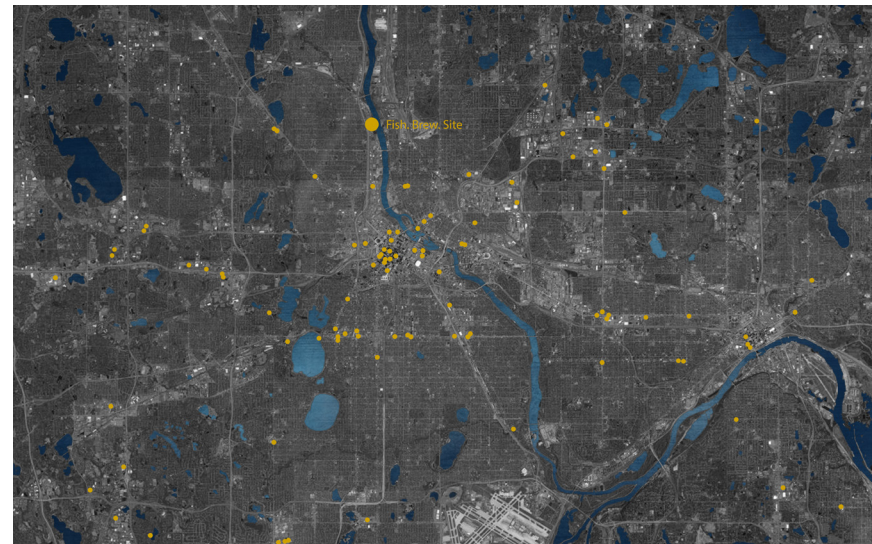
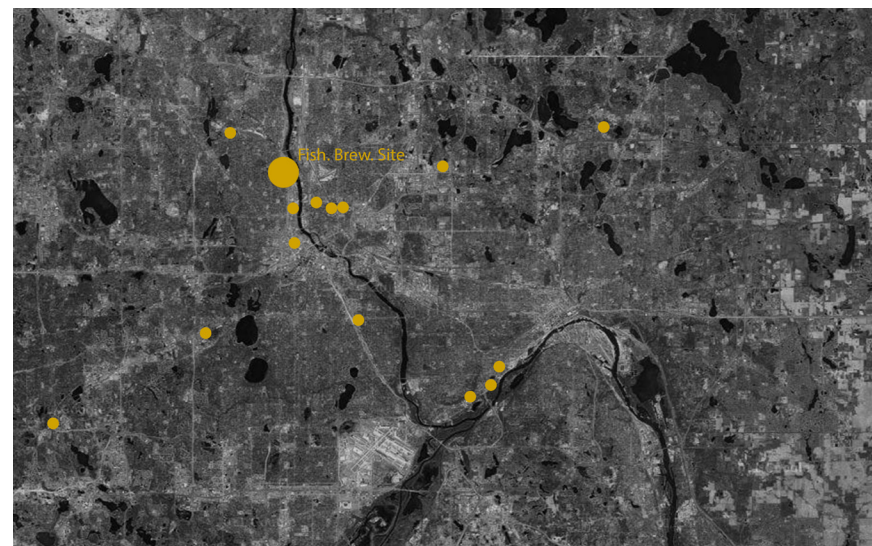


