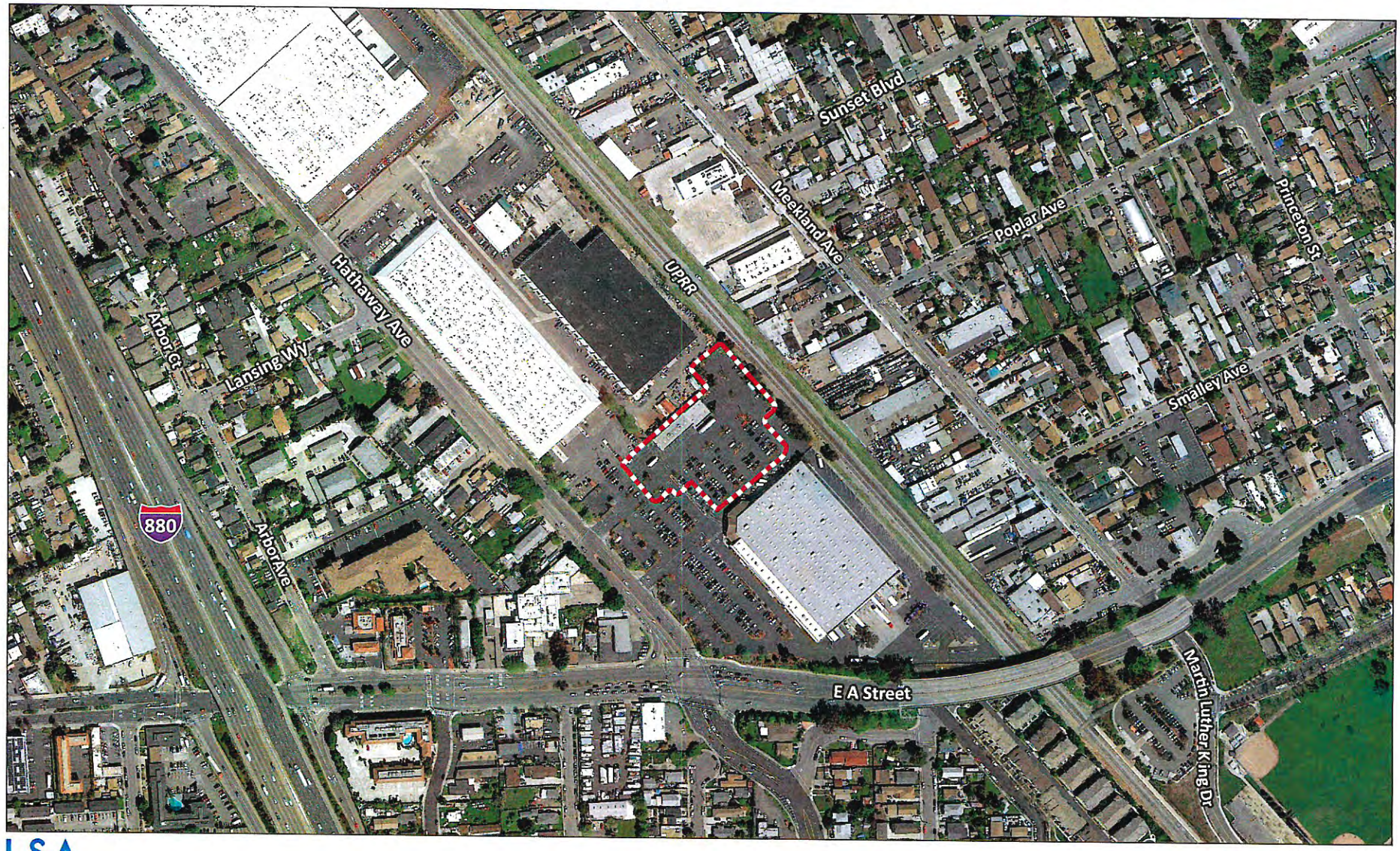

LSA

FIGURE 1-2

0 150 300
FEET

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Project Site

Costco Business Center Fuel Facility Project IS/MND

Aerial Photograph of Project Site and Surrounding Land Uses

SOURCES: GOOGLE EARTH, 4/2/18; LSA, 2019.

