# Contemporizing Historical Precincts of The Sovabazar Sector of North Kolkata

Kolkata, India

## CEPT UNIVERSITY

Masters in Conservation & Regeneration (MCR)
**Faculty of Architecture, CEPT University**

# Contemporizing Historical Precincts of The Sovabazar Sector of North Kolkata

Kolkata, India

## Studio CR4006: Contemporizing Historical Precincts of The Sovabazar Sector of North Kolkata

Monsoon 2024
Urban Regeneration Studio
Faculty of Architecture
Masters in Conservation and Regeneration

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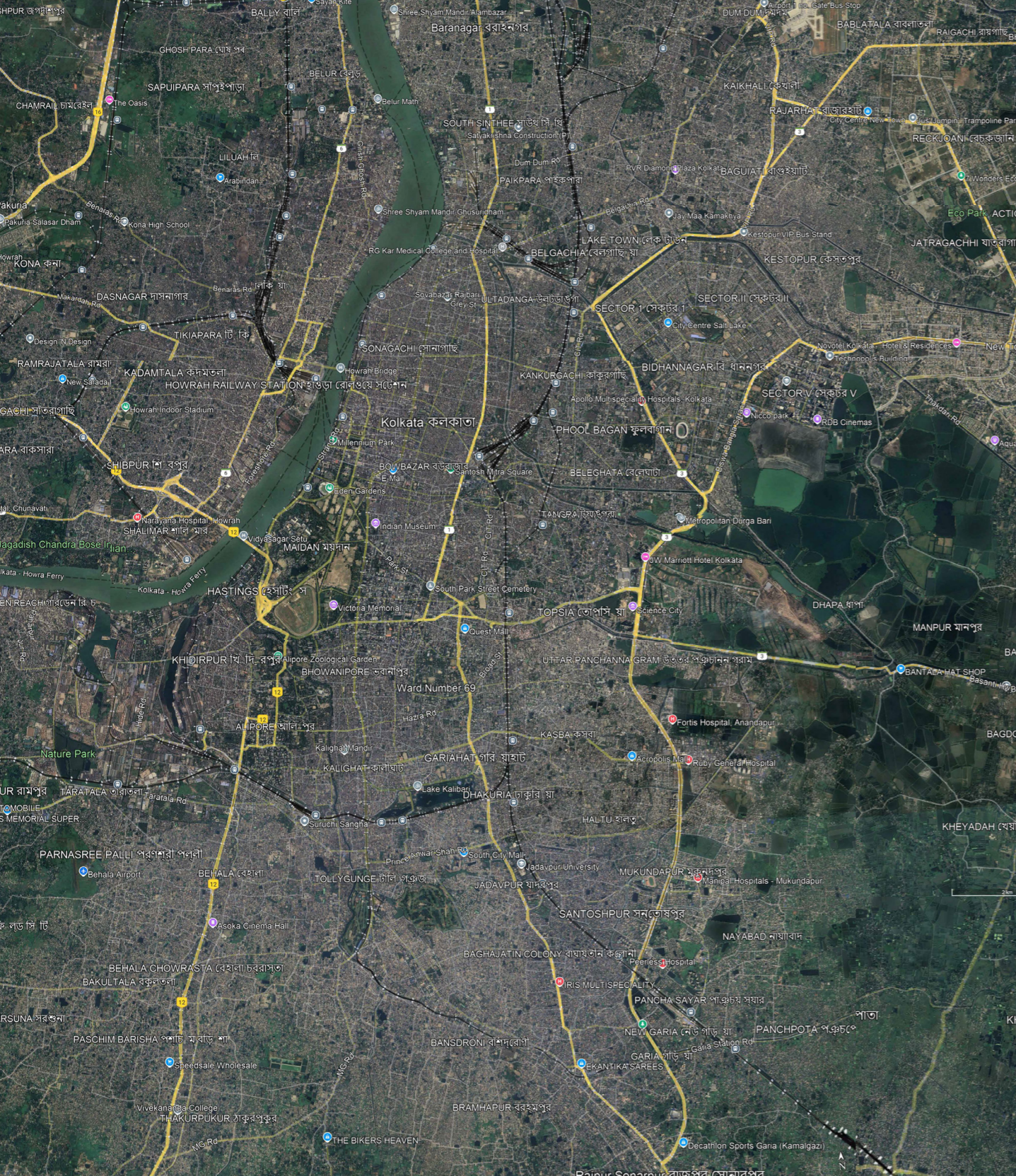ayan.sen@cept.ac.in

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## Studio Outline

The studio focuses on learning various approaches to urban conservation that integrate existing historic fabric with today's needs, through the case of Sovabazar Sector in North Kolkata. This historic neighborhood dates itself back to the origins of Kolkata located on the River Hoogly and sandwiched between the ancient canal and spine road that runs north-south along the city. It also comprises the culturally significant Kumartuli street which plays an important role during the Durga Puja festival. The site offers an array of urban transportation options like the ghat on the river for river transportation, a train station for the circular rail, Metro station with spine road having already established bus routes etc.

The historic neighborhood with its crumbling stock of built heritage, burdened infrastructure and neglected systems is ripe for revitalization. Through urban conservation and adaptive reuse methods, this can be transformed into a competitive live work precinct in the core of the old city of North Kolkata celebrating its history and unique cultural aspects. This involves the conservation of significant architectural landmarks of the district and tactful urban design interventions that will rejuvenate the old neighborhood and cater to todays needs. This will equip the team to handle urban design issues as well as conservation and adaptive reuse. One can create a toolkit of conservation policy measures and design ideas that will re invigorate not just this district but the entire old city as a model development.

## KOLKATA STUDY

## KOLKATA SITE VISIT

## SITE ANALYSIS & MANIFESTO

## DESIGN PROPOSAL AND DESIGN DEVELOPMENT

The semester begin with students being divided into groups, each tasked with studying different aspects of Kokata; history, culture, architecture etc. before visiting the site. This preliminary research provided them a solid understanding of the city, which helped them to fully engage with the site during their brief time in Kolkata

The students conductued in-depth studies of their individual sites in groups, engaging in activities such as cultural mapping, stakeholder consultations, photographic documentation, identified issues etc. Their study was further solidified by expert lectures who provided valuable insights on the city and their sites.

All the data collected from site was digitalised and through literature study, historic maps, the students gained deeper insights on their sites. This initial site analysis became a solid foundation on which they built their manifestos and design briefs.

Based on their manifestos, the students developed design proposals, which they refined through case studies and additional literature research to further strengthen and develop their designs for their sites.

Week 2

Week 3

Week 9

Week18

# KOLKATA STUDY
## HISTORY AND EVOLUTION

**1651:**
First factory was set up in Hugli
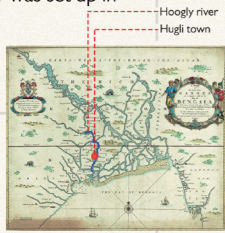


Hoogly river
Hugli town

*Image: Map by English Cartographer, John Thornton, approximately dating back to 1680, included in the 1703 edition of The English Pilot*

**1634:**
British are given permission to trade in Bengal and set up first factory of cloth.

**Early 17th Century:**
The English attempt at establishing commercial links between Bengal and Bihar.

Cloth factory is set up in Harihar, Orissa.

**1698:**
Transfer of administrative rights of Calcutta to the East India Company

**1686-1689:**
Period of political tensions between the East India Company and the Mughals

**1690:**
Job Charnok, an Agent of the East India Company took over the three villages of Sutanuti, Kalikata, and Gobindpur on the east bank of the Hoogly river.



*Image: The Conjectural map of Calcutta, 1690*



*Image: Old Fort William on the banks of the Hoogly River, 1754*

**1712:**
Completion of construction of Fort William in Gobindpur

**18th CENTURY AD :**
Rise of the British Empire

**1876:**
Passing of Calcutta Municipal Consolidation Act, 1876, formation of Howrah Municipal Corporation

**1872:**
Tea plantations acros Assam and Darjeeling and trading via Calcutta

Start of Bengal Renaisance

**1854:**
Howrah to Hoogly
Telegraph connections
Became the financial capital

**19th CENTURY AD :**
1854: Construction of Railways in Calcutta

**1883:**
First National Conference of the Indian National Association. There after became the hub for nationalist movement and freedom movement



Fig. 2P-2A: Digitized Map of Kolkata Showing Urban Growth



*Image: Map of Calcutta 1893*



*Image: Map of Calcutta 1911*



Fig. 0.20 Kolkata Metropolitan Area as Depicted in NATMO Map Showing its Growth over the Period

**1911:**
Political activities prompted capital shift from Calcutta to Delhi

Creation of Calcuta Improvement Trust

**20th CENTURY AD :**
1905: First partition of Bengal

**1913-1917:**
First World War

Representation of funds to Calcuta Improvement Trust

**1920-1939:**
Improvement of urban infrastructure

**1929:**
Dum dum airstrip

**1939-1944:**
Second World war

Threaths from Japanese troops

**1942-1944:**
Heavy bombing by Japanese troops

**1970:**
Civil war/ Bangladesh Liberation war- blow of refugees into Calcutta

Establishment of Calcutta Metropolitan Development Authority

CMDA jurisdiction consisted of 33 towns, North 24 Parganas, South 24 Parganas, Hoogly and Howrah (Parganas - group of villages forming subdivision of a district)

**1960s-1970s:**
Naxalites movement, alignment with leftist ideas and human suffering due to poor urban conditions

**1967:**
Calcutta Metropolitan Organisation established (CMPO)

**1969:**
Creation of Sector II and III planned as Residential
Later IV and V planed as Industrial

**1965:**
Creation of Sector I planned as Residential

**1962:**
Creation of Salt lake city

**1947:**
Second partition of Bengal



*Image: Map of Calcutta Metropolitan Area 1987*
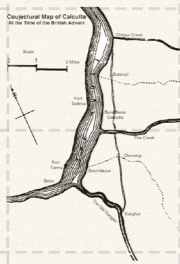


Kolkata Urban Area: 1901-2011
CORE & SUBURBAN POPULATION
SUBURBS
KOLKATA (CORE)
Figure 1
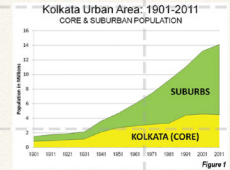
**2001-2011:**
Growth dropped to 29% during the 1940s but continued at 20% or more until 2001. However, between 2001 and 2011, the urban area growth rate dropped to 7%, as the area added only 900,000 new residents. Despite its earlier, smaller size, the Kolkata urban area had not added this few people since the 1921 to 1931 decade.

Kolkata getting less dense by the day.

Growth of suburban Kolkata.

**21th CENTURY AD :**

**2000s:**
IT Industry introduced changing the momentum of the city

**2001:**
Calcutta renamed to Kolkata

Durga Puja was mainly celebrated as a family festival of the wealthy and elite class until 1761 when twelve young men were prevented from attending a family puja in Guptipara of Hooghly district. They formed a twelve-member committee, which organized the first public or community Durga Puja with subscriptions. Hence this type of worship is called Barwari (baro, twelve; yar, friend).

Bengali Babu
The title 'Babu' was added as a prefix or suffix to a person's name to recognize (wealthy) Indians who had provided service and assistance to the British in establishing their commercial and political base in India.

Kumartouli Sarbojanin Durgotsab

Dum Dum Sarbojanin Durga Puja

Ahirtola Sarbojanin Durgotsab

Chaltabagan Durga Puja Pandal

Hatkhola Gosaipara Sarbojanin Durgotsab

College square Puja Mandap

Maddocks square Durga puja

Tridhara Sammilani Durga puja

Deshapriyo park Durga puja

Bosepukur Sitala Mandir Durga puja

Jatindas Sarbojanin Durga puja

Shiv Mandir Sarbojanin Durgapuja

Ekdalia Evergreen club Durga Puja

Samaj Sebi Sangha Durga

Mudiali club Durga Puja

Selimpur Pally Durga Puja

Suruchi Sangha Durga Puja

Jodhpur park Durga Puja

Naktala Udayan Sangha Durga Puja

## Musical Instuments

### Ektara
Ektara is the musical instrument with one string. Also known as the "gopijanra", it is used by the native people of Bengal for making folk music. Mostly used in Baul music.
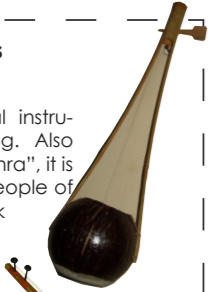
### Dotara
Dotara is an instrument containing two, fair or sometimes five strings and resembles a sarod. Also used in Baul music.

### Khamak
Khamak is composed of three main components: a wooden base that is joined to another wooden artwork by several strings.

### Morsing
It comprises a metal ring in the shape of a horseshoe, two parallel frames which form the basic frame and a metal tongue in the middle of it.

### Dramyin
The dramyin is a long-necked lute cut out of a hollowed piece of wood with seven strings attached to the base.

## Bengali cinema and Influence of bengali in Bollywood

Antarmahal: Views of the Inner Chamber (2005)

KAHAANI

Parineeta

Kishore Kumar

Jalsaghar(movie)

PIKU
MOTION SP HI EMOTION

Konkana Sen

Charulata(movie)

Aparajito

Pather Panchali, Satyajit Ray's debut as a director
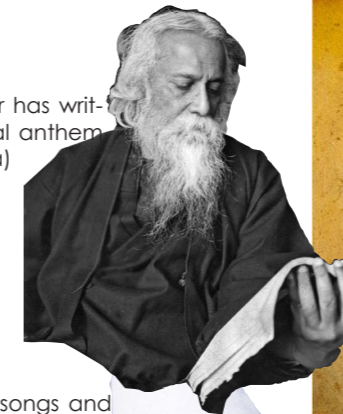
Shoojit Sircar

Satyajit Ray

## Nationalist Movement and Free

Literature, with its evocative power, ignited patriotic fervor in Calcutta, inspiring masses through stirring narratives and thought-provoking critiques. Cinema, a visual medium, became a potent tool, weaving tales of national pride and sacrifice, captivating hearts and minds with its powerful imagery. Together, these art forms galvanized the spirit of resistance, fostering a collective identity and fueling the flames of the nationalist movement.
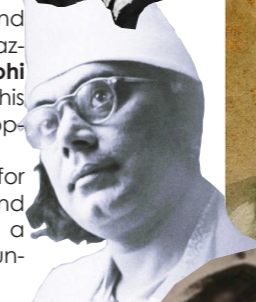
Rabindranth Tagor has written Indian national anthem (Jana Gana Mana) and ekla chalo re.

### Nazrul Geeti:
This term refers to songs and poems written by Kazi Nazrul Islam. Also called **Bidrohi Kobi,** or rebel poet, for his works that staunchly opposed the British rule.
A Muslim, he is praised for incorporating Persian and Urdu words into his works, a practice that was virtually unheard of at the time.
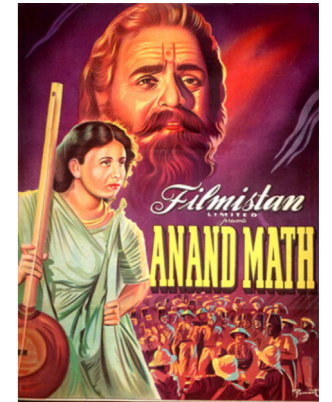
ANAND MATH
Filmistan

आनंद मठ

Anand Math, a cinematic masterpiece, breathes life into Bankim Chandra Chatterjee's revolutionary novel, capturing the spirit of the Sannyasi Rebellion against British oppression, immortalized through the iconic song "Vande Mataram."
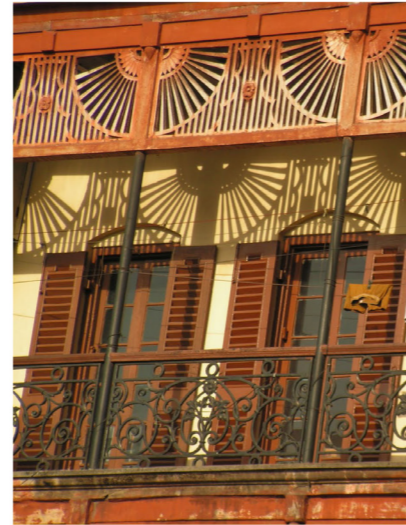
Bharat-Mata by Abanindranath Tagore

**FREEDOM** IS NOT GIVEN, IT IS **TAKEN**

Chittaranjan Das

Basanti Devi

Shubhas Chandra Bose

# KOLKATA ARCHITECTURE

**MARBLE COLUMNS** — **BRICK COLUMNS** — **CAST IRON COLUMNS**



VICTORIA MEMORIAL



TRADITIONAL HOUSE OF KOLKATA



TRADITIONAL HOUSE OF KOLKATA

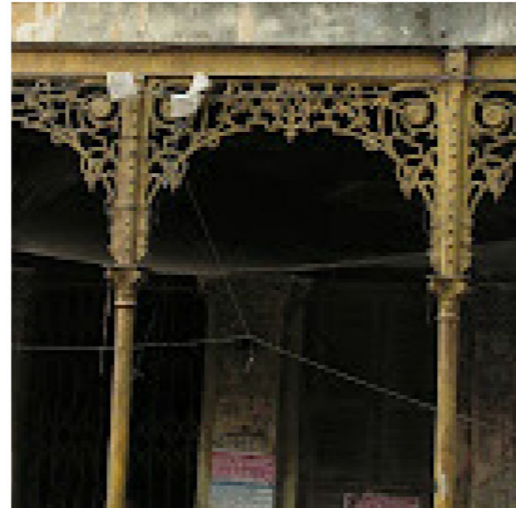**STONE ARCHES** — **CAST IRON ARCHES**





**CAST IRON RAILING**



**COURTYARD** *(THAKURDALAAN)*

# LEGISLATION



## REGULATIONS AND LEGISLATIONS OF KOLKATA

### The Kolkata Municipal Corporation Act, 1980 (amendment)

CHAPTER XXviiA

**Preservation and Conservation of Heritage Buildings**

Section

425A. Owner to maintain, preserve and conserve heritage building.
425B. Power of Corporation to declare a building as a heritage building.
425C. Gradation or heritage building.
425D. Heritage Conservation Committee.
425E. Powers and functions of Heritage Conservation Committee.
425F. Power of Corporation to require, purchase or take on lease heritage building. 425G.
Transfer of right of development for the purpose of acquisition by agreement. 425H. Right of
access to heritage building acquired by Corporation.
425I. Sub-lease of heritage building.
425J. Permission of concerned department of State Government before acquisition of heritage building.
425K. Power to exempt rates and taxes, etc. an heritage building.
425L. Agreement with owner of heritage building pending acquisition.
425M. Voluntary contribution andagreement with any voluntary organisation, person orcompany. 425N.
Taking over management and control of heritage building.
425O. When heritage building ceases to be heritage building.
425P. Penalty.

The salient features of KMC Act on heritage conservation are (KMC, 2019):
- assigns responsibilities to owners of heritage buildings to maintain, preserve and conserve them
- enables KMC to declare a building as a heritage building and classify it in multiple categories
- creates HCC with its powers and responsibilities
- defines ownership and transfer of rights of heritage buildings
- exempts heritage buildings from rates and taxes
- creates a KMC fund for heritage conservation.

### Hierarchy of Heritage Conservation Committee
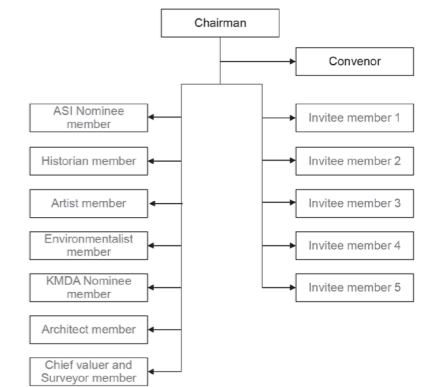


The Heritage Conservation Committee is a 14 member committee with the Municipal Commissioner as its Chairman and an officer of the Corporation as its Convenor.
The Committee has the power to function independent of the Municipal Building Committee for purpose of preservation, conservation and maintenance of heritage buildings.

# CASE STUDIES



## REVITALIZATION OF HISTORIC CITY
## PEARLING PATH

### Location: Muharraq, Bahrain

The pearling path encompasses 330,000 square meters including oyster beds and buildings related to the 19th century pearl industry.

In 2013, the Bahrain Authority for Culture and Antiquities set out to preserve and revive the spirit of this historical area, highlighting its social and economic importance, especially in relation to the historical pearl trade. In addition to preserving and restoring historical structures, the urban regeneration project aims to ensure any new construction in the area is sensitive to heritage conservation and contemporary public space planning.



## REVITALISATION OF PUBLIC SQUARE METROPOL PARASOL

### Location: Sevilla, Spain

The metropol parasol stands as an successful example of how innovatove urban design and strategic public-private partnership can transform a city's social and cultural landscape.

By providing a versatile public space, it has enhanced community cohesion and cultural expression.



## NIZAMUDDIN URBAN RENEWAL INITIATIVE

### Location: Delhi, India

The project is a unique collaboration of government with the local bodies and the private sector for conserving the historical monument along with creating opportunities for the community.

The project created job opportunities for the Nizamuddin Basti community wherein the youth were trained by the artisans which further lead to the revival of the art as well as conserve the monuments of the Humayun Tomb.
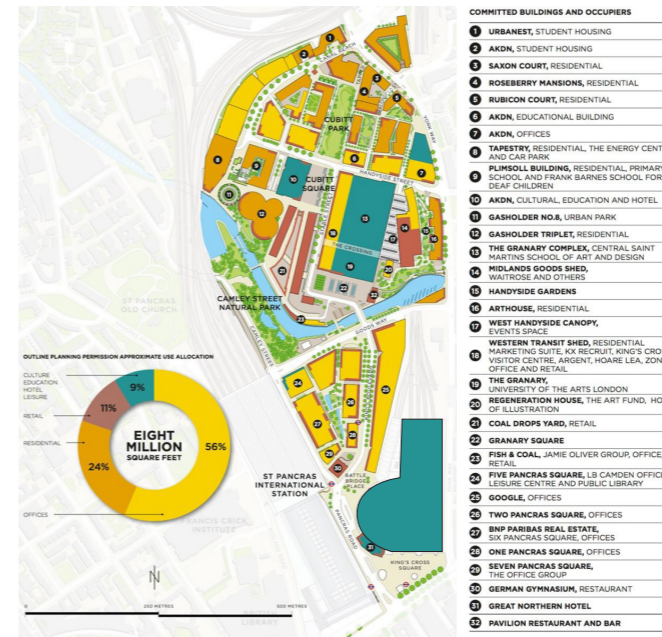


## URBAN REPAIR
## KING'S CROSS

### Location: London

King's cross has undergrown a remarkable transformation, evolving from an isolated and overlooked area into a vibrant urban hub. The master plan for this regeneration provides a flexible framework for phased development, accomodating a diverse range of uses.

Highlight inclused a new home, St. Martins and google UK's headquarter. This project seamlessly integrates a previously neglected part of London, revitalizing a key historical industrial area. Although the aea is still developing, it has quickly become London's most desirable locations.

# KOLKATA SITE VISIT

Talk with conservation architect Kamalika Bose with the students.



Lunch organized for the students with prominent architects Abin Chaudhuri, Subhrajit Mita, Ranit Maiti, and Saptarshi Mitra who are working in Kolkata.



Seminar with eminent conservation experts and practitioners like Neeta Das, Manish Chakraborty and Mukul Agarwal



Heritage walk with conservation architect Sohini Pyne in and around the Sovabazar sector.

Visit to Ayan Sen's Studio in Kolkata.


On- site discussions


Visit to Ayan Sen's Studio in Kolkata.
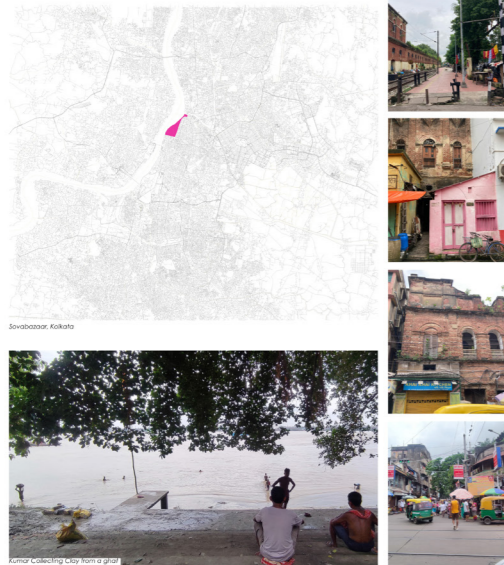

On- site discussions

# SITE ANALYSIS

Ghats and circular railway

Kumortully Area

Abhoy Mitra Street and surroundings

# SOVABAZAR OVERALL GROUP

## HISTORY AND EVOLUTION OF SITE

### Sovabazaar History and Setting


Sovabazaar, Kolkata


Kumar Collecting Clay from a ghat

### Evolution of Sovabazaar- Sutanuti

The present Sovabazar area has very dense urban development and the lakes and ponds have disappeared.

Many of the existing streets have been existing since the beginning of this area. These are now some well-known historical streets- Sovabazar St, Banomali St, Chitpur Rd (Rabindra Sarani)

Increase in pakka houses (the darkly marked houses). Along with these the number of ponds decreased slightly.

The ghats and their functions, other than Kashi Mitra Ghat, kept changing with every ruling person.

Increase in settlements- elite, workers and informal. the area also had a large network of ponds and lakes associated with zamindars and temples.

British had started conglomerating the 3 villages to form the old Calcutta boundaries.

Sutanuti was the trading centre during Portuguese and Dutch times. It also had jute and cotton products industries.

### Archival Photos of Sovabazaar


Govinda Ram Mittoor's Pagoda, 1789


Calcutta—Dancer on the Chitpore Road. Year 1831


Bathing Ghat, by Bourne & Shepherd 1880s


Jute Centre of the World, 1947


INDIA ALIA




Sovabazar St, 1940




Chitpur Road, 1990s

**pre-1500**
1500s, during the Portugese and Dutch rule, Sovabazar existed as the village Sutanuti. Many ghats here were used for trading. One of them being the present Mayer Ghat. This was also the only ghat known to have had ports on both sides of the river for trading purposes.

**1500 1600**
In the late 1500s and early 1600s, many traders from near by places settled in sutanuti. Sutanuti was mainly a jute and cotton making industrial area. Some of the well known family names are Gocul Chendur Mitra, Banamali, Umichand etc. They marked the beginning zamindari system. Salt traders, opium, farming, jute and cotton were some of the major activities handled by them.

**1600 1700**
The age of 2 temples out of the Shiva Trilogy- Rameswar and Baneswar temple is still under speculation. They can be placed anywhere from early 1600s to mid to late 1600s. Baneswar temple is believe to have been built by Banomoli Sarkar. This time period is also when British first came to Kalikata.

**1700 1800**
1700s is when Calcutta as we know started taking shape. Kolkata Municipal Corporation was established in 1727.
After the win over Siraj-ud-Daulah in Battle of Plassey (Palasi), the then zamindar of Sovabazar- Raja Nabakrishna Deb of the Deb family organised a Durga Pujo at their residence the Rajbari. This was also presided over by Robert Clive. All the zamindars slowly started having Durga Pujo organised at their Rajbari/Thakurbari. Kumartuli also started getting occupied by Kumors (potters) to make Durga idols.

Mid-late 1700s witnessed not just a cultural and religious boom, but also significant changes in the business, research, media, Ayurvedic medicine learning hospital was set up in Kumortuli area. Bengal Gazette was founded, with this came multiple printing press across Calcutta.

In the mid-18th century, after the Permanent Settlement Act, Raja Nabakrishna Deb purchased large areas of land. He built grand mansions on the property and rented out the rest. This led to the creation of a new neighborhood, with the Raja at the center of its development, collecting rent from tenants on his land.

Around Raja Nabakrishna Deb, a diverse middle-class community of professionals like teachers, lawyers, doctors, and journalists settled. These people lived in a complex neighborhood structure known as the "para," which included various social groups: shopkeepers, temple priests, artisans, and laborers. The para represented a harmonious blend of different castes and communities. Today, such neighborhoods contribute to the city's historic character, reflecting the heritage, culture, and traditions of those communities through their architecture and urban layout.

In the late 18th and early 19th centuries, the northern part of Calcutta was structured by the Bengali zamindars who bought vast tracts of land, settled tenants, and fostered a large number of dependents related by kinship and service.

**1800 1900**
1800s saw a wave of freedom fight, Bengal Renaissance, new ideologies like Ramakrishna Mission and Brahma Samaj. The birth of Ramakrishna Mission and Matt started from the Northern section of Sovabazaar.

The first printing press in the north was started by Biswanath Dev in Sovabazaar. There were 4 Indian owned press in Calcutta by mid 1800s.

The late 1800s were the beginning of documentation and restoration of monuments in India by the British.

Ramakrishna at the house of Keshab Chandra Sen with Brahmo Samaj devotees, circa, 1879

**1900 2000**
Bengal was hit with the first partition in 1905, femine in 1943. Many lives were lost and the gap between the rich and the poor only got wider.

