MAINAMATI CULTURAL COMPLEX

THE HUB OF CULTURE AND MEMORIES



Submitted by

Kazi Umme Mazhabin Methila

ID: 10308016

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Department of Architecture
BRAC University

Abstract

Comilla is one of the richest heritage site of Bangladesh. This site is unique among all the archaeologically important sites of Bangladesh. About 50 scattered ancient remains of settlement from the 8th - 12th century AD known as Mainamati are located throughout the comilla district. At mainamati the principal monument is the Shalban Bihara which is the main interest here. The Shalban Bihara is the middle of the mainamati range. Excavations have been continued since 1955 and items such as copper plates, gold and silver coins, and more than 150 bronze statues have been found. The largest number of stone sculptures and terra cotta plaques have been found in comilla's archaeological sites, representing Bengal and the subcontinent. The excavation of the Mainamati sites are noteworthy for revealing previously unknown facts about Bangladesh's political, religious, historical and Buddhist architecture.

The proposal of this project is to design a research institute for the students of archaeology department and the people who are interested to do research on excavation, preservation and exploring the sites of archaeology. A museum should be design for a complete tourist facility which will contains an archive along with the library facility. An accommodation for the researcher and the tourist should be design so that they can stay as long as they can visit the other historical sites in Mainamati. This project would be a place where people can learn the history of Bangladesh and also they can go back about 800 to 1200 years ago.

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CHAPTER 1: Background of the projects

1.1 Introduction

Archaeology gives the modern world a window into the past. Bangladesh is a country considerably rich in archaeological wealth, especially of the medieval period both during the Muslim and pre-Muslim rules, though most of it is still unexplored and unknown. In archaeological fieldwork and research this area was very much neglected for a long time for various reasons, not the least of which are its difficult geography and climate and remoteness from the main centers of the subcontinent. With the independence of Bangladesh in 1971 the Government has undertaken a number of field projects including a comprehensive survey and exploration of the hitherto unexplored areas and a fairly ambitious scheme of excavations on selected sites. Though work at present is carried out on a limited scale, the discoveries already made have been significant, while new information and fresh evidence are coming out gradually. These fresh explorations are likely to add substantially to our knowledge of the history and chronology of ancient Bangladesh and various aspects of her life and culture. The earlier history of Bangladesh reveals that Buddhism received royal patronage from some important ruling dynasties like the great Pala rulers, the Chandras and the Deva Kings. Under their royal patronage numerous well-organized, self-contained monasteries sprang up all over the country.

1.2 Project Brief

Bangladesh is young as a state but its land, people and culture are stepped in history, the cultural heritage of Bangladesh reflecting The creative genius of the people was enriched by the great civilizations that flourished in the region of well over two millennia.

we can watch about 1200 to 1300 years ago past history throughout the archaeological

heritage site of Mainamati, Paharpur, Mahasthangarh. From these we can perceive that we are

very rich from the very ancient time by our culture, art and crafts and architecture.

Around 50 sites being discovered in and around Comilla. From Khadgas to Devas many rules

lived but left us little to draw a picture out of it.

Selected archaeological sites: 50 sites

Explored: 23 sites

Completely explored: 10 sites

The obligation of this project is highly essential in Bangladesh's context, as the rich

architectural and cultural heritage of our country is struggling to continue its existence in the

rapidly developing Bangladesh. This project will hence attempt in research and excavation for

the historic buildings and a vision of through back the past history of Buddhist period.

1.3 Aims and objectives of the project

This project is to creating a social awareness among the people about our valuable heritage and

also making the awareness of govt so that they should concren about not to built a project so

close to the site. This project will be create its own community which will make people aware

about our heritage sites and make a vision to them about our past. this project will enhance our

historical, cultural image among the people.

Mainamati, Comilla is the richest part Of Bangladesh as most heritage sites are located over

there. The proposal of this project is to design a complete Research facility for this site, so that it

can be the center of research and excavation for Bangladesh Heritage Forum. Presently, there

is no accommodation place or any restaurant that can cater tourists from outside. The aim is to

design an accommodation and food court facility for tourist so that, tourist can stay in Shalban-

Bihara, as well as visit the other historical sites nearby. Also, to bring life to this site, some

additional facilities are necessary such as Museum and will be introduced.

1.4 Given Programme

- RECEPTION AND LOBBY
- SOUVEINIR SHOP
- KHADI CLOTHING WORKSHOP
- POTTERIES WORKSHOP
- HANDICRAFS WORKSHOP
- GALLERY
- MULTIPURPOSE HALL
- OFFICE AND ADMIN FACILITY
- LIBRARY
- ARCHIVE
- DORMATORY
- RESTAURENT
- EXCAVATION AND RESARCH FACILITY
- LABORATORY
- STORAGE
- PARKING

Chapter 02: Site appraisal

2.1 Location of the site

Location: Shalban, bihara, besides the existing museum, Comilla, Bangladesh

Site area: 575832 square ft

This site is government proposed site for tourist facility and museum. This site is located just besides the mainamati buddhist bihara. The department of archaeology of Bangladesh have thinking the public facilities of the archaeological site of mainamati and the site is already proposed.

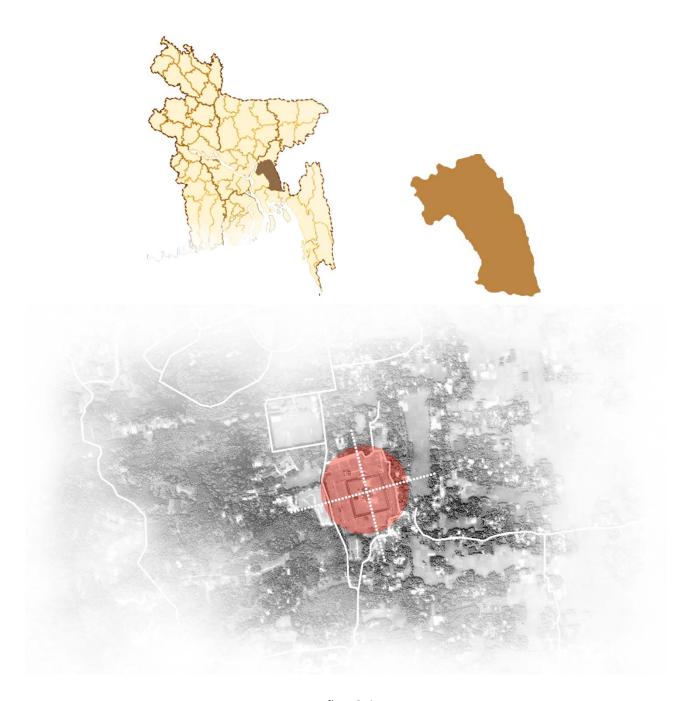


fig: 2.1

2.1.1 The site at present



fig 2.2

2.3 Site and surroundings

Site has a wonderful site force as mainamati shalban bihara is situated just opposite of the site. A huge green chunk shalban forest is situated just south west corner of the site. A new temple named mainamati new buddhist bihara is situated just western portion of the site. there are two roads just besids of the site one is the northern road and another is the eastern road which divided the site from shalban bihara. Comilla cadet collage, BARD, teachers training collage, mainamati cantorment is located just northern portion of the site and comilla university is located southern portion of the site.

Ancient COMILLA BHOJ BHIHARA, RUPBAN MURA, KOTILA MURA, ANONDO BHIHARA, ANONDO RAJAR DIGHI, ETAKHOLA MURA also located on mainamati cantonment area and bard area.so these ancient excaveted sites are also main site forces of my projects.

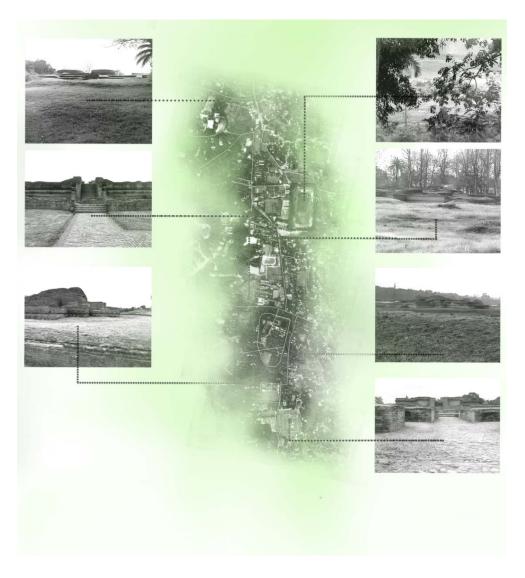


fig 2.3

2.4 Topography

The site is located a minimum 2 feet contour level from road level . Shalbon forest is situated minimum 25 feet contour level which is on the southern west side of the selected site.

