



WINERY PROCESS WASTEWATER FEASIBILITY REPORT

SAWYER CELLARS
NAPA, CALIFORNIA

APN 057-330-005



CLIENT:

Brad and Lisa Warner
Rutherford Equipment Rental
P.O Box 66
Rutherford, CA, 94558

Project# 4114058.0
October 22, 2014



WASTEWATER FEASIBILITY REPORT

TABLE OF CONTENTS

INTRODUCTION	2
EXISTING SEPTIC SYSTEM.....	2
WINERY PROCESS WASTEWATER CHARACTERISTICS	2
OPERATION AND MAINTENANCE.....	3
CONCLUSION	4

APPENDICES

1. Vicinity Map & USGS Site Map
2. Reduced Use Permit Plan Set



INTRODUCTION

The Owner is proposing to improve one unit in an existing commercial building for use as a 10,000 gallon per year winery. The parcel number for the unit is 057-033-005.

The property is currently developed and the site is relatively level. The full development consists of two structures with 7 units in each building. The property has landscaping along Technology Way and around the perimeter of the site. The two buildings are separated by a driveway that allows access to both buildings. The buildings also have shared parking around the perimeters of each building. Runoff from the site is captured in on-site storm drains. Appendix 1 contains a Site Location Map and a USGS Site Map showing the parcel topography, features and boundary. Appendix 2 contains a reduced version of the Use Permit plan set.

This report will evaluate the disposal of the facility's process wastewater.

EXISTING SEPTIC SYSTEM

The existing septic system is connected to the Napa Sanitation collection system.

WINERY PROCESS WASTEWATER CHARACTERISTICS

<i>Wine Production:</i>	10,000 gallons of wine per year 2.38 gallons of wine per case = 10,000 gal/year/2.38 cases/year = 4,202 cases/year
<i>Wastewater Production:</i>	5 gallons of wastewater/gallon of wine = 10,000 gal/year x 5 gal wastewater/gal = 50,000 gal/year wastewater
<i>Peak Daily Waste Water Flow:</i>	Crush Period = 30 days 10,000 gallons x 1.5 / 30 days = 500 gallons/day
<i>Average Daily Flow:</i>	50,000 gal/yr = 50,000 gallons/year/365 = 137 gallons/day
<i>Monthly Wastewater Flows:</i>	(See Table 2)



TABLE 2

	% By Month	Waste/Month	
Sep	15%	7,500	Gal/Month
Oct	15%	7,500	Gal/Month
Nov	11%	5,250	Gal/Month
Dec	8%	3,750	Gal/Month
Jan	4%	2,000	Gal/Month
Feb	6%	3,000	Gal/Month
Mar	6%	3,000	Gal/Month
Apr	5%	2,250	Gal/Month
May	6%	3,000	Gal/Month
Jun	7%	3,500	Gal/Month
Jul	9%	4,250	Gal/Month
Aug	10%	5,000	Gal/Month
Totals	100%	50,000	Gal/Year

Winery Process Waste Water Treatment – Hold and Haul

Napa County Design Guidelines require a Hold and Haul volume equivalent to 7 days of peak process waste flow. This equates to 3,500 gallons of required storage for the proposed project at full production. Storage for 4,000 gallons is proposed in two 2,000 gallon tanks.

For this option polyethylene holding tanks would be used. An existing trench drain would pick up all wastewater flows and convey it to an in-floor sump and pump that would pump the wastewater to the holding tanks. A high water alarm beacon, powered by the electrical system in the winery, will be located on an exterior panel adjacent to the crush pad.

STORMWATER DIVERSION

Operational areas will be indoors and will not have contact with stormwater.

OPERATION AND MAINTENANCE

The process wastewater system has been designed so minimal input from facility staff is required. All holding tanks shall be operated under a valid operating permit issued by Napa County Planning, Building, and Environmental Services (PBES). The winery will contract an approved septage hauler permitted with the Napa County PBES. The contract with the responsible party will be provided prior to the final inspection for the system installed. Pumping records shall be submitted to Environmental Management every 3 months. A flow meter will be installed to measure the amount of wastewater generated. Pumping records will be kept for a period of 5 years.



CONCLUSION

This report demonstrates that Hold and Haul is a feasible option for treating the Sawyer Cellars winery process wastewater.



