

**THE RIVERBED**  
FIELD OF REMEMBRANCE  
Essay + Research + Logbook

Payam Baktash

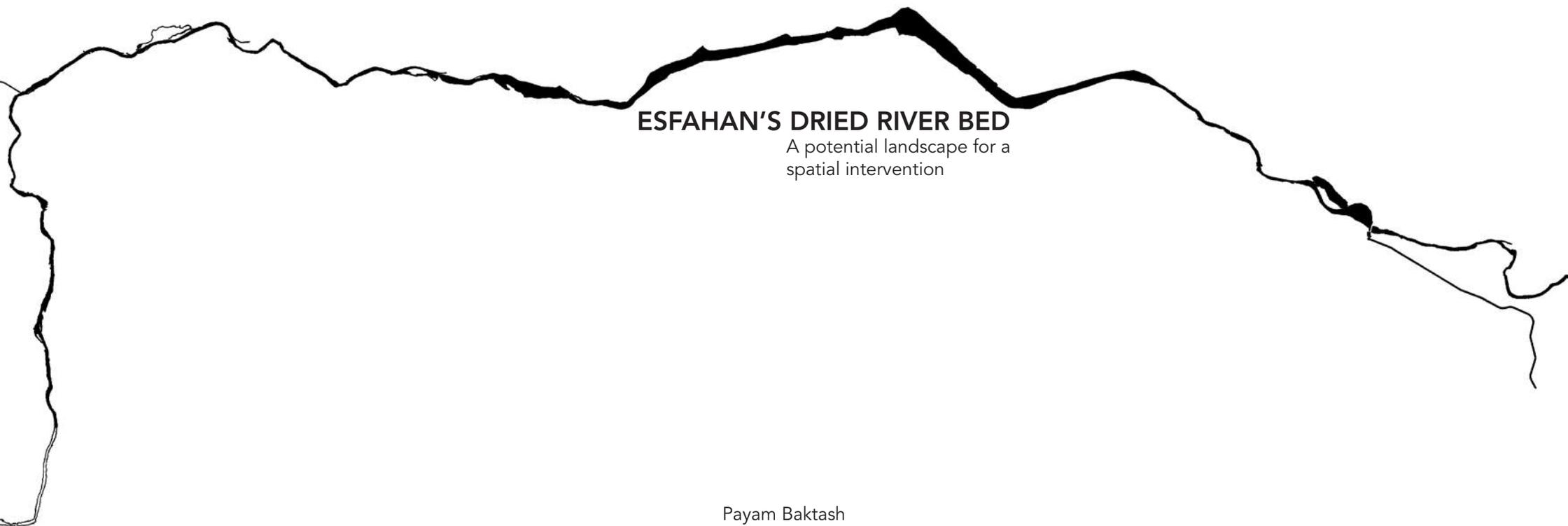


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FIELD OF REMEMBRANCE  
Essay + Research + Logbook

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Field of Remembrance

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2018 - 2019



**ESFAHAN'S DRIED RIVER BED**

A potential landscape for a  
spatial intervention

Payam Baktash

The dried riverbed provides a unique potential land in heart of the city. The Zayanderood was the largest river in the center of Iran which passed through the city of Esfahan. Although by the disappearance of water through Zayanderood, created lifestyle and connection of people, psychological security and economic opportunities has been destroyed, but **I believe through designing a network of spatial interventions on the river bed, it is possible to connect different isolated existing historical and architectural features. Here the riverbed is considered as a landscape in the process of forming and transforming which can provide an experience about the water and its absence; while seeking a new social and cultural interaction to raise collective awareness and the shared knowledge about the history and the culture of water.**



## EssaY

# THE RIVERBED

FIELD OF REMEMBRANCE

## Esfahan's Dried Riverbed

Zayanderood is the largest river in the center of Iran's plateau in a dry and semi-desert landscape which passes through the city of Esfahan. Zayandehrood, literally meaning life-giving River, effects on people socially, culturally and mentally. Unfortunately, the river, which has created the lifestyle and social adherence, psychological security, and economic opportunities, has been diminishing and drying since eight years ago. There are several reasons behind this disaster of which the most important one is the lack of knowledge and ignorance about water and its absence in this territory. The dried riverbed provides a unique potential territory in the heart of the city. Now the question is; Would it be possible to use the dried riverbed as a potential connecting space, a sort of soft-scape where time and social condensers are important elements to raise collective awareness ?!

## Esfahan; Past and Present

Esfahan granted its growth and prosperity through activating its hidden potential resources during different historical periods. Indeed, Zayandehrood is not just a river for the city. Through the time, the inhabitants of Esfahan nurtured the territory and trained the river for the sake of establishing the city.

In fact, the early core of the city has been formed far from the river. Since 1597 A.C. the situation of the territory and its features have been studied and its hidden potential sources has been activated in order to develop the city toward the river. Therefore, the land has been prepared for planting and making gardens by distributing the river water through canals – to wash the salty soil and feed underground resources. At the same time, the soil was enriched by pigeon fertilizer, through the construction of the pigeon towers in this area. As a result, the garden has been expanded in two main axes of the city. This was the initial process to transcend the idea of the garden to the city. Esfahan is still growing according to the defined axis and structure.

Hence, to develop the city, it has been necessary to

deal with the river patiently and smoothly. In other words, to cultivate this territory, the inhabitants have had an understanding of the limitations and potentials of where they live. Indeed living in this territory would not be possible without a collective awareness of the value of water. Thanks to intelligent measures of the ancestors, Esfahan looked like a city, which was rich with water and lush greenery.

However, during the last decades, planning and urban development have consumed and exhausted the water sources, by assuming the water as a constant given. Governments and Esfahan's inhabitant were water consumer in the last few decades without attention to water shortage. In fact, there is a lack of collective knowledge and shared awareness about water shortage and limitation of Esfahan's territory and landscape since a few decades ago.

## Esfahan; Tomorrow

The dried riverbed provides a unique potential land in the heart of the city to design a network of spatial interventions on the riverbed. Here the riverbed is considered as a landscape in the process of forming and transforming which can provide experience about the water and its absence; while seeking a new social and cultural interaction to raise collective awareness and the shared knowledge about the history and the culture of water.

This spatial intervention which is called 'the field of remembrance' appears in heart of the dried riverbed in the same direction of water-flow. It is embodied as a network of five different pavilions, with the purpose of raising awareness of citizens about water and its importance in this territory. The network of pavilions, which changed the dried riverbed to the field of remembrance, in fact, is acting as an extended water museum. Every pavilion extends certain features and conditions of its surrounding urban tissue, meaning that each zone of the river and thus the pavilion has its own theme and spatial formation. The position

of every single pavilion and the connecting path has been defined according to the practical and conceptual connection between different important water-related existing features along the river. Furthermore, by looking to the project in urban scale it is realizable that, the 'field of remembrance', including surrounding parks and urban districts like a garden, acts as a "state of exception". In this garden in scale of the city, existing surrounding parks which are the green belt act as edge. On one hand, this edge separates this area from the urban tissue and creates an isolated area in the heart of the city, and on the other hand, it acts as an inviting threshold to the 'field of remembrance'. Three existing historical bridges are landmarks, which act as a reference point for orientation in the environment. In addition, they are also gates or 'connectors' between the urban fabric and the project. The garden has been divided according to five different zones related to the urban context. These five zones are defined according to characters of every area as cultural zone, historical zone, social zone, life zone, and political zone, which influence the formation of each pavilion. Therefore, the existing edges, landmarks, districts, and dried riverbed created the base to complete the design of the 'field of remembrance' by defining paths and nodes in the dried riverbed. Accordingly, in the 'field of the remembrance', five pavilions, act as the nodes, focal points, and social condenser. These nodes are connected together through a series of paths in the riverbed. It is interesting to know that all pavilions and paths are accessible for use in both condition of dryness and river flow, but in some points, their function, image, and accessibility can change.

## Pavilion 1. Water Gallery

### Void of water

Water Gallery is the first Pavilion in the network. It has designed as a void space in the riverbed to remind people about the absence of water in Esfahan's territory. In other words, the void (which in a way frames

the landscape) shows the lack of something, in this case is the water, which supposes to be there but it is not, . The form of the pavilion has been inspired from Naqshe Jahan Square that it was a public square in front of the gate of empire garden in the Safavid period.

Existing void in the riverbed attracts people to get there through a temporary entrance?. After reaching the pavilion, they will face the sunken public square, which is designed as a place for a water-base cultural event. Due to its function, one side of the square has been designed as a stepped sitting area. Sunken square provides a natural open isolated territory in the heart of the busy city where only earth, sky and people are present. The space wishes to give a kind of similar feeling to people while being in the desert. Besides that, the open square is surrounded by a completely enclosed gallery, which is accessible, by stairs from the top and it provides a rather more permanent place for water-base cultural exhibitions and events .

By returning of water to the riverbed, the open square will be the last part which becomes full of water, so in the beginning, the void square will remain in the river, and after a while, the water fills the void. It is interesting that when the river becomes dry again, the void will be the last part, which will be dried, and it looks like a pond in the heart of the dried riverbed. When the water is back to the river, this pavilion will be accessible only by boat (to keep the concept of the void), therefore, the gallery is useable and accessible all the time in the riverbed with or without water.

## Pavilion 2. Water Chamber

### Extraction of hidden water

The water chamber is the highest pavilion in the network to show the presence of water from underground resources. While the pavilion is sunken into the riverbed to reach the underground water resources as a hidden potential, it frames unique views to the city, such as historical bridges and Charbagh Street in three different levels.

The design of water chamber, which is inspired by Ali-Qapou palace (the gate of the Safavid garden Empire) is the integration of two different volumes. The outer volume (cubic form) is mainly used for circulation. Through openings, it provides unique views to the city for visitors. The created void by the integration of the second volume inside the cubic volume provides a special sitting area for the visitors which at the same time have the view to the outside (city) and inside (underground water). The inner volume (cylinder form) sunken into the ground, provides underground water for few numbers of purposes. The main purpose is to keep people attention to underground resources as an extremely valuable gift in the desert. The water is used for planting (desert plants) around the pavilion and by the vertical circulation of water inside the pavilion; a cool and nice place will be provided for the visitor to experience the joy of the proper usage of water. The experience of space becomes more and more pleasant by directing main south-west wind through the big openings into the pavilion. In fact, this pavilion by providing a unique view to outside and creating a cool and pleasant place inside invites people to remember a glance of treasure of water enhancing life in the city. Therefore, this pavilion is the cool and pleasant tower museum, which is showing the city to the people (as a reminder).

## Pavilion 3. Water Terrace

### As the scene for urban water ceremonies

The water terrace has been designed as a place to celebrate the existing small amount of water. This Pavilion itself formed from five different terraces one of which provides the facilities and four others are the exhibitions and gathering places. Each of these four terraces has been designed according to the features and circulation of water. An entrance gate is a place where water is pumped from the underground resources and from there it circulates in terraces. In order to communicate the feeling of the existing water in this terrace, local materials has been used like brick and

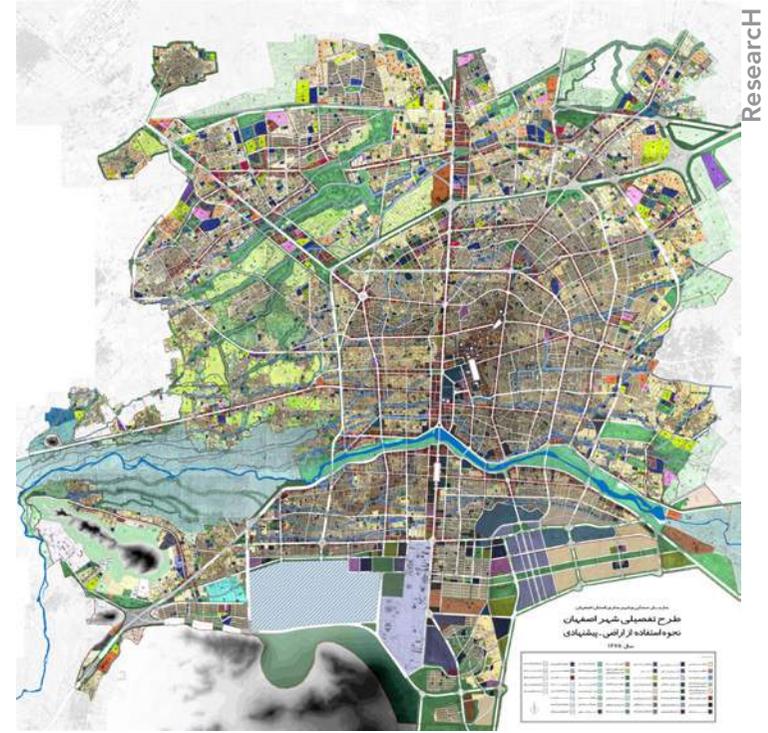
clay. Combination of clay and water create an amazing smell, which is water reminder as well. A grid of short columns in the riverbed create a texture in the water, in the time that river flows. It aims to play with a formless substance like water, to enhance it to a spatial level by employing its sound, colour, fluidity, and texture. This pavilion is considered to become a place related to water festivities that have been part of the history and culture of the city such as *Abpashan*, *Tirgan* and etc. to make all these festivals alive again.

Moreover, the considered distance between the pavilions has been designed mainly by forming and transforming the landscape. In some point by digging the riverbed, people will experience the surroundings in different ways and height, which at same time they enjoy the created shades. Furthermore, there are few numbers of architectural elements like walls which create shadows for people to walk beside it and during the return of water into the riverbed, these walls stand outside the flow as a reminder of absence of water. At the end, there are people who will navigate and find their way and direct to get their point in the riverbed. Therefore, all these pavilions together with connection paths provide a unique experience about the water and its absence, to raise collective awareness and the shared knowledge about the history and the culture of water.

Payam Baktash

## Research

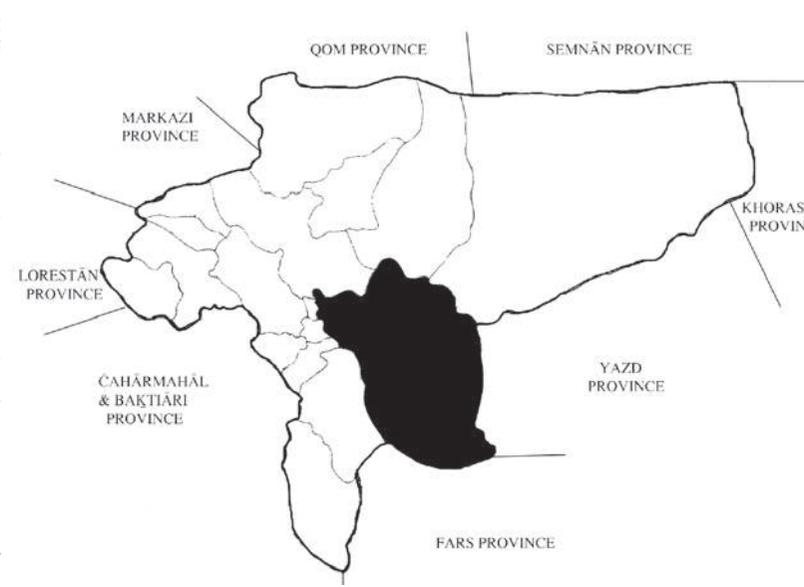
About Esfahan . . .



Research



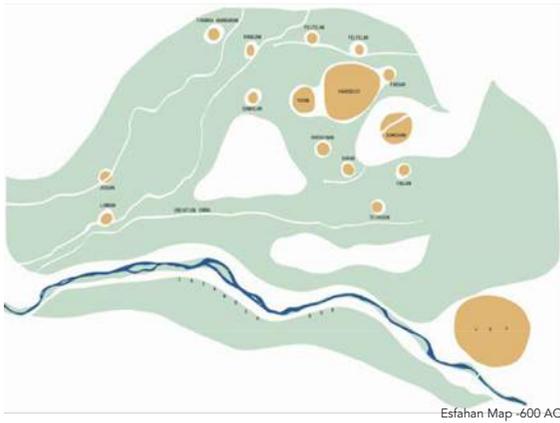
- . Located in centre of Iran's plateau
- . Located in dry and semi-desert area
- . Located beside the most important river of Iran's plateau (zayanderood)



- . 3rd biggest city of Iran
- . 2,000,000 inhabitants
- . Area of 300 km<sup>2</sup>



- . Well-known due to its Art & Architecture
- . It was Capital of Iran 3 times during history
- . Industrial city



Esfahan Map -600 AC

The city primary cores has been formed far from the river !



Esfahan Map -1400 AC

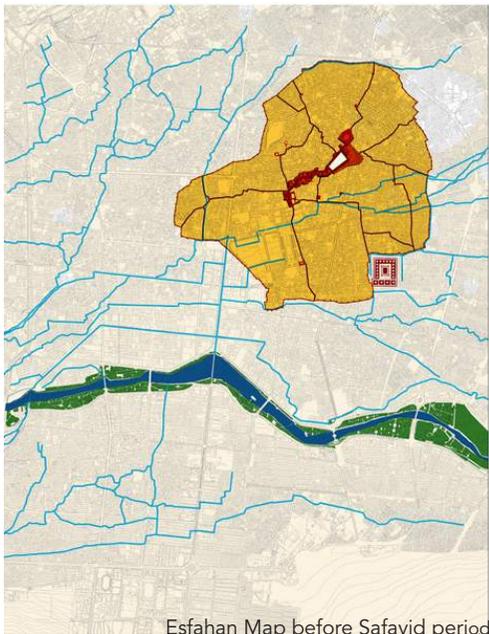
Esfahan has been formed & developed far from river because :

- . Poor soil condition along river
- . Preventing city destruction by river flood
- . High fluctuating of water (summer / winter)



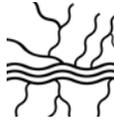
Esfahan Map -1700 AC

Since 1597 AC Esfahan has been developed toward the river. To gain this purpose they studied about situation of Esfahan and its features which they realized that Esfahan is a city with many hidden potential. Zayanderood and underground resources has been consider as an main potential which through water management of these two resources they could spread gardens in that district through two man axis. In fact, gardens were initial preparation for developing the city which it was a successful idea and even nowadays the city are developing according to defined axis and structure.



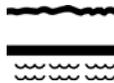
Esfahan Map before Safavid period

+ Canals



→ . Washing soil  
. Injecting water to underground resources

+ Control Underground water resources



→ . Saving water for water shortage period  
Khaju Bridge foundation used as underground dam

+ Planting (suitable and powerful plant for dry weather & poor soil)



→ . Creating mulch  
. Refusing of water wast during soil wash  
. Climate change

+ Planting along the river

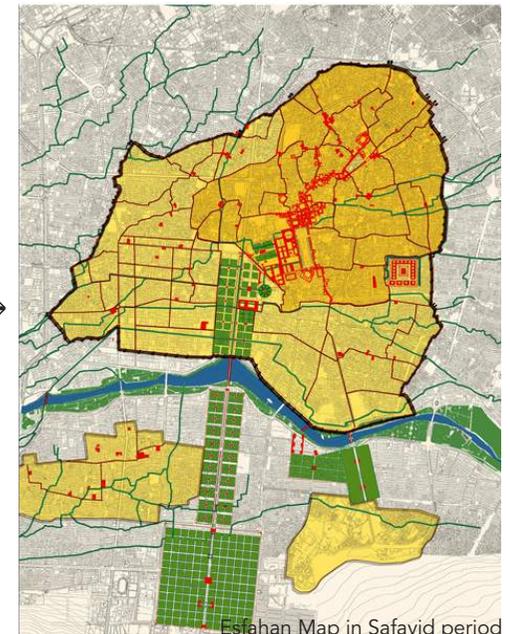


→ . Control water fluctuating  
. Speed down the water speed  
. Transfer water to underground sources

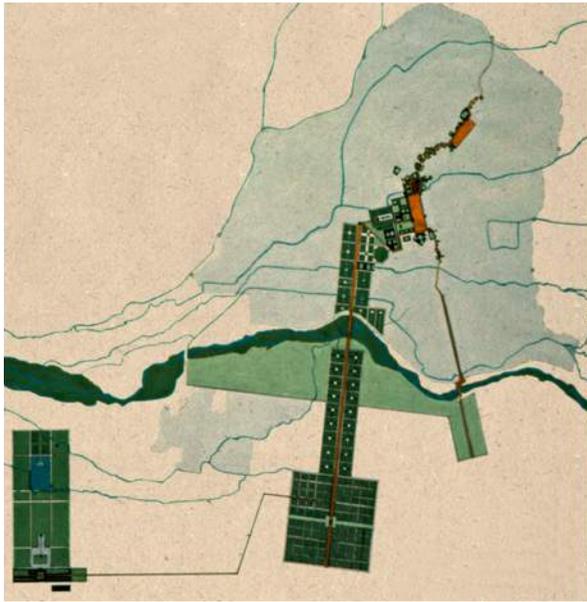
+ Pigeon tower



→ . Enrich soil by pigeon fertilizer

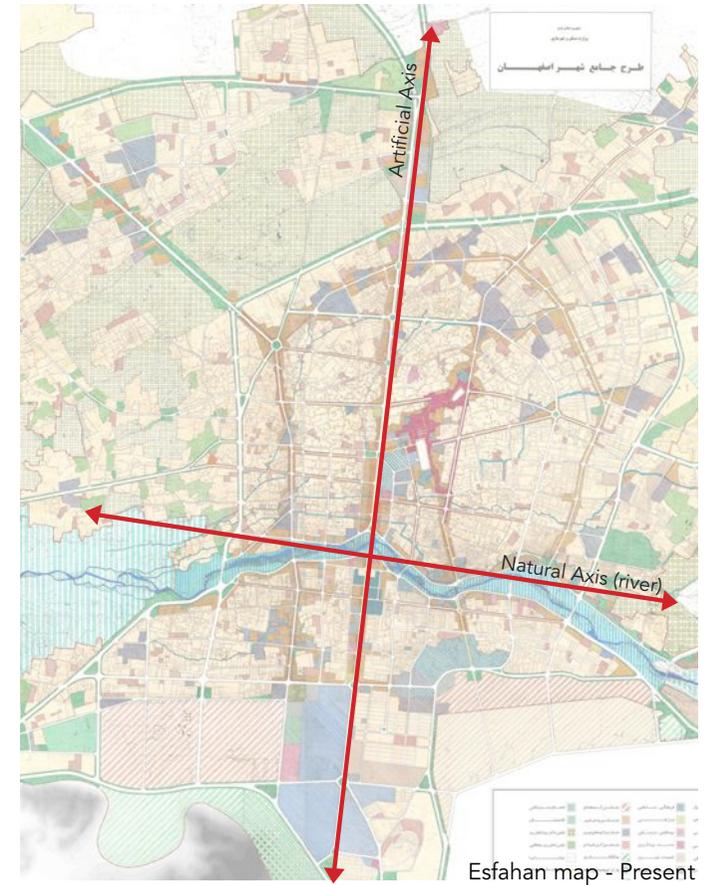
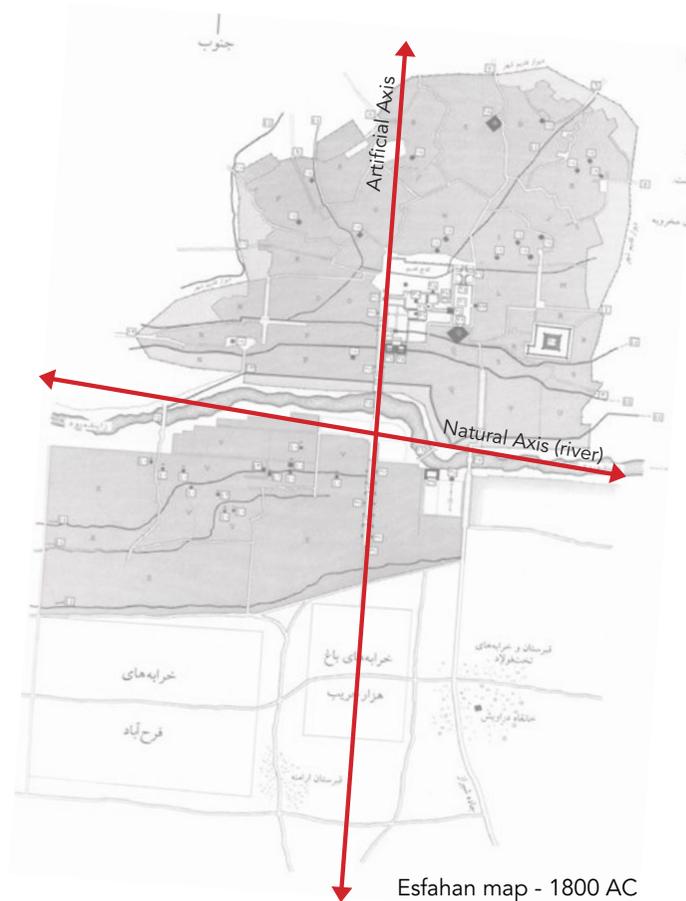


Esfahan Map in Safavid period



**Esfahan has been changed from a desert city to the garden city. It developed both side the river and from old city toward the river.** The city grew over the gardens which were made to prepare the land for inhabitation the master plan of Isfahan. For example the naqshe jahan sqare which is still the main public space of the city was constructed over a garden which was bought by Shah Abbas to construct the square.

By considering the idea of garden as the public spaces of the city, chahar bagh street and khajou street has been formed by making gardens along them which after that the city has been grown along the mentioned streets and gardens. Nowadays, the main square and streets remain in same green format as before which it is shown in next page.



The city has been formed according to two main axis, which it still are using as city development base.

Isfahan granted its growth and prosperity through **activating its hidden potential resource** during different periods.

Zayandehrood is **not** just a river for the city. Through the time, the inhabitants of Isfahan **nurtured the territory and trained the river for the sake of establishing the city.**

Hence, to develop the city, it has been necessary to **deal with the river patiently and smoothly.** For that, the potentials of this territory should be **recognized and activated.**

**Therefore, the river effects on people socially, culturally and mentally. Esfahan inhabitant are really depended on river.**

Zayandehrood a live giving river  
Social interaction along the river

Zayandehrood created social interaction, cultural pattern and life style in Esfahan....



Side river walking



Sitting along the river



Sitting on bridge stairs



walking on bridge - river view



Boat riding



Gathering under the bridge and singing



Gathering along river



Cafe under the bridge



Running along river



Boat riding



Parks along the river



Collective cycling along the river



Rafting



Forest park /picnic area along the river



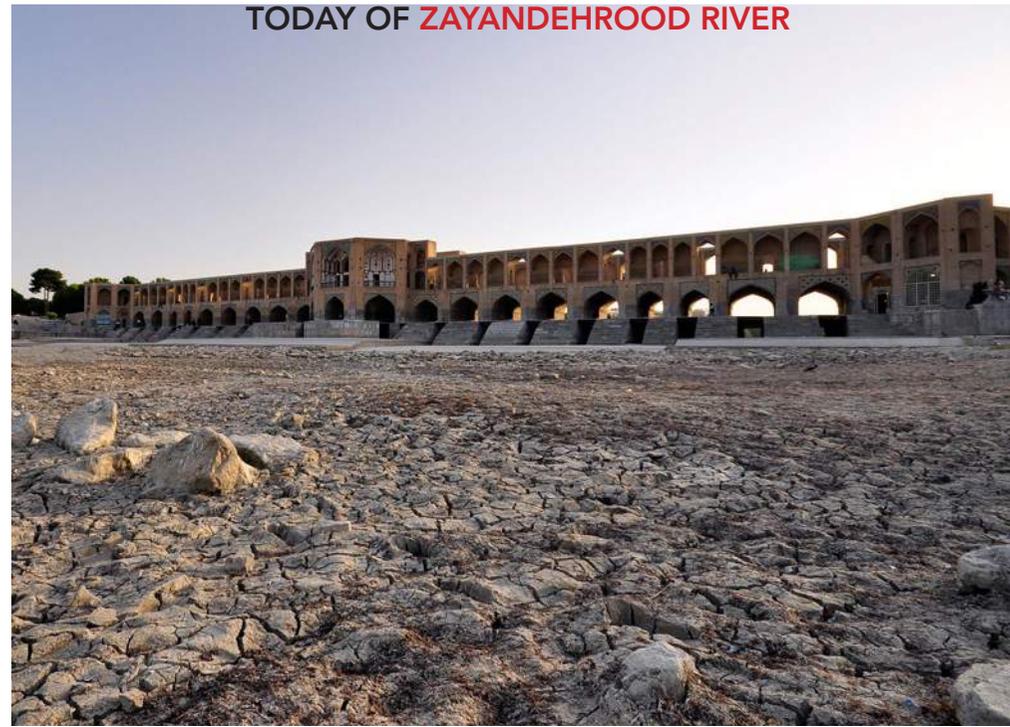
Cycling along the river



Selling local agriculture products



Cabin car along the river with river view



### River drought reasons

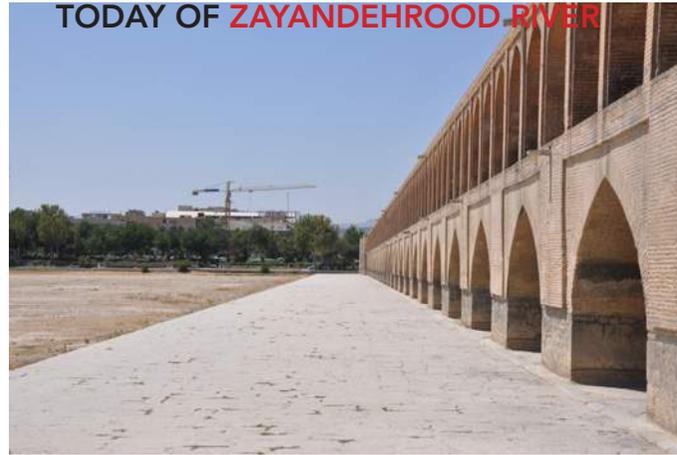
- Irregular water usage for drinking and industrial purpose
- Illegal water usage
- Transferring water to three other cities
- Population increase
- **Mismanagement**
- Climate change
- Considering Zayanderood as permanent water resources

### River drought effects

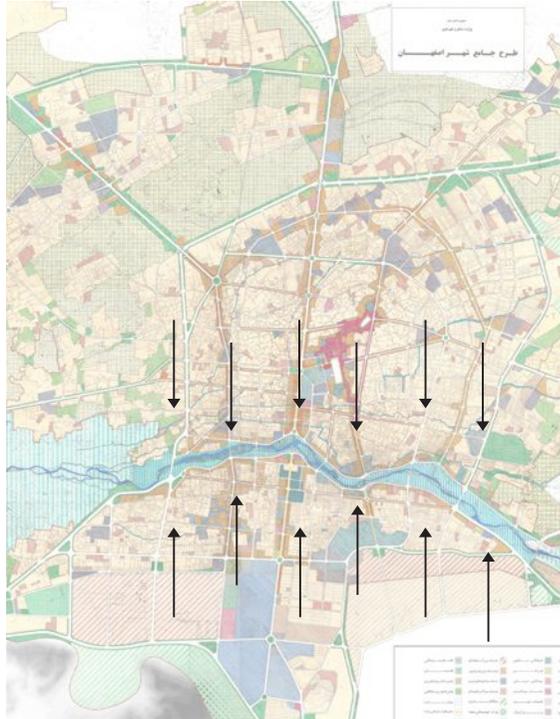
- Ecological issues
- **Social issues**
- Economical issues
- Climate change
- Dusty wind
- Agriculture production
- Increase disease
- Urban management

### Social issue

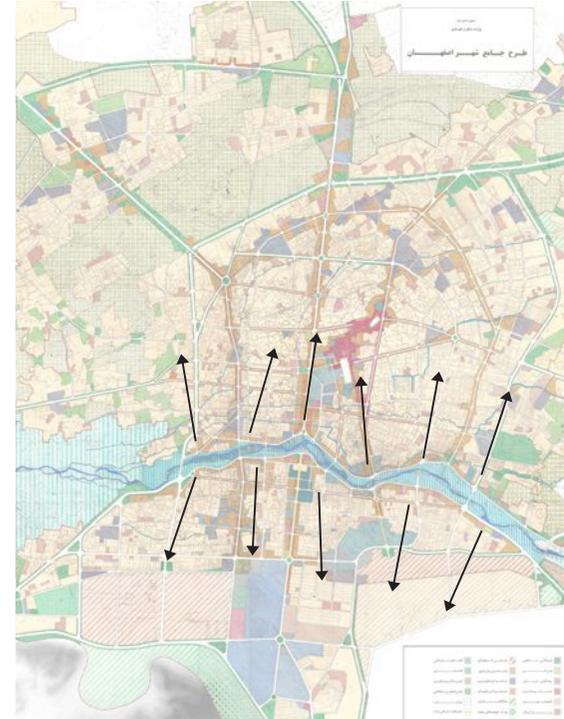
- Collective depression
- Low energy level
- Increase social tension
- Decreasing social interaction
- Decreasing of people connection with environment
- Decreasing of people association in social activities
- Decreasing of psychological security in public area around the river
- No motivation for people to be at river sides for entertainment and sport
- People are not using the provided facilities around the river (for sport, picnic , walking, biking & etc.)
- Tourist reduction
- Jobless population increase



Drought river bed created a social separation and it disconnected people from each other



River with water



Drought river bed

**Would it be possible to use the dried riverbed as a potential connecting space, a sort of soft scape where time and social condensers are important elements !?**



Infrastructure map

- Main Road
- Ditch



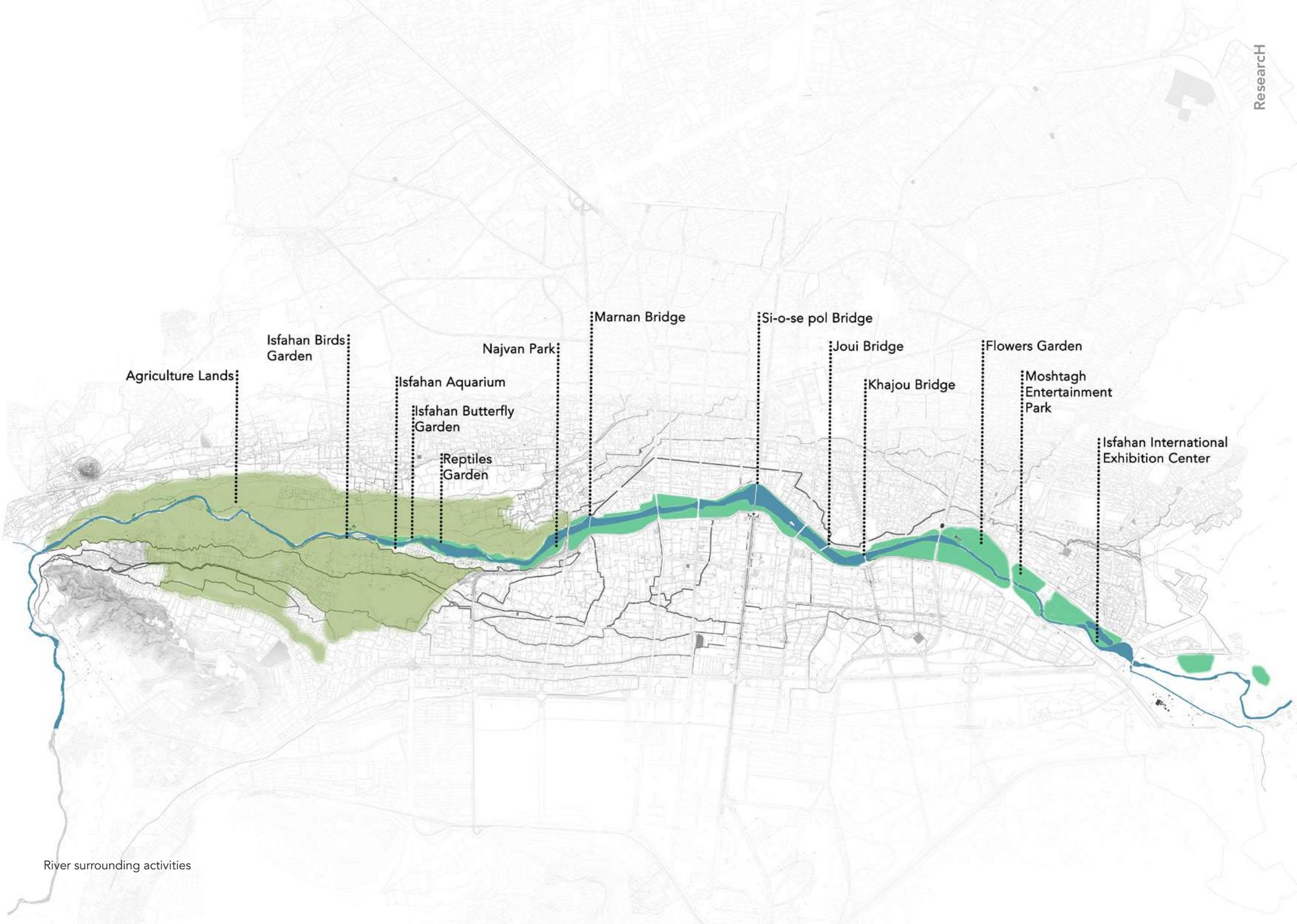
Public transportation map

-  Bus
-  Taxi
-  Subway



Social map

- market / shopping
- Historical places
- Religious
- Park / landscape
- Food



Agriculture Lands

Isfahan Birds Garden

Isfahan Aquarium

Isfahan Butterfly Garden

Reptiles Garden

Najvan Park

Marnan Bridge

Si-o-se pol Bridge

Joui Bridge

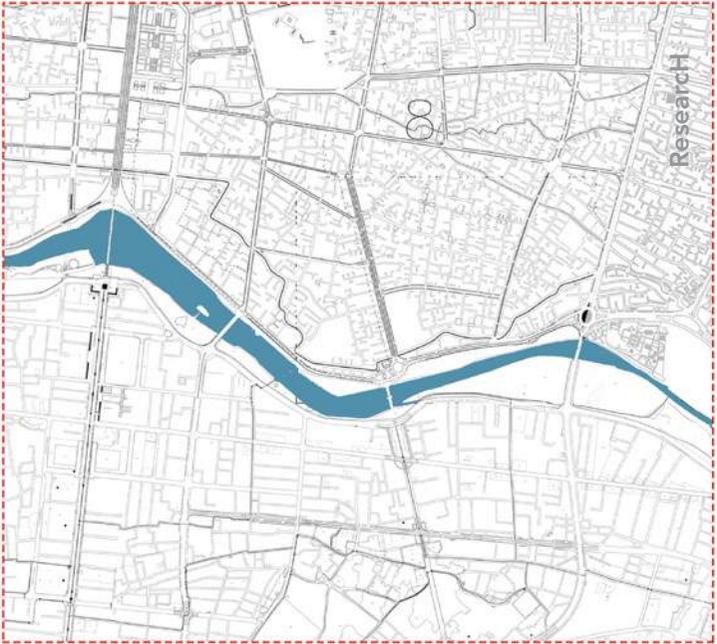
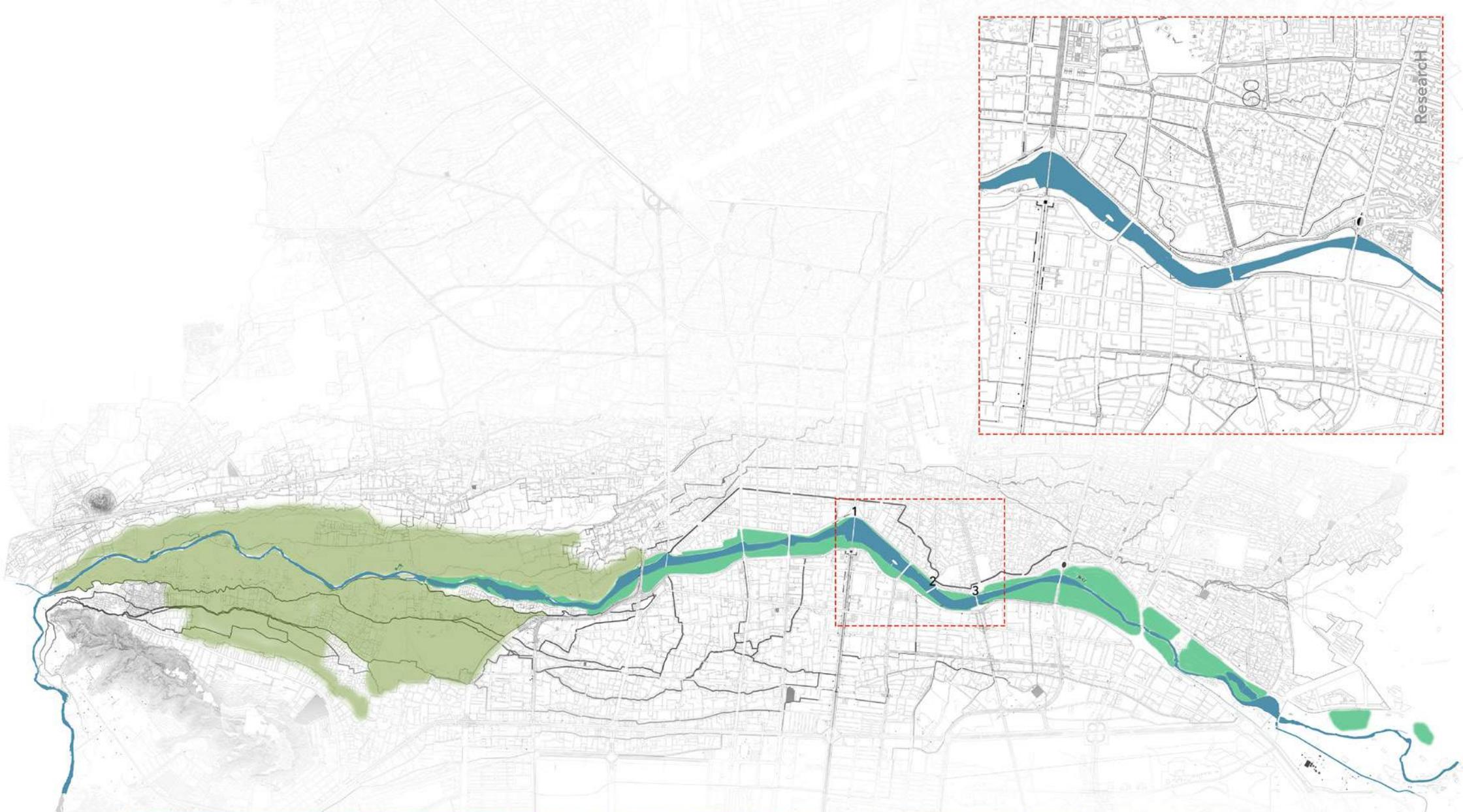
Khajou Bridge

Flowers Garden

Moshtagh Entertainment Park

Isfahan International Exhibition Center

River surrounding activities

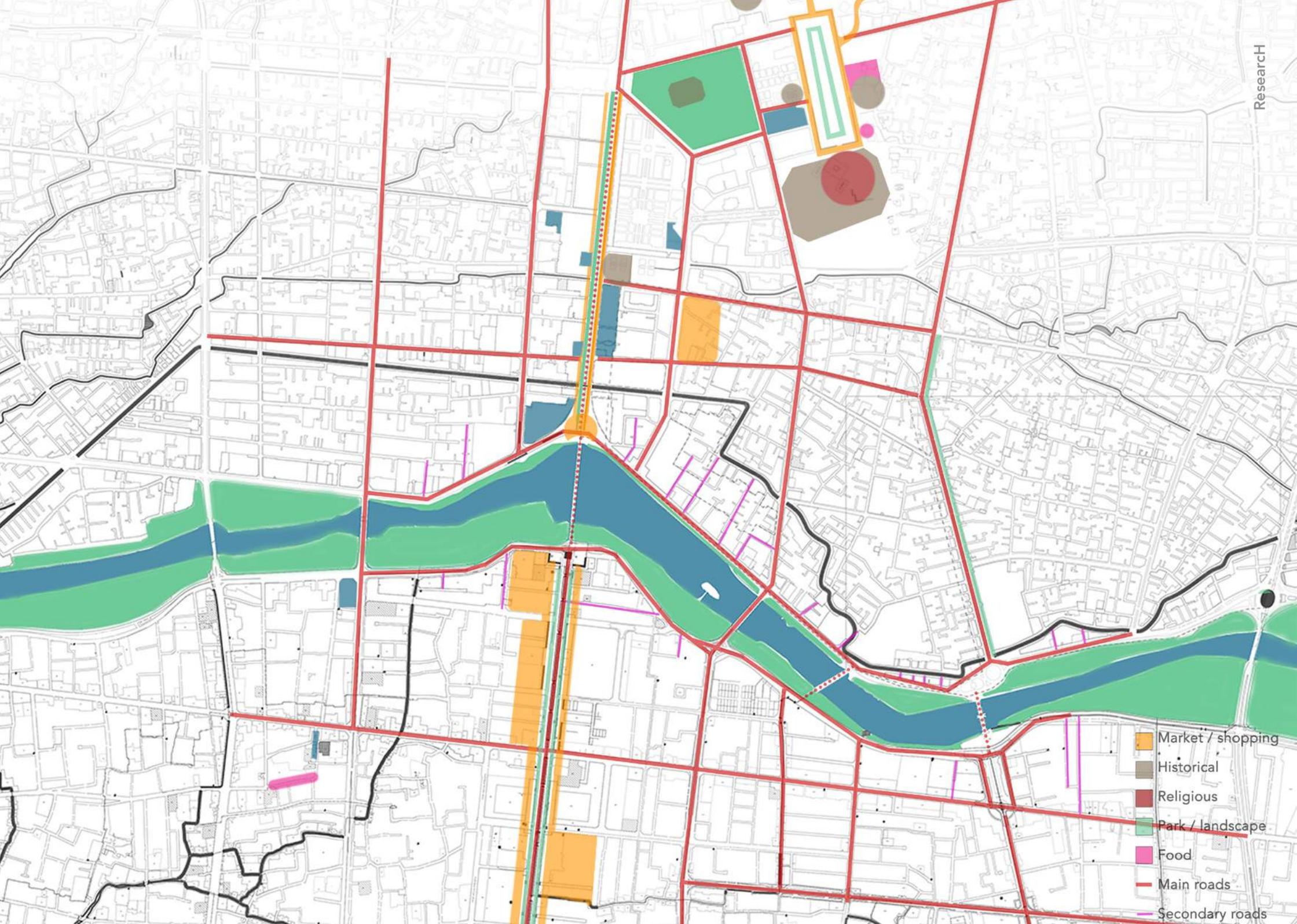


Chosen site

1.Si-o-se pol Bridge

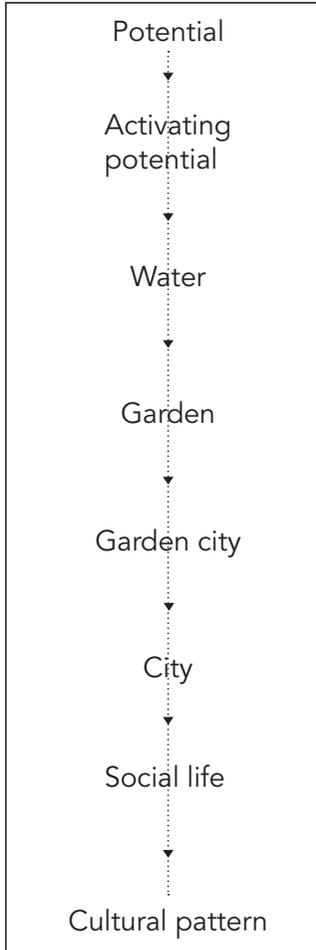
2.Joui Bridge

3.Khajou Bridge

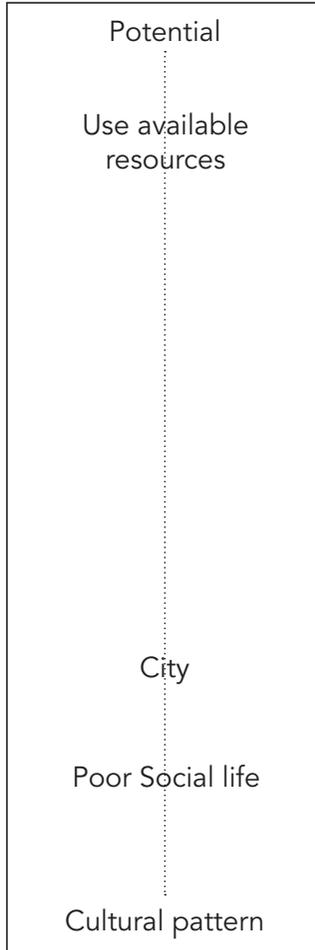


- Market / shopping
- Historical
- Religious
- Park / landscape
- Food
- Main roads
- Secondary roads

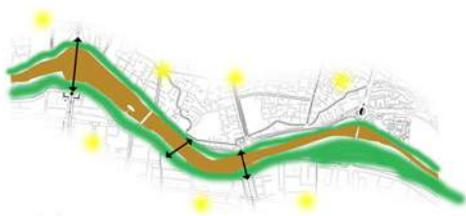
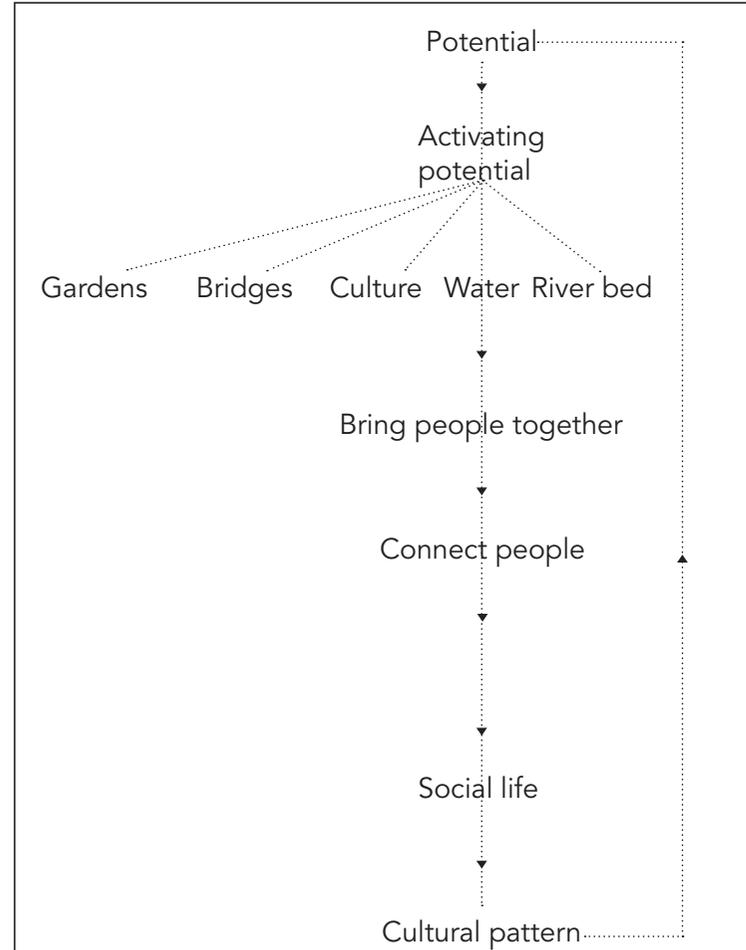
**HISTORY**



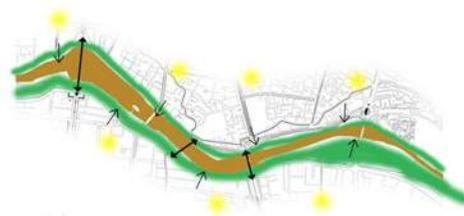
**CURRENT**



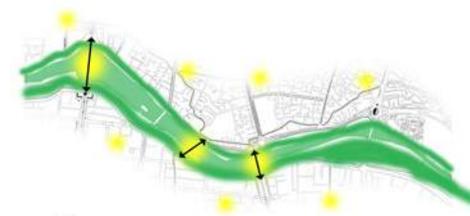
**FUTURE**



Current situation



Program



Future

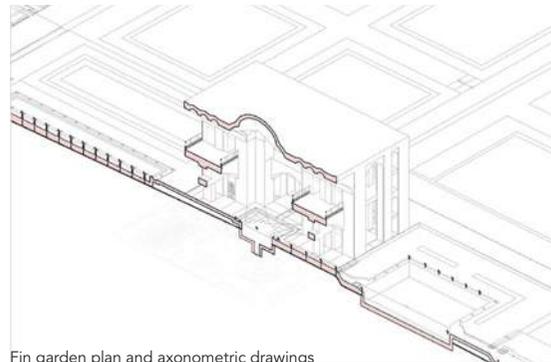
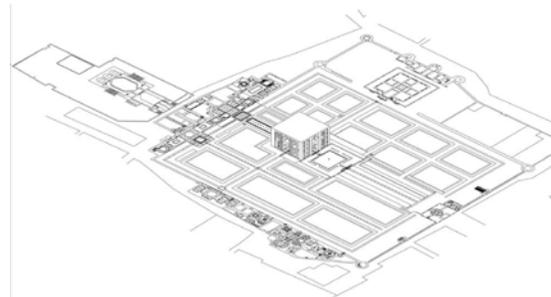
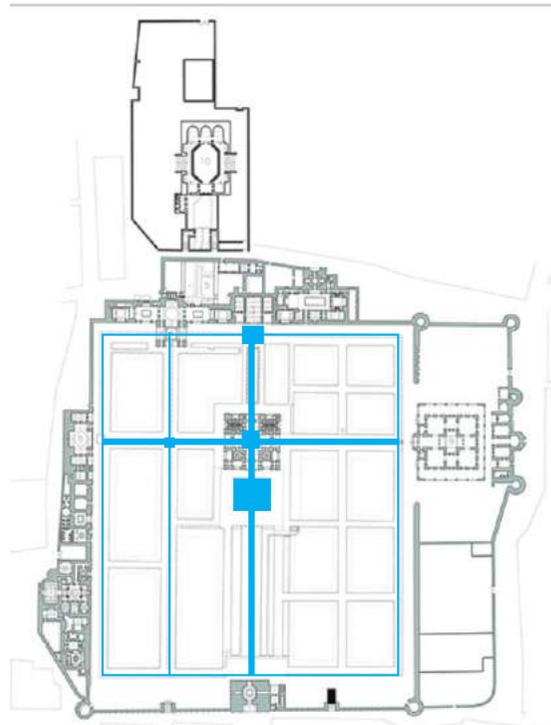
**Research & Back to History 1600 A.C**  
**Iran**  
**Persian Garden**  
**Water Management**  
**Esfahan**

Due to geographical location and geological condition of Esfahan, this city has been dealing with the lack of water throughout the history. In fact, **dealing with water and its fluctuation and shortage** has been the main focus of the city making and places of inhabitation.

