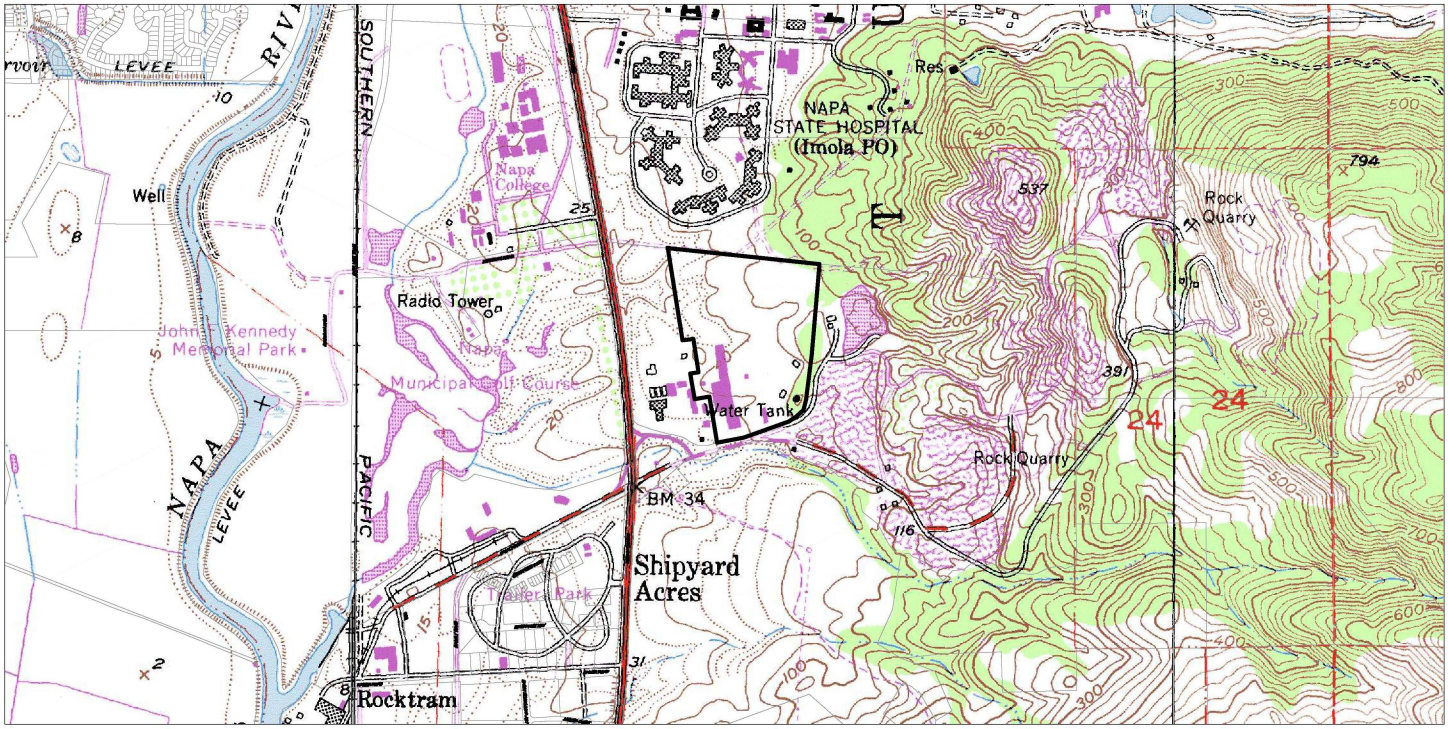
BASANITES

USGS MAP

NAPA CALIFORNIA



GRAPHIC SCALE

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(IN FEET)

1 inch = 1000 FT

RSA+

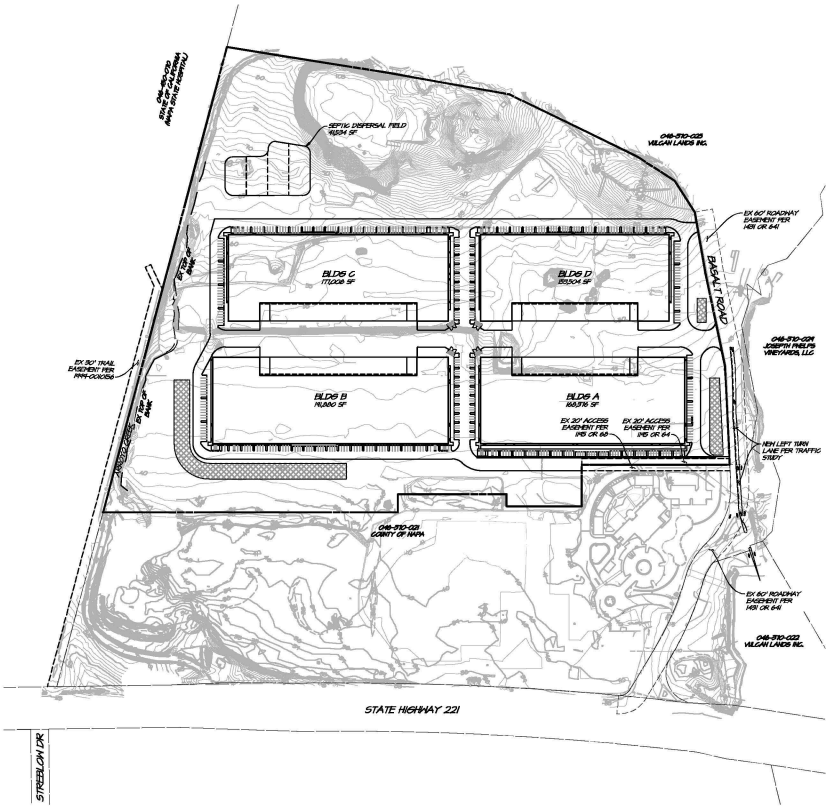
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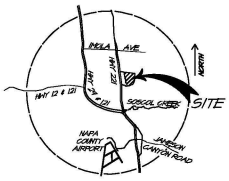
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USE PERMIT PLANS FOR
BASANITES
NAPA COUNTY CALIFORNIA
PL19-00421





LOCATION MAP
NO SCALE

ABBREVIATIONS

AC	ASPHALT CONCRETE	LSA	LANDSCAPE ARCHITECT
AD	AREA DRAIN	MIN	MINIMUM
APN	ASSESSORS PARCEL NUMBER	MTR	METER
AD	AREA DRAIN	MU	MIXED USE
BA	BIORETENTION AREA	N	NORTH
BFE	BASE FLOOD ELEVATION	NAVD	NORTH AMERICAN VERTICAL DATUM
BLDG	BUILDING	NE	NORTHEAST
BMP	BEST MANAGEMENT PRACTICE	NO	NUMBER
BRG	BOTTOM OF RETAINING CURB	NW	NORTHWEST
BRF	BIORETENTION FACILITY	NVVR	NAPA VALLEY WINE TRAIN
BSW	BACK OF SIDEWALK	OH	OVERHEAD UTILITIES
CB	CATCH BASIN	PG&E	PACIFIC GAS AND ELECTRIC
CA#SH	CAN#, SLOT# & SIDEWALK	POR	PORTION
CL	CENTER LINE	PL	PROPERTY LINE
CO	CLEANOUT	PS	PROTECTIVE SLOPE
CONC	CONCRETE	PVC	POLYVINYL CHLORIDE
CONT	CONTOUR	RCE	REGISTERED CIVIL ENGINEER
CT	TOURIST COMMERCIAL	RCP	REINFORCED CONCRETE PIPE
DCV	DOUBLE CHECK VALVE	RET	RETAINING
DI	DROP INLET	ROW	RIGHT OF WAY LINE
DIP	DUCTILE IRON PIPE	RR	RAILROAD
DR	DOOR	RPBD	REDUCED PRESSURE BACKFLOW
DS	DOMESTIC	RS	REVISE
DW	DOMESTIC WATER	RSA	RECORD OF SURVEY
DWY	DRIVEWAY	RH	REGISTERED SURVEYOR # ASSOCIATES
E	EAST	S	RETAINING WALL
EX	EXISTING	SE	SLOPE EASEMENT
ELEC	ELECTRIC	SD	SOUTH EAST
EP	EDGE OF PAVEMENT	SDE	STORM DRAIN
EXP	EXPIRE	SDMH	STORM DRAIN EASEMENT
FB	FLAT BOTTOM ELEVATION	SF	STORM DRAIN MANHOLE
FC	FACE OF CURB	SL	SQUARE FEET
FD	FOUND	SA	STREET LIGHT
FF	FINISH FLOOR ELEVATION	SS	SEWER LATERAL
FG	FINISH GRADE	SSCO	SANITARY SEWER
FH	FIRE HYDRANT	SSMH	SANITARY SEWER CLEANOUT
FL	FLOW LINE	ST	SANITARY SEWER MANHOLE
FS	FINISH SURFACE	SW	STREET
FT	FEET	SWC	SOUTHWEST
FW	FIRE WATER SERVICE	TO	SYCAMORE
GB	GRADE BREAK	TC	TOTAL
GM	GAS METER	TE	TOP OF CURB
GR	GRADE	TH	TRASH ENCLOSURE
GV	GATE VALVE	TRG	TENTATIVE MAP
HP	HIGH POINT	TSL	TOP OF ROLLED CURB
ICV	IRRIGATION CONTROL VALVE	TYP	TOP OF SOIL ELEVATION
INC	INCORPORATED	TW	TYPICAL
INV	INVERT	UE	TOP OF WALL
IB	IRRIGATION BOX	UTE	UTILITY EASEMENT
JP	JOINT POLE	V	VALVE
LF	LINEAL FEET/FOOT	VC	VALLEY GUTTER
LLC	LIMITED LIABILITY COMPANY	VT	VAULT
LO	LIVE OAK	WM	WATER METER
LP	LOW POINT/ LIMITED PARTNERSHIP	WV	WATER METER
MAX	MAXIMUM	WE	WATER VALVE
		WS	WATER SERVICE

SYMBOL LEGEND

EXISTING SYMBOL	EXISTING DESCRIPTION	PROPOSED SYMBOL	PROPOSED DESCRIPTION
	CATCH BASIN	DI	DRAIN INLET
	CURB AND GUTTER		CURB + GUTTER
DI	DROP INLET		GRADE BREAK
	EXISTING CURTOR FENCE	SL	SEWER LATERAL LINE
			PROPERTY LINE
FH	FIRE HYDRANT		EASEMENT
	JOINT POLE WITH GUY WIRE		BUILDING LINE
	RIDGE/SIDE SWR		SWALE FLOWLINE
SS	SANITARY SEWER LINE	SD	STORM DRAIN LINE
SSMH	SANITARY SEWER MANHOLE	DWL	DOMESTIC WATER LINE
SL	SEWER LATERAL LINE	MH	WATER METER
+343	SPOT ELEVATION		WATER TEE
SD	STORM DRAIN LINE	WV	WATER VALVE
	STORM DRAIN MANHOLE		OVERLAND RELEASE
	RAILROAD TRACKS	AD	AREA DRAIN
W	WATER LINE	FH	FIRE WATER LINE
WM	WATER METER		
WS	WATER SERVICE		
WV	WATER VALVE		
	TREE		
ICV	IRRIGATION CONTROL VALVE		
GV	GAS VALVE		
VLT	VAULT		
	WOOD FENCE		
GM	GAS METER		
ELEC MTR	ELECTRIC METER		
	STREET LIGHT		
	CONC WALL		
	CURB, GUTTER AND SIDEWALK		
OH	OVERHEAD UTILITIES		
SSCO	SANITARY SEWER CLEANOUT		
	DRIVEWAY		

PROJECT INFORMATION

CLIENT:	PDC SACRAMENTO, LLC 8175 FOLSOM BOULEVARD, SUITE 200 SACRAMENTO, CA 95828
SITE ADDRESS:	11 BASALT ROAD NAPA, CA 94558
CIVIL ENGINEER:	RSA+ 515 FOURTH STREET NAPA, CALIFORNIA 94559 (707) 252-8901
APN & AREA:	046-510-024, 55.21 AC.

PROJECT NOTES

1. THE TOPOGRAPHY SHOWN ON THESE PLANS WAS COMPILED FROM A FIELD SURVEY PERFORMED BY RSA+ IN FEBRUARY, 2020. CONTOUR LINES ARE SHOWN AT ONE FOOT INTERVALS AND HIGHLIGHTED AT FIVE FOOT INTERVALS.
2. BOUNDARY SHOWN IN RECORD INFORMATION PER BOOK 24 OF SURVEYS AT PAGE 10, NAPA COUNTY RECORDS.
3. BENCHMARK: POINT N, ELEVATION 434' (NAVD 1988) PER THE CITY OF NAPA CONTROL NETWORK RECORDED IN BOOK 41 OF SURVEYS AT PAGES 44-47, NAPA COUNTY RECORDS, AND THE CITY OF NAPA MEMO DATED OCTOBER 21, 2015 ENTITLED "EARTHQUAKE ADJUSTMENT TO CITY CONTROL NETWORK".
4. ALL PORTIONS OF THE SUBJECT PROPERTY ARE NOT SUBJECT TO INUNDATION BY FLOOD WATERS AS SHOWN ON THE FLOOD INSURANCE RATE MAP (FIRM) NUMBER 06055C0595, EFFECTIVE DATE 05/17/2012.
5. EXISTING AND PROPOSED EASEMENTS ARE SHOWN.
6. EXISTING AND PROPOSED UTILITIES ARE SHOWN. EXISTING UNDERGROUND UTILITIES AS SHOWN HERE DRAWN FROM RECORD SOURCES ONLY. BURIED PIPES HERE NOT VERIFIED, NOR HAS ANY SUBSURFACE EXPLORATION CONDUCTED.

SHEET INDEX

UP1.0	COVER SHEET
UP2.0	EXISTING CONDITIONS
UP2.1	LAYOUT & CIRCULATION PLAN
UP3.0	GRADING PLAN
UP4.0	UTILITY PLAN
UP5.0	SCP SITE PLAN

GRAPHIC SCALE
50 0 50 100
(IN FEET)
1 inch = 150 ft

NO.	DATE	REVISIONS	BY	APP'D

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NAPA, CALIF. 94559
(707)252-8901 (FAX)
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BASANITES USE PERMIT
COVER SHEET
NAPA COUNTY CALIFORNIA

DATE: AUGUST 20, 2020
DRAWN: DEL
DESIGNED: DJS
CHECKED: DHD
JOB NO.: 4PDC0120

SHEET NO.
UP1.0
1 OF 6 SHEETS

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DEMOLITION NOTES:

1. ALL EXISTING PAVED SURFACES, STRUCTURES, AND FENCES AS SHOWN ON PLAN SHALL BE REMOVED.
2. ALL EXISTING UTILITY SERVICES (SEWER, WATER, GAS & ELECTRIC SERVING THE EXISTING STRUCTURES TO BE REMOVED) SHALL BE PROPERLY REMOVED OR ABANDONED PER THEIR RESPECTIVE AGENCY'S STANDARD.
3. EXISTING ON-SITE SEWER MANHOLE AND LATERALS SHALL BE REMOVED AS SHOWN ABOVE. CUT AND PLUG EXISTING PIPES IN ACCORDANCE WITH NSD STANDARDS AFTER CLEANOUT REMOVALS.
4. CONTRACTOR TO IMPLEMENT BEST MANAGEMENT PRACTICES (BMPS) PRIOR TO THE START OF DEMOLITION.
5. ALL SUBSURFACE IMPROVEMENTS INCLUDING PIPELINES, FOUNDATIONS, SUBSURFACE STRUCTURES AND ASSOCIATED BACKFILL SOILS SHALL BE COMPLETELY REMOVED AS PART OF SITE DEMOLITION. THE RESULTING EXCAVATIONS SHALL BE CLEANED OF ALL LOOSE, DISTURBED SOILS AND THE BOTTOM OF THE EXCAVATION SHALL BE SCARIFIED AND COMPACTED AS ENGINEERED FILL PER THE GEOTECHNICAL REPORT.
6. EX WELL AND PRESSURE TANK TO BE ABANDONED PER NAPA COUNTY ENVIRONMENTAL HEALTH DIVISION STANDARDS. PROVIDE COPY OF WELL MANAGEMENT PERMIT FROM COUNTY.
7. PRIOR TO START OF WORK, THE CONTRACTOR SHALL OBTAIN CITY PERMITS AND ALSO NOTIFY APPLICABLE UTILITY COMPANIES IF EXISTING SERVICES NEED TO BE SHUTOFF BEFORE WORK COMMENCES.
8. EXISTING JOINT POLES TO BE REMOVED PER JOINT TRENCH PLANS.

GRAPHIC SCALE
80 0 80 160
(IN FEET)
1 inch = 80 FT

PROJECT INFORMATION

SITE ADDRESS: 11 BASALT ROAD NAPA, CA 94558
APN: 046-370-024
PARCEL AREA: 55.21 AC
PROJECT AREA: 3.61 AC

EXISTING POWER POLE TO REMAIN
EXISTING POWER POLE TO REMAIN
EXISTING WELL TO REMAIN
EXISTING JOINT POLE & POWER POLE TO REMAIN
EXISTING TELEPHONE POLE TO REMAIN
EXISTING WATER TANK TO REMAIN
EXISTING POWER POLE TO REMAIN
EX FENCE TO BE REMOVED
ALL EXISTING GRAVEL TO BE REMOVED
ALL EXISTING GRAVEL TO BE REMOVED
EXISTING WELL & ASSOCIATED STRUCTURES TO BE REMOVED
EXISTING JOINT POLES AND OVERHEAD LINES TO BE REMOVED
EXISTING POWER POLE TO REMAIN
EXISTING JOINT POLES AND OVERHEAD TO BE REMOVED
EXISTING WELL TO BE REMOVED
EXISTING STRUCTURE TO BE REMOVED
ALL EXISTING JOINT POLES AND OVERHEAD TO BE REMOVED
EXISTING HALL TO BE REMOVED
60' ROADWAY EASEMENT PER VOL 1245 OR 641
EXISTING TELEPHONE POLE TO REMAIN
50' SETBACK (EPHEMERAL STREAM)
EX EDGE OF BANK
EX FENCE TO BE REMOVED
EXISTING CONCRETE PADS TO BE REMOVED
EXISTING CONCRETE PAD TO BE REMOVED
ALL EXISTING AC PAVEMENT TO BE REMOVED
EXISTING CONTAINERS TO BE REMOVED
EXISTING PIT TO BE REMOVED
ALL EXISTING GRAVEL TO BE REMOVED
EXISTING POWER POLE TO REMAIN
EXISTING TELEPHONE POLE TO REMAIN
BASALT ROAD
EXISTING JOINT POLE TO BE REMOVED
ALL EXISTING BUILDINGS TO BE REMOVED
ALL EXISTING CONCRETE PADS TO BE REMOVED
EXISTING JOINT POLE TO REMAIN
EXISTING AC PAVEMENT TO BE REMOVED
EXISTING STRUCTURES TO BE REMOVED
EXISTING STORM DRAIN MANGLE TO BE REMOVED
EXISTING TREE TO BE REMOVED, TYP
EXISTING POWER POLE TO BE REMOVED
EXISTING STRUCTURE TO BE REMOVED
EXISTING HALLS TO BE REMOVED
EX EP
EXISTING CONCRETE TRENCH DRAIN TO BE REMOVED
50' SETBACK
LIMIT OF REMOVAL 120' FROM TOP OF BANK
EXISTING BUILDINGS TO BE REMOVED
EXISTING STORM DRAIN MANHOLE TO BE REMOVED
50' SETBACK (PER SLOPE ANALYSIS)
EX TOP OF BANK
EX EP
EXISTING CONCRETE TO BE REMOVED
EXISTING OVERHEAD TO BE REMOVED
EXISTING JOINT POLE TO REMAIN
EX BAY TRAIL EASEMENT
EXISTING GREASE TANK TO BE REMOVED
EX SEPTIC TANK (LOCATION BASED ON SCHEMATIC PLOT PLAN OF SEPTIC SYSTEM INSPECTION FORM REPORT DATED SEPTEMBER 17, 1998)
EX 60' UTILITY EASEMENT PER VOL 614 OR 64
SEPTIC TANK TO BE REMOVED
PUMP AND PUMP SUMP TO BE REMOVED
EX PUMP AND PUMP SUMP
EX 2" PVC LINE
EX 100' LEACH LINES
EX 2" PVC LINE
046-350-020 STATE OF CALIFORNIA (NAPA STATE HOSPITAL)
ALL EXISTING AC PAVEMENT TO BE REMOVED
EXISTING WALL TO BE REMOVED
EX SEPTIC FIELD
EX DISTRIBUTION BOX
EX ACCESS EASEMENT PER VOL 614 OR 64
EXISTING TELEPHONE POLE AND OVERHEAD TO BE REMOVED
JOSEPH A
EX EP
JOINT POLES TO BE REMOVED

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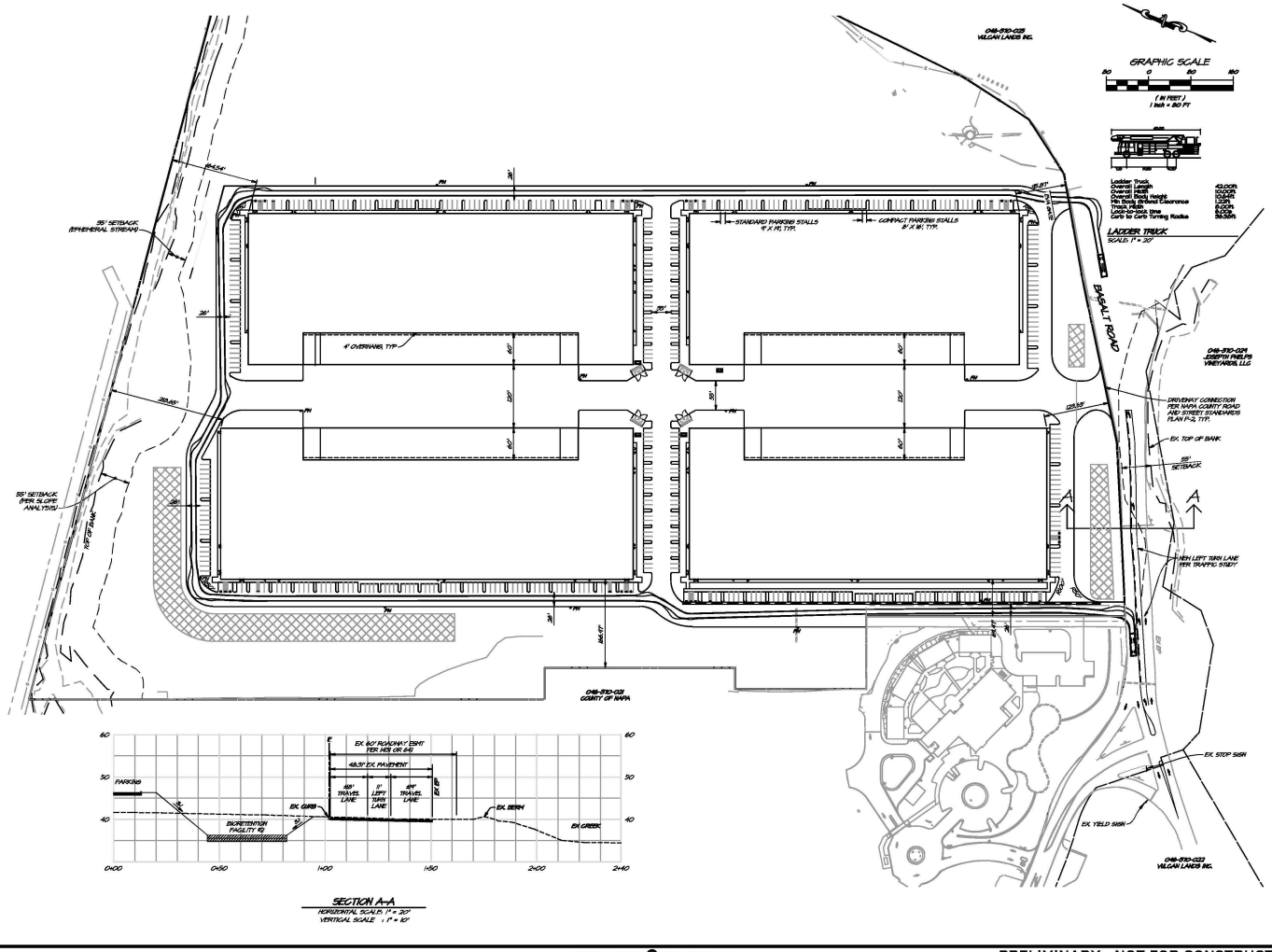
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EXISTING CONDITIONS & DEMOLITION PLAN
NAPA COUNTY CALIFORNIA

DATE	AUGUST 20, 2021
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JOB NO.	4PEN20

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UP2.0
2 OF 6 SHEETS

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SECTION A-A
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE : 1" = 10'

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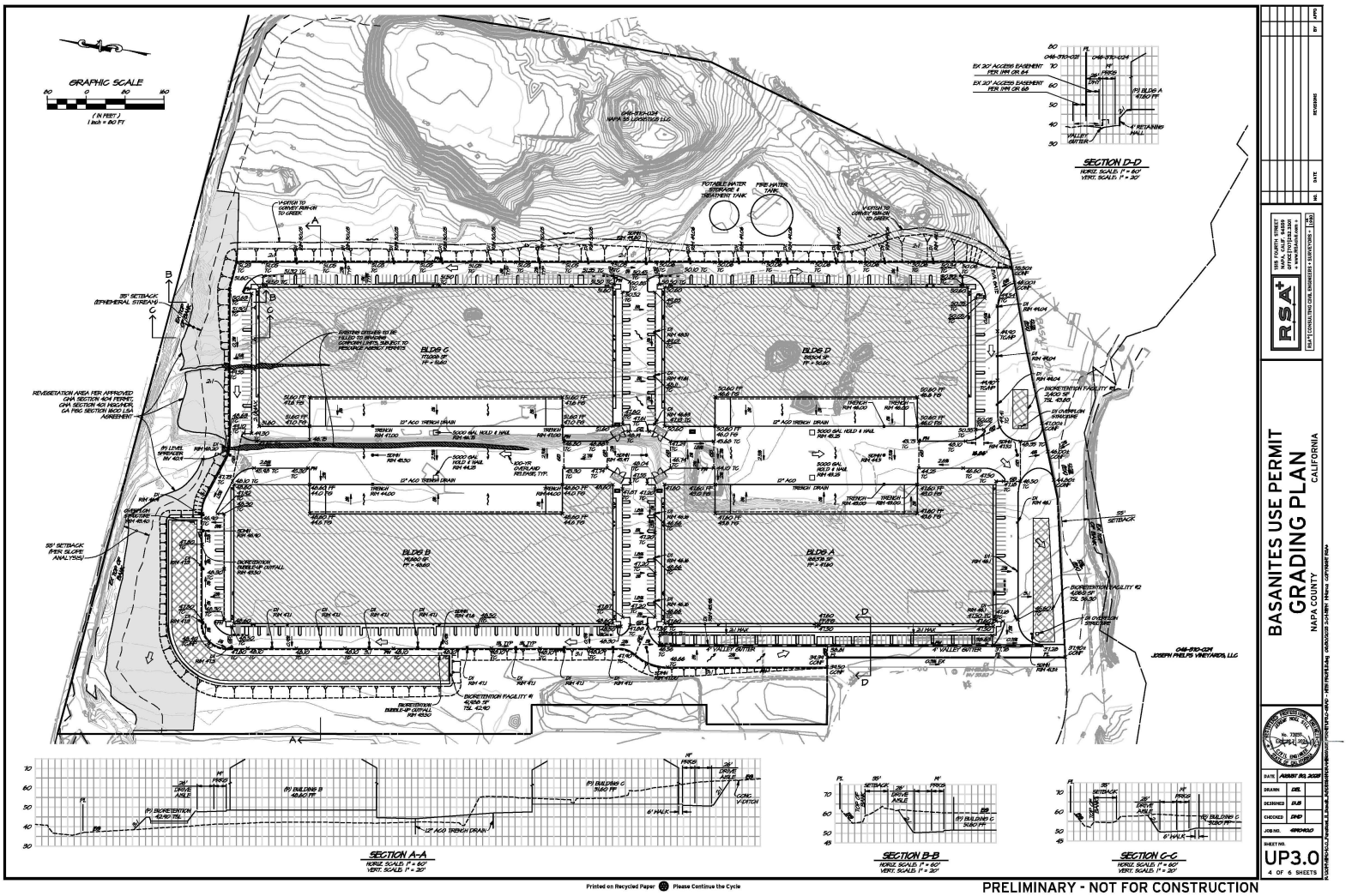
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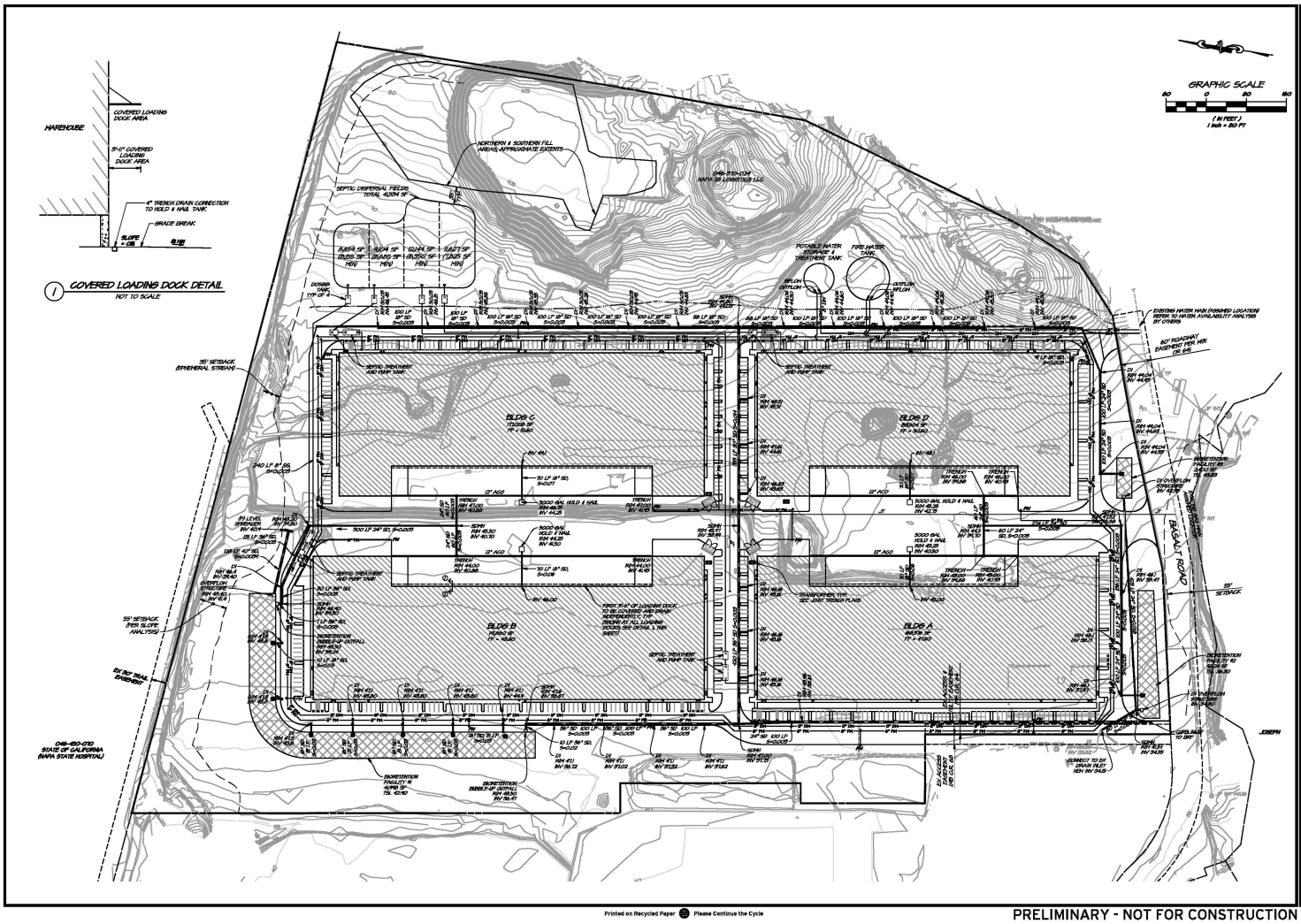
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BASANITES USE PERMIT
GRADING PLAN
NAPA COUNTY CALIFORNIA

DATE	AUGUST 20, 2020
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DESIGNED	EJS
CHECKED	DNB
JOB NO.	4990.10
SHEET NO.	UP3.0
	4 OF 6 SHEETS

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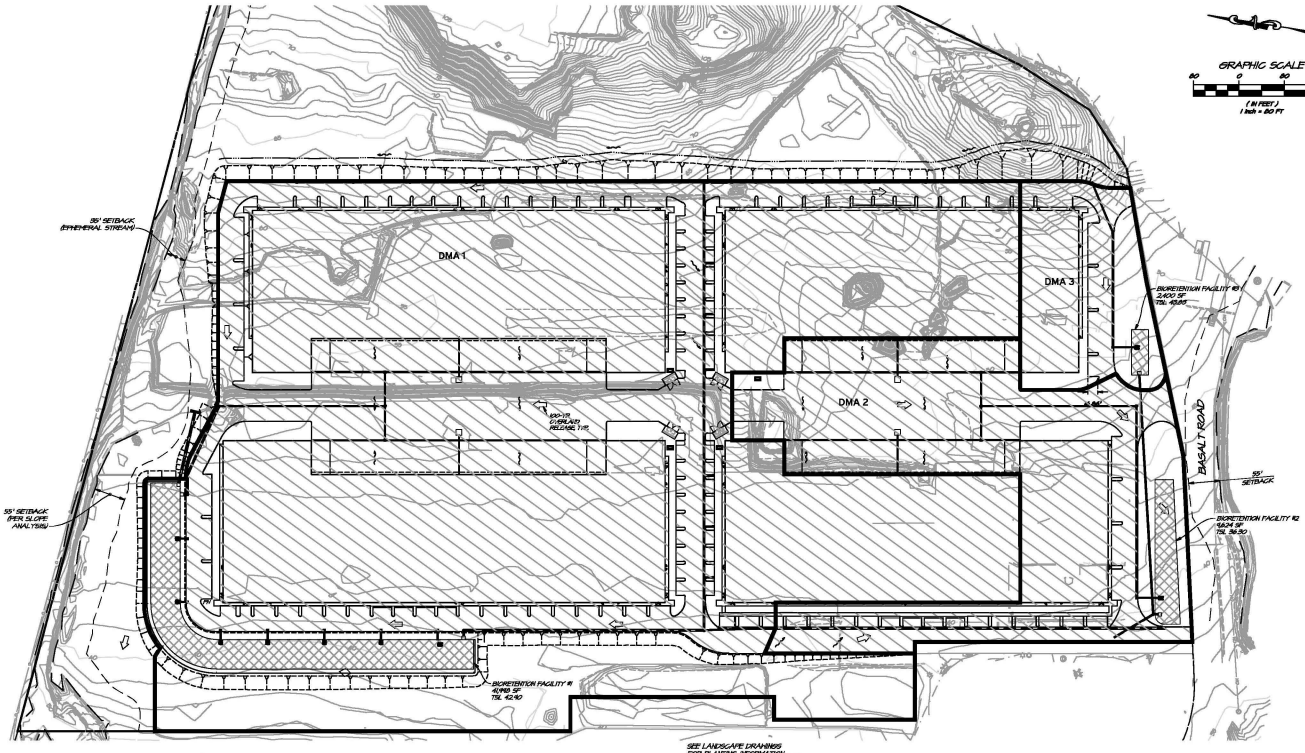
BASANITES USE PERMIT
UTILITY PLAN
NAPA COUNTY CALIFORNIA

DATE	AUGUST 20, 2025
DRAWN	DEL
DESIGNED	DJS
CHECKED	DHD
JOB NO.	4PEH20

SHEET NO.
UP4.0
5 OF 6 SHEETS

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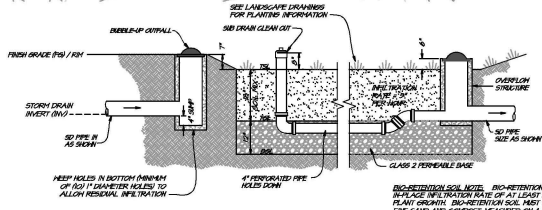


PROPOSED STORMWATER CONTROL PLAN AREA CALCULATIONS							
DMA #	Total Area (SF)	Proposed Impervious Area (SF)	Impervious Runoff Factor	Proposed Pervious Area (SF)	Pervious Runoff Factor	Required Bioretention Treatment Area (SF)	Provided Treatment Area (SF)
1	1,229,838	962,377	1	225,463*	0.1	39,397	41,998
2	277,069	226,315	1	41,130 *	0.1	9,217	9,624
3	81,168	53,170	1	25,588 *	0.1	2,229	2,400

* PROVIDED BIORETENTION AREA NOT INCLUDED.

LEGEND

- BIORETENTION AREA
- DRAINAGE MANAGEMENT AREA (DMA) BOUNDARY
- PROPOSED IMPERVIOUS AREAS
- PROPOSED PERVIOUS AREAS



NOTES:
1. NO COMPACTION OF SOILS BENEATH THE FACILITY, OR RIPPING/LOOSENING OF SOILS IF COMPACTED.
2. NO LINERS OR OTHER BARRIERS INTERFERING WITH INFILTRATION.
3. APPROPRIATE PLANT PALETTE FOR THE SPECIFIED SOIL MIX & MAXIMUM AVAILABLE WATER USE.

BIO-RETENTION SOIL NOTE: BIO-RETENTION SOIL SHALL ACHIEVE A LONG TERM, IN-PLACE INFILTRATION RATE OF AT LEAST 5 INCHES PER HOUR, AND SUPPORT VIGOROUS PLANT GROWTH. BIO-RETENTION SOIL MUST CONSIST OF THE FOLLOWING MIXTURE OF FINE SAND AND COMPOST, MEASURED ON A VOLUME BASIS (60-70% SAND, 30-40% COMPOST) PER ATTACHMENT 1. OF THE MUNICIPAL REGIONAL STORM WATER PERMIT.

1/A10 INLET MARKER NOT TO SCALE

2/A10 BIORETENTION AREA DETAIL NOT TO SCALE

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STORMWATER CONTROL PLAN
NAPA COUNTY CALIFORNIA

DATE	AUGUST 20, 2019
DRAWN	EJS
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JOB NO.	4990.010
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	6 OF 6 SHEETS

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Air Quality and Greenhouse Gas Report

11 Basalt Road, Napa Project

Panattoni Development Company, Inc

July 26, 2023



Air Quality and Greenhouse Gas Report
11 Basalt Road, Napa Project

This document has been prepared by:

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July 26, 2023

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Appendices

Appendix A CalEEMod Output

Acronyms and Abbreviations

AB	Assembly Bill
AF	Acre-feet
ATCM	Airborne Toxic Control Measures
BAAQMD	Bay Area Air Quality Management District
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CARB	California Air Resources Board
CAT	California Climate Action Team
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFC	Chlorofluorocarbons
DPM	Diesel particulate matter
EPA	U.S. Environmental Protection Agency
GHG	Greenhouse Gases
GWP	Global warming potential
HFC	Hydrofluorocarbon
IPCC	Intergovernmental Panel on Climate Change
MMT	Million metric tons
MRR	Mandatory Reporting of Greenhouse Gas Emissions Regulation
$MTCO_2e$	Metric tons or more of carbon dioxide equivalent
NAAQS	National Ambient Air Quality Standards
NO_X	Oxides of Nitrogen
OPR	California Governor's Office of Planning and Research
PCL	Power Content Label
PG&E	Pacific Gas and Electric
PM	Particulate Matter
ROG	Reactive Organic Gases
RPM	Refrigerant Management Program
RPS	Renewables Portfolio Standard
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SMAQMD	Sacramento Metropolitan Air Quality Management District
SNAP	Significant New Alternatives Policy
TACs	Toxic air contaminants
TDM	Transportation Demand Management

TIA	Traffic Impact Analysis
TRU	Transportation Refrigeration Units
VMT	Vehicle miles travelled

1. Project Description

1.1 Project Location and Existing Use

The Site consists of an approximately 55.27-acre parcel located at 11 Basalt Road, Napa. The site was purchased in 1936 by Basalt Rock Company, Inc. (Basalt Rock), which owned and operated the Napa Quarry immediately east of the site and the Basalite Block concrete block manufacturing facility immediately west of the site. The site was agricultural prior to 1936 and remained largely undeveloped until the early 1950s, when Basalt Rock expanded its operations. The approximately 100,000-square-foot main building in the southwest corner of the site was constructed in or around 1953 and was used to manufacture precast concrete wall panels until 1986, when the site was sold to Dillingham Construction. Dillingham sold the site in 2005, and since then, tenants/occupants have included Pacific Steel Group, Inc. (Pacific Steel) and Superior Equipment Company in the main building, multiple construction contractors in the central and eastern portions of the site, and Rammed Earthworks in and around the Watershed building. Superior Equipment Company no longer occupies the site but is believed to have used its space to store and maintain waste management equipment.

Pacific Steel currently uses the main building and roughly the western half of the site to store, fabricate, and ship rebar and other steel products. The site has a roughly 70-year history of industrial use.

1.2 Proposed Project

Panattoni intends to purchase the parcel and redevelop the site with four new commercial buildings (Project). The parcel will be improved as follows: demolition of existing industrial and commercial buildings, construction of four speculative Class A single-story concrete tilt-up warehouse buildings (Buildings A-D) totaling 690,700 square feet at the project location. The Project is being developed on a speculative basis so the precise tenant make up is not certain. Panattoni anticipates this development supporting several small local businesses and also being able to meet some larger business occupancies in excess of 100,000 square feet. Uses may include wine production facilities, commercial office space, and industrial or commercial warehousing or wine storage. The Project also includes the construction of a water tank for fire water storage, a potable water storage and treatment tank, a bioretention area and the associated driveway and parking areas. Detailed construction and operational parameters are identified in Section 4, Methodology, of this report.

1.3 Construction Best Management Practices

To limit dust, criteria pollutants, and precursor emissions associated with construction, the following Bay Area Air Quality Management District (BAAQMD) recommended Basic Construction Measures will be included in construction contract specifications and required during implementation of the project:

- All exposed soil surfaces (e.g., parking areas, staging areas, soil piles, graded areas and unpaved access roads) shall be watered as necessary to prevent visible migration of dust as airborne particulates;
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered or tarped;
- All visible mud or dirt tracked-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping shall be prohibited;
- All vehicle speeds on unpaved areas shall be limited to 15 miles per hour;

- All paving shall be completed as soon as possible after trenching work is finished;
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points;
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation;
- A publicly visible sign shall be posted with the telephone number and person to contact at the BAAQMD regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

2. Air Quality Setting

2.1 Regulatory Setting

The federal Clean Air Act of 1977 (CAA) governs air quality in the United States. In addition to being subject to federal requirements, air quality in California is also governed by more stringent regulations under the California Clean Air Act.

Because chronic exposure can result in adverse health effects, toxic air contaminants (TACs) are regulated at the regional, state, and federal level. The identification, regulation, and monitoring of TACs is relatively new compared to that for criteria air pollutants that have established ambient air quality standards. Specifically, TACs are regulated or evaluated on the basis of risk to human health rather than comparison to an ambient air quality standard or emission-based threshold.

Federal

The federal Clean Air Act of 1977 (CAA) governs air quality in the United States. The U.S. Environmental Protection Agency (EPA) is responsible for enforcing the federal CAA. The EPA is also responsible for establishing the National Ambient Air Quality Standards (NAAQS) for the following six 'criteria' air pollutants: ozone, particulate matter (PM_{10} and $PM_{2.5}$), nitrogen dioxide, carbon monoxide, lead, and sulfur dioxide. The NAAQS are required under the CAA and subsequent amendments.

State

California Clean Air Act

In addition to being subject to federal requirements, air quality in California is also governed by more stringent regulations under the California Clean Air Act. The California Clean Air Act is administered by the California Air Resources Board (CARB), which is part of the California Environmental Protection Agency, and by the Air Quality Management Districts at the regional and local levels. The CARB is responsible for meeting the state requirements of the federal CAA, administering the California Clean Air Act, and establishing the California Ambient Air Quality Standards (CAAQS) which include the six NAAQS criteria pollutants listed above as well as visibility-reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride. The CARB regulates mobile air pollution sources, such as motor vehicles. It is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment.

California Diesel Risk Reduction Program

CARB identified particulate emissions from diesel-fueled engines as TACs in August 1998. Following the identification process, CARB was required by law to determine if there is a need for further control, which led to the risk management phase of the program.

For the risk management phase, CARB formed the Diesel Advisory Committee to assist in the development of a risk management guidance document and a risk reduction plan. With the assistance of the Diesel Advisory Committee and its subcommittees, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles and the Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines. The Diesel Advisory Committee approved these documents on September 28, 2000, paving the way for the next step in the regulatory process: the control measure phase. The adopted Diesel Risk Reduction Plan contains the goals of 75 percent PM reduction by 2010 and 85 percent by 2020.

During the control measure phase, specific statewide regulations designed to further reduce Diesel particulate matter (DPM) emissions from diesel-fueled engines and vehicles have and continue to be evaluated and developed. The goal of each regulation is to make diesel engines as clean as possible by establishing state-of-the-art technology requirements or emission standards to reduce DPM emissions. Multiple Airborne Toxic Control Measures (ATCMs) have since been adopted, reducing DPM emissions for mobile sources such as Diesel-fueled Transportation Refrigeration Units (TRU) and TRU Generator Sets, and commercial vehicles.

Bay Area Air Quality Management District

The BAAQMD is the regional agency responsible for air quality regulation within the San Francisco Bay Area Air Basin, regulating air quality through planning and review activities. The BAAQMD has permit authority over most types of stationary emission sources and can require stationary sources to obtain permits, impose emission limits, set fuel or material specifications, or establish operational limits to reduce air emissions. The BAAQMD's responsibilities include operating an air quality monitoring network as well as awarding grants to reduce motor vehicle emissions, conducting public education campaigns, and many other activities.

To protect public health, BAAQMD has adopted plans to achieve ambient air quality standards. BAAQMD must continuously monitor its progress in implementing attainment plans and must periodically report to CARB and the U.S. EPA. It must also periodically revise its attainment plans to reflect new conditions and requirements.

CEQA Air Quality Guidelines

The BAAQMD publishes the CEQA Air Quality Guidelines to assist lead agencies in evaluating air quality and greenhouse impacts of projects and plans undergoing CEQA review in the Bay Area. The original Air Quality Guidelines were published in 1999. The CEQA Air Quality Guidelines were updated in June 2010 to include new recommended thresholds of significance adopted by the BAAQMD Governing Board. The BAAQMD's Air Quality Guidelines were further updated in May 2017 to address the California Supreme Court's 2015 opinion in California Building Industry Association vs. Bay Area Air Quality Management District, 62 Cal.4th 369. The BAAQMD's recommendations for assessing greenhouse gas impacts are provided in Section 3.1, Regulatory Setting.

Table 1 BAAQMD Recommended Air Quality Thresholds of Significance

Criteria Air Pollutants and Precursors (Regional)	Construction-Related Average Daily Emissions (lbs/day)	Operational Related	
		Average Daily Emissions (lbs/day)	Maximum Annual Emissions (tpy)
Project-Level			
ROG	54[1]	54	10
NO_X	54[1]	54	10
PM_{10}	82[1] (exhaust)	82	15
$PM_{2.5}$	54[1] (exhaust)	54	10
PM_{10}/ $PM_{2.5}$ (fugitive dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	
Risk and Hazards for new sources and receptors (Individual Project) [2]	Same as Operational Thresholds[2]	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient $PM_{2.5}$ increase: > 0.3 µg/m3 annual average Zone of Influence: 1,000-foot radius from property line of source or receptor	
Risk and Hazards for new sources and receptors (Cumulative Threshold)[2]	Same as Operational Thresholds	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) $PM_{2.5}$: > 0.8 µg/m3 annual average (from all local sources) Zone of Influence: 1,000-foot radius from property line of source or receptor	
Accidental Release of Acutely Hazardous Air Pollutants*	None	Storage or use of acutely hazardous materials locating near receptors or new receptors locating near stored or used acutely hazardous materials considered significant	
Odors*	None	5 confirmed complaints per year averaged over three years	

Notes:

[1]. The BAAQMD recommends that for construction projects that are less than one year duration, Lead Agencies should annualize impacts over the scope of actual days that peak impacts are to occur, rather than the full year.

[2]. The receptor thresholds were the subject of litigation in California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal. 4th 369.

Clean Air Plan

In 2017, BAAQMD adopted the most recent update of the Bay Area Clean Air Plan (2017 Clean Air Plan) (BAAQMD 2017). The Clean Air Plan is meant to demonstrate progress toward meeting the more stringent 1-hour ozone California Ambient Air Quality Standard. This Clean Air Plan addresses the California Clean Air Act and updates the most recent ozone plan, the 2010 Clean Air Plan. The 2017 Clean Air Plan is a multi-pollutant air quality plan that addresses four categories of air pollutants:

- Ground-level ozone and the key ozone precursor pollutants (reactive organic gases and NO_X), as required by State law;
- Particulate matter, primarily $PM_{2.5}$, as well as the precursors to secondary $PM_{2.5}$;
- Toxic air contaminants; and
- Greenhouse gases.

The Clean Air Plan includes 85 Control Measures in nine categories based upon the economic sector framework used by the CARB for the AB 32 Scoping Plan Update, including: stationary (industrial) sources; transportation; energy; buildings; agriculture; natural and working lands; waste management; water; and super-GHG pollutants. These measures are primarily policy-level and would be implemented by BAAQMD and the Metropolitan Transportation Commission (examples: establishing new emission limits on stationary sources, requiring new control measures on industrial facilities, implementing public education programs, promoting trip reduction programs, etc.).

Napa County

Napa County General Plan

The following Napa County General Plan policies relate to air quality and are applicable to this Project.

Policy CC-53: Odors associated with industrial and commercial uses—in particular, those generated by chemical or industrial processes—are considered generally unacceptable, and shall be required to mitigate their effects on nearby businesses and residences in accordance with standards of the Bay Area Air Quality Management District (BAAQMD).

Policy CC-54: The County shall either require that adequate buffers be maintained between air pollution or odor sources and sensitive receptors such as residences, or that filters or other mitigation be provided to reduce potential exposures to acceptable levels consistent with regulatory requirements.

a) New sources of toxic air contaminants or odors proposed near residences or sensitive receptors within screening distances recommended by the California Air Resources Board (CARB) or BAAQMD shall be evaluated and adequate buffers or filters or other equipment shall be provided.

Goal CON-17: Reduce air pollution and reduce local contributions to regional air quality problems, achieving and maintaining air quality in Napa County which meets or exceeds state and federal standards.

Policy CON-75: The County shall work to implement all applicable local, state, and federal air pollution standards, including those related to reductions in GHG emissions. [Implemented by Action Item CON CPSP-6]

Policy CON-77: All new discretionary projects shall be evaluated to determine potential significant project-specific air quality impacts and shall be required to incorporate appropriate design, construction, and operational features to reduce emissions of criteria pollutants regulated by the state and federal governments below

the applicable significance standard(s) or implement alternate and equally effective mitigation strategies consistent with BAAQMD's air quality improvement programs to reduce emissions.

Policy CON-80: The County shall seek to reduce particulate emissions and avoid exceedences of state particulate matter (PM) standards by:

e) Requiring implementation of dust control measures during construction and grading activities and enforcing winter grading deadlines.

Policy CON-81: The County shall require dust control measures to be applied to construction projects consistent with measures recommended for use by the BAAQMD.

Policy CON-82: The County shall require applicants seeking demolition permits to demonstrate compliance with any applicable BAAQMD requirements, particularly those related to asbestos-containing materials (ACMs) and exposure to lead paint. [Implemented by Action Item CON CPSP-6]

Policy CON-84: The County shall require the establishment and maintenance of adequate buffer distances or filters or other equipment modifications for new sources of toxic air contaminants (TACs) and odors near proposed or existing sensitive receptors consistent with local and state regulatory requirements and guidelines. [Implemented by Action Item CON CPSP-6]

Policy CON-85: The County shall utilize construction emission control measures required by CARB or BAAQMD that are appropriate for the specifics of the project (e.g., length of time of construction and distance from sensitive receptors). These measures shall be made conditions of approval and/or adopted as mitigation to ensure implementation. [Implemented by Action Item CON CPSP-6]

2.2 Environmental Setting

San Francisco Bay Area Air Basin

The Project site is located in Napa County, which is within the San Francisco Bay Area Air Basin. Ambient concentrations of air pollutants in the Project area are a product of the quantity of pollutants emitted by local sources and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect air quality and pollutant transport and dilution include terrain, wind, atmospheric stability, and the presence of sunlight.

The Napa Valley is bordered by relatively high mountains. With an average ridge line height of about 2,000 feet, with some peaks approaching 3,000 to 4,000 feet, these mountains are effective barriers to the prevailing northwesterly winds. The Napa Valley is widest at its southern end and narrows in the north.

During the day, the prevailing winds flow upvalley from the south about half of the time. A strong upvalley wind frequently develops during warm summer afternoons, drawing air in from the San Pablo Bay. Daytime winds sometimes flow downvalley from the north. During the evening, especially in the winter, downvalley drainage often occurs. Wind speeds are generally low, with almost 50 percent of the winds less than 4 mph. Only 5 percent of the winds are between 16 and 18 mph, representing strong summertime upvalley winds and winter storms.

Summer average maximum temperatures are in the low 80's at the southern end of the valley and in the low 90's at the northern end. Winter average maximum temperatures are in the high-50's and low-60's, and minimum temperatures are in the high to mid 30's with the slightly cooler temperatures in the northern end.

The air pollution potential in the Napa Valley could be high if there were sufficient sources of air contaminants nearby. Summer and fall prevailing winds can transport ozone precursors northward from the Carquinez Strait Region to the Napa Valley, effectively trapping and concentrating the pollutants when stable conditions are present. The local upslope and downslope flows created by the surrounding mountains may also recirculate pollutants already present, contributing to buildup of air pollution. High ozone concentrations are a potential problem to sensitive crops such as wine grapes, as well as to human health. The high frequency of light winds and stable conditions during the late fall and winter contribute to the buildup of particulate matter from motor vehicles, agriculture and wood burning in fireplaces and stoves (BAAQMD 2017).

Sensitive Receptors

Sensitive receptors are people who are particularly susceptible to the adverse effects of air pollution. The CARB and BAAQMD have identified the following people most likely to be affected by air pollution: children, the elderly, the acutely ill, and the chronically ill, especially those with cardio-respiratory diseases. Sensitive receptors include residences, schools, playgrounds, childcare centers, retirement homes, hospitals, and medical clinics.

The Project Area is located in a rural industrial area. There nearest potential sensitive receptors are the residential units at Napa State Hospital and the approved county jail located approximately 350 feet north and 100 feet west of the project boundary, respectively. The residential units are approximately 680 feet away from the limits of project-associated heavy-heavy truck activity The approved jail will be approximately 500 feet away from the limits of project-associated heavy-heavy truck activity. No other sensitive receptors are located within 1,000 feet of the project boundary.

Air Pollutants and Effects

California and the federal government (i.e., the EPA) have established ambient air quality standards for several different pollutants. Most standards have been set to protect public health, but standards for some pollutants have other purposes, such as to protect crops, protect materials, or avoid nuisance conditions. Of pollutants that may be generated by the proposed Project, those of greatest concern are emitted by motor vehicles. These pollutants include fine particulate matter (PM) less than 2.5 microns in diameter ($PM_{2.5}$) and particulate matter less than 10 microns in diameter (PM_{10}). Other pollutants that are less problematic to the region include ozone precursors (nitrogen oxides [NO_X] and reactive organic gases [ROG]) and carbon monoxide.

Table 2, Relevant Ambient Air Quality Standards and Attainment Status, summarizes state and federal ambient air quality standards. The San Francisco Bay Area Air Basin is currently designated as non-attainment for the state standards for 8-hour and 1-hour ozone, 24-hour and annual PM_{10}, and annual $PM_{2.5}$, as well as for the national standards for 8-hour ozone and 24-hour $PM_{2.5}$.

Table 2 Relevant Ambient Air Quality Standards and Attainment Status

Pollutant	Averaging Time	California		National (Federal)	
		Ambient Standards	Attainment Status	Ambient Standards	Attainment Status
Ozone	8-hour	0.070 ppm (137µg/m^3)	Nonattainment	0.070 ppm	Nonattainment
	1-hour	0.09 ppm (180 µg/m^3)	Nonattainment	None	—
Carbon Monoxide	8-hour	9.0 ppm (10 mg/m^3)	Attainment	9 ppm (10 mg/m^3)	Attainment
	1-hour	20 ppm (23 mg/m^3)	Attainment	35 ppm (40 mg/m^3)	Attainment
Nitrogen Dioxide (NO_2)	1-hour	0.18 ppm (339 µg/m^3)	Attainment	0.100 ppm	
	Annual	0.030 ppm (57 µg/m^3)	—	0.053 ppm (100 µg/m^3)	Attainment
Sulfur Dioxide (SO_2)	24-hour	0.04 ppm (105 µg/m^3)	Attainment	0.14 ppm (365 µg/m^3)	
	1-hour	0.25 ppm (655 µg/m^3)	Attainment	0.075 ppm (196 µg/m^3)	
	Annual	None	—	0.030 ppm (80 µg/m^3)	—
Particulate Matter (PM_{10})	Annual	20 µg/m^3		None	—
	24-hour	50 µg/m^3		150 µg/m^3	
Particulate Matter - Fine ($PM_{2.5}$)	Annual	12 µg/m^3	—	12 µg/m^3	
	24-hour	*NA*		35 µg/m^3	

Notes: ppm = parts per million
mg/m3 = milligrams per cubic meter
µg/m3 = micrograms per cubic meter

Source: BAAQMD 2022a

Particulate Matter

Particulate matter is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size, and chemical composition, and can be made up of many different materials such as metals, soot, soil, and dust. Particles 10 microns or less in diameter are defined as respirable particulate matter or PM_{10}. PM_{10} emissions include unpaved road dust, smoke from wood stoves, construction dust, open burning of vegetation, and airborne salts and other particulate matter naturally generated by ocean surf. Fine particles are 2.5 microns or less in diameter ($PM_{2.5}$) and, while also respirable, can contribute significantly to regional haze and reduction of visibility. Inhalable particulates come from smoke, dust, aerosols, and metallic oxides. Although particulates are found naturally in the air, most particulate matter found in the study area is emitted either directly or indirectly by motor vehicles, agricultural activities, and wind erosion of disturbed areas. Most $PM_{2.5}$ is

comprised of combustion products such as smoke. Extended exposure to PM can increase the risk of chronic respiratory disease (BAAQMD 2017).

Ozone

Ground-level ozone is the principal component of smog. Ozone is not directly emitted into the atmosphere, but instead forms through a photochemical reaction of reactive organic gases (ROG) and nitrogen oxides (NO_X), which are known as ozone precursors. Ozone levels are highest from late spring through autumn when precursor emissions are high and meteorological conditions are warm and stagnant. Motor vehicles create the majority of ROG and NO_X emissions in California. Exposure to levels of ozone above current ambient air quality standards can lead to human health effects such as lung inflammation, tissue damage and impaired lung function. Ozone exposure is also associated with symptoms such as coughing, chest tightness, shortness of breath, and the worsening of asthma symptoms (BAAQMD 2017). The greatest risk for harmful health effects belongs to outdoor workers, athletes, children, and others who spend greater amounts of time outdoors during periods of high ozone levels, typically during the summer.

Carbon Monoxide

Carbon Monoxide is a non-reactive pollutant that is toxic, invisible, and odorless. It is formed by the incomplete combustion of fuels. The largest sources of CO emissions are motor vehicles, wood stoves, and fireplaces. Carbon Monoxide is directly emitted to the atmosphere, where levels are strongly influenced by meteorological factors such as wind speed and atmospheric stability. The health threat from elevated ambient levels of CO is most serious for those who suffer from heart disease, like angina, clogged arteries, or congestive heart failure; however, high levels of CO can affect even healthy people. People who breathe high levels of CO can develop vision problems, reduced ability to work or learn, reduced manual dexterity, and difficulty performing complex tasks. At extremely high levels, CO is poisonous and can cause death.

Toxic Air Contaminants

Toxic Air Contaminants (TACs) are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer or serious illness) and include, but are not limited to, the criteria air pollutants listed in Table 3.2-1. Toxic Air Contaminants are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). Toxic Air Contaminants are typically found in low concentrations, even near their source (e.g., diesel particulate matter near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level. The identification, regulation and monitoring of TACs is relatively new compared to that for criteria air pollutants that have established ambient air quality standards. TACs are regulated or evaluated on the basis of risk to human health rather than comparison to an ambient air quality standard or emission-based threshold.

Diesel exhaust is the predominant TAC in urban air with the potential to cause cancer. It is estimated to represent about two-thirds of the cancer risk from TACs (based on the statewide average). According to the CARB, diesel exhaust is a complex mixture of gases, vapors, and fine particles. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the state's Proposition 65 or under the federal Hazardous Air Pollutants programs. California has adopted a comprehensive diesel risk reduction program, and recently adopted new regulations requiring the retrofit and/or replacement of construction equipment, on-highway diesel trucks, and diesel buses in order to lower $PM_{2.5}$ emissions and reduce statewide cancer risk from diesel exhaust.

3. Greenhouse Gas Setting

3.1 Regulatory Setting

Federal

The U.S. Environmental Protection Agency (EPA) is the federal agency responsible for implementing the Clean Air Act (CAA). The U.S. Supreme Court ruled on April 2, 2007, that carbon dioxide is an air pollutant as defined under the CAA, and that EPA has the authority to regulate emissions of (GHGs). In response to the mounting issue of climate change, EPA has taken actions to regulate, monitor, and potentially reduce GHG emissions. Actions include a national program to reduce GHG emissions and improve fuel economy for all new cars and trucks sold in the United States. However, there are no federal plans, policies, regulations, or laws related to GHGs that are directly applicable to the Project.

Council on Environmental Quality

On February 18, 2010, the Council on Environmental Quality (CEQ) provided a draft guidance memorandum for public consideration and comment on the ways in which federal agencies can improve their consideration of the effects of greenhouse gas emissions and climate change in evaluations of proposals for federal actions under the NEPA (CEQ 2010). The CEQ updated that draft in 2014 and provided a final guidance on August 2, 2016 (CEQ 2016).

The CEQ's 2010 draft guidance proposed to advise federal agencies to consider, in scoping their NEPA analyses, whether analysis of the direct and indirect greenhouse gas emissions from their proposed actions may provide meaningful information to decision makers and the public. Specifically, if a proposed action would be reasonably anticipated to cause direct emissions of 25,000 metric tons or more of carbon dioxide equivalent ($MTCO_2e$) emissions on an annual basis, agencies should consider this an indicator that a quantitative and qualitative assessment may be meaningful to decision makers and the public. For long-term actions that have annual direct emissions of less than 25,000 $MTCO_2e$, CEQ encouraged federal agencies to consider whether the action's long-term emissions should receive similar analysis. CEQ did not propose this as an indicator of a threshold of significant effects, but rather as an indicator of a minimum level of greenhouse gas emissions that may warrant some description in the appropriate NEPA analysis for agency actions involving direct emissions of greenhouse gases. The CEQ removed the direct emissions criteria from the 2016 final guidance, which contains no numeric recommendations. However, the CEQ replaced the 2016 final guidance with the 2019 Draft GHG Guidance. The CEQ then rescinded the 2019 Draft GHG Guidance and committed to review, revise, and update its 2016 GHG Guidance in accordance with Executive Order 13990. This does not automatically restore the 2016 Final GHG Guidance, and CEQ's announcement of the rescission encouraged agencies to consider "all available tools and resources" when analyzing GHG emissions and climate change in their NEPA reviews, including the 2016 Guidance "as appropriate and relevant." For comparison, the EPA's Greenhouse Gas Reporting Program requires mandatory reporting for 'large' industrial sources of GHG to report GHG data and defines large industrial sources as those that emit more than 25,000 $MTCO_2e$ per year.

State

Executive Order S-3-05

In 2005, the Governor of California signed Executive Order S-3-05, which established greenhouse gas emission reduction targets to reduce emissions as follows:

- By 2010, reduce GHG emissions to 2000 levels,
- By 2020, reduce GHG emissions to 1990 levels, and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The Secretary of the California Environmental Protection Agency (Secretary) was designated to coordinate oversight of the multi-agency efforts made to meet the targets.

The Cal/EPA Secretary must also submit biannual reports to the governor and California Legislature describing the progress made toward the emissions targets, the impacts of global climate change on California's resources, and mitigation and adaptation plans to combat these impacts. To comply with the executive order, the Secretary of Cal/EPA created the California Climate Action Team (CAT), made up of members from various state agencies and commissions. The team released its first CAT Report in March 2006, with its most recent S-3-05-mandated CAT Report released in 2010. The report proposes to achieve the targets by building on the voluntary actions of California businesses, local governments, and communities and through state incentive and regulatory programs.

Assembly Bill 32, California Global Warming Solutions Act of 2006

In 2006, the Governor of California signed the Global Warming Solutions Act of 2006 (Assembly Bill 32), committing the State of California to reducing GHG emissions to 1990 levels by 2020. The statute requires the CARB to track emissions through mandatory reporting, determine the 1990 emission levels, set annual emissions limits that would result in meeting the 2020 target, and design and implement regulations and other feasible and cost-effective measures to ensure that statewide GHG emissions would be reduced to 1990 levels by 2020. As shown below, the 2020 emissions goal was 431 MMT CO_2e; the State achieved this emission reduction goal in 2016 with a calculated GHG inventory of 429.0 MMT CO_2e.

Climate Change Scoping Plan

In December 2008, pursuant to AB 32, the CARB adopted the Climate Change Scoping Plan (Scoping Plan), which outlined measures to attain the 2020 GHG emissions limit. The Scoping Plan estimated that implementation of identified measures would result in a reduction of 105.3 MMT CO_2e from various sectors including transportation, energy, forestry, and high global warming potential gas sectors (originally reported as 174 MMT CO_2e but updated to 105.3 MMT CO_2e in the Status of Scoping Plan Recommended Measures [found at the CARB website]). This is 24 percent more than is needed to meet the 2020 mandate. AB 32 requires CARB to update the Scoping Plan at least every five years.

CARB approved the First Update to the Climate Change Scoping Plan (Updated Scoping Plan) in May 2014. The Updated Scoping Plan describes the progress made to meet the near-term (2020) objectives of AB 32 and defines California's climate change priorities and activities for the next several years. The Updated Scoping Plan also updated the 2020 emissions limit and business-as-usual emissions for 2020. The 2020 limit is now 431 MMT CO_2e and the business-as-usual forecast is 509 MMT CO_2e. Finally, the Updated Scoping Plan provides recommendations for establishing a mid-term emissions limit that aligns with the long-term (2050) goals of Executive Order S-3-05. The recommendations cover the energy,

transportation, agriculture, water, waste management, natural and working lands, short-lived climate pollutants, green building, and cap-and-trade sectors.

The second update to the Scoping Plan, the 2017 Climate Change Scoping Plan (2017 Scoping Plan), was released in November 2017 and approved in December 2018. The 2017 Scoping Plan provides California's climate policy portfolio and recommended strategies to put the state on a path to achieve the 2030 target set by EO B-30-15 and SB 32, discussed below. The scenario includes ongoing and statutorily required programs, continuing the Cap-and-Trade Program, and high-level objectives and goals to reduce GHGs across multiple economic sectors. Existing programs, also known as "known commitments", identified by the 2017 Scoping Plan include: SB 350, the Low Carbon Fuel Standard Program, CARB's Mobile Source Strategy, Senate Bill 1383 for short-lived climate pollutants, California's Sustainable Freight Action Plan. The high-level objective and goals recommendations cover the energy, transportation, industry, water, waste management, agriculture, and natural and working lands, and are to be implemented by a variety of state agencies.

The recommendations are broad policy and regulatory initiatives that will be implemented at the state level and do not relate to the construction and operation of individual projects such as the Project. Although project construction and operation may benefit from some of the state-level regulations and policies that will be implemented, such as SB 100's requirement that 100 percent or retail sales of electricity be renewable by 2045.

The CARB's Cap-and-Trade Program relies on data collected through the Mandatory Reporting of Greenhouse Gas Emissions Regulation (MRR) to identify major sources of greenhouse gas emissions in California. The MRR was originally adopted in 2007 and was updated in 2011. Industries that emit 10,000 or MT CO_2e are required to report their GHGs to CARB; a subset of industrial facilities with annual emissions equal to or greater than 25,000 metric tons of CO_2e are required to comply with the Cap-and-Trade Program.

The CARB's proposed Draft 2022 Scoping Plan is currently in the public review and comment period. The Draft 2022 Scoping Plan assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045.

Executive Order B-30-15

On April 29, 2015, California Governor Jerry Brown signed EO B-30-15, which contains the target of reducing GHG emissions to 40 percent below 1990 levels by 2030. The emission reduction is an interim-year goal to provide substantial progress toward the ultimate goal of reducing emissions by 80 percent below 1990 levels by 2050.

Senate Bill 32 and Assembly Bill 197

Senate Bill (SB) 32, passed in 2016, extended the goals of AB 32 and codifies the GHG reduction target of 40 percent below 1990 levels by year 2030, consistent with EO B-30-15. The companion bill to SB 32, AB 197 provides additional direction to CARB in developing each update to the Scoping Plan.

Renewables Portfolio Standard

California's Renewables Portfolio Standard (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020. The 33 percent standard is consistent with the RPS goal established in the Scoping Plan. The passage of Senate Bill 350 in 2015 updates the RPS to require the amount of electricity generated and sold to retail customers

per year from eligible renewable energy resources to increase to 50 percent by December 31, 2030. The bill would make other revisions to the RPS program and to certain other requirements on public utilities and publicly owned electric utilities.

RPS was further strengthen in 2018 by the passage of Senate Bill 100, which increases the RPS requirement to 60 percent by 2030, and requires renewable energy and zero-carbon resources supply 100 percent of electric retail sales to end-use customers by 2045.

Refrigerants

As part of the California Global Warming Solutions Act of 2006 (AB 32) the CARB adopted a regulation in 2009 creating the Refrigerant Management Program (RMP) to reduce greenhouse gas (GHG) emissions from stationary sources through refrigerant leak detection and monitoring, leak repair, system retirement and retrofitting, reporting and recordkeeping, and proper refrigerant cylinder use, sale, and disposal.

California's Significant New Alternatives Policy (SNAP), founded on SB 1013 and the CARB's hydrofluorocarbon (HFC) regulations specify prohibitions on use of certain HFCs in air conditioning equipment, chillers, cold storage, and other end-use refrigerated systems. CARB's current HFC regulations include global warming limits for refrigerants in new refrigeration and air conditioning equipment

Starting in 2022, the Refrigerant Management Program (RMP) requires facilities with refrigeration systems containing more than 50 pounds of high-GWP refrigerant to conduct and report periodic leak inspections, promptly repair leaks; and keep service records on site. Additionally, newly adopted regulations by CARB requires new stationary refrigeration installations and cold storage warehouses to use refrigerants with a global warming potential (GWP) of 150 or less. According to the CARB, the 150-GWP cap is expected to cut emissions reduction per facility by more than 90 percent.

California Building Code, Title 24

Title 24 of the CCR regulates how each new home and business is built or altered in California. It includes requirements for the structural, plumbing, electrical, and mechanical systems of buildings, and for fire and life safety, energy conservation, green design, and accessibility in and about buildings. Two sections of Title 24 – Part 6, the California Energy Code, and Part 11, the California Green Building Standards Code or CalGreen Code – contain standards that address GHG emissions related to construction.

The California Green Building Standards Code, or CalGreen, became a mandatory code beginning January 1, 2011. The code takes a holistic approach to green building by including minimum requirements in the areas of planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. The CalGreen code has minimum mandatory standards and two additional tiers of voluntary measures intended to achieve greater levels of efficiency that result in lower levels of GHG emissions. Local governments must enforce the minimum standards and can choose to adopt either Tier 1 or Tier 2 standards to achieve greater positive environmental impacts.

Bay Area Air Quality Management District

The BAAQMD publishes CEQA Air Quality Guidelines to assist local jurisdictions and lead agencies in complying with the requirements of CEQA regarding potentially adverse impacts to air quality and greenhouse gases. On April 20, 2022, the BAAQMD adopted new thresholds of significance for climate impacts and substantiated the thresholds in the *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans* (Draft Justification Report) (BAAQMD 2022b). The BAAQMD analyzed what would be required of new land use development projects to achieve

California's long-term climate goal of carbon neutrality by 2045, and identified specific measures for new land use development to address its "fair share" of implementing the goal of carbon neutrality by 2045. The BAAQMD's newly adopted thresholds for land use development are provided in Table 3. The BAAQMD did not adopt or provide recommended thresholds for construction-generated GHGs.

Table 3 BAAQMD Recommended GHG Thresholds of Significance for Land Use Projects

Thresholds for Land Use Projects (Must Include A or B)
A. Projects must include, at a minimum, the following project design elements: 1. Buildings a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development). b. The project will not result in any wasteful, inefficient, or unnecessary electrical usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines. 2. Transportation a. Achieve compliance with electric vehicle requirements in the most recently adopted version of CALGreen Tier 2. b. Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA: i. Residential projects: 15 percent below the existing VMT per capita ii. Office projects: 15 percent below the existing VMT per employee iii. iii. Retail projects: no net increase in existing VMT
B. Projects must be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

Source: BAAQMD 2022b

Napa County

Napa County does not have an adopted, qualified Climate Action Plan. Napa County General Plan Policy CON-65 (e) and Policy CON-67 (d) require the consideration of Greenhouse Gas (GHG) emissions in the review of discretionary projects and to promote and encourage "green building" design. Applicable General Plan Policies are provided below:

Policy CON-65: The County shall support efforts to reduce and offset greenhouse gas (GHG) emissions and strive to maintain and enhance the County's current level of carbon sequestration functions through the following measures:

e) Consider GHG emissions in the review of discretionary projects. Consideration may include an inventory of GHG emissions produced by the traffic expected to be generated by the project, any changes in carbon sequestration capacities caused by the project, and anticipated fuel needs generated by building heating, cooling, lighting systems, manufacturing, or commercial activities on the premises. Projects shall consider methods to reduce GHG emissions and incorporate permanent and verifiable emission offsets.

Policy CON-66: The County shall promote the implementation of sustainable practices and green technology in agriculture, commercial, industrial, and residential development through the following actions:

a) Project Construction

1) Utilize recycled, low-carbon, and otherwise climate-friendly building materials such as salvaged and recycled content materials for buildings, hard surfaces, and landscaping materials.

2) Minimize, reuse, and recycle construction-related waste.

3) Utilize alternative fuels in construction equipment and require construction equipment to utilize the best available technology to reduce emissions.

Policy CON-67: The County shall promote and encourage "green building" design, development, and construction through the achievement of Leadership in Energy and Environmental Design (LEED) standards set by the U.S. Green Building Council, the Green Point Rated system standards set by Builditgreen.org, or equivalent programs. Actions in support of this policy shall include:

d) Encourage all new large development projects and major renovation of existing facilities to be based on Green Building Council standards utilizing sustainable construction and practices to achieve a minimum LEED rating of Silver, or comparable level on the Green Point Rated system per standards set by Builditgreen.org or other comparable updated rating systems.

Policy CON-72: The County shall seek to reduce the energy impacts from new buildings by applying Title 24 energy standards as required by law and providing information to the public and builders on available energy conservation techniques, products, and methods available to exceed those standards by 15 percent or more.

Policy CON-75: The County shall work to implement all applicable local, state, and federal air pollution standards, including those related to reductions in GHG emissions. [Implemented by Action Item CON CPSP-6]

3.2 Environmental Setting

Greenhouse Gases

Gases that trap heat in the atmosphere are referred to as GHGs because they capture heat radiated from the sun as it is reflected back into the atmosphere, much like a greenhouse. The accumulation of GHGs has been implicated as the driving force for global climate change. The primary GHGs are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), ozone (O_3), and water vapor (H_2O).

While GHGs in the atmosphere are naturally occurring, the emission rate of CO_2, CH_4 and N_2O has been accelerated by human activities. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results from off-gassing associated with such activities as agricultural practices and landfills. Other GHGs include hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, which are generated during certain industrial processes. GHGs are typically reported in "carbon-dioxide-equivalent" measures (CO_2e).

There is international scientific consensus that human-caused increases in GHGs have contributed, and will continue to contribute, to climate change. Potential climate change impacts in California may include, but are not limited to, a decrease in snowpack, sea level rise, and a greater number of extreme heat days per

year, high ozone days, large forest fires, and drought years. Secondary effects are likely to include impacts on agriculture, changes in disease vectors, and changes in habitat and biodiversity.

The U.S. Environmental Protection Agency (EPA) reports U.S. GHG emissions for 2019 as 6,558 million metric tons (MMT) of CO_2e. The transportation sector accounts for 29 percent, followed by the electricity sector at 25 percent and the industrial sector at 23 percent. Commercial and residential fuel use and the agricultural sector accounted for the remaining 23 percent (EPA 2021).

CARB estimated that in 2019 California produced about 418.2 MMT of CO_2. The transportation sector was the highest source at 40 percent of the State's total GHGs, followed by the industrial sector at 21 percent, and electricity generation (both in-state and out-of-state) at 14 percent. Commercial and residential fuel use, recycling and waste, high global warming potential, and agricultural sectors accounted for the remaining 25 percent of the State's total GHG emissions (CARB 2018). CARB uses the Intergovernmental Panel on Climate Change (IPCC) 2007 Fourth Assessment Report (AR4) global warming potentials for the state's 2000-2019 emissions inventory.

GHGs normally associated with the proposed Project include the following listed below. Global Warming Potential (GWP) is a measurement of the heat absorbed by any GHG in the atmosphere, as a multiple of the heat that would be absorbed by the same mass of CO_2. All GWP are given as 100-year GWP. Unless otherwise noted, all GWPs and information presented below were obtained from the IPCC 2007 AR4 (IPCC 2007):

Water Vapor (H_2O). Although water vapor has not received the scrutiny of other GHGs, it is the primary contributor to the greenhouse effect. Natural processes, such as evaporation from oceans and rivers, and transpiration from plants, contribute 90 percent and 10 percent of the water vapor in our atmosphere, respectively. The primary human-related source of water vapor comes from fuel combustion in motor vehicles; however, it does not contribute a significant amount (less than one percent) to atmospheric concentrations of water vapor. The Intergovernmental Panel on Climate Change (IPCC) has not determined a Global Warming Potential for water vapor.

Carbon Dioxide (CO_2). Carbon dioxide is primarily generated by fossil fuel combustion in stationary and mobile sources. Due to the emergence of industrial facilities and mobile sources in the past 250 years, CO_2 emissions from fossil fuel combustion increased by a total of 5.6 percent between 1990 and 2015 (EPA 2017). Carbon dioxide is the most widely emitted GHG and is the reference gas (GWP of 1) for determining GWP for other GHGs (IPCC 2007).

Methane (CH_4). Methane is emitted from biogenic sources, incomplete combustion in forest fires, landfills, manure management, and leaks in natural gas pipelines. The United States' top three methane sources are landfills, natural gas systems, and enteric fermentation (flatulence produced by livestock digestion). Methane is the primary component of natural gas, used for space and water heating, steam production, and power generation. The GWP of methane is 25 (IPCC 2007).

Nitrous Oxide (N_2O). Nitrous oxide is produced by both natural and human-related sources. Primary human-related sources include agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. The GWP of nitrous oxide is 298 (IPCC 2007).

Hydrofluorocarbons (HFCs). HFCs are typically used as refrigerants for both stationary refrigeration and mobile air conditioning. The use of HFCs for cooling and foam blowing is increasing, as the continued phase-out of Chlorofluorocarbons (CFCs) and HFCs gains momentum. The GWP of HFCs range from 124 for HFC-152 to 14,800 for HFC-23 (EPA 2017, IPCC 2007).

4. Methodology

4.1 Thresholds of Significance

Air Quality Thresholds

The air quality analysis utilizes the thresholds of significance, screening criteria and levels, and impact assessment methodologies presented in the BAAQMD's Air Quality Guidelines (BAAQMD 2017). As provided by the BAAQMD's guidance, if the Project meets the screening criteria for an impact category, and is consistent with the methodology used to develop the screening criteria, then its air quality impact for that category may be considered less than significant.

Greenhouse Gas Thresholds

As described in Section 3.1, Regulatory Setting, the BAAQMD adopted new GHG thresholds for typical commercial/residential development in April 2022. The BAAQMD provides that a lead agency should not use the BAAQMD-adopted threshold when the agency is, "faced with a unique or unusual project for which the analysis supporting the thresholds as described in this report do not squarely apply." The BAAQMD recommends that in such cases, the lead agency should develop an alternative approach that is more appropriate to the particular project before it, considering all the facts and circumstances of the project on a case-by-case basis.

This Project is, in fact, unique as an industrial project, and is not suitable for thresholds that would apply to a standard land use project or typical commercial/residential development. The Project does not fit the activity, use, or emissions inventory profiles of typical commercial or residential land uses. The Project is an industrial development, which would generate more heavy-heavy truck trips than light duty auto trips. Therefore, thresholds of significance for industrial development are more appropriate for the Project's analysis than thresholds developed for typical commercial or residential development.

A review of potential sources for thresholds of significance to apply includes:

- CARB's Mandatory Reporting Program for Greenhouse Gases (MRR) and Cap-and-Trade Program Regulatory Documents (including Initial and Final Statements of Reasons)
- SCAQMD's Agenda No. 31, Board Meeting December 5, 2008, Synopsis, and Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold (SCAQMD 2008)
- BAAQMD's California Environmental Quality Act Air Quality Guidelines (including Appendix D, Thresholds of Significance Justification) (BAAQMD 2017)
- SMAQMD Guide to Air Quality Assessment in Sacramento County (SMAQMD 2021)

Based on the review of potential thresholds of significance, the SMAQMD's recommended thresholds were selected to apply to assess the Project's potential greenhouse gas emissions impact.

CARB Background

The State has implemented a Cap-and-Trade program as a major climate program, effective 2012. As described in CARB's 2017 Scoping Plan:

> The Cap-and-Trade Program includes GHG emissions from transportation, electricity, industrial, agricultural, waste, residential and commercial sources, and caps them while complementing the

other measures needed to meet the 2030 GHG target. Altogether, the emissions covered by the Cap-and-Trade program total 80 percent of all GHG emissions in California.

AB 32 also requires CARB to adopt regulations for the mandatory reporting of GHG emissions (MRR) in order to monitor and enforce compliance with CARB's GHG emissions reduction actions. The MRR and Cap-and-Trade programs use two emissions thresholds for determining compliance requirements:

- 10,000 $MTCO_2e$ Threshold for MRR reporting
- 25,000 $MTCO_2e$ "Major Source" Threshold for Cap-And-Trade Compliance

The 10,000 $MTCO_2e$ threshold is for entry into the MRR reporting system; the 25,000 $MTCO_2e$ threshold defines a 'major source' under the Cap-and-Trade program.

South Coast Air Quality Management District Guidance

The current SCAQMD guidance on assessing GHG emissions from industrial developments is to apply a 10,000 $MTCO_2e$/year threshold of significance. SCAQMD recommends including construction emissions amortized over 30 years added to operational GHG emissions to assess the significance of industrial projects under CEQA (SCAQMD 2008). SCAQMD's guidance references the CARB's MRR reporting threshold as informing the recommended threshold of significance (SCAQMD 2008). The SCAQMD threshold of 10,000 $MTCO_2e$/year is industry standard for industrial developments and is regularly used by agencies such as the Port of Los Angeles for industrial projects in the State of California.

Although the Project is not within SCAQMD's jurisdiction, GHG emissions are inherently global, not local, in nature; accordingly, it is appropriate to utilize guidance from jurisdictions where large scale industrial developments are more common.

Bay Area Air Quality Management District Guidance

2010 Thresholds/2017 Guidelines

In 2010, the BAAQMD adopted thresholds of significance for GHG impacts and updated their Guidelines to reflect the new thresholds. The BAAQMD's Guidelines were further updated in May 2017 to address the California Supreme Court's 2015 opinion in California Building Industry Association vs. Bay Area Air Quality Management District, 62 Cal.4th 369. The BAAQMD's 2017 Air Quality Guidelines provide the following project-level operational GHG thresholds of significance:

- For land use development projects, the threshold is compliance with a qualified GHG Reduction Strategy; or annual emissions less than 1,100 metric tons per year (MT/yr) of CO2e; or 4.6 MT CO2e/SP/yr (residents + employees). Land use development projects include residential, commercial, industrial, and public land uses and facilities.
- For stationary-source projects, the threshold is 10,000 metric tons per year (MT/yr) of CO2e. Stationary-source projects include land uses that would accommodate processes and equipment that emit GHG emissions and would require an Air District permit to operate.

2022 Thresholds

On April 20, 2022, the BAAQMD adopted new thresholds of significance for climate impacts. The BAAQMD's Justification Report for the newly adopted greenhouse gas thresholds differentiates between

thresholds and treatment of commercial/residential development and other projects. Per the Draft Justification Report:

> The Air District has developed these thresholds of significance based on **typical residential and commercial land use projects** and typical long-term communitywide planning documents such as general plans and similar long-range development plans. As such, **these thresholds may not be appropriate for other types of projects that do not fit into the mold of a typical residential or commercial project** or general plan update.
>
> Lead agencies should keep this point in mind when evaluating other types of projects. A lead agency does not necessarily need to use a threshold of significance if the analysis and justifications that were used to develop the threshold do not reflect the particular circumstances of the project under review. Accordingly, a lead agency should not use these thresholds if it is faced with a unique or unusual project for which the analyses supporting the thresholds as described in this report do not squarely apply. In such cases, the lead agency should develop an alternative approach that would be more appropriate for the particular project before it, considering all of the facts and circumstances of the project on a case-by-case basis. (emphasis added)

Additionally, the BAAQMD's Justification Report states:

> There is no proposed construction-related climate impact threshold at this time. Greenhouse gas emissions from construction represent a very small portion of a project's lifetime GHG emissions. The proposed thresholds for land use projects are designed to address operational GHG emissions which represent the vast majority of project GHG emissions. (BAAQMD 2022b)

The BAAQMD's recommended 2022 thresholds differentiate between typical 'indirect' land uses (commercial or residential development) and other types of development such as industrial land uses. As an industrial development, the BAAQMD's recommended threshold would not apply to the proposed project.

Sacramento Metropolitan Air Quality Management District Guidance

The SMAQMD provides threshold of significance applicable to project construction and operation, as shown in Table 4.

Table 4 SMAQMD Greenhouse Gas Thresholds

Construction Phase	Operational Phase
1,100 $MTCO_2e$/Year	Demonstrate consistency with the Climate Change Scoping Plan by implementing applicable Best Management Practices (BMP), or equivalent on-site or off-site mitigation.
	All projects must implement tier 1 BMPs (BMP 1 & 2): *BMP 1* - projects shall be designed and constructed without natural gas infrastructure. *BMP 2* - projects shall meet the current CalGreen Tier 2 standards, except all electric vehicle capable spaces shall instead be electric vehicle ready. Projects that exceed 1,100 metric tons/year after implementation of tier 1 BMPs must implement tier 2 BMPs (BMP 3): *BMP 3* - residential projects shall achieve a 15% reduction in vehicle miles traveled per resident and office projects shall achieve a 15% reduction in vehicle miles traveled per worker compared to existing average vehicle miles traveled for the county, and retail projects shall achieve a no net increase in total vehicle miles traveled to show consistency with SB 743.

Thresholds Applied to Project

Therefore, as the BAAQMD does not have recommended thresholds of significance to apply to construction-period emissions or roadway/infrastructure projects, the SMAQMD and SCAQMD recommended GHG methodologies and thresholds were applied as follows:

- Construction emissions are quantified and amortized over the life of the project, defined as 30 years, and added to the operational emissions for comparison against the threshold of significance (SCAQMD Methodology)
- Operational emissions are quantified and compared against the thresholds identified by SMAQMD and provided in Table 4 of this report (SMAQMD Threshold)

In order to assess the potential impact of construction-generated emissions, the construction GHG emissions are annualized over an assumed 30-year project lifespan, added to operational emissions, and compared against a threshold of 1,100 $MTCO_2e$.

The GHG analysis also discusses greenhouse gas emissions and consistency with the goals of the State of California's 2017 Climate Change Scoping Plan. If the Project meets the criteria laid out in applicable greenhouse gas emissions plans, policies, and regulations, then its impact for that category may be considered less than significant.

4.2 Emissions Modeling

The Project's construction and operational air quality and greenhouse gas emissions were estimated with the California Emissions Estimator Model (CalEEMod) version 2020.4.0, and then compared to the relevant thresholds established in the BAAQMD CEQA Air Quality Guidelines and Section 4.1, Thresholds of Significance, of this report. CalEEMod output is provided in Appendix A. CalEEMod is designed as a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant emissions associated with construction and operation from a variety of land uses. A 'soft-release' CalEEMod update, version 2022.1, was released in June 2022, and consists of a website-only model interface.

Construction

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. Construction emissions result from onsite and offsite activities. Onsite emissions principally consist of exhaust emissions from the activity levels of heavy-duty construction equipment, motor vehicle operation, and fugitive dust (mainly PM_{10}) from disturbed soil. Additionally, paving operations and application of architectural coatings would release VOC emissions. Offsite emissions are caused by motor vehicle exhaust from delivery vehicles, worker traffic, and road dust (PM_{10} and $PM_{2.5}$).

Equipment Tiers and Emission Factors

Equipment tiers refer to a generation of emission standards established by the US EPA and CARB that apply to diesel engines in off-road equipment. The "tier" of an engine depends on the model year and horsepower rating; generally, the newer a piece of equipment is, the greater the tier it is likely to have. Excluding engines greater than 750 horsepower, Tier 1 engines were manufactured generally between 1996 and 2003. Tier 2 engines were manufactured between 2001 and 2007. Tier 3 engines were manufactured between 2006 and 2011. Tier 4 engines are the newest and some incorporate hybrid electric technology; they were manufactured after 2007.

CalEEMod contains an inventory of construction equipment that incorporates estimates of the number of equipment, their age, their horsepower, and equipment tier from which rates of emissions are developed. The CalEEMod default tier mix was used in this analysis for the estimation of emissions from onsite construction equipment for the unmitigated scenario.

CalEEMod's off-road emission factors are based on the equipment populations from the OFFROAD2011 model. For the unmitigated scenario, emission factors for the applicable year of each construction phase were used.

Construction Parameters

The model adjusts the construction activity based on the land use type and amounts input into the model. Project-specific model inputs for construction include:

- Construction is scheduled to begin in 2023 and last approximately 12 months
- Construction of 690,770 sf of Industrial Park, approximately 12.76 acres of paving, roads, and other impervious surfaces
- Project construction includes demolition and removal of approximately 100,000 sf of existing buildings, approximately 24 acres of AC pavement and concrete pads, and approximately 3.7 acres of gravel.
- The tonnage of materials to be removed was estimated using CalEEMod's assumed demolition weight of 0.046 tons/sf of building removed, and CalRecycle's estimated demolition materials conversion factors (CalRecycle 2021). A total of 22,700 tons of demolition materials (building, pavement, and gravel) was entered into CalEEMod.

Construction Schedule

The construction schedule would is provided in Table 5.

Table 5 Project Construction Schedule

No.	Construction Phase	Start Date	End Date	Working Days per Week	Duration (working days)
1	Demolition	07/01/2023	08/15/2023	5	32
2	Site Preparation	08/01/2023	08/31/2023	5	21
3	Grading	09/01/2023	10/31/2023	5	43
4	Building Construction[1]	11/01/2023	07/01/2024	5	174
5	Underground Utility Trenching	02/15/2024	04/15/2024	5	43
6	Sidewalk Curb Gutter Offsite Road	02/15/2024	06/01/2024	5	76
7	Architectural Coatings	03/01/2024	03/15/2024	5	10
8	Paving	04/15/2024	05/06/2024	5	15

Notes:

1. Building Construction Includes Tank Construction

A variety of construction equipment would be used to build the project, including various sized cranes, excavators, loaders, backhoe, small dozer, loader, backhoe, rollers, pavers, and welders. The construction equipment list is shown in Table 3. The activity for construction equipment is based on the horsepower and load factors of the equipment. In general, the horsepower is the power of an engine—the greater the

horsepower, the greater the power. The load factor is the average power of a given piece of equipment while in operation compared with its maximum rated horsepower. A load factor of 1.0 indicates that a piece of equipment continually operates at its maximum operating capacity. This analysis uses the CalEEMod default load factors for off-road equipment

Table 6 Construction Equipment Assumptions

Equipment	Number	Average Hours/Day	Horsepower	Load Factor
Phase 1 Demolition				
Concrete/Industrial Saw	4	8.0	81	0.73
Excavators	3	8.0	158	0.38
Rubber Tired Dozers	2	8.0	247	0.40
Tractors/Loaders/Backhoes	3	8.0	97	0.37
Phase 2 Site Preparation				
Rubber Tired Dozers	3	8.0	247	0.40
Tractors/Loaders/Backhoes	4	8.0	97	0.37
Phase 3 Grading				
Excavators	1	0.60	158	0.38
Graders	4	2.30	187	0.41
Graders	2	5.60	187	0.41
Off-highway Tractors	1	0.70	124	0.44
Off-highway Tractors	1	2.20	124	0.44
Rollers	2	1.90	80	0.38
Rubber Tired Dozers	1	0.90	203	0.40
Scrapers	2	2.60	570	0.48
Scrapers	2	1.70	407	0.48
Scrapers	1	1.50	250	0.48
Tractors/Loaders/Backhoes	1	1.30	97	0.37
Phase 4 Building Construction				
Cranes	1	7.0	231	0.29
Forklifts	3	8.0	89	0.20
Generator Sets	1	8.0	84	0.74
Tractors/Loaders/Backhoes	3	7.0	97	0.37
Welders	1	8.0	46	0.45
Phase 5 Underground Utility Trenching84				
Generator Sets	2	4.0	84	0.74
Tractors/Loaders/Backhoes	2	6.0	97	0.37
Trenchers	2	6.0	78	0.50
Phase 6 Sidewalk Curb Gutter Offsite Road				
Cement and Motor Mixers	1	1.50	9	0.56

Equipment	Number	Average Hours/Day	Horsepower	Load Factor
Concrete/Industrial Saws	1	1.50	84	0.73
Paving Equipment	1	1.50	132	0.36
Phase 7 Architectural Coating				
Air Compressors	1	6	78	0.48
Phase 8 Paving				
Pavers	2	8.0	130	0.42
Paving Equipment	2	8.0	132	0.36
Rollers	2	8.0	80	0.38

Notes:

[1.] Building Construction Includes Tank Construction

Soils and Material Movement

Default fugitive dust calculations based on equipment type, equipment usage hours, and materials movement.

Construction Offsite Trips

CalEEMod default values for worker trip generation, trip length, and vehicle fleet were used in this analysis. Vendor trips were also calculated using CalEEMod default values. The CalEEMod default vehicle type (Heavy Heavy-Duty Truck) was used for haul trips. A summary of the construction related trips is shown in Table 7. The total number of offsite construction trips would not necessarily occur on the same day since the various construction activities would vary each day.

Table 7 Construction Offsite Trips

Construction Phase	Construction Trips		
	Worker (trips per day)	Vendor (trips per day)	Hauling (total trips)
Phase 1 Demolition	30	0	2,245
Phase 2 Site Preparation	18	0	0
Phase 3 Grading	45	0	0
Phase 4 Building Construction	524	204	0
Phase 5 Underground Utility Trenching	15	0	0
Phase 6 Sidewalk, Curb Gutter Offsite	8	0	0
Phase 7 Architectural Coating	105	0	0
Phase 8 Paving	15	0	0

Operation

Operational emissions are those emissions that occur during operation of the project. Operations of the facility are assumed to begin in 2024. Operational emissions modeling were broken into mobile and non-

mobile sources. Mobile sources include employee, vendor, and commercial-customer trips. Non-mobile emissions sources include area, energy use, offroad and stationary sources, waste generation and disposal, and water consumption and disposal. The parameters for each emissions source is provided below.

Mobile Sources

Motor vehicle emissions refer to exhaust and road dust emissions from the motor vehicles that would travel to and from the project site. CalEEMod contains assumptions for trip length based on the type of trip (trip type), distribution of trip types, and trip purpose. Each of these components is used in the VMT calculations. The trip types, trip lengths, distribution and trip purpose distribution are detailed below and in the CalEEMod output, which is included in Appendix A.

Land use trip types used in the analysis consist of the following categories, each with its own trip length: home-work (H-W) / commercial-work (C-W), home-school (H-S) / commercial-commercial (C-C), and home-other (H-O) / commercial-nonwork (C-NW) such as delivery trips.

The model then modifies the trip lengths according to trip purpose. Trip purposes are

- Primary: Primary trips are assumed to be dedicated to travel to the land use from the originating source or from the land use to the ultimate destination.
- Diverted: Diverted trips are trips that may occur as a result of travel to multiple land uses, such as would occur for running errands or other trip linking activity. Diverted trips are assumed to be 25 percent of the primary trip length.
- Pass-by trips: Pass-by trips are those that occur as minor jaunts off another trip, such as pulling into a gas station while on the way to work. Pass-by trips are assumed to be 0.1 mile in length and are a result of no diversion from the primary route.

The trip length per trip type assumptions are for primary trip purposes, and serve as the 'starting point' for the VMT calculations. The CalEEMod default trip purposes of 79 percent primary, 19 percent diverted, and 2 percent pass-by was used.

CalEEMod default vehicle emission factors for year 2024 and the trip generation rates identified in the Project's traffic impact study were used. The trip generation inputs are shown in Table 8.

Table 8 Trip Generation

Land Use	Units	Daily Activity	
		Trip Rate	Total Trips
Existing Use	45 employees	3.05	137
Proposed Use	690.77 ksf	3.37	2,329
Net New Trips			2,192

Source: W-Trans 2021.

The vehicle fleet mix is defined as the mix of motor vehicle classes active during the operation of the project. Emission factors are assigned to the expected vehicle mix as a function of vehicle class, speed, and fuel use (gasoline and diesel-powered vehicles). The CalEEMod default fleet mix was used modified to reflect the fleet mix identified in the Project's traffic impact study. Specifically, the Project is anticipated to

have a fleet mix that is comprised of 15 percent heavy-heavy truck trips, and the remainder from light-duty automobiles. The project-specific vehicle fleet mix is shown in Table 9.

Table 9 Operational Fleet Mix

Types of Vehicles	Project Fleet (%)	
	CalEEMod Default	Project-Specific Inputs
Light-duty automobile (LDA)	0.535449	0.535449
Light-duty truck (LDT1)	0.056642	0.056642
Light-duty truck (LDT2)	0.175177	0.175177
Medium duty vehicle (MDV)	0.133432	0.082732
Light-heavy duty truck (LHDT1)	0.032505	0.000000
Light-heavy duty truck (LHDT2)	0.007974	0.000000
Medium-heavy duty truck (MHDT)	0.012804	0.000000
Heavy-heavy duty truck (HHDT)	0.010998	0.150000
Other bus (OBUS)	0.001732	0.000000
Urban bus (UBUS)	0.000629	0.000000
Motorcycle (MCY)	0.026564	0.000000
School bus (SBUS)	0.001947	0.000000
Motor home (MH)	0.004147	0.000000
Total	1.0000000	1.0000000

Source: CalEEMod 2021, W-Trans 2021.

Architectural Coatings

Paints release VOC emissions. The buildings in the project would be repainted on occasion. CalEEMod defaults were used for this purpose. CalEEMod defaults are: reapplication rate of 10 percent per year, with a paint emission factor of 250 grams per liter.

Consumer Products

Consumer products are various solvents used in non-industrial applications, which emit VOCs during their product use. “Consumer Product” means a chemically formulated product used by household and institutional consumers including, but not limited to, detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products; but does not include other paint products, furniture coatings, or architectural coatings.

The default emission factor developed for CalEEMod of 0.0000214 pound ROG per day, per square foot is based on a statewide factor and is not applicable to the project. The entire project would not use consumer products as specified above. The facility may have small kitchen areas and bathrooms that would use cleaning products. However, the default factor was applied for the purposes of conservative analysis.

Landscaping

CalEEMod estimated the landscaping equipment using the default assumptions in the model.

Electricity

There would be emissions from the power plants that would generate electricity to be used by the project (for lighting, etc.).

Electricity Emission Factor

Power is provided to the Project site by Pacific Gas & Electric (PG&E). The default CalEEMod emission factors for PG&E are from the year 2018, and does not reflect the most-recent verified carbon intensity factors, or the emission factors applicable to future years. PG&E's 2020 Power Content Label (PCL) reported data shows a substantial reduction in the carbon intensity factor of their energy as compared to the 2018 reported data. PG&E's 2020 reported carbon intensity factor was used in the analysis. Energy intensity factors are provided in Table 10.

Table 10 PG&E Energy Intensity Factors

Pollutant	Energy Intensity Factors (lbs/MWh)	
	2018 CalEEMod Default	2020 PCL Reported Data
Carbon Dioxide	203.983	160
Methane	0.033	*
Nitrous Oxide	0.004	*

Notes: * Not Reported
Source: CalEEMod 2021 , PG&E 2020

Electricity Consumption

CalEEMod has three categories for electricity consumption: electricity that is impacted by Title 24 regulations, non-Title 24 electricity, and lighting. The Title 24 uses are defined as the major building envelope systems covered by California's Building Code, Title 24 Part 6, such as space heating, space cooling, water heating, and ventilation. Lighting is separate since it can be both part and not part of Title-24. Since lighting is not considered as part of the building envelope energy budget, CalEEMod does not consider lighting to have any further association with Title 24 references in the program. Non-Title 24 includes everything else such as appliances and electronics. CalEEMod default energy consumption was used for all energy categories except Non-title 24. Model defaults for electricity consumption were used.

Natural Gas

There would be emissions from the combustion of natural gas used for the project (water heaters, heat, etc.). CalEEMod has two categories for natural gas consumption: Title 24 and non-Title 24. Default values contained in the CalEEMod model for natural gas consumption were used.

Water and Wastewater

Water Availability Analysis report estimated water consumption as 5 acre-feet (AF) of water consumption for Project landscaping, and 33.1 AF for process water, employee, and warehouse use (GHD 2022). There

would be greenhouse gas emissions from the use of electricity to pump water to the project and to treat wastewater. The operational water consumption calculations are provided in Table 11.

Table 11 Operational Change in Water Usage

Parameter	Water Use	
	Acre-Feet	Gallons
Existing Water Usage	5.55	1,808,473
Historic Water Usage	40.28	13,125,278
Proposed Project Water Usage	38.10	12,414,923
Landscaping	*5*	1,629,255
Remainder	*33.1*	10,785,668
Expected Increase Above Existing		
Landscaping	5	1,629,255
Remainder	27.55	8,977,195

Source: GHD 2022

Solid Waste

Greenhouse gas emissions would be generated from the decomposition of solid waste generated by the project. CalEEMod was used to estimate the greenhouse gas emissions from this source. The CalEEMod default for the mix of landfill types is as follows:

- Landfill no gas capture: 6 percent
- Landfill capture gas flare: 94 percent
- Landfill capture gas energy recovery: 0 percent

The CalEEMod default waste generation value of 856.55 tons of waste disposed per year was used for this analysis.

5. Impacts and Mitigation Measures

5.1 Air Quality Impacts

Impact AQ-1: Would the Project conflict with or obstruct implementation of the applicable air quality plan?

The 2017 Clean Air Plan contains 85 individual control measures in nine economic sectors: stationary (industrial) sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, water, and GHG pollutants. Many of these control measures require action on the part of the BAAQMD, the CARB, or local communities, and are not directly related to the actions undertaken for a commercial project. The Project would not prevent the BAAQMD from implementing these actions and none apply directly to the Project.

The 2017 Clean Air Plan contains air pollutant reduction strategies based growth forecasts, and those growth forecasts are defined in consultation with the Association of Bay Area Governments (ABAG) and local governments and with reference to local general plans. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Therefore, the if the Project is consistent with the assumptions used in preparing the forecasts presented in the 2017 Clean Air Plan, then the growth associated with the Project is consistent with the 2017 Clean Air Plan. The Napa County 2008 General Plan was prepared prior to the development of the 2017 Clean Air Plan; therefore, 2017 Clean Air Plan growth assumptions include the growth projected by the 2008 General Plan. The Project is consistent with the General Plan land use designation for the site; therefore, the Project would not exceed the growth assumptions contained in the 2017 Clean Area Plan and the impact would be less than significant.

Impact AQ-2: Would the Project result in a cumulatively considerable net increase in any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?

Construction

Construction activities are anticipated to take approximately 12 months to complete, which would include demolition, site grading, construction of athletic facilities, drainage improvements, ancillary buildings, and installation of sports lights.

Localize PM Emissions (Fugitive Dust)

For construction-related $PM_{2.5}$ and PM_{10} dust, the BAAQMD recommends incorporation of best management practices (BMPs) to reduce localized dust impacts to less than significant. As described in Section 2.3, Construction Best Management Practices, the Project would incorporate the BAAQMD's Basic Construction Measures for fugitive dust. Therefore, the Project would adhere to the basic construction measures recommended by BAAQMD, and the construction-phase impacts from fugitive $PM_{2.5}$ and PM_{10} dust would be less than significant.

Exhaust Criteria Pollutants

The types of air pollutants generated by construction activities are typically nitrogen oxides and particulate matter, such as dust and exhaust. Construction activities could temporarily increase levels of $PM_{2.5}$ and PM_{10} downwind of construction activity. These are temporary emissions that vary considerably from day-to-day and by the type of equipment and weather. In addition, CO and reactive organic gases are emitted during operation of gas and diesel-powered construction equipment.

Construction-related air pollutant emissions were estimated for the Project using CalEEMod version 2020.4.0. The Project's calculated total construction exhaust emissions were averaged over the estimated working days (12 months, 22 working days per month, for 264 total working days). The average daily emissions were then compared to the BAAQMD thresholds of significance for criteria pollutants. As shown in Table 12, the estimated construction-related emissions are less than the thresholds of significance adopted by the BAAQMD. Therefore, the impact from construction related emissions would be less than significant.

Table 12 Construction Exhaust Air Emissions

Parameter	Air Pollutant Emissions (average lbs/day)			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
Project Construction Emissions	31.95	30.42	4.50	1.00
BAAQMD Thresholds	54	54	82	54

Source: BAAQMD 2017.

Operation

Following construction, operation of the Project result in operational trips, as well as energy consumption. Project operational emissions were estimated using CalEEMod version 2020.4.0. As shown in the Table 13, the Project's operational emissions are below the BAAQMD's thresholds. Therefore, the Project's operational emissions are considered to have a less than significant impact.

Table 13 Operational Air Emissions

Parameter	Air Pollutant Emissions			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
Average Daily Emissions (lbs/day)				
Project Emissions[1]	20.71	26.54	12.66	3.66
BAAQMD Thresholds	54	54	82	54
Annual Emissions (tpy)				
Project Emissions	3.64	4.21	1.97	0.58
BAAQMD Thresholds	10	10	15	10

Notes: 1. Emissions reported for maximum seasonal emissions.

Significance **Less than Significant**

Mitigation **No mitigation is required.**

Impact AQ-3: Would the Project expose sensitive receptors to substantial pollutant concentrations?

Construction

Sensitive receptors are defined by the BAAQMD as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. The nearest location of potential sensitive receptors is the approved County Jail that will be located approximately 100 feet west of the project boundary, and approximately 500 feet away from the limits of project-associated heavy-heavy truck activity. Additionally, the residential units at the Napa State Hospital are located approximately 350 feet north of the project boundary, and 680 feet away from the

limits of project-associated heavy-heavy truck activity. No other sensitive receptors are located within 1,000 feet of the project boundary.

Construction equipment and heavy-duty truck traffic generate diesel particulate matter (DPM) exhaust, which is a known toxic air contaminant. DPM is a human carcinogen and chronic (long-term) inhalation exposure to DPM poses a chronic health risk. As described in Section 2.3, Construction Best Management Practices, the Project would incorporate the BAAQMD's Basic Construction Measures. These measures also reduce DPM emissions.

Due to short construction duration (12 months), size of the project site and continuous shifting of the construction activities, and the distance from the Project activity to the residences, prolonged exposure of sensitive receptors to substantial pollutant concentrations would not occur. The impact would be less than significant.

During Project operations, the project is anticipated to generate 2,329 total weekday trips, approximately 350 trips per day would be truck trips (W-Trans 2021). Onsite truck activity would be approximately 500 feet away from the nearest location of sensitive receptors.

For reference, the CARB Air Quality and Land Use Handbook: A Community Health Perspective (Land Use Handbook) provides CARB's recommendations regarding the siting of new sensitive land uses near facilities that are associated with health risks, particularly from air toxic emissions. The Land Use Handbook has siting guidance for freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities. Although this guidance is for siting new locations of sensitive receptors, the facility distance and size guidance may be used as a screening level to identify when additional analysis is warranted during environmental review, including CEQA.

The Land Use Handbook advisory recommendation for relevant land uses are:

Freeways and High Traffic Roads

- Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.

At 2,329 total weekday trips, 350 of which would be trucks, the Project's vehicle activity would comprise a fraction of the sizes warranting recommended distances as contained in the CARB's Land Use Handbook. Due to the distance from truck ingress/egress and receptors and limited number of truck trips, exposure of sensitive receptors to substantial pollution concentration would be less than significant.

Significance **Less than Significant**

Mitigation **No mitigation is required.**

Impact AQ-4: **Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

Implementation of the Project would not result in major sources of odor. The Project type is not one of the common types of facilities known to produce adverse odors (i.e., landfill, coffee roaster, wastewater treatment facility, etc.). Minor odors from the use of equipment during construction activities would be intermittent and temporary and would dissipate rapidly from the source with an increase in distance.

In addition, operation of the Project would not result in locating sensitive receptors near an existing odor source. Thus, the Project would not create objectionable odors affecting a substantial number of people. The impact would be less than significant.

Significance **Less than Significant**

Mitigation **No mitigation is required.**

5.2 Greenhouse Gas Impacts

Impact GHG-1: **Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Construction and operational emissions were estimated as discussed in Section 5.2, Emissions Modeling. In order to assess the potential impact of construction-generated emissions, the construction GHG emissions are annualized over an assumed 30-year project lifespan, added to operational emissions, and compared against a threshold of 1,100 $MTCO_2e$. The Project's construction-generated greenhouse gas emissions of 1,203 $MTCO_2e$ annualized over 30 years would equal 40.11 $MTCO_2e$ per year.

As shown in Table 14, the Project would exceed the SMAQMD's recommended threshold of significance for greenhouse gas impacts, and mitigation is required to reduce the impact to less than significant. The SMAQMD identifies recommended "Tier 2 Best Management Practices (BMP 3)" to reduce a Project's operational greenhouse impact if the threshold of significance is exceeded.

Table 14 Project Greenhouse Gas Emissions

Parameter	Metric Tons of Carbon Dioxide Equivalent ($MTCO_2e$)
Area	0.01
Energy	1,486.64
Mobile	2,457.65
Waste	430.76
Water	16.21
Construction (Annualized)[1]	40.11
Total Annual Emissions	4,431.38

Parameter	Metric Tons of Carbon Dioxide Equivalent ($MTCO_2e$)
SMAQMD Thresholds	1,100

Notes: 1.Construction emissions are annualized over an assumed 30-year operational Project lifespan.

If a project achieves BMP 3, then the operational impact is considered less than significant, and no additional analysis is required. Projects that do not meet the BMP 3 are required to implement additional measures. BMP 3 consists of reductions in vehicle miles traveled (VMT) that are based on adopted SB 743 targets and includes quantifiable VMT reduction targets for residential, office, and retail projects.

BMP 3 does not include industrial land uses. SMAQMD's guidance provides that a project that meets the de minimis criteria for VMT in the Office of Planning and Research's (OPR) SB 743 Technical Advisory on Evaluating Transportation Impacts in CEQA, must document the qualifying criteria to satisfy the BMP 3 requirement.

The Project's VMT was analyzed in the Traffic Impact Analysis (TIA) Report prepared by W-Trans determined that the Project would achieve a 6.4 percent of the 15 percent. SB 743-informed reduction target. Per the Project TIA, additional reductions totaling 8.6 percent would need to be achieved through implementation of Transportation Demand Management (TDM) strategies aimed at reducing the project's automobile VMT.

The TIA identified TDMs that achieve an 11 percent reduction in operational VMT. Implementation of the TDMs would result in the Project achieving the SB 743 VMT target reduction of 15 percent. With Implementation of Mitigation Measure GHG-1, the Project's would result in a less-than-significant impact for greenhouse gas emissions.

Significance

Potentially Significant

Implementation of Mitigation Measure GHG-1 would reduce the impact of greenhouse gas generation to less than significant through requiring TDM strategies that would result in the Project achieving a 15 percent reduction in VMT.

Mitigation

GHG-1, Implement Transportation Demand Management (TDM) for Employees

The Project Applicant shall incorporate the Transportation Demand Management (TDM) strategies that would achieve, at a minimum, 8.6 percent VMT reduction. The following TDM strategies have been calculated to achieve the required level of reduction:

- Ridesharing Program
- Ridematching
- Vanpooling
- Dedicated Transportation Coordinator
- Welcome Packet for New Employees

- Online Transportation Information
- Monitor Performance

Significance After Mitigation:

Less than Significant with Mitigation

Impact GHG-2: Would the Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

CARB 2017 Climate Change Scoping Plan provides California's climate policy portfolio and recommended strategies to put the State on a pathway to achieve the 2030 target. The scenario includes ongoing and statutorily required programs, continuing the Cap-and-Trade Program, and high-level objectives and goals to reduce GHGs across multiple economic sectors. Existing programs, also known as "known commitments," identified by the 2017 Climate Change Scoping Plan include: SB 350, the Low Carbon Fuel Standard, CARB's Mobile Source Strategy, SB 1383 for short-lived climate pollutants and California's Sustainable Freight Action Plan. The high-level objective and goals recommendations cover the energy, transportation, industry, water, waste management, agriculture, and natural and working lands, and are to be implemented by a variety of State agencies.

The Project is analyzed for consistency with the 2017 Climate Change Scoping Plan in Table 15.

Table 15 Consistency Analysis between Project and Climate Change Scoping Plan.

Scoping Plan Reduction Measure	Consistency/Applicability Determination
California Cap-and-Trade Program Linked to Western Climate Initiative Implement a broad-based California Cap-and-Trade program to provide a firm limit on emissions. Link the California cap-and-trade program with other Western Climate Initiative Partner programs to create a regional market system to achieve greater environmental and economic benefits for California. Ensure California's program meets all applicable AB 32 requirements for market-based mechanisms.	**Consistent**. This is a statewide measure that cannot be implemented by the Project or lead agency. PG&E obtains 30 percent of its power supply from renewable sources such as solar, wind, and geothermal, in conformance with various regulations (PG&E 2021). The State's Renewable Portfolio goals require energy producers to achieve a 60% renewables goal by 2030, and 100% carbon-free by 2045.
California Light-Duty Vehicle Greenhouse Gas Standards Implement adopted standards and planned second phase of the program. Align zero-emission vehicle, alternative	**Consistent**. This is a statewide measure that cannot be implemented by the Project or lead agency. However, the standards would be applicable to the light-duty vehicles that will access the Project Site.

Scoping Plan Reduction Measure	Consistency/Applicability Determination
and renewable fuel, and vehicle technology programs with long-term climate change goals.	
Energy Efficiency Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.	**Consistent**. This is a measure for the state to increase its energy efficiency standards in new buildings. The Project would be required to build to the latest standards in energy efficiency.
Renewable Portfolio Standard Achieve 50 percent renewable energy mix statewide by 2030. Renewable energy sources include (but are not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas	**Consistent**. This is a statewide measure that cannot be implemented by the Project or lead agency. The Project would receive energy from PG&E which is required to achieve a 60% renewables goal by 2030 and be 100% carbon-free by 2045.
Low Carbon Fuel Standard Develop and adopt the Low Carbon Fuel Standard.	**Consistent**. This is a statewide measure that cannot be implemented by the Project or lead agency. The standard would be applicable to the fuel used by vehicles that will access the Project Site.
Regional Transportation-Related Greenhouse Gas Targets Develop regional greenhouse gas emissions reduction targets for passenger vehicles. This measure refers to SB 375.	**Not Applicable**. This is a statewide measure calling for the development of GHG emission reduction targets.
Vehicle Efficiency Measures Implement light-duty vehicle efficiency measures.	**Not Applicable**. This is a statewide measure that cannot be implemented by the Project or lead agency.
Goods Movement Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities.	**Not Applicable**. The Project does not propose any changes to modes of transportation of goods.
Million Solar Roofs Program Install 3,000 MW of solar-electric capacity under California's existing solar programs.	**Not Applicable**. This measure is intended to increase solar power throughout California, which is being done by various utility companies and solar programs.
Medium/Heavy-Duty Vehicles Adopt medium and heavy-duty vehicle efficiency measures.	**Consistent**. This is a statewide measure that cannot be implemented by the Project or lead agency. However, the standards would be applicable to the medium and heavy-duty vehicles that would access the Project Site.
Industrial Emissions Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce greenhouse gas emissions and provide other pollution reduction co-benefits. Reduce greenhouse gas emissions from fugitive	**Not Applicable**. This measure will apply to the direct GHG emissions at major industrial facilities. The Project size and estimated generation of greenhouse gases are less than the threshold for large or 'major' industrial sources.

Scoping Plan Reduction Measure	Consistency/Applicability Determination
emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive methane emissions and reduce flaring at refineries.	
High Speed Rail Support implementation of a high-speed rail system.	**Not Applicable**. This is a statewide measure that cannot be implemented by the Project or lead agency. High speed rail systems are not part of this Project.
Green Building Strategy Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	**Consistent**. The Project would comply with the California Energy Code and thus include the required energy efficiency features.
High Global Warming Potential Gases Adopt measures to reduce high global warming potential gases.	**Consistent**. This measure is applicable to the high global warming potential gases such as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF6) found in air conditioning and commercial refrigerators. The Project's cooling system would utilize equipment that complies with this measure. Consistent with new State law, the project would be required to use refrigerants with a Global Warming Potential of 150 or less, and to comply with the Refrigerant Management Program that will be in place prior to Project operations.
Recycling and Waste Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero-waste.	**Consistent**. The Project does not include a landfill. The project would reduce waste with implementation of state mandated recycling and reuse mandates.
Sustainable Forests Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation.	**Not Applicable**. The Project would not include tree removal or areas for reforestation.
Water Continue efficiency programs and use cleaner energy sources to move and treat water.	**Consistent**. This is a measure for State and local agencies. However, the Project would adhere to California Green Building Standards Code regulation.
Agriculture In the near-term, encourage investment in manure digesters and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020.	**Not Applicable**. The Project does not include agricultural production.

Source of Scoping Plan Reduction Measures: CARB 2017

Significance **Less than Significant**

Mitigation **No mitigation is required.**

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7. Report Preparers

GHD

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Appendices

Appendix A

CalEEMod Output



Wetland & Biological Resources Assessment

Proposed Napa 55 Commercial Site
11 Basalt Rd. Napa County, CA 94559
APN: 046-370-024



Prepared For:
Panattoni Development Corporation
8775 Folsom Blvd
Sacramento, CA 95826

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1.0 INTRODUCTION

Barnett Environmental has conducted a Biological Resource Assessment (BRA) of a ±55-acre property ("Study Area") at 11 Basalt Road in Napa, California (APN: 046-370-024), near the intersection Basalt Road and California Highway 221 in southern Napa County (Figure 1). It is within Section 23, Township 5 North, Range 4 West of the Napa California 7.5-minute USGS quadrangle (Figure 1) and lies within the Napa River watershed (Hydrologic Unit Code 18050002) at approximately 35 – 80 feet in elevation above mean sea level (msl) and centered at 38°16'0.30" North latitude and 122°16'2.72" West longitude. The parcel is a partially abandoned industrial/commercial site with a large asphalt pavement area, and surrounding uses include industrial and agricultural.

Beyond a formal delineation of all wetlands and "other waters of the U.S." within the entire Study Area according to U.S. Army Corps of Engineers (1987) protocol, this report:

- Identifies and describes the vegetation communities present;
- Records all plant and animal species observed during the field survey(s);
- Evaluates and identifies sensitive habitats and special status plant and animal species that may occur in the Study Area and could be affected by project activities; and
- Provides conclusions and recommendations for mitigating potential adverse impacts to identified resources.

2.0 REGULATORY SETTING

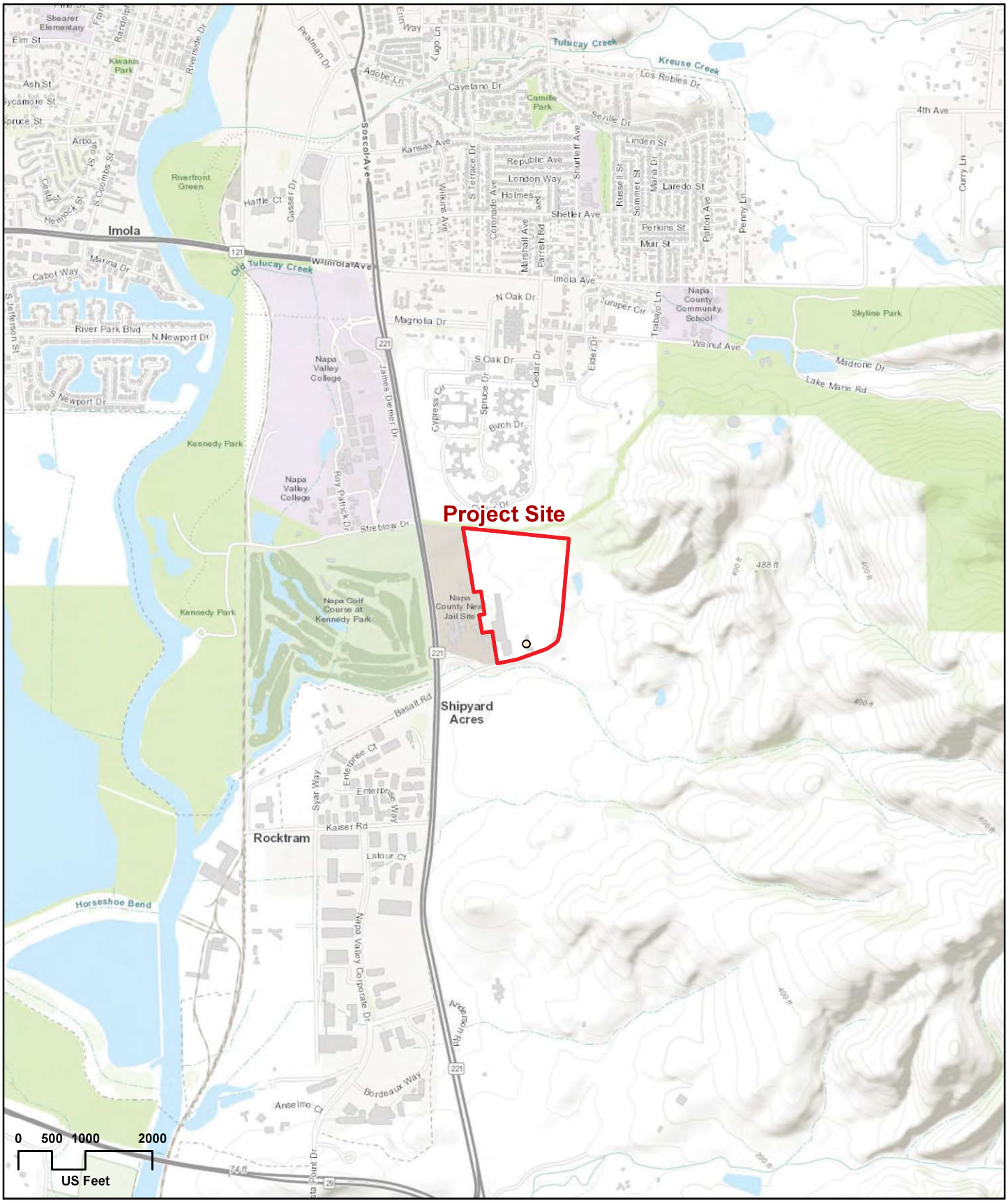
The following federal laws, regulations and/or policies provide the legal framework guiding the protection of biological resources. We have included those laws most relevant to biological and wetland resources in and around the Study Area.

2.1 FEDERAL LAWS & REGULATIONS

FEDERAL ENDANGERED SPECIES ACT (FESA)

The FESA, enacted in 1973, prohibits the taking, possession, sale, or transport of endangered species. Under the FESA, the Secretary of the Interior and the Secretary of Commerce jointly have the authority to list a species as threatened or endangered. Both the National Marine Fisheries Service (NMFS) and the U.S. Fish & Wildlife Service (USFWS) administer FESA. NMFS is accountable for animals that are threatened or endangered (16 United States Code [USC] 1533[c]) and spend most of their lives in marine waters, including marine fish, most marine mammals, and anadromous fish such as Pacific salmon. The USFWS is accountable for all other federally listed plants and animals.

Pursuant to the requirements of FESA, a federal agency reviewing a project within its jurisdiction must determine whether any federally listed threatened or endangered species could be present in the Study Area and whether the project will have a potentially significant impact on such species. In addition, federal agencies are required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed



Source: USGS 7.5-Minute Topographic Quads Napa, Cuttings Wharf, Mount George & Cordelia, Napa County,CA

FIGURE 1 - PROJECT AREA LOCATION

NAPA 55 PANATTONI PROJECT • NAPA COUNTY, CA

Date: December 30, 2019

N

BARNETT ENVIRONMENTAL

under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC 1536[3], [4]).

Projects that would result in a "take" of any federally-listed threatened or endangered species are required to obtain authorization from NMFS and/or USFWS through either Section 7 (interagency consultation) or section 10(a) (incidental take permit) of FESA, depending on whether the federal government is involved in permitting or funding the project. The Section 7 authorization process is used to determine if a project with a federal nexus would jeopardize the continued existence of a listed species and what mitigation measures would be required to avoid jeopardizing the species. The Section 10(a) process allows take of endangered species or their habitat in non-federal activities.

MIGRATORY BIRD TREATY ACT

The Migratory Bird Treaty Act (MBTA) regulates or prohibits taking, killing, possession of, or harm to migratory bird species listed in Title 50 Code of Federal Regulations (CFR) Section 10.13. The MBTA is an international treaty for the conservation and management of bird species that migrate through more than one country and is enforced in the United States by the USFWS. Hunting of specific migratory game birds is permitted under the regulations listed in Title 50 CFR 20. The MBTA was amended in 1972 to include protection for migratory birds of prey (raptors).

BALD AND GOLDEN EAGLE PROTECTION ACT

The federal Bald and Golden Eagle Protection Act regulates or prohibits taking, possession, sale, purchase, barter, offer to sell, purchase or barter, transport, export or import, of any bald or golden eagle, alive or dead, including any part, nest, or egg, unless allowed by permit (16 U.S.C. 668(a); 50 CFR 22). "Take" includes pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb (16 U.S.C. 668c; 50 CFR 22.3).

FEDERAL CLEAN WATER ACT (CWA)

Section 404

Section 404 of the CWA identifies the U.S. Army Corps of Engineers (USACE) as the principal authority to regulate activity that could discharge fill or dredge material or otherwise adversely modify wetlands or Waters of the U.S. (WOUS). The USACE implements the federal policy embodied in Executive Order 11990, which, when implemented, is intended to result in no net loss of wetland values or function. U.S. Congress has authorized the Environmental Protection Agency (EPA) to have a specific oversight role over USACE's authority.

Section 401

The State Water Resources Control Board (SWRCB) has authority over wetlands through Section 401 of the CWA, as well as the Porter-Cologne Act, California Code of Regulations Section 3831(k), and California Wetlands Conservation Policy.

The CWA requires that an applicant for a Section 404 permit (to discharge dredged or fill material into waters of the United States) first obtain a certificate from the appropriate state agency stating that the fill is consistent with the State's water quality standards and criteria. In California, the authority to either grant certification or waive

the requirement for permits is delegated by the SWRCB to the nine regional boards. The Central Valley Regional Water Quality Control Board (CVRWQCB) is the appointed authority for Section 401 compliance in the project site. A request for certification or waiver is submitted to the Regional Board at the same time an application is filed with the USACE. The regional board has 60 days to review the application and act on it. Because no USACE permit is valid under the CWA unless "certified" by the state, these boards may effectively veto or add conditions to any USACE permit.

2.2 STATE LAWS & REGULATIONS

CALIFORNIA ENDANGERED SPECIES ACT (CESA)

The CESA was enacted in 1984. Under the CESA, the California Fish and Wildlife Commission (CFWC) has the responsibility for maintaining a list of threatened and endangered species, while The California Department of Fish & Wildlife (CDFW) is responsible for enforcement. CDFW also maintains lists of species of special concern. A Species of Special Concern (CSC) is a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- is extirpated from the State or, in the case of birds, in its primary seasonal or breeding role;
- is listed as Federally-, but not State-, threatened or endangered;
- meets the State definition of threatened or endangered but has not formally been listed;
- is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status;
- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.

CESA prohibits the take of California listed animals and plants in most cases, but CDFW may issue incidental take permits under special conditions. Pursuant to the requirements of CESA, a State agency reviewing a project within its jurisdiction must determine whether any state-listed endangered or threatened species could be present in the project site and determine whether the project would have a potentially significant impact on such species. In addition, CDFW encourages consultation on any project that could affect a listed or candidate species.

FISH AND GAME CODE – SECTIONS 1600-1616

Under Sections 1600-1616 of the California Fish and Game Code, the CDFW regulates activities that would alter the flow, bed, channel, or bank of streams and lakes. The limits of CDFW's jurisdiction are defined in the code as the "… bed, channel or bank of any river, stream, or lake designated by the department in which there is at any time an existing fish or wildlife resource or from which these resources derive benefit ..." (Section 1601). In practice, the CDFW usually marks its jurisdictional limit at the top of the stream or bank, or at the outer edge of the riparian vegetation, whichever is wider.

The CDFW also derives its authority to oversee activities that affect wetlands from state legislation. This authority includes Sections 1600-1616 of the Fish and Game Code (lake and streambed alteration agreements), Section

30411 of the California Coastal Act (CDFW becomes the lead agency for the study and identification of degraded wetlands within the Coastal Zone), CESA (protection of state listed species and their habitats - which could include wetlands), and the Keene-Nejedly California Wetlands Preservation Act of 1976 (states a need for an affirmative and sustained public policy program directed at wetlands preservation, restoration, and enhancement). In general, the CDFW asserts authority over wetlands within the state either through review and comment on USACE Section 404 permits, review and comment on CEQA documents, preservation of state listed species, or through stream and lakebed alteration agreements.

FISH AND GAME CODE – SECTIONS 1900-1913

These Sections embody the Native Plant Protection Act, which is intended to preserve, protect, and enhance endangered or rare native plants in the state. The act directs CDFW to establish criteria for determining what native plants are rare or endangered. Under Section 1901, a species is endangered when its prospects for survival and reproduction are in immediate jeopardy from one or more causes. A species is rare when, although not threatened with immediate extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens. Under the act, CDFW may adopt regulations governing the taking, possessing, propagation or sale of any endangered or rare native plant.

Section 1913 of that Act allows landowners in conducting certain activities to take actions that will destroy rare or endangered plants, provided that, where the Department of Fish and Game (DFG) has previously notified the owner "that rare or endangered plants are growing" on his or her land, the owner notifies CDFW "at least 10 days in advance of changing the land" to allow the state agency to come and "salvage" the plants. Subject to this requirement, section 1913 states that "the presence of rare or endangered plants" on a property shall not restrict (1) timber operations conducted pursuant to an approved timber harvest plan, (2) "required mining assessment work pursuant to federal or state mining laws," (3) "the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, other right-of-way by the owner of the land or his agent," or (4) "the performance by a public agency or publicly or privately owned public utility of its obligation to provide service to the public."

FISH AND GAME CODE – SECTIONS 3503, 3503.5, 3513

Fish and Game Code Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Fish and Game Code Section 3503.5 protects all birds-of-prey (raptors) and their eggs and nests. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the Migratory Bird Treaty Act.

FISH AND GAME CODE – SECTIONS 3511, 4700, 5050, AND 5515

Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code designate certain species as "fully protected." Fully protected species, or parts thereof, may not be taken or possessed at any time, and no provision of the CFWC or any other law may be construed to authorize the issuance of permits of licenses to take any fully protected species. No such permits or licenses heretofore issued may have any force or effect for any such purpose, except that the CFGC may authorize the collecting of such species for necessary scientific research. Legally imported and fully protected species or parts thereof ay be possessed under a permit issued by CDFW. Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act established the SWRCB and each Regional Water Quality Control Board (RWQCB) as the principal state agencies for coordinating and controlling water quality in California. Responsibility for the protection of water quality in California rests with the SWRCB and nine RWQCBs. The SWRCB establishes statewide policies and regulations for the implementation of water quality control programs mandated by federal and state water quality statutes and regulations. Pursuant to the Act, each of California's nine regional boards must prepare and periodically update basin plans that set forth water quality standards for surface and groundwater, as well as actions to control point and non-point sources of pollution to achieve and maintain these standards. Basin plans offer an opportunity to achieve wetlands protection through enforcement of water quality standards.

The Porter-Cologne Water Quality Control Act provides that "All discharges of waste into the waters of the State are privileges, not rights." Waters of the State are defined in Section 13050(e) of the Porter-Cologne Water Quality Control Act as "…any surface water or groundwater, including saline waters, within the boundaries of the state." All dischargers are subject to regulation under the Porter-Cologne Water Quality Control Act, including both point and nonpoint source dischargers. The RWQCB has the authority to implement water quality protection standards through the issuance of permits for discharges to waters at locations within its jurisdiction, which would include the project site. As noted above, the RWQCB is the appointed authority for Section 401 compliance in the project site. If the USACE determines that they have no regulatory authority on the project site and they also determine that a CWA Section 404 permit is not required, the project proponent could still be responsible for obtaining the appropriate CWA Section 401 permit or waiver from RWQCB for impacts to Waters of the State.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

Although specific federal and state statutes protect threatened and endangered species, California Environmental Quality Act (CEQA) Guidelines Section 15380(b) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain criteria. These criteria have been modeled after the definition in FESA and the section of the California Fish and Game Code dealing with rare or endangered plants and animals and allows a public agency to undertake a review to determine if a significant effect on a species that has not yet been listed by either the USFWS or CDFW (i.e., species of concern) would occur. Whether a species is rare, threatened, or endangered can be legally significant because, under CEQA Guidelines Section 15065, an agency must find an impact to be significant if a project would "substantially reduce the number or restrict the range of an endangered, rare, or threatened species." Thus, CEQA provides an agency with the ability to protect a species from a project's potential impacts until the respective government agencies have an opportunity to designate the species as protected, if warranted.

2.3 LOCAL LAWS & REGULATION

NAPA COUNTY CONSERVATION POLICIES

Napa County has adopted a number of general plan policies related to the protection of biological resources (Napa County 2009). These policies are summarized below.

Fish and wildlife habitat (Napa County General Plan, Natural Resources Protections, Policy Con-13). – The Napa County General Plan states that the County residential, commercial, industrial, recreational, agricultural, and water development projects must include effective mitigation measures and management plans to offset impacts to fisheries and habitat supporting special status species. Mitigation measures and management plans should include, but would not be limited to, provisions to provide protection for habitat supporting specials status species through buffering or other means, provide replacement onsite or offsite habitat of similar quantity and quality, and enhance existing habitat values.

Sensitive biotic communities – (Napa County General Plan, Natural Resources Protections, Policy Con-17) The General Plan has a policy to "preserve and protect native grasslands, serpentine grasslands, mixed serpentine chaparral, and other sensitive biotic communities and habitats of limited distribution." The County has the discretion to require mitigation that would result in "no net loss of sensitive biotic communities and habitats of limited distribution through avoidance, restoration, or replacement where feasible." If avoidance, restoration, or replacement is not feasible, like habitat should be preserved at a 2:1 ratio or greater within Napa County to avoid significant cumulative loss of valuable habitats.

Oak woodlands (Napa County General Plan, Natural Resources Protection, Policy Con-24) – Napa County seeks to "maintain and improve oak woodland habitat to provide for slope stabilization, soil protection, species diversity, and wildlife habitat." Measures to achieve this goal include, but are not limited to:

- Preserving oak trees and other significant vegetation that occur near the heads of drainages or depressions to maintain diversity;
- Complying with the Oak Woodlands Preservation Act (Public Resources Code [PRC] Section 21083.4) to conserve the integrity and diversity of oak woodlands and retain, to the maximum extent feasible, existing oak woodland and chaparral communities and other significant vegetation; and
- Providing replacement of lost oak woodlands or preservation of like habitat at a 2:1 ratio when retention of existing vegetation is not feasible.

Riparian habitats (Napa County General Plan, Natural Resources Protection, Policy CON-26) – Napa County has a General Plan policy that natural vegetation retention areas along perennial and intermittent streams shall vary in width with steepness of the terrain, the nature of the undercover, and type of soil. Site-specific setbacks will be established in coordination with the appropriate resource agencies. Where avoidance of impacts to riparian habitats is not feasible, appropriate protection, restoration, and enhancement measures should be implemented to ensure that no net loss of aquatic habitat functions and values occurs.

Vegetation preservation and replacement – For projects occurring in erosion hazard areas, discretionary permits are subject to a number of conditions, including preservation of existing vegetation to the maximum extent practicable. If native vegetation is removed, planting replacement vegetation of an equivalent kind, quality, and quantity may be necessary or should be compatible with the existing habitat area in which the project is located. Additionally, trees with a diameter at breast height (DBH) of six inches or greater cannot be removed until specifically authorized by the County (Chapter 18.108.100 of the County Code).

Intermittent and perennial streams – Construction or earthmoving activities, grading or removal of vegetation or agricultural uses of land are prohibited within stream setback areas established by Napa County based on

percent slope of the topography. Stream setbacks shall be measured from the top of the bank on both sides of the stream or the "outboard dripline of upper canopy vegetation," whichever is greater. Revegetation of portions of the streamside setbacks may be required as part of restoration efforts (Chapter 18.108.025 of the County Code).

3.0 METHODOLOGY

Prior to our field surveys, we queried the U.S. Fish & Wildlife Service's *National Wetland Inventory* (NWI; Figure 2); EcoAtlas' *California Aquatic Resources Inventory* (CARI; Figure 3); NRCS Web Soil Survey (Appendix A; Figure 4); and Hydric Soil Map Units for Napa County, California to determine whether any wetlands or "other waters of the U.S.", "waters of the State", or soils compatible with wetland resources had been historically recorded on or around, or are likely to occur on the site, as defined by the 1987 U.S. Army Corps of Engineers (USACE, 1987) *Wetlands Delineation Manual* and its 2008 *Arid West Regional Supplement*. We also assessed potentially federal and/or state jurisdictional wetlands and "other waters of the U.S." in the Study Area in accordance with the 2014 Corps *Field Guide to the Identification of the Ordinary High Water Mark (OHWM) for Non-perennial Streams in the Arid West Region of the Western United States.*

To provide a vision of what potential biological resources may be present on the property, we queried the following online sources for information on the Study Area's potential plant and wildlife communities.

1. California Department of Fish & Wildlife's Natural Diversity Database (RareFind 5) for observations of special status plant and animal species within five miles of the Study Area (Figure 6; Appendix D),
2. U.S. Fish and Wildlife Service's iPac Database of federally-listed special status species in Napa County (Appendix E),
3. The California Native Plant Society's Inventory of Rare & Endangered Plants in California

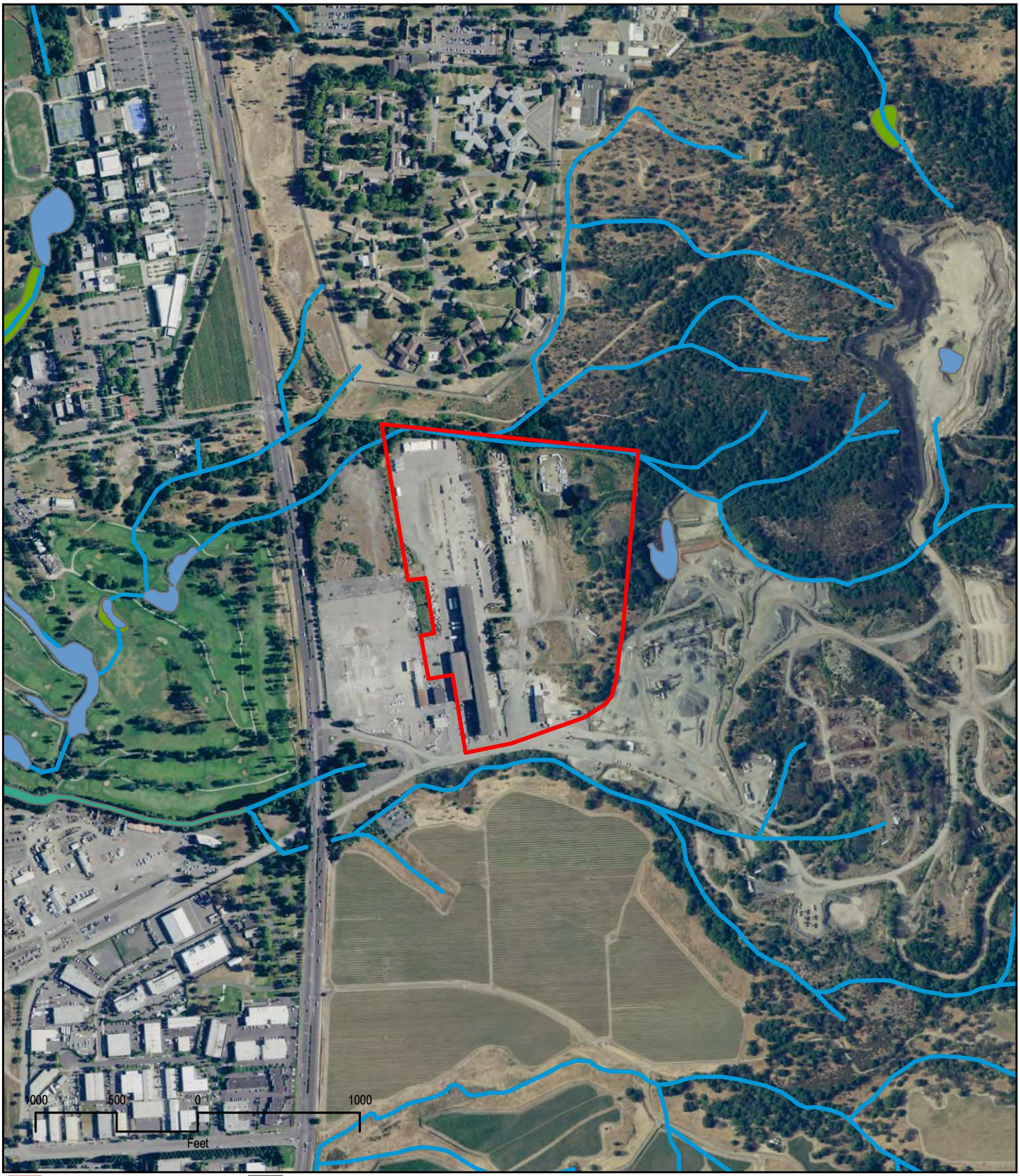
A Barnett Environmental biologist surveyed the Study Area on January 10, 2020 for special status plant and wildlife species and their habitats that could be supported onsite. The survey included recorded observations of: (1) dominant plant communities, (2) plant and animal species (with emphasis on rare and endangered species) observed or their sign (nests, burrows, tracks, scat) and (3) the suitability of onsite habitats and those immediately adjoining the Study Area to support special status plant or animal species. We used generalized plant community classification schemes to classify onsite habitat types (Sawyer, Keeler-Wolf, and Evens, 2009).

4.0 EXISTING CONDITIONS

4.1 SOILS

According to Natural Resource Conservation Service (NRCS), the Study Area is comprised of four soil types (Figure 4 and Appendix A), including:

Coombs gravelly loam, 2 to 5 percent slopes is found on terraces and alluvial fans at elevations 50 to 500 feet.



Parcel APN046370024

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Pond

Riverine

U. S. Fish and Wildlife Service. Publication date October 2019. National Wetlands Inventory website. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. http://www.fws.gov/wetlands/. Accessed January 1, 2020. Base Map Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Esri, USDA Farm Service Agency. Scale 1:10,000 original report (8.5 x 11).

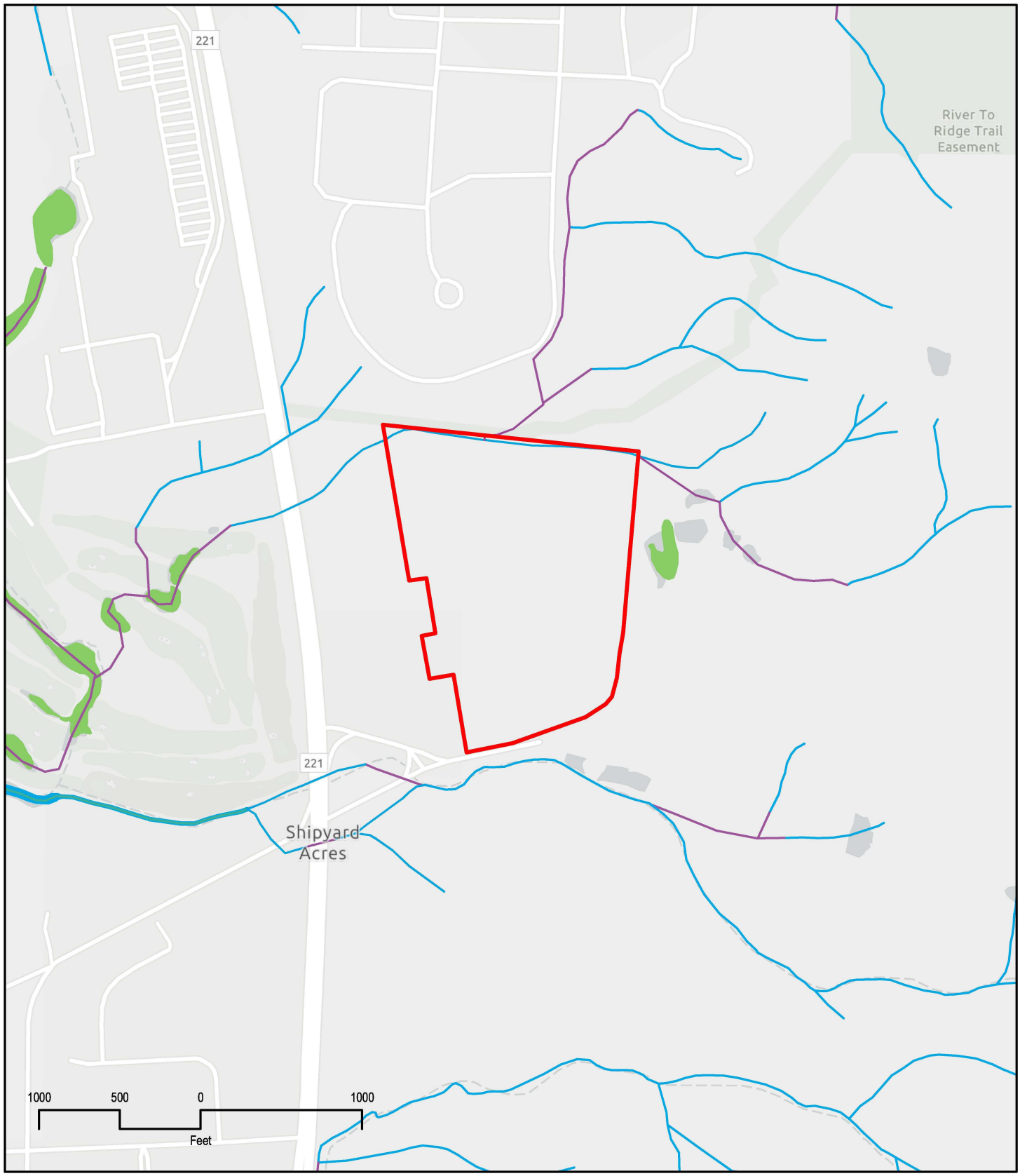
FIGURE 2 - NATIONAL WETLANDS INVENTORY (NWI) WETLANDS

NAPA 55 PANATTONI PROJECT • NAPA COUNTY, CA

N

BARNETT ENVIRONMENTAL

Date: January 01, 2020



Parcel APN046370024
Fluvial Natural
Fluvial Unnatural
Tidal Unnatural
Pond and associated vegetation
Tidal Channel

San Francisco Estuary Institute (SFEI). "California Aquatic Resource Inventory (CARI) version 0.3." Accessed June 9, 2018. Original report (8.5 x 11) scale 1:10,000.

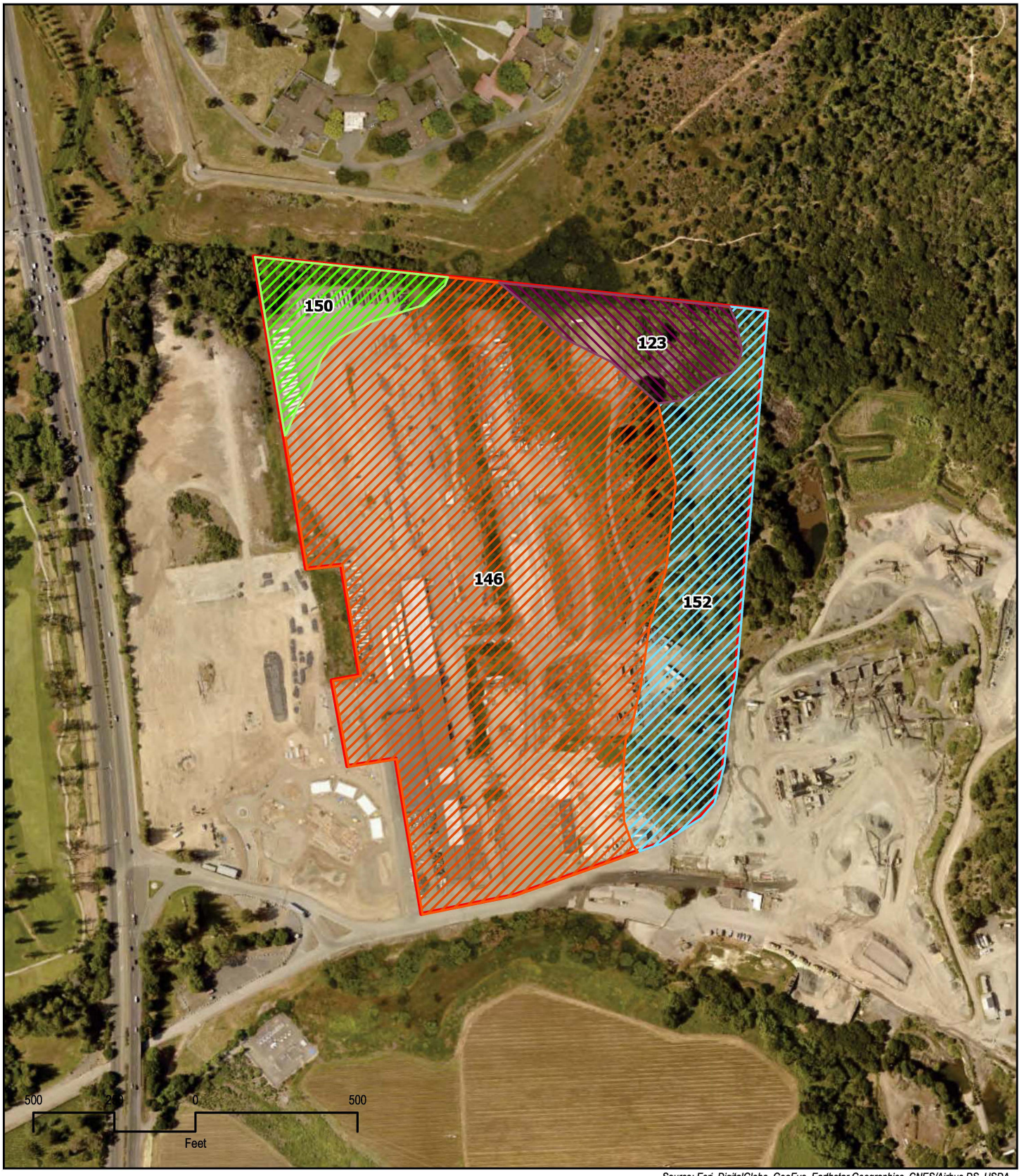
FIGURE 3 - CALIFORNIA AQUATIC RESOURCES INVENTORY (CARI) WETLANDS

NAPA 55 PANATTONI PROJECT • NAPA COUNTY, CA

N

BARNETT ENVIRONMENTAL

Date: January 01, 2020



Parcel APN046370024

123 Coombs gravelly loam, 2 to 5 percent slopes

146 Haire loam, 2 to 9 percent slopes

150 Haire clay loam, 15 to 30 percent slopes

152 Hambright rock-Outcrop complex, 30 to 75 percent slopes

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Esri, USDA Farm Service Agency. USDA NRCS Soil Survey accessed 1/1/20, https://datagateway.nrcs.usda.gov/GDGOrder.aspx. Original report scale 1:5,000, 8.5x11.

FIGURE 4 - SOILS

NAPA 55 PANATTONI PROJECT • NAPA COUNTY, CA

N

BARNETT ENVIRONMENTAL

Date: January 01, 2020

A typical profile consists of gravelly loam, clay loam, and very gravelly loamy fine sand. Permeability of the soils is moderately high with a low runoff class, and the erosion hazard is slight to moderate.

Haire loam, 2 to 9 percent slopes is found on terraces and alluvial fans. A typical profile is composed of loam, sandy clay loam, clay and sandy clay. Runoff class is high and the erosion hazard is slight to moderate.

Haire clay loam, 15 to 30 percent slopes is found on terraces and at elevations between 20 and 2,400 ft. A typical profile is made up of clay loam, sandy clay loam, clay and sandy clay. Runoff class is high, permeability is very low to moderately low, and the erosion hazard is high.

Hambrock rock-Outcrop Complex, 30 to 75 percent slope is similar found on hills and is typically composed of very stony loam and unweathered bedrock. Surface runoff is high, permeability varies from low to high, and the erosion hazard varies from moderate to high.

4.2 HYDROLOGY

The Pannatoni 55 property is within the Napa River watershed (HCU10#18050002). Water enters the Study Area either by direct precipitation or via Arroyo Creek on the parcel's northern boundary. Two North-South ditches, excavated on the old lumberyard property in the early 1960s to collect and drain runoff into Arroyo Creek, are still apparent today. The longer, westernmost of these ditches appears to collect a greater volume of runoff water (i.e. from a larger area) than the eastern ditch and consequently appears to support a more robust vegetation community.

4.3 WETLANDS AND OTHER WATERS OF THE U.S.

A total of 0.857 acres of "other waters of the U.S." were mapped within Study Area.

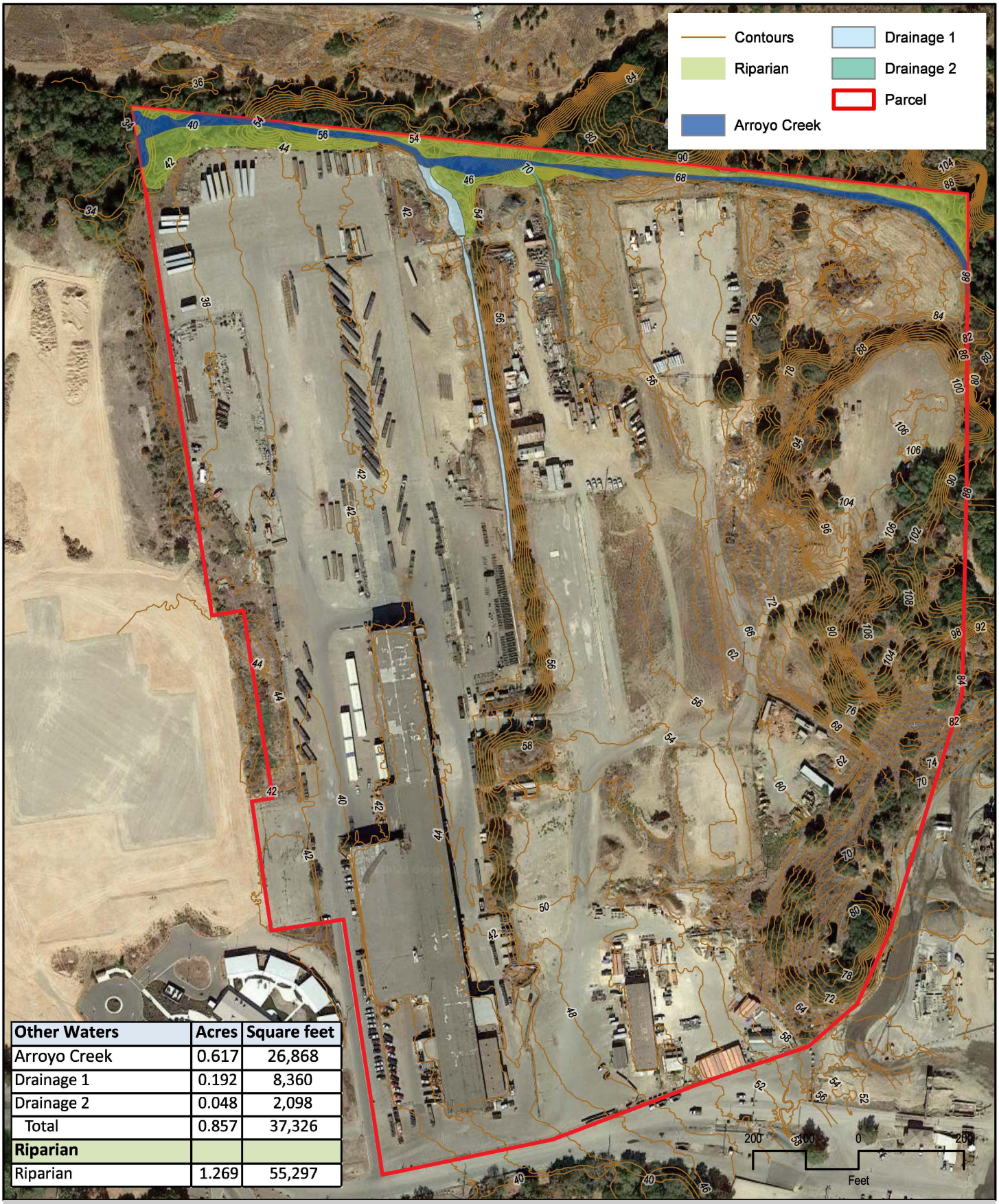
- 0.617 acre consists of Arroyo Creek (a tributary of Tulucay Creek, which is a tributary of the Napa River) along the project's northern boundary; and
- 0.240 acre consists of two N-S ditches off Tulucay Creek (see Table 1 and Figure 5).

TABLE 1 STUDY AREA "WATERS OF THE U.S." BY TYPE

Name	Area (SF)	Area (acres)
Arroyo Creek	26,868	0.617
Drainage Ditches (x2)	10,458	0.240
Total	**37,326**	**0.857**

There are no ponded depressions or other wetland features on the property, though there are several "ponds" to the east, within the Syar quarry.

The OHWM on either side of Arroyo Creek and the internal drainage ditches was delineated on the basis of a break in slope, change in the type and amount of vegetative cover, and change in the amount of surface litter.



Other Waters	Acres	Square feet
Arroyo Creek	0.617	26,868
Drainage 1	0.192	8,360
Drainage 2	0.048	2,098
Total	0.857	37,326
Riparian		
Riparian	1.269	55,297

FIGURE 5 - EXISTING CONDITIONS

NAPA 55 PANATTONI PROJECT • NAPA COUNTY, CA

Date: June 13, 2022

N

BARNETT ENVIRONMENTAL

Neither of the internal drainage ditches are natural stream courses (as they were created in the 1960s), and neither have a riparian zone. The westernmost drainage is heavily incised, and vegetation on the east side is growing out of a steep hill. The easternmost drainage is heavily overgrown with invasive and upland species. However, I would conclude that these ditches are, in fact, jurisdictional under the U.S. Clean Water Act and would require federal Section 404 permitting to remove. And regardless of federal jurisdiction, these features will be jurisdictional under the Water Board "Dredge & Fill Procedures" that became effective on May 28, 2020.

Therefore, removal of these ditches will likely require federal and state "Dredge & Fill" permits from the U.S. Army Corps of Engineers and State Water Board. In addition, we will also pursue a (CA Fish & Game Code, Section 1602) *Lake & Streambed Alteration* Agreement with the CDFW for any impacts to these features.

4.4 VEGETATION COMMUNITIES

Riparian Woodland (Arroyo Creek) – This occurs as a narrow strip associated with Arroyo Creek and is characterized by an overstory of willow (Salix spp.), California buckeye (Aesculus californica), coast live oak (Quercus agrifolia), and valley oak (Quercus lobata) trees in the and Himalayan blackberry (Rubus armeniacus), coyote brush (Baccharis pilularis), and poison oak (Toxicodendron diversilobum) in the shrub understory layer.

Oak Woodland – the northeastern portion of the study area contains small, disjunct stands of oak woodland, with dominant tree species including coast live oak, valley oak, and California bay-laurel (Umbellaria californica).

The remainder of the Study Area consists of the old lumberyard and mill with associated abandoned and functioning buildings, parking lots, internal roads, and various areas of debris.

4.5 WILDLIFE

In the Study Area, riparian and stream corridors are narrow and discontinuous, but can still function as important wildlife corridors, especially for resident and migratory birds that can effectively move through stretches of fragmented riparian forest that provides shade, food, and nutrients. While coarse wood debris from riparian trees and shrubs provide protection, they are also an important feature of in-stream habitat forming scour pools for fish, insects, and amphibians.

- Amphibians found in riparian woodland and forests include the Pacific tree frog (*Hyla regilla*), western skink (*Eumeces skiltonianus*), ensatina (*Ensatina eschscholtzii*) and California slender salamander (*Batrachoseps attenuatus*);
- Reptiles such as western fence lizard (*Sceloprous occidentalis*), western rattlesnake (*Crotalis viridis*), California mountain kingsnake (*Lampropeltis zonata*), and northern alligator lizard (*Elgaria coerula*);
- Birds like the downy woodpecker (*Picoides pubescens*), yellow warbler (*Dendroica petechia brewsteri*), Nuttall's woodpecker (*Picoides nuttallii*), warbling vireo (*Vireo gilvus*), chestnut-backed chickadee (*Poecile rufescens*), black-throated gray warbler (*Dendroica nigrescens*), black-headed grosbeak (*Pheucticus melanocephalus*), black phoebe (*Sayornis nigricans*), barn swallow (*Hirundo rustica*), and white-tailed kite (*Elanus leucurus*); and

- Mammals such as the sonoma chipmunk (*Tamias sonomae*), grey squirrel (*Scirurus griseus*), riparian brush rabbit (*Sylvilagus bachmanii*), black-tailed jackrabbit (*Lepus californicus*), northern raccoon (*Procyon lotor*), and striped skunk (*Mephitis mephitis*). Predators such as the gray fox (*Urocyon cinereoargenteus*), bobcat (*Lynx rufus*), and coyote (*Canis latrans*), as well as their primary ungulate prey species – the black-tailed deer (*Odocoileus hemionus*) – can range through the site on occasion, especially via the Arroyo Creek riparian corridor"

5.0 SPECIAL STATUS SPECIES

Special status species are those that fall into one or more of the following categories:

- Listed as endangered or threatened under the Federal Endangered Species Act (FESA) (50 CFR 17.11/17.12) (or formally proposed for listing) (64 FR 205, October 25, 1999; 57533-57547),
- Listed as endangered or threatened under the California Endangered Species Act (CESA) (or proposed for listing) (14 California Code of Regulations [CCR] 670.5),
- Designated as rare, protected, or fully protected pursuant to California Fish and Game Code (FGC, Section 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).
- Designated a Species of Concern by the California Department of Fish and Game,
- Defined as rare or endangered under the California Environmental Quality Act (CEQA), or
- Occurring on List 1 or 2 maintained by the California Native Plant Society.

We reviewed California Natural Diversity Database (CNDDB), CNPS, and iPAC databases for special status species potentially occurring within the vicinity (i.e. within a five-mile radius of the Study Area). While there may be a number of plant and animal species occurring within a 5-mile radius of the Study Area (Figure 6), we can better refine the list of those species with any real potential of occurring in the Study Area by filtering for relevant onsite habitats, locations, and elevations. A summary of the results is given in (Table 2).

TABLE 2: SPECIAL STATUS SPECIES WITH POTENTIAL TO OCCUR IN THE STUDY AREA

Species	Federal	State	CNPS	Habitat	Potential for Occurrence	Rationale for Assessing Potential of Occurrence
Plant species						
Contra Costa Goldfields *Lasthenia conjugens*	FE	CE	1B	Grow in vernal pools, swales, and other depressions in open grasslands and woodland communities, often in alkaline soils. It grows on clay or loam soils in the Haire soil series.	None	The species is found in vernal pools, swales, and other depressions in open grassland and woodland communities, often in alkaline soils; none of these occur onsite. In addition, there have been no sightings reported to the CNDDB within five miles of the Study Area, and there was no sign of this species observed during the January 2020 site visit.
Showy Indian Clover *Trifolium amoenum*	FT	CE	1B	Found in a variety of habitats including low, wet swales, grasslands, and grassy hillsides. It typically grows in moist, heavy soils below 328 feet in altitude.	None	There is no suitable wet swales or marginal grassland habitat on site. In addition, there have been no sightings reported to the CNDDB within five miles of the Study Area, and there was no sign of this species observed during the January 2020 site visit.
Reptiles						
California red-legged frog *Rana draytonii*	FT		NA	Dense shrubby or emergent vegetation in or near permanent sources of deep water in California foothills. Requires 11-20 weeks of permanent water for larval development.	Very low	There is marginal habitat within the Arroyo Creek drainage along the northern boundary, but no species were observed during the January 2020 site visit and only one CNDDB occurrence was recorded (in 2008) approximately 4.7 miles south of the Study Area back.

Species	Federal	State	CNPS	Habitat	Potential for Occurrence	Rationale for Assessing Potential of Occurrence
Western Pond Turtle *Emmys marmorata*	-	CSC	-	Found in ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation below 6000ft elevation.	Low	The Study Area does contain marginal suitable habitat such as an Arroyo Creek and associated vegetation located along the norther border of the property. Additionally, CNDDB has eight recorded occurrences within five miles of the Study Area with the nearest occurrence .4 miles southwest. However, no western pond turtles were observed during the January 2020 site visit.
Birds						
Swainson's Hawk *Buteo swainsoni*	None	CT	NA	Great Basin grassland, riparian forest and woodlands, valley and foothill grassland. Breeds in grasslands with scattered trees, juniper-sage flats, savannahs, & agricultural or ranch lands with groves or lines of trees.	Very low	There is no foraging habitat onsite though the species could nest in the trees along Arroyo Creek. There have been seven reported CNDDB occurrences, the most recent in 2013, and the closest approximately 1.4 miles south of the Study Area. No Swainson's hawks were observed during the January 2020 site survey.
Bank Swallow *Riparia riparia*	None	CT	NA	Live in low areas along rivers, streams, ocean coasts, and reservoirs. Their territories usually include vertical cliffs or banks where they nest in colonies.	None	There are no suitable vertical cliffs or bankside nesting habitat onsite and there have been no reported CNNDB occurrences within five miles of the Study Area. We found no sign of this species during the January 2020 field survey.

Special Status Species Codes:

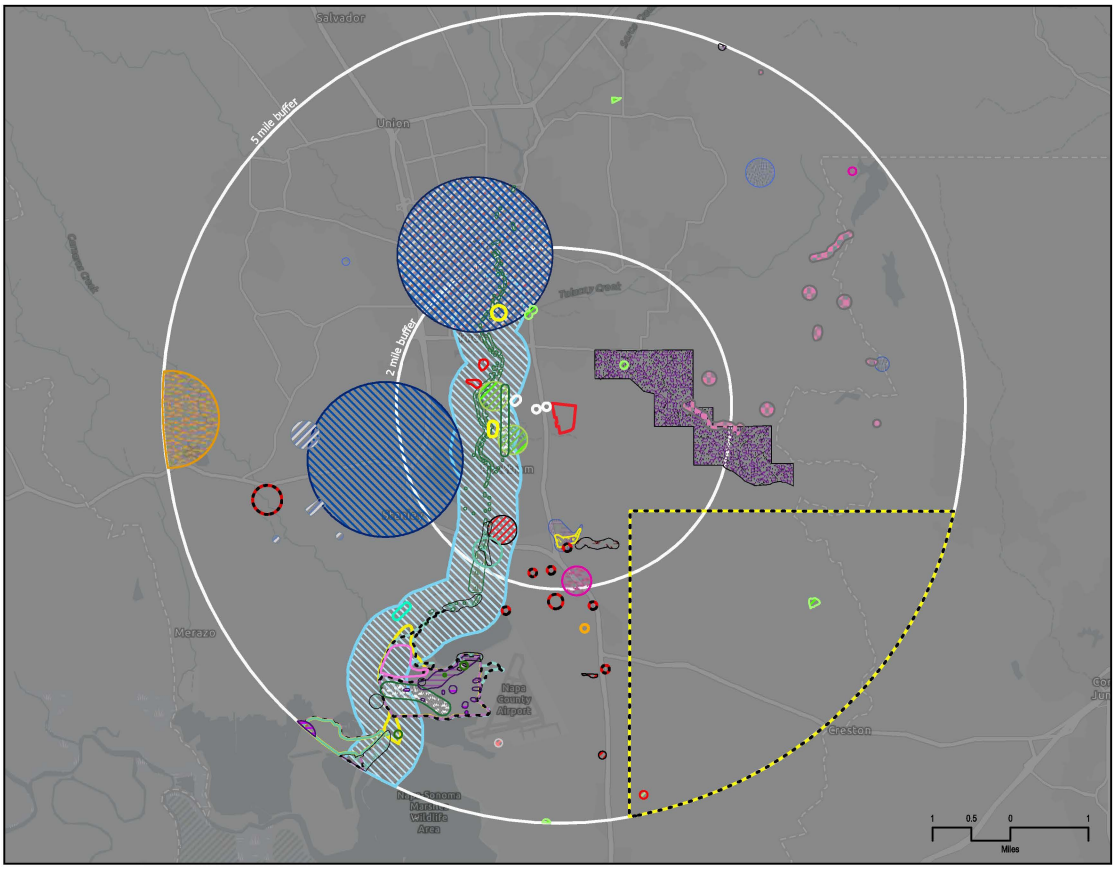
Federal: FE = Federal Endangered. FT = Federal Threatened

State: SSC = California Species of Special Concern CE = California Endangered

CFP = California Fully Protected CT = California Threatened

SCT = State Candidate California Threatened

SCE = State Candidate California Endangered



Detail Map



- Parcel APN046370024
- American badger
- American peregrine falcon
- California Ridgway's rail
- California black rail
- California red-legged frog
- Contra Costa goldfields
- Delta tule pea
- Franciscan onion
- Greene's narrow-leaved daisy
- Jepson's leptosiphon
- Lyngbye's sedge
- Mason's lilaeopsis
- Napa bluecurls
- San Joaquin spearscale
- San Pablo song sparrow
- Suisun Marsh aster
- Swainson's hawk
- burrowing owl
- dwarf downingia
- holly-leaved ceanothus
- legenere
- longfin smelt
- narrow-anthered brodiaea
- pallid bat
- saline clover
- salt-marsh harvest mouse
- saltmarsh common yellowthroat
- soft salty bird's-beak
- tricolored blackbird
- two-fork clover
- vernal pool fairy shrimp
- western pond turtle
- western snowy plover
- white-tailed kite

CNDDB version 12/2019. Please Note: The occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not yet been surveyed and/or mapped. Lack of information in the CNDDB about a species or an area can never be used as proof that no special status species occur in an area California Department of Fish and Wildlife. https://www.wildlife.ca.gov/Data/CNDDB, December 8, 2019. Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community Scale 1:78,000 original report 11x17.

FIGURE 6 - CALIFORNIA NATIONAL DIVERSITY DATABASE (CNDDB) RECORDED SPECIES OBSERVATION

NAPA 55 PANATTONI PROJECT • NAPA COUNTY, CA

Date: January 01, 2020

N

BARNETT ENVIRONMENTAL

CNPS: 1B = Rare or Threatened in CA and elsewhere 2B = Rare, Threatened, or Endangered in CA, but more common elsewhere

Potential for Occurrence Codes:

None:	*No suitable habitat for the special status species within the Study Area*
Very Low:	*Either the special status species is known to occur within five miles and there is marginal suitable habitat exists in the Study Area, or the Study Area provides suitable habitat but the species is not known to occur within a five-mile radius.*
Low:	*Marginally suitable habitat exists in the Study Area and the special status species occurs within 5 miles, but surrounding urban land use conditions and regularity of human activity make it unlikely that the species occurs in the Study Area.*
Moderate:	*The special status species is known to occur within a five-mile radius and the Study Area contains suitable habitat, however surrounding urban land use conditions and onsite disturbance reduce the likelihood of occurrence.*
High:	*The Study area provides suitable habitat and there is either documentation of species occurrence within a five-mile radius or evidence gathered by a professional surveyor during an onsite field assessment.*
Present:	*Species known to occur within the Study Area based on record search and/or evidence collect during onsite field surveys.*

5.1 CRITICAL HABITAT FOR SPECIAL STATUS SPECIES

The Federal Endangered Species Act (FESA) requires the federal government to designate critical habitat for any listed species. Critical habitat is defined as: (1) specific areas within the geographical area occupied by the species at the time of listing, if they contain physical or biological features essential to conservation, and those features may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by the species if the agency determines that the area itself is essential for conservation. There is no designated critical habitat within the Study Area (Appendix C). However, there is critical habitat for the vernal pool plant Contra Costa goldfields tangential to the southern border of the Study Area, and for the red-legged frog, there is critical habitat to approximately three miles to the south/southwest (Figure 7).

5.2 SPECIAL STATUS WILDLIFE

FEDERALLY LISTED SPECIES

A single federally listed animal species has the potential to occur but are not known to occur within the Study Area (Appendix B, Table 2):

California red-legged frog (*Rana draytonii*) – California red-legged frog is a federally-listed threatened species. It prefers slow-moving or standing deep ponds, pools, and streams with surrounding tall vegetation (e.g. grasses, cattails, and shrubs) that provide protection from predators and the sun. This species predominately occurs along the coast and in the foothills, and there is critical habitat. California red-legged

frog has a very low potential to occur, given the marginal drainage habitat requirement and that there has been only one recorded CNDDB occurrence of this species located 4.7 miles south of the Study Area (Figure 6). Additionally, no red-legged frogs were observed during the January 2020 site survey.

STATE LISTED SPECIES

A single state-listed animal species has the potential to occur but are not known to occur within the Study Area (Appendix B, Table 2):

Swainson's Hawk (*Buteo swainsoni*) – This raptor is listed as threatened by the state of California. The Swainson's hawk has a very low potential for occurrence given the open grassland on this site that is provides appropriate foraging habitat; however there is a significant amount of human disturbance that may preclude this species. According to CNDDB, there are seven recorded occurrences within five miles of the Study Area, with the nearest occurrence 1.4 miles to the south. No Swainson's hawks were observed during the January 2020 site visit.

CALIFORNIA (STATE) SPECIES OF SPECIAL CONCERN

In addition to California rare, threatened, and fully protected species, the CDFW has also identified California Species of Concern (CSC), which could be a species, subspecies, or distinct population of an animal native to California that:

- Is extirpated from the State or, in the case of birds, in its primary seasonal or breeding role;
- Is listed as Federally-, but not State-, threatened or endangered;
- Meets the State definition of threatened or endangered, but has not formally been listed;
- Is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; or
- Is part of naturally small populations exhibiting high susceptibility to risk from an factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.

The following CSC species, because of their known habitat requirements, have the potential to occur on the Project Area:

Western pond turtle (*Emmys marmorata*) – The western pond turtle is not a federally or state listed species, but is is a California Species of Special Concern addressed in CEQA. This turtle occurs in ponds and other perennial surface waters with aquatic vegetation. They require basking sites and suitable upland habitat for egg laying. Nest sites most often characterized as having gentle slopes (<15%) with little vegetation or sandy banks. Western pond turtles could occur in Arroyo Creek along the northern property boundary and there are eight recorded CNDDB occurrences within five miles of the Project Area with the nearest occurrence 0.4 miles to the southwest (Figure 6). No western pond turtles were observed during the January 2020 site survey.

6.0 EFFECTS IF PROPOSED ACTION

6.1 EFFECTS ON "OTHER WATERS OF THE U.S."

Any adverse effects on these features from planned development of the site would be subject to U.S. Clean Water Act, Section 404 permitting by the Army Corps of Engineers (Corps) and Section 401 Water Quality Certification by the Regional Water Quality Control Board (RWQCB).

Additionally, the new State Water Board's "Dredge & Fill Procedures" become effective on May 28, 2020 and adverse impacts to these features will likely require permitting under these new procedures as well.

Finally, while drainage ditches do not normally fall under the CDFW's (CA Fish & Game Code, Section 1602) Lake & Streambed Alteration Agreement (LSA) jurisdiction, any impacts to Arroyo Creek would therefore require an LSA Agreement with that Agency.

6.2 EFFECTS ON RARE PLANTS AND HABITAT

The following discussion of biological resources impacts and mitigation measures is based on implementation of the proposed project in light of existing conditions.

Trees – No trees within the riparian setback or any other sensitive biotic area are scheduled for removal. The trees recommended for removal by the arborist are in poor structural health, suffering from significant decay with weak attachments and significant amounts of deadwood. These trees have questionable longevity and could cause a hazard to human safety. If the applicant proceeds with the removal of these trees, they will most likely subject to the Napa County tree regulations, requiring 2 to 1 tree replacement mitigation.

The removal of these trees will not have a negative impact any biological sensitive communities or cause any risk of erosion as oak grove communities on site should be enhanced by the any oak tree mitigation on site. We recommend that any efforts to remove trees comply with all applicable measures as suggested under N.C.C. 18.108.070.

6.3 EFFECTS OF PROPOSED ACTION ON WILDLIFE AND HABITAT

California red-legged frog – Since there is a possible occurrence of California reg-legged frog (*Rana draytonii*) within this drainage, we propose pre-construction protocol surveys during their respective reproductive seasons for CRLF (November–April) and FYLF (April–July) if any modification of this drainage is proposed as part of site improvement.

Swainson's hawk – No Swainson's hawks were observed during the January 2020 field survey, but the species is migratory and was not in the region at the time of the field survey. A preconstruction raptor survey during the hawk's breeding period would reveal its presence or absence within the Study Area. Therefore, prior to issuance of a grading permit for development:

1. A pre-construction nesting bird survey shall be conducted on-site within 15 days prior to construction if construction associated with the project would commence between March 1st and September 1st ("the

nesting season"). If disturbance associated with the project would occur outside of the nesting season, no surveys shall be required.

2. If Swainson's hawk are identified as nesting on the project site, a non-disturbance buffer of 75-feet shall be established or as otherwise prescribed by a qualified ornithologist. The buffer shall be demarcated with painted orange lath or via the installation of orange construction fencing. Disturbance within the buffer shall be postponed until a qualified ornithologist has determined that the young have attained sufficient flight skills to leave the area or that the nesting cycle has otherwise completed.
3. If the proposed project requires a loss of potential foraging habitat than the project proponent shall be responsible for mitigating on the project site at a ratio of 1:1 if the project is within a mile, 0.5:1 ratio if the project is within a half-mile, 0.75:1 ratio if the project is within five miles, and 0.5:1 ratio if the project is within ten miles, per the CDFW's 1994 Guidance on Swainson's Hawk Mitigation.

Western Pond Turtle (optional, should development activity cause impacts to Arroyo Creek) – Should development of the site result in direct impacts to the Arroyo Creek riparian corridor along the project's northern boundary, the following mitigation measures for the species should be planned:

- A qualified biologist would perform a pre-construction survey for pond turtles within Arroyo Creek no more than 14 days prior to construction. The California Department of Fish and Wildlife will be contacted if pond turtles are found within the planned work area Study Area and will recommend appropriate mitigation measures to avoid adverse effects on the species.

7.0 CONCLUSIONS

The Study Area contains approximately 0.857 acre of "other waters of the United States" and waters of the State. Activities that affect this area would require a permit from the U.S. Army Corps of Engineers pursuant to Section 404 of the federal Clean Water Act. The project would also need to obtain a Water Quality Certification from the Regional Water Quality Control Board pursuant to Section 401 of the federal Clean Water Act.

Additionally, the new State Water Board's "Dredge & Fill Procedures" become effective on May 28, 2020 and adverse impacts to these features will likely require permitting under these new procedures as well.

Finally, while drainage ditches do not normally fall under the CDFW's (CA Fish & Game Code, Section 1602) Lake & Streambed Alteration Agreement (LSA) jurisdiction, any impacts to Arroyo Creek would and would therefore require an LSA Agreement with that Agency.

The California Natural Diversity Database (Rarefind) contains no records of any species of special concern within the Study Area. While the species listed in Table 2 could occur in the Project region, preconstruction surveys would confirm presence/absence of these species at the time of the proposed construction and ensure no adverse effect to any species encountered.

If any trees are removed during construction then the applicant will replace the trees at a 2 to 1 ratio.

8.0 REFERENCES

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Appendix A:
NRCS Soils Report

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Napa County, California

Napa 55 Panattoni Project



January 1, 2020

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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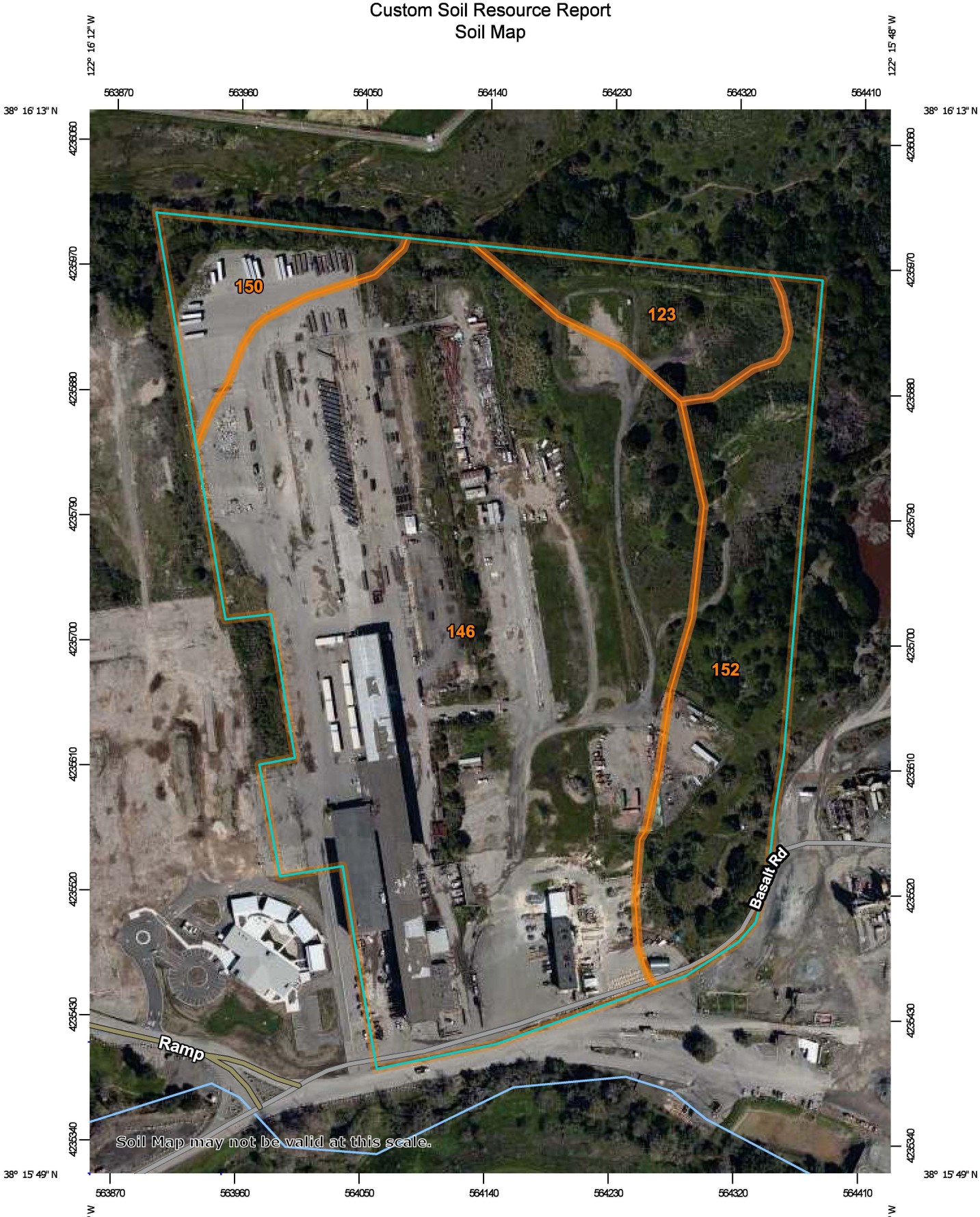
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Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:3,730 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Napa County, California
Survey Area Data: Version 12, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 15, 2019—Apr 10, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
123	Coombs gravelly loam, 2 to 5 percent slopes	3.3	6.1%
146	Haire loam, 2 to 9 percent slopes	38.0	71.1%
150	Haire clay loam, 15 to 30 percent slopes	3.0	5.6%
152	Hambright rock-Outcrop complex, 30 to 75 percent slopes	9.2	17.2%
Totals for Area of Interest		**53.5**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Napa County, California

123—Coombs gravelly loam, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: hdkr
Elevation: 50 to 500 feet
Mean annual precipitation: 24 to 30 inches
Mean annual air temperature: 59 to 63 degrees F
Frost-free period: 220 to 260 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Coombs and similar soils: 85 percent
Minor components: 3 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Coombs

Setting

Landform: Terraces, alluvial fans
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope, tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous rock and/or alluvium derived from sedimentary rock

Typical profile

H1 - 0 to 14 inches: gravelly loam
H2 - 14 to 54 inches: clay loam
H3 - 54 to 60 inches: very gravelly loamy fine sand

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Clear lake

Percent of map unit: 3 percent
Landform: Alluvial fans
Hydric soil rating: Yes

146—Haire loam, 2 to 9 percent slopes

Map Unit Setting

National map unit symbol: hdlh
Elevation: 20 to 2,400 feet
Mean annual precipitation: 25 to 30 inches
Mean annual air temperature: 57 to 61 degrees F
Frost-free period: 220 to 260 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Haire and similar soils: 85 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Haire

Setting

Landform: Terraces, alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope, riser
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Typical profile

H1 - 0 to 22 inches: loam
H2 - 22 to 27 inches: sandy clay loam
H3 - 27 to 45 inches: clay
H4 - 45 to 60 inches: sandy clay

Properties and qualities

Slope: 2 to 9 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water storage in profile: Moderate (about 6.5 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: D
Ecological site: CLAYPAN (R014XD089CA)
Hydric soil rating: No

Minor Components

Clear lake

Percent of map unit: 5 percent
Landform: Alluvial fans
Hydric soil rating: Yes

150—Haire clay loam, 15 to 30 percent slopes

Map Unit Setting

National map unit symbol: hdlm
Elevation: 20 to 2,400 feet
Mean annual precipitation: 25 to 30 inches
Mean annual air temperature: 59 to 61 degrees F
Frost-free period: 220 to 260 days
Farmland classification: Not prime farmland

Map Unit Composition

Haire and similar soils: 85 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Haire

Setting

Landform: Terraces
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Riser
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Alluvium derived from sedimentary rock

Typical profile

H1 - 0 to 22 inches: clay loam
H2 - 22 to 27 inches: sandy clay loam
H3 - 27 to 45 inches: clay
H4 - 45 to 60 inches: sandy clay

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Moderate (about 6.5 inches)

Interpretive groups
Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Ecological site: CLAYPAN (R015XD115CA)
Hydric soil rating: No

152—Hambright rock-Outcrop complex, 30 to 75 percent slopes

Map Unit Setting
National map unit symbol: hdlp
Elevation: 200 to 3,000 feet
Mean annual precipitation: 23 to 35 inches
Mean annual air temperature: 59 to 63 degrees F
Frost-free period: 220 to 260 days
Farmland classification: Not prime farmland

Map Unit Composition
Hambright and similar soils: 50 percent
Rock outcrop: 40 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hambright

Setting
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from basic volcanic rock

Typical profile
H1 - 0 to 12 inches: very stony loam
H2 - 12 to 22 inches: unweathered bedrock

Properties and qualities
Slope: 30 to 75 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Natural drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 1.98 in/hr)

Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Very low (about 1.1 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: VERY SHALLOW ROCKY (R015XD127CA)
Hydric soil rating: No

Description of Rock Outcrop

Setting

Landform: Hills
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Free face
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Residuum weathered from igneous, metamorphic and sedimentary rock

Properties and qualities

Slope: 30 to 75 percent
Depth to restrictive feature: About 0 inches to lithic bedrock
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

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Appendix B: CNDDB

Multiple Occurrences per Page

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: (Federal Listing Status IS (Endangered OR Threatened) OR State Listing Status IS (Endangered OR Threatened))
 AND County IS (Napa)
 AND Elevation IS greater than OR equal to "0"
 AND Elevation IS less than OR equal to "120"
 AND Habitat IS (Pavement plain OR Riparian scrub OR Riparian woodland)

Rana draytonii **Element Code:** AAABH01022

California red-legged frog

Listing Status:	**Federal:**	Threatened	**CNDDB Element Ranks:**	**Global:**	G2G3
	State:	None		**State:**	S2S3
	Other:	CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable			
Habitat:	**General:**	LOWLANDS AND FOOTHILLS IN OR NEAR PERMANENT SOURCES OF DEEP WATER WITH DENSE, SHRUBBY OR EMERGENT RIPARIAN VEGETATION.			
	Micro:	REQUIRES 11-20 WEEKS OF PERMANENT WATER FOR LARVAL DEVELOPMENT. MUST HAVE ACCESS TO ESTIVATION HABITAT.			

Occurrence No.	896	**Map Index:** 66084	**EO Index:**	66163	**Element Last Seen:** 2006-07-26
Occ. Rank:	Poor		**Presence:**	Presumed Extant	**Site Last Seen:** 2006-08-21
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:** 2007-02-27

Quad Summary: Cordelia (3812222)

County Summary: Napa

Lat/Long:	38.18066 / -122.24837	**Accuracy:**	80 meters
UTM:	Zone-10 N4226127 E565829	**Elevation (ft):**	85
PLSS:	T04N, R04W, Sec. 24, NE (M)	**Acres:**	0.0

Location: 1 MILE NNE OF THE INTERSECTION OF AMERICAN CANYON ROAD AND HIGHWAY 29, SOUTH OF NAPA.

Detailed Location: A LARGE QUARRY POND, MEASURING 729' X 243' ALSO OCCURS ON-SITE.

Ecological: HABITAT CONSISTS OF A MAN-MADE CEMENT TANK, HISTORICALLY USED IN A QUARRY OPERATION; TANK MEASURES 7' X 50' X 14'. CATTAILS AND SOME WILLOWS LINE THE BOTTOM OF THE TANK; HIMALAYAN BLACKBERRIES AND WILLOWS OCCUR ALONG THE OUT EDGES.

General: 1 ADULT OBSERVED ON 10 JUL AND 1 ADULT OBSERVED ON 26 JUL 2006; BY 21 AUG 2006, WATER IN THE TANK WAS GONE AND RACCOON PRINTS WERE OBSERVED.

Owner/Manager: PVT

Occurrence No.	1062	**Map Index:** 74844	**EO Index:**	75844	**Element Last Seen:** 2008-08-04
Occ. Rank:	Fair		**Presence:**	Presumed Extant	**Site Last Seen:** 2008-08-04
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:** 2009-04-24

Quad Summary: Cordelia (3812222)

County Summary: Napa

Lat/Long:	38.19710 / -122.24773	**Accuracy:**	80 meters
UTM:	Zone-10 N4227951 E565870	**Elevation (ft):**	110
PLSS:	T04N, R04W, Sec. 13, NE (M)	**Acres:**	0.0

Location: NORTH SLOUGH CREEK, ABOUT 0.68 AIR MI NNE OF NAPA JUNCTION.

Detailed Location: FROG OBSERVED DURING A NATURAL GAS PIPELINE REPLACEMENT PROJECT FOR PG & E THAT CROSSES A SECTION OF NORTH SLOUGH CREEK, ABOUT 40 M DOWNSTREAM OF FROG LOCALITY.

Ecological: ISOLATED SIDE POOL (2 X 2 M) WITHIN NORTH SLOUGH CREEK CONTAINING EMERGENT TYPHA LATIFOLIA AND DENSE MYRIOPHYLLUM SP; 60 CM MAX DEPTH; 17.5 C WATER TEMP.

General: 1 ADULT (SVL= 130 MM) WAS OBSERVED ON 4 AUG 2008. POND LOCATED UPSTREAM OF THIS LOCALITY CONTAINS GOOD QUALITY BREEDING HABITAT.

Owner/Manager: PVT

Buteo swainsoni **Element Code:** ABNKC19070

Swainson's hawk

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5
	State:	Threatened		**State:**	S3
	Other:	BLM_S-Sensitive, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern			

Habitat:	**General:**	BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.
	Micro:	REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No.	1619	**Map Index:**	64468	**EO Index:**	64547	**Element Last Seen:**	2013-07-XX
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2013-07-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-02-16

Quad Summary:	Cuttings Wharf (3812223)
County Summary:	Napa

Lat/Long:	38.23876 / -122.26966	**Accuracy:**	specific area
UTM:	Zone-10 N4232559 E563913	**Elevation (ft):**	60
PLSS:	T05N, R04W, Sec. 35, NE (M)	**Acres:**	10.0

Location:	ALONG SUSCOL CREEK, ABOUT 0.05-0.1 MILE DOWNSTREAM (SW) OF DEVLIN ROAD, SOUTH NAPA.
Detailed Location:	TWO PART GRAPHIC FEATURE REPRESENTING 2 NEST SITES. EAST POLYGON: MAPPED TO COORDINATES GIVEN FOR 2005 NEST TREE. WEST POLYGON: MAPPED TO COORDINATES GIVEN FOR 2012 NEST SITE.
Ecological:	2005 NEST IN VALLEY OAK. 2012 & 2013 NEST IN OAK. IN RIPARIAN WOODLAND DOMINATED BY VALLEY & LIVE OAK, WILLOW, HIMALAYAN BLACKBERRY, & EUCALYPTUS. INACTIVE RANCH, SANITATION DISTRICT SPRAY FIELDS & STORAGE FACILITY SURROUNDING.
General:	NESTING SUSPECTED IN 2003 BUT NO NEST FOUND. 1 PAIR NESTED, A 2ND PAIR MAY HAVE NESTED NEARBY IN 2005; NEST-BUILDING, COPULATION, & COURTSHIP DISPLAY OBSERVED, 1-14 MAY 2005. NEST FLEDGED 3 YOUNG IN 2012 AND 2 IN 2013.
Owner/Manager:	UNKNOWN

Occurrence No.	1717	**Map Index:**	78881	**EO Index:**	79862	**Element Last Seen:**	2008-05-25
Occ. Rank:	Fair			**Presence:**	Presumed Extant	**Site Last Seen:**	2008-05-25
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2010-05-19

Quad Summary:	Cuttings Wharf (3812223)
County Summary:	Napa

Lat/Long:	38.23129 / -122.28029	**Accuracy:**	80 meters
UTM:	Zone-10 N4231722 E562989	**Elevation (ft):**	7
PLSS:	T05N, R04W, Sec. 35, SW (M)	**Acres:**	0.0

Location:	ALONG RAILROAD TRACKS ON THE EAST SIDE OF THE WASTEWATER TREATMENT PLANT, NORTH OF THE NAPA COUNTY AIRPORT.
Detailed Location:	MAPPED ACCORDING TO LOCATION ON PROVIDED MAP.
Ecological:	HABITAT CONSISTS OF A CONIFER WINDBREAK. SURROUNDING LAND COMPRISED OF WASTEWATER TREATMENT PLANT, RAILROAD, AND SPRAY FIELDS.
General:	3 ADULTS OBSERVED ON 25 MAY 2008. NEST PRESENT.
Owner/Manager:	NAPA SANITATION DISTRICT

Occurrence No.	1718	**Map Index:**	78882	**EO Index:**	79863	**Element Last Seen:**	2008-05-11
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2008-05-11
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2010-05-19

Quad Summary:	Cuttings Wharf (3812223)
County Summary:	Napa

Lat/Long:	38.23300 / -122.26857	**Accuracy:**	1/10 mile
UTM:	Zone-10 N4231921 E564014	**Elevation (ft):**	26
PLSS:	T05N, R04W, Sec. 35, SE (M)	**Acres:**	0.0

Location:	JUST NORTH OF UNNAMED DRAINAGE ON THE EAST SIDE OF THE WASTEWATER TREATMENT PLANT, NORTH OF THE NAPA COUNTY AIRPORT.
Detailed Location:	MAPPED TO WHAT APPEARS TO BE A EUCALYPTUS GROVE (AERIAL IMAGERY). LOCATION ON PROVIDED MAP IS ABOUT 270 METERS ENE OF MAPPED LOCATION.
Ecological:	HABITAT CONSISTS OF A EUCALYPTUS GROVE IN A GRASSLAND. SURROUNDING LAND COMPRISED OF TREATED WASTEWATER SPRAY FIELDS.
General:	2 ADULTS OBSERVED ON 11 MAY 2008. NEST IS LOCATED IN A EUCALYPTUS TREE. NEST BUILDING ALSO OBSERVED.
Owner/Manager:	NAPA SANITATION DISTRICT

Occurrence No.	1719	**Map Index:**	78883	**EO Index:**	79864	**Element Last Seen:**	2007-08-18
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2007-08-18
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2013-10-14

Quad Summary:	Cuttings Wharf (3812223)
County Summary:	Napa

Lat/Long:	38.23227 / -122.25976	**Accuracy:**	80 meters
UTM:	Zone-10 N4231846 E564785	**Elevation (ft):**	60
PLSS:	T05N, R04W, Sec. 36, SW (M)	**Acres:**	0.0

Location:	ALONG SR 29, ABOUT 0.3 MILE NORTH OF SHEEHY CREEK, NORTH OF THE NAPA COUNTY AIRPORT.
Detailed Location:	MAPPED TO 2007 NEST PER LOCATION ON PROVIDED MAP. 2012 SUSPECTED NEST SITE LESS THAN 80 M NORTHWEST OF 2005 SITE.
Ecological:	HABITAT CONSISTED OF A EUCALYPTUS GROVE WITHIN RIGHT OF WAY OF SR 29. 2012 SUSPECTED NEST IN EUCALYPTUS. SURROUNDING LAND COMPRISED OF ROADS, LIGHT INDUSTRIAL, AND GRASSLAND.
General:	A NEST WITH 1 FEATHERED NESTLING WAS OBSERVED ON 24 JUN 2007. A JUVENILE WAS OBSERVED IN THE AREA ON 18 AUG 2007, 2 ADULTS WERE ALSO OBSERVED AT THIS SITE. ABANDONED NEST WITH SWHA FEATHERS & PELLETS FOUND LATE IN 2012.
Owner/Manager:	UNKNOWN

Occurrence No.	2621	**Map Index:**	90608	**EO Index:**	91741	**Element Last Seen:**	2013-XX-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2013-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-02-16

Quad Summary:	Cuttings Wharf (3812223)
County Summary:	Napa

Lat/Long:	38.24301 / -122.26587	**Accuracy:**	80 meters
UTM:	Zone-10 N4233032 E564241	**Elevation (ft):**	100
PLSS:	T05N, R04W, Sec. 35, NE (M)	**Acres:**	0.0

Location:	SUSCOL CREEK, ABOUT 0.2 MILE NE OF THE HWY 29/12 CROSSING AND 0.6 MILE SSE OF HWY 221 AT ANDERSON RD, 3.75 MI S OF NAPA.
Detailed Location:	MAPPED TO COORDINATES FROM TABLE OF 2012 AND 2013 SURVEY DATA.
Ecological:	NEST IN COTTONWOOD. RED-TAILED HAWKS BELIEVED TO HAVE NESTED NEARBY.
General:	NESTING PAIR PRESENT EARLY IN 2012 SEASON, BEGAN INCUBATION EARLY; SUCCESS UNKNOWN. PAIR OBSERVED NEST BUILDING IN 2013 BUT NO EGGS LAID.
Owner/Manager:	UNKNOWN

Occurrence No.	2743	**Map Index:**	A8500	**EO Index:**	110291	**Element Last Seen:**	2013-XX-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2013-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-02-16

Quad Summary:	Cuttings Wharf (3812223), Napa (3812233)
County Summary:	Napa

Lat/Long:	38.25174 / -122.33665	**Accuracy:**	1/5 mile
UTM:	Zone-10 N4233955 E558041	**Elevation (ft):**	82
PLSS:	T05N, R04W, Sec. 30, E (M)	**Acres:**	70.0

Location:	CARNEROS CREEK, ABOUT 0.25 MILE SE OF HIGHWAY 12, 3 MILES SW OF THE CITY OF NAPA.
Detailed Location:	
Ecological:	
General:	A PAIR WAS OBSERVED DISPLAYING, COPULATING, AND DEFENDING TERRITORY IN THIS AREA IN 2013, BUT NESTING SITE WAS NOT LOCATED.
Owner/Manager:	PVT

Occurrence No.	2744	**Map Index:**	A8501	**EO Index:**	110292	**Element Last Seen:**	2013-07-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	2013-07-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2018-02-16

Quad Summary:	Cuttings Wharf (3812223)
County Summary:	Napa

Lat/Long:	38.22046 / -122.2568	**Accuracy:**	80 meters
UTM:	Zone-10 N4230537 E565056	**Elevation (ft):**	92
PLSS:	T04N, R04W, Sec. 1, SW (M)	**Acres:**	5.0

Location:	0.2 MILE SOUTH OF THE JUNCTION OF HIGHWAY 12 AND HIGHWAY 29, EAST OF NAPA COUNTY AIRPORT, SOUTH OF THE CITY OF NAPA.
Detailed Location:	MAPPED TO PROVIDED COORDINATES, JUST EAST OF HIGHWAY 29.
Ecological:	NEST IN A EUCALYPTUS TREE, WITHIN A SMALL GROVE OF EUCALYPTUS.
General:	FEMALE OBSERVED REFURBISHING NEST ON 15 APR AND 1+ FLEDGED IN JUL 2013.
Owner/Manager:	UNKNOWN

Riparia riparia **Element Code:** ABPAU08010

bank swallow

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5
	State:	Threatened		**State:**	S2
	Other:	BLM_S-Sensitive, IUCN_LC-Least Concern			
Habitat:	**General:**	COLONIAL NESTER; NESTS PRIMARILY IN RIPARIAN AND OTHER LOWLAND HABITATS WEST OF THE DESERT.			
	Micro:	REQUIRES VERTICAL BANKS/CLIFFS WITH FINE-TEXTURED/SANDY SOILS NEAR STREAMS, RIVERS, LAKES, OCEAN TO DIG NESTING HOLE.			

