

The image shows a modern architectural interior with a wall of horizontal wooden slats. A concrete planter with tall grass is in the foreground on the left. A dark, overhanging structure is above, and a window with vertical bars is in the background. Light creates strong shadows on the floor and wall.

Sammana Hasan

Architectural design portfolio

a compilation of **undergraduate design studio projects** (2007- 2013),
Dept. of Architecture, Bangladesh University of Engineering and Technology
and **Professional Works** (2014- 2016)

Bangladesh as a nation inherits the legacy of an eternal and colourful past and tradition. The forest cover, flora and fauna, and a smoothing natural environment is mingled with our tradition. Different regions of Bangladesh manifest different natural heritage. In the south-western region of the country there lies the great forest of Sundarbans, the Shalban in the middle and the evergreen hill forests in the South-East. A great variation in flora and fauna develop a different and distinct ecosystem.

Furthermore, Millions of Bangladeshis depend on the forest resources, be it for daily subsistence needs or for commercial opportunities. Despite hosting generations of diverse flora and fauna, the country's forests and wetlands are undergoing progressive environmental degradation in the form of land encroachment and over exploitation, resulting in ecological degradation.

In Bangladesh to address the deforestation and bio diversity conservation, the government has taken alternative forest management strategies; forests or part of forests have been declared as protected areas according to the IUCN categories and initiated collaborative management approach to include the active participation of the local forest users.

Recently, Bangladesh Government has taken initiative to establish ecoparks at different places of the country. Shitakunda eco park and botanical garden is the first of such establishments in our country. The first Ecopark & Botanical Garden has been inaugurated at Chandranath Hill and surrounding areas, located in Sitakunda upazila of Chittagong. The place is rich with tropical evergreen and semi-evergreen forest flora and herbs, shrubs, creepers and climbers of diversified habits.

According to the brief description of the project (establishment of the eco park), undertaken by the Forest Department the specific objectives are:

- _ To Conserve & develop valuable & rare species through collection & raising plantation.
- _ Alternative Livelihoods Development training and support for SEP-dependent communities.
- _ To construct different infrastructure for the promotion of eco-tourism.
- _ To create research & education facilities for the relevant institutions like Institute of Forestry, BFRI, Forest Academy, Chittagong and so on.
- _ To maintain a rich gene pool of flora and fauna for the purpose of conserving biodiversity while supporting infrastructural developments to encourage students, teachers, researchers and visitors alike to visit the Eco-Park.

But unfortunately establishment of the park was all that took place while the necessary physical infrastructures to carry on the site specific research and educational activities were totally ignored.

According to the "Development plan for Shitakunda Eco park and Botanical garden", there is a tentative future development plan, visioning the research and environmental education activities. Some important points of the proposal are:

- _ Create research and education facilities (particularly the Herbarium, Museum, Environmental education facilities, research stations and information center).
- _ Arrange training programs among local people to extend garden's activities, environmental awareness and other areas whenever identified necessary.
- _ Create site specific recreation and visitor's facilities as needed.

The aim of this project is to raise awareness within the professionals and general people in our country about the conservation of our national protected greens. In order to give a framework to the idea this particular project is formulated and its functions have been derived accordingly. This project will encourage the professionals (researches) to contribute in their respective fields for conserving nature of Bangladesh. It will also encourage environmental stewardship among the young generation by providing educational facilities.

The design process is conducted in 3 phases to achieve the overall conservation of Sitakunda Eco Park. The phases are:

- Phase 1:** Analysis of the present condition, accumulate the conservation activities that should be taking place.
- Phase 2:** Proposal of a future development plan with the intervention points where some necessary infrastructures will be designed to accommodate the conservation activities.
- Phase 3:** Detail design of the intervention points



Design studio X
Year 2013

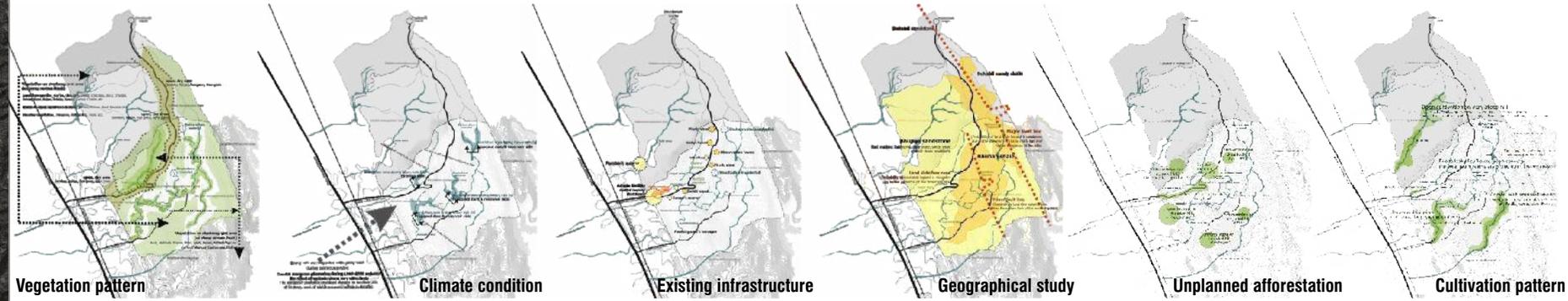
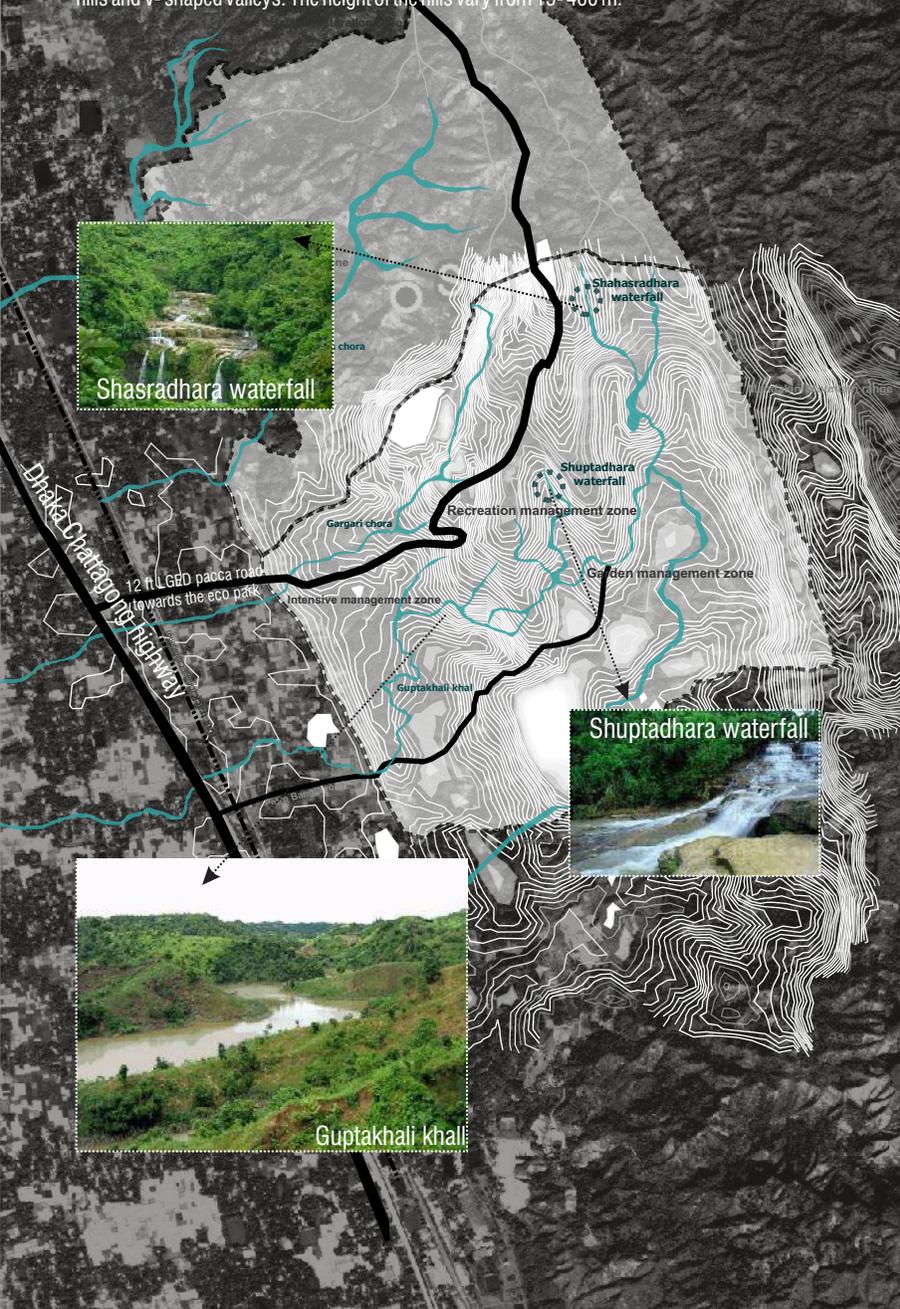
- _ Course tutor _ Dr. Zebun Nasrin Ahmed
- _ Dr. Shayer Ghafur
- _ Patrick D. Rozario
- _ Dr. Ashiqur Rahman

Center for Nature Conservation at Sitakunda Eco Park, Sitakunda P.S.

"Forests were the first temples of God and in forests men grasped their first idea of Architecture" _James C. Snyder, Introduction to Architecture

Phase 1 Site introduction and analysis

The botanical garden and Eco park under Shitakunda Upazilla of Chittagong district is about 35 km North to Chittagong city, 3 km away from Shitakunda Upazilla Headquarter. It is easily accessible and about 1 km east to the Dhaka- Chittagong Highway. It comprises an area of about 808 ha. 405 ha for the eco park and the rest for the botanical garden. There are a number of hills, the hills are elevated from the South- west towards the North- East side. The landscape has a broken topography of very steep hills and V- shaped valleys. The height of the hills vary from 15- 400 m.



Site analysis:

Topography:

The soil of Sitakunda hills are developed on tertiary hill sediments on Tipam- Surma series. The hills are elevated from the South and West towards the North and East. The topography comprises of very steep hills and V shaped valleys. The degree of slope range from 40- 90 degree. The valleys serve as drainage channels.

Climatic Condition:

The area lies close to the Bay of Bengal consisting three seasons: The summer, The winter, the monsoon. Average temperature range during summer: 30- 40 degree C. Summer starts from March and continues up to May. Average temperature range during Winter: 13.9- 23.5 degree C. Winter continues from November to February. Average rainfall: 2000- 2400 mm. Rainy season consists of June- October. Average monthly humidity: (66.5- 88.6)%

Local Community:

Apart from the Bengali majority, there are a number of small communities of ethnic minorities in the area. Many of the resident Rakhine people are believed to have settled here during the Arakanese rule of Chittagong (1459–1666), though the event is not historically traceable. The Rakhine population in Khagrachari District migrated from the surrounding area and built up their permanent abode here. Other ethnic groups include the recently migrated Tripuri people. There are around 14,162 households around the Sitakunda E.P. They mainly reside in the outskirts of the Eco Park and they engage in homestead gardening, aquaculture, agroforestry, horticulture etc.

Flora & Fauna:

The forests of the region are known to be evergreen type with a preponderance of deciduous species with a levelled distribution. The topmost level consists of Garjan (*Dipterocarpus alatus*), Telsur (*Hopea odorata*), Chapalish (*Artocarpus chaplasha*), Chundul (*Tetrameles nudiflora*) and Koro or the Moluccan albizia (*Albizia falcata*). The lower level consists of species of Jarul (*Lagerstroemia speciosa*), Toon (*Toona ciliata*), Jam (*Syzygium cumini*), Jalpai (*Elaeocarpus robustus*) and Glochidion. Lianas, epiphytes (mostly of orchids, asclepiads, ferns and leafy mosses) and herbaceous undergrowths are abundant. Savannah formations are found in the open, along the banks of rivers and swamps with common tall grasses like Kans (*Saccharum spontaneum*), Shon (*Imperata cylindrica* and *I. arundinacea*) and Bena (*Vetiveria zizanioides*). Several species of Bamboo are cultivated that are common in Bangladesh including *Bambusa balcooa* (which is also common in Assam), *B. vulgaris*, *B. longispiculata*, *B. tulda* and *B. nutans*; the latter two also being common in the hills of the region.

Soil Condition:

The upper level of the soil (5- 25ft) consists of **Bhuban Sandstone** (Brown, medium to fine sand with little silt). The soil composition is: sand_ 70%, silt_ 25%, clay_ 5%. The lower level of soil consists of **Bhuban Shale** (bluish very very dense silt with fine sand and shale). The soil composition is: sand_ 60%, silt_ 40%. The compressive strength is (.375- .5)ton/ sft.

Negative impacts inflicted by local/ native people who are dependant on forest land:

Land Use Pattern for Cultivation :

The traditional and widespread practice of shifting cultivation, known as “jhum” in small watersheds of the CHT is associated with profound changes in hydrological responses and soil quality. The overall on- and off-site impacts of intensified shifting cultivation are negative. They include soil nutrient depletion in the uplands and increased downstream flooding, erosion on the hill slopes and sedimentation downstream. Soil loss is especially high in the year of clearing and cultivation.

Other than Jhum, there are four major cultivation system in CHT: **1.** Annual cash crop cultivation (rice, turmeric, ginger etc.) **2.** Agro- Forestry (blend of trees and several field crops) **3.** Horticulture (pineapple, banana, papaya etc.) **4.** Farm Forestry (Farming major timber species)

Among these farming systems. Cash crop farming is the most beneficial from economic point of view but they cause adverse effect on soil condition and bio diversity. So in long term they are not harmful for the farmers. On the other hand, Agro forestry, Horticulture or Farm forestry are not very effective for instant income generation but they are very effective for biodiversity protection and sustainable forest management.

Farming system on hill slopes :

Surface run-off is the main cause of soil resource loss and land degradation. A continuous process of soil and nutrient loss is going on all over the Hill soils under high rates of precipitation. The process is accelerated by the open cultivation system on steep to very steep land. The plants are grown in rows which are mostly oriented vertically down the slope. The inter-row spaces are clear-tilled by hoeing leaving the loosened soils highly vulnerable to sheet and gully erosion. In Chittagong Hill Tracts, soil erosion is mainly due to shifting cultivation. The worsening soil fertility of hill soils becomes more serious if the faulty cultivation goes on unabated. Due to Surface runoff from the steep slopes the soil is being carried to downstream, where they deposit and thus causing flood in downstream.

The density of population of the hilly region has been increasing at an alarming rate and the present cultivation practices have been deteriorating the soil fertility and nutrient status. Biodiversity is in a great threat. Many of flora and fauna are endangered. Therefore, food chain as a whole is disrupted. The overall human activity needs immediate attention to restore the food chain, restore the eco-partners, pollinators, tree crops especially for timber, fruits, soil conservation and soil creation, wind protection, habitat for associate flora and fauna etc., and for restoration of hydrological cycle to revive the perennial streams.

Other issues causing degradation:

The invasive flora and fauna are sometimes very harmful for the native biodiversity. For example, Acacia and Eucalyptus are largely planted on the denuded hills as a means of afforestation. But after studying the afforested areas it is now evident that these trees are causing serious harmful affects on native biodiversity, because Acacia and Eucalyptus trees produce leaves that are not easily degradable. So the soil becomes less fertile and the existence of thousands of humus-dependent species including herbs and earthworms become threatened. These trees absorb large amount of water and hence even the indigenous trees cannot properly grow around it. These trees do not support any wildlife since these do not produce edible fruit or nectar for them.

The government is leasing chunks of forests to private ownership for monoculture (rubber, timber wood etc.). This is a very harmful practice because biodiversity can't flourish in those areas and it eventually causes soil quality degradation.

Program formulation and generation of a strategic development plan

Based on extensive site survey and analysis of resource available, it is apparent that, **3 steps are very important for an overall conservation approach**. They are:

1. Steps regarding the local community:

- _ Awareness raising about sustainable use of natural resources.
- _ Capacity building so they can monitor and report on the status of bio diversity threats, underlying causes etc.
- _ Help them to regenerate the depleted tropical forests and denuded hills of CHT.
- _ Support to rural livelihoods by increasing productivity of their farming systems.
- _ Making provision for alternative livelihood activities.
- _ Gathering indigenous knowledge on natural resources and their management and apply them properly.
- _ Helping them to generate and manage the "Village Common Forest."

2. Steps regarding researchers and other interested groups:

- _ Addressing threats to bio diversity from pollution and climate change.
- _ Control of alien species.
- _ Promotion of sustainable resource use.
- _ Conservation of genetic diversity.
- _ Reduction of species and habitat loss.
- _ Create the information database of all the protected areas and nature reserves.

3. Steps regarding awareness raising among common people:

- _ Lack of awareness poses the greatest threat to any conservation effort. Very often, species are lost forever due to the lack of information and awareness. Many ecosystems and species are facing threats from non-biological processes undertaken without possible impact assessments.
- _ Integrate conservation and sustainable use into both formal and non-formal education programmes through the provision of education opportunities that particularly target the poor and natural resource dependent communities, e.g. those living in PAs.
- _ Most of Bangladesh's people are still ignorant about Protected Areas and their importance to conservation. Peoples knowledge regarding bio diversity; conservation and sustainable resource collection is also very poor.

In short following program is formulated:

| | | |
|---|---|--|
| facilities for local people _ Alternative livelihood generation _ training facilities | facilities for visitors _ Interpretation facility _ Info portal _ multipurpose outdoor recreation facility _ accommodation facility | facilities for researchers/ semi professionals _ research laboratory _ open research facility _ resource facility _ accommodation facility |
|---|---|--|

Again above stated programs can be categorized under 4 facilities:

| | | | |
|--|--|---|---|
| research & resource facility _ Information resource area _ outdoor and indoor classrooms _ research laboratories _ library | visitor's facility _ exhibition gallery _ interpretation area _ restaurant _ souvenir shop | accommodation facility _ single & multiple bedrooms _ admin & lobby lounge _ dining area | outdoor multipurpose facility _ refreshment pavilion _ nature hide _ observation deck _ nature trails |
|--|--|---|---|

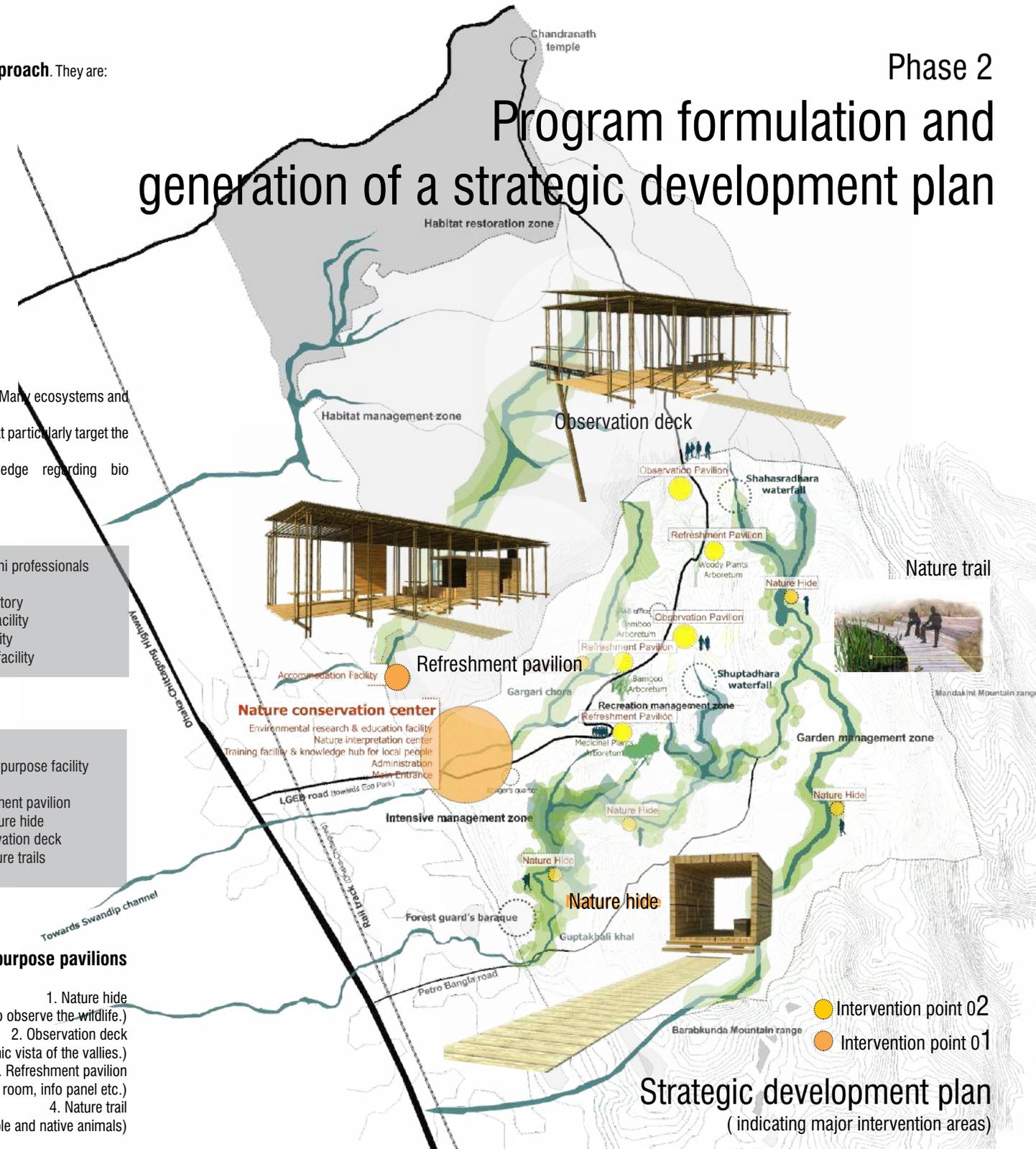
Finally all the facilities are distributed under two groups of intervention in the proposed development plan:

Intervention point 1:

- _ Center for nature conservation (including research & resource facility, visitor's facility)
- _ Accommodation facility (single, double, 3 & 4 seated rooms with dining & lounge)
- _ Gate house & entry plaza (including gate house, info panel, sales outlet & entry plaza to hold festivals, orientation sessions etc.)

