

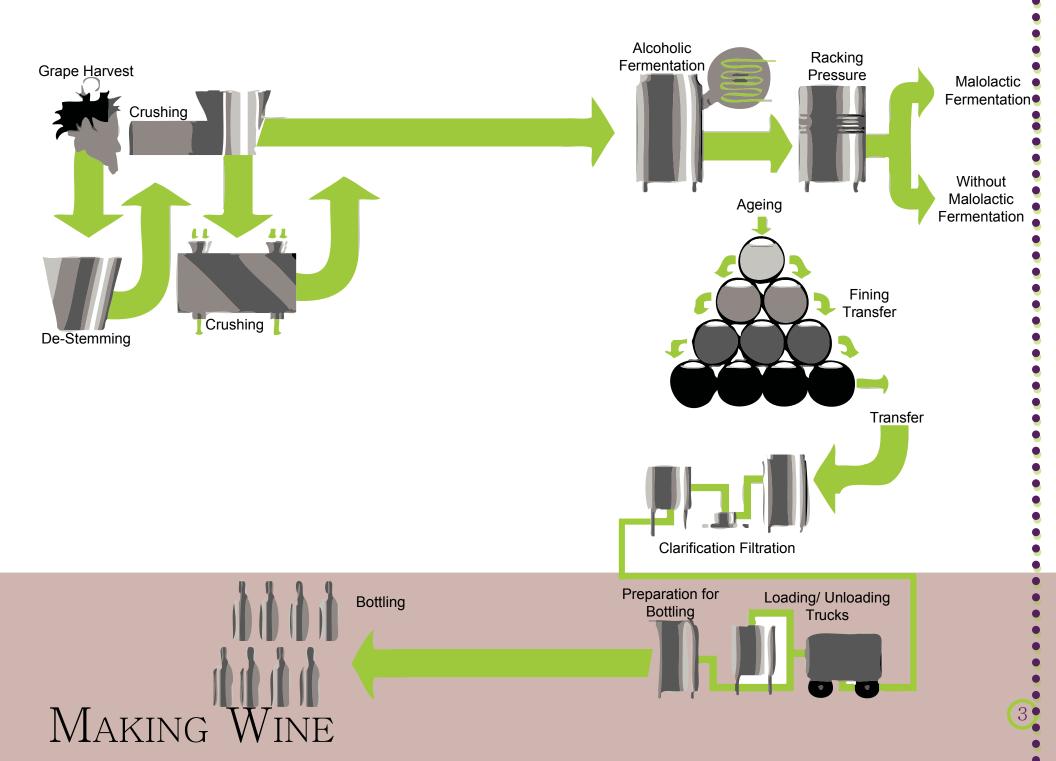
# Senseful Design

Design Thesis by: Chelsea Lenz

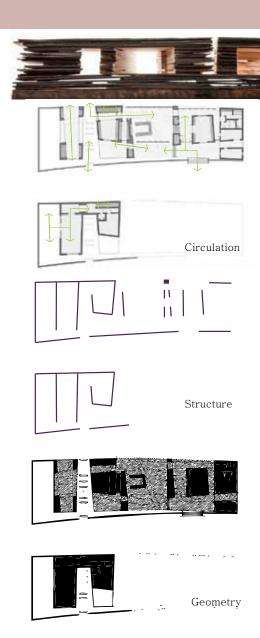
### HISTORY OF WINE

| 7000 BC 💠       | Fermented honey/rice/fruit found in China  |
|-----------------|--|
| 4100 BC         | Oldest winery found in a cave in Armenia   |
| 1500-300 BC     | ——Phoenicians spread Vitis vinifera throughout Mediterranean   |
| 340 BC          | —————Aristotle Drinks "Black Wine" in Lemnos, Greece. Remarks tastes of oregano and thyme                  |
| 70 BC           | ———Pliny the Elder writes "In Vino Ceritas" in Naturalis Historia translates as "In wine, there is truth." |
| 200             | Jesus turns water into wine  |
|                 |  |
| 1-500           | Romans spread wine grapes throughout Europe (Fall of the   |
|                 | Roman Empire 500 AD)   |
| 1000 •          | ——Chateau de Goulaine in the Loire Valley Built. Assumed to be the   |
|                 | eldest operating winery  |
| 1100 💁          | ——————————————————————————————————————   |
| 1304            | First mention of Muscat Blanc as Muscatellus   |
| 1336            | ——————————————————————————————————————   |
|                 | Vougeot in Burgundy, France.   |
| 1400            |  |
|                 | While it bailer to drilling that water (Black I lague)   |
| 1530 💁          | — Wine travels to the New World and through Mexico and Brazil by   |
| 1530 <b>O</b> - |  |