Occurrence No.	296	**Map Index:**	84455	**EO Index:**	85482	**Element Last Seen:**	1893-05-23
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1893-05-23
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2011-12-06

Quad Summary:	Cuttings Wharf (3812223), Sears Point (3812224), Petaluma River (3812225), Napa (3812233), Sonoma (3812234), Glen Ellen (3812235)
County Summary:	Napa, Sonoma

Lat/Long:	38.26270 / -122.46446	**Accuracy:**	5 miles
UTM:	Zone-10 N4235099 E546850	**Elevation (ft):**	25
PLSS:	T05N, R05W, Sec. 19 (M)	**Acres:**	0.0

Location:	SONOMA CREEK NEAR THE TOWN OF SONOMA.
Detailed Location:	LOCATION STATED AS "SONOMA, SONOMA CO." NEST LOCATED SIX FEET UP IN GRAVEL BANK ON "SONOMA RIVER." MAPPED GENERALLY TO SONOMA CREEK BY THE TOWN OF SONOMA.
Ecological:	
General:	EGG SET COLLECTED ON 23 MAY 1893.
Owner/Manager:	UNKNOWN

Appendix C:
IPaC

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

NOT FOR CONSULTATION

Location

Napa County, California



Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

NOT FOR CONSULTATION

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS

Salt Marsh Harvest Mouse Reithrodontomys raviventris — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/613

Birds

NAME	STATUS
California Least Tern Sterna antillarum browni	Endangered
No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8104	
Northern Spotted Owl Strix occidentalis caurina	Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/1123	

Amphibians

NAME	STATUS
California Red-legged Frog Rana draytonii	Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2891	

Fishes

NAME	STATUS
Delta Smelt Hypomesus transpacificus	Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/321	

Crustaceans

NAME	STATUS
California Freshwater Shrimp Syncaris pacifica	Endangered
No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7903	
Conservancy Fairy Shrimp Branchinecta conservatio	Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/8246	

Flowering Plants

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NAME	STATUS
Contra Costa Goldfields Lasthenia conjugens There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/7058	Endangered
Showy Indian Clover Trifolium amoenum No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6459	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

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Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping

tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
Allen's Hummingbird *Selasphorus sasin* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Black Rail *Laterallus jamaicensis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/7717	Breeds Mar 1 to Sep 15
Clark's Grebe *Aechmophorus clarkii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Dec 31

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Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Long-billed Curlew Numenius americanus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/5511

Marbled Godwit Limosa fedoa — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Rufous Hummingbird selasphorus rufus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8002

Short-billed Dowitcher Limnodromus griseus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9480

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Song Sparrow Melospiza melodia This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Feb 20 to Sep 5
Spotted Towhee Pipilo maculatus clementae This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/4243	Breeds Apr 15 to Jul 20
Tricolored Blackbird Agelaius tricolor This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3910	Breeds Mar 15 to Aug 10
Whimbrel Numenius phaeopus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9483	Breeds elsewhere
Willet Tringa semipalmata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Wrentit Chamaea fasciata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10

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Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

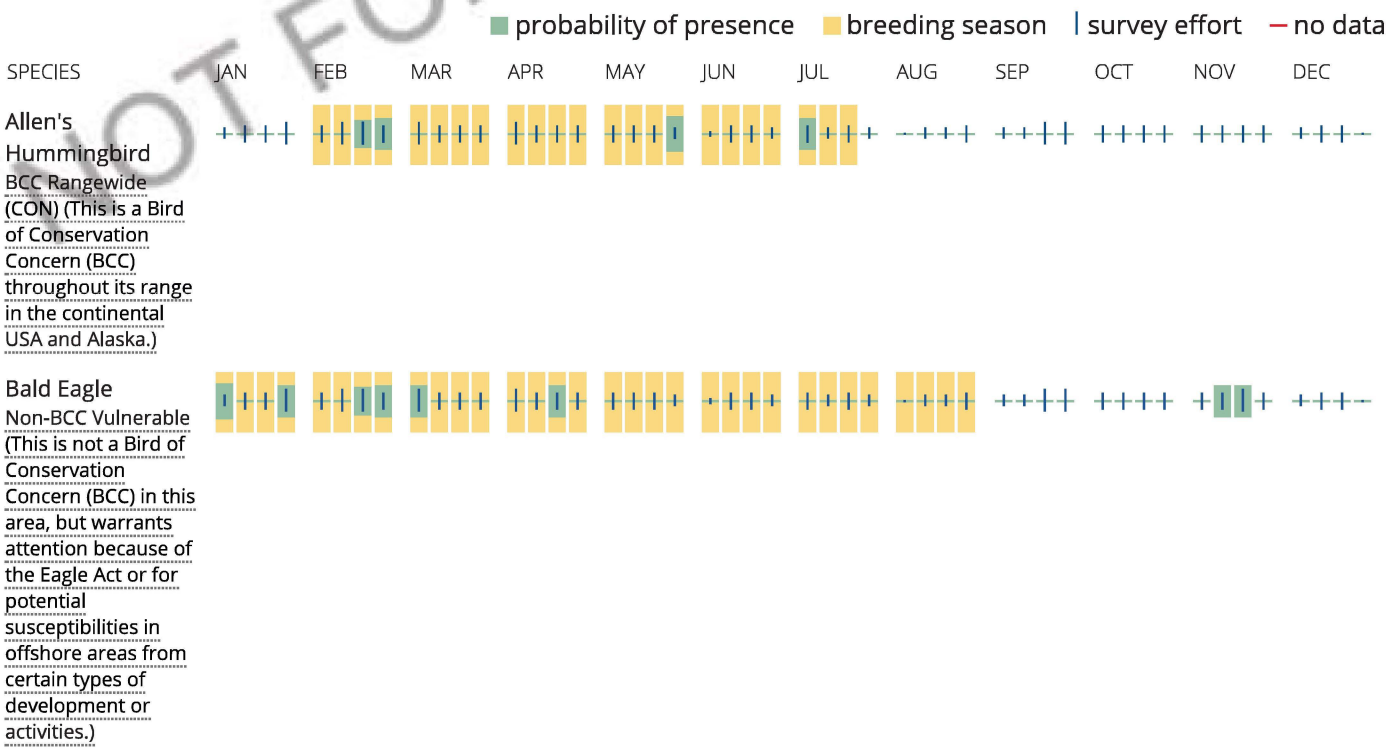
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

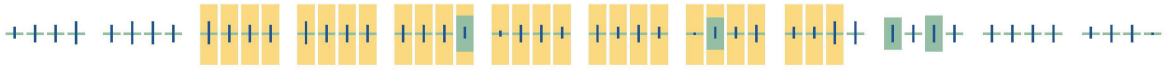
No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

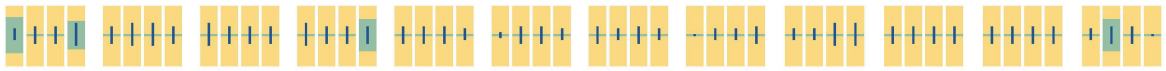
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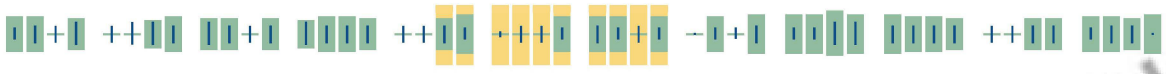
Black Rail
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



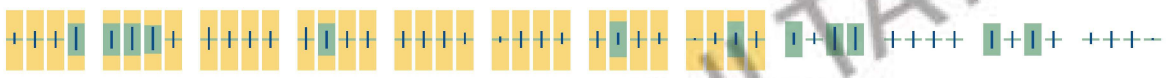
Clark's Grebe
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



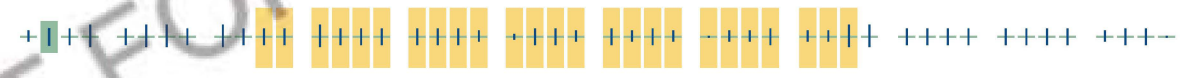
Common Yellowthroat
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Golden Eagle
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



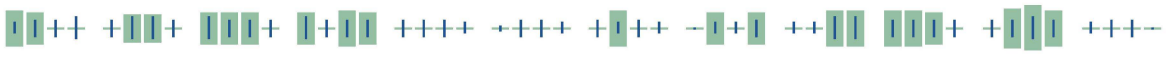
Lawrence's Goldfinch
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Long-billed Curlew
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Marbled Godwit
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



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Nuttall's Woodpecker
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Oak Titmouse
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Rufous Hummingbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

SPECIES JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Short-billed Dowitcher
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

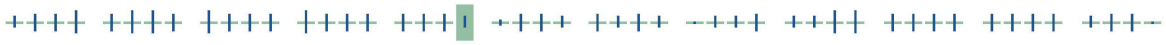
Song Sparrow
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Spotted Towhee
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

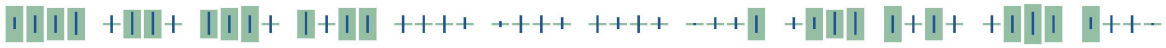
Tricolored Blackbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

NOT FOR CONSULTATION

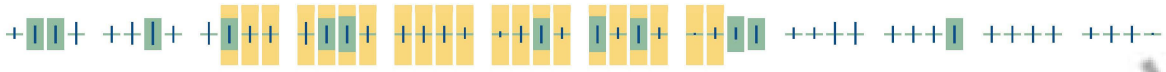
Whimbrel
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Willet
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Wrentit
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



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Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ “What does IPaC use to generate the migratory birds potentially occurring in my specified location”. Please be aware this report provides the “probability of presence” of birds within the 10

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km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

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Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

RIVERINE

- R4SBA
- R4SBCx

R4SBAx

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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ARBORIST REPORT
AND
TREE INVENTORY SUMMARY

NAPA 55 PROJECT SITE
Basalt Road, County of Napa, California

Prepared for:

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Barnett Environmental
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Prepared by:

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International Society of Arboriculture
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ISA Tree Risk Assessment Qualified
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Auburn, California 95603

May 19, 2022

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B. Tree Inventory Field Exhibits (Northeast, Northwest and South Sections)

COPYRIGHT STATEMENT

This consultant's report, dated May 19, 2022, is for the exclusive and confidential use of Barnett Environmental concerning potential development of the Napa 55 Project Site, located at Basalt Road in the County of Napa, California. Any use of this report, the accompanying appendices, or portions thereof, other than for project review and approval by appropriate governmental authorities, shall be subject to and require the written permission of Sierra Nevada Arborists. Unauthorized modification, distribution and/or use of this report, including the data or portions thereof contained within the accompanying appendices, is strictly prohibited.

QUALIFICATION STATEMENT

Sierra Nevada Arborists is a fully insured, Auburn, California-based arboriculture consulting firm founded in January of 1998 by its Principal, Edwin E. Stirtz. Mr. Stirtz is an ISA Certified Arborist and is ISA Tree Risk Assessment Qualified. He is a member of the American Society of Consulting Arborists and International Society of Arboriculture. Mr. Stirtz possesses in excess of 40 years of experience in arboriculture, forestry, and horticulture, both maintenance and construction, and has spent the last 29 years as a consultant focusing on preservation and compliance with environmental regulations in the Sacramento and surrounding regions.

INTRODUCTION

Sierra Nevada Arborists is pleased to present this revised Arborist Report and Tree Inventory Summary for the trees located within and/or overhanging the Napa 55 property located at Basalt Road in the County of Napa, California. This Arborist Report and Tree Inventory Summary memorializes tree data obtained by Edwin E. Stirtz, ISA Certified Arborist WE-0510A, at the time of field reconnaissance and inventory efforts on September 3 and 12, 2019. The date of the previous report was October 13, 2021.

LOCATION AND SITE

The site is a partially abandoned industrial/commercial site with a large asphalt pavement area. Vegetation on the north boundary is comprised of recent growth Coast Live Oak trees growing in the drainage swale. There are small trees with low quality and very dense.

SCOPE OF INVENTORY EFFORT

The County of Napa's Protected Native Tree Program for trees located on property zoned for commercial or industrial purposes regulates the following species: Black Oak 12"+ DBH, Black Walnut 12"+ DBH, Blue Oak 6"+ DBH, California Bay 12"+ DBH, Coast Live Oak 12"+ DBH, Coast Redwood 36"+ DBH, and Valley Oak 12"+ DBH.

At the request of Barnett Environmental, on September 3 and 12, 2019, Edwin E. Stirtz of Sierra Nevada Arborists visited the project site in the County of Napa, California. The purpose of this field reconnaissance effort was to inventory and prepare a pre-construction Arborist Report for the Napa 55 property.

METHODOLOGY

During field reconnaissance and inventory efforts, Edwin E. Stirtz of Sierra Nevada Arborists conducted a visual review from ground level of the trees within and/or overhanging the project site. The trees which met the defined criteria were identified in the field with square tags with blue flagging being affixed to the tree trunks. The tree numbers utilized in this report and accompanying Tree Inventory Summary correspond to the tree tags which were affixed to the trees in the field, and those tree numbers or grouping of numbers were rough-plotted on the attached Tree Inventory Field Exhibits (North and South) so that the precise vertical and horizontal location of the trees may be surveyed in the field by a licensed land surveyor and data for the trees (i.e. tree number, diameter, dripline and protected root zone radii) may be properly depicted on future development plans and Tree Location Exhibit.

At the time of field identification and inventory efforts specific data was gathered for each tagged tree including the tree's species, diameter measured at breast height ("DBH") and dripline radius ("DLR"). Utilizing this data, the tree's overall structural condition and vigor were separately assessed ranging from "excellent"[1] to "poor" based upon the observed characteristics noted within the tree and the Arborist's best professional judgment. Ratings are subjective and are dependent upon both the structure and vigor of the tree. The vigor rating considers factors such as the size, color and density of the foliage; the amount of deadwood within the canopy; bud viability; evidence of wound closure; and the presence or evidence of stress, disease, nutrient deficiency and insect infestation. The structural rating reflects the root crown/collar, trunk and branch configurations; canopy balance; the presence of included bark, weak crotches and other structural defects and decay and the potential for structural failure. Finally, notable characteristics were documented and recommendations on a tree-by-tree basis were made which logically followed the observed characteristics noted within the trees at the time of the field inventory effort. The recommendations are based on the assumption that the tree would be introduced into a developed environment and may require maintenance and/or may not be suitable for retention within a post-development setting.

SUMMARY OF INVENTORY EFFORT

Field reconnaissance and inventory efforts found 227 trees measuring 6 inches in diameter and larger measured at breast height within and/or overhanging the proposed project area. Composition of the 227 inventoried trees includes the following species and accompanying aggregate diameter inches:

SPECIES DIVERSIFICATION			
Bailey Acacia	=	2 trees	(18 aggregate diameter inches)
Blue Oak	=	3 trees	(32 aggregate diameter inches)
California Bay Laurel	=	2 trees	(42 aggregate diameter inches)
California Buckeye	=	9 trees	(141 aggregate diameter inches)
Coast Live Oak	=	185 trees	(3,696 aggregate diameter inches)
Pacific Willow	=	6 trees	(100 aggregate diameter inches)
Pine	=	6 trees	(66 aggregate diameter inches)
Prunus sp.	=	2 trees	(17 aggregate diameter inches)
Valley Oak	=	12 trees	(142 aggregate diameter inches)
TOTAL	**=**	**227 trees**	**(4,254 aggregate diameter inches)**

[1] It is rare that a tree qualifies in an "excellent" category, and it should be noted that there were no trees observed within the project area which fell within the criteria of an "excellent" or "good" rating. A complete description of the terms and ratings utilized in this report and accompany inventory summary are found on pages 10-11.

CONDITIONAL RATINGS (1-6, where 6 is remove)
1 = None
2 = None
3 = 200 trees
4 = None
5 = None
6 = 27 trees
TOTAL = 227 trees

SUITABILITY FOR PRESERVATION (P/M/G)
Poor = 2 trees
Poor to Moderate = 2 trees
Moderate = 17 trees
Moderate to Good = 12 trees
Good = 194 trees
TOTAL = 227 trees

TOTAL PROTECTED SPECIES			
Blue Oak	=	3 trees	(17 aggregate diameter inches)
California Bay Laurel	=	1 tree	(31 aggregate diameter inches)
Coast Live Oak	=	136 trees	(2,763 aggregate diameter inches)
Valley Oak	=	7 trees	(90 aggregate diameter inches)
TOTAL	**=**	**147 trees**	**(2,901 aggregate diameter inches)**

DESIGNATED PRECAUTION TREES

At this time, 27 trees have been designated as precaution trees for the proposed project area due to the nature and extent of defects, compromised health, and/or structural instability noted at the time of field inventory efforts. If these trees were retained within the proposed project area, it is our opinion that they may be hazardous depending upon their proximity to planned development activities. No improvements/activities should occur within the potential fall zones of these trees due to questionable longevity. For reference, the trees which have been designated as precaution trees due to the severity of noted defects, compromised health, and/or structural instability are highlighted in yellow within the accompanying Tree Inventory Summary and are briefly summarized as follows:

TREE #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH (inches)	DLR (feet)	CONDITIONAL ASSESSMENT	
						STRUCTURE	VIGOR
31	Coast Live Oak	*(Quercus agrifolia)*		17	24	Poor to fair	Fair
84	Coast Live Oak	*(Quercus agrifolia)*		14	15	Poor	Fair
86	Coast Live Oak	*(Quercus agrifolia)*		18	17	Poor	Fair

TREE #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH (inches)	DLR (feet)	CONDITIONAL ASSESSMENT	
						STRUCTURE	VIGOR
89	Coast Live Oak	*(Quercus agrifolia)*		22	23	Poor	Fair
95	Coast Live Oak	*(Quercus agrifolia)*	14,19	33	26	Poor	Fair
96	Coast Live Oak	*(Quercus agrifolia)*		7	11	Poor to fair	Poor
101	Coast Live Oak	*(Quercus agrifolia)*	7,10	17	17	Poor	Fair
102	Coast Live Oak	*(Quercus agrifolia)*	10,12,15	37	25	Poor	Fair
113	Coast Live Oak	*(Quercus agrifolia)*	8,11,12	31	27	Poor	Fair
116	Coast Live Oak	*(Quercus agrifolia)*	7,16	23	20	Poor	Poor to fair
118	Coast Live Oak	*(Quercus agrifolia)*		9	15	Poor	Fair
120	Coast Live Oak	*(Quercus agrifolia)*	15,17,32	64	29	Poor	Fair
122	Coast Live Oak	*(Quercus agrifolia)*	14,15	29	16	Poor	Fair
126	Coast Live Oak	*(Quercus agrifolia)*	7,10	17	16	Poor	Fair
134	Coast Live Oak	*(Quercus agrifolia)*	5,6,7	18	13	Poor	Fair
136	Coast Live Oak	*(Quercus agrifolia)*		9	13	Poor to fair	Fair
137	Coast Live Oak	*(Quercus agrifolia)*	3,4,5	12	11	Poor	Poor to fair
138	Coast Live Oak	*(Quercus agrifolia)*		9	16	Poor	Fair
142	Coast Live Oak	*(Quercus agrifolia)*		12	17	Poor	Fair
148	Coast Live Oak	*(Quercus agrifolia)*		10	25	Poor	Fair
149	Coast Live Oak	*(Quercus agrifolia)*		25	26	Poor	Poor to fair
156	Valley Oak	*(Quercus lobata)*		15	16	Poor to fair	Fair
163	Coast Live Oak	*(Quercus agrifolia)*		11	16	Poor	Fair
169	Coast Live Oak	*(Quercus agrifolia)*	30,35	65	36	Poor to fair	Fair
172	Coast Live Oak	*(Quercus agrifolia)*	10,12,14	36	18	Poor to fair	Poor
174	Coast Live Oak	*(Quercus agrifolia)*	8,8,9	25	24	Poor to fair	Poor
176	Blue Oak	*(Quercus douglasii)*		15	30	Poor	Fair

It should also be noted that some of the trees within the proposed project area are trees which may be undesirable on commercial development, or are trees which will require periodic/seasonal monitoring to assess the trees' ongoing structural integrity. At this early stage of the project Sierra Nevada Arborists has not recommended the removal of these trees since development plans, including proposed home sites and building footprints, have not yet been finalized and the precise location of these trees in proximity to planned improvement

activities is not known. At this time, it is recommended that these trees be monitored and thoroughly inspected by a qualified ISA Certified Arborist on at least an annual basis to keep abreast of the trees' changing condition(s) and to assess the trees' ongoing structural integrity and potential for hazard in a developed environment.

CONSTRUCTION IMPACT ASSESSMENT

This Arborist Report and Tree Inventory Summary is intended to provide to Barnett Environmental, the County of Napa, and other members of the development team a detailed *pre-development review* of the species, size, and current structure and vigor of the trees within and/or overhanging the proposed project area. It is not an exhaustive review of the impacts which will be sustained from project implementation. At this early stage of the project specific root system and canopy impacts on a tree-by-tree basis cannot be definitively assessed until the site development, grading, and other improvement plans have been refined and finalized and data from the accompanying inventory summary (i.e., tree numbers, dripline radius, and root protection zones) is properly depicted on the plans.

Since trees are living organisms whose condition may change at any time a complete assessment of construction impacts and specific recommendations to help mitigate for the adverse impacts which may be sustained by the trees from contemplated construction activities cannot be made until the development plans have been refined and finalized. Once final plans have been developed for the site a qualified ISA Certified Arborist with special expertise and demonstrated experience with construction projects in and among native and non-native trees should review those plans and provide a more detailed assessment of impacts, including identification of trees which may require removal to facilitate home construction and other contemplated site development activities. This review will be particularly important if structures and/or commercial activities will fall within or near the fall zone of a tree which has been noted as exhibiting structural defects, questionable long-term longevity and/or a conditional rating which is less than "fair", and for trees which measure 16 inches and greater in diameter which will be retained within close proximity to development as trees of this size may pose a more significant hazard if a sudden limb shed and/or catastrophic failure should occur. In addition, the review should include an assessment of root system and canopy impacts which will be sustained by the trees which will be retained within the proposed development area, along with specific recommendations on a tree-by-tree basis to help reduce adverse impacts of construction on the retained trees. In the meantime, this report provides some pre-development recommendations which logically follow the observed characteristics noted in the trees at the time of the field inventory efforts, as well as General Protection Measures which should be utilized as a guideline for the protection of trees which may be retained within the development area. These recommendations will require modification and/or augmentation as development plans are refined and finalized.

GENERAL COMMENTS AND ARBORISTS' DISCLAIMER

The County of Napa regulates both the removal of "protected trees" and the encroachment of construction activities within their driplines. Therefore, a tree permit and/or additional development authorization should be obtained from the County of Napa prior to the removal of any trees within the proposed project area. All terms and conditions of the tree permit and/or other Conditions of Approval are the sole and exclusive responsibility of the project applicant. It should be noted that prior to final inspection written verification from an ISA Certified Arborist may be required certifying the approved removal activities and/or implementation of other Conditions of Approval outlined for the retained trees on the site. ***Sierra Nevada Arborists will not provide written Certification of Compliance unless we have been provided with a copy of the approved site development plans, applicable permits and/or Conditions of Approval, and are on site to monitor and observe regulated activities during the course of construction.*** Therefore, it will be necessary for the project applicant to notify Sierra Nevada Arborists well in advance (at least 72 hours prior notice) of any regulated activities which are scheduled to occur on site so that those activities can be properly monitored and documented for compliance certification.

Please bear in mind that implementation of the recommendations provided within this report will help to reduce adverse impacts of construction on the retained trees; however, implementation of any recommendations should not be viewed as a guarantee or warranty against the trees' ultimate demise and/or failure in the future. Arborists are tree specialists who use their education, knowledge, training and experience to examine trees, recommend measures to enhance the beauty and health of the trees and ***attempt to reduce the risk of living near trees***. Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. There are some inherent risks with trees that cannot be predicted with any degree of certainty, even by a skilled and experienced arborist. Entities who choose to construct homes on wooded property are accepting a certain level of risk from unpredictable tree related hazards such as toppling in storms, limbs falling and fires that may damage property at some time in the future. Since trees are living organisms their structure and vigor constantly change over time, and they are not immune to changes in site conditions or seasonal variations in the weather. Further, conditions are often hidden within the tree and/or below ground. Arborists and other tree care professionals cannot guarantee that a tree will be healthy and/or safe under all circumstances or for a specific period of time. Likewise, remedial treatments cannot be guaranteed. Trees can be managed but they cannot be controlled. To develop land and live near trees is to accept some degree of risk and the only way to eliminate all risk associated with trees would be to eliminate all of the trees. ***An entity who develops land and builds a home with a tree in the vicinity should be aware of and inform their future residents of this Arborists' Disclaimer, and be further advised that the developer and the future residents assume the risk that a tree could at any time suffer a branch and/or limb failure, blow over in a storm and/or fail for no apparent reason which may cause bodily injury or property damage***. Sierra Nevada Arborists cannot predict acts of nature including, without limitation, storms of sufficient strength which can even take down a tree with a structurally sound and vigorous appearance.

Finally, the trees preserved within and/or overhanging the proposed project area will experience a physical environment different from the pre-development environment. As a result, tree health and structural stability should be regularly monitored. Occasional pruning, fertilization, mulch, pest management, replanting and/or irrigation may be required. In addition, ***provisions for monitoring both tree health and structural stability following construction must be made a priority***. As trees age, the likelihood of failure of branches or entire trees increases. Therefore, ***the future management plan must include an annual inspection*** by a qualified ISA Certified Arborist to keep abreast of the trees' changing condition(s) and to assess the trees' ongoing structural integrity and potential for hazard in a developed environment.

Thank you for allowing Sierra Nevada Arborists to assist you with this review. Please feel free to give me a call if you have any questions or require additional information and/or clarification.

Sincerely,

Edwin E. Stirtz
International Society of Arboriculture
Certified Arborist WE-0510A
ISA Tree Risk Assessment Qualified
Member, American Society of Consulting Arborists

ASSUMPTIONS AND LIMITING CONDITIONS

1. Any legal description provided to the consultant is assumed to be correct. Any titles and ownership to any property are assumed to be good and marketable. No responsibility is assumed for matters legal in character. Any and all property is appraised or evaluated as though free and clear, under responsible ownership and competent management.

2. It is assumed that any property is not in violation of any applicable codes, ordinances, statutes, or other governmental regulations.

3. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant can neither guarantee nor be responsible for the accuracy of information provided by others.

4. The consultant shall not be required to give a deposition and/or attend court by reason of this report unless subsequent contractual arrangements are made for in advance, including payment of an additional fee for such services according to our standard fee schedule, adjusted yearly, and terms of the subsequent contract of engagement.

5. Loss or alteration of any part of this report invalidates the entire report. Ownership of any documents produced passes to the Client only when all fees have been paid.

6. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person to whom it is addressed, without the prior expressed written or verbal consent of the consultant.

7. Neither all nor any part of the contents of this report, nor copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales, or other media, without the prior expressed written or verbal consent of the consultant, particularly as to value conclusions, identity of the consultant, or any reference to any professional society or institute or to any initialed designation conferred upon the consultant as stated in his qualifications.

8. This report and any values expressed herein represent the opinion of the consultant and the consultant's fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.

9. Sketches, diagrams, graphs, drawings and photographs within this report are intended as visual aids and are not necessarily to scale and should not be construed as engineering or architectural reports or surveys. The reproduction of information generated by other consultants is for coordination and ease of

reference. Inclusion of such information does not constitute a representation by the consultant as to the sufficiency or accuracy of the information.

10. Unless expressed otherwise: 1) information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection; and 2) the inspection is limited to visual examination of accessible items without laboratory analysis, dissection, excavation, probing or coring, unless otherwise stated.

11. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.

12. This report is based on the observations and opinions of Edwin E. Stirtz, and does not provide guarantees regarding the future performance, health, vigor, structural stability or safety of the plants described herein. Neither this author nor Sierra Nevada Arborists has assumed any responsibility for liability associated with the trees on or adjacent to this Project Site, their future demise and/or any damage which may result therefrom.

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13. The information contained within this report is true to the best of the author's knowledge and experience as of the date it was prepared; however, certain conditions may exist which only a comprehensive, scientific, investigation might reveal which should be performed by other consulting professionals.

14. The legal description, dimensions, and areas herein are assumed to be correct. No responsibility is assumed for matters that are legal in nature.

15. Any changes to an established tree's environment can cause its decline, death and/or structural failure.

DEFINITIONS

Tree Number:	Corresponds to aluminum tag attached to the tree.
Species Identification:	Scientific and common species name.
Diameter ("DBH"):	This is the trunk diameter measured at breast height (industry standard 4.5 feet above ground level).
Dripline radius ("DLR"):	A radius equal to the horizontal distance from the trunk of the tree to the end of the farthest most branch tip prior to any cutting. When depicted on a map, the dripline will appear as an irregularly shaped circle that follows the contour of the tree's branches as seen from overhead.
Protected Zone:	A circle equal to the largest radius of a protected tree's dripline plus 1 foot.
Root Crown:	Assessment of the root crown/collar area located at the base of the trunk of the tree at soil level.
Trunk:	Assessment of the tree's main trunk from ground level generally to the point of the primary crotch structure.
Limbs:	Assessment of both smaller and larger branching, generally from primary crotch structure to branch tips.
Foliage:	Tree's leaves.
Overall Condition:	Describes overall condition of the tree in terms of structure and vigor.
Recommendation:	Pre-development recommendations based upon observed characteristics noted at the time of the field inventory effort.
Obscured:	Occasionally some portion of the tree may be obscured from visual inspection due to the presence of dense vegetation which, during the course of inspection for the arborist report, prevented a complete evaluation of the tree. In these cases, if the tree is to be retained on site the vegetation should be removed to allow for a complete assessment of the tree prior to making final decisions regarding the suitability for retention.

TREE CONDITION RATING CRITERIA

RATING TERM	ROOT CROWN	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR
Good	No apparent injuries, decay, cavities or evidence of hollowing; no anchoring roots exposed; no indications of infestation or disease	No apparent injuries, decay, cavities or evidence of hollowing; no codominant attachments or multiple trunk attachments are observed; no indications of infestation or disease	No apparent injuries, decay, cavities or evidence of hollowing; below average amount of dead limbs or twigs; no major limb failures or included bark; callus growth is vigorous	Leaf size, color and density are typical for the species; buds are normal in size, viable, abundant and uniform throughout the canopy; annual seasonal growth increments are average or above average; no insect or disease infestations/ infections evident	No apparent structural defects; no weak crotches; no excessively weighted branches and no significant cavities or decay	Tree appears healthy and has little or no significant deadwood; foliage is normal and healthy
Fair	Small to moderate injuries, decay, cavities or hollowing may be evident but are not currently affecting the overall structure; some evidence of infestation or disease may be present but is not currently affecting the tree's structure	Small to moderate injuries, decay, cavities or hollowing may be evident; codominant branching or multiple trunk attachments or minor bark inclusion may be observed; some infestation or disease may be present but not currently affecting the tree's structure	Small to moderate injuries, decay or cavities may be present; average or above average dead limbs or twigs may be present; some limb failures or bark inclusion observed; callus growth is average	Leaf size, color and density are typical or slightly below typical for the species; buds are normal or slightly sparse with potentially varied viability, abundance and distribution throughout the canopy; annual seasonal growth increments are average or slightly below average; minor insect or disease infestation/infection may be present	Minor structural problems such as weak crotches, minor wounds and/or cavities or moderate amount of excessive weight; non-critical structural defects which can be mitigated through pruning, cabling or bracing	Tree appears stressed or partially damaged; minimal vegetative growth since previous season; moderate amount of deadwood, abnormal foliage and minor lesions or cambium dieback
Poor	Moderate to severe injuries, decay, cavities or hollowing may be evident and are affecting the overall structure; presence of infestation or disease may be significant and affecting the tree's structure	Moderate to severe injuries, decay, cavities or hollowing may be evident and are affecting the tree's structure; presence of infestation or disease may be significant and affecting the tree's structure	Severe injuries, decay or cavities may be present; major deadwood, twig dieback, limb failures or bark inclusion observed; callus growth is below average	Leaf size, color and density are obviously abnormal; buds are obviously abnormal or absent; annual seasonal growth is well below average for the species; insect or disease problems may be severe	Obvious major structural problems which cannot be corrected with mitigation; potential for major limb, trunk or root system failure is high; significant decay or dieback may be present	Tree health is declining; no new vegetative growth; large amounts of deadwood; foliage is severely abnormal

The ratings "good to fair" and "fair to poor" are used to describe trees that fall between the described major categories and have elements of both

GENERAL PROTECTION GUIDELINES FOR TREES PLANNED FOR PRESERVATION

Great care must be exercised when work is conducted upon or around protected trees. The purpose of these General Protection Measures is to provide guidelines to protect the health of the affected protected trees. These guidelines apply to all encroachments into the protected zone of a protected tree, and may be incorporated into tree permits and/or other Conditions of Approval as deemed appropriate by the applicable governing body.

- A circle with a radius measurement from the trunk of the tree to the tip of its longest limb, plus one foot, shall constitute the critical root zone protection area of each protected tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of each protected tree. Removing limbs that make up the dripline does not change the protected area.

- Any protected trees on site which require pruning shall be pruned by an ISA Certified Arborist prior to the start of construction work. All pruning shall be in accordance with the American National Standards Institute (ANSI) A300 pruning standards, ANSI Standard 2133.1-2000 regarding safety practices, and the International Society of Arboriculture (ISA) "Tree Pruning Guidelines" and Best Management Practices.

- Prior to initiating construction, temporary protective fencing shall be installed at least one foot outside the root protection zone of the protected trees in order to avoid damage to the tree canopies and root systems. Fencing shall be installed in accordance with the approved fencing plan prior to the commencement of any grading operations or such other time as determined by the review body. The developer shall contact the Project Arborist and the Planning Department for an inspection of the fencing prior to commencing construction activities on site.

- Signs shall be installed on the protective fence in four (4) equidistant locations around each individual protected tree. The size of each sign must be a minimum of two (2) feet by two (2) feet and must contain the following language:

  WARNING: THIS FENCE SHALL NOT BE REMOVED OR RELOCATED WITHOUT WRITTEN AUTHORIZATION FROM THE COUNTY OF NAPA.

  Once approval has been obtained by the County of Napa protective fencing shall remain in place throughout the entire construction period and shall not be removed, relocated, taken down or otherwise modified in whole or in part without prior written authorization from the Agency, or as deemed necessary by the Project Arborist to facilitate approved activities within the root protection zone.

- Any removal of paving or structures (i.e. demolition) that occurs within the dripline of a protected tree shall be done under the direct supervision of the Project Arborist. To the maximum extent feasible, demolition work within the dripline protection area of the protected tree shall be performed by hand. If the Project Arborist determines that it is not feasible to perform some portion(s) of this work by hand, then the smallest/lightest weight equipment that will adequately perform the demolition work shall be used.

- No signs, ropes, cables (except those which may be installed by an ISA Certified Arborist to provide limb support) or any other items shall be attached to the protected trees. Small metallic numbering tags for the purpose of identification in preparing tree reports and inventories shall be allowed.

- No vehicles, construction equipment, mobile homes/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within the driplines of protected trees.

- Drainage patterns on the site shall not be modified so that water collects, stands or is diverted across the dripline of any protected tree.

- No trenching shall be allowed within the driplines of protected trees, except as specifically approved by the Planning Department as set forth in the project's Conditions of Approval and/or approved tree permit. If it is absolutely necessary to install underground utilities within the dripline of a protected tree the utility line within the protected zone shall be "bored and jacked" or performed utilizing hand tools to avoid root injury under the direct supervision of the Project Arborist.

- Grading within the protected zone of a protected tree shall be minimized. Cuts within the protected zone shall be maintained at less than 20% of the critical root zone area. Grade cuts shall be monitored by the Project Arborist. Any damaged roots encountered shall be root pruned and properly treated as deemed necessary by the Project Arborist.

- Minor roots less than one (1) inch in diameter encountered during approved excavation and/or grading activities may be cut, but damaged roots shall be traced back and cleanly cut behind any split, cracked or damaged area as deemed necessary by the Project Arborist.

- Major roots greater than one (1) inch in diameter encountered during approved excavation and/or grading activities may not be cut without approval of the Project Arborist. Depending upon the type of improvement being proposed, bridging techniques or a new site design may need to be employed to protect the roots and the tree.

- Cut faces, which will be exposed for more than 2-3 days, shall be covered with dense burlap fabric and watered to maintain soil moisture at least on a daily basis (or possibly more frequently during summer months). If any native ground surface fabric within the protected zone must be removed for any reason, it shall be replaced within forty-eight (48) hours.

- If fills exceed 1 foot in depth up to 20% of the critical root zone area, aeration systems may serve to mitigate the presence of the fill materials as determined by the Project Arborist.

- When fill materials are deemed necessary on two or three sides of a tree it is critical to provide for drainage away from the critical root zone area of the tree (particularly when considering heavy winter rainfalls). Overland releases and subterranean drains dug outside the critical root zone area and tied directly to the main storm drain system are two options.

- In cases where a permit has been approved for construction of a retaining wall(s) within the protected zone of a protected tree the applicant will be required to provide for immediate protection of exposed roots from moisture loss during the time prior to completion of the wall. The retaining wall within the protected zone of the protected tree shall be constructed within seventy-two (72) hours after completion of grading within the root protection zone.

- The construction of impervious surfaces within the dripline of a protected tree shall be minimized. When necessary, a piped aeration system shall be installed under the direct supervision of the Project Arborist.

- Preservation devices such as aeration systems, tree wells, drains, special paving and cabling systems must be installed in conformance with approved plans and certified by the Project Arborist.

- No sprinkler or irrigation system shall be installed in such a manner that sprays water or requires trenching within the dripline of a protected tree. An above ground drip irrigation system is recommended. An independent low-flow drip irrigation system may be used for establishing drought-tolerant plants within the protected zone of a protected tree. Irrigation shall be gradually reduced and discontinued after a two (2) year period.

- All portions of permanent fencing that will encroach into the protected zone of a protected tree shall be constructed using posts set no closer than ten (10) feet on center. Posts shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts in order to reduce impacts to the tree(s).

- Landscaping beneath native oak trees may include non-plant materials such as bark mulch, wood chips, boulders, etc. Planting live material under protected native oak trees is generally discouraged, and is not recommended within six (6) feet of the trunk of a native oak tree with a diameter a breast height (DBH) of eighteen (18) inches or less, or within ten (10) feet of the trunk of a native oak tree with a DBH of more than eighteen (18) inches. The only plant species which shall be planted within the dripline of native oak trees are those which are tolerant of the natural, semi-arid environs of the tree(s).

BARNETT ENVIRONMENTAL
Napa 55 Project Site
Basalt Road, City of Napa, California
TREE INVENTORY SUMMARY

TREE #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH (inches)	DLR (feet)	CONDITIONAL ASSESSMENT						Rating (1-6)	Preser-vation (P/M/G)	Protected Native Tree	NOTABLE CHARACTERISTICS	MAINTENANCE RECOMMENDATIONS
						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
1	Coast Live Oak	*(Quercus agrifolia)*	12,14,15	41	22	Fair	Fair	Fair	Fair	Fair	Fair	3	G	41	Above average amount of deadwood.	None at this time.
2	Coast Live Oak	*(Quercus agrifolia)*		7	9	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
3	Coast Live Oak	*(Quercus agrifolia)*		15	22	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	G	15	Forks 4'-5' above grade. Inherently weak primary crotch with included bark. Above average amount of deadwood.	None at this time.
4	Coast Live Oak	*(Quercus agrifolia)*		10	12	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Out of balance west. Slightly above average amount of deadwood.	None at this time.
5	Coast Live Oak	*(Quercus agrifolia)*		14	19	Fair	Fair	Fair	Fair	Fair	Fair	3	G	14	Above average amount of deadwood.	None at this time.
6	Coast Live Oak	*(Quercus agrifolia)*		11	15	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
7	Coast Live Oak	*(Quercus agrifolia)*		15	22	Fair	Fair	Fair	Fair	Fair	Fair	3	G	15	Slightly above average amount of deadwood.	None at this time.
8	Coast Live Oak	*(Quercus agrifolia)*	8,11,16	35	28	Fair	Fair	Fair	Fair	Fair	Fair	3	G	35	Forks at grade. Weak attachments. Up to 8" of separation between the largest stem and the 2 smaller stems. Above average amount of deadwood.	None at this time.
9	Coast Live Oak	*(Quercus agrifolia)*		18	23	Fair	Poor to fair	Fair	Fair	Poor to fair	Poor to fair	3	G	18	Out of balance northeast. Forks 5'-6' above grade. Inherently weak primary crotch with an inclusion. Above average amount of deadwood. Sparse foliage.	None at this time.
10	Coast Live Oak	*(Quercus agrifolia)*		11	17	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Out of balance east. Above average amount of deadwood.	None at this time.
11	Coast Live Oak	*(Quercus agrifolia)*		12	16	Fair	Fair	Fair	Fair	Fair	Fair	3	G	12	Out of balance east. Slightly above average amount of deadwood.	None at this time.
12	Coast Live Oak	*(Quercus agrifolia)*		8	9	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	G		Suppressed. Out of balance/one-sided east. Above average amount of deadwood.	None at this time.
13	Coast Live Oak	*(Quercus agrifolia)*		20	24	Fair	Fair	Fair	Fair	Poor to fair	Fair	3	G	20	Measured at 1' above grade. Branches at 4' above grade and again at 6' above grade. Weak attachments with included bark. Above average amount of deadwood.	None at this time.
14	Coast Live Oak	*(Quercus agrifolia)*		15	16	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	G	15	Measured at 3' above grade. Forks 3'-5' above grade with moderate to severe inclusion. Above average amount of deadwood.	None at this time.

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						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
15	Coast Live Oak	*(Quercus agrifolia)*		13	16	Fair	Fair	Fair	Fair	Fair	Fair	3	G	13	Above average amount of deadwood.	None at this time.
16	Coast Live Oak	*(Quercus agrifolia)*		15	21	Fair	Fair	Fair	Fair	Fair	Fair	3	G	15	Slightly above average amount of deadwood.	None at this time.
17	Coast Live Oak	*(Quercus agrifolia)*		10	12	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
18	Coast Live Oak	*(Quercus agrifolia)*		12	16	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	G	12	Out of balance west. Slightly above average amount of deadwood.	None at this time.
19	Coast Live Oak	*(Quercus agrifolia)*		13	17	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	G	13	Trunk has a moderate to abrupt self-correcting crook 8' above grade. Slightly out of balance southeast. Slightly above average amount of deadwood.	None at this time.
20	Coast Live Oak	*(Quercus agrifolia)*	12,13	25	25	Poor to fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3	G	25	Measured 3' above grade. Forks at grade. Inherently weak primary crotch with moderate. Additional inclusions in upper crotches. Above average amount of deadwood.	None at this time.
21	Coast Live Oak	*(Quercus agrifolia)*		17	27	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	G	17	One-sided/out of balance south. Above average amount of deadwood.	None at this time.
22	Coast Live Oak	*(Quercus agrifolia)*		7	6	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
23	Coast Live Oak	*(Quercus agrifolia)*	6,9	15	12	Fair	Fair	Fair	Fair	Fair	Fair	3	G	15	Slightly above average amount of deadwood.	None at this time.
24	Coast Live Oak	*(Quercus agrifolia)*	4,6	10	10	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
25	Coast Live Oak	*(Quercus agrifolia)*	2,3,4,5	14	9	Fair	Fair	Fair	Fair	Fair	Fair	3	G	14	Slightly above average amount of deadwood.	None at this time.
26	Coast Live Oak	*(Quercus agrifolia)*		7	10	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
27	Coast Live Oak	*(Quercus agrifolia)*		9	17	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Measured at 2' above grade. Out of balance south. Slightly above average amount of deadwood.	None at this time.
28	Coast Live Oak	*(Quercus agrifolia)*		12	17	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	G	12	Suppressed. Out of balance south. Slightly above average amount of deadwood.	None at this time.
29	Coast Live Oak	*(Quercus agrifolia)*		18	24	Fair	Fair	Fair	Fair	Fair	Fair	3	G	18	Suppressed. Out of balance south. Slightly above average amount of deadwood.	None at this time.
30	Coast Live Oak	*(Quercus agrifolia)*		12	26	Fair	Fair	Fair	Fair	Fair	Fair	3	G	12	Suppressed. Out of balance south. Slightly above average amount of deadwood.	None at this time.

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						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
31	Coast Live Oak	*(Quercus agrifolia)*		17	24	Poor to fair	Poor to fair	Fair	Fair	Poor to fair	Fair	6	G	0	Measured at 3' above grade. Out of balance south. Basal fruiting bodies, north side, with minor to moderate decay evident. Slightly above average amount of deadwood.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***
32	Coast Live Oak	*(Quercus agrifolia)*		17	24	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	G	17	Measured at 3' above grade. Suppressed. Out of balance south. Slightly above average amount of deadwood.	None at this time.
33	Coast Live Oak	*(Quercus agrifolia)*	4,8	12	16	Fair	Fair	Fair	Fair	Fair	Fair	3	G	12	Suppressed. One-sided south. Slightly above average amount of deadwood.	None at this time.
34	Coast Live Oak	*(Quercus agrifolia)*	3,5,7,12	27	18	Poor to fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	G	27	Suppressed. One-sided south. One large stem grows horizontal to grade. Slightly above average amount of deadwood.	None at this time.
35	Coast Live Oak	*(Quercus agrifolia)*	6,11	17	19	Fair	Fair	Fair	Fair	Fair	Fair	3	G	17	Suppressed. One-sided south. Slightly above average amount of deadwood.	None at this time.
36	Coast Live Oak	*(Quercus agrifolia)*	8,12	20	23	Fair	Poor to fair	Poor to fair	Fair	Fair	Fair	3	G	20	Out of balance south. Slightly above average amount of deadwood.	None at this time.
37	Coast Live Oak	*(Quercus agrifolia)*		8	11	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
38	Coast Live Oak	*(Quercus agrifolia)*	8,11	19	18	Fair	Fair	Fair	Fair	Fair	Fair	3	G	19	Slightly above average amount of deadwood.	None at this time.
39	Coast Live Oak	*(Quercus agrifolia)*		6	12	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Leans south. Slightly above average amount of deadwood.	None at this time.
40	Coast Live Oak	*(Quercus agrifolia)*	4,6	10	14	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
41	Coast Live Oak	*(Quercus agrifolia)*	4,5,8	17	13	Fair	Fair	Fair	Fair	Fair	Fair	3	G	17	Slightly above average amount of deadwood.	None at this time.
42	Coast Live Oak	*(Quercus agrifolia)*		8	17	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	G		Out of balance south. Slightly above average amount of deadwood.	None at this time.
43	Coast Live Oak	*(Quercus agrifolia)*		17	24	Fair	Fair	Fair	Fair	Fair	Fair	3	G	17	Slightly above average amount of deadwood.	None at this time.
44	Coast Live Oak	*(Quercus agrifolia)*		20	25	Fair	Fair	Fair	Fair	Fair	Fair	3	G	20	Measured at 18" above grade. Slightly above average amount of deadwood. Slightly sparse foliage.	None at this time.
45	Coast Live Oak	*(Quercus agrifolia)*		12	13	Fair	Fair	Fair	Fair	Fair	Fair	3	G	12	Suppressed. Slightly above average amount of deadwood.	None at this time.
46	Coast Live Oak	*(Quercus agrifolia)*		17	20	Fair	Fair	Fair	Fair	Fair	Fair	3	G	17	Slightly above average amount of deadwood.	None at this time.

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						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
47	Pacific Willow	*(Salix lucida)*		7	13	Fair	Fair	Fair	Fair	Fair	Fair	3	M-G		Slightly above average amount of deadwood.	None at this time.
48	Coast Live Oak	*(Quercus agrifolia)*	4,4	8	13	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slight lean north.	None at this time.
49	Coast Live Oak	*(Quercus agrifolia)*		9	13	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
50	Coast Live Oak	*(Quercus agrifolia)*		8	12	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
51	Pine	*Pinus sp.*		12	13	Fair	Fair	Fair	Fair	Fair	Fair	3	M-G			None at this time.
52	Pine	*Pinus sp.*		8	7	Fair	Fair	Fair	Fair	Fair	Fair	3	M-G			None at this time.
53	Pine	*Pinus sp.*		10	13	Fair	Fair	Fair	Fair	Fair	Fair	3	M-G			None at this time.
54	Pine	*Pinus sp.*		8	6	Fair	Fair	Fair	Fair	Fair	Fair	3	M-G			None at this time.
55	Pine	*Pinus sp.*		14	16	Fair	Fair	Fair	Fair	Fair	Fair	3	M-G			None at this time.
56	Coast Live Oak	*(Quercus agrifolia)*		7	14	Fair	Fair	Fair	Fair	Fair	Fair	3	G			None at this time.
57	Coast Live Oak	*(Quercus agrifolia)*		6	10	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Suppressed. Out of balance south. Slightly above average amount of deadwood.	None at this time.
58	Pine	*Pinus sp.*		14	16	Fair	Fair	Fair	Fair	Fair	Fair	3	M-G		Above average amount of deadwood.	None at this time.
59	Pacific Willow	*(Salix lucida)*	3,4,4,6	17	8	Fair	Fair	Fair	Fair	Fair	Fair	3	M-G			None at this time.
60	Pacific Willow	*(Salix lucida)*		13	18	Fair	Fair	Fair	Fair	Fair	Fair	3	M-G		Slightly above average amount of deadwood.	None at this time.
61	Pacific Willow	*(Salix lucida)*		9	11	Fair	Fair	Fair	Fair	Fair	Fair	3	M-G		Slightly above average amount of deadwood.	None at this time.
62	Pacific Willow	*(Salix lucida)*	4,5,6,6,7	28	16	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	M-G		Out of balance north. Surrounded by numerous other 3"-4" diameterWillow saplings.	None at this time.
63	Pacific Willow	*(Salix lucida)*	12,14	26	22	Fair	Fair	Fair	Fair	Fair	Fair	3	M-G		Slightly above average amount of deadwood. Tag on branch.	None at this time.
64	Bailey Acacia	*(Acacia baileyana)*		9	12	Fair	Fair	Fair	Fair	Fair	Fair	3	P		Tag on branch.	None at this time.
65	Bailey Acacia	*(Acacia baileyana)*		9	14	Fair	Fair	Fair	Fair	Fair	Fair	3	P		Slightly above average amount of deadwood. Tag on branch.	None at this time.
66	Coast Live Oak	*(Quercus agrifolia)*	13,14	27	22	Fair	Fair	Fair	Fair	Fair	Fair	3	G	27	Forks at grade. Weak attachments. Above average amount of deadwood.	None at this time.
67	Coast Live Oak	*(Quercus agrifolia)*	4,4,4,5,8	25	16	Fair	Fair	Fair	Fair	Fair	Fair	3	G	25	One-sided south. Slightly above average amount of deadwood.	None at this time.
68	Coast Live Oak	*(Quercus agrifolia)*		8	10	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Above average amount of deadwood.	None at this time.

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						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
69	Coast Live Oak	*(Quercus agrifolia)*	17,19	36	29	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	G	36	Forks 3' above grade. Inherently weak primary crotch with moderate to severe inclusion and dark flux. Above average amount of deadwood.	None at this time.
70	Coast Live Oak	*(Quercus agrifolia)*		15	19	Fair	Fair	Fair	Fair	Fair	Fair	3	G	15	Slightly above average amount of deadwood.	None at this time.
71	Coast Live Oak	*(Quercus agrifolia)*		31	33	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	G	31	Measured at 18" above grade. Forks 3.5'-6' above grade. Weak attachments with inclusions. Above average amount of deadwood.	None at this time.
72	Coast Live Oak	*(Quercus agrifolia)*		44	39	Fair	Fair	Poor to fair	Poor to fair	Poor to fair	Poor	3	G	44	Measured 1' above grade. Old fire scars on the lower sides of the scaffold branches. Above average amount of deadwood. Sparse foliage.	None at this time.
73	Coast Live Oak	*(Quercus agrifolia)*		38	32	Fair	Poor to fair	Poor to fair	Poor to fair	Poor to fair	Poor to fair	3	G	38	Measured 1' above grade. Callusing basal lower trunk wounds, various locations. Bacterial canker evident. Above average amount of deadwood. Slightly sparse foliage.	None at this time.
74	Coast Live Oak	*(Quercus agrifolia)*	12,16	28	24	Fair	Fair	Poor to fair	Fair	Poor to fair	Fair	3	G	28	Old callusing trunk wound/old fire scar with minor to moderate decay. Out of balance north. Above average amount of deadwood.	None at this time.
75	Coast Live Oak	*(Quercus agrifolia)*		13	12	Fair	Fair	Fair	Fair	Fair	Fair	3	G	13	Slightly above average amount of deadwood.	None at this time.
76	Coast Live Oak	*(Quercus agrifolia)*		38	32	Poor	Poor to fair	Fair	Fair	Poor	Fair	3	G	38	Measured at 18" above grade. Callusing basal lower trunk wounds 2' above grade with minor decay. Forks from grade to 3.5' above grade. Weak attachments with inclusion. Above average amount of deadwood.	None at this time.
77	Coast Live Oak	*(Quercus agrifolia)*		32	35	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	G	32	Out of balance/one-sided south. Above average amount of deadwood.	None at this time.
78	Coast Live Oak	*(Quercus agrifolia)*		32	36	Fair	Fair	Fair	Fair	Fair	Fair	3	G	32	Measured at 18" above grade. Slightly above average amount of deadwood.	None at this time.
79	Coast Live Oak	*(Quercus agrifolia)*		17	24	Fair	Fair	Fair	Fair	Fair	Fair	3	G	17	Slightly above average amount of deadwood.	None at this time.
80	Coast Live Oak	*(Quercus agrifolia)*		25	27	Fair	Fair	Fair	Fair	Fair	Fair	3	G	25	Leans southwest. Slightly above average amount of deadwood.	None at this time.

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						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
81	Coast Live Oak	*(Quercus agrifolia)*		45	37	Fair	Fair	Fair	Fair	Fair	Fair	3	G	45	Slightly above average amount of deadwood.	None at this time.
82	Coast Live Oak	*(Quercus agrifolia)*	22,28	50	31	Fair	Fair	Fair	Fair	Fair	Fair	3	G	50	Slightly above average amount of deadwood.	None at this time.
83	Coast Live Oak	*(Quercus agrifolia)*		7	10	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
84	Coast Live Oak	*(Quercus agrifolia)*		14	15	Poor	Poor	Poor to fair	Fair	Poor	Fair	6	G	0	Old callusing basal lower trunk wounds from grade to 7' above grade. Old fire scar with significant decay. Out of balance southeast.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***
85	Coast Live Oak	*(Quercus agrifolia)*		20	23	Fair	Obscured	Fair	Fair	Obscured	Fair	3	G	20	Root collar and lower trunk obscured by dense poison oak.	***Remove poison oak and reevaluate.***
86	Coast Live Oak	*(Quercus agrifolia)*		18	17	Fair	Poor	Poor to fair	Fair	Poor	Fair	6	G	0	Measured at 1' above grade. Callusing lower trunk wound with moderate to significant decay. Weak attachments.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***
87	Coast Live Oak	*(Quercus agrifolia)*		23	20	Poor to fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	G	23	Callusing basal lower trunk wounds, various locations, with minor decay.	None at this time.
88	Coast Live Oak	*(Quercus agrifolia)*		28	27	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	G	28	Measured at 2' above grade. Callusing lower trunk wounds, various locations, with minor decay.	None at this time.
89	Coast Live Oak	*(Quercus agrifolia)*		22	23	Poor to fair	Poor	Fair	Fair	Poor	Fair	6	G	0	Basal injuries with moderate decay. Tree is growing in a railroad tie planter box. Callusing lower trunk wound 5'-6' above grade with significant decay. Above average amount of deadwood.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***
90	Coast Live Oak	*(Quercus agrifolia)*	17,19	36	22	Fair	Fair	Fair	Fair	Fair	Fair	3	G	36	Measured at 2' above grade. Slightly above average amount of deadwood.	None at this time.
91	Coast Live Oak	*(Quercus agrifolia)*		41	35	Fair	Poor	Poor to fair	Fair	Poor	Fair	3	G	41	Measured at 2' above grade. Tree is growing in a deep depression with a bend at an angle to the west/northwest close to grade at the upper end. Above average amount of deadwood.	None at this time.

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						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
92	Coast Live Oak	*(Quercus agrifolia)*		17	29	Poor to fair	Poor	Poor to fair	Poor	Poor to fair	Poor to fair	3	G	17	Growing at an angle to the southeast. Bends south. Above average amount of deadwood. Sparse foliage.	None at this time.
93	Coast Live Oak	*(Quercus agrifolia)*	8,14	22	22	Poor to fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3	G	22	Growing at an angle to the south. Above average amount of deadwood.	None at this time.
94	Coast Live Oak	*(Quercus agrifolia)*		14	27	Fair	Fair	Poor to fair	Fair	Poor to fair	Fair	3	G	14	Branches at 7' above grade.	None at this time.
95	Coast Live Oak	*(Quercus agrifolia)*	14,19	33	26	Poor	Poor	Fair	Fair	Poor	Fair	6	G	0	Callusing basal trunk cavities, various locations, with moderate to significant decay. Weak attachments. Above average amount of deadwood.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***
96	Coast Live Oak	*(Quercus agrifolia)*		7	11	Poor to fair	Poor to fair	Poor	Poor	Poor to fair	Poor	6	G		Above average amount of deadwood. Sparse foliage.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***
97	California Buckeye	*(Aesculus californica)*	7,8	15	12	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
98	California Buckeye	*(Aesculus californica)*		8	12	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
99	California Buckeye	*(Aesculus californica)*	8,9	17	9	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
100	California Buckeye	*(Aesculus californica)*	3,4,6	13	11	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
101	Coast Live Oak	*(Quercus agrifolia)*	7,10	17	17	Poor	Poor	Poor to fair	Fair	Poor	Fair	6	G	0	Callusing basal trunk wounds, various locations, with significant decay. One-sided north. Above average amount of deadwood.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***
102	Coast Live Oak	*(Quercus agrifolia)*	10,12,15	37	25	Poor to fair	Poor	Fair	Fair	Poor	Fair	6	G	0	Callusing basal lower trunk wounds, various locations, with minor to moderate decay. Weak attachments. Above average amount of deadwood.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***

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						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
103	Coast Live Oak	*(Quercus agrifolia)*	6,12,14	32	12	Fair	Fair	Fair	Fair	Fair	Fair	3	G	32	Measured at 1' above grade. Slightly above average amount of deadwood.	None at this time.
104	Coast Live Oak	*(Quercus agrifolia)*		29	30	Fair	Fair	Fair	Fair	Fair	Fair	3	G	29	Measured at 1' above grade. Above average amount of deadwood.	None at this time.
105	Coast Live Oak	*(Quercus agrifolia)*		17	16	Fair	Fair	Fair	Fair	Fair	Fair	3	G	17	Measured at 2' above grade. Slightly above average amount of deadwood.	None at this time.
106	Coast Live Oak	*(Quercus agrifolia)*		17	19	Fair	Fair	Fair	Fair	Fair	Fair	3	G	17	Measured at 2' above grade. Slightly above average amount of deadwood.	None at this time.
107	Coast Live Oak	*(Quercus agrifolia)*	5,6	11	10	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
108	Coast Live Oak	*(Quercus agrifolia)*		10	9	Fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3	G		Callusing lower trunk wounds, various locations, with minor decay.	None at this time.
109	Coast Live Oak	*(Quercus agrifolia)*	9,11,14	34	17	Fair	Poor to fair	Poor to fair	Poor to fair	Poor to fair	Poor to fair	3	G	34	Forks from grade to 3' above grade. Weak attachments. Above average amount of deadwood. Sparse foliage.	None at this time.
110	Valley Oak	*(Quercus lobata)*		19	22	Fair	Fair	Fair	Fair	Fair	Fair	3	M	19	Out of balance west. Above average amount of deadwood.	None at this time.
111	Coast Live Oak	*(Quercus agrifolia)*		26	29	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	G	26	Callusing fire damage to the bottoms of the large scaffold branches with minor decay evident. Out of balance east. Above average amount of deadwood.	None at this time.
112	California Bay Laurel	*(Umbellularia californica)*		11	16	Fair	Fair	Fair	Fair	Fair	Fair	3	M		Slightly above average amount of deadwood.	None at this time.
113	Coast Live Oak	*(Quercus agrifolia)*	8,11,12	31	27	Poor	Poor	Fair	Fair	Poor	Fair	6	G	0	Callusing basal trunk wound/cavity with moderate to significant decay. Weak attachments. Above average amount of deadwood.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***
114	Coast Live Oak	*(Quercus agrifolia)*	11,15	26	28	Poor to fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3	G	26	Callusing basal lower trunk wounds, various locations, with minor decay. Weak attachments. Above average amount of deadwood.	None at this time.
115	Coast Live Oak	*(Quercus agrifolia)*	8,9,10, 12,20	59	26	Poor to fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	G	59	Callusing basal lower trunk wounds, various locations. Old fire damage. Minor to moderate decay. Weak attachments. Above average amount of deadwood.	None at this time.

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TREE #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH (inches)	DLR (feet)	CONDITIONAL ASSESSMENT						Rating (1-6)	Preser-vation (P/M/G)	Protected Native Tree	NOTABLE CHARACTERISTICS	MAINTENANCE RECOMMENDATIONS
						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
116	Coast Live Oak	*(Quercus agrifolia)*	7,16	23	20	Poor to fair	Poor	Poor to fair	Fair	Poor	Poor to fair	6	G	0	Callusing basal lower trunk wounds/cavities, various locations, with minor to moderate decay. Failures in the upper canopy with resulting decay. Above average amount of deadwood.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***
117	Coast Live Oak	*(Quercus agrifolia)*		39	38	Poor to fair	Poor to fair	Poor to fair	Fair	Poor to fair	Poor to fair	3	G	39	Measured at 2' above grade. Callusing basal lower trunk wounds, various locations, with minor to moderate decay. Forks from grade to 4' above grade. Weak attachments. Above average amount of deadwood.	None at this time.
118	Coast Live Oak	*(Quercus agrifolia)*		9	15	Poor	Poor	Poor to fair	Fair	Poor	Fair	6	G		Callusing basal trunk cavity, northwest side, with moderate decay. One-sided/bends and growing horizontal to grade to the south. Above average amount of deadwood.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***
119	Coast Live Oak	*(Quercus agrifolia)*	21,23	44	30	Poor to fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3	G	44	Forks from grade to 4' above grade. Weak attachments. Above average amount of deadwood.	None at this time.
120	Coast Live Oak	*(Quercus agrifolia)*	15,17,32	64	29	Poor	Poor	Poor to fair	Fair	Poor	Fair	6	G	0	Callusing basal trunk cavities, various locations, with moderate to significant decay. Forks from grade to 4' above grade. Weak attachments. Above average amount of deadwood.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***
121	Coast Live Oak	*(Quercus agrifolia)*		15	16	Fair	Poor	Poor to fair	Fair	Poor	Fair	3	G	15	Callusing lower trunk wound, north side, 5' above grade with moderate decay. One-sided south. Pruned for utility line clearance. Above average amount of deadwood.	None at this time.
122	Coast Live Oak	*(Quercus agrifolia)*	14,15	29	16	Poor	Poor	Poor to fair	Fair	Poor	Fair	6	G	0	Forks at grade. Weak attachments. Several failures in the upper canopy with resulting moderate to significant decay in the parent stems. Stems grow in opposite directions north and south. Tree is 80% dead.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***

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						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
123	Coast Live Oak	*(Quercus agrifolia)*		10	16	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	G		Leans east. Bends north. Slightly above average amount of deadwood.	None at this time.
124	Coast Live Oak	*(Quercus agrifolia)*	8,12	20	15	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	G	20	Callusing lower trunk wounds with minor to moderate decay. Above average amount of deadwood.	None at this time.
125	Coast Live Oak	*(Quercus agrifolia)*	6,7,8,9	30	15	Fair	Fair	Fair	Fair	Fair	Fair	3	G	30	Weak attachments. Slightly above average amount of deadwood.	None at this time.
126	Coast Live Oak	*(Quercus agrifolia)*	7,10	17	16	Poor	Poor	Poor to fair	Fair	Poor	Fair	6	G	0	Several other stems have been either removed or failed in the past with significant decay resulting. Weak attachments. Above average amount of deadwood.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***
127	Coast Live Oak	*(Quercus agrifolia)*	10,10,10	30	22	Poor to fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3	G	30	Forks at grade and 3' above grade. Weak attachments. One-sided south. Above average amount of deadwood.	None at this time.
128	Coast Live Oak	*(Quercus agrifolia)*	8,13,17	38	31	Fair	Fair	Fair	Fair	Fair	Fair	3	G	38	Slightly above average amount of deadwood.	None at this time.
129	Coast Live Oak	*(Quercus agrifolia)*	6,10,14	30	16	Fair	Fair	Fair	Fair	Fair	Fair	3	G	30		None at this time.
130	Coast Live Oak	*(Quercus agrifolia)*		16	20	Fair	Fair	Fair	Fair	Fair	Fair	3	G	16	Slightly above average amount of deadwood.	None at this time.
131	Coast Live Oak	*(Quercus agrifolia)*		25	28	Fair	Fair	Fair	Fair	Fair	Fair	3	G	25	Measured 1' above grade. Out of balance northeast. Slightly above average amount of deadwood.	None at this time.
132	Coast Live Oak	*(Quercus agrifolia)*		15	28	Poor to fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3	G	15	Growing at an angle to the east. Callusing lower trunk wounds, various locations, with minor decay. Above average amount of deadwood.	None at this time.
133	Coast Live Oak	*(Quercus agrifolia)*	6,8,10	24	29	Fair	Fair	Fair	Fair	Fair	Fair	3	G	24	Forks at grade. Weak attachments. Above average amount of deadwood.	None at this time.
134	Coast Live Oak	*(Quercus agrifolia)*	5,6,7	18	13	Poor	Poor	Fair	Fair	Poor	Fair	6	G	0	Callusing basal trunk wounds, various locations, with moderate decay. Weak attachments. Above average amount of deadwood.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***

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						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
135	Coast Live Oak	*(Quercus agrifolia)*	7,10, 11,13	41	28	Poor to fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3	G	41	Forks at grade. Past partial failure of the attachments has left one stem growing horizontal on grade and two touching grade. Minor decay. Above average amount of deadwood.	None at this time.
136	Coast Live Oak	*(Quercus agrifolia)*		9	13	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	6	G		Previous failure of the top has left the tree with weak attachments.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***
137	Coast Live Oak	*(Quercus agrifolia)*	3,4,5	12	11	Poor to fair	Poor	Poor to fair	Fair	Poor	Poor to fair	6	G	0	Basal cavity, north side, at grade. Branches at 3' above grade. Cavity in the main trunk with severe decay.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***
138	Coast Live Oak	*(Quercus agrifolia)*		9	16	Poor	Poor to fair	Fair	Fair	Poor	Fair	6	G		Callusing basal lower trunk cavities with moderate decay. Out of balance west. Above average amount of deadwood.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***
139	Valley Oak	*(Quercus lobata)*		6	5	Fair	Fair	Fair	Fair	Fair	Fair	3	M		Slightly above average amount of deadwood.	None at this time.
140	Coast Live Oak	*(Quercus agrifolia)*		6	8	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
141	Coast Live Oak	*(Quercus agrifolia)*	10,11,13	34	25	Fair	Fair	Fair	Fair	Fair	Fair	3	G	34	Above average amount of deadwood.	None at this time.
142	Coast Live Oak	*(Quercus agrifolia)*		12	17	Poor	Poor	Poor to fair	Fair	Poor	Fair	6	G	0	Two stems of the tree have failed recently, leaving this remaining stem. Out of balance east. Above average amount of deadwood.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***
143	Coast Live Oak	*(Quercus agrifolia)*		12	11	Fair	Fair	Fair	Fair	Fair	Fair	3	G	12	Measured at 2' above grade. Leans south. Slightly above average amount of deadwood.	None at this time.

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						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
144	Coast Live Oak	*(Quercus agrifolia)*		25	27	Fair	Fair	Fair	Fair	Fair	Fair	3	G	25	Measured at 1' above grade. Out of balance southwest. Above average amount of deadwood.	None at this time.
145	Coast Live Oak	*(Quercus agrifolia)*		19	23	Fair	Fair	Fair	Fair	Fair	Fair	3	G	19	Out of balance east. Above average amount of deadwood.	None at this time.
146	Coast Live Oak	*(Quercus agrifolia)*	8,10,12	30	21	Fair	Fair	Fair	Fair	Fair	Fair	3	G	30	Forks at grade. Above average amount of deadwood.	None at this time.
147	Coast Live Oak	*(Quercus agrifolia)*		7	9	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	G		Bends west. Above average amount of deadwood.	None at this time.
148	Coast Live Oak	*(Quercus agrifolia)*		10	25	Fair	Poor	Poor to fair	Fair	Poor	Fair	6	G		Trunk bends northeast with an abupt crook 6' above grade. Above average amount of deadwood.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***
149	Coast Live Oak	*(Quercus agrifolia)*		25	26	Poor	Poor	Poor to fair	Poor to fair	Poor	Poor to fair	6	G	0	Callusing basal trunk cavity, east side, to 3' above grade with significant decay. One-sided/out of balance west. Above average amount of deadwood.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***
150	Coast Live Oak	*(Quercus agrifolia)*		15	20	Fair	Fair	Fair	Fair	Fair	Fair	3	G	15	Slightly above average amount of deadwood.	None at this time.
151	Valley Oak	*(Quercus lobata)*		7	22	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	M		Bends 6' above grade, growing horizontal to the south. Above average amount of deadwood.	None at this time.
152	Coast Live Oak	*(Quercus agrifolia)*		12	16	Fair	Fair	Fair	Fair	Fair	Fair	3	G	12	Above average amount of deadwood.	None at this time.
153	Valley Oak	*(Quercus lobata)*		7	9	Fair	Fair	Fair	Fair	Fair	Fair	3	M		Slightly above average amount of deadwood.	None at this time.
154	Valley Oak	*(Quercus lobata)*		11	19	Fair	Fair	Fair	Fair	Fair	Fair	3	M		Above average amount of deadwood.	None at this time.
155	Coast Live Oak	*(Quercus agrifolia)*		16	24	Fair	Poor to fair	Fair	Fair	Fair	Fair	3	G	16	Callusing lower trunk wound, northeast side, with minor decay. Out of balance southwest. Slightly above average amount of deadwood.	None at this time.

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						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
156	Valley Oak	*(Quercus lobata)*		15	16	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	6	M	0	Old limb dieback, resulting in main stem decay in at least 2 locations.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***
157	Coast Live Oak	*(Quercus agrifolia)*		9	15	Fair	Fair	Poor to fair	Fair	Poor to fair	Fair	3	G		Branches at 7' above grade. Out of balance north.	None at this time.
158	Coast Live Oak	*(Quercus agrifolia)*		13	19	Fair	Poor to fair	Poor to fair	Fair	Poor	Poor to fair	3	G	13	Callusing wound, south side, from 3'-6' above grade with no decay. Branches at 7' above grade with weakly attached stems with inclusions. Out of balance east. Sparse upper canopy.	None at this time.
159	Coast Live Oak	*(Quercus agrifolia)*	5,6	11	12	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Suppressed. Slightly above average amount of deadwood.	None at this time.
160	Coast Live Oak	*(Quercus agrifolia)*	14,15,15	44	25	Poor to fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3	G	44	Callusing basal lower trunk wounds, various locations, with minor decay. Forks from grade to 2' above grade. Weak attachments. Out of balance west. Above average amount of deadwood.	None at this time.
161	Coast Live Oak	*(Quercus agrifolia)*	6,6	12	10	Fair	Fair	Fair	Fair	Fair	Fair	3	G	12	Slightly above average amount of deadwood.	None at this time.
162	Coast Live Oak	*(Quercus agrifolia)*		16	27	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	G	16	Callusing lower trunk wounds, various locations, with minor decay. Leans south. Slightly above average amount of deadwood.	None at this time.
163	Coast Live Oak	*(Quercus agrifolia)*		11	16	Poor	Poor	Poor to fair	Fair	Poor	Fair	6	G		Basal cavity, south side, with moderate decay. Growing horizontal and laying prone on grade at one point. Tree is 60% dead.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***
164	Blue Oak	*(Quercus douglasii)*		6	8	Fair	Fair	Fair	Fair	Fair	Fair	3	M	6	Slightly above average amount of deadwood.	None at this time.
165	Coast Live Oak	*(Quercus agrifolia)*	14,15	29	17	Poor to fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3	G	29	Callusing basal lower trunk wounds, primarily due to rock contact. Weak attachments. Above average amount of deadwood.	None at this time.

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						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
166	Coast Live Oak	*(Quercus agrifolia)*		16	25	Fair	Fair	Fair	Fair	Fair	Fair	3	G	16	Leans northeast. Slightly above average amount of deadwood.	None at this time.
167	Valley Oak	*(Quercus lobata)*		14	22	Fair	Fair	Fair	Fair	Fair	Fair	3	M	14	Slightly above average amount of deadwood.	None at this time.
168	Coast Live Oak	*(Quercus agrifolia)*		24	27	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	G	24	Callusing lower trunk wound with minor to moderate decay. Slightly above average amount of deadwood.	None at this time.
169	Coast Live Oak	*(Quercus agrifolia)*	30,35	65	36	Poor to fair	Poor	Poor to fair	Fair	Poor to fair	Fair	6	G	0	Southerly stem lying on grade. Larger stem is one-sided southwest. Callusing lower trunk wounds with minor to moderate decay. Tree is 95% dead.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***
170	Coast Live Oak	*(Quercus agrifolia)*		29	28	Poor to fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3	G	29	Measured at 3' above grade. Leans/bends east. Above average amount of deadwood.	None at this time.
171	Coast Live Oak	*(Quercus agrifolia)*		30	25	Fair	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	3	G	30	Measured at 3' above grade. Above average amount of deadwood. Sparse foliage.	None at this time.
172	Coast Live Oak	*(Quercus agrifolia)*	10,12,14	36	18	Poor to fair	Poor to fair	Poor	Poor to fair	Poor to fair	Poor	6	G	0	Forks from grade to 3' above grade. Weak attachments. Old wounds with minor decay. Above average amount of deadwood.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***
173	Valley Oak	*(Quercus lobata)*		12	21	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	M	12	Bends northwest. Above average amount of deadwood.	None at this time.
174	Coast Live Oak	*(Quercus agrifolia)*	8,8,9	25	24	Poor to fair	Poor to fair	Poor	Poor to fair	Poor to fair	Poor	6	G	0	Forks from grade to 3' above grade. Weak attachments. Out of balance southeast. Above average amount of deadwood. Sparse foliage.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***
175	Coast Live Oak	*(Quercus agrifolia)*		11	16	Fair	Fair	Fair	Fair	Fair	Fair	3	G		One-sided west. Slightly above average amount of deadwood.	None at this time.

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176	Blue Oak	*(Quercus douglasii)*		15	30	Poor	Poor	Poor to fair	Fair	Poor	Fair	6	M	0	Callusing basal and lower trunk wounds, southeast side, to 6' above grade with moderate decay. Out of balance northwest. Above average amount of deadwood.	***No improvements/activities should occur within the potential fall zone of the tree due to questionable longevity.***
177	Coast Live Oak	*(Quercus agrifolia)*	14,16,17	47	25	Poor to fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3	G	47	Forks from grade to 3' above grade. Weak attachments. Above average amount of deadwood.	None at this time.
178	Coast Live Oak	*(Quercus agrifolia)*	5,5	10	7	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
179	Coast Live Oak	*(Quercus agrifolia)*		15	19	Poor	Poor	Poor to fair	Poor to fair	Poor	Fair	3	G	15	Callusing basal trunk cavity, south side, to 3' above grade with moderate to significant interior decay. Trunk has grown in a spiral pattern.	None at this time.
180	Coast Live Oak	*(Quercus agrifolia)*	17,22	39	31	Fair	Fair	Fair	Fair	Fair	Fair	3	G	39	Forks at grade. Weak attachments. Above average amount of deadwood.	None at this time.
181	Coast Live Oak	*(Quercus agrifolia)*		6	8	Poor to fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3	G		Lower trunk bends north. Old callusing wounds with minor decay.	None at this time.
182	Coast Live Oak	*(Quercus agrifolia)*	7,8	15	12	Fair	Fair	Fair	Fair	Fair	Fair	3	G	15	Slightly above average amount of deadwood.	None at this time.
183	California Buckeye	*(Aesculus californica)*	6,6,6, 7,8	33	16	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
184	California Bay Laurel	*(Umbellularia californica)*	4,4,5, 5,6,7	31	12	Fair	Fair	Fair	Fair	Fair	Fair	3	M	31	Slightly above average amount of deadwood.	None at this time.
185	Blue Oak	*(Quercus douglasii)*		11	13	Fair	Fair	Fair	Fair	Fair	Fair	3	M	11	Slightly above average amount of deadwood.	None at this time.
186	Prunus sp.	*(Prunus spp.)*		10	14	Poor to fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	P-M		Eminating from a rock outcropping. Basal callusing. Above average amount of deadwood.	None at this time.
187	California Buckeye	*(Aesculus californica)*	8,9	17	16	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
188	Coast Live Oak	*(Quercus agrifolia)*		17	26	Fair	Fair	Fair	Fair	Fair	Fair	3	G	17	Slightly above average amount of deadwood.	None at this time.
189	Coast Live Oak	*(Quercus agrifolia)*		29	31	Poor to fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3	G	29	Reaction growth against rocks, southwest side. Bends southwest. Above average amount of deadwood.	None at this time.
190	Coast Live Oak	*(Quercus agrifolia)*		19	28	Fair	Fair	Fair	Fair	Fair	Fair	3	G	19	Measured at 3' above grade. Slightly above average amount of deadwood.	None at this time.

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						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
191	California Buckeye	*(Aesculus californica)*		9	12	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
192	Prunus sp.	*(Prunus spp.)*		7	12	Fair	Fair	Fair	Fair	Fair	Fair	3	P-M		Slightly above average amount of deadwood.	None at this time.
193	California Buckeye	*(Aesculus californica)*		12	16	Fair	Fair	Fair	Fair	Fair	Fair	3	G		One-sided south. Slightly above average amount of deadwood.	None at this time.
194	California Buckeye	*(Aesculus californica)*	7,10	17	18	Fair	Fair	Fair	Fair	Fair	Fair	3	G		One-sided north. Slightly above average amount of deadwood.	None at this time.
195	Coast Live Oak	*(Quercus agrifolia)*		18	20	Fair	Fair	Fair	Fair	Fair	Fair	3	G	18	Measured at 2' above grade. One-sided southwest. Slightly above average amount of deadwood.	None at this time.
196	Coast Live Oak	*(Quercus agrifolia)*	13,15	28	24	Poor to fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3	G	28	Measured at 3' above grade. Callusing basal lower trunk wounds, various locations, with minor decay. One-sided east. Slightly above average amount of deadwood.	None at this time.
197	Coast Live Oak	*(Quercus agrifolia)*		33	30	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	G	33	Measured at 1.5' above grade. Main stem grows at an angle to the east. Above average amount of deadwood.	None at this time.
198	Valley Oak	*(Quercus lobata)*		17	26	Fair	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	3	M	17	Above average amount of deadwood. Sparse foliage.	None at this time.
199	Coast Live Oak	*(Quercus agrifolia)*		11	17	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
200	Coast Live Oak	*(Quercus agrifolia)*		7	12	Fair	Fair	Fair	Fair	Fair	Fair	3	G		One-sided west. Slightly above average amount of deadwood.	None at this time.
201	Coast Live Oak	*(Quercus agrifolia)*	3,3,4,5	15	9	Fair	Fair	Fair	Fair	Fair	Fair	3	G	15		None at this time.
202	Valley Oak	*(Quercus lobata)*		12	19	Fair	Fair	Fair	Fair	Fair	Fair	3	M	12	Slightly above average amount of deadwood.	None at this time.
203	Coast Live Oak	*(Quercus agrifolia)*		20	27	Fair	Fair	Fair	Fair	Fair	Fair	3	G	20	Measured at 2' above grade. Out of balance east. Slightly above average amount of deadwood.	None at this time.
204	Coast Live Oak	*(Quercus agrifolia)*		33	30	Fair	Fair	Fair	Fair	Fair	Fair	3	G	33	Measured at 1.5' above grade. Weak attachments. One-sided west. Slightly above average amount of deadwood.	None at this time.
205	Coast Live Oak	*(Quercus agrifolia)*		13	17	Fair	Fair	Fair	Fair	Fair	Fair	3	G	13	Slightly above average amount of deadwood.	None at this time.

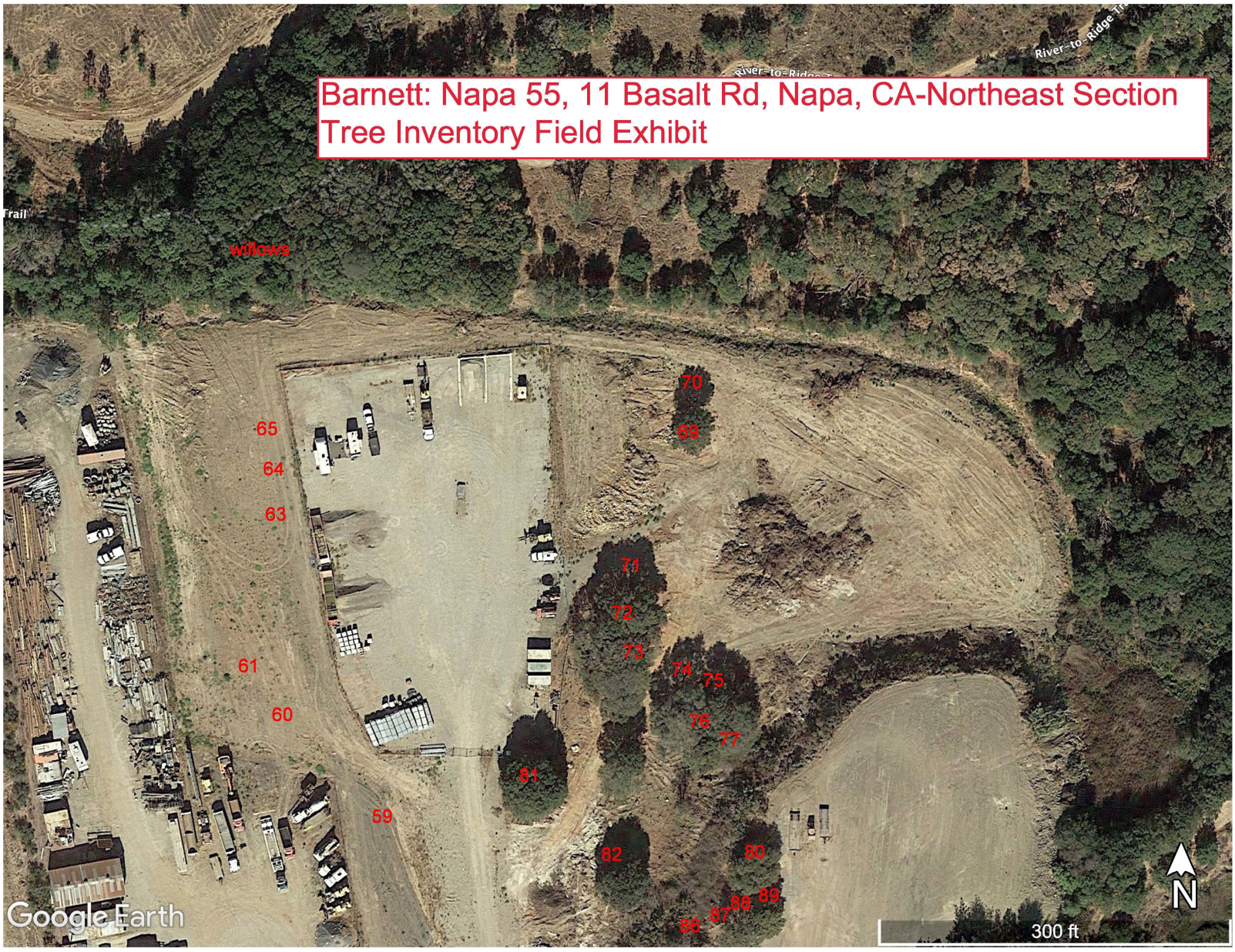
BARNETT ENVIRONMENTAL
Napa 55 Project Site
Basalt Road, City of Napa, California
TREE INVENTORY SUMMARY

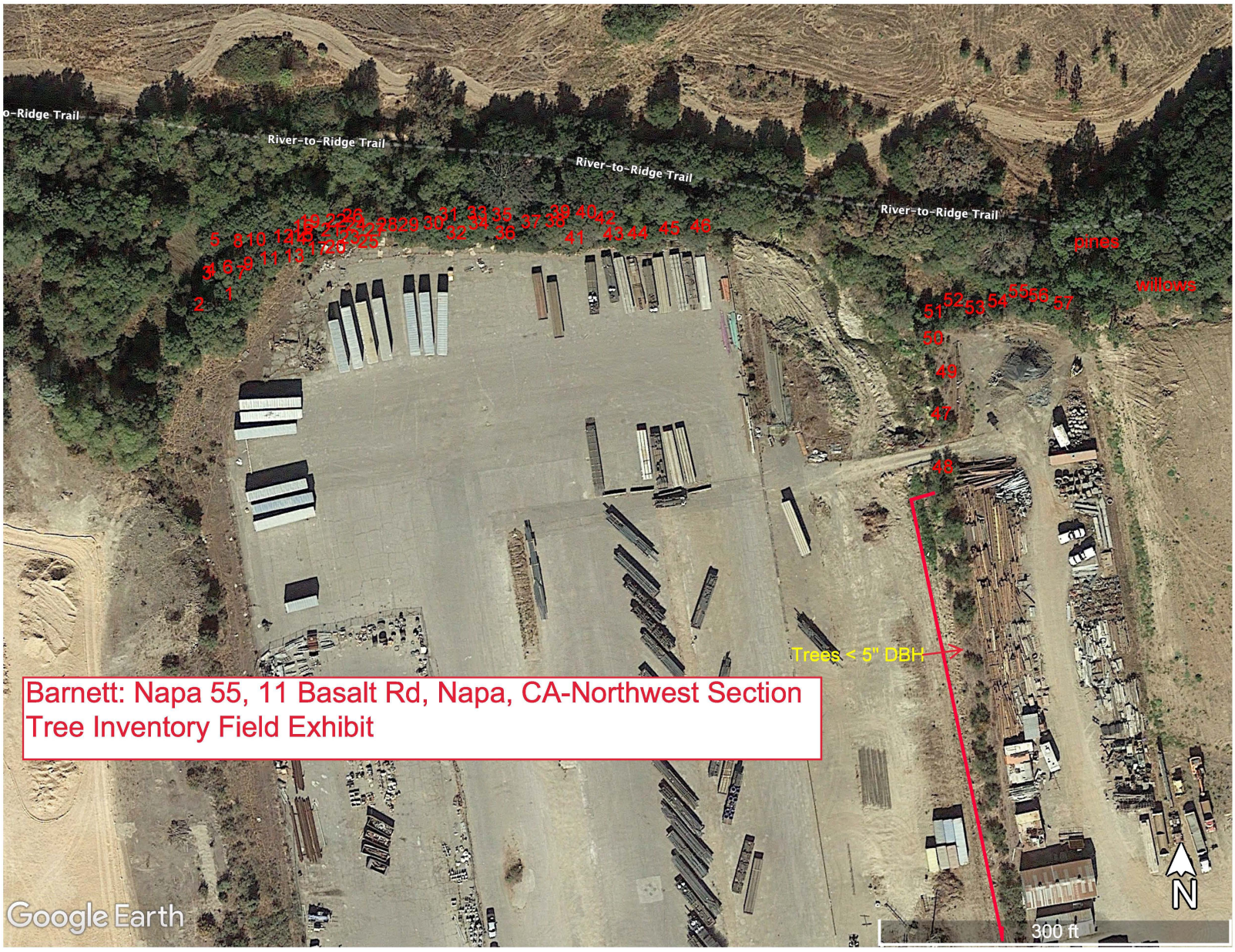
TREE #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH (inches)	DLR (feet)	CONDITIONAL ASSESSMENT						Rating (1-6)	Preser-vation (P/M/G)	Protected Native Tree	NOTABLE CHARACTERISTICS	MAINTENANCE RECOMMENDATIONS
						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
206	Coast Live Oak	*(Quercus agrifolia)*	6,8	14	15	Fair	Fair	Fair	Fair	Fair	Fair	3	G	14	Forks 2' above grade. One-sided south. Slightly above average amount of deadwood.	None at this time.
207	Coast Live Oak	*(Quercus agrifolia)*	10,12,15	37	24	Fair	Fair	Fair	Fair	Fair	Fair	3	G	37	Measured at 3' above grade. Slightly above average amount of deadwood.	None at this time.
208	Valley Oak	*(Quercus lobata)*		6	10	Fair	Fair	Fair	Fair	Fair	Fair	3	M		Slightly above average amount of deadwood.	None at this time.
209	Coast Live Oak	*(Quercus agrifolia)*	4,6	10	12	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
210	Coast Live Oak	*(Quercus agrifolia)*		17	20	Fair	Poor to fair	Poor to fair	Poor to fair	Fair	Poor to fair	3	G	17	Measured at 3' above grade. Forks 4' above grade. Inherently weak primary crotch with an inclusion and evidence of an old stress fracture. Minor tip dieback. Sparse foliage.	None at this time.
211	Valley Oak	*(Quercus lobata)*		16	22	Fair	Fair	Fair	Fair	Fair	Fair	3	M	16	Measured at 1' above grade. Above average amount of deadwood. Slightly sparse foliage.	None at this time.
212	Coast Live Oak	*(Quercus agrifolia)*		8	14	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
213	Coast Live Oak	*(Quercus agrifolia)*	3,3,4,5	15	12	Fair	Fair	Fair	Fair	Fair	Fair	3	G	15	Slightly above average amount of deadwood.	None at this time.
214	Coast Live Oak	*(Quercus agrifolia)*		6	11	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
215	Coast Live Oak	*(Quercus agrifolia)*		19	20	Fair	Fair	Fair	Fair	Fair	Fair	3	G	19	Slightly above average amount of deadwood.	None at this time.
216	Coast Live Oak	*(Quercus agrifolia)*		6	9	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
217	Coast Live Oak	*(Quercus agrifolia)*	5,6,7	18	18	Fair	Fair	Fair	Fair	Fair	Fair	3	G	18		None at this time.
218	Coast Live Oak	*(Quercus agrifolia)*		6	8	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.
219	Coast Live Oak	*(Quercus agrifolia)*	8,10,11	29	17	Fair	Fair	Fair	Fair	Fair	Fair	3	G	29	Slightly above average amount of deadwood.	None at this time.
220	Coast Live Oak	*(Quercus agrifolia)*		6	10	Fair	Fair	Fair	Fair	Fair	Fair	3	G			None at this time.
221	Coast Live Oak	*(Quercus agrifolia)*		10	16	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.

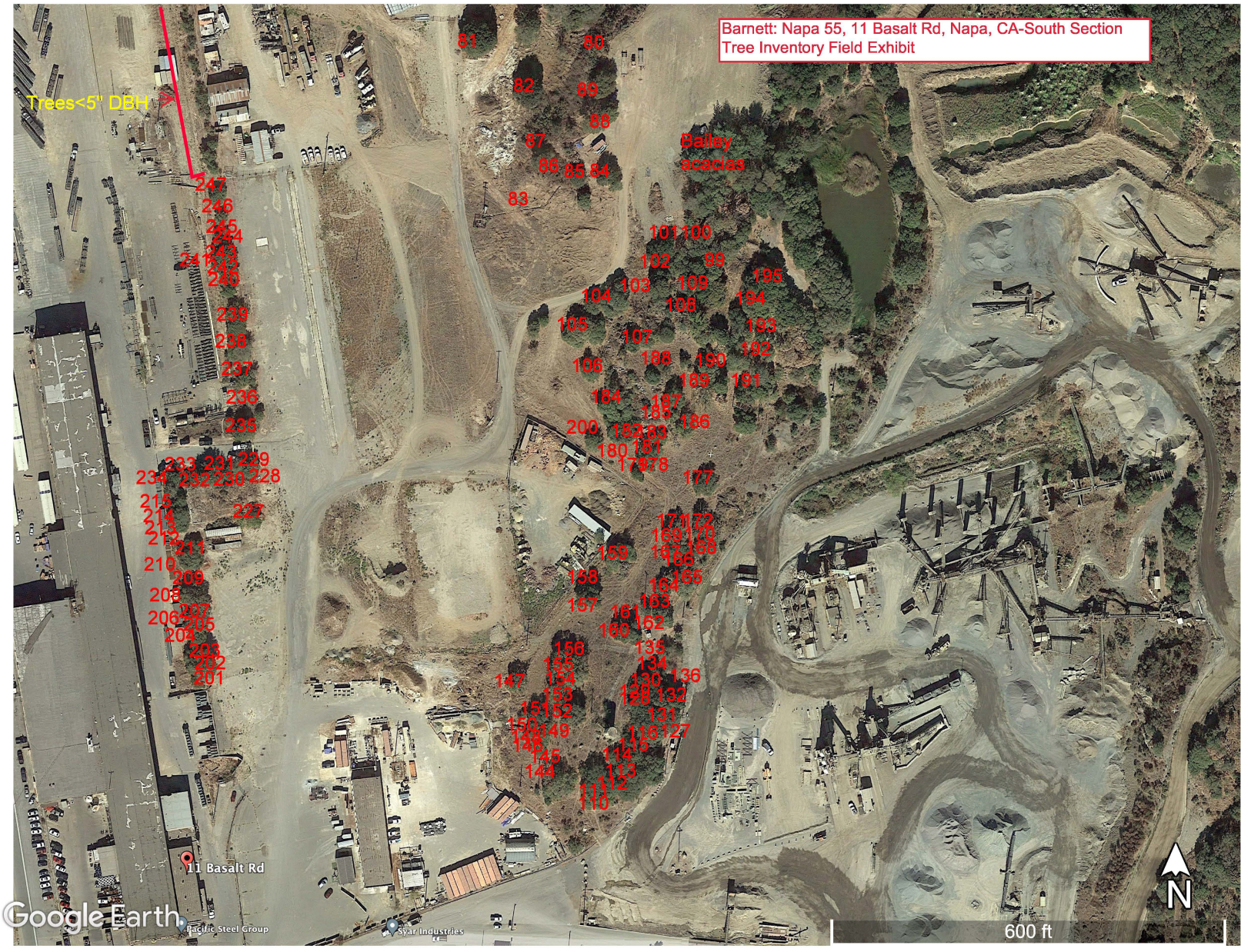
BARNETT ENVIRONMENTAL
Napa 55 Project Site
Basalt Road, City of Napa, California
TREE INVENTORY SUMMARY

TREE #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH (inches)	DLR (feet)	CONDITIONAL ASSESSMENT						Rating (1-6)	Preser-vation (P/M/G)	Protected Native Tree	NOTABLE CHARACTERISTICS	MAINTENANCE RECOMMENDATIONS
						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
222	Coast Live Oak	*(Quercus agrifolia)*		9	15	Fair	Poor to fair	Poor to fair	Fair	Poor to fair	Fair	3	G		Measured 2' above grade. Suppressed. One-sided north. Slightly above average amount of deadwood.	None at this time.
223	Coast Live Oak	*(Quercus agrifolia)*		13	14	Fair	Fair	Fair	Fair	Fair	Fair	3	G	13	Slightly above average amount of deadwood.	None at this time.
224	Coast Live Oak	*(Quercus agrifolia)*		8	16	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Suppressed. One-sided north. Slightly above average amount of deadwood.	None at this time.
225	Coast Live Oak	*(Quercus agrifolia)*	9,10	19	16	Fair	Fair	Fair	Fair	Fair	Fair	3	G	19	Slightly above average amount of deadwood.	None at this time.
226	Coast Live Oak	*(Quercus agrifolia)*	7,8	15	12	Fair	Fair	Fair	Fair	Fair	Fair	3	G	15	Measured 3' above grade. Slightly above average amount of deadwood.	None at this time.
227	Coast Live Oak	*(Quercus agrifolia)*	4,6	10	10	Fair	Fair	Fair	Fair	Fair	Fair	3	G		Slightly above average amount of deadwood.	None at this time.

TOTAL INVENTORIED TREES = 227 trees (4,254 aggregate diameter inches)
TOTAL RECOMMENDED REMOVALS = 0 trees (0 aggregate diameter inches)
PRECAUTIONARY TREES HIGHLIGHTED FOR REFERENCE = 27 trees
Rating (1-6, where 6 is remove) = 3=200 trees; 6=27 trees
Suitability for Preservation (Poor/Mod/Good) = P=2 trees; P-M=2 trees; M=17 trees; M-G=12 trees; G=194 trees
Total Protected Trees = 147 trees (2,901 aggregate diameter inches)


Barnett: Napa 55, 11 Basalt Rd, Napa, CA-Northeast Section
Tree Inventory Field Exhibit
willows
70
69
65
64
63
71
72
73
74
75
76
77
61
60
81
59
82
80
88
89
87
86
N
300 ft
Google Earth


River-to-Ridge Trail
River-to-Ridge Trail
River-to-Ridge Trail
pines
willows
Trees < 5" DBH
Barnett: Napa 55, 11 Basalt Rd, Napa, CA-Northwest Section
Tree Inventory Field Exhibit
Google Earth
300 ft
N


Barnett: Napa 55, 11 Basalt Rd, Napa, CA-South Section
Tree Inventory Field Exhibit
Trees<5" DBH
Bailey acacias
11 Basalt Rd
Pacific Steel Group
Syar Industries
Google Earth
600 ft
N

Landscape Restoration Plan

Proposed Napa 55 Commercial Site
11 Basalt Rd. Napa County, CA 94559
APN: 046-370-024



Prepared For:
Panattoni Development Corporation
8775 Folsom Blvd
Sacramento, CA 95826

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1.0 PURPOSE AND NEED

1.1 PROJECT BACKGROUND

This Landscape Restoration Plan has been prepared as part of a permit application for a 1602 Lake and Stream Agreement from the Department of Fish and Wildlife, a 401 Water Quality Certification from the California Water Board, and a conditional use permit from Napa County. Landscape restoration is proposed as part of a mitigation plan for the previous riparian area disturbance and current loss of 0.136 acre of drainage that will occur as part of a new commercial development project on the parcels. As part of mitigation for these improvements, 0.145 acre of wetlands and 2.38 acres of riparian area will be recreated, including 1.01 acres within the riparian setback and an additional 1.37 acres of riparian scrub outside the setback. With these changes, the project will improve the overall abundance and diversity of flora and fauna and improve the condition of water resources on the property.

The project is located on a 55-acre parcel located in southern Napa County, 0.05 miles east of the intersection of Basalt Road and Napa Valley Highway and can be located using the following: Latitude 38°16'0.30 N, Longitude-38°16'0.30"W; Assessor's Parcel Number 046-370-024.

1.2 PROJECT GOALS

The overall project goal of this landscape restoration plan is to recreate 1.28 acres of riparian area along Arroyo Creek and 0.145 acres of riverine habitat onsite, and to enhance water quality, aquatic habitat, and riparian vegetation. Additional project goals are as follows:

1. Prepare a long-term plan to restore landscape conditions and create new wetlands and riparian habitat.
2. Develop a landscape plan that creates habitat attractive for special species.
3. Develop a monitoring and reporting schedule to track implementation success.

2.0 EXISTING SITE CONDITIONS

The site lies in the Napa River watershed (HCU10#18050002) at approximately 35 to 80 feet in elevation above mean sea level (msl). The parcel is a partially abandoned industrial/commercial site with a large asphalt pavement area, and surrounding uses include industrial and agricultural. A large portion of the site had been previously paved and contains a laydown yard as well as several metal, wood, and concrete buildings. Parcels to the south are agricultural lands, the parcel to the north contains Napa State Hospital, Napa Municipal Golf Course lies to the west over highway 221, and Napa Quarry borders it on the east.

The site is largely flat, sloping very gently from south to north, and two artificial concrete drainages convey water north and empty it into the seasonal stream, Arroyo Creek, that runs from east to west along the northern border of the property. After exiting the parcel, Arroyo Creek empties into Tulucay creek and then into Napa River. A fence and concrete drainage used by the previous industrial businesses lay within the riparian setback. Other industrial detritus is strewn throughout the riparian area.

The vegetative cover that occurs within Arroyo creek is riparian woodland. This occurs as a narrow strip associated with Arroyo Creek and is characterized by an overstory of willow (*Salix* spp.), California buckeye (*Aesculus californica*), coast live oak (*Quercus agrifolia*), and valley oak (*Quercus lobata*) trees in the and Himalayan blackberry (*Rubus armeniacus*), coyote brush (*Baccharis pilularis*), and poison oak (*Toxicodendron diversilobum*) in the shrub understory layer. *Oak woodland*, the vegetative cover in the northeastern portion of the study area, contains small, disjunct stands of oak woodland, with dominant tree species including coast live oak, valley oak, and California bay-laurel (*Umbellaria californica*).

At present, the site has little habitat value. The previous owners installed asphalt, a fence, and an above-ground concrete drainage channel in the riparian setback. A large stockpile of sediment material also remains within the riparian area. There have been no signs of any state or federally listed species on the parcels, and Barnett Environmental's biological assessment revealed that the California red-legged frog is the sole federally-listed species with a potential (very low) to occur on site. Vegetation consists of mostly non-natives, and there is no discernible riparian zone around the drainage ditches.

Riparian zones are areas of high species diversity and habitat type of increasing scarcity in the Sierra foothill region. The thickets of blackberry brambles and other riparian shrubs provide cover, foraging grounds, and nesting habitat for many animals. Song sparrows, California quail, white-crowned and golden-crowned sparrows, cottontails, Virginia opossums, beaver, gray fox, striped skunks, and raccoons are all likely inhabitants of the riparian woodland. Amphibians may occur within the corridor, including pacific chorus frog, western toad, and bullfrog.

3.0 LANDSCAPE RESTORATION

3.1 RESTORATION PROGRAMMING

This plan seeks to restore the pre-existing natural ecology of the wetlands, adjacent riparian edge, and surrounding upland areas. As previously noted, the project is essentially a generally flat landscape mostly devoid of surface water. The 1-3-foot deep seasonal creek that runs along the northern border is very incised and carries significant pollutant and sediment loads. Water in this seasonal creek is expected to occur mostly in the winter and early spring months of the year, coming through precipitation, upland flow, and runoff from the adjacent development. Water in the summer months occurs at a more limited rate with dry periods in between. Given the intent of restoring this landscape is to create a sustainable ecosystem, plant selections must be focused on those that can survive long periods of drought.

The amount of water potentially available to the root zone of the restored landscape is related to how far the plants are located from the wetlands. Plants located along the edge of the wetlands should be therefore selected based on their suitability for occasional soil saturation while those plants located upslope from the wetlands should be selected for more extreme drought tolerance.

Our consideration regarding location and selection of plantings suitable for the project area focuses on the native plants that are suitable to the microclimate and soils. Landscape restoration should focus on limiting recurrence

of non-native species while encouraging future success of native plants. The plan will also connect the corridor habitat along the line of creek by adding multi-layered vegetation, avoiding any breaks, and enhancing the wetland habitat. Efforts will be made to achieve full-sized undergrowth by planting plants and shrubs of the same type of those found in adjoining habitats. Our consideration regarding selection of plants involves those that are tolerant of droughts and inundation.

3.2 INVASIVE PLANT REMOVAL

Barnett Environmental conducted a biological survey of the site and found that non-native vegetation, including tree of heaven (*Ailanthus altissima*), Himalayan blackberry (*Rubus discolor*), Large periwinkle (*Vinca major*), French broom (*Genista monspessulana*), tamarisk (*Tamarix* spp.), poison ivy (*Toxicodendron radicans*), Pampas grass (*Cortaderia* spp.) and purple star thistle (*Centaurea calcitrapa*), occur in the project area. These species will be removed from the site as part of the restoration plan.

3.3 ZONING

To begin restoration implementation the project area was divided into four distinct zones based on plant drought or saturated soil conditions, as follows:

Zone 0 – Wetlands

This zone includes Arroyo Creek, which flows through the property from east to west on the northern border of the property. The drainage ditches that run from south to north before entering the creek are also considered wetlands but are not considered part of this zone as they are in upland areas that will be filled.

Zone 1 – Riparian Edge/Riparian Setback

This zone consists of the first several feet adjacent to the creek that runs from east to west where plant roots would experience periods of saturation. Existing conditions indicate these periods of inundation would be limited to winter months during higher rainfall.

Zone 2 – Riparian-Upland Transition

This zone includes areas that are less likely to be inundated at any time of the year but would be provided more water than upland areas during rainfall events. Additionally, deeper tap roots would allow plants in these areas access to water percolating laterally from the wetlands or deeper subsurface sources.

Zone 3 – Upland

This zone is more typical of the overall property habitat, marked by scatterings of upland, drought-tolerant shrubs and trees.

3.4 PLANT SELECTION AND AVAILABILITY

Our starting point in selecting plants for this restoration will be to review the native plants identified through a biological survey visit as well as other plant species that grow on site that could be considered foraging plants for special status species. Tree species selected include arroyo willow (*Salix lasiolepsis*), California Bay (*Umbellularia californica*), Freemont's cottonwood (*Populus fremontii*), Oregon Ash (*Fraxinus latifolia*), red willow (*Salix laevigata*), Sandbar willow (*Salix exigua*), Valley oak (*Quercus lobat*a), and white adler (*Alnus rhombifoli*a). Shrub species will be California rose (*Rosa Californica*), coyote rush (*Bacharis pilularis*), canyon gooseberry (*Ribes menziesii*), spicebrush (*Calycanthuys occidentalis*). Species like blue brunch wheat grass (*Elymus spicatus*), bee plant (*Scrophularia californica*), California gray rush (*Juncus patens*), round fruit sedge (*Carex globose*), Santa Barbara sedge (*Carex barbarae*), Seep-spring monkey flower (*Mimulus guttatus*), and California buckwheat (*Erigornum* species).

Our search for local native plant nurseries resulted in "California Floral Nursery" in Fulton, CA, as our recommended native plant supplier. This nursery is regularly stocked with a variety of native plants and currently carries most of our recommended plants. Stock availability will dictate the final plant selection. Local nurseries can provide alternative native species depending on availability. The alternative native plants will also be selected based on their drought-resistant characteristics and success in saturated soils.

3.5 IMPLEMENTATION PHASING

Implementation of the landscape restoration will occur in the following phases under the direction of a biologist or landscape architect who will then monitor installation, establishment, weaning, and maturity phases.

- First Six Months
  - Phase 1 - Installation
  - Phase 2 - Establishment
- Second Six Months
  - Phase 3 - Weaning
- Two-Three Years
  - Phase 4 - Maturity
- Four-Five Years
  - Phase 5 - Monitoring and Maintenance

3.6 RESTORATION ESTIMATING

Restoration will require estimating to be implemented correctly. These estimates shall be reviewed by a licensed contractor and native plant nursery representatives to calculate the final quantities of plants, seed mix, soil amendments, mulch, and other materials.

3.7 RESTORATION IMPLEMENTATION

3.7.1 Eradication Approaches for Non-Native Species

To eradicate exotic species, various methods of weed management are often used in different combinations to promote efficacy. While many methodologies including mechanical (hand pulling, digging, machetes, axes, etc), biological, competition, and chemical (use of herbicides) exist, we intend to conduct eradication using the recommended methods for control of particular species cross-referenced using the California Interagency Noxious Weed Coordinating Committee and Invasive Plants of California Wildlands' CalWeed Database, and various other sources.

Control methods depend on the characteristics of each species, including considerations associated with site-specific density, area of infestation, and the ecological sensitivity of the habitat. Hand or mechanical means are preferred methods for control of weed species around sensitive flora and fauna because of potential adverse effects of chemical control on sensitive native species.

All exotic plants and their associated humus should be removed and disposed of at an off-site location to minimize effects of the biomass on downstream locations and to minimize the possibility of re-sprouting by cuttings.

- **Hand or mechanical means** are preferred methods for control of weed species around sensitive flora and fauna because of potential adverse effects of chemical control on sensitive native species.
- **Solarization** has also proven to be successful in areas with higher temperatures and does not have any adverse effect on the environment. Combined with cutting and mulching, this method may quickly prepare an area for restoration plantings.
- **Cutting and removal** followed by spot foliar herbicide application immediately following the cut or upon re-growth may be required for some stubborn plants but should be used only when other methods have not proven effective.

All exotic plants and their associated humus should be removed and disposed of at an off-site location to minimize effects of the biomass on downstream locations and to minimize the possibility of re-sprouting by cuttings.

3.8 INSTALLATION PREPARATION

The condition of the soil can have a major impact on the success of the project based on its ability to grow native plants. Soil testing should be done prior to any plant installation to determine if existing site fill and topsoil will be suitable to grow native plants or determine if topsoil needs to be imported.

Re-establishing soil nutrients to a disturbed area takes time. Composting the entire disturbed area will begin that critical process of adding nutrients to the soil over a long-term period and will continue to help installed plants grow successfully as well as additional new plants generated from seeds of adjacent existing native plants.

1. Soil testing should be done prior to the start of any construction to gain the average soil content and determine suitability for growing native plants. If the fill/topsoil is suitable, then the top 24" should be scraped and stockpiled in a nearby location and fenced off to keep equipment from compacting the soil. If topsoil is

unsuitable, then 24" of topsoil should be brought in to replace all of the old infill and topsoil in affected areas where plants or hydroseed are planned. Soil samples shall be tested for standard soil suitability, texture analysis, infiltration rate, and organic matter evaluation. Once the results are confirmed, the client or client's rep shall approve the retention of existing topsoil or the import of topsoil based on the recommendations from the soil testing facility and their report. If imported topsoil is determined to be the best solution, then the imported topsoil should be tested prior to delivery to site to make sure it is suitable for growing plants.

2. Good quality compost/amendment is critical in starting the process of adding nutrients to soil. Soil amendment shall be added to existing topsoil or import soil based on the recommendations from soil testing facility. Three (3) samples of the compost/amendment will be sent to a soil testing facility prior to delivery to the project site to confirm it meets the recommendations of the soil testing facility.

3.9 WETLAND CREATION

Once exotic plants have been removed from the area and trash and remnant concrete pieces that litter the riparian zone have been removed from the area, the applicant will construct 0.451 acres of seasonal stream. The area for this installation was selected because of its proximity to the drainage that will be removed and ease of excavation as most of the area appears to be fill material from previous development. The installation will be accomplished by excavating to a level below the ordinary-high-water mark to allow seasonal flooding from Arroyo Creek. A discontinuous line of berms will be installed slightly higher than the ordinary high-water mark on the north/northeastern boundary of the new wetland to be dissipate the water as it is coming down the stream. Spaces between the berms will allow water to enter and move slowly to the downstream side and re-entering the creek, acting as an alluvial floodplain or swale. The riparian area adjacent to the swale will also be regraded from an existing slope of 75-95 percent to 25 percent and will be revegetated.

3.10 PLANT AND GROW MEDIA INSTALLATION

Installation will occur under the supervision of a qualified biologist or landscape architect. This qualified professional will ensure each phase of the project is successful. The following steps outline how installation shall be carried out:

1. Plant Count Determination – The applicant's qualified professional shall determine exact quantities of plants and locations for plant installation before any further steps are taken.

2. Plant Selection – Inspect plants before and after delivery as needed to ensure all are healthy and able to handle transplanting.

3. Site Inspection – Inspect the project area to determine suitability for installation. This step may be needed more than once as site construction occurs.

4. Clear and Grub – Depending on the condition of the site after mass grading and other construction activities occur in the adjacent development, the installation area shall be cleared and grubbed of as much debris as is needed to facilitate installation. Remove all vegetation, including logs, brush, all roots and other debris that remain in the ground.

5. Topsoil Installation – Spread topsoil saved from grading activities and any additional imported topsoil and soil amendments to an approximately 2”-3” cover over installation area or as directed by the qualified professional and/or licensed contractor.
6. Finish Grading - Recontour the ground around the drainage outfalls, road crossing and other areas where needed. The qualified professional and/or licensed contractor shall make the final determination that the ground is properly graded and ready for installation.
7. Planting – The qualified professional shall oversee locating plants in the installation area based on its designated zone and location on the attached planting plan. The installer shall dig a hole to the appropriate depth needed for each plant plus an additional 3”-6” buffer to ensure aeration at the edge of the root ball. Supplements should be added under the direction of the qualified professional as needed to help growth. Each plant shall be gently removed from its pot and placed into the planting hole. Replaced earth shall be packed gently so as not to overly compact the soil but firmly enough to form a moat around the top of the plant to capture irrigation water.
8. Hydroseed – A local nursery will put together hydroseed mix ratios, which will then be sprayed uniformly over designated areas identified on the planting plan and as directed by the qualified professional.
9. Mulch - Place straw or wood mulch over the soil around the installed plants as needed to complete a 2”-3” cover. Installed mulch shall not contain any artificial chemicals or materials.
10. Irrigation - Install a temporary irrigation system to enable watering of the plants and help facilitate growth and viability.

3.11 ESTABLISHMENT

The establishment period allows trees, shrubs, and other vegetation to grow a normal root system. Plants will undergo regular irrigation to help their roots anchor firmly to the soil, and mulch will be applied to help keep moisture available for seedlings and young plants. The appropriate fertilizer will be applied to ensure that plants have enough nutrients and carbohydrates to develop strong root systems instead of searching for energy sources. In addition, aggressive weeding will ensure that the early root systems aren’t crowded out by competitors. Plants will be monitored to ensure that they are surviving, and replacements will be made as necessary.

3.12 WEANING

During the second six months, plants will slowly be weaned off of irrigated water; this practice will help plants adapt to the natural rain cycle and will help prevent root rot. From the regular watering that occurs during the first several months, watering will then be decreased to 2 or 3 times weekly. Then, depending on the soil and weather conditions, the frequency can be reduced to once or twice weekly. Through measured and methodical weaning, plants will grow roots that penetrate deep into the ground where they will be able to tap moisture for their needs.

3.13 MATURITY

After plants have matured, they will be carefully monitored and maintained for optimal health. Monitoring will be conducted for the return of invasive species, pests, and disease. Regular weeding for invasives will occur and pruning and trimming will be done to prevent any disease from spreading to new growth. The landscaped area will also be edged for fire suppression purposes.

4.0 SCHEDULING, MONITORING, AND REPORTING

4.1 SUCCESS CRITERIA

All plantings shall have a minimum of 80% survival, by species, each year for the first three years. Following this timeframe, plantings attain 75% cover in years four and five and 90% cover in subsequent years. Vegetation will be grouped by type of coverage, including shrubs, trees, and groundcover. Measurement of percent cover shall focus first on groundcover and shrubs to ensure the maximum amount of soil coverage and contiguous habitat, as well as minimize erosion. Trees shall be measured for success after three years based on comparing age with average dripline diameter. Cover of vegetation will be determined by using the quadrat method, using square frames of differing sizes – according to the size of the vegetation – to visually make estimations. A minimum of 20 randomized samples will be taken for the shrub and groundcover per quadrat while trees will each be measured by canopy size and diameter-at-breast-height (DBH).

Prior to the restoration being determined successful, the plantings shall be entirely without supplemental irrigation for a minimum of three years. No single species shall constitute more than 50% of the vegetative cover, no woody invasive species shall be present, and herbaceous invasive species shall not exceed 5% cover.

If the survival and cover requirements have not been met, replacement planting will occur to achieve these requirements. Replacement plants shall be monitored with the same survival and growth requirements for ten years after planting.

4.2 REPORTING

The permittee will submit an annual monitoring report to regulatory agencies for review and approval for five years. The report will discuss the performance as it relates to the success criteria noted above, including the success of seed mix establishment, survival, percent cover, and how invasive species have been controlled, including the methods used for removal, and how much of the native seed mix has been replaced. Lastly, the report will include a list of observed wildlife and site photos.

The project will follow the timeline and actions considered sufficient for meeting the requirements of the regulatory agencies (Table 1).

TABLE 1. TIMELINE

Project Element	Timeframe	Actions
Landscaping	First six months of project	Clear land and grub, grade for new wetlands, install plants and temporary irrigation system
Weaning	Second Six Months	Wean plants from water, slowly increasing tolerance for the natural rain cycle
Maturity	Two-three years	Plants will be monitored for health, the presence of disease and pests. Any unhealthy plants will be replaced.
Reporting	Annually for 10 years	Submit completion report to regulatory agencies

Appendix A:
Plant Lists



Restoration Plant List

Trees		qty	sqft
Brewers Willow	*Salix breweri 'Cedar's Gold'*	15	
Red bud	*Cercis occidentalis*	9	
Fremont's cottonwood	*Populus fremontii*	16	
English Oak	*Quercus ruber*	48	
Valley Oak	*Quercus lobata*	113	
Blue Oak	*Quercus douglasii*	71	
Shrubs			
Coyote brush	*Bacharis pilularis*	81	
Canyon gooseberry	*Ribes menziesii*	138	
Spicebush	*Calycanthuys occidentalis*		
Groundcovers			
Aquilegia Formosa	*Calycanthuys occidentalis*	1600	4750
California Fushia	*Epilobium canum*	3350	10000
Nude Buckwheat	*Eriogonum nudum*	2200	6500
Hydroseeding Native Erosion control mix			8850
Hydroseeding Native Fine Fescue Mix			10500
Hydroseeding Native Wetland Mix			6500

*** Final plant schedule pending local availability**

Reference:

https://www.countyofnapa.org/DocumentCenter/View/2791/Caring-for-Creeks-PDF

https://www.cityofwatsonville.org/DocumentCenter/View/3204/Landscape-Guidelines-and-Policies-PDF?

*** Final plant schedule pending local availability**

LOCAL NURSERY https://www.calfloranursery.com/inventory-list
50 mi away

Wetland & Biological Resources Assessment

Proposed Napa 55 Commercial Site
11 Basalt Rd. Napa County, CA 94559
APN: 046-370-024



Prepared For:
Panattoni Development Corporation
8775 Folsom Blvd
Sacramento, CA 95826

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1. WATERSHED PROFILE

The project lies within the Napa River watershed, which is located almost entirely in Napa County and defined by Mt. St. Helena to the north, the Mayacamas Mountains to the west, Howell Mountain, Atlas Peak, and Mt. George to the east, and the Napa Sonoma Marsh to the south. The Napa River runs through the center of the watershed on the valley floor, draining number tributaries along a 550-mile run from the headwaters of Mt. St. Helena to the San Pablo Bay. The Napa River winds through many types of landscapes, forested mountain slopes, vineyards, urban areas, open pasture, grasslands, industrial zones, and marshes. Reservoirs in the watershed include Lake Hennessey, Lake Milliken, and Bell Canyon Reservoir. This watershed also habitat for many types of plants, fish, and wildlife. Chapparal, brackish and saltwater marsh, vernal pools, forests, oak woodlands, grasslands, and riparian habitats can all be found in the watershed.

The watershed has experienced significant decline due to the imbalance of water and sediments. The health of the natural river watershed, Napa River, is listed as impaired under section 303 (d) of the US Clean Water Act due to pathogens, nutrients, and excessive sedimentation. Goals for the watershed include assuring adequate flood control and maintaining enough water for agricultural and domestic uses. Drainage through the watershed to the river needs to be slowed and more evenly distributed through the seasons.

2. AQUATIC RESOURCES

The project is an existing industrial facility proposed for redevelopment. Approximately 0.857 acres of wetlands were delineated on the property. Arroyo Creek, a tributary to Tulucay creek which empties into the Napa River, runs along the northern border of the property from east to west. Two drainages run from south to north along the interior of the parcel and eventually drain into Arroyo creek. The eastern drainage, identified as Drainage 1, begins its headwaters onsite from overland drainage that travels through a previously disturbed area of the site covered with invasive species, and littered with industrial detritus and trash. The drainage then travels through the riparian edge and into Arroyo Creek.

Drainage 2 is located to the west of Drainage 1 and is concrete-lined, apparently to capture storm and other waters from the industrial site as they flow across the existing parking lot. This channel is otherwise degraded and lined with mostly invasive species except for the trees on the northside slope until it outfalls into the existing outfall and backflow area of Arroyo Creek.

In addition, the previous property owners installed a fence and asphalt within the riparian setback. An above-ground concrete drainage channel was also installed in the riparian zone and was used to dump some type of effluent into the river. Pieces of concrete, shipping containers, rebar, and industrial debris litter the riparian zone and creek area.

3. PROJECT IMPACTS

Panattoni Development proposes to develop a new commercial venture on the property, consisting of four large commercial buildings and associated parking. As part of this development, the existing drainages on site will be filled, resulting in the loss of 0.141 acres (5,924 square feet) of Waters of the State and of the U.S.

4. PROPOSED ONSITE MITIGATION

Compensatory mitigation will include the recreation of 0.145 acres of stream enhancement along Arroyo creek and 2.38 acres of riparian area will be recreated, including 1.01 acres within the riparian setback and an additional 1.37 acres of riparian scrub outside the setback.

The landscape plan involves removing non-native vegetation and installing native drought tolerant species in the riparian zone. This effort will restore the adjacent riparian area to its natural form. In addition, by creating a vegetation plan with a mix of native trees, shrubs, forbs, and grasses, the plan will develop a riparian habitat attractive to local wildlife and potentially special status species like the California red-legged frog.

Key components of the stream enhancement will be providing enhanced water storage and dissipation, attenuating flood flows, and enhancing the river's ecological functions. It will serve as an emergent wetland component of the creek, capturing sedimentation and providing slower flows.

In summary, the project will not cause a net loss of overall abundance, diversity, and condition of water resources. Instead, the project will increase the amount of wetlands on site, restore the riparian area, and enhance the onsite habitat for local wildlife, as well as federal and state special status species. With these changes, the project will improve the overall abundance and diversity of flora and fauna and improve the condition of water resources on the property.

5. ECOLOGICAL PERFORMANCE, PROTECTION, AND MANAGEMENT

All plantings shall have a minimum of 80% survival, by species, each year for the first three years. Following this timeframe, plantings attain 75% cover in years four and five and 90% cover in subsequent years. Vegetation will be grouped by type of coverage, including shrubs, trees, and groundcover. Measurement of percent cover shall focus first on groundcover and shrubs to ensure the maximum amount of soil coverage and contiguous habitat, as well as minimize erosion. Trees shall be measured for success after three years based on comparing age with average dripline diameter. Cover of vegetation will be determined by using the quadrat method, using square frames of differing sizes – according to the size of the vegetation – to visually make estimations. A minimum of 20 randomized samples will be taken for the shrub and groundcover per quadrat while trees will each be measured by canopy size and diameter-at-breast-height (DBH).

An arborist's report has identified trees selected for removal due to poor health, declining structural fitness, and disease and that have the potential to be a safety hazard. The removal of these trees will be mitigated by replanting

the same type of species at a ratio determined by Napa County. The installation of trees will be monitored by a biologist and subsequently evaluated on a regular basis, either through on site visits or drone imagery, for continued good health.

Prior to the restoration being determined successful, vegetation shall be entirely without supplemental irrigation for a minimum of three years. No single species shall constitute more than 50% of the vegetative cover, no woody invasive species shall be present, and herbaceous invasive species shall not exceed 5% cover.

If the survival and cover requirements have not been met, replacement planting will occur to achieve these requirements. Replacement trees and plants shall be monitored with the same survival and growth requirements for ten years after planting.

After completion of the restoration activities, the restoration plan will be monitored for ten years to document its success. The applicant will submit annual monitoring reports to the Department of Fish and Wildlife and Napa County as required by any associated conditions of approval.

6.0 TIMETABLE

Within the seasonal limitations set by regulatory agencies, the applicant intends to begin its landscape restoration plan as soon as construction of the commercial center is underway

- First Six Months
  - Phase 1 - Installation
  - Phase 2 - Establishment
- Second Six Months
  - Phase 3 - Weaning
- Two-Three Years
  - Phase 4 - Maturity
  - Phase 5 - Monitoring

Attachment H

Project Description

Location

The project is situated at 11 Basalt Rd in Napa County. The parcel is the site of a former lumber company and is zoned industrial. A large portion of the site had been previously paved and contains a laydown yard as well as several metal, wood, and concrete buildings. Parcels to the south are agricultural lands, the parcel to the north contains Napa State Hospital, Napa Municipal Golf Course lies to the west over highway 221, and Napa Quarry borders it on the east.

The property is located within the Napa River watershed, and the river is listed as impaired due to pathogens, nutrients, and excessive sedimentation. Approximately 0.857 acres of wetlands were delineated on the property. Arroyo Creek, a perennial water body and a tributary to Tulucay creek, runs along the northern border of the property from west to east. Two drainages run from south to north along the interior of the parcel and eventually drain into Arroyo creek. The eastern drainage, identified as Drainage 1 on the attached delineation and impacts maps, begins its headwaters onsite from overland drainage that travels through a previously disturbed area of the site covered with invasive species, and littered with industrial detritus and trash. The drainage then travels through the riparian edge and into Arroyo Creek. Drainage 2 is located to the west of Drainage 1 and is concrete-lined, apparently to capture storm and other waters from the industrial site as they flowed across the existing parking lot. This channel is otherwise degraded and lined with mostly invasive species except for the trees on the northside slope until it outfalls into the existing outfall and backflow area of Arroyo Creek.

A biological assessment of the site found that the California red-legged frog (*Rana draytonnii)* is the sole federally listed species that has a potential (very low) to occur on the property. However, the habitat value of the creek and riparian area is very poor. Previous owners installed a fence, asphalt, and a concrete drainage within the riparian setback. Industrial detritus, including a stockpile, is located haphazardly throughout the riparian area. In addition, the concrete drainages that empty into Arroyo Creek are lined by invasive species. Two state-listed species, Swanson's hawk (*Buteo swainsoni)* and western pond turtle (*Emmys marmorata),* have the potential, very low and low, respectively, to occur on the property.

Project Need

The proposed plan involves the filling of the two drainage ditches on a 53.5-acre plot to develop the property for a commercial park of four buildings. This commercial center will bring desired business and employment to Napa County. The buildings will run in size from 153,000 square feet

to 191,000 square feet. A 46,000 square foot bioretention pond will be built on the west side of the property to capture stormwater from the property.

Impacts to the on-site wetlands are unavoidable, as two drainage ditches run through the middle property from north to south. Any redevelopment of the existing industrial site would require impacts to these drainages, meaning avoidance would not be feasible. These features will be graded and filled in accordance with the approved County grading permit, but the project has been carefully designed to avoid all impacts to Arroyo Creek and the associated riparian area.

Construction Steps:

1) Equipment and material will be brought to the project site and stored, upland of all riparian and wetland areas.
2) The project site will be grubbed and cleared and existing concrete and industrial detritus within the riparian setback will be removed.
3) The drainage ditches will be filled in to conform with grading limits and contours. The easternmost drainage will need 148 cubic yards of fill, while the westernmost drainage will require 565 cubic yards.
4) The bioretention pond will be built adjacent to the riparian zone and an outfall path will be created to carry water from the pond to the existing outfall of the westernmost concrete drainage. This outfall path will also be built outside of the riparian setback.
5) The proposed wetland area will be constructed adjacent to Arroyo Creek at the location identified on the impacts map, just downstream from the existing outfall.
6) The riparian area along Arroyo Creek will be revegetated as proposed on the attached landscape revegetation plans.

As mentioned previously, the project was designed to minimize wetland and riparian impacts and will completely avoid all impacts to the Arroyo Creek. In summary, the project will result in 5,924 square feet (0.141 acres) of permanent wetland impacts and no temporary wetland impacts. There will be no riparian impacts and no impacts to any federal or state special status species.

Mitigation

To mitigate for the permanent loss of 0.141 acre of drainage, the applicant plans to enhance Arroyo Creek by recreating 0.145 acre of riverine area at the confluence of the impacted drainage (Drainage 2). These stream improvements will enhance habitat value and have the potential to attract local wildlife, including special status species such as California red-legged frog. In addition, the applicant proposes to restore the riparian setback to its natural form by removing the fence, asphalt and other industrial waste, recontouring the area to a more gentle slope that stabilizes soils and collects more water, and revegetating the area to the natural habitats identified on the landscape restoration plans.



PLANT PALETTE

Item (COMMON NAME – scientific name)	Qty/ sq ft
VALLEY OAK Quercus lobata	113
BLUE OAK Quercus douglasii	71
ENGLISH OAK Quercus Ruber	48
FREMONT COTTONWOOD Populus fremontii	16
BREWERS WILLOW Salix breweri 'Cedar's Gold'	15

Item (COMMON NAME – scientific name)	Qty/ sq ft
WESTERN REDBUD Cercis occidentalis	9
CANYON GOOSEBERRY Ribes menziesii	138
FLANNEL BUSH Fremontodendron californicum	333
COYOTE BRUSH Bacharis pilularis	81
SPICE BUSH Calycanthuys occidentalis	45

Item (COMMON NAME – scientific name)	Qty/ sq ft
Red Columbine Aquilegia Formosa	4750 sq/ft
CALIFORNIA FUCHSIA Epilobium canum	10000 sq/ft
NUDE BUCKWHEAT Eriogonum nudum	8500 sq/ft
Hydroseeding Native Erosion Control Mix	8850 sq/ft
Hydroseeding Native Fine Fescue Mix	10800 sq/ft
Hydroseeding Native Wetland Mix	8500 sq/ft

begreenlegal

Date: June 21, 2022

Planting Plan

BASANITES/PANATTONI NAPA 55 PROJECT
11 Basalt Road, Napa, CA

1.0



begreenlegal

Date: June 21, 2022

Proposed Wetland

BASANITES/PANATTONI NAPA 55 PROJECT
11 Basalt Road, Napa, CA

2.0

GENERAL NOTES:
Before installing any underground features such as fence footings, wall footings, drainage lines, verify locations of existing utilities and coordinate with civil and mechanical drawings of this package. Contractor shall obtain required dig permits.

Location of Civil Structures such as catch basins, manholes, or vaults are are shown for coordination purposes only. See Civil and Mechanical series drawings for exact location of structures and underground utilities.

Provide expansion joints with sealant wherever paving abuts curbs, walls, buildings, columns, and structures. Verify color of sealant with employer prior to placement.

JOB CONDITIONS:
Any building construction material or foreign material shall be removed from planting areas and replaced with acceptable top soil.

Care shall be taken not to disturb or damage any underground construction or utilities. Any damage to these facilities during the planting operations will be repaired at the expense of the Landscape Contractor in a manner approved by the Owner. Where underground obstructions will not permit the planting materials in accordance with the plans, new locations shall be approved by the Landscape Architect.

Landscape work shall be coordinated with the landscape irrigation work. Landscape Contractor shall ensure that no plantings will interfere with the proper coverage. Landscape Contractor shall point out situations where minor adjustments or relocation or addition of sprinklers heads may be most beneficial for the landscape work as a whole.

SOIL TESTING:
Soil testing should be done prior to the start of any construction to gain the average soil content and determine suitability for growing native plants. If the fill/topsoil should be deemed suitable, then the top 24" should be scraped and stockpiled in a near by location and fenced off to keep equipment from compacting the soil. If topsoil is determined to be unsuitable, then 24" of topsoil should be brought in and replace all of the old infill and topsoil in affected areas where plants or hydro seed are planned to go. Soil testing is different than geo-soils report in that the soil testing is to determine whether the soil is suitable to grow plants or not. Soil samples shall be tested for Standard soil suitability, texture analysis, infiltration rate, and organic matter evaluation. Once the results are confirmed, the client or client's rep shall approve the retention of existing topsoil or the import of topsoil based on the recommendations from the soil testing facility and their report. If imported topsoil is determined to be the best solution, then the imported topsoil should be tested prior to delivery to site to make sure it is suitable for growing plants. Contractor to use Wallace Laboratories for soil analysis. Contact Wallace Laboratories for soil sample process. Refer to soil specifications for the project submitted with the landscape plans.

a. Location of three (3) soil sample pits shall be identified along the entire project area to determine an average/baseline for the project site.
b. In each pit, one sample is taken between 6"-12" and one sample between 12"-24" for a total of six (6) samples in three (3) soil sample pits.

Good quality compost/amendment is critical in starting the process of adding nutrients to soil. Soil amendment shall be added to existing topsoil or import soil based on the recommendations from soil testing facility. See Organic Soil Amendment Specifications for more information.

a. Recommending three (3) samples be sent to soil testing facility of the soil amendment prior to delivery to project site to confirm it meets the recommendations of the soil testing facility. Three samples are needed to sufficiently determine average of the results.

PLANT MATERIAL:
Plant species and size shall conform to those indicated on the drawings. Nomenclature shall conform to STANDARDIZED PLANT NAMES, LATEST EDITION. All plant material shall be in accordance with GRADES AND STANDARDS FOR NURSERY PLANTS, latest edition published by the California Department Agriculture and Consumer Services. Specimen means an exceptionally heavy, symmetrical, tightly-knit plant, so trained or favored in its development that its appearance is unquestionable and outstandingly superior in form, number of branches, compactness and symmetry. All plants shall be sound, healthy, vigorous, well branched and free of disease and insect eggs and larvae and shall have adequate root systems. Trees and shrubs for planting rows shall be uniform in size and shape. All materials shall be subject to approval by the Landscape Architect. Where any requirements are omitted from the Plant List, the plants furnished shall be normal for the variety.

All container grown material shall be healthy, vigorous, well-rooted plants and established in the container. The plants shall have tops which are good quality and are in a healthy growing condition. An established container grown plant shall be transplanted into a container and grown in that container long enough for the new fibrous roots to have developed enough to hold the root mass together when removed from the container. Root bound plants will not be accepted.

Site water shall be verified by Contractor prior to submission of bids.

The use of natural material is strongly encouraged for balled and burlapped plants. All synthetic material shall be completely removed from root ball PRIOR to planting.

TREES:
The most critical factor for selecting a healthy California Number 1 tree is the structure. This consists of one central main trunk and leader. Branches are considered competing if they are 2/3 the diameter of the leader or greater. Competing branches may be acceptable if they occur above 50% of the overall height of the tree. Caliper of tree should meet specifications. Leader (center trunk) may have slight (<15 degree) bow (Tabebuia caraiba excluded), but must be intact with apical (leading) bud.
Branches should be spread evenly (staggered, alternating) through the tree branches spaced no closer than 4".

Canopy should be full to specifications with little or no openings or holes. A thinning canopy will be taken into consideration with field dug plant material.

Trees should have no open wounds or damage, flush cuts, chlorosis, shorter or taller than specified height, girdling roots, undersize loose root ball, crossing branches, smaller than normal leaves.

10% of root ball shall be above grade after planting. Root ball tying ropes removed from trunk and top of root ball.

MULTI TRUNK TREES:
Trees having no distinct leader. Trunks on these trees should not be touching and free of damage and similar in size. Canopy should be full and uniform.

RELOCATED TREES:
These trees may not conform to grades and standards, yet do have quality criteria which effect the health, longevity and safety of the tree (and person which may contact tree). This is NOT meant to be a guideline for transplanting trees, but rather the criteria by which relocated trees will meet Town, County, State or governing agency guidelines. Trees which require excessive pruning should NOT be used. Damaged or dead relocated trees will be replaced with appropriate number of caliper inches and species equal to relocated or dead tree, as approved by the Landscape Architect. No more than 20% of the foliage should be removed for any reason. Trees should be corrected for any structural defects, touching branches, dead or rotting wood, V-shaped branching or branching which may effect human safety issues post relocation. Topping a relocated tree is not acceptable. Damage to the trunk/branches will not exceed 10% of the trunk diameter and 2" in height. Any major limb or canopy pruning will be qualified and performed by a Certified Arborist.

IRRIGATION:
Temporary irrigation systems shall be installed to provide consistent moisture during the establishment period. These systems are usually connected to fire hydrants with a portable construction meter. Pipe, aluminum or PVC is laid on top of the ground with sprinkler heads attached at regular intervals to provide maximum coverage.

MATERIALS LIST:
Landscape Contractor shall be responsible for verifying all quantities for material shown on drawings prior to submitting a bid. Planting plan shall take precedence over the plant list. Final quantity of sod and mulch shall be verified.

SUBSTITUTIONS:
No substitutions shall be made without the approval from the Landscape Architect and/or the Owner. Intended substitutions shall be indicated on the bid.

MEASUREMENTS:
Canopy Trees- Height shall be measured from the ground to the average height of canopy. Spread shall be measured to the end of branching equally around the crown from the center of the trunk. Caliper (d.b.h.) will be measured 4'-6" above grade. Overall height (O.A.) shall be measured from the ground to the tip of the unopened bud.

GUARANTEE:
All new plant materials shall be guaranteed for one year from the time of acceptance and shall be alive and in satisfactory growth for each specific kind of plant at the end of the guarantee period. The Landscape Contractor shall not be responsible for damage caused by vandalism, violent wind storms or other acts of God beyond control. Replacement shall occur within two weeks of rejection and guaranteed six months from date of installation. Landscape Contractor shall repair damage to other plants or lawns during plant replacements at no additional cost.

MULCH:
A minimum 3-inch layer of mulch shall be applied on all exposed soil surfaces of planting areas except turf areas, creeping or rooting groundcovers, or direct seeding applications where mulch is contraindicated.

SOIL:
For soils less than 6% organic matter in the top 6 inches of soil, compost at a rate of a minimum of four cubic yards per 1,000 square feet of permeable area shall be incorporated to a depth of six inches into the soil.

HYDROSEEDING:
Hydroseeding (or hydraulic mulch seeding, hydro-mulching, hydraseeding) is a planting process which utilizes a slurry of seed, mulch, and nutrients. The slurry is transported in a tank, either truck- or trailer-mounted and pressure sprayed over prepared ground in a uniform layer. Hydroseeding is an alternative to the traditional process of broadcasting or sowing dry seed. It promotes quick germination and inhibits soil erosion. To ensure optimal results, it is important that you take extra care of your newly hydroseeded lawn or garden areas. Here are some important hydroseed care instructions to follow:

Traffic
Avoid walking on hydroseeded areas. Block children, pets, and other pedestrian traffic if possible to avoid disruption of the hydroseeded mulch or germinating seeds. You should also minimize traffic after application for 5 to 6 weeks to allow your lawn to mature. Foot traffic can damage new grass.

Watering
Begin to water one day after application. We recommend watering 3 times per day. For example, set your sprinkler for 8 am, Noon, and 4 pm. The amount of time per watering cycle will vary depending on your water pressure, but usually 5 minutes per cycle will work well. The goal is to keep the surface of newly seeded areas consistently moist, like a sponge.

Note: You will notice that the die used in the slurry application will fade within a day or so. This is expected and does not indicate any problem with the hydroseed application. Once the seed is 100 percent germinated, you can set the watering cycle to every day or every other day, at 5am for example. This will vary depending on temperature.

STAKING:
Landscape Contractor to suggest alternate means of staking for approval with Landscape Architect if staking methods shown are not feasible due to site conditions.

CLEANUP:
Landscape Contractor shall at all times keep job site clean and free from accumulation of waste material, debris and rubbish.

IRRIGATION INSPECTION:
An Irrigation audit report shall be completed at the time of final inspection.

COMPLETION:
A Certificate of Completion shall be filled out and certified by either the designer of the landscape plans, irrigation plans, or the licensed contractor for the project.

HYDROSEEDING MIXES

NATIVE EROSION CONTROL MIX

BROMUS CARINATUS, CALIFORNIA BROME
ELYMUS GLAUCUS, BLUE WILDRYE
FESTUCA MICROSTACHYS, SMALL FESCUE
TRIFOLIUM WILLDENOVII, TOMCAT CLOVER

THIS GRASS MIXTURE FEATURES CALIFORNIA NATIVE GRASSES THAT ARE ACCLIMATED TO VARYING CONDITIONS

NATIVE ORNAMENTAL FINE FESCUE MIX

FESTUCA RUBRA MOLATE RED, MOLATE RED FESCUE
FESTUCA OVINA INGRATA, WESTERN FESCUE
FESTUCA IDAHOENSIS, NATIVE IDAHO FESCUE

FINE-TEXTURED NATIVE GRASSES GROW BEST WITH SUPPLEMENTAL IRRIGATION. ONCE ESTABLISHED, THEY PROVIDE COOL SEASON GREEN YEAR AFTER YEAR. MOSTLY PERENNIAL WILDFLOWERS CAN BE ADDED FOR COLOR.

SOURCE NorthWest Hydroseeding, https://store.pcseed.com/

INDIVIDUAL SHRUB PLANTING

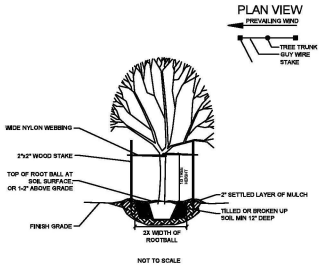


NOT TO SCALE

NOTES: TYPICAL SHURB PLANTING, INDIVIDUAL PLANTING HOLE

1. DIG PLANTING HOLE AT LEAST 2X THE WIDTH OF THE ROOT BALL OR CONTAINER.
2. SCARIFY SUBGRADE AND SIDES OF PLANTING HOLE WHEN PLANTING IN CLAY SOIL.
3. SET THE TOP OF THE ROOT BALL LEVEL WITH THE SOIL SURFACE, OR 1-2" ABOVE IF THE SOIL IS PRONE TO SETTLING.
4. IF CONTAINER GROWN PLANT, GENTLY SLIDE PLANT OUT OF CONTAINER. DISTURB THE ROOTS.
5. IF B&B PLANT, REMOVE BURLAP FROM AT LEAST THE TOP 12 INCHES OF THE ROOTBALL, WITHOUT DISTURBING THE ROOTBALL. REMOVE ALL CORD FROM THE TRUNK. REMOVE BURLAP AND WIRE BASKET (IF PRESENT) FROM THE ROOT BALL.
6. BACK FILL THE PLANTING HOLE WITH EXCAVATED NATIVE SOIL, BROKEN UP OR TILLED. WATER TO REMOVE AIR POCKETS. DO NOT ADD AMENDMENTS.
7. PLACE PINE STRAW OR BARK MULCH ON THE SURFACE TO A (SETTLED) DEPTH OF 1 TO 3 INCHES.

TREE PLANTING



NOT TO SCALE

NOTES: SMALL TREE PLANTING (<2" CAL.)

1. ALL PLANT MATERIALS SHALL BE IN ACCORDANCE WITH THE AMERICAN STANDARDS FOR NURSERY STOCK (ANSI Z60.1-2004). PLANT ACCORDING TO ANSI A300 PART 6.
2. DIG THE PLANTING HOLE A MINIMUM OF 2x WIDTH OF ROOTBALL FOR AT LEAST THE FIRST 12 INCHES OF DEPTH, BELOW 12 INCHES, DIG HOLE WIDE ENOUGH TO PERMIT ADJUSTING. DO NOT DIG THE HOLE DEEPER THAN ROOT BALL DEPTH.
3. SCARIFY THE SUBGRADE AND SIDES OF THE PLANTING HOLE WHEN PLANTING IN CLAY SOILS (MORE THAN 15% CLAY).
4. LIFT AND SET THE TREE BY ROOT BALL ONLY. DO NOT LIFT USING THE TREE TRUNK AND DO NOT USE TREE TRUNK AS A LEVER.
5. SET THE TOP OF THE ROOT BALL LEVEL WITH THE SOIL SURFACE OR SLIGHTLY HIGHER IF THE SOIL IS PRONE TO SETTLING.
6. AFTER THE TREE IS SET IN PLACE, REMOVE BURLAP, WIRE AND STRAPS FROM AT LEAST THE UPPER 1/3 OF THE ROOTBALL.
7. BACKFILL WITH EXISTING SOIL THAT HAS BEEN WELL-TILLED OR BROKEN UP. DO NOT ADD AMENDMENTS TO THE BACKFILL SOIL. AMEND THE SURFACE WITH MULCH.
8. USE TWO 2" X 2" WOOD STAKES 1/3 TREE HEIGHT IN LENGTH DRIVEN INTO UNDISTURBED SOIL A MINIMUM OF 18 INCHES. STAKES SHOULD BE SPACED EQUALLY ACROSS FROM AND IN LINE WITH THE TRUNK PARALLEL TO THE PREVAILING WIND.
9. ATTACH 3/4" NYLON WEBBING TO CONNECT THE TREE TO STAKES. ATTACH WEBBING AT 1/3 THE TREE HEIGHT.
10. APPLY A 2-3" (SETTLED) DEPTH OF PINE STRAW OR BARK MULCH TO THE PLANTING SURFACE. LEAVE A 2" SPACE AROUND THE TRUNK FOR AIR CIRCULATION.
11. PRUNING SHALL BE LIMITED TO DEAD, DISEASED, OR BROKEN LIMBS ONLY AND SHALL BE IN ACCORDANCE WITH ANSI A300 SPECIFICATIONS.
12. REMOVE ANY TRUNK WRAP REMAINING AT TIME OF PLANTING. NO WRAPS SHALL BE PLACED ON TRUNK.

SOURCE http://gpshort.uga.edu/TreePlantingDetails.html

PHASE I ENVIRONMENTAL SITE ASSESSMENT

11 Basalt Road
Napa, California 94558

July 26, 2021

AVOCET
ENVIRONMENTAL, INC.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

11 Basalt Road
Napa, California 94558

July 26, 2021

PREPARED FOR

Napa 55 Logistics, LLC and LaSalle Investment Management, Inc.
c/o Panattoni Development Company, Inc.
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PREPARED BY

Avocet Environmental, Inc.
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Irvine, California 92618-5302

Project No. 1627.003

AVOCET ENVIRONMENTAL, INC.

AVOCET
ENVIRONMENTAL, INC.

July 26, 2021 Project No. 1627.003

NAPA 55 LOGISTICS, LLC and
LASALLE INVESTMENT MANAGEMENT, INC.
c/o Mr. Guillermo Accame
Director of Risk Management
PANATTONI DEVELOPMENT COMPANY, INC.
7887 East Belleview Avenue, Suite 475
Denver, Colorado 80111

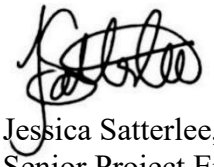
Phase I Environmental Site Assessment
11 Basalt Road
Napa, California 94558

Dear Mr. Accame:

This report documents a Phase I environmental site assessment for the approximately 55.27-acre property at 11 Basalt Road in Napa, California. This Phase I ESA updates and supersedes Avocet's previous Phase I ESA report for the site, which was issued on February 14, 2020. If you have any questions about the report or require additional information, please do not hesitate to contact the undersigned at (949) 296-0977 Ext. 110 or at jsatterlee@avocetenv.com. As always, Avocet Environmental, Inc. appreciates the opportunity to be of service to LaSalle Investment Management, Inc. and Panattoni Development Company.

Respectfully submitted,

AVOCET ENVIRONMENTAL, INC.



Jessica Satterlee, P.E.
Senior Project Engineer

JMS:sh
Attachments

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LIST OF ABBREVIATIONS AND ACRONYMS

ACM	asbestos-containing material
AST	aboveground storage tank
ASTM	ASTM International
bgs	below ground surface
BMPs	Best Management Practices
BTEX	benzene, toluene, ethylbenzene, and xylenes
CalEPA	California Environmental Protection Agency
CalGEM	California Geologic Energy Management Division
CDHS	California Department of Health Services
CDPH	California Department of Public Health
CREC	Controlled REC
DTSC	California Department of Toxic Substances Control
EDR	Environmental Data Resources, Inc.
EPA	U.S. Environmental Protection Agency
ESA	environmental site assessment
ESL	SFBRWQCB Environmental Screening Level
HREC	Historical REC
LBP	lead-bearing paint and coatings
LEA	Local Enforcement Agency
MCL	Maximum Contaminant Level
mg/kg	milligram per kilogram
mg/L	milligram per liter
msl	mean sea level
MTBE	methyl *tert*-butyl ether
NCoEHD	Napa County Environmental Health Division
NCoDEM	Napa County Department of Environmental Management
NOV	Notice of Violation
OEF	other environmental feature
PCB	polychlorinated biphenyl
PCBP	Pacific Coast Building Products
PCE	tetrachloroethylene
pCi/L	picocuries per liter
POLs	petroleum, oils, and lubricants
REC	Recognized Environmental Condition
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
TCE	trichloroethylene
TPH	total petroleum hydrocarbons
TPH-d	total petroleum hydrocarbons as diesel
TPH-g	total petroleum hydrocarbons as gasoline
TPH-o	total petroleum hydrocarbons as oil
µg/L	microgram per liter

UST	underground storage tank
VEC	vapor encroachment condition
VIC	vapor intrusion condition
VOC	volatile organic compound

EXECUTIVE SUMMARY

Avocet Environmental, Inc. (Avocet) has conducted a Phase I environmental site assessment (ESA) for the approximately 55.27-acre property at 11 Basalt Road in Napa, California (the site) in general accordance with the requirements and limitations of ASTM International (ASTM) Standard E1527-13. Avocet conducted the Phase I ESA on behalf of Napa 55 Logistics, LLC and LaSalle Investment Management, Inc., c/o Panattoni Development Company, Inc. (Panattoni). Avocet understands that Napa 55 Logistics, LLC and LaSalle Investment Management, Inc. plan to purchase the site, which is currently owned by the BOCA Company, and redevelop it for commercial/industrial purposes. The primary purpose of the Phase I ESA is to evaluate the history and current condition of the site and surrounding properties in the context of the use, storage, handling, and disposal of potentially hazardous chemicals or wastes that could have adversely impacted the underlying soil and groundwater. Based on the site's history and current condition, the possible existence of "Recognized Environmental Conditions" (RECs), "Controlled RECs" (CRECs), and "Historical RECs" (HRECs), as defined in ASTM Standard E1527-13 (ASTM, 2013), and "other environmental features" (OEFs) has been evaluated. For Phase I ESA purposes, OEFs are environmental conditions that do not meet the ASTM definition of a REC, CREC, or HREC but which warrant mention for visibility purposes in the context of acquiring and redeveloping the site. OEFs do not necessarily require any action to address their presence or condition but are identified for the sake of thoroughness and completeness. The site location is shown in Figure 1 and an aerial photograph of the site and vicinity s presented in Figure 2. A larger-scale aerial photograph of the site is presented in Figure 3. This report updates and supersedes Avocet's February 14, 2020 Phase I ESA report for the subject site.

SITE HISTORY AND OPERATIONS

The site was purchased in 1936 by Basalt Rock Company, Inc. (Basalt Rock), which owned and operated the Napa Quarry immediately east of the site and the Basalite Block concrete block manufacturing facility immediately west of the site. The site was agricultural prior to 1936 and remained largely undeveloped until the early 1950s, when Basalt Rock expanded its operations. The approximately 100,000-square-foot main building in the southwest corner of the site was constructed in or around 1953 and was used to manufacture precast concrete wall panels until 1986, when the site was sold to Dillingham Construction. During its occupancy, Basalt Rock reportedly utilized two areas in the northeast corner of the site to dispose of waste materials generated at the adjoining Napa Quarry and from its wall panel manufacturing processes. The waste materials reportedly were limited to construction-type debris, including concrete, asphalt, wood, and sheet metal; potentially hazardous materials reportedly were not disposed in either of the two areas. Two rounds of exploratory trenching in the waste disposal areas confirmed the presence of primarily inert construction debris. Neither of the investigations encountered hazardous waste materials; however, soil matrix samples and one groundwater sample collected during the trenching contained generally low concentrations of total petroleum hydrocarbons (TPH) in the diesel and oil ranges (TPH-d and TPH-o). The presence of TPH was attributed to leaching from buried debris, which included asphalt and wooden formwork to which mold release oil may have been applied.

Shortly before Dillingham took over the site, a second building, the Watershed building, was constructed to the southeast of the main building at the site. Dillingham used the main building and the western half of the site to store construction equipment, vehicles, and tools, including used electrical transformers that may have contained polychlorinated biphenyls (PCBs). Dillingham also leased other areas of the site to Napa Valley Cast Stone (Watershed building and surrounding area), Cultured Stone Products (northern portion of the site), and Ragsdale, Inc. (eastern central portion of the site). Napa Valley Cast Stone reportedly conducted acid etching in a concrete-lined pit. The acid and water used during the process were recycled and reused. Ragsdale, Inc. used its space to maintain drilling equipment, and Cultured Stone Products used its space for outdoor storage.

Dillingham sold the site in 2005, and since then, tenants/occupants have included Pacific Steel Group, Inc. (Pacific Steel) and Superior Equipment Company in the main building, multiple construction contractors in the central and eastern portions of the site, and Rammed Earthworks in and around the Watershed building. Superior Equipment Company no longer occupies the site but is believed to have used its space to store and maintain waste management equipment. Pacific Steel currently uses the main building and roughly the western half of the site to store, fabricate, and ship rebar and other steel products. The various construction contractors appear to use their spaces to store vehicles and equipment, with little to no maintenance, based on Avocet's observations. Rammed Earthworks, which manufactured structural components made from aggregate materials, utilized the Watershed building as a workshop and the area to the east of the Watershed building as outdoor storage for finished products and for raw aggregate materials. The Watershed building is currently being used as a cabinet shop and is fitted out with woodworking and related equipment. Avocet was not allowed to inspect the interior, but it appears operations involve staining and painting wooden cabinets, although the quantities of stain and paint appeared very small.

The site has a roughly 70-year history of industrial use, during which time petroleum, oils, and lubricants (POLs) used in equipment maintenance and equipment and vehicle fueling were used at various locations. Cleaning solvents, possibly including volatile organic compounds (VOCs), may also have been used. Previous Phase I ESAs documented generally poor housekeeping practices by several former tenants, and Avocet observed surface staining and other indications of generally *de minimis* releases of POLs on both paved and unpaved surfaces throughout the site. Based on the available records, it appears that the hazardous materials used at the site were stored aboveground, including in aboveground storage tanks (ASTs); however, there are no records of underground storage tanks (USTs) at the site. Groundwater occurs at between 6 and 10 feet below ground surface (bgs).

Based on the above, Avocet conducted a Phase II investigation in February 2020 to assess the possible presence of VOCs, including fuel oxygenates, and other industrial contaminants, in soil, soil vapor, and groundwater. Certain of the soil vapor samples contained low but detectable concentrations of several VOCs, notably benzene, carbon disulfide, chloroform, and toluene along with tetrachloroethylene (PCE) and trichloroethylene (TCE). However, none of the VOC detections in soil vapor suggest that a significant release has occurred, and related hypothetical VOC concentrations in indoor air exceed commercial/ industrial screening levels only if the most

conservative attenuation factor of 0.03 is applied. Using more realistic attenuation factors of 0.001 and 0.005, hypothetical VOC concentrations in indoor air are well below commercial/ industrial screening levels. Groundwater grab samples did not contain detectable concentrations of TPH or any VOCs other than 7.1 micrograms per liter (µg/L) of methyl *tert*-butyl ether (MTBE), a fuel oxygenate, which is below the California drinking water Maximum Contaminant level (MCL) of 13 µg/L. Barium was also reported in groundwater grab samples at what were likely background concentrations.

RECOGNIZED ENVIRONMENTAL CONDITIONS (RECS)

ASTM (2013) defines RECs as:

> *". . . the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to 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."*

ASTM (2013) goes on to define *de minimis* as:

> *". . . 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."*

Based on the subject Phase I ESA, Avocet identified two RECs at the subject site, as follows:

- **REC 1 – Possible PCB-Containing Transformers.** There are three pad-mounted electrical transformers in a fenced enclosure outside the northeast corner of the Watershed building. The vertical, cylindrical transformers are on a concrete pad, appear old, and do not feature any visible decals indicating whether or not they contain PCBs. There is visible oil staining around the base of one of the transformers and oil staining on the side of another. The oil staining on the concrete pad is considered *de minimis* but the transformers themselves are considered a REC until they are removed or tested and shown not to contain PCBs.

- **REC 2 – Sitewide Use of POLs.** The subject site has been used for industrial purposes for roughly 70 years, since the early 1950s. The use of POLs at the site has been documented in two previous Phase I ESAs and was observed during Avocet's walkover surveys of the site. Moreover, previous Phase I ESAs documented "poor housekeeping" by various tenants, including evidence of spills being cleaned up, staining on both paved and unpaved surfaces, and hazardous material storage without secondary containment. Avocet personnel did not observe any indications of significant POL releases during its January 2020 or June 2021 site visits but observed *de minimis* staining on paved and unpaved surfaces, storage of waste petroleum products without secondary containment, and oily water ponded over a backed-up drain. The results of Avocet's February 2020 Phase II

investigation indicated the presence of VOCs in shallow soil vapor throughout the site. For the most part, the concentrations were not of concern, with the exception of benzene and chloroform, which were present at concentrations that potentially could exceed screening levels for indoor air based on the most conservative of the commonly used attenuation factors.

CONTROLLED RECS (CRECS)

ASTM (2013) defines CRECs as a REC:

> *". . . 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 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)."*

Based on the subject Phase I ESA, Avocet has not identified any CRECs at the site.

HISTORICAL RECS (HRECS)

ASTM defines HRECs 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 any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."*

Based on the subject Phase I ESA, Avocet has not identified any HRECs at the site.

OTHER ENVIRONMENTAL FEATURES (OEFS)

OEFs are potential environmental features or conditions that do not meet the ASTM definition of a REC, CREC, or HREC but which may warrant mention in the context of acquiring and redeveloping the site. Based on the subject Phase I ESA, Avocet has identified six OEFs at the site (sequentially numbered after the RECs), as follows:

- **OEF 3 – Abandoned ASTs.** The subject site features two 5,000-gallon ASTs located east of the main building, one for gasoline and one for diesel fuel. The ASTs are inactive and have not been used since at least as far back as 2003. The ASTs are located within a concrete secondary containment structure. There were no obvious indications of leakage from the ASTs, and the secondary containment structure appears to be in good condition.

- **OEF 4 – Other Oil-Filled Electrical Transformers.** In addition to the pad-mounted transformers mentioned above (REC 1), there are pad-mounted electrical transformers at two other locations within the site boundary. However, both of the transformers feature labels indicating they do not contain PCBs and there were no visual indications that either had leaked.

- **OEF 5 – ACMs and LBP.** The buildings at the site were constructed when the use of asbestos-containing materials (ACMs) and lead-bearing paint and coatings (LBP) in construction was common, although no obvious hazardous conditions involving ACMs or LBP were observed.

- **OEF 6 – Water Wells.** There appear to be three water wells at the site, one in the east-central area and two in the southeast corner. The well in the east-central part of the site is inside a small enclosure and was not accessible for inspection. As such, its condition and operational status are unknown, although it appears to be powered via an oil-filled electrical transformer on a nearby wooden platform. Of the two wells in the southeast corner of the site, the northernmost of the two was active at the time of Avocet's June 17, 2021 site visit and appears to pump water up to a nearby AST. Based on visible aboveground piping, water from the active well is supplied, via the AST, to a water truck filling station on the adjoining Napa Quarry to the east. The active well may also supply water to the subject site but the connection to the adjoining Napa Quarry creates a potential future utility separation issue. The second and third water wells were not operating at the time of Avocet's site visit, and it is not clear if they are still in use and, if so, what they supply. Avocet was not provided, and has so far been unable to obtain, well construction details such as depths and screened intervals.

- **OEF 7 – Solid Waste Disposal Areas.** Basalt Rock reportedly used two areas in the northeast corner of the site to dispose of waste materials from its aggregate mining operations at the east-adjoining Napa Quarry and possibly from precast concrete manufacturing operations at the subject site. Two trenching investigations within the waste disposal areas encountered primarily inert construction debris, including concrete, asphalt, sheet metal, and other nonhazardous materials. Soil matrix and groundwater grab samples collected from the exploratory trenches contained trace concentrations of TPH-d and TPH-o attributed to wooden formwork coated with mold release oil. Based on Avocet's Phase II investigation in February 2020, the site does not appear to be underlain by groundwater in a laterally continuous aquifer in the conventional sense, reducing the likelihood of contamination potentially migrating in the subsurface. Additionally, groundwater data collected during the Phase II investigation, although limited, suggest that the impact on groundwater has been negligible.

- **OEF 8 – Septic Systems.** The subject site features two septic systems and an associated leach field that are connected to the main building currently occupied by Pacific Steel. An inspection form completed in 1999 indicates that at the time, the

septic systems were in good condition; however, nothing else is known about them and they were not addressed in any of the Phase II investigations conducted previously at the site. Avocet installed a soil vapor probe in the vicinity of the septic systems during its February 2020 Phase II investigation; however, no significant VOC concentrations were detected.

VAPOR INTRUSION/VAPOR ENCROACHMENT

As part of the Phase I ESA, Avocet evaluated the potential presence of vapor intrusion conditions (VICs) and/or vapor encroachment conditions (VECs) at the subject site. A VIC can occur if VOCs are present in the vadose zone or in groundwater beneath a property at concentrations such that vapor could intrude into, and accumulate in, overlying structures at concentrations potentially hazardous to human health. A VEC can occur if VOCs from an offsite source migrate beneath a property in the vapor phase. Avocet has not reviewed any records that indicate VOCs were stored or used in significant quantities at the site or on the adjoining properties. However, the site has a roughly 70-year history of industrial land use, during which solvents may have been used for equipment cleaning and/or other purposes and gasoline appears to have been stored in at least one AST at the site. Avocet's additional Phase II investigation in February 2020 indicated that VOCs are present in shallow soil vapor at concentrations that, based on an attenuation factor of 0.03, could marginally exceed potentially applicable indoor air screening levels. Using more realistic California Department of Toxic Substances Control attenuation factors, hypothetical indoor air screening levels are well below potentially applicable indoor air screening levels.

RECOMMENDATIONS

Based on the above, Avocet offers the following recommendations regarding Phase II investigation and site clearance:

- The site owner should remove the two ASTs prior to the sale of the site, with the appropriate permits and regulatory agency oversight. Unless they belong to the local utility company, the pad-mounted electrical transformers also should be removed by the site owner.

- Inactive water wells should be destroyed in accordance with California standards, with the appropriate well destruction permit and regulatory agency oversight.

- Pre-demolition surveys should be conducted for ACMs, LBP, and other potentially hazardous building materials, including "universal wastes," and confirmed hazardous materials should be abated, as necessary, prior to general building demolition.

- Avocet conducted a Phase II investigation in February 2020, which indicated the presence of VOCs in shallow soil vapor at concentrations that marginally exceed applicable soil vapor screening levels, specifically chloroform and benzene. Avocet notes that chloroform and benzene are both commonly detected in ambient air at background concentrations that exceed regulatory screening levels. Avocet

recommends the collection of ambient air samples concurrently with additional soil vapor samples from the same probes to confirm whether these soil vapor VOC concentrations are representative of site subsurface conditions and whether they present a potentially unacceptable vapor intrusion risk to future commercial building tenants. Avocet also recommends that soil vapor samples from the probes closest to the two solid waste disposal areas be analyzed for methane.

1.0 INTRODUCTION

This report documents a Phase I environmental site assessment (ESA) for the approximately 55.27-acre[1] property at 11 Basalt Road in Napa, California (the site). Avocet Environmental, Inc. (Avocet) conducted the Phase I ESA on behalf of Napa 55 Logistics, LLC and LaSalle Investment Management, Inc., c/o Panattoni Development Company, Inc. (Panattoni). Avocet understands that Napa 55 Logistics, LLC and LaSalle Investment Management, Inc. plan to purchase the site, which is currently owned by the BOCA Company, and redevelop it for commercial/industrial purposes. Avocet conducted the Phase I ESA in general accordance with the scope and limitations of ASTM International (ASTM) Standard E1527-13. This report updates and supersedes Avocet's February 14, 2020 Phase I ESA report for the subject site. The site location is shown in Figure 1 and an aerial photograph of the site and vicinity is presented in Figure 2. A larger-scale aerial photograph of the site is presented in Figure 3.

1.1 OVERVIEW

The site was purchased in 1936 by Basalt Rock Company, Inc. (Basalt Rock), which owned and operated the Napa Quarry immediately east of the site and the Basalite Block concrete block manufacturing facility immediately west of the site. The site was agricultural prior to 1936 and remained largely undeveloped until the early 1950s, when Basalt Rock expanded its operations. The approximately 100,000-square-foot main building in the southwest corner of the site was constructed in or around 1953 and was used to manufacture precast concrete wall panels until 1986, when the site was sold to Dillingham Construction. During its occupancy, Basalt Rock reportedly utilized two areas in the northeast corner of the site to dispose of waste materials generated at the adjoining Napa Quarry and from its wall panel manufacturing processes. The waste materials reportedly were limited to construction-type debris, including concrete, asphalt, wood, and sheet metal; potentially hazardous materials reportedly were not disposed of in either of the two areas. Two rounds of exploratory trenching in the waste disposal areas confirmed the presence of primarily inert construction debris. Neither of the investigations encountered hazardous waste materials; however, soil matrix samples and one groundwater sample collected during the trenching contained generally low concentrations of total petroleum hydrocarbons (TPH) in the diesel and oil ranges (TPH-d and TPH-o). The presence of TPH was attributed to leaching from buried debris, which included asphalt and wooden formwork to which mold release oil may have been applied.

Shortly before Dillingham took over the site, a second building, the Watershed building, was constructed to the southeast of the main building at the site. Dillingham used the main building and the western half of the site to store construction equipment, vehicles, and tools, including used electrical transformers that may have contained polychlorinated biphenyls (PCBs). Dillingham also leased other areas of the site to Napa Valley Cast Stone (Watershed building and surrounding area), Cultured Stone Products (northern portion of the site), and Ragsdale, Inc. (eastern central

[1] The acreages and measurements in this report are approximate only and have not been independently verified by Avocet unless specifically indicated otherwise.

portion of the site). Napa Valley Cast Stone reportedly conducted acid etching in a concrete-lined pit. The acid and water used during the process were recycled and reused. Ragsdale, Inc. used its space to maintain drilling equipment, and Cultured Stone Products used its space for outdoor storage.

Dillingham sold the site in 2005, and since then, tenants/occupants have included Pacific Steel Group, Inc. (Pacific Steel) and Superior Equipment Company in the main building, multiple construction contractors in the central and eastern portions of the site, and Rammed Earthworks in and around the Watershed building. Superior Equipment Company no longer occupies the site but is believed to have used its space to store and maintain waste management equipment. Pacific Steel currently uses the main building and roughly the western half of the site to store, fabricate, and ship rebar and other steel products. The various construction contractors appear to use their spaces to store vehicles and equipment with little to no maintenance, based on Avocet's observations. Rammed Earthworks, which manufactured structural components made from aggregate materials), utilized the Watershed building as a workshop and the area to the east of the Watershed building as outdoor storage for finished products and for raw aggregate materials. The Watershed building is currently being used as a cabinet shop and is fitted out with woodworking and related equipment. Avocet was not allowed to inspect the interior, but it appears operations involve staining and painting wooden cabinets, although the quantities of stain and paint appeared very small.

The site has a roughly 70-year history of industrial use, during which time petroleum, oils, and lubricants (POLs) used in equipment maintenance and equipment and vehicle fueling were used at various locations. Cleaning solvents, possibly including volatile organic compounds (VOCs), may also have been used. Previous Phase I ESAs documented generally poor housekeeping practices by several former tenants, and Avocet observed surface staining and other indications of generally *de minimis* releases of POLs on both paved and unpaved surfaces throughout the site. Based on the available records, it appears that the hazardous materials used at the site were stored aboveground, including in aboveground storage tanks (ASTs); however, there are no records of underground storage tanks (USTs) at the site. Groundwater occurs at between 6 and 10 feet below ground surface (bgs).

Based on the above, Avocet conducted a Phase II investigation in February 2020 to assess the possible presence of VOCs, including fuel oxygenates, and other industrial contaminants in soil, soil vapor, and groundwater. Certain of the soil vapor samples contained low but detectable concentrations of several VOCs, notably benzene, carbon disulfide, chloroform, and toluene, along with tetrachloroethylene (PCE) and trichloroethylene (TCE). However, none of the VOC detections in soil vapor suggest that a significant release has occurred, and related hypothetical VOC concentrations in indoor air exceed commercial/industrial screening levels only if the most conservative attenuation factor of 0.03 is applied. Using more realistic attenuation factors of 0.001 and 0.005, hypothetical VOC concentrations in indoor air are well below commercial/ industrial screening levels. Groundwater grab samples did not contain detectable concentrations of TPH or any VOCs, other than 7.1 micrograms per liter (µg/L) of methyl *tert*-butyl ether (MTBE), a fuel oxygenate, which is below the California drinking water Maximum Contaminant level (MCL) of

13 µg/L. Barium was also reported in groundwater grab samples at what were likely background concentrations.

1.2 PHASE I ESA OBJECTIVES

The overall objective of the Phase I ESA documented herein is to assess the site in the context of the presence of hazardous substances in the underlying vadose zone and groundwater. Specific objectives of the Phase I ESA are:

- Document the history of the site and surrounding properties in the context of the use, storage, handling, and disposal of potentially hazardous substances.
- Review and evaluate available information related to the investigation and remediation of known subsurface impacts.
- Assess the possible presence of previously unidentified hazardous substances that could be present in the subsurface as a result of their past use, storage, handling, or disposal within or near the site.
- Visually survey the existing buildings at the site for the possible presence of asbestos-containing materials (ACMs), lead-bearing paint and coatings (LBP), and/or other potentially hazardous "universal waste" materials; however, no samples were collected or analyzed for confirmation purposes.
- Identify "Recognized Environmental Conditions" (RECs), "Controlled RECs" (CRECs), and "Historical RECs" (HRECs), as defined in ASTM Standard E1527-13 (ASTM, 2013).
- Identify "other environmental features" (OEFs), defined for Phase I ESA purposes as existing or former site features or conditions that do not meet the ASTM definition of a REC, CREC, or HREC, but which may be relevant in the context of acquiring and redeveloping the site.

1.3 APPROACH

The subject Phase I ESA was conducted in general accordance with the requirements of ASTM Standard E1527-13 (ASTM, 2013) and included:

- A review of relevant background information, including the history of the site and adjacent properties, past land use, and regional hydrogeological conditions.
- A review of aerial photographs, topographic maps, and environmental records pertaining to the site.
- Walkover surveys of the site and vicinity on January 14, 2020, during Avocet's original Phase I ESA, and on June 17, 2021.

- A review of potential offsite sources of contamination that could adversely impact the subsurface environment beneath the site, including a search of regulatory agency databases and visual surveys of adjoining properties.

The format of this Phase I ESA report deviates from that suggested by ASTM; however, all of the elements required by ASTM E1527-13 are included or otherwise addressed.

1.4 LIMITATIONS

This Phase I ESA was performed in general accordance with current ASTM practice (ASTM, 2013) and the standard of care customary in the environmental consulting industry as of the date of this report. Certain components of the Phase I ESA were conducted on Avocet's behalf by Environmental Data Resources, Inc. (EDR), of Shelton, Connecticut. Key dates in the Phase I ESA process were as follows:

Key Phase I ESA Dates		
Task	**Responsible Party**	**Date**
Database Search	EDR	06/01/21
Site Inspection	Avocet	06/17/21

The conclusions in this Phase I ESA report are based on the information available to Avocet from the sources cited; however, Avocet makes no warranty regarding the accuracy or completeness of this information. Moreover, this Phase I ESA specifically excludes any evaluation of geotechnical conditions, the stability of onsite or adjacent slopes or retaining walls, seismicity or liquefaction, flooding hazards, and the possible impact, if any, of electromagnetic fields associated with onsite or nearby electrical facilities. Also, this report cannot and does not include any evaluation of undocumented activities at the site or on adjacent or nearby properties. The exclusions noted above should not be interpreted to mean that every other environmental condition or potential environmental condition has been considered in the subject Phase I ESA.

Avocet conducted the Phase I ESA on behalf of Napa 55 Logistics, LLC and LaSalle Investment Management, Inc. to document environmental conditions at the site for decision making in the context of acquiring and redeveloping the site. Napa 55 Logistics, LLC, LaSalle Investment Management, Inc., and Panattoni may rely on the information in this Phase I ESA report until November 28, 2021, which is 180 days from the earliest of the key dates above. After November 21, 2021, this Phase I ESA should be updated in accordance with ASTM guidance or, after June 1, 2022, the Phase I ESA should be redone. Avocet will not be liable for any consequential damages arising from the use of this report for other than its intended purpose, for use of this report beyond these viability dates, or from unauthorized use by third parties.

1.5 REPORT ORGANIZATION

Including the introduction, this Phase I ESA report is organized into seven sections. Section 2.0 describes the various sources of information utilized in preparing this Phase I ESA report. Section 3.0 presents a summary of relevant background and regional information. Section 4.0

describes the history and current condition of the site with emphasis on past and ongoing operations involving potentially hazardous substances. Section 5.0 summarizes past environmental investigations at the site. Section 6.0 describes the properties adjoining the site and summarizes information gathered from a review of environmental databases maintained by local, state, and federal government agencies. Section 7.0 presents conclusions, including the identified RECs, CRECs, HRECs, and OEFs, with recommendations as appropriate.

Supporting information is contained in figures and six appendices, all of which follow the text of this report. Appendices A and B contain historical topographic maps and historical aerial photographs, respectively, which have been annotated with the site boundary. Appendix C contains a report indicating that Sanborn® fire insurance map coverage of the site is not available. Appendix D is a City Directory Abstract summarizing entries recorded in business, telephone, and other directories. Appendix E contains photographs of the site taken during walkover surveys on January 14, 2020 and June 17, 2021. Appendix F is a report summarizing information available from a review of environmental databases maintained by local, state, and federal government agencies.

2.0 SOURCES OF INFORMATION

Sources of information utilized in preparing this Phase I ESA report included a walkover survey of the site and adjoining properties; historical topographic maps; historical aerial photographs; records available from selected local and state regulatory agencies; a review of databases maintained by local, state, and federal government agencies; and other records available from commercial and online sources.

2.1 TOPOGRAPHIC MAPS

To evaluate the history of the site and past land uses, copies of historical U.S. Geological Survey topographic maps published between 1902 and 2012 were obtained from EDR. The maps, which EDR marks up with the approximate site boundary, are included in chronological order in Appendix A.

2.2 AERIAL PHOTOGRAPHS

To further evaluate the site's history, a "Decade Package" of historical aerial photographs was obtained from EDR. EDR's Decade Package generally includes at least one aerial photograph from each decade from the 1920s through the present day. For the subject Phase I ESA, EDR provided aerial photographs taken between 1947 and 2016. The photographs, which EDR marks up with the approximate site boundary, are included in chronological order in Appendix B.

2.3 FIRE INSURANCE MAPS

At Avocet's request, EDR conducted a search for Sanborn® fire insurance map coverage but reported that the site is an "unmapped property." A copy of EDR's "Certified Sanborn® Map Report" to that effect is included as Appendix C to this report.

2.4 CITY DIRECTORIES

Telephone and business directories have been published for cities and counties across the United States since the 1700s and often contain potentially useful information on past land uses and the types of business that operated at specific street addresses. EDR extracts information from such directories and consolidates it in its "The EDR-City Directory Abstract," a copy of which is included as Appendix D to this report.

2.5 WALKOVER SURVEY

Avocet personnel conducted a walkover survey of the site on June 17, 2021 accompanied by Alana Lundgren, an attorney with Hartman King PC representing BOCA Company, the current owner. Ms. Lundgren did not have the health and safety equipment (hard hat, hi-viz vest, or boots) required to enter the buildings at the site and was unwilling to allow Avocet to enter the buildings without her. As such, Avocet was unable to enter any of the buildings at the site but was able to view the interiors from exterior vantage points and, as noted previously, Avocet had inspected the interiors of the buildings in January 2020. Selected photographs taken during Avocet's

January 14, 2020 and June 17, 2021 walkover surveys are included in Appendix E and are referenced, as appropriate, throughout the remainder of this report.

2.6 GOVERNMENT DATABASES

EDR conducted a government records search to identify potential sources of contamination at or near the site. The search included local, state, and federal records for the site and for other properties within ASTM-standard radii of the site. The records search is summarized in Section 6.0, and a copy of "The EDR Radius Map™ Report with GeoCheck®" is included in its entirety as Appendix F. As recommended by ASTM, all but a few of the databases searched were "current," i.e., had been updated within 90 days prior to the search date.

In addition to the above, Avocet searched for potentially relevant environmental records pertaining to the site and nearby properties on the GeoTracker and EnviroStor websites maintained by the California Environmental Protection Agency (CalEPA). Relevant information from this review is incorporated or referred to, as appropriate, throughout the remainder of this report.

2.7 INFORMATION FROM LOCAL AND STATE AGENCIES

Selected federal, state, and local regulatory agencies were contacted on December 24, 2019, during Avocet's original Phase I ESA, to determine whether they have potentially relevant environmental records pertaining to the site. In particular, Avocet requested records relating to USTs, ASTs, environmental permits, and enforcement orders; reports and correspondence related to site investigation/assessment, soil sampling, monitoring, cleanup/remediation, removal actions, and closures; or any records related to conditions in air, soil, surface water, groundwater, or other environmental media. The agencies contacted and Avocet's interactions with them were as follows:

- Avocet searched the U.S. Environmental Protection Agency (EPA) MyProperty online portal for records related to the subject site address; however, no records were available.

- Written requests were emailed to the California Department of Toxic Substances Control (DTSC) offices in Berkeley and Sacramento. In an email dated December 26, 2019, the Sacramento office indicated that it does not have any records pertaining to the subject site. On December 31, 2019, the Berkeley office responded that it has records pertaining to 2301 Napa Vallejo Highway. This address is currently associated with the western adjacent property but may have been associated with the subject site in the past. Avocet personnel reviewed the records in DTSC's Berkeley office on January 13, 2020; however, none of the records pertained to the subject site.

- A written request was emailed to the California Department of Forestry and Fire Protection, which responded on January 6, 2020 that it does not have any records pertaining to the subject site.

- A written request was emailed to the Napa County Environmental Health Division (NCoEHD), which responded on December 30, 2019 that records related to the site are available on the County's electronic document portal. Avocet searched the document portal and downloaded selected records, which are referred to, where appropriate, throughout the remainder of this report.

- A written request was emailed to San Francisco Bay Regional Water Quality Control Board (SFBRWQCB), including its UST and SLIC (Spills, Leaks, Investigation and Cleanup) divisions. In a telephone call on January 2, 2020, SFBRWQCB stated that it does not have any records responsive to Avocet's request.

- An online request to review public records was submitted to the Bay Area Air Quality Management District, which responded via email on January 6, 2020 that it does not have any records pertaining to the subject site.

- Avocet searched the online records portal for the City of Napa; however, no relevant records pertaining to the subject site were found.

The agencies listed above were not recontacted for the subject Phase I ESA on the basis that site activities have not changed significantly since Avocet's original Phase I ESA was completed. However, Avocet did review records available on the GeoTracker and EnviroStor websites maintained by CalEPA for the purposes of the subject Phase I ESA. Relevant information from these reviews is incorporated or referred to as appropriate throughout the remainder of this report.

2.8 Oil and Gas Records

To assess the presence of oil and/or natural gas wells at and in the vicinity of the site, Avocet checked online information available from California Geologic Energy Management Division (CalGEM). The findings of this review are summarized in Section 3.5.

2.9 Radon Gas Records

To assess the possible presence of naturally occurring radon gas in the subsurface in the site vicinity, Avocet reviewed data available from EPA and the California Department of Public Health (CDPH), as summarized in "The EDR Radius Map™ Report with GeoCheck®" (Appendix F). The available radon gas data are summarized in Section 3.6.

3.0 BACKGROUND AND REGIONAL INFORMATION

Background and regional information considered relevant to the subject Phase I ESA includes the site's physiographic setting, nearby surface water features, and regional geologic and hydrogeologic conditions.

3.1 PHYSIOGRAPHIC SETTING, SURFACE WATER, AND DRAINAGE

The site is located within the San Francisco Bay Hydrologic region, near the southern end of the Napa Valley. The Napa Valley trends northwest and occupies a structural depression in the central Coast Ranges, approximately 40 miles northeast of San Francisco. The valley is bounded to the south by San Pablo Bay and to the north, east, and west by the Coast Ranges. The site is terraced into the hillside along the eastern flank of the Napa Valley and the natural ground surface slopes to the southwest. The western half of the site is relatively flat at an elevation of approximately 40 feet above mean sea level (msl) but steps up approximately 10 feet up to the east, with the middle portion of the site at approximately 50 feet above msl. The northeast corner of the site rises more steeply to a maximum elevation of 105 feet above msl. In terms of surface water, the site is located approximately 0.8 mile east of the Napa River, the main water course in the Napa Valley and which drains into San Pablo Bay.

Within the site boundary, Avocet observed a drainage channel along the edge of a paved area that flows north and discharges into what appears to be a natural, albeit ephemeral water course along the northern boundary of the site (Figure 3). Avocet noted the drainage channel was at least partially covered with steel plates. Drainage in the western half of the site appears to be either toward this drainage channel or westerly via sheet flow. The eastern half of the site is largely unpaved and most precipitation in this area is assumed to infiltrate into the subsurface.

3.2 REGIONAL GEOLOGY AND HYDROGEOLOGY

The site is located within the California Coastal Range Physiographic Province. The northwest-trending mountains in this province are the result of seismic activity in the late Pliocene through the mid-Pleistocene. The area around the site is underlain by recent and Pleistocene age alluvium composed primarily of unconsolidated gravel, sand, silt, and clay. The recent and Pleistocene alluvium is underlain by the Pleistocene Huichica Formation, which is composed of deformed continental beds of yellow silt, with some interbedded lenses of silt and gravel or boulders. The Pleistocene Huichica formation unconformably overlies the Sonoma Volcanics, which are composed of continental volcanic rocks. The subject site is located within the Napa Valley Subbasin of the Napa-Sonoma Valley Groundwater Basin. Groundwater in the Napa Valley Subbasin generally flows to the southwest, toward San Pablo Bay. Groundwater has been encountered at the subject site at between 6 and 10 feet bgs. The groundwater flow direction directly beneath the subject site has not been evaluated; however, groundwater wells at the western-adjacent property and another nearby property to the north have indicated flow to the west, which is consistent with the site's location on the flank of the hills that define the eastern margin of the Napa Valley.

3.3 SITE HYDROGEOLOGY

Based on previous investigations at the adjacent property to the west of the site (Section 6.5), soils consist mainly of silty sand to between 4 and 6 feet bgs, underlain by clayey sand and sandy clay to approximately 17 feet bgs. During the installation of monitoring wells at the adjacent site, groundwater was generally encountered at approximately 10 feet bgs but was encountered in one boring at approximately 23 feet bgs. The deeper groundwater was interpreted as a possible second, discrete water-bearing zone; however, it does not appear that any permanent groundwater monitoring wells were screened in it (ACC Environmental Consultants, July 3, 1996). The depth to groundwater in monitoring wells at the west-adjacent property in the 1990s and early 2000s ranged between 6 and 10 feet bgs (ACC Environmental Consultants, July 30, 2001). Groundwater was reportedly encountered at 8 feet bgs at the subject site during exploratory trenching at the former waste disposal area in the northeast corner of the site (Kwest Engineering [Kwest], August 6, 2003). The nearest municipal well is approximately 0.5 mile northwest of the site (California State Water Resources Control Board, 2021).

3.4 WASTEWATER

Sanitary waste at the site is handled primarily by portable toilets, although the offices in the main building are served by two septic systems, both of which discharge to a nearby onsite leach field. The approximate locations of the septic systems and the leach field are shown in Figure 3. In brief, the only information available pertaining to the septic systems is from a Napa County Department of Environmental Management (NCoDEM) inspection form from 1999. The inspection form indicates that the systems were in good condition at the time (NCoDEM, September 17, 1999). There is no indication whether industrial wastewater was ever produced as part of site operations and, if so, if it was ever discharged to the septic systems. A floor drain was observed in the vicinity of the Watershed building in the southern portion of the site. It is assumed the floor drain is connected to the storm drain system, as the site is not connected to the municipal sanitary sewer system and the two septic systems do not appear to service this area of the site.

3.5 OIL AND GAS WELLS

CalGEM records available online (CalGEM, June 2, 2021) indicate that the site is not located within the administrative boundary of an oil or gas field. And there do not appear to have been any "wildcat" or "prospect" well in the vicinity. As such, the subsurface environment beneath the site is not likely to have been impacted by oil and gas exploration or storage activities.

3.6 RADON GAS

EPA recommends avoiding long-term exposure to radon levels greater than 4 picocuries per liter (pCi/L). To assess the possible presence of unhealthful levels of naturally occurring radon gas in the vicinity of the site, Avocet checked information available from the CDPH and other government agencies. CDPH maintains a radon database for California sorted by zip code (CDPH, February 2016). In brief, indoor radon measurements were performed throughout the state, and the percentage of buildings with reported radon levels greater than 4 pCi/L within each zip code was reported. Of the 82 tests conducted in the zip code for the site (94558), 9 indicated radon concentrations greater than 4 pCi/L, with a maximum of 9 pCi/L. EDR's Radius Report

(Appendix F) includes Federal Area Radon information in addition to the state radon database described above. According to the report, 17 sites were tested within the 94558 zip code and a radon concentration of 1.324 pCi/L was reported. Based on the above, and notwithstanding the 9 pCi/L "outlier," naturally occurring radon is unlikely to be of concern in the vicinity of the site.

4.0 SITE HISTORY AND CURRENT CONDITION

This section documents the history of the site and describes current site conditions, with emphasis on existing and former environmental features.

4.1 SITE HISTORY

The history of the site and vicinity has been compiled based on information from the sources outlined in Section 2.0, particularly the historical topographic maps and aerial photographs.

4.1.1 Predevelopment History, 1902 - ~1940

The earliest document reviewed for Phase I ESA purposes was a topographic map published in 1902 (Appendix A). The 1902 map indicates the site featured a single small structure accessed from present day Napa Vallejo Highway via an unpaved track. The nature of the structure is unknown; however, as there was essentially no industry in the area, it may have been a residence or an agricultural building. Prominent on the 1902 map was Napa State Hospital (annotated "Insane Asylum") to the north of the subject site. According to the California Department of State Hospitals website, Napa State Hospital opened in November 1875 and is the oldest state hospital still in operation. Aside from the hospital and the onsite structure, the site and the surrounding area were depicted as undeveloped on the 1902 map, although they may have been agricultural at the time. The existing Southern Pacific railroad tracks were shown approximately 0.5 mile west of the site, on the far side of Napa Vallejo Highway, and the more densely populated downtown Napa is shown approximately 1.25 miles to the northwest.

According to the available records, the Basalt Rock opened the Napa Quarry immediately east of the subject site in 1920. According to a previous Phase I ESA, Basalt Rock became the owner of the subject site in 1936 (ERM, June 21, 2018) but reportedly did not develop it until the early 1950s. A topographic map published in 1940 (Appendix A) indicates the onsite structure shown on the 1902 map had been removed and the dirt road that served it had been rerouted along the southern site boundary as the main access road to the Napa Quarry, which by 1940 was well established in the hills to the east and southeast of the site. Avocet notes the rerouted access road was later improved and became present day Basalt Road. The 1940 map also shows two water courses running through the site, one through the northwest corner and the other through the center. Both water courses originated in the hills to the northeast and east and flowed west toward the Napa River. A second railroad annotated "Silverado" had been constructed along the west side of Napa Vallejo Highway by 1940.

4.1.2 Basalt Rock Operations, ~1940-1986

The first aerial photograph reviewed for Phase I ESA purposes was taken in 1947 (Appendix B) and shows the site was agricultural or at least was grassed for animal grazing or haymaking. A small structure was located inside the southern site boundary and was accessed via a narrow unpaved track from present day Basalt Road. Based on its small size, the structure may have been a residence, but it is unclear whether it was related in any way to Basalt Rock's Napa Quarry

operations, which were prominently underway in the hills to the east and southeast. In fact, it appears that quarrying operations had encroached into the eastern portion of the site. Specifically, it appears waste rock had been dozed into the eastern portion of the site to create an elevated pad and further north was a rectangular area that may have featured a cover of crushed or waste rock. These two areas correspond roughly with the suspected dumpsites operated by Basalt Rock. These dumpsites are discussed further in Section 5.0. The adjacent property to the west of the subject site had been developed into the Basalite Block facility, owned by Basalt Rock, by 1947. According to records available at the DTSC office in Berkeley, Basalt Rock owned the subject site, the western adjacent property, and the Napa Quarry to the east. Basalite Block reportedly manufactured concrete blocks and mixed and bagged pre-packaged concrete products. Production facilities at the Basalite Block facility included a concrete mixing and block forming building, multiple concrete curing ovens, and a facility for the pre-packaged concrete products (California Department of Health Services [CDHS], July 25, 1988). The main manufacturing building was located in the center of the property and outdoor storage of concrete blocks is evident throughout the property in the 1947 photograph. The two water courses through the site are visible in the 1947 photograph and the one that ran through the center of the site is depicted in a topographic map published the same year (Appendix A).

A topographic map published in 1951 (Appendix A) shows the Napa Quarry was still in operation to the east and suggests that quarry operations had encroached further into the site since 1947. Specifically, the 1951 map indicates a water AST located inside the southeast corner of the site and what appear to be two small structures inside the eastern site boundary. However, an aerial photograph taken in 1953 (Appendix B) suggests they were not structures but rather were rectangular areas that had been disturbed, possibly by spreading waste rock in them. The 1951 map also shows the water course flowing through the center of the site. To the west, the 1951 map shows two larger buildings at the Basalite Block facility, and to the north, Napa State Hospital had expanded closer to the subject site. To the southwest, the unincorporated community of Shipyard Acres had been developed.

The next available aerial photograph reviewed for Phase I ESA purposes is only a partial photograph of the site taken in 1953 (Appendix B). In brief, the main building at the site had been constructed by 1953 and there appeared to be some paved parking or outdoor storage to the north of the building. Avocet understands that Basalt Rock operations at the site at that time included the fabrication of pre-cast concrete wall panels. As noted above, the water AST shown on the 1951 topographic map cannot be discerned on the 1953 photograph and the two structures shown on the 1951 map appear to be disturbed areas, possibly storage areas, with a cover of crushed rock presumably derived from the east-adjoining Napa Quarry. An aerial photograph taken in 1957 (Appendix B) is particularly sharp and shows the features mentioned above more clearly. In brief, the western half of the site had been developed and featured the existing main building and the existing paved area to the north. Much of the remainder of the developed area of the site was being used for outdoor storage and/or for parking vehicles. The eastern portion of the site essentially remained unimproved but by 1957 had been increasingly disturbed by quarry operations and apparently by traffic between the quarry and the existing buildings in the western portion of the site. Specifically, several unpaved tracks ran between Basalt Rock's manufacturing facilities and

its Napa Quarry. The western adjacent property was being used for similar purposes as shown in previous photographs, mainly for manufacturing concrete products and related outdoor storage. At least two additional buildings were constructed in the northwest and southeast portions of the property, although their purposes are not clear. Development of the western portion of the site in the early 1950s essentially severed the water course that had run through the center of the site, although the northern watercourse remains to this day. According to the 2003 Phase I ESA (Kwest, August 6, 2003), interviews with previous Dillingham employees indicate that storm water was diverted into this northernmost stream. This is consistent with Avocet's observation of a partially covered channel flowing offsite to the north (Figure 3) during the January 2020 site visit.

A topographic map published in 1968 (Appendix A) shows little, if any, discernable change in land use at or adjacent to the subject site, other than the development of the Napa Municipal Golf Course across Napa Vallejo Highway to the west and Napa College immediately north of the golf course and northwest of the site. An aerial photograph taken the same year (Appendix B) shows a small extension outside the southeast corner of the main building at the site. Avocet noticed that a sign on this extension indicated it was a "Quality Control Laboratory"; however, it is not clear what Basalt Rock used it for. Avocet further notes that the extension was being used as a welding shop in January 2020. Outdoor storage had expanded slightly to the east at the subject site, including what appears to have been multiple stockpiles of soil along the northern site boundary. The eastern portion of the site was relatively unchanged, although the image quality is such that the water AST depicted in earlier topographic maps is visible. In the surrounding area, the 1968 photograph shows that Napa Municipal Golf Course across Napa Vallejo Highway and at least two additional buildings had been constructed in the southeast corner of the Basalite Block facility. What are assumed to have been sediment ponds are visible within the Napa Quarry in the 1968 photograph. These sediment ponds, which may have been present but not discernible in earlier photographs, are assumed to have been used to control sediment in runoff from the quarry.

An aerial photograph taken in 1973 (Appendix B) shows little change in conditions at and around the site other than that the outdoor storage area east of the main manufacturing building had expanded so that roughly the western two-thirds of the property were being used, leaving only the eastern third largely unimproved. A dirt road between the manufacturing and outdoor storage area and a disturbed area corresponding to the northernmost of the two former dumpsites used by Basalt Rock is clearly visible in the 1973 photograph. It appears that Basalt Rock was still utilizing the southernmost of the two dumpsites, which was accessed from the adjoining Napa Quarry, but which was not directly accessible from the subject site. The 1973 photograph is in color and shows that a majority of the outdoor storage and related activities in the middle portion of the site were being conducted in unpaved areas, while the western half of the property was paved. A topographic map published in 1980 (Appendix A) shows that the existing Watershed building had been constructed east of the main building.

An aerial photograph taken in 1982 (Appendix B) shows the Watershed building to the east of the main building but the site generally appears inactive, as does the quarry to the east. The 1982 photograph shows the area around the Watershed building was paved and the eastern outdoor storage areas appear to either have been paved or covered with gravel. The area in the northeast corner of the site, corresponding to the northern dumpsite, appears overgrown, suggesting it was

no longer being used. A roadway from the quarry to the second dumpsite was still present, but as noted above, both the site and the quarry appeared inactive in 1982. To the west, the Basalite Block facility was still active, although it had been sold to Syar Industries in 1979.

4.1.3 Dillingham Construction Operations, 1986 – 2005

The subject site was reportedly sold to Dillingham Construction Company in 1986, although the 2003 Phase I ESA (Kwest, August 6, 2003) indicates that Dillingham did not begin using it until 1994. This is consistent with an aerial photograph taken in 1993 (Appendix B), which shows the site and the adjoining quarry apparently inactive. Since 1982, however, a dirt road had been established between the central portion of the site and the southern dumpsite that was previously accessible only from the adjoining quarry. Another looped roadway had been established between the north-central portion of the site and the northern dumpsite. Basalite Block reportedly terminated manufacturing operations to the west of the site in 1988 and transferred them to Dixon, California (CDHS, July 25, 1988). The vacated former Basalite Block property was being used at this time by Pacific Coast Building Products (PCBP) to store finished building materials, including wallboard, roofing, and insulation, among other items. Along with the subject site, Basalt Rock had sold the Napa Quarry to Syar Industries, which still owns and operates it. There are no City Directory records for 11 Basalt Road; however, the available records indicate occupants of 2301 Napa Vallejo Highway in 1990 and 1994 as Dillingham, Pacific Supply (aka PCBP), Syar Industries, Basalite, and Basalt Precast (Appendix C).

4.1.4 Boca Company Ownership 2005 – Present

The site was reportedly purchased by the current owner, Boca Company, in 2005. An aerial photograph taken in 2006 (Appendix B) shows the site apparently inactive or underused. Immediately prior to the sale to the Boca Company, Dillingham reportedly was using a majority of the western portion of the site, including the main building, to store construction equipment, vehicles, and tools (Kwest, August 6, 2003). Napa Valley Cast Stone occupied the Watershed building and reportedly used it to manufacture architectural construction products. The manufacturing processes apparently involved acid etching; however, the acid reportedly was contained and acid wastewater from the process was recycled onsite (Kwest, August 6, 2003). The northern portion of the site was being used by Cultured Stone Products to store architectural stone products. Ragsdale, Inc. used the approximate area shown in Figure 3 to store and maintain drilling equipment and vehicles. Avocet notes that the 2003 Phase I ESA (Kwest, August 6, 2003) documented Ragsdale's poor housekeeping practices. A transformer storage area was noted by Kwest in the approximate location shown in Figure 3 and Kwest also noted two empty 5,000-gallon ASTs nearby (Figure 3). Surrounding land uses had remained largely the same, with the exception of the formerly vacant land to the south of the site which had been developed into a vineyard.

An aerial photograph taken in 2009 (Appendix B) shows that between 2006 and 2009, the contractor storage yard currently located immediately west of the former northern dumpsite (Figure 3) was established. The site and surrounding area remained largely in the same configuration until 2016 (Appendix B) when the western adjacent property was cleared of all but three buildings located along its eastern property boundary. These buildings have since been

cleared and the western adjacent property is currently being developed into the Napa County Jail. According to a Phase I ESA conducted in 2018, site occupants included Pacific Steel Group, Inc. (Pacific Steel), Superior Equipment Company, Inc. (Superior Equipment), Rammed Earth Works, Keith J. Gale General Engineering, Mark Dixon General Engineering, UPS, and Avcon Constructors, Inc. (Avcon). Most of the above used or use their respective areas to store construction or related equipment. Pacific Steel did and still does use the main building to store steel reinforcement bars and operates a maintenance and welding area. Superior Equipment stored solid waste management equipment inside and west of the main building but also reportedly stored hazardous materials, including petroleum products that reportedly were not stored properly (ERM, June 21, 2018). Rammed Earth Works runs a workshop out of the Watershed building.

4.2 CURRENT SITE CONDITIONS

This section describes current and recent conditions at the site, with emphasis on the storage, use, and disposal of hazardous substances. The descriptions are based on the observations made by Avocet personnel during walkover surveys of the site on January 14, 2020 and June 17, 2021. Photographs taken in the course of the walkover survey are included as Appendix E and are referenced, as appropriate, below.

4.2.1 Pacific Steel

Pacific Steel utilizes the main building at the site and the areas surrounding the main building to the north, west, and east. The main building occupies approximately 100,000 square feet in the southwest corner of the subject site. The western portion of the main building is constructed of concrete, while the eastern portion is an open-sided metal canopy. Employee parking for Pacific Steel is in an area outside the southwest corner of the main building. Immediately east of the employee parking lot are outdoor storage areas for miscellaneous items such as pallets, equipment, and scrap metal (Photograph E-1). Immediately north of these storage areas is a concrete extension to the main building that houses additional dry storage (Photograph E-2). To the north of the concrete extension are two large ASTs (Photograph E-3). It was not clear during the walkover survey whether the ASTs were empty or full; however, one of them featured a label indicating it contained grease. A small stain was noted on the ground surface next to the AST labeled as containing grease. The stain was immediately adjacent to a small open bucket that appeared to contain grease. The Pacific Steel offices are located in the western portion of the main building. The rest of the building is used to store, cut, and bend rebar and assemble rebar cages and similar (Photograph E-4). Machines for cutting and bending rebar are located throughout the building, as are machines for winding the cable onto reels. A welding area is located in the central portion of the main building. Avocet personnel were not able to walk through the building during the June 2021 walkover survey, however, during the January 2020 walkover survey, the area immediately north of the welding area was being used to store buckets of hydraulic oil and drums containing waste oil. Some of the buckets of hydraulic oil were set on a table; however, three buckets were located on the floor beneath a table (Photograph E-5). Some of the drums of waste oil were being stored on pallets or plastic secondary containment units, but two were stored directly on the ground. Oil staining was observed on the floor around the waste oil drums (Photograph E-6).

The area to the north and northwest of the main building features multiple storage containers for finished products, as well as outdoor storage of vehicles and products (Photograph E-7). In January 2020, a fenced area in the northwest corner of the site was being used by PG&E as a laydown yard for transformers, power poles, and other equipment; however, the laydown yard has since been cleared (Photograph E-8). Additional outdoor storage of vehicles and storage containers was observed along the northern and northwestern site boundary (Photograph E-9). A drainage channel extends from the middle of the site up to the northern site boundary, where it discharges into the natural water course that runs along the northern property boundary. At the time of the walkover survey, portions of the drainage channel were covered with steel plates (Photographs E-10 and E-11). Additional outdoor storage by Pacific Steel is located immediately east and northeast of the main building (Photographs E-11 and E-12). Two storage containers connected by a sheet metal roof are located northeast of the main building. These containers are used to store employee safety equipment and miscellaneous tools. The covered area between them appears to be used as an employee break area (Photograph E-13). Two 5,000-gallon ASTs, one for gasoline and one for diesel fuel, are located at the approximate location shown in Figure 3. The ASTs are located within a concrete containment berm (Photograph E-14), which appeared to be in good condition during the walkover survey; however, neither of the ASTs appear to be in operation. There were no signs of staining around the ASTs.

Immediately east of the main building is a covered canopy under which hazardous waste generated at the site is stored (Figure 3). In January 2020, Avocet personnel observed a 300-gallon diesel AST within a metal secondary containment berm (Photograph E-15). In addition, two 55-gallon drums were noted in the hazardous waste storage area, one of which was a spill kit. The second was a waste oil drum located on a wooden pallet (Photograph E-15). Staining was observed on the ground surface in the hazardous waste storage area.

A smaller building, placarded as a "Quality Control Laboratory," is attached to the southeast corner of the main building. It is not clear if this sign applies to the current business or to some prior use. Regardless, the building appears to be a workshop used for, among other things, welding (Photograph E-16). Avocet did not observe storage of significant quantities of hazardous waste inside the building but noticed at least one portable generator and minor staining on the ground inside the workshop (Photograph E-16). Immediately north of this building is a covered canopy area that was being used to store miscellaneous items, including a rebar machine and items in cardboard boxes. A floor drain was observed in this area. The floor drain appeared to be backed up to the surface and the ponded water featured an oily sheen (Photograph E-17). There were no hazardous materials being stored in this area, but some oil staining was observed on the ground.

4.2.2 Former Contractor Storage Yards

In January 2020, Avocet personnel observed four contractor storage yards in the eastern portion of the site, at the approximate locations shown in Figure 3. These areas were occupied by Keith J. Gale General Engineering, R&M Grading, Inc., Mark Dixon General Engineering, PG&E (Pacific Gas and Electric), and Avcon. In January 2020, these areas were being used to store construction-related equipment, tools, and vehicles, although the storage areas had been cleared or partially cleared by June 2021. In January 2020, the Avcon area featured excavator buckets, a conveyor,

cable drums, and other miscellaneous items (Photograph E-18). A large soil stockpile was located in the northern area of the Avcon yard (Photograph E-19). The stockpile was not obviously impacted, with no odors or staining discernible; however, its origin was unknown. The stockpile is no longer present at that location; however, in June 2021, Avocet observed another stockpile covered with polyethylene sheeting a little further north (Figure 3, Photograph E-20). It is not clear whether the stockpiled material observed in January 2020 and June 2021 is the same; however, Ms. Lundgren indicated that the owner planned to have it removed. The Avcon yard is unpaved but there were no visible oil stains or other obvious indications that potentially hazardous materials might have been spilled. Moreover, Avocet personnel did not observe the storage of oil or items associated with vehicle maintenance, suggesting that equipment or vehicle maintenance is not conducted onsite. The former Keith J. Gale, R&M, and Mark Dixon storage yards similarly were being used to store vehicles and miscellaneous items. There were no obvious signs that vehicle maintenance activities were conducted in these areas; however, they are also unpaved.

In January 2020, a second PG&E storage yard was in operation immediately west of the northern waste disposal area in the northeast corner of the site, although it had been cleared by June 2021. Similar to the PG&E storage area near the main building in the western portion of the site, the second PG&E yard previously featured power poles, transformers, work trucks, and miscellaneous items in storage (Photograph E-21). The yard also featured two portable office trailers. A small, precast concrete structure (Photograph E-22) was observed in the northeast corner of the PG&E yard in January 2020; however, its purpose was not clear and it did not appear to be in use.

4.2.3 Northern and Southern Solid Waste Disposal Areas

The northern and southern solid waste disposal areas are located in the northeast corner of the site (Figure 3), although they are not that obvious at ground level and the northern disposal area in particular is overgrown with vegetation. In January 2020, Avocet observed construction debris, including broken asphalt paving, strewn across the surface of the southern solid waste disposal area (Photographs E-24 and E-25), although it is not clear if the debris represented buried disposed waste or was just dumped on top of the disposal area. By June 2021, it appears this debris had been removed and the southern waste disposal area appeared featureless (Photograph E-26), although a discarded precast concrete chamber present in January 2020 was still present in June 2021 (Photograph E-27). The northern solid waste disposal area appeared more or less level and featureless apart from a stockpile of tree limbs and green waste in 2021 (Photograph E-28).

4.2.4 Watershed Building

The approximately 6,000-square-foot Watershed building inside the southern site boundary (Figure 3) is currently occupied by a cabinet shop but in January 2020 was occupied by Rammed Earth Works. Avocet was not allowed to photograph the interior of the cabinet shop but observed typical woodworking equipment such as saws and jointers. Avocet also observed equipment and supplies for staining and painting finished cabinets, although the quantities appeared very small and there were no obvious indications of spills or poor housekeeping.

As its name suggests, Rammed Earth Works manufactured architectural features and components for commercial and residential projects using “rammed earth,” essentially highly compacted

natural materials. The Rammed Earth Works workshop featured tools, table saws, and other carpentry equipment (Photograph E-29). The concrete floor of the workshop appeared to be in relatively good condition. Small volumes of paint, cleaner, and the like were observed on shelves inside the workshop and on a pallet outside the western wall of the building. Rammed Earth Works used the area to the east of the Watershed building to store finished materials and raw aggregate for its operations. An example of its work was located immediately to the east of the building during Avocet's January 2020 walkover survey (Photograph E-30). A row of storage containers was located along the southern property boundary to the east of the Watershed building during the January 2020 walkover survey.

4.2.5 Other Outdoor Features

Other outdoor features at the site include electrical transformers, water wells, and a concrete water sump.

There are three pad-mounted electrical transformers in a fenced enclosure outside the northeast corner of the Watershed building (Figure 3). The transformers are vertical cylinders (Photograph E-30), appear old, and do not feature any visible decals indicating whether or not they contain PCBs. There is visible oil staining around the base of one of the transformers and oil staining on the side of another. There is another transformer in the east-central portion of the site, next to one of the three water wells at the site (Photograph E-32). This transformer is mounted on a wooden pallet (Photograph E-33), likely in contravention of local and national electrical codes, appears relatively new and features a decal indicating it does not contain PCBs. Another pad-mounted transformer also featured a decal indicating it does not contain PCBs.

