

TRANSFORMING EXISTING CITIES INTO GREEN CITIES – Presenting a case of Visakhapatnam Beachfront Redevelopment

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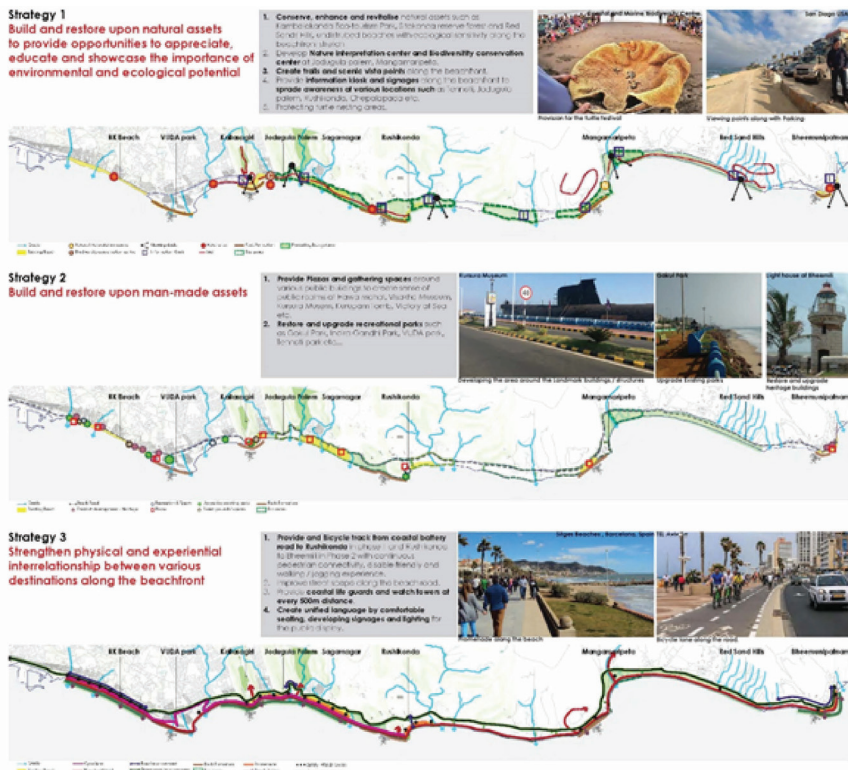
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Planning and urban design with sustainable ethos have traditionally had deep roots in India. The rich history of urban planning that is seen through the prehistoric Dholavira to the imperial character of New Delhi and planned vision of Corbusier's Chandigarh, has gradually withered away. Post-independence, Indian cities witnessed an exuberant growth in their geographical spread and the numbers residing in them. The cities, unable to cope with the exorbitant pressure, grew in a sporadic, unplanned and ad hoc manner.

Visakhapatnam Beachfront Redevelopment, Shiv Nadar University, Central Business District at Ahmedabad, ABD Rajkot Smart City, TOZ based redevelopments, Fort Kochi Redevelopment etc.

Visakhapatnam Beachfront Redevelopment

The Masterplan as developed by INI and jointly funded by World Bank for Visakhapatnam beachfront is envisioned to create a comprehensive development for the entire stretch of 30-km beachfront that provides restoration of infrastructure damaged during Hud-Hud Cyclone in 2014; redevelops the entire stretch in a holistic and integrated manner, addressing the changing contexts that the beachfront runs across; and provides opportunities for an enhanced interface, both physical and visual, with the beachfront. It also provides an opportunity to promote sustainable solutions for accessibility, transportation and amenities on the Beachfront.



The range of planning and design interventions that India is now looking at include works as location-specific as revamping streetscape of select localities within a city, to sustainable land-use zoning and mapping and large regional development plans and Re-building disaster struck areas. To address these demands of urbanscape, the design practitioners need a multidisciplinary and collaborative approach which integrates expertise from various backgrounds and also engage in productive dialogue with the civic bodies and the users to deliver a design solution that caters to present needs and is

flexible to grow and adapt with the future dynamics. It also provides an opportunity that currently when we are re-visiting many such spaces, and creating many more, the ethos of sustainability are kept at the forefront that ties us back to where we started.

At INI Design Studio (INI), we are keen to rebuild the relationship between buildings, public spaces and community, through human-centred planning and design, while doing these with sustainable measures. Our urban design and planning principles are visible in our works at Redevelopment of Kedarpuri and surrounding areas,



Existing and Proposed Images of RK Beach with widened Pathways and Bicycle Track.

Opportunity to drive sustainability to drive sustainability, meaningful integration and enhance resilience.

The beachfront at Visakhapatnam presents a dynamic character from being dense urban, to public parks and utilities, eco-sensitive zones, tourist spots and fisher settlements as it traverses from south to north. However, the stretch is fragmented with sporadic and haphazard development in pockets. Further, there is a distinct physical disconnect between the existing beachfront promenade and the water edge due to the difference in levels between the retaining wall and the water. The masterplan is perceived as a solution to provide an integrated design that shall facilitate an active beachfront realm and enhance the resilience of the beachfront to future hazards.