| 1650          | Cabernet Sauvignon is born - Bordeaux, France           |
|---------------|---|
| 1659 <b>(</b> | ———Wine is brought to South Africa                      |
| 1670 (        | First Vineyards planted at Chateau Lafite-Rothschild    |
| 1693          | Champagne is invented                                   |
| 1752          | Port Wine is demarcated                                 |
| 1775 (        | 1st Late Harvest recorded                               |
| 1830          | Modern bottle shape introduced                          |
| 1836          | Wine to New Zealand                                     |
| 1857 (        | First commercial California Winery - Buena Vista Winery |
| 1870 (        | Phylloxera destroys 75% of France's vineyards           |
| 1920-1933     | Prohibition   |
| 1964          | Box wine is invented                                    |



### Case Studies





Allied Works Architecture SOKOL BLOSSER Tasting Room

This is a good example of how designing for our five senses can enhance the architectural experience that a user may have. Looking more closely at this I found the following:

Sight - the relationship with the views and natural light.

Smell - the smells of the cedar wood and the scent of wine.

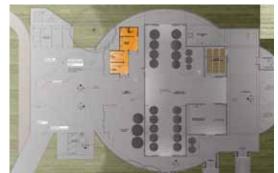
Touch - textures of the ceder wood on both the interior and exterior. In combination with traditional barrel materials

Taste - the use of wine and food. Sound - open windows and doorways to bring nature inside.











Signum Architecture
ODETTE ESTATE

#### Winery

The advantage of this winery is that it is a great example of how LEED can be incorporated into the project. It also greatly helps with sizing for equipment for wine preparation, fermentation, bottling, storage, etc.

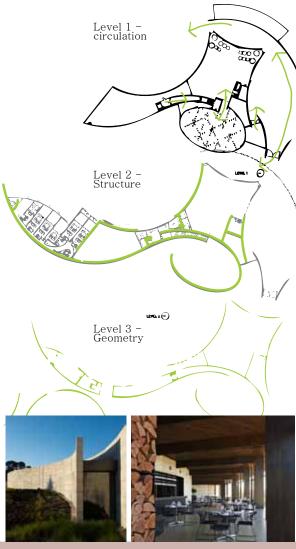
Alongside this wine making building, there is a tasting room, and fifty acres of vines.

Sight - blending with surrounding nature.

Smell - the scent of wine. Touch - smooth aluminum contrasting the surrounded earth and vines.

Taste - the taste of wine. Sound - people talking, wine making equipment working.





#### Wood/Marsh Pty Ltd PORT PHILLIP

Restaurant and Winery

The architect designed this winery with local materials that celebrated the coastal landscape. These materials create a contrast in colors and textures that enhance the character of the winery.

Sight – unfolding from the site. Contrasting Materials for character.

Smell - The water nearby, smell of earth (from the rammed earth) and smells of food.

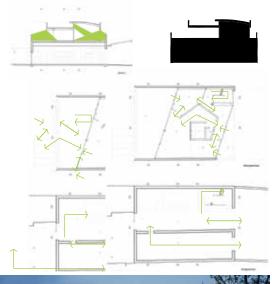
Touch - Smooth texture of the rammed earth versus the rough texture of the burnt timbers.

Taste - pairing of the wine and

Taste - pairing of the wine and the food.

Sound - people talking, water from the bay nearby.









### Architects Collective SATTLER

Winery and Event Center

This project is a good example of a small scale winery. It shows most of the rooms I will be needing like the kitchen and event hosting spaces, however is missing the restaurant element crucial to my proposal. The layout for the interior is a creative idea for adapting to the client. I found that the unifying presence is seen in:

Sight – unique form of the building.