There appear to be three water wells at the site, one in the east-central area and two in the southeast corner. The well in the east-central part of the site is inside a small enclosure (Photograph E-32) and was not accessible for inspection. As such, its condition and operational status are unknown, although it appears to be powered via an oil-filled electrical transformer on a nearby wooden platform (Photograph E-33). Of the two wells in the southeast corner of the site, the northernmost of the two (Photograph E-34) was active at the time of Avocet's June 17, 2021 site inspection and appears to pump water up to a nearby AST (Photograph E-34). Based on visible aboveground piping, water from the active well is supplied, via the AST, to a water truck filling station on the adjoining Napa Quarry to the east. The active well may also supply water to the subject site but the connection to the adjoining Napa Quarry creates a potential future utility separation issue. The second water well in the southeast corner of the site (Photograph E-36) was not operating at the time of Avocet's site visit, and it is not clear if it is still in use and, if so, what it supplies. Avocet was not provided, and has so far been unable to obtain, well construction details, such as depths and screened intervals.

North of the Watershed building is a large, rectangular water-filled concrete sump and equipment for loading water trucks (Photographs E-37 and E-38). Avocet assumes previous tenants at the site, possibly including Rammed Earth Works, used the sump to fill water trucks, although the cabinet shop reportedly does not use it. Avocet further assumes that the water in the sump is

obtained from one of the wells in the southeast corner of the site, although it is not clear which one.

4.3 OTHER ASTM E1527-13 FEATURES

ASTM E1527-13 includes a list of potential environmental features, such as USTs, sumps, stained surfaces, and the like, that are to be addressed in a Phase I ESA for a commercial or industrial property. The presence or absence of these features is summarized below with references, where appropriate, to the section of text in which they are described.

Potential Environmental Feature or Condition	Absent	Present	Notes
Hazardous Substances and Petroleum Products in Connection with Identified Uses		✓	Section 4.2
Storage Tanks		✓	Section 4.2
Odors	✓		
Pools of Liquid		✓	Section 4.2.1
Drums		✓	Section 4.2.1
Hazardous Substance and Petroleum Products Containers (Not Necessarily in Connection with Identified Uses)		✓	Section 4.2
Unidentified Substance Containers	✓		
Polychlorinated Biphenyls (PCBs)		✓	Possibly in transformers near Watershed building, Section 4.2.4
Heating/Cooling		✓	In buildings at site
Stains or Corrosion		✓	Minor oil staining, Section 4.2
Drains and Sumps		✓	Water sump outside watershed building, Section 4.2.4
Pits, Ponds, or Lagoons	✓		
Stained Soil or Pavement		✓	Minor oil staining, Section 4.2
Stressed Vegetation	✓		
Solid Waste		✓	Section 4.2
Wastewater	✓		
Wells		✓	Section 4.2.5
Septic Systems		✓	West of main building

5.0 PREVIOUS INVESTIGATIONS

Legacy investigations at the site have included previous Phase I ESAs, limited soil sampling, and trenching in the solid waste disposal areas in the northeast corner of the site. More recently, Avocet conducted soil matrix, soil vapor, and groundwater grabs sampling.

5.1 PHASE I ESA AND LIMITED PHASE II INVESTIGATION (2003)

In 2003, Kwest conducted a Phase I ESA and limited Phase II investigation at the site. The following findings were noted by Kwest during the Phase I ESA:

- Interviews with site personnel at the time indicated that the northeast corner of the site had been used for solid waste disposal by Basalt Rock.
- The site featured multiple ASTs for fuels and oils, a self-contained vehicle wash rack, and several abandoned batch plant silos.
- Oil staining and other signs of past spills and general "poor housekeeping" were observed throughout the site, notably in the former Ragsdale storage yard, which was subsequently used by Keith J. Gale General Engineering, R&M Grading, Inc., and Mark Dixon General Engineering for storage.
- Multiple electrical transformers were being stored to the east of the 100,000-square-foot building, at least one of which was observed to be leaking.
- A settling basin was observed.
- One of the tenants, Napa Valley Cast Stone, reportedly conducted acid etching onsite. The process reportedly occurred on a concrete pad surrounded by concrete curbs and sloped to drain into a concrete-lined pit. The acid and water used during the process reportedly was recycled and reused onsite.
- An inactive water well was observed at the approximate location shown in Figure 3.
- Sanitary wastewater was discharged to an onsite septic system.

Based on the above, Kwest investigated the leaking transformer, the oil staining observed in the vicinity of the former Ragsdale storage yard, and the solid waste disposal areas (Kwest, August 6, 2003).

5.1.1 Disposal Area Test Trenching

Kwest excavated five trenches within the solid waste disposal areas in the northeast corner of the site to depths between 8 and 10 feet bgs. In three of the five trenches, construction debris, including wood, concrete, metal, and plastic were observed between 3.5 and 10 feet bgs. No evidence of hazardous materials was observed; however, the extent of the waste materials was not

fully delineated as the backhoe used could not dig deeper than 10 feet bgs. Groundwater was encountered at approximately 6 feet bgs during the excavations (Kwest, August 6, 2003).

Kwest noted there were no odors or oily sheen associated with the groundwater, but a groundwater grab sample was collected to assess groundwater quality. The groundwater grab sample contained TPH-o at 4.9 milligrams per liter (mg/L) and dissolved zinc at 143 mg/L. Kwest concluded that the TPH-o was attributable to wooden forms, coated with mold release oil, observed in the trenches and that the relatively low concentration was not a significant concern to environmental health (Kwest, August 6, 2003).

5.1.2 Ragsdale Yard Soil Sampling

Four surficial soil matrix samples (Samples DY-1 through DY-4) were collected from the Ragsdale storage yard and analyzed for TPH and nickel, cadmium, chromium, lead, and zinc. The maximum TPH concentration was 23 milligrams per kilogram (mg/kg) of TPH-o in Sample DY-4. The highest metals concentrations were reported in Sample DY-2 and included chromium at 37 mg/kg, nickel at 17 mg/kg, and zinc at 31 mg/kg. Lead was detected only in Sample DY-4 at a concentration of 28 mg/kg. Kwest noted that the reported concentrations of TPH and metals were well below potentially applicable regulatory levels at the time the investigation was conducted (Kwest, August 6, 2003).

Six soil samples were collected from four locations in the outdoor transformer storage area (Samples TS-1 9", TS-1 18", TS-1 36", and TS-2 through TS-4). The soil samples from the transformer area were analyzed for PCBs; however, none were detected (Kwest, August 6, 2003).

5.2 PHASE I ESA – ERM, JUNE 2018

In 2018, ERM conducted another Phase I ESA for the site and reported the following significant findings:

- A 10,000-gallon diesel UST at the site was listed in the SWEEPS database. ERM was not able to confirm the existence or location of a UST at the site and research by Avocet suggests it was actually located on the former Basalite Block property to the west.
- The site features two septic systems that date back to the 1950s; however, only very limited information was available with respect to their condition.
- A possible second solid waste disposal area was identified immediately south of the solid waste disposal area identified in the 2003 Phase I ESA in the northeast corner of the site.
- Treated power poles were observed being stored on unpaved surfaces.
- Oil staining was observed throughout the site.

Based on the findings of the Phase I ESA, ERM conducted an additional Phase II investigation as outlined below.

5.3 LIMITED PHASE II INVESTIGATION – ERM, NOVEMBER 2018

To determine whether the environmental concerns outlined above had impacted the subsurface, ERM conducted a limited Phase II investigation that consisted of the collection of 13 surface soil samples, soil samples from five soil borings advanced to between 5 and 15 feet bgs, and exploratory trenching and soil sampling in the solid waste disposal areas (ERM, November 21, 2018). The generalized investigation areas are shown in Figure 3 and the results of ERM's investigation were as follows:

- ERM collected 52 discrete soil samples at approximately 3 inches bgs and had them combined into 13 composite samples (Samples COMP-1 through COMP-13), as follows:

Sample ID	Location Description
COMP-1	Area of visible debris in the northeast waste disposal area
COMP-2	Area of visible debris in the northeast waste disposal area
COMP-3	Area of visible debris in the northeast waste disposal area
COMP-4	Construction equipment yard
COMP-5	Area of visible debris in the southern waste disposal area
COMP-6	Area of visible debris in the southern waste disposal area
COMP-7	Construction equipment yard
COMP-8	Construction equipment yard
COMP-9	Construction equipment yard
COMP-10	Area of soil staining along western property boundary
COMP-11	Vicinity of 5,000-gallon ASTs
COMP-12	Vicinity of diesel AST and hazardous waste storage
COMP-13	Vicinity of treated wooden power poles

  In brief, TPH in the gasoline (TPH-g), TPH-d, and TPH-o ranges was detected in multiple of the composite samples, as were various Title 22 metals. TPH-d was reported at concentrations above commercial SFBRWQCB Environmental Screening Levels (ESLs) in four of the samples, specifically in Samples COMP-6 (1,000 mg/kg), COMP-7 (4,200 mg/kg), COMP-9 (3,200 mg/kg), and COMP-12 (16,000 mg/kg). In addition, arsenic was detected above commercial SFBRWQCB ESLs in all but two of the composite soil samples; however, the reported arsenic concentrations, which ranged between 3.2 and 11 mg/kg (ERM, November 21, 2018), were within the accepted background range for northern California.

- Based on the results of the composite surface soil sampling, Borings SB-1 through SB-5 were advanced to between 5 and 15 feet bgs at the approximate locations shown in Figure 3. Three of the locations were collocated with

Samples COMP-7, COMP-9, and COMP-12, and the remaining two were advanced in the Pacific Steel Group parking lot and the yard east of the Watershed building, respectively. Soil matrix samples were collected at 0.5-foot bgs in all five borings, and one additional sample was collected at 15 feet bgs in Boring SB-2. TPH and metals concentrations in these samples were as follows:

2018 Limited Phase II Discrete Soil Sample Analytical Results
(Units are mg/kg)

Sample ID	SB-1-0.5	SB-2-0.5	SB-2-15	SB-3-0.5	SB-4-0.5	SB-5-0.5
Total Petroleum Hydrocarbons						
TPH-g	<0.24	<0.25	<0.22	<0.21	<0.26	<0.23
TPH-d	**30**	**36**	**13**	**5.3**	**88**	**110**
TPH-o	**130**	**140**	<48	<48	**850**	**520**
Title 22 Metals						
Arsenic	<3.4	**3.0**	<3.1	<3.6	<3.3	<3.4
Barium	**50**	**180**	**150**	**83**	**42**	**110**
Beryllium	<0.34	**0.74**	**0.59**	**0.6**	**0.33**	**0.77**
Chromium	**19**	**26**	**10**	**14**	**6.9**	**9.0**
Cobalt	**7.1**	**14**	**3.7**	**7.4**	**4.4**	**4.7**
Copper	**21**	**13**	**6.0**	**8.7**	**6.1**	**6.0**
Lead	**5.3**	**6.9**	**3.8**	**6.5**	**4.3**	**4.6**
Mercury	**0.33**	**0.12**	**0.019**	**0.021**	<0.016	**0.04**
Nickel	**15**	**29**	**9.7**	**10**	**5.7**	**9.4**
Vanadium	**21**	**30**	**15**	**38**	**38**	**31**
Zinc	**29**	**38**	**15**	**32**	**36**	**21**

Notes: < indicates not detected at the Reporting Limit indicated

In brief, the detected TPH concentrations were all within the diesel and motor oil ranges and none of the concentrations exceeded their respective commercial ESLs (ERM, November 21, 2018). Similarly, none of the reported metals concentrations exceeded commercial ESLs except for arsenic; however, the reported arsenic concentrations were within the accepted background range.

- Four trenches were excavated within the former waste disposal areas in the northeast corner of the site to between 3 and 5 feet bgs. Similar to the previous trenching activities, construction debris, including concrete, asphalt, nails, and sheet metal, were observed. Four soil matrix samples were collected from three of the trenches, with the following analytical results:

2018 Limited Phase II Discrete Soil Sample Analytical Results (Units are mg/kg)				
Sample ID	**Trench-1-3**	**Trench-2-3**	**Trench-2-5**	**Trench-3-5**
Total Petroleum Hydrocarbons				
TPH-g	<0.24	<0.25	<0.25	<0.25
TPH-d	**270**	**68**	**240**	**38**
TPH-o	**1,700**	**360**	**170**	**160**
Title 22 Metals				
Arsenic	3.4	<2.5	<2.8	<3.4
Barium	**98**	**74**	**84**	**73**
Beryllium	**0.65**	**0.65**	**0.56**	**0.93**
Chromium	**16**	**8.2**	**14**	**8.5**
Cobalt	**8.2**	**5.9**	**6.7**	**2.9**
Copper	**14**	**13**	**8.6**	**7.6**
Lead	**8.8**	**9.1**	**7.8**	**13**
Mercury	**0.085**	**0.028**	**0.033**	<0.016
Nickel	**21**	**6.7**	**17**	**5.6**
Vanadium	**37**	**34**	**26**	**14**
Zinc	**48**	**47**	**34**	**43**

As in the soil samples from the borings, low concentrations of TPH-d and TPH-o were detected in the trench soil samples; however, none of the reported concentrations were above commercial ESLs.

Avocet notes that the generally low TPH concentrations in soil are consistent with the presence of asphalt debris, and none of the soil sample results are indicative of the disposal of hazardous substances such as waste oil or the like.

5.4 PHASE I ESA – AVOCET, JANUARY 2020

In early 2020, Avocet conducted a Phase I ESA for the site on behalf of Panattoni. Avocet's Phase I ESA included a site inspection and review of the previous investigations summarized above. Avocet identified the solid waste disposal areas, the septic systems, and the site-wide use of POLs as RECs but did not identify any CRECs or HRECs (Avocet, February 14, 2020). Avocet also identified the abandoned ASTs, oil-filled electrical transformers, ACMs and LBPs, and the water well as OEFs. In its Phase I ESA report, Avocet recommended additional Phase II investigation, in particular the analysis of soil and soil matrix samples for VOCs (Avocet, February 14, 2020).

5.5 ADDITIONAL PHASE II INVESTIGATION – AVOCET, FEBRUARY 2020

In February 2020, Avocet conducted an additional Phase II investigation at the site. The investigation involved the collection of groundwater "grab," and/or soil vapor samples from 16 borings advanced to depths ranging from 4.5 to 30 feet bgs (Avocet, March 31, 2020). The Phase II investigation was designed to assess the following:

- The occurrence of groundwater and whether it might have been impacted by operations at or adjacent to the subject site. As noted above, previous groundwater

investigations had been limited to a single grab sample from an excavated pothole in the northeast corner of the site; however, investigations at surrounding properties indicated that the depth to groundwater in the vicinity of the site is less than 10 feet bgs.

- The possible presence of VOCs, including fuel oxygenates, in soil vapor and whether vapor mitigation measures, i.e., vapor barriers, might be required for the planned new buildings.

- The possible presence of contaminants in the vicinity of the septic systems and/or leach field.

- The possible presence of contaminants in the southwest corner of the site, near the former leaking UST at 2301 Napa Vallejo Highway.

The results of Avocet's investigation were as follows:

- TPH was not detected in the groundwater grab samples; however, the sample from Boring B-14 contained 7.1 µg/L of MTBE, a fuel additive, but no other VOCs were detected. The reported MTBE concentration was below the California drinking water MCL of 13 µg/L, and none of the other aromatic VOCs typically associated with motor vehicle fuels were detected. Boring B-14 was located immediately downgradient of the waste disposal area in the northeast corner of the site; however, it is not clear if the MTBE in groundwater was related. Barium was reported in two groundwater grab samples, albeit at what were likely background concentrations.

- The 15 soil vapor samples collected contained detectable concentrations of 1 or more of 17 VOCs, as follows:

VOCs in Soil Vapor Samples
(Units are micrograms per cubic meter or µg/m^3)

Compound	Detection Frequency	Concentration Range
Acetone	15/15	13 – 170
Benzene	15/15	1.6 – 23
Bromodichloromethane	4/15	4.4 – 9.5
2-Butanone (MEK)	8/15	4.8 – 12
Carbon Disulfide	13/15	6.2 – 62
Chloroform	14/15	3.5 – 83
Chloromethane	4/15	1.2 – 1.6
Dichlorodifluoromethane	9/15	2.6 – 67
1,3-Dichlorobenzene	2/15	5.3 – 11
1,1-Difluoroethane (1,1-DFA)	3/15	9.4 – 29
Ethylbenzene	3/15	2.7 – 5
Isopropyl alcohol (IPA/LDC)	15/15	16 – 56
Tetrachloroethylene (PCE)	2/15	4.5 – 11

VOCs in Soil Vapor Samples (Units are micrograms per cubic meter or µg/m³)		
Compound	**Detection Frequency**	**Concentration Range**
Toluene	15/15	4.1 – 41
Trichloroethylene (TCE)	9/15	3.5 – 16
o-Xylene	4/15	2.2 – 4.5
p,m-Xylenes	2/15	9.1 – 15

Notes: µg/m³ = microgram per cubic meter

Excluding acetone, a common laboratory artifact, and isopropyl alcohol, used for leak detection purposes, benzene, carbon disulfide, chloroform, and toluene were the most widely distributed/frequently detected VOCs in soil vapor. In addition, there were two detections of PCE and nine detections of TCE, albeit at generally very low concentrations. None of the VOC detections suggested that a significant chemical release had occurred at the subject site.

Avocet conducted a preliminary soil vapor intrusion assessment using the soil vapor concentrations detected during the Phase II investigation and "default" attenuation factors recommended by DTSC and EPA. California recently adopted the very conservative EPA default attenuation factor of 0.03 (EPA, June 2015), which Avocet understands is based in large part on vapor intrusion into residences with basements in a few areas of the country. Prior to California adopting the EPA default attenuation factor of 0.03, the DTSC default attenuation factor for new commercial buildings was 0.0005 (DTSC, October 2011). Using default attenuation factors of 0.03 and 0.0005, the estimated potential VOC concentrations in indoor air were calculated as follows (Avocet, March 31, 2020):

Preliminary Soil Vapor Intrusion Assessment (units are µg/m³)						
Compound	**Max. Soil Vapor Conc.**	**Estimated Indoor Air Conc.**		**Commercial/Industrial Screening Levels**		
		DTSC (0.0005)	**EPA** (0.03)	**SFBRWQCB ESLs**	**DTSC-SLs**	**EPA RSLs**
Acetone	1.7E+02	8.5E-02	5.1E+00	1.4E+05	- -	1.4E+05
Benzene	2.3E+01	1.2E-02	6.9E-01	4.2E-01	4.2E-01	1.6E+00
Bromodichloromethane	9.5E+00	4.8E-03	2.9E-01	3.3E-01	3.3E-01	3.3E-01
2-Butanone	1.2E+01	6.0E-03	3.6E-01	2.2E+04	- -	2.2E+04
Carbon Disulfide	6.2E+01	3.1E-02	1.9E+00	- -	- -	3.1E+03
Chloroform	8.3E+01	4.2E-02	2.5E+00	5.3E-01	- -	5.3E-01
Chloromethane	1.6E+00	8.0E-04	4.8E-02	3.9E+02	- -	3.9E+02
Dichlorodifluoromethane	6.7E+01	3.4E-02	2.0E+00	- -	- -	4.4E+02
1,3-Dichlorobenzene	1.1E+01	5.5E-03	3.3E-01	3.5E+01	3.5E+01	- -
1,1-Difluoroethane (1,1-DFA)	2.9E+01	1.5E-02	8.7E-01	- -	- -	1.8E+05
Ethylbenzene	5.0E+00	2.5E-03	1.5E-01	4.9E+00	- -	4.9E+00
Isopropyl Alcohol (IPA/LDC)	5.6E+01	2.8E-02	1.7E+00	- -	- -	8.8E+02
Tetrachloroethylene (PCE)	1.1E+01	5.5E-03	3.3E-01	2.0E+00	2.0E+00	4.7E+01

Preliminary Soil Vapor Intrusion Assessment (units are µg/m³)						
Compound	**Max. Soil Vapor Conc.**	**Estimated Indoor Air Conc.**		**Commercial/Industrial Screening Levels**		
		DTSC (0.0005)	**EPA** (0.03)	**SFBRWQCB ESLs**	**DTSC-SLs**	**EPA RSLs**
Toluene	4.1E+01	2.1E-02	1.2E+00	1.3E+03	1.3E+03	2.2E+04
Trichloroethylene (TCE)	1.6E+01	8.0E-03	4.8E-01	3.0E+00	- -	3.0E+00
o-Xylene	4.5E+00	2.3E-03	1.4E-01	4.4E+02	- -	4.4E+02
p,m-Xylenes	1.5E+01	7.5E-03	4.5E-01	4.4E+02	- -	4.4E+02

Notes: Orange shading indicates highlighted indoor air concentration exceeds the highlighted screening level

Using an attenuation factor of 0.0005, the hypothetical VOC concentrations in indoor air were all lower, often by several orders of magnitude, than the corresponding commercial/industrial screening levels. Using the current and significantly more conservative attenuation factor of 0.03, however, the hypothetical concentrations of benzene and chloroform in indoor air exceeded one or more of the potentially applicable screening levels. Although benzene and chloroform are common, if not ubiquitous, in ambient air, and chloroform is also a common laboratory contaminant, it was determined that additional soil vapor sampling with concurrent ambient air sampling would be required to assess the validity of the screening level exceedances and whether they are representative of *in-situ* soil vapor conditions (Avocet, March 31, 2020).

5.6 Site Inspection and NOV, Napa County, 2020

The Napa County Planning, Building, and Environmental Services Department (PBES), which is the Local Enforcement Agency (LEA) for waste disposal in Napa County, conducted a site inspection on June 10, 2020, and based on their observations, reported that "significant grading, excavation, and spreading of contaminated soil had occurred throughout the northeast area of the property." In addition, solid waste debris was noted to have been pushed into an "adjacent wetland area" and various signs of recent dumping were noted, including the presence of wood, metal, green waste, household trash, tires, and chairs. Based on the observations made during this site visit, the Napa County LEA reported the waste disposal areas to CalRecycle's Closed, Illegal, and Abandoned Sites technical staff for further review and sent a Notice of Violation (NOV) to the current property owner (Napa County PBES, September 10, 2020). The LEA indicated that the solid waste disposal areas are subject to the State Minimum Standards for older, closed disposal sites unless and until they are "clean closed" (i.e., all waste is removed). The NOV included a request to provide an Emergency Cleanup & Remediation Plan to further delineate the lateral and vertical extent of the disposed wastes and a work plan to remove the debris and trash that was observed during the June 10, 2020 site inspection.

5.7 Summary Report and Work Plan – Geosyntec, October 2020

In response to the Napa County LEA September 2020 NOV, Geosyntec Consultants (Geosyntec) prepared a Technical Summary Report and Work Plan. In brief, Geosyntec argued that the lateral and vertical extent of the disposed waste had been adequately delineated during the investigations summarized above. Various Best Management Practices (BMPs) were proposed to address

erosion and contamination concerns for the nearby creek that were outlined in the NOV letter. The Geosyntec report indicated that other than the erosion issue, the solid waste disposal areas were in compliance with the State Minimum Standards, thus only the BMPs were proposed (Geosyntec, October 9, 2020). The LEA rejected the Report and Work Plan on the grounds that it did not propose any additional delineation of the waste disposal areas and did not propose the removal of wastes exposed at the ground surface. In addition, the LEA stated that it did not concur with the assertion that the solid waste disposal areas were in compliance with the State Minimum Standards. The LEA gave the property owner the option to prepare a new work plan that addressed its concerns or to notify them of an inability to comply with the requests based on lack of financial resources (Napa County PBES, November 19, 2020).

During another site inspection on December 31, 2020, LEA staff observed additional trash around the solid waste disposal areas and that a mixture of soil and debris had been dumped over the upper pad of the southern waste disposal area since the previous inspection in June 2020. LEA staff noted that some of this soil and debris had encroached into an adjacent "wetland," although Avocet is not aware of any designated wetlands at the site. The LEA inspection report also referenced new soil stockpiles had been placed on the upper pad, as had gravel, which LEA staff assumed had been laid down to help winterize the site. It was also noted that one of the construction company tenants at the site was utilizing the southern waste disposal area to store equipment. The LEA indicated in its site inspection report that BOCA Company had not addressed its concerns regarding illegal dumping, which appears to have continued after the June 2020 inspection, and efforts to secure the site, to prevent illegal dumping, and to properly winterize the site to prevent erosion before the rainy season were insufficient. The LEA further reminded the property owner that it had not submitted a revised Emergency Cleanup and Remediation Workplan and a Workplan to investigate the extent of waste, as had been requested in its November 19, 2020 letter (Napa County PBES, December 31, 2020). Avocet understands that BOCA Company's consultant issued drafts of the work plans mentioned above in July 2021, but it is not clear if they have been submitted to Napa County as of the date of this report.

6.0 ADJOINING AND NEARBY PROPERTIES

This section summarizes a search by EDR of environmental databases maintained by local, state, and federal government agencies and describes properties adjoining the subject site and selected nearby properties. The descriptions of adjoining and selected nearby properties are based on Avocet's observations from public rights-of-way, information included in EDR's report (Appendix F), and information available from the GeoTracker and EnviroStor websites maintained by CalEPA.

6.1 DATABASE LISTINGS

EDR's search encompassed over 90 databases maintained by local, state, and federal government agencies, including the databases specified in ASTM E1527-13, Section 8.2.1. The "target property" address used by EDR for records search purposes was 11 Basalt Drive, Napa, California 94558.

EDR's June 1, 2021 Radius Map Report with GeoCheck®, which is included in Appendix F, includes multiple database listings, summarized in Table 1, within ASTM-recommended search radii. In the interest of providing a concise review and making relevant information more accessible, the following summaries focus on those database listings considered potentially relevant to the objectives of the subject Phase I ESA, specifically those pertaining to the subject site and to nearby properties with documented hazardous substance releases with the potential to have impacted the site. Other properties/database listings not considered indicative of a hazardous substance release, database listings for hydraulically downgradient/crossgradient properties, and database listings with "Completed – Case Closed" status have generally been screened out. Moreover, Avocet notes that inclusion in certain of the databases searched by EDR is not, in and of itself, an indication that hazardous substances have been released or that the subsurface beneath the properties is contaminated. For example, inclusion in the HAZNET or similar databases indicates that a facility generates hazardous waste but the generator is following the proper manifest procedures. Similarly, the fact that USTs or ASTs are or were operated at a property and were registered with the state is not, in and of itself, of concern unless the tanks(s) had leaked, in which case the property should be included in other databases.

6.2 TARGET PROPERTY LISTINGS

The 11 Basalt Road street address, which is currently associated with the subject site, is listed in several of the databases searched by EDR, as summarized below.

Address	Company	Database	Comment
11 Basalt Road	Wilson Utility Construction Company	RCRA NonGen/NLR	Indicates the business does not currently generate hazardous waste
		HWTS	Pertains to the generation of hazardous waste in 2021
	Mark Dixon General Engineering	RCRA NonGen/NLR	Indicates the business does not currently generate hazardous waste
		HWTS	Pertains to the generation of hazardous waste in 2020
		FINDS, ECHO	Indicates listings in other databases
		CIWQS, NPDES	Indicates business has obtained a storm water industrial and water-related
	Rammed Earth Works, LLC	RCRA NonGen/NLR	Indicates the business does not currently generate hazardous waste
		HWTS	Pertains to the generation of hazardous waste in 2021
	Pacific Steel Group	FINDS, ECHO	Indicates listings in other databases

In addition to the above, the databases searched by EDR also list Basalt Rock Dumpsite immediately south of the site, approximately 111 feet away. The associated address is 1 Basalt Road, and it is listed in the SWF/LF database as "Closed" and in the CERS database as a solid waste and recycle site (Site No. 28-CR-0005). These database listings are believed to pertain to the north and south waste disposal areas recently entered into CalRecycle's solid waste information system after inspections by the Napa County LEA in June 2020. Information pertaining to these inspections and ongoing enforcement actions is summarized in Sections 5.5 and 5.6. In brief, however, the target property listings summarized above are consistent with the site's known history and none suggest site conditions beyond those documented elsewhere in this report.

6.3 Adjoining Properties to the North

The subject site is bordered to the north by the River-to-Ridge trail and an ephemeral stream, beyond which is the Napa State Hospital campus. Napa State Hospital was first opened in 1875 to alleviate overcrowding at other facilities. The hospital, which occupies approximately 410 acres, currently operates approximately 1,255 beds. The facility is currently subject to a Cleanup and Abatement Order from SFBRWQCB relating to a release of diesel fuel from broken pipelines associated with the onsite cogeneration power plant and backup generators (SFBRWQCB, 2002). The release was discovered in 2001. The broken pipelines have since been replaced, and investigation into the release has included groundwater monitoring and soil vapor sampling. The feasibility of soil vapor extraction was tested in 2018; however, it was determined that the technology would not be appropriate, as the contaminant removal rate was low. Most recently, a site work plan to advance ten direct-push soil borings was submitted to SFBRWQCB for review. Based on the available reports, the diesel release occurred from the diesel fuel storage area near the intersection of Cedar Drive and Oak Drive, approximately 0.6 mile north of the northern boundary of the subject site. Investigation activities conducted to the south of the release point, mainly groundwater monitoring wells that were installed over 300 feet to the south, have not contained detectable concentrations of TPH-d, MTBE, or benzene, toluene, ethylbenzene, or

xylenes (BTEX). In addition, the groundwater flow direction at the property is reportedly to the west-northwest, away from the subject site (Cardno ERI, January 25, 2012). Considering the intervening distance and that groundwater does not flow in the direction of the subject site, the leaking UST case at Napa State Hospital is not considered an environmental concern for the subject site.

According to databases searched by EDR, the Napa State Hospital Disposal Site is listed in the CERS and SWF/LF databases. These listings indicate that Napa State Hospital operated a solid waste disposal site at one time; however, the listing also indicates that the site is closed. No other information was available pertaining to a disposal site operated at Napa State Hospital, and aerial photographs do not indicate any obvious location for the disposal facility. The EDR Radius Map Report indicates the site is located north-northeast of the subject site and approximately 0.413 mile away. Considering this intervening distance and barring additional information to the contrary, the former Napa State Hospital Disposal Site is not considered an environmental concern for the subject site.

6.4 Adjoining Properties to the South

The adjacent property to the south of the subject site currently operates as Joseph Phelps Vineyards. Based on historical aerial photographs, it appears that this property has been in use as a vineyard since the early 2000s. Prior to that, it was either vacant or used for agricultural purposes. The property does not appear to ever have been developed, with the exception of a substation located in the northwest corner of the property, just south of Basalt Road. The property is not listed in any of the databases searched by EDR, nor is it featured on the GeoTracker or EnviroStor websites managed by CalEPA. Absent additional information and considering it is located hydraulically downgradient of the subject site, Joseph Phelps Vineyards is not considered an environmental concern for the subject site.

The databases searched by EDR included two listings associated with Syar Industries immediately south of the subject site. The first listing is in the CA FID UST and SWEEPS UST databases, and the address associated with the listing is Vanden Road. Avocet was not able to locate a Vanden Road in the vicinity of the subject site. In addition, no USTs are known to have been located at the subject site or at the quarry to the east. It is noted that Syar Industries is a former owner of another property on the west side of Napa Vallejo Highway and operated USTs at that property. Absent additional information, the UST listings do not appear to be associated with the subject site. The second listing is for CHMIRS, and the address associated with the listing is a private road off of 2301 Napa Vallejo Highway. The listing indicates that in November 2015, a hydraulic leak was reported, but did not impact any water or waterways and that the spilled was contained and/or cleaned up.

6.5 Adjoining Properties to the East

The subject site is bounded to the east by the Napa Quarry. As discussed previously, the Napa Quarry was started by Basalt Rock in the 1920s and was operated by Basalt Rock until it was sold to Syar Industries in 1986. The quarry has been used to mine and process aggregate materials for the construction industry. Materials from the quarry have also been processed at the subject site

and the western adjacent property, as well as at property owned by Syar Industries on the west side of Napa Vallejo Highway. The quarry also appears to be associated with the address of 2301 Napa Vallejo Highway, although most of the database listings for that address have been determined to be associated with operations conducted at the western adjacent property, the subject site, or at another property on the west side of the highway. The listings relevant to the quarry specifically are assumed to include the ABANDONED MINES, US MINES, and MINES listings, which refer to the aggregate mining operations.

In addition, the Napa Quarry is listed in the VCP and ENVIROSTOR databases. Based on data available on EnviroStor, the Napa County Sherriff's Department began using an inactive portion of the quarry for firearms training in 1987. Soils within the firearms training area were subsequently impacted with lead from spent ammunition. Napa County entered into a voluntary cleanup agreement with the DTSC in 2003 to address the impacted soil (DTSC, March 6, 2003) and remedial excavation was conducted between 2004 and 2005 (Napa County Department of Public Works, Undated). According to site descriptions and available maps, the shooting range was located approximately 0.5 mile northeast of the subject site. Based on the intervening distance and the fact that the impacted material has been removed from the site, the former Napa Quarry shooting range is not considered an environmental concern for the subject site.

6.6 ADJOINING PROPERTIES TO THE WEST

The Napa County Jail facility, which is currently under construction, is located at 2301 Napa Vallejo Highway, immediately west of the subject site. The address is listed in multiple databases under various businesses, such as Pacific Coast Supplies, Syar Industries, 1x Basalt Precast, Napa Shop, Pacific Steel Group, International Line Builders, Mark Dixon, Superior Equipment, Basalite/Basalt Rock Division of the Pacific, and Basalite Block, some of which are known to have operated at the subject site. Most of these listings are associated with the general historical industrial operations at the property and leaking UST cases, which have since been closed. It is noted that multiple owners were essentially conducting the same operations over many years at the property and some of these owners, including Basalt Rock and Syar Industries, also owned or own both the quarry to the east of the subject site and additional property on the west side of Napa Vallejo Highway. As such, some of the listings may be associated with these other properties, rather than the western adjacent property. The most pertinent listings for Phase I ESA purposes are the UST listings, which pertain to a UST formerly located in the southeast corner of the property in close proximity to the subject site.

Prior to its redevelopment into the Napa County Jail, the western adjacent property was occupied by PCBP and Basalite Block as far back as the early 1950s. The operations at the property, which included manufacturing of concrete blocks and dry pre-cast concrete products, were first performed by Basalt Rock and later by Syar Industries. One 10,000-gallon diesel UST was reportedly installed at the property in 1979 at the approximate location shown in Figure 3. The UST was reportedly removed in 1994. Two soil matrix samples were collected from the sidewalls of the UST excavation at approximately 8 feet bgs, the depth at which groundwater was encountered. Additional soil samples were collected from beneath the associated fuel supply and return piping, from beneath the former product dispenser, and from the resulting soil stockpile.

One groundwater sample was also collected from the excavation. In brief, TPH and BTEX were not detected in the soil samples from the excavation. However, TPH-d was detected in the dispenser and product piping samples at 450 and 200 mg/kg, respectively. TPH-d was also detected in the stockpile soil sample at 470 mg/kg. TPH-d was detected in the groundwater sample at 89,000 µg/L.

Based on the limited sampling conducted during the UST removal, additional investigation was recommended to assess the extent of impacts to the subsurface (BCR & Associates, April 15, 1994). In July 1995, seven borings (Borings B1 through B7) were advanced in the vicinity of the former UST. The borings were reportedly advanced to 10 feet bgs, at which point groundwater was encountered in all but Borings B1 and B7. Analytical results indicated TPH was detected in only one soil sample from Boring B4 at a concentration of 21 mg/kg. TPH was detected in only one groundwater sample, from Boring B2, at a concentration of 2,200 µg/L (ACC Environmental Consultants, December 1995). Impacts to the subsurface appeared to be limited in extent; however, groundwater monitoring wells were requested by NCoDEM, and three groundwater monitoring wells were subsequently installed. Analytical results from initial groundwater monitoring indicated TPH-d in Wells MW-1 and MW-3 at concentrations of 640 and 1,200 µg/L, respectively. In addition, Well MW-1 contained ethylbenzene and total xylenes at concentrations of 38 and 23 µg/L, respectively, and Well MW-3 contained trace concentrations of toluene, ethylbenzene, and total xylenes. The groundwater flow direction was calculated to be to the west-northwest, away from the subject site (ACC Environmental Consultants, July 3, 1996).

At NCoDEM's request, oxygen release compound was injected immediately downgradient of the former UST in October 1996 to remediate the small groundwater plume (ACC Environmental Consultants, October 23, 1996). A final groundwater monitoring event was conducted in March 2001, with analytical results indicating concentrations of TPH-d at 160 and 1,600 µg/L in Wells MW-1 and MW-3, respectively, but no detectable concentrations of BTEX. Based on these results, the environmental consultant requested site closure (ACC Environmental Consultants, July 30, 2001), which was subsequently granted in a letter from NCoDEM dated January 11, 2002. Considering its downgradient location, it is not likely that the former UST impacted the subsurface beneath the subject site; however, Avocet notes that, based on the concentration of TPH-d in groundwater from Boring B2 collected near the boundary with the subject site, it does not appear that the extent of contamination in groundwater was fully delineated to the east. As such, potential residual impacts from the former UST cannot be ruled out.

6.7 OTHER DATABASE LISTINGS

In addition to its ownership of the subject site, the western-adjacent property, and the Napa Quarry, Basalt Rock also owned property on Basalt Road on the west side of Napa Vallejo Highway. Basalt Rock sold this property to Syar Industries along with the Napa Quarry and the western-adjacent property. As such, some of the listings at 2301 Napa Vallejo Highway are associated with this property. Specifically, Syar Industries has UST and LUST listings at 2301 Napa Vallejo Highway. However, the only LUST that appears to be associated with Syar Industries is located at the property on the west side of Napa Vallejo Highway. In brief, releases from USTs at the Syar Industries property on the west side of Napa Vallejo Highway impacted soil and groundwater and

investigation and cleanup was overseen by SFBRWQCB. Because this property is located downgradient of the subject site and is not, in fact the western adjacent property as the listed address would suggest, it is not expected that the leaking USTs would have impacted the subsurface beneath the subject site.

7.0 CONCLUSIONS AND RECOMMENDATIONS

This section presents the conclusions of the Phase I ESA for the subject site in terms of identified and sequentially numbered RECs, CRECs, HRECs, and OEFs, the locations of which are shown in Figure 3.

7.1 RECOGNIZED ENVIRONMENTAL CONDITIONS (RECS)

ASTM (2013) defines RECs as:

> *". . . the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to 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."*

ASTM (2013) goes on to define *de minimis* as:

> *". . . 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."*

Based on the subject Phase I ESA, Avocet identified two RECs at the subject site, as follows:

- **REC 1 – Possible PCB-Containing Transformers.** There are three pad-mounted electrical transformers in a fenced enclosure outside the northeast corner of the Watershed building. The vertical, cylindrical transformers are on a concrete pad, appear old, and do not feature any visible decals indicating whether or not they contain PCBs. There is visible oil staining around the base of one of the transformers and oil staining on the side of another. The oil staining on the concrete pad is considered *de minimis* but the transformers themselves are considered a REC until they are removed or tested and shown not to contain PCBs.

- **REC 2 – Sitewide Use of POLs.** The subject site has been used for industrial purposes for roughly 70 years, since the early 1950s. The use of POLs at the site has been documented in two previous Phase I ESAs and was observed during Avocet's walkover surveys of the site. Moreover, previous Phase I ESAs documented "poor housekeeping" by various tenants, including evidence of spills being cleaned up, staining on both paved and unpaved surfaces, and hazardous material storage without secondary containment. Avocet personnel did not observe any indications of significant POL releases during its January 2020 or June 2021 site visits but observed *de minimis* staining on paved and unpaved surfaces, the storage of waste petroleum products without secondary containment, and oily water ponded over a backed-up drain. The results of Avocet's February 2020 Phase II investigation indicated the presence of VOCs in shallow soil vapor throughout the site. For the most part, the concentrations were not of concern, with the exception

of benzene and chloroform, which were present at concentrations that potentially could exceed screening levels for indoor air based on the most conservative of the commonly used attenuation factors.

7.2 CONTROLLED RECS (CRECS)

ASTM (2013) defines CRECs as a REC:

> *". . . 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 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)."*

Based on the subject Phase I ESA, Avocet has not identified any CRECs at the site.

7.3 HISTORICAL RECS (HRECS)

ASTM defines HRECs 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 any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."*

Based on the subject Phase I ESA, Avocet has not identified any HRECs at the site.

7.4 OTHER ENVIRONMENTAL FEATURES (OEFS)

OEFs are potential environmental features or conditions that do not meet the ASTM definition of a REC, CREC, or HREC but which may warrant mention in the context of acquiring and redeveloping the site. Based on the subject Phase I ESA, Avocet has identified six OEFs at the site (sequentially numbered after the RECs), as follows:

- **OEF 3 – Abandoned ASTs.** The subject site features two 5,000-gallon ASTs located east of the main building, one for gasoline and one for diesel fuel. The ASTs are inactive and have not been used since at least as far back as 2003. The ASTs are located within a concrete secondary containment structure. There were no obvious indications of leakage from the ASTs, and the secondary containment structure appears to be in good condition.
- **OEF 4 – Other Oil-Filled Electrical Transformers.** In addition to the pad-mounted transformers mentioned above (REC 1), there are pad-mounted electrical transformers at two other locations within the site boundary. However, both of the

transformers feature labels indicating they do not contain PCBs and there were no visual indications that either had leaked.

- **OEF 5 – ACMs and LBP.** The buildings at the site were constructed when the use of ACMs and LBP in construction was common, although no obvious hazardous conditions involving ACMs or LBP were observed.

- **OEF 6 – Water Wells.** There appear to be three water wells at the site, one in the east-central area and two in the southeast corner. The well in the east-central part of the site is inside a small enclosure and was not accessible for inspection. As such, its condition and operational status are unknown, although it appears to be powered via an oil-filled electrical transformer on a nearby wooden platform. Of the two wells in the southeast corner of the site, the northernmost of the two was active at the time of Avocet's June 17, 2021 site visit and appears to pump water up to a nearby AST. Based on visible aboveground piping, water from the active well is supplied, via the AST, to a water truck filling station on the adjoining Napa Quarry to the east. The active well may also supply water to the subject site but the connection to the adjoining Napa Quarry creates a potential future utility separation issue. The second and third water wells were not operating at the time of Avocet's site visit, and it is not clear if they are still in use and, if so, what they supply. Avocet was not provided, and has so far been unable to obtain, well construction details such as depths and screened intervals.

- **OEF 7 – Solid Waste Disposal Areas.** Basalt Rock reportedly used two areas in the northeast corner of the site to dispose of waste materials from its aggregate mining operations at the east-adjoining Napa Quarry and possibly from precast concrete manufacturing operations at the subject site. Two trenching investigations within the waste disposal areas encountered primarily inert construction debris, including concrete, asphalt, sheet metal, and other nonhazardous materials. Soil matrix and groundwater grab samples collected from the exploratory trenches contained trace concentrations of TPH-d and TPH-o attributed to wooden formwork coated with mold release oil. Based on Avocet's Phase II investigation in February 2020, the site does not appear to be underlain by groundwater in a laterally continuous aquifer in the conventional sense, reducing the likelihood of contamination potentially migrating in the subsurface. Additionally, groundwater data collected during the Phase II investigation, although limited, suggest that the impact on groundwater has been negligible.

- **OEF 8 – Septic Systems.** The subject site features two septic systems and an associated leach field that are connected to the main building currently occupied by Pacific Steel. An inspection form completed in 1999 indicates that at the time, the septic systems were in good condition; however, nothing else is known about them and they were not addressed in any of the Phase II investigations conducted previously at the site. Avocet installed a soil vapor probe in the vicinity of the

septic systems during its February 2020 Phase II investigation; however, no significant VOC concentrations were detected.

7.5 VAPOR INTRUSION/VAPOR ENCROACHMENT

As part of the Phase I ESA, Avocet evaluated the potential presence of vapor intrusion conditions (VICs) and/or vapor encroachment conditions (VECs) at the subject site. A VIC can occur if VOCs are present in the vadose zone or in groundwater beneath a property at concentrations such that vapor could intrude into, and accumulate in, overlying structures at concentrations potentially hazardous to human health. A VEC can occur if VOCs from an offsite source migrate beneath a property in the vapor phase. Avocet has not reviewed any records that indicate VOCs were stored or used in significant quantities at the site or on the adjoining properties. However, the site has a roughly 70-year history of industrial land use, during which solvents may have been used for equipment cleaning and/or other purposes and gasoline appears to have been stored in at least one AST at the site. Avocet's additional Phase II investigation in February 2020 indicated that VOCs are present in shallow soil vapor at concentrations that, based on an attenuation factor of 0.03, could marginally exceed potentially applicable indoor air screening levels. Using more realistic DTSC attenuation factors, hypothetical indoor air screening levels are well below potentially applicable indoor air screening levels.

7.6 RECOMMENDATIONS

Based on the above, Avocet offers the following recommendations regarding Phase II investigation and site clearance:

- The site owner should remove the two ASTs prior to the sale of the site, with the appropriate permits and regulatory agency oversight. Unless they belong to the local utility company, the pad-mounted electrical transformers also should be removed by the site owner.

- If the water wells in the southeast corner of the site are no longer needed, they should be destroyed in accordance with California standards, with the appropriate well destruction permit and regulatory agency oversight. Avocet notes in this regard that one of the wells appears to supply water to the east-adjoining Napa Quarry, raising potential future utility separation issues.

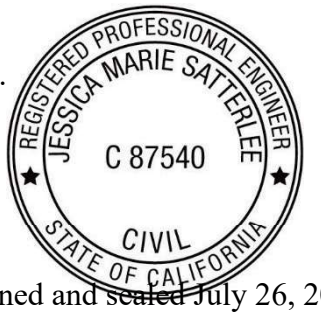
- Pre-demolition surveys should be conducted for ACMs, LBP, and other potentially hazardous building materials, including "universal wastes," and confirmed hazardous materials should be abated, as necessary, prior to general building demolition.

- Avocet conducted a Phase II investigation in February 2020, which indicated the presence of VOCs in shallow soil vapor that marginally exceed applicable soil vapor screening levels, specifically chloroform and benzene. Avocet notes that chloroform and benzene are both commonly detected in ambient air at background concentrations that exceed regulatory screening levels. Avocet recommends the

collection of ambient air samples concurrently with additional soil vapor samples from the same probes to confirm whether these soil vapor VOC concentrations are representative of subsurface conditions and whether they present a potentially unacceptable vapor intrusion risk to future commercial building tenants. Avocet also recommends that soil vapor samples from the probes closest to the two solid waste disposal areas be analyzed for methane.

Respectfully submitted,

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Signed and ~~sealed~~ July 26, 2021

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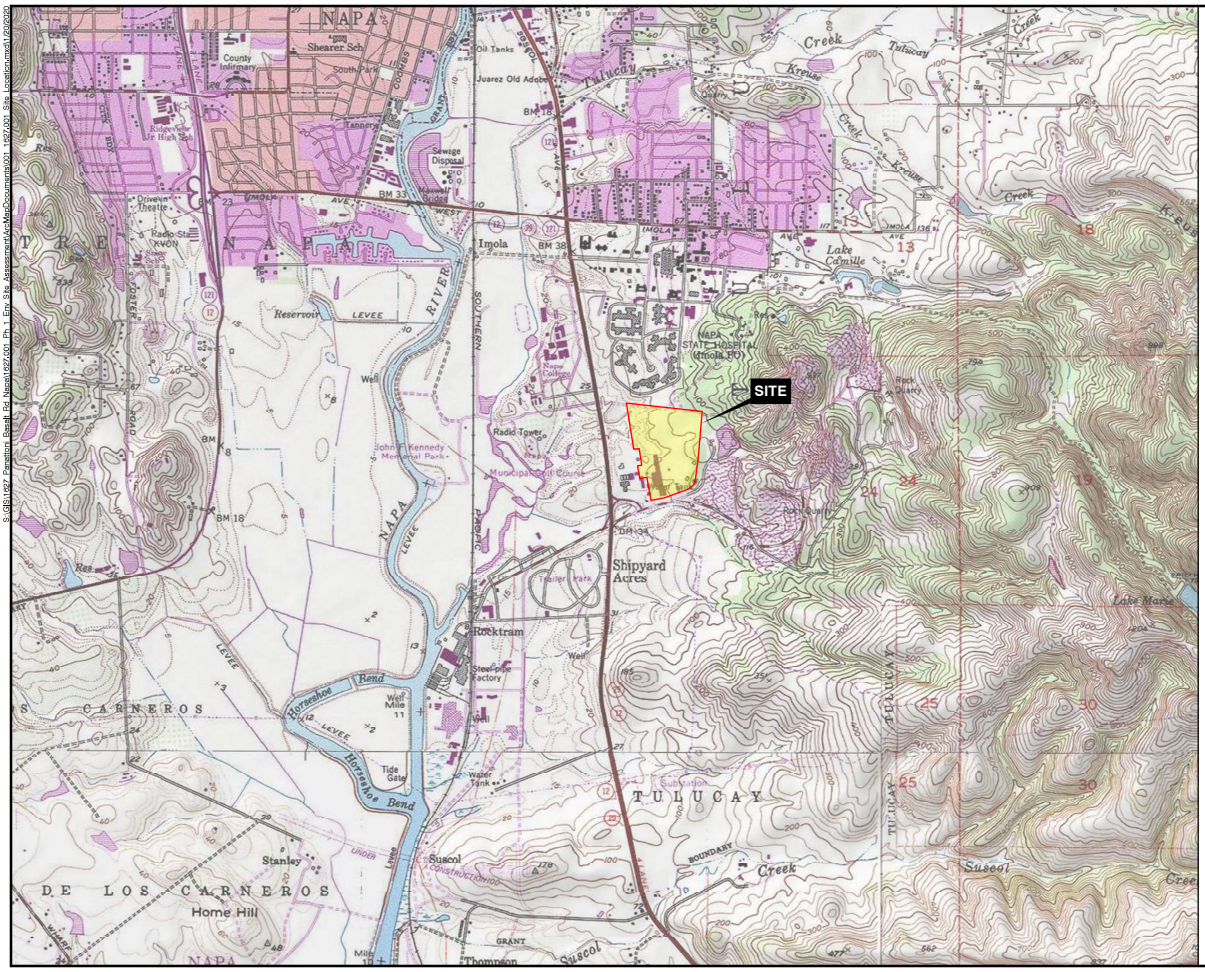
Tables

Table 1
EDR Database Listings
11 Basalt Road
Napa, California

Site Name	Address	Database	Distance (miles)	Direction	Discussed Further
Wilson Utility Construction Company	11 Basalt Road	RCRA NonGen / NLR	Target Property	Target Property	Yes
Wilson Utility Construction Company		HWTS			
Mark Dixon General Engineering		FINDS			
Mark Dixon General Engineering		HWTS, NPDES, CIWQS			
Mark Dixon General Engineering		ECHO			
Mark Dixon General Engineering		RCRA NonGen / NLR			
Rammed Earth Works		HWTS			
Rammed Earth Works, Llc		HWTS			
Rammed Earth Works, Llc		RCRA NonGen / NLR			
Pacific Steel Group		FINDS			
Pacific Steel Group		ECHO			
	Private Road In The Correy: 2301 Napa/vallejo Hwy	CHMIRS	0.000	S	Yes
Syar Industries	Vanden Rd	CA FID UST, SWEEPS UST	0.000	S	No
Basalt Rock Dumpsite	1 Basalt Road	SWF/LF	0.021	SSE	Yes
Napa Quarry	2301 Napa-valleho Highway	US MINES	0.048	WSW	Yes
Napa Quarry	Po Box 2540	MINES	0.110	SE	Yes
Syar Industries Napa Shop	Tower Road Hwy 29	RCRA-SQG	0.118	W	No
R & M Grading Inc	2303 Napa Vallejo Hwy	RCRA NonGen / NLR	0.133	WNW	No
Private Residence	Private Residence	LUST	0.133	NW	No
Pacific Coast Supplies	2301 Napa Vallejo Highway	UST	0.134	WNW	Yes
Pacific Coast Supplies		LUST, Cortese, HIST CORTESE			
Syar Industries, Inc. Napa Quarry & Shop		RCRA-SQG, LUST, Cortese, CPS-SLIC, AST, CERS TANKS, CERS HAZ WASTE			
Syar Quarry Shooting Range		RCRA-SQG			
Syar Industries, Inc.		UST			
1x Basalt Precast		HWTS, LUST			
Napa Shop		ABANDONED MINES			
Napa Shop		US MINES			
Pacific Steel Group		LUST, HIST CORTESE, CPS-SLIC, CERS HAZ WASTE, HIST UST			
Pacific Steel Group		RCRA NonGen / NLR			
International Line Builders		RCRA NonGen / NLR			
Mark Dixon		RCRA NonGen / NLR			
Superior Equipment Co Inc		RCRA NonGen / NLR			
Basalite Rock Div Pacific		RCRA-SQG, SEMS-ARCHIVE			
The Basalt Rock Division Of Di		HIST UST			
Basalite Block/rock		CA FID UST, SWEEPS UST, HIST UST			
Napa Valley College	Napa-vallejo Hwy	CA FID UST	0.210	NW	No
Napa Valley College		HIST UST			
Napa Valley College	2277 State Highway 221	LUST	0.241	NW	No
Napa City Kennedy Park	2295 Streblow Dr	LUST, Cortese	0.363	WNW	No
Napa City Kennedy Park		LUST, HIST CORTESE			
Napa State Hospital Disposal Site	Napa State Hospital	SWF/LF	0.413	NNE	No
Napa Valley College	2277 Napa Vallejo Hwy	Cortese	0.438	NW	No
Napa Valley College		LUST			
Napa Valley College		LUST, HIST CORTESE			
Napa Valley College		SWF/LF			
The Basalt Rock Division Of Di	2301 Napa-vallejo Highway	VCP, ENVIROSTOR	0.499	SW	Yes
860 Kaiser Road	860 Kaiser Road	ENVIROSTOR	0.512	SSW	No
Nova Group, Inc.	7411 Napa-vallejo Highway	ENVIROSTOR	0.888	SSW	No
Napa Pipe Corporation	1025 Kaiser Road	Notify 65	0.915	SW	No
Napa Pipe Corporation		Notify 65			
Napa Pipe - Slic/sub15		ENVIROSTOR			

Notes:
Gray shading indicates database listing is hydraulically downgradient or crossgradient and/or is a closed case
Blue shading indicates database listing does not necessarily indicate a release or contamination

Figures


NAPA
SITE
Imola
Shipyard Acres
Rocktram
TULUCAY
CARNEROS
DE LOS CARNEROS
Home Hill
Stanley
Suscol
Thompson
Lake Camille
Lake Marie
Creek
RIVER
LEVEE
Horseshoe Bend
IMOLA AVE
BM 18
BM 33
BM 38
BM 34
Municipal Golf Course
Radio Tower
Sewage Disposal
Tide Gate
Water Tank
Steel Pipe Factory
Trailer Park
Sub Station
Oil Tanks
Juarez Old Adobe
Tannery
Shearer Sch
County Infirmary
Drive-in Theatre
Radio Sta KVON
Kidwell High Sch
Kidwell Bridge
Napa State Hospital (Imola PO)
Johnson Kennedy Memorial Park
Napa Valley College
Well
Reservoir
Pumping Plant
Quarry
Boundary
Grant
Union
Milk
Res
Tulucay Creek
Kreuse Creek
Suscol Creek
Napa River
Southern Pacific
Napa Levee
Levee
Imola Ave
Grant
Boundary
Tulucay
Suscol
Creek
Bend
Well
Mile



N

0 600 1,200
Feet

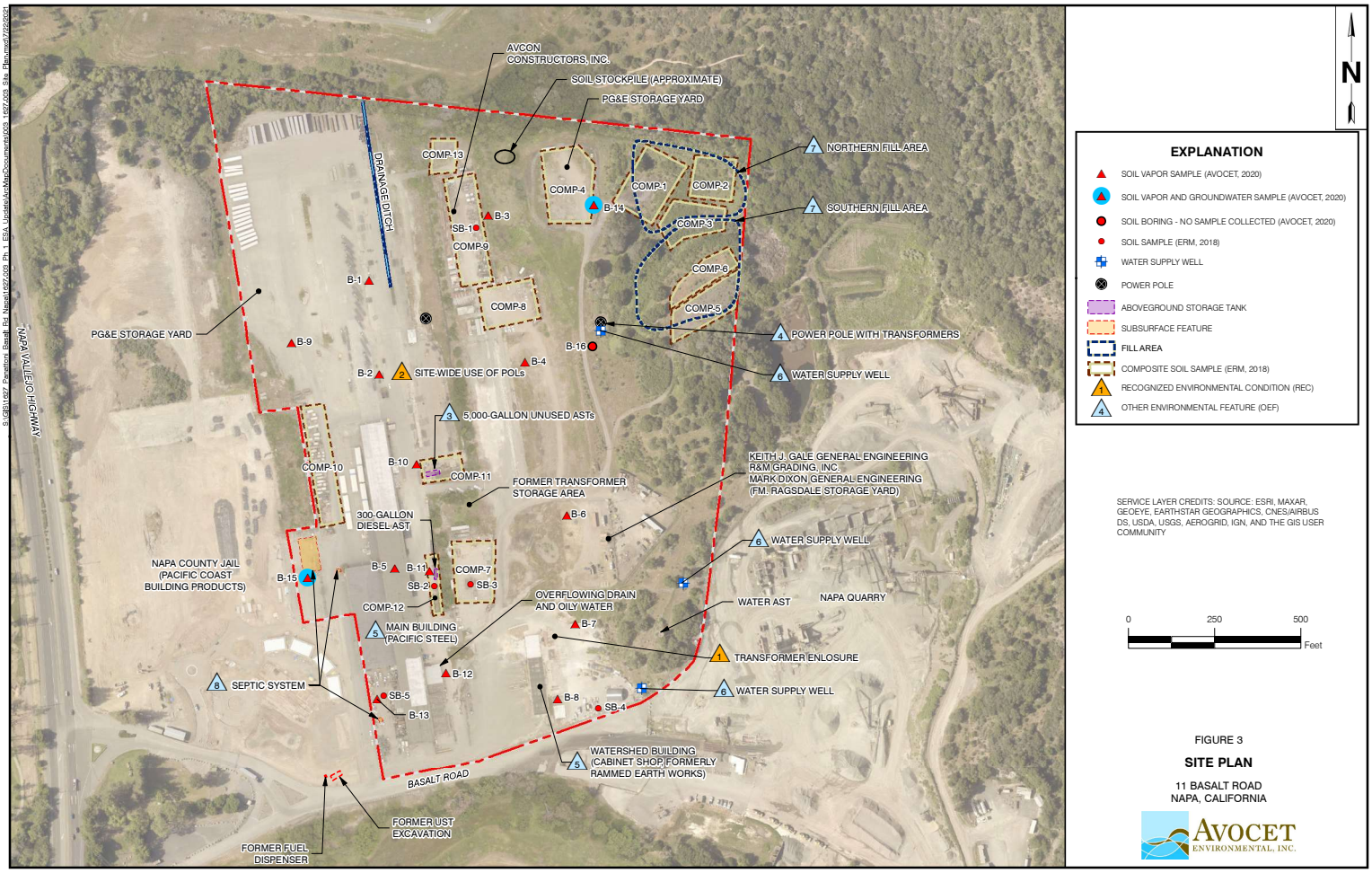
FIGURE 2

SITE VICINITY

11 BASALT ROAD
NAPA, CALIFORNIA

AVOCET
ENVIRONMENTAL, INC.

S:\GIS\1927 Panattoni Basalt Rd Napa\1927.001 Ph 1 Env Site Assessment\Arc\MapDocuments\003 1927.001 Site Vicinity.mxd 9/28/2020



S:\GIS\1627 Panattoni Basalt Rd Napa\1627.003 Ph 1 ESA Update\ArcMap\Documents\003 1627.003 Site Plan.mxd 7/22/2021

FIGURE 3

SITE PLAN

11 BASALT ROAD
NAPA, CALIFORNIA

AVOCET ENVIRONMENTAL, INC.

Appendix A

EDR Historical Topo Map Report

AVOCET
ENVIRONMENTAL, INC.

11 Basalt Road

11 Basalt Road

Napa, CA 94558

Inquiry Number: 5916016.4

December 24, 2019

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

12/24/19

Site Name:	Client Name:
11 Basalt Road	Avocet Environmental, Inc.
11 Basalt Road	1 Technology Drive Suite C515
Napa, CA 94558	Irvine, CA 92618-0000
EDR Inquiry # 5916016.4	Contact: Jessica Satterlee

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Avocet Environmental, 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:		*Coordinates:*	
P.O.#	1627.001	**Latitude:**	38.267343 38° 16' 2" North
Project:	11 Basalt Road	**Longitude:**	-122.266623 -122° 16' 0" West
		UTM Zone:	Zone 10 North
		UTM X Meters:	564154.50
		UTM Y Meters:	4235732.25
		Elevation:	42.00' above sea level

Maps Provided:

1902
1940, 1942
1942, 1947
1951
1968
1973
1980, 1981
2012

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1902 Source Sheets



Napa

30-minute, 125000

1940, 1942 Source Sheets



Carquinez Strait

15-minute, 62500



Carquinez

15-minute, 62500
Aerial Photo Revised 1937



Sonoma

15-minute, 62500
Aerial Photo Revised 1939



Mt. Vaca

15-minute, 62500
Aerial Photo Revised 1939

1942, 1947 Source Sheets



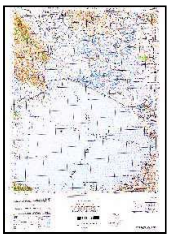
SONOMA

15-minute, 50000



PORT CHICAGO

15-minute, 50000



MARE ISLAND

15-minute, 50000



MOUNT VACA

15-minute, 50000

1951 Source Sheets



Cordelia

7.5-minute, 24000
Aerial Photo Revised 1948



Napa

7.5-minute, 24000
Aerial Photo Revised 1948



Cuttings Wharf

7.5-minute, 24000
Aerial Photo Revised 1948



Mt. George

7.5-minute, 24000
Aerial Photo Revised 1948

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1968 Source Sheets



Cuttings Wharf

7.5-minute, 24000
Aerial Photo Revised 1968



Cordelia

7.5-minute, 24000
Aerial Photo Revised 1968



Napa

7.5-minute, 24000
Aerial Photo Revised 1968



Mt. George

7.5-minute, 24000
Aerial Photo Revised 1968

1973 Source Sheets



Cuttings Wharf

7.5-minute, 24000
Aerial Photo Revised 1968



Mt. George

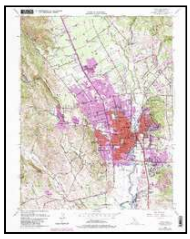
7.5-minute, 24000
Aerial Photo Revised 1968



Napa

7.5-minute, 24000
Aerial Photo Revised 1973

1980, 1981 Source Sheets



Napa

7.5-minute, 24000
Aerial Photo Revised 1978



Cordelia

7.5-minute, 24000
Aerial Photo Revised 1978



Cuttings Wharf

7.5-minute, 24000

2012 Source Sheets



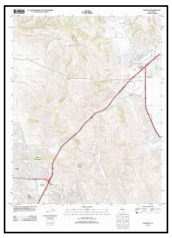
Napa

7.5-minute, 24000



Cuttings Wharf

7.5-minute, 24000



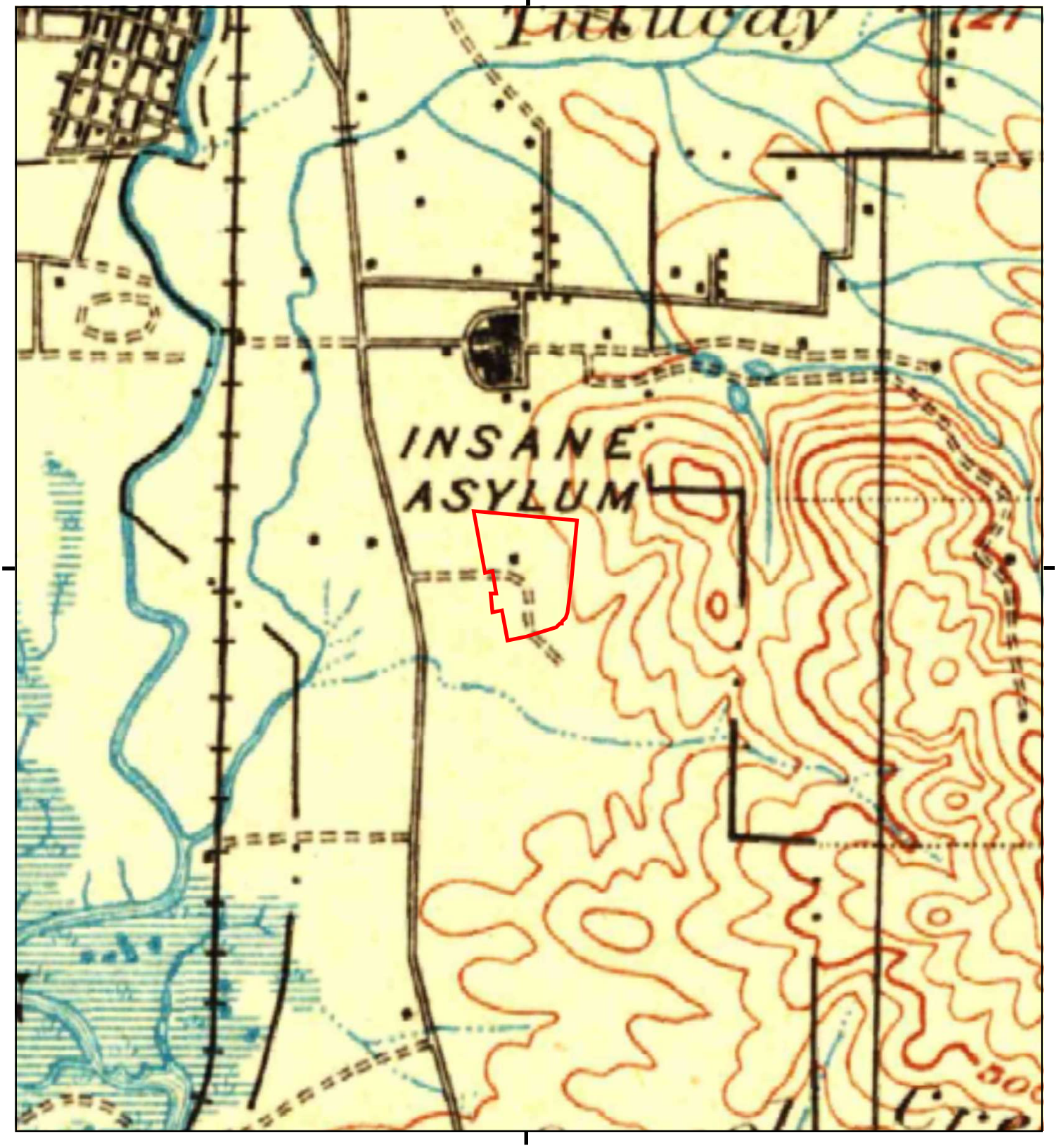
Cordelia

7.5-minute, 24000



Mount George

7.5-minute, 24000



This report includes information from the following map sheet(s).

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NW N NE
W E
SW S SE

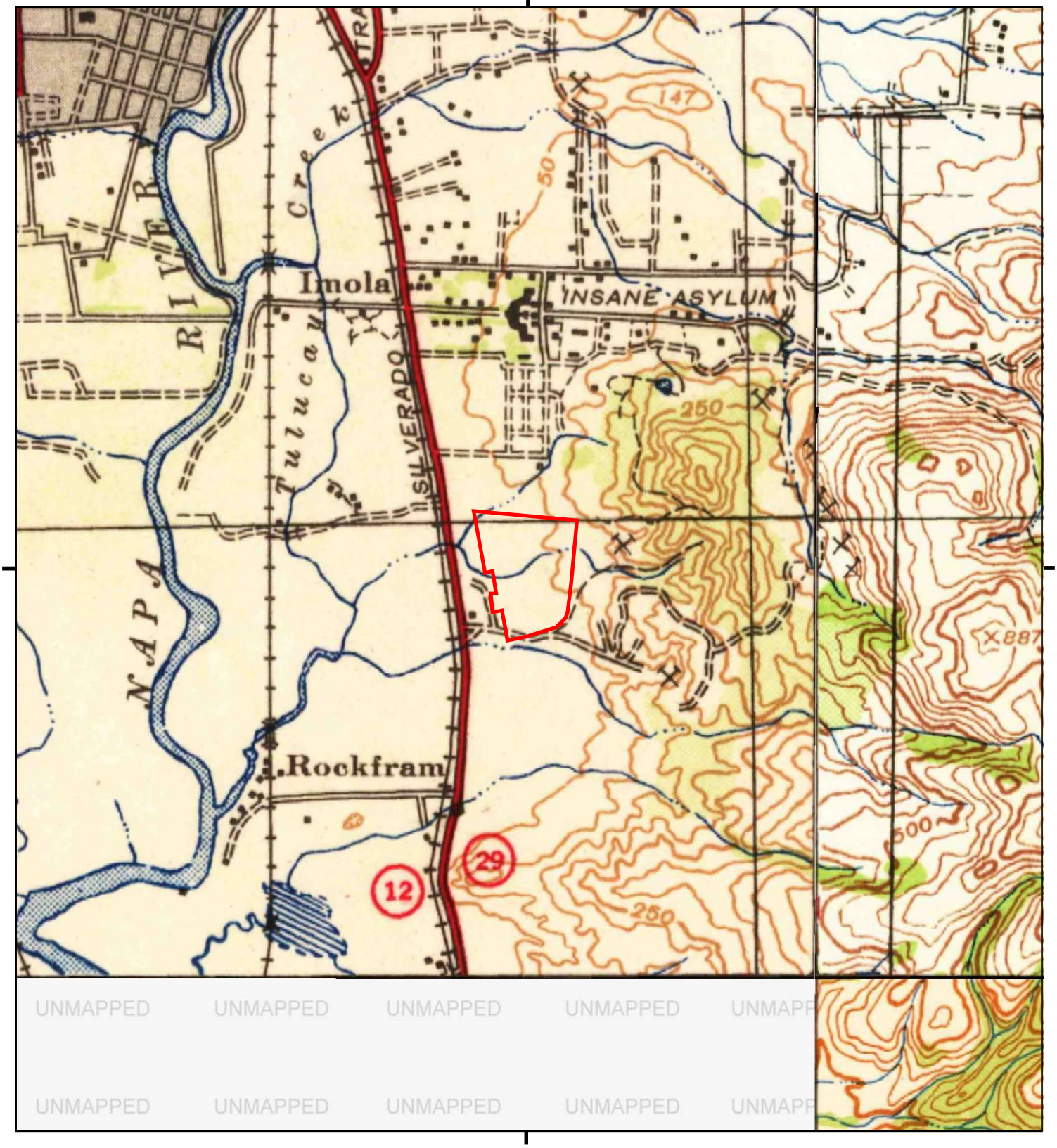
TP, Napa, 1902, 30-minute

SITE NAME: 11 Basalt Road
ADDRESS: 11 Basalt Road
Napa, CA 94558
CLIENT: Avocet Environmental, Inc.

N

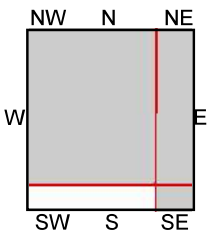
Historical Topo Map

1940, 1942



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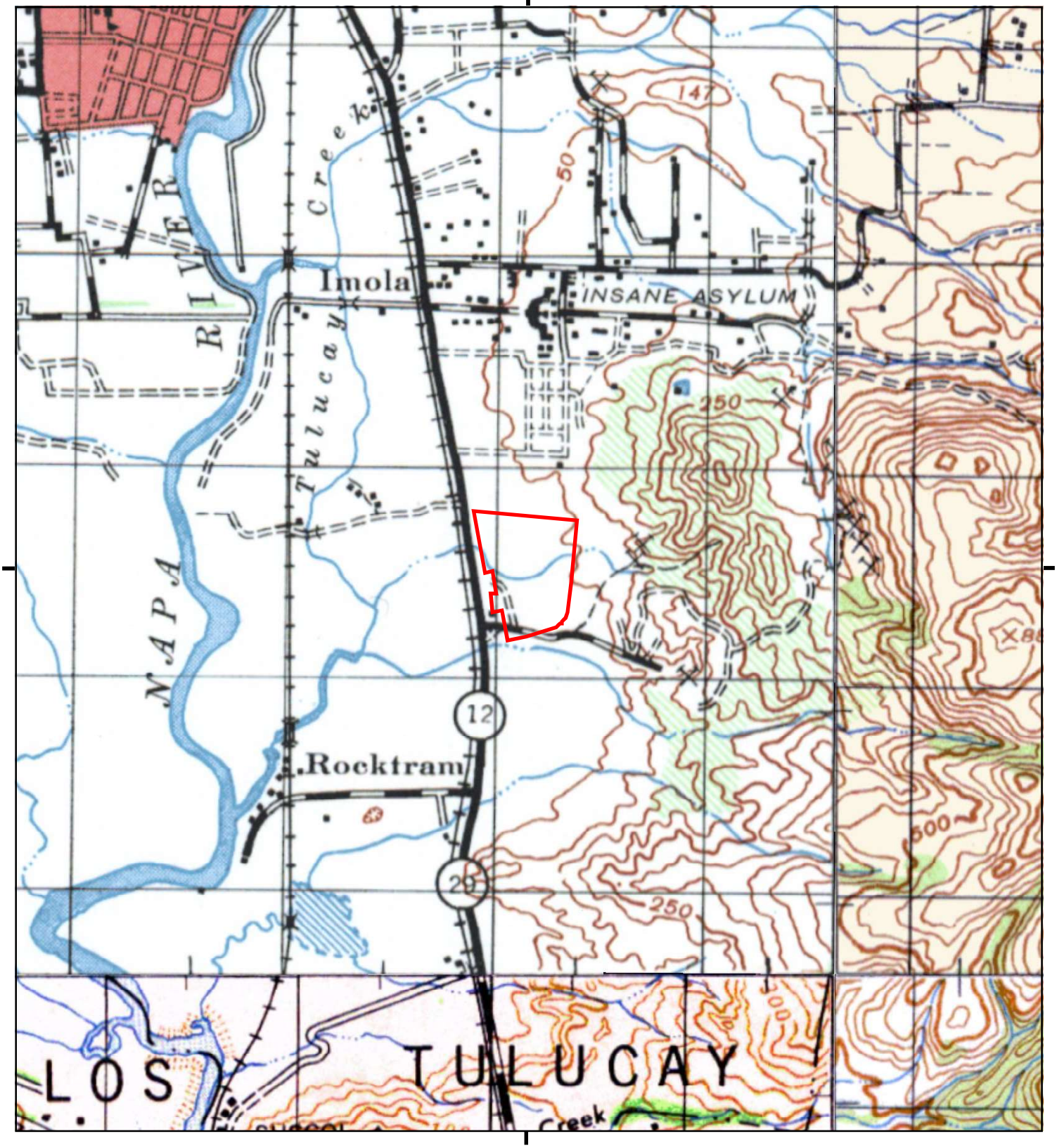
TP, Sonoma, 1942, 15-minute
NE, Mt. Vaca, 1942, 15-minute
SE, Carquinez Strait, 1940, 15-minute
SE, Carquinez, 1942, 15-minute

SITE NAME: 11 Basalt Road
ADDRESS: 11 Basalt Road
Napa, CA 94558
CLIENT: Avocet Environmental, Inc.

N

Historical Topo Map

1942, 1947



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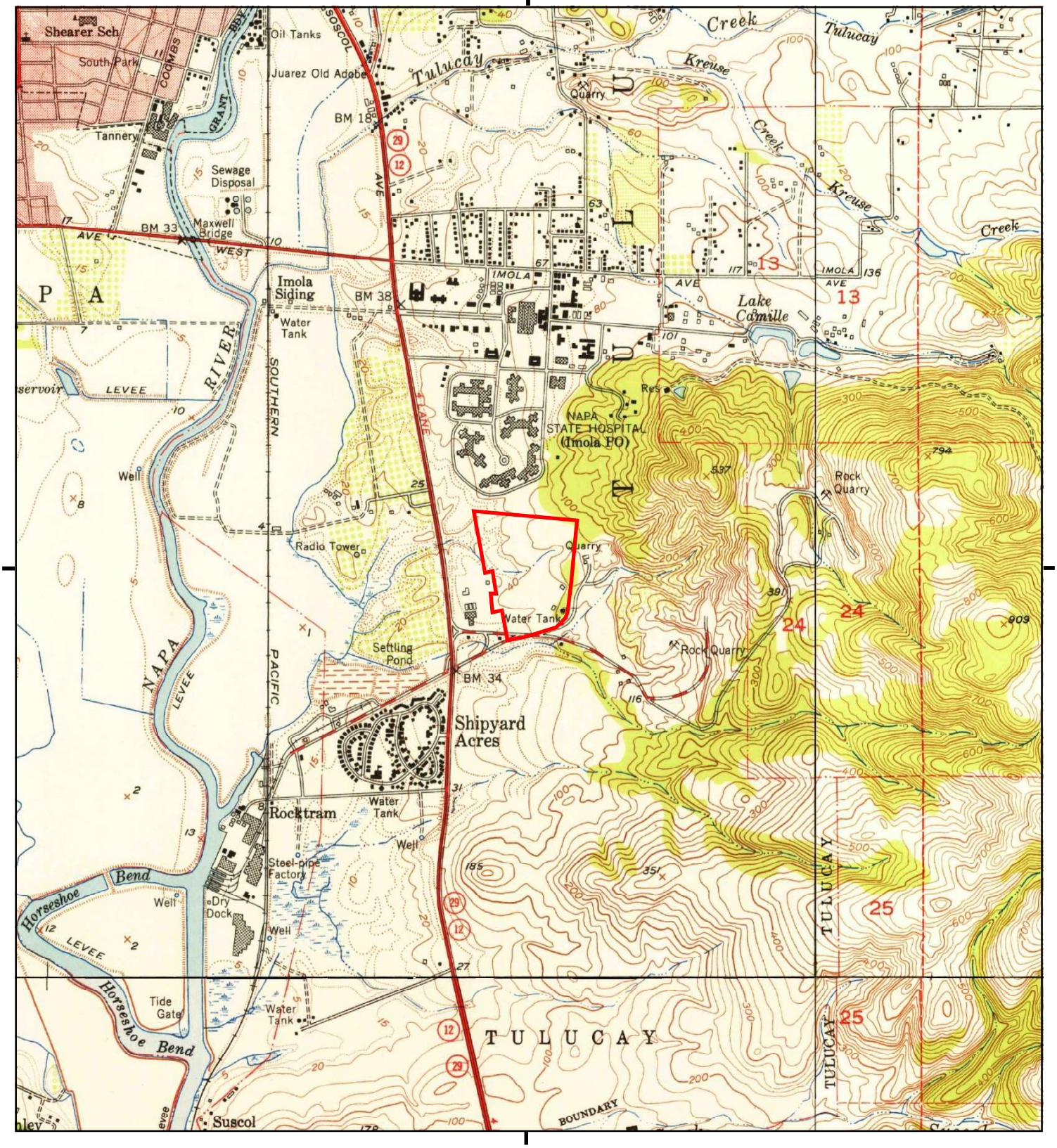
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, SONOMA, 1942, 15-minute
NE, MOUNT VACA, 1947, 15-minute
SE, PORT CHICAGO, 1947, 15-minute
SW, MARE ISLAND, 1947, 15-minute

SITE NAME: 11 Basalt Road
ADDRESS: 11 Basalt Road
Napa, CA 94558
CLIENT: Avocet Environmental, Inc.

N



This report includes information from the following map sheet(s).

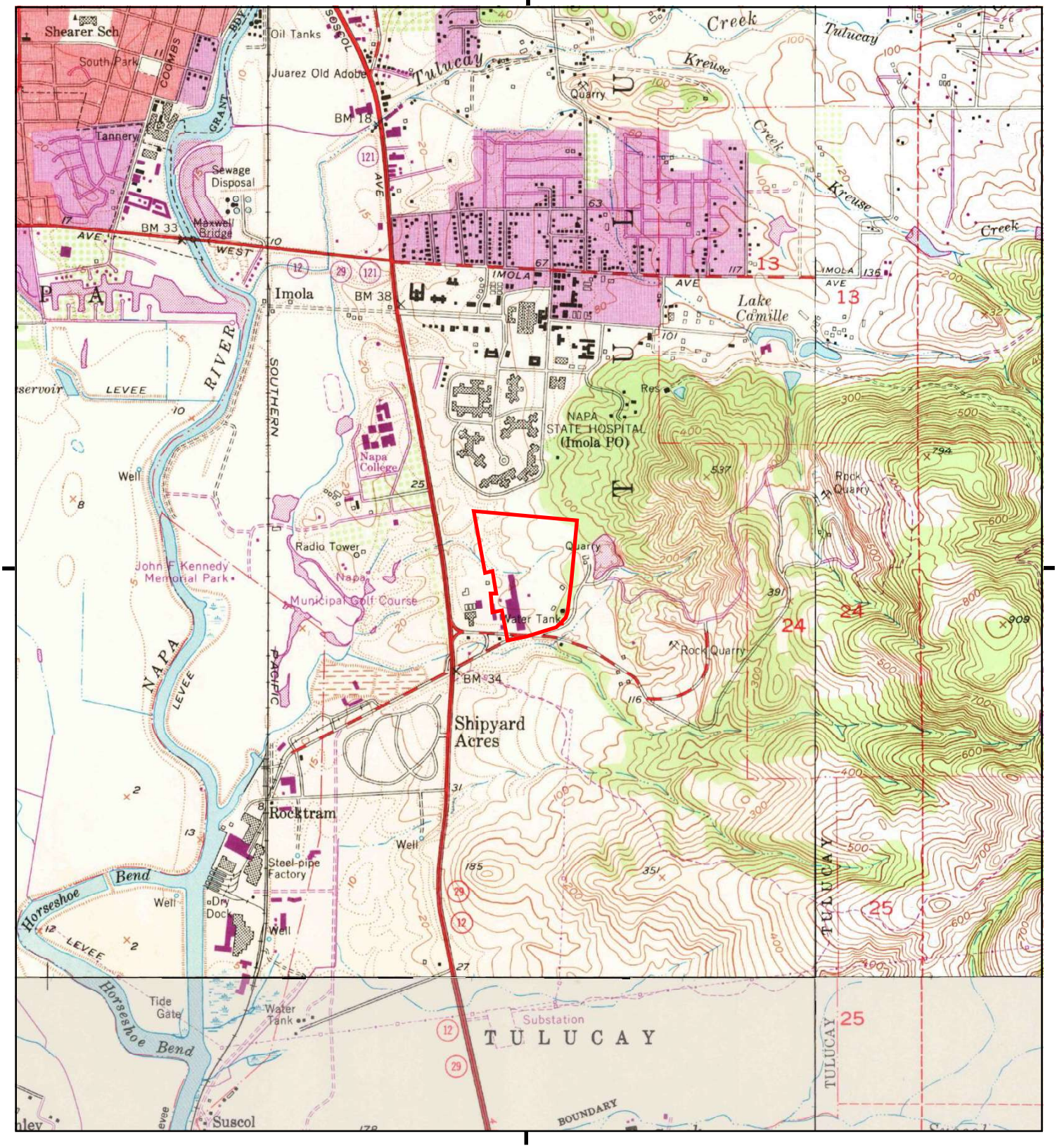
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Napa, 1951, 7.5-minute
NE, Mt. George, 1951, 7.5-minute
SE, Cordelia, 1951, 7.5-minute
SW, Cuttings Wharf, 1951, 7.5-minute

SITE NAME: 11 Basalt Road
ADDRESS: 11 Basalt Road
Napa, CA 94558
CLIENT: Avocet Environmental, Inc.

N



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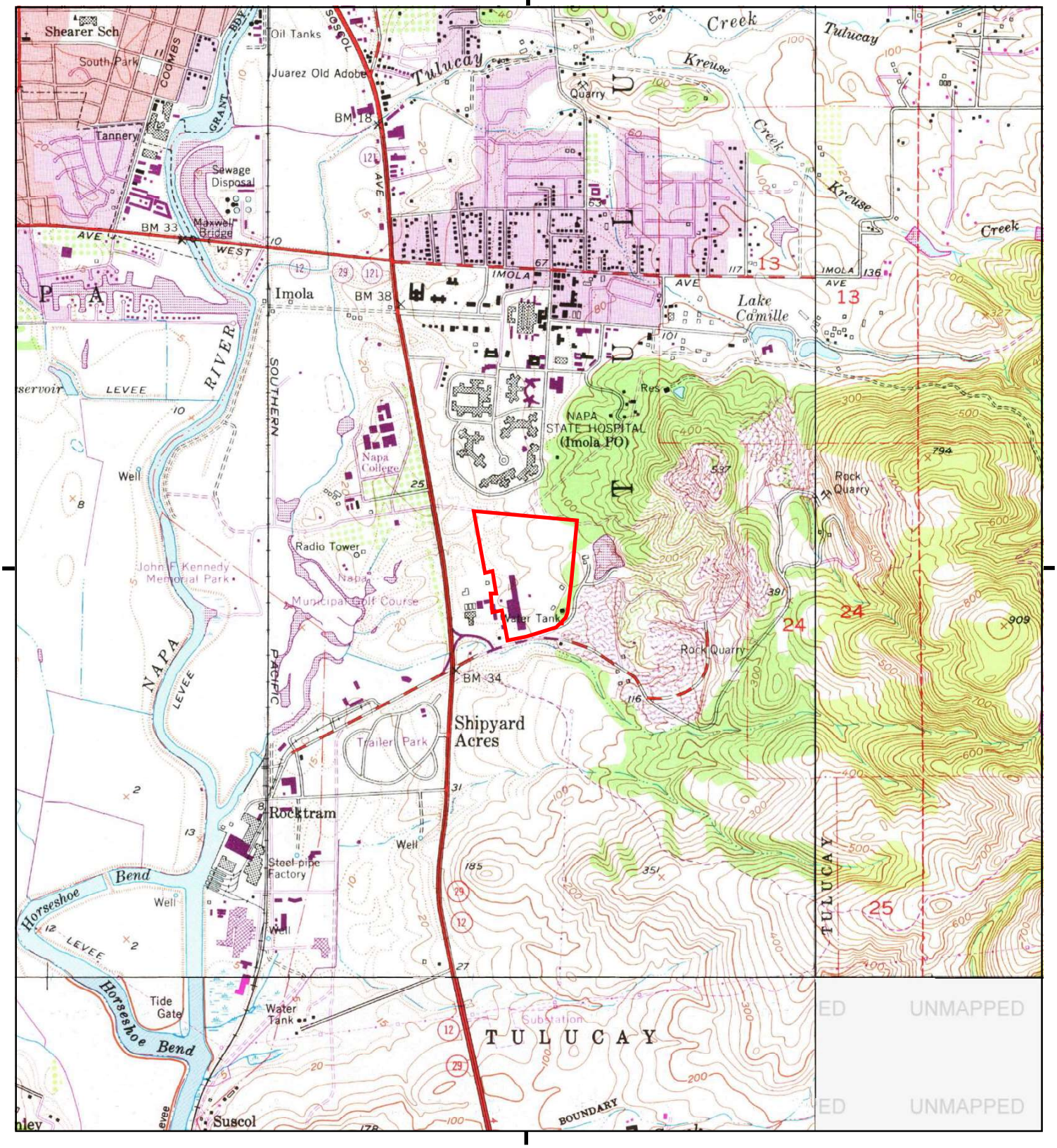
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Napa, 1968, 7.5-minute
NE, Mt. George, 1968, 7.5-minute
SE, Cordelia, 1968, 7.5-minute
SW, Cuttings Wharf, 1968, 7.5-minute

SITE NAME: 11 Basalt Road
ADDRESS: 11 Basalt Road
Napa, CA 94558
CLIENT: Avocet Environmental, Inc.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

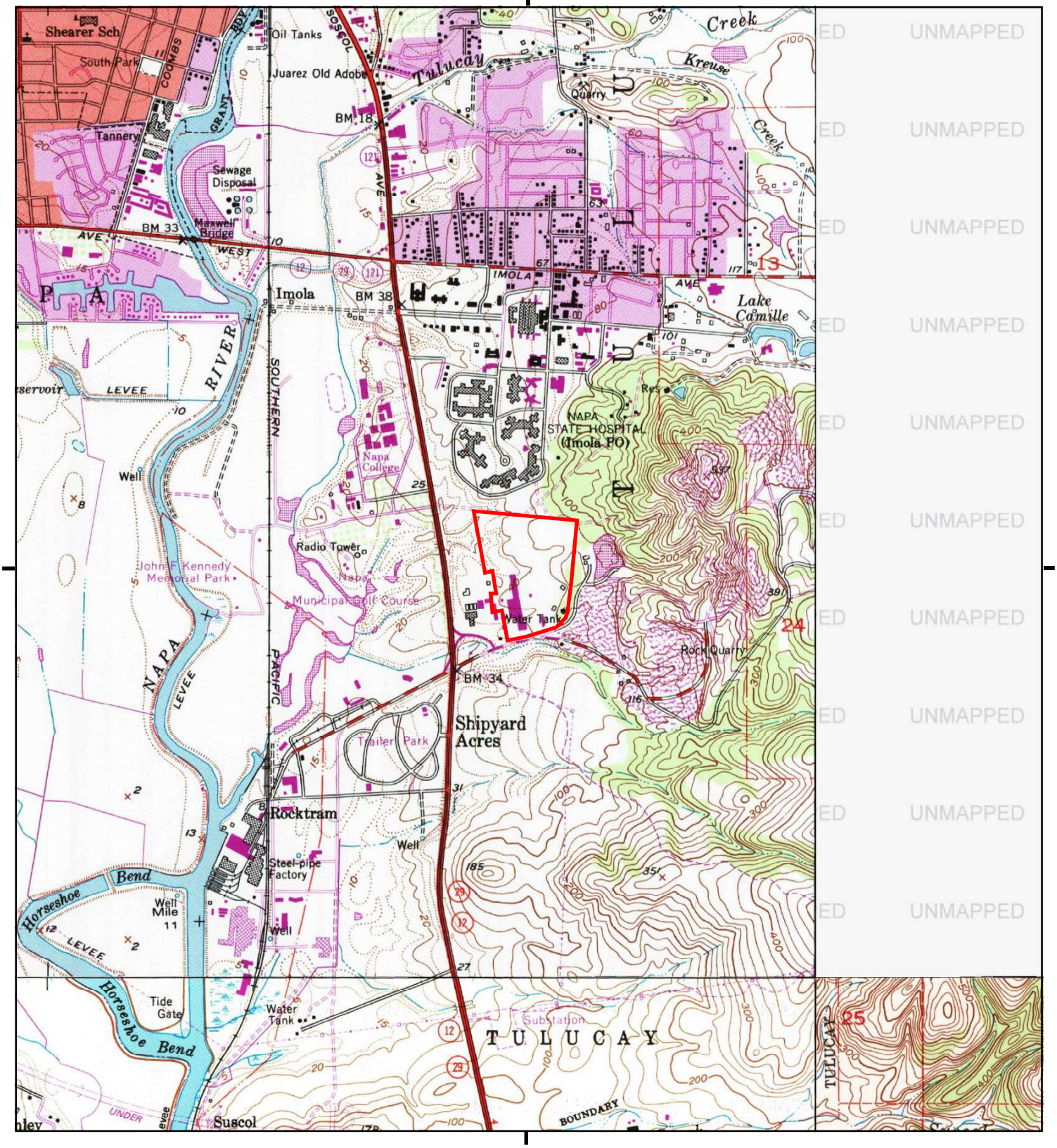
TP, Napa, 1973, 7.5-minute
NE, Mt. George, 1973, 7.5-minute
SW, Cuttings Wharf, 1973, 7.5-minute

SITE NAME: 11 Basalt Road
ADDRESS: 11 Basalt Road
Napa, CA 94558
CLIENT: Avocet Environmental, Inc.

N

Historical Topo Map

1980, 1981



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

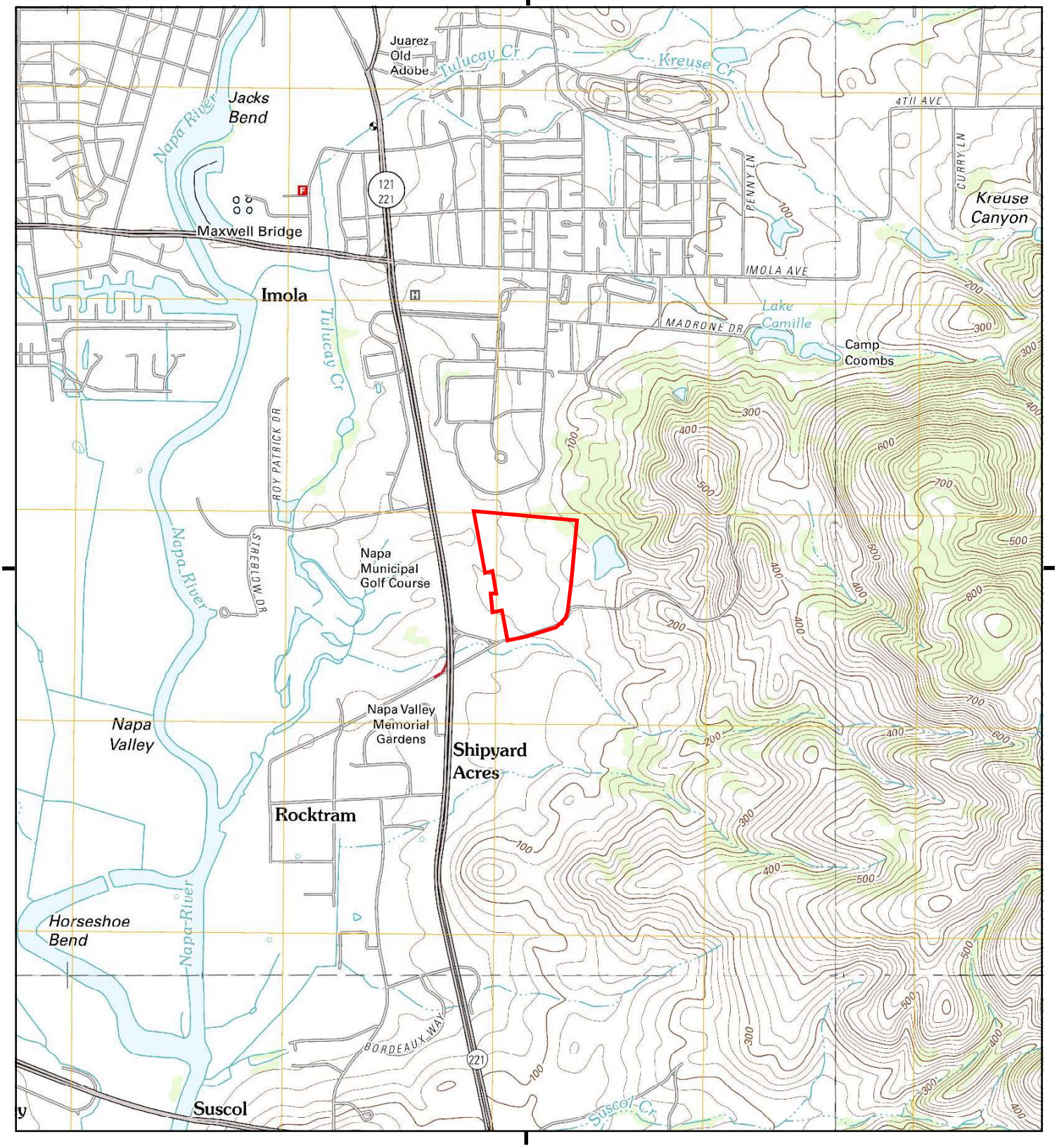
TP, Napa, 1980, 7.5-minute
SE, Cordelia, 1980, 7.5-minute
SW, Cuttings Wharf, 1981, 7.5-minute

SITE NAME: 11 Basalt Road
ADDRESS: 11 Basalt Road
Napa, CA 94558
CLIENT: Avocet Environmental, Inc.

N

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
SW S SE

TP, Napa, 2012, 7.5-minute
NE, Mount George, 2012, 7.5-minute
SE, Cordelia, 2012, 7.5-minute
SW, Cuttings Wharf, 2012, 7.5-minute

SITE NAME: 11 Basalt Road
ADDRESS: 11 Basalt Road
Napa, CA 94558
CLIENT: Avocet Environmental, Inc.

N

Appendix B

The EDR Aerial Photo Decade Package

AVOCET
ENVIRONMENTAL, INC.

11 Basalt Road

11 Basalt Road

Napa, CA 94558

Inquiry Number: 5916016.8

December 24, 2019

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

12/24/19

Site Name:

11 Basalt Road
11 Basalt Road
Napa, CA 94558
EDR Inquiry # 5916016.8

Client Name:

Avocet Environmental, Inc.
1 Technology Drive Suite C515
Irvine, CA 92618-0000
Contact: Jessica Satterlee

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
1947	1"=500'	Flight Date: March 01, 1947	USGS
1953	1"=500'	Flight Date: June 13, 1953	USDA
1957	1"=500'	Flight Date: June 18, 1957	USGS
1968	1"=500'	Flight Date: April 20, 1968	USGS
1973	1"=500'	Flight Date: September 27, 1973	USGS
1982	1"=500'	Flight Date: July 08, 1982	USDA
1993	1"=500'	Acquisition Date: July 06, 1993	USGS/DOQQ
2006	1"=500'	Flight Year: 2006	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2016	1"=500'	Flight Year: 2016	USDA/NAIP

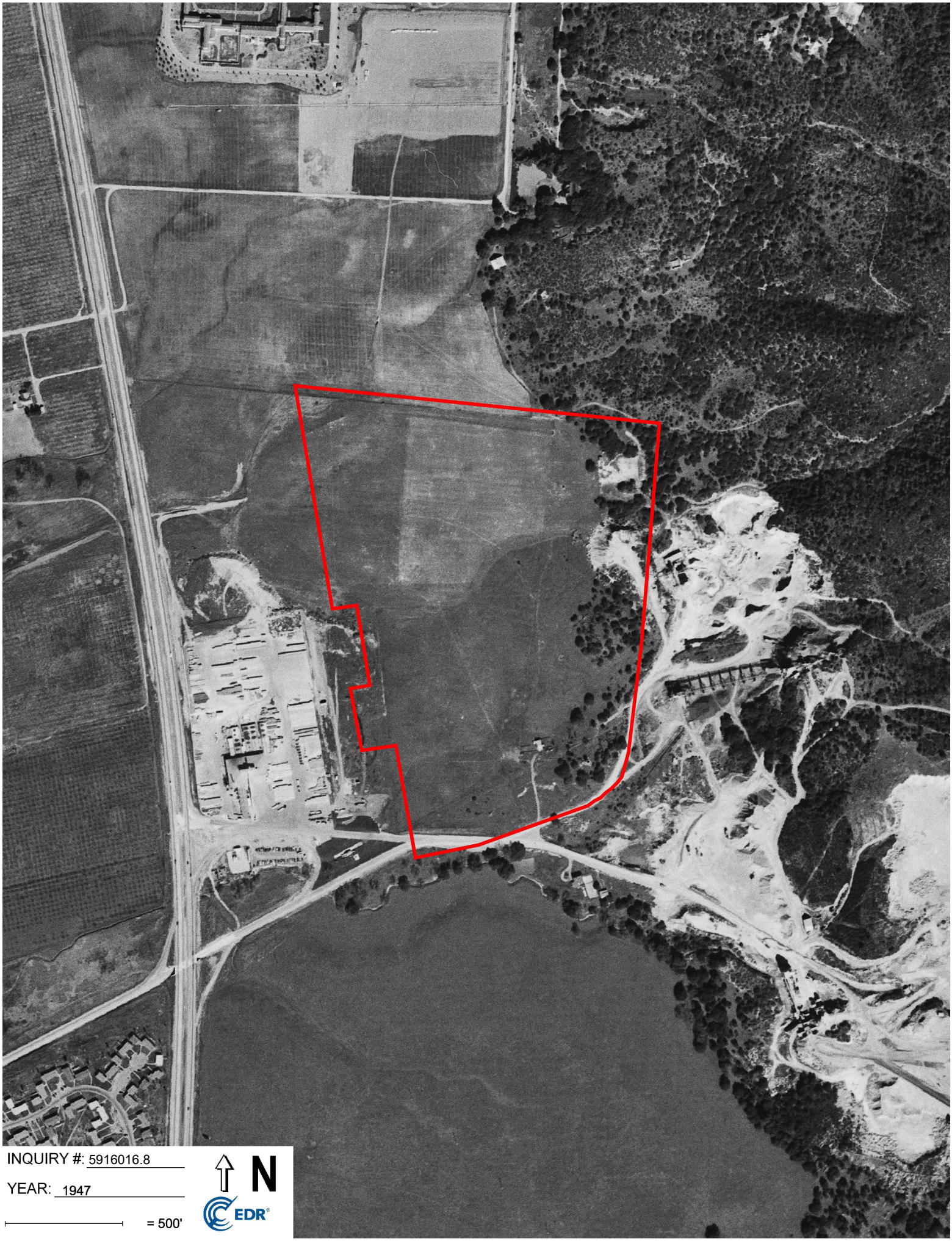
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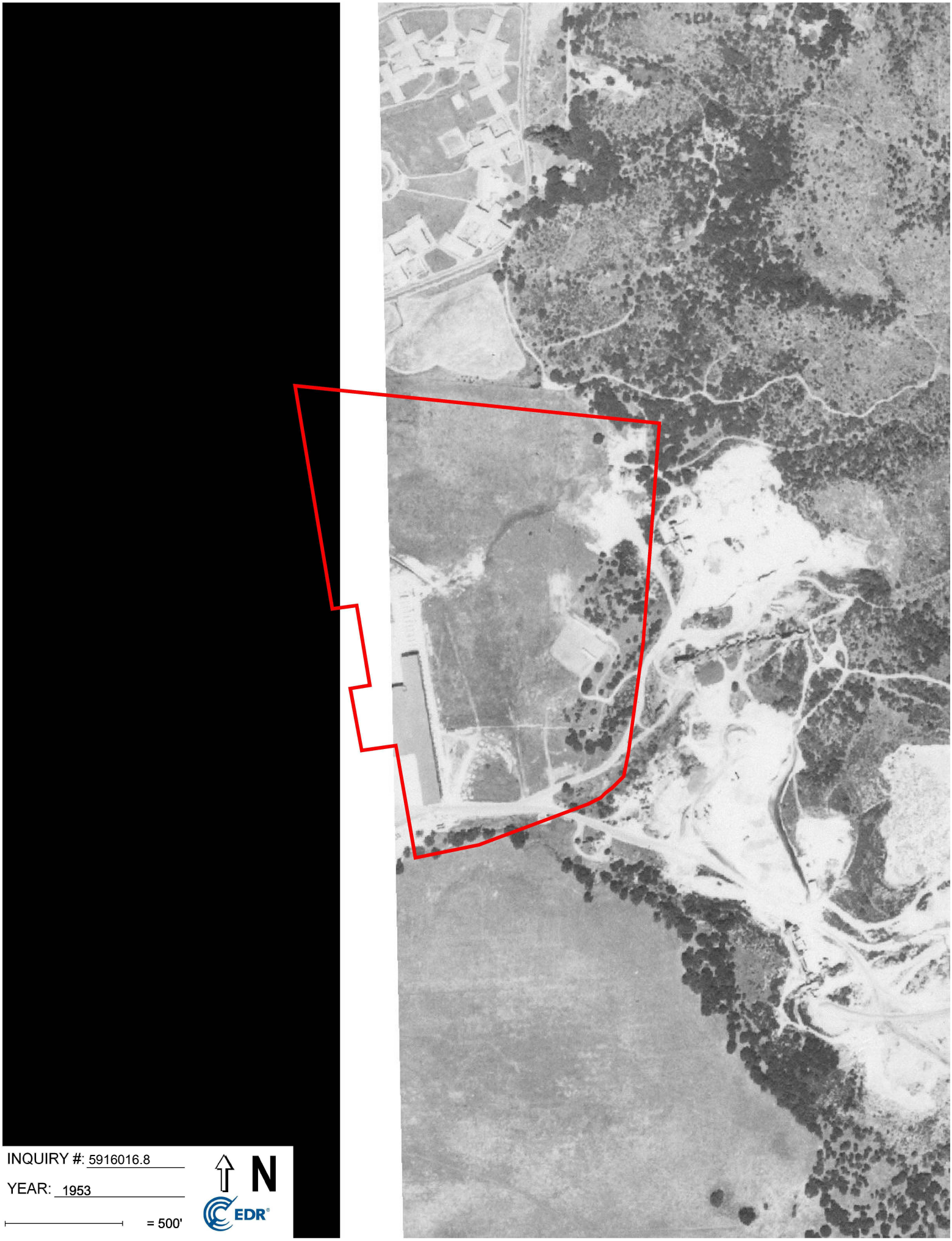
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YEAR: 1947

= 500'

N

EDR



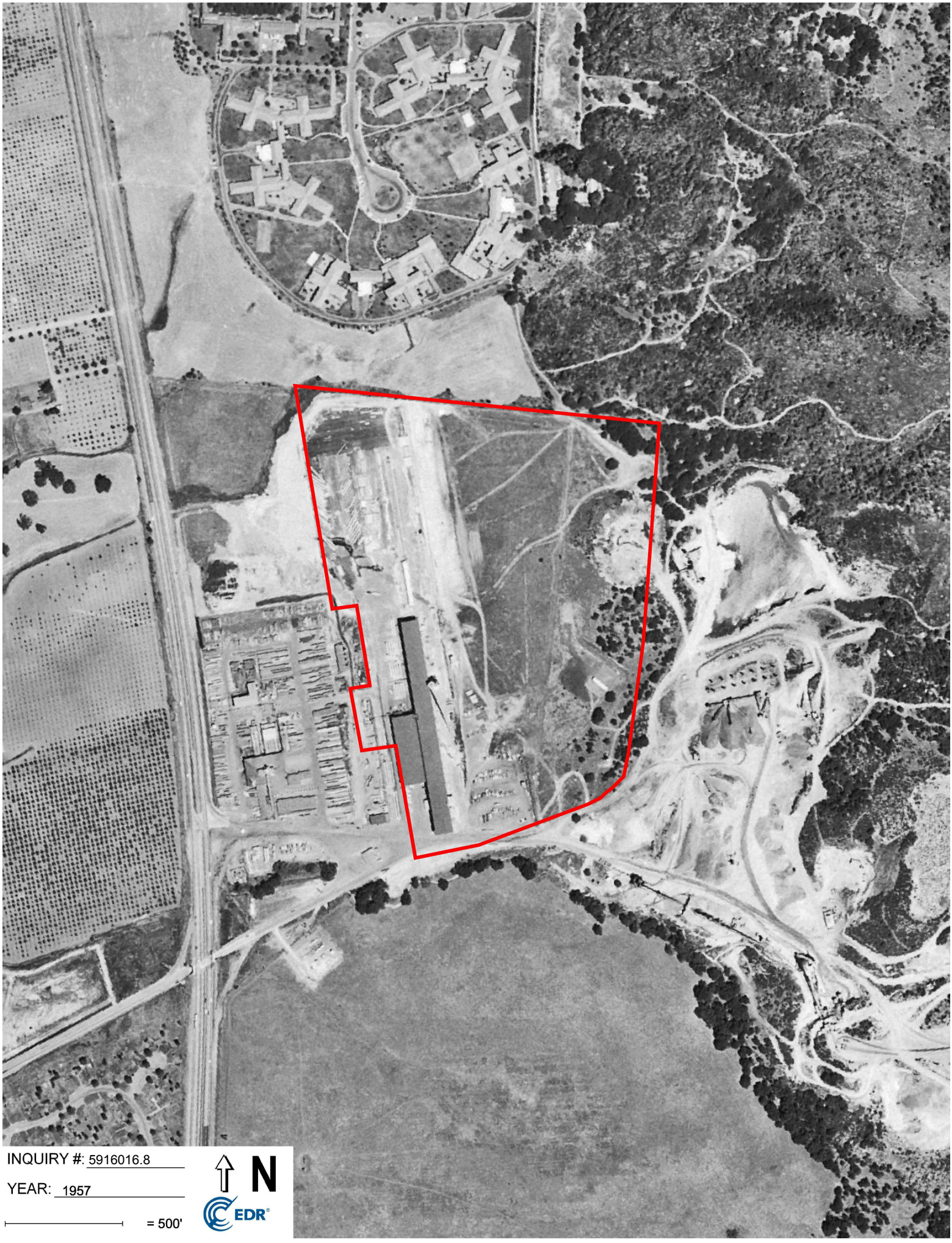
INQUIRY #: 5916016.8

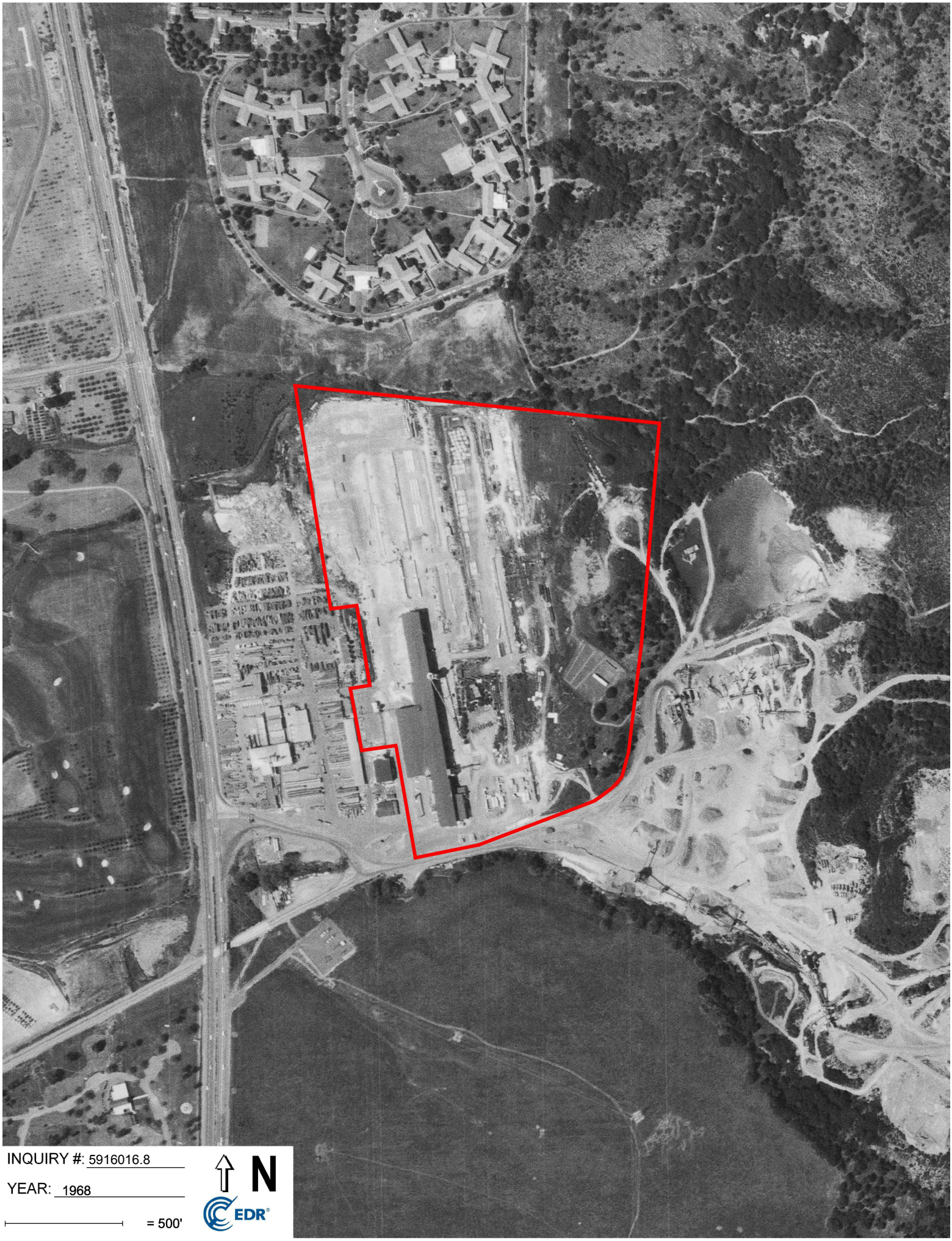
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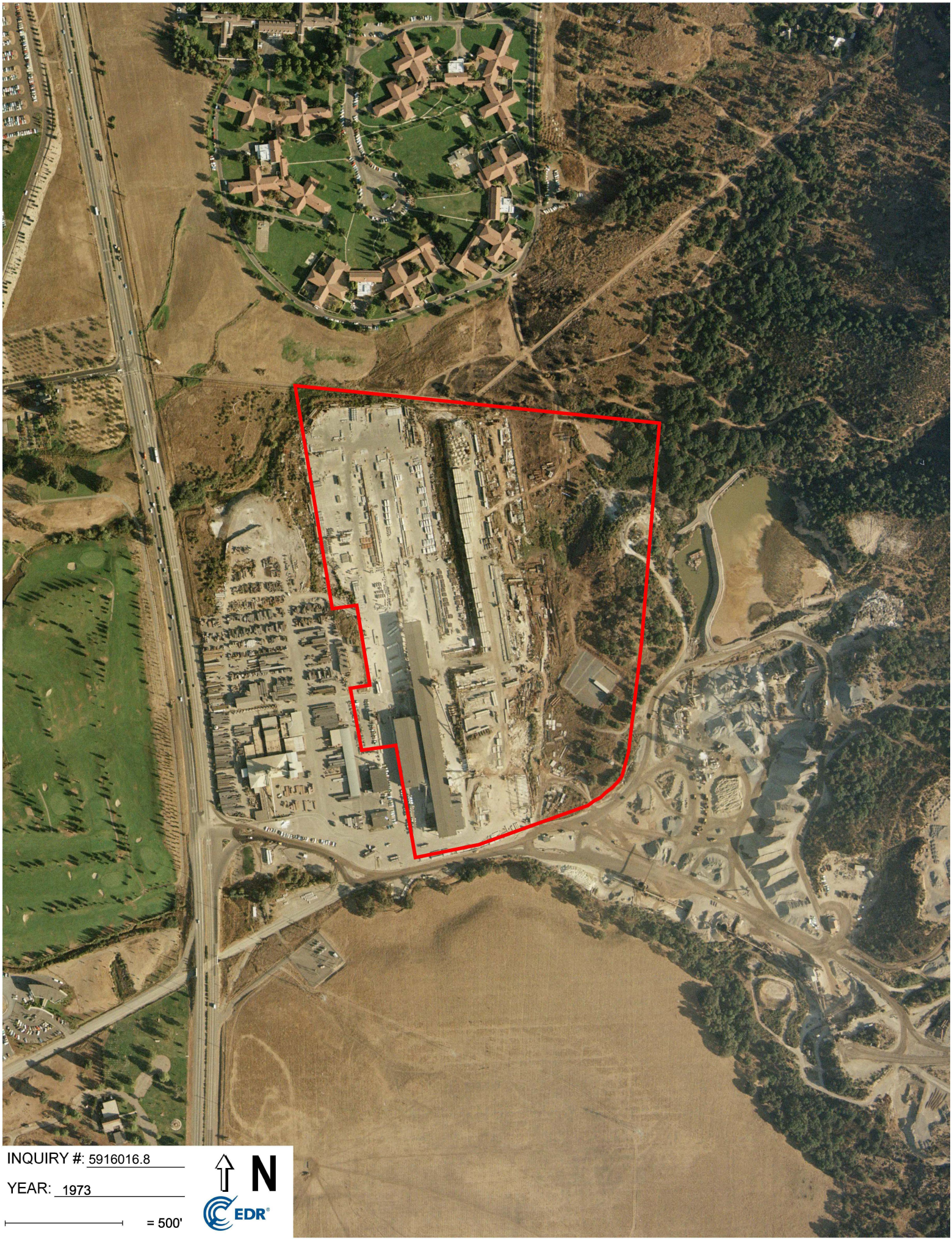
= 500'

N

EDR


INQUIRY #: 5916016.8
YEAR: 1957
= 500'
N
EDR


INQUIRY #: 5916016.8
YEAR: 1968
= 500'
N
EDR



INQUIRY #: 5916016.8

YEAR: 1973

= 500'

N

EDR


INQUIRY #: 5916016.8
YEAR: 1982
= 500'
N
EDR



INQUIRY #: 5916016.8

YEAR: 1993

= 500'

N

EDR


INQUIRY #: 5916016.8
YEAR: 2006
= 500'
N
EDR



INQUIRY #: 5916016.8

YEAR: 2009

= 500'

N

EDR

Appendix C

Certified Sanborn® Map Report

AVOCET
ENVIRONMENTAL, INC.

11 Basalt Road

11 Basalt Road

Napa, CA 94558

Inquiry Number: 5916016.3

December 24, 2019

Certified Sanborn® Map Report

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

Certified Sanborn® Map Report

12/24/19

Site Name:

11 Basalt Road
11 Basalt Road
Napa, CA 94558
EDR Inquiry # 5916016.3

Client Name:

Avocet Environmental, Inc.
1 Technology Drive Suite C515
Irvine, CA 92618-0000
Contact: Jessica Satterlee

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Avocet Environmental, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

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 # 9D9C-407D-A71C

PO # 1627.001

Project 11 Basalt Road

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: 9D9C-407D-A71C

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

The Sanborn Library LLC Since 1866™

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Appendix D

The EDR-City Directory Abstract

AVOCET
ENVIRONMENTAL, INC.

11 Basalt Road
11 Basalt Road
Napa, CA 94558

Inquiry Number: 5916016.5
December 24, 2019

The EDR-City Directory Abstract

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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Findings

City Directory Images

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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 1923 through 2014. 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.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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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
2014	EDR Digital Archive	-	-	-	-
2010	EDR Digital Archive	-	-	-	-
2005	EDR Digital Archive	-	-	-	-
2003	HAINES & COMPANY INC.	-	-	-	-
1996	Polk	-	X	X	-
1994	Pacific Bell	-	X	X	-
1990	Polk	-	X	X	-
1981	R. L. Polk & Co.	-	X	X	-
1975	R. L. Polk & Co.	-	X	X	-
1970	R. L. Polk & Co.	-	-	-	-
1965	R. L. Polk & Co.	-	-	-	-
1960	R. L. Polk & Co.	-	-	-	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1954	R. L. Polk & Co. of California	-	-	-	-
1947	R. L. Polk & Co.	-	-	-	-
1942	R. L. Polk & Co.	-	-	-	-
1935	R. L. Polk & Co.	-	-	-	-
1929	R. L. Polk & Co.	-	-	-	-
1923	Polk-Husted Directory Co.	-	-	-	-

EXECUTIVE SUMMARY

SELECTED ADDRESSES

The following addresses were selected by the client, for EDR to research. An "X" indicates where information was identified.

Address	*Type*	*Findings*
2301 Napa Vallejo Highway	Client Entered	X

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

11 Basalt Road
Napa, CA 94558

FINDINGS DETAIL

Target Property research detail.

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

Napa Vallejo Highway

2301 Napa Vallejo Highway

Year	*Uses*	*Source*
1996	BASALITE 6242 C	Polk
1994	BASALITE	Pacific Bell
	SYAR INDUSTRIES INC	Pacific Bell
	PACIFIC SUPPLY	Pacific Bell
	BASALT PRECAST	Pacific Bell
	DIVISION OF	Pacific Bell
	DILLINGHAM	Pacific Bell
	CAMELLIA VALLEY	Pacific Bell
	SUPPLY	Pacific Bell
1990	Syar Industries Inc	Polk
	Pacific Supply bldr sup	Polk
	Basalt Precast A Div Of Diingham	Polk
	Corp bldg matls	Polk
1981	Basalt Rock Company Inc	R. L. Polk & Co.
1975	Basalt Rock Comnpany Inc	R. L. Polk & Co.

FINDINGS

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
2301 Napa Vallejo Highway	2014, 2010, 2005, 2003, 1970, 1965, 1960, 1954, 1947, 1942, 1935, 1929, 1923

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
11 Basalt Road	2014, 2010, 2005, 2003, 1996, 1994, 1990, 1981, 1975, 1970, 1965, 1960, 1954, 1947, 1942, 1935, 1929, 1923

Appendix E

Site Photographs

AVOCET
ENVIRONMENTAL, INC.



E-1. Looking northeast at outdoor storage next to employee parking and main building (06/17/2021).



E-2. Concrete extension to main building that houses additional dry storage (06/17/2021).



E-3. Storage tanks southwest of the main building (06/17/2021).



E-4. Storage of cable inside the main building (06/17/2021).



E-5. Hydraulic oil and portable generator north of welding area (01/14/2020).



E-6. Waste oil drums and staining inside the main building (01/14/2020).



E-7. Outdoor storage northwest of the main building (06/17/2021).



E-8. Cleared, paved area in the northwest corner of the site (06/17/2021).



E-9. Trailers and storage containers parked along northwestern site boundary (06/17/2021)



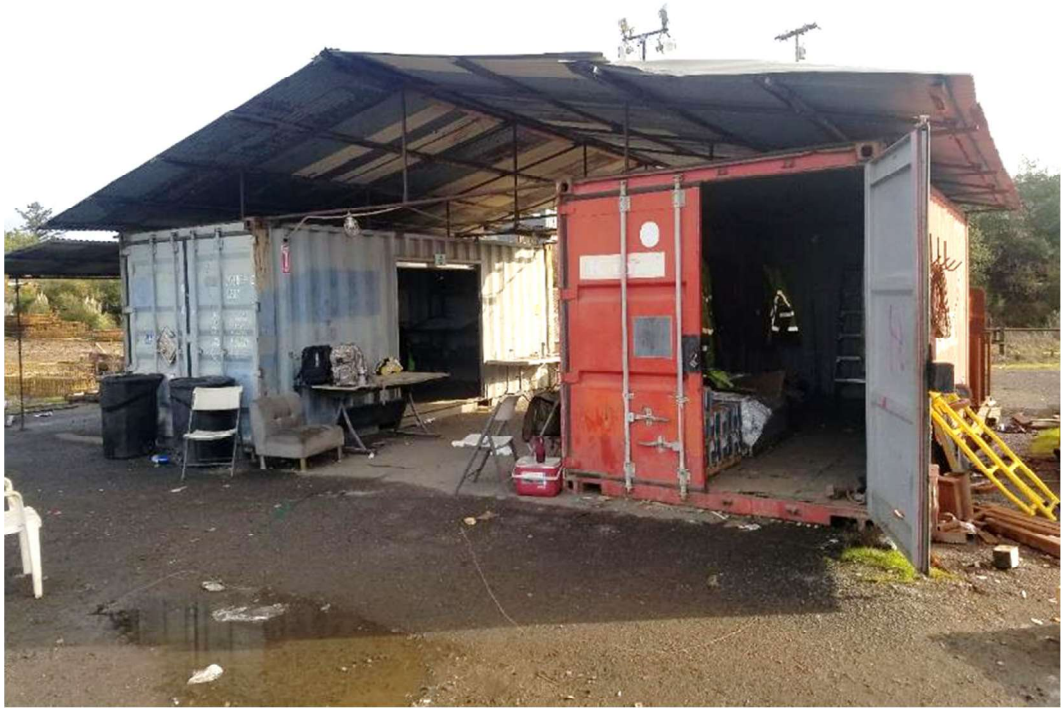
E-10. Looking south at drainage channel in the western part of the site (06/17/2021).



E-11. Looking south at covered portion of the drainage channel (01/14/2020).



E-12. Outdoor storage to the northeast of the main building (seen in right of photo) (01/14/2020).



E-13. Storage containers used as employee break area (01/14/2020).



E-14. Two 5,000-gallon ASTs located east of the main building (01/14/2020).



E-15. Diesel fuel AST and drum inside hazardous waste storage area east of main building (01/14/2020).



E-16. Portable generator and staining inside “Quality Control Laboratory” (01/14/2020).



E-17. Backed up drain with oily water located outside the east side of the main building (01/14/2020).



E-18. Miscellaneous equipment storage in former Avcon Constructors, Inc. yard (01/14/2020).



E-19. Covered soil stockpile located at north end of former Avcon storage yard (01/14/2020).



E-20. Covered soil stockpile inside northern site boundary, north of former Avcon storage yard (06/17/2021).



E-21. Equipment storage in former PG&E yard in the northeast corner of the site (01/14/2020).



E-22. Structure in former PG&E yard in northeast corner of the site (01/14/2020).



E-23. Cleared former PG&E storage area inside northern site boundary (06/17/2021).



E-24. Miscellaneous debris in southern solid waste disposal area (01/14/2020).



E-25. Crushed asphalt in former southern waste disposal area (01/14/2020).



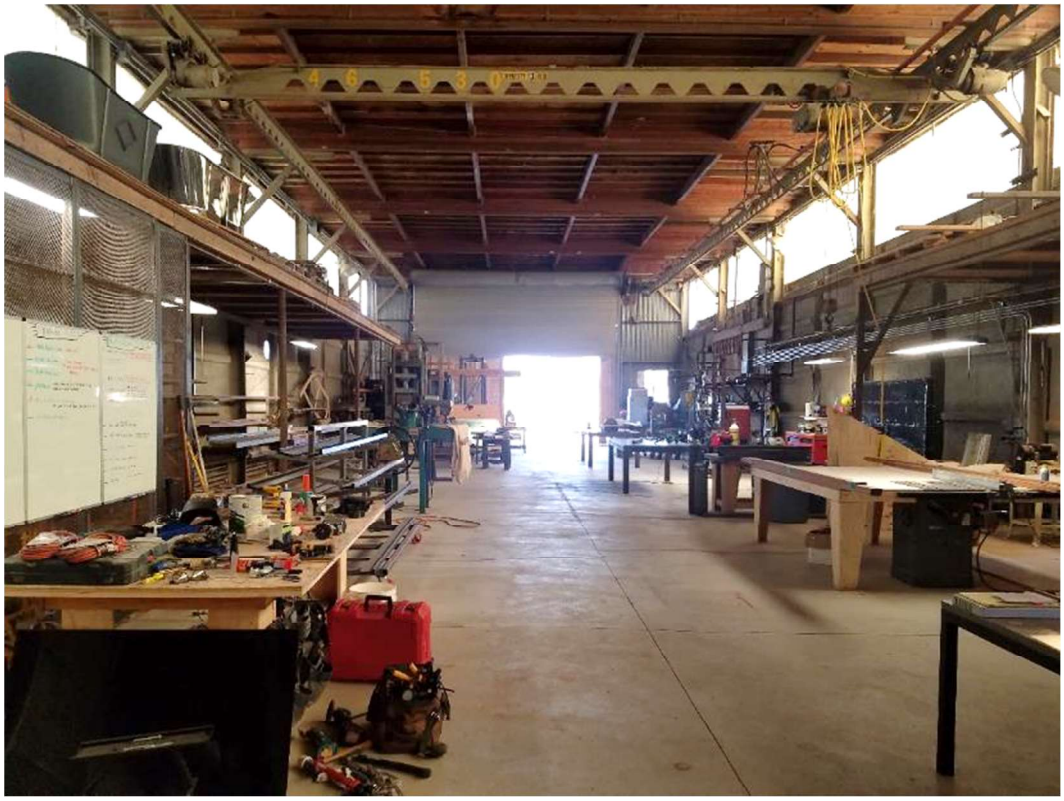
E-26. Looking north across southern waste disposal area with Napa Quarry in background (06/17/2021)).



E-27. Precast concrete settling or grit basin on edge of southern solid waste disposal area (06/17/2021).



E-28. Looking north at northern solid waste disposal area from edge of southern solid waste disposal area (06/17/2021).



E-29. Inside the Watershed building during Rammed Earthworks' occupancy (01/14/2020).



E-30. Example of a rammed earth piece and product storage immediately east of the Watershed building (01/14/2020).



E-31. Fenced enclosure for electrical transformers located east of the Watershed building (06/17/2021).



E-32. Water well (at left) and adjacent electrical transformer in east central portion of the site (06/17/2021).



E-33. Electrical transformer next to water well in east central portion of the site with blue decal indicating no PCBs (06/17/2021).



E-34. Apparently active water well in southeast corner of site (06/17/2021).



E-35. Water AST in southwest corner of site (06/17/2021). One of the visible pipelines appears to supply the east-adjoining Napa Quarry.



E-36. Water well located in the southeast corner of the site (01/14/2020).



E-37. Looking south at in-ground sump and water truck loading facility with Watershed building in background (06/17/2021).



E-38. Looking west at in-ground sump and water truck loading facility with Pacific Steel building in background (06/17/2021).

Appendix F

EDR Radius Map Report™ with GeoCheck®

AVOCET ENVIRONMENTAL, INC.

11 Basalt Road
11 Basalt Road
Napa, CA 94558

Inquiry Number: 6518186.2s
June 01, 2021

The EDR Radius Map™ Report with GeoCheck®

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

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Physical Setting Source Records Searched	PSGR-1

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TARGET PROPERTY INFORMATION

ADDRESS

11 BASALT ROAD
NAPA, CA 94558

COORDINATES

Latitude (North):	38.2673430 - 38˚ 16' 2.43''
Longitude (West):	122.2666230 - 122˚ 15' 59.84''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	564156.1
UTM Y (Meters):	4235526.0
Elevation:	42 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5602154 NAPA, CA
Version Date:	2012
Northeast Map:	5602148 MOUNT GEORGE, CA
Version Date:	2012
Southeast Map:	5602186 CORDELIA, CA
Version Date:	2012
Southwest Map:	5602106 CUTTINGS WHARF, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140608
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
11 BASALT ROAD
NAPA, CA 94558

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	WILSON UTILITY CONST	11 BASALT RD.	RCRA NonGen / NLR		TP
A2	RAMMED EARTH WORKS	11 BASALT ROAD	HWTS		TP
A3	MARK DIXON GENERAL E	11 BASALT RD	NPDES, CIWQS, HWTS		TP
A4	MARK DIXON GENERAL E	11 BASALT RD	RCRA NonGen / NLR		TP
A5	RAMMED EARTH WORKS,	11 BASALT ROAD	HWTS		TP
A6	MARK DIXON GENERAL E	11 BASALT RD	ECHO		TP
A7	PACIFIC STEEL GROUP	11 BASALT RD	FINDS		TP
A8	PACIFIC STEEL GROUP	11 BASALT RD	ECHO		TP
A9	RAMMED EARTH WORKS,	11 BASALT ROAD	RCRA NonGen / NLR		TP
A10	WILSON UTILITY CONST	11 BASALT RD.	HWTS		TP
A11	MARK DIXON GENERAL E	11 BASALT RD	FINDS		TP
12		PRIVATE ROAD IN THE	CHMIRS	Higher	1 ft.
13	SYAR INDUSTRIES	VANDEN RD	SWEEPS UST, CA FID UST	Higher	1 ft.
14	BASALT ROCK DUMPSITE	1 BASALT ROAD	SWF/LF, CERS	Higher	111, 0.021, SSE
15	NAPA QUARRY	2301 NAPA-VALLEHO HI	US MINES	Lower	252, 0.048, WSW
16	NAPA QUARRY	PO BOX 2540	MINES	Higher	581, 0.110, SE
17	SYAR INDUSTRIES NAPA	TOWER ROAD HWY 29	RCRA-SQG	Lower	624, 0.118, West
B18	R & M GRADING INC	2303 NAPA VALLEJO HW	RCRA NonGen / NLR	Lower	703, 0.133, WNW
19	PRIVATE RESIDENCE	PRIVATE RESIDENCE	LUST	Lower	704, 0.133, NW
B20	PACIFIC COAST SUPPLI	2301 NAPA VALLEJO HW	UST	Lower	710, 0.134, WNW
B21	PACIFIC COAST SUPPLI	2301 HWY 221	LUST, Cortese, HIST CORTESE, CERS	Lower	710, 0.134, WNW
B22	SYAR INDUSTRIES, INC	2301 NAPA-VALLEJO HI	RCRA-SQG, LUST, CPS-SLIC, AST, CERS HAZ WASTE,...	Lower	710, 0.134, WNW
B23	SYAR QUARRY SHOOTING	2301 NAPA - VALLEJO	RCRA-SQG	Lower	710, 0.134, WNW
B24	1X BASALT PRECAST	2301 NAPA VALLEJO HI	LUST, HAZNET, HWTS	Lower	710, 0.134, WNW
B25	INTERNATIONAL LINE B	2301 NAPA VALLEJO HW	RCRA NonGen / NLR	Lower	710, 0.134, WNW
B26	MARK DIXON	2301 NAPA VALLEJO HI	RCRA NonGen / NLR	Lower	710, 0.134, WNW
B27	NAPA SHOP	2301 NAPA-VALLEJO HI	US MINES	Lower	710, 0.134, WNW
B28	SUPERIOR EQUIPMENT C	2301 NAPA VALLEJO HW	RCRA NonGen / NLR	Lower	710, 0.134, WNW
B29	PACIFIC STEEL GROUP	2301 NAPA VALLEJO HW	RCRA NonGen / NLR	Lower	710, 0.134, WNW
B30	BASALITE ROCK DIV PA	2301 NAPA-VALLEJO HW	SEMS-ARCHIVE, RCRA-SQG	Lower	710, 0.134, WNW
B31	THE BASALT ROCK DIVI	2301 NAPA VALLEJO HW	HIST UST	Lower	710, 0.134, WNW
B32	BASALITE BLOCK/ROCK	2301 NAPA VALLEJO HW	SWEEPS UST, HIST UST, CA FID UST, FINDS, ECHO,...	Lower	710, 0.134, WNW
B33	NAPA SHOP	2301 NAPA-VALLEJO HI	ABANDONED MINES	Lower	710, 0.134, WNW
B34	SYAR INDUSTRIES, INC	2301 NAPA VALLEJO HW	UST	Lower	710, 0.134, WNW
B35	PACIFIC STEEL GROUP	2301 NAPA VALLEJO HW	LUST, CPS-SLIC, CERS HAZ WASTE, HIST UST, CHMIRS,...	Lower	710, 0.134, WNW
C36	NAPA VALLEY COLLEGE	NAPA-VALLEJO HWY	CA FID UST	Lower	1110, 0.210, NW
C37	NAPA VALLEY COLLEGE	NAPA-VALLEJO HWY	HIST UST	Lower	1110, 0.210, NW
C38	NAPA VALLEY COLLEGE	2277 STATE HIGHWAY 2	LUST	Lower	1270, 0.241, NW
D39	NAPA CITY KENNEDY PA	2295 STREBLOW DR	LUST, UST, Cortese	Lower	1916, 0.363, WNW

MAPPED SITES SUMMARY

Target Property Address:
11 BASALT ROAD
NAPA, CA 94558

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
D40	NAPA CITY KENNEDY PA	2295 STREBLOW	LUST, CERS HAZ WASTE, HIST CORTESE, CERS	Lower	1916, 0.363, WNW
41	NAPA STATE HOSPITAL	NAPA STATE HOSPITAL	SWF/LF, CERS	Higher	2180, 0.413, NNE
E42	NAPA VALLEY COLLEGE	2277 NAPA VALLEJO HW	Cortese, HAZNET, HWTS	Lower	2315, 0.438, NW
E43	NAPA VALLEY COLLEGE	2277 NAPA VALLEJO HW	LUST, UST, FINDS	Lower	2315, 0.438, NW
E44	NAPA VALLEY COLLEGE	2277 NAPA VALLEJO HW	LUST, HIST CORTESE	Lower	2315, 0.438, NW
E45	NAPA VALLEY COLLEGE	2277 NAPA-VALLEJO HW	SWF/LF, CERS	Lower	2315, 0.438, NW
46	THE BASALT ROCK DIVI	2301 NAPA-VALLEJO HI	ENVIROSTOR, VCP, HIST UST	Lower	2633, 0.499, SW
47	860 KAISER ROAD	860 KAISER ROAD	ENVIROSTOR, VCP, DEED	Lower	2703, 0.512, SSW
48	NOVA GROUP, INC.	7411 NAPA-VALLEJO HI	ENVIROSTOR	Lower	4691, 0.888, SSW
F49	NAPA PIPE CORPORATIO	1025 KAISER ROAD	Notify 65	Lower	4831, 0.915, SW
F50	NAPA PIPE CORPORATIO	1025 KAISER ROAD	EMI, Notify 65	Lower	4831, 0.915, SW
F51	NAPA PIPE - SLIC/SUB	1025 KAISER ROAD	ENVIROSTOR, LUST, CPS-SLIC, ENF, HIST CORTESE,...	Lower	4831, 0.915, SW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 9 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
WILSON UTILITY CONST 11 BASALT RD. NAPA, CA 94559	RCRA NonGen / NLR	CAC003100246
RAMMED EARTH WORKS 11 BASALT ROAD NAPA, CA 94558	HWTS	N/A
MARK DIXON GENERAL E 11 BASALT RD NAPA, CA 94559	NPDES Facility Status: Active CIWQS HWTS	N/A
MARK DIXON GENERAL E 11 BASALT RD NAPA, CA 94559	RCRA NonGen / NLR EPA ID:: CAC003050914	CAC003050914
RAMMED EARTH WORKS, 11 BASALT ROAD NAPA, CA 94558	HWTS	N/A
MARK DIXON GENERAL E 11 BASALT RD NAPA, CA 94559	ECHO Registry ID: 110070719132	N/A
PACIFIC STEEL GROUP 11 BASALT RD NAPA, CA 94559	FINDS	N/A
PACIFIC STEEL GROUP 11 BASALT RD NAPA, CA 94559	ECHO Registry ID: 110070792466	N/A
RAMMED EARTH WORKS, 11 BASALT ROAD NAPA, CA 94558	RCRA NonGen / NLR	CAC003108905
WILSON UTILITY CONST 11 BASALT RD. NAPA, CA 94559	HWTS	N/A
MARK DIXON GENERAL E 11 BASALT RD NAPA, CA 94559	FINDS	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 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-VSQG ---------- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROLS ---------- Institutional Controls Sites List

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ---------- State Response Sites

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
INDIAN UST - Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP - Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS - Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS - A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

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

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
PFAS - PFAS Contamination Site Location Listing

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
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
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
UXO	Unexploded Ordnance Sites
DOCKET HWC	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN	Bond Expenditure Plan
CUPA Listings	CUPA Resources List
DRYCLEANERS	Cleaner Facilities
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
HAZNET	Facility and Manifest Data
ICE	ICE
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
MWMP	Medical Waste Management Program Listing
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database
UIC	UIC Listing
UIC GEO	UIC GEO (GEOTRACKER)
WASTEWATER PITS	Oil Wastewater Pits Listing
WDS	Waste Discharge System

WIP ---- Well Investigation Program Case List
MILITARY PRIV SITES ---- MILITARY PRIV SITES (GEOTRACKER)
PROJECT ---- PROJECT (GEOTRACKER)
WDR ---- Waste Discharge Requirements Listing
CERS ---- CERS
NON-CASE INFO ---- NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS ---- OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS ---- PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT ---- SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ ---- Well Stimulation Project (GEOTRACKER)
MINES MRDS ---- Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ---- EDR Proprietary Manufactured Gas Plants
EDR Hist Auto ---- EDR Exclusive Historical Auto Stations
EDR Hist Cleaner ---- EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF ---- Recovered Government Archive Solid Waste Facilities List
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 CERCLIS NFRAP site list

SEMS-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.

A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 04/27/2021 has revealed that there is 1 SEMS-ARCHIVE site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
BASALITE ROCK DIV PA Site ID: 0903121 EPA Id: CAD098325442	***2301 NAPA-VALLEJO HW***	***WNW 1/8 - 1/4 (0.134 mi.)***	***B30***	***82***

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 03/22/2021 has revealed that there are 4 RCRA-SQG sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SYAR INDUSTRIES NAPA EPA ID:: CAD983596214	TOWER ROAD HWY 29	W 0 - 1/8 (0.118 mi.)	17	34
SYAR INDUSTRIES, INC EPA ID:: CAD982470700	***2301 NAPA-VALLEJO HI***	***WNW 1/8 - 1/4 (0.134 mi.)***	***B22***	***45***
SYAR QUARRY SHOOTING EPA ID:: CAC002586497	2301 NAPA - VALLEJO	WNW 1/8 - 1/4 (0.134 mi.)	B23	59
BASALITE ROCK DIV PA EPA ID:: CAD098325442	***2301 NAPA-VALLEJO HW***	***WNW 1/8 - 1/4 (0.134 mi.)***	***B30***	***82***

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 01/25/2021 has revealed that there are

4 ENVIROSTOR sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
THE BASALT ROCK DIVI	***2301 NAPA-VALLEJO HI***	***SW 1/4 - 1/2 (0.499 mi.)***	***46***	***212***
Facility Id: 28990002				
Status: Certified				
860 KAISER ROAD	***860 KAISER ROAD***	***SSW 1/2 - 1 (0.512 mi.)***	***47***	***216***
Facility Id: 60002512				
Status: Certified O&M - Land Use Restrictions Only				
NOVA GROUP, INC.	7411 NAPA-VALLEJO HI	SSW 1/2 - 1 (0.888 mi.)	48	227
Facility Id: 71002524				
Status: Inactive - Needs Evaluation				
NAPA PIPE - SLIC/SUB	***1025 KAISER ROAD***	***SW 1/2 - 1 (0.915 mi.)***	***F51***	***236***
Facility Id: 71003039				
Facility Id: 28340003				
Status: Refer: Other Agency				
Status: Refer: RWQCB				

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

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Integrated Waste Management Board's Solid Waste Information System (SWIS) database.

A review of the SWF/LF list, as provided by EDR, has revealed that there are 3 SWF/LF sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BASALT ROCK DUMPSITE	***1 BASALT ROAD***	***SSE 0 - 1/8 (0.021 mi.)***	***14***	***25***
Database: SWF/LF (SWIS), Date of Government Version: 02/08/2021				
Facility ID: 28-CR-0005				
Operational Status: Closed				
Regulation Status: Unpermitted				
NAPA STATE HOSPITAL	***NAPA STATE HOSPITAL***	***NNE 1/4 - 1/2 (0.413 mi.)***	***41***	***131***
Database: SWF/LF (SWIS), Date of Government Version: 02/08/2021				
Facility ID: 28-AA-0008				
Operational Status: Closed				
Regulation Status: Exempt				

Lower Elevation	Address	Direction / Distance	Map ID	Page
NAPA VALLEY COLLEGE	***2277 NAPA-VALLEJO HW***	***NW 1/4 - 1/2 (0.438 mi.)***	***E45***	***211***
Database: SWF/LF (SWIS), Date of Government Version: 02/08/2021				
Facility ID: 28-AA-0029				
Operational Status: Closed				
Regulation Status: Unpermitted				

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 10 LUST sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PRIVATE RESIDENCE	PRIVATE RESIDENCE	NW 1/8 - 1/4 (0.133 mi.)	19	39
Database: LUST, Date of Government Version: 03/08/2021 Global Id: T0605500105 Status: Completed - Case Closed				
PACIFIC COAST SUPPLI	***2301 HWY 221***	***WNW 1/8 - 1/4 (0.134 mi.)***	***B21***	***41***
Database: LUST REG 2, Date of Government Version: 09/30/2004 Database: LUST, Date of Government Version: 03/08/2021 Facility Id: 28-0308 Facility Status: Case Closed Global Id: T0605500263 date9: 1/11/2002 Status: Completed - Case Closed				
SYAR INDUSTRIES, INC	***2301 NAPA-VALLEJO HI***	***WNW 1/8 - 1/4 (0.134 mi.)***	***B22***	***45***
Database: LUST REG 2, Date of Government Version: 09/30/2004 Facility Id: 28-0166 Facility Status: Preliminary site assessment underway				
1X BASALT PRECAST	***2301 NAPA VALLEJO HI***	***WNW 1/8 - 1/4 (0.134 mi.)***	***B24***	***63***
Database: NAPA CO. LUST, Date of Government Version: 01/09/2017 Status: Closed Permit ID: 248083				
PACIFIC STEEL GROUP	***2301 NAPA VALLEJO HW***	***WNW 1/8 - 1/4 (0.134 mi.)***	***B35***	***101***
Database: LUST, Date of Government Version: 03/08/2021 Global Id: T0605500150 Status: Completed - Case Closed				
NAPA VALLEY COLLEGE	2277 STATE HIGHWAY 2	NW 1/8 - 1/4 (0.241 mi.)	C38	121
Database: NAPA CO. LUST, Date of Government Version: 01/09/2017 Status: Closed Permit ID: 248293				
NAPA CITY KENNEDY PA	***2295 STREBLOW DR***	***WNW 1/4 - 1/2 (0.363 mi.)***	***D39***	***122***
Database: LUST REG 2, Date of Government Version: 09/30/2004 Facility Id: 28-0333 Facility Status: Case Closed date9: 6/10/2004				
NAPA CITY KENNEDY PA	***2295 STREBLOW***	***WNW 1/4 - 1/2 (0.363 mi.)***	***D40***	***123***
Database: NAPA CO. LUST, Date of Government Version: 01/09/2017 Database: LUST, Date of Government Version: 03/08/2021 Global Id: T0605500287 Status: Closed Permit ID: 248662 Status: Completed - Case Closed				
NAPA VALLEY COLLEGE	***2277 NAPA VALLEJO HW***	***NW 1/4 - 1/2 (0.438 mi.)***	***E43***	***206***
Database: LUST REG 2, Date of Government Version: 09/30/2004				

Facility Id: 28-0222
Facility Status: Case Closed
date9: 6/23/1995

NAPA VALLEY COLLEGE ***2277 NAPA VALLEJO HW*** ***NW 1/4 - 1/2 (0.438 mi.)*** ***E44*** ***209***
Database: LUST, Date of Government Version: 03/08/2021
Global Id: T0605500199
Status: Completed - Case Closed

CPS-SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the CPS-SLIC list, as provided by EDR, has revealed that there are 2 CPS-SLIC sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SYAR INDUSTRIES, INC	***2301 NAPA-VALLEJO HI***	***WNW 1/8 - 1/4 (0.134 mi.)***	***B22***	***45***
Database: SLIC REG 2, Date of Government Version: 09/30/2004				
PACIFIC STEEL GROUP	***2301 NAPA VALLEJO HW***	***WNW 1/8 - 1/4 (0.134 mi.)***	***B35***	***101***
Database: CPS-SLIC, Date of Government Version: 03/08/2021				
Facility Status: Completed - Case Closed				
Global Id: SL0605546286				

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, has revealed that there are 2 UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC COAST SUPPLI	2301 NAPA VALLEJO HW	WNW 1/8 - 1/4 (0.134 mi.)	B20	41
Database: NAPA CO. UST, Date of Government Version: 09/05/2019				
Facility Id: NAPA0013				
SYAR INDUSTRIES, INC	2301 NAPA VALLEJO HW	WNW 1/8 - 1/4 (0.134 mi.)	B34	101
Database: NAPA CO. UST, Date of Government Version: 09/05/2019				
Facility Id: NAPA0212				

AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the AST list, as provided by EDR, has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SYAR INDUSTRIES, INC	***2301 NAPA-VALLEJO HI***	***WNW 1/8 - 1/4 (0.134 mi.)***	***B22***	***45***
Database: AST, Date of Government Version: 07/06/2016				

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 01/25/2021 has revealed that there is 1 VCP site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
THE BASALT ROCK DIVI	***2301 NAPA-VALLEJO HI***	***SW 1/4 - 1/2 (0.499 mi.)***	***46***	***212***
Status: Certified				
Facility Id: 28990002				

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 01/20/2021 has revealed that there are 2 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SYAR INDUSTRIES, INC	***2301 NAPA-VALLEJO HI***	***WNW 1/8 - 1/4 (0.134 mi.)***	***B22***	***45***
PACIFIC STEEL GROUP	***2301 NAPA VALLEJO HW***	***WNW 1/8 - 1/4 (0.134 mi.)***	***B35***	***101***

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 2 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SYAR INDUSTRIES	***VANDEN RD***	***0 - 1/8 (0.000 mi.)***	***13***	***24***
Comp Number: 80148				

Lower Elevation	Address	Direction / Distance	Map ID	Page
BASALITE BLOCK/ROCK	***2301 NAPA VALLEJO HW***	***WNW 1/8 - 1/4 (0.134 mi.)***	***B32***	***88***
Status: A				

Tank Status: A
Comp Number: 1576

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 4 HIST UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
THE BASALT ROCK DIVI Facility Id: 00000000702	2301 NAPA VALLEJO HW	WNW 1/8 - 1/4 (0.134 mi.)	B31	87
BASALITE BLOCK/ROCK Facility Id: 00000001576	***2301 NAPA VALLEJO HW***	***WNW 1/8 - 1/4 (0.134 mi.)***	***B32***	***88***
PACIFIC STEEL GROUP	***2301 NAPA VALLEJO HW***	***WNW 1/8 - 1/4 (0.134 mi.)***	***B35***	***101***
NAPA VALLEY COLLEGE Facility Id: 00000065886	NAPA-VALLEJO HWY	NW 1/8 - 1/4 (0.210 mi.)	C37	120

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 3 CA FID UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SYAR INDUSTRIES Facility Id: 48002172 Status: I	***VANDEN RD***	***0 - 1/8 (0.000 mi.)***	***13***	***24***

Lower Elevation	Address	Direction / Distance	Map ID	Page
BASALITE BLOCK/ROCK Facility Id: 28000306 Status: A	***2301 NAPA VALLEJO HW***	***WNW 1/8 - 1/4 (0.134 mi.)***	***B32***	***88***
NAPA VALLEY COLLEGE Facility Id: 28001192 Status: A	NAPA-VALLEJO HWY	NW 1/8 - 1/4 (0.210 mi.)	C36	120

CERS TANKS: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

A review of the CERS TANKS list, as provided by EDR, and dated 01/20/2021 has revealed that there is 1 CERS TANKS site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SYAR INDUSTRIES, INC	***2301 NAPA-VALLEJO HI***	***WNW 1/8 - 1/4 (0.134 mi.)***	***B22***	***45***

Records of Emergency Release Reports

CHMIRS: The California Hazardous Material Incident Report System contains information on reported hazardous material incidents, i.e., accidental releases or spills. The source is the California Office of Emergency Services.

A review of the CHMIRS list, as provided by EDR, and dated 12/31/2020 has revealed that there is 1 CHMIRS site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported OES Incident Number: 15-6681	PRIVATE ROAD IN THE	0 - 1/8 (0.000 mi.)	12	23

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 03/22/2021 has revealed that there are 5 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
R & M GRADING INC EPA ID:: CAL000338303	2303 NAPA VALLEJO HW	WNW 1/8 - 1/4 (0.133 mi.)	B18	37
INTERNATIONAL LINE B EPA ID:: CAC003028417	2301 NAPA VALLEJO HW	WNW 1/8 - 1/4 (0.134 mi.)	B25	66
MARK DIXON EPA ID:: CAC003007236	2301 NAPA VALLEJO HI	WNW 1/8 - 1/4 (0.134 mi.)	B26	68
SUPERIOR EQUIPMENT C EPA ID:: CAL000310293	2301 NAPA VALLEJO HW	WNW 1/8 - 1/4 (0.134 mi.)	B28	77
PACIFIC STEEL GROUP EPA ID:: CAL000406246	2301 NAPA VALLEJO HW	WNW 1/8 - 1/4 (0.134 mi.)	B29	80

US MINES: Mines Master Index File. The source of this database is the Dept. of Labor, Mine Safety and Health Administration.

A review of the US MINES list, as provided by EDR, has revealed that there are 2 US MINES sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NAPA QUARRY Database: MINES VIOLATIONS, Date of Government Version: 11/24/2020	2301 NAPA-VALLEHO HI	WSW 0 - 1/8 (0.048 mi.)	15	27
NAPA SHOP Database: MINES VIOLATIONS, Date of Government Version: 11/24/2020	2301 NAPA-VALLEJO HI	WNW 1/8 - 1/4 (0.134 mi.)	B27	71

ABANDONED MINES: An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

A review of the ABANDONED MINES list, as provided by EDR, and dated 12/11/2020 has revealed that there is 1 ABANDONED MINES site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NAPA SHOP	2301 NAPA-VALLEJO HI	WNW 1/8 - 1/4 (0.134 mi.)	B33	100

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 (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 12/17/2020 has revealed that there are 4 Cortese sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC COAST SUPPLI	***2301 HWY 221***	***WNW 1/8 - 1/4 (0.134 mi.)***	***B21***	***41***
Cleanup Status: COMPLETED - CASE CLOSED				
SYAR INDUSTRIES, INC	***2301 NAPA-VALLEJO HI***	***WNW 1/8 - 1/4 (0.134 mi.)***	***B22***	***45***
Cleanup Status: COMPLETED - CASE CLOSED				
NAPA CITY KENNEDY PA	***2295 STREBLOW DR***	***WNW 1/4 - 1/2 (0.363 mi.)***	***D39***	***122***
Cleanup Status: COMPLETED - CASE CLOSED				
NAPA VALLEY COLLEGE	***2277 NAPA VALLEJO HW***	***NW 1/4 - 1/2 (0.438 mi.)***	***E42***	***133***
Cleanup Status: COMPLETED - CASE CLOSED				

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 4 HIST CORTESE sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC COAST SUPPLI	***2301 HWY 221***	***WNW 1/8 - 1/4 (0.134 mi.)***	***B21***	***41***
Reg Id: 28-0308				
PACIFIC STEEL GROUP	***2301 NAPA VALLEJO HW***	***WNW 1/8 - 1/4 (0.134 mi.)***	***B35***	***101***
Reg Id: 28-0166				
NAPA CITY KENNEDY PA	***2295 STREBLOW***	***WNW 1/4 - 1/2 (0.363 mi.)***	***D40***	***123***
Reg Id: 28-0333				
NAPA VALLEY COLLEGE	***2277 NAPA VALLEJO HW***	***NW 1/4 - 1/2 (0.438 mi.)***	***E44***	***209***
Reg Id: 28-0222				

MINES: A listing of mine site locations from the Office of Mine Reclamation.

A review of the MINES list, as provided by EDR, and dated 03/08/2021 has revealed that there is 1 MINES site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NAPA QUARRY	PO BOX 2540	SE 0 - 1/8 (0.110 mi.)	16	33

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 12/07/2020 has revealed that there are 2 Notify 65 sites within approximately 1 mile of the target property.

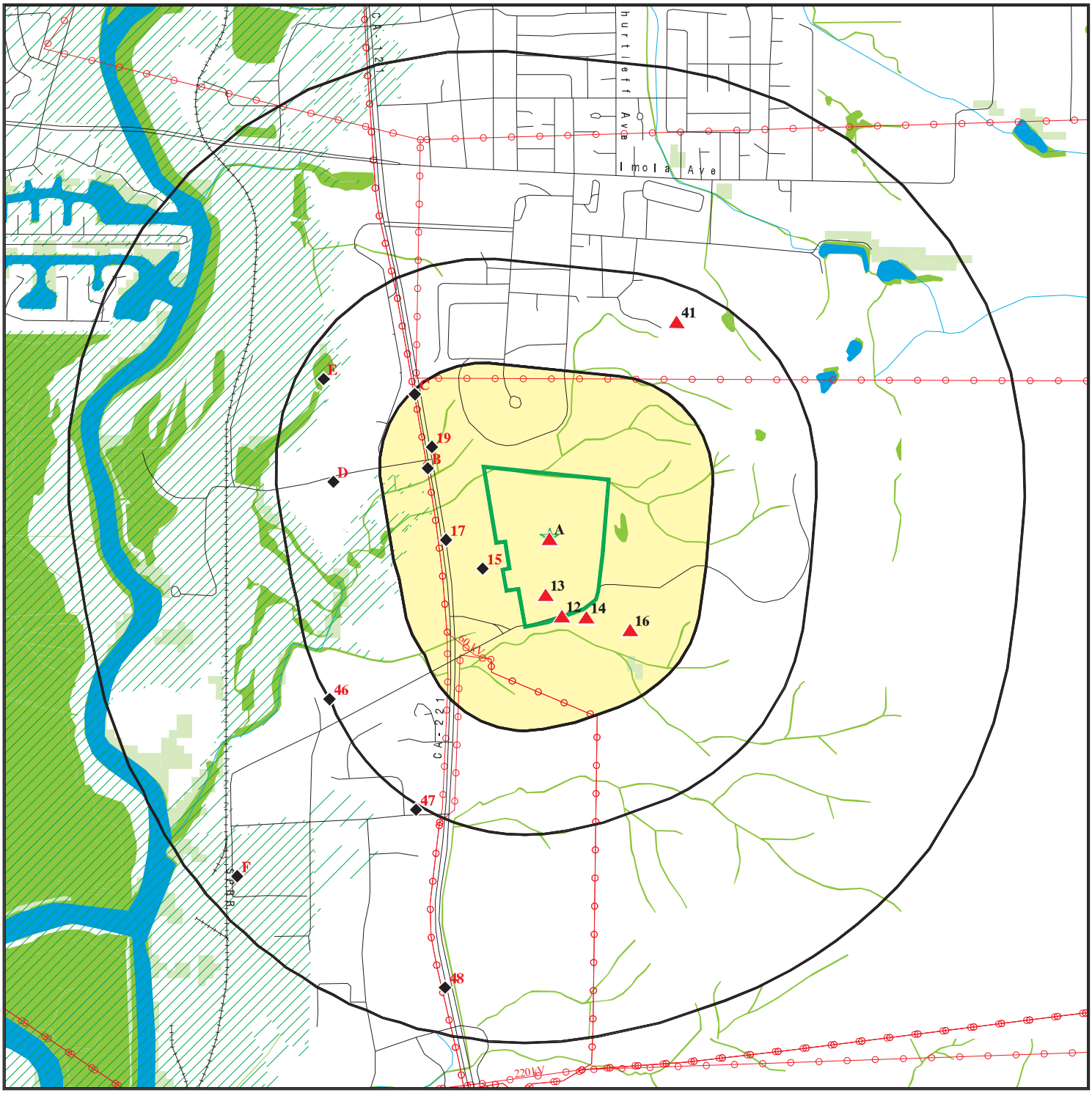
Lower Elevation	Address	Direction / Distance	Map ID	Page
NAPA PIPE CORPORATIO	1025 KAISER ROAD	SW 1/2 - 1 (0.915 mi.)	F49	229
NAPA PIPE CORPORATIO	***1025 KAISER ROAD***	***SW 1/2 - 1 (0.915 mi.)***	***F50***	***229***

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.

Site Name	Database(s)
NAPA PIPE CORP	SEMS-ARCHIVE, RCRA-SQG

OVERVIEW MAP - 6518186.2S



0 1/4 1/2 1 Miles

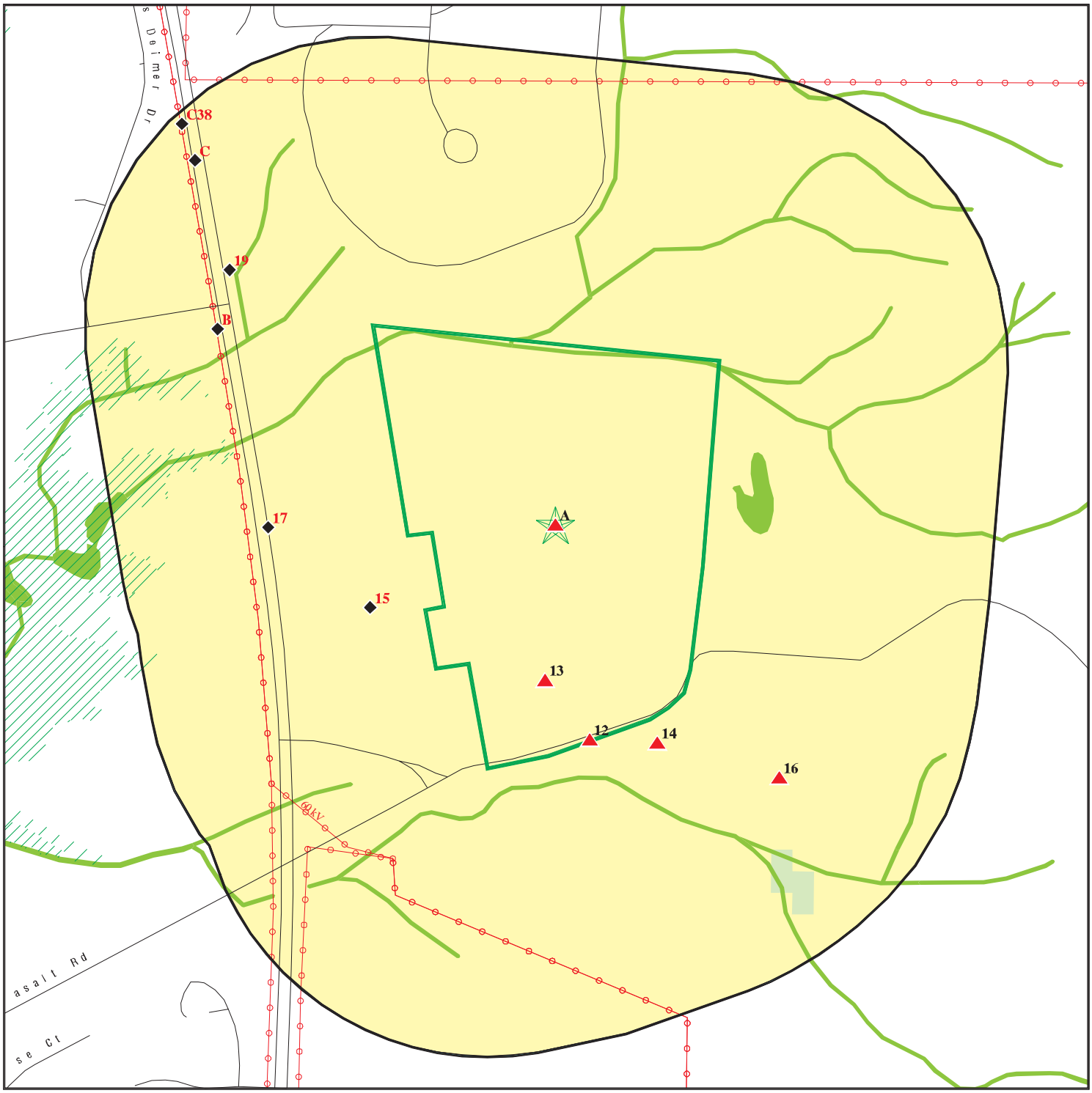
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- 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: 11 Basalt Road ADDRESS: 11 Basalt Road Napa CA 94558 LAT/LONG: 38.267343 / 122.266623	CLIENT: Avocet Environmental, Inc. CONTACT: Jessica Satterlee INQUIRY #: 6518186.2s DATE: June 01, 2021 8:20 pm

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DETAIL MAP - 6518186.2S



- 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
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- 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: 11 Basalt Road ADDRESS: 11 Basalt Road Napa CA 94558 LAT/LONG: 38.267343 / 122.266623	CLIENT: Avocet Environmental, Inc. CONTACT: Jessica Satterlee INQUIRY #: 6518186.2s DATE: June 01, 2021 8:21 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	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	1	0	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		1	3	NR	NR	NR	4
RCRA-VSQG	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	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	1	3	NR	4
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		1	0	2	NR	NR	3
State and tribal leaking storage tank lists								
LUST	0.500		0	6	4	NR	NR	10

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
CPS-SLIC	0.500		0	2	0	NR	NR	2
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	2	NR	NR	NR	2
AST	0.250		0	1	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	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	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		0	2	NR	NR	NR	2
US CDL	0.001		0	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	1	NR	NR	NR	2
HIST UST	0.250		0	4	NR	NR	NR	4
CA FID UST	0.250		1	2	NR	NR	NR	3
CERS TANKS	0.250		0	1	NR	NR	NR	1
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		1	NR	NR	NR	NR	1
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250	3	0	5	NR	NR	NR	8
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	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	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	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		1	1	NR	NR	NR	2
ABANDONED MINES	0.250		0	1	NR	NR	NR	1
FINDS	0.001	2	0	NR	NR	NR	NR	2
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001	2	0	NR	NR	NR	NR	2
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	2	2	NR	NR	4
CUPA Listings	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
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	2	2	NR	NR	4
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		1	0	NR	NR	NR	1
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001	1	0	NR	NR	NR	NR	1
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	2	NR	2
UIC	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
WDR	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001	1	0	NR	NR	NR	NR	1
CERS	0.001		0	NR	NR	NR	NR	0
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0
HWTS	TP	4	NR	NR	NR	NR	NR	4
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		13	7	36	12	5	0	73

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

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 Target Property **WILSON UTILITY CONSTRUCTION COMPANY**
11 BASALT RD.
NAPA, CA 94559

RCRA NonGen / NLR **1026712044** **CAC003100246**

Site 1 of 11 in cluster A

Actual: 42 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:	2021-01-11 00:00:00.0
Handler Name:	WILSON UTILITY CONSTRUCTION COMPANY
Handler Address:	11 BASALT RD.
Handler City,State,Zip:	NAPA, CA 94559
EPA ID:	CAC003100246
Contact Name:	DANIEL DEBRULER
Contact Address:	3395 LUYUNG DRIVE
Contact City,State,Zip:	RANCHO CORDOVA, CA 95742
Contact Telephone:	503-729-6205
Contact Fax:	Not reported
Contact Email:	DDEBRULER@WILSONCONST.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	3395 LUYUNG DRIVE
Mailing City,State,Zip:	RANCHO CORDOVA, CA 95742
Owner Name:	WILSON UTILITY CONSTRUCTION COMPANY
Owner Type:	Other
Operator Name:	DANIEL DEBRULER
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported

WILSON UTILITY CONSTRUCTION COMPANY (Continued) **1026712044**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2021-02-26 18:44:13.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	DANIEL DEBRULER
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	3395 LUYUNG DRIVE
Owner/Operator City,State,Zip:	RANCHO CORDOVA, CA 95742
Owner/Operator Telephone:	503-729-6205
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	WILSON UTILITY CONSTRUCTION COMPANY
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1190 NW 3RD
Owner/Operator City,State,Zip:	CANBY, OR 97013
Owner/Operator Telephone:	503-263-6882
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

WILSON UTILITY CONSTRUCTION COMPANY (Continued) **1026712044**

Historic Generators:
- Receive Date: 2021-01-11 00:00:00.0
- Handler Name: WILSON UTILITY CONSTRUCTION COMPANY
- Federal Waste Generator Description: Not a generator, verified
- State District Owner: Not reported
- Large Quantity Handler of Universal Waste: No
- Recognized Trader Importer: No
- Recognized Trader Exporter: No
- Spent Lead Acid Battery Importer: No
- Spent Lead Acid Battery Exporter: No
- Current Record: Yes
- Non Storage Recycler Activity: No
- Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
- NAICS Code: 237120
- NAICS Description: OIL AND GAS PIPELINE AND RELATED STRUCTURES CONSTRUCTION

Facility Has Received Notices of Violations:
- Violations: No Violations Found

Evaluation Action Summary:
- Evaluations: No Evaluations Found

A2 Target Property **RAMMED EARTH WORKS** **HWTS** **S124658294**
11 BASALT ROAD **N/A**
NAPA, CA 94558

Site 2 of 11 in cluster A

Actual: 42 ft.

HWTS:
- Name: RAMMED EARTH WORKS
- Address: 11 BASALT ROAD
- Address 2: Not reported
- City,State,Zip: NAPA, CA 94558
- EPA ID: CAC002932886
- Inactive Date: 01/18/2018
- Create Date: 10/18/2017
- Last Act Date: 01/18/2018
- Mailing Name: Not reported
- Mailing Address: 11 BASALT ROAD
- Mailing Address 2: Not reported
- Mailing City,State,Zip: NAPA, CA 94558
- Owner Name: DAVID EASTON
- Owner Address: 11 BASALT ROAD
- Owner Address 2: Not reported
- Owner City,State,Zip: NAPA, CA 94558
- Contact Name: DAN ALVARADO
- Contact Address: 11 BASALT ROAD
- Contact Address 2: Not reported
- City,State,Zip: NAPA, CA 94558

NAICS:
- EPA ID: CAC002932886
- Create Date: 2017-10-18 13:16:20.840

RAMMED EARTH WORKS (Continued) **S124658294**

NAICS Code:	327999
NAICS Description:	All Other Miscellaneous Nonmetallic Mineral Product Manufacturing
Issued EPA ID Date:	2017-10-18 13:16:20.86000
Inactive Date:	2018-01-18 03:00:18.74700
Facility Name:	RAMMED EARTH WORKS
Facility Address:	11 BASALT ROAD
Facility Address 2:	Not reported
Facility City:	NAPA
Facility County:	Not reported
Facility State:	CA
Facility Zip:	94558

A3 **MARK DIXON GENERAL ENGINEERING** **NPDES S126101525**
Target **11 BASALT RD** **CIWQS N/A**
Property **NAPA, CA 94559** **HWTS**

Site 3 of 11 in cluster A

Actual: **42 ft.**

NPDES:

Name:	PACIFIC STEEL GROUP
Address:	11 BASALT RD
City,State,Zip:	NAPA, CA 94559
Facility Status:	Active
NPDES Number:	CAS000001
Region:	2
Agency Number:	0
Regulatory Measure ID:	513014
Place ID:	Not reported
Order Number:	97-03-DWQ
WDID:	2 28I028669
Regulatory Measure Type:	Enrollee
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	05/27/2020
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	11 Basalt Rd
Discharge Name:	Pacific Steel Group
Discharge City:	Napa
Discharge State:	California
Discharge Zip:	94559
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

Name:	PACIFIC STEEL GROUP
Address:	11 BASALT RD
City,State,Zip:	NAPA, CA 94559
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported

MARK DIXON GENERAL ENGINEERING (Continued) **S126101525**

Place ID:	Not reported
Order Number:	Not reported
WDID:	2 28I028669
Regulatory Measure Type:	Industrial
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Active
Status Date:	05/27/2020
Operator Name:	Pacific Steel Group
Operator Address:	11 Basalt Rd
Operator City:	Napa
Operator State:	California
Operator Zip:	94559

CIWQS:

Name:	PACIFIC STEEL GROUP
Address:	11 BASALT RD
City,State,Zip:	NAPA, CA 94559
Agency:	Pacific Steel Group
Agency Address:	11 Basalt Rd, Napa, CA 94559
Place/Project Type:	Industrial - Fabricated Structural Metal
SIC/NAICS:	3441
Region:	2
Program:	INDSTW
Regulatory Measure Status:	Active
Regulatory Measure Type:	Storm water industrial
Order Number:	2014-0057-DWQ
WDID:	2 28I028669
NPDES Number:	CAS000001
Adoption Date:	01/01/1900
Effective Date:	05/27/2020
Termination Date:	01/01/1900
Expiration/Review Date:	01/01/1900
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	38.26531
Longitude:	-122.2676

HWTS:

Name:	MARK DIXON GENERAL ENGINEERING
Address:	11 BASALT RD
Address 2:	Not reported
City,State,Zip:	NAPA, CA 94559
EPA ID:	CAC003050914

MARK DIXON GENERAL ENGINEERING (Continued) **S126101525**

Inactive Date:	04/14/2020
Create Date:	01/14/2020
Last Act Date:	04/15/2020
Mailing Name:	Not reported
Mailing Address:	11 BASALT RD
Mailing Address 2:	Not reported
Mailing City,State,Zip:	NAPA, CA 94559
Owner Name:	MARK DIXON
Owner Address:	11 BASALT RD
Owner Address 2:	Not reported
Owner City,State,Zip:	NAPA, CA 94559
Contact Name:	LARSEN ROSARIO
Contact Address:	11 BASALT RD
Contact Address 2:	Not reported
City,State,Zip:	NAPA, CA 94559

NAICS:

EPA ID:	CAC003050914
Create Date:	2020-01-14 10:55:27.707
NAICS Code:	238910
NAICS Description:	Site Preparation Contractors
Issued EPA ID Date:	2020-01-14 10:55:27.70700
Inactive Date:	2020-04-14 10:55:27.70700
Facility Name:	MARK DIXON GENERAL ENGINEERING
Facility Address:	11 BASALT RD
Facility Address 2:	Not reported
Facility City:	NAPA
Facility County:	Not reported
Facility State:	CA
Facility Zip:	94559

EPA ID:	CAC003050914
Create Date:	2020-01-14 10:55:27.707
NAICS Code:	238910
NAICS Description:	Site Preparation Contractors
Issued EPA ID Date:	2020-01-14 10:55:27.70700
Inactive Date:	2020-04-14 10:55:27.70700
Facility Name:	MARK DIXON GENERAL ENGINEERING
Facility Address:	11 BASALT RD
Facility Address 2:	Not reported
Facility City:	NAPA
Facility County:	Not reported
Facility State:	CA
Facility Zip:	94559

A4 **MARK DIXON GENERAL ENGINEERING** **RCRA NonGen / NLR** **1026044589**
Target **11 BASALT RD** **CAC003050914**
Property **NAPA, CA 94559**

Site 4 of 11 in cluster A

Actual: **42 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:	2020-01-14 00:00:00.0
Handler Name:	MARK DIXON GENERAL ENGINEERING
Handler Address:	11 BASALT RD
Handler City,State,Zip:	NAPA, CA 94559
EPA ID:	CAC003050914

MARK DIXON GENERAL ENGINEERING (Continued) **1026044589**

Contact Name:	LARSEN ROSARIO
Contact Address:	11 BASALT RD
Contact City,State,Zip:	NAPA, CA 94559
Contact Telephone:	516-946-6887
Contact Fax:	Not reported
Contact Email:	LARSENCOFFEE@GMAIL.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	11 BASALT RD
Mailing City,State,Zip:	NAPA, CA 94559
Owner Name:	MARK DIXON
Owner Type:	Other
Operator Name:	LARSEN ROSARIO
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No

MARK DIXON GENERAL ENGINEERING (Continued) **1026044589**

Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2020-02-10 17:52:33.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	MARK DIXON
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	11 BASALT RD
Owner/Operator City,State,Zip:	NAPA, CA 94559
Owner/Operator Telephone:	707-322-0912
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	LARSEN ROSARIO
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	11 BASALT RD
Owner/Operator City,State,Zip:	NAPA, CA 94559
Owner/Operator Telephone:	516-946-6887
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2020-01-14 00:00:00.0
Handler Name:	MARK DIXON GENERAL ENGINEERING
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No

MARK DIXON GENERAL ENGINEERING (Continued) **1026044589**

Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 238910
NAICS Description: SITE PREPARATION CONTRACTORS

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

A5 **RAMMED EARTH WORKS, LLC** **HWTS** **S127118349**
Target **11 BASALT ROAD** **N/A**
Property **NAPA, CA 94558**

Site 5 of 11 in cluster A

Actual: **42 ft.**

HWTS:
Name: RAMMED EARTH WORKS, LLC
Address: 11 BASALT ROAD
Address 2: Not reported
City,State,Zip: NAPA, CA 94558
EPA ID: CAC003108905
Inactive Date: Not reported
Create Date: 03/08/2021
Last Act Date: 03/08/2021
Mailing Name: Not reported
Mailing Address: 11 BASALT ROAD
Mailing Address 2: Not reported
Mailing City,State,Zip: NAPA, CA 94558
Owner Name: CYNTHIA }WRIGHT
Owner Address: 11 BASALT ROAD
Owner Address 2: Not reported
Owner City,State,Zip: NAPA, CA 94558
Contact Name: DAN ALVARADO
Contact Address: 11 BASALT ROAD
Contact Address 2: Not reported
City,State,Zip: NAPA, CA 94558

NAICS:
EPA ID: CAC003108905
Create Date: 2021-03-08 12:10:36.923
NAICS Code: 236118
NAICS Description: Residential Remodelers
Issued EPA ID Date: 2021-03-08 12:10:36.92700
Inactive Date: Not reported
Facility Name: RAMMED EARTH WORKS, LLC
Facility Address: 11 BASALT ROAD
Facility Address 2: Not reported
Facility City: NAPA
Facility County: Not reported
Facility State: CA

RAMMED EARTH WORKS, LLC (Continued) **S127118349**

Facility Zip: 94558

EPA ID: CAC003108905
Create Date: 2021-03-08 12:10:36.923
NAICS Code: 236118
NAICS Description: Residential Remodelers
Issued EPA ID Date: 2021-03-08 12:10:36.92700
Inactive Date: Not reported
Facility Name: RAMMED EARTH WORKS, LLC
Facility Address: 11 BASALT ROAD
Facility Address 2: Not reported
Facility City: NAPA
Facility County: Not reported
Facility State: CA
Facility Zip: 94558

A6 **MARK DIXON GENERAL ENGINEERING** **ECHO** **1026143310**
Target Property **11 BASALT RD** **N/A**
NAPA, CA 94559

Site 6 of 11 in cluster A

Actual: 42 ft.

ECHO:
Envid: 1026143310
Registry ID: 110070719132
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110070719132
Name: MARK DIXON GENERAL ENGINEERING
Address: 11 BASALT RD
City,State,Zip: NAPA, CA 94559

A7 **PACIFIC STEEL GROUP** **FINDS** **1026436816**
Target Property **11 BASALT RD** **N/A**
NAPA, CA 94559

Site 7 of 11 in cluster A

Actual: 42 ft.

FINDS:
Registry ID: 110070792466

Click Here:

Environmental Interest/Information System:
US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

A8 **PACIFIC STEEL GROUP** **ECHO** **1026209530**
Target **11 BASALT RD** **N/A**
Property **NAPA, CA 94559**

Site 8 of 11 in cluster A

Actual: ECHO:
42 ft.

Envid:	1026209530
Registry ID:	110070792466
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110070792466
Name:	PACIFIC STEEL GROUP
Address:	11 BASALT RD
City,State,Zip:	NAPA, CA 94559

A9 **RAMMED EARTH WORKS, LLC** **RCRA NonGen / NLR** **1026720212**
Target **11 BASALT ROAD** **CAC003108905**
Property **NAPA, CA 94558**

Site 9 of 11 in cluster A

Actual: RCRA NonGen / NLR:
42 ft.

Date Form Received by Agency:	2021-03-08 00:00:00.0
Handler Name:	RAMMED EARTH WORKS, LLC
Handler Address:	11 BASALT ROAD
Handler City,State,Zip:	NAPA, CA 94558
EPA ID:	CAC003108905
Contact Name:	DAN ALVARADO
Contact Address:	11 BASALT ROAD
Contact City,State,Zip:	NAPA, CA 94558
Contact Telephone:	408-592-4008
Contact Fax:	Not reported
Contact Email:	DAN@RAMMEDEARTHWORKS.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	11 BASALT ROAD
Mailing City,State,Zip:	NAPA, CA 94558
Owner Name:	CYNTHIA }WRIGHT
Owner Type:	Other
Operator Name:	DAN ALVARADO
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No

RAMMED EARTH WORKS, LLC (Continued) **1026720212**

Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2021-03-12 19:46:10.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	CYNTHIA }WRIGHT
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	11 BASALT ROAD
Owner/Operator City,State,Zip:	NAPA, CA 94558
Owner/Operator Telephone:	408-592-4008
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

RAMMED EARTH WORKS, LLC (Continued) **1026720212**

Owner/Operator Indicator:	Operator
Owner/Operator Name:	DAN ALVARADO
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	11 BASALT ROAD
Owner/Operator City,State,Zip:	NAPA, CA 94558
Owner/Operator Telephone:	408-592-4008
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2021-03-08 00:00:00.0
Handler Name:	RAMMED EARTH WORKS, LLC
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

List of NAICS Codes and Descriptions:

NAICS Code:	236118
NAICS Description:	RESIDENTIAL REMODELERS

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

A10 **WILSON UTILITY CONSTRUCTION COMPANY** **HWTS** **S127110367**
Target **11 BASALT RD.** **N/A**
Property **NAPA, CA 94559**

Site 10 of 11 in cluster A

Actual:
42 ft.

HWTS:

Name:	WILSON UTILITY CONSTRUCTION COMPANY
Address:	11 BASALT RD.
Address 2:	Not reported
City,State,Zip:	NAPA, CA 94559
EPA ID:	CAC003100246
Inactive Date:	Not reported
Create Date:	01/11/2021
Last Act Date:	01/11/2021
Mailing Name:	Not reported
Mailing Address:	3395 LUYUNG DRIVE
Mailing Address 2:	Not reported
Mailing City,State,Zip:	RANCHO CORDOVA, CA 95742

WILSON UTILITY CONSTRUCTION COMPANY (Continued) **S127110367**

Owner Name: WILSON UTILITY CONSTRUCTION COMPANY
Owner Address: 1190 NW 3RD
Owner Address 2: Not reported
Owner City,State,Zip: CANBY, OR 97013
Contact Name: DANIEL DEBRULER
Contact Address: 3395 LUYUNG DRIVE
Contact Address 2: Not reported
City,State,Zip: RANCHO CORDOVA, CA 95742

NAICS:
EPA ID: CAC003100246
Create Date: 2021-01-11 09:35:51.490
NAICS Code: 237120
NAICS Description: Oil and Gas Pipeline and Related Structures Construction
Issued EPA ID Date: 2021-01-11 09:35:51.49000
Inactive Date: Not reported
Facility Name: WILSON UTILITY CONSTRUCTION COMPANY
Facility Address: 11 BASALT RD.
Facility Address 2: Not reported
Facility City: NAPA
Facility County: Not reported
Facility State: CA
Facility Zip: 94559

EPA ID: CAC003100246
Create Date: 2021-01-11 09:35:51.490
NAICS Code: 237120
NAICS Description: Oil and Gas Pipeline and Related Structures Construction
Issued EPA ID Date: 2021-01-11 09:35:51.49000
Inactive Date: Not reported
Facility Name: WILSON UTILITY CONSTRUCTION COMPANY
Facility Address: 11 BASALT RD.
Facility Address 2: Not reported
Facility City: NAPA
Facility County: Not reported
Facility State: CA
Facility Zip: 94559

A11 **MARK DIXON GENERAL ENGINEERING** **FINDS** **1026409437**
Target **11 BASALT RD** **N/A**
Property **NAPA, CA 94559**

Site 11 of 11 in cluster A

Actual:
42 ft.

FINDS:
Registry ID: 110070719132

Click Here:

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.

MARK DIXON GENERAL ENGINEERING (Continued) **1026409437**

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

12 **CHMIRS** **S118465610**
PRIVATE ROAD IN THE CORREY: 2301 NAPA/VALLEJO HWY **N/A**
< 1/8 **NAPA, CA**
1 ft.

Relative: Higher
Actual: 47 ft.

CHMIRS:

Name:	Not reported
Address:	PRIVATE ROAD IN THE CORREY: 2301 NAPA/VALLEJO HWY
City,State,Zip:	NAPA, CA
OES Incident Number:	15-6681
OES notification:	11/12/2015
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
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:	Road
Cleanup By:	Reporting Party
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Type:	PETROLEUM
Measure:	Gal(s)
Other:	Not reported
Date/Time:	1045
Year:	2015
Agency:	Syar Industries,
Incident Date:	11/11/2015
Admin Agency:	Napa County Department Environmental Management

(Continued) **S118465610**

Amount:	Not reported
Contained:	Yes
Site Type:	Not reported
E Date:	Not reported
Substance:	Hydraulic oil
Quantity Released:	30
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	No
#2 Pipeline:	No
#3 Pipeline:	No
#1 Vessel >= 300 Tons:	No
#2 Vessel >= 300 Tons:	No
#3 Vessel >= 300 Tons:	No
Evacs:	No
Injuries:	No
Fatals:	No
Comments:	Not reported
Description:	Caller states: a hydraulic leak occurred due to equipment failure. Release did not impact any water or waterways and the spill has been contained/cleaned up.

---

13 **SYAR INDUSTRIES** **SWEEPS UST** **S101595162**
VANDEN RD **CA FID UST** **N/A**
< 1/8 **NAPA, CA 94558**
1 ft.

Relative: Higher
Actual: 42 ft.

SWEEPS UST:

Name:	SYAR INDUSTRIES
Address:	VANDEN RD
City:	NAPA
Status:	Not reported
Comp Number:	80148
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:	Not reported
Tank Status:	Not reported
Capacity:	Not reported
Active Date:	Not reported
Tank Use:	Not reported
STG:	Not reported
Content:	Not reported
Number Of Tanks:	0

CA FID UST:

Facility ID:	48002172
Regulated By:	UTNKI
Regulated ID:	Not reported

SYAR INDUSTRIES (Continued) **S101595162**

Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	Not reported
Mail To:	Not reported
Mailing Address:	P.O. BOX 2540
Mailing Address 2:	Not reported
Mailing City,St,Zip:	NAPA 94558
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Inactive

---

14 **BASALT ROCK DUMPSITE** **SWF/LF** **S126327631**
SSE **1 BASALT ROAD** **CERS** **N/A**
< 1/8 **NAPA, CA 94559**
0.021 mi.
111 ft.

Relative:
Higher

Actual:
49 ft.

SWF/LF (SWIS):

Name:	BASALT ROCK DUMPSITE
Address:	1 BASALT ROAD
City,State,Zip:	NAPA, CA 94559
Region:	STATE
Facility ID:	28-CR-0005
SWIS Number:	28-CR-0005
Point of Contact:	Abel Martinez-Centeno
Is Archived:	No
Is Closed Illegal Abandoned:	No
Is Site Inert Debris Engineered Fill:	No
Is Financial Assurances Responsible:	No
Absorbed On:	Not reported
Operational Status:	Closed
Absorbed By:	Not reported
Closed Illegal Abandoned Category:	Not reported
EPA Federal Registry ID:	Not reported
ARB District:	Bay Area
SWRCB Region:	San Francisco Bay
Local Government:	Napa
Reporting Agency Legal Name:	County of Napa
Reporting Agency Department:	Planning Building & Environmt'l Services, Local Enforcement Agency
Enforcing Agency Legal Name:	County of Napa
Enforcing Agency Department:	Planning Building & Environmt'l Services, Local Enforcement Agency
Regulation Status:	Unpermitted

Activity:

SWIS Number:	28-CR-0005
Site Name:	Basalt Rock Dumpsite
Activity:	Solid Waste Disposal Site
Activity Is Archived:	No
Category:	Disposal
Activity Classification:	Solid Waste Disposal Site
WDR Number:	Not reported
WDR Landfill Class:	Not reported
Cease Operation:	Not reported
Cease Operation Type:	Not reported

BASALT ROCK DUMPSITE (Continued) **S126327631**

Inspection Frequency:	Quarterly
Throughput:	Not reported
Throughput Units:	Not reported
Remaining Capacity:	Not reported
Remaining Capacity Date:	Not reported
Capacity:	Not reported
Capacity Units:	Not reported
Total Acreage:	Not reported
Disposal Acreage:	Not reported
Permitted Elevation:	Not reported
Permitted Elevation Type:	Not reported
Permitted Depth:	Not reported
Permitted Depth Type:	Not reported
Point of Contact:	Abel Martinez-Centeno
Site Operational Status:	Closed
Site Regulatory Status:	Unpermitted
Site Is Archived:	No
Is Closed Illegal Abandoned:	No
Is Site Inert Debris Engineered Fill:	No
Is Financial Assurances Responsible:	No
Absorbed On:	Not reported
Absorbed By:	Not reported
Closed Illegal Abandoned Category:	Not reported
EPA Federal Registry ID:	Not reported
County:	Napa
ARB District:	Bay Area
SWRCB Region:	San Francisco Bay
Local Government:	Napa
Street Address:	1 Basalt Road
City:	Napa
State:	CA
ZIP Code:	94559
Reporting Agency Legal Name:	County of Napa
Reporting Agency Department:	Planning Building & Environmt'l Services, Local Enforcement Agency
Enforcing Agency Legal Name:	County of Napa
Enforcing Agency Department:	Planning Building & Environmt'l Services, Local Enforcement Agency

Owner:

SWIS Number:	28-CR-0005
Owner:	Boca Company
Owner Address:	3709 Seaport Blvd.
Owner City:	West Sacramento
Owner State:	CA
Owner Zip:	94574
Site Name:	Basalt Rock Dumpsite
Site Operational Status:	Closed
Site Type:	Disposal Only
Site Regulatory Status:	Unpermitted
Latitude:	38.26458
Longitude:	-122.26488
Is Archived:	No
Started On:	6/22/2020
Contact Name:	Renee Carter
Contact Title:	Not reported
Contact Email:	Not reported
Contact Phone:	(916) 373-0148

BASALT ROCK DUMPSITE (Continued) **S126327631**

CERS:

Name:	BASALT ROCK DUMPSITE
Address:	1 BASALT ROAD
City,State,Zip:	NAPA, CA
Site ID:	566776
CERS ID:	28-CR-0005
CERS Description:	Solid Waste and Recycle Sites

Affiliation:

Affiliation Type Desc:	Legal Owner
Entity Name:	Boca Company
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	West Sacramento
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94574
Affiliation Phone:	9163730148

15
WSW
< 1/8
0.048 mi.
252 ft.

NAPA QUARRY **US MINES** **1024906311**
2301 NAPA-VALLEHO HIGHWAY **N/A**
NAPA, CA 94558

Relative:
Lower

Actual:
40 ft.

MINES VIOLATIONS:

Name:	NAPA QUARRY
Address:	2301 NAPA-VALLEHO HIGHWAY
City,State,Zip:	NAPA, CA 94558
Facility ID:	Not reported

MINES VIOLATIONS:

Violation Number:	9377846
Mine ID:	0400023
Contractor ID:	Not reported
Date Issued:	4/26/2019
Action Type:	104(a)
Type of Issue:	Citation
S and S:	N
Term Date:	4/26/2019
Title 30 Code of Federal Regulations:	56.12025
Proposed Penalty:	474.00
Assessment Amount:	474.00
Paid Penalty Amount:	474.00
Assessment Case Status:	Closed
Assessment Status:	Proposed
Year:	2019
Address Type:	MineLocation
PO Box:	Not reported
Address:	2301 NAPA-VALLEHO HIGHWAY
City:	NAPA
State:	CA
Operator:	Syar Industries Inc
Zip:	94558
Mine Controller Name:	James M Syar
Name:	NAPA QUARRY
Ownership Date:	5/7/1986

NAPA QUARRY (Continued) **1024906311**

Mine Status:	Active
Status Date:	3/2/1976
Primary Site Description:	Sand, Industrial NEC
Mine Type:	Surface
State 2:	CA
County:	NAPA
Violation Number:	9433194
Mine ID:	0400023
Contractor ID:	Not reported
Date Issued:	7/2/2019
Action Type:	104(a)
Type of Issue:	Citation
S and S:	N
Term Date:	7/2/2019
Title 30 Code of Federal Regulations:	56.14207
Proposed Penalty:	121.00
Assessment Amount:	121.00
Paid Penalty Amount:	121.00
Assessment Case Status:	Closed
Assessment Status:	Proposed
Year:	2019
Address Type:	MineLocation
PO Box:	Not reported
Address:	2301 NAPA-VALLEHO HIGHWAY
City:	NAPA
State:	CA
Operator:	Syar Industries Inc
Zip:	94558
Mine Controller Name:	James M Syar
Name:	NAPA QUARRY
Ownership Date:	5/7/1986
Mine Status:	Active
Status Date:	3/2/1976
Primary Site Description:	Sand, Industrial NEC
Mine Type:	Surface
State 2:	CA
County:	NAPA
Violation Number:	9433195
Mine ID:	0400023
Contractor ID:	Not reported
Date Issued:	7/8/2019
Action Type:	104(a)
Type of Issue:	Citation
S and S:	N
Term Date:	7/8/2019
Title 30 Code of Federal Regulations:	50.30(a)
Proposed Penalty:	121.00
Assessment Amount:	121.00
Paid Penalty Amount:	121.00
Assessment Case Status:	Closed
Assessment Status:	Proposed
Year:	2019
Address Type:	MineLocation
PO Box:	Not reported
Address:	2301 NAPA-VALLEHO HIGHWAY

NAPA QUARRY (Continued) **1024906311**

City:	NAPA
State:	CA
Operator:	Syar Industries Inc
Zip:	94558
Mine Controller Name:	James M Syar
Name:	NAPA QUARRY
Ownership Date:	5/7/1986
Mine Status:	Active
Status Date:	3/2/1976
Primary Site Description:	Sand, Industrial NEC
Mine Type:	Surface
State 2:	CA
County:	NAPA
Violation Number:	9502214
Mine ID:	0400023
Contractor ID:	Not reported
Date Issued:	1/9/2020
Action Type:	104(a)
Type of Issue:	Citation
S and S:	N
Term Date:	1/9/2020
Title 30 Code of Federal Regulations:	56.12032
Proposed Penalty:	123.00
Assessment Amount:	123.00
Paid Penalty Amount:	123.00
Assessment Case Status:	Closed
Assessment Status:	Proposed
Year:	2020
Address Type:	MineLocation
PO Box:	Not reported
Address:	2301 NAPA-VALLEHO HIGHWAY
City:	NAPA
State:	CA
Operator:	Syar Industries Inc
Zip:	94558
Mine Controller Name:	James M Syar
Name:	NAPA QUARRY
Ownership Date:	5/7/1986
Mine Status:	Active
Status Date:	3/2/1976
Primary Site Description:	Sand, Industrial NEC
Mine Type:	Surface
State 2:	CA
County:	NAPA
Violation Number:	8991888
Mine ID:	0400023
Contractor ID:	Not reported
Date Issued:	8/8/2017
Action Type:	104(a)
Type of Issue:	Citation
S and S:	N
Term Date:	8/8/2017
Title 30 Code of Federal Regulations:	56.12001
Proposed Penalty:	116.00
Assessment Amount:	116.00

NAPA QUARRY (Continued) **1024906311**

Paid Penalty Amount:	116.00
Assessment Case Status:	Closed
Assessment Status:	Proposed
Year:	2017
Address Type:	MineLocation
PO Box:	Not reported
Address:	2301 NAPA-VALLEHO HIGHWAY
City:	NAPA
State:	CA
Operator:	Syar Industries Inc
Zip:	94558
Mine Controller Name:	James M Syar
Name:	NAPA QUARRY
Ownership Date:	5/7/1986
Mine Status:	Active
Status Date:	3/2/1976
Primary Site Description:	Sand, Industrial NEC
Mine Type:	Surface
State 2:	CA
County:	NAPA

Violation Number:	8991889
Mine ID:	0400023
Contractor ID:	Not reported
Date Issued:	8/8/2017
Action Type:	104(a)
Type of Issue:	Citation
S and S:	N
Term Date:	8/9/2017
Title 30 Code of Federal Regulations:	56.12002
Proposed Penalty:	116.00
Assessment Amount:	116.00
Paid Penalty Amount:	116.00
Assessment Case Status:	Closed
Assessment Status:	Proposed
Year:	2017
Address Type:	MineLocation
PO Box:	Not reported
Address:	2301 NAPA-VALLEHO HIGHWAY
City:	NAPA
State:	CA
Operator:	Syar Industries Inc
Zip:	94558
Mine Controller Name:	James M Syar
Name:	NAPA QUARRY
Ownership Date:	5/7/1986
Mine Status:	Active
Status Date:	3/2/1976
Primary Site Description:	Sand, Industrial NEC
Mine Type:	Surface
State 2:	CA
County:	NAPA

Violation Number:	8991890
Mine ID:	0400023
Contractor ID:	Not reported
Date Issued:	8/9/2017

NAPA QUARRY (Continued) **1024906311**

Action Type:	104(a)
Type of Issue:	Citation
S and S:	N
Term Date:	8/9/2017
Title 30 Code of Federal Regulations:	56.11027
Proposed Penalty:	116.00
Assessment Amount:	116.00
Paid Penalty Amount:	116.00
Assessment Case Status:	Closed
Assessment Status:	Proposed
Year:	2017
Address Type:	MineLocation
PO Box:	Not reported
Address:	2301 NAPA-VALLEHO HIGHWAY
City:	NAPA
State:	CA
Operator:	Syar Industries Inc
Zip:	94558
Mine Controller Name:	James M Syar
Name:	NAPA QUARRY
Ownership Date:	5/7/1986
Mine Status:	Active
Status Date:	3/2/1976
Primary Site Description:	Sand, Industrial NEC
Mine Type:	Surface
State 2:	CA
County:	NAPA

Violation Number:	8785850
Mine ID:	0400023
Contractor ID:	Not reported
Date Issued:	08/20/2014
Action Type:	104(a)
Type of Issue:	Citation
S and S:	N
Term Date:	08/20/2014
Title 30 Code of Federal Regulations:	56.9300(a)
Proposed Penalty:	100.00
Assessment Amount:	100.00
Paid Penalty Amount:	100.00
Assessment Case Status:	Proposed
Assessment Status:	Closed
Year:	2014
Address Type:	MineLocation
PO Box:	Not reported
Address:	2301 NAPA-VALLEHO HIGHWAY
City:	NAPA
State:	CA
Operator:	Syar Industries Inc
Zip:	94558
Mine Controller Name:	James M Syar
Name:	NAPA QUARRY
Ownership Date:	05/07/1986
Mine Status:	Active
Status Date:	03/02/1976
Primary Site Description:	Sand, Industrial NEC
Mine Type:	Surface

NAPA QUARRY (Continued) **1024906311**

State 2:	CA
County:	NAPA
Violation Number:	8785851
Mine ID:	0400023
Contractor ID:	Not reported
Date Issued:	08/21/2014
Action Type:	104(a)
Type of Issue:	Citation
S and S:	N
Term Date:	09/03/2014
Title 30 Code of Federal Regulations:	56.14109
Proposed Penalty:	100.00
Assessment Amount:	100.00
Paid Penalty Amount:	100.00
Assessment Case Status:	Proposed
Assessment Status:	Closed
Year:	2014
Address Type:	MineLocation
PO Box:	Not reported
Address:	2301 NAPA-VALLEHO HIGHWAY
City:	NAPA
State:	CA
Operator:	Syar Industries Inc
Zip:	94558
Mine Controller Name:	James M Syar
Name:	NAPA QUARRY
Ownership Date:	05/07/1986
Mine Status:	Active
Status Date:	03/02/1976
Primary Site Description:	Sand, Industrial NEC
Mine Type:	Surface
State 2:	CA
County:	NAPA
Violation Number:	8785852
Mine ID:	0400023
Contractor ID:	Not reported
Date Issued:	08/21/2014
Action Type:	104(a)
Type of Issue:	Citation
S and S:	N
Term Date:	09/03/2014
Title 30 Code of Federal Regulations:	56.14107(a)
Proposed Penalty:	100.00
Assessment Amount:	100.00
Paid Penalty Amount:	100.00
Assessment Case Status:	Proposed
Assessment Status:	Closed
Year:	2014
Address Type:	MineLocation
PO Box:	Not reported
Address:	2301 NAPA-VALLEHO HIGHWAY
City:	NAPA
State:	CA
Operator:	Syar Industries Inc
Zip:	94558

NAPA QUARRY (Continued) **1024906311**

Mine Controller Name:	James M Syar
Name:	NAPA QUARRY
Ownership Date:	05/07/1986
Mine Status:	Active
Status Date:	03/02/1976
Primary Site Description:	Sand, Industrial NEC
Mine Type:	Surface
State 2:	CA
County:	NAPA
Violation Number:	8785853
Mine ID:	0400023
Contractor ID:	Not reported
Date Issued:	08/21/2014
Action Type:	104(a)
Type of Issue:	Citation
S and S:	N
Term Date:	09/03/2014
Title 30 Code of Federal Regulations:	56.14112(a)(1)
Proposed Penalty:	100.00
Assessment Amount:	100.00
Paid Penalty Amount:	100.00
Assessment Case Status:	Proposed
Assessment Status:	Closed
Year:	2014
Address Type:	MineLocation
PO Box:	Not reported
Address:	2301 NAPA-VALLEHO HIGHWAY
City:	NAPA
State:	CA
Operator:	Syar Industries Inc
Zip:	94558
Mine Controller Name:	James M Syar
Name:	NAPA QUARRY
Ownership Date:	05/07/1986
Mine Status:	Active
Status Date:	03/02/1976
Primary Site Description:	Sand, Industrial NEC
Mine Type:	Surface
State 2:	CA
County:	NAPA

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

16
SE
< 1/8
0.110 mi.
581 ft.

NAPA QUARRY
PO BOX 2540
, CA

MINES **S117662172**
N/A

Relative:
Higher

Actual:
65 ft.

MINES:

Name:	NAPA QUARRY
Address:	PO BOX 2540
City,State,Zip:	CA
Latitude:	38.264167
Longitude:	-122.263056

NAPA QUARRY (Continued) **S117662172**

Lead Agency identification code:	28
Lead Agency name:	County of Napa
Year of the operator supplied annual report:	2019
Type of report submitted by operator:	2
Number of acres disturbed by the mine:	255
Status of mining operation:	ACTIVE
Status of mine reclamation:	RECLAMATION NOT STARTED
Mine operator:	SYAR INDUSTRIES INC
Operator Address:	PO BOX 2540
Operator City, State, Zip:	NAPA, CA 94558
Operator County:	Not reported
Mine owner:	SYAR INDUSTRIES INC
Owner Address:	PO BOX 2540
Owner City, State, Zip:	NAPA, CA 94558
Owner County:	Not reported
Reclamation plan identification number:	2225
Primary product produced by the mine:	Stone
Other products produced by the mine:	Not reported
Type of mining utilized by mine:	QUARRY
Conditional use permit identification number:	Not reported
Number of acres permitted for mining disturbance:	603
Total amount of funds posted by the mine for reclamation:	4208899.46
Financial Assurance Cost Estimate for reclamation:	4004359.51

---

17 **SYAR INDUSTRIES NAPA SHOP** **RCRA-SQG** **1000595669**
West **TOWER ROAD HWY 29** **CAD983596214**
< 1/8 **NAPA, CA 94558**
0.118 mi.
624 ft.

Relative: **Lower**

Actual: **26 ft.**

RCRA-SQG:

Date Form Received by Agency:	1991-07-24 00:00:00.0
Handler Name:	SYAR INDUSTRIES NAPA SHOP
Handler Address:	TOWER ROAD HWY 29
Handler City,State,Zip:	NAPA, CA 94558
EPA ID:	CAD983596214
Contact Name:	STEVE AZEVEDO
Contact Address:	TOWER ROAD HWY TWENTY NINETH
Contact City,State,Zip:	NAPA, CA 94558
Contact Telephone:	707-252-8711
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Other
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	CA
State District:	4R
Mailing Address:	PO BOX 2540
Mailing City,State,Zip:	NAPA, CA 94558
Owner Name:	SYAR INDUSTRIES INC
Owner Type:	Private
Operator Name:	NOT REQUIRED
Operator Type:	Private

SYAR INDUSTRIES NAPA SHOP (Continued) **1000595669**

Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2002-06-27 03:35:29.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

SYAR INDUSTRIES NAPA SHOP (Continued) **1000595669**

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	SYAR INDUSTRIES INC
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	1991-07-24 00:00:00.0
Handler Name: SYAR INDUSTRIES NAPA SHOP	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1992-03-27 00:00:00.0
Handler Name: NAPA SHOP	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	32732
NAICS Description:	READY-MIX CONCRETE MANUFACTURING

SYAR INDUSTRIES NAPA SHOP (Continued) **1000595669**

NAICS Code: 42132
NAICS Description: BRICK, STONE, AND RELATED CONSTRUCTION MATERIAL WHOLESALERS

NAICS Code: 811118
NAICS Description: OTHER AUTOMOTIVE MECHANICAL AND ELECTRICAL REPAIR AND MAINTENANCE

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

B18 **R & M GRADING INC** **RCRA NonGen / NLR** **1024821740**
WNW **2303 NAPA VALLEJO HWY** **CAL000338303**
1/8-1/4 **NAPA, CA 94558**
0.133 mi.
703 ft. **Site 1 of 17 in cluster B**

Relative: **Lower**

Actual: **23 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		2008-11-26 00:00:00.0
Handler Name:	R & M GRADING INC	
Handler Address:		2303 NAPA VALLEJO HWY
Handler City,State,Zip:		NAPA, CA 94558-6242
EPA ID:		CAL000338303
Contact Name:		ALEX RODRIGUEZ/PRES
Contact Address:		2200 BIG RANCH RD
Contact City,State,Zip:		NAPA, CA 94558
Contact Telephone:		707-255-5009
Contact Fax:		707-255-8535
Contact Email:		2003VALENTINO@COMCAST.NET
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		2200 BIG RANCH RD
Mailing City,State,Zip:		NAPA, CA 94558-1947
Owner Name:		R & M GRADING INC
Owner Type:		Other
Operator Name:		ALEX RODRIGUEZ/PRES
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No

R & M GRADING INC (Continued) **1024821740**

Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-05 20:30:51.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	R & M GRADING INC
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2200 BIG RANCH RD
Owner/Operator City,State,Zip:	NAPA, CA 94558-1947
Owner/Operator Telephone:	707-255-5009
Owner/Operator Telephone Ext:	Not reported

R & M GRADING INC (Continued) **1024821740**

Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: ALEX RODRIGUEZ/PRES
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 2200 BIG RANCH RD
Owner/Operator City,State,Zip: NAPA, CA 94558
Owner/Operator Telephone: 707-255-5009
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 2008-11-26 00:00:00.0
Handler Name: R & M GRADING INC
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 23411
NAICS Description: HIGHWAY AND STREET CONSTRUCTION

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

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19 **PRIVATE RESIDENCE** **LUST S110654771**
NW **PRIVATE RESIDENCE** **N/A**
1/8-1/4 **NAPA, CA 94558**
0.133 mi.
704 ft.