Sovabazaar due to multiple factors such as the war, Naxalite Movement, femine and growing population saw a decline in its glory. The zamindar families by this time had started moving out to the better section of Calcutta.

1961 calcutta Metropolitan Planning Organisation was formed and produced basic development plan. Policy reforms taking place. Conservation talks had begun in Calcutta.

1980, Society for Preservation was formed with an objective to raise public awareness for conservation of historic buildings.

The revised KMC Building Rules of 1990 again did not specifically mention conservation of heritage properties.

1992-1995 an effort was made to indentify and document historic buildings. The first declaration of a list of heritage buildings in Kolkata by the State Government was published in 1996.

1999-2004 KMC inroduces amended Building Rule 425(A-P) which addressed the preservation and conservation of heritage buildings.

Building Rule 401 prevented the demolition of any declared or listed heritage building in the city through its publication in February 2009 demolition of any declared or listed heritage building in the city through its publication in February 2009. The same KMC released an updated list of graded structures.

In contrast, Kolkata's conservation movement started in 1999 with some legal and administrative support. While a few government buildings were restored and some private owners used their own funds for restoration, many old buildings remain neglected or are being demolished. Thousands of non-listed but valuable heritage buildings are in poor condition. The need for modern infrastructure has led to a decline in the city's historic fabric, with new developments taking the place of old structures.

# SITE CONNECTIVITY



- railway line
- tram line
- ferry line
- metro line
- one way
- two way
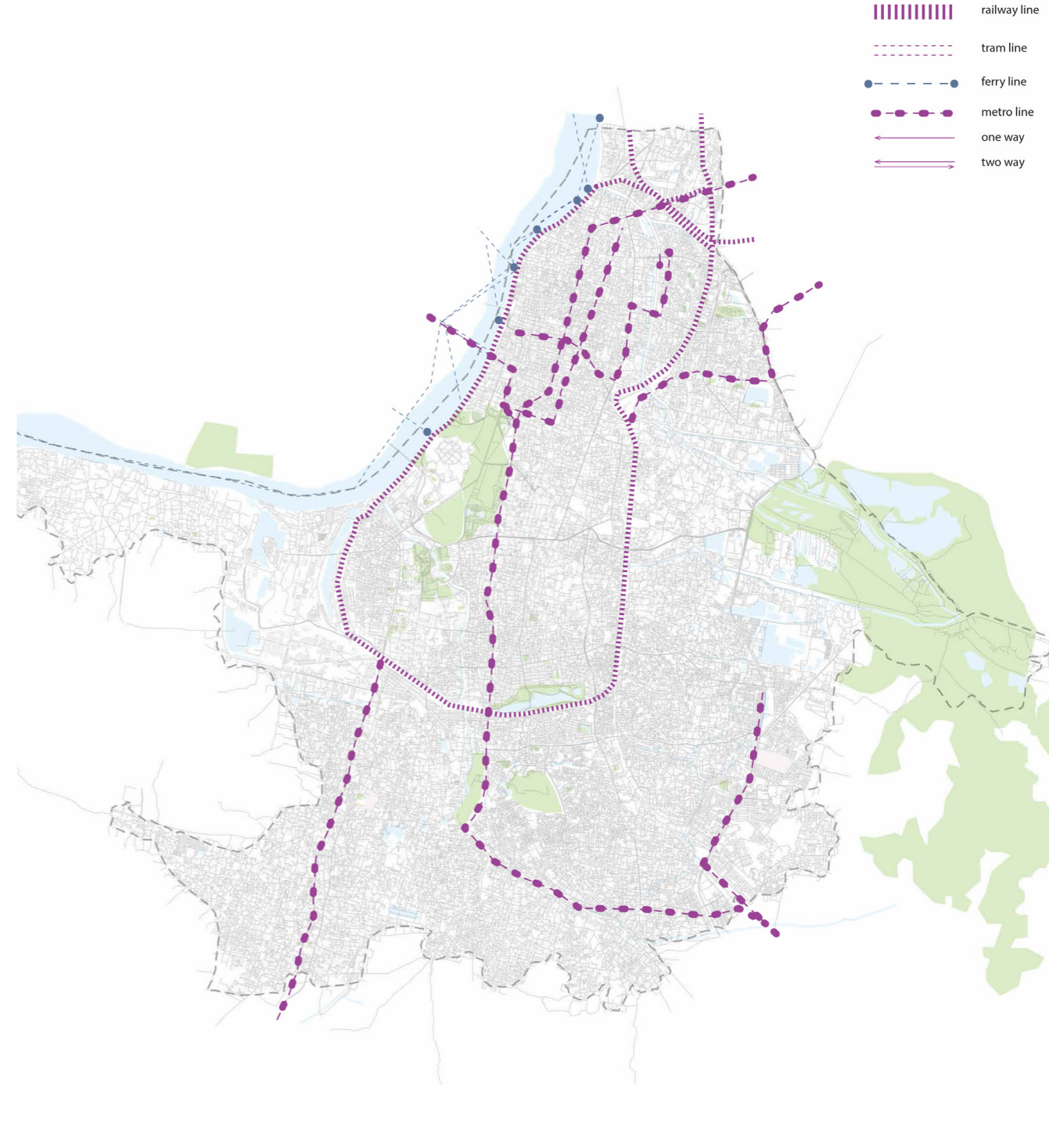
## Figure & Ground

Sovabazar sector selected partially has 3 wards - Ward 7, 8 and 9 each having an approximate population of 15-20 thousand.
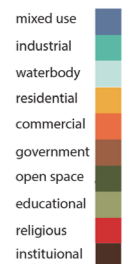
Inference & Issues

- High density of population has been noticed in the Kumortuli area, where the settlement has developed very close knit due to occupation, proximity to Ghat and main road and other required aspects of Durga making. They also have tarp and bamboo structures along the road edge to attain suitable workspace.
- The area has lack of open spaces. The only one noticed is the Kumartuli park.
- The roads decrease in width from 8m to 3-4m wide which has led to a lot of inner areas being accessed either by two wheeler or pedastrian.
- The rest of the inner networks are mainly alleyways and gullys which are mainly pedastrian.
- Due to growing needs and urbanization people require to update transport mode to cars or extra 2 wheelers, but due to dense fabric parking of these vehicles has become an issue.
- Dense fabric in some cases has also been noted to be a reason for increase in unhygenic corners.

## Building Use

Inference & Issues

- The building usage has changed over the centuries. many centuries old residences have been leased out to multiple users such as hoziery industries, small commercial activities etc for a very low rent.
- The functions have changed but the structures remained as is with least maintainence which has led to the deterioration and abandonment of buldings.
- The canal edge is mainly occupied by informal dwellings and slum. The dwellers here depend on the canal for catching earthworms which are then sold as food for fishes.
- The southern part of the sector is closer to the Indian elite area- various Rajbaris. this influence can be seen in the architecture.
- As we move towarsd north the spinal road- Chitpur road has lot of commercial activities happening: markets, shops, vendors and the northern most reion has more bigger businesses such as construction material delaers.
- Major of the clinics and chemists are situated on and around Sovabazar St. Apart from these few scattered homeo and ayurvedic clinics are observed. many if which are not in fucntioning state leadin to an inadequate urgent medical facilities.
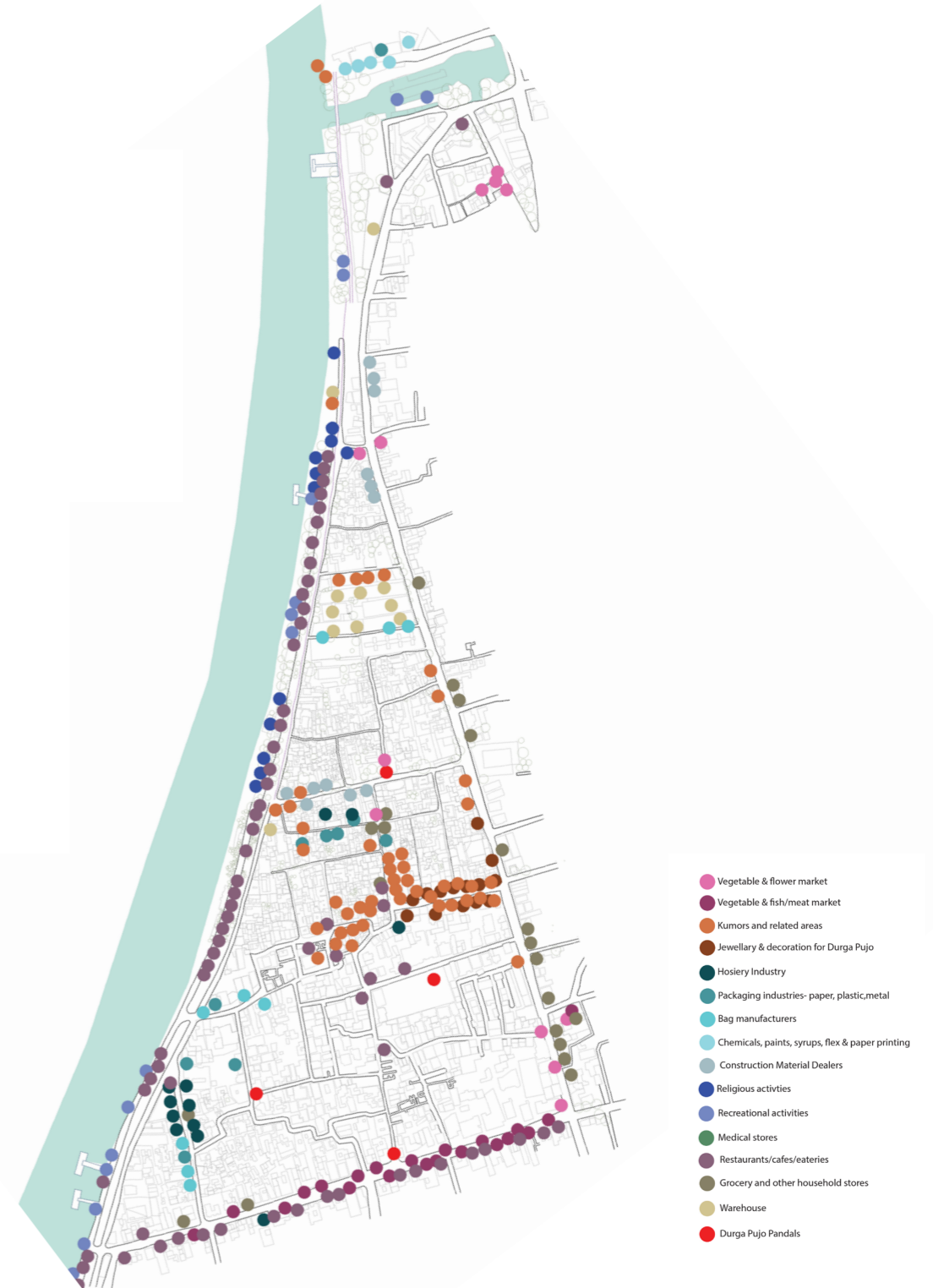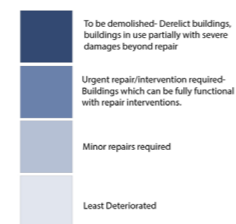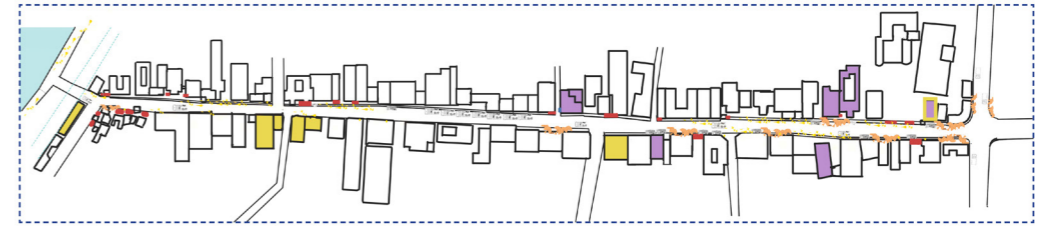- 



mixed use
industrial
waterbody
residential
commercial
government
open space
educational
religious
instituional

## Condition Mapping

### Inference & Issues

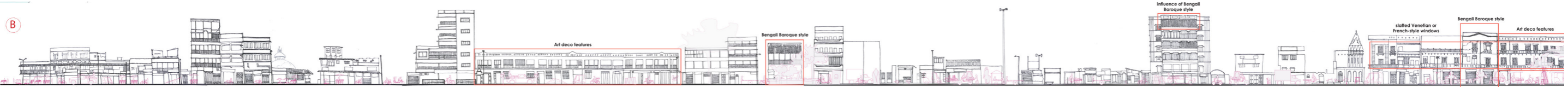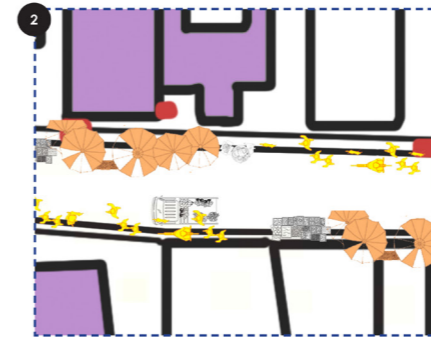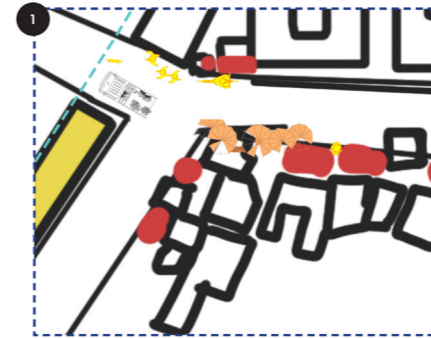- Based on the visual analysis of building conditions such as vegetation growth, algae growth, cracks and material deterioration, the conditons have been categorised into 4 categories mentioned below.

- Majority of the buildings on site need urgent repair works to increase their longevity.

- It can also be noted that some centuries old buildings have been repaired to a better conditoin, may not be in a sensitive way.

- KMC has guidelines for demolition of dilapidated structures which can be applied to some buildings on site and create more oper spaces or infrastructure of contemporary facilities.

**Condition Map**

- To be demolished- Derelict buildings, buildings in use partially with severe damages beyond repair
- Urgent repair/intervention required- Buildings which can be fully functional with repair interventions.
- Minor repairs required
- Least Deteriorated

**Legend (right map):**
- Vegetable & flower market
- Vegetable & fish/meat market
- Kumors and related areas
- Jewellary & decoration for Durga Pujo
- Hosiery Industry
- Packaging industries- paper, plastic,metal
- Bag manufacturers
- Chemicals, paints, syrups, flex & paper printing
- Construction Material Dealers
- Religious activties
- Recreational activities
- Medical stores
- Restaurants/cafes/eateries
- Grocery and other household stores
- Warehouse
- Durga Pujo Pandals

Legend:
- KMC Graded Structures
- Temporary structures
- Vegetable and fish market
- Public Urinal/water points
- Potential Intervention Sites

art deco features

Bengali Baroque style

influence of Bengali Baroque style

slatted Venetian or French-style windows

Bengali Baroque style

Art deco features

art-deco elements: semi-circular balconies

slatted Venetian or French-style windows

art-deco

# ABHAY MITRA GROUP

## HISTORY AND EVOLUTION OF SITE



*Abhay Mitro street* — *Rabindra Sarani*
*Banamali Sarkar street* — *Strand Bund* — *Railway line*

Abhay Mitra Street, nestled in the historic Shobha Bazar neighborhood of Kolkata, is a thoroughfare steeped in rich cultural and historical significance. This narrow street is closely connected to significant landmarks like the grand Shobhabazar Rajbari, the culturally iconic Jorasanko Thakur Bari, and the majestic Nakhoda Masjid.

Its proximity to Rabindra Sarani, one of Kolkata's oldest and most storied roads, ensures seamless access to the vibrant neighborhoods that define the area's character.

The street is characterized by its old-world charm, where colonial-era architecture meets traditional Bengali homes, many of which have stood the test of time. Shobha Bazar itself is known for its role in Bengal's cultural renaissance and is home to several heritage structures, including palatial mansions and temples that narrate stories of a bygone era.

**Who is Abhay Mitra?**
Abhay Charan Mitra, a landed aristocrat who exported spices, made enormous wealth conducting business with the East India Company. During Durga Puja, the Mitra family used to entertain their guests with 100 different varieties of dishes at lunch. The food was so delectable that the deity reserved her lunches for Abhay Charan's house.

Abhay Mitra Street, with its narrow lanes and unique character, encapsulates the vibrant spirit of North Kolkata, offering a glimpse into the city's past while thriving in the present. Life here blends private and public as residents engage in street life—shopping, collecting water, socializing—before returning to their cherished old homes, where the street's lively pulse continues. The park also becomes a focal point for large pandal setups, attracting crowds with intricate designs and increasing foot traffic in Abhay Mitra Lane and nearby areas.

### 1757
**Territory of Calcutta**
*Source:*
*Orme, Robert [1728-1801]. A History Of The Military Transactions Of The British Nation in Inostan. From The Year MDCCXLV.*
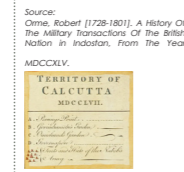
The "Territory of Calcutta MDCCLVII" map by Sir John Call, a military engineer, provides an early depiction of the region around Calcutta in 1757, during the period of intense political and military tension surrounding the Battle of Plassey. At this time, Abhay Mitra Street, as we know it today, does not appear to be marked on the map. Instead, the area is depicted as hosting tents and huts of the Nabob's army, indicating the military presence during this significant historical moment.
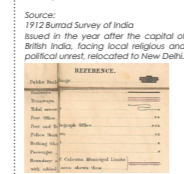
### 1848
**Map of Calcutta**
*Source:*
*Published by John Walker, Geographer to the Honble. East India Co., Jany, 20th, 1858.*
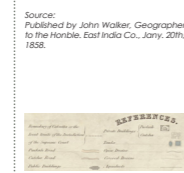
The Map of Calcutta from Actual Survey in the Years 1847-1849, published by John Walker in 1858, provides a detailed snapshot of the period's urban landscape. Present-day Kumartolly Street is labeled "Coomaurtolly Street," and Banomali Sarkar Street as "Banomaly Sirgar Street." These culturally significant streets were lined with a mix of kutcha (temporary) and pucca (permanent) houses, indicating diverse socioeconomic conditions.

The map also shows water tanks and drains, reflecting early urban planning and water management for a growing population. The Baneshwar Temple is marked, highlighting the area's historical and religious importance, further emphasizing its deep-rooted cultural significance.

### 1912
**Map of Calcutta**
*Source:*
*1912 Burrad Survey of India. Issued in the year after the capital of British India, facing local religious and political unrest, relocated to New Delhi.*

The 1912 Burrard Survey of India - Map of Calcutta, issued when the capital moved from Calcutta to New Delhi, marks a shift in the city's development. In this map, Abhay Mitra Lane is labeled "Ashoy Charan Mitra Street," its first formal appearance, reflecting the street's emergence in Calcutta's growing urban landscape.

This change highlights the area's transformation from its depiction in Sir John Call's 1757 map, when it was linked to military encampments, to a more structured urban form by 1912. The formalization of streets may indicate the area's rising significance, influenced by local figures or evolving community identities.

### 2024
**Google image of Calcutta**
*Source:*
*Google Earth*
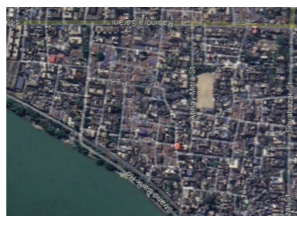
The area around Kumartuli today features a mix of old, middle-aged, and recent structures, showcasing its evolving architectural landscape. Abhay Mitra Lane has developed into a prominent street with a rich historical backdrop, blending with the contemporary urban fabric. Kumartuli Park, now an integral part of daily life, serves as a vital community space and a landmark, especially during Durga Puja when it transforms into a hub of activity. The Baneshwar Temple, with its deep historical significance, remains a key site for religious and cultural events, reinforcing the neighborhood's connection to its traditions while adapting to modern life.
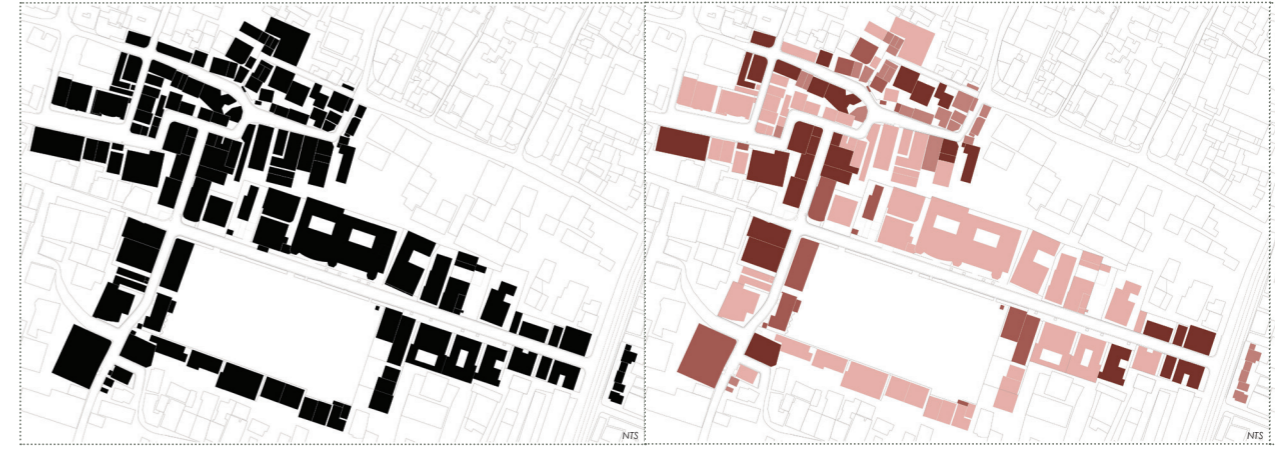
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# SITE MAPPING



**Figure Ground Mapping**
It becomes evident that the distribution of green spaces is uneven, with scattered pockets of greenery amidst a dense urban fabric. Kumartuli Park stands out as a significant exception, serving as one of the few large, dedicated green spaces in the vicinity.
The presence of informal encroachments, temple settings and community office and adda taking over roads, points to a dynamic and adaptable use of public space. These informal activities, while encroaching on official road space, also indicate how the community shapes and interacts with its environment. It suggests a vibrant street life but also raises questions about the balance between formal and informal use of public spaces and the potential strain on infrastructure and accessibility.

**Typology Mapping**
The ground floors of these structures are allocated for commercial activities, though not for retail purposes. In contrast, the upper floors are utilized as residential spaces. Also, it is observed that commercialisation has started to seep from the end of Rabindra Sarani

■ Mixed use
■ Institutional
■ Commercial
■ Residential

**Material Mapping**
Most structures on the lane were constructed using traditional materials such as brick and timber, with some buildings incorporating cast iron elements imported during the British period. This combination of materials reflects the construction techniques and stylistic preferences prevalent in the past.

Brick + Timber
Composite
RCC
| Not defined
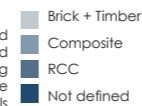
**Graded Structures Mapping**
In the entire Shobhabazar there are 34 graded structures mainly Grade 1, 2a, 2b. Out of this, 4 Grade 1 structures are present in our area of study. This comprises Baneshwar temple and three residential properties.
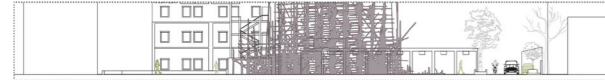
■ Grade I
■ Grade IIA
■ Grade IIB
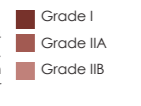
# ACTIVITY MAPPING



6 AM- 10 AM



2 PM- 6 PM

Daily activities in Kumartuli park

Daily activities in Abhay Mitra street

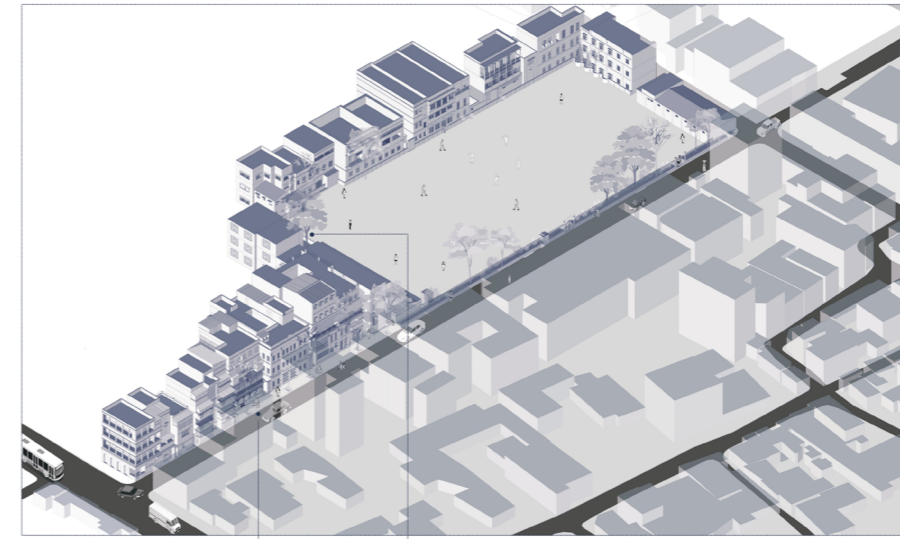Daily activities in Abhay Mitra street junction

Daily activities in Kumartuli lane facing Baneswar temple



7 PM- 10 PM

During Durga Pooja

## Abhay Mitro Street South side

This side of the area is lined with a mix of residential and mixed-use buildings, leading up to the vibrant Kumartuli Park.

The park stands out as the most active space, hosting a variety of activities throughout the day and night. Its diverse functionality attracts different user groups at various times, making it a dynamic hub for the community.

Although pedestrian paths are present, they are primarily used for parking rather than by passerby, who tend to walk along the road. Instead, these paths are frequented by people coming to access public amenities or engage in social interactions. Despite their limited role in foot traffic, these pathways contribute to the social life of the area, offering spaces for gathering and community interaction.



## Abhay Mitro Street North side

This side of the area is home to the landmark building Pulin Bhavan, along with three Grade I heritage structures of Kolkata.

Ironically, despite their historic significance, these three heritage buildings are the least maintained. According to local residents, the restrictions tied to their graded status make proper upkeep difficult.

