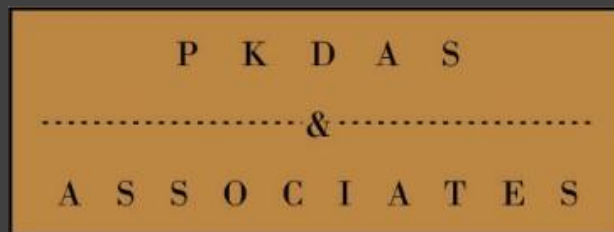


THE WUHAN PLACEMAKING WEEK 2018

**PLACEMAKING FOR
SUSTAINABLE ECOLOGY OF CITIES' :**

THE RE-INVIGORATION OF IRLA NULLAH, MUMBAI



4th DECEMBER 2018

THE NULLAHS OF MUMBAI



Aerial Image of the Irla Nullah taken in 2006

EVOLVING A PLAN FOR TRANSFORMATIVE, CITY-WIDE CHANGE

Mumbai has a large network of water channels and water courses that aid the natural storm water drainage in the city. The city authorities are apathetic towards their protection, conservation and integration with the city's Development Plan. Instead, these assets are merely looked upon to maximize construction and to accommodate real estate interests.

This initiative addresses the abuse and exclusion of over 300 kms of watercourses, that includes four rivers within the city that have been turned into 'nullahs' or drains. It brings to light the continuing degradation of the vital 140 sq. km of natural areas of the city -- its mangroves, wetlands, creeks, salt pans, rivers, lakes, beaches, hills and forests.

The Irla Nullah Re-invigoration Plan -- part of a larger citizens' movement advocating the Juhu Vision Plan that covers an area of 4 sq. km -- focuses on cleaning and turning the waters of a polluted and much-abused natural watercourse backyard and its immediate precinct in the western suburb of Juhu into a vibrant public space and neighborhood fore-court generating rich social, political and environmental dividends since these are the natural storm water drains of the city.

Imagine a scenario where Mumbaikars have easy access to over 600 kilometers of landscaped walking and cycling tracks and open spaces along the watercourses that intermingle and interweave through various parts of the city's urban fabric?

This is the over-arching vision that has manifested itself in a tangible pilot effort -- the Irla Nullah Re-invigoration Project.



**A LARGER ECOLOGY &
THE CITY**

RECLAIMING WATERFRONTS AND EXPANDING PUBLIC SPACES

A Movement for Protection of Mumbai's Seafront

One of Mumbai's greatest assets is its coastline which forms a series of unique and picturesque waterfronts. Unfortunately, these have become the backyard of the city and degenerated into its biggest dumping ground.

Reclamation, sewage disposal and encroachment have ravaged the waterfronts.



Mumbai Metropolitan Region. Image: Nasa Space Observatory



OPEN MUMBAI

WHAT WE DON'T SEE AND REALIZE AS OUR PUBLIC SPACES ASSETS:

482 SQ KMS OF TOTAL AREA

149 KMS OF COASTLINE

16 KMS OF BEACHES

40.7 KMS OF RIVERS COVERING 1.5 SQ KMS

09.25 SQ KMS OF CREEKS

48 KMS OF 'NULLAHS'

305 KMS OF POTENTIAL PEDESTRIAN AVENUES ALONG ROADS

64.31 SQ KMS OF FORESTS AND HILLS

155 ACRES OF 51 RAILWAY STATIONS









PRODUCTION OF BACKYARDS

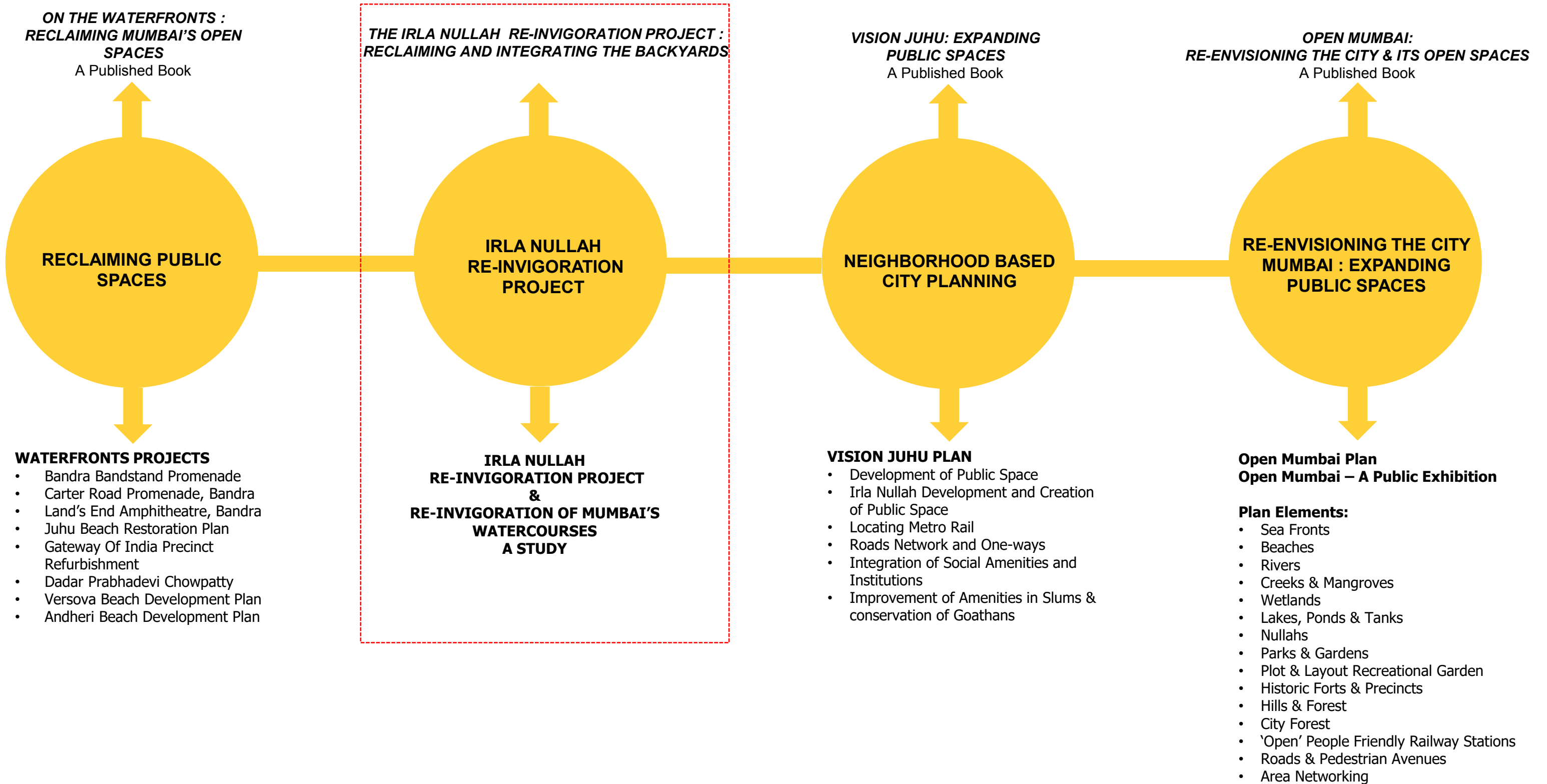




INTEGRATION :
IRLA NULLAH RE-INVIGORATION
PROJECT

NEIGHBOURHOOD PROJECTS TO A CITY-WIDE MOVEMENT

22 years and continuing





the
vision juhu
plan

* Juhu-giri: Taken from a colloquial slang 'dada-giri' which means 'by coercive force'. Here it is re-interpreted as the collective power of the people of Juhu.