## Persian Garden (Water management)



Fin Garden is the paragon of ancient Persian Gardens. Founded by Shah Abbas between the end of the 16th century the garden was one of a series designed at that time. Fin is situated in Kashan, province of Esfahan. It is structured similarly to the palatial gardens of the Middle Ages, a perimeter wall with four control towers encloses a highly organised system of prominent walkways, pavilion, waterways and pond. The planning of Persian gardens derived from the careful consideration of environmental conditions and performative criteria. **The gardens were strategically positioned at the point where underground water springs came to the surface.**



Fin garden plan and axonometric drawings

**Main stream** - transferring water from source  
**Secondary stream** - spread water in garden

**Canals** - separation in water movement

**Grids** - creating volume in water

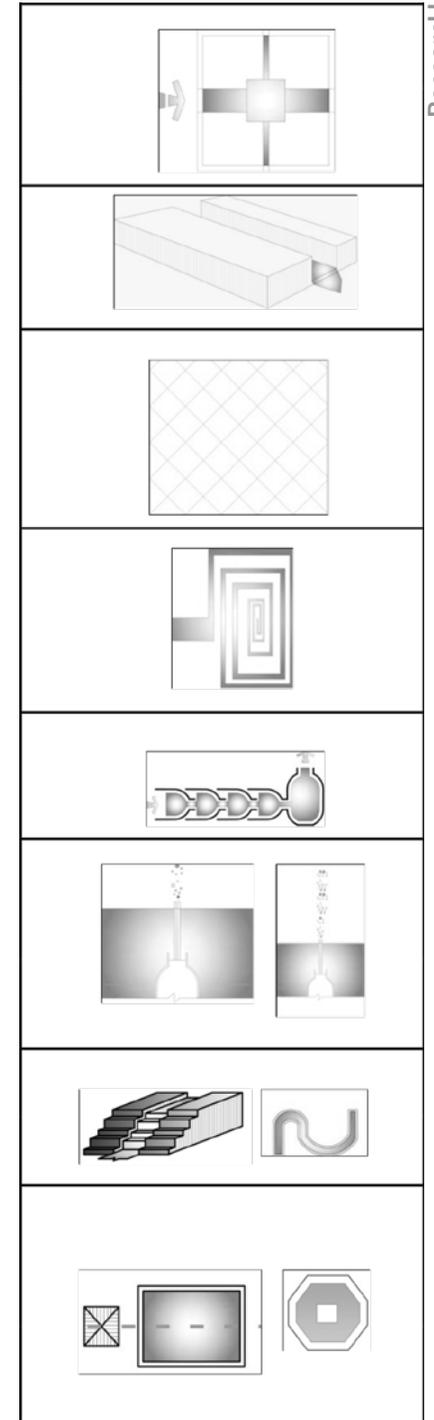
**Circulator** - making permanent water circulation

**Tubes** - transferring water to above surface

**Fountain** - show of amount of water

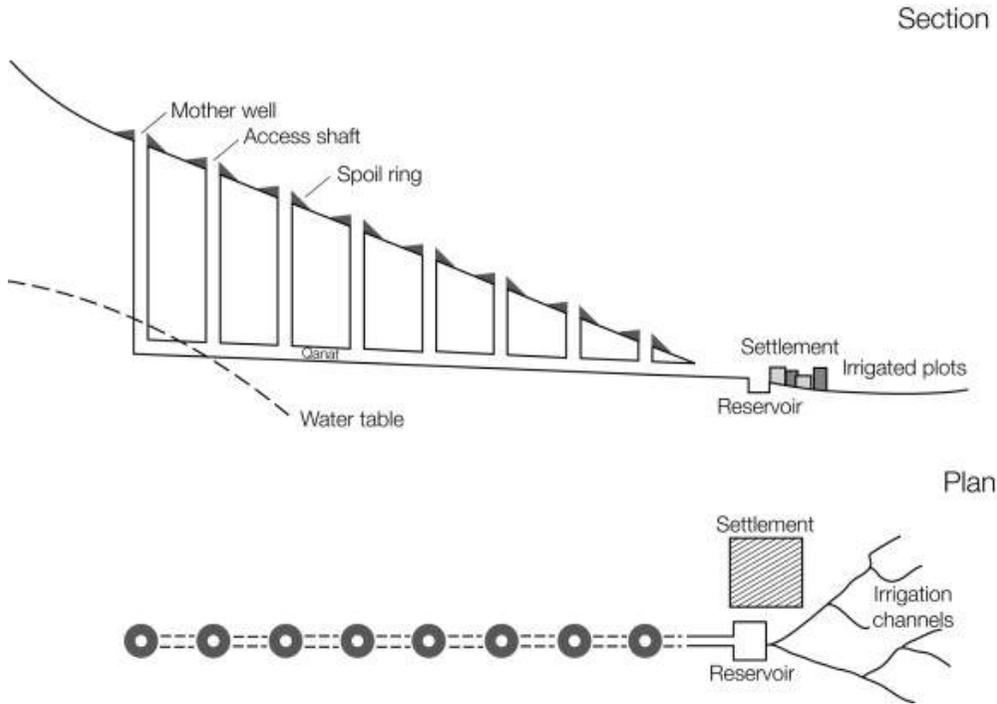
**Step canal** - creating waterfall

**Pond** - water storage , pause in water



Research

Qanat (Water management)

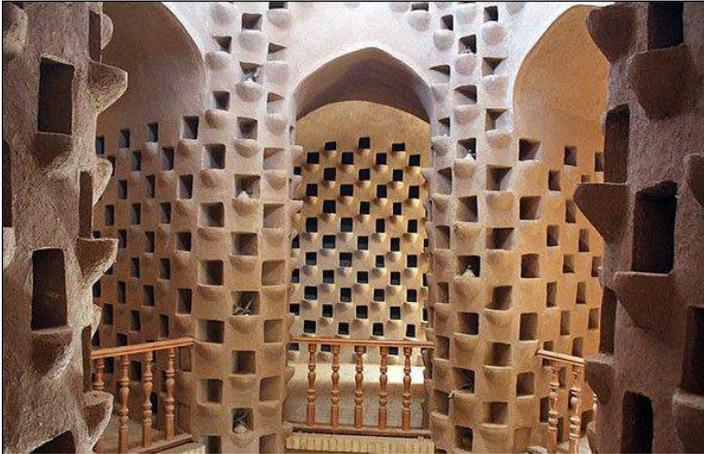


ResearchH

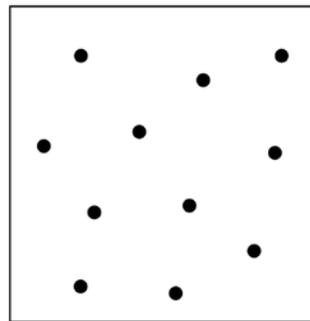
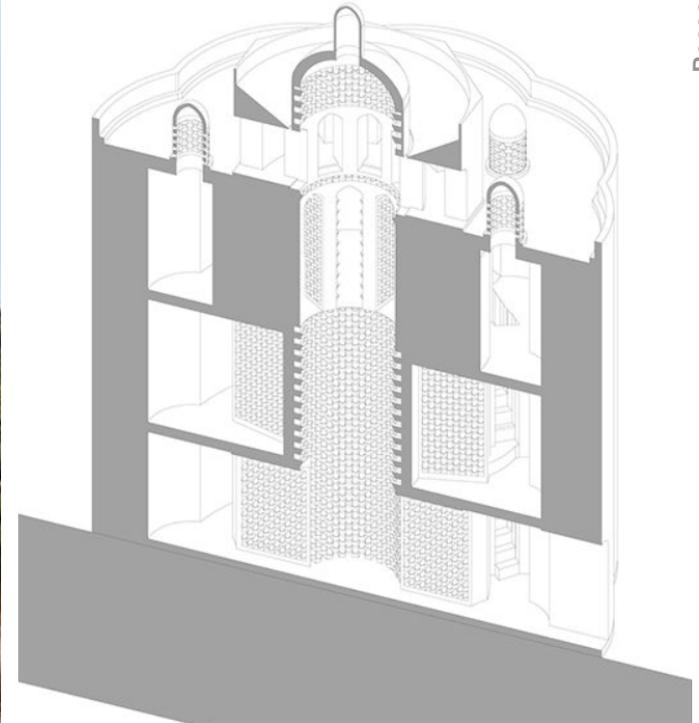
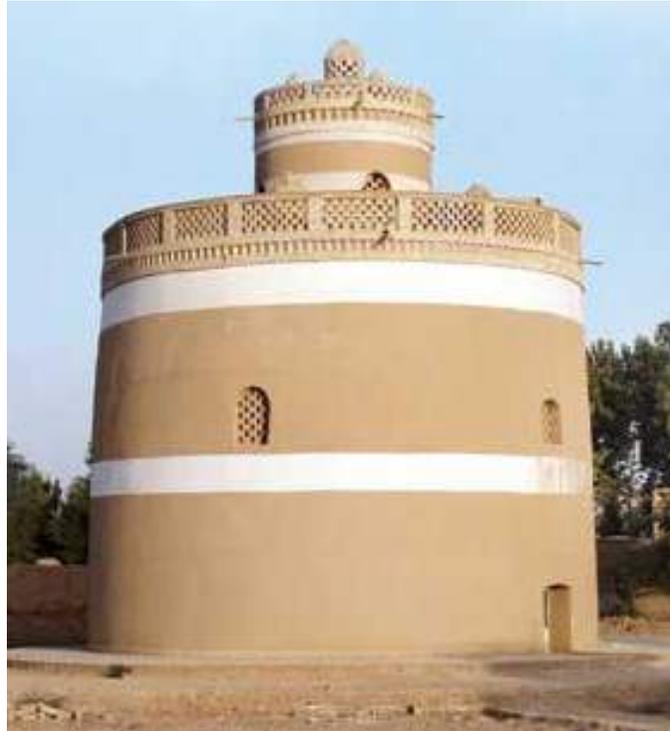
Type of underground irrigation canal between an aquifer on the piedmont to a garden on an arid plain. This system is best known from Iran.



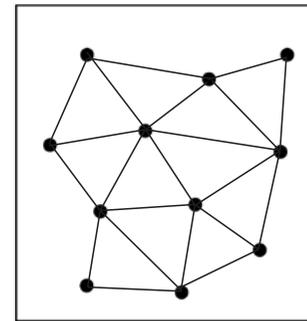
Pigeon tower (Water management + Soil enrichment)



The monumental pigeon towers that are still a feature of the landscape near Isfahan (Pis. 102,103) have amazed travellers through the ages. The towers were designed for the collection of pigeon dung to fertilize the fields. Such dung is exceptionally rich in phosphorus and nitrogen and when mixed with ash and soil was called *tehalgous* (enlivening) according to Jean Chardin. The dung was also used for the manufacture of gunpowder. The towers are build of sun-dried mud-brick and cob (which has no tensile strength), so a circular plan makes for maximum stability (a few rectangular towers exist and one square one may also survive).



every tower work individually as an architectural element



All tower together worked as an network system to provide fertilizer to enriched soil.

To cultivate this territory, the inhabitants has had an understanding about the limitations and potentials of where they live. Indeed living in this territory would not be possible without a **collective awareness of the value of water**.

Thanks to intelligent measures of the ancestors, Esfahan looked like a city which was rich with water and lush greenery. However, during the last decades, planning and urban development has consumed and exhausted the water sources, by assuming the water as a constant given.

Governments and Esfahan's inhabitant were water consumer in last few decades without attention to water shortage. In fact, there are lack **collective knowledge and shared awareness** about water shortage and limitation of Esfahan's territory and landscape since few decades ago.

# Abuse of water

Transferring river water to the hill-sides by water pump for agriculture purpose increased water harvesting 9 times more that before since 2008.



Overusing water for agriculture



Illegal well



Esfahan steel company



Esfahan Oil Refining company



Isfahan Petrochemical Co.

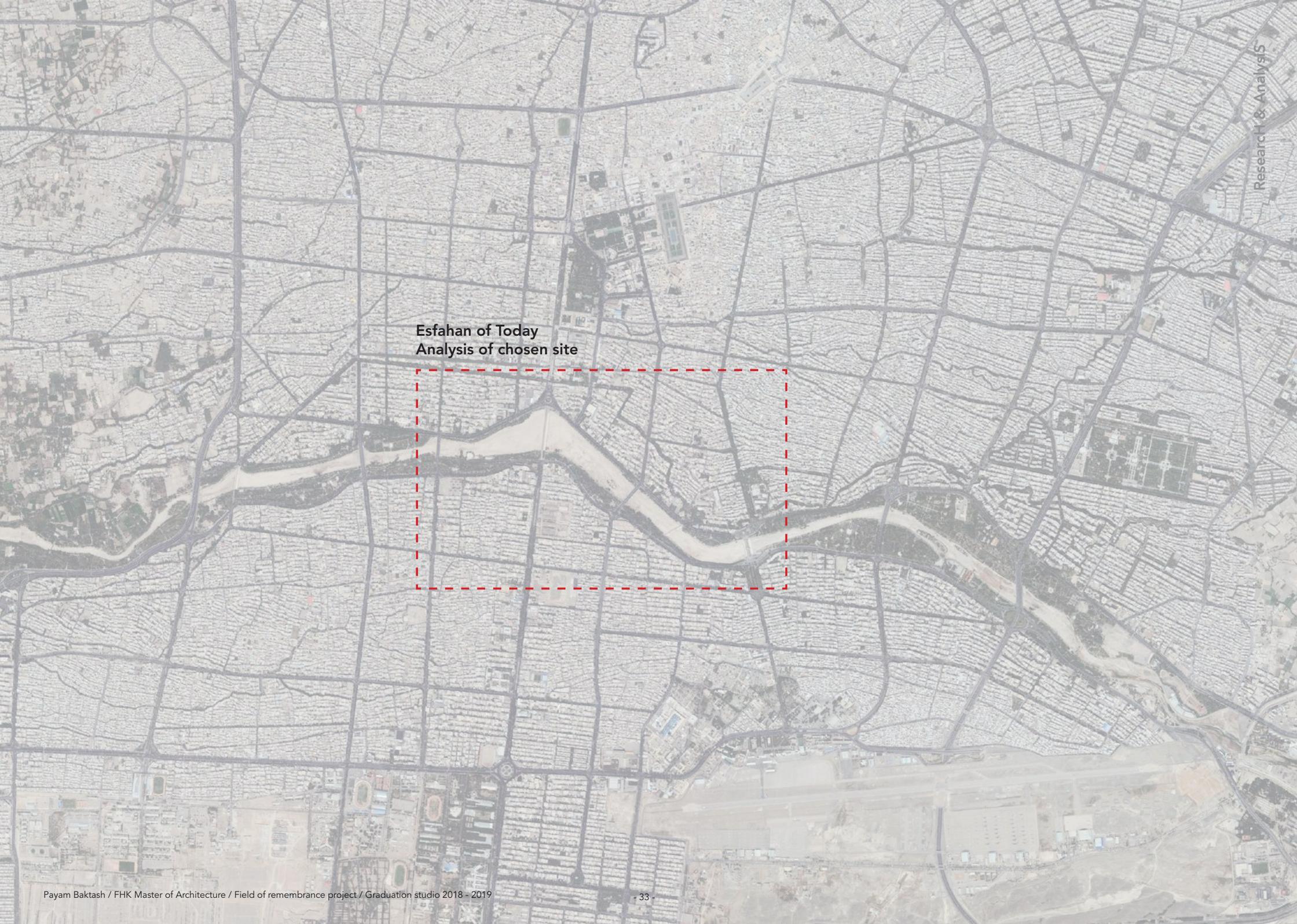


Several industrial township



Building several town around Zayanderood

## Research & Analysis

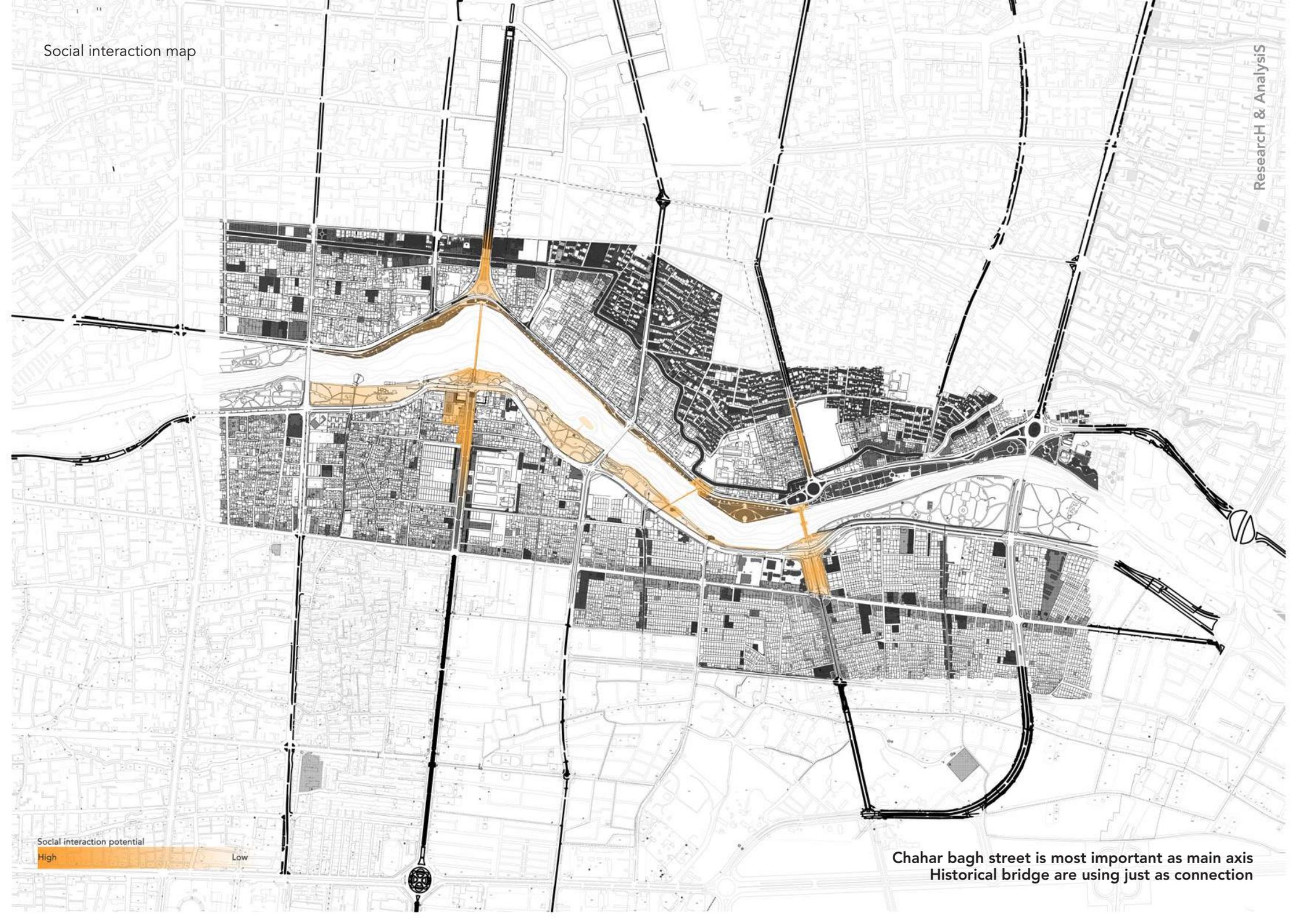


Esfahan of Today  
Analysis of chosen site

- Art & cultural complex
- Shop
- Shopping center
- Mosque
- Restaurant
- Hotel
- School
- Bank
- IRIB
- Government organization
- Cinema



There are different kind of social activities along the river



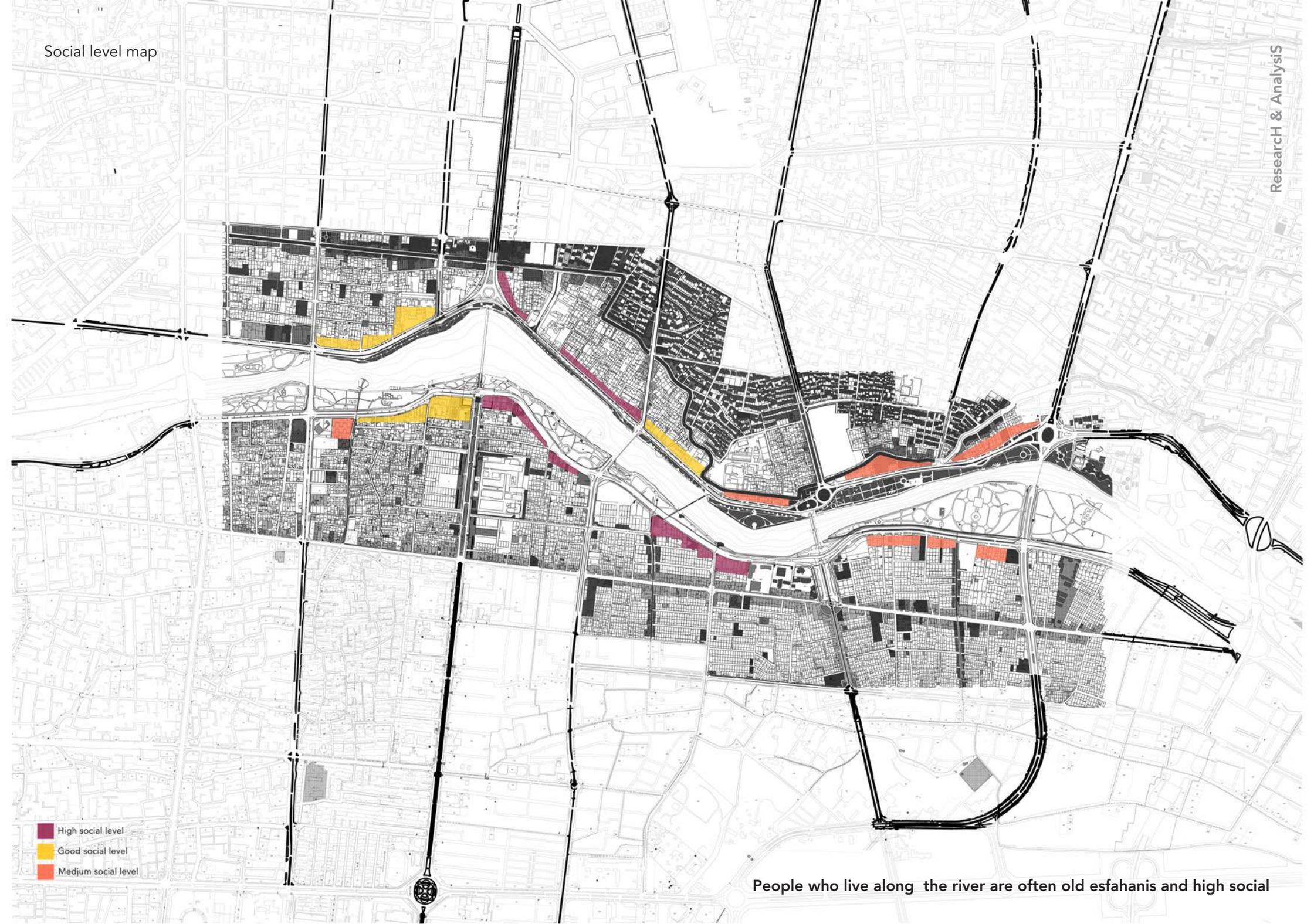
Social interaction potential  
High Low

Chahar bagh street is most important as main axis  
Historical bridge are using just as connection



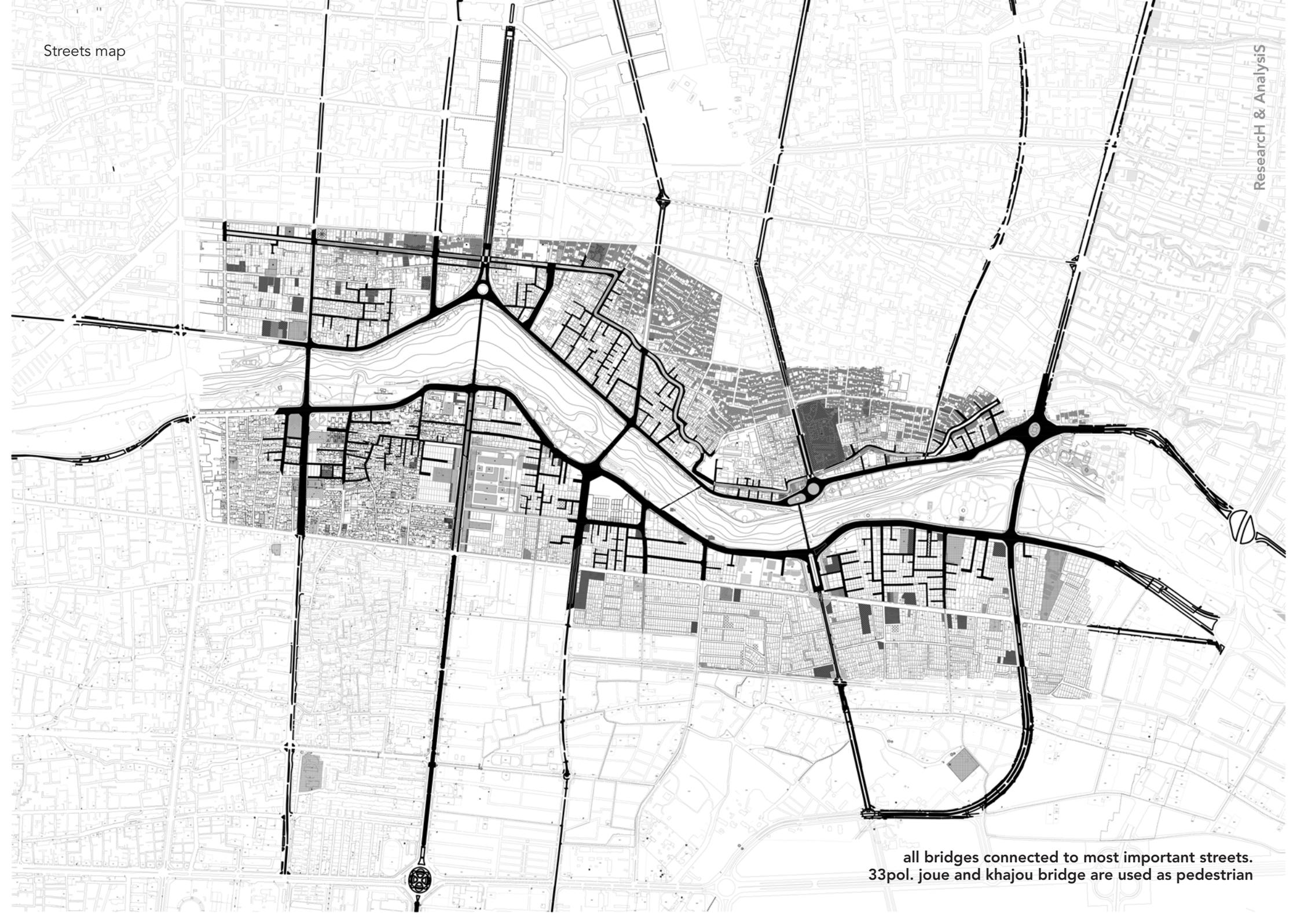
Historical place  
Historical and traditional house

House along Niasarm canal are historically valuable  
The factories are historically and architecturally important



- High social level
- Good social level
- Medium social level

People who live along the river are often old esfahanis and high social



all bridges connected to most important streets.  
33pol. joue and khajou bridge are used as pedestrian



Different orientation of houses in north and south part of the river



Canals map



Research & Analysis

All canals are exist but they are dried as well

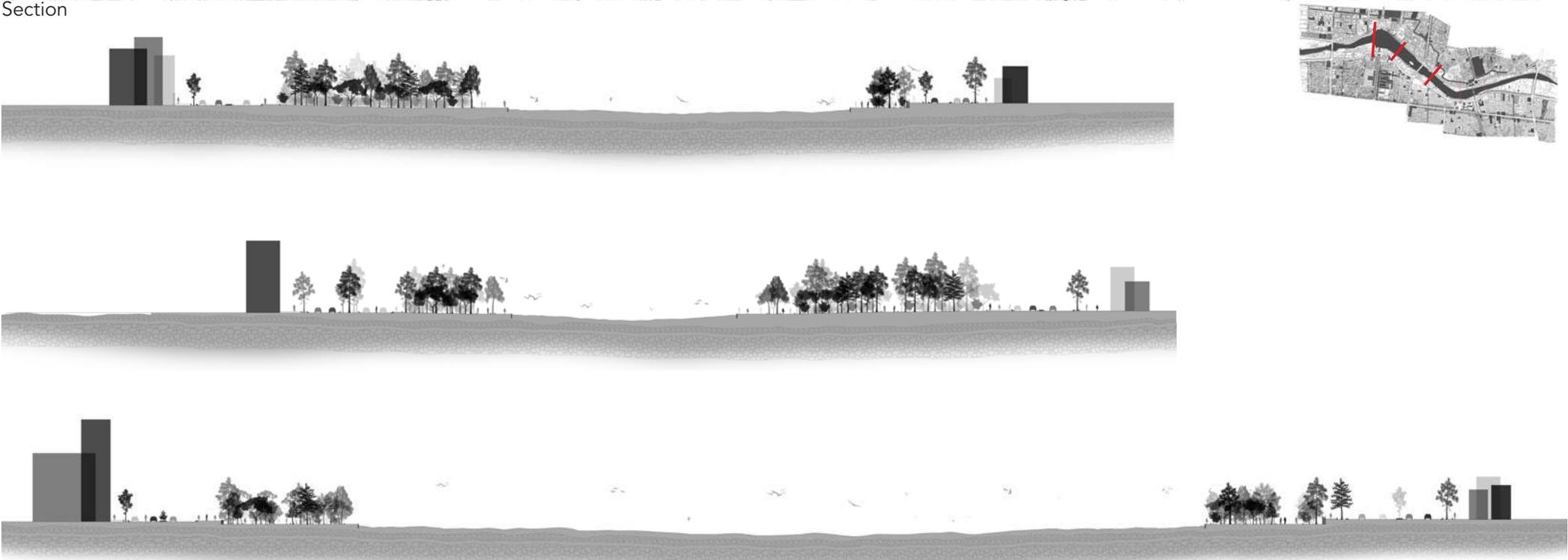


Parks are first layer after river bed  
Parks in north are more narrow  
Parks in south were facilitated more

Surrounding parks map (zoom)

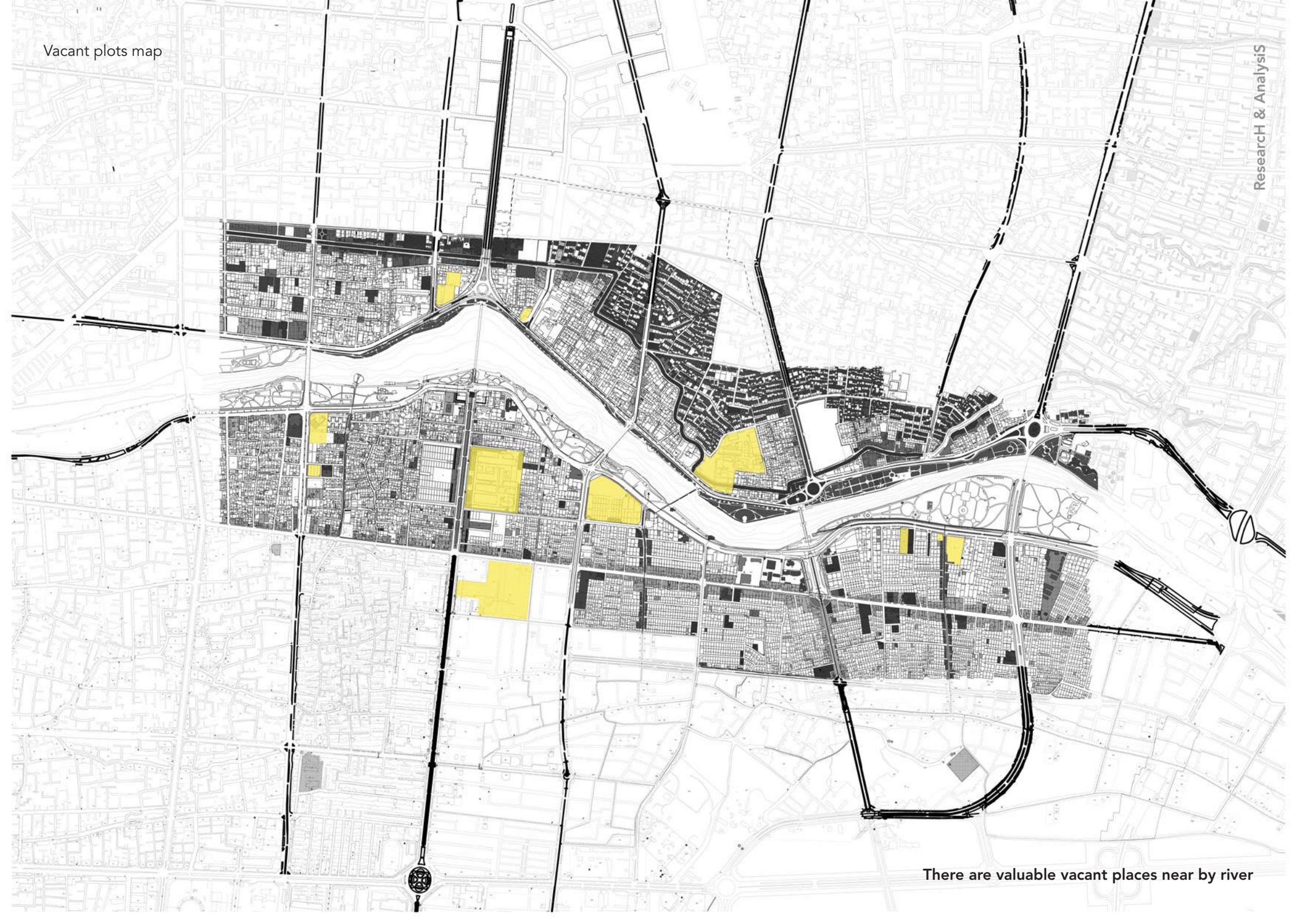


Section



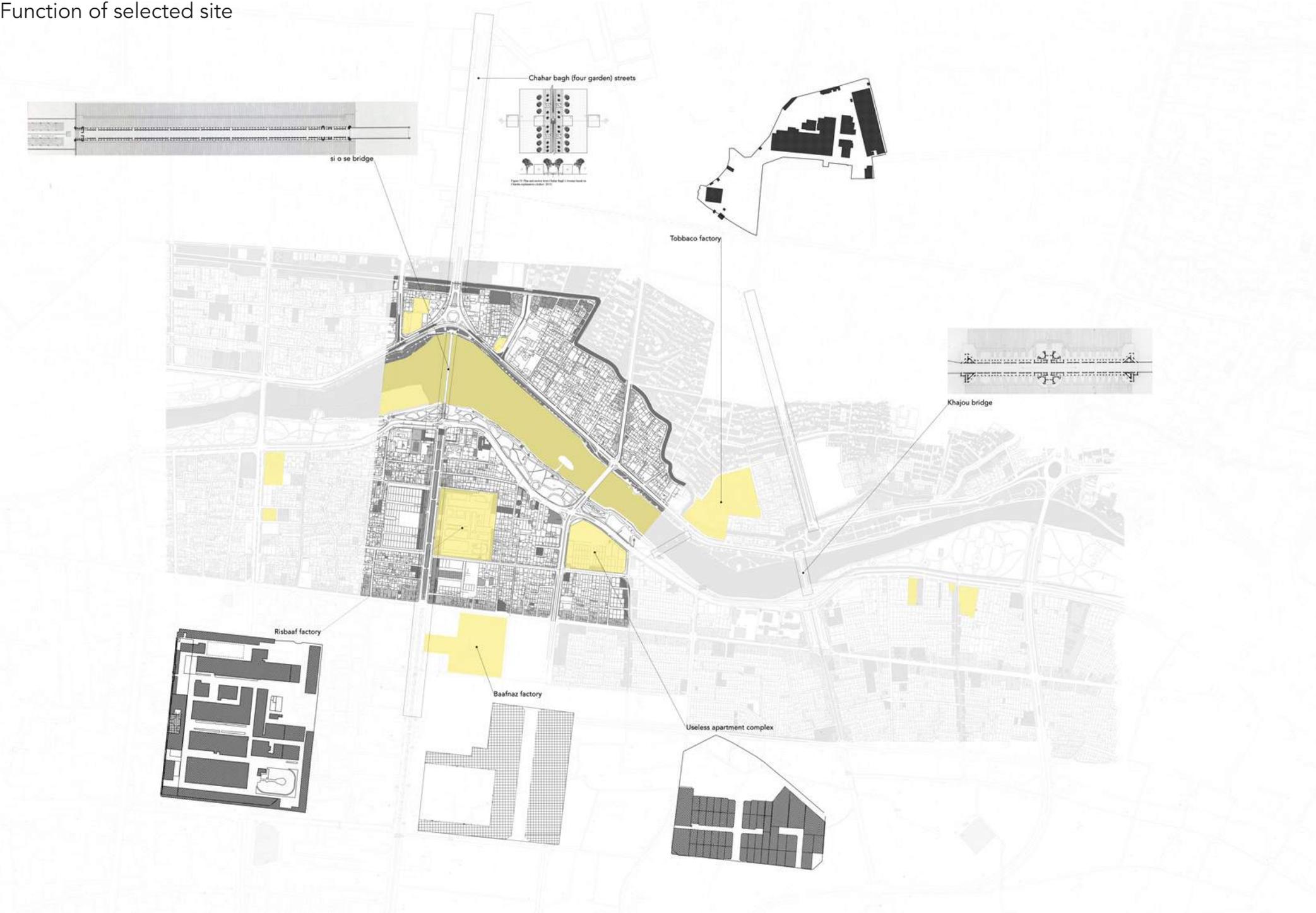


There are several vacant area near by riverbed

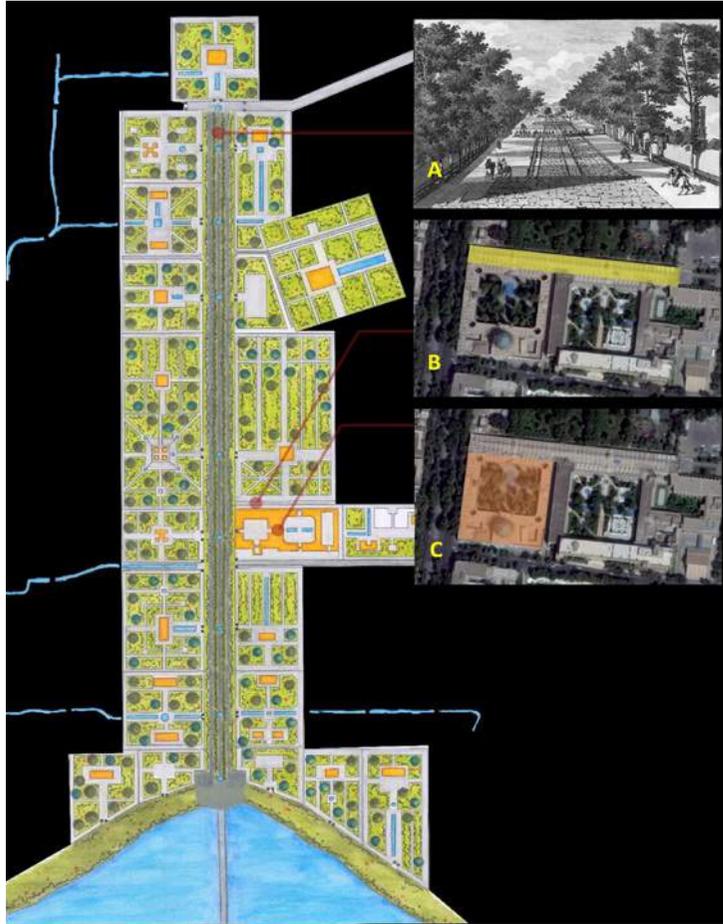


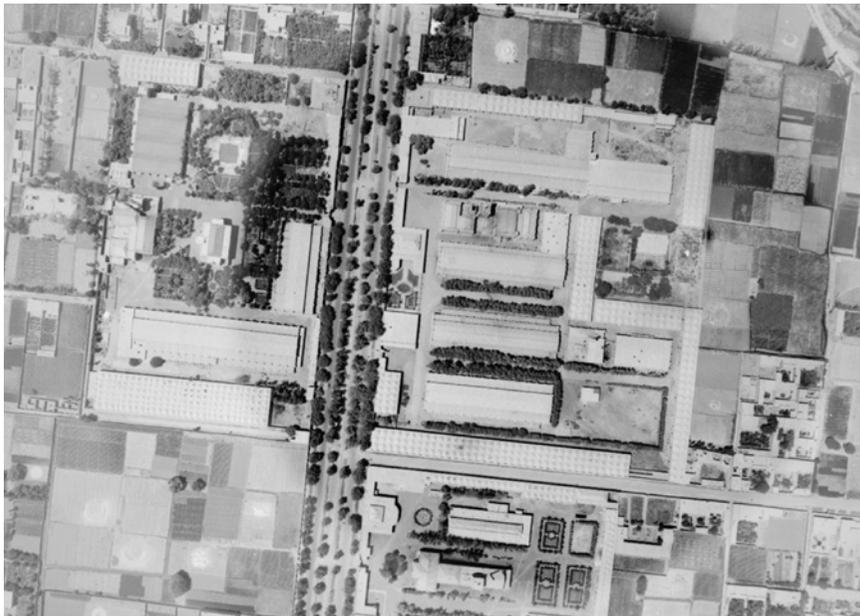
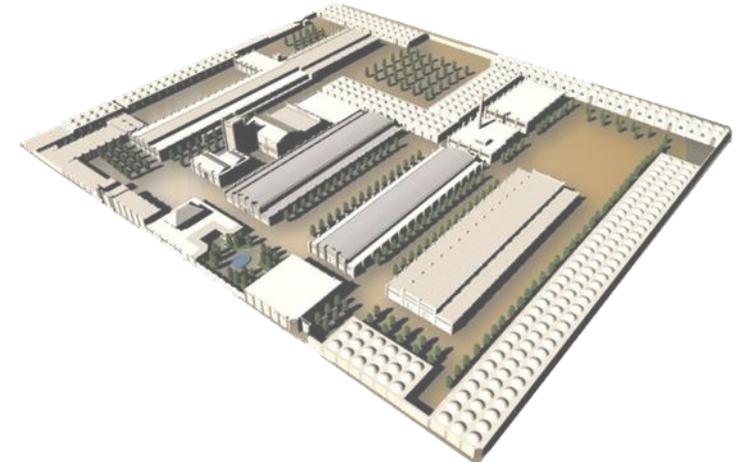
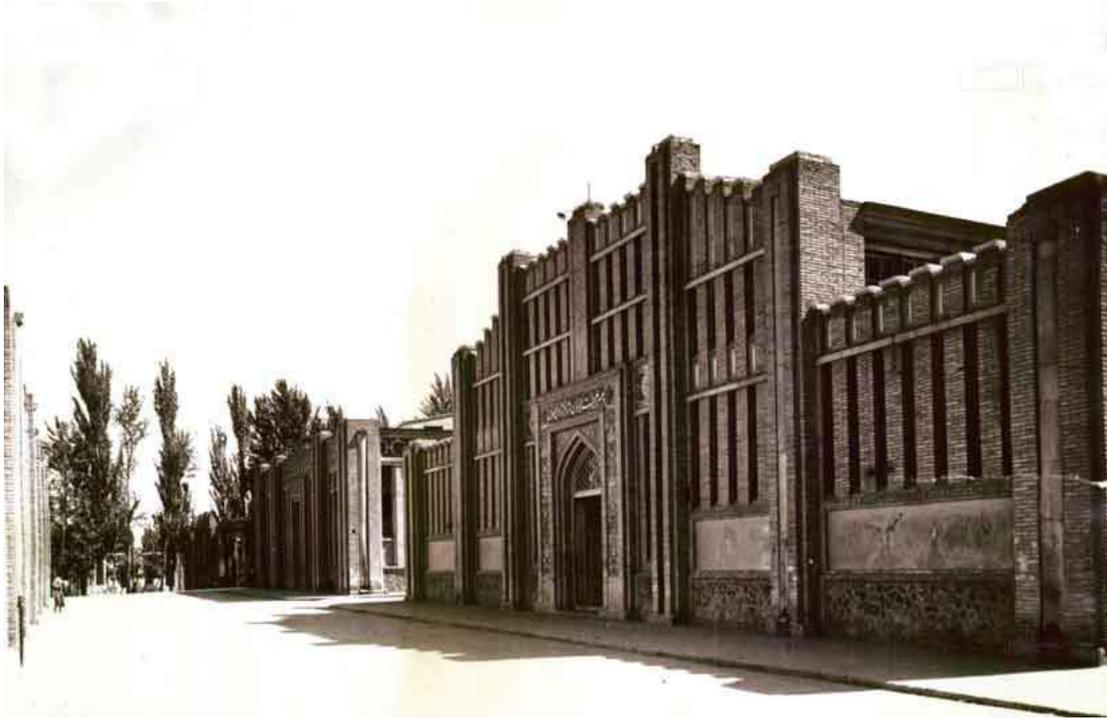
There are valuable vacant places near by river

Function of selected site

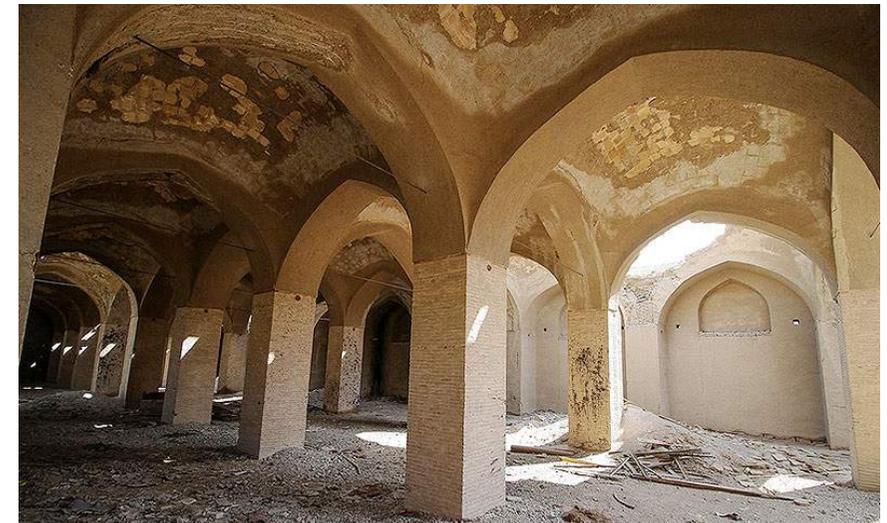


charbagh (four garden)

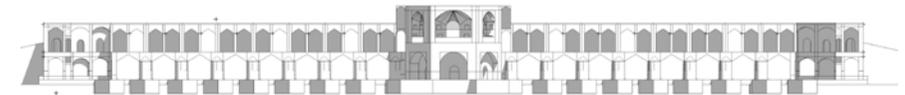
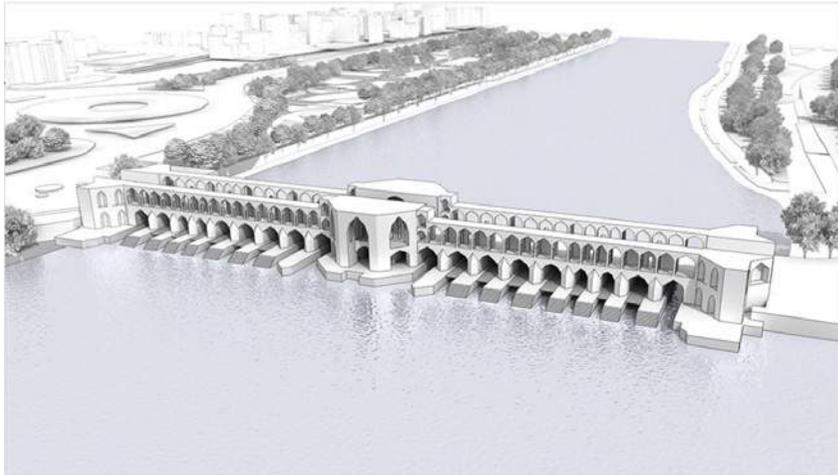
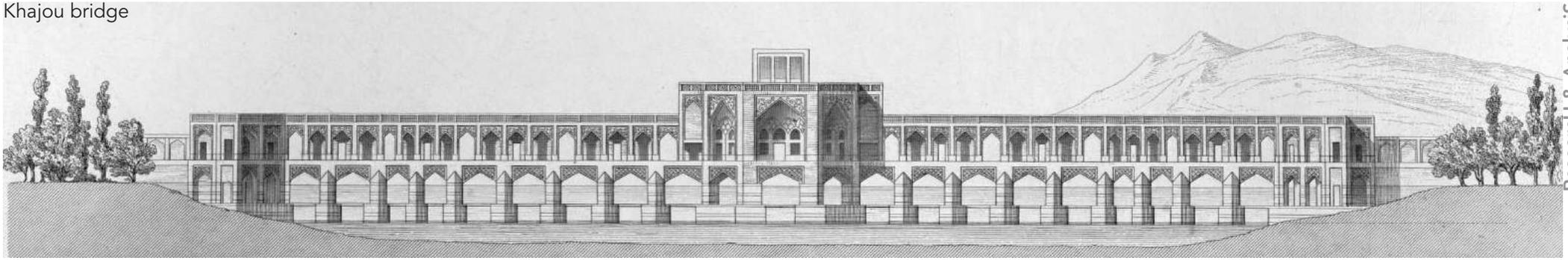




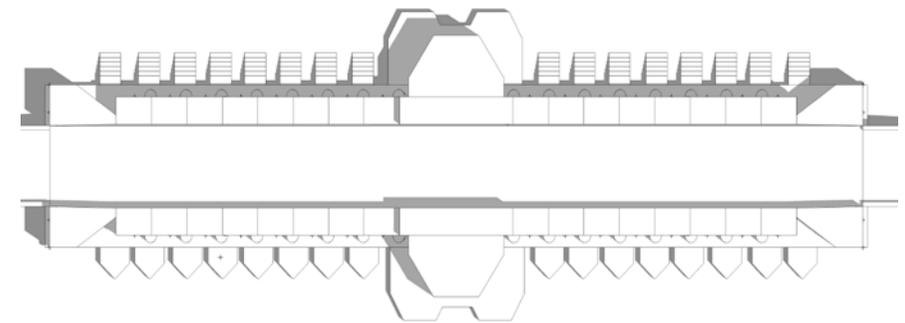
Risbaaf textile factory and other factories which has been established around 90 years ago along charbagh streets (south part of river) have been entered Esfahan to different phase and changed Esfahan to an industrial city. Layout and size of these factorizes plots shows that most of the gardens in south part of river changed to factory. Few number of these factories remain which they are valuable historically and architecturally.