Fish. Brew. | Minneapolis

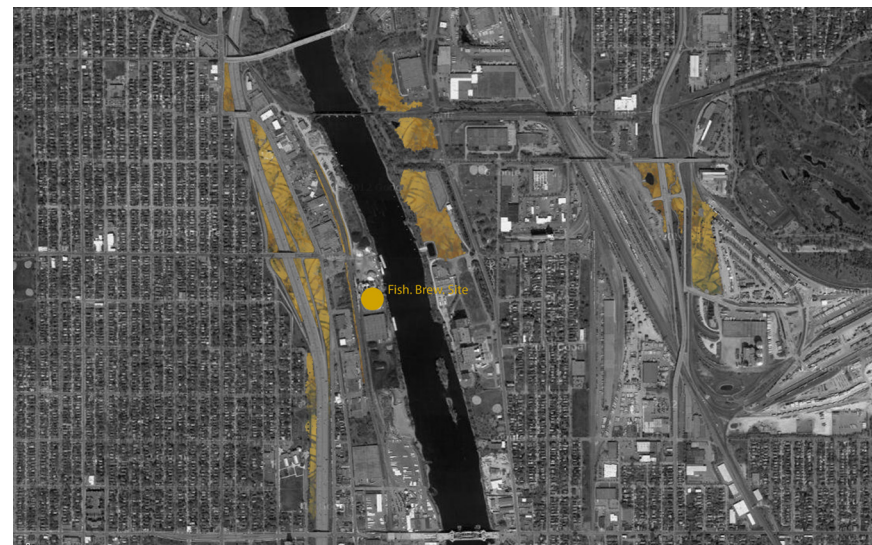
Jenna Johansson & David Johansson



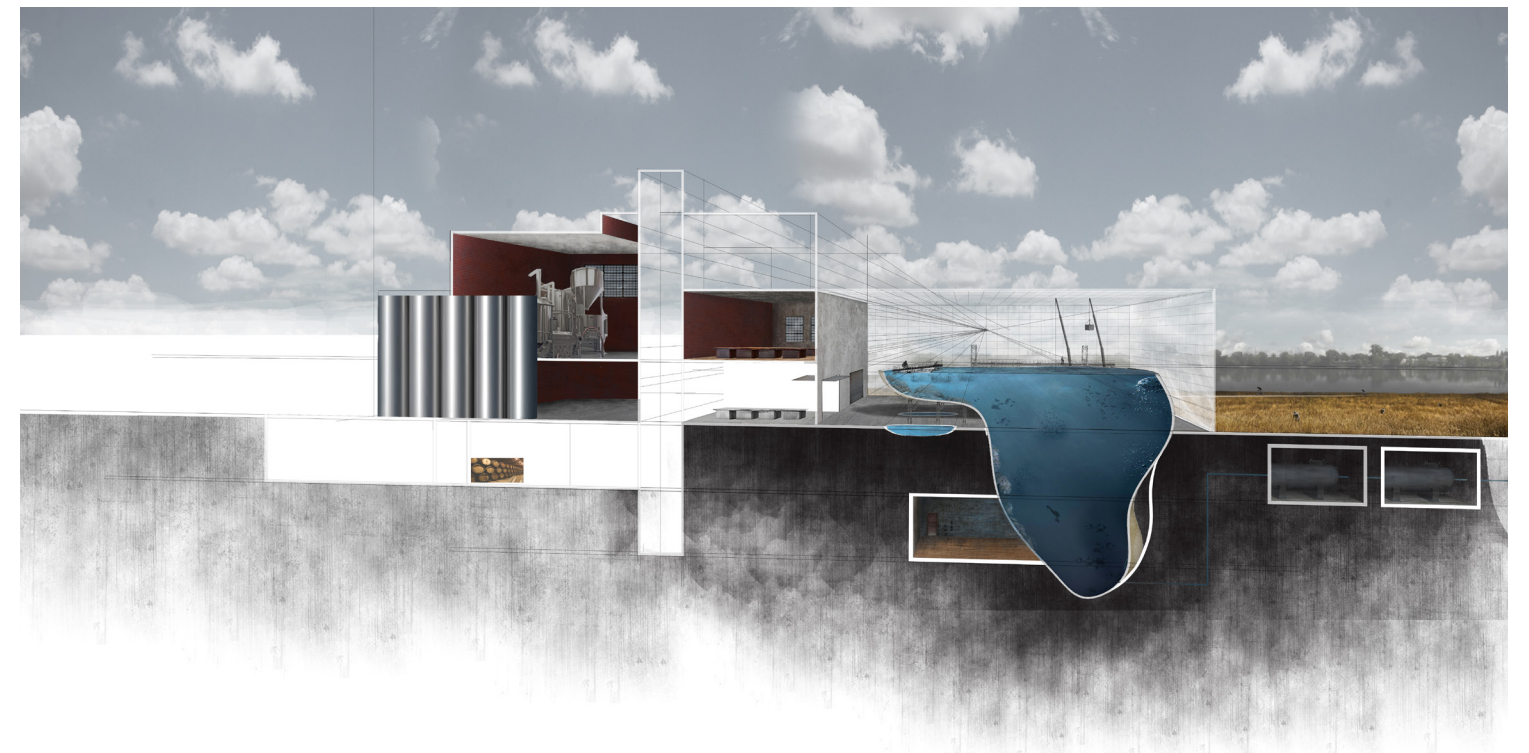
Where to Buy Fish - Twin Cities



Brewery Locations - Twin Cities



Possible Growing Area - Twin Cities



Speculative Section Collage

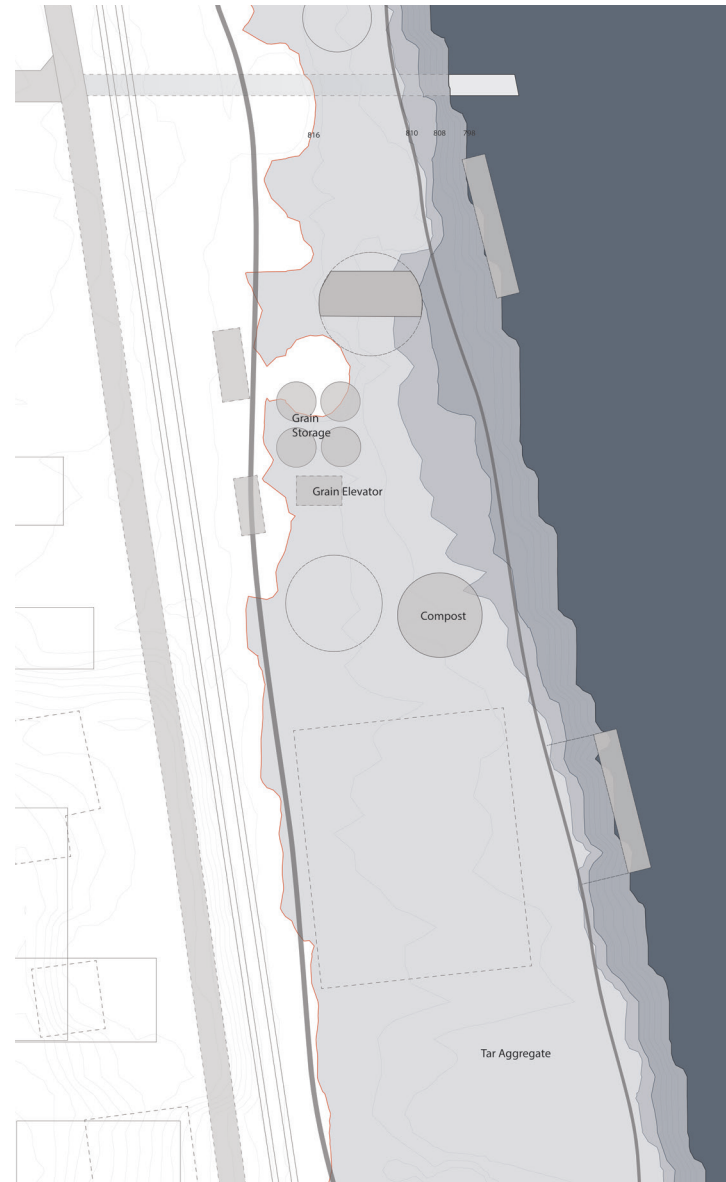
Premise

This project is a dual industry venture between a saltwater fish farming and craft beer brewing. The project looks at the two industries of fish farming and beer brewing in context with one another in order to push the boundaries of what is typically done in each industrial process including: capitalizing on benefits of cross-utilization of process byproducts and welcoming community engagement not only within the site, but also within the industrial processes. Salt-water fish farming is new and innovative and will be the economic driver for this project in terms of sizing and scale. Its waste will go toward powering the brewery, which is already a well-established industry in the city. We look to explore potential economic related benefits while also pushing current brewing and fish farming practices. In

addition, we intend to capitalize on the culture of craft brewing as precedent for how industry and culture might engage in processes that are both socially and environmentally rich, while maintaining economic viability.