Relative: **Lower**
Actual: **26 ft.**

LUST:
Name: PRIVATE RESIDENCE
Address: PRIVATE RESIDENCE
City,State,Zip: NAPA, CA 94558
Lead Agency: NAPA COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605500105
Global Id: T0605500105
Latitude: 38.2705418
Longitude: -122.2718188

PRIVATE RESIDENCE (Continued) **S110654771**

Status: Completed - Case Closed
Status Date: 08/05/2004
Case Worker: JTN
RB Case Number: 28-0113
Local Agency: NAPA COUNTY
File Location: Local Agency
Local Case Number: 0140
Potential Media Affect: Soil
Potential Contaminants of Concern: Diesel, Gasoline
Site History: Not reported

LUST:
Global Id: T0605500105
Contact Type: Local Agency Caseworker
Contact Name: James Newman, P.G., C.E.G.
Organization Name: NAPA COUNTY
Address: 1195 THIRD STREET, SUITE 101
City: NAPA
Email: james.newman@countyofnapa.org
Phone Number: Not reported

LUST:
Global Id: T0605500105
Action Type: ENFORCEMENT
Date: 05/06/1997
Action: Notice to Comply

Global Id: T0605500105
Action Type: ENFORCEMENT
Date: 03/03/1998
Action: * Historical Enforcement

Global Id: T0605500105
Action Type: ENFORCEMENT
Date: 08/05/2004
Action: Closure/No Further Action Letter - #8/5/2004

Global Id: T0605500105
Action Type: Other
Date: 05/07/1985
Action: Leak Discovery

Global Id: T0605500105
Action Type: Other
Date: 05/07/1985
Action: Leak Stopped

Global Id: T0605500105
Action Type: Other
Date: 07/09/1991
Action: Leak Reported

Global Id: T0605500105
Action Type: ENFORCEMENT
Date: 09/16/1999
Action: * Historical Enforcement

PRIVATE RESIDENCE (Continued) **S110654771**

Global Id: T0605500105
Action Type: ENFORCEMENT
Date: 03/18/1999
Action: Notification - Fee Title Owners Notice

LUST:
Global Id: T0605500105
Status: Open - Case Begin Date
Status Date: 05/07/1985

Global Id: T0605500105
Status: Open - Site Assessment
Status Date: 02/18/1992

Global Id: T0605500105
Status: Completed - Case Closed
Status Date: 08/05/2004

B20 **PACIFIC COAST SUPPLIES** **UST** **U003114717**
WNW **2301 NAPA VALLEJO HWY** **N/A**
1/8-1/4 **NAPA, CA**
0.134 mi.
710 ft. **Site 2 of 17 in cluster B**

Relative: **Lower**
Actual: **23 ft.**

NAPA CO. UST:
Name: PACIFIC COAST SUPPLIES
Address: 2301 NAPA VALLEJO HWY
City,State,Zip: NAPA
Facility ID: NAPA0013
Permit ID: Not reported
Facility Status: Not reported
Permit Type: Not reported
District: Not reported
Num of Tanks: 0

B21 **PACIFIC COAST SUPPLIES** **LUST** **S105025149**
WNW **2301 HWY 221** **Cortese** **N/A**
1/8-1/4 **NAPA, CA 94558** **HIST CORTESE**
0.134 mi. **CERS**
710 ft. **Site 3 of 17 in cluster B**

Relative: **Lower**
Actual: **23 ft.**

LUST:
Name: PACIFIC COAST SUPPLIES
Address: 2301 HWY 221
City,State,Zip: NAPA, CA 94558-
Lead Agency: NAPA COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605500263
Global Id: T0605500263
Latitude: 38.26517491543
Longitude: -122.27034330368
Status: Completed - Case Closed
Status Date: 01/11/2002
Case Worker: ZZZ
RB Case Number: 28-0308

PACIFIC COAST SUPPLIES (Continued) **S105025149**

Local Agency: NAPA COUNTY
File Location: Not reported
Local Case Number: 0013
Potential Media Affect: Soil
Potential Contaminants of Concern: Freon
Site History: Not reported

LUST:
Global Id: T0605500263
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: NAPA COUNTY
Address: 1195 THIRD ST., ROOM 101
City: NAPA
Email: Not reported
Phone Number: 7072534269

LUST:
Global Id: T0605500263
Action Type: ENFORCEMENT
Date: 05/01/1995
Action: Other Report

Global Id: T0605500263
Action Type: ENFORCEMENT
Date: 10/16/2001
Action: LOP Case Closure Summary to RB

Global Id: T0605500263
Action Type: ENFORCEMENT
Date: 05/01/1996
Action: Other Report

Global Id: T0605500263
Action Type: ENFORCEMENT
Date: 01/11/2002
Action: Closure/No Further Action Letter

Global Id: T0605500263
Action Type: ENFORCEMENT
Date: 04/15/1994
Action: Other Report

Global Id: T0605500263
Action Type: ENFORCEMENT
Date: 07/30/2001
Action: Other Report

Global Id: T0605500263
Action Type: ENFORCEMENT
Date: 07/03/1996
Action: Other Report

Global Id: T0605500263
Action Type: ENFORCEMENT
Date: 05/02/1997
Action: Other Report

PACIFIC COAST SUPPLIES (Continued) **S105025149**

Global Id: T0605500263
Action Type: Other
Date: 04/26/1994
Action: Leak Discovery

Global Id: T0605500263
Action Type: Other
Date: 04/26/1994
Action: Leak Stopped

Global Id: T0605500263
Action Type: Other
Date: 04/26/1994
Action: Leak Reported

Global Id: T0605500263
Action Type: ENFORCEMENT
Date: 12/01/1995
Action: Other Report

Global Id: T0605500263
Action Type: ENFORCEMENT
Date: 01/07/2002
Action: Other Report

LUST:
Global Id: T0605500263
Status: Open - Case Begin Date
Status Date: 04/26/1994

Global Id: T0605500263
Status: Open - Site Assessment
Status Date: 04/26/1994

Global Id: T0605500263
Status: Completed - Case Closed
Status Date: 01/11/2002

LUST REG 2:
Region: 2
Facility Id: 28-0308
Facility Status: Case Closed
Case Number: 0013
How Discovered: Tank Closure
Leak Cause: UNK
Leak Source: UNK
Date Leak Confirmed: 4/26/1994
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

PACIFIC COAST SUPPLIES (Continued) **S105025149**

CORTESE:

Name:	PACIFIC COAST SUPPLIES
Address:	2301 HWY 221
City,State,Zip:	NAPA, CA
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0605500263
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

HIST CORTESE:

edr_fname:	PACIFIC COAST SUPPLIES
edr_fadd1:	2301 221
City,State,Zip:	NAPA, CA 94558
Region:	CORTESE
Facility County Code:	28
Reg By:	LTNKA
Reg Id:	28-0308

CERS:

Name:	PACIFIC COAST SUPPLIES
Address:	2301 HWY 221
City,State,Zip:	NAPA, CA 94558-
Site ID:	201106
CERS ID:	T0605500263
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	UST CASE WORKER - NAPA COUNTY
Entity Title:	Not reported
Affiliation Address:	1195 THIRD ST., ROOM 101
Affiliation City:	NAPA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	7072534269

B22
WNW
1/8-1/4
0.134 mi.
710 ft.

Relative:
Lower

Actual:
23 ft.

SYAR INDUSTRIES, INC. NAPA QUARRY & SHOP
2301 NAPA-VALLEJO HIGHWAY
NAPA, CA 94558

Site 4 of 17 in cluster B

Database(s): RCRA-SQG, LUST, CPS-SLIC, AST, CERS HAZ WASTE, CERS TANKS, Cortese, WDS, CERS

EDR ID Number: 1000351377
EPA ID Number: CAD982470700

RCRA-SQG:

Date Form Received by Agency:	2006-02-23 00:00:00.0
Handler Name:	SYAR INDUSTRIES, INC. NAPA QUARRY & SHOP
Handler Address:	2301 NAPA-VALLEJO HIGHWAY
Handler City,State,Zip:	NAPA, CA 94558
EPA ID:	CAD982470700
Contact Name:	TOBY P GOYETTE
Contact Address:	Not reported
Contact City,State,Zip:	Not reported
Contact Telephone:	707-259-5848 x848
Contact Fax:	Not reported
Contact Email:	TGOYETTE@SYAR.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Private
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	P.O. BOX 2540
Mailing City,State,Zip:	NAPA, CA 94558
Owner Name:	JIM SYAR
Owner Type:	Private
Operator Name:	ALLEN BLAKE BROWN
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No

SYAR INDUSTRIES, INC. NAPA QUARRY & SHOP (Continued) **1000351377**

Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2007-03-05 00:00:00.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Biennial: List of Years
Year: 2005

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:
Waste Code: D001
Waste Description: IGNITABLE WASTE

Waste Code: D003
Waste Description: REACTIVE WASTE

Waste Code: F003
Waste Description: 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

SYAR INDUSTRIES, INC. NAPA QUARRY & SHOP (Continued) **1000351377**

BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F005
Waste Description: 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.

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	JIM SYAR
Legal Status:	Private
Date Became Current:	1986-02-28 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	P.O. BOX 2540
Owner/Operator City,State,Zip:	NAPA, CA 94558
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	ALLEN BLAKE BROWN
Legal Status:	Private
Date Became Current:	2003-09-02 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	SYAR INDUSTRIES
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	JIM SYAR
Legal Status:	Private
Date Became Current:	1986-02-28 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	P.O. BOX 2540
Owner/Operator City,State,Zip:	NAPA, CA 94558
Owner/Operator Telephone:	Not reported

SYAR INDUSTRIES, INC. NAPA QUARRY & SHOP (Continued) **1000351377**

Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	ALLEN BLAKE BROWN
Legal Status:	Private
Date Became Current:	2003-09-02 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2006-02-23 00:00:00.0
Handler Name:	SYAR INDUSTRIES, INC. NAPA QUARRY & SHOP
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported
Receive Date:	1988-09-23 00:00:00.0
Handler Name:	SYAR INDUSTRIES INC
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported
Receive Date:	1992-02-22 00:00:00.0
Handler Name:	SYAR INDUSTRIES INC
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported
Receive Date:	2006-02-23 00:00:00.0

SYAR INDUSTRIES, INC. NAPA QUARRY & SHOP (Continued) **1000351377**

Handler Name: SYAR INDUSTRIES, INC. NAPA QUARRY & SHOP
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 212313
NAICS Description: CRUSHED AND BROKEN GRANITE MINING AND QUARRYING

NAICS Code: 212319
NAICS Description: OTHER CRUSHED AND BROKEN STONE MINING AND QUARRYING

NAICS Code: 324121
NAICS Description: ASPHALT PAVING MIXTURE AND BLOCK MANUFACTURING

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

LUST REG 2:
Region: 2
Facility Id: 28-0166
Facility Status: Preliminary site assessment underway
Case Number: 0212
How Discovered: Tank Closure
Leak Cause: Structure Failure
Leak Source: UNK
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: 3/8/1990
Preliminary Site Assesment Began: 4/13/1990
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 REG 2:
Region: 2
Facility ID: Not reported
Facility Status: Not reported
Date Closed: Not reported
Local Case #: Not reported
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported

SYAR INDUSTRIES, INC. NAPA QUARRY & SHOP (Continued) **1000351377**

Date Confirmed: Not reported
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

AST:

Name:	SYAR INDUSTRIES
Address:	2301 NAPA VALLEJO HWY
City/Zip:	NAPA,94558
Certified Unified Program Agencies:	Not reported
Owner:	Syar Industries, Inc.
Total Gallons:	Not reported
CERSID:	10172389
Facility ID:	Not reported
Business Name:	Syar Industries, Incorporated
Phone:	707-252-8711
Fax:	Not reported
Mailing Address:	PO Box 2540
Mailing Address City:	Napa
Mailing Address State:	CA
Mailing Address Zip Code:	94558
Operator Name:	Syar Industries - Napa Quarry
Operator Phone:	707-224-6202
Owner Phone:	707-252-8711
Owner Mail Address:	PO Box 2540
Owner State:	CA
Owner Zip Code:	94558
Owner Country:	United States
Property Owner Name:	Not reported
Property Owner Phone:	Not reported
Property Owner Mailing Address:	Not reported
Property Owner City:	Not reported
Property Owner Stat :	Not reported
Property Owner Zip Code:	Not reported
Property Owner Country:	Not reported
EPAID:	CAD982470700

CERS HAZ WASTE:

Name:	SYAR INDUSTRIES
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558
Site ID:	72944
CERS ID:	10172389
CERS Description:	Hazardous Waste Generator

CERS TANKS:

Name:	SYAR INDUSTRIES
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558
Site ID:	72944
CERS ID:	10172389
CERS Description:	Aboveground Petroleum Storage

SYAR INDUSTRIES, INC. NAPA QUARRY & SHOP (Continued) **1000351377**

CORTESE:

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0605500150
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

WDS:

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY
City:	NAPA
Facility ID:	San Francisco Bay 28S005111
Facility Type:	Other - Does not fall into the category of Municipal/Domestic, Industrial, Agricultural or Solid Waste (Class I, II or III)
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	2
Facility Telephone:	7073336724
Facility Contact:	Cliff Dilbert
Agency Name:	SYAR INDUSTRIES INC
Agency Address:	2301 NAPA VALLEJO HWY
Agency City,St,Zip:	NAPA 94558
Agency Contact:	Cliff Dilbert
Agency Telephone:	7072595848
Agency Type:	Private
SIC Code:	0
SIC Code 2:	Not reported
Primary Waste Type:	Not reported
Primary Waste:	Not reported
Waste Type2:	Not reported
Waste2:	Not reported
Primary Waste Type:	Not reported
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0

SYAR INDUSTRIES, INC. NAPA QUARRY & SHOP (Continued) **1000351377**

Baseline Flow: 0
Reclamation: Not reported
POTW: The facility is not a POTW.
Treat To Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

CERS:
Name: SYAR INDUSTRIES
Address: 2301 NAPA VALLEJO HWY
City,State,Zip: NAPA, CA 94558
Site ID: 72944
CERS ID: 10172389
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 72944
Site Name: SYAR INDUSTRIES
Violation Date: 09-08-2014
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit a site map with all required content.
Violation Notes: Returned to compliance on 11/06/2014. missing components
Violation Division: Napa County Department of Environmental Management
Violation Program: HMRRP
Violation Source: CERS

Site ID: 72944
Site Name: SYAR INDUSTRIES
Violation Date: 09-08-2014
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes: Returned to compliance on 11/06/2014.
Violation Division: Napa County Department of Environmental Management
Violation Program: HMRRP
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-10-2011
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Napa County Department of Environmental Management

SYAR INDUSTRIES, INC. NAPA QUARRY & SHOP (Continued) **1000351377**

Eval Program: APSA
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-10-2011
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Napa County Department of Environmental Management
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-10-2011
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Napa County Department of Environmental Management
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-28-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Napa County Department of Environmental Management
Eval Program: APSA
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-28-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Napa County Department of Environmental Management
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-28-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Napa County Department of Environmental Management
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-08-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Napa County Department of Environmental Management
Eval Program: APSA
Eval Source: CERS

SYAR INDUSTRIES, INC. NAPA QUARRY & SHOP (Continued) **1000351377**

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-08-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Napa County Department of Environmental Management
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-08-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Napa County Department of Environmental Management
Eval Program: HMRRP
Eval Source: CERS

Coordinates:
Site ID: 72944
Facility Name: SYAR INDUSTRIES
Env Int Type Code: HWG
Program ID: 10172389
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 38.269950
Longitude: -122.272020

Affiliation:
Affiliation Type Desc: Environmental Contact
Entity Name: Jennifer Gomez
Entity Title: Not reported
Affiliation Address: PO Box 2540
Affiliation City: Napa
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94558
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: PO Box 2540
Affiliation City: Napa
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94558
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District
Entity Name: Napa County Env Mgmt
Entity Title: Not reported
Affiliation Address: 1195 Third Street, Suite 210
Affiliation City: Napa
Affiliation State: CA
Affiliation Country: Not reported

SYAR INDUSTRIES, INC. NAPA QUARRY & SHOP (Continued) **1000351377**

Affiliation Zip:	94559
Affiliation Phone:	(707) 253-4417
Affiliation Type Desc:	Parent Corporation
Entity Name:	Syar Industries, Incorporated
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Identification Signer
Entity Name:	Mike Lombard
Entity Title:	Environmental Specialist
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Document Preparer
Entity Name:	Mike Lombard
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Legal Owner
Entity Name:	Syar Industries, Inc.
Entity Title:	Not reported
Affiliation Address:	PO Box 2540
Affiliation City:	Napa
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94558
Affiliation Phone:	(707) 252-8711
Affiliation Type Desc:	Operator
Entity Name:	Syar Industries - Napa Quarry
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(707) 224-6202
Name:	SYAR INDUSTRIES
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558

SYAR INDUSTRIES, INC. NAPA QUARRY & SHOP (Continued) **1000351377**

Site ID: 72944
CERS ID: SL0605546286
CERS Description: Cleanup Program Site

Violations:
Site ID: 72944
Site Name: SYAR INDUSTRIES
Violation Date: 09-08-2014
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit a site map with all required content.
Violation Notes: Returned to compliance on 11/06/2014. missing components
Violation Division: Napa County Department of Environmental Management
Violation Program: HMRRP
Violation Source: CERS

Site ID: 72944
Site Name: SYAR INDUSTRIES
Violation Date: 09-08-2014
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes: Returned to compliance on 11/06/2014.
Violation Division: Napa County Department of Environmental Management
Violation Program: HMRRP
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-10-2011
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Napa County Department of Environmental Management
Eval Program: APSA
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-10-2011
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Napa County Department of Environmental Management
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-10-2011
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Napa County Department of Environmental Management
Eval Program: HW
Eval Source: CERS

SYAR INDUSTRIES, INC. NAPA QUARRY & SHOP (Continued) **1000351377**

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-28-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Napa County Department of Environmental Management
Eval Program: APSA
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-28-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Napa County Department of Environmental Management
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-28-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Napa County Department of Environmental Management
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-08-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Napa County Department of Environmental Management
Eval Program: APSA
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-08-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Napa County Department of Environmental Management
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-08-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Napa County Department of Environmental Management
Eval Program: HMRRP
Eval Source: CERS

Coordinates:
Site ID: 72944
Facility Name: SYAR INDUSTRIES

SYAR INDUSTRIES, INC. NAPA QUARRY & SHOP (Continued) **1000351377**

Env Int Type Code:	HWG
Program ID:	10172389
Coord Name:	Not reported
Ref Point Type Desc:	Center of a facility or station.
Latitude:	38.269950
Longitude:	-122.272020

Affiliation:

Affiliation Type Desc:	Environmental Contact
Entity Name:	Jennifer Gomez
Entity Title:	Not reported
Affiliation Address:	PO Box 2540
Affiliation City:	Napa
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94558
Affiliation Phone:	Not reported

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	PO Box 2540
Affiliation City:	Napa
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94558
Affiliation Phone:	Not reported

Affiliation Type Desc:	CUPA District
Entity Name:	Napa County Env Mgmt
Entity Title:	Not reported
Affiliation Address:	1195 Third Street, Suite 210
Affiliation City:	Napa
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94559
Affiliation Phone:	(707) 253-4417

Affiliation Type Desc:	Parent Corporation
Entity Name:	Syar Industries, Incorporated
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Identification Signer
Entity Name:	Mike Lombard
Entity Title:	Environmental Specialist
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

SYAR INDUSTRIES, INC. NAPA QUARRY & SHOP (Continued) **1000351377**

Affiliation Type Desc:	Document Preparer
Entity Name:	Mike Lombard
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Legal Owner
Entity Name:	Syar Industries, Inc.
Entity Title:	Not reported
Affiliation Address:	PO Box 2540
Affiliation City:	Napa
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94558
Affiliation Phone:	(707) 252-8711

Affiliation Type Desc:	Operator
Entity Name:	Syar Industries - Napa Quarry
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(707) 224-6202

B23 **SYAR QUARRY SHOOTING RANGE** **RCRA-SQG** **1010312871**
WNW **2301 NAPA - VALLEJO HWY** **CAC002586497**
1/8-1/4 **NAPA, CA 94558**
0.134 mi.
710 ft. **Site 5 of 17 in cluster B**

Relative: **Lower**

Actual: **23 ft.**

RCRA-SQG:

Date Form Received by Agency:		2006-06-05 00:00:00.0
Handler Name:	SYAR QUARRY SHOOTING RANGE	
Handler Address:		2301 NAPA - VALLEJO HWY
Handler City,State,Zip:		NAPA, CA 94558
EPA ID:		CAC002586497
Contact Name:		JANE SLATTERY
Contact Address:		Not reported
Contact City,State,Zip:		Not reported
Contact Telephone:		707-259-8372
Contact Fax:		Not reported
Contact Email:		JSLATTER@CO.NAPA.CA.US
Contact Title:		Not reported
EPA Region:		09
Land Type:		Private
Federal Waste Generator Description:		Small Quantity Generator
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported

SYAR QUARRY SHOOTING RANGE (Continued) **1010312871**

State District:	Not reported
Mailing Address:	2301 NAPA - VALLEJO HWY
Mailing City,State,Zip:	NAPA, CA 94558
Owner Name:	SYAR INDUSTRIES
Owner Type:	Private
Operator Name:	SYAR INDUSTRIES
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2007-03-05 00:00:00.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No

SYAR QUARRY SHOOTING RANGE (Continued) **1010312871**

Importer of Spent Lead Acid Batteries: No
Exporter of Spent Lead Acid Batteries: No
Recycler Activity Without Storage: Not reported
Manifest Broker: Not reported
Sub-Part P Indicator: No

Biennial: List of Years
Year: 2005

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:
Waste Code: D008
Waste Description: LEAD

Handler - Owner Operator:
Owner/Operator Indicator: Operator
Owner/Operator Name: SYAR INDUSTRIES
Legal Status: Private
Date Became Current: 1987-12-01 00:00:00.
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: SYAR INDUSTRIES
Legal Status: Private
Date Became Current: 1987-12-01 00:00:00.
Date Ended Current: Not reported
Owner/Operator Address: SAME
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: SYAR INDUSTRIES
Legal Status: Private
Date Became Current: 1987-12-01 00:00:00.
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: SYAR INDUSTRIES
Legal Status: Private
Date Became Current: 1987-12-01 00:00:00.

SYAR QUARRY SHOOTING RANGE (Continued) **1010312871**

Date Ended Current: Not reported
Owner/Operator Address: SAME
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 2006-06-05 00:00:00.0
Handler Name: SYAR QUARRY SHOOTING RANGE
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 2006-06-05 00:00:00.0
Handler Name: SYAR QUARRY SHOOTING RANGE
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 212319
NAICS Description: OTHER CRUSHED AND BROKEN STONE MINING AND QUARRYING

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

B24 **1X BASALT PRECAST** **LUST** **S112837645**
WNW **2301 NAPA VALLEJO HIGHWAY** **HAZNET** **N/A**
1/8-1/4 **NAPA, CA 94558** **HWTS**
0.134 mi.
710 ft. **Site 6 of 17 in cluster B**

Relative:
Lower

Actual:
23 ft.

NAPA CO. LUST:
Name: SYAR/BASALITE BLOCK
Address: 2301 NAPA VALLEJO HWY
City,State,Zip: NAPA, CA
Permit ID: 248083
Status: Closed
Permit Type: Non-LOP
District: 0

HAZNET:
Name: 1X BASALT PRECAST
Address: 2301 NAPA VALLEJO HIGHWAY
Address 2: Not reported
City,State,Zip: NAPA, CA 945580000
Contact: CAPLES, GREG/PRES
Telephone: 7074489162
Mailing Name: Not reported
Mailing Address: --

Year: 1994
Gepaid: CAC000220697
TSD EPA ID: WAD092300250
CA Waste Code: 331 - Off-specification, aged or surplus organics
Disposal Method: -
Tons: 0.415

Year: 1994
Gepaid: CAC000220697
TSD EPA ID: WAD092300250
CA Waste Code: 352 - Other organic solids
Disposal Method: -
Tons: 0.75

Year: 1990
Gepaid: CAC000220697
TSD EPA ID: CAD009452657
CA Waste Code: 214 - Unspecified solvent mixture
Disposal Method: D99 - Disposal, Other
Tons: 0.834

Year: 1989
Gepaid: CAC000220697
TSD EPA ID: OHD053576294
CA Waste Code: 261 - Polychlorinated biphenyls and material containing PCBs
Disposal Method: -
Tons: 2.25

Additional Info:
Year: 1994
Gen EPA ID: CAC000220697

1X BASALT PRECAST (Continued) **S112837645**

Shipment Date:	19940411
Creation Date:	10/10/1995 0:00:00
Receipt Date:	19940413
Manifest ID:	92653052
Trans EPA ID:	CAD009466392
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	WAD092300250
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	- Not reported
Quantity Tons:	0.165
Waste Quantity:	50
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19940411
Creation Date:	10/10/1995 0:00:00
Receipt Date:	19940413
Manifest ID:	92653052
Trans EPA ID:	CAD009466392
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	WAD092300250
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.25
Waste Quantity:	500
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19940411
Creation Date:	10/10/1995 0:00:00
Receipt Date:	19940413
Manifest ID:	92653052
Trans EPA ID:	CAD009466392
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	WAD092300250

1X BASALT PRECAST (Continued) **S112837645**

Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.25
Waste Quantity:	500
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19940411
Creation Date:	10/10/1995 0:00:00
Receipt Date:	19940413
Manifest ID:	92653052
Trans EPA ID:	CAD009466392
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	WAD092300250
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.5
Waste Quantity:	1000
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HWTS:

Name:	1X BASALT PRECAST
Address:	2301 NAPA VALLEJO HIGHWAY
Address 2:	Not reported
City,State,Zip:	NAPA, CA 945580000
EPA ID:	CAC000220697
Inactive Date:	10/25/2000
Create Date:	11/13/1989
Last Act Date:	10/25/2000
Mailing Name:	Not reported
Mailing Address:	--
Mailing Address 2:	Not reported
Mailing City,State,Zip:	NAPA, CA 945580000
Owner Name:	BASALT PRECAST
Owner Address:	--
Owner Address 2:	Not reported
Owner City,State,Zip:	--, 99 --
Contact Name:	CAPLES, GREG/PRES

1X BASALT PRECAST (Continued) **S112837645**

Contact Address: --
Contact Address 2: Not reported
City,State,Zip: --, 99 --

B25 **INTERNATIONAL LINE BUILDERS** **RCRA NonGen / NLR** **1025848368**
WNW **2301 NAPA VALLEJO HWY** **CAC003028417**
1/8-1/4 **NAPA, CA 94558**
0.134 mi.
710 ft. **Site 7 of 17 in cluster B**

Relative: **Lower**
Actual: **23 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:	2019-08-08 00:00:00.0
Handler Name:	INTERNATIONAL LINE BUILDERS
Handler Address:	2301 NAPA VALLEJO HWY
Handler City,State,Zip:	NAPA, CA 94558-6242
EPA ID:	CAC003028417
Contact Name:	DAVID ROBINSON
Contact Address:	1375 TERMINAL ST
Contact City,State,Zip:	WEST SACRAMENTO, CA 95691-3514
Contact Telephone:	916-373-1426
Contact Fax:	Not reported
Contact Email:	DAVID.ROBINSON@ILBINC.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1375 TERMINAL ST
Mailing City,State,Zip:	WEST SACRAMENTO, CA 95691-3514
Owner Name:	INTERNATIONAL LINE BUILDERS
Owner Type:	Other
Operator Name:	DAVID ROBINSON
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported

INTERNATIONAL LINE BUILDERS (Continued) **1025848368**

Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2019-09-10 15:06:40.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	INTERNATIONAL LINE BUILDERS
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1375 TERMINAL ST
Owner/Operator City,State,Zip:	WEST SACRAMENTO, CA 95691-3514
Owner/Operator Telephone:	916-373-1426
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	DAVID ROBINSON
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1375 TERMINAL ST
Owner/Operator City,State,Zip:	WEST SACRAMENTO, CA 95691-3514

INTERNATIONAL LINE BUILDERS (Continued) **1025848368**

Owner/Operator Telephone: 916-373-1426
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 2019-08-08 00:00:00.0
Handler Name: INTERNATIONAL LINE BUILDERS
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 221116
NAICS Description: GEOTHERMAL ELECTRIC POWER GENERATION

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

B26 **MARK DIXON** **RCRA NonGen / NLR** **1025827684**
WNW **2301 NAPA VALLEJO HIGHWAY** **CAC003007236**
1/8-1/4 **NAPA, CA 94558**
0.134 mi.
710 ft. **Site 8 of 17 in cluster B**

Relative: **Lower**

Actual: **23 ft.**

RCRA NonGen / NLR:
Date Form Received by Agency: 2019-03-25 00:00:00.0
Handler Name: MARK DIXON
Handler Address: 2301 NAPA VALLEJO HIGHWAY
Handler City,State,Zip: NAPA, CA 94558
EPA ID: CAC003007236
Contact Name: MARK DIXON
Contact Address: 2301 NAPA VALLEJO HIGHWAY
Contact City,State,Zip: NAPA, CA 94558
Contact Telephone: 707-322-0912
Contact Fax: Not reported
Contact Email: MARKDIXON11@GMAIL.COM
Contact Title: Not reported
EPA Region: 09
Land Type: Not reported
Federal Waste Generator Description: Not a generator, verified
Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Handler Activities

MARK DIXON (Continued) **1025827684**

State District Owner:	Not reported
State District:	Not reported
Mailing Address:	PO BOX 188
Mailing City,State,Zip:	MIDDLETOWN, CA 95461
Owner Name:	MARK DIXON
Owner Type:	Other
Operator Name:	MARK DIXON
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2019-06-26 18:51:16.0
Recognized Trader-Importer:	No

MARK DIXON (Continued) **1025827684**

Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	MARK DIXON
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 188
Owner/Operator City,State,Zip:	MIDDLETOWN, CA 95461
Owner/Operator Telephone:	707-322-0912
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	MARK DIXON
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2301 NAPA VALLEJO HIGHWAY
Owner/Operator City,State,Zip:	NAPA, CA 94558
Owner/Operator Telephone:	707-322-0912
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2019-03-25 00:00:00.0
Handler Name: MARK DIXON	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	237110
NAICS Description:	WATER AND SEWER LINE AND RELATED STRUCTURES CONSTRUCTION

Facility Has Received Notices of Violations:

Violations:	No Violations Found

MARK DIXON (Continued) **1025827684**

Evaluation Action Summary:
Evaluations: No Evaluations Found

B27 **NAPA SHOP** **US MINES** **1024906690**
WNW **2301 NAPA-VALLEJO HIGHWAY** **N/A**
1/8-1/4 **NAPA, CA 94558**
0.134 mi.
710 ft. **Site 9 of 17 in cluster B**

Relative:
Lower

Actual:
23 ft.

MINES VIOLATIONS:

Name:	NAPA SHOP
Address:	2301 NAPA-VALLEJO HIGHWAY
City,State,Zip:	NAPA, CA 94558
Facility ID:	Not reported

MINES VIOLATIONS:

Violation Number:	8991815
Mine ID:	0405242
Contractor ID:	Not reported
Date Issued:	2/22/2017
Action Type:	104(a)
Type of Issue:	Citation
S and S:	N
Term Date:	2/22/2017
Title 30 Code of Federal Regulations:	56.12002
Proposed Penalty:	116.00
Assessment Amount:	116.00
Paid Penalty Amount:	116.00
Assessment Case Status:	Closed
Assessment Status:	Proposed
Year:	2017
Address Type:	MineLocation
PO Box:	Not reported
Address:	2301 NAPA-VALLEJO HIGHWAY
City:	NAPA
State:	CA
Operator:	Syar Industries Inc
Zip:	94558
Mine Controller Name:	James M Syar
Name:	NAPA SHOP
Ownership Date:	5/1/1994
Mine Status:	Abandoned
Status Date:	4/10/2017
Primary Site Description:	Crushed, Broken Stone NEC
Mine Type:	Facility
State 2:	CA
County:	NAPA

Violation Number:	8991816
Mine ID:	0405242
Contractor ID:	Not reported
Date Issued:	2/23/2017
Action Type:	104(a)
Type of Issue:	Citation
S and S:	Y
Term Date:	Not reported
Title 30 Code of Federal Regulations:	56.5002

NAPA SHOP (Continued) **1024906690**

Proposed Penalty:	Not reported
Assessment Amount:	Not reported
Paid Penalty Amount:	Not reported
Assessment Case Status:	Not reported
Assessment Status:	Not reported
Year:	2017
Address Type:	MineLocation
PO Box:	Not reported
Address:	2301 NAPA-VALLEJO HIGHWAY
City:	NAPA
State:	CA
Operator:	Syar Industries Inc
Zip:	94558
Mine Controller Name:	James M Syar
Name:	NAPA SHOP
Ownership Date:	5/1/1994
Mine Status:	Abandoned
Status Date:	4/10/2017
Primary Site Description:	Crushed, Broken Stone NEC
Mine Type:	Facility
State 2:	CA
County:	NAPA

Violation Number:	8603968
Mine ID:	0405242
Contractor ID:	Not reported
Date Issued:	01/27/2012
Action Type:	104(a)
Type of Issue:	Citation
S and S:	N
Term Date:	01/27/2012
Title 30 Code of Federal Regulations:	56.12004
Proposed Penalty:	100
Assessment Amount:	100
Paid Penalty Amount:	100
Assessment Case Status:	Proposed
Assessment Status:	Closed
Year:	2012
Address Type:	MineLocation
PO Box:	Not reported
Address:	2301 NAPA-VALLEJO HIGHWAY
City:	NAPA
State:	CA
Operator:	Syar Industries Inc
Zip:	94558
Mine Controller Name:	James M Syar
Name:	NAPA SHOP
Ownership Date:	05/01/1994
Mine Status:	Active
Status Date:	05/10/1994
Primary Site Description:	Crushed, Broken Stone NEC
Mine Type:	Facility
State 2:	CA
County:	NAPA

Violation Number:	6348413
Mine ID:	0405242

NAPA SHOP (Continued) **1024906690**

Contractor ID:	Not reported
Date Issued:	02/25/2003
Action Type:	104(a)
Type of Issue:	Citation
S and S:	N
Term Date:	02/25/2003
Title 30 Code of Federal Regulations:	56.20003(b)
Proposed Penalty:	55
Assessment Amount:	55
Paid Penalty Amount:	55
Assessment Case Status:	Proposed
Assessment Status:	Closed
Year:	2003
Address Type:	MineLocation
PO Box:	Not reported
Address:	2301 NAPA-VALLEJO HIGHWAY
City:	NAPA
State:	CA
Operator:	Syar Industries Inc
Zip:	94558
Mine Controller Name:	James M Syar
Name:	NAPA SHOP
Ownership Date:	05/01/1994
Mine Status:	Active
Status Date:	05/10/1994
Primary Site Description:	Crushed, Broken Stone NEC
Mine Type:	Facility
State 2:	CA
County:	NAPA

Violation Number:	6348414
Mine ID:	0405242
Contractor ID:	Not reported
Date Issued:	02/25/2003
Action Type:	104(a)
Type of Issue:	Citation
S and S:	N
Term Date:	02/25/2003
Title 30 Code of Federal Regulations:	56.12018
Proposed Penalty:	55
Assessment Amount:	55
Paid Penalty Amount:	55
Assessment Case Status:	Proposed
Assessment Status:	Closed
Year:	2003
Address Type:	MineLocation
PO Box:	Not reported
Address:	2301 NAPA-VALLEJO HIGHWAY
City:	NAPA
State:	CA
Operator:	Syar Industries Inc
Zip:	94558
Mine Controller Name:	James M Syar
Name:	NAPA SHOP
Ownership Date:	05/01/1994
Mine Status:	Active
Status Date:	05/10/1994

NAPA SHOP (Continued) **1024906690**

Primary Site Description:	Crushed, Broken Stone NEC
Mine Type:	Facility
State 2:	CA
County:	NAPA
Violation Number:	6348415
Mine ID:	0405242
Contractor ID:	Not reported
Date Issued:	02/25/2003
Action Type:	104(a)
Type of Issue:	Citation
S and S:	N
Term Date:	02/25/2003
Title 30 Code of Federal Regulations:	56.16005
Proposed Penalty:	55
Assessment Amount:	55
Paid Penalty Amount:	55
Assessment Case Status:	Proposed
Assessment Status:	Closed
Year:	2003
Address Type:	MineLocation
PO Box:	Not reported
Address:	2301 NAPA-VALLEJO HIGHWAY
City:	NAPA
State:	CA
Operator:	Syar Industries Inc
Zip:	94558
Mine Controller Name:	James M Syar
Name:	NAPA SHOP
Ownership Date:	05/01/1994
Mine Status:	Active
Status Date:	05/10/1994
Primary Site Description:	Crushed, Broken Stone NEC
Mine Type:	Facility
State 2:	CA
County:	NAPA
Violation Number:	8561775
Mine ID:	0405242
Contractor ID:	Not reported
Date Issued:	07/25/2011
Action Type:	104(a)
Type of Issue:	Citation
S and S:	N
Term Date:	07/25/2011
Title 30 Code of Federal Regulations:	56.14115(b)
Proposed Penalty:	100.00
Assessment Amount:	100.00
Paid Penalty Amount:	100.00
Assessment Case Status:	Proposed
Assessment Status:	Closed
Year:	2011
Address Type:	MineLocation
PO Box:	Not reported
Address:	2301 NAPA-VALLEJO HIGHWAY
City:	NAPA
State:	CA

NAPA SHOP (Continued) **1024906690**

Operator:	Syar Industries Inc
Zip:	94558
Mine Controller Name:	James M Syar
Name:	NAPA SHOP
Ownership Date:	05/01/1994
Mine Status:	Active
Status Date:	05/10/1994
Primary Site Description:	Crushed, Broken Stone NEC
Mine Type:	Facility
State 2:	CA
County:	NAPA
Violation Number:	8561776
Mine ID:	0405242
Contractor ID:	Not reported
Date Issued:	07/25/2011
Action Type:	104(a)
Type of Issue:	Citation
S and S:	N
Term Date:	07/25/2011
Title 30 Code of Federal Regulations:	56.12004
Proposed Penalty:	100.00
Assessment Amount:	100.00
Paid Penalty Amount:	100.00
Assessment Case Status:	Proposed
Assessment Status:	Closed
Year:	2011
Address Type:	MineLocation
PO Box:	Not reported
Address:	2301 NAPA-VALLEJO HIGHWAY
City:	NAPA
State:	CA
Operator:	Syar Industries Inc
Zip:	94558
Mine Controller Name:	James M Syar
Name:	NAPA SHOP
Ownership Date:	05/01/1994
Mine Status:	Active
Status Date:	05/10/1994
Primary Site Description:	Crushed, Broken Stone NEC
Mine Type:	Facility
State 2:	CA
County:	NAPA
Violation Number:	6393883
Mine ID:	0405242
Contractor ID:	Not reported
Date Issued:	01/19/2007
Action Type:	104(a)
Type of Issue:	Citation
S and S:	N
Term Date:	01/30/2007
Title 30 Code of Federal Regulations:	56.12004
Proposed Penalty:	60.00
Assessment Amount:	60.00
Paid Penalty Amount:	60.00
Assessment Case Status:	Proposed

NAPA SHOP (Continued) **1024906690**

Assessment Status:	Closed
Year:	2007
Address Type:	MineLocation
PO Box:	Not reported
Address:	2301 NAPA-VALLEJO HIGHWAY
City:	NAPA
State:	CA
Operator:	Syar Industries Inc
Zip:	94558
Mine Controller Name:	James M Syar
Name:	NAPA SHOP
Ownership Date:	05/01/1994
Mine Status:	Active
Status Date:	05/10/1994
Primary Site Description:	Crushed, Broken Stone NEC
Mine Type:	Facility
State 2:	CA
County:	NAPA

Violation Number:	6393964
Mine ID:	0405242
Contractor ID:	Not reported
Date Issued:	05/29/2007
Action Type:	104(a)
Type of Issue:	Citation
S and S:	N
Term Date:	05/29/2007
Title 30 Code of Federal Regulations:	56.12030
Proposed Penalty:	100.00
Assessment Amount:	100.00
Paid Penalty Amount:	100.00
Assessment Case Status:	Proposed
Assessment Status:	Closed
Year:	2007
Address Type:	MineLocation
PO Box:	Not reported
Address:	2301 NAPA-VALLEJO HIGHWAY
City:	NAPA
State:	CA
Operator:	Syar Industries Inc
Zip:	94558
Mine Controller Name:	James M Syar
Name:	NAPA SHOP
Ownership Date:	05/01/1994
Mine Status:	Active
Status Date:	05/10/1994
Primary Site Description:	Crushed, Broken Stone NEC
Mine Type:	Facility
State 2:	CA
County:	NAPA

Violation Number:	6393965
Mine ID:	0405242
Contractor ID:	Not reported
Date Issued:	05/29/2007
Action Type:	104(a)
Type of Issue:	Citation

NAPA SHOP (Continued) **1024906690**

S and S:	N
Term Date:	06/04/2007
Title 30 Code of Federal Regulations:	50.40(b)
Proposed Penalty:	60.00
Assessment Amount:	60.00
Paid Penalty Amount:	60.00
Assessment Case Status:	Proposed
Assessment Status:	Closed
Year:	2007
Address Type:	MineLocation
PO Box:	Not reported
Address:	2301 NAPA-VALLEJO HIGHWAY
City:	NAPA
State:	CA
Operator:	Syar Industries Inc
Zip:	94558
Mine Controller Name:	James M Syar
Name:	NAPA SHOP
Ownership Date:	05/01/1994
Mine Status:	Active
Status Date:	05/10/1994
Primary Site Description:	Crushed, Broken Stone NEC
Mine Type:	Facility
State 2:	CA
County:	NAPA

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

B28 **SUPERIOR EQUIPMENT CO INC** **RCRA NonGen / NLR** **1024814752**
WNW **2301 NAPA VALLEJO HWY** **CAL000310293**
1/8-1/4 **NAPA, CA 94558**
0.134 mi.
710 ft. **Site 10 of 17 in cluster B**

Relative: **Lower**
Actual: **23 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:	2019-12-04 00:00:00.0
Handler Name:	SUPERIOR EQUIPMENT CO INC
Handler Address:	2301 NAPA VALLEJO HWY
Handler City,State,Zip:	NAPA, CA 94558-6242
EPA ID:	CAL000310293
Contact Name:	DEBBIE MACK
Contact Address:	TOWER RD
Contact City,State,Zip:	AMERICAN CANYON, CA 94503
Contact Telephone:	707-256-3600 x101
Contact Fax:	Not reported
Contact Email:	DMACK@SUPERIOREQUIPCO.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported

SUPERIOR EQUIPMENT CO INC (Continued) **1024814752**

Mailing Address:	PO BOX 10369
Mailing City,State,Zip:	NAPA, CA 94581-0000
Owner Name:	SUPERIOR EQUIPMENT CO INC
Owner Type:	Other
Operator Name:	SUPERIOR EQUIPMENT CO INC
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2019-12-16 11:13:25.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No

SUPERIOR EQUIPMENT CO INC (Continued) **1024814752**

Exporter of Spent Lead Acid Batteries: No
Recycler Activity Without Storage: No
Manifest Broker: No
Sub-Part P Indicator: No

Handler - Owner Operator:
Owner/Operator Indicator: Owner
Owner/Operator Name: SUPERIOR EQUIPMENT CO INC
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 129 WILLOWGLENN CT
Owner/Operator City,State,Zip: NAPA, CA 94559
Owner/Operator Telephone: 707-249-0087
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: SUPERIOR EQUIPMENT CO INC
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 129 WILLOWGLENN CT
Owner/Operator City,State,Zip: NAPA, CA 94559
Owner/Operator Telephone: 707-249-0087
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 2019-12-04 00:00:00.0
Handler Name: SUPERIOR EQUIPMENT CO INC
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 562119
NAICS Description: OTHER WASTE COLLECTION

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

B29 **PACIFIC STEEL GROUP** **RCRA NonGen / NLR** **1024849526**
WNW **2301 NAPA VALLEJO HWY** **CAL000406246**
1/8-1/4 **NAPA, CA 94558**
0.134 mi.
710 ft. **Site 11 of 17 in cluster B**

Relative: **Lower**
Actual: **23 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		2015-04-22 00:00:00.0
Handler Name:	PACIFIC STEEL GROUP	
Handler Address:		2301 NAPA VALLEJO HWY
Handler City,State,Zip:		NAPA, CA 94558
EPA ID:		CAL000406246
Contact Name:		STEVE HEINEN
Contact Address:		4805 MURPHY CANYON RD
Contact City,State,Zip:		SAN DIEGO, CA 92123-0000
Contact Telephone:		619-433-5809
Contact Fax:		Not reported
Contact Email:		S.HEINEN@PACIFICSTEELGROUP.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		4805 MURPHY CANYON RD
Mailing City,State,Zip:		SAN DIEGO, CA 92123
Owner Name:		PACIFIC STEEL GROUP
Owner Type:		Other
Operator Name:		STEVE HEINEN
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		Yes
Universal Waste Destination Facility:		Yes
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported

PACIFIC STEEL GROUP (Continued) **1024849526**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-09-06 17:06:02.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	STEVE HEINEN
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	4805 MURPHY CANYON RD
Owner/Operator City,State,Zip:	SAN DIEGO, CA 92123-0000
Owner/Operator Telephone:	619-433-5809
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	PACIFIC STEEL GROUP
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	4805 MURPHY CANYON RD
Owner/Operator City,State,Zip:	SAN DIEGO, CA 92123
Owner/Operator Telephone:	858-251-1100
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

PACIFIC STEEL GROUP (Continued) **1024849526**

Historic Generators:
Receive Date: 2015-04-22 00:00:00.0
Handler Name: PACIFIC STEEL GROUP
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 332312
NAICS Description: FABRICATED STRUCTURAL METAL MANUFACTURING

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

B30 **BASALITE ROCK DIV PACIFIC** **SEMS-ARCHIVE** **1015732816**
WNW **2301 NAPA-VALLEJO HWY** **RCRA-SQG** **CAD098325442**
1/8-1/4 **NAPA, CA 94558**
0.134 mi.
710 ft. **Site 12 of 17 in cluster B**

Relative: **Lower**
Actual: **23 ft.**

SEMS Archive:
Site ID: 0903121
EPA ID: CAD098325442
Name: BASALITE ROCK DIV PACIFIC
Address: 2301 NAPA-VALLEJO HWY
Address 2: Not reported
City,State,Zip: NAPA, CA 94558
Cong District: 01
FIPS Code: 06055
FF: N
NPL: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

SEMS Archive Detail:
Region: 09
Site ID: 0903121
EPA ID: CAD098325442
Site Name: BASALITE ROCK DIV PACIFIC
NPL: N
FF: N
OU: 00
Action Code: VS
Action Name: ARCH SITE
SEQ: 1
Start Date: Not reported

BASALITE ROCK DIV PACIFIC (Continued) **1015732816**

Finish Date: 1989-05-02 04:00:00
Qual: Not reported
Current Action Lead: EPA Perf In-Hse

Region: 09
Site ID: 0903121
EPA ID: CAD098325442
Site Name: BASALITE ROCK DIV PACIFIC
NPL: N
FF: N
OU: 00
Action Code: PA
Action Name: PA
SEQ: 1
Start Date: Not reported
Finish Date: 1989-05-02 04:00:00
Qual: N
Current Action Lead: St Perf

Region: 09
Site ID: 0903121
EPA ID: CAD098325442
Site Name: BASALITE ROCK DIV PACIFIC
NPL: N
FF: N
OU: 00
Action Code: DS
Action Name: DISCVRY
SEQ: 1
Start Date: 1987-12-01 05:00:00
Finish Date: 1987-12-01 05:00:00
Qual: Not reported
Current Action Lead: St Perf

RCRA-SQG:
Date Form Received by Agency: 1986-09-30 00:00:00.0
Handler Name: BASALITE BLOCK/ROCK
Handler Address: 2301 NAPA VALLEJO HWY
Handler City,State,Zip: NAPA, CA 94558
EPA ID: CAD098325442
Contact Name: ENVIRONMENTAL MANAGER
Contact Address: 2301 NAPA VALLEJO HWY
Contact City,State,Zip: NAPA, CA 94558
Contact Telephone: 707-255-8054
Contact Fax: Not reported
Contact Email: Not reported
Contact Title: Not reported
EPA Region: 09
Land Type: Other
Federal Waste Generator Description: Small Quantity Generator
Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Handler Activities
State District Owner: CA
State District: 2

BASALITE ROCK DIV PACIFIC (Continued) **1015732816**

Mailing Address:	NAPA VALLEJO HWY PO BOX 819
Mailing City,State,Zip:	NAPA, CA 94558
Owner Name:	DBA BASALITE BLOCK-NAPA
Owner Type:	Private
Operator Name:	NOT REQUIRED
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2002-06-27 03:21:10.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No

BASALITE ROCK DIV PACIFIC (Continued) **1015732816**

Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	DBA BASALITE BLOCK-NAPA
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	1986-09-30 00:00:00.0
Handler Name: BASALITE BLOCK/ROCK	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Codes:	No NAICS Codes Found

Facility Has Received Notices of Violation:

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	LDR - General
Date Violation was Determined:	1988-07-21 00:00:00.0
Actual Return to Compliance Date:	1988-07-21 00:00:00.0
Return to Compliance Qualifier:	Observed

BASALITE ROCK DIV PACIFIC (Continued) **1015732816**

Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 1988-07-21 00:00:00.0
Actual Return to Compliance Date: 1988-07-21 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 001
Date of Enforcement Action: 1989-01-06 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: R9
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9
Enforcement Responsible Sub-Organization: Not reported

BASALITE ROCK DIV PACIFIC (Continued) **1015732816**

SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Evaluation Action Summary:

Evaluation Date:	1988-07-21 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	R9
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1988-07-21 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1988-07-21 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1988-07-21 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

B31 **THE BASALT ROCK DIVISION OF DI** **HIST UST** **U001597664**
WNW **2301 NAPA VALLEJO HWY** **N/A**
1/8-1/4 **NAPA, CA 94558**
0.134 mi.
710 ft. **Site 13 of 17 in cluster B**

Relative: **Lower**

Actual: **23 ft.**

HIST UST:

Name:	THE BASALT ROCK DIVISION OF DI
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558
File Number:	Not reported
URL:	Not reported
Region:	STATE
Facility ID:	00000000702
Facility Type:	Other
Other Type:	MAINTENANCE SHOP

THE BASALT ROCK DIVISION OF DI (Continued) **U001597664**

Contact Name:	JOHN M. SALES, PLANT SUPT.
Telephone:	7072528711
Owner Name:	THE BASALT ROCK DIVISION OF DI
Owner Address:	2301 NAPA-VALLEJO HIGHWAY
Owner City,St,Zip:	NAPA, CA 94558
Total Tanks:	0003
Tank Num:	001
Container Num:	GARI-500
Year Installed:	Not reported
Tank Capacity:	00000500
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	None
Tank Num:	002
Container Num:	GAR2-500
Year Installed:	Not reported
Tank Capacity:	00000500
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	None
Tank Num:	003
Container Num:	NAP-1
Year Installed:	Not reported
Tank Capacity:	00000000
Tank Used for:	WASTE
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Visual

B32 **BASALITE BLOCK/ROCK** **SWEEPS UST** **1000149001**
WNW **2301 NAPA VALLEJO HWY** **HIST UST** **N/A**
1/8-1/4 **NAPA, CA 94558** **CA FID UST**
0.134 mi. **FINDS**
710 ft. **Site 14 of 17 in cluster B** **ECHO**
EMI
Relative: **CERS**
Lower

Actual: SWEEPS UST:
23 ft.

Name:	BASALITE BLOCK
Address:	2301 NAPA VALLEJO HWY
City:	NAPA
Status:	Active
Comp Number:	1576
Number:	9
Board Of Equalization:	44-015287
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	06-30-89
Owner Tank Id:	1
SWRCB Tank Id:	28-000-001576-000001
Tank Status:	A
Capacity:	10000
Active Date:	07-01-85

BASALITE BLOCK/ROCK (Continued) **1000149001**

Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: 1

HIST UST:
Name: BASALITE BLOCK
Address: 2301 NAPA VALLEJO HWY
City,State,Zip: NAPA, CA 94558
File Number: Not reported
URL: Not reported
Region: STATE
Facility ID: 00000001576
Facility Type: Other
Other Type: Not reported
Contact Name: FRITZ ANTHES
Telephone: 7072558054
Owner Name: PACIFIC COAST BUILDING PRODUCT
Owner Address: 3001 I STREET
Owner City,St,Zip: SACRAMENTO, CA 95816
Total Tanks: 0001

Tank Num: 001
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: Visual, Stock Inventor

CA FID UST:
Facility ID: 28000306
Regulated By: UTNKA
Regulated ID: 00001576
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7072558054
Mail To: Not reported
Mailing Address: P O BOX
Mailing Address 2: Not reported
Mailing City,St,Zip: NAPA 94558
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

FINDS:
Registry ID: 110001161199

Click Here:

Environmental Interest/Information System:

BASALITE BLOCK/ROCK (Continued) **1000149001**

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: 110070655180

Click Here:

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.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000149001
Registry ID:	110001161199
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110001161199
Name:	BASALITE BLOCK/ROCK
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558

EMI:

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA
Year:	1987
County Code:	28
Air Basin:	SF
Facility ID:	2158
Air District Name:	BA
SIC Code:	1429
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:	4
NOX - Oxides of Nitrogen Tons/Yr:	14
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	20
Part. Matter 10 Micrometers and Smllr Tons/Yr:	3

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA
Year:	1990
County Code:	28
Air Basin:	SF
Facility ID:	2158
Air District Name:	BA

BASALITE BLOCK/ROCK (Continued) **1000149001**

SIC Code:	1429
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:	3
NOX - Oxides of Nitrogen Tons/Yr:	13
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	25
Part. Matter 10 Micrometers and Smllr Tons/Yr:	8

Name:	BASALT PRECAST
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558
Year:	1990
County Code:	28
Air Basin:	SF
Facility ID:	129
Air District Name:	BA
SIC Code:	3272
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:	2
Part. Matter 10 Micrometers and Smllr Tons/Yr:	2

Name:	BASALT PRECAST
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558
Year:	1993
County Code:	28
Air Basin:	SF
Facility ID:	129
Air District Name:	BA
SIC Code:	3272
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 and Smllr Tons/Yr:	0

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA
Year:	1995
County Code:	28

BASALITE BLOCK/ROCK (Continued) **1000149001**

Air Basin:	SF
Facility ID:	2158
Air District Name:	BA
SIC Code:	1429
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:	11
Reactive Organic Gases Tons/Yr:	10
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	4
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	53
Part. Matter 10 Micrometers and Smllr Tons/Yr:	20

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA
Year:	1996
County Code:	28
Air Basin:	SF
Facility ID:	2158
Air District Name:	BA
SIC Code:	1429
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:	1
NOX - Oxides of Nitrogen Tons/Yr:	4
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	40
Part. Matter 10 Micrometers and Smllr Tons/Yr:	16

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA
Year:	1997
County Code:	28
Air Basin:	SF
Facility ID:	2158
Air District Name:	BA
SIC Code:	1429
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:	1
NOX - Oxides of Nitrogen Tons/Yr:	5
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	6
Part. Matter 10 Micrometers and Smllr Tons/Yr:	3

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY

BASALITE BLOCK/ROCK (Continued) **1000149001**

City,State,Zip:	NAPA, CA
Year:	1998
County Code:	28
Air Basin:	SF
Facility ID:	2158
Air District Name:	BA
SIC Code:	2951
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:	1
NOX - Oxides of Nitrogen Tons/Yr:	6
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	5
Part. Matter 10 Micrometers and Smllr Tons/Yr:	2

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA
Year:	1999
County Code:	28
Air Basin:	SF
Facility ID:	2158
Air District Name:	BA
SIC Code:	5032
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:	2
NOX - Oxides of Nitrogen Tons/Yr:	7
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers and Smllr Tons/Yr:	1

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA
Year:	2000
County Code:	28
Air Basin:	SF
Facility ID:	2158
Air District Name:	BA
SIC Code:	5032
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:	2
NOX - Oxides of Nitrogen Tons/Yr:	7
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers and Smllr Tons/Yr:	1

BASALITE BLOCK/ROCK (Continued) **1000149001**

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA
Year:	2001
County Code:	28
Air Basin:	SF
Facility ID:	2158
Air District Name:	BA
SIC Code:	5032
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:	2
NOX - Oxides of Nitrogen Tons/Yr:	7
SOX - Oxides of Sulphur Tons/Yr:	2
Particulate Matter Tons/Yr:	2
Part. Matter 10 Micrometers and Smllr Tons/Yr:	1

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA
Year:	2002
County Code:	28
Air Basin:	SF
Facility ID:	2158
Air District Name:	BA
SIC Code:	2951
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:	2
NOX - Oxides of Nitrogen Tons/Yr:	7
SOX - Oxides of Sulphur Tons/Yr:	2
Particulate Matter Tons/Yr:	2
Part. Matter 10 Micrometers and Smllr Tons/Yr:	1

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA
Year:	2003
County Code:	28
Air Basin:	SF
Facility ID:	2158
Air District Name:	BA
SIC Code:	2951
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:	1
NOX - Oxides of Nitrogen Tons/Yr:	5
SOX - Oxides of Sulphur Tons/Yr:	0

BASALITE BLOCK/ROCK (Continued) **1000149001**

Particulate Matter Tons/Yr: 2
Part. Matter 10 Micrometers and Smllr Tons/Yr:1

Name: SYAR INDUSTRIES INC
Address: 2301 NAPA VALLEJO HWY
City,State,Zip: NAPA, CA
Year: 2004
County Code: 28
Air Basin: SF
Facility ID: 2158
Air District Name: BA
SIC Code: 2951
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: 1.566
Reactive Organic Gases Tons/Yr: 1.3976625
Carbon Monoxide Emissions Tons/Yr: 1.189
NOX - Oxides of Nitrogen Tons/Yr: 4.756
SOX - Oxides of Sulphur Tons/Yr: 0.02
Particulate Matter Tons/Yr: 29.742
Part. Matter 10 Micrometers and Smllr Tons/Yr:7.679864

Name: SYAR INDUSTRIES INC
Address: 2301 NAPA VALLEJO HWY
City,State,Zip: NAPA, CA
Year: 2005
County Code: 28
Air Basin: SF
Facility ID: 2158
Air District Name: BA
SIC Code: 2951
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: 1.566
Reactive Organic Gases Tons/Yr: 1.3976625
Carbon Monoxide Emissions Tons/Yr: 1.189
NOX - Oxides of Nitrogen Tons/Yr: 4.756
SOX - Oxides of Sulphur Tons/Yr: .02
Particulate Matter Tons/Yr: 29.742
Part. Matter 10 Micrometers and Smllr Tons/Yr:7.679864

Name: SYAR INDUSTRIES INC
Address: 2301 NAPA VALLEJO HWY
City,State,Zip: NAPA, CA
Year: 2006
County Code: 28
Air Basin: SF
Facility ID: 2158
Air District Name: BA
SIC Code: 2951
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: 1.566
Reactive Organic Gases Tons/Yr: 1.3976625

BASALITE BLOCK/ROCK (Continued) **1000149001**

Carbon Monoxide Emissions Tons/Yr: 1.189
NOX - Oxides of Nitrogen Tons/Yr: 4.756
SOX - Oxides of Sulphur Tons/Yr: .02
Particulate Matter Tons/Yr: 29.742
Part. Matter 10 Micrometers and Smllr Tons/Yr: 7.679864

Name: SYAR INDUSTRIES INC
Address: 2301 NAPA VALLEJO HWY
City,State,Zip: NAPA, CA 953860000
Year: 2007
County Code: 28
Air Basin: SF
Facility ID: 2158
Air District Name: BA
SIC Code: 2951
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: 1.119
Reactive Organic Gases Tons/Yr: .9999795
Carbon Monoxide Emissions Tons/Yr: 6.503
NOX - Oxides of Nitrogen Tons/Yr: 4.047
SOX - Oxides of Sulphur Tons/Yr: .016
Particulate Matter Tons/Yr: 31.927
Part. Matter 10 Micrometers and Smllr Tons/Yr: 8.997224

Name: SYAR INDUSTRIES INC
Address: 2301 NAPA VALLEJO HWY
City,State,Zip: NAPA, CA 94558
Year: 2008
County Code: 28
Air Basin: SF
Facility ID: 2158
Air District Name: BA
SIC Code: 2951
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: 1.174
Reactive Organic Gases Tons/Yr: 1.0050065
Carbon Monoxide Emissions Tons/Yr: 6.503
NOX - Oxides of Nitrogen Tons/Yr: 4.047
SOX - Oxides of Sulphur Tons/Yr: .016
Particulate Matter Tons/Yr: 31.927
Part. Matter 10 Micrometers and Smllr Tons/Yr: 8.997224

Name: SYAR INDUSTRIES INC
Address: 2301 NAPA VALLEJO HWY
City,State,Zip: NAPA, CA 94558
Year: 2009
County Code: 28
Air Basin: SF
Facility ID: 2158
Air District Name: BA
SIC Code: 2951
Air District Name: BAY AREA AQMD
Community Health Air Pollution Info System: Not reported

BASALITE BLOCK/ROCK (Continued) **1000149001**

Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1.286
Reactive Organic Gases Tons/Yr:	1.0152433000000001
Carbon Monoxide Emissions Tons/Yr:	7.6909999999999998
NOX - Oxides of Nitrogen Tons/Yr:	4.6079999999999997
SOX - Oxides of Sulphur Tons/Yr:	1.7999999999999999E-2
Particulate Matter Tons/Yr:	64.929000000000002
Part. Matter 10 Micrometers and Smllr Tons/Yr:	17.237442000000001

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558
Year:	2010
County Code:	28
Air Basin:	SF
Facility ID:	2158
Air District Name:	BA
SIC Code:	2951
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:	1.6870000000000001
Reactive Organic Gases Tons/Yr:	1.3018519
Carbon Monoxide Emissions Tons/Yr:	9.1140000000000008
NOX - Oxides of Nitrogen Tons/Yr:	5.0289999999999999
SOX - Oxides of Sulphur Tons/Yr:	0.02
Particulate Matter Tons/Yr:	327.09681935025401
Part. Matter 10 Micrometers and Smllr Tons/Yr:	48.198656

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558
Year:	2011
County Code:	28
Air Basin:	SF
Facility ID:	2158
Air District Name:	BA
SIC Code:	2951
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:	1.687
Reactive Organic Gases Tons/Yr:	1.3018519
Carbon Monoxide Emissions Tons/Yr:	9.114
NOX - Oxides of Nitrogen Tons/Yr:	5.029
SOX - Oxides of Sulphur Tons/Yr:	0.02
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558
Year:	2012
County Code:	28
Air Basin:	SF
Facility ID:	2158
Air District Name:	BA

BASALITE BLOCK/ROCK (Continued) **1000149001**

SIC Code:	2951
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:	1.687
Reactive Organic Gases Tons/Yr:	1.3018519
Carbon Monoxide Emissions Tons/Yr:	9.114
NOX - Oxides of Nitrogen Tons/Yr:	5.029
SOX - Oxides of Sulphur Tons/Yr:	0.02
Particulate Matter Tons/Yr:	182.67983672
Part. Matter 10 Micrometers and Smllr Tons/Yr:	33.669

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558
Year:	2013
County Code:	28
Air Basin:	SF
Facility ID:	2158
Air District Name:	BA
SIC Code:	2951
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:	1.618
Reactive Organic Gases Tons/Yr:	1.2959523
Carbon Monoxide Emissions Tons/Yr:	5.933
NOX - Oxides of Nitrogen Tons/Yr:	3.762
SOX - Oxides of Sulphur Tons/Yr:	0.015
Particulate Matter Tons/Yr:	29.228
Part. Matter 10 Micrometers and Smllr Tons/Yr:	13.763

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558
Year:	2014
County Code:	28
Air Basin:	SF
Facility ID:	2158
Air District Name:	BA
SIC Code:	2951
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:	1.727484985
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	10.601845609
NOX - Oxides of Nitrogen Tons/Yr:	5.763567195
SOX - Oxides of Sulphur Tons/Yr:	0.023355279
Particulate Matter Tons/Yr:	33.646986187
Part. Matter 10 Micrometers and Smllr Tons/Yr:	19.734129767

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558
Year:	2015
County Code:	28

BASALITE BLOCK/ROCK (Continued) **1000149001**

Air Basin:	SF
Facility ID:	2158
Air District Name:	BA
SIC Code:	2951
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:	0.348927754
Reactive Organic Gases Tons/Yr:	0.318765664
Carbon Monoxide Emissions Tons/Yr:	4.959275
NOX - Oxides of Nitrogen Tons/Yr:	2.226133
SOX - Oxides of Sulphur Tons/Yr:	0.009020794
Particulate Matter Tons/Yr:	28.778219784
Part. Matter 10 Micrometers and Smllr Tons/Yr:	17.932184715

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558
Year:	2016
County Code:	28
Air Basin:	SF
Facility ID:	2158
Air District Name:	BA
SIC Code:	2951
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:	0.360866824
Reactive Organic Gases Tons/Yr:	0.24003527799
Carbon Monoxide Emissions Tons/Yr:	5.315263071
NOX - Oxides of Nitrogen Tons/Yr:	2.385930226
SOX - Oxides of Sulphur Tons/Yr:	0.009668324
Particulate Matter Tons/Yr:	34.081706562
Part. Matter 10 Micrometers and Smllr Tons/Yr:	22.533029327

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558
Year:	2017
County Code:	28
Air Basin:	SF
Facility ID:	2158
Air District Name:	BA
SIC Code:	2951
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:	0.36214493
Reactive Organic Gases Tons/Yr:	0.2429554462
Carbon Monoxide Emissions Tons/Yr:	5.234410205
NOX - Oxides of Nitrogen Tons/Yr:	2.349636331
SOX - Oxides of Sulphur Tons/Yr:	0.009521258
Particulate Matter Tons/Yr:	33.075706046
Part. Matter 10 Micrometers and Smllr Tons/Yr:	23.541291625

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY

BASALITE BLOCK/ROCK (Continued) **1000149001**

City,State,Zip:	NAPA, CA 94558
Year:	2018
County Code:	28
Air Basin:	SF
Facility ID:	2158
Air District Name:	BA
SIC Code:	2951
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:	0.259167434
Reactive Organic Gases Tons/Yr:	0.15578875247
Carbon Monoxide Emissions Tons/Yr:	4.599151714
NOX - Oxides of Nitrogen Tons/Yr:	2.064480381
SOX - Oxides of Sulphur Tons/Yr:	0.008365741
Particulate Matter Tons/Yr:	24.384931425
Part. Matter 10 Micrometers and Smllr Tons/Yr:	22.372278279

CERS:

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558
Site ID:	255335
CERS ID:	T0605500150
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	James Newman, P.G., C.E.G. - NAPA COUNTY
Entity Title:	Not reported
Affiliation Address:	1195 THIRD STREET, SUITE 101
Affiliation City:	NAPA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

B33 **NAPA SHOP** **ABANDONED MINES** **1023712341**
WNW **2301 NAPA-VALLEJO HIGHWAY** **N/A**
1/8-1/4 **NAPA, CA 94558**
0.134 mi.
710 ft. **Site 15 of 17 in cluster B**

Relative:
Lower

Actual:
23 ft.

ABANDONED MINES:

Mine ID:	0405242
Mine Name:	NAPA SHOP
Mine Address:	2301 NAPA-VALLEJO HIGHWAY
City,State,Zip:	NAPA, CA 945580524
Primary SIC Code:	Crushed, Broken Stone NEC
Mine Type:	Facility
Mine Status Description:	Abandoned
Mine Status Date:	2017-04-10 00:00:00
Coal (C) or Metal (M) Mine:	M
Controller ID:	M01777
Controller Name:	James M Syar
Operator ID:	L01976
Operator name:	Syar Industries Inc

NAPA SHOP (Continued) **1023712341**

Address of Record Street:	2301 Napa-Vallejo Highway
Address of Record PO Box:	Not reported
Address of Record City:	Napa
Address of Record State:	CA
Address of Record Zip Code:	945580524
Assessment Address Street:	Not reported
Assessment Address PO Box:	2540
Assessment Address City:	NAPA
Assessment Address State:	CA
Assessment Address Zip Code:	945580524
Mine Health and Safety Address Street:	2301 Napa-Vallejo Highway
Mine Health and Safety Address PO Box:	Not reported
Mine Health and Safety Address City:	Napa
Mine Health and Safety Address State:	CA
Mine Health and Safety Address Zip Code:	Not reported
Latitude:	38.261944
Longitude:	-122.275833

B34 **SYAR INDUSTRIES, INC.** **UST** **U003114718**
WNW **2301 NAPA VALLEJO HWY** **N/A**
1/8-1/4 **NAPA, CA**
0.134 mi.
710 ft. **Site 16 of 17 in cluster B**

Relative:
Lower

Actual:
23 ft.

NAPA CO. UST:

Name:	SYAR INDUSTRIES, INC.
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA
Facility ID:	NAPA0212
Permit ID:	Not reported
Facility Status:	Not reported
Permit Type:	Not reported
District:	Not reported
Num of Tanks:	0

B35 **PACIFIC STEEL GROUP** **LUST** **S103946752**
WNW **2301 NAPA VALLEJO HWY** **CPS-SLIC** **N/A**
1/8-1/4 **NAPA, CA 94558** **CERS HAZ WASTE**
0.134 mi. **HIST UST**
710 ft. **Site 17 of 17 in cluster B** **CHMIRS**
HIST CORTESE

Relative:
Lower

NPDES
CIWQS

Actual:
23 ft.

CERS

LUST:

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558
Lead Agency:	NAPA COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605500150
Global Id:	T0605500150
Latitude:	38.2650569824546
Longitude:	-122.269678115845
Status:	Completed - Case Closed

PACIFIC STEEL GROUP (Continued) **S103946752**

Status Date: 03/22/2007
Case Worker: JTN
RB Case Number: 28-0166
Local Agency: NAPA COUNTY
File Location: Regional Board
Local Case Number: 0212
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating
Site History: Not reported

LUST:
Global Id: T0605500150
Contact Type: Local Agency Caseworker
Contact Name: James Newman, P.G., C.E.G.
Organization Name: NAPA COUNTY
Address: 1195 THIRD STREET, SUITE 101
City: NAPA
Email: james.newman@countyofnapa.org
Phone Number: Not reported

LUST:
Global Id: T0605500150
Action Type: ENFORCEMENT
Date: 07/01/2003
Action: Meeting

Global Id: T0605500150
Action Type: ENFORCEMENT
Date: 09/25/2003
Action: Staff Letter

Global Id: T0605500150
Action Type: ENFORCEMENT
Date: 06/26/2003
Action: * Referral to Regional Board or Another State Agency

Global Id: T0605500150
Action Type: Other
Date: 04/20/1988
Action: Leak Discovery

Global Id: T0605500150
Action Type: Other
Date: 04/20/1988
Action: Leak Stopped

Global Id: T0605500150
Action Type: Other
Date: 04/20/1988
Action: Leak Reported

Global Id: T0605500150
Action Type: ENFORCEMENT
Date: 07/07/2003
Action: * Referral to Regional Board or Another State Agency

Global Id: T0605500150

PACIFIC STEEL GROUP (Continued) **S103946752**

Action Type: REMEDIATION
Date: 08/25/1989
Action: Excavation

Global Id: T0605500150
Action Type: ENFORCEMENT
Date: 03/28/2007
Action: Closure/No Further Action Letter

LUST:
Global Id: T0605500150
Status: Open - Case Begin Date
Status Date: 04/20/1988

Global Id: T0605500150
Status: Open - Site Assessment
Status Date: 03/08/1990

Global Id: T0605500150
Status: Open - Site Assessment
Status Date: 04/13/1990

Global Id: T0605500150
Status: Completed - Case Closed
Status Date: 03/22/2007

CPS-SLIC:
Name: SYAR INDUSTRIES
Address: 2301 NAPA VALLEJO HWY
City,State,Zip: NAPA, CA 94558
Region: STATE
Facility Status: **Completed - Case Closed**
Status Date: 04/03/2007
Global Id: SL0605546286
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number: Not reported
Latitude: 38.269731
Longitude: -122.271924
Case Type: Cleanup Program Site
Case Worker: Not reported
Local Agency: Not reported
RB Case Number: Not reported
File Location: Regional Board
Potential Media Affected: Not reported
Potential Contaminants of Concern: Not reported
Site History: Case closure letter issued by Water Board staff dated March 2007. Monitoring wells confirimed destroyed on April 3, 2007. Closure letter and summary inlcuded two older USTs from a case initially opened by Napa County LOP - removed in 1988, and three ASTs removed in 2003. All investigations, cleanup and monitoring confirmed complete.

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

PACIFIC STEEL GROUP (Continued) **S103946752**

CERS HAZ WASTE:
Name: PACIFIC STEEL GROUP
Address: 2301 NAPA VALLEJO HWY
City,State,Zip: NAPA, CA 94558
Site ID: 434753
CERS ID: 10757650
CERS Description: Hazardous Waste Generator

HIST UST:
Name: BASALITE BLOCK
Address: 2301 NAPA VALLEJO HIGHWAY
City,State,Zip: NAPA, CA 94558
File Number: 0002B092
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002B092.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:

CHMIRS:
Name: Not reported
Address: 2301 NAPA VALLEJO HIGHWAY
City,State,Zip: NAPA, CA 94558
OES Incident Number: 18-2019
OES notification: 03/28/2018
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
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

PACIFIC STEEL GROUP (Continued) **S103946752**

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:	None
Spill Site:	Other
Cleanup By:	On-site personnel
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Type:	CHEMICAL
Measure:	Gal(s)
Other:	Not reported
Date/Time:	1530
Year:	2018
Agency:	Syar Industries
Incident Date:	03/27/2018
Admin Agency:	Napa County Department Environmental Management
Amount:	Not reported
Contained:	Yes
Site Type:	None
E Date:	Not reported
Substance:	Coolant
Quantity Released:	55
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	No
#2 Pipeline:	No
#3 Pipeline:	No
#1 Vessel >= 300 Tons:	No
#2 Vessel >= 300 Tons:	No
#3 Vessel >= 300 Tons:	No
Evacs:	No
Injuries:	No
Fatals:	No
Comments:	Not reported
Description:	The coolant tank of a wheeled loader ruptured due to unknown reasons. The incident resulted in a coolant spill to soil. No injuries were reported. On-site personnel are in the process of conducting a cleanup. No waterways were impacted.

PACIFIC STEEL GROUP (Continued) **S103946752**

Name:	Not reported
Address:	2301 NAPA VALLEJO HIGHWAY
City,State,Zip:	NAPA, CA
OES Incident Number:	4-4577
OES notification:	08/15/2014
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
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:	Merchant/Business
Cleanup By:	No
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Type:	PETROLEUM
Measure:	Gal(s)
Other:	Not reported
Date/Time:	1005
Year:	2014
Agency:	Syar Industries
Incident Date:	8/13/2014
Admin Agency:	Not reported
Amount:	Not reported
Contained:	Yes
Site Type:	Not reported
E Date:	Not reported
Substance:	Hydraulic Oil
Quantity Released:	55
Unknown:	Not reported
Substance #2:	Not reported

PACIFIC STEEL GROUP (Continued) **S103946752**

Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	No
#2 Pipeline:	No
#3 Pipeline:	No
#1 Vessel >= 300 Tons:	No
#2 Vessel >= 300 Tons:	No
#3 Vessel >= 300 Tons:	No
Evacs:	No
Injuries:	Mechanical
Fatals:	No
Comments:	Not reported
Description:	Historical Report: RP states that a hydraulic line broke resulting in the release of approx 55 gal of hydraulic oil onto the ground. The release is contained, cleanup is complete, and no waterways were impacted.

HIST CORTESE:

edr_fname:	SYAR INDUSTRIES INC
edr_fadd1:	2301 NAPA VALLEJO
City,State,Zip:	NAPA, CA 94558
Region:	CORTESE
Facility County Code:	28
Reg By:	LTNKA
Reg Id:	28-0166

NPDES:

Name:	SYAR INDUSTRIES INC
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	2 28CN601267
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	No Action Required
Status Date:	07/23/2019
Operator Name:	SYAR Industries Inc
Operator Address:	PO Box 2540

PACIFIC STEEL GROUP (Continued) **S103946752**

Operator City:	Napa
Operator State:	California
Operator Zip:	94558
Name:	SYAR INDUSTRIES INC NAPA QUARRY
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	2 28I005111
Regulatory Measure Type:	Industrial
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Active
Status Date:	04/07/1992
Operator Name:	SYAR Industries Inc
Operator Address:	PO Box 2540
Operator City:	Napa
Operator State:	California
Operator Zip:	94558

NPDES as of 03/2018:

NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	2
Regulatory Measure ID:	275352
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	2 28I005111
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:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	05/09/2008
Processed Date:	04/07/1992
Status:	Active
Status Date:	04/07/1992

PACIFIC STEEL GROUP (Continued) **S103946752**

Place Size:	793
Place Size Unit:	Acres
Contact:	Mike Burneson
Contact Title:	Plant Manager
Contact Phone:	707-259-5852
Contact Phone Ext:	Not reported
Contact Email:	mburneson@syar.com
Operator Name:	SYAR Industries Inc
Operator Address:	PO Box 2540
Operator City:	Napa
Operator State:	California
Operator Zip:	94558
Operator Contact:	Mike Burneson
Operator Contact Title:	Plant Manager
Operator Contact Phone:	707-486-2211
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	mburneson@syar.com
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	707-486-2211
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 Description:	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:	N
Receiving Water Name:	Napa River
Certifier:	Brian Stopper
Certifier Title:	Environmental Manager
Certification Date:	06-OCT-16
Primary Sic:	1429-Crushed and Broken Stone, NEC
Secondary Sic:	2951-Asphalt Paving Mixtures and Blocks
Tertiary Sic:	3273-Ready-Mixed Concrete
NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	2

PACIFIC STEEL GROUP (Continued) **S103946752**

Regulatory Measure ID:	275352
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	2 28I005111
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	04/07/1992
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	SYAR Industries Inc
Discharge Address:	PO Box 2540
Discharge City:	Napa
Discharge State:	California
Discharge Zip:	94558
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
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:	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:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	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 Description:	Not reported
Constype Other Ind:	Not reported

PACIFIC STEEL GROUP (Continued) **S103946752**

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:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

Name:	SYAR INDUSTRIES INC NAPA QUARRY
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558
Facility Status:	Active
NPDES Number:	CAS000001
Region:	2
Agency Number:	0
Regulatory Measure ID:	275352
Place ID:	Not reported
Order Number:	97-03-DWQ
WDID:	2 28I005111
Regulatory Measure Type:	Enrollee
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	04/07/1992
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	PO Box 2540
Discharge Name:	SYAR Industries Inc
Discharge City:	Napa
Discharge State:	California
Discharge Zip:	94558
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

NPDES as of 03/2018:

NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	2
Regulatory Measure ID:	275352
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	2 28I005111
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported

PACIFIC STEEL GROUP (Continued) **S103946752**

Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	05/09/2008
Processed Date:	04/07/1992
Status:	Active
Status Date:	04/07/1992
Place Size:	793
Place Size Unit:	Acres
Contact:	Mike Burneson
Contact Title:	Plant Manager
Contact Phone:	707-259-5852
Contact Phone Ext:	Not reported
Contact Email:	mburneson@syar.com
Operator Name:	SYAR Industries Inc
Operator Address:	PO Box 2540
Operator City:	Napa
Operator State:	California
Operator Zip:	94558
Operator Contact:	Mike Burneson
Operator Contact Title:	Plant Manager
Operator Contact Phone:	707-486-2211
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	mburneson@syar.com
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	707-486-2211
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 Description:	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:	N

PACIFIC STEEL GROUP (Continued) **S103946752**

Receiving Water Name:	Napa River
Certifier:	Brian Stopper
Certifier Title:	Environmental Manager
Certification Date:	06-OCT-16
Primary Sic:	1429-Crushed and Broken Stone, NEC
Secondary Sic:	2951-Asphalt Paving Mixtures and Blocks
Tertiary Sic:	3273-Ready-Mixed Concrete
NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	2
Regulatory Measure ID:	275352
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	2 28I005111
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	04/07/1992
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	SYAR Industries Inc
Discharge Address:	PO Box 2540
Discharge City:	Napa
Discharge State:	California
Discharge Zip:	94558
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
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:	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:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported

PACIFIC STEEL GROUP (Continued) **S103946752**

Emergency Phone:	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 Description:	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:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

CIWQS:

Name:	SYAR INDUSTRIES INC NAPA QUARRY
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558
Agency:	SYAR Industries Inc
Agency Address:	PO Box 2540, Napa, CA 94558
Place/Project Type:	Industrial - Crushed and Broken Stone, NEC
SIC/NAICS:	1429(+)
Region:	2
Program:	INDSTW
Regulatory Measure Status:	Active
Regulatory Measure Type:	Storm water industrial
Order Number:	2014-0057-DWQ
WDID:	2 28I005111
NPDES Number:	CAS000001
Adoption Date:	01/01/1900
Effective Date:	04/07/1992
Termination Date:	01/01/1900
Expiration/Review Date:	01/01/1900
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	38.265034
Longitude:	-122.263346

PACIFIC STEEL GROUP (Continued) **S103946752**

CERS:
Name: PACIFIC STEEL GROUP
Address: 2301 NAPA VALLEJO HWY
City,State,Zip: NAPA, CA 94558
Site ID: 434753
CERS ID: 10757650
CERS Description: Chemical Storage Facilities

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-23-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Napa County Department of Environmental Management
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-23-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: This was the initial inspection after new permit was issued.
Documented employee Emergency Response Plan training was not checked.
It will be checked at next routine inspection. New employees are
required to be trained upon hire. Existing employees are required to
be trained annually. The training is required to be documented.
Eval Division: Napa County Department of Environmental Management
Eval Program: HMRRP
Eval Source: CERS

Coordinates:
Site ID: 434753
Facility Name: Pacific Steel Group
Env Int Type Code: HMBP
Program ID: 10757650
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 38.261750
Longitude: -122.276350

Affiliation:
Affiliation Type Desc: Document Preparer
Entity Name: Steve Heinen
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact
Entity Name: Steve Heinen
Entity Title: Not reported
Affiliation Address: 4805 Murphy Canyon Rd

PACIFIC STEEL GROUP (Continued) **S103946752**

Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92123
Affiliation Phone:	Not reported
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	4805 Murphy Canyon Rd
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92123
Affiliation Phone:	Not reported
Affiliation Type Desc:	Parent Corporation
Entity Name:	Pacific Steel Group
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Identification Signer
Entity Name:	Steve Heinen
Entity Title:	Maintenance &Facilities Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Legal Owner
Entity Name:	Pacific Steel Group
Entity Title:	Not reported
Affiliation Address:	4805 Murphy Canyon Rd
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92123
Affiliation Phone:	(858) 251-1100
Affiliation Type Desc:	CUPA District
Entity Name:	Napa County Env Mgmt
Entity Title:	Not reported
Affiliation Address:	1195 Third Street, Suite 210
Affiliation City:	Napa
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94559
Affiliation Phone:	(707) 253-4417
Affiliation Type Desc:	Operator

PACIFIC STEEL GROUP (Continued) **S103946752**

Entity Name: Pacific Steel Group
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (858) 251-0110

Name: SYAR INDUSTRIES INC
Address: 2301 NAPA VALLEJO HIGHWAY
City,State,Zip: NAPA, CA 94558-6242
Site ID: 497386
CERS ID: 110006535053
CERS Description: US EPA Air Emission Inventory System (EIS)

Affiliation:
Affiliation Type Desc: Operator
Entity Name: SYAR IND NAPA QUARRY
Entity Title: OPERATOR
Affiliation Address: POBOX 2540
Affiliation City: NAPA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact
Entity Name: Christina Baril
Entity Title: Not reported
Affiliation Address: POBOX 2540
Affiliation City: NAPA
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact
Entity Name: Michael Burneson
Entity Title: Plant Manager
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact
Entity Name: TOBY GOYETTE
Entity Title: ENVIRONMENTAL CONTACT
Affiliation Address: POBOX 2540
Affiliation City: NAPA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

PACIFIC STEEL GROUP (Continued) **S103946752**

Affiliation Type Desc:	Public Contact
Entity Name:	Christina Baril
Entity Title:	Not reported
Affiliation Address:	POBOX 2540
Affiliation City:	NAPA
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Environmental Contact
Entity Name:	DAN KRUEGER
Entity Title:	ASST. PLANT MANAGER
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Environmental Contact
Entity Name:	TOBY P GOYETTE
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Facility Owner
Entity Name:	SYAR IND
Entity Title:	OWNER
Affiliation Address:	POBOX 2540
Affiliation City:	NAPA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	JAMES NEWMANNA P G NA C E G NAPA CNTY LOP
Entity Title:	Not reported
Affiliation Address:	1195 THIRD STREETNA SUITE 101
Affiliation City:	NAPA
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Name:	SYAR INDUSTRIES INC NAPA QUARRY
Address:	2301 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558
Site ID:	543765
CERS ID:	615481
CERS Description:	Industrial Facility Storm Water

PACIFIC STEEL GROUP (Continued) **S103946752**

Violations:

Site ID:	543765
Site Name:	Syar Industries Inc Napa Quarry
Violation Date:	06-12-2002
Citation:	2014-0057-DWQ - Industrial General Permit
Violation Description:	SW - Deficient Report
Violation Notes:	Joint inspection with RIch Hiett in response to a complaint from Fish and Game. The Syar Facility in Napa has an asphalt berm surrounding Arroyo Creek. Also had an inadequate SWPPP and some housekeeping issues.
Violation Division:	Water Boards
Violation Program:	INDSTW
Violation Source:	SMARTS

Site ID:	543765
Site Name:	Syar Industries Inc Napa Quarry
Violation Date:	06-12-2002
Citation:	2014-0057-DWQ - Industrial General Permit
Violation Description:	SW - Deficient BMP Implementation
Violation Notes:	SWPPP inadequate, discharge of asphaltic materials and sediment into creek.
Violation Division:	Water Boards
Violation Program:	INDSTW
Violation Source:	SMARTS

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	02-15-2018
Violations Found:	No
Eval Type:	Industrial Storm Water Compliance Evaluation
Eval Notes:	We performed the industry-wide assessment and a limited evaluation of IGP compliance. For the stormwater features inspected, we observed appropriate stormwater best management practices (BMPs) and housekeeping. Repairs to a corroded culv"ert are scheduled to be completed pending Fish and Game and Corps of Engineers approval of plans. As of 12/4/2018: We are currently waiting on approval of our plan to replace that culvert; Outfall B. Plans were submitted to Fish and Game and the Corps of Engineers who have jurisdiction on the stream (adjacent to Arroyo Creek) that the culvert sits in. We also are working with Mapistry consultants to amend the Level 2 Exceedance Response Action (ERA) Plan and to create the L2 Technical Report. The amended L2 ERA will be uploaded to SMARTS (I can send you copy directly) soon and the L2 Tech Rpt will need a 6 month extension, so that we can test methods discussed in the ERA. We are expecting approval of the culvert replacement within 3 to 6 months. Materials are currently on the ground and ready to be placed. Ivory Briggs"
Eval Division:	Water Boards
Eval Program:	INDSTW
Eval Source:	SMARTS

Affiliation:

Affiliation Type Desc:	Owner/Operator
Entity Name:	SYAR Industries Inc
Entity Title:	Operator
Affiliation Address:	PO Box 2540
Affiliation City:	Napa

PACIFIC STEEL GROUP (Continued) **S103946752**

Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94558
Affiliation Phone: Not reported

C36 **NAPA VALLEY COLLEGE** **CA FID UST** **S101623954**
NW **NAPA-VALLEJO HWY** **N/A**
1/8-1/4 **NAPA, CA 94558**
0.210 mi.
1110 ft. **Site 1 of 3 in cluster C**

Relative: CA FID UST:
Lower
Actual: Facility ID: 28001192
33 ft. Regulated By: UTNKA
Regulated ID: 00065886
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7072533340
Mail To: Not reported
Mailing Address: NAPA-VALLEJO HWY
Mailing Address 2: Not reported
Mailing City,St,Zip: NAPA 94558
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

C37 **NAPA VALLEY COLLEGE** **HIST UST** **U001597617**
NW **NAPA-VALLEJO HWY** **N/A**
1/8-1/4 **NAPA, CA 94558**
0.210 mi.
1110 ft. **Site 2 of 3 in cluster C**

Relative: HIST UST:
Lower
Actual: Name: NAPA VALLEY COLLEGE
33 ft. Address: NAPA-VALLEJO HWY
City,State,Zip: NAPA, CA 94558
File Number: 0002B06A
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002B06A.pdf
Region: STATE
Facility ID: 00000065886
Facility Type: Other
Other Type: PUBLIC EDUCATION
Contact Name: Not reported
Telephone: 7072533340
Owner Name: NAPA VALLEY COMMUNITY COLLEGE
Owner Address: NAPA VALLEJO HWY
Owner City,St,Zip: NAPA, CA 94558
Total Tanks: 0004

Tank Num: 001
Container Num: GR-1

NAPA VALLEY COLLEGE (Continued) **U001597617**

Year Installed:	1965
Tank Capacity:	00000550
Tank Used for:	WASTE
Type of Fuel:	2
Container Construction Thickness:	2 1
Leak Detection:	Stock Inventor
Tank Num:	002
Container Num:	D-1
Year Installed:	1975
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	003
Container Num:	GUL-1
Year Installed:	1975
Tank Capacity:	00000550
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	12
Leak Detection:	Stock Inventor
Tank Num:	004
Container Num:	A-1
Year Installed:	1965
Tank Capacity:	00002000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	None

Click here for Geo Tracker PDF:

C38 **NAPA VALLEY COLLEGE** **LUST** **S119102563**
NW **2277 STATE HIGHWAY 221** **N/A**
1/8-1/4 **NAPA, CA 94558**
0.241 mi.
1270 ft. **Site 3 of 3 in cluster C**

Relative: NAPA CO. LUST:
Lower

Name:	NAPA VALLEY COLLEGE
Address:	2277 STATE HIGHWAY 221
City,State,Zip:	NAPA, CA 94558
Permit ID:	248293
Status:	Closed
Permit Type:	Non-LOP
District:	0

Actual:
33 ft.

D39 **NAPA CITY KENNEDY PARK** **LUST** **U003114999**
WNW **2295 STREBLOW DR** **UST** **N/A**
1/4-1/2 **NAPA, CA** **Cortese**
0.363 mi.
1916 ft. **Site 1 of 2 in cluster D**

Relative:
Lower

Actual:
22 ft.

LUST REG 2:

Region:	2
Facility Id:	28-0333
Facility Status:	Case Closed
Case Number:	0091
How Discovered:	Tank Closure
Leak Cause:	UNK
Leak Source:	UNK
Date Leak Confirmed:	8/25/1997
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	Not reported
Pollution Characterization Began:	10/29/2002
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	7/14/2003

NAPA CO. UST:

Name:	NAPA CITY KENNEDY PARK
Address:	2295 STREBLOW DR
City,State,Zip:	NAPA
Facility ID:	NAPA0091
Permit ID:	Not reported
Facility Status:	Not reported
Permit Type:	Not reported
District:	Not reported
Num of Tanks:	0

CORTESE:

Name:	NAPA CITY KENNEDY PARK
Address:	2295 STREBLOW DR
City,State,Zip:	NAPA, CA 94559
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0605500287
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported

NAPA CITY KENNEDY PARK (Continued) **U003114999**

File Name: Active Open

D40 **NAPA CITY KENNEDY PARK** **LUST** **S104577401**
WNW **2295 STREBLOW** **CERS HAZ WASTE** **N/A**
1/4-1/2 **NAPA, CA 94559** **HIST CORTESE**
0.363 mi. **CERS**
1916 ft. **Site 2 of 2 in cluster D**

Relative: **Lower**
Actual: **22 ft.**

NAPA CO. LUST:
Name: NAPA CITY KENNEDY PARK
Address: 2295 STREBLOW DR
City,State,Zip: NAPA, CA 94558
Permit ID: 248662
Status: Closed
Permit Type: Non-LOP
District: 1

LUST:
Name: NAPA CITY KENNEDY PARK
Address: 2295 STREBLOW DR
City,State,Zip: NAPA, CA 94559
Lead Agency: NAPA COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605500287
Global Id: T0605500287
Latitude: 38.268873
Longitude: -122.279449
Status: Completed - Case Closed
Status Date: 06/10/2004
Case Worker: JTN
RB Case Number: 28-0333
Local Agency: NAPA COUNTY
File Location: Local Agency
Local Case Number: 0091
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0605500287
Contact Type: Local Agency Caseworker
Contact Name: James Newman, P.G., C.E.G.
Organization Name: NAPA COUNTY
Address: 1195 THIRD STREET, SUITE 101
City: NAPA
Email: james.newman@countyofnapa.org
Phone Number: Not reported

LUST:
Global Id: T0605500287
Action Type: ENFORCEMENT
Date: 03/17/2003
Action: Site Visit / Inspection / Sampling

Global Id: T0605500287
Action Type: ENFORCEMENT
Date: 10/08/2003

NAPA CITY KENNEDY PARK (Continued) **S104577401**

Action: * No Action

Global Id: T0605500287
Action Type: ENFORCEMENT
Date: 10/29/2002
Action: Meeting

Global Id: T0605500287
Action Type: ENFORCEMENT
Date: 10/08/2003
Action: LOP Case Closure Summary to RB

Global Id: T0605500287
Action Type: ENFORCEMENT
Date: 06/10/2004
Action: Closure/No Further Action Letter - #6/10/04

Global Id: T0605500287
Action Type: Other
Date: 08/26/1997
Action: Leak Discovery

Global Id: T0605500287
Action Type: Other
Date: 08/26/1997
Action: Leak Stopped

Global Id: T0605500287
Action Type: Other
Date: 08/25/1997
Action: Leak Reported

Global Id: T0605500287
Action Type: ENFORCEMENT
Date: 12/02/2002
Action: Site Visit / Inspection / Sampling

LUST:
Global Id: T0605500287
Status: Open - Case Begin Date
Status Date: 08/25/1997

Global Id: T0605500287
Status: Open - Site Assessment
Status Date: 08/25/1997

Global Id: T0605500287
Status: Open - Site Assessment
Status Date: 10/29/2002

Global Id: T0605500287
Status: Open - Verification Monitoring
Status Date: 07/14/2003

Global Id: T0605500287
Status: Completed - Case Closed
Status Date: 06/10/2004

NAPA CITY KENNEDY PARK (Continued) **S104577401**

CERS HAZ WASTE:
- Name: NAPA CITY KENNEDY PARK
- Address: 2295 STREBLOW DR
- City,State,Zip: NAPA, CA 94558
- Site ID: 137155
- CERS ID: 10171671
- CERS Description: Hazardous Waste Generator

HIST CORTESE:
- edr_fname: NAPA CITY KENNEDY PARK
- edr_fadd1: 2295 STREBLOW
- City,State,Zip: NAPA, CA 94559
- Region: CORTESE
- Facility County Code: 28
- Reg By: LTNKA
- Reg Id: 28-0333

CERS:
- Name: NAPA CITY KENNEDY PARK
- Address: 2295 STREBLOW DR
- City,State,Zip: NAPA, CA 94558
- Site ID: 137155
- CERS ID: 10171671
- CERS Description: Chemical Storage Facilities

Violations:
- Site ID: 137155
- Site Name: NAPA CITY KENNEDY PARK
- Violation Date: 01-08-2014
- Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
- Violation Description: Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
- Violation Notes: Returned to compliance on 03/26/2014. Observed used oil tank, one 55-gallon drum of waste filters, one 55-gallon drum of used absorbent, one 55-gallon drum of waste antifreeze without Accumulation Start Date. NOV sent 2/14/14, delivered 2/18/14; no response. Referred to Supervisor 2/28/14.
- Violation Division: Napa County Department of Environmental Management
- Violation Program: HW
- Violation Source: CERS

Evaluation:
- Eval General Type: Compliance Evaluation Inspection
- Eval Date: 01-08-2014
- Violations Found: No
- Eval Type: Routine done by local agency
- Eval Notes: Not reported
- Eval Division: Napa County Department of Environmental Management
- Eval Program: HMRRP
- Eval Source: CERS

- Eval General Type: Compliance Evaluation Inspection
- Eval Date: 01-08-2014

NAPA CITY KENNEDY PARK (Continued) **S104577401**

Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Napa County Department of Environmental Management
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-09-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Napa County Department of Environmental Management
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-09-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Napa County Department of Environmental Management
Eval Program:	HW
Eval Source:	CERS

Coordinates:

Site ID:	137155
Facility Name:	NAPA CITY KENNEDY PARK
Env Int Type Code:	HWG
Program ID:	10171671
Coord Name:	Not reported
Ref Point Type Desc:	Center of a facility or station.
Latitude:	38.265780
Longitude:	-122.276280

Affiliation:

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	2295 STREBLOW DR
Affiliation City:	NAPA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94558
Affiliation Phone:	Not reported
Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	James Newman, P.G., C.E.G. - NAPA COUNTY
Entity Title:	Not reported
Affiliation Address:	1195 THIRD STREET, SUITE 101
Affiliation City:	NAPA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

NAPA CITY KENNEDY PARK (Continued) **S104577401**

Affiliation Type Desc:	CUPA District
Entity Name:	Napa County Env Mgmt
Entity Title:	Not reported
Affiliation Address:	1195 Third Street, Suite 210
Affiliation City:	Napa
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94559
Affiliation Phone:	(707) 253-4417

Affiliation Type Desc:	Document Preparer
Entity Name:	Thomas Slevin
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Environmental Contact
Entity Name:	Thomas Slevin
Entity Title:	Not reported
Affiliation Address:	2295 Streblow Dr
Affiliation City:	Napa
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94558
Affiliation Phone:	Not reported

Affiliation Type Desc:	Identification Signer
Entity Name:	Thomas Slevin
Entity Title:	GC Superintendent
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Legal Owner
Entity Name:	Tom Isaac
Entity Title:	Not reported
Affiliation Address:	PO Box 5668
Affiliation City:	Petaluma
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94954
Affiliation Phone:	(707) 763-0335

Affiliation Type Desc:	Operator
Entity Name:	Napa Golf Course
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported

NAPA CITY KENNEDY PARK (Continued) **S104577401**

Affiliation Zip: Not reported
Affiliation Phone: (707) 255-4333

Affiliation Type Desc: Parent Corporation
Entity Name: NAPA CITY KENNEDY PARK
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Name: NAPA CITY KENNEDY PARK
Address: 2295 STREBLOW DR
City,State,Zip: NAPA, CA 94558
Site ID: 137155
CERS ID: T0605500287
CERS Description: Leaking Underground Storage Tank Cleanup Site

Violations:
Site ID: 137155
Site Name: NAPA CITY KENNEDY PARK
Violation Date: 01-08-2014
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 03/26/2014. Observed used oil tank, one 55-gallon drum of waste filters, one 55-gallon drum of used absorbent, one 55-gallon drum of waste antifreeze without Accumulation Start Date. NOV sent 2/14/14, delivered 2/18/14; no response. Referred to Supervisor 2/28/14.
Violation Division: Napa County Department of Environmental Management
Violation Program: HW
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-08-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Napa County Department of Environmental Management
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-08-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Napa County Department of Environmental Management
Eval Program: HW

NAPA CITY KENNEDY PARK (Continued) **S104577401**

Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-09-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Napa County Department of Environmental Management
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-09-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Napa County Department of Environmental Management
Eval Program: HW
Eval Source: CERS

Coordinates:
Site ID: 137155
Facility Name: NAPA CITY KENNEDY PARK
Env Int Type Code: HWG
Program ID: 10171671
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.
Latitude: 38.265780
Longitude: -122.276280

Affiliation:
Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 2295 STREBLOW DR
Affiliation City: NAPA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94558
Affiliation Phone: Not reported

Affiliation Type Desc: Local Agency Caseworker
Entity Name: James Newman, P.G., C.E.G. - NAPA COUNTY
Entity Title: Not reported
Affiliation Address: 1195 THIRD STREET, SUITE 101
Affiliation City: NAPA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District
Entity Name: Napa County Env Mgmt
Entity Title: Not reported
Affiliation Address: 1195 Third Street, Suite 210
Affiliation City: Napa

NAPA CITY KENNEDY PARK (Continued) **S104577401**

Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94559
Affiliation Phone:	(707) 253-4417
Affiliation Type Desc:	Document Preparer
Entity Name:	Thomas Slevin
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Environmental Contact
Entity Name:	Thomas Slevin
Entity Title:	Not reported
Affiliation Address:	2295 Streblow Dr
Affiliation City:	Napa
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94558
Affiliation Phone:	Not reported
Affiliation Type Desc:	Identification Signer
Entity Name:	Thomas Slevin
Entity Title:	GC Superintendent
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Legal Owner
Entity Name:	Tom Isaac
Entity Title:	Not reported
Affiliation Address:	PO Box 5668
Affiliation City:	Petaluma
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94954
Affiliation Phone:	(707) 763-0335
Affiliation Type Desc:	Operator
Entity Name:	Napa Golf Course
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(707) 255-4333
Affiliation Type Desc:	Parent Corporation
Entity Name:	NAPA CITY KENNEDY PARK

NAPA CITY KENNEDY PARK (Continued) **S104577401**

Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

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41 **NAPA STATE HOSPITAL DISPOSAL SITE** **SWF/LF** **S102361377**
NNE **NAPA STATE HOSPITAL** **CERS** **N/A**
1/4-1/2 **IMOLA (NAPA STATE HOSPITAL), CA 99999**
0.413 mi.
2180 ft.

Relative:
Higher

Actual:
172 ft.

SWF/LF (SWIS):

Name:	NAPA STATE HOSPITAL DISPOSAL SITE
Address:	NAPA STATE HOSPITAL
City,State,Zip:	IMOLA (NAPA STATE HOSPITAL), CA 99999
Region:	STATE
Facility ID:	28-AA-0008
SWIS Number:	28-AA-0008
Point of Contact:	Abel Martinez-Centeno
Is Archived:	No
Is Closed Illegal Abandoned:	Yes
Is Site Inert Debris Engineered Fill:	No
Is Financial Assurances Responsible:	No
Absorbed On:	Not reported
Operational Status:	Closed
Absorbed By:	Not reported
Closed Illegal Abandoned Category:	C1
EPA Federal Registry ID:	Not reported
ARB District:	Bay Area
SWRCB Region:	San Francisco Bay
Local Government:	Napa County (Unincorporated)
Reporting Agency Legal Name:	County of Napa
Reporting Agency Department:	Planning Building & Environmt'l Services, Local Enforcement Agency
Enforcing Agency Legal Name:	County of Napa
Enforcing Agency Department:	Planning Building & Environmt'l Services, Local Enforcement Agency
Regulation Status:	Exempt

Activity:

SWIS Number:	28-AA-0008
Site Name:	Napa State Hospital Disposal Site
Activity:	Solid Waste Disposal Site
Activity Is Archived:	No
Category:	Disposal
Activity Classification:	Solid Waste Disposal Site
WDR Number:	Not reported
WDR Landfill Class:	Not reported
Cease Operation:	Not reported
Cease Operation Type:	Not reported
Inspection Frequency:	Annual
Throughput:	0
Throughput Units:	Not reported
Remaining Capacity:	0
Remaining Capacity Date:	Not reported
Capacity:	0

NAPA STATE HOSPITAL DISPOSAL SITE (Continued) **S102361377**

Capacity Units:	Not reported
Total Acreage:	0
Disposal Acreage:	0
Permitted Elevation:	0
Permitted Elevation Type:	Not reported
Permitted Depth:	0
Permitted Depth Type:	Not reported
Point of Contact:	Abel Martinez-Centeno
Site Operational Status:	Closed
Site Regulatory Status:	Exempt
Site Is Archived:	No
Is Closed Illegal Abandoned:	Yes
Is Site Inert Debris Engineered Fill:	No
Is Financial Assurances Responsible:	No
Absorbed On:	Not reported
Absorbed By:	Not reported
Closed Illegal Abandoned Category:	C1
EPA Federal Registry ID:	Not reported
County:	Napa
ARB District:	Bay Area
SWRCB Region:	San Francisco Bay
Local Government:	Napa County (Unincorporated)
Street Address:	Napa State Hospital
City:	Imola (Napa State Hospital)
State:	CA
ZIP Code:	99999
Reporting Agency Legal Name:	County of Napa
Reporting Agency Department:	Planning Building & Environmt'l Services, Local Enforcement Agency
Enforcing Agency Legal Name:	County of Napa
Enforcing Agency Department:	Planning Building & Environmt'l Services, Local Enforcement Agency

Operator:

SWIS Number:	28-AA-0008
Site Name:	Napa State Hospital Disposal Site
Site Operational Status:	Closed
Site Type:	Disposal Only
Site Regulatory Status:	Exempt
Latitude:	38.2749
Longitude:	-122.2613
Is Archived:	No
Operator:	State Of California
Started On:	3/21/2000
Contact Name:	Department Of M Health
Contact Title:	Napa State Hospital
Contact Email:	Not reported
Contact Phone:	(707) 253-5667
Street Address:	2100 Napa Vallejo Hwy
Operator City:	Napa
Operator State:	CA
Operator Zip:	94558

Owner:

SWIS Number:	28-AA-0008
Owner:	State Of California
Owner Address:	2100 Napa Vallejo Hwy
Owner City:	Napa

NAPA STATE HOSPITAL DISPOSAL SITE (Continued) **S102361377**

Owner State:	CA
Owner Zip:	94558
Site Name:	Napa State Hospital Disposal Site
Site Operational Status:	Closed
Site Type:	Disposal Only
Site Regulatory Status:	Exempt
Latitude:	38.2749
Longitude:	-122.2613
Is Archived:	No
Started On:	3/21/2000
Contact Name:	Department Of M Health
Contact Title:	Napa State Hospital
Contact Email:	Not reported
Contact Phone:	(707) 253-5667

CERS:

Name:	NAPA STATE HOSPITAL DISPOSAL SITE
Address:	NAPA STATE HOSPITAL
City,State,Zip:	IMOLA (NAPA STATE HOSPITAL), CA
Site ID:	510388
CERS ID:	28-AA-0008
CERS Description:	Solid Waste and Recycle Sites

Affiliation:

Affiliation Type Desc:	Legal Operator
Entity Name:	STATE OF CALIFORNIA
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Napa
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94558
Affiliation Phone:	7072535667

Affiliation Type Desc:	Legal Owner
Entity Name:	STATE OF CALIFORNIA
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Napa
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94558
Affiliation Phone:	7072535667

E42
NW
1/4-1/2
0.438 mi.
2315 ft.

NAPA VALLEY COLLEGE
2277 NAPA VALLEJO HWY
NAPA, CA 94558

Site 1 of 4 in cluster E

Cortese **S113025726**
HAZNET **N/A**
HWTS

Relative:
Lower

Actual:
6 ft.

CORTESE:

Name:	NAPA VALLEY COLLEGE
Address:	2277 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558
Region:	CORTESE
Envirostor Id:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Global ID:	T0605500199
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

HAZNET:

Name:	NAPA VALLEY COLLEGE
Address:	2277 NAPA VALLEJO HWY
Address 2:	Not reported
City,State,Zip:	NAPA, CA 945586236
Contact:	IAN HOLBROOK
Telephone:	7072567580
Mailing Name:	Not reported
Mailing Address:	2277 NAPA VALLEJO HWY
Year:	2019
Gepaid:	CAL000012203
TSD EPA ID:	AZR000515924
CA Waste Code:	135 - Unspecified aqueous solution
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.01700
Year:	2019
Gepaid:	CAL000012203
TSD EPA ID:	NMD002208627
CA Waste Code:	141 - Off-specification, aged or surplus inorganics
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.03700
Year:	2019
Gepaid:	CAL000012203
TSD EPA ID:	AZR000515924
CA Waste Code:	291 - Latex waste
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.11100
Year:	2019
Gepaid:	CAL000012203
TSD EPA ID:	NMD002208627

NAPA VALLEY COLLEGE (Continued) **S113025726**

CA Waste Code:	212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.04600
Year:	2019
Gepaid:	CAL000012203
TSD EPA ID:	NMD002208627
CA Waste Code:	551 - Laboratory waste chemicals
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.03150
Year:	2019
Gepaid:	CAL000012203
TSD EPA ID:	UTD981552177
CA Waste Code:	551 - Laboratory waste chemicals
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.00300
Year:	2019
Gepaid:	CAL000012203
TSD EPA ID:	AZR000515924
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.30550
Year:	2019
Gepaid:	CAL000012203
TSD EPA ID:	NMD002208627
CA Waste Code:	725 - Liquids with mercury >= 20 Mg./L
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.00600
Year:	2019
Gepaid:	CAL000012203
TSD EPA ID:	AZR000515924
CA Waste Code:	181 - Other inorganic solid waste
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.00400
Year:	2019
Gepaid:	CAL000012203
TSD EPA ID:	NMD002208627
CA Waste Code:	181 - Other inorganic solid waste
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.00200

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

NAPA VALLEY COLLEGE (Continued) **S113025726**

Additional Info:

Year:	2006
Gen EPA ID:	CAL000012203
Shipment Date:	20061116
Creation Date:	7/13/2007 18:30:28
Receipt Date:	20061208
Manifest ID:	000169794CEX
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	OKD981588791
Trans 2 Name:	TRIAD TRANSPORT INC
TSDF EPA ID:	TXD077603371
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	221 - Waste oil and mixed oil
RCRA Code:	D008
Meth Code:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.29
Waste Quantity:	580
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	D006
Additional Code 3:	D005
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20060712
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	24972092
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SERVICES INC
Trans 2 EPA ID:	UTD988074712
Trans 2 Name:	TW COMPANY
TSDF EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDF Alt EPA ID:	9490019999
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D009
Meth Code:	- Not reported
Quantity Tons:	0.0095
Waste Quantity:	19
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20060712
Creation Date:	10/25/2006 18:30:15
Receipt Date:	20060728
Manifest ID:	24972092
Trans EPA ID:	MAD039322250

NAPA VALLEY COLLEGE (Continued) **S113025726**

Trans Name:	CLEAN HARBORS ENV SERVICES INC
Trans 2 EPA ID:	UTD988074712
Trans 2 Name:	TW COMPANY
TSDF EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDF Alt EPA ID:	9490019999
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D001
Meth Code:	T03 - Treatment, Incineration
Quantity Tons:	0.002
Waste Quantity:	4
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20060712
Creation Date:	10/25/2006 18:30:15
Receipt Date:	20060728
Manifest ID:	24972092
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SERVICES INC
Trans 2 EPA ID:	UTD988074712
Trans 2 Name:	TW COMPANY
TSDF EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDF Alt EPA ID:	9490019999
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D001
Meth Code:	T03 - Treatment, Incineration
Quantity Tons:	0.002
Waste Quantity:	4
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20060712
Creation Date:	10/25/2006 18:30:15
Receipt Date:	20060728
Manifest ID:	24972092
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SERVICES INC
Trans 2 EPA ID:	UTD988074712
Trans 2 Name:	TW COMPANY
TSDF EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDF Alt EPA ID:	9490019999
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D001

NAPA VALLEY COLLEGE (Continued) **S113025726**

Meth Code:	T03 - Treatment, Incineration
Quantity Tons:	0.0025
Waste Quantity:	5
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20060712
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	24972092
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SERVICES INC
Trans 2 EPA ID:	UTD988074712
Trans 2 Name:	TW COMPANY
TSDF EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDF Alt EPA ID:	9490019999
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D008
Meth Code:	- Not reported
Quantity Tons:	0.023
Waste Quantity:	46
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20060712
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	24972092
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SERVICES INC
Trans 2 EPA ID:	UTD988074712
Trans 2 Name:	TW COMPANY
TSDF EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDF Alt EPA ID:	9490019999
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D002
Meth Code:	- Not reported
Quantity Tons:	0.0035
Waste Quantity:	7
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Shipment Date:	20060317
Creation Date:	7/27/2006 18:31:56
Receipt Date:	20060327
Manifest ID:	25159676
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SERVICES INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDF Alt EPA ID:	9490019999
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	D001
Meth Code:	T03 - Treatment, Incineration
Quantity Tons:	0.0025
Waste Quantity:	5
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20060317
Creation Date:	7/27/2006 18:31:56
Receipt Date:	20060327
Manifest ID:	25159676
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SERVICES INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDF Alt EPA ID:	9490019999
TSDF Alt Name:	Not reported
Waste Code Description:	791 - Liquids with pH < 2 792 Liquids with pH < 2 with metals
RCRA Code:	D002
Meth Code:	T03 - Treatment, Incineration
Quantity Tons:	0.005
Waste Quantity:	10
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20060317
Creation Date:	7/27/2006 18:31:56
Receipt Date:	20060327
Manifest ID:	25159676
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SERVICES INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	UTD981552177

NAPA VALLEY COLLEGE (Continued) **S113025726**

Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDF Alt EPA ID:	9490019999
TSDF Alt Name:	Not reported
Waste Code Description:	123 - Unspecified alkaline solution
RCRA Code:	D001
Meth Code:	T03 - Treatment, Incineration
Quantity Tons:	0.005
Waste Quantity:	10
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1997
Gen EPA ID:	CAL000012203
Shipment Date:	19970527
Creation Date:	9/12/1997 0:00:00
Receipt Date:	19970530
Manifest ID:	96806133
Trans EPA ID:	CAL931024038
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD050806850
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD050806850
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D001
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0125
Waste Quantity:	25
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19970515
Creation Date:	7/17/1997 0:00:00
Receipt Date:	19970516
Manifest ID:	95381999
Trans EPA ID:	CAR000002774
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD000088252
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D001

NAPA VALLEY COLLEGE (Continued) **S113025726**

Meth Code:	D99 - Disposal, Other
Quantity Tons:	0.0125
Waste Quantity:	25
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19970515
Creation Date:	7/17/1997 0:00:00
Receipt Date:	19970516
Manifest ID:	95381999
Trans EPA ID:	CAR000002774
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD000088252
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D001
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0417
Waste Quantity:	10
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19970515
Creation Date:	7/17/1997 0:00:00
Receipt Date:	19970516
Manifest ID:	95381999
Trans EPA ID:	CAR000002774
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD000088252
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.033
Waste Quantity:	10
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Additional Info:

Year:	1994
Gen EPA ID:	CAL000012203
Shipment Date:	19940428
Creation Date:	3/25/1996 0:00:00
Receipt Date:	19940502
Manifest ID:	92881539
Trans EPA ID:	CAD980814594
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080022148
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D001
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0125
Waste Quantity:	3
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19940428
Creation Date:	3/25/1996 0:00:00
Receipt Date:	19940502
Manifest ID:	92881539
Trans EPA ID:	CAD980814594
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080022148
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D001
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0208
Waste Quantity:	5
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19940428
Creation Date:	3/25/1996 0:00:00
Receipt Date:	19940502
Manifest ID:	92881539
Trans EPA ID:	CAD980814594

NAPA VALLEY COLLEGE (Continued) **S113025726**

Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080022148
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D007
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0083
Waste Quantity:	2
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19940428
Creation Date:	3/25/1996 0:00:00
Receipt Date:	19940502
Manifest ID:	92881539
Trans EPA ID:	CAD980814594
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080022148
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D001
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0625
Waste Quantity:	15
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2007
Gen EPA ID:	CAL000012203

Shipment Date:	20071218
Creation Date:	5/12/2008 13:23:32
Receipt Date:	20071221
Manifest ID:	000687036SKS
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC

NAPA VALLEY COLLEGE (Continued) **S113025726**

TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	213 - Hydrocarbon solvents (benzene, hexane, Stoddard, etc.
RCRA Code:	D039
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.03336
Waste Quantity:	8
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20071218
Creation Date:	5/12/2008 13:23:32
Receipt Date:	20071221
Manifest ID:	000687036SKS
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	D040
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.03336
Waste Quantity:	8
Quantity Unit:	G
Additional Code 1:	D039
Additional Code 2:	D018
Additional Code 3:	D001
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20071112
Creation Date:	2/4/2008 18:30:20
Receipt Date:	20071012
Manifest ID:	003338115JJK
Trans EPA ID:	CAD982413262
Trans Name:	EVERGREEN ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980887418
Trans Name:	EVERGREEN OIL INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	135 - Unspecified aqueous solution
RCRA Code:	Not reported
Meth Code:	H135 - Discharge To Sewer/Potw Or Npdes(With Prior Storage--With Or Without Treatment)
Quantity Tons:	2.373

NAPA VALLEY COLLEGE (Continued) **S113025726**

Waste Quantity:	565
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20071011
Creation Date:	1/25/2008 18:30:14
Receipt Date:	20071016
Manifest ID:	000595249SKS
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	213 - Hydrocarbon solvents (benzene, hexane, Stoddard, etc.
RCRA Code:	D039
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.03336
Waste Quantity:	8
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20071005
Creation Date:	3/18/2008 18:30:29
Receipt Date:	20071024
Manifest ID:	000595251SKS
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY NEVADA
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	221 - Waste oil and mixed oil
RCRA Code:	Not reported
Meth Code:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Quantity Tons:	0.15
Waste Quantity:	300
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Shipment Date:	20070927
Creation Date:	3/12/2008 18:30:30
Receipt Date:	20071015
Manifest ID:	000216781SKS
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	OKD981588791
Trans 2 Name:	TRAID
TSDF EPA ID:	TXD077603371
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	221 - Waste oil and mixed oil
RCRA Code:	D008
Meth Code:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.25
Waste Quantity:	500
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	D006
Additional Code 3:	D005
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20070802
Creation Date:	1/25/2008 18:31:13
Receipt Date:	20070816
Manifest ID:	000216780SKS
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	OKD981588791
Trans 2 Name:	TRIAD
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY NEVADA
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	291 - Latex waste
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20070802
Creation Date:	3/4/2008 18:30:34
Receipt Date:	20070816
Manifest ID:	000169796CEX
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	OKD981588791
Trans 2 Name:	TRIAD

NAPA VALLEY COLLEGE (Continued) **S113025726**

TSDF EPA ID:	TXD077603371
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.04
Waste Quantity:	80
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20070802
Creation Date:	3/4/2008 18:30:34
Receipt Date:	20070816
Manifest ID:	000169796CEX
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	OKD981588791
Trans 2 Name:	TRIAD
TSDF EPA ID:	TXD077603371
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.
RCRA Code:	F005
Meth Code:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.02
Waste Quantity:	40
Quantity Unit:	P
Additional Code 1:	F003
Additional Code 2:	D035
Additional Code 3:	D001
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20070802
Creation Date:	3/4/2008 18:30:34
Receipt Date:	20070816
Manifest ID:	000169796CEX
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	OKD981588791
Trans 2 Name:	TRIAD
TSDF EPA ID:	TXD077603371
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

NAPA VALLEY COLLEGE (Continued) **S113025726**

Quantity Tons: 0.025
Waste Quantity: 50
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Additional Info:
Year: 2005
Gen EPA ID: CAL000012203

Shipment Date: 20050810
Creation Date: 3/10/2006 10:49:15
Receipt Date: 20050817
Manifest ID: 24576694
Trans EPA ID: CAR000052803
Trans Name: 21ST CENTURY EMI
Trans 2 EPA ID: TXR000025072
Trans 2 Name: ROCKETLINE CARRIER SERVICES
TSDF EPA ID: WAD991281767
Trans Name: BURLINGTON ENVIRONMENTAL INC KENT
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code: D003
Meth Code: T03 - Treatment, Incineration
Quantity Tons: 0.0075
Waste Quantity: 15
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Shipment Date: 20050810
Creation Date: 3/10/2006 10:49:15
Receipt Date: 20050817
Manifest ID: 24576694
Trans EPA ID: CAR000052803
Trans Name: 21ST CENTURY EMI
Trans 2 EPA ID: TXR000025072
Trans 2 Name: ROCKETLINE CARRIER SERVICES
TSDF EPA ID: WAD991281767
Trans Name: BURLINGTON ENVIRONMENTAL INC KENT
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code: D001
Meth Code: D80 - Disposal, Land Fill
Quantity Tons: 0.0375
Waste Quantity: 75
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20050810
Creation Date:	3/10/2006 10:49:15
Receipt Date:	20050817
Manifest ID:	24576694
Trans EPA ID:	CAR000052803
Trans Name:	21ST CENTURY EMI
Trans 2 EPA ID:	TXR000025072
Trans 2 Name:	ROCKETLINE CARRIER SERVICES
TSDF EPA ID:	WAD991281767
Trans Name:	BURLINGTON ENVIRONMENTAL INC KENT
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	F002
Meth Code:	T03 - Treatment, Incineration
Quantity Tons:	0.0834
Waste Quantity:	20
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20050810
Creation Date:	3/10/2006 10:49:15
Receipt Date:	20050817
Manifest ID:	24576694
Trans EPA ID:	CAR000052803
Trans Name:	21ST CENTURY EMI
Trans 2 EPA ID:	TXR000025072
Trans 2 Name:	ROCKETLINE CARRIER SERVICES
TSDF EPA ID:	WAD991281767
Trans Name:	BURLINGTON ENVIRONMENTAL INC KENT
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D001
Meth Code:	T03 - Treatment, Incineration
Quantity Tons:	0.0075
Waste Quantity:	15
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20050715
Creation Date:	3/10/2006 10:49:15
Receipt Date:	20050722
Manifest ID:	24214166
Trans EPA ID:	CAR000052803

NAPA VALLEY COLLEGE (Continued) **S113025726**

Trans Name:	21ST CENTURY EMI
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY EMI
TSDF Alt EPA ID:	NVD980895338
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	D001
Meth Code:	T03 - Treatment, Incineration
Quantity Tons:	0.0025
Waste Quantity:	5
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20050715
Creation Date:	3/10/2006 10:49:15
Receipt Date:	20050722
Manifest ID:	24214166
Trans EPA ID:	CAR000052803
Trans Name:	21ST CENTURY EMI
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY EMI
TSDF Alt EPA ID:	NVD980895338
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	T03 - Treatment, Incineration
Quantity Tons:	0.0025
Waste Quantity:	5
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20050715
Creation Date:	3/10/2006 10:49:15
Receipt Date:	20050722
Manifest ID:	24214166
Trans EPA ID:	CAR000052803
Trans Name:	21ST CENTURY EMI
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY EMI
TSDF Alt EPA ID:	NVD980895338
TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	D001

NAPA VALLEY COLLEGE (Continued) **S113025726**

Meth Code:	T03 - Treatment, Incineration
Quantity Tons:	0.15
Waste Quantity:	300
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20050715
Creation Date:	3/10/2006 10:49:15
Receipt Date:	20050722
Manifest ID:	24214166
Trans EPA ID:	CAR000052803
Trans Name:	21ST CENTURY EMI
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY EMI
TSDF Alt EPA ID:	NVD980895338
TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	Not reported
Meth Code:	T03 - Treatment, Incineration
Quantity Tons:	0.3
Waste Quantity:	600
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20050616
Creation Date:	9/13/2005 18:30:54
Receipt Date:	20050616
Manifest ID:	24077223
Trans EPA ID:	CAR000037283
Trans Name:	WORLD ENVIRON & ENERGY
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD982042475
Trans Name:	NWS HAYROAD LANDFILL
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	12.642
Waste Quantity:	15
Quantity Unit:	Y
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Shipment Date:	20050520
Creation Date:	7/27/2005 10:48:47
Receipt Date:	20050520
Manifest ID:	24077219
Trans EPA ID:	CAR000037283
Trans Name:	WORLD ENVIRON & ENERGY
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD982042475
Trans Name:	NWS HAYROAD LANDFILL
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	29.498
Waste Quantity:	35
Quantity Unit:	Y
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1998
Gen EPA ID:	CAL000012203

Shipment Date:	19981216
Creation Date:	2/8/1999 0:00:00
Receipt Date:	19981223
Manifest ID:	98592860
Trans EPA ID:	CAD000603738
Trans Name:	Not reported
Trans 2 EPA ID:	CAD981634116
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000646117
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT000646117
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	0.2
Waste Quantity:	400
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1995
Gen EPA ID:	CAL000012203

NAPA VALLEY COLLEGE (Continued) **S113025726**

Shipment Date:	19951002
Creation Date:	7/26/1996 0:00:00
Receipt Date:	19951003
Manifest ID:	95381602
Trans EPA ID:	CAR000002774
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080022148
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	Not reported
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0125
Waste Quantity:	3
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19951002
Creation Date:	7/26/1996 0:00:00
Receipt Date:	19951003
Manifest ID:	95381602
Trans EPA ID:	CAR000002774
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080022148
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D027
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.007
Waste Quantity:	14
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19951002
Creation Date:	7/26/1996 0:00:00
Receipt Date:	19951003
Manifest ID:	95381602
Trans EPA ID:	CAR000002774
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080022148

NAPA VALLEY COLLEGE (Continued) **S113025726**

Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.1419
Waste Quantity:	43
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19950504
Creation Date:	4/2/1996 0:00:00
Receipt Date:	19950505
Manifest ID:	93712099
Trans EPA ID:	CAD982519209
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAL000827758
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	261 - Not reported
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	3.5264
Waste Quantity:	3200
Quantity Unit:	K
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19950301
Creation Date:	3/29/1996 0:00:00
Receipt Date:	19950306
Manifest ID:	95154409
Trans EPA ID:	CAD980814594
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080022148
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT080022148
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	D001
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.25
Waste Quantity:	500
Quantity Unit:	P

NAPA VALLEY COLLEGE (Continued) **S113025726**

Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19950301
Creation Date:	3/29/1996 0:00:00
Receipt Date:	19950306
Manifest ID:	95154409
Trans EPA ID:	CAD980814594
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080022148
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT080022148
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0542
Waste Quantity:	13
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19950301
Creation Date:	3/29/1996 0:00:00
Receipt Date:	19950306
Manifest ID:	95154409
Trans EPA ID:	CAD980814594
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080022148
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT080022148
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D001
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0208
Waste Quantity:	5
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19950301
Creation Date:	3/29/1996 0:00:00
Receipt Date:	19950306

NAPA VALLEY COLLEGE (Continued) **S113025726**

Manifest ID:	95154409
Trans EPA ID:	CAD980814594
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080022148
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT080022148
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	Not reported
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0417
Waste Quantity:	10
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2016
Gen EPA ID:	CAL000012203
Shipment Date:	20151202
Creation Date:	3/5/2016 22:15:15
Receipt Date:	20151221
Manifest ID:	015361526JJK
Trans EPA ID:	CAR000179747
Trans Name:	INGENIUM (MILPITAS)
Trans 2 EPA ID:	CAD983649880
Trans 2 Name:	PSC ENVIRONMENTAL SERVICES OF POMONA LP
TSDF EPA ID:	CAD008364432
Trans Name:	RHO-CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	D011
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.272
Waste Quantity:	80
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150930
Creation Date:	1/11/2016 22:16:05
Receipt Date:	20151016
Manifest ID:	014895223JJK
Trans EPA ID:	CAR000179747
Trans Name:	INGENIUM (MILPITAS)
Trans 2 EPA ID:	MAD039322250

NAPA VALLEY COLLEGE (Continued) **S113025726**

Trans 2 Name:	CLEAN HARBORS ENVIRONMENTAL SERVICES
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	792 - Not reported
RCRA Code:	D011
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.01251
Waste Quantity:	3
Quantity Unit:	G
Additional Code 1:	D008
Additional Code 2:	D007
Additional Code 3:	D005
Additional Code 4:	D002
Additional Code 5:	Not reported
Shipment Date:	20150930
Creation Date:	5/4/2016 22:15:22
Receipt Date:	20151016
Manifest ID:	014895225JJK
Trans EPA ID:	CAR000179747
Trans Name:	INGENIUM (MILPITAS)
Trans 2 EPA ID:	CAD982523433
Trans 2 Name:	DILLARD ENVIRONMENTAL SERVICES
TSDF EPA ID:	ARD981057870
Trans Name:	RINECO
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.055
Waste Quantity:	110
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150930
Creation Date:	1/11/2016 22:16:05
Receipt Date:	20151016
Manifest ID:	014895223JJK
Trans EPA ID:	CAR000179747
Trans Name:	INGENIUM (MILPITAS)
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS ENVIRONMENTAL SERVICES
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	F003
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No

NAPA VALLEY COLLEGE (Continued) **S113025726**

	Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0408
Waste Quantity:	12
Quantity Unit:	G
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150930
Creation Date:	12/16/2015 22:15:07
Receipt Date:	20151022
Manifest ID:	014895224JJK
Trans EPA ID:	CAR000179747
Trans Name:	INGENIUM (MILPITAS)
Trans 2 EPA ID:	CAR000179747
Trans 2 Name:	INGENIUM (ESCONDIDO)
TSDF EPA ID:	CAD008364432
Trans Name:	RHO-CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	D011
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.17
Waste Quantity:	50
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2004
Gen EPA ID:	CAL000012203
Shipment Date:	20040510
Creation Date:	10/29/2004 7:40:51
Receipt Date:	20040513
Manifest ID:	23535198
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SERVICES INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	CAD059494310
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D001
Meth Code:	D99 - Disposal, Other
Quantity Tons:	0.3
Waste Quantity:	600
Quantity Unit:	P

NAPA VALLEY COLLEGE (Continued) **S113025726**

Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20040510
Creation Date:	10/29/2004 7:40:51
Receipt Date:	20040513
Manifest ID:	23535198
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SERVICES INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	CAD059494310
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	Not reported
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.04
Waste Quantity:	80
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20040510
Creation Date:	10/29/2004 7:40:51
Receipt Date:	20040513
Manifest ID:	23535198
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SERVICES INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	CAD059494310
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	Not reported
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.5
Waste Quantity:	1000
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20040427
Creation Date:	10/8/2004 11:21:14
Receipt Date:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Manifest ID:	23534136
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SERVICES INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	CAD059494310
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D001
Meth Code:	- Not reported
Quantity Tons:	0.125
Waste Quantity:	250
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20040427
Creation Date:	10/8/2004 11:21:14
Receipt Date:	Not reported
Manifest ID:	23534136
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SERVICES INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	CAD059494310
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D001
Meth Code:	- Not reported
Quantity Tons:	0.0025
Waste Quantity:	5
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20040427
Creation Date:	10/8/2004 11:21:14
Receipt Date:	Not reported
Manifest ID:	23534136
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SERVICES INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	CAD059494310
TSDF Alt Name:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D001
Meth Code:	- Not reported
Quantity Tons:	0.0425
Waste Quantity:	85
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20040427
Creation Date:	10/8/2004 11:21:14
Receipt Date:	Not reported
Manifest ID:	23534136
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SERVICES INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	CAD059494310
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D001
Meth Code:	- Not reported
Quantity Tons:	0.225
Waste Quantity:	450
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20040325
Creation Date:	8/23/2004 8:25:08
Receipt Date:	20040325
Manifest ID:	21285823
Trans EPA ID:	CAD982435596
Trans Name:	NORTHERN ABATEMENT CO INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD982042475
Trans Name:	NWS HAY ROAD LANDFILL
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	13.4848
Waste Quantity:	16
Quantity Unit:	Y
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Additional Code 4: Not reported
Additional Code 5: Not reported

Additional Info:
Year: 2017
Gen EPA ID: CAL000012203

Shipment Date: 20170907
Creation Date: 7/6/2018 18:30:59
Receipt Date: 20170919
Manifest ID: 000176803DAT
Trans EPA ID: CAR000179747
Trans Name: INGENIUM (SACRAMENTO)
Trans 2 EPA ID: CAD982523433
Trans 2 Name: DILLARD ENVIRONMENTAL SERVICES
TSDF EPA ID: ARD981057870
Trans Name: RINECO
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 331 - Off-specification, aged, or surplus organics
RCRA Code: D001
Meth Code: H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons: 0.006
Waste Quantity: 12
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Shipment Date: 20170907
Creation Date: 7/6/2018 18:30:59
Receipt Date: 20170919
Manifest ID: 000176803DAT
Trans EPA ID: CAR000179747
Trans Name: INGENIUM (SACRAMENTO)
Trans 2 EPA ID: CAD982523433
Trans 2 Name: DILLARD ENVIRONMENTAL SERVICES
TSDF EPA ID: ARD981057870
Trans Name: RINECO
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 352 - Other organic solids
RCRA Code: D011
Meth Code: H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons: 0.0875
Waste Quantity: 175
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Shipment Date: 20170907
Creation Date: 6/27/2018 18:30:40

NAPA VALLEY COLLEGE (Continued) **S113025726**

Receipt Date:	20170929
Manifest ID:	000176806DAT
Trans EPA ID:	CAR000179747
Trans Name:	INGENIUM (MILPITAS)
Trans 2 EPA ID:	CAD982523433
Trans 2 Name:	DILLARD ENVIRONMENTAL SERVICES
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	792 - Not reported
RCRA Code:	D011
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.02085
Waste Quantity:	5
Quantity Unit:	G
Additional Code 1:	D008
Additional Code 2:	D007
Additional Code 3:	D005
Additional Code 4:	D002
Additional Code 5:	Not reported

Shipment Date:	20170907
Creation Date:	6/27/2018 18:30:40
Receipt Date:	20170929
Manifest ID:	000176806DAT
Trans EPA ID:	CAR000179747
Trans Name:	INGENIUM (MILPITAS)
Trans 2 EPA ID:	CAD982523433
Trans 2 Name:	DILLARD ENVIRONMENTAL SERVICES
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	541 - Photochemicals / photo processing waste
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0325
Waste Quantity:	65
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20170907
Creation Date:	6/27/2018 18:30:40
Receipt Date:	20170929
Manifest ID:	000176806DAT
Trans EPA ID:	CAR000179747
Trans Name:	INGENIUM (MILPITAS)
Trans 2 EPA ID:	CAD982523433
Trans 2 Name:	DILLARD ENVIRONMENTAL SERVICES
TSDF EPA ID:	CAD059494310

NAPA VALLEY COLLEGE (Continued) **S113025726**

Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	F003
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.017
Waste Quantity:	5
Quantity Unit:	G
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170907
Creation Date:	7/6/2018 18:30:59
Receipt Date:	20170919
Manifest ID:	000176803DAT
Trans EPA ID:	CAR000179747
Trans Name:	INGENIUM (SACRAMENTO)
Trans 2 EPA ID:	CAD982523433
Trans 2 Name:	DILLARD ENVIRONMENTAL SERVICES
TSDF EPA ID:	ARD981057870
Trans Name:	RINECO
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.726
Waste Quantity:	220
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2000
Gen EPA ID:	CAL000012203
Shipment Date:	20001129
Creation Date:	1/12/2001 0:00:00
Receipt Date:	20001130
Manifest ID:	20092650
Trans EPA ID:	CAD028277036
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD044003556
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	223 - Unspecified oil-containing waste

NAPA VALLEY COLLEGE (Continued) **S113025726**

RCRA Code:	Not reported
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.4587
Waste Quantity:	110
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20000825
Creation Date:	10/23/2000 0:00:00
Receipt Date:	Not reported
Manifest ID:	20153978
Trans EPA ID:	CAD981446156
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	TND000772186
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D002
Meth Code:	- Not reported
Quantity Tons:	0.1251
Waste Quantity:	30
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20000825
Creation Date:	10/23/2000 0:00:00
Receipt Date:	Not reported
Manifest ID:	20153978
Trans EPA ID:	CAD981446156
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	TND000772186
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	- Not reported
Quantity Tons:	0.02
Waste Quantity:	40
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Additional Code 5:	Not reported
Shipment Date:	20000825
Creation Date:	11/14/2000 0:00:00
Receipt Date:	20000918
Manifest ID:	20153981
Trans EPA ID:	CAD981446156
Trans Name:	Not reported
Trans 2 EPA ID:	CAD009661844
Trans 2 Name:	Not reported
TSDF EPA ID:	TND000772186
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D002
Meth Code:	- Not reported
Quantity Tons:	0.0208
Waste Quantity:	5
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20000825
Creation Date:	11/14/2000 0:00:00
Receipt Date:	20000918
Manifest ID:	20153971
Trans EPA ID:	CAD981446156
Trans Name:	Not reported
Trans 2 EPA ID:	CAD009661844
Trans 2 Name:	Not reported
TSDF EPA ID:	TND000772186
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	- Not reported
Quantity Tons:	0.6
Waste Quantity:	1200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20000825
Creation Date:	11/14/2000 0:00:00
Receipt Date:	20000918
Manifest ID:	20153971
Trans EPA ID:	CAD981446156
Trans Name:	Not reported
Trans 2 EPA ID:	CAD009661844

NAPA VALLEY COLLEGE (Continued) **S113025726**

Trans 2 Name:	Not reported
TSDF EPA ID:	TND000772186
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.033
Waste Quantity:	10
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20000825
Creation Date:	11/14/2000 0:00:00
Receipt Date:	20000918
Manifest ID:	20153971
Trans EPA ID:	CAD981446156
Trans Name:	Not reported
Trans 2 EPA ID:	CAD009661844
Trans 2 Name:	Not reported
TSDF EPA ID:	TND000772186
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.05
Waste Quantity:	100
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20000825
Creation Date:	10/23/2000 0:00:00
Receipt Date:	Not reported
Manifest ID:	20153978
Trans EPA ID:	CAD981446156
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	TND000772186
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	- Not reported
Quantity Tons:	0.462

NAPA VALLEY COLLEGE (Continued) **S113025726**

Waste Quantity:	140
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2013
Gen EPA ID:	CAL000012203
Shipment Date:	20130422
Creation Date:	6/11/2013 22:15:07
Receipt Date:	20130429
Manifest ID:	003615887SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY NEVADA
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.15
Waste Quantity:	300
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20130321
Creation Date:	9/15/2013 22:15:19
Receipt Date:	20130429
Manifest ID:	003911191FLE
Trans EPA ID:	CAL000365413
Trans Name:	SPARTAN ENVIRONMENTAL
Trans 2 EPA ID:	ORQ000020644
Trans 2 Name:	NRC ENVIRONMENTAL
TSDF EPA ID:	WAD991281767
Trans Name:	BURLINGTON ENV (PSC)
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.018
Waste Quantity:	5
Quantity Unit:	G
Additional Code 1:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20130222
Creation Date:	8/23/2013 22:15:13
Receipt Date:	20130405
Manifest ID:	003911185FLE
Trans EPA ID:	CAL000365413
Trans Name:	SPARTAN ENVIRONMENTAL
Trans 2 EPA ID:	ORQ000024475
Trans 2 Name:	SPARTEN ENVIRONMENTAL
TSDF EPA ID:	IDD073114654
Trans Name:	US ECOLOGY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.02919
Waste Quantity:	7
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20130222
Creation Date:	8/23/2013 22:15:13
Receipt Date:	20130411
Manifest ID:	003911226FLE
Trans EPA ID:	CAL000365413
Trans Name:	SPARTAN ENVIRONMENTAL
Trans 2 EPA ID:	ORQ000020644
Trans 2 Name:	NRC ENVIRONMENTAL
TSDF EPA ID:	WAD991281767
Trans Name:	BURLINGTON ENV (PSC)
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D005
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0495
Waste Quantity:	15
Quantity Unit:	G
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20130222
Creation Date:	8/23/2013 22:15:13

NAPA VALLEY COLLEGE (Continued) **S113025726**

Receipt Date:	20130405
Manifest ID:	003911185FLE
Trans EPA ID:	CAL000365413
Trans Name:	SPARTAN ENVIRONMENTAL
Trans 2 EPA ID:	ORQ000024475
Trans 2 Name:	SPARTEN ENVIRONMENTAL
TSDF EPA ID:	IDD073114654
Trans Name:	US ECOLOGY
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.01251
Waste Quantity:	3
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20130222
Creation Date:	8/23/2013 22:15:13
Receipt Date:	20130411
Manifest ID:	003911226FLE
Trans EPA ID:	CAL000365413
Trans Name:	SPARTAN ENVIRONMENTAL
Trans 2 EPA ID:	ORQ000020644
Trans 2 Name:	NRC ENVIRONMENTAL
TSDF EPA ID:	WAD991281767
Trans Name:	BURLINGTON ENV (PSC)
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D003
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.02085
Waste Quantity:	5
Quantity Unit:	G
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20130214
Creation Date:	7/6/2013 22:15:13
Receipt Date:	20130304
Manifest ID:	003517952SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	OKD981588791
Trans 2 Name:	TRIAD TRANSPORT INC
TSDF EPA ID:	TXD077603371

NAPA VALLEY COLLEGE (Continued) **S113025726**

Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20130214
Creation Date:	6/29/2013 22:15:06
Receipt Date:	20130225
Manifest ID:	003615733SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY NEVADA
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.025
Waste Quantity:	50
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20130205
Creation Date:	4/10/2013 22:15:15
Receipt Date:	20130206
Manifest ID:	001989811GBF
Trans EPA ID:	CAR000162636
Trans Name:	ABE ARENS BROTHERS ENVIRONMENTAL INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080012602
Trans Name:	DK DIXON
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	223 - Unspecified oil-containing waste
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

NAPA VALLEY COLLEGE (Continued) **S113025726**

Quantity Tons:	1.35525
Waste Quantity:	325
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1993
Gen EPA ID:	CAL000012203
Shipment Date:	19931103
Creation Date:	9/12/1995 0:00:00
Receipt Date:	Not reported
Manifest ID:	92719587
Trans EPA ID:	CAD000083121
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD000633164
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19931103
Creation Date:	9/12/1995 0:00:00
Receipt Date:	Not reported
Manifest ID:	92719587
Trans EPA ID:	CAD000083121
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD000633164
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.125
Waste Quantity:	250
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19931103
Creation Date:	9/12/1995 0:00:00
Receipt Date:	Not reported
Manifest ID:	92719587
Trans EPA ID:	CAD000083121
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD000633164
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	132 - Aqueous solution w/metals (< restricted levels and see waste code 121 for a list of metals
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.8757
Waste Quantity:	210
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19930401
Creation Date:	9/6/1995 0:00:00
Receipt Date:	19930406
Manifest ID:	92801562
Trans EPA ID:	CAD980814594
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080022148
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	U151
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.1251
Waste Quantity:	30
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19930401
Creation Date:	9/6/1995 0:00:00
Receipt Date:	19930406
Manifest ID:	92801562

NAPA VALLEY COLLEGE (Continued) **S113025726**

Trans EPA ID:	CAD980814594
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080022148
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D008
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0834
Waste Quantity:	20
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19930401
Creation Date:	9/6/1995 0:00:00
Receipt Date:	19930406
Manifest ID:	92801562
Trans EPA ID:	CAD980814594
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080022148
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0041
Waste Quantity:	1
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19930401
Creation Date:	9/6/1995 0:00:00
Receipt Date:	19930406
Manifest ID:	92801562
Trans EPA ID:	CAD980814594
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080022148
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap

NAPA VALLEY COLLEGE (Continued) **S113025726**

RCRA Code:	D008
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19930125
Creation Date:	9/15/1995 0:00:00
Receipt Date:	19930126
Manifest ID:	92801559
Trans EPA ID:	CAD980814594
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080020101
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT080010101
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D001
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0208
Waste Quantity:	5
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19930125
Creation Date:	9/15/1995 0:00:00
Receipt Date:	19930126
Manifest ID:	92801559
Trans EPA ID:	CAD980814594
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080020101
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT080010101
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	D005
Meth Code:	T01 - Treatment, Tank
Quantity Tons:	0.0208
Waste Quantity:	5
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Additional Code 5:	Not reported
Shipment Date:	19930125
Creation Date:	9/15/1995 0:00:00
Receipt Date:	19930126
Manifest ID:	92801559
Trans EPA ID:	CAD980814594
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080020101
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT080010101
TSDF Alt Name:	Not reported
Waste Code Description:	212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.
RCRA Code:	U002
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.099
Waste Quantity:	30
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2002
Gen EPA ID:	CAL000012203
Shipment Date:	Not reported
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	21995196
Trans EPA ID:	SCR000074591
Trans Name:	Not reported
Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	512 - Other empty containers 30 gallons or more
RCRA Code:	Not reported
Meth Code:	D99 - Disposal, Other
Quantity Tons:	0.0075
Waste Quantity:	15
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	Not reported
Creation Date:	Not reported
Receipt Date:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Manifest ID:	20934240
Trans EPA ID:	SCR000074591
Trans Name:	Not reported
Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D005
Meth Code:	- Not reported
Quantity Tons:	0.375
Waste Quantity:	750
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	Not reported
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	20934240
Trans EPA ID:	SCR000074591
Trans Name:	Not reported
Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D002
Meth Code:	- Not reported
Quantity Tons:	0.0075
Waste Quantity:	15
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	Not reported
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	20934240
Trans EPA ID:	SCR000074591
Trans Name:	Not reported
Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	Not reported
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	21995196
Trans EPA ID:	SCR000074591
Trans Name:	Not reported
Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.08
Waste Quantity:	160
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20020813
Creation Date:	1/31/2003 15:02:08
Receipt Date:	20020822
Manifest ID:	21995196
Trans EPA ID:	SCR000074591
Trans Name:	Not reported
Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D003
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0075
Waste Quantity:	15
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20020813
Creation Date:	1/31/2003 15:02:08
Receipt Date:	20020822
Manifest ID:	21995196
Trans EPA ID:	SCR000074591
Trans Name:	Not reported
Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20020813
Creation Date:	1/31/2003 15:02:08
Receipt Date:	20020822
Manifest ID:	21995196
Trans EPA ID:	SCR000074591
Trans Name:	Not reported
Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	D99 - Disposal, Other
Quantity Tons:	0.225
Waste Quantity:	450
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20020813
Creation Date:	1/31/2003 15:02:08
Receipt Date:	20020822
Manifest ID:	21995196
Trans EPA ID:	SCR000074591
Trans Name:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.01
Waste Quantity:	20
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20020325
Creation Date:	12/26/2002 18:30:50
Receipt Date:	20020328
Manifest ID:	20934240
Trans EPA ID:	SCR000074591
Trans Name:	Not reported
Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D001
Meth Code:	D99 - Disposal, Other
Quantity Tons:	0.1625
Waste Quantity:	325
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1996
Gen EPA ID:	CAL000012203

Shipment Date:	19960618
Creation Date:	5/30/1997 0:00:00
Receipt Date:	19960620
Manifest ID:	95381665
Trans EPA ID:	CAR000002774
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD000088252
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D001
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0125
Waste Quantity:	3
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19960618
Creation Date:	5/30/1997 0:00:00
Receipt Date:	19960620
Manifest ID:	95381665
Trans EPA ID:	CAR000002774
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD000088252
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D001
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0834
Waste Quantity:	20
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19960618
Creation Date:	5/30/1997 0:00:00
Receipt Date:	19960620
Manifest ID:	95381665
Trans EPA ID:	CAR000002774
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD000088252
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.066
Waste Quantity:	20
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19960618
Creation Date:	5/30/1997 0:00:00
Receipt Date:	19960620
Manifest ID:	95381665
Trans EPA ID:	CAR000002774
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD000088252
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.066
Waste Quantity:	20
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2009
Gen EPA ID:	CAL000012203
Shipment Date:	20091218
Creation Date:	2/3/2010 18:31:03
Receipt Date:	20091223
Manifest ID:	002187524SKS
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	213 - Hydrocarbon solvents (benzene, hexane, Stoddard, etc.
RCRA Code:	D039
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.03336
Waste Quantity:	8
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Shipment Date:	20091117
Creation Date:	5/20/2010 18:30:47
Receipt Date:	20091203
Manifest ID:	001770472SKS
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	OKD981588791
Trans 2 Name:	TRIAD
TSDF EPA ID:	TXD077603371
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	221 - Waste oil and mixed oil
RCRA Code:	D008
Meth Code:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.62
Waste Quantity:	1240
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	D006
Additional Code 3:	D005
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20091030
Creation Date:	10/8/2010 18:31:19
Receipt Date:	20091103
Manifest ID:	002187040SKS
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	D040
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.03336
Waste Quantity:	8
Quantity Unit:	G
Additional Code 1:	D039
Additional Code 2:	D018
Additional Code 3:	D001
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20090811
Creation Date:	9/23/2009 18:30:08
Receipt Date:	20090813
Manifest ID:	002015204SKS
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

TSDF EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	213 - Hydrocarbon solvents (benzene, hexane, Stoddard, etc.
RCRA Code:	D039
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.03336
Waste Quantity:	8
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20090728
Creation Date:	1/8/2010 18:30:28
Receipt Date:	20090810
Manifest ID:	002015184SKS
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	OKD981588791
Trans 2 Name:	TRIAD TRANSPORT INC
TSDF EPA ID:	TXD077603371
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	F004
Meth Code:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.425
Waste Quantity:	850
Quantity Unit:	P
Additional Code 1:	F003
Additional Code 2:	F002
Additional Code 3:	F001
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20090610
Creation Date:	8/17/2009 18:30:31
Receipt Date:	20090710
Manifest ID:	002465166FLE
Trans EPA ID:	OKD007222128
Trans Name:	AMEREX
Trans 2 EPA ID:	ORQ000024475
Trans 2 Name:	SPARTAN
TSDF EPA ID:	MOD981123391
Trans Name:	WASTE EXPRESS
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D018
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

NAPA VALLEY COLLEGE (Continued) **S113025726**

Quantity Tons:	0.3
Waste Quantity:	600
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20090610
Creation Date:	8/17/2009 18:30:31
Receipt Date:	20090710
Manifest ID:	002465166FLE
Trans EPA ID:	OKD007222128
Trans Name:	AMEREX
Trans 2 EPA ID:	ORQ000024475
Trans 2 Name:	SPARTAN
TSDF EPA ID:	MOD981123391
Trans Name:	WASTE EXPRESS
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D011
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.015
Waste Quantity:	30
Quantity Unit:	P
Additional Code 1:	D008
Additional Code 2:	D007
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20090610
Creation Date:	8/17/2009 18:30:31
Receipt Date:	20090710
Manifest ID:	002465166FLE
Trans EPA ID:	OKD007222128
Trans Name:	AMEREX
Trans 2 EPA ID:	ORQ000024475
Trans 2 Name:	SPARTAN
TSDF EPA ID:	MOD981123391
Trans Name:	WASTE EXPRESS
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D002
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0025
Waste Quantity:	5
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Additional Code 5:	Not reported
Shipment Date:	20090610
Creation Date:	8/17/2009 18:30:31
Receipt Date:	20090710
Manifest ID:	002465166FLE
Trans EPA ID:	OKD007222128
Trans Name:	AMEREX
Trans 2 EPA ID:	ORQ000024475
Trans 2 Name:	SPARTAN
TSDF EPA ID:	MOD981123391
Trans Name:	WASTE EXPRESS
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D009
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.005
Waste Quantity:	10
Quantity Unit:	P
Additional Code 1:	D002
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20090610
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	002465166FLE
Trans EPA ID:	OKD007222128
Trans Name:	AMEREX
Trans 2 EPA ID:	ORQ000024475
Trans 2 Name:	SPARTAN
TSDF EPA ID:	MOD981123391
Trans Name:	WASTE EXPRESS
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.2
Waste Quantity:	400
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2010
Gen EPA ID:	CAL000012203
Shipment Date:	20100713
Creation Date:	9/30/2010 18:30:32

NAPA VALLEY COLLEGE (Continued) **S113025726**

Receipt Date:	20100720
Manifest ID:	005958150JJK
Trans EPA ID:	CAL000253427
Trans Name:	SOUTHWEST HAZARD CONTROL INC
Trans 2 EPA ID:	CAD983608258
Trans 2 Name:	OCEAN BLUE ENVIRONMENTAL
TSDF EPA ID:	CAD028409019
Trans Name:	CROSBY & OVERTON
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.4
Waste Quantity:	800
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20100701
Creation Date:	9/30/2010 18:30:32
Receipt Date:	20100720
Manifest ID:	002872810FLE
Trans EPA ID:	OKD918914401
Trans Name:	WES & T
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	MOD981123391
Trans Name:	WASTE EXPRESS
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.002
Waste Quantity:	4
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20100701
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	002872810FLE
Trans EPA ID:	OKD918914401
Trans Name:	WES & T
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	MOD981123391
Trans Name:	WASTE EXPRESS

NAPA VALLEY COLLEGE (Continued) **S113025726**

TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	D005
Meth Code:	- Not reported
Quantity Tons:	0.0075
Waste Quantity:	15
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20100701
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	002872810FLE
Trans EPA ID:	OKD918914401
Trans Name:	WES & T
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	MOD981123391
Trans Name:	WASTE EXPRESS
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.0135
Waste Quantity:	27
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20100701
Creation Date:	9/30/2010 18:30:32
Receipt Date:	20100720
Manifest ID:	002872810FLE
Trans EPA ID:	OKD918914401
Trans Name:	WES & T
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	MOD981123391
Trans Name:	WASTE EXPRESS
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	122 - Alkaline solution without metals (pH > 12.5
RCRA Code:	D002
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0805
Waste Quantity:	161
Quantity Unit:	P

NAPA VALLEY COLLEGE (Continued) **S113025726**

Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20100701
Creation Date:	9/30/2010 18:30:32
Receipt Date:	20100720
Manifest ID:	002872810FLE
Trans EPA ID:	OKD918914401
Trans Name:	WES & T
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	MOD981123391
Trans Name:	WASTE EXPRESS
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0865
Waste Quantity:	173
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20100701
Creation Date:	9/30/2010 18:30:32
Receipt Date:	20100720
Manifest ID:	002872810FLE
Trans EPA ID:	OKD918914401
Trans Name:	WES & T
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	MOD981123391
Trans Name:	WASTE EXPRESS
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D011
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0235
Waste Quantity:	47
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	D001
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20100701

NAPA VALLEY COLLEGE (Continued) **S113025726**

Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	002872810FLE
Trans EPA ID:	OKD918914401
Trans Name:	WES & T
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	MOD981123391
Trans Name:	WASTE EXPRESS
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.025
Waste Quantity:	50
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20100701
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	002872810FLE
Trans EPA ID:	OKD918914401
Trans Name:	WES & T
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	MOD981123391
Trans Name:	WASTE EXPRESS
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	291 - Latex waste
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	0.4
Waste Quantity:	800
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20100701
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	002872810FLE
Trans EPA ID:	OKD918914401
Trans Name:	WES & T
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	MOD981123391
Trans Name:	WASTE EXPRESS

NAPA VALLEY COLLEGE (Continued) **S113025726**

TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D009
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.001
Waste Quantity:	2
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2008
Gen EPA ID:	CAL000012203
Shipment Date:	20081001
Creation Date:	11/3/2008 18:30:40
Receipt Date:	20081006
Manifest ID:	003236418JJK
Trans EPA ID:	CAL000306015
Trans Name:	AMERICAN TECHNOLOGIES INC
Trans 2 EPA ID:	CAR000037283
Trans 2 Name:	WORLD ENVIRONMENTAL & ENERGY INC
TSDF EPA ID:	CAD982042475
Trans Name:	NWS HAY ROAD LANDFILL
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	1.2
Waste Quantity:	3
Quantity Unit:	Y
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20080826
Creation Date:	10/13/2008 18:30:08
Receipt Date:	20080829
Manifest ID:	001281432SKS
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	213 - Hydrocarbon solvents (benzene, hexane, Stoddard, etc.

NAPA VALLEY COLLEGE (Continued) **S113025726**

RCRA Code:	D039
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.03336
Waste Quantity:	8
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20080527
Creation Date:	9/10/2008 18:30:25
Receipt Date:	20080603
Manifest ID:	001041740SKS
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	741 - Liquids with halogenated organic compounds > 1000 mg/l
RCRA Code:	D040
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.03336
Waste Quantity:	8
Quantity Unit:	G
Additional Code 1:	D039
Additional Code 2:	D018
Additional Code 3:	D001
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20080411
Creation Date:	8/29/2008 18:30:08
Receipt Date:	20080428
Manifest ID:	001042158SKS
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	OKD981588791
Trans 2 Name:	TRIAD
TSDF EPA ID:	TXD077603371
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	221 - Waste oil and mixed oil
RCRA Code:	D008
Meth Code:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.6
Waste Quantity:	1200
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	D006

NAPA VALLEY COLLEGE (Continued) **S113025726**

Additional Code 3:	D005
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20080319
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	002013235JJK
Trans EPA ID:	CAL000827853
Trans Name:	ENSERV WEST LLC
Trans 2 EPA ID:	CAL000297268
Trans 2 Name:	CURBSIDE INC
TSDF EPA ID:	OKD987084068
Trans Name:	ENVIROSOLVE INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D002
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0015
Waste Quantity:	3
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20080319
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	002013235JJK
Trans EPA ID:	CAL000827853
Trans Name:	ENSERV WEST LLC
Trans 2 EPA ID:	CAL000297268
Trans 2 Name:	CURBSIDE INC
TSDF EPA ID:	OKD987084068
Trans Name:	ENVIROSOLVE INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.002
Waste Quantity:	4
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20080319
Creation Date:	Not reported
Receipt Date:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Manifest ID:	002013235JJK
Trans EPA ID:	CAL000827853
Trans Name:	ENSERV WEST LLC
Trans 2 EPA ID:	CAL000297268
Trans 2 Name:	CURBSIDE INC
TSDF EPA ID:	OKD987084068
Trans Name:	ENVIROSOLVE INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.3
Waste Quantity:	600
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20080319
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	002013235JJK
Trans EPA ID:	CAL000827853
Trans Name:	ENSERV WEST LLC
Trans 2 EPA ID:	CAL000297268
Trans 2 Name:	CURBSIDE INC
TSDF EPA ID:	OKD987084068
Trans Name:	ENVIROSOLVE INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.015
Waste Quantity:	30
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20080319
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	002013235JJK
Trans EPA ID:	CAL000827853
Trans Name:	ENSERV WEST LLC
Trans 2 EPA ID:	CAL000297268
Trans 2 Name:	CURBSIDE INC
TSDF EPA ID:	OKD987084068
Trans Name:	ENVIROSOLVE INC

NAPA VALLEY COLLEGE (Continued) **S113025726**

TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.05
Waste Quantity:	100
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20080319
Creation Date:	9/25/2008 18:30:24
Receipt Date:	20080501
Manifest ID:	002013235JJK
Trans EPA ID:	CAL000827853
Trans Name:	ENSERV WEST LLC
Trans 2 EPA ID:	CAL000297268
Trans 2 Name:	CURBSIDE INC
TSDF EPA ID:	OKD987084068
Trans Name:	ENVIROSOLVE INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0025
Waste Quantity:	5
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2014
Gen EPA ID:	CAL000012203
Shipment Date:	20140507
Creation Date:	8/12/2014 22:15:10
Receipt Date:	20140523
Manifest ID:	012864849JJK
Trans EPA ID:	CAR000179747
Trans Name:	INGENIUM (MILPITAS)
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS ENVIRONMENTAL SERVICES
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	322 - Biological waste other than sewage sludge

NAPA VALLEY COLLEGE (Continued) **S113025726**

RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0575
Waste Quantity:	115
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140507
Creation Date:	10/3/2014 22:15:01
Receipt Date:	20140521
Manifest ID:	012864851JJK
Trans EPA ID:	CAR000179747
Trans Name:	INGENIUM (MILPITAS)
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS ENVIRONMENTAL SERVICES
TSDF EPA ID:	UTD981552177
Trans Name:	CLEAN HARBORS ARAGONITE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D035
Meth Code:	H040 - Incineration--Thermal Destruction Other Than Use As A Fuel
Quantity Tons:	0.015
Waste Quantity:	30
Quantity Unit:	P
Additional Code 1:	D011
Additional Code 2:	D007
Additional Code 3:	D002
Additional Code 4:	D001
Additional Code 5:	Not reported
Shipment Date:	20140507
Creation Date:	8/22/2014 22:15:05
Receipt Date:	20140522
Manifest ID:	012864850JJK
Trans EPA ID:	CAR000179747
Trans Name:	INGENIUM (MILPITAS)
Trans 2 EPA ID:	CAR000179747
Trans 2 Name:	INGENIUM (ESCONDIDO)
TSDF EPA ID:	CAD008364432
Trans Name:	RHO-CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	D011
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.153
Waste Quantity:	45
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2011
Gen EPA ID:	CAL000012203
Shipment Date:	20111110
Creation Date:	6/15/2012 20:30:07
Receipt Date:	20111128
Manifest ID:	002829011SKS
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY NEVADA
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	291 - Latex waste
RCRA Code:	Not reported
Meth Code:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Quantity Tons:	0.5
Waste Quantity:	1000
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20111110
Creation Date:	1/12/2012 18:30:42
Receipt Date:	20111110
Manifest ID:	008812951JJK
Trans EPA ID:	CAR000183152
Trans Name:	LD TRANSPORTATION LLC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD982042475
Trans Name:	RECOLOGY HAY RD LANDFILL
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.4
Waste Quantity:	1
Quantity Unit:	Y
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Shipment Date:	20111110
Creation Date:	6/15/2012 20:30:07
Receipt Date:	20111128
Manifest ID:	002829011SKS
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY NEVADA
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	291 - Latex waste
RCRA Code:	Not reported
Meth Code:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20111103
Creation Date:	1/20/2012 20:31:22
Receipt Date:	20111110
Manifest ID:	008812912JJK
Trans EPA ID:	CAR000183152
Trans Name:	LD TRANSPORTATION LLC
Trans 2 EPA ID:	CAR000179382
Trans 2 Name:	ENV ENVIRONMENTAL
TSDF EPA ID:	CAD028409019
Trans Name:	CROSBY & OVERTON
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.65
Waste Quantity:	1300
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20111103
Creation Date:	1/12/2012 18:30:42
Receipt Date:	20111107
Manifest ID:	008812917JJK
Trans EPA ID:	CAR000183152
Trans Name:	LD TRANSPORTATION LLC
Trans 2 EPA ID:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Trans 2 Name:	Not reported
TSDF EPA ID:	CAD982042475
Trans Name:	RECOLOGY HAY ROAD LANDFILL
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.4
Waste Quantity:	1
Quantity Unit:	Y
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20110315
Creation Date:	4/27/2011 18:30:43
Receipt Date:	20110316
Manifest ID:	006652394JJK
Trans EPA ID:	CAR000183152
Trans Name:	LD TRANSPORTATION LLC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD982042475
Trans Name:	RECOLOGY HAY ROAD LANDFILL
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.4
Waste Quantity:	1
Quantity Unit:	Y
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20110218
Creation Date:	4/22/2011 18:31:02
Receipt Date:	20110228
Manifest ID:	000024564DAT
Trans EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC DBA PSC ENVIRONMENTAL SERVICES
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D011

NAPA VALLEY COLLEGE (Continued) **S113025726**

Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.075
Waste Quantity:	150
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20110218
Creation Date:	4/22/2011 18:31:02
Receipt Date:	20110228
Manifest ID:	000024564DAT
Trans EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC DBA PSC ENVIRONMENTAL SERVICES
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.3
Waste Quantity:	600
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20110218
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	000024564DAT
Trans EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC DBA PSC ENVIRONMENTAL SERVICES
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D002
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0125
Waste Quantity:	25
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20110218
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	000024564DAT
Trans EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC DBA PSC ENVIRONMENTAL SERVICES
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	551 - Laboratory waste chemicals 561 Detergent and soap
RCRA Code:	D002
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.005
Waste Quantity:	10
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2001
Gen EPA ID:	CAL000012203
Shipment Date:	20010725
Creation Date:	12/17/2001 0:00:00
Receipt Date:	20010907
Manifest ID:	20700132
Trans EPA ID:	CAL000027706
Trans Name:	Not reported
Trans 2 EPA ID:	CAD982524480
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD028409019
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	D008
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.045
Waste Quantity:	90
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

Additional Info:

Year:	2015
Gen EPA ID:	CAL000012203
Shipment Date:	20151202
Creation Date:	3/5/2016 22:15:15
Receipt Date:	20151221
Manifest ID:	015361526JJK
Trans EPA ID:	CAR000179747
Trans Name:	INGENIUM (MILPITAS)
Trans 2 EPA ID:	CAD983649880
Trans 2 Name:	PSC ENVIRONMENTAL SERVICES OF POMONA LP
TSDF EPA ID:	CAD008364432
Trans Name:	RHO-CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	D011
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.272
Waste Quantity:	80
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150930
Creation Date:	1/11/2016 22:16:05
Receipt Date:	20151016
Manifest ID:	014895223JJK
Trans EPA ID:	CAR000179747
Trans Name:	INGENIUM (MILPITAS)
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS ENVIRONMENTAL SERVICES
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	792 - Not reported
RCRA Code:	D011
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.01251
Waste Quantity:	3
Quantity Unit:	G
Additional Code 1:	D008
Additional Code 2:	D007
Additional Code 3:	D005
Additional Code 4:	D002
Additional Code 5:	Not reported
Shipment Date:	20150930
Creation Date:	5/4/2016 22:15:22
Receipt Date:	20151016

NAPA VALLEY COLLEGE (Continued) **S113025726**

Manifest ID:	014895225JJK
Trans EPA ID:	CAR000179747
Trans Name:	INGENIUM (MILPITAS)
Trans 2 EPA ID:	CAD982523433
Trans 2 Name:	DILLARD ENVIRONMENTAL SERVICES
TSDF EPA ID:	ARD981057870
Trans Name:	RINECO
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H061 - Fuel Blending Prior To Energy Recovery At Another Site
Quantity Tons:	0.055
Waste Quantity:	110
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150930
Creation Date:	1/11/2016 22:16:05
Receipt Date:	20151016
Manifest ID:	014895223JJK
Trans EPA ID:	CAR000179747
Trans Name:	INGENIUM (MILPITAS)
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS ENVIRONMENTAL SERVICES
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	F003
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0408
Waste Quantity:	12
Quantity Unit:	G
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150930
Creation Date:	12/16/2015 22:15:07
Receipt Date:	20151022
Manifest ID:	014895224JJK
Trans EPA ID:	CAR000179747
Trans Name:	INGENIUM (MILPITAS)
Trans 2 EPA ID:	CAR000179747
Trans 2 Name:	INGENIUM (ESCONDIDO)
TSDF EPA ID:	CAD008364432
Trans Name:	RHO-CHEM LLC
TSDF Alt EPA ID:	Not reported

NAPA VALLEY COLLEGE (Continued) **S113025726**

TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	D011
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.17
Waste Quantity:	50
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2012
Gen EPA ID:	CAL000012203
Shipment Date:	20120730
Creation Date:	8/18/2013 22:15:15
Receipt Date:	20121009
Manifest ID:	003911127FLE
Trans EPA ID:	CAL000365413
Trans Name:	SPARTAN ENVIRONMENTAL
Trans 2 EPA ID:	ORQ000024475
Trans 2 Name:	SPARTEN ENVIRONMENTAL
TSDF EPA ID:	IDD073114654
Trans Name:	US ECOLOGY IDAHO INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.0325
Waste Quantity:	65
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20120131
Creation Date:	12/3/2012 22:16:30
Receipt Date:	20120310
Manifest ID:	003911135FLE
Trans EPA ID:	CAL000365413
Trans Name:	SPARTAN ENVIRONMENTAL
Trans 2 EPA ID:	ORQ000020644
Trans 2 Name:	NRC ENVIRONMENTAL
TSDF EPA ID:	WAD991281767
Trans Name:	BURLINGTON ENVIRONMENTAL LLC (PSC)
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	D001

NAPA VALLEY COLLEGE (Continued) **S113025726**

Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0075
Waste Quantity:	15
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20120131
Creation Date:	12/3/2012 22:16:30
Receipt Date:	20120310
Manifest ID:	003911135FLE
Trans EPA ID:	CAL000365413
Trans Name:	SPARTAN ENVIRONMENTAL
Trans 2 EPA ID:	ORQ000020644
Trans 2 Name:	NRC ENVIRONMENTAL
TSDF EPA ID:	WAD991281767
Trans Name:	BURLINGTON ENVIRONMENTAL LLC (PSC)
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	791 - Liquids with pH < 2 792 Liquids with pH < 2 with metals
RCRA Code:	D008
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.005
Waste Quantity:	10
Quantity Unit:	P
Additional Code 1:	D002
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HWTS:

Name:	NAPA VALLEY COLLEGE
Address:	2277 NAPA VALLEJO HWY
Address 2:	Not reported
City,State,Zip:	NAPA, CA 945586236
EPA ID:	CAL000012203
Inactive Date:	Not reported
Create Date:	11/14/1989
Last Act Date:	09/02/2020
Mailing Name:	Not reported
Mailing Address:	2277 NAPA VALLEJO HWY
Mailing Address 2:	Not reported
Mailing City,State,Zip:	NAPA, CA 945586236
Owner Name:	NAPA VALLEY COMM COLLEGE DIST
Owner Address:	2277 NAPA VALLEJO HWY
Owner Address 2:	Not reported
Owner City,State,Zip:	NAPA, CA 945586236
Contact Name:	IAN HOLBROOK
Contact Address:	2277 NAPA VALLEJO HWY
Contact Address 2:	Not reported
City,State,Zip:	NAPA, CA 94558

NAPA VALLEY COLLEGE (Continued) **S113025726**

NAICS:

EPA ID:	CAL000012203
Create Date:	2002-03-14 16:36:27.000
NAICS Code:	61121
NAICS Description:	Junior Colleges
Issued EPA ID Date:	1989-11-14 00:00:00
Inactive Date:	Not reported
Facility Name:	NAPA VALLEY COLLEGE
Facility Address:	2277 NAPA VALLEJO HWY
Facility Address 2:	Not reported
Facility City:	NAPA
Facility County:	Not reported
Facility State:	CA
Facility Zip:	945586236

E43
NW
1/4-1/2
0.438 mi.
2315 ft.

NAPA VALLEY COLLEGE **LUST 1006839559**
2277 NAPA VALLEJO HWY **UST N/A**
NAPA, CA 94558 **FINDS**

Site 2 of 4 in cluster E

Relative:
Lower

Actual:
6 ft.

LUST REG 2:

Region:	2
Facility Id:	28-0222
Facility Status:	Case Closed
Case Number:	0223
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:	Not reported
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

UST:

Name:	NAPA VALLEY COLLEGE
Address:	2277 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558
Facility ID:	Not reported
Permitting Agency:	Napa County Department of Environmental Management
Latitude:	38.2729
Longitude:	-122.2766

Name:	NAPA VALLEY COLLEGE
Address:	2277 NAPA VALLEJO HWY
City,State,Zip:	NAPA, CA 94558
Facility ID:	Not reported
Permitting Agency:	Napa County Department of Environmental
Latitude:	38.2729
Longitude:	-122.2766

Name:	NAPA VALLEY COLLEGE

NAPA VALLEY COLLEGE (Continued) **1006839559**

Address: 2277 NAPA VALLEJO HWY
City,State,Zip: NAPA, CA 94558
Facility ID: Not reported
Permitting Agency: Napa County Department of Environmental Management
Latitude: 38.2729
Longitude: -122.2766

NAPA CO. UST:
Name: NAPA VALLEY COLLEGE
Address: 2277 NAPA VALLEJO HWY
City,State,Zip: NAPA, CA 94558
Facility ID: Not reported
Permit ID: 4696
Facility Status: Open
Permit Type: UST
District: 1
Num of Tanks: Not reported

Name: NAPA VALLEY COLLEGE
Address: 2277 NAPA VALLEJO HWY
City,State,Zip: NAPA
Facility ID: NAPA0223
Permit ID: Not reported
Facility Status: Not reported
Permit Type: Not reported
District: Not reported
Num of Tanks: 1

Name: NAPA VALLEY COLLEGE
Address: 2277 NAPA VALLEJO HWY
City,State,Zip: NAPA
Facility ID: NAPA0223
Permit ID: Not reported
Facility Status: Not reported
Permit Type: Not reported
District: Not reported
Num of Tanks: 1

Name: NAPA VALLEY COLLEGE
Address: 2277 NAPA VALLEJO HWY
City,State,Zip: NAPA
Facility ID: NAPA0223
Permit ID: Not reported
Facility Status: Not reported
Permit Type: Not reported
District: Not reported
Num of Tanks: 1

Name: NAPA VALLEY COLLEGE
Address: 2277 NAPA VALLEJO HWY
City,State,Zip: NAPA
Facility ID: NAPA0223
Permit ID: Not reported
Facility Status: Not reported
Permit Type: Not reported
District: Not reported
Num of Tanks: 1

NAPA VALLEY COLLEGE (Continued) **1006839559**

Name: NAPA VALLEY COLLEGE
Address: 2277 NAPA VALLEJO HWY
City,State,Zip: NAPA
Facility ID: Not reported
Permit ID: Not reported
Facility Status: Not reported
Permit Type: Not reported
District: Not reported
Num of Tanks: Not reported

Name: NAPA VALLEY COLLEGE
Address: 2277 NAPA VALLEJO HWY
City,State,Zip: NAPA
Facility ID: Not reported
Permit ID: Not reported
Facility Status: Not reported
Permit Type: Not reported
District: Not reported
Num of Tanks: Not reported

Name: NAPA VALLEY COLLEGE
Address: 2277 NAPA VALLEJO HWY
City,State,Zip: NAPA
Facility ID: Not reported
Permit ID: Not reported
Facility Status: Not reported
Permit Type: Not reported
District: Not reported
Num of Tanks: Not reported

Name: NAPA VALLEY COLLEGE
Address: 2277 NAPA VALLEJO HWY
City,State,Zip: NAPA
Facility ID: Not reported
Permit ID: Not reported
Facility Status: Not reported
Permit Type: Not reported
District: Not reported
Num of Tanks: Not reported

Name: NAPA VALLEY COLLEGE
Address: 2277 NAPA VALLEJO HWY
City,State,Zip: NAPA
Facility ID: Not reported
Permit ID: Not reported
Facility Status: Not reported
Permit Type: Not reported
District: Not reported
Num of Tanks: Not reported

Name: NAPA VALLEY COLLEGE
Address: 2277 NAPA VALLEJO HWY
City,State,Zip: NAPA
Facility ID: Not reported
Permit ID: Not reported
Facility Status: Not reported
Permit Type: Not reported

NAPA VALLEY COLLEGE (Continued) **1006839559**

District: Not reported
Num of Tanks: Not reported

Name: NAPA VALLEY COLLEGE
Address: 2277 NAPA VALLEJO HWY
City,State,Zip: NAPA
Facility ID: Not reported
Permit ID: Not reported
Facility Status: Not reported
Permit Type: Not reported
District: Not reported
Num of Tanks: Not reported

Name: NAPA VALLEY COLLEGE
Address: 2277 NAPA VALLEJO HWY
City,State,Zip: NAPA
Facility ID: Not reported
Permit ID: Not reported
Facility Status: Not reported
Permit Type: Not reported
District: Not reported
Num of Tanks: Not reported

FINDS:
Registry ID: 110014005931

Click Here:

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.
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

E44 **NAPA VALLEY COLLEGE** **LUST** **S103978848**
NW **2277 NAPA VALLEJO HWY** **HIST CORTESE** **N/A**
1/4-1/2 **NAPA, CA 94558**
0.438 mi.
2315 ft. **Site 3 of 4 in cluster E**

Relative:
Lower

Actual:
6 ft.

LUST:
Name: NAPA VALLEY COLLEGE
Address: 2277 NAPA VALLEJO HWY
City,State,Zip: NAPA, CA 94558
Lead Agency: NAPA COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605500199
Global Id: T0605500199
Latitude: 38.275872
Longitude: -122.279785
Status: Completed - Case Closed
Status Date: 06/23/1995

NAPA VALLEY COLLEGE (Continued) **S103978848**

Case Worker: JTN
RB Case Number: 28-0222
Local Agency: NAPA COUNTY
File Location: Local Agency
Local Case Number: 0223
Potential Media Affect: Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern: Diesel
Site History: Not reported

LUST:
Global Id: T0605500199
Contact Type: Local Agency Caseworker
Contact Name: James Newman, P.G., C.E.G.
Organization Name: NAPA COUNTY
Address: 1195 THIRD STREET, SUITE 101
City: NAPA
Email: james.newman@countyofnapa.org
Phone Number: Not reported

LUST:
Global Id: T0605500199
Action Type: Other
Date: 04/05/1993
Action: Leak Discovery

Global Id: T0605500199
Action Type: Other
Date: 04/05/1993
Action: Leak Stopped

Global Id: T0605500199
Action Type: Other
Date: 07/30/1991
Action: Leak Reported

LUST:
Global Id: T0605500199
Status: Open - Case Begin Date
Status Date: 07/30/1991

Global Id: T0605500199
Status: Completed - Case Closed
Status Date: 06/23/1995

HIST CORTESE:
edr_fname: NAPA VALLEY COLLEGE
edr_fadd1: 2277 NAPA VALLEJO
City,State,Zip: NAPA, CA
Region: CORTESE
Facility County Code: 28
Reg By: LTNKA
Reg Id: 28-0222

E45
NW
1/4-1/2
0.438 mi.
2315 ft.

NAPA VALLEY COLLEGE
2277 NAPA-VALLEJO HWY.
NAPA, CA 99999

Site 4 of 4 in cluster E

SWF/LF **S109821529**
CERS **N/A**

Relative:
Lower

Actual:
6 ft.

SWF/LF (SWIS):

Name:	NAPA VALLEY COLLEGE
Address:	2277 NAPA-VALLEJO HWY.
City,State,Zip:	NAPA, CA 99999
Region:	STATE
Facility ID:	28-AA-0029
SWIS Number:	28-AA-0029
Point of Contact:	Abel Martinez-Centeno
Is Archived:	No
Is Closed Illegal Abandoned:	Yes
Is Site Inert Debris Engineered Fill:	No
Is Financial Assurances Responsible:	No
Absorbed On:	Not reported
Operational Status:	Closed
Absorbed By:	Not reported
Closed Illegal Abandoned Category:	C1
EPA Federal Registry ID:	Not reported
ARB District:	Bay Area
SWRCB Region:	San Francisco Bay
Local Government:	Napa
Reporting Agency Legal Name:	County of Napa
Reporting Agency Department:	Planning Building & Environmt'l Services, Local Enforcement Agency
Enforcing Agency Legal Name:	County of Napa
Enforcing Agency Department:	Planning Building & Environmt'l Services, Local Enforcement Agency
Regulation Status:	Unpermitted

Activity:

SWIS Number:	28-AA-0029
Site Name:	Napa Valley College
Activity:	Solid Waste Disposal Site
Activity Is Archived:	No
Category:	Disposal
Activity Classification:	Solid Waste Disposal Site
WDR Number:	Not reported
WDR Landfill Class:	Not reported
Cease Operation:	Not reported
Cease Operation Type:	Not reported
Inspection Frequency:	Quarterly
Throughput:	0
Throughput Units:	Not reported
Remaining Capacity:	0
Remaining Capacity Date:	Not reported
Capacity:	0
Capacity Units:	Not reported
Total Acreage:	0
Disposal Acreage:	0
Permitted Elevation:	0
Permitted Elevation Type:	Not reported
Permitted Depth:	0
Permitted Depth Type:	Not reported
Point of Contact:	Abel Martinez-Centeno
Site Operational Status:	Closed
Site Regulatory Status:	Unpermitted
Site Is Archived:	No

NAPA VALLEY COLLEGE (Continued) **S109821529**

Is Closed Illegal Abandoned:	Yes
Is Site Inert Debris Engineered Fill:	No
Is Financial Assurances Responsible:	No
Absorbed On:	Not reported
Absorbed By:	Not reported
Closed Illegal Abandoned Category:	C1
EPA Federal Registry ID:	Not reported
County:	Napa
ARB District:	Bay Area
SWRCB Region:	San Francisco Bay
Local Government:	Napa
Street Address:	2277 Napa-Vallejo Hwy.
City:	Napa
State:	CA
ZIP Code:	99999
Reporting Agency Legal Name:	County of Napa
Reporting Agency Department:	Planning Building & Environmt'l Services, Local Enforcement Agency
Enforcing Agency Legal Name:	County of Napa
Enforcing Agency Department:	Planning Building & Environmt'l Services, Local Enforcement Agency

CERS:

Name:	NAPA VALLEY COLLEGE
Address:	2277 NAPA-VALLEJO HWY.
City,State,Zip:	NAPA, CA
Site ID:	510389
CERS ID:	28-AA-0029
CERS Description:	Solid Waste and Recycle Sites

46
SW
1/4-1/2
0.499 mi.
2633 ft.

THE BASALT ROCK DIVISION OF DI
2301 NAPA-VALLEJO HIGHWAY
NAPA, CA 94558

ENVIROSTOR **S105689630**
VCP **N/A**
HIST UST

Relative:
Lower

Actual:
22 ft.

ENVIROSTOR:

Name:	SYAR INDUSTRIES SHOOTING RANGE
Address:	2301 NAPA-VALLEJO HIGHWAY
City,State,Zip:	NAPA, CA 94558
Facility ID:	28990002
Status:	Certified
Status Date:	03/30/2005
Site Code:	201471
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	1.4
NPL:	NO
Regulatory Agencies:	SMBRP, NAPA COUNTY
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Denise Tsuji
Division Branch:	Cleanup Berkeley
Assembly:	04
Senate:	03
Special Program:	Voluntary Cleanup Program
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED

THE BASALT ROCK DIVISION OF DI (Continued) **S105689630**

Funding: Responsible Party
Latitude: 38.26630
Longitude: -122.2695
APN: 046-370-120, 046370002000
Past Use: FIRING RANGE - SMALL ARMS ETC...
Potential COC: Lead
Confirmed COC: Lead
Potential Description: SOIL, SURFW
Alias Name: SYAR INDUSTRIES ROCK QUARRY
Alias Type: Alternate Name
Alias Name: 046-370-120
Alias Type: APN
Alias Name: 046370002000
Alias Type: APN
Alias Name: 110006535053
Alias Type: EPA (FRS #)
Alias Name: 201471
Alias Type: Project Code (Site Code)
Alias Name: 28990002
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 03/30/2005
Comments: Report indicating completion of all excavation, disposal and confirmation sampling activities approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 01/13/2004
Comments: Approved RAW and CEQA/NOE document. Excavation and off-site disposal of lead and arsenic contaminated soil. Cleanup was to unrestricted levels.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 12/01/2003
Comments: Fact Sheet mailed out on 12/1/2003.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 12/01/2003
Comments: Public Notice published on 12/1/2003.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Participation Plan / Community Relations Plan
Completed Date: 07/01/2003
Comments: Community Profile finalized.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Notice of Exemption

THE BASALT ROCK DIVISION OF DI (Continued) **S105689630**

Completed Date:	01/13/2004
Comments:	Notice of Exemption approved for excavation and disposal activities implemented in accordance with the RAW.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Certification
Completed Date:	03/30/2005
Comments:	Certification of completion of all remedial actions outlined in the Final RAW.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Standard Voluntary Agreement
Completed Date:	03/17/2003
Comments:	VCA signed with Napa County Department of Public Works.
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:

Name:	SYAR INDUSTRIES SHOOTING RANGE
Address:	2301 NAPA-VALLEJO HIGHWAY
City,State,Zip:	NAPA, CA 94558
Facility ID:	28990002
Site Type:	Voluntary Cleanup
Site Type Detail:	Voluntary Cleanup
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	1.4
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP, NAPA COUNTY
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Not reported
Supervisor:	Denise Tsuji
Division Branch:	Cleanup Berkeley
Site Code:	201471
Assembly:	04
Senate:	03
Special Programs Code:	Voluntary Cleanup Program
Status:	Certified
Status Date:	03/30/2005
Restricted Use:	NO
Funding:	Responsible Party
Lat/Long:	38.26630 / -122.2695
APN:	046-370-120, 046370002000
Past Use:	FIRING RANGE - SMALL ARMS ETC...
Potential COC:	30013
Confirmed COC:	30013
Potential Description:	SOIL, SURFW

THE BASALT ROCK DIVISION OF DI (Continued) **S105689630**

Alias Name: SYAR INDUSTRIES ROCK QUARRY
Alias Type: Alternate Name
Alias Name: 046-370-120
Alias Type: APN
Alias Name: 046370002000
Alias Type: APN
Alias Name: 110006535053
Alias Type: EPA (FRS #)
Alias Name: 201471
Alias Type: Project Code (Site Code)
Alias Name: 28990002
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 03/30/2005
Comments: Report indicating completion of all excavation, disposal and confirmation sampling activities approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 01/13/2004
Comments: Approved RAW and CEQA/NOE document. Excavation and off-site disposal of lead and arsenic contaminated soil. Cleanup was to unrestricted levels.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 12/01/2003
Comments: Fact Sheet mailed out on 12/1/2003.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 12/01/2003
Comments: Public Notice published on 12/1/2003.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Participation Plan / Community Relations Plan
Completed Date: 07/01/2003
Comments: Community Profile finalized.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Notice of Exemption
Completed Date: 01/13/2004
Comments: Notice of Exemption approved for excavation and disposal activities implemented in accordance with the RAW.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 03/30/2005

THE BASALT ROCK DIVISION OF DI (Continued) **S105689630**

Comments: Certification of completion of all remedial actions outlined in the Final RAW.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Standard Voluntary Agreement
Completed Date: 03/17/2003
Comments: VCA signed with Napa County Department of Public Works.

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

HIST UST:
Name: THE BASALT ROCK DIVISION OF DI
Address: 2301 NAPA-VALLEJO HIGHWAY
City,State,Zip: NAPA, CA 94558
File Number: 0001EFEB
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0001EFEB.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:

47
SSW
1/2-1
0.512 mi.
2703 ft.

860 KAISER ROAD
860 KAISER ROAD
NAPA, CA 94558

ENVIROSTOR **S120714353**
VCP **N/A**
DEED

Relative:
Lower

Actual:
28 ft.

ENVIROSTOR:
Name: 860 KAISER ROAD
Address: 860 KAISER ROAD
City,State,Zip: NAPA, CA 94558

860 KAISER ROAD (Continued) **S120714353**

Facility ID:	60002512
Status:	Certified O&M - Land Use Restrictions Only
Status Date:	06/13/2018
Site Code:	202231
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	1.11
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Sagar Bhatt
Supervisor:	Cheryl Prowell
Division Branch:	Cleanup Berkeley
Assembly:	, 04
Senate:	, 03
Special Program:	Voluntary Cleanup Program
Restricted Use:	YES
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	38.25800
Longitude:	-122.2726
APN:	046-531-040, 046531040000
Past Use:	DRY CLEANING
Potential COC:	Tetrachloroethylene (PCE 1,1,1-Trichloroethane (TCA Trichloroethylene (TCE Vinyl chloride Bromomethane (Methyl bromide Chloroform Chloromethane (methyl chloride 1,2-Dichloroethylene (trans Xylenes
Confirmed COC:	Tetrachloroethylene (PCE 30026-NO Trichloroethylene (TCE 30028-NO 30096-NO 30136-NO 30137-NO 30196-NO 30593-NO
Potential Description:	AQUI, IA, OTH, SOIL, SV, UE
Alias Name:	046-531-040
Alias Type:	APN
Alias Name:	046531040000
Alias Type:	APN
Alias Name:	T10000005248
Alias Type:	GeoTracker Global ID
Alias Name:	202141
Alias Type:	Project Code (Site Code)
Alias Name:	202231
Alias Type:	Project Code (Site Code)
Alias Name:	60002512
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Application
Completed Date:	06/13/2017
Comments:	860 Kaiser LLC submitted a Request for Agency Oversight Application for the Department of Toxic Substances Control or Regional Water Quality Control Board to review the existing site documents and provided case closure. The Napa County Department of Public Works has been providing oversight of investigation and cleanup activities at the site.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Other Report

860 KAISER ROAD (Continued) **S120714353**

Completed Date: 07/14/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 01/05/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Workplan
Completed Date: 08/05/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pilot/Treatability Study Report
Completed Date: 02/09/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 10/28/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 11/06/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/04/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 06/13/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 06/22/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pilot Study/Treatability Workplan
Completed Date: 05/28/2015
Comments: Not reported

860 KAISER ROAD (Continued) **S120714353**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Standard Voluntary Agreement
Completed Date:	07/19/2017
Comments:	Voluntary Cleanup Agreement entered into between DTSC and 860 Kaiser, LLC to review various reports documenting investigation and cleanup activities conducted with oversight from Napa County. Based on these reports, DTSC will determine whether the site has been cleaned up to levels allowing for unrestricted land use and a no further action determination can be made, or whether land use and activity restrictions need to be placed on the site through a land use covenant.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Certification
Completed Date:	06/13/2018
Comments:	A Land Use Covenant (LUC) between DTSC and LeFever Mattson, Inc. has been executed that restricts land use and activities on a portion of the Site. The LUC was recorded with Napa County on May 30, 2018, which completed the scope of work under the Voluntary Cleanup Agreement. With the exception of compliance with the restrictions and requirements of the LUC, DTSC has determined that no further action is necessary with respect to the investigation and remediation of hazardous substances at the Site.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Land Use Restriction
Completed Date:	05/30/2018
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	09/28/2018
Comments:	Annual DTSC oversight cost estimate letter to LeFever Mattson, Inc. for fiscal year 2018/2019 (July 1, 2018 - June 30, 2019).

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	10/07/2019
Comments:	Annual DTSC oversight cost estimate letter for fiscal year 2019/2020 (July 1, 2019 - June 30, 2020).

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	09/30/2020
Comments:	Annual DTSC oversight cost estimate letter for fiscal year 2020/2021 (July 1, 2020 - June 30, 2021).

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Well Completion Report
Completed Date:	02/10/2014

860 KAISER ROAD (Continued) **S120714353**

Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pilot Study/Treatability Workplan
Completed Date: 10/01/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 05/10/2016
Comments: The workplan was prepared for the destruction of select subslab gas and soil gas probes/wells at the site. The workplan was requested by the Napa County Department of Public Works and includes the requested rational for probe destruction and a proposed program for soil gas monitoring.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 09/18/2017
Comments: The Excavation, Vapor Extraction, and Groundwater Characterization Report documents implementation of the Vapor Mitigation Workplan that was approved by the Napa County Department of Public Works. The Report also documents rebound testing of soil gas and indoor air sampling after source excavation and vapor extraction and requests regulatory case closure. DTSC did not issue an approval letter for this Report since the documented work was completed under the oversight of the Napa County Department of Public Works. Instead, DTSC reviewed the Report and verbally requested on September 18, 2017 during a phone conversation with the Site owner and the environmental consultant that a post-remediation human health risk assessment be performed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/13/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/15/2016
Comments: The report presents the results of groundwater sampling that was performed and depth to groundwater measurements that were made on January 21, 2016. The report was submitted to the Napa County Department of Public Works for review.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/27/2015
Comments: The report presents the results of groundwater sampling that was performed and depth to groundwater measurements that were made on March 31, 2015. The report was submitted to the Napa County

860 KAISER ROAD (Continued) **S120714353**

Department of Public Works for review.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/29/2016
Comments: The report presents the results of groundwater sampling that was performed and depth to groundwater measurements that were made on July 6, 2016 and November 8, 2015. The report was submitted to the Napa County Department of Public Works for review.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 01/31/2018
Comments: The Post-Remediation Human Health Risk Assessment (HHRA) evaluates human health risks associated with potential exposures to volatile organic compounds (VOCs) remaining at the Site following implementation of remedial activities performed under the oversight of the Napa County Department of Public Works. A passive sub-slab ventilation system has been installed at three locations within the building at the Site, and limited soil excavation has been performed to remove the primary source of tetrachloroethene (PCE). Confirmation soil sampling did not detect any VOCs in soil above residential screening levels. VOCs were detected in soil gas, indoor air samples, and groundwater at concentrations above levels that would allow for unrestricted land use. The HHRA concluded that the Site is acceptable for continued commercial/industrial land use, and recommended that a land use covenant be placed on the Site, restricting sensitive land uses to protect human health. DTSC agreed with the conclusion and approved the HHRA on January 31, 2018.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 03/15/2018
Comments: DTSC published a public notice in the Napa Valley Register announcing the intent to enter into a land use covenant at the Site. The public notice contains information about the contamination, and gives reasons for why land use restrictions are proposed at the Site. It also contains information about where to get more information about the Site and provides contact information if there are any questions.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction Monitoring Report
Completed Date: 02/15/2019
Comments: The 2018 Annual Inspection Report presents the results of the inspection performed at the Site as required by the Land Use Covenant. No violations of the Lands Use Covenant were observed during the inspection, and the Site was in compliance. The next annual inspection report is due by January 15, 2020.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction Monitoring Report
Completed Date: 02/03/2020

860 KAISER ROAD (Continued) **S120714353**

Comments: The 2019 Annual Inspection Report presents the results of the inspection performed at the Site as required by the Land Use Covenant. No violations of the Lands Use Covenant were observed during the inspection, and the Site was in compliance. The next annual inspection report is due by January 15, 2021.

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: 5 Year Review Reports
Future Due Date: 2023
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:
Name: 860 KAISER ROAD
Address: 860 KAISER ROAD
City,State,Zip: NAPA, CA 94558
Facility ID: 60002512
Site Type: Voluntary Cleanup
Site Type Detail: Voluntary Cleanup
Site Mgmt. Req.: NONE SPECIFIED
Acres: 1.11
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Sagar Bhatt
Supervisor: Cheryl Prowell
Division Branch: Cleanup Berkeley
Site Code: 202231
Assembly: , 04
Senate: , 03
Special Programs Code: Voluntary Cleanup Program
Status: Certified O&M - Land Use Restrictions Only
Status Date: 06/13/2018
Restricted Use: YES
Funding: Responsible Party
Lat/Long: 38.25800 / -122.2726
APN: 046-531-040, 046531040000
Past Use: DRY CLEANING
Potential COC: 30022, 30026, 30027, 30028, 30096, 30136, 30137, 30196, 30593
Confirmed COC: 30022,30026-NO,30027,30028-NO,30096-NO,30136-NO,30137-NO,30196-NO, 30593-NO
Potential Description: AQUI, IA, OTH, SOIL, SV, UE
Alias Name: 046-531-040
Alias Type: APN
Alias Name: 046531040000
Alias Type: APN
Alias Name: T10000005248
Alias Type: GeoTracker Global ID
Alias Name: 202141
Alias Type: Project Code (Site Code)
Alias Name: 202231
Alias Type: Project Code (Site Code)

860 KAISER ROAD (Continued) **S120714353**

Alias Name: 60002512
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Application
Completed Date: 06/13/2017
Comments: 860 Kaiser LLC submitted a Request for Agency Oversight Application for the Department of Toxic Substances Control or Regional Water Quality Control Board to review the existing site documents and provided case closure. The Napa County Department of Public Works has been providing oversight of investigation and cleanup activities at the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 07/14/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 01/05/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Workplan
Completed Date: 08/05/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pilot/Treatability Study Report
Completed Date: 02/09/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 10/28/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 11/06/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/04/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE

860 KAISER ROAD (Continued) **S120714353**

Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 06/13/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 06/22/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pilot Study/Treatability Workplan
Completed Date: 05/28/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Standard Voluntary Agreement
Completed Date: 07/19/2017
Comments: Voluntary Cleanup Agreement entered into between DTSC and 860 Kaiser, LLC to review various reports documenting investigation and cleanup activities conducted with oversight from Napa County. Based on these reports, DTSC will determine whether the site has been cleaned up to levels allowing for unrestricted land use and a no further action determination can be made, or whether land use and activity restrictions need to be placed on the site through a land use covenant.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 06/13/2018
Comments: A Land Use Covenant (LUC) between DTSC and LeFever Mattson, Inc. has been executed that restricts land use and activities on a portion of the Site. The LUC was recorded with Napa County on May 30, 2018, which completed the scope of work under the Voluntary Cleanup Agreement. With the exception of compliance with the restrictions and requirements of the LUC, DTSC has determined that no further action is necessary with respect to the investigation and remediation of hazardous substances at the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction
Completed Date: 05/30/2018
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/28/2018
Comments: Annual DTSC oversight cost estimate letter to LeFever Mattson, Inc. for fiscal year 2018/2019 (July 1, 2018 - June 30, 2019).

Completed Area Name: PROJECT WIDE

860 KAISER ROAD (Continued) **S120714353**

Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/07/2019
Comments: Annual DTSC oversight cost estimate letter for fiscal year 2019/2020 (July 1, 2019 - June 30, 2020).

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/30/2020
Comments: Annual DTSC oversight cost estimate letter for fiscal year 2020/2021 (July 1, 2020 - June 30, 2021).

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Well Completion Report
Completed Date: 02/10/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pilot Study/Treatability Workplan
Completed Date: 10/01/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 05/10/2016
Comments: The workplan was prepared for the destruction of select subslab gas and soil gas probes/wells at the site. The workplan was requested by the Napa County Department of Public Works and includes the requested rational for probe destruction and a proposed program for soil gas monitoring.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 09/18/2017
Comments: The Excavation, Vapor Extraction, and Groundwater Characterization Report documents implementation of the Vapor Mitigation Workplan that was approved by the Napa County Department of Public Works. The Report also documents rebound testing of soil gas and indoor air sampling after source excavation and vapor extraction and requests regulatory case closure. DTSC did not issue an approval letter for this Report since the documented work was completed under the oversight of the Napa County Department of Public Works. Instead, DTSC reviewed the Report and verbally requested on September 18, 2017 during a phone conversation with the Site owner and the environmental consultant that a post-remediation human health risk assessment be performed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/13/2015
Comments: Not reported

860 KAISER ROAD (Continued) **S120714353**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/15/2016
Comments: The report presents the results of groundwater sampling that was performed and depth to groundwater measurements that were made on January 21, 2016. The report was submitted to the Napa County Department of Public Works for review.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/27/2015
Comments: The report presents the results of groundwater sampling that was performed and depth to groundwater measurements that were made on March 31, 2015. The report was submitted to the Napa County Department of Public Works for review.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/29/2016
Comments: The report presents the results of groundwater sampling that was performed and depth to groundwater measurements that were made on July 6, 2016 and November 8, 2015. The report was submitted to the Napa County Department of Public Works for review.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 01/31/2018
Comments: The Post-Remediation Human Health Risk Assessment (HHRA) evaluates human health risks associated with potential exposures to volatile organic compounds (VOCs) remaining at the Site following implementation of remedial activities performed under the oversight of the Napa County Department of Public Works. A passive sub-slab ventilation system has been installed at three locations within the building at the Site, and limited soil excavation has been performed to remove the primary source of tetrachloroethene (PCE). Confirmation soil sampling did not detect any VOCs in soil above residential screening levels. VOCs were detected in soil gas, indoor air samples, and groundwater at concentrations above levels that would allow for unrestricted land use. The HHRA concluded that the Site is acceptable for continued commercial/industrial land use, and recommended that a land use covenant be placed on the Site, restricting sensitive land uses to protect human health. DTSC agreed with the conclusion and approved the HHRA on January 31, 2018.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 03/15/2018
Comments: DTSC published a public notice in the Napa Valley Register announcing the intent to enter into a land use covenant at the Site. The public notice contains information about the contamination, and gives reasons for why land use restrictions are proposed at the Site. It also contains information about where to get more information about

860 KAISER ROAD (Continued) **S120714353**

the Site and provides contact information if there are any questions.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction Monitoring Report
Completed Date: 02/15/2019
Comments: The 2018 Annual Inspection Report presents the results of the inspection performed at the Site as required by the Land Use Covenant. No violations of the Lands Use Covenant were observed during the inspection, and the Site was in compliance. The next annual inspection report is due by January 15, 2020.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction Monitoring Report
Completed Date: 02/03/2020
Comments: The 2019 Annual Inspection Report presents the results of the inspection performed at the Site as required by the Land Use Covenant. No violations of the Lands Use Covenant were observed during the inspection, and the Site was in compliance. The next annual inspection report is due by January 15, 2021.

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: 5 Year Review Reports
Future Due Date: 2023
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:
Name: 860 KAISER ROAD
Address: 860 KAISER ROAD
City,State,Zip: NAPA, CA 94558
Envirostor ID: 60002512
Area: PROJECT WIDE
Sub Area: Not reported
Site Type: VOLUNTARY CLEANUP
Status: CERTIFIED O&M - LAND USE RESTRICTIONS ONLY
Agency: Not reported
Covenant Uploaded: Not reported
Deed Date(s): Not reported
File Name: Envirostor Land Use Restrictions

48
SSW
1/2-1
0.888 mi.
4691 ft.

NOVA GROUP, INC. **ENVIROSTOR** **S110494113**
7411 NAPA-VALLEJO HIGHWAY **N/A**
NAPA, CA 94558

Relative:
Lower

Actual:
33 ft.

ENVIROSTOR:
Name: NOVA GROUP, INC.
Address: 7411 NAPA-VALLEJO HIGHWAY
City,State,Zip: NAPA, CA 94558
Facility ID: 71002524

NOVA GROUP, INC. (Continued) **S110494113**

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: 04
Senate: 03
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 38.23799
Longitude: -122.2696
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD066099219
Alias Type: EPA Identification Number
Alias Name: 110001161233
Alias Type: EPA (FRS #)
Alias Name: 71002524
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

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

F49
SW
1/2-1
0.915 mi.
4831 ft.

NAPA PIPE CORPORATION
1025 KAISER ROAD
NAPA, CA 92543

Site 1 of 3 in cluster F

Notify 65 **S100179666**
N/A

Relative:
Lower

Actual:
10 ft.

NOTIFY 65:

Name:	NAPA PIPE CORPORATION
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 92543
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
Global ID:	Not reported
Status:	Not reported

F50
SW
1/2-1
0.915 mi.
4831 ft.

NAPA PIPE CORPORATION
1025 KAISER ROAD
NAPA, CA 92543

Site 2 of 3 in cluster F

EMI **S100230125**
Notify 65 **N/A**

Relative:
Lower

Actual:
10 ft.

