

# Abstract

**Kristiania Teglverk:**

**Preservation of architecture and ecology**

*A new annex to NATUR Vocational School and developing a  
Flowerfield at Bryn*

# Diploma

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# Abstract

More than ever we are demolishing our built environment and obliterating our nature in the sake of progress. This attitude towards the existing environment has high costs on many levels. As a coming architect I am inspired to think and see value in what we already have around us, both the built and the living. In the design process words like securing, preserving and maintaining has gained new strength. And only when needed, additions are made.

This diploma work explores aspects of preservation of architecture and ecology through an existing example; Kristiania Teglverk at Bryn in Oslo. Attempts to discover and seek correlation between these two fields are tested. Kristiania Teglverk, a former brick factory from 1898 had and have an intertwined relation to the surrounding nature and the Alna River passing by.

I have approached and learned about the building and the surrounding ecosystems taking different paths. These paths or branches are organized in five delivery documents. They can be seen as separate documents or all together feeding in to my attempt to get closer to the relationship between Architecture and Ecology, with old Kristiania Teglverk as the centre of attention.

A major focus of this delivery has been the search in finding a program and a proposal for the building that can inherit the discussion of the relationship between Architecture and Ecology. This search of program was not linear and can be seen in fragments in the different documents attached, more or less highlighted.

The conclusion of the search for program ended in two levels - *The Landscape* and *the Building*. The two levels are connected by the existing path D10 following the Alna River from the Fjord almost to the source in Marka. This path enables the visitors to explore and discover the diversity of nature, the collection of old industrial buildings along the river and their mutual relation. The path is broken at the Bryn area with Kristiania Teglverk in the centre.

## **The program**

*Landscape level:* The aim is to reconnect the path at Bryn area with the reintroduction of a Flowerfield, whom historically dominated the area.

*Building level:* To make an annex to Nature Vocational School located at Furuset further up the valley of Grorud. This annex would explore a new topic - developing and running a Flowerfield.

This delivery contains five documents:

1. Pre-diploma (made fall 2019)
2. Proposal booklet + program
3. Proposal posters
4. Process booklet
5. Model booklet

### 1. Pre-diploma (fall 2019)

The pre-diploma discuss the correlation between preserving Architecture and Ecology in a broad perspective. It briefly looks at the history and movements in sustainable design. Then a short selection references were described as potential strategies for Architecture to relate in a fruitful way with the nature. These references are categorized in a list. The Pre-diploma presents the backdrop and the bigger context for my Diploma work. The categorizing of the approaches has been with me in the development of the approach on Kristiania Teglverk.

### 2. Proposal Booklet + Program

The Proposal Booklet has been the working document where relevant sketches, analysis and first design attempts are gathered. It follows the search for a project that can discuss the Preservation of Architecture and Ecology. The Program is the result of this search.

### 3. Proposal Posters

The Proposal Posters seek to gather the discussions I have had this semester in a Project at the same time as it is the answer to the Program that was set in Proposal Booklet + Program.

### 4. Process booklet

The Process booklet is a selection of sketches, images from study-trips, archive drawings and more. Each page are given a title and is put in a category. It should be easy to get a overview from the table of content.

### 5. Model Booklet

The Architecture of Kristiania Teglverk is a result of its original function; the production of bricks. It was a streamlined production relating to nature on many levels almost like a ecological cycle. Some of the traces of this production were lost with the closure of the factory in the 1960's, some is still inherited in the building.

Inspired from old drawings, a study trip to a brick factory museum in Denmark and archival documents; models were developed to discuss the production of bricks with the relation to the nature and in some cases how this process might be turned.

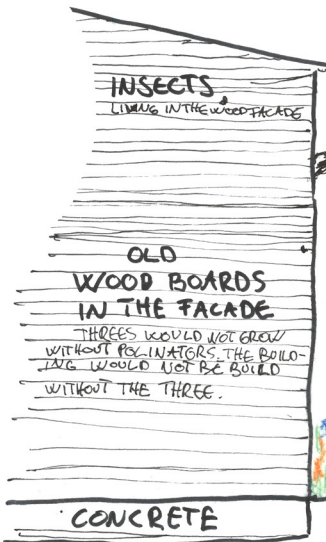
Together this process have given me insight in the importance of observing and discover the quality of what we find in our environment and how these qualities can be included in the design process.

