

WenZhou WenRui Tang River Map

Project 2

Title: Water Purification Park
 Instructor: Evan Saarinen
 Location: WenZhou WenRui Tang River
 Studio: Arch 2103 Landscape
 Time: 2020 Fall

该项目创造了一个自然的水过滤系统，为乡村和工厂工人提供公共空间。通过自动清洗工厂的污水，为工人和村民提供一个框架。它不仅作为一个公园，同时也能连接周围的土地，为汽车和路人提供更多的机会到达他们的目的地。该项目将结合生物学、景观学、城市形态和建筑设计，对文瑞塘上游污染河流周围的区域进行改造。这个项目的目的是通过图片和模型来展示文瑞塘江水净化工程的理念。

The project creates a natural water filtration system that doubles for a public space for both village and factory workers. Passively cleans polluted water from the factory and provides a frame for workers and the villagers. It not only work as a park but also connect the surrounding land, provide more opportunity for cars and passerby to arrive their destination. This project will combine biology, landscape science, urban morphology and architectural design to renovate the area surrounding a polluted river in the upper reaches of Wenruitang river. The purpose of this project is to show the idea of the water purification project along the Wenruitang River through pictures and models.



WenZhou WenRui Tang River Pollution Map

Wenruitang River is a river that originated from Ruian in the southwest of Wenzhou, runs through Wenzhou from south to north, and finally joins the Oujiang River. The map on the right uses squares of different sizes to indicate the degree of pollution in the river area. Finally, I chose to conduct an in-depth investigation of the most polluted river section.

温瑞堂河是一条从温州西南部瑞安发源，自南向
北贯穿整个温州并最后汇入瓯江的河流
右边地图用不同大小的方块表示河流区域的污
染程度。
最后我选择对目前污染最严重的河段进行深入
调查



Site Map

Three Problems:
Water pollution
Urban texture chaos
Less connections in various areas

三个问题：
温瑞堂河水污染
城市纹理修复
区域缺少交通连接

Water Purification Park 净水公园

The park tried to learn the traditional Chinese agricultural irrigation canal, let small entrances leading the polluted water, follow the texture into the landscape architecture, flow through the water purification facilities and some wetland water purification vegetation, and finally re-enter the main river. This model Also as Irrigation facilities

At the same time, park arranged the mass functions of different buildings. The water quality monitoring center is the closest to the north of the project. As the end of the main river, it is the most suitable place to test the results of water purification, where people can obtain the effective water quality improvement. Data and improve water purification facilities based on these data. On the right is the cafe. From the plan on the second floor, cafe used large floor-to-ceiling windows to view the view to ensure a good view of the restaurant. In the middle of the project is a water purification museum. A souvenir supermarket is also set up on the bridge connecting the two sides of the strait, which not only connects the regions but also guarantees part of the project's revenue.

The Section presents the vegetation, facilities, and purification organisms used in the project
Vegetation: Wetland Plants, typha orientalis reed juncus lotus

Animals: mosquito fish,Barn Swallows, Septic tank, gravel to be a grading system

In general, there are 2 to 5 species of wetlands in one area

该公园尝试学习中国传统的农业灌溉水渠，让小型水渠引导污水流动，顺着纹理进入景观建筑，流经净水设施以及一些湿地净水植被，最后重新进入主河道。这种模式也可以作为一种灌溉系统。

同时公园内安排了不同建筑的体块功能，最靠项目北面的是水质监测中心，作为主河道的末端，这是最适合检测净水成果的地方，在这里人们可以获得水质提升的有效数据，并依据这些数据改善净水设施。右边的是咖啡厅，从二楼的平面图可以看出，咖啡厅采用了大落地窗观景，保证了餐厅的良好视野。项目中部则是一个净水博物馆，连接两岸的桥梁上还设置了纪念品超市，在连接各区域的同时也保障了项目的部分收益。