Intervention point 2: Multipurpose pavilions

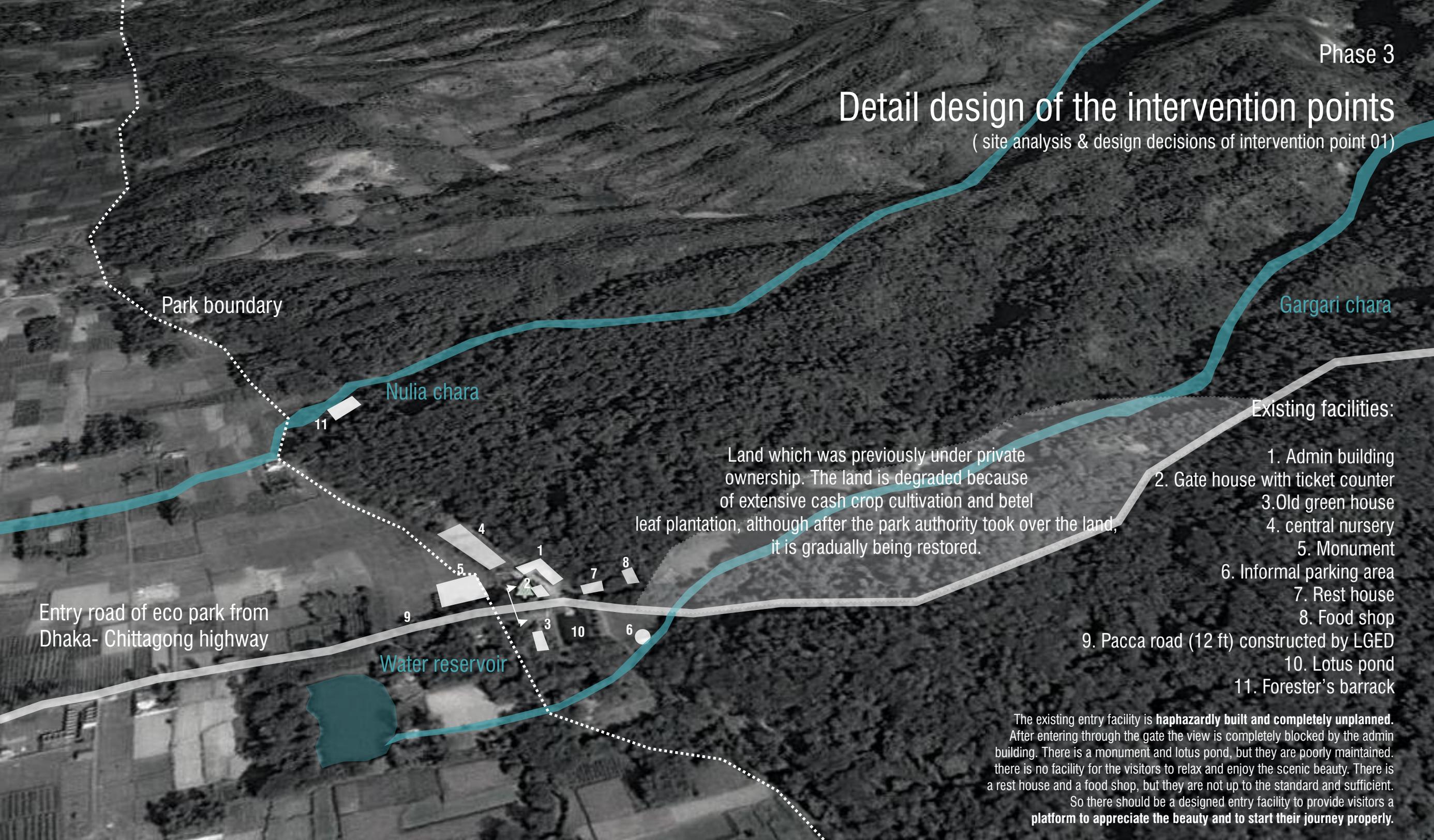
1. Nature hide (located along the streams & ecological hotspots to observe the wildlife.)
2. Observation deck (located beside the LGED road to enjoy the panoramic vista of the valleys.)
3. Refreshment pavilion (located along the arboretums which includes local tea stall, rest room, info panel etc.)
4. Nature trail (wooden boardwalk built along the trails used by local people and native animals)



Strategic development plan
(indicating major intervention areas)

Detail design of the intervention points

(site analysis & design decisions of intervention point 01)



Park boundary

Nulia chara

Gargari chara

Existing facilities:

Land which was previously under private ownership. The land is degraded because of extensive cash crop cultivation and betel leaf plantation, although after the park authority took over the land, it is gradually being restored.

Entry road of eco park from Dhaka- Chittagong highway

Water reservoir

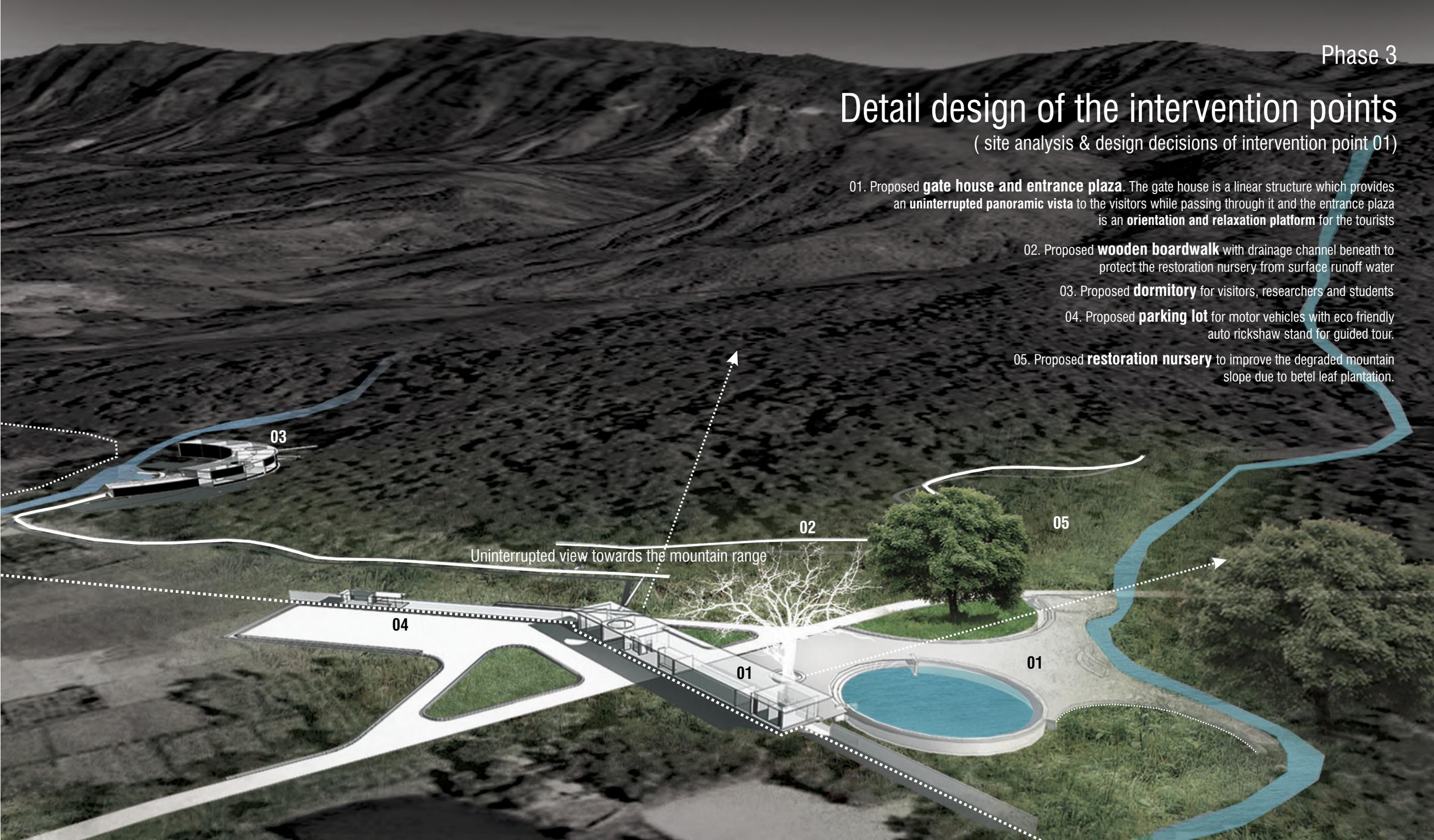
- 1. Admin building
- 2. Gate house with ticket counter
- 3. Old green house
- 4. central nursery
- 5. Monument
- 6. Informal parking area
- 7. Rest house
- 8. Food shop
- 9. Pacca road (12 ft) constructed by LGED
- 10. Lotus pond
- 11. Forester's barrack

The existing entry facility is **haphazardly built and completely unplanned**. After entering through the gate the view is completely blocked by the admin building. There is a monument and lotus pond, but they are poorly maintained. there is no facility for the visitors to relax and enjoy the scenic beauty. There is a rest house and a food shop, but they are not up to the standard and sufficient. So there should be a designed entry facility to provide visitors a **platform to appreciate the beauty and to start their journey properly.**

Detail design of the intervention points

(site analysis & design decisions of intervention point 01)

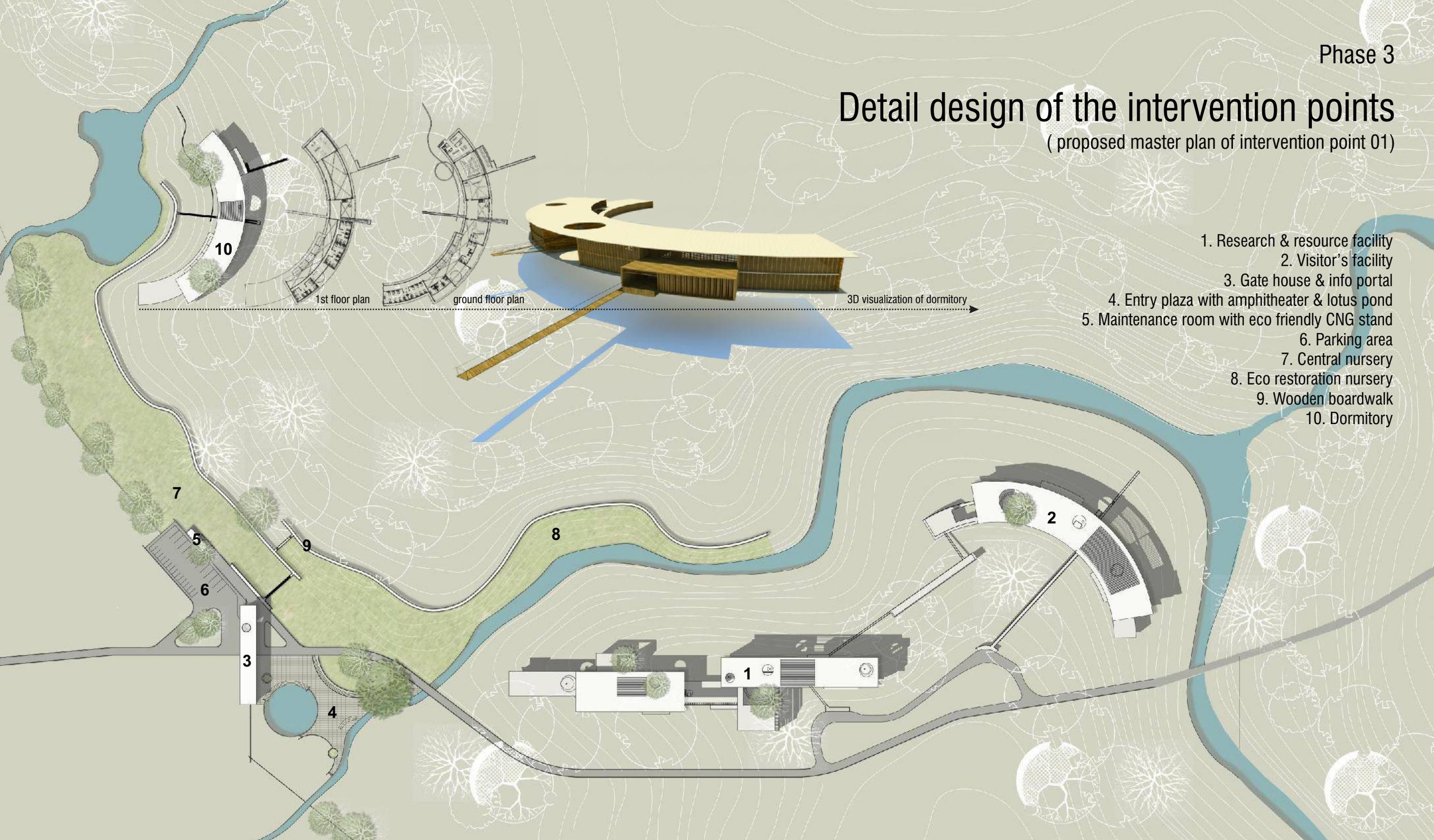
- 01. Proposed **gate house and entrance plaza**. The gate house is a linear structure which provides an **uninterrupted panoramic vista** to the visitors while passing through it and the entrance plaza is an **orientation and relaxation platform** for the tourists
- 02. Proposed **wooden boardwalk** with drainage channel beneath to protect the restoration nursery from surface runoff water
- 03. Proposed **dormitory** for visitors, researchers and students
- 04. Proposed **parking lot** for motor vehicles with eco friendly auto rickshaw stand for guided tour.
- 05. Proposed **restoration nursery** to improve the degraded mountain slope due to betel leaf plantation.



Detail design of the intervention points

(proposed master plan of intervention point 01)

- 1. Research & resource facility
- 2. Visitor's facility
- 3. Gate house & info portal
- 4. Entry plaza with amphitheater & lotus pond
- 5. Maintenance room with eco friendly CNG stand
- 6. Parking area
- 7. Central nursery
- 8. Eco restoration nursery
- 9. Wooden boardwalk
- 10. Dormitory



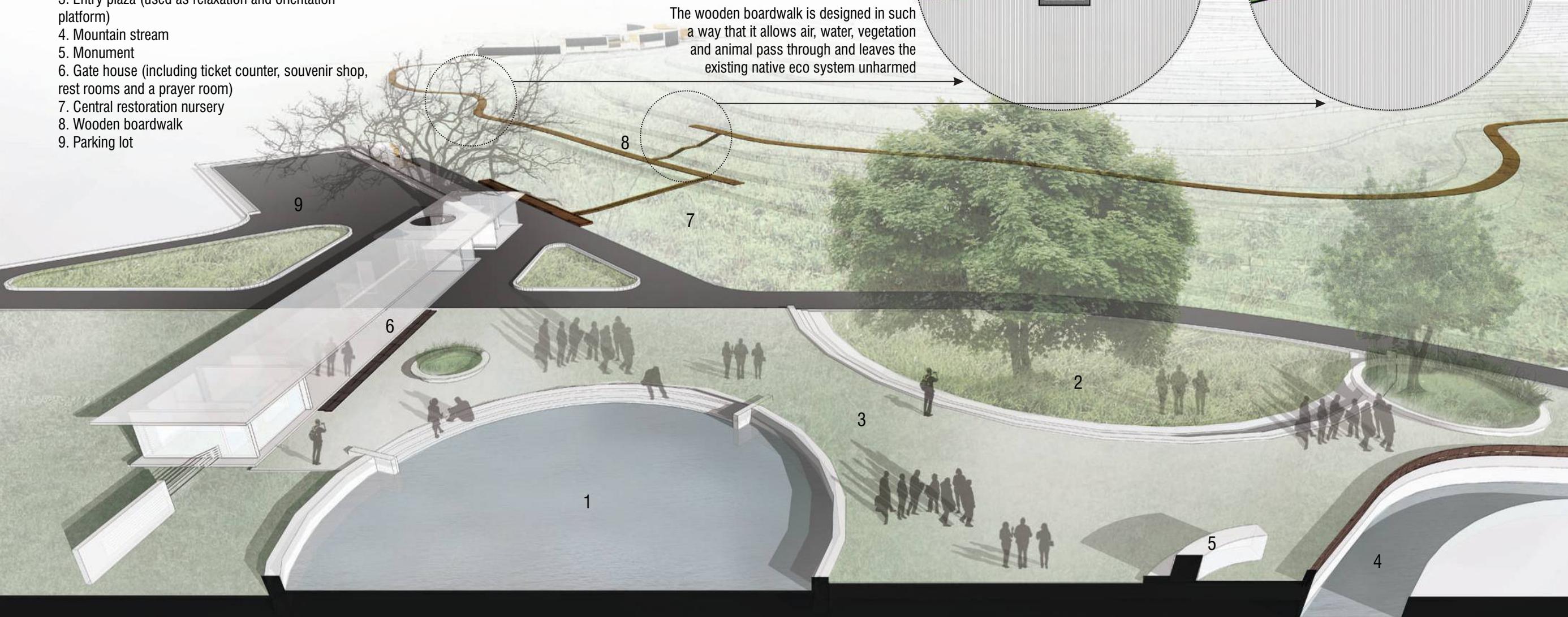
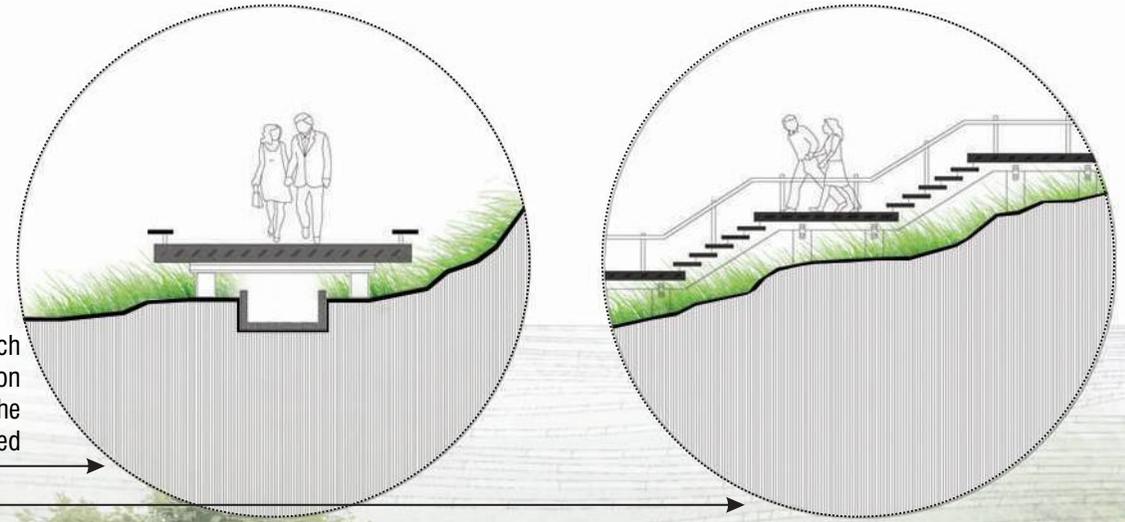
Phase 3

Detail design of the intervention points

(3D visualization: sectional perspective of the gate house and entrance plaza)

1. Lotus pond
2. Amphitheatre for cultural and local performance
3. Entry plaza (used as relaxation and orientation platform)
4. Mountain stream
5. Monument
6. Gate house (including ticket counter, souvenir shop, rest rooms and a prayer room)
7. Central restoration nursery
8. Wooden boardwalk
9. Parking lot

The wooden boardwalk is designed in such a way that it allows air, water, vegetation and animal pass through and leaves the existing native eco system unharmed



Concept generation:

Local vernacular architecture:

- _ The **traditional vernacular ethnic houses** can be stated as a cluster of raised platforms (locally called as mancha).
- _ The manchas that accommodate the living spaces are covered and others are semi covered or open according to the use pattern.
- _ The houses are made of bamboo panels and wooden post and beam structure.

Climatic conditions:

- _ The building should be **raised on stilt** to catch better airflow.
- _ **Large openings** with good shading device to allow wind into the building.
- _ Shallow building depth.
- _ Shaded outdoor areas are more desired than indoor area.
- _ Pitched/ tilted roof to allow better drainage of rainwater.

Ecological conditions:

- _ The average height of the existing trees on the southern side of the site is 50- 60 ft.
- _ The middle sized trees are 30- 40 ft on average.
- _ The shrubby vegetation on the northern side is 5- 10 ft on average.

Design decisions:

- _ The building will be **raised on stilt (above 7 ft) to catch better airflow and to leave the restoring vegetation uninterrupted.**
- _ More outdoor open areas which will be used as gathering and exhibition areas.
- _ The building will be shallow in depth with large openings to achieve maximum airflow.
- _ The building should be designed in such a way that it does not overpower the landscape rather it should appear as if it is grown along the trees.
- _ The functional spaces should be **interactive and open to nature** and the view.

Land previously used for cash crop cultivation (now recovered)

Land used for betel leaf plantation (still in adverse condition)

Mountain stream (In bad condition due to stilt)

Land previously used for cash crop cultivation (now recovered)

Land used for cash crop cultivation when it was privately owned (the area is gradually restoring it's native eco system which mostly consists of dense ground coverage on it's own)

The visitor's center

The mass is designed along the contour line to **leave the slope unharmed**. The mass is curvilinear, so the visitors can **enjoy a panoramic vista** of the waterfall and the surrounding mountain range.

The mass is located in the **intermediate zone** between the dense vegetation area and the restoration zone. So the mass is **least domineering** over the eco system.