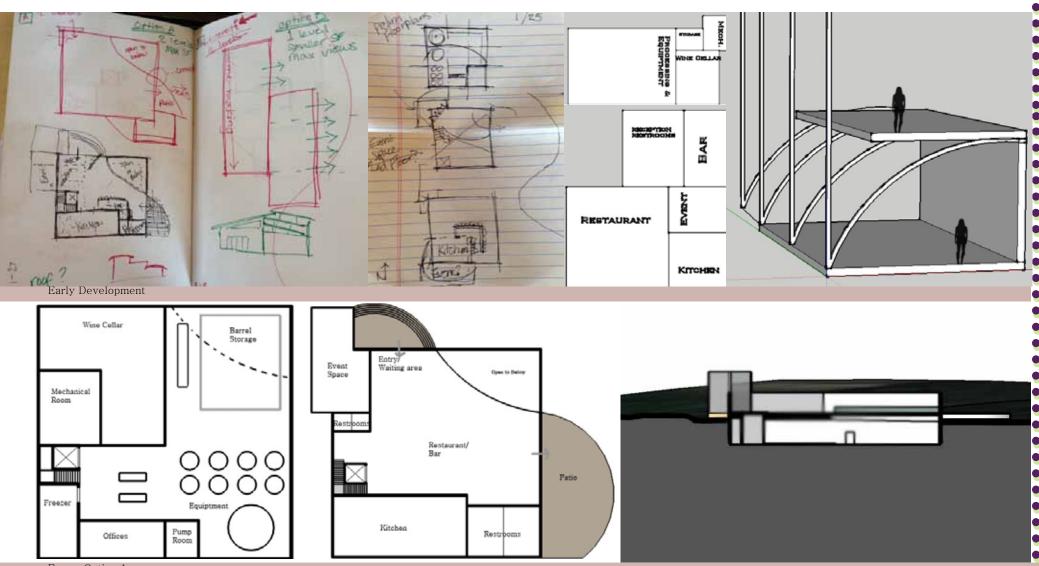
Smell - the scent of wine. Touch - smoothness of materiality.

Taste - the use of wine. Sound - people talking, the busyness of surrounding town.



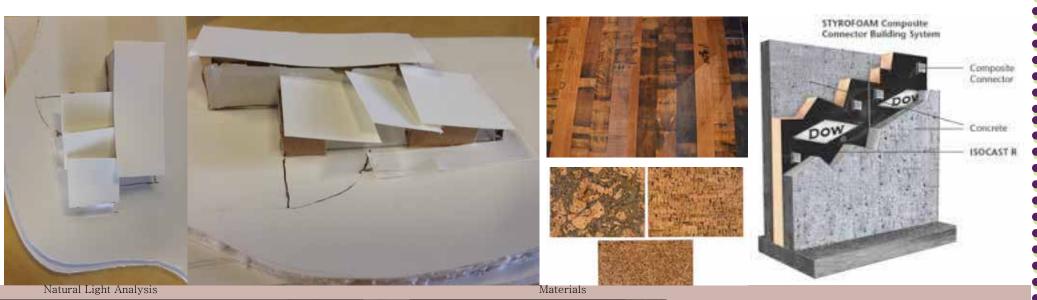
### SITE





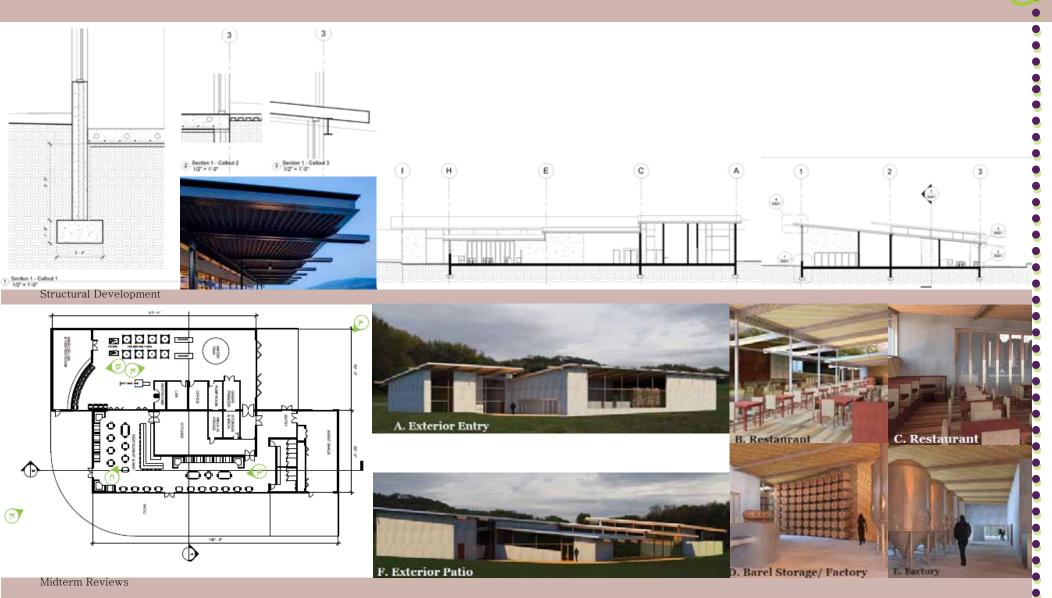
Forms Option 1







Interior Materiality Development









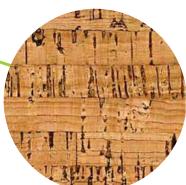
Testing Materials





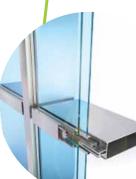
#### OAK PANELS

The oak panels are used to deflect noise through parts of the restaurant. The waving form is inspiration from wine being poured.