RiverFIRST - KVA/TLS

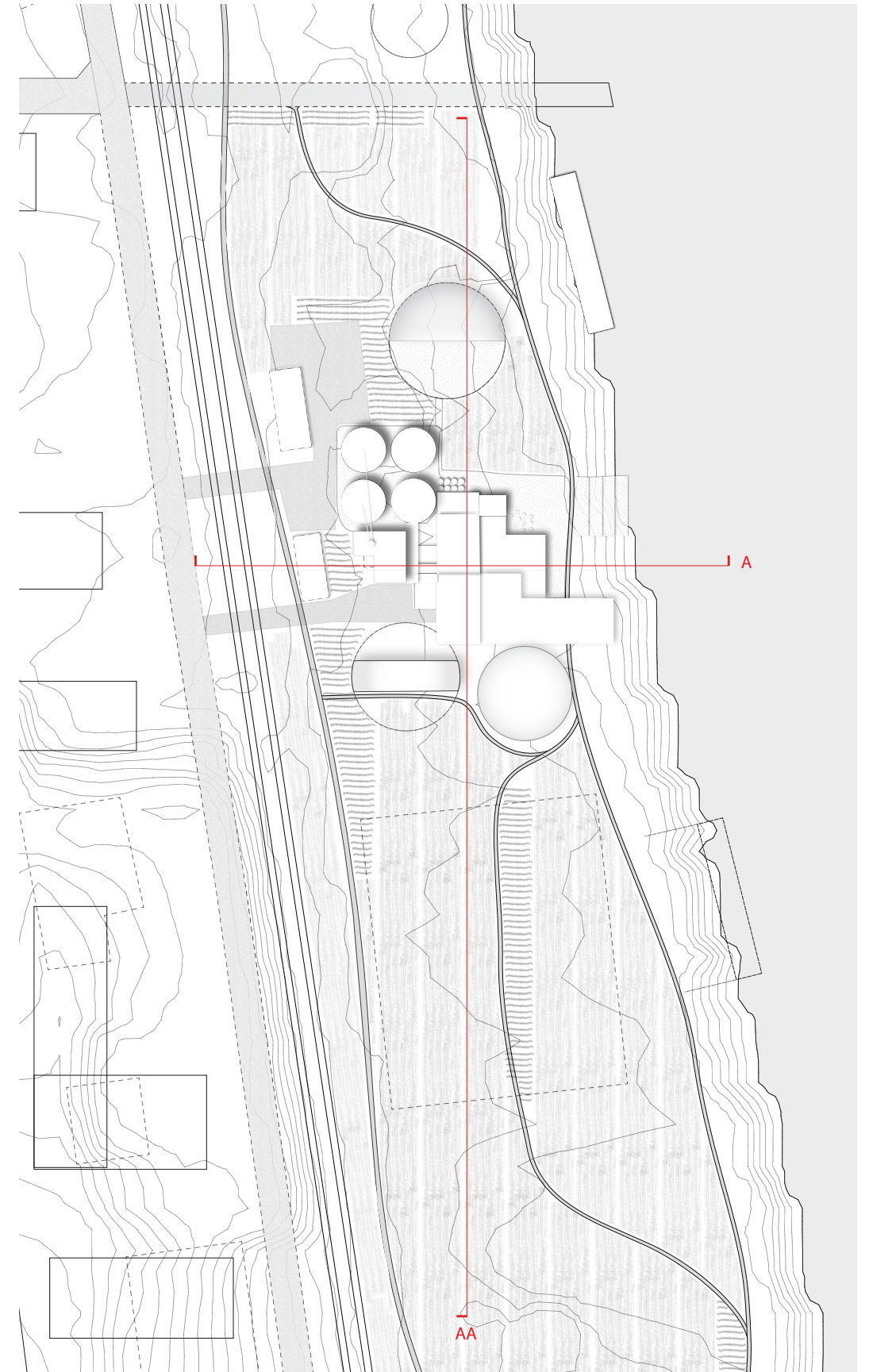