EMI:

Name:	NAPA PIPE CORPORATION
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 92543
Year:	1990
County Code:	28
Air Basin:	SF
Facility ID:	3148
Air District Name:	BA
SIC Code:	3317
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:	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 and Smllr Tons/Yr:	0

Name:	MIDWESTERN PIPELINE SERVICES
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 92543
Year:	1990
County Code:	28
Air Basin:	SF
Facility ID:	2193
Air District Name:	BA
SIC Code:	3479
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:	55

NAPA PIPE CORPORATION (Continued) **S100230125**

Reactive Organic Gases Tons/Yr:	33
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 and Smllr Tons/Yr:	0

Name:	COMMERCIAL RESINS COMPANY
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 92543
Year:	1993
County Code:	28
Air Basin:	SF
Facility ID:	2193
Air District Name:	BA
SIC Code:	3479
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:	15
Reactive Organic Gases Tons/Yr:	11
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 and Smllr Tons/Yr:	0

Name:	NAPA PIPE CORPORATION
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 92543
Year:	1995
County Code:	28
Air Basin:	SF
Facility ID:	3148
Air District Name:	BA
SIC Code:	3317
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 and Smllr Tons/Yr:	0

Name:	NAPA PIPE CORPORATION
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 92543
Year:	1996
County Code:	28
Air Basin:	SF
Facility ID:	3148
Air District Name:	BA
SIC Code:	3317
Air District Name:	BAY AREA AQMD

NAPA PIPE CORPORATION (Continued) **S100230125**

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 and Smllr Tons/Yr:	0

Name:	NAPA PIPE CORPORATION
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 92543
Year:	1997
County Code:	28
Air Basin:	SF
Facility ID:	3148
Air District Name:	BA
SIC Code:	3317
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:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	MIDWESTERN PIPELINE SERVICES
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 92543
Year:	1997
County Code:	28
Air Basin:	SF
Facility ID:	2193
Air District Name:	BA
SIC Code:	3479
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 and Smllr Tons/Yr:	0

Name:	MIDWESTERN PIPELINE SERVICES
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 92543
Year:	1998
County Code:	28
Air Basin:	SF
Facility ID:	2193

NAPA PIPE CORPORATION (Continued) **S100230125**

Air District Name:	BA
SIC Code:	3479
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:	8
Reactive Organic Gases Tons/Yr:	6
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 and Smllr Tons/Yr:	0

Name:	NAPA PIPE CORPORATION
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 92543
Year:	1998
County Code:	28
Air Basin:	SF
Facility ID:	3148
Air District Name:	BA
SIC Code:	3317
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:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	NAPA PIPE CORPORATION
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 92543
Year:	1999
County Code:	28
Air Basin:	SF
Facility ID:	3148
Air District Name:	BA
SIC Code:	3547
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:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	MIDWESTERN PIPELINE SERVICES
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 92543
Year:	1999

NAPA PIPE CORPORATION (Continued) **S100230125**

County Code:	28
Air Basin:	SF
Facility ID:	2193
Air District Name:	BA
SIC Code:	3479
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:	15
Reactive Organic Gases Tons/Yr:	15
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 and Smllr Tons/Yr:	0

Name:	MIDWESTERN PIPELINE SERVICES
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 92543
Year:	2000
County Code:	28
Air Basin:	SF
Facility ID:	2193
Air District Name:	BA
SIC Code:	3479
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:	15
Reactive Organic Gases Tons/Yr:	15
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 and Smllr Tons/Yr:	0

Name:	NAPA PIPE CORPORATION
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 92543
Year:	2000
County Code:	28
Air Basin:	SF
Facility ID:	3148
Air District Name:	BA
SIC Code:	3547
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:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Name:	NAPA PIPE CORPORATION

NAPA PIPE CORPORATION (Continued) **S100230125**

Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 92543
Year:	2001
County Code:	28
Air Basin:	SF
Facility ID:	3148
Air District Name:	BA
SIC Code:	4931
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 and Smllr Tons/Yr:	0

Name:	MIDWESTERN PIPELINE SERVICES
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 92543
Year:	2001
County Code:	28
Air Basin:	SF
Facility ID:	2193
Air District Name:	BA
SIC Code:	3479
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:	6
Reactive Organic Gases Tons/Yr:	6
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 and Smllr Tons/Yr:	0

Name:	MIDWESTERN PIPELINE SERVICES
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 92543
Year:	2002
County Code:	28
Air Basin:	SF
Facility ID:	2193
Air District Name:	BA
SIC Code:	3479
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:	6
Reactive Organic Gases Tons/Yr:	6
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

NAPA PIPE CORPORATION (Continued) **S100230125**

Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Name:	NAPA PIPE CORPORATION
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 92543
Year:	2002
County Code:	28
Air Basin:	SF
Facility ID:	3148
Air District Name:	BA
SIC Code:	3317
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 and Smllr Tons/Yr:	0

Name:	NAPA PIPE CORPORATION
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 92543
Year:	2003
County Code:	28
Air Basin:	SF
Facility ID:	3148
Air District Name:	BA
SIC Code:	3317
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 and Smllr Tons/Yr:	0

Name:	NAPA PIPE CORPORATION
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 92543
Year:	2004
County Code:	28
Air Basin:	SF
Facility ID:	3148
Air District Name:	BA
SIC Code:	3317
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:	0.411
Reactive Organic Gases Tons/Yr:	0.2245025
Carbon Monoxide Emissions Tons/Yr:	0.172

NAPA PIPE CORPORATION (Continued) **S100230125**

NOX - Oxides of Nitrogen Tons/Yr:	0.796
SOX - Oxides of Sulphur Tons/Yr:	0.012
Particulate Matter Tons/Yr:	0.056
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.054656

Name:	MIDWESTERN PIPELINE SERVICES
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 92543
Year:	2005
County Code:	28
Air Basin:	SF
Facility ID:	2193
Air District Name:	BA
SIC Code:	3479
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:	17.356
Reactive Organic Gases Tons/Yr:	17.1447332
Carbon Monoxide Emissions Tons/Yr:	.051
NOX - Oxides of Nitrogen Tons/Yr:	.204
SOX - Oxides of Sulphur Tons/Yr:	.001
Particulate Matter Tons/Yr:	.004
Part. Matter 10 Micrometers and Smllr Tons/Yr:	.002296

NOTIFY 65:

Name:	NAPA PIPE CORPORATION
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 92543
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
Global ID:	Not reported
Status:	Not reported

F51 **NAPA PIPE - SLIC/SUB15** **ENVIROSTOR** **1000726691**
SW **1025 KAISER ROAD** **LUST** **N/A**
1/2-1 **NAPA, CA 94559** **CPS-SLIC**
0.915 mi. **ENF**
4831 ft. **Site 3 of 3 in cluster F** **HIST CORTESE**
NPDES
Relative: Lower **CIWQS**
CERS
Actual: 10 ft.

ENVIROSTOR:

Name:	NAPA PIPE CORP.
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 94558
Facility ID:	71003039
Status:	Refer: Other Agency
Status Date:	Not reported
Site Code:	Not reported
Site Type:	Tiered Permit

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

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: 04
Senate: 03
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 38.25321
Longitude: -122.2792
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD982417172
Alias Type: EPA Identification Number
Alias Name: 110002081899
Alias Type: EPA (FRS #)
Alias Name: 28340003
Alias Type: Envirostor ID Number
Alias Name: 71003039
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

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

Name: NAPA PIPE
Address: 1025 KAISER ROAD
City,State,Zip: NAPA, CA 94558
Facility ID: 28340003
Status: Refer: RWQCB
Status Date: 01/01/1990
Site Code: Not reported
Site Type: Historical
Site Type Detailed: * Historical
Acres: Not reported
NPL: NO

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

Regulatory Agencies: RWQCB 2 - San Francisco Bay
Lead Agency: RWQCB 2 - San Francisco Bay
Program Manager: Not reported
Supervisor: Referred - Not Assigned
Division Branch: Cleanup Berkeley
Assembly: 04
Senate: 03
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 38.25321
Longitude: -122.2792
APN: 046412005000
Past Use: NONE SPECIFIED
Potential COC: * HALOGENATED ORGANIC COMPOUNDS * HALOGENATED SOLVENTS * Metals - Sludge Lead
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: KAISER STEEL CORPORATION
Alias Type: Alternate Name
Alias Name: 046412005000
Alias Type: APN
Alias Name: CAD009103151
Alias Type: EPA Identification Number
Alias Name: 110002081899
Alias Type: EPA (FRS #)
Alias Name: P23038
Alias Type: PCode
Alias Name: 28340003
Alias Type: Envirostor ID Number
Alias Name: 71003039
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 12/26/1991
Comments: The SFRWQCB is providing direct oversight under Order No. 90-147 (site cleanup requirements) issued on 11/14/90. National Pipe Corp. (NPC) is a steel pipe manufacturing facility located at 1025 Kaiser Rd. in Napa, California. The site occupies approx. 152 acres and was a Kaiser Steel facility from 1955 to 1986. NPC, a subsidiary or Oregon Steel Mills, Inc., is the current owner. During the removal of a waste oil tank in 1987, soil and groundwater contamination was discovered at the site. NPC conducted soil and groundwater investigation at the site and developed a corrective action plan under direct supervision from the SF Regional Water Quality Control Board (SFWQCB). Soil sampling revealed presence of the following contaminants: barium (40-52 ppm), copper (120-20,000 ppm), and zinc (50 ppm). Sludge and water samples from a surface impoundment showed elevated levels of soluble lead (12 ppm). Soil and groundwater analyses from the area of the waste oil tank removed earlier showed elevated levels of toluene (420 ppb), 1,1-dichloroethane (DCA) (72 ppb); 1,1,1-trichloroethane (TCA) (660 ppb); trichloroethylene (TCE) (3 ppb) and 1,4-dichlorobenzene (DCB) (3 ppb). Additional sampling conducted in 2/88 indicated soil contamination with the FF:1,1

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

dichloroethene (42 ppb); tetrachloroethene (8 ppb), and 1,2,1-trichloroethene (230 ppb). Groundwater samples indicated the following: 1,2-dichloroethane (100 ppb), trichloroethene (16,000 ppb), chloroethane (280 ppb), and ethylbenzene (83 ppb). NPC is currently doing remedial work under the direct supervision of SFRWQCB, which has issued Order 90-147 (site cleanup requirements) on 11-14-90. The U.S. EPA has conducted a preliminary assessment and a site inspection in 1/88 which recommended that a hazard ranking (HRS) package be prepared for the site to see whether it will score high enough for possible inclusion on the National Priorities List. Toxic pits site. Referred to RWQCB for oversight of clean-up.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 12/12/1988
Comments: SITE SCREENING DONE EPA LEAD - LISTING SITE INSPECTION DONE & EPA WILL LIST SITE.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 05/02/2014
Comments: Reassessment conducted by DTSC on EPA’s behalf. DTSC concluded that no further federal assessment under CERCLA was necessary as the San Francisco Bay waterboard is overseeing environmental investigation and remediation at the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 11/17/1997
Comments: RWQCB is providing oversight.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 01/12/1988
Comments: FACILITY IDENTIFIED NAPA ENVR HLTH; CERCLIS: LIST 8 4/12/88. INSPECTION(FED) COMPL DATE: DS1 - 10/01/87.

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

LUST:
Name: NAPA PIPE CORP
Address: 1025 KAISER RD
City,State,Zip: NAPA, CA 94559
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Case Type: LUST Cleanup Site

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605500100
Global Id: T0605500100
Latitude: 38.25238
Longitude: -122.279939
Status: Completed - Case Closed
Status Date: 07/21/2009
Case Worker: AJK
RB Case Number: 28-0108
Local Agency: NAPA COUNTY
File Location: Not reported
Local Case Number: 28-0108
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: * Solvents
Site History: Not reported

LUST:
Global Id: T0605500100
Contact Type: Regional Board Caseworker
Contact Name: ALYX KARPOWICZ
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 Clay St., Suite 1400
City: OAKLAND
Email: akarpowicz@waterboards.ca.gov
Phone Number: 5106222427

Global Id: T0605500100
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: NAPA COUNTY
Address: 1195 THIRD ST., ROOM 101
City: NAPA
Email: Not reported
Phone Number: 7072534269

LUST:
Global Id: T0605500100
Action Type: RESPONSE
Date: 03/19/1997
Action: Monitoring Report - Other

Global Id: T0605500100
Action Type: ENFORCEMENT
Date: 04/22/1999
Action: 13267 Requirement

Global Id: T0605500100
Action Type: ENFORCEMENT
Date: 05/05/2000
Action: 13267 Requirement

Global Id: T0605500100
Action Type: ENFORCEMENT
Date: 07/21/2009
Action: Closure/No Further Action Letter

Global Id: T0605500100
Action Type: ENFORCEMENT

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

Date: 05/05/2000
Action: Notice of Responsibility

Global Id: T0605500100
Action Type: ENFORCEMENT
Date: 09/03/1988
Action: Other Report

Global Id: T0605500100
Action Type: RESPONSE
Date: 06/21/1988
Action: Other Workplan

Global Id: T0605500100
Action Type: ENFORCEMENT
Date: 06/19/1989
Action: Amendment to Agreement

Global Id: T0605500100
Action Type: ENFORCEMENT
Date: 04/22/1999
Action: 13267 Requirement

Global Id: T0605500100
Action Type: ENFORCEMENT
Date: 07/16/1997
Action: 13267 Requirement

Global Id: T0605500100
Action Type: Other
Date: 06/26/1987
Action: Leak Discovery

Global Id: T0605500100
Action Type: Other
Date: 06/26/1987
Action: Leak Stopped

Global Id: T0605500100
Action Type: Other
Date: 06/26/1987
Action: Leak Reported

Global Id: T0605500100
Action Type: RESPONSE
Date: 10/15/1997
Action: Correspondence

Global Id: T0605500100
Action Type: RESPONSE
Date: 09/02/1987
Action: Other Report / Document

Global Id: T0605500100
Action Type: RESPONSE
Date: 07/13/1987
Action: Monitoring Report - Other

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

Global Id: T0605500100
Action Type: RESPONSE
Date: 05/14/1990
Action: Other Report / Document

Global Id: T0605500100
Action Type: RESPONSE
Date: 05/06/1987
Action: Other Report / Document

Global Id: T0605500100
Action Type: RESPONSE
Date: 05/07/1998
Action: Other Report / Document

Global Id: T0605500100
Action Type: RESPONSE
Date: 06/24/1987
Action: Monitoring Report - Other

Global Id: T0605500100
Action Type: RESPONSE
Date: 10/20/1997
Action: Correspondence

Global Id: T0605500100
Action Type: RESPONSE
Date: 05/25/1999
Action: Correspondence

LUST:
Global Id: T0605500100
Status: Open - Case Begin Date
Status Date: 06/26/1987

Global Id: T0605500100
Status: Open - Site Assessment
Status Date: 08/30/1988

Global Id: T0605500100
Status: Open - Remediation
Status Date: 04/12/1990

Global Id: T0605500100
Status: Open - Site Assessment
Status Date: 05/12/2008

Global Id: T0605500100
Status: Completed - Case Closed
Status Date: 07/21/2009

CPS-SLIC:
Name: NAPA PIPE CORP
Address: 1025 KAISER RD
City,State,Zip: NAPA, CA 94558

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

Region:	STATE
Facility Status:	**Open - Eligible for Closure**
Status Date:	06/19/2019
Global Id:	SL181281128
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number:	Not reported
Latitude:	38.257902
Longitude:	-122.271849
Case Type:	Cleanup Program Site
Case Worker:	AJK
Local Agency:	Not reported
RB Case Number:	SL181281128
File Location:	Regional Board
Potential Media Affected:	Other Groundwater (uses other than drinking water), Soil, Surface water
Potential Contaminants of Concern:	Other Chlorinated Hydrocarbons, Trichloroethylene (TCE), Vinyl chloride, Chromium, Lead, Other Metal, Diesel, Gasoline, Other Petroleum
Site History:	The former Napa Pipe facility is located about three miles south of downtown Napa along the east bank of the Napa River. Since the late 1930s the facility was used first for shipbuilding and later for pipe and other steel fabrication activities. Steel pipe fabrication ended in 2005 and the property was sold. The property is currently used for warehousing with a limited amount of manufacturing. Plans are under way to redevelop the facility into a mixture of residential, commercial and open space uses.

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

ENF:

Name:	NAPA PIPE - SLIC/SUB15
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 94559
Region:	2
Facility Id:	244839
Agency Name:	Oregon Steel Mills
Place Type:	Manufacturing
Place Subtype:	Manufacturing NEC
Facility Type:	Solid Waste Class II - designated wastes
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	3443
SIC Desc 1:	Fabricated Plate Work (Boiler Shops)
SIC Code 2:	3498
SIC Desc 2:	Fabricated Pipe and Pipe Fittings
SIC Code 3:	286
SIC Desc 3:	Industrial organic chemicals
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:	2
Source Of Facility:	Reg Meas

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

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:	UST
Program Category1:	TANKS
Program Category2:	TANKS
# Of Programs:	1
WDID:	2 28-0108
Reg Measure Id:	168245
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):	237289
Region:	2
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	13267 Letter
Effective Date:	04/22/1999
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 28-0108
Description:	Requirements for MTBE Info Pertaining to the Leaking Underground Storage Tank
Program:	UST
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Name:	NAPA PIPE - SLIC/SUB15
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 94559
Region:	2
Facility Id:	244839
Agency Name:	Not reported
Place Type:	Manufacturing
Place Subtype:	Manufacturing NEC
Facility Type:	Solid Waste Class II - designated wastes
Agency Type:	Not reported
# Of Agencies:	Not reported
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	3443
SIC Desc 1:	Fabricated Plate Work (Boiler Shops)
SIC Code 2:	3498
SIC Desc 2:	Fabricated Pipe and Pipe Fittings
SIC Code 3:	286
SIC Desc 3:	Industrial organic chemicals
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:	Enf Action
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:	Not reported
Program Category1:	Not reported
Program Category2:	LNDISP
# Of Programs:	Not reported
WDID:	Not reported
Reg Measure Id:	Not reported
Reg Measure Type:	Not reported
Region:	Not reported
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

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

Application Fee Amt Received:	Not reported
Status:	Not reported
Status Date:	Not reported
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:	Not reported
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Not reported
Enforcement Id(EID):	219937
Region:	2
Order / Resolution Number:	90-147
Enforcement Action Type:	Clean-up and Abatement Order
Effective Date:	11/14/1990
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 283007002
Description:	SCR-
Program:	LNDISP
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Name:	NAPA PIPE - SLIC/SUB15
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 94559
Region:	2
Facility Id:	244839
Agency Name:	Not reported
Place Type:	Manufacturing
Place Subtype:	Manufacturing NEC
Facility Type:	Solid Waste Class II - designated wastes
Agency Type:	Not reported
# Of Agencies:	Not reported
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	3443
SIC Desc 1:	Fabricated Plate Work (Boiler Shops)
SIC Code 2:	3498
SIC Desc 2:	Fabricated Pipe and Pipe Fittings

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

SIC Code 3:	286
SIC Desc 3:	Industrial organic chemicals
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:	Enf Action
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:	Not reported
Program Category1:	Not reported
Program Category2:	TANKS
# Of Programs:	Not reported
WDID:	Not reported
Reg Measure Id:	Not reported
Reg Measure Type:	Not reported
Region:	Not reported
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:	Not reported
Status Date:	Not reported
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:	Not reported
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Not reported
Enforcement Id(EID):	169253
Region:	2
Order / Resolution Number:	90-147
Enforcement Action Type:	Clean-up and Abatement Order
Effective Date:	11/14/1990
Adoption/Issuance Date:	11/14/1990
Achieve Date:	Not reported
Termination Date:	Not reported

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Active
Title:	SCR 90-147 for the Napa Pipe Facility
Description:	SCR for Napa Pipe Facility, located in Napa. in midto late 1990s, Napa Pipe was bought by Oregon Steel MIlls.
Program:	SLIC
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

HIST CORTESE:

edr_fname:	NAPA PIPE CORP
edr_fadd1:	1025 KAISER
City,State,Zip:	NAPA, CA 94559
Region:	CORTESE
Facility County Code:	28
Reg By:	LTNKA
Reg Id:	28-0108

edr_fname:	WDR-NAPA FABRICATING PLAN
edr_fadd1:	1025 KAISER
City,State,Zip:	NAPA, CA 94559
Region:	CORTESE
Facility County Code:	28
Reg By:	WBC&D
Reg Id:	2 283007002

NPDES:

Name:	FORMER NAPA PIPE FACILITY
Address:	1025 KAISER RD
City,State,Zip:	NAPA, CA 94558
Facility Status:	Active
NPDES Number:	CAS000002
Region:	2
Agency Number:	0
Regulatory Measure ID:	404170
Place ID:	Not reported
Order Number:	2009-0009-DWQ
WDID:	2 28C358952
Regulatory Measure Type:	Enrollee
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	06/29/2010
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	1025 Kaiser Road
Discharge Name:	Napa Redevelopment Partners LLC
Discharge City:	Napa
Discharge State:	California

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

Discharge Zip:	94558
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

NPDES as of 03/2018:

NPDES Number:	CAS000002
Status:	Active
Agency Number:	0
Region:	2
Regulatory Measure ID:	404170
Order Number:	2009-0009-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	2 28C358952
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	06/29/2010
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Napa Redevelopment Partners LLC
Discharge Address:	1025 Kaiser Road
Discharge City:	Napa
Discharge State:	California
Discharge Zip:	94558
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
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:	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:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

Constype Linear Utility Ind:	Not reported
Emergency Phone:	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 Description:	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:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	2
Regulatory Measure ID:	404170
Order Number:	Not reported
Regulatory Measure Type:	Construction
Place ID:	Not reported
WDID:	2 28C358952
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:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	Not reported
Processed Date:	06/29/2010
Status:	Active
Status Date:	06/29/2010
Place Size:	33
Place Size Unit:	Acres
Contact:	Steve Orndorf
Contact Title:	Not reported
Contact Phone:	707-259-5430
Contact Phone Ext:	Not reported

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

Contact Email:	steve@rogalwalshmol.com
Operator Name:	Napa Redevelopment Partners LLC
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	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:	Private Individual
Developer:	Napa Redevelopment Partners LLC
Developer Address:	1025 Kaiser Road
Developer City:	Napa
Developer State:	California
Developer Zip:	94558
Developer Contact:	Richard Walsh
Developer Contact Title:	Partner
Constype Linear Utility Ind:	N
Emergency Phone:	707-256-9129
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	N
Constype Below Ground Ind:	N
Constype Cable Line Ind:	N
Constype Comm Line Ind:	N
Constype Commertial Ind:	N
Constype Electrical Line Ind:	N
Constype Gas Line Ind:	N
Constype Industrial Ind:	N
Constype Other Description:	import soil storage
Constype Other Ind:	Y
Constype Recons Ind:	Y
Constype Residential Ind:	N
Constype Transport Ind:	N
Constype Utility Description:	Not reported
Constype Utility Ind:	N
Constype Water Sewer Ind:	N
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Not reported
Certifier:	Richard Walsh
Certifier Title:	Not reported
Certification Date:	01-JUL-10
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

Name:	NAPA REDEVELOPMENT PARTNERS LLC
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 94558
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

Order Number:	Not reported
WDID:	2 28NEC000060
Regulatory Measure Type:	Industrial
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Terminated
Status Date:	10/09/2018
Operator Name:	Napa Redevelopment Partners LLC
Operator Address:	1025 Kaiser Rd
Operator City:	Napa
Operator State:	California
Operator Zip:	94103

NPDES as of 03/2018:

NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	2
Regulatory Measure ID:	296711
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	2 28NEC000060
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	07/13/2015
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Napa Redevelopment Partners LLC
Discharge Address:	1025 Kaiser Rd
Discharge City:	Napa
Discharge State:	California
Discharge Zip:	94103
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
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:	Not reported

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

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:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	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 Description:	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:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	2
Regulatory Measure ID:	296711
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	2 28NEC000060
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:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	06/30/2015
Processed Date:	07/13/2015
Status:	Active
Status Date:	07/13/2015
Place Size:	152
Place Size Unit:	Acres
Contact:	Richard Walsh
Contact Title:	Not reported
Contact Phone:	707-259-5430
Contact Phone Ext:	Not reported
Contact Email:	richard@rogalwalshmol.com
Operator Name:	Napa Redevelopment Partners LLC
Operator Address:	1025 Kaiser Rd
Operator City:	Napa
Operator State:	California
Operator Zip:	94103
Operator Contact:	Richard Walsh
Operator Contact Title:	Not reported
Operator Contact Phone:	707-259-5430
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	richard@rogalwalshmol.com
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	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 Description:	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:	Napa River
Certifier:	Richard Walsh
Certifier Title:	Partner
Certification Date:	22-SEP-16
Primary Sic:	9999-Nonclassifiable Establishments
Secondary Sic:	Not reported

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

Tertiary Sic: Not reported

Name: FORMER NAPA PIPE FACILITY
Address: 1025 KAISER RD
City,State,Zip: NAPA, CA 94558
Facility Status: Not reported
NPDES Number: Not reported
Region: Not reported
Agency Number: Not reported
Regulatory Measure ID: Not reported
Place ID: Not reported
Order Number: Not reported
WDID: 2 28C358952
Regulatory Measure Type: Construction
Program Type: Not reported
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported
Expiration Date Of Regulatory Measure: Not reported
Discharge Address: Not reported
Discharge Name: Not reported
Discharge City: Not reported
Discharge State: Not reported
Discharge Zip: Not reported
Status: Active
Status Date: 06/29/2010
Operator Name: Napa Redevelopment Partners LLC
Operator Address: Not reported
Operator City: Not reported
Operator State: Not reported
Operator Zip: Not reported

NPDES as of 03/2018:
NPDES Number: CAS000002
Status: Active
Agency Number: 0
Region: 2
Regulatory Measure ID: 404170
Order Number: 2009-0009-DWQ
Regulatory Measure Type: Enrollee
Place ID: Not reported
WDID: 2 28C358952
Program Type: Construction
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: 06/29/2010
Expiration Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported
Discharge Name: Napa Redevelopment Partners LLC
Discharge Address: 1025 Kaiser Road
Discharge City: Napa
Discharge State: California
Discharge Zip: 94558
Received Date: Not reported
Processed Date: Not reported
Status: Not reported
Status Date: Not reported
Place Size: Not reported

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
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:	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:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	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 Description:	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:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	2
Regulatory Measure ID:	404170

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

Order Number:	Not reported
Regulatory Measure Type:	Construction
Place ID:	Not reported
WDID:	2 28C358952
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:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	Not reported
Processed Date:	06/29/2010
Status:	Active
Status Date:	06/29/2010
Place Size:	33
Place Size Unit:	Acres
Contact:	Steve Orndorf
Contact Title:	Not reported
Contact Phone:	707-259-5430
Contact Phone Ext:	Not reported
Contact Email:	steve@rogalwalshmol.com
Operator Name:	Napa Redevelopment Partners LLC
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	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:	Private Individual
Developer:	Napa Redevelopment Partners LLC
Developer Address:	1025 Kaiser Road
Developer City:	Napa
Developer State:	California
Developer Zip:	94558
Developer Contact:	Richard Walsh
Developer Contact Title:	Partner
Constype Linear Utility Ind:	N
Emergency Phone:	707-256-9129
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	N
Constype Below Ground Ind:	N
Constype Cable Line Ind:	N
Constype Comm Line Ind:	N
Constype Commertial Ind:	N
Constype Electrical Line Ind:	N
Constype Gas Line Ind:	N
Constype Industrial Ind:	N
Constype Other Description:	import soil storage
Constype Other Ind:	Y
Constype Recons Ind:	Y

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

Constype Residential Ind:	N
Constype Transport Ind:	N
Constype Utility Description:	Not reported
Constype Utility Ind:	N
Constype Water Sewer Ind:	N
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Not reported
Certifier:	Richard Walsh
Certifier Title:	Not reported
Certification Date:	01-JUL-10
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

Name:	NAPA REDEVELOPMENT PARTNERS LLC
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 94558
Facility Status:	Terminated
NPDES Number:	CAS000001
Region:	2
Agency Number:	0
Regulatory Measure ID:	296711
Place ID:	Not reported
Order Number:	97-03-DWQ
WDID:	2 28NEC000060
Regulatory Measure Type:	Enrollee
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	07/13/2015
Termination Date Of Regulatory Measure:	08/02/2018
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	1025 Kaiser Rd
Discharge Name:	Napa Redevelopment Partners LLC
Discharge City:	Napa
Discharge State:	California
Discharge Zip:	94103
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

NPDES as of 03/2018:

NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	2
Regulatory Measure ID:	296711
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	2 28NEC000060
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	07/13/2015

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Napa Redevelopment Partners LLC
Discharge Address:	1025 Kaiser Rd
Discharge City:	Napa
Discharge State:	California
Discharge Zip:	94103
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
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:	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:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	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 Description:	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

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	2
Regulatory Measure ID:	296711
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	2 28NEC000060
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:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	06/30/2015
Processed Date:	07/13/2015
Status:	Active
Status Date:	07/13/2015
Place Size:	152
Place Size Unit:	Acres
Contact:	Richard Walsh
Contact Title:	Not reported
Contact Phone:	707-259-5430
Contact Phone Ext:	Not reported
Contact Email:	richard@rogalwalshmol.com
Operator Name:	Napa Redevelopment Partners LLC
Operator Address:	1025 Kaiser Rd
Operator City:	Napa
Operator State:	California
Operator Zip:	94103
Operator Contact:	Richard Walsh
Operator Contact Title:	Not reported
Operator Contact Phone:	707-259-5430
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	richard@rogalwalshmol.com
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

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 Description:	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:	Napa River
Certifier:	Richard Walsh
Certifier Title:	Partner
Certification Date:	22-SEP-16
Primary Sic:	9999-Nonclassifiable Establishments
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

CIWQS:

Name:	NAPA PIPE - SLIC/SUB15
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 94559
Agency:	Napa Redevelopment Partners LLC
Agency Address:	5 3rd Street 1014, San Francisco, CA 94103
Place/Project Type:	Manufacturing NEC
SIC/NAICS:	3443(+)
Region:	SB
Program:	LFNONOPER, SLIC
Regulatory Measure Status:	Active
Regulatory Measure Type:	Co-Permitee
Order Number:	2019-0006-DWQ
WDID:	2 283007003
NPDES Number:	Not reported
Adoption Date:	01/01/1900
Effective Date:	03/20/2019
Termination Date:	01/01/1900
Expiration/Review Date:	01/01/1900
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	Not reported
Longitude:	Not reported

Name:	FORMER NAPA PIPE FACILITY
Address:	1025 KAISER RD

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

City,State,Zip:	NAPA, CA 94558
Agency:	Napa Redevelopment Partners LLC
Agency Address:	1025 Kaiser Road, Napa, CA 94558
Place/Project Type:	Construction - Other: import soil storage , Reconstruction
SIC/NAICS:	Not reported
Region:	2
Program:	CONSTW
Regulatory Measure Status:	Active
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	2 28C358952
NPDES Number:	CAS000002
Adoption Date:	01/01/1900
Effective Date:	06/29/2010
Termination Date:	01/01/1900
Expiration/Review Date:	01/01/1900
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	38.254775
Longitude:	-122.278572

Name:	NAPA REDEVELOPMENT PARTNERS LLC
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 94558
Agency:	Napa Redevelopment Partners LLC
Agency Address:	1025 Kaiser Rd, Napa, CA 94103
Place/Project Type:	Industrial - Nonclassifiable Establishments
SIC/NAICS:	9999
Region:	2
Program:	INDSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water industrial
Order Number:	2014-0057-DWQ
WDID:	2 28NEC000060
NPDES Number:	CAS000001
Adoption Date:	01/01/1900
Effective Date:	07/13/2015
Termination Date:	08/02/2018
Expiration/Review Date:	01/01/1900
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	38.25744
Longitude:	-122.27812

Name:	NAPA PIPE - SLIC/SUB15
Address:	1025 KAISER ROAD
City,State,Zip:	NAPA, CA 94559
Agency:	Oregon Steel Mills
Agency Address:	1025 Kaiser Road, Napa, CA 94558-6257

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

Place/Project Type:	Manufacturing NEC
SIC/NAICS:	3443(+)
Region:	2
Program:	LNDISP
Regulatory Measure Status:	Historical
Regulatory Measure Type:	WDR
Order Number:	95-011
WDID:	2 283007003
NPDES Number:	Not reported
Adoption Date:	01/18/1995
Effective Date:	01/18/1995
Termination Date:	04/20/2005
Expiration/Review Date:	01/18/2005
Design Flow:	0.0001
Major/Minor:	Not reported
Complexity:	C
TTWQ:	2
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	Not reported
Longitude:	Not reported

CERS:

Name:	NAPA PIPE CORP
Address:	1025 KAISER RD
City,State,Zip:	NAPA, CA 94558
Site ID:	189226
CERS ID:	SL181281128
CERS Description:	Cleanup Program Site

Affiliation:

Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	ALYX KARPOWICZ - SAN FRANCISCO BAY RWQCB (REGION 2)
Entity Title:	Not reported
Affiliation Address:	1515 Clay St., Suite 1400
Affiliation City:	OAKLAND
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	5106222427

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	UST CASE WORKER - NAPA COUNTY
Entity Title:	Not reported
Affiliation Address:	1195 THIRD ST., ROOM 101
Affiliation City:	NAPA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	7072534269

Name:	NAPA PIPE CORP
Address:	1025 KAISER RD
City,State,Zip:	NAPA, CA 94558
Site ID:	189226
CERS ID:	T0605500100

NAPA PIPE - SLIC/SUB15 (Continued) **1000726691**

CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Regional Board Caseworker
Entity Name: ALYX KARPOWICZ - SAN FRANCISCO BAY RWQCB (REGION 2)
Entity Title: Not reported
Affiliation Address: 1515 Clay St., Suite 1400
Affiliation City: OAKLAND
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 5106222427

Affiliation Type Desc: Local Agency Caseworker
Entity Name: UST CASE WORKER - NAPA COUNTY
Entity Title: Not reported
Affiliation Address: 1195 THIRD ST., ROOM 101
Affiliation City: NAPA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 7072534269

Name: FORMER NAPA PIPE FACILITY
Address: 1025 KAISER RD
City,State,Zip: NAPA, CA 94558
Site ID: 532249
CERS ID: 803719
CERS Description: Construction Storm Water

Affiliation:
Affiliation Type Desc: Owner/Operator
Entity Name: Napa Redevelopment Partners LLC
Entity Title: Operator
Affiliation Address: 1025 Kaiser Road
Affiliation City: Napa
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94558
Affiliation Phone: Not reported

Count: 1 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
NAPA	1000143048	NAPA PIPE CORP	NAPA VALLEJO HWY	94558	SEMS-ARCHIVE, RCRA-SQG

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 05/03/2021
Next Scheduled EDR Contact: 07/12/2021
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: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 05/03/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 05/03/2021
Next Scheduled EDR Contact: 07/12/2021
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: 04/03/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 03/30/2021
Next Scheduled EDR Contact: 07/12/2021
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: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/03/2021
Next Scheduled EDR Contact: 07/26/2021
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: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/03/2021
Next Scheduled EDR Contact: 07/26/2021
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: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
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: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
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: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
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: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly 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). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

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: 02/09/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 39

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/05/2021
Next Scheduled EDR Contact: 08/23/2021
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: 02/22/2021
Date Data Arrived at EDR: 02/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

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: 02/22/2021
Date Data Arrived at EDR: 02/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/14/2020
Date Data Arrived at EDR: 12/15/2020
Date Made Active in Reports: 12/22/2020
Number of Days to Update: 7

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 12/15/2020
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

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: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/13/2021
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/09/2021
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: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/13/2021
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/09/2021
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: 02/08/2021
Date Data Arrived at EDR: 02/09/2021
Date Made Active in Reports: 05/03/2021
Number of Days to Update: 83

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/11/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
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 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: No Update Planned

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 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 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 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: 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 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: 11/12/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
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: 10/07/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/09/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/30/2020
Date Data Arrived at EDR: 12/22/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 80

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
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: 10/02/2020
Date Data Arrived at EDR: 12/18/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 84

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

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: 10/01/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
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: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
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: No Update Planned

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: No Update Planned

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: No Update Planned

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: No Update Planned

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: No Update Planned

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: No Update Planned

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: No Update Planned

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: 01/29/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 33

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/05/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases
UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 03/05/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 04/01/2021
Number of Days to Update: 23

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
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: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/12/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: Varies

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: 10/01/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
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: 10/02/2020
Date Data Arrived at EDR: 12/18/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 84

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
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: 11/12/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
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: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

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: 10/09/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

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: 10/01/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

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: 09/30/2020
Date Data Arrived at EDR: 12/22/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 80

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

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: 10/07/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

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: 03/22/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/13/2021
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Quarterly

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: 12/17/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 03/09/2021
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

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: 12/11/2020
Date Data Arrived at EDR: 12/11/2020
Date Made Active in Reports: 03/02/2021
Number of Days to Update: 81

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/16/2021
Next Scheduled EDR Contact: 06/28/2021
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: 04/21/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 03/09/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 11/23/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 08/23/2021
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: 04/22/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 04/29/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

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: 12/07/2020
Date Data Arrived at EDR: 12/09/2020
Date Made Active in Reports: 03/02/2021
Number of Days to Update: 83

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/22/2021
Next Scheduled EDR Contact: 09/06/2021
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: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/13/2021
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/09/2021
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: 12/31/2019
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 07/19/2021
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

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 01/20/2021
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Quarterly

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: 12/07/2020
Date Data Arrived at EDR: 12/09/2020
Date Made Active in Reports: 03/02/2021
Number of Days to Update: 83

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 02/24/2021
Date Data Arrived at EDR: 02/24/2021
Date Made Active in Reports: 05/14/2021
Number of Days to Update: 79

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

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

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

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 83

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

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

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 01/20/2021
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Quarterly

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: 03/01/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
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: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 05/03/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Semi-Annually

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: 03/02/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 77

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 05/28/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/16/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 85

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/24/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

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: 12/31/2020
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
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: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

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: 02/11/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 04/05/2021
Number of Days to Update: 47

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 08/30/2021
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: 04/16/2021
Next Scheduled EDR Contact: 07/26/2021
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: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/05/2021
Next Scheduled EDR Contact: 07/19/2021
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: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 08/23/2021
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: 12/14/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
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: 04/30/2021
Next Scheduled EDR Contact: 08/16/2021
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: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/07/2021
Next Scheduled EDR Contact: 08/16/2021
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: 12/31/2016
Date Data Arrived at EDR: 06/17/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 85

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/19/2021
Next Scheduled EDR Contact: 06/28/2021
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: 12/31/2018
Date Data Arrived at EDR: 08/14/2020
Date Made Active in Reports: 11/04/2020
Number of Days to Update: 82
Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/17/2021
Next Scheduled EDR Contact: 08/30/2021
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: 01/20/2021
Date Data Arrived at EDR: 01/21/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 60
Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
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: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16
Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 05/03/2021
Next Scheduled EDR Contact: 06/14/2021
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: 01/22/2021
Date Data Arrived at EDR: 02/18/2021
Date Made Active in Reports: 05/11/2021
Number of Days to Update: 82
Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/19/2021
Next Scheduled EDR Contact: 08/02/2021
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

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 12/30/2020
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 03/05/2021
Number of Days to Update: 50

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 05/03/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/19/2020
Date Data Arrived at EDR: 01/08/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 73

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/19/2021
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: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
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: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/11/2021
Date Made Active in Reports: 05/11/2021
Number of Days to Update: 61

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 04/16/2021
Next Scheduled EDR Contact: 08/02/2021
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: 12/31/2019
Date Data Arrived at EDR: 12/01/2020
Date Made Active in Reports: 02/09/2021
Number of Days to Update: 70
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/13/2021
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: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/13/2021
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: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 05/07/2021
Next Scheduled EDR Contact: 08/16/2021
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: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 03/25/2021
Next Scheduled EDR Contact: 07/12/2021
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: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Quarterly

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: 12/31/2020
Date Data Arrived at EDR: 01/13/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 68

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/05/2021
Next Scheduled EDR Contact: 07/19/2021
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: 12/31/2017
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 11/20/2020
Number of Days to Update: 151

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
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: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/06/2021
Next Scheduled EDR Contact: 07/19/2021
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: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 04/28/2021
Next Scheduled EDR Contact: 08/16/2021
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: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 05/03/2021
Next Scheduled EDR Contact: 07/12/2021
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: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 11/24/2020
Date Data Arrived at EDR: 11/30/2020
Date Made Active in Reports: 01/25/2021
Number of Days to Update: 56

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 05/26/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/01/2021
Date Data Arrived at EDR: 02/24/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 84

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/06/2021
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: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/06/2021
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: 05/27/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 12/11/2020
Date Data Arrived at EDR: 12/11/2020
Date Made Active in Reports: 03/02/2021
Number of Days to Update: 81

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/10/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/03/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 04/05/2021
Number of Days to Update: 33

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 07/02/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 77

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/13/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 01/02/2021
Date Data Arrived at EDR: 01/08/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 04/06/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/17/2020
Date Made Active in Reports: 02/09/2021
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

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: 02/17/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 33

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/30/2021
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: 12/17/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 03/09/2021
Number of Days to Update: 82

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Varies

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: 03/01/2021
Date Data Arrived at EDR: 03/04/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 77

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Annually

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 02/23/2021
Date Data Arrived at EDR: 02/25/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 83

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 02/26/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 06/16/2020
Date Made Active in Reports: 08/28/2020
Number of Days to Update: 73

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/19/2021
Next Scheduled EDR Contact: 06/28/2021
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: 12/31/2020
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/09/2021
Number of Days to Update: 79

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/13/2021
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
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: 02/08/2021
Date Data Arrived at EDR: 02/12/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 82

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 05/05/2021
Next Scheduled EDR Contact: 08/23/2021
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: 12/31/2019
Date Data Arrived at EDR: 04/15/2020
Date Made Active in Reports: 07/02/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 02/16/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 05/07/2021
Number of Days to Update: 79

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

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

Date of Government Version: 02/16/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 05/10/2021
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/30/2021
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: 01/05/2021
Date Data Arrived at EDR: 01/05/2021
Date Made Active in Reports: 03/18/2021
Number of Days to Update: 72

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/06/2021
Next Scheduled EDR Contact: 07/19/2021
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: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 01/29/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 78

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 05/28/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 02/08/2021
Date Data Arrived at EDR: 02/09/2021
Date Made Active in Reports: 05/04/2021
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/11/2021
Next Scheduled EDR Contact: 08/23/2021
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: 03/02/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 78

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 05/28/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 03/09/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
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: 12/07/2020
Date Data Arrived at EDR: 12/09/2020
Date Made Active in Reports: 12/10/2020
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/12/2021
Next Scheduled EDR Contact: 06/28/2021
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: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
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 boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 11/19/2019
Date Data Arrived at EDR: 01/07/2020
Date Made Active in Reports: 03/09/2020
Number of Days to Update: 62

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/19/2021
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: 05/14/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: No Update Planned

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: 03/19/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing
In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 03/09/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 11/30/2020
Date Data Arrived at EDR: 12/01/2020
Date Made Active in Reports: 02/12/2021
Number of Days to Update: 73

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 05/19/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 01/20/2021
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Varies

PCS INACTIVE: Listing of Inactive PCS Permits
An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

HWTS: Hazardous Waste Tracking System
DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 04/08/2021
Date Data Arrived at EDR: 04/09/2021
Date Made Active in Reports: 04/20/2021
Number of Days to Update: 11

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 04/05/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

PCS: Permit Compliance System
PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Varies

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 Historical Auto 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 Historical 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:

CS ALAMEDA: 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: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53
Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 03/17/2021
Date Data Arrived at EDR: 03/18/2021
Date Made Active in Reports: 03/25/2021
Number of Days to Update: 7
Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/17/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 02/02/2021
Date Data Arrived at EDR: 02/04/2021
Date Made Active in Reports: 04/23/2021
Number of Days to Update: 78
Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 12/15/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 12/24/2020
Number of Days to Update: 8

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/16/2021
Number of Days to Update: 80

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 12/17/2020
Date Data Arrived at EDR: 01/28/2021
Date Made Active in Reports: 04/16/2021
Number of Days to Update: 78

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 04/21/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 02/09/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 83

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 05/05/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: 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: 01/14/2021
Date Data Arrived at EDR: 01/15/2021
Date Made Active in Reports: 04/05/2021
Number of Days to Update: 80

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 04/01/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 05/17/2021
Date Data Arrived at EDR: 05/18/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 2

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/10/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 01/19/2021
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 05/11/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 10/29/2020
Date Data Arrived at EDR: 10/30/2020
Date Made Active in Reports: 01/15/2021
Number of Days to Update: 77

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 01/19/2021
Date Data Arrived at EDR: 01/21/2021
Date Made Active in Reports: 01/28/2021
Number of Days to Update: 7

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: 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: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 02/10/2021
Date Data Arrived at EDR: 02/12/2021
Date Made Active in Reports: 03/11/2021
Number of Days to Update: 27

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/07/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

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: N/A
Telephone: N/A
Last EDR Contact: 03/12/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 01/11/2021
Date Data Arrived at EDR: 01/12/2021
Date Made Active in Reports: 03/25/2021
Number of Days to Update: 72

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/05/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/11/2021
Date Data Arrived at EDR: 01/12/2021
Date Made Active in Reports: 03/26/2021
Number of Days to Update: 73

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/13/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2021
Date Data Arrived at EDR: 02/18/2021
Date Made Active in Reports: 05/10/2021
Number of Days to Update: 81

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/07/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/26/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 02/04/2021
Date Data Arrived at EDR: 04/16/2021
Date Made Active in Reports: 04/21/2021
Number of Days to Update: 5

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 04/16/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/26/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/26/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 10/19/2020
Date Data Arrived at EDR: 01/12/2021
Date Made Active in Reports: 03/26/2021
Number of Days to Update: 73

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 04/16/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/07/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 09/11/2020
Date Data Arrived at EDR: 10/07/2020
Date Made Active in Reports: 12/23/2020
Number of Days to Update: 77

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: 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: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 03/25/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 12/21/2020
Date Data Arrived at EDR: 12/21/2020
Date Made Active in Reports: 03/10/2021
Number of Days to Update: 79

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 02/04/2021
Date Data Arrived at EDR: 02/09/2021
Date Made Active in Reports: 02/18/2021
Number of Days to Update: 9

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/3021
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 01/08/2021
Date Data Arrived at EDR: 01/12/2021
Date Made Active in Reports: 03/25/2021
Number of Days to Update: 72

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 03/25/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 02/03/2021
Date Data Arrived at EDR: 02/04/2021
Date Made Active in Reports: 04/23/2021
Number of Days to Update: 78

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 04/21/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 02/01/2021
Date Data Arrived at EDR: 02/04/2021
Date Made Active in Reports: 04/23/2021
Number of Days to Update: 78
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 04/29/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/12/2021
Number of Days to Update: 9
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 04/29/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/01/2021
Date Data Arrived at EDR: 02/02/2021
Date Made Active in Reports: 04/20/2021
Number of Days to Update: 77
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 04/30/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 11/24/2020
Date Data Arrived at EDR: 11/24/2020
Date Made Active in Reports: 11/25/2020
Number of Days to Update: 1
Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64
Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 03/10/2021
Number of Days to Update: 55
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/15/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 03/10/2021
Number of Days to Update: 55

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/15/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/18/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/15/2020
Number of Days to Update: 76

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Quarterly

ML SACRAMENTO: 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: 02/24/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/17/2020
Number of Days to Update: 78

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/01/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 04/28/2021
Date Data Arrived at EDR: 04/29/2021
Date Made Active in Reports: 05/03/2021
Number of Days to Update: 4

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: 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: 11/16/2020
Date Data Arrived at EDR: 11/18/2020
Date Made Active in Reports: 02/04/2021
Number of Days to Update: 78

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 05/03/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: 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: 03/02/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/21/2021
Number of Days to Update: 79

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 05/28/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/14/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

SAN DIEGO CO SAM: 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: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 83

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

LUST SAN FRANCISCO: 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: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 83

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/12/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 05/07/2021
Date Data Arrived at EDR: 05/11/2021
Date Made Active in Reports: 05/14/2021
Number of Days to Update: 3

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 05/06/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/12/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/08/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: 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: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 02/24/2021
Date Data Arrived at EDR: 02/26/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 82

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

HIST LUST SANTA CLARA: 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

LUST SANTA CLARA: 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: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 12/03/2020
Date Made Active in Reports: 02/18/2021
Number of Days to Update: 77

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 05/24/2021
Next Scheduled EDR Contact: 09/12/2021
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 12/15/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 12/23/2020
Number of Days to Update: 7

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/19/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 01/05/2021
Date Data Arrived at EDR: 01/06/2021
Date Made Active in Reports: 03/18/2021
Number of Days to Update: 71

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/19/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 02/09/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 83

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 04/21/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 04/06/2021
Number of Days to Update: 82

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 01/19/2021
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 02/02/2021
Date Data Arrived at EDR: 02/04/2021
Date Made Active in Reports: 04/23/2021
Number of Days to Update: 78

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: 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: 12/28/2020
Date Data Arrived at EDR: 01/29/2021
Date Made Active in Reports: 04/22/2021
Number of Days to Update: 83

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/19/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Quarterly

LF VENTURA: 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: 03/25/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: No Update Planned

LUST VENTURA: 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: 05/05/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: No Update Planned

MED WASTE VENTURA: 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: 03/29/2021
Date Data Arrived at EDR: 04/21/2021
Date Made Active in Reports: 04/23/2021
Number of Days to Update: 2

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/19/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/09/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 12/21/2020
Date Data Arrived at EDR: 12/23/2020
Date Made Active in Reports: 01/04/2021
Number of Days to Update: 12

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/26/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 04/21/2021
Date Data Arrived at EDR: 04/22/2021
Date Made Active in Reports: 05/12/2021
Number of Days to Update: 20

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 04/24/2021
Next Scheduled EDR Contact: 08/09/2021
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: 10/05/2020
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 05/10/2021
Number of Days to Update: 82

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/11/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/19/2021
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: 01/01/2019
Date Data Arrived at EDR: 04/29/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 72

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 04/30/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 02/24/2021
Number of Days to Update: 13

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/13/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/08/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
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 Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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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 was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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 and Wildlife
Telephone: 916-445-0411

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

11 BASALT ROAD
11 BASALT ROAD
NAPA, CA 94558

TARGET PROPERTY COORDINATES

Latitude (North):	38.267343 - 38° 16' 2.43''
Longitude (West):	122.266623 - 122° 15' 59.84''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	564156.1
UTM Y (Meters):	4235526.0
Elevation:	42 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5602154 NAPA, CA
Version Date:	2012
Northeast Map:	5602148 MOUNT GEORGE, CA
Version Date:	2012
Southeast Map:	5602186 CORDELIA, CA
Version Date:	2012
Southwest Map:	5602106 CUTTINGS WHARF, 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 principle 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).

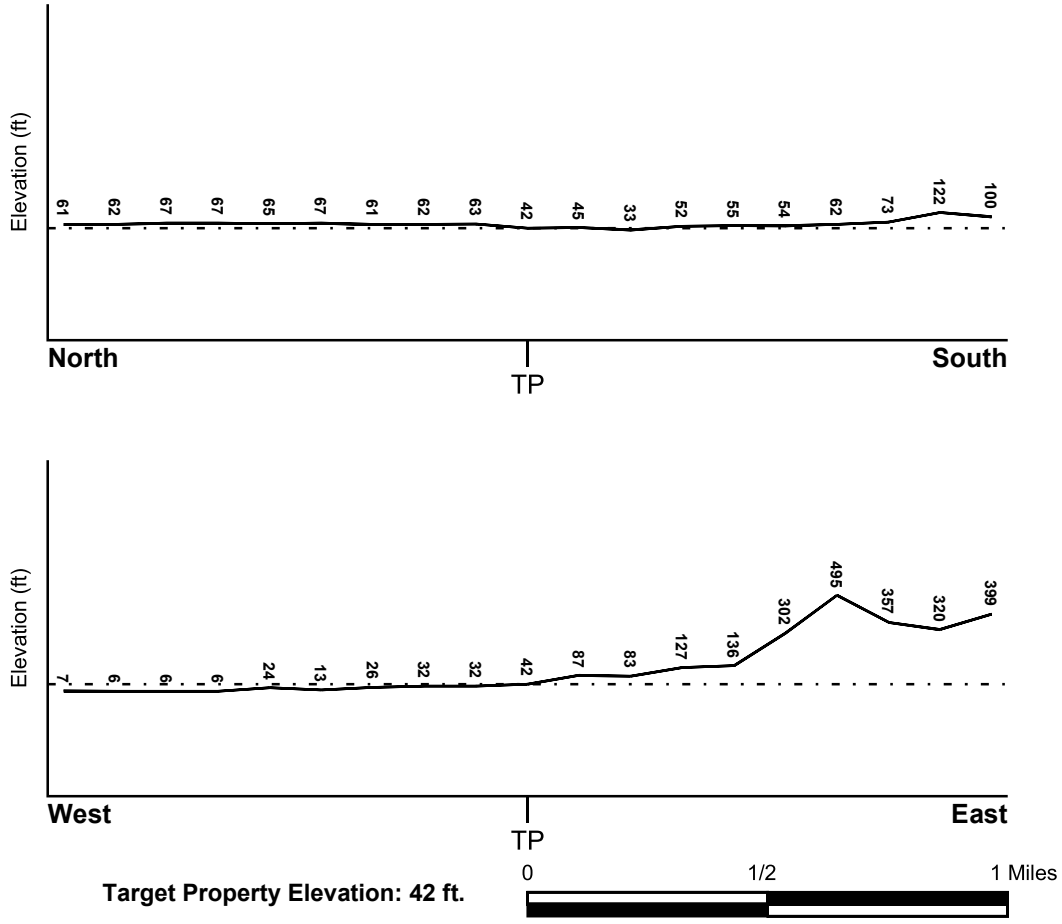
TOPOGRAPHIC INFORMATION

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 WSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



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

Flood Plain Panel at Target Property	FEMA Source Type
06055C0519F	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06055C0517F	FEMA FIRM Flood data
06055C0550E	FEMA FIRM Flood data
06055C0518F	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
NAPA	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

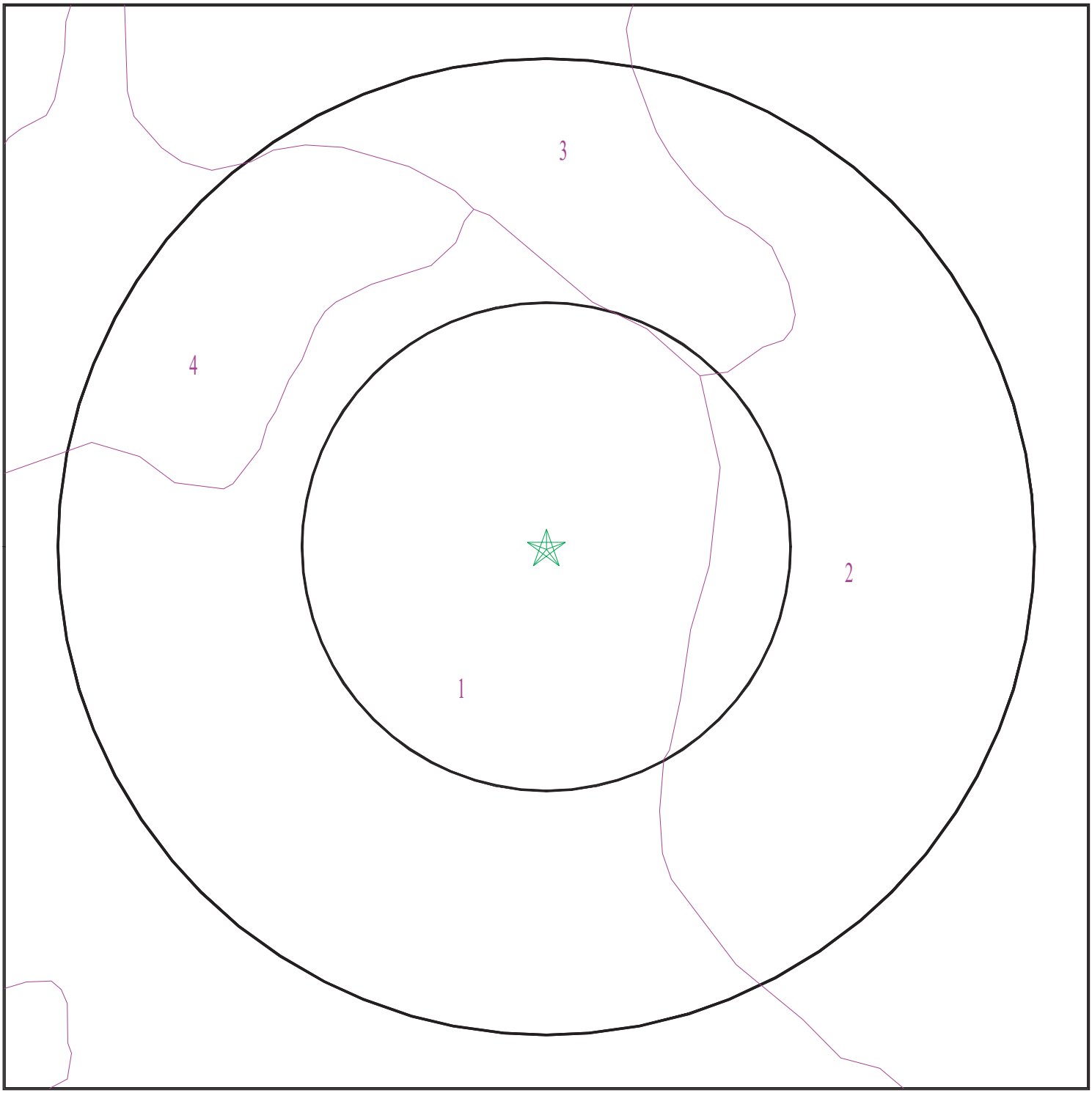
Era:	Cenozoic
System:	Tertiary
Series:	Pliocene volcanic rocks
Code:	Tpv *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Volcanic Rocks

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 6518186.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	11 Basalt Road	CLIENT:	Avocet Environmental, Inc.
ADDRESS:	11 Basalt Road Napa CA 94558	CONTACT:	Jessica Satterlee
LAT/LONG:	38.267343 / 122.266623	INQUIRY #:	6518186.2s
		DATE:	June 01, 2021 8:21 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: HAIRE

Soil Surface Texture: 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: Moderately 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	22 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 0.42 Min: 0.01	Max: 5.5 Min: 4.5
2	22 inches	27 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 0.42 Min: 0.01	Max: 5.5 Min: 4.5
3	27 inches	44 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 0.42 Min: 0.01	Max: 5.5 Min: 4.5
4	44 inches	59 inches	sandy clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 0.42 Min: 0.01	Max: 5.5 Min: 4.5

Soil Map ID: 2

Soil Component Name: Hambright

Soil Surface Texture: very stony loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 38 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	11 inches	very stony loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 141 Min: 0.07	Max: Min:
2	11 inches	16 inches	unweathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 141 Min: 0.07	Max: Min:

Soil Map ID: 3

Soil Component Name: Coombs

Soil Surface Texture: gravelly 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	14 inches	gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILIS, Gravels, Clean Gravels, Well-graded gravel.	Max: 141 Min: 42	Max: 6 Min: 5.6
2	14 inches	53 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILIS, Gravels, Clean Gravels, Well-graded gravel.	Max: 141 Min: 42	Max: 6 Min: 5.6
3	53 inches	59 inches	very gravelly loamy fine sand	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILIS, Gravels, Clean Gravels, Well-graded gravel.	Max: 141 Min: 42	Max: 6 Min: 5.6

Soil Map ID: 4

Soil Component Name: HAIRE

Soil Surface Texture: 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: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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	22 inches	clay loam	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: 0.42 Min: 0.01	Max: 5.5 Min: 4.5
2	22 inches	27 inches	sandy clay loam	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: 0.42 Min: 0.01	Max: 5.5 Min: 4.5
3	27 inches	44 inches	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: 0.42 Min: 0.01	Max: 5.5 Min: 4.5
4	44 inches	59 inches	sandy 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: 0.42 Min: 0.01	Max: 5.5 Min: 4.5

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

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
E16	USGS40000187606	1/2 - 1 Mile North

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

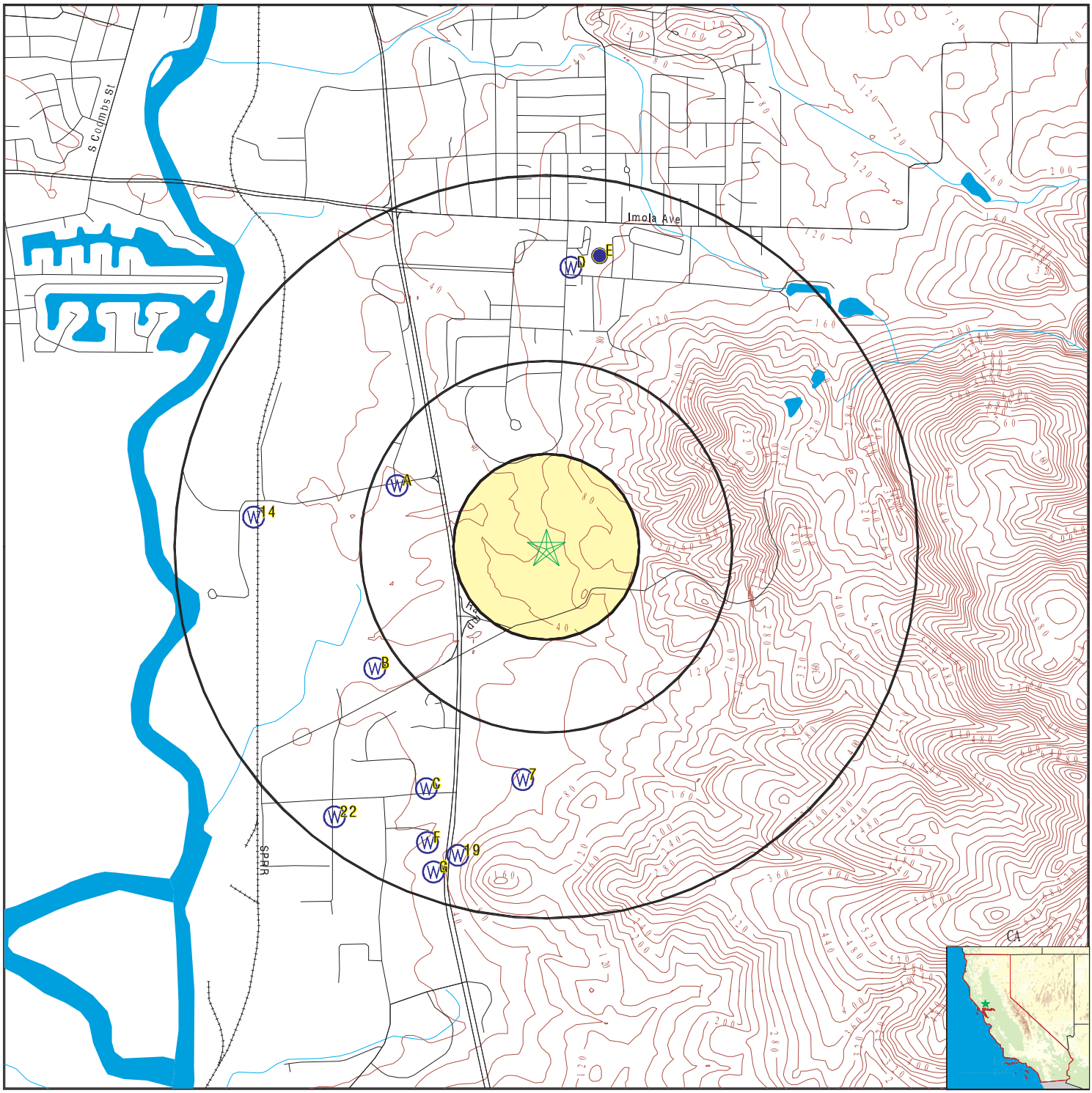
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	CADWR0000023979	1/4 - 1/2 Mile WNW
A2	CADWR8000037496	1/4 - 1/2 Mile WNW
A3	CADWR8000037497	1/4 - 1/2 Mile WNW
B4	CAEDF0000105836	1/2 - 1 Mile SW
B5	CAEDF0000049355	1/2 - 1 Mile SW
B6	CAEDF0000021044	1/2 - 1 Mile SW
7	5539	1/2 - 1 Mile South
C8	CAEDF0000125996	1/2 - 1 Mile SSW
C9	CAEDF0000008942	1/2 - 1 Mile SSW
C10	CAEDF0000099925	1/2 - 1 Mile SSW
C11	CAEDF0000098068	1/2 - 1 Mile SSW
D12	CAEDF0000087636	1/2 - 1 Mile North
D13	CAEDF0000126586	1/2 - 1 Mile North
14	CAEDF0000008087	1/2 - 1 Mile West
E15	CADWR8000037532	1/2 - 1 Mile North
F17	CADDW0000000734	1/2 - 1 Mile SSW
F18	CAPFAS000001041	1/2 - 1 Mile SSW
19	CADWR0000004788	1/2 - 1 Mile SSW
G20	CAEDF0000083472	1/2 - 1 Mile SSW
G21	CAEDF0000085927	1/2 - 1 Mile SSW
22	CAEDF0000034891	1/2 - 1 Mile SW
G23	CAEDF0000125603	1/2 - 1 Mile SSW
G24	CAEDF0000037611	1/2 - 1 Mile SSW

PHYSICAL SETTING SOURCE MAP - 6518186.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	11 Basalt Road	CLIENT:	Avocet Environmental, Inc.
ADDRESS:	11 Basalt Road Napa CA 94558	CONTACT:	Jessica Satterlee
LAT/LONG:	38.267343 / 122.266623	INQUIRY #:	6518186.2s
		DATE:	June 01, 2021 8:21 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A1
WNW
1/4 - 1/2 Mile
Lower

CA WELLS **CADWR0000023979**

Well ID:	05N04W23C002M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	05N04W23C002M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=05N04W23C002M&store_num=		
GeoTracker Data:	Not Reported		

A2
WNW
1/4 - 1/2 Mile
Lower

CA WELLS **CADWR8000037496**

State Well #:	05N04W23C001M	Station ID:	36951
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	200
Basin Name:	Napa Valley	Well Completion Rpt #:	Not Reported

A3
WNW
1/4 - 1/2 Mile
Lower

CA WELLS **CADWR8000037497**

State Well #:	05N04W23C002M	Station ID:	23204
Well Name:	Not Reported	Well Use:	Irrigation
Well Type:	Unknown	Well Depth:	323
Basin Name:	Napa Valley	Well Completion Rpt #:	Not Reported

B4
SW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000105836**

Well ID:	T0605500150-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0605500150&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0605500150&assigned_name=MW-3		

B5
SW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000049355**

Well ID:	T0605500150-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2

GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0605500150&assigned_name=MW-2&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0605500150&assigned_name=MW-2

B6
SW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000021044**

Well ID:	T0605500150-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1

GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0605500150&assigned_name=MW-1&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0605500150&assigned_name=MW-1

7
South
1/2 - 1 Mile
Higher

CA WELLS **5539**

Seq:	5539	Prim sta c:	05N/04W-29D10 M
Frds no:	2800538001	County:	28
District:	58	User id:	28C
System no:	2800538	Water type:	G
Source nam:	WELL 10	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	381530.0	Longitude:	1221600.0
Precision:	4	Status:	AR
Comment 1:	4048 SONOMA HWY NAPA	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	2800538	System nam:	Wine Valley Mobile Estates
Hqname:	Not Reported	Address:	1290 EL CAPITAN
City:	NAPA	State:	CA
Zip:	94558	Zip ext:	Not Reported
Pop serv:	54	Connection:	27
Area serve:	Not Reported		

Sample date:	30-NOV-17	Finding:	310.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	30-NOV-17	Finding:	22.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	30-NOV-17	Finding:	440.
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		

Sample date:	30-NOV-17	Finding:	31.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	30-NOV-17	Finding:	170.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	23-MAY-17	Finding:	515.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	23-MAY-17	Finding:	422.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	23-MAY-17	Finding:	8.2
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	23-MAY-17	Finding:	2300.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	23-MAY-17	Finding:	8.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	23-MAY-17	Finding:	470.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	23-MAY-17	Finding:	150.
Chemical:	BARIUM	Report units:	UG/L
Dlr:	100.		
Sample date:	23-MAY-17	Finding:	48.
Chemical:	MANGANESE	Report units:	UG/L
Dlr:	20.		
Sample date:	23-MAY-17	Finding:	1300.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	23-MAY-17	Finding:	3.4e-002
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	23-MAY-17	Finding:	0.168
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	23-MAY-17	Finding:	0.79
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	13-AUG-13	Finding:	12.42
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	1.8
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	13-AUG-13	Finding:	61.
Chemical:	MANGANESE	Report units:	UG/L

Dlr:	20.		
Sample date:	13-AUG-13	Finding:	970.
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	13-AUG-13	Finding:	300.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	300.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	22.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	28.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	160.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	6.
Chemical:	CARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	570.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	460.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	1800.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	20.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	13-AUG-13	Finding:	9.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	13-AUG-13	Finding:	1100.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	20-FEB-13	Finding:	0.81
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		

Sample date:	20-FEB-13	Finding:	7.2
Chemical:	SELENIUM	Report units:	UG/L
Dlr:	5.		
Sample date:	20-FEB-13	Finding:	130.
Chemical:	BARIUM	Report units:	UG/L
Dlr:	100.		
Sample date:	20-FEB-13	Finding:	0.18
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	20-FEB-13	Finding:	1900.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	20-FEB-13	Finding:	1.6
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		

C8
SSW **CA WELLS** **CAEDF0000125996**
1/2 - 1 Mile
Lower

Well ID:	T10000005248-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T10000005248&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T10000005248&assigned_name=MW-1		

C9
SSW **CA WELLS** **CAEDF0000008942**
1/2 - 1 Mile
Lower

Well ID:	T10000005248-B-3	Well Type:	MONITORING
Source:	EDF	Other Name:	B-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T10000005248&assigned_name=B-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T10000005248&assigned_name=B-3		

C10
SSW **CA WELLS** **CAEDF0000099925**
1/2 - 1 Mile
Lower

Well ID:	T10000005248-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T10000005248&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T10000005248&assigned_name=MW-3		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

C11
SSW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000098068**

Well ID:	T10000005248-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T10000005248&assigned_name=MW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T10000005248&assigned_name=MW-2		

D12
North
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000087636**

Well ID:	SL605592776-MW2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL605592776&assigned_name=MW2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL605592776&assigned_name=MW2		

D13
North
1/2 - 1 Mile
Higher

CA WELLS **CAEDF0000126586**

Well ID:	SL605592776-MW4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL605592776&assigned_name=MW4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL605592776&assigned_name=MW4		

14
West
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000008087**

Well ID:	T0605500287-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0605500287&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0605500287&assigned_name=MW-3		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

E15
North
1/2 - 1 Mile
Higher | **CA WELLS** | **CADWR8000037532**

State Well #:	05N04W14J003M	Station ID:	30124
Well Name:	49	Well Use:	Other
Well Type:	Single Well	Well Depth:	399
Basin Name:	Napa Valley	Well Completion Rpt #:	28141

E16
North
1/2 - 1 Mile
Higher | **FED USGS** | **USGS40000187606**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N004W14J003M	Type:	Well
Description:	Well depth measured 418 ft by USGS in 2002.		
HUC:	18050002	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	California Coastal Basin aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	418
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	92	Level reading date:	2002-10-07
Feet below surface:	56.3	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	2002-04-26	Feet below surface:	55.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-04-05	Feet below surface:	53.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-01-07	Feet below surface:	53.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-10-09	Feet below surface:	57.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-08-27	Feet below surface:	57.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-04-09	Feet below surface:	54.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-10-20	Feet below surface:	55.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-10-13	Feet below surface:	58.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-04-11	Feet below surface:	54.1
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1982-10-14	Feet below surface:	57.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-03-15	Feet below surface:	72.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-10-14	Feet below surface:	56.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-04-20	Feet below surface:	57.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-09-16	Feet below surface:	57
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-04-08	Feet below surface:	54.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-09-27	Feet below surface:	55.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04	Feet below surface:	53.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-10-03	Feet below surface:	54.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-05-26	Feet below surface:	52.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-12-16	Feet below surface:	52.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-11-11	Feet below surface:	50.44
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-10	Feet below surface:	49.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-09-11	Feet below surface:	50.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-08-12	Feet below surface:	51.77
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-07-19	Feet below surface:	51.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-07-10	Feet below surface:	51.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-05-13	Feet below surface:	51.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-04-21	Feet below surface:	51.89
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-04-09	Feet below surface:	51.04
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1952-03-27	Feet below surface:	95.54
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1951-12-07	Feet below surface:	89.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1951-10-09	Feet below surface:	104.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1951-05-25	Feet below surface:	103.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1951-04-02	Feet below surface:	104.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1951-02-15	Feet below surface:	105.48
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1951-02-02	Feet below surface:	106.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1951-01-19	Feet below surface:	102.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1951-01-05	Feet below surface:	109.46
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1950-12-28	Feet below surface:	108.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1950-12-22	Feet below surface:	97.51
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1950-11-08	Feet below surface:	111.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1950-10-09	Feet below surface:	113.03
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1950-09-07	Feet below surface:	113.44
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1950-08-11	Feet below surface:	114.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1950-07-07	Feet below surface:	115.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1950-06-06	Feet below surface:	115.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1950-05-03	Feet below surface:	115.66
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1950-04-04	Feet below surface:	115.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1950-03-16	Feet below surface:	116.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1950-01-25	Feet below surface:	109.67
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1949-12-16	Feet below surface:	115.79
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1942-10-17	Feet below surface:	107.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1932-04-30	Feet below surface:	110.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1932-03-31	Feet below surface:	110.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1932-02-15	Feet below surface:	110.43
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1932-01-15	Feet below surface:	110.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1931-12-15	Feet below surface:	109.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1931-11-16	Feet below surface:	111.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1931-10-15	Feet below surface:	110.67
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1931-09-15	Feet below surface:	112.62
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1931-08-08	Feet below surface:	109.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1931-07-09	Feet below surface:	102.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1931-06-15	Feet below surface:	97.24
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1931-05-18	Feet below surface:	96.94
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1931-04-20	Feet below surface:	93.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1931-03-17	Feet below surface:	91.71
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1931-02-14	Feet below surface:	86.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1931-01-14	Feet below surface:	84.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1930-12-15	Feet below surface:	83.73
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1930-11-12	Feet below surface:	82.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1930-10-14	Feet below surface:	82.84
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1930-09-14	Feet below surface:	82.23
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1930-08-10	Feet below surface:	80.76
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1930-07-07	Feet below surface:	78.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1930-06-18	Feet below surface:	78.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1930-05-28	Feet below surface:	77.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1930-04-17	Feet below surface:	78.44
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1930-03-15	Feet below surface:	79.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1930-02-11	Feet below surface:	81.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1930-01-13	Feet below surface:	92.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1929-04-15	Feet below surface:	84.01
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1929-03-15	Feet below surface:	83.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1929-02-15	Feet below surface:	86.79
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1929-01-15	Feet below surface:	91.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1928-12-15	Feet below surface:	93.76
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1928-11-15	Feet below surface:	95.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1928-10-15	Feet below surface:	86.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1928-09-15	Feet below surface:	85.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1928-08-29	Feet below surface:	83.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1921-03-03	Feet below surface:	64.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1920-07-01	Feet below surface:	75.2
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

F17
SSW
1/2 - 1 Mile
Lower

CA WELLS **CADDW0000000734**

Well ID:	2800580-001	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 01	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=2800580-001&store_num=		
GeoTracker Data:	Not Reported		

F18
SSW
1/2 - 1 Mile
Lower

CA WELLS **CAPFAS000001041**

Well ID:	2800580-001	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 01	GAMA PFAS Testing:	Yes
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=2800580-001&store_num=		
GeoTracker Data:	Not Reported		

19
SSW
1/2 - 1 Mile
Higher

CA WELLS **CADWR0000004788**

Well ID:	05N04W26B001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	05N04W26B001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=05N04W26B001M&store_num=		
GeoTracker Data:	Not Reported		

G20
SSW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000083472**

Well ID:	T10000000413-MW-3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T10000000413&assigned_name=MW-3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T10000000413&assigned_name=MW-3		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

G21
SSW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000085927**

Well ID:	T10000000413-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T10000000413&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T10000000413&assigned_name=MW-1		

22
SW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000034891**

Well ID:	L10002804480-MW-1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=L10002804480&assigned_name=MW-1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=L10002804480&assigned_name=MW-1		

G23
SSW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000125603**

Well ID:	T10000000413-MW-2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T10000000413&assigned_name=MW-2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T10000000413&assigned_name=MW-2		

G24
SSW
1/2 - 1 Mile
Lower

CA WELLS **CAEDF0000037611**

Well ID:	T10000000413-MW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T10000000413&assigned_name=MW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T10000000413&assigned_name=MW-4		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
94558	82	9

Federal EPA Radon Zone for NAPA County: 3

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: 94558

Number of sites tested: 17

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.324 pCi/L	88%	12%	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 was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

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 and Wildlife
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.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

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.

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
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.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

PHYSICAL SETTING SOURCE RECORDS SEARCHED

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.

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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REVISED WORK PLAN FOR WASTE CHARACTERIZATION AND MANAGEMENT

Former BOCA Company Property
11 Basalt Road
Napa, California 94558
(SWIS No. 28-CR-0005)

January 4, 2022



AVOCET
ENVIRONMENTAL, INC.

REVISED WORK PLAN FOR WASTE CHARACTERIZATION AND MANAGEMENT

Former BOCA Company Property
11 Basalt Road
Napa, California 94558
(SWIS No. 28-CR-0005)

January 4, 2022

PREPARED FOR

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Project No. 1627.005

AVOCET ENVIRONMENTAL, INC.

AVOCET
ENVIRONMENTAL, INC.

January 4, 2022 Project No. 1627.005

Mr. Peter Ex
Solid Waste Program Manager
COUNTY OF NAPA
Planning, Building, and Environmental Services Department
Environmental Health Division
1195 Third Street, Suite 210
Napa, California 94559

Revised Work Plan for Waste Characterization and Management
Former BOCA Company Property
11 Basalt Road
Napa, California 94558
(SWIS No. 28-CR-0005)

Dear Mr. Ex:

This revised work plan covers the characterization, consolidation, and management of stockpiles of soil and other materials, including inert construction debris in the so-called northern and southern fill areas, at the approximately 55.27-acre industrial property at 11 Basalt Road in the city and county of Napa, California. The revisions address your December 22, 2021 comments on the original work plan submitted on October 27, 2021. If you have any questions about the revised work plan or require additional information, please do not hesitate to contact the undersigned at (949) 933-6380 or at pmiller@avocetenv.com.

Respectfully submitted,

AVOCET ENVIRONMENTAL, INC.

Philip Miller, P.E.
Principal

PM:sh
Attachments
cc: Mr. Guillermo Accame – Panattoni Development Company, Inc.
Ms. Kristen Dickey – Panattoni Development Company, Inc.

P:\1627 Panattoni-Basalt Road Napa\005 Predevelopment Services\Waste Management Work Plan\Basalt Rd_Napa_Rev. Work Plan_Waste Char+Mgmt_2022-01-04.docx

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LIST OF ABBREVIATIONS AND ACRONYMS

1.75H:1V	1.75 horizontal to 1 vertical
DTSC	California Department of Toxic Substances Control
EHS	Napa County Environmental Health Division
EPA	U.S. Environmental Protection Agency
HASP	Health and Safety Plan
IDW	investigation-derived waste
OCP	organochlorine pesticide
PCB	polychlorinated biphenyl
PID	photoionization detector
PPE	personal protective equipment
PSG	Pacific Steel Group
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
SMP	Soil Management Plan
SVOC	semi-volatile organic compound
TPH	total petroleum hydrocarbons
VOC	volatile organic compound

1.0 INTRODUCTION

On October 27, 2021, Avocet Environmental, Inc. (Avocet) issued a work plan for the characterization, consolidation, and management of stockpiles of soil and other materials, including construction debris in the so-called northern and southern fill areas, at the approximately 55.27-acre industrial property at 11 Basalt Road in the city and county of Napa, California (the site). This revised work plan addresses comments received from Napa County Planning, Building & Environmental Services, Environmental Health Division (County EHS) in a letter dated December 22, 2021. Avocet prepared the original and revised work plans for Napa 55 Logistics, LLC, which recently acquired the site and plans to demolish the existing improvements and redevelop the cleared land with four commercial/light industrial warehouse buildings. The site location is shown in Figure 1 and an aerial photograph of the site, showing the northern and southern fill areas and the footprints of the planned new buildings, is presented in Figure 2. A larger-scale topographic map of the site is presented in Figure 3.

1.1 OVERVIEW

The site was purchased in 1936 by Basalt Rock Company, Inc. (Basalt Rock), which owned and operated the Napa Quarry (now the Syar Quarry) immediately east of the site and the Basalite Block concrete block manufacturing facility immediately west of the site. The site was agricultural prior to 1936 and remained largely undeveloped until the early 1950s, when Basalt Rock expanded its operations. The approximately 100,000-square-foot industrial building in the southwest corner of the site, currently occupied by the Pacific Steel Group (PSG), was constructed in or around 1953 and was used to manufacture precast concrete wall panels until 1986, when the site was sold to Dillingham Heavy Construction, Inc. (Dillingham). The location of the PSG building is shown in Figure 2. During its occupancy, Basalt Rock reportedly utilized two areas in the northeast corner of the site (Figure 2) to dispose of waste materials generated at the adjoining Napa Quarry and from its onsite wall panel manufacturing processes. The waste materials reportedly were limited to construction-type debris, including concrete, asphalt, wood, and sheet metal. Potentially hazardous materials reportedly were not disposed in either of the two areas and two rounds of exploratory trenching have confirmed the presence of primarily inert construction debris. Neither of the trenching investigations encountered hazardous waste materials; however, soil matrix samples and one groundwater sample collected during the trenching contained generally low concentrations of total petroleum hydrocarbons (TPH) in the diesel and oil ranges. The presence of TPH was attributed to leaching from buried debris, which included asphalt and wooden formwork to which mold-release oil may have been applied.

Shortly before Dillingham acquired the site in 1986, a second building, the Watershed building, was constructed to the southeast of the original building (Figure 2). Dillingham used the original building and the western half of the site to store construction equipment, vehicles, and tools. Dillingham also leased other areas of the site to Napa Valley Cast Stone (Watershed building and surrounding area), Cultured Stone Products (northern portion of the site), and Ragsdale, Inc. (eastern central portion of the site). Dillingham sold the site in 2005, and since then

tenants/occupants have included PSG and Superior Equipment Company in the main building, multiple construction contractors in the central and eastern portions of the site, and Rammed Earth Works in and around the Watershed building. Pacific Gas and Electric also occupied a portion of the site for a time. All of the tenants have either vacated the site or are expected to vacate the site in the near future.

Over its approximately 70-year history of industrial land use, the original ground surface at the site has been transformed by:

- Grading for development purposes, specifically cutting and filling to create level building pads and outdoor storage areas
- Borrowing of native soil, possibly for use in the above
- Stockpiling of waste materials, mostly soil and construction debris, but including some green waste

In broad terms, the western portion of the site was graded in the early 1950s prior to construction of the existing PSG building. A comparison of predevelopment (1951) and current topography indicates a fill thickness on the order of 17 feet at the western site boundary. The central portion of the site (Watershed building) was graded in the late 1950s or early 1960s, although cut and fill thicknesses were probably much less than in the western portion of the site. There appears to have been only minor grading in the eastern portion of the site, but previous tenants have stockpiled broken concrete and asphalt in piles up to approximately 25 feet high (southern fill area). Grading in the eastern portion of the site severed a small water course, although the upstream drainage had already been disrupted by quarry operations. Also, the 1951 topographic map indicates the existing drainage channel along the northern site boundary is not natural, but rather was excavated, probably by the quarry operator, to drain surface water and possibly shallow groundwater that accumulates in the quarry pit.

County EHS considers the stockpiles of soil at the site and the northern and southern fill areas unpermitted disposal facilities and directed the BOCA Company, the former site owner, to investigate and manage them as such. In particular, County EHS directed the BOCA Company to investigate and take appropriate mitigation measures to address the northern and southern fill areas in the northeast corner of the site. County EHS has also expressed concern that structural fill, crushed rock, and other ground cover materials could contain debris and, hence, could be considered unpermitted waste disposal areas.

1.2 APPROACH

Avocet proposes the following approach to address waste materials and to more generally tidy up the site:

- Analyze representative samples of the various stockpiles of soil at the site to determine whether the stockpiled material can be reused onsite, for example during redevelopment grading, or should be transported offsite for disposal or to be recycled. This determination will be based on conservative soil screening levels developed by (in order of preference), the California Department of Toxic Substances Control (DTSC), the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB), and the U.S. Environmental Protection Agency (EPA).

- Transport soil not suitable for onsite reuse to appropriately permitted offsite disposal or recycling facilities.

- Collect stockpiled soil considered suitable for onsite reuse, green waste, and debris from throughout the site and consolidate in stockpiles based on material type. Throughout this process, debris that cannot be reused onsite, such as scrap metal, trash, lumber, and other deleterious materials, will be screened out and stockpiled separately for offsite disposal or recycling. Debris expected to be suitable for future onsite reuse, after onsite crushing, includes broken concrete and asphalt.

- Systematically characterize the northern and southern fill areas using a sonic drill rig to determine the full waste thickness and test pits or trenches to establish the lateral extent of disposed waste materials. The waste types encountered in the borings and test pits/trenches will be visually characterized, and representative samples of the waste and the underlying native materials will be collected for fixed laboratory analysis.

On completion, Avocet will submit a report to County EHS documenting the investigation and offsite disposal activities outlined above and including recommendations for follow-up actions. Follow-up actions are expected to include preparation of a final closure plan for the northern and southern fill areas and installation of methane gas monitoring probes. The final closure plan, which will be submitted to County EHS for review and approval, is expected to include regrading (flattening) the north and east sides of the southern fill area for stabilization purposes, onsite redisposal of waste materials disturbed in the process, and construction of a final cover of clean soil, possibly including soil currently stockpiled at the site, provided it is approved for onsite reuse.

1.3 HEALTH AND SAFETY PLAN

The work outlined in this work plan will be conducted in accordance with the site-specific Health and Safety Plan (HASP) prepared by Avocet for previous work at the subject site. The HASP (Avocet, July 2, 2021) identifies the potential chemical and physical hazards that may be encountered at the site, as well as the "generic" hazards associated with working in proximity to drilling and other mechanized equipment. It also specifies the measures to be taken to avoid or minimize these hazards. The identification of potential chemical hazards is based on the types and concentrations of chemicals potentially present in the subsurface based on the types of operations

known to have been conducted at and around the site. The identification of potential physical hazards is based primarily on the type(s) of equipment expected to be used during subsurface investigation and subsequent earthmoving, the potential for encountering and damaging subsurface or overhead utilities, and the potential hazards posed by external factors such as temperature. Based on the identified hazards, the HASP specifies the minimum level of personal protective equipment (PPE) to be worn (Level D), the type(s) of monitoring to be conducted, the circumstances under which the minimum PPE will be upgraded, and other protective measures. The HASP also provides emergency contact information and the route to the nearest hospital with an emergency room.

All field personnel will be required to review the HASP prior to any fieldwork involving possible exposure to the potential chemical or physical hazards and to sign a HASP Distribution Record form to acknowledge that they have reviewed it and agree to abide by its requirements. Subcontractors providing onsite services will have the option of following Avocet's or their own HASP, provided it is at least as stringent.

2.0 STOCKPILE CHARACTERIZATION AND MANAGEMENT

Based on a detailed topographic map prepared by Stantec, there were at least 39 stockpiles of waste material scattered throughout the site as of May 15, 2018 (Stantec, July 19, 2018), all of which are believed to have been deposited by previous tenants. Most of the stockpiles are or were in the central and eastern portions of the site but there are or were two in the western portion. Of the 39 stockpiles, 31 were annotated "dirt piles," 2 as "rock piles," 1 as a "debris pile," 1 as "miscellaneous," and 4 were not labeled. Although several have since been removed or consolidated, the 39 stockpiles are shown on Figure 3 for illustrative purposes. Avocet proposes to systematically identify and characterize all of the remaining stockpiles at the site to determine whether they can be reused onsite or should be transported offsite for disposal or to be recycled. Characterization of the stockpiles composed of or containing earthen material would include collecting and analyzing representative samples; however, stockpiles of green waste, rock, and construction debris only would not be sampled. After stockpiled materials deemed unsuitable for onsite reuse have been removed, the remaining stockpiled materials will be consolidated, by material type, for future reuse.

2.1 SOIL STOCKPILE CHARACTERIZATION

As shown in Figure 3, there were numerous discrete stockpiles of soil at the site as of July 2018. Although several have since been removed or consolidated, the stockpiles are shown on Figure 3 for illustrative purposes and have been annotated Stockpiles SP-1 through SP-35. Based on Avocet's visual observations, some of the stockpiles include inert construction debris, such as broken concrete, broken asphalt, lumber, tree limbs, and scrap metal. The stockpiles range in size from very small (around 1 cubic yard), such as might have been unloaded from a pickup truck, to large (up to around 40 cubic yards), representing more than one truckload of soil.

Avocet proposes to collect and analyze between one and six discrete and representative samples from all of the stockpiles comprised of or containing soil to determine whether the stockpiled material can be reused onsite or should be transported offsite for disposal or to be recycled. The number of soil samples to be collected per stockpile will be proportionate to the stockpile volume, as follows:

Classification	Estimated Volume	Number of Samples
Small	Less than 2 cubic yards	1
Medium	Between 2 and 5 cubic yards	2
Large	More than 5 cubic yards	4

Avocet notes that the proposed number of stockpile soil samples above meets or exceeds (is more conservative than) the minimum number of samples recommended by DTSC in its "Clean Imported Fill Material" advisory (DTSC, October 2001). Avocet will use clean trowels and, where necessary, hand augering equipment to collect representative discrete samples from different

locations and depths within each stockpile. Avocet will also carefully examine the stockpiled materials for visual or olfactory indications of contamination, such as discoloration, odors in ambient air, and the like, and will screen the stockpiled soil for organic vapor using a calibrated photoionization detector (PID).

The discrete soil matrix samples will be packed into 8-ounce glass jars, leaving no headspace, labeled, and immediately placed on ice in coolers. Chain of custody will be documented from sample collection to delivery to the Eurofins Calscience, LLC (Eurofins) laboratory in Garden Grove, California. Eurofins will be instructed to analyze the stockpile samples, using standard EPA methods, for the following:

- TPH with carbon chain speciation using EPA Method 8015B (M)
- Volatile organic compounds (VOCs), including fuel oxygenates, using EPA Method 8260B
- Title 22 metals using EPA 6010B (EPA Method 7471A for mercury)
- Asbestos using EPA Method 600/R-93/116

Based on Avocet's field observations and the PID readings, 25 percent of the soil samples will be further analyzed for the following:

- Semivolatile organic compounds (SVOCs) using EPA Method 8270C
- Polychlorinated biphenyls (PCBs) using EPA Method 8082
- Organochlorine pesticides (OCPs) using EPA Method 8081A

If there are no field indications of contamination, the samples for SVOC, PCB, and OCP analyses will be randomly selected.

The results of the analyses listed above will be compared, in order of preference, to "DTSC-modified Screening Levels" (DTSC-SLs; DTSC, June 2020), SFBRWQCB's "Environmental Screening Levels" (ESLs; SFBRWQCB, January 2019), and EPA's "Regional Screening Levels" (RSLs; EPA, May 2021). If analyte concentrations are all below commercial/industrial screening levels, the soil will be considered suitable for onsite reuse. If any analyte concentration exceeds a commercial/industrial screening level, the soil will be profiled for offsite disposal or recycling.

2.2 Soil Stockpiles for Offsite Disposal or Recycling

As noted above, if a soil stockpile sample contains one or more analyte at concentrations exceeding commercial/industrial screening levels, the soil in that stockpile will be profiled for offsite disposal or recycling. Stockpiled material for offsite disposal will be properly manifested, loaded into trucks, and transported offsite to an appropriately permitted disposal or recycling facility by a licensed hazardous waste hauler. Suppression measures, such as misting with potable water, will be employed, as necessary, to control dust during truck loading and covers will be deployed over

loaded trucks to minimize the potential for soil to be lost during transportation. Trucks exiting the site will be inspected and, if necessary, cleaned to avoid tracking soil onto Basalt Road. Notwithstanding any of the above, however, and although it may not meet onsite reuse criteria, Avocet does not expect any of the soil stockpiled at the site to be profiled as hazardous waste based on currently available information.

The amount of soil transported offsite will be tracked using weight tickets issued by the receiving facility(ies). The weight tickets and the corresponding manifest documents will be included in a final report (Section 4.0) to be issued on completion of the scope of work outlined in this work plan.

2.3 Soil Stockpile Consolidation for Onsite Reuse

Stockpiles of soil approved for onsite reuse will be mechanically screened to remove debris and then consolidated in a single larger stockpile in a paved area of the site. Debris screened out of the soil stockpiles will be combined with similar material and either stockpiled for future crushing and onsite reuse or transported offsite for disposal or to be recycled. The consolidated stockpile will be on the asphalt pavement west of the Watershed building, at the approximate location shown in Figure 2. Avocet notes that the combined volume of all of the soil stockpiles at the site is expected to be less than 200 cubic yards, and as such, the consolidated soil stockpile is expected to occupy an area no more than 25 by 80 feet. The consolidated soil stockpile will be covered with heavy-duty polyethylene sheeting, which will be weighted down with sandbags or similar to control dust and help maintain the stockpiled soil's moisture content. With County EHS's approval, clean, debris-free stockpiled soil could be used for general grading during site redevelopment or could be used as cover material for improperly disposed solid waste in the northern and/or southern fill areas.

2.4 Construction Debris and Other Waste Materials

The condition of the site once the remaining tenants move out remains to be seen; however, as of September 14, 2021, there was construction debris, broken equipment, scrap metal, and litter scattered throughout the site, including in areas the current tenants are not using. There are or were at least one "debris pile" (SP-36) and two "rock piles" (SP-37 and SP-38) as of July 2018 (Figure 3). Assuming the vacating tenants do not remove all of these waste materials, Avocet proposes they be systematically collected, consolidated by waste type, and either stockpiled for onsite reuse or transported offsite for disposal or recycling, as follows:

- Broken concrete and asphalt, including debris removed from the soil stockpiles mentioned above, will be collected from across the site and consolidated in a single stockpile along with other crushable items, such as the precast concrete vault currently in the northern fill area. The stockpiled construction debris will be crushed for onsite reuse in conjunction with site redevelopment, specifically in conjunction with crushing concrete and asphalt demolition debris from the existing site improvements.

- Scrap metal and other materials with salvage value will be collected from across the site and temporarily stockpiled pending offsite transportation for recycling.

- Litter and non-salvageable trash similarly will be collected from across the site and placed in containers for offsite disposal.

- Potentially hazardous materials left behind by the vacating tenants will be collected, consolidated by waste type, and transported offsite for disposal. Avocet notes there were several containers of used motor oil, with a combined volume of around 10 gallons, and a few pieces of concrete pipe at the site as of mid-September 2021, although the responsible tenants have been asked to remove all such materials when they vacate the site.

2.5 GREEN WASTE

There are currently about a dozen small stockpiles of green waste scattered around the central and eastern portions of the site. Most of the stockpiles are of tree limbs and/or shrubs, but a few appear to be processed mulch. Avocet proposes to consolidate all of the green waste materials in two stockpiles: one for tree limbs and shrubs and the other for processed material. Any debris or non-green waste materials will be separated out during the consolidation process to be combined with one or more of the waste types outlined above. The consolidated stockpiles of green waste will be located on an asphalt-paved area of the site during characterization. If the stockpiled green wastes are determined to have no economic value, they will be transported offsite for disposal or recycling at a local facility. If the green waste can be utilized during site redevelopment, possibly after additional processing or mulching, the stockpile(s) will be covered until the material is needed. Tentative primary and alternate stockpile locations are shown in Figure 2.

3.0 NORTHERN AND SOUTHERN FILL AREA CHARACTERIZATION

There are two inert waste disposal areas, dubbed the northern and southern fill areas, in the northeast corner of the site (Figure 2). The northern fill area is vegetated and more or less flat but reportedly contains inert construction debris that appears to have been buried. By contrast, the southern fill area is actually a large stockpile, up to 25 feet high, that extends from a natural knoll north to the site boundary. The top of the stockpile is partially vegetated and relatively flat. The County suspects the former site owner recently had soil placed on top of the stockpile, but Avocet observed construction debris protruding at several locations. The northern slope of the stockpile is at 1.75 horizontal to 1 vertical (1.75H:1V) or steeper and partially vegetated but is composed primarily of broken asphalt and concrete. The County has requested that the northern and southern fill areas be investigated to determine their lateral and vertical extent, the types of material disposed, and whether methane is being generated.

3.1 PERMITTING AND UTILITY CLEARANCE

Prior to implementing investigation activities in the fill areas, Avocet will obtain a drilling permit from Napa County. Prior to any intrusive field work, the boring locations will be marked on the ground surface using white chalk-based paint, and as required by law, Avocet will notify "USA North 811" 48 hours prior to any intrusive field work. That said, Avocet is not aware of any subsurface utilities in or near the northern or southern fill areas.

3.2 DRILLING AND SAMPLING

Using a sonic drill rig, advance six borings in each of the northern and southern fill areas (12 borings total) through the full thickness of the disposed waste. Tentative boring locations are shown in Figure 2. The borings will be advanced until native soil or, more likely, bedrock is encountered beneath the waste material. Avocet estimates the six borings in the northern fill area may be up to 15 feet deep and the six borings in the southern fill area may be up to 30 feet deep. The continuous cores recovered from the sonic borings will be logged to document the types of waste material disposed, especially potentially hazardous or putrescible wastes, and representative samples of the waste and/or soil matrix will be collected for laboratory analyses. Samples of the underlying native material also will be collected for laboratory analysis to determine whether waste disposal operations have impacted the vadose zone or groundwater. The continuous cores recovered from the sonic borings will be examined in the field for visual and olfactory indications of chemical impacts such as discoloration, excess moisture, and odors in ambient air. In addition to being visually screened for indicators of contamination and the presence of waste materials, the cores will be screened for the possible presence of organic vapors using a calibrated PID. Based on Avocet's field observations and screening with the PID, up to two samples of waste and a sample of the underlying native material will be collected from each of the six borings in the northern fill area and up to four samples of waste and a sample of the underlying native material will be collected from each of the six borings in the southern fill area (48 samples total).

Subsamples of waste and native material for VOC analysis will be collected using Terra Core devices in accordance with EPA Method 5035. The waste and native material samples and subsamples will be labeled and placed on ice for fixed laboratory analysis for the following:

- TPH with carbon chain speciation using EPA Method 8015B (M)
- VOCs, including fuel oxygenates, using EPA Method 5035/8260B
- Title 22 metals using EPA 6010B (EPA Method 7471A for mercury)
- Asbestos using EPA Method 600/R-93/116

Based on Avocet's field observations and the PID readings, one of the waste samples from each of the borings in the northern fill area and two of the waste samples from each of the borings in the southern fill area (18 samples total) will be further analyzed for the following:

- SVOCs using EPA Method 8270C
- PCBs using EPA Method 8082

If there are no field indications of contamination, the 18 samples for SVOC and PCB analyses will be selected at random.

When sampling is complete, the sonic borings will be backfilled with bentonite chips, as liquid grout may migrate into the disposed waste without sealing the borings. Investigation-derived waste (IDW) from the investigation, specifically drill cuttings and equipment decontamination rinsate, will be placed in 55-gallon drums. The IDW will be profiled for disposal based on the results of the above. The IDW will be stored onsite and then transported to a suitably licensed disposal or recycling facility.

3.3 PERIMETER TEST PITS

To determine the lateral extent of waste in the northern and southern fill areas, up to 16 test pits and/or trenches will be excavated around the estimated perimeter using a backhoe or excavator. Tentative test pit locations are shown in Figure 2. As the pits/trenches are excavated, the types of waste material encountered will be recorded and representative samples of waste and the underlying native material will be collected for laboratory analysis. Specifically, the excavated materials will be examined in the field for visual and olfactory indications of chemical impacts such as discoloration, excess moisture, and odors in ambient air. In addition to being visually screened for indicators of contamination, the excavated materials will be screened for the possible presence of organic vapors using a calibrated PID. Based on Avocet's field observations and screening with the PID, one sample of waste and one sample of the underlying native material will be collected from each of the 16 test pits/trenches (32 samples total). Subsamples of waste and native material for VOC analysis will be collected using Terra Core devices in accordance with EPA Method 5035. The waste and native material samples and subsamples will be labelled, and placed on ice for fixed laboratory analysis for the following:

- TPH with carbon chain speciation using EPA Method 8015B (M)
- VOCs, including fuel oxygenates, using EPA Method 8260B
- Title 22 metals using EPA 6010B (EPA Method 7471A for mercury)
- Asbestos using EPA Method 600/R-93/116

Based on Avocet's field observations and the PID readings, up to eight of the waste samples and four of the native material samples will be further analyzed for the following:

- SVOCs using EPA Method 8270C
- PCBs using EPA Method 8082

If there are no field indications of contamination, the eight samples for SVOC and PCB analyses will be selected at random.

When sampling is complete, the test pits/trenches will be backfilled with the excavated material.

4.0 REPORTING AND FINAL CLOSURE PLAN

Avocet anticipates two deliverables pursuant to the characterization work outlined in this work plan: a waste characterization report and a final closure plan for the northern and southern fill areas.

4.1 WASTE CHARACTERIZATION REPORT

The characterization activities outlined above will be documented in a report supported by tabular summaries of the analytical results, figures, and appendices. The text of the report will include:

- Background information
- Narrative descriptions of field, laboratory, and related activities; an interpretation of the results
- Summaries of which waste materials were transported offsite and which are suitable for future onsite reuse
- The limits and types of waste in the northern and southern fill areas

Based on the above, the report will also include recommendations for additional investigation and/or other actions, as appropriate. At a minimum, appendices to the report will include boring logs, test pit/trench logs, laboratory reports, IDW documentation, and manifests and other documentation pertaining to the offsite disposal of waste materials. The report will be signed by a suitably registered professional and submitted to County EHS for its review and comment.

4.2 FINAL CLOSURE PLAN

Concurrent with the above, Avocet will prepare a Final Closure Plan for the northern and southern fill areas in accordance with Title 27 of the California Code of Regulations. The plan will document the limits and types of waste in the northern and southern fill areas and propose waste stabilization measures, final cover construction, and methane gas monitoring for County EHS approval.

4.2.1 Conceptual Waste Stabilization Measures

As previously mentioned, waste in the northern fill area is buried below grade, but the southern fill area is actually a large stockpile, up to 25 feet high, that extends from a natural knoll north to the site boundary and in one area beyond onto the north-adjoining Syar quarry property. For stabilization purposes, Avocet anticipates it may be necessary to flatten the northern and eastern slopes of the southern fill area to a maximum of 1.75H:1V. Subject to County EHS approval, this task could be completed using an excavator positioned on top of the stockpile with a boom long enough to reach the bottom of the stockpile. Waste material disturbed during slope stabilization could, subject to County EHS approval, be redisposed in either the northern or southern fill areas,

although Avocet notes that adding it to the southern fill area would increase the height of an already high stockpile, with potential aesthetic impacts.

4.2.2 Conceptual Final Cover

Assuming the waste materials in the northern and southern fill areas are indeed inert, as opposed to containing significant concentrations of potentially leachable contaminants, a final cover of clean soil is expected to be adequate for closure purposes. As such, the Final Closure Plan is expected to specify a minimum thickness of clean soil cover, some of which could be material currently stockpiled at the site that meets onsite reuse criteria. Avocet will evaluate material available from the east-adjoining Syar Quarry as a borrow source for the balance of the cover material required. The final cover will be designed and constructed in general accordance with 27 CCR §21090 subject to County EHS review and approval.

4.2.3 Conceptual Post-Closure Monitoring

Post closure monitoring of the northern and southern fill areas is, at a minimum, expected to involve the installation of soil vapor probes to verify the disposed wastes are not generating methane gas at concentrations that warrant mitigation measures. Consistent with only inert waste materials being disposed, Avocet notes that soil vapor sampling conducted to date immediately west of the north and south fill areas does not indicate that methane is being generated. Regardless, soil vapor probes will be installed around the western and southern perimeter of the northern and southern fill areas. The probes will be installed and sampled in general accordance with the requirements of 27 CCR §20923 et seq, although modifications to these requirements will be necessary to account for site-specific conditions, such as near-surface bedrock and shallow groundwater.. Avocet notes that 27 CCR §20933 requires, at a minimum, quarterly monitoring for methane gas; however, County EHS has requested monthly "gas screening for methane and fixed gases" and quarterly analysis for VOCs using EPA Method TO-15. Given that previous investigations have not indicated that the disposed wastes are generating significant, if any, methane gas, Avocet respectfully suggests the soil vapor probes be monitored monthly for three months and quarterly for the remainder of the first year, after which the need for additional monitoring and monitoring frequency would be discussed and agreed with County EHS.

5.0 REDEVELOPMENT GRADING

After the waste characterization investigations outlined in this work plan have been completed and the soil stockpiles managed, as appropriate, Napa 55 Logistics, LLC will proceed with clearing the site of the existing improvements and redeveloping it with warehouse buildings. A preliminary redevelopment site plan is presented in Figure 2. Redevelopment grading is expected to involve removing and recompacting near-surface soil to create building pads and to prepare the subgrade elsewhere for paving and other infrastructure. The depth to which soil will be removed will be determined by the geotechnical engineer but a range of 2 to 4 feet bgs would be typical unless competent bedrock is encountered at shallower depths. If encountered during redevelopment grading, previously disposed waste materials will be removed, segregated, stockpiled, and characterized as outlined elsewhere in this work plan. Potentially hazardous waste materials, if any, will be transported offsite for disposal. Nonhazardous wastes may be crushed for onsite reuse or transported offsite as nonhazardous construction debris.

The redevelopment grading process could also expose near-surface soil contamination, such as in areas where tenants may have stored and used oil and/or other potentially hazardous substances. Suspected soil contamination, if any, will be investigated by sampling and analysis, and soil confirmed as being contaminated will be removed, temporarily stockpiled, and then transported offsite for disposal or to be recycled as appropriate. It is beyond the scope of this work plan to specify how suspected soil contamination will be investigated and, if necessary, managed. However, detailed procedures will be provided in a Soil Management Plan (SMP). The SMP will include procedures for identifying, segregating, stockpiling, and characterizing soil suspected of being contaminated. The SMP will also includeconservative screening levels for use in determining whether impacted soil, if encountered, can be reused onsite or must be transported offsite or disposal or to be recycled.

6.0 PROPOSED SCHEDULE

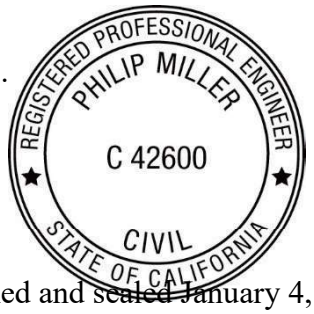
Subject to subcontractor availability, Avocet hopes to mobilize to the field within three weeks of receiving County EHS approval of this work plan. The field work is expected to take two weeks and the results of the soil and soil vapor sample analyses should be available by the end of Project Week 7. Ideally, the final closure plan could be submitted, reviewed by County EHS, and approved for implementation in time to close the northern and southern fill areas before the 2022/23 wet season. Avocet understands the existing improvements at the site are scheduled to be demolished between late-2022 and mid-2023, at which time an onsite crushing plant will be set up to process demolition debris. Recyclable concrete and asphalt currently stockpiled at the site would be crushed in conjunction with site redevelopment.

Respectfully submitted,

AVOCET ENVIRONMENTAL, INC.



Philip Miller, P.E.
Principal



Signed and sealed January 4, 2022

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California Department of Toxic Substances Control (DTSC), October 2001, "Information Advisory, Clean Imported Fill Material."

California Department of Toxic Substances Control (DTSC, et al.), Los Angeles Regional Water Quality Control Board, San Francisco Bay Regional Water Quality Control Board, July 2015, "Advisory, Active Soil Gas Investigations."

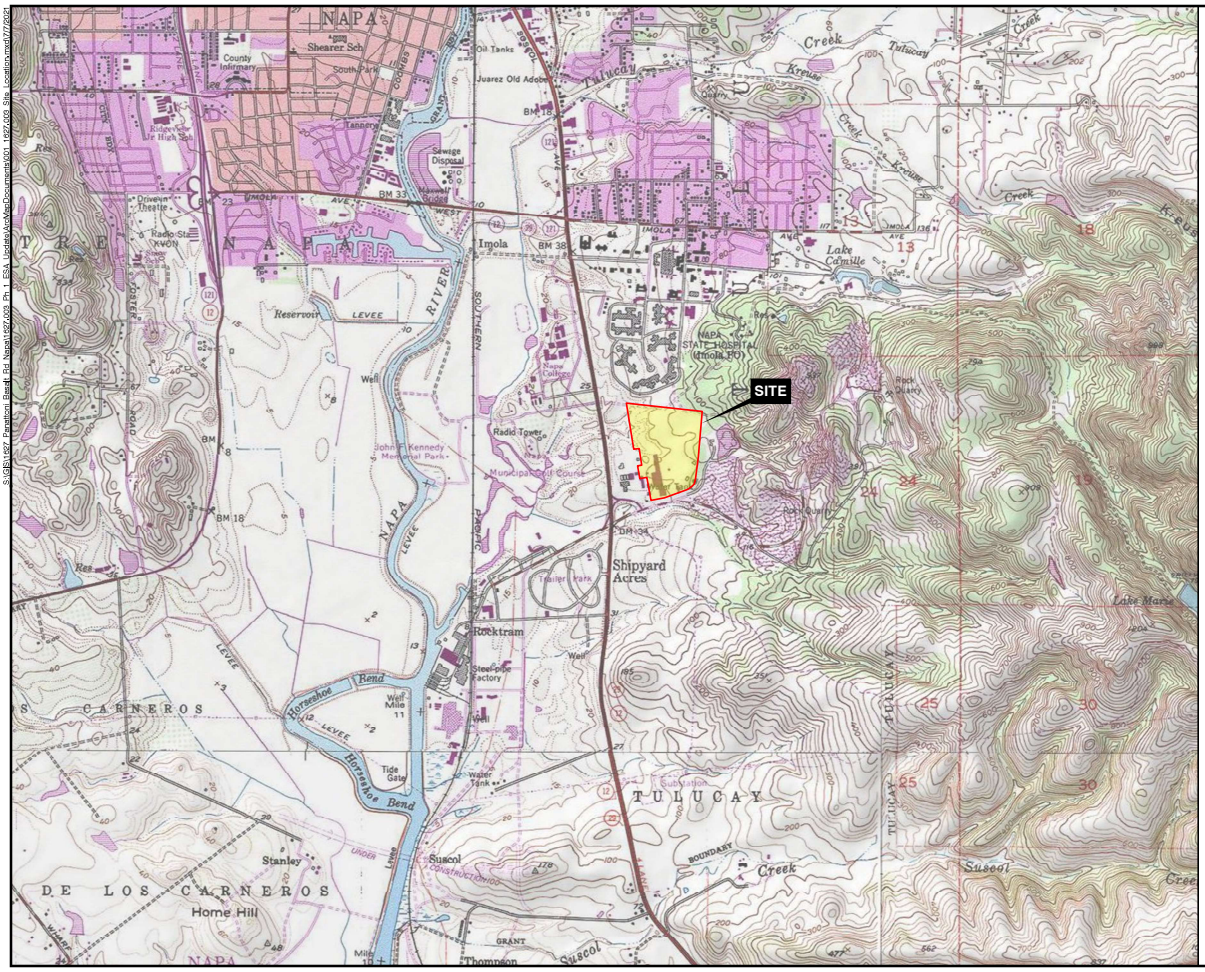
California Department of Toxic Substances Control (DTSC), Human and Ecological Risk Office (HERO), June 2020, "Human Health Risk Assessment (HHRA) Note, HERO HHRA Note Number: 3, DTSC-modified Screening Levels (DTSC-SLs)."

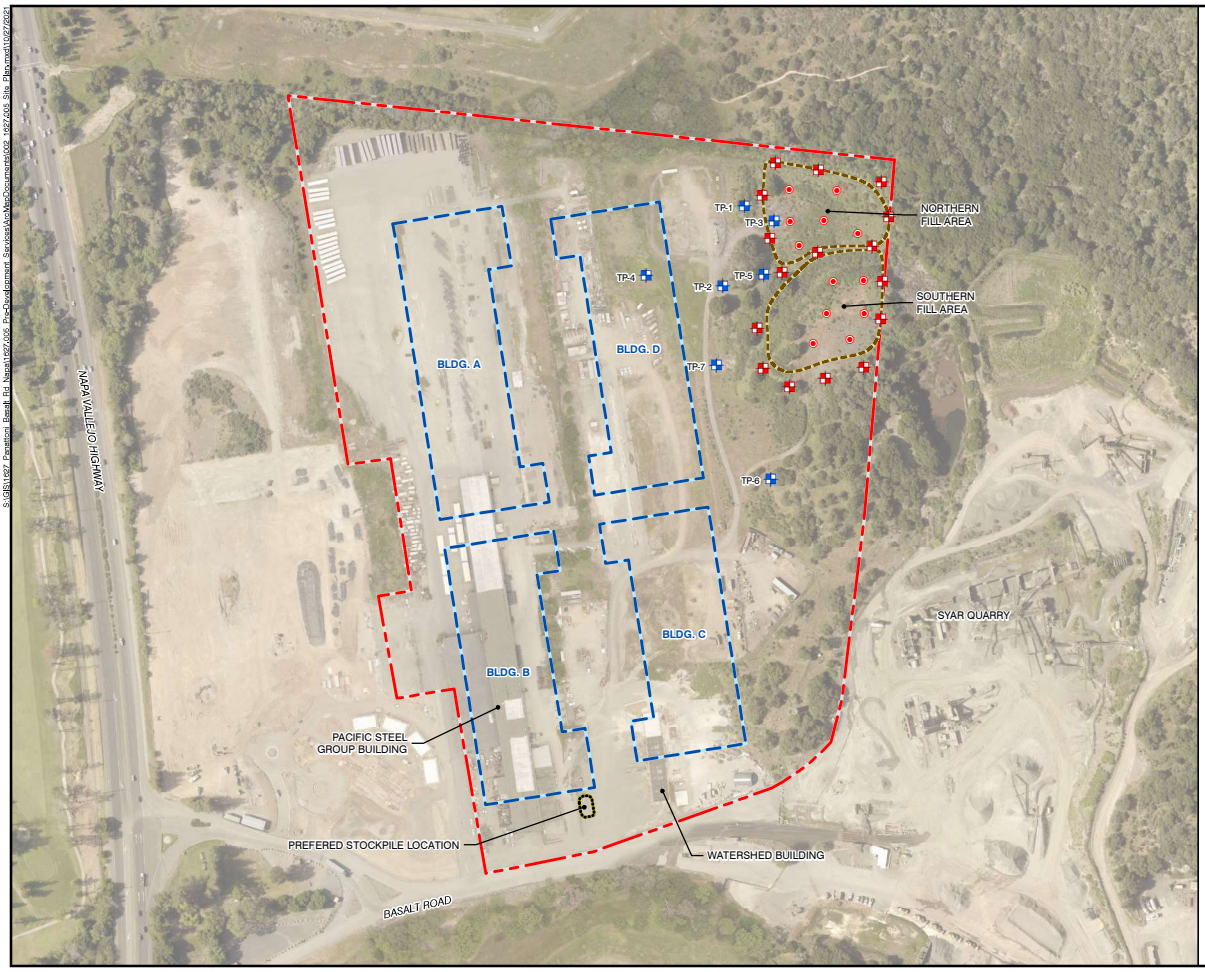
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Figures


SITE
NAPA
Imola
Shipyard Acres
Rocktram
TULUCAY
DE LOS CARNEROS
Home Hill
Stanley
Suscol
Thompson
Lake Camille
Lake Marie
Tulucay Creek
Napa River
Southern Pacific
Horseshoe Bend
Levee
Reservoir
Municipal Golf Course
NAPA STATE HOSPITAL (Imola PO)
Sewage Disposal
Juarez Old Adobe
Oil Tanks
Shearer Sch
County Infirmary
Tannery
Drive-in Theatre
Radio Sta KVON
Kennedy High Sch
Radio Tower
Trailer Park
Steel Pipe Factory
Tide Gate
Water Tank
Well
Mile 11
Mile 10
BM 18
BM 33
BM 38
BM 34
Subdivision
Construction
Boundary
Grant
Imola
Lake
Creek
Res
Quarry
Rock Quarry
Municipal Golf Course
Trailer Park
Subdivision
Construction
Boundary
Grant
Thompson
Suscol
Tulucay
Kreuse
Napa
Levee
Reservoir
Well
Radio Tower
Trailer Park
Steel Pipe Factory
Tide Gate
Water Tank
Mile 11
Mile 10
BM 18
BM 33
BM 38
BM 34



N

EXPLANATION

- PROPOSED SONIC BORING
- PREVIOUS TEST PIT
- PROPOPSED TEST PIT
- STOCKPILE
- FILL AREA
- PROPOSED BUILDING FOOTPRINTS
- SITE BOUNDARY

REFERENCE:
PREVIOUS TEST PIT LOCATIONS FROM
RGH CONSULTANTS, PLATE 2, EXPLORATION PLAN.
DATED: OCTOBER 2019

0 250 500
Feet

FIGURE 2

SITE PLAN

11 BASALT ROAD
NAPA, CALIFORNIA

AVOCET ENVIRONMENTAL, INC.

S:\GIS\1627 Penatoni Basalt Rd Napa\1627-006 Pre-Development Services\ArcMap\Documents\006 1627-006 Site Plan.mxd 10/27/2021

V:\1627 PANATTONI BASALT RD NAPA\1627.005 PRE-DEVELOPMENT SERVICES\001 1627.005 TOPOGRAPHIC MAP.DWG - PLOTTED BY SAM PEPKE ON 10/27/21



REFERENCE:
STANTEC DRAWING,
01656C-EX001.DWG
DATED: 07/19/2018

FIGURE 3

TOPOGRAPHIC MAP

11 BASALT ROAD
NAPA, CALIFORNIA

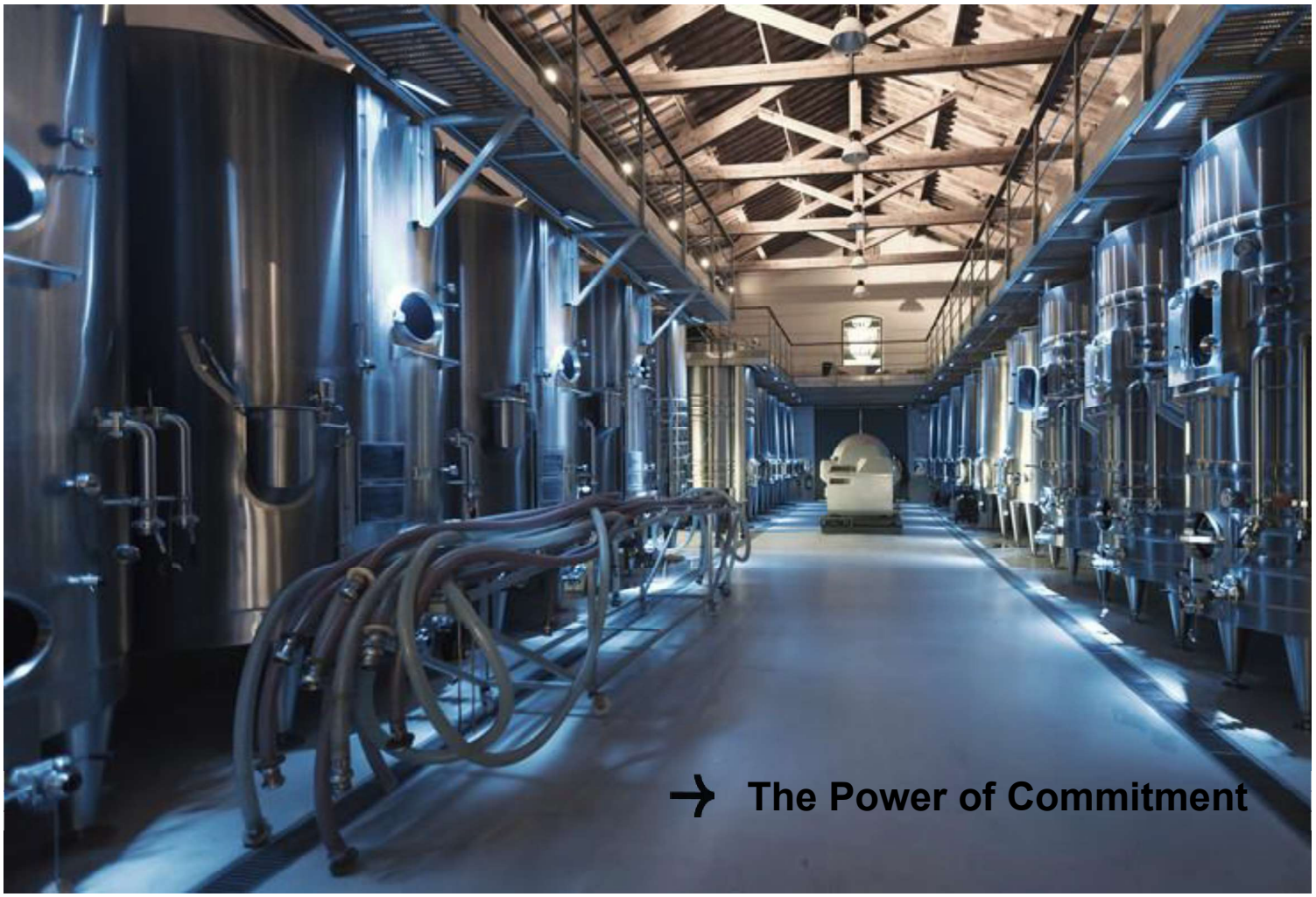
AVOCET ENVIRONMENTAL, INC.

Revised Water Availability Analysis

11 Basalt Road, Napa

Panattoni Development Company, Inc

26 July 2023



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Document status

Status Code	Revision	Author	Reviewer		Approved for issue		
			Name	Signature	Name	Signature	Date
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D	02	Coleton Golden	S Willis				07/21/21
D	03		R.Crawford				07/23/21
F	04	Coleton Golden	R. Crawford				9/27/21
F	05	C. Golden	R. Crawford				7/18/23

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Appendix A – Water Agreement

1. Introduction

1.1 Purpose of this report

GHD, Inc. (GHD) was engaged by Panattoni Development Company, Inc (Panattoni) to prepare this report to assist the development project with compliance with Napa County Water Availability Analysis requirements. As of May 13, 2015, a water availability analysis is required for any discretionary project that may utilize groundwater or will increase the intensity of groundwater use of any parcel through an existing, improved, or new water supply system (Napa County Code 13.15.010).

1.2 Site History

The Site consists of an approximately 55.27-acre parcel located at 11 Basalt Road, Napa, shown in Figure 1. The site was purchased in 1936 by Basalt Rock Company, Inc. (Basalt Rock), which owned and operated the Napa Quarry immediately east of the site and the Basalite Block concrete block manufacturing facility immediately west of the site. The site was agricultural prior to 1936 and remained largely undeveloped until the early 1950s, when Basalt Rock expanded its operations. The approximately 100,000-square-foot main building in the southwest corner of the site was constructed in or around 1953 and was used to manufacture precast concrete wall panels until 1986, when the site was sold to Dillingham Construction. Dillingham sold the site in 2005, and since then, tenants/occupants have included Pacific Steel Group, Inc. (Pacific Steel) and Superior Equipment Company in the main building, multiple construction contractors in the central and eastern portions of the site, and Rammed Earthworks in and around the Watershed building. Superior Equipment Company no longer occupies the site but is believed to have used its space to store and maintain waste management equipment. Pacific Steel currently uses the main building and roughly the western half of the site to store, fabricate, and ship rebar and other steel products. The site has a roughly 70-year history of industrial use.

1.3 Project Description

Panattoni has purchased the parcel and plan to redevelop the site with four new commercial buildings (Project). The parcel will be improved as follows: demolition of existing industrial and commercial buildings, construction of four speculative Class A single-story concrete tilt-up warehouse buildings (Buildings A-D) totaling 690,700 square feet at the project location. The Project is being developed on a speculative basis so the precise tenant make up is not certain. Panattoni anticipates this development supporting several small local businesses and also being able to meet some larger business occupancies in excess of 100,000 square feet. Uses may include wine production facilities, commercial office space, and industrial or commercial warehousing or wine storage. The Project also includes the construction of a water tank for fire water storage, a potable water storage and treatment tank, a bioretention area and the associated driveway and parking areas. The parcel is zoned as industrial and located inside the Napa Valley Subbasin area, which is defined as a historically groundwater deficient area. According to the Napa County Well Permit Standards and WAA Requirements (2023), summarized in Table 1.3A, below, the project will be subject to Tier 1 analysis requirements. A Tier 2 analysis would be required for the existing well if there was less than 500 feet to a neighboring well and/or a natural spring within 1,500 feet of the existing well. A Tier 3 analysis would be required for the existing well if it was within 1,500 feet to a Significant Stream.

Table 1.3A Project Screening Criteria Applicability

Well Type	Groundwater Use	Inside Napa Valley Subbasin		Outside Napa Valley Subbasin	
		Previous	New Regulation	Previous	New Regulation
New Well	Domestic – Individual User	NA	0.3 acre-foot/acre[3,5]	NA	NA[1]
	Commercial, Industrial, or Agricultural	1 acre-foot/acre[2]	0.3 acre-foot/acre[3]	Parcel Specific Recharge[2]	Parcel Specific Recharge[4]
	Public Water System	1 acre-foot/acre[2]	0.3 acre-foot/acre[3]	Parcel Specific Recharge[2]	Parcel Specific Recharge[4]

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Well Type	Groundwater Use	Inside Napa Valley Subbasin		Outside Napa Valley Subbasin	
		Previous	New Regulation	Previous	New Regulation
Replacement Well	Domestic – Individual User	NA	0.3 acre-foot/acre[3]	NA	Parcel Specific Recharge[1,4]
	Commercial, Industrial, or Agricultural	NA	0.3 acre-foot/acre[3]	NA	Parcel Specific Recharge[4]
	Public Water System	NA	0.3 acre-foot/acre[3]	NA	Parcel Specific Recharge[4]
Existing Well	New or I	1 acre-foot/acre	0.3 acre-foot/acre[3]	Parcel Specific Recharge	Parcel Specific Recharge[4]

NA = Not Applicable
1 - Assumes less than 2-acre-feet per year of groundwater for individual domestic users.
2 - Napa County previous practice was to apply Tier 1 requirements to only Discretionary Project. No water use limits were imposed on a Ministerial Project.
3 - Where existing groundwater use exceeds the 0.3 acre-foot/acre, No Net Increase in Groundwater use is required (Subject to change by the Groundwater Sustainability Agency)
4 - Where existing groundwater use exceeds the Paracel Specific Recharge, No Net Increase in Groundwater use is required.
5 - Requirement can be met by using a "Water Use Declaration" that reflects the allowed water usage.

Based on the proposed development plan, the maximum number of staff to be on-site on any given day is estimated in Table 1.3B.

Table 1.3B Maximum Daily Staff

	Building A (Office)	Building B (Winery)	Building C (Warehouse)	Building D (Warehouse)
Staff	130	40	36	31

A Water Rights and Groundwater Resources Review (WRGRR) was performed in 2019 which reviewed the existing 1986 Water Agreement between Vulcan (located on an adjacent parcel to the southeast) and one of the previous owners of the property, Dillingham Heavy Construction. This agreement provides the subject property with non-exclusive rights to draw water from a well located on Latour Ct. Well design and specifications are not available for the Latour Ct well. A second groundwater well was identified on the subject property in the WRGRR that is not identified in the existing Water Agreement and does not appear connected to on-site water lines; however, according to recent discussions, Vulcan currently operates the well as part of their water system (hereafter called "Sandplant Well"). The location of the known groundwater wells are shown in Figure 2.

While no well drilling report is available for the identified wells, the well report for the closest known well on Vulcan property south of the Project (Off-site Well, see Figure 2), indicates a well yield of 800 gallons per minute (1,290 acre-feet per year) which is consistent with published descriptions of relatively high well yields from the tuff/pumice units of the Sonoma Volcanic bedrock in the area. Vulcan is not currently using the Off-site Well.

1.4 Scope and limitations

This report has been prepared by GHD for Panattoni Development Company, Inc and may only be used and relied on by Panattoni Development Company, Inc and their affiliates (namely Napa 55 Logistics, LLC a Delaware Limited Liability Company; Napa 55 Logistics PG, LLC a Delaware Limited Liability Company; and PDC Sacramento LPIV, LLC a Delaware Limited Liability Company) for the purpose agreed between GHD and Panattoni Development Company, Inc as set out in section 1.1 of this report.

GHD otherwise disclaims responsibility to any person other than Panattoni Development Company, Inc arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

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The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report (refer to sections 1.5 and 2.4 of this report). GHD disclaims liability arising from any of the assumptions being incorrect.

1.5 Assumptions

Site records indicate that just prior to current ownership, the site was recently (until about 2004) used as a precast concrete production facility. Historical satellite imagery shows an approximately 100,000 square foot structure surrounded by storage yards for precast products, shown in Figure 3.

Precast concrete manufacturing facilities are known to use a large quantity of water. The operators of the precast facility, Basalite (formerly Basalt Rock) have indicated that no production records exist from which to estimate historical water usage as a baseline for this site. Historical water usage by precast concrete facilities has not been widely documented, as they have typically been constructed in water-rich areas. Precast concrete production rates can also vary widely from facility to facility, depending on if the facility was used primarily for custom runs (i.e. specialty manholes) or generic, high-volume runs (i.e., standard culverts).

The best available information on this topic is from industry reports. For the purposes of this Analysis, the following assumptions are made:

1. Number of employees per square foot of enclosed structure is approximately on-par with recent reports
2. Production (tonnes) of precast per employee per year is approximately on-par with recent reports
3. Water usage per ton of precast produced is approximately on-par with recent reports
4. Improvements in water efficiency (usage per tonne of precast) over time are roughly equivalent to the effects of increased production rate and capacity of facilities, such that water usage at precast facilities has remained constant over the past 30 years or so.

With these assumptions in mind, the following values are used to estimate historical water usage at the site:

- An average precast concrete facility produces between 1,524 and 1,960 tonnes of precast concrete per employee per year (British Precast 2009/2016).
- Facilities of similar size employ approximately 73 individuals per 100,000 square feet of enclosed facility area (NPCA 2012).
- Typical process water use at the time of closure in 2004 is better estimated using publicly available data from the early 2000s than current best practices, at 844 L/m^3 of precast (Portland Cement Association- Marceau et al 2007). With a typical representative precast mix (178 L/m^3 mix water and a resultant mass of 2.287 tonne/m^3), this leads to a total water demand of 447 L or 118 gal water per tonne of precast.

With these assumptions and values in mind, a range of production at the historical precast facility would have been:

100,000 sq ft facility x 73 employees / 100,000 sq ft facility x (1,524 to 1,960 tonnes precast) / employee / year = 111,252 to 143,080 tonnes of precast per year

The water usage at the facility would have been with typical water usage just after the plant closed (2004) in 2007: (111,252 to 143,080 tonnes precast) / year x 118 gallons / tonne precast = 13,127,736 to 9,715,076 gallons / year (13,127,736 gallons / year) / (325,851 gallons / acre-ft) = 40.28 to 51.81 acre-ft water used per year

2. Tier 1 Analysis

Tier 1 of the WAA requires the applicant to estimate the proposed water usage for the project, and then compare the estimated parcel usage for the property to the applicable water use criteria. Per the New Regulations in response to the Governor's Executive Order N-7-22 all new, replacement, and existing wells within the Napa Floor

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Subbasin are subject to a 0.3 acre-feet per acre limitation. As shown in Figure 2, the project parcel and the Latour Ct well are located within the Napa Floor-MST area.

2.1 Water Use Guidelines

Appendix B of the WAA guidelines includes recommendations for determining the estimated water use for specified land uses. The land uses in this appendix do not completely align with the proposed site uses, but they are employed to create worst-case demand estimates. A summary of these guidelines which were used in estimating the future water use at this parcel are presented in Table 2.1.

Table 2.1 Water Use Guidelines per WAA Appendix B

Use	Recommended Water Use Values	Applied Water Use Values	Unit
Commercial			
Office Space	0.01	0.01	AF per Employee per Year
Warehouse	0.05	0.05	AF per Employee per Year
Winery			
Process Water	2.15	2.15	AF per 100,000-gal Wine Produced per Year
Domestic Water	0.5	0.5	AF per 100,000-gal Wine Produced per Year
Employees	15	15	Gallons per Shift
Landscaping	-	5.0	Gallons per Square Foot per Year

2.2 Existing Water Usage

The primary use of the Site is for fabrication and storage of rebar and other steel products, which only requires water for employee use. Based on the facility being primarily used as a storage facility with less than 10 full time employees we estimate the existing water use to be less than 5 acre-feet per year. One onsite groundwater well is under the operation of Vulcan and is not actively used by the parcel. An offsite well (Latour Court well) has historically provided water to the Site and other parcels. Currently it is providing an estimated 0.55 acre-feet of water annually to the to the Vulcan offices (approximately 11,000 total square feet across five buildings[1]) located on the adjacent parcel.

2.3 Historical Water Usage

In or around 1953, an approximately 100,000-square-foot facility was constructed and used to manufacture precast concrete until approximately 2004. Specific water use details are not available, but recent data suggests that the manufacturing facility could produce between 111,252 and 143,080 tonnes (122,634 to 129,801 tons) of precast concrete per year (see Section 1.5 for related calculations). Based on current manufacturing procedures, which consume less water than historical practices, a conservative estimate for water use, would be 40.28 to 51.81 acre-ft of water per year. This demand has historically been provided by the Latour Court well that operates under a deeded water agreement, Appendix A. While historical pumping data for the Latour Court well is unavailable, it historically supplied water to Basanite (Site), the Napa Vulcan quarry, the County Jail, and the Napa Pipe Factory. The Latour Court well is located within the Napa Valley floor MST area (See Figure 2) and currently operates under an open agreement with the Site, providing water to the Site with no set volume limits. Historical water uses also included the use of now abandoned on-site wells, however the installation dates and groundwater volumes extracted from the former wells are unknown and no driller's Well Completion Reports (WCRs) were obtained as of the date of this report submittal.

[1] Water use estimate based on the 2019 California Pluming Code Table 422.1, Table A.

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2.4 Proposed Water Usage

The proposed uses for the Site include four buildings ranging in size between 153,000 and 192,000 square feet (see Figure 2). The spaces will be outfitted according to each tenant's needs (not yet identified), but all are anticipated to be commercial enterprises. The anticipated uses include warehouse / storage, small-scale wine production and tasting, and office space. In order to create a reasonable water usage estimate, the following tenants were assumed:

1. Building A (168,376 square feet) to be used as a mix of office space (6,000 square feet) and commercial warehousing (162,376 square feet)
2. Building B (191,880 square feet) to be used as a mix of office space (6,000 square feet) and wine processing and/or bottling and storage, up to 368,520 gallons per year (155,000 cases per year)
3. Building C (177,008 square feet) to be used as a mix of office space (6,000 square feet) and storage or commercial warehousing
4. Building D (153,504 square feet) to be used as a mix of office space (6,000 square feet) and storage or commercial warehousing

The proposed water uses for the development are presented in Table 2.4A.

Table 2.4A Proposed Property Uses

Use	Value	Unit
Building A		
Commercial Office	30	Employees
Commercial Warehouse	33	Employees
Building B		
Commercial Office	30	Employees
Winery	368,520	Gallons per Year
Employees (Full Time)	40	Employees
Building C		
Commercial Office	30	Employees
Commercial Warehouse	35	Employees
Building D		
Commercial Office	30	Employees
Commercial Warehouse	30	Employees
Summary		
Wineries	368,520	Gallons per Year
Employees (Full Time)	43	Employees
Commercial Office	120	Employees
Commercial Warehouse	98	Employees
Landscaping	34,526	Square Feet

Based on these modifications the proposed water usage of the parcel is presented in Table 2.4B below.

Due to the speculative nature of the development, it is important to note that these estimates are intended to identify the total allowable water usage and should not restrict future tenants from using more efficient processes or appliances, including the use of recycled water, to increase the number of employees or volume of wine produced provided they do not exceed the total proposed water usage as outline in this analysis. An example of a tenant using a more efficient winery process is presented in Table 2.4C, where the 2.15 acre-ft per 100,000 gallons of wine was reduced in half (1.075 acre-ft per 100,000 gallons of wine).

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Table 2.4B ***Proposed Water Usage – No Recycled Water***

			Building A	Building B	Building C	Building D	A	B	C	D	Irrigation (AF)
Building area (square feet)			168,376	191,880	177,008	153,504					
Winery Process Water	2.15	acre-feet per 100,000 gallons wine		368,520 gal wine			0	7.92	0	0	
Winery Domestic & Landscaping Water	0.5	acre-feet per 100,000 gallons of wine		368,520 gal wine			0	1.84	0	0	(0)[i]
Winery Employees[ii]	15	gallons per 8-hr shift		40 employees			0	0.48	0	0	
Winery Tasting Room Visitation	3	gallons per visitor		5,000			0	0.05	0	0	
Winery Events Incl. Food/Catering	15	gallons per visitor		1,500			0	0.07	0	0	
Commercial Office Space[iii]	0.01	acre-feet per employee per year	30 employees	30 employees	30 employees	30 employees	0.30	0.30	0.30	0.30	
Commercial Warehouse[iii]	0.05	acre-feet per employee per year	33 employees		35 employees	30 employees	1.65	0	1.75	1.50	
Total Scenario Water Use		acre-feet per year					1.95	10.66	2.10	1.80	**16.46**

Notes:

Building A: Mix 6,000 square feet Commercial Office Space and 148,376 square feet of Commercial Warehouse Space

Building B: Mix 6,000 square feet Commercial Office Space and 368,520 gallons (160,000 cases) per year of process wine

Building C: Mix 6,000 square feet Commercial Office Space and 171,008 square feet of Commercial Warehouse Space

Building D: Mix 6,000 square feet Commercial Office Space and 149,504 square feet of Commercial Warehouse Space

i: 5 acre-feet per year irrigation demand provided by Landscape Architect. All landscape irrigation is assumed to be provided with recycled winery process water.

ii: Full time employees estimated by production volume (2017 Winery Financial Benchmarking Report)

iii: Estimated from the 2019 California Pluming Code plumbing fixture calculation based on square footage and occupancy (office occupant load factor at 200 square feet and warehouse occupant load factor at 5,000 square-feet)

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Table 2.4C Proposed Water Usage –Recycled Water

			Building A	Building B	Building C	Building D	A	B	C	D	Irrigation (AF)
Building area (square feet)			168,376	191,880	177,008	153,504					
Winery Process Water	1.075	acre-feet per 100,000 gal wine		618,163 gal wine			0	6.65	0	0	
Winery Domestic & Landscaping Water	0.5	acre-feet per 100,000 gallons of wine		618,163 gal wine			0	3.09	0	0	(0)[i]
Winery Employees[ii]	15	gallon per 8-hr shift		40 employees			0	0.48	0	0	
Winery Tasting Room Visitation	3	gallons per visitor		5,000			0	0.05	0	0	
Winery Events Incl. Food/Catering	15	gallons per visitor		1,500			0	0.07	0	0	
Commercial Office Space[iii]	0.01	acre-feet per employee per year	30 employees	30 employees	30 employees	30 employees	0.30	0.30	0.30	0.30	
Commercial Warehouse[iii]	0.05	acre-feet per employee per year	33 employees		35 employees	30 employees	1.65	0	1.75	1.50	
Total Scenario Water Use		acre-feet per year					1.95	10.63	2.10	1.80	**16.43**

Notes

Building A: Mix 6,000 square feet Commercial Office Space and 148,376 square feet of Commercial Warehouse Space

Building B: Mix 6,000 square feet Commercial Office Space and 618,163 gallons (260,000 cases) per year of process wine

Building C: Mix 6,000 square feet Commercial Office Space and 171,008 square feet of Commercial Warehouse Space

Building D: Mix 6,000 square feet Commercial Office Space and 149,504 square feet of Commercial Warehouse Space

i: 5 acre-feet per year irrigation demand provided by Landscape Architect. All landscape irrigation is assumed to be provided with recycled winery process water.

ii: Full time employees estimated by production volume (2017 Winery Financial Benchmarking Report)

iii: Estimated from the 2019 California Pluming Code plumbing fixture calculation based on square footage and occupancy (office occupant load factor at 200 square feet and warehouse occupant load factor at 5,000 square-feet)

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A summary of the change in water from the existing condition to the proposed use is presented in Table 2.4C.

Table 2.4D Proposed Change in Water Usage

	Value	Unit
Existing Water Usage	5.55	AF per Year
Historical Water Usage	40.28	AF per Year
Proposed Water Usage	16.58	AF per Year
Expected Usage Increase	**11.03**	**AF per Year**

Due to the majority of the historical water use ceasing nearly 20 years ago it is not suitable for use as an existing environmental baseline. Therefore, this WAA proposes an increase in water usage from 5.55 AF per year to 16.58 AF per year. The parcel developers do not anticipate using on-site water for any purpose with exception of a single fill of the planned fire water storage tank (estimated between 500,000 and 750,000 gallons) and potentially as a backup source during emergencies. This one-time tank fill up will be filled from the on-site Sandplant Well currently serving the Vulcan Sandplant and quarry operations. This small volume is not anticipated to significantly impact Vulcan's annual groundwater usage or Vulcan's allotment agreement with the County of Napa. All Project potable and process water will be supplied from the Latour Court well.

2.5 Water Supply Capacity

Based on the property size of 55.27 acres, and a water use criterion of 0.3 acre-ft/acre/year from the Napa County's Drought Emergency, Governor's Executive Order N-7-22, the maximum water use from the Latour Court well could be as high as 16.58 acre-feet per year. While well capacity data is not available for the Latour Court well, the Sonoma Valley Volcanic base rock and wells in the area are considered high-yield, producing approximately 1,290 acre-feet per year (Wagner & Bonsignore, 2019). Considering the historical use of the of the Latour Court well to supply the precast concrete facility, the Vulcan Napa quarry, the County Jail, and the Napa Pipe Factory, we anticipate no well capacity issues in supporting the 16.58-acre-feet per year proposed maximum anticipated water demand for the Project. Therefore, overall proposed Project water use is within the physical capabilities of the available combination of on-site and off-site water sources.

3. Tier 2 Analysis

Per the 2023 Napa County Well Permit Standards and WAA guidelines, the project must be evaluated for the potential for well and/or spring interference if the existing well is within 500 feet of a neighboring well and/or is within 1,500-feet of a natural spring. No known wells are within 500 feet of the Latour Ct well and a review of the Department of Water Recourses Well Completion Report map application indicates that there are no reported wells within the vicinity of the Latour Ct well. Based on a review of the Napa Valley Subbasin Groundwater Sustainability Plan, no known springs are located within 1,500 feet of the Latour Ct. well. Based on this information, a Tier 2 analysis is not required.

4. Tier 3 Analysis

Per the 2023 Napa County Well Permit Standards and WAA guidelines, a Tier 3 analysis is required when a well is located within 1,500 feet of a Significant Stream (as shown on Figure 1 of the Napa County Well Permit Standards). As shown on Figure 2, no Significant Streams are located within 1,500 feet of the Latour Court Well.

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USGS and Napa County maps indicate a blue line stream (Central Creek) is located within 1,500 feet of the project well. Central Creek is an intermittent stream that is dry for the majority of the year. The creek originates from a relatively small 430-acre drainage basin that drains to the Napa River. Central Creek flows west from its headwaters until it enters a culvert on the east side of Napa Vallejo Hwy, approximately 400 feet east of the Latour Ct well. The culvert appears to extend approximately 3,500 feet under commercially developed parcels before daylighting adjacent to Kaiser Rd where artificial drainage pathways lead to the Napa River. Based on the controlled pathway and the infrequent flow of Central Creek, it is unlikely to support aquatic habitat in the vicinity of the Latour Ct well or contain an associated water right. Additionally, Figure 6-127 of the Napa Valley Subbasin Groundwater Sustainability Plan depicts the groundwater dependent ecosystems in the Napa Valley Subbasin, and Central Creek is not depicted within a groundwater dependent ecosystem. Therefore, Central Creek does not qualify as a Surface Water under the WAA Guidance definition and no Tier 3 Analysis is required.

5. Conclusion

This report demonstrates that the proposed project is in compliance with current County Code related to groundwater usage per the 2023 Napa County Well Permit Standards and the Napa County Water Availability Analysis guidelines.

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6. References

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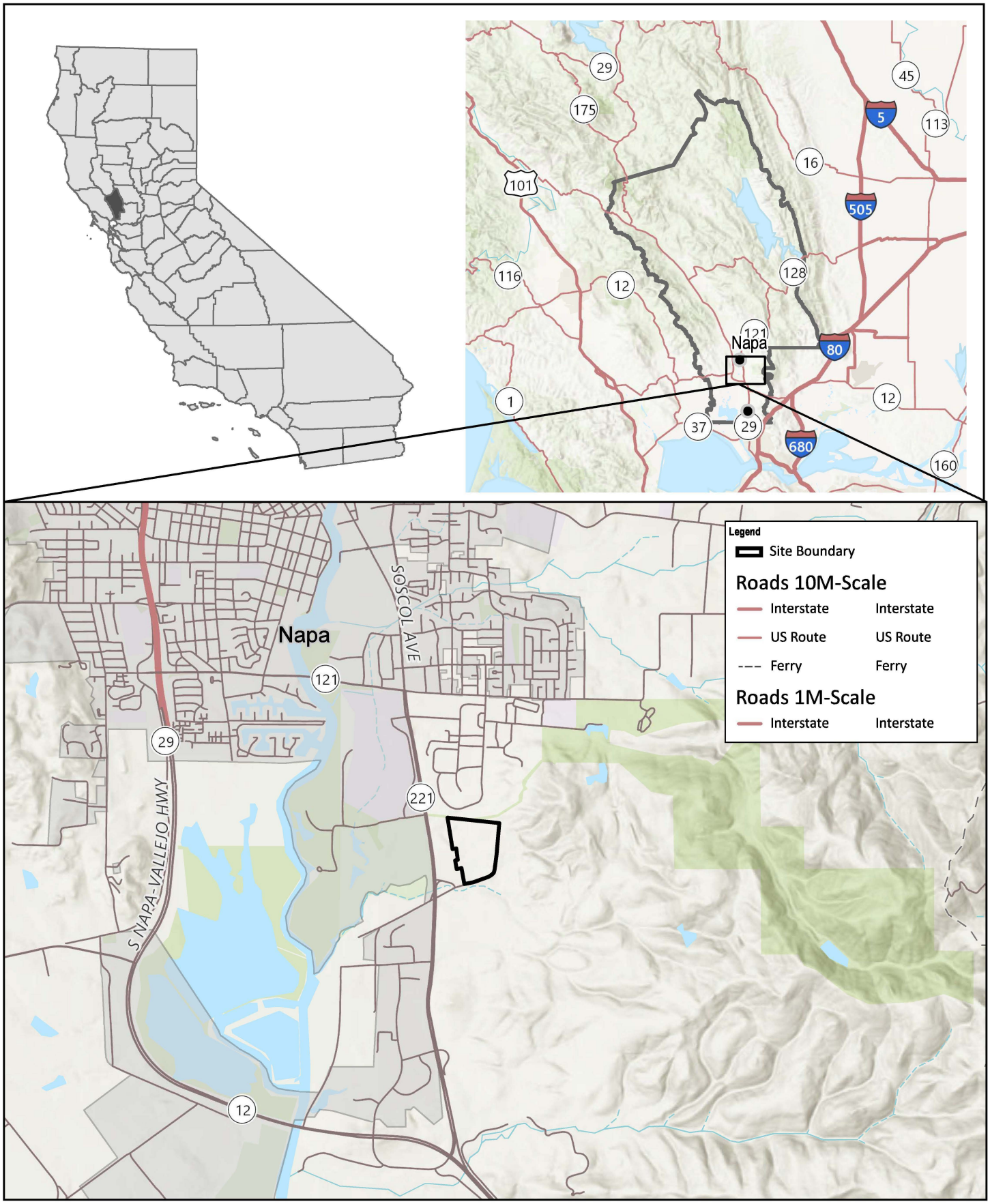
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Figures



Paper Size ANSI A

0 0.2 0.4 0.6 0.8

Miles

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California II FIPS 0402 Feet

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GHD

Panattoni Development Company Inc.
Water Availability Analysis

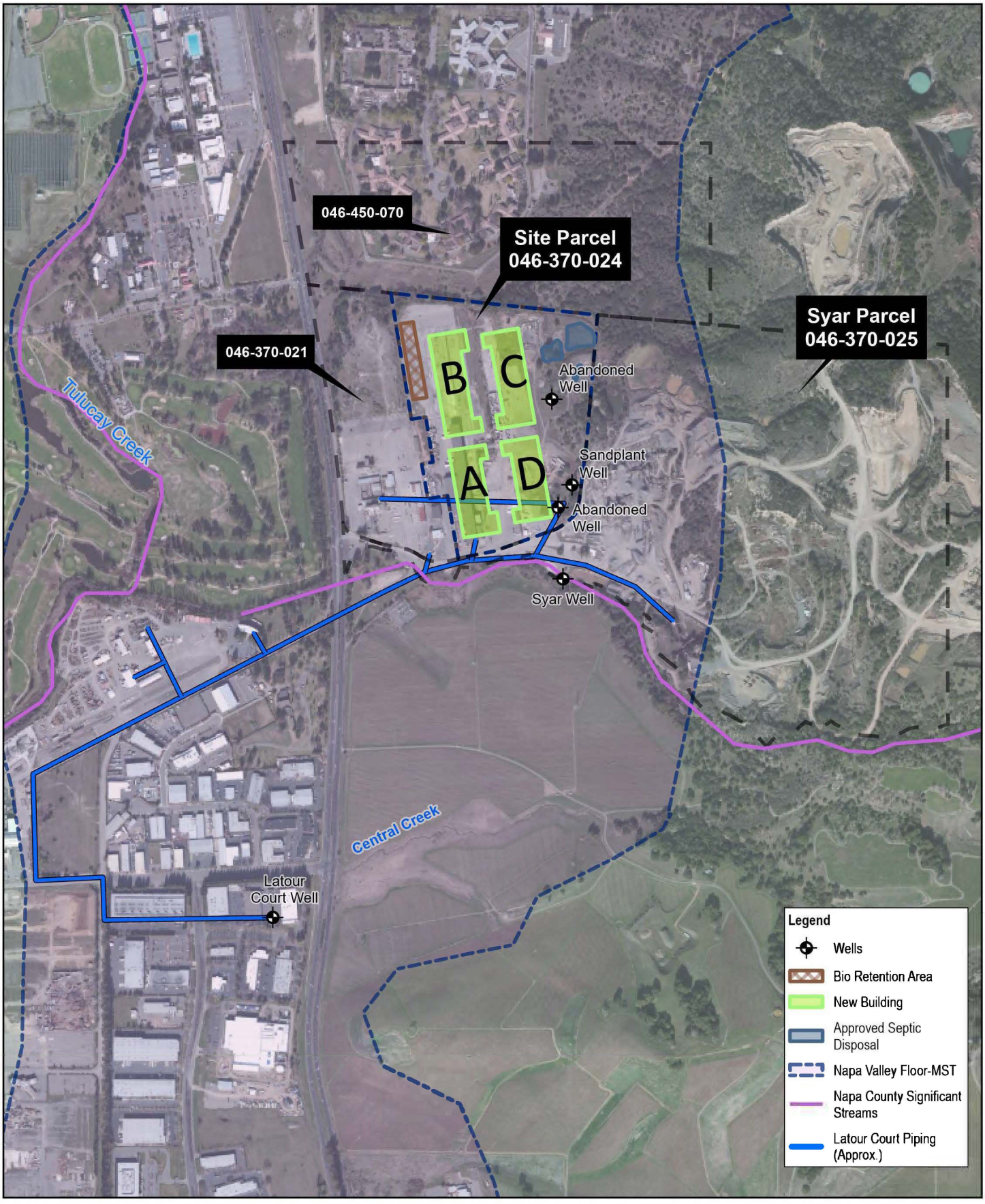
Project No. **11224710**
Revision No. **-**
Date **Jun 2021**

Vicinity Map

FIGURE 1

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Data source: World Topographic Map - labelless: County of Napa, Yolo County, Esri, HERE, Garmin, FAO, NOAA, USGS, Bureau of Land Management, EPA, NPS; World Topographic Map - labelless: County of Napa, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA; World Hillshade: Esri, NASA, NGA, USGS, FEMA; transportation: USGS The National Map: National Transportation Dataset; U.S. Census Bureau – TIGER/Line; U.S. Forest Service, Data Refreshed April, 2021.; World Hillshade: Esri, CGIAR, USGS. Created by: ethompson3



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0 230 460 690 920 1,150

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Map Projection: Lambert Conformal Conic
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Grid: NAD 1983 StatePlane California II FIPS 0402 Feet

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Panattoni Development Company Inc.
Revised Water Availability Analysis

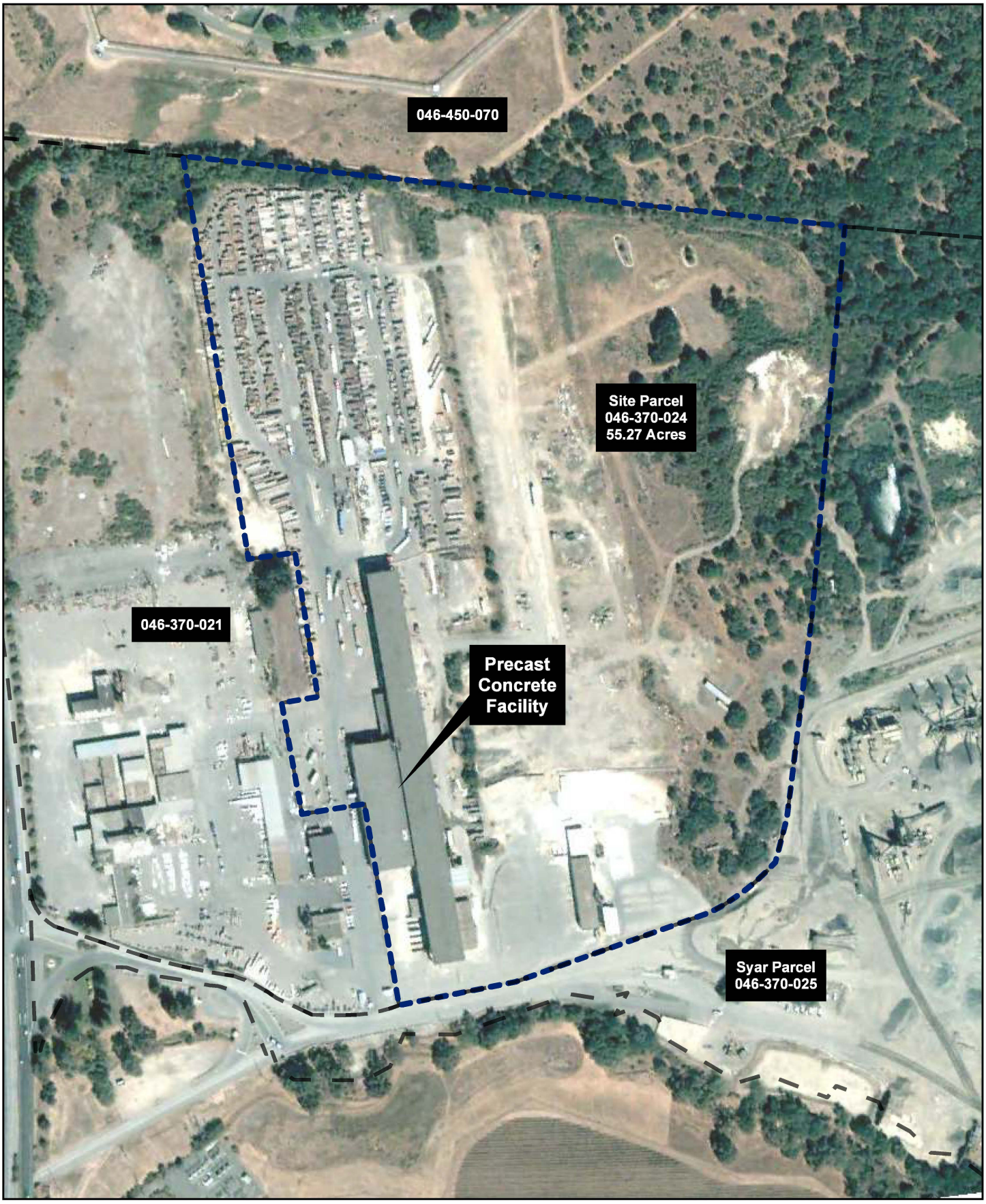
Project No. **11224710**
Revision No. -
Date **Jul 2023**

Site Location

FIGURE 2

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Data source: World Imagery (Clarity): Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community Created by: ethompson3



Paper Size ANSI A

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Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California II FIPS 0402 Feet

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Panattoni Development Company Inc.
Water Availability Analysis

Project No. **11224710**
Revision No. **-**
Date **Jul 2021**

Historic Satellite Imagery

FIGURE 3

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Data source: .Oct, 2004 Imagery Maxar Technologies
Created by: ethompson3

Appendices

NAPA COUNTY

VOL 1431 PAGE 660

Recording requested by and
when recorded mail to:

Heller, Ehrman, White & McAuliffe
44 Montgomery Street
San Francisco, California 94104
Attention: Barry A. Weiss

OFFICIAL RECORDS
NAPA COUNTY, CALIF.
FIRST AMERICAN TITLE COMPANY
FEB 28 1986
AT 3:00 P M.
ELEANOR E. KIMBROUGH
COUNTY RECORDER

24.00	R
1.00	M
22.00	F
	L
TOTAL	
$47.00	

(Space above this line for Recorder's use)

WATER AGREEMENT

This Water Agreement (the "Agreement") is made this 28th day of February, 1986, by and between SYAR INDUSTRIES, INC., a California corporation ("Buyer"), and DILLINGHAM HEAVY CONSTRUCTION, INC., a Nevada corporation and DILLINGHAM CORPORATION, a Hawaii corporation (collectively, "Seller").

RECITALS

A. This Agreement is entered into concurrently with and is being recorded immediately subsequent to the conveyance by Seller to Buyer and the acquisition by Buyer from Seller of certain real property located in the County of Napa, State of California, more fully described on Exhibit A attached hereto ("Buyer's Property").

B. Seller was and remains the owner of certain real property which is adjacent to a portion of Buyer's Property and located in the County of Napa, State of California, more fully described on Exhibit B attached hereto ("Seller's Property").

C. Buyer's Property and Seller's Property have as an appurtenance thereto and are mutually benefitted by (i) the right

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to take water from a well located on an isolated portion of Buyer's Property (shown as Parcel 16 on Exhibit A) which isolated portion is surrounded by property currently owned by Kaiser Steel Corporation (the "Kaiser Property"), and (ii) a non-exclusive easement and right of way (which includes the right to lay, inspect, repair and replace pipelines) across a portion of the Kaiser Property, said right to take water and right of way being more fully described in the following documents which are hereby incorporated herein by this reference: (a) that certain Grant Deed from Basalt Rock Company, Inc. to Kaiser Steel Corporation recorded on May 9, 1955 in the Official Records of Napa County at Book 474, Page 240; (b) that certain Agreement Regarding Easements between Basalt Rock Company, Inc. and William A. Craig, dated September 21, 1978 and recorded in the Official Records of Napa County at Volume 1097, Page 555; and (c) that certain Quitclaim Deed from Basalt Rock Division of Dillingham Heavy Construction, Inc., successor to Basalt Rock Company, Inc. to Kaiser Steel Corporation, recorded on October 6, 1983 in the Official Records of Napa County at Volume 1305, Page 758. (The rights described in (i) and (ii) above are hereinafter referred to collectively as the "Kaiser Easement".)

D. Buyer's Property and Seller's Property have as an appurtenance thereto and are mutually benefitted by an easement (the "Bedford Easement") over property currently owned by Peter M. Bedford (the "Bedford Property") for extraction and transportation of water from a well located on the Bedford Property, which easement is more fully described in that certain Corporation Grant

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Deed from Basalt Rock Company, Inc. to Peter M. Bedford recorded on February 28, 1980 in the Official Records of Napa County at Volume 1156, Page 208, which is hereby incorporated herein by this reference.

E. The pipeline and transmission facilities connecting Seller's Property to the Kaiser Easement and the Bedford Easement are located on Buyer's Property over which Seller is hereby retaining an easement and as to which Buyer has agreed to grant Seller certain other rights.

F. The parties desire to acknowledge and agree as to the sharing between themselves of the benefits of the Kaiser Easement and the Bedford Easement and Seller desires to acquire certain rights with respect to a portion of Buyer's Property and Buyer desires to acquire certain rights with respect to a portion of Seller's Property and the parties are willing to grant such rights.

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

1. Grant of Easements.

a. Buyer acknowledges its understanding and agreement that the Kaiser Easement and the Bedford Easement were each intended to be, and were, and remain, appurtenant to and benefit the entirety of Seller's Property and Buyer's Property and Buyer hereby reaffirms the continuation of said rights and easements. Buyer further agrees that to the extent of any

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assignable interest Buyer may have therein, Buyer hereby grants and assigns to Seller the non-exclusive right to use (together with Buyer) the Kaiser Easement and the Bedford Easement for the benefit of and as an appurtenance to Seller's Property, for the uses described in Paragraph 2.

b. Buyer hereby grants to Seller a non-exclusive right and easement in, under, over and across Buyer's Property for the respective uses described in Paragraph 2 hereof (the "Seller's Easement").

c. Seller hereby grants to Buyer a non-exclusive right and easement in, over and across portions of Seller's Property for the uses described in Paragraph 3 (the "Buyer's Easement").

2. Use of Seller's Easement. Seller's Easement shall include (i) a non-exclusive right to draw water from the well currently located on Buyer's Property and from the well currently located on the Bedford Property, as well as any additional or replacement wells drilled on Buyer's Property in accordance with the terms hereof (the "Water Wells"); (ii) a non-exclusive right to the use of existing water pipelines, water transmission facilities, pumps, well-casings, well heads and any other equipment associated with drawing and transporting water from the Water Wells and any replacement or additional pipelines, facilities, pumps, well-casings, well heads and any other equipment associated with drawing and transporting water from the Water Wells (collectively, the "Facilities") located on Buyer's Property, on the Bedford Easement

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and on the Kaiser Easement; (iii) a right to enter upon Buyer's Property as reasonably necessary to inspect, repair, replace and maintain the Water Wells and Facilities in accordance with the terms hereof and (iv) to the full extent Buyer has such rights, Buyer hereby grants to Seller, as its agent, the right to enter upon the Bedford Property and the Kaiser Property, as reasonably necessary to inspect, repair, replace and maintain the Water Wells and Facilities in accordance with the terms hereof. Except as otherwise provided herein, Buyer makes no warranty as to the quality, quantity or potability of the water being drawn from the Water Wells.

3. Use of Buyer's Easement. Buyer's Easement shall include (i) a non-exclusive right to the use of the Facilities located on Seller's Property and (ii) a right to enter upon Seller's Property as reasonably necessary to inspect, repair, replace and maintain the Facilities in accordance with the terms hereof.

4. Maintenance and Repair. Buyer shall maintain the Water Wells and Facilities subject to Seller's Easement in good repair and condition, and shall replace, repair and maintain the Water Wells and Facilities as necessary to accommodate the permitted uses under this Agreement and all the permitted users of the Water Wells. In the event Buyer fails to maintain the Water Wells and Facilities in such condition, Seller, after the giving of notice to Buyer of such failure and the affording to Buyer of a reasonable opportunity to cure the same, shall have the right, but

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without any obligation, to enter upon Buyer's Property with workers, equipment and materials to repair, replace or maintain the Water Wells and Facilities as Seller deems necessary to cause the Water Wells and Facilities to be returned to the condition required hereunder, and in such event all costs reasonably incurred by Seller shall be reimbursed by Buyer to Seller immediately upon demand.

5. Restrictions. During the term of the easements granted herein, the parties shall not use, nor permit use of their respective property in any manner that would interfere with permitted uses hereunder, nor shall Buyer or any person or entity claiming through Buyer, draw from the Water Wells subject to the Easement amounts of water that would impair Seller's ability to receive a commercially-reasonable volume of water, or otherwise interfere with or interrupt Seller's access to the Facilities. Except as otherwise provided herein, Buyer makes no warranty as to the current quality, quantity or potability of the water being drawn from the Water Wells.

6. Payment. Seller shall pay for water drawn from the water supply subject to the Easement at the following rate: a flat fee of One Hundred Dollars ($100) per month.

7. Alterations. Buyer shall be permitted to move or replace the existing pipelines or other portion of the Facilities, or to drill one or more replacement wells for the existing water supply, or to provide water from substitute wells on Buyer's Property, provided any such alterations are made at Buyer's sole

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cost and expense and do not disrupt or diminish Seller's water supply including, without limitation, water quality and availability of adequate water during drought periods, or otherwise adversely affect Seller's rights hereunder.

8. Covenants Run With the Land. All of the provisions, agreements, rights, powers, covenants, conditions and obligations contained in this Agreement shall be binding upon and inure to the benefit of the parties hereto, their respective heirs, successors (by merger, consolidation, or otherwise), assigns, devisees, administrators, representatives, and all other persons acquiring any interest in the respective Buyer's Property and Seller's Property, whether by operation of law or in any manner whatsoever. All of the provisions of this Agreement shall be equitable servitudes and covenants running with the land pursuant to applicable law, including, without limitation, Section 1468 of the Civil Code of the State of California. This Agreement shall not be deemed to create in any third party any right or interest as a third-party beneficiary or otherwise, nor shall any person or entity other than Buyer and Seller or their successors-in-interest have any rights of consent or enforcement hereunder.

9. Termination. This Agreement and the rights and easements granted herein shall continue in full force and effect until such time as Seller gives written notice to Buyer that it no longer requires the use of the rights and Seller's Easement. In the event this Agreement shall be terminated, Seller shall at the

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request of Buyer execute and deliver to Buyer an agreement in recordable form evidencing such termination.

10. Cooperation. Buyer and Seller agree to take such other actions and to execute such other documents as may be necessary or appropriate to fully effectuate the intent and purpose of this Agreement.

11. Entire Agreement. This instrument contains the entire agreement between the parties relating to the rights herein granted and the obligations herein assumed. Any oral representations or modifications concerning this Agreement shall be of no force or effect. This Agreement may be modified only by an instrument in writing executed by the parties hereto.

12. Attorneys' Fees. In the event of any controversy, claim or dispute relating to this Agreement, its interpretation, or the breach thereof, the prevailing party shall be entitled to recover from the other party reasonable expenses, attorneys' fees and costs.

13. Notices. All notices and other communications hereunder shall be in writing and shall be personally delivered or sent by first class, registered or certified United States mail, return receipt requested, postage prepaid, addressed as follows:

If to Buyer: Syar Industries, Inc.
275 Mini Drive
Vallejo, California 94590
Attention: Mr. C. M. Syar

If to Seller: Dillingham Heavy Construction, Inc.
7100 Johnson Drive
Pleasanton, California 94566
Attention: Bruce W. Ashford, Esq.

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or such other address as either party may from time to time specify in writing to the other. All such notices and other communications if sent by mail shall be deemed to have been given three (3) business days after the date of such mailing.

14. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of California.

15. Captions. The captions preceding the text of each paragraph of this Agreement are included only for convenience of reference and shall be disregarded in the interpretation of this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this instrument the day and year first above written.

BUYER: SVAR INDUSTRIES, INC.,
a California corporation

By _____
Its Chairman

SELLER: DILLINGHAM HEAVY CONSTRUCTION, INC.,
a Nevada Corporation

By _____
Its Vice President

DILLINGHAM CORPORATION,
a Hawaii corporation

By _____
Its Executive Vice President

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NAPA COUNTY

VOL 1431 PAGE 669

Acknowledgment - Corporation

State of Calbrnia }
County of San Francisco } ss.

On this 28th day of Feb, in the year 1986, before me Sharon Noah
(HERE INSERT THE NAME AND QUALITY OF THE OFFICER), personally appeared C.M. Syar, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person who executed the within instrument as ~~president (or secretary)~~ chairman or on behalf of the corporation therein named and acknowledged to me that the corporation executed it.

OFFICIAL SEAL
SHARON NOAH
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
SONOMA COUNTY
My Commission Expires July 14, 1986

Sharon Noah
Notary Public for California

ATTORNEYS PRINTING SUPPLY FORM NO. 7
CC 1190 11801 (REV. 1982)

BMI DR10002

STATE OF California)
) ss.
COUNTY OF San Francisco)

On this 28th day of Feb, 1986, before me, a Notary Public in and for said State, duly commissioned and sworn, personally appeared G. B. Casten, personally known to me (or provided to me on the basis of satisfying evidence) to be the Vice-President of DILLINGHAM HEAVY CONSTRUCTION, INC. a Nevada corporation, the officer executing the within instrument, and acknowledged to me that such corporation executed the within instrument pursuant to its bylaws or a resolution of its board of directors, and acknowledged to me that he subscribed his name on the within instrument.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal on the date in this certificate first above written.

OFFICIAL SEAL
SHARON NOAH
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
SONOMA COUNTY
My Commission Expires July 14, 1986

Sharon Noah
Notary Public

STATE OF California)
) ss.
COUNTY OF San Francisco)

On this 28th day of Feb, 1986, before me, a Notary Public in and for said State, duly commissioned and sworn, personally appeared Gregg W. Robertson, personally known to me (or provided to me on the basis of satisfying evidence) to be the Executive Vice-President of DILLINGHAM CORPORATION, a Hawaii corporation, the officer executing the within instrument, and acknowledged to me that such corporation executed the within instrument pursuant to its bylaws or a resolution of its board of directors, and acknowledged to me that he subscribed his name on the within instrument.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal on the date in this certificate first above written.

OFFICIAL SEAL
SHARON NOAH
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
SONOMA COUNTY
My Commission Expires July 14, 1986

Sharon Noah
Notary Public

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SCHEDULE A

LEGAL DESCRIPTION

ALL THAT REAL PROPERTY SITUATE IN THE COUNTY OF NAPA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

UNINCORPORATED AREA - COUNTY OF NAPA

PARCEL ONE:

COMMENCING AT A POINT ON THE SOUTHERLY LINE OF THE PROPERTY FORMERLY OF THE STATE OF CALIFORNIA (NAPA STATE HOSPITAL), WHICH LINE IS THE NORTHERLY LINE OF THE FORMER LANDS OF MERCANTILE TRUST COMPANY, HEREINAFTER DESCRIBED, AND AT THE NORTHEAST CORNER OF A TRACT OF LAND CONVEYED TO THE MERCANTILE TRUST COMPANY BY SAN FRANCISCO, NAPA & CALISTOGA RAILWAY BY DEED DATED DECEMBER 8, 1923 AND RECORDED JANUARY 14, 1924, IN VOLUME 2 OF OFFICIAL RECORDS, PAGE 431, NAPA COUNTY RECORDS; RUNNING THENCE ALONG THE EAST SIDE OF THE SAID LAST MENTIONED TRACT AND ON THE WEST SIDE OF THE RIGHT OF WAY OF SAN FRANCISCO, NAPA & CALISTOGA RAILWAY, SOUTH ONE (1) DEGREE FORTY-FIVE (45) MINUTES WEST, SIXTY-SEVEN (67) FEET, SIX (6) INCHES; THENCE CONTINUING ALONG SAID COURSE AND THE WESTERLY BOUNDARY OF SAID RIGHT OF WAY OF SAID SAN FRANCISCO, NAPA & CALISTOGA RAILWAY, ONE HUNDRED NINETY-EIGHT (198) FEET TO A POINT; THENCE SOUTH SIXTY-ONE AND THREE QUARTERS (61-3/4) DEGREES WEST FORTY-SEVEN AND 48/100 (47.48) CHAINS TO A STAKE ON THE EASTERLY LINE OF THE RIGHT OF WAY OF THE NAPA BRANCH OF THE SOUTHERN PACIFIC RAILROAD, SAID STAKE BEING SIX HUNDRED FOUR (604) FEET NORTHERLY FROM THE POINT OF INTERSECTION OF THE EASTERLY LINE OF SAID RIGHT OF WAY WITH THE SOUTHERLY LINE OF A CERTAIN ONE HUNDRED TWENTY-NINE (129) ACRE TRACT OF LAND DESCRIBED IN DEED DATED JULY 9, 1920, FROM FEDELE MARTINELLI AND WIFE TO MERCANTILE TRUST COMPANY, RECORDED JULY 9, 1920, IN VOLUME 126 OF DEEDS, PAGE 497, RECORDS OF SAID COUNTY OF NAPA; THENCE WESTERLY AND ACROSS SAID RAILROAD RIGHT OF WAY AT A RIGHT ANGLE THERETO SIXTY (60) FEET TO THE WESTERLY LINE THEREOF; THENCE SOUTH ONE-HALF (1/2) DEGREE, EAST ALONG THE WESTERLY LINE OF SAID RIGHT OF WAY NINETY-FIVE (95) FEET TO THE INTERSECTION OF A CROSS FENCE; THENCE ALONG SAID CROSS FENCE NORTH EIGHTY-THREE (83) DEGREES WEST ONE AND 21/100 (1.21) CHAINS MORE OR LESS TO THE EASTERLY BANK OF THE SLOUGH KNOWN AS THE TULOCAY SLOUGH; THENCE NORTHEASTERLY UP THE EASTERN BANK OF SAID SLOUGH AND FOLLOWING THE MEANDERINGS THEREOF TO THE END OF A FENCE ON THE SOUTHERN LINE OF THE PREMISES BELONGING TO THE STATE OF CALIFORNIA AND HEREINBEFORE REFERRED TO, AND THENCE ALONG THE SOUTHERN LINE OF SAID LAST NAMED PREMISES, SOUTH SEVENTY-SIX (76) DEGREES EAST THIRTEEN AND 20/100 (13.20) CHAINS AND NORTH SEVENTY (70) DEGREES EAST ELEVEN AND 87/100 (11.87) CHAINS, MORE OR LESS, TO THE POINT OF COMMENCEMENT.

(Continued)

BMI DR10002

BEING A PORTION OF THE TULOCAY RANCHO AND ALSO A PORTION OF SWAMP AND OVERFLOWED LAND SURVEY NUMBER 12, EXCEPTING THEREFROM, HOWEVER, ALL THAT PORTION THEREOF WITHIN THE RIGHT OF WAY OF THE SOUTHERN PACIFIC RAILROAD.

PARCEL TWO:

COMMENCING AT A POINT ON THE EASTERLY BANK OF THE SLOUGH KNOWN AS THE TULOCAY SLOUGH AT THE SOUTHWESTERLY CORNER OF THE THIRTY-NINE AND 90/100 (39.90) ACRE TRACT OF LAND CONVEYED BY MERCANTILE TRUST COMPANY OF CALIFORNIA TO BASALT ROCK COMPANY, A CORPORATION, BY DEED DATED MARCH 1, 1926, RECORDED MARCH 1, 1926, IN BOOK 16 OF OFFICIAL RECORDS, PAGE 248, RECORDS OF NAPA COUNTY; THENCE FROM SAID POINT ALONG THE SOUTHERLY BOUNDARY OF SAID THIRTY-NINE AND 90/100 (39.90) ACRE TRACT SOUTH EIGHTY-THREE (83) DEGREES EAST ONE AND TWENTY-ONE HUNDREDTHS (1.21) CHAINS MORE OR LESS, TO THE WESTERLY LINE OF THE RIGHT OF WAY OF THE NAPA VALLEY BRANCH OF THE SOUTHERN PACIFIC RAILROAD; THENCE SOUTH ALONG SAID RAILROAD RIGHT OF WAY THREE HUNDRED FIFTY-SEVEN (357) FEET TO AN IRON STAKE DRIVEN IN THE GROUND; THENCE AT A RIGHT ANGLE AND ALONG AN EXISTING FENCE WEST THREE HUNDRED TWENTY-SEVEN (327) FEET TO THE EASTERLY BANK OF SAID TULOCAY SLOUGH, (THE LAST NAMED LINE BEING APPROXIMATELY ONE HUNDRED FOUR (104) FEET, MEASURED AT A RIGHT ANGLE TO THE SAID LINE, NORTHERLY FROM THE NORTH SIDE OF THE MAIN PORTION OF THE RANCH HOUSE ON THE PROPERTY ON APRIL 14, 1926; THENCE NORTHEASTERLY ALONG THE EASTERLY BANK OF SAID SLOUGH AND FOLLOWING THE MEANDERS THEREOF ABOUT FOUR HUNDRED FORTY-THREE (443) FEET TO THE SAID POINT OF COMMENCEMENT, BEING A PORTION OF 'SWAMP AND OVERFLOWED LAND SURVEY NO. 12, NAPA COUNTY'.

PARCEL THREE:

COMMENCING AT A POINT FORMED BY THE INTERSECTION OF THE SOUTHERN LINE OF THE ONE AND FIFTY-HUNDREDTHS (1.50) ACRE TRACT OF LAND CONVEYED BY THE MERCANTILE TRUST COMPANY OF CALIFORNIA TO THE BASALT ROCK COMPANY BY DEED OF RECORD IN VOLUME 18 OF OFFICIAL RECORDS, PAGE 273, NAPA COUNTY RECORDS, WITH THE WESTERN LINE OF THE SOUTHERN PACIFIC RAILROAD COMPANY RIGHT OF WAY, SAID POINT OF COMMENCEMENT BEING ALSO THE SOUTHEAST CORNER OF SAID ONE AND FIFTY-HUNDREDTHS (1.50) ACRE TRACT; RUNNING THENCE ALONG THE WESTERN LINE OF SAID RAILROAD RIGHT OF WAY DUE SOUTH ONE HUNDRED AND THIRTY-ONE FEET (131.00); THENCE ON A LINE WHICH IS TWENTY-FIVE (25) FEET NORTH OF AND PARALLEL TO THE NORTHERN LINE PRODUCED OF THE THREE AND SEVENTY-NINE HUNDREDTHS (3.79) ACRE TRACT OF LAND CONVEYED BY MRS. MARY PEDROTTI, ET AL TO THE MERCANTILE TRUST COMPANY OF CALIFORNIA BY DEED OF RECORD IN VOLUME 128 OF DEEDS, PAGE 378, NAPA COUNTY RECORDS, SOUTH 86 DEGREES 32 MINUTES WEST FOUR HUNDRED AND EIGHTEEN (418.00) FEET, MORE OR LESS, TO THE MEAN HIGH TIDE LINE OF TULOCAY SLOUGH; THENCE ALONG SAID MEAN HIGH TIDE LINE

(Continued)

OF SLOUGH NORTH 29 DEGREES 40 MINUTES EAST ONE HUNDRED AND EIGHTY-ONE (181.00) FEET TO THE SOUTHWEST CORNER OF THE AFORESAID ONE AND FIFTY-HUNDREDTHS (1.50) ACRE TRACT; THENCE ALONG THE SOUTHERN LINE OF SAID ONE AND FIFTY-HUNDREDTHS (1.50) ACRE TRACT DUE EAST THREE HUNDRED AND TWENTY-SEVEN (327.00) FEET TO THE POINT OF COMMENCEMENT.

BEING A PORTION OF SWAMP AND OVERFLOW SURVEY NO. 12, NAPA COUNTY, CALIFORNIA.

PARCEL FOUR:

COMMENCING AT A POINT ON THE WESTERLY LINE OF THE SOUTHERN PACIFIC RAILROAD COMPANY RIGHT OF WAY SAID POINT BEING SOUTHEASTERN CORNER OF THE ONE AND TWENTY-TWO ONE-HUNDREDTHS (1.22) ACRE TRACT OF LAND CONVEYED BY THE AMERICAN TRUST COMPANY TO THE BASALT ROCK COMPANY, INC., BY DEED OF RECORD IN VOLUME 98 OF OFFICIAL RECORDS, PAGE 153, NAPA COUNTY RECORDS; RUNNING THENCE ALONG THE WESTERLY LINE OF SAID RAILROAD RIGHT OF WAY DUE SOUTH NINE HUNDRED AND FORTY (940.00) FEET, THENCE DUE WEST FOUR HUNDRED AND EIGHTY (480.00) FEET; THENCE SOUTH 64 DEGREES 33' WEST TWO HUNDRED FIFTY-TWO AND SIXTY-FOUR ONE-HUNDREDTHS (252.64) FEET; THENCE SOUTH 25 DEGREES 42' WEST ONE HUNDRED AND TWENTY (120.00) FEET; THENCE NORTH 64 DEGREES 17' WEST ONE HUNDRED AND TEN (110.00) FEET MORE OR LESS, TO THE MEAN HIGH TIDE LINE OF THE EASTERLY BANK OF NAPA RIVER; THENCE ALONG THE MEAN HIGH TIDE LINE OF SAID RIVER AND ALSO OF THE TULOCAY SLOUGH NORTH 18 DEGREES 51' EAST TWO HUNDRED FIFTY-ONE AND TEN ONE-HUNDREDTHS (251.10) FEET; NORTH 11 DEGREES 58' EAST TWO HUNDRED TWENTY-ONE AND EIGHTY ONE-HUNDREDTHS (221.80) FEET; NORTH 2 DEGREES 12' EAST TWO HUNDRED EIGHTY-SIX AND FORTY ONE-HUNDREDTHS (286.40) FEET; NORTH 14 DEGREES 54' EAST SEVENTY-NINE (79.00) FEET; NORTH 61 DEGREES 08' EAST ONE HUNDRED EIGHTY-EIGHT AND FORTY ONE-HUNDREDTHS (188.40) FEET AND NORTH 34 DEGREES 23' EAST TWO HUNDRED ELEVEN AND TEN ONE-HUNDREDTHS (211.10) FEET TO THE SOUTHWESTERN CORNER OF THE AFORESAID ONE AND TWENTY-TWO ONE-HUNDREDTHS (1.22) ACRE TRACT; THENCE ALONG THE SOUTHERLY LINE OF SAID ONE AND TWENTY-TWO ONE-HUNDREDTHS (1.22) ACRE TRACT NORTH 86 DEGREES 22' EAST FOUR HUNDRED AND EIGHTEEN (418.00) FEET TO THE POINT OF COMMENCEMENT.

BEING A PORTION OF SWAMP AND OVERFLOW SURVEYS NUMBERS 12 AND 13, NAPA COUNTY, CALIFORNIA.

EXCEPTING FROM PARCEL FOUR ABOVE ALL THAT PORTION DESCRIBED IN THE DEED FROM BASALT ROCK COMPANY, INC. TO KAISER STEEL CORPORATION RECORDED MAY 9, 1955 IN BOOK 474 PAGE 240, OFFICIAL RECORDS, AS INSTRUMENT NO. B 8323, NAPA COUNTY RECORDS.

PARCEL FIVE:

(Continued)

BMI DR10002

A STRIP OF LAND 60 FEET WIDE AS DESCRIBED IN THAT DEED FROM THE UNITED STATES OF AMERICA TO BASALT ROCK COMPANY, INC., RECORDED NOVEMBER 6, 1945 IN BOOK 232 PAGE 376, OFFICIAL RECORDS AS INSTRUMENT NO. E 0966, NAPA COUNTY RECORDS.

APN 46-370-01 AND 46-370-02

PARCEL SIX:

BEGINNING AT THE SOUTHWESTERLY CORNER OF THAT CERTAIN 55.2245 ACRE TRACT OF LAND CONVEYED TO J.E. DAVIES AND E. MACGREGOR DAVIES BY UNITED STATES PUBLIC HOUSING ADMINISTRATION BY DEED RECORDED OCTOBER 4, 1960, IN VOLUME 619 OF OFFICIAL RECORDS AT PAGE 364 OF OFFICIAL NAPA COUNTY RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF THE COUNTY OF NAPA, STATE OF CALIFORNIA, THENCE NORTH 86 DEGREES 19' 30" EAST, 472.14 FEET ALONG THE SOUTHERLY BOUNDARY OF SAID PARCEL TO THE TRUE POINT OF BEGINNING OF THE HEREINAFTER DESCRIBED PARCEL OF LAND.

BEGINNING AT THE POINT ABOVE DESCRIBED AS THE TRUE POINT OF BEGINNING, THENCE NORTH 86 DEGREES 19' 30" EAST, 60.12 FEET ALONG THE SOUTHERLY LINE OF THE ABOVE 55.2245 ACRE TRACT OF LAND; THENCE LEAVING SAID SOUTHERLY BOUNDARY NORTH 0 DEGREES 05' 30" WEST, 691.38 FEET; THENCE CURVING TO THE RIGHT WITH A RADIUS OF 497.93 FEET FROM A TANGENT THAT BEARS NORTH 0 DEGREES 05' 30" WEST FOR A DISTANCE OF 546.69 FEET, MORE OR LESS, TO THE NORTHERLY LINE OF SAID 55.2245 ACRE PARCEL; THENCE SOUTH 62 DEGREES 35' 08" WEST, 361.46 FEET ALONG SAID NORTHERLY LINE; THENCE CURVING TO THE RIGHT WITH A RADIUS OF 13.0 FEET FROM A TANGENT THAT BEARS NORTH 62 DEGREES 35' 08" EAST FOR A DISTANCE OF 33.69 FEET; THENCE CURVING TO THE LEFT WITH A RADIUS OF 517.93 FEET FROM A TANGENT THAT BEARS SOUTH 30 DEGREES 43' WEST FOR A DISTANCE OF 306.0 FEET; THENCE SOUTH 0 DEGREES 05' 30" EAST, 595.16 FEET TO THE POINT OF BEGINNING.

APN 46-370-05

PARCEL SEVEN:

COMMENCING ON THE EAST LINE OF THE RIGHT OF WAY OF THE SOUTHERN PACIFIC RAILROAD AT THE POINT WHERE THE NORTH LINE OF THE LAND NOW OR FORMERLY OF MRS. MARY PEDROTTI ETAL, INTERSECTS SAID EAST LINE OF THE RIGHT OF WAY; THENCE ALONG THE NORTH LINE OF SAID LANDS NOW OR FORMERLY OF MARY PEDROTTI, NORTH 85 DEGREES EAST 2679 FEET TO THE NORTHWEST CORNER OF THE RIGHT OF WAY TRACT OF THE LAND CONVEYED BY VALENTINE NATHANAY TO THE VALLEJO BENECIA AND NAPA VALLEY RAILWAY COMPANY, BY DEED DATED JANUARY 9, 1904 AND OF RECORD IN BOOK 77 OF DEEDS, AT PAGE 261, NAPA COUNTY RECORDS; THENCE SOUTH 1-3/4 DEGREES WEST ALONG THE WEST LINE OF SAID RAILROAD RIGHT OF WAY 60 FEET; THENCE SOUTH 85 1/2 DEGREES WEST ALONG A LINE PARALLEL TO AND 60 FEET SOUTHERLY FROM SAID NORTH LINE OF PEDROTTI 2677 FEET

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BMI DR10002

THE SAID EAST LINE OF THE RIGHT OF WAY OF THE SOUTHERN PACIFIC RAILROAD; THENCE NORTH 8-1/4 DEGREES WEST ALONG SAID EAST LINE, TO THE PLACE OF BEGINNING.

EXCEPTING FROM PARCEL SEVEN ABOVE ALL THAT PORTION DESCRIBED IN THE DEED FROM BASALT ROCK COMPANY, INC. TO THE COUNTY OF NAPA RECORDED MAY 7, 1969 IN BOOK 807 PAGE 250 OFFICIAL RECORDS, AS INSTRUMENT NO. AN 8347, NAPA COUNTY RECORDS.

APN 46-400-07

PARCEL EIGHT:

PARCEL C, AS SHOWN ON THE MAP ENTITLED, "PARCEL MAP OF A PORTION OF THE LANDS OF BASALT ROCK COMPANY, INC., BOOK 148 OFFICIAL DEEDS, PAGE 272, NAPA COUNTY RECORDS", FILED MARCH 10, 1981 IN BOOK 12 OF PARCEL MAPS, AT PAGE 20, IN THE OFFICE OF THE RECORDER OF NAPA COUNTY, CALIFORNIA.

APN 46-370-22

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BMI DR10002

PARCEL TEN:

COMMENCING AT THE NORTHEAST CORNER OF PARCEL 'A' AS SHOWN ON THE MAP ENTITLED, 'PARCEL MAP OF A PORTION OF THE LANDS OF BASALT ROCK COMPANY, INC.', FILED MARCH 10, 1981 IN BOOK 12 OF PARCEL MAPS AT PAGE 20; THENCE SOUTH 84 DEGREES 09' 28'' EAST 772.33 FEET TO THE TRUE POINT OF COMMENCEMENT, SAID POINT BEING A POINT ON THE NORTHERN LINE OF THE PARCEL OF LAND AS DESCRIBED IN THE DEED TO BASALT ROCK COMPANY, INC., RECORDED OCTOBER 29, 1923, IN BOOK 140 OF OFFICIAL RECORDS, AT PAGE 272; THENCE FROM SAID TRUE POINT OF COMMENCEMENT AND RUNNING ALONG SAID NORTHERN LINE OF SAID LAST MENTIONED PARCEL SOUTH 84 DEGREES 15' EAST 2760.78 FEET TO THE NORTHEAST CORNER OF SAID PARCEL OF LAND TO BASALT ROCK COMPANY, INC., AS DESCRIBED IN THE DEED RECORDED OCTOBER 29, 1923, IN BOOK 140 OF OFFICIAL RECORDS AT PAGE 272; THENCE ALONG THE EAST LINE OF SAID LANDS OF BASALT ROCK COMPANY, INC., SOUTH 2892.78 FEET TO THE SOUTHEAST CORNER THEREOF; THENCE LEAVING SAID EAST LINE AND CONTINUING ALONG ARROYO CREEK THE FOLLOWING DISTANCES AND COURSES: SOUTH 73 DEGREES 00' WEST 198 FEET, NORTH 73 DEGREES 00' WEST 87.78 FEET, SOUTH 76 DEGREES 15' WEST 99 FEET, WEST 66 FIET, SOUTH 72 DEGREES 30' WEST 231 FEET, WEST 165 FEET, NORTH 73 DEGREES 00' WEST 198 FEET, NORTH 61 DEGREES 00' WEST 238.80 FEET, SOUTH 36 DEGREES 45' WEST 82.50 FEET, NORTH 84 DEGREES 34' WEST 627 FEET, NORTH 62 DEGREES 30' WEST 429 FEET, NORTH 37 DEGREES 39' WEST 277.96 FEET, NORTH 26 DEGREES 00' WEST 330 FEET, NORTH 131 FEET, NORTH 45 DEGREES 00' WEST 198 FEET NORTH 71 DEGREES 30' WEST 363 FEET, NORTH 65 DEGREES 30' WEST 462 FEET, SOUTH 71 DEGREES 00' WEST 594 FEET, NORTH 58 DEGREES 15' WEST 140 FEET MORE OR LESS TO A 1/2'' REBAR AND TAG STAMPED L.S. 4366 MARKING THE MOST EASTERN CORNER OF PARCEL 'C' AS SHOWN ON THE PARCEL MAP ENTITLED, 'PARCEL MAP A DIVISION OF A PORTION OF THE LANDS OF BASALT ROCK COMPANY, INC., FILED MARCH 10, 1981 IN BOOK 12 OF PARCEL MAPS AT PAGE 20. THENCE ALONG THE EASTERLY LINE OF SAID PARCEL 'C' THE FOLLOWING COURSES AND DISTANCES NORTH 28 DEGREES 11' 09'' WEST 44.58 FEET, SOUTH 62 DEGREES 24' 14'' WEST 15.10 FEET, NORTH 27 DEGREES 35' 46'' WEST 134.50 FEET TO A POINT ON THE SOUTHERN LINE OF THE 60 FOOT RIGHT OF WAY AS SHOWN ON SAID MAP. THENCE ALONG THE SOUTHERLY LINE OF SAID RIGHT OF WAY (BEING THE NORTHERLY LINE OF SAID PARCEL 'C') THE FOLLOWING COURSES AND DISTANCES; ALONG A CURVE TO THE LEFT WITH A RADIUS OF 190.00 FEET THROUGH A CENTRAL ANGLE OF 22 DEGREES 39' 06'' A DISTANCE OF 75.12 FEET TO A POINT OF REVERSE CURVE WITH A RADIUS OF 1010.00 FEET THROUGH A CENTRAL ANGLE OF 15 DEGREES 21' 05'' A DISTANCE OF 270.61 FEET TO A POINT OF REVERSE CURVE WITH A RADIUS OF 100.00 FEET THROUGH A CENTRAL ANGLE OF 84 DEGREES 33' 53'' A DISTANCE OF 147.59 FEET, THENCE SOUTH 25 DEGREES 17' 00'' WEST 96.40 FEET TO THE INTERSECTION WITH THE EASTERLY LINE OF STATE HIGHWAY 29 AND 12 AS SHOWN ON SAID PARCEL MAP. THENCE ALONG SAID EASTERLY LINE OF SAID STATE HIGHWAY IN A NORTHERLY DIRECTION ALONG A CURVE TO THE LEFT WITH A RADIUS OF 10,080.00 FEET THROUGH A CENTRAL ANGLE OF 00 DEGREES 52' 39'' A DISTANCE OF 154.35 FEET TO A 1/2'' REBAR AND TAG STAMPED L.S. 4366 MARKING THE SOUTHWEST CORNER OF PARCEL 'A' AS SHOWN ON THE PARCEL MAP FILED DECEMBER 21, 1979 IN BOOK 11 OF PARCEL MAPS AT PAGE 11. THENCE ALONG THE SOUTHERN LINE OF SAID LAST MENTIONED PARCEL 'A' THE FOLLOWING COURSES AND DISTANCES; ALONG A CURVE TO THE LEFT WITH A RADIUS OF 40.00 FEET THROUGH A CENTRAL ANGLE OF 64 DEGREES 10' 03'' A DISTANCE OF 44.80 FEET, SOUTH 68 DEGREES 00' 00'' EAST 159.43 FEET, ALONG A CURVE TO THE LEFT WITH A RADIUS OF 950.00 FEET THROUGH A CENTRAL ANGLE OF 15

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BMI DR10002

DEGREES 21' 05'' A DISTANCE OF 254.53 FEET TO A POINT OF BEGINNING OF A REVERSE CURVE WITH A RADIUS OF 250.00 FEET THROUGH A CENTRAL ANGLE OF 31 DEGREES 04' 47'' A DISTANCE OF 135.61 FEET TO THE MOST SOUTHERN CORNER OF SAID PARCEL 'A' (11PM 11). THENCE CONTINUING ALONG SAID CURVE WITH A RADIUS OF 250.00 FEET THROUGH A CENTRAL ANGLE OF 00 DEGREES 21' 08'' A DISTANCE OF 1.56 FEET, THENCE ALONG A CURVE TO THE LEFT WITH A RADIUS OF 250.00 FEET THROUGH A CENTRAL ANGLE OF 49 DEGREES 56' 44'' A DISTANCE OF 217.93 FEET TO THE MOST SOUTHERN CORNER OF PARCEL 'A' AS SHOWN ON THE PARCEL MAP FILED MARCH 10, 1981 IN BOOK 12 OF PARCEL MAPS AT PAGE 20. THENCE ALONG THE SOUTHERN

LINE OF SAID LAST MENTIONED PARCEL THE FOLLOWING COURSES AND DISTANCES: NORTH 78 DEGREES 08' 07'' EAST 328.15 FEET AND NORTH 69 DEGREES 03' 23'' EAST 313.99 FEET TO THE SOUTHEAST CORNER OF SAID LAST MENTIONED PARCEL 'A', NORTH 71 DEGREES 00' 52'' EAST 203.44 FEET TO A 1/2'' REBAR AND TAG STAMPED L.S. 4366; THENCE NORTH 48 DEGREES 23' 30'' EAST 122.99 FEET TO A 1/2'' REBAR AND TAG STAMPED L.S. 4366; THENCE NORTH 23 DEGREES 43' 01'' EAST 147.20 FEET TO A 1/2'' REBAR AND TAG STAMPED L.S. 4366; THENCE NORTH 16 DEGREES 55' 33'' EAST 470.36 FEET TO A 1/2'' REBAR AND TAG STAMPED L.S. 4366; THENCE NORTH 01 DEGREES 02' 29'' EAST 416.30 FEET TO A 1/2'' REBAR AND TAG STAMPED L.S. 4366; THENCE DUE NORTH 531.75 FEET TO THE TRUE POINT OF COMMENCEMENT.

PORTION OF APN 46-370-23

PARCEL ELEVEN:

THE NORTHEAST QUARTER OF SECTION TWENTY FOUR (24), IN TOWNSHIP FIVE (5) NORTH, RANGE FOUR (4) WEST, MOUNT DIABLO BASE AND MERIDIAN ACCORDING TO THE OFFICIAL PLAT THEREOF. EXCEPTING THEREFROM, HOWEVER, THAT CERTAIN 6.53 ACRE TRACT HERETOFORE CONVEYED TO THE "BOARD OF TRUSTEES OF THE NAPA STATE ASYLUM FOR THE INSANE", A CORPORATION, BY DEED OF RECORD IN LIBER 56 OF DEEDS, PAGE 299.

APN 46-370-11

PARCEL TWELVE:

COMMENCING AT A POINT IN THE CENTER OF SECTION TWENTY-FOUR (24) IN TOWNSHIP FIVE (5) NORTH, RANGE FOUR (4) WEST, MOUNT DIABLO BASE AND MERIDIAN, AND RUNNING THENCE SOUTHERLY ALONG THE NORTH AND SOUTH LINE RUNNING THROUGH THE CENTER OF SAID SECTION TWENTY-FOUR (24), 900 FEET; THENCE NORTHEASTERLY

(Continued)

BMI DR10002

IN A DIRECT LINE TO A POINT ON THE NORTHERN LINE OF THE SOUTHEAST QUARTER OF SAID SECTION TWENTY-FOUR (24) DISTANT THEREON 600 FEET EAST OF THE POINT OF COMMENCEMENT AND THENCE WEST ALONG THE NORTHERN LINE OF SAID SOUTHEAST QUARTER OF SAID SECTION TWENTY-FOUR (24), 600 FEET TO THE POINT OF COMMENCEMENT.

BEING A PORTION OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION TWENTY-FOUR (24) IN TOWNSHIP FIVE (5) NORTH, RANGE FOUR (4) WEST, MOUNT DIABLO BASE AND MERIDIAN.

APN 46-370-13

PARCEL THIRTEEN:

BEING PORTIONS OF SECTIONS 19 AND 30 TOWNSHIP 5 NORTH RANGE 3 WEST AND PORTIONS OF SECTIONS 24 AND 25, TOWNSHIP 5 NORTH RANGE 4 WEST, MDB & M, DESCRIBED AS FOLLOWS:

BEGINNING AT THE 1/4 SECTION CORNER ON THE EASTERN LINE OF SECTION 24, TOWNSHIP 5 NORTH, RANGE 4 WEST, MOUNT DIABLO BASE AND MERIDIAN; THENCE WESTERLY ALONG THE NORTHERLY LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 24, 2645.22 FEET TO THE MOST EASTERN CORNER OF THE 6.2 ACRE TRACT OF LAND DESCRIBED IN THE DEED TO BASALT ROCK COMPANY, A CORPORATION, BY DEED RECORDED FEBRUARY 15, 1928 IN BOOK 89 OF OFFICIAL RECORDS, PAGE 429, OF NAPA COUNTY, CALIFORNIA; THENCE SOUTHWESTERLY ALONG THE SOUTHEASTERN LINE OF SAID 6.2 ACRE TRACT TO THE MOST SOUTHERN CORNER THEREOF; THENCE SOUTHERLY ALONG THE WESTERN LINE OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 24 ABOVE REFERRED TO; TO THE SOUTHWESTERN CORNER THEREOF; THENCE EAST TO THE SOUTHEASTERN CORNER OF SAID NORTHWEST QUARTER OF THE SOUTHEAST QUARTER; THENCE SOUTH, ALONG THE WEST LINE OF THE EAST ONE-HALF OF THE EAST ONE-HALF OF SAID SECTION 24 AND THE EAST ONE-HALF OF THE EAST ONE-HALF OF SECTION 25, TOWNSHIP 5 NORTH, RANGE 4 WEST MOUNT DIABLO BASE AND MERIDIAN, 3951.54 FEET, MORE OR LESS, TO THE NORTH CO-ORDINATE LINE 213,000 ACCORDING TO THE CALIFORNIA CO-ORDINATE SYSTEM ZONE II. SAID NORTH CO-ORDINATE LINE LIES 8.50 FEET, MORE OR LESS, NORTH OF THE SOUTHERLY LINE OF THE NORTHEAST QUARTER OF SAID SECTION 25; THENCE EAST ALONG SAID NORTH CO-ORDINATE LINE 1330.81 FEET TO THE EAST CO-ORDINATE LINE 1,929,900 OF SAID ZONE II; THENCE NORTH 900.60 FEET; THENCE EAST 256.80 FEET; THENCE NORTH 47 DEGREES EAST 457.00 FEET; THENCE NORTH 57 DEGREES EAST 216.00 FEET; THENCE NORTH 41 DEGREES 30' EAST 770.80 FEET; THENCE NORTH 78 DEGREES EAST 588.00 FEET; THENCE EAST 676.28 FEET; THENCE NORTH 583.20 FEET, MORE OR LESS, TO THE COMMON LINE BETWEEN SECTION 19 AND 30 IN TOWNSHIP 5 NORTH RANGE 3 WEST, MDB & M; THENCE WESTERLY ALONG SAID COMMON LINE, A PORTION OF WHICH IS ALSO THE SOUTHERN LINE OF THE PARCEL OF LAND DISCRIBED IN THE DEED TO BENO SEGHETTI, ETAL, RECORDED JULY 26, 1951 IN BOOK 369 OF OFFICIAL RECORDS, PAGE 320, NAPA COUNTY RECORDS; TO THE INTERSECTION THEREOF WITH THE EXISTING STONE FENCE REFERRED TO IN THE DEED TO ROBERT SHERRY IN BOOK

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BMI DR10002

L OF DEEDS, PAGE 250, NAPA COUNTY RECORDS; SAID POINT OF INTERSECTION BEING ALSO THE MOST EASTERN CORNER OF THE 48 ACRE TRACT OF LAND DESCRIBED IN THE DEED TO SHEEHY ABOVE REFERRED TO; THENCE NORTHWESTERLY ALONG THE STONE FENCE BEING THE SOUTHWESTERN LINE OF THE PARCEL OF LAND DESCRIBED IN THE DEED TO SECHETTI, ETAL, ABOVE REFERRED TO; TO THE EASTERN LINE OF SECTION 24, BEING THE WESTERN LINE OF SECHETTI, PARCEL; THENCE NORTHERLY ALONG LAST MENTIONED SECTION LINE TO THE POINT OF COMMENCEMENT.

APN'S 45-360-05, 46-370-19 AND 46-370-03

PARCEL FOURTEEN:

ALL THAT REAL PROPERTY SITUATE IN THE CITY OF NAPA, COUNTY OF NAPA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT ON THE SOUTHEASTERLY CORNER OF THE LANDS BELONGING NOW OR FORMERLY TO FRANCES M. CARAWAY AND JAMES M. CARAWAY, HER HUSBAND, LYING BETWEEN THE COUNTY ROAD LEADING TO THE NAPA CITY WATER WORKS AND NAPA RIVER, AND BOUNDED ON THE NORTH BY SARCOS CREEK, WHICH POINT OF BEGINNING IS ON THE WESTERLY LINE OF SAID COUNTY ROAD; THENCE ALONG THE SOUTHERLY LINE OF SAID TRACT BELONGING NOW OR FORMERLY TO SAID FRANCES M. CARAWAY AND JAMES M. CARAWAY, HER HUSBAND, SOUTH 89 DEGREES 15' WEST, 178.94 FEET TO THE CENTER OF NAPA RIVER; THENCE UP THE CENTER OF NAPA RIVER, AT RIGHT ANGLES, 8 FEET; THENCE BACK TO SAID COUNTY ROAD ON A LINE PARALLEL WITH THE FIRST LINE DESCRIBED, AT A UNIFORM DISTANCE OF 8 FEET THEREFROM, TO THE WESTERLY LINE OF SAID COUNTY ROAD; THENCE SOUTH 11 DEGREES WEST, 8 FEET TO THE POINT OF BEGINNING.

APN 52-060-02

PARCEL FIFTEEN:

INTENTIONALLY OMITTED

PARCEL SIXTEEN: A parcel of land circumscribed by a 20 feet radius circle surrounding an existing well, the center of which is located south 29 degrees 41 minutes east, 954.31 feet from the aforementioned point of commencement, together with the right to take water from the well situate on the above described premises and a right of way across the land hereby conveyed to the said well, including the right of laying, inspecting, repairing and replacing pipe lines for the purpose of taking water therefrom.

BMI DR10002

EXHIBIT B

PARCEL ONE:
Commencing at the most Southern corner of Parcel "A" as shown on the Parcel Map entitled, "Parcel Map a Division of a Portion of the Lands of Basalt Rock Company Inc", filed March 10, 1981 in Book 12 of Parcel Maps at page 20, Napa County Records; thence from said point of commencement and running along the Western line of said Parcel "A" hereinabove referred to the following courses and distances: North 09 deg. 03' 07" West 489.55 feet, South 80 deg. 56' 53" West 137.50 feet, North 09 deg. 03' 07" West 248.44 feet, North 80 deg. 56' 53" East 40.00 feet, North 09 deg. 03' 07" West 359.63 feet, South 80 deg. 56' 53" West 60.00 feet and North 09 deg. 03' 07" West 975.34 feet to the Northwest corner of said Parcel "A" hereinabove referred to; thence South 84 deg. 09' 28" East along the Northern line of said Parcel "A" a distance of 820.05 feet to the Northeastern corner of said Parcel "A"; thence continuing South 84 deg. 09' 28" East along a wire fence that is on the Northern line of the parcel of land as described in the Deed to Basalt Rock Company Inc., recorded October 29, 1923 in Book 140 of Deeds at page 272, a distance of 772.33 feet; thence leaving the Northern line of said parcel to Basalt Rock Company Inc., hereinabove referred to and running due South 531.75 feet to 1/2 inch rebar and tagged stamped L.S. 4366; thence South 01 deg. 02' 29" West 416.30 feet to a 1/2 inch rebar and tag stamped L.S. 4366; thence South 16 deg. 55' 33" West 470.36 feet to a 1/2 inch rebar and tag stamped L.S. 4366; thence South 23 deg. 43' 01" West 147.20 feet to a 1/2 inch rebar and tag stamped L.S. 4366; thence South 48 deg. 23' 50" West 122.99 feet to a 1/2 inch rebar and tag stamped L.S. 4366; thence South 71 deg. 00' 52" West 203.44 feet to the Southeast corner of Parcel "A" hereinabove referred to; thence along the Southern line of said Parcel "A" the following courses and distances: South 69 deg. 03' 23" West 313.99 feet and South 78 deg. 08' 07" West 328.15 feet to the point of commencement.

