

G5 GROWING CITY ----FARMING PARK VISITOR CENTER

Chen Li 4238192

Tutor: Henri van Bennekom, Hubert van der Meel, Roberto Cavallo



CONTENT

URBAN DEVELOPMENT

CONDITION OF SITE
KICK-OFF PROJECT PROPOSAL--- URBAN FARMING
DESIGN STRATEGY
PHASING

PERSONAL PROJECT

PROGRAM
LOCATION
DESIGN CONCEPT
DESIGN DEVELOPMENT
DRAWINGS

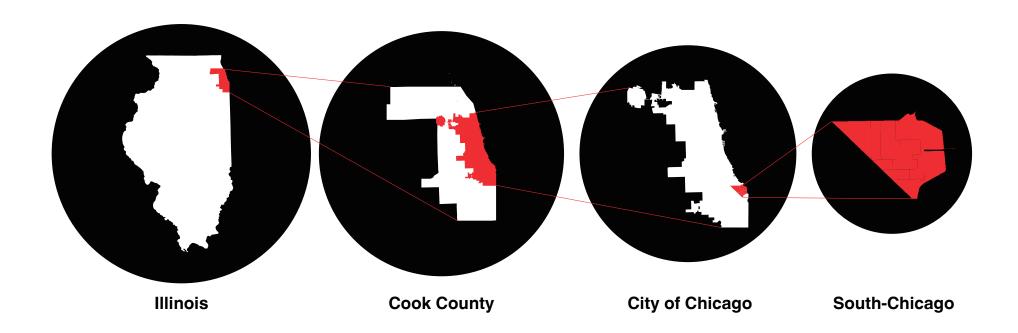








CONDITION OF SITE LOCATION









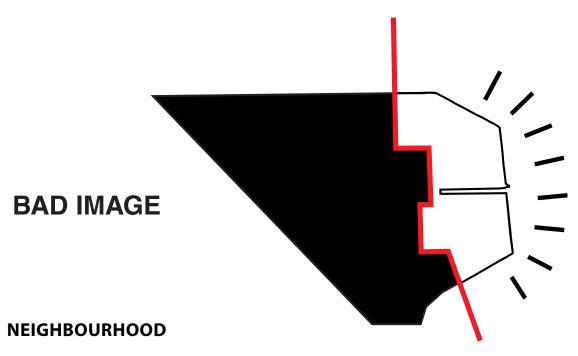






G CON

CONDITION OF SITE PROBLEM AND ADVENTAGE



EMPTY & NICE VIEW

High Crime Rate

High Unemployment

Low Education

Low Income

Food Desert

SITE

Huge Empty Land

Lakeside

Lakefront Park

Canal

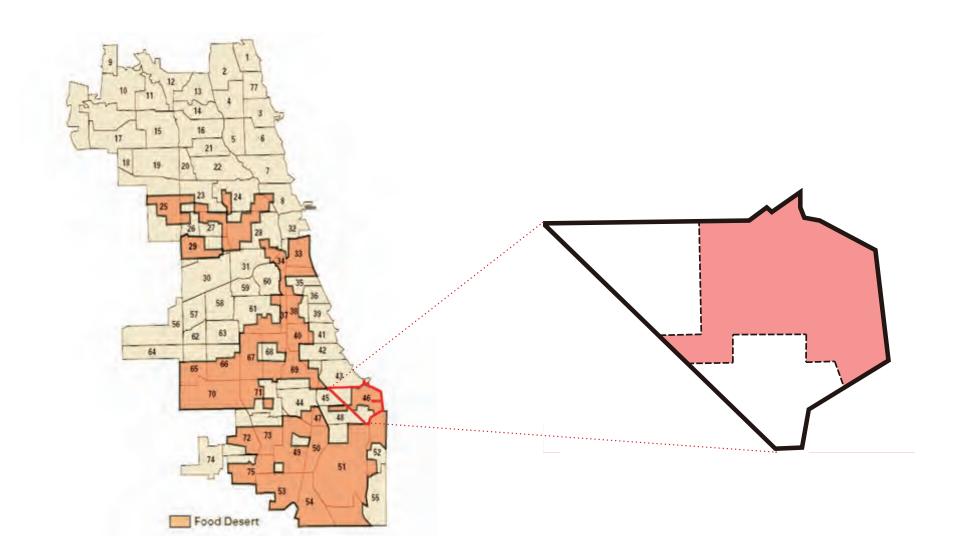
Ore walls





KICK-OFF PROJECT PROPOSAL --- URBAN FARMING

FOOD DESERT---- LACKING ACCESS TO FRESH FOOD





KICK-OFF PROJECT PROPOSAL --- URBAN FARMING

URBAN FARMING POLICY IN CHICAGO



Mayor Emanuel Launches New "Farmers For Chicago" Network For Chicago Urban Farmers (March 15,2013)



KICK-OFF PROJECT PROPOSAL --- URBAN FARMING

NON-PROFIT URBAN FARMING SUPPORTING ORGANIZATION

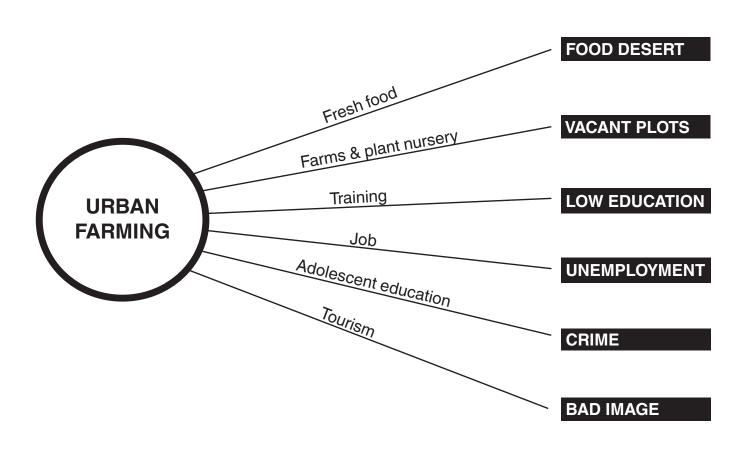


Growing Power is a national nonprofit organization which help people grow, process, market and distribute food in a sustainable manner.