The research & resource facility

Area with existing native vegetation (consists mostly mature trees and leafy ground coverage)

Phase 3

Detail design of the intervention points

(site analysis & design decisions of center for nature conservation)

Phase 3

Detail design of the intervention points

(site analysis & design decisions of center for nature conservation)

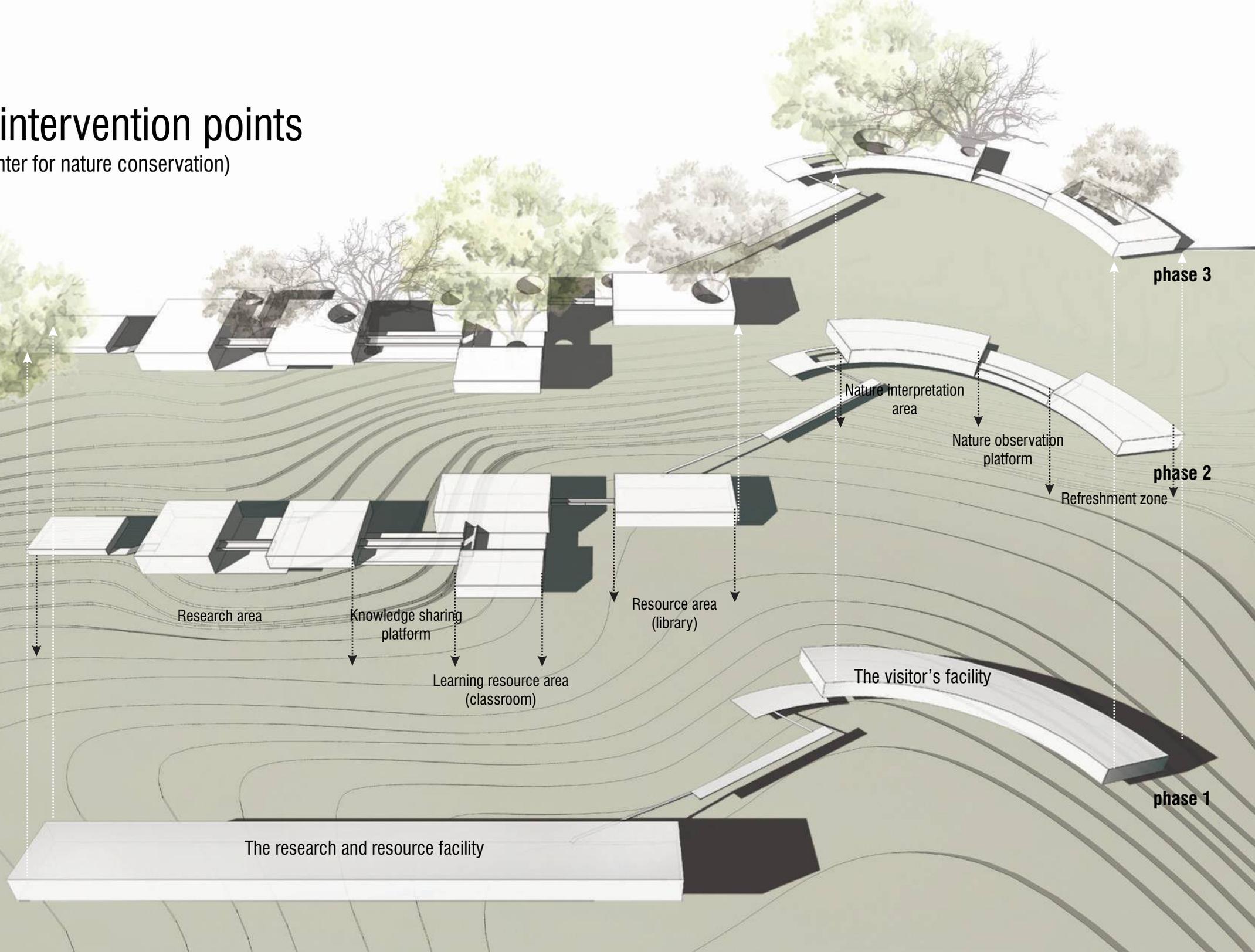
Design morphology:

The formulation and placement of the mass is conducted in three phases.

In phase 1, overall function was divided in two distinct masses; research and resource facility and visitor's facility. The masses were placed according to the surrounding landscape and vista.

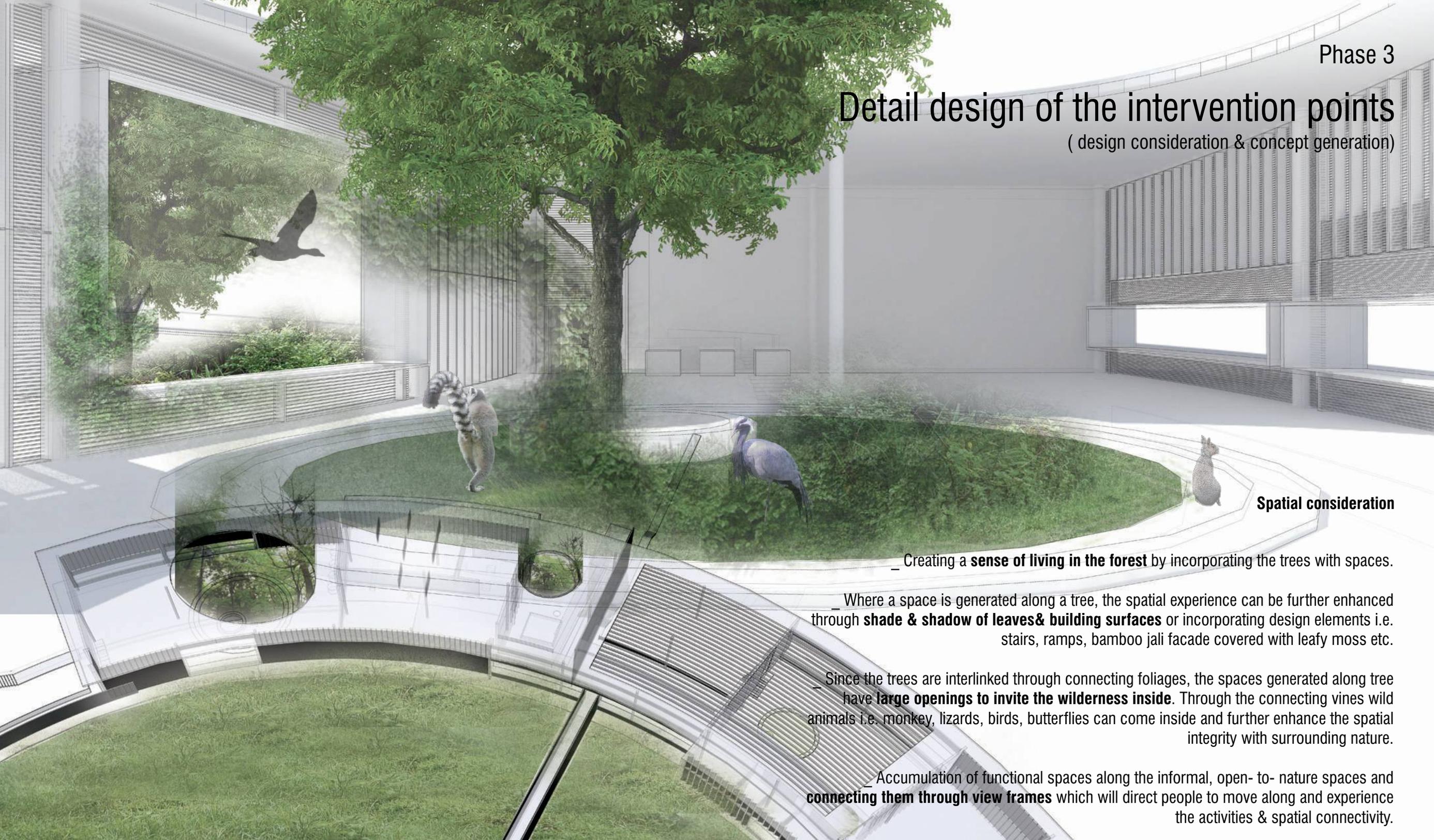
In phase 2, the two masses were subdivided according to function and existing contour pattern. The broken masses then elevated or lowered with relation to the terrain and connected through bridges. this bridges can be used as nature observation platform that brings people closer to the wilderness of the site.

In phase 3, the masses were further perforated to accommodate the existing trees inside the built area instead of cutting them. Since the trees are an integral part of the design ,they create a sense of forest living inside the built area and help people enjoy the nature.



Detail design of the intervention points

(design consideration & concept generation)



Spatial consideration

_ Creating a **sense of living in the forest** by incorporating the trees with spaces.

_ Where a space is generated along a tree, the spatial experience can be further enhanced through **shade & shadow of leaves & building surfaces** or incorporating design elements i.e. stairs, ramps, bamboo jali facade covered with leafy moss etc.

_ Since the trees are interlinked through connecting foliage, the spaces generated along tree have **large openings to invite the wilderness inside**. Through the connecting vines wild animals i.e. monkey, lizards, birds, butterflies can come inside and further enhance the spatial integrity with surrounding nature.

_ Accumulation of functional spaces along the informal, open- to- nature spaces and **connecting them through view frames** which will direct people to move along and experience the activities & spatial connectivity.



Phase 3

Detail design of the intervention points

(design consideration & concept generation)

- _ The building will grow organically with the surrounding
- _ Trees that are located inside the built area will be treated respectfully
- _ Spaces surrounding the tree will be formed in such a way that they enhance the experience of nature living. Elements i.e. Bamboo facade, circular opening on roof plate, stair or ramp will be incorporated into the space.
- _ Eventually the leafy ground coverage will envelop the building and thus blend the building with the surrounding nature.



North elevation



- 1. Library
- 2. Entry and info portal
- 3. Restaurant
- 4. Research office
- 5. Admin office
- 6. Convention room

plan at +39' 

Phase 3

Detail design of the intervention points

(detail plan of the center for nature conservation)



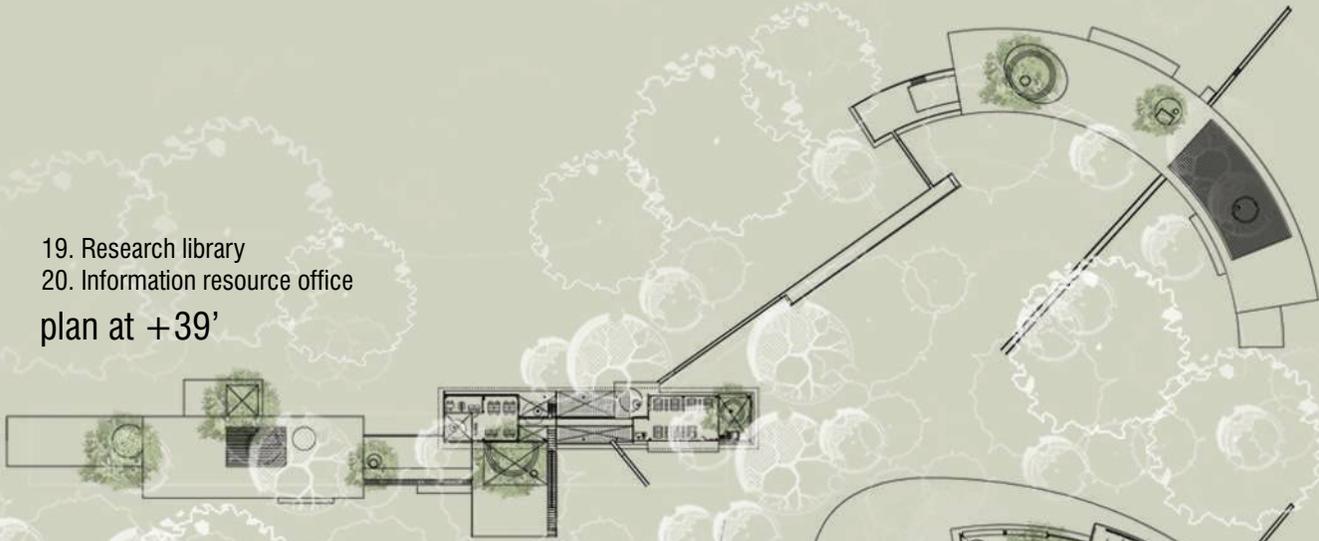
South elevation

Phase 3

Detail design of the intervention points

(detail plan of the center for nature conservation)

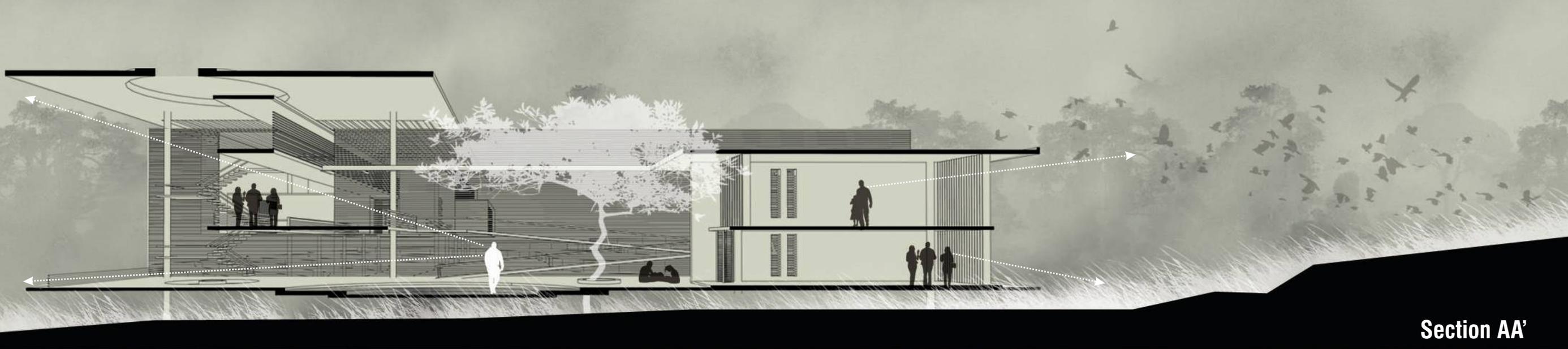
19. Research library
20. Information resource office
plan at +39'



9. Open exhibition area
10. Classroom
11. research office
12. Informal research zone
13. Exhibition area
14 Interpretation gallery
15. Restaurant
plan at +31'

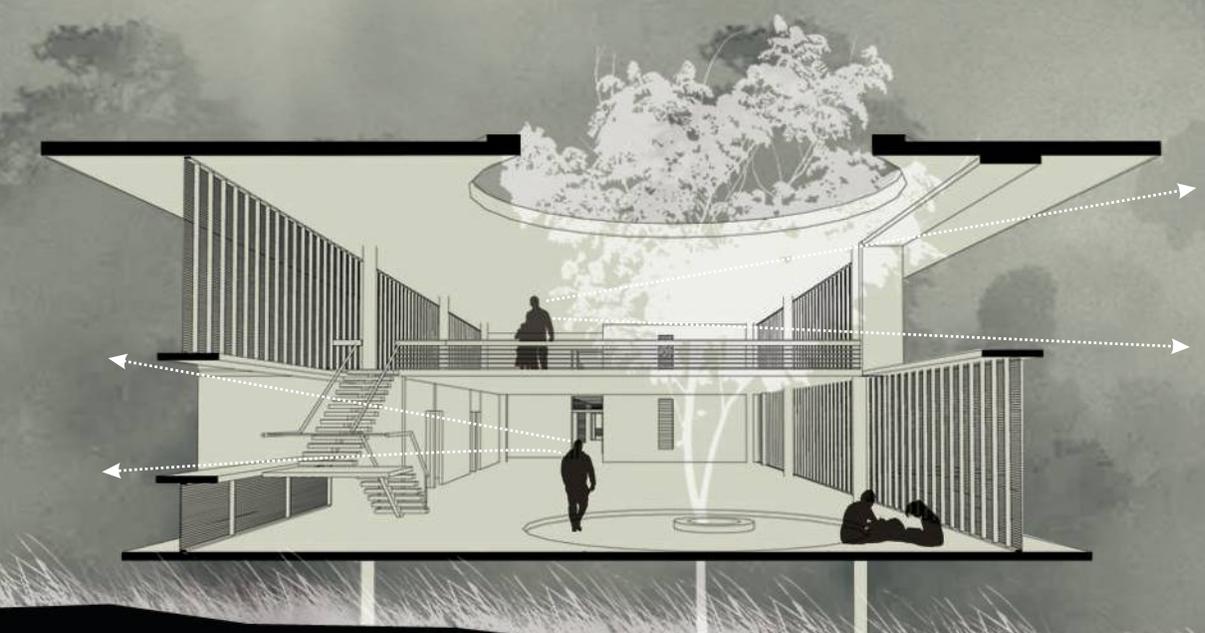


16. Formal research lab
17. Tissue culture lab
18. Maintenance room & workshop
plan at +21'



Section AA'

Phase 3
Detail design of the intervention points
(detail sectional perspectives of the center for nature conservation)



Section CC'



Section BB'

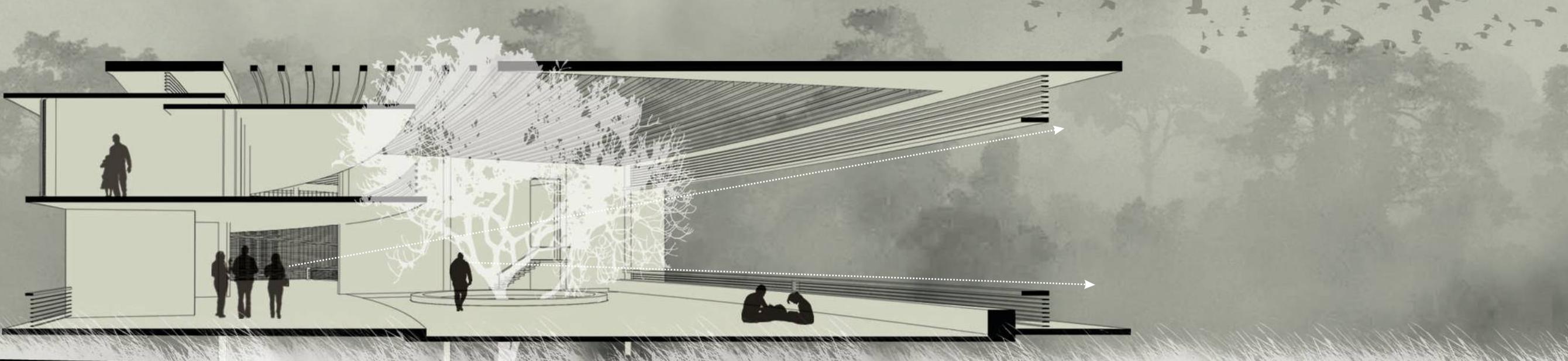


Section DD'

Phase 3

Detail design of the intervention points

(detail sectional perspectives of the center for nature conservation)



Section EE'

Phase 3

Detail design of the intervention points

(final complete 3D visualization: aerial view)





Revitalization of urban community through reclamation of waterbody

Integreting public facilities at major intervention locations

Design Studio VII

Year 2010

Course tutor_ Prof. Khaleda Ekram

Prof. Dr. Farida Nilufar

Dr. Nasreen Hossain

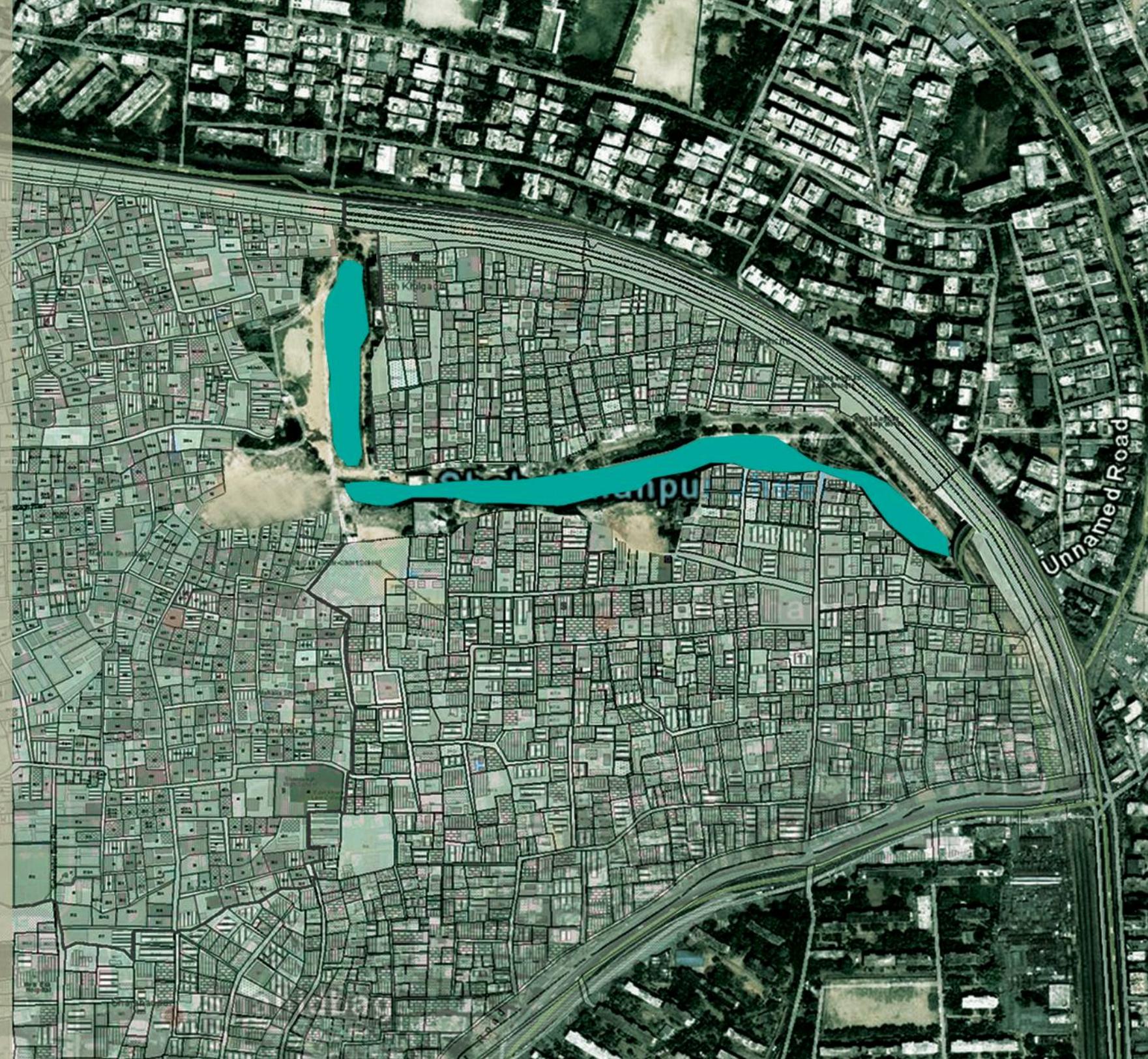
Fahmid Ahmed

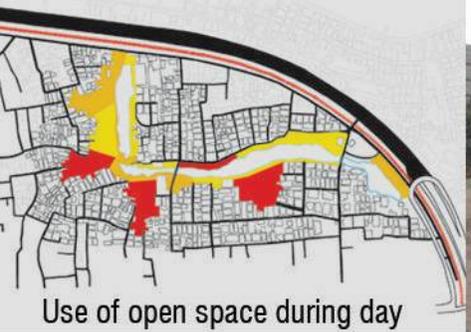
Historical transformation of the Shahjahanpur Khal

The survey area falls under a geological unit consisting of depression deposits and abandoned channel deposits. It comprises of low lying areas inundated during flood. Although the primary use of the land was residential and agricultural, due to housing purposes construction and built areas developed heavily. Severe reduction in the number of waterbodies, open spaces and vegetation with the exponential increase in construction. As the surrounding areas were being subsequently filled, the surface runoff and storm water runoff fell in Shahjahanpur Khal. Although there are some small ponds, they are not connected with Shahjahanpur Khal.