#### CORK

Also a traditional material in wine making, cork is used as an accent material and a sound buffer within the space.



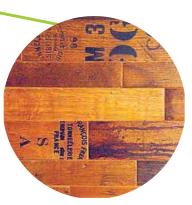
#### **GLASS**

Plays an important roll in lighting.
Larger windows were placed to either bring in southern light, or to frame views of the river and the vineyard.



#### CONCRETE

Is used as the main exterior material because it ages well, without much upkeep. The textured concrete on the North and south walls allows for vines to grow up the walls for additional materiality.



#### RECLAIMED BARRELS

The variation of stamps and wine stained wood adds a unique character to the floor.



#### NATURAL LIGHT

There are very few trees on the site allowing for maximum light to the vines and into the building. The stepping up of the roof faces south to allows natural light to be brought throughout the entire building.

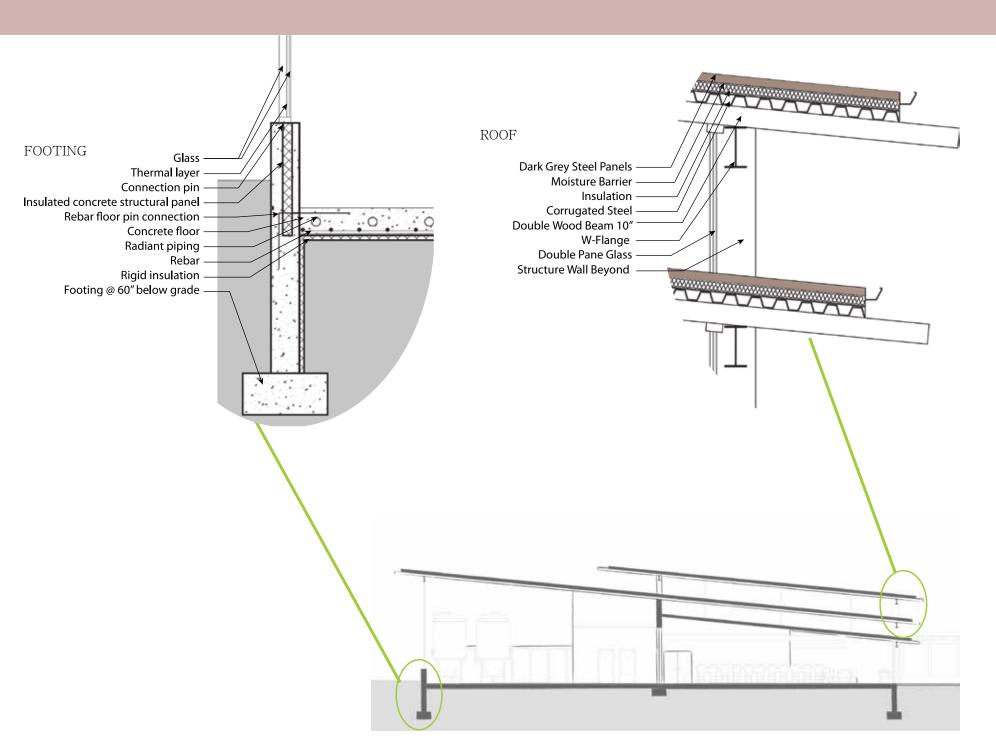
#### **INSULATION**

The Exterior walls consist of concrete structural panels, with rigid insulation between the two layers of concrete. This minimizes heat gain and loss. Walls surrounding the wine cellar are have an additional thickness to help keep the space at a lower temperature. An interior fan system allows for ventilation.

#### RADIANT FLOOR

There are three (winery, restaurant, and event space.) radiant geothermal floor loops controlled by a ground pump. This allows for the spaces to remain at a comfortable temperature. A fourth pump is used to control the temperatures of the fermenting tanks.

### Structure



#### TASTE & SMELL

The experience of eating the grapes, or tasting and smelling the wine play a large part of the memorability of the design.

#### SOUND

"Clink!" Our auditory experience of architecture is influenced by materials and the people surrounding.

#### VISUAL

Glass is used to frame views, not only to the exterior river and vineyard, but also between the restaurant and the factory.



#### TACTILE

Encouraging the users to interact with the architecture allows them to experience the materials in a new sense.

## $\underset{\text{scale }3/64"=1"-"0}{FLOOR}PLAN$