KICK-OFF PROJECT PROPOSAL --- URBAN FARMING

USING URBAN FARMING TO SOLVE NEIGHBORHOOD PROBLEMS





KICK-OFF PROJECT PROPOSAL --- URBAN FARMING

USING URBAN FARMING AS TEMPORARY STRATEGY TO CATALYZE URBAN DEVELOPMENT ON THE SITE





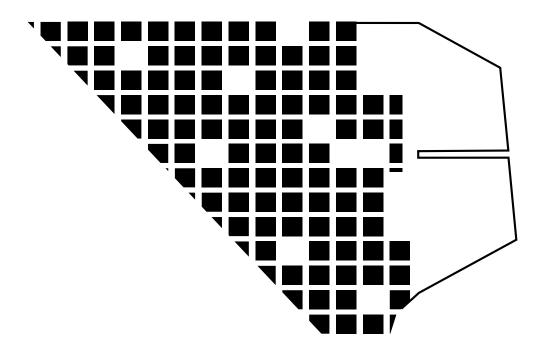






CONCEPT OF DEVELOPMENT

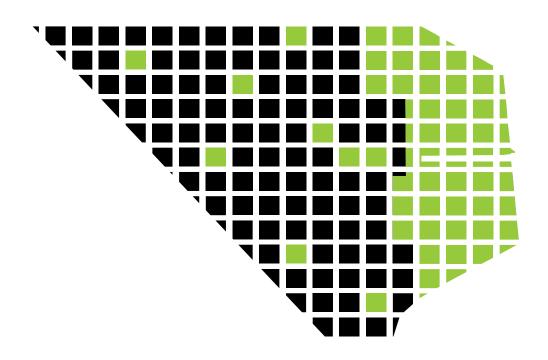
VACANT PLOTS IN THE NEIGHBOURHOOD





CONCEPT OF DEVELOPMENT

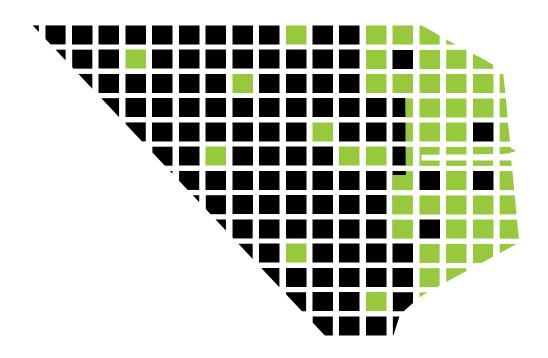
FILL VACANT PLOTS WITH URBAN FARMING TO TREAT PROBLEMS IN NEIGHBOURHOOD





CONCEPT OF DEVELOPMENT

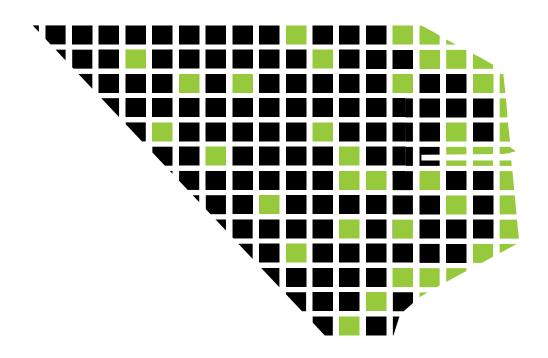
INSERT SEVERAL PROGRAM SEEDS INTO THE VACANT SITE TO DRIVE THE DEVELOPMENT





CONCEPT OF DEVELOPMENT

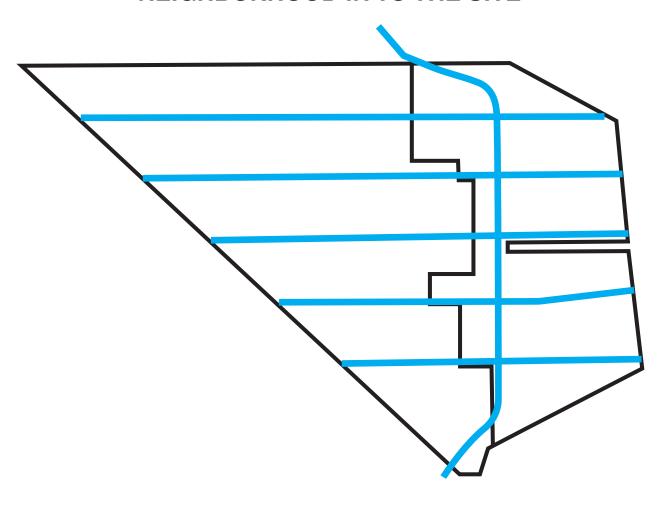
A BALANCE BETWEEN URBAN EXPANSION AND URBAN FARMING





DESIGN STRATEGY

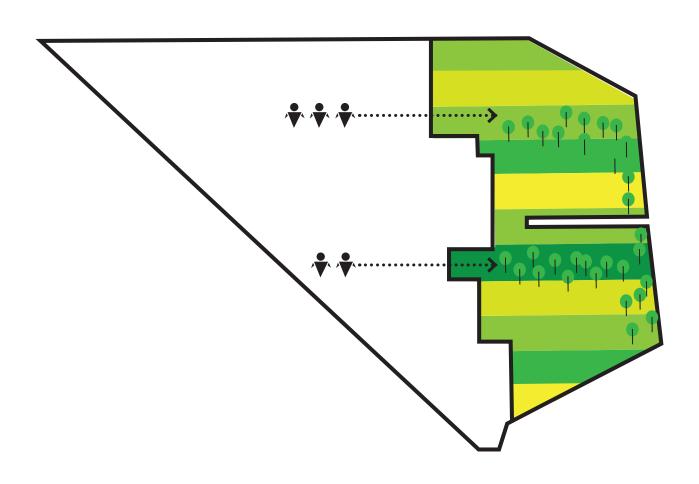
EXTEND THE EXISTING INFRUSTRUCTURE IN THE NEIGHBORHOOD IN TO THE SITE





DESIGN STRATEGY

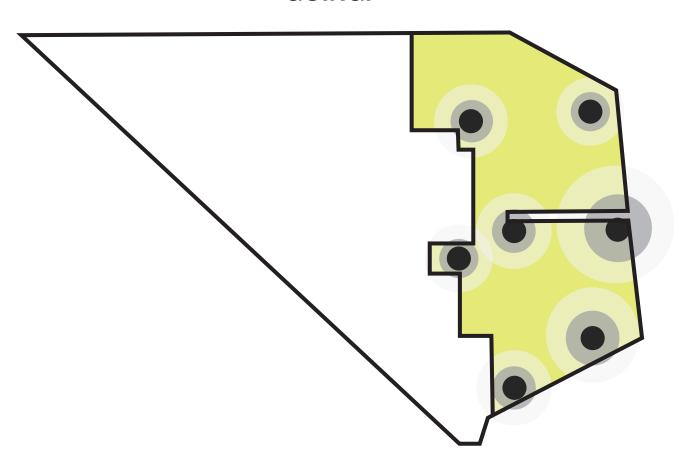
CREATE LINEAR LANDSCAPE BARS TO ATTRACT PEOPLE





DESIGN STRATEGY

DECENTRALIZE PROGRAM SEEDS TO ENSURE THAT THEY CAN FUND BY DIFFERENT INVESTORS TO KEEP THE DEVELOPMENT GOING.





PHASING

30 YEARS AGO

The steel factory occupied the lakefront of South Chicago neighborhood 30 years ago.





PHASING

NOW

After the steel factory was shut down, all the buildings were demolished. What remains are only the foundations and the ore walls.





PHASING

