SIEGFRIED

MEMORANDUM

To: Shea Rhoda

From: Paul Schneider, P.E.

Date: 03/14/2025

Re: **Napa Gateway Sewer Feasibility Report**

I. Introduction

Our office has been retained to document the design and operational parameters for the proposed wastewater disposal system for the Gateway Building. The facility is proposing to allow for wine production during peak season which will generate process waste water.

II. Employees, Visitors, and Wine Production

The facility does not anticipate visitors as there is no retail operation planned. Wastewater generation is based on the County of Napa use table of 15 gpd per employee. The maximum number of employees onsite is 15, however this waste does not enter the hold ana haul system. The facility is proposing to produce 250,000 gallons of wine per year, which according to Exhibit A generates 450,000 gallons of process waste water at peak daily flow of 8,250 gallons.

III. Proposed Hold and Haul System

The project proposes to utilize a hold and haul system to dispose of the process wastewater. The system will have the following design elements:

- Odor control and venting
- High water alarm set to 70% of the full volume
- 7 day peak flow capacity
- Tanks will be below grade Xerxes tanks
- Manway access will be elevated 2” minimum above grade to prevent intake of water and will be H20 traffic rated

The anticipated total volume required is 8,250 gallons per day (gpd) for 7 days shown in Table A below:

Table B: Available Capacity (gpd)		
Process Waste (gpd)	Days	Total Volume (gal)
8,250	7	57,750

Per Exhibit B the project proposes to install 60,000 gallons of waste storage capacity.

IV. Conclusion

The projects hold and haul system has bene design per the County requirements and is a viable solution to hold up to 7 days of peak waste flow before operations have to cease.

Exhibit A: Industrial Water Demand Estimate

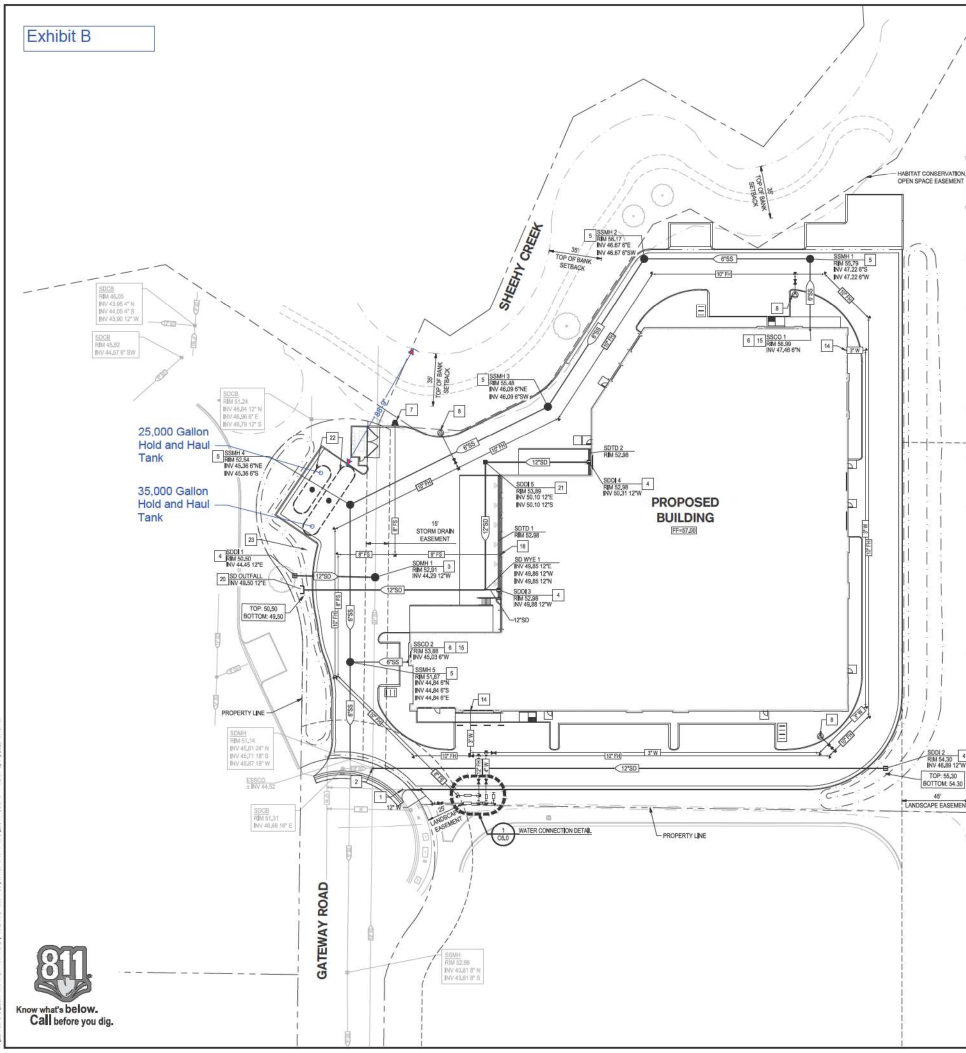
Converter	Tons/Cases/Gallons of Wine (input blue number)			
	ENTER	Cases	Tons	Gallons of Finished Wine
Tons	1	63		150
Cases	22575	-	358.3	53729
Gallon finished Wine	250,000	105042	1667	-
Total WW/year	3650000	383403	6086	912500