*Pyar se: means 'With love'

Juhugiri. Pyar se.

- Free open space: add almost 3 Oval maidans
- Create 10-km tree-lined, flood-free walkway along Irla nala
- Inter-connect open spaces with institutions & amenities
- Re-align & integrate Metro rail network with public spaces
- Protect beach, improve access, enhance facilities
- Provide civic amenities for gaothans, redevelop slums
- Form a model for neighbourhood planning, participation & governance

Vision Juhu Expanding public space

Kamala Raheja Vidyanidhi Institute for Architecture • PK Das & Associates, Architects • Mumbai Waterfronts Centre

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This was a project campaign poster made for response and reaction in public meetings from citizens and local stakeholders. The idea was to popularize the movement and thereby the planning process of such public interest projects in cities.



VISION JUHU - EXPANDING PUBLIC SPACES

Juhu is a residential suburb in the western part of Mumbai, synonymous with glamorous bungalows of movie stars and one that houses one of the most popular public spaces in the city - the iconic Juhu beach.

Vision Juhu has evolved keeping the larger issues of the city in mind. It includes conserving reserved open spaces and creating new ones, pedestrianisation, significant solutions to flooding in Juhu, development of the Irla nullah, improvement in transport infrastructure by skillfully integrating the proposed Metro rail and re-planning traffic flow, opening up of several accesses to the beach, appraisal of social amenities like educational and health facilities and making them accessible to all, improvement in the standard of living in slums and gaathans (urban villages), provision of space and security to hawkers and most importantly- networking this public realm.



EXPANDING PUBLIC SPACES VISION JUHU

EXPANDING
PUBLIC
VISION Juhu
SPACES



The Vision Juhu Movement has been rooted in public participation and democratic planning ideals.

These clearly manifested themselves when citizens would turn up regularly in large numbers to oppose wrong doings and malpractices when it came to open spaces in their neighbourhood.

Juhu's green lung back after 8-yr fight

BMC has taken over a 3.5-acre plot in Gulmohar locality that was given to Ronson Foundation for construction of a club



RESIDENTS SPEAK

At last, we have got our open space back. It's a big victory for us.

SHABITA BHALI

When the BMC was taking down unauthorized structures on the plot, we felt proud to be citizens of the city.

SHABITA BHALI

When the BMC demolished structures that had come up on the plot, the structures crumbled, but they have been looked up by officials.



Residents pry open park gates

After a long struggle, residents have managed to pry open the gates to a park in Juhu, Mumbai.

RESIDENTS FOR ACTION



Juhu residents fight for access to playground

Alleged that Ronson Foundation, which was granted BMC permission for development and maintenance was later allowed to build a club; the trust has taken charge of the entire plot shutting them out




Members of the Gulmohar Area Societies' Welfare Group (GASWG) have been fighting for access to a 3.5-acre plot in Juhu, Mumbai, which was granted BMC permission for development and maintenance by the foundation. The trust has taken charge of the entire plot shutting them out.

The plot, owned by Ronson Foundation, was granted BMC permission for development and maintenance in 2008. The foundation had promised to build a club on the plot, but it has been used for other purposes. The GASWG has been fighting for access to the plot for a playground.

The foundation has been accused of misusing the plot for other purposes. The GASWG has been fighting for access to the plot for a playground.

Gunning For Green Neighbourhood

An open space opposite Vidyanidhi school reserved as a recreation ground was taken over by the builder to build a club in the garb of maintenance. The Gulmohar Area Societies' Welfare Group opposed it when the builder started hacking trees. Schoolchildren and residents took to the streets, and approached one authority after another. With the help of then mayor Shubha Raut and now MP Gurudas Kamat, the residents managed to obtain a stay from civic chief Swadheen Kshatriya four months ago. Residents are confident that the problem will soon be sorted as they have finally managed to convince all the authorities concerned about the genuineness of the issue.