0~2 YEARS

In the initial stage, some of the left foundations are used as the foundations of greenhouses and the rest of the site are filled with different plant which can treat the soil polluted by the factory.

The community center, market and the research center are as the first three seeds to drive the development.





PHASING

3~5 YEARS

Other program seeds will be added after a few years to keep the development going smoothly.







PHASING

20 YEARS

The program seeds help to development their nearby district inside a existing grid which extend from the neighborhood.





PHASING

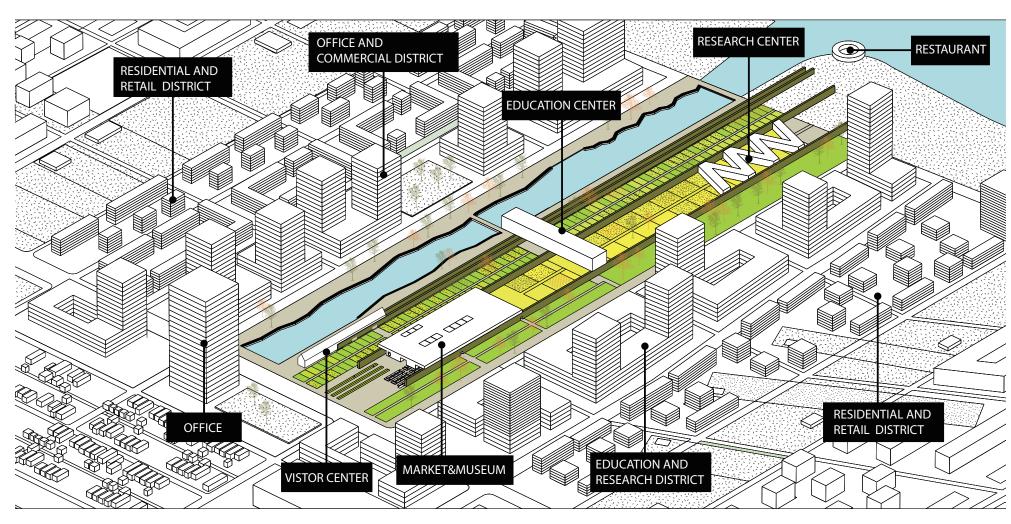
50 YEARS

After this site is comlpetely developed, the linear landscape are left to growing urban farming.





CENTRAL FARMING DISTRICT



CENTRAL FARMING DISTRICT





PERSONAL PROJECT

FARMING PARK VISITOR CENTER





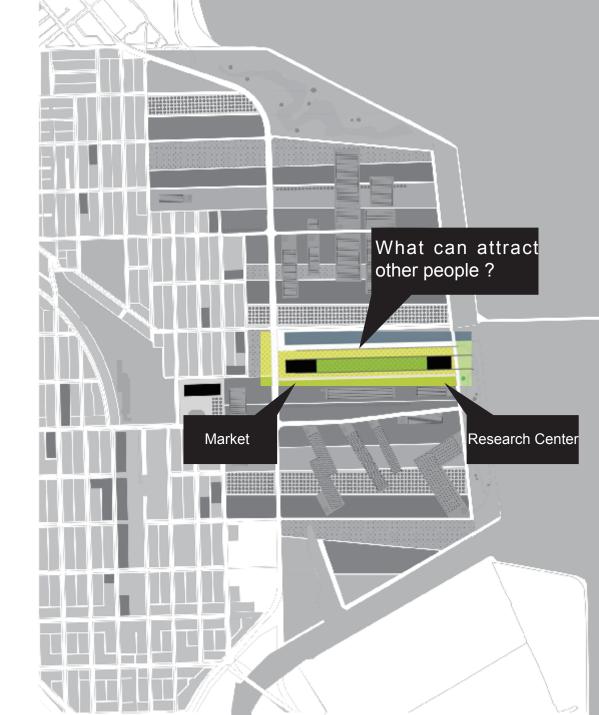
PROGRAM

0~5 YEARS

The Central Farming District is the start of the whole masterplan.

Market and farmland can attract the people from the old neighborhood to the vacant site to work from the beginning.

The research center can attract the researchers to establish a new research center of urban farming to support the development in the next years.





PROGRAM What can help the park well organized?

AFTER DEVELOPED

The Central Farming District will be the most outstanding part which displays an urban farming experimental field.