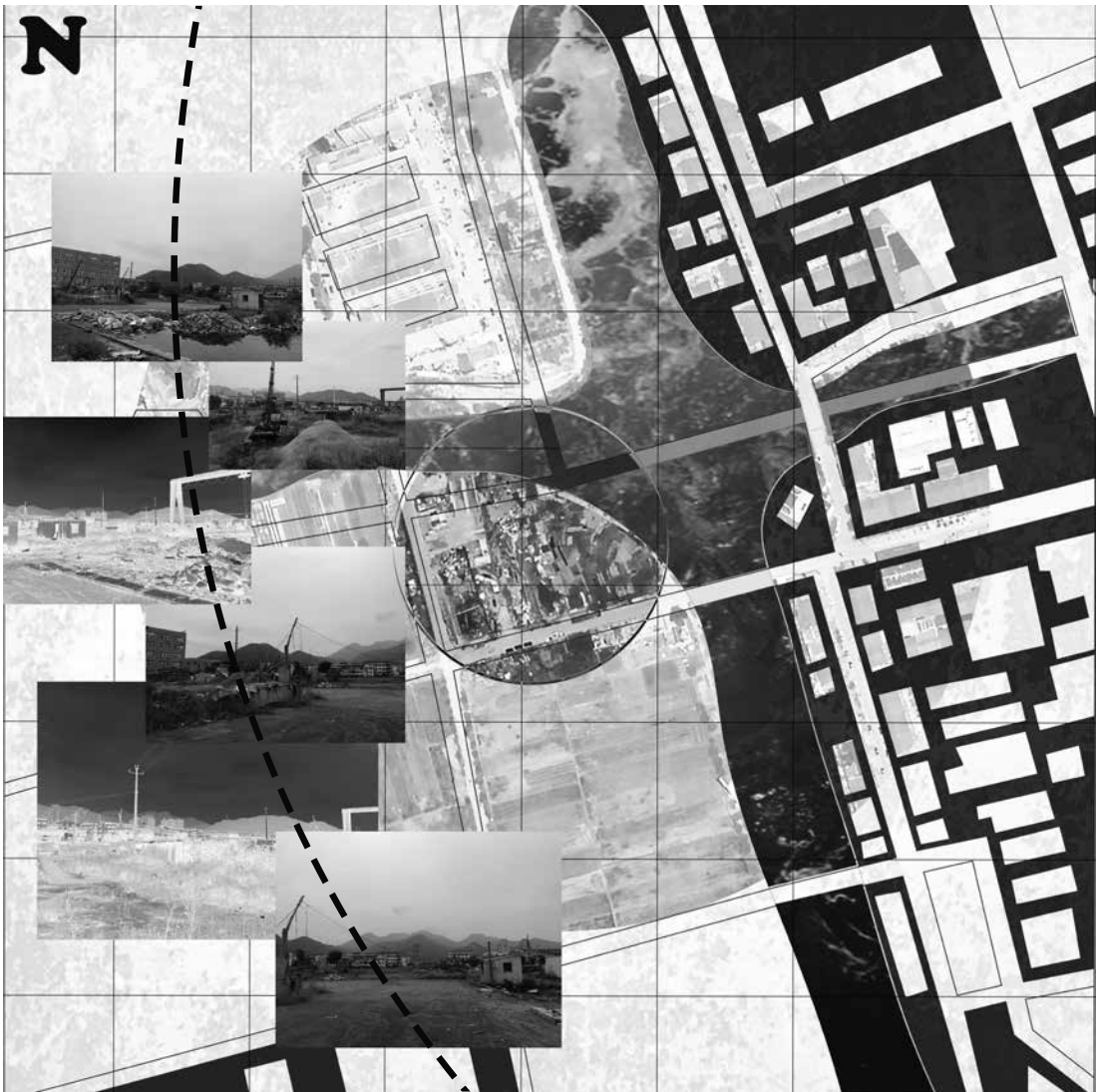
剖面图展现了项目中使用的植被，设施，以及净化生物

植被：湿地植物，芦苇，大叶子芦苇 小草荷花

动物：蚊子鱼，家燕、

设施：化粪池、砂砾滤过屏障

一般一个区域的湿地选择 2 - 5 的物种



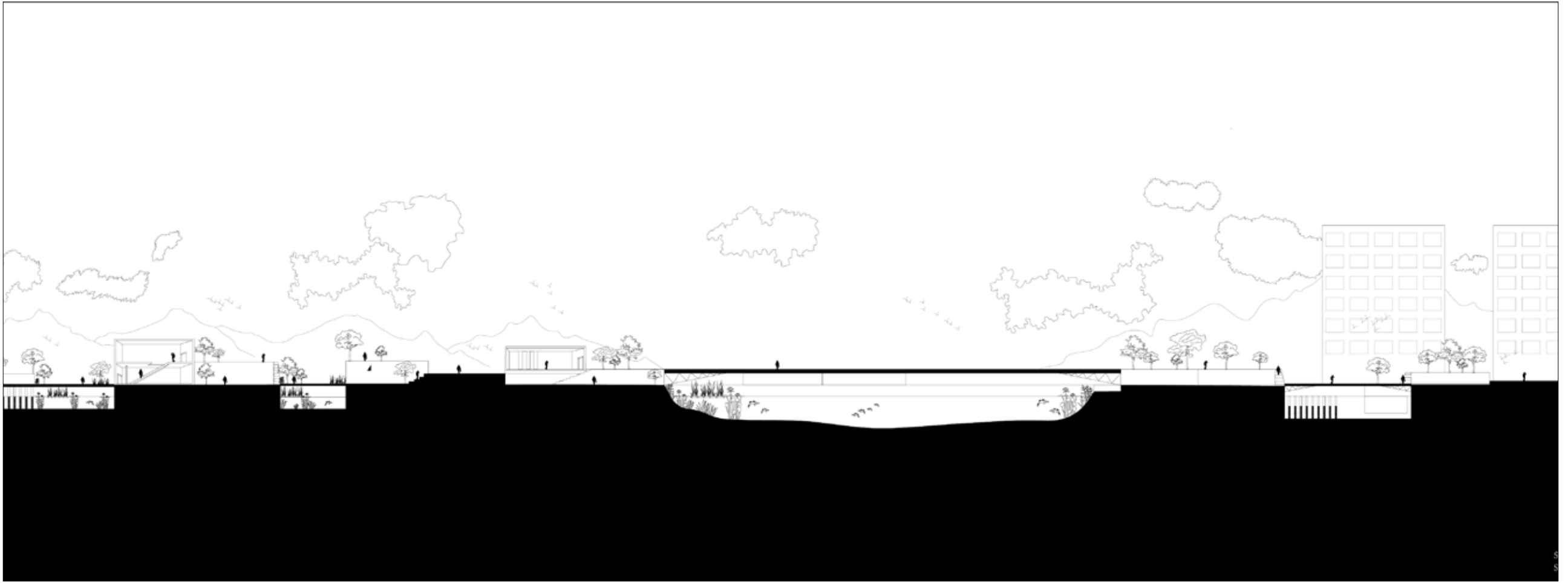