2.5 historical background

The surrounding of the site is historically rich and significant. The most powerful and rich heritage site MAINAMATI SHALBON BIHARA, RUPBAN MURA,ETAKHOLA MURA,CHONDRI MURA, BHOJA BIHARA, LOTIKOT MURA,ANONDO BIHARA,

ANONDO DIGHI, KOTILA MURA is situated on mainamati. About eight kilometres west of Comilla town, lies a range of low hills known as the Mainamati-Lalmai range which is dotted with more than 50 ancient Buddhist settlements dating from the 8th to the 12th centuries. Almost at middle is the Salvan Vihara of 115 cells built around a spacious courtyard with a cruciform temple in the centre. About 5 kilometres north of Shalvan Vihara is Kutila Mura, which is a picturesque relic of a unique Buddhist establishment. This was once a self-contained Buddhist monastery where, monks lived, studied and prayed. It was the royal palace for the early Buddhist students. Students from various places come here for their meditation and religious learning. During their study period the students stay in the dormitory/cells around the temple. It's such a quite place inside a barren forest and one of the greatest tourist spots in Bangladesh. The selected government site is just beside of mainamati shalban bihara so there is a great change of tourist attaction is alreasy established in the site and tourist force is already so vibrant.

Chapter 03: Literature review

• 3.1 Buddhist architecture in bangladesh

The Pala Empire was an early Indian empire of Bengali Buddhist dynasty ruling from Bengal from the 8th to the 12th centuries. The Palas created a distinctive form of Bengali architecture and art known as the "Pala School of Sculptural Art." The gigantic structures of Vikramashila Vihar, Odantpuri Vihar, and Jagaddal Vihar were masterpieces of the Palas. These mammoth structures were destroyed by the forces of the infamous Bakhtiar Khilji The Somapura Mahavihara, a creation of Dharmapala, at Paharpur, Bangladesh is the largest Buddhist Vihara in the Indian subcontinent, and has been described as a "pleasure to the eyes of the world." UNESCO made it a World Heritage Site in 1985. The Pala architectural style was followed throughout south-eastern Asia and China, Japan, and Tibet. Bengal rightfully earned the name "Mistress of the East". Dr. Stella Kramrisch says: "The art of Bihar and Bengal exercised a lasting influence on that of Nepal, Burma, Ceylon and Java." Dhiman

and Vittpala were two celebrated Pala sculptors. But had we spent only one percent of that money for the excavation of Somapura Mahavihara, who knows what extraordinary discoveries could have been made. There are several monasteries in the Chittagong, and in most Buddhist villages there is a school where boys live and learn to read Bengali and some Pali (an ancient Buddhist scriptural language). It is common for men who have finished their schooling to return at regular intervals for periods of residence in the school. The local Buddhist shrine is often an important center of village life.

Buddhism outside the monastic retreats has absorbed and adapted indigenous popular creeds and beliefs of the regions to which it has spread. In most areas religious ritual focuses on the image of the Buddha, and the major festivals observed by Buddhists in Bangladesh commemorate the important events of his life. Although doctrinal Buddhism rejects the worship of gods and preserves the memory of the Buddha as an enlightened man, popular Buddhism contains a pantheon of gods and lesser deities headed by the Buddha.

Legend said that Gautama Buddha came to the region to spread Buddhism, and it was speculated that one or two individuals became monks to follow his footsteps. However, Buddhism did not gain much support until under the reign of Asoka when Buddhism gained a toehold. The Pala Empire that control the Indian subcontinent spread many Buddhist ideologies in modern Bangladesh and builds many monasteries such as the Mahasthangarh and the Somapura Mahavihara. Also within the same Pala era, a famous preacher named Atisha who was born in the city of Bikrampur and spread Tibetan-Buddhism ideology.

Chandra Dynasty's Puranchandra and Subarnachandra adopted Buddhism, as did their successors Trailokyachandra and Srichandra who ruled Harikel and Chandradwip. Khadga Dynasty were a Buddhist dynasty that carried the surname Bhatt. They made several temples and monasteries. For example, Raja Bhatta of the monarchy was a very committed Mahayanist Buddhist.

Buddhism in various forms appears to have been prevalent at the time of the Turkish conquest in 1202. The invading armies apparently found numerous monasteries, which they destroyed. With the destruction of its centers of learning such as Nalanda University, Buddhism rapidly disintegrated. In subsequent centuries and up through the 1980s nearly all the remaining Buddhists lived in the region around Chittagong, which had not been entirely conquered until the time of the British Raj (1858-1947).

In the Chittagong Hills, Buddhist tribes formed the majority of the population, and their religion appeared to be a mixture of tribal beliefs and Buddhist doctrines. According to the 1981 census, there were approximately 538,000 Buddhists in Bangladesh, representing less than 1 percent of the population.

3.2 Importance of conservation, cultural heritage and history.

Historical places ,buildings, objects and manifestation of cultural, scientific, symbolic, spiritual and religious value are important expressions of the culture and heritage, identity and religious beliefs of societies. Their role and importance, particularly in the light of the need for cultural identity and continuity in a rapidly changing world, need to be promoted. Buildings, spaces, places and landscapes charged with historical, cultural, spiritual and religious value represent an important element of stable and humane social life and community pride. Without appropriate restoration / conservation, the architectural evolution in relation to socio cultural concept of a country's heritage remains misinterpreted, and can lead to virtual disappearance.

3.3 The conservation and excavation in bangladesh's context

Conservation ,rehabilitation and culturally sensitive adaptive reuse of urban ,rural and architectural heritage shall be in accordance with the sustainable use of natural and human made resources. Access to culture and the cultural dimension of development is of utmost importance, benefiting all the people who have such access. In order to promote historical and cultural continuity and to encourage broad civic participation in all kinds of cultural activities, the government appreciate levels including all local authorities identify the documents, whenever possible, the historical and cultural significant areas in comilla .Promote awareness of heritage in order to highlight its value and need for its conservation and the financial viability of rehabilitation.

Chapter 04: Contextual analysis

4.1 A brief historical background of the sites

Mainamati an isolated ridge of low hills in the eastern margins of deltaic Bangladesh, about 8 km to the west of Comilla town is a very familiar name in our cultural heritage, where archaeological excavations have revealed very significant materials. A landmark of our ancient history, it represents a small mass of quasi-lateritic old alluvium. The ridge, set in the vast expanse of the fertile lower Meghna basin, extends for about 17 km north-south from Mainamati village on the Gumti River to Chandi Mura near the Lalmai railway station. In its widest parts, the ridge is about 4.5 km across and its highest peaks attain a height of about 45 metres. These highlands were once thickly wooded with an abundance of wild life, but modern developments have rudely disturbed its serene and idyllic setting.

With an ever-expanding Cantonment at Mainamati, in the northern half of the ridge, and a fast growing township at Kotbari in about its centre, the fairy-tale beauty of the place is already a thing of the past.



fig 3.1

The twin names - Lalmai- Mainamati - of the place have significant link with the past: Lalmai or the southern part is identical with Lalambi-vana of the Chandra epigraphs, while the northern part recalls the name of the legendary Chandra queen 'Maynamati', mentioned in local ballads and folk-songs. The archaeological finds have now established beyond any doubt that the cultural and political centre of ancient Vanga-Samatata (southeast Bengal) was located here. The glory and magnitude of that remarkable past is emphatically manifest in the innumerable monuments, mounds and excavated remains, adequately supplemented by an impressive array of stray finds from the area. Mainamati today is, however, better known for its Buddhist remains exposed by excavations. Here, indeed, lies the greatest assemblage of ancient Buddhist remains in Bangladesh.