A theme park will be the heart of the whole masterplan. It will show the achievement of urban farming and at the same time it can offer opportunity to people who want to own a field.



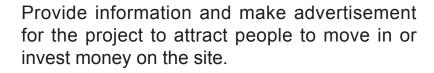
PROGRAM

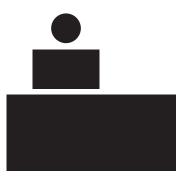
INFROMATION CENTER



VISITOR CENTER





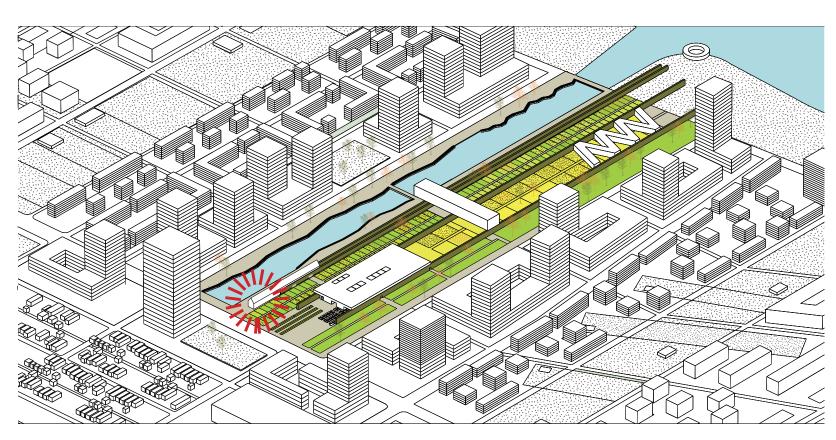


Provide information and service for the visitor to experience a specific urban farming park.



CP)

LOCATION

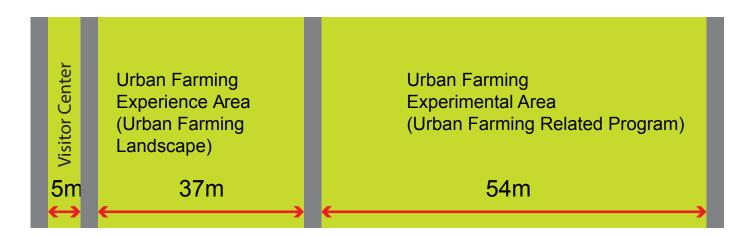


It is at the beginning of the farming park and adjacent to canal, lakeshore drive and ore walls.



CP)

LOCATION





The ore walls divide the urban farming park into different strips, every strip has its own character.





LOCATION



Two high walls can not provide a closed feeling by themself.



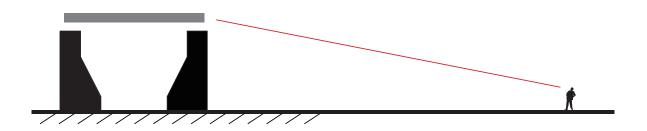
Two short ore walls form a special space in which people can experience a certain volumn. In this case, the best way to get an inside building space is to cover a new roof on the existing wall.

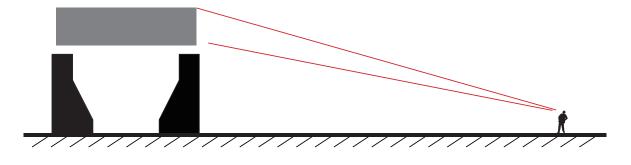




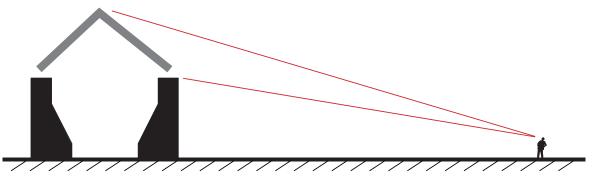
DESIGN CONCEPT

ROOF FORM (FROM LONG DISTANCE)





Flat roof need a volumn to make an outstanding appearance.

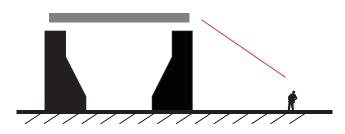


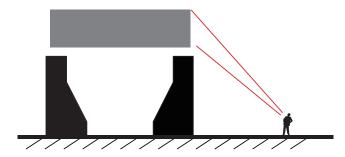
When people are far away from the wall, the pitched roof will be outstanding from the wall to attract people to come around.

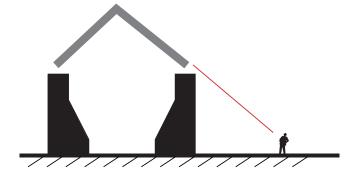




ROOF FORM (FROM NEARBY)

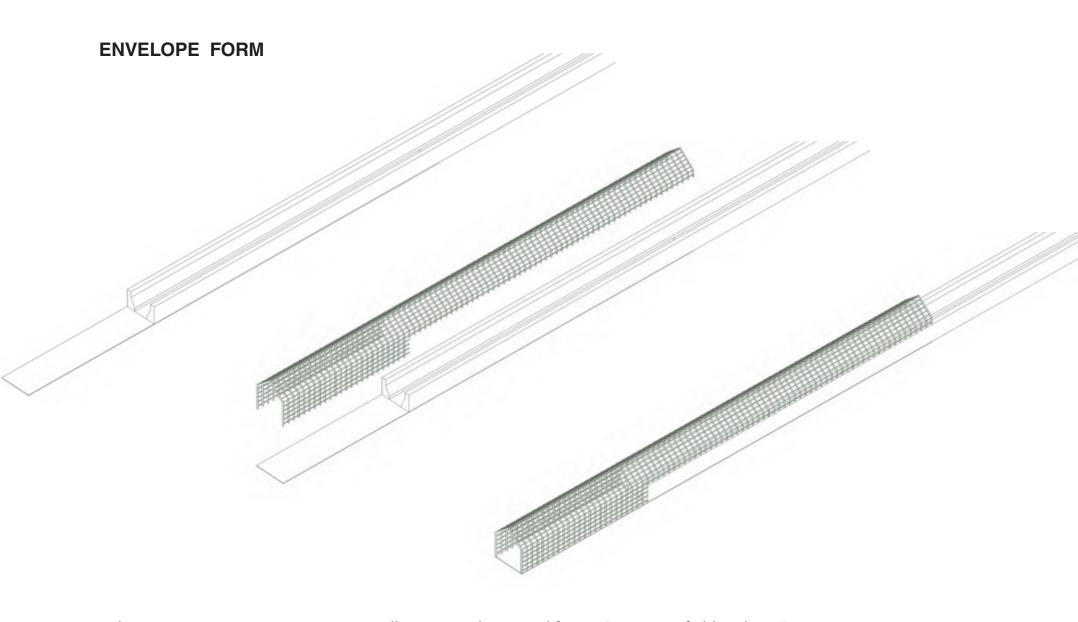






People have similar feeling of thin flat roof and pitched roof when they are near the wall because pitched roof reduces feeling of the big volumn.