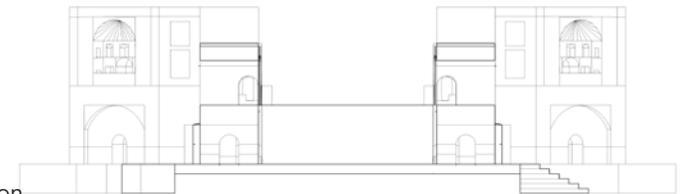
Khajou bridge



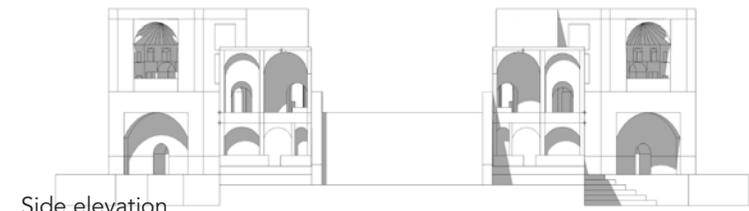
Front elevation



Plan



Side section



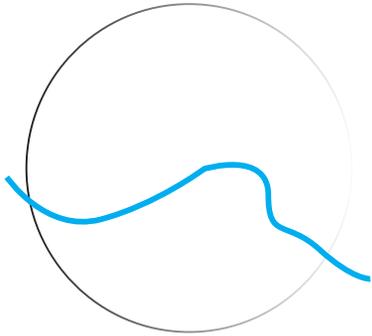
Side elevation

The Khaju Bridge spanning across the Zayandeh River. Built on the foundations of an ancient bridge in 1667 it is an archetypical model of a Roman Arch bridge. The **two-storey** Khaju Bridge with a length of approximately 132 meters and a width of 14 meters is constructed entirely from stone and brick. The pedestrianised lower level of the bridge comprises vaulted spaces within the arches, which not only provide public circulation routes but also microclimatic conditions.

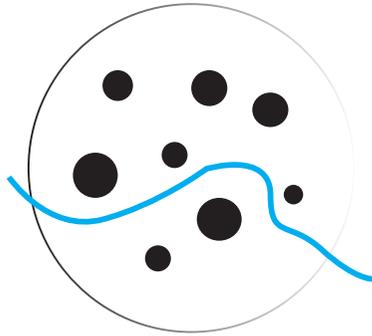
**Khaju not only forms a crossing point across the Zayandeh River, but it also performs as a social focal point, a dam and sluice gates.** The longevity and consistent structural stability of the Khaju Bridge illustrates the effectiveness and sophistication of the design and engineering which was involved with its construction. The combination of environmental and climatic conditioning alongside auxiliary social functions epitomizes the overall success of the bridge as an urban heterogeneous piece of architecture and infrastructure.



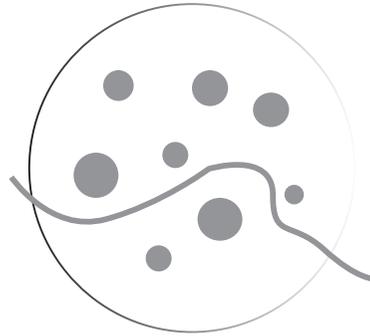
Diagrammatic idea to use riverbed as connector of different features along the river



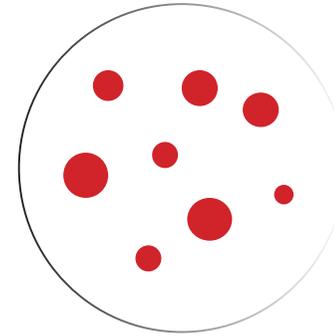
Nurtured river



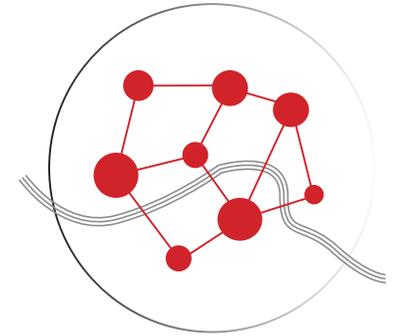
River presented many character to inhabitant



Lack of inhabitant's awareness about water and this district during the years destroyed the river



Lack of river put its created character in crisis



All will be united to increase people awareness about their creators

**Program**

The interventions seek to raise a collective awareness for the cultural and historical importance of water. It intends to be a reminder to the collective responsibility of all citizens. A platform for knowledge about water and a space for experiencing water.

**Architectural theme**

- . Temporary sensitive intervention in river bed
- . A permanent temporary intervention in riverbed.

**scale**

Landscape and architectural scale

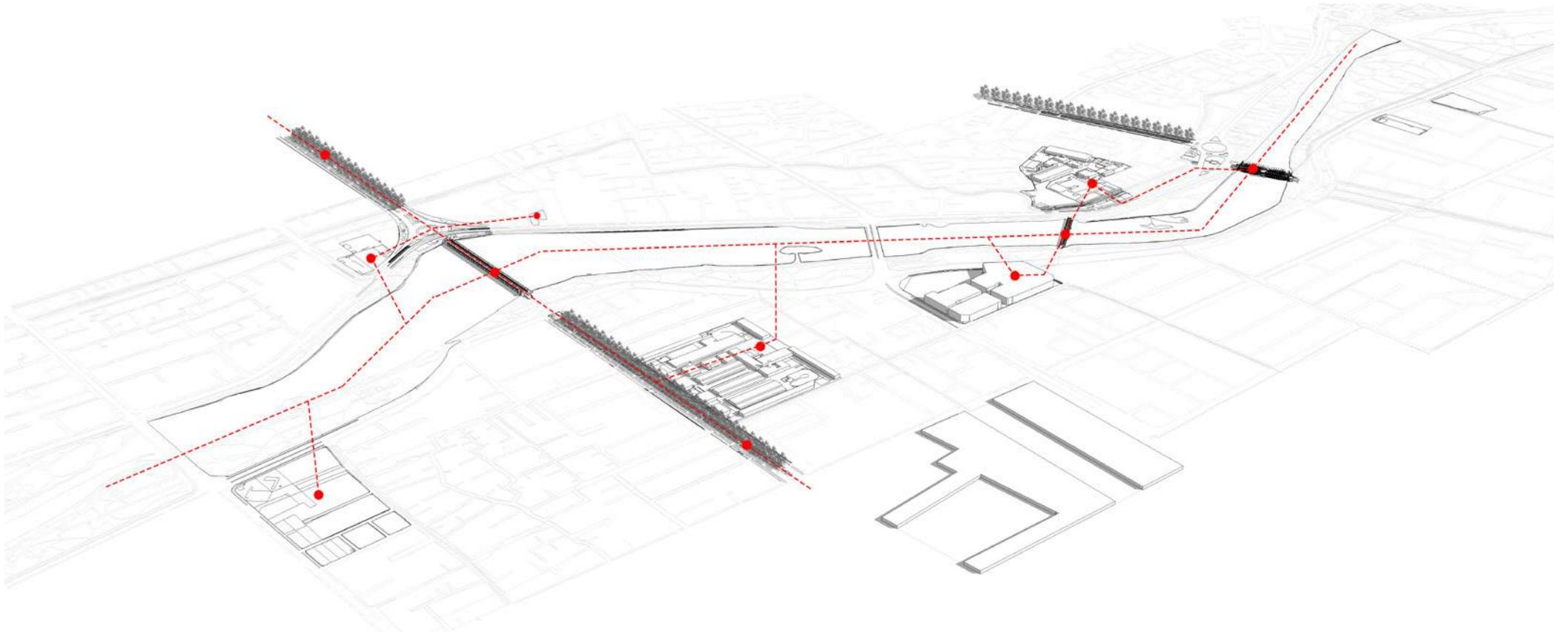
**Location**

Different spot and riverbed in heart of Esfahan (as shown)

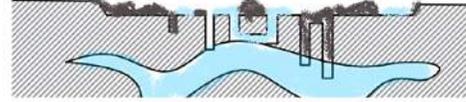
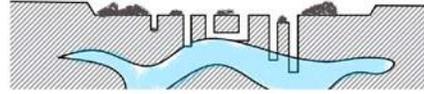
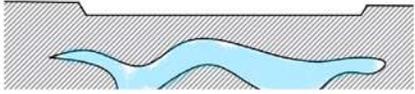
**Concept**

Network as a reminder

Connection Diagram

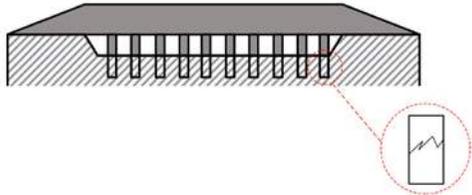
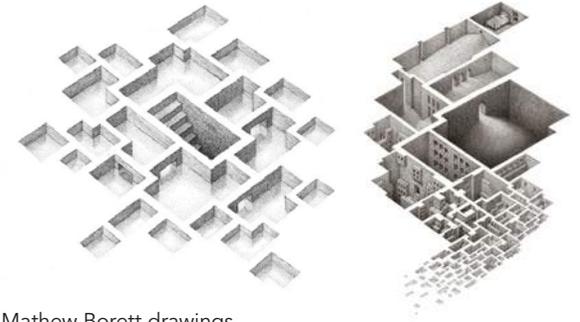


Future design consideration

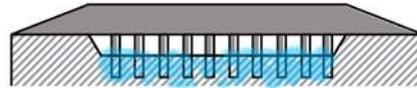


Riverbed acts an open field which can be formed and transformed by digging and adding the earth

The river landscape is considered to be transformed and reshaped when the water flows again Mathew Borett drawings



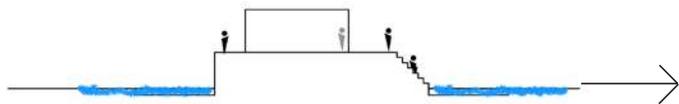
bridges need water for their foundation.



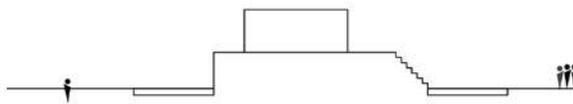
How to address such urgent necessity



Garden river project -Georges Descombes



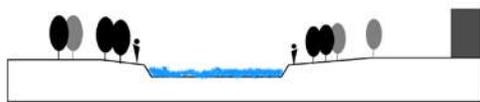
The bridges were designed as places of observing and spending time.



The relation of dried river bed and bridge can be vice versa



Garden river project -Georges Descombes



View from river side to water



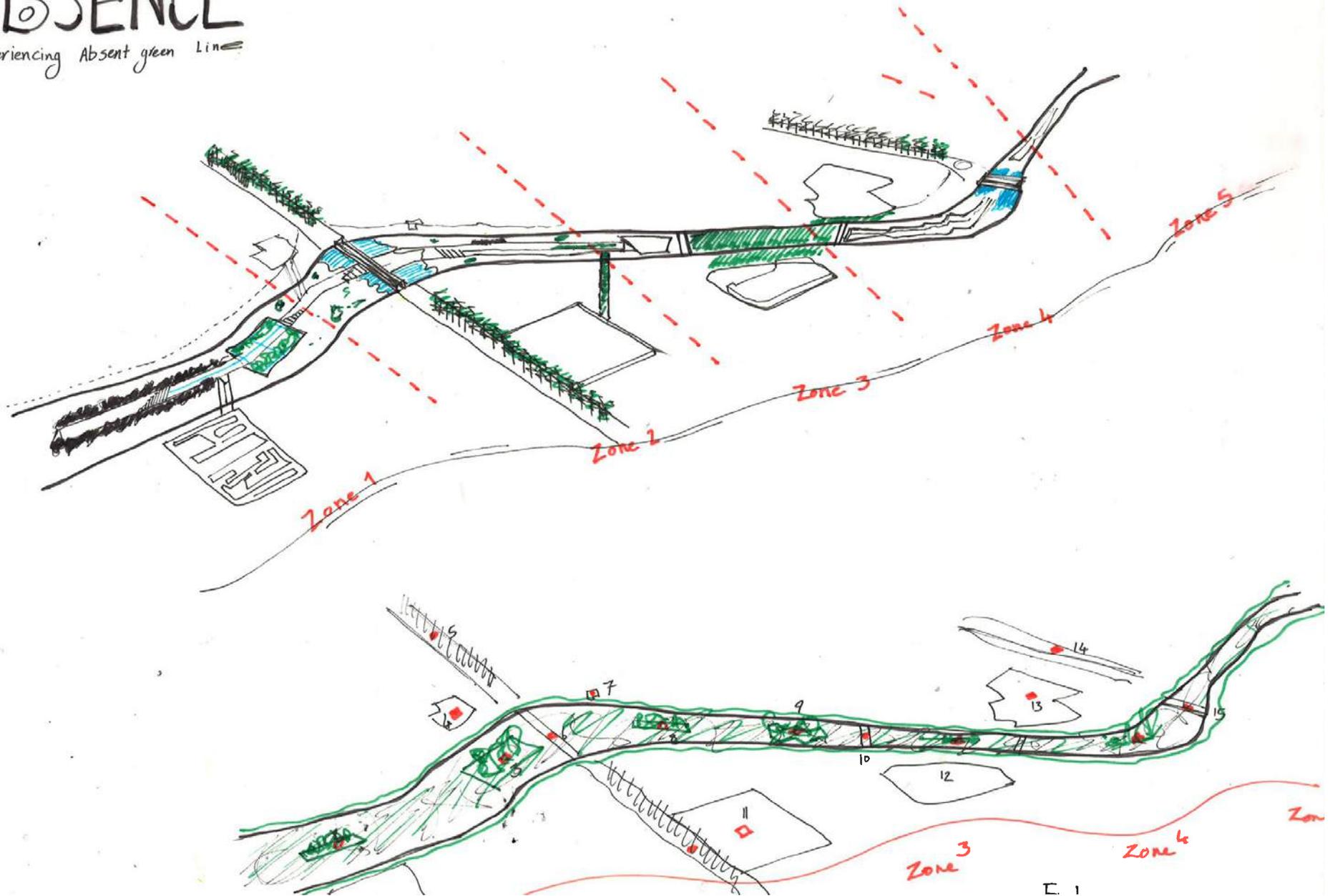
Observing experience can be different

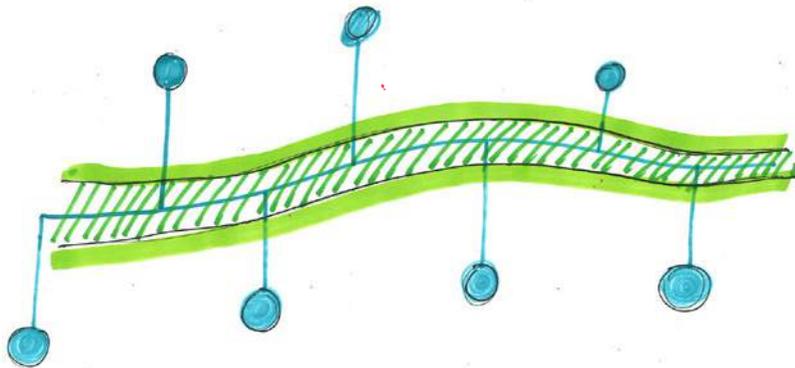
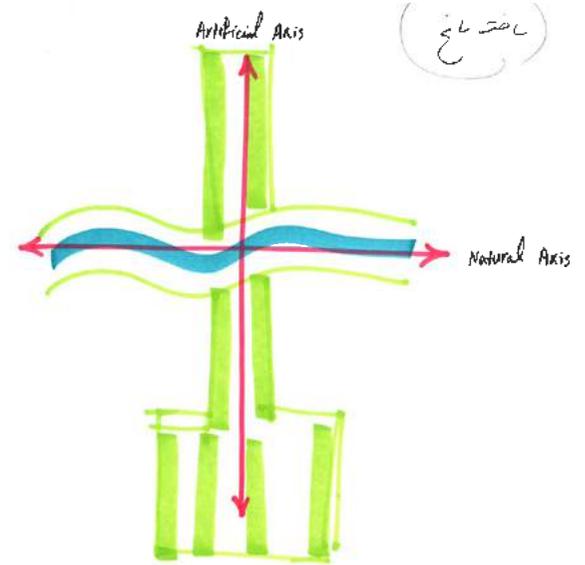
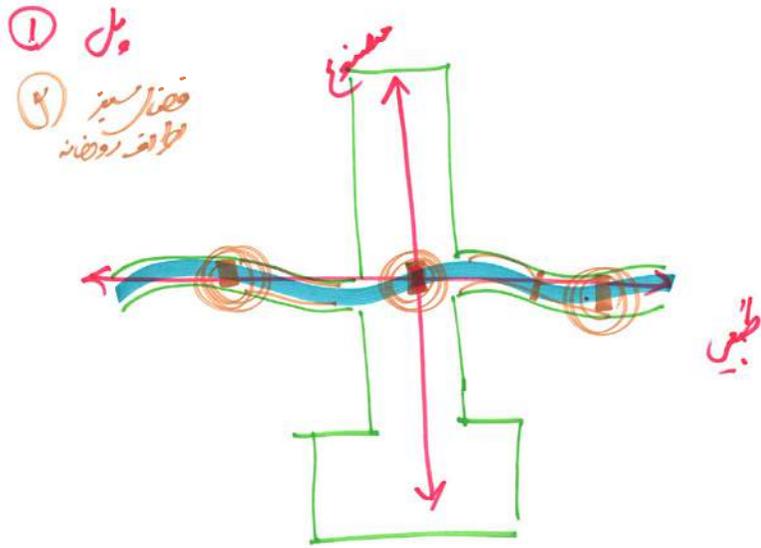
## Concept

The dried riverbed provides a unique potential land in heart of the city. The Zayanderood was the largest river in the center of Iran which passed through the city of Esfahan. Although by the disappearance of water through Zayanderood, created lifestyle and connection of people, psychological security and economic opportunities has been destroyed, but **I believe through designing a network of spatial interventions on the river bed, it is possible to connect different isolated existing historical and architectural features. Here the riverbed is considered as a landscape in the process of forming and transforming which can provide an experience about the water and its absence; while seeking a new social and cultural interaction to raise collective awareness and the shared knowledge about the history and the culture of water.**

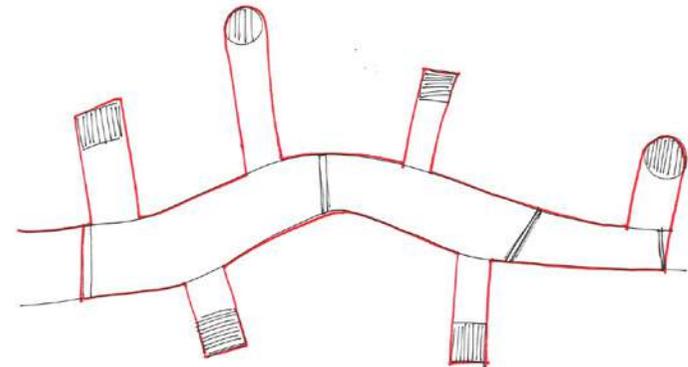
# SPACE OF ABSENCE

Experiencing Absent green Line





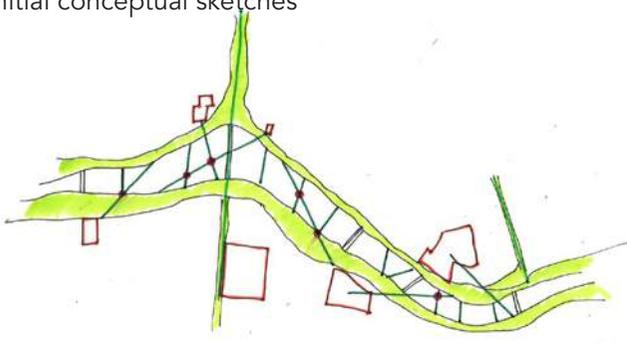
Supply water from every elements to river-bed.  
Showing Absence of water with its presence.



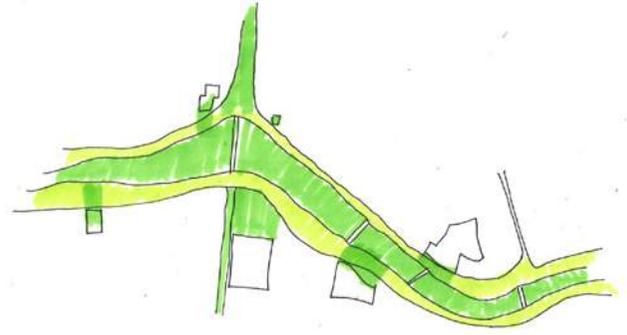
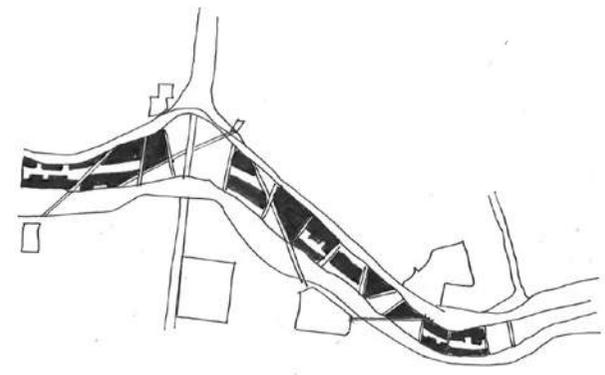
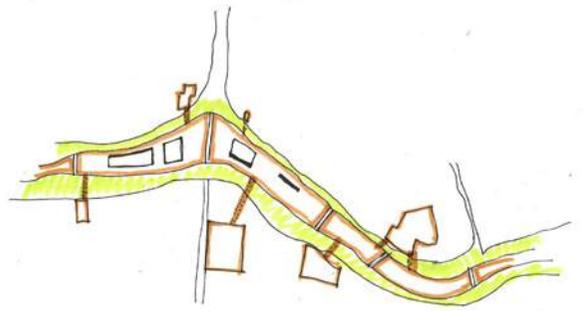
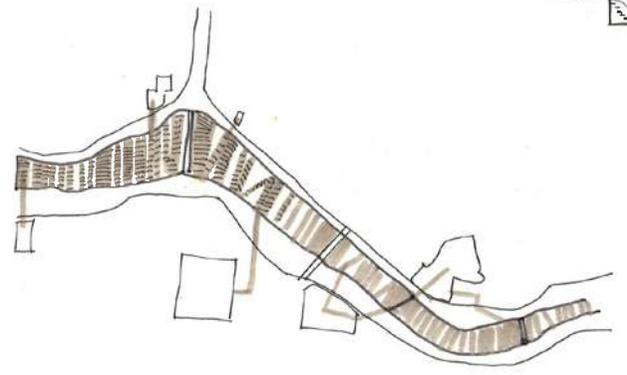
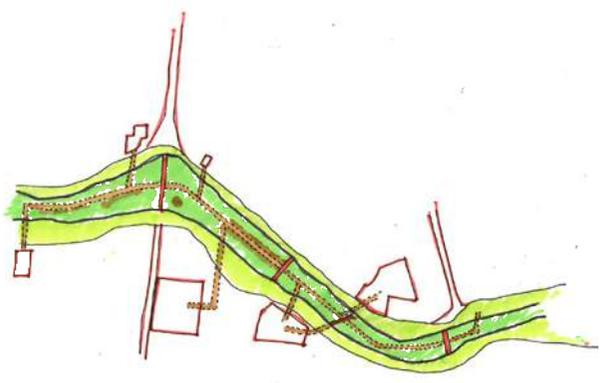
Absence in city.

Artistic people awareness

Initial conceptual sketches



- Event
- Green Cross



- State of Exception
- (invasion of Persian Garden)
- Desert city / Desert Mall
- Open event center
- new eco-system
- Forbidden District

Development of urban Tissue  
in River bed

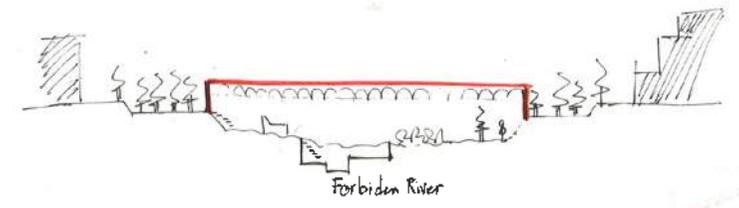
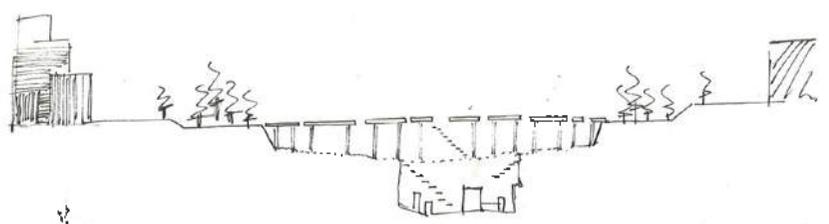
Connecting by Developing

next step

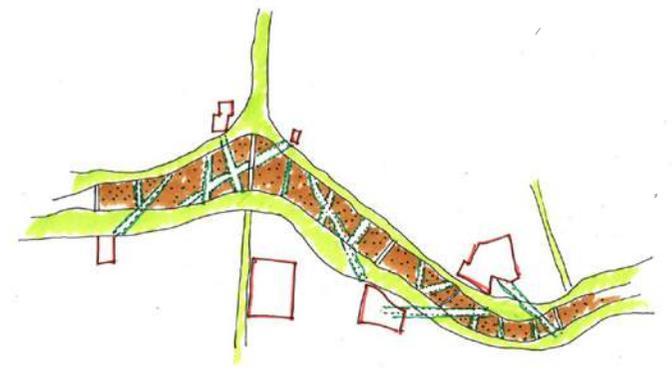
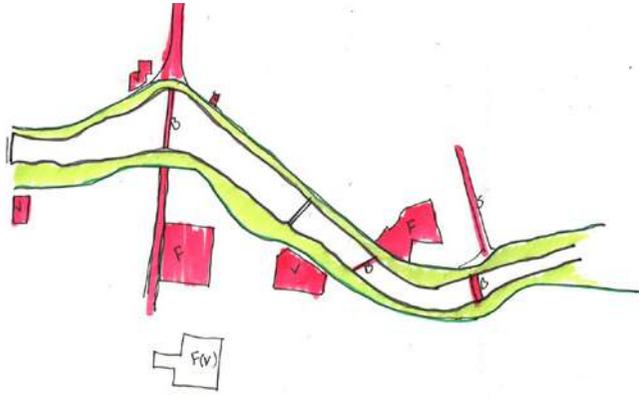
- Feature → Acting as architectural element (water museum)

- Connection through Landscape
- new eco-system
- Green wall (district) in <sup>heart</sup> middle of city
- Feature → Acting as water supplier
- showing Absence of water by its effects

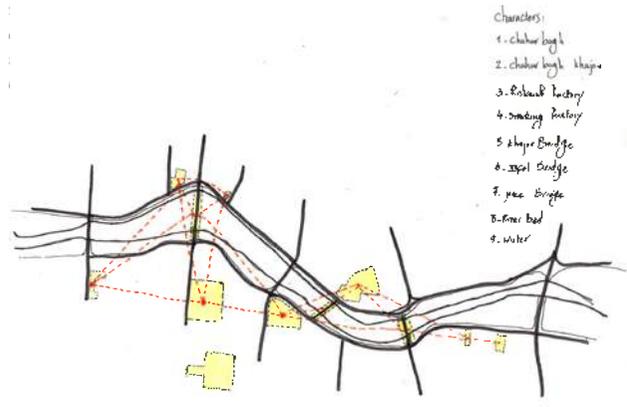
COVERED RIVER  
Plate on River bed...



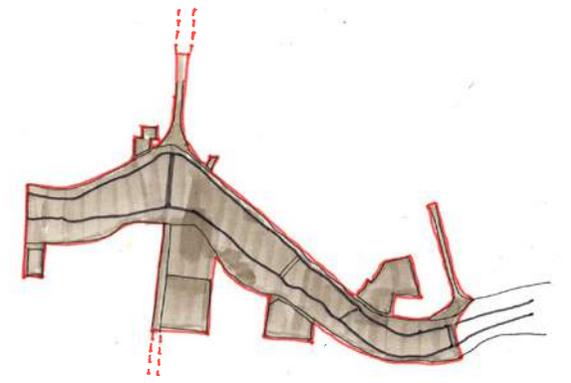
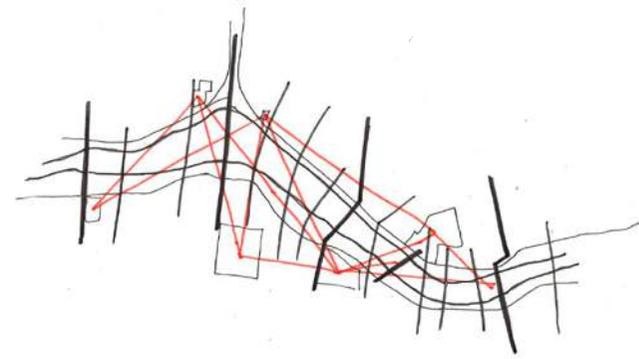
Forbidden River



- Cross Point as event area
- Walk in green look to desert
- Connection to streets
- special species of desert plant can grow
- Different level in walking (Dig in foot)



- Characters:
1. chahar bagh
  2. chahar bagh khajur
  3. Tobacco Factory
  4. Smoking Factory
  5. khajur Bridge
  6. spiral Bridge
  7. yac Bridge
  8. River bed
  9. water



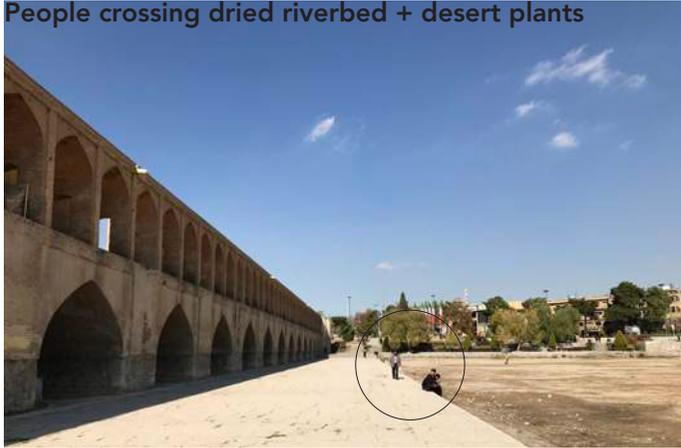
**Absence in City...**  
 (region)  
 All Parks, Feature (characters) and  
 riverbed considered as a Absence  
 region in heart of the city...  
 comfortable, Different Look, environment,  
 Feeling, texture, (context) will appear  
 in this districts.

• chahar bagh + khajur will use as pedestrian

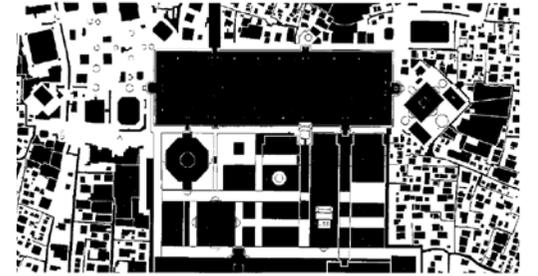
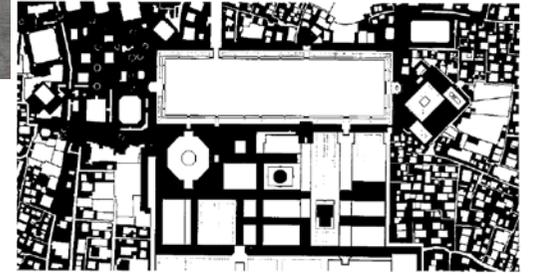
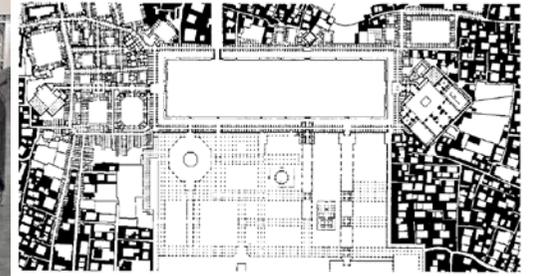
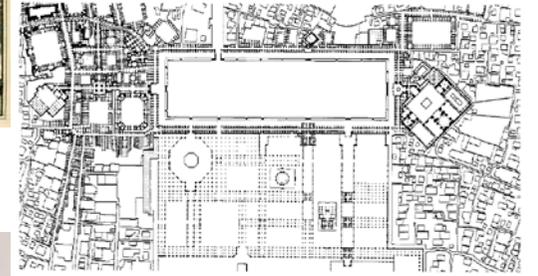
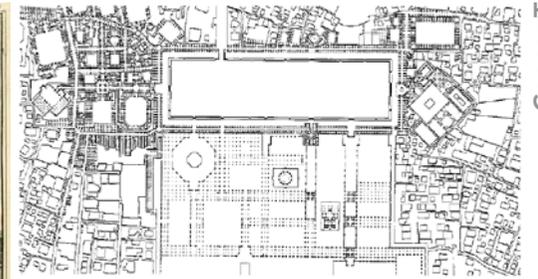
Study - Collage of park, chaharbagh garden and desert



People crossing dried riverbed + desert plants

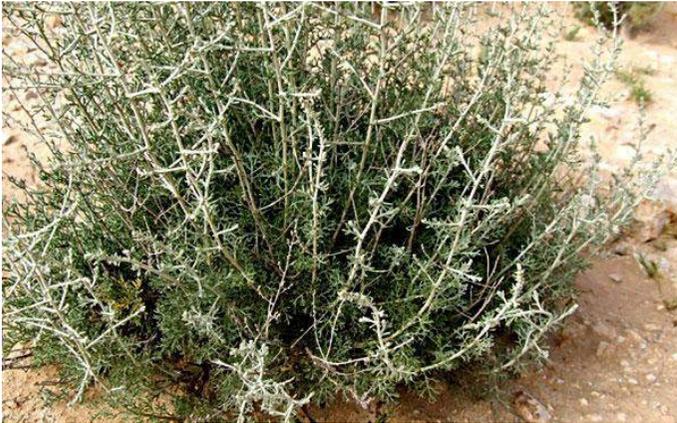


Existing public space (square in Esfahan)



Concept

Desert ecosystem



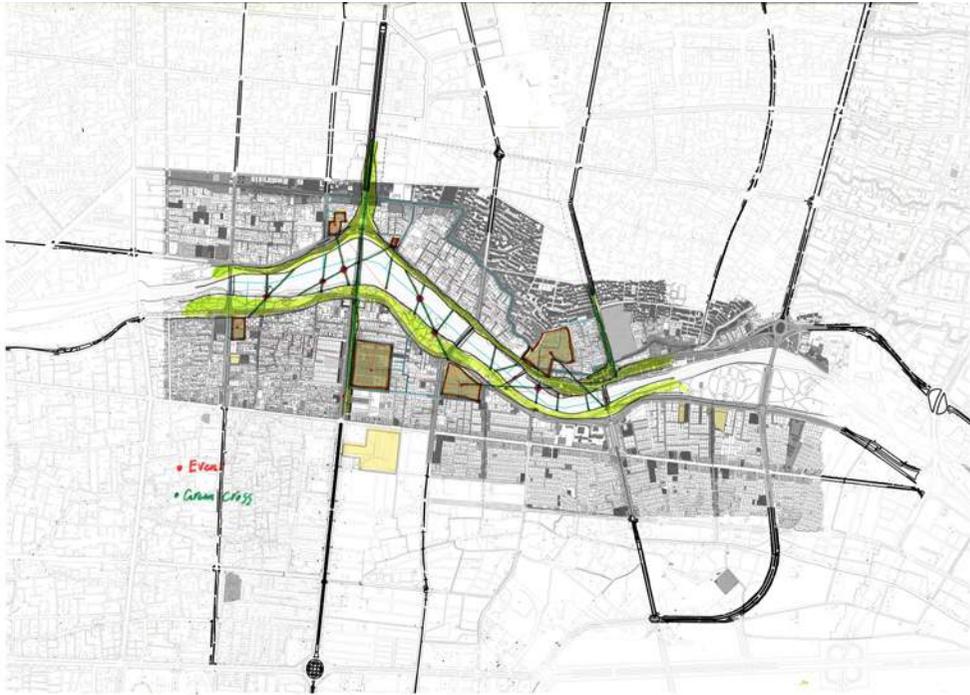
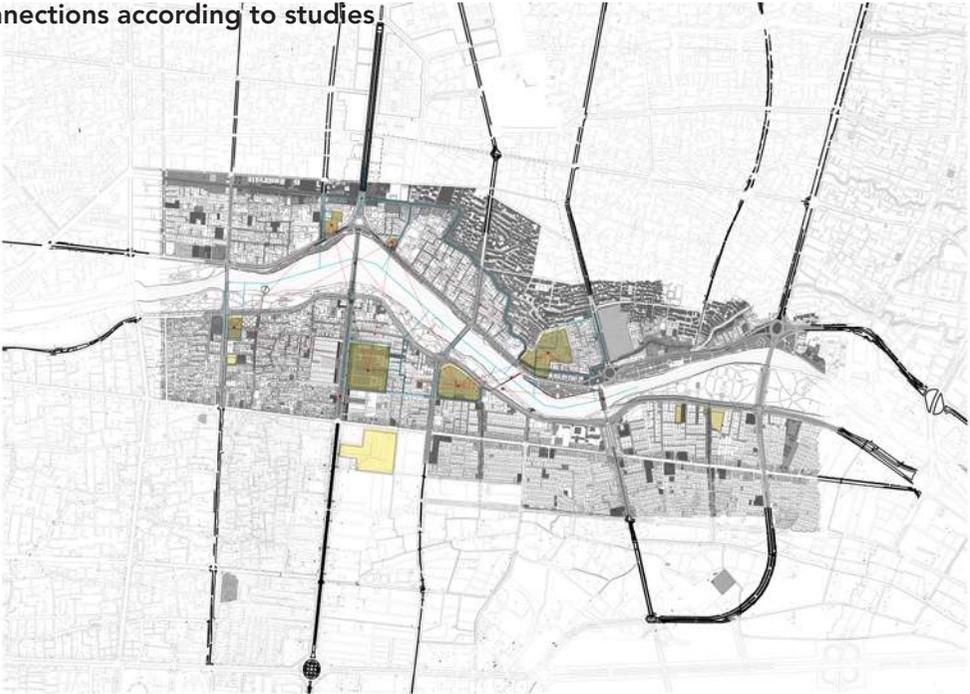
Collage of View from riverbed to surroundings



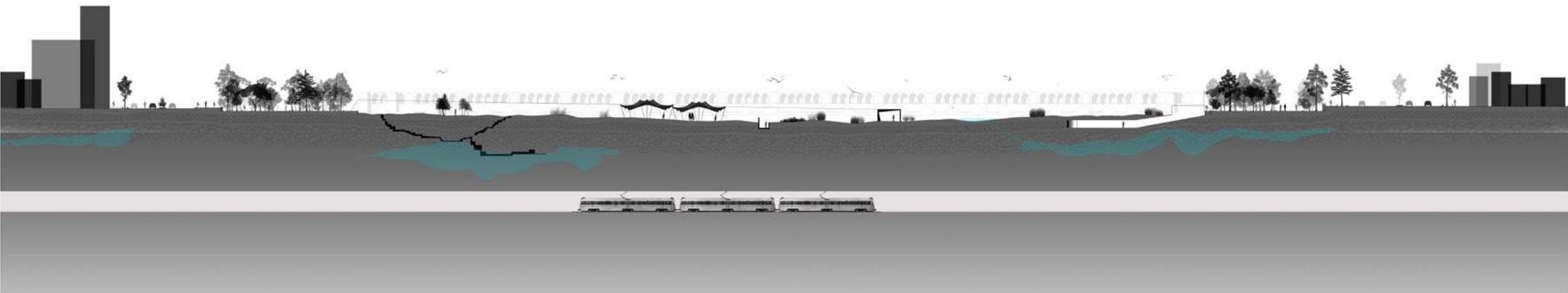
Collage of View from riverbed to surroundings



Connections according to studies

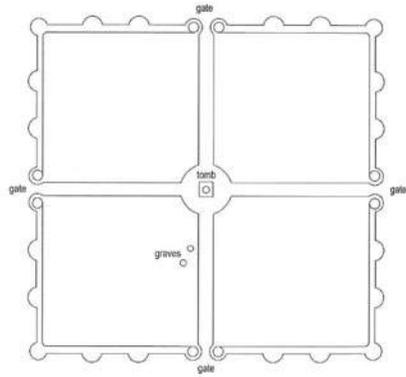
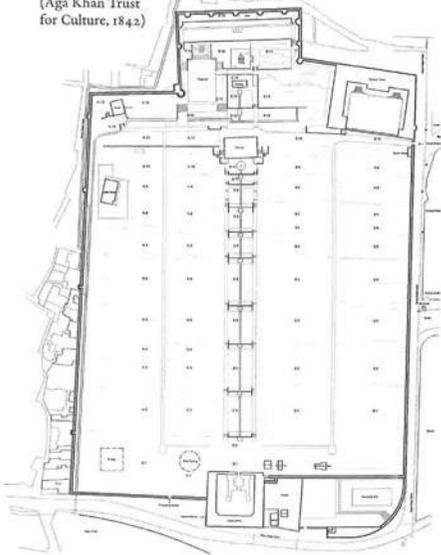






# Study about Persian garden & its architecture

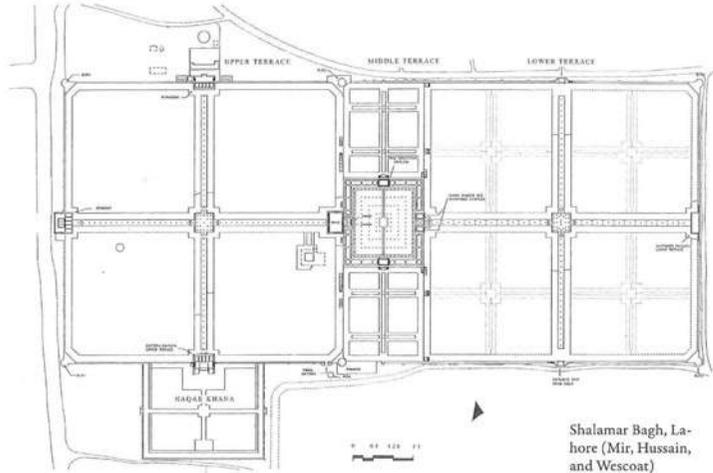
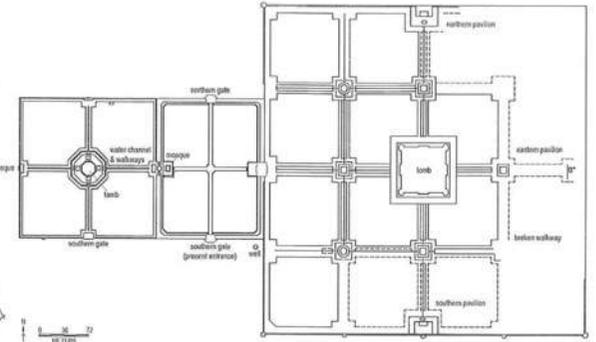
(Aga Khan Trust for Culture, 1842)



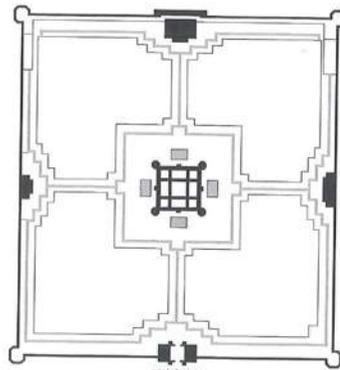
Tomb of Sultan Sanjar (O'Donovan)



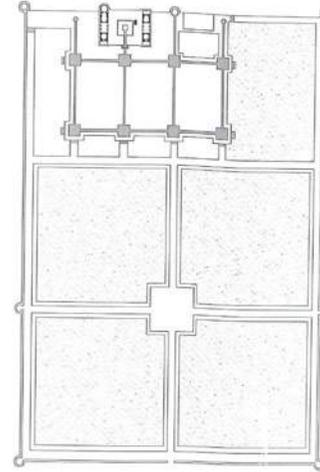
Tombs of Jahangir, Asaf Khan, and Nur Jahan (after Mir, Hussain, and Wescoat)



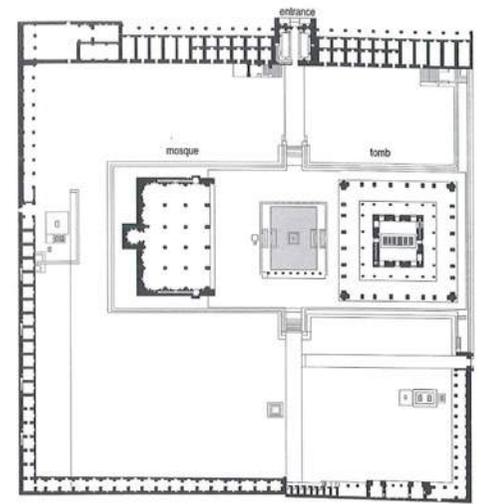
Shalamar Bagh, Lahore (Mir, Hussain, and Wescoat)



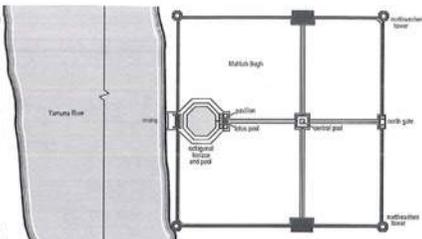
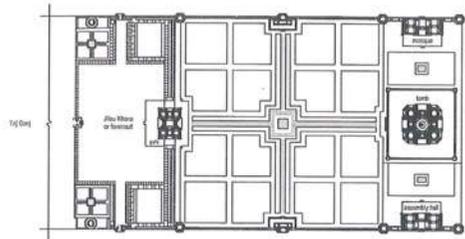
Tomb of I'timad al-Daula (Ruggles and Variava)



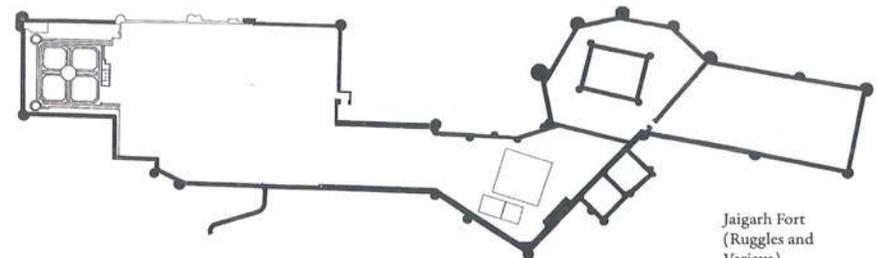
Ram Bagh (Chodon)



Ibrahim Rauza complex (Chodon after Christopher Taddell)



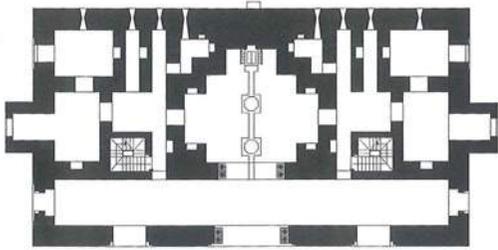
Taj Mahal and Mahtab Bagh (Chodon, after Elizabeth Moynihan)



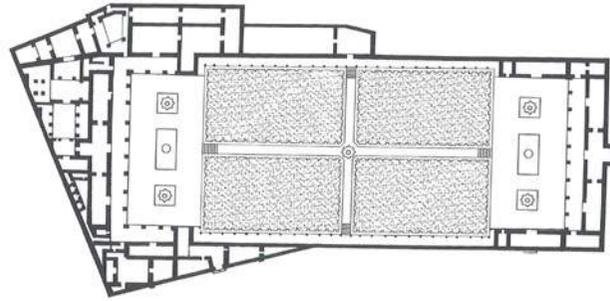
Jaigarh Fort (Ruggles and Variava)

Study about Persian garden & its architecture

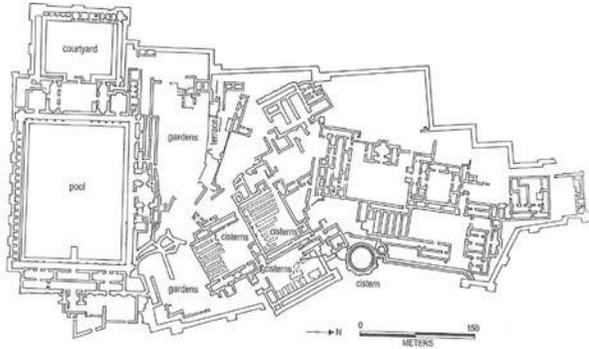
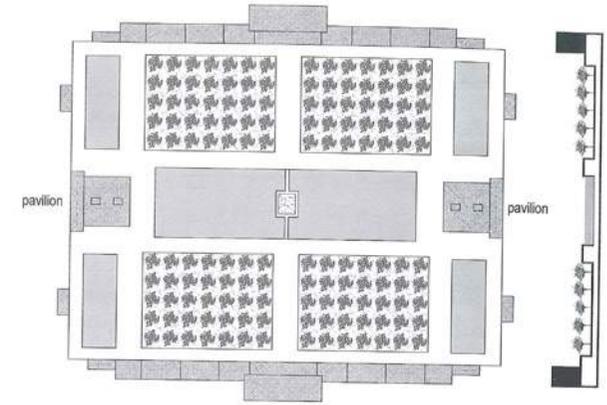
Ziza Palace  
(Variava,  
after  
Giuseppe  
Caronia)



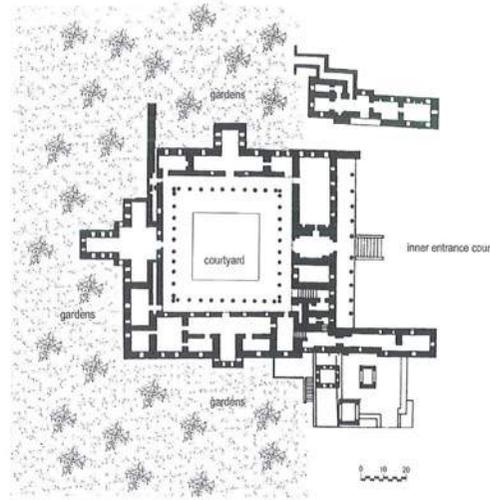
Dar al-Batha  
(Variava)



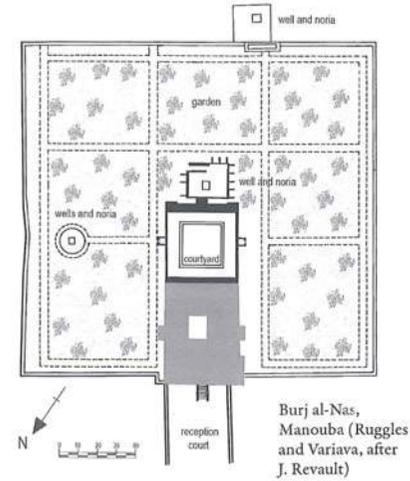
Al-Badi' Palace  
(Variava after  
von Hantelmann)



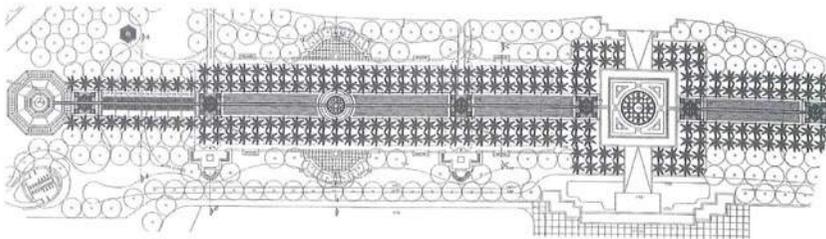
Qal'a Bani Ham-  
mad, Lake Palace  
(after L. de Beylié,  
1909)



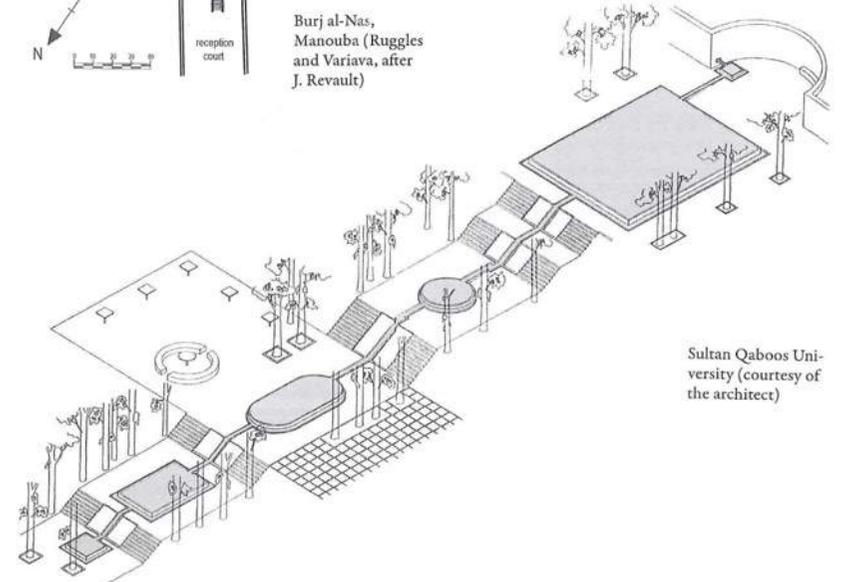
Burj al-Kabir,  
Manouba (Ruggles  
and Variava)



Burj al-Nas,  
Manouba (Ruggles  
and Variava, after  
J. Revault)

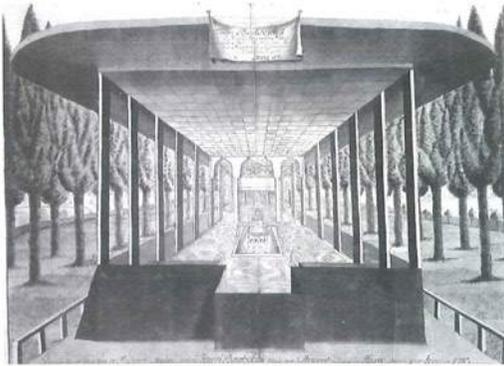


Azhar Park, Palm  
Processional Walk  
(Aga Khan Trust  
for Culture)

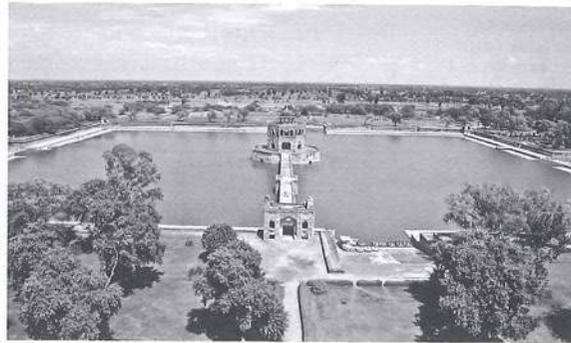


Sultan Qaboos Uni-  
versity (courtesy of  
the architect)

Study about Persian garden & its architecture



Fenerbahçe  
(Cornelius Loos,  
National Museum,  
Sweden)



Hiran Minar  
(James L.  
Wescoat, Jr.)