Existing Site Plan - Flood Lines

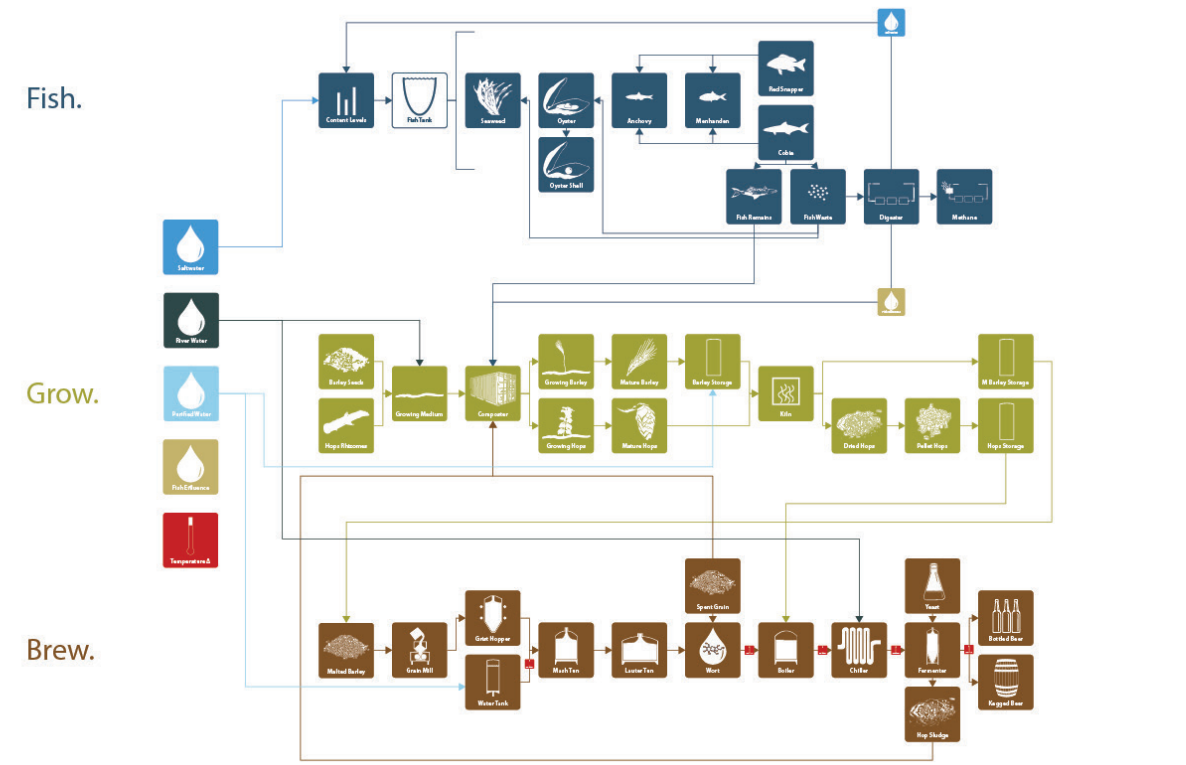