As a result, the pedestrian paths in front of these buildings have become encroached upon by street hawkers, used for parking, and in some cases, taken over by permanent constructions. The lack of dedicated seating areas in the vicinity further contributes to this issue, as locals often gather in front of these historic buildings for adda (informal social gatherings), using the building fronts as makeshift communal spaces.
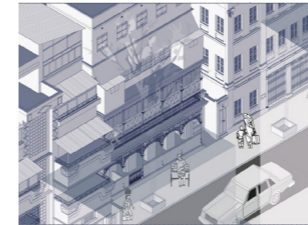


**Sharma Residence**
The broad pedestrian path served as a link between the building and the street, facilitating a variety of social interactions.
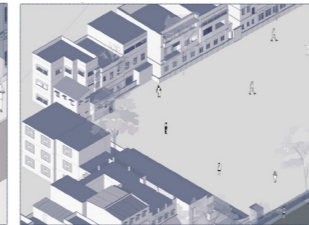
**Kumartuli park**
Kumartuli Park is a lively area within the site, regularly hosting football selection trials that draw large crowds outside of the puja festivities.
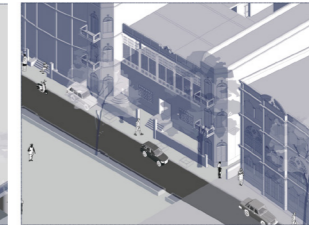
**Pulin Bhavan**
This residence, overlooking the park, hosts an annual Durga Puja on its premises, open to the public
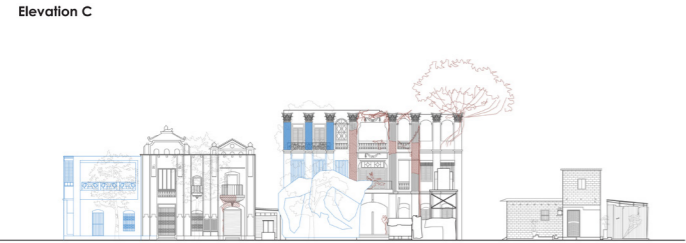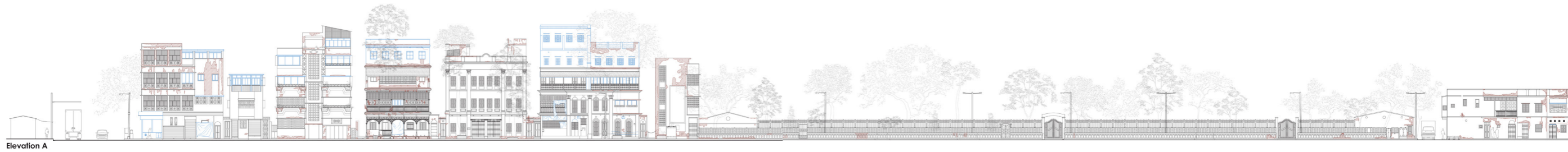
**Contemporary Apartments**
Five to six-story apartment buildings have replaced historic residential structures after demolition, altering the entire street's character
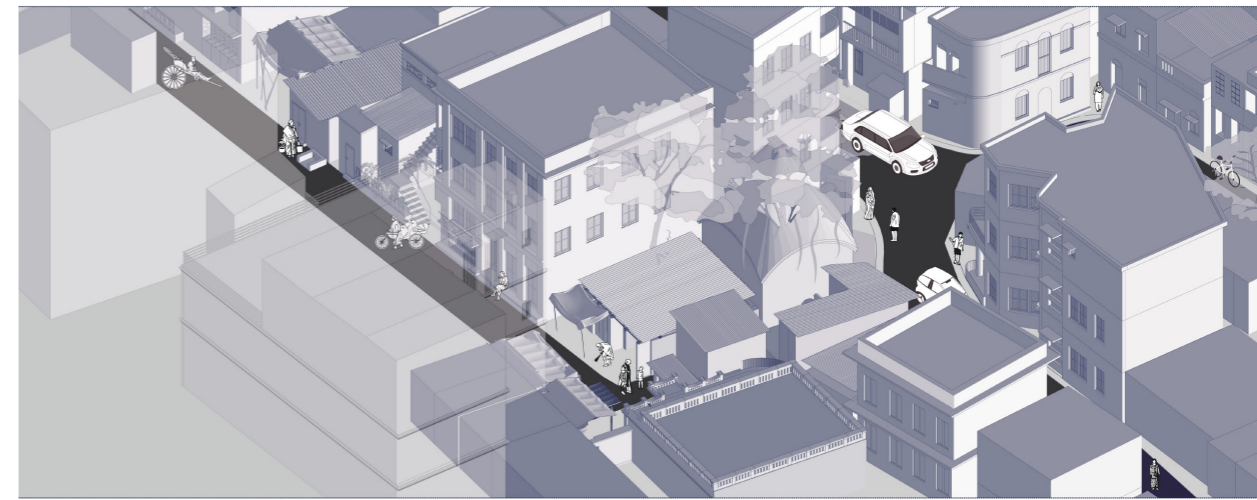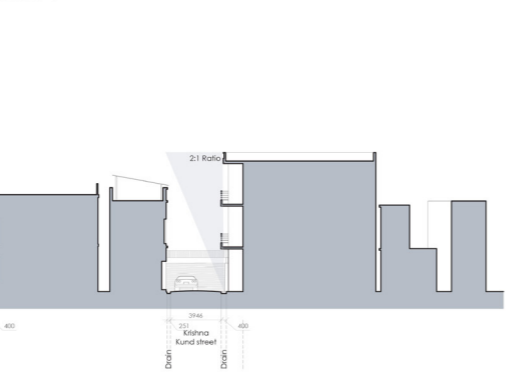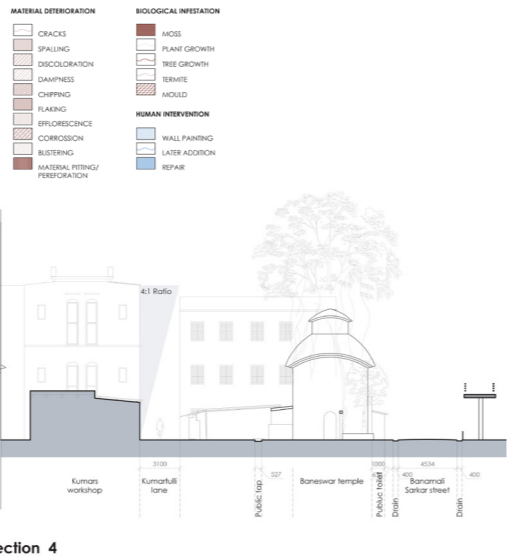


## Baneswar temple vicinity

This zone is primarily used by the Kumars, whose workshops are located around the temple. Their daily routine involves a bath at the ghat, with the temple serving as a stop for prayers before heading to work. The area's artistic idol-making also draws many tourists, eager to witness the creation of the iconic Durga idols. This mix of spiritual practice and craftsmanship makes the zone a hub for both artisans and visitors, blending religious significance with cultural tourism.
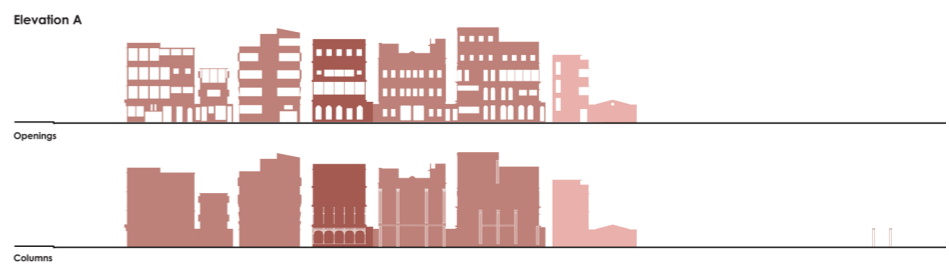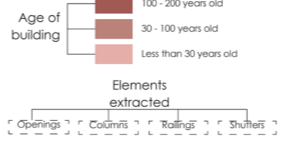
**Elevation A**

**Elevation B**

**Elevation C**

**Elevation D**

Section 4

Kumars workshop
Kumartuli lane
Public tap
Baneswar temple
Public toilet
Banamali Sarkar street
Drain

4:1 Ratio

Section 3

← Banamali Sarkar street
Narayan Sur street
Banamali Sarkar street
Krishna Kund street
Drain

2:1 Ratio

**MATERIAL DETERIORATION**
- CRACKS
- SPALLING
- DISCOLORATION
- DAMPNESS
- CHIPPING
- FLAKING
- EFFLORESCENCE
- CORROSSION
- BLISTERING
- MATERIAL PITTING/PEREFORATION

**BIOLOGICAL INFESTATION**
- MOSS
- PLANT GROWTH
- TREE GROWTH
- TERMITE
- MOULD

**HUMAN INTERVENTION**
- WALL PAINTING
- LATER ADDITION
- REPAIR

## FACADE ANALYSIS

Inorder to analyse the style and type of construction found on the facades, various elements have been extracted and mapped on the elevations. The building profiles are colour coded according to their time of construction and the discussion primarily centers on architectural elements like arches or lintels as openings, columns, railings and balustrades built during these different periods.

**Age of building**
- 100 - 200 years old
- 30 - 100 years old
- Less than 30 years old

**Elements extracted**
Openings | Columns | Railings | Shutters

Elevation A
Openings
Columns

**Key architectural features**
- Romanesque semi-circular arch windows
- Indo sarcenic motifs
- Neo-classical semicircular arch
- Cast iron columns and 3center arch
- Iron railings
- Neoclassical semicircular arch windows with tinted glass
- Iron column-sraiing with wooden ghilmi
- Neo-classical segmental arch
- Round trefoil arch
- Corinthian column
- Doric column

**1800 - 1900**

**Prominent influences**
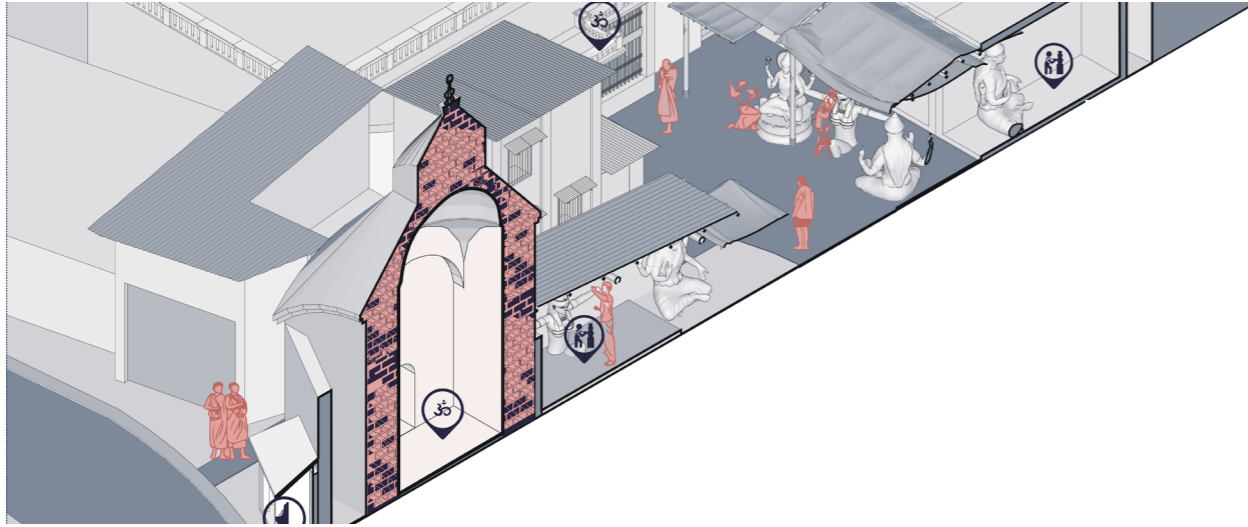Bengal Hindu style
Neo classical
Gothic
Baroque
Indo Sarcenic

**Openings**
-Iron lintels are observed in some buildings but openings were mostly spanned by arches.
-Arches Predominantly are semi-circular Neoclassical arches with a prominent keystone
-Romanesque arches with tinted glass and cast iron ornamnetation are also observed.

**Columns**
-Ornate corinthian columns are featured in masonry buildings along with Doric columns in some structures,
-Slender cast iron columns are observed in one structure throughout its verandah and balcony.
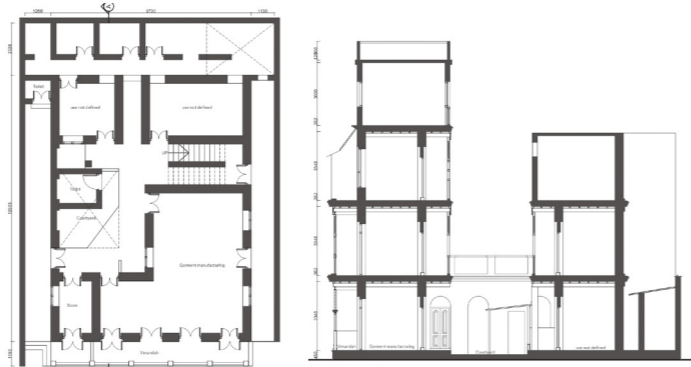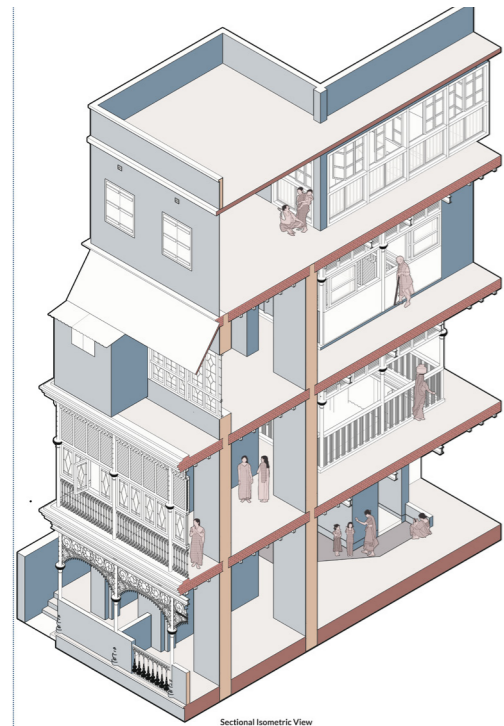
**Railings**
-Predominantly crafted in cast iron and featured Victorian and Edwardian styles,
-Few buildings also feature stone balusters.

**1800**
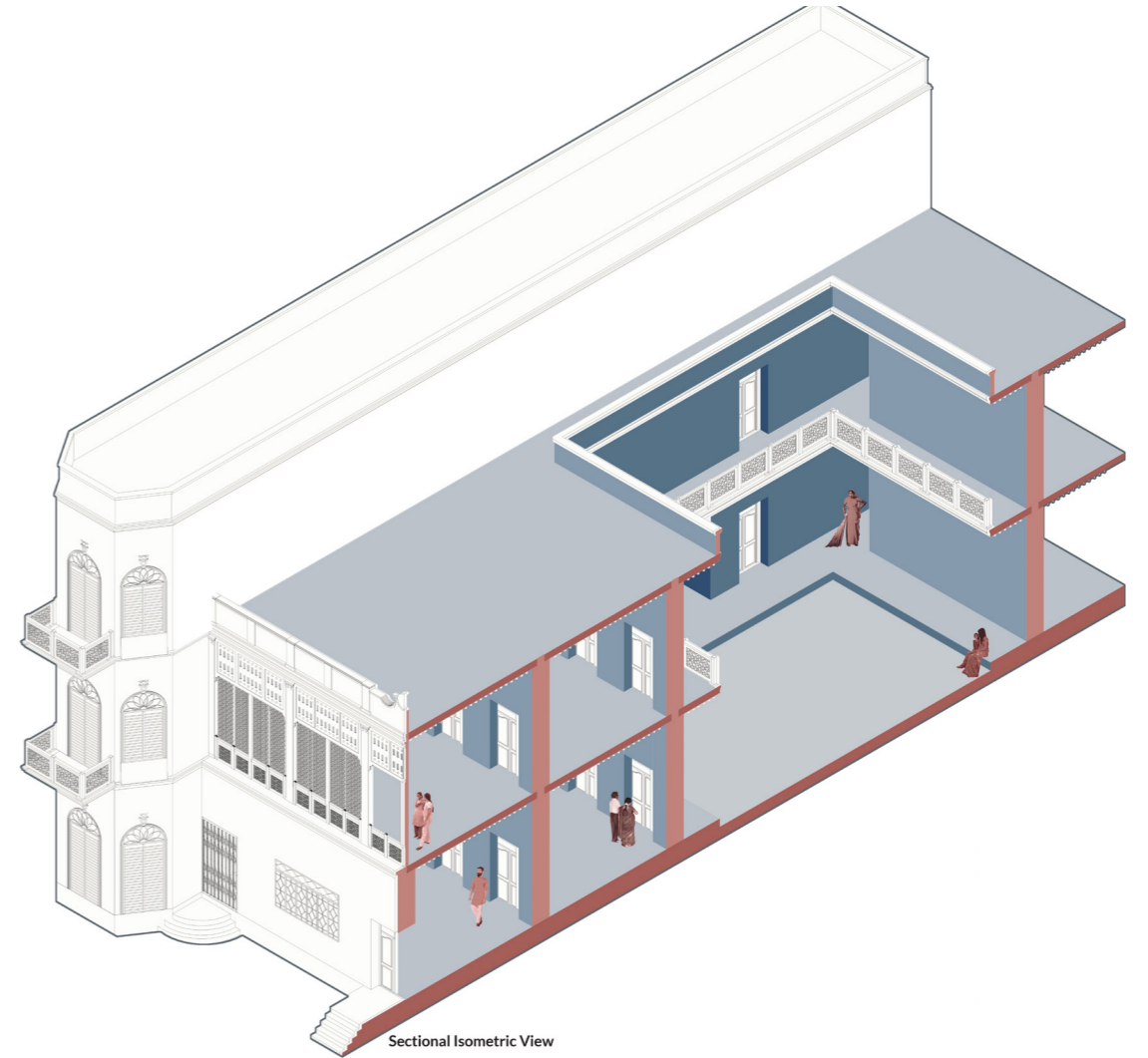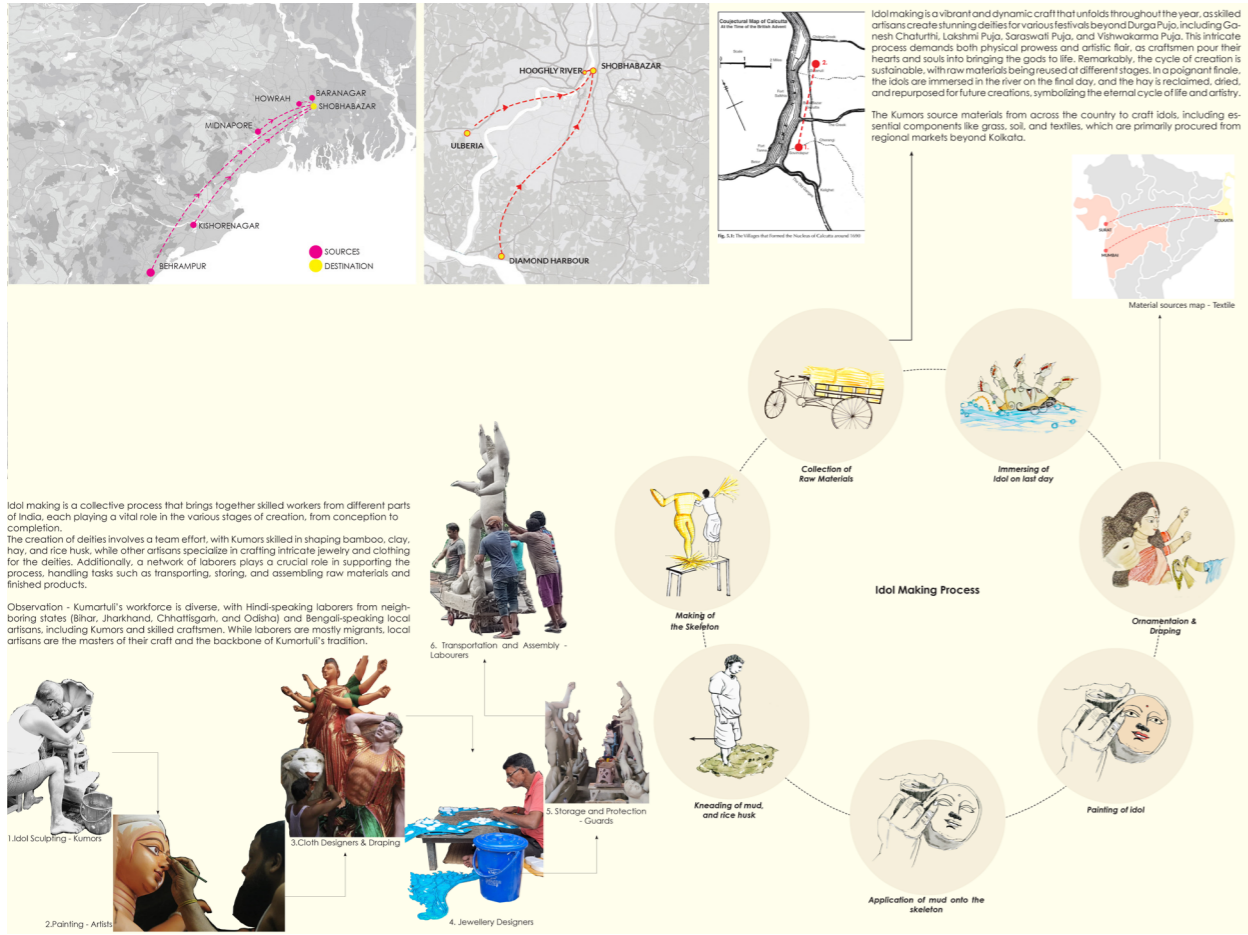
TIMELINE
Level of ornamentation
Standardisation using generic template

**Key architectural features**
- Neo-classical segmental arch
- Balcony with Iron columns, railing & wooden ghilmi
- Iron railing
- Wooden louvred window
- Neoclassical arch and jali railing
- Masonry corbel supporting balcony
- Ionic columns

# TYPOLOGY STUDY

## TEMPLE TYPOLOGY



Sectional Isometric View

## BONEDI BADI TYPOLOGY



Sectional Isometric View

## COURTYARD TYPOLOGY



Sectional Isometric View

# KUMARTULI GROUP

## KUMARTULI AND THE COMMUNITY OF KUMAR



HOOGHLY RIVER • SHOBHABAZAR

BARANAGAR
SHOBHABAZAR
HOWRAH

MIDNAPORE

ULBERIA

KISHORENAGAR

BEHRAMPUR

DIAMOND HARBOUR

SOURCES
DESTINATION

Fig. 5.5: The Villages that Formed the Nucleus of Calcutta around 1690

Material sources map - Textile

Idol making is a vibrant and dynamic craft that unfolds throughout the year, as skilled artisans create stunning deities for various festivals beyond Durga Pujo, including Ganesh Chaturthi, Lakshmi Puja, Saraswati Puja, and Vishwakarma Puja. This intricate process demands both physical prowess and artistic flair, as craftsmen pour their hearts and souls into bringing the gods to life. Remarkably, the cycle of creation is sustainable, with raw materials being reused at different stages. In a poignant finale, the idols are immersed in the river on the final day, and the hay is reclaimed, dried, and repurposed for future creations, symbolizing the eternal cycle of life and artistry.

The Kumors source materials from across the country to craft idols, including essential components like grass, soil, and textiles, which are primarily procured from regional markets beyond Kolkata.

Idol making is a collective process that brings together skilled workers from different parts of India, each playing a vital role in the various stages of creation, from conception to completion.

The creation of deities involves a team effort, with Kumors skilled in shaping bamboo, clay, hay, and rice husk, while other artisans specialize in crafting intricate jewelry and clothing for the deities. Additionally, a network of laborers plays a crucial role in supporting the process, handling tasks such as transporting, storing, and assembling raw materials and finished products.

Observation - Kumartuli's workforce is diverse, with Hindi-speaking laborers from neighboring states (Bihar, Jharkhand, Chhattisgarh, and Odisha) and Bengali-speaking local artisans, including Kumors and skilled craftsmen. While laborers are mostly migrants, local artisans are the masters of their craft and the backbone of Kumartuli's tradition.

### Idol Making Process

Collection of Raw Materials

Immersing of Idol on last day

Ornamentaion & Draping

Painting of idol

Application of mud onto the skeleton

Kneading of mud, and rice husk

Making of the Skeleton

6. Transportation and Assembly - Labourers

5. Storage and Protection - Guards

1.Idol Sculpting - Kumors

2.Painting - Artists

3.Cloth Designers & Draping

4. Jewellery Designers

MOVEMENT MAPPING

SPATIAL MAP

SPATIAL PLANNING OF WORKSHOP

SECTION A-A: TYPICAL KUMOR'S WORKSHOP

### KUMORS'S WORKING SPACE

Diagramatic representation of Kumors's workspace showing possible movements within the workshops, the congestion within the workshop with aisle space onit upto 1-1.5m and the placement of their idols.

The plans show the only free space available for the kumors to work and carry out all their activities throughout the day. Some workshops also have mezzanine floors which are used for working and storing of the idols.

The basic materials used in the construction of the workshops are timber, metal sheets, brick masonry and bamboos. Due to the use of these materials the workshops are flexible in nature.

KEY PLAN

METAL SHEET    TARPAULIN

### Axonometric view of P Lane - Kumors' Workshops



TIMBER SUPPORTS

BRICK WALL

METAL SHEETS



Kumartuli features family-run workshops where skilled artisans create intricate clay idols for religious and cultural celebrations. Visitors can observe the traditional techniques and purchase these artistic creations.

The **Sen House**, a prominent structure in the area, is renowned for its distinctive architectural features.The house's historical significance and architecture has made it a striking site on Kumartuli Street, attracting visitors for photography and sightseeing.
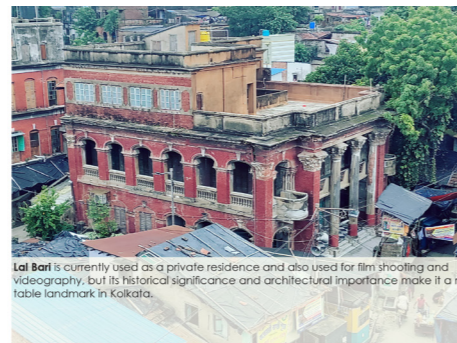
**Lal Bari** is currently used as a private residence and also used for film shooting and videography, but its historical significance and architectural importance make it a notable landmark in Kolkata.
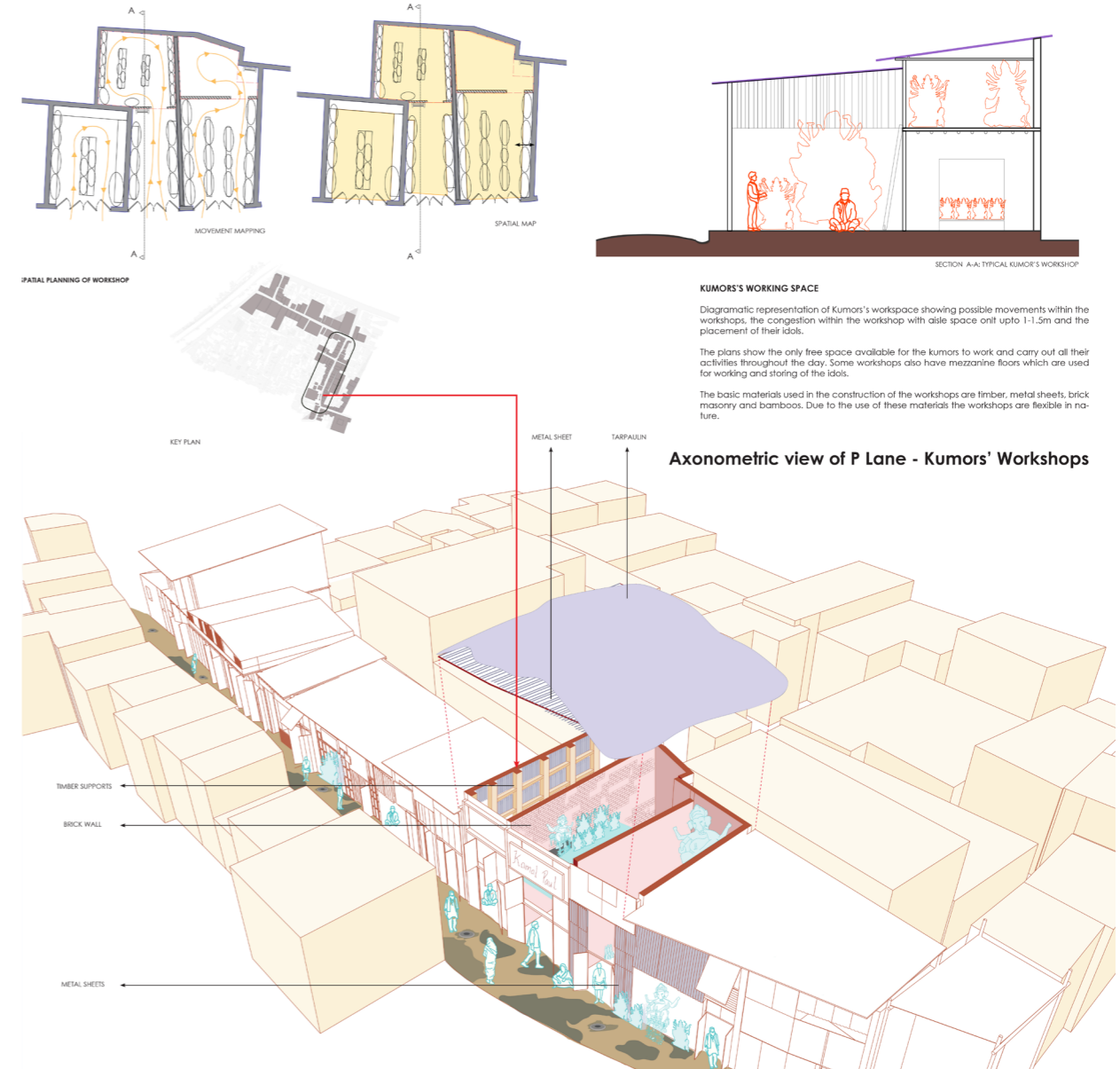
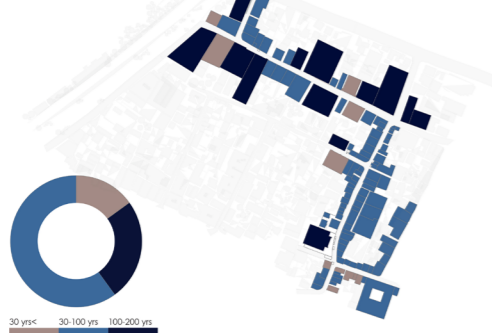# SITE MAPPING

## Figure Ground



Built Space  Open Space

**Inference**
The dense urban fabric of Kumartuli's streets creates a strong figure-ground relationship. Open spaces within the built environment are limited, posing challenges for outdoor activities and public gathering.

## Building Age



30 yrs<   30-100 yrs   100-200 yrs

**Inference**
Kumartuli's streets retain their historical character, but the buildings have significantly evolved over the past two centuries. Although many structures are aged between 30 and 100 years, newer ones have also been introduced. Existing residential and commercial spaces have been retrofitted to meet contemporary needs and aspirations.

## Amenities



Urinals  Food outlets  KMC Taps  Drinking water

**Inference**
The basic amenities in Kumartuli, while available, are not fully adequate. Municipal water supply is limited, and the placement of urinals in front of heritage structures is problematic. Although waste collection services are provided, there's a lack of designated garbage spaces. These factors indicate a need for improved infrastructure and waste management solutions in the area.