Residents win fight over entry to open ground

After a March 18 meeting, the BMC asked Ronson Foundation to give public access to the ground near Kaifi Azmi Park



G-10 Dr Parasuram Parikh, Adhek Pawar, Shabita Bhalgi and Sampatka Bhalgi were the activists who got this ground opened to the public.

The residents of Juhu have won yet another battle in opening a public ground that was taken over by Ronson Foundation. The BMC had restricted the maintenance of the ground, located next to Kaifi Azmi Park, to the Ronson Foundation.

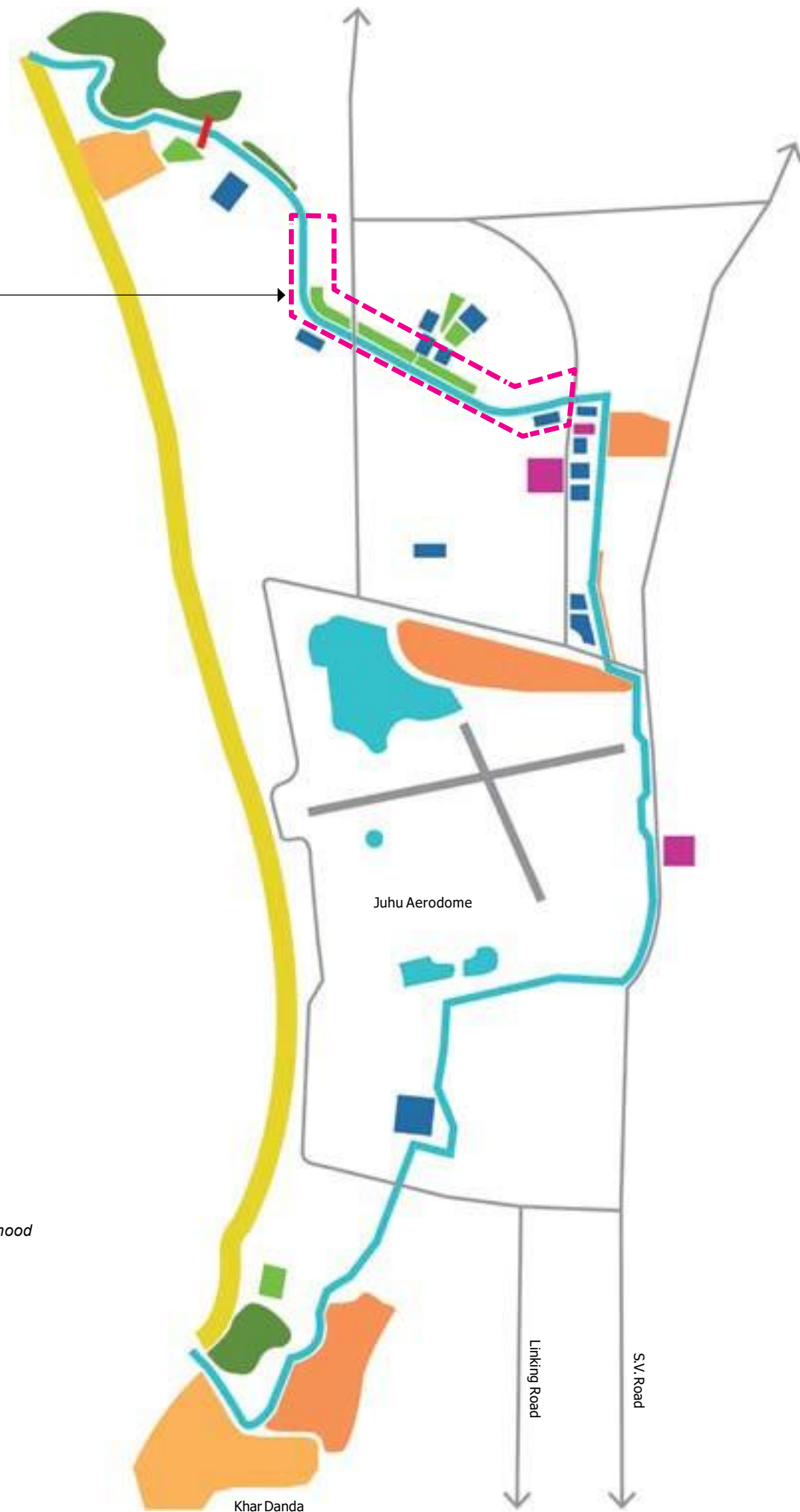
The residents had requested in April 2010 that the BMC take over the ground. The BMC had restricted the maintenance of the ground, located next to Kaifi Azmi Park, to the Ronson Foundation.