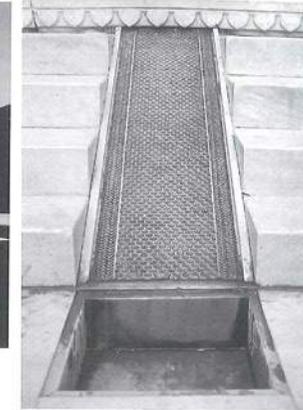
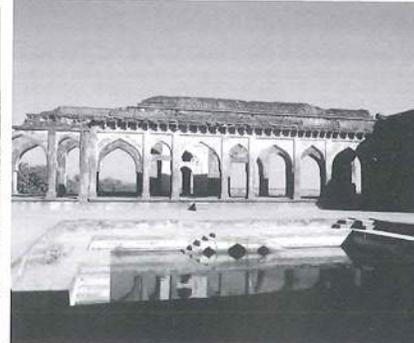


FIGURE 90.  
Water flows over  
the scalloped  
surface of a *chadar*  
in the Sukh Niwas  
pavilion of the Amber  
Fort, producing  
a cooling spray and  
a pleasing sound.  
The animation of  
water in the garden  
setting is the most  
visible sign of life.



Anand Mandal  
Bagh, Orchha  
(Ruggles)



FIGURE 91.  
The Anand Mandal  
garden in front of  
the Raj Praveen  
pavilion in Or-  
chha had several  
ornamental basins  
(foreground) and a  
grid of sunken cavi-  
ties where plants  
and probably small  
trees were grown.  
Without trees to  
shade the extensive  
pavement, the radi-  
ant heat would have  
been unpleasant.



FIGURE 71.  
This monumental  
tomb of Sher Shah  
Sur, the archrival  
of the Mughal  
Emperor, Humayun,  
was built in Sasara  
in 1545. Qur'anic  
verses on its exterior  
refer to the faithful  
quenching their  
thirst upon entering  
paradise, a selection  
chosen perhaps to  
refer to the tomb's  
lake setting. (Cath-  
erine Asher)

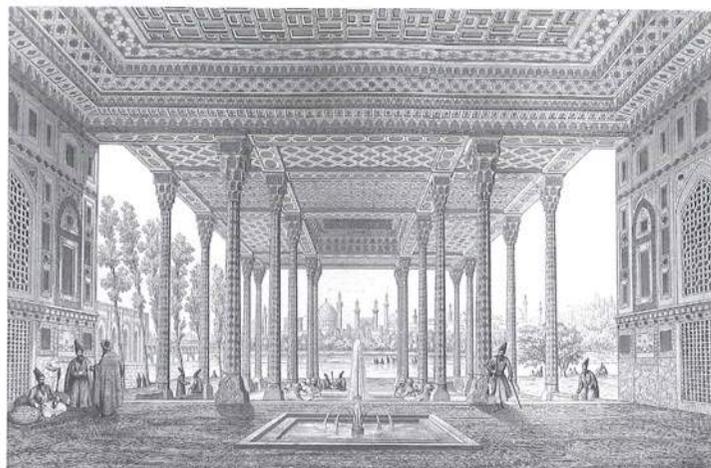


FIGURE 52.  
An 1867 engraving  
of the Palace of  
Mirrors, Isfahan,  
shows a pavilion,  
similar to the  
Chihil Situn, with  
an open *talar* porch  
that gave views to-  
ward the riverbank.  
The pavilion no  
longer exists.  
(P. Coste)

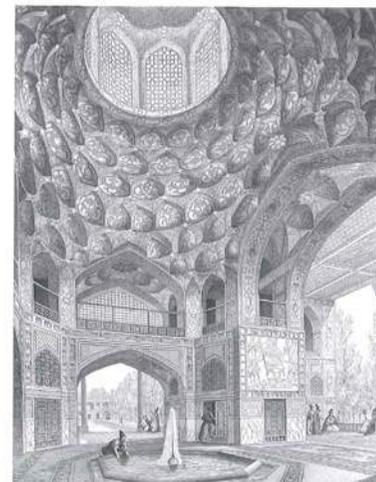


FIGURE 53.  
The Hesh Behesht  
pavilion in Isfahan  
(in an 1867 print)  
was like an enorm-  
ous fountain  
from which water  
spouted in a cen-  
tral jet and then  
flowed beneath the  
floor, into basins,  
down ornamental  
cascades, and into  
the pools of the  
surrounding garden.  
(P. Coste)

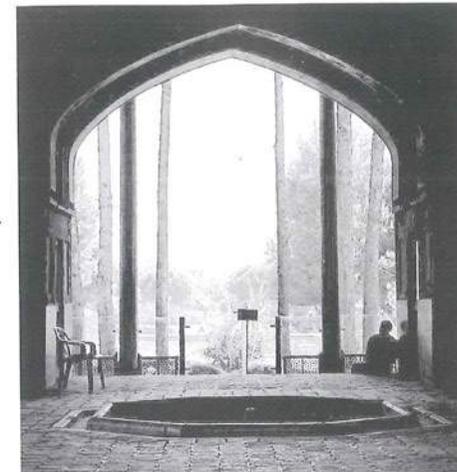
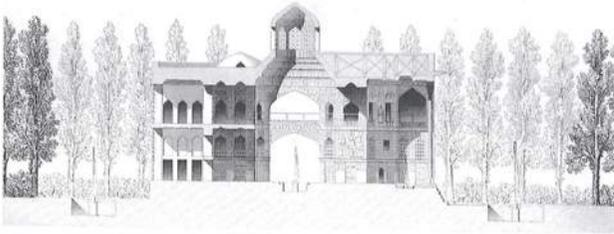
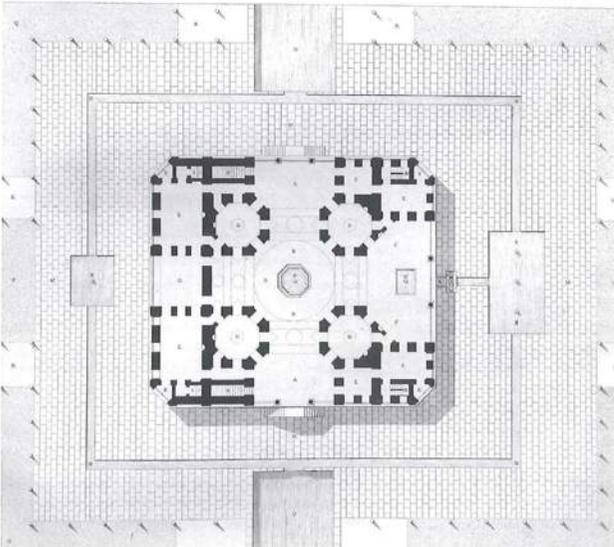


FIGURE 54.  
The *eyvans* (large  
arched apertures) of  
the Hesh Behesht  
framed the view of  
the garden on all  
sides. In garden  
pavilions such as  
this, nature was  
represented in wall  
tiles and carpets on  
the floors, and the  
real flowers, trees,  
and birds were never  
far away. (Yasamin  
Bahadorzadeh)

## Study about Persian garden & its architecture



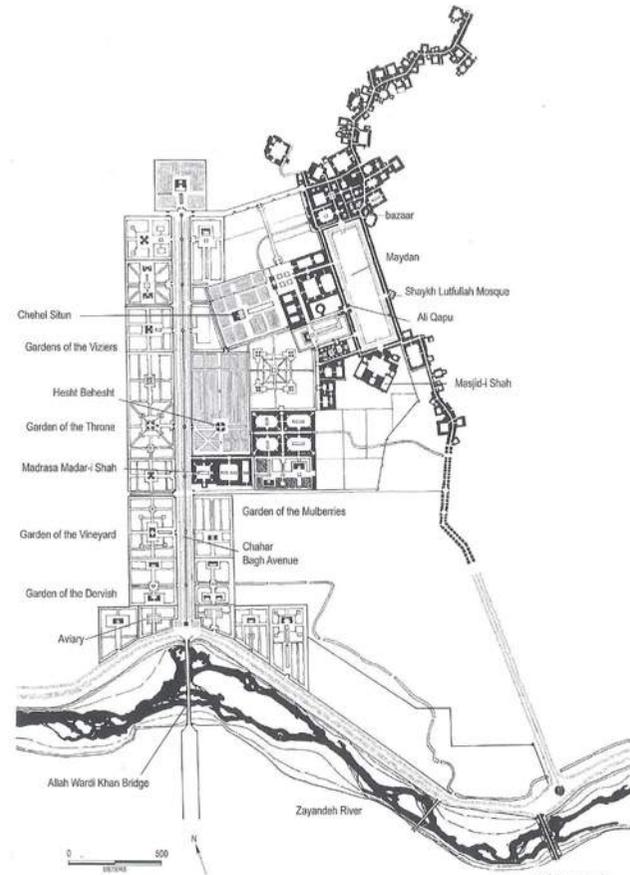
A. - Pavillon et entrée du Paradis.  
 B. - Salle des Fes jardins.  
 C. - Fontaine monumentale au centre du Parc.  
 D. - Escaliers du Parc.  
 E. - Salle des Fes jardins.  
 F. - Salle des Fes jardins.  
 G. - Salle des Fes jardins.  
 H. - Salle des Fes jardins.  
 I. - Salle des Fes jardins.  
 J. - Salle des Fes jardins.  
 K. - Salle des Fes jardins.  
 L. - Salle des Fes jardins.  
 M. - Salle des Fes jardins.  
 N. - Salle des Fes jardins.  
 O. - Salle des Fes jardins.  
 P. - Salle des Fes jardins.  
 Q. - Salle des Fes jardins.  
 R. - Salle des Fes jardins.  
 S. - Salle des Fes jardins.  
 T. - Salle des Fes jardins.  
 U. - Salle des Fes jardins.  
 V. - Salle des Fes jardins.  
 W. - Salle des Fes jardins.  
 X. - Salle des Fes jardins.  
 Y. - Salle des Fes jardins.  
 Z. - Salle des Fes jardins.



Heshit Behesht and the Bagh-i Bulbul (Pascal Coste, 1867)

### Bagh-i Bulbul and the Heshit Behesht

The Bagh-i Bulbul ("Garden of the Nightingale") was the largest of the gardens along the Chahar Bagh Avenue in Isfahan in the Safavid period, and is the only one that remains today. It was built in 1670 by Shah Suleyman I, renovated in the Qajar period (1779–1924), and restored in the 1970s. Of its plantings, nothing remains. But its broad axial watercourses (7.6 m wide) still converge on the octagonally planned Heshit Behesht ("Eight Paradises") pavilion that rises on an elevated platform about two-thirds of the way down the garden's central axis (Plate 18). An 1867 engraving shows a magnificent muqarnas-domed interior with a lantern above corresponding to a fountain at floor level. From here as well as the broad porches, the garden could be regarded with enjoyment. Indeed, the theme of nature and gardens permeated the painted and tile ornament of the hall, and the water that emerged in the pavilion's center to flow over chadars seemed to bind the inside and outside together as one continuous environment.

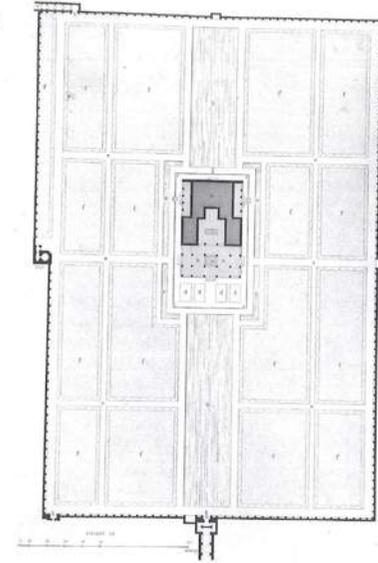


Isfahan and the Chahar Bagh Avenue (after N. Ardalan and L. Bakhtiar)

### Chahar Bagh Avenue

When Shah 'Abbas I (1587–1629) moved the Safavid capital to Isfahan in 1598, he commenced a major transformation of the city that included a new *maydan* (public plaza) with a palace precinct on its west side that led to a long avenue called the Chahar Bagh. Lined with plane trees and enclosed gardens with romantic names like Bagh-i Guldasta (Garden of Flowers) and Bagh-i Bulbul (Garden of the Nightingale), the avenue presented a coherent façade of gates and pavilion-portals that belied the individuality of the spaces laid out within. The 50-meter-wide avenue had a central watercourse flanked by smaller channels that flowed over chadars in slightly descending levels from the Jahan Nama pavilion at its northern end, down to the Ziyandeh River and the Allah Wardi Khan Bridge. On the opposite bank, the Chahar Bagh continued uphill to a vast imperial estate called the Hazar Jarib (1596, destroyed in 1722) which consisted of twelve terraces, each raised approximately 2 meters above the next. This estate in turn was connected by a tree-lined avenue to the extensive Farahabad gardens to the west.

Chihil Situn (Pascal Coste, 1867)

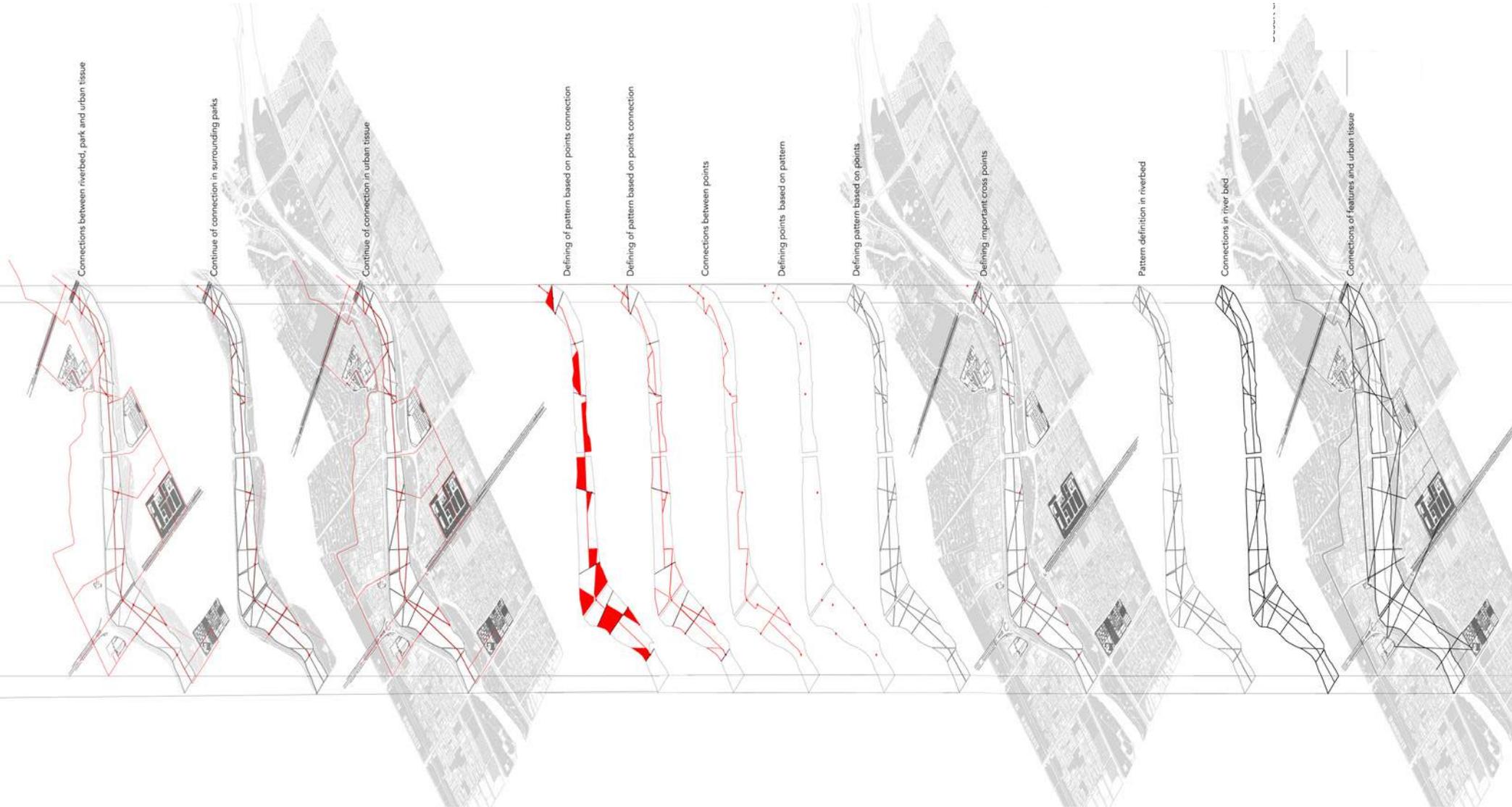


### Chihil Situn

Finished 1647 by the Safavid Shah 'Abbas II, the Chihil Situn was a reception hall within a fifteen-acre garden (90 m on a side) that belonged to the larger array of royal gardens between Isfahan's palace precinct and the Chahar Bagh Avenue. The hall burned in 1706 and was rebuilt within a year by Shah Sultan Husain. In the garden, there were three walkways lined with trees that led to the hall. The name means "Forty Columns," a reference to the twenty wooden supports that form the *talar* porch and their reflection, which effectively replicates them, in the long rectangular pool that extends from the eastern façade of the pavilion. The *talar* nearly doubles the length of the pavilion: an 1840 engraving gives a sense of the spatial permeability achieved by the pavilion's open interior and lofty porch. The pavilion's cedar columns correspond to the trees in the garden and the distant minarets; the water of the rectangular basin set within the heart of the pavilion reappears as the spouting fountains of the *talar* and ultimately in the channels and broad pools in the garden. Finally, the theme of a garden parterre filled with colorful blooms would have been introduced to the architectural interior in the form of rich carpets depicting flowers and chahar bagh layouts on the pavilion's floor. Elsewhere on its grounds, the garden formerly had four smaller pavilions.

## Preliminary Design

Concept development to design in large scale

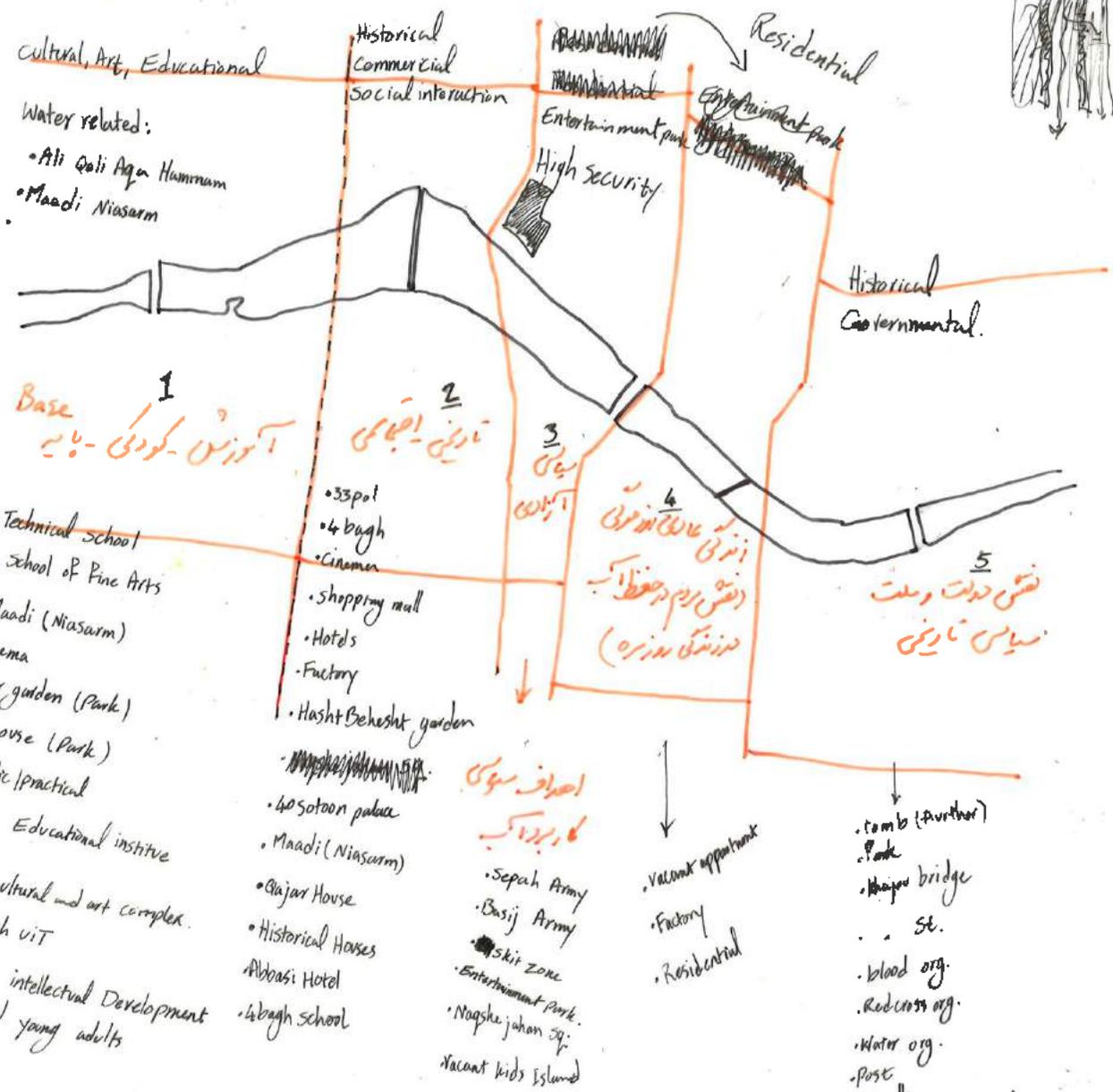
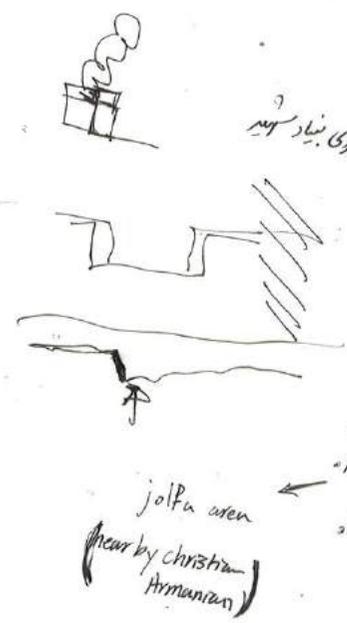


Concept development to design

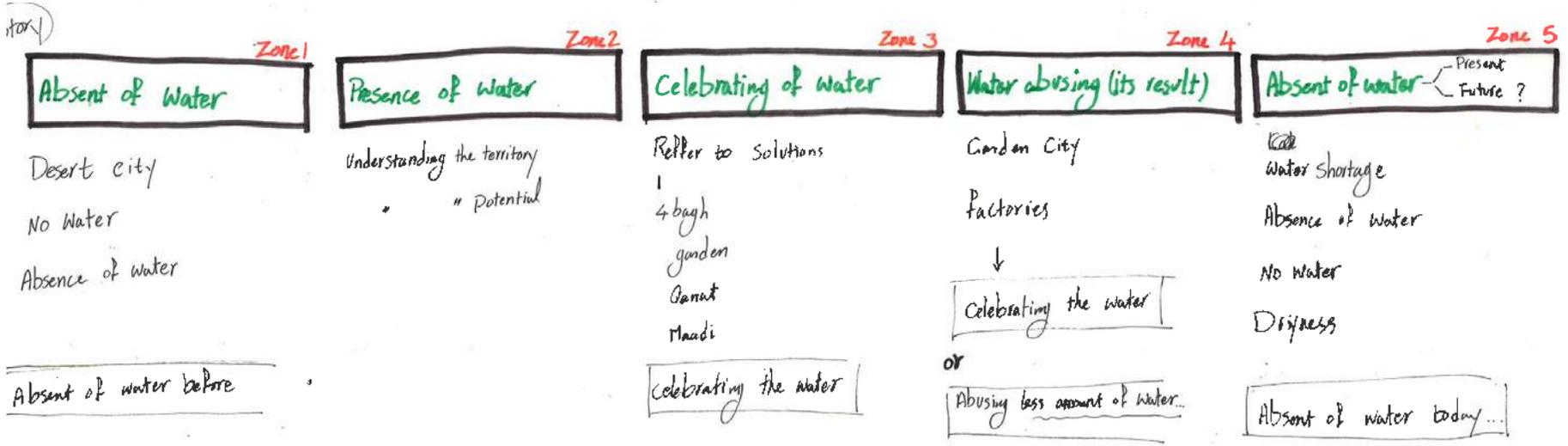
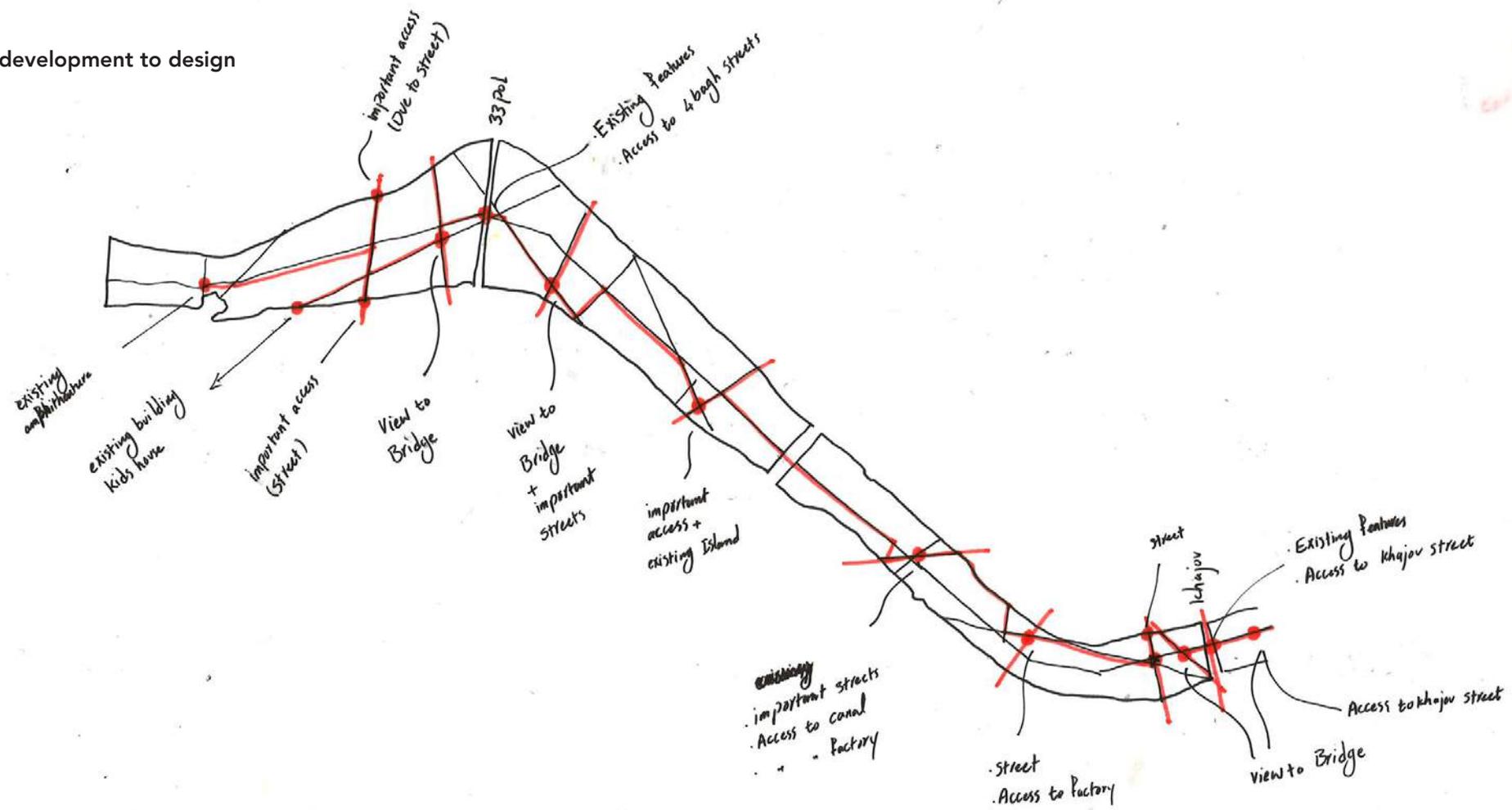
- No Water
- Coming Water (the moment)
- With Water

سلسله مراتب در کل پروژه  
که بودی - هستی - ...

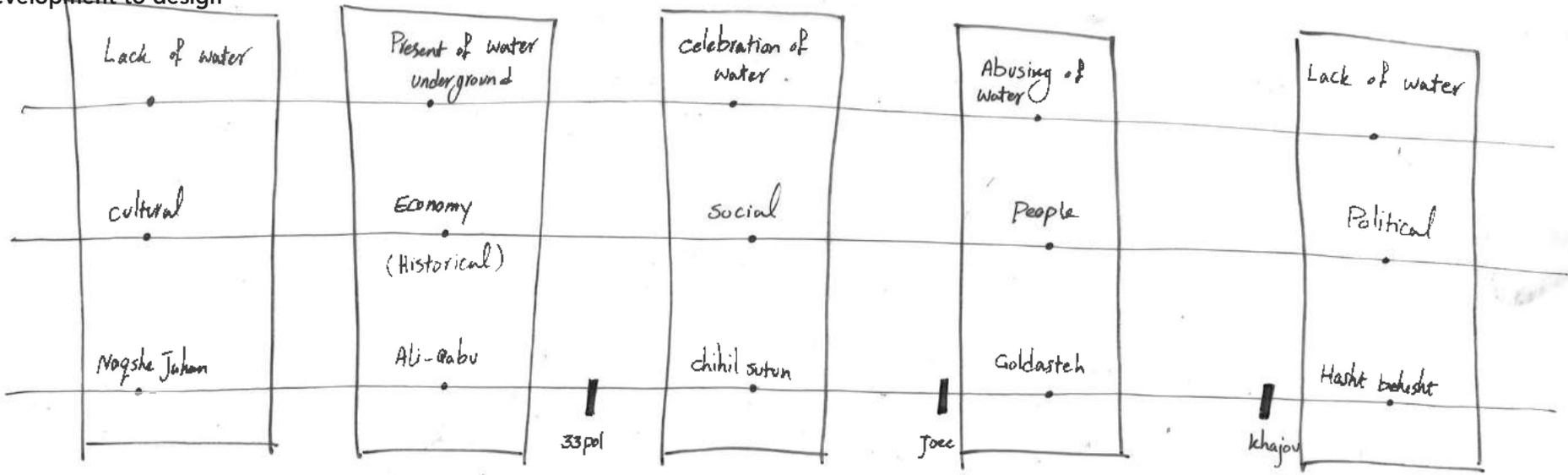
\* Position  
\* People (how to get them?)



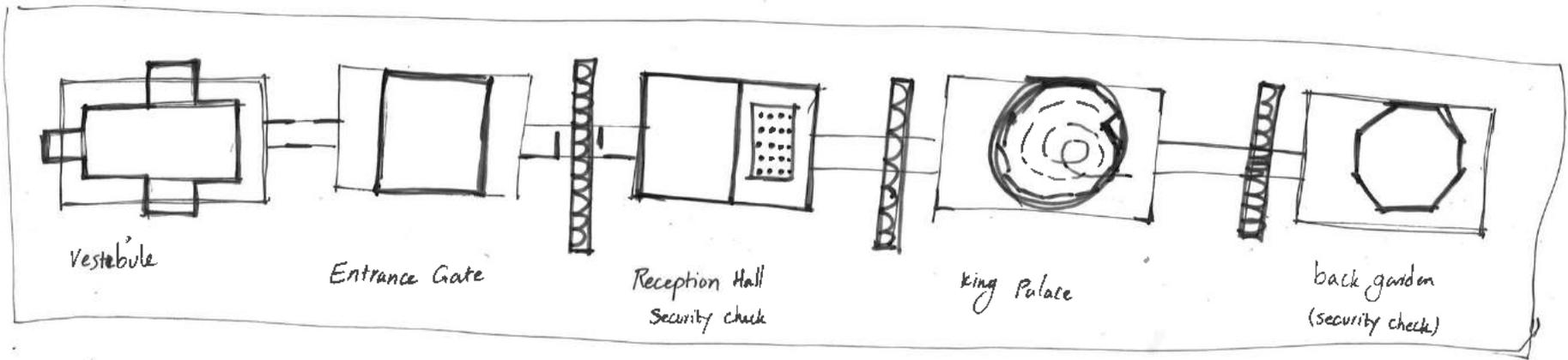
Concept development to design



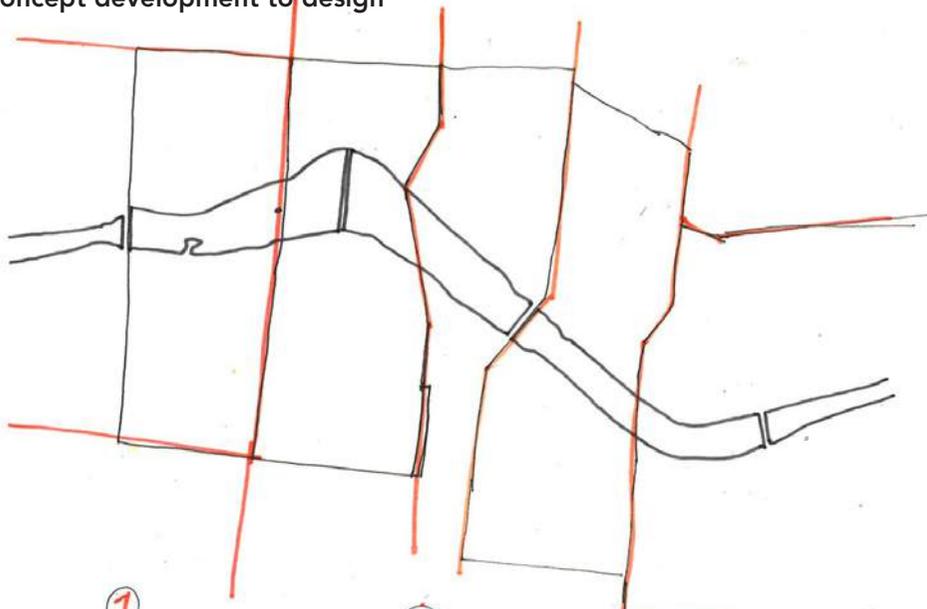
Concept development to design



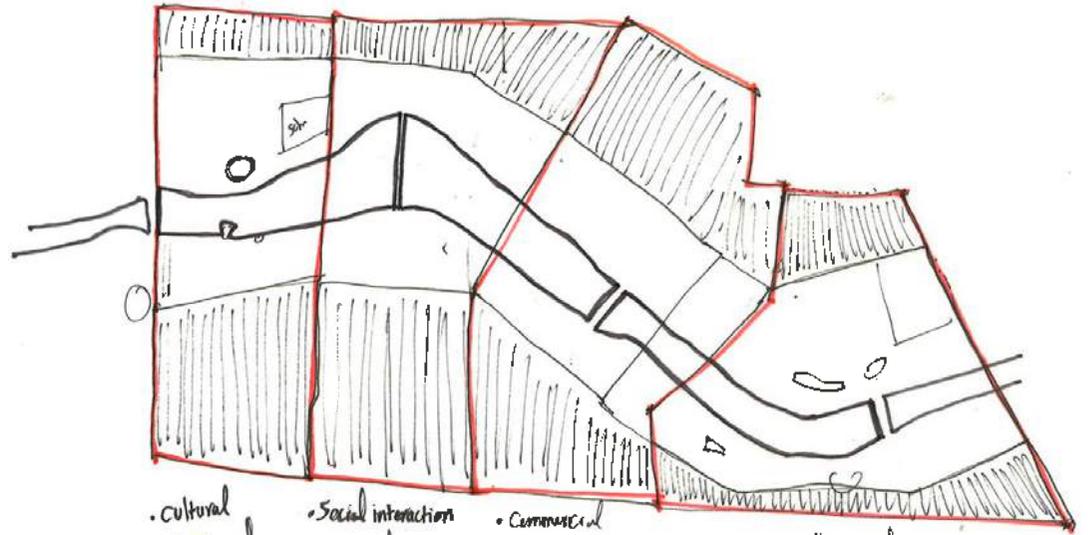
Water Empire → Unknown king (open-end story)



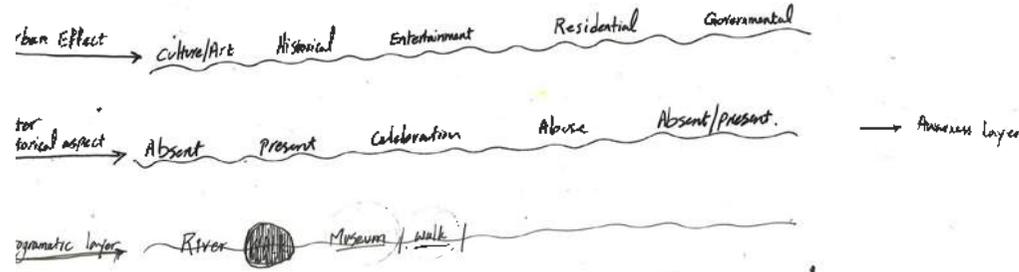
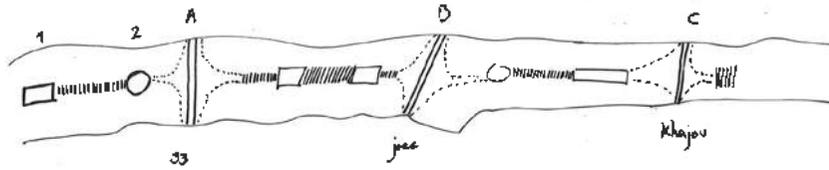
Concept development to design



- ①
  - Cultural
  - Art
  - Educational
- ②
  - Historical
  - Commercial
  - Social interaction
- ③
  - Interactive park entertainment
  - High Security (army)
- ④
  - Residential
- ⑤
  - Historical
  - Governmental

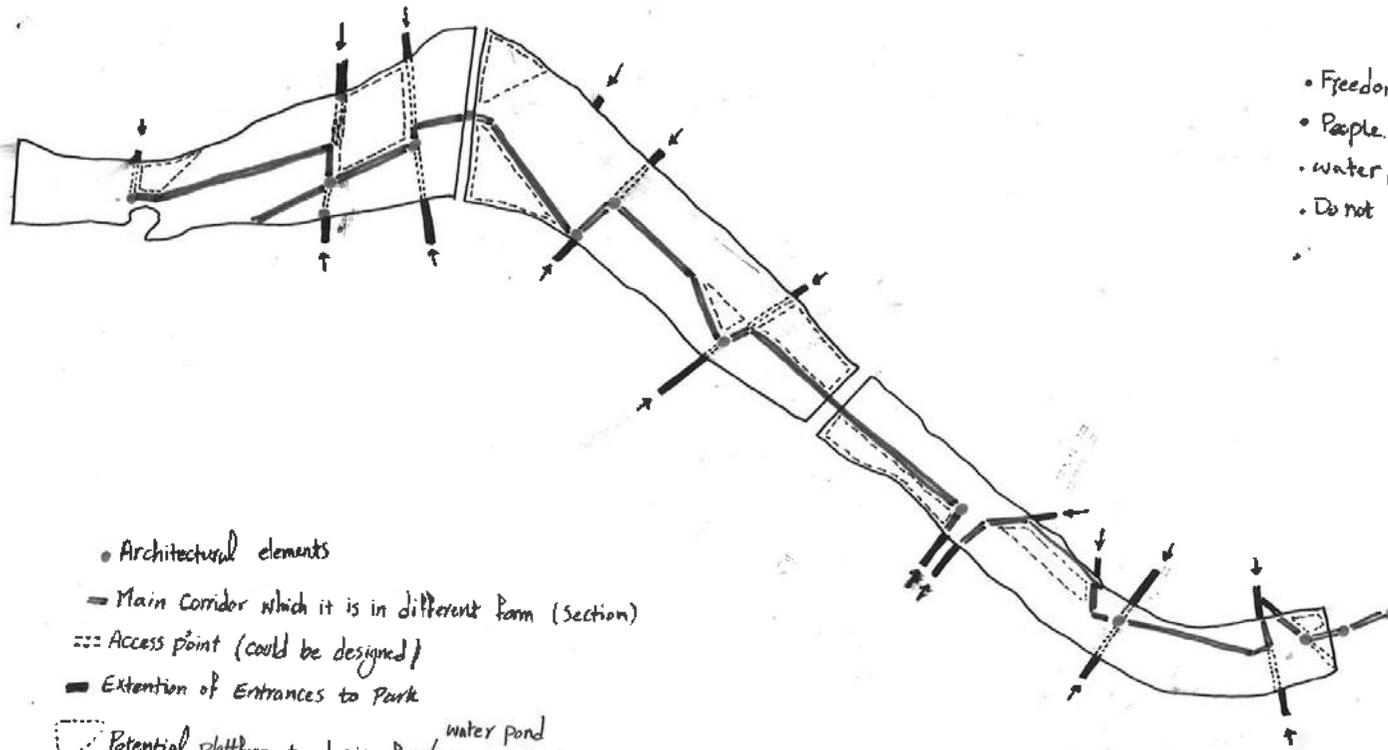


- Cultural
- Educational
  - ↓
  - theatre school
  - amphi-theatre
  - kids horse
- Social interaction
  - Commercial
  - Historical
    - ↓
    - 33pol
    - Cinema
    - Hotel
    - Shopping mall
    - stores
    - 33pol bridge
    - Alough St.
    - Factory
- Commercial
  - interactive activities in park
- Historical
  - Government organization
    - ↓
    - khajou bridge
    - khajou St.
    - Factory
    - trib (tv)



- Library of celebrating water
- Connection between both River Sides
- Space Experience
- Event platform
- Social interaction

