



Somaya & Kalappa Consultants

Maritime Museum for Mumbai  
Traffic Office building/ Ghadiyal Ghar

**SNK**

- Somaya and Kalappa was founded in 1975
- International and National award winning firm
- Handled projects both in India and abroad
- Head Office in the heritage business district of Mumbai

SNK is a full service architectural firm offering each client a combination of imaginative design, expertise, and intense involvement. The firm's reputation is based on providing the highest quality of professional services to every client. We strive to produce work that is creative, practical and economical, while keeping in mind the social, economic, environmental and aesthetic issues relevant to each project.

## SELECTED INTERNATIONAL AWARDS

### •UIA – VASSILIS SGOUTAS PRIZE

For Rehabilitation of *Bhadli* Village, Bhuj

### •SEED (SOCIAL ECONOMIC ENVIRONMENTAL DESIGN) – CHICAGO COMPETITION SFI 11

Honourable mention for Rehabilitation of *Bhadli* Village, Bhuj

### •LEAF AWARDS – THE LEADING EUROPEAN ARCHITECTS FORUM

For Nalanda International School, Vadodara

### •UNESCO ASIA- PACIFIC HERITAGE AWARDS FOR CULTURE HERITAGE CONSERVATION

For St. Thomas Cathedral, Mumbai

### •THE PHAIDON ATLAS – ALL THE GREATEST BUILDINGS OF THE 21<sup>ST</sup> CENTURY

For *Bhadli* Village School, Bhuj

## SELECTED NATIONAL AWARDS

### •INDIAN INSTITUTE OF ARCHITECTS NATIONAL AWARDS FOR EXCELLENCE

For Restoration and Preservation of Rajabai Clock Tower and University Library Building, Mumbai

### •KOHLER BOLD DESIGN AWARDS

For Mumbai Esplanade Project, The Visionaries - The Big Idea Category

### •URBAN HERITAGE AWARD – INDIAN HERITAGE SOCIETY, MUMBAI

For St. Thomas Cathedral, Mumbai

### •THE IGEN 50 AWARD

For the top 50 next generation architects and interior designers

### •FELICITATES AND HONOURS FOR BEING AN ACHIEVER AND AN ICON AMONG WOMEN

From Institute of Indian Interior Designers

### •J.K. CEMENTS – AYA AWARD – INDIAN STATE OF ARCHITECTURE AWARD

For Jubilee Church at Sanpada, Navi Mumbai



### INDIAN INSTITUTE OF ARCHITECT'S BABURAO MHATRE GOLD MEDAL

Award given to a Distinguished Architect or Man of Science or letters who has produced works which promote or facilitate the knowledge of Architecture or the various branches of Science connected therewith.

### SMITH COLLEGE

### HONORARY DOCTORATE

“For your drawing together of the built and un built, the forms of the old and the imperatives of the new, Smith College is proud to award you the degree doctor of fine arts, *Honoris causa.*”



### GLOBAL 100

### PUBLIC INTEREST DESIGN

Persons working at the intersection of design and service globally.



### THE WIENERBERGER GOLDEN ARCHITECT AWARD FOR LIFETIME ACHIEVEMENT

“It is heartening to observe a person's lifetime dedication, involvement and focused creativity being applauded with such unanimity.”

## BRINDA SOMAYA

FOUNDER | PRINCIPAL ARCHITECT

**Chairperson of Board of Governors** – School of Planning and Architecture, Vijayawada – 2016, an Institute of National Importance

**Member** - National Advisory Board of NCSHS (National Centre for Safety of Heritage Structures) - 2014

**Member** - Editorial Board for MARG Architectural Books – 2008

**Member** - INTBAU, (International Network for Traditional Building, Architecture & Urbanism) India – 2007

**Member** - Committee of `Environmental Impact Assessment of New Construction Projects & New Industrial Estates' for `Ministry of Environment & Forests', Government of India - 2006

**Member** - Committee of Oval as the Nominee of the Navajbai Ratan Tata Trust - 2005

**Member** - IAWA board of Advisors (International Archive of Women in Architecture) - Virginia Tech, Blacksburg, U.S.A. - 2000-2003

**Founder Trustee** - The HECAR Foundation - 1999

**Chairperson** - Women in Architecture - 2000 Plus Conference & Exhibition on the works of the South Asian Women Architects

**Member** - Mumbai's Initiative for the Protection & Improvement of Streets & Public Spaces – 1999

**Member** - Urban Heritage Conservation Committee, Bombay. 1993 1995 & 1996 - 1999

**Selection Committee Member** - Post of Principal Sir J.J. College of Architecture 1996

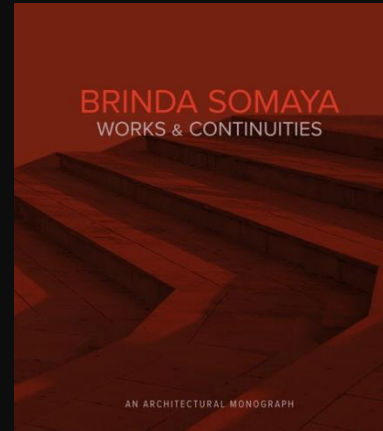
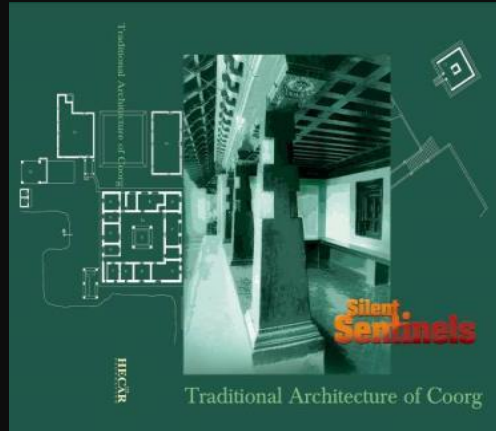
**High Power Committee** - Appointed by the University of Bombay to inspect Sir J.J. College of Architecture - 1996.

**Managing Committee** - Colaba Woods & Sports Complex - 1989

**Trustee** - Spastic Society of India - 1988 - 1993

**BRINDA CHINNAPPA SOMAYA**

FOUNDER | PRINCIPAL ARCHITECT



The Hecar Foundation hosting 'Women in Architecture - 2000 Plus' was created to celebrate Mumbai's multifaceted historic tradition.



THE  
**HECAR**  
FOUNDATION

With this exhibition we hope to achieve the public exposure that all women richly deserve. We will now become more aware of our own achievements and even more importantly, the work of each other. Design standards will be elevated and our professional image further validated.

**H**ERITAGE

**E**DUCTION

**C**ONSERVATION

**A**RCHITECTURE

**R**ESTORATION

Through three decades of design

the common thread connecting projects have been elements that represent

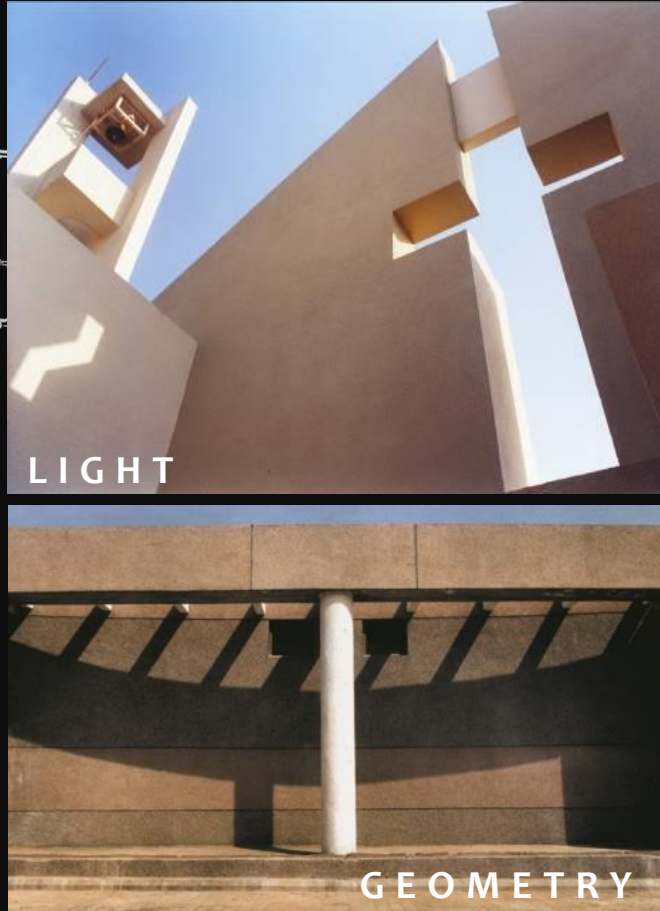
# INDIAN ARCHITECTURAL VOCABULARY



WATER



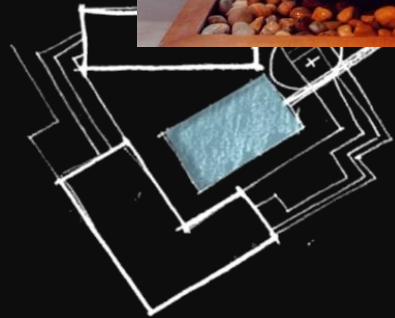
WALLS



LIGHT

GEOMETRY

MATERIAL





# Fort, Mumbai



TCS House  
(2007)

Cathedral & John Connon Schools – Junior, Middle & Senior  
(2001, 1994, 1998)

St. Thomas Cathedral  
(2004)

Rajabai Clock Tower  
(2015)

India & the World  
(2017)

Textile Gallery  
(2015)

The Old Yacht Club  
(2007)

Image © 2015 DigitalGlobe  
Image © 2015 TerraMetrics



NEED FOR REGENERATION OF URBAN SPACE

INDIA IS MULTI-LAYERED.

## LACCHA PARATHA – step by step



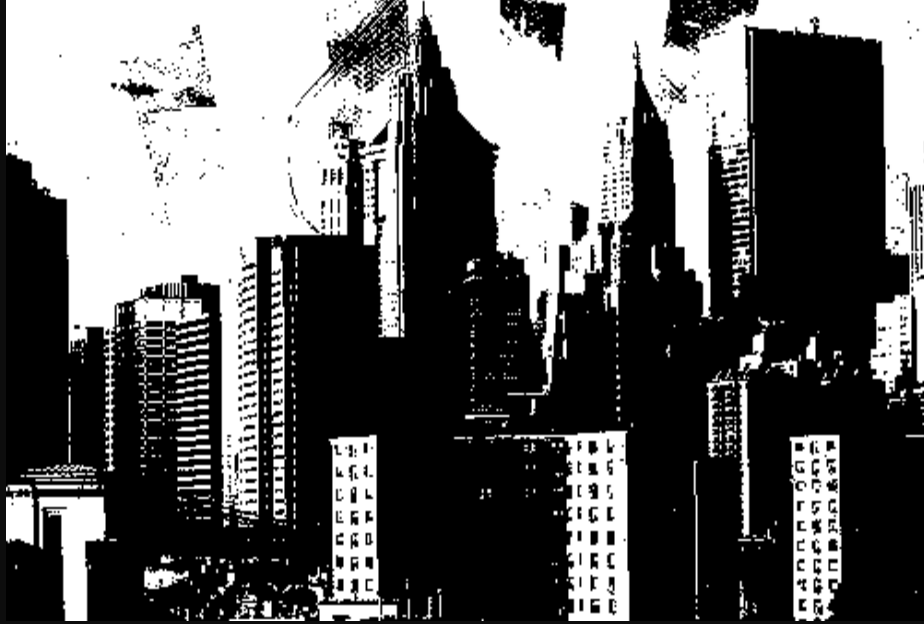
INDIA IS MULTI-LAYERED.

TO CAPTURE HER IN A SINGLE FRAME IS NEAR IMPOSSIBLE.





**SNK** ... BUT IN A SINGLE FRAME YOU WILL CAPTURE HER 'ESSENCE' EACH AND EVERY TIME.



1 Billion people  
In SLUMS



3 Billion people  
In CITIES

**TODAY...**  
7 Billion people





380 million people  
In CITIES

65 million people  
In SLUMS



**INDIA** TODAY...  
1.2 Billion people





# By 2020

## India will be facing



housing shortage of **30 million** dwelling units,



**200 million** water connections will be required,



**350 million** people to be given access to sewage.



**160 GW** of power-generating capacity to be added



number of vehicles on roads will increase **five-fold**.

# INDIA 2020...



SOURCE: [www.dailymail.co.uk/indiahome/indianews/article-2527291/The-future-Indias-growth-process-lies-cities.html#ixzz3TUrE2HCZ](http://www.dailymail.co.uk/indiahome/indianews/article-2527291/The-future-Indias-growth-process-lies-cities.html#ixzz3TUrE2HCZ)



Every minute  
30 Indians  
are leaving rural India  
to settle in Urban India.

700 million Indians will inhabit cities by 2050

Rural

Urban





**Urban**

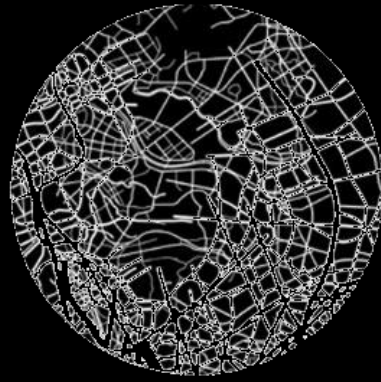


**Rural**



This will be the  
**largest urban movement**  
in the world.





**Urban**

“As India urbanises,  
it will face severe challenges.

But there are huge opportunities for smart and sustainable  
growth which can have a dramatic impact on the quality of life of  
the expected **700 million** urban citizens.”

**Rural**

Amitabh Kant  
Secretary, Department of Industrial Policy & Promotion (DIPP), Government of India.