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PHASE 1:
1.5 kms

Map of Irla Nullah flowing through the Juhu neighborhood

- Waterbodies
- Mangroves
- Parks
- Koliwadass
- Institutions
- Hospitals
- Notified Slums
- Beach
- Roads



The Irla Nullah runs through the western suburb of Juhu with a total length of 7.5 kms. Owing to its geographical footprint, most areas of the neighbourhood have direct access or are in close proximity to this water body.

A host of public institutions and amenities are found adjacent to this nullah. The re-invigoration proposal looks to interconnect these amenities and open spaces to the nullah in order to increase participation and thereby improve vigilance of these public spaces.

THE IRLA NULLAH RE-INVIGORATION PLAN

Importantly, this movement and the project are a unique example of the need for waging citizens' struggles for exercising their Right to the City and in scripting its current and future growth and take on several challenges.

A plan that networks and integrates the nullah into the neighbourhood as well as with the multiple amenities and institutions in the precinct through green streets and roads that promote a walking culture along the nullah as well as within the Irla precinct.

These include the conservation of a vital natural asset; its integration with the neighborhood and the city; expanding public spaces -- both in physical and democratic terms; popularising and demystifying the planning process for effective participation in conceptualisation and implementation process, primarily effecting a paradigm shift in understanding of sustainable ecology and building with nature and its benefits to the quality of life and environment.

Phase 1 of the project includes the development of three citizens' parks namely the Kishore Kumar baug, Kaifi Azmi Park and the Childrens' Forest Park; a public, open air amphitheatre - the Vijay Tendulkar Rang Manch; walking and cycling tracks along the nullah complete with lighting and landscaping, and most importantly the cleaning of the waters in the nullah itself.