## Building Typology
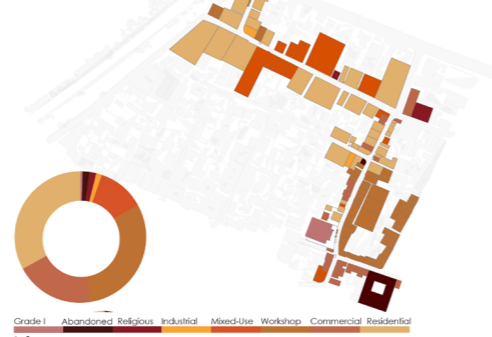


Grade I  Abandoned  Religious  Industrial  Mixed-Use  Workshop  Commercial  Residential

**Inference**
Kumartuli, once a pottery-making hub, has evolved. Residential buildings, both old and new, coexist. While pottery remains dominant, other industries like textile and retail have emerged. Public amenities, though helpful, have caused street congestion

## Building Height
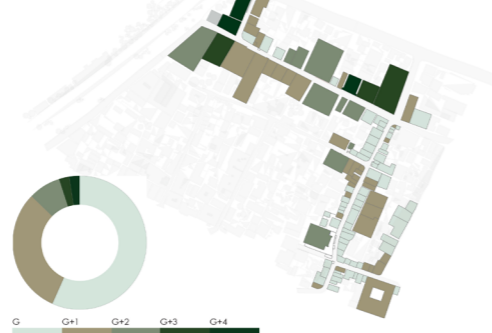


G  G+1  G+2  G+3  G+4

**Inference**
Kumartuli's dense building landscape along Potter's Lane includes vertical expansions of workshops, a notable two-story structure, and a mix of residential and commercial buildings. New multi-story constructions reflect a shift in the area's development dynamics.

## Density Mapping



Increasing the population

**Inference**
The population density map reveals a notable contrast in population distribution between the two streets. The loaded medium density observed in only one street suggests a concentrated gathering of people. In contrast, the mixed density observed in Kumartuli street could be attributed to its diverse land use, pedestrian activity.

# ACTIVITY MAPPING



A Junction At 1pm-3pm        B Junction At 8 -10 am

Kumor going to ghat, for bath        Sweet shop

C Junction At 10am-1pm        D Junction At 3pm- 4pm

kumor working
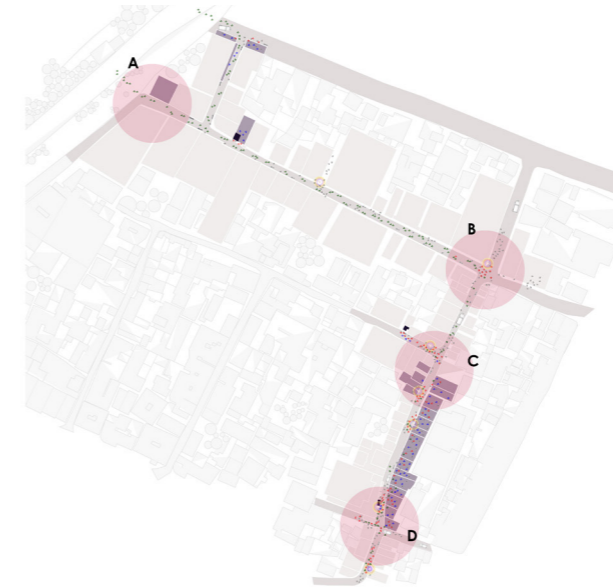
**Activity Mapping of Overall neighbourhood**



6am-10am        10am-1pm        1pm-6pm

Egg vendor comes everyday morning.

Barber sets his shop on the otta of a house.

Vegetable vendor stays at the junction from morning to evening

The rokko in front of Sen house serves as adda spot for the locals.

## Activity matix

| ACTIVITY | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Grocery Shopping | | | | | | | | | | | | |
| Mandir Puja | | | | | | | | | | | | |
| Flower Vendor | | | | | | | | | | | | |
| Vegetable Vendor | | | | | | | | | | | | |
| Adda Spot | | | | | | | | | | | | |
| Loading/ Unloading Material | | | | | | | | | | | | |
| Barber/ Salon | | | | | | | | | | | | |
| Municipal Taps | | | | | | | | | | | | |
| Transportation of | | | | | | | | | | | | |
| Kumar going to Ghats(Bathing) | | | | | | | | | | | | |
| Photography | | | | | | | | | | | | |
| Other shops | | | | | | | | | | | | |

# UNDERSTANDING STREET CHARACTER

# CHARACTER OF LAL BARI



A -Junction showing activities around residential and commercial spaces

B-Junction showing the use of partially abandoned building and activities around

Elevation S

Elevation R

## SITE INTRODUCTION

**ARCHIVAL MAPS**

MAP 1692

MAP 1757

MAP 1832

MAP 1840

MAP 1842

MAP 1847

MAP 1874

MAP 1882

MAP 1883

MAP 1893

MAP 1900

MAP 1913
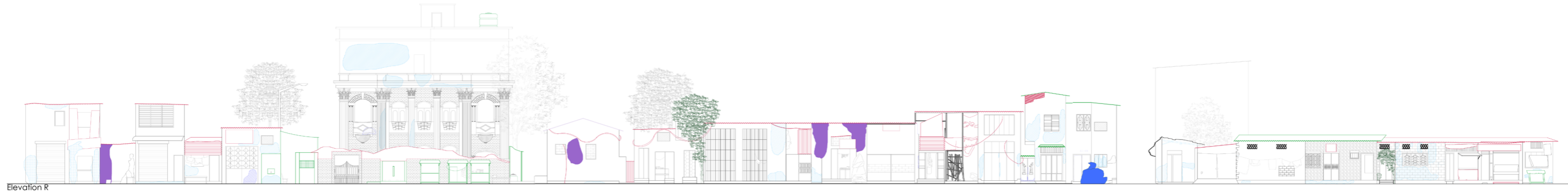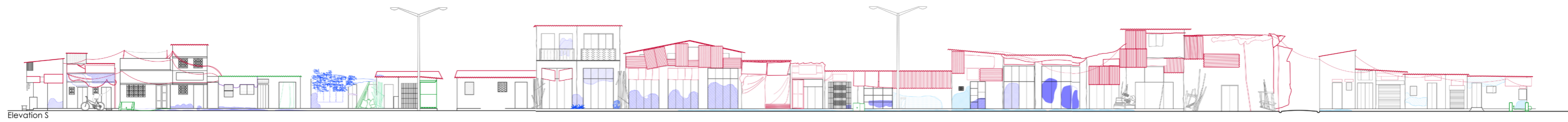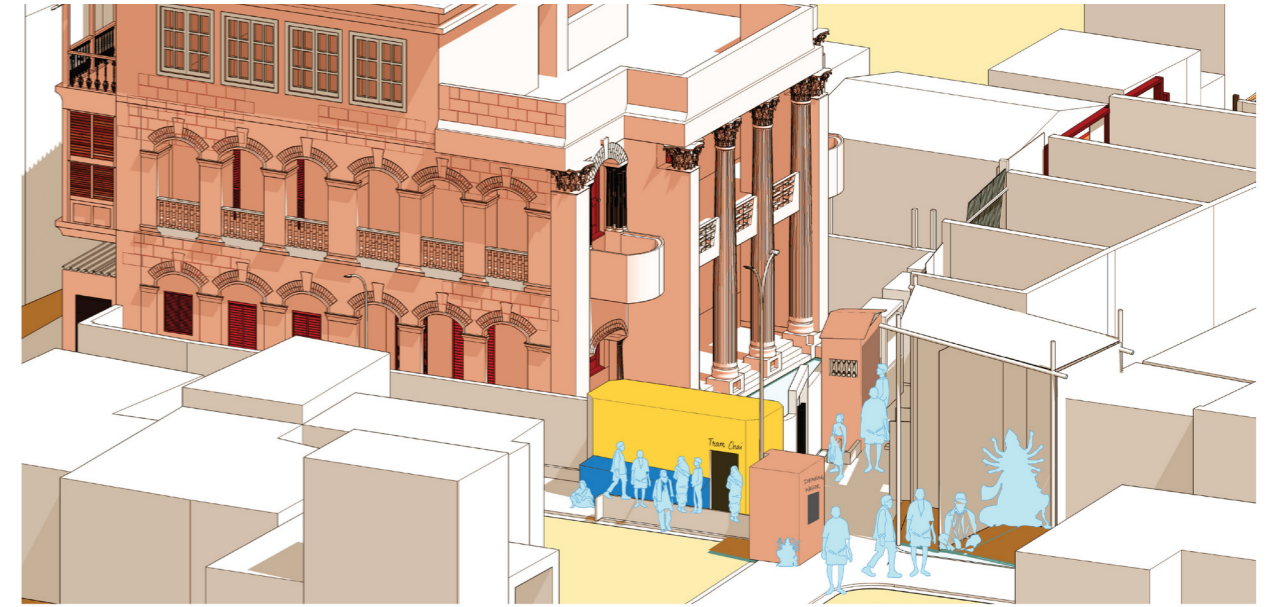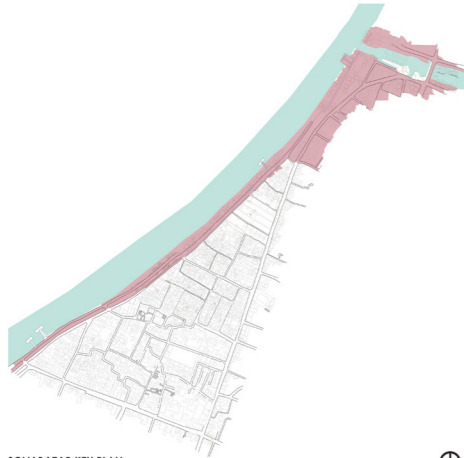
**SOVABAZAR KEY PLAN**

**CIRCULAR CANAL, RAIL LINE AND STRAND BANK ROAD:**

**Circular Canal-** The earliest drainage cum navigation was taken up by Major Tolly, an officer in the British Army who submitted a proposal to use the bed of the almost dead channel of Adi Ganga as a private venture and excavated the channel named after him as Tolly Nullah, which was opened in 1777. The total stretch of 17 miles (27.2 km) used to outfall into Bidyadhari at Samukpota or Tardaport.

Excavation of the Circular Canal from Entally to Hooghly River was done in 1820 while construction of Chitpur Lock was completed in 1833.

A network of drainage channels excavated, handed over, and maintained over the years by the Irrigation & Waterways Department thus drains the city of Kolkata and its adjoining metropolitan areas. Around 1970, several new channels were excavated in the areas adjoining the main city where people started to live after the partition of Bengal by the funds available from the Calcutta Metropolitan Development Authority (CMDA). Subsequently, in the absence of adequate maintenance funds, increasing encroachments on the canal banks and their slopes, and extension of human settlement in the low-lying areas in fringe areas of the city, aggravated the drainage congestion in not only the city core area but the Greater Metropolitan District also. Apart from the drainage channels, several pumping houses located at Uttarbhag, Chowbaga, and Keorapukur in the South 24-Parganas district are rendering great service towards the removal of drainage congestion in their respective areas.

The **Circular Railway** was constructed in 1875 as a Docking, Loading, and Unloading of Goods for the big ships that would dock at the Calcutta Docks and Jetty Points; this was only used by Dockworkers. The Public Rail was opened for the Common people and travelers by the Government in 1965, after the population suddenly boomed after independence, as the Hooghly River started silting, became less deep for the big ships, and after the traffic became a huge issue in 1950. So Circular Dock Railway 1873-1965 and the Public Circular Railway from 1965-Present.

**Strand Road** was completed in 1828, undertaken by the Lottery Committee, along what was previously a long sedge bank. According to the Historian H.E.A. Cotton, the road ran from Prinsep Ghat to Hatkhola Ghat. The area around Prinsep Ghat had a large portion of the riverbank reclaimed and thrown into the roadway. Erected in 1838, Baboo Ghat is a significant monument in Doric Greek style on Strand Road. Baboo Raj Chunder Das commissioned it husband of Rani Rashmoni, founder of Dakshineswar Kali Temple.

Immediately west of the Kolkata High Court is Chandpal Ghat, named after Chunder Nath Pal, who owned a shop at the site for the 'refreshment of pedestrians and boatmen'. The ghat dates from at least 1774 (predating Strand Road itself) and eventually became the point at which the colonial rulers and administrators of India would arrive and leave the city before the advent of rail travel.

SECTION - AA

SECTION - BB

SECTION - CC

A

B

C

D
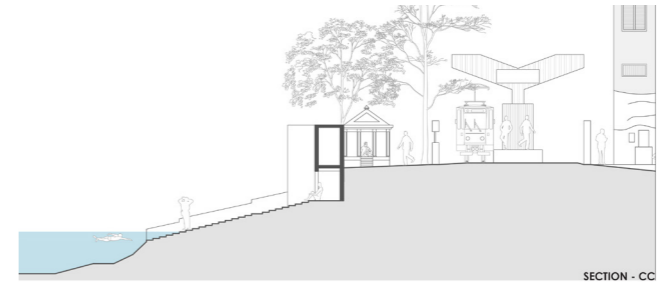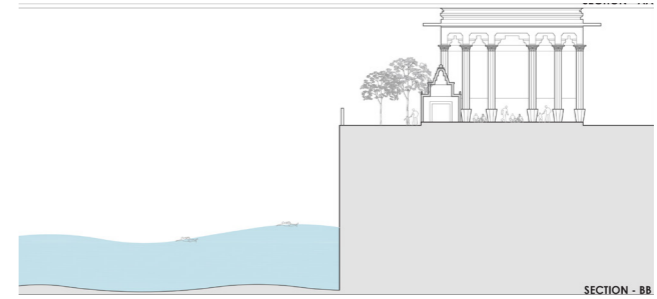
# SITE MAPPING

LANDUSE MAP

LEGEND

Hoogly River | Open Area | Green Area | Jetty/ Ghat | Railway line | Roads | Residential | Mixed Use | Government Building | Commerical | Industrial | Amenities | Temples | Encroachment

AGE OF BUILDING MAP



LEGEND

Hoogly River | 30< | 30-100 | 100-200 | >200

BUILDING MATERIAL MAP

LEGEND

Hoogly River  Brick  Concrete  Brick & Concrete  Corrugated

ACTIVITY MAPPING

LEGEND
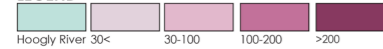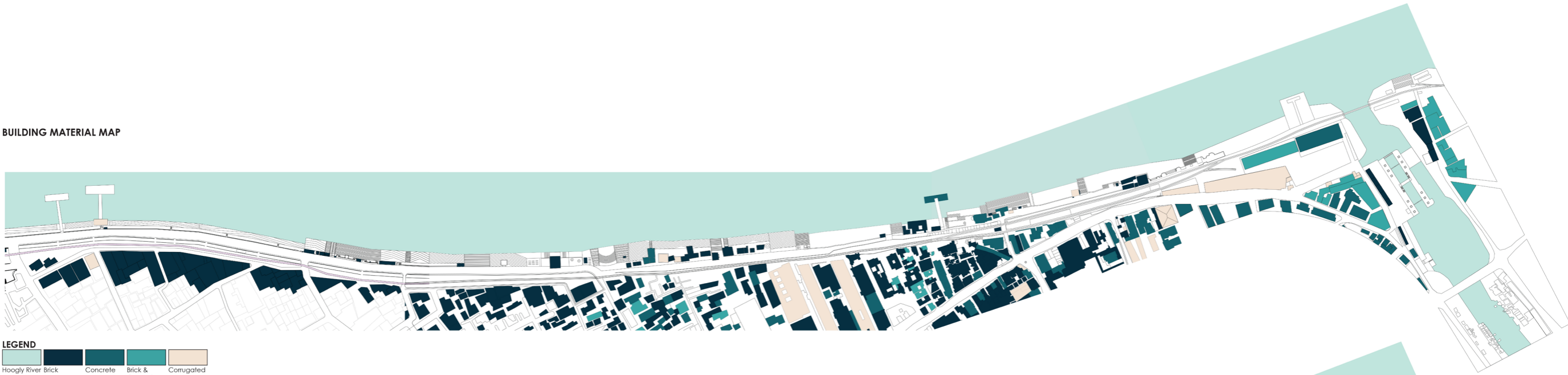
Hoogly River  Open Area  Green Area  Ferry Rides  Public gathering  Bathing  Photoshoot  Mundan  Rituals  Recreational Activities  Railway as pedestrian  Truck Loading
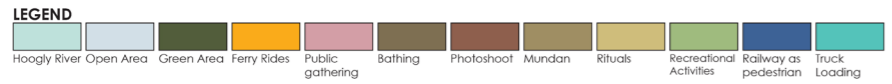
# MID-SEMESTER REVIEW



Mid-semester review with Prof. Jigna Desai and Conservation architect Kamalika Bose.



Mid-semester with Prof. Jigna Desai and Conservation Architect Kamalika Bose



Students explaining their site analysis to the jurors.



Students explaining their designs to the students.

# Design Proposals and Development

The site study resulted in the identification of various sites within distinct zones spread across the site. Ranging from urban to building level, the interventions were targetted at rejuvenating the old neighborhood and transforming and equipping it with contemporary needs. The distinct zones comprised of a riverfront edge with the historical ghats, Kumartuli - inhabited by the potters plying their craft and playing a crucial role in the UNESCO tagged Durga Pujo festival, Abhoy Mitra Street - a residential street with characteristic architecture of the city, and overall group strategies. Through this diverse range, students would be equipped to handle urban issues as well as conservation and adaptive reuse.

The array of projects included transformation of the ghat edge, rejuvenation of streets, contemporization of precincts and public squares, conservation of landmark buildings and temples, street level guidelines, and adaptive reuse of buildings. Through imaginative design ideas interweaved with policy measures, the aim was to reinvigorate and celebrate the history of Sovabazar whilst transforming it into a vibrant cultural precinct.

**Unni Ammu**
PCR23410

## Revitalizing Abhay Mitro Street: Balancing Tradition with Contemporary Needs

Guidelines for Reviving and Reinterpreting Street Character

After a detailed analysis of the challenges identified along the selected Abhay Mitro street, a set of regulations and recommendations is to be formulated to guide repairs, maintenance, additions, and reconstruction works. These guidelines aim to restore the traditional character of the street while accommodating contemporary needs and demands. The proposal also includes incentive mechanisms to offset the loss of development opportunities that may arise from these regulations.

The viability of these proposed regulations is demonstrated through the redesign of an apartment typology that currently stands in stark contrast to the traditional courtyard houses. Furthermore, the façade restoration of the Sharma residence is suggested to exemplify the implementation of these guidelines, reinforcing the conservation ethos of the street.

*To revitalize streets as vibrant, culturally rich spaces along with prioritising restoration of heritage building character alongside the integration of contemporary design. Streets will be transformed into shared, inclusive environments that foster public engagement in preserving urban history, reconnecting them with their past and ensuring their timeless significance for future generations.*

# GUIDELINES TO CONTROL FUTURE DEVELOPMENT

NOC from the newly constituted Heritage Sub Committee* is required prior to commencing the new construction work.
*a Sub Committee of the existing Heritage Conservation Committee (HCC) is proposed to be formed to oversee the development of significant heritage zones in Kolkata
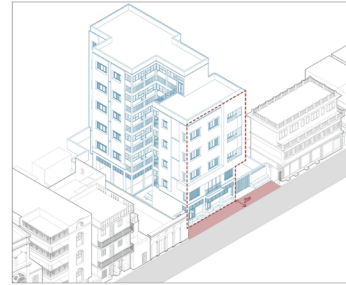
### i. Gifting Strip of Land:

New construction must relinquish a strip of land abutting the street to KMC, ensuring a 2m clear path between road and the building. The rights of the relinquished land will go to the government. In addition, the building foundation should not exceed more than 750mm into the gifted strip.

**Incentive details:**
In return for the strip of land provided, KMC will permit the property to forgo the requirement for a front setback. Additionally, property tax breaks will be granted to these plots.
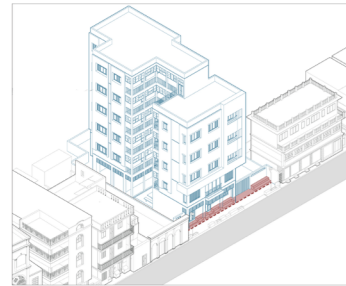
### ii. Rowak/ Rok

All new constructions must incorporate Rowak/ Rok into the ground floor threshold as part of the design and it should not be enclosed or partitioned at any later stage.
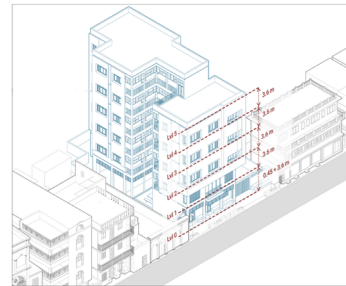
### iii. Proposed Floor Height:

The floor height for any newly added floor, as visible from the street, shall be 3.60 meters, excluding the permitted maximum plinth height of 0.45 m. If the plinth height is less than 0.45 m, the 3.60-meter floor height must be increased at the ground floor level accordingly to achieve the total height that would have been attained with a 0.45 m plinth.
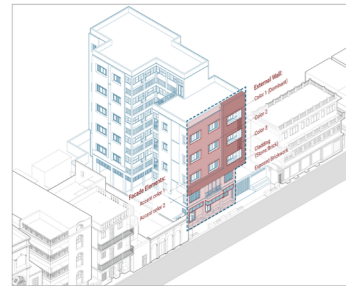
### iv. Façade Colors and Finishes:

For external painting, the walls should feature a combination of no more than three colors, with one serving as the dominant color. Other major façade elements may include up to two accent colors. Additionally, other finishes for façade elements, as required by the material, are permitted subject to approval, provided they complement the overall aesthetics. The complete color scheme and finishes must be approved by the Heritage Sub Committee. Exterior walls should be plastered and finished according to the approved color schemes. Wall claddings are not allowed, except for stone and brick. Exposed brickwork is also permitted.
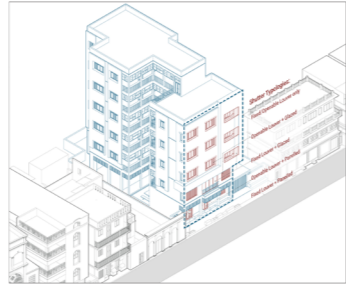
### v. Openings and Shutters

The use of arches to span openings is encouraged. Louvers for door and window shutters are strongly recommended. Any other shutter types such as glazed and/or panelled shutters, if used, can be combined with louvers. External grills are not permitted outside doors or windows. The colors and finishes for doors and windows must comply with point (iv).
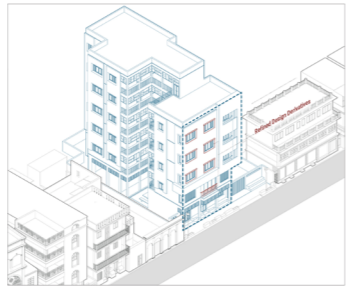
### vi. Authenticity in Detailing:

The uncritical replication of tWraditional detailing, such as extremely ornate railings and arches, lessens the understanding and appreciation of existing Significant and Contributory buildings and will generally not be supported.
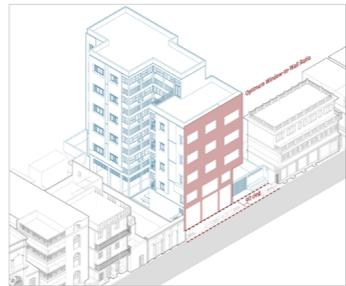
### vii. Frontages:

The front façade should be oriented at right angles to Abhay Mitro street. Frontages should be designed to provide a strong engagement with the street at all times. Large areas of plain walling or obscure glass, windows that are largely covered with signage, rolling doors and shutters are generally discouraged.
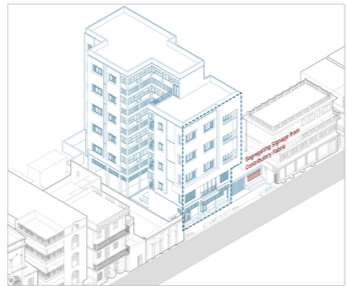
### viii. Signage:

Signage must not obstruct any contributory elements. Installing new signs should avoid the removal or undue damage to any contributory fabric. Any fixing holes or alterations should be easily repairable when the sign is removed in the future. Additionally, Signages should not be painted onto the façades.
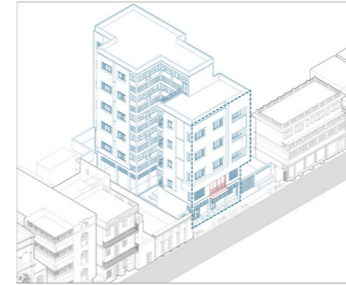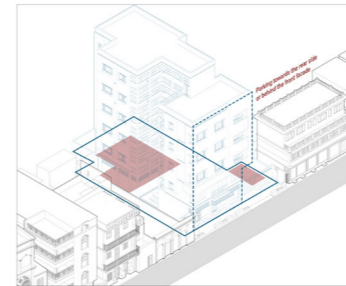
### ix. Balcony/ Verandah:

Incorporating balcony and/or verandah spaces overlooking the street is encouraged. These spaces should preferably remain open, or, if enclosed, should feature openable shutters.
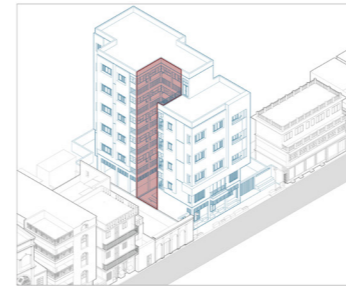
### x. Courtyard:

New constructions are strongly encouraged to incorporate courtyard spaces into their design, where appropriate and required.

### xi. Parking:

Parking should ideally be located along the rear side of the property. If site constraints prevent this, parking may be positioned at the front, but it should be visually unobtrusive and set behind the front façade.
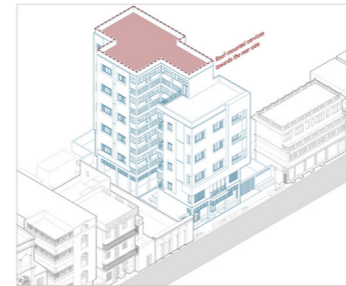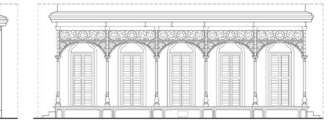
### xii. Roof-mounted services:

Roof-mounted services and plant rooms should be positioned toward the rear of the site or concealed behind parapets.

## Suggestive Designs:

**ii. Rowak/ Rok**

Rok as threshold extensions

Rok as part of Verandah

**iv. Façade Colors and Finishes:**

suggestive colors for external wall paint

suggestive colors for other facade elements
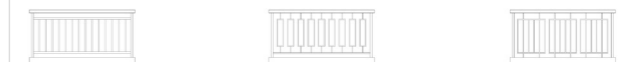
**v. Openings and Shutters**

(a). Fixed/ openable Louver only

(b). Fixed/ openable Louver + glazed

(c). Fixed/ openable Louver + panelled

**vi. Authenticity in Detailing:**
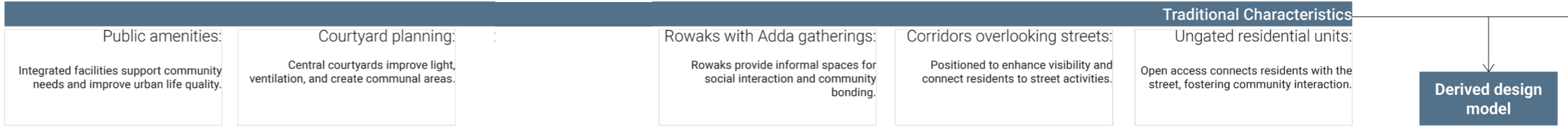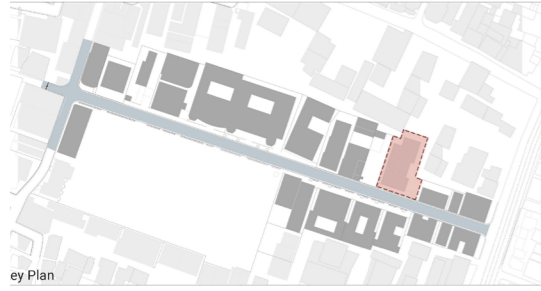
(a) Railing

(b). Arches

**viii. Signage:**

Examples of appropriate signage locations

Examples of inappropriate signage locations

# REIMAGINING CONTEMPORARY APARTMENT TYPOLOGY



ey Plan

**Public amenities:**

Integrated facilities support community needs and improve urban life quality.

**Courtyard planning:**

Central courtyards improve light, ventilation, and create communal areas.

**Rowaks with Adda gatherings:**

Rowaks provide informal spaces for social interaction and community bonding.

**Corridors overlooking streets:**

Positioned to enhance visibility and connect residents to street activities.