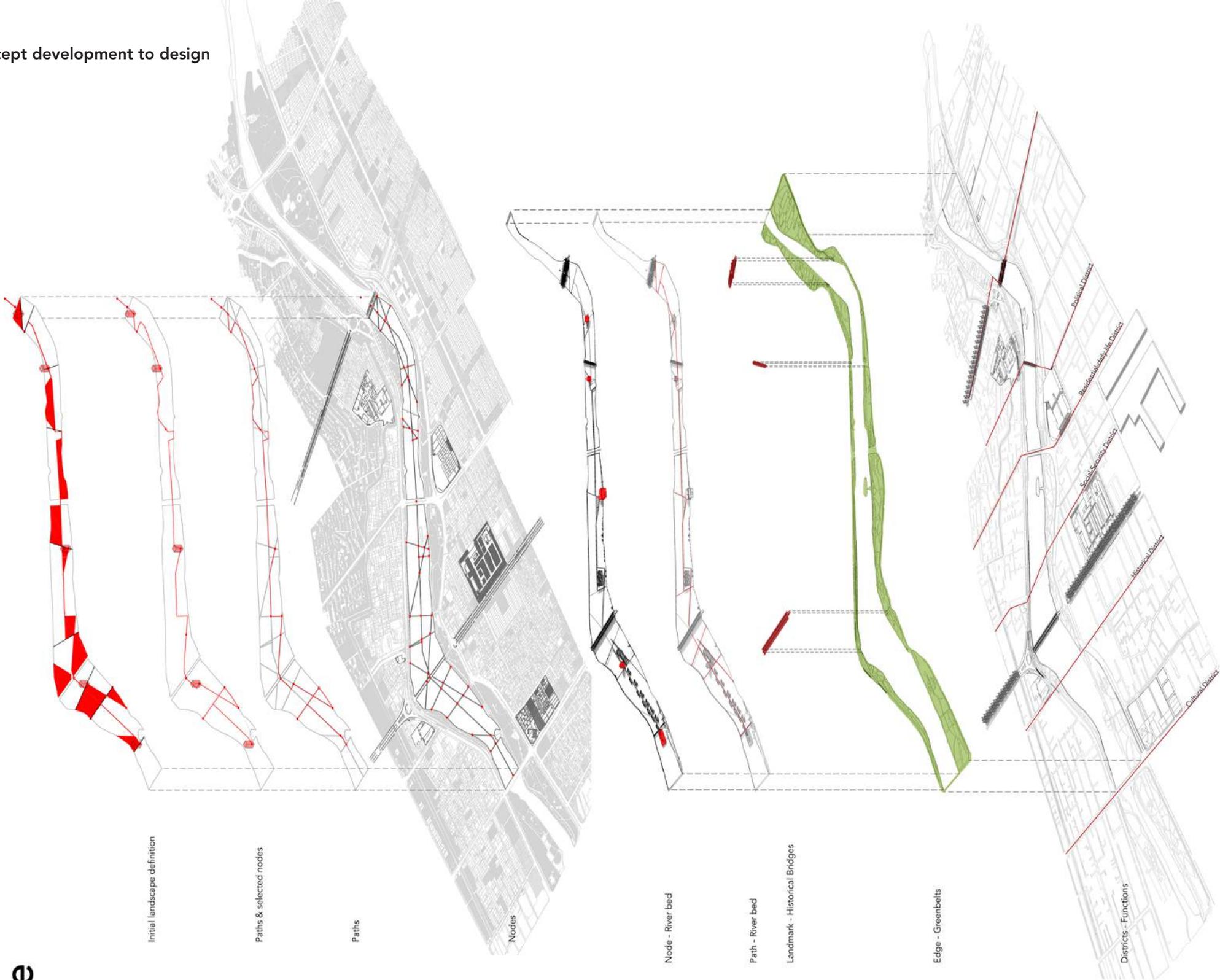
- WATER CORRIDOR MUSEUM  
◦ Pen Field to celebrate water
- Extend Entrances to surrounding Parks

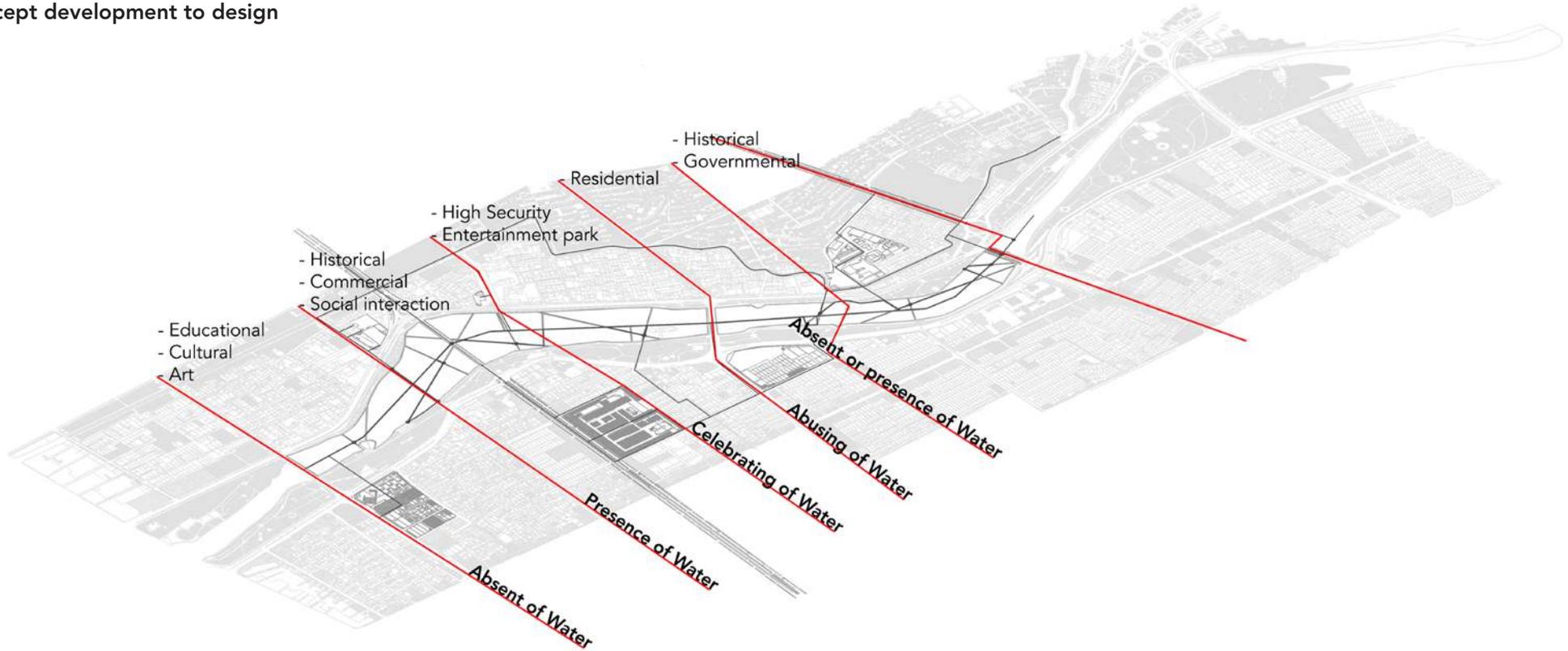


- Freedom
- People
- water / it back
- Do not waste Soil

- Architectural elements
- Main Corridor which it is in different form (Section)
- Access point (could be designed)
- Extension of Entrances to Park
- Potential platform to design for
  - water pond
  - Event gathering
  - softscape → introduce new eco-system
  - Extension of corridor

Concept development to design





**Absent of Water**

- back to history
- Origin of Esfahan
- About Esfahan territory
- Desert city

**Presence of Water**

- Back to history
- Underground water resources
- Esfahan underground layers

**Celebrating of Water**

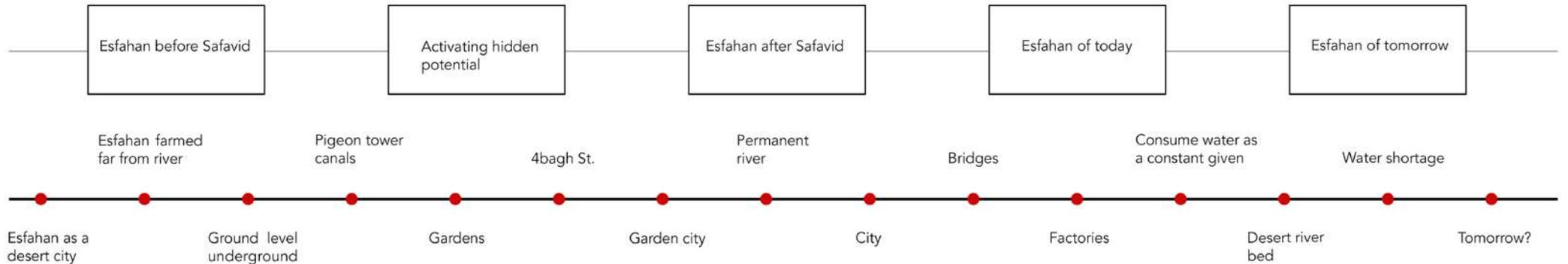
- Back to history
- Look to possible future
- Persian garden
- River
- Bridges
- Factories

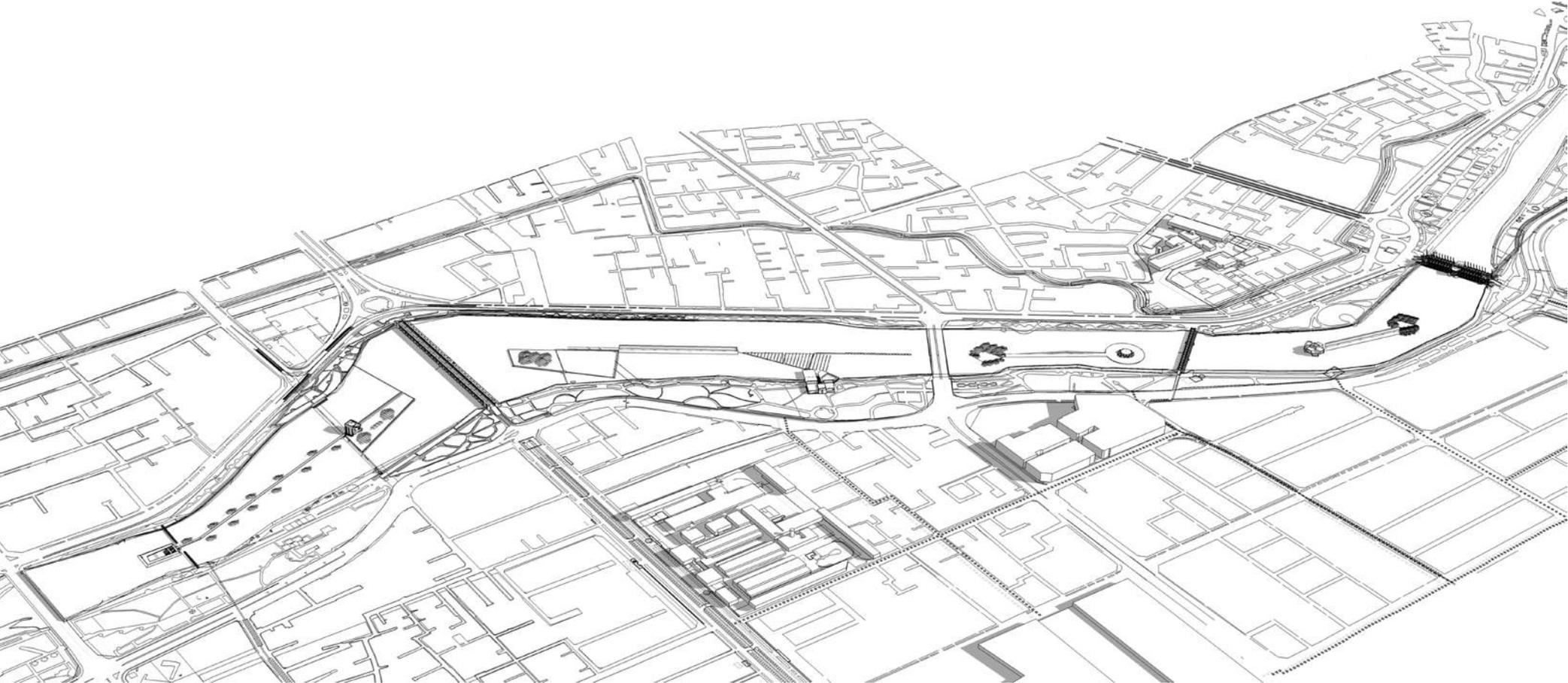
**Abusing of Water**

- Look to today
- Industry
- People
- Agriculture

**Absent or Presence of Water**

- back to future
- What shall we do?
- Future with water
- Future without water

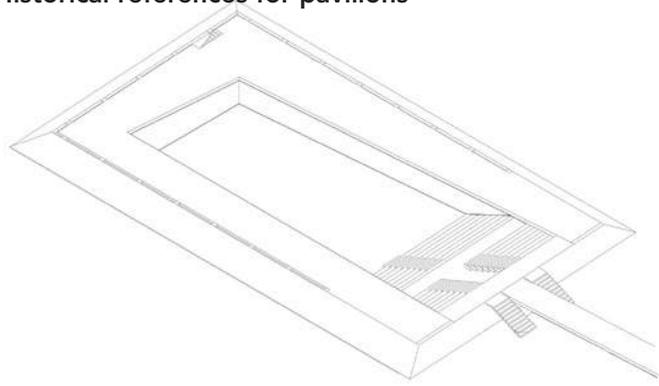




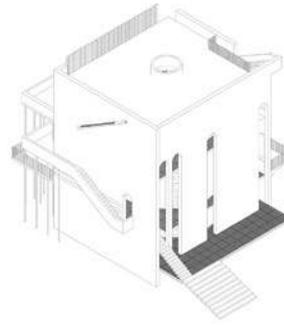
Study Model



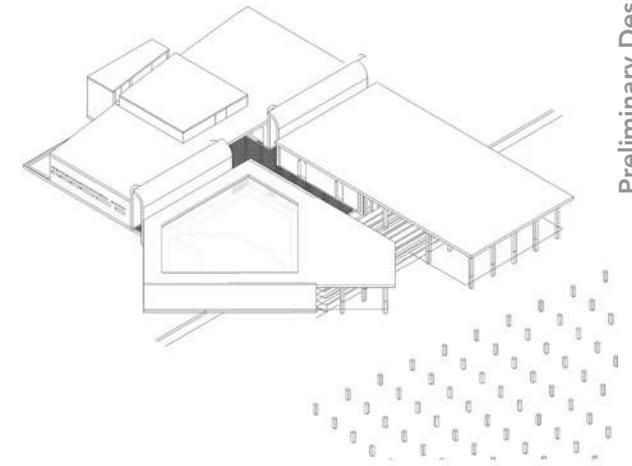
Historical references for pavilions



Node 1.

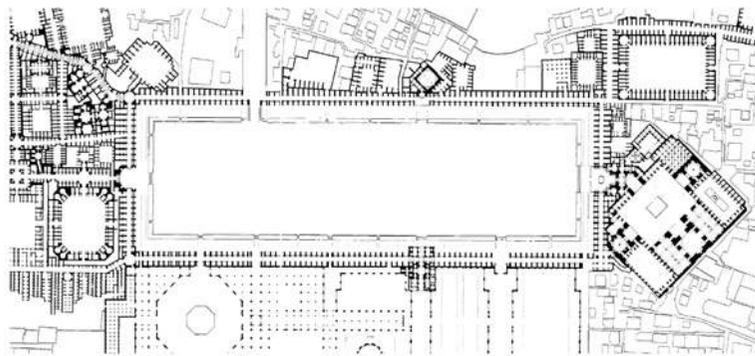


Node 2.

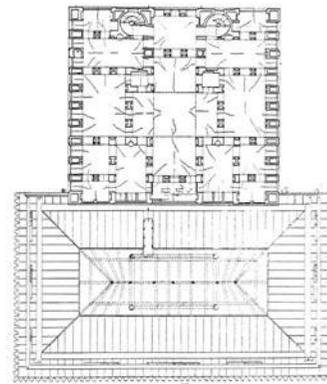


Node 3.

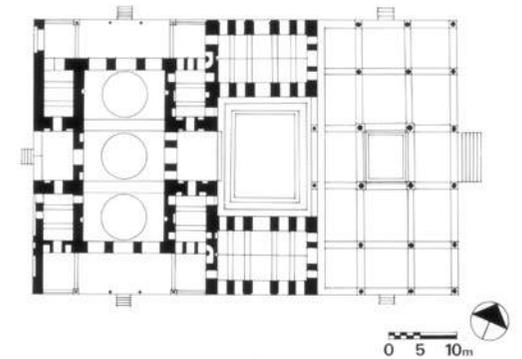
Preliminary Design



Naqsh-e jahan square



Ali Qapu palace



Chehel Sotouon palace



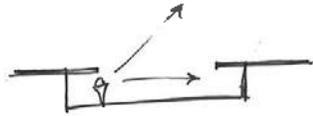
Scenario

People Feeling

1.



2.



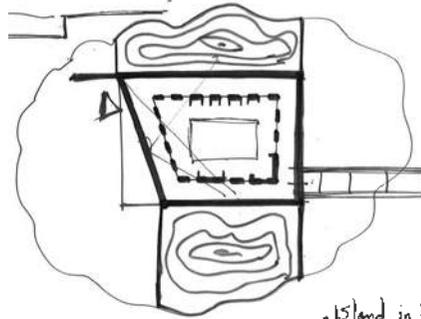
3.



4.



5.



Island in 1

\* Although here is a pleasure place to be, on the other hand, it remind people how and what your origin Estahum. Looks like before.

Layer 1 (water - Lack of water) - Awareness

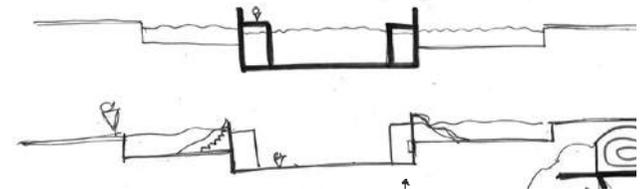
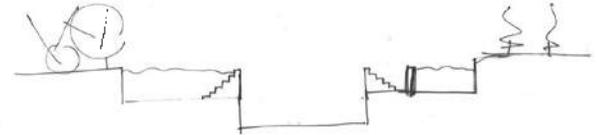
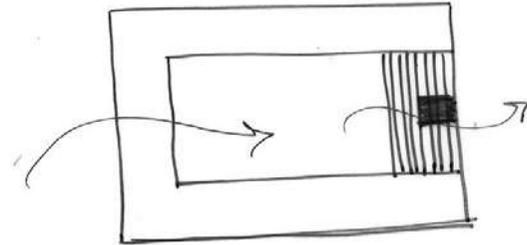
- The hole show the Absent
- • work as a reminder to people that alway there is lack of water even when there river is full of water

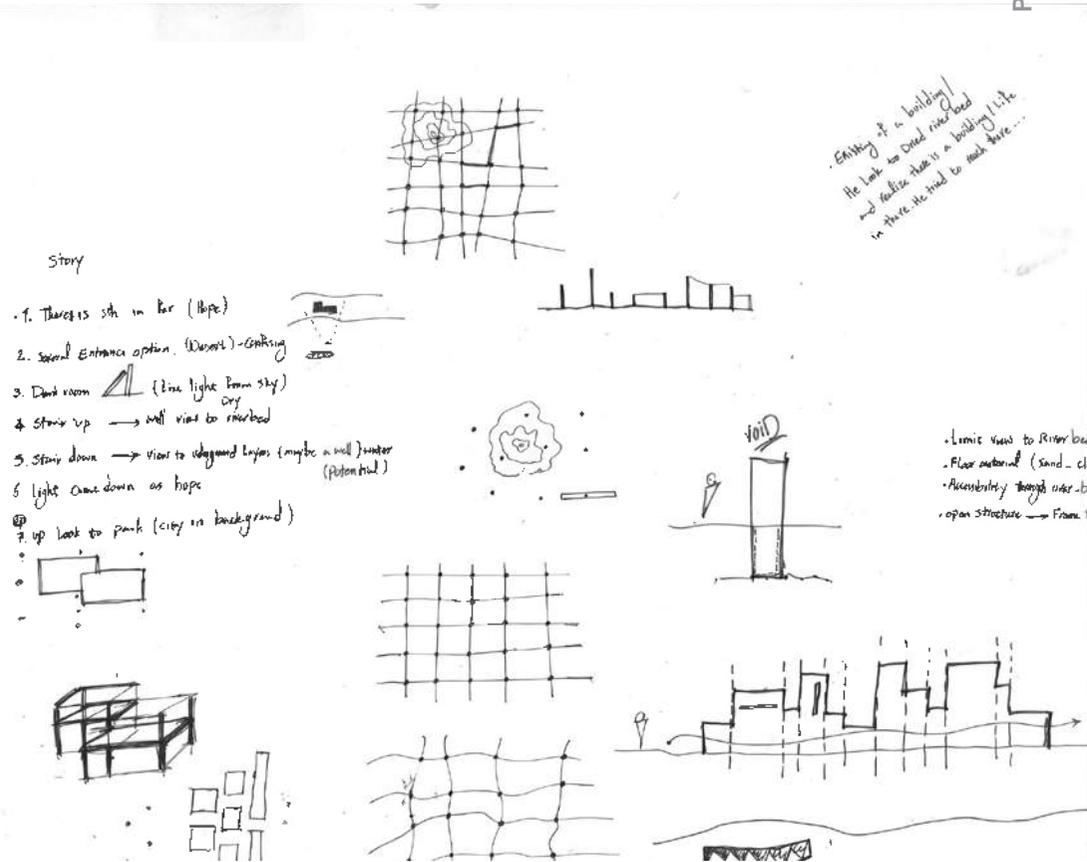
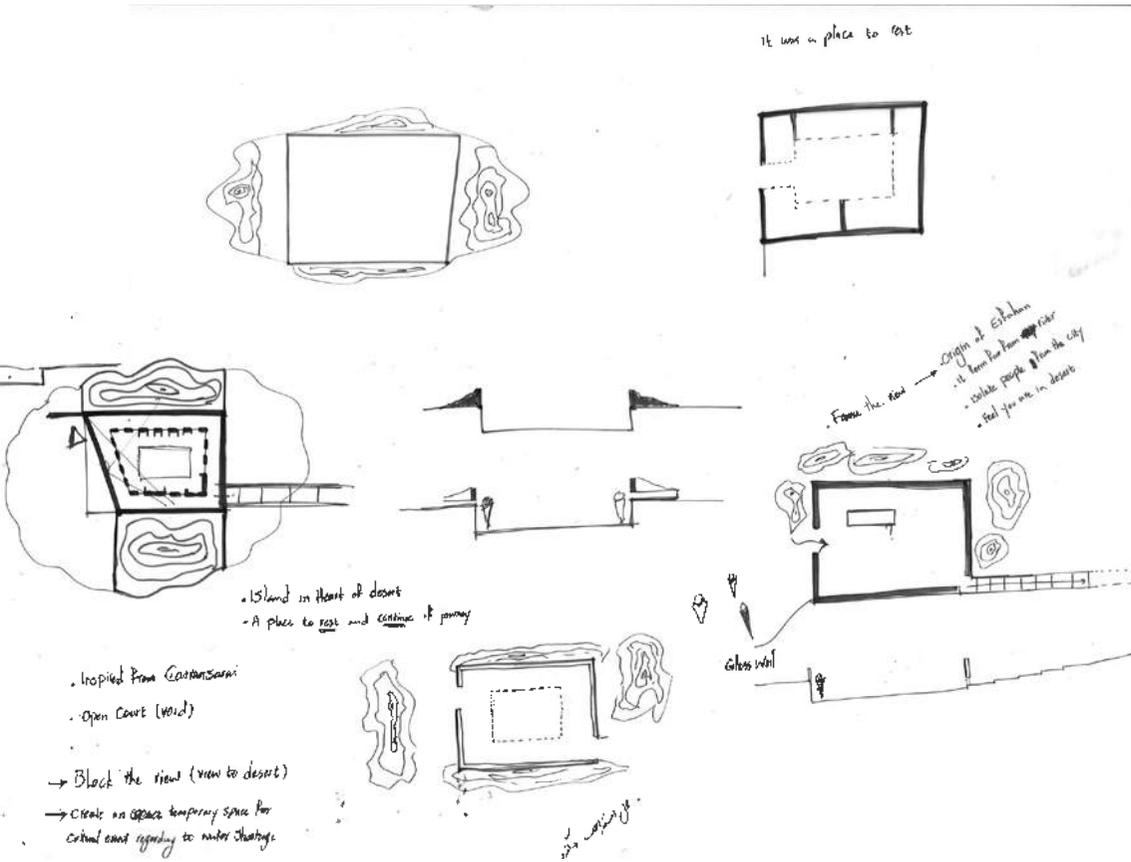
Layer 2 (cultural district)

- A place for cultural event and gathering
- • For Exhibition and exposition

Layer 3 (Pleasure)

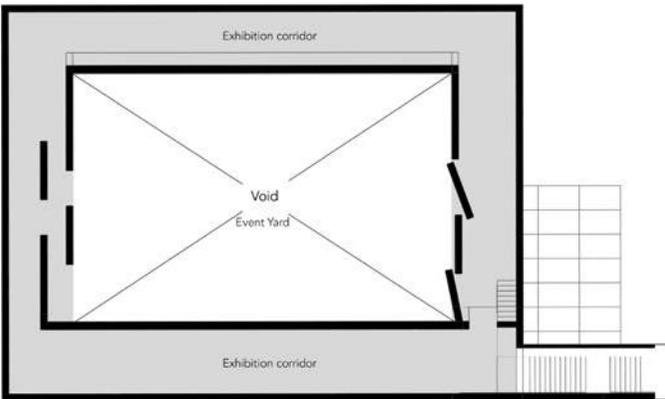
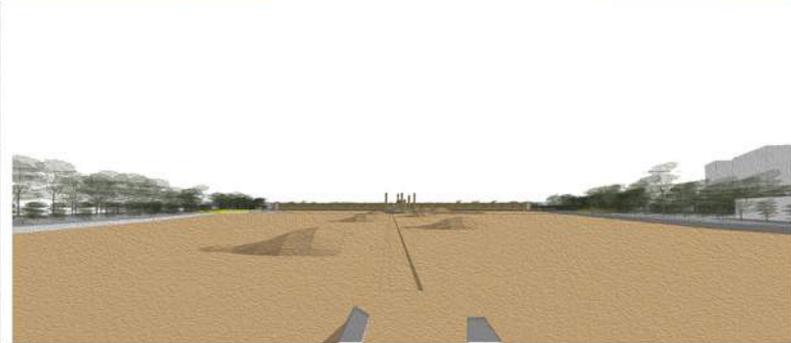
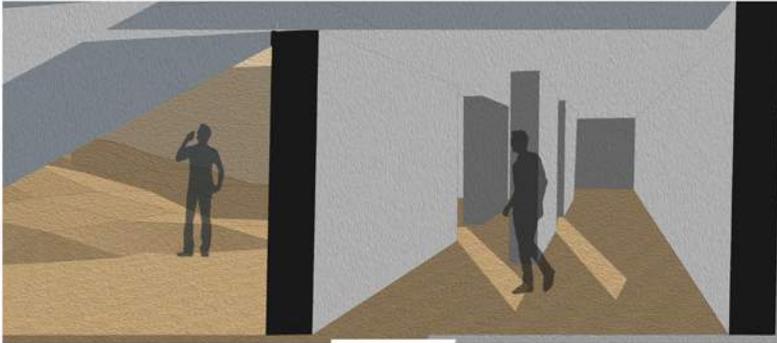
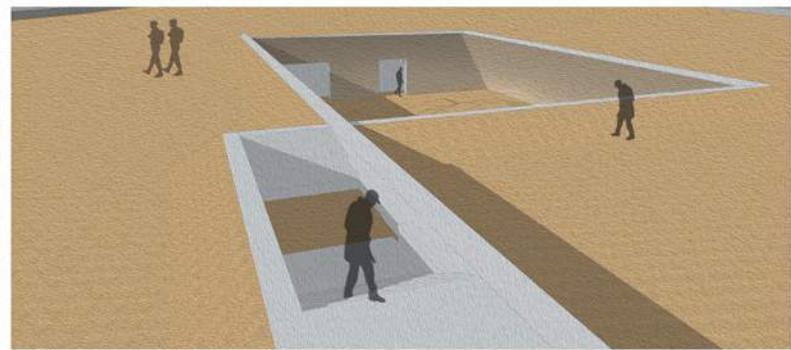
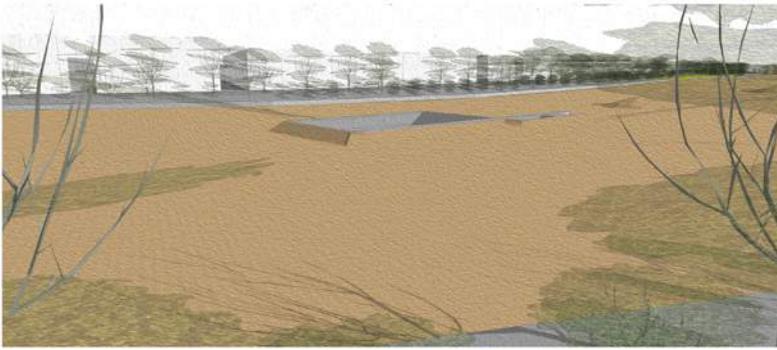
- It is a pleasure place for people to sit and spend their time in a isolated area. A place where is isolated from noisy city. Here they ~~are~~ there is are people, sky and earth. Due to created shadows with overlaps here is a cooler and cozy place.



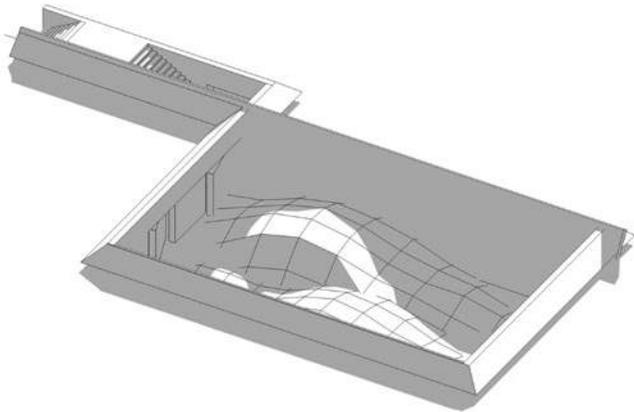


# Absence of Water - point 1

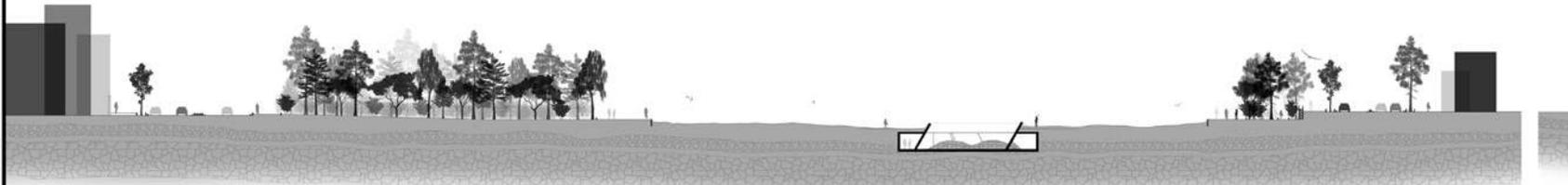
A place to remind people about Esfahan territory & origin



Plan 1:200



Axonometric view



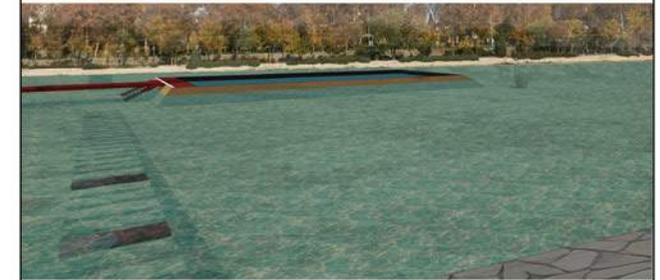
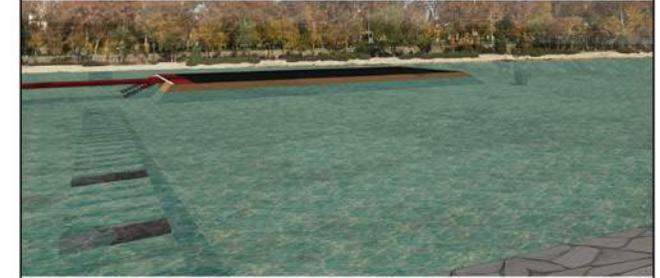
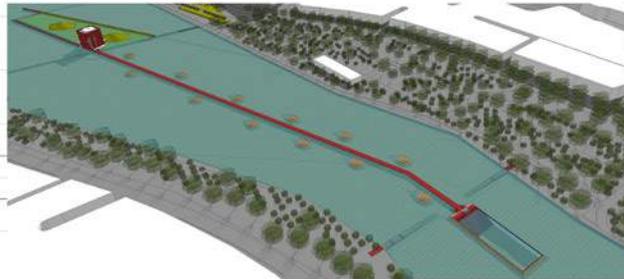
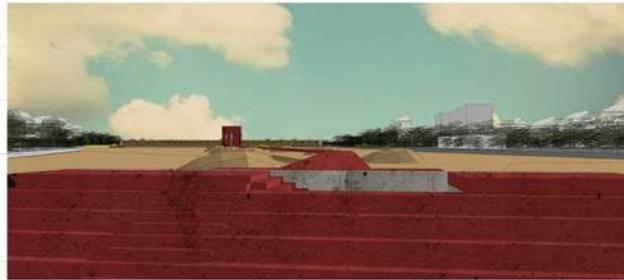
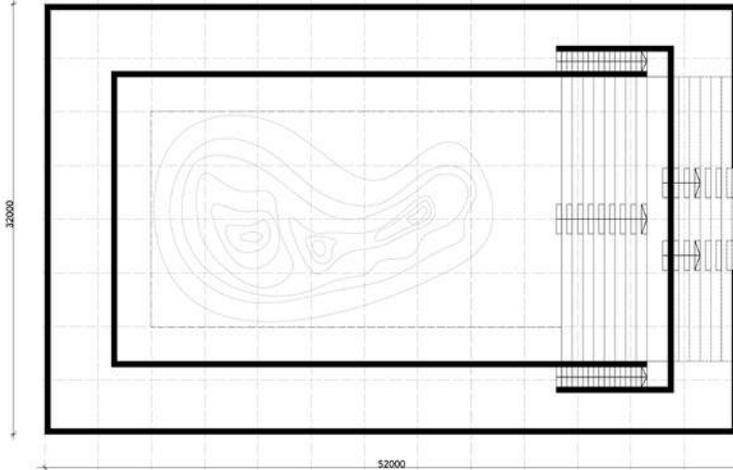
### Node 1.

This is the first Pavilion in the network which it looks like a void space in the riverbed to remind people about absent of water in Esfahan territory (in a semi-desert area). In other words, the void (which is kind of framing the landscape) shows the lack of something which supposes to be there but there is not which in this case is water. Existing a void in the riverbed attract people to get there through a temporary path which is defined bulging (outstanding) riverbed soil.

The form of the node 1 has been inspired form Naqshe Jahan Square which it was a public square in front of the gate of empire garden in the Safavid period. When people get to node 1, they will face the sunk public square which is designed as a place for a water-base cultural event. Due to its function one side of the square has been designed as a stepped sitting area. Sunk square provided a natural open isolated area in the heart of the busy city where only people, sky and people are there which is similar to the desert area. Applying mirrors all around the square help visitors to feel the space more and more.

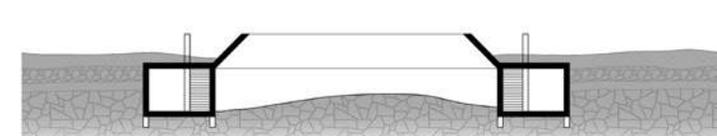
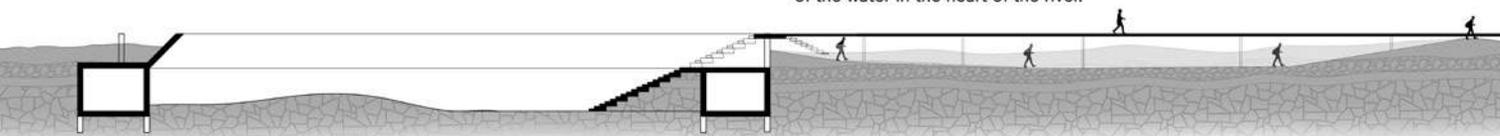
Besides that, all around the open square surrounded by a completely enclosed gallery which is accessible by stairs from the top and it provides a place for water-base cultural exhibition and events as well.

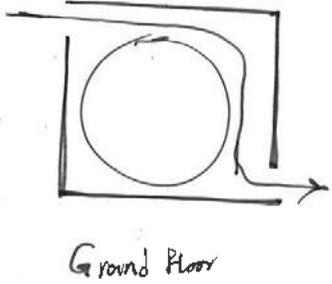
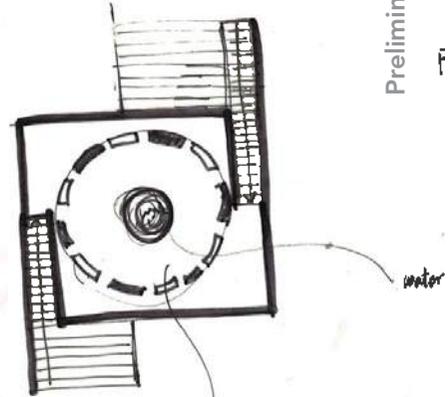
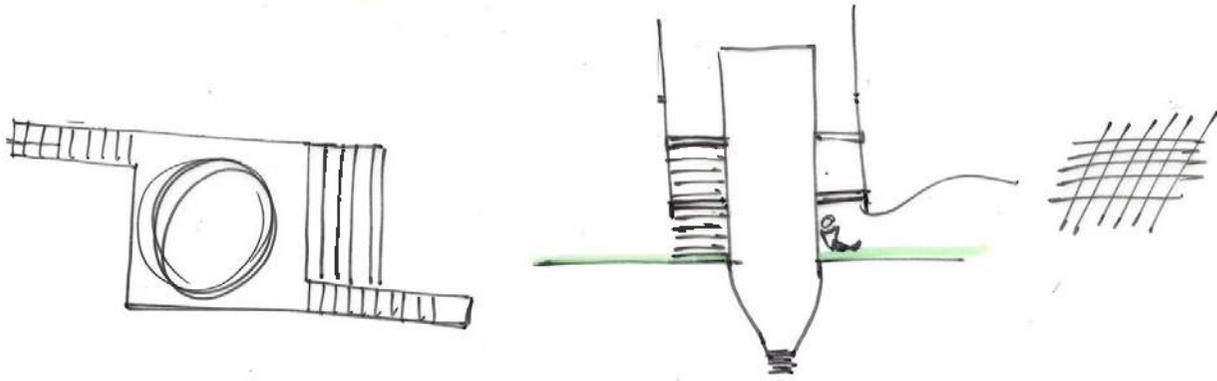
By presenting of water in the riverbed, the open square will be the last part that becomes full of water, so in the beginning, the void square will be in the river after a while the water fills the void. It is interesting that when the river becomes dry again the void will be the last part which will be dried and it looks like a pool (pond) in the heart of the dried river bed. When the water back to the river, although node 1 will be accessible by boat (to keep the concept of the void), the bulging riverbed as a pathway will create a pattern in the river and the river flow cause of erosion and reshape the path. The gallery is useable and accessible all the time in the riverbed with or without water.



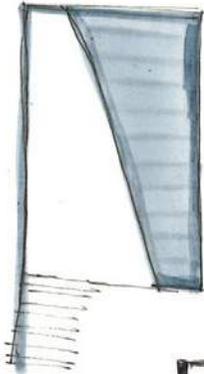
### Connection Node1 to Node2

Node 1 is connecting to Node 2 by digging the riverbed in different height from 500 mm to 1800mm which in the way people will experience different view to the riverbed and surrounding parks. This path is covered by a flat roof in the top (in height of 1500mm) to provide shadow for people who walk through the path. By presenting of water in the river, the path's cover will be unique walking path itself in the same surface of the water in the heart of the river.

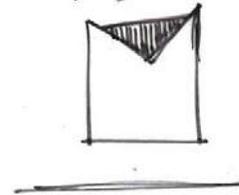




Ground Floor

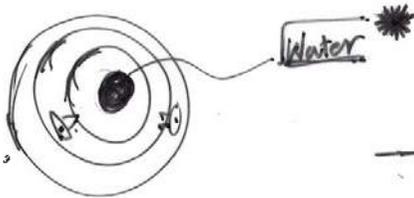


باد خنوب غربی (عمیق)  
 باد غربی (سخت) (درجهت) + سرد سرد

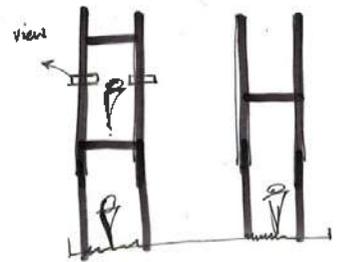
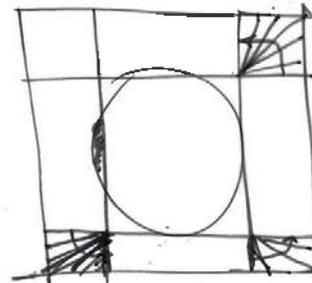
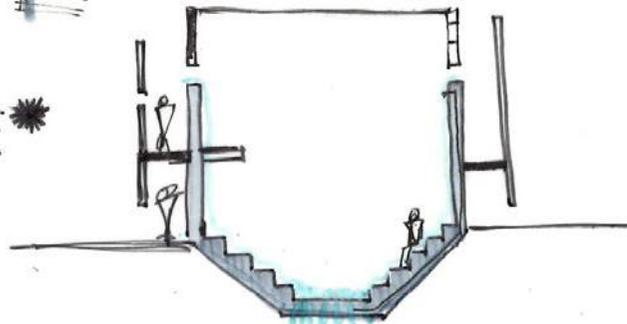


Pleasure place to be  
 (water - cool - Fanned view)

Facility ?

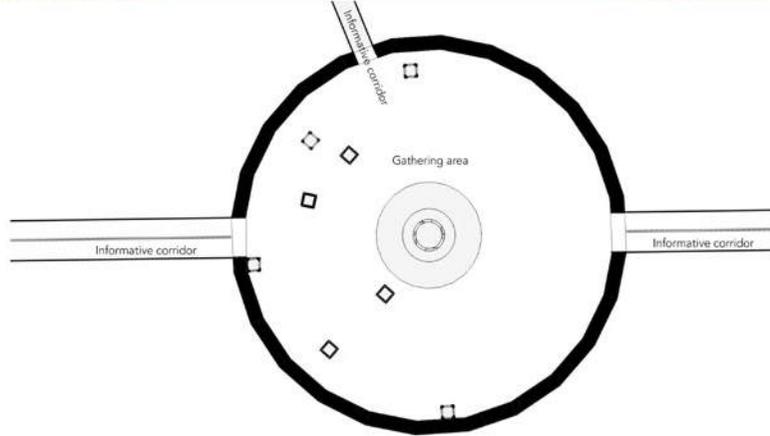


basement. (to rest)  
 cool, cozy, water

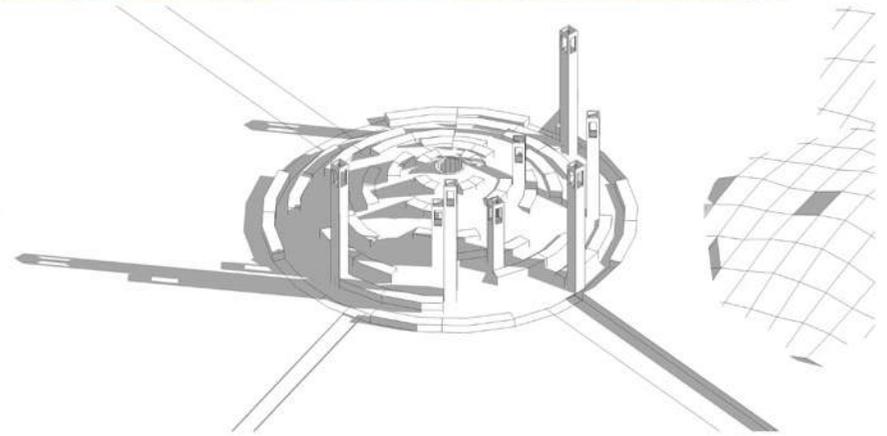


# Presence of Water - point2

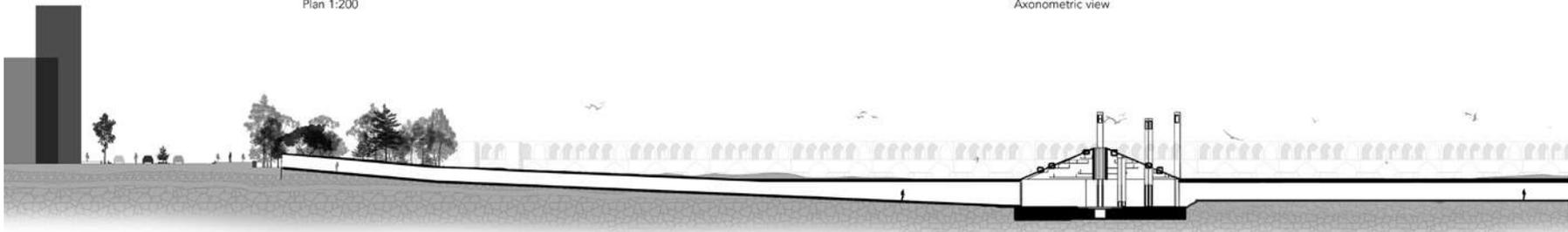
A place to remind people about Esfahan's hidden potential

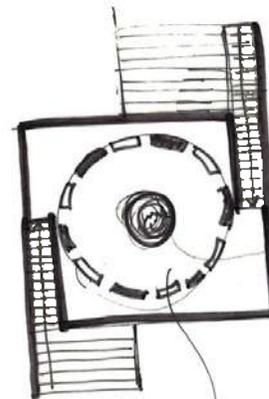
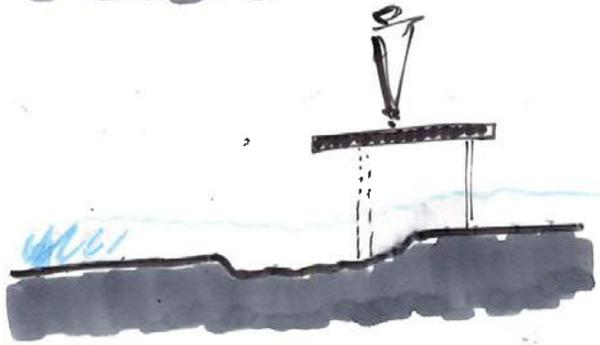
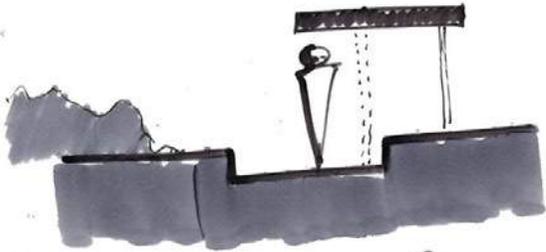
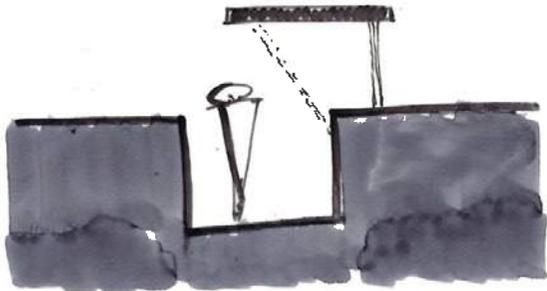
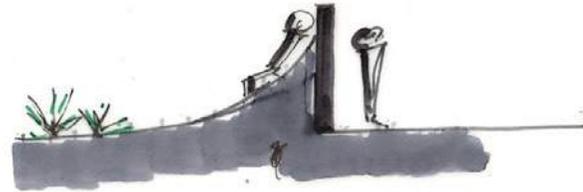
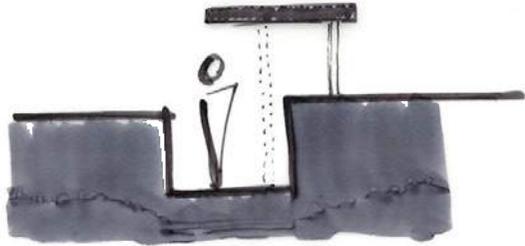


Plan 1:200

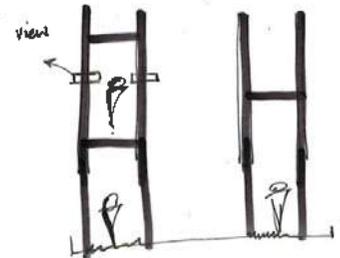


Axonometric view





Facility ?



Pleasure place to be  
(water - cool - Fanned view)

## Node 2.

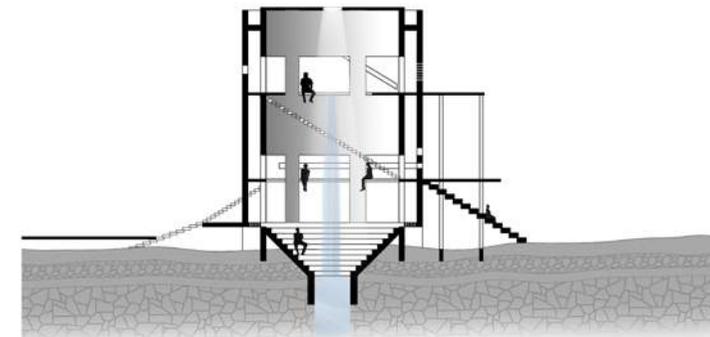
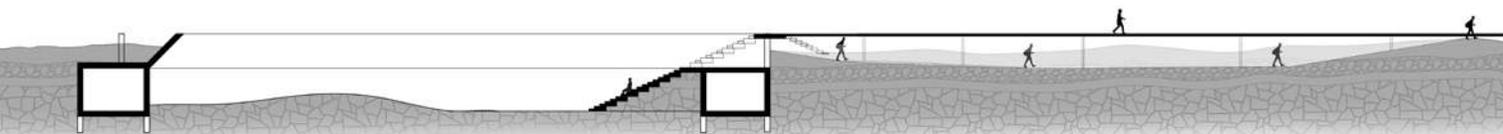
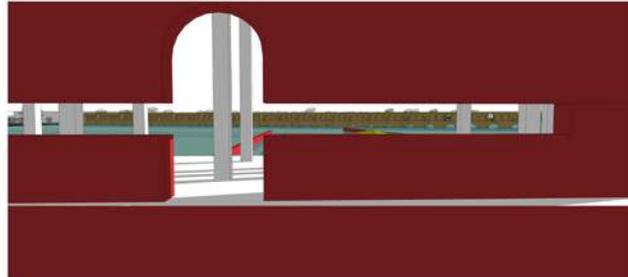
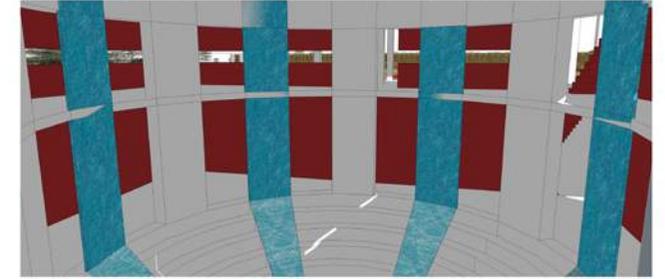
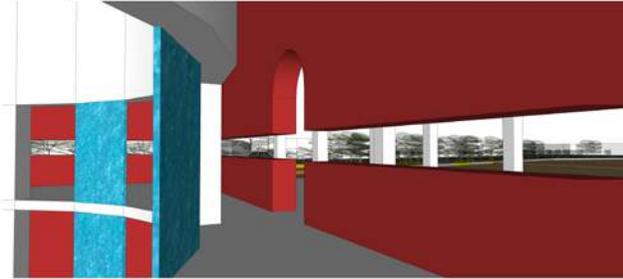
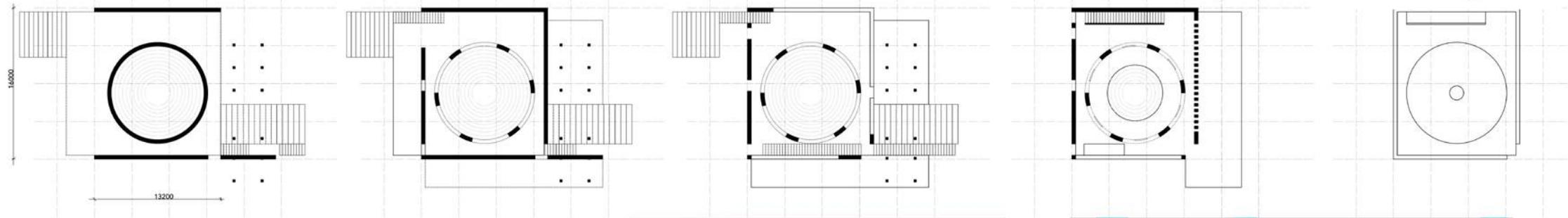
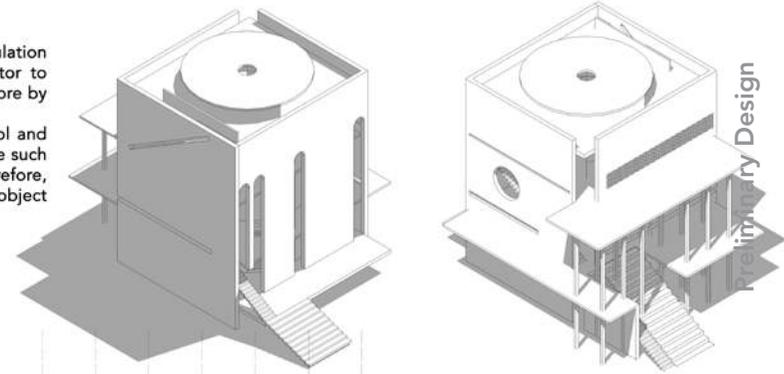
Node 2 is the highest pavilion in the network which from one hand it sunk into the riverbed to reach the underground water resources as a hidden potential, and on the other hand, it provides unique views to the city, historical bridges, and Charbagh Street in three different levels to remind people result of realizing and activating hidden potentials.