PROPOSAL



BEFORE



AFTER



AFTER



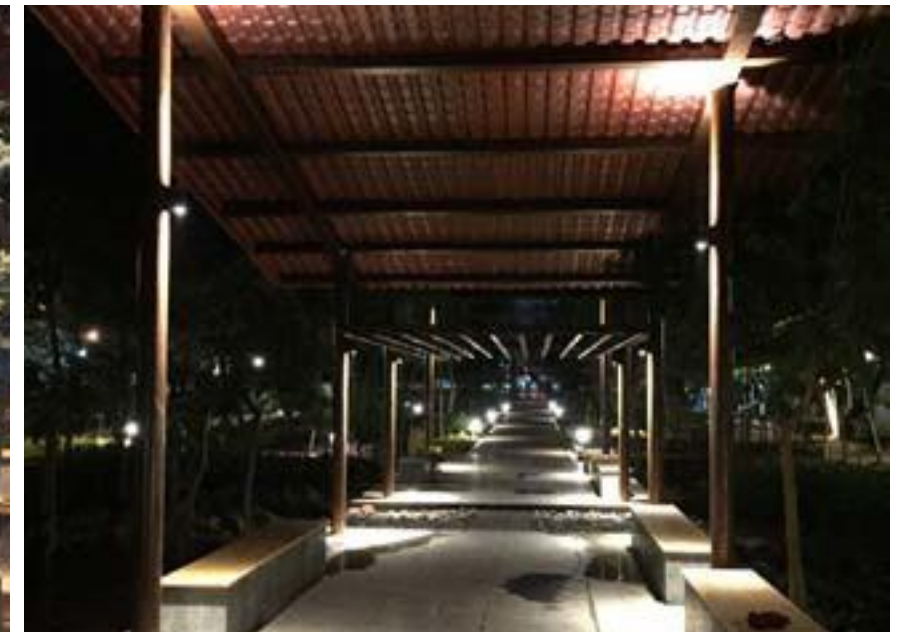


The chain of public parks along Irla Nullah in the form of the Kaifi Azmi Park, Kishore Kumar Baug and the Childrens' Forest Park form an immaculate 'city forest' within a dense urban setting.