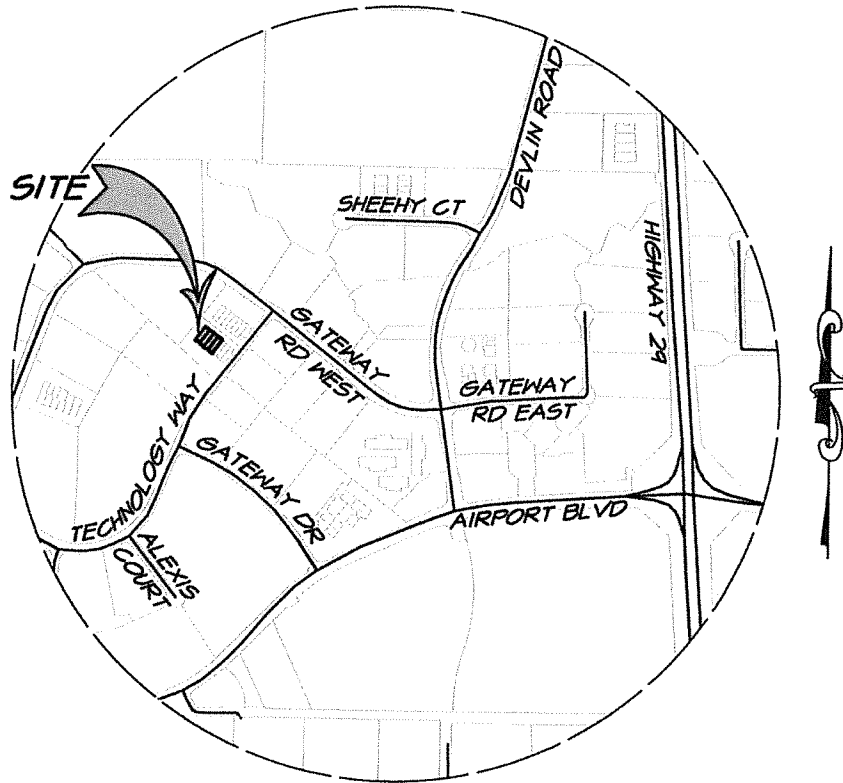
APPENDIX 1

Vicinity Map & USGS Site Map

SAWYER CELLARS VICINITY MAP

NAPA COUNTY

CALIFORNIA



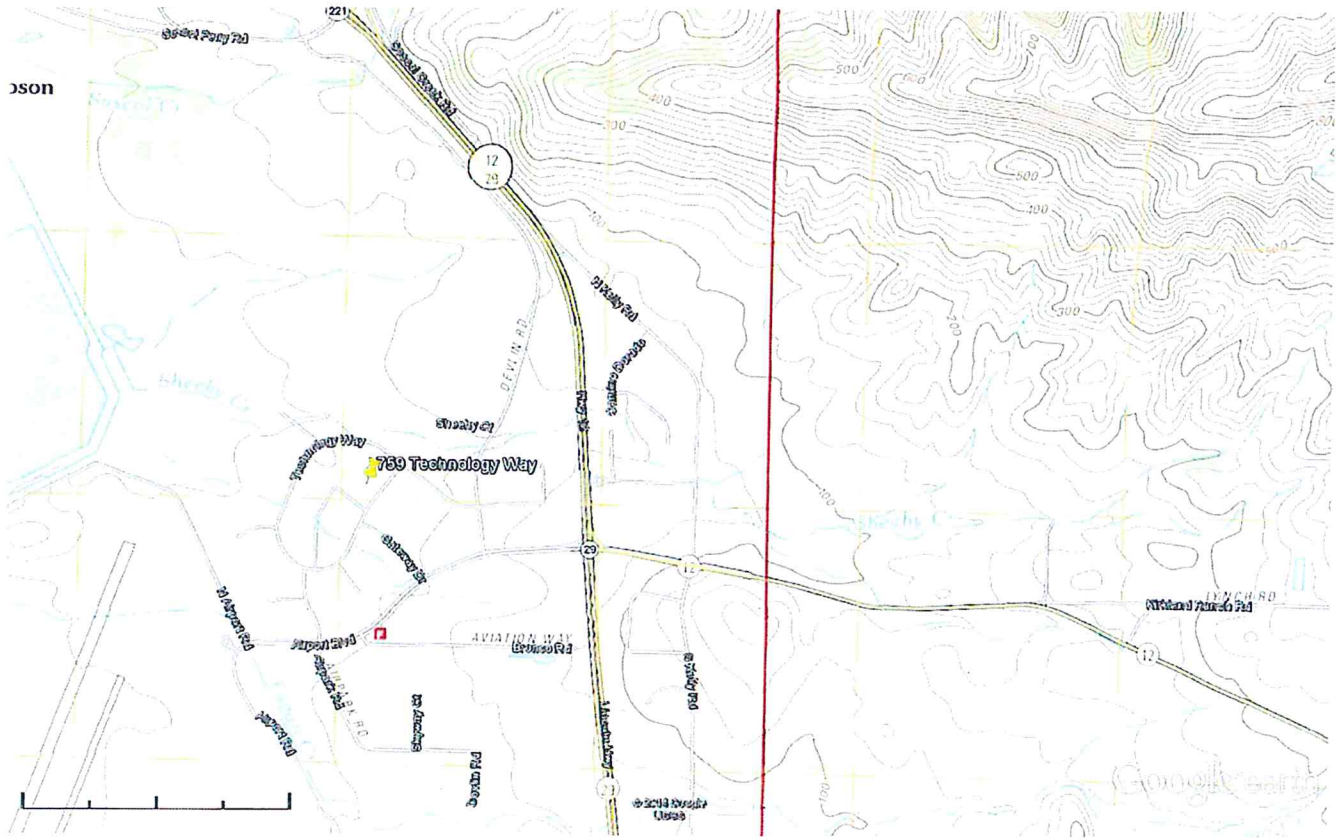
VICINITY MAP

SCALE: 1" = 1000'

RSA⁺	1515 FOURTH STREET
	NAPA, CALIF. 94559