Design Strategies

The design process is guided by seven strategies that were developed based on a thorough site understanding, analysis of the interface between people and the place, and intense consultations with the key stakeholders.

1. Build and restore the existing natural assets to provide opportunities to appreciate, educate and showcase the importance of environmental and ecological potential
2. Build upon and restore the man-made assets and increase green cover
3. Enhancing the resilience and livelihoods of the coastal communities
4. Build sustainable infrastructure to enhance resilience along beachfront
5. Strengthen physical and experiential interrelationship between various public places along the Beachfront
6. Integrate and complement with the larger city network and other ongoing developments with Cycling tracks, jogging

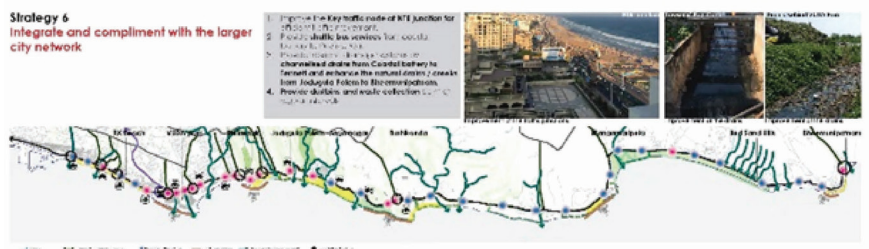
Strategy 4 Enhance the resilience and livelihoods of Coastal Communities



Strategy 5 Build the infrastructure to enhance resilience along beachfront



Strategy 6 Integrate and complement with the larger city network



Strategy 7 Develop new and complementary public spaces as per the potential and current / future needs



IDENTIFICATION OF INTERVENTION AREAS THROUGH COMMUNITY & STAKEHOLDER PARTICIPATION

3 Public Consultations	2 Survey with Fisher Communities	400+ Online User Survey	17+ Multiple Stakeholders	Informal Discussions with Street Hawkers
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tracks and improved Public Transport connectivity.

7. Develop new and complementary public spaces as per the potential and current / future needs

Design Process And Evolution Of The Plan

The design process entailed a thorough baseline assessment of the site involving physical site survey and mapping, 200+ household surveys with the fisher community, traffic counts and surveys at key junctions, pedestrian counts on the beachfront, study of relevant documents, online survey with the city residents and informal interviews with hawkers and the urban residential community along the beachfront. In addition, two public consultations were also held where the design interventions were displayed and discussed with the community.

Design Features

The masterplan integrates the entire stretch through a set of elusive design solutions that enable connectivity and lend a uniform design language. These interventions include a continuous cycling track, retaining wall and introduction of uniform urban elements like



MASTER PLAN

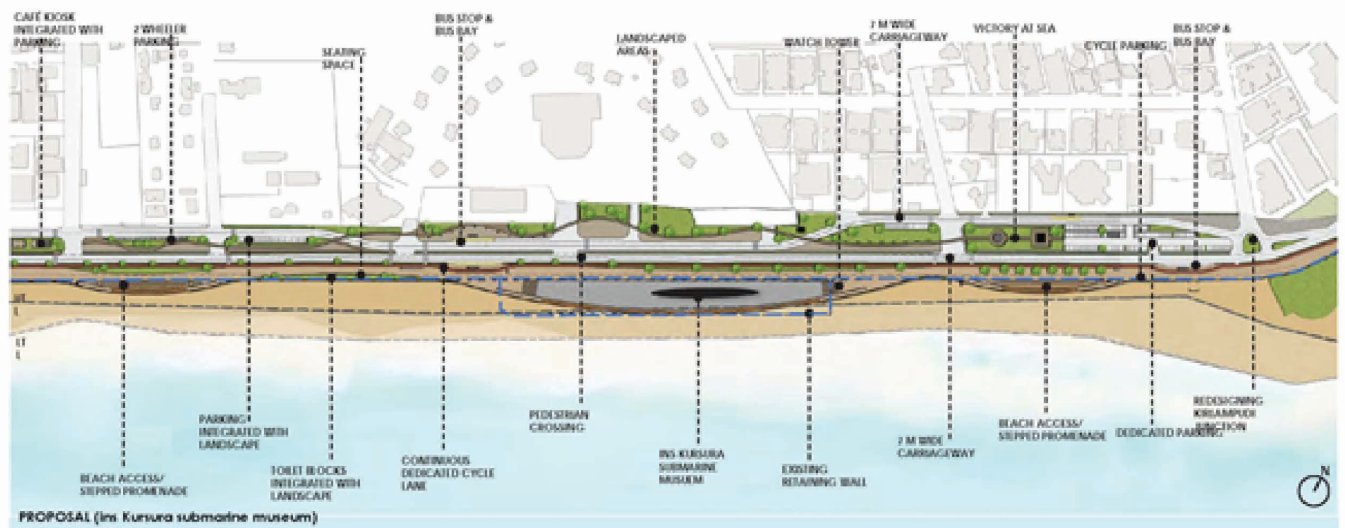
Overall Master Plan of the Visakhapatnam Beachfront.