The Discovery During the course of rebuilding the old axial road through these hills in 1875, workers accidentally uncovered the ruins of what at that time was thought to be 'a small brick fort'. It was actually a Buddhist monastery. Some 72 years earlier (1803), from the same area, was discovered the first Mainamati relic, the copperplate of Ranavankamalla Harikaladeva, dated 1220 AD, which records a description of the capital city of Pattikera as 'adorned with forts and monasteries'. The name now survives in the modern Patikara pargana of the locality.

The Mainamati ruins were rediscovered during the Second World War. While setting up an advance camp, the military came across ancient remains at a number of points in the ridge. In the hurried survey that followed, 18 sites were recognised and protected by the government. In more regular and systematic surveys undertaken between 1955 and 1957, when the entire ridge was undisturbed by human occupation, more than 50 sites were located. Most of those sites lie in the northern half of the ridge, now within the Cantonment. Archaeological excavations started in January 1955. In several phases of excavation of the 50 odd sites nine have so far been exposed. Though the excavations have not yet been completed and have been limited in many respects, the results so far obtained and the information gained provide a sound archaeological basis for the reconstruction of the history and culture of the early period of this hitherto obscure region.

4.3 Other archaeological sites of Mainamati

4.3.1 Rupban Konnar Bari

Rupban Mura is an Important archaeological site Of Mainamati Lying on a hillock just between the modern Bard and BDR establishments in the Kotbari area on the south of the Comilla-Kalirbazer road.excavations have revealed here the remains of remarkable semi crucuform shirne of medium size (28.2m eas-west, 28m north-south),together with a numberod subsidiary structure.including a octagonl stupa and another one on a square base. A boundary wall within the oblong stupa courtyard enclosed all sides. its regular enterence is on the east, facing the monastery entrance. Deep diggings have revealed three main periods of building and repairs and rebuilding, the earliest corresponding to 6th - 7th centuries AD.Very few remains of the latest period 9 10th-11th centry Ad) survive now in this very heavily disturbed site. Significant discoveries from the site include, besides the colossal stone Buddha, five debased gold coins of Balabhatta,



fig 3.2

4.3.2 Mainamati Mount 1A

Mainamati Mound 1A situated near the Mainamati bus stop north of the Dhaka - Chittagong highway. Limited excavations carried out here have revealed six long walls, straight roads and crossroads, gateways and other scanty remains. The remains here indicate that there were ten rectangular blocks, five containing major structures and five open courtyards, together with an elaborate gateway complex (13.9m*9.8m). The remains seem to be secular in nature.

4.3.3 ItaKhola Mura

Itakhola Mura an archaeological site in mainamati. The site, like that of the kutila mura, is one of the most impressive ruins. It lies in three terraces on adjacent hillocks just opposite the rupban mura site across the Kotbari road, Comilla. It served for a long time as a quarry for ancient bricks, hence the name. Excavations have revealed here a grand stupa complex with an attached monastery, located 42m to its north. The cultural phases of the site are stated (or overstated) to be five; the earlier three being still buried underneath the later remains.

The Stupa Complex was originally built as a solid stupa in the traditional style on a 13.1m square basement. However, it has one peculiarity; a small sanctum (2.4m x 2.1m) built in the centre of its eastern or front side.

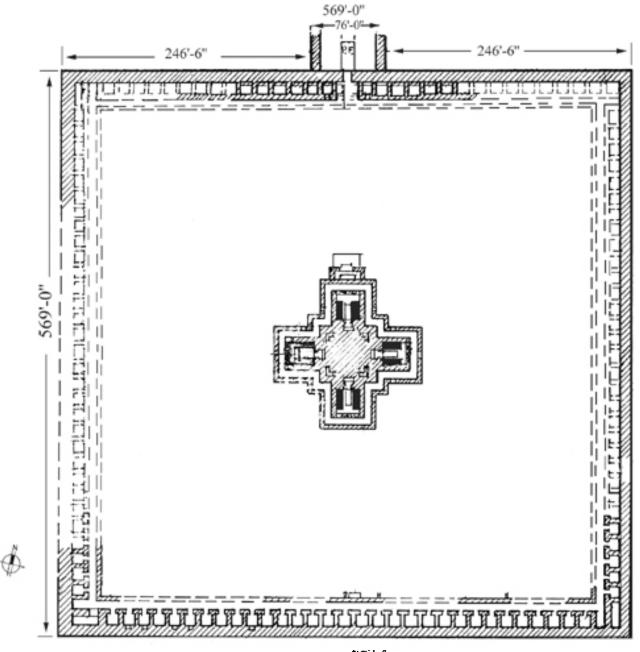


fig 3.3

Itakhola Mura, Mainamati, Comilla

4.3.4 Bhoja bihara

Bhoja Vihara is the third most extensive monastic establishment in Mainamati near Comilla, next to Shalban-bihara and Ananda-Bihara. It is situated almost in the centre of the culturally rich Kotbari area, just adjacent to BARD. A huge water tank lies on its east. Recent excavations have revealed the outlines of a 137.2m square monastery with a large cruciform shrine at the centre of its open courtyard. Vandals extensively damaged it in 1944-45. Excavations here are still in the initial stage and much remain to be uncovered.



tig3.4

Plan of Bhoja Vihara

Work done so far has revealed the upper part of the central shrine and the outline of the square monastery with its impressive gateway at the centre of the northern wing. It is almost identical with Shalvan Vihara and Ananda Vihara in every respect except in minor details. The architectural characteristics that distinguish them all are a citadel like square shaped monastery, well-protected by 5m or more thick back walls, with only one fortified entrance set in an

attractive and wide front facade, and guard rooms projecting outwards in the middle of the north side. A cruciform central shrine, the most attractive monument of the site, lies in the centre of the wide open courtyard, while a very large water tank lies on the east of each site. The courtyard is crowded with a host of ancillary buildings: votive stupas, subsidiary shrines and chapels. The northern wing of the cruciform central shrine has been fully uncovered. A giant bronze image of Vajrasattva has been discovered here. This is evidently the consecrated cult image of this shrine. Its sanctum was sanctified by double Pradaksina paths.

4.3.5 Ananda Vihara

Ananda Vihara situated in the archaeologically rich Kotbari area near Comilla, is the largest of themainamati monuments. It also has the largest water tank in the area. This Vihara complex was built by Anandadeva, the third ruler of the Early deva dynasty, at the end of the 7th or the beginning of 8th century AD. The contractors and brick hunters damaged this great establishment beyond recognition in 1944-45; the builders of the Cantonment did more damage to it in subsequent years.

The excavations carried out here are incomplete. The work done so far has revealed the outlines of a large shalvan vihara type monastery, 198m square in size. The Vihara has similar rows of monastic cells arranged in four wings around a large cruciform shrine that stands majestically in the centre of a wide open courtyard.



fig 3.5 Ananda Vihara, Kotbari, Comilla

Its imposing single entrance in the middle of the north side is set in a broad and massive front facade projected outwards. It is larger and more elaborate than that of Shalvan Vihara. The massive outer wall is also more pleasing due to the decorations of offsets and mouldings. The inner verandah wall is also decorated with mouldings and ornamental bricks. A few cells in the

northern wing and a section of the southern part of the central shrine have been cleared. They show clear evidence of intensive occupation of the site for a long time.

Much work remains to be done yet. But the excavations did not continue beyond the initial stage. Itslarge size, earlier discoveries of a copperplate inscription, a hoard of 63 silver coins, many bronze images, terracotta sculptured plaques and pottery kilns outside the monastery indicate the potential importance of the site.

4.3.6 kotila Mura

kutila mura, the highest mound in the northeastern part of the ridge near ananda vihara, were unearthed the most attractive monuments in Mainamati The excavated monuments include three principal stupas and a number of subsidiary chapels and chaitya-halls built around them, all of which were enclosed by a massive boundary wall. Interesting and intricate structural forms and decorative styles have been preserved at the site. Excavations have not yet been completed here; the monastery in the northern end and two grand stupas in two wings of the site remain to be cleared yet. The excavated evidence suggests 7th century AD as the date of the beginning of these monuments. The site continued to be occupied till the 13th century AD as indicated by an Abbasid gold coin recovered from an upper level of the site.