PARCEL TWO:
A non-exclusive easement for ingress, egress and public utilities over a strip of land, 60.00 feet wide, the Northerly line of which is described as follows:

COMMENCING at a point on the Easterly line of State Highways 12 and 29; said point being the most Northerly point of the parcel of land labeled "60 foot wide Road Easement 1.39 acres" as shown on the Parcel Map entitled, "Parcel Map Basalt Rock Company Inc.", filed October 9, 1980 in Book 11 of Parcel Maps at page 78, Napa County Records; thence from said point of commencement and running along the Northeasterly line of said 60 foot wide road easement the following courses and distances: along a curve to the left in an Easterly direction with a radius of 40.0 feet through a central angle of 64 deg. 10' 03" an arc distance of 44.80 feet, South 68 deg. 00' 00" East 159.43 feet along a curve to the left with a radius of 950.0 feet through a central angle of 15 deg. 21' 05" an arc distance of 254.53 feet to a point of reverse curve with a radius of 250.0 feet through a central angle of 31 deg. 25' 55" an arc distance of 137.15 feet to a point of reverse curve with a radius of 250.0 feet through a central angle of 49 deg. 56' 44" an arc distance of 217.93 feet and North 78 deg. 08' 07" East 3.56 feet to a point where said 60.0 foot easement angles Northerly; thence continuing North 78 deg. 08' 07" East 60.68 feet, more or less, to the intersection of the most Southern corner of Parcel "A" as shown on the hereinabove referred to Parcel Map.

PARCEL THREE:
A non-exclusive easement for ingress, egress and public utilities over a strip of land, 60.0 feet wide, the Northwesterly line of which is described as follows:

(Continued)

BMI DR10002

legal description (continued)

COMMENCING at the most Southern corner of the parcel of land labeled "Lands of the Basalt Rock Division 55.27 acres" as shown on the Record of Survey Map filed December 31, 1985 in Book 24 Surveys at page 70, Napa County Records; thence from said point of commencement along the Southerly line of said 55.27 acre parcel, the following courses and distances: North 78 deg. 08' 07" East 328.15 feet, North 69 deg. 03' 23" East 313.99 feet and North 71 deg. 00' 52" East 203.44 feet to an angle point in said Southerly line, said point being the Easterly terminus of this decription.

PARCEL FOUR:
A non-exclusive easement to be used for ingress and egress described as follows:

An Easement for access purposes, 20 feet in width, the Eastern line of which is described as follows:

BEGINNING at the Southwest corner of Parcel "A" as shown on the Map of a Portion of the Lands of Basalt Rock Company, Inc., recorded October 9, 1980 in Book 11 of Parcel Maps at page 78; thence South 78 deg. 80' 07" West 20.00 feet; thence North 09 deg. 03' 07" West 490.53 feet to a point that is North 80 deg. 56' 53" East 117.50 feet from the West line of said Parcel "A"; thence North 80 deg. 56' 53" East 20.00 feet; thence South 09 deg. 03' 07" East 489.55 feet to the point of beginning.

END OF DOCUMENT

BMI DR10002

ghd.com

The Power of Commitment

2235 Mercury Way, Suite 150
Santa Rosa, California 95407
ghd.com

Your ref: P19-00421: Basanites
Our ref: 11224710

30 April 2024

Trevor Hawkes, Supervising Planner
County of Napa
1195 Third Street
Suite 101
Napa, California, 94559-3092

Response Letter to February 21st, 2024, Meeting

Dear Mr. Hawkes

In our February 21, 2024, meeting we discussed that Napa 55 may evaluate the Latour Court well as a water source on a contiguous parcel, where each of the parcels benefitting from the 1986 Water Agreement shall be considered for water availability. The following numerated points contains our findings.

1. The Latour Court well is located in the Napa Valley floor groundwater basin, not within the designated Milliken-Sarco-Tulocay water deficient zone, and its water use screening criterion is 0.3 acre-feet per acre or no net-increase in use.

2. Napa 55 was one of numerous contiguous properties held in common ownership for many years. In 1986, Dillingham Heavy Construction sold various contiguous parcels to the west and to the east of Highway 29 to Syar Industries, including the Napa 55 parcel. As part of the sale Dillingham reserved to Syar the rights to use two wells in the Napa Valley floor groundwater basin in a 1986 Water Agreement (1431 OR 660): a well on the property then owned by Kaiser Steel ("Kaiser Well"), now the Napa Pipe property; and a well on the property then owned by Bedford Properties ("Bedford Well"), now in the Latour Court business park ("Latour Ct Well"). These water rights remain appurtenant to the Napa 55 parcel.

3. The contiguous properties entitled to use the two wells per the 1986 Water Agreement are depicted in Figure 1 and Figure 2 and are summarized in Table 1 below:

Table 1 *Properties Entitled to use Kaiser Well and Bedford Well per the 1986 Water Agreement*

Property (Current Ownership)	APN	Acres
Napa 55	046-370-024	55.27
Napa Shop (Office)	046-370-002	43.68
Napa Shop (Port)	046-370-001	4.04
Benson Kaiser	046-370-003	8.52
Napa Shop (Kaiser Rd)	046-400-007	1.49
Napa Shop (Syar Way)	046-370-005	1.54
Vulcan Lands	046-450-071	103.13
	046-370-012	144.11
	046-390-003	41.72
	046-370-015	113.8
	045-360-005	142.52
	04-370-022	5.02
Napa County (Jail)	046-370-021	27.11
	Total Acreage	**745.97**

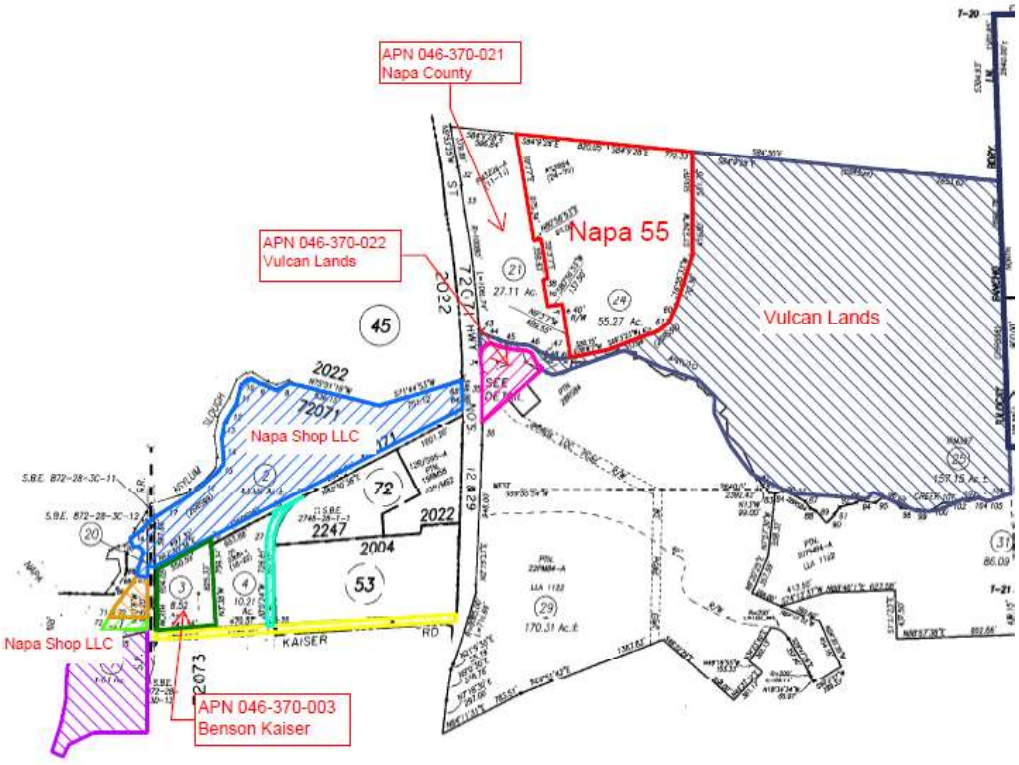


Figure 1 *Former Syar Parcels Entitled to Use the Two Wells with Current Ownership Noted.*

4. The contiguous parcels that are the source of water for the above parcels per the 1986 Water Agreement are depicted in Figure 3 and are summarized in Table 2, below. Water rights to use the two wells on these properties were severed from the Bedford and Kaiser properties and reserved for the benefit of the parcels listed in Table 1.

Table 2 Contiguous Parcels per the 1986 Water Agreement

Property	APN	Acres (Approximate)
Former Bedford Properties (water source parcels)	various	238
Former Kaiser Steel Properties (Napa Pipe) (water source parcels)	various	112
	Total Acreage	**350**

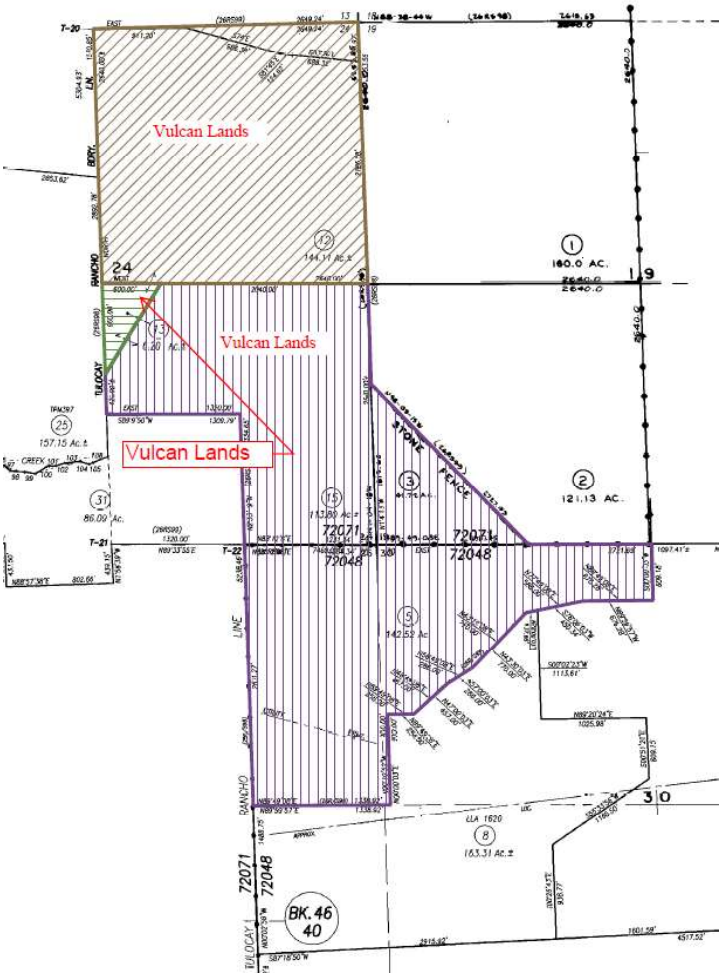


Figure 2 Additional Vulcan (formerly Syar) Parcels Entitled to Use the Two Wells

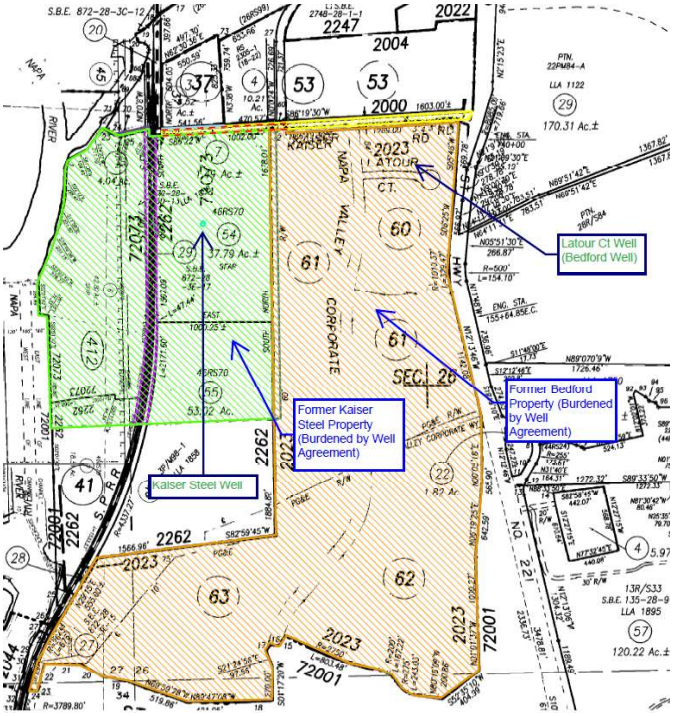


Figure 3 *Two Wells and Water Source Parcels Serving Former Syar Parcels.*

5. Current ownership, acreage and water use of the contiguous parcels subject to the 1986 Water Agreement are depicted in Table 3 below:

Table 3 *Contiguous Parcels subject to the 1986 Water Agreement*

Property (Current Ownership)	APN	Current Source of Water	Valley Floor (acres)	MST (acres)	Latour Ct Well Use (af/yr)
Napa 55	046-370-024	Latour Ct Well (Valley Floor)	0	55.27	16*
Napa Shop (Office)	046-370-002	Latour Ct Well (Valley Floor)	38.37	5.31	0.5**
Napa Shop (Port)	046-370-001	No Use	4.04	0	0
Benson Kaiser	046-370-003	Latour Ct Well (Valley Floor)	8.52	0	0.5**
Napa Shop (Kaiser Rd)	046-400-007	No Use	1.49	0	0
Napa Shop (Syar Way)	046-370-005	No Use	1.54	0	0
Former Bedford Properties (water source parcels)	various	City	238	0	0
Former Kaiser Steel Properties (Napa Pipe) (water source parcels)	various	City	112	0	0
Vulcan Lands	various	Wells (MST)	0	604.32	0
Napa County (Jail)	046-370-021	City	0	27.11	0
Totals			403.96	692.01	17.0

- * Proposed future use.
- ** Only aware of minimal office use, conservatively estimated.

6. Vulcan uses an on-site well in the MST that is not located within the Valley Floor Basin. The Napa County Jail and former Kaiser Steel and Bedford properties use City water.

7. The only current and future users of the Latour Court Well are the Benson Kaiser, Napa Shop and Napa 55. The total projected groundwater use from the Latour Court well is 17.0 af/acre. No other groundwater is produced from 1986 Water Agreement lands overlying the Valley Floor Basin. The total acres of 1986 Water Agreement lands within the Valley Floor Basin, which are subject to the County's current 0.3 af/acre no net increase, total 403.96. Because the total projected groundwater use from the 1986 Water Agreements lands overlying the Valley Floor Basin is less than 0.3 af/acre (403.96*0.3 = 121.19 > 17), the Napa 55 water and other use of Latour Court Well meet the County's groundwater screening criterion, no further analysis should be required.

8. The Napa 55 project meets the 0.3 af/acre County standard for Valley Floor water use. A property-specific recharge analysis and pumping effects analysis is not required based on the details above.

Regards,

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Senior Hydrogeologist

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MEMORANDUM

To: PDC Sacramento LLC
Attn: Mr. Steve Beauchamp

From: Paula J. Whealen, Principal and David H. Peterson, CEG

Date: October 9, 2019

Re: **Water Right and Groundwater Resources Review**
11 Basalt Road, Napa, California
Napa County Assessor's Parcel 046-370-024

This Memorandum summarizes our review of potential regulatory issues associated with continued diversion of water from wells serving the property at 11 Basalt Road (Napa APN 046-370-024) southeast of Napa in Napa County, California. The property is east of Highway 121 and north of Basalt Road, as shown on the attached *Parcel Maps* **(Exhibits A and B)**.

We understand you plan to develop the subject property as a commercial development with storage units and office space. Water supply for the property will be from existing or new groundwater wells and will be used for domestic, industrial, and/or fire protection purposes. As outlined in our Standard Agreement dated May 23, 2019, our scope of work was to develop an understanding of an existing water sharing agreement for wells on the adjacent property, as well as identify potential regulatory issues associated with continued use of groundwater. In performing our evaluation, we reviewed the following:

- Preliminary Title Report, ALTA map, and a 1986 Water Agreement, as well as other documents provided to us by the client;
- The State Water Resources Control Board (SWRCB) eWRIMS online water rights information system;
- Aerial photography from Google Earth (1993 to 2019);
- Topographic quadrangle mapping by the U.S. Geological Survey (Napa Quad);
- Published geologic mapping and groundwater reports by the California Geological Survey and U.S. Geological Survey;
- California Department of Water Resources online *Well Completion Report, Water Data Library, SGMA Portal,* and *Groundwater Information Center* applications.

A site visit or field testing were not performed as part of this review. Full citations of the geologic references reviewed are included in the References section.

Water Agreement

We reviewed a February 28, 1986 Water Agreement (see Attachment 1) between "Buyer" Syar Industries (located on adjacent parcel to east-southeast, APN 046-370-025) and "Seller" Dillingham Heavy Construction (subject property), recorded immediately after acquisition by Syar. The agreement provides the Seller with a non-exclusive right to draw water from a well located on the Buyer's property and from "the well currently located on the Bedford Property, as well as any additional or replacement wells drilled on Buyer's Property in accordance with the terms hereof." In addition, the Agreement grants a non-exclusive right to "the use of existing water pipelines, water transmission facilities, pumps, well casings, well heads and any other equipment associated with the drawing and transporting water from the Water Wells."

There are two "Water Wells" referenced in the Water Agreement: one is located on the Syar property (also referred to as the "Kaiser Easement" well) and the second well on the "Bedford Property". The exact locations could not be determined from the descriptions in the Water Agreement. Additionally, under the "Exception Notes" on the ALTA survey map for the subject property, Item 11 states that the waterline and well referenced in the Water Agreement "per Doc. Recorded in Vol 1156, Page 208 which is unlocatable as described – not plotted hereon."

From the data reviewed, the locations of the two older offsite wells described in the 1986 Water Agreement were not found, nor are the well logs readily available. However, in discussions with you, we learned that the Kaiser Easement well is located west of Highway 221, at the east end of Latour Court (see **Exhibit C** for location). With regard to the Bedford Property well, the Water Agreement references a Corporation Grant Deed from Basalt Rock Company, Inc. to Peter M. Bedford, recorded on February 28, 1980 in the Official Records of Napa County, Volume 1156, Page 208 and additional information about the location of the Bedford well may be available in that document. That document has been ordered from Napa County.

Hydrogeologic Setting

The subject property and adjacent Syar Industries property are shown on the attached Vicinity Geologic Map, **Exhibit C**. The published geologic mapping by California Geological Survey (CGS; Clahan and others, 2004) indicates that low-lying, western portions of the subject property are underlain at the surface by older alluvial deposits (early to late Pleistocene in age; map symbol *Qoa*), composed of consolidated sand, silt, clay, and gravel. At the southern boundary of the subject property and extending south into the Syar property, younger alluvial deposits of sand, gravel, silt and minor clay (Holocene age; map symbol *Qha*) are mapped along a generally west-trending, low-lying area at the entrance road into the Subject and Syar properties. In general, the alluvial deposits grade west toward the Napa River, into younger units, with undivided alluvium of late Pleistocene age, *Qpa*) south and west of the subject property, grading further west to younger, fine grained (silt and clay) bay mud deposits (*Qhbm*).

In the upland areas to the east, exposed bedrock consists of units of the Tertiary-age Sonoma Volcanics. The mapping by CGS indicates that the volcanics consist of mafic (i.e., basalt

and andesite) lava flows and breccias, interbedded with tuff and agglomerate (map symbol *Tsvm*), and the Dacite of Mt. George, consisting of lava flows and domes of gray to tan dacite (map symbol *Tsvdg*). Prior groundwater studies by the U.S. Geological Survey (Kunkel and Upson, 1960; Ferrar and Metzger, 2003) indicate that the tuff and pumice units within the Sonoma Volcanics yield water freely to wells, while the interbedded lava flows typically yield little to no water.

Existing Water Wells

Water Rights of Record

We reviewed the SWRCB's online electronic Water Rights Information System (eWRIMS) database for water rights of record for the subject property and adjacent Syar Industries property, related to diversions of groundwater from wells. No water rights of record were found for the properties.

Review of Well Completion Reports

The drillers logs for the two wells described in the Water Agreement were not found in the California Department of Water Resources (DWR) online well completion report website, the U.S. Geological Survey's online National Water Information Service website, or in published groundwater reports for the area.

A Well Completion Report (WCR) for a well drilled on the Syar property in 2007 by Pulliam Well Drilling was found on the DWR Well Completion Report site. A copy of the log is attached as Attachment 2. As located by DWR, the well is south of the subject property and in the driveway of the Syar property (see **Exhibit C** for location). Based on the published geologic mapping, the well is located in an area underlain at the surface by alluvial deposits and presumably underlain a depth by bedrock units of the Sonoma Volcanics. The WCR indicates that the well bore was drilled to a total depth of 400 feet. The geologic log indicates that brown clay (likely either fine grained alluvium or weathered volcanic ash) was encountered to a depth of 40 feet. Underlying this clay layer, volcanic bedrock units were encountered consisting of green clay, and black, green, red volcanic ash units to a depth of 385 feet. From 385 to 400 feet, hard blue basalt (lava flows) were logged. The well bore was subsequently completed as a 385-foot deep well, consisting of 10-inch (I.D.) PVC casing with perforations from 113 to 393 feet. The well is gravel packed from the bottom to a depth of 65 feet, with a cement seal from 65 feet to the surface.

The well report indicates that the Syar well yielded 800 gallons per minute, which appears consistent with published descriptions of relatively high well yields from the tuff/pumice units of the Sonoma Volcanics. The estimate of yield was made while the well was being developed by air-lift methods for a period of six hours. This yield appears to be an estimate (probably visual) and does not appear to have been verified by a metered pumping test. However, the estimates made during well development seem to indicate that this well, competed in volcanic units, has a very high yield. From our discussions with you, it appears that this newer well is not connected to the

shared water system, although the well log indicates a good potential to develop new wells locally in the Sonoma Volcanics.

The ALTA/NSPS Land Title Survey Map by Stantec notes a well located near the southeastern corner of the subject property, although underground water lines ("ugw" on the map) are not shown connecting to the well. There does not appear to be any reference to this well in the 1986 Water Agreement, nor were we able to locate a copy of the WCR. As located, the well appears to penetrate older alluvial deposits (map symbol Qoa on **Exhibit C**) near the surface, and likely encountered volcanic units at depth. Further evaluation of this well would likely require a video survey to verify the condition of the casing and location of perforations.

The Kaiser Easement well, which reportedly supplies water to the subject property as part of the Water Agreement, is located about 3,500 feet south of the subject property, in an area mapped as underlain at the surface by older alluvium (see **Exhibit C**). The well is located near the base of upland areas consisting of units of the Sonoma Volcanics, although it is not known to what depth the well might penetrate volcanic bedrock. In addition, the condition and yield of this well is not currently known.

SWRCB Permitting Authority over Groundwater Pumping

There is a legal presumption in California that groundwater is "percolating groundwater," which is outside the permitting authority of the SWRCB. However, the SWRCB does have permitting jurisdiction over subterranean streams flowing in known and definite channels. The criteria for a subterranean stream, referred to as the "four part test," requires that: (1) a subsurface channel must be present; (2) the channel must have relatively impermeable bed and banks; (3) the course of the channel must be known or capable of being determined by reasonable inference; and (4) groundwater must be flowing in the channel, in the same general direction as the channel.

The published geologic maps of the vicinity (Clahan and others, 2004) show the low-lying portions of the Subject Property and adjacent Syar property as underlain at the ground surface by alluvial fan deposits of Holocene to Pleistocene age (deposited in the past 11,000 years), underlain at some depth by bedrock units of the Sonoma Volcanics.

The log for the well drilled in 2007 on the Syar property indicates that it encountered clays in the upper 40 feet, underlain by weathered bedrock units (mainly ash) of the Sonoma Volcanics. No evidence of a subsurface channel (i.e., a sand-gravel alluvial deposit) was noted in the well log. Since a subterranean stream channel is not evident in the well log, the most critical element of the four-part test is not met (i.e., no subsurface channel is present). Therefore, we conclude that this well pumps percolating groundwater from bedrock units, which would not be under the permitting authority of the SWRCB.

As discussed, the well logs for the two wells described in the Water Agreement were not found. However, the Kaiser Easement well, which reportedly supplies water to the subject property, is located southwest of the subject property in an area underlain by older alluvial

deposits, likely underlain at relatively shallow depth by volcanic bedrock units. As mapped, the older alluvium unit has the general geomorphic characteristics of an alluvial fan or valley margin deposits that likely grade to the west into finer grained basin deposits. A specific channel is not shown on the geologic maps within this unit. Therefore, the potential for a well-defined subterranean stream channel within the unit seems unlikely. However, without the well drillers log, we cannot verify the subsurface conditions and potential permitting jurisdiction. If the log becomes available, we can review the geologic conditions and reassess our conclusions.

Sustainable Groundwater Management Act (SGMA)

California passed the Sustainable Groundwater Management Act (SGMA) in 2014, requiring formation of local groundwater sustainability agencies (GSAs) and development, adoption, and implementation of groundwater sustainability plans (GSPs) for groundwater basins assigned a high or medium level of priority. From review of the Department of Water Resources online *Groundwater Information Center*, the subject property is located in the Napa Valley Subbasin of the Napa-Sonoma Valley Groundwater Basin (DWR Basin No. 2-002.01).

With regard to basin prioritization for the purposes of the Sustainable Groundwater Management Act (SGMA), the basin is rated by DWR as medium priority and so would fall under the requirements of SGMA. This typically requires establishment of a Groundwater Sustainability Agency and preparation of a Groundwater Sustainability Plan for the basin. However, SGMA also allows for the management of a groundwater basin under an Alternative Plan, if the basin can be demonstrated to have been stable for the prior 10 years. The County of Napa has been managing the basin under an Alternative Plan and has submitted annual monitoring reports to DWR for 2017 and 2018 (2019 plan due April 2020). The report for Water Year 2018 (Luhdorff & Scalmanini Consulting Engineers, 2019) concluded that water levels throughout the county had generally remained stable.

Napa County Groundwater Ordinance

The County of Napa has adopted a groundwater ordinance in which regulates planned development relying on groundwater. Within the *MST Groundwater Deficient Area* (i.e., the area underlain by the Milliken, Sarco and Tulucay groundwater basins), groundwater permits are required for many types of ministerial and discretionary projects, with a general "no net increase" standard for groundwater use. As part of the use permit process, a water availability analysis is typically required. In addition, monitoring of water use (by metering of wells) and reporting of water use to the County is required.

Review of the MST basin map appended to the County Ordinance (Ordinance No. 1294, Map 13-1; see Attachment 3) shows the subject property and the western portion of the adjacent Syar property as lying within the Groundwater Deficient Area. However, as described to us, the Kaiser Easement well, located at the east end of Latour Court, falls outside of the MST Groundwater Deficient Area. Presumably, if new wells were drilled on the subject property (i.e.,

within the Groundwater Deficient Area), they may be subject to monitoring and reporting under the County groundwater ordinance.

Discussion and Conclusions

- No water rights of record were found for the subject properties in our search of the SWRCB online database.

- The locations and drillers logs for the two water wells described in the 1986 Water Agreement for the subject property and adjacent Syar Industries property could not be found. As a follow-up to our August 30, 2019 phone conference call, we understand you contacted Syar Industries to obtain additional information about the location of the older Kaiser Easement well. We understand the Kaiser Easement well is still in use and will provide water to the project in the future. The current condition of the well is not known. If you wish, we can assist you in obtaining a contractor to video log the well and evaluate its condition. As described to us, the Kaiser Easement well lies somewhat southwest and outside of the County's MST Groundwater Deficient area.

- The newer well drilled in 2007 on the Syar property had a high reported yield and suggests that it may be feasible to develop other wells on the subject property. As mapped, the subject property lies within the County Groundwater Deficient Area and would likely be subject to the requirements of the County Groundwater Ordinance.

- The well log for the Syar property (drilled in 2007), is completed in surficial clay deposits, underlain by volcanic bedrock units. Evidence of groundwater flowing in a subterranean stream channel beneath the property was not found in the well log or geologic data reviewed. Accordingly, we conclude that the 2007 well pumps percolating groundwater, which is not under the jurisdiction of the SWRCB. As described, the Kaiser Easement Well is located in an area where an obvious subterranean stream feature is not evident on the geologic mapping. However, without the well logs to evaluate the geologic conditions, no conclusion could be reached about the two older wells described in the Water Agreement.

- The site lies within the Napa Valley Subbasin of the Sonoma-Napa Groundwater Basin, classified as medium priority and subject to the requirements of SGMA. The County of Napa is managing the subbasin under and Alternative Plan and a Groundwater Sustainability Plan is not currently proposed. Based on recent monitoring, the County has concluded that groundwater levels remain relatively stable. However, if population, land-use and/or groundwater demand were to lead to chronic lowering of groundwater levels or other "undesirable effects" identified by SGMA, it is conceivable that the County may need to re-evaluate the applicability of the Alternative plan.

We trust this Memorandum provides the information you require. Please contact us if you have questions about our review, need additional information, or would like to schedule a call to discuss the findings.

Exhibits and Attachments

Exhibits A and B – Parcel Maps (aerial and topo base)
Exhibit C – Vicinity Geologic Map

Attachment 1 – 1986 Water Agreement
Attachment 2 – Syar Property 2007 Well Completion Report
Attachment 3 – Map of Napa County Groundwater Deficient Area

References

California Department of Water Resources, 2019, Groundwater Information Center, Interactive Map Application (Basin boundary and SGMA information): https://gis.water.ca.gov/app/gicima/

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Luhdorff & Scalmanini Consulting Engineers, 2013, Updated Hydrogeologic Conceptualization and Characterization of Conditions: unpublished consultant's report to Napa County, prepared in conjunction with MBK Consulting Engineers, January 2013, 181p.

Luhdorff & Scalmanini Consulting Engineers, 2019, Napa County Groundwater Sustainability Annual Report – Water Year 2018: unpublished consultant's report to Napa County, March 2019, 272p.

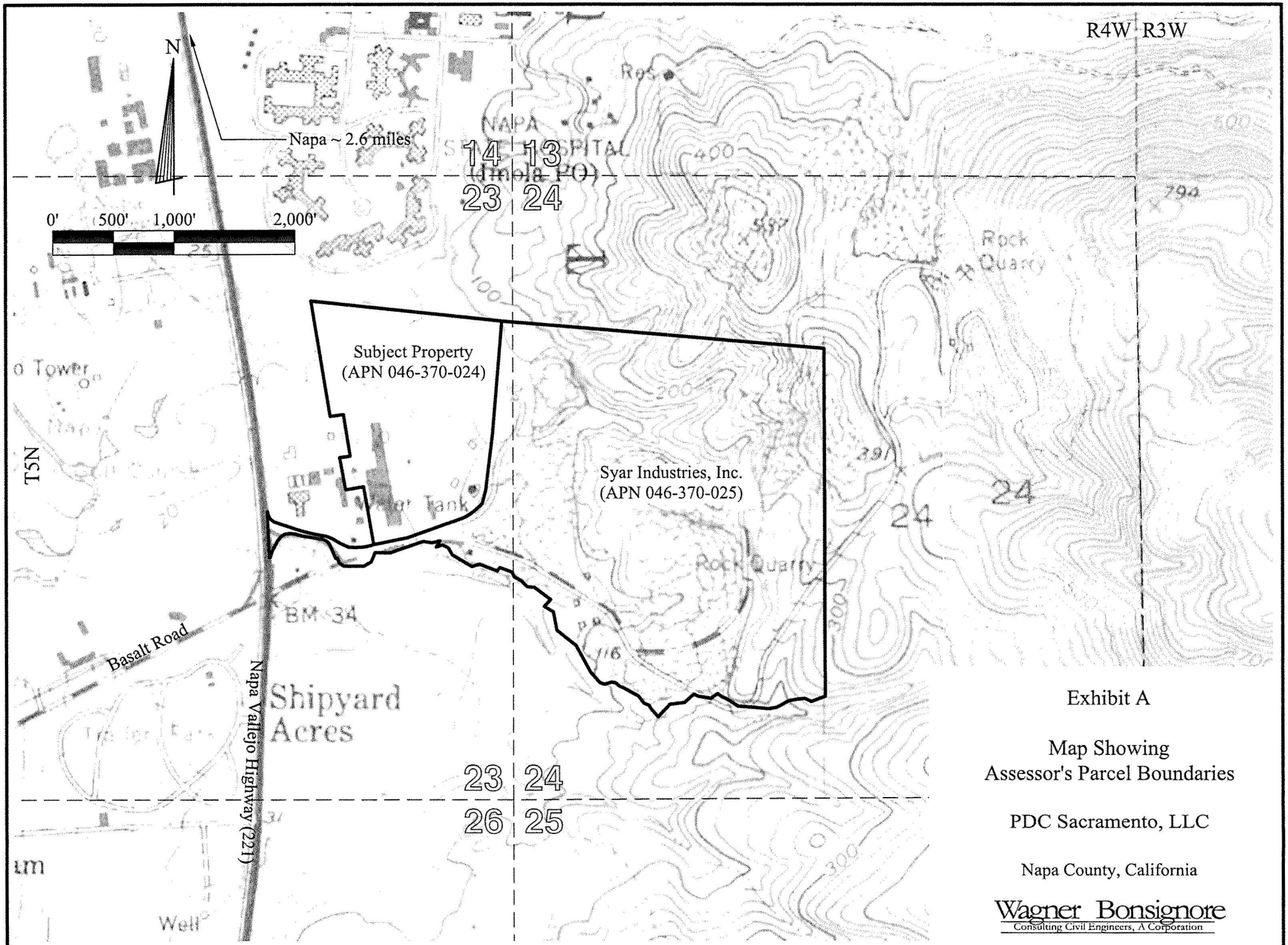


Exhibit A

Map Showing
Assessor's Parcel Boundaries

PDC Sacramento, LLC

Napa County, California

Wagner Bonsignore
Consulting Civil Engineers, A Corporation

Base map per USGS 7.5 Minute Quad maps for Mt. George and Napa.

Q:\Drawings\Panattoni Development Co\CAD\Parcel Map.dwg

October 2019

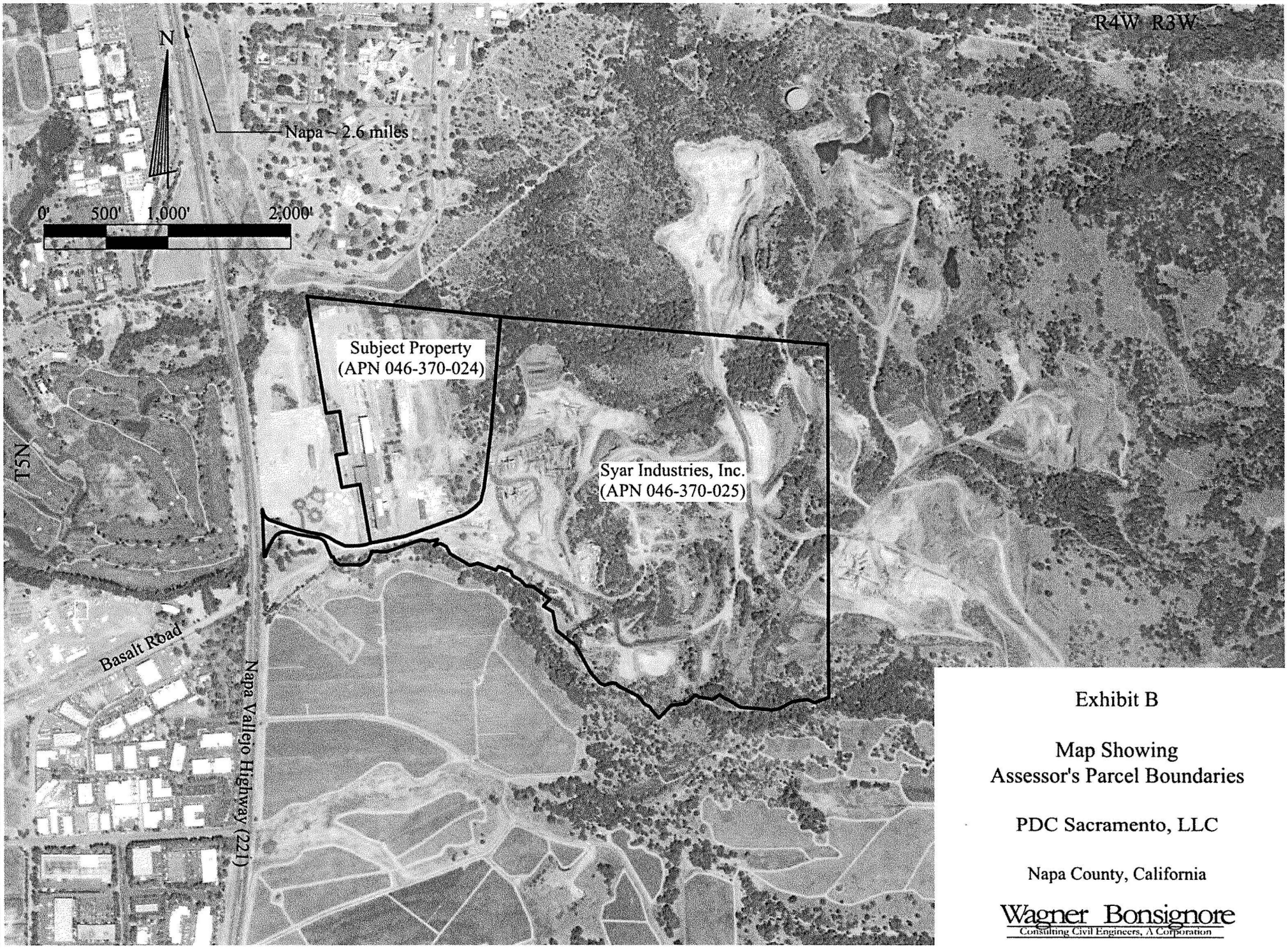


Exhibit B

Map Showing
Assessor's Parcel Boundaries

PDC Sacramento, LLC

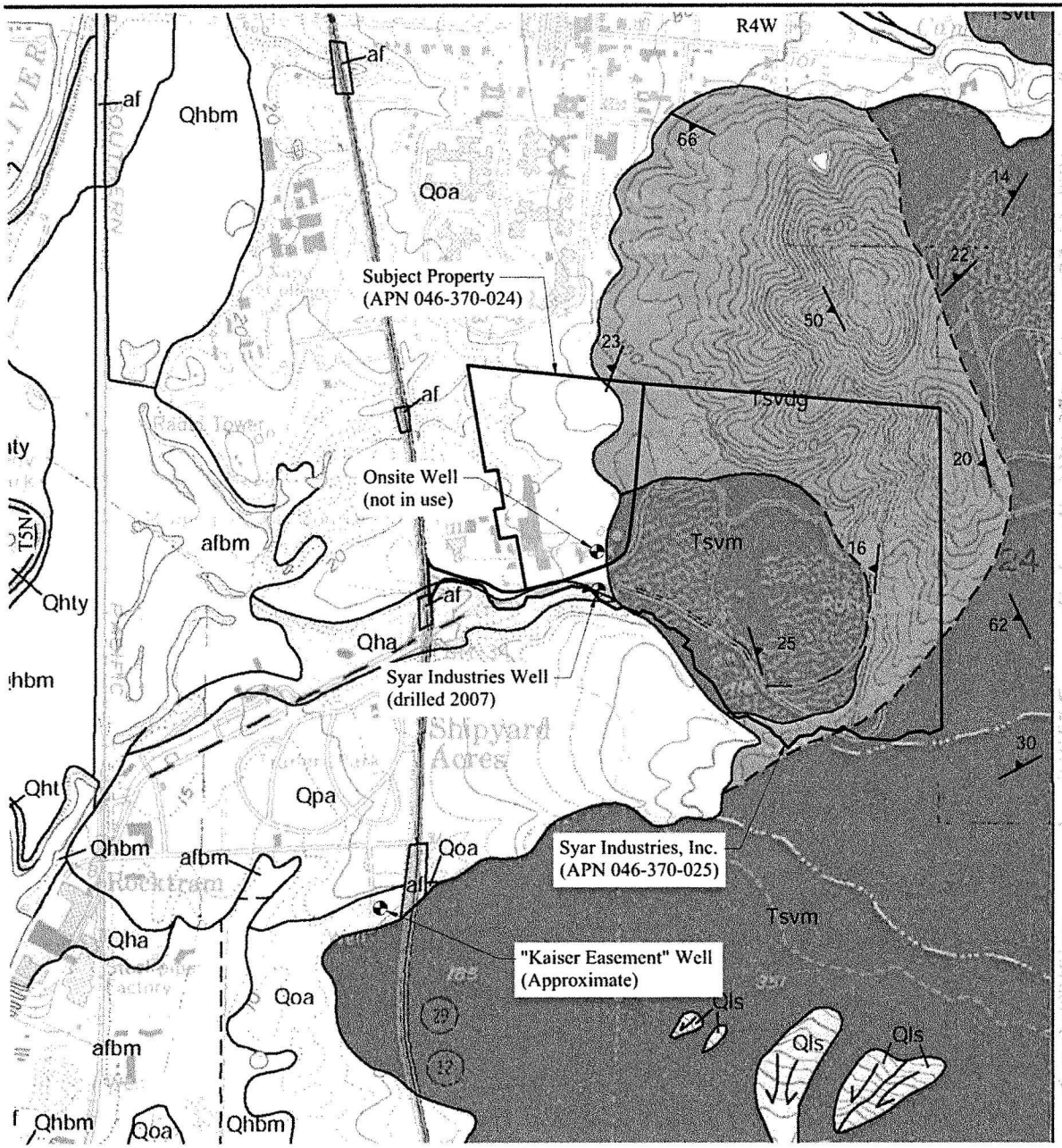
Napa County, California

Wagner Bonsignore
Consulting Civil Engineers, A Corporation

Base map per USGS 7.5 Minute Quad maps for Mt. George and Napa.

Q:\Drawings\Panattoni Development Co\CAD\Parcel Map.dwg

October 2019



N

0' 500' 1,000' 2,000'

Explanation:

af, alf - Man-placed fill materials
afbm - Artificial fill placed over bay Mud
Qhbm - Bay mud deposits
Qhty - Stream terrace deposits
Qha - Alluvium, undivided (Holocene)
Qpa - Alluvium, undivided (latest Pleistocene)
Qoa - Alluvium (early to late Pleistocene)
Sonoma Volcanics:
Tsvm - Adesite and basalt lava flows and breccias
Tsvdg - Dacite of Mt. George; flows and domes of dacite

Contact Between Units

25 Strike and Dip of Foliation

Well location

Exhibit C
Vicinity Geologic Map

PDC Sacramento, LLC

Napa County, California

Wagner Bonsignore
Consulting Civil Engineers, A Corporation

Base map per Geologic Map of the Napa 7.5' Quadrangle Napa County, California

October 2019

NAPA COUNTY

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Recording requested by and
when recorded mail to:

Heller, Ehrman, White & McAuliffe
44 Montgomery Street
San Francisco, California 94104
Attention: Barry A. Weiss

OFFICIAL RECORDS
NAPA COUNTY, CALIF.
FIRST AMERICAN TITLE COMPANY
FEB 28 1986
AT 3:00 P M.
ELEANOR E. KIMBROUGH
COUNTY RECORDER

24.00	R
1.00	M
22.00	F
	L
TOTAL	F.
47.00	

(Space above this line for Recorder's use)

WATER AGREEMENT

This Water Agreement (the "Agreement") is made this 28th day of February, 1986, by and between SYAR INDUSTRIES, INC., a California corporation ("Buyer"), and DILLINGHAM HEAVY CONSTRUCTION, INC., a Nevada corporation and DILLINGHAM CORPORATION, a Hawaii corporation (collectively, "Seller").

RECITALS

A. This Agreement is entered into concurrently with and is being recorded immediately subsequent to the conveyance by Seller to Buyer and the acquisition by Buyer from Seller of certain real property located in the County of Napa, State of California, more fully described on Exhibit A attached hereto ("Buyer's Property").

B. Seller was and remains the owner of certain real property which is adjacent to a portion of Buyer's Property and located in the County of Napa, State of California, more fully described on Exhibit B attached hereto ("Seller's Property").

C. Buyer's Property and Seller's Property have as an appurtenance thereto and are mutually benefitted by (i) the right

to take water from a well located on an isolated portion of Buyer's Property (shown as Parcel 16 on Exhibit A) which isolated portion is surrounded by property currently owned by Kaiser Steel Corporation (the "Kaiser Property"), and (ii) a non-exclusive easement and right of way (which includes the right to lay, inspect, repair and replace pipelines) across a portion of the Kaiser Property, said right to take water and right of way being more fully described in the following documents which are hereby incorporated herein by this reference: (a) that certain Grant Deed from Basalt Rock Company, Inc. to Kaiser Steel Corporation recorded on May 9, 1955 in the Official Records of Napa County at Book 474, Page 240; (b) that certain Agreement Regarding Easements between Basalt Rock Company, Inc. and William A. Craig, dated September 21, 1978 and recorded in the Official Records of Napa County at Volume 1097, Page 555; and (c) that certain Quitclaim Deed from Basalt Rock Division of Dillingham Heavy Construction, Inc., successor to Basalt Rock Company, Inc. to Kaiser Steel Corporation, recorded on October 6, 1983 in the Official Records of Napa County at Volume 1305, Page 758. (The rights described in (i) and (ii) above are hereinafter referred to collectively as the "Kaiser Easement".)

D. Buyer's Property and Seller's Property have as an appurtenance thereto and are mutually benefitted by an easement (the "Bedford Easement") over property currently owned by Peter M. Bedford (the "Bedford Property") for extraction and transportation of water from a well located on the Bedford Property, which easement is more fully described in that certain Corporation Grant

NAPA COUNTY

Deed from Basalt Rock Company, Inc. to Peter M. Bedford recorded on February 28, 1980 in the Official Records of Napa County at Volume 1156, Page 208, which is hereby incorporated herein by this reference.

E. The pipeline and transmission facilities connecting Seller's Property to the Kaiser Easement and the Bedford Easement are located on Buyer's Property over which Seller is hereby retaining an easement and as to which Buyer has agreed to grant Seller certain other rights.

F. The parties desire to acknowledge and agree as to the sharing between themselves of the benefits of the Kaiser Easement and the Bedford Easement and Seller desires to acquire certain rights with respect to a portion of Buyer's Property and Buyer desires to acquire certain rights with respect to a portion of Seller's Property and the parties are willing to grant such rights.

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

1. Grant of Easements.

a. Buyer acknowledges its understanding and agreement that the Kaiser Easement and the Bedford Easement were each intended to be, and were, and remain, appurtenant to and benefit the entirety of Seller's Property and Buyer's Property and Buyer hereby reaffirms the continuation of said rights and easements. Buyer further agrees that to the extent of any

assignable interest Buyer may have therein, Buyer hereby grants and assigns to Seller the non-exclusive right to use (together with Buyer) the Kaiser Easement and the Bedford Easement for the benefit of and as an appurtenance to Seller's Property, for the uses described in Paragraph 2.

b. Buyer hereby grants to Seller a non-exclusive right and easement in, under, over and across Buyer's Property for the respective uses described in Paragraph 2 hereof (the "Seller's Easement").

c. Seller hereby grants to Buyer a non-exclusive right and easement in, over and across portions of Seller's Property for the uses described in Paragraph 3 (the "Buyer's Easement").

2. Use of Seller's Easement. Seller's Easement shall include (i) a non-exclusive right to draw water from the well currently located on Buyer's Property and from the well currently located on the Bedford Property, as well as any additional or replacement wells drilled on Buyer's Property in accordance with the terms hereof (the "Water Wells"); (ii) a non-exclusive right to the use of existing water pipelines, water transmission facilities, pumps, well-casings, well heads and any other equipment associated with drawing and transporting water from the Water Wells and any replacement or additional pipelines, facilities, pumps, well-casings, well heads and any other equipment associated with drawing and transporting water from the Water Wells (collectively, the "Facilities") located on Buyer's Property, on the Bedford Easement

NAPA COUNTY

and on the Kaiser Easement; (iii) a right to enter upon Buyer's Property as reasonably necessary to inspect, repair, replace and maintain the Water Wells and Facilities in accordance with the terms hereof and (iv) to the full extent Buyer has such rights, Buyer hereby grants to Seller, as its agent, the right to enter upon the Bedford Property and the Kaiser Property, as reasonably necessary to inspect, repair, replace and maintain the Water Wells and Facilities in accordance with the terms hereof. Except as otherwise provided herein, Buyer makes no warranty as to the quality, quantity or potability of the water being drawn from the Water Wells.

3. Use of Buyer's Easement. Buyer's Easement shall include (i) a non-exclusive right to the use of the Facilities located on Seller's Property and (ii) a right to enter upon Seller's Property as reasonably necessary to inspect, repair, replace and maintain the Facilities in accordance with the terms hereof.

4. Maintenance and Repair. Buyer shall maintain the Water Wells and Facilities subject to Seller's Easement in good repair and condition, and shall replace, repair and maintain the Water Wells and Facilities as necessary to accommodate the permitted uses under this Agreement and all the permitted users of the Water Wells. In the event Buyer fails to maintain the Water Wells and Facilities in such condition, Seller, after the giving of notice to Buyer of such failure and the affording to Buyer of a reasonable opportunity to cure the same, shall have the right, but

NAPA COUNTY

without any obligation, to enter upon Buyer's Property with workers, equipment and materials to repair, replace or maintain the Water Wells and Facilities as Seller deems necessary to cause the Water Wells and Facilities to be returned to the condition required hereunder, and in such event all costs reasonably incurred by Seller shall be reimbursed by Buyer to Seller immediately upon demand.

5. Restrictions. During the term of the easements granted herein, the parties shall not use, nor permit use of their respective property in any manner that would interfere with permitted uses hereunder, nor shall Buyer or any person or entity claiming through Buyer, draw from the Water Wells subject to the Easement amounts of water that would impair Seller's ability to receive a commercially-reasonable volume of water, or otherwise interfere with or interrupt Seller's access to the Facilities. Except as otherwise provided herein, Buyer makes no warranty as to the current quality, quantity or potability of the water being drawn from the Water Wells.

6. Payment. Seller shall pay for water drawn from the water supply subject to the Easement at the following rate: a flat fee of One Hundred Dollars ($100) per month.

7. Alterations. Buyer shall be permitted to move or replace the existing pipelines or other portion of the Facilities, or to drill one or more replacement wells for the existing water supply, or to provide water from substitute wells on Buyer's Property, provided any such alterations are made at Buyer's sole

cost and expense and do not disrupt or diminish Seller's water supply including, without limitation, water quality and availability of adequate water during drought periods, or otherwise adversely affect Seller's rights hereunder.

8. Covenants Run With the Land. All of the provisions, agreements, rights, powers, covenants, conditions and obligations contained in this Agreement shall be binding upon and inure to the benefit of the parties hereto, their respective heirs, successors (by merger, consolidation, or otherwise), assigns, devisees, administrators, representatives, and all other persons acquiring any interest in the respective Buyer's Property and Seller's Property, whether by operation of law or in any manner whatsoever. All of the provisions of this Agreement shall be equitable servitudes and covenants running with the land pursuant to applicable law, including, without limitation, Section 1468 of the Civil Code of the State of California. This Agreement shall not be deemed to create in any third party any right or interest as a third-party beneficiary or otherwise, nor shall any person or entity other than Buyer and Seller or their successors-in-interest have any rights of consent or enforcement hereunder.

9. Termination. This Agreement and the rights and easements granted herein shall continue in full force and effect until such time as Seller gives written notice to Buyer that it no longer requires the use of the rights and Seller's Easement. In the event this Agreement shall be terminated, Seller shall at the

NAPA COUNTY

request of Buyer execute and deliver to Buyer an agreement in recordable form evidencing such termination.

10. Cooperation. Buyer and Seller agree to take such other actions and to execute such other documents as may be necessary or appropriate to fully effectuate the intent and purpose of this Agreement.

11. Entire Agreement. This instrument contains the entire agreement between the parties relating to the rights herein granted and the obligations herein assumed. Any oral representations or modifications concerning this Agreement shall be of no force or effect. This Agreement may be modified only by an instrument in writing executed by the parties hereto.

12. Attorneys' Fees. In the event of any controversy, claim or dispute relating to this Agreement, its interpretation, or the breach thereof, the prevailing party shall be entitled to recover from the other party reasonable expenses, attorneys' fees and costs.

13. Notices. All notices and other communications hereunder shall be in writing and shall be personally delivered or sent by first class, registered or certified United States mail, return receipt requested, postage prepaid, addressed as follows:

If to Buyer: Syar Industries, Inc.
275 Mini Drive
Vallejo, California 94590
Attention: Mr. C. M. Syar

If to Seller: Dillingham Heavy Construction, Inc.
7100 Johnson Drive
Pleasanton, California 94566
Attention: Bruce W. Ashford, Esq.

NAPA COUNTY

or such other address as either party may from time to time specify in writing to the other. All such notices and other communications if sent by mail shall be deemed to have been given three (3) business days after the date of such mailing.

14. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of California.

15. Captions. The captions preceding the text of each paragraph of this Agreement are included only for convenience of reference and shall be disregarded in the interpretation of this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this instrument the day and year first above written.

BUYER: SYAR INDUSTRIES, INC.,
a California corporation

By _____
Its Chairman

SELLER: DILLINGHAM HEAVY CONSTRUCTION, INC.,
a Nevada Corporation

By _____
Its Vice President

DILLINGHAM CORPORATION,
a Hawaii corporation

By _____
Its Executive Vice President

NAPA COUNTY

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Acknowledgment - Corporation

State of California } ss.
County of San Francisco }

On this 28th day of Feb in the year 1986 before me Sharon Noah
(HERE INSERT THE NAME AND QUALITY OF THE OFFICER)

, personally appeared C.M. Syar , personally known to me (or proved to me on the basis of satisfactory evidence) to be the person who executed the within instrument as ~~president (or secretary)~~ Chairman or on behalf of the corporation therein named and acknowledged to me that the corporation executed it.

OFFICIAL SEAL
SHARON NOAH
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
SONOMA COUNTY
My Commission Expires July 14, 1986

Sharon Noah
Notary Public for California

ATTORNEY'S PRINTING SUPPLY FORM NO. 7
CC 1180 11801 (REV. 10821)

NAPA COUNTY

STATE OF California)
) ss.
COUNTY OF San Francisco)

On this 28th day of Feb, 1986, before me, a Notary Public in and for said State, duly commissioned and sworn, personally appeared G B Casten, personally known to me (or provided to me on the basis of satisfying evidence) to be the Vice-President of DILLINGHAM HEAVY CONSTRUCTION, INC. a Nevada corporation, the officer executing the within instrument, and acknowledged to me that such corporation executed the within instrument pursuant to its bylaws or a resolution of its board of directors, and acknowledged to me that he subscribed his name on the within instrument.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal on the date in this certificate first above written.

OFFICIAL SEAL
SHARON NOAH
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
SONOMA COUNTY
My Commission Expires July 14, 1986

Sharon Noah
Notary Public

STATE OF California)
) ss.
COUNTY OF San Francisco)

On this 28th day of Feb, 1986, before me, a Notary Public in and for said State, duly commissioned and sworn, personally appeared Gregg W. Robertson, personally known to me (or provided to me on the basis of satisfying evidence) to be the Executive Vice-President of DILLINGHAM CORPORATION, a Hawaii corporation, the officer executing the within instrument, and acknowledged to me that such corporation executed the within instrument pursuant to its bylaws or a resolution of its board of directors, and acknowledged to me that he subscribed his name on the within instrument.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal on the date in this certificate first above written.

OFFICIAL SEAL
SHARON NOAH
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
SONOMA COUNTY
My Commission Expires July 14, 1986

Sharon Noah
Notary Public

L OF DEEDS, PAGE 310, NAPA COUNTY RECORDS; SAID POINT OF INTERSECTION BEING ALSO THE MOST EASTERN CORNER OF THE 48 ACRE TRACT OF LAND DESCRIBED IN THE DEED TO SHERRY ABOVE REFERRED TO; THENCE NORTHWESTERLY ALONG THE STONE FENCE BEING THE SOUTHWESTERLY LINE OF THE PARCEL OF LAND DESCRIBED IN THE DEED TO SEGHETTI, ETAL, ABOVE REFERRED TO; TO THE EASTERN LINE OF SECTION 24, BEING THE WESTERN LINE OF SEGHETTI, PARCEL; THENCE NORTHERLY ALONG LAST MENTIONED SECTION LINE TO THE POINT OF COMMENCEMENT.

APN'S 45-360-05, 46-370-15 AND 46-370-03

PARCEL FOURTEEN:

ALL THAT REAL PROPERTY SITUATE IN THE CITY OF NAPA, COUNTY OF NAPA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT ON THE SOUTHEASTERLY CORNER OF THE LANDS BELONGING NOW OR FORMERLY TO FRANCES M. CARAWAY AND JAMES W. CARAWAY, HER HUSBAND, LYING BETWEEN THE COUNTY ROAD LEADING TO THE NAPA CITY WATER WORKS AND NAPA RIVER, AND BOUNDED ON THE NORTH BY SARCOS CREEK, WHICH POINT OF BEGINNING IS ON THE WESTERLY LINE OF SAID COUNTY ROAD; THENCE ALONG THE SOUTHERLY LINE OF SAID TRACT BELONGING NOW OR FORMERLY TO SAID FRANCES M. CARAWAY AND JAMES W. CARAWAY, HER HUSBAND, SOUTH 89 DEGREES 15' WEST, 178.04 FEET TO THE CENTER OF NAPA RIVER; THENCE UP THE CENTER OF NAPA RIVER, AT RIGHT ANGLES, 8 FEET; THENCE BACK TO SAID COUNTY ROAD ON A LINE PARALLEL WITH THE FIRST LINE DESCRIBED, AT A UNIFORM DISTANCE OF 8 FEET THEREFROM, TO THE WESTERLY LINE OF SAID COUNTY ROAD; THENCE SOUTH 13 DEGREES WEST, 8 FEET TO THE POINT OF BEGINNING.

APN 52-060-02

PARCEL FIFTEEN:

INTENTIONALLY OMITTED

PARCEL SIXTEEN: A parcel of land circumscribed by a 20 foot radius circle surrounding an existing well, the center of which is located south 29 degrees 41 minutes east, 954.31 feet from the aforementioned point of commencement, together with the right to take water from the well situate on the above described premises and a right of way across the land hereby conveyed to the said well, including the right of laying, inspecting, repairing and replacing pipe lines for the purpose of taking water therefrom.

NAPA COUNTY

EXHIBIT B

PARCEL ONE:
Commencing at the most Southern corner of Parcel "A" as shown on the Parcel Map entitled, "Parcel Map a Division of a Portion of the Lands of Basalt Rock Company Inc", filed March 10, 1981 in Book 12 of Parcel Maps at page 20, Napa County Records; thence from said point of commencement and running along the Western line of said Parcel "A" hereinabove referred to the following courses and distances: North 09 deg. 03' 07" West 489.55 feet, South 80 deg. 56' 53" West 137.50 feet, North 09 deg. 03' 07" West 248.44 feet, North 80 deg. 56' 53" East 40.00 feet, North 09 deg. 03' 07" West 359.63 feet, South 80 deg. 56' 53" West 60.00 feet and North 09 deg. 03' 07" West 975.34 feet to the Northwest corner of said Parcel "A" hereinabove referred to; thence South 84 deg. 09' 28" East along the Northern line of said Parcel "A" a distance of 820.05 feet to the Northeastern corner of said Parcel "A"; thence continuing South 84 deg. 09' 28" East along a wire fence that is on the Northern line of the parcel of land as described in the Deed to Basalt Rock Company Inc., recorded October 29, 1923 in Book 140 of Deeds at page 272, a distance of 772.33 feet; thence leaving the Northern line of said parcel to Basalt Rock Company Inc., hereinabove referred to and running due South 531.75 feet to 1/2 inch rebar and tagged stamped L.S. 4366; thence South 01 deg. 02' 29" West 416.30 feet to a 1/2 inch rebar and tag stamped L.S. 4366; thence South 16 deg. 55' 33" West 470.36 feet to a 1/2 inch rebar and tag stamped L.S. 4366; thence South 23 deg. 43' 01" West 147.20 feet to a 1/2 inch rebar and tag stamped L.S. 4366; thence South 48 deg. 23' 50" West 122.99 feet to a 1/2 inch rebar and tag stamped L.S. 4366; thence South 71 deg. 00' 52" West 203.44 feet to the Southeast corner of Parcel "A" hereinabove referred to; thence along the Southern line of said Parcel "A" the following courses and distances: South 69 deg. 03' 23" West 313.99 feet and South 78 deg. 08' 07" West 328.15 feet to the point of commencement.

PARCEL TWO:
A non-exclusive easement for ingress, egress and public utilities over a strip of land, 60.00 feet wide, the Northerly line of which is described as follows:

COMMENCING at a point on the Easterly line of State Highways 12 and 29; said point being the most Northerly point of the parcel of land labeled "60 foot wide Road Easement 1.39 acres" as shown on the Parcel Map entitled, "Parcel Map Basalt Rock Company Inc.", filed October 9, 1980 in Book 11 of Parcel Maps at page 78, Napa County Records; thence from said point of commencement and running along the Northeasterly line of said 60 foot wide road easement the following courses and distances: along a curve to the left in an Easterly direction with a radius of 40.0 feet through a central angle of 64 deg. 10' 03" an arc distance of 44.80 feet, South 68 deg. 00' 00" East 159.43 feet along a curve to the left with a radius of 950.0 feet through a central angle of 15 deg. 21' 05" an arc distance of 254.53 feet to a point of reverse curve with a radius of 250.0 feet through a central angle of 31 deg. 25' 55" an arc distance of 137.15 feet to a point of reverse curve with a radius of 250.0 feet through a central angle of 49 deg. 56' 44" an arc distance of 217.93 feet and North 78 deg. 08' 07" East 3.56 feet to a point where said 60.0 foot easement angles Northerly; thence continuing North 78 deg. 08' 07" East 60.68 feet, more or less, to the intersection of the most Southern corner of Parcel "A" as shown on the hereinabove referred to Parcel Map.

PARCEL THREE:
A non-exclusive easement for ingress, egress and public utilities over a strip of land, 60.0 feet wide, the Northwesterly line of which is described as follows:

(Continued)

NAPA COUNTY

legal description (continued)

COMMENCING at the most Southern corner of the parcel of land labeled "Lands of the Basalt Rock Division 55.27 acres" as shown on the Record of Survey Map filed December 31, 1985 in Book 24 Surveys at page 70, Napa County Records; thence from said point of commencement along the Southerly line of said 55.27 acre parcel, the following courses and distances: North 78 deg. 08' 07" East 328.15 feet, North 69 deg. 03' 23" East 313.99 feet and North 71 deg. 00' 52" East 203.44 feet to an angle point in said Southerly line, said point being the Easterly terminus of this decription.

PARCEL FOUR:
A non-exclusive easement to be used for ingress and egress described as follows:

An Easement for access purposes, 20 feet in width, the Eastern line of which is described as follows:

BEGINNING at the Southwest corner of Parcel "A" as shown on the Map of a Portion of the Lands of Basalt Rock Company, Inc., recorded October 9, 1980 in Book 11 of Parcel Maps at page 78; thence South 78 deg. 80' 07" West 20.00 feet; thence North 09 deg. 03' 07" West 490.53 feet to a point that is North 80 deg. 56' 53" East 117.50 feet from the West line of said Parcel "A"; thence North 80 deg. 56' 53" East 20.00 feet; thence South 09 deg. 03' 07" East 489.55 feet to the point of beginning.

END OF DOCUMENT

NAPA COUNTY

SCHEDULE A

LEGAL DESCRIPTION

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ALL THAT REAL PROPERTY SITUATE IN THE COUNTY OF NAPA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

UNINCORPORATED AREA - COUNTY OF NAPA

PARCEL ONE:

COMMENCING AT A POINT ON THE SOUTHERLY LINE OF THE PROPERTY FORMERLY OF THE STATE OF CALIFORNIA (NAPA STATE HOSPITAL), WHICH LINE IS THE NORTHERLY LINE OF THE FORMER LANDS OF MERCANTILE TRUST COMPANY, HEREINAFTER DESCRIBED, AND AT THE NORTHEAST CORNER OF A TRACT OF LAND CONVEYED TO THE MERCANTILE TRUST COMPANY BY SAN FRANCISCO, NAPA & CALISTOGA RAILWAY BY DEED DATED DECEMBER 8, 1923 AND RECORDED JANUARY 14, 1924, IN VOLUME 2 OF OFFICIAL RECORDS, PAGE 431, NAPA COUNTY RECORDS. RUNNING THENCE ALONG THE EAST SIDE OF THE SAID LAST MENTIONED TRACT AND ON THE WEST SIDE OF THE RIGHT OF WAY OF SAN FRANCISCO, NAPA & CALISTOGA RAILWAY, SOUTH ONE (1) DEGREE FORTY-FIVE (45) MINUTES WEST, SIXTY-SEVEN (67) FEET, SIX (6) INCHES; THENCE CONTINUING ALONG SAID COURSE AND THE WESTERLY BOUNDARY OF SAID RIGHT OF WAY OF SAID SAN FRANCISCO, NAPA & CALISTOGA RAILWAY, ONE HUNDRED NINETY-EIGHT (198) FEET TO A POINT; THENCE SOUTH SIXTY-ONE AND THREE QUARTERS (61-3/4) DEGREES WEST FORTY-SEVEN AND 48/100 (47.48) CHAINS TO A STAKE ON THE EASTERLY LINE OF THE RIGHT OF WAY OF THE NAPA BRANCH OF THE SOUTHERN PACIFIC RAILROAD, SAID STAKE BEING SIX HUNDRED FOUR (604) FEET NORTHERLY FROM THE POINT OF INTERSECTION OF THE EASTERLY LINE OF SAID RIGHT OF WAY WITH THE SOUTHERLY LINE OF A CERTAIN ONE HUNDRED TWENTY-NINE (129) ACRE TRACT OF LAND DESCRIBED IN DEED DATED JULY 9, 1920, FROM FEDELE MARTINELLI AND WIFE TO MERCANTILE TRUST COMPANY, RECORDED JULY 9, 1920, IN VOLUME 126 OF DEEDS, PAGE 497, RECORDS OF SAID COUNTY OF NAPA; THENCE WESTERLY AND ACROSS SAID RAILROAD RIGHT OF WAY AT A RIGHT ANGLE THERETO SIXTY (60) FEET TO THE WESTERLY LINE THEREOF; THENCE SOUTH ONE-HALF (1/2) DEGREE, EAST ALONG THE WESTERLY LINE OF SAID RIGHT OF WAY NINETY-FIVE (95) FEET TO THE INTERSECTION OF A CROSS FENCE; THENCE ALONG SAID CROSS FENCE NORTH EIGHTY-THREE (83) DEGREES WEST ONE AND 21/100 (1.21) CHAINS MORE OR LESS TO THE EASTERLY BANK OF THE SLOUGH KNOWN AS THE TULOCAY SLOUGH; THENCE NORTHEASTERLY UP THE EASTERN BANK OF SAID SLOUGH AND FOLLOWING THE MEANDERINGS THEREOF TO THE END OF A FENCE ON THE SOUTHERN LINE OF THE PREMISES BELONGING TO THE STATE OF CALIFORNIA AND HEREINBEFORE REFERRED TO, AND THENCE ALONG THE SOUTHERN LINE OF SAID LAST NAMED PREMISES, SOUTH SEVENTY-SIX (76) DEGREES EAST THIRTEEN AND 20/100 (13.20) CHAINS AND NORTH SEVENTY (70) DEGREES EAST ELEVEN AND 87/100 (11.87) CHAINS, MORE OR LESS, TO THE POINT OF COMMENCEMENT.

(Continued)

BEING A PORTION OF THE TULOCAY RANCHO AND ALSO A PORTION OF SWAMP AND OVERFLOWED LAND SURVEY NUMBER 12, EXCEPTING THEREFROM, HOWEVER, ALL THAT PORTION THEREOF WITHIN THE RIGHT OF WAY OF THE SOUTHERN PACIFIC RAILROAD.

PARCEL TWO:

COMMENCING AT A POINT ON THE EASTERLY BANK OF THE SLOUGH KNOWN AS THE TULOCAY SLOUGH AT THE SOUTHWESTERLY CORNER OF THE THIRTY-NINE AND 90/100 (39.90) ACRE TRACT OF LAND CONVEYED BY MERCANTILE TRUST COMPANY OF CALIFORNIA TO BASALT ROCK COMPANY, A CORPORATION, BY DEED DATED MARCH 1, 1926, RECORDED MARCH 1, 1926, IN BOOK 16 OF OFFICIAL RECORDS, PAGE 248, RECORDS OF NAPA COUNTY; THENCE FROM SAID POINT ALONG THE SOUTHERLY BOUNDARY OF SAID THIRTY-NINE AND 90/100 (39.90) ACRE TRACT SOUTH EIGHTY-THREE (83) DEGREES EAST ONE AND TWENTY-ONE HUNDREDTHS (1.21) CHAINS MORE OR LESS, TO THE WESTERLY LINE OF THE RIGHT OF WAY OF THE NAPA VALLEY BRANCH OF THE SOUTHERN PACIFIC RAILROAD; THENCE SOUTH ALONG SAID RAILROAD RIGHT OF WAY THREE HUNDRED FIFTY-SEVEN (357) FEET TO AN IRON STAKE DRIVEN IN THE GROUND; THENCE AT A RIGHT ANGLE AND ALONG AN EXISTING FENCE WEST THREE HUNDRED TWENTY-SEVEN (327) FEET TO THE EASTERLY BANK OF SAID TULOCAY SLOUGH, (THE LAST NAMED LINE BEING APPROXIMATELY ONE HUNDRED FOUR (104) FEET, MEASURED AT A RIGHT ANGLE TO THE SAID LINE, NORTHERLY FROM THE NORTH SIDE OF THE MAIN PORTION OF THE RANCH HOUSE ON THE PROPERTY ON APRIL 14, 1926; THENCE NORTHEASTERLY ALONG THE EASTERLY BANK OF SAID SLOUGH AND FOLLOWING THE MEANDERS THEREOF ABOUT FOUR HUNDRED FORTY-THREE (443) FEET TO THE SAID POINT OF COMMENCEMENT, BEING A PORTION OF 'SWAMP AND OVERFLOWED LAND SURVEY NO. 12, NAPA COUNTY'.

PARCEL THREE:

COMMENCING AT A POINT FORMED BY THE INTERSECTION OF THE SOUTHERN LINE OF THE ONE AND FIFTY-HUNDREDTHS (1.50) ACRE TRACT OF LAND CONVEYED BY THE MERCANTILE TRUST COMPANY OF CALIFORNIA TO THE BASALT ROCK COMPANY BY DEED OF RECORD IN VOLUME 18 OF OFFICIAL RECORDS, PAGE 273, NAPA COUNTY RECORDS, WITH THE WESTERN LINE OF THE SOUTHERN PACIFIC RAILROAD COMPANY RIGHT OF WAY, SAID POINT OF COMMENCEMENT BEING ALSO THE SOUTHEAST CORNER OF SAID ONE AND FIFTY-HUNDREDTHS (1.50) ACRE TRACT; RUNNING THENCE ALONG THE WESTERN LINE OF SAID RAILROAD RIGHT OF WAY DUE SOUTH ONE HUNDRED AND THIRTY-ONE FEET (131.00); THENCE ON A LINE WHICH IS TWENTY-FIVE (25) FEET NORTH OF AND PARALLEL TO THE NORTHERN LINE PRODUCED OF THE THREE AND SEVENTY-NINE HUNDREDTHS (3.79) ACRE TRACT OF LAND CONVEYED BY MRS. MARY PEDROTTI, ET AL TO THE MERCANTILE TRUST COMPANY OF CALIFORNIA BY DEED OF RECORD IN VOLUME 128 OF DEEDS, PAGE 378, NAPA COUNTY RECORDS, SOUTH 86 DEGREES 22 MINUTES WEST FOUR HUNDRED AND EIGHTEEN (418.00) FEET, MORE OR LESS, TO THE MEAN HIGH TIDE LINE OF TULOCAY SLOUGH; THENCE ALONG SAID MEAN HIGH TIDE LINE

(Continued)

OF SLOUGH NORTH 29 DEGREES 48 MINUTES EAST ONE HUNDRED AND EIGHTY-ONE (181.00) FEET TO THE SOUTHWEST CORNER OF THE AFORESAID ONE AND FIFTY-HUNDREDTHS (1.50) ACRE TRACT; THENCE ALONG THE SOUTHERN LINE OF SAID ONE AND FIFTY-HUNDREDTHS (1.50) ACRE TRACT DUE EAST THREE HUNDRED AND TWENTY-SEVEN (327.00) FEET TO THE POINT OF COMMENCEMENT.

BEING A PORTION OF SWAMP AND OVERFLOW SURVEY NO. 12, NAPA COUNTY, CALIFORNIA.

PARCEL FOUR:

COMMENCING AT A POINT ON THE WESTERLY LINE OF THE SOUTHERN PACIFIC RAILROAD COMPANY RIGHT OF WAY SAID POINT BEING SOUTHEASTERN CORNER OF THE ONE AND TWENTY-TWO ONE-HUNDREDTHS (1.22) ACRE TRACT OF LAND CONVEYED BY THE AMERICAN TRUST COMPANY TO THE BASALT ROCK COMPANY, INC., BY DEED OF RECORD IN VOLUME 88 OF OFFICIAL RECORDS, PAGE 153, NAPA COUNTY RECORDS, RUNNING THENCE ALONG THE WESTERLY LINE OF SAID RAILROAD RIGHT OF WAY DUE SOUTH NINE HUNDRED AND FORTY (940.00) FEET, THENCE DUE WEST FOUR HUNDRED AND EIGHTY (480.00) FEET; THENCE SOUTH 64 DEGREES 33' WEST TWO HUNDRED FIFTY-TWO AND SIXTY-FOUR ONE-HUNDREDTHS (252.64) FEET; THENCE SOUTH 25 DEGREES 43' WEST ONE HUNDRED AND TWENTY (120.00) FEET; THENCE NORTH 64 DEGREES 17' WEST ONE HUNDRED AND TEN (110.00) FEET MORE OR LESS, TO THE MEAN HIGH TIDE LINE OF THE EASTERLY BANK OF NAPA RIVER; THENCE ALONG THE MEAN HIGH TIDE LINE OF SAID RIVER AND ALSO OF THE TULOCAY SLOUGH NORTH 18 DEGREES 51' EAST TWO HUNDRED FIFTY-ONE AND TEN ONE-HUNDREDTHS (251.10) FEET; NORTH 11 DEGREES 58' EAST TWO HUNDRED TWENTY-ONE AND EIGHTY ONE-HUNDREDTHS (221.80) FEET; NORTH 2 DEGREES 12' EAST TWO HUNDRED EIGHTY-SIX AND FORTY ONE-HUNDREDTHS (286.40) FEET; NORTH 14 DEGREES 54' EAST SEVENTY-NINE (79.00) FEET; NORTH 61 DEGREES 08' EAST ONE HUNDRED EIGHTY-EIGHT AND FORTY ONE-HUNDREDTHS (188.40) FEET AND NORTH 34 DEGREES 22' EAST TWO HUNDRED ELEVEN AND TEN ONE-HUNDREDTHS (211.10) FEET TO THE SOUTHWESTERN CORNER OF THE AFORESAID ONE AND TWENTY-TWO ONE-HUNDREDTHS (1.22) ACRE TRACT; THENCE ALONG THE SOUTHERLY LINE OF SAID ONE AND TWENTY-TWO ONE-HUNDREDTHS (1.22) ACRE TRACT NORTH 86 DEGREES 22' EAST FOUR HUNDRED AND EIGHTEEN (418.00) FEET TO THE POINT OF COMMENCEMENT.

BEING A PORTION OF SWAMP AND OVERFLOW SURVEYS NUMBERS 12 AND 13, NAPA COUNTY, CALIFORNIA.

EXCEPTING FROM PARCEL FOUR ABOVE ALL THAT PORTION DESCRIBED IN THE DEED FROM BASALT ROCK COMPANY, INC. TO KAISER STEEL CORPORATION RECORDED MAY 9, 1955 IN BOOK 474 PAGE 240, OFFICIAL RECORDS, AS INSTRUMENT NO. S 8323, NAPA COUNTY RECORDS.

PARCEL FIVE:

(Continued)

A STRIP OF LAND 60 FEET WIDE AS DESCRIBED IN THAT DEED FROM THE UNITED STATES OF AMERICA TO BASALT ROCK COMPANY, INC., RECORDED NOVEMBER 6, 1945 IN BOOK 232 PAGE 376, OFFICIAL RECORDS AS INSTRUMENT NO. K 0966, NAPA COUNTY RECORDS.

APN 46-370-01 AND 46-370-02

PARCEL SIX:

BEGINNING AT THE SOUTHWESTERLY CORNER OF THAT CERTAIN 55.2245 ACRE TRACT OF LAND CONVEYED TO J.E. DAVIES AND E. MACGREGOR DAVIES BY UNITED STATES PUBLIC HOUSING ADMINISTRATION BY DEED RECORDED OCTOBER 4, 1960, IN VOLUME 619 OF OFFICIAL RECORDS AT PAGE 364 OF OFFICIAL NAPA COUNTY RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF THE COUNTY OF NAPA, STATE OF CALIFORNIA, THENCE NORTH 23 DEGREES 19' 30" EAST, 472.14 FEET ALONG THE SOUTHERLY BOUNDARY OF SAID PARCEL TO THE TRUE POINT OF BEGINNING OF THE HEREINAFTER DESCRIBED PARCEL OF LAND.

BEGINNING AT THE POINT ABOVE DESCRIBED AS THE TRUE POINT OF BEGINNING, THENCE NORTH 35 DEGREES 19' 30" EAST, 60.12 FEET ALONG THE SOUTHERLY LINE OF THE ABOVE 55.2245 ACRE TRACT OF LAND; THENCE LEAVING SAID SOUTHERLY BOUNDARY NORTH 0 DEGREES 05' 30" WEST, 691.38 FEET; THENCE CURVING TO THE RIGHT WITH A RADIUS OF 497.93 FEET FROM A TANGENT THAT BEARS NORTH 0 DEGREES 05' 30" WEST FOR A DISTANCE OF 544.69 FEET, MORE OR LESS, TO THE NORTHERLY LINE OF SAID 55.2245 ACRE PARCEL; THENCE SOUTH 62 DEGREES 35' 08" WEST, 301.45 FEET ALONG SAID NORTHERLY LINE; THENCE CURVING TO THE RIGHT WITH A RADIUS OF 13.0 FEET FROM A TANGENT THAT BEARS NORTH 62 DEGREES 35' 08" EAST FOR A DISTANCE OF 33.69 FEET; THENCE CURVING TO THE LEFT WITH A RADIUS OF 557.93 FEET FROM A TANGENT THAT BEARS SOUTH 30 DEGREES 42' WEST FOR A DISTANCE OF 300.8 FEET; THENCE SOUTH 0 DEGREES 05' 30" EAST, 595.14 FEET TO THE POINT OF BEGINNING.

APN 46-370-05

PARCEL SEVEN:

COMMENCING ON THE EAST LINE OF THE RIGHT OF WAY OF THE SOUTHERN PACIFIC RAILROAD AT THE POINT WHERE THE NORTH LINE OF THE LAND NOW OR FORMERLY OF MRS. MARY PEDROTTI ETAL, INTERSECTS SAID EAST LINE OF THE RIGHT OF WAY; THENCE ALONG THE NORTH LINE OF SAID LANDS NOW OR FORMERLY OF MARY PEDROTTI, NORTH 85 DEGREES EAST 2679 FEET TO THE NORTHWEST CORNER OF THE RIGHT OF WAY TRACT OF THE LAND CONVEYED BY VALENTINE NATHANAY TO THE VALLEJO BENECIA AND NAPA VALLEY RAILWAY COMPANY, BY DEED DATED JANUARY 8, 1904 AND OF RECORD IN BOOK 77 OF DEEDS, AT PAGE 261, NAPA COUNTY RECORDS; THENCE SOUTH 1-3/4 DEGREES WEST ALONG THE WEST LINE OF SAID RAILROAD RIGHT OF WAY 60 FEET; THENCE SOUTH 85 1/2 DEGREES WEST ALONG A LINE PARALLEL TO AND 60 FEET SOUTHERLY FROM SAID NORTH LINE OF PEDROTTI 2677 FEET

(Continued)

THE SAID EAST LINE OF THE RIGHT OF WAY OF THE SOUTHERN PACIFIC RAILROAD; THENCE NORTH 0-3/4 DEGREES WEST ALONG SAID EAST LINE, TO THE PLACE OF BEGINNING.

EXCEPTING FROM PARCEL SEVEN ABOVE ALL THAT PORTION DESCRIBED IN THE DEED FROM BASALT ROCK COMPANY, INC. TO THE COUNTY OF NAPA RECORDED MAY 7, 1969 IN BOOK 807 PAGE 250 OFFICIAL RECORDS, AS INSTRUMENT NO. AN 8247, NAPA COUNTY RECORDS.

APN 46-400-07

PARCEL EIGHT:

PARCEL C, AS SHOWN ON THE MAP ENTITLED, "PARCEL MAP OF A PORTION OF THE LANDS OF BASALT ROCK COMPANY, INC., BOOK 140 OFFICIAL DEEDS, PAGE 272, NAPA COUNTY RECORDS", FILED MARCH 10, 1981 IN BOOK 12 OF PARCEL MAPS, AT PAGE 20, IN THE OFFICE OF THE RECORDER OF NAPA COUNTY, CALIFORNIA.

APN 46-370-22

(CONTINUED)

PARCEL TEN:

COMMENCING AT THE NORTHEAST CORNER OF PARCEL 'A' AS SHOWN ON THE MAP ENTITLED, 'PARCEL MAP OF A PORTION OF THE LANDS OF BASALT ROCK COMPANY, INC.', FILED MARCH 10, 1981 IN BOOK 12 OF PARCEL MAPS AT PAGE 20; THENCE SOUTH 84 DEGREES 09' 28'' EAST 772.33 FEET TO THE TRUE POINT OF COMMENCEMENT, SAID POINT BEING A POINT ON THE NORTHERN LINE OF THE PARCEL OF LAND AS DESCRIBED IN THE DEED TO BASALT ROCK COMPANY, INC., RECORDED OCTOBER 29, 1923, IN BOOK 140 OF OFFICIAL RECORDS, AT PAGE 272; THENCE FROM SAID TRUE POINT OF COMMENCEMENT AND RUNNING ALONG SAID NORTHERN LINE OF SAID LAST MENTIONED PARCEL SOUTH 84 DEGREES 15' EAST 2760.78 FEET TO THE NORTHEAST CORNER OF SAID PARCEL OF LAND TO BASALT ROCK COMPANY, INC., AS DESCRIBED IN THE DEED RECORDED OCTOBER 29, 1923, IN BOOK 140 OF OFFICIAL RECORDS AT PAGE 272; THENCE ALONG THE EAST LINE OF SAID LANDS OF BASALT ROCK COMPANY, INC., SOUTH 2892.78 FEET TO THE SOUTHEAST CORNER THEREOF; THENCE LEAVING SAID EAST LINE AND CONTINUING ALONG ARROYO CREEK THE FOLLOWING DISTANCES AND COURSES: SOUTH 73 DEGREES 00' WEST 198 FEET, NORTH 73 DEGREES 00' WEST 87.78 FEET, SOUTH 76 DEGREES 15' WEST 99 FEET, WEST 66 FEET, SOUTH 72 DEGREES 30' WEST 231 FEET, WEST 165 FEET, NORTH 73 DEGREES 00' WEST 198 FEET, NORTH 61 DEGREES 00' WEST 238.80 FEET, SOUTH 36 DEGREES 45' WEST 82.50 FEET, NORTH 84 DEGREES 34' WEST 627 FEET, NORTH 62 DEGREES 30' WEST 429 FEET, NORTH 37 DEGREES 39' WEST 277.86 FEET, NORTH 26 DEGREES 00' WEST 330 FEET, NORTH 132 FEET, NORTH 45 DEGREES 00' WEST 198 FEET NORTH 71 DEGREES 30' WEST 363 FEET, NORTH 65 DEGREES 30' WEST 462 FEET, SOUTH 71 DEGREES 00' WEST 594 FEET, NORTH 58 DEGREES 15' WEST 140 FEET MORE OR LESS TO A 1/2'' REBAR AND TAG STAMPED L.S. 4366 MARKING THE MOST EASTERN CORNER OF PARCEL 'C' AS SHOWN ON THE PARCEL MAP ENTITLED, 'PARCEL MAP A DIVISION OF A PORTION OF THE LANDS OF BASALT ROCK COMPANY, INC., FILED MARCH 10, 1981 IN BOOK 12 OF PARCEL MAPS AT PAGE 20. THENCE ALONG THE EASTERLY LINE OF SAID PARCEL 'C' THE FOLLOWING COURSES AND DISTANCES NORTH 28 DEGREES 11' 09'' WEST 44.58 FEET, SOUTH 62 DEGREES 24' 14'' WEST 15.10 FEET, NORTH 27 DEGREES 35' 46'' WEST 134.50 FEET TO A POINT ON THE SOUTHERN LINE OF THE 60 FOOT RIGHT OF WAY AS SHOWN ON SAID MAP. THENCE ALONG THE SOUTHERLY LINE OF SAID RIGHT OF WAY (BEING THE NORTHERLY LINE OF SAID PARCEL 'C') THE FOLLOWING COURSES AND DISTANCES; ALONG A CURVE TO THE LEFT WITH A RADIUS OF 190.00 FEET THROUGH A CENTRAL ANGLE OF 22 DEGREES 39' 06'' A DISTANCE OF 75.12 FEET TO A POINT OF REVERSE CURVE WITH A RADIUS OF 1010.00 FEET THROUGH A CENTRAL ANGLE OF 15 DEGREES 21' 05'' A DISTANCE OF 270.61 FEET TO A POINT OF REVERSE CURVE WITH A RADIUS OF 100.00 FEET THROUGH A CENTRAL ANGLE OF 84 DEGREES 33' 53'' A DISTANCE OF 147.59 FEET, THENCE SOUTH 25 DEGREES 17' 00'' WEST 96.40 FEET TO THE INTERSECTION WITH THE EASTERLY LINE OF STATE HIGHWAY 29 AND 12 AS SHOWN ON SAID PARCEL MAP. THENCE ALONG SAID EASTERLY LINE OF SAID STATE HIGHWAY IN A NORTHERLY DIRECTION ALONG A CURVE TO THE LEFT WITH A RADIUS OF 10,080.00 FEET THROUGH A CENTRAL ANGLE OF 00 DEGREES 52' 39'' A DISTANCE OF 154.35 FEET TO A 1/2'' REBAR AND TAG STAMPED L.S. 4366 MARKING THE SOUTHWEST CORNER OF PARCEL 'A' AS SHOWN ON THE PARCEL MAP FILED DECEMBER 21, 1979 IN BOOK 11 OF PARCEL MAPS AT PAGE 11. THENCE ALONG THE SOUTHERN LINE OF SAID LAST MENTIONED PARCEL 'A' THE FOLLOWING COURSES AND DISTANCES; ALONG A CURVE TO THE LEFT WITH A RADIUS OF 40.00 FEET THROUGH A CENTRAL ANGLE OF 64 DEGREES 10' 03'' A DISTANCE OF 44.80 FEET, SOUTH 68 DEGREES 00' 00'' EAST 139.43 FEET, ALONG A CURVE TO THE LEFT WITH A RADIUS OF 950.00 FEET THROUGH A CENTRAL ANGLE OF 15

(CONTINUED)

DEGREES 21' 05'' A DISTANCE OF 254.53 FEET TO A POINT OF BEGINNING OF A REVERSE CURVE WITH A RADIUS OF 250.00 FEET THROUGH A CENTRAL ANGLE OF 31 DEGREES 04' 47'' A DISTANCE OF 135.61 FEET TO THE MOST SOUTHERN CORNER OF SAID PARCEL 'A' (11PM 11). THENCE CONTINUING ALONG SAID CURVE WITH A RADIUS OF 250.00 FEET THROUGH A CENTRAL ANGLE OF 00 DEGREES 21' 08'' A DISTANCE OF 1.54 FEET, THENCE ALONG A CURVE TO THE LEFT WITH A RADIUS OF 250.00 FEET THROUGH A CENTRAL ANGLE OF 49 DEGREES 56' 44'' A DISTANCE OF 217.93 FEET TO THE MOST SOUTHERN CORNER OF PARCEL 'A' AS SHOWN ON THE PARCEL MAP FILED MARCH 10, 1981 IN BOOK 12 OF PARCEL MAPS AT PAGE 20. THENCE ALONG THE SOUTHERN

LINE OF SAID LAST MENTIONED PARCEL THE FOLLOWING COURSES AND DISTANCES: NORTH 78 DEGREES 08' 07'' EAST 328.15 FEET AND NORTH 69 DEGREES 03' 23'' EAST 313.99 FEET TO THE SOUTHEAST CORNER OF SAID LAST MENTIONED PARCEL 'A', NORTH 71 DEGREES 00' 52'' EAST 203.44 FEET TO A 1/2'' REBAR AND TAG STAMPED L.S. 4366; THENCE NORTH 48 DEGREES 23' 50'' EAST 122.99 FEET TO A 1/2'' REBAR AND TAG STAMPED L.S. 4366; THENCE NORTH 23 DEGREES 43' 01'' EAST 147.20 FEET TO A 1/2'' REBAR AND TAG STAMPED L.S. 4366; THENCE NORTH 16 DEGREES 55' 33'' EAST 470.36 FEET TO A 1/2'' REBAR AND TAG STAMPED L.S. 4366; THENCE NORTH 01 DEGREES 02' 20'' EAST 416.30 FEET TO A 1/2'' REBAR AND TAG STAMPED L.S. 4366; THENCE DUE NORTH 531.75 FEET TO THE TRUE POINT OF COMMENCEMENT.

PORTION OF APN 46-370-23

PARCEL ELEVEN:

THE NORTHEAST QUARTER OF SECTION TWENTY FOUR (24), IN TOWNSHIP FIVE (5) NORTH, RANGE FOUR (4) WEST, MOUNT DIABLO BASE AND MERIDIAN ACCORDING TO THE OFFICIAL PLAT THEREOF. EXCEPTING THEREFROM, HOWEVER, THAT CERTAIN 6.53 ACRE TRACT HERETOFORE CONVEYED TO THE "BOARD OF TRUSTEES OF THE NAPA STATE ASYLUM FOR THE INSANE", A CORPORATION, BY DEED OF RECORD IN LIBER 56 OF DEEDS, PAGE 299.

APN 46-370-12

PARCEL TWELVE:

COMMENCING AT A POINT IN THE CENTER OF SECTION TWENTY-FOUR (24) IN TOWNSHIP FIVE (5) NORTH, RANGE FOUR (4) WEST, MOUNT DIABLO BASE AND MERIDIAN, AND RUNNING THENCE SOUTHERLY ALONG THE NORTH AND SOUTH LINE RUNNING THROUGH THE CENTER OF SAID SECTION TWENTY-FOUR (24), 900 FEET; THENCE NORTHEASTERLY

(Continued)

IN A DIRECT LINE TO A POINT ON THE NORTHERN LINE OF THE SOUTHEAST QUARTER OF SAID SECTION TWENTY-FOUR (24) DISTANT THEREON 600 FEET EAST OF THE POINT OF COMMENCEMENT AND THENCE WEST ALONG THE NORTHERN LINE OF SAID SOUTHEAST QUARTER OF SAID SECTION TWENTY-FOUR (24), 600 FEET TO THE POINT OF COMMENCEMENT.

BEING A PORTION OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION TWENTY-FOUR (24) IN TOWNSHIP FIVE (5) NORTH, RANGE FOUR (4) WEST, MOUNT DIABLO BASE AND MERIDIAN.

APN 46-370-13

PARCEL THIRTEEN:

BEING PORTIONS OF SECTIONS 19 AND 30 TOWNSHIP 5 NORTH RANGE 3 WEST AND PORTIONS OF SECTIONS 24 AND 25, TOWNSHIP 5 NORTH RANGE 4 WEST, MDB & M, DESCRIBED AS FOLLOWS:

BEGINNING AT THE 1/4 SECTION CORNER ON THE EASTERN LINE OF SECTION 24,TOWNSHIP 5 NORTH, RANGE 4 WEST, MOUNT DIABLO BASE AND MERIDIAN; THENCE WESTERLY ALONG THE NORTHERLY LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 24, 2045.22 FEET TO THE MOST EASTERN CORNER OF THE 6.2 ACRE TRACT OF LAND DESCRIBED IN THE DEED TO BASALT ROCK COMPANY, A CORPORATION, BY DEED RECORDED FEBRUARY 15, 1926 IN BOOK 29 OF OFFICIAL RECORDS, PAGE 429, OF NAPA COUNTY, CALIFORNIA; THENCE SOUTHWESTERLY ALONG THE SOUTHEASTERN LINE OF SAID 6.2 ACRE TRACT TO THE MOST SOUTHERN CORNER THEREOF; THENCE SOUTHERLY ALONG THE WESTERN LINE OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 24 ABOVE REFERRED TO; TO THE SOUTHWESTERN CORNER THEREOF; THENCE EAST TO THE SOUTHEASTERN CORNER OF SAID NORTHWEST QUARTER OF THE SOUTHEAST QUARTER; THENCE SOUTH, ALONG THE WEST LINE OF THE EAST ONE-HALF OF THE EAST ONE-HALF OF SAID SECTION 24 AND THE EAST ONE-HALF OF THE EAST ONE-HALF OF SECTION 25, TOWNSHIP 5 NORTH, RANGE 4 WEST MOUNT DIABLO BASE AND MERIDIAN, 3951.54 FEET, MORE OR LESS, TO THE NORTH CO-ORDINATE LINE 213,000 ACCORDING TO THE CALIFORNIA CO-ORDINATE SYSTEM ZONE II. SAID NORTH CO-ORDINATE LINE LIES 8.50 FEET, MORE OR LESS, NORTH OF THE SOUTHERLY LINE OF THE NORTHEAST QUARTER OF SAID SECTION 25; THENCE EAST ALONG SAID NORTH CO-ORDINATE LINE 1338.88 FEET TO THE EAST CO-ORDINATE LINE 1,929,900 OF SAID ZONE II; THENCE NORTH 900.00 FEET; THENCE EAST 256.00 FEET; THENCE NORTH 47 DEGREES EAST 457.00 FEET; THENCE NORTH 57 DEGREES EAST 286.00 FEET; THENCE NORTH 43 DEGREES 30' EAST 770.00 FEET; THENCE NORTH 78 DEGREES EAST 588.00 FEET; THENCE EAST 676.28 FEET; THENCE NORTH 893.30 FEET, MORE OR LESS, TO THE COMMON LINE BETWEEN SECTION 19 AND 30 IN TOWNSHIP 5 NORTH RANGE 3 WEST, MDB & M; THENCE WESTERLY ALONG SAID COMMON LINE, A PORTION OF WHICH IS ALSO THE SOUTHERN LINE OF THE PARCEL OF LAND DESCRIBED IN THE DEED TO BENO SEGHETTI, ETAL, RECORDED JULY 26, 1951 IN BOOK 369 OF OFFICIAL RECORDS, PAGE 330, NAPA COUNTY RECORDS; TO THE INTERSECTION THEREOF WITH THE EXISTING STONE FENCE REFERRED TO IN THE DEED TO ROBERT SHEEHY IN BOOK

(Continued)

L OF DEEDS, PAGE 230, NAPA COUNTY RECORDS; SAID POINT OF INTERSECTION BEING ALSO THE MOST EASTERN CORNER OF THE 40 ACRE TRACT OF LAND DESCRIBED IN THE DEED TO SEZZEY ABOVE REFERRED TO; THENCE NORTHWESTERLY ALONG THE STONE FENCE BEING THE SOUTHWESTERN LINE OF SAID PARCEL OF LAND DESCRIBED IN THE DEED TO SEGHETTI, ETAL, ABOVE REFERRED TO; TO THE EASTERN LINE OF SECTION 24, BEING THE WESTERN LINE OF SEGHETTI, PARCEL; THENCE NORTHERLY ALONG LAST MENTIONED SECTION LINE TO THE POINT OF COMMENCEMENT.

APN'S 46-360-05, 46-370-15 AND 46-370-03

PARCEL FOURTEEN:

ALL THAT REAL PROPERTY SITUATE IN THE CITY OF NAPA, COUNTY OF NAPA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT ON THE SOUTHEASTERLY CORNER OF THE LANDS BELONGING NOW OR FORMERLY TO FRANCES M. CARAWAY AND JAMES M. CARAWAY, HER HUSBAND, LYING BETWEEN THE COUNTY ROAD LEADING TO THE NAPA CITY WATER WORKS AND NAPA RIVER, AND BOUNDED ON THE NORTH BY SARCOS CREEK, WHICH POINT OF BEGINNING IS ON THE WESTERLY LINE OF SAID COUNTY ROAD; THENCE ALONG THE SOUTHERLY LINE OF SAID TRACT BELONGING NOW OR FORMERLY TO SAID FRANCES M. CARAWAY AND JAMES M. CARAWAY, HER HUSBAND, SOUTH 89 DEGREES 25' WEST, 178.04 FEET TO THE CENTER OF NAPA RIVER; THENCE UP THE CENTER OF NAPA RIVER, AT RIGHT ANGLES, 8 FEET; THENCE BACK TO SAID COUNTY ROAD ON A LINE PARALLEL WITH THE FIRST LINE DESCRIBED, AT A UNIFORM DISTANCE OF 8 FEET THEREFROM, TO THE WESTERLY LINE OF SAID COUNTY ROAD; THENCE SOUTH 13 DEGREES WEST, 8 FEET TO THE POINT OF BEGINNING.

APN 52-040-02

PARCEL FIFTEEN:

INTENTIONALLY OMITTED

PARCEL SIXTEEN: A parcel of land circumscribed by a 20 foot radius circle surrounding an existing well, the center of which is located south 29 degrees 41 minutes east, 954.31 feet from the aforementioned point of commencement, together with the right to take water from the well situate on the above described premises and a right of way across the land hereby conveyed to the said well, including the right of laying, inspecting, repairing and replacing pipe lines for the purpose of taking water therefrom.

NAPA COUNTY

EXHIBIT B

PARCEL ONE:
Commencing at the most Southern corner of Parcel "A" as shown on the Parcel Map entitled, "Parcel Map a Division of a Portion of the Lands of Basalt Rock Company Inc", filed March 10, 1981 in Book 12 of Parcel Maps at page 20, Napa County Records; thence from said point of commencement and running along the Western line of said Parcel "A" hereinabove referred to the following courses and distances: North 09 deg. 03' 07" West 489.55 feet, South 80 deg. 56' 53" West 137.50 feet, North 09 deg. 03' 07" West 248.44 feet, North 80 deg. 56' 53" East 40.00 feet, North 09 deg. 03' 07" West 359.63 feet, South 80 deg. 56' 53" West 60.00 feet and North 09 deg. 03' 07" West 975.34 feet to the Northwest corner of said Parcel "A" hereinabove referred to; thence South 84 deg. 09' 28" East along the Northern line of said Parcel "A" a distance of 820.05 feet to the Northeastern corner of said Parcel "A"; thence continuing South 84 deg. 09' 28" East along a wire fence that is on the Northern line of the parcel of land as described in the Deed to Basalt Rock Company Inc., recorded October 29, 1923 in Book 140 of Deeds at page 272, a distance of 772.33 feet; thence leaving the Northern line of said parcel to Basalt Rock Company Inc., hereinabove referred to and running due South 531.75 feet to 1/2 inch rebar and tagged stamped L.S. 4366; thence South 01 deg. 02' 29" West 416.30 feet to a 1/2 inch rebar and tag stamped L.S. 4366; thence South 16 deg. 55' 33" West 470.36 feet to a 1/2 inch rebar and tag stamped L.S. 4366; thence South 23 deg. 43' 01" West 147.20 feet to a 1/2 inch rebar and tag stamped L.S. 4366; thence South 48 deg. 23' 50" West 122.99 feet to a 1/2 inch rebar and tag stamped L.S. 4366; thence South 71 deg. 00' 52" West 203.44 feet to the Southeast corner of Parcel "A" hereinabove referred to; thence along the Southern line of said Parcel "A" the following courses and distances: South 69 deg. 03' 23" West 313.99 feet and South 78 deg. 08' 07" West 328.15 feet to the point of commencement.

PARCEL TWO:
A non-exclusive easement for ingress, egress and public utilities over a strip of land, 60.00 feet wide, the Northerly line of which is described as follows:

COMMENCING at a point on the Easterly line of State Highways 12 and 29; said point being the most Northerly point of the parcel of land labeled "60 foot wide Road Easement 1.39 acres" as shown on the Parcel Map entitled, "Parcel Map Basalt Rock Company Inc.", filed October 9, 1980 in Book 11 of Parcel Maps at page 78, Napa County Records; thence from said point of commencement and running along the Northeasterly line of said 60 foot wide road easement the following courses and distances: along a curve to the left in an Easterly direction with a radius of 40.0 feet through a central angle of 64 deg. 10' 03" an arc distance of 44.80 feet, South 68 deg. 00' 00" East 159.43 feet along a curve to the left with a radius of 950.0 feet through a central angle of 15 deg. 21' 05" an arc distance of 254.53 feet to a point of reverse curve with a radius of 250.0 feet through a central angle of 31 deg. 25' 55" an arc distance of 137.15 feet to a point of reverse curve with a radius of 250.0 feet through a central angle of 49 deg. 56' 44" an arc distance of 217.93 feet and North 78 deg. 08' 07" East 3.56 feet to a point where said 60.0 foot easement angles Northerly; thence continuing North 78 deg. 08' 07" East 60.68 feet, more or less, to the intersection of the most Southern corner of Parcel "A" as shown on the hereinabove referred to Parcel Map.

PARCEL THREE:
A non-exclusive easement for ingress, egress and public utilities over a strip of land, 60.0 feet wide, the Northwesterly line of which is described as follows:

(Continued)

NAPA COUNTY

legal description (continued)

COMMENCING at the most Southern corner of the parcel of land labeled "Lands of the Basalt Rock Division 55.27 acres" as shown on the Record of Survey Map filed December 31, 1985 in Book 24 Surveys at page 70, Napa County Records; thence from said point of commencement along the Southerly line of said 55.27 acre parcel, the following courses and distances: North 78 deg. 08' 07" East 328.15 feet, North 69 deg. 03' 23" East 313.99 feet and North 71 deg. 00' 52" East 203.44 feet to an angle point in said Southerly line, said point being the Easterly terminus of this decription.

PARCEL FOUR:
A non-exclusive easement to be used for ingress and egress described as follows:

An Easement for access purposes, 20 feet in width, the Eastern line of which is described as follows:

BEGINNING at the Southwest corner of Parcel "A" as shown on the Map of a Portion of the Lands of Basalt Rock Company, Inc., recorded October 9, 1980 in Book 11 of Parcel Maps at page 78; thence South 78 deg. 80' 07" West 20.00 feet; thence North 09 deg. 03' 07" West 490.53 feet to a point that is North 80 deg. 56' 53" East 117.50 feet from the West line of said Parcel "A"; thence North 80 deg. 56' 53" East 20.00 feet; thence South 09 deg. 03' 07" East 489.55 feet to the point of beginning.

END OF DOCUMENT

ORIGINAL
File with DWR

Page ___ of ___
Owner's Well No. ___

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet
No. 0938198

Date Work Began 07/18/2007, Ended 08/01/2007
Local Permit Agency Napa County
Permit No. 96-11053 Permit Date 05/11/1999

DWR USE ONLY — DO NOT FILL IN
05N04W23
STATE WELL NO./STATION NO.
38 15 52 | 122 15 56
LATITUDE | LONGITUDE
APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DRILLING METHOD Rotary FLUID Mud

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
0	40	Brown Clay
40	100	Green Clay & Green Ash
100	120	Black Volcanic Ash
120	300	Light Green Volcanic Ash
300	360	Black & Red Volcanic Ash
360	370	Red Volcanic Ash
370	385	Black Volcanic Ash
385	400	Hard Blue Basalts

TOTAL DEPTH OF BORING 400 (Feet)
TOTAL DEPTH OF COMPLETED WELL 393 (Feet)

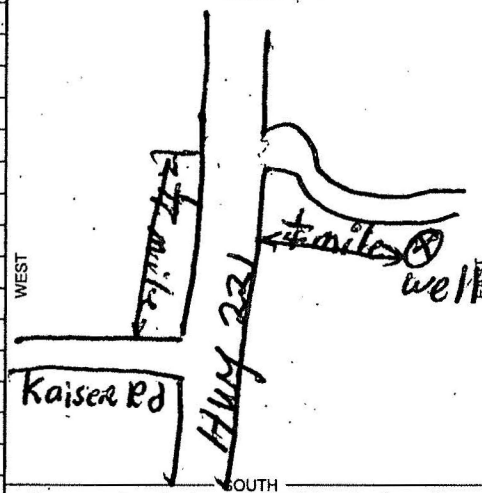
WELL OWNER

Attachment 2

WELL LOCATION

Address ~~Syar Industries~~ 2301 Napa, Vallejo hi
City Napa
County Napa
APN Book 046- Page 370 Parcel 025
Township ___ Range ___ Section ___
Lat ___ DEG. ___ MIN. ___ SEC. N
Long ___ DEG. ___ MIN. ___ SEC. W

LOCATION SKETCH



*Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. **PLEASE BE ACCURATE & COMPLETE.***

ACTIVITY (✓)

✓ NEW WELL
MODIFICATION/REPAIR
___ Deepen
___ Other (Specify)
___ DESTROY *(Describe Procedures and Materials Under "GEOLOGIC LOG")*

USES (✓)

WATER SUPPLY
___ Domestic ✓ Public
___ Irrigation ___ Industrial
___ MONITORING
___ TEST WELL
___ CATHODIC PROTECTION
___ HEAT EXCHANGE
___ DIRECT PUSH
___ INJECTION
___ VAPOR EXTRACTION
___ SPARGING
___ REMEDIATION
___ OTHER (SPECIFY)

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER 60 (Ft.) BELOW SURFACE
DEPTH OF STATIC WATER LEVEL 35 (Ft.) & DATE MEASURED 8-1-07
ESTIMATED YIELD 800+ (GPM) & TEST TYPE Air lift
TEST LENGTH 6 (Hrs.) TOTAL DRAWDOWN UK (Ft.)
* *May not be representative of a well's long-term yield.*

GPMat day of test

CASING (S)

DEPTH FROM SURFACE Ft.	to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CON-DUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	65	17½	✓				Plastic	10	F480	
65	113	17½	✓				"	"	"	
113	393	17½		✓			"	"	"	.030

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	65	✓			
65	393				Well Pack Gravel

ATTACHMENTS (✓)

___ Geologic Log
___ Well Construction Diagram
___ Geophysical Log(s)
___ Soil/Water Chemical Analyses
___ Other ___

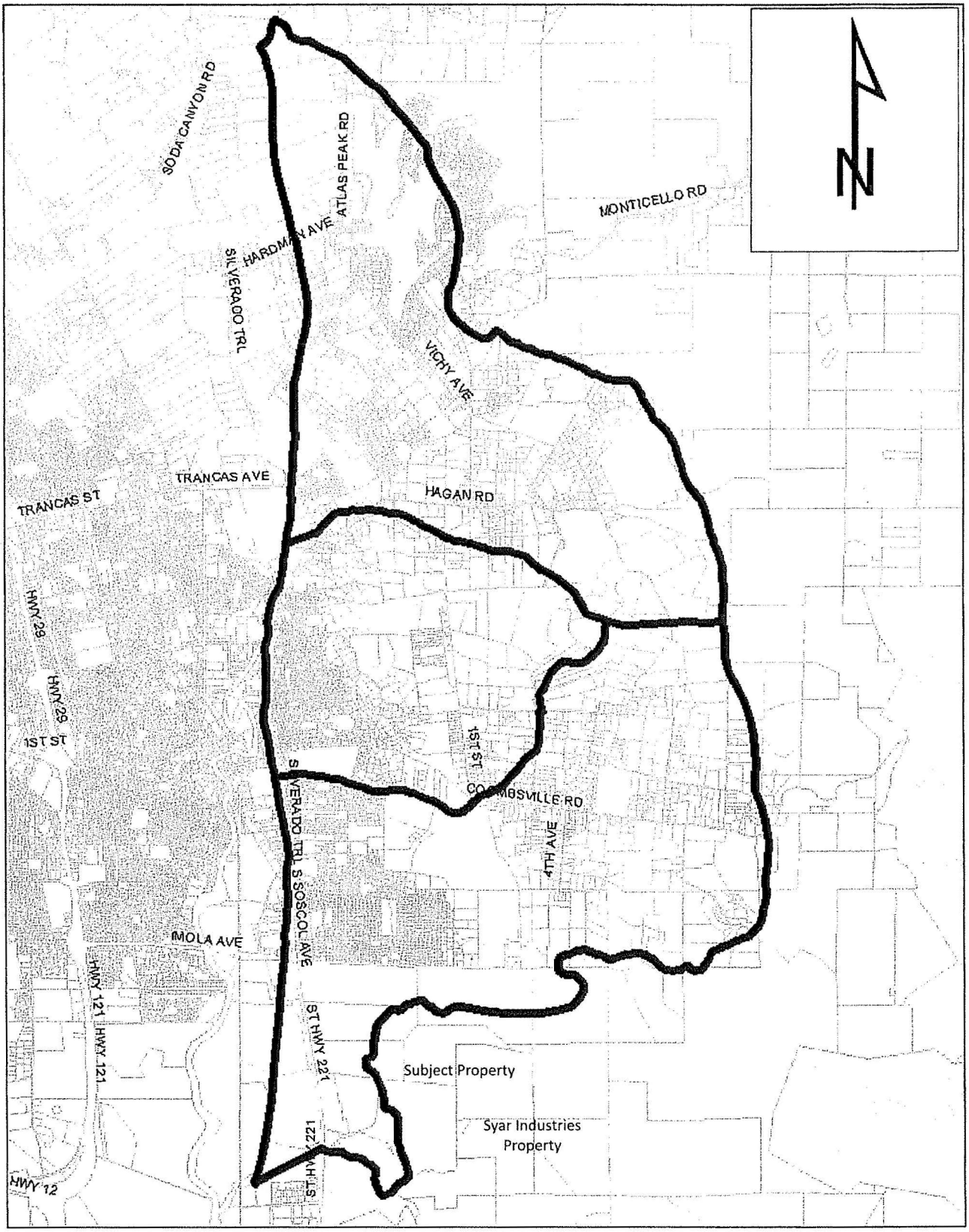
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Pulliam Well Exploration
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
ADDRESS 5110 Highway 128 CITY Napa, STATE CA ZIP 94558
Signed Tom Pulliam
C-57 LICENSED WATER WELL CONTRACTOR
DATE SIGNED 8-8-07
C-57 LICENSE NUMBER 808-508

DWR 188 REV. 05-03 IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM OSP 03 7883



Map 13-1: Milliken Sarco Tulocay Groundwater Deficient Basin

Attachment 3

PRELIMINARY WASTEWATER FEASIBILITY REPORT

BASANITES
11 BASALT ROAD
NAPA, CA 94559

Prepared for:

PDC Sacramento LLC
Attn: Steve Beauchamp
8775 Folsom Blvd., Suite 200
Sacramento, CA 95826



Project #4119040.0

June 27, 2022

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INTRODUCTION 1
EXISTING CONDITIONS 1
SITE EVALUATION 1
DOMESTIC WASTEWATER CHARACTERISTICS 1
DOMESTIC WASTEWATER – SUB SURFACE DRIP 2
OPERATION AND MAINTENANCE 3
CONCLUSION 4

ATTACHMENTS

1. Site Plan (UP4.0)

2. Vicinity Map
   USGS Map
   Soils Map

3. Site Evaluation Reports
   Pit Maps

4. Existing Wastewater Treatment System Design Documentation

INTRODUCTION

The Basanites project (APN 046-370-024) is requesting a Use Permit to construct a warehouse facility. New septic systems will be installed for the proposed 4-warehouse buildings and will serve the warehouse employees as well as office staff. Each warehouse building will have its own septic system. See Attachment 1 for the proposed site plan.

This report will demonstrate that the proposed domestic wastewater systems will be sufficiently sized to accommodate peak flows from the warehouse and office buildings. Attachment 2 contains a Site Location Map and a USGS Site Map showing parcel topography, features, and boundary.

EXISTING CONDITIONS

The parcel has multiple industrial yards on site, with one septic system located in the southwest corner of the site. The other yards all appear to be served by portable toilets. The client proposes to demolish the existing structures, remove mobile office buildings, and demolish the existing septic system per Napa County guidelines. The existing system consists of two separate septic tanks which flow into separate sump pump vaults before being combined and dispersed into three 100-foot leach lines located in an elevated fill area west of the structures (See Attachment 4 for records of the existing system). The other industrial yards at the site all rely on portable toilets for their wastewater disposal.

SITE EVALUATION

RSA$^+$ conducted site evaluations at the parcel on October 1, 2019, February 21, 2020, and September 29, 2021. See Attachment 3 for copies of the site evaluation reports.

The site evaluations were conducted by Brett Frasier and Donal O'Briain of RSA$^+$ and observed by Darell Choate and Maureen Shields-Bown of Napa County Environmental Management.

DOMESTIC WASTEWATER CHARACTERISTICS

The domestic wastewater systems for the warehouse and office buildings have been designed to accommodate the projected flows described in this section. The anticipated number of employees is shown in Tables 1A-D below, which has been determined based upon the California Plumbing Code fixture calculation using the building square footage and occupancy type. It is assumed that employees are full-time. The projected flows are based on Table 4 from the Napa County Environmental Management Document Regulations for Design, Construction, and Installation of Alternative Sewage Treatment Systems. To allow for potential future use by tenants with more intense wastewater flows, the assumed design flows were assumed to be an additional 50% above the baseline flow. The following is a summary of the estimated flows from the proposed project:

Table 1A – Building A

Use	Source	Number	Projected Flow (gpd)	Total Flow (gpd)
Warehouse	Office Employees	30	20	600
	Warehouse Employees	32.48	15	487
Total Peak Wastewater Flow (Baseline)				1,087
Total Peak Wastewater Flow (Assumed Design)				**1,631**

Table 1B – Building B

Use	Source	Number	Projected Flow (gpd)	Total Flow (gpd)
Warehouse	Office Employees	30	20	600
	Warehouse Employees	37.18	15	558
Total Peak Wastewater Flow (Baseline)				1,158
Total Peak Wastewater Flow (Assumed Design)				**1,737**

Table 1C – Building C

Use	Source	Number	Projected Flow (gpd)	Total Flow (gpd)
Warehouse	Office Employees	30	20	600
	Warehouse Employees	34.20	15	513
Total Peak Wastewater Flow (Baseline)				1,113
Total Peak Wastewater Flow (Assumed Design)				**1,670**

Table 1D – Building D

Use	Source	Number	Projected Flow (gpd)	Total Flow (gpd)
Warehouse	Office Employees	30	20	600
	Warehouse Employees	29.50	15	443
Total Peak Wastewater Flow (Baseline)				1,043
Total Peak Wastewater Flow (Assumed Design)				**1,565**

DOMESTIC WASTEWATER – SUB SURFACE DRIP

A septic system and dispersal field will be designed for each warehouse building of the proposed facility. An Orenco AdvanTex, HOOT, or other advanced treatment system and new dispersal field are proposed.

Domestic wastewater from the proposed warehouse facilities will flow into new septic tanks. Wastewater will then flow into treatment tanks that allows recirculation. After treatment, wastewater will flow to dosing tanks, where it will be pumped to each proposed distribution field. The sizing of the tanks and the type of advanced treatment system will be determined as the actual program is refined throughout the permitting process.

Septic Tank

The septic tanks will serve to buffer peak flows and strengths from overwhelming the system and impairing treatment. These tanks will be designed with baffles near the outlet. These tanks will provide three days storage and will also serve to function as a primary settling basin.

Treatment Tank

The treatment tanks will serve to treat wastewater flows. Flow to these tanks will be metered to ensure that the system is not overloaded.

Pump Tank

The pump tanks will serve to hold treated wastewater prior to pumping to the dispersal field. These tanks will house dual pumps.

Dispersal Field

The subsurface drip fields are sized to meet Napa County Environmental Management guidelines. The distribution fields will be placed where the most limiting soil type was clay loam with a moderate subangular-blocky structure. The allowable application rate for this soil type is 0.6 gallons/square foot/day for pretreated effluent from Table 9 from the Napa County Environmental Management Document Regulations for Design, Construction, and Installation of Alternative Sewage Treatment Systems. The following is a summary of the primary and reserve dispersal areas for the facility:

Table 2 – Dispersal Field Area Calculations

	Building A	Building B	Building C	Building D
Peak Daily Wastewater Flow, Assumed Design	1,631 gpd	1,737 gpd	1,670 gpd	1,565
Dispersal Field Area (Primary) = Peak flow / 0.6 gpd/sf	2,718.33 sf	2,895 sf	2,783.33 sf	2,608.33 sf
Dispersal Field Area (Reverse) = 200% x Primary Field Area	5,436.67 sf	5,790 sf	5,566.67 sf	5,216.67 sf
Total Dispersal Field Area Required	8,155 sf	8,685 sf	8,350 sf	7,825 sf
Total Dispersal Field Area Provided	8,210 sf	9,245 sf	9,248 sf	8,318 sf

The total combined area required for the primary and reserve fields for the domestic warehouse and office buildings is 33,015 square feet. Recent site evaluations have verified a total acceptable pit area of 35,023 square feet, which exceeds the total combined required field area. See Attachment 3 for copies of the site evaluation reports and pit maps.

OPERATION AND MAINTENANCE

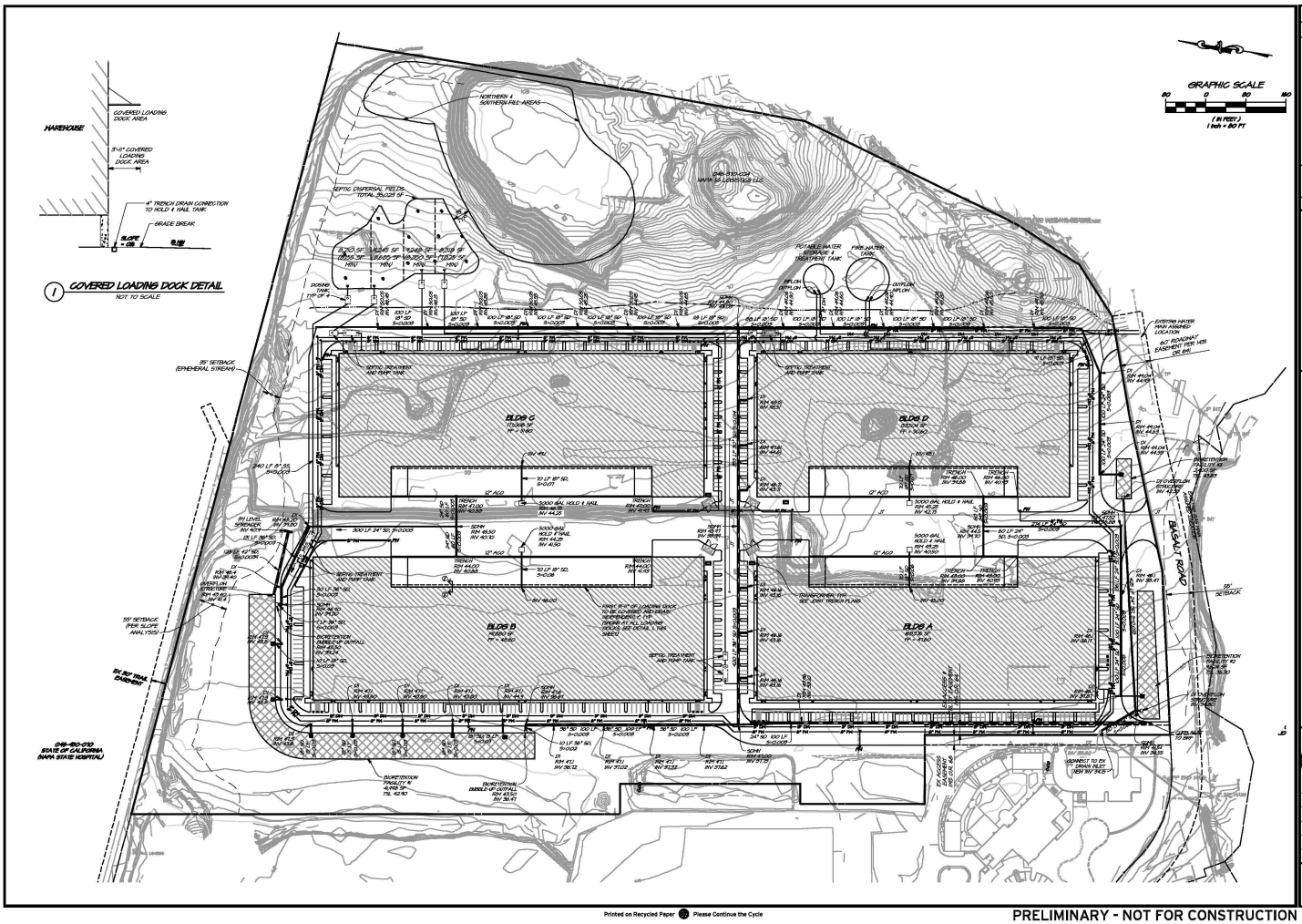
The domestic wastewater systems will be fully automated and will be designed so minimal input from warehouse staff is required. Per Napa County guidelines, a Registered Civil Engineer, Registered Environmental Health Specialist, or Licensed Contractor will provide semi-annual monitoring and evaluation of the systems. The contract with the responsible party will be provided prior to the final inspection for the installed systems.

CONCLUSION

This report demonstrates that the Basanites warehouse project can feasibly treat and disperse domestic wastewater onsite, meeting the Napa County Environmental Management Design Standards for the treatment of domestic wastewater.

ATTACHMENT 1

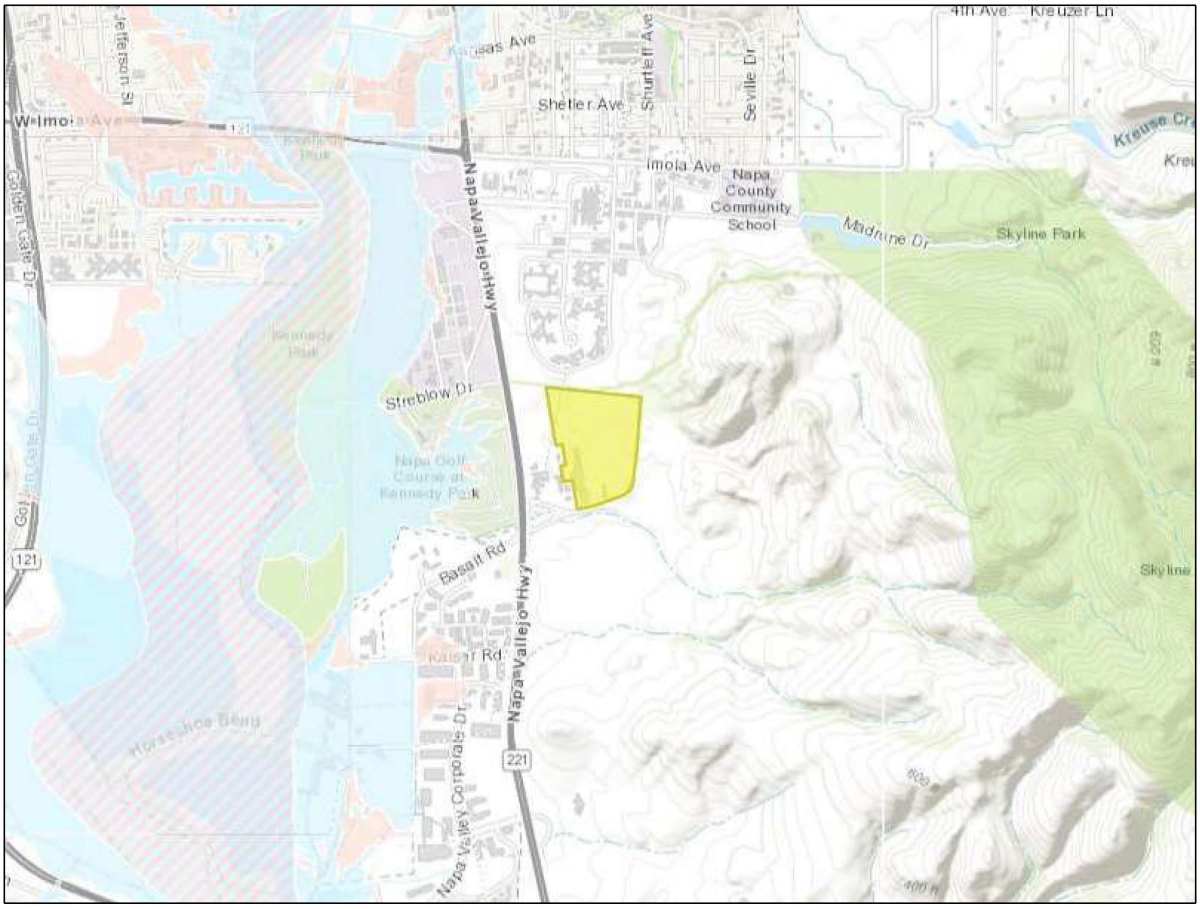
SITE PLAN (UP4.0)


GRAPHIC SCALE
80 0 80 160
(IN FEET)
1 inch = 80 ft
WAREHOUSE
COVERED LOADING DOCK AREA
3'-11" COVERED LOADING DOCK AREA
4" TRENCH DRAIN CONNECTION TO HOLD 4 HAUL TANK
GRADE BREAK
SLOPE = 12%
BLDG C
BLDG D
BLDG B
BLDG A
SEPTIC TREATMENT AND PUMP TANK
5000 GAL HOLD 4 HAUL
BASALT ROAD
35' SETBACK (EPHEMERAL STREAM)
55' SETBACK (PER SLOPE ANALYSIS)
50' SETBACK
STATE OF CALIFORNIA (NAPA STATE HOSPITAL)
NORTHERN & SOUTHERN FILE AREAS
POTABLE WATER STORAGE & TREATMENT TANK
FIRE WATER TANK
EXISTING WATER MAIN ASSIGNED LOCATION
60' ECONOMY EASEMENT PER NOR 05-541
DETENTION FACILITY #2 ELEV. 38.50
DETENTION FACILITY #1 ELEV. 42.10
DETENTION BUBBLE-UP OUTFALL ELEV. 43.50
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ATTACHMENT 2

VICINITY MAP
USGS MAP
SOILS MAP

County of Napa GIS
VICINITY MAP





Legend

Flood Hazard Zones

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazan
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chan
- Area with Reduced Risk Due to Lev

County Boundary

6,018.7 0 3,009.33 6,018.7 Feet

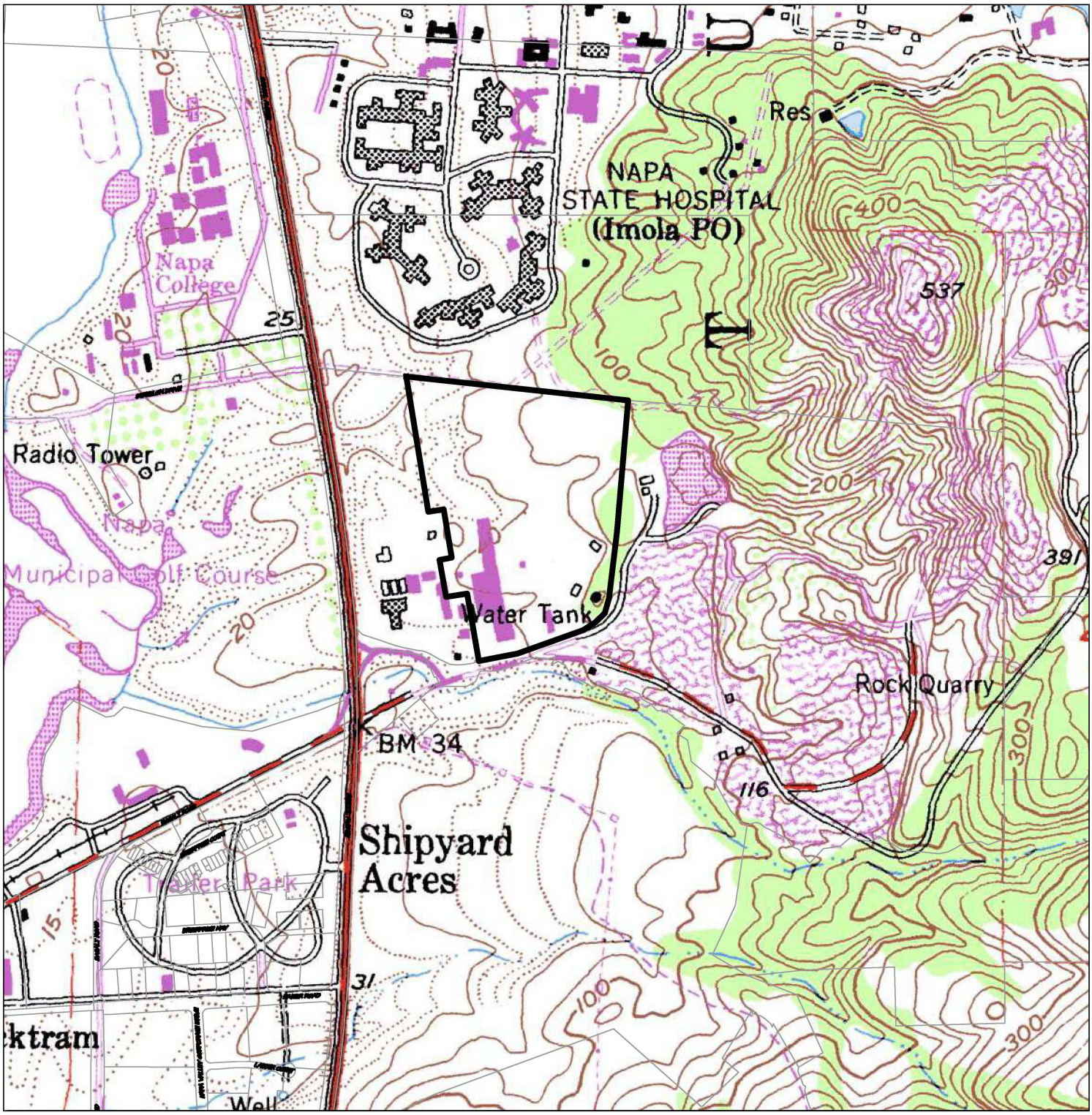
Disclaimer: This map was prepared for informational purposes only.
No liability is assumed for the accuracy of the data delineated hereon.

This map was printed on 10/3/2019

Notes

BASANITES
USGS MAP

NAPA CALIFORNIA



GRAPHIC SCALE

1000 0 1000 2000

(IN FEET)

1 inch = 1000 FT

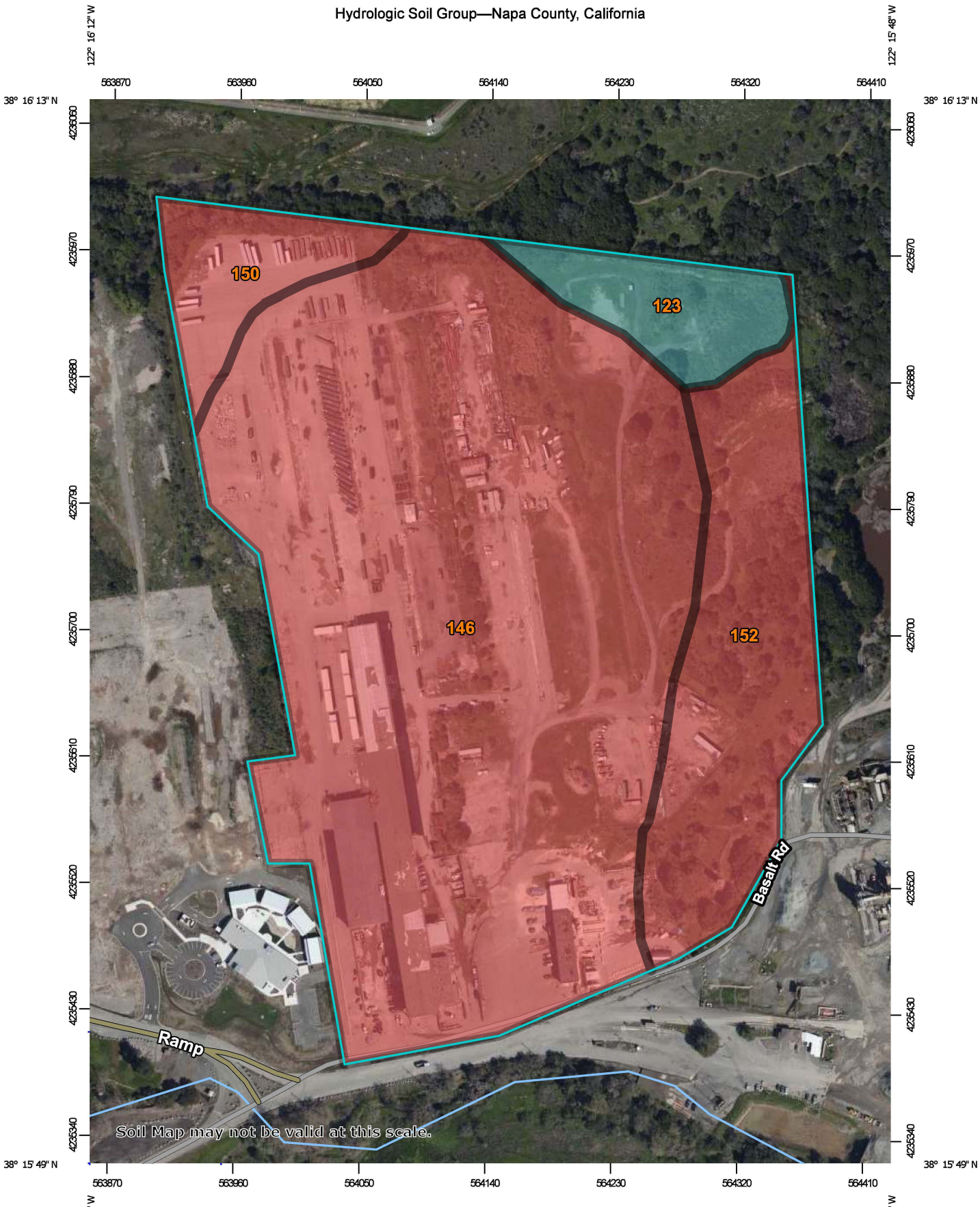
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10/03/19 4119040.0 USGS Map

Hydrologic Soil Group—Napa County, California



Map Scale: 1:3,690 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Napa County, California
Survey Area Data: Version 12, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 15, 2019—Apr 10, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
123	Coombs gravelly loam, 2 to 5 percent slopes	C	2.9	5.5%
146	Haire loam, 2 to 9 percent slopes	D	38.3	72.0%
150	Haire clay loam, 15 to 30 percent slopes	D	2.9	5.5%
152	Hambright rock-Outcrop complex, 30 to 75 percent slopes	D	9.0	16.9%
Totals for Area of Interest			**53.1**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

ATTACHMENT 3

SITE EVALUATION REPORTS
PIT MAPS

Napa County Department of Environmental Management

SITE EVALUATION REPORT

Please attach an 8.5" x 11" plot map showing the locations of all test pits triangulated from permanent landmarks or known property corners. The map must be drawn to scale and include a North arrow, surrounding geographic and topographic features, direction and % slope, distance to drainages, water bodies, potential areas for flooding, unstable landforms, existing or proposed roads, structures, utilities, domestic water supplies, wells, ponds, existing wastewater treatment systems and facilities.

Permit #: E19-00525
APN: 046-370-024
(County Use Only) Reviewed by: Date:

PLEASE PRINT OR TYPE ALL INFORMATION

Property Owner Boca Company	☒ New Construction ☐ Addition ☐ Remodel ☐ Relocation ☐ Other:
Property Owner Mailing Address 511 Houston St	☐ Residential - # of Bedrooms: Design Flow : gpd
City State Zip Sacramento CA 95691	☒ Commercial – Type: Winery Sanitary Waste: 4,070 gpd Process Waste: 0 gpd
Site Address/Location 11 Basalt Road, Napa, CA 94558	☐ Other: Sanitary Waste: gpd Process Waste: gpd

Evaluation Conducted By:

Company Name RSA+	Evaluator's Name Brett Frasier	Signature (Civil Engineer, R.E.H.S., Geologist, Soil Scientist)
Mailing Address: 1515 Fourth Street		Telephone Number 707-252-3301
City State Zip Napa CA 94559		Date Evaluation Conducted 9/30/19 – 10/01/19

Primary Area	**Expansion Area**
Acceptable Soil Depth: 36 in. Test pit #'s: 4, 5, 9, 10	Acceptable Soil Depth: 26 in. Test pit #'s: 1, 2, 3, 8, 14
Soil Application Rate (gal. /sq. ft. /day): 0.6	Soil Application Rate (gal. /sq. ft. /day): 0.6
System Type(s) Recommended: Sub-surface Drip	System Type(s) Recommended: Sub-surface Drip
Slope: < 30% Distance to nearest water source: 220 ft.	Slope: < 30 % Distance to nearest water source: 140 ft.
Hydrometer test performed? No ☐ Yes ☒ (Pending)	Hydrometer test performed? No ☐ Yes ☒ (Pending)
Bulk Density test performed? No ☐ Yes ☐ (attach results)	Bulk Density test performed? No ☐ Yes ☐ (attach results)
Percolation test performed? No ☐ Yes ☐ (attach results)	Percolation test performed? No ☐ Yes ☐ (attach results)
Groundwater Monitoring Performed? No ☐ Yes ☐ (attach results)	Groundwater Monitoring Performed? No ☐ Yes ☐ (attach results)

Site constraints/Recommendations:

Test Pit # 1

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0-12"	C	35-40%	SCL	M/SB	L	VFRB	NS	C/VF-M	C/F-M	N/A
	12-36"	C	20-25%	SCL	M/SB	SH	FRB	SS	M/VF-M	F/F	N/A
X	36-57"	Bottom	25-35%	SCL	M/SB	SH/H	FRB	SS	C/VF-M	F/F	N/A

Notes:

Test Pit # 2

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0-3"	C	40-45%	CL	M/SB	S	FRB	SS	M/VF-M	M/F-M	N/A
	3-26"	C	25%	CL	M/SB	SH	FRB	SS	M/VF-M	C/F-M	N/A
X	26-49"	Bottom									F-C/F/D

Notes:

Test Pit # 3

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0-6"	C	35-40%	CL	M/SB	SH	FRB	SS	M/VF-M	M/F-M	N/A
	6-31"	C	25-30%	SCL	M/SB	SH	FRB	SS	M/VF-M	C/F-M	N/A
X	31-54"	Bottom	20-25%		M/SB	S	VFRB	SS	M/VF-M	F/F-M	F-C/F/F

Notes:

Test Pit # 4

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0-6"	A	40-45%	CL	M/SB	L	FRB	SS	M/VF-M	M/F-C	N/A
	6-46"	C	25%	CL	M/SB	SH	FRB	SS	M/VF-M	M/F-C	N/A
X	46-55"	Bottom									F-C/F/F

Notes:

Test Pit # 5

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0-36"	C	30-35%	CL	M/SB	SH	FRB	SS	M/VF-M	C/F-M	N/A
X	36-60"	Bottom									F-C/F/F

Notes:

Test Pit # 6

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0-17"	C	30-35%	CL	M/SB	SH	FRB	SS	M/VF-M	M/F-M	N/A
X	17-38"										F-C/F/F

Notes:

Test Pit # 7

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0-5"	A	45-50%	S	M/SB	L	FRB	NS	C/F-M	C/F-M	N/A
	5-24"	C	30%	CL	M/SB	H	FRB	NS	M/F-M	C/F-M	N/A
	24-36"	C	30%	CL	M/SB	SH	FRB	SS	M/F-M	F/F-M	N/A
X	36-50"	Bottom									F-C/F/F

Notes:

Test Pit # 8

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0-15"	C	30%	CL	M/SB	SH	VFRB	SS	M/VF-M	M/F-M	N/A
	15-31"	C	20-30%	SCL	M/SB	H	FRB	SS	C/VF-F	F/F	N/A
X	31-55"	Bottom									F-C/F/F

Notes:

Test Pit # 9

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0-5"	C	40%	CL	M/SB	L	FRB	NS	M/VF-M	M/F-M	N/A
	5-45"	C	30%	CL	M/SB	SH	FRB	SS	M/VF-M	C/F-M	N/A
X	45-59"	Bottom									F-C/F/F

Notes:

Test Pit # 10

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0-7"	C	40-45%	S	M/SB	S	FRB	SS	M/VF-M	M/F-M	N/A
	7-43"	C	30%	CL	M/SB	SH	FRB	SS	M/VF-M	C/F-M	N/A
X	43-58"	Bottom									F-C/F/F

Notes:

Test Pit # 11

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0-12"	C	50-60%	CL	S/SB	S	F	NS	M/VF-F	F/F-M	N/A
X	12-22"	A	ROCK	ROCK	M/PL	H	VF				N/A
	22-40"	C	30%	SCL	M/SB	SH	FRB	VS	M/F-M	C/F-M	N/A
	40-60"	Bottom									F-C/F/F

Notes:

Test Pit # 12

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0-18"	C	45-50%	CL	M/SB	L	FRB	SS	M/VF-F	C/F-M	N/A
X	18-23"	A	ROCK	ROCK	S/PL	SH	F	NS	C/VF-F	F/F	N/A
	23-48"	C	25%	CL	M/SB	SH	FRB	SS	M/VF-M	F-F	N/A
	48-60"	Bottom									F-C/F/F

Notes:

Test Pit # 13

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0-6"	C	40-45%	CL	M/SB	L	FRB	SS	M/VF-M	M/F-M	N/A
X	6-14"	A	ROCK	ROCK	M/PL	H	F	SS	M/VF-F	F/F	N/A
	14-60"	Bottom	30%	CL	M/SB	SH	FRB	SS	M/VF-M	C/F-M	N/A
Notes:											

Test Pit # 14

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0-6"	C	40-45%	SCL	M/SB	S	FRB	NS	C/VF-F	M/F-M	N/A
X	6-54"	Bottom	25-30%	CL	M/SB	SH	FRB	S	M/VF-F	C/F-M	N/A
Notes:											

Permit Number: E20-00009
APN: 046-370-024
RSA+ Project Number: 4119040.0

Napa County Department of Environmental Management

SITE EVALUATION REPORT

Please attach an 8.5" x 11" plot map showing the locations of all test pits triangulated from permanent landmarks or known property corners. The map must be drawn to scale and include a North arrow, surrounding geographic and topographic features, direction and % slope, distance to drainages, water bodies, potential areas for flooding, unstable landforms, existing or proposed roads, structures, utilities, domestic water supplies, wells, ponds, existing wastewater treatment systems and facilities.

Permit #: E20-00009
APN: 046-370-024
(County Use Only) Reviewed by: Date:

PLEASE PRINT OR TYPE ALL INFORMATION

Property Owner BOCA Company	☐ New Construction ☒ Addition ☐ Remodel ☐ Relocation ☐ Other:
Property Owner Mailing Address 511 Houston St	☐ Residential - # of Bedrooms: Design Flow : gpd
City State Zip Sacramento CA 95691	☒ Commercial – Type: Warehouse Sanitary Waste: 8,050 gpd Process Waste: gpd
Site Address/Location 11Basalt Rad, Napa, CA 94558	☐ Other: Sanitary Waste: gpd Process Waste: gpd

Evaluation Conducted By:

Company Name RSA+	Evaluator's Name Donal O'Briain	Signature (Civil Engineer, R.E.H.S., Geologist, Soil Scientist)
Mailing Address: 1515 Fourth Street		Telephone Number 707-252-3301
City State Zip Napa CA 94559		Date Evaluation Conducted

Primary Area	Expansion Area
Acceptable Soil Depth:30 in. Test pit #'s: 6, 7, 8, 9, 10	Acceptable Soil Depth:24 in. Test pit #'s: 1, 2, 3, 4, 5, 11, 12, 13
Soil Application Rate (gal. /sq. ft. /day): 0.6	Soil Application Rate (gal. /sq. ft. /day): 0.6
System Type(s) Recommended: Subsurface Drip	System Type(s) Recommended: Subsurface Drip
Slope: 2 % Distance to nearest water source: >100'	Slope: 2 % Distance to nearest water source: >100'
Hydrometer test performed? No ☒ Yes ☐ (attach results)	Hydrometer test performed? No ☒ Yes ☐ (attach results)
Bulk Density test performed? No ☒ Yes ☐ (attach results)	Bulk Density test performed? No ☒ Yes ☐ (attach results)
Percolation test performed? No ☒ Yes ☐ (attach results)	Percolation test performed? No ☒ Yes ☐ (attach results)
Groundwater Monitoring Performed? No ☒ Yes ☐ (attach results)	Groundwater Monitoring Performed? No ☒ Yes ☐ (attach results)

Site constraints/Recommendations:
39,630 s.f. proven suitable by site evaluation for subsurface drip dispersal. Hollow near Pit #11 may be filled in to add approx. 2,000 s.f. currently in setback. Supplemental to 18,980 s.f. proven in prior site evaluation conducted 10/01/2019.

Permit Number: E20-00009
APN: 046-370-024
RSA+ Project Number: 4119040.0

Test Pit # 1

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
X			>50%								N/A

Notes: Shallow rock near surface. Pit not acceptable.

Test Pit # 2

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0 - 24	A	30%	SCL	MSB	SH	FRB	SP	CM	CF	N/A
X			>50%								

Notes: Hard pan at 24". Pit acceptable.

Test Pit # 3

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0 - 46	C	30%	SCL	MSB	SH	FRB	SP	CM	CF	N/A
X			>50%								

Notes: Rock at 46". Pit acceptable.

Permit Number: E20-00009
APN: 046-370-024
RSA+ Project Number: 4119040.0

Test Pit # 4

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0 - 12	C	20	SCL	MSB	SH	FRB	SP	CM	CF	N/A
	12 - 24	C	40	SCL	MSB	SH	FRB	SP	CM	CF	N/A
	24 – 36	C	30	SCL	MSB	SH	FRB	SP	CM	CF	N/A
X											

Notes: Refusal at 36". Changes in coloration of soil at 12", 24". Pit Acceptable.

Test Pit # 5

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0 – 20	A	45%	SCL	MSB	SH	FRB	SP	CM	CF	N/A
X	20		>50%								

Notes: Asphaltic layer at 20" was limiting condition. Pit not acceptable.

Test Pit # 6

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0 – 40	-	20	SCL	MSB	SH	VFRB	SS	CM	CM	N/A

Notes: Limiting condition was bottom of pit. Pit acceptable.

Permit Number: E20-00009
APN: 046-370-024
RSA+ Project Number: 4119040.0

Test Pit # 7

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0 – 30	A	20%	SCL	MSB	SH	FRB	SP	CM	CM	N/A
X			>50%								

Notes: Shale layer at 30". Pit acceptable.

Test Pit # 8

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0 – 36	-	20	SCL	MSB	SH	FRB	SS	CM	CM	N/A

Notes: Excavator hit refusal at 36". Pit acceptable.

Test Pit # 9

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0 – 36	-	20%	SCL	MSB	SH	FRB	SS	CM	CM	N/A
X	36		>50%								

Notes: Boulders at 36". Pit acceptable.

Permit Number: E20-00009
APN: 046-370-024
RSA+ Project Number: 4119040.0

Test Pit # 10

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0 – 39	C	20%	SCL	MSB	SH	FRB	SP	CM	CM	FFFt

Notes: Refusal at 39". Pit acceptable. Discoloration in soil likely due to mineral deposits, due to proximity to quarry and historical imported material.

Test Pit # 11

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0 – 18	A	20%	SCL	MSB	L	L	SP	CM	CM	N/A
	18 – 36		30%	SCL	MSB	L	L	SP	CM	CF	N/A
X											

Notes: Pit next to approximately 4' deep hollow. Refusal at 36". Pit acceptable.

Test Pit # 12

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0 – 46	C	20%	SCL	MSB	SH	L	SS	CM	CM	N/A
X			>50%								

Notes: Construction debris, brick and blocks in pit, was limiting condition. Pit acceptable.

Permit Number: E20-00009
APN: 046-370-024
RSA+ Project Number: 4119040.0

Test Pit # 13

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0 – 46	C	20%	SCL	MSB	H	F	SS	CF	FF	N/A
X	46		>50%								

Notes: Refusal at 46". Pit acceptable.

Permit Number: E21-00666
APN: 046-370-024
RSA+ Project Number: 4119040.0

Napa County Department of Environmental Management

SITE EVALUATION REPORT

Please attach an 8.5" x 11" plot map showing the locations of all test pits triangulated from permanent landmarks or known property corners. The map must be drawn to scale and include a North arrow, surrounding geographic and topographic features, direction and % slope, distance to drainages, water bodies, potential areas for flooding, unstable landforms, existing or proposed roads, structures, utilities, domestic water supplies, wells, ponds, existing wastewater treatment systems and facilities.

Permit #: E21-00666
APN: 046-370-024
(County Use Only) Reviewed by: Date:

PLEASE PRINT OR TYPE ALL INFORMATION

Property Owner Napa 55 Logistics LLC	☒ New Construction ☐ Addition ☐ Remodel ☐ Relocation ☐ Other:
Property Owner Mailing Address 8775 Folsom Blvd., Suite 200	☐ Residential - # of Bedrooms: Design Flow : gpd
City: Sacramento State: CA Zip: 95826-3725	☒ Commercial – Type: Warehouse Sanitary Waste: gpd Process Waste: gpd
Site Address/Location 11 Basalt Rad, Napa, CA 94558	☐ Other: Sanitary Waste: gpd Process Waste: gpd

Evaluation Conducted By:

Company Name RSA+	Evaluator's Name Donal O'Briain	Signature (Civil Engineer, R.E.H.S., Geologist, Soil Scientist)
Mailing Address: 1515 Fourth Street		Telephone Number 707-252-3301
City: Napa State: CA Zip: 94559		Date Evaluation Conducted 09/29/2021

Primary Area	**Expansion Area**
Acceptable Soil Depth: 60 in. Test pit #'s: 5, 6, 7	Acceptable Soil Depth:24 in. Test pit #'s: 8, 9
Soil Application Rate (gal. /sq. ft. /day): 0.6 gpd/sf	Soil Application Rate (gal. /sq. ft. /day): 0.6 gpd/sf
System Type(s) Recommended: Subsurface Drip w/ Pretreatment	System Type(s) Recommended: Subsurface Drip w/ Pretreatment
Slope: <2 % Distance to nearest water source: >100'	Slope: <2 % Distance to nearest water source: >100'
Hydrometer test performed? No ☒ Yes ☐ (attach results)	Hydrometer test performed? No ☒ Yes ☐ (attach results)
Bulk Density test performed? No ☒ Yes ☐ (attach results)	Bulk Density test performed? No ☒ Yes ☐ (attach results)
Percolation test performed? No ☒ Yes ☐ (attach results)	Percolation test performed? No ☒ Yes ☐ (attach results)
Groundwater Monitoring Performed? No ☒ Yes ☐ (attach results)	Groundwater Monitoring Performed? No ☒ Yes ☐ (attach results)

Site constraints/Recommendations:
5 test pits found to be suitable for subsurface drip to 24 inches or greater. Test pits in existing storage yards must reserve top layer of gravel/ aggregate base before used as primary.

Permit Number: E21-00666
APN: 046-370-024
RSA+ Project Number: 4119040.0

Test Pit # 1

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0-10		50%								-
X	10-18		>50%								-
X	18-45										CMD

Notes: compacted road base layer top, rock layer below. Mottled soil at bottom. Pit not suitable.

Test Pit # 2

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0-6	G	50%							FF	-
	6-16	G	30%	SCL	MSB	L	FRB	P	CM	-	-
X	16-45	C	>50%								CMD

Notes: Compacted Road base top. Mottled rocky soil at 16" was limiting condition. Pit not suitable.

Test Pit # 3

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0 - 10	G	50%								
X	10-30		>50%								CMD

Notes: Mottled soil with decomposing brittle rock at 10". Pit not suitable.

Permit Number: E21-00666
APN: 046-370-024
RSA+ Project Number: 4119040.0

Test Pit # 4 15' E of Survey CP 78

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
X			>50%								

Notes: Rock close to surface. Pit not suitable

Test Pit # 5 50' to vault structure, 30' W of fence

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0 – 5	A	>50%								
	5-32	G	20%	SCL	MSB	SH	FRB	SP	CF	-	-
	32-65		40%	SCL	MG	H	-	SP	FF	-	

Notes: Roadway gravel layer on top. 60" of soil below. Bottom of excavation was limiting condition. Pit suitable.

Test Pit # 6 75' S of top TP #5, 30' W of fence.

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0-6	A	>50%								
	6-36	G	20%	SCL	G	SM	L	SP	CF	-	-
	36-69		45%	SCL	G	SM	L	SP	CF	-	-

Notes: Roadway gravel layer on top. Suitable soil below. Pit suitable to 69". Top 6" of gravel/ aggregate base to be replaced with suitable soil if used for primary.

Permit Number: E21-00666
APN: 046-370-024
RSA+ Project Number: 4119040.0

Test Pit # 7 30' E of fence, 9' S of gate.

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0 – 36	G	25%	SCL	MSB	SH	FRB	SP	CM	CM	-
	36-63		45%	SCL	MSB	SH	FRB	SP	FF	FF	-

Notes: Bottom of excavation was limiting condition.

Test Pit # 8 25' to tree

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0 – 24	G	30%	SCL	MSB	VH	FRB	SP	FF	CF	-
X	24-48								FF	FF	

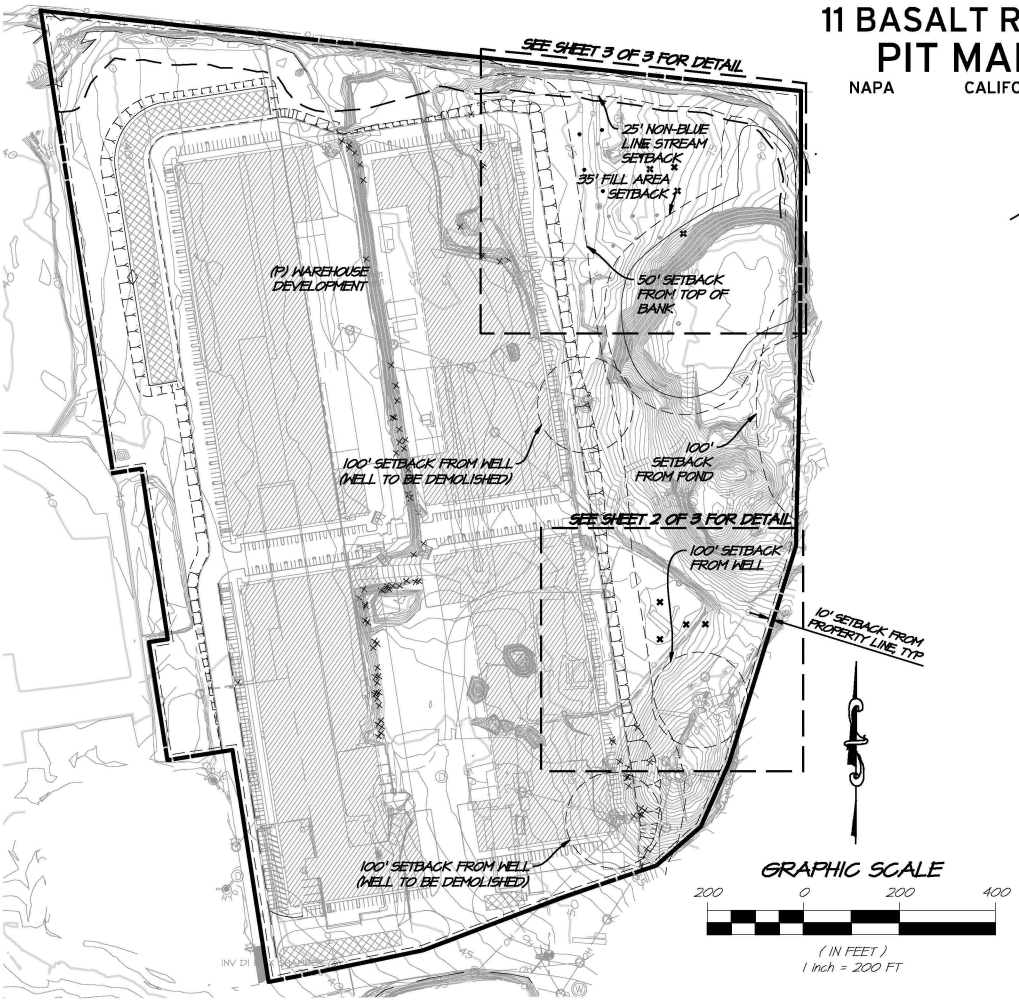
Notes: Refusal at 48" brittle rock at 24". Corroded soil.

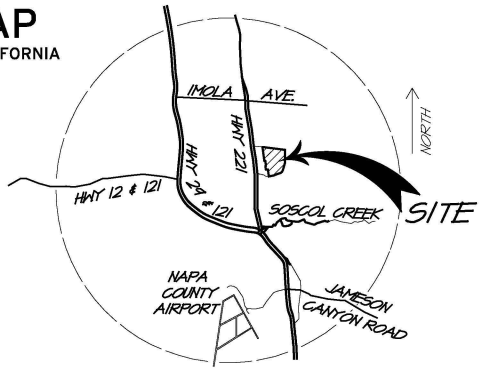
Test Pit # 9 105' to creek, 75' to conc. structure

X = Limiting Horizon	Horizon Depth (Inches)	Boundary	%Rock	Texture	Structure (Grade / Shape)	Consistence			Pores (QTY / Size)	Roots (QTY / Size)	Mottling (QTY / Size/ Contrast)
						Side Wall	Ped	Wet			
	0 – 36	C	40%	SCL	MSB	L	FRB	SP	CM	FF	-
	36-66		30%	SCL	MSB	H	FRB	SP	FF	FF	-

Notes: /native soil at 36" horizon. Pit suitable

11 BASALT ROAD
PIT MAP
NAPA CALIFORNIA





LOCATION MAP
NO SCALE

LEGEND

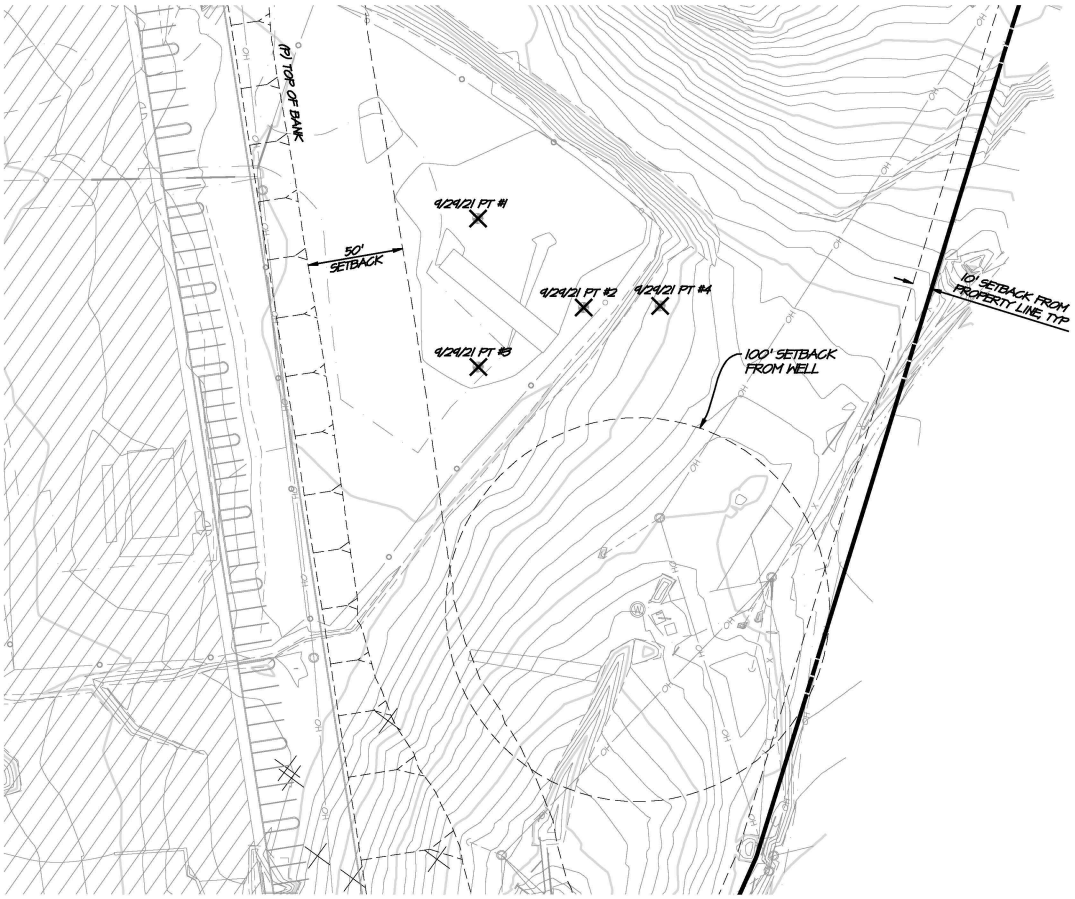
- PT. — ACCEPTABLE SOIL PIT, DATE AND PIT NUMBER
- PT. — NOT ACCEPTABLE SOIL PIT, DATE AND PIT NUMBER
- PT. — SOIL PIT FROM PREVIOUS EVALUATION, DATE AND PIT NUMBER
- PROPERTY BOUNDARY
- SETBACK

DATE OF EVALUATION: 09/29/21
APN: 046-370-024
SITE ADDRESS: 11 BASALT RD, NAPA CA
ENVIRONMENTAL HEALTH INSPECTOR: MAUREEN SHIELDS-BOHN

GRAPHIC SCALE
200 0 200 400
(IN FEET)
1 inch = 200 FT

RSA+
1515 FOURTH STREET
NAPA, CALIF. 94559
OFFICE|707|252.3301
+ www.RSAcivil.com +
RSA+| CONSULTING CIVIL ENGINEERS + SURVEYORS + | est. 1980

11 BASALT ROAD
PIT MAP



LEGEND

- PT. — ACCEPTABLE SOIL PIT DATE AND PIT NUMBER
- PT. — NOT ACCEPTABLE SOIL PIT DATE AND PIT NUMBER
- PT. — SOIL PIT FROM PREVIOUS EVALUATION DATE AND PIT NUMBER
- PROPERTY BOUNDARY
- SETBACK

DATE OF EVALUATION: 04/24/21
APN: 046-370-024
SITE ADDRESS: 11 BASALT RD, NAPA CA
ENVIRONMENTAL HEALTH INSPECTOR: MAUREEN SHIELDS-BOHN

GRAPHIC SCALE

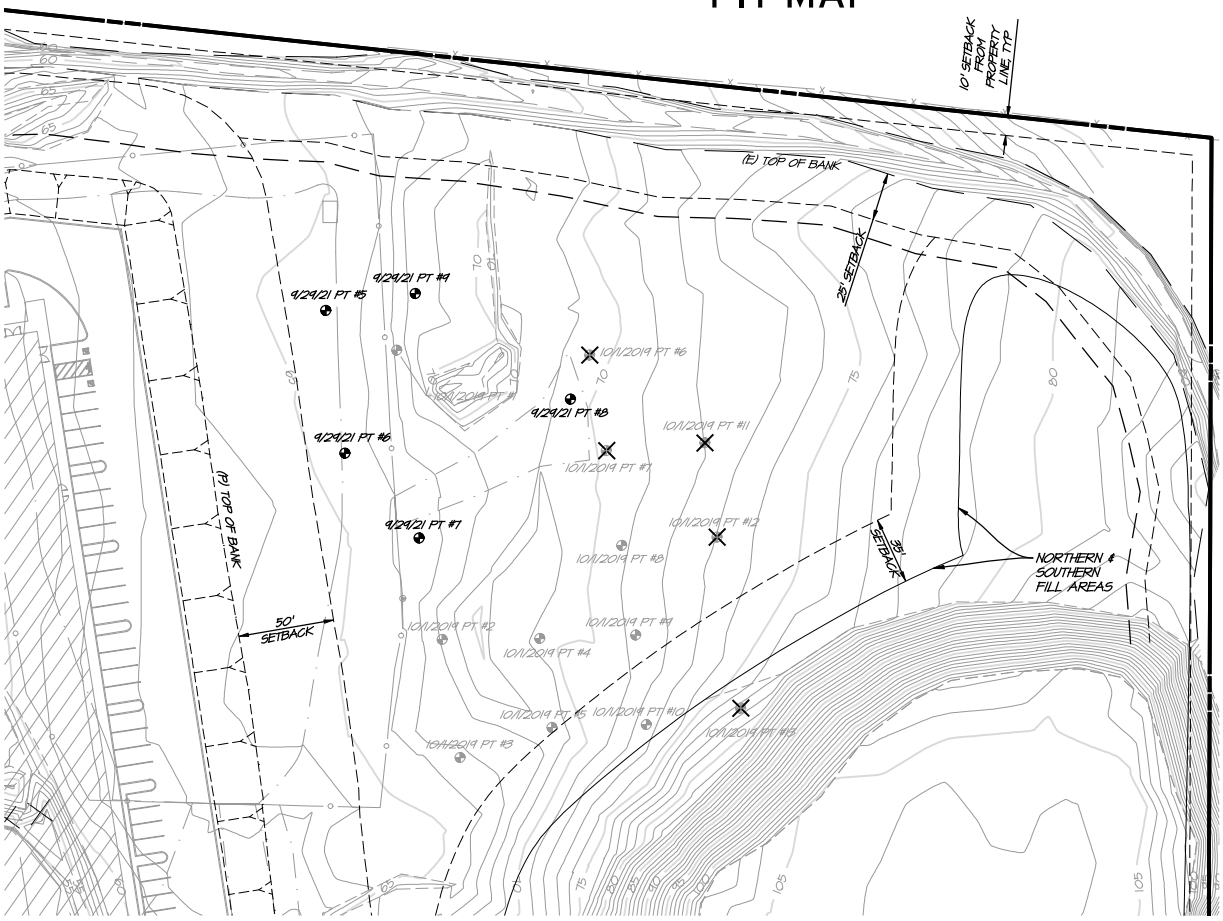
50 0 50 100

(IN FEET)
1 inch = 50 FT

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11 BASALT ROAD
PIT MAP



LEGEND

- PT. ACCEPTABLE SOIL PIT DATE AND PIT NUMBER
- PT. NOT ACCEPTABLE SOIL PIT DATE AND PIT NUMBER
- PT. SOIL PIT FROM PREVIOUS EVALUATION DATE AND PIT NUMBER
- PROPERTY BOUNDARY
- SETBACK

DATE OF EVALUATION: 09/24/21
APN: 046-370-024
SITE ADDRESS: 11 BASALT RD, NAPA CA
ENVIRONMENTAL HEALTH INSPECTOR: MAUREEN SHIELDS-BOHN

GRAPHIC SCALE

50 0 50 100

(IN FEET)
1 inch = 50 FT

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10/26/2021 4119040.0 EXH-Pit Map.dwg 3 of 3

ATTACHMENT 4

EXISTING WASTEWATER TREATMENT SYSTEM DESIGN DOCUMENTATION

Environmental

Cover Sheet

APN	046 - 370 - 024 - 000
Permit #	
Program	SD
DocType	IR
Street #	11
Street Name	Basalt Rd
Year	1999

NAPA COUNTY DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
EXISTING INDIVIDUAL SEPTIC SYSTEM INSPECTION REPORT FORM

PROPERTY OWNER SYAR IND. DATE 9/17/99
ADDRESS 2301 NAPA-VALLEJO HWY APN 46-370-24

PRIMARY TREATMENT-SEPTIC TANK OFFICE SYSTEM
Distance from closest well: PUBLIC WATER
this parcel — adjacent parcel —
Distance from foundation 5' ±
Distance from property line 300' +
Material-tank CONCRETE
Number of compartments TWO
Total Capacity 1000 ± gals.

Date tank was last pumped 7/95
Pumped by N.S.T.
Pre-fab tank or poured in place (describe)
Inside length 9 width 4 depth 4.5

SECONDARY TREATMENT-DISPOSAL FIELD (if other than leach field, describe below)
Distance from closest well:
this parcel — adjacent parcel —
Distance from foundation 300' ±
Distance to property line 500' ±
Number of lines 3

Total length on leach line 300
Amount of filter material:
below pipe 12"
above pipe 4"
Trench width 18 depth 30" ±

Total effective sidewall 900' A'
Type of pipe P.V.C.
Type of filter material gravel
Depth of cover over rock 15" ±

GENERAL INFORMATION
Is the ~~house~~/structure presently occupied YES How many bedrooms —
If commercial use-how many employees (FT and PT) 5 ± How many units served by this system 2
Any other septic systems on the property YES If yes. how many 1

CONDITION OF SYSTEM
Make a statement on the condition of the septic tank and interior surfaces. including baffles and fittings. How was this determined? SEPTIC TANK IS IN GOOD CONDITION. FITTINGS AND BAFFLE. WALL ARE IN PLACE AND WORKING PROPERLY. TANK DOES NOT NEED PUMPING.
Note: If tank is over five years old, it must be inspected (pumping is required to allow inspection).

Make a statement on the condition of the sump/pump (if applicable). including size, alarm. structure, etc. PUMP SUMP AND PUMP ARE WORKING ALARM IS IN WORKING CONDITION.

Make a statement on the condition of the distribution box, leaching lines, etc. How was the length and location of the disposal field determined DIST. BOX IS IN GOOD CONDITION LEACH LINES ARE WORKING PROPERLY INFO ON SYSTEM FROM RECORDS OF OUR INSTALLATION
Note: Information on disposal field must be determined by physically locating each line by exposing the ends. All distribution boxes must be uncovered and inspected.

A PLOT PLAN OF THE SEPTIC SYSTEM AND ALL OTHER IMPROVEMENTS MUST BE ATTACHED TO THIS REPORT-DISTANCE TO PONDS/STREAMS, WELLS, BUILDINGS, ETC. MUST BE SHOWN

RECEIVED
SEP 29 1999
DEPT. OF
ENVIRONMENTAL MANAGEMENT

Joe Lawrence
(Licensed Contractor)

Note: In order to secure clearance of an individual sewage disposal system from the Department of Environmental Management, the system must be inspected by a licensed sewage contractor and the completed form returned to our office for evaluation. It should be accompanied by a plot plan showing the septic system, wells, buildings and other improvements on the property and the 100% expansion area.

NAPA COUNTY DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
EXISTING INDIVIDUAL SEPTIC SYSTEM INSPECTION REPORT FORM Pg. 2

PROPERTY OWNER SYAR INDS. DATE 9/17/99
ADDRESS 2301 NAPA-VALLEJO HWY. APN
SHOP BLDG. BEHIND OFFICE

PRIMARY TREATMENT-SEPTIC TANK

Distance from closest well:
this parcel N/A adjacent parcel
Distance from foundation 5'+
Distance from property line 300'+
Material-tank CONCRETE lid —
Number of compartments TWO
Total Capacity 2000 gals ±

Date tank was last pumped 7/95
Pumped by N-S-T.
Pre-fab tank or poured in place (describe) IN PLACE.
Inside length 12' width 5.5' depth 5'

SECONDARY TREATMENT-DISPOSAL FIELD (if other than leach field describe below)

Distance from closest well:
this parcel ____ adjacent parcel ____
Distance from foundation ____
Distance to property line ____
Number of lines ____

Total length on leach line ____
Amount of filter material:
below pipe ____
above pipe ____
Trench width ____ depth ____

Total effective sidewall ____
Type of pipe ____
Type of filter material ____
Depth of cover over rock ____

SEE PAGE 1 FOR LEACH FIELD INFO.

GENERAL INFORMATION

Is the house/structure presently occupied YES How many bedrooms —
If commercial use-how many employees (FT and PT) ? How many units served by this system 1
Any other septic systems on the property YES If yes. how many 1

CONDITION OF SYSTEM

Make a statement on the condition of the septic tank and interior surfaces. including baffles and fittings. How was this determined? SEPTIC TANK IS IN GOOD CONDITION. BAFFLE WALL & FITTINGS ARE IN PLACE.

Note: If tank is over five years old, it must be inspected (pumping is required to allow inspection).

Make a statement on the condition of the sump/pump (if applicable). including size. alarm. structure. etc. SUMP & PUMP ARE WORKING PROPERLY. SYSTEM WAS INSTALLED BEFORE ALARM WAS REQUIRED

Make a statement on the condition of the distribution box, leaching lines, etc. How was the length and location of the disposal field determined SEE PAGE 1

Note: Information on disposal field must be determined by physically locating each line by exposing the ends. All distribution boxes must be uncovered and inspected.

A PLOT PLAN OF THE SEPTIC SYSTEM AND ALL OTHER IMPROVEMENTS MUST BE ATTACHED TO THIS REPORT-DISTANCE TO PONDS/STREAMS, WELLS, BUILDINGS, ETC. MUST BE SHOWN

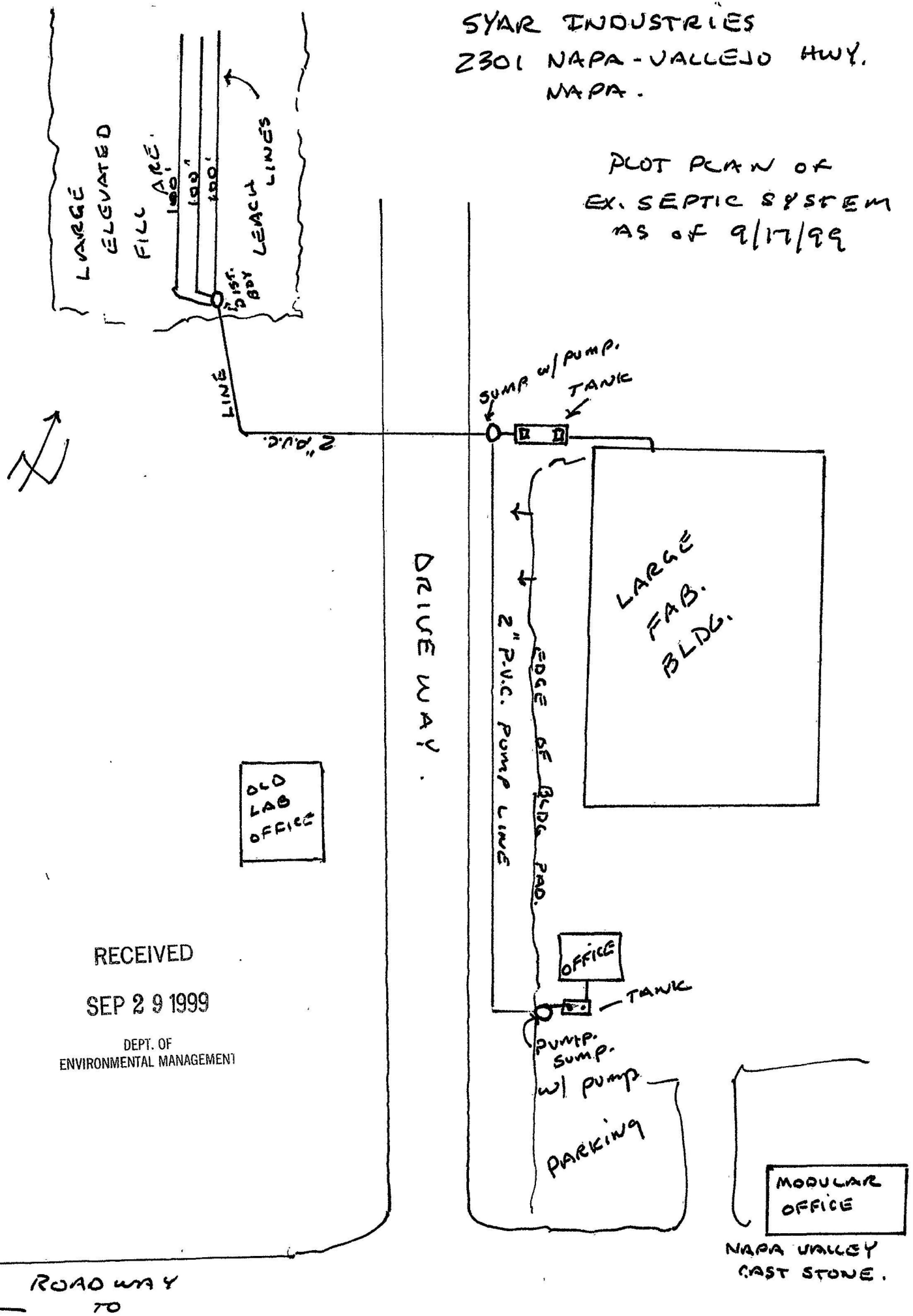
RECEIVED
SEP 29 1999
DEPT. OF ENVIRONMENTAL MANAGEMENT

(Licensed Contractor)

Note: In order to secure clearance of an individual sewage disposal system from the Department of Environmental Management. the system must be inspected by a licensed sewage contractor and the completed form returned to our office for evaluation. It should be accompanied by a plot plan showing the septic system. wells. buildings and other improvements on the property and the 100% expansion area.

SYAR INDUSTRIES
2301 NAPA-VALLEJO HWY.
NAPA.

PLOT PLAN OF
EX. SEPTIC SYSTEM
AS of 9/17/99



RECEIVED

SEP 2 9 1999

DEPT. OF
ENVIRONMENTAL MANAGEMENT

STORMWATER CONTROL PLAN FOR A REGULATED PROJECT

BASANITES
11 BASALT ROAD
NAPA, CA 94559

Prepared for:

PDC Sacramento LLC
8775 Folsom Blvd., Suite 200
Sacramento, CA 95826



Project #4119040.0

June 27, 2022

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Table 1. Project Data Form

Table 2. Drainage Management Areas

Table 3. Potential Pollutant Sources and Source Control Measures

Table 4. Construction Plan E.12 Checklist

FIGURES

Figure 1. Vicinity Map

Figure 2. Existing Site Conditions

Figure 3. Bioretention Cross Section

ATTACHMENTS

1. Soils Classification

2. Stormwater Control Plan Sheet

3. Provision E.12 Sizing Calculator Spreadsheet

I. Project Data

Table 1. Project Data Form

Project Name/Number	Basanites/4119040.0
Application Submittal Date	
Project Location	APNs: 046-370-024
Project Phase No.	N/A
Project Type and Description	Construction of a warehouse facility with surrounding parking lot and landscaping
Total Project Site Area	39.4± ac
Total New and Replaced Impervious Surface Area	1,241,342 SF
Total Pre-Project Impervious Surface Area	991,000 SF
Total Post-Project Impervious Surface Area	1,241,342 SF

II. Setting

II.A. Project Location and Description

This project involves the demolition of existing warehouse buildings and asphalt parking lots. The site will be developed into four (4) warehouses with office space, truck docking bays, and parking. This development is located at 11 Basalt Road, Napa, CA, east of the Napa Vallejo Highway.



Figure 1. Vicinity Map (APNs: 046-370-024)

II.B. Existing Site Features and Conditions

The project site is irregular in shape and generally slopes from east to west. The site currently has a paved parking lot and warehouse buildings used for industrial purposes. The site is bounded by the Napa County Jail to the west, the Napa State Hospital to the north, Syar Industries to the east, and Basalt Road to the south.



Figure 2. Existing Site Conditions

Mapping by the U.S. Conservation Service has classified soil over this project area as predominantly haire loam (146), which is of the Hydraulic Soil Group D. Refer to Attachment 1 for Soils Map. Natural drainage consists of sheet flow over the ground surface that concentrates into private storm drains and into the adjacent creek, eventually connecting to the Napa River.

II.C. Opportunities and Constraints for Stormwater Control

Stormwater treatment facilities have been integrated into the planning, design, construction, operation, and maintenance of the proposed development. The following potential opportunities and constraints were considered in determining the best stormwater control design for this development.

Opportunities for this site are the availability of landscaped areas in and around the parking lot. Stormwater from the parking lot and warehouse roofs will be piped to three bioretention facilities located in low points of each drainage management area. Runoff will be conveyed to the bioretention facilities via storm drains that discharge to the top soil level of the bioretention or to bubble-up structures. Once

in the bioretention basin, runoff will be treated via infiltration together with the pollutant retention capabilities of the plants in the facility. See Attachment 2 for locations of the bioretention facilities.

Constraints include the site location, conform to existing neighboring parcels, and existing grades and features. Runoff reduction will be mitigated through the use of on-site bioretention facilities within the project parcel. The bioretention facilities will reduce runoff by promoting infiltration to the maximum extent practicable.

III. Low Impact Development Design Strategies

III.A. Optimization of Site Layout

1. Limitation of development envelope
   The average slopes of the development area are suitable for the proposed improvements.
2. Preservation of natural drainage features
   Portions of existing drainages conflict with the proposed development and will be filled to the minimum extent required.
3. Setbacks from creeks, wetlands, and riparian habitats
   The buildings, parking areas, and bioretention facilities are outside of the creek setbacks. Existing asphalt will be removed from within the northern creek setback and landscape restoration is proposed, refer to the revegetation plan.
4. Minimization of imperviousness
   Landscaping will be used in and around the parking lot. Impervious areas will be minimized to the maximum extent practicable.
5. Use of drainage as a design element
   The bioretention facilities will be incorporated into the aesthetic landscape design of the site. Grading and storm drain locations have been designed to direct runoff to the bioretention facilities.

III.B. Use of Permeable Pavements

Permeable pavements will be not used.

III.C. Dispersal of Runoff to Pervious Areas

Stormwater runoff will be directed to landscaped areas.

III.D. Stormwater Control Measures

Runoff from the project site will be routed to the bioretention facilities. These facilities are designed and will be constructed to the criteria in the BASMAA Post-Construction Manual (Jan 2019), including the following features (see Figure 3):

Bioretention Facility

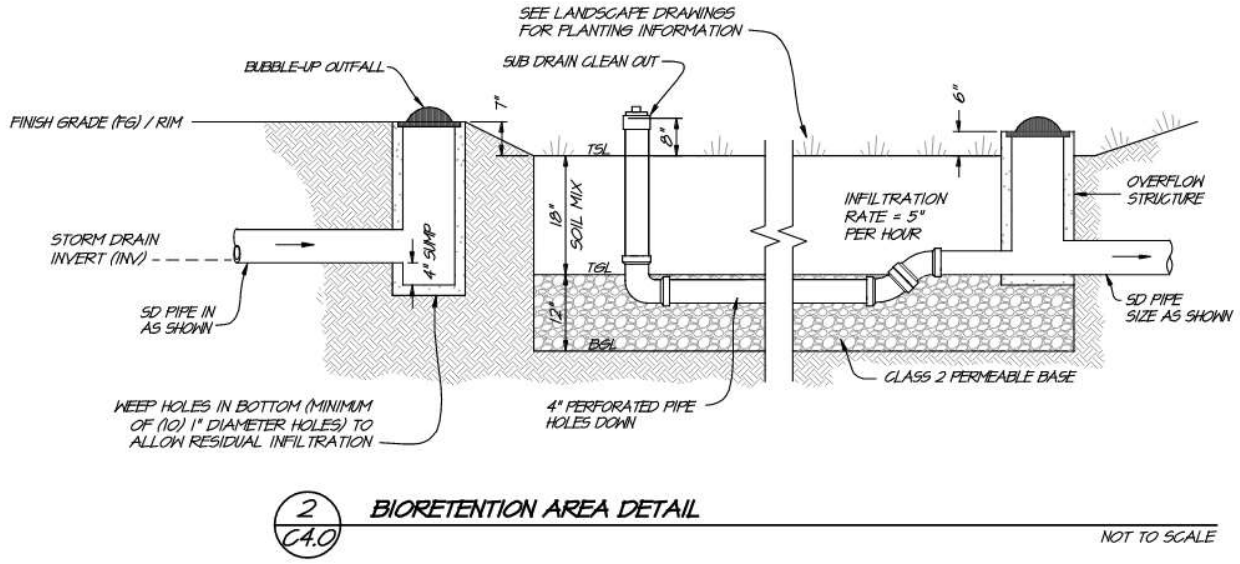


Figure 3. Bioretention Cross Section

- Each layer built flat, level, and to elevations specified in the plans:
  - Bottom of Gravel Layer (BGL)
  - Top of Gravel Layer (TGL)
  - Top of Soil Layer (TSL)
  - Overflow Grate
  - Facility Rim
- 12 inches of Class 2 permeable, Caltrans specification 68-2.02F (3).
- 18 inches sand/compost mix meeting BASMAA specifications.
- 4-inch diameter PVC SDR 35 perforated pipe underdrain, installed with the invert at the top of the Class 2 permeable layer with holes facing down, and connected to the overflow structure at that same elevation.
- 6-inch-deep reservoir between top of soil elevation and overflow grate elevation.
- Concrete drop inlet with frame overflow structure. With grate set to specified elevation, see civil plans.
- Plantings selected for water conservation.
- Irrigation system on a separate zone, with drip emitters and “smart” irrigation controllers.
- Sign identifying the facility as a stormwater treatment facility.
- The storm drain clean out (SDCO) should be a minimum of 8 inches above the top soil level and can be a plug or a grate.

IV. Documentation of Drainage Design

IV.A. Descriptions of Each Drainage Management Areas

IV.A.1. Drainage Management Areas

Table 2. Drainage Management Areas (DMAs) as shown on Attachment 2.

DMA #	Total Area (SF)	Proposed Impervious Area (SF)	Impervious Runoff Factor	Proposed Pervious Area (SF)	Pervious Runoff Factor	Required Bioretention Treatment Area (SF)	Provided Treatment Area (SF)
1	1,229,838	962,214	1	267,624	0.1	39,559	41,998
2	277,069	226,172	1	50,897	0.1	9,250	9,624
3	81,168	52,956	1	28,212	0.1	2,231	2,400

IV.A.2. Drainage Management Area Descriptions

DMA 1: Consists of the two northern buildings, portions of the southern buildings, the a majority of the parking lots and landscape areas. Runoff from the buildings and parking lots will sheet-flow into drain inlets and trench drains. The concentrated flow will then be piped into the storm drain system and discharged into the bioretention facility. Bioretention facility #1 has a total area of 41,998 square feet.

DMA 2: Consists of a portion of the southwestern building, loading dock, and surrounding parking lots and landscape areas. Runoff from the building and southern parking lot will be collected by drain inlets and discharged into the bioretention facility. Runoff from the western parking lot will drain via surface flow into a valley gutter and discharge into the bioretention facility. Bioretention facility #2 has a total area of 9,624 square feet.

DMA 3: Consists of a portion of the southeastern building, a portion of the surrounding parking lot, and landscape areas. It drains south along the southeastern parking lot and into drain inlets that discharge into the bioretention facility. Bioretention facility #3 has a total area of 2,400 square feet.

IV.B. Tabulation and Sizing Calculations

Refer to Attachment 3 for Provision E.12 Sizing Calculator Spreadsheet. This project does not include any self-treating or self-retaining areas.

V. Source Control Measures

V.A. Site activities and potential sources of pollutants

On-site activities that could potentially produce stormwater pollutants include:

- On-site storm drains

- Pest Control
- Landscaping
- Refuse Areas
- Miscellaneous drain water
- Streets and sidewalks

V.B. Potential Pollutant Sources and Source Control Measures

The site activities and potential sources of pollutants for the project are listed in Table 3, below.

Table 3. Potential Pollutant Sources and Source Control Measures

Potential Sources of Runoff Pollutants	Permanent Source Control BMPs	Operational Source Control BMPs
A. On-site storm drain inlets (unauthorized non-stormwater discharges and accidental spills or leaks)	☐ Mark all inlets with the words "No Dumping! Flows to River" or similar.	☐ Maintain and periodically repaint or replace inlet markings. ☐ Provide stormwater pollution prevention information to new site owners, lessees, or operators. ☐ See applicable operational BMPs in Fact Sheet SC-74, "Drainage System Maintenance."
D_1. Need for future indoor & structural pest control	☐ Building design shall incorporate features that discourage entry of pests.	☐ Provide Integrated Pest Management information to owners, lessees, and operators.
D_2. Landscape / outdoor pesticide use / building and grounds maintenance	Final landscape plans will accomplish all of the following: ☐ Preserve existing native trees, shrubs, and ground cover to the maximum extent possible. ☐ Minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution. ☐ Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions. ☐ Use pest-resistant plants, especially adjacent to hardscape. ☐ To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	☐ Maintain landscaping using minimum or no pesticides. ☐ See applicable operational BMPs in Fact Sheet SC-41, "Building and Grounds Maintenance." ☐ Provide IPM information to new owners, lessees and operators.

M. Loading Docks	☐ Show the loading dock area, including roofing and drainage. Loading docks shall be covered and/or graded to minimize run-on to and runoff from the loading area. Roof downspouts shall be positioned to direct stormwater away from the loading area. Water from loading dock areas shall be drained to the sanitary sewer, or diverted and collected in a tank for ultimate discharge to the sanitary sewer. ☐ Loading sock areas draining directly to the sanitary sewer shall be equipped with a spill control valve or equivalent device, which shall be kept closed during periods of operation. ☐ Provide a roof overhang over the loading area or install door skirts (cowling) at each bay that enclose the end of the trailer.	☐ Move loaded and unloaded items indoors as soon as possible. ☐ See Fact Sheet SC-30, "Outdoor Loading and Unloading," in the CASQA Stormwater Quality Handbooks.
O. Miscellaneous drain or wash water or other sources • Boiler drain lines • Condensate drain lines • Rooftop equipment • Drainage sumps • Roofing, gutters, and trim • Other sources	☐ Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not discharge to the storm drain. ☐ Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur. Condensate drain lines may not discharge to the storm drain system. ☐ Rooftop equipment with potential to produce pollutants shall be roofed and/or have secondary containment. ☐ Any drainage sumps on-site shall feature a sediment sump to reduce the quantity of sediment in pumped water.	If architectural copper is used, implement the following BMPs for management of rinse water during installation: ☐ If possible, purchase copper materials that have been pre-patinated at the factory. ☐ If patination is done on-site, prevent rinse water from entering storm drains by discharging to landscaping or by collecting in a tank and hauling off-site. ☐ Consider coating the copper materials with an impervious coating that prevents further corrosion and runoff. ☐ Implement the following BMPs during routine maintenance: ☐ Prevent rinse water from entering storm drains by discharging to landscaping or by collecting in a tank and hauling off-site.

VI. Stormwater Facility Maintenance

VI.A. Ownership and Responsibility for Maintenance in Perpetuity

Maintenance of stormwater facilities will be the responsibility of the property owner and will be performed by the owner's contractors or employees as part of routine maintenance of buildings, grounds, and landscaping. The applicant will review the Post-Construction BMP Maintenance Agreement with the

County of Napa regarding the maintenance of the stormwater facilities and commit to executing any necessary agreements prior to completion of construction. Applicant accepts responsibility for interim operation and maintenance of stormwater treatment and flow-control facility until such time as this responsibility is formally transferred to a subsequent owner.

VI.B. Summary of Maintenance Requirements for Each Stormwater Facility

The bioretention facilities will be maintained on the following schedule at a minimum. Details of maintenance responsibility and procedures will be included in an Operation and Maintenance Plan to be submitted for approval prior to the completion of construction.

At no time will synthetic pesticides or fertilizers be applied, nor will any soil amendments, other than aged compost mulch or sand/compost mix, be introduced.

Daily: The facility will be examined for visible trash during regular policing of the site, and trash will be removed. Debris and sediment should be removed to ensure the bioretention system maintains its treatment area and volume capacity.

After Significant Rain Events: A significant rain event is one that produces approximately a half-inch or more rainfall in a 24-hour period. Within 24 hours after each such event, the following will be conducted:

- The surface of the facility will be observed to confirm there is no excessive ponding. The facility is designed to pond up to a 6” reservoir for stormwater treatment.
- Inlets will be inspected, and any accumulations of trash or debris will be removed.
- The surface of the mulch layer will be inspected for movement of material. Mulch will be replaced and raked smooth if needed.

Prior to the Start of the Rainy Season: In September of each year, the facility will be inspected to confirm there is no accumulation of debris that would block flow, and that growth and spread of plantings does not block inlets or the movement of runoff across the surface of the facility.

Annual Landscape Maintenance: In December – February of each year, vegetation will be cut back as needed, debris removed, and plants and mulch replaced as needed. The concrete work will be inspected for damage. The elevation of the top of soil and mulch layer will be confirmed to be consistent with the 6-inch reservoir depth.

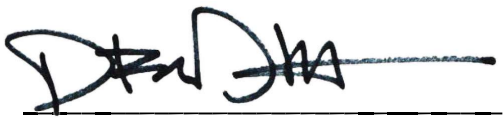
VII. Construction Plan E.12 Checklist

Table 4. Construction Plan E.12 Checklist

Stormwater Control Plan Page #	Source Control or Treatment Control Measure	See Plan
14	Bioretention Facilities	UP5.0

VIII. Certifications

The preliminary design of stormwater treatment facilities and other stormwater pollution control measures in this plan are in accordance with the current edition of the BASMAA Post-Construction Manual, dated January 2019.

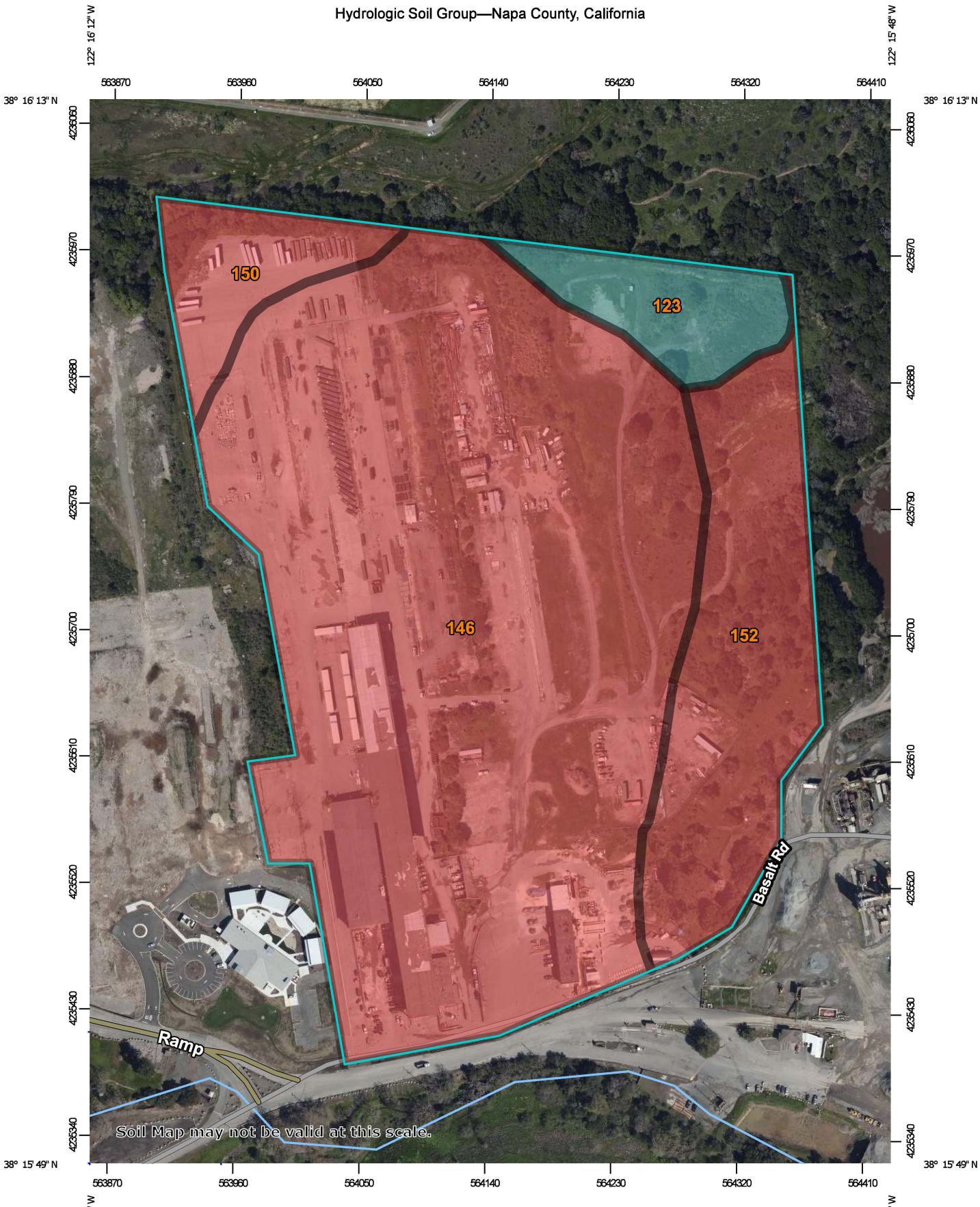


Preparer
Derek Dittman, PE

ATTACHMENT 1

SOIL CLASSIFICATION

Hydrologic Soil Group—Napa County, California



Map Scale: 1:3,690 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Napa County, California
Survey Area Data: Version 12, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 15, 2019—Apr 10, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
123	Coombs gravelly loam, 2 to 5 percent slopes	C	2.9	5.5%
146	Haire loam, 2 to 9 percent slopes	D	38.3	72.0%
150	Haire clay loam, 15 to 30 percent slopes	D	2.9	5.5%
152	Hambright rock-Outcrop complex, 30 to 75 percent slopes	D	9.0	16.9%
Totals for Area of Interest			**53.1**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

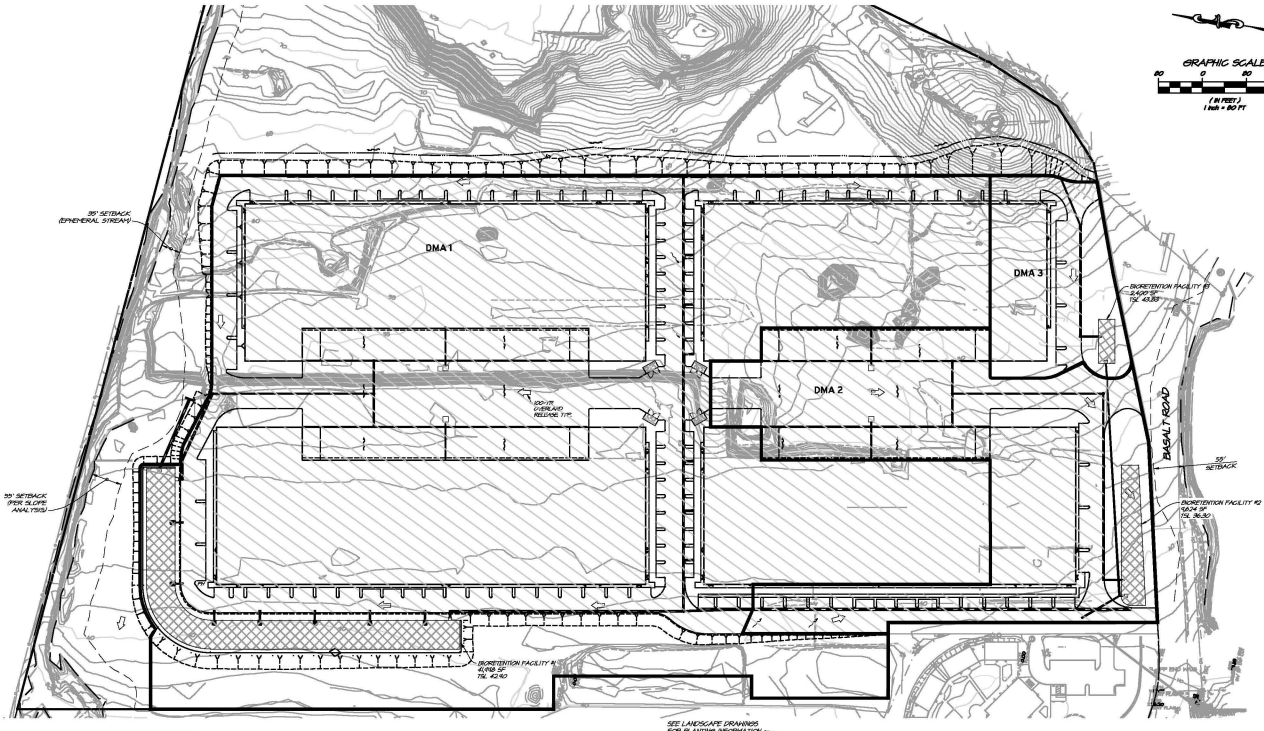
Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

ATTACHMENT 2

STORMWATER CONTROL PLAN SHEET



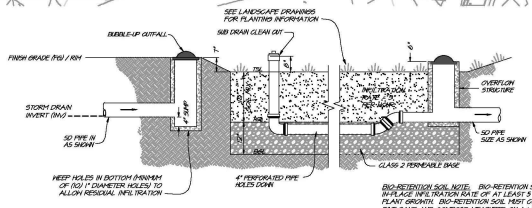
PROPOSED STORMWATER CONTROL PLAN AREA CALCULATIONS							
DMA #	Total Area (SF)	Proposed Impervious Area (SF)	Impervious Runoff Factor	Proposed Pervious Area (SF)	Pervious Runoff Factor	Required Bioretention Treatment Area (SF)	Provided Treatment Area (SF)
1	1,229,838	962,214	1	267,624	0.1	39,559	41,998
2	277,069	226,172	1	50,897	0.1	9,250	9,624
3	81,168	52,956	1	28,212	0.1	2,231	2,400

LEGEND

- BIORETENTION AREA
- DRAINAGE MANAGEMENT AREA (DMA) BOUNDARY
- PROPOSED IMPERVIOUS AREAS
- PROPOSED PERVIOUS AREAS



1 / 2.A0 **INLET MARKER**
NOT TO SCALE



2 / 2.A0 **BIORETENTION AREA DETAIL**
NOT TO SCALE

NOTES:
1. NO COMPACTION OF SOILS BENEATH THE FACILITY, OR RIPPING & LOOSENING OF SOILS IF COMPACTED.
2. NO LINERS OR OTHER BARRIERS INTERFERING WITH INFILTRATION.
3. APPROPRIATE PLANT PALETTE FOR THE SPECIFIED SOIL MIX & MAXIMUM AVAILABLE WATER USE.

BIO-RETENTION SOIL NOTE: BIO-RETENTION SOIL SHALL ACHIEVE A LONG TERM INFILTRATION RATE OF AT LEAST 5 INCHES PER HOUR AND SUPPORT VIGOROUS PLANT GROWTH. BIO-RETENTION SOIL MUST CONSIST OF THE FOLLOWING MIXTURE OF FINE SAND AND COMPOST, MEASURED ON A VOLUME BASIS (60-70% SAND, 30-40% COMPOST) PER ATTACHMENT L OF THE MUNICIPAL REGIONAL STORM WATER PERMIT.

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CIVIL ENGINEERS • SURVEYORS

NO.	DATE	REVISIONS	BY	APP'D

BASANITES USE PERMIT
STORMWATER CONTROL PLAN
NAPA COUNTY CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
No. 73257
Exp. 12.31.2021
CIVIL ENGINEERING
STATE OF CALIFORNIA

DATE	JUNE 21, 2022
DRAWN	AEL
DESIGNED	ELB
CHECKED	DMD
JOB NO.	4909.040

SHEET NO.
UP5.0
6 OF 6 SHEETS

S:\Projects\4900s\4909.040 Basanites\Civil\Plotting\4909.040 Basanites Use Permit Set.dwg 6/21/2022 3:42:26 PM Landon Coffman

ATTACHMENT 3

PROVISION E.12 SIZING CALCULATOR SPREADSHEET

Provision E.12 Sizing Calculator

See the instructions and the BASMAA Post-Construction Manual

Step 1: Enter Total Site Area	**Step 2:** List names of all DMAs and square footage of each	**Step 3:** If DMA is "Self-Treating" or "Self-Retaining," **copy** square footage to appropriate column		**Step 4:** If the DMA is "Drains to Self Retaining" or "Drains to Bioretention" enter runoff factor from Table 4-1		**Step 6:** For "Drains to Self-Retaining" DMAs, enter the **name of receiving DMA**	**Step 5:** Slide (move) number from this column to correct column (F or H-Q)		
Total Site Area:	1,642,097						**BIORETENTION FACILITIES**		
DMA Names	**Square Feet**	**Self-Treating**	**Self-Retaining**	**Runoff Factor**	**Drains to Self-Retaining**	**Name of Receiving DMA**	**BRF #1**	**BRF #2**	**BRF #3**
DMA-1_{perv}	267,624			0.1			26,762		
DMA-1_{imp}	962,214			1			962,214		
DMA-2_{perv}	50,897			0.1				5,090	
DMA-2_{imp}	226,172			1				226,172	
DMA-3_{perv}	28,212			0.1					2,821
DMA-3_{imp}	52,956			1					52,956
Total DMAs	**1,588,075**	**0**	**0**		**0**		**988,976**	**231,262**	**55,777**
						Sizing Factor	**0.04**	**0.04**	**0.04**
						Minimum Size	**39,559**	**9,250**	**2,231**
Total Facilities	**54,022**	**Step 7:** Enter Facilty Footprints				**Footprint on Exhibit**	41,998	9,624	2,400
DMAs + Facilities	**1,642,097**						**OK**	**OK**	**OK**
	OK	**Step 8:** Iterate sizes of facility footprints and DMAs until all footprints are at least the minimum **AND** DMAs + Facilities equals Total Site Area							
		Step 9: Check to make sure Areas Draining to each Receiving Self-Retaining Area do not exceed maximum 2:1 ratio.							
		Step 10: Check results on this spreadsheet are consistent with what is shown on the SCP Exhibit.							