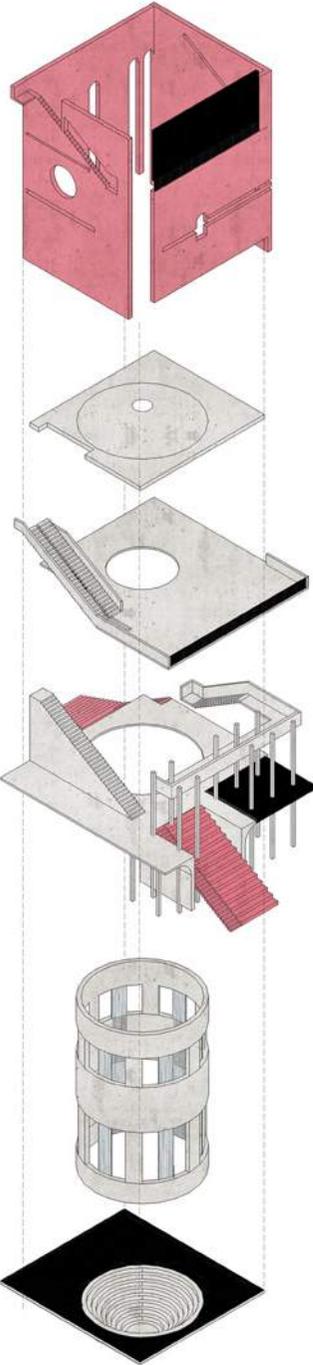
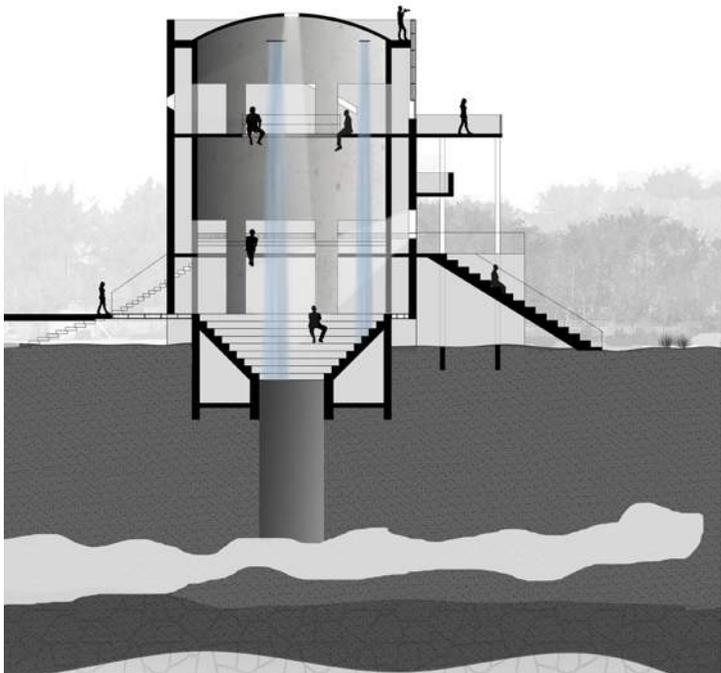
The design of node 2 which inspired from Ali-Qapoo palace (the gate of the Safavid garden Empire) is the integration of two different volume. The outer volume (cubic form) is mainly used for circulation and through openings, it provides unique views to the city for visitors. The created void by integration of the second volume inside the cubic volume provides a special sitting area for the visitors which in the same time they have the view to the outside(city) and inside(underground water).

The inner volume (cylinder form) sunk into the ground to provide underground water for few numbers of purposes. The main purpose is, keep people attention to underground resources as an extremely valuable gift in the heart of the desert. The

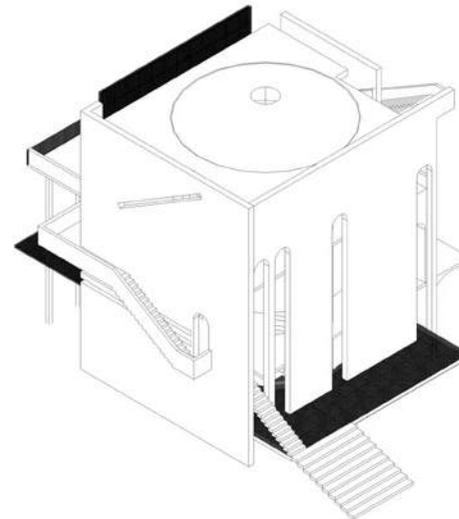
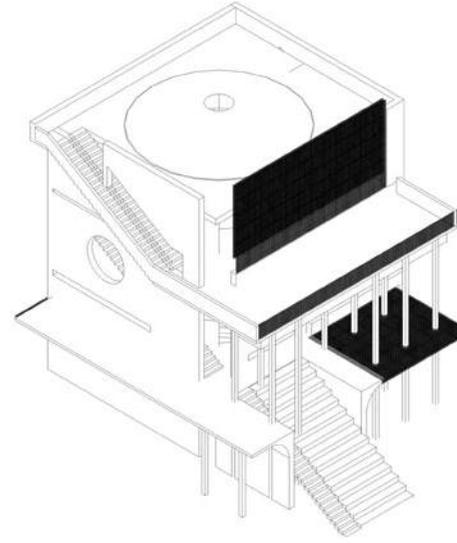
water is using for planting (desert plants) around the pavilion and by vertical circulation of water inside the pavilion, a cool and nice place is provided for the visitor to experience the joy of proper using of water. This pleasant become more and more by inviting south-west wind through the big openings into the pavilion.

In fact, this pavilion by providing a unique view to outside and creating a cool and pleasant place inside, help people to remember how our ancestors could create such a city by realizing the territory and its potentials and then activating them. Therefore, this pavilion is the cool and pleasant tower of the museum and the city is the object which the museum is showing it to the people (as a reminder).

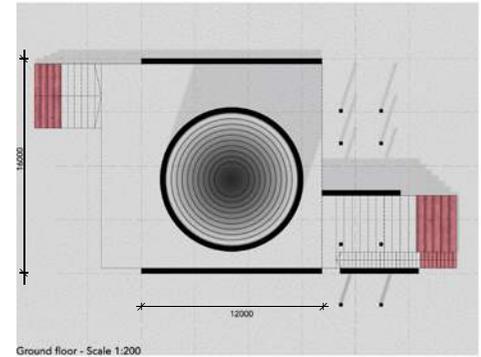




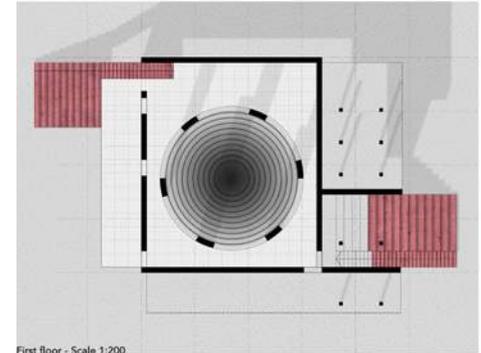
Exploded Axonometric



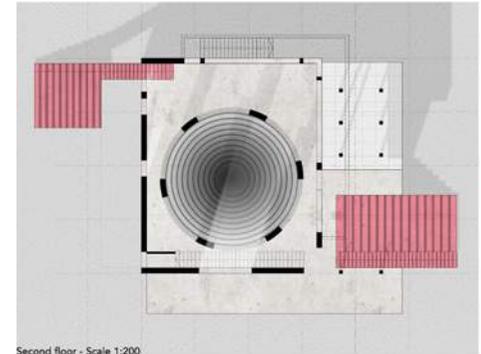
Axonometric view



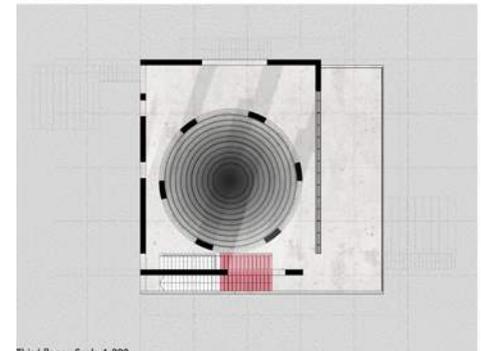
Ground floor - Scale 1:200



First floor - Scale 1:200



Second floor - Scale 1:200

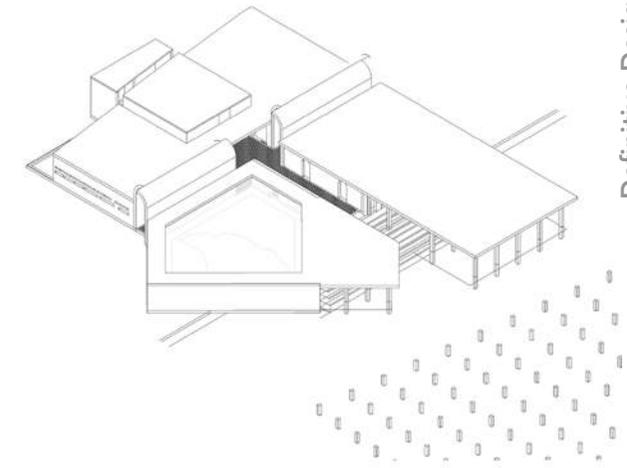
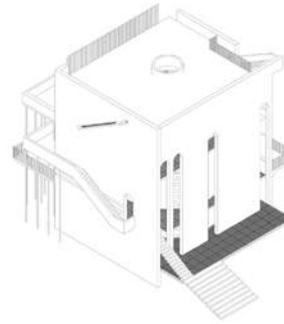
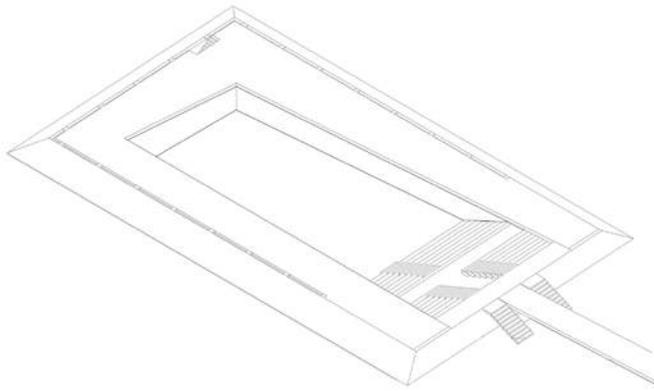


Third floor - Scale 1:200

## Definitive Design

Master plan in dried river





Definitive Design

Absent of water

Present of water as underground resources

Celebration of Water

Permanent program

Informative museum about Esfahan's characteristic and water limitation in this territory (Interior).

View tower with focus on historical places

Informative museum about water, its importance and proper way of using it

Temporary program

Art, Cultural & Educational event

Experiencing the absent of water in landscape

View tower with focus on historical places

Experiencing the effect of present of water

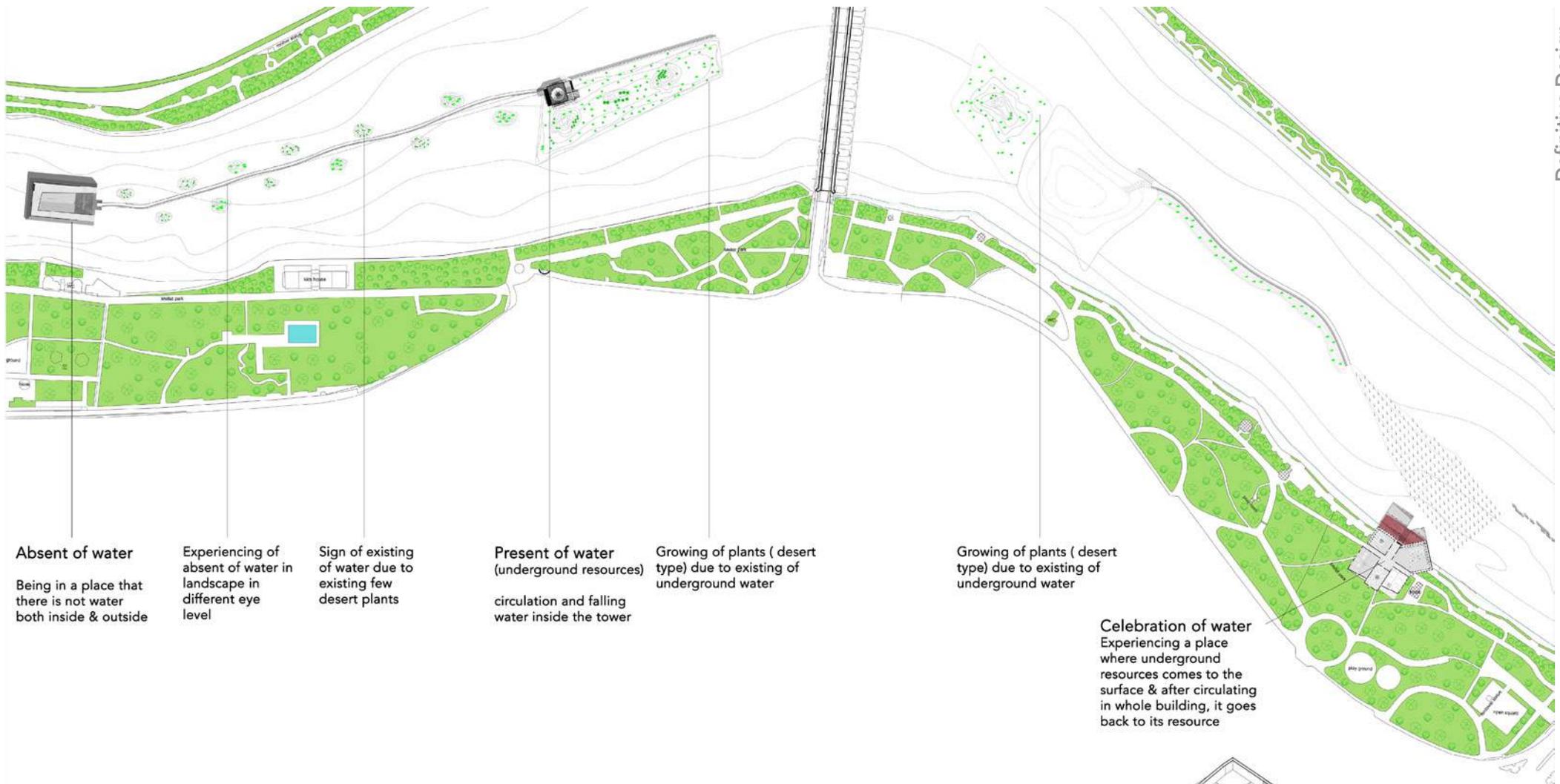
Water based educational and cultural event according to Persian rituals

Learning process

- Esfahan's territory
- Limitation of water in this territory
- Development of Esfahan
- Zayanderoud River

- Connection of underground resources (water) and on the ground resources
- Activating Hidden potential
- Overview to whole city as result of understanding and activating of hidden potential
- Experiencing effect of water

- Persian's water based rituals and festivals
- Proper way of using water
- Celebrating of water
- Considering water as most valuable thing in this territory
- Respect to water



**Absent of water**  
Being in a place that there is not water both inside & outside

Experiencing of absent of water in landscape in different eye level

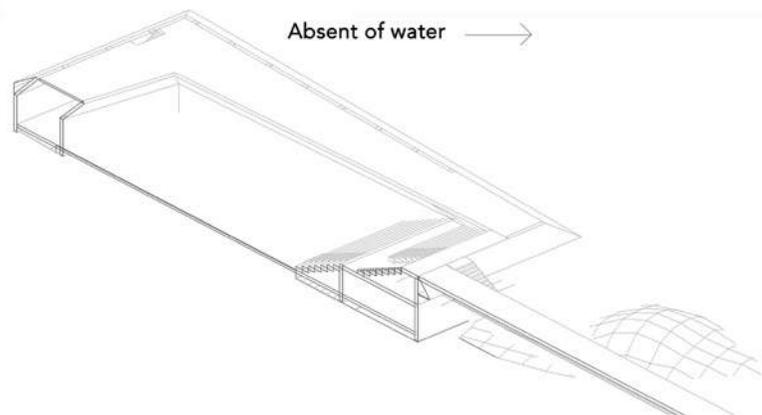
Sign of existing of water due to existing few desert plants

**Present of water (underground resources)**  
circulation and falling water inside the tower

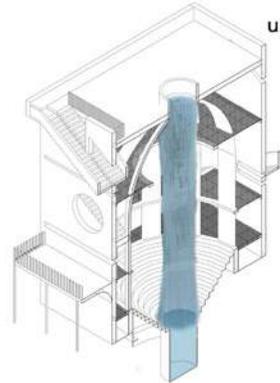
Growing of plants ( desert type) due to existing of underground water

Growing of plants ( desert type) due to existing of underground water

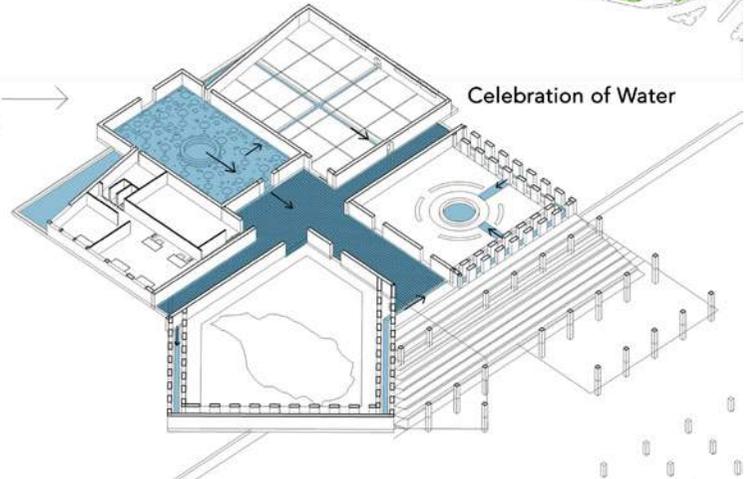
**Celebration of water**  
Experiencing a place where underground resources comes to the surface & after circulating in whole building, it goes back to its resource



Absent of water →



Present of water as underground resources →



Celebration of Water

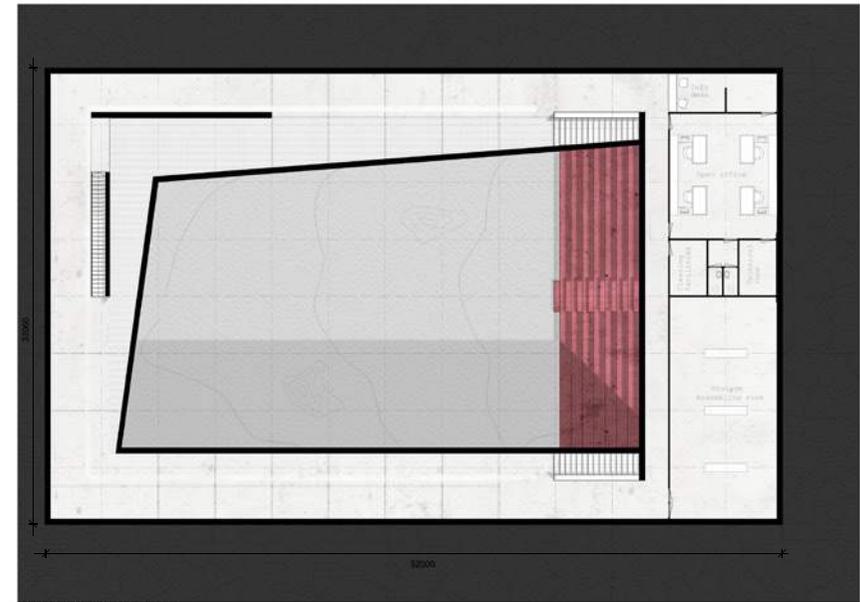
## Pavilion 1.

This is the first Pavilion in the network which it looks like a void space in the riverbed to remind people about absent of water in Esfahan territory (in a semi-desert area). In other words, the void (which is kind of framing the landscape) shows the lack of something which supposes to be there but there is not which in this case is water. Existing a void in the riverbed attract people to get there through a temporary path which is defined bulging (outstanding) riverbed soil.

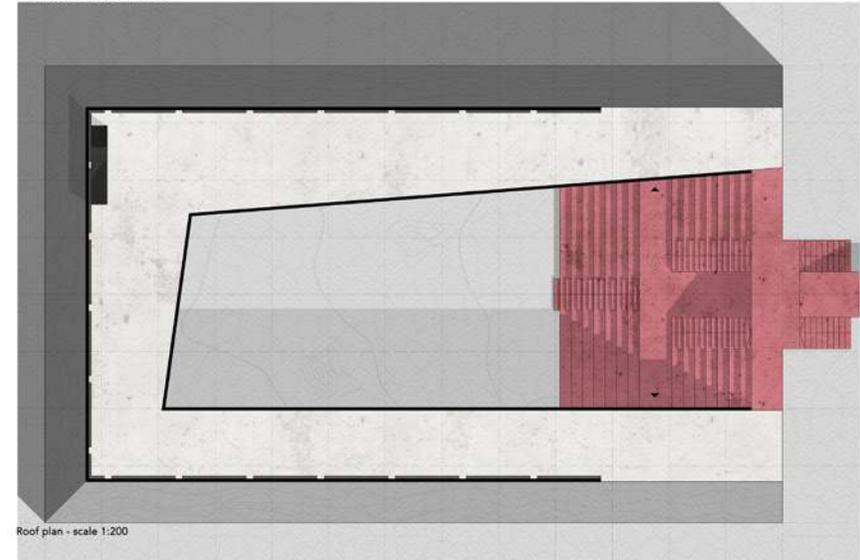
The form of the node 1 has been inspired form Naqshe Jahan Square which it was a public square in front of the gate of empire garden in the Safavid period. When people get to node 1, they will face the sunk public square which is designed as a place for a water-base cultural event. Due to its function one side of the square has been designed as a stepped sitting area. Sunk square provided a natural open isolated area in the heart of the busy city where only people, sky and people are there which is similar to the desert area. Applying mirrors all around the square help visitors to feel the space more and more.

Besides that, all around the open square surrounded by a completely enclosed gallery which is accessible by stairs from the top and it provides a place for water-base cultural exhibition and events as well.

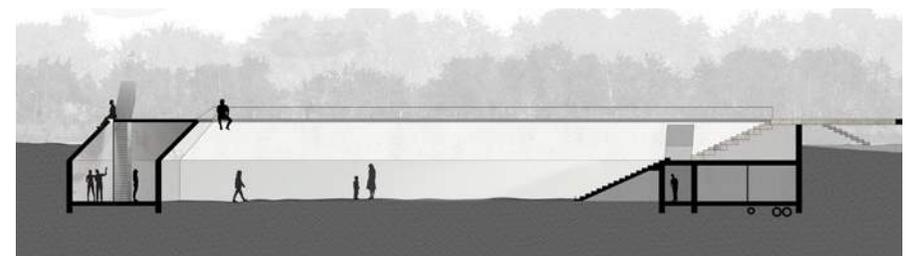
By presenting of water in the riverbed, the open square will be the last part that becomes full of water, so in the beginning, the void square will be in the river after a while the water fills the void. It is interesting that when the river becomes dry again the void will be the last part which will be dried and it looks like a pool (pond) in the heart of the dried river bed. When the water back to the river, although node 1 will be accessible by boat (to keep the concept of the void), the bulging riverbed as a pathway will create a pattern in the river and the river flow cause of erosion and reshape the path. The gallery is useable and accessible all the time in the riverbed with or without water.



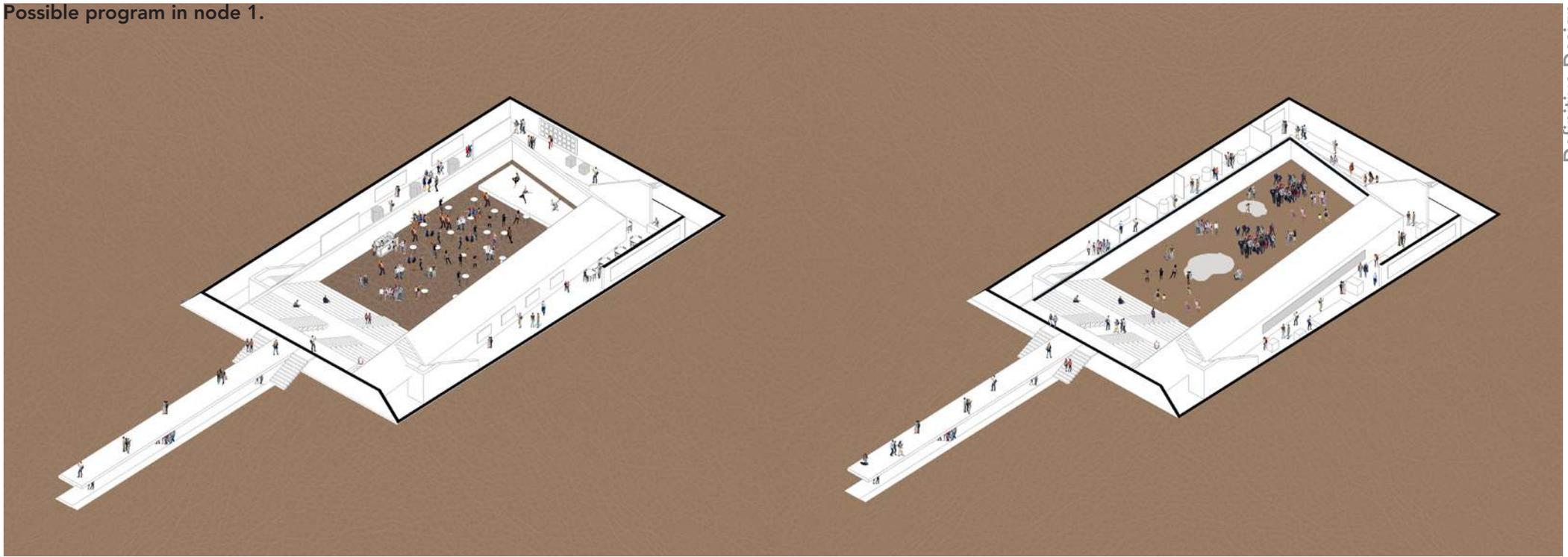
Underground floor - scale 1:200



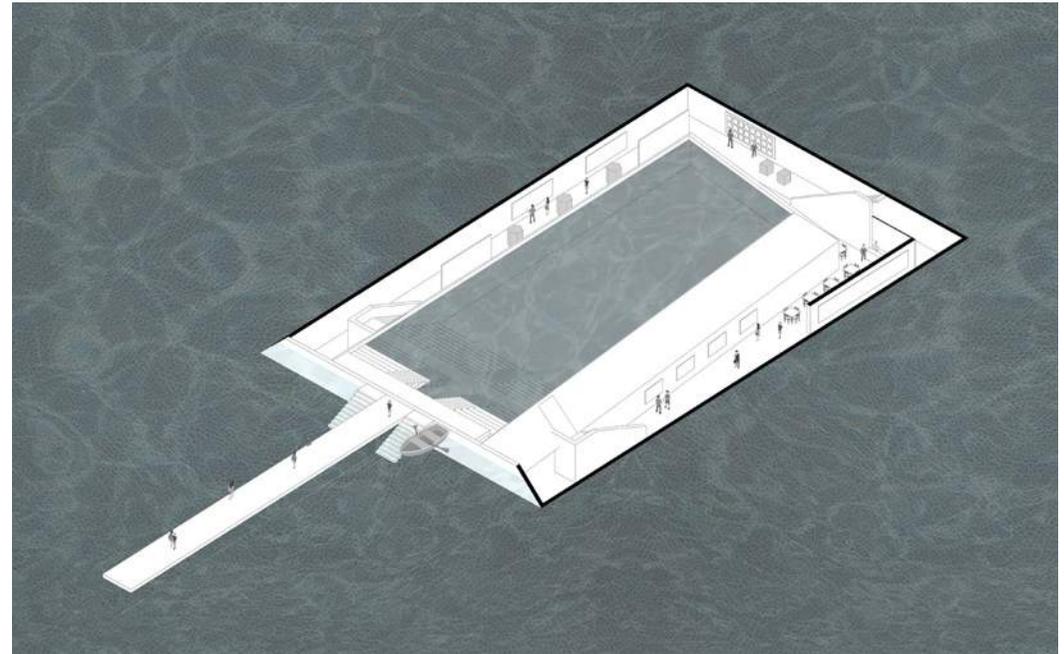
Roof plan - scale 1:200



Possible program in node 1.



Definitive Design

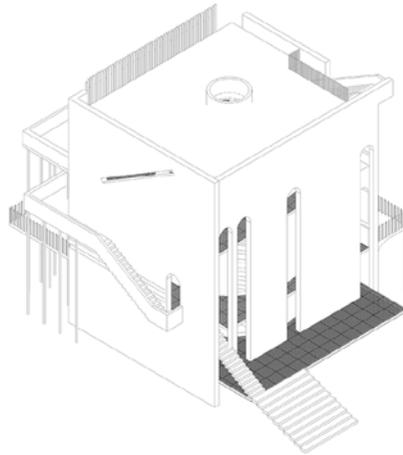


## Pavilion 2.

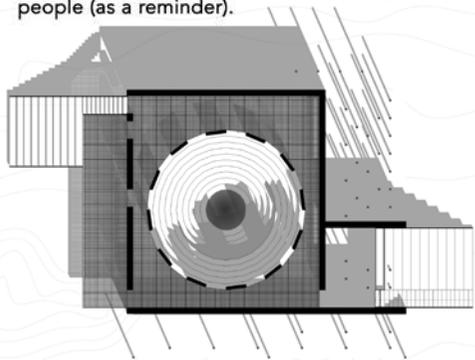
Node 2 is the highest pavilion in the network which from one hand it sunk into the riverbed to reach the underground water resources as a hidden potential, and on the other hand, it provides unique views to the city, historical bridges, and Charbagh Street in three different levels to remind people result of realizing and activating hidden potentials.

The design of node 2 which inspired from Ali-Qapoo palace (the gate of the Safavid garden Empire) is the integration of two different volume. The outer volume (cubic form) is mainly used for circulation and through openings, it provides unique views to the city for visitors. The created void by integration of the second volume inside the cubic volume provides a special sitting area for the visitors which in the same time they have the view to the outside(city) and inside(underground water). The inner volume (cylinder form) sunk into the ground to provide underground water for few numbers of purposes. The main purpose is, keep people attention to underground resources as an extremely valuable gift in the heart of the desert. The water is using for planting (desert plants) around the pavilion and by vertical circulation of water inside the pavilion, a cool and nice place is provided for the visitor to experience the joy of proper using of water. This pleasant become more and more by inviting south-west wind through the big openings into the pavilion.

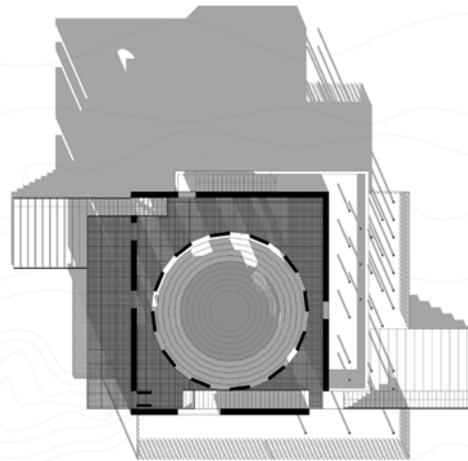
In fact, this pavilion by providing a unique view to outside and creating a cool and pleasant place inside, help people to remember how our ancestors could create such a city by realizing the territory and its potentials and then activating them. Therefore, this pavilion is the cool and pleasant tower of the museum and the city is the object which the museum is showing it to the people (as a reminder).



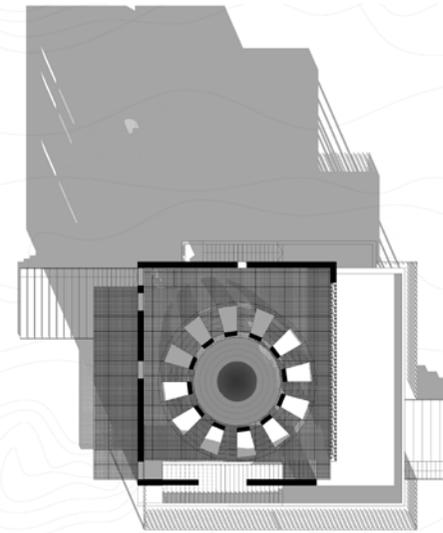
Definitive Design



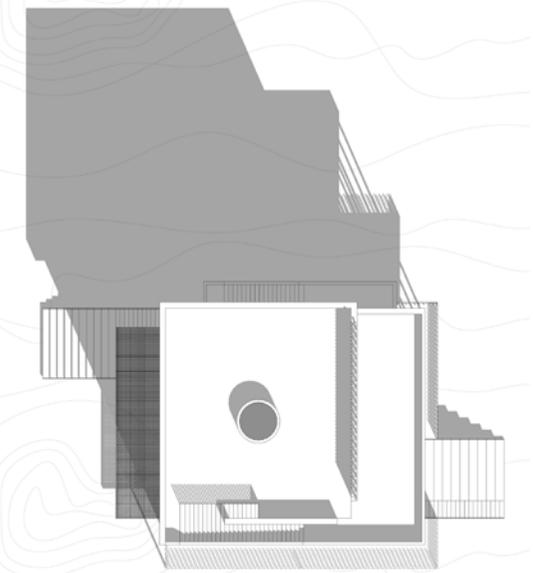
Ground floor - scale 1:200



1st floor - scale 1:200

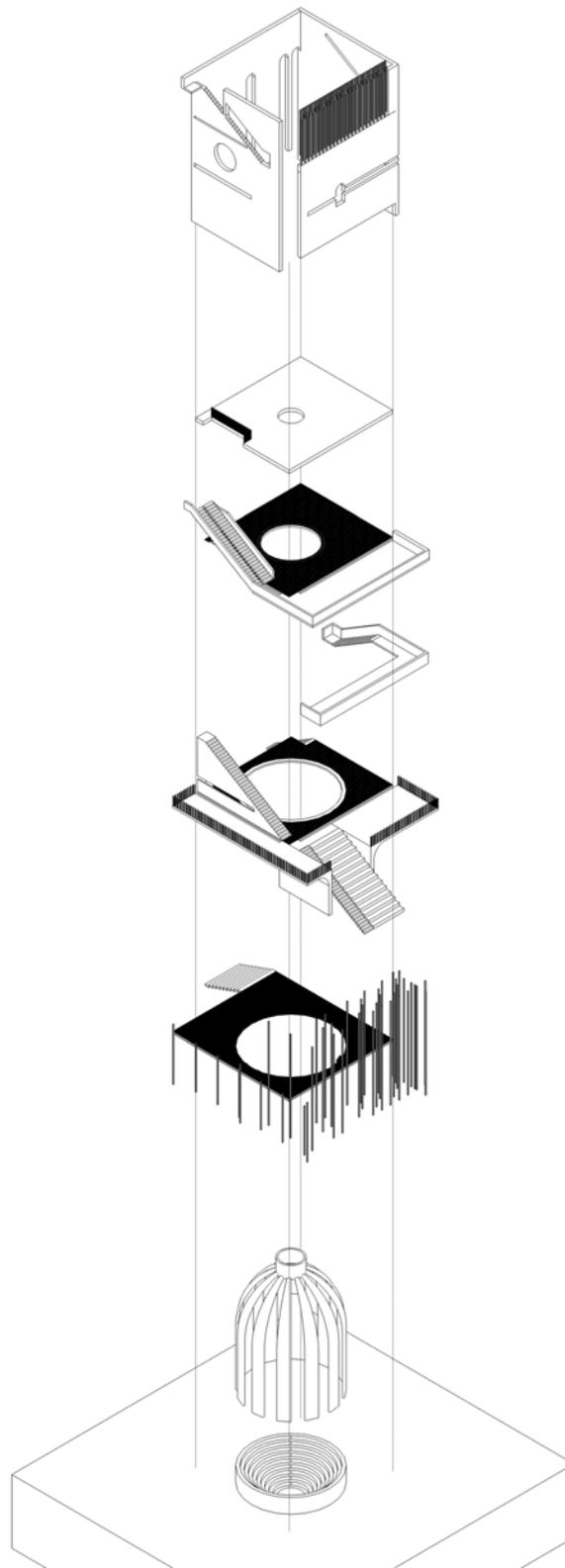


2nd floor plan - scale 1:200

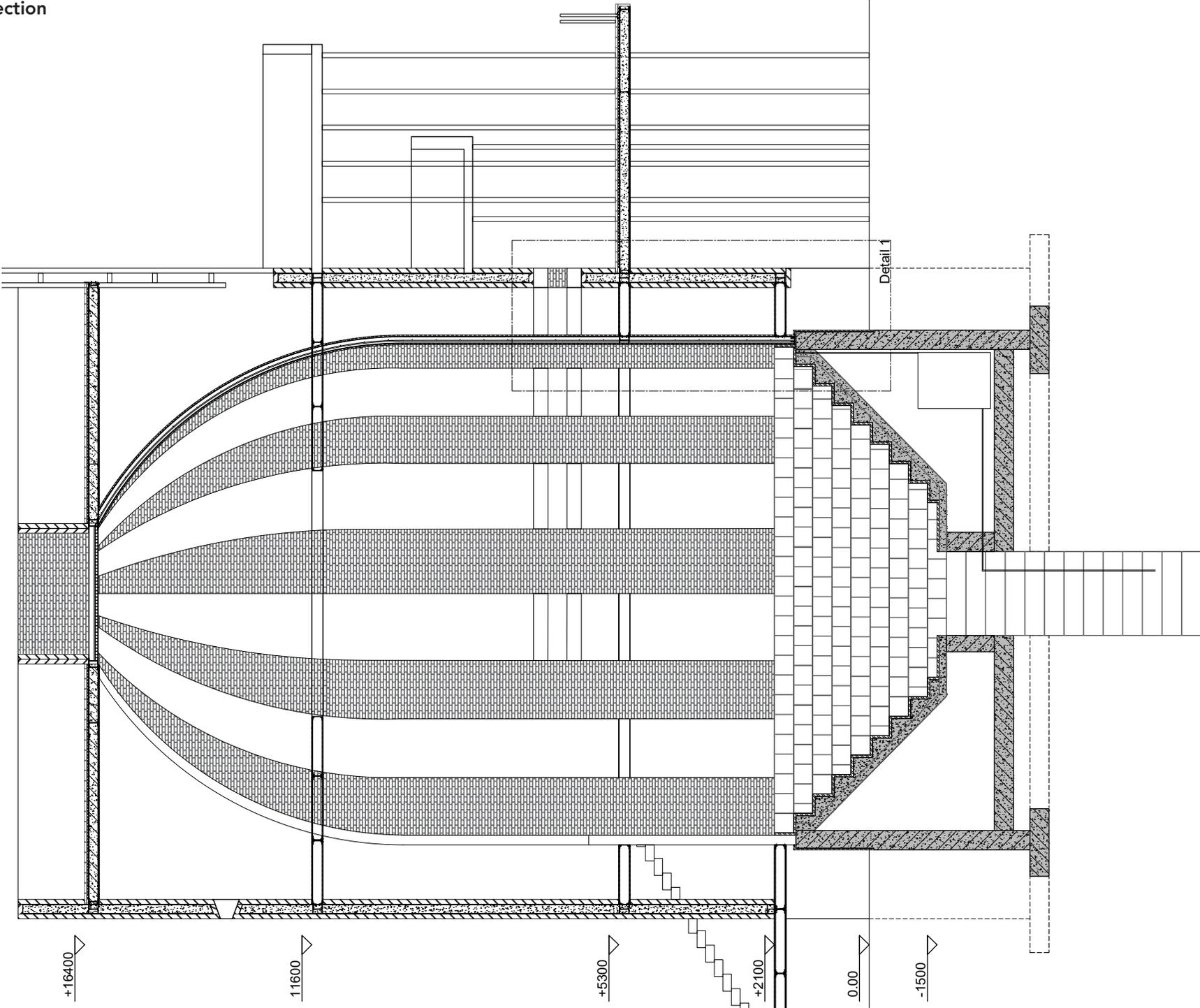


Roof plan - scale 1:200

Exploded Axo view of Node 2

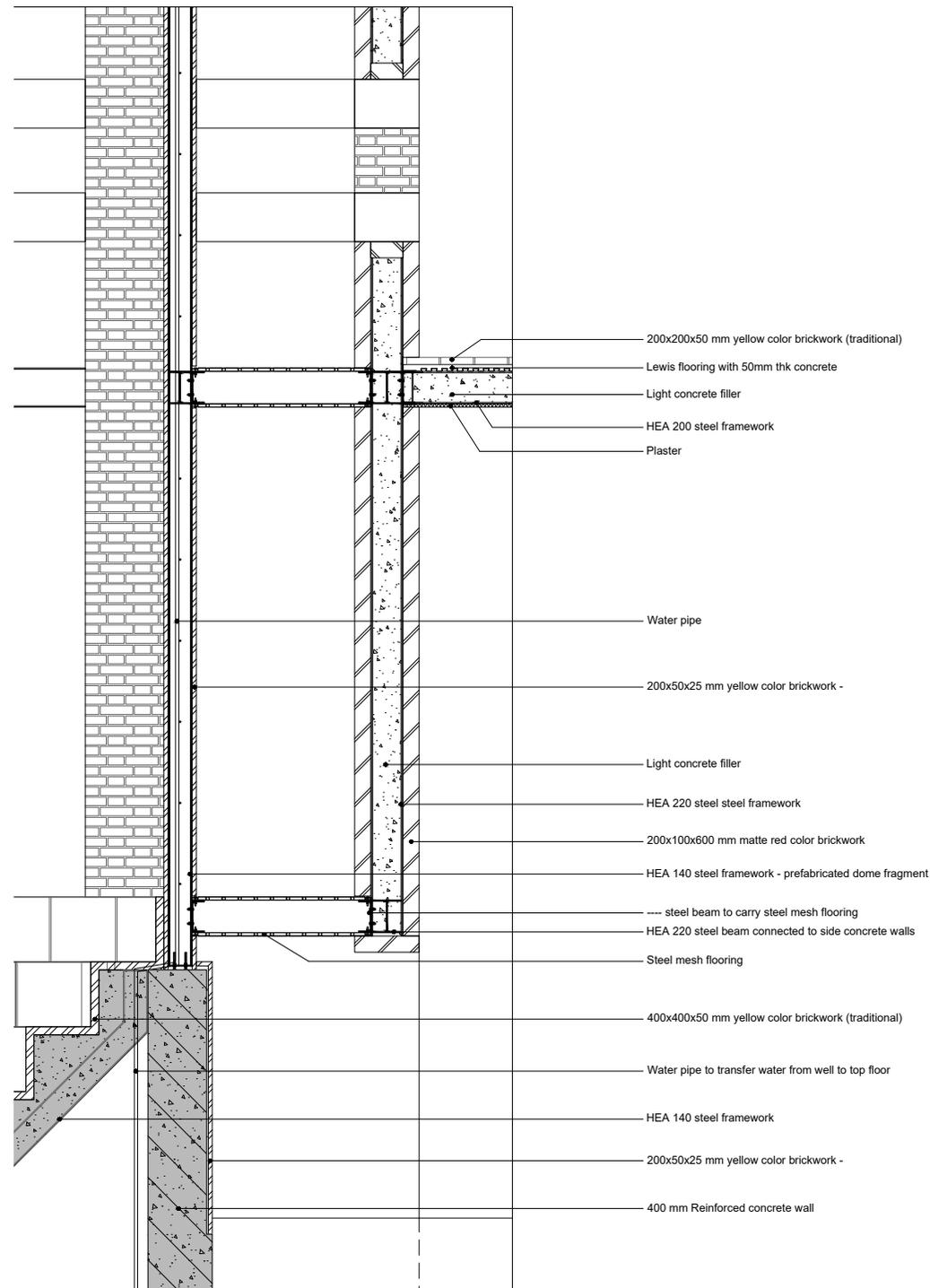


Principle section



principles section - scale 1:75

# Detail principle

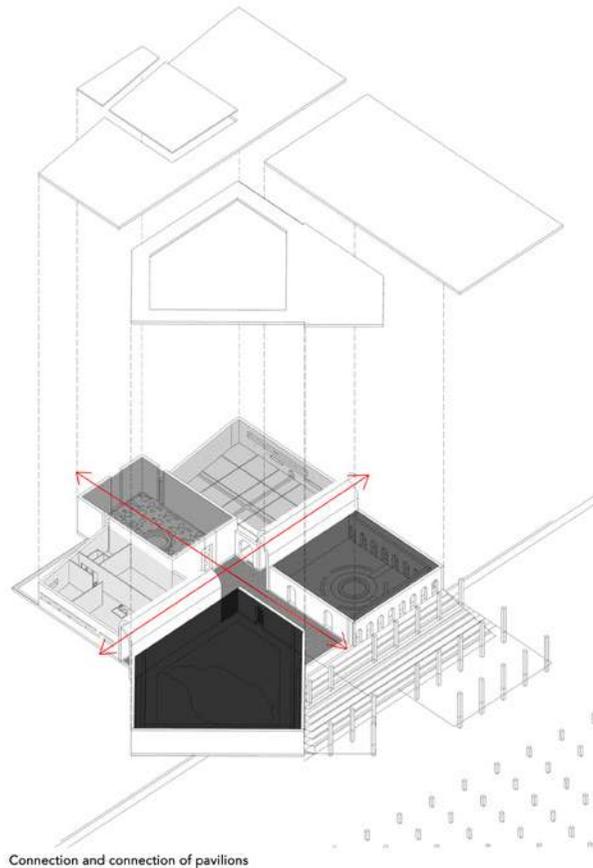


Detail and material principles section - scale 1:20

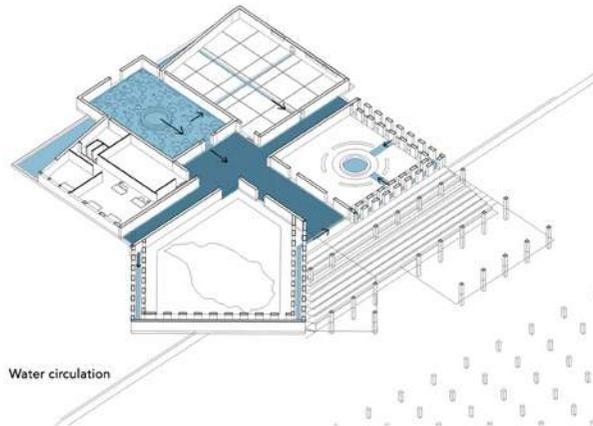
### Pavilion 3.

The third pavilion has been designed as a place to celebrate the existing small amount of water. This Pavilion itself formed from 5 different pavilions which one of them provide the facilities and 4 others are a place for exhibitions and gathering. Every one of these 4 pavilions has been designed according to features and circulation of water.

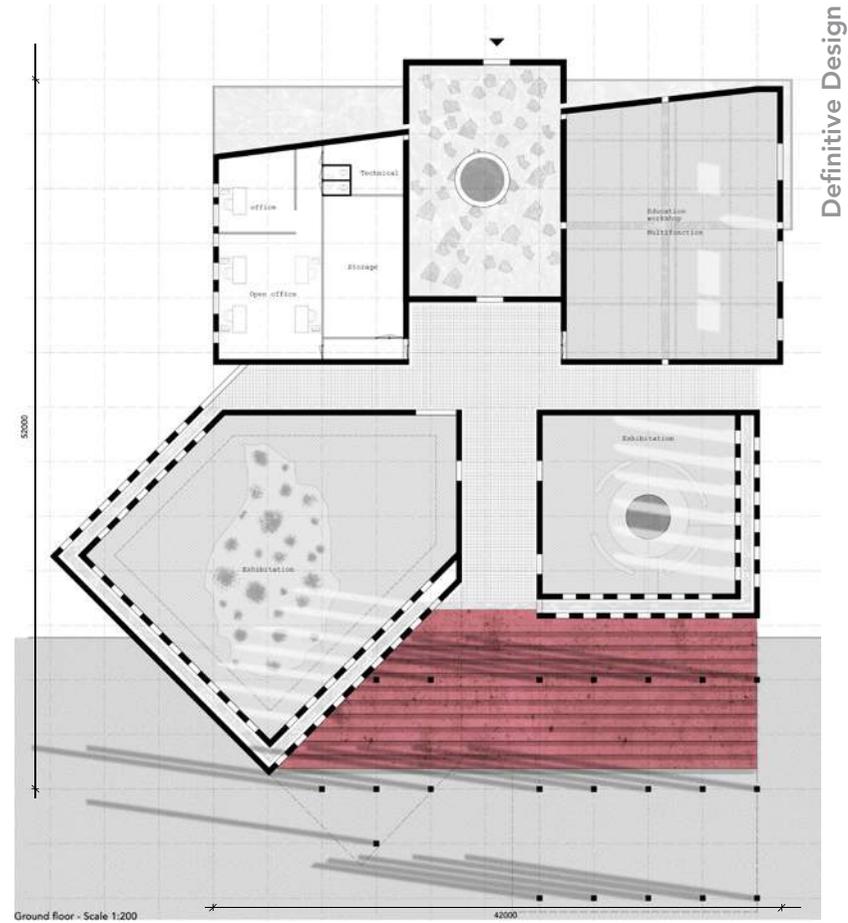
An entrance gate is a place where water pump from underground resources and from there it circulates in the whole building. The way water circulates and people circulation have been shown in drawings. The interesting part about this pavilion is the material which the traditional material has been used like brick and clay. Combination of clay and water create an amazing smell which is water reminder as well. There are few numbers of the short column in the river bed which in the time of river flowing they create waves s in water to remind people the time of lack of w a t e r . This pavilion considers for a place to celebrate all Persian celebration which is related to water. This pavilion provides a place to make all those celebrations alive again.