BOMBAY TO MUMBAI

# Bombay to Mumbai

## ORIGINAL SETTLERS OF BOMBAY ISLANDS

Kolis



## SILAHARA DYNASTY (8<sup>th</sup> to 13<sup>th</sup> CENTURY)

Walkeshwar temple, Malabar Hill  
(1127 AD)



## MAURYAN DYNASTY (10<sup>th</sup> TO 12<sup>th</sup> CENTURY)

Mauryan capital of Puri carved in Elephanta  
Island



## ISLAMIC INVASION (13<sup>TH</sup> CENTURY)

Sultan Ahmad (1412-1441)  
Bahudar Shah (1527-1536)



## PORTUGUESE ARRIVAL (15<sup>TH</sup> CENTURY)

Vasco da gama the first Portuguese  
sea captain to land in India



## BRITISH RULE (15<sup>TH</sup> CENTURY)



The seven original islands of Mumbai at the beginning  
of the British rule – Late 17<sup>th</sup> century



The Island City of Mumbai - 1864

# Bombay to Mumbai



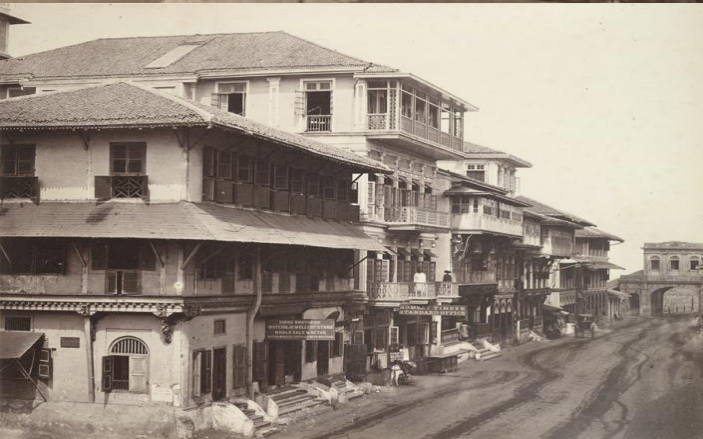
1800s



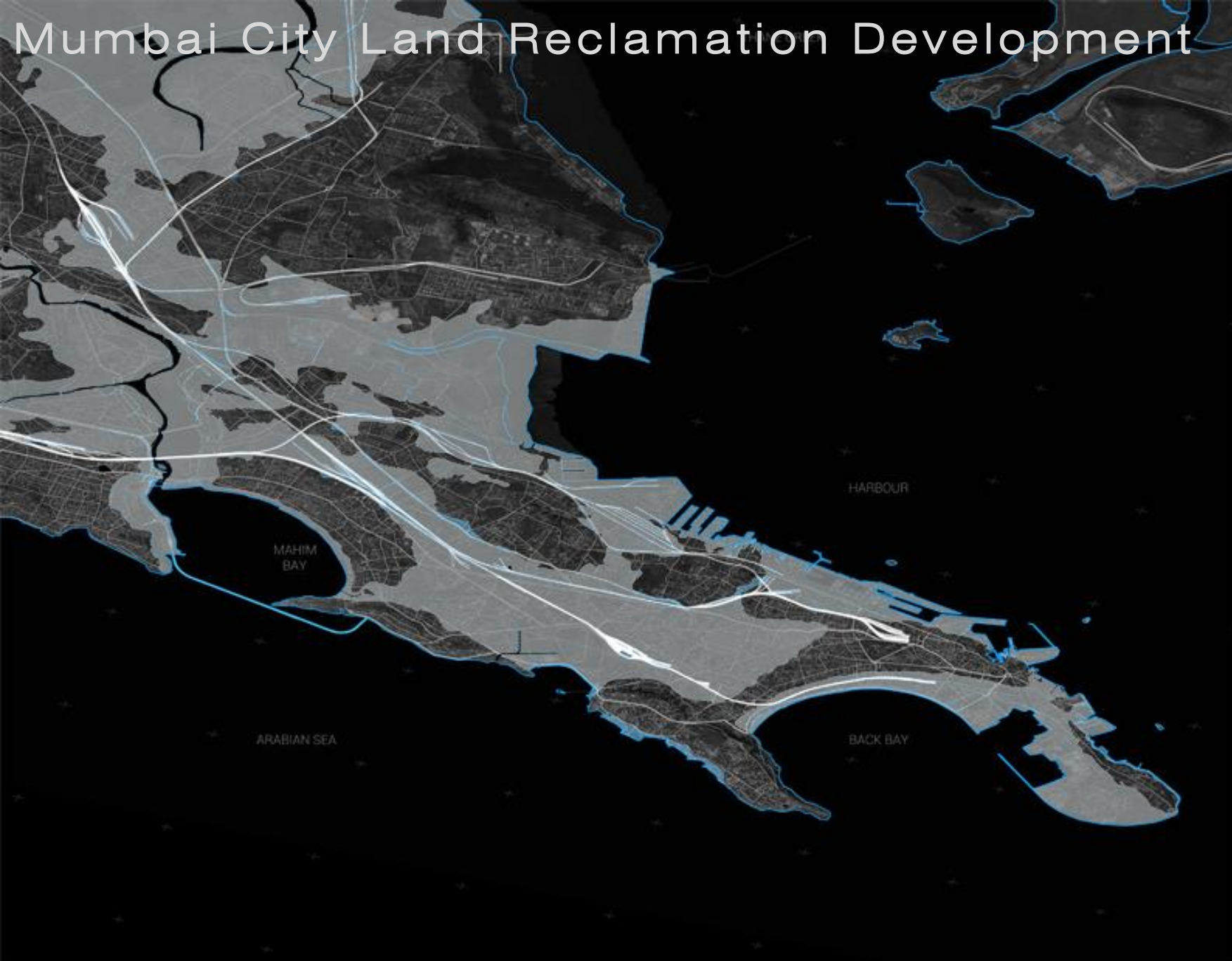
George Fort

# Bombay to Mumbai

1860s



# Mumbai City Land Reclamation Development





# Mumbai City Land Reclamation Development

1670



## CAUSEWAYS

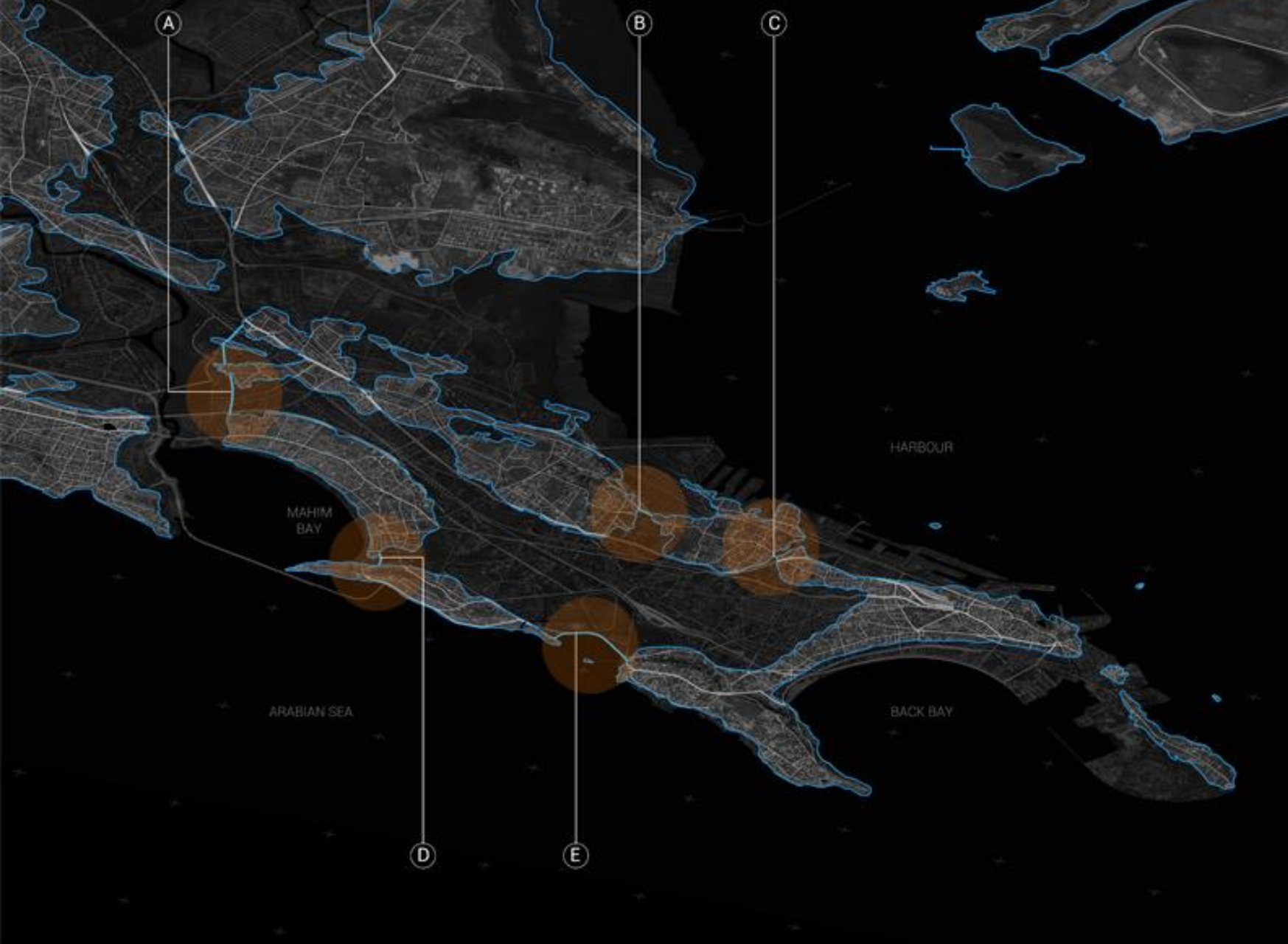
- A Mahim-Sion Causeway
- B Umarkhadi
- C Pydhonie
- D Worli-Mahim Causeway
- E Hornby Vellard
- F Sion-Kurla Causeway
- G Colaba Causeway
- H Lady Jamsetji's Causeway
- I Bandra-Worli Sea Link

## RECLAMATIONS

- 1 Filling of Great Breach
- 2 Dharavi
- 3 Carnac Bunder
- 4 Fort George
- 5 Further Filling of Great Breach
- 6 Filling at Mahim Bay
- 7 First Back Bay
- 8 Dockyards
- 9 Apollo Bunder
- 10 Tank Bunder
- 11 Filling of Flats at Matoonga
- 12 Filling of Flats at Nagaum
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- 18 Filling at Malabar and Cumballa
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- 20 Filling of Thane Creek Flats
- 21 Filling of Mahul Creek Flats
- 22 Third Back Bay
- 23 Bandra-Kurla Complex
- 24 Naval Dockyard

# Mumbai City Land Reclamation Development

## 1820-1880



### CAUSEWAYS

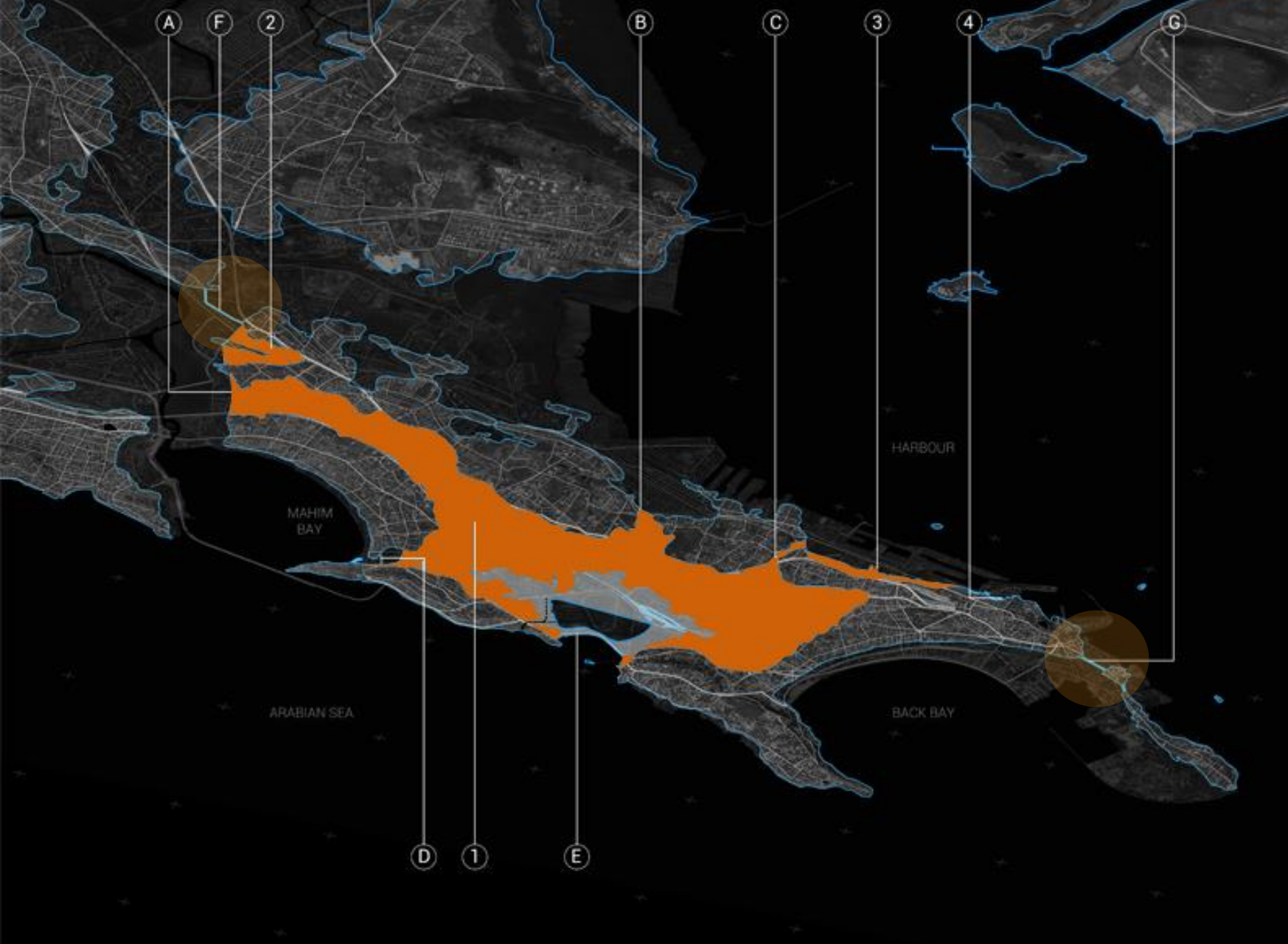
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1820-1880