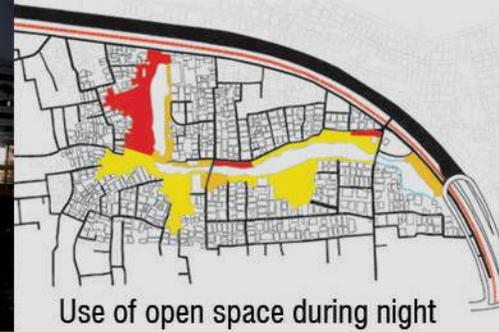
Proposals for revitalization of the khal along with the community

- Improving the water quality.
- Creating continuous channels for water.
- Utilizing the potential of renewable energy source.
- Improving soil condition by phytoremediation.
- Efficient system of waste disposal for the community.
- Utilizing the fertility of the soil and developing vegetation in a way beneficiary to the community.
- Creating suitable environment for enriching biodiversity.
- Community need for public spaces: 52% want a library, 90% demands community center, 88% votes for public play ground and 52% asks for walkways.
- Re-establishing communal pride and unity through the water body.





Use of open space during day



Use of open space during night

The lake is distributed into two parts; the northern part and the southern part. A thorough comparative analysis of both sides of the lake is given below.

Southern part of the lake:

- Water of this part is severely polluted by the discharge from sewerage pipes. The bank is covered with insoluble filth.
- Vegetation is unplanned and uncontrolled. Presence of harmful contaminants in water and air can be distinguished. There are no aquatic plants or animal present because of the contaminated water.
- People normally don't use this part of the lake for any purpose i.e. fishing, boating, swimming etc.

Social and ecological analysis

Northern part of the lake

- Water is comparatively clear and is simultaneously used by local people and domestic animals presence of aquatic plants and fishes can be seen although the banks are gradually being covered with filths.
- The open fields adjacent to the northern part of the lake is being used for various purposes. During night the place turns into a festival place with vendors and temporary shops, while during daytime the grounds used as play ground of the local children.

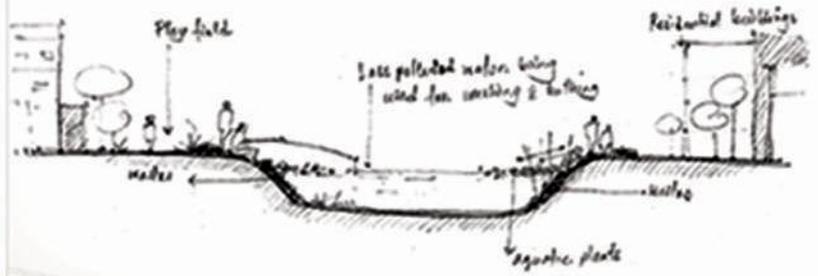
SOUTHERN PART OF THE KHAL

- severely polluted by the discharge from sewage pipes
- edges covered by insoluble wastes and filth
- unplanned and uncontrolled vegetation
- presence of harmful contaminants in water and air
- no aquatic animals in water



NORTHERN PART OF THE KHAL

- used for washing and bathing
- presence of aquatic and riparian plants
- used simultaneously by domestic animals and birds
- presence of carp fish in water
- edges mostly covered by dumped wastes



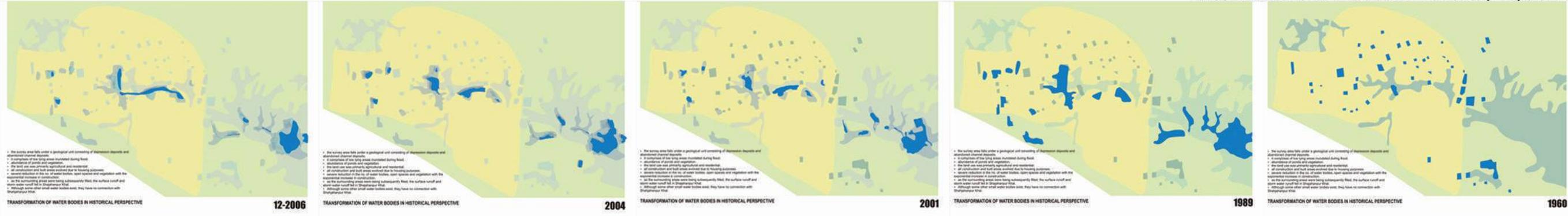


Physical survey

Chronological development of buildings and construction



Transformation of waterbodies in historical perspective



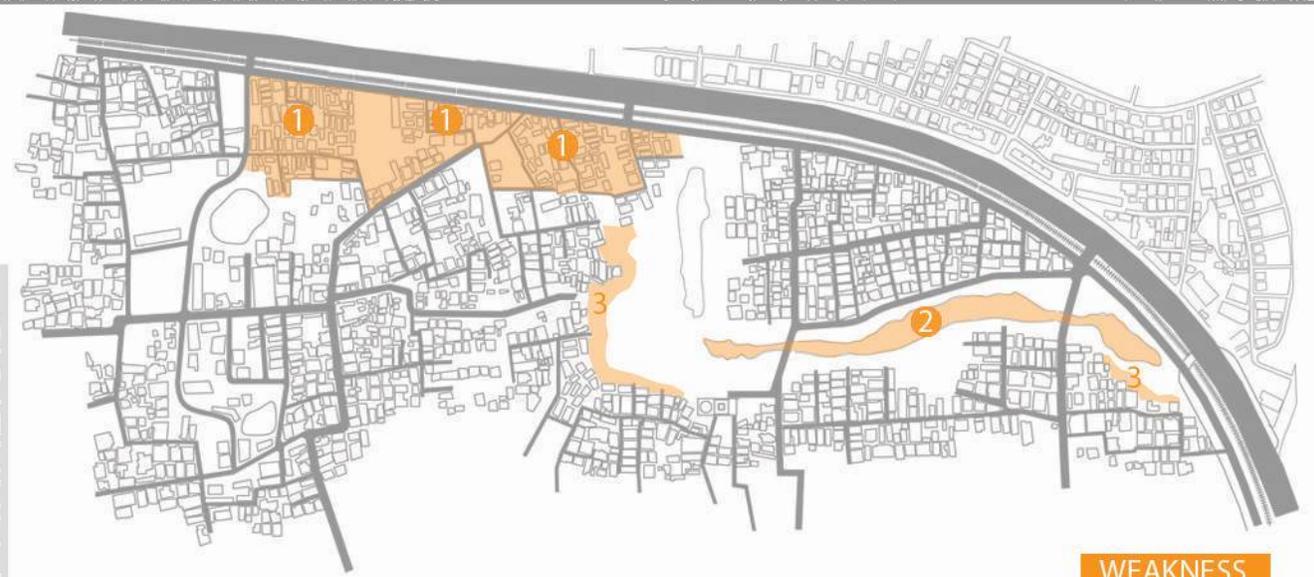
Transformation of green vegetation in historical perspective





STRENGTH

1. The open field on the west side of the cleaner part of lake is being used as a gathering place for the local people.
2. The unoccupied pocket spaces are used as playground of children living in adjacent houses.
3. Two small water retention ponds on the western part of the catchment area .
4. There are several schools, masjids, health care centers surrounding the lake which promote usability of the greens.



WEAKNESS

1. The illegal squatter settlement stretched along the railway track is obscuring the lake view from the highway and northern residential blocks. The residents of this squatters dispose their everyday waste production into the lake.
2. Because of continuous waste disposal into the lake, the water is highly contaminated and bad odor comes out of it.
3. People dump their everyday garbage on the left over lands surrounding the lake which is making the open fields unusable.

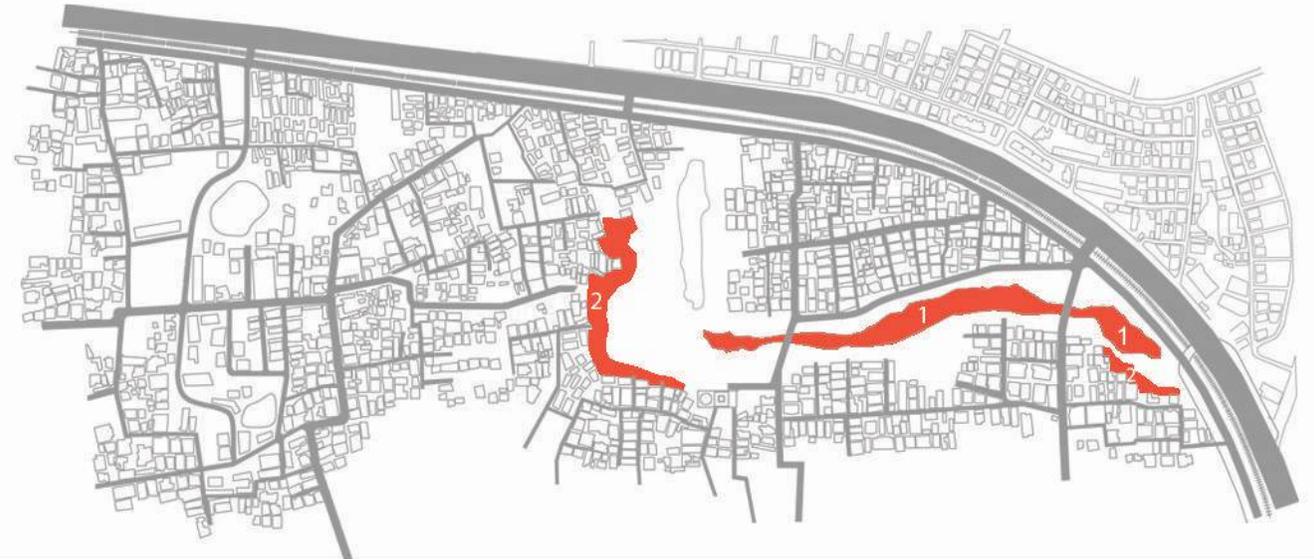
OPPORTUNITY

1. The open unoccupied fields can be revitalized as green belt surrounding the lake and can be used as a recreational park.
2. The retention ponds can be linked with the lake to create an uninterrupted water channel and to revive the dying lake.
3. The unused government land adjacent to the retention ponds can be utilized to habitate and compensate the people who's lands are acquired for the lake extension.
4. Squatters can be cleaned off for the new water channel and the dwellers can be relocated in government residential projects.



THREAT

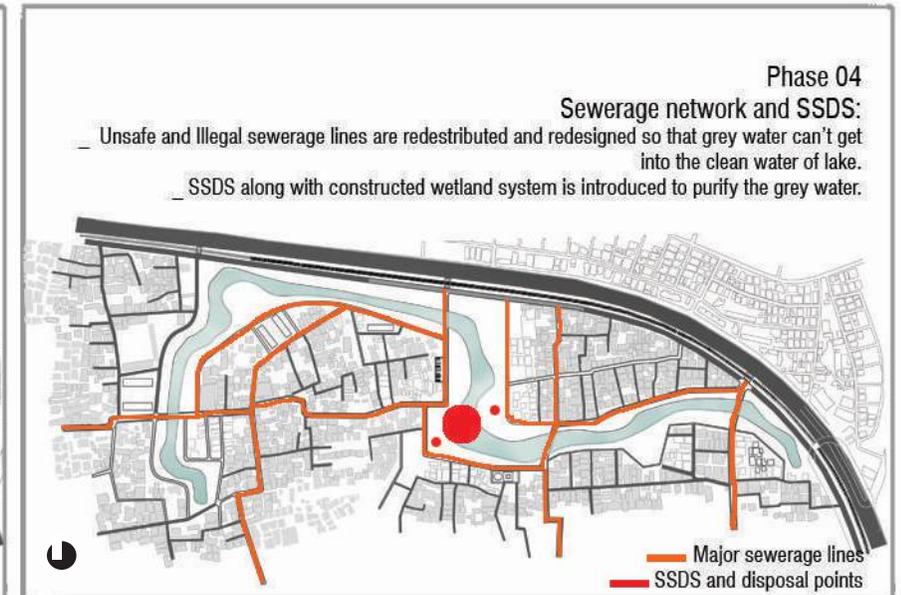
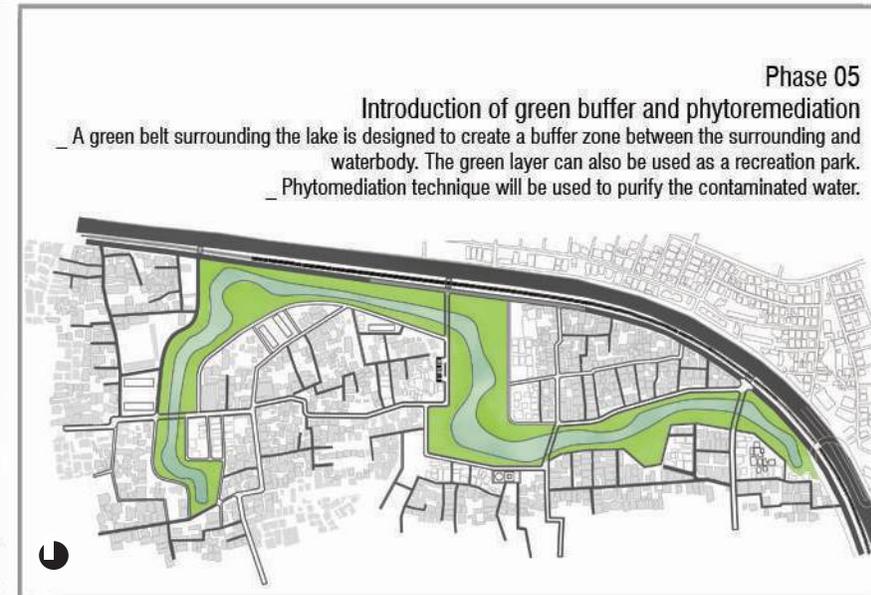
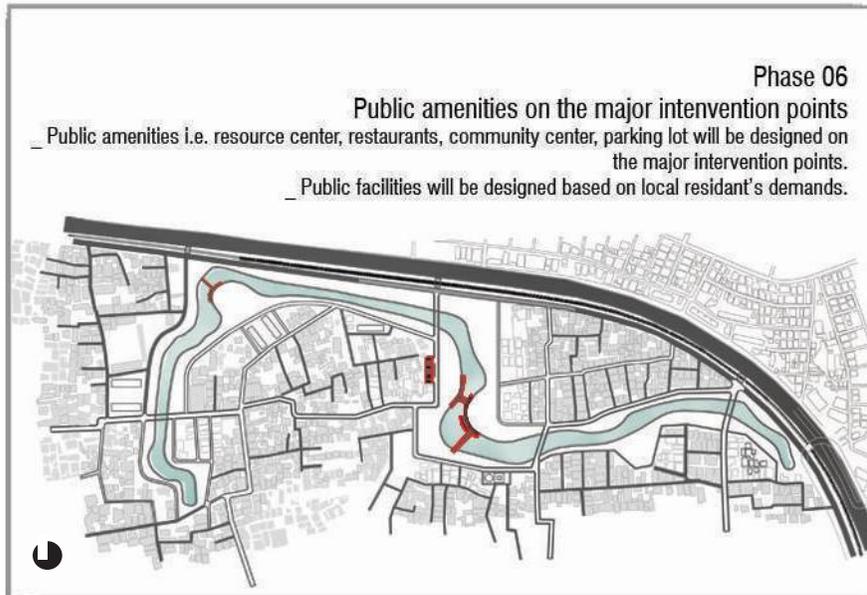
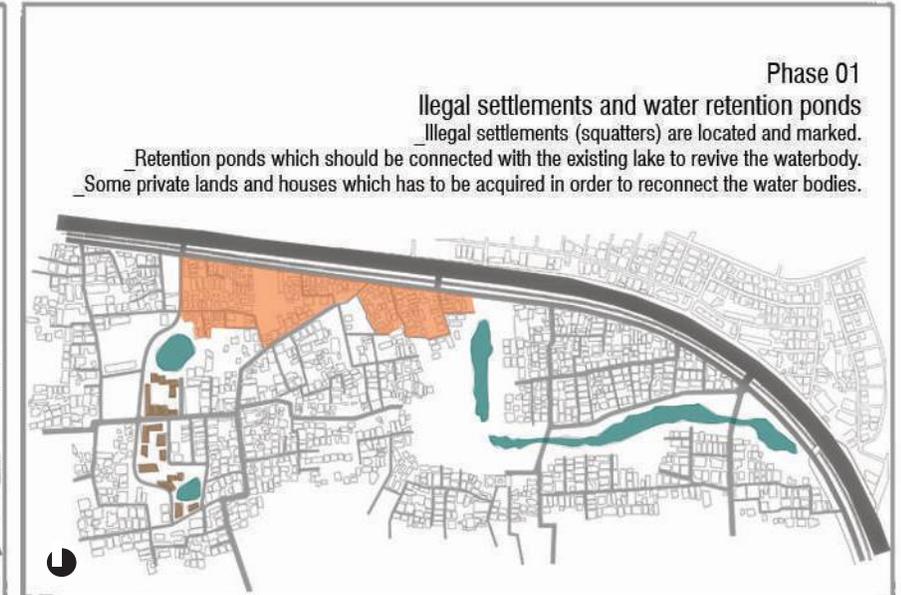
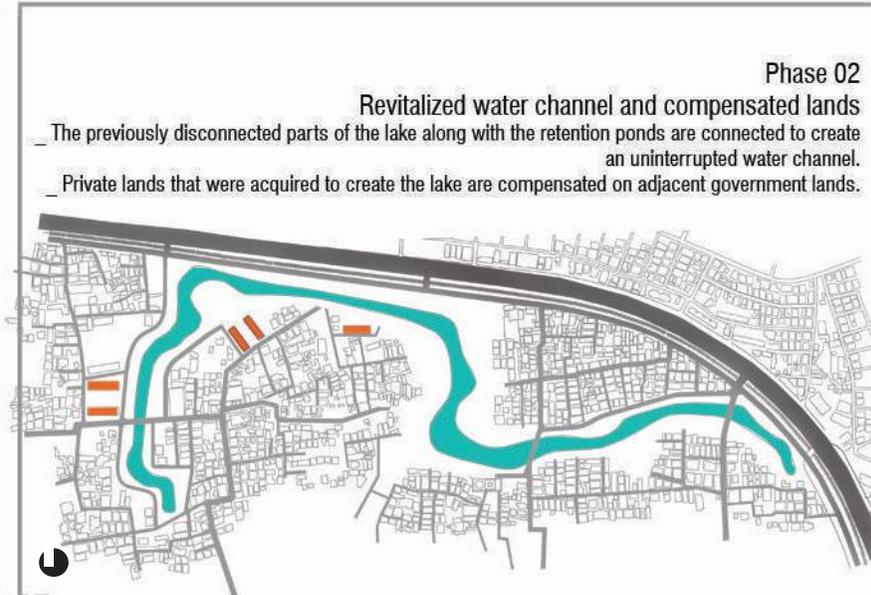
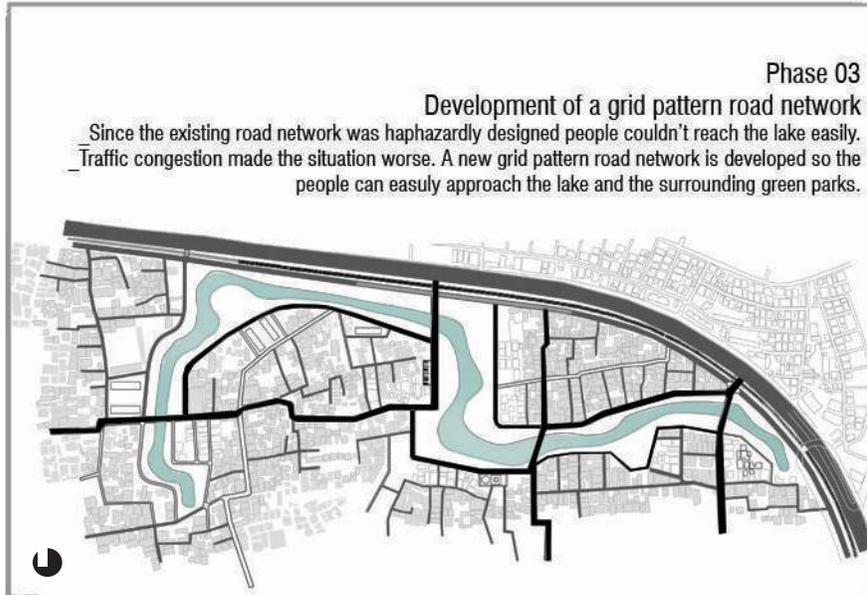
1. Several illegal swerage lines open into the lake and dispose severely contaminated grey water into the lake. This grey water is polluting the lake and turning the water blak and odorous which in turn can harm the whole community.
2. The growing amount of garbage disposed by the squatters is a threat to the open fields.