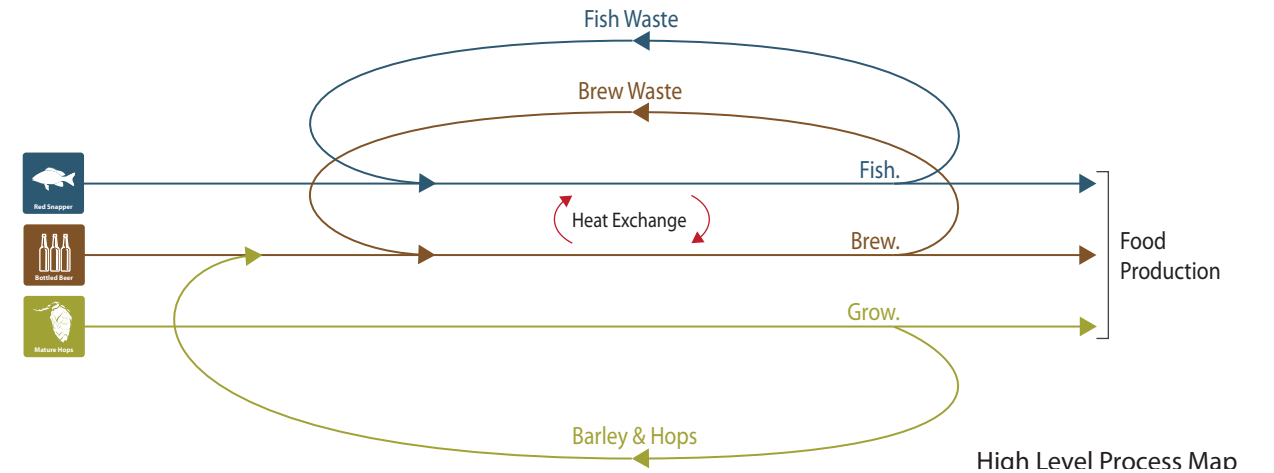
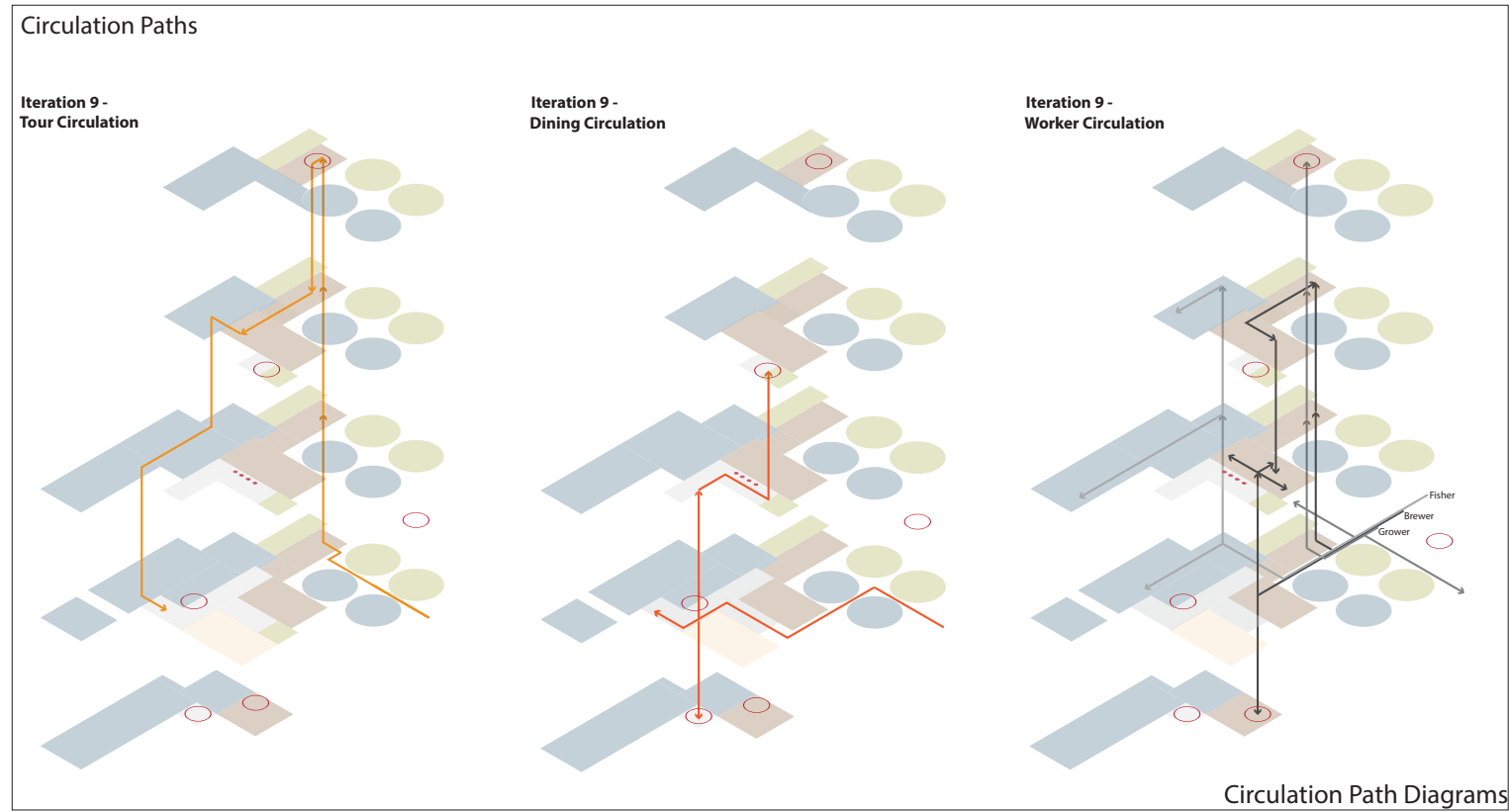
Site