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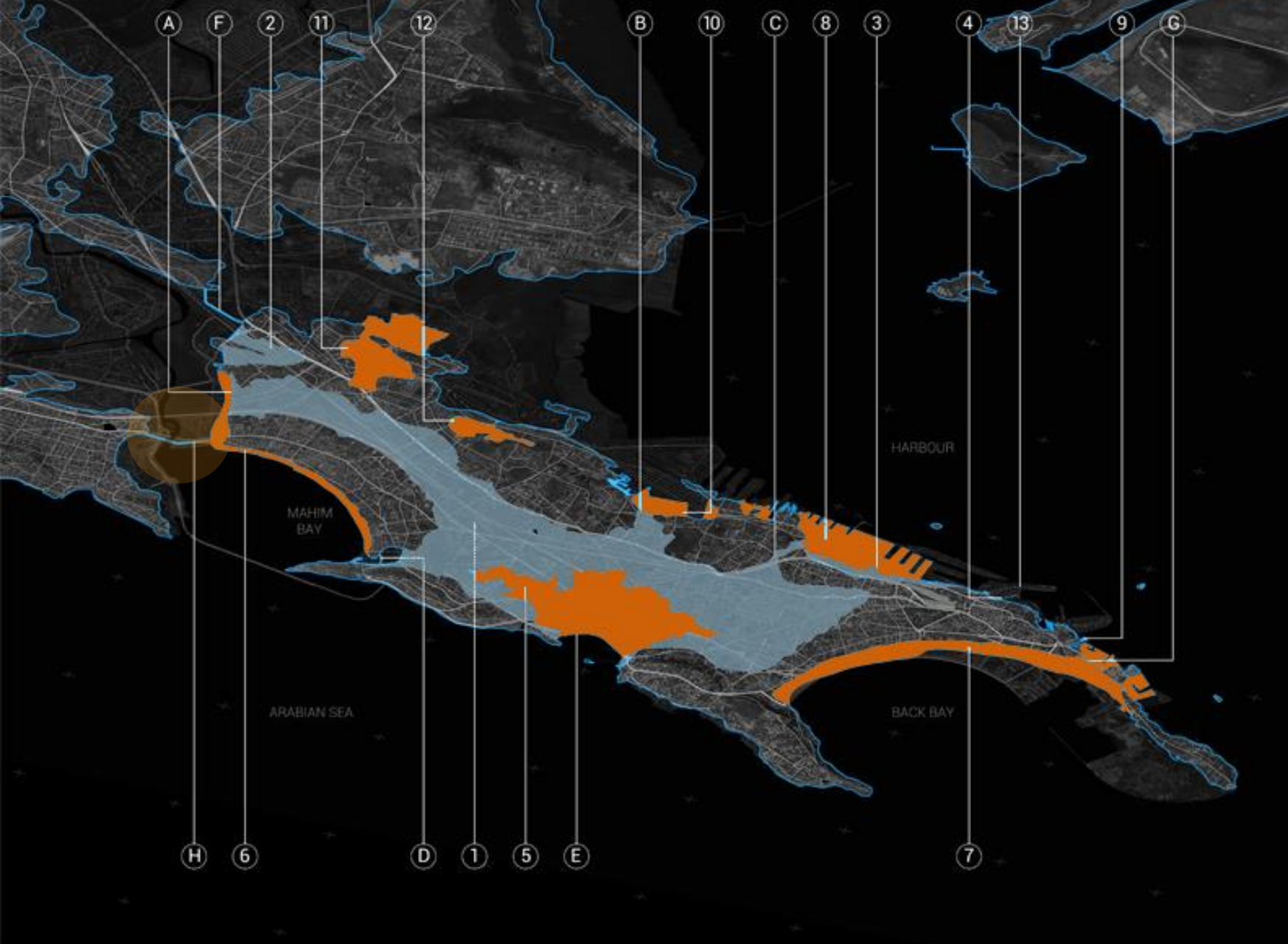
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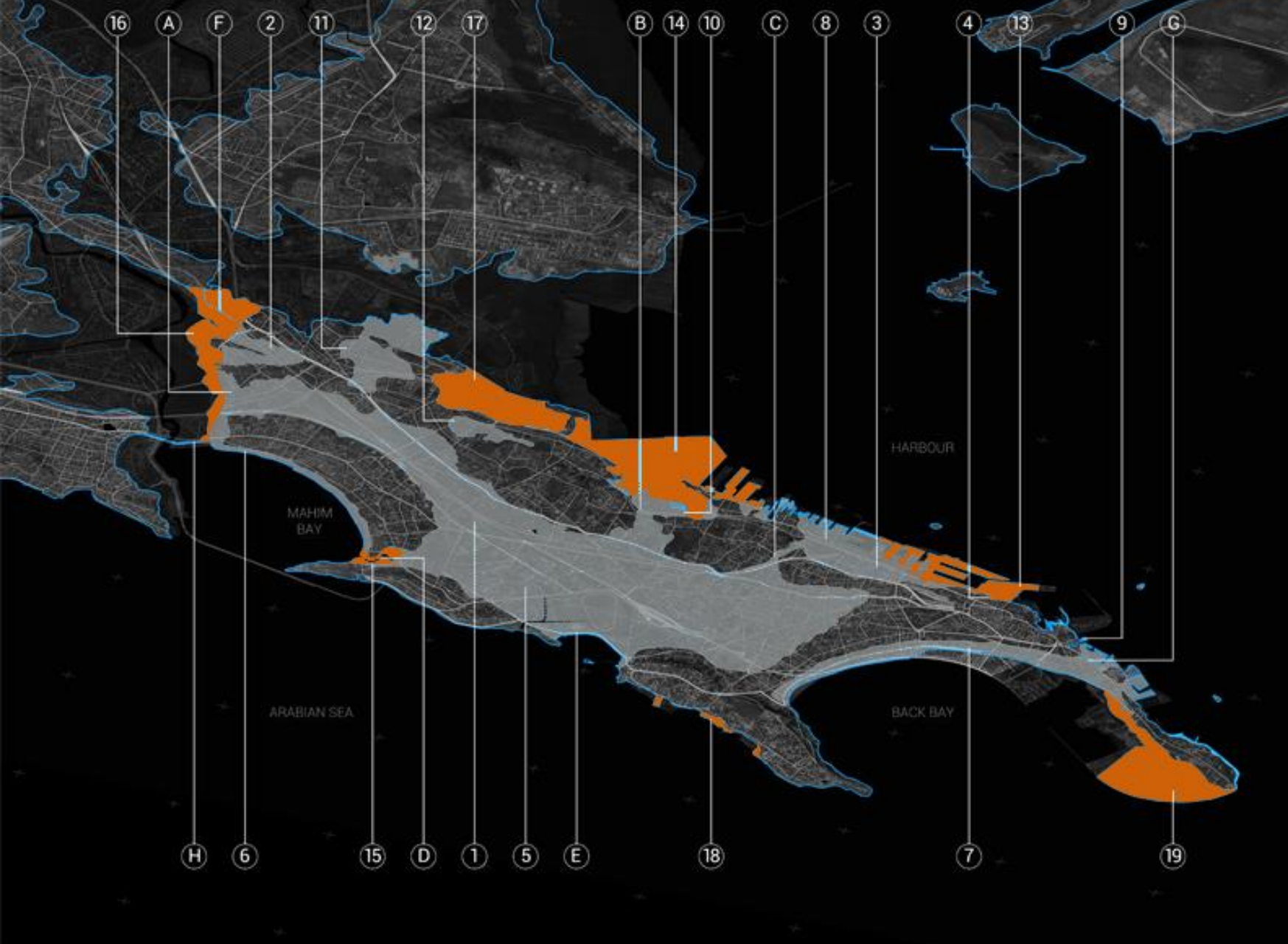
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# Mumbai City Land Reclamation Development

## 1880-1930



### CAUSEWAYS

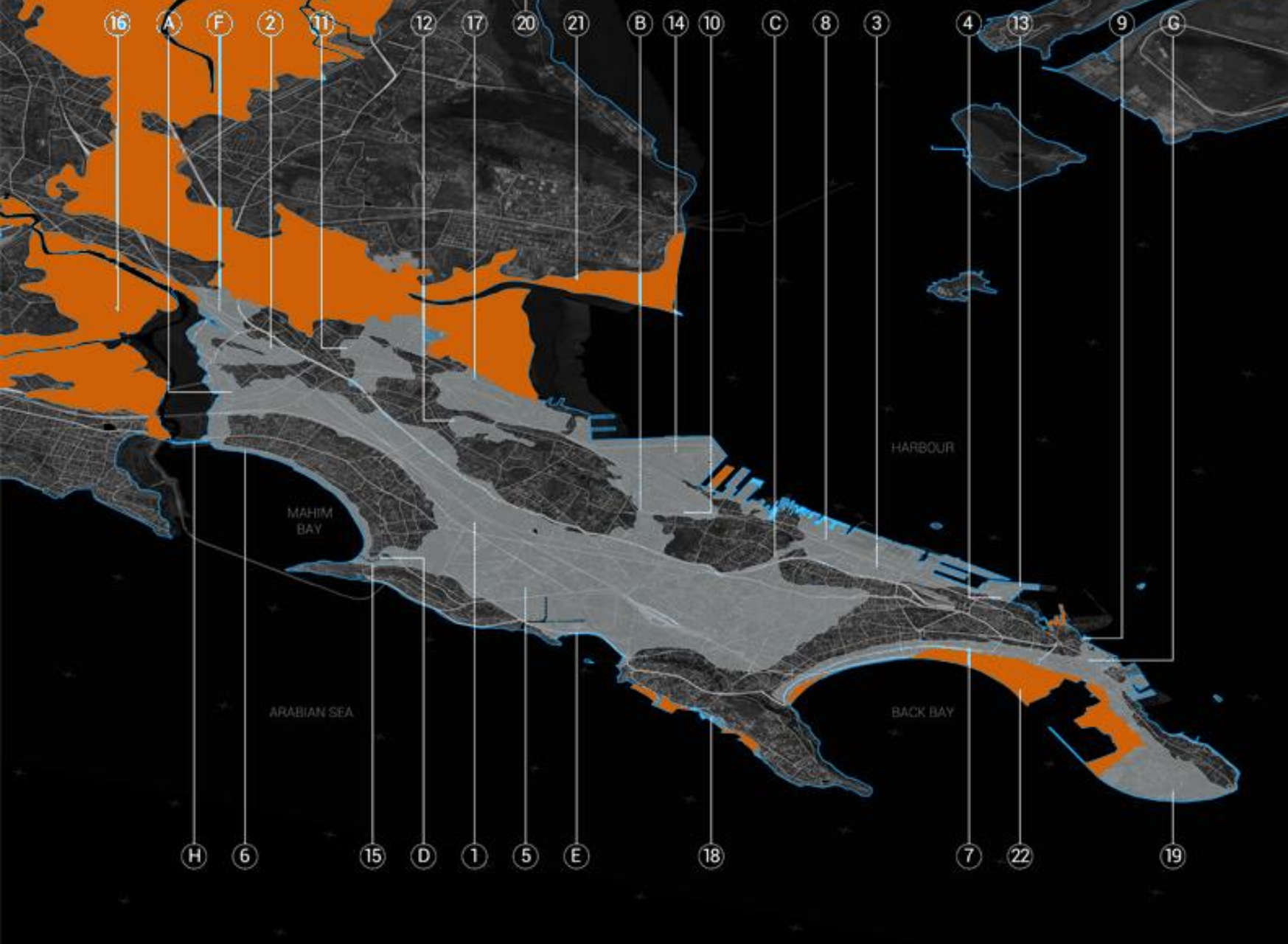
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# Mumbai City Land Reclamation Development

## 1930-1970



### CAUSEWAYS

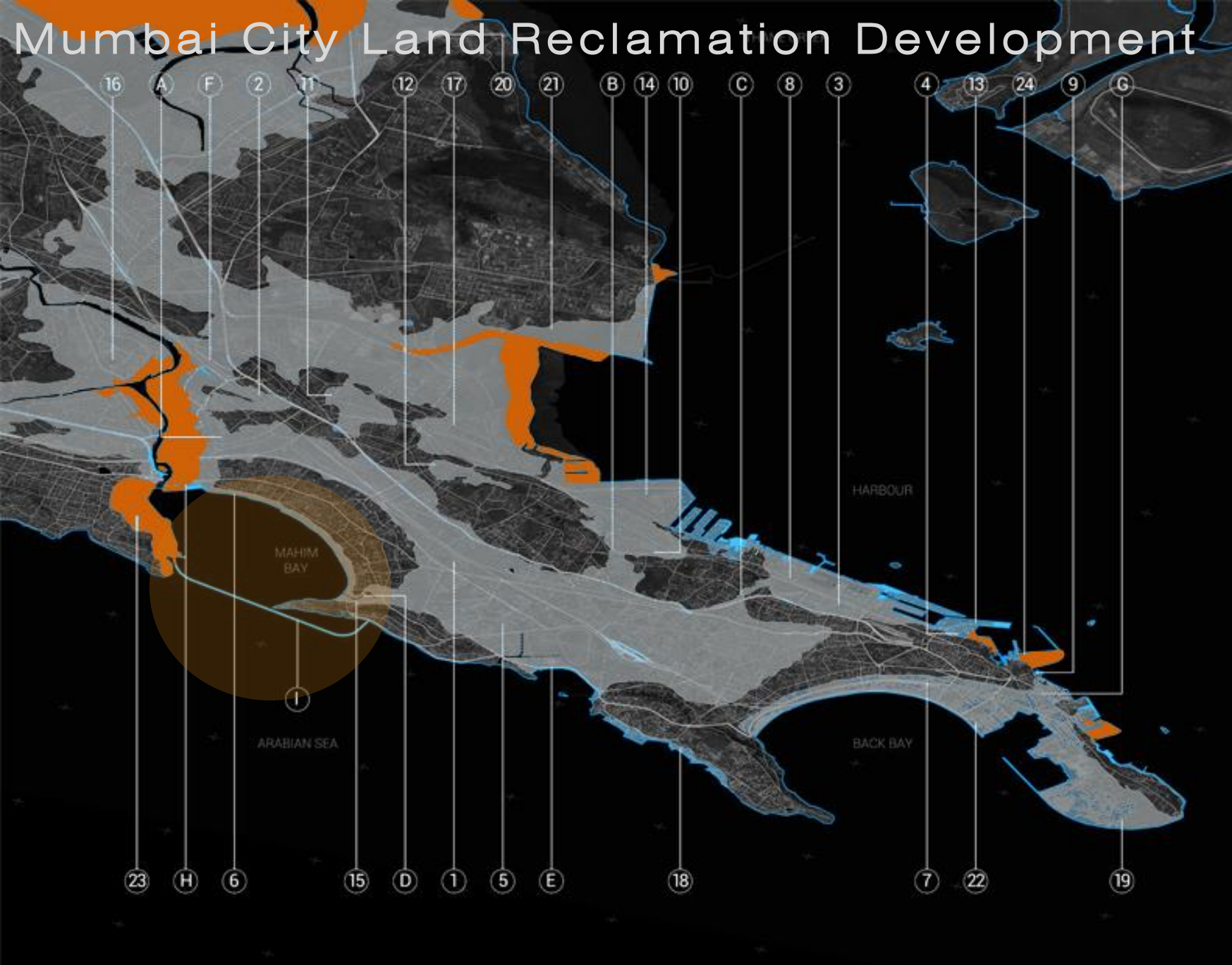
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# Mumbai City Land Reclamation Development

## 1970-2012



### CAUSEWAYS

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- 24 **Naval Dockyard**





# Land Reclamation at Eastern Harbor

## 19<sup>th</sup>- 20<sup>th</sup> century

Reclamation took place from Sassoon Dock in the south to Sewri in the north

## 1860's-

The Elphinstone Land & Press Company was formed to reclaim 250 acres of land from Apollo Bunder to Mazagaon

## 1880's-

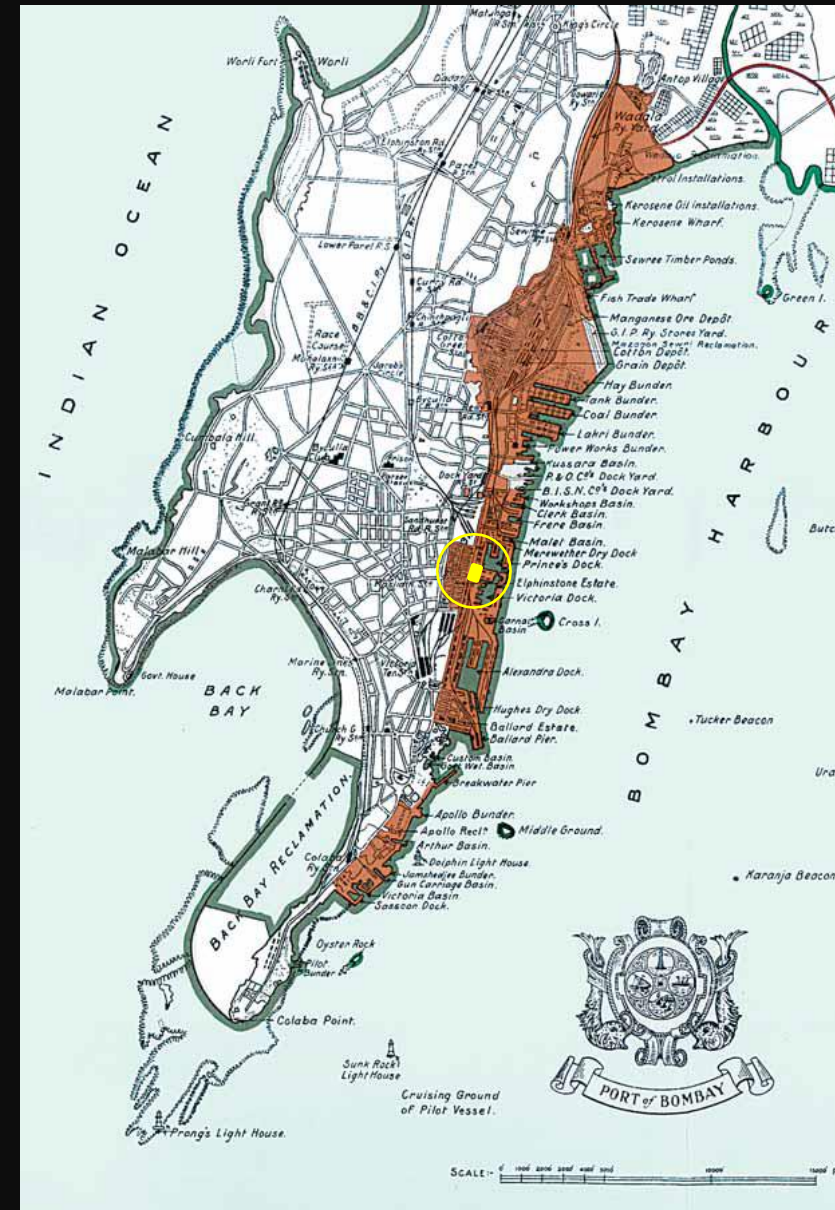
Bombay Port Trust completed the rest of Apollo Bunder to Mazagaon reclamation and built dry docks

## 1900's-

22 acres Ballard estate built from the earth excavated for building a dry dock



Reclaimed lands of Bombay



Docks of Bombay Harbour

# Est. of Bombay Port Trust (BPT) 1873

Private companies reclaimed land on the foreshore for the landing and shipping facilities

These Private properties were later claimed by the government which made BPT the largest land owner in the city of Bombay.