Facade Structure: Existing concrete ore wall + New timber portal frame. (Contrast of old and new)



DESIGN CONCEPT

STRUCTURE MODEL











INSIDE SPACE FORM







INSIDE SPACE FORM







INSIDE SPACE FORM



The ore walls were used to be the container of ore and the shape of ore could be seen from outside. It forms a significant character which was a strong memory of the old steel factory. When the new functions of visitor center are filled into ore walls, different function forms different boxes. The boxes are distict from the ore wall so it can also be seen from outside through a transparent facade.



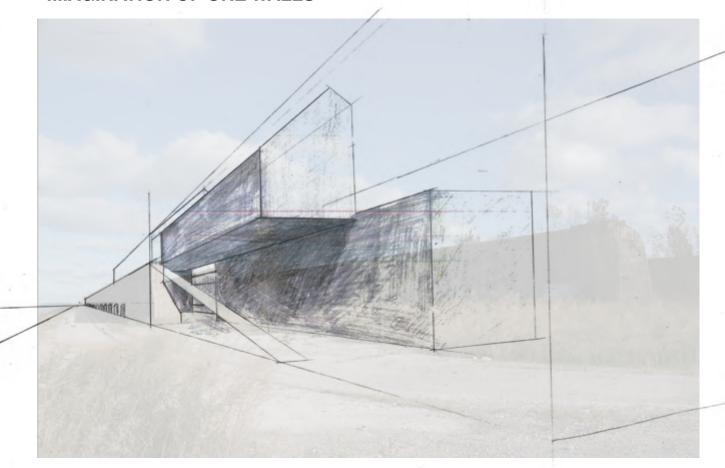
CONDITION OF ORE WALLS





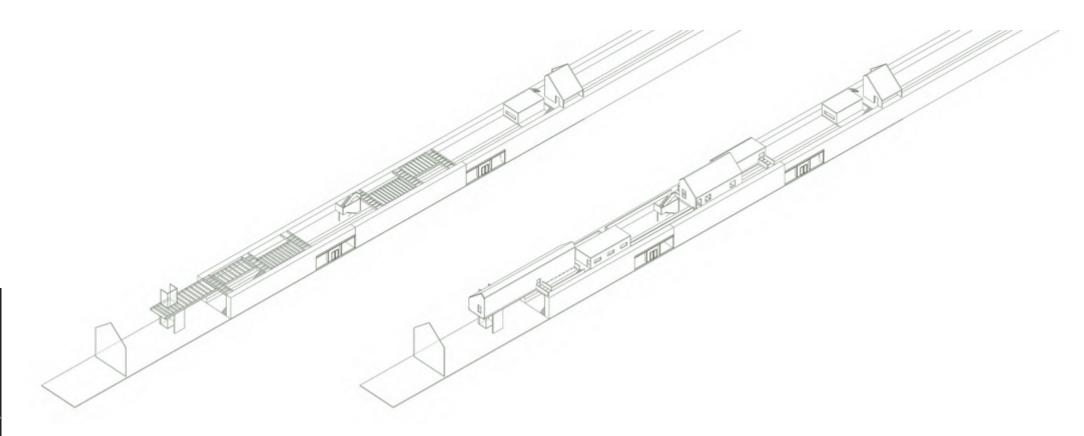


IMAGINATION OF ORE WALLS





INSIDE STRUCTURE



Light timber structure attatched to the existing concrete wall.(Free to add new function under the same roof.)





CONCEPT MODEL













ENTRANCE DESIGN

The new portal frame cover is extended to the very beginning of the farming park to make a outstanding appearance from the old wall to show there is something new .



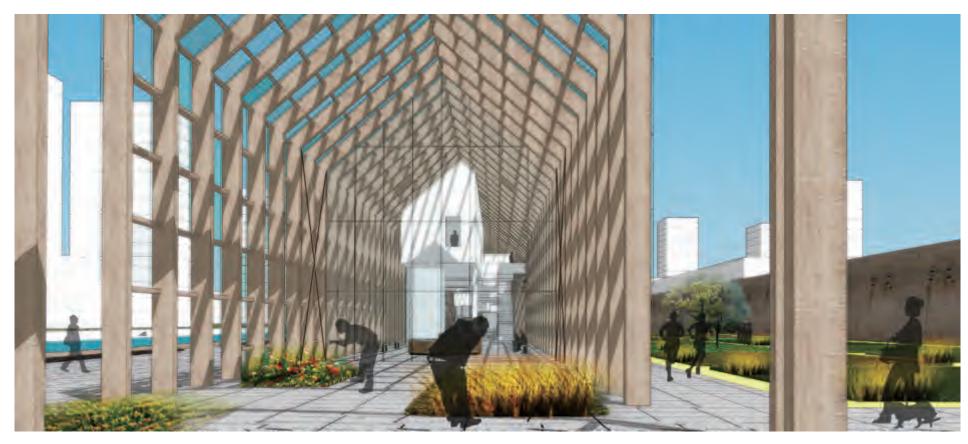






ENTRACNE DESIGN

The real entrance is sent backward to avoid overheat from the non-shading part at the beginning. Some part of the outside glass panel is removed to get ventilation in the glass box and entrance.