Connection and connection of pavilions



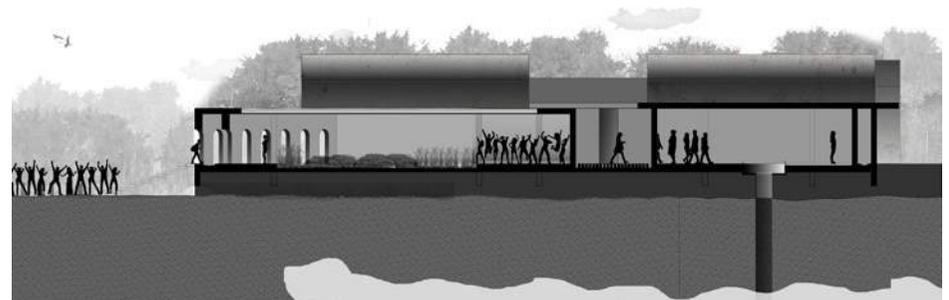
Water circulation



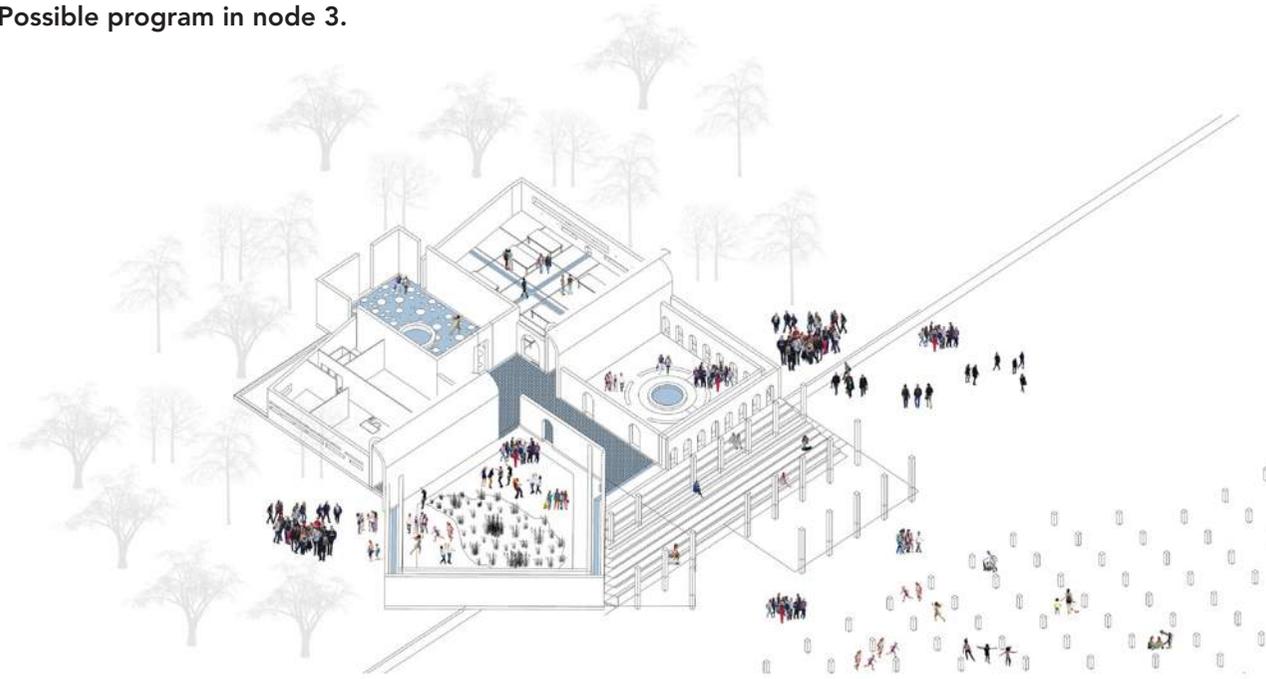
Ground floor - Scale 1:200

42000

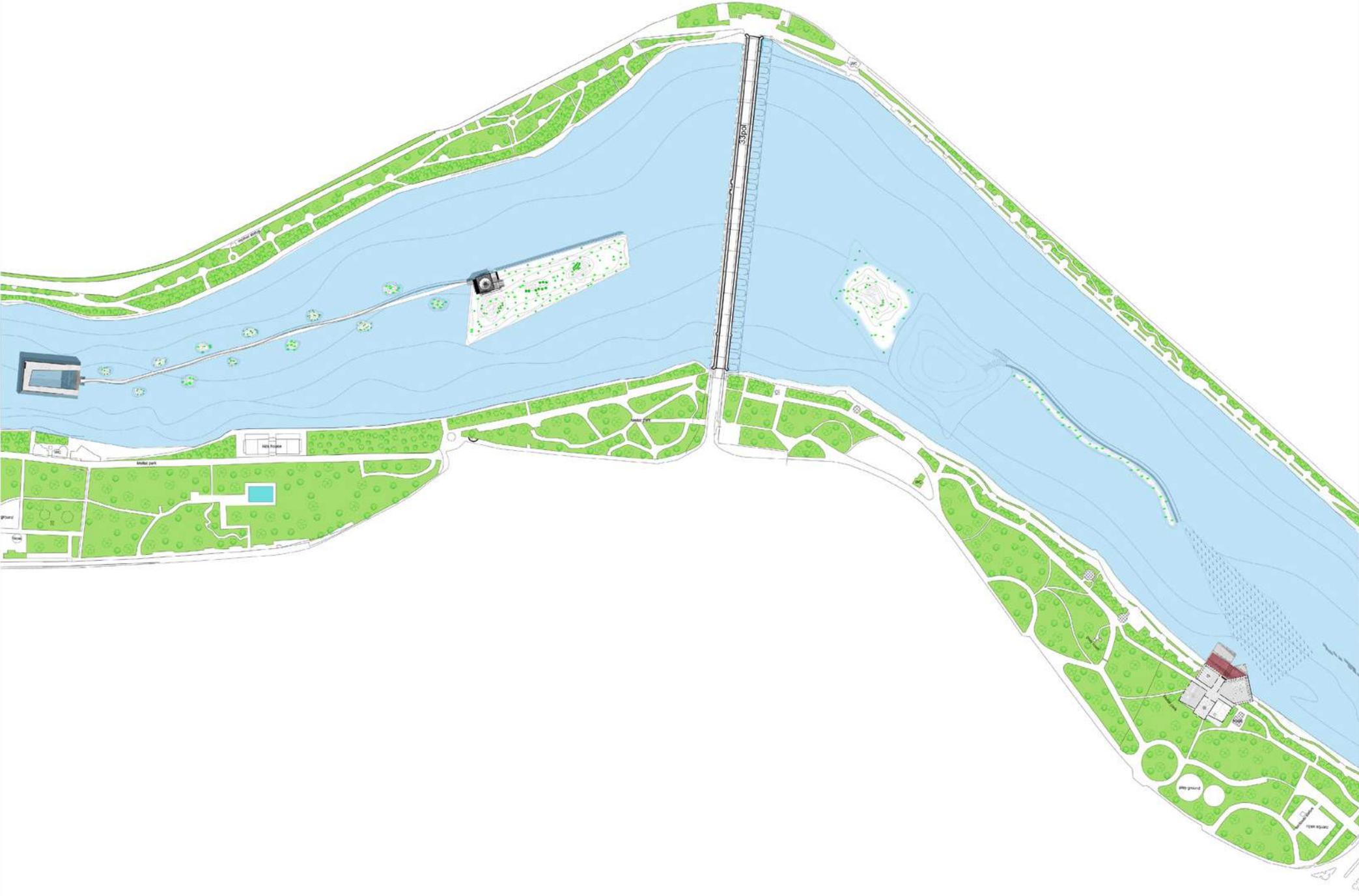
Definitive Design



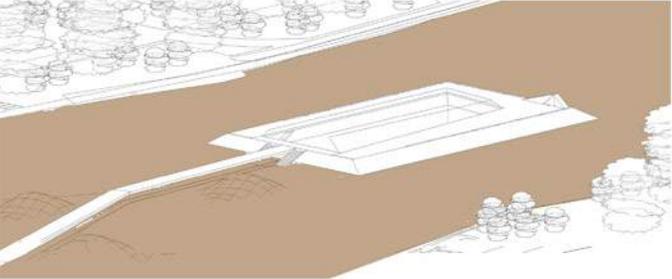
Possible program in node 3.



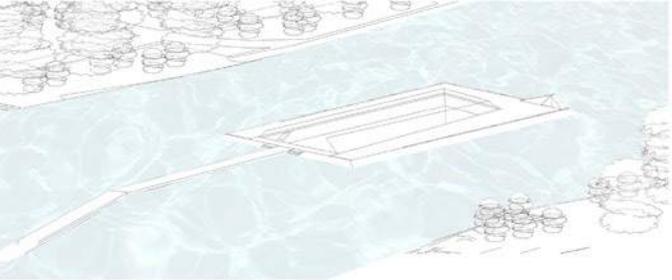
Master plan with water flow in river



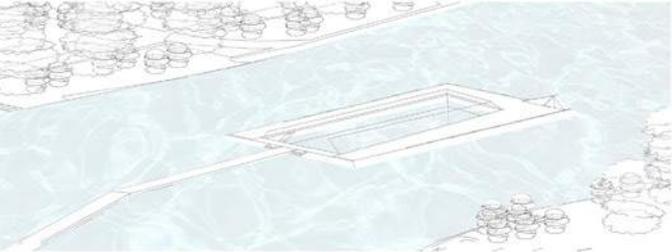
Pavilions in 2 different condition (river with / without water)



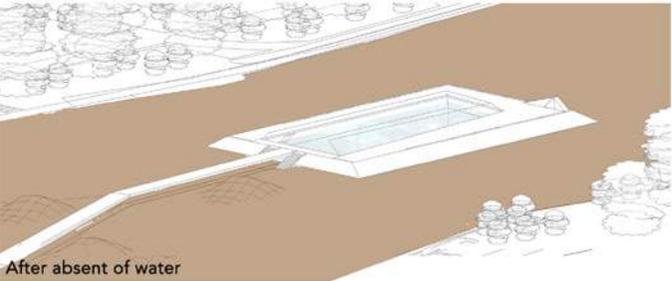
Dried riverbed



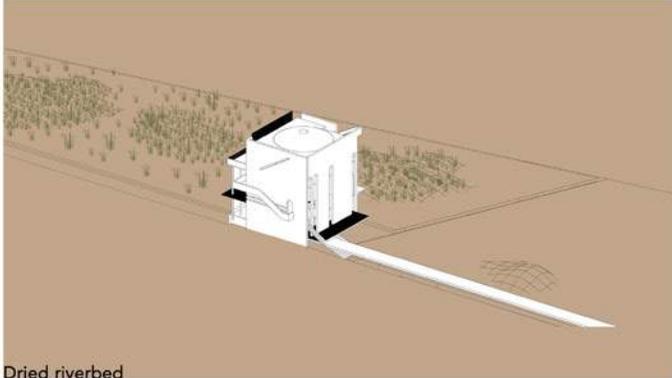
After present of water



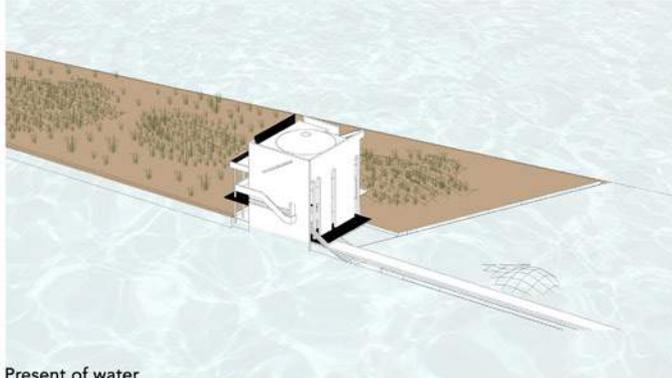
In present of water



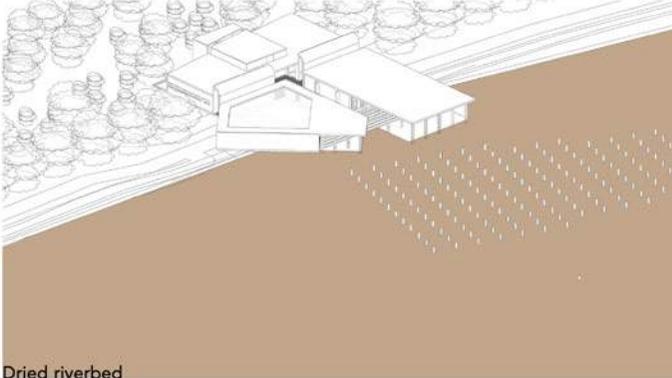
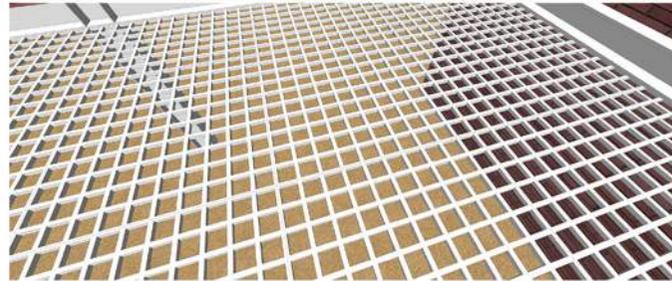
After absent of water



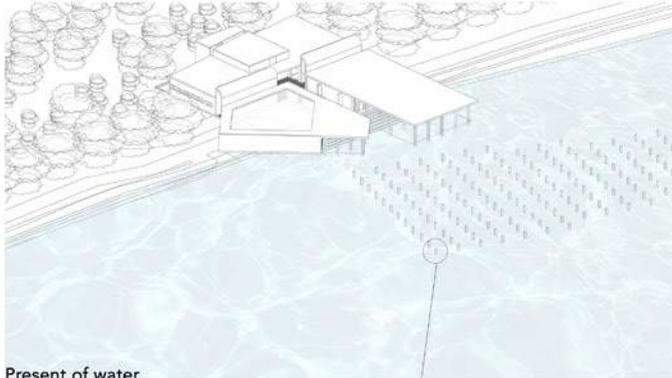
Dried riverbed



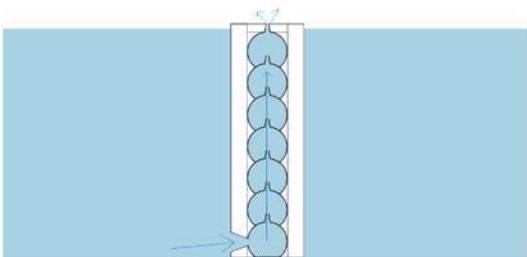
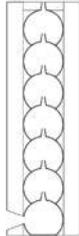
Present of water



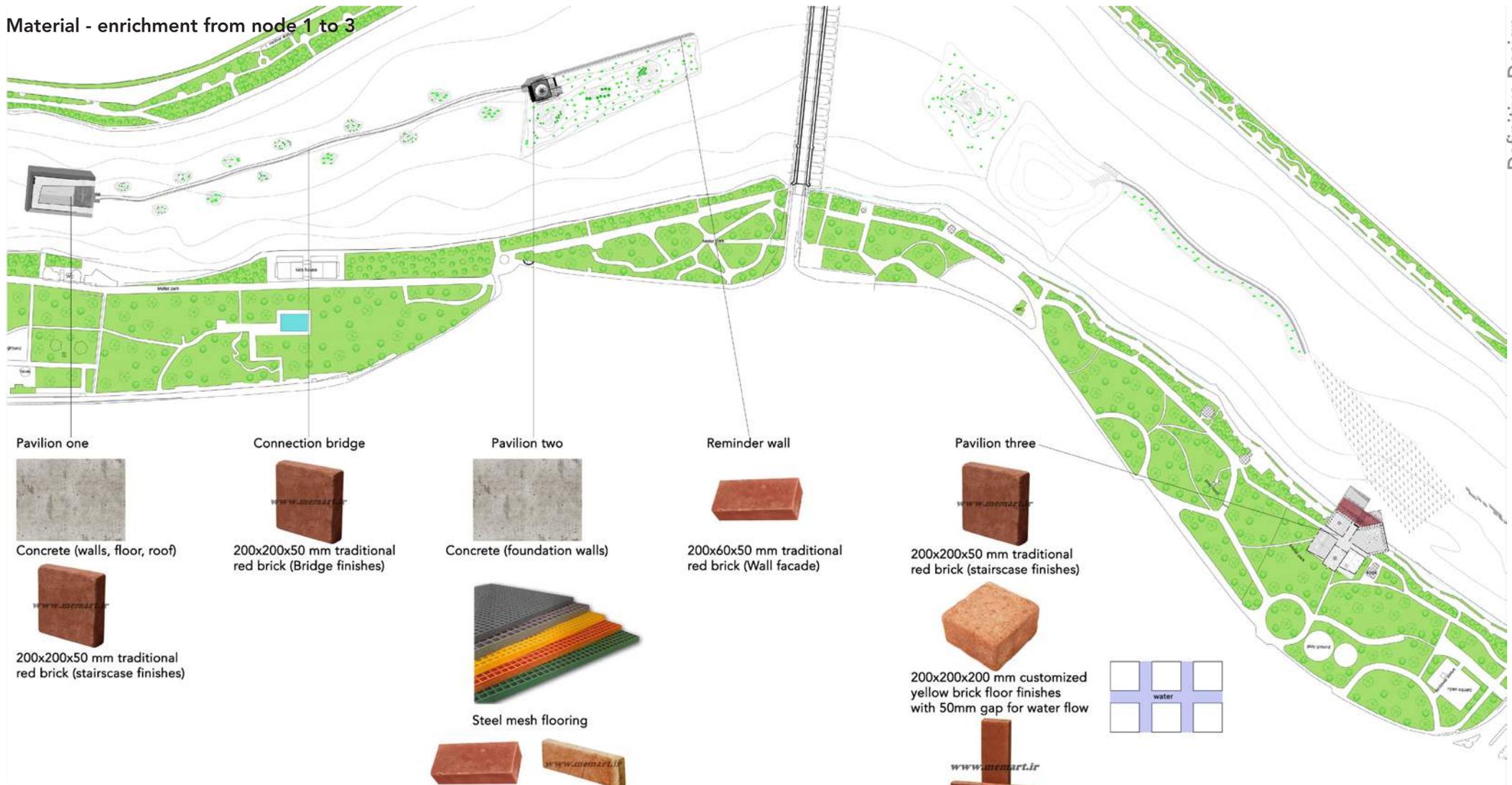
Dried riverbed

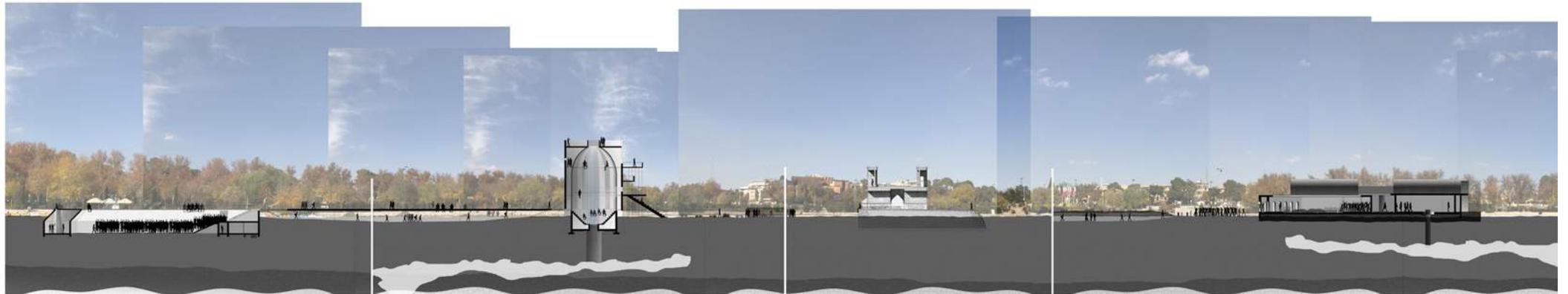


Present of water



Material - enrichment from node 1 to 3





# Final Design



**THE RIVERBED**  
Field of Remembrance





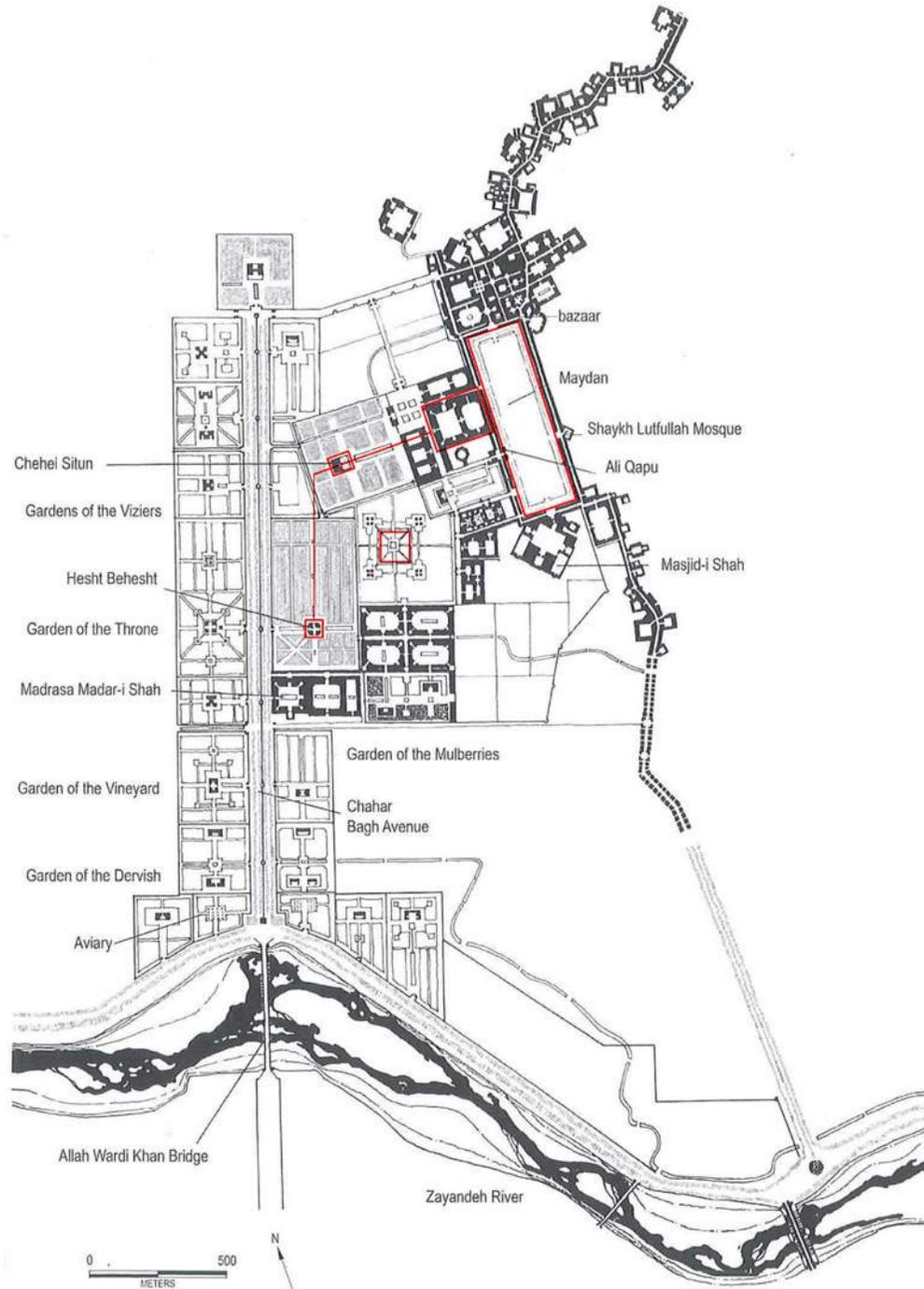
**Water gallery**  
The void of water

**Water chamber**  
Extraction of hidden water

**Water terrace**  
As the scene for the urban water ceremonies



# Initial axis of garden's development in Esfahan



# A journey to the riverbed Field of remembrance



View to water gallery pavilion from surrounding park - dried riverbed



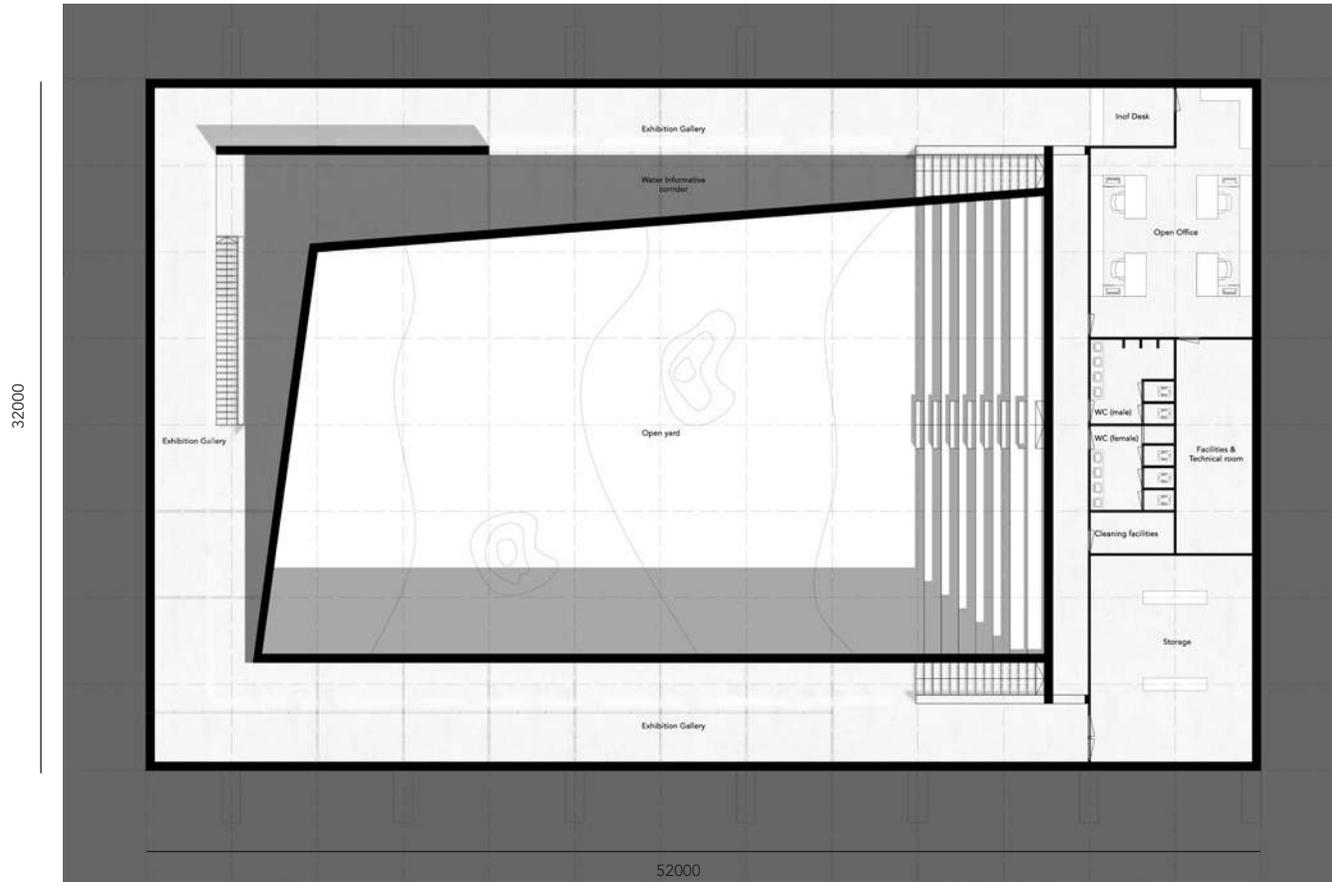
View to water gallery pavilion from surrounding park - existing water in river



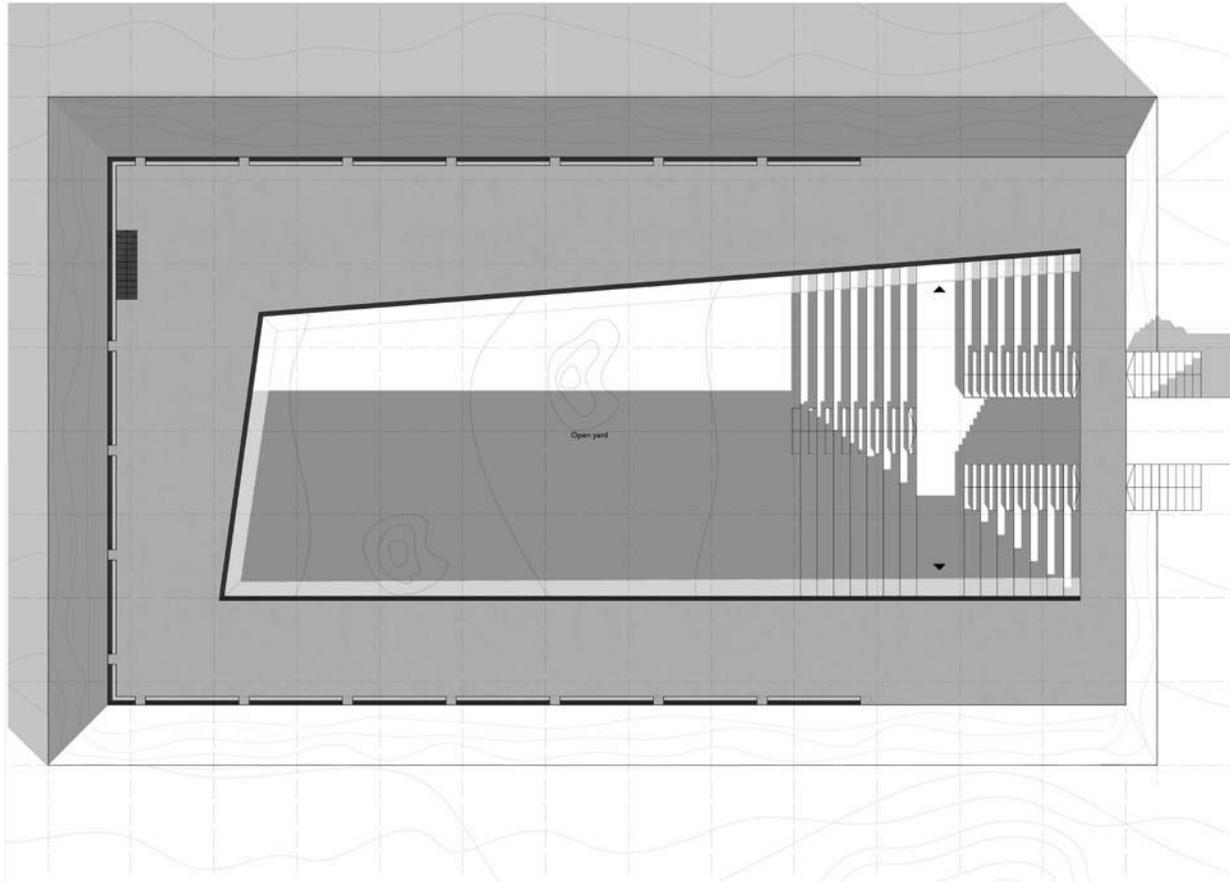
View to event sunk riverbed - a place for every cultural event



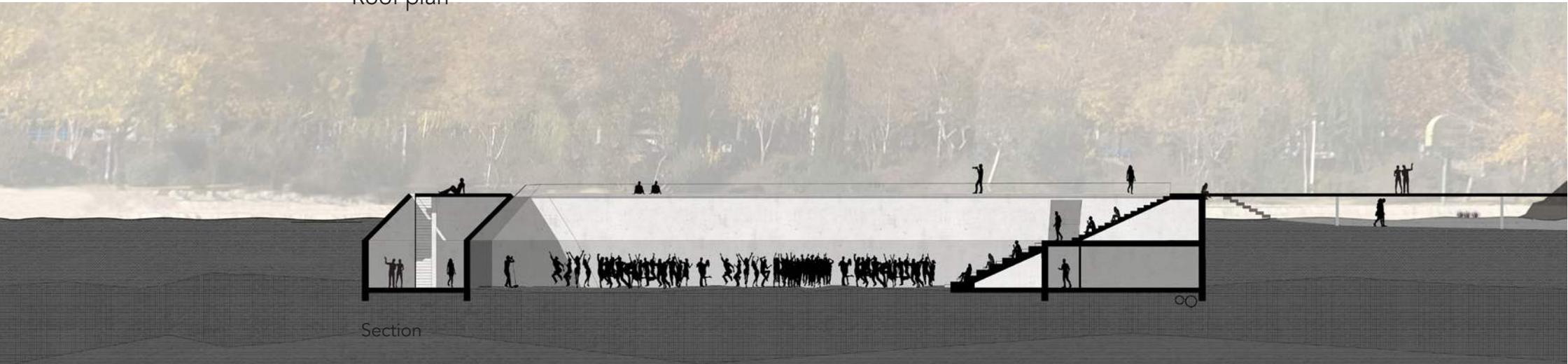
Interior of water gallery - a place for every cultural event



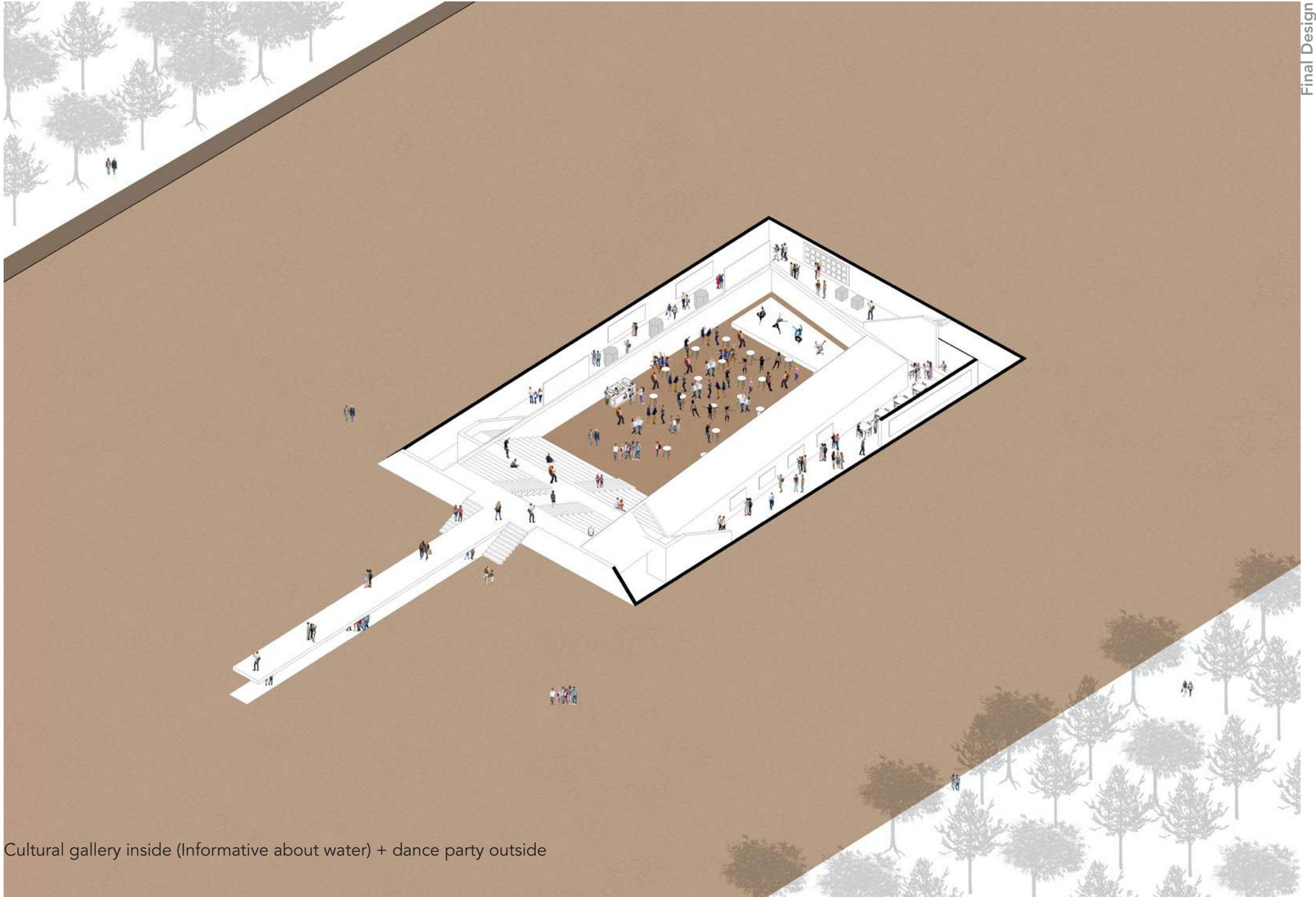
Underground plan



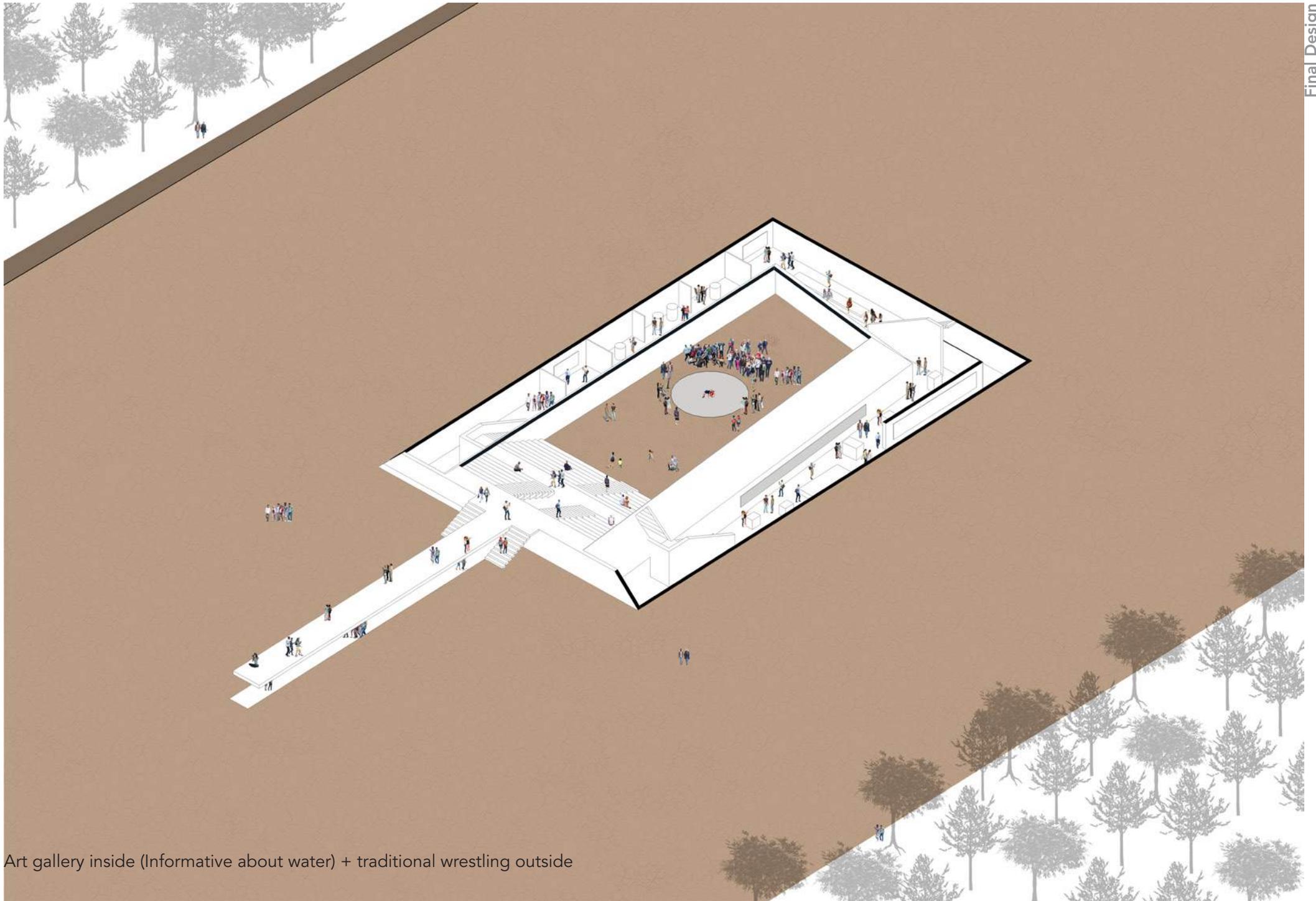
Roof plan



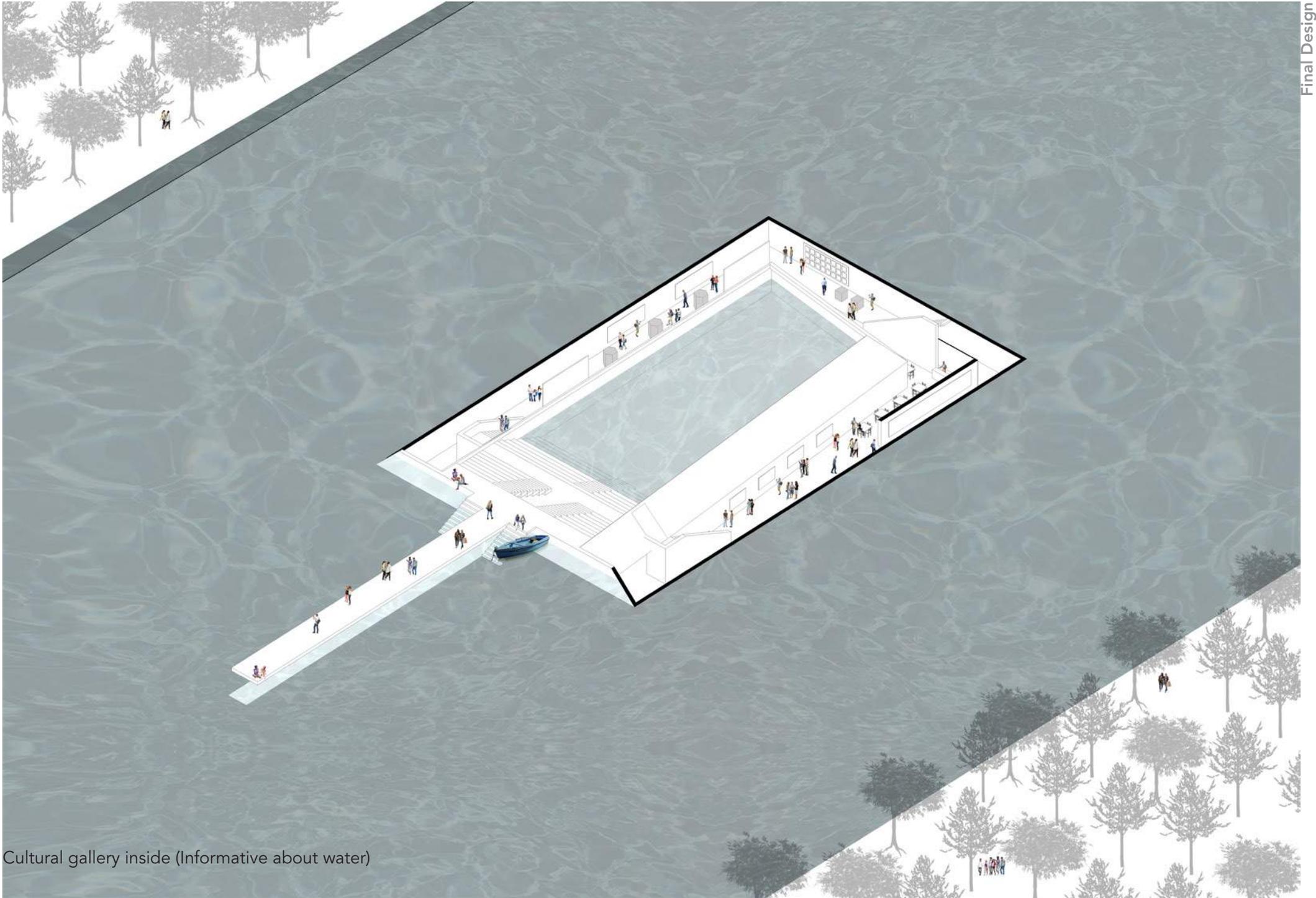
Section



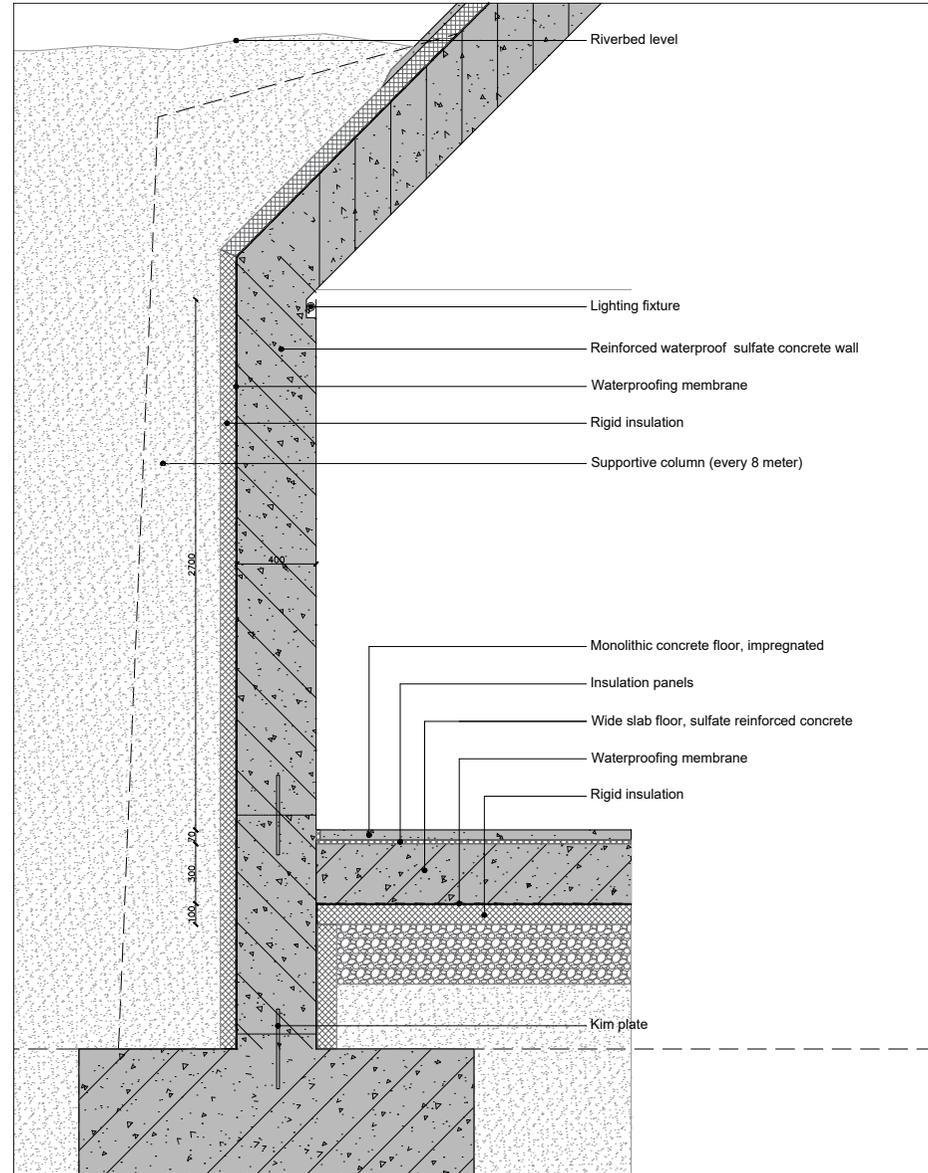
Cultural gallery inside (Informative about water) + dance party outside



Art gallery inside (Informative about water) + traditional wrestling outside



Cultural gallery inside (Informative about water)



# Water gallery

## The void of water



View from the bridge (roof of open corridor) - dried riverbed



View to the open corridor toward the next pavilion - formation of riverbed landscape



View from the bridge (roof of open corridor) - Existing water in river

## **Water chamber**

Extraction of hidden water



View to the water chamber, its surrounding landscape transformation and reminder wall - dried riverbed



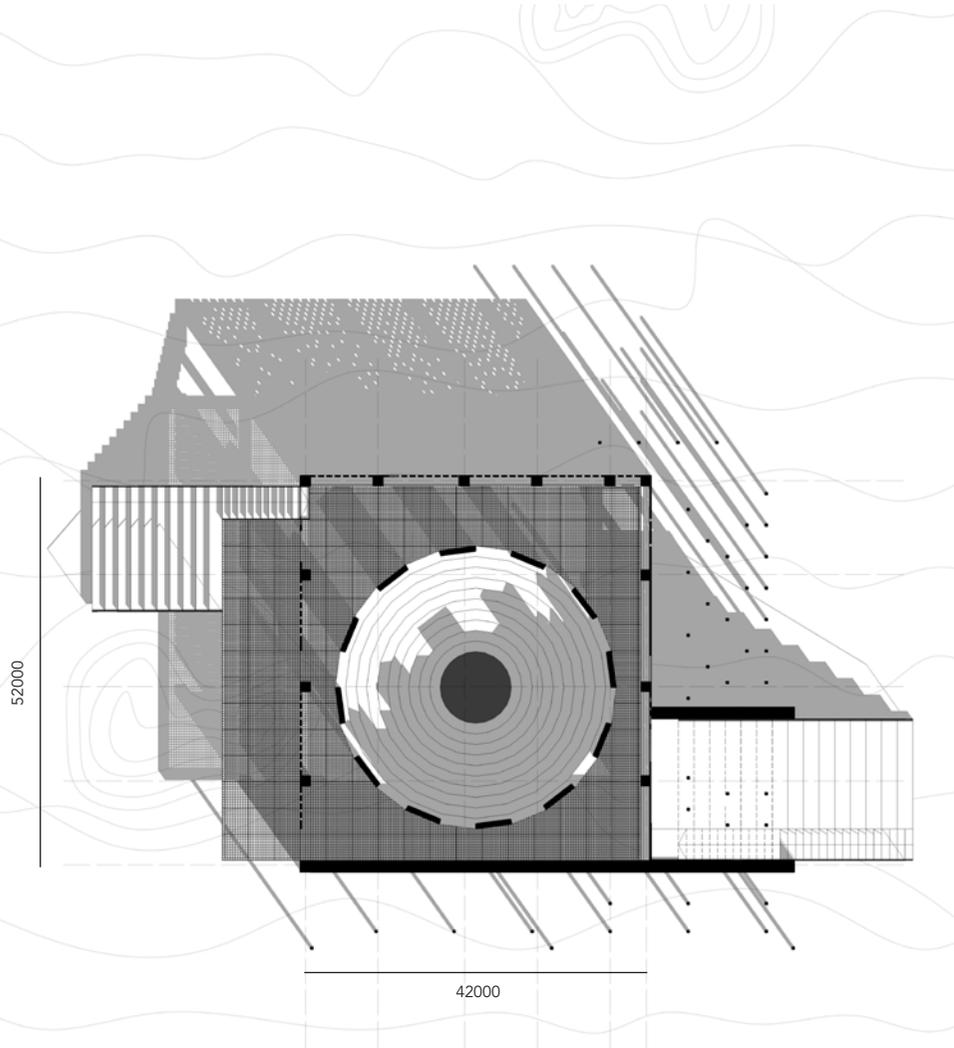
View to the water chamber, its surrounding landscape transformation and reminder wall - existing water in river