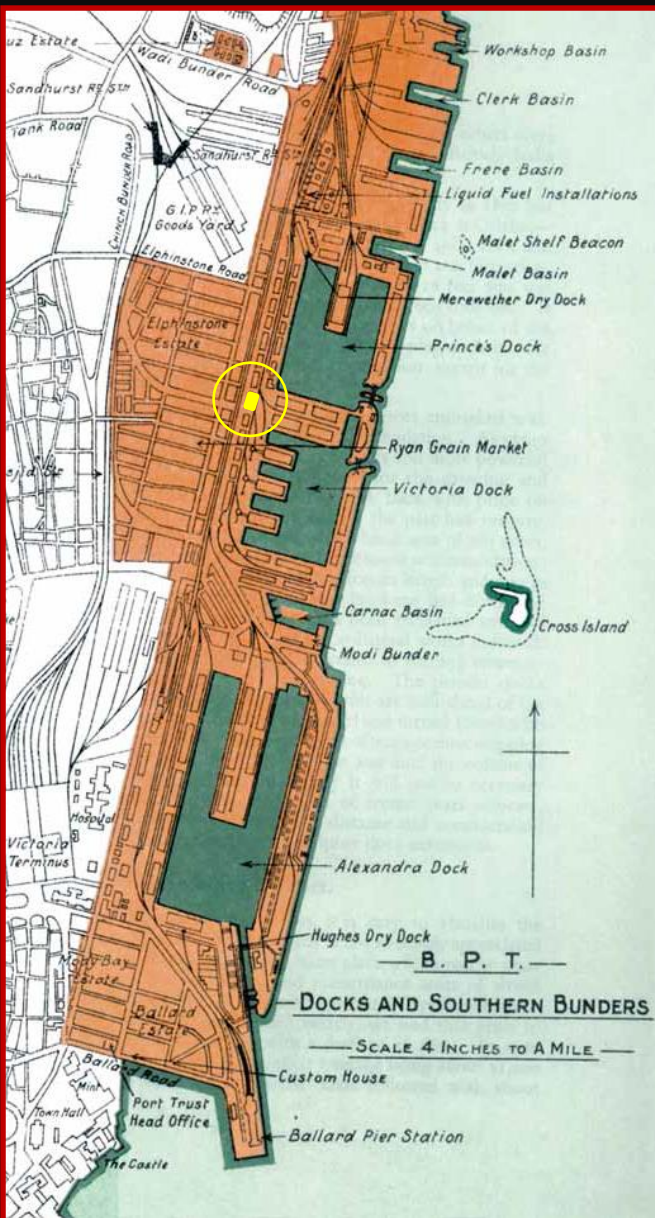
**BOMBAY PORT TRUST** was established in June 26, 1873

Government dry Docks were built between 1748-1811

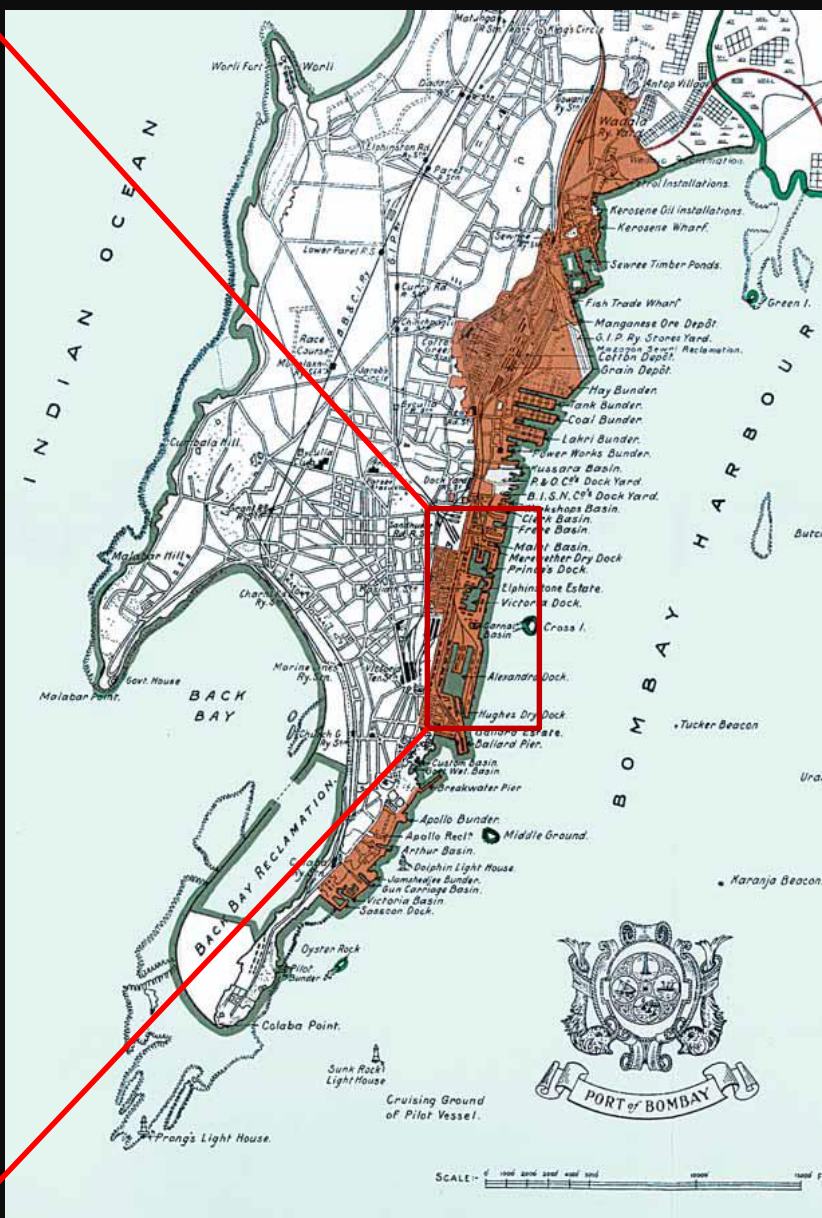
**Sassoon Dock** being the first private Wet dock was built by Sir David Sassoon in 1875.

Prince's dock was opened in 1880, Victoria Dock in 1888 and Alexandra Dock (later Indira) in 1914

Hughes dry dock constructed in 1950



Southern Docks of Bombay Harbour



Docks of Bombay Harbour

# Bombay Port Trust (BPT) 1938



Aerial view of Alexandra dock entrance and the Hughes dry dock



Aerial view of Prince's and Victoria Dock with Carnac Bunder in Foreground, 1938

REGENERATING MUMBAI'S PORTLANDS  
IMC-APLI MUMBAI

# Introduction

## Access to ALL

Sports, Health, Education facilities  
open for all

Parks, Museums, Libraries etc for All



### Transit Oriented Design

integrated mobility

Pedestrian and cyclist friendly

Walking time to transit max. 10  
minutes

Water front to remain  
public

Human scale : First People  
then roads

Access for ALL

Standing together  
as One MUMBAIKAR  
Community



**ME MUMBAIKAR - MY VOICE -  
MY CITY**

## A Citizens Vision Plan

### Opportunity Mumbai:

*Redeveloping the PortLands for a liveable Mumbai*

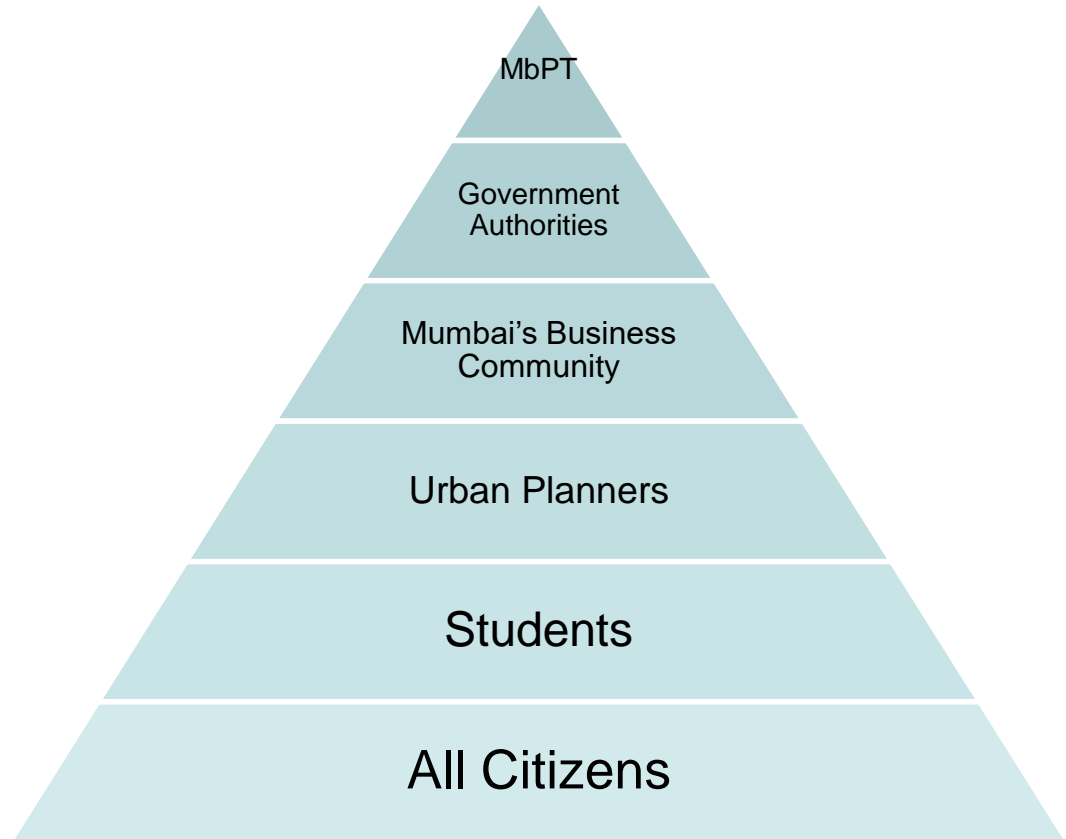


APLI Mumbai - A Port Lands Initiative By Citizens To Re-Imagine Mumbai

# Introduction



## A COLLABORATIVE & CONSTRUCTIVE MULTI-STAKE HOLDER INVOLVEMENT



APLI Mumbai - A Port Lands Initiative By Citizens To Re-Imagine Mumbai


# Introduction

  
**Transit Oriented Design**  
integrated mobility  
Pedestrian and cyclist friendly  
Walking time to transit max. 10 minutes

**Water front to remain public**  
Human scale : First People then roads  
Access for ALL

**Access to ALL**  
Sports, Health, Education facilities open for all  
Parks, Museums, Libraries etc for All

**Standing together as One MUMBAIKAR Community**

  
**ME MUMBAIKAR - MY VOICE - MY CITY**

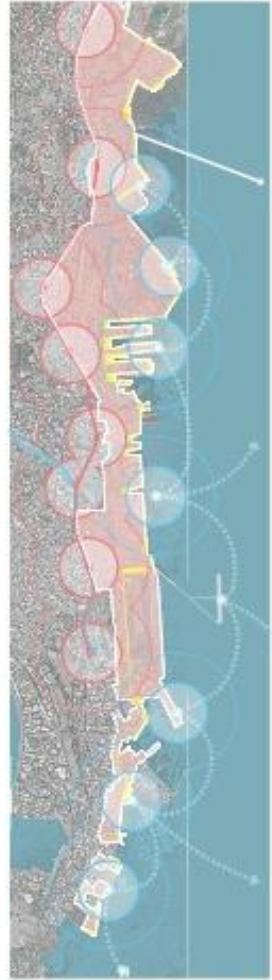
Neighbourhood for Living



Transit Oriented Development



Public Water Front



# Highlights

## Access to ALL

Sports, Health, Education facilities open for all

Parks, Museums, Libraries etc for All



### Transit Oriented Design

integrated mobility

Pedestrian and cyclist friendly

Walking time to transit max. 10 minutes

Water front to remain public

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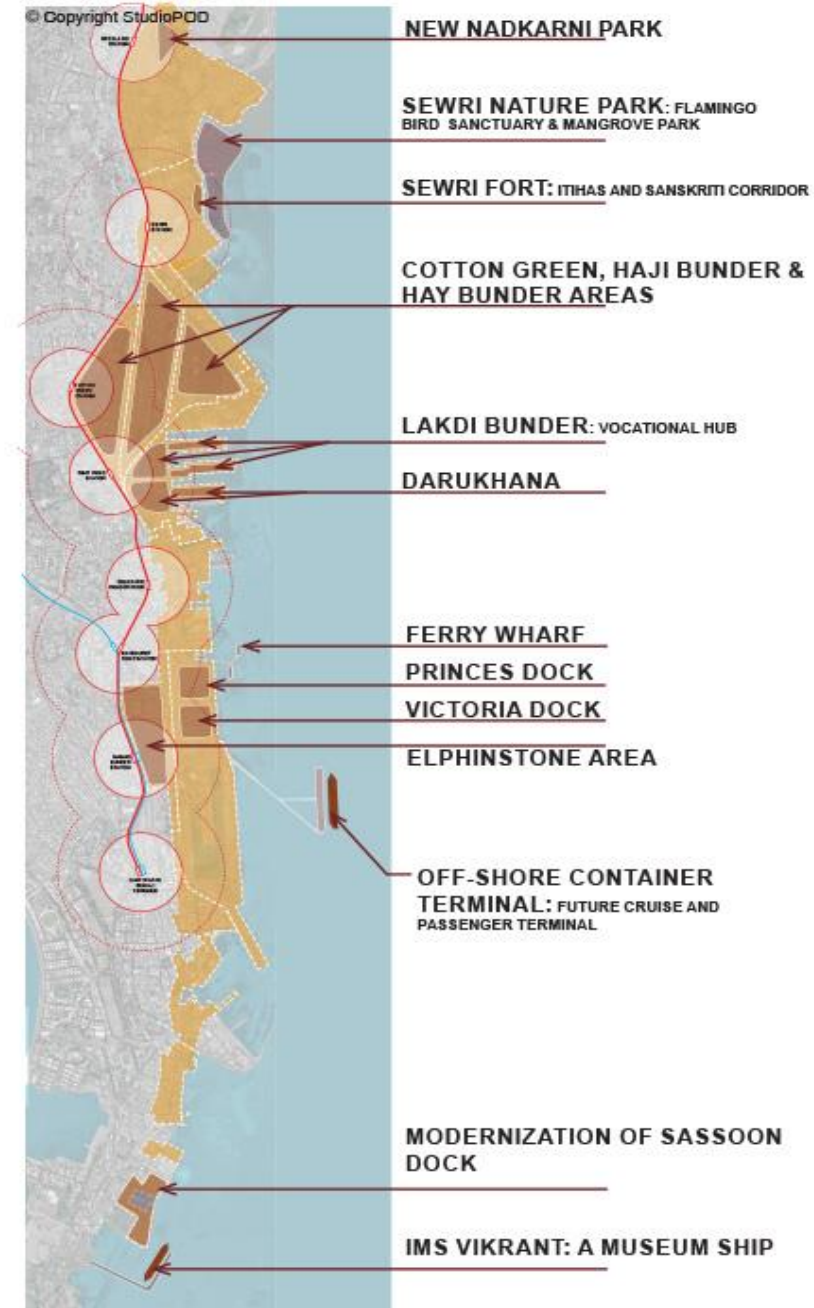