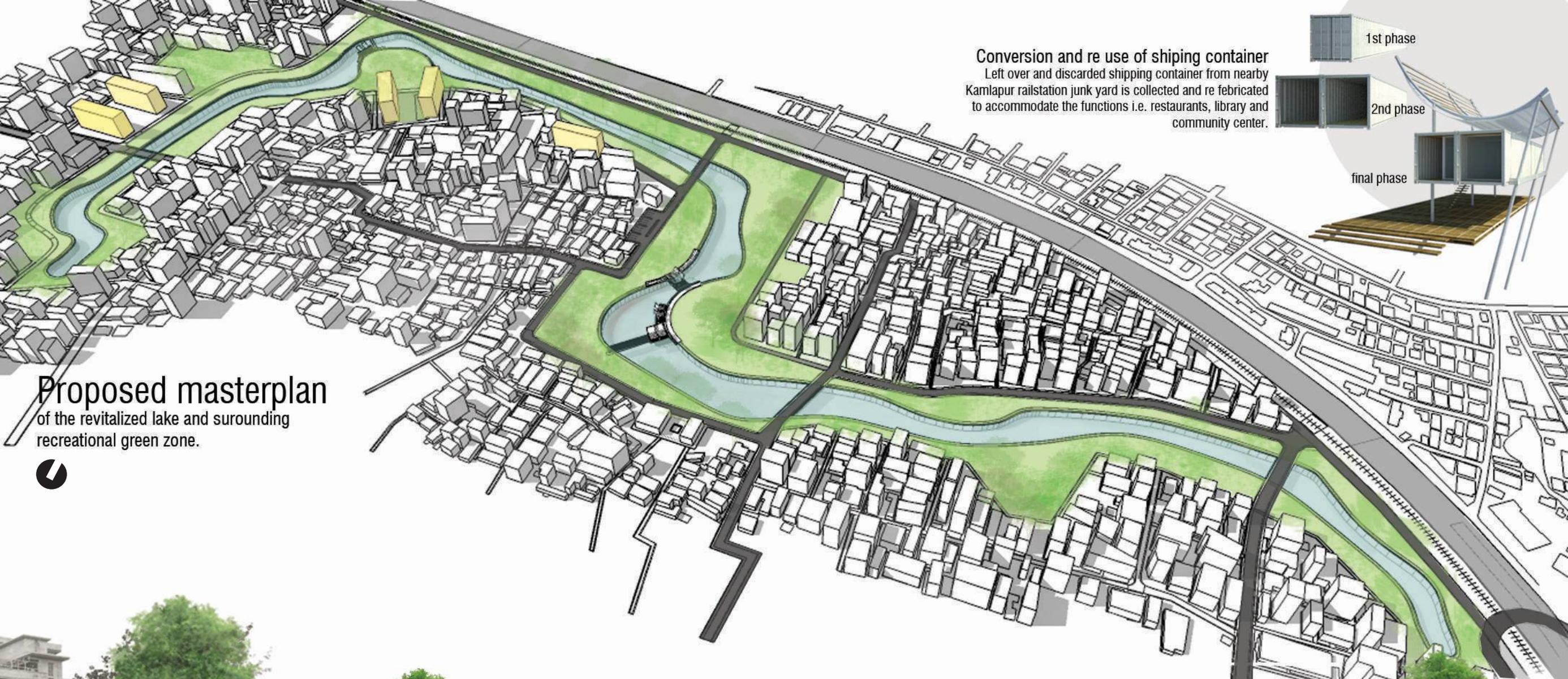


SWOT ANALYSIS

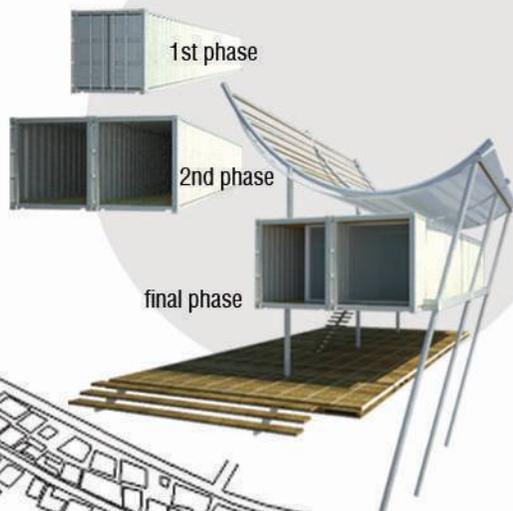
Design Development and formulation

(a series of strategic decisions and interventions)





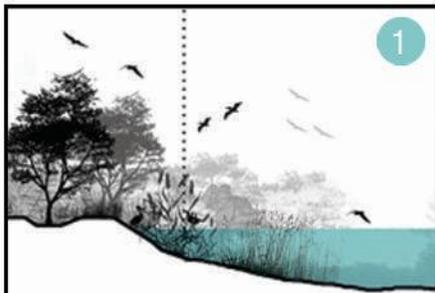
Conversion and re use of shipping container
Left over and discarded shipping container from nearby Kamlapur railstation junk yard is collected and re fabricated to accommodate the functions i.e. restaurants, library and community center.



Proposed masterplan
of the revitalized lake and surrounding recreational green zone.

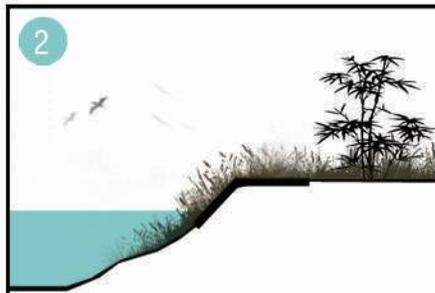


Typical section line showing the layers of green buffering the residential zone and vehicular roads with the lake (khal)



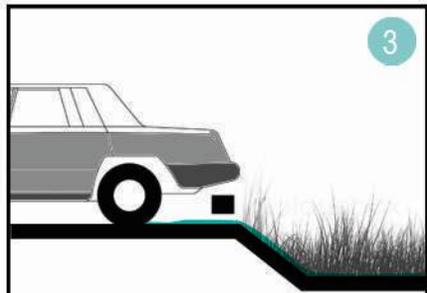
1

Floating riparian plants used for restoration of the polluted water
The use of floating riparian plants and useful bacteria is a much cheaper way than conventional mechanical water cleansing system. Also it enhances the visual quality.



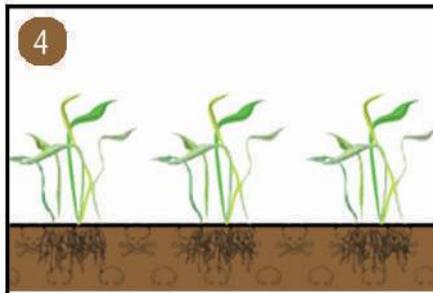
2

Bank stabilization of the lake
Bank stabilization is critical for reducing erosion. Erosion can cause degradation of water quality and illegal encroachment. The bank can be stabilized using organic fibers which will in turn support vegetation.



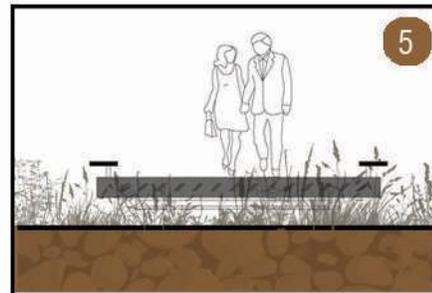
3

Storm water management
Urban surface run-off water is highly contaminated with synthetic pollutants. Retention basins use plants and their filtering capacity to filter the runoff water before entering the ground water level and contaminate.



4

Soil phytoremediation
The process of soil phytoremediation is the use of plants to extract heavy metallic and non organic pollutants from sub soil level. The process is significantly cheap although it may require longer period of time .



5

Elevated pathways surrounding the lake for pedestrians
The elevated pathways for pedestrians around the lake allows surface runoff water to flow uninterrupted and the natural vegetation grow freely.



6

The green perforated pavement
The paved areas surrounding the lake is designed in a way so that it allows vegetation in between the blocks. This perforation also helps reducing solar heat radiation and thus improving the micro climate.



Water Quality Improvement Measures

Since the water is significantly polluted and thus affecting the surrounding area it is critically important to improve the water quality before designing and altering any other infrastructures. Various measures are used and incorporated in the design solutions which will help develop the water quality and the surrounding micro climate so that the whole area becomes more inviting and accommodating. At first stage phytoremediation and floating riparian plants will be used to enhance the water and surrounding soil quality. The banks of the lake will be stabilized through organic fibers so erosion is prevented and the eco system is left unharmed. Elevated pathways and perforated stone blocs as pavements will allow the natural elements to grow freely and uninterrupted.



7 Constructed wetland system incorporating SSDS

One of the major source of water pollution is the grey water that is discharged directly into the lake through illegal sewerage lines. To solve this problem constructed wetlands are designed along with grey water filtering technology (incorporating SSDS and grey water anaerobic batch reactor) which will filter the polluted water before it gets into the lake.

Bird's eye view of the main intervention area

with all the activity hubs and green recreational parkland showing the **mobility** between the two banks of the lake



01. The community center

Around 90% of the local people living in adjacent areas asked for a community center while the survey was being conducted. The community center can accommodate wedding ceremonies, social get togethers or various parties. It can also house exhibitions and small scale festivals.

02. The small food stalls

These small food stalls can provide for the afternoon and evening crowds. Since a large number of local people gather here to enjoy their weekends or leisure times these shops can add to the festivity.

03. The Resource Center

Nearly 55% people voted for a library while asked. So a resource center is designed which can house a library and also audio visual room with modern facilities. It can help both the children and the young generation. Also women's vocational skill development trainings can be hosted here.



3D visualization (view showing the food stalls and the resource center)



Design studio VIII
Year 2011
Course tutor _ Prof. Khaleda Ekram
Prof. Dr. Farida Nilufar
Dr. Nasreen Hossain
Rehnuma Parveen

Design of housing for class III & IV govt. employees of Dhaka University

" I believe the way people live can be directed a little by architecture" _Tadao Ando



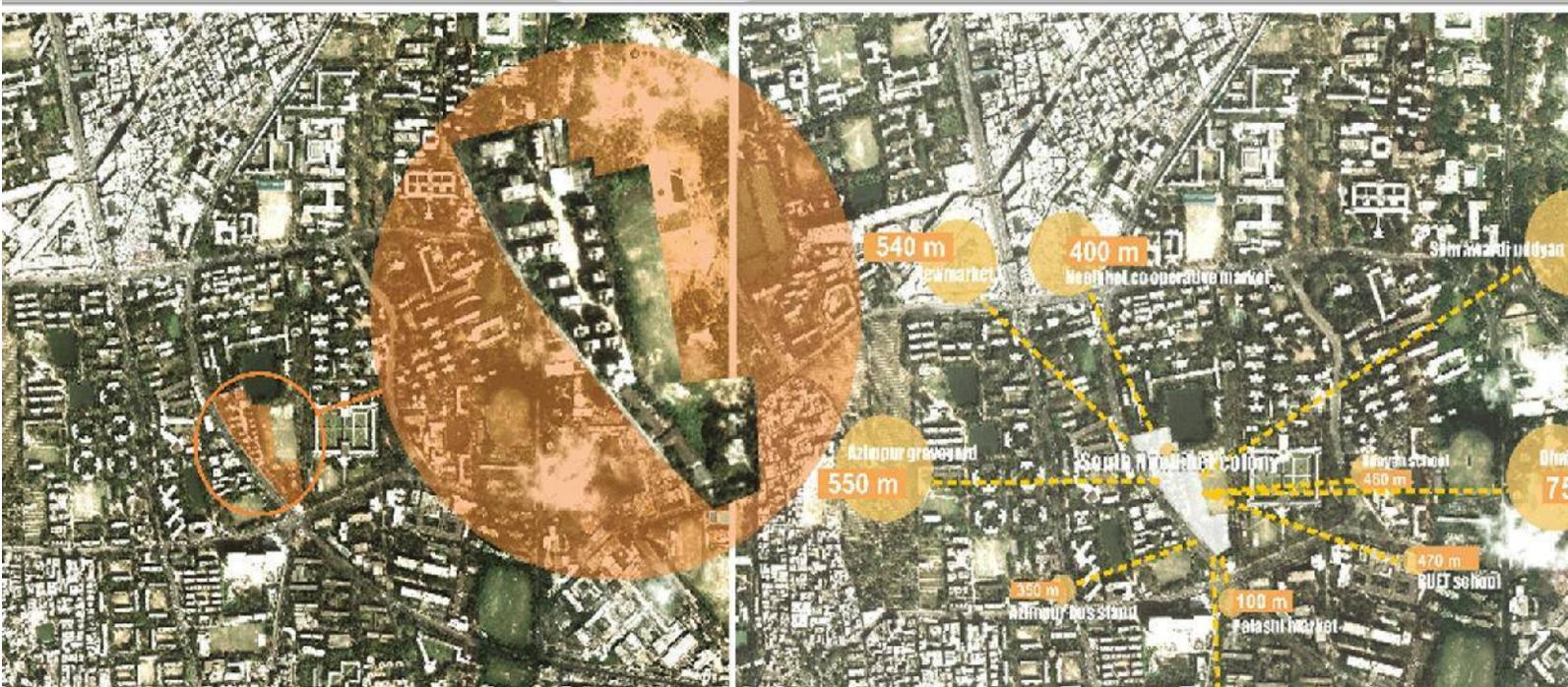
Site Introduction and Analysis

The colony was completed in three phases. First phase was completed at 60th decade. Second phase was at 80s and the last residential block was completed 2008. There is a club house separated from the residential block & a mosque inside the site. The site is just beside the Jahurul Haque hall, although the visual & physical linkage is broken.

Section showing different functional zones
 green space is inaccessible & totally separated
 building height is not proportionate to the open space

- Physical aspects:
- The site is surrounded by 12' high wall all around separating from the adjacent road and students dorm visually & physically
 - Zoning is maintained properly in its permanent buildings although the temporary structures created an imbalance in the masterplan.
 - Commercial need is not fulfilled by the two unplanned grocery shops at the entrance
 - The open space of the front of the blocks have been used as gardens by the residents
 - Children plays at the hard open space as there is a lack of playground
 - Drainage system is good enough although the rainwater creates water clogging at the southern part

- Social Aspects:
- Social interaction pattern: primary gathering spaces: in front of the individual building (generally women gather in the afternoon for chatting)
 secondary gathering spaces: in the common open spaces among buildings (children aged 7-12 play during the afternoon)
 other gathering spaces: within the mosque premises and in front of the only shop which is situated at the entry of the site (grown up men gather after prayers)
 - Occasional gathering space: the inhabitants of the housing arrange their occasional programs outside the housing area, still some programs are arranged on the rooftop.
 - Security condition: the condition of tenant security within the housing premises is good although sometimes discrete incidents of crimes happen. there is a security guard who controls the entrance point of the housing area.

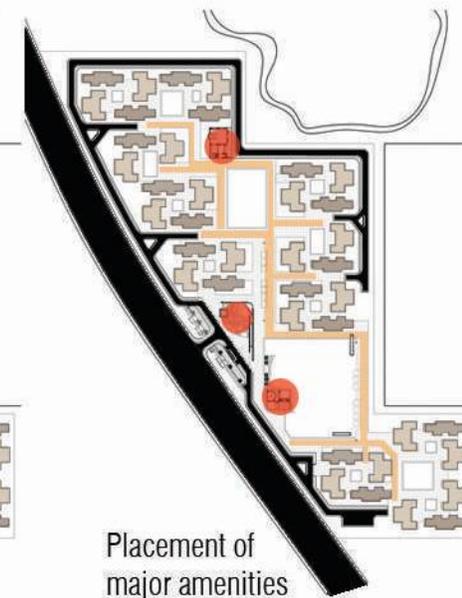
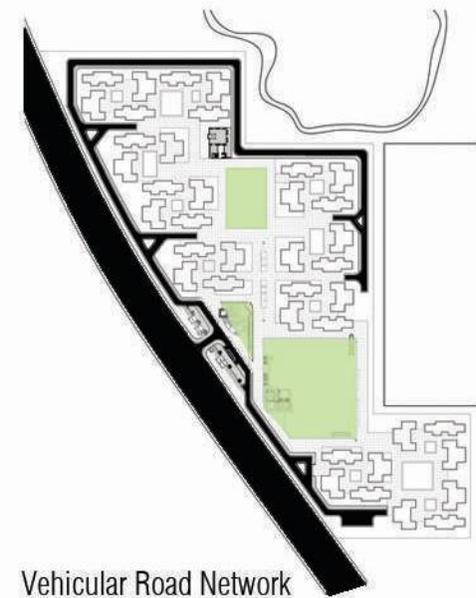


Design decisions to formulate a wholesome spatial experience:

- _ The residential blocks will be organized around green activity hubs.
- _ These green patches will be connected with each other to formulate a network of green zones and will generate interaction between the residents.
- _ The green zones will be categorized according to their size and purpose; i.e. small greens will be placed in between residential blocks which will be used for mostly vegetation and large greens will connect these small greens which will accommodate communal facilities.
- _ Vehicular roads will be placed on the periphery so the residential zones are left uninterrupted and safe for pedestrians.



Design Morphology: The design is formulated with careful overlapping of several layers of infrastructures and amenities, i.e. vehicular and pedestrian road network, green layer, recreational and communal amenities etc.



Vehicular Road Network

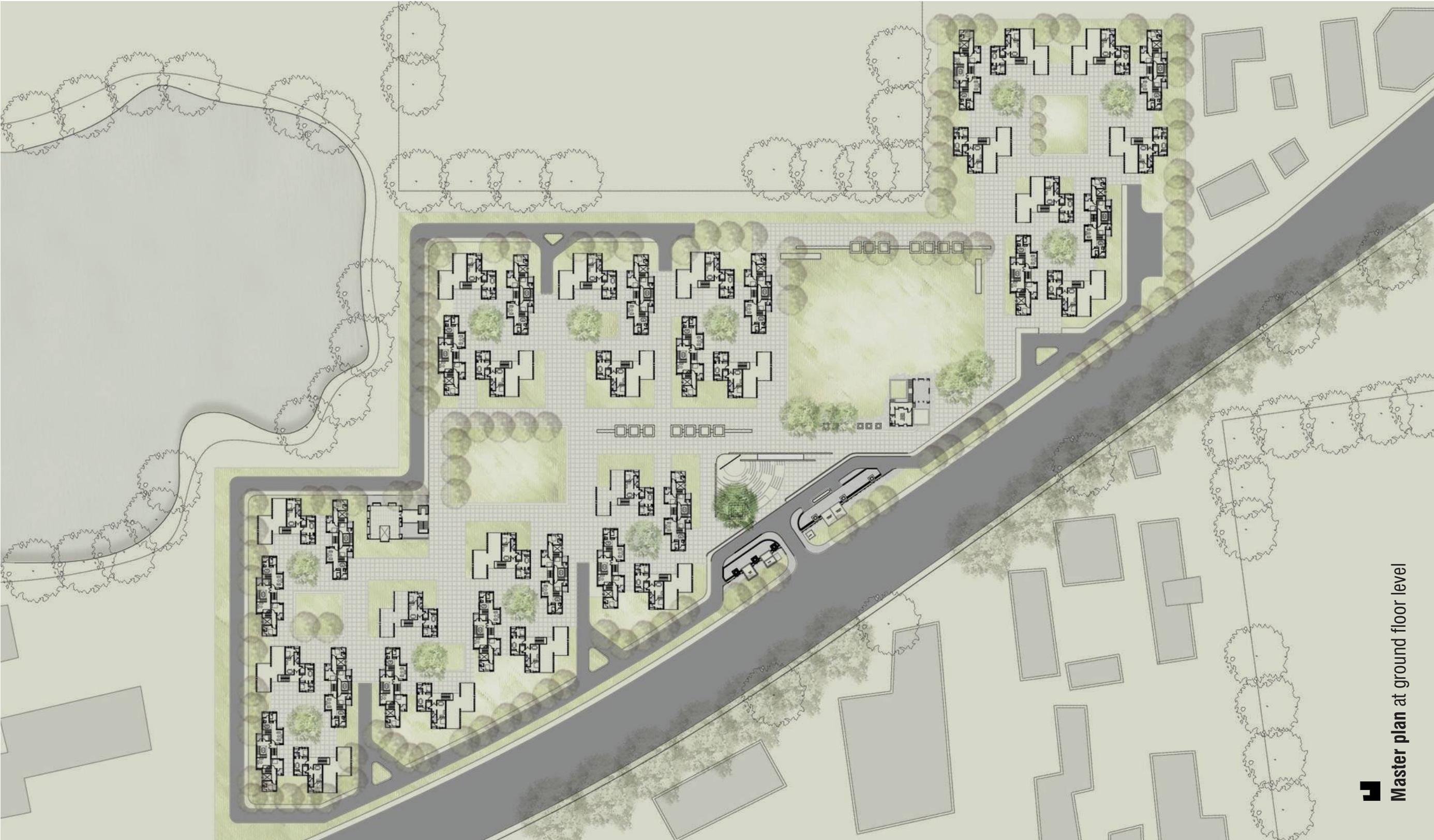
Connection of built form and green zone

Formulation of residential blocks

Location of major green areas

Pedestrian road network

Placement of major amenities

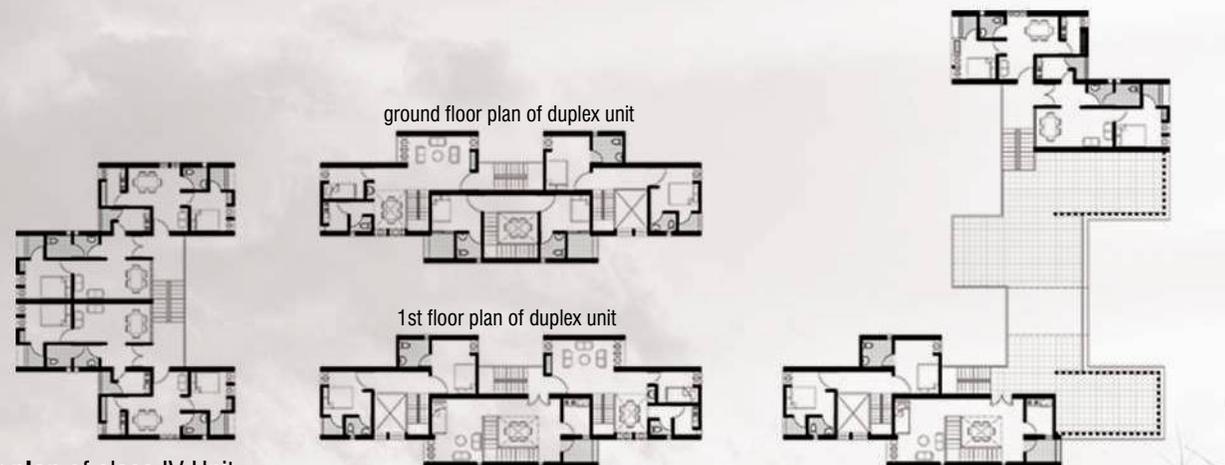


Master plan at ground floor level



Elevation of class IV Unit

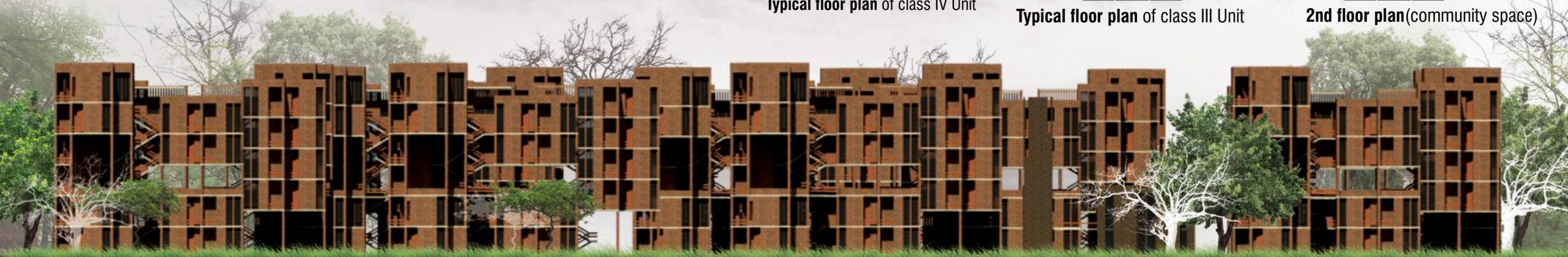
Section of duplex class III Unit



Typical floor plan of class IV Unit

Typical floor plan of class III Unit

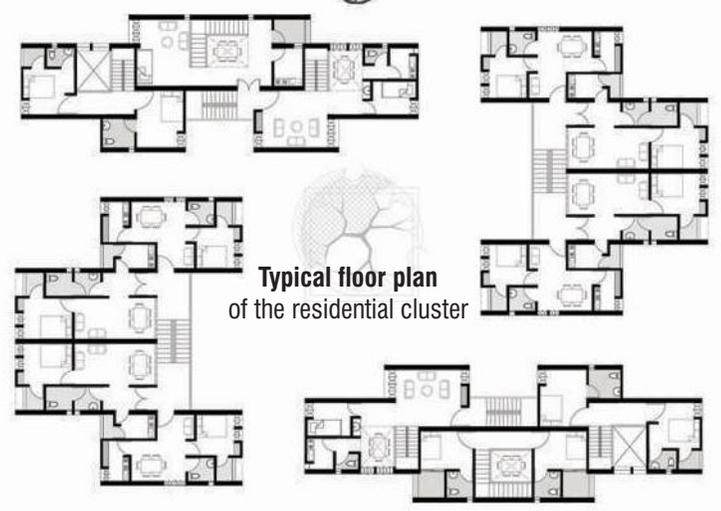
2nd floor plan(community space)



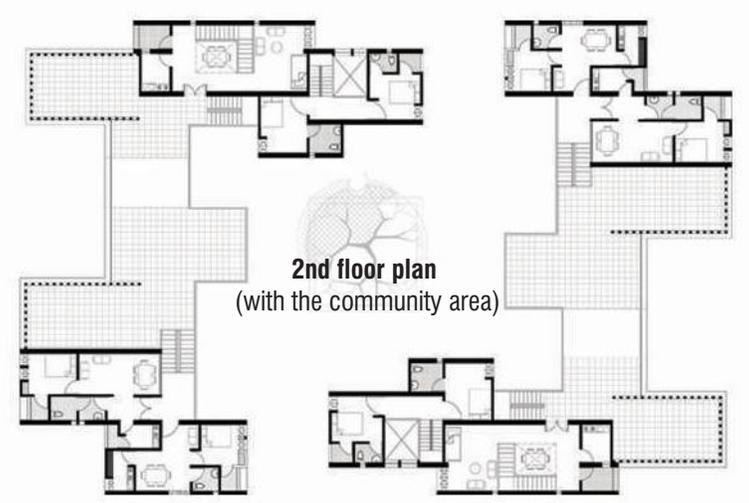
West elevation (partial)



Section through the community area of a building block



Typical floor plan of the residential cluster



2nd floor plan (with the community area)



Ground floor plan (with the community area)



Visual connectivity between the green areas

Visual connectivity and spatial flow of the open and green zones

Kitchen garden zone:

This area is used as the kitchen garden. The housewives and children can **work in the garden in free time**. It can add to the monthly income as well as developing the food served on table.