The project is sited between N 36th Ave and Dowling Ave on the Mississippi River on what is currently the site of the North Port of Minneapolis. The North Port has recently been under debate as to whether or not it should remain open for import/export. Industry in this area argues that it is the cheapest way to transport goods in and out of the area, however environmentalist groups would like to see alternatives. They argue that the lock at St. Anthony Falls should be permanently closed to stop the spread of Asian Carp any further North, thus cutting off any transportation further up river. The city of Minneapolis would like to see this area along with other Mississippi River front locations revitalized environmentally as well as for community engagement. The RiverFIRST proposal

by TLS/KVA won the Minneapolis River Front Revitalization competition with master plans for this real estate that suggested green industry on our site that could cohabit with public traffic. We intend to approach our project as one manifestation of the ideals proposed by RiverFIRST.



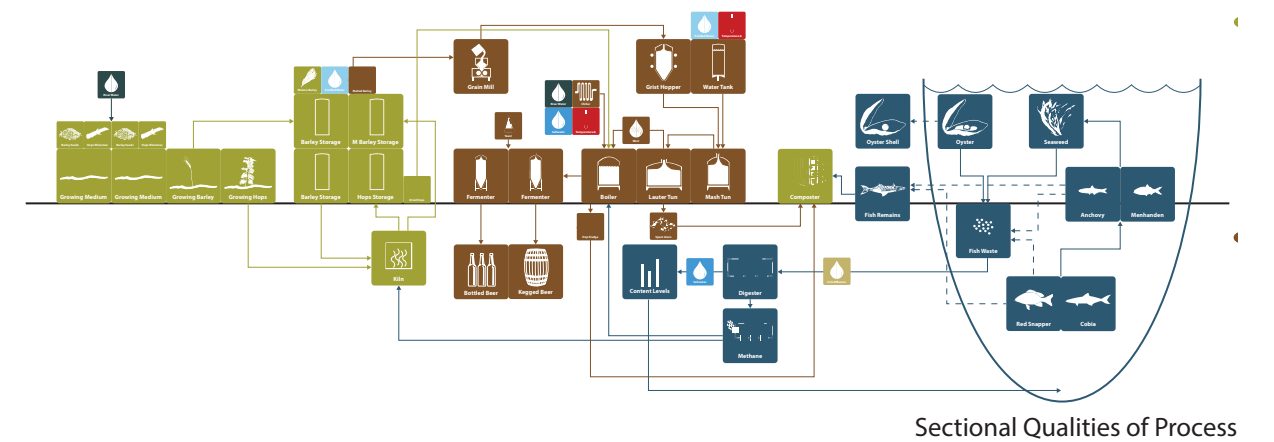
Design Speculation



Program

The salt-water fish farm is very unique to the industry of fish farming. One company out of New York, Local Oceans, is the first and, at this point, only inland salt-water fish farm in the United States. Much can be improved and is being researched in fish farming so we propose that our program push typical boundaries with the intent that new methods and practices can be developed. We are proposing habitat for multiple fish species to be sold and eaten as well as areas for prey species to be raised for feeding purposes. The fish pools shall also provide nutrient for aquatic plant life to grow – both to aid in filtering water as well as for the fish to eat. Tying into the community will take form in areas to serve fresh fish as well as a market where people can come to purchase take home portions.

The brewery is another way to bring people to the site. Brewing 20,000 barrels per year, the brewery will have the capacity to serve visitors coming to buy or eat fish, those who come for tours of the site and even visitors that need a break from the travels along the public pathways. A portion of the barley and hops that go into the beer will be grown and processed on the eleven-acre site and in the onsite malting and drying facilities. By producing the specialty grains that go into the beer, the brewery will be able to experiment and explore – then boast about – new unique flavors and recipes. There is also opportunity for community engagement during harvest time – everyone comes together to pick hops and can then be a part of sampling the freshest goods produced from the site.





Hop Harvest Community Event



Yeast Culturing Laboratory

Approach