RGH CONSULTANTS

Experience is the difference

GEOTECHNICAL STUDY REPORT

BASANITES
11 BASALT ROAD
NAPA, CALIFORNIA

Project Number:

7345.01.04.2

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STATE OF CALIFORNIA

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INFORMATION ABOUT YOUR GEOTECHNICAL REPORT

INTRODUCTION

This report presents the results of our geotechnical study for the industrial facility to be constructed at 11 Basalt Road in Napa, California. The 55-acre parcel extends over relatively level to moderately sloping terrain and is presently used as construction storage lots for equipment and steel manufacturing. The site location is shown on Plate 1, Appendix A.

We understand it is planned to construct an office building complex consisting of four buildings with about 153,504 to 191,800 square feet of slab-on-grade floor area per building. Actual foundation loads are not known at this time. We anticipate the loads will be typical for the moderately heavy type of construction planned.

Grading plans are not available, but we anticipate that the planned grading will be the minimum amount needed to construct level building pads and provide the building sites and paved areas with positive drainage. There appears to be heterogenous fill covering much of the site. Cuts and fills of 3 to 8 feet are planned. Utility plans are not available, but we have assumed for this study that the project utilities will extend no deeper than 5 feet below the existing ground surface.

SCOPE

The purpose of our study, as outlined in our Professional Service Agreement dated May 30, 2019, was to generate geotechnical information for the design and construction of the project. Our scope of services included reviewing selected published geologic data pertinent to the site; evaluating the subsurface conditions with borings, test pits, and laboratory tests; analyzing the field and laboratory data; and presenting this report with the following geotechnical information:

1. A brief description of the soil, bedrock, and groundwater conditions observed during our study;

2. A discussion of seismic hazards that may affect the proposed development; and

3. Conclusions and recommendations regarding:

    a. Primary geotechnical engineering concerns and mitigating measures, as applicable;

    b. Site preparation and grading including remedial grading of weak, porous, compressible surface soils and the construction of hillside fills;

    c. Foundation type, design criteria, and estimated settlement behavior;

    d. Lateral loads for retaining wall design;

    e. Support of concrete slabs-on-grade;

    f. Preliminary pavement thickness based on our experience with similar soil and projects;

g. Utility trench backfill;

h. Geotechnical engineering drainage improvements; and

i. Supplemental geotechnical engineering services.

STUDY

Site Exploration

We reviewed our previous geotechnical studies in the vicinity and selected geologic references pertinent to the site. The geologic literature reviewed is listed in Appendix B. On September 16 and 20, 2019, we performed a geotechnical reconnaissance of the site and explored the subsurface conditions by drilling thirteen borings to depths ranging from about 6 to 21½ feet. The borings were drilled with a truck-mounted drill rig equipped with 4-inch diameter, solid stem augers at the approximate locations shown on the Exploration Plan, Plate 2. On September 30, 2019, we explored the subsurface conditions by excavating seven test pits to depths ranging from about 5 to 7½ feet or to refusal. The test pits were excavated with a track-mounted backhoe at the approximate locations shown on the Exploration Plan, Plate 2. The boring and test pit locations were determined approximately by pacing their distance from features shown on the Exploration Plan and should be considered accurate only to the degree implied by the method used. Our field engineer located and logged the borings and test pits, and obtained samples of the materials encountered for visual examination, classification and laboratory testing.

Relatively undisturbed samples were obtained from the borings at selected intervals by driving a 2.43-inch inside diameter, split spoon sampler, containing 6-inch long brass liners, using a 140-pound hammer dropping approximately 30 inches. The sampler was driven 12 to 18 inches. The blows required to drive each 6-inch increment were recorded and the blows required to drive the last 12 inches, or portion thereof, were converted to equivalent Standard Penetration Test (SPT) blow counts using a conversion factor of 0.65 for correlation with empirical data. Disturbed samples were also obtained at selected depths by driving a 1.375-inch inside diameter (2-inch outside diameter) SPT sampler, without liners or rings, using a 140-pound hammer dropping approximately 30 inches. The sampler was driven 12 to 18 inches, the blows to drive each 6-inch increment were recorded, and the blows required to drive the final 12 inches, or portion thereof, are provided on the boring logs. Disturbed "bulk" samples were also obtained at selected depths from the borings and test pits and placed in plastic bags.

The logs of the borings and test pits showing the materials encountered, groundwater conditions, converted blow counts, and sample depths are presented on Plates 3 through 15 and Plates 16 through 18, respectively. The soil is described in accordance with the Unified Soil Classification System, outlined on Plate 19. Bedrock is described in accordance with Engineering Geology Rock Terms, shown on Plate 20.

The boring and test pit logs show our interpretation of the subsurface soil, bedrock, and groundwater conditions on the date and at the locations indicated. Subsurface conditions may vary at other locations and times. Our interpretation is based on visual inspection of soil and bedrock samples, laboratory test results, and interpretation of drilling, excavation, and sampling resistance. The location of the soil and

bedrock boundaries should be considered approximate. The transition between soil and bedrock types may be gradual.

Laboratory Testing

The samples obtained from the borings and test pits were transported to our office and re-examined to verify soil classifications, evaluate characteristics, and assign tests pertinent to our analysis. Selected samples were laboratory tested to determine their classification (Atterberg Limits, percent of silt and clay) and expansion potential (Expansion Index - EI). The test results are referenced on the boring logs. Results of the classification tests are presented on Plate 20.

SITE CONDITIONS

General

Napa County is located within the California Coast Range geomorphic province. This province is a geologically complex and seismically active region characterized by sub-parallel northwest-trending faults, mountain ranges and valleys. The oldest bedrock units are the Jurassic-Cretaceous Franciscan Complex and Great Valley sequence sediments originally deposited in a marine environment. Subsequently, younger rocks such as the Tertiary-age Sonoma Volcanics group, the Plio-Pleistocene-age Clear Lake Volcanics and sedimentary rocks such as the Guinda, Domengine, Petaluma, Wilson Grove, Cache, Huichica and Glen Ellen formations were deposited throughout the province. Extensive folding and thrust faulting during late Cretaceous through early Tertiary geologic time created complex geologic conditions that underlie the highly varied topography of today. In valleys, the bedrock is covered by thick alluvial soil.

Geology

Published geologic maps (Clahan et al., 2004) indicate the property is underlain by alluvium (Qoa), dacite (Tsvdg), and mafic flows and breccias (Tsvm). The alluvium is composed of sand, silt, clay, and gravel. The dacite is composed of flows and domes of porphyritic dacite. The mafic flows and breccias are composed of basalt, basaltic andesite, andesite flows and breccias, and volcanic agglomerate and tuff.

Landslides

Published landslide maps (Dwyer, 1976) do not indicate large-scale slope instability at the site, and we did not observe active landslides at the site during our study.

Surface

The property extends primarily over relatively level terrain underneath the construction lots and is moderately sloping between the western and eastern portions of the property. The portion of the property near the eastern property line is moderately sloping. The vegetation consists of seasonal grasses and mature trees. In general, the ground surface is paved with asphalt concrete or gravel. In the unpaved areas, the ground surface is moderately hard. However, soil in the area that appears hard and strong when dry will typically lose strength rapidly and settle under the loads of fills, foundations and slabs as its moisture content increases and approaches saturation. This typically occurs because the surface soil is weak, porous and compressible. Natural drainage consists of sheet flow over the ground surface and slopes that concentrates in man made surface drainage elements such as roadside ditches, canals and gutters, and natural drainage elements such as swales and creeks.

Subsurface

Our borings, test pits, and laboratory tests indicate that near borings B-1, B-3, B-6, B-7, B-8, B-9, B-10, B-11, and B-13, 3 to 5 inches of asphalt concrete is present over 6 to 8 inches of aggregate base. In borings B-4 and B-12, the ground surface is covered with about 3 to 6 inches of aggregate base or gravel fill. In borings B-2 and B-5 and test pits TP-1, TP-2, TP-3, TP-5, and TP-6, the ground surface is blanketed by ½ foot to 1½ feet of weak, porous, compressible, clayey soil. Porous soil appears hard and strong when dry but becomes weak and compressible as its moisture content increases towards saturation. This soil exhibits low to high plasticity (LL = 24.7 – 62.0; PI = 5.0 – 21.4) and very low to moderate expansion potential (EI = 10 – 66). Underneath the paved portions of the site and in test pit TP-4, there is about 3 to 5½ feet of heterogeneous fill. Heterogeneous fill is a material with varying density, strength, compressibility and shrink-swell characteristics that often has an unknown origin and placement history. These surface materials are underlain by sandy lean clay or bedrock.

Sandstone, basalt, and siltstone bedrock extends from beneath the surface materials to the maximum depths explored (16½ feet). The bedrock is generally soft to moderately hard, friable to moderately strong, and completely to moderately weathered. A detailed description of the subsurface conditions found in our borings and test pits is given on Plates 3 through 18, Appendix A. Based on Table 20.3-1 of American Society of Civil Engineers (ASCE) Standard 7-10, titled “Minimum Design Loads for Buildings and Other Structures” (2010), we have determined a Site Class of C should be used for the site.

Corrosion Potential

Mapping by the Natural Resources Conservation Service (2019) indicates that the corrosion potential of the near surface soil is high for uncoated steel and moderate for concrete. Performing corrosivity tests to verify these values was not part of our requested and/or proposed scope of work. Should the need arise, we would be pleased to provide a proposal to evaluate these characteristics.

Groundwater

Free groundwater was first detected in boring B-5 at a depth of about 10 feet below the ground surface at the time of drilling. When the hole was backfilled after drilling was completed, the water level had risen to a depth of about 5½ feet. Groundwater was not observed in the other borings. Fluctuation in the groundwater level typically occurs because of a variation in rainfall intensity, duration and other factors such as flooding and periodic irrigation.

Groundwater seepage was observed in test pit TP-4 at about 4½ feet below the ground surface at the time of excavation. Groundwater seepage was not observed in the other test pits. On hillsides, rainwater typically percolates through the porous surface materials and migrates downslope in the form of seepage at the interface of the surface materials and bedrock, and through fractures in the bedrock. Fluctuations in the seepage rates typically occur due to variations in rainfall intensity, duration and other factors such as periodic irrigation.

DISCUSSION AND CONCLUSIONS

Seismic Hazards

General

We did not observe subsurface conditions within the portion of the property we studied that would suggest the presence of materials that may be susceptible to seismically induced densification, liquefaction, or lurching. Therefore, we judge the potential for the occurrence of these phenomena at the site to be low.

Faulting and Seismicity

We did not observe landforms within the area that would indicate the presence of active faults and the site is not within a current Alquist-Priolo Earthquake Fault Zone (Bryant and Hart, 2007). Therefore, we believe the risk of fault rupture at the site is low. However, the site is within an area affected by strong seismic activity and future seismic shaking should be anticipated at the site. It will be necessary to design and construct the proposed improvements in strict adherence with current standards for earthquake-resistant construction.

Geotechnical Issues

General

Based on our study, we judge the proposed improvements can be built as planned, provided the recommendations presented in this report are incorporated into their design and construction. The primary geotechnical concerns during design and construction of the project are:

1. The presence of ½ to 5½ feet of moderately expansive weak, porous, compressible, clayey surface soil and heterogeneous fill;

2. The detrimental effects of uncontrolled surface runoff and groundwater seepage; and

3. The strong ground shaking predicted to impact the site during the life of the project.

Heterogeneous Fill

Heterogeneous fills of unknown quality and unknown method of placement, such as those found at the site, can settle and/or heave erratically under the load of new fills, structures, slabs, and pavements. Footings, slabs, and pavements supported on heterogeneous fill could also crack as a result of such erratic movements. Thus, where not removed by planned grading, the heterogeneous fill must be excavated and replaced as an engineered fill if it is to be used for structural support.

Weak, Porous Surface Soil

Weak, porous surface soil, such as that found at the site, appears hard and strong when dry but will lose strength rapidly and settle under the load of fills, foundations, slabs, and pavements as its moisture content increases and approaches saturation. The moisture content of this soil can increase as the result of rainfall, periodic irrigation or when the natural upward migration of water vapor through the soil is impeded by, and condenses under fills, foundations, slabs, and pavements. The detrimental effects of such movements can be reduced by strengthening the soil during grading. This can be achieved by excavating the weak soil and replacing it as properly compacted (engineered) fill.

Foundation, Slab and Pavement Support - After remedial grading, satisfactory foundation support for the buildings can be obtained from spread footings bottomed on the engineered fill at least 30 inches below pad subgrade. Interior slab-on-grade floors, exterior slabs and pavements can also be satisfactorily supported on the engineered fill.

Fill Support - Hillside fills need to be constructed on level keyways and benches excavated entirely on rock. However, regardless of the care used during grading, buttressed fills of uneven thickness such as those typically built on hillsides, will settle differentially. Satisfactory performance of structural elements constructed on hillside fills, such as slabs and driveways will require the use of specialized grading techniques discussed in the following sections of this report. These include excavating all the weak surface soil and replacing these materials as a buttressed fill of even thickness or constructing the improvements entirely on cut. For the purpose of this discussion, fills with a differential thickness of less than 5 feet can be assumed to have equal thickness. In order to provide the equal thicknesses, it may be

necessary to overexcavate at least a few feet in cut areas. Where the total fill thickness is less than 3 feet, the fill can be placed at 95 percent relative compaction in lieu of overexcavation in cut areas.

Excavation Difficulty

Site excavation will encounter hard, resistant bedrock a few feet below the surface. Site excavations, including utility trenches will require heavy ripping and jack hammering. The contractors and subcontractors bidding this job should read this report and become familiar with site conditions as they pertain to their operation and the appropriate equipment needed to perform their tasks. If more detailed information regarding excavatability of the bedrock is required, a seismic refraction study should be performed or additional test pits should be excavated using the type and size of equipment planned for construction.

On-Site Soil Quality

All fill materials used in the upper 30 inches of the building area must be select, as subsequently described in "Recommendations." We anticipate that, with the exception of organic matter and of rocks or lumps larger than 6 inches in diameter, the excavated material will be suitable for re-use as general fill but some localized soils will not be suitable for re-use as select fill.

Select Fill

The select fill can consist of approved on-site soil or import materials with a low expansion potential. The geotechnical engineer must approve the use of on-site soil as select fill during grading.

Settlement

If remedial grading is performed and the spread footings are installed in accordance with the recommendations presented in this report, we estimate that post-construction differential settlements across the building will be about ½ inch.

Surface Drainage

Because of topography and location, the site will be impacted by surface runoff from the upgradient slopes. Surface runoff typically sheet flows over the ground surface and slopes but can be concentrated by the planned site grading, landscaping, and drainage. The surface runoff can pond against structures, seep into the slab rock, and cause deeper than normal soil heave. Therefore, strict control of surface runoff is necessary to provide long-term satisfactory performance of the project. It will be necessary to divert surface runoff around slopes and improvements and provide positive drainage away from structures. This can be achieved by constructing the building pad several inches above the surrounding area and conveying the runoff into man made drainage elements or natural swales that lead downgradient of the site.

RECOMMENDATIONS

Seismic Design

Seismic design parameters presented below are based on Section 1613 titled "Earthquake Loads" of the 2016 California Building Code (CBC). Based on Table 20.3-1 of American Society of Civil Engineers (ASCE) Standard 7-10, titled "Minimum Design Loads for Buildings and Other Structures" (2010), we have determined a Site Class of C should be used for the site. Using a site latitude and longitude of 38.2669°N and 122.2669°W, respectively, and the OSHPD Seismic Design Maps website (https://seismicmaps.org), we recommend that the following seismic design criteria be used for applicable structures at the site.

2016 CBC Seismic Criteria	
Spectral Response Parameter	**Acceleration (g)**
S_S (0.2 second period)	1.904
S_1 (1 second period)	0.685
S_{MS} (0.2 second period)	1.904
S_{M1} (1 second period)	0.891
S_{DS} (0.2 second period)	1.269
S_{D1} (1 second period)	0.594

Grading

Site Preparation

Areas to be developed should be cleared of vegetation and debris, including that left by the removal of obsolete structures. Trees and shrubs that will not be part of the proposed development should be removed and their primary root systems grubbed. Cleared and grubbed material should be removed from the site and disposed of in accordance with County Health Department guidelines. We did not observe septic tanks, leach lines or underground fuel tanks during our study. Any such appurtenances found during grading should be capped and sealed and/or excavated and removed from the site, respectively, in accordance with established guidelines and requirements of the County Health Department. Voids created during clearing should be backfilled with engineered fill as recommended herein.

Stripping

Areas to be graded should be stripped of the upper few inches of soil containing organic matter. Soil containing more than two percent by weight of organic matter should be considered organic. Actual stripping depth should be determined by a representative of the geotechnical engineer in the field at the time of stripping. The strippings should be removed from the site, or if suitable, stockpiled for re-use as topsoil in landscaping.

Excavations

Following initial site preparation, excavation should be performed as recommended herein. Excavations extending below the proposed finished grade should be backfilled with suitable materials compacted to the requirements given below.

Within building areas, where spread footings bottomed at minimum depth are chosen for foundation support, and within fill and interior slab-on-grade areas, the old fill and weak, porous, compressible surface soil should be excavated to within 6 inches of its entire depth. Old fill was observed at depths up to about 5½ feet in our borings and test pits. Additional excavation should be performed, as necessary, to allow space for the installation of a blanket of select fill, at least 30 inches thick, beneath the building pad subgrade. The excavation of weak, compressible, soil should also extend at least 12 inches below exterior slab and pavement subgrade to allow space for the installation of the select fill blanket discussed in the conclusions section of this report. On sloping terrain 5:1 or steeper, fills should be constructed by excavating level keyways that expose undisturbed bedrock. The keyways should be at least 10 feet wide, extend at least 2 feet below the existing ground or bedrock surface on the downhill side and should be sloped to drain to the rear. Keyway excavations should extend laterally to at least a 1:1 imaginary line extending down from the toe of the fill. Keyway subdrains are discussed hereinafter in "Subsurface Drainage."

The excavation of weak, porous, compressible, surface materials should extend at least 5 feet beyond the outside edge of the exterior footings of the proposed buildings and 3 feet beyond the edge of exterior slabs and pavements and three feet beyond the toe of new fills that are not supported by keyways. The excavated materials should be stockpiled for later use as compacted fill, or removed from the site, as applicable. Excavation of hard resistant bedrock at the site may require heavy ripping and/or jack hammering. The grading contractor should review this report, become familiar with site conditions as they pertain to his operation and draw his own conclusions regarding excavation difficulty and suitable grading equipment.

At all times, temporary construction excavations should conform to the regulations of the State of California, Department of Industrial Relations, Division of Industrial Safety or other stricter governing regulations. The stability of temporary cut slopes, such as those constructed during the installation of underground utilities, should be the responsibility of the contractor. Depending on the time of year when grading is performed, and the surface conditions exposed, temporary cut slopes may need to be excavated to 1½:1, or flatter. The tops of the temporary cut slopes should be rounded back to 2:1 in weak soil zones.

Subsurface Drainage

A subdrain should be installed at the rear of the keyways and where evidence of seepage is observed. The subdrain should consist of a 4-inch diameter (minimum) perforated plastic pipe with SDR 35 or better embedded in Class 2 permeable material. The permeable material should be at least 12 inches thick and extend at least 48 inches above the bottom of the keyway (see Plate 22) and 12 inches above and below the seepage zone.

In addition, subdrains should be installed at a minimum slope of 1 percent and should have cleanouts located at their ends and at turning points. “Sweep” type elbows and wyes should be used at all turning points and cleanouts, respectively. Subdrain outlets and riser cleanouts should be fabricated of the same material as the subdrain pipe as specified herein. Outlet and riser pipe fittings should not be perforated. A licensed land surveyor or civil engineer should provide “record drawings” depicting the locations of subdrains and cleanouts.

Fill Quality

All fill materials should be free of perishable matter and rocks or lumps over 6 inches in diameter, and must be approved by the geotechnical engineer prior to use. The upper 30 inches of fill beneath and within 5 feet of the building area and the upper 12 inches of fill beneath and within 3 feet of exterior slabs and pavement edges should be select fill. We judge the on-site soil is generally suitable for use as general fill. The suitability of the on-site soil for use as select fill should be verified during grading.

Select Fill

Select fill should be free of organic matter, have a low expansion potential, and conform in general to the following requirements:

SIEVE SIZE	PERCENT PASSING (by dry weight)
6 inch	100
4 inch	90 – 100
No. 200	10 – 60

Liquid Limit – 40 Percent Maximum
Plasticity Index – 15 Percent Maximum
R-value – 20 Minimum (pavement areas only)

In general, imported fill, if needed, should be select. Material not conforming to these requirements may be suitable for use as import fill; however, it shall be the contractor’s responsibility to demonstrate that the proposed material will perform in an equivalent manner. The geotechnical engineer should approve imported materials prior to use as compacted fill. The grading contractor is responsible for submitting, at least 72 hours (3 days) in advance of its intended use, samples of the proposed import materials for laboratory testing and approval by the soils engineer.

Fill Placement

The surface exposed by stripping and removal of heterogeneous fill and weak, compressible, surface soil should be scarified to a depth of at least 6 inches, uniformly moisture-conditioned to near optimum and compacted to at least 90 percent of the maximum dry density of the materials as determined by ASTM Test Method D-1557. Approved fill material should then be spread in thin lifts, uniformly moisture-conditioned to near optimum and properly compacted. All structural fills, including those placed to establish site surface drainage, should be compacted to at least 90 percent relative compaction. Only approved select materials should be used for fill within the upper 30 inches of interior slab subgrades. and within the upper 12 inches of exterior slabs and pavement subgrades. Fills placed on terrain sloping at 5:1 or steeper should be continually keyed and benched into firm, undisturbed bedrock. The benches should allow space for the placement of select fill of even thickness under settlement sensitive structural elements supported directly on the fill. An illustration of this grading technique is shown on Plate 22.

SUMMARY OF COMPACTION RECOMMENDATIONS

Area	Compaction Recommendation (ASTM D-1557)
Preparation for areas to receive fill	After preparation in accordance with this report, compact upper 6 inches to a minimum of 90 percent relative compaction.
General fill (native or import)	Compact to a minimum of 90 percent relative compaction.
Structural fill beneath buildings, extending outward to 5' beyond building perimeter	Compact to a minimum of 90 percent relative compaction. Compact to a minimum of 95 percent where building pad transitions between bedrock and fill.
Structural fill beneath building pads that transition between bedrock and fills less than 3 feet thick	Compact to a minimum of 95 percent relative compaction.
Trenches	Compact to a minimum of 90 percent relative compaction. Compact the top 6 inches below vehicle pavement subgrade to a minimum of 95 percent relative compaction.
Retaining wall backfill	Compact to a minimum of 90 percent relative compaction, but not more than 95 percent.

SUMMARY OF COMPACTION RECOMMENDATIONS	
Area	Compaction Recommendation (ASTM D-1557)
Pavements, extending outward to 3' beyond edge of pavement	Compact upper 6 inches of subgrade to a minimum of 95 percent relative compaction.
Concrete flatwork and exterior slabs, extending outward to 3' beyond edge of slab	Compact subgrade to a minimum of 90 percent relative compaction. Where subject to vehicle traffic, compact upper 6 inches of subgrade to at least 95 percent relative compaction.
Aggregate Base	Compact aggregate base to at least 95 percent relative compaction.

Permanent Cut and Fill Slopes

In general, cut and fill slopes should be designed and constructed at slope gradients of 2:1 (horizontal to vertical) or flatter, unless otherwise approved by the geotechnical engineer in specified areas. Where steeper slopes are required, retaining walls should be used. Fill slopes should be constructed by overfilling and cutting the slope to final grade. “Track walking” of a slope to achieve slope compaction is not an acceptable procedure for slope construction. The geotechnical engineer is not responsible for measuring the angles of these slopes.

Wet Weather Grading

Generally, grading is performed more economically during the summer months when the on-site soil is usually dry of optimum moisture content. Delays should be anticipated in site grading performed during the rainy season or early spring due to excessive moisture in on-site soil. Special and relatively expensive construction procedures, including dewatering of excavations and importing granular soil, should be anticipated if grading must be completed during the winter and early spring or if localized areas of soft saturated soil are found during grading in the summer and fall.

Open excavations also tend to be more unstable during wet weather as groundwater seeps towards the exposed cut slope. Severe sloughing and occasional slope failures should be anticipated. The occurrence of these events will require extensive clean up and the installation of slope protection measures, thus delaying projects. The general contractor is responsible for the performance, maintenance and repair of temporary cut slopes.

Foundation Support

Provided the weak surface soil is removed by or strengthened and/or stabilized by remedial grading as recommended herein, the proposed structures can be supported on continuous and isolated spread footings that bottom on bedrock or select engineered fill.

Spread Footings

Spread footings should be at least 12 inches wide and should bottom on select engineered fill or on undisturbed bedrock, as applicable, at least 12 inches below pad subgrade. Additional embedment or width may be needed to satisfy code and/or structural requirements. On ungraded sloping terrain, the footings should be stepped as necessary to produce level tops and bottoms. Footings should be deepened as necessary to provide at least 7 feet of horizontal confinement between the footing bottoms and the face of the nearest slope. Confinement in bedrock can be reduced to 5 feet.

The bottoms of all footing excavations should be thoroughly cleaned out or wetted and compacted using hand-operated tamping equipment prior to placing steel and concrete. This will remove the soil disturbed during footing excavations, or restore their adequate bearing capacity, and reduce post-construction settlements. Footing excavations should not be allowed to dry before placing concrete. If shrinkage cracks appear in soil exposed in the footing excavations, the soil should be thoroughly moistened to close all cracks prior to concrete placement. The moisture condition of the foundation excavations should be checked by the geotechnical engineer no more than 24 hours prior to placing concrete.

Bearing Pressures - Footings installed in accordance with these recommendations may be designed using allowable bearing pressures of 3,000, 4,500, and 6,000 pounds per square foot (psf), for dead loads, dead plus code live loads, and total loads (including wind and seismic), respectively.

Lateral Pressures - The portion of spread footing foundations extending into undisturbed bedrock or select engineered fill may impose a passive equivalent fluid pressure and a friction factor of 350 pcf and 0.35, respectively, to resist sliding. Passive pressure should be neglected within the upper 6 inches, unless the soil is confined by concrete slabs or pavements.

Retaining Walls

Retaining walls constructed at the site must be designed to resist lateral earth pressures plus additional lateral pressures that may be caused by surcharge loads applied at the ground surface behind the walls. Retaining walls free to rotate (yielding greater than 0.1 percent of the wall height at the top of the backfill) should be designed for active lateral earth pressures. If walls are restrained by rigid elements to prevent rotation, they should be designed for “at rest” lateral earth pressures.

Retaining walls should be designed to resist the following earth equivalent fluid pressures (triangular distribution):

EARTH EQUIVALENT FLUID PRESSURES		
Loading Condition	**Pressure (pcf)**	**Additional Seismic Pressure (pcf)***
Active - Level Backfill	42	14
Active - Sloping Backfill 3:1 or Flatter	53	34
At Rest - Level Backfill	63	35

* If required

These pressures do not consider additional loads resulting from adjacent foundations or other loads. If these additional surcharge loadings are anticipated, we can assist in evaluating their effects. Where retaining wall backfill is subject to vehicular traffic, the walls should be designed to resist an additional surcharge pressure equivalent to two feet of additional backfill.

Retaining walls will yield slightly during backfilling. Therefore, walls should be backfilled prior to building on, or adjacent to, the walls. Backfill against retaining walls should be compacted to at least 90 and not more than 95 percent relative compaction. Over-compaction or the use of large compaction equipment should be avoided because increased compactive effort can result in lateral pressures higher than those recommended above.

Foundation Support

Retaining walls should be supported on spread footings designed in accordance with the recommendations presented in this report. Retaining wall foundations should be designed by the project civil or structural engineer to resist the lateral forces set forth in this section.

Wall Drainage and Backfill

Retaining walls should be backdrained as shown on Plate 23, Appendix A. The backdrains should consist of 4-inch diameter, rigid perforated pipe embedded in Class 2 permeable material. The pipe should be PVC Schedule 40 or ABS with SDR 35 or better, and the pipe should be sloped to drain to outlets by gravity. The top of the pipe should be at least 8 inches below lowest adjacent grade. The Class 2 permeable material should extend to within 1½ feet of the surface. The upper 1½ feet should be backfilled with compacted soil to exclude surface water. Retaining walls designed to resist full hydrostatic pressure do not need to be backdrained. Expansive soil should not be used for wall backfill. Where expansive soil is present in the excavation made to install the retaining wall, the excavation should be sloped back 1:1 from the back of the footing. The ground surface behind retaining walls should be sloped to drain. Where migration of moisture through retaining walls would be detrimental, retaining walls should be waterproofed.

Slab-On-Grade

Provided grading is performed in accordance with the recommendations presented herein, interior slabs should be underlain by undisturbed bedrock or select engineered fill. Slab-on-grade subgrade should be rolled to produce a dense, uniform surface. The slabs should be underlain with a capillary moisture break consisting of at least 4 inches of clean, free-draining crushed rock or gravel (excluding pea gravel) at least ¼-inch and no larger than ¾-inch in size. Interior slabs subject to vehicular traffic may be underlain by Class 2 aggregate base. The use of Class 2 aggregate base should be reviewed on a case by case basis. Class 2 aggregate base can be used for slab rock under exterior slabs. Interior area slabs should be provided with an underdrain system. The installation of this subdrain system is discussed in the "Geotechnical Drainage" section.

Slabs should be designed by the project civil or structural engineer to support the anticipated loads, reduce cracking and provide protection against the infiltration of moisture vapor. Warehouse slabs subjected to heavy concentrated wheel loads, such as forklift or trailer-trucks, should be designed to carry the anticipated wheel loads. Garage slabs should be separated from foundations and framing elements with low friction material.

A vapor barrier should be placed under all slabs-on-grade that are likely to receive an impermeable floor finish or be used for any purpose where the passage of water vapor through the floor is undesirable. RGH does not practice in the field of moisture vapor transmission evaluation or mitigation. Therefore, we recommend that a qualified person be consulted to evaluate the general and specific moisture vapor transmission paths and any impact on the proposed construction. This person should provide recommendations for mitigation of the potential adverse impact of moisture vapor transmission on various components of the structure as deemed appropriate.

Utility Trenches

The shoring and safety of trench excavations is solely the responsibility of the contractor. Attention is drawn to the State of California Safety Orders dealing with "Excavations and Trenches."

Unless otherwise specified by the County of Napa, on-site, inorganic soil may be used as utility trench backfill. Where utility trenches support pavements, slabs and foundations, trench backfill should consist of aggregate baserock. The baserock should comply with the minimum requirements in Caltrans Standard Specifications, Section 26 for Class 2 Aggregate Base. Trench backfill should be moisture-conditioned as necessary, and placed in horizontal layers not exceeding 8 inches in thickness, before compaction. Each layer should be compacted to at least 90 percent relative compaction as determined by ASTM Test Method D-1557. The top 6 inches of trench backfill below vehicle pavement subgrades should be moisture-conditioned as necessary and compacted to at least 95 percent relative compaction. Jetting or ponding of trench backfill to aid in achieving the recommended degree of compaction should not be attempted.

Pavements

Provided the site grading is performed as recommended herein the uppermost 12-inches of pavement subgrade soil will be select fill with a minimum R-value of 20. Based on that R-value we recommend the pavement sections listed in the tables below be used.

PAVEMENT SECTIONS WITH IMPORTED SELECT FILL SUBGRADE			
TI	ASPHALT CONCRETE (feet)	CLASS 2 AGGREGATE BASE (feet)	IMPORTED SELECT FILL* (feet)
7.0	0.30	1.15	1.0
6.0	0.25	1.05	1.0
5.0	0.20	0.90	1.0

* R-value ≥ 20

Pavement thicknesses were computed using Caltrans design equations and are based on a pavement life of 20 years. These recommendations are intended to provide support for traffic represented by the indicated Traffic Indices. They are not intended to provide pavement sections for heavy concentrated construction storage or wheel loads such as forklifts, parked truck-trailers and concrete trucks or for post-construction concentrated wheel loads such as self-loading dumpster trucks.

In areas where heavy construction storage and wheel loads are anticipated, the pavements should be designed to support these loads. Support could be provided by increasing pavement sections or by providing reinforced concrete slabs. Alternatively, paving can be deferred until heavy construction storage and wheel loads are no longer present.

Prior to placement of aggregate base, the upper 6 inches of the pavement subgrade soil should be scarified, uniformly moisture-conditioned to near optimum, and compacted to at least 95 percent relative compaction to form a firm, non-yielding surface.

Aggregate base materials should be spread in thin layers, uniformly moisture-conditioned, and compacted to at least 95 percent relative compaction to form a firm, non-yielding surface. The materials and methods used should conform to the requirements of the County of Napa and the current edition of the Caltrans Standard Specifications, except that compaction requirements should be based on ASTM Test Method D-1557. Aggregate used for the base course should comply with the minimum requirements specified in Caltrans Standard Specifications, Section 26 for Class 2 Aggregate Base.

Geotechnical Drainage

This section presents recommendations for surface and subsurface drainage. For the discussion of subsurface drainage related to grading, especially on hillsides, refer to the "Subsurface Drainage" section.

Surface

Surface water should be diverted away from slopes, foundations and edges of pavements. Surface drainage gradients should slope away from building foundations in accordance with the requirements of the CBC or local governing agency. Where a gradient flatter than 2 percent for paved areas and 4 percent for unpaved areas is required to satisfy design constraints, area drains should be installed with a spacing no greater than about 20 feet. Roofs should be provided with gutters and the downspouts should empty onto splash blocks that discharge directly onto paved areas or be connected to closed (glued Schedule 40 PVC or ABS with SDR of 35 or better) conduits discharging or into the site's surface drainage system. Roof downspouts and surface drains must be maintained entirely separate from the slab underdrains recommended hereinafter.

Water seepage or the spread of extensive root systems into the soil subgrade of footings, slabs or pavements could cause differential movements and consequent distress in these structural elements. Landscaping should be planned with consideration for these potential problems.

Perimeter Foundation Drains

Where upslope grades may convey water toward buildings, subdrains should be installed adjacent to perimeter foundations, except on the downhill side, to prevent surface runoff from entering the areas under buildings. Foundation drains should consist of trenches that are at least 10 inches below the pad grade surface and are sloped to drain by gravity. Four-inch diameter perforated pipe sloped to drain to outlets by gravity should be placed in the bottom of the trenches. The top of subdrain pipes should be at least 6 inches lower than the remainder of the pad grade. The perimeter subdrain trenches should be backfilled to within 6 inches of the surface with Class 2 permeable material. The upper 6 inches should be backfilled with compacted soil to exclude surface water. An illustration of this system is shown on Plate 24. Where retaining walls are used for perimeter foundations, retaining wall backdrains may be used in lieu of foundation drains.

Slab Underdrains

Where interior slab subgrades are less than 6 inches above adjacent exterior grade and where migration of moisture through the slab would be detrimental, slab underdrains should be installed to dispose of surface and/or groundwater that may seep and collect in the slab rock. Slab underdrains should consist of 6-inch wide trenches that extend at least 6 inches below the bottom of the slab rock and slope to drain by gravity. The slab underdrain trenches should be spaced no further than 15 feet, both ways. Additional drain trenches should be installed, as necessary, to drain all isolated under slab areas. Four-inch diameter perforated pipe (SDR 35 or better) sloped to drain to outlets by gravity should be placed in the bottom of the trenches. Slab underdrain trenches should be backfilled to subgrade level with clean, free draining slab rock. An illustration of this system is shown on Plate 24. If slab underdrains are

not used, it should be anticipated that water will enter the slab rock, permeate through the concrete slab and ruin floor coverings.

Maintenance

Periodic land maintenance, especially on hillsides, will be required. Surface and subsurface drainage facilities should be checked frequently, and cleaned and maintained as necessary or at least annually. A dense growth of deep-rooted ground cover must be maintained on all slopes to reduce sloughing and erosion. Sloughing and erosion that occurs must be repaired promptly before it can enlarge.

Supplemental Services

Pre-Bid Meeting

It has been our experience that contractors bidding on the project often contact us to discuss the geotechnical aspects. Informal contacts between RGH Consultants (RGH) and an individual contractor could result in incomplete or misinterpreted information being provided to the contractor. Therefore, we recommend a pre-bid meeting be held to answer any questions about the report prior to submittal of bids. If this is not possible, questions or clarifications regarding this report should be directed to the project owner or their designated representative. After consultation with RGH, the project owner or their representative should provide clarifications or additional information to all contractors bidding the job.

Plan and Specifications Review

Coordination between the design team and the geotechnical engineer is recommended to assure that the design is compatible with the soil, geologic and groundwater conditions encountered during our study. RGH recommends that we be retained to review the project plans and specifications to determine if they are consistent with our recommendations. In the event we are not retained to perform this recommended review, we will assume no responsibility for misinterpretation of our recommendations.

Construction Observation and Testing

Prior to construction, a meeting should be held at the site that includes, but is not limited to, the owner or owner's representative, the general contractor, the grading contractor, the foundation contractor, the underground contractor, any specialty contractors, the project civil engineer, other members of the project design team and RGH. This meeting should serve as a time to discuss and answer questions regarding the recommendations presented herein and to establish the coordination procedure between the contractors and RGH.

In addition, we should be retained to monitor all soil related work during construction, including:

- Site stripping, over-excavation, grading, and compaction of near surface soil;
- Placement of all engineered fill and trench backfill with verification field and laboratory testing;
- Observation of all foundation excavations; and
- Observation of foundation and subdrain installations.

If, during construction, we observe subsurface conditions different from those encountered during the explorations, we should be allowed to amend our recommendations accordingly. If different conditions are observed by others, or appear to be present beneath excavations, RGH should be advised at once so that these conditions may be evaluated and our recommendations reviewed and updated, if warranted. The validity of recommendations made in this report is contingent upon our being notified and retained to review the changed conditions.

If more than 18 months have elapsed between the submission of this report and the start of work at the site, or if conditions have changed because of natural causes or construction operations at, or adjacent to, the site, the recommendations made in this report may no longer be valid or appropriate. In such case, we recommend that we be retained to review this report and verify the applicability of the conclusions and recommendations or modify the same considering the time lapsed or changed conditions. The validity of recommendations made in this report is contingent upon such review.

These supplemental services are performed on an as-requested basis and are in addition to this geotechnical study. We cannot accept responsibility for items that we are not notified to observe or for changed conditions we are not allowed to review.

LIMITATIONS

This report has been prepared by RGH for the exclusive use of the property owner and their consultants as an aid in the design and construction of the proposed improvements described in this report.

The validity of the recommendations contained in this report depends upon an adequate testing and monitoring program during the construction phase. Unless the construction monitoring and testing program is provided by our firm, we will not be held responsible for compliance with design recommendations presented in this report and other addendum submitted as part of this report.

Our services consist of professional opinions and conclusions developed in accordance with generally accepted geotechnical engineering principles and practices. We provide no warranty, either expressed or implied. Our conclusions and recommendations are based on the information provided to us regarding the proposed construction, the results of our field exploration, laboratory testing program, and professional judgment. Verification of our conclusions and recommendations is subject to our review of the project plans and specifications, and our observation of construction.

The borings and test pits represent the subsurface conditions at the locations and on the date indicated. It is not warranted that they are representative of such conditions elsewhere or at other times. Site conditions and cultural features described in the text of this report are those existing at the time of our field exploration and may not necessarily be the same or comparable at other times.

It should be understood that slope failures including landslides, debris flows and erosion are on-going natural processes which gradually wear away the landscape. Residual soil and weathered bedrock can be susceptible to downslope movement, even on apparently stable sites. Such inherent hillside and slope risks are generally more prevalent during periods of intense and prolonged rainfall, which occasionally occur, in northern California and/or during earthquakes. Therefore, it must be accepted that occasional, unpredictable slope failure and erosion and deposition of the residual soil and weathered bedrock materials are irreducible risks and hazards of building upon or near the base of any hillside or any steeper slope area throughout northern California. By accepting this report, the client and other recipients acknowledge their understanding and acceptance of these risks and hazards, and the terms and conditions herein.

The scope of our services did not include an environmental assessment or a study of the presence or absence of toxic mold and/or hazardous, toxic or corrosive materials in the soil, surface water, groundwater or air (on, below or around this site), nor did it include an evaluation or study for the presence or absence of wetlands. These studies should be conducted under separate cover, scope and fee and should be provided by a qualified expert in those fields.

APPENDIX A - PLATES

LIST OF PLATES

Plate 1	Site Location Map
Plate 2	Exploration Plan
Plates 3 through 15	Logs of Borings B-1 through B-13
Plates 16 through 18	Logs of Test Pits TP-1 through TP-7
Plate 19	Soil Classification Chart and Key to Test Data
Plate 20	Engineering Geology Rock Terms
Plate 21	Classification Test Data
Plate 22	Hillside Grading Illustration
Plate 23	Retaining Wall Backdrain Illustration
Plate 24	Typical Subdrain Details Illustration

APPENDIX B - REFERENCES

American Society of Civil Engineers, 2010, Minimum Design Loads for Buildings and Other Structures, ASCE Standard ASCE/SEI 7-10.

Bryant, W.A., and Hart, E.W., Interim Revision 2007, Fault-Rupture Zones in California; California Geological Survey, Special Publication 42, p. 21 with Appendices A through F.

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Dwyer, M.J., Noguchi, N., and O'Rourke, J., 1976, Reconnaissance Photo-Interpretation Map of Landslides in 24 Selected 7.5-Minute Quadrangles in Lake, Napa, Solano, and Sonoma Counties, California: U.S. Geological Survey OFR 76-74, 25 Plates, Scale 1:24,000.

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APPENDIX C - DISTRIBUTION

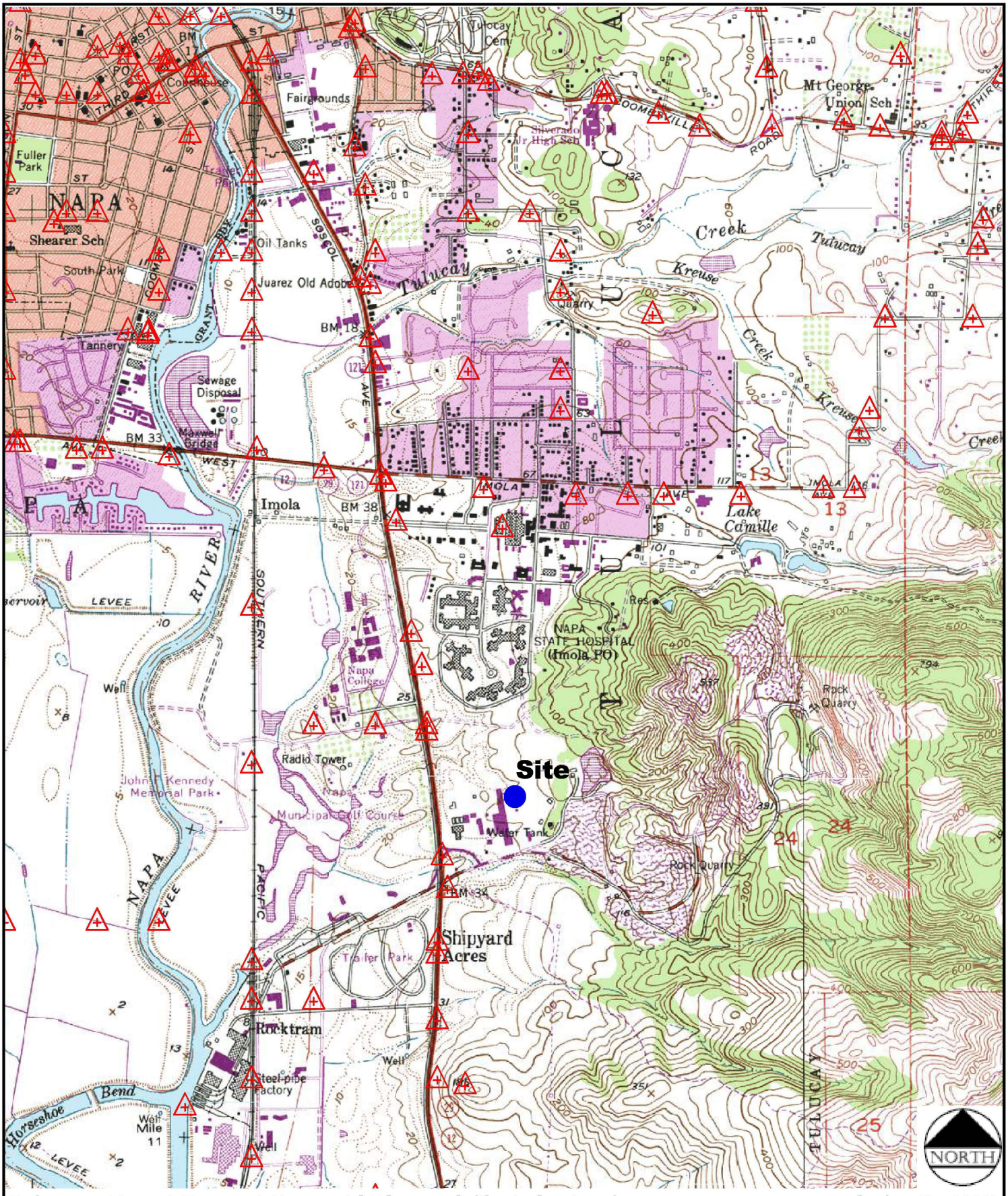
PDC Sacramento LLC (e)
Attention: Steve Beauchamp
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akenneally@dga-mv.com

JJP:TAW:ku:bw

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Reference: Maptech Topoquad, Napa and St. George, California Quadrangles

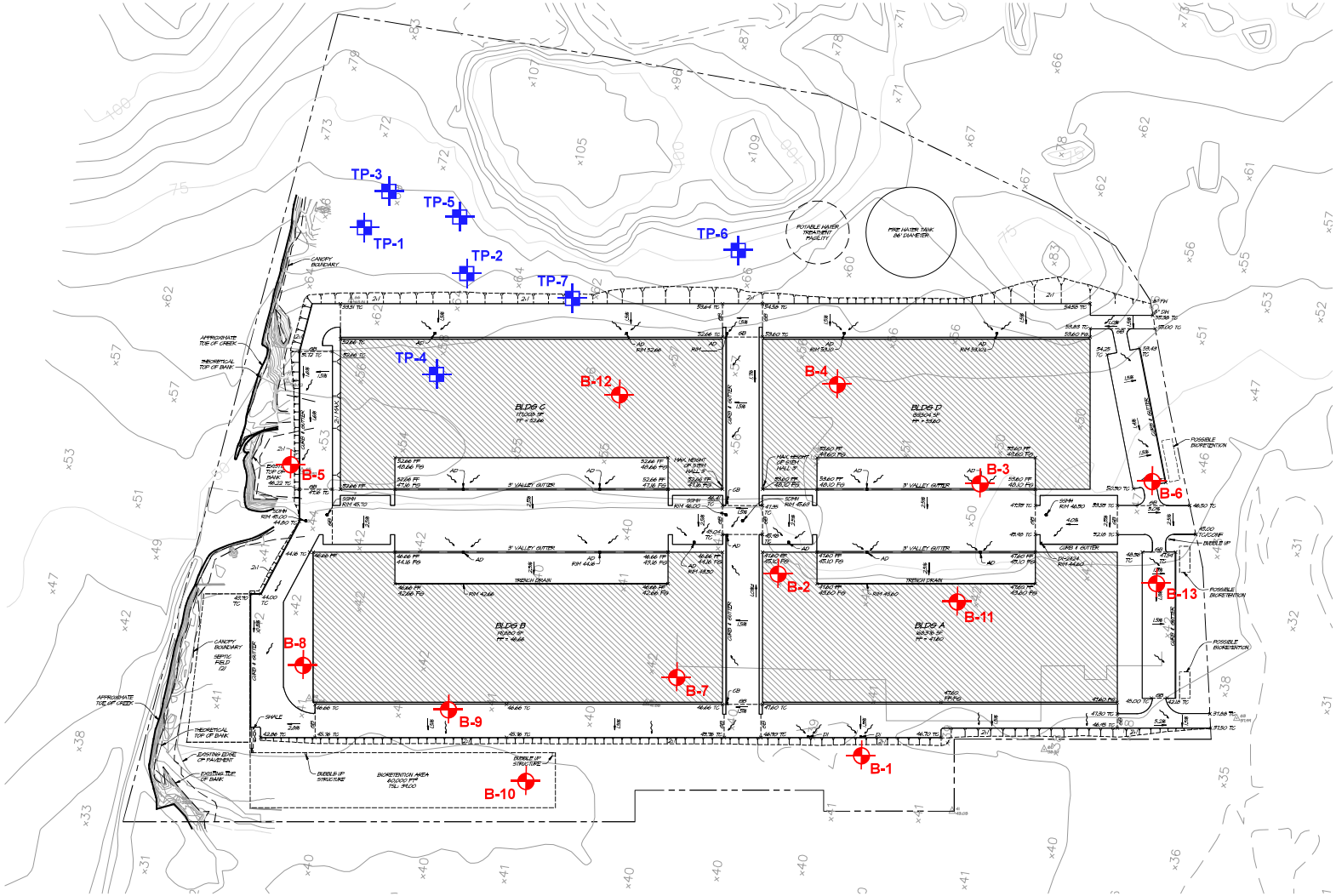
Scale: 1" = 2000'

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Job No: 7345.01.04.2 | Date: OCT 2019

SITE LOCATION MAP
Basanites
11 Basalt Road
Napa, California

PLATE
1



EXPLANATION

TP-7 Test Pit Location and Number

B-13 Boring Location and Number

200 0 200 feet

Scale: 1" = 200'

Reference: Conceptual Grading by RSA+ dated Sept. 2019

RGH CONSULTANTS

Job No: 7345.01.04.2 | Date: OCT 2019

EXPLORATION PLAN
Basanites
11 Basalt Road
Napa, California

PLATE 2

Date(s) Drilled **9/16/2019**	Logged By **KU**	Checked By **JJP**
Drilling Method **Solid-Stem Auger**	Drill Bit Size/Type **4"**	Total Depth of Borehole **21 1/2 feet**
Drill Rig Type **Truck Mounted**	Drilling Contractor **California Geotech**	Approximate Surface Elevation **Existing Ground Surface**
Groundwater Level **No Groundwater Encountered**	Sampling Method(s) **Modified California, SPT**	Hammer Data **140lb, 30" drop**

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance, blows/ft	Graphic Log	MATERIAL DESCRIPTION	Dry Density (pcf)	Water Content (%)	% <#200 Sieve	PI, %	LL, %	Expansion Index (EI)	UC, ksf	REMARKS AND OTHER TESTS
	0				3" Concrete over 8" Aggregate Base								
					BROWN CLAYEY SAND (SC), medium dense to dense, moist (Fill)			43.6	16.3	37.8	66		
			46		LIGHT BROWN CLAYEY SAND (SC), dense to medium dense, dry to moist (Fill)								
			27										
	5				RED BROWN SANDY CLAY (CL), very stiff, moist (Alluvium)								
			26										
	10				RED BROWN SANDY CLAY WITH GRAVEL (CL), hard, moist								
			47										
					LIGHT BROWN CLAY WITH SAND (CL), stiff to very stiff, moist								
					RED BROWN SANDY CLAY (CL), very hard, moist, trace gravel (Alluvium)								
	15		50/6"										
	20		42		Boring terminated at 21 1/2 feet No groundwater encountered								

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LOG OF BORING B-1

Basanites
11 Basalt Road
Napa, California

PLATE **3**

Date(s) Drilled **9/16/2019**	Logged By **KU**	Checked By **JJP**
Drilling Method **Solid-Stem Auger**	Drill Bit Size/Type **4"**	Total Depth of Borehole **6 feet**
Drill Rig Type **Truck Mounted**	Drilling Contractor **California Geotech**	Approximate Surface Elevation **Existing Ground Surface**
Groundwater Level **No Groundwater Encountered**	Sampling Method(s) **Modified California**	Hammer Data **140lb, 30" drop**

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance, blows/ft	Graphic Log	MATERIAL DESCRIPTION	Dry Density (pcf)	Water Content (%)	% <#200 Sieve	PI, %	LL, %	Expansion Index (EI)	UC, ksf	REMARKS AND OTHER TESTS
	0				LIGHT GRAY CLAYEY SAND WITH GRAVEL (SC), loose, dry, weak and porous to 1 1/2 feet								
			50/5"		RED BROWN SANDY CLAY WITH GRAVEL (CL), very hard, dry to moist (Alluvium)								
	5		50/5"										
					Boring terminated at 6 feet No groundwater encountered								
	10												
	15												
	20												

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LOG OF BORING B-2
Basanites
11 Basalt Road
Napa, California

PLATE **4**

Date(s) Drilled **9/16/2019**	Logged By **KU**	Checked By **JJP**
Drilling Method **Solid-Stem Auger**	Drill Bit Size/Type **4"**	Total Depth of Borehole **16 feet**
Drill Rig Type **Truck Mounted**	Drilling Contractor **California Geotech**	Approximate Surface Elevation **Existing Ground Surface**
Groundwater Level **No Groundwater Encountered**	Sampling Method(s) **Modified California, SPT**	Hammer Data **140lb, 30" drop**

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance, blows/ft	Graphic Log	MATERIAL DESCRIPTION	Dry Density (pcf)	Water Content (%)	% <#200 Sieve	PI, %	LL, %	Expansion Index (EI)	UC, ksf	REMARKS AND OTHER TESTS
	0				3" Concrete over 6" Aggregate Base								
					RED BROWN SILTY SAND WITH GRAVEL (SM), medium dense, moist								
			23					32.1	11.8	41.1			
	5												
			50/4"		RED BROWN AND DARK GRAY BASALT, firm to moderately hard, weak to moderately strong, highly weathered								
	10		50/4"										
	15		50/6"		Boring terminated at 16 feet No groundwater encountered								
	20												

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LOG OF BORING B-3
Basanites
11 Basalt Road
Napa, California

PLATE **5**

Date(s) Drilled **9/16/2019**	Logged By **KU**	Checked By **JJP**
Drilling Method **Solid-Stem Auger**	Drill Bit Size/Type **4"**	Total Depth of Borehole **10 1/2 feet**
Drill Rig Type **Truck Mounted**	Drilling Contractor **California Geotech**	Approximate Surface Elevation **Existing Ground Surface**
Groundwater Level **No Groundwater Encountered**	Sampling Method(s) **Modified California, SPT**	Hammer Data **140lb, 30" drop**

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance, blows/ft	Graphic Log	MATERIAL DESCRIPTION	Dry Density (pcf)	Water Content (%)	% <#200 Sieve	PI, %	LL, %	Expansion Index (EI)	UC, ksf	REMARKS AND OTHER TESTS
	0				6" Gravel fill								
					RED BROWN SILTY SAND WITH GRAVEL (SM), very hard, moist, subangular gravel								
			50/1"						21.4	62.0			
	5		50/5"		LIGHT BROWN SANDSTONE, soft to moderately hard, friable, highly weathered								
	10		50/5"		Boring terminated at 10 1/2 feet No groundwater encountered								
	15												
	20												

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LOG OF BORING B-4
Basanites
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PLATE
6

Date(s) Drilled **9/16/2019**	Logged By **KU**	Checked By **JJP**
Drilling Method **Solid-Stem Auger**	Drill Bit Size/Type **4"**	Total Depth of Borehole **12 1/2 feet**
Drill Rig Type **Truck Mounted**	Drilling Contractor **California Geotech**	Approximate Surface Elevation **Existing Ground Surface**
Groundwater Level **6 1/2 feet**	Sampling Method(s) **Modified California, SPT**	Hammer Data **140lb, 30" drop**

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance, blows/ft	Graphic Log	MATERIAL DESCRIPTION	Dry Density (pcf)	Water Content (%)	% <#200 Sieve	PI, %	LL, %	Expansion Index (EI)	UC, ksf	REMARKS AND OTHER TESTS
	0				LIGHT BROWN SANDY SILT (ML), dense, dry, weak and porous to 1/2 foot			58.2	5.0	28.8	10		
			50/4"		LIGHT GRAY BROWN SANDSTONE, soft to weak, friable, highly weathered								
	5		60										
	10		50/3"										
			50/6"		Boring terminated at 12 1/2 feet Drilling refusal at 12 feet Groundwater at 6 1/2 feet								
	15												
	20												

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LOG OF BORING B-5

Basanites
11 Basalt Road
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PLATE **7**

Date(s) Drilled **9/16/2019**	Logged By **KU**	Checked By **JJP**
Drilling Method **Solid-Stem Auger**	Drill Bit Size/Type **4"**	Total Depth of Borehole **10 1/2 feet**
Drill Rig Type **Truck Mounted**	Drilling Contractor **California Geotech**	Approximate Surface Elevation **Existing Ground Surface**
Groundwater Level **No Groundwater Encountered**	Sampling Method(s) **Modified California**	Hammer Data **140lb, 30" drop**

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance, blows/ft	Graphic Log	MATERIAL DESCRIPTION	Dry Density (pcf)	Water Content (%)	% <#200 Sieve	PI, %	LL, %	Expansion Index (EI)	UC, ksf	REMARKS AND OTHER TESTS
	0				3" Concrete over 6" Aggregate Base								
					RED BROWN CLAYEY SAND WITH GRAVEL (SC), very dense, moist (Alluvium)								
	5		50/4"										
	10		50/6"		Boring terminated at 10 1/2 feet No groundwater encountered								
	15												
	20												

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LOG OF BORING B-6
Basanites
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PLATE **8**

Date(s) Drilled **9/20/2019**	Logged By **KU**	Checked By **JJP**
Drilling Method **Solid-Stem Auger**	Drill Bit Size/Type **4"**	Total Depth of Borehole **15 1/2 feet**
Drill Rig Type **Truck Mounted**	Drilling Contractor **California Geotech**	Approximate Surface Elevation **Existing Ground Surface**
Groundwater Level **No Groundwater Encountered**	Sampling Method(s) **Modified California, SPT**	Hammer Data **140lb, 30" drop**

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance, blows/ft	Graphic Log	MATERIAL DESCRIPTION	Dry Density (pcf)	Water Content (%)	% <#200 Sieve	PI, %	LL, %	Expansion Index (EI)	UC, ksf	REMARKS AND OTHER TESTS
	0				4" Concrete over 8" Aggregate Base								
					BROWN SANDY SILTY CLAY (CL-ML), medium dense, moist (Fill)								
			18						5.1	24.8			
	5				GRAY BROWN SANDY CLAY WITH GRAVEL (CL), very stiff, moist (Fill)								
			19										
					GRAY CLAY WITH SAND (CH), stiff to very stiff, moist								
	10		17		RED BROWN SANDY CLAY (CL), very stiff to hard, moist, trace gravel (Alluvium)								
			35										
	15				Boring terminated at 15 1/2 feet No groundwater encountered								
	20												

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LOG OF BORING B-7
Basanites
11 Basalt Road
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PLATE **9**

Date(s) Drilled **9/20/2019**	Logged By **KU**	Checked By **JJP**
Drilling Method **Solid-Stem Auger**	Drill Bit Size/Type **4"**	Total Depth of Borehole **16 1/2 feet**
Drill Rig Type **Truck Mounted**	Drilling Contractor **California Geotech**	Approximate Surface Elevation **Existing Ground Surface**
Groundwater Level **No Groundwater Encountered**	Sampling Method(s) **Modified California, SPT**	Hammer Data **140lb, 30" drop**

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance, blows/ft	Graphic Log	MATERIAL DESCRIPTION	Dry Density (pcf)	Water Content (%)	% <#200 Sieve	PI, %	LL, %	Expansion Index (EI)	UC, ksf	REMARKS AND OTHER TESTS
	0				5" Concrete over 7" Aggregate Base								
					BROWN SANDY CLAY (CL), medium dense, moist (Fill)				9.7	33.7			
			21										
			29										
	5				RED BROWN SANDY CLAY (CL), hard, moist (Alluvium)								
			44										
					DDISH YELLOW/GRAY SILTSTONE, oft to firm, friable, highly weathered								
	10		40										
	15		51		Boring terminated at 16 1/2 feet No groundwater encountered								
	20												

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LOG OF BORING B-8
Basanites
11 Basalt Road
Napa, California

PLATE **10**

Date(s) Drilled **9/20/2019**	Logged By **KU**	Checked By **JJP**
Drilling Method **Solid-Stem Auger**	Drill Bit Size/Type **4"**	Total Depth of Borehole **10 1/2 feet**
Drill Rig Type **Truck Mounted**	Drilling Contractor **California Geotech**	Approximate Surface Elevation **Existing Ground Surface**
Groundwater Level **No Groundwater Encountered**	Sampling Method(s) **Modified California, SPT**	Hammer Data **140lb, 30" drop**

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance, blows/ft	Graphic Log	MATERIAL DESCRIPTION	Dry Density (pcf)	Water Content (%)	% <#200 Sieve	PI, %	LL, %	Expansion Index (EI)	UC, ksf	REMARKS AND OTHER TESTS
	0				3" Concrete over 8" Aggregate Base								
					BROWN SANDY CLAY WITH GRAVEL (CL), stiff, moist (Fill)								
			8										
					GRAY SANDY CLAY WITH GRAVEL (CH), very stiff to hard, moist, organics								
	5		33										
					GRAY/REDDISH YELLOW GRAVELLY SANDSTONE, firm to moderately hard, friable to weak, highly weathered								
			50/4"										
	10				Boring terminated at 10 1/2 feet No groundwater encountered								
	15												
	20												

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LOG OF BORING B-9

Basanites
11 Basalt Road
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PLATE **11**

Date(s) Drilled **9/20/2019**	Logged By **KU**	Checked By **JJP**
Drilling Method **Solid-Stem Auger**	Drill Bit Size/Type **4"**	Total Depth of Borehole **16 feet**
Drill Rig Type **Truck Mounted**	Drilling Contractor **California Geotech**	Approximate Surface Elevation **Existing Ground Surface**
Groundwater Level **No Groundwater Encountered**	Sampling Method(s) **Bulk, Modified California, SPT**	Hammer Data **140lb, 30" drop**

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance, blows/ft	Graphic Log	MATERIAL DESCRIPTION	Dry Density (pcf)	Water Content (%)	% <#200 Sieve	PI, %	LL, %	Expansion Index (EI)	UC, ksf	REMARKS AND OTHER TESTS
	0				4" Concrete over 8" Aggregate Base								
					BROWN CLAYEY SAND WITH GRAVEL (SC), loose, moist (Fill)								
	5		6		DARK BROWN/DARK GRAY SANDY CLAY (CL), medium stiff, moist, organics								
					RED BROWN SANDY CLAY (CL), very stiff, moist (Alluvium)								
	10		17										
	15		50/6"		Boring terminated at 16 feet No groundwater encountered								
	20												

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LOG OF BORING B-10
Basanites
11 Basalt Road
Napa, California

PLATE
12

Date(s) Drilled **9/20/2019**	Logged By **KU**	Checked By **JJP**
Drilling Method **Solid-Stem Auger**	Drill Bit Size/Type **4"**	Total Depth of Borehole **7 feet**
Drill Rig Type **Truck Mounted**	Drilling Contractor **California Geotech**	Approximate Surface Elevation **Existing Ground Surface**
Groundwater Level **No Groundwater Encountered**	Sampling Method(s) **Modified California, SPT**	Hammer Data **140lb, 30" drop**

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance, blows/ft	Graphic Log	MATERIAL DESCRIPTION	Dry Density (pcf)	Water Content (%)	% <#200 Sieve	PI, %	LL, %	Expansion Index (EI)	UC, ksf	REMARKS AND OTHER TESTS
	0				3" Concrete over 7" Aggregate Base								
					RED BROWN SANDY CLAY (CL), very stiff, moist (Alluvium)								
			16										
			50/4"		LIGHT GRAY/LIGHT BROWN SILTSTONE, firm to moderately hard, friable to weak, highly weathered								
	5		50/5"										
					Boring terminated at 7 feet Drilling refusal at 6 feet No groundwater encountered								
	10												
	15												
	20												

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LOG OF BORING B-11

Basanites
11 Basalt Road
Napa, California

PLATE **13**

Date(s) Drilled **9/20/2019**	Logged By **KU**	Checked By **JJP**
Drilling Method **Solid-Stem Auger**	Drill Bit Size/Type **4"**	Total Depth of Borehole **6 feet**
Drill Rig Type **Truck Mounted**	Drilling Contractor **California Geotech**	Approximate Surface Elevation **Existing Ground Surface**
Groundwater Level **No Groundwater Encountered**	Sampling Method(s) **SPT**	Hammer Data **140lb, 30" drop**

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance, blows/ft	Graphic Log	MATERIAL DESCRIPTION	Dry Density (pcf)	Water Content (%)	% <#200 Sieve	PI, %	LL, %	Expansion Index (EI)	UC, ksf	REMARKS AND OTHER TESTS
	0				3" Aggregate Base/Gravel fill								
					REDDISH BROWN/GRAY SANDSTONE, firm to moderately hard, friable to moderately strong, completely weathered								
			70										
			50/6"										
	5				Boring terminated at 6 feet No groundwater encountered								
	10												
	15												
	20												

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LOG OF BORING B-12

Basanites
11 Basalt Road
Napa, California

PLATE **14**

Date(s) Drilled **9/20/2019**	Logged By **KU**	Checked By **JJP**
Drilling Method **Solid-Stem Auger**	Drill Bit Size/Type **4"**	Total Depth of Borehole **10 1/2 feet**
Drill Rig Type **Truck Mounted**	Drilling Contractor **California Geotech**	Approximate Surface Elevation **Existing Ground Surface**
Groundwater Level **No Groundwater Encountered**	Sampling Method(s) **Modified California, SPT**	Hammer Data **140lb, 30" drop**

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance, blows/ft	Graphic Log	MATERIAL DESCRIPTION	Dry Density (pcf)	Water Content (%)	% <#200 Sieve	PI, %	LL, %	Expansion Index (EI)	UC, ksf	REMARKS AND OTHER TESTS
	0				4" Concrete over 8" Aggregate Base								
					RED BROWN SANDY CLAY (CL), very hard, moist (Alluvium)								
			50/3"		LIGHT BROWN/GRAY BASALT, firm to moderately hard, friable to moderately strong, completely weathered								
			50/4"										
	5												
			50/5"										
	10				Boring terminated at 10 1/2 feet No groundwater encountered								
	15												
	20												

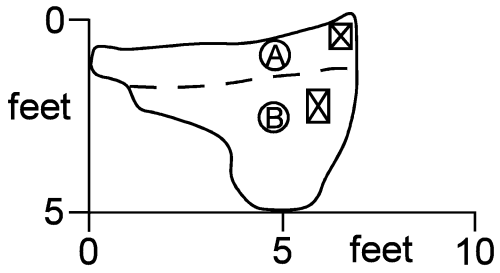
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LOG OF BORING B-13
11 Basalt Road
11 Basalt Road
Napa, California

PLATE
15

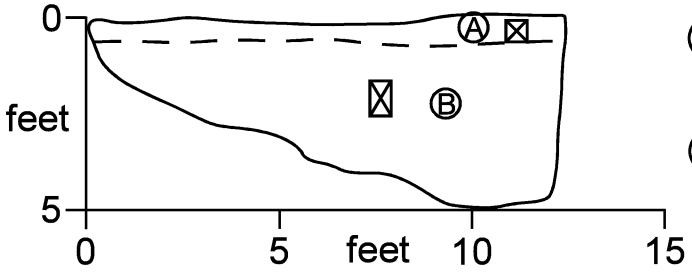
TP-1
S84°E



(A) LIGHT GRAY BROWN CLAYEY SAND WITH GRAVEL (SC), loose, moist, weak and porous

(B) RED BROWN SANDSTONE, firm to moderately hard, friable to weak, moderately weathered

TP-2
S79°E



(A) LIGHT GRAY BROWN CLAYEY SAND WITH GRAVEL (SC), loose, moist, weak and porous

(B) RED BROWN SANDSTONE, firm to moderately hard, friable to weak, moderately weathered, with rootlets to 3½ feet

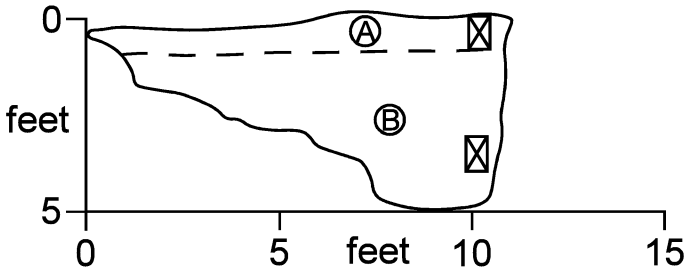
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LOG OF TEST PITS TP-1 & TP-2
11 Basalt Road
11 Basalt Road
Napa, California

PLATE
16

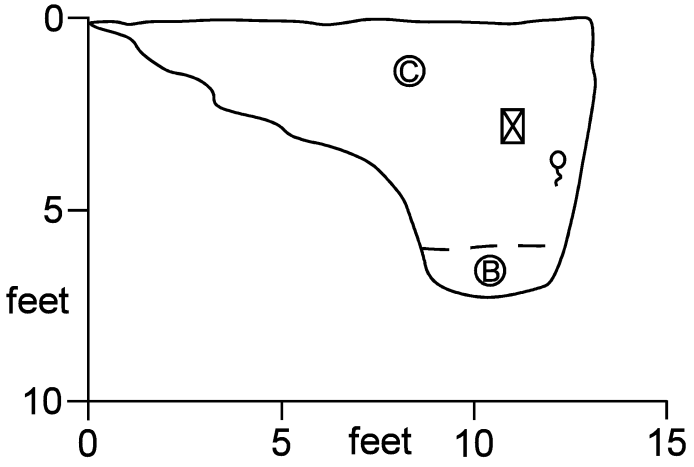
TP-3
S76°E



Ⓐ LIGHT GRAY BROWN CLAYEY SAND WITH GRAVEL (SC), loose, moist, weak and porous

Ⓑ RED BROWN SANDSTONE, firm to moderately hard, friable to weak, moderately weathered, with rootlets to 3 feet

TP-4
S9°W



Ⓒ GRAY BROWN CLAYEY SAND (SC), medium dense to dense, moist to wet, fill (scraps of cables, metal and garbage)

Ⓑ RED BROWN SANDSTONE, moderately hard to hard, weak to moderately strong, moderately weathered

*Seepage at 4½ feet

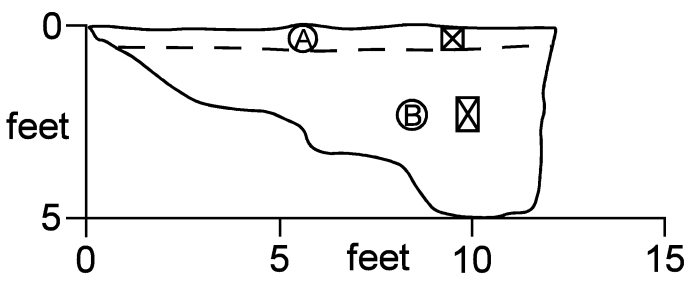
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LOG OF TEST PITS TP-3 & TP-4
11 Basalt Road
11 Basalt Road
Napa, California

PLATE
17

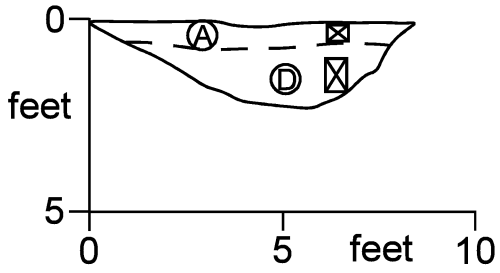
TP-5
S72°W



Ⓐ LIGHT GRAY BROWN CLAYEY SAND WITH GRAVEL (SC), loose, moist, weak and porous

Ⓑ RED BROWN SANDSTONE, firm to moderately hard, friable to weak, moderately weathered, with roots to 2 feet

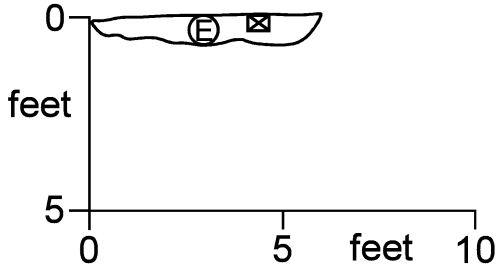
TP-6
S80°E



Ⓐ LIGHT GRAY BROWN CLAYEY SAND WITH GRAVEL (SC), loose, moist, weak and porous

Ⓓ GRAY BASALT, firm to hard, weak to moderately strong, moderately weathered

TP-7
N8°E



Ⓔ GRAY BASALT, moderately hard to hard, moderately strong to strong, moderately weathered

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LOG OF TEST PITS TP-5, TP-6 & TP-7
11 Basalt Road
11 Basalt Road
Napa, California

PLATE
18

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance, blows/ft	Graphic Log	MATERIAL DESCRIPTION	Dry Density (pcf)	Water Content (%)	% <#200 Sieve	PI, %	LL, %	Expansion Index (EI)	UC, ksf	REMARKS AND OTHER TESTS
1	2	3	4	5	6	7	8	9	10	11	12	13	14

COLUMN DESCRIPTIONS

1 Elevation (feet): Elevation (MSL, feet).
2 Depth (feet): Depth in feet below the ground surface.
3 Sample Type: Type of soil sample collected at the depth interval shown.
4 Sampling Resistance, blows/ft: Number of blows to advance driven sampler one foot (or distance shown) beyond seating interval using the hammer identified on the boring log.
5 Graphic Log: Graphic depiction of the subsurface material encountered.
6 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
7 Dry Density (pcf): Dry density, in pcf.
8 Water Content (%): Water content, percent.
9 % <#200 Sieve: % <#200 Sieve
10 PI, %: Plasticity Index, expressed as a water content.
11 LL, %: Liquid Limit, expressed as a water content.
12 Expansion Index (EI): Expansion Index (EI)
13 UC, ksf: Unconfined compressive strength, in kips per square foot.
14 REMARKS AND OTHER TESTS: Comments and observations regarding drilling or sampling made by driller or field personnel.

FIELD AND LABORATORY TEST ABBREVIATIONS

CHEM: Chemical tests to assess corrosivity
COMP: Compaction test
CONS: One-dimensional consolidation test
LL: Liquid Limit, percent
PI: Plasticity Index, percent
SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

Basalt
Fat CLAY, CLAY w/SAND, SANDY CLAY (CH)
Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)
SILTY CLAY (CL-ML)
Portland Cement Concrete
Gravel
SILT, SILT w/SAND, SANDY SILT (ML)
Sandstone
Clayey SAND (SC)
Siltstone
Silty SAND (SM)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Bulk Sample
2.5-inch-ID Modified California w/ brass liners
Sample Recovered But Not Retained
2-inch-OD unlined split spoon (SPT)

OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)
Water level (after waiting)
Minor change in material properties within a stratum
Inferred/gradational contact between strata
Queried contact between strata

GENERAL NOTES

1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
2: Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.

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SOIL CLASSIFICATION AND KEY TO TEST DATA

Basanites
11 Basalt Road
Napa, California

PLATE
19

LAYERING

MASSIVE	Greater than 6 feet
THICKLY BEDDED	2 to 6 feet
MEDIUM BEDDED	8 to 24 inches
THINLY BEDDED	2½ to 8 inches
VERY THINLY BEDDED	¾ to 2½ inches
CLOSELY LAMINATED	¼ to ¾ inches
VERY CLOSELY LAMINATED	Less than ¼ inch

JOINT, FRACTURE, OR SHEAR SPACING

VERY WIDELY SPACED	Greater than 6 feet
WIDELY SPACED	2 to 6 feet
MODERATELY SPACED	8 to 24 inches
CLOSELY SPACED	2½ to 8 inches
VERY CLOSELY SPACED	¾ to 2½ inches
EXTREMELY CLOSELY SPACED	Less than ¼ inch

HARDNESS

Soft - pliable; can be dug by hand

Firm - can be gouged deeply or carved with a pocket knife

Moderately Hard - can be readily scratched by a knife blade; scratch leaves heavy trace of dust and is readily visible after the powder has been blown away

Hard - can be scratched with difficulty; scratch produces little powder and is often faintly visible

Very Hard - cannot be scratched with pocket knife, leaves a metallic streak

STRENGTH

Plastic - capable of being molded by hand

Friable - crumbles by rubbing with fingers

Weak - an unfractured specimen of such material will crumble under light hammer blows

Moderately Strong - specimen will withstand a few heavy hammer blows before breaking

Strong - specimen will withstand a few heavy ringing hammer blows and usually yields large fragments

Very Strong - rock will resist heavy ringing hammer blows and will yield with difficulty only dust and small flying fragments

DEGREE OF WEATHERING

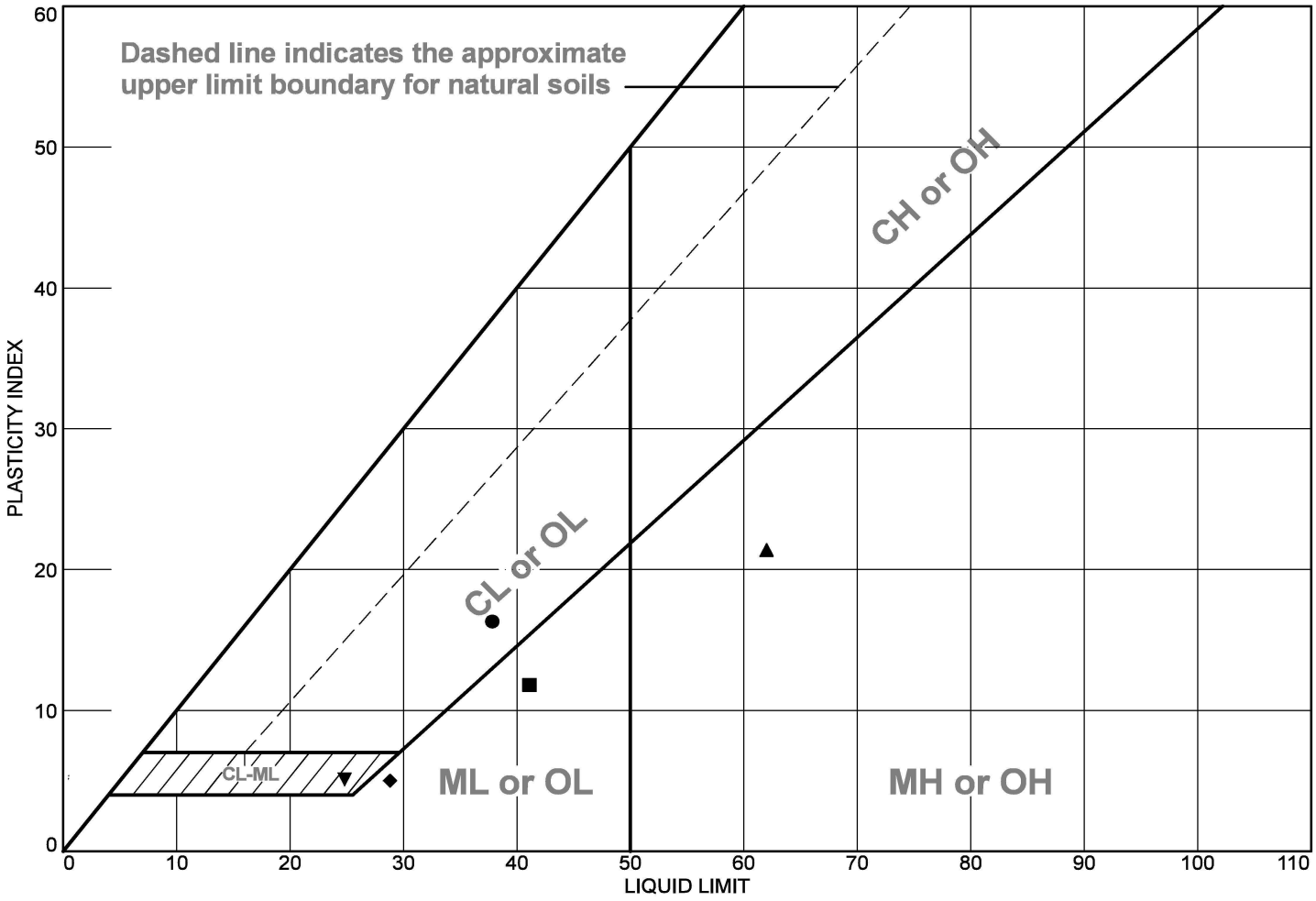
Highly Weathered - abundant fractures coated with oxides, carbonates, sulphates, mud, etc., thorough discoloration, rock disintegration, mineral decomposition

Moderately Weathered - some fracture coating, moderate or localized discoloration, little to no effect on cementation, slight mineral decomposition

Slightly Weathered - a few stained fractures, slight discoloration, little or no effect on cementation, no mineral composition

Fresh - unaffected by weathering agents; no appreciable change with depth

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Brown Clayey Sand (SC)	37.8	21.5	16.3		43.6	SC
■	Brown Silty Sand (SM)	41.1	29.3	11.8		32.1	SM
▲	Orange Silty Sand W/ Gravel (SM)	62.0	40.6	21.4			SM
◆	Tan Sandy Silt (ML)	28.8	23.8	5.0		58.2	ML
▼	Gray/Brown Sandy Silty Clay (CL-ML)	24.8	19.7	5.1			CL-ML

Project No. 7345.01.04.2 **Client:** RGH Consultants

Project: 11 Basalt Road

● **Source of Sample:** B-1 **Depth:** 1.5' & 2.0'
■ **Source of Sample:** B-3 **Depth:** 3.5' & 4.0'
▲ **Source of Sample:** B-4 **Depth:** 3.0'
◆ **Source of Sample:** B-5 **Depth:** 3.0' & 3.5'
▼ **Source of Sample:** B-7 **Depth:** 2.5'

Remarks:
● Expansion Index= 66 (Medium)
◆ Expansion Index = 10 (Very Low)

Tested By: SCW
Checked By: SEF

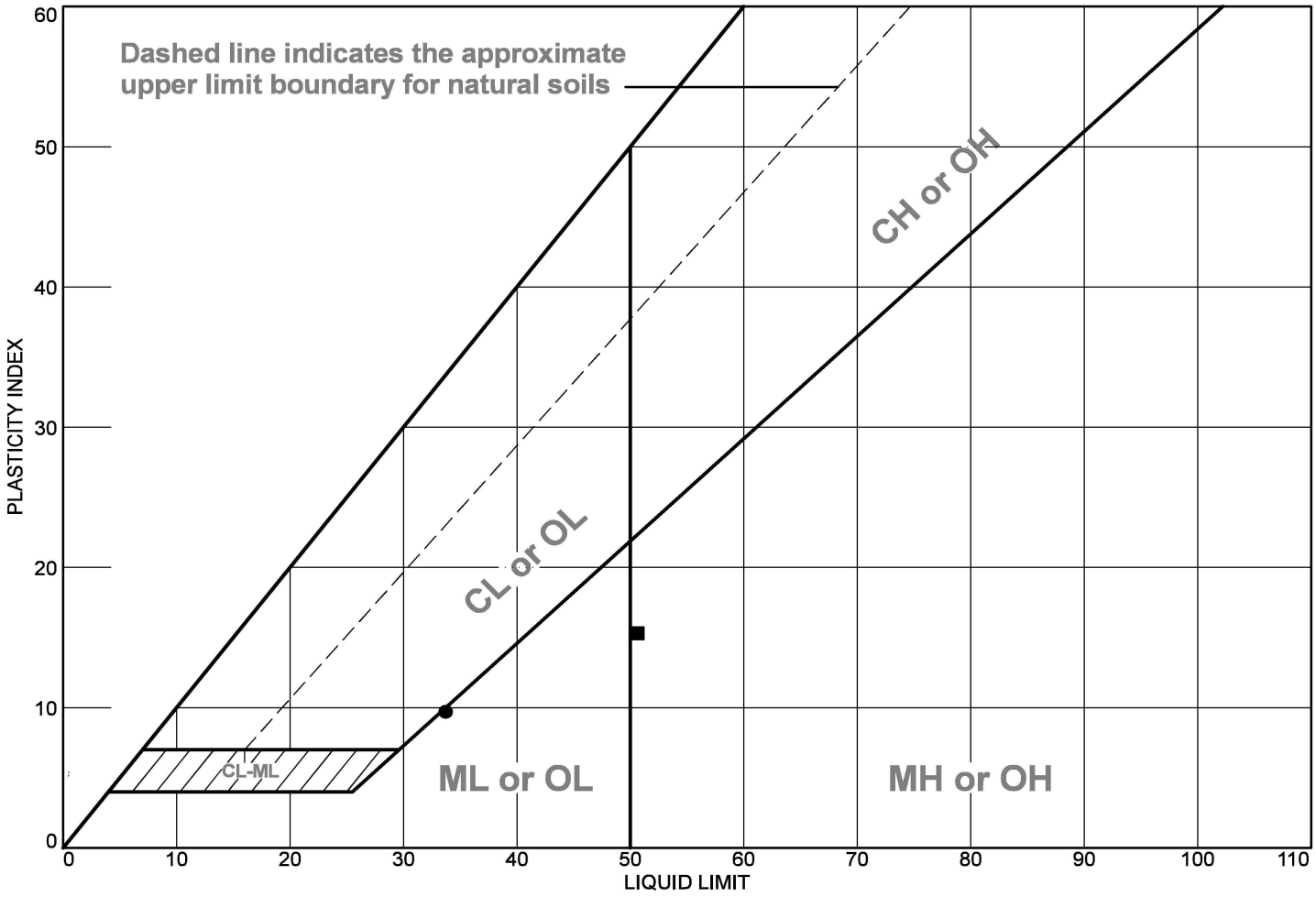
RGH CONSULTANTS

Job No: 7345.01.04.2 | Date: OCT 2019

CLASSIFICATION TEST DATA
Basanites
11 Basalt Road
Napa, California

PLATE
21

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Brown Sandy Clay (CL)	33.7	24.0	9.7			CL
■	Brown Silty Sand (SM)	50.6	35.3	15.3		34.6	SM

Project No. 7345.01.04.2 **Client:** RGH Consultants

Project: 11 Basalt Road

● **Source of Sample:** B-8 **Depth:** 1.5' & 2.0'

■ **Source of Sample:** B-5 & B-12 Composite **Depth:** 2', 4' & 5', 10'

Remarks:

■ Expansion Index= 15 (Low)

Tested By: SCW

Checked By: SEF

RGH CONSULTANTS

Job No: 7345.01.04.2 | Date: OCT 2019

CLASSIFICATION TEST DATA

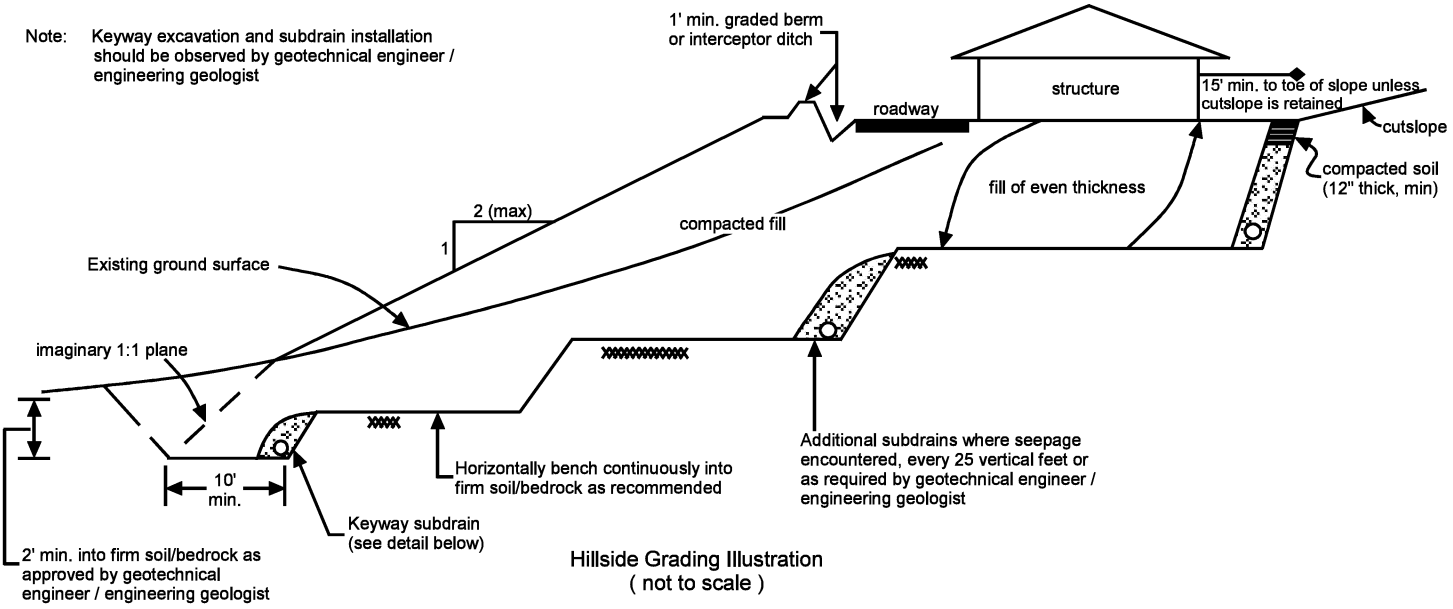
Basanites

11 Basalt Road

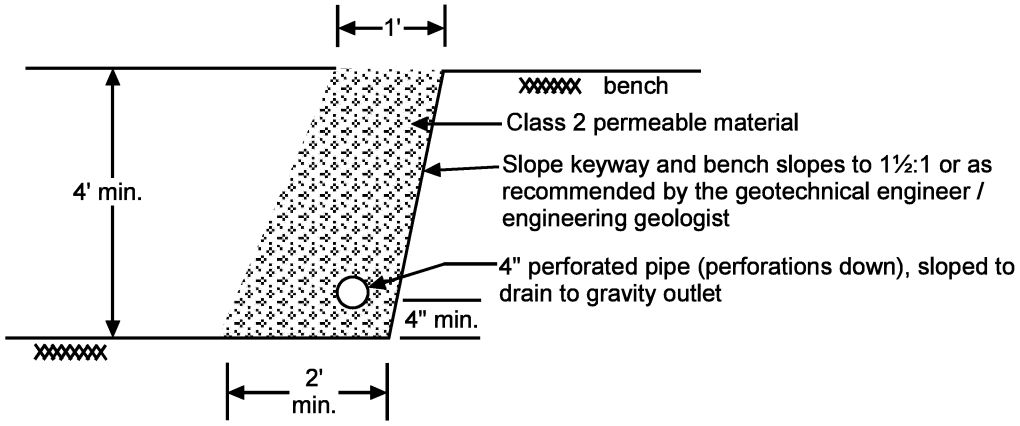
Napa, California

PLATE

21 Cont.



Hillside Grading Illustration
(not to scale)



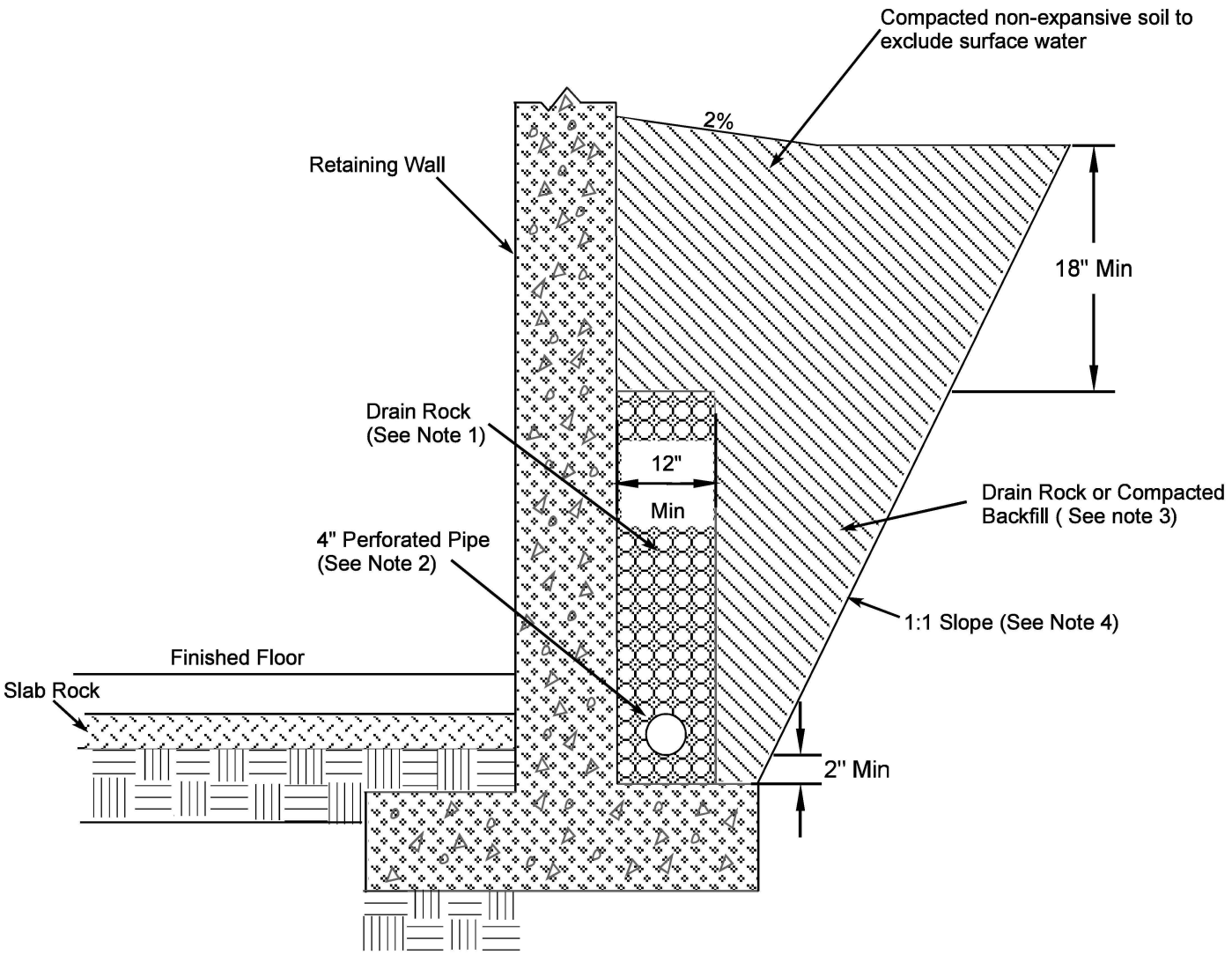
Keyway Subdrain
(not to scale)

RGH CONSULTANTS

Job No: 7345.01.04.2 | Date: OCT 2019

HILLSIDE GRADING ILLUSTRATION
Basanites
11 Basalt Road
Napa, California

PLATE
22



Notes:

1. Drain rock should meet the requirements for Class 2 Permeable Material, Section 68, State of California "Caltrans" Standard Specification, latest edition. Drain rock should be placed to approximately three-quarters the height of the retaining wall.

2. Pipe should conform to the requirements of Section 68 of State of California "Caltrans" Standards, perforations placed down, sloped at 1% for gravity flow to outlet or sump with automatic pump. The pipe invert should be located at least 8 inches below the lowest adjacent finished surface.

3. During construction the contractor should use appropriate methods such as temporary bracing and/or light compaction equipment to avoid overstressing the walls. Non-expansive soils to be used as backfill.

4. Slope excavation back at a 1:1 gradient from the back of footing where expansive materials are exposed.

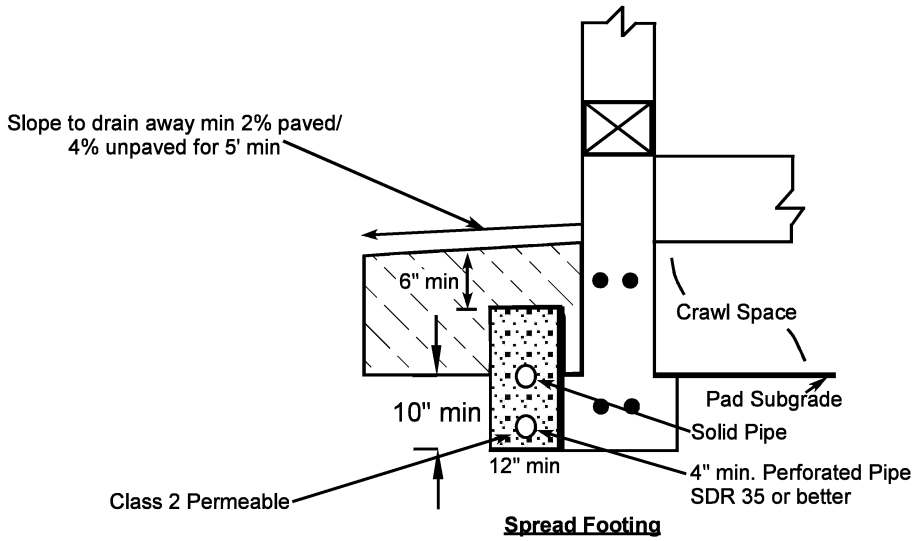
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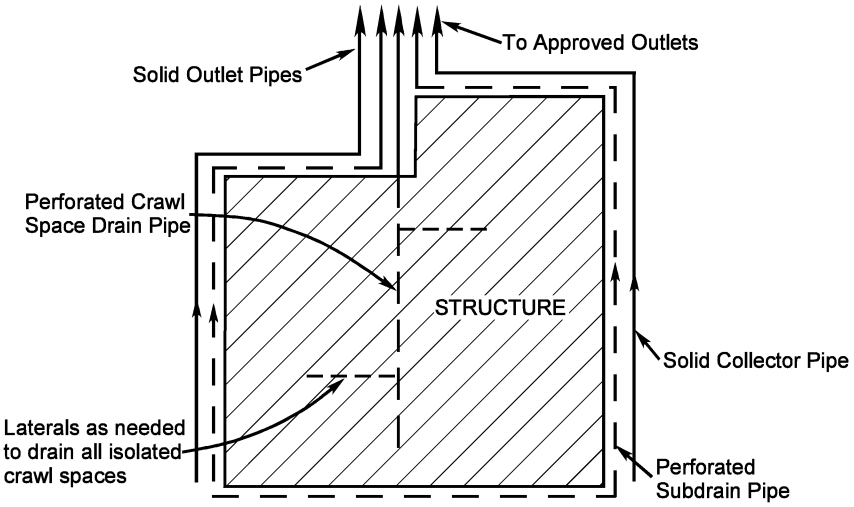
RETAINING WALL BACKDRAIN ILLUSTRATION
Basanites
11 Basalt Road
Napa, California

PLATE
23

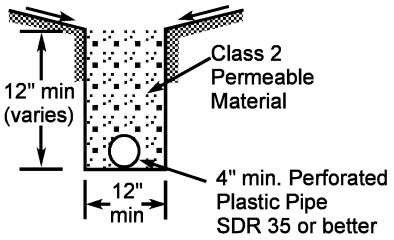


Spread Footing

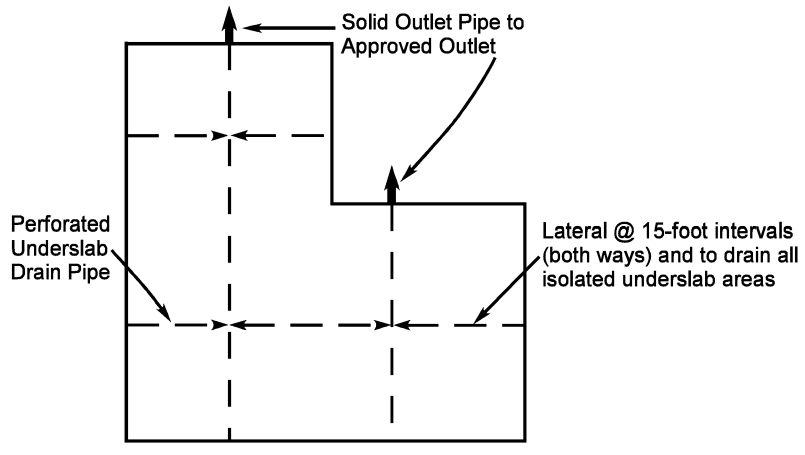
PERIMETER FOUNDATION DRAINS



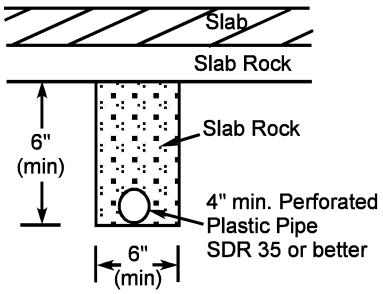
TYPICAL FOUNDATION DRAIN PLAN



CRAWL SPACE DRAIN



TYPICAL UNDERSLAB DRAIN PLAN



SLAB UNDERDRAIN

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Job No: 7345.01.04.2 | Date: OCT 2019

TYPICAL SUBDRAIN DETAILS

Basanites
11 Basalt Road
Napa, California

PLATE

24

Transportation Impact Study for the Basanites Project



Prepared for the County of Napa

File Number: P19-00421

Submitted by

W-Trans

March 22, 2022

TRAFFIC ENGINEERING
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Executive Summary

The proposed 690,768 square-foot industrial park would be located at 11 Basalt Road. Based on standard trip generation rates, the proposed project would be expected to generate an average of 2,329 new daily trips, including 276 during both the weekday a.m. and p.m. peak hours.

The study area included intersections along State Route (SR) 221 through the City and County of Napa, along with the Imola Avenue interchange at SR 29, and the intersections of SR 29/SR 12-121 and Napa-Vallejo Highway (SR 221)-Soscol Ferry Road/SR 29. The study intersections of Napa-Vallejo Highway (SR 221)/Project Access and Napa-Vallejo Highway (SR 221)-Soscol Ferry Road/SR 29 are currently operating at LOS F and Soscol Avenue-SR 221/SR 121-Imola Avenue is anticipated to in the future. All three of these locations are under the jurisdiction of Caltrans. Because there are no readily available measures to achieve operation that meets the standard of LOS D typically applied, the intersections of Napa-Vallejo Highway (SR 221)-Soscol Ferry Road/SR 29 and Soscol Avenue-SR 221/SR 121-Imola Avenue have been exempted and LOS F operation has been deemed acceptable, which is consistent with Caltrans policy as indicated in *Vehicle Miles Traveled-Focused Transportation Impact Study Guide* (TISG) that no longer considers service levels as an environmental impact. The County is working with Caltrans on improvements to reduce congestion and achieve better operation, but these projects are not yet adopted and funded.

All study intersections are currently operating acceptably under the standards applied and are expected to continue doing so under both short-term and long-term future volumes. Upon adding trips associated with the proposed project, the study intersections would be expected to continue operating acceptably, again recognizing that LOS F is considered acceptable for some locations. The County is currently finishing the design for installation of a traffic signal at SR 221/Project Access that was a mitigation measure for the jail being constructed adjacent to the project site, and this traffic signal was assumed to be operational for all "plus Project" scenarios.

Facilities providing access to the site for alternative modes, including pedestrians, bicyclists, and transit riders, are generally adequate given the rural setting of the project site as well as the type of operation proposed.

Access to the site is proposed to occur via Basalt Road and three driveways. Sight lines along Basalt Road from the project driveways are adequate. Left-turn lanes are warranted, and therefore recommended, at all three of the project's driveways.

Introduction

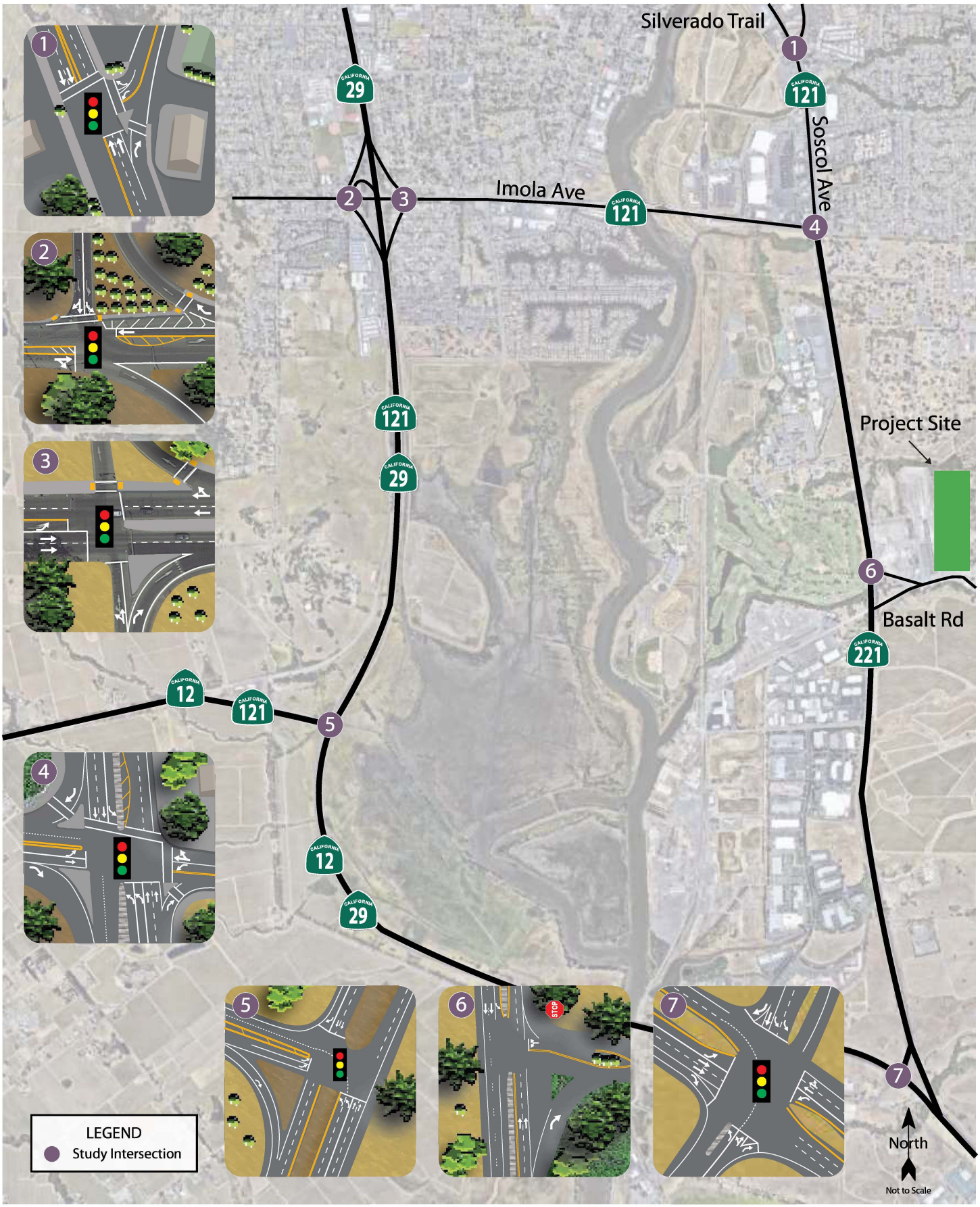
This report presents an analysis of the potential traffic impacts that would be associated with development of a proposed 690,768 square foot Industrial Park at 11 Basalt Road in the County of Napa. The traffic study was completed in accordance with the criteria established by the County of Napa, is consistent with standard traffic engineering techniques and reflects a scope of work approved by County staff.

Prelude

The purpose of a traffic impact study is to provide County staff and policy makers with data that they can use to make an informed decision regarding the potential transportation impacts of a proposed project, and any associated improvements that would be required to mitigate these impacts to an acceptable level under CEQA, the County's General Plan, or other policies. This report provides an analysis of those items that are identified as areas of environmental concern under the California Environmental Quality Act (CEQA) and that, if significant, require an EIR. Impacts associated with access for pedestrians, bicyclists, and to transit; the vehicle miles traveled (VMT) generated by the project; potential safety concerns such as increased queuing in dedicated turn lanes, adequacy of sight distance, and need for turn lanes; and emergency access are addressed in the context of the CEQA criteria. While no longer a part of the CEQA review process, vehicular traffic service levels at key intersections were evaluated for consistency with General Plan policies by determining the number of new trips that the proposed use would be expected to generate, distributing these trips to the surrounding street system based on anticipated travel patterns specific to the proposed project, then analyzing the effect the new traffic would be expected to have on the study intersections and need for improvements to maintain acceptable operation. Adequacy of parking is also addressed as a policy issue.

Project Profile

The project as proposed includes development of four buildings having a total area of 690,768 square feet. It is anticipated that three-quarters of the building space would be used for warehousing while the remaining fourth is assumed to have light industrial use. Access to the site would be via the unnamed street that connects to Basalt Road, which provides access to the Syar Quarry and the new jail facility on the site immediately adjacent to the one for the proposed project. The County of Napa file number for this project is P19-00421. The project site is located at 11 Basalt Road, as shown in Figure 1.



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Transportation Impact Study for the Basanites Project

Figure 1 – Study Area and Existing Lane Configurations

Transportation Setting

Operational Analysis

Study Area and Periods

The study area consists of the section of Basalt Road fronting the project site and the project access point as well as the following intersections, many of which were also included in the EIR for the Napa Jail project. Turning movement volumes were collected in 2020, prior to the pandemic. Volume, speed, and classification data for Basalt Road are enclosed in Appendix A.

The study area consists of the following intersections:

1. Soscol Avenue/Silverado Trail (State Route (SR) 121)
2. SR 29 South Ramps/SR 121 (Imola Avenue)
3. SR 29 North Ramps/SR 121 (Imola Avenue)
4. Soscol Avenue-SR 221/SR 121-Imola Avenue
5. SR 29/SR 12-121
6. Napa-Vallejo Highway (Hwy) (SR 221)/Project Access Rd
7. Napa-Vallejo Hwy (SR 221)-Soscol Ferry Road/SR 29

Operating conditions during the a.m. and p.m. peak periods were evaluated to capture the highest potential impacts for the proposed project as well as the highest volumes on the local transportation network. The morning peak hour occurs between 7:00 and 9:00 a.m. and reflects conditions during the home to work or school commute, while the p.m. peak hour occurs between 4:00 and 6:00 p.m. and typically reflects the highest level of congestion during the homeward bound commute.

Study Intersections

Soscol Avenue/Silverado Trail (SR 121) is a signalized tee-intersection in the City of Napa. There are marked crosswalks on the north and west legs.

SR 29 South Ramps/SR 121 (West Imola Avenue) is a signalized four-legged intersection, with the south leg being an on-ramp for SR 29 in the City of Napa. A crosswalk is available on the north leg of the intersection.

SR 29 North Ramps/SR 121 (West Imola Avenue) is a signalized four-legged intersection in the City of Napa. A protected left-turn phase is provided on the eastbound West Imola Avenue approach. A crosswalk is available on the north leg of the intersection.

Soscol Avenue-SR 221/SR 121-Imola Avenue is a signalized four-legged intersection in the City of Napa. A protected left-turn phase is provided on all approaches. Crosswalks are available on the north and east legs of the intersection.

SR 29/SR 12-121 is a signalized tee-intersection in the City of Napa. A protected left-turn phase is provided on the northbound SR 12 approach. There are no marked crosswalks at this intersection.

Napa-Vallejo Highway (SR 221)/Project Access Road is an unsignalized tee-intersection in the County of Napa. There is currently a plan in the design stage to install a traffic signal at this intersection, which would give the southbound approach a protected left-turn movement.

Napa-Vallejo Highway (SR 221)-Soscol Ferry Road/SR 29 is a signalized four-legged intersection in the County of Napa. There are protected left-turn phases provided for each approach at the intersection.

The locations of the study intersections and the existing lane configurations and controls are shown in Figure 1.

Collision History

The collision history for the study area was reviewed to determine any trends or patterns that may indicate a safety issue. Collision rates were calculated based on records available from the California Highway Patrol as published in their Statewide Integrated Traffic Records System (SWITRS) reports. The most current five-year period available is October 1, 2015 through September 30, 2020.

As presented in Table 1, the calculated collision rates for the study intersections were compared to average collision rates for similar facilities statewide, as indicated in *2018 Collision Data on California State Highways*, California Department of Transportation (Caltrans). The intersections of Soscol Avenue/Silverado Trail (SR 121), SR 29 South Ramps/SR 121 (W. Imola Avenue), SR 29 North Ramps/SR 121 (W. Imola Avenue), SR 29/SR 12-121, and Napa-Vallejo Highway had collision rates above the statewide average, which warranted further analysis. The collision rate calculations are provided in Appendix B.

Table 1 – Collision Rates at the Study Intersections

Study Intersection	Number of Collisions (2015-2020)	Calculated Collision Rate (c/mve)	Statewide Avg Collision Rate (c/mve)
1. Soscol Ave/Silverado Trail (SR 121)	18	**0.34**	0.19
2. SR 29 South Ramps/SR 121 (Imola Ave)	27	**0.67**	0.24
3. SR 29 North Ramps/SR 121 (Imola Ave)	40	**0.74**	0.24
4. Soscol Ave-SR 221/SR 121-Imola Ave	16	0.21	0.24
5. SR 29/SR 12-121	75	**0.85**	0.22
6. Napa-Vallejo Hwy (SR 221)/Project Access Rd	0	0.00	0.08
7. Napa-Vallejo Hwy (SR 221)-Soscol Ferry Rd/SR 29	36	**0.41**	0.24

Note: c/mve = collisions per million vehicles entering; **Bold** text indicates rate is higher than statewide average

Further review of the collisions at Soscol Avenue/Silverado Trail revealed that eight of the 18 collisions were rear-end, six were broadside, and two were sideswipe types. Three collisions involved hitting an object. Five of the eight rear-end collisions were due to unsafe speeds. Three of the six broadside collisions were related to traffic signals and signs and involved a northbound vehicle colliding with vehicles making left turns. Two of the three collisions that involved hit objects were primarily due to driving under the influence. While there were no clear trends to the collisions, drivers on Soscol Avenue were indicated

as causing the crashes in all cases. The City may wish to explore the need for additional speed enforcement or modify timing to provide additional clearance times due to the skewed alignment and resulting longer times needed to clear the intersection.

The collision history for the intersection of SR 29 South Ramps/SR 121 indicated that of the twenty-seven collisions, six were rear-end, four were sideswipe, two were broadside, and one was head-on. An additional eleven collisions reported involved a driver hitting a fixed object. Five of the six rear-end collisions were primarily due unsafe speed on the SR 29 southbound exit ramp. Three of the four sideswipes were primarily due to an unsafe lane change on the southbound approach. After review of the collisions involving hit objects, four were due to improper turning, three were due to driving under the influence, and another three were due to unsafe speed. It is noted that while the collision rate was above average, the incidence of injury was 37.0 percent compared to a statewide average of 44.6 percent, so there does not appear to be a safety concern associated with this above-average crash rate. Further, because of the way that crashes near interchanges are coded, it is difficult to determine if the crashes occurred on the ramp or on the mainline, so it is likely that many of the crashes included in the calculated rate did not, in fact, occur at the intersection but rather on the freeway.

Review of the collision history for the intersection of SR 29 North Ramps/SR 121 revealed that of the reported forty collisions, nineteen were rear-end, eight were broadside, six were hit object, two were head-on, and another two were sideswipe. Of the nineteen rear-end collisions, nine occurred on the SR 29 northbound exit ramp or, more likely, on the mainline freeway and seven occurred on the northbound on ramp or, again, on the mainline of the freeway. Fourteen of the of the nineteen rear-end collisions were due to unsafe speed. Of the eight broadside collisions, five reported traffic signals and signs as the primary collision factor with westbound drivers at fault. Of the six hit object collisions, five were primarily due to improper turning. Because many of the crashes were likely on the freeway and not at the study intersection, there is less likelihood of a safety issue requiring remediation.

At the intersection of SR 29/SR 12-121, which had seventy-five reported collisions, twenty-nine were rear-end, twenty-three were broadside, and eight were sideswipe. In addition, there were ten incidents that involved hit objects, two collisions that involved an overturned vehicle, and three that involved head-on collisions. Of the twenty-nine rear-end collisions, nineteen were due to unsafe speed. Eleven of the twenty-three broadsides were the result of right-of-way violations made by drivers turning left. Lastly, two of the three head-on collisions were a result of northbound vehicles turning left against southbound traffic. This intersection experiences substantial congestion during peak periods, which routinely translates to rear-end crashes. Caltrans may wish to review the safety record of this location to determine if any changes to signal timing or phasing might be appropriate.

The collision history for the intersection of Napa-Vallejo Highway-Soscol Ferry Road/SR 29 revealed fourteen of the thirty-six collisions were rear-ends. Eight of these collisions occurred in the southbound direction and were primarily caused by unsafe speeds. Furthermore, of the thirty-six collisions, ten were sideswipes; nine of the ten occurred between two southbound vehicles and unsafe lane changes were the primary collision factor. Additional review shows ten of the thirty-six collisions were broadsides. Half of these incidents occurred between a vehicle proceeding straight and a vehicle turning left. This intersection had an injury ratio of 30.6 percent versus the statewide average of 44.6 percent, indicating that despite the above-average crash rate there is not a corresponding demonstrated safety concern.

Alternative Modes

Pedestrian Facilities

Pedestrian facilities include sidewalks, crosswalks, pedestrian signal phases, curb ramps, curb extensions, and various streetscape amenities such as lighting, benches, etc. In general, there are no pedestrian facilities in the vicinity of the proposed project site.

- **Basalt Road** –Basalt Road is a rural street that provides access to commercial sites east of SR 221. Sidewalks and streetlights are typically not provided along rural streets such as this one as these facilities would be inconsistent with the character.

Bicycle Facilities

The *Highway Design Manual*, Caltrans, 2017, classifies bikeways into four categories:

- **Class I Multi-Use Path** – a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flows of motorized traffic minimized.
- **Class II Bike Lane** – a striped and signed lane for one-way bike travel on a street or highway.
- **Class III Bike Route** – signing only for shared use with motor vehicles within the same travel lane on a street or highway.
- **Class IV Bikeway** – also known as a separated bikeway, a Class IV Bikeway is for the exclusive use of bicycles and includes a separation between the bikeway and the motor vehicle traffic lane. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.

Bike facilities are nonexistent in the vicinity of the project site. There is a planned either Class I shared use path or Class II bike lanes along SR 221 near the project site. Bicyclists currently ride in the roadway along all streets within the project area. Table 2 summarizes the existing and planned bicycle facilities in the project vicinity, as contained in the *2019 Napa Countywide Bicycle Plan.* As a part of the mitigation measures for the Napa Jail, a bike trail connection will be constructed to connect the jail to the River to Ridge Trail less than a mile from the project site.

Table 2 – Bicycle Facility Summary				
Status **Facility**	**Class**	**Length (miles)**	**Begin Point**	**End Point**
Existing				
River to Ridge Trail	I	2.25	Napa Valley Vine Trail	Napa Valley Hwy
Napa Valley Vine Trail	I	5.80	Napa Valley Vine Trail Head near Redwood Rd	California Dr
Napa River Trail	I	0.50	Clark St	Trancas St
Planned				
Napa Vallejo Hwy (SR 221)	I	1.57	Imola Ave	Kaiser Rd
Napa Vallejo Hwy (SR 221)	II	1.44	Kaiser Rd	Magnolia Dr
Napa Jail Trail	tbd	0.80	Napa Jail	River to Ridge Trailhead

Notes: All or portions of these bikeways are located within the County of Napa; tbd = to be determined
Source: *Napa Countywide Bicycle Plan,* Napa Valley Transportation Authority, 2019

Transit Facilities

Transit Services throughout Napa County are provided by Napa Valley Transit (VINE). There are currently no VINE stops within one-quarter of a mile of the project site, with the nearest bus stop being one mile away from the project access road. However, prior to occupancy of the Napa Jail a new Route 20 will be initiated, which will serve a bus stop to be provided by the Jail project, creating three lines accessing within one-quarter mile of the project site.

Dial-a-ride, also known as paratransit, or door-to-door service, is available for those who are unable to independently use the transit system due to a physical or mental disability. NVTA Paratransit is designed to serve the needs of individuals with disabilities within Napa County and the greater Napa County area.

Capacity Analysis

Intersection Level of Service Methodologies

Level of Service (LOS) is used to rank traffic operation on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F. Generally, Level of Service A represents free flow conditions and Level of Service F represents forced flow or breakdown conditions. A unit of measure that indicates a level of delay generally accompanies the LOS designation.

The study intersections were analyzed using two methodologies published in the *Highway Capacity Manual* (HCM), Transportation Research Board, 2000 and 6th Edition. It should be noted the intersections of SR 29 South Ramps/SR 121 (Imola Avenue) and Napa-Vallejo Highway (SR 221)-Soscol Ferry Road/SR 29 were analyzed with HCM 2000 as HCM 2010 and HCM 6th Edition cannot accommodate turning movements with shared and exclusive lanes or speeds higher than 55 miles per hour. This source contains methodologies for various types of intersection control, all of which are related to a measurement of delay in average number of seconds per vehicle.

The Project Access intersection, which currently has side street stop controls, was analyzed in the short-term using the "Two-Way Stop-Controlled" intersection capacity method from the HCM. This methodology determines a level of service for each minor turning movement by estimating the level of average delay in seconds per vehicle. Results are presented for individual movements together with the weighted overall average delay for the intersection.

The study intersections that are currently controlled by a traffic signal or may be in the future like the Project Access intersection, were evaluated using the signalized methodology from the HCM. This methodology is based on factors including traffic volumes, green time for each movement, phasing, whether the signals are coordinated or not, truck traffic, and pedestrian activity. Average stopped delay per vehicle in seconds is used as the basis for evaluation in this LOS methodology. For purposes of this study, delays were calculated using signal timing obtained from the agency having jurisdiction or optimized for near-term and future conditions.

The ranges of delay associated with the various levels of service are indicated in Table 3.

Table 3 – Intersection Level of Service Criteria		
LOS	**Two-Way Stop-Controlled**	**Signalized**
A	Delay of 0 to 10 seconds. Gaps in traffic are readily available for drivers exiting the minor street.	Delay of 0 to 10 seconds. Most vehicles arrive during the green phase, so do not stop at all.
B	Delay of 10 to 15 seconds. Gaps in traffic are somewhat less readily available than with LOS A, but no queuing occurs on the minor street.	Delay of 10 to 20 seconds. More vehicles stop than with LOS A, but many drivers still do not have to stop.
C	Delay of 15 to 25 seconds. Acceptable gaps in traffic are less frequent, and drivers may approach while another vehicle is already waiting to exit the side street.	Delay of 20 to 35 seconds. The number of vehicles stopping is significant, although many still pass through without stopping.
D	Delay of 25 to 35 seconds. There are fewer acceptable gaps in traffic, and drivers may enter a queue of one or two vehicles on the side street.	Delay of 35 to 55 seconds. The influence of congestion is noticeable, and most vehicles have to stop.
E	Delay of 35 to 50 seconds. Few acceptable gaps in traffic are available, and longer queues may form on the side street.	Delay of 55 to 80 seconds. Most, if not all, vehicles must stop, and drivers consider the delay excessive.
F	Delay of more than 50 seconds. Drivers may wait for long periods before there is an acceptable gap in traffic for exiting the side streets, creating long queues.	Delay of more than 80 seconds. Vehicles may wait through more than one cycle to clear the intersection.

Reference: *Highway Capacity Manual,* Transportation Research Board, 2000 and 2018

Traffic Operation Standards

Napa County

In the Circulation Element of the *Napa County General Plan*, the following policies have been adopted:

- **Policy CIR-31** – *The County seeks to provide a roadway system that maintains current roadway capacities in most locations and is efficient in providing local access.*

- **Policy CIR-38** – *The County seeks to maintain operations of roads and intersections in the unincorporated County area that minimize travel delays and promote safe access for all users. Operational analysis shall be conducted according to the latest version of the Highway Capacity Manual and as described in the current version of the County's Transportation Impact Study Guidelines. In general, the County seeks to maintain Level of Service (LOS) D on arterial roadways and at signalized intersections, as the service level that best aligns with the County's desire to balance its rural character with the needs of supporting economic vitality and growth.*

  In situations where the County determines that achieving LOS D would cause an unacceptable conflict with other goals and objectives, minimizing collisions and the adequacy of local access will be the County's priorities. Mitigating operational impacts should first focus on reducing

the project's vehicular trips through modifying the project definition, applying TDM strategies, and/or applying new technologies that could reduce vehicular travel and associated delays; then secondarily should consider physical infrastructure changes. Proposed mitigations will be evaluated for their effect on collisions and local access, and for their effectiveness in achieving the maximum potential reduction in the project's operational impacts (see the County's Transportation Impact Study Guidelines for a list of potential mitigation measures).

The following roadway segments are exceptions to the LOS D standard described above:

- *State Route 29 in the unincorporated areas between Yountville and Calistoga: LOS F is acceptable.*
- *Silverado Trail between State Route 128 and Yountville Cross Road: LOS E is acceptable.*
- *State Route 12/121 between the Napa/Sonoma county line and Carneros Junction: LOS F is acceptable.*
- *American Canyon Road from I-80 to American Canyon City Limit: LOS E is acceptable.*

To provide a more quantitative method of adhering to the above standards, the County refers to G*uidelines for Interpretation of General Plan Circulation Policies on Significance Criteria* (Fehr & Peers, 2015). The document establishes thresholds of significance for road segments and different intersection control types. The memorandum states a project would cause a significant impact requiring mitigation if, for existing conditions:

- *A signalized intersection operates at LOS A, B, C, or D during the selected peak hours without Project trips, and the LOS deteriorates to LOS E or F with the addition of Project trips; or*
- *A signalized intersection operates at LOS E or F during the selected peak hours without Project trips, and the addition of Project trips increases the total entering volume by one percent or more.*
  - *Project Contribution % = Project Trips ÷ Existing Volumes*
- *An unsignalized intersection operates at LOS A, B, C, or D during the selected peak hours without Project trips, and the LOS deteriorates to LOS E or F with the addition of Project traffic; the peak hour traffic signal warrant criteria should also be evaluated and presented for informational purposes; or*
- *An unsignalized intersection operates at LOS E or F during the selected peak hours without Project trips, and the project contributes one percent or more of the total entering traffic for all-way stop-controlled intersections, or ten percent or more of the traffic on a side-street approach for side-street stop-controlled intersections; the peak hour traffic signal criteria should also be evaluated and presented for informational purposes. Both of those volumes are for the stop-controlled approaches only. Each stop-controlled approach that operates at LOS E or F should be analyzed individually*
  - *<u>All-Way Stop-Controlled Intersections</u> – The following equation should be used if the all-way stop-controlled intersection operates at LOS E or F without the Project:*
    - *Project Contribution % = Project Trips ÷ Existing Volumes*
  - *<u>Side-Street Stop-Controlled Intersections</u> – The following equation should be used if the side-street stop-controlled intersection operates at LOS E or F without the Project:*
    - *Project Contribution % = Project Trips ÷ Existing Volumes*
- *An arterial segment operates at LOS A, B, C or D during the selected peak hours without Project trips, and deteriorates to LOS E or F with the addition of Project trips; or*

- *An arterial segment operates at LOS E or F during the selected peak hours without Project trips, and the addition of Project trips increases the total segment volume by one percent or more. The following equation should be used if the arterial segment operates at LOS E or F without the Project:*
    - *Project Contribution % = Project Trips ÷ Existing Volumes*

Further, a project would cause a significant impact requiring mitigation if, for cumulative (future) conditions, the Project's volume is equal to, or greater than five percent of the difference between cumulative (future) and existing volumes.

- *Cumulative Conditions* – A *Project's contribution to a cumulative condition would be calculated as the Project's percentage contribution to the total growth in traffic. This calculation applies to arterials, signalized intersections, and unsignalized intersections.*
    - *Project Contribution % = Project Trips ÷ (Cumulative Volumes – Existing Volumes)*

The County of Napa does not prescribe thresholds of significance regarding queue lengths. However, an increase in queue length due to project traffic was considered a potentially significant impact if the increase would cause the queue to extend out of a dedicated turn lane into a through traffic lane, or the back of queue into a visually restricted area, such as a blind corner. If queues would already be expected to extend past a dedicated turn lane or into a visually restricted area without project traffic, the addition of more than one vehicle of queue length (25 feet) due to project traffic was considered to constitute a potentially adverse effect.

City of Napa

The City of Napa established a Level of Service (LOS) Standard of mid-LOS D for signalized intersections in Policy T-2.1 of *Envision Napa 2020 – City of Napa General Plan*, and mid-LOS E for unsignalized intersections. This translates to an allowable average delay of 45 seconds at signalized intersections and 42.5 seconds or less for unsignalized intersections, with the following exceptions where midrange LOS E (67.5 seconds) will be permitted:

- Downtown Napa within the area bounded by Soscol Avenue, First Street, California Boulevard and third Street;
- Jefferson Street between Third Street and Old Sonoma Road; and
- Silverado Trail between Soscol Avenue and First Street.

In its *Traffic Impact Study Guidelines*, City of Napa, 2004, the City establishes criteria for traffic signals on State highway facilities, the following criteria shall be used in a collaborative effort between the City of Napa and Caltrans District 4:

- The City of Napa shall use as a reference the threshold level LOS 'E', consistent with the criteria used by the former Napa County Congestion Management Agency (CMA) for freeway mainline sections and freeway ramps. Facilities previously under the jurisdiction of the CMA in the City of Napa are the State Highways (SR-12, SR-29, SR-121, and SR-221).
- Caltrans has indicated that "Caltrans endeavors to maintain a target LOS at the transition between LOS 'C' and LOS 'D' … on State highway facilities, however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing State highway facility is operating at less than the

appropriate target LOS, the existing MOE (measure of effectiveness) should be maintained." Through the use of the Napa TMP Traffic Model, which was co-sponsored by the City of Napa, Caltrans, NCTPA, and NCFCWCD, the State highway intersections operating at less than appropriate target LOS per Caltrans criteria have been identified.

For traffic signals on State highway facilities, the following criteria shall be used in a collaborative effort between the City of Napa and Caltrans District 4:

Through the use of the Napa TMP (Transportation Management Plan) Traffic Model, which was cosponsored by the City of Napa, Caltrans, NCTPA and Napa County Flood Control and Water Conservation District (NCFCWCD), the State highway intersections operating at less than appropriate target level of service per Caltrans criteria have been identified as a preliminary reference.

- Highway 121-Imola Avenue/Soscol Avenue – LOS F
- Highway 12-29/Napa Vallejo Highway – LOS F

The *Traffic Impact Study Guidelines* also establish levels of significance for a situation where an intersection operates unacceptably without the influence of a proposed project.

When a signalized intersection operates at LOS F (a violation of the General Plan LOS policy) under existing or interim baseline conditions, the addition of more than 50 peak hour project trips contributes to the continuing operational failure at the intersection. The project mitigation should bring the facility to pre-project conditions.

When a low-volume movement at an unsignalized intersection has delays that yield LOS E or F, operation may still be considered as acceptable by considering both total delay and LOS; operation may be deemed acceptable if the total delay is less than 4.0 hours for a single lane movement or 5.0 vehicle hours for a multilane movement.

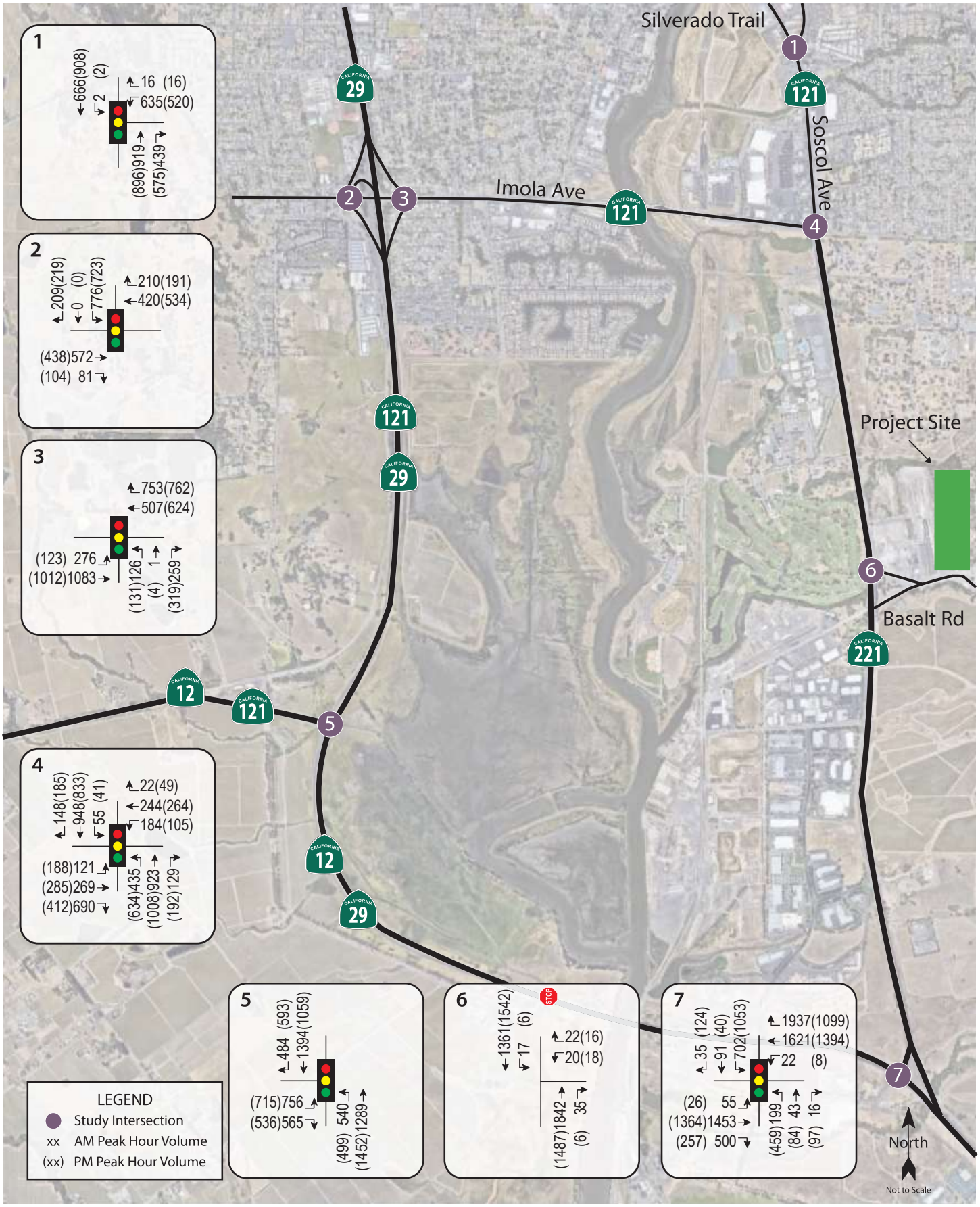
Caltrans

Caltrans does not have a standard of significance relative to operation as this is no longer a CEQA issue. The new *Vehicle Miles Traveled-Focused Transportation Impact Study Guide* (TISG), published in May 2020, replaced the *Guide for the Preparation of Traffic Impact Studies*, 2002. As indicated in the TISG, the Department is transitioning away from requesting LOS or other vehicle operations analyses of land use projects and will instead focus on Vehicle Miles Traveled (VMT). Adequacy of operation was therefore evaluated using either the Napa County or City of Napa standards.

Existing Conditions

The Existing Conditions scenario provides an evaluation of current operation based on existing traffic volumes during the a.m. and p.m. peak periods. This condition does not include project-generated traffic volumes. Volume data was collected when while local schools were in session, prior to the COVID-19 pandemic.

Under existing conditions, all intersections are operating acceptably under the applicable standards for each location. The existing traffic volumes are shown in Figure 2. A summary of the intersection Level of Service calculations is contained in Table 4, and copies of the calculations are provided in Appendix C.



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Figure 2 – Existing Traffic Volumes

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Table 4 – Existing Peak Hour Intersection Levels of Service				
Study Intersection *Approach*	**AM Peak**		**PM Peak**	
	Delay	**LOS**	**Delay**	**LOS**
1. Soscol Ave/Silverado Trail (SR 121)	14.0	B	11.1	B
2. SR 29 South Ramps/SR 121 (Imola Ave)	21.4	C	14.1	B
3. SR 29 North Ramps/SR 121 (Imola Ave)	9.6	A	7.9	A
4. Soscol Ave-SR 221/SR 121-Imola Ave	45.0	D	51.8	D
5. SR 29/SR 12-121	45.6	D	26.2	C
6. Napa-Vallejo Hwy (SR 221)/Project Access Rd	3.2	A	1.3	A
Westbound (Project Access) Approach	**	*F*	**	*F*
7. Napa-Vallejo Hwy (SR 221)-Soscol Ferry Rd/SR 29	**	F	**	F

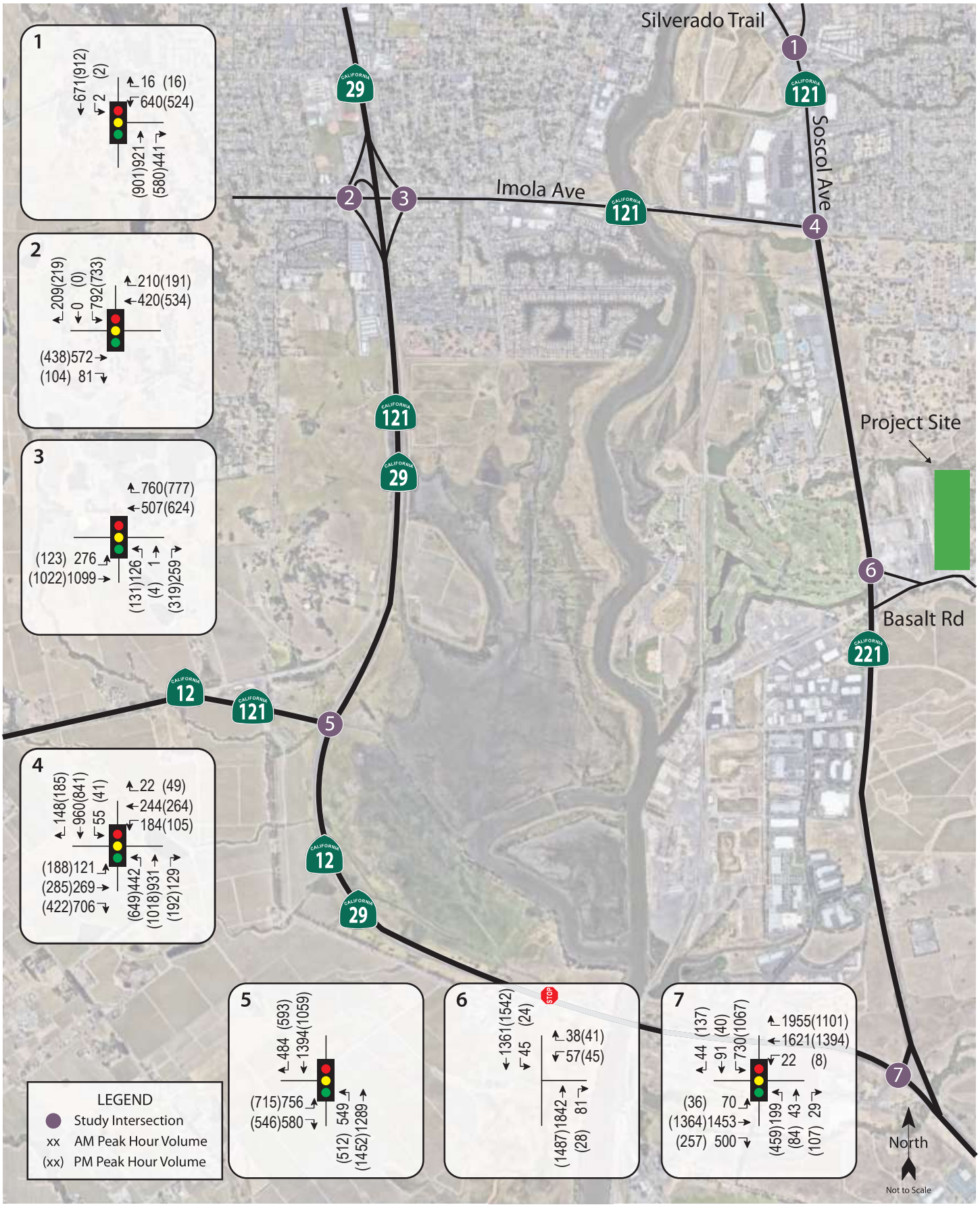
Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; Results for minor approaches to two-way stop-controlled intersections are indicated in *italics;* ** = delay greater than 120 seconds

Near-Term Conditions

Near-Term operating conditions were determined with traffic associated with approved projects in the vicinity of the proposed project as indicated on a list provided by County of Napa staff added to the existing volumes as well as completion of the traffic signal at the Project Access Road which is required to be constructed as part of the Napa Jail project as a mitigation to address impacts associated with that project. Under these conditions, all intersections are expected to continue operating acceptably under the standards applied. These results are summarized in Table 5, and Near-Term volumes are shown in Figure 3.

Table 5 – Near-Term Peak Hour Intersection Levels of Service				
Study Intersection	**AM Peak**		**PM Peak**	
	Delay	**LOS**	**Delay**	**LOS**
1. Soscol Ave/Silverado Trail (SR 121)	14.2	B	11.3	B
2. SR 29 South Ramps/SR 121 (Imola Ave)	22.1	C	14.3	B
3. SR 29 North Ramps/SR 121 (Imola Ave)	9.6	A	7.9	A
4. Soscol Ave-SR 221/SR 121-Imola Ave	45.4	D	52.8	D
5. SR 29/SR 12-121	46.3	D	26.5	C
6. Napa-Vallejo Hwy (SR 221)/Project Access Rd	7.2	A	5.4	A
7. Napa-Vallejo Hwy (SR 221)-Soscol Ferry Rd/SR 29	**	F	**	F

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; ** = delay greater than 120 seconds



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Figure 3 – Near-Term Traffic Volumes

Future Conditions

Segment volumes for the horizon year of 2040 were obtained from the Solano-Napa Activity-Based gravity demand model and translated to turning movement volumes at each of the study intersections using a combination of the "Furness" method and factoring, depending on how the model was configured at each

intersection. The Furness method is an iterative process that employs existing turn movement data, existing link volumes and future link volumes to project likely turning future movement volumes at intersections.

As the intersection of Napa Vallejo Highway (SR 221)/Project Access Road is currently in the design phase for the installation of a traffic signal, it was assumed this traffic signal would be installed by 2040, thus the analysis was run as a signalized intersection. This signal installation is a part of the Napa Jail project and is being funded as part of that project. The future lane configuration with the Napa Jail driveway is shown in Appendix D. Also, while the NVTA is currently coordinating with Caltrans and other agencies to convert the intersection of SR 29/SR 221 (Napa Vallejo Highway) to a roundabout, this potential project is not far enough along to be considered in this evaluation. It is anticipated that such an improvement would result in improved operation and substantially reduced delays compared to conditions with the existing controls and configuration.

Under the anticipated Future volumes, and with the addition of improvements, the study intersections are expected to operate acceptably under the standards set for each location. Future volumes are shown in Figure 4 and operating conditions are summarized in Table 6.

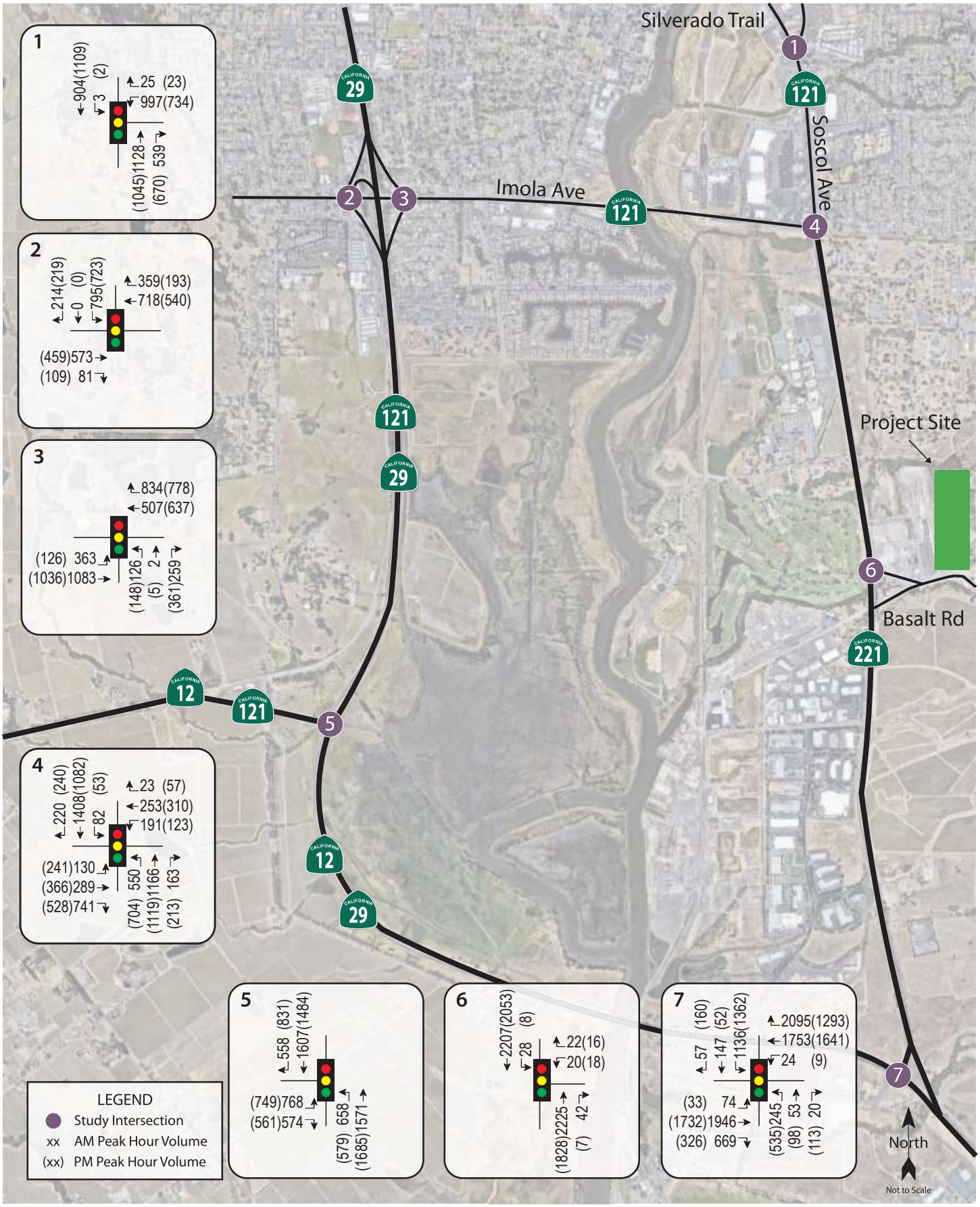
Table 6 – Future Peak Hour Intersection Levels of Service

Study Intersection	AM Peak		PM Peak	
	Delay	LOS	Delay	LOS
1. Soscol Ave/Silverado Trail (SR 121)	40.0	D	42.7	D
2. SR 29 South Ramps/SR 121 (Imola Ave)	42.7	D	47.5	D
3. SR 29 North Ramps/SR 121 (Imola Ave)	17.1	B	18.1	B
4. Soscol Ave-SR 221/SR 121-Imola Ave	62.7	E	66.8	E
5. SR 29/SR 12-121	66.1	E	66.7	E
6. Napa-Vallejo Hwy (SR 221)/Project Access Rd (signalized)	4.0	A	3.5	A
7. Napa-Vallejo Hwy (SR 221)-Soscol Ferry Rd/SR 29	**	F	**	F

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; ** = delay greater than 120 seconds

Project Description

The project consists of a 690,768 square foot Industrial Park development to be constructed at 11 Basalt Road, which is currently occupied by a construction storage yard and various light industrial buildings, in the County of Napa. The most recent uses had a combined total of 45 employees generating traffic, though for a more conservative analysis, no trip deductions to reflect traffic associated with the existing uses were applied. The project will have three driveways connecting to Basalt Road, one will be gated,



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Figure 4 – Future Traffic Volumes

the center driveway will be the main driveway with both ingress and egress, while the final driveway will be for egress only. The proposed project site plan is shown in Figure 5.

Trip Generation

The anticipated trip generations for the most recent actual uses and the proposed project were estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, 10th Edition, 2017. The past use was estimated based on rates for "General Light Industrial" use (LU 110) based on the 45 employees that worked at the site until early 2021 and rates for an Industrial Park (LU 130) were applied to the proposed project. It is noted that while some office space is identified in each of the four buildings, it is normal for industrial use buildings to have a small amount of office space for administrative staff, as well as warehousing area, so this space was considered as being part of the industrial use.

Based on application of these rates, the proposed project is expected to generate an average of 2,329 trips per day, including 276 a.m. and p.m. peak hours trips. As the site has not been operational since early 2021, to be conservative no existing trips were deducted for purposes of the analysis, though when taken into account the project's net new trip generation would include 2,192 trips per day, with 253 during the morning peak hour and 254 during the evening peak hour. These results are summarized in Table 7.

Table 7 – Trip Generation Summary

Land Use	Units	Daily		AM Peak Hour				PM Peak Hour			
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
Previous Use											
Light Industrial	45 emp	3.05	137	0.53	23	19	4	0.49	22	5	17
Proposed Use											
Industrial Park	690.77 ksf	3.37	2,329	0.40	276	224	52	0.40	276	58	218
Net New Trips			**2,192**		**253**	**205**	**48**		**254**	**53**	**201**

Note: emp = employees; ksf = 1,000 square feet

Trip Distribution

The pattern used to allocate new project trips to the street network was based on the assumptions applied in the Napa Jail EIR, with modifications to reflect the difference in the site uses. These assumptions are shown in Table 8.

Transportation Impact Study for the Basanites Project

Figure 5 – Site Plan

1 ARCHITECTURAL SITE PLAN
SCALE: 1" = 80'-0"

DGA planning | architecture | interiors

550 Ellis Street, Mountain View, CA 94043 650-943-1660
201 Filbert Street, 3rd Floor, San Francisco, CA 94133 415-477-2700
2550 Fifth Avenue, Suite 115, San Diego, CA 92103 619-685-3990
1720 8th Street, Sacramento, CA 95811 916-441-6800

STAMP

PRELIMINARY NOT FOR CONSTRUCTION

NO.	DESCRIPTION	DATE

DRAFTED BY Author

CLIENT PDC SACRAMENTO LLC

PROJECT BASANITES

PARCEL NO. 046-370-024

ADDRESS 11 BASALT ROAD
NAPA, CA

PROJECT NO. 19218

SCALE 1" = 80'-0"

TITLE

ARCHITECTURAL SITE PLAN

A101

DGA planning | architecture | interiors 2019

Source: DGA Planning | Architecture | Interiors 12/21

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W-Trans

Table 8 – Trip Distribution Assumptions	
Route	**Percent**
SR 29 (north of Imola Ave)	30%
SR 29 (via SR 221 south of the project site)	25%
SR 12 (west of SR 121)	25%
Silverado Trail (north of Soscol Ave)	10%
Soscol Ave (north of Silverado Trail)	10%
TOTAL	**100%**

Intersection Operation

Existing plus Project Conditions

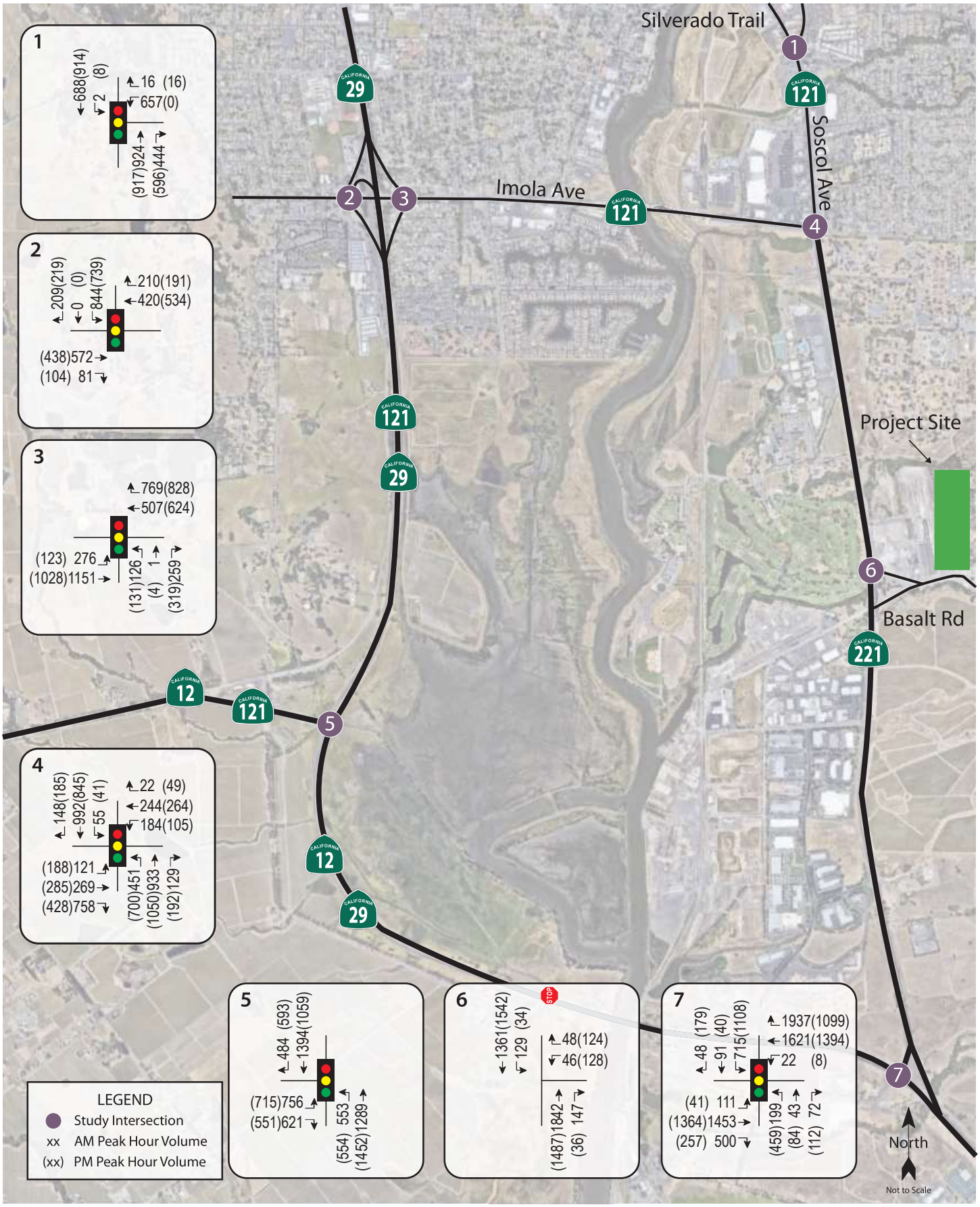
Upon the addition of project-related traffic to the Existing volumes, the study intersections are expected to continue operating acceptably under the standards applied. It is assumed the intersection of Napa-Vallejo Hwy/Project Access would be signalized by the time the project is constructed as the design is currently near completion. These results are summarized in Table 9. Project traffic volumes are shown in Figure 6.

Table 9 – Existing and Existing plus Project Peak Hour Intersection Levels of Service

Study Intersection *Approach*		**Existing Conditions**				**Existing plus Project**			
		AM Peak		**PM Peak**		**AM Peak**		**PM Peak**	
		Delay	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**
1.	Soscol Ave/Silverado Trail (SR 121)	14.0	B	11.1	B	14.9	B	11.4	B
2.	SR 29 South Ramps/SR 121 (Imola Ave)	21.4	C	14.1	B	24.5	C	14.4	B
3.	SR 29 North Ramps/SR 121 (Imola Ave)	6.6	A	7.9	A	9.6	A	7.9	A
4.	Soscol Ave-SR 221/SR 121-Imola Ave	45.0	D	51.8	D	46.0	D	60.1	E
5.	SR 29/SR 12-121	45.6	D	26.2	C	46.5	D	27.8	C
6.	Napa-Vallejo Hwy (SR 221)/Project Access Rd	3.2	A	1.3	A	-	-	-	-
	Westbound (Project Access) Approach	**	*F*	**	*F*	-	-	-	-
	Signalized	-	-	-	-	7.6	A	7.2	A
7.	Napa-Vallejo Hwy (SR 221)-Soscol Ferry Rd/SR 29	**	F	**	F	**	F	**	F

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; Results for minor approaches to two-way stop-controlled intersections are indicated in *italics;* ** = delay greater than 120 seconds

Finding – The study intersections are expected to continue operating acceptably at the same Levels of Service or at an acceptable LOS.



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Figure 6 – Existing Plus Project Traffic Volumes

Near-Term plus Project Conditions

With project-related traffic added to Near-Term volumes and assuming construction of the signal at the Project Access Road, the study intersections are expected to operate at the same service levels as without the project volumes. Near-Term plus Project traffic volumes are shown in Figure 7. These results are summarized in Table 10.

Table 10 – Near-Term and Near-Term plus Project Peak Hour Intersection Levels of Service

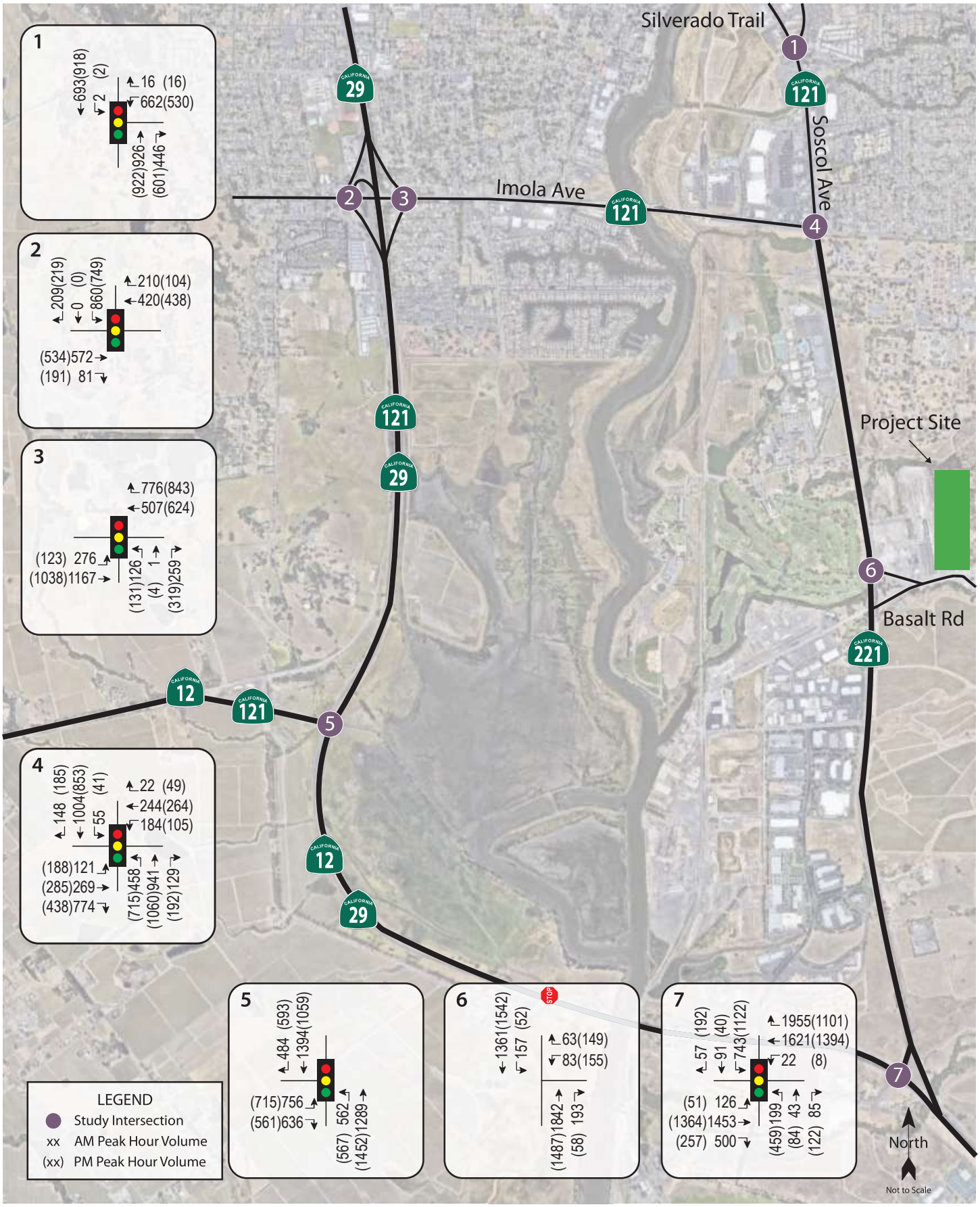
Study Intersection	Near-Term Conditions				Near-Term plus Project			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Soscol Ave/Silverado Trail (SR 121)	14.2	B	11.3	B	15.2	B	11.5	B
2. SR 29 South Ramps/SR 121 (Imola Ave)	22.1	C	14.3	B	25.4	C	14.5	B
3. SR 29 North Ramps/SR 121 (Imola Ave)	9.6	A	7.9	A	9.6	A	7.9	A
4. Soscol Ave-SR 221/SR 121-Imola Ave	45.4	D	52.8	D	46.6	D	61.4	E
5. SR 29/SR 12-121	46.3	D	26.5	C	47.2	D	28.3	C
6. Napa-Vallejo Hwy (SR 221)/Project Access Rd	7.2	A	5.4	A	8.7	A	7.7	A
7. Napa-Vallejo Hwy (SR 221)-Soscol Ferry Rd/SR 29	**	F	**	F	**	F	**	F

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; ** = delay greater than 120 seconds

Finding – The study intersections are expected to continue operating acceptably at the same Levels of Service or an acceptable LOS upon the addition of project-generated traffic.

Future plus Project Conditions

Upon the addition of project-generated traffic to the anticipated Future volumes, and with the planned improvements, the study intersections are expected to operate at the same Levels of Service with the exception of Soscol Avenue-SR 221/SR 121-Imola Avenue during the evening peak hour, which degrades to LOS F. Note that this is considered acceptable under the standards identified by the City and NVTA. Future plus Project traffic volumes are shown in Figure 8. The Future plus Project operating conditions are summarized in Table 11.

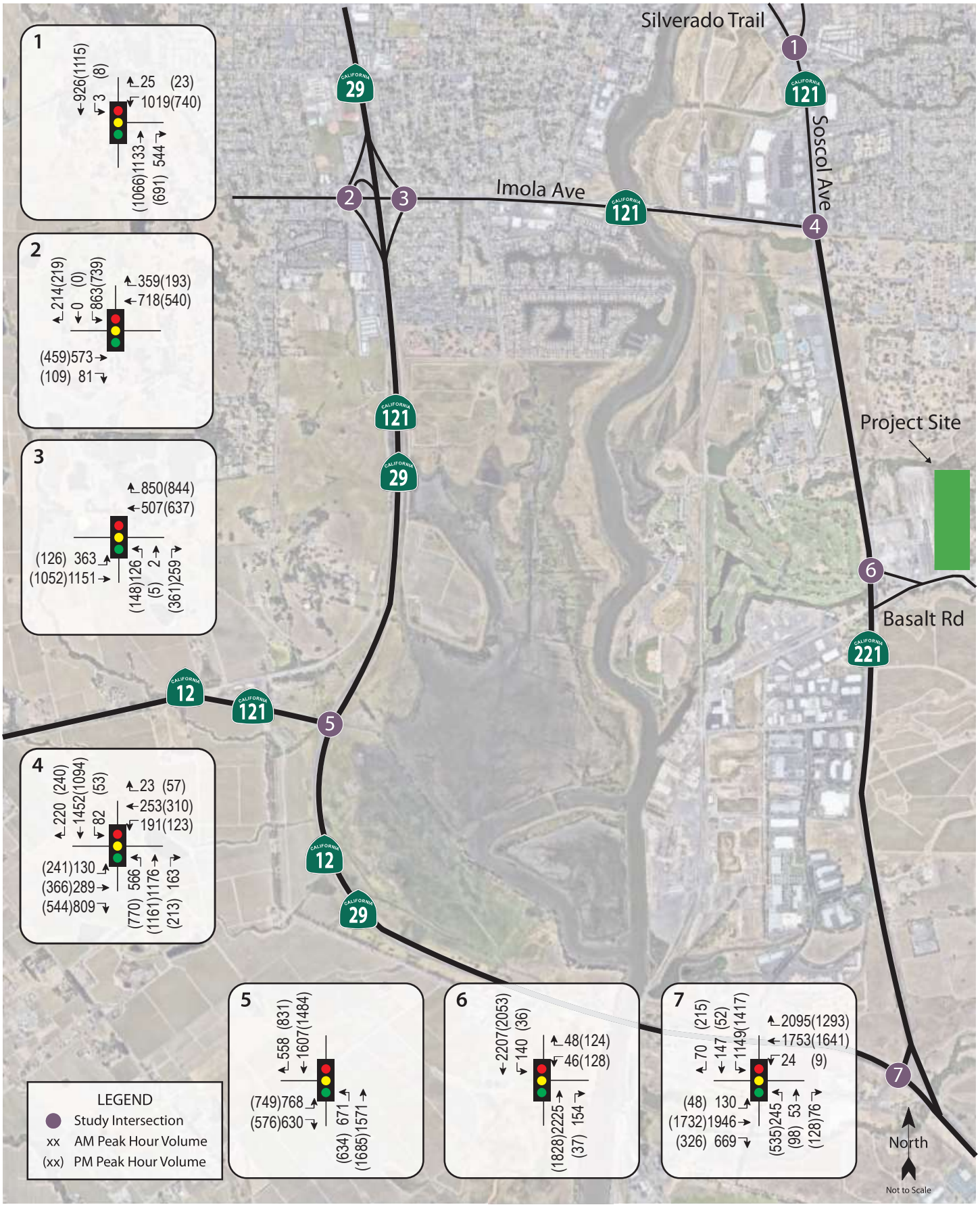


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Figure 7 – Near-Term Plus Project Traffic Volumes

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Transportation Impact Study for the Basanites Project

Figure 8 – Future Plus Project Traffic Volumes

Table 11 – Future and Future plus Project Peak Hour Intersection Levels of Service								
Study Intersection	**Future Conditions**				**Future plus Project**			
	AM Peak		**PM Peak**		**AM Peak**		**PM Peak**	
	Delay	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**
1. Soscol Ave/Silverado Trail (SR 121)	40.0	D	20.9	C	42.7	D	23.0	C
2. SR 29 South Ramps/SR 121 (Imola Ave)	42.7	D	37.1	D	47.5	D	25.2	C
3. SR 29 North Ramps/SR 121 (Imola Ave)	17.1	B	10.9	B	18.1	B	9.6	A
4. Soscol Ave-SR 221/SR 121-Imola Ave	62.7	E	75.5	E	66.8	E	90.7	F
5. SR 29/SR 12-121	66.1	E	45.6	D	66.7	E	54.5	D
6. Napa-Vallejo Hwy (SR 221)/Project Access Rd (signalized)	4.0	A	3.5	A	5.8	A	6.9	A
7. Napa-Vallejo Hwy (SR 221)-Soscol Ferry Rd/SR 29	**	*F*	**	F	**	F	**	F

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service*;* ** = delay greater than 120 seconds

Finding – The study intersections are expected to continue operating acceptably under the applicable standards.

Alternative Modes

Pedestrian Facilities

Given that the area surrounding the project site is rural, pedestrian trips are unlikely to occur, and the lack of sidewalks is consistent with the rural character of the roadway. On-site there would be a system of sidewalks for pedestrian use.

Finding – Pedestrian facilities are not expected to be necessary, so the lack of such facilities surrounding the site is considered acceptable.

Bicycle Facilities

Existing and planned future bicycle facilities provide adequate access for bicyclists.

Bicycle Storage

The project site plan does not identify the provision of bicycle parking or storage facilities. The County of Napa's Municipal Code stipulates the County's bicycle parking requirements for new developments. According to the *Napa County Municipal Code*, space for 10 bicycles to park is required if over ten vehicle spaces are required. For the proposed project, bicycle parking would be required for 10 bicycles. The site plan shows 16 bicycle parking spaces.

Finding – Bicycle facilities serving the project site are adequate.

Transit

There are no existing stops within an acceptable walking distance of the site, nor are there transit routes serving the area. However, as demand would likely be limited, and transit riders could access the site via bicycle from the nearest transit stops, transit accommodations are considered adequate for the rural setting.

Finding – There are no transit facilities directly serving the project site, but transit access can be acceptably accommodated.

Vehicle Miles Traveled

Background and Threshold of Significance

A project's effects on Vehicle Miles Traveled (VMT) is used as the basis for determining California Environmental Quality Act (CEQA) impacts with respect to transportation and traffic. As of the date of this analysis, the County of Napa has not yet formally adopted thresholds of significance related to VMT, though staff has provided guidance based on a working draft document and Policy CIR-7 of the County's General Plan which indicates that development projects are expected to reduce unmitigated VMT by 15 or more percent.

The County of Napa intends to maintain consistency with the Technical Advisory in basing transportation related VMT impacts on travel associated with automobiles, excluding travel generated by heavy trucks. The County also expects VMT impacts be compared to the baseline condition, wherein the assessment takes into consideration the VMT that is already generated by existing or recent development on a project site.

Based on this guidance, the following significance threshold has been applied.

A project that does not reduce its unmitigated automobile VMT by 15 or more percent, after taking into consideration proposed VMT reduction measures and automobile VMT generated by existing or recent uses, would cause a significant VMT impact.

Estimation of Automobile VMT

Proposed Project

The proposed project is anticipated to generate 2,329 total weekday trips. A portion of these trips will be made by heavy vehicles which are not subject to VMT analysis. Based on data contained in the *Trip Generation Manual*, 10th Edition Supplement, Institute of Transportation Engineers, 2020, approximately 15 percent of daily trips at Industrial Park land uses are truck trips. The remaining 85 percent of the Basanite Project's daily trips, or 1,980 trips, are estimated to be made by automobiles. These daily trips are multiplied by the average trip length of 11.8 miles for unincorporated Napa County to derive the project's unmitigated VMT estimate of 23,364 miles.

Baseline Site Development

The Basanites project would be located on a site that has been used for various industrial activities for over 100 years, including a rock quarry that in 1903 employed 200 persons. In recent years there has been less activity, with a mix of tenants using the site for industrial and storage-related uses. Based on information obtained from the project applicant, tenants in 2020 through early 2021 included Pacific Steel Group with 21 on-site employees, Avcon Constructors with eight on-site employees, R&M Grading with six on-site employees, ABB with five on-site employees, Rammed Earth Works with three on-site employees, and Belle Maison Builders with two on-site employees. Additional tenants included Wilson Construction, MGE Underground, M3 General Engineering, and UPS; while these tenants likely generated

modest automobile trips, they did not have employees routinely commuting to the site, so their VMT was not included. In total, 45 employees work or recently worked on the site.

The estimated traffic and VMT generated by these 45 employees were estimated for the purposes of the VMT analysis. In reviewing trip generation data available from ITE, it was determined that "Light Industrial" trip generation rates based on the number of employees were most appropriate for application, since this small number of employees is well outside of the range included in ITE rates for the "Industrial Park" land use. Using these rates, a total of 137 daily trips are estimated to be associated with baseline site uses. According to ITE data, approximately 92 percent of these Light Industrial trips would be made by automobiles, or approximately 126 daily trips. Multiplying these 126 daily auto trips by the unincorporated County average trip length of 11.8 miles results in a VMT of 1,487 miles assumed to have been associated with recent use of the site.

Adjusted Project VMT and Required Reductions

The proposed project has an unmitigated automobile VMT of 23,364 miles. Recent activities on the project site are estimated to have produced 1,487 automobile miles, constituting 6.4 percent of the 15 percent reduction to unmitigated VMT that the project would need to achieve. Additional reductions totaling 8.6 percent would need to be achieved through implementation of Transportation Demand Management strategies aimed at reducing the project's automobile VMT.

Transportation Demand Management

A Transportation Demand Management (TDM) program for employees in the industrial park was developed to achieve at least an 8.6-percent reduction in trips.

Ridesharing Program

Ridesharing is one of the most common and cost-effective alternative modes of transportation and one that commuters can adopt part-time. Given the industrial park's location, it can also be one of the most effective alternatives to driving alone. There are numerous benefits to ridesharing. It can reduce peak-period vehicle trips and increase commuters' travel choices. Further, it reduces congestion, road and parking facility costs and pollution emissions. Ridesharing tends to have the lowest cost per passenger-mile of any motorized mode of transportation since it makes use of a vehicle seat that would otherwise be empty. It also provides financial savings for the consumer by decreasing fuel and parking costs.

Ridematching

The greatest barrier to workplace carpooling is often simply being able to identify and travel with other employees who live nearby. There are many services that can assist in pairing employees within the same organization or across organizations. The most basic publicly available service is 511.org's free ridematching service. There are also various private ridematching providers (e.g., Zimride, RideAmigos, Via, Scoop) that can effectively create carpool networks while making them safe and convenient for their users. The Napa Valley Transportation Authority (NVTA) uses RideAmigos as a resource for local employers as part of its V-Commute program. V-Commute participants are also eligible to use the agency's Guaranteed Ride Home (GRH) program that offers up to four free trips for employees who do not drive alone to work and need to return home in an emergency.

Vanpooling

Employer-provided vans can provide several advantages. Vans are defined as vehicles able to carry at least six adults and can reduce the cost of commuting for employees by removing the need for workers to put mileage on their own vehicles and, depending on the level of subsidy, they may not need to pay for gas. For tax purposes, employers may be able to deduct the costs of vans as a "qualified transportation fringe benefit."

Education, Outreach & Marketing

Transportation Coordinator

The presence of a staff person dedicated part-time to overseeing and managing the TDM program will be helpful in ensuring the ongoing success of these programs. This would not be a distinct position, but instead would be a role that is integrated into the duties of an employee with other primary duties. The oversight duties can include the following.

- Create and distribute employee transportation information welcome packets.
- Maintain and update a bulletin board or other physical source of transportation information.
- Promote the ride-matching program.
- Administer the vanpool program.
- Market special events such as the NVTA "V-Commute Challenge" program.

Welcome Packet for New Employees

New employees should be provided with a welcome packet containing relevant transportation information. The packet should include maps and information from Vine Transit and the NVTA as well as material regarding the organization's other programs such as ride-matching services, the guaranteed ride home program, and the vanpool program.

Online Transportation Information

Providing employees with an on-line source of information regarding transportation options for travel to the industrial park can help encourage them to consider non-auto or rideshare options. This information should be provided to employees in their welcome packets and maintained by the transportation coordinator.

Monitor Performance

It is important to continually monitor the performance of a TDM program and adjust measures as necessary to ensure its success. Employee mode split surveys should be conducted each year and the actual trip lengths of employee commutes assessed to calculate VMT totals. This information can be used internally to make programmatic adjustments and can be provided to County staff upon request. Employee satisfaction surveys are also an effective way of ensuring a quality TDM program and should be conducted periodically.

Vehicle Miles Traveled Reduction

The expected VMT reductions associated with the various TDM measures were estimated based on information published in the California Air Pollution Officers Association (CAPCOA) report *Handbook for Analyzing Greenhouse Gas Emission Reductions*, CAPCOA, 2021, the location of the project site, and

knowledge of transportation characteristics of the area. The TDM strategies listed above are projected to result in a VMT reduction potential of 11.0 percent. The estimated VMT reduction calculations are summarized in Table 12.

Table 12 – Estimated Employee VMT Reduction

TDM Measure	VMT Reduction (%) Project Estimate
Ridematching Program	4.0
Vanpool Program	3.4
Education, Outreach, and Marketing	4.0
Total Potential VMT Reduction	**11.0**

Notes: VMT project estimate reductions are subject to multiplicative dampening; total reduced to avoid double-counting TDM measure effectiveness.

Access and Circulation

Site Access

Site access would be provided through three driveways on Basalt Road, one being gated, a second that is for egress only and the third, middle driveway, being the main driveway for both ingress and egress.

Sight Distance

Sight distances along Basalt Road at the project driveways were evaluated based on sight distance criteria contained in the *Highway Design Manual* published by Caltrans. The recommended sight distances for minor street approaches that are a driveway are based on stopping sight distance, with the approach travel speed used as the basis for determining the recommended sight distance.

Sight distances at the proposed driveways were measured. Based on a design speed of 25 mph, the minimum stopping sight distance needed is 150 feet. There is significantly more than 150 feet of sight distance on Basalt Road from each of the three driveways.

Access Analysis

Left-Turn Lane Warrants

The need for left-turn channelization in the form of left-turn pockets on Basalt Road at the three project driveways for Basanites was evaluated using the criteria published by the County in the *Napa County Road and Street Standards*, February 4, 2020. Based on Existing plus Project peak hour volumes and using the graph on Page 21, a left-turn lane is warranted on Basalt Road at all three driveways for the Basanites Project during both of the peak periods evaluated. A copy of the graph indicating an even split of trips among all three driveways is provided in Appendix E.

Emergency Access

The project site as designed has driveways and drive aisles that are of sufficient width to accommodate emergency response vehicles, including fire trucks. The site serves truck traffic, so has a circulation system that would allow a fire truck to turn around and exit. The primary drive aisle would connect to all the new buildings, with sufficient space between the buildings to stage fire suppression equipment. The site would therefore have adequate emergency access.

Parking

The project was analyzed to determine whether the proposed parking supply would be sufficient for the anticipated parking demand. The project site as proposed would provide a total of 469 standard parking spaces and a minimum of 9 accessible spaces.

Jurisdiction parking supply requirements are based on the Napa Code Chapter 18.110.030 for Manufacturing, as there is not an industrial park specified use. The proposed parking supply is anticipated to accommodate the estimated parking demand for the Industrial Park.

The proposed parking supply and County requirements are shown in Table 13.

Table 13 – Parking Analysis Summary

Land Use	Units	Supply (spaces)	County Requirements	
			Rate	Spaces Required
Manufacturing	690.77 ksf	484	1 space per 1 ksf for first 10 ksf, and 1 space per 2 ksf exceeding 10 ksf	350
Total		**484**		**350**

Notes: ksf = 1,000 square feet

The site plan shows that out of the 469 spaces proposed not including sixteen accessible stalls. Based on requirements stipulated by the Federal Accessibility Guidelines, the required number of accessible stalls is nine. The proposed accessible stall supply is therefore adequate.

The proposed site plan also includes parking for delivery trucks loading and unloading at the site. The proposed delivery parking zone would provide adequate parking for delivery trucks. On-site circulation would be expected to operate acceptably while delivery trucks load and unload at the delivery parking zone.

Finding – The proposed parking supply meets County requirements.

Conclusions and Recommendations

Conclusions

- Five of the seven study intersection have above-average collision rates.
- The proposed project is expected to generate an average of 2,329 trips daily, including 276 trips during both the morning and evening peak hours.
- Upon the addition of project-generated traffic to Existing, Near-Term and Future volumes, the study intersections are expected to continue operating acceptably under the standards applied.
- The parking supply is adequate, including more than the nine ADA compliant parking spaces required, and 16 bicycle parking spaces.
- Access for alternative modes is adequate given the type of development and rural location, and transit access will be improved by the anticipated future improvements to be provided as part of the Napa Jail project.
- Sight distance at the project driveways is adequate.

Recommendations

- A left-turn lane should be constructed on the Project Access Road at the site driveway.