## ME MUMBAIKAR - MY VOICE - MY CITY

## Area Under Consideration

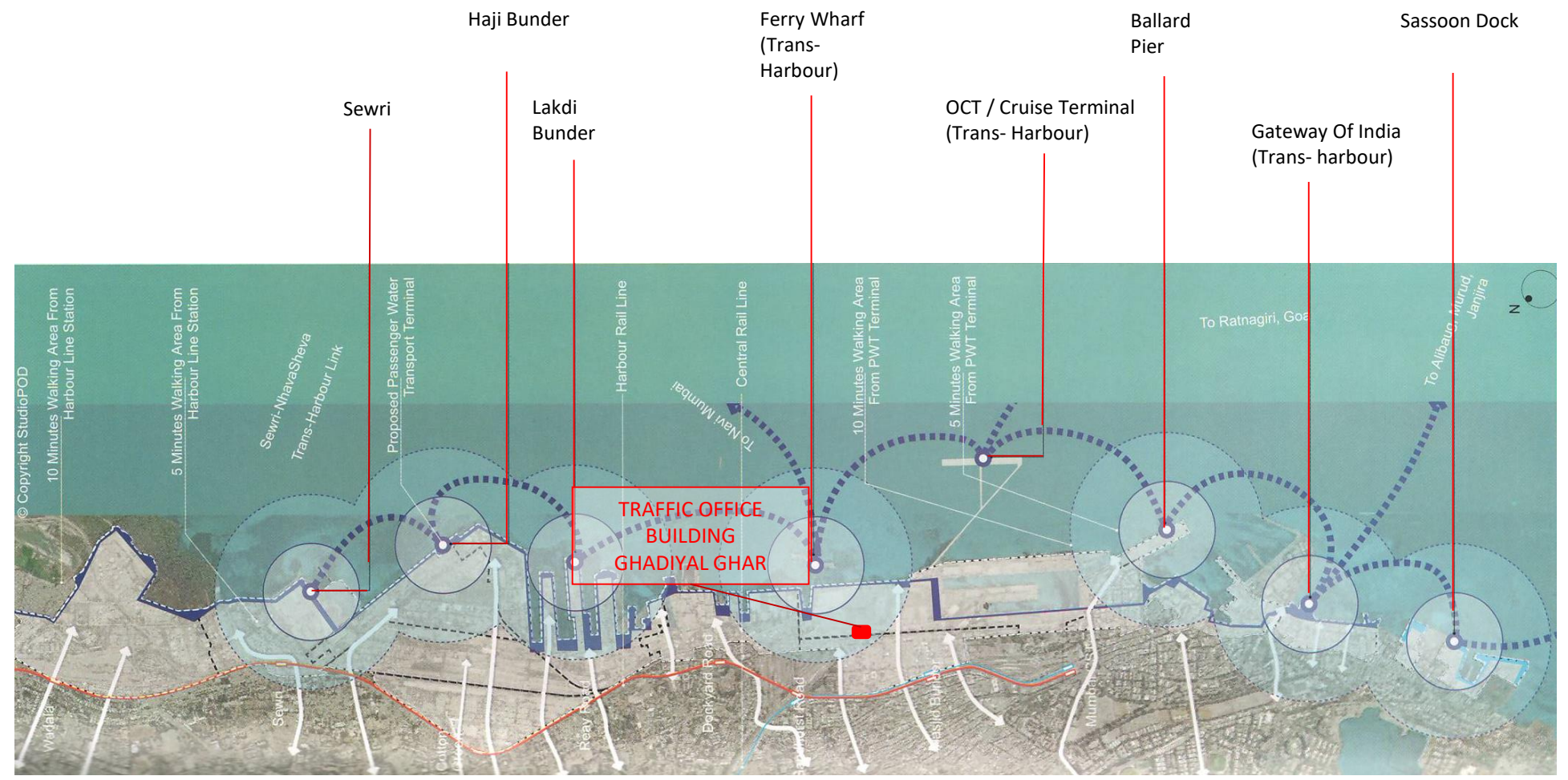


## Creating 12 Neighbourhoods



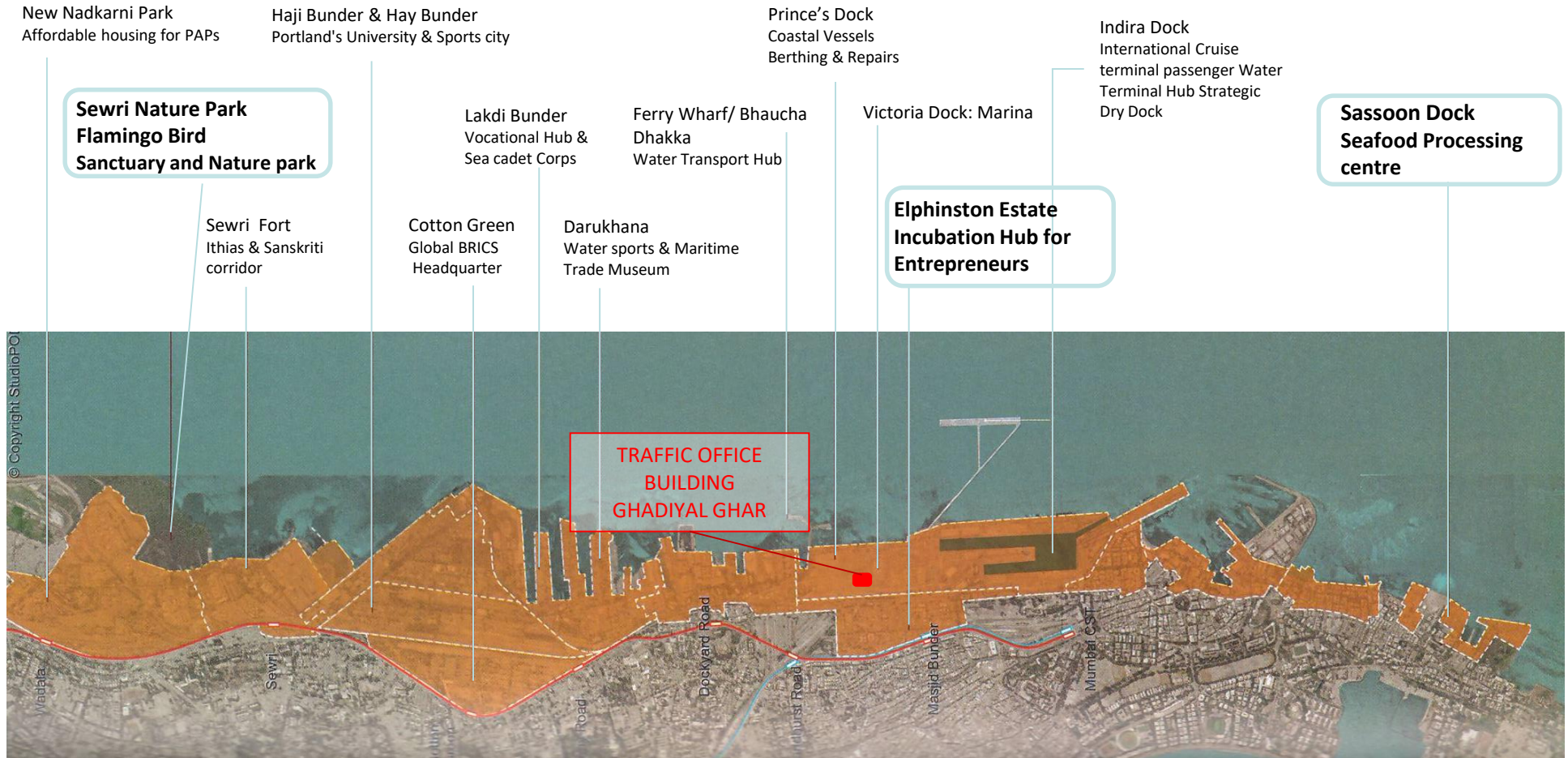


# Highlights: Vision for Water Transport

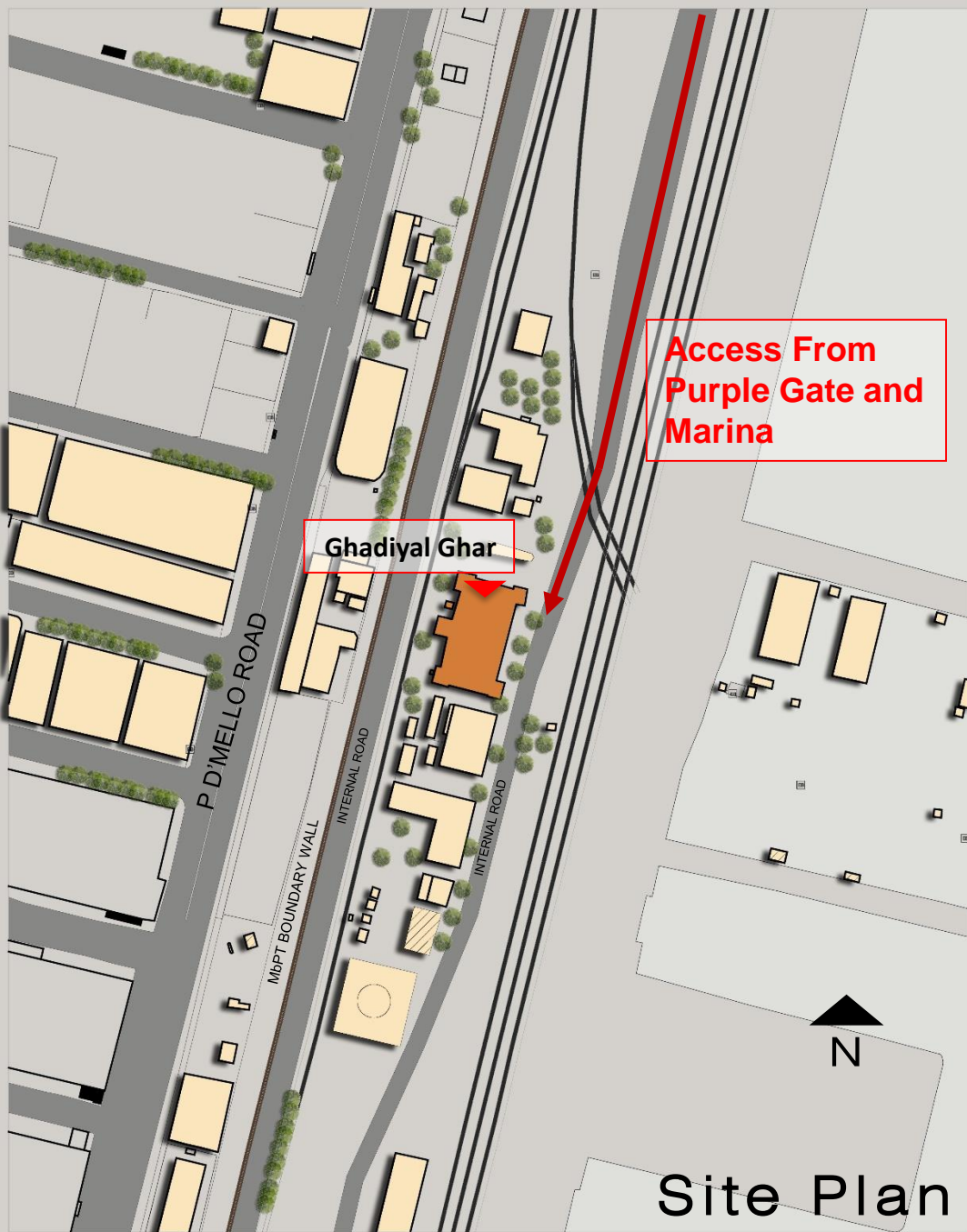


© Copyright StudioPOD

# Highlights: Vision for Port Lands Neighbourhoods



© Copyright: StudioPOD



View from Ghadiyal Ghar – Looking towards North (Purple Gate)



View from Ghadiyal Ghar – Looking towards West (P D'Mello Road)

TIME BALL BUILDING/ TRAFFIC OFFICE BUILDING  
MARITIME MUSEUM FOR MUSEUM

# Traffic Office Building

The Dock Traffic office building (Prince's and Victoria Docks) – **Ghadiyal Ghar**, name derived owing to this Clock Tower

Built by the Bombay Port Trust under **Engineer In-charge Ormiston**

Commenced in **January 1888**, and completed in **June 1890**.

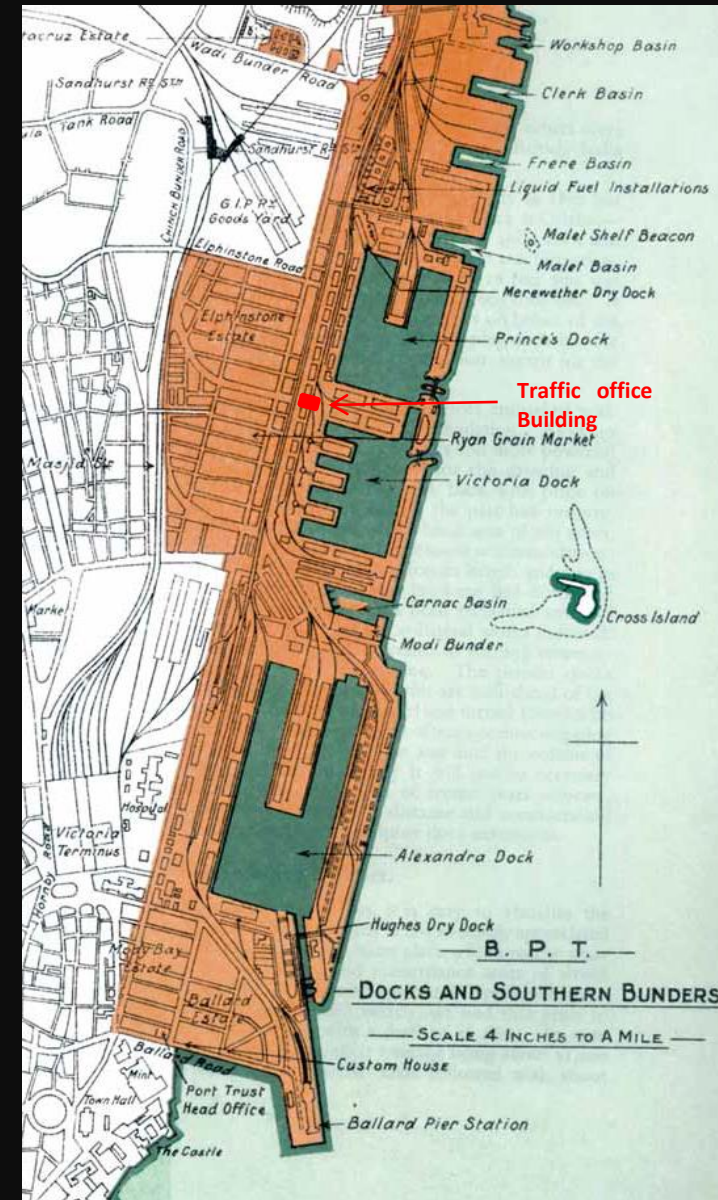
The building has a large turret containing a **clock** and surmounted by a **time-ball** which used to fall daily at noon. The watch operated for the last time on the day of explosion on 1944

Constructed using **Basalt stone**.