KAIFI AZMI UDYAN



KISHORE KUMAR BAUG + VIJAY TENDULKAR RANG MANCH





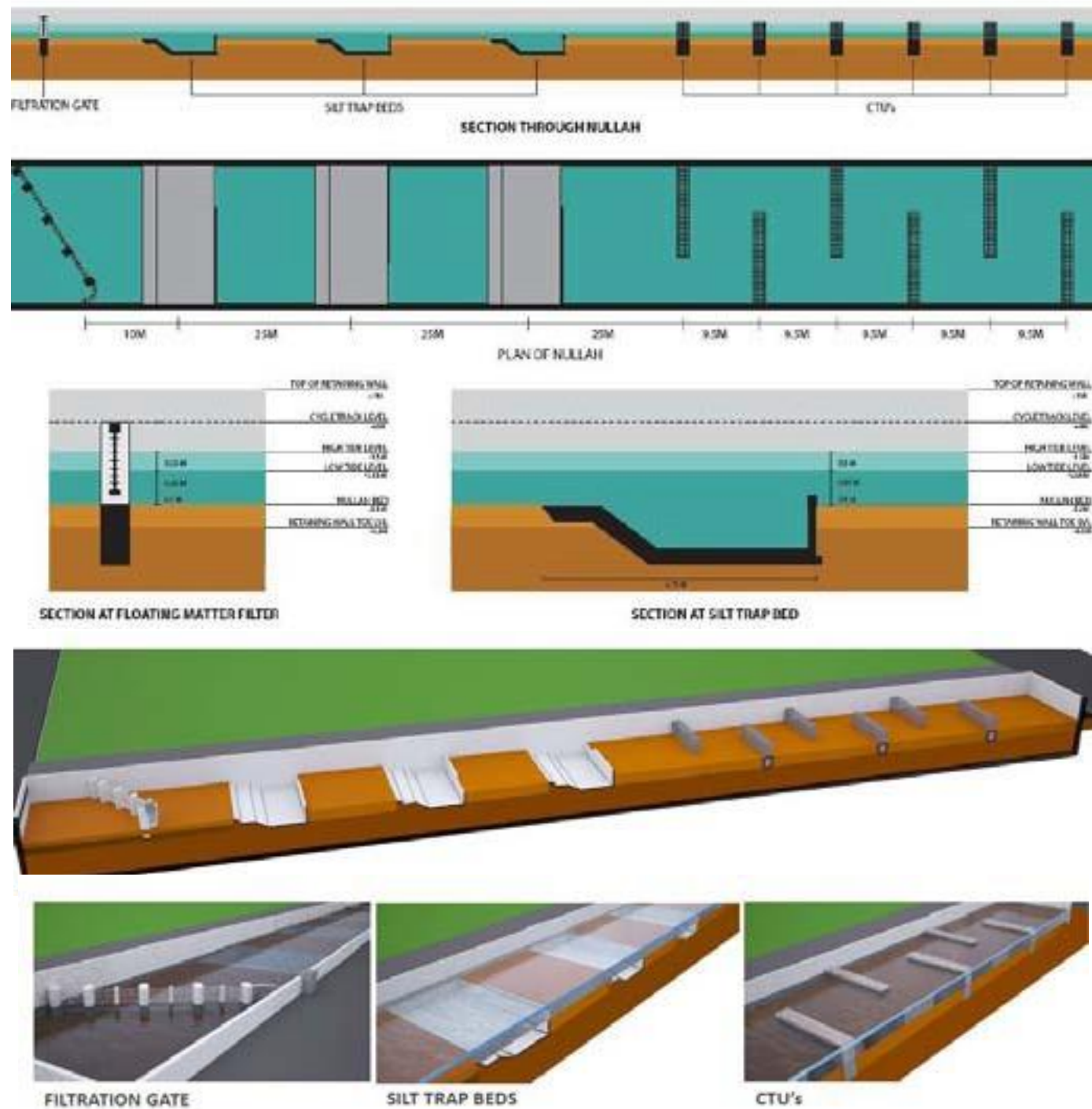
CHILDRENS' FOREST PARK



CLEANING THE IRLA NULLAH

One of the focal points of the project and one that was key to the success of the re-appropriation and re-invigoration of the nullah itself was the challenge of cleaning the water. It has been mentioned earlier, that these water bodies were originally built as natural and open storm water channels that would take water from inland into the sea. Unfortunately over the years, most of the flow in these water bodies is contributed by illegal sewage and waste water connections from adjacent areas.

There is a tremendous amount of silt that has accumulated over the years on the nullah bed, and the effective cleaning of the water would also entail reducing this bio-waste silt from the bed itself in order to reduce the foul smell and odour of the water too.



The design team has worked closely with the National Environmental Engineering Research Institute (NEERI) to develop a system for cleaning the water. This system comprises of several elements that include 1) a floating matter filtration gate, 2) silt trap beds, 3) compact treatment units and 4) floating beds of phytoid plants.



Floating bed treatment unit



Canna Indica variant used as plants on the floating bed

**PLACEMAKING:
A CONTINUING ECO-STRUGGLE**

THE MOVEMENT TO RECLAIM PUBLIC SPACES IN MUMBAI

22 years and continuing

AWARDS AND RECOGNITION



Clearwater Citizens Award
to PK Das & Assc. by Waterfronts Center, Washington, 2002