	OFFICE 707 252.3301
	+ www.RSAcivil.com +

RSA⁺ | CONSULTING CIVIL ENGINEERS + SURVEYORS + EST. 1980

SEPTEMBER 15, 2014 4114058.0 Exh-Vicinity Map.dwg



Google earth

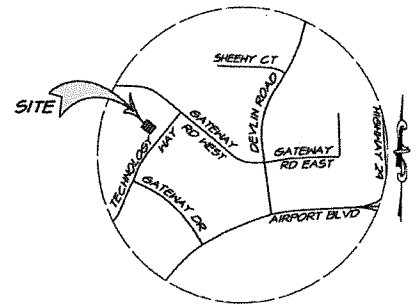
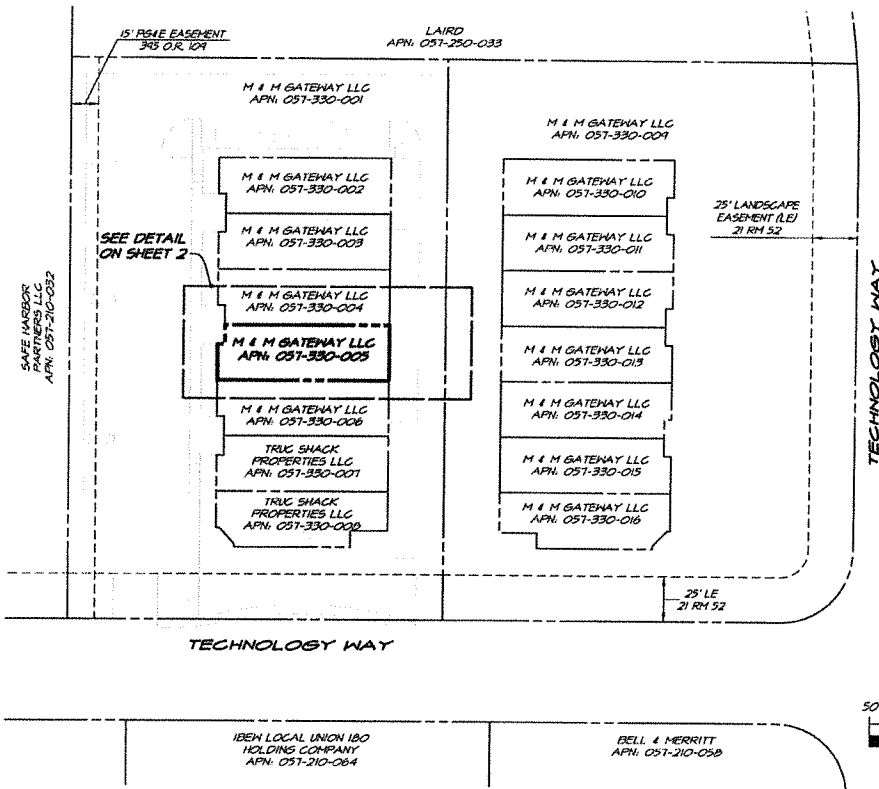