Three storeys high houses the offices of Dock Superintendent, Traffic Manager, Audit and the departmental staff officers. The top floor had the quarters of Dock Master.



Traffic Office (Time ball Building) at Prince's & Victoria Dock



Docks of Mumbai

# Traffic Office Building –Timeball

The Time ball is time signalling device

It consists of a **large, brightly painted wooden or metal ball** that used to drop at a predetermined time.



Clock Tower Turret and its time ball

# Victoria Docks Explosion 1944



The BPT railway suffered severe damage during the explosion, Ghadiyal Ghar in background

# Memorial at P&V Docks

**14 April 1944** - The great explosion of Fort Stikine in Victoria dock carrying explosives during the second world war

A memorial erected (Shipwreck) in the honour of those who died in the dock in the foreground of Traffic Office building

The day of explosion is now observed as the Bombay Fire Service day



Memorial Constructed outside the fire Brigade Headquarter, Byculla

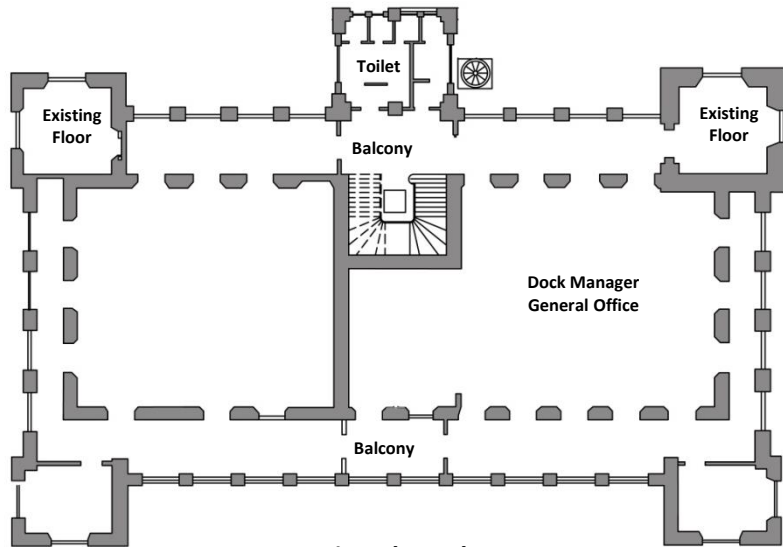


Shipwreck Memorial in front of Traffic Office (Time ball Building) at Prince's & Victoria dock (1940-60s picture)

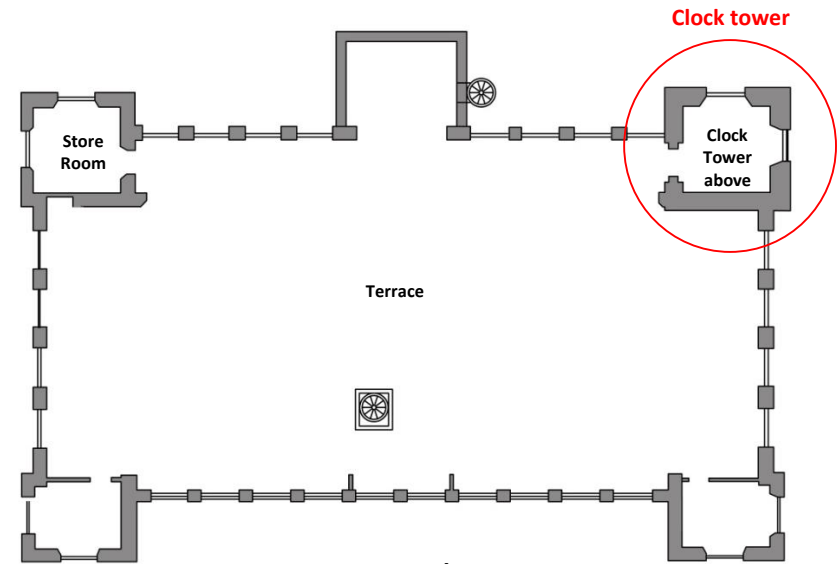


# Floor Plans dated September 1944

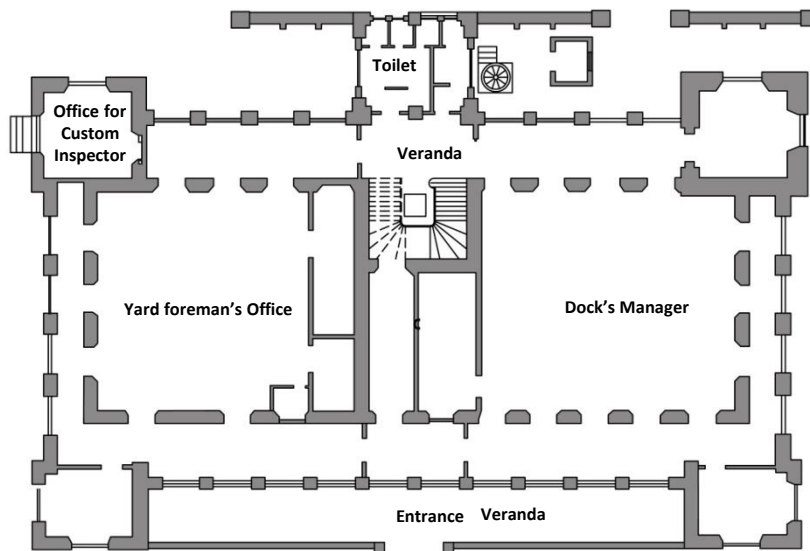
Total Built-up 24000 sq.ft approx.



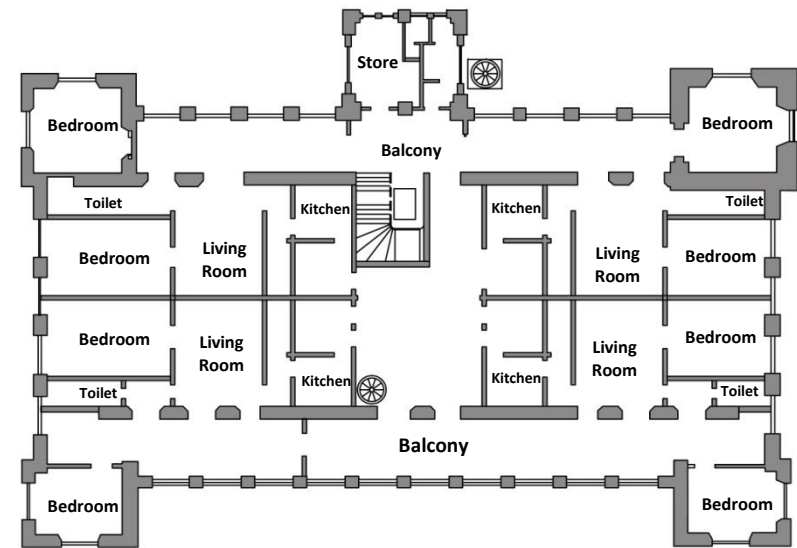
First Floor Plan



Terrace Plan



Ground Floor Plan



Second Floor Plan



# Exterior (April 2018)



Clock Tower from Terrace



Traffic Office (Time ball Building) from P D'Mello Road



Terrace



Entrance Facade of the Building (inside MbPT)

# Interior (April 2018)



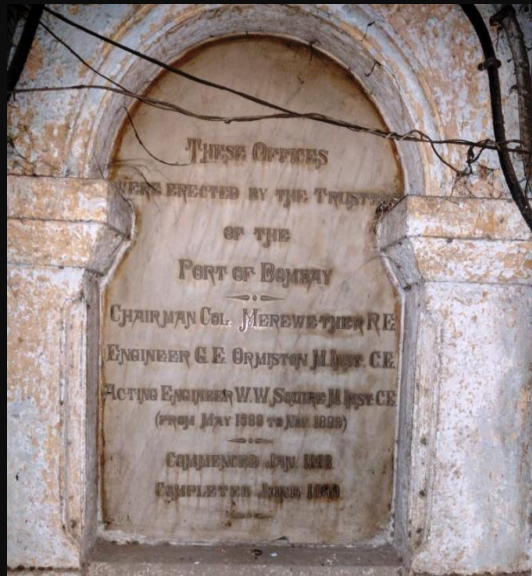
Entrance Facade of the Building



Main Staircase



Ground floor Hall



Traffic Office (Time ball Building) Plaque



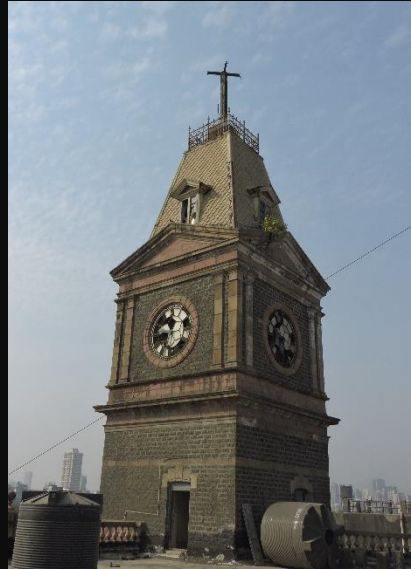
First Floor Balcony



First Floor Hall

# Clock Tower Interior (2016)

Credit: Mohan Narayan



External view



Time ball at Clock Tower Apex



Clock Mechanism



Clock from inside



Clock Mechanism

# CONSERVATION OF TRAFFIC OFFICE BUILDING

PRESERVATION

RESTORATION

RETROFITTING

SERVICES UPGRADE

INTERIORS FOR MARITIME MUSEUM

## STAGE I BUILDING DOCUMENTATION

CULTURAL SIGNIFICANCE

MEASUREMENT SURVEY FOR AS-BUILT DRAWINGS

ARCHIVES

TYPE OF STRUCTURE, MATERIALS & CONSTRUCTION, SPECS & TECHNIQUES

PAST WORKS

## STAGE II BUILDING CONDITION ASSESSMENT & ANALYSIS

VISUAL CONDITION MAPPING

ARCHITECTURAL DEVIATION (ORIGINAL VS ADHOC)

STRUCTURAL AUDITS & ANALYSIS

FUNCTIONAL AUDITS (FIRE SAFETY, ACCESSIBILITY, ENERGY EFFICIENCY, ETC)

MEP ANALYSIS

STANDARDS & CODES

FUTURE NEEDS

## STAGE III FORMULATION, PROPOSAL & FUNDING

CONSERVATION SOLUTIONS

SERVICES UPGRADE

INTERIORS FOR MARITIME MUSEUM

PRIORITY LIST & LOGISTICS

COSTING

PROJECT FUNDING

## STAGE IV PROPOSAL FINALIZATION & APPROVAL

CLIENT

LOCAL MUNICIPAL AUTHORITY & OTHERS

## STAGE V IMPLEMENTATION

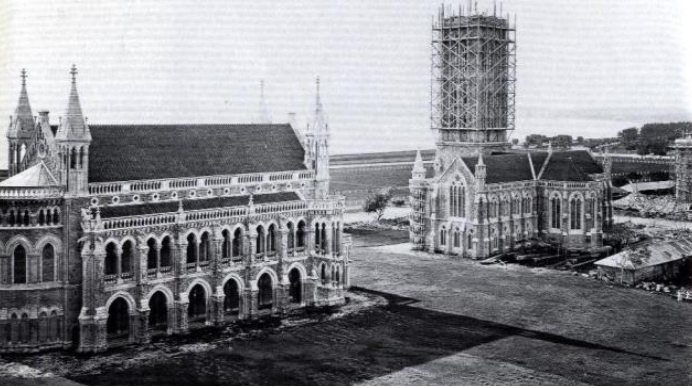
TENDER

EXECUTION

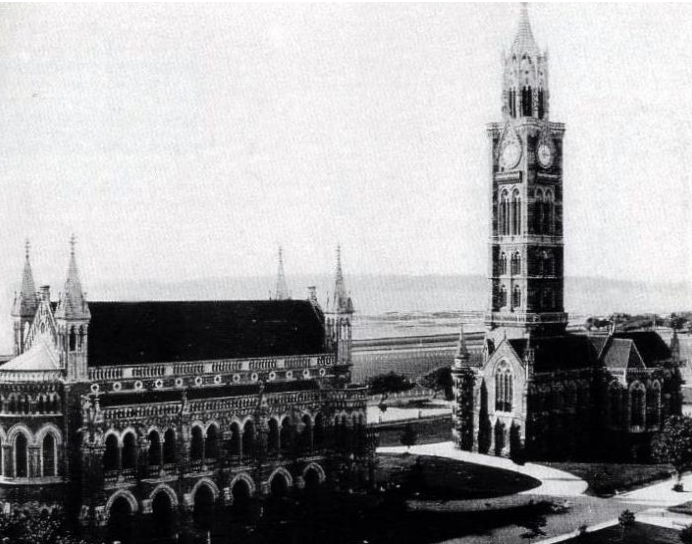
SITE MONITORING

AFTER COMPLETION – ASSISTING CLIENT FOR DEVELOPING FUTURE MANAGEMENT STRATEGIES AND MAINTENANCE

RAJABAI CLOCK TOWER  
&  
UNIVERSITY OF MUMBAI LIBRARY BUILDING  
MUMBAI UNIVERSITY, FORT, MUMBAI



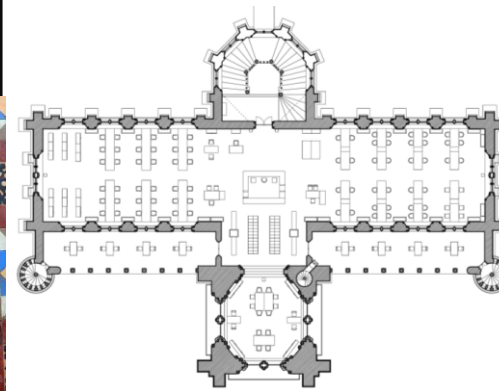
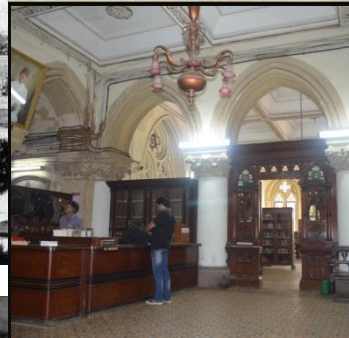
CONSTRUCTION OF TOWER 1874