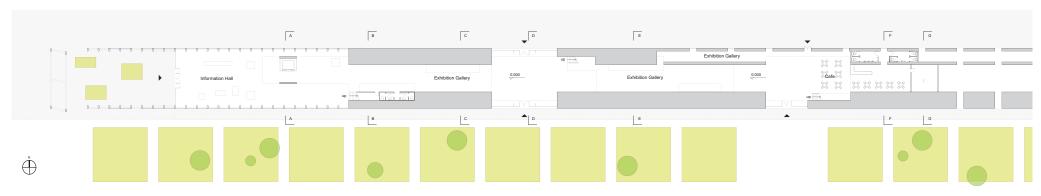








ENTRANCE DESIGN









FACADE DESIGN

In order to see the inside function box, the facade is made of double glazing panels with coloured aluminium louvers fitted in cavity. The glass from the entrance to the end is changing from transparent to translucent then non-transparent. That will made the inside function box gradually hidden by the panels, which can rise the visitor's curiosity to get inside.



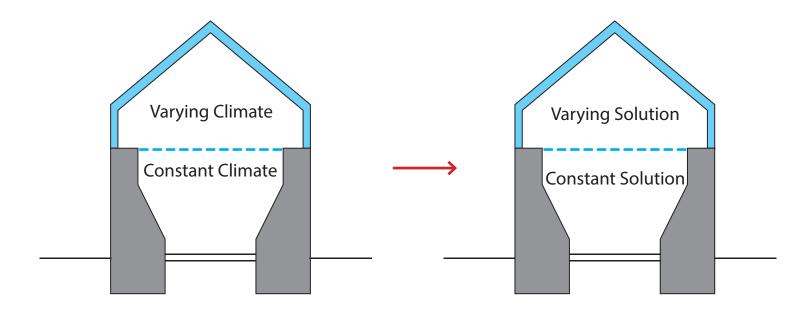
NORTH ELEVATION 1:200





FACADE CLIMATE

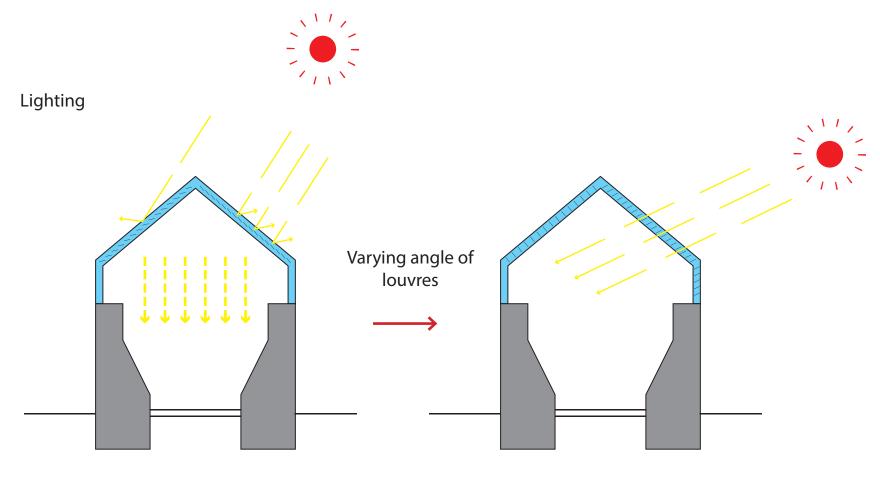
The ore wall provide a constant climate for the lower part but the glass cover will made a varying climate for the upper part. As a result, the solution of climate of the glass facade will vary too.



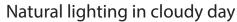


DESIGN DEVELOPMENT

NATURAL LIGHT



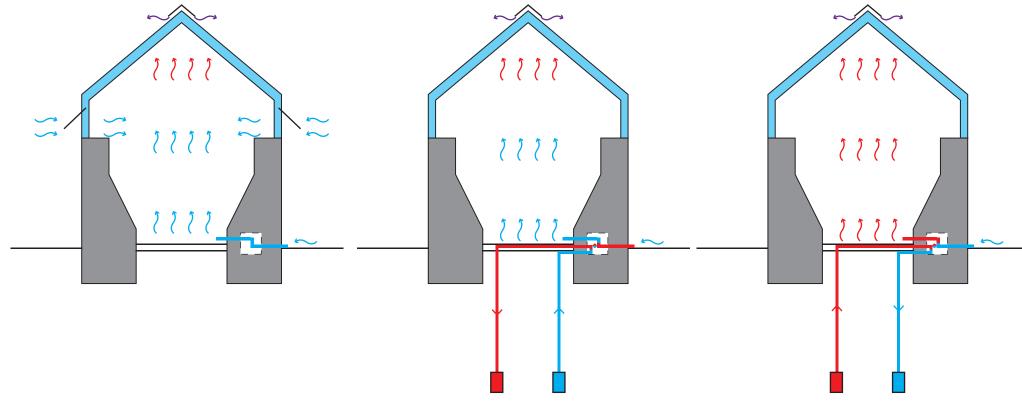








FACADE VENTILATION





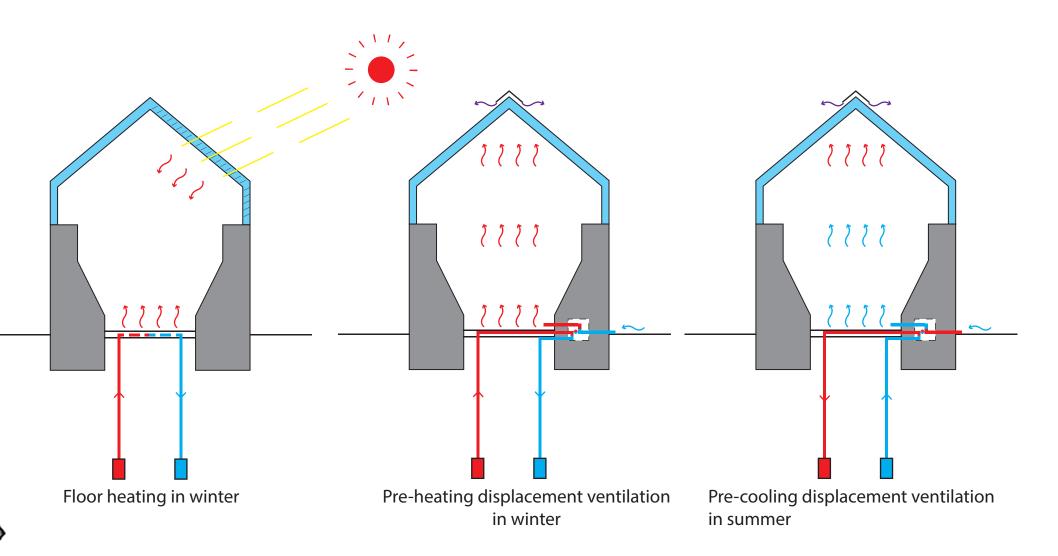
Pre-cooling displacement ventilation in summer