# The ecological cycles

## Kristiania Teglverk, the Flowerfield and the Alna River

### THE INCLUDED BUILDING KRISTIANIA TEGLVERK

THE BUILDING WORKS AS A WINTER INSECTS HOTEL AND PLAYS A ROLE AS PROTECTING THE POLLINATING INSECTS WE ARE DEPENDENT ON FOR FOOD PRODUCTION



### BUFFER FOR RIVER FLOWERFIELD

THE FLOWERFIELD IS A PRIORITIZED NATURE TYPE IN NORWAY. IT HAS EXCEPTIONAL GOOD BIODIVERSE CAPABILITIES

**DOVE**  
THE BIRDS FEED ON THE INSECTS AND BUILD HOME IN THE BUILDING

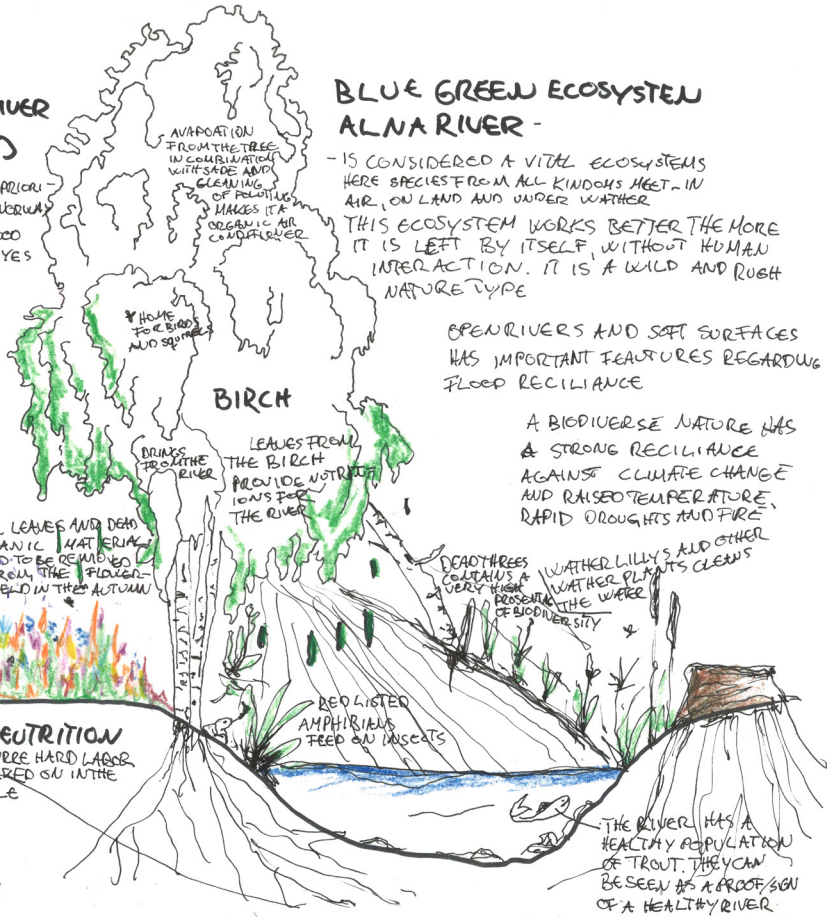
THE FLOWERFIELD IS VITAL FOR PROTECTING POLLINATORS

ALL LEAVES AND DEAD ORGANIC MATERIAL NEED TO BE RETURNED TO THE FLOWERFIELD IN THE AUTUMN

**CLAY GROUND -**  
A PREREQUISITE FOR ESTABLISHING THE BRICK FACTORY. THE FACTORY TRANSFORMED THE LANDSCAPE

**BY RUNNING THE PLANTSCHOOL**  
THE STUDENTS GATHER KNOWLEDGE ON LOCAL PLANTS AND FLOWERS - THEY WILL SEE SEEDS AND SHARE KNOWLEDGE

**SOIL LOW ON NUTRITION**  
FLOWERFIELDS REQUIRE HARD LABOR AND NEED TO BE WORKED ON IN THE RIGHT TIME SCHEDULE



### BLUE GREEN ECOSYSTEM ALNA RIVER -

- IS CONSIDERED A VITAL ECOSYSTEMS HERE SPECIES FROM ALL KINDS MEET - IN AIR, ON LAND AND UNDER WATER. THIS ECOSYSTEM WORKS BETTER THE MORE IT IS LEFT BY ITSELF, WITHOUT HUMAN INTERACTION. IT IS A WILD AND ROUGH NATURE TYPE

OPEN RIVERS AND SOFT SURFACES HAS IMPORTANT FEATURES REGARDING FLOOD RESILIENCE

A BIODIVERSE NATURE HAS A STRONG RESILIENCE AGAINST CLIMATE CHANGE AND RAISED TEMPERATURE, RAPID DROUGHTS AND FIRE

WATER LILYS AND OTHER PLANTS CLEAN THE WATER

THE RIVER HAS A HEALTHY REPOPULATION OF TROUT. THEY CAN BE SEEN AS A PROOF/SIGN OF A HEALTHY RIVER