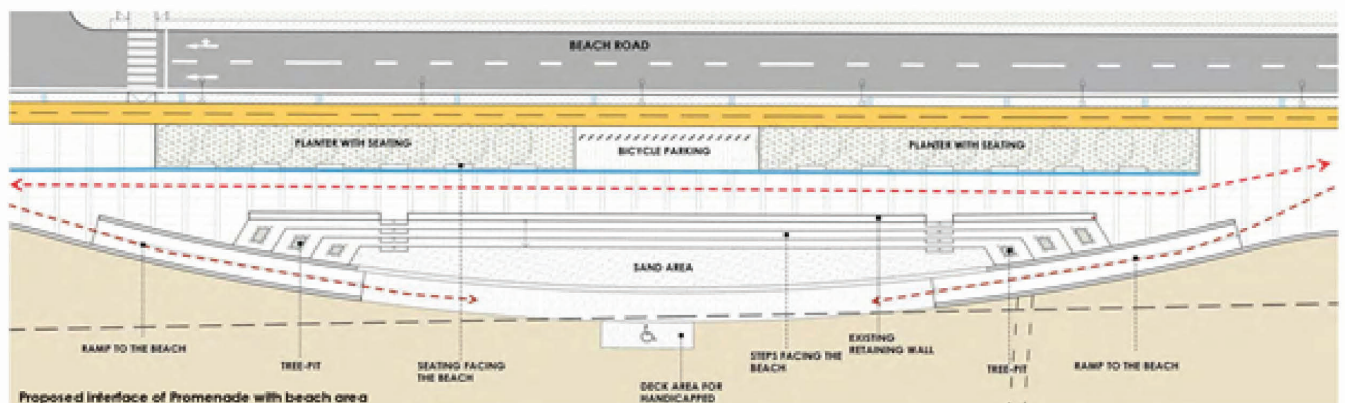
DETAILED LAYOUT OF THE PROJECT

Layout Plan of the RK Beach .

SOLUTION FOR RK BEACH EDGE - CREATING PEDESTRIAN SPACES AND A VIBRANT PUBLIC SPACE



PROPOSAL (In: Kusrura submarine museum)



Proposed Interface of Promenade with beach area

Enlarged Part Plan of RK Beach Steps leading to the Beach .

signage, street furniture, and consistent construction material. Specific clusters have been identified for area-based development that shall respond to the needs and potential of

their immediate precinct and desired usage.

Restoration of retaining wall and designing it in a way that it facilitates an active water edge is one of the key interventions in the plan. The

retaining wall doubles up as seating space with ample pause points, giving way in between to ramps and stepped access to the beach. Thus, enabling physical and visual interface



Proposed Cycle Track throughout the Beachfront

throughout the beachfront along with a robust safety infrastructure from future storm surges. The design opens the promenade space towards the beach through stepped seating areas that mitigate the level difference between the promenade space and the water edge.

A continuous 30-km long cycling track along the beachfront is another integrating design intervention. This track is proposed with uniform signages, landscape and street furniture that shall bind the entire stretch together lending it a uniform identity while it traverses through varying precincts. A resilient landscape plan throughout the stretch pivoted on local species safeguards the beachfront from the future storm surges.

Area Based Development (ABD)

Distinct pockets have been delineated for area-based developments. These are planned with contextual interventions. In the clusters located along the urban pockets, active beachfront promenade with seating spaces, public activity zones and disable-friendly access to water have been planned. In the fisher settlements, improved streetscape in the community settlement, dedicated spaces for fish drying and processing, boat parking and storage along with a sensitive interface with the walking and cycling track is provided. The masterplan design presents a unique case of integrating multiple experiences that cross-over from densely urban to fisherman settlements to tourist spots and forested areas through a comprehensive manner that makes it an active public realm for a wide range of users while adding to the resilience of people, place and livelihoods.

Specific intervention at RK Beach includes Re-alignment of the carriageways. This helps increase the space along the beach for pedestrians, cyclists and plantations.

Conclusion:

Today when we are finally looking at redeveloping the public realm in our cities it is very critical that the ethos of Sustainability that have been at the core of urbanization in the



Existing and Proposed Images of RK Beach with widened Pathways and Bicycle Track.

ancient civilizations are carried forward. It is very often seen that due to the political and social demands getting the projects completed in the time frame take higher seat than getting

them right. How we face these challenges and keep the core values intact and take them through actualization will define the future cities.