Site Analysis Collage



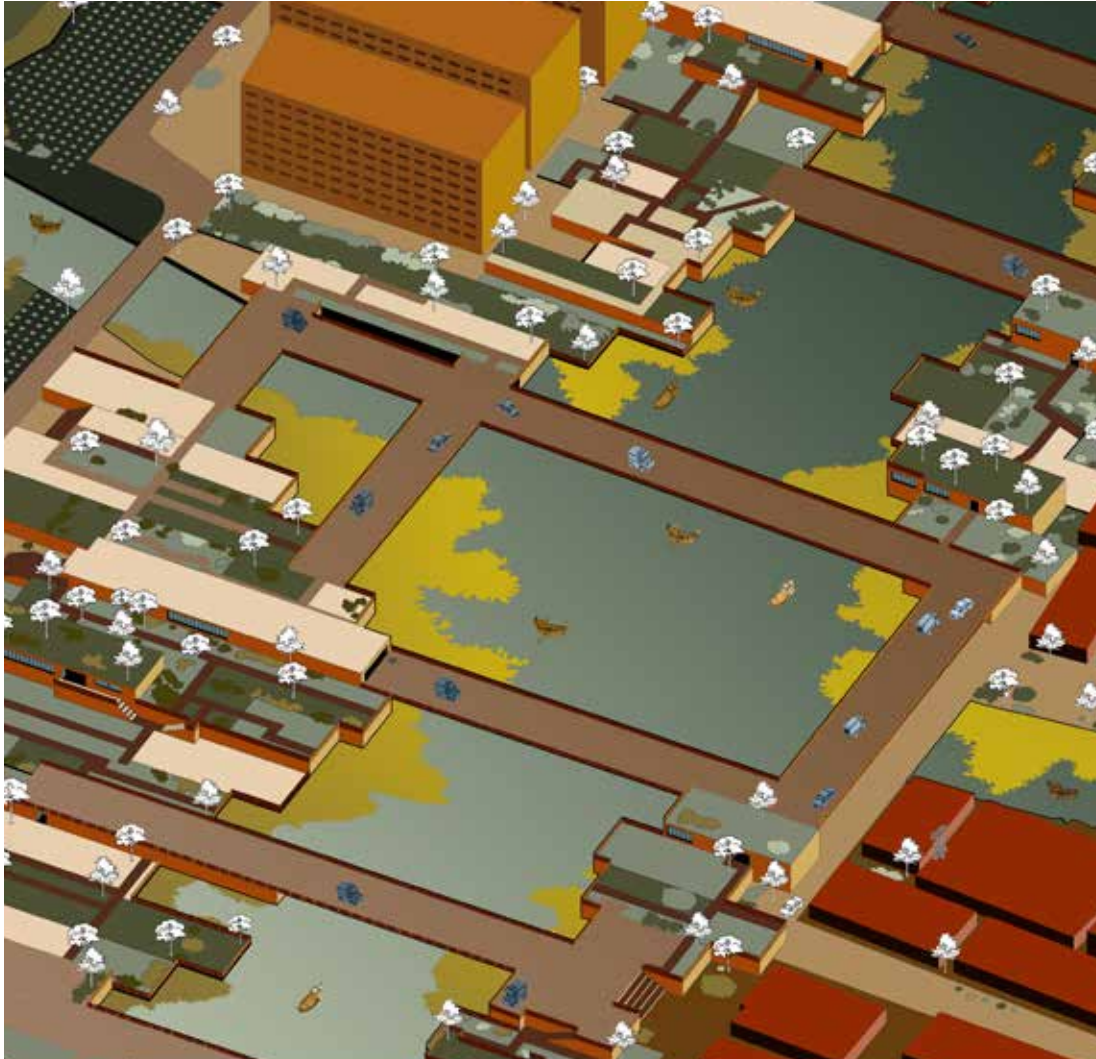
First Floor Plan



Second Floor Plan



Section A-A



Collage 1



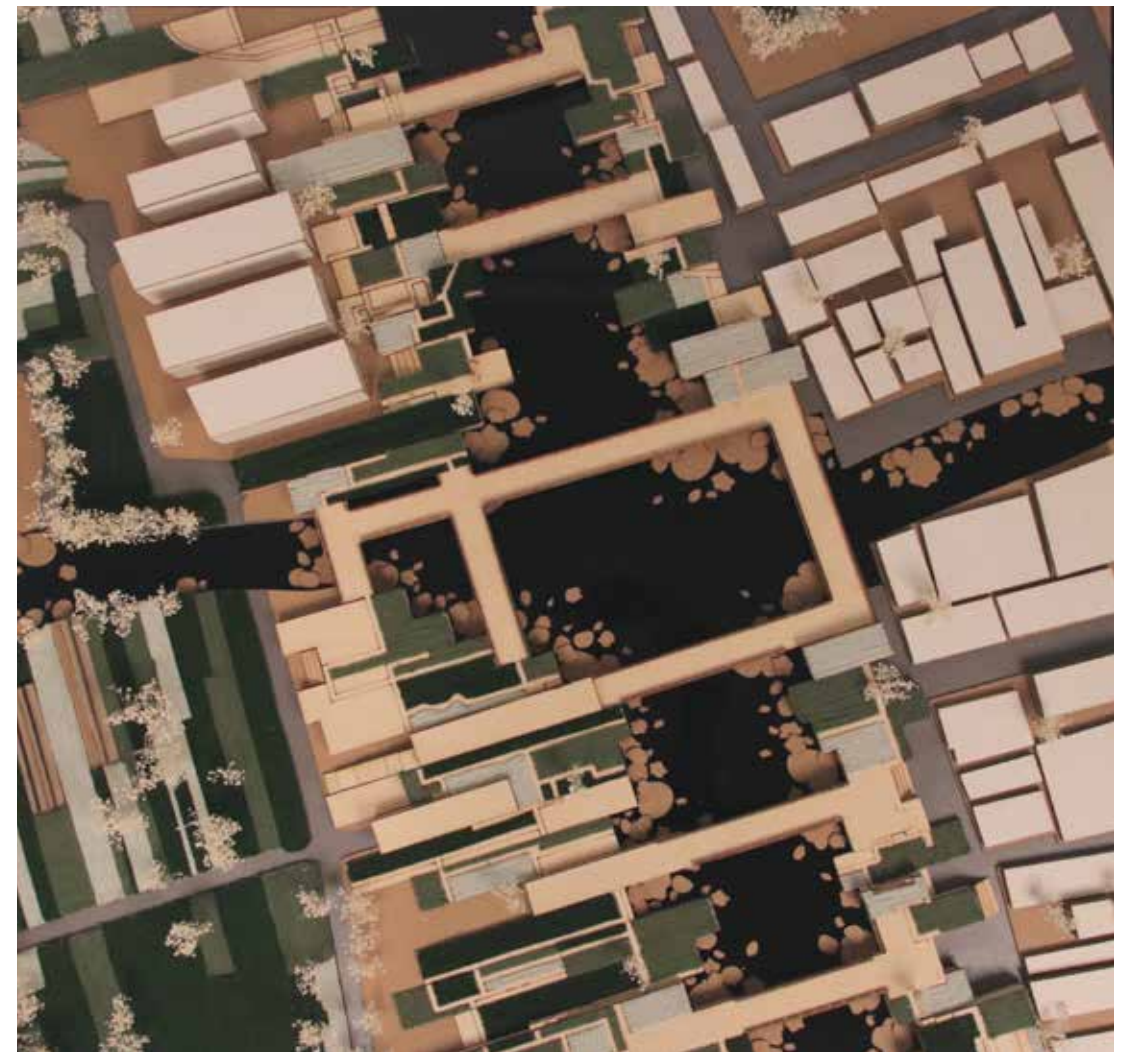
Collage 2