4.3.7 Pakka Mura

Pakka Mura is an important unexcavated site (274m x 91m, 15m high) on the western edge of the ridge, about a mile and a half southwest of the Kotbari ruins. The importance of the site lies in its subsequent extension to its lower base on the west, presumably after the river had dried out or changed its course. A part of the silted up riverbed was turned into a huge water reservoir called Tara Dighi (a large tank named Tara), the deeper central part of which has now been turned into two modern tanks. While constructing the larger tank, about two acres in size, two interesting black stone images of Visnu, one life-size and the other slightly smaller, showing mature Sena-Deva characteristics, were found. Among other associated finds most significant is a copperplate inscription of Dasharathadeva (13th century), son and successor of Damodaradeva of the later Deva dynasty.

The extensive high mound on the western edge of the ridge, about 2.5 km to the northwest of the southernmost site of Chandi Mura, locally known as Rupban Mura, had visible structural remains in the shape of a circular dome at the top of the mound. Removal of bricks by local inhabitants has already caused destruction of the exposed structural remains. The site has the potential of yielding important remains.

At the extreme southern end of the ridge, about 1.6 km to the northwest of Lalmai railway station is a prominent mound (457m ' 183m, 18m high), locally called Chandi Mura. The site derives its name from the twin temples of Chandi built on the summit of the mound, some 250 years back by a Maharaja of Tripura. The archaeological character of the site is undisturbed; the mound probably contains the remains of a large temple. The top of the mound was badly damaged, first by the construction of the Chandi temples, and later by modern constructions undertaken by people associated with the temples. However, the archaeological remains at the lower levels may still be intact.

4.3.8 Queen Mainamati's Palace Mound

Queen Mainamati's Palace Mound is the largest and highest mound in the northern extremity of the ridge near to the village that still bears the name of the queen, just east of Brahmanbaria road. The site is traditionally associated with the legendary Chandra queen Mainamati, mother of the last-known Chandra king, Govinda Chanda. Excavations on a limited scale have uncovered here parts of a massive defense wall round different parts of the site, probably a citadel, and the corner of a substantial structure, probably a palace, at the centre of the site. This is probably the only site in Mainamati that has revealed structures of secular nature.

4.3.9 Charpatra Mura

Charpatra Mura is a small but interesting archaeological site in mainamati. It is situated in the northern part of the Lalmai ridge at about the centre of the Comilla Cantonment area. A small Hindu shrine, 45.7m x 16.8m, was uncovered here.

In plan, shape and architectural design and decoration, it is unique; differing basically both from the Buddhist architecture of Mainamati and the traditional Hindu temple architecture of the Gupta or other Indian types. It appears to represent a synthetic Bengal type that has evolved gradually by assimilating certain elements and features of local Buddhist architecture.



fig3.6 Charpatra Mura, Mainamati, Comilla

The temple has two distinct parts, an open pillared hall in the badly damaged front part and a cella at the back in the west. The latter part was found less damaged and decayed, that is to say, better preserved and undisturbed. It could therefore be properly excavated and uncovered. The exterior of this cella or temple proper at the back shows a fantastically complex and variegated shape produced by a multiplicity of angles and corners resulting from a combination of symmetrical projections and offsets at lateral and vertical planes, maintaining, nevertheless, a delicate balance between exotic growth and basic strength and proportions of the original form and the traditional plan. The overall effect is highly pleasing.

4.2 Analysis of the growing the present state of the locality

Mainamati excavations have, thus, thrown a flood of light on almost every aspect of the life and culture of the southeastern part of Bengal. It has supplied detailed information regarding the social, political and economic condition of the region and has led to the discovery of the remarkable early Deva dynasty and of Balabhatta, the founder of Devaparvata.

It has settled a number of historical and geographical questions, for instance, concerning the extent and bounds of Samatata, the location of Devaparvata, Pattikera and Lalambi-vana (jungle), and the situation of Harikela.

More important, with the studies and analysis of terracotta and the classification and sequence dating of the pottery types and other common objects, Mainamati has now provided set a workable basis for further investigations and research in the field. Mainamati finds have no doubt broadened the horizon of our understanding of our past.

The primary significance of this collection lies in the fact that it represents the only available authentic and contemporary stratified materials from southeast.

Bengal that provide for the first time a dependable archaeological basis for the reconstruction of the history and civilization of this region of Bengal.







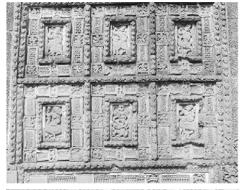






Khadi, also known as "khaddar" has a long history in Bangladesh. In 6th century a local variation of Khadi cloth was described by Huen Tsang of China and Marco Polo in 12th century AD describes a fabrics, most probably khadi Muslin in the Bengal region to be as fine as the spider's web. Romans were great aficionados of Bengal khadi Muslin and imported vast amounts of fabrics. The khadi weaves of Comilla during the Mughal period were re nowned as valuable tex-

Pottery is the ceramic material which makes up potterywares, of which major types include earthenware, stoneware and porcelain. The place where such wares are made is also called a pottery Pottery also refers to the art or craft of a potter or the manufacture of pottery. A dictionary definition is simply objects of fired clays







Terracotta, terra cotta or tra-cotta a type of earthenware, is a clay-based unglazed or glazed ceramic, where the fired body is porous. Terrcotta is the term normally used for sculpture made in earthenware, and also for various utilitarian uses including vessels.In archaeology and art hist ry, "terracotta" is often used to describe ojects such as figurines not made on a potter's wheel. Vessels and other objects that are or might be made on a wheel from the same material are called earthenware pottery.





A handicraft, sometimes more precisely expressed as artisanal handicraft or handmade, is any of a wide variety of types of work where useful and decorative objects are made completely by hand or by using only simple tools. It is a traditional main sector of craft, and applies to a wide range of creative and design activities that are related to making things with one's hands and skill, including work with textiles, moldable and rigid materials, paper, plant fibers, etc. Usually the term is applied to traditional techniques of creating items that are both practical and aesthetic.

Chapter 05: Case studies

5.1 Deccan Archaeological and Cultural Research Institute

5.1.1 Introduction of the project

The Deccan Archaeological and Cultural Research Institute is a non-profit organization operating in the Deccan region of India, registered under Act 2 of 1882 Indian Trust ACT. It is a non-profit membership organization dedicated to conservation and preservation of India's natural, cultural, living, tangible and intangible heritage. It is going all out to bulwark and preserve the cultural legacy of India, conserving the natural heritage by undertaking obligatory actions and measures, documenting unprotected buildings of archaeological, architectural, historical and aesthetic significance and cultural resources.

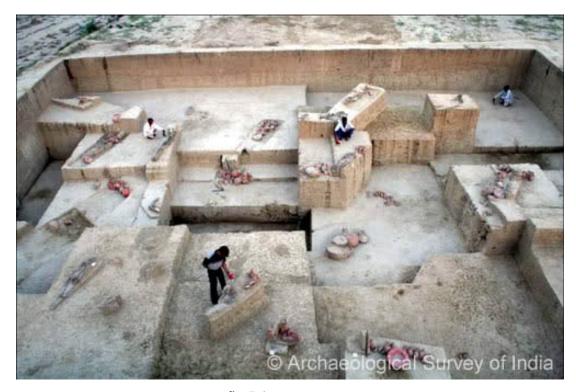


fig 5.1



fig 5.2



fig 5.3

5.1.2 features and layout:

- Research based project
- Cultural analytical project
- Students can involve with the culture n heritage sites excavating of india.
- Architectural features are not present but functional features are related to this project
- this project is functionally worth full for archaeological research students

5.1.3 Analysis

From the analysis of this project, every student who have a minimum interest of the archaeology of a country can come and involve with the historical research. Cultural research is also provides for the students so that they can know about the particular regions culture and heritage. basically its just a school of archaeology which can provides

5.2 GUANGDONG MUSEUM

5.2.1 Introduction of the project

Rocco Design Architects have completed a fascinating new work of architecture in China's Guangzhou province, the Guangdong Museum of Art. The rectangular structure of the museum appears almost alien in nature, with a sliced and cut facade featuring random indentation accents. The museum doesn't feel like a work of municipal architecture, but a concept of science fiction come to life.