Internal courtyard:

The internal courtyard has tree shed and sitting arrangement. The area can be used as **socializing place** from different apartments of the buildings.

Community area:

The floor is left for community use. Neighbors from different flats use this area for several uses. Mothers can watch over their kids from up here, so the area can be a **parental guidance area**.

Kitchen garden zone:

This area is used as the kitchen garden. The housewives and children can work in the garden in free time. It can **add to the monthly income** as well as developing the food served on table.

Central green area:

This is the central green area. Children and teenagers from surrounding building complex can come here and **mingle with each other**. the area is visible from all the buildings so it has a **good visual and spatial connectivity** with the other areas.

Kitchen garden zone:

This area is used as the kitchen garden. The housewives and children can **work in the garden in free time**. It can add to the monthly income as well as developing the food served on table.

Community area:

The floor is left for community use. **Neighbors from different flats** use this area for several uses. Mothers can watch over their kids from up here, so the area can be a parental guidance area.

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Kitchen garden zone:

This area is used as the kitchen garden. The housewives and children can work in the garden in free time. It can add to the **monthly income**.



3D visualization: Perspective view of the club house, central green area and amphitheatre



Granery

Conservation of **Archaeological heritage site** of Wari Bateshwar, Narshingdi

Design studio VIII
Year 2011
Course tutor Prof. Khaleda Ekram
Prof. Dr. Farida Nilufar
Dr. Nasreen Hossain
Rehnuma Parveen

"The sleepy little villages of Wari bateshwar are the picture perfect vision of rural bangladesh.
But beneath the earth are treasures that could turn our knowledge of prehistory on its head" _The daily New Age, April 27, 2007

Site introduction and analysis

Historical overview:

Wari bateswar is a significant archaeological site in Indian sub- continent. Vivid evidences of a lost city are hidden beneath the site. Md. pathan, a school teacher first brought light on the importance of the site in 1993. later his son, Md. Habibullah Pathan, an amateur archaeologist took an initiative to collect the antiquities and study them. The archaeological department of jahangirnagar University is studying them since 1989.

Reason of development of the city:

By the geographical character we know that the site was divided into 'byde' & 'chala'. It is proved that the byde as lowland that used to be under water in the monsoon. But the chalas were the highland. As the bydes collected alluvial soil, the land was so fertile that it might grow extra crops than the people's need. So there comes a need to store them. From the present position of Wari Bateshwar, it is assumed that it was situated over the bank of the Brahmaputra river. Even as the current path of the Meghna is not passing by so far, If it was, it had a great chance to be a port city not only connected to not only Mahasthangarh, but the whole way to even Chittagong. Along with agriculture, might be influenced the life style of this region. The construction material may be another key point for this region. is still being used as construction material at the locality. The easy availability influenced the development of Wari Bateshwar. The area of Wari Bateshwar is protected both naturally & artificially. Naturally, by the rivers at the eastern part. The eastern part is protected by the 'Asom Rajar Garh'. So the city became well protected by both sides. The soil is very fertile & used as agricultural land.

Legal issues and standard/charters for archaeological conservation:

1. Conservation, reinforcement and restoration of architectural heritage requires a multi-disciplinary approach.
2. Value and authenticity of architectural heritage cannot be based on fixed criteria because the respect due to all cultures also requires that its physical heritage be considered within the cultural context to which it belongs.
3. The value of architectural heritage is not only in its appearance, but also in the integrity of all its components as a unique product of the specific building technology of its time. In particular the removal of the inner structures maintaining only the facades does not fit the conservation criteria.
4. Restoration of the structure in Architecture Heritage is not an end in itself but a means to an end.
6. The peculiarity of heritage structures, with their complex history, requires the organization of studies and proposals in precise steps.

Trade potential and tourism development:

Cultural tourism aspect of an area can be classified in 2 catagories.

Able categories: _ Ready-made garments industry is a potential trade sector of Narshingdi district.

_ Several fruits i.e. Banana, latkan, jackfruit are being cultivated in mass scale and the district is famous for these fruits.

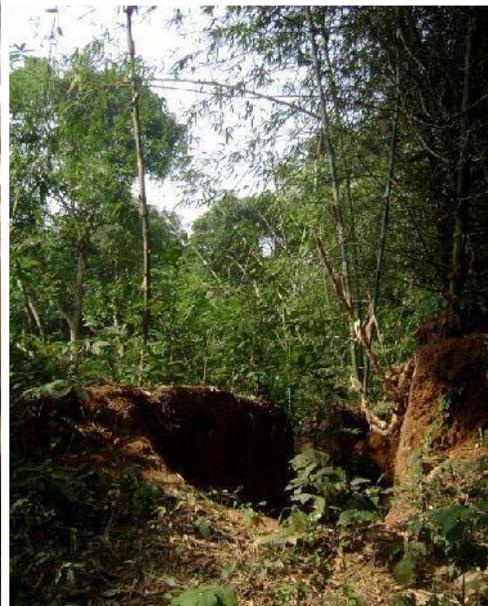
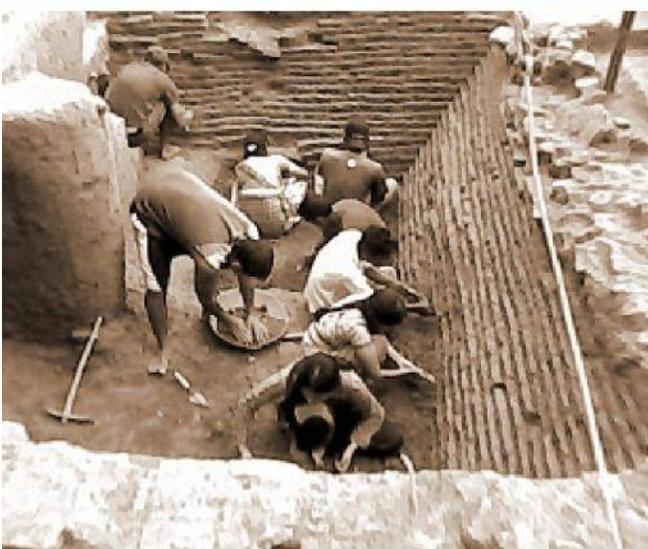
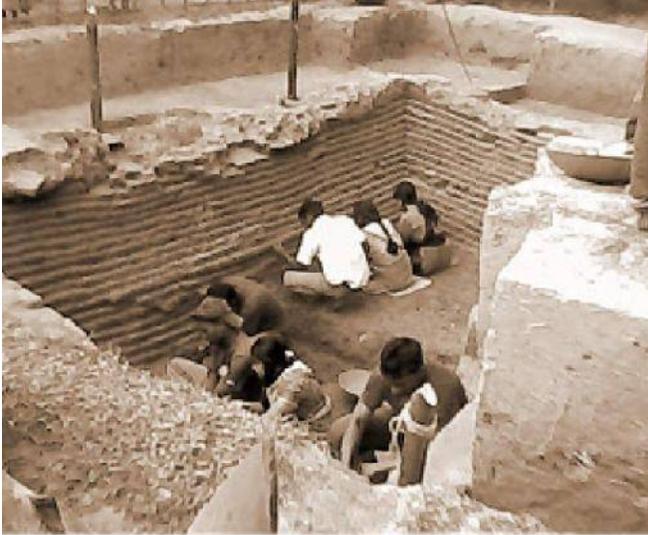
_ Narshingdi is also well known for the wood works, which is even penetrating the wood market of surrounding districts.

_ The archeological heritage site of Wari- Bateswar is one of the most famous heritage sites of Bangladesh, which can draw a large number of tourists here.

Ready categories: _ Cottage industry can be flourished through Fair trade system. Fair trade system is a trading partnership based on dialogue and transparency between the producers and distributors. The fair trade system has already been introduced in Narshingdi district. several kinds of products like bamboo made "mora", "haatpakha", " sheetal pati", knitted toys, handmade cotton toys, decorated pottery, handmade blankets, "nakshi katha" can be included in Fair trade system.

_ Several kinds of monthly and annual cultural events take place through out the district. They are:

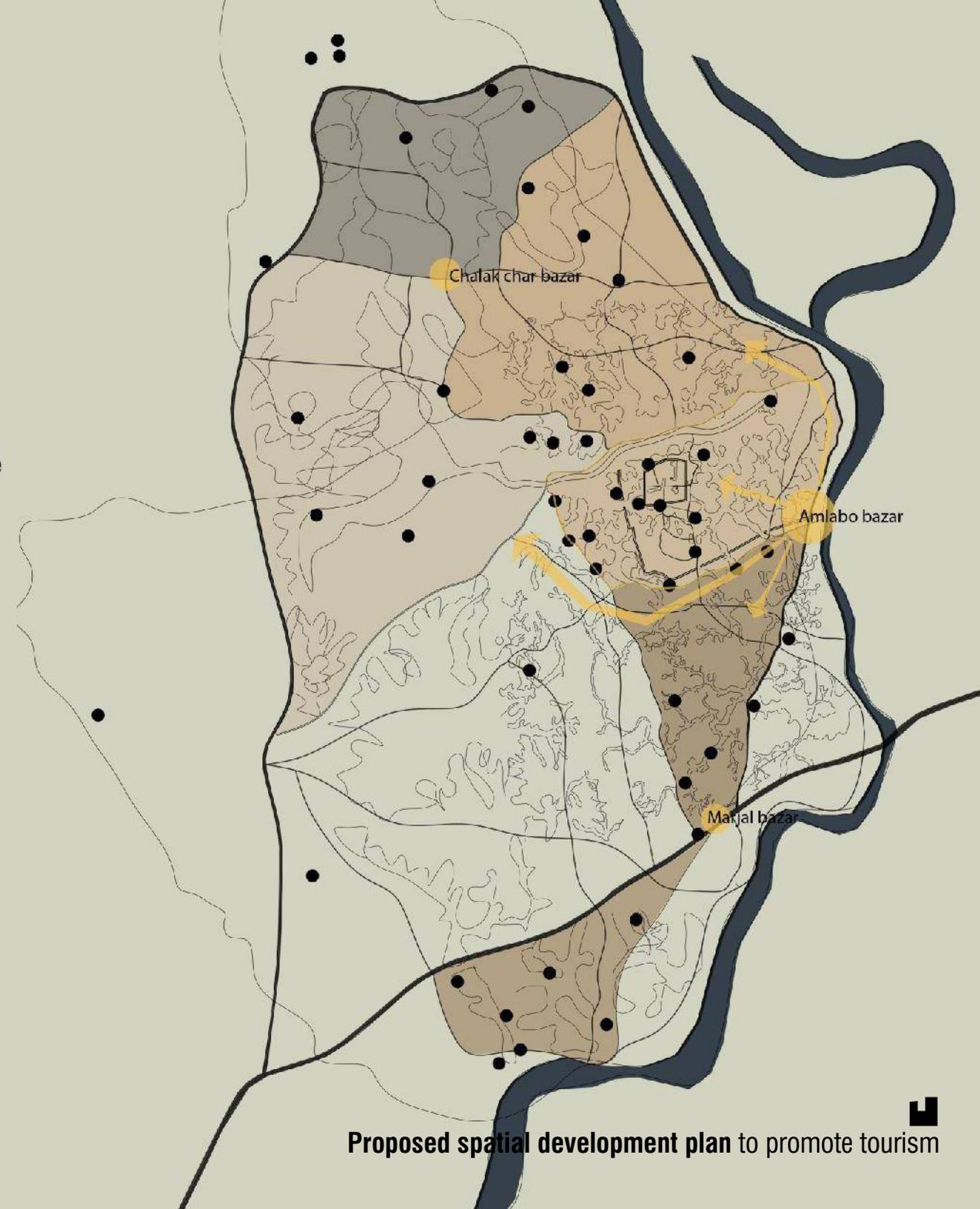
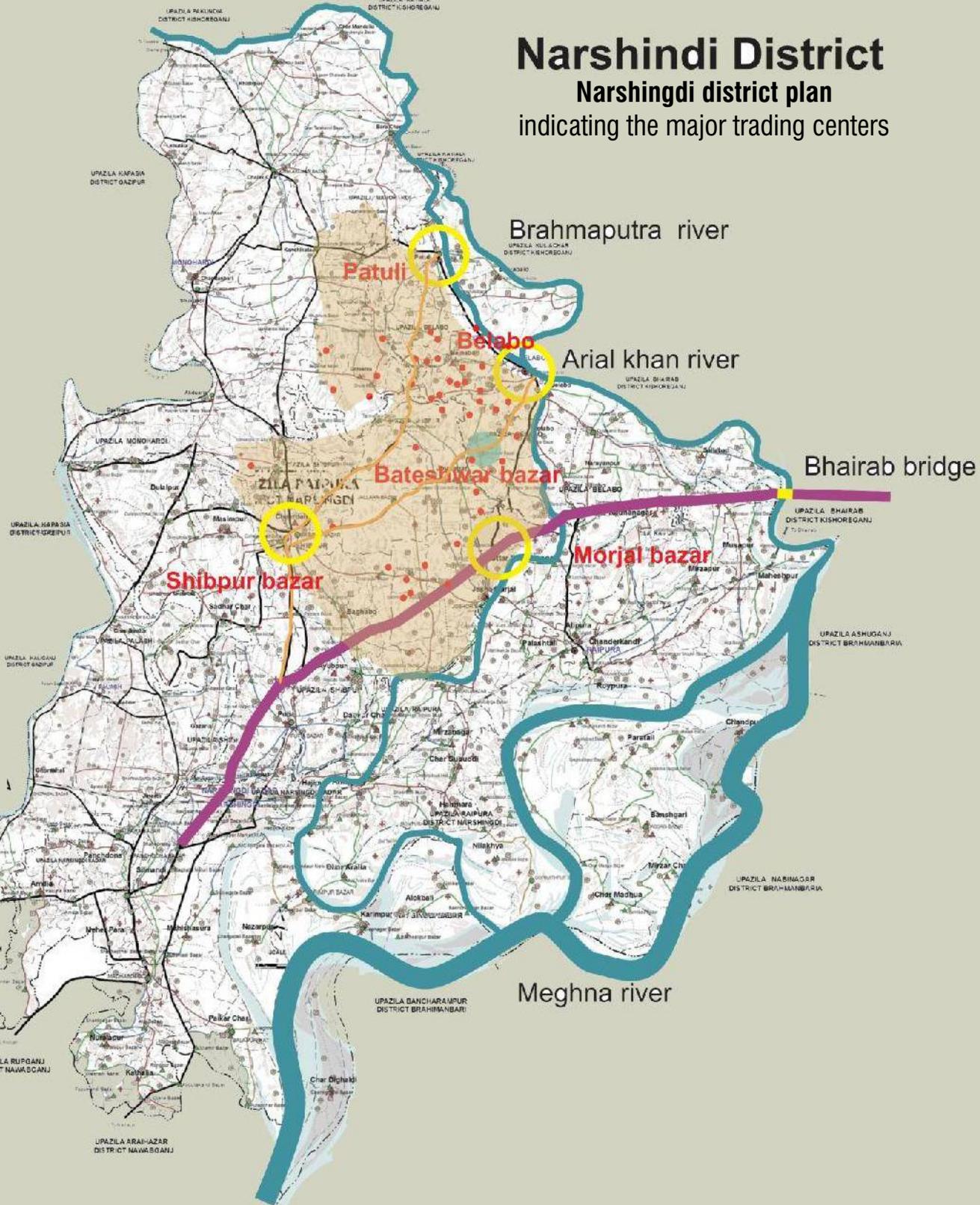
- > Monthly stage drama performed and directed by local people of Wari- Bateshwar villages.
- > Weekly and monthly performance of folk songs including " pala gaan", " baul gaan", " puthi path" etc.
- > Annual "Baishakhi mela".
- > Annual " Oros" programme, Akhra of Jalalabad and several religious programs tourism.



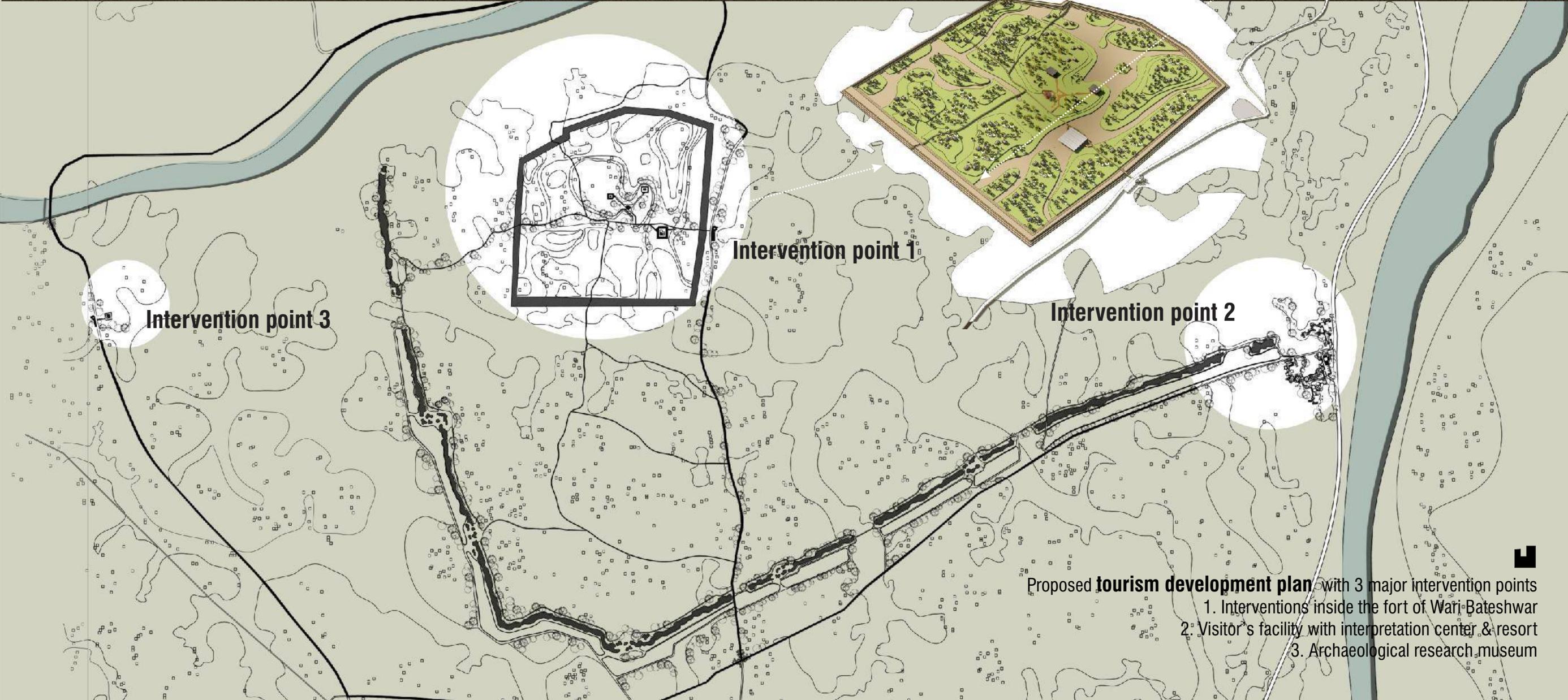
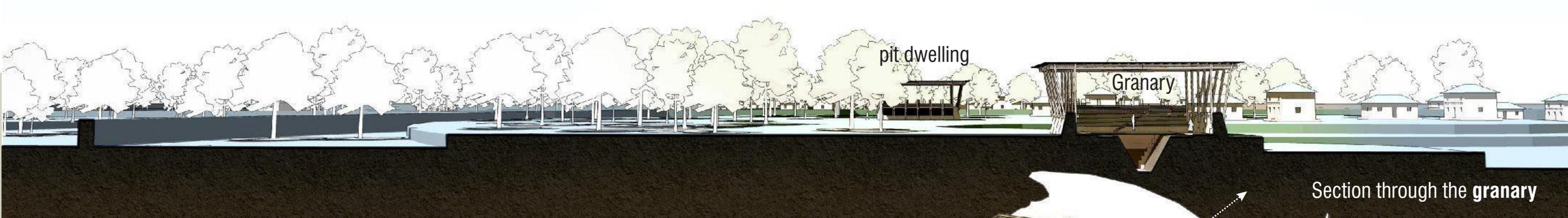
Narshindi District