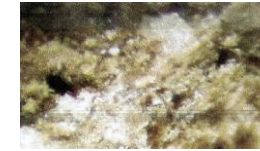
AT COMPLETION 1878



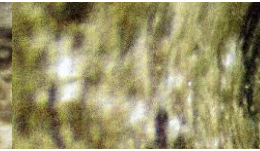
OVAL MAIDAN 1938



SAMPLE FOR TESTING STEEL & WOOD



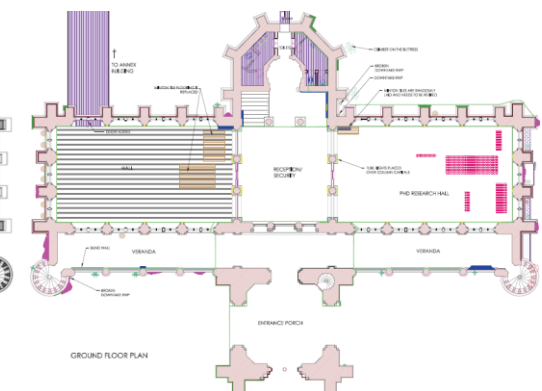
DAMAGED WOODEN SECTION



GOOD QUALITY WOODEN SECTION



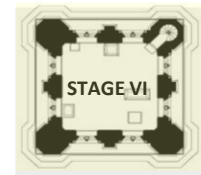
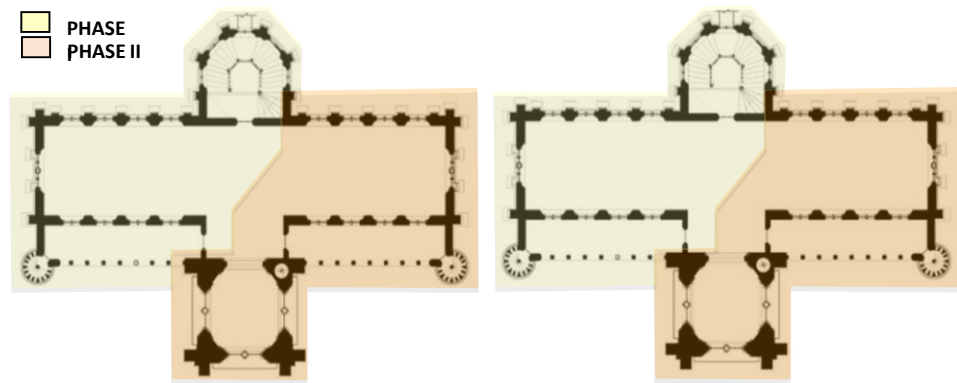
FIRST FLOOR FRAMEWORK IN STEEL GIRDERS WITH BURMA TEAK LATH PLASTER SURFACE STEEL FOUND RUSTED, IN DIRECT CONTACT WITH LIME



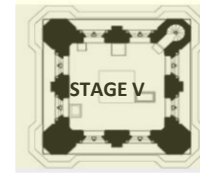
GROUND FLOOR PLAN



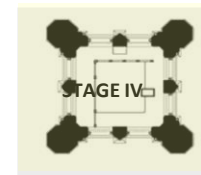
PHASE I  
PHASE II



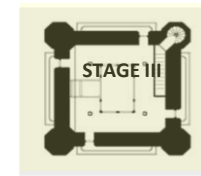
LEVEL 1



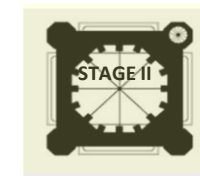
LEVEL 2



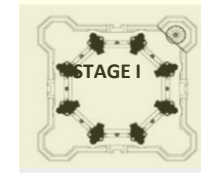
LEVEL 3



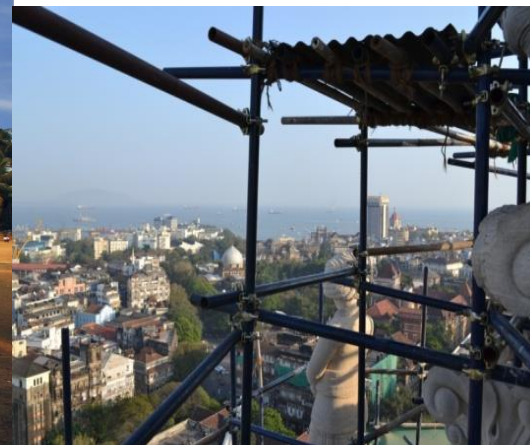
LEVEL 4



LEVEL 5



LEVEL 6





# RESTORATION OF RAJABAI CLOCK TOWER



DURING RESTORATION – FAÇADE CLEANING



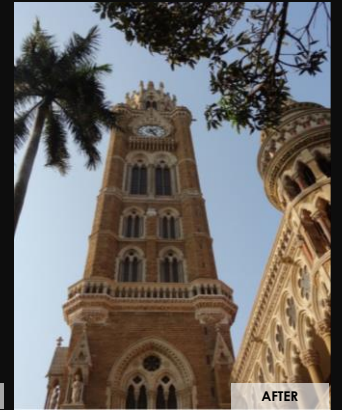
BEFORE



AFTER



BEFORE



AFTER



JETS SPRAY CLEANING



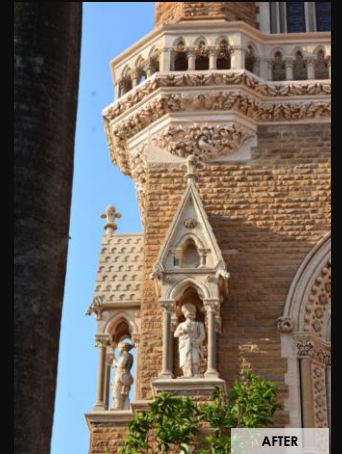
LIME REPOINTING



LOUVER REPAIR WORKSHOP AT 196 FEET



BEFORE



AFTER



SPLICE REPAIR TO RESTORE TW FLOOR JOISTS



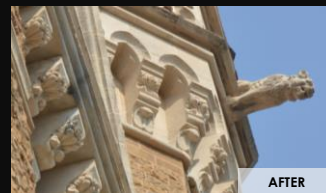
INTERNAL LIME PLASTER REPAIR (BEFORE & AFTER)



PAPER POULICING FOR DELICATE CLEANING OF LIME STONE DETAILS



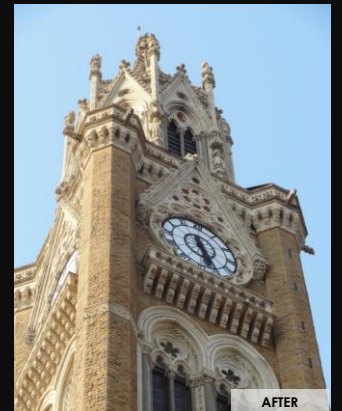
BEFORE



AFTER



BEFORE



AFTER

RESTORATION OF THE UNIVERSITY OF MUMBAI LIBRARY BUILDING



LIBRARY BURMATEAK CEILING RESTORATION

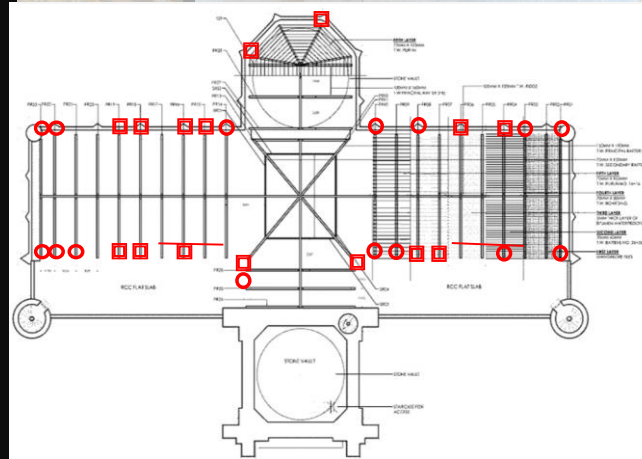
BEFORE



BEFORE

AFTER

DOORS & WINDOWS RESTORATION REMOVAL OF PAINT & POLISHING



RESTORATION WORK LOCATIONS ON FLOOR PLAN



BEFORE



AFTER



AFTER



MINTON TILE RESTORATION

BEFORE

AFTER

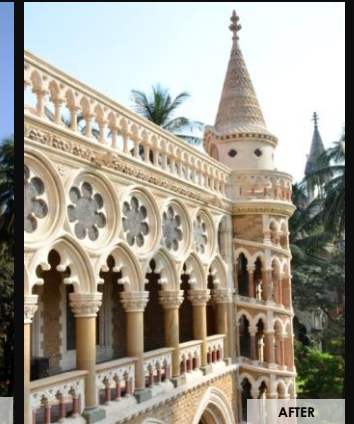


BEFORE

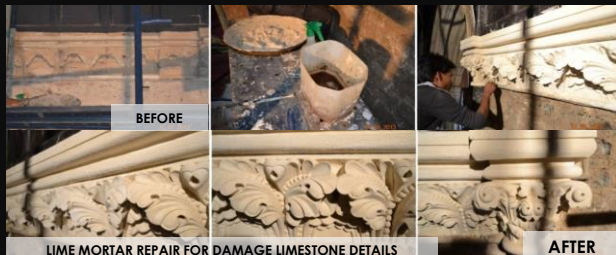
AFTER



BEFORE



AFTER



BEFORE

AFTER

LIME MORTAR REPAIR FOR DAMAGE LIMESTONE DETAILS



BEFORE

AFTER



BEFORE



AFTER

CSMVS TEXTILE GALLERY  
CSMVS MUSEUM, FORT, MUMBAI



# CONCEPT

Kabir  
I weave your name on the loom of my mind

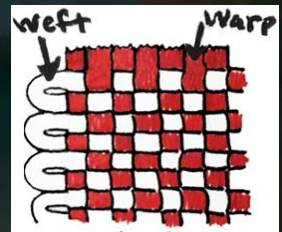
WARP-WEFT



+



= **CONCEPT**



Weaving involves using a loom to interlace two sets of threads at right angles to each other : the **warp** which runs longitudinally and the **weft** that crosses it.

The most common dye colors of:

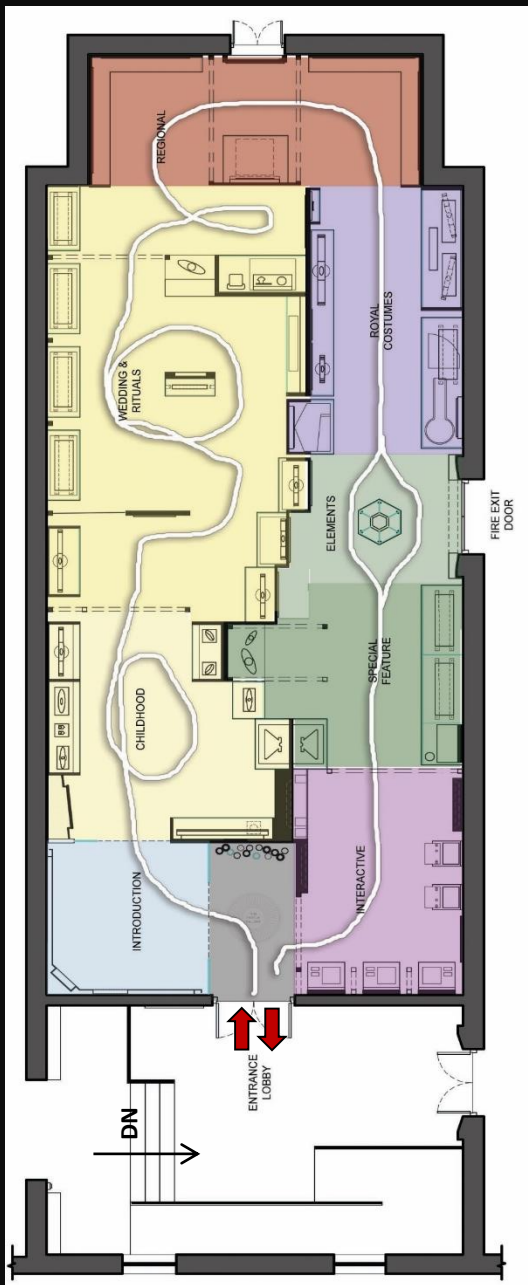
blue,	blue
yellow,	yellow
red,	red
violet, and	violet
green,	green

were obtained from plants and minerals native to the subcontinent.

	ENTRANCE	
	INTRODUCTION	blue
	FABRIC OF LIFE	yellow
	RELIGION	red
	ROYAL COSTUMES	violet
	ELEMENTS	
	SPECIAL FEATURE	green

Key design concept emerged during the research, design and consultation process.

It revolves creating a gallery that showcases in an **INNOVATIVE** and **INTERACTIVE** manner the vast collection of textiles of CSMVS. Based on the above the Museum interior space shall be divided into the following sections :



INTRODUCTION

FABRIC OF LIFE

RELIGION

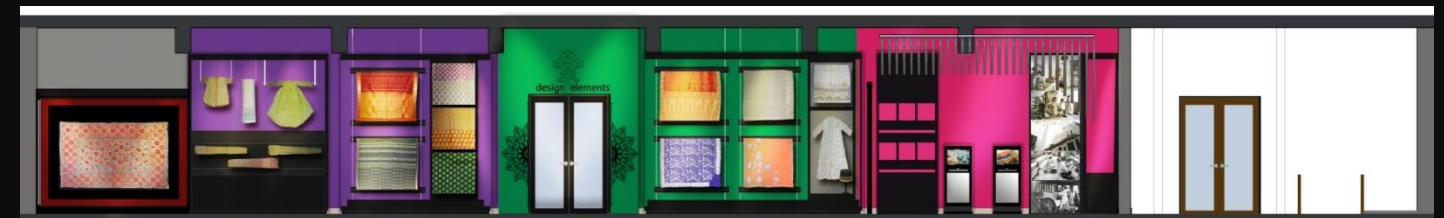


ROYAL COSTUMES

ELEMENTS

SPECIAL FEATURE

INTERACTIVE





INDIA & THE WORLD  
CSMVS MUSEUM, FORT, MUMBAI

# INDIA & THE WORLD A HISTORY IN NINE STORIES

देस-परदेस  
एक इतिहास नौ कहानियों में

The British  
Museum

THE MUSEUM  
OF  
MUMBAI



LEAD SUPPORT FOR THE EXHIBITION PROVIDED BY:

The City Foundation

123  
TATA TRUSTS

# INDIA AND THE WORLD

A HISTORY IN NINE STORIES



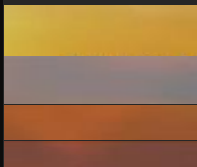
The exhibition tells the viewers nine stories of important historical eras in Indian history and what was going on in the world at the same time.

The aim is to engage the visitor in discussion; exploring not only similarities, but also the differences which demonstrate respect for parallel systems of knowledge, as well as present opportunities to learn something new. This helps us understand how our country India relates to the world today.