**Ungated residential units:**

Open access connects residents with the street, fostering community interaction.

**Derived design model**

4m wide driveway

Abhay Mitro Street

Abhay Mitro Street

Abhay Mitro Street

Abhay Mitro Street

Ground Floor plan

First Floor plan

Typical Floor plan- 2nd, 3rd, 4th

Fifth Floor plan

## Contemporary Characteristics

**Gated community:**
Creates a separation from the street, reducing community interaction.

**Increased security needs:**
Emphasizes controlled access and privacy for residents.

**More units in lesser space:**
Higher density with compact housing arrangements.

**Exclusive amenities:**
Provides facilities solely for residents, enhancing privacy and exclusivity.

**Total No. of Units:**

1 BHK= 5

1.5 BHK= 2

2 BHK= 7

**Total builtup area per Unit:**

1 BHK= 42.5 sq.m

1.5 BHK= 52.8 sq.m

2 BHK= 69.8 sq.m

**Total plot area** = 448.4 sq.m

**Total builtup area** = 1032.2 sq.m

**FSI Attained=** 2.24

- 1 BHK
- 1.5 BHK
- 2 BHK
- Common Area
- Service Area
- Courtyard
- Parking



Terrace Level +22.17m from GL

Fifth Floor Level +18.57m from GL

Fourth Floor Level +14.97m from GL

Third Floor Level +11.37m from GL

Second Floor Level +7.77m from GL

First Floor Level +4.17m from GL

Plinth Level +0.30m from GL

Section A



Side Elevation



Detail A- Rok area

- Wooden Ghilmil
- Projected planted bed extension from balcony
- 1m wide Rok space as extension from the building threshold
- 1.4m wide clear walkway
- Movable concrete street furniture blocks

### Material Palette

**Wall-**
**Exposed Concrete**
Material: Brickwork
Finish: Concrete Finish

**Exterior Paint**
Material: Brickwork
Finish: White Emulsion paint,
Beige Emulsion paint (Textured finish)

**Exposed Brick**
Material & Finish: Brickwork

**Doors & Windows-**
Material: Wood, Glass
Finish: Blue Enamel paint on wood, Clear Glass

**Vertical Shades**
Material: Wood, Glass
Finish: Clear Varnish on wood, Blue Enamel paint on wood, Clear Glass, Tinted Glass finish

**Railing**
Material: Wood, Galvanised Iron
Finish: Clear varnish on wood, Grey Epozy paint on GI

# GUIDELINES TO MANAGE EXISTING ARCHITECTURE

The buildings in Abhay Mitro street are broadly classified into three categories based on their significance to the street character:

(I) Significant Buildings,
(II) Contributory Buildings, and
(III) Non-Contributory Buildings.

While buildings in categories I and II must adhere to all guidelines, category III buildings are required to comply with guideline (i) below and should aim to align with the street's character as much as possible.

Any façade modifications for category III buildings still require approval from the Heritage Sub-Committee as alterations to non-contributory building should not detract from the assessed significance of the street.

Guidelines (iv) mentioned under Section A: 'Guidelines to Control Future Architecture' shall also be applicable to Section B: 'Guidelines to Manage Existing Architecture'.
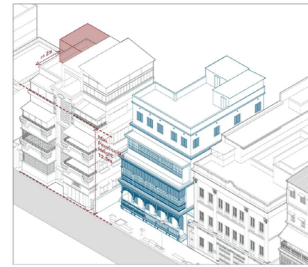


### i. For Existing buildings already crossing the allowable height:

For any new horizontal extensions at levels where the existing building height has already exceeded the maximum height limit, a minimum setback of 2 meters from the existing outer built boundary at that level must be maintained on the side facing the street, and the extension should not surpass the current height of the building.
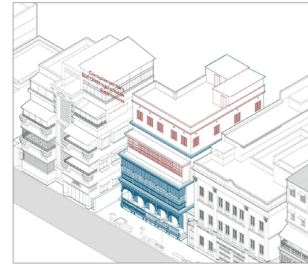


### ii. New extensions:

Any new horizontal/ vertical extensions shall essentially complement the existing built fabric but should be easily distinguishable from it. These extensions must not compromise the structural integrity of the building, and all such works are permitted only after review and approval by the Heritage Sub Committee.
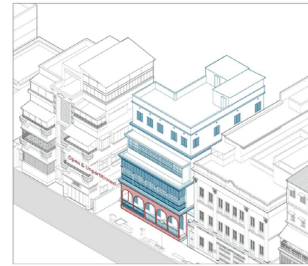


### iii. Rowak/ Rok

The Rowak/ Rok should not be enclosed or partitioned by any type of material.
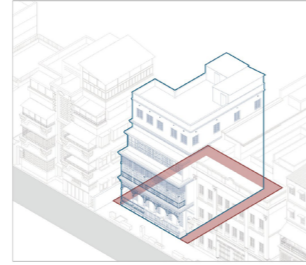
### iv. Open space:

The mandatory open space along the periphery of the plot shall be kept as open un-built space and should not be used for any purpose other than as garden space.
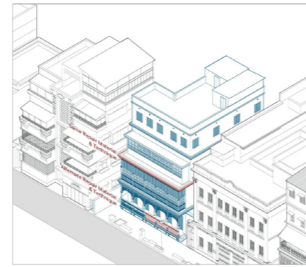
### v. Repair works:

If contributory elements have degraded to a point that requires repair or replacement, it is recommended to use matching materials and detailing. However, alternative materials and techniques with a similar appearance to the original may also be acceptable, as long as they do not negatively impact the character of the streetscape.

All structural and/or non-structural repairs to the building shall be carried out only after prior approval from the Heritage Sub Committee. However, this shall not apply to any non-structural interior works. All necessary approvals for external and/or internal repairs shall still be obtained from KMC and/or other relevant authority as is already required.
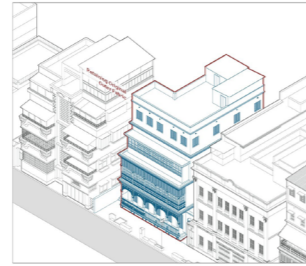
### vi. Built fabric:

The original outer fabric of the building shall not be altered in any way in terms of profile/ shape, material, color, texture etc, in an effort to retain the original street character unless it demands repair. Existing decorative elements forming part of balcony parapet walls, arches, columns, openings, motifs, grooves etc. shall also be retained. No additions that cover the existing façade, including extended box grills, large areas of signages, are permitted.
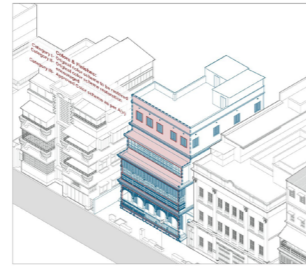
### vii. Façade Colors and Finishes:

For repainting category I building facades, restoring the original color schemes is required, while this approach is encouraged for category II buildings. If a new color scheme is needed for buildings in categories II and III, it must comply with guideline (iv) in Section A and receive approval from the Heritage Sub-Committee. Individual ownership within a single building should not be expressed through variations in wall color.
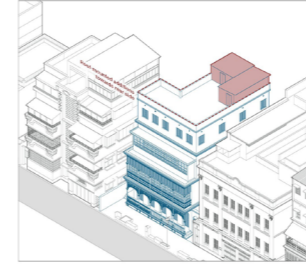
### viii. Roof-mounted services:

Any later addition above the terrace slab must not compromise the façade's character and should preferably be towards the rear side or concealed behind parapets. The location of these elements shall be subject to approval by the Heritage Sub Committee.
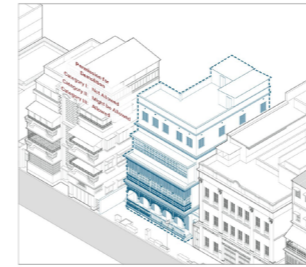
### ix. Demolition:

Significant buildings are not permitted to be demolished under any circumstances. Contributory buildings are encouraged to remain and be repurposed as needed. Poor structural or aesthetic conditions of significant or contributory buildings will not be considered valid grounds for demolition. Non-contributory buildings may be demolished, and any new construction should reflect the character of the street.



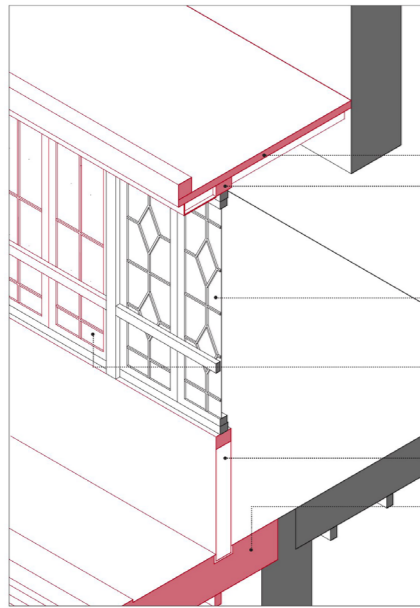G+3 residential structure in Abhay Mitro street built in 1904

**Walls:**
0.40 m thick, brick with lime mortar and lime plaster; later additions used cement mortar with thinner walls.

**Roofing:**
Traditional Kori-borga style with wooden rafters (30-50 cm apart) and flat tiles in lime mortar. Rafters replaced with steel I-sections, now deteriorated.

**Joinery & Ornamentation:**
Cast iron on facade, fixed louvres, stained glass, wood for doors/windows; original wood balusters replaced with masonry.

**Usage Pattern:**
Mixed-use; ground floor for garment manufacturing, upper floors residential. Active during the day with foot traffic due to public tap nearby.

## Suggestive Designs:

**ii. New extensions:**



Example of a complementary yet distinguishable Extension

**v. Repair works**



Example of using Alternate Repair material & Technique
Case of Cast Iron railing completed using GI railing for the missing units

Example of using Same Repair material & Technique
Case of settled Kori-Borga roof repaired by rebuilding the entire bay using same material and technique

**vi. Built fabric**



Examples of elements that need to be retained

50mm thick AAC concrete panel

Steel Frame supporting wall panels and window units

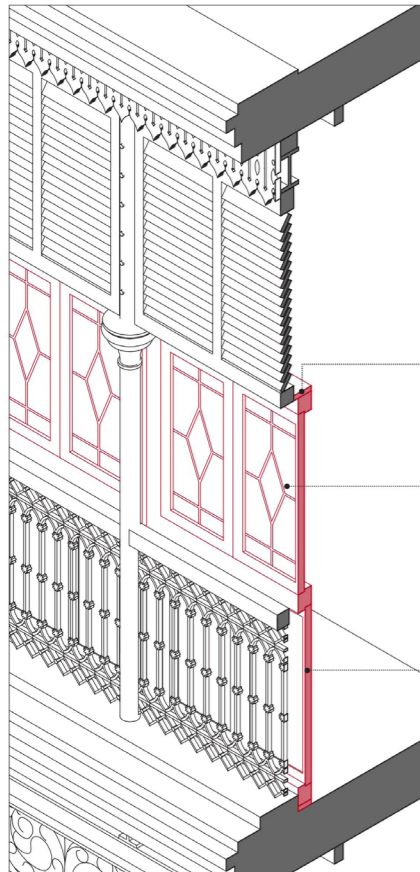Reused window units from the dismantled extension

Abstract replica of existing window unit

120mm thick Aerocon wall panel

Newly laid Kori-Borga roof front Bay

### Detail B

Lightweight extension over the newly laid Kori-Borga slab

Steel frame supporting the new window unit

Existing tinted glass window taken off from the handrail

Openable wooden panels giving access to the cast iron handrails

### Detail C

Handrail made free from the incongruent window addition by

## Wall
### Exterior paint

Material: Brickwork
Finish: Beige emulsion paint
(Textured finish),
Beige Limewash

### Flooring

Material: Kori-Borga
Finish: Red Oxide

### Doors & Windows
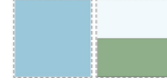
Material: Wood, Glass
Finish: Blue Enamel paint on
wood, Frosted glass, Tinted glass

### Vertical Shades

Material: Wood
Finish: Blue Enamel paint on
wood

### Column, Arches & Railing

Material: Cast Iron, Galvanised
Iron
Finish: Red Enamel finish on Cast
Iron, Red Epoxy paint on GI

Contemporizing Historical Precincts of the Sovabazar Sector of North Kolkata

**Gayathri S.**
PCR23121

## Revitalization of Baneswar temple precinct

Redefining Kolkata's Sacred and Living Streets with Contemporary Interventions

The design intervention brief focus on conserving the Baneswar Temple's cultural and historical significance through meticulous restoration, enhance the precinct's livability by transforming shared spaces into clean, safe, and vibrant areas, benefiting residents, artisans, and visitors.

As the part of the temple precinct upgradation the project also focuses on improving sanitation, hygiene, and environmental conditions to restore dignity and well-being for all stakeholders and to empower the community as heritage custodians, fostering ownership and stewardship for sustainable long-term preservation and management of the regenerated precinct.

*Sustainable conservation is not about monumentalizing built structures; it is rather about humanizing dwellings and creations, making them personal and relatable. Through community driven rejuvenation, heritage preservation becomes a collective celebration of our shared identity.*

# Revitalization of Baneswar temple precinct

Redefining Kolkata's Sacred and Living Streets with Contemporary Interventions

**Issue Statement:** Despite the grandeur of Durga Puja drawing attention to the Abhay Mitro Street and Kumartulli precinct, the harsh realities of the local inhabitants' living and working conditions remain overlooked. While the cultural significance of the festival and the craft of the Kumars are celebrated, the environment in which these craftspeople work is marked by unsafe and dirty conditions. The neglect of tangible heritage—such as historic monuments, aging residential structures, and Kumar workshops—stands in stark contrast to the extravagant display of intangible heritage. With crumbling buildings, neglected streets, and poor living standards, the local community has begun to disengage from heritage stewardship, leading to a loss of dignity and pride in their surroundings. This disconnect threatens both the preservation of the area's cultural identity and the well-being of its people.

## Site Introduction/ Anlaysis

The revitalization of the Baneswar Temple precinct offers a holistic solution to the challenges faced by the Abhay Mitro Street and Kumartulli precinct by addressing the needs and aspirations of all key stakeholders—commercial, religious, and residential.



Key Plan

Site Section

Stakeholders legend
- Religious
- Commercial
- Residential

Site Plan

## EMPOWERING HERITAGE THROUGH COLLECTIVE IDENTITY: A MANIFESTO FOR COMMUNITY-DRIVEN CONSERVATION

Cultural heritage thrives not just in monuments, but in the people who inhabit and shape these spaces. While experts in architecture, heritage, or culture may possess a wealth of knowledge, they can never fully encapsulate the lived experiences and identities of the inhabitants. The people who reside in a place are the true custodians of its heritage. They carry forward the legacy, stories, and essence of their surroundings. As such, the future of cultural heritage preservation must prioritize community-driven and participatory conservation. This approach not only respects the intrinsic value of local voices but also empowers communities to take an active role in the stewardship of their own cultural identity.

Urban heritage conservation can be intertwined with social and economic development. This approach recognizes that heritage extends beyond individual monuments, encompassing the broader human environment, both tangible and intangible.

In this context, the Baneswar Temple serves as more than just a historical monument. It is a living symbol of cultural significance, whose heritage value encompasses not only its physical structure but the people and practices that surround it. The potters of Kumartulli, known for crafting the revered Durga idols, and the original patrons of the temple, are integral to this historic fabric. These human elements—the crafts, livelihoods, and stories—are as vital to the temple's legacy as the monument itself. By engaging the local community, this heritage site can catalyze social and economic improvements for all stakeholders. Religious tourism, for instance, can generate the funds necessary to enhance public spaces and improve the quality of life for the people who contribute to the temple's cultural ecosystem.



*Preserving monuments sparks community renewal, cultivating a shared sense of identity and belonging. As heritage sites flourish, they become catalysts for integrated development, enhancing the social, economic, and cultural fabric of the surrounding area.*

- Baneswar temple
- Biswas family house
- Community health center
- Radha Krishna temple





MONUMENT

Cultural oasis

HISTORIC URBAN LANDSCAPE

green infrastructure

collaborative placemaking

COMMUNITY BASED MANAGEMENT

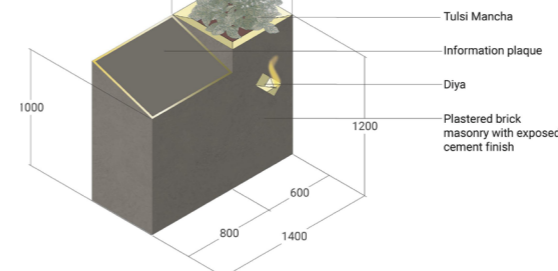Inclusive urban transformation
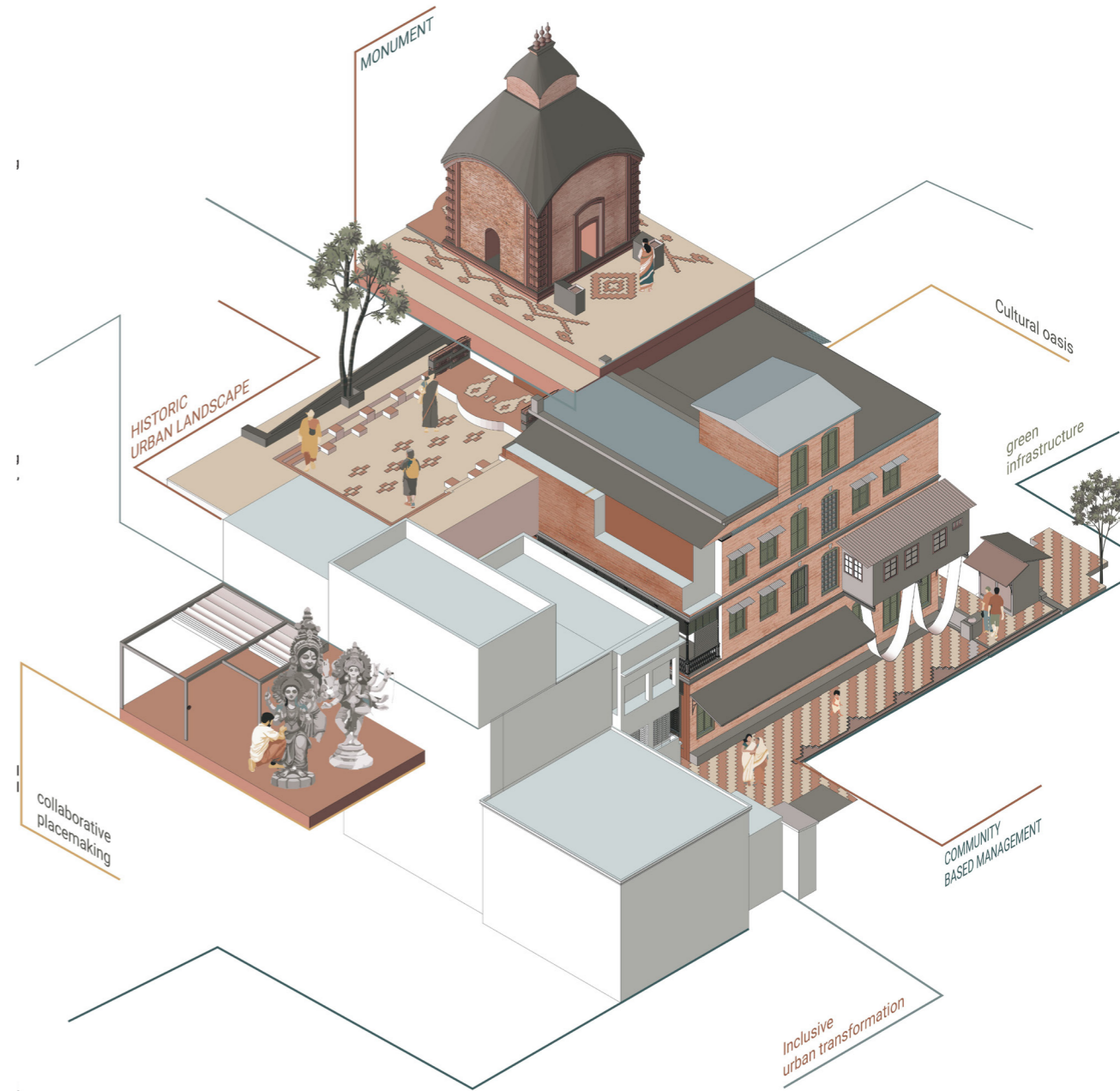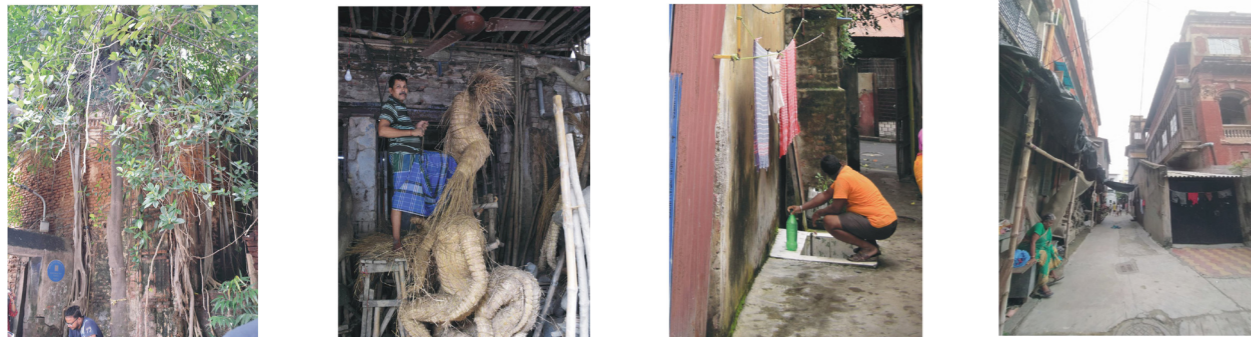
# RESTORATION STRATEGY - STEPS

## 1. Documentation

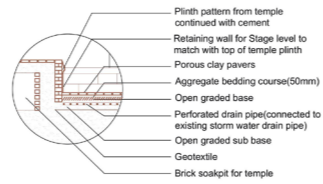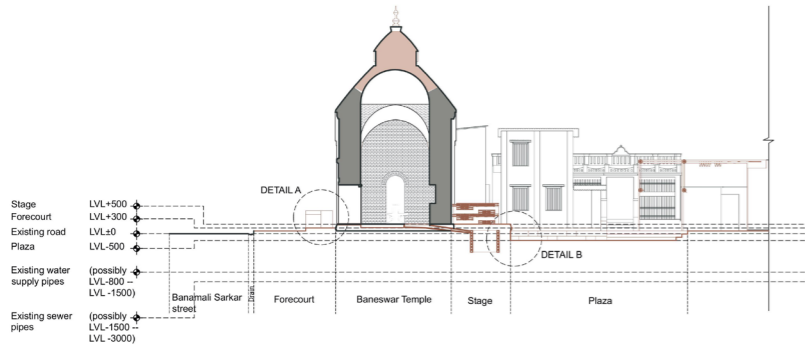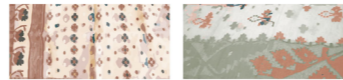Involves basic measurement of accessible areas and condition analysis based on visual observations



Elevation

Section BB

Floor Plan

RCP

**Baneswar temple**
Construction Detail

- Masonry dome
- Pendentives with bricks corbelled in diagonal arrangement
- Lime concrete finish on roof
- Arches supporting pendentives
- Terracotta plaques with figurines
- Mortar: lime, surkhi and snail shells
- Wall: Bricks laid in stretchers
- Terracotta bricks of varying sizes and shapes create decorative corners



- Terracotta finials reinstalled
- Vegetation removed and roof reconstructed
- New lime plaster to be applied over brick arches, pendentives and dome
- Masonry revealed and repointed using lime mortar matching existing.
- Original entrance to the tempe restored by removing filled bricks

DETAIL A

- Waterproof membrane
- Stainless steel drain channel

DETAIL A

New wooden door

DETAIL A

DETAIL B

- Groove between granite stones in flooring

DETAIL A

- Reconstructed roof coated with lime concrete and finished with lime plaster
- Terracotta plaques to be reassembled or reproduced in distinct style by Kumars
- Granite stones over lime concrete after removing existing cement flooring

- Custom made brass lampshades with upward facing warm wall lights
- Lime mortar pointing to conceal wiring along the wall corner lines

DETAIL B

- Original entrance to the tempe restored by removing filled bricks

- Tulsi Mancha
- Information plaque
- Diya
- Plastered brick masonry with exposed cement finish

## Signage

This information signage celebrates Baneswar Temple's heritage through a harmonious blend of traditional elements and modern design. Its cuboidal form, crafted from brick masonry with a smooth cement plaster finish, integrates a Tulsi mancha—a sacred planter box for Tulsi—alongside a brass diya for lighting. Brass accents provide a golden touch, drawing attention to the temple's significance and the enduring traditions of worship. The accompanying plaque details the temple's history and significance, guiding visitors in appreciating its cultural and spiritual value.

# TEMPLE PLAZA





**DETAIL A**

**DETAIL B**

| | |
|---|---|
| Stage | LVL +500 |
| Forecourt | LVL +300 |
| Existing road | LVL ±0 |
| Plaza | LVL -500 |
| Existing water supply pipes | (possibly LVL-800 – LVL -1500) |
| Existing sewer pipes | (possibly LVL-1500 – LVL -3000) |

Banamali Sarkar street    Forecourt    Baneswar Temple    Stage    Plaza

Detail B

**Terracotta Weave: Pavement Patterns Inspired by Bengal's Textile Heritage**

Porous terracotta-finish pavement of 2 shades has been laid in continuous linear pattern, drawing inspiration from the intricate motifs of Shantipur and Tangail weaves of Bengal. These traditional textiles, known for their geometric and rhythmic designs, have influenced the arrangement of the terracotta tiles, creating a textured surface that mimics the distinctive patterns of the weaves. The use of porous terracotta allows for natural water percolation, aiding in sustainable drainage while evoking a sense of cultural continuity.

Plinth pattern from temple continued with cement
Retaining wall for Stage level to match with top of temple plinth
Porous clay pavers
Aggregate bedding course(50mm)
Open graded base
Perforated drain pipe(connected to existing storm water drain pipe)
Open graded sub base
Geotextile
Brick soakpit for temple

Banamali Sarkar street    Temple finished floor level LVL ±0    Stage LVL +500    Plaza LVL -350    Existing sewage manholes    LVL +150

## Adaptive Modular Assemblies of Furniture

The original entrance in south was filled with bricks and currently a public urinal is When an open common area serves diverse stakeholders, the space should prioritize flexibility and adaptability for various users. A highly suitable solution for providing amenities and furniture is to incorporate modular pieces that can be easily assembled and compactly stored when not in use. This proposal therefore calculates the optimal layout for arranging furniture to support multiple functions, as well as the compact volume to which it can be stored when not needed.



**490.8sq.ft to 254 cu.ft**

**Temple feast**
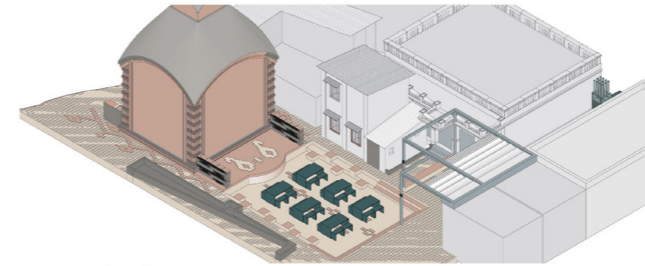
**Community dining**
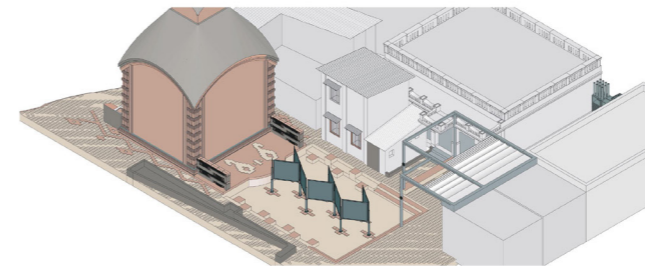
**Exhibition**

**Performance**



2500 mm
3200 mm
900 mm

x 10
1450 mm
70 mm
734 mm

x 10
1450 mm
800 mm
340 mm
700 mm
450 mm

x 6
881 mm
1664 mm
Fasteners
Foldable textile panel
Telescopic aluminium tubes
2347 mm
1600 mm

x 8
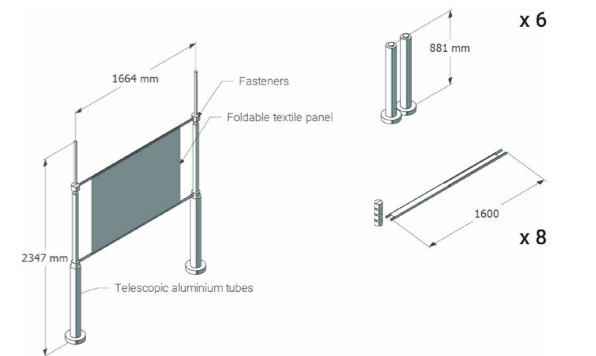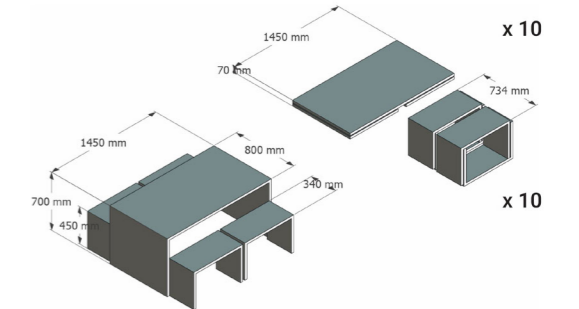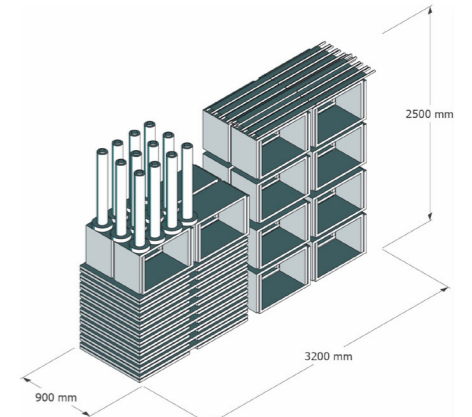
# COMMUNITY CORRIDOR

**Archana Sujith**
PCR23054

## Revitalization of Kumartuli Park focusing on the seamless integration of public space.

A focused revival of historic inner core public spaces

One of the major interventions of the design was to transform the rigid fenced boundary of Kumartuli Park into a more interactive and permeable edge, encouraging a stronger connection between the street and the park. The objective is to maintain a balance between privacy and openness, drawing more people into the space without disrupting existing uses, such as cricket, football, and cultural events like the Durga Puja.