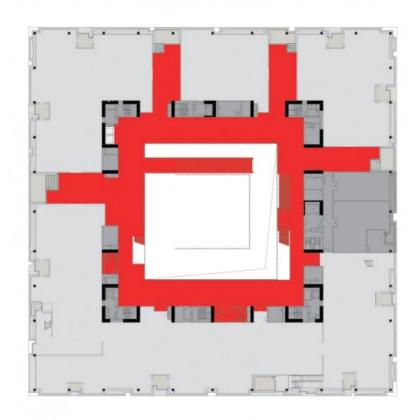
Visitors enter the Guangdong Musuem through a stone-paved depression on its central lawn. Inside, the design is slightly more conservative than its outer skin, filled with light from a large central skylight and styled in a contemporary fashion. Across its five stories, the museum features four exhibition halls which host over 130,000 exhibits. In all, an effective and visually striking piece of sculptural architecture, the guangdong museum is one of four major cultural landmark buildings for the new financial hub in zhujiang xincheng of guangzhou, china, rocco design architects was announced winner of the international invited competition in may 2004 and was subsequently appointed as the architects of the project.

the five-storey museum has a total floor area of approximately 67,000 square meters. conceived as an objet d'art at a monumental scale, an allegory to the impeccably and intricately sculpted antique Chinese artifact, such as a lacquer box, an ivory ball, a jade bowl or a bronze tank, which collects and reflects treasures of the times. the new museum is not only designed to house a great variety of fascinating objects of treasure, it is also in itself designed as a treasured object of great fascination that contemplates to become an identifiable cultural icon, giving the visitors a memorable tour and experience of the local provincial history and traditional wisdom as well as contributing to the appreciation and enhancement of cultural identity of the city.





fig 5.2.1 and 5.2.2



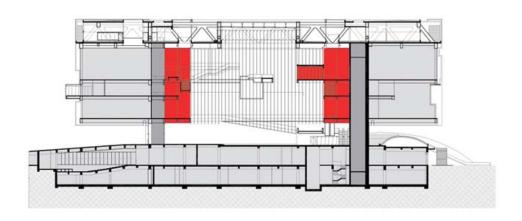


fig 5.2.3 and 5.2.4

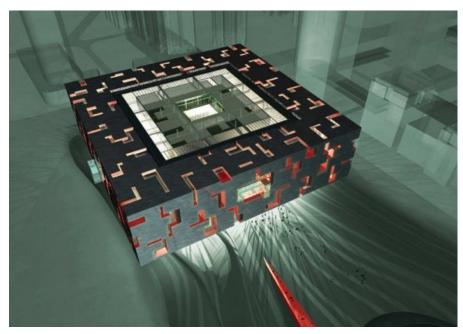


fig 5.2.5 and 5.2.6



• 5.3 Salk institute for biological studies

5.3.1 Introduction of the project

The Salk Institute was established in the 1960s by Jonas Salk, M.D., the developer of the polio vaccine. Salk selected the world-renowned architect Louis I. Kahn as the person who could design the facility that he envisioned.

Jonas Salk had a distinctive vision for the creation of the Institute. He directed the worldrenowned architect Louis Kahn to provide spacious, unobstructed laboratory spaces that could be adapted to the ever-changing needs of science. The building materials had to be simple, strong, durable, and as maintenance-free as possible.

Kahn's creation consists of two mirror-image structures that flank a grand courtyard. Each building is six stories tall. Three floors contain laboratories and the three levels above the laboratory floors provide access to utilities. Protruding into the courtyard are separate towers that provide space for individual professorial studies. The towers at the east end of the buildings contain heating, ventilating, and other support systems. At the west end are six floors of offices overlooking the ocean. Together, there are 29 separate structures joined together to form the Institute.

You can see the impact of Kahn's architecture in the courtyard. Important to note are Kahn's imaginative use of space and his high regard for natural light. In response to Salk's request that the Institute provide a welcoming and inspiring.

environment for scientific research, Kahn flooded the laboratories with daylight. He built all four outer walls of the laboratory levels out of large, double-strength glass panes, producing an open, airy work environment. Local zoning codes restricted the height of the buildings so that the first two stories had to be underground. This did not, however, prevent the architect from bringing in daylight: he designed a series of light wells 40 feet long and 25 feet wide on both sides of each building to bring daylight into the lowest level.

The collaboration between Louis Kahn and Jonas Salk produced a design for a facility uniquely suited to scientific research. The next challenge was to realize it through the use of materials that could last for generations with only minimal maintenance. The materials chosen for this purpose were concrete, teak, lead, glass, and special steel. The poured-in-place concrete walls create the first bold impression for visitors. Kahn actually went back to Roman times to rediscover the waterproof qualities and the warm, pinkish glow of "pozzuolanic" concrete. Once the concrete was set, he allowed no further processing of the finish—no grinding, no filling, and above all, no painting. The architect chose an unfinished look for the teak surrounding the study towers and west office windows, and he directed that no sealer or stain be applied to the teak. The building's exterior, with only minor required maintenance, today looks much as it did in the 1960s.

The open courtyard of travertine marble acting as a facade to the sky adds to the monumental nature of the building. In 1992, the Salk received a 25-Year Award from the American Institute of Architects (AIA) and was featured in the AIA exhibit Structures of Our Time: 31 Buildings That Changed Modern Life. The Salk Institute has been described in the San Diego Union-Tribune as the single most significant architectural site in San Diego.

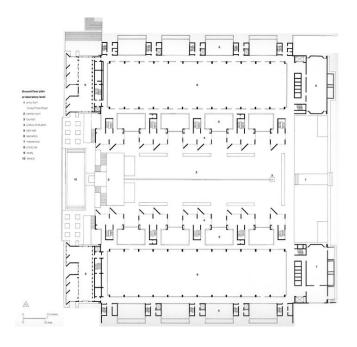








fig 5.3.1 ,5.3.2, 5.3.3, 5.3.4



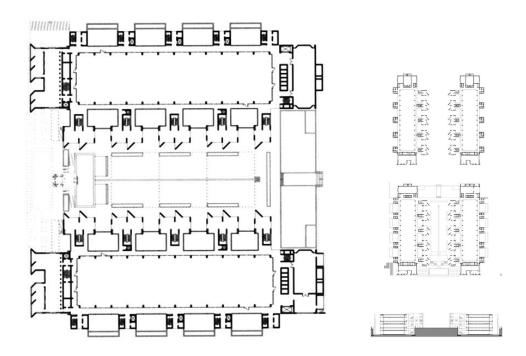


fig 5.3.5, 5.3.6, 5.3.7

5.4 TECHNICAL PARK OF OBIDOS

Back in 2010 the Óbidos Municipality launched an international architectural competition. The aim of the competition was to design the Central Buildings and Main Piazza for the Óbidos Technological Park, intended as a start-up built structure to allocate creative companies.

The Technological Park site is located in the outskirts of Óbidos, a small and beautiful historic town located approximately one hundred kilometres north of Lisbon.

The Óbidos region is still characterised by a mainly rural and balanced arrangement between forest and small agricultural premises, where paved surfaces spread through this territory in an almost random way. The plot designated to build the Óbidos Technological Park main building and main piazza uses the place where before was located the main supply site for the A8 highway construction, that today links Lisbon to the north of the country.

The design strategy proposes a solution that tries to reverse the ongoing pavement process in this territory, trough a solution that tries to reverse the this logic, increasing as much as possible the green surface. More than designing a building, the adopted strategy tries to recreate a place where landscape is determinant for the spatial structure.

Either as a result of negotiation trough time within the urban fabric convenes an all range of associated functions - housing, commerce, crafts, etc - as seen in Piazza San Marco in Venice, or as a baroque symbolic design as in Praça do Comércio in Lisbon or even as in Piazza Navona in Rome where the piazza overlaps is actual geometry on top of earlier premises and programs. The piazza, as concept, cannot be separated from the urban realm that conforms and shapes its limits and purpose. The study concerning the shape, uses and geometry of several piazzas and the possible adequacy to the project site emerged during the design process as a quite strange and forced solution. So, how to draw a piazza without a city, without its generator urban fabric. This design perplexity, the

inadequacy of trying to design a piazza without a urban fabric, as been a key factor to look and try to search for alternative public spaces. So, the design strategy shifted and tried to search for other kind of convivial spaces who could achieve the intended public realm without designing a piazza as such.

