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THE FUTURE
OF ARCHITECTURE:
**CLIMATE-RESPONSIVE
DESIGN**

By

NURU KARIM
RAHUL KADRI
REINIER DE GRAAF
SACHIN RASTOGI
PRANAV IYER

**RAHUL
MEHROTRA**
“IT’S THE ARCHITECT’S
RESPONSIBILITY TO IMAGINE
SPATIAL POSSIBILITIES”





A WALK IN AN URBAN FOREST

Project: Malabar Hill Forest Trail, Mumbai; **Architects:** IMK Architects, Mumbai

The Malabar Hill Forest Trail creates an elevated wooden walkway for people to experience the 12-acre Malabar Hill Forest, one of the last remaining natural ecosystems in Mumbai

Malabar Hill Forest Trail offers remarkable views of the Arabian Sea as well as Mumbai's skyline

A roughly 12-acre green pocket of land in the midst of the densely populated urban landscape of Mumbai, the Malabar Hill Forest houses a diverse mix of flora and fauna. The upcoming Malabar Hill Forest Trail will take visitors on an immersive natural journey through the forest, providing a place of recreation and scope for experiencing nature, while exploring the potential of eco-tourism in the middle of one of the world's densest cities.

The forest houses many indigenous trees like gulmohar, copperpod, mango, coconut, rain tree, jamun and jackfruit. A dozen rare birds including the rose-ringed parakeet, hornbill, coppersmith barbet, magpie-robin, golden oriole and peafowl also call the green space home. The project thus presents a novel way of catalysing the preservation and restoration of often neglected and swiftly degrading urban forests, which are increasingly prone to the effects of unchecked development.

A collective initiative of the Malabar Hill Citizens' Forum (MHCF), the Nepeansea Road Citizens' Forum (NRCF) and IMK Architects, the project is supported by the JSW Foundation. It will be funded by the Brihanmumbai Municipal Corporation (BMC), and is slated for completion by the end of 2021.

A historically popular venue for joggers, athletes, nature lovers and leisure seekers from the Malabar Hill neighbourhood, the forest today seems to be falling into a state of disrepair and neglect. Temporary and permanent structures

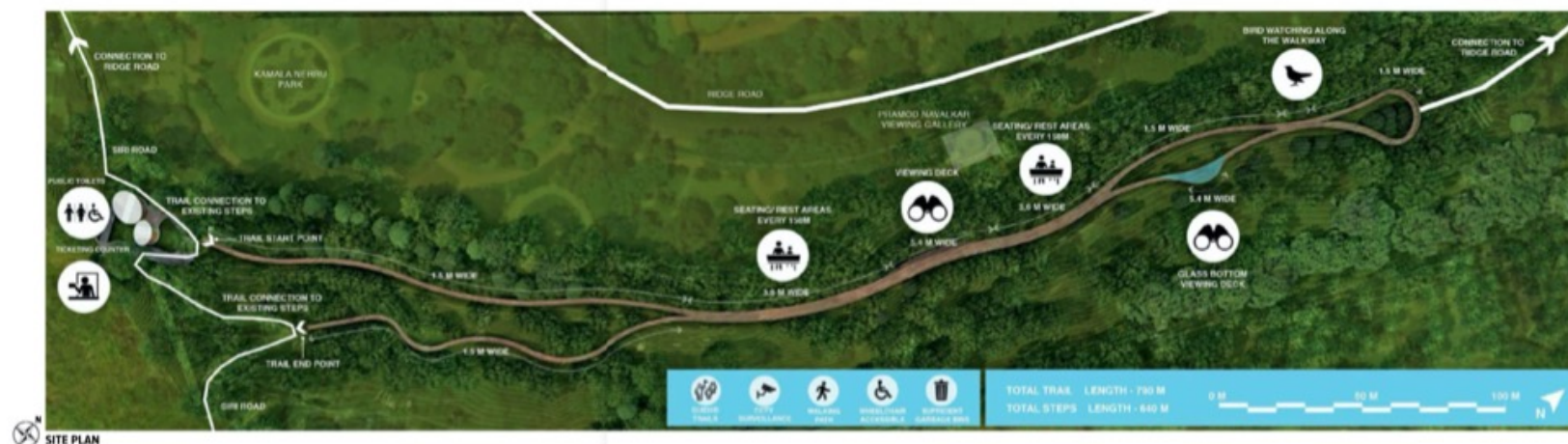


AR. RAHUL KADRI

Partner & Principal Architect at IMK Architects

Rahul Kadri is a Partner & Principal Architect at IMK Architects, an architecture and urban design practice founded in 1957 with offices in Mumbai and Bengaluru. He holds a graduate diploma in architecture from the Academy of Architecture, Mumbai, and a Masters in Urban and Regional Planning from the University of Michigan, USA.