Apart from the kumartuli park the design brief also focussed on adding essential amenities to Kumartuli Park to cater to both daily users and festival visitors, ensuring the park remains a functional and inviting community hub. These improvements will respect the existing historical and cultural uses of the space while enhancing its role as a central gathering point.

*Conservation is not a static reflection of the past, but a dynamic interaction between history and the present, shaping the future of our streets and urban spaces.*

## Project Management Overview

### *Who steps up to care for a public space?*

**Durgotsav Committee Integration:**
Active Period: 3 months annually, starting 2 months before Durga Puja.

**Phase Development**
Phase 1: Upgrade the community basic needs for year-round functionality.
Phase 2: Add interactive spaces that support daily users and festival activities.
Phase 3: Create a seasonal setup for the Durgotsav space, allowing for quick assembly and disassembly.

**Maintenance and Long-Term Management:**
Implement regular maintenance for park facilities.
Engage the community and Durgotsav Committee in shared upkeep and

## Objectives
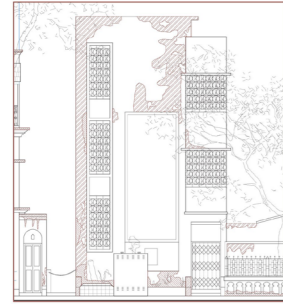


**Conservation of Historical Character**
Enhancing the facade of the Kumartuli Institute, an integral structures in the park's immediate vicinity, to reflect the historical identity of the lane.
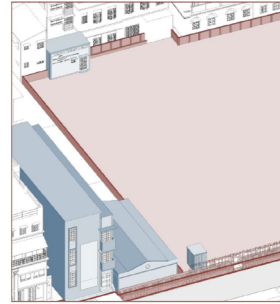
**Integration with Public Spaces**
Transform the rigid fenced boundary of Kumartuli Park into a more interactive and permeable edge, encouraging a stronger connection between the street and the park.
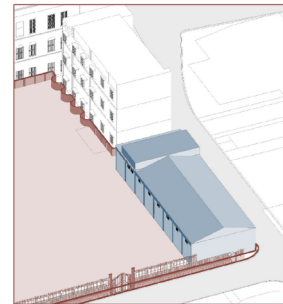
**Redesigning the Indoor Arena and Swimming Club**
Involves transforming what are currently simple structures with CGI sheets into more thoughtful and functional spaces.
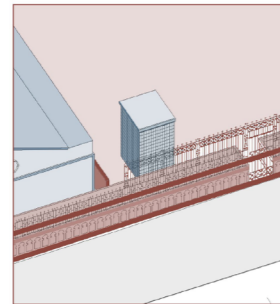
**Enhancing Park Amenities**
Add essential amenities to Kumartuli Park to cater to both daily users and festival visitors, ensuring the park remains a functional and inviting community hub.

Heritage conservation and enhancement

Cultural and Community Space Revitalization

Architectural Restoration of Surrounding Buildings

Architectural Restoration of Surrounding Buildings

Improvement of Public Space Quality

Integration of Ecological Elements

Promoting Cultural Tourism

Temporary and Reconfigurable Structures

## Conservation of historical character of Kumartuli Institute



Step 1:                                     Assessment and Documentation

| Condition survey | Material analysis | Moisture mapping | Photographic documentation |

Step 2                                 Address the cause for dampness

| Reason for drainage | Repair | Waterproofing measures |

Step 3                                     Cleaning the facade

| Preliminary cleanign | Mould removal | Deep cleaning |

Step 4                          Repairing and retrofitting the facade

| Damaged plaster | Treat efflorescence |

Step 5                                     Restoring art mosaic

| Clean mosaic tiles using soft brushes | Repair or replace tiles | Regrouting | Surface protection |

Step 6                                     Finishing and protection

| Repaint | Final waterproof check | Long term maintenance plan. |

## DESIGN DEVELOPMENT



Bring in an eatery

Have areas designated for vendor

Add toilets and other need to the front edge so the passer by can also use.

Have engaging landscape

Installation?

Add seating and other amenities, shaded areas

Make the edge permeable.

Brick back the memory of water

Redesign the swimming pool block and indoor arena.

Add openings
Change roof from asbestos to puff panels

Remove the harsh fence boundaries.

Not completely transform the ground from present day-use

Indoor arena

Opening to an open space for yoga, exercise.

Multi-functional hall

Provide seating for matches

Provisions for temporary stalls and seatings during festival season

# MASTER PLAN

Introduced drinking water point on the junction of the street

Installation of Sholapith that lasts upto 2-3 years and requires continuous care

Altering the layout of the swimming pool and placing a toilet block of tinted glass (originally designed by Shigeru Ban against the old swimming pool.

Use of cast glass to make installation mimicking and reviving the memory of the presence of water body.

Plaza space along the curvilinear path of the landscape region

Introducing seating within the backdrop of architecture

Shelters for them to be made temporary-out of fabric and people can pull push according to their need

Intermediate softscaping to break the hardscape and using landscape as a bufferzone
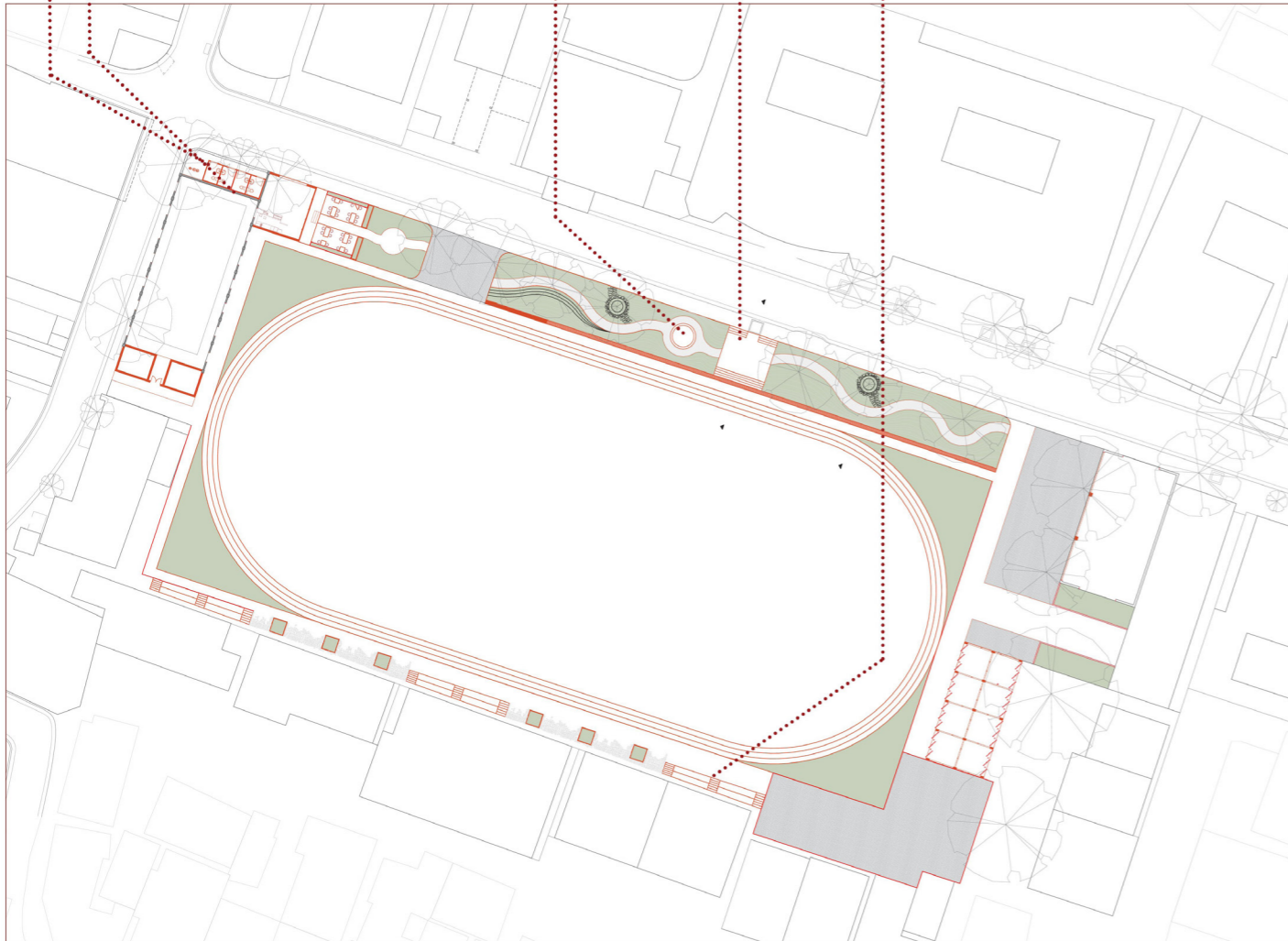


Plan of Indoor Arena and extension block



Detail for sliding louvre panel of aluminium
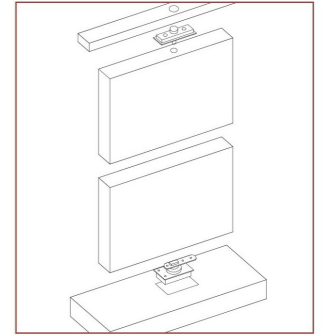


Detail for central pivot joinery panel of aluminium



Detail of temporary fabric that is designed as shelter and can be used as per the user's needs





Plan of Kumartuli Swimming pool with new opening and later additions of toilet block and cafe



Elevation 1



Elevation 2
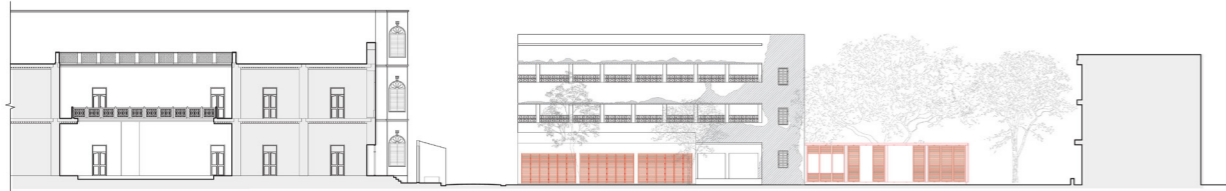
Elevation A

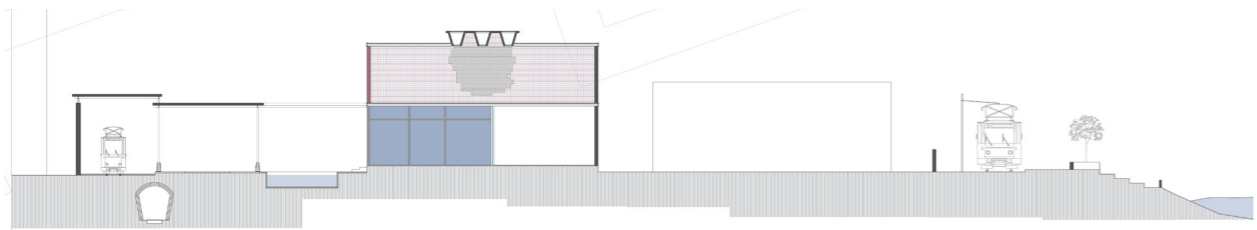Elevation B
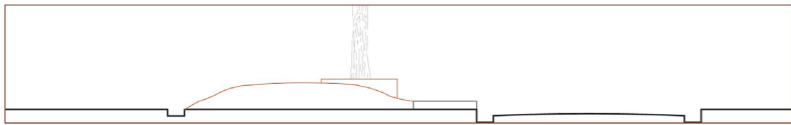
Elevation C

Detail 4

Detail 5

Elevation D
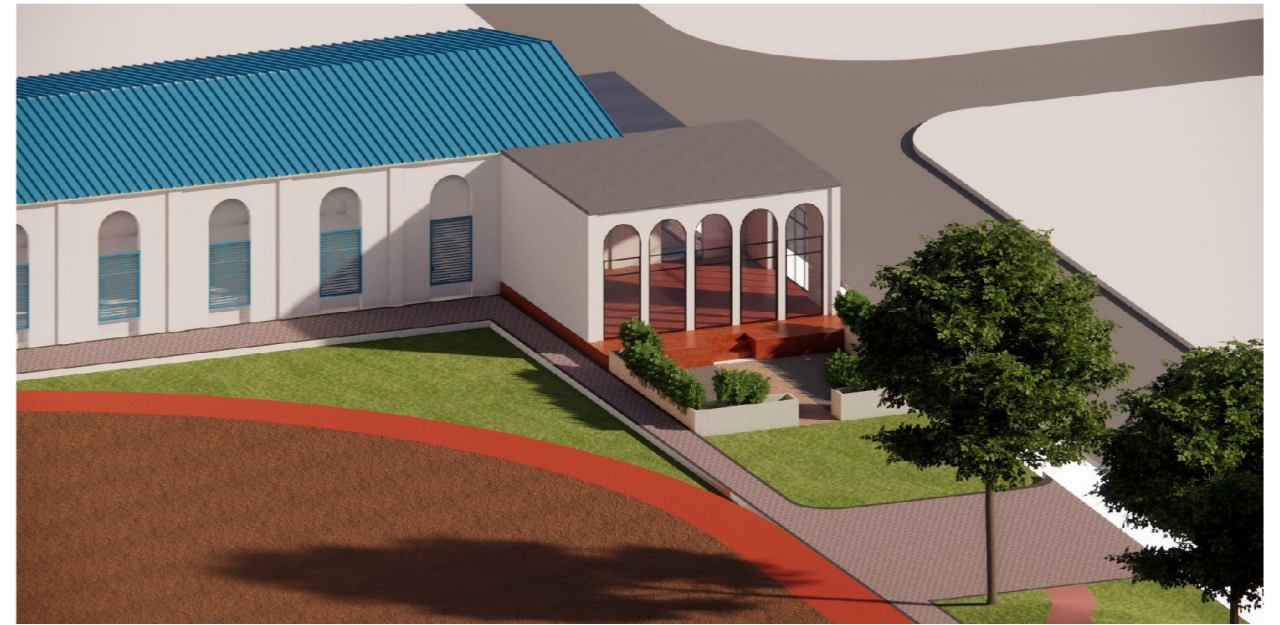
**Koushik Jain**
PCR23183

## Bridging Past and Present: The Canal-River Junction Revival

Integrating Ecology, History, and Modern Needs

-Proposing an interpretation in the empty plot at the canal and river junction which tells history and evolution of the river-canal junction and Souvbazaar area with parking facilities, a cultural center for the community around and the building will open to proposed recreational space between canal and the building edge.

-Conservation approach to the building which are juxtaposing the plot which address the housing issues of the community and commercializing warehouse space into market and cafes.

-Creating road network between all the proposed interventions of the Souva bazar to the site and establishing road network to surround neighborhood.

-Introducing nods/recreational space/public space at regular intervals in the proposed network.

-Revival of canal jetties along the industrial corridor for the goods trading.

-Policies for slum rehabilitation.

-In order to recreate the ecology of the canal, policies need to be introduced for drainage system for slums, treatment of sewage and drain water, waste management's etc.

*Volume Zero, an empty space that has witnessed many layers of history without any built form. It carries the context of historical structures built across different timelines.*

# HISTORY AND EVOLUTION
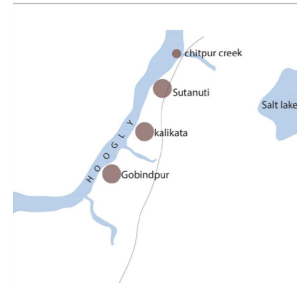


**1690**
Job Charnock, an agent of the East India Company, acquired three villages—Sutanuti, Kalikata, and Gobindpur—located on the eastern banks of the Hooghly River, along with Chitpur Creek.
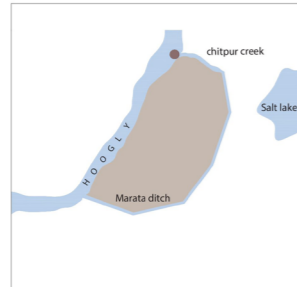
**1757**
A deep trench boundary was established around the area, followed by Chitpur Creek, to protect the place from attacks by outsiders, especially the Marathas. The "Maratha Ditch" was constructed for this purpose.
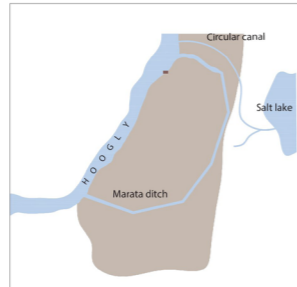
**1829-33**
Excavation of circular canal from hoogly river to salt lake and ghat was constructed by dutch for trading and later it was named as mayer ghat.

**1847-49**
Construction of chittpur permit ghat for the commercial trading through the water ways and were has been built along and underground sewrage was built in 1857.
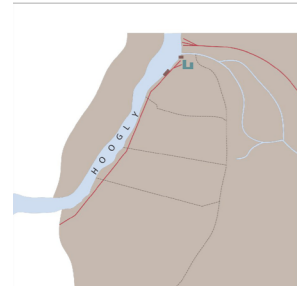
**1857-59**
The excavation of the Kristopur Canal split the canal into two sections and circular rail was built between hawda and baghbazar terminus.

**1874**
Ahanging bridge was proposed across the canal above chitpur lock to connect raboindra sarani to pran krishna mukarji road.

**1904-2012**
The excavation of the Kristopur Canal split the canal into two sections. The reclamation of the saltwater lake was undertaken to expand the city.circular railways extended across the canal bagbazar terminal converted into baghbazar tram terminal.

**Present day**
In 2012 tram service was terminsted and building was used as were house for next few years untill demolished.

CHITPUR LOCK (CIRCULAR CANAL)  KESHTOPUR CANAL  NEW CUT CANAL  BHANGAR CANAL  WET LANDS  GHUSIGHATA

1.Mayer Ghat
2.Mayer ghat entrance and bhagbazar jn
3.New bhagbazar ghat
4.Mittiwala's home
5.Industries in pran nularji rd
8.Godowns in rabindra sarani rd
5.Pran krishna mukarji rd
9.Rabindra sarani rd
6.Chitpur lock
13.Baghbazar railwaystation
14.Mohit moitra sarani
15.KMC water pumping unit
16.Aboudent building belongs to kmc
17.Chitpur bridge
18.Gallif street
10.Ketchu collection in canal
7.Slum encrochment along canal
11.Ganga view point

SOUVA BAZAR

GHATS OF SOUVABAZAR

# DESIGN PROPOSAL



creating direct access from gallif road to site .

praposed interepretation and community center

e or suspension bridge in
same place during 1883.

water front devrlopment

re-locating mittiwala's to this unused building

spill-over areas and transition spaces exist between mayer
ghat, baghbazar ghat, and the site. by decluttering the road
network from mayer ghat to the other ghats on the site,
these connections can be improved.

water front devrlopment
which gets connected to ganga view point.

a conservation approach to building restoration
involves revealing hidden architectural elements.
since the building faces rabindra sarani road on
one side and mayer ghat on the other, it has the
potential for commercialization, making it suitable
for conversion into cafes and restaurants.

establishing connection
between mayer gaht and baghbazar

**DESIGN PRAPOSAL**   PRAPOSED BUILD-   PRAPOSED ROAD NET-

Bridging Past and Present: The Canal-River Junction Revival:
Integrating Ecology, History, and Modern Needs



1.Drop off zone nad plazza
2.Intrepretation center
3.Tram terminal
4.Plazza
5.Water front recreational space
6.Relocation of shops
7.Housing for 'Mitti wala's'
8.Restoration of commercial stracture
9.New pedestrian path
10.Redevelopment of pedestrain path
11.Parking and information kisok

SCALE- 1:

Section AA'

EXISTING
INTERVENTION

Section BB'

Elevation AA'

SCALE: 1:100

Contemporizing Historical Precincts of the Sovabazar Sector of North Kolkata

91

**Simran Mohanty**
PCR23382

## Revitalizing Kumartuli: A Modular Approach to Enhancing Artisans' Working Conditions

The Interplay between Tangible and Intangible Heritage

The older workshops in Kumartuli can be gradually replaced by new prototype designs that incorporate modern amenities and improved working conditions. The introduction of alleys and open spaces will enhance circulation and provide areas for idol drying. Essential facilities such as toilets and water tanks should be provided to ensure the well-being of the artisans. This revitalization process will not only improve the working environment but also contribute to the overall development of the Kumartuli neighborhood.

The design prototype takes the same flexible approach and uses the same materials. The new prototype's frame will be made of timber or metal rods, with various materials used for the walls or coverings. The new structure should be more modular, durable, and adaptable. The design allows for removing and reattaching certain elements as the user needs.

*The preservation of Kumor artists and their bamboo-framed workspaces would assure the continuation of the Durga Puja tradition and its accompanying crafts, preserving a vital aspect of our cultural heritage for future generations.*

# MASTER PLAN

The design proposes a modular approach to workspace construction, primarily using bamboo as the building material. This aligns with the traditional pandal-making techniques prevalent in the region. Three module types are proposed:
There are 3 types of modules which are
1. Ground Floor Module: This basic module provides a single-story workspace without dedicated toilet facilities. It's suitable for artisans who primarily work during the day and do not require overnight accommodation.

2.Mezzanine Floor Module: This module incorporates a mezzanine level for additional living space, ideal for artisans who need overnight accommodation or have family members living with them.

3.Double-Level Module: This larger module, with two levels, can accommodate a larger number of artisans or workshops with multiple functions. It offers ample space for both work and storage.



Module 3
Module 2
Module 1
Amenities( toilet)