Its in those very flexible spaces that throughout the year small communities in the region organise traditional corteges, informal open air markets, religious processions, music concerts and traditional activities or games. Much less dependent from an urban fabric, those civic spaces are very flexible and quite strong in providing opportunities to encounter and convivial activities. Then, instead of proposing to draw a urban piazza as such, the project aims to develop a large public space with similar convivial characteristics as a piazza, but much more flexible towards the relations with a building environment or geometry.

Maintaining the convivial aims expressed in the competition brief, the design decision focused in the aim of creating a large public space with either an easy and flexible relation with the buildings surrounding it, either as a complement of the natural landscape.

Other aspect of research trough the design process concerned the qualities and characteristics of large buildings in this particular territory. It was possible to notice that apart from the small built settlements that somehow mark this lusty territory, we could notice some large farms or convents and monasteries scratching thin horizontal lines in the still mainly green landscape. Those larger built structures mark the territory perspective with thin horizontal lines where of crucial importance for the design development. So, the design tried to draw a building that would appear in the landscape as a thin horizontal line, as a long and continuous wall.

On the other hand, the research and study of larger religious structures in the region, namely as Batalha's Monastery and Cristo's Convent in Tomar, revealed interesting aspects towards the competition programme. The cloisters presented

by those religious structures where of particular effectiveness for the requested programmed. In fact, as a start-up companies compound, communication and easy contact between users is a fundamental aspect. Or, a cloister structure is quite effective towards the possibility of a strong visual interaction. So, the design process went also trough the possibility of creating a solution where a kind of cloister could be related with all other design premises.

In parallel, further layers of knowledge contaminate and have given support to the ongoing design process. Two sources where of particular interest for the design team. One was the John Maeda's book "The Laws of Simplicity" and the other the exhibition "The New Silk Roads" from Kyong Park, held at Museo de Arte Contemporáneo de Castilla y Léon in Spain a few years ago.



fig: 5.4.1

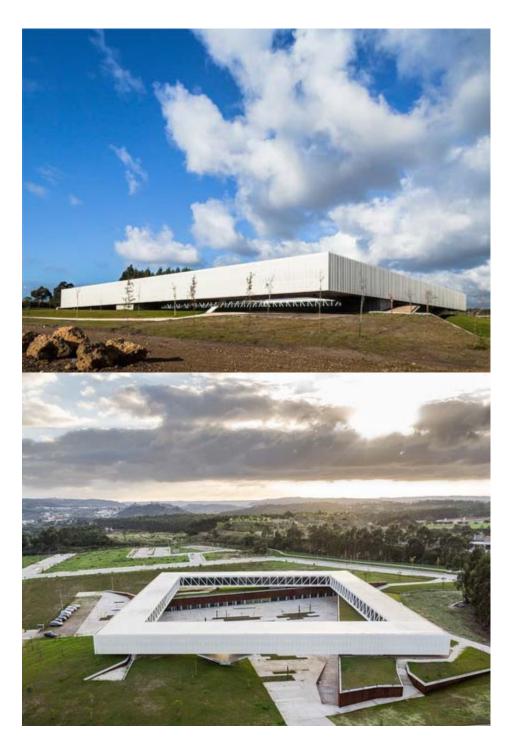


fig 5.4.2 and fig 5.4.3





fig 5.4.4 and 5.4.5

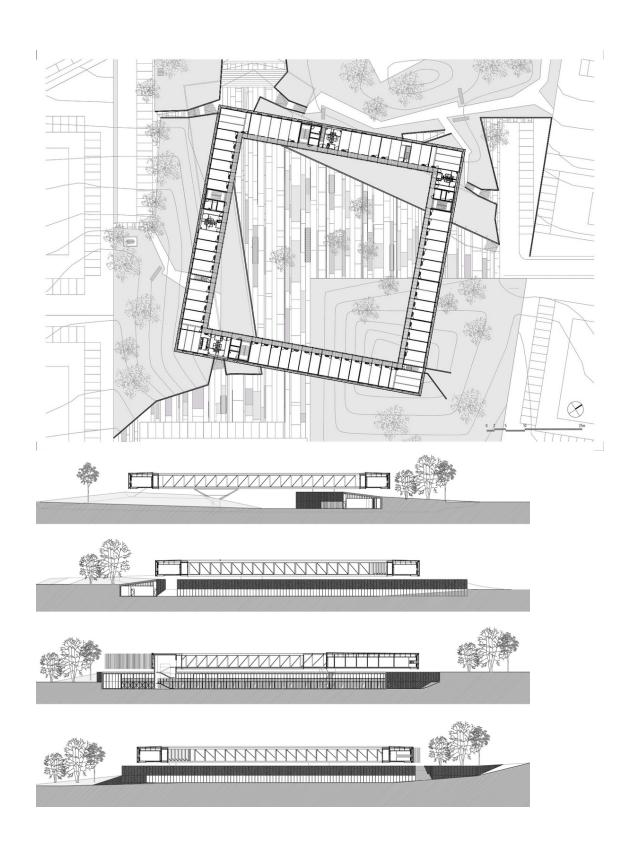


fig 5.4.6 and 5.4.7

• 5.5 Excavating detroit

Excavating Detroit: Archaeological research center, Detroit MI

Master thesis project architecture School of architecture, Lund Tekniska Högskola Instructor: David A. Garcia

The Possibility of Foyerness

Excavating Detroit: Archaeological...

Woolopolis

Pacific Film Archive

A Visual Abduction

Pavillion Competition, Kongen's Have,...

Portrero Hill Library

Toxic Asset Horror Cabinet

Stage House

Hutong Heights

Kalmar Seafront Restaurant

About Hannes Frykholm

Visitor Center

The project is a speculation on a future archaeology of the 20th century. Using the empirical researchmethod of archaeology and the analytical design process of architecture, the project investigates the city of Detroit as a case study for how remnants of modernism can be excavated, analyzed, archived and exhibited. The project proposes a series of archaeological excavations adjacent to an existing railroad system, combined with a research center placed in a disused automotive plant.

The center becomes a global node for industrial archaeological research, as well as a tourist attraction with curated exhibitions and training grounds for volunteers taking part in the remote excavations. Hence, the future archaeology of Detroit is turned into a public event, activating the local community as well as generating globally relevant research on the heritage of 20th century modernism. Link to project book.