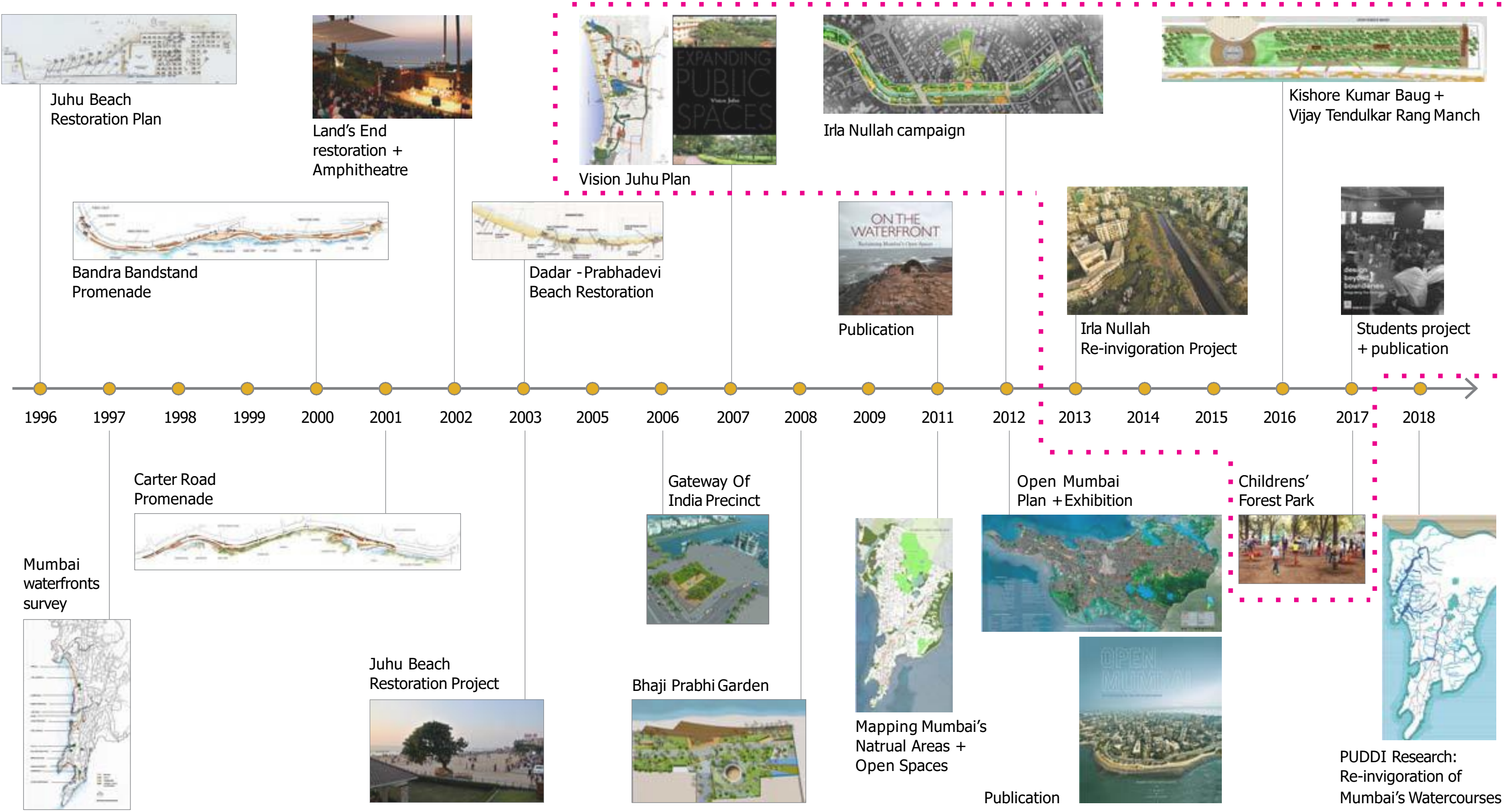
The Urban Age Award
by The Deutsche Bank, 2007



Changemakers of Mumbai Award
to PK Das by Hindustan Times, 2013



The International Jane Jacobs Medal
to PK Das by Rockefeller Center, 2016



The timeline illustrates the progression of public space reclamation in Mumbai from 1996 to 2018. A central horizontal axis marks the years, with vertical lines connecting to various projects and publications. A pink dotted line highlights a specific period from 2005 to 2018.

- 1996:** Juhu Beach Restoration Plan
- 1997:** Mumbai waterfronts survey
- 1998:** Carter Road Promenade
- 1999:** Bandra Bandstand Promenade
- 2000:** Land's End restoration + Amphitheatre
- 2001:** Juhu Beach Restoration Project
- 2002:** Dadar - Prabhadevi Beach Restoration
- 2003:** Vision Juhu Plan
- 2005:** Bhaji Prabhi Garden
- 2006:** Gateway Of India Precinct
- 2007:** Publication: *ON THE WATERFRONT: Reclaiming Mumbai's Open Spaces*
- 2008:** Irla Nullah campaign
- 2009:** Irla Nullah Re-invigoration Project
- 2011:** Mapping Mumbai's Natural Areas + Open Spaces
- 2012:** Open Mumbai Plan + Exhibition
- 2013:** Students project + publication
- 2014:** Childrens' Forest Park
- 2015:** Kishore Kumar Baug + Vijay Tendulkar Rang Manch
- 2016:** PUDDI Research: Re-invigoration of Mumbai's Watercourses
- 2017:** Childrens' Forest Park
- 2018:** Childrens' Forest Park



**a continuing
movement..**