Our proposal takes the Local Oceans salt-water fish farm system and expands on it by challenging the current practice of packing many fish into small tanks for efficiency of resource usage. Instead we present the system as a hybrid between typical fish farming and the keeping of aquatic life in aquarium type habitats. Shaping the program in this way will allow for continued innovation in fish farming research – pushing the practice into a more humane model. Based on current research, an approach of less fish per gallon of water and polyculture (multiple species) structuring of the tanks may lead to savings in food cost and antibiotics – eventually resulting in a healthy habitat for fish and a healthy food source for humans. Beer brewing enters the mix for having an already solidified culture of craft within the process. From growing the ingredients

of hops and barley, to processing these for use, to concocting brews then allowing them aging time, to serving them and of course drinking, craft beer brewing insists on high levels of care and product. This type of care can be better practiced in the industry of making food as well, specifically fish in this case.

By relating these two industrial processes we are able to propose opportunities for each to benefit from the other in terms of using outputs as inputs. For each trading of input and output, there are spatial and programmatic (architectural) implications that may serve as a response or a driver. We have sized the program based on precedents from each industry beginning with the amount of fish that could potentially be sold in one year (based on the amount of seafood sold from a local restaurant, Sea Salt, per

week). From those fish, we expect a certain amount of energy to be produced from their excrement being broken down, using anaerobic digesters, into biogas (methane, CO₂, and water) which can be used to create heat and electricity. The electricity will go toward powering the brewery and fish farm while the heat will be used to help regulate temperatures of fish tanks as well as during heating and cooling points in the brew process. The physical connections that are made between industrial processes create opportunity for interesting experiential events to occur. While being served in the tap house, for example, one might be able to observe the activity of the fish in the aquarium while on the other side viewing brewers at work.

Next Steps

In the coming weeks we will be exploring further the overall site connections to the public and how interactions can happen between the public and the project. We will look more closely at the seasonal qualities of each process and of the site and how program and architecture are or could be affected by changes in season. We will also get into the more personal scale interactions that could take place on site whether from the perspective of work or visitor, we find it important to consider the human scale of the project and how the design will impact the person.