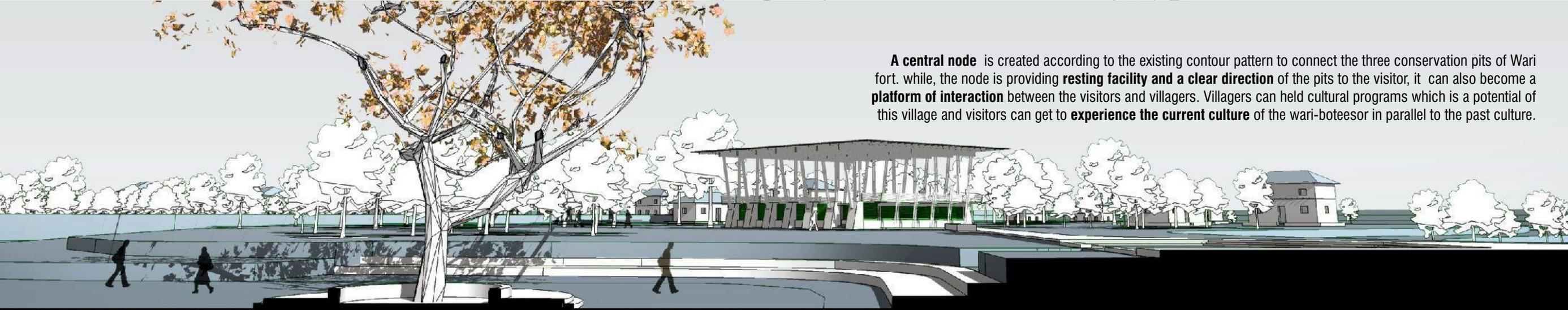
Narshingdi district plan

indicating the major trading centers



Proposed spatial development plan to promote tourism





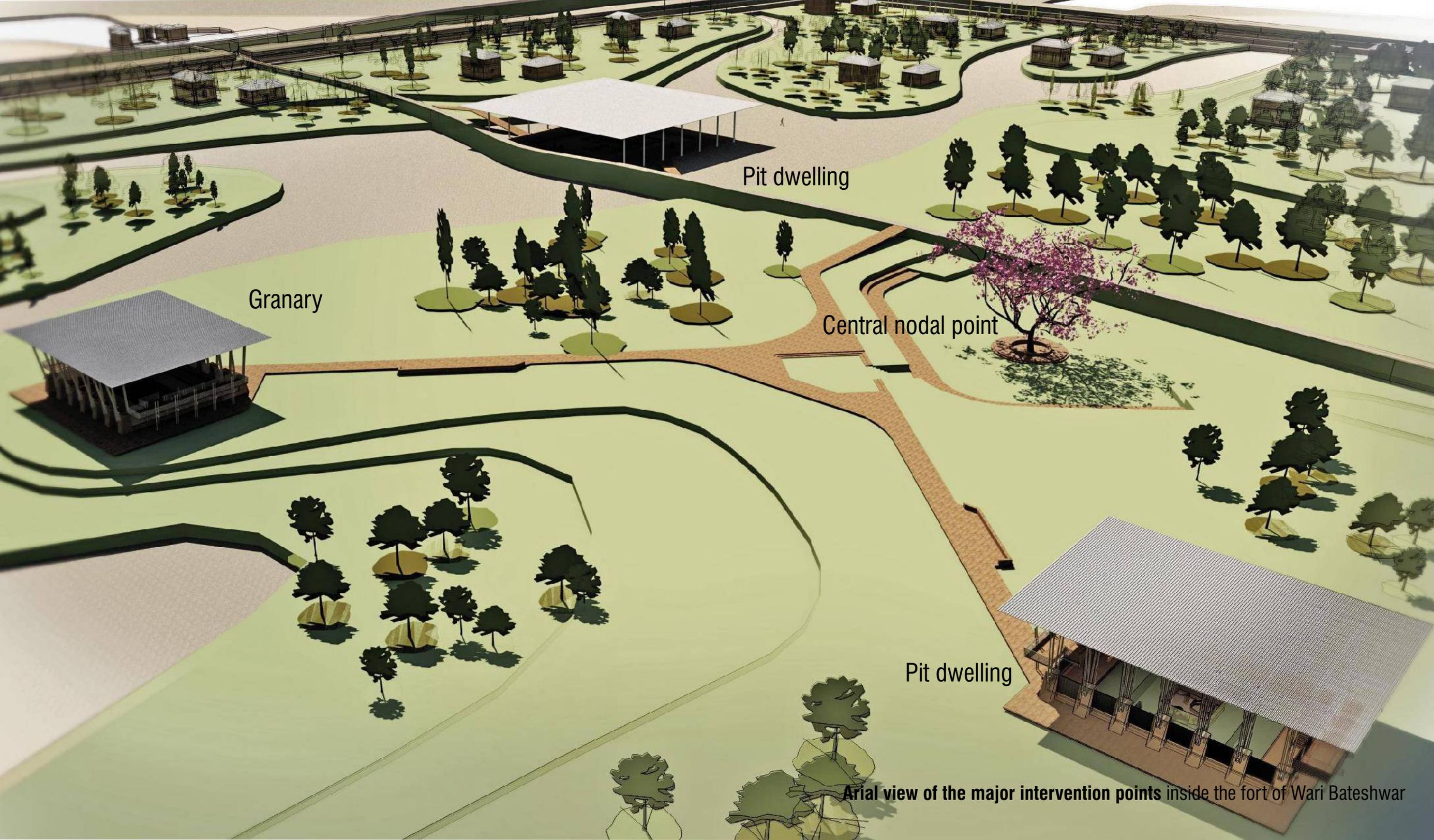
A **central node** is created according to the existing contour pattern to connect the three conservation pits of Wari fort. while, the node is providing **resting facility and a clear direction** of the pits to the visitor, it can also become a **platform of interaction** between the visitors and villagers. Villagers can held cultural programs which is a potential of this village and visitors can get to **experience the current culture** of the wari-boteesor in parallel to the past culture.

Sectional perspective through the **central nodal point**



- 1. Pit dwelling shed
- 2. Granary shed
- 3. central nodal point
- 4. Info portal and ticket counter

 Spatial plan with the **Major interventions** inside the fort of Wari Bateshwar



Pit dwelling

Granary

Central nodal point

Pit dwelling

Aerial view of the major intervention points inside the fort of Wari Bateshwar



3D visualization: Perspective view of the shed over the granary



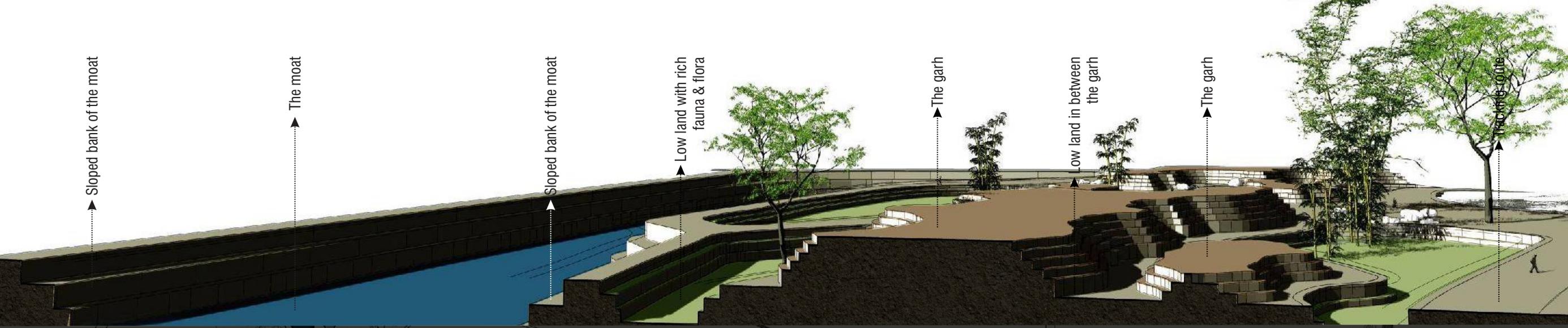
Tourist resort

Interpretation center & museum

Masterplan of the intervention point 2
(including the interpretation point, resort)

Section through the interpretation center





Sectional perspective through the Asam rajar Garh

1. The moat surrounding the garh
2. The asam rajar Garh
3. The break in the garh (which can be used as resting & relaxation area)
4. The tracking route
5. Low land with rich flora & fauna



Development plan for the Asam rajar Garh



Design studio IX
Year 2012
Course tutor_ Prof. Dr. Faruque A U Khan
Prof. Khaleda Ekram
Tasneem Tarique
Mohaimen Islam

Design of 150 bed referral hospital at Cox's bazar, Chattagong.

" The architectural work of clinics and hospitals should be understood as an art and a technology that are aimed at helping one to achieve the desired state of well-being" _Arian Mostaedi, New health facilities

Site analysis

Mei maid eco resort

Mangrove forestation

Union parishad
katcha road

Rejukhali river

Green belt (wind buffer)

Shrimp hatchery

Union parishad pacca road

Shonarpara high school

Existing disaster shelter

Madrasa complex

Mosque

Shonarpara primary school

Jaliapalang union complex

Jaliapalang high school

Sonar Para Bazar

Community clinic

+ Z
from sea level

| Serial No. | Function | Quantity | Unit Area | Space Requirement (sqft) | Total Area | Remarks |
|------------|-----------------------------------|----------|-----------|--------------------------|------------|------------|
| 1 | Reception and Family Waiting Room | 1 | 500 | 500 | 500 | 20 Persons |
| 2 | Recovery | 1 | 400 | 400 | 400 | 4 Persons |
| 3 | Doctors' Lounge | 1 | 200 | 200 | 200 | 1 Person |
| 4 | Doctors' Toilet (M/F) | 1 | 50 | 50 | 50 | 2 Persons |
| 5 | Nurses Lounge | 1 | 200 | 200 | 200 | 1 Person |
| 6 | Nurses Toilet | 1 | 50 | 50 | 50 | 2 Persons |
| 7 | Preparation Room with Toilet | 1 | 200 | 200 | 200 | 1 Person |
| 8 | Labor Room with toilet | 1 | 200 | 200 | 200 | 1 Person |
| 9 | Delivery Room | 1 | 350 | 350 | 350 | 1 Person |
| 10 | Scrub up Area | 1 | 50 | 50 | 50 | 1 Person |
| 11 | Baby Wash | 1 | 100 | 100 | 100 | 1 Person |
| 12 | Sterile Room | 1 | 300 | 300 | 300 | 1 Person |
| 13 | Clean up | 1 | 150 | 150 | 150 | 1 Person |
| 14 | Dirty Utility | 1 | 100 | 100 | 100 | 1 Person |
| 15 | Record Room | 1 | 100 | 100 | 100 | 1 Person |
| 16 | Medicine Storage | 1 | 150 | 150 | 150 | 1 Person |
| 17 | Emergency Services | 1 | 100 | 100 | 100 | 1 Person |
| 18 | Newborn Nurseries | 1 | 400 | 400 | 400 | 1 Person |
| 19 | Services | 1 | 400 | 400 | 400 | 1 Person |
| 20 | Food Services | 1 | 70 | 70 | 70 | 1 Person |

View towards the sea

Prevailing wind
(September-February)

Internal private courtyard
(working as a **green buffer area**
between the rehabilitation and general hospital)

View towards the hill range

View towards
Rejukhal

Prevailing wind
(March- August)

View towards
Rejukhal

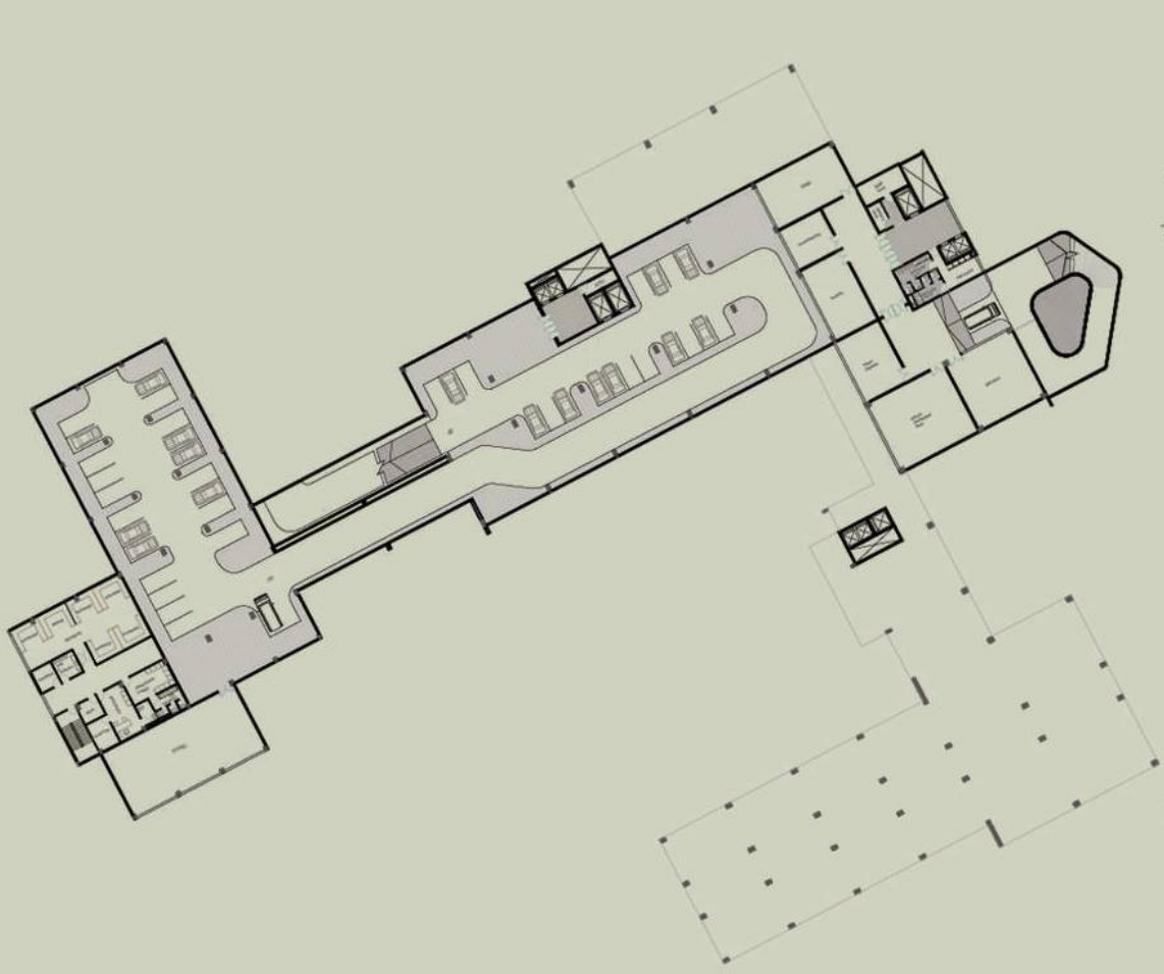
Design considerations:

- _ There is a mountain range on the Eastern side of the site, Rejukhali khal on the South and the sea is on the western side. So building is located in such a way that there is always an **exposure to these views**.
- _ There are two major prevailing winds. One is coming from South Western side (March- August), and the other is from The North Western side (September-February). The longer axis of the building complex is East-West. So the wind can not hit the building directly, but can **flow easily through** the building.
- _ The entire complex is divided in two parts. The main general hospital part and a rehabilitation part. The is an **internal courtyard separating** these two different functional parts and allowing the **inpatients to go outdoor**.

Front elevation



Basement plan



Ground floor plan





South elevation



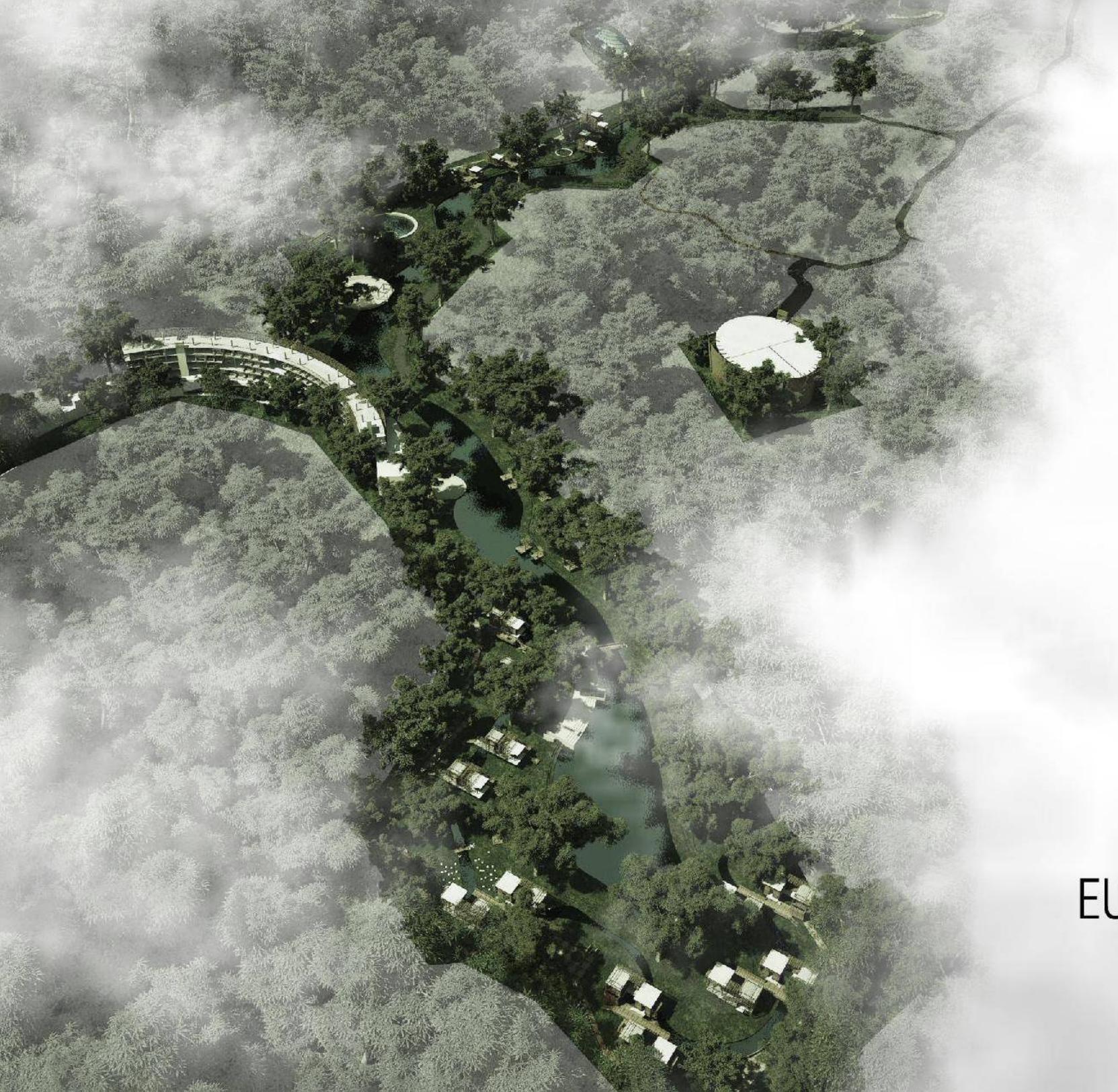
2nd floor plan

3rd- 4th floor plan

1st floor plan



3D visualization: Perspective view from the rejukhal towards the internal court



Professional Work

Year : 2014- 2015

Type of work: Project Proposal

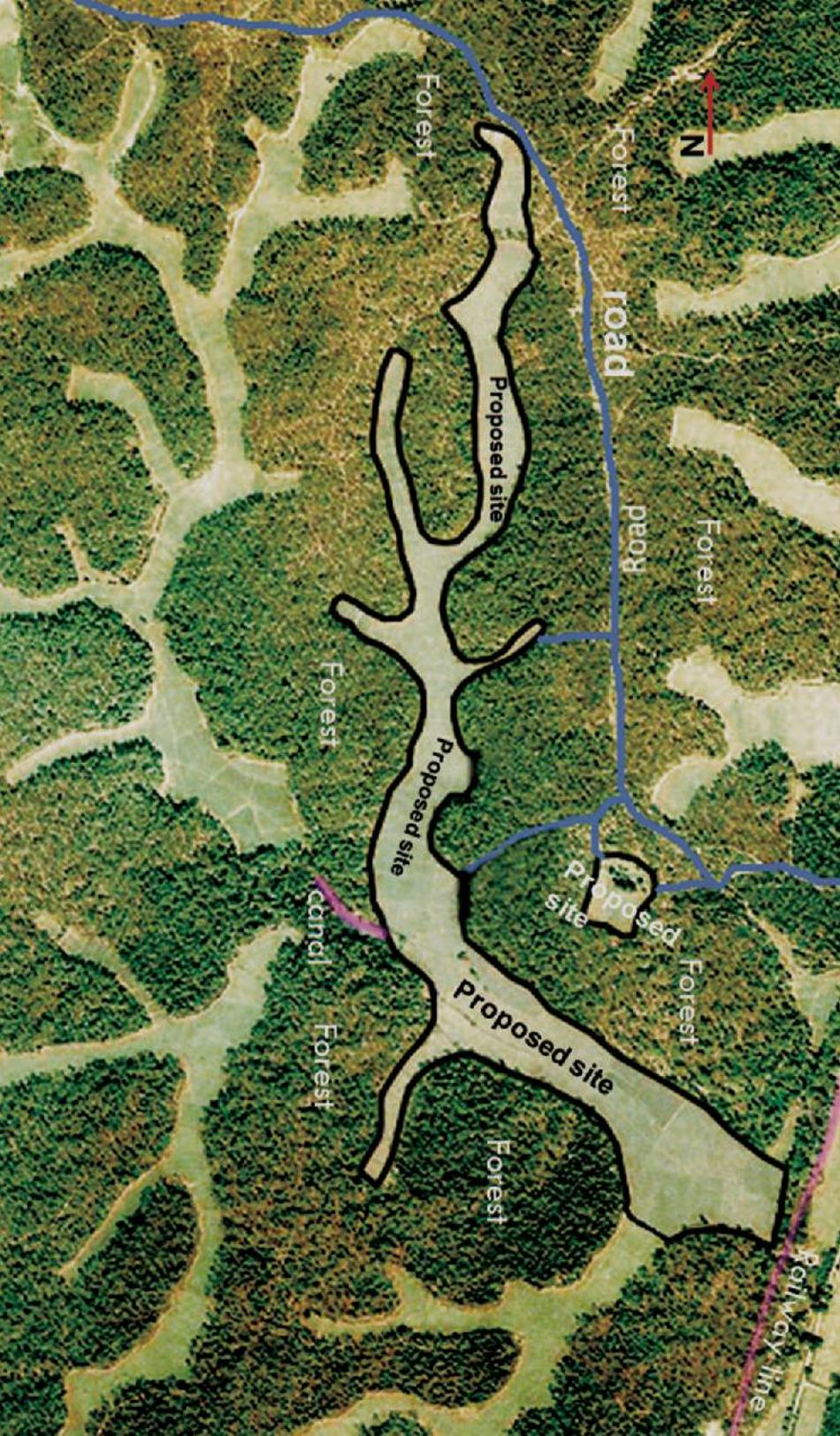
Role: Concept development, design formulation, drawing preparation

Client: Eucalyptus services PVT. limited

Site: Shreepur, Gazipur, Bangladesh. (Approximately 18 acres)

EUCALYPTUS ECO RESORT at Gazipur

a **holiday retreat** in wilderness



About the site:

Total size of the land is approximately 18 acres. The site is located on flat land areas (presently paddy fields) amongst the gojari forest.