Open spaces

Adda spots



## Module 1

Plan

Section AA

Metal Frame

Sectional Isometric View

**Ground Floor**

**Mezzanine floor**

**Elevation**

**Section BB**
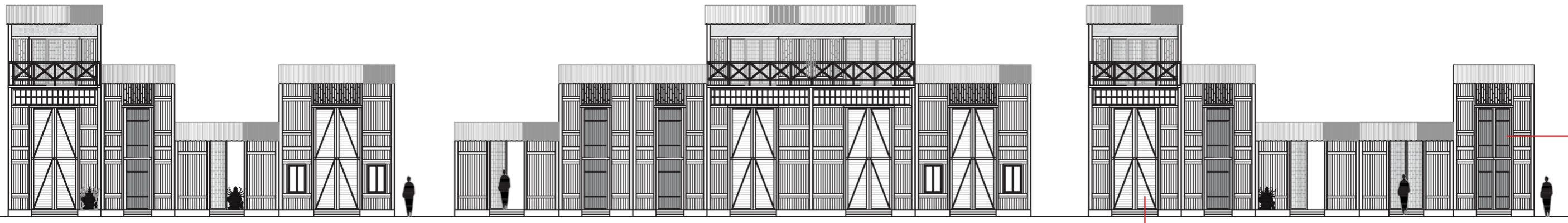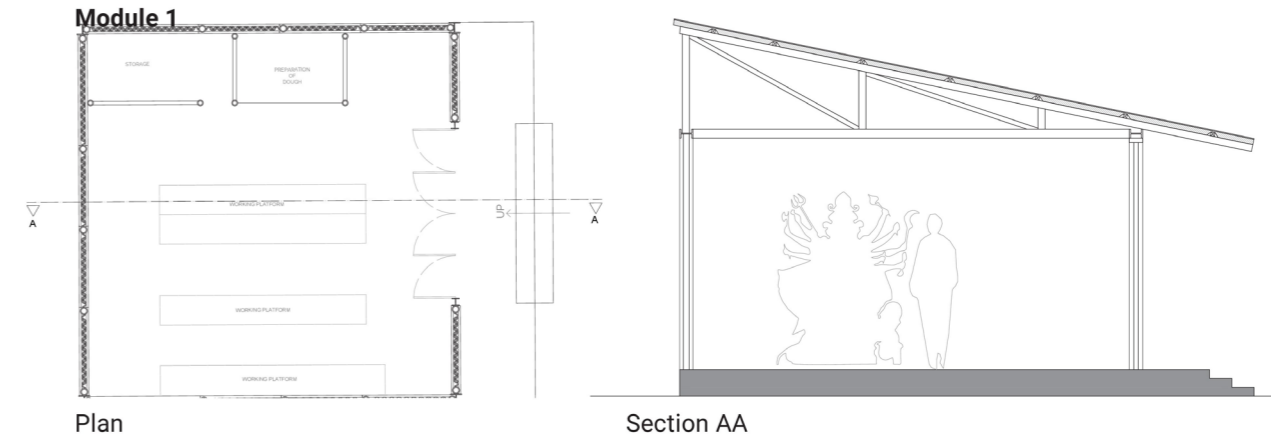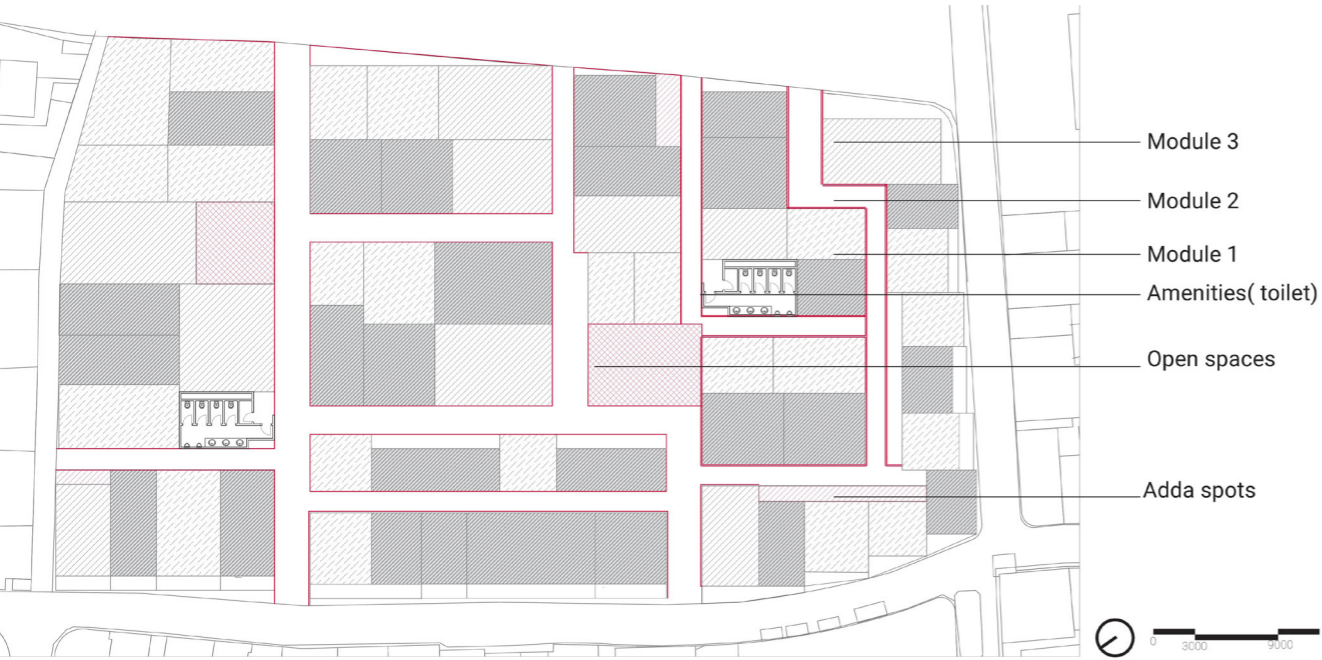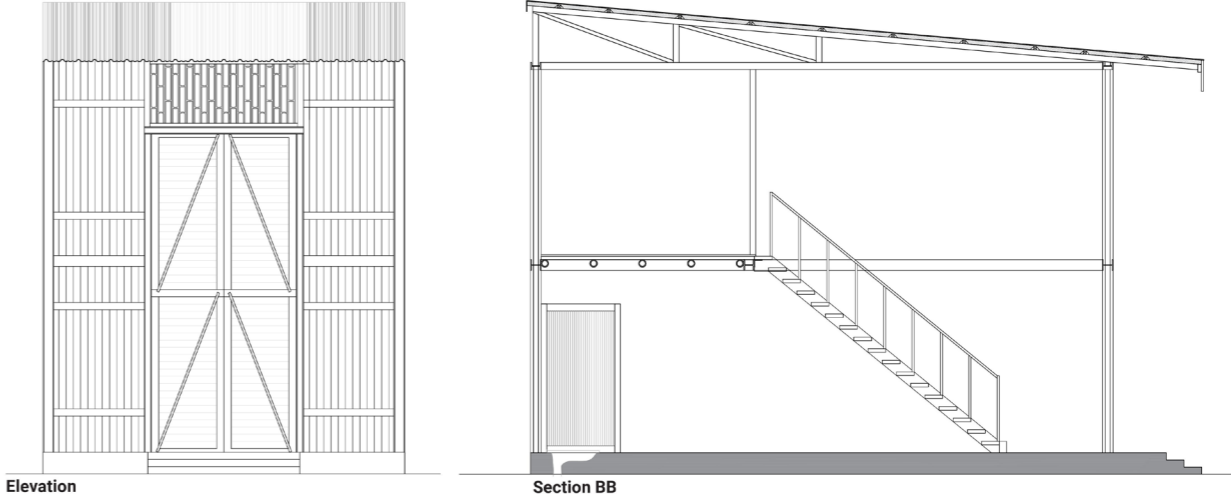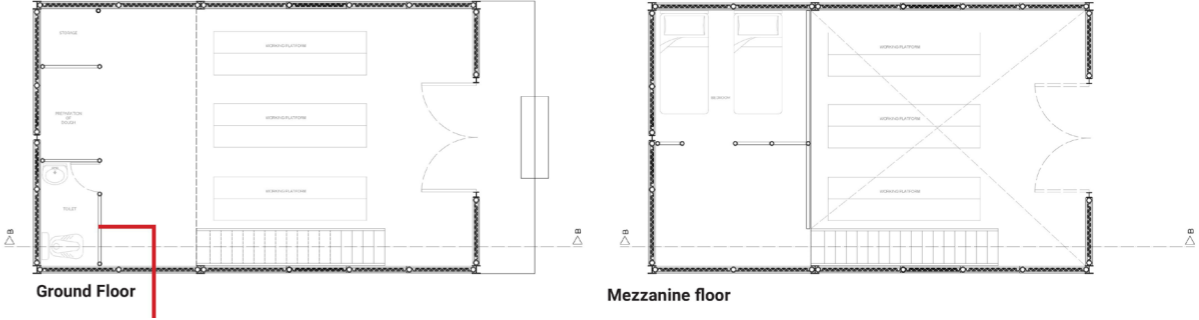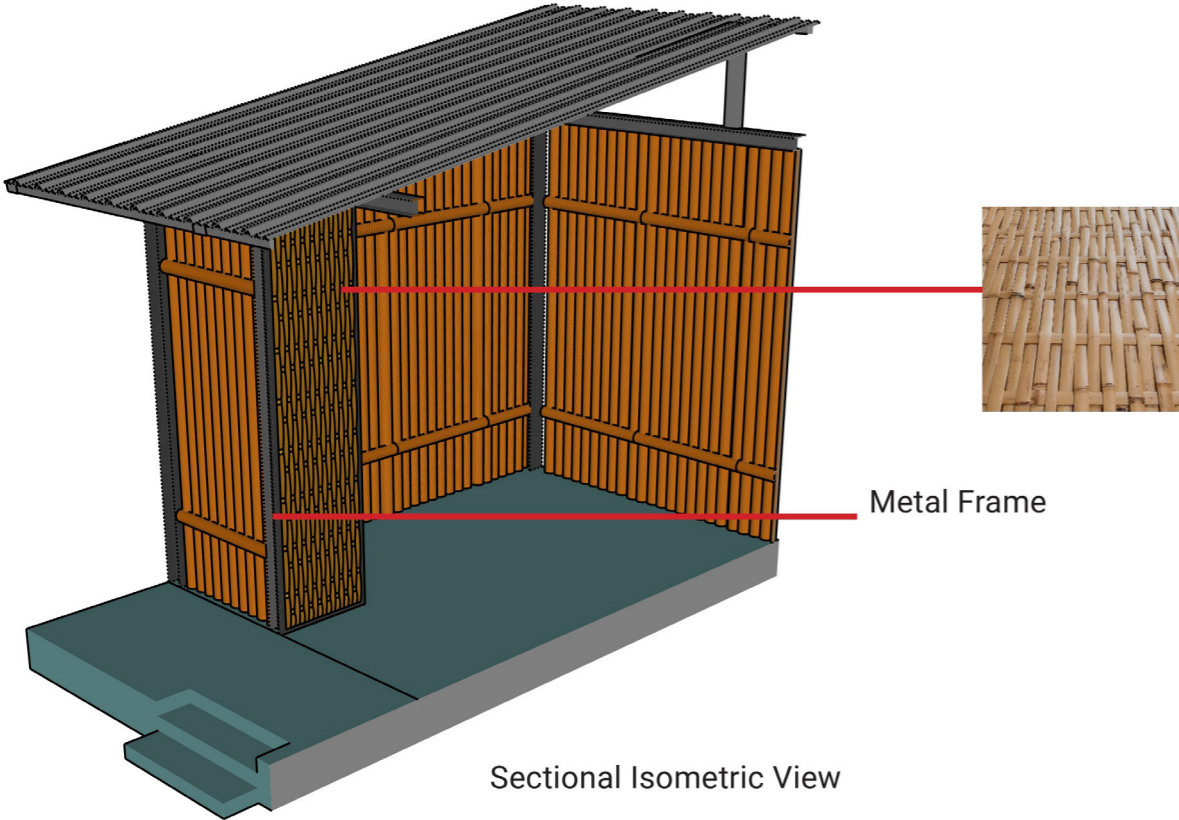
# EXPLODED AXONOMETRIC VIEW



# MODULE 3 DESIGN



Plan Ground Floor

Second Floor

First Floor

# JOINERY DETAILS


Steel column details


vertical halved Culm wall

Vertical halved culms bamboo
Bolt
Gusset Plate

Clumps
I section column
Bolt
Bamboo pole

Joining bamboo
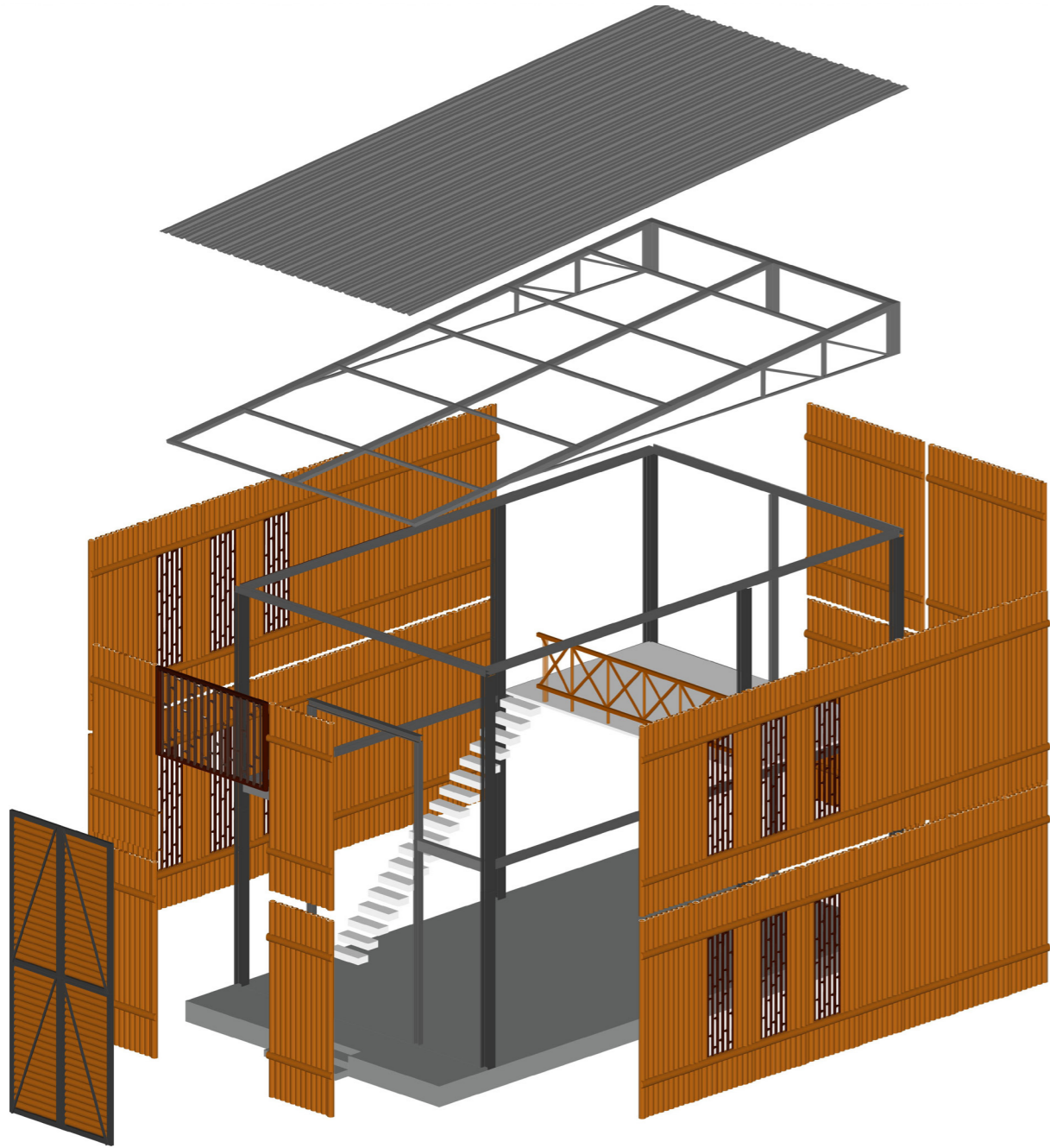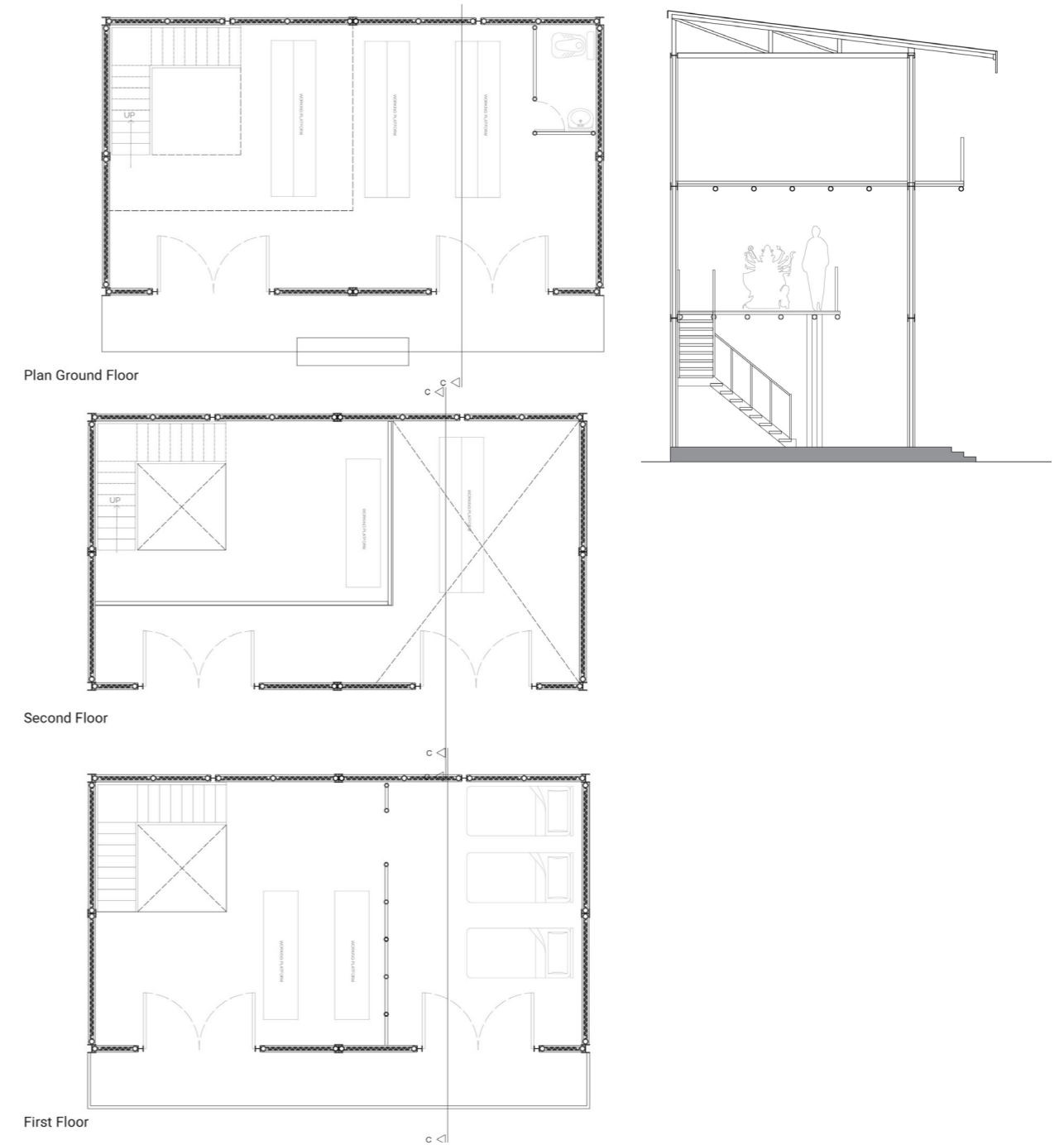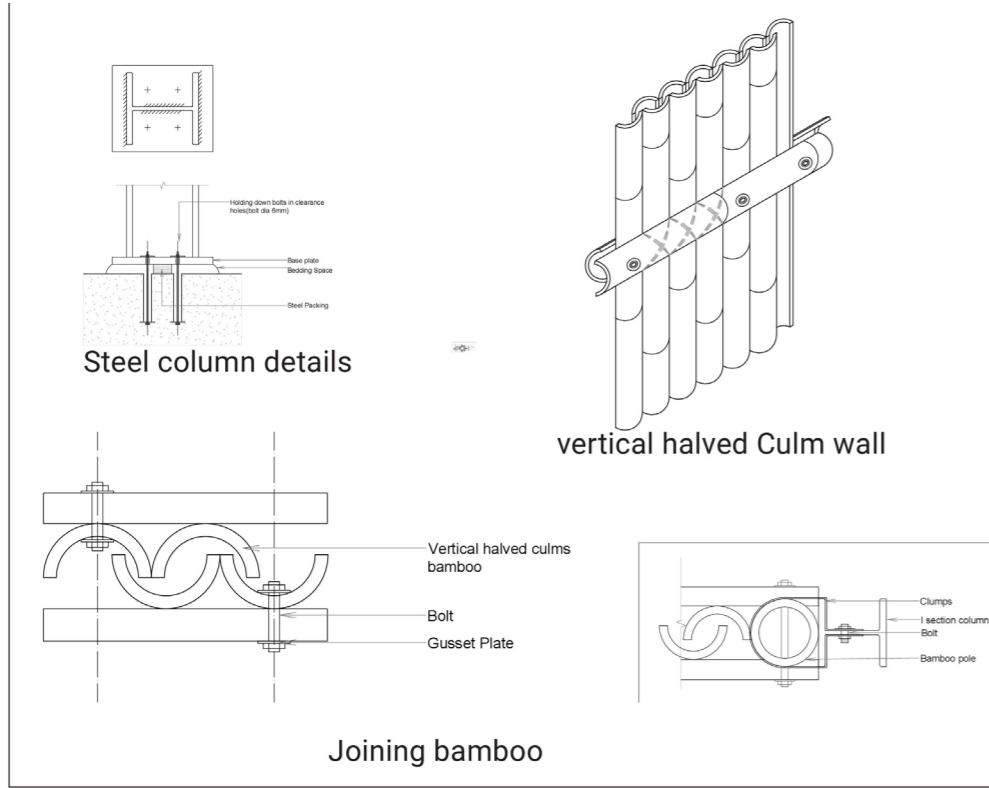
**Karan Kothari**
PCR23176

## Weaving The Past Into The Present

Revitalizing Kolkata's Historic Ghats

The historic ghats of Kolkata, nestled along the Hooghly River, are deeply woven into the fabric of the city's cultural, religious, and social life. However, over time, modern challenges such as urbanization, poor infrastructure, and neglect have diminished their significance. The proposed intervention seeks to blend heritage conservation with modern urban solutions, ensuring the ghats remain vibrant and accessible to both locals and visitors.

This intervention blends heritage conservation with modern urban design, ensuring the revitalization of Kolkata's ghats while respecting their historical and cultural significance. By improving infrastructure, restoring historic structures, and creating vibrant public spaces, the ghats will be transformed into a dynamic, inclusive environment that serves both the community and the city's rich cultural heritage.

*Conservation should emphasize inclusivity, involving local communities in decision-making to ensure preservation aligns with their needs and values, while seamlessly weaving the past into the present.*

# OBJECTIVES

**Heritage Conservation and Restoration**
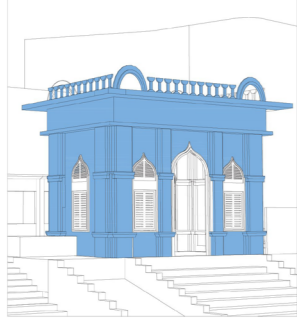


The project focuses on restoring damaged and forgotten ghats, such as Putul Bari and Kumartulli Ghat, ensuring architectural integrity while reviving their cultural and spiritual significance.

**Improved Accessibility**
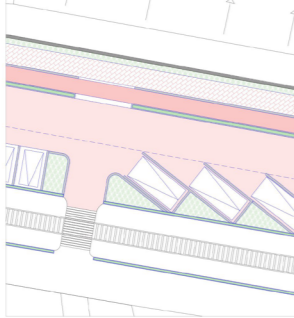


Incorporating streetlights, toilets, pedestrian paths, and cycle tracks will address hygiene, safety, and accessibility, ensuring the ghats remain vibrant and functional for all users.

**Enhanced Public Spaces**
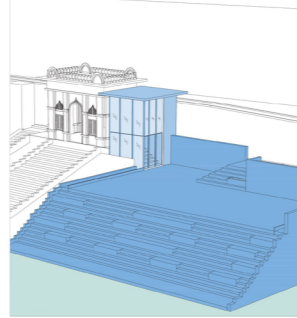


New public spaces like riverside seating, and performance areas will foster community interaction, blending modern urban design with heritage, and enhancing visitors' engagement with the ghats.

**Cultural Engagement and Interaction with the River**
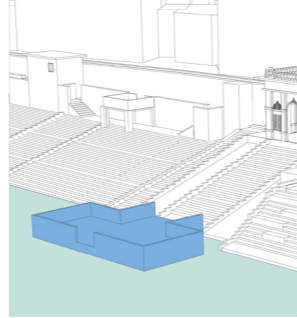


The project includes interactive heritage installations, gathering spaces, and water interaction platforms that create a deeper connection between the visitors, the river, and the ghats' historical narratives.

# AXONOMETRIC VIEW
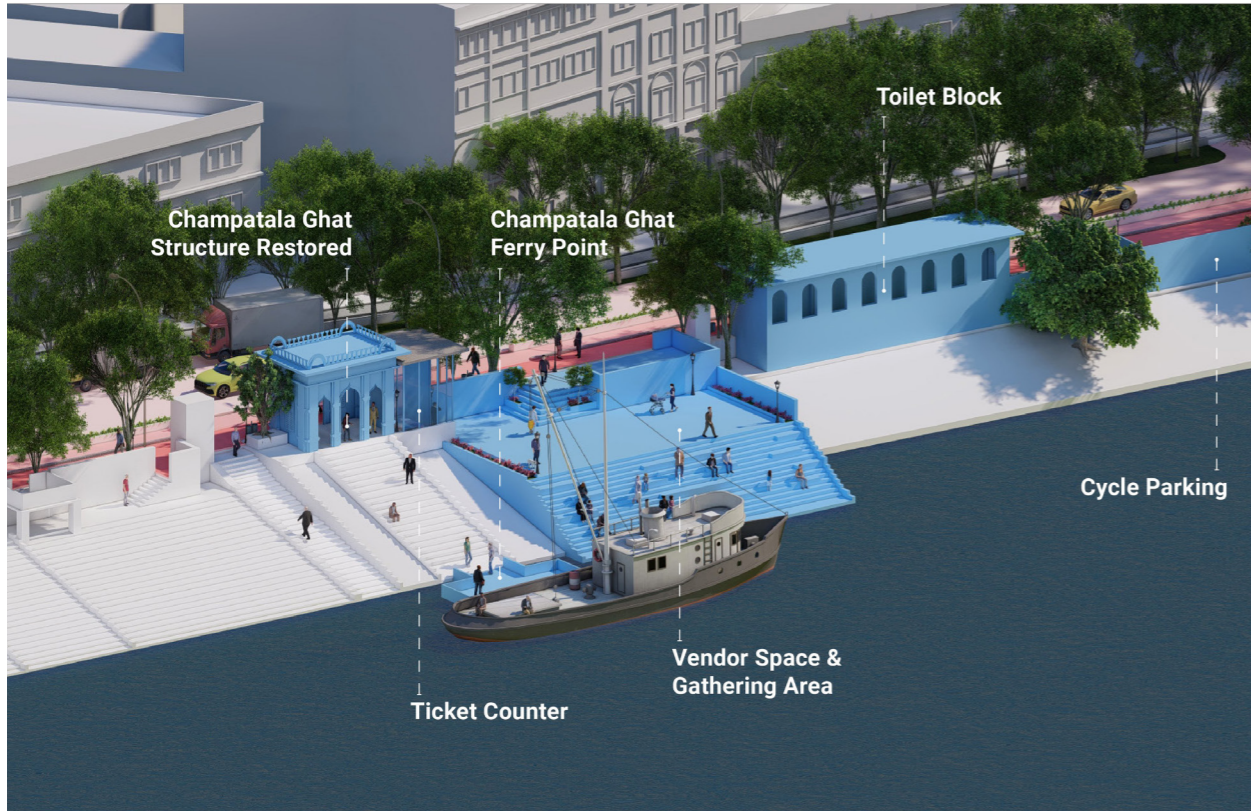


# CHAMPATA GHAT ZONE DETAIL - EXISTING PLAN



LEGEND

HOOGLY RIVER | BUILDINGS | ONE WAY VEHICULAR ROAD | SECONDARY VEHICULAR ROAD | OPEN AREA | TEMPLES | ENCROACHMENT

# CHAMPATA GHAT ZONE DETAIL - PROPSED PLAN



LEGEND

HOOGLY RIVER | BUILDINGS | VEHICULAR ROAD | CYCLE TRACK | PEDESTRIAN PATHWAY | TEMPLES | PROPOSED AMENITIES | VENDOR SPACE ALLOCATED | DUSTBIN | OPEN AREA
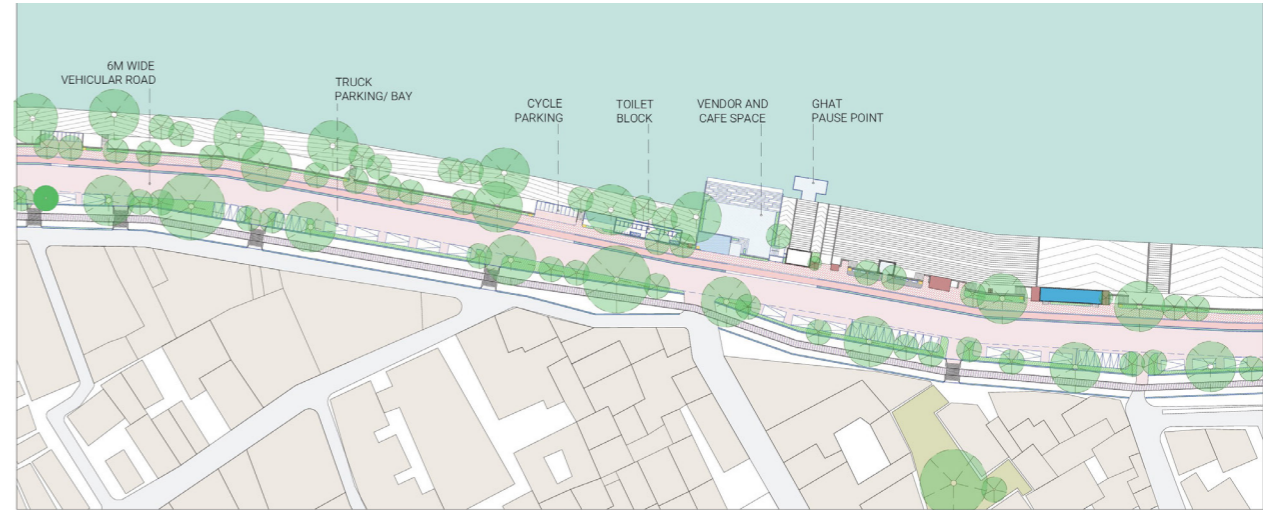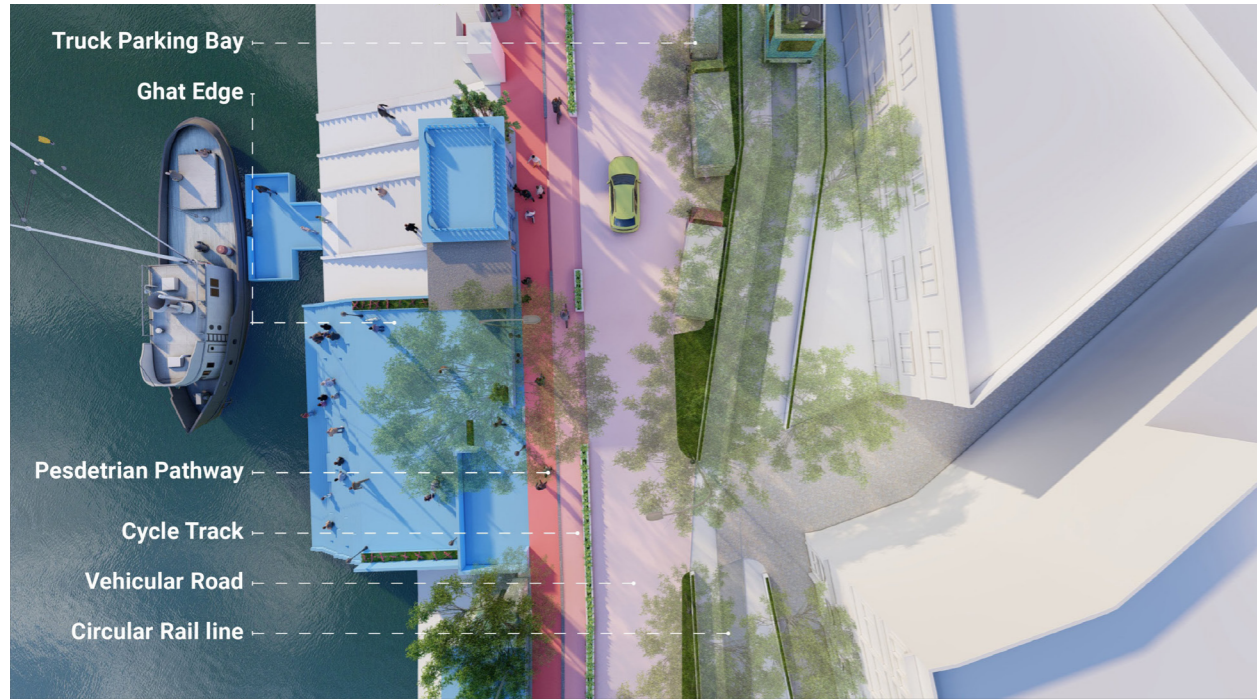
Bird's Eye View Showing Proposed Streetscape of the Ghat Edge

Truck Parking Bay
Ghat Edge
Pesdetrian Pathway
Cycle Track
Vehicular Road
Circular Rail line