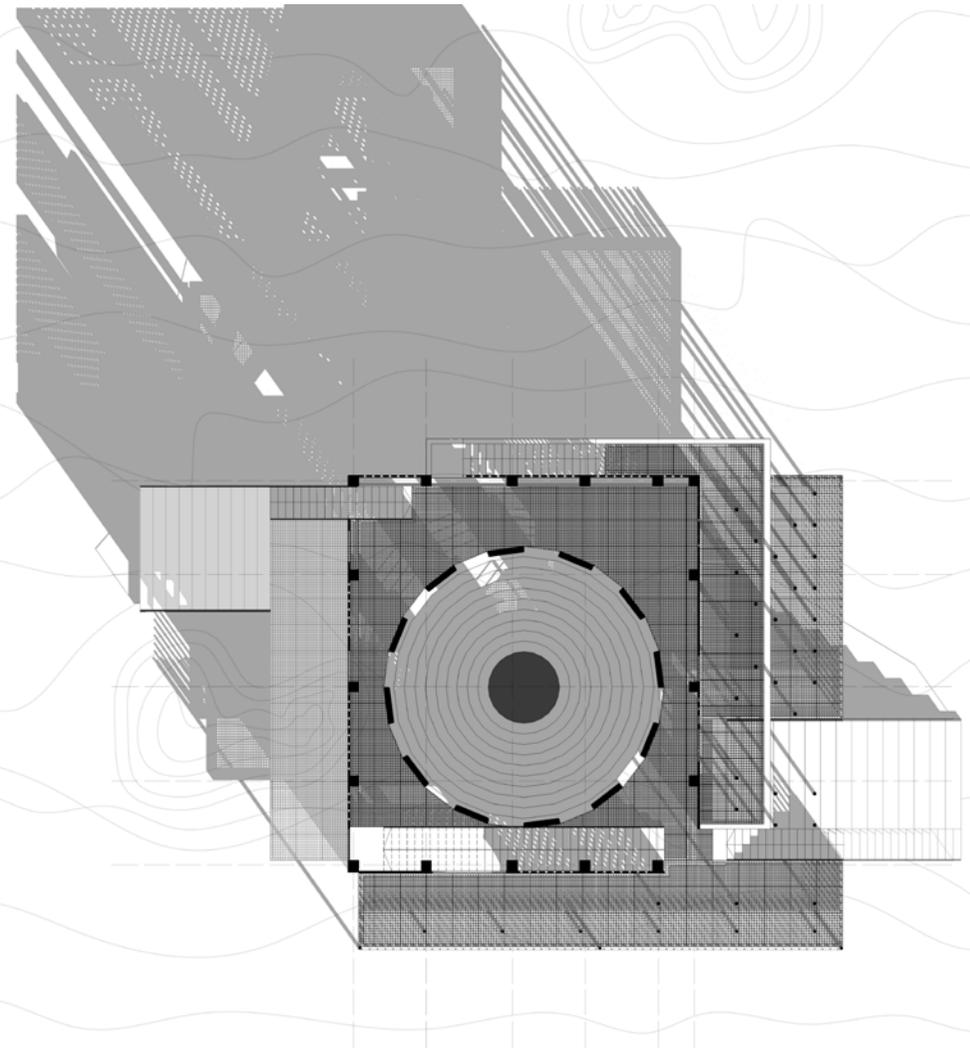
Interior view of water chamber with waterfall in middle



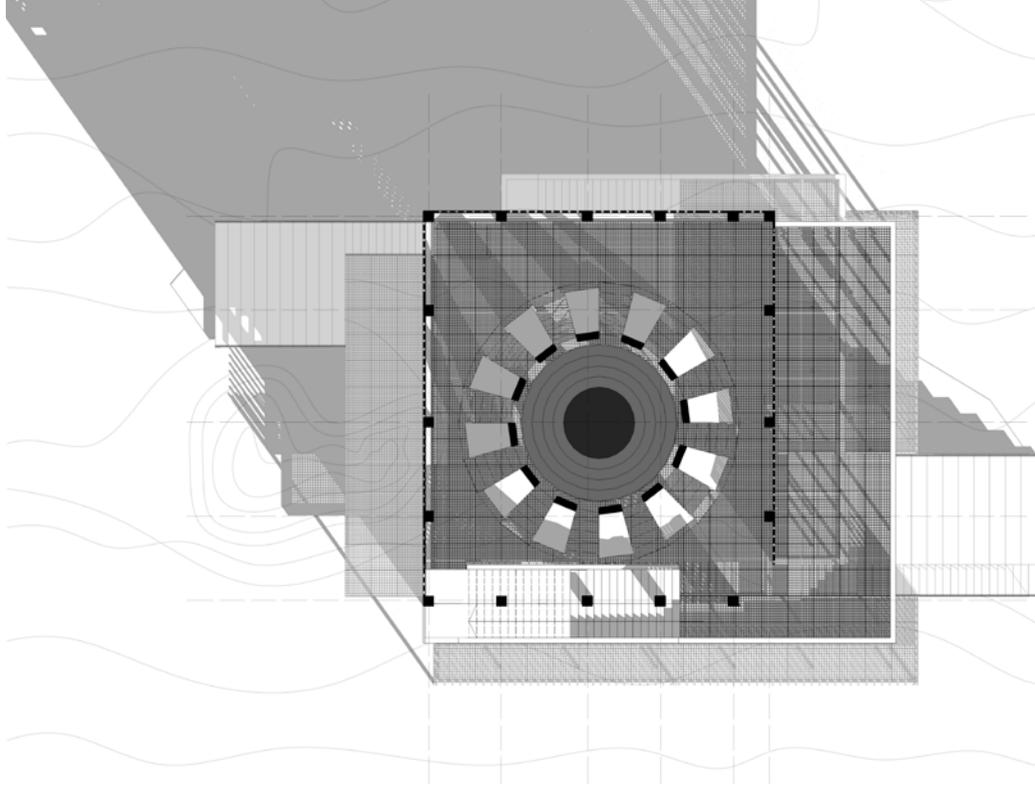
View to the water chamber, its surrounding landscape transformation and desert type vegetation



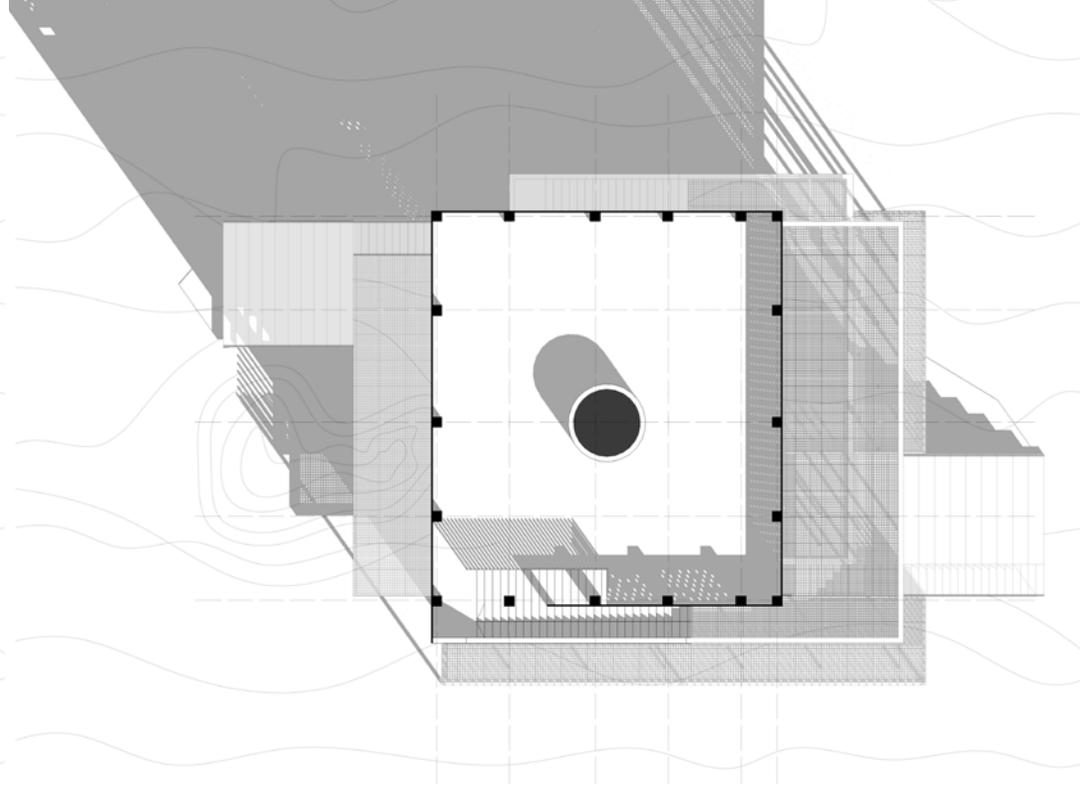
Ground floor plan



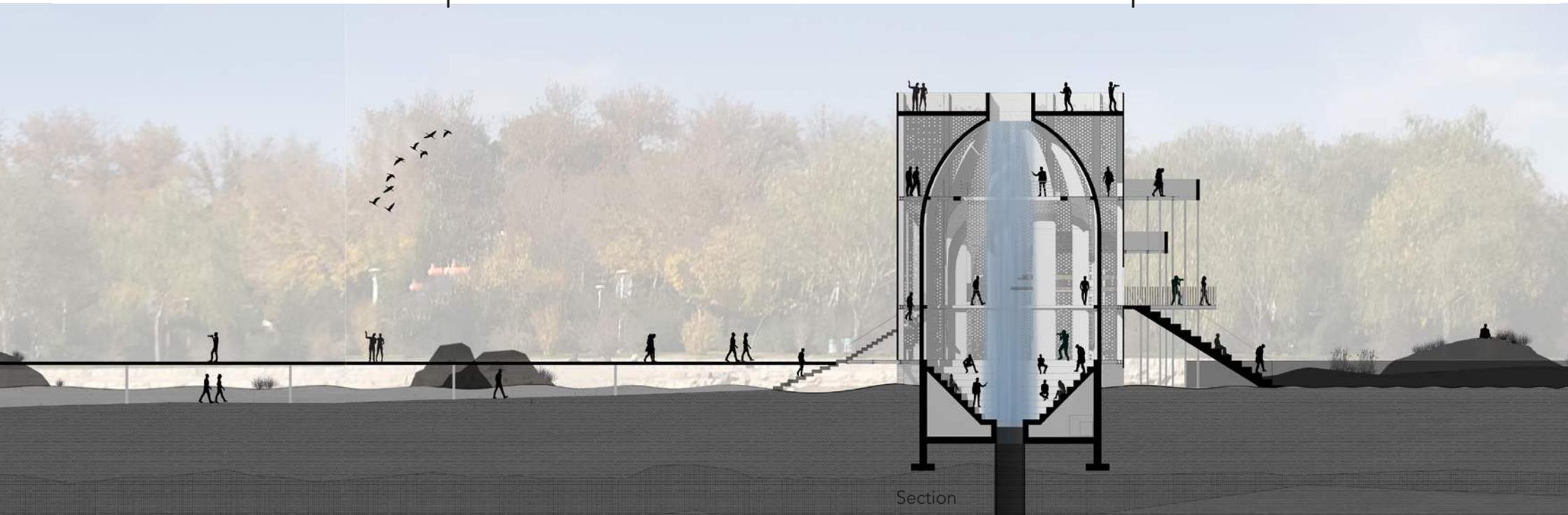
First floor plan



Second floor plan

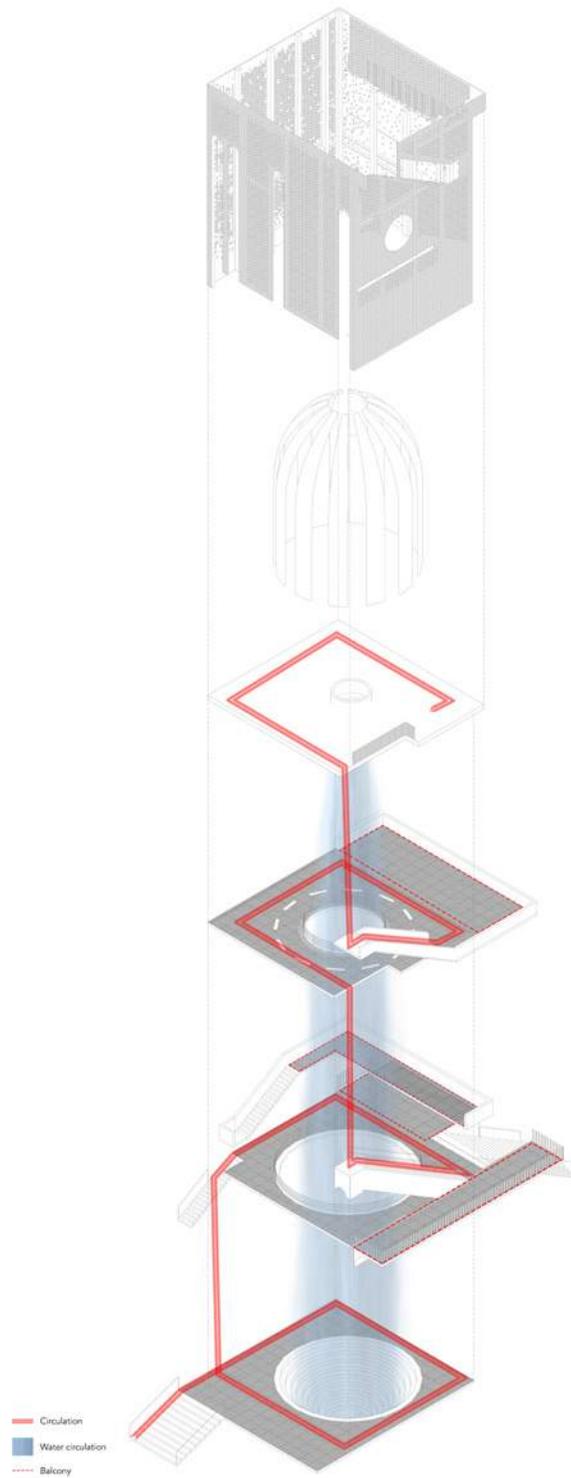


Roof plan



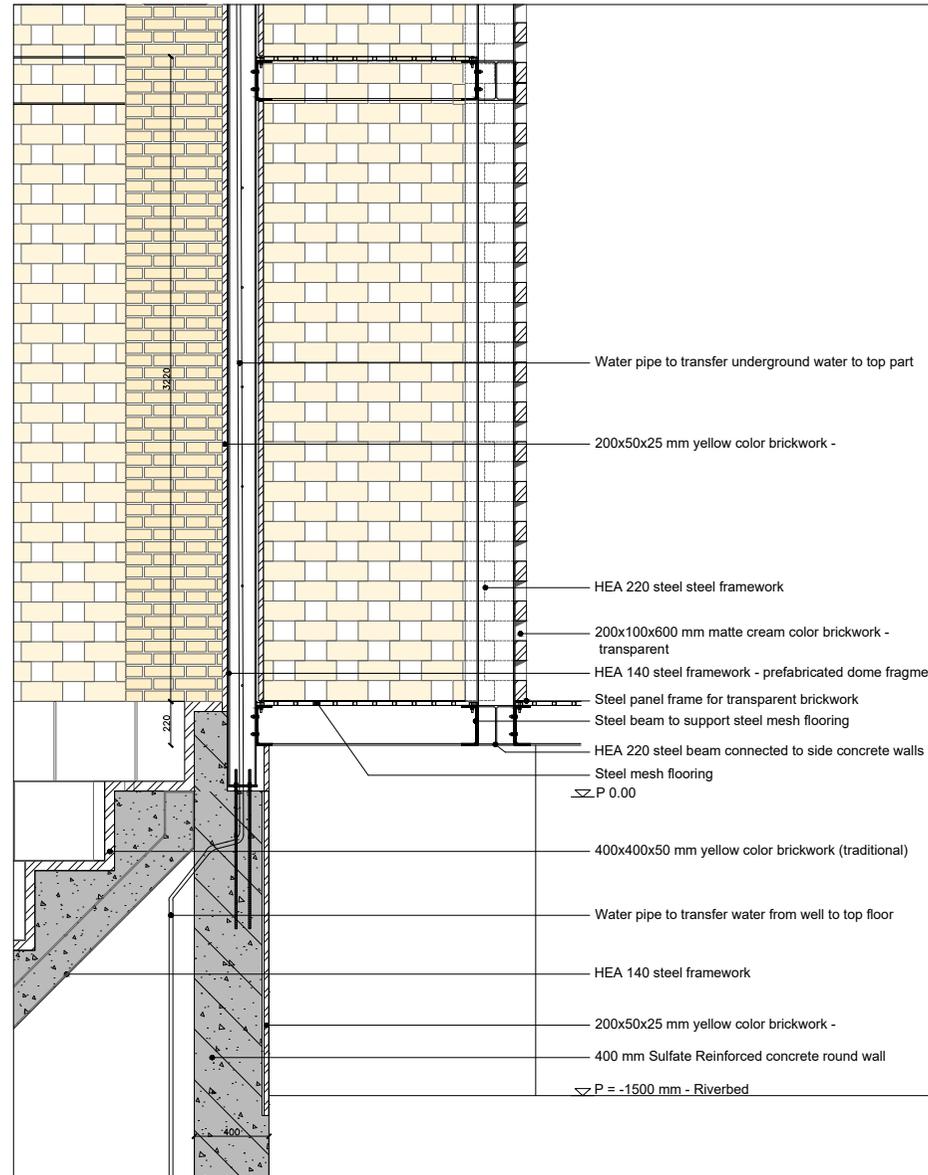
Section

Water chamber exploded axonometric view showing user and water circulation





View to the city from the water chamber



## Water chamber

### Extraction of hidden water



View to riverbed landscape transformation (temporary) and reminder wall - toward the historical bridge



View to riverbed landscape transformation (temporary)

**Water terrace**  
As the scene for the  
urban water ceremonies



View to water terrace - dried riverbed



View to water terrace - existing of water in river

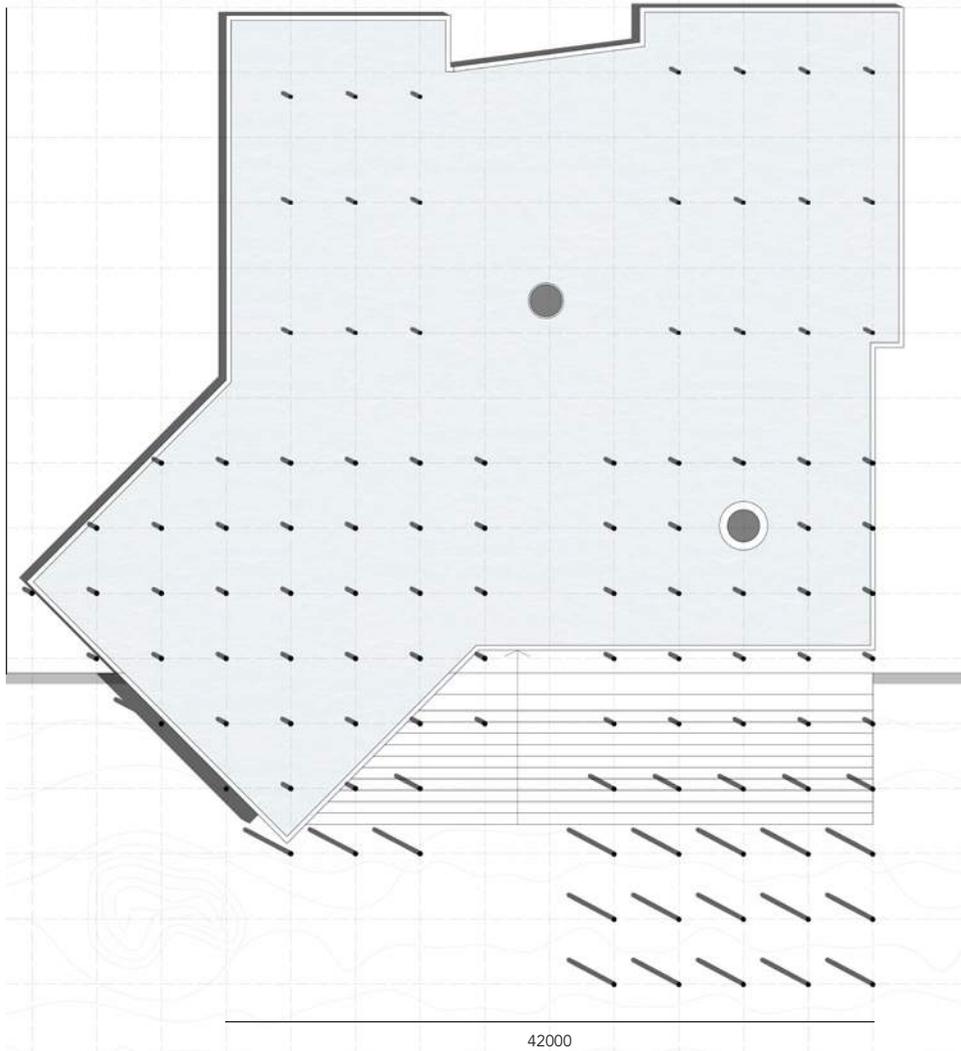


Interior view from water terrace



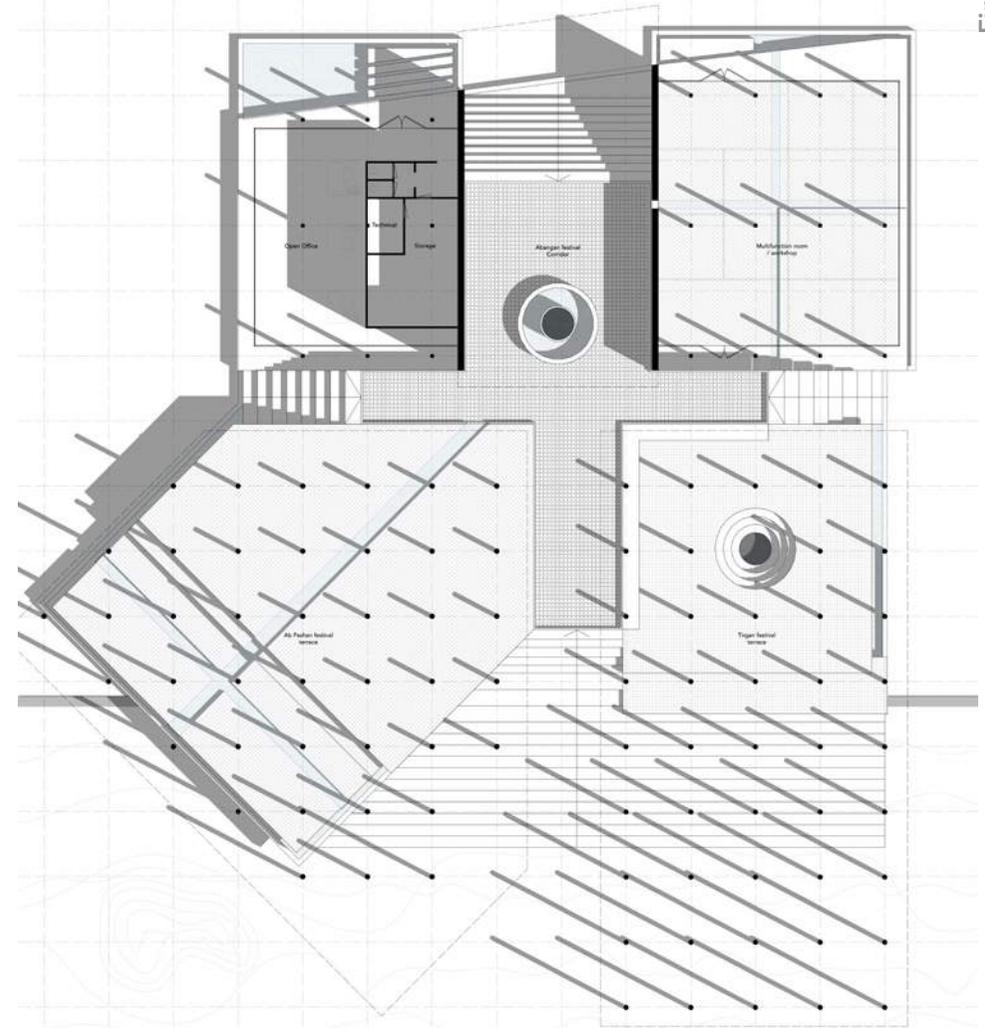
View to water terrace from surrounding park

52000

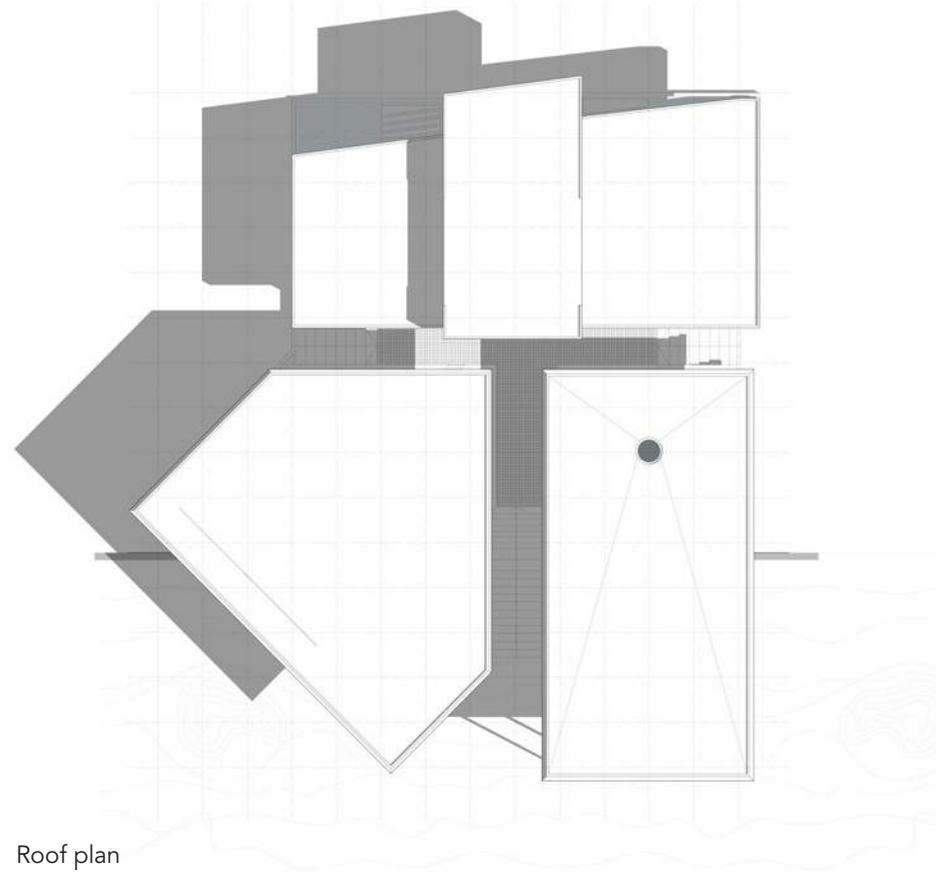


42000

Underground floor plan



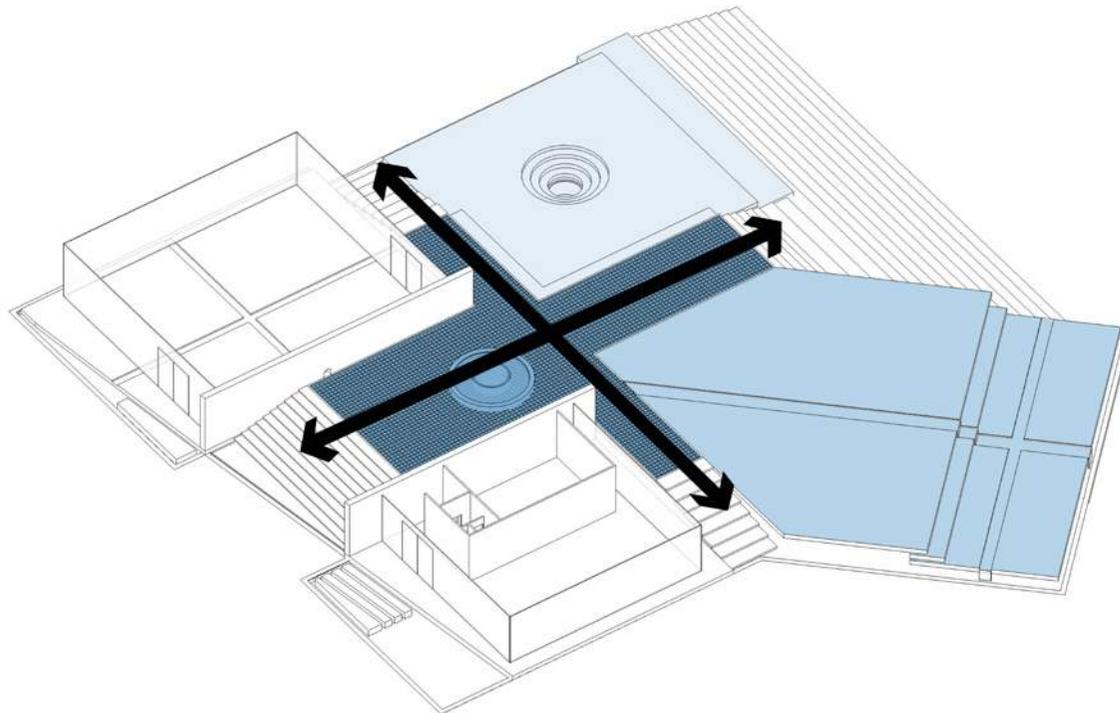
Ground floor plan



Roof plan



Section



- Abangah festival
- Ab pashan festival
- Tirgan festival
- + plan circulation

### Tirgan festival

it held in 10 of July and it based on ex-isting of rain star in that time. people gather near by river and pray for more rain and then they celebrate by pouring water and play.

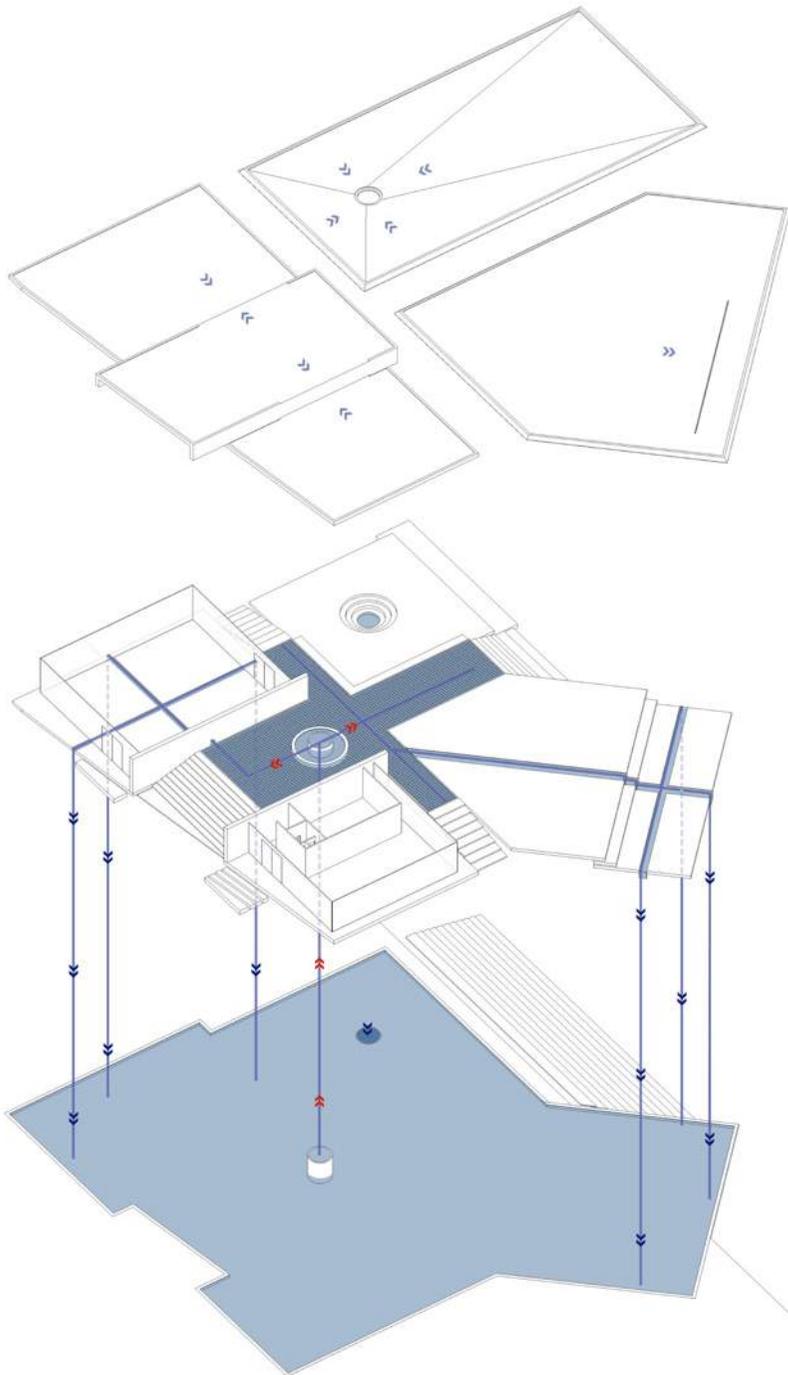
### Ab pashan festival

it held in end of the march. people wear their old and funny clothes and gather together near by river. they pouring wa-ter and play arond. By this celebration they ask god of the water for more rain in spring.

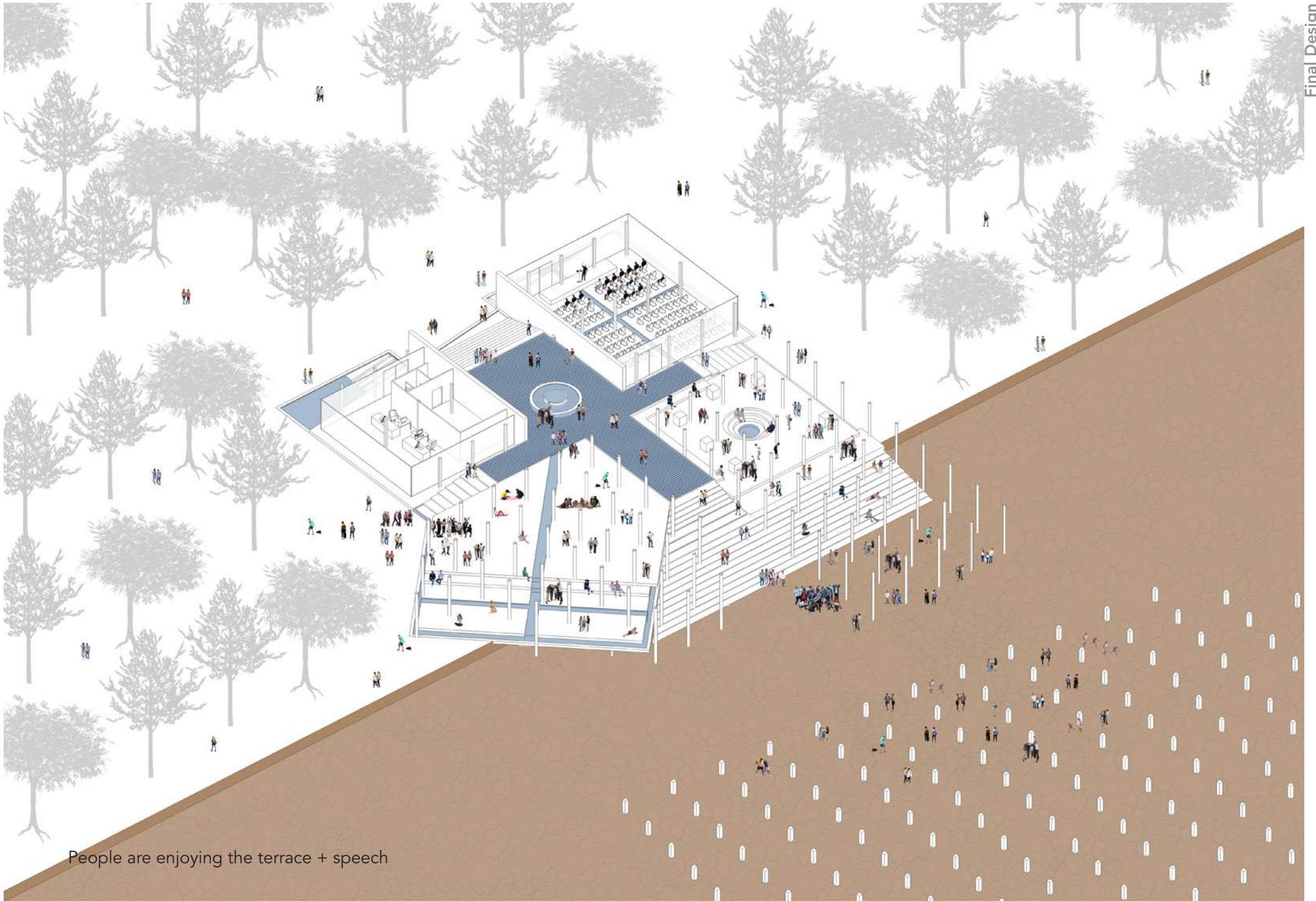
### Abangan festival

This is cermony in middle of atumn to pray for a full of bless winter in case of rain and snow. people gather together somewhere near by river, well or lake for a collective pray.

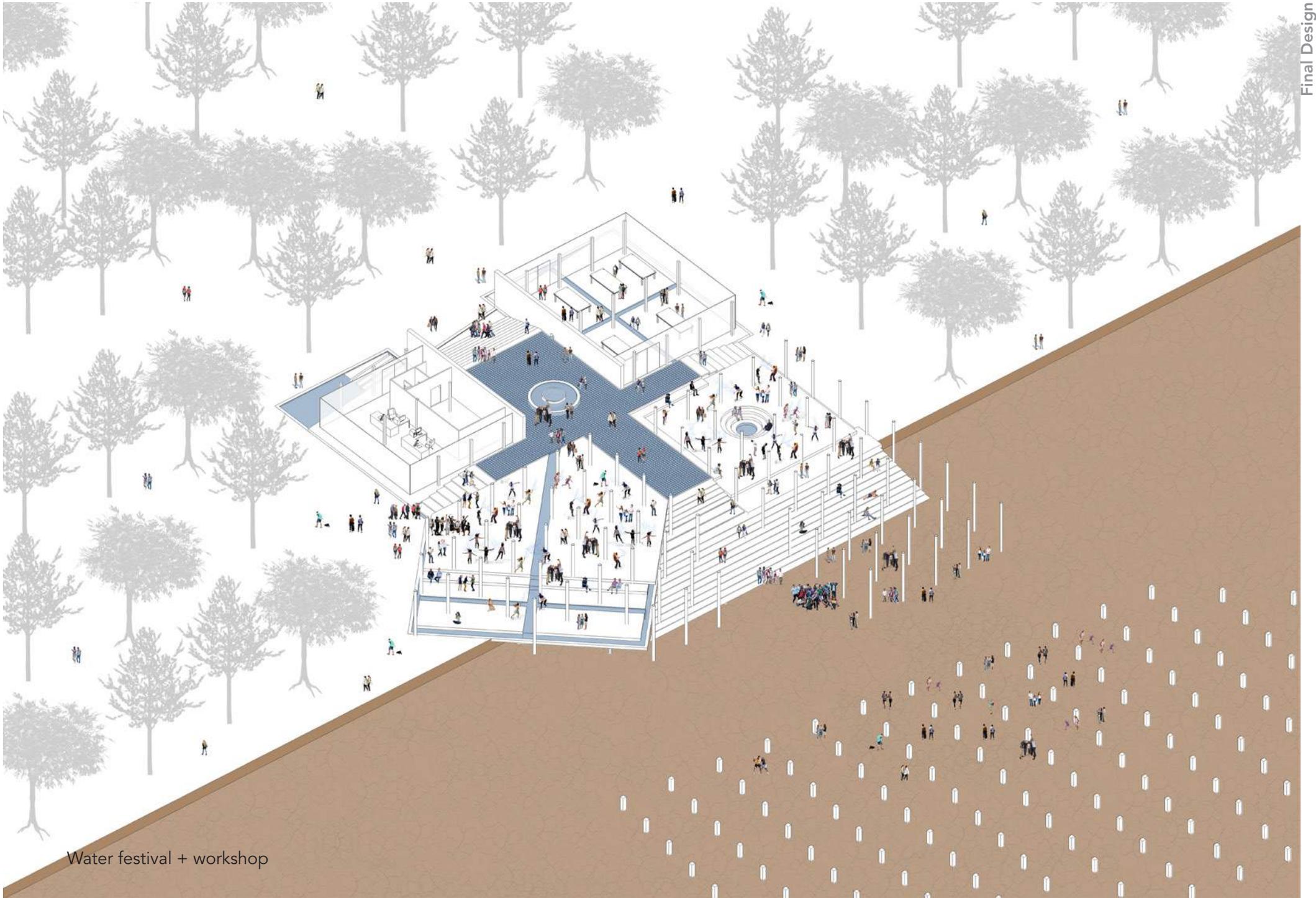
## Definition of space according to different traditional water festivals



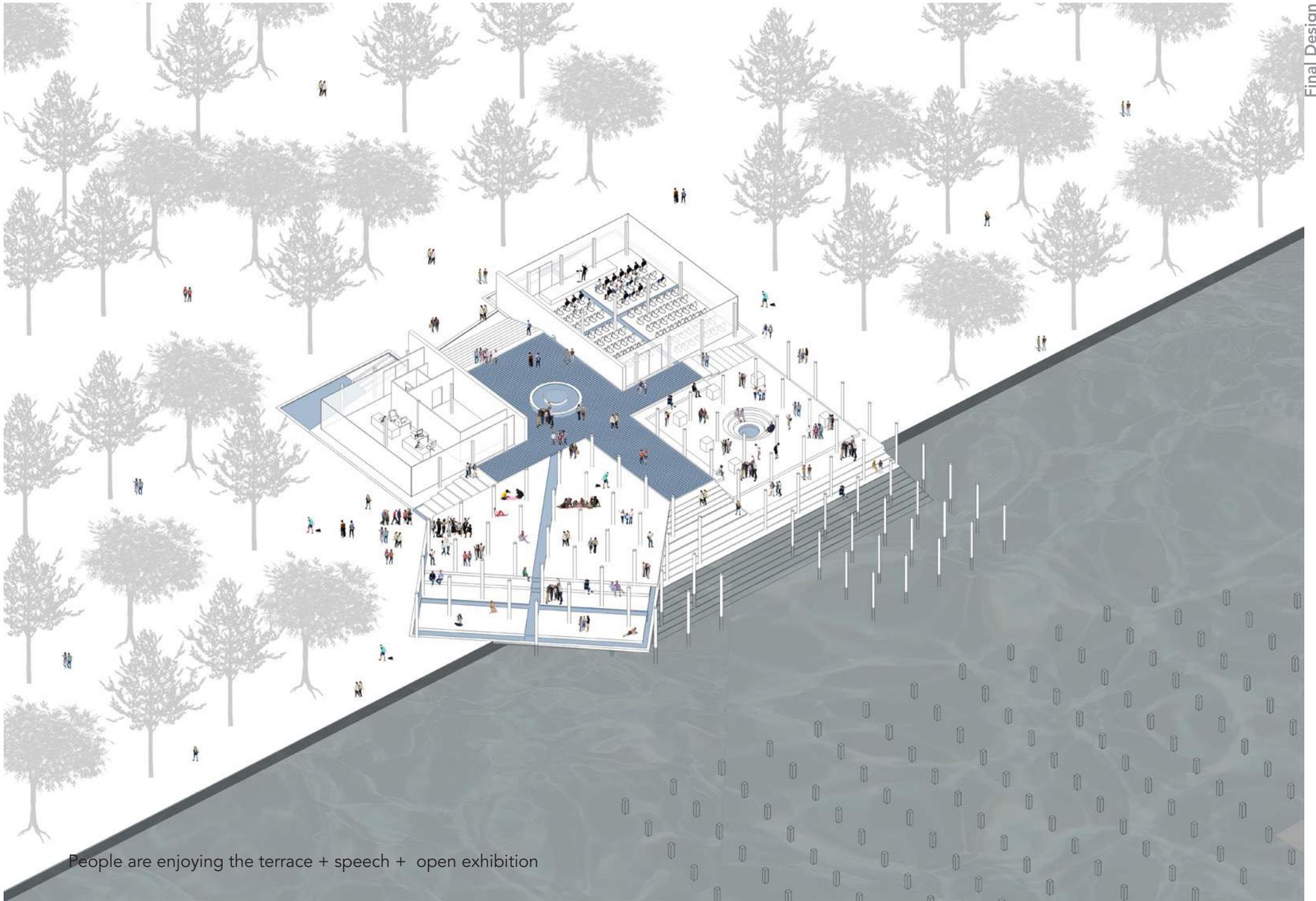
Water terrace exploded axonometric view showing water circulation



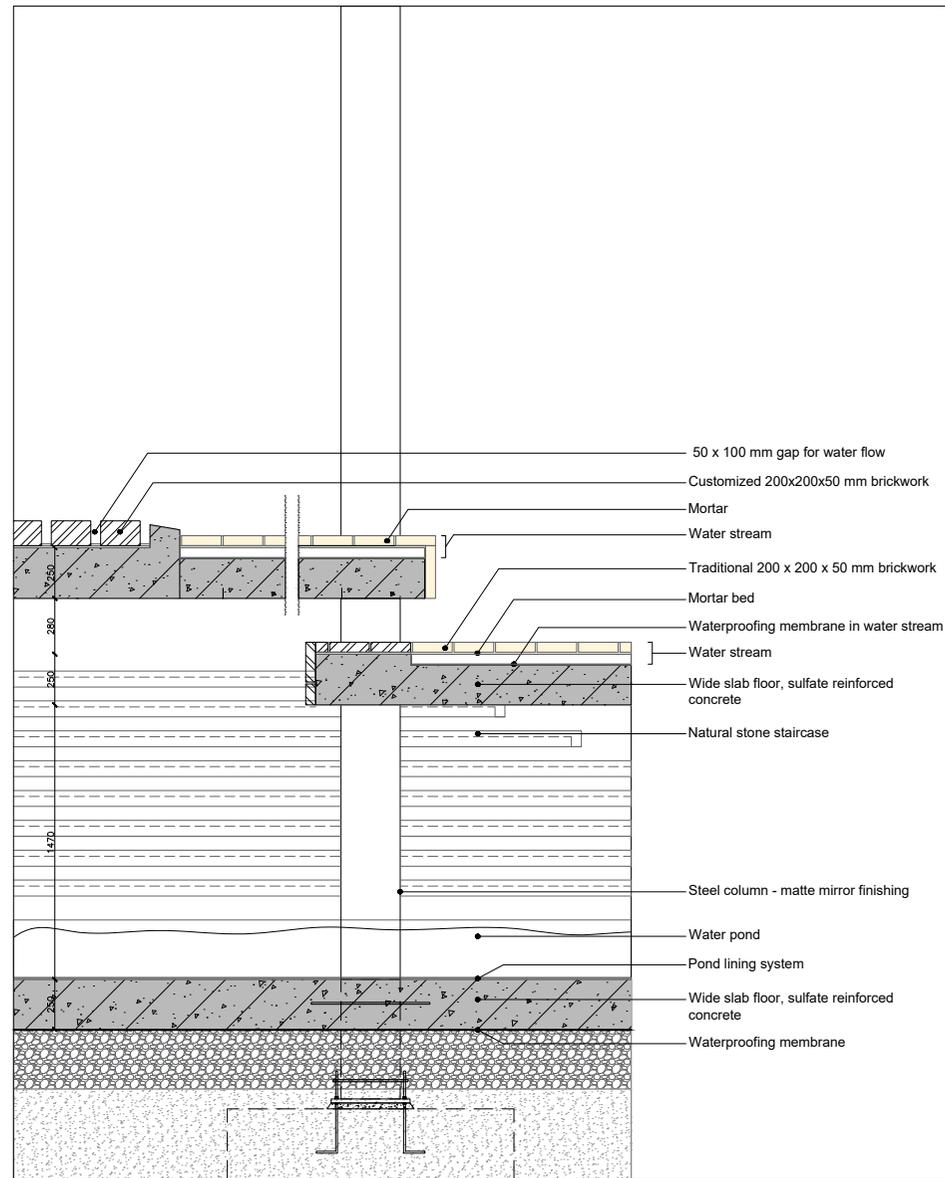
People are enjoying the terrace + speech



Water festival + workshop



People are enjoying the terrace + speech + open exhibition



**Water terrace**  
 As the scene for the  
 urban water ceremonies

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## Tutor and Expert

### Tutor

#### Jan Willem Kuilenburg

Architect

#### Pieter Feenstra

Architect

#### Negar Sanaan Bensi

She is an architect and PhD researcher at TU Delft. She received an honourable mention in National Archiprix 2011 in the Netherlands for her graduation project. Since her research focuses on the relation between architecture and territory, infrastructure and inhabitation specially in context of Iranian plateau, therefore she can help me to understand the territory of Iran and its relation with architecture and its necessities. According to her knowledge and experience I believe she will guide me in right direction in my project about defining different spaces by considering time and social and cultural aspect of water which it will be experience by people.

### Experts

#### Ashkan Iranpour

He is graduated in Archeology in Iran. He did studied several years about architecture of Iran in different period of history.

#### Ali Jazbi

He is an architect and he hold a Ph.D. in History of architecture. He is professor in Tehran University. As I plan to design in territory of Esfahan I believe he help me to understand the relationship of architecture with that district and territory better which is one of the important consideration in my project.

#### Frank Doomen

Architect - Technical advices

#### Mohammadhassan Baktash

Civil engineer

THE END  
THE RIVERBED  
Field of Remembrance