Vision for the Project:

Away from the hustle and bustle of the metropolis, a place where you **can not only see nature rather you can hear, smell and feel that one is in the arms of nature**. At the same time, one would not like to be deprived from the comforts of a hotel. Staying in a hotel brings expectation of extra pampering, extra comfort, extra ordinary experience, great food and place to enjoy with friends, colleagues and or family. It's like a perfect balance between nature and luxury. The experience has to be unique and far different from a regular living, a perfect place to escape. **The place needs to be soothing to the eyes and the structures should least be like a sore thumb in middle of nature**. Yet the efficiency level be such that it becomes a unique experience by itself. One spends money to enjoy, especially during holiday or perks received e.g. friends & families outing, Sales Meet, Strategy Meet, Conference, kitty party etc. The value in return with the resort's look & feel must exceed their spends.

During day the landscaping is natural. At night the destination should lit up like an illuminated village.

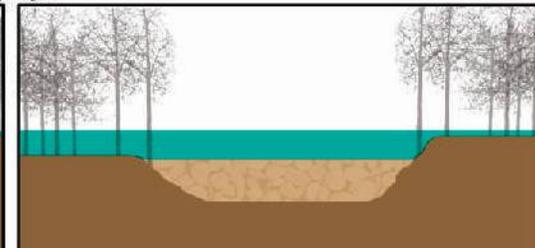
Proposed Functions:

- _ Hotel complex of 80 keys (Premium, Deluxe, Suite)
- _ Villas : 20 keys (some deluxe room in two-storied villas & some are one storied single unit villas)
- _ Water body with minimum level activity
- _ Butterfly/bird park and Tree house
- _ Outdoor activity facility (hiking, jogging, trekking, star gazing etc) with Relaxing zones
- _ Night Village Hut inside the compound
- _ Multi-purpose conference hall
- _ Banquet Hall (150 person)
- _ Business Center

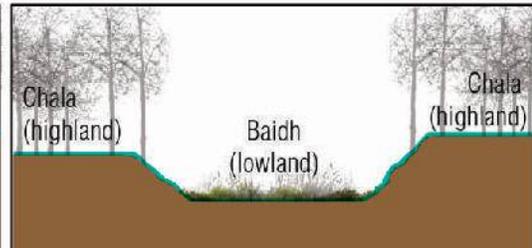
Design Decisions with respect to the existing topography:



_ To prevent man made flooding and eradication of the rich topsoil it was decided that the land will be left as it is.
 _ Rather the structures will be raised on stilts so that the storm water can flow and existing plants and vegetation can grow naturally without any foreign disruption.



_ The site is on lowland (baidh) which is a paddy-field at present.
 _ If the site is elevated through landfill which is the regular practise then there will be no drainage provisions and thus it will cause water clogging.



_ The local topography consists of two chala (highland) and baidh (lowland).
 _ Chala most contain forests while baidh provides for paddyfield which also helps to drain out the storm water and hence prevent flooding.

CONCEPT:

The underlying inspiration of the project was to create a holiday retreat, which would take visitors to a land of forgotten tranquility. To achieve that, several design decisions were made.

— **A central lake is proposed as a ribbon of natural strip** and activity spine. As Bangladesh is a land of numerous rivers, water plays a vital and influential role in our psyche. So the lake will become a dynamic design element which will pull our emotional strings. It can also provide with recreational facility and rain water discharge system.

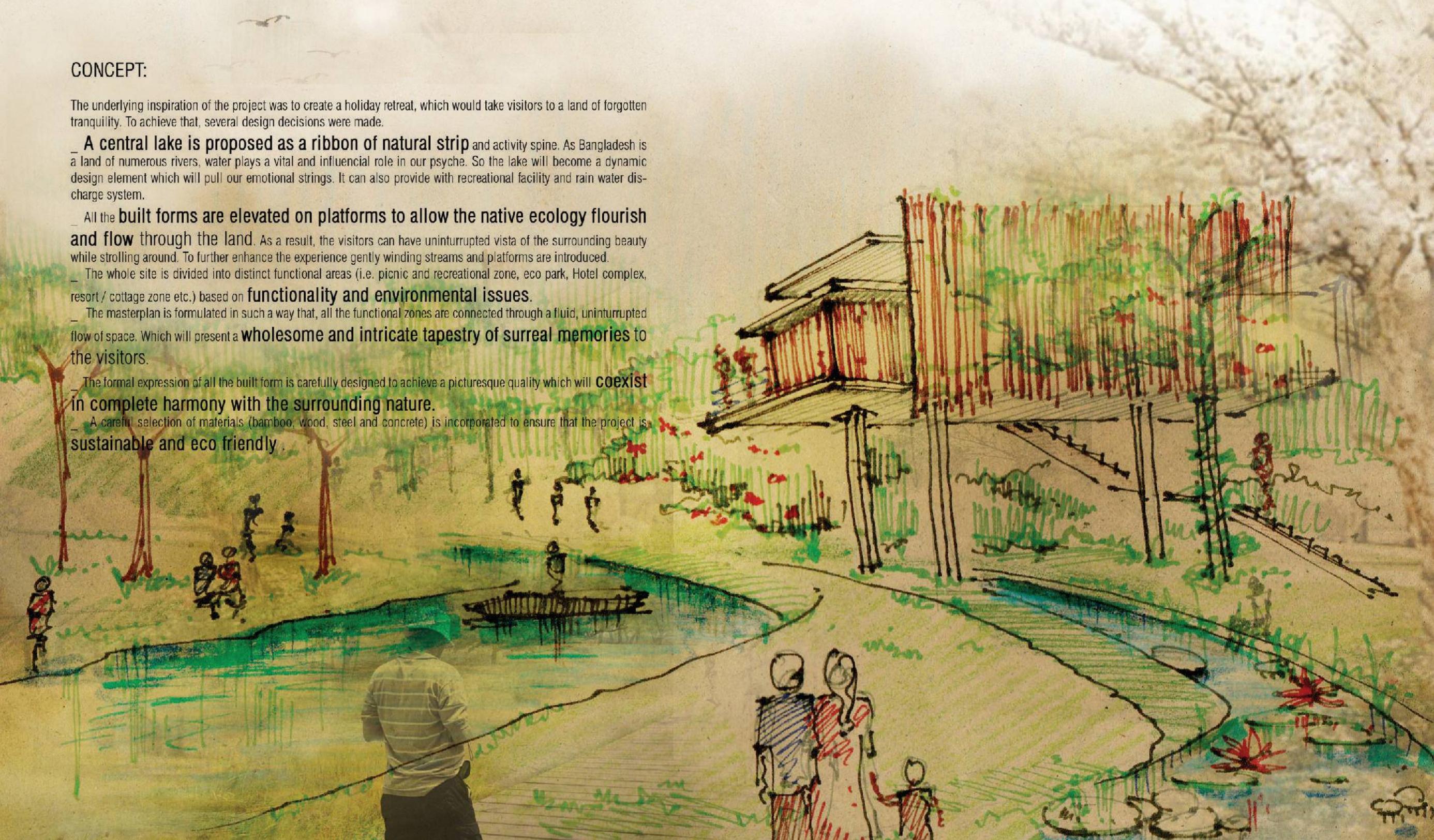
— All the **built forms are elevated on platforms to allow the native ecology flourish and flow** through the land. As a result, the visitors can have uninterrupted vista of the surrounding beauty while strolling around. To further enhance the experience gently winding streams and platforms are introduced.

— The whole site is divided into distinct functional areas (i.e. picnic and recreational zone, eco park, Hotel complex, resort / cottage zone etc.) based on **functionality and environmental issues**.

— The masterplan is formulated in such a way that, all the functional zones are connected through a fluid, uninterrupted flow of space. Which will present a **wholesome and intricate tapestry of surreal memories** to the visitors.

— The formal expression of all the built form is carefully designed to achieve a picturesque quality which will **coexist in complete harmony with the surrounding nature**.

— A careful selection of materials (bamboo, wood, steel and concrete) is incorporated to ensure that the project is **sustainable and eco friendly**.





Typical section line during summer time showing the relation of ground space under the stilt structure with the surrounding landscape



Typical section line during rainy season showing the relation of ground space under the stilt structure with the surrounding landscape



Parking spot for picnic groups

Amphitheatre for large gatherings

Large playground that can hold various sports

Eco park with tree houses

Lotus pond with surrounding seating arrangements

Butterfly museum

Main entrance gate house with car parking lot

The lake as an activity spine

The single cottage zone

Outdoor swimming pool with poolside activities

The business centre

The hotel complex

The executive cottage zone

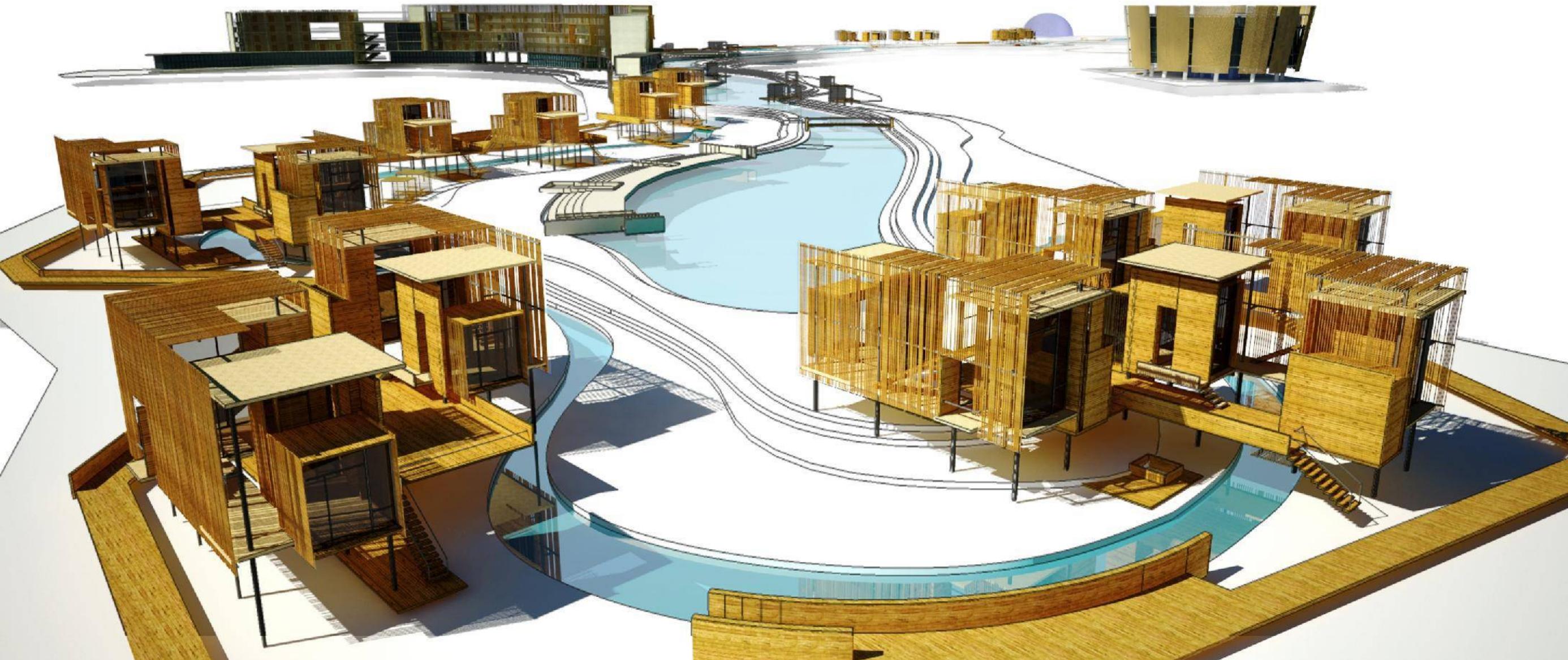
The lake side boating dock

The double cottage zone

The Master Plan showing various functional zones

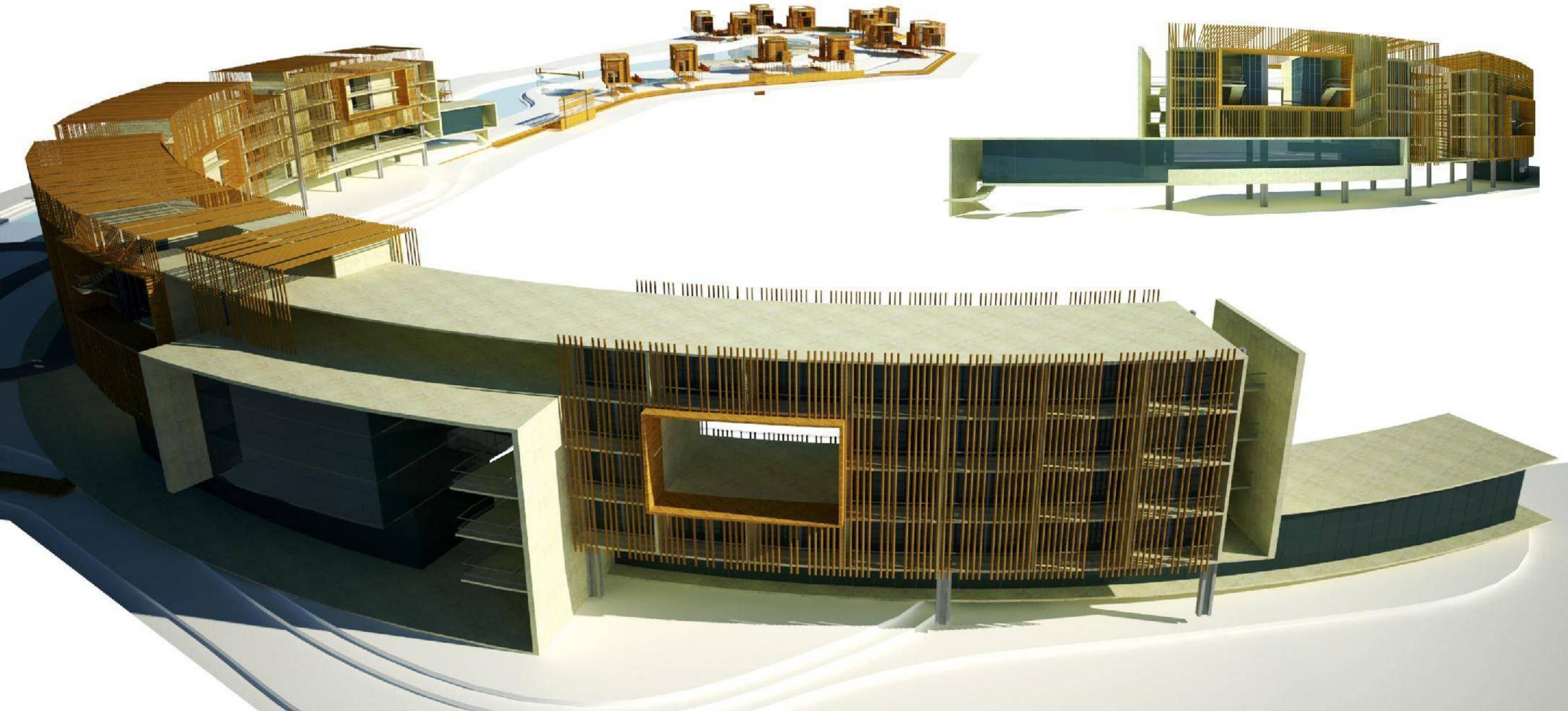
RESORT:

The resort area is designed with several prototypical villas, which are then located in such a way, that each of the villas has their own **unique indoor-outdoor connection**. There are three types of villas: single, double and executive. The layout and spatial quality of these villas are that of a traditional bamboo cottage, only the appearance is more contemporary and the interior spaces are fully equipped to ensure **luxury and comfort**. The open plan layouts **enhance the indoor environment and welcome the lush surrounding inside**. The villas are designed to provide **a sense of living in the nature**, not just watching it from a distance. The villas will grow organically along with nature, as the leafy green surrounding entwines with the bamboo screen wall. The surfaces of the villas will then turn into palette of colors from nature, which will create intricate **shade and shadow in the interior walls**, enhancing the tranquil reverie of it's inhabitants



THE HOTEL COMPLEX:

The Hotel complex comprises of three circular wings. The advantages of the circular form is that, it provides the guests to have **wide panoramic view of the great outdoor** and at the same time, ensures maximum light and ventilation. The interior spaces are designed in such a way that several activity pockets with designed viewframes are weaved together with the rooms (premium, deluxe and executive suits). And finally the whole form is housed within a **bamboo screening covered with lush green creeper plants**. As a result the formal expression of the building is like a **perforated green framework which doesn't block the flowing nature, rather enhance the mystery of what lies beyond the form**. The hotel complex houses not only luxurious accommodation, but also spacious and fully equipped spa and gymnasium accompanied with an infinity pool, a library, prayer hall, minimovie hall and multi cuisine restaurant.







ECO PARK



Recreational Facility

To provide the visitors a holiday full with activities, we designed several outdoor activity hubs. They consist swimming pool, open food courts, live performance plaza, wooden boardwalk along with the lake etc. To accommodate the functions, several modular "mancha" 's were designed

OUTDOOR SWIMMING POOL and amphitheatre



PICNIC SPOT AND LOTUS POND



SEATING PLATFORMS around the lake

746444

Competition

arranged by Matterbetter
competition entry: 746444

The MH17 tragedy was a manmade catastrophe which was very sudden and unsuspected. The incident can be described as termination of precious human life up in the air in a very unexpected manner. The aftermath of the event and the sense of loss it created came in different scale and proportion for different people.

The way we felt about the whole incident can be described as an absence, no matter who the victims were or what they did. Each individual is important to us regardless of their age, sex, occupation or religion. As a whole their absence has created a void in the history of human race.

When we started thinking of how to depict the incidence, we decided to create an emptiness of monumental scale instead of forming a physical monument. Because, the void that was created; cannot be appreciated by a physical entity, rather it should be experienced through a space which creates a sense of absence in human mind.

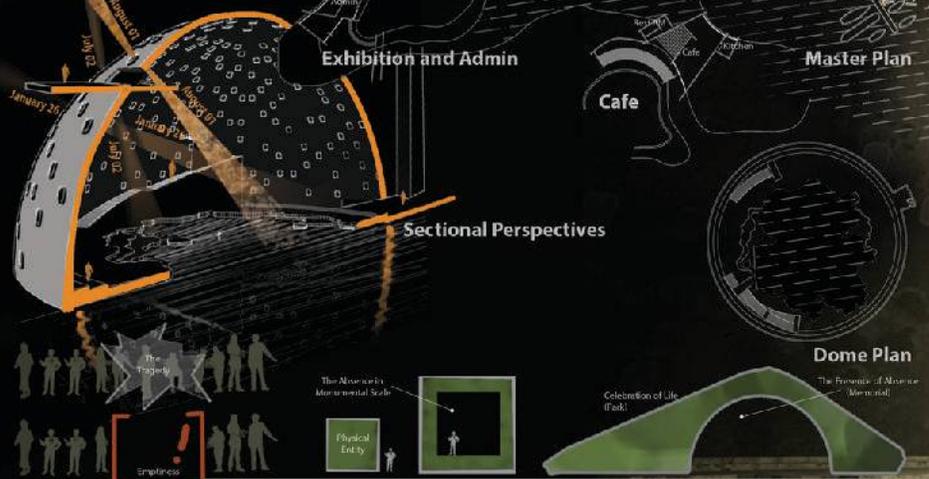
Since the presence and absence are intertwined with each other, and cannot be properly appreciated without the existence of each other; we decided to address them both through solid and void. The solid will depict the celebration of life which holds the void, in other words, death.

Through analysis it was found that the Dutch people love outdoor activities. Keeping that in mind, we designed a terrain landscape which houses different activity zones in different levels. The rolling landscape not only creates an inviting public space, but also engulfs the underlying void. As a result, when visitors go through the activity route and suddenly find themselves in the void, it will come as an unexpected shock to them. The park which will act as a green axis connecting the old center and The North of Amsterdam, also establishes a visual connection with the mainland because of the gradual elevation of contours.

The void, which is totally submerged by the undulated park, is interpreted as a dome. The spherical dome, when experienced with the shadow of it on water forms an illusion of being in an entire sphere. As a result the scale of the space becomes immeasurable. Also, because of the lack of outside light sources, the sense of undefined emptiness gets proficient. There are in total 298 deformed airplane window openings on the surface of the dome to represent each of the victims. Every day, one single opening will project light in and out, both at night and day, as a memoir of each fallen life.



1. Dock
2. Boardwalk
3. Cafe
4. Exhibition & Admin
5. Open Theatre
6. Memorial Entry
7. Memorial Log



The whole MH17 tragedy can be described as an absence of souls. Each individual is important to us regardless of their age, sex, or religion. As a whole, their absence has created a void in the history of human race. We decided to create an emptiness of monumental scale instead of forming a physical monument. Because, the void that was created; cannot be appreciated fully by a physical entity, rather it should be experienced through a space which creates a sense of absence in human mind. Since the presence and absence are intertwined with each other; we decided to address them both through solid and void. The solid will depict the celebration of life which holds the void representing death. We designed a terrain landscape which houses different activity zones in different levels as well as engulfing the underlying void. As a result, when visitors go through the activity route and suddenly find themselves in the void, it will be an unexpected shock to them. The enveloped void is interpreted as a dome which will create an immeasurable feeling. Also, because of the lack of outside light sources, the sense of undefined emptiness gets proficient. There are in total 298 deformed airplane window openings on the surface of the dome to represent each of the victims. Every day, one single opening will project light in and out, both at night and day, as a memoir of each fallen life.