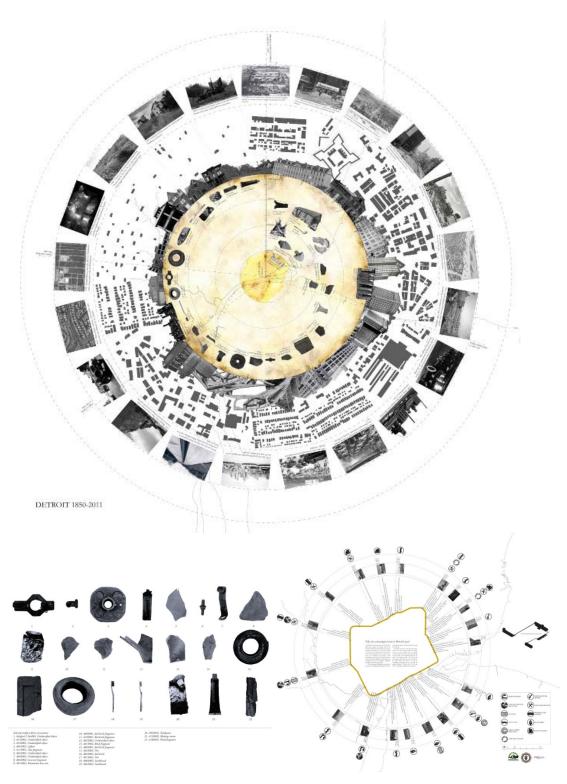


fig 5.5.1

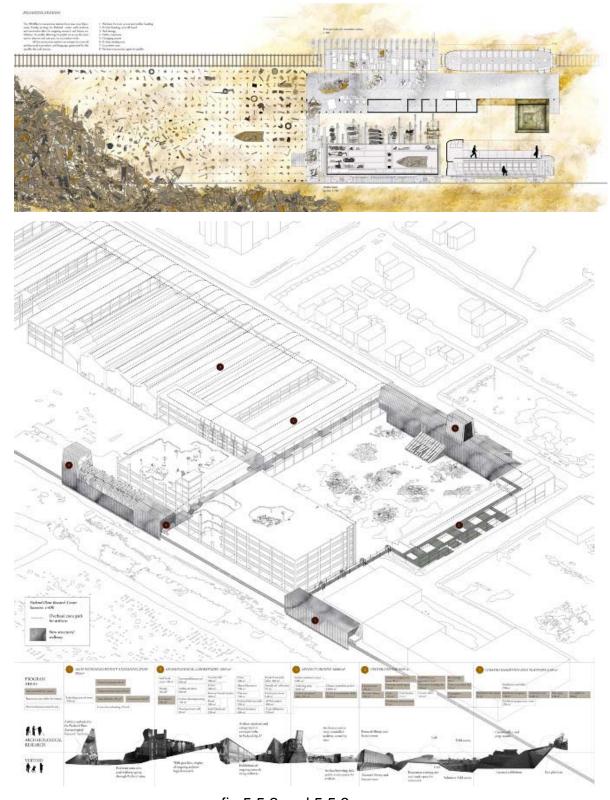


fig 5.5.2 and 5.5.3

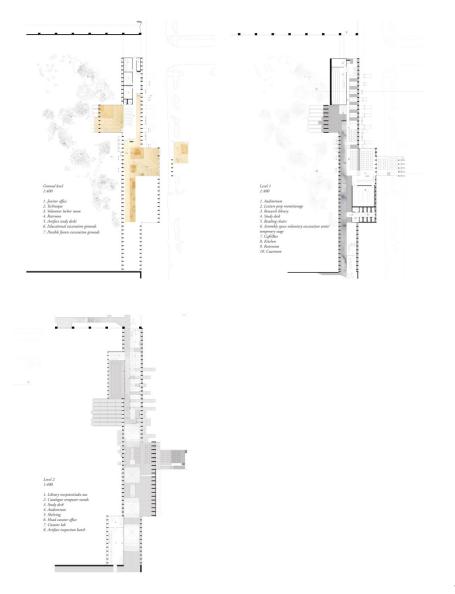


fig 5.5.4

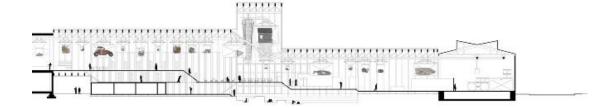








fig 5.5.5 ,5.5.6, 5.5.7

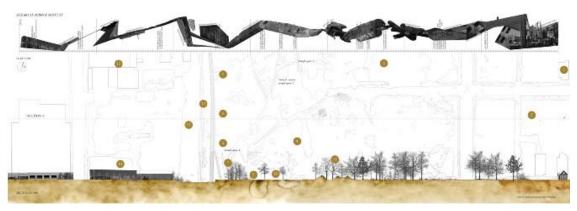






fig 5.5.8, 5.5.9, 5.5.10



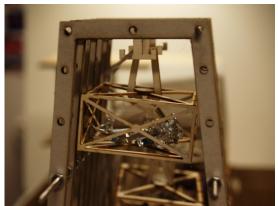






fig: 5.5.11, 5.5.12, 5.5.13, 5.5.14

5.6 Museum and Research center madinat zahra

5.5.1 Introduction Of the Project

Museum & Research Centre Madinat Al Zahra

Winner of the 2010 Aga Kahn Award for Architecture

A visit to the Madinat al Zahra archaeological site and the allotment reserved for the museum and offices arouses contradictory emotions. On the one hand, nostalgia for a remote, undiscovered past impregnates the landscape stretching towards the Cordoba Hills, while on the other hand, disorderly sprawl of modern buildings creeps disturbingly around the area that was once a palace-city.

Our first reaction on arrival had to be a definition of the future proposal: we should not build on this landscape. Faced with such a broad expanse still awaiting excavations in the old Arab city, we wanted to work like archaeologists: not to construct a new building, but rather, if we were lucky, we would discover it under the surface, as if the passage of time had kept it hidden right up to the present day.

We will establish a two-dimensional mesh, a starting point and a referenced height level. We will outline the rectangular boxes from which to begin the excavations, removing successive layers in strata with regular depths.

This patient task has concluded with encouraging results: our photos, sketches and field notes have revealed the ground plan for three buildings whose walls have ended up configuring the main spaces of the new offices: Museum, Auditorium, Workshop-Warehouse. We will consolidate the walls, establish a uniform finishing level, roof them and shape new spaces to serve the others. We have discovered pavements from old patios and corridors which we will restore and convert into the highlights of the new project. Finally, we will outline the scope of our operation with the construction of a perimeter fence- a precinct that will protect the unearthed remains.

The building will articulate its new uses around a sequence of full and empty spaces; covered spaces and open patios which will guide the travellers on their visit. From the main vestibule, a broad patio spreads out on a square plan, blue from the reflection of the pond presiding over it.

Like a cloister, the main public spaces will be organised around it: model exhibits, book and catalogue sales, coffee shop, auditorium and exhibition hall. Another long, deep patio, green in this case from the surrounding vegetation, will articulate the private areas: administration, conservation and research workshops. A final patio will reflect the golden light of the Atauriques and other archaeological remains on display, constituting the outdoor extension of the museum exhibition area. A mezzanine basement completes the exhibition, auditorium and workshop areas, while also housing ample zones for storage and equipment.

The materials respond to the prevailing criteria of the project: the walls unearthed in the excavations will be in white face concrete using wooden formwork; the roofs resting on them will be in thin slabs; the patio will be paved in limestone. The concept of this project is implicitly prepared for future growth, especially in the museum and workshop areas which, in the manner of new excavations, can have new pavilions added on.

The new Madinat al Zahra museum will be an introverted building with no outward disclosure of the sequence of its spaces: it will have appeared silently in the landscape, unearthed over the coming years like the remains of the ancient city of Abd al Rahman.





fig 5.6.1 and 5.6.2





5.6 BAHMIYAN CULTURAL CENTER AFGANISTAN





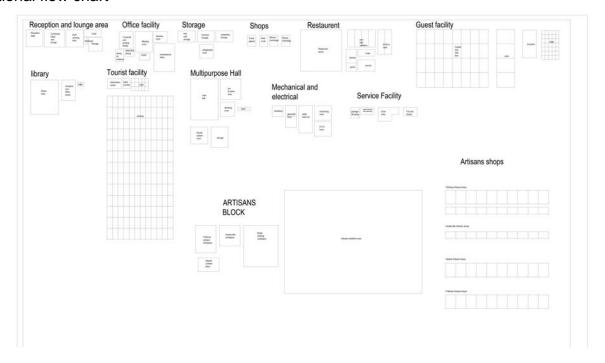
fig 5.7.1 and 5.7.2

Chapter 06: Program and development

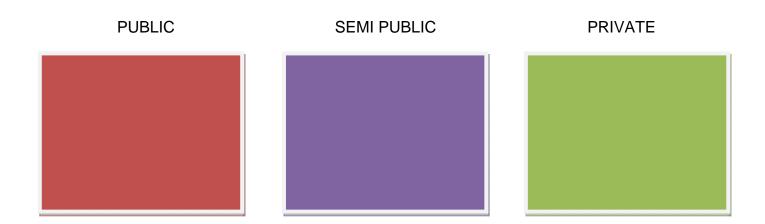
- 6.1 Rationale of the program
- 6.1 program derivation
- 6.3 program with required area