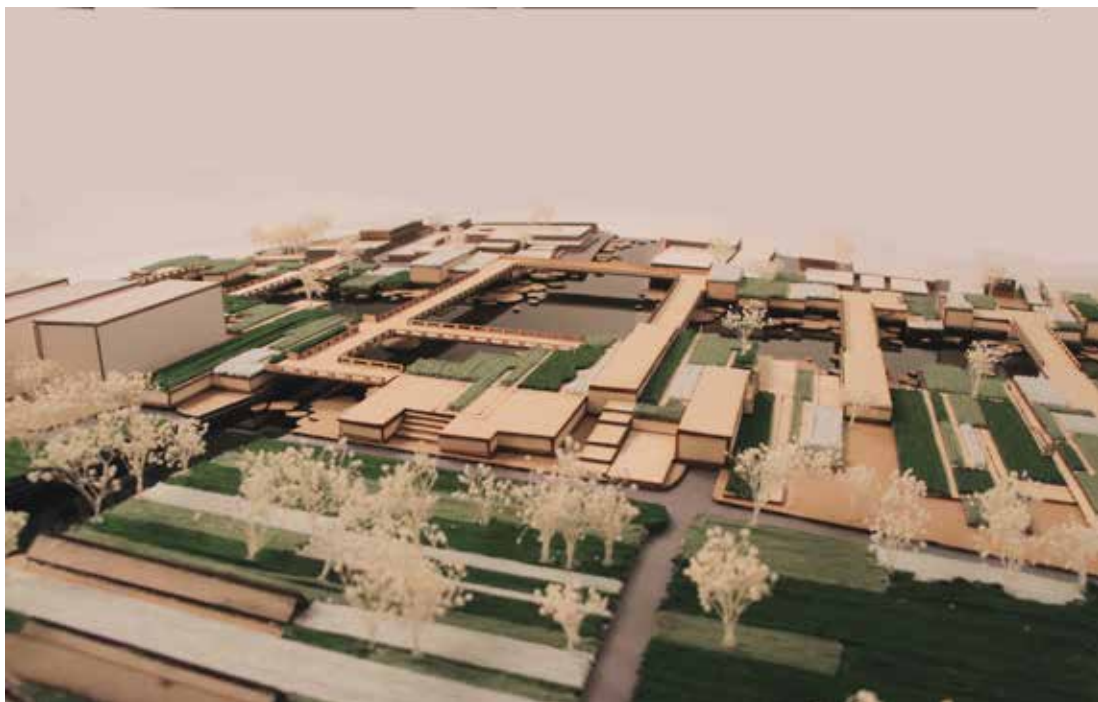
Collage 3



Collage 4



Model Photo 1



Model Photo 2



Model Photo 3

For this model, I used wool to make the field to ensure a natural texture. From the overall model, I added a roof garden and vegetation coverage area to ensure the normal connection with the left field

这个模型我使用了毛线制作田野来保证自然的纹理。从模型的整体我们可以看到在建筑和净水区域我都有加入屋顶花园以及植被覆盖区域，来保证与左侧田野的正常衔接