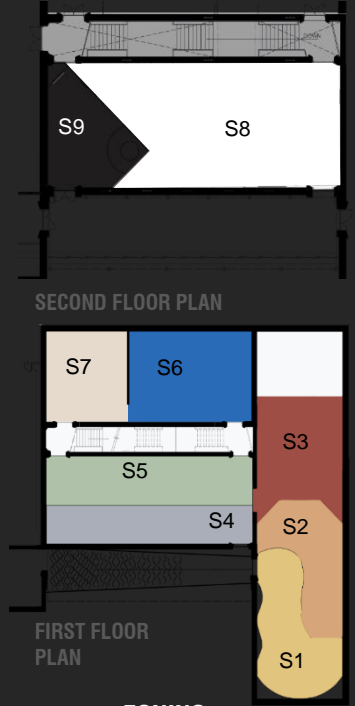




- S1 SHARED BEGINNINGS  
ANTIQUE GOLD
- S2 FIRST CITIES  
COPPER BROWN
- S3 EMPIRE  
MAROON
- S4 STATES AND FAITH  
SILVER GREY
- S5 PICTURING THE DIVINE  
GREY GREEN
- S6 INDIAN OCEAN TRADE  
DEEP BLUE
- S7 COURTLY CULTURES  
LAVENDER
- S8 QUEST FOR FREEDOM  
EGGSHELL WHITE
- S9 TIME UNBOUND  
BLACK



COLOUR PALETTE

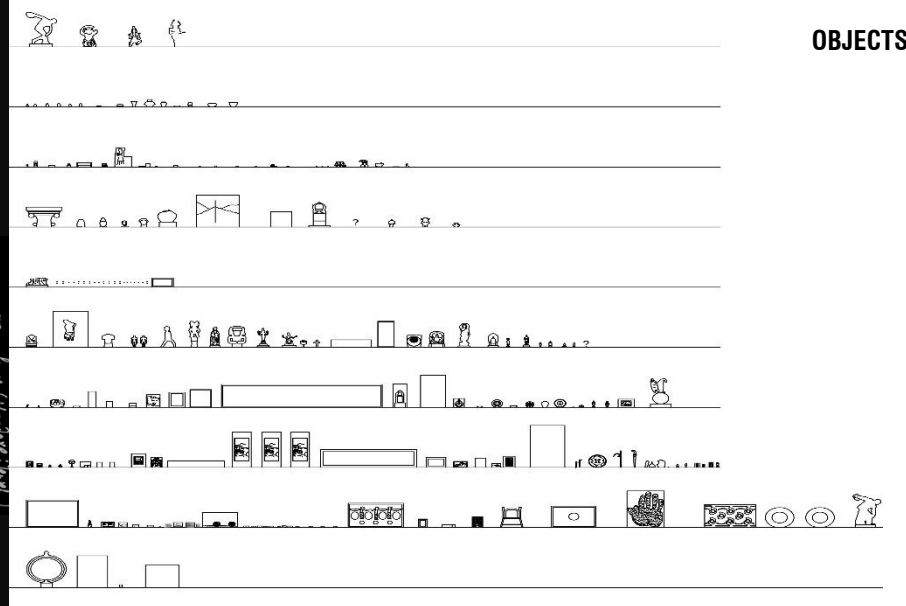
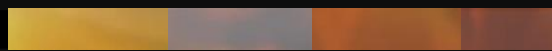
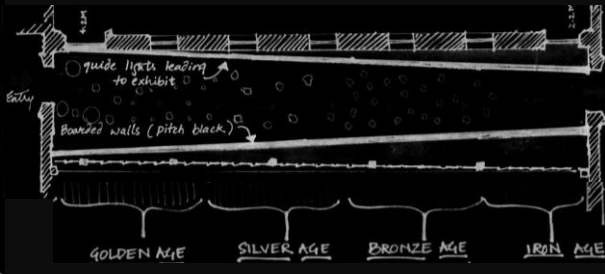
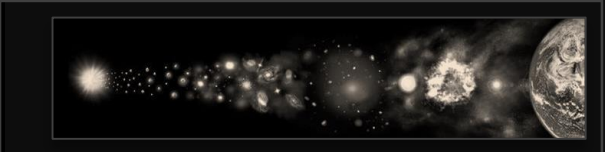


ZONING

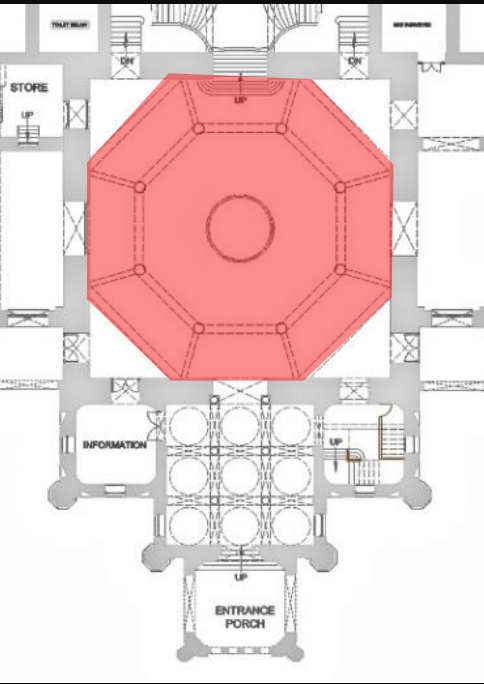
Creation of  
labyrinth like narratives  
that give context to  
individual objects



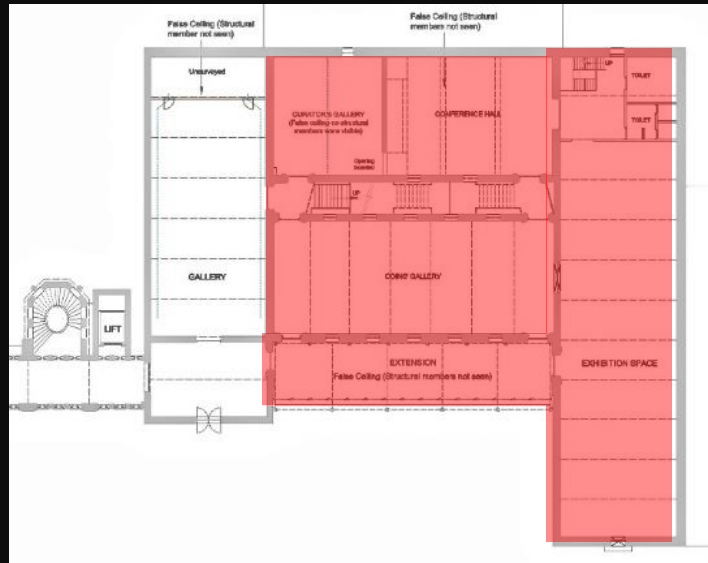
PREAMBLE



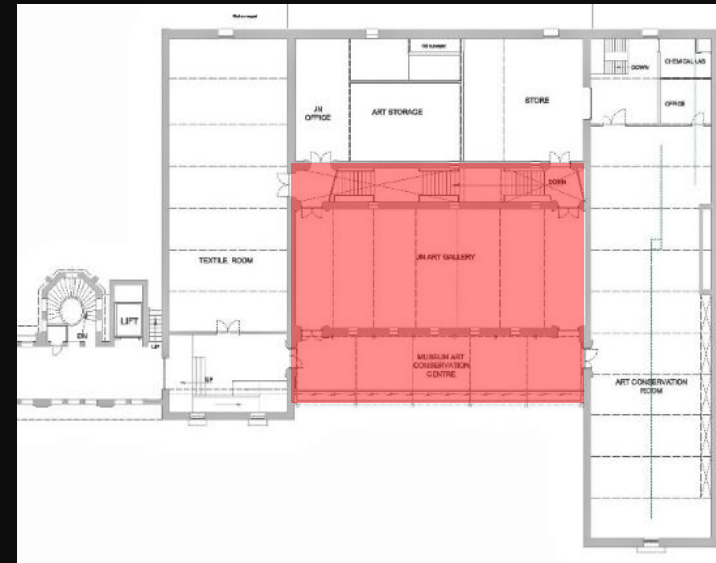
OBJECTS



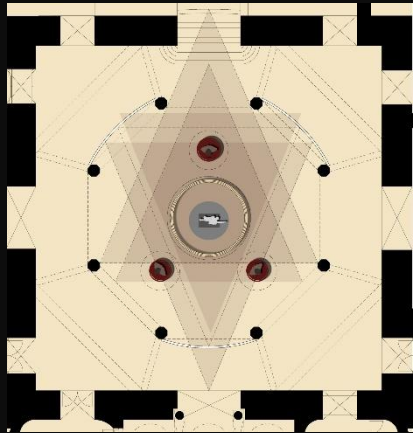
**GROUND FLOOR**



**FIRST FLOOR**



**SECOND FLOOR**



On Earth

TIME

appears to move in a straight ray

from start-point linearly to an infinite future.



**ROTUNDA**



**S1- SHARED BEGINNINGS**



**S2- FIRST CITIES**



**S3- EMPIRE**



**S4 & S5- STATES & FAITH, PICTURING THE DIVINE**



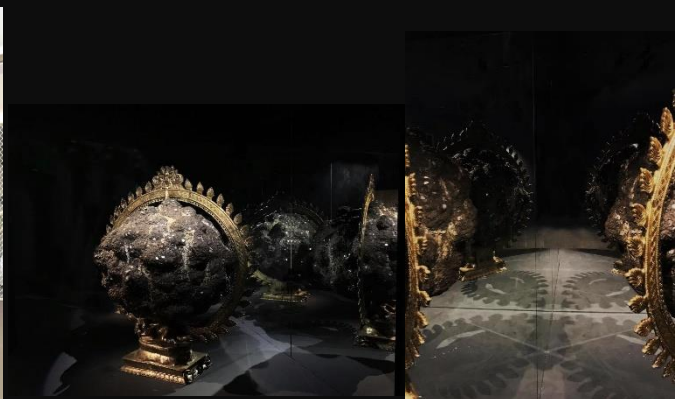
**S6- INDIAN OCEAN TRADE**



**S7- COURTLY CULTURES**

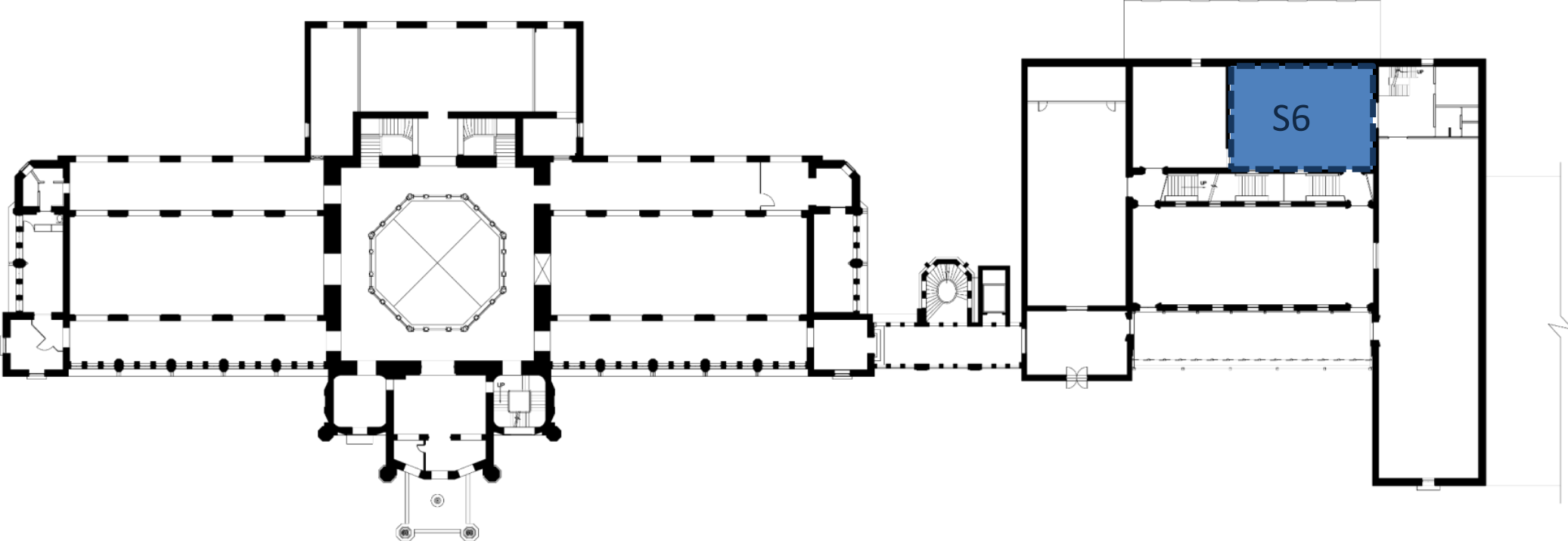


**S8 – QUEST FOR FREEDOM**



**S9 – TIME UNBOUND**

INDIA & THE WORLD  
INDIAN OCEAN TRADE GALLERY



- **Complex networks** existed that saw raw materials and products traveling extensively, merchants and sailors living and working far from their native homes .

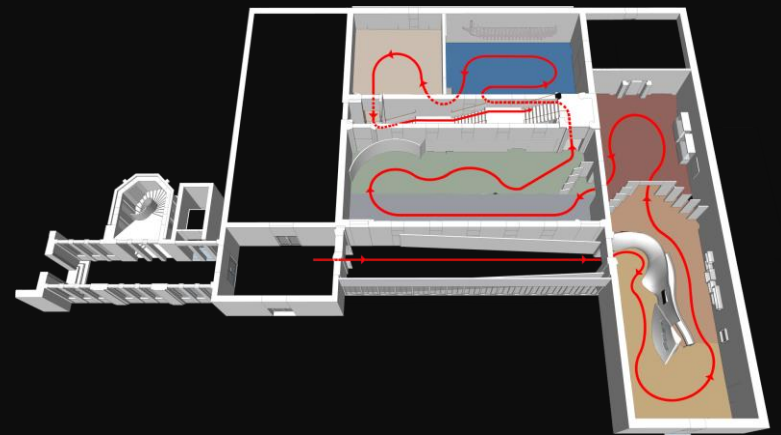
- **Trade & travel** across the Indian Ocean, linking East and South East Asia, with South Asia, the Middle East and Africa.







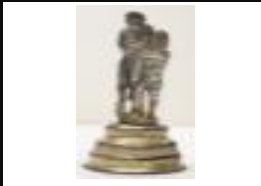












- Creation of an economic system linking Asia, Africa and Europe before European trade and empire.

S6

## INDIAN OCEAN TRADE

DEEP BLUE



<p>ROYAL BARGE</p> 	<p>COOKING POT</p> 	<p>RHINOCE ROS, AFTER DURER</p> 	<p>TOMBSTONE OF FRANCISCO BARBOSA DE MAGALHAES</p> 
<p>POSEIDON</p> 	<p>CHINESE BLUE AND WHITE JAR</p> 	<p>ROMAN PEPPER POT</p> 	<p>COIN OF EMPEROR THEODOSIUS</p> 
<p>ISLAMIC GRAVESTONE</p> 	<p>BOTTLE</p> 	<p>CHINESE DISH</p> 	<p>TEXTILES EXCAVATED FROM FUSTAT IN EGYPT</p> 
<p>ASTROLABE</p> 	<p>INDIAN CLOTH FROM EGYPT</p> 	<p>PILGRIMAGE MANUAL: FUTUH AL-HARAMAYN</p> 	<p>HEIRLOOM TEXTILE</p> 
<p>ROMAN NECKLACE</p> 	<p>KALAMKARI TEXTILE</p> 	<p>PELICAN ALTARPIECE</p> 	

# OBJECTS









Images & References Credits

- From Vision to Action Regenerating Mumbai Portland Report, IMC-Apfi Mumbai
- StudioPOD website
- Tides of Time, M K Kamath
- The Port of Bombay, MbPT
- Evolutionary Mumbai: Making of the "Island City" is part of a series of essays analysing the role of land reclamation in the (re)formation of eight coastal cities: Dubai, Mumbai, Singapore, Hong Kong, Incheon, Tokyo, Amsterdam, and Venice