The Malabar Hill Forest Trail thus arises out of the urgent need to preserve and restore the forest's rich ecosystem, while creating a new, sustainable interface between nature and the city. Traversing roughly the same path as the two older trails on the ground level, the new, elevated walkway will run a total length of 705 metres, taking visitors through the entire length of the forest.



spread through the forest, including a stairwell, a greenhouse, older access steps, trails, fences and guardrails, are worn down or broken. Garbage and construction waste are routinely dumped along the trails, and the forest is under increasing threat of encroachment by slums along its eastern edge. The hillock's subsoil has started to give away too due to constant soil erosion, which is exacerbated by vigorous stormwater run-off along the steep slopes. Furthermore, the area is increasingly becoming an avenue for antisocial activities such as illicit liquor brewing and consumption of drugs, leading to safety concerns. Evidently, the forest and the ecological systems it supports are under threat, and if kept unsupervised, might soon be encroached upon in entirety.

The Malabar Hill Forest Trail thus arises out of the urgent need to preserve and restore the forest's rich ecosystem, while creating a new, sustainable interface between nature and the city. Traversing roughly the same path as the two older trails on the ground level, the new, elevated walkway will run a total length of 705 metres, taking visitors through the entire length of the forest. The site will be fenced on the ground level and ingress/egress points will be provided at either end of the trail, connecting it to the two existing, prominent points of access for Malabar Hill—a 192-step stairway from the Babulnath Temple in the south and a 100-step picturesque stairway carved into the hill from the Hughes Road bus stop area in the south-west, both of which will be restored as part of the project. In addition, a utility block with toilets, ticketing booths, and other public amenities will come up at the start of the trail towards the west along Siri Road.

The trail, set to be constructed without damaging a single tree in the forest, will stand on a series of cylindrical, epoxy-coated structural steel columns,





Malabar Hill Forest Trail opens up unexplored avenues for bird-watching and recreation in the middle of Mumbai

The walkway will be illuminated by warm lighting fixtures placed within the Sal wood balustrade, a strategy centred on keeping light pollution spilling onto the forest floor to a minimum. Information panels and small kiosks along the walk will provide essential information to first-time or infrequent visitors.

by steel joists over structural steel beams, which will themselves be supported by the columns. Averaging at 1.5m, the width of the deck will increase every 150m to accommodate amenities for visitors—from 1.5m to 3.6m to include seating zones, and to 5.4m to accommodate expansive viewing decks, one of which will feature a glass bottom.

The walkway will be illuminated by warm lighting fixtures placed within the Sal wood balustrade, a strategy centred on keeping light pollution spilling onto the forest floor to a minimum. Information panels and small kiosks along the walk will provide essential information to first-time or infrequent visitors. Garbage bins will be placed at regular intervals too to help curb instances of littering, while a network of CCTV cameras will ensure improved supervision of the precinct.

The Malabar Hill Forest Trail will thus offer an unparalleled and transcendent natural experience akin

to walking in the woods in the heart of a bustling city like Mumbai, while opening up unexplored avenues for bird-watching and recreation as well as facilitating remarkable views of the Arabian Sea and the city skyline. According to Rahul Kadri, Partner & Principal Architect, IMK Architects, "The project seeks to set a precedent for other green, tourist spots in the country by demonstrating how we can enjoy nature while causing minimum disturbance to the environment." +

FACTFILE

Typology: Public use project

Client: Brihanmumbai Municipal Corporation (BMC)

Sponsors: JSW Foundation (concept stage)

Design team: Rahul Kadri, Harish Vyas, Bhumiika Ganjawala, Heena Shaikh

Total length of trail: 705m