Street Section Showing Proposed Streetscape of the Ghat Edge


Bird's Eye View Showing Existing Streetscape of the Ghat Edge
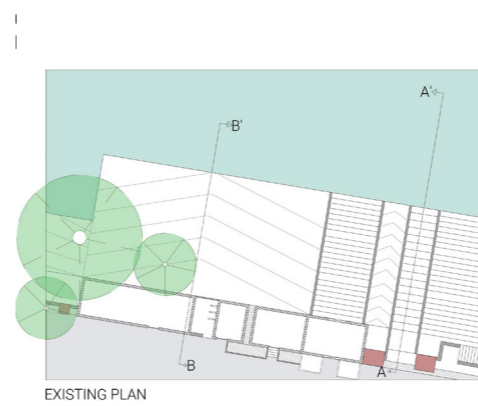

EXISTING PLAN
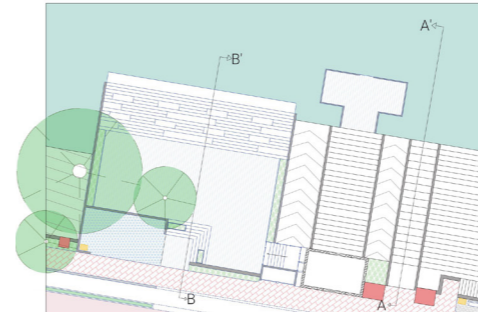

PROPOSED TICKET COUNTER AND VENDOR AND CAFE AREA PLAN
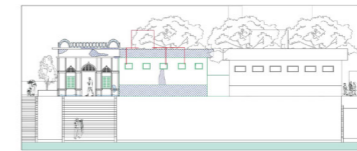

RIVER SIDE ELEVATION- EXISTING
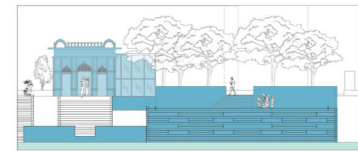

RIVER SIDE ELEVATION- PROPOSED


STREET SIDE ELEVATION- EXISTING
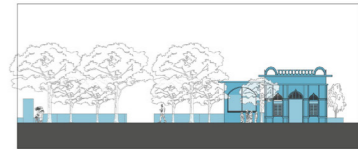

STREET SIDE ELEVATION- PROPOSED
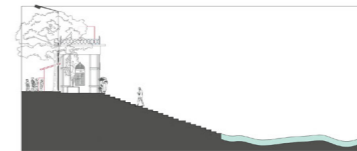

SECTION A-A'


SECTION A-A'


SECTION B-B'


SECTION B-B'

LEGEND
HOOGLY RIVER    CRACKS    DAMPNESS    DISCOLORATION    CHIPPING    FLAKING    RETROFIT    ADDITION    PROPOSAL
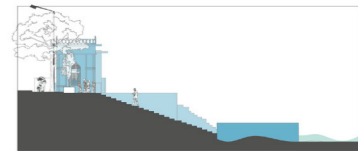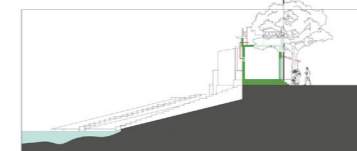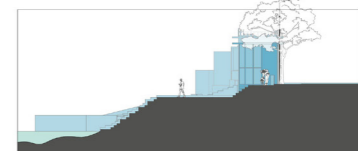

View Showing Champatala Ghat Proposal


View Showing Champatala Ghat Ticket Counter Proposal


View Showing Champatala Ghat Vendor Space Proposal


NANDIBARI GHAT        CHAMPATALA GHAT        CHAMPATALA GHAT STRUCTURE        SLANTING GHAT        PUTUL BARI

Contemporizing Historical Precincts of the Sovabazar Sector of North Kolkata

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**SECTION C-C'**

**SECTION D-D'**

PROPOSED TOILET BLOCK
AND CYCLE PARKING PLAN

**SECTION A-A'**

**SECTION B-B'**
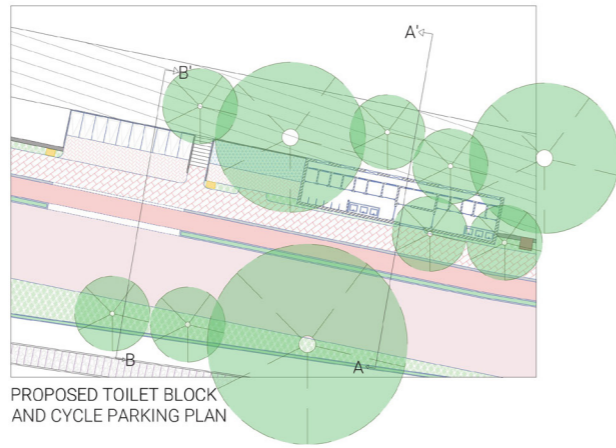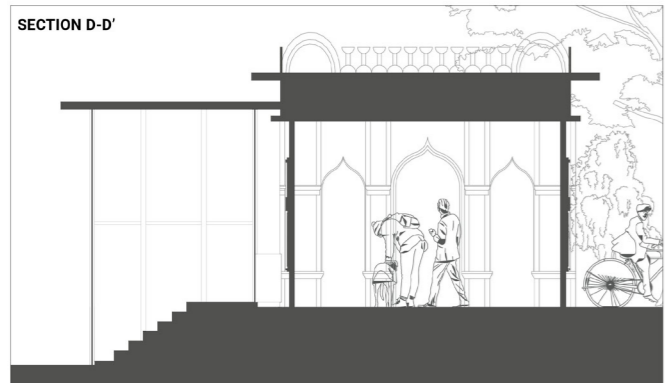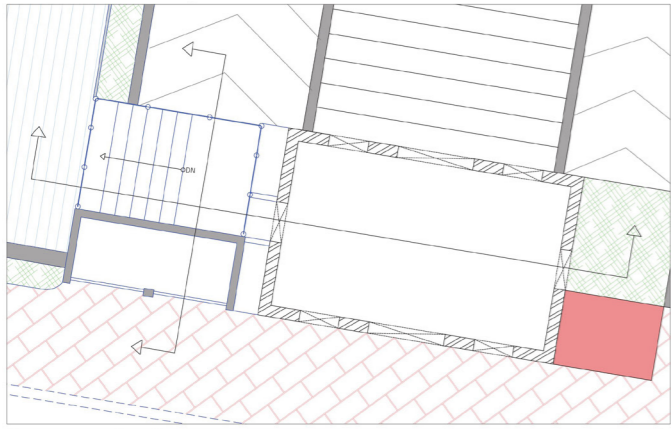
**Richa Patki**
PCR23306

## Revitalizing the node of Kumartuli neighborhood

Abandonment to aid

The design intervention brief focus on to improve basic sanitation, hygiene and health issues, which are being, faced every day, revitalizing community spaces and infrastructure, improve livelihood of local communities by increasing local economic growth and self-sufficiency, shaping vehicular free street for reviving adda culture into the junction and to empower local residents to drive their own development.

▲▲

*I believe that a deep comprehension of the local community's history, traditions and aspirations is essential to unlock the potential of a site's architectural, cultural and historical value.*

▼▼
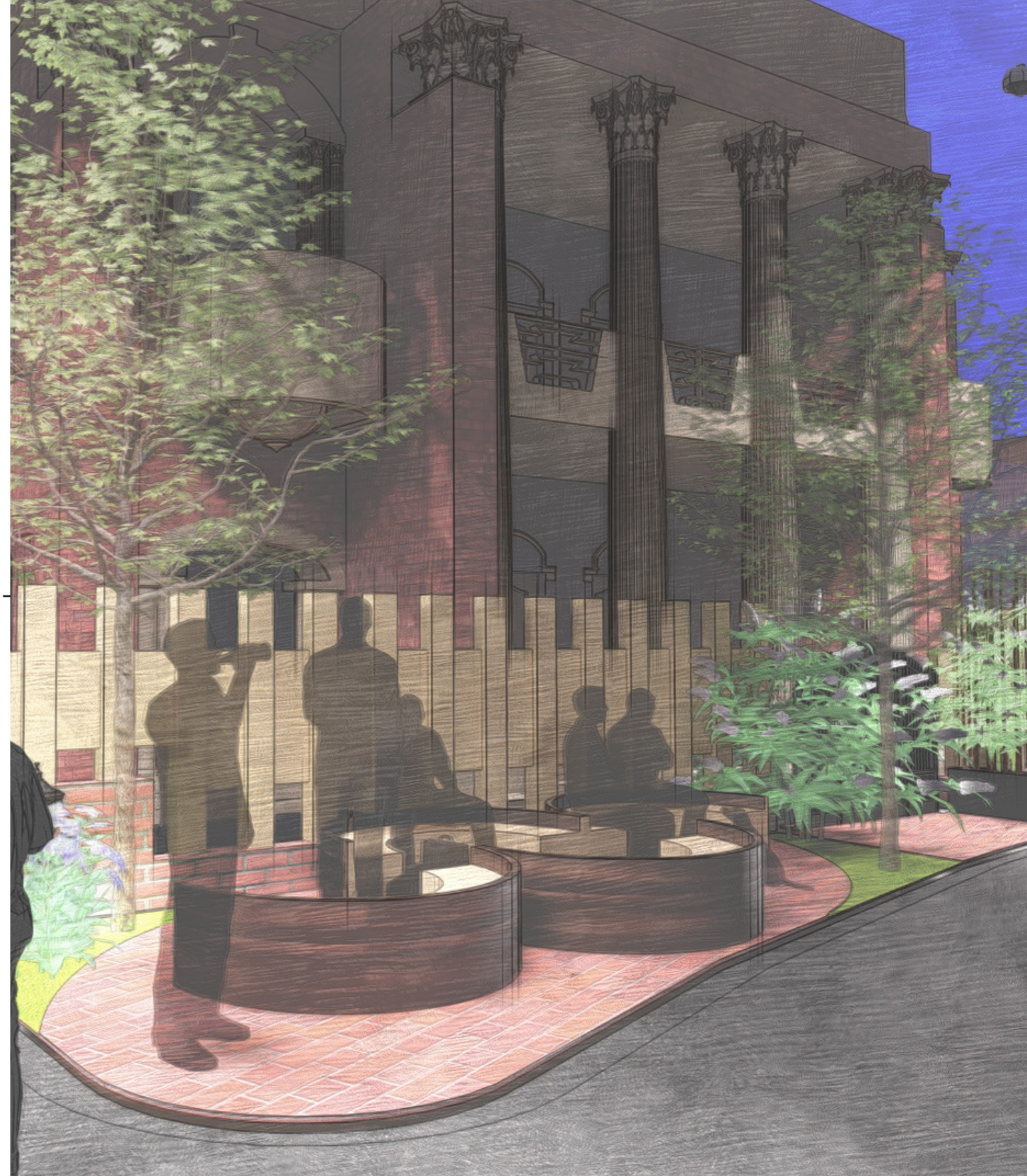
# PROPOSED DRAWINGS



## STREET SECTIONS

Section AA'

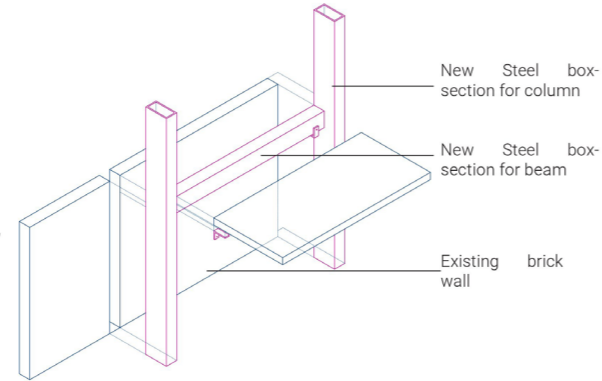Section BB'

First Floor Plan
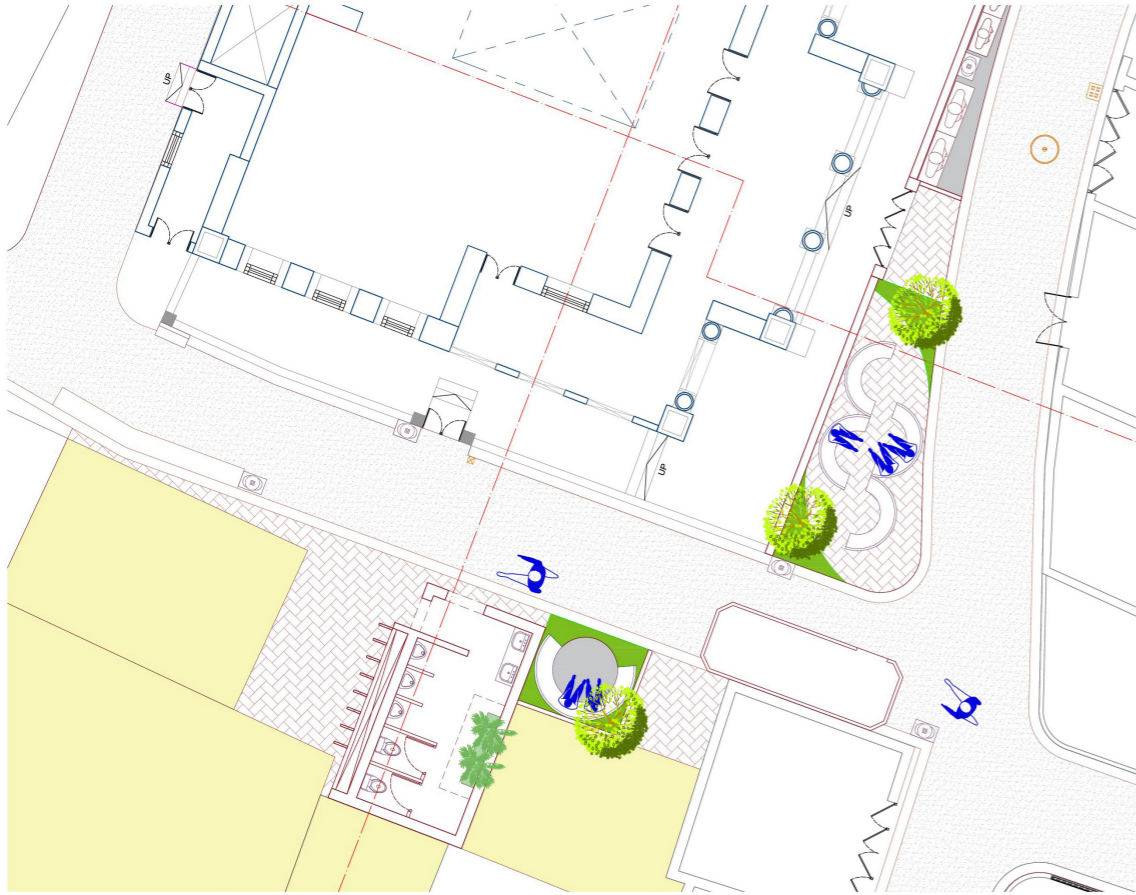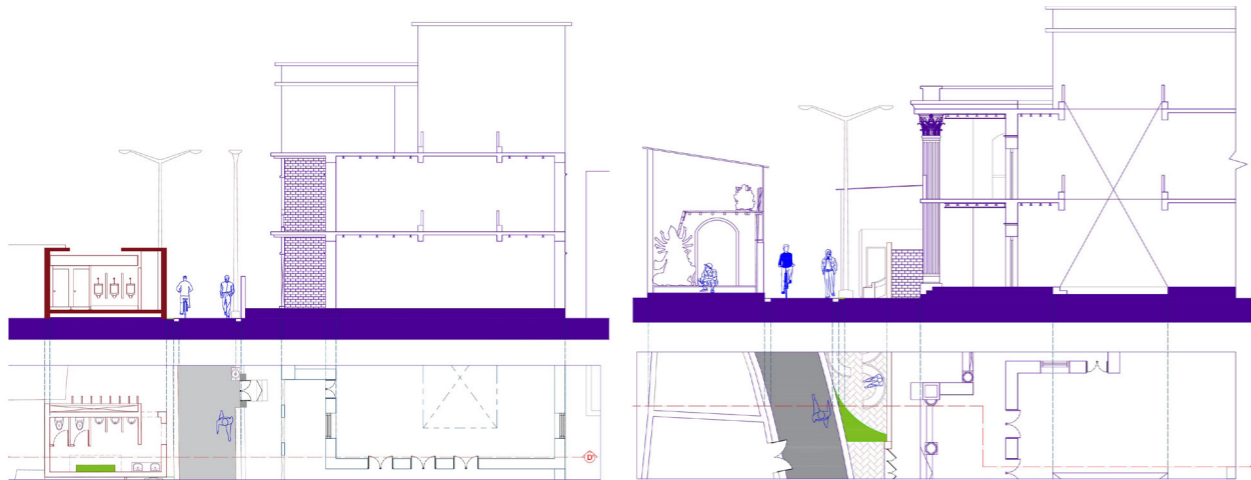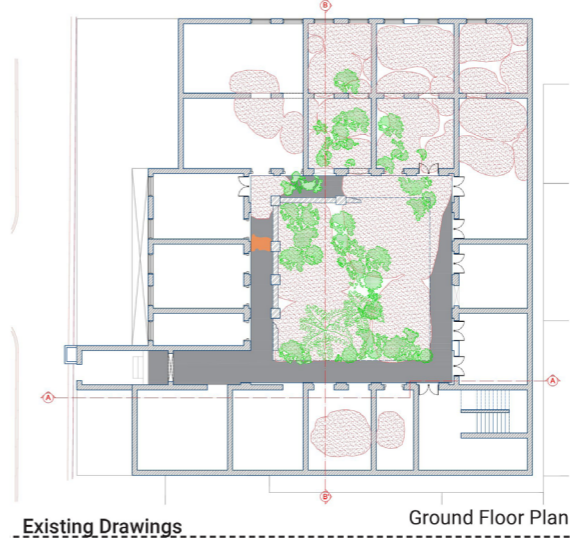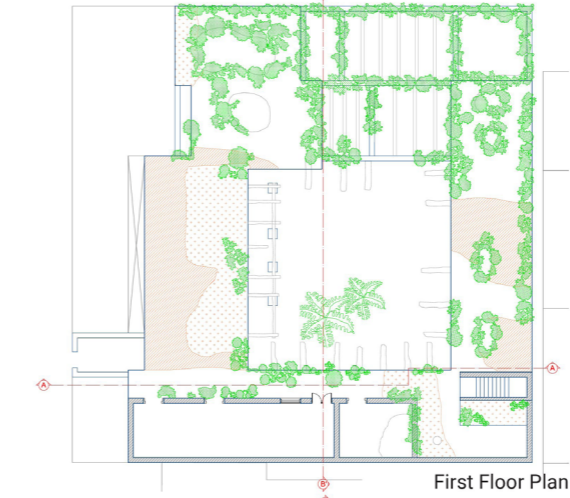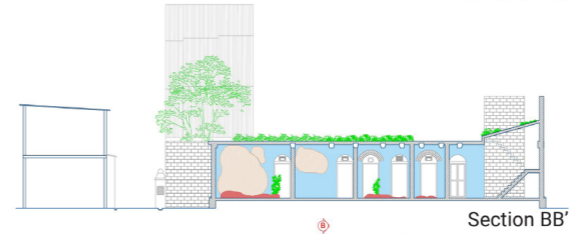
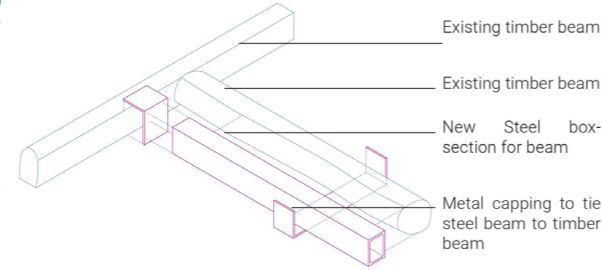Existing Drawings

Ground Floor Plan
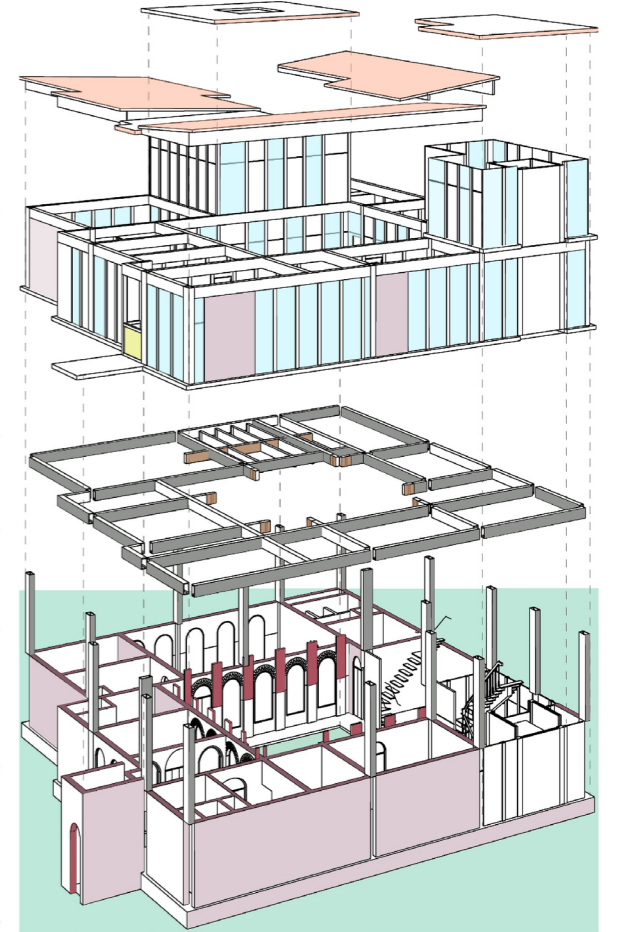
# Details
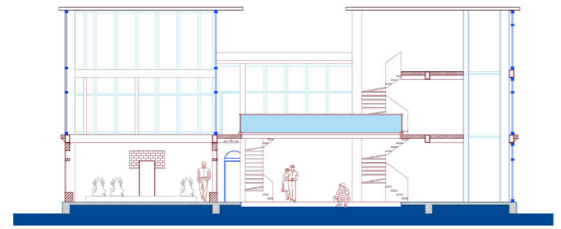


Section CC'
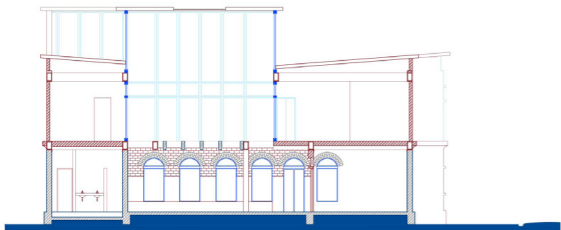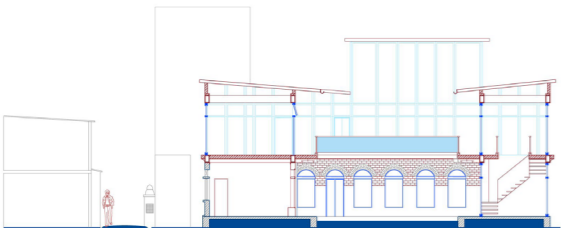

New Steel box-section for column

New Steel box-section for beam

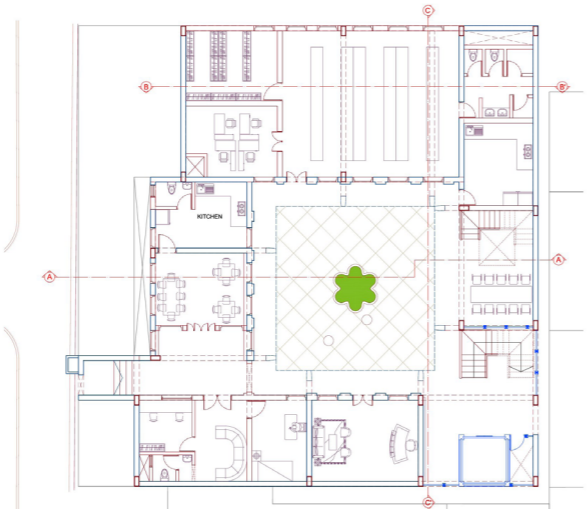Existing brick wall

Steel column and beam with existing brick work
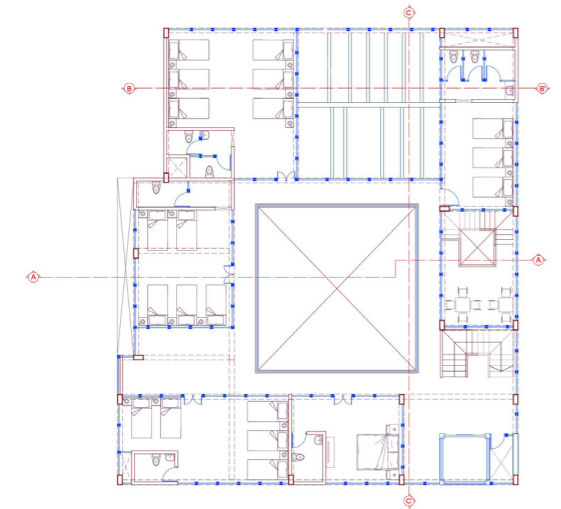
Section BB'


Existing timber beam

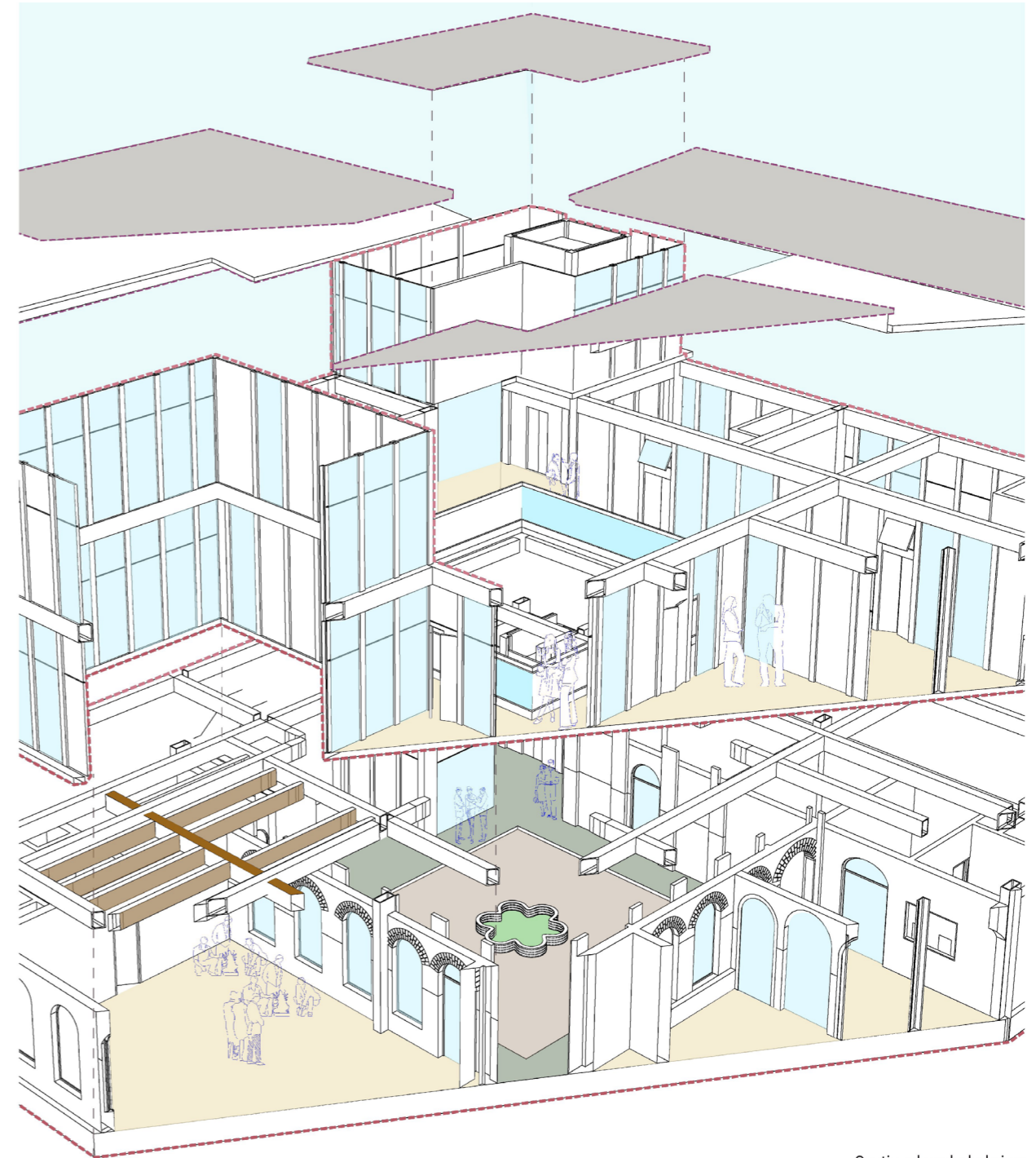Existing timber beam

New Steel box-section for beam

Metal capping to tie steel beam to timber beam

Section AA'    Existing timber beam with new steel beam



**Intervention Drawings**



Sectional exploded view

# FINAL REVIEW



Final review with Conservation architects Gurmeet Rai and Jayshree Bardhan



Mid-semester with Prof. Jigna Desai and Conservation Architect Kamalika Bose



Students explaining their design projects to the jurors.



Students explaining their designs to the students.