Pre-heating displacement ventilation in winter





HEATING AND COOLING







INTERIOR DESIGN

The ore walls provide a rough inside atmosphere and the new additional boxes are painting with fine white latex paint. The contrast of old and new are not just on the facade but also of the interior.







INTERIOR DESIGN

The rhythm of the portal frame makes a constant corridor on ore walls to connect different function box.

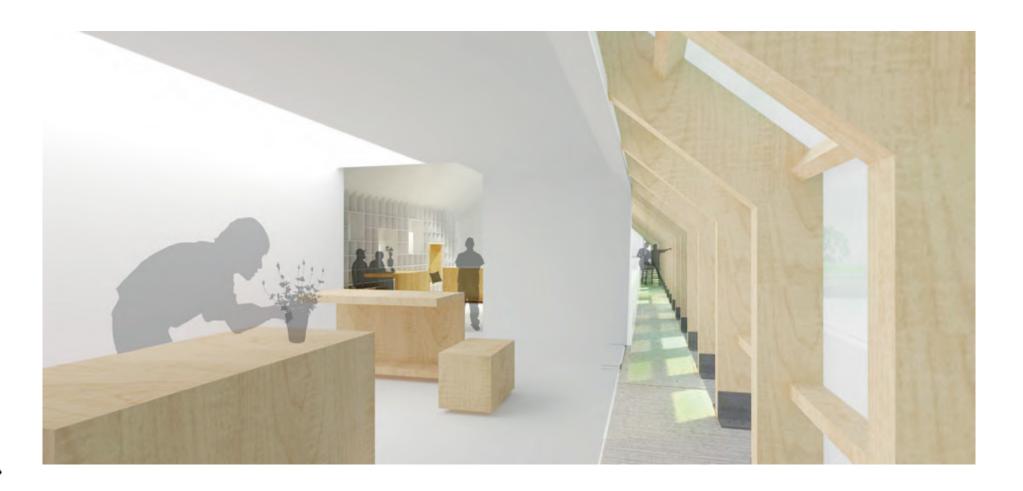






INTERIOR DESIGN

The rhythm of the portal frame makes a constant corridor on ore walls to connect different function box.





DESIGN DEVELOPMENT

CONDITION OF INSIDE ORE WALLS







IMAGINATION OF INSIDE ORE WALLS

Keep the original space of the ore wall to make a exhibition corridor with fascinating light and shadow.