•	RECEPTION AND LOBBY	2000sqf
•	SOUVEINIR SHOP	3600sqf
•	KHADI CLOTHING WORKSHO	DP5600sqf
•	POTTERIES WORKSHOP	5600sqf
•	HANDICRAFS WORKSHOP	5600sqf
•	GALLERY	12000sqf
•	MULTIPURPOSE HALL	4000sqf
•	OFFICE AND ADMIN FACILITY	/2000sqf
•	LIBRARY	3000sqf
•	ARCHIVE	3000sqf
•	DORMATORY	(500*24)=12000sqf
•	RESTAURENT	4000sqf
•	EXCAVATION AND RESARCH	I FACILITY2400sqf
•	LABORATORY	1200sqf
•	STORAGE	600sqf
•	PARKING	(20*128)=2560sqf
		Total84720sqf
		Circulation(30 %)25416sqf
		Total with circulation1,10,136sqf

functional flow chart



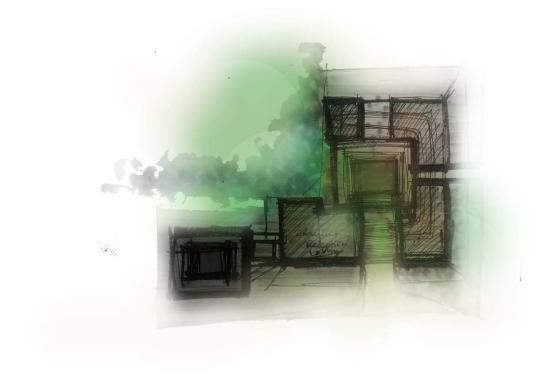
• zoning of the program





Chapter 07: Conceptual stage and design development

• 7.1 CONCEPTUAL SKETCH



• 7.2 CONCEPTUAL SKETCH 2

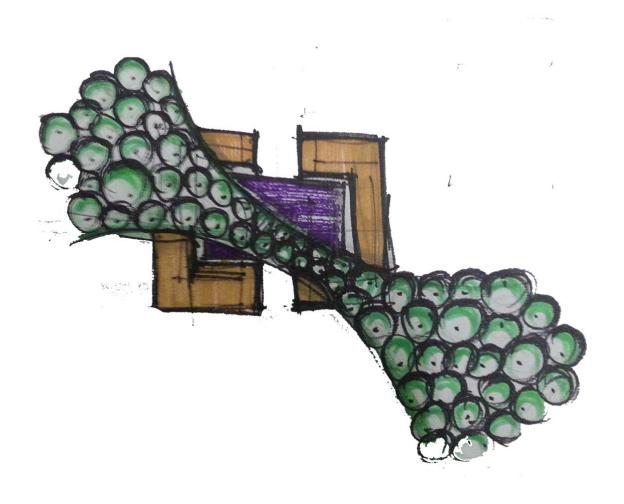
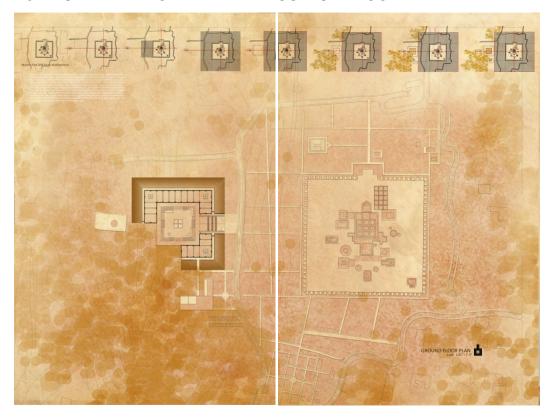
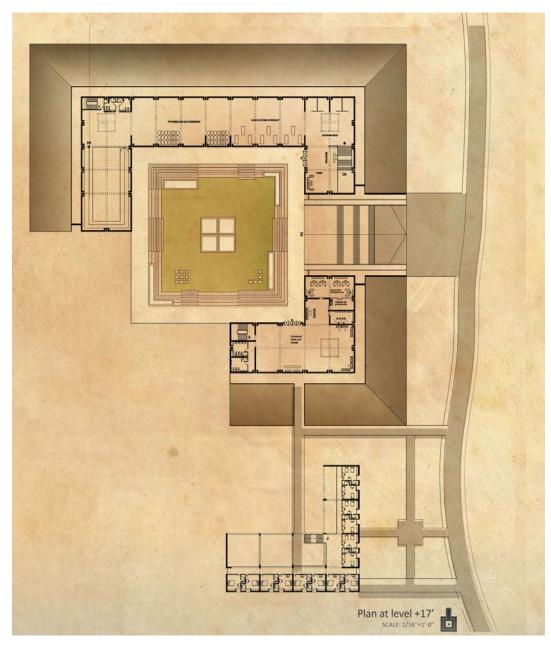


fig 7.2

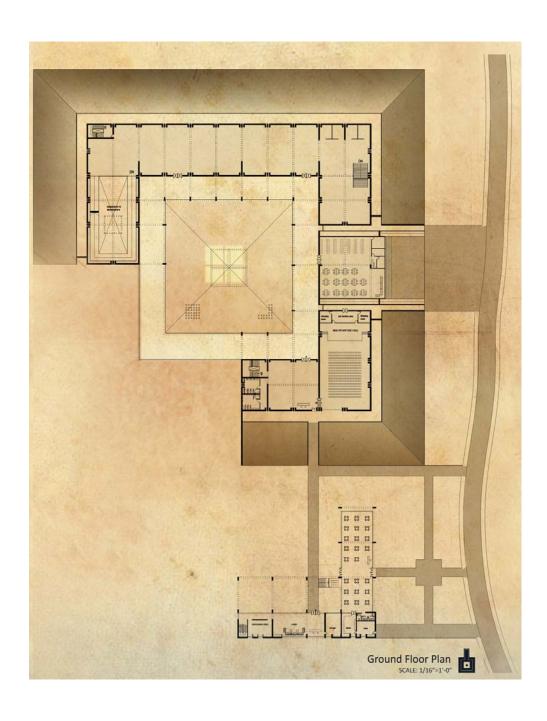
• 7.3 MASTER PLAN OF MAINAMATI CULTURAL COMPLEX



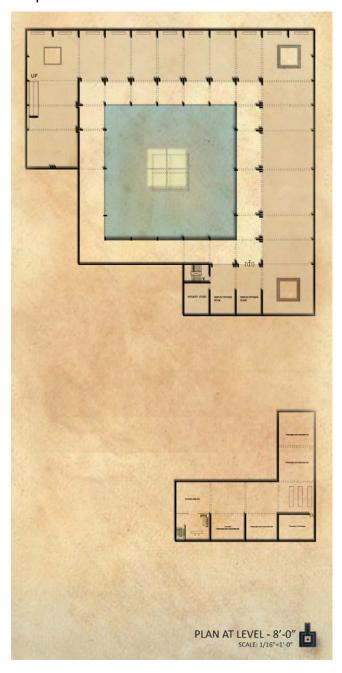
• 7. 4 PLAN AT LEVEL +17



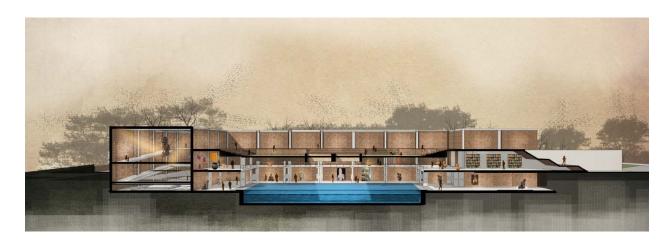
• 7.5 GROUND FLOOR PLAN



• 7.6 plan at level -8



SECTIONAL EXONOMETRIC





Chapter 8: Conclusion

This project is to create a social and historical awareness among the people of Comilla and all the people of the country should know about our all heritage sites and also know our culture. Comilla is famous for many cultural activities as this district was a part of Tripura of India. It was culturally rich before ages but no one basically care about those richness ,No one doesn't wants to know about the culture, about the heritage. So it is a path of knowing the cultural along with the archaeological museum. People should know about the culture and heritage sites together. Also a multipurpose hall is proposed for this project so that the local society can use this for the social and cultural purpose. A dormitory for national and international tourists is provided so that they can come and stay here for a certain time and they can research about the archaeological sites or they can visit those heritage sites. A gallery space designed for archaeological museum besides a spiritual water body situated on the ground floor of the building.