APPENDIX 2

Reduced Use Permit Plan Set

SAWYER CELLARS HOLD & HAUL PLAN



VICINITY MAP
SCALE: 1" = 1000'

PROJECT INFORMATION

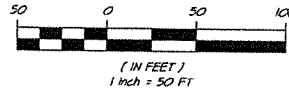
OWNER: M & M GATEWAY LLC
194 GAMING ARBUSA #1
NAPA, CALIFORNIA 94558

CLIENT: BRAD & LISA WARNER
RUTHERFORD EQUIPMENT RENTAL
P.O. BOX 66
RUTHERFORD, CA 94573

SITE ADDRESS: TECHNOLOGY WAY
NAPA, CALIFORNIA 94558

A.P. NUMBER: 057-033-005

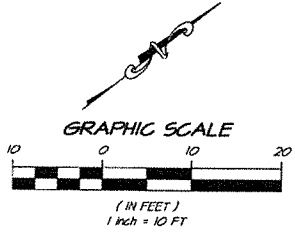
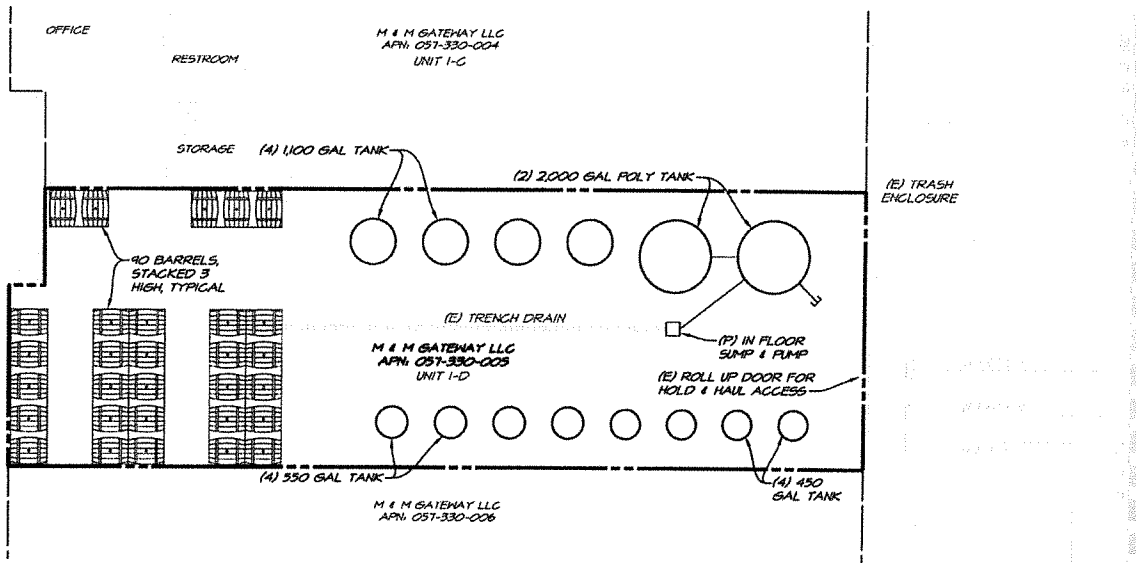
GRAPHIC SCALE



RSA CONSULTING CIVIL ENGINEERS + SURVEYORS 1980

OCTOBER 22, 2014 414088.0 1-COV.dwg 1 OF 2

SAWYER CELLARS HOLD & HAUL PLAN



RSA⁺	1915 FOURTH STREET HAPA, CALIF. 94559 OFFICE 707.1252.3301 + www.RSAcivl.com +
	RSA ⁺ CONSULTING CIVIL ENGINEERS + SURVEYORS + 1990 OCTOBER 22, 2014 414055.0 2-HHNDwg 2 OF 2