P:\HAY1701.05 Hayward Costco Gas\Graphics\Figures\Fig_1-2.ai (4/5/19)

June 11, 2019

Indian Canyon Mutsun Band of Costanoan
Ann Marie Sayers, Chairperson
P.O. Box 28
Hollister, CA 95024

SUBJECT: Assembly Bill 52 Consultation Notification for the Costco Business Center Fuel Facility Project, Hayward, Alameda County

Chairperson Sayers:

The City of Hayward ("City") is the Lead Agency for an Initial Study that will be prepared for the proposed Costco Business Center Fuel Facility Project ("project"), consistent with the requirements of the California Environmental Quality Act (CEQA). The project would result in the demolition of an existing tire service building and construction of a new fuel station with 12 dispensers (24 fueling positions). The attached figures show the proposed project location.

Assembly Bill 52 (AB 52) requires that, as part of the CEQA review process, public agencies provide early notice of a project to California Native American tribes, and, if formally requested in writing by a tribe, consult with tribes regarding the project. Via this letter, the City is hereby notifying the Indian Canyon Mutsun Band of Costanoan of its opportunity to consult with the City for the project, pursuant to Public Resources Code 21080.3.1. To request consultation under AB 52 for the project, or to request additional information regarding the proposed project, please contact me via email at marcus.martinez@hayward-ca.gov, by telephone at (510) 583-4236, or via a letter sent to my attention to the address below within 30 days of receipt of this letter. Failure to respond within this timeframe means that the City is not required to consult with you on this matter. I look forward to hearing from you.

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Assistant Planner

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Project Site

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SOURCE: ESRI, USGS (04/19).

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Project Location and Regional Vicinity Map

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LSA

FIGURE 1-2

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Project Site

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Costco Business Center Fuel Facility Project IS/MND

Aerial Photograph of Project Site and Surrounding Land Uses

June 11, 2019

Amah Mutsun Tribal Band of Mission San Juan Bautista
Irenne Zwierlein, Chairperson
789 Canada Road
Woodside, CA 94062

SUBJECT: Assembly Bill 52 Consultation Notification for the Costco Business Center Fuel Facility Project, Hayward, Alameda County

Chairperson Zwierlein:

The City of Hayward ("City") is the Lead Agency for an Initial Study that will be prepared for the proposed Costco Business Center Fuel Facility Project ("project"), consistent with the requirements of the California Environmental Quality Act (CEQA). The project would result in the demolition of an existing tire service building and construction of a new fuel station with 12 dispensers (24 fueling positions). The attached figures show the proposed project location.

Assembly Bill 52 (AB 52) requires that, as part of the CEQA review process, public agencies provide early notice of a project to California Native American tribes, and, if formally requested in writing by a tribe, consult with tribes regarding the project. Via this letter, the City is hereby notifying the Amah Mutsun Tribal Band of Mission San Juan Bautista of its opportunity to consult with the City for the project, pursuant to Public Resources Code 21080.3.1. To request consultation under AB 52 for the project, or to request additional information regarding the proposed project, please contact me via email at marcus.martinez@hayward-ca.gov, by telephone at (510) 583-4236, or via a letter sent to my attention to the address below within 30 days of receipt of this letter. Failure to respond within this timeframe means that the City is not required to consult with you on this matter. I look forward to hearing from you.

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SOURCE: ESRI, USGS (04/19).

Costco Business Center Fuel Facility Project IS/MND

Project Location and Regional Vicinity Map

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FIGURE 1-2

0 150 300
FEET

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Project Site

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Aerial Photograph of Project Site and Surrounding Land Uses

SOURCES: GOOGLE EARTH, 4/2/18; LSA, 2019.

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