105042	Cases/Year
63	Cases/Ton
2.38	Gal of Wine/Case
4	Gal of PW:Wine Ratio
45	% of Annual PW Used During Vintage
60	Days of Vintage
305	Days/Year
1.1	SF for Peak/Max Daily Flow

250000	**Total Finished Wine/Year**, in Gallons	
1000000	**Total PW/Year**, in Gallons	
450000	**Total Volume of Wastewater Generated During Vintage**, in Gallons	
7500	**Average Daily Wastewater Production During Vintage**, in Gallons	
1803	**Average Daily Wastewater Production During Rest of the Year**, in Gallons	
8250	**Peak Daily Flow During Vintage**, in Gallons	**(System Size Based On This Number)**
16500	**Recommended EQ Capacity (2-Day Minimum)**, in Gallons	

Exhibit B: Hold and Haul Schematic

Exhibit B



UTILITY LEGEND

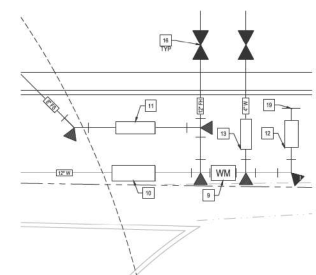
- PROPOSED MAINTENANCE HOLE
- PROPOSED STORM CATCH BASIN
- PROPOSED STORM DRAIN INLET
- PROPOSED AREA DRAIN
- PROPOSED SANITARY SEWER CLEANOUT
- GATE VALVE
- PROPOSED FIRE DEPARTMENT CONNECTION
- PROPOSED FIRE HYDRANT
- PROPOSED SANITARY SEWER LINE
- PROPOSED STORM DRAIN LINE
- PROPOSED FIRE SERVICE LINE
- EXISTING STORM DRAIN LINE
- EXISTING SANITARY SEWER LINE
- EXISTING GAS LINE
- EXISTING WATER LINE
- EXISTING ELECTRICAL CONDUIT

UTILITY NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY OF THE EXISTING UTILITIES, INCLUDING, BUT NOT LIMITED TO UTILITY BOXES, THAT ARE FOUND TO BE BROKEN, CRACKED, OR OTHERWISE DAMAGED.
2. ALL UTILITY BOXES AND MAINTENANCE HOLES SHALL BE PROTECTED AND ADJUSTED TO FINISH GRADE, UNLESS OTHERWISE NOTED.

UTILITY KEY NOTES

1	CONNECT TO EXISTING WATER MAIN
2	CONNECT TO EXISTING STORM DRAIN MANHOLE
3	INSTALL STORM DRAIN MANHOLE
4	INSTALL STORM DRAIN DRAIN INLET
5	INSTALL SANITARY SEWER MANHOLE
6	INSTALL SANITARY SEWER CLEANOUT
7	INSTALL FIRE DEPARTMENT CONNECTION
8	INSTALL FIRE HYDRANT
9	INSTALL WATER METER
10	INSTALL FIRE HYDRANT DOUBLE DETECTOR CHECK ASSEMBLY
11	INSTALL FIRE SPRINKLER DOUBLE DETECTOR CHECK ASSEMBLY
12	INSTALL LANDSCAPE BACKFLOW PREVENTER
13	INSTALL DOMESTIC WATER BACKFLOW PREVENTER
14	DOMESTIC WATER BUILDING POINT OF CONNECTION, SEE PLUMBING PLANS FOR CONTINUATION
15	SANITARY SEWER BUILDING POINT OF CONNECTION
16	INSTALL GATE VALVE
17	INSTALL STORM DRAIN STUB FOR FUTURE USE
18	FIRE SPRINKLER BUILDING POINT OF CONNECTION
19	LANDSCAPE POINT OF CONNECTION
20	STORM DRAIN OUTFALL
21	INSTALL STORM DRAIN DRAIN INLET WITH SOLID TOP
22	INDUSTRIAL WASTEWATER HOLD TANK
23	EQUIPMENT PAD



1 WATER CONNECTION DETAIL
1" = 5'

SCALE: 1"=30'

SIEGFRIED
3428 Brookside Road
Stockton, California 95219
209-943-2021
Fax: 209-942-0214
www.siegfriedeng.com

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- STRUCTURAL
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- SURVEYING
- PLANNING
- ATHLETIC FACILITY DESIGN
- GEOTECHNICAL

REVISIONS
No. Date Description

PROJECT

NAPA GATEWAY ROAD

GATEWAY ROAD
NAPA, CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER PAUL J. SCHNEIDER No. 62498 Exp. 09/30/25 CIVIL STATE OF CALIFORNIA

SHEET TITLE

UTILITY PLAN

Proj Mgr	PJS
Drawn by	KJG
Date	03/14/2025
Job No.	23347

SHEET: C6.0
OF: 1