Study Participants and References

Study Participants

Principal in Charge	Dalene J. Whitlock, PE, PTOE
Principal Planner	Zack Matley, AICP
Associate Engineer	Allison Jaromin, EIT
Graphics	Cameron Wong
Editing/Formatting	Alex Scrobonia; Hannah Yung-Boxdell
Quality Control	Dalene J. Whitlock, PE, PTOE

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Highway Capacity Manual, Transportation Research Board, 2000
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Napa Countywide Bicycle Plan, Napa Valley Transportation Authority, 2019
Napa County Code, Municipal Code Corporation, 2017
Napa County General Plan, County of Napa, 2013
Napa County Road and Street Standards, County of Napa, 2020
Statewide Integrated Traffic Records System (SWITRS), California Highway Patrol, 2015-2020
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Trip Generation Manual, 10th Edition, Institute of Transportation Engineers, 2017
Vehicle Miles Traveled-Focused Transportation Impact Study Guide, California Department of Transportation, 2020
VINE Transit, http://www.ridethevine.com

NAX155





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Appendix A

Count Data



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Prepared by NDS/ATD

Prepared by National Data & Surveying Services

VOLUME

Basalt Rd N/O Basalt Location 1

Day: Thursday
Date: 2/27/2020

City: Napa
Project #: CA20_8073_002

DAILY TOTALS	NB	SB	EB	WB	Total
	118	140	0	0	258

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	0		0		0	0			12:00	3		3		0	0	6	
00:15	0		0		0	0			12:15	3		5		0	0	8	
00:30	0		0		0	0			12:30	2		0		0	0	2	
00:45	0		0		0	0			12:45	5	13	3	11	0	0	8	24
01:00	0		0		0	0			13:00	6		1		0	0	7	
01:15	0		0		0	0			13:15	4		1		0	0	5	
01:30	0		0		0	0			13:30	2		5		0	0	7	
01:45	0		0		0	0			13:45	2	14	1	8	0	0	3	22
02:00	0		0		0	0			14:00	0		10		0	0	10	
02:15	0		0		0	0			14:15	1		3		0	0	4	
02:30	0		0		0	0			14:30	7		2		0	0	9	
02:45	0		0		0	0			14:45	1	9	1	16	0	0	2	25
03:00	0		0		0	0			15:00	1		7		0	0	8	
03:15	0		0		0	0			15:15	2		2		0	0	4	
03:30	0		0		0	0			15:30	3		2		0	0	5	
03:45	0		1	1	0	0	1	1	15:45	6	12	1	12	0	0	7	24
04:00	0		0		0	0			16:00	2		1		0	0	3	
04:15	0		0		0	0			16:15	4		8		0	0	12	
04:30	0		1		0	0	1		16:30	2		0		0	0	2	
04:45	0		1	2	0	0	1	2	16:45	2	10	0	9	0	0	2	19
05:00	2		6		0	0	8		17:00	2		0		0	0	2	
05:15	1		4		0	0	5		17:15	0		0		0	0		
05:30	1		8		0	0	9		17:30	2		0		0	0	2	
05:45	5	9	3	21	0	0	8	30	17:45	0	4	0		0	0		4
06:00	2		0		0	0	2		18:00	0		0		0	0		
06:15	1		4		0	0	5		18:15	0		0		0	0		
06:30	3		2		0	0	5		18:30	0		0		0	0		
06:45	1	7	5	11	0	0	6	18	18:45	0		0		0	0		
07:00	2		1		0	0	3		19:00	0		0		0	0		
07:15	0		3		0	0	3		19:15	0		0		0	0		
07:30	1		5		0	0	6		19:30	1		0		0	0	1	
07:45	0	3	3	12	0	0	3	15	19:45	0	1	0		0	0		1
08:00	2		3		0	0	5		20:00	0		0		0	0		
08:15	1		3		0	0	4		20:15	0		0		0	0		
08:30	1		4		0	0	5		20:30	0		0		0	0		
08:45	3	7	5	15	0	0	8	22	20:45	0		0		0	0		
09:00	1		3		0	0	4		21:00	1		0		0	0	1	
09:15	0		2		0	0	2		21:15	0		0		0	0		
09:30	3		1		0	0	4		21:30	1		1		0	0	2	
09:45	1	5	0	6	0	0	1	11	21:45	0	2	0	1	0	0		3
10:00	1		0		0	0	1		22:00	0		0		0	0		
10:15	2		3		0	0	5		22:15	0		0		0	0		
10:30	0		1		0	0	1		22:30	0		0		0	0		
10:45	0	3	0	4	0	0		7	22:45	0		0		0	0		
11:00	3		2		0	0	5		23:00	0		0		0	0		
11:15	5		3		0	0	8		23:15	0		0		0	0		
11:30	3		2		0	0	5		23:30	0		0		0	0		
11:45	8	19	4	11	0	0	12	30	23:45	0		0		0	0		
TOTALS		53		83				**136**	**TOTALS**		65		57				**122**
SPLIT %		39.0%		61.0%				**52.7%**	**SPLIT %**		53.3%		46.7%				**47.3%**

DAILY TOTALS	NB	SB	EB	WB	Total
	118	140	0	0	258

AM Peak Hour	11:00	05:00			**11:15**	**PM Peak Hour**	12:30	13:30			**12:45**
AM Pk Volume	19	21			**31**	**PM Pk Volume**	17	19			**27**
Pk Hr Factor	0.594	0.656			**0.646**	**Pk Hr Factor**	0.708	0.475			**0.844**
7 - 9 Volume	10	27	0	0	**37**	**4 - 6 Volume**	14	9	0	0	**23**
7 - 9 Peak Hour	08:00	08:00			**08:00**	**4 - 6 Peak Hour**	16:00	16:00			**16:00**
7 - 9 Pk Volume	7	15	0	0	**22**	**4 - 6 Pk Volume**	10	9	0	0	**19**
Pk Hr Factor	0.583	0.750	0.000	0.000	**0.688**	**Pk Hr Factor**	0.625	0.281	0.000	0.000	**0.396**

Prepared by NDS/ATD

Prepared by National Data & Surveying Services

VOLUME

Basalt Rd S/O Basalt Location 2

Day: Thursday
Date: 2/27/2020

City: Napa
Project #: CA20_8073_001

DAILY TOTALS	NB	SB	EB	WB	Total
	372	465	0	0	837

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	0		0		0	0			12:00	11		5		0	0	16	
00:15	0		2		0	0	2		12:15	9		8		0	0	17	
00:30	0		8		0	0	8		12:30	7		14		0	0	21	
00:45	0		1	11	0	0	1	11	12:45	12	39	4	31	0	0	16	70
01:00	0		0		0	0			13:00	4		10		0	0	14	
01:15	0		0		0	0			13:15	11		13		0	0	24	
01:30	0		1		0	0	1		13:30	16		5		0	0	21	
01:45	0		0	1	0	0		1	13:45	10	41	9	37	0	0	19	78
02:00	0		0		0	0			14:00	9		24		0	0	33	
02:15	1		0		0	0	1		14:15	3		12		0	0	15	
02:30	1		0		0	0	1		14:30	7		14		0	0	21	
02:45	0	2	0		0	0		2	14:45	3	22	4	54	0	0	7	76
03:00	3		0		0	0	3		15:00	4		16		0	0	20	
03:15	0		1		0	0	1		15:15	3		12		0	0	15	
03:30	2		0		0	0	2		15:30	0		11		0	0	11	
03:45	10	15	0	1	0	0	10	16	15:45	2	9	5	44	0	0	7	53
04:00	1		1		0	0	2		16:00	3		12		0	0	15	
04:15	2		2		0	0	4		16:15	3		9		0	0	12	
04:30	0		2		0	0	2		16:30	3		8		0	0	11	
04:45	0	3	3	8	0	0	3	11	16:45	5	14	2	31	0	0	7	45
05:00	1		0		0	0	1		17:00	3		6		0	0	9	
05:15	7		4		0	0	11		17:15	1		3		0	0	4	
05:30	6		0		0	0	6		17:30	0		5		0	0	5	
05:45	11	25	3	7	0	0	14	32	17:45	1	5	4	18	0	0	5	23
06:00	8		1		0	0	9		18:00	0		0		0	0		
06:15	4		0		0	0	4		18:15	0		1		0	0	1	
06:30	4		2		0	0	6		18:30	0		3		0	0	3	
06:45	18	34	2	5	0	0	20	39	18:45	1	1	0	4	0	0	1	5
07:00	9		12		0	0	21		19:00	0		1		0	0	1	
07:15	9		12		0	0	21		19:15	0		1		0	0	1	
07:30	5		5		0	0	10		19:30	2		1		0	0	3	
07:45	6	29	17	46	0	0	23	75	19:45	0	2	1	4	0	0	1	6
08:00	9		11		0	0	20		20:00	0		0		0	0		
08:15	12		17		0	0	29		20:15	2		1		0	0	3	
08:30	8		9		0	0	17		20:30	0		1		0	0	1	
08:45	10	39	10	47	0	0	20	86	20:45	0	2	2	4	0	0	2	6
09:00	3		7		0	0	10		21:00	0		0		0	0		
09:15	7		11		0	0	18		21:15	0		0		0	0		
09:30	11		7		0	0	18		21:30	0		0		0	0		
09:45	9	30	7	32	0	0	16	62	21:45	0		0		0	0		
10:00	8		13		0	0	21		22:00	0		0		0	0		
10:15	1		7		0	0	8		22:15	0		0		0	0		
10:30	10		5		0	0	15		22:30	0		0		0	0		
10:45	8	27	9	34	0	0	17	61	22:45	0		0		0	0		
11:00	9		12		0	0	21		23:00	0		0		0	0		
11:15	4		13		0	0	17		23:15	0		0		0	0		
11:30	11		13		0	0	24		23:30	0		0		0	0		
11:45	9	33	8	46	0	0	17	79	23:45	0		0		0	0		
TOTALS		237		238				475	TOTALS		135		227				362
SPLIT %		49.9%		50.1%				56.8%	SPLIT %		37.3%		62.7%				43.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	372	465	0	0	837

AM Peak Hour	06:45	07:45					07:45		PM Peak Hour	13:15	13:45					13:15		
AM Pk Volume	41	54					89		PM Pk Volume	46	59					97		
Pk Hr Factor	0.569	0.794					0.767		Pk Hr Factor	0.719	0.615					0.735		
7 - 9 Volume	68	93	0	0			161		4 - 6 Volume	19	49	0	0			68		
7 - 9 Peak Hour	08:00	07:45					07:45		4 - 6 Peak Hour	16:00	16:00					16:00		
7 - 9 Pk Volume	39	54	0	0			89		4 - 6 Pk Volume	14	31	0	0			45		
Pk Hr Factor	0.813	0.794	0.000	0.000			0.767		Pk Hr Factor	0.700	0.646	0.000	0.000			0.750		

Prepared by NDS/ATD

Prepared by National Data & Surveying Services

VOLUME

Syar Industries Dwy W/O Basalt Rd

Day: Thursday
Date: 2/27/2020

City: Napa
Project #: CA20_8073_003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	503	473	976

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00	0	0	0		0				12:00	0	0	5		6		11	
00:15	0	0	0		1		1		12:15	0	0	14		8		22	
00:30	0	0	0		5		5		12:30	0	0	12		12		24	
00:45	0	0	0		0	6		6	12:45	0	0	7	38	14	40	21	78
01:00	0	0	0		0				13:00	0	0	12		11		23	
01:15	0	0	1		0		1		13:15	0	0	17		13		30	
01:30	0	0	0		1		1		13:30	0	0	15		10		25	
01:45	0	0	0	1	0	1		2	13:45	0	0	13	57	8	42	21	99
02:00	0	0	0		0				14:00	0	0	4		24		28	
02:15	0	0	0		0				14:15	0	0	5		8		13	
02:30	0	0	0		7		7		14:30	0	0	4		10		14	
02:45	0	0	0		1	8	1	8	14:45	0	0	6	19	11	53	17	72
03:00	0	0	2		0		2		15:00	0	0	4		17		21	
03:15	0	0	1		0		1		15:15	0	0	6		10		16	
03:30	0	0	7		0		7		15:30	0	0	6		13		19	
03:45	0	0	20	30	1	1	21	31	15:45	0	0	2	18	17	57	19	75
04:00	0	0	3		3		6		16:00	0	0	3		5		8	
04:15	0	0	4		3		7		16:15	0	0	5		12		17	
04:30	0	0	4		0		4		16:30	0	0	3		7		10	
04:45	0	0	4	15	4	10	8	25	16:45	0	0	3	14	4	28	7	42
05:00	0	0	9		0		9		17:00	0	0	4		4		8	
05:15	0	0	9		5		14		17:15	0	0	2		5		7	
05:30	0	0	19		5		24		17:30	0	0	5		2		7	
05:45	0	0	10	47	2	12	12	59	17:45	0	0	1	12	0	11	1	23
06:00	0	0	7		2		9		18:00	0	0	1		2		3	
06:15	0	0	6		1		7		18:15	0	0	1		2		3	
06:30	0	0	13		0		13		18:30	0	0	0		1		1	
06:45	0	0	16	42	2	5	18	47	18:45	0	0	0	2	1	6	1	8
07:00	0	0	11		7		18		19:00	0	0	1		1		2	
07:15	0	0	18		5		23		19:15	0	0	1		0		1	
07:30	0	0	15		15		30		19:30	0	0	0		1		1	
07:45	0	0	6	50	8	35	14	85	19:45	0	0	4	6	1	3	5	9
08:00	0	0	11		8		19		20:00	0	0	0		3		3	
08:15	0	0	12		10		22		20:15	0	0	0		1		1	
08:30	0	0	8		7		15		20:30	0	0	0		1		1	
08:45	0	0	9	40	10	35	19	75	20:45	0	0	1	1	0	5	1	6
09:00	0	0	7		7		14		21:00	0	0	1		1		2	
09:15	0	0	8		5		13		21:15	0	0	0		0			
09:30	0	0	6		7		13		21:30	0	0	1		2		3	
09:45	0	0	13	34	12	31	25	65	21:45	0	0	0	2	0	3		5
10:00	0	0	7		10		17		22:00	0	0	0		0			
10:15	0	0	8		7		15		22:15	0	0	0		0			
10:30	0	0	6		4		10		22:30	0	0	0		0			
10:45	0	0	9	30	7	28	16	58	22:45	0	0	0		0			
11:00	0	0	14		14		28		23:00	0	0	0		0			
11:15	0	0	6		15		21		23:15	0	0	0		0			
11:30	0	0	8		14		22		23:30	0	0	0		0			
11:45	0	0	17	45	10	53	27	98	23:45	0	0	0		0			
TOTALS				334		225		**559**	**TOTALS**				169		248		**417**
SPLIT %				59.7%		40.3%		**57.3%**	**SPLIT %**				40.5%		59.5%		**42.7%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	503	473	976

AM Peak Hour			06:45	11:00	**11:00**	**PM Peak Hour**			13:00	15:00	**13:15**
AM Pk Volume			60	53	**98**	**PM Pk Volume**			57	57	**104**
Pk Hr Factor			0.833	0.883	**0.875**	**Pk Hr Factor**			0.838	0.838	**0.867**
7 - 9 Volume	0	0	90	70	**160**	**4 - 6 Volume**	0	0	26	39	**65**
7 - 9 Peak Hour			07:00	07:30	**07:15**	**4 - 6 Peak Hour**			16:15	16:00	**16:00**
7 - 9 Pk Volume	0	0	50	41	**86**	**4 - 6 Pk Volume**	0	0	15	28	**42**
Pk Hr Factor	0.000	0.000	0.694	0.683	**0.717**	**Pk Hr Factor**	0.000	0.000	0.750	0.583	**0.618**

Prepared by National Data & Surveying Services

SPEED

Basalt Rd N/O Basalt Location 1

Day: Thursday
Date: 2/27/2020

City: Napa
Project #: CA20_8073_002

Summary

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	1	1	0	0	0	0	0	0	0	0	0	2
05:00	0	1	3	6	10	6	4	0	0	0	0	0	0	30
06:00	0	0	2	9	5	1	1	0	0	0	0	0	0	18
07:00	0	1	0	2	6	5	1	0	0	0	0	0	0	15
08:00	1	2	3	3	8	5	0	0	0	0	0	0	0	22
09:00	0	0	2	3	4	2	0	0	0	0	0	0	0	11
10:00	0	0	2	3	1	1	0	0	0	0	0	0	0	7
11:00	1	1	4	6	15	2	0	1	0	0	0	0	0	30
12:00 PM	1	2	7	8	3	3	0	0	0	0	0	0	0	24
13:00	1	3	5	4	5	3	0	1	0	0	0	0	0	22
14:00	0	0	0	7	7	6	2	3	0	0	0	0	0	25
15:00	0	0	1	5	10	4	3	1	0	0	0	0	0	24
16:00	0	0	0	5	5	5	3	1	0	0	0	0	0	19
17:00	0	0	0	1	2	1	0	0	0	0	0	0	0	4
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	1	2	0	0	0	0	0	0	0	0	0	3
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	4	10	32	65	82	44	14	7						258
% of Totals	2%	4%	12%	25%	32%	17%	5%	3%						100%

AM Volumes	2	5	18	33	49	22	6	1	0	0	0	0	0	136
% AM	1%	2%	7%	13%	19%	9%	2%	0%						53%
AM Peak Hour	08:00	08:00	11:00	06:00	11:00	05:00	05:00	11:00						05:00
Volume	1	2	4	9	15	6	4	1						30
PM Volumes	2	5	14	32	33	22	8	6	0	0	0	0	0	122
% PM	1%	2%	5%	12%	13%	9%	3%	2%						47%
PM Peak Hour	12:00	13:00	12:00	12:00	15:00	14:00	15:00	14:00						14:00
Volume	1	3	7	8	10	6	3	3						25

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	37	↔	14%	46	↔	18%	23	↔	9%	152	↔	59%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Basalt Rd	Summary	24	31	31	38	43	258

Prepared by National Data & Surveying Services

SPEED

Basalt Rd S/O Basalt Location 2

Day: Thursday
Date: 2/27/2020

City: Napa
Project #: CA20_8073_001

Summary

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	1	3	6	1	0	0	0	0	0	0	0	0	0	11
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	1	1	0	0	0	0	0	0	0	0	0	2
03:00	1	2	5	8	0	0	0	0	0	0	0	0	0	16
04:00	4	4	3	0	0	0	0	0	0	0	0	0	0	11
05:00	8	12	6	3	3	0	0	0	0	0	0	0	0	32
06:00	6	13	10	6	3	1	0	0	0	0	0	0	0	39
07:00	14	23	28	7	3	0	0	0	0	0	0	0	0	75
08:00	20	31	21	10	4	0	0	0	0	0	0	0	0	86
09:00	11	24	20	5	2	0	0	0	0	0	0	0	0	62
10:00	20	28	11	2	0	0	0	0	0	0	0	0	0	61
11:00	12	38	19	5	4	1	0	0	0	0	0	0	0	79
12:00 PM	15	27	24	4	0	0	0	0	0	0	0	0	0	70
13:00	16	30	22	9	1	0	0	0	0	0	0	0	0	78
14:00	12	31	21	9	3	0	0	0	0	0	0	0	0	76
15:00	8	25	12	5	1	1	1	0	0	0	0	0	0	53
16:00	9	18	14	4	0	0	0	0	0	0	0	0	0	45
17:00	3	11	7	1	1	0	0	0	0	0	0	0	0	23
18:00	2	0	3	0	0	0	0	0	0	0	0	0	0	5
19:00	0	3	2	1	0	0	0	0	0	0	0	0	0	6
20:00	1	4	1	0	0	0	0	0	0	0	0	0	0	6
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	163	328	236	81	25	3	1							837
% of Totals	19%	39%	28%	10%	3%	0%	0%							100%

AM Volumes	97	179	130	48	19	2	0	0	0	0	0	0	0	475
% AM	12%	21%	16%	6%	2%	0%								57%
AM Peak Hour	08:00	11:00	07:00	08:00	08:00	06:00								08:00
Volume	20	38	28	10	4	1								86
PM Volumes	66	149	106	33	6	1	1	0	0	0	0	0	0	362
% PM	8%	18%	13%	4%	1%	0%	0%							43%
PM Peak Hour	13:00	14:00	12:00	13:00	14:00	15:00	15:00							13:00
Volume	16	31	24	9	3	1	1							78

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	161	↔	19%	148	↔	18%	68	↔	8%	460	↔	55%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Basalt Rd	Summary	13	19	19	25	29	837

Prepared by National Data & Surveying Services

SPEED

Syar Industries Dwy W/O Basalt Rd

Day: Thursday
Date: 2/27/2020

City: Napa
Project #: CA20_8073_003

Summary

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	4	0	0	1	0	1	0	0	0	0	0	6
01:00	0	0	1	1	0	0	0	0	0	0	0	0	0	2
02:00	0	0	3	3	2	0	0	0	0	0	0	0	0	8
03:00	0	2	8	10	8	2	1	0	0	0	0	0	0	31
04:00	4	6	9	4	2	0	0	0	0	0	0	0	0	25
05:00	6	10	15	21	7	0	0	0	0	0	0	0	0	59
06:00	2	11	17	10	5	1	1	0	0	0	0	0	0	47
07:00	17	29	31	16	7	0	0	0	0	0	0	0	0	100
08:00	10	18	29	14	8	0	0	0	0	1	0	0	0	80
09:00	4	17	32	6	6	0	0	0	0	0	0	0	0	65
10:00	3	20	18	15	2	0	0	0	0	0	0	0	0	58
11:00	6	24	35	30	3	0	0	0	0	0	0	0	0	98
12:00 PM	12	25	20	17	3	1	0	0	0	0	0	0	0	78
13:00	8	21	33	24	12	1	0	0	0	0	0	0	0	99
14:00	10	15	19	20	6	2	0	0	0	0	0	0	0	72
15:00	3	10	24	23	11	4	0	0	0	0	0	0	0	75
16:00	1	3	15	11	16	1	1	0	0	0	0	0	0	48
17:00	0	2	9	5	1	0	0	0	0	0	0	0	0	17
18:00	0	1	4	0	2	1	0	0	0	0	0	0	0	8
19:00	2	1	5	1	0	0	0	0	0	0	0	0	0	9
20:00	0	1	0	3	2	0	0	0	0	0	0	0	0	6
21:00	0	2	2	0	0	1	0	0	0	0	0	0	0	5
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	88	218	333	234	103	15	3	1		1				996
% of Totals	9%	22%	33%	23%	10%	2%	0%	0%		0%				100%

AM Volumes	52	137	202	130	50	4	2	1	0	1	0	0	0	579
% AM	5%	14%	20%	13%	5%	0%	0%	0%		0%				58%
AM Peak Hour	07:00	07:00	11:00	11:00	03:00	03:00	03:00			08:00				07:00
Volume	17	29	35	30	8	2	1	1		1				100
PM Volumes	36	81	131	104	53	11	1	0	0	0	0	0	0	417
% PM	4%	8%	13%	10%	5%	1%	0%							42%
PM Peak Hour	12:00	12:00	13:00	13:00	16:00	15:00	16:00							13:00
Volume	12	25	33	24	16	4	1							99

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds	Volume		%	Volume		%	Volume		%	Volume		%
	180	⟷	18%	177	⟷	18%	65	⟷	7%	574	⟷	58%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Syar Industries Dwy	Summary	16	23	23	29	34	996

Prepared by National Data & Surveying Services

CLASSIFICATION

Basalt Rd N/O Basalt Location 1

Day: Thursday
Date: 2/27/2020

City: Napa
Project #: CA20_8073_002

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
05:00	0	14	12	0	4	0	0	0	0	0	0	0	0	30
06:00	0	4	5	0	6	3	0	0	0	0	0	0	0	18
07:00	0	8	4	0	3	0	0	0	0	0	0	0	0	15
08:00	0	10	5	0	6	1	0	0	0	0	0	0	0	22
09:00	0	2	5	0	2	2	0	0	0	0	0	0	0	11
10:00	0	0	6	0	1	0	0	0	0	0	0	0	0	7
11:00	0	9	13	0	6	2	0	0	0	0	0	0	0	30
12:00 PM	0	4	10	0	4	6	0	0	0	0	0	0	0	24
13:00	0	10	7	0	0	5	0	0	0	0	0	0	0	22
14:00	0	16	6	0	3	0	0	0	0	0	0	0	0	25
15:00	0	13	10	0	0	1	0	0	0	0	0	0	0	24
16:00	0	7	10	0	2	0	0	0	0	0	0	0	0	19
17:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals		106	95		37	20								258
% of Totals		41%	37%		14%	8%								100%

AM Volumes	0	49	51	0	28	8	0	0	0	0	0	0	0	136
% AM		19%	20%		11%	3%								53%
AM Peak Hour		05:00	11:00		06:00	06:00								05:00
Volume		14	13		6	3								30
PM Volumes	0	57	44	0	9	12	0	0	0	0	0	0	0	122
% PM		22%	17%		3%	5%								47%
PM Peak Hour		14:00	12:00		12:00	12:00								14:00
Volume		16	10		4	6								25

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	37		14%	46		18%	23		9%	152		59%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

Basalt Rd S/O Basalt Location 2

Day: Thursday
Date: 2/27/2020

City: Napa
Project #: CA20_8073_001

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	8	2	0	1	0	0	0	0	0	0	0	0	11
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	10	5	0	1	0	0	0	0	0	0	0	0	16
04:00	0	3	1	0	2	2	0	0	3	0	0	0	0	11
05:00	1	4	9	2	11	3	0	0	2	0	0	0	0	32
06:00	0	9	13	0	13	1	0	0	2	0	1	0	0	39
07:00	1	12	22	1	19	9	2	0	4	0	5	0	0	75
08:00	1	15	19	0	18	22	3	1	3	0	4	0	0	86
09:00	3	8	7	0	16	16	3	0	4	0	5	0	0	62
10:00	1	5	13	2	16	16	1	0	5	0	2	0	0	61
11:00	0	16	18	0	16	19	3	0	3	0	4	0	0	79
12:00 PM	0	9	16	2	15	12	1	1	10	0	4	0	0	70
13:00	2	15	21	3	12	15	2	0	3	0	5	0	0	78
14:00	0	26	14	2	18	10	2	0	0	1	3	0	0	76
15:00	1	16	17	0	11	1	1	1	4	0	1	0	0	53
16:00	1	18	12	0	9	1	0	2	2	0	0	0	0	45
17:00	2	4	9	0	4	1	0	1	1	1	0	0	0	23
18:00	0	3	0	0	2	0	0	0	0	0	0	0	0	5
19:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6
20:00	0	2	1	0	1	2	0	0	0	0	0	0	0	6
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	13	191	200	12	185	130	18	6	46	2	34			837
% of Totals	2%	23%	24%	1%	22%	16%	2%	1%	5%	0%	4%			100%

AM Volumes	7	93	109	5	113	88	12	1	26	0	21	0	0	475
% AM	1%	11%	13%	1%	14%	11%	1%	0%	3%		3%			57%
AM Peak Hour	09:00	11:00	07:00	05:00	07:00	08:00	08:00	08:00	10:00		07:00			08:00
Volume	3	16	22	2	19	22	3	1	5		5			86
PM Volumes	6	98	91	7	72	42	6	5	20	2	13	0	0	362
% PM	1%	12%	11%	1%	9%	5%	1%	1%	2%	0%	2%			43%
PM Peak Hour	13:00	14:00	13:00	13:00	14:00	13:00	13:00	16:00	12:00	14:00	13:00			13:00
Volume	2	26	21	3	18	15	2	2	10	1	5			78

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	161	⟷	19%	148	⟷	18%	68	⟷	8%	460	⟷	55%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

Syar Industries Dwy W/O Basalt Rd

Day: Thursday
Date: 2/27/2020

City: Napa
Project #: CA20_8073_003

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	4	2	0	0	0	0	0	0	0	0	0	0	6
01:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
02:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
03:00	0	21	9	0	0	0	0	0	1	0	0	0	0	31
04:00	2	6	4	0	5	1	0	0	7	0	0	0	0	25
05:00	0	25	19	0	9	0	0	2	4	0	0	0	0	59
06:00	0	18	12	0	14	1	0	0	1	0	1	0	0	47
07:00	0	20	21	0	24	4	4	2	5	0	4	1	0	85
08:00	0	20	17	0	16	11	2	1	4	0	4	0	0	75
09:00	0	12	12	0	17	13	2	0	4	0	5	0	0	65
10:00	1	4	26	0	6	14	2	1	3	1	0	0	0	58
11:00	0	24	38	0	16	6	2	0	7	1	4	0	0	98
12:00 PM	0	13	22	0	15	11	2	1	8	0	6	0	0	78
13:00	0	33	23	0	14	17	4	0	6	0	2	0	0	99
14:00	0	21	25	1	7	8	5	0	2	0	2	1	0	72
15:00	1	38	23	0	7	1	2	3	0	0	0	0	0	75
16:00	0	26	12	0	1	0	1	0	2	0	0	0	0	42
17:00	0	16	5	0	0	0	0	1	1	0	0	0	0	23
18:00	0	2	5	0	0	0	0	1	0	0	0	0	0	8
19:00	0	4	0	0	2	3	0	0	0	0	0	0	0	9
20:00	0	1	4	0	1	0	0	0	0	0	0	0	0	6
21:00	0	3	2	0	0	0	0	0	0	0	0	0	0	5
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	4	320	281	1	155	90	26	12	55	2	28	2		976
% of Totals	0%	33%	29%	0%	16%	9%	3%	1%	6%	0%	3%	0%		100%

AM Volumes	3	163	160	0	108	50	12	6	36	2	18	1	0	559
% AM	0%	17%	16%		11%	5%	1%	1%	4%	0%	2%	0%		57%
AM Peak Hour	04:00	05:00	11:00		07:00	10:00	07:00	05:00	04:00	10:00	09:00	07:00		11:00
Volume	2	25	38		24	14	4	2	7	1	5	1		98
PM Volumes	1	157	121	1	47	40	14	6	19	0	10	1	0	417
% PM	0%	16%	12%	0%	5%	4%	1%	1%	2%		1%	0%		43%
PM Peak Hour	15:00	15:00	14:00	14:00	12:00	13:00	14:00	15:00	12:00		12:00	14:00		13:00
Volume	1	38	25	1	15	17	5	3	8		6	1		99

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	160		16%	177		18%	65		7%	574		59%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	



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Appendix B

Collision Rate Calculations



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Intersection Collision Rate Worksheet

Traffic Impact Study for the Basanites Project

Intersection # 1: Soscol Avenue & Silverado Trail (SR 121)
Date of Count: 02/27/2020

Number of Collisions: 18
Number of Injuries: 12
Number of Fatalities: 0
Average Daily Traffic (ADT): 29200
Start Date: October 1, 2015
End Date: September 30, 2020
Number of Years: 5

Intersection Type: Tee
Control Type: Signals
Area: Urban

$$\text{Collision Rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x Days per Year x Number of Years}}$$

$$\text{Collision Rate} = \frac{18 \times 1{,}000{,}000}{29{,}200 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.34 c/mve**	**0.0%**	**66.7%**
Statewide Average*	**0.19 c/mve**	**0.4%**	**46.8%**

Notes
ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2016 Collision Data on California State Highways, Caltrans

Intersection # 2: SR 29 South Ramps & SR 121 (Imola Avenue)
Date of Count: 02/27/2020

Number of Collisions: 27
Number of Injuries: 10
Number of Fatalities: 0
Average Daily Traffic (ADT): 22100
Start Date: October 1, 2015
End Date: September 30, 2020
Number of Years: 5

Intersection Type: Four-Legged
Control Type: Signals
Area: Urban

$$\text{Collision Rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x Days per Year x Number of Years}}$$

$$\text{Collision Rate} = \frac{27 \times 1{,}000{,}000}{22{,}100 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.67 c/mve**	**0.0%**	**37.0%**
Statewide Average*	**0.24 c/mve**	**0.5%**	**44.6%**

Notes
ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2016 Collision Data on California State Highways, Caltrans

Intersection Collision Rate Worksheet

Traffic Impact Study for the Basanites Project

Intersection # 3: SR 29 North Ramps & SR 121 (Imola Avenue)
Date of Count: 02/27/2020

Number of Collisions: 40
Number of Injuries: 22
Number of Fatalities: 0
Average Daily Traffic (ADT): 29800
Start Date: October 1, 2015
End Date: September 30, 2020
Number of Years: 5

Intersection Type: Four-Legged
Control Type: Signals
Area: Urban

$$\text{Collision Rate} = \frac{\text{Number of Collisions} \times 1 \text{ Million}}{\text{ADT} \times \text{Days per Year} \times \text{Number of Years}}$$

$$\text{Collision Rate} = \frac{40 \times 1{,}000{,}000}{29{,}800 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.74 c/mve**	**0.0%**	**55.0%**
Statewide Average*	**0.24 c/mve**	**0.5%**	**44.6%**

Notes
ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2016 Collision Data on California State Highways, Caltrans

Intersection # 4: Soscol Avenue-SR 221 & SR 121-Imola Avenue
Date of Count: 02/27/2020

Number of Collisions: 16
Number of Injuries: 10
Number of Fatalities: 0
Average Daily Traffic (ADT): 42000
Start Date: October 1, 2015
End Date: September 30, 2020
Number of Years: 5

Intersection Type: Four-Legged
Control Type: Signals
Area: Urban

$$\text{Collision Rate} = \frac{\text{Number of Collisions} \times 1 \text{ Million}}{\text{ADT} \times \text{Days per Year} \times \text{Number of Years}}$$

$$\text{Collision Rate} = \frac{16 \times 1{,}000{,}000}{42{,}000 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.21 c/mve**	**0.0%**	**62.5%**
Statewide Average*	**0.24 c/mve**	**0.5%**	**44.6%**

Notes
ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2016 Collision Data on California State Highways, Caltrans

Intersection Collision Rate Worksheet

Traffic Impact Study for the Basanites Project

Intersection # 5: SR 29 & SR 12-121
Date of Count: 02/27/2020

Number of Collisions: 75
Number of Injuries: 43
Number of Fatalities: 0
Average Daily Traffic (ADT): 48500
Start Date: October 1, 2015
End Date: September 30, 2020
Number of Years: 5

Intersection Type: Tee
Control Type: Signals
Area: Rural

$$\text{Collision Rate} = \frac{\text{Number of Collisions} \times 1 \text{ Million}}{\text{ADT} \times \text{Days per Year} \times \text{Number of Years}}$$

$$\text{Collision Rate} = \frac{75 \times 1{,}000{,}000}{48{,}500 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.85 c/mve**	**0.0%**	**57.3%**
Statewide Average*	**0.22 c/mve**	**0.8%**	**42.6%**

Notes
ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2016 Collision Data on California State Highways, Caltrans

Intersection # 6: Napa-Vallejo Highway (SR 221) & Project Access Road
Date of Count: 02/27/2020

Number of Collisions: 0
Number of Injuries: 0
Number of Fatalities: 0
Average Daily Traffic (ADT): 30800
Start Date: October 1, 2015
End Date: September 30, 2020
Number of Years: 5

Intersection Type: Tee
Control Type: Stop & Yield Controls
Area: Urban

$$\text{Collision Rate} = \frac{\text{Number of Collisions} \times 1 \text{ Million}}{\text{ADT} \times \text{Days per Year} \times \text{Number of Years}}$$

$$\text{Collision Rate} = \frac{0 \times 1{,}000{,}000}{30{,}800 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.00 c/mve**	**0.0%**	**0.0%**
Statewide Average*	**0.08 c/mve**	**1.0%**	**45.1%**

Notes
ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2016 Collision Data on California State Highways, Caltrans

Intersection Collision Rate Worksheet

Traffic Impact Study for the Basanites Project

Intersection # 7: Napa-Vallejo Highway (SR 221)-Soscol Ferry Road & SR 29
Date of Count: 02/27/2020

Number of Collisions: 36
Number of Injuries: 11
Number of Fatalities: 0
Average Daily Traffic (ADT): 48500
Start Date: October 1, 2015
End Date: September 30, 2020
Number of Years: 5

Intersection Type: Four-Legged
Control Type: Signals
Area: Urban

$$\text{Collision Rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x Days per Year x Number of Years}}$$

$$\text{Collision Rate} = \frac{36 \times 1{,}000{,}000}{48{,}500 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.41 c/mve**	**0.0%**	**30.6%**
Statewide Average*	**0.24 c/mve**	**0.5%**	**44.6%**

Notes
ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2016 Collision Data on California State Highways, Caltrans

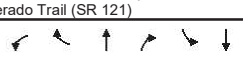
Appendix C

Intersection Level of Service Calculations



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HCM 6th Signalized Intersection Summary
1: Soscol Ave & Silverado Trail (SR 121) 04/13/2021

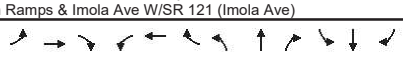


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	635	16	919	439	2	666
Future Volume (veh/h)	635	16	919	439	2	666
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1870
Adj Flow Rate, veh/h	648	16	938	448	2	680
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	710	632	1582	1391	56	1550
Arrive On Green	0.40	0.40	0.45	0.45	0.45	0.45
Sat Flow, veh/h	1781	1585	3647	1648	1	3565
Grp Volume(v), veh/h	648	16	938	448	365	317
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1648	1865	1617
Q Serve(g_s), s	22.5	0.4	13.0	3.8	0.0	8.8
Cycle Q Clear(g_c), s	22.5	0.4	13.0	3.8	8.8	8.8
Prop In Lane	1.00	1.00		1.00	0.01	
Lane Grp Cap(c), veh/h	710	632	1582	1391	886	720
V/C Ratio(X)	0.91	0.03	0.59	0.32	0.41	0.44
Avail Cap(c_a), veh/h	1226	1091	2446	1792	1331	1113
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.6	11.9	13.7	1.1	12.5	12.5
Incr Delay (d2), s/veh	4.9	0.0	0.5	0.2	0.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	0.5	4.6	4.4	3.3	2.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	23.5	12.0	14.2	1.3	12.9	13.1
LnGrp LOS	C	B	B	A	B	B
Approach Vol, veh/h	664		1386			682
Approach Delay, s/veh	23.2		10.0			13.0
Approach LOS	C		B			B

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	34.2	31.2	34.2
Change Period (Y+Rc), s	5.1	5.1	5.1
Max Green Setting (Gmax), s	45.0	45.0	45.0
Max Q Clear Time (g_c+I1), s	10.8	24.5	15.0
Green Ext Time (p_c), s	6.7	1.6	14.1

Intersection Summary	
HCM 6th Ctrl Delay	14.0
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary
2: SR 29 South Ramps & Imola Ave W/SR 121 (Imola Ave) 04/13/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	572	81	0	420	210	0	0	0	776	0	209
Future Volume (veh/h)	0	572	81	0	420	210	0	0	0	776	0	209
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870				1870	1870	1870
Adj Flow Rate, veh/h	0	657	0	0	483	0				566	456	240
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87				0.87	0.87	0.87
Percent Heavy Veh, %	0	2	2	0	2	2				2	2	2
Cap, veh/h	0	767		0	767					813	527	277
Arrive On Green	0.00	0.41	0.00	0.00	0.41	0.00				0.46	0.46	0.46
Sat Flow, veh/h	0	1870	0	0	1870	1585				1781	1154	607
Grp Volume(v), veh/h	0	657	0	0	483	0				566	0	696
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	1870	1585				1781	0	1761
Q Serve(g_s), s	0.0	23.4	0.0	0.0	15.1	0.0				18.6	0.0	26.1
Cycle Q Clear(g_c), s	0.0	23.4	0.0	0.0	15.1	0.0				18.6	0.0	26.1
Prop In Lane	0.00		0.00	0.00		1.00				1.00		0.34
Lane Grp Cap(c), veh/h	0	767		0	767					813	0	804
V/C Ratio(X)	0.00	0.86		0.00	0.63					0.70	0.00	0.87
Avail Cap(c_a), veh/h	0	1300		0	1631					961	0	950
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	19.7	0.0	0.0	17.2	0.0				15.9	0.0	17.9
Incr Delay (d2), s/veh	0.0	3.0	0.0	0.0	0.9	0.0				1.8	0.0	7.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.7	0.0	0.0	6.0	0.0				7.2	0.0	11.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	22.7	0.0	0.0	18.1	0.0				17.7	0.0	25.4
LnGrp LOS	A	C		A	B					B	A	C
Approach Vol, veh/h		657	A		483	A					1262	
Approach Delay, s/veh		22.7			18.1						21.9	
Approach LOS		C			B						C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	35.2	38.2	35.2
Change Period (Y+Rc), s	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	51.0	* 40	64.0
Max Q Clear Time (g_c+I1), s	25.4	28.1	17.1
Green Ext Time (p_c), s	4.6	5.4	3.3

Intersection Summary	
HCM 6th Ctrl Delay	21.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3: SR 29 North Ramps & SR 121 (Imola Ave)/SR 121

04/13/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	276	1083	0	0	507	753	126	1	259	0	0	0
Future Volume (veh/h)	276	1083	0	0	507	753	126	1	259	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	321	1259	0	0	590	0	147	1	0			
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	415	2268	0	0	1041		214	1				
Arrive On Green	0.23	0.64	0.00	0.00	0.29	0.00	0.12	0.12	0.00			
Sat Flow, veh/h	1781	3647	0	0	3647	1585	1770	12	1585			
Grp Volume(v), veh/h	321	1259	0	0	590	0	148	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1585	1782	0	1585			
Q Serve(g_s), s	7.1	8.3	0.0	0.0	5.9	0.0	3.3	0.0	0.0			
Cycle Q Clear(g_c), s	7.1	8.3	0.0	0.0	5.9	0.0	3.3	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	415	2268	0	0	1041		216	0				
V/C Ratio(X)	0.77	0.56	0.00	0.00	0.57		0.69	0.00				
Avail Cap(c_a), veh/h	1486	4235	0	0	4235		1487	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	15.0	4.3	0.0	0.0	12.6	0.0	17.7	0.0	0.0			
Incr Delay (d2), s/veh	3.1	0.2	0.0	0.0	0.5	0.0	3.8	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.6	1.1	0.0	0.0	1.9	0.0	1.4	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.1	4.5	0.0	0.0	13.1	0.0	21.5	0.0	0.0			
LnGrp LOS	B	A	A	A	B		C	A				
Approach Vol, veh/h		1580			590	A		148	A			
Approach Delay, s/veh		7.2			13.1			21.5				
Approach LOS		A			B			C				

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		31.9			14.5	17.4		10.1				
Change Period (Y+Rc), s		5.1			* 4.7	5.1		5.0				
Max Green Setting (Gmax), s		50.0			* 35	50.0		35.0				
Max Q Clear Time (g_c+I1), s		10.3			9.1	7.9		5.3				
Green Ext Time (p_c), s		12.1			0.9	4.4		0.8				

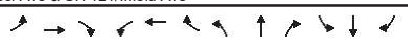
Intersection Summary	
HCM 6th Ctrl Delay	9.6
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
4: SR 221/Soscol Ave & SR 121/Imola Ave

04/13/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	269	690	184	244	22	435	923	129	55	948	148
Future Volume (veh/h)	121	269	690	184	244	22	435	923	129	55	948	148
Initial Q (Qb), veh	0	0	0	0	0	0	0	2	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	274	0	188	249	19	444	942	0	56	967	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	117	407		216	469	36	496	1342		198	1226	
Arrive On Green	0.07	0.22	0.00	0.12	0.27	0.27	0.14	0.38	0.00	0.11	0.35	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1716	131	3456	3647	0	1781	3554	1585
Grp Volume(v), veh/h	62	274	0	188	0	268	444	942	0	56	967	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1847	1728	1777	0	1781	1777	1585
Q Serve(g_s), s	4.0	16.1	0.0	12.4	0.0	14.8	15.1	26.9	0.0	3.5	29.4	0.0
Cycle Q Clear(g_c), s	4.0	16.1	0.0	12.4	0.0	14.8	15.1	26.9	0.0	3.5	29.4	0.0
Prop In Lane	1.00		1.00	1.00		0.07	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	117	407		216	0	505	496	1342		198	1226	
V/C Ratio(X)	0.53	0.67		0.87	0.00	0.53	0.89	0.70		0.28	0.79	
Avail Cap(c_a), veh/h	134	426		248	0	539	507	1342		198	1226	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.80	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.72	0.72	0.00
Uniform Delay (d), s/veh	54.3	43.0	0.0	51.8	0.0	37.1	50.5	31.8	0.0	48.9	35.4	0.0
Incr Delay (d2), s/veh	2.2	2.5	0.0	24.3	0.0	0.3	18.0	3.1	0.0	0.2	3.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	7.6	0.0	7.0	0.0	6.7	7.7	11.9	0.0	1.5	13.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.5	45.5	0.0	76.1	0.0	37.4	68.4	34.9	0.0	49.1	39.1	0.0
LnGrp LOS	E	D		E	A	D	E	C		D	D	
Approach Vol, veh/h		336	A		456			1386	A		1023	A
Approach Delay, s/veh		47.5			53.3			45.6			39.7	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	46.5	13.0	37.9	18.5	50.7	19.6	31.2
Change Period (Y+Rc), s	5.4	5.1	5.1	5.1	5.1	5.4	5.1	5.1
Max Green Setting (Gmax), s	7.6	37.7	9.0	35.0	10.0	45.3	16.7	27.3
Max Q Clear Time (g_c+I1), s	1.9	31.4	6.0	16.8	5.5	28.9	14.4	18.1
Green Ext Time (p_c), s	0.1	2.9	0.0	0.9	0.0	4.8	0.1	0.6

Intersection Summary	
HCM 6th Ctrl Delay	45.0
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
Unsignalized Delay for [NBR, EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
5: SR 29/SR 121 & SR 12

04/13/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	756	565	540	1289	1394	484
Future Volume (veh/h)	756	565	540	1289	1394	484
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	796	0	568	1357	1467	509
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	805		624	2342	1502	1039
Arrive On Green	0.23	0.00	0.18	0.66	0.42	0.42
Sat Flow, veh/h	3456	1585	3456	3647	3647	1585
Grp Volume(v), veh/h	796	0	568	1357	1467	509
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1777	1777	1585
Q Serve(g_s), s	32.5	0.0	22.8	29.8	57.5	23.1
Cycle Q Clear(g_c), s	32.5	0.0	22.8	29.8	57.5	23.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	805		624	2342	1502	1039
V/C Ratio(X)	0.99		0.91	0.58	0.98	0.49
Avail Cap(c_a), veh/h	805		805	2342	1505	1040
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.2	0.0	56.9	13.3	40.2	12.4
Incr Delay (d2), s/veh	28.9	0.0	10.6	0.2	17.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.8	0.0	10.5	10.4	27.1	27.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	83.0	0.0	67.5	13.6	58.0	12.6
LnGrp LOS	F		E	B	E	B
Approach Vol, veh/h	796	A		1925	1976	
Approach Delay, s/veh	83.0			29.5	46.3	
Approach LOS	F			C	D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		100.8		40.9	33.5	67.3
Change Period (Y+Rc), s		7.4		7.9	7.9	7.4
Max Green Setting (Gmax), s		30.0		33.0	33.0	60.0
Max Q Clear Time (g_c+I1), s		31.8		34.5	24.8	59.5
Green Ext Time (p_c), s		0.0		0.0	0.8	0.4

Intersection Summary	
HCM 6th Ctrl Delay	45.6
HCM 6th LOS	D

Notes

User approved changes to right turn type.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th TWSC
6: Napa Vallejo Hwy (SR 221)/SR 221 & Project Access Road

04/13/2021

Intersection	
Int Delay, s/veh	3.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	22	1842	35	17	1361
Future Vol, veh/h	20	22	1842	35	17	1361
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Yield	-	None
Storage Length	0	120	-	220	265	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	22	1880	36	17	1389

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2609	-	0	0	1880	0
Stage 1	1880	-	-	-	-	-
Stage 2	729	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	2.22	-
Pot Cap-1 Maneuver	~ 20	0	-	-	315	-
Stage 1	106	0	-	-	-	-
Stage 2	438	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 19	-	-	-	315	-
Mov Cap-2 Maneuver	~ 19	-	-	-	-	-
Stage 1	106	-	-	-	-	-
Stage 2	414	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 514.2	0	0.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	19	-	315	-
HCM Lane V/C Ratio	-	-	1.074	-	0.055	-
HCM Control Delay (s)	-	-	$ 514.2	0	17.1	-
HCM Lane LOS	-	-	F	A	C	-
HCM 95th %tile Q(veh)	-	-	2.9	-	0.2	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th Signalized Intersection Summary
7: Soscol Ferry Rd/Napa Vallejo Hwy (SR 221) & SR 29/SR 12

04/13/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	1453	500	22	1621	1937	199	43	16	702	91	35
Future Volume (veh/h)	55	1453	500	22	1621	1937	199	43	16	702	91	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	57	1514	521	23	1627	0	207	45	17	731	95	36
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	112	1771	790	91	909		198	208	177	761	412	349
Arrive On Green	0.06	0.50	0.50	0.05	0.49	0.00	0.11	0.11	0.11	0.22	0.22	0.22
Sat Flow, veh/h	1781	3554	1585	1781	1870	3170	1781	1870	1585	3456	1870	1585
Grp Volume(v), veh/h	57	1514	521	23	1627	0	207	45	17	731	95	36
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1870	1585	1781	1870	1585	1728	1870	1585
Q Serve(g_s), s	6.1	73.5	48.5	2.5	96.0	0.0	22.0	4.3	1.9	41.3	8.2	3.6
Cycle Q Clear(g_c), s	6.1	73.5	48.5	2.5	96.0	0.0	22.0	4.3	1.9	41.3	8.2	3.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	112	1771	790	91	909		198	208	177	761	412	349
V/C Ratio(X)	0.51	0.85	0.66	0.25	1.79		1.04	0.22	0.10	0.96	0.23	0.10
Avail Cap(c_a), veh/h	262	1771	790	271	909		198	208	177	770	417	353
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	89.5	43.3	37.0	90.1	50.7	0.0	87.7	79.9	78.8	76.1	63.2	61.4
Incr Delay (d2), s/veh	1.3	4.5	2.3	0.5	359.5	0.0	75.6	0.2	0.1	22.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	32.1	18.7	1.1	133.6	0.0	14.2	2.1	0.8	20.4	3.9	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	90.9	47.8	39.3	90.6	410.2	0.0	163.3	80.1	78.9	98.9	63.3	61.4
LnGrp LOS	F	D	D	F	F		F	F	E	F	E	E
Approach Vol, veh/h		2092			1650	A		269			862	
Approach Delay, s/veh		46.8			405.7			144.0			93.4	
Approach LOS		D			F			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.1	102.9		27.4	14.7	105.3		50.0				
Change Period (Y+Rc), s	* 4.7	6.9		5.4	* 4.7	6.9		6.5				
Max Green Setting (Gmax), s	* 29	96.0		22.0	* 30	96.0		44.0				
Max Q Clear Time (g_c+I1), s	9.1	98.0		24.0	4.5	75.5		43.3				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	15.7		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		181.9	
HCM 6th LOS		F	

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
1: Soscol Ave & Silverado Trail (SR 121)

04/14/2021

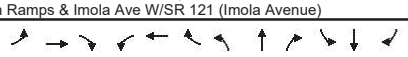


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	520	16	896	575	2	908
Future Volume (veh/h)	520	16	896	575	2	908
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1870
Adj Flow Rate, veh/h	536	16	924	593	2	936
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	605	539	1729	1362	62	1694
Arrive On Green	0.34	0.34	0.49	0.49	0.49	0.49
Sat Flow, veh/h	1781	1585	3647	1648	1	3567
Grp Volume(v), veh/h	536	16	924	593	503	435
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1648	1866	1617
Q Serve(g_s), s	16.7	0.4	10.6	5.7	0.0	11.1
Cycle Q Clear(g_c), s	16.7	0.4	10.6	5.7	11.1	11.1
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	605	539	1729	1362	969	787
V/C Ratio(X)	0.89	0.03	0.53	0.44	0.52	0.55
Avail Cap(c_a), veh/h	1363	1213	2720	1822	1482	1238
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.3	12.9	10.5	1.4	10.6	10.6
Incr Delay (d2), s/veh	3.4	0.0	0.4	0.3	0.6	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	0.4	3.4	5.0	3.8	3.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.8	13.0	10.8	1.7	11.2	11.5
LnGrp LOS	C	B	B	A	B	B
Approach Vol, veh/h	552		1517			938
Approach Delay, s/veh	21.5		7.3			11.3
Approach LOS	C		A			B

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		33.7		25.1		33.7
Change Period (Y+Rc), s		5.1		5.1		5.1
Max Green Setting (Gmax), s		45.0		45.0		45.0
Max Q Clear Time (g_c+I1), s		13.1		18.7		12.6
Green Ext Time (p_c), s		9.9		1.3		16.0

Intersection Summary			
HCM 6th Ctrl Delay		11.1	
HCM 6th LOS		B	

HCM 6th Signalized Intersection Summary
2: SR 29 South Ramps & Imola Ave W/SR 121 (Imola Avenue) 04/14/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	438	104	0	534	191	0	0	0	723	0	219
Future Volume (veh/h)	0	438	104	0	534	191	0	0	0	723	0	219
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870				1870	1870	1870
Adj Flow Rate, veh/h	0	447	0	0	545	0				480	360	223
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	0	2	2				2	2	2
Cap, veh/h	0	697		0	697					778	472	292
Arrive On Green	0.00	0.37	0.00	0.00	0.37	0.00				0.44	0.44	0.44
Sat Flow, veh/h	0	1870	0	0	1870	1585				1781	1081	669
Grp Volume(v), veh/h	0	447	0	0	545	0				480	0	583
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	1870	1585				1781	0	1750
Q Serve(g_s), s	0.0	10.1	0.0	0.0	13.3	0.0				10.7	0.0	14.5
Cycle Q Clear(g_c), s	0.0	10.1	0.0	0.0	13.3	0.0				10.7	0.0	14.5
Prop In Lane	0.00		0.00	0.00		1.00				1.00		0.38
Lane Grp Cap(c), veh/h	0	697		0	697					778	0	765
V/C Ratio(X)	0.00	0.64		0.00	0.78					0.62	0.00	0.76
Avail Cap(c_a), veh/h	0	1853		0	2325					1370	0	1346
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	13.3	0.0	0.0	14.3	0.0				11.2	0.0	12.2
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	2.0	0.0				0.8	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.6	0.0	0.0	4.9	0.0				3.6	0.0	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	14.3	0.0	0.0	16.3	0.0				12.0	0.0	13.8
LnGrp LOS	A	B		A	B					B	A	B
Approach Vol, veh/h		447	A		545	A					1063	
Approach Delay, s/veh		14.3			16.3						13.0	
Approach LOS		B			B						B	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	24.3		27.2		24.3
Change Period (Y+Rc), s	5.1		* 4.7		5.1
Max Green Setting (Gmax), s	51.0		* 40		64.0
Max Q Clear Time (g_c+I1), s	12.1		16.5		15.3
Green Ext Time (p_c), s	3.0		6.0		3.9

Intersection Summary		
HCM 6th Ctrl Delay		14.1
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3: SR 29 North Ramps & SR 121 (Imola Avenue)/SR 121 04/14/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	1012	0	0	624	762	131	4	319	0	0	0
Future Volume (veh/h)	123	1012	0	0	624	762	131	4	319	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	128	1054	0	0	650	0	136	4	0			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	183	2093	0	0	1239		200	6				
Arrive On Green	0.10	0.59	0.00	0.00	0.35	0.00	0.12	0.12	0.00			
Sat Flow, veh/h	1781	3647	0	0	3647	1585	1733	51	1585			
Grp Volume(v), veh/h	128	1054	0	0	650	0	140	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1585	1784	0	1585			
Q Serve(g_s), s	2.4	5.9	0.0	0.0	5.0	0.0	2.6	0.0	0.0			
Cycle Q Clear(g_c), s	2.4	5.9	0.0	0.0	5.0	0.0	2.6	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.97		1.00			
Lane Grp Cap(c), veh/h	183	2093	0	0	1239		206	0				
V/C Ratio(X)	0.70	0.50	0.00	0.00	0.52		0.68	0.00				
Avail Cap(c_a), veh/h	1823	5197	0	0	5197		1826	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	14.8	4.1	0.0	0.0	8.9	0.0	14.5	0.0	0.0			
Incr Delay (d2), s/veh	4.8	0.2	0.0	0.0	0.3	0.0	3.9	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	0.7	0.0	0.0	1.3	0.0	1.1	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.6	4.3	0.0	0.0	9.2	0.0	18.4	0.0	0.0			
LnGrp LOS	B	A	A	A	A		B	A				
Approach Vol, veh/h		1182			650	A		140	A			
Approach Delay, s/veh		5.9			9.2			18.4				
Approach LOS		A			A			B				

Timer - Assigned Phs	2			5	6		8
Phs Duration (G+Y+Rc), s	25.2			8.2	17.0		9.0
Change Period (Y+Rc), s	5.1			* 4.7	5.1		5.0
Max Green Setting (Gmax), s	50.0			* 35	50.0		35.0
Max Q Clear Time (g_c+I1), s	7.9			4.4	7.0		4.6
Green Ext Time (p_c), s	9.4			0.3	4.9		0.8

Intersection Summary		
HCM 6th Ctrl Delay		7.9
HCM 6th LOS		A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
4: SR 221/Soscol Ave & SR 121/Imola Ave

04/14/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	188	285	412	105	264	49	634	1008	192	41	833	185
Future Volume (veh/h)	188	285	412	105	264	49	634	1008	192	41	833	185
Initial Q (Qb), veh	0	0	0	0	11	0	3	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	101	306	0	113	284	48	682	1084	0	44	896	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	124	478		137	426	54	729	1487		161	1058	
Arrive On Green	0.07	0.25	0.00	0.08	0.26	0.26	0.21	0.42	0.00	0.09	0.30	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1559	264	3456	3647	0	1781	3554	1585
Grp Volume(v), veh/h	101	306	0	113	0	332	682	1084	0	44	896	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1823	1728	1777	0	1781	1777	1585
Q Serve(g_s), s	7.3	19.0	0.0	8.1	0.0	21.4	25.2	33.2	0.0	3.0	30.7	0.0
Cycle Q Clear(g_c), s	7.3	19.0	0.0	8.1	0.0	21.4	25.2	33.2	0.0	3.0	30.7	0.0
Prop In Lane	1.00		1.00	1.00		0.14	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	124	478		137	0	482	729	1487		161	1058	
V/C Ratio(X)	0.82	0.64		0.83	0.00	0.69	0.94	0.73		0.27	0.85	
Avail Cap(c_a), veh/h	136	478		160	0	491	734	1487		165	1067	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.70	0.70	0.00
Uniform Delay (d), s/veh	59.7	43.1	0.0	59.2	0.0	44.5	50.6	31.6	0.0	55.2	42.9	0.0
Incr Delay (d2), s/veh	23.7	1.9	0.0	22.3	0.0	3.3	19.2	3.2	0.0	0.2	6.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	12.1	1.9	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	8.9	0.0	4.5	0.0	13.3	13.2	14.6	0.0	1.4	14.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.4	45.0	0.0	81.5	0.0	59.9	71.8	34.8	0.0	55.4	48.9	0.0
LnGrp LOS	F	D		F	A	E	E	C		E	D	
Approach Vol, veh/h		407	A		445			1766	A		940	A
Approach Delay, s/veh		54.5			65.4			49.1			49.2	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.8	44.1	14.1	39.0	17.1	59.8	15.1	38.0
Change Period (Y+Rc), s	5.4	5.1	5.1	5.1	5.1	5.4	5.1	5.1
Max Green Setting (Gmax), s	27.6	36.8	9.9	35.0	10.0	54.4	11.7	33.2
Max Q Clear Time (g_c+I1), s	27.2	32.7	9.3	23.4	5.0	35.2	10.1	21.0
Green Ext Time (p_c), s	0.1	1.9	0.0	1.0	0.0	6.4	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	51.8
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR, EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
5: SR 29/SR 121 & SR 12

04/14/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	715	536	499	1452	1059	593
Future Volume (veh/h)	715	536	499	1452	1059	593
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	730	0	509	1482	1081	605
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	815		592	2174	1286	947
Arrive On Green	0.24	0.00	0.17	0.61	0.36	0.36
Sat Flow, veh/h	3456	1585	3456	3647	3647	1585
Grp Volume(v), veh/h	730	0	509	1482	1081	605
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1777	1777	1585
Q Serve(g_s), s	20.6	0.0	14.4	27.9	28.0	24.9
Cycle Q Clear(g_c), s	20.6	0.0	14.4	27.9	28.0	24.9
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	815		592	2174	1286	947
V/C Ratio(X)	0.90		0.86	0.68	0.84	0.64
Avail Cap(c_a), veh/h	1136		1136	2174	1769	1163
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.2	0.0	40.4	13.0	29.4	13.1
Incr Delay (d2), s/veh	5.8	0.0	1.5	0.7	2.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	0.0	5.8	8.9	11.1	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	43.0	0.0	41.9	13.7	31.6	13.7
LnGrp LOS	D		D	B	C	B
Approach Vol, veh/h	730	A		1991	1686	
Approach Delay, s/veh	43.0			20.9	25.2	
Approach LOS	D			C	C	

Timer - Assigned Phs	2	4	5	6
Phs Duration (G+Y+Rc), s	68.8	31.6	25.1	43.7
Change Period (Y+Rc), s	7.4	7.9	7.9	7.4
Max Green Setting (Gmax), s	30.0	33.0	33.0	50.0
Max Q Clear Time (g_c+I1), s	29.9	22.6	16.4	30.0
Green Ext Time (p_c), s	0.1	1.1	0.8	6.3

Intersection Summary	
HCM 6th Ctrl Delay	26.2
HCM 6th LOS	C

Notes

User approved changes to right turn type.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th TWSC
6: Napa Vallejo Hwy (SR 221)/SR 221 & Project Access Road 04/14/2021

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	16	1487	6	6	1542
Future Vol, veh/h	18	16	1487	6	6	1542
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Yield	-	None
Storage Length	0	120	-	220	265	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	16	1517	6	6	1573

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2316	-	0	0	1517	0
Stage 1	1517	-	-	-	-	-
Stage 2	799	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	2.22	-
Pot Cap-1 Maneuver	32	0	-	-	436	-
Stage 1	167	0	-	-	-	-
Stage 2	403	0	-	-	-	-
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	32	-	-	-	436	-
Mov Cap-2 Maneuver	32	-	-	-	-	-
Stage 1	167	-	-	-	-	-
Stage 2	397	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	217.2	0	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	32	-	436	-
HCM Lane V/C Ratio	-	-	0.574	-	0.014	-
HCM Control Delay (s)	-	-	217.2	0	13.4	-
HCM Lane LOS	-	-	F	A	B	-
HCM 95th %tile Q(veh)	-	-	1.9	-	0	-

HCM 6th Signalized Intersection Summary
7: Soscol Ferry Rd/Napa Vallejo Hwy (SR 221) & SR 29/SR 29/SR 12 04/14/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	1364	257	8	1394	1099	459	84	97	1053	40	124
Future Volume (veh/h)	26	1364	257	8	1394	1099	459	84	97	1053	40	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	1406	265	8	1851	0	473	87	100	1086	41	128
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	95	1385	618	46	1355		303	318	270	986	534	452
Arrive On Green	0.05	0.39	0.39	0.03	0.36	0.00	0.17	0.17	0.17	0.29	0.29	0.29
Sat Flow, veh/h	1781	3554	1585	1781	3741	1585	1781	1870	1585	3456	1870	1585
Grp Volume(v), veh/h	27	1406	265	8	1851	0	473	87	100	1086	41	128
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1870	1585	1781	1870	1585	1728	1870	1585
Q Serve(g_s), s	2.7	71.0	22.3	0.8	66.0	0.0	31.0	7.4	10.2	52.0	2.9	11.4
Cycle Q Clear(g_c), s	2.7	71.0	22.3	0.8	66.0	0.0	31.0	7.4	10.2	52.0	2.9	11.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	95	1385	618	46	1355		303	318	270	986	534	452
V/C Ratio(X)	0.29	1.01	0.43	0.18	1.37		1.56	0.27	0.37	1.10	0.08	0.28
Avail Cap(c_a), veh/h	284	1385	618	293	1355		303	318	270	986	534	452
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	82.9	55.6	40.7	86.9	58.1	0.0	75.6	65.8	67.0	65.1	47.6	50.6
Incr Delay (d2), s/veh	0.6	27.9	0.7	0.7	169.5	0.0	267.8	0.2	0.3	60.4	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	35.9	8.7	0.4	61.9	0.0	36.4	3.5	4.1	30.5	1.3	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.5	83.5	41.4	87.6	227.6	0.0	343.4	66.0	67.3	125.5	47.6	50.7
LnGrp LOS	F	F	D	F	F		F	E	E	F	D	D
Approach Vol, veh/h		1698			1859	A		660			1255	
Approach Delay, s/veh		76.9			227.0			265.0			115.3	
Approach LOS		E			F			F			F	

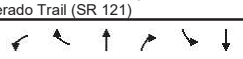
Timer - Assigned Phs	1	2	4	5	6	8
Phs Duration (G+Y+Rc), s	14.4	72.9	36.4	9.4	77.9	58.5
Change Period (Y+Rc), s	* 4.7	6.9	5.4	* 4.7	6.9	6.5
Max Green Setting (Gmax), s	* 29	66.0	31.0	* 30	66.0	52.0
Max Q Clear Time (g_c+I1), s	4.7	68.0	33.0	2.8	73.0	54.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	159.4
HCM 6th LOS	F

Notes

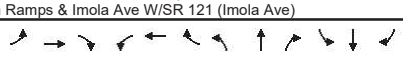
User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
1: Soscol Ave & Silverado Trail (SR 121) 04/13/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	640	16	921	441	2	671
Future Volume (veh/h)	640	16	921	441	2	671
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1870
Adj Flow Rate, veh/h	653	16	940	450	2	685
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	715	636	1578	1394	56	1546
Arrive On Green	0.40	0.40	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1781	1585	3647	1648	1	3565
Grp Volume(v), veh/h	653	16	940	450	368	319
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1648	1865	1617
Q Serve(g_s), s	22.9	0.4	13.2	3.8	0.0	9.0
Cycle Q Clear(g_c), s	22.9	0.4	13.2	3.8	9.0	9.0
Prop In Lane	1.00	1.00		1.00	0.01	
Lane Grp Cap(c), veh/h	715	636	1578	1394	883	718
V/C Ratio(X)	0.91	0.03	0.60	0.32	0.42	0.44
Avail Cap(c_a), veh/h	1215	1081	2424	1786	1319	1103
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.7	11.9	13.9	1.1	12.7	12.7
Incr Delay (d2), s/veh	5.2	0.0	0.5	0.2	0.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	0.5	4.6	4.4	3.4	2.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	23.9	12.0	14.4	1.3	13.1	13.3
LnGrp LOS	C	B	B	A	B	B
Approach Vol, veh/h	669		1390			687
Approach Delay, s/veh	23.6		10.1			13.2
Approach LOS	C		B			B
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		34.4		31.6		34.4
Change Period (Y+Rc), s		5.1		5.1		5.1
Max Green Setting (Gmax), s		45.0		45.0		45.0
Max Q Clear Time (g_c+I1), s		11.0		24.9		15.2
Green Ext Time (p_c), s		6.7		1.6		14.1
Intersection Summary						
HCM 6th Ctrl Delay			14.2			
HCM 6th LOS			B			

HCM 6th Signalized Intersection Summary
2: SR 29 South Ramps & Imola Ave W/SR 121 (Imola Ave) 04/13/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	572	81	0	420	210	0	0	0	792	0	209
Future Volume (veh/h)	0	572	81	0	420	210	0	0	0	792	0	209
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870				1870	1870	1870
Adj Flow Rate, veh/h	0	657	0	0	483	0				575	469	240
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87				0.87	0.87	0.87
Percent Heavy Veh, %	0	2	2	0	2	2				2	2	2
Cap, veh/h	0	765		0	765					819	536	274
Arrive On Green	0.00	0.41	0.00	0.00	0.41	0.00				0.46	0.46	0.46
Sat Flow, veh/h	0	1870	0	0	1870	1585				1781	1166	597
Grp Volume(v), veh/h	0	657	0	0	483	0				575	0	709
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	1870	1585				1781	0	1763
Q Serve(g_s), s	0.0	23.9	0.0	0.0	15.4	0.0				19.2	0.0	27.1
Cycle Q Clear(g_c), s	0.0	23.9	0.0	0.0	15.4	0.0				19.2	0.0	27.1
Prop In Lane	0.00		0.00	0.00		1.00				1.00		0.34
Lane Grp Cap(c), veh/h	0	765		0	765					819	0	811
V/C Ratio(X)	0.00	0.86		0.00	0.63					0.70	0.00	0.87
Avail Cap(c_a), veh/h	0	1278		0	1603					945	0	935
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	20.1	0.0	0.0	17.6	0.0				16.1	0.0	18.2
Incr Delay (d2), s/veh	0.0	3.3	0.0	0.0	0.9	0.0				2.0	0.0	8.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.0	0.0	0.0	6.1	0.0				7.5	0.0	11.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	23.4	0.0	0.0	18.5	0.0				18.1	0.0	26.6
LnGrp LOS	A	C		A	B					B	A	C
Approach Vol, veh/h		657	A		483	A					1284	
Approach Delay, s/veh		23.4			18.5						22.8	
Approach LOS		C			B						C	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		35.6		39.0		35.6						
Change Period (Y+Rc), s		5.1		* 4.7		5.1						
Max Green Setting (Gmax), s		51.0		* 40		64.0						
Max Q Clear Time (g_c+I1), s		25.9		29.1		17.4						
Green Ext Time (p_c), s		4.6		5.2		3.3						
Intersection Summary												
HCM 6th Ctrl Delay			22.1									
HCM 6th LOS			C									

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3: SR 29 North Ramps & SR 121 (Imola Ave)/SR 121

04/13/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	276	1099	0	0	507	760	126	1	259	0	0	0
Future Volume (veh/h)	276	1099	0	0	507	760	126	1	259	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	321	1278	0	0	590	0	147	1	0			
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	415	2268	0	0	1041		214	1				
Arrive On Green	0.23	0.64	0.00	0.00	0.29	0.00	0.12	0.12	0.00			
Sat Flow, veh/h	1781	3647	0	0	3647	1585	1770	12	1585			
Grp Volume(v), veh/h	321	1278	0	0	590	0	148	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1585	1782	0	1585			
Q Serve(g_s), s	7.1	8.5	0.0	0.0	5.9	0.0	3.3	0.0	0.0			
Cycle Q Clear(g_c), s	7.1	8.5	0.0	0.0	5.9	0.0	3.3	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	415	2268	0	0	1041		216	0				
V/C Ratio(X)	0.77	0.56	0.00	0.00	0.57		0.69	0.00				
Avail Cap(c_a), veh/h	1486	4235	0	0	4235		1487	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	15.0	4.3	0.0	0.0	12.6	0.0	17.7	0.0	0.0			
Incr Delay (d2), s/veh	3.1	0.2	0.0	0.0	0.5	0.0	3.8	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.6	1.2	0.0	0.0	1.9	0.0	1.4	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.1	4.5	0.0	0.0	13.1	0.0	21.5	0.0	0.0			
LnGrp LOS	B	A	A	A	B		C	A				
Approach Vol, veh/h		1599			590	A		148	A			
Approach Delay, s/veh		7.2			13.1			21.5				
Approach LOS		A			B			C				

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		31.9			14.5	17.4		10.1				
Change Period (Y+Rc), s		5.1			* 4.7	5.1		5.0				
Max Green Setting (Gmax), s		50.0			* 35	50.0		35.0				
Max Q Clear Time (g_c+I1), s		10.5			9.1	7.9		5.3				
Green Ext Time (p_c), s		12.4			0.9	4.4		0.8				

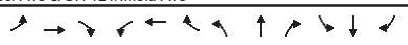
Intersection Summary	
HCM 6th Ctrl Delay	9.6
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
4: SR 221/Soscol Ave & SR 121/Imola Ave

04/13/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	269	706	184	244	22	442	931	129	55	960	148
Future Volume (veh/h)	121	269	706	184	244	22	442	931	129	55	960	148
Initial Q (Qb), veh	0	0	0	0	0	0	0	2	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	274	0	188	249	19	451	950	0	56	980	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	117	407		216	469	36	502	1342		198	1221	
Arrive On Green	0.07	0.22	0.00	0.12	0.27	0.27	0.15	0.38	0.00	0.11	0.34	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1716	131	3456	3647	0	1781	3554	1585
Grp Volume(v), veh/h	62	274	0	188	0	268	451	950	0	56	980	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1847	1728	1777	0	1781	1777	1585
Q Serve(g_s), s	4.0	16.1	0.0	12.4	0.0	14.8	15.4	27.3	0.0	3.5	30.0	0.0
Cycle Q Clear(g_c), s	4.0	16.1	0.0	12.4	0.0	14.8	15.4	27.3	0.0	3.5	30.0	0.0
Prop In Lane	1.00		1.00	1.00		0.07	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	117	407		216	0	505	502	1342		198	1221	
V/C Ratio(X)	0.53	0.67		0.87	0.00	0.53	0.90	0.71		0.28	0.80	
Avail Cap(c_a), veh/h	134	426		248	0	539	507	1342		198	1221	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.79	0.79	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.72	0.72	0.00
Uniform Delay (d), s/veh	54.3	43.0	0.0	51.8	0.0	37.1	50.4	31.8	0.0	48.9	35.7	0.0
Incr Delay (d2), s/veh	2.2	2.4	0.0	24.3	0.0	0.3	18.6	3.2	0.0	0.2	4.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	7.6	0.0	7.0	0.0	6.7	7.8	12.0	0.0	1.5	13.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.5	45.5	0.0	76.1	0.0	37.4	69.0	35.1	0.0	49.1	39.8	0.0
LnGrp LOS	E	D		E	A	D	E	D		D	D	
Approach Vol, veh/h		336	A		456			1401	A		1036	A
Approach Delay, s/veh		47.5			53.3			46.0			40.3	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.8	46.3	13.0	37.9	18.5	50.7	19.6	31.2				
Change Period (Y+Rc), s	5.4	5.1	5.1	5.1	5.1	5.4	5.1	5.1				
Max Green Setting (Gmax), s	7.6	37.7	9.0	35.0	10.0	45.3	16.7	27.3				
Max Q Clear Time (g_c+I1), s	6.0	32.0	6.0	16.8	5.5	29.3	14.4	18.1				
Green Ext Time (p_c), s	0.0	2.7	0.0	0.9	0.0	4.8	0.1	0.6				

Intersection Summary	
HCM 6th Ctrl Delay	45.4
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
Unsignalized Delay for [NBR, EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
5: SR 29/SR 121 & SR 12

04/13/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	756	580	549	1289	1394	484
Future Volume (veh/h)	756	580	549	1289	1394	484
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	796	0	578	1357	1467	509
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	802		634	2347	1498	1036
Arrive On Green	0.23	0.00	0.18	0.66	0.42	0.42
Sat Flow, veh/h	3456	1585	3456	3647	3647	1585
Grp Volume(v), veh/h	796	0	578	1357	1467	509
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1777	1777	1585
Q Serve(g_s), s	32.7	0.0	23.3	29.8	57.8	23.3
Cycle Q Clear(g_c), s	32.7	0.0	23.3	29.8	57.8	23.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	802		634	2347	1498	1036
V/C Ratio(X)	0.99		0.91	0.58	0.98	0.49
Avail Cap(c_a), veh/h	802		802	2347	1499	1036
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.5	0.0	57.0	13.3	40.5	12.6
Incr Delay (d2), s/veh	29.9	0.0	11.2	0.2	18.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.0	0.0	10.8	10.4	27.4	27.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	84.4	0.0	68.2	13.5	58.9	12.8
LnGrp LOS	F		E	B	E	B
Approach Vol, veh/h	796	A		1935	1976	
Approach Delay, s/veh	84.4			29.8	47.0	
Approach LOS	F			C	D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		101.4		40.9	34.0	67.4
Change Period (Y+Rc), s		7.4		7.9	7.9	7.4
Max Green Setting (Gmax), s		30.0		33.0	33.0	60.0
Max Q Clear Time (g_c+I1), s		31.8		34.7	25.3	59.8
Green Ext Time (p_c), s		0.0		0.0	0.8	0.1

Intersection Summary	
HCM 6th Ctrl Delay	46.3
HCM 6th LOS	D

Notes

User approved changes to right turn type.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th TWSC
6: Napa Vallejo Hwy (SR 221)/SR 221 & Project Access Road

04/13/2021

Intersection	
Int Delay, s/veh	30.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	57	38	1842	81	45	1361
Future Vol, veh/h	57	38	1842	81	45	1361
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Yield	-	None
Storage Length	0	120	-	220	265	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	58	39	1880	83	46	1389

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2667	-	0	0	1880	0
Stage 1	1880	-	-	-	-	-
Stage 2	787	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	2.22	-
Pot Cap-1 Maneuver	~ 18	0	-	-	315	-
Stage 1	106	0	-	-	-	-
Stage 2	409	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 15	-	-	-	315	-
Mov Cap-2 Maneuver	~ 15	-	-	-	-	-
Stage 1	106	-	-	-	-	-
Stage 2	349	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, $	1807.9	0	0.6
HCM LOS	F		

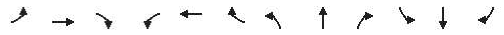
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	15	-	315	-
HCM Lane V/C Ratio	-	-	3.878	-	0.146	-
HCM Control Delay (s)	-	-	$ 1807.9	0	18.4	-
HCM Lane LOS	-	-	F	A	C	-
HCM 95th %tile Q(veh)	-	-	8.1	-	0.5	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th Signalized Intersection Summary
7: Soscol Ferry Rd/Napa Vallejo Hwy (SR 221) & SR 29/SR 12

04/13/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	1453	500	22	1621	1955	199	43	29	730	91	44
Future Volume (veh/h)	70	1453	500	22	1621	1955	199	43	29	730	91	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	73	1514	521	23	1639	0	207	45	30	760	95	46
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	1769	789	90	906		198	208	176	767	415	352
Arrive On Green	0.06	0.50	0.50	0.05	0.48	0.00	0.11	0.11	0.11	0.22	0.22	0.22
Sat Flow, veh/h	1781	3554	1585	1781	1870	3170	1781	1870	1585	3456	1870	1585
Grp Volume(v), veh/h	73	1514	521	23	1639	0	207	45	30	760	95	46
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1870	1585	1781	1870	1585	1728	1870	1585
Q Serve(g_s), s	7.9	73.9	48.7	2.5	96.0	0.0	22.0	4.3	3.4	43.5	8.3	4.6
Cycle Q Clear(g_c), s	7.9	73.9	48.7	2.5	96.0	0.0	22.0	4.3	3.4	43.5	8.3	4.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	115	1769	789	90	906		198	208	176	767	415	352
V/C Ratio(X)	0.64	0.86	0.66	0.25	1.81		1.05	0.22	0.17	0.99	0.23	0.13
Avail Cap(c_a), veh/h	261	1769	789	270	906		198	208	176	767	415	352
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	90.5	43.5	37.2	90.5	51.1	0.0	88.1	80.3	79.9	76.9	63.2	61.8
Incr Delay (d2), s/veh	2.2	4.5	2.3	0.5	368.8	0.0	77.0	0.2	0.2	30.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	32.3	18.9	1.1	135.6	0.0	14.2	2.1	1.4	22.1	3.9	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	92.7	48.1	39.5	91.0	419.9	0.0	165.1	80.5	80.0	107.1	63.3	61.9
LnGrp LOS	F	D	D	F	F		F	F	F	F	E	E
Approach Vol, veh/h		2108			1662	A		282			901	
Approach Delay, s/veh		47.5			415.4			142.6			100.1	
Approach LOS		D			F			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.5	102.9		27.4	14.8	105.6		50.5				
Change Period (Y+Rc), s	* 4.7	6.9		5.4	* 4.7	6.9		6.5				
Max Green Setting (Gmax), s	* 29	96.0		22.0	* 30	96.0		44.0				
Max Q Clear Time (g_c+I1), s	10.9	98.0		24.0	4.5	75.9		45.5				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	15.4		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		185.9	
HCM 6th LOS		F	

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
1: Soscol Ave & Silverado Trail (SR 121)

04/14/2021

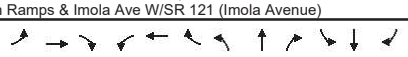


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	524	16	901	580	2	912
Future Volume (veh/h)	524	16	901	580	2	912
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1870
Adj Flow Rate, veh/h	540	16	929	598	2	940
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	609	542	1729	1365	61	1694
Arrive On Green	0.34	0.34	0.49	0.49	0.49	0.49
Sat Flow, veh/h	1781	1585	3647	1648	1	3567
Grp Volume(v), veh/h	540	16	929	598	505	437
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1648	1866	1617
Q Serve(g_s), s	17.0	0.4	10.8	5.8	0.0	11.3
Cycle Q Clear(g_c), s	17.0	0.4	10.8	5.8	11.3	11.3
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	609	542	1729	1365	968	787
V/C Ratio(X)	0.89	0.03	0.54	0.44	0.52	0.56
Avail Cap(c_a), veh/h	1350	1201	2693	1813	1467	1225
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.5	13.0	10.6	1.4	10.7	10.7
Incr Delay (d2), s/veh	3.5	0.0	0.4	0.3	0.6	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	0.4	3.5	5.1	3.9	3.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.9	13.0	11.0	1.7	11.3	11.6
LnGrp LOS	C	B	B	A	B	B
Approach Vol, veh/h	556		1527			942
Approach Delay, s/veh	21.7		7.3			11.5
Approach LOS	C		A			B

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		34.0		25.4		34.0
Change Period (Y+Rc), s		5.1		5.1		5.1
Max Green Setting (Gmax), s		45.0		45.0		45.0
Max Q Clear Time (g_c+I1), s		13.3		19.0		12.8
Green Ext Time (p_c), s		9.9		1.3		16.1

Intersection Summary			
HCM 6th Ctrl Delay		11.3	
HCM 6th LOS		B	

HCM 6th Signalized Intersection Summary
2: SR 29 South Ramps & Imola Ave W/SR 121 (Imola Avenue) 04/14/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	438	104	0	534	191	0	0	0	733	0	219
Future Volume (veh/h)	0	438	104	0	534	191	0	0	0	733	0	219
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870				1870	1870	1870
Adj Flow Rate, veh/h	0	447	0	0	545	0				486	367	223
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	0	2	2				2	2	2
Cap, veh/h	0	695		0	695					784	479	291
Arrive On Green	0.00	0.37	0.00	0.00	0.37	0.00				0.44	0.44	0.44
Sat Flow, veh/h	0	1870	0	0	1870	1585				1781	1089	662
Grp Volume(v), veh/h	0	447	0	0	545	0				486	0	590
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	1870	1585				1781	0	1751
Q Serve(g_s), s	0.0	10.3	0.0	0.0	13.4	0.0				10.9	0.0	14.8
Cycle Q Clear(g_c), s	0.0	10.3	0.0	0.0	13.4	0.0				10.9	0.0	14.8
Prop In Lane	0.00		0.00	0.00		1.00				1.00		0.38
Lane Grp Cap(c), veh/h	0	695		0	695					784	0	770
V/C Ratio(X)	0.00	0.64		0.00	0.78					0.62	0.00	0.77
Avail Cap(c_a), veh/h	0	1833		0	2300					1355	0	1333
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	13.5	0.0	0.0	14.5	0.0				11.2	0.0	12.3
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	2.0	0.0				0.8	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.7	0.0	0.0	5.0	0.0				3.7	0.0	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	14.5	0.0	0.0	16.5	0.0				12.0	0.0	13.9
LnGrp LOS	A	B		A	B					B	A	B
Approach Vol, veh/h		447	A		545	A					1076	
Approach Delay, s/veh		14.5			16.5						13.1	
Approach LOS		B			B						B	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	24.4		27.6		24.4
Change Period (Y+Rc), s	5.1		* 4.7		5.1
Max Green Setting (Gmax), s	51.0		* 40		64.0
Max Q Clear Time (g_c+I1), s	12.3		16.8		15.4
Green Ext Time (p_c), s	3.0		6.1		3.9

Intersection Summary		
HCM 6th Ctrl Delay		14.3
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3: SR 29 North Ramps & SR 121 (Imola Avenue)/SR 121 04/14/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	1022	0	0	624	777	131	4	319	0	0	0
Future Volume (veh/h)	123	1022	0	0	624	777	131	4	319	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	128	1065	0	0	650	0	136	4	0			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	183	2093	0	0	1239		200	6				
Arrive On Green	0.10	0.59	0.00	0.00	0.35	0.00	0.12	0.12	0.00			
Sat Flow, veh/h	1781	3647	0	0	3647	1585	1733	51	1585			
Grp Volume(v), veh/h	128	1065	0	0	650	0	140	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1585	1784	0	1585			
Q Serve(g_s), s	2.4	6.0	0.0	0.0	5.0	0.0	2.6	0.0	0.0			
Cycle Q Clear(g_c), s	2.4	6.0	0.0	0.0	5.0	0.0	2.6	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.97		1.00			
Lane Grp Cap(c), veh/h	183	2093	0	0	1239		206	0				
V/C Ratio(X)	0.70	0.51	0.00	0.00	0.52		0.68	0.00				
Avail Cap(c_a), veh/h	1823	5197	0	0	5197		1826	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	14.8	4.1	0.0	0.0	8.9	0.0	14.5	0.0	0.0			
Incr Delay (d2), s/veh	4.8	0.2	0.0	0.0	0.3	0.0	3.9	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.0	0.7	0.0	0.0	1.3	0.0	1.1	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.6	4.3	0.0	0.0	9.2	0.0	18.4	0.0	0.0			
LnGrp LOS	B	A	A	A	A		B	A				
Approach Vol, veh/h		1193			650	A		140	A			
Approach Delay, s/veh		6.0			9.2			18.4				
Approach LOS		A			A			B				

Timer - Assigned Phs	2			5	6		8
Phs Duration (G+Y+Rc), s	25.2			8.2	17.0		9.0
Change Period (Y+Rc), s	5.1			* 4.7	5.1		5.0
Max Green Setting (Gmax), s	50.0			* 35	50.0		35.0
Max Q Clear Time (g_c+I1), s	8.0			4.4	7.0		4.6
Green Ext Time (p_c), s	9.5			0.3	4.9		0.8

Intersection Summary		
HCM 6th Ctrl Delay		7.9
HCM 6th LOS		A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
4: SR 221/Soscol Ave & SR 121/Imola Ave

04/14/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	188	285	422	105	264	49	649	1018	192	41	841	185
Future Volume (veh/h)	188	285	422	105	264	49	649	1018	192	41	841	185
Initial Q (Qb), veh	0	0	0	0	11	0	3	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	101	306	0	113	284	48	698	1095	0	44	904	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	124	478		137	431	54	734	1487		160	1051	
Arrive On Green	0.07	0.25	0.00	0.08	0.26	0.26	0.21	0.42	0.00	0.09	0.30	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1559	264	3456	3647	0	1781	3554	1585
Grp Volume(v), veh/h	101	306	0	113	0	332	698	1095	0	44	904	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1823	1728	1777	0	1781	1777	1585
Q Serve(g_s), s	7.3	19.0	0.0	8.1	0.0	21.4	25.9	33.7	0.0	3.0	31.1	0.0
Cycle Q Clear(g_c), s	7.3	19.0	0.0	8.1	0.0	21.4	25.9	33.7	0.0	3.0	31.1	0.0
Prop In Lane	1.00		1.00	1.00		0.14	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	124	478		137	0	482	734	1487		160	1051	
V/C Ratio(X)	0.82	0.64		0.83	0.00	0.69	0.95	0.74		0.28	0.86	
Avail Cap(c_a), veh/h	136	478		160	0	491	734	1487		165	1061	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.69	0.69	0.00
Uniform Delay (d), s/veh	59.7	43.0	0.0	59.2	0.0	44.5	50.8	31.8	0.0	55.2	43.2	0.0
Incr Delay (d2), s/veh	23.7	1.9	0.0	22.3	0.0	3.3	22.1	3.3	0.0	0.2	6.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	12.1	2.5	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	8.9	0.0	4.5	0.0	13.3	13.8	14.8	0.0	1.4	14.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.4	44.9	0.0	81.5	0.0	59.9	75.3	35.1	0.0	55.5	49.8	0.0
LnGrp LOS	F	D		F	A	E	E	D		E	D	
Approach Vol, veh/h		407	A		445			1793	A		948	A
Approach Delay, s/veh		54.4			65.4			50.7			50.0	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	43.9	14.1	39.0	17.1	59.8	15.1	38.0
Change Period (Y+Rc), s	5.4	5.1	5.1	5.1	5.1	5.4	5.1	5.1
Max Green Setting (Gmax), s	27.6	36.8	9.9	35.0	10.0	54.4	11.7	33.2
Max Q Clear Time (g_c+I1), s	27.9	33.1	9.3	23.4	5.0	35.7	10.1	21.0
Green Ext Time (p_c), s	0.0	1.8	0.0	1.0	0.0	6.4	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	52.8
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR, EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
5: SR 29/SR 121 & SR 12

04/14/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	715	546	512	1452	1059	593
Future Volume (veh/h)	715	546	512	1452	1059	593
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	730	0	522	1482	1081	605
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	814		604	2181	1283	946
Arrive On Green	0.24	0.00	0.17	0.61	0.36	0.36
Sat Flow, veh/h	3456	1585	3456	3647	3647	1585
Grp Volume(v), veh/h	730	0	522	1482	1081	605
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1777	1777	1585
Q Serve(g_s), s	20.8	0.0	14.9	28.0	28.3	25.3
Cycle Q Clear(g_c), s	20.8	0.0	14.9	28.0	28.3	25.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	814		604	2181	1283	946
V/C Ratio(X)	0.90		0.86	0.68	0.84	0.64
Avail Cap(c_a), veh/h	1124		1124	2181	1751	1154
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.6	0.0	40.7	13.0	29.8	13.4
Incr Delay (d2), s/veh	6.1	0.0	1.5	0.7	2.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	0.0	6.0	8.9	11.3	24.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	43.7	0.0	42.2	13.7	32.1	13.9
LnGrp LOS	D		D	B	C	B
Approach Vol, veh/h	730	A		2004	1686	
Approach Delay, s/veh	43.7			21.1	25.6	
Approach LOS	D			C	C	

Timer - Assigned Phs	2	4	5	6
Phs Duration (G+Y+Rc), s	69.7	31.8	25.6	44.0
Change Period (Y+Rc), s	7.4	7.9	7.9	7.4
Max Green Setting (Gmax), s	30.0	33.0	33.0	50.0
Max Q Clear Time (g_c+I1), s	30.0	22.8	16.9	30.3
Green Ext Time (p_c), s	0.0	1.1	0.8	6.3

Intersection Summary	
HCM 6th Ctrl Delay	26.5
HCM 6th LOS	C

Notes

User approved changes to right turn type.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th TWSC
6: Napa Vallejo Hwy (SR 221)/SR 221 & Project Access Road 04/14/2021

Intersection	
Int Delay, s/veh	9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	45	41	1487	28	24	1542
Future Vol, veh/h	45	41	1487	28	24	1542
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Yield	-	None
Storage Length	0	120	-	220	265	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	42	1517	29	24	1573

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2352	-	0	0	1517	0
Stage 1	1517	-	-	-	-	-
Stage 2	835	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	2.22	-
Pot Cap-1 Maneuver	~ 30	0	-	-	436	-
Stage 1	167	0	-	-	-	-
Stage 2	386	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 28	-	-	-	436	-
Mov Cap-2 Maneuver	~ 28	-	-	-	-	-
Stage 1	167	-	-	-	-	-
Stage 2	365	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 617.6	0	0.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	28	-	436	-
HCM Lane V/C Ratio	-	-	1.64	-	0.056	-
HCM Control Delay (s)	-	-	$ 617.6	0	13.7	-
HCM Lane LOS	-	-	F	A	B	-
HCM 95th %tile Q(veh)	-	-	5.4	-	0.2	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th Signalized Intersection Summary
7: Soscol Ferry Rd/Napa Vallejo Hwy (SR 221) & SR 29/SR 29/SR 12 04/14/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	1364	257	8	1394	1101	459	84	107	1067	40	137
Future Volume (veh/h)	36	1364	257	8	1394	1101	459	84	107	1067	40	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	1406	265	8	1854	0	473	87	110	1100	41	141
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	1401	625	46	1345		301	316	268	979	530	449
Arrive On Green	0.06	0.39	0.39	0.03	0.36	0.00	0.17	0.17	0.17	0.28	0.28	0.28
Sat Flow, veh/h	1781	3554	1585	1781	3741	1585	1781	1870	1585	3456	1870	1585
Grp Volume(v), veh/h	37	1406	265	8	1854	0	473	87	110	1100	41	141
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1870	1585	1781	1870	1585	1728	1870	1585
Q Serve(g_s), s	3.7	72.3	22.3	0.8	66.0	0.0	31.0	7.4	11.4	52.0	2.9	12.8
Cycle Q Clear(g_c), s	3.7	72.3	22.3	0.8	66.0	0.0	31.0	7.4	11.4	52.0	2.9	12.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	107	1401	625	46	1345		301	316	268	979	530	449
V/C Ratio(X)	0.35	1.00	0.42	0.18	1.38		1.57	0.28	0.41	1.12	0.08	0.31
Avail Cap(c_a), veh/h	281	1401	625	291	1345		301	316	268	979	530	449
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	82.8	55.6	40.4	87.5	58.8	0.0	76.3	66.5	68.1	65.8	48.2	51.7
Incr Delay (d2), s/veh	0.7	25.0	0.7	0.7	174.9	0.0	272.9	0.2	0.4	69.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	35.9	8.7	0.4	62.8	0.0	36.7	3.5	4.6	31.6	1.4	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.5	80.5	41.1	88.2	233.7	0.0	349.2	66.6	68.5	134.8	48.2	51.9
LnGrp LOS	F	F	D	F	F		F	E	E	F	D	D
Approach Vol, veh/h		1708			1862	A		670			1282	
Approach Delay, s/veh		74.5			233.1			266.4			122.9	
Approach LOS		E			F			F			F	

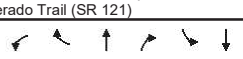
Timer - Assigned Phs	1	2	4	5	6	8
Phs Duration (G+Y+Rc), s	15.7	72.9	36.4	9.4	79.2	58.5
Change Period (Y+Rc), s	* 4.7	6.9	5.4	* 4.7	6.9	6.5
Max Green Setting (Gmax), s	* 29	66.0	31.0	* 30	66.0	52.0
Max Q Clear Time (g_c+I1), s	5.7	68.0	33.0	2.8	74.3	54.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	162.5
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

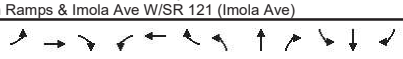
HCM 6th Signalized Intersection Summary
1: Soscol Ave & Silverado Trail (SR 121) 04/13/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	997	25	1128	539	3	904
Future Volume (veh/h)	997	25	1128	539	3	904
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1870
Adj Flow Rate, veh/h	1017	26	1151	550	3	922
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	975	867	1245	1480	37	1165
Arrive On Green	0.55	0.55	0.35	0.35	0.35	0.35
Sat Flow, veh/h	1781	1585	3647	1648	1	3409
Grp Volume(v), veh/h	1017	26	1151	550	495	430
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1648	1708	1617
Q Serve(g_s), s	54.5	0.8	31.0	5.1	1.1	23.5
Cycle Q Clear(g_c), s	54.5	0.8	31.0	5.1	32.1	23.5
Prop In Lane	1.00	1.00		1.00	0.01	
Lane Grp Cap(c), veh/h	975	867	1245	1480	635	567
V/C Ratio(X)	1.04	0.03	0.92	0.37	0.78	0.76
Avail Cap(c_a), veh/h	975	867	1245	1480	642	573
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.6	10.4	31.1	0.8	28.6	28.6
Incr Delay (d2), s/veh	40.8	0.0	11.8	0.2	6.4	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	31.3	0.0	14.7	12.3	11.1	9.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	63.3	10.4	42.8	1.0	35.0	34.8
LnGrp LOS	F	B	D	A	D	C
Approach Vol, veh/h	1043		1701			925
Approach Delay, s/veh	62.0		29.3			34.9
Approach LOS	E		C			C
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		40.0		59.6		40.0
Change Period (Y+Rc), s		5.1		5.1		5.1
Max Green Setting (Gmax), s		35.3		54.5		21.3
Max Q Clear Time (g_c+I1), s		34.1		56.5		33.0
Green Ext Time (p_c), s		0.8		0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	40.0
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary
2: SR 29 South Ramps & Imola Ave W/SR 121 (Imola Ave) 04/13/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	573	81	0	718	359	0	0	0	795	0	214
Future Volume (veh/h)	0	573	81	0	718	359	0	0	0	795	0	214
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870				1870	1870	1870
Adj Flow Rate, veh/h	0	659	0	0	825	0				580	468	246
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87				0.87	0.87	0.87
Percent Heavy Veh, %	0	2	2	0	2	2				2	2	2
Cap, veh/h	0	875		0	875					718	465	245
Arrive On Green	0.00	0.47	0.00	0.00	0.47	0.00				0.40	0.40	0.40
Sat Flow, veh/h	0	1870	0	0	1870	1585				1781	1154	607
Grp Volume(v), veh/h	0	659	0	0	825	0				580	0	714
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	1870	1585				1781	0	1761
Q Serve(g_s), s	0.0	28.9	0.0	0.0	42.0	0.0				28.8	0.0	40.3
Cycle Q Clear(g_c), s	0.0	28.9	0.0	0.0	42.0	0.0				28.8	0.0	40.3
Prop In Lane	0.00		0.00	0.00		1.00				1.00		0.34
Lane Grp Cap(c), veh/h	0	875		0	875					718	0	710
V/C Ratio(X)	0.00	0.75		0.00	0.94					0.81	0.00	1.01
Avail Cap(c_a), veh/h	0	933		0	933					718	0	710
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	0.94	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	21.9	0.0	0.0	25.3	0.0				26.4	0.0	29.9
Incr Delay (d2), s/veh	0.0	3.3	0.0	0.0	18.5	0.0				6.8	0.0	35.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	12.7	0.0	0.0	21.8	0.0				13.1	0.0	23.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	25.1	0.0	0.0	43.8	0.0				33.3	0.0	65.1
LnGrp LOS	A	C		A	D					C	A	F
Approach Vol, veh/h		659	A		825	A					1294	
Approach Delay, s/veh		25.1			43.8						50.8	
Approach LOS		C			D						D	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		51.9		45.0		51.9						
Change Period (Y+Rc), s		5.1		* 4.7		5.1						
Max Green Setting (Gmax), s		49.9		* 40		49.9						
Max Q Clear Time (g_c+I1), s		30.9		42.3		44.0						
Green Ext Time (p_c), s		4.2		0.0		2.8						

Intersection Summary	
HCM 6th Ctrl Delay	42.7
HCM 6th LOS	D

Notes
User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3: SR 29 North Ramps & SR 121 (Imola Ave)/SR 121

04/13/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	363	1083	0	0	507	834	126	2	259	0	0	0
Future Volume (veh/h)	363	1083	0	0	507	834	126	2	259	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	422	1259	0	0	590	0	147	2	0			
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	941	2830	0	0	772		180	2				
Arrive On Green	0.53	0.80	0.00	0.00	0.22	0.00	0.10	0.10	0.00			
Sat Flow, veh/h	1781	3647	0	0	3647	1585	1759	24	1585			
Grp Volume(v), veh/h	422	1259	0	0	590	0	149	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1585	1782	0	1585			
Q Serve(g_s), s	14.6	11.2	0.0	0.0	15.6	0.0	8.2	0.0	0.0			
Cycle Q Clear(g_c), s	14.6	11.2	0.0	0.0	15.6	0.0	8.2	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	941	2830	0	0	772		183	0				
V/C Ratio(X)	0.45	0.44	0.00	0.00	0.76		0.82	0.00				
Avail Cap(c_a), veh/h	941	2830	0	0	1631		250	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.42	0.42	0.00	0.00	0.55	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	14.6	3.2	0.0	0.0	36.7	0.0	43.9	0.0	0.0			
Incr Delay (d2), s/veh	0.1	0.2	0.0	0.0	0.9	0.0	13.8	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	6.6	2.6	0.0	0.0	6.7	0.0	4.3	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.7	3.4	0.0	0.0	37.6	0.0	57.7	0.0	0.0			
LnGrp LOS	B	A	A	A	D		E	A				
Approach Vol, veh/h		1681			590	A		149	A			
Approach Delay, s/veh		6.3			37.6			57.7				
Approach LOS		A			D			E				

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		84.7			57.9	26.8		15.3				
Change Period (Y+Rc), s		5.1			5.1	* 5.1		5.0				
Max Green Setting (Gmax), s		75.9			25.3	* 46		14.0				
Max Q Clear Time (g_c+I1), s		13.2			16.6	17.6		10.2				
Green Ext Time (p_c), s		13.1			0.9	4.2		0.2				

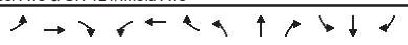
Intersection Summary	
HCM 6th Ctrl Delay	17.1
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
4: SR 221/Soscol Ave & SR 121/Imola Ave

04/13/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	289	741	191	253	23	550	1166	163	82	1408	220
Future Volume (veh/h)	130	289	741	191	253	23	550	1166	163	82	1408	220
Initial Q (Qb), veh	0	0	0	0	0	0	0	2	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	66	295	0	195	258	20	561	1190	0	84	1437	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	104	318		210	392	30	571	1777		130	1450	
Arrive On Green	0.06	0.17	0.00	0.12	0.23	0.23	0.17	0.50	0.00	0.07	0.41	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1714	133	3456	3647	0	1781	3554	1585
Grp Volume(v), veh/h	66	295	0	195	0	278	561	1190	0	84	1437	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1846	1728	1777	0	1781	1777	1585
Q Serve(g_s), s	5.4	23.1	0.0	16.1	0.0	20.3	24.1	37.4	0.0	6.8	59.8	0.0
Cycle Q Clear(g_c), s	5.4	23.1	0.0	16.1	0.0	20.3	24.1	37.4	0.0	6.8	59.8	0.0
Prop In Lane	1.00		1.00	1.00		0.07	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	104	318		210	0	423	571	1777		130	1450	
V/C Ratio(X)	0.63	0.93		0.93	0.00	0.66	0.98	0.67		0.64	0.99	
Avail Cap(c_a), veh/h	108	333		210	0	434	571	1777		130	1450	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	68.5	60.9	0.0	65.0	0.0	52.1	61.9	28.1	0.0	67.1	43.8	0.0
Incr Delay (d2), s/veh	9.8	30.0	0.0	43.1	0.0	2.7	32.9	2.0	0.0	8.2	21.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	13.6	0.0	9.8	0.0	9.7	13.0	16.2	0.0	3.4	30.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.3	90.8	0.0	108.1	0.0	54.8	94.8	30.1	0.0	75.2	65.4	0.0
LnGrp LOS	E	F		F	A	D	F	C		E	E	
Approach Vol, veh/h		361	A		473			1751	A		1521	A
Approach Delay, s/veh		88.5			76.8			50.8			65.9	
Approach LOS		F			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	30.0	65.8	13.8	39.2	16.0	79.8	22.6	30.4				
Change Period (Y+Rc), s	5.4	5.1	5.1	5.1	5.1	5.4	5.1	5.1				
Max Green Setting (Gmax), s	24.6	60.7	9.0	35.0	10.9	74.4	17.5	26.5				
Max Q Clear Time (g_c+I1), s	29.1	61.8	7.4	22.3	8.8	39.4	18.1	25.1				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.8	0.0	8.2	0.0	0.2				

Intersection Summary	
HCM 6th Ctrl Delay	62.7
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.
Unsignalized Delay for [NBR, EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
5: SR 29/SR 121 & SR 12

04/13/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	768	574	658	1571	1607	558
Future Volume (veh/h)	768	574	658	1571	1607	558
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	808	0	693	1654	1692	587
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	756		652	2414	1557	1041
Arrive On Green	0.22	0.00	0.19	0.68	0.44	0.44
Sat Flow, veh/h	3456	1585	3456	3647	3647	1585
Grp Volume(v), veh/h	808	0	693	1654	1692	587
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1777	1777	1585
Q Serve(g_s), s	32.8	0.0	28.3	41.9	65.7	30.3
Cycle Q Clear(g_c), s	32.8	0.0	28.3	41.9	65.7	30.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	756		652	2414	1557	1041
V/C Ratio(X)	1.07		1.06	0.69	1.09	0.56
Avail Cap(c_a), veh/h	756		652	2414	1557	1041
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.6	0.0	60.8	14.4	42.1	14.0
Incr Delay (d2), s/veh	52.9	0.0	53.2	0.7	50.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.3	0.0	16.8	14.7	37.7	33.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	111.5	0.0	114.0	15.1	92.5	14.6
LnGrp LOS	F		F	B	F	B
Approach Vol, veh/h	808	A		2347	2279	
Approach Delay, s/veh	111.5			44.3	72.5	
Approach LOS	F			D	E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		109.3		40.7	36.2	73.1
Change Period (Y+Rc), s		7.4		7.9	7.9	7.4
Max Green Setting (Gmax), s		101.9		32.8	28.3	65.7
Max Q Clear Time (g_c+I1), s		43.9		34.8	30.3	67.7
Green Ext Time (p_c), s		9.5		0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	66.1
HCM 6th LOS	E

Notes

User approved changes to right turn type.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
6: Napa Vallejo Hwy (SR 221)/SR 221 & Project Access Road

08/05/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	20	22	2225	42	28	2207
Future Volume (veh/h)	20	22	2225	42	28	2207
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	0	2270	0	29	2252
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	41		3039		197	3039
Arrive On Green	0.02	0.00	0.86	0.00	0.86	0.86
Sat Flow, veh/h	1781	1585	3647	1585	165	3647
Grp Volume(v), veh/h	20	0	2270	0	29	2252
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	165	1777
Q Serve(g_s), s	0.8	0.0	18.9	0.0	6.3	18.5
Cycle Q Clear(g_c), s	0.8	0.0	18.9	0.0	25.2	18.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	41		3039		197	3039
V/C Ratio(X)	0.49		0.75		0.15	0.74
Avail Cap(c_a), veh/h	435		3039		197	3039
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	0.0	2.1	0.0	7.2	2.1
Incr Delay (d2), s/veh	8.9	0.0	1.7	0.0	1.6	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.7	0.0	0.2	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	44.5	0.0	3.9	0.0	8.8	3.8
LnGrp LOS	D		A		A	A
Approach Vol, veh/h	20	A	2270	A		2281
Approach Delay, s/veh	44.5		3.9			3.8
Approach LOS	D		A			A

Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		67.5				67.5	6.2
Change Period (Y+Rc), s		4.5				4.5	4.5
Max Green Setting (Gmax), s		63.0				63.0	18.0
Max Q Clear Time (g_c+I1), s		20.9				27.2	2.8
Green Ext Time (p_c), s		27.3				25.7	0.0

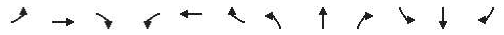
Intersection Summary	
HCM 6th Ctrl Delay	4.0
HCM 6th LOS	A

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
7: Soscol Ferry Rd/Napa Vallejo Hwy (SR 221) & SR 29/SR 12

04/13/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	1946	669	24	1753	2095	245	53	20	1136	147	57
Future Volume (veh/h)	74	1946	669	24	1753	2095	245	53	20	1136	147	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	77	2027	697	25	1759	0	255	55	21	1183	153	59
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	149	1684	751	108	843		186	195	165	705	382	323
Arrive On Green	0.08	0.47	0.47	0.06	0.45	0.00	0.10	0.10	0.10	0.20	0.20	0.20
Sat Flow, veh/h	1781	3554	1585	1781	1870	3170	1781	1870	1585	3456	1870	1585
Grp Volume(v), veh/h	77	2027	697	25	1759	0	255	55	21	1183	153	59
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1870	1585	1781	1870	1585	1728	1870	1585
Q Serve(g_s), s	6.2	70.8	61.7	2.0	67.4	0.0	15.6	4.1	1.8	30.5	10.6	4.6
Cycle Q Clear(g_c), s	6.2	70.8	61.7	2.0	67.4	0.0	15.6	4.1	1.8	30.5	10.6	4.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	149	1684	751	108	843		186	195	165	705	382	323
V/C Ratio(X)	0.52	1.20	0.93	0.23	2.09		1.37	0.28	0.13	1.68	0.40	0.18
Avail Cap(c_a), veh/h	155	1684	751	167	843		186	195	165	705	382	323
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.6	39.3	36.9	66.9	41.0	0.0	66.9	61.8	60.8	59.5	51.6	49.2
Incr Delay (d2), s/veh	1.0	97.6	17.9	0.4	492.6	0.0	197.5	0.3	0.1	311.1	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	51.4	25.9	0.9	144.3	0.0	17.1	1.9	0.7	43.3	4.9	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.7	136.9	54.8	67.3	533.6	0.0	264.4	62.1	60.9	370.6	51.8	49.3
LnGrp LOS	E	F	D	E	F		F	E	E	F	D	D
Approach Vol, veh/h		2801			1784	A		331			1395	
Approach Delay, s/veh		114.6			527.1			217.9			322.1	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.2	74.3		21.0	13.7	77.7		37.0				
Change Period (Y+Rc), s	* 4.7	6.9		5.4	* 4.7	6.9		6.5				
Max Green Setting (Gmax), s	* 13	67.4		15.6	* 14	66.4		30.5				
Max Q Clear Time (g_c+I1), s	9.2	69.4		17.6	4.0	72.8		32.5				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	282.5
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
1: Soscol Ave & Silverado Trail (SR 121)

04/14/2021

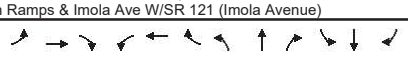


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	734	23	1045	670	2	1109
Future Volume (veh/h)	734	23	1045	670	2	1109
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1870
Adj Flow Rate, veh/h	757	24	1077	691	2	1143
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	803	715	1446	1414	51	1416
Arrive On Green	0.45	0.45	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1781	1585	3647	1648	1	3566
Grp Volume(v), veh/h	757	24	1077	691	613	532
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1648	1865	1617
Q Serve(g_s), s	29.1	0.6	18.5	7.4	0.0	20.8
Cycle Q Clear(g_c), s	29.1	0.6	18.5	7.4	20.8	20.8
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	803	715	1446	1414	809	658
V/C Ratio(X)	0.94	0.03	0.74	0.49	0.76	0.81
Avail Cap(c_a), veh/h	916	815	1446	1414	904	741
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.8	11.0	18.1	1.2	18.8	18.8
Incr Delay (d2), s/veh	16.0	0.0	2.3	0.4	3.7	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.9	0.7	7.2	10.5	8.8	8.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.9	11.0	20.4	1.6	22.5	25.3
LnGrp LOS	C	B	C	A	C	C
Approach Vol, veh/h	781		1768			1145
Approach Delay, s/veh	34.1		13.1			23.8
Approach LOS	C		B			C

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		34.3		37.5		34.3
Change Period (Y+Rc), s		5.1		5.1		5.1
Max Green Setting (Gmax), s		32.9		36.9		18.9
Max Q Clear Time (g_c+I1), s		22.8		31.1		20.5
Green Ext Time (p_c), s		6.4		1.2		0.0

Intersection Summary	
HCM 6th Ctrl Delay	20.9
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary
2: SR 29 South Ramps & Imola Ave W/SR 121 (Imola Avenue) 04/14/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	459	109	0	540	193	0	0	0	723	0	219
Future Volume (veh/h)	0	459	109	0	540	193	0	0	0	723	0	219
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870				1870	1870	1870
Adj Flow Rate, veh/h	0	468	0	0	551	0				480	360	223
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	0	2	2				2	2	2
Cap, veh/h	0	665		0	665					559	339	210
Arrive On Green	0.00	0.36	0.00	0.00	0.36	0.00				0.31	0.31	0.31
Sat Flow, veh/h	0	1870	0	0	1870	1585				1781	1081	669
Grp Volume(v), veh/h	0	468	0	0	551	0				480	0	583
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	1870	1585				1781	0	1750
Q Serve(g_s), s	0.0	10.8	0.0	0.0	13.5	0.0				12.7	0.0	15.7
Cycle Q Clear(g_c), s	0.0	10.8	0.0	0.0	13.5	0.0				12.7	0.0	15.7
Prop In Lane	0.00		0.00	0.00		1.00				1.00		0.38
Lane Grp Cap(c), veh/h	0	665		0	665					559	0	549
V/C Ratio(X)	0.00	0.70		0.00	0.83					0.86	0.00	1.06
Avail Cap(c_a), veh/h	0	916		0	916					559	0	549
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	0.91	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	13.8	0.0	0.0	14.7	0.0				16.1	0.0	17.2
Incr Delay (d2), s/veh	0.0	1.5	0.0	0.0	10.5	0.0				12.6	0.0	55.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.9	0.0	0.0	6.5	0.0				6.3	0.0	13.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	15.3	0.0	0.0	25.2	0.0				28.7	0.0	72.7
LnGrp LOS	A	B		A	C					C	A	F
Approach Vol, veh/h		468	A		551	A					1063	
Approach Delay, s/veh		15.3			25.2						52.9	
Approach LOS		B			C						D	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	22.9	20.4	22.9
Change Period (Y+Rc), s	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	24.5	* 16	24.5
Max Q Clear Time (g_c+I1), s	12.8	17.7	15.5
Green Ext Time (p_c), s	2.2	0.0	2.3

Intersection Summary		
HCM 6th Ctrl Delay	37.1	
HCM 6th LOS	D	

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3: SR 29 North Ramps & SR 121 (Imola Avenue)/SR 121 04/14/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	1036	0	0	637	778	148	5	361	0	0	0
Future Volume (veh/h)	126	1036	0	0	637	778	148	5	361	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	131	1079	0	0	664	0	154	5	0			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	544	2432	0	0	984		196	6				
Arrive On Green	0.31	0.68	0.00	0.00	0.28	0.00	0.11	0.11	0.00			
Sat Flow, veh/h	1781	3647	0	0	3647	1585	1728	56	1585			
Grp Volume(v), veh/h	131	1079	0	0	664	0	159	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1585	1784	0	1585			
Q Serve(g_s), s	2.8	6.9	0.0	0.0	8.3	0.0	4.3	0.0	0.0			
Cycle Q Clear(g_c), s	2.8	6.9	0.0	0.0	8.3	0.0	4.3	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.97		1.00			
Lane Grp Cap(c), veh/h	544	2432	0	0	984		203	0				
V/C Ratio(X)	0.24	0.44	0.00	0.00	0.68		0.78	0.00				
Avail Cap(c_a), veh/h	544	2432	0	0	1628		250	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.57	0.57	0.00	0.00	0.36	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	13.0	3.6	0.0	0.0	16.1	0.0	21.6	0.0	0.0			
Incr Delay (d2), s/veh	0.1	0.3	0.0	0.0	0.3	0.0	12.3	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.9	1.1	0.0	0.0	2.9	0.0	2.3	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.1	3.9	0.0	0.0	16.4	0.0	33.9	0.0	0.0			
LnGrp LOS	B	A	A	A	B		C	A				
Approach Vol, veh/h		1210			664	A		159	A			
Approach Delay, s/veh		4.9			16.4			33.9				
Approach LOS		A			B			C				

Timer - Assigned Phs	2	5	6	8
Phs Duration (G+Y+Rc), s	39.3	20.4	18.9	10.7
Change Period (Y+Rc), s	5.1	5.1	* 5.1	5.0
Max Green Setting (Gmax), s	32.9	5.3	* 23	7.0
Max Q Clear Time (g_c+I1), s	8.9	4.8	10.3	6.3
Green Ext Time (p_c), s	8.3	0.0	3.5	0.0

Intersection Summary	
HCM 6th Ctrl Delay	10.9
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
4: SR 221/Soscol Ave & SR 121/Imola Ave

04/14/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	241	366	528	123	310	57	704	1119	213	53	1082	240
Future Volume (veh/h)	241	366	528	123	310	57	704	1119	213	53	1082	240
Initial Q (Qb), veh	0	0	0	0	11	0	3	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	130	394	0	132	333	56	757	1203	0	57	1163	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	428		145	420	14	751	1722		120	1189	
Arrive On Green	0.08	0.23	0.00	0.08	0.23	0.23	0.22	0.49	0.00	0.07	0.33	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1561	262	3456	3647	0	1781	3554	1585
Grp Volume(v), veh/h	130	394	0	132	0	389	757	1203	0	57	1163	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1823	1728	1777	0	1781	1777	1585
Q Serve(g_s), s	10.9	30.9	0.0	11.0	0.0	31.2	32.6	39.5	0.0	4.6	48.5	0.0
Cycle Q Clear(g_c), s	10.9	30.9	0.0	11.0	0.0	31.2	32.6	39.5	0.0	4.6	48.5	0.0
Prop In Lane	1.00		1.00	1.00		0.14	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	137	428		145	0	434	751	1722		120	1189	
V/C Ratio(X)	0.95	0.92		0.91	0.00	0.90	1.01	0.70		0.48	0.98	
Avail Cap(c_a), veh/h	137	428		145	0	426	752	1724		120	1190	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	69.0	56.5	0.0	68.4	0.0	57.5	58.7	30.1	0.0	67.4	49.4	0.0
Incr Delay (d2), s/veh	62.0	24.8	0.0	48.2	0.0	20.9	34.8	2.4	0.0	1.1	21.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	44.8	14.4	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	17.4	0.0	7.0	0.0	24.2	19.3	17.3	0.0	2.1	24.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	131.0	81.3	0.0	116.6	0.0	123.2	107.9	32.5	0.0	68.5	70.7	0.0
LnGrp LOS	F	F		F	A	F	F	C		E	E	
Approach Vol, veh/h		524	A		521			1960	A		1220	A
Approach Delay, s/veh		93.6			121.5			61.6			70.6	
Approach LOS		F			F			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	38.0	55.3	16.6	40.0	15.2	78.1	17.3	39.3
Change Period (Y+Rc), s	5.4	5.1	5.1	5.1	5.1	5.4	5.1	5.1
Max Green Setting (Gmax), s	32.6	50.2	11.5	35.0	10.1	72.7	12.2	34.3
Max Q Clear Time (g_c+I1), s	34.6	50.5	12.9	33.2	6.6	41.5	13.0	32.9
Green Ext Time (p_c), s	0.0	0.0	0.0	0.3	0.0	8.6	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	75.5
HCM 6th LOS	E

Notes

Unsignalized Delay for [NBR, EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
5: SR 29/SR 121 & SR 12

04/14/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	749	561	579	1685	1484	831
Future Volume (veh/h)	749	561	579	1685	1484	831
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	764	0	591	1719	1514	848
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	774		596	2369	1556	1049
Arrive On Green	0.22	0.00	0.17	0.67	0.44	0.44
Sat Flow, veh/h	3456	1585	3456	3647	3647	1585
Grp Volume(v), veh/h	764	0	591	1719	1514	848
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1777	1777	1585
Q Serve(g_s), s	30.8	0.0	23.9	43.7	58.3	54.4
Cycle Q Clear(g_c), s	30.8	0.0	23.9	43.7	58.3	54.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	774		596	2369	1556	1049
V/C Ratio(X)	0.99		0.99	0.73	0.97	0.81
Avail Cap(c_a), veh/h	774		596	2374	1560	1051
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.1	0.0	57.8	15.0	38.5	17.2
Incr Delay (d2), s/veh	29.1	0.0	34.8	1.0	16.6	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.9	0.0	12.9	15.2	27.1	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	83.2	0.0	92.6	16.0	55.1	21.7
LnGrp LOS	F		F	B	E	C
Approach Vol, veh/h	764	A		2310	2362	
Approach Delay, s/veh	83.2			35.6	43.1	
Approach LOS	F			D	D	

Timer - Assigned Phs	2	4	5	6
Phs Duration (G+Y+Rc), s	100.6	39.2	32.0	68.6
Change Period (Y+Rc), s	7.4	7.9	7.9	7.4
Max Green Setting (Gmax), s	93.4	31.3	24.1	61.4
Max Q Clear Time (g_c+I1), s	45.7	32.8	25.9	60.3
Green Ext Time (p_c), s	10.1	0.0	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	45.6
HCM 6th LOS	D

Notes

User approved changes to right turn type.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
6: Napa Vallejo Hwy (SR 221)/SR 221 & Project Access Road 08/05/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	18	16	1828	7	8	2053
Future Volume (veh/h)	18	16	1828	7	8	2053
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	0	1865	0	8	2095
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	39		2928		278	2928
Arrive On Green	0.02	0.00	0.82	0.00	0.82	0.82
Sat Flow, veh/h	1781	1585	3647	1585	246	3647
Grp Volume(v), veh/h	18	0	1865	0	8	2095
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	246	1777
Q Serve(g_s), s	0.6	0.0	11.3	0.0	0.7	14.7
Cycle Q Clear(g_c), s	0.6	0.0	11.3	0.0	12.1	14.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	39		2928		278	2928
V/C Ratio(X)	0.47		0.64		0.03	0.72
Avail Cap(c_a), veh/h	550		2928		278	2928
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	28.2	0.0	1.9	0.0	4.1	2.2
Incr Delay (d2), s/veh	8.5	0.0	1.1	0.0	0.2	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.4	0.0	0.0	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	36.6	0.0	3.0	0.0	4.3	3.7
LnGrp LOS	D		A		A	A
Approach Vol, veh/h	18	A	1865	A		2103
Approach Delay, s/veh	36.6		3.0			3.7
Approach LOS	D		A			A

Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		52.5			52.5	5.8
Change Period (Y+Rc), s		4.5			4.5	4.5
Max Green Setting (Gmax), s		48.0			48.0	18.0
Max Q Clear Time (g_c+I1), s		13.3			16.7	2.6
Green Ext Time (p_c), s		18.1			20.4	0.0

Intersection Summary			
HCM 6th Ctrl Delay		3.5	
HCM 6th LOS		A	

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
7: Soscol Ferry Rd/Napa Vallejo Hwy (SR 221) & SR 29/SR 29/SR 12 04/14/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	1732	326	9	1641	1293	535	98	113	1362	52	160
Future Volume (veh/h)	33	1732	326	9	1641	1293	535	98	113	1362	52	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	1786	336	9	2179	0	552	101	116	1404	54	165
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	118	1377	614	52	1310		335	352	298	812	440	373
Arrive On Green	0.07	0.39	0.39	0.03	0.35	0.00	0.19	0.19	0.19	0.24	0.24	0.24
Sat Flow, veh/h	1781	3554	1585	1781	3741	1585	1781	1870	1585	3456	1870	1585
Grp Volume(v), veh/h	34	1786	336	9	2179	0	552	101	116	1404	54	165
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1870	1585	1781	1870	1585	1728	1870	1585
Q Serve(g_s), s	2.7	56.8	24.2	0.7	51.4	0.0	27.6	6.8	9.4	34.5	3.3	13.0
Cycle Q Clear(g_c), s	2.7	56.8	24.2	0.7	51.4	0.0	27.6	6.8	9.4	34.5	3.3	13.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	118	1377	614	52	1310		335	352	298	812	440	373
V/C Ratio(X)	0.29	1.30	0.55	0.17	1.66		1.65	0.29	0.39	1.73	0.12	0.44
Avail Cap(c_a), veh/h	158	1377	614	170	1310		335	352	298	812	440	373
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.2	44.9	34.9	69.5	47.7	0.0	59.6	51.1	52.2	56.1	44.2	47.9
Incr Delay (d2), s/veh	0.5	139.3	1.3	0.6	301.8	0.0	304.5	0.2	0.3	332.9	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	50.2	9.2	0.3	77.6	0.0	40.3	3.1	3.7	52.0	1.5	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.7	184.2	36.3	70.1	349.5	0.0	364.1	51.3	52.5	389.0	44.3	48.2
LnGrp LOS	E	F	D	E	F		F	D	D	F	D	D
Approach Vol, veh/h		2156			2188	A		769			1623	
Approach Delay, s/veh		159.3			348.3			276.0			342.9	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.4	58.3		33.0	9.0	63.7		41.0				
Change Period (Y+Rc), s	* 4.7	6.9		5.4	* 4.7	6.9		6.5				
Max Green Setting (Gmax), s	* 13	51.4		27.6	* 14	50.4		34.5				
Max Q Clear Time (g_c+I1), s	4.7	53.4		29.6	2.7	58.8		36.5				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		278.3	
HCM 6th LOS		F	

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
1: Soscol Ave & Silverado Trail (SR 121) 04/13/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	657	16	924	444	2	688
Future Volume (veh/h)	657	16	924	444	2	688
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1870
Adj Flow Rate, veh/h	670	16	943	453	2	702
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	730	649	1562	1400	54	1530
Arrive On Green	0.41	0.41	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1781	1585	3647	1648	1	3565
Grp Volume(v), veh/h	670	16	943	453	377	327
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1648	1865	1617
Q Serve(g_s), s	24.1	0.4	13.7	3.9	0.0	9.6
Cycle Q Clear(g_c), s	24.1	0.4	13.7	3.9	9.6	9.6
Prop In Lane	1.00	1.00		1.00	0.01	
Lane Grp Cap(c), veh/h	730	649	1562	1400	873	711
V/C Ratio(X)	0.92	0.02	0.60	0.32	0.43	0.46
Avail Cap(c_a), veh/h	1184	1053	2362	1771	1286	1075
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.9	11.9	14.5	1.1	13.3	13.3
Incr Delay (d2), s/veh	6.4	0.0	0.5	0.2	0.5	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	0.0	4.9	4.7	3.6	3.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.3	11.9	15.0	1.2	13.8	14.0
LnGrp LOS	C	B	B	A	B	B
Approach Vol, veh/h	686		1396			704
Approach Delay, s/veh	25.0		10.5			13.9
Approach LOS	C		B			B
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		34.9		32.8		34.9
Change Period (Y+Rc), s		5.1		5.1		5.1
Max Green Setting (Gmax), s		45.0		45.0		45.0
Max Q Clear Time (g_c+I1), s		11.6		26.1		15.7
Green Ext Time (p_c), s		6.9		1.6		14.1
Intersection Summary						
HCM 6th Ctrl Delay			14.9			
HCM 6th LOS			B			

HCM 6th Signalized Intersection Summary
2: SR 29 South Ramps & Imola Ave W/SR 121 (Imola Ave) 04/13/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	572	81	0	420	210	0	0	0	844	0	209
Future Volume (veh/h)	0	572	81	0	420	210	0	0	0	844	0	209
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870				1870	1870	1870
Adj Flow Rate, veh/h	0	657	0	0	483	0				605	511	240
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87				0.87	0.87	0.87
Percent Heavy Veh, %	0	2	2	0	2	2				2	2	2
Cap, veh/h	0	759		0	759					836	565	265
Arrive On Green	0.00	0.41	0.00	0.00	0.41	0.00				0.47	0.47	0.47
Sat Flow, veh/h	0	1870	0	0	1870	1585				1781	1203	565
Grp Volume(v), veh/h	0	657	0	0	483	0				605	0	751
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	1870	1585				1781	0	1769
Q Serve(g_s), s	0.0	25.2	0.0	0.0	16.2	0.0				21.4	0.0	30.7
Cycle Q Clear(g_c), s	0.0	25.2	0.0	0.0	16.2	0.0				21.4	0.0	30.7
Prop In Lane	0.00		0.00	0.00		1.00				1.00		0.32
Lane Grp Cap(c), veh/h	0	759		0	759					836	0	830
V/C Ratio(X)	0.00	0.87		0.00	0.64					0.72	0.00	0.90
Avail Cap(c_a), veh/h	0	1217		0	1528					900	0	894
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	21.3	0.0	0.0	18.7	0.0				16.7	0.0	19.2
Incr Delay (d2), s/veh	0.0	4.0	0.0	0.0	0.9	0.0				2.7	0.0	12.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.8	0.0	0.0	6.6	0.0				8.6	0.0	14.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	25.3	0.0	0.0	19.6	0.0				19.4	0.0	31.2
LnGrp LOS	A	C		A	B					B	A	C
Approach Vol, veh/h		657	A		483	A					1356	
Approach Delay, s/veh		25.3			19.6						25.9	
Approach LOS		C			B						C	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		36.9		41.5		36.9						
Change Period (Y+Rc), s		5.1		* 4.7		5.1						
Max Green Setting (Gmax), s		51.0		* 40		64.0						
Max Q Clear Time (g_c+I1), s		27.2		32.7		18.2						
Green Ext Time (p_c), s		4.6		4.1		3.3						
Intersection Summary												
HCM 6th Ctrl Delay			24.5									
HCM 6th LOS			C									

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3: SR 29 North Ramps & SR 121 (Imola Ave)/SR 121

04/13/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	276	1151	0	0	507	769	126	1	259	0	0	0
Future Volume (veh/h)	276	1151	0	0	507	769	126	1	259	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	321	1338	0	0	590	0	147	1	0			
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	415	2268	0	0	1041		214	1				
Arrive On Green	0.23	0.64	0.00	0.00	0.29	0.00	0.12	0.12	0.00			
Sat Flow, veh/h	1781	3647	0	0	3647	1585	1770	12	1585			
Grp Volume(v), veh/h	321	1338	0	0	590	0	148	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1585	1782	0	1585			
Q Serve(g_s), s	7.1	9.2	0.0	0.0	5.9	0.0	3.3	0.0	0.0			
Cycle Q Clear(g_c), s	7.1	9.2	0.0	0.0	5.9	0.0	3.3	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	415	2268	0	0	1041		216	0				
V/C Ratio(X)	0.77	0.59	0.00	0.00	0.57		0.69	0.00				
Avail Cap(c_a), veh/h	1486	4235	0	0	4235		1487	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	15.0	4.4	0.0	0.0	12.6	0.0	17.7	0.0	0.0			
Incr Delay (d2), s/veh	3.1	0.2	0.0	0.0	0.5	0.0	3.8	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.6	1.3	0.0	0.0	1.9	0.0	1.4	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.1	4.7	0.0	0.0	13.1	0.0	21.5	0.0	0.0			
LnGrp LOS	B	A	A	A	B		C	A				
Approach Vol, veh/h		1659			590	A		148	A			
Approach Delay, s/veh		7.3			13.1			21.5				
Approach LOS		A			B			C				

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		31.9			14.5	17.4		10.1				
Change Period (Y+Rc), s		5.1			* 4.7	5.1		5.0				
Max Green Setting (Gmax), s		50.0			* 35	50.0		35.0				
Max Q Clear Time (g_c+I1), s		11.2			9.1	7.9		5.3				
Green Ext Time (p_c), s		13.2			0.9	4.4		0.8				

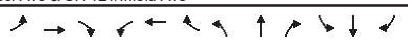
Intersection Summary	
HCM 6th Ctrl Delay	9.6
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
4: SR 221/Soscol Ave & SR 121/Imola Ave

04/13/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	269	758	184	244	22	451	933	129	55	992	148
Future Volume (veh/h)	121	269	758	184	244	22	451	933	129	55	992	148
Initial Q (Qb), veh	0	0	0	0	0	0	0	2	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	274	0	188	249	19	460	952	0	56	1012	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	117	407		216	469	36	507	1342		198	1216	
Arrive On Green	0.07	0.22	0.00	0.12	0.27	0.27	0.15	0.38	0.00	0.11	0.34	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1716	131	3456	3647	0	1781	3554	1585
Grp Volume(v), veh/h	62	274	0	188	0	268	460	952	0	56	1012	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1847	1728	1777	0	1781	1777	1585
Q Serve(g_s), s	4.0	16.1	0.0	12.4	0.0	14.8	15.7	27.3	0.0	3.5	31.4	0.0
Cycle Q Clear(g_c), s	4.0	16.1	0.0	12.4	0.0	14.8	15.7	27.3	0.0	3.5	31.4	0.0
Prop In Lane	1.00		1.00	1.00		0.07	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	117	407		216	0	505	507	1342		198	1216	
V/C Ratio(X)	0.53	0.67		0.87	0.00	0.53	0.91	0.71		0.28	0.83	
Avail Cap(c_a), veh/h	134	426		248	0	539	507	1342		198	1216	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.77	0.77	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.71	0.71	0.00
Uniform Delay (d), s/veh	54.3	43.0	0.0	51.8	0.0	37.1	50.4	31.9	0.0	48.9	36.3	0.0
Incr Delay (d2), s/veh	2.1	2.4	0.0	24.3	0.0	0.3	20.1	3.2	0.0	0.2	4.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	7.6	0.0	7.0	0.0	6.7	8.1	12.1	0.0	1.5	14.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.4	45.4	0.0	76.1	0.0	37.4	70.5	35.1	0.0	49.1	41.2	0.0
LnGrp LOS	E	D		E	A	D	E	D		D	D	
Approach Vol, veh/h		336	A		456			1412	A		1068	A
Approach Delay, s/veh		47.5			53.3			46.7			41.6	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.0	46.2	13.0	37.9	18.5	50.7	19.6	31.2				
Change Period (Y+Rc), s	5.4	5.1	5.1	5.1	5.1	5.4	5.1	5.1				
Max Green Setting (Gmax), s	7.6	37.7	9.0	35.0	10.0	45.3	16.7	27.3				
Max Q Clear Time (g_c+I1), s	7.5	33.4	6.0	16.8	5.5	29.3	14.4	18.1				
Green Ext Time (p_c), s	0.0	2.2	0.0	0.9	0.0	4.8	0.1	0.6				

Intersection Summary	
HCM 6th Ctrl Delay	46.0
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
Unsignalized Delay for [NBR, EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
5: SR 29/SR 121 & SR 12

04/13/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	756	621	553	1289	1394	484
Future Volume (veh/h)	756	621	553	1289	1394	484
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	796	0	582	1357	1467	509
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	800		637	2349	1496	1035
Arrive On Green	0.23	0.00	0.18	0.66	0.42	0.42
Sat Flow, veh/h	3456	1585	3456	3647	3647	1585
Grp Volume(v), veh/h	796	0	582	1357	1467	509
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1777	1777	1585
Q Serve(g_s), s	32.8	0.0	23.5	29.8	58.0	23.4
Cycle Q Clear(g_c), s	32.8	0.0	23.5	29.8	58.0	23.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	800		637	2349	1496	1035
V/C Ratio(X)	0.99		0.91	0.58	0.98	0.49
Avail Cap(c_a), veh/h	800		800	2349	1497	1035
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.6	0.0	57.0	13.2	40.7	12.7
Incr Delay (d2), s/veh	30.4	0.0	11.4	0.2	18.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.0	0.0	10.9	10.4	27.5	27.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	85.0	0.0	68.4	13.5	59.3	12.9
LnGrp LOS	F		E	B	E	B
Approach Vol, veh/h	796	A		1939	1976	
Approach Delay, s/veh	85.0			30.0	47.3	
Approach LOS	F			C	D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		101.6		40.9	34.2	67.4
Change Period (Y+Rc), s		7.4		7.9	7.9	7.4
Max Green Setting (Gmax), s		30.0		33.0	33.0	60.0
Max Q Clear Time (g_c+I1), s		31.8		34.8	25.5	60.0
Green Ext Time (p_c), s		0.0		0.0	0.7	0.0

Intersection Summary	
HCM 6th Ctrl Delay	46.5
HCM 6th LOS	D

Notes

User approved changes to right turn type.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th TWSC
6: Napa Vallejo Hwy (SR 221)/SR 221 & Project Access Road

04/13/2021

Intersection	
Int Delay, s/veh	41.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	46	48	1842	147	129	1361
Future Vol, veh/h	46	48	1842	147	129	1361
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Yield	-	None
Storage Length	0	120	-	220	265	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	49	1880	150	132	1389

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2839	-	0	0	1880	0
Stage 1	1880	-	-	-	-	-
Stage 2	959	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	2.22	-
Pot Cap-1 Maneuver	~ 14	0	-	-	315	-
Stage 1	106	0	-	-	-	-
Stage 2	333	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 8	-	-	-	315	-
Mov Cap-2 Maneuver	~ 8	-	-	-	-	-
Stage 1	106	-	-	-	-	-
Stage 2	193	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, $	3095.3	0	2.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	8	-	315	-
HCM Lane V/C Ratio	-	-	5.867	-	0.418	-
HCM Control Delay (s)	-	-	$ 3095.3	0	24.4	-
HCM Lane LOS	-	-	F	A	C	-
HCM 95th %tile Q(veh)	-	-	7.3	-	2	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th Signalized Intersection Summary
7: Soscol Ferry Rd/Napa Vallejo Hwy (SR 221) & SR 29/SR 12

04/13/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	1453	500	22	1621	1937	199	43	72	715	91	48
Future Volume (veh/h)	111	1453	500	22	1621	1937	199	43	72	715	91	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	116	1514	521	23	1627	0	207	45	75	745	95	50
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	141	1796	801	90	891		194	204	173	755	408	346
Arrive On Green	0.08	0.51	0.51	0.05	0.48	0.00	0.11	0.11	0.11	0.22	0.22	0.22
Sat Flow, veh/h	1781	3554	1585	1781	1870	3170	1781	1870	1585	3456	1870	1585
Grp Volume(v), veh/h	116	1514	521	23	1627	0	207	45	75	745	95	50
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1870	1585	1781	1870	1585	1728	1870	1585
Q Serve(g_s), s	12.9	74.0	48.8	2.5	96.0	0.0	22.0	4.4	8.9	43.3	8.4	5.1
Cycle Q Clear(g_c), s	12.9	74.0	48.8	2.5	96.0	0.0	22.0	4.4	8.9	43.3	8.4	5.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	141	1796	801	90	891		194	204	173	755	408	346
V/C Ratio(X)	0.82	0.84	0.65	0.26	1.83		1.06	0.22	0.43	0.99	0.23	0.14
Avail Cap(c_a), veh/h	256	1796	801	265	891		194	204	173	755	408	346
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	91.3	42.9	36.7	92.1	52.7	0.0	89.7	81.9	83.9	78.5	64.8	63.6
Incr Delay (d2), s/veh	4.4	4.0	2.1	0.6	376.0	0.0	82.6	0.2	0.6	29.4	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	32.2	18.9	1.2	136.1	0.0	14.5	2.1	3.6	22.0	4.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	95.8	46.9	38.8	92.6	428.8	0.0	172.3	82.1	84.6	107.9	65.0	63.6
LnGrp LOS	F	D	D	F	F		F	F	F	F	E	E
Approach Vol, veh/h		2151			1650	A		327			890	
Approach Delay, s/veh		47.6			424.1			139.8			100.8	
Approach LOS		D			F			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.7	102.9		27.4	14.8	108.8		50.5				
Change Period (Y+Rc), s	* 4.7	6.9		5.4	* 4.7	6.9		6.5				
Max Green Setting (Gmax), s	* 29	96.0		22.0	* 30	96.0		44.0				
Max Q Clear Time (g_c+I1), s	15.9	98.0		24.0	4.5	76.0		45.3				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	15.4		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			186.8									
HCM 6th LOS			F									

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
1: Soscol Ave & Silverado Trail (SR 121)

04/14/2021

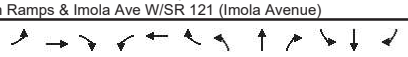


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	16	917	596	8	914
Future Volume (veh/h)	0	16	917	596	8	914
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1870
Adj Flow Rate, veh/h	0	16	945	614	8	942
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	66	58	2451	1198	102	2382
Arrive On Green	0.00	0.04	0.69	0.69	0.69	0.69
Sat Flow, veh/h	1781	1585	3647	1648	6	3539
Grp Volume(v), veh/h	0	16	945	614	506	444
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1648	1843	1617
Q Serve(g_s), s	0.0	0.4	4.2	6.1	0.0	4.4
Cycle Q Clear(g_c), s	0.0	0.4	4.2	6.1	4.3	4.4
Prop In Lane	1.00	1.00		1.00	0.02	
Lane Grp Cap(c), veh/h	66	58	2451	1198	1369	1115
V/C Ratio(X)	0.00	0.27	0.39	0.51	0.37	0.40
Avail Cap(c_a), veh/h	2149	1912	4288	2050	2269	1951
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	17.5	2.4	2.2	2.5	2.5
Incr Delay (d2), s/veh	0.0	1.9	0.1	0.5	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.1	0.3	0.2	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	19.3	2.6	2.7	2.7	2.8
LnGrp LOS	A	B	A	A	A	A
Approach Vol, veh/h	16		1559			950
Approach Delay, s/veh	19.3		2.6			2.7
Approach LOS	B		A			A

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		30.8		6.5		30.8
Change Period (Y+Rc), s		5.1		5.1		5.1
Max Green Setting (Gmax), s		45.0		45.0		45.0
Max Q Clear Time (g_c+I1), s		6.4		2.4		8.1
Green Ext Time (p_c), s		10.9		0.0		17.7

Intersection Summary						
HCM 6th Ctrl Delay			2.8			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary
2: SR 29 South Ramps & Imola Ave W/SR 121 (Imola Avenue) 04/14/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	438	104	0	534	191	0	0	0	739	0	219
Future Volume (veh/h)	0	438	104	0	534	191	0	0	0	739	0	219
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870				1870	1870	1870
Adj Flow Rate, veh/h	0	447	0	0	545	0				488	372	223
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	0	2	2				2	2	2
Cap, veh/h	0	694		0	694					787	484	290
Arrive On Green	0.00	0.37	0.00	0.00	0.37	0.00				0.44	0.44	0.44
Sat Flow, veh/h	0	1870	0	0	1870	1585				1781	1095	657
Grp Volume(v), veh/h	0	447	0	0	545	0				488	0	595
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	1870	1585				1781	0	1752
Q Serve(g_s), s	0.0	10.4	0.0	0.0	13.6	0.0				11.0	0.0	15.0
Cycle Q Clear(g_c), s	0.0	10.4	0.0	0.0	13.6	0.0				11.0	0.0	15.0
Prop In Lane	0.00		0.00	0.00		1.00				1.00		0.37
Lane Grp Cap(c), veh/h	0	694		0	694					787	0	774
V/C Ratio(X)	0.00	0.64		0.00	0.79					0.62	0.00	0.77
Avail Cap(c_a), veh/h	0	1819		0	2283					1345	0	1323
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	13.6	0.0	0.0	14.6	0.0				11.2	0.0	12.4
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	2.0	0.0				0.8	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.7	0.0	0.0	5.0	0.0				3.7	0.0	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	14.6	0.0	0.0	16.6	0.0				12.0	0.0	14.0
LnGrp LOS	A	B		A	B					B	A	B
Approach Vol, veh/h		447	A		545	A					1083	
Approach Delay, s/veh		14.6			16.6						13.1	
Approach LOS		B			B						B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	24.6	27.9	24.6
Change Period (Y+Rc), s	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	51.0	* 40	64.0
Max Q Clear Time (g_c+I1), s	12.4	17.0	15.6
Green Ext Time (p_c), s	3.0	6.1	3.9

Intersection Summary		
HCM 6th Ctrl Delay	14.4	
HCM 6th LOS	B	

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3: SR 29 North Ramps & SR 121 (Imola Avenue)/SR 121 04/14/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	1028	0	0	624	828	131	4	319	0	0	0
Future Volume (veh/h)	123	1028	0	0	624	828	131	4	319	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	128	1071	0	0	650	0	136	4	0			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	183	2093	0	0	1239		200	6				
Arrive On Green	0.10	0.59	0.00	0.00	0.35	0.00	0.12	0.12	0.00			
Sat Flow, veh/h	1781	3647	0	0	3647	1585	1733	51	1585			
Grp Volume(v), veh/h	128	1071	0	0	650	0	140	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1585	1784	0	1585			
Q Serve(g_s), s	2.4	6.1	0.0	0.0	5.0	0.0	2.6	0.0	0.0			
Cycle Q Clear(g_c), s	2.4	6.1	0.0	0.0	5.0	0.0	2.6	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.97		1.00			
Lane Grp Cap(c), veh/h	183	2093	0	0	1239		206	0				
V/C Ratio(X)	0.70	0.51	0.00	0.00	0.52		0.68	0.00				
Avail Cap(c_a), veh/h	1823	5197	0	0	5197		1826	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	14.8	4.1	0.0	0.0	8.9	0.0	14.5	0.0	0.0			
Incr Delay (d2), s/veh	4.8	0.2	0.0	0.0	0.3	0.0	3.9	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	1.3	0.0	1.1	0.0	0.0				
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.6	4.3	0.0	0.0	9.2	0.0	18.4	0.0	0.0			
LnGrp LOS	B	A	A	A	A		B	A				
Approach Vol, veh/h		1199			650	A		140	A			
Approach Delay, s/veh		6.0			9.2			18.4				
Approach LOS		A			A			B				

Timer - Assigned Phs	2	5	6	8
Phs Duration (G+Y+Rc), s	25.2	8.2	17.0	9.0
Change Period (Y+Rc), s	5.1	* 4.7	5.1	5.0
Max Green Setting (Gmax), s	50.0	* 35	50.0	35.0
Max Q Clear Time (g_c+I1), s	8.1	4.4	7.0	4.6
Green Ext Time (p_c), s	9.6	0.3	4.9	0.8

Intersection Summary	
HCM 6th Ctrl Delay	7.9
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
4: SR 221/Soscol Ave & SR 121/Imola Ave

04/14/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	188	285	428	105	264	49	700	1050	192	41	845	185
Future Volume (veh/h)	188	285	428	105	264	49	700	1050	192	41	845	185
Initial Q (Qb), veh	0	0	0	0	11	0	3	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	101	306	0	113	284	48	753	1129	0	44	909	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	124	484		137	458	54	734	1487		155	1041	
Arrive On Green	0.07	0.25	0.00	0.08	0.26	0.26	0.21	0.42	0.00	0.09	0.30	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1559	264	3456	3647	0	1781	3554	1585
Grp Volume(v), veh/h	101	306	0	113	0	332	753	1129	0	44	909	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1823	1728	1777	0	1781	1777	1585
Q Serve(g_s), s	7.3	19.0	0.0	8.1	0.0	21.4	27.6	35.2	0.0	3.0	31.3	0.0
Cycle Q Clear(g_c), s	7.3	19.0	0.0	8.1	0.0	21.4	27.6	35.2	0.0	3.0	31.3	0.0
Prop In Lane	1.00		1.00	1.00		0.14	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	124	484		137	0	482	734	1487		155	1041	
V/C Ratio(X)	0.82	0.63		0.83	0.00	0.69	1.03	0.76		0.28	0.87	
Avail Cap(c_a), veh/h	136	478		160	0	491	734	1487		165	1061	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.85	0.85	0.00
Uniform Delay (d), s/veh	59.7	42.7	0.0	59.2	0.0	44.5	51.2	32.2	0.0	55.6	43.7	0.0
Incr Delay (d2), s/veh	23.7	1.8	0.0	22.3	0.0	3.3	40.1	3.7	0.0	0.3	8.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	12.1	14.7	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	8.9	0.0	4.5	0.0	13.3	17.4	15.5	0.0	1.4	15.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.4	44.5	0.0	81.5	0.0	59.9	106.0	35.9	0.0	55.9	52.4	0.0
LnGrp LOS	F	D		F	A	E	F	D		E	D	
Approach Vol, veh/h		407	A		445			1882	A		953	A
Approach Delay, s/veh		54.1			65.4			64.0			52.6	
Approach LOS		D			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	43.9	14.1	39.0	17.1	59.8	15.1	38.0
Change Period (Y+Rc), s	5.4	5.1	5.1	5.1	5.1	5.4	5.1	5.1
Max Green Setting (Gmax), s	27.6	36.8	9.9	35.0	10.0	54.4	11.7	33.2
Max Q Clear Time (g_c+I1), s	29.6	33.3	9.3	23.4	5.0	37.2	10.1	21.0
Green Ext Time (p_c), s	0.0	1.7	0.0	1.0	0.0	6.4	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	60.1
HCM 6th LOS	E

Notes

Unsignalized Delay for [NBR, EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
5: SR 29/SR 121 & SR 12

04/14/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	715	551	554	1452	1059	593
Future Volume (veh/h)	715	551	554	1452	1059	593
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	730	0	565	1482	1081	605
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	810		645	2203	1273	939
Arrive On Green	0.23	0.00	0.19	0.62	0.36	0.36
Sat Flow, veh/h	3456	1585	3456	3647	3647	1585
Grp Volume(v), veh/h	730	0	565	1482	1081	605
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1777	1777	1585
Q Serve(g_s), s	21.6	0.0	16.7	28.6	29.5	26.4
Cycle Q Clear(g_c), s	21.6	0.0	16.7	28.6	29.5	26.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	810		645	2203	1273	939
V/C Ratio(X)	0.90		0.88	0.67	0.85	0.64
Avail Cap(c_a), veh/h	1085		1085	2203	1690	1126
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.1	0.0	41.6	13.0	31.1	14.1
Incr Delay (d2), s/veh	7.0	0.0	2.2	0.7	2.8	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.3	0.0	6.9	9.2	11.9	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	46.0	0.0	43.8	13.7	33.9	14.7
LnGrp LOS	D		D	B	C	B
Approach Vol, veh/h	730	A		2047	1686	
Approach Delay, s/veh	46.0			22.0	27.0	
Approach LOS	D			C	C	

Timer - Assigned Phs	2	4	5	6
Phs Duration (G+Y+Rc), s	72.6	32.5	27.5	45.1
Change Period (Y+Rc), s	7.4	7.9	7.9	7.4
Max Green Setting (Gmax), s	30.0	33.0	33.0	50.0
Max Q Clear Time (g_c+I1), s	30.6	23.6	18.7	31.5
Green Ext Time (p_c), s	0.0	1.1	0.9	6.2

Intersection Summary	
HCM 6th Ctrl Delay	27.8
HCM 6th LOS	C

Notes

User approved changes to right turn type.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th TWSC
6: Napa Vallejo Hwy (SR 221)/SR 221 & Project Access Road 04/14/2021

Intersection	
Int Delay, s/veh	80.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	128	124	1487	36	34	1542
Future Vol, veh/h	128	124	1487	36	34	1542
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Yield	-	None
Storage Length	0	120	-	220	265	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	131	127	1517	37	35	1573

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2374	-	0	0	1517	0
Stage 1	1517	-	-	-	-	-
Stage 2	857	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	2.22	-
Pot Cap-1 Maneuver	~ 29	0	-	-	436	-
Stage 1	167	0	-	-	-	-
Stage 2	376	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 27	-	-	-	436	-
Mov Cap-2 Maneuver	~ 27	-	-	-	-	-
Stage 1	167	-	-	-	-	-
Stage 2	346	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, $	2019.5	0	0.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	27	-	436	-
HCM Lane V/C Ratio	-	-	4.837	-	0.08	-
HCM Control Delay (s)	-	-	$ 2019.5	0	14	-
HCM Lane LOS	-	-	F	A	B	-
HCM 95th %tile Q(veh)	-	-	16	-	0.3	-

Notes
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th Signalized Intersection Summary
7: Soscol Ferry Rd/Napa Vallejo Hwy (SR 221) & SR 29/SR 29/SR 12 04/14/2021

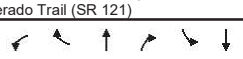
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	1364	257	8	1394	1099	459	84	112	1108	40	179
Future Volume (veh/h)	41	1364	257	8	1394	1099	459	84	112	1108	40	179
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	1406	265	8	1851	0	473	87	115	1142	41	185
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	111	1406	627	45	1342		300	315	267	977	529	448
Arrive On Green	0.06	0.40	0.40	0.03	0.36	0.00	0.17	0.17	0.17	0.28	0.28	0.28
Sat Flow, veh/h	1781	3554	1585	1781	3741	1585	1781	1870	1585	3456	1870	1585
Grp Volume(v), veh/h	42	1406	265	8	1851	0	473	87	115	1142	41	185
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1870	1585	1781	1870	1585	1728	1870	1585
Q Serve(g_s), s	4.2	72.8	22.3	0.8	66.0	0.0	31.0	7.5	12.0	52.0	3.0	17.4
Cycle Q Clear(g_c), s	4.2	72.8	22.3	0.8	66.0	0.0	31.0	7.5	12.0	52.0	3.0	17.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	111	1406	627	45	1342		300	315	267	977	529	448
V/C Ratio(X)	0.38	1.00	0.42	0.18	1.38		1.58	0.28	0.43	1.17	0.08	0.41
Avail Cap(c_a), veh/h	281	1406	627	290	1342		300	315	267	977	529	448
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	82.8	55.6	40.4	87.7	59.0	0.0	76.5	66.7	68.6	66.0	48.4	53.6
Incr Delay (d2), s/veh	0.8	24.0	0.6	0.7	175.5	0.0	274.6	0.2	0.4	87.3	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	35.9	8.7	0.4	62.8	0.0	36.8	3.5	4.8	34.1	1.4	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.6	79.6	41.0	88.4	234.4	0.0	351.1	66.9	69.0	153.3	48.4	53.8
LnGrp LOS	F	F	D	F	F		F	E	E	F	D	D
Approach Vol, veh/h		1713			1859	A		675			1368	
Approach Delay, s/veh		73.8			233.8			266.4			136.7	
Approach LOS		E			F			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.2	72.9		36.4	9.4	79.7		58.5				
Change Period (Y+Rc), s	* 4.7	6.9		5.4	* 4.7	6.9		6.5				
Max Green Setting (Gmax), s	* 29	66.0		31.0	* 30	66.0		52.0				
Max Q Clear Time (g_c+I1), s	6.2	68.0		33.0	2.8	74.8		54.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	165.2
HCM 6th LOS	F

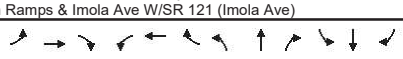
Notes
User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
1: Soscol Ave & Silverado Trail (SR 121) 04/13/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	662	16	926	446	2	693
Future Volume (veh/h)	662	16	926	446	2	693
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1870
Adj Flow Rate, veh/h	676	16	945	455	2	707
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	735	654	1557	1403	54	1525
Arrive On Green	0.41	0.41	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1781	1585	3647	1648	1	3565
Grp Volume(v), veh/h	676	16	945	455	380	329
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1648	1865	1617
Q Serve(g_s), s	24.6	0.4	13.9	3.9	0.0	9.8
Cycle Q Clear(g_c), s	24.6	0.4	13.9	3.9	9.8	9.8
Prop In Lane	1.00	1.00		1.00	0.01	
Lane Grp Cap(c), veh/h	735	654	1557	1403	870	709
V/C Ratio(X)	0.92	0.02	0.61	0.32	0.44	0.46
Avail Cap(c_a), veh/h	1172	1043	2337	1765	1273	1064
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.0	11.9	14.7	1.1	13.5	13.6
Incr Delay (d2), s/veh	6.8	0.0	0.5	0.2	0.5	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	0.0	5.0	4.8	3.7	3.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.8	11.9	15.3	1.2	14.0	14.2
LnGrp LOS	C	B	B	A	B	B
Approach Vol, veh/h	692		1400			709
Approach Delay, s/veh	25.5		10.7			14.1
Approach LOS	C		B			B
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		35.1		33.3		35.1
Change Period (Y+Rc), s		5.1		5.1		5.1
Max Green Setting (Gmax), s		45.0		45.0		45.0
Max Q Clear Time (g_c+I1), s		11.8		26.6		15.9
Green Ext Time (p_c), s		7.0		1.7		14.1
Intersection Summary						
HCM 6th Ctrl Delay			15.2			
HCM 6th LOS			B			

HCM 6th Signalized Intersection Summary
2: SR 29 South Ramps & Imola Ave W/SR 121 (Imola Ave) 04/13/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	572	81	0	420	210	0	0	0	860	0	209
Future Volume (veh/h)	0	572	81	0	420	210	0	0	0	860	0	209
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870				1870	1870	1870
Adj Flow Rate, veh/h	0	657	0	0	483	0				614	524	240
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87				0.87	0.87	0.87
Percent Heavy Veh, %	0	2	2	0	2	2				2	2	2
Cap, veh/h	0	757		0	757					840	573	262
Arrive On Green	0.00	0.40	0.00	0.00	0.40	0.00				0.47	0.47	0.47
Sat Flow, veh/h	0	1870	0	0	1870	1585				1781	1214	556
Grp Volume(v), veh/h	0	657	0	0	483	0				614	0	764
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	1870	1585				1781	0	1770
Q Serve(g_s), s	0.0	25.6	0.0	0.0	16.4	0.0				22.0	0.0	31.8
Cycle Q Clear(g_c), s	0.0	25.6	0.0	0.0	16.4	0.0				22.0	0.0	31.8
Prop In Lane	0.00		0.00	0.00		1.00				1.00		0.31
Lane Grp Cap(c), veh/h	0	757		0	757					840	0	835
V/C Ratio(X)	0.00	0.87		0.00	0.64					0.73	0.00	0.91
Avail Cap(c_a), veh/h	0	1202		0	1509					889	0	884
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	21.7	0.0	0.0	18.9	0.0				16.9	0.0	19.5
Incr Delay (d2), s/veh	0.0	4.2	0.0	0.0	0.9	0.0				2.9	0.0	13.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	11.0	0.0	0.0	6.7	0.0				8.9	0.0	14.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	25.9	0.0	0.0	19.9	0.0				19.8	0.0	33.0
LnGrp LOS	A	C		A	B					B	A	C
Approach Vol, veh/h		657	A		483	A					1378	
Approach Delay, s/veh		25.9			19.9						27.1	
Approach LOS		C			B						C	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		37.2		42.1		37.2						
Change Period (Y+Rc), s		5.1		* 4.7		5.1						
Max Green Setting (Gmax), s		51.0		* 40		64.0						
Max Q Clear Time (g_c+I1), s		27.6		33.8		18.4						
Green Ext Time (p_c), s		4.5		3.6		3.3						
Intersection Summary												
HCM 6th Ctrl Delay			25.4									
HCM 6th LOS			C									

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3: SR 29 North Ramps & SR 121 (Imola Ave)/SR 121 04/13/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	276	1167	0	0	507	776	126	1	259	0	0	0
Future Volume (veh/h)	276	1167	0	0	507	776	126	1	259	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	321	1357	0	0	590	0	147	1	0			
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	415	2268	0	0	1041		214	1				
Arrive On Green	0.23	0.64	0.00	0.00	0.29	0.00	0.12	0.12	0.00			
Sat Flow, veh/h	1781	3647	0	0	3647	1585	1770	12	1585			
Grp Volume(v), veh/h	321	1357	0	0	590	0	148	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1585	1782	0	1585			
Q Serve(g_s), s	7.1	9.4	0.0	0.0	5.9	0.0	3.3	0.0	0.0			
Cycle Q Clear(g_c), s	7.1	9.4	0.0	0.0	5.9	0.0	3.3	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	415	2268	0	0	1041		216	0				
V/C Ratio(X)	0.77	0.60	0.00	0.00	0.57		0.69	0.00				
Avail Cap(c_a), veh/h	1486	4235	0	0	4235		1487	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	15.0	4.4	0.0	0.0	12.6	0.0	17.7	0.0	0.0			
Incr Delay (d2), s/veh	3.1	0.3	0.0	0.0	0.5	0.0	3.8	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.6	1.3	0.0	0.0	1.9	0.0	1.4	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.1	4.7	0.0	0.0	13.1	0.0	21.5	0.0	0.0			
LnGrp LOS	B	A	A	A	B		C	A				
Approach Vol, veh/h		1678			590	A		148	A			
Approach Delay, s/veh		7.3			13.1			21.5				
Approach LOS		A			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		31.9			14.5	17.4		10.1				
Change Period (Y+Rc), s		5.1			* 4.7	5.1		5.0				
Max Green Setting (Gmax), s		50.0			* 35	50.0		35.0				
Max Q Clear Time (g_c+I1), s		11.4			9.1	7.9		5.3				
Green Ext Time (p_c), s		13.5			0.9	4.4		0.8				

Intersection Summary	
HCM 6th Ctrl Delay	9.6
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
4: SR 221/Soscol Ave & SR 121/Imola Ave 04/13/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	269	774	184	244	22	458	941	129	55	1004	148
Future Volume (veh/h)	121	269	774	184	244	22	458	941	129	55	1004	148
Initial Q (Qb), veh	0	0	0	0	0	0	0	2	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	274	0	188	249	19	467	960	0	56	1024	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	117	407		216	469	36	507	1342		198	1216	
Arrive On Green	0.07	0.22	0.00	0.12	0.27	0.27	0.15	0.38	0.00	0.11	0.34	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1716	131	3456	3647	0	1781	3554	1585
Grp Volume(v), veh/h	62	274	0	188	0	268	467	960	0	56	1024	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1847	1728	1777	0	1781	1777	1585
Q Serve(g_s), s	4.0	16.1	0.0	12.4	0.0	14.8	16.0	27.6	0.0	3.5	32.0	0.0
Cycle Q Clear(g_c), s	4.0	16.1	0.0	12.4	0.0	14.8	16.0	27.6	0.0	3.5	32.0	0.0
Prop In Lane	1.00		1.00	1.00		0.07	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	117	407		216	0	505	507	1342		198	1216	
V/C Ratio(X)	0.53	0.67		0.87	0.00	0.53	0.92	0.72		0.28	0.84	
Avail Cap(c_a), veh/h	134	426		248	0	539	507	1342		198	1216	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.77	0.77	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.70	0.70	0.00
Uniform Delay (d), s/veh	54.3	43.0	0.0	51.8	0.0	37.1	50.5	32.0	0.0	48.9	36.5	0.0
Incr Delay (d2), s/veh	2.1	2.4	0.0	24.3	0.0	0.3	22.4	3.3	0.0	0.2	5.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	7.6	0.0	7.0	0.0	6.7	8.3	12.2	0.0	1.5	14.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.4	45.4	0.0	76.1	0.0	37.4	72.9	35.3	0.0	49.1	41.6	0.0
LnGrp LOS	E	D		E	A	D	E	D		D	D	
Approach Vol, veh/h		336	A		456			1427	A		1080	A
Approach Delay, s/veh		47.5			53.3			47.6			42.0	
Approach LOS		D			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.0	46.2	13.0	37.9	18.5	50.7	19.6	31.2				
Change Period (Y+Rc), s	5.4	5.1	5.1	5.1	5.1	5.4	5.1	5.1				
Max Green Setting (Gmax), s	7.6	37.7	9.0	35.0	10.0	45.3	16.7	27.3				
Max Q Clear Time (g_c+I1), s	6.0	34.0	6.0	16.8	5.5	29.6	14.4	18.1				
Green Ext Time (p_c), s	0.0	2.0	0.0	0.9	0.0	4.8	0.1	0.6				

Intersection Summary	
HCM 6th Ctrl Delay	46.6
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
Unsignalized Delay for [NBR, EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
5: SR 29/SR 121 & SR 12

04/13/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	756	636	562	1289	1394	484
Future Volume (veh/h)	756	636	562	1289	1394	484
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	796	0	592	1357	1467	509
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	798		647	2353	1491	1031
Arrive On Green	0.23	0.00	0.19	0.66	0.42	0.42
Sat Flow, veh/h	3456	1585	3456	3647	3647	1585
Grp Volume(v), veh/h	796	0	592	1357	1467	509
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1777	1777	1585
Q Serve(g_s), s	32.9	0.0	24.0	29.8	58.3	23.6
Cycle Q Clear(g_c), s	32.9	0.0	24.0	29.8	58.3	23.6
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	798		647	2353	1491	1031
V/C Ratio(X)	1.00		0.92	0.58	0.98	0.49
Avail Cap(c_a), veh/h	798		798	2353	1491	1031
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.9	0.0	57.0	13.2	41.0	12.9
Incr Delay (d2), s/veh	31.3	0.0	12.0	0.2	19.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.2	0.0	11.2	10.4	27.8	27.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	86.2	0.0	69.0	13.4	60.4	13.1
LnGrp LOS	F		E	B	E	B
Approach Vol, veh/h	796	A		1949	1976	
Approach Delay, s/veh	86.2			30.3	48.2	
Approach LOS	F			C	D	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		102.1		40.9	34.7	67.4
Change Period (Y+Rc), s		7.4		7.9	7.9	7.4
Max Green Setting (Gmax), s		30.0		33.0	33.0	60.0
Max Q Clear Time (g_c+I1), s		31.8		34.9	26.0	60.3
Green Ext Time (p_c), s		0.0		0.0	0.7	0.0

Intersection Summary	
HCM 6th Ctrl Delay	47.2
HCM 6th LOS	D

Notes

User approved changes to right turn type.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th TWSC
6: Napa Vallejo Hwy (SR 221)/SR 221 & Project Access Road

04/13/2021

Intersection	
Int Delay, s/veh	163.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	83	63	1842	193	157	1361
Future Vol, veh/h	83	63	1842	193	157	1361
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Yield	-	None
Storage Length	0	120	-	220	265	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	85	64	1880	197	160	1389

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2895	-	0	0	1880	0
Stage 1	1880	-	-	-	-	-
Stage 2	1015	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	2.22	-
Pot Cap-1 Maneuver	~ 13	0	-	-	315	-
Stage 1	106	0	-	-	-	-
Stage 2	311	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 6	-	-	-	315	-
Mov Cap-2 Maneuver	~ 6	-	-	-	-	-
Stage 1	106	-	-	-	-	-
Stage 2	153	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, $	7094.3	0	2.9
HCM LOS	F		

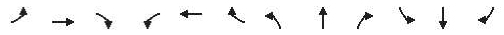
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	6	-	315	-
HCM Lane V/C Ratio	-	-	14.116	-	0.509	-
HCM Control Delay (s)	-	-	$ 7094.3	0	27.7	-
HCM Lane LOS	-	-	F	A	D	-
HCM 95th %tile Q(veh)	-	-	12.4	-	2.7	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th Signalized Intersection Summary
7: Soscol Ferry Rd/Napa Vallejo Hwy (SR 221) & SR 29/SR 12

04/13/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	1453	500	22	1621	1955	199	43	85	743	91	57
Future Volume (veh/h)	126	1453	500	22	1621	1955	199	43	85	743	91	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	131	1514	521	23	1639	0	207	45	89	774	95	59
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	156	1811	808	89	883		193	202	172	748	405	343
Arrive On Green	0.09	0.51	0.51	0.05	0.47	0.00	0.11	0.11	0.11	0.22	0.22	0.22
Sat Flow, veh/h	1781	3554	1585	1781	1870	3170	1781	1870	1585	3456	1870	1585
Grp Volume(v), veh/h	131	1514	521	23	1639	0	207	45	89	774	95	59
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1870	1585	1781	1870	1585	1728	1870	1585
Q Serve(g_s), s	14.7	74.0	48.8	2.5	96.0	0.0	22.0	4.5	10.8	44.0	8.5	6.2
Cycle Q Clear(g_c), s	14.7	74.0	48.8	2.5	96.0	0.0	22.0	4.5	10.8	44.0	8.5	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	156	1811	808	89	883		193	202	172	748	405	343
V/C Ratio(X)	0.84	0.84	0.64	0.26	1.86		1.07	0.22	0.52	1.03	0.23	0.17
Avail Cap(c_a), veh/h	254	1811	808	263	883		193	202	172	748	405	343
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	91.3	42.6	36.4	92.9	53.7	0.0	90.7	82.8	85.7	79.7	65.8	64.8
Incr Delay (d2), s/veh	6.1	3.7	2.0	0.6	389.5	0.0	85.8	0.2	1.3	42.3	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	32.2	18.8	1.2	138.7	0.0	14.6	2.1	4.4	23.6	4.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	97.4	46.3	38.4	93.5	443.2	0.0	176.5	83.0	87.0	121.9	65.9	64.9
LnGrp LOS	F	D	D	F	F		F	F	F	F	E	E
Approach Vol, veh/h		2166			1662	A		341			928	
Approach Delay, s/veh		47.5			438.3			140.8			112.6	
Approach LOS		D			F			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	22.5	102.9		27.4	14.9	110.5		50.5				
Change Period (Y+Rc), s	* 4.7	6.9		5.4	* 4.7	6.9		6.5				
Max Green Setting (Gmax), s	* 29	96.0		22.0	* 30	96.0		44.0				
Max Q Clear Time (g_c+I1), s	17.7	98.0		24.0	4.5	76.0		46.0				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	15.4		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		193.0
HCM 6th LOS		F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
1: Soscol Ave & Silverado Trail (SR 121)

04/14/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	530	16	922	601	2	918
Future Volume (veh/h)	530	16	922	601	2	918
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1870
Adj Flow Rate, veh/h	546	16	951	620	2	946
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	613	545	1738	1374	60	1703
Arrive On Green	0.34	0.34	0.49	0.49	0.49	0.49
Sat Flow, veh/h	1781	1585	3647	1648	1	3567
Grp Volume(v), veh/h	546	16	951	620	508	440
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1648	1866	1617
Q Serve(g_s), s	17.7	0.4	11.4	6.1	0.0	11.7
Cycle Q Clear(g_c), s	17.7	0.4	11.4	6.1	11.6	11.7
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	613	545	1738	1374	972	791
V/C Ratio(X)	0.89	0.03	0.55	0.45	0.52	0.56
Avail Cap(c_a), veh/h	1311	1166	2615	1780	1425	1190
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.0	13.3	10.9	1.4	11.0	11.0
Incr Delay (d2), s/veh	3.6	0.0	0.4	0.3	0.6	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	0.5	3.7	5.7	4.0	3.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.6	13.3	11.3	1.7	11.6	11.8
LnGrp LOS	C	B	B	A	B	B
Approach Vol, veh/h	562		1571			948
Approach Delay, s/veh	22.3		7.5			11.7
Approach LOS	C		A			B

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		35.0		26.1		35.0
Change Period (Y+Rc), s		5.1		5.1		5.1
Max Green Setting (Gmax), s		45.0		45.0		45.0
Max Q Clear Time (g_c+I1), s		13.7		19.7		13.4
Green Ext Time (p_c), s		10.0		1.3		16.5

Intersection Summary		
HCM 6th Ctrl Delay		11.5
HCM 6th LOS		B

HCM 6th Signalized Intersection Summary
2: SR 29 South Ramps & Imola Ave W/SR 121 (Imola Avenue) 04/14/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	438	104	0	534	191	0	0	0	749	0	219
Future Volume (veh/h)	0	438	104	0	534	191	0	0	0	749	0	219
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870				1870	1870	1870
Adj Flow Rate, veh/h	0	447	0	0	545	0				494	379	223
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	0	2	2				2	2	2
Cap, veh/h	0	693		0	693					792	491	289
Arrive On Green	0.00	0.37	0.00	0.00	0.37	0.00				0.44	0.44	0.44
Sat Flow, veh/h	0	1870	0	0	1870	1585				1781	1104	650
Grp Volume(v), veh/h	0	447	0	0	545	0				494	0	602
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	1870	1585				1781	0	1753
Q Serve(g_s), s	0.0	10.5	0.0	0.0	13.7	0.0				11.3	0.0	15.4
Cycle Q Clear(g_c), s	0.0	10.5	0.0	0.0	13.7	0.0				11.3	0.0	15.4
Prop In Lane	0.00		0.00	0.00		1.00				1.00		0.37
Lane Grp Cap(c), veh/h	0	693		0	693					792	0	780
V/C Ratio(X)	0.00	0.65		0.00	0.79					0.62	0.00	0.77
Avail Cap(c_a), veh/h	0	1800		0	2258					1331	0	1310
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	13.8	0.0	0.0	14.8	0.0				11.3	0.0	12.4
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	2.0	0.0				0.8	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.8	0.0	0.0	5.1	0.0				3.8	0.0	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	14.8	0.0	0.0	16.9	0.0				12.1	0.0	14.1
LnGrp LOS	A	B		A	B					B	A	B
Approach Vol, veh/h		447	A		545	A					1096	
Approach Delay, s/veh		14.8			16.9						13.2	
Approach LOS		B			B						B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	24.7	28.3	24.7
Change Period (Y+Rc), s	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	51.0	* 40	64.0
Max Q Clear Time (g_c+I1), s	12.5	17.4	15.7
Green Ext Time (p_c), s	3.0	6.2	3.9

Intersection Summary		
HCM 6th Ctrl Delay	14.5	
HCM 6th LOS	B	

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3: SR 29 North Ramps & SR 121 (Imola Avenue)/SR 121 04/14/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	1038	0	0	624	843	131	4	319	0	0	0
Future Volume (veh/h)	123	1038	0	0	624	843	131	4	319	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	128	1081	0	0	650	0	136	4	0			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	183	2093	0	0	1239		200	6				
Arrive On Green	0.10	0.59	0.00	0.00	0.35	0.00	0.12	0.12	0.00			
Sat Flow, veh/h	1781	3647	0	0	3647	1585	1733	51	1585			
Grp Volume(v), veh/h	128	1081	0	0	650	0	140	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1585	1784	0	1585			
Q Serve(g_s), s	2.4	6.1	0.0	0.0	5.0	0.0	2.6	0.0	0.0			
Cycle Q Clear(g_c), s	2.4	6.1	0.0	0.0	5.0	0.0	2.6	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.97		1.00			
Lane Grp Cap(c), veh/h	183	2093	0	0	1239		206	0				
V/C Ratio(X)	0.70	0.52	0.00	0.00	0.52		0.68	0.00				
Avail Cap(c_a), veh/h	1823	5197	0	0	5197		1826	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	14.8	4.1	0.0	0.0	8.9	0.0	14.5	0.0	0.0			
Incr Delay (d2), s/veh	4.8	0.2	0.0	0.0	0.3	0.0	3.9	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	0.7	0.0	0.0	1.3	0.0	1.1	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.6	4.3	0.0	0.0	9.2	0.0	18.4	0.0	0.0			
LnGrp LOS	B	A	A	A	A		B	A				
Approach Vol, veh/h		1209			650	A		140	A			
Approach Delay, s/veh		6.0			9.2			18.4				
Approach LOS		A			A			B				

Timer - Assigned Phs	2	5	6	8
Phs Duration (G+Y+Rc), s	25.2	8.2	17.0	9.0
Change Period (Y+Rc), s	5.1	* 4.7	5.1	5.0
Max Green Setting (Gmax), s	50.0	* 35	50.0	35.0
Max Q Clear Time (g_c+I1), s	8.1	4.4	7.0	4.6
Green Ext Time (p_c), s	9.7	0.3	4.9	0.8

Intersection Summary	
HCM 6th Ctrl Delay	7.9
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
4: SR 221/Soscol Ave & SR 121/Imola Ave

04/14/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	188	285	438	105	264	49	715	1060	192	41	853	185
Future Volume (veh/h)	188	285	438	105	264	49	715	1060	192	41	853	185
Initial Q (Qb), veh	0	0	0	0	11	0	3	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	101	306	0	113	284	48	769	1140	0	44	917	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	124	484		137	458	54	734	1487		155	1041	
Arrive On Green	0.07	0.25	0.00	0.08	0.26	0.26	0.21	0.42	0.00	0.09	0.30	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1559	264	3456	3647	0	1781	3554	1585
Grp Volume(v), veh/h	101	306	0	113	0	332	769	1140	0	44	917	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1823	1728	1777	0	1781	1777	1585
Q Serve(g_s), s	7.3	19.0	0.0	8.1	0.0	21.4	27.6	35.7	0.0	3.0	31.7	0.0
Cycle Q Clear(g_c), s	7.3	19.0	0.0	8.1	0.0	21.4	27.6	35.7	0.0	3.0	31.7	0.0
Prop In Lane	1.00		1.00	1.00		0.14	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	124	484		137	0	482	734	1487		155	1041	
V/C Ratio(X)	0.82	0.63		0.83	0.00	0.69	1.05	0.77		0.28	0.88	
Avail Cap(c_a), veh/h	136	478		160	0	491	734	1487		165	1061	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.69	0.69	0.00
Uniform Delay (d), s/veh	59.7	42.7	0.0	59.2	0.0	44.5	51.2	32.4	0.0	55.6	43.8	0.0
Incr Delay (d2), s/veh	23.5	1.8	0.0	22.3	0.0	3.3	46.5	3.8	0.0	0.3	7.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	12.1	14.7	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	8.9	0.0	4.5	0.0	13.3	18.0	15.8	0.0	1.4	15.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.1	44.5	0.0	81.5	0.0	59.9	112.5	36.2	0.0	55.8	51.5	0.0
LnGrp LOS	F	D		F	A	E	F	D		E	D	
Approach Vol, veh/h		407	A		445			1909	A		961	A
Approach Delay, s/veh		54.1			65.4			66.9			51.7	
Approach LOS		D			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	43.9	14.1	39.0	17.1	59.8	15.1	38.0
Change Period (Y+Rc), s	5.4	5.1	5.1	5.1	5.1	5.4	5.1	5.1
Max Green Setting (Gmax), s	27.6	36.8	9.9	35.0	10.0	54.4	11.7	33.2
Max Q Clear Time (g_c+I1), s	29.6	33.7	9.3	23.4	5.0	37.7	10.1	21.0
Green Ext Time (p_c), s	0.0	1.6	0.0	1.0	0.0	6.4	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	61.4
HCM 6th LOS	E

Notes

Unsignalized Delay for [NBR, EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
5: SR 29/SR 121 & SR 12

04/14/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	715	561	567	1452	1059	593
Future Volume (veh/h)	715	561	567	1452	1059	593
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	730	0	579	1482	1081	605
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	809		658	2211	1270	937
Arrive On Green	0.23	0.00	0.19	0.62	0.36	0.36
Sat Flow, veh/h	3456	1585	3456	3647	3647	1585
Grp Volume(v), veh/h	730	0	579	1482	1081	605
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1777	1777	1585
Q Serve(g_s), s	21.8	0.0	17.3	28.8	29.9	26.8
Cycle Q Clear(g_c), s	21.8	0.0	17.3	28.8	29.9	26.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	809		658	2211	1270	937
V/C Ratio(X)	0.90		0.88	0.67	0.85	0.65
Avail Cap(c_a), veh/h	1072		1072	2211	1671	1116
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.5	0.0	41.9	13.0	31.6	14.4
Incr Delay (d2), s/veh	7.3	0.0	2.9	0.6	2.9	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	0.0	7.2	9.3	12.2	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	46.8	0.0	44.8	13.7	34.5	15.0
LnGrp LOS	D		D	B	C	B
Approach Vol, veh/h	730	A		2061	1686	
Approach Delay, s/veh	46.8			22.4	27.5	
Approach LOS	D			C	C	

Timer - Assigned Phs	2	4	5	6
Phs Duration (G+Y+Rc), s	73.5	32.8	28.2	45.4
Change Period (Y+Rc), s	7.4	7.9	7.9	7.4
Max Green Setting (Gmax), s	30.0	33.0	33.0	50.0
Max Q Clear Time (g_c+I1), s	30.8	23.8	19.3	31.9
Green Ext Time (p_c), s	0.0	1.1	0.9	6.1

Intersection Summary	
HCM 6th Ctrl Delay	28.3
HCM 6th LOS	C

Notes

User approved changes to right turn type.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th TWSC
6: Napa Vallejo Hwy (SR 221)/SR 221 & Project Access Road 04/14/2021

Intersection	
Int Delay, s/veh	133.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	155	149	1487	58	52	1542
Future Vol, veh/h	155	149	1487	58	52	1542
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Yield	-	None
Storage Length	0	120	-	220	265	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	158	152	1517	59	53	1573

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2410	-	0	0	1517	0
Stage 1	1517	-	-	-	-	-
Stage 2	893	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	2.22	-
Pot Cap-1 Maneuver	~ 27	0	-	-	436	-
Stage 1	167	0	-	-	-	-
Stage 2	360	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 24	-	-	-	436	-
Mov Cap-2 Maneuver	~ 24	-	-	-	-	-
Stage 1	167	-	-	-	-	-
Stage 2	316	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, $	2836.5	0	0.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	24	-	436	-
HCM Lane V/C Ratio	-	-	6.59	-	0.122	-
HCM Control Delay (s)	-	-	$ 2836.5	0	14.4	-
HCM Lane LOS	-	-	F	A	B	-
HCM 95th %tile Q(veh)	-	-	19.8	-	0.4	-

Notes
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th Signalized Intersection Summary
7: Soscol Ferry Rd/Napa Vallejo Hwy (SR 221) & SR 29/SR 29/SR 12 04/14/2021

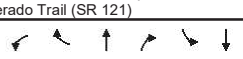
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	1364	257	8	1394	1101	459	84	122	1122	40	192
Future Volume (veh/h)	51	1364	257	8	1394	1101	459	84	122	1122	40	192
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	1406	265	8	1854	0	473	87	126	1157	41	198
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	117	1413	630	45	1337		299	314	266	973	527	446
Arrive On Green	0.07	0.40	0.40	0.03	0.36	0.00	0.17	0.17	0.17	0.28	0.28	0.28
Sat Flow, veh/h	1781	3554	1585	1781	3741	1585	1781	1870	1585	3456	1870	1585
Grp Volume(v), veh/h	53	1406	265	8	1854	0	473	87	126	1157	41	198
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1870	1585	1781	1870	1585	1728	1870	1585
Q Serve(g_s), s	5.3	72.8	22.3	0.8	66.0	0.0	31.0	7.5	13.3	52.0	3.0	18.9
Cycle Q Clear(g_c), s	5.3	72.8	22.3	0.8	66.0	0.0	31.0	7.5	13.3	52.0	3.0	18.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	117	1413	630	45	1337		299	314	266	973	527	446
V/C Ratio(X)	0.45	0.99	0.42	0.18	1.39		1.58	0.28	0.47	1.19	0.08	0.44
Avail Cap(c_a), veh/h	280	1413	630	289	1337		299	314	266	973	527	446
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	83.0	55.4	40.2	88.1	59.3	0.0	76.8	67.0	69.4	66.3	48.7	54.4
Incr Delay (d2), s/veh	1.0	22.7	0.6	0.7	178.7	0.0	277.2	0.2	0.5	95.4	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	35.7	8.7	0.4	63.3	0.0	36.9	3.5	5.3	35.1	1.4	7.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	84.1	78.1	40.9	88.7	238.0	0.0	354.0	67.2	69.9	161.7	48.7	54.7
LnGrp LOS	F	E	D	F	F		F	E	E	F	D	D
Approach Vol, veh/h		1724			1862	A		686			1396	
Approach Delay, s/veh		72.5			237.3			265.4			143.2	
Approach LOS		E			F			F			F	

Timer - Assigned Phs	1	2	4	5	6	8
Phs Duration (G+Y+Rc), s	16.8	72.9	36.4	9.4	80.3	58.5
Change Period (Y+Rc), s	* 4.7	6.9	5.4	* 4.7	6.9	6.5
Max Green Setting (Gmax), s	* 29	66.0	31.0	* 30	66.0	52.0
Max Q Clear Time (g_c+I1), s	7.3	68.0	33.0	2.8	74.8	54.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	167.4
HCM 6th LOS	F

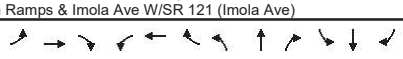
Notes
User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
1: Soscol Ave & Silverado Trail (SR 121) 04/13/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1019	25	1133	544	3	926
Future Volume (veh/h)	1019	25	1133	544	3	926
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1870
Adj Flow Rate, veh/h	1040	26	1156	555	3	945
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	967	860	1260	1479	37	1186
Arrive On Green	0.54	0.54	0.35	0.35	0.35	0.35
Sat Flow, veh/h	1781	1585	3647	1648	1	3430
Grp Volume(v), veh/h	1040	26	1156	555	507	441
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1648	1730	1617
Q Serve(g_s), s	53.9	0.8	30.9	5.2	1.0	24.0
Cycle Q Clear(g_c), s	53.9	0.8	30.9	5.2	31.9	24.0
Prop In Lane	1.00	1.00		1.00	0.01	
Lane Grp Cap(c), veh/h	967	860	1260	1479	650	573
V/C Ratio(X)	1.08	0.03	0.92	0.38	0.78	0.77
Avail Cap(c_a), veh/h	967	860	1260	1479	662	584
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.7	10.6	30.7	0.8	28.4	28.4
Incr Delay (d2), s/veh	51.6	0.0	10.8	0.2	6.2	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	34.0	0.0	14.5	12.4	11.4	9.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	74.4	10.6	41.5	1.0	34.7	34.9
LnGrp LOS	F	B	D	A	C	C
Approach Vol, veh/h	1066		1711			948
Approach Delay, s/veh	72.8		28.4			34.8
Approach LOS	E		C			C
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		40.3		59.0		40.3
Change Period (Y+Rc), s		5.1		5.1		5.1
Max Green Setting (Gmax), s		35.9		53.9		21.9
Max Q Clear Time (g_c+I1), s		33.9		55.9		32.9
Green Ext Time (p_c), s		1.3		0.0		0.0
Intersection Summary						
HCM 6th Ctrl Delay			42.7			
HCM 6th LOS			D			

HCM 6th Signalized Intersection Summary
2: SR 29 South Ramps & Imola Ave W/SR 121 (Imola Ave) 04/13/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	573	81	0	718	359	0	0	0	863	0	214
Future Volume (veh/h)	0	573	81	0	718	359	0	0	0	863	0	214
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870				1870	1870	1870
Adj Flow Rate, veh/h	0	659	0	0	825	0				619	522	246
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87				0.87	0.87	0.87
Percent Heavy Veh, %	0	2	2	0	2	2				2	2	2
Cap, veh/h	0	869		0	869					750	506	238
Arrive On Green	0.00	0.46	0.00	0.00	0.46	0.00				0.42	0.42	0.42
Sat Flow, veh/h	0	1870	0	0	1870	1585				1781	1202	566
Grp Volume(v), veh/h	0	659	0	0	825	0				619	0	768
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	1870	1585				1781	0	1768
Q Serve(g_s), s	0.0	32.0	0.0	0.0	46.5	0.0				33.9	0.0	46.3
Cycle Q Clear(g_c), s	0.0	32.0	0.0	0.0	46.5	0.0				33.9	0.0	46.3
Prop In Lane	0.00		0.00	0.00		1.00				1.00		0.32
Lane Grp Cap(c), veh/h	0	869		0	869					750	0	744
V/C Ratio(X)	0.00	0.76		0.00	0.95					0.83	0.00	1.03
Avail Cap(c_a), veh/h	0	916		0	916					750	0	744
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	0.95	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	24.3	0.0	0.0	28.2	0.0				28.3	0.0	31.9
Incr Delay (d2), s/veh	0.0	3.5	0.0	0.0	19.8	0.0				7.5	0.0	41.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	14.3	0.0	0.0	24.3	0.0				15.6	0.0	27.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	27.9	0.0	0.0	48.0	0.0				35.8	0.0	73.3
LnGrp LOS	A	C		A	D					D	A	F
Approach Vol, veh/h		659	A		825	A					1387	
Approach Delay, s/veh		27.9			48.0						56.5	
Approach LOS		C			D						E	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		56.2		51.0		56.2						
Change Period (Y+Rc), s		5.1		* 4.7		5.1						
Max Green Setting (Gmax), s		53.9		* 46		53.9						
Max Q Clear Time (g_c+I1), s		34.0		48.3		48.5						
Green Ext Time (p_c), s		4.3		0.0		2.6						
Intersection Summary												
HCM 6th Ctrl Delay			47.5									
HCM 6th LOS			D									

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3: SR 29 North Ramps & SR 121 (Imola Ave)/SR 121

04/13/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	363	1151	0	0	507	850	126	2	259	0	0	0
Future Volume (veh/h)	363	1151	0	0	507	850	126	2	259	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	422	1338	0	0	590	0	147	2	0			
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	974	2868	0	0	759		178	2				
Arrive On Green	0.55	0.81	0.00	0.00	0.21	0.00	0.10	0.10	0.00			
Sat Flow, veh/h	1781	3647	0	0	3647	1585	1759	24	1585			
Grp Volume(v), veh/h	422	1338	0	0	590	0	149	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1585	1782	0	1585			
Q Serve(g_s), s	15.5	12.8	0.0	0.0	17.2	0.0	9.0	0.0	0.0			
Cycle Q Clear(g_c), s	15.5	12.8	0.0	0.0	17.2	0.0	9.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	974	2868	0	0	759		180	0				
V/C Ratio(X)	0.43	0.47	0.00	0.00	0.78		0.83	0.00				
Avail Cap(c_a), veh/h	974	2868	0	0	1709		243	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.38	0.38	0.00	0.00	0.52	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	14.8	3.3	0.0	0.0	40.8	0.0	48.5	0.0	0.0			
Incr Delay (d2), s/veh	0.1	0.2	0.0	0.0	0.9	0.0	15.5	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	6.0	3.1	0.0	0.0	7.5	0.0	4.8	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.9	3.5	0.0	0.0	41.7	0.0	64.0	0.0	0.0			
LnGrp LOS	B	A	A	A	D		E	A				
Approach Vol, veh/h		1760			590	A		149	A			
Approach Delay, s/veh		6.2			41.7			64.0				
Approach LOS		A			D			E				

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		93.9			65.3	28.6		16.1				
Change Period (Y+Rc), s		5.1			5.1	* 5.1		5.0				
Max Green Setting (Gmax), s		84.9			27.3	* 53		15.0				
Max Q Clear Time (g_c+I1), s		14.8			17.5	19.2		11.0				
Green Ext Time (p_c), s		14.8			1.0	4.3		0.2				

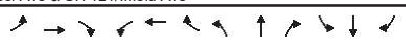
Intersection Summary	
HCM 6th Ctrl Delay	18.1
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
4: SR 221/Soscol Ave & SR 121/Imola Ave

04/13/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	289	809	191	253	23	566	1176	163	82	1452	220
Future Volume (veh/h)	130	289	809	191	253	23	566	1176	163	82	1452	220
Initial Q (Qb), veh	0	0	0	0	0	0	0	2	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	66	295	0	195	258	20	578	1200	0	84	1482	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	104	318		210	392	30	571	1777		130	1450	
Arrive On Green	0.06	0.17	0.00	0.12	0.23	0.23	0.17	0.50	0.00	0.07	0.41	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1714	133	3456	3647	0	1781	3554	1585
Grp Volume(v), veh/h	66	295	0	195	0	278	578	1200	0	84	1482	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1846	1728	1777	0	1781	1777	1585
Q Serve(g_s), s	5.4	23.1	0.0	16.1	0.0	20.3	24.6	37.9	0.0	6.8	60.7	0.0
Cycle Q Clear(g_c), s	5.4	23.1	0.0	16.1	0.0	20.3	24.6	37.9	0.0	6.8	60.7	0.0
Prop In Lane	1.00		1.00	1.00		0.07	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	104	318		210	0	423	571	1777		130	1450	
V/C Ratio(X)	0.63	0.93		0.93	0.00	0.66	1.01	0.68		0.64	1.02	
Avail Cap(c_a), veh/h	108	333		210	0	434	571	1777		130	1450	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	68.5	60.9	0.0	65.0	0.0	52.1	62.1	28.2	0.0	67.1	44.0	0.0
Incr Delay (d2), s/veh	9.8	30.0	0.0	43.1	0.0	2.7	40.6	2.1	0.0	8.2	29.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	13.6	0.0	9.8	0.0	9.7	13.9	16.4	0.0	3.4	32.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.3	90.8	0.0	108.1	0.0	54.8	102.7	30.3	0.0	75.2	73.4	0.0
LnGrp LOS	E	F		F	A	D	F	C		E	F	
Approach Vol, veh/h		361	A		473			1778	A		1566	A
Approach Delay, s/veh		88.5			76.8			53.8			73.5	
Approach LOS		F			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	30.0	65.8	13.8	39.2	16.0	79.8	22.6	30.4				
Change Period (Y+Rc), s	5.4	5.1	5.1	5.1	5.1	5.4	5.1	5.1				
Max Green Setting (Gmax), s	24.6	60.7	9.0	35.0	10.9	74.4	17.5	26.5				
Max Q Clear Time (g_c+I1), s	20.6	62.7	7.4	22.3	8.8	39.9	18.1	25.1				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.8	0.0	8.3	0.0	0.2				

Intersection Summary	
HCM 6th Ctrl Delay	66.8
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.
Unsignalized Delay for [NBR, EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
5: SR 29/SR 121 & SR 12

04/13/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	768	630	671	1571	1607	558
Future Volume (veh/h)	768	630	671	1571	1607	558
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	808	0	706	1654	1692	587
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	740		647	2431	1578	1043
Arrive On Green	0.21	0.00	0.19	0.68	0.44	0.44
Sat Flow, veh/h	3456	1585	3456	3647	3647	1585
Grp Volume(v), veh/h	808	0	706	1654	1692	587
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1777	1777	1585
Q Serve(g_s), s	32.1	0.0	28.1	41.3	66.6	30.2
Cycle Q Clear(g_c), s	32.1	0.0	28.1	41.3	66.6	30.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	740		647	2431	1578	1043
V/C Ratio(X)	1.09		1.09	0.68	1.07	0.56
Avail Cap(c_a), veh/h	740		647	2431	1578	1043
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.9	0.0	60.9	14.0	41.7	13.9
Incr Delay (d2), s/veh	61.2	0.0	62.6	0.6	44.8	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.8	0.0	17.5	14.4	37.0	33.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	120.2	0.0	123.5	14.7	86.5	14.4
LnGrp LOS	F		F	B	F	B
Approach Vol, veh/h	808	A		2360	2279	
Approach Delay, s/veh	120.2			47.2	68.0	
Approach LOS	F			D	E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		110.0		40.0	36.0	74.0
Change Period (Y+Rc), s		7.4		7.9	7.9	7.4
Max Green Setting (Gmax), s		102.6		32.1	28.1	66.6
Max Q Clear Time (g_c+I1), s		43.3		34.1	30.1	68.6
Green Ext Time (p_c), s		9.5		0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	66.7
HCM 6th LOS	E

Notes

User approved changes to right turn type.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
6: Napa Vallejo Hwy (SR 221)/SR 221 & Project Access Road

08/05/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	46	48	2225	154	140	2207
Future Volume (veh/h)	46	48	2225	154	140	2207
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	0	2270	0	143	2252
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	61		3198		172	3198
Arrive On Green	0.03	0.00	0.90	0.00	0.90	0.90
Sat Flow, veh/h	1781	1585	3647	1585	165	3647
Grp Volume(v), veh/h	47	0	2270	0	143	2252
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	165	1777
Q Serve(g_s), s	3.6	0.0	24.2	0.0	98.8	23.7
Cycle Q Clear(g_c), s	3.6	0.0	24.2	0.0	123.0	23.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	61		3198		172	3198
V/C Ratio(X)	0.77		0.71		0.83	0.70
Avail Cap(c_a), veh/h	235		3198		172	3198
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	65.5	0.0	1.9	0.0	27.1	1.9
Incr Delay (d2), s/veh	18.1	0.0	1.4	0.0	35.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.6	0.0	6.5	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	83.5	0.0	3.3	0.0	62.4	3.2
LnGrp LOS	F		A		E	A
Approach Vol, veh/h	47	A	2270	A		2395
Approach Delay, s/veh	83.5		3.3			6.7
Approach LOS	F		A			A

Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		127.5				127.5	9.2
Change Period (Y+Rc), s		4.5				4.5	4.5
Max Green Setting (Gmax), s		123.0				123.0	18.0
Max Q Clear Time (g_c+I1), s		26.2				125.0	5.6
Green Ext Time (p_c), s		41.3				0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	5.8
HCM 6th LOS	A

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
7: Soscol Ferry Rd/Napa Vallejo Hwy (SR 221) & SR 29/SR 12

04/13/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	1946	669	24	1753	2095	245	53	76	1149	147	70
Future Volume (veh/h)	130	1946	669	24	1753	2095	245	53	76	1149	147	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	135	2027	697	25	1759	0	255	55	79	1197	153	73
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	154	1690	754	108	840		185	195	165	703	380	322
Arrive On Green	0.09	0.48	0.48	0.06	0.45	0.00	0.10	0.10	0.10	0.20	0.20	0.20
Sat Flow, veh/h	1781	3554	1585	1781	1870	3170	1781	1870	1585	3456	1870	1585
Grp Volume(v), veh/h	135	2027	697	25	1759	0	255	55	79	1197	153	73
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1870	1585	1781	1870	1585	1728	1870	1585
Q Serve(g_s), s	11.2	71.3	61.7	2.0	67.4	0.0	15.6	4.1	7.0	30.5	10.6	5.8
Cycle Q Clear(g_c), s	11.2	71.3	61.7	2.0	67.4	0.0	15.6	4.1	7.0	30.5	10.6	5.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	154	1690	754	108	840		185	195	165	703	380	322
V/C Ratio(X)	0.87	1.20	0.92	0.23	2.09		1.38	0.28	0.48	1.70	0.40	0.23
Avail Cap(c_a), veh/h	154	1690	754	166	840		185	195	165	703	380	322
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.7	39.3	36.8	67.2	41.3	0.0	67.2	62.0	63.4	59.8	51.8	49.9
Incr Delay (d2), s/veh	37.5	95.7	17.3	0.4	495.9	0.0	199.6	0.3	0.8	322.7	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	51.2	25.8	0.9	144.6	0.0	17.2	1.9	2.8	44.4	4.9	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	105.2	135.0	54.2	67.6	537.2	0.0	266.8	62.3	64.2	382.4	52.1	50.0
LnGrp LOS	F	F	D	E	F		F	E	E	F	D	D
Approach Vol, veh/h		2859			1784	A		389			1423	
Approach Delay, s/veh		113.9			530.6			196.7			329.9	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.7	74.3		21.0	13.8	78.2		37.0				
Change Period (Y+Rc), s	* 4.7	6.9		5.4	* 4.7	6.9		6.5				
Max Green Setting (Gmax), s	* 13	67.4		15.6	* 14	66.4		30.5				
Max Q Clear Time (g_c+I1), s	14.2	69.4		17.6	4.0	73.3		32.5				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		281.7
HCM 6th LOS		F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
1: Soscol Ave & Silverado Trail (SR 121)

04/14/2021

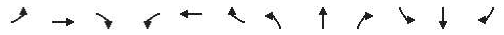


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	740	23	1066	691	8	1115
Future Volume (veh/h)	740	23	1066	691	8	1115
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1945	1870	1870
Adj Flow Rate, veh/h	763	24	1099	712	8	1149
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	800	712	1552	1461	44	1502
Arrive On Green	0.45	0.45	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1781	1585	3647	1648	7	3525
Grp Volume(v), veh/h	763	24	1099	712	615	542
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1648	1829	1617
Q Serve(g_s), s	36.9	0.8	22.6	7.8	0.0	25.5
Cycle Q Clear(g_c), s	36.9	0.8	22.6	7.8	24.7	25.5
Prop In Lane	1.00	1.00		1.00	0.01	
Lane Grp Cap(c), veh/h	800	712	1552	1461	840	706
V/C Ratio(X)	0.95	0.03	0.71	0.49	0.73	0.77
Avail Cap(c_a), veh/h	896	797	1787	1570	954	813
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.7	13.8	20.6	1.0	21.2	21.4
Incr Delay (d2), s/veh	18.4	0.0	1.3	0.4	2.9	4.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.2	0.9	9.0	13.8	10.7	9.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	42.1	13.8	21.9	1.4	24.1	25.7
LnGrp LOS	D	B	C	A	C	C
Approach Vol, veh/h	787		1811			1157
Approach Delay, s/veh	41.2		13.8			24.8
Approach LOS	D		B			C

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		44.2		45.3		44.2
Change Period (Y+Rc), s		5.1		5.1		5.1
Max Green Setting (Gmax), s		45.0		45.0		45.0
Max Q Clear Time (g_c+I1), s		27.5		38.9		24.6
Green Ext Time (p_c), s		9.7		1.3		14.5

Intersection Summary		
HCM 6th Ctrl Delay		23.0
HCM 6th LOS		C

HCM 6th Signalized Intersection Summary
2: SR 29 South Ramps & Imola Ave W/SR 121 (Imola Avenue) 08/05/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	459	109	0	540	193	0	0	0	739	0	219
Future Volume (veh/h)	0	459	109	0	540	193	0	0	0	739	0	219
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870				1870	1870	1870
Adj Flow Rate, veh/h	0	468	0	0	551	0				488	372	223
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	0	2	2				2	2	2
Cap, veh/h	0	646		0	646					665	409	245
Arrive On Green	0.00	0.35	0.00	0.00	0.35	0.00				0.37	0.37	0.37
Sat Flow, veh/h	0	1870	0	0	1870	1585				1781	1095	657
Grp Volume(v), veh/h	0	468	0	0	551	0				488	0	595
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	1870	1585				1781	0	1752
Q Serve(g_s), s	0.0	12.0	0.0	0.0	15.0	0.0				13.0	0.0	17.7
Cycle Q Clear(g_c), s	0.0	12.0	0.0	0.0	15.0	0.0				13.0	0.0	17.7
Prop In Lane	0.00		0.00	0.00		1.00				1.00		0.37
Lane Grp Cap(c), veh/h	0	646		0	646					665	0	654
V/C Ratio(X)	0.00	0.72		0.00	0.85					0.73	0.00	0.91
Avail Cap(c_a), veh/h	0	820		0	820					683	0	672
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	0.92	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	15.7	0.0	0.0	16.7	0.0				14.9	0.0	16.3
Incr Delay (d2), s/veh	0.0	2.4	0.0	0.0	12.5	0.0				4.0	0.0	16.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.7	0.0	0.0	7.6	0.0				5.2	0.0	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	18.1	0.0	0.0	29.2	0.0				18.8	0.0	32.5
LnGrp LOS	A	B		A	C					B	A	C
Approach Vol, veh/h		468	A		551	A					1083	
Approach Delay, s/veh		18.1			29.2						26.4	
Approach LOS		B			C						C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	24.1	25.2	24.1
Change Period (Y+Rc), s	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	24.1	* 21	24.1
Max Q Clear Time (g_c+I1), s	14.0	19.7	17.0
Green Ext Time (p_c), s	2.0	0.8	2.0

Intersection Summary	
HCM 6th Ctrl Delay	25.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
3: SR 29 North Ramps & SR 121 (Imola Avenue)/SR 121 08/05/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	1052	0	0	637	844	148	5	361	0	0	0
Future Volume (veh/h)	126	1052	0	0	637	844	148	5	361	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	131	1096	0	0	664	0	154	5	0			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	166	2589	0	0	2000		201	7				
Arrive On Green	0.09	0.73	0.00	0.00	0.56	0.00	0.12	0.12	0.00			
Sat Flow, veh/h	1781	3647	0	0	3647	1585	1728	56	1585			
Grp Volume(v), veh/h	131	1096	0	0	664	0	159	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1585	1784	0	1585			
Q Serve(g_s), s	4.7	7.9	0.0	0.0	6.5	0.0	5.6	0.0	0.0			
Cycle Q Clear(g_c), s	4.7	7.9	0.0	0.0	6.5	0.0	5.6	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.97		1.00			
Lane Grp Cap(c), veh/h	166	2589	0	0	2000		207	0				
V/C Ratio(X)	0.79	0.42	0.00	0.00	0.33		0.77	0.00				
Avail Cap(c_a), veh/h	200	2589	0	0	2000		384	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.58	0.58	0.00	0.00	0.30	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	28.8	3.5	0.0	0.0	7.6	0.0	27.9	0.0	0.0			
Incr Delay (d2), s/veh	9.7	0.3	0.0	0.0	0.0	0.0	5.8	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.3	1.5	0.0	0.0	2.0	0.0	2.6	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.5	3.8	0.0	0.0	7.7	0.0	33.7	0.0	0.0			
LnGrp LOS	D	A	A	A	A		C	A				
Approach Vol, veh/h		1227			664	A		159	A			
Approach Delay, s/veh		7.5			7.7			33.7				
Approach LOS		A			A			C				

Timer - Assigned Phs	2	5	6	8
Phs Duration (G+Y+Rc), s	52.4	10.8	41.7	12.6
Change Period (Y+Rc), s	5.1	* 4.7	5.1	5.0
Max Green Setting (Gmax), s	40.9	* 7.3	28.9	14.0
Max Q Clear Time (g_c+I1), s	9.9	6.7	8.5	7.6
Green Ext Time (p_c), s	9.3	0.0	4.4	0.4

Intersection Summary	
HCM 6th Ctrl Delay	9.6
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
4: SR 221/Soscol Ave & SR 121/Imola Ave

04/14/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	241	366	544	123	310	57	770	1161	213	53	1094	240
Future Volume (veh/h)	241	366	544	123	310	57	770	1161	213	53	1094	240
Initial Q (Qb), veh	0	0	0	0	11	0	3	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	130	394	0	132	333	56	828	1248	0	57	1176	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	136	480		156	471	48	734	1487		139	1006	
Arrive On Green	0.08	0.25	0.00	0.09	0.26	0.26	0.21	0.42	0.00	0.08	0.29	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1561	262	3456	3647	0	1781	3554	1585
Grp Volume(v), veh/h	130	394	0	132	0	389	828	1248	0	57	1176	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1823	1728	1777	0	1781	1777	1585
Q Serve(g_s), s	9.5	25.9	0.0	9.5	0.0	25.9	27.6	40.9	0.0	3.9	37.5	0.0
Cycle Q Clear(g_c), s	9.5	25.9	0.0	9.5	0.0	25.9	27.6	40.9	0.0	3.9	37.5	0.0
Prop In Lane	1.00		1.00	1.00		0.14	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	136	480		156	0	489	734	1487		139	1006	
V/C Ratio(X)	0.96	0.82		0.85	0.00	0.80	1.13	0.84		0.41	1.17	
Avail Cap(c_a), veh/h	136	478		160	0	491	734	1487		146	1024	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.80	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.42	0.42	0.00
Uniform Delay (d), s/veh	59.8	45.5	0.0	58.4	0.0	45.8	51.2	33.9	0.0	57.1	46.6	0.0
Incr Delay (d2), s/veh	56.5	8.4	0.0	29.8	0.0	8.1	74.6	5.8	0.0	0.3	80.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	17.8	14.7	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	13.0	0.0	5.5	0.0	16.8	20.9	18.4	0.0	1.8	27.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	116.4	53.9	0.0	88.2	0.0	71.7	140.5	39.7	0.0	57.4	127.5	0.0
LnGrp LOS	F	D		F	A	E	F	D		E	F	
Approach Vol, veh/h		524	A		521			2076	A		1233	A
Approach Delay, s/veh		69.4			75.9			79.9			124.3	
Approach LOS		E			E			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	42.6	15.0	39.4	15.8	59.8	16.5	37.9
Change Period (Y+Rc), s	5.4	5.1	5.1	5.1	5.1	5.4	5.1	5.1
Max Green Setting (Gmax), s	27.6	36.8	9.9	35.0	10.0	54.4	11.7	33.2
Max Q Clear Time (g_c+I1), s	29.9	39.5	11.5	27.9	5.9	42.9	11.5	27.9
Green Ext Time (p_c), s	0.0	0.0	0.0	0.9	0.0	5.7	0.0	0.7

Intersection Summary	
HCM 6th Ctrl Delay	90.7
HCM 6th LOS	F

Notes

Unsignalized Delay for [NBR, EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
5: SR 29/SR 121 & SR 12

04/14/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	749	576	634	1685	1484	831
Future Volume (veh/h)	749	576	634	1685	1484	831
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	764	0	647	1719	1514	848
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	816		708	2299	1357	980
Arrive On Green	0.24	0.00	0.20	0.65	0.38	0.38
Sat Flow, veh/h	3456	1585	3456	3647	3647	1585
Grp Volume(v), veh/h	764	0	647	1719	1514	848
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1777	1777	1585
Q Serve(g_s), s	28.4	0.0	24.0	43.3	50.0	50.0
Cycle Q Clear(g_c), s	28.4	0.0	24.0	43.3	50.0	50.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	816		708	2299	1357	980
V/C Ratio(X)	0.94		0.91	0.75	1.12	0.87
Avail Cap(c_a), veh/h	871		871	2299	1357	980
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.0	0.0	50.9	15.8	40.5	20.5
Incr Delay (d2), s/veh	16.1	0.0	11.1	1.2	62.7	8.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.5	0.0	11.0	15.1	32.1	2.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	65.1	0.0	62.0	17.0	103.1	28.5
LnGrp LOS	E		E	B	F	C
Approach Vol, veh/h	764	A		2366	2362	
Approach Delay, s/veh	65.1			29.3	76.3	
Approach LOS	E			C	E	

Timer - Assigned Phs	2	4	5	6
Phs Duration (G+Y+Rc), s	92.1	38.8	34.7	57.4
Change Period (Y+Rc), s	7.4	7.9	7.9	7.4
Max Green Setting (Gmax), s	30.0	33.0	33.0	50.0
Max Q Clear Time (g_c+I1), s	45.3	30.4	26.0	52.0
Green Ext Time (p_c), s	0.0	0.5	0.8	0.0

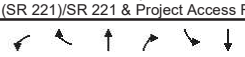
Intersection Summary	
HCM 6th Ctrl Delay	54.5
HCM 6th LOS	D

Notes

User approved changes to right turn type.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
6: Napa Vallejo Hwy (SR 221)/SR 221 & Project Access Road 08/05/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	128	124	1828	37	36	2053
Future Volume (veh/h)	128	124	1828	37	36	2053
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	131	0	1865	0	37	2095
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	172		2704		236	2704
Arrive On Green	0.10	0.00	0.76	0.00	0.76	0.76
Sat Flow, veh/h	1781	1585	3647	1585	246	3647
Grp Volume(v), veh/h	131	0	1865	0	37	2095
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	246	1777
Q Serve(g_s), s	4.5	0.0	16.7	0.0	5.6	21.7
Cycle Q Clear(g_c), s	4.5	0.0	16.7	0.0	22.3	21.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	172		2704		236	2704
V/C Ratio(X)	0.76		0.69		0.16	0.77
Avail Cap(c_a), veh/h	508		2704		236	2704
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	0.0	3.8	0.0	9.4	4.4
Incr Delay (d2), s/veh	6.8	0.0	1.5	0.0	1.4	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	0.9	0.0	0.3	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.6	0.0	5.3	0.0	10.8	6.6
LnGrp LOS	C		A		B	A
Approach Vol, veh/h	131	A	1865	A		2132
Approach Delay, s/veh	34.6		5.3			6.7
Approach LOS	C		A			A

Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		52.5			52.5	10.6
Change Period (Y+Rc), s		4.5			4.5	4.5
Max Green Setting (Gmax), s		48.0			48.0	18.0
Max Q Clear Time (g_c+I1), s		18.7			24.3	6.5
Green Ext Time (p_c), s		16.6			17.4	0.2

Intersection Summary			
HCM 6th Ctrl Delay		6.9	
HCM 6th LOS		A	

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
7: Soscol Ferry Rd/Napa Vallejo Hwy (SR 221) & SR 29/SR 29/SR 12 04/14/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	1732	326	9	1641	1293	535	98	128	1417	52	215
Future Volume (veh/h)	48	1732	326	9	1641	1293	535	98	128	1417	52	215
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	49	1786	336	9	2179	0	552	101	132	1461	54	222
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	1402	625	50	1339		299	314	266	974	527	447
Arrive On Green	0.06	0.39	0.39	0.03	0.36	0.00	0.17	0.17	0.17	0.28	0.28	0.28
Sat Flow, veh/h	1781	3554	1585	1781	3741	1585	1781	1870	1585	3456	1870	1585
Grp Volume(v), veh/h	49	1786	336	9	2179	0	552	101	132	1461	54	222
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1870	1585	1781	1870	1585	1728	1870	1585
Q Serve(g_s), s	4.9	72.8	30.0	0.9	66.0	0.0	31.0	8.8	13.9	52.0	3.9	21.6
Cycle Q Clear(g_c), s	4.9	72.8	30.0	0.9	66.0	0.0	31.0	8.8	13.9	52.0	3.9	21.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	115	1402	625	50	1339		299	314	266	974	527	447
V/C Ratio(X)	0.42	1.27	0.54	0.18	1.63		1.84	0.32	0.50	1.50	0.10	0.50
Avail Cap(c_a), veh/h	280	1402	625	290	1339		299	314	266	974	527	447
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	82.9	55.8	42.9	87.6	59.2	0.0	76.7	67.5	69.6	66.2	49.0	55.3
Incr Delay (d2), s/veh	0.9	128.9	1.2	0.6	286.0	0.0	392.4	0.2	0.5	230.2	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	56.4	11.7	0.4	83.3	0.0	46.5	4.1	5.6	53.4	1.8	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.9	184.8	44.1	88.2	345.2	0.0	469.1	67.7	70.2	296.5	49.0	55.6
LnGrp LOS	F	F	D	F	F		F	E	E	F	D	E
Approach Vol, veh/h		2171			2188	A		785			1737	
Approach Delay, s/veh		160.7			344.2			350.4			258.0	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.6	72.9		36.4	9.9	79.7		58.5				
Change Period (Y+Rc), s	* 4.7	6.9		5.4	* 4.7	6.9		6.5				
Max Green Setting (Gmax), s	* 29	66.0		31.0	* 30	66.0		52.0				
Max Q Clear Time (g_c+I1), s	6.9	68.0		33.0	2.9	74.8		54.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		265.2	
HCM 6th LOS		F	

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

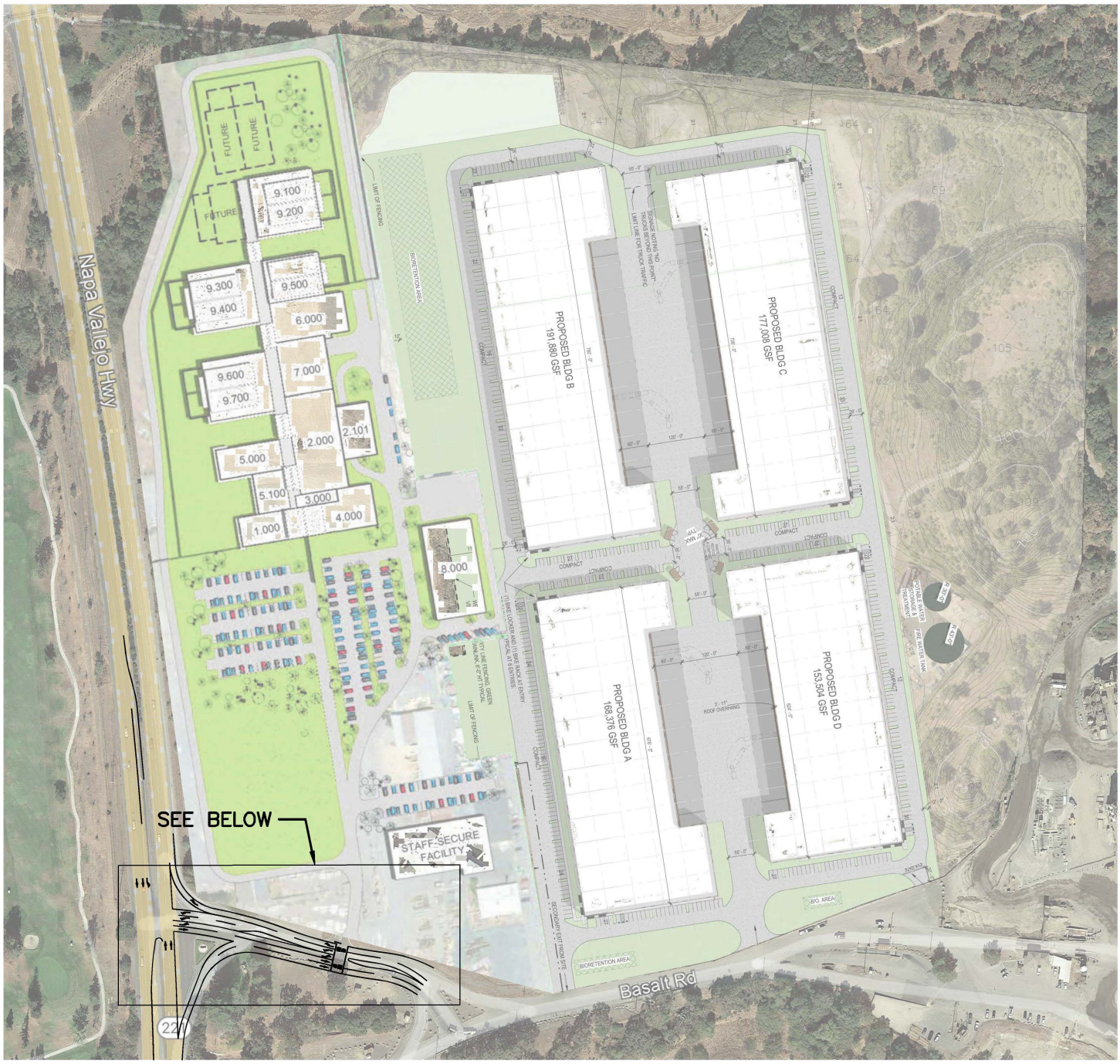
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

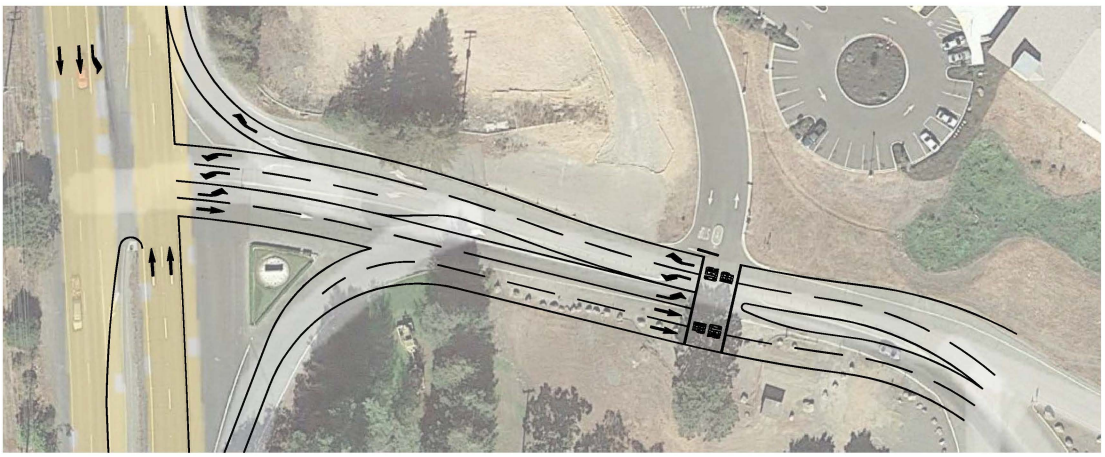
Appendix D

Striping Layout Plan



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INTERSECTION DETAIL

PROPOSED BASALT RD LAYOUT

NAX155–BASANITES PROJECT

2/9/2022



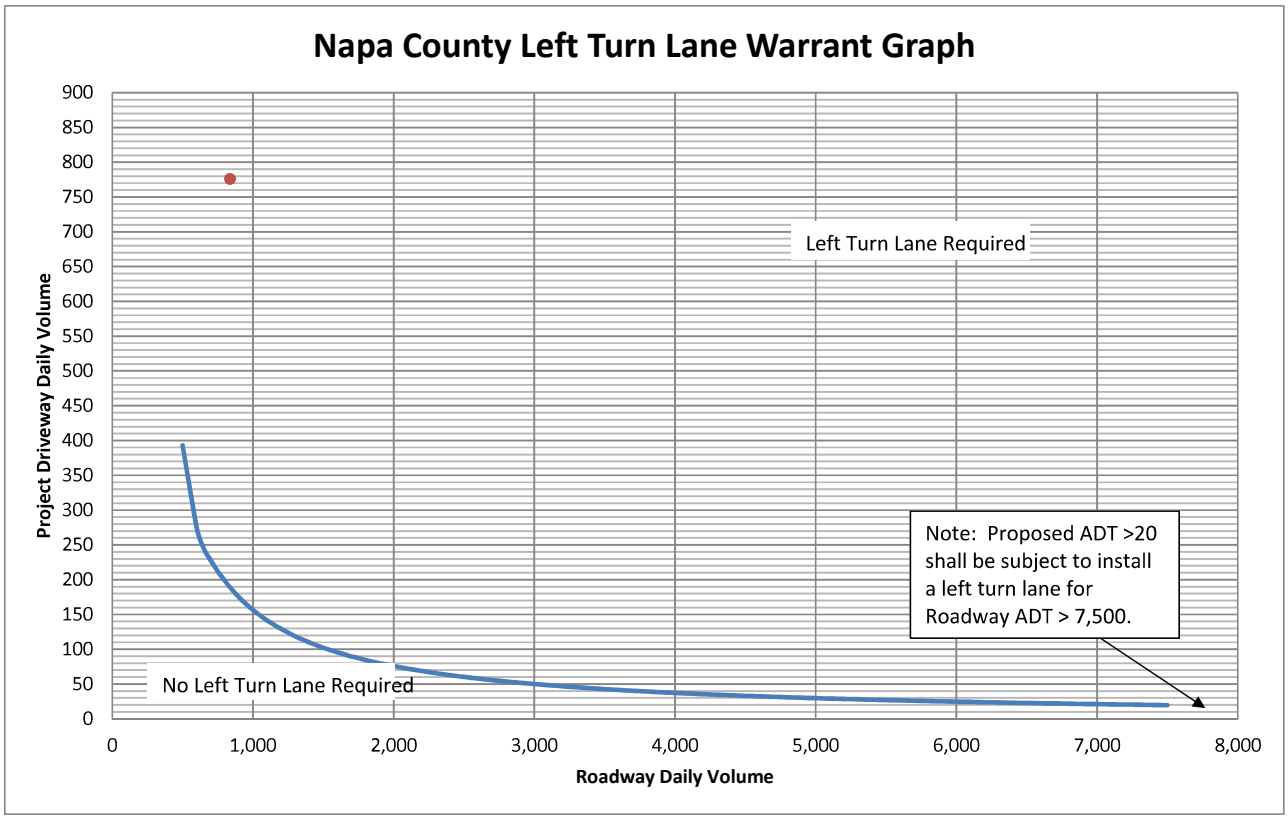
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Appendix E

Left-Turn Lane Warrant



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Napa County Left Turn Lane Warrant Graph
Project Driveway Daily Volume
900
850
800
750
700
650
600
550
500
450
400
350
300
250
200
150
100
50
0
0
1,000
2,000
3,000
4,000
5,000
6,000
7,000
8,000
Roadway Daily Volume
Left Turn Lane Required
No Left Turn Lane Required
Note: Proposed ADT >20 shall be subject to install a left turn lane for Roadway ADT > 7,500.



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January 5, 2024

Ms. Sonya Kinz
Panattoni Development Company, Inc.
8775 Folsom Boulevard, Suite 200
Sacramento, CA 95826

Addendum to the *Transportation Impact Study for the Basanites Project* - P19-00421

Dear Ms. Kinz;

As requested, W-Trans has prepared this addendum to the *Transportation Impact Study for the Basanites Project* (TIS), W-Trans, March 22, 2022. The TIS evaluated all three driveways to the site as having full access and, as a result, left-turn lanes were recommended for all three based on application of the County of Napa's criteria. We understand that the third driveway is to be used by emergency vehicles only, and therefore would carry no vehicles on most days.

Access Analysis

Left-Turn Lane Warrants

The need for left-turn channelization in the form of left-turn pockets on Basalt Road at the three project driveways for Basanites was evaluated using the criteria published by the County in the *Napa County Road and Street Standards*, February 4, 2020. Since completion of the TIS the easternmost driveway has been dedicated to emergency access only, so would carry no traffic most days. The volume would therefore be below the curve on the graph in the Street Standards, and a left-turn lane would not be warranted at this location.

Although the westernmost driveway is striped for egress only, the independent variable applied in the County's methodology is total average daily volume, so directionality was not considered. Based on Existing plus Project peak hour, left-turn lanes are warranted on Basalt Road at the two ungated driveways for the Basanites Project during both of the peak periods evaluated. However, as the westernmost driveway is used exclusively for egress, so would generate zero left turns from Basalt Road, installation of a left-turn lane is not recommended for this driveway. County policy allows exceptions that provide "the same overall practical effect" as implementing the improvements indicated through application of the criteria in the Standards. Due to the lack of any left-turn movements, the road would operate exactly the same without a left-turn lane as it would with one. An exception to the policy may therefore be appropriate.

A left-turn lane would remain warranted for the middle driveway which serves inbound traffic, and is recommended.

A copy of the graph indicating an even split of trips among the two non-gated driveways is provided and replaces Appendix E.

Emergency Access

The project site as designed has driveways and drive aisles that are of sufficient width to accommodate emergency response vehicles, including fire trucks. The site serves truck traffic, so has a circulation system that would allow a fire truck to turn around and exit. The primary drive aisle would connect to all the new buildings, with sufficient space between the buildings to stage fire suppression equipment. The third driveway would be gated with a KNOX box and used for emergency access only. The site would therefore have adequate emergency access.

Conclusions and Recommendations

- A left-turn lane is not warranted at the easternmost emergency vehicle access driveway based on the anticipated lack of trips on this driveway.

- While a left-turn lane is warranted at the westernmost driveway, since this driveway serves outbound trips only a left-turn lane is not recommended. It is noted that an exception to the County standard may be appropriate as operation would be exactly the same without a turn lane as with one, therefore meeting the requirement of having the "same practical effect."

- A left-turn lane should be constructed on the Basalt Road at the middle site driveway that serves all inbound trips.

Thank you for giving W-Trans the opportunity to provide these services. Please call if you have any questions.

Sincerely,

Allison C. Moser

Allison Moser, PE (Civil, Traffic)
Traffic Engineer

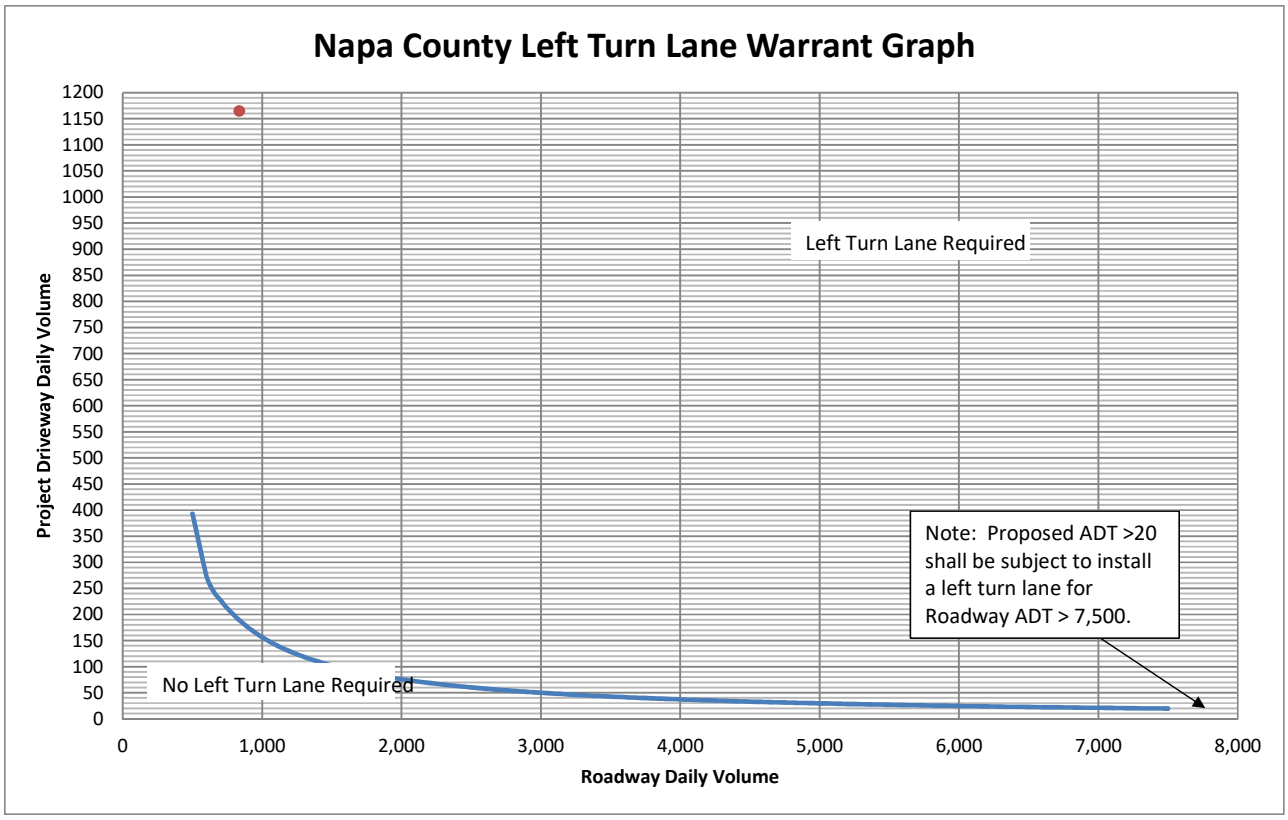


Dalene J. Whitlock

Dalene J. Whitlock, PE (Civil, Traffic), PTOE
Senior Principal

DJW/acj/NAX155-1.L1

Enclosures: Left-turn Lane Warrant Spreadsheets


Napa County Left Turn Lane Warrant Graph
Project Driveway Daily Volume
1200
1150
1100
1050
1000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
200
150
100
50
0
Left Turn Lane Required
No Left Turn Lane Required
Note: Proposed ADT >20 shall be subject to install a left turn lane for Roadway ADT > 7,500.
0
1,000
2,000
3,000
4,000
5,000
6,000
7,000
8,000
Roadway Daily Volume