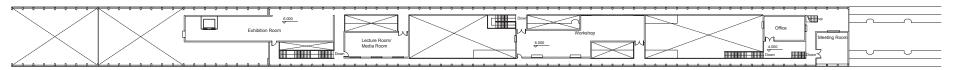




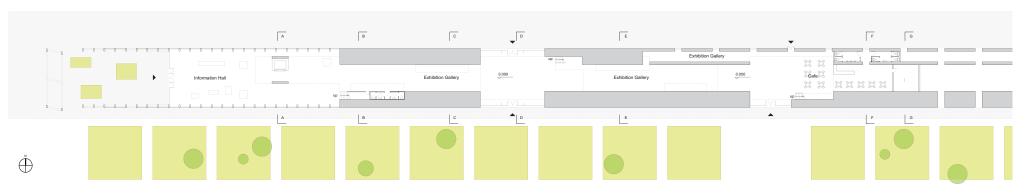








FIRST FLOOR PLAN 1:200

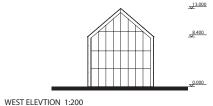








DRAWINGS



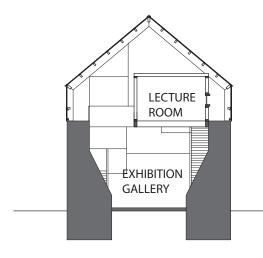


NORTH ELEVATION 1:200



SOUTH ELEVATION 1:200

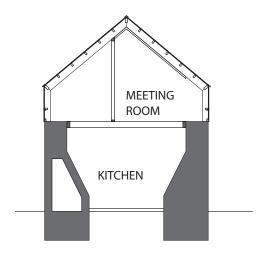




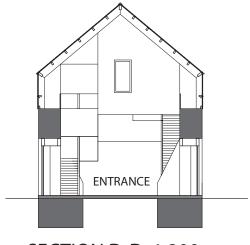
SECTION C-C 1:200



SECTION E-E 1:200



SECTION G-G 1:200

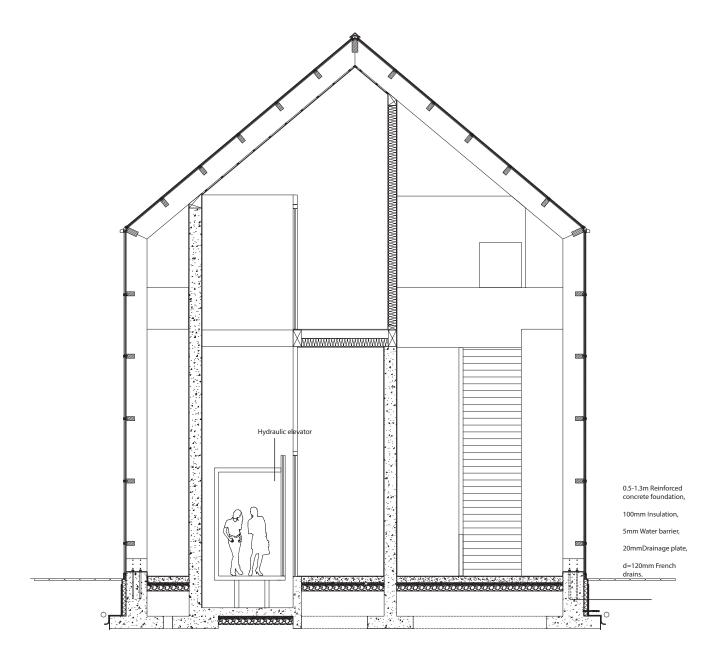


SECTION D-D 1:200



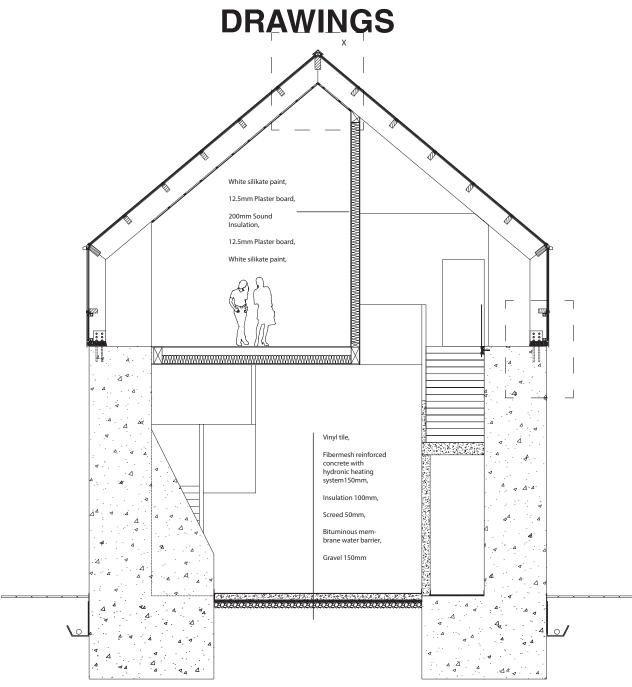
SECTION F-F 1:200





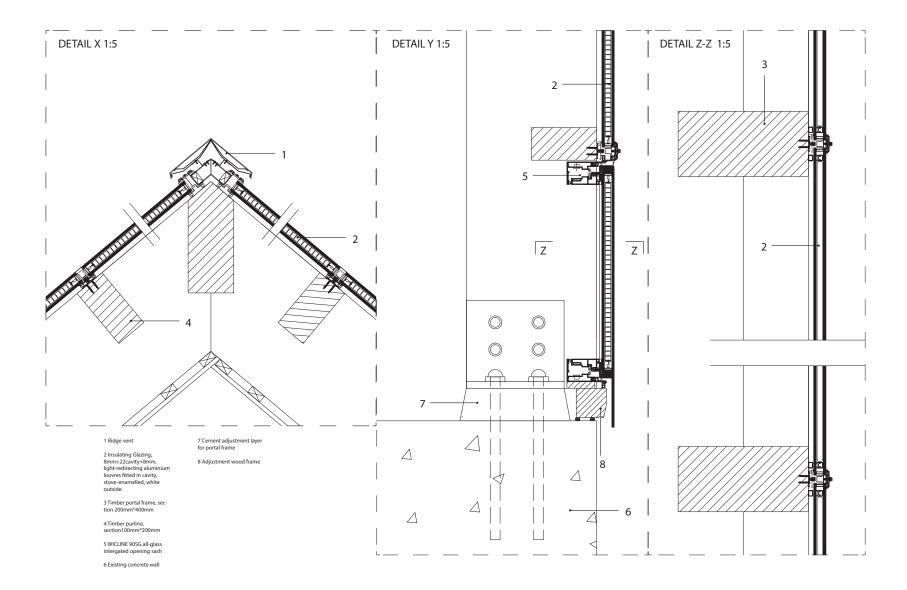








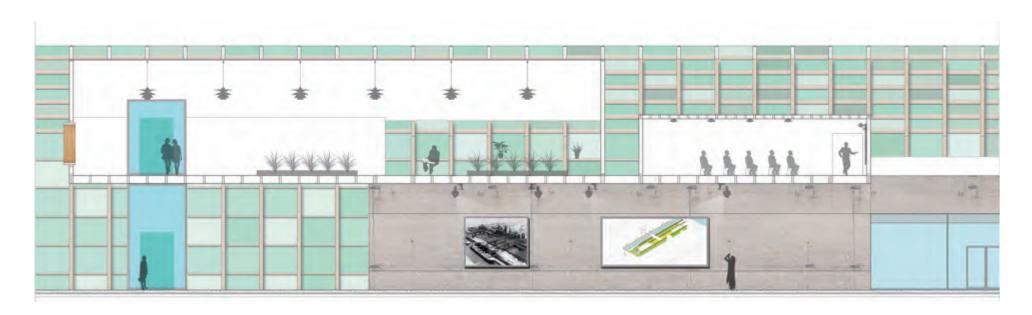




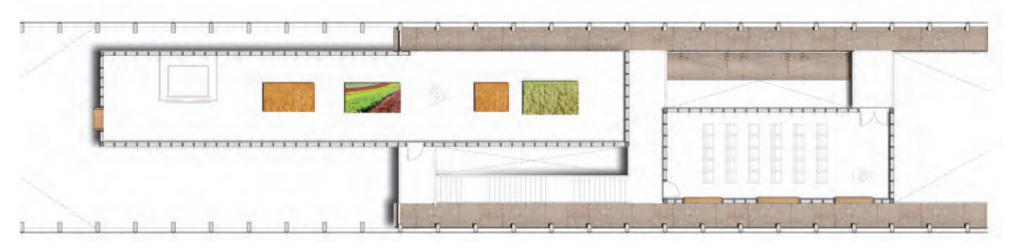




DRAWINGS



INSIDE FACADE